
**Planned Unit Development
Special Permit Application
(Final Development Plan)**

Binney Street Project

March 15, 2010

Submitted by:

ALEXANDRIA REAL ESTATE EQUITIES INC



Planned Unit Development Special Permit Application (Final Development Plan)

Binney Street Project

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ALEXANDRIA REAL ESTATE EQUITIES INC

Architecture and Urban Design

Elkus Manfredi Architects

Landscape Architecture

Michael Van Valkenburgh Associates, Inc.

Transportation

Vanasse Hangen Brustlin, Inc.

Infrastructure

S E A Consultants, Inc.

Permitting

Epsilon Associates, Inc.

Planning

Catherine Donaher + Associates

Structural Engineering

McNamara/Salvia Inc.

Acoustics

Cavanaugh Tocci Associates, Inc.

Legal

Adams & Rafferty

WilmerHale

FINAL DEVELOPMENT PLAN

BINNEY STREET PROJECT
Alexandria Real Estate Equities
Cambridge Planning Board File #243

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Section 1

Introduction



ALEXANDRIA.

700 TECHNOLOGY SQUARE
SUITE 302
CAMBRIDGE, MA 02139
TEL: 617 494 9023
FAX: 617 494 0015

March 15, 2010

By Hand

City of Cambridge
Office of the Planning Board
City Hall Annex
344 Broadway
Cambridge, MA 02139

Re: Binney Street Project - Final Development Plan
Planning Board Case #243

Ladies and Gentlemen:

On behalf of Alexandria Real Estate Equities (ARE), it is my pleasure to submit for your review a Final Development Plan for the proposed mixed-use Binney Street Project. This Final Development Plan addresses the comments and questions raised by the Planning Board at its January 26, 2010 public hearing, and the written comments, recommendations and requests for additional information contained in the Board's Notice of Preliminary Determination for the Planned Unit Development (PUD), a copy of which is included in Section 3 hereof.

This Final Development Plan is being submitted as a supplement to and in furtherance of the materials previously submitted by ARE to the Board in connection with ARE's pending applications for a PUD Special Permit and an Article 19 Project Review Special Permit. The Final Development Plan builds upon the information contained in those initial submissions, providing certain refinements, clarifications and supporting information requested by the Board.

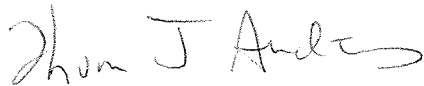
The information provided in these enclosures expands upon and enhances the PUD Development Proposal submitted to the Board on December 17, 2009, a copy of which is included in Section 6 hereof, and should be considered together with that prior submission as a single, comprehensive Development Plan. Similarly, the information provided in these enclosures expands upon and enhances ARE's pending Article 19 Project Review Special Permit application, and should be considered together with that prior submission as a single, comprehensive application for a Project Review Special Permit.

Please note that in an effort to facilitate the Board's review of the Final Development Plan, we have included with this submission (i) a complete set of revised Graphic Materials as Addendum A (submitted under separate cover), which supersedes and replaces the Graphic Materials submitted on December 17, 2009, and (ii) an amended and restated Marketing and Merchandizing Plan in Section 5 hereof, which supersedes and replaces the Marketing and Merchandizing Plan attached to the PUD Development Proposal as Attachment C.

Please do not hesitate to contact me if you have any questions or if I can be of assistance in your review of any the enclosed materials.

On behalf of the entire Alexandria team, we appreciate your continued consideration of this exciting project and we look forward to working with you to pursue this unique development opportunity.

Sincerely yours,



Thomas J. Andrews
Senior Vice President, Regional Market
Director – Massachusetts
for ARE-MA Region No. 21, LLC, ARE-MA Region No. 32, LLC
ARE-MA Region No. 34, LLC, ARE-MA Region No. 37, LLC
ARE-MA Region No. 39, LLC, ARE-MA Region No. 40, LLC
and ARE-MA Region No. 42, LLC

Section 2

*Cover Sheet, Certificate and Application Summary
(Submitted December 17, 2009)*

PB243

City of Cambridge, Massachusetts
Planning Board
City Hall Annex, 344 Broadway, Cambridge, MA 02139

SPECIAL PERMIT APPLICATION - COVER SHEET

To the Planning Board of the City of Cambridge:

The undersigned hereby petitions the Planning Board for one or more Special Permits in accordance with the requirements of the following Sections of the Zoning Ordinance:

- 1. Sections 12.20, 13.40 and 13.50 (PUD Special Permit)
- 2. Section 19.20 (Project Review Special Permit)
- 3. _____
- 4. _____

Applicant: ARE-MA Region No. 21, LLC, ARE-MA Region No. 32, LLC, ARE-MA Region No. 34, LLC, ARE-MA Region No. 37, LLC, ARE-MA Region No. 39, LLC, ARE-MA Region No. 40, LLC and ARE-MA Region No. 42, LLC

Address: c/o Alexandria Real Estate Equities, 700 Technology Square, Suite 302, Cambridge, Massachusetts 02139

Telephone: (617) 494-9028 FAX: (617) 494-0015

Location of Premises: : 161 First Street; 54, 56, 57, 60, 61, 64, 65, 67, 68, 69, 71, 72, 74, 75, 79, 80, 83, 84 and 126-144 Rogers Street; 50 Rogers/200 Second Street; 87, 95, 101, 107, 80-122, 143 and 241 Binney Street; 242-248, 264, 270 and 276 Third Street; 167, 173 and 179 Second Street; 61 Rear Rogers Street; 182-198 and 200 First Street; 195 First Street; 41 and 77 William "Doc" Linskey Way

Zoning District: IA-1 and PUD-3A; IA-1, ECHO and PUD-4C; C-3A and PUD-2

Submitted Materials: Cover Sheet (PUD and Project Review Special Permits); Summary of Application (PUD and Project Review Special Permits); Ownership Certificate (PUD and Project Review Special Permits); PUD Development Proposal (Supporting Statement and Narratives); Project Review Special Permit Application (Supporting Statement and Narratives); Graphic Materials—Binney Street Project (in support of PUD Development Proposal and Project Review Special Permit Applications); Certified Traffic Impact Study; Tree Study

Signature of Applicant:

ARE-MA Region No. 21, LLC, ARE-MA Region No. 32, LLC
ARE-MA Region No. 34, LLC, ARE-MA Region No. 37, LLC
ARE-MA Region No. 39, LLC, ARE-MA Region No. 40, LLC
and ARE-MA Region No. 42, LLC

By: Alexandria Real Estate Equities, L.P.,
A Delaware limited partnership

By: ARE-QRS Corp.,
a Maryland corporation

By: Joseph T. Maguire Jr
Name: Joseph T. Maguire Jr
Title: Authorized Signatory
A.V.P. Development and Asset Services

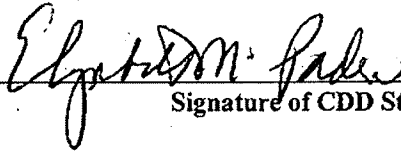
2009 DEC 22 A 11: 18
OFFICE OF THE CITY CLERK
CAMBRIDGE, MASSACHUSETTS

12/22/09

Eugene M. Paden

For the Planning Board, this application has been reviewed and is hereby certified complete by the
Community Development Department:

12/22/09



Signature of CDD Staff

OWNERSHIP CERTIFICATE – PLANNING BOARD SPECIAL PERMIT

This form is to be completed by the OWNER, signed, and returned to the Office of the Planning Board.

I hereby authorized: **the undersigned**

(Petitioner)

Address: **c/o Alexandria Real Estate Equities, 700 Technology Square, Suite 302, Cambridge, Massachusetts 02139**

to apply for a special permit for: **Project Review Special Permit (Section 19.20) and Planned Unit Development Special Permit (Sections 12.20, 13.40 and 13.50)**

(type of development)

on premises located at: **See attached SCHEDULE A**

for which the record title stands in the name of: **the undersigned, as shown on SCHEDULE A**

whose address is: **c/o Alexandria Real Estate Equities, 700 Technology Square, Suite 302, Cambridge, Massachusetts 02139**

by deeds duly recorded in the: **Middlesex South Registry of Deeds or Registry District of the Land Court [copies enclosed herewith—see SCHEDULE A for a list recording references].**

- ARE-MA Region No. 21, LLC
- ARE-MA Region No. 32, LLC
- ARE-MA Region No. 34, LLC
- ARE-MA Region No. 37, LLC
- ARE-MA Region No. 39, LLC
- ARE-MA Region No. 40, LLC
- ARE-MA Region No. 42, LLC

By: Alexandria Real Estate Equities, L.P.,
a Delaware limited partnership, member

By: ARE-QRS Corp., a Maryland corporation
general partner

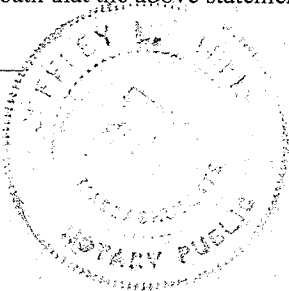
By: *Joseph T. Maguire Jr.*
 Name: *Joseph T. Maguire Jr.*
 Title: *Ch. V.P. Development and Asset Services*

Commonwealth of Massachusetts, County of Middlesex

The above named *Joseph Maguire* personally appeared before me,

This *16* of December, 2009 and made oath that the above statement is true.

Notary: *Jeffrey Idels*
 Name: *Jeffrey Idels*
 My Commission expires: *AUG. 16, 2013*



SCHEDULE A

The entire Project Site is currently owned and controlled by the entities listed below, each of which is a Delaware limited liability company wholly-owned by Alexandria Real Estate Equities, Inc. ("AREE, Inc."), and each of which owns the land opposite its name below. The entities listed below, together with their successors and assigns, are collectively referred to in the PUD and Project Review Special Permit Applications as "ARE").

<u>ARE ENTITY</u>	<u>ARE LAND</u>
ARE-MA Region No. 21, LLC	161 First Street (Parcel 16-20) [Book 45147, Page 477]
ARE-MA Region No. 32, LLC	54, 56, 57, 60, 61, 64, 65, 67, 68, 69, 71, 72, 74, 75, 79, 80, 83 and 84 Rogers Street; 87, 95, 101, 107, 80-122 and 143 Binney Street; 264, 270 and 276 Third Street; 167, 173 and 179 Second Street; 61 Rear Rogers Street; 50 Rogers/200 Second Street [Book 48428, Page 408 and Land Court Document No. 01426204]; and 242-248 Third Street [Book 53735, Page 187] (Parcel 16-25, Parcel 16-27, Parcel 16-15, Parcel 16-21, Parcel 16-22, Parcel 15-26; and Parcel 16-1)
ARE-MA Region No. 34, LLC	241 Binney Street, 126-144 Rogers Street (Parcel 28-23) [Book 48701, Page 242]
ARE-MA Region No. 37, LLC	41 Linskey Way (Parcel 15-11) [Book 49241, Page 296]
ARE-MA Region No. 39, LLC	182-198 First Street (Parcel 11-32), 200 First Street (Parcel 11-46) [Book 50214, Page 169 and land Court Document No. 01456315]
ARE-MA Region No. 40, LLC	195 First Street (Parcel 15-28) [Book 50214, Page 167]
ARE-MA Region No. 42, LLC	77 William "Doc" Linskey Way (Parcel 15-25) [Land Court Document No. 01460384]

LIST OF SPECIAL PERMITS AND VARIANCES AFFECTING THE PROJECT SITE

246 Third Street: Planning Board Special Permit #118 dated September 24, 1996 and recorded in Book 27267, Page 219, to allow for accessory parking [see related Board of Zoning Appeal variance in Book 27267, Page 223]. The referenced parking has since been relocated to land located outside of the proposed Project Site at 249 Third Street; see Board of Zoning Appeal Special Permit #9755 dated February 12, 2009 and recorded at Book 52616, Page 555.

241 Binney Street, 126-144 Rogers Street: Zoning Board of Appeal Variance #7178 dated January 25, 1996 regarding building signage.

SPECIAL PERMIT APPLICATION – SUMMARY OF APPLICATION

Project Name: BINNEY STREET PROJECT
Address of Site: 161 First Street; 54, 56, 57, 60, 61, 64, 65, 67, 68, 69, 71, 72, 74, 75, 79, 80, 83, 84 and 126-144 Rogers Street; 50 Rogers/200 Second Street; 87, 95, 101, 107, 80-122, 143 and 241 Binney Street; 242-248, 264, 270 and 276 Third Street; 167, 173 and 179 Second Street; 61 Rear Rogers Street; 182-198 and 200 First Street; 195 First Street; 41 and 77 William "Doc" Linskey Way
Applicant: ARE-MA Region No. 21, LLC, ARE-MA Region No. 32, LLC, ARE-MA Region No. 34, LLC, ARE-MA Region No. 37, LLC, ARE-MA Region No. 39, LLC, ARE-MA Region No. 40, LLC, and ARE-MA Region No. 42, LLC
Planning Board Project Number: (CDD)

Hearing Timeline (CDD)

Application Date: _____ *

Planning Board 1st Hearing Date: _____ *

(PUD Development Proposal, other special permit)

Planning Board Preliminary Determination: _____ *

(PUD Development Proposal)

Second Submission Date: _____ *

(PUD Final Development Plan)

Planning Board 2nd Hearing Date: _____ *

(PUD Final Development Plan)

Final Planning Board Action Date: _____ *

(PUD Final Development Plan, other special permit)

Deadline for Filing Decision: _____ *

**Subject to extension by mutual agreement of the Applicant and the Planning Board*

Requested Relief: (include other boards and commissions)

- Planned Unit Development Special Permit (Sections 12.20, 13.40 and 13.50)
- Project Review Special Permit (Section 19.20)

Project Description

Brief Narrative: A mixed-use, planned unit development resulting in the construction of five (5) new commercial buildings and ancillary structures, two (2) new residential buildings, and the preservation and adaptive reuse of four (4) existing buildings. The project will contain approximately 1,753,200 square feet of gross floor area, consisting of approximately 1,513,200 square feet of technical office and laboratory space, approximately 220,000 square feet of residential space and approximately 20,000 square feet of retail space, and will also contain approximately 1,932 parking spaces (1,290 net new spaces).

Project Size:

- Total GFA: _____ 1,753,200
- Non-residential uses GFA: _____ 1,533,200
- Site Area (acres and SF): _____ Approx. 491,320 square feet (Approx. 11.3 acres)
- # of Parking Spaces: _____ 1,932 (1,290 net new)

Proposed Uses:

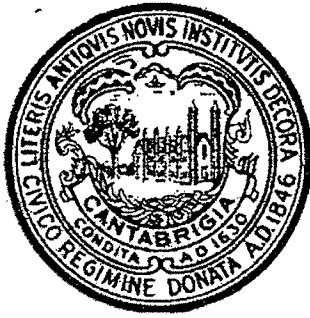
- # of Dwelling Units: _____ Approx. 220 units
- Other Uses _____ Technical Office, Laboratory, Retail, Residential
- Open Space (% of the site and SF) _____ Approx. 28% proposed (Approx. 137,569 sq. feet)

Proposed Dimensions:

- Height: _____ 65'-0" to 140'-0"
- FAR: _____ 3.0

Section 3

Notice of Preliminary Determination



CITY OF CAMBRIDGE, MASSACHUSETTS

PLANNING BOARD

CITY HALL ANNEX, 344 BROADWAY, CAMBRIDGE, MA 02139

NOTICE OF PRELIMINARY DETERMINATION FOR PLANNED UNIT DEVELOPMENT PROPOSAL

Case Number:	243
Address:	50, 75, 100, 125 and 225 Binney Street; 161 First Street; 270 Third Street
Zoning:	Industry A-1 / PUD-3A and PUD-4C
Applicant:	Alexandria Real Estate Equities, Inc. c/o Joseph Maguire 700 Technology Square Suite 302 Cambridge, MA 02139
Owner:	Alexandria Real Estate Equities, Inc.
PUD/Project Review Special Permit Application Date:	December 17, 2009
Date of Planning Board Public Hearing:	January 26, 2010
Date of Preliminary Determination:	January 26, 2010

DETERMINATION

Section 12.35.2 of the Zoning Ordinance requires that the Planning Board make a preliminary determination with regard to a PUD application within twenty-one days of the first public hearing. The Planning Board may approve the Development Proposal, approve the Development Proposal with conditions, or deny the application for a special permit.

It is the Planning Board's Determination to conditionally approve the Planned Unit Development Proposal for parcels along Binney Street, with recommendations for modification and requests for further information as set forth below. It is the Board's expectation that the additional information and further design explorations requested of the Applicant will result in a modified Final Development Plan to be reviewed by the Planning Board at the second public hearing.

FINDINGS

In making this Preliminary Determination, the Board is guided by the standards set forth in Section 12.35.3 of the Zoning Ordinance. Those standards are as follows:

- (1) *The Development Proposal conforms with the General Development Controls set forth in Section 12.50, and the development controls set forth in the specific PUD district in which the project is located.*

The Development Proposal conforms with the General Development Controls described in Section 12.50 with regard to roadways, utilities, landscaping, and environmental performance standards. The Development Proposal also conforms with the use and dimensional requirements of the PUD-3A and PUD-4C districts as described in Sections 13.40 and 13.50 of the Zoning Ordinance.

- (2) *The Development Proposal conforms with adopted policy plans or development guidelines for the portion of the city in which the PUD district is located.*

The applicable development policies and guidelines for the project area were established in the Cambridge Zoning Ordinance by the Alexandria Rezoning Petition, adopted in February, 2009. Additionally, the Eastern Cambridge Design Guidelines, adopted in 2001, provide guidance for City review of proposed development in the project area, except where those guidelines are modified by the zoning regulations for the PUD-3A and PUD-4C districts, in which case the zoning regulations supersede the design guidelines.

The Development Proposal is in conformance with the applicable plans and development guidelines established in the Zoning Ordinance and the Eastern Cambridge Design Guidelines. The Development Proposal shows only schematic building designs, and detailed building designs will be reviewed at later times, consistent with the procedures set forth in the Final Development Plan, to determine their conformance with applicable regulations.

- (3) *The Development Proposal provides benefits to the city that outweigh its adverse effects. In making this determination the Planning Board shall consider the following:*

- (a) *The quality of the site design, including integration of a variety of land uses, building types, and densities; preservation of natural features; compatibility with adjacent land uses; provision and type of open space; provision of other amenities designed to benefit the general public*

The Development Proposal seeks to transform an area dominated by surface parking and smaller-scale commercial office and laboratory uses into a mixed-use environment with larger-scale life science office and laboratory uses, 220 units of mixed-income housing, ground-level active retail uses, open space in the form of two new public parks and several smaller urban plazas, below-grade parking, and transportation infrastructure improvements to encourage travel by foot, bicycle, and public transportation.

This proposed site plan is compatible with adjacent land uses and consistent with the City's expectation that former industrial districts will redevelop to accommodate new commercial and residential uses. In its mix and design of uses, the Development Proposal supports the City's interest in promoting development that enhances the local economy, creates jobs and strengthens Cambridge's role as a worldwide center of life science research. The Development Proposal is consistent with the City's growth policies of locating new commercial development and employment opportunities in areas well served by public transportation, designing buildings to be friendly to pedestrians and bicycles, and limiting the parking supply in order to discourage automobile travel. The Development Proposal is also consistent with the City's policies of increasing the supply of housing in Cambridge for a range of incomes, expanding the supply of public open space to be used by neighborhood residents, and providing a range of retail businesses that are pedestrian-accessible, serve the local community, and contribute to an active and safe urban environment at the sidewalk level.

(b) Traffic flow and safety

The Transportation Impact Study for the Development Proposal and accompanying memorandum from Susan Clippinger, Director of Traffic, Parking and Transportation, show that estimated traffic impacts exceed some of the indicators specified in Subsection 19.25.11 of the Zoning Ordinance. The Development Proposal describes significant efforts to reduce traffic or mitigate impacts by limiting automobile parking supply, incorporating public transportation enhancements, developing facilities to support bicycle travel, fully redesigning a section of Binney Street and providing other street improvements to improve pedestrian safety and comfort, and implementing transportation demand management measures. The Board finds that these improvements will mitigate or offset the potential traffic impacts of the Development Proposal, and it is the Board's expectation that the Applicant, in consultation with the Traffic, Parking and Transportation Department, will provide a more detailed description of planned transportation improvements in the Final Development Plan.

(c) Adequacy of utilities and other public works

The Applicant has submitted the Development Proposal for review by the City's Department of Public Works, Water Department, and Electrical Department. The Board has received comments and suggestions for improvement to public utilities from the Water Department and Electrical Department, and expects that these suggestions, along with any comments from the Department of Public Works, will be addressed in the Final Development Plan. Assuming the recommended improvements are made, any adverse impacts of the proposed development on utilities or other public works will be appropriately mitigated.

(d) Impact on existing public facilities within the city

Aside from utilities and transportation infrastructure, which are discussed above, the proposed development will not adversely impact public facilities. Moreover, the

Development Proposal includes the provision of land and funding to design and develop two new public parks, along Rogers Street and First Street (approximately 2.6 acres in total), along with a building to be conveyed to the City for municipal or community uses, thus providing expanded and improved facilities to serve the public.

(e) Potential fiscal impacts

The proposed development will expand the City's tax base through the provision of additional commercial development to support the research and technology industry in Cambridge, additional housing units, and retail businesses.

RECOMMENDATIONS FOR MODIFICATION

It is the Planning Board's Determination that in the preparation of a Final Development Plan, the Applicant must address the following issues:

Traffic, Transportation and Parking

1. Provide specific information about the planned traffic and transportation mitigation measures to be implemented in response to the criteria exceeded in the Transportation Impact Study. Consider streets within the project area as well as neighborhood streets where exceedences are predicted, including Cambridge Street and Fifth Street. Mitigation measures should be developed in consultation with the Traffic, Parking and Transportation Department.
2. Provide a plan for ongoing traffic monitoring in the vicinity of the proposed project, in consultation with the Traffic, Parking and Transportation Department.
3. In assessing traffic impacts and planning mitigation measures, consider possible roadway projects that may occur in the surrounding area, such as reconstruction of the Longfellow Bridge and proposed changes to Rutherford Avenue in Somerville.
4. Describe how truck traffic is being considered in the planning for Binney Street. Consider the impacts of truck traffic on the roadway itself, as well as on pedestrians, bicyclists, ground-level retail activity, and the overall character of the project area.
5. Describe how customer parking for retail businesses will be treated. Identify locations where retail customers will be expected to park, and describe how retail customers and visitors are being considered in transportation impact mitigation plans.
6. Respond to the comments submitted by the Bicycle and Pedestrian Committees in their memorandum to the Planning Board dated January 22, 2010.

7. Consider further the proposed placement of loading dock facilities and describe their impact on the pedestrian experience and the ground-level retail environment, along with what measures might be implemented to mitigate those impacts. Especially consider loading areas adjacent to open spaces, such as the proposed vehicular access to 100 Binney Street along Linskey Way, across from the existing Kendall Square plaza and skating rink.
8. Consider further the proposed placement of the parking garage entrance to 100 Binney Street, and address possible impacts on the experience for pedestrians traveling through the corridor between 100 Binney Street and the existing building at 300 Third Street.
9. In consultation with the Traffic, Parking and Transportation Department, investigate the feasibility of providing a mid-block pedestrian crossing of Binney Street between Third and Second Streets, in order to provide a more direct pedestrian connection from the residential neighborhood to the existing Kendall Square plaza and skating rink.
10. Respond to the recommendations submitted by Susan Clippinger, the Director of Traffic, Parking and Transportation, in the memorandum dated January 19, 2010. In particular, comment on the recommendation to seek a reduction in the required supply of residential parking.

Urban Design

1. The Development Proposal shows a common Streetscape Type to be applied to both Third Street and Second Street. In the Final Development Plan, consider that these two streets may have differences in character, due to planned retail on Third Street, anticipated pedestrian traffic patterns and other considerations. Account for these factors in planning the sidewalk width and streetscape design of the two respective streets.
2. Continue to work with Community Development Department staff to further refine and develop the proposed streetscape and façade types identified in the Development Proposal.
3. Describe in further detail the intended use(s) of the through-block passageway spaces indicated in the Development Proposal. Describe the level of pedestrian and bicycle flow that will be accommodated along with features such as street furniture, trees, planted areas, bicycle parking, outdoor retail/restaurant uses, and other active or passive uses. Identify potential conflicts among users, or between users and physical impediments, and discuss how those conflicts will be addressed or mitigated.
4. Further refine the design treatment of the streetscape around the designated "Triangle Park" space. Consider how the space will be accessed by pedestrians and bicyclists. Given traffic conditions in the area, access to the space may be challenging.

5. Specifically describe the level of public access anticipated in each of the spaces designated as “Courtyard Spaces” in the Development Proposal.
6. Describe the strategy for achieving the stated goal that “The architecture of the new buildings will be varied and distinguished.”

Retail/Merchandising

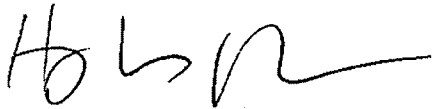
Further develop and refine the retail and merchandising plan in the Final Development Plan. Provide detailed responses to the following questions:

1. What is the strategy for leasing the 20,000 square feet of “first generation” retail space required in the Zoning Ordinance? Discuss whether the amount and placement of this retail will be sufficient to achieve the stated goal of creating “a thriving, mixed-use neighborhood, rich with daytime and evening activity.”
2. What is the long-range plan for programming the approximate 40,000 square feet of potential “second generation” retail space? How will the use of this space be determined? If it is not initially used for retail, how will this space be programmed in the interim to ensure that it could be converted into retail space over time?
3. How are the economics of retail being accounted for in the retail plan? Make note of past experiences in trying to establish ground-floor retail in the area, identify the challenges that need to be overcome for retail to be successful, and describe how those challenges will be addressed.
4. What types of retail are being considered and what users will those businesses serve? Identify the radius from which different types of businesses typically draw customers, and account for residents, employees, and visitors to the area.
5. How will the timing of the retail plan align with the overall phasing of the development plan? When in the project phasing will there be critical mass to support different types and amounts of retail?
6. What types of leasing strategies will be employed to ensure that the retail space remains filled with businesses that support the project goals? How will rents be established in order to ensure that viable, desired businesses are not faced with prohibitively high rental prices?
7. What is the strategy for incorporating local retailers into the business mix?

Other Issues

1. In the Final Development Plan, include a phasing strategy for landscape improvements, traffic mitigation, and retail marketing/leasing.
2. In the Final Development Plan, address the water and electrical/streetlight improvements recommended by the Cambridge Water Department and the City Electrician.
3. Describe the schedule by which soil testing will be conducted for Phase 1 project sites. Based on the history of the area and the predicted depth to which excavation will be required, describe any anticipated issues that may need to be addressed during construction.

For the Planning Board,



Hugh Russell, Chair

ATTACHMENTS

1. Memorandum from George Fernandes, City Electrician, dated January 15, 2010.
2. Memorandum from Susan Clippinger, Director of Traffic, Parking and Transportation, dated January 19, 2010.
3. Comments from Steven Lush, Cambridge Water Department, dated January 22, 2010.
4. Comments submitted by the Bicycle and Pedestrian Committees dated January 22, 2010.

Section 4

Responses to Requests for Additional Information

Applicant's Responses to Requests for Additional Information

Each request by the Planning Board for modifications or for additional information is addressed below in the order in which such comments appear in the Planning Board's Notice of Preliminary Determination for Planned Unit Development Proposal of January 26, 2010.

Traffic, Transportation and Parking

- 1. Provide specific information about the planned traffic and transportation mitigation measures to be implemented in response to the criteria exceeded in the Transportation Impact Study. Consider streets within the project area as well as neighborhood streets where exceedances are predicted, including Cambridge Street and Fifth Street. Mitigation measures should be developed in consultation with the Traffic, Parking and Transportation Department.*

ARE has planned numerous transportation mitigation measures to be implemented as part of enhancing multi-modal accessibility to and from the project. The foundation for our approach is to integrate a comprehensive range of TDM programs with a transit, bicycle and pedestrian friendly environment.

In addition to the Project's commitment to TDM strategies, the Project includes many physical improvements that will enhance pedestrian, bicycle and transit infrastructure and therefore contribute to a reduction in the vehicle mode split. The Mixed-Mode Transportation Hub, expanded EZ ride shuttle service and the redesign and reconstruction of a portion of Binney Street to incorporate significant bicycle accommodations and pedestrian improvements, represent substantial enhancements in this regard. In addition, intersection improvements at Binney Street and Land Boulevard will not only mitigate the morning LOS exceedance at this location but will improve pedestrian crossing accommodations through the addition of a second crosswalk across Land Boulevard.

The foundation for our approach is to reduce the amount of single occupancy vehicles commuting to the Project through the proposed TDM program and the PTDM Plan, thereby eliminating or mitigating the exceedance. The consistency of the actual amount of vehicle trips generated by the Project with the amount of vehicle trips estimated by the TIS analysis and their impact on neighborhood residential streets, will be monitored through the PTDM monitoring report and a Traffic Monitoring Plan report. The draft PTDM Plan has been submitted to the PTDM officer and is currently under review. As discussed below, the Traffic Monitoring Plan will be developed collaboratively with TP&T staff.

The exceedances identified in the TIS include a range of criteria, and therefore the planned traffic and transportation mitigation measures for the Project comprise a package of strategies and specific improvements to address them. ARE's starting point in responding to exceedances has been to investigate possible ways to eliminate or reduce the specific exceedance, and then to identify actions which, individually or together, will not only result in no substantial adverse impact on city traffic in the study area but will ultimately result in an overall enhancement to and improvement of traffic and transportation conditions.

With regard to traffic on residential streets, any reductions in project vehicle trips reduces the size of an exceedance. Traffic calming measures have been implemented on several streets in Cambridge

to address traffic speed and safety, but they do not tend to have a significant impact on reducing the overall number of project vehicle trips.

The extension of First Street to O'Brien Highway as part of the Commonwealth's Green Line Extension project will create an enhanced roadway connection that is expected to shift many project trips from Third and Second Streets onto First Street. It is important to note that although the Project's TIS analysis does not assume the construction of the extension of First Street to O'Brien Highway, it is clear that this connection will ultimately reduce project trips on these residential streets.

Since the amount of traffic on both Second Street and Fifth Street is currently low, the number of Project trips needed to cause an exceedance on those residential streets under the Planning Board's guidelines is also relatively low. For the reasons set forth above, many of these project trips on Second Street, in particular, can reasonably be expected to shift to First Street in the future. ARE recognizes that it will be important to monitor the impacts of Project traffic on these residential streets through its Traffic Monitoring Plan. If through the Traffic Monitoring Plan ARE and TP&T determine that Project traffic impacts are more significant than anticipated in the TIS, appropriate mitigation measures will be investigated at that time.

The traffic on residential streets criteria exceedance on Cambridge Street is limited to a single section between Sixth Street and Sciarappa Street. As a practical matter, this section of Cambridge Street is primarily a commercial/mixed-use arterial street rather than a residential street. Reducing Project vehicle trips through TDM programs, enhanced transit services, and improved bicycle and pedestrian accommodations may reduce trips on this section of Cambridge Street.

Turning to criteria specifically related to pedestrians and bicycles, of 53 crosswalk locations, nine (9) crosswalks in the morning and ten (10) crosswalks in the evening have PLOS exceedances. However, at the five (5) signalized intersections where this occurs, the exceedance arises only because those locations already experience an unsatisfactory PLOS E in the existing condition, and would therefore need to be improved to a PLOS D in order to not be considered an exceedance.

Traffic signal phasing improvements being planned as mitigation for the Project at two (2) of these locations will seek to improve the PLOS. The intersection improvements being planned for the intersection of Binney Street and First Street will aim to improve the PLOS in that location. The lane geometry and traffic signal phasing improvements being planned for the intersection of Binney Street and Land Boulevard will also seek to improve the PLOS there by changing the crossing from an exclusive pedestrian phase to concurrent pedestrian phasing. The addition of a second pedestrian crossing of Land Boulevard at Binney Street will also improve the pedestrian cross experience at this location.

Crosswalks at two (2) unsignalized intersections also experience exceedances, and the shortening of such crosswalks can sometimes eliminate the exceedance. However, investigations in the field indicate that shortening the crosswalks at these two locations is not feasible. It should also be noted that the required analysis methodology upon which the criteria are evaluated is very conservative, since it does not take into consideration the fact that, in practice, vehicles frequently yield to pedestrians in the crosswalk, as required by Massachusetts State law. Finally, the three (3) identified exceedances related to the absence of sidewalks will be eliminated by the provision of sidewalks in those areas as part of the Project.

In addition to the foregoing measures, the Project's site plan incorporates numerous enhancements such as curb extensions in the Project area. ARE will continue collaboratively to work with TP&T, CDD, Public Works and other involved City departments to finalize the streetscape and engineering design of the sidewalks and roadways abutting the Project parcels.

Taken separately, none of the proposed buildings exceeds the daily vehicle trip generation threshold of Planning Board Criteria 1. The only building that exceeds the trip generation threshold criteria during the peak hours is 50 Binney Street, which exceeds the threshold by 37 vehicle trips in the

morning peak hour and 2 vehicle trips in the evening peak hour. All of the other buildings taken separately generate less vehicle trips than the Criteria 1 threshold for daily, morning peak hour and evening peak hour.

As a result of the foregoing, ARE believes that the Project and its associated traffic mitigation commitments represent an appropriate response to each of the identified TIS exceedances. In particular, the proposed mitigation package has been designed to help ensure that the Project has no substantial adverse impact on City traffic within the TIS study area, and that it ultimately provides substantial overall transportation improvements for the neighborhood and the wider study area. To this end, the Project's design and construction in accordance with this Final Development Plan are expected to provide traffic flow and safety benefits to the City which substantially outweigh the Project's adverse effects.

2. *Provide a plan for ongoing traffic monitoring in the vicinity of the proposed project, in consultation with the Traffic, Parking and Transportation Department.*

ARE will continue to work collaboratively with TP&T to develop a mutually acceptable Traffic Monitoring Plan to be implemented in connection with the Project.

3. *In determining traffic impacts and planning mitigation measures, consider possible roadway projects that may occur in the surrounding area, such as reconstruction of the Longfellow Bridge and proposed changes to Rutherford Avenue in Somerville.*

Longfellow Bridge Rehabilitation Project

The only major roadway projects known at this time that could be reasonably anticipated to impact Project traffic are the Longfellow Bridge Rehabilitation Project and the Sullivan Square Revitalization Project. Each is discussed below.

The Massachusetts Highway Department and the Massachusetts Department of Conservation and Recreation are collaborating in the rehabilitation of the Longfellow Bridge, which spans the Charles River between Boston and Cambridge. The federally-funded project is a part of the Accelerated Bridge Program, which includes approximately three billion dollars in repairs over an 8-year period. The main goal of the rehabilitation project is to repair the deteriorated parts of the bridge as well as improve the ramped approaches to keep the bridge consistent with its historical character.

Preliminary design was completed in May, 2009. The final design is planned to be completed in July, 2010 with construction advertised in the fall of 2010. Construction is scheduled to begin in 2011 and be completed by 2014.

The Binney Street Project tenants who would be principally affected by this bridge rehabilitation project are those who will be traveling from downtown Boston to the Binney Street Project site. However, these tenants will not be affected on their return trip, as the eastbound travel lanes will remain open in the construction scenarios currently being considered by the Commonwealth. If the westbound lanes are removed, it is assumed that the majority of these trips will travel over the Craigie Dam Bridge. Only five project trips during the initial construction phase of the Binney Street Project will be directly affected by this detour to O'Brien Highway during the morning peak hour (peak direction). Transit trips utilizing the Red Line will not be affected during the peak hours, as discussed below.

There are two options for vehicular, transit, pedestrian and bicycle traffic during the bridge rehabilitation construction. The first option, which reduces construction by 12 months overall, would remove all westbound traffic (Cambridge bound) from the Longfellow Bridge detouring them to the

Craigie Dam Bridge. Under this scenario, there would be three phases of work. Phase 1 would involve closing the eastbound lanes and moving all eastbound traffic onto the westbound lanes, including a shift in the MBTA red line subway. Phase 2 would involve moving all eastbound traffic back to the eastbound side while the westbound lanes and outbound Red Line tracks are rehabilitated. Finally, Phase 3 would involve reopening the westbound travel lanes to westbound traffic, recommencing the Red Line's operation on the new tracks and reopening the eastbound lanes.

The second option maintains all transportation functions by portioning the work to limited areas during four phases. Under this scenario, in Phase 1, contractors would be working below the eastbound slow lane and sidewalk and the westbound fast lane. In Phase 2, work would be shifted to below the eastbound fast lane and westbound slow lane and sidewalk. In Phase 3, the deck below the inbound Red Line would be demolished and rebuilt at site-specific locations during weeknights and weekend time periods to minimize Red Line shutdowns. In Phase 4, the deck below the outbound Red Line would be demolished and rebuilt.

ARE recognizes that many existing vehicles using the Longfellow Bridge may shift to use the Craigie Dam Bridge along O'Brien Highway, which is highly utilized during the peak hours. This will be a temporary regional traffic situation that ARE will use as an opportunity to encourage alternatives to driving alone to the Project site. ARE will also take the reconstruction of the Longfellow Bridge into account when planning the routing of construction trucks serving the Project site.

Sullivan Square Revitalization Project

Though still in preliminary design, the Sullivan Square Revitalization Project is being designed to create a neighborhood atmosphere for Boston and Somerville residents and remove the "highway" dimensions of existing Rutherford Avenue. No timetable for construction of this project has been determined by the City of Boston, nor has a funding source been identified. The City of Boston is currently discussing two design options with area residents to determine which is most favorable. The two options currently being analyzed are (1) a surface roadway, eliminating the existing underpass, or (2) an underpass with narrowed roadways over and/or through the neighborhoods. A traffic impact analysis of this proposed roadway project on regional traffic is not available.

The Binney Street Project trips that utilize Rutherford Avenue as a bypass to or from Route 93 would be affected by this revitalization project. These trips could respond to the contemplated roadway changes in several ways, including (A) connecting with Route 93 from Route 38 in East Somerville and traveling down O'Brien Highway to the Binney Street Project site, (B) connecting with Route 93 at Storrow Drive via the O'Brien Highway Bridge over the Charles River, or (C) maintaining their existing route through Sullivan Square onto Rutherford Avenue. Trips that travel on Rutherford Avenue to continue through Route 99 to Melrose, Malden and Everett would continue to use this route due to the lack of roadway options to and from these areas. Given that no timeline has been established for the construction or completion of this revitalization project, it is not possible to determine the number of trips affected by the Sullivan Square project. Approximately twenty peak hour vehicle trips are anticipated to travel to the Project site to and from the Everett, Malden and Melrose areas, for which trips it will be necessary to traverse Sullivan Square in order to access Route 99.

4. *Describe how truck traffic is being considered in the planning for Binney Street. Consider the impacts of truck traffic on the roadway itself, as well as on pedestrians, bicyclists, ground-level retail activity, and the overall character of the project area.*

As the Binney Street corridor between First Street and Third Street is redesigned, it is important to acknowledge the level of truck traffic and the impacts on the roadway, pedestrians, bicyclists, retail and the character of the roadway. Binney Street is a designated truck route, 24 hours a day.

Automatic Traffic Recorder (ATR) Counts were conducted along Binney Street east of Sixth Street and west of Second Street on Tuesday, May 5, 2009 and Wednesday, May 6, 2009. Approximately eleven percent (11%) of the traffic in both directions consisted of truck traffic over the course of the day. During the morning peak hour, approximately nineteen percent (19%) of the traffic in the eastbound direction and twelve percent (12%) of the traffic in the westbound direction were trucks. During the evening peak hour, approximately two percent (2%) of the traffic in the eastbound and westbound direction were trucks.

In order to accommodate this level of truck traffic in the redesign of Binney Street, travel lane widths have been set at eleven feet (11') per the direction of the City. Additionally, a two-to-three foot buffer between the travel lane and the cycle track is planned as part of the conceptual design in locations where there is no on-street parking. Areas in which on-street parking is present provide the cyclists with a wider buffer between themselves and moving traffic. Pedestrians and retail spaces are provided a large buffer consisting of the cycle track and a planting zone of six feet (6'), totaling twenty-one and a half feet (21.5') when on-street parking is present and fourteen feet (14') where there is no on-street parking. As the design of Binney Street progresses, truck turn analyses will be conducted to ensure that corner radii are adequately sized for truck movements.

5. *Describe how customer parking for retail businesses will be treated. Identify locations where retail customers will be expected to park, and describe how retail customers and visitors are being considered in transportation impact mitigation plans.*

It is expected that retail customers of the Project will travel to and from the site by various modes of transportation, including transit, walking, bicycling and driving. It is anticipated that many of the tenants of the commercial and residential buildings will utilize the ground floor retail and will make internal trips. In addition to the internal retail trips, there will be destination and pass-by retail trips that will be accommodated by on-street parking along Binney Street, Rogers Street, First Street, Second Street and Third Street. The current Binney Street redesign conceptual plan shows twenty-eight (28) parking spaces along Binney Street, though it may be possible and desirable from a retail perspective to increase this number by a few additional spaces as the Project progresses. Bicycle trips to the retail nodes will be accommodated with surface bicycle parking adjacent to the buildings. During the interim construction period, prior to the completion of the Binney Street traffic improvements and the construction of the on-street parking contemplated in connection therewith, it is anticipated that retail customers will be provided temporary surface parking options proximate to the retail locations in order to support the viability of the retail components of the new commercial buildings. As noted in more detail below, ARE is coordinating with TP&T to determine mutually acceptable parameters for such interim retail parking arrangements.

6. *Respond to the comments submitted by the Bicycle and Pedestrian Committee in its memorandum to the Planning Board dated January 22, 2010.*

Each of the comments raised in the January 22, 2010 memorandum from the Bicycle and Pedestrian Project Review Committee is addressed below in a single response. Topics are addressed in the order in which they appear in the Committee's memorandum.

On Second Street, the existing building at 41 Linskey Way and its addition will have a wide sidewalk to accommodate the pedestrian needs of the Mixed-Mode Transportation Hub. Elsewhere on Second Street, sidewalks will be wide enough to accommodate the range of pedestrian amenities described in the PUD Development Proposal. See below (Urban Design #1) for a more detailed discussion concerning the sidewalk width on Third Street.

Shadow studies show minimal shadow impacts on the Rogers Street Park and the plaza that faces it on the block containing 75 and 125 Binney Street, other than during winter months. This is due in large part to the fact that the plaza's location and size have been designed to maximize daylight on the park area and create a through-block space between the Rogers Street Park and Binney Street. The plaza, bound on three sides by buildings, will be largely protected from wind and, during summer months, is expected to provide a respite from the sun and heat. ARE does not anticipate that the design of the Project's through-block connectors will exacerbate existing wind conditions. Nonetheless, ARE will have the opportunity to examine wind conditions again, specifically in the context of the pedestrian environment, in connection with the final design of the buildings to be located at 75 and 125 Binney Street. As the design of the buildings and landscape planting develops, attention will be paid not only to reducing wind issues around the buildings, but also to providing a variety of sunny and shaded microclimates for user comfort in different seasons and at different times of the day.

Consistent with the comments of Bicycle and Pedestrian Committee, the Building entrances are currently designed to be oriented towards intersections. Through-block connectors adjacent to 41 Linskey Way and 270 Third Street are also intended to lead to intersections. The existing connector to the east of 300 Third Street and the proposed connector between 75 and 125 Binney Street are located mid-block, and their use as quiet spaces for resting, eating and reading will be emphasized. The topic of pedestrian mid-block crossings is discussed in more detail in ARE's response to Question 9 below.

The Project's design is responsive to the Committee's recommendation that any improvements to the Land Boulevard/Binney Street intersection be designed to make pedestrian crossings there more convenient. A second crosswalk is proposed across Land Boulevard on the south side of the intersection, in order to provide a more convenient connection to the Charles River Path. The Project also proposes intersection timing and signal phasing modifications as well as restriping of the northbound approach at this intersection as part of the mitigation along Binney Street. In addition, the Land Boulevard approach would contain two double left-turn lanes instead of the single existing left-turn lane in existence today, and signal phasing would be changed to provide concurrent pedestrian crossings, rather than an exclusive pedestrian phase. These modifications are anticipated to result in shorter delays for pedestrians to cross the intersection than those that exist today with the exclusive pedestrian phase. ARE will coordinate the approval of any modifications to this intersection with TP&T and the Department of Conservation and Recreation ("DCR"), as discussed in the response to Question 10 below.

It is anticipated that the Project's exterior through-block connectors will remain accessible to the public, and that interior connectors through building lobbies will be accessible to the public during normal business hours.

The Project team has been consulting with the City to develop a preferred concept for the redesign of Binney Street between First Street and Third Street, including travel lanes, buffer zones, on-street parking, a cycle track, planting strips, and sidewalks and the locations of ground floor retail space. Cyclists will be provided with an off-street cycle track located between the planting area and either the travel way or adjacent on-street parking. This proposed cycle track between First Street and Third Street will connect to a proposed cycle track along Binney Street to the west of Third Street. The latter cycle track is being planned, designed and funded by the City independent of the Binney Street Project. Pedestrians will be provided with wide sidewalks, having an approximate minimum width of eight feet (8') and with a planting area of approximately six feet (6'), which will buffer pedestrians from the cyclists and traffic along Binney Street. The ARE team feels strongly that maintaining the planting area to separate pedestrians from cyclists will reduce conflicts and is particularly important in the planned retail areas. The updated PUD Graphic Materials submitted together with this Final Development Plan illustrate the preferred Binney Street redesign concept, which plan has emerged as the result of significant collaboration between ARE and appropriate City departments.

The Transportation Impact Study provided a proposed bicycle parking supply of 281 spaces, which is the minimum allocation based on the City's zoning provisions governing bicycle parking. Since the TIS was submitted, the Project team has added a significant amount of additional bicycle parking to the Project as the design concept has advanced. Current plans for the Project now call for a total of 435 bicycle parking spaces in a combination of indoor bicycle racks near the Mixed-Mode Transportation Hub and outdoors adjacent to building entrances and retail areas. Bicycle parking will be provided at all building sites, and outdoor racks will be installed in appropriate locations, such as building entries, retail locations and through-block connectors.

The Project's through-block connectors and passages are designed for pedestrian traffic and for bicyclists walking, not riding, their bicycles. To that end, these areas will be designed in an effort to discourage mounted bicyclists from traveling through them.

- 7. Consider the proposed placement of loading dock facilities and describe their impact on the pedestrian experience and the ground-level retail environment, along with what measures might be implemented to mitigate those impacts. Especially consider loading areas adjacent to open spaces, such as the proposed vehicular access to 100 Binney Street along Linskey Way, across from the existing Kendall Square plaza and skating rink.*

Loading dock areas are used infrequently on weekdays to receive goods from large trucks and trash removal. More common are deliveries made by small trucks or vans. The large loading dock doors will stay closed except for receiving times, will be of a quality and scale in keeping with a pedestrian friendly streetscape, and are located a sufficient distance from retail areas as to avoid creating an adverse effect.

Of the three surrounding streets, Linskey Way is the most appropriate for service. For this reason, ARE is proposing that both loading and garage access to 100 Binney Street be provided off Linskey Way. ARE has also sought to avoid placing both loading and garage doors facing the Kendall Square Plaza, instead providing space there for possible future active uses at this location. This presented two alternatives for the placement of the loading area and garage entrance: (1) Placing the loading area opposite the northwest corner of 650 East Kendall and the garage entry opposite the Kendall Square Plaza; or (2) Placing both loading and garage entry opposite the western edge of the north façade of 650 East Kendall. In the latter, a blank wall, that of the garage entry ramp, would face the through-block connector—a result ARE considered undesirable. Instead, in the former alternative, this area could contain an active use at some point in the life of the building, rather than a blank wall, and enliven the connector. Additionally, this approach allows three-quarters of the ground floor of the building facing the Kendall Square Plaza to be designed to accommodate potential future active uses.

- 8. Consider the proposed placement of the parking garage entrance to 100 Binney Street, and address possible impacts on the experience for pedestrians traveling through the corridor between 100 Binney Street and the existing building at 300 Third Street.*

In response to the comments and concerns of the Planning Board relative to location of the parking garage entrance for 100 Binney Street, ARE has redesigned the building to relocate the garage entrance. Specifically, and as noted above, the garage entrance has been moved to Linskey Way from its previously proposed location in the corridor between the building and the existing building at 300 Third Street. The redesigned garage entrance creates several positive design opportunities for 100 Binney Street and the Project, including the creation of a non-vehicular through-block connector between the building and 300 Third Street. These design enhancements specifically respond to the Planning Board's inquiries and concerns about the initially proposed access area, and are more particularly described in the materials ARE is simultaneously submitting to the Planning Board in connection with its request for Design Approval of the 100 Binney Street building. The design

showing the building's garage access off Linskey Way is reflected in the revised PUD Graphic Materials submitted together with and as part of this Final Development Plan.

9. *In consultation with the Traffic, Parking and Transportation Department, investigate the feasibility of providing a mid-block pedestrian crossing of Binney Street between Third and Second Streets, in order to provide a more direct pedestrian connection from the residential neighborhood to the existing Kendall Square plaza and skating rink.*

In accordance with the Cambridge Pedestrian Plan - 2000, mid-block crossings should be consistent with MUTCD standards, should only be used when pedestrian volumes are high, and should not be less than 300 feet from the nearest intersection. The distance between the intersections of Second Street and Third Street on Binney Street is approximately 620 feet, which would mean that a mid-block crosswalk in this location would be approximately 310 feet from Second Street and 310 feet from Third Street, which is at the limits of the applicable guidelines. On-street parking must be 20 feet from the edge of each side of the crosswalk as indicated in the Cambridge Pedestrian Plan – 2000. Where curb-extensions are not present, a minimum of 60 feet is recommended to provide adequate visibility.

The potential location of the mid-block crossing would be in the same vicinity of the block where the left turning lanes onto Third Street southbound and onto Second Street northbound begin. These are lane transition areas, making a pedestrian crossing at this location dangerous. TP&T has stated that it does not recommend a mid-block crossing at this location due to safety reasons.

A mid-block crossing on Binney Street between Third Street and Second Street would also further eliminate a portion of the proposed on-street parking that is designed to support the retail land uses of the Project.

TP&T does not want to promote crossing activity mid-block, preferring instead to channelize pedestrians to crosswalks provided at the signalized intersections of Binney Street/Second Street and Binney Street/Third Street. Sidewalks along Second Street and Third Street will be widened to attract pedestrians to these corners and encourage them to cross Binney Street at the intersections. Improvements will be made at these corners to provide prominent pedestrian crossing locations. The building footprint of 270 Third Street has been moved back from its initially proposed location in order to provide a wider space for pedestrians along Third Street to promote pedestrian activity in this direction. In summary, the Project does not propose a mid-block crossing at this location, which is consistent with TP&T's desire.

10. *Respond to the recommendations submitted by Susan Clippinger, the Director of Traffic, Parking and Transportation, in the memorandum dated January 19, 2010. In particular, comment on the recommendation to seek a reduction in the required supply of residential parking.*

Each of the comments raised in the January 19, 2010 memorandum (the "Traffic Memorandum") from Susan Clippinger is addressed below in the order in which they appear in the memorandum. Responses correspond to the headings provided in the Traffic Memorandum.

Athenaeum Parking - *The information in the TIS is not sufficient to explain the parking need at the Athenaeum and we are having ongoing discussions with Alexandria.*

As contemplated by the Traffic Memorandum, ARE has had ongoing detailed discussions with TP&T to analyze the present and anticipated future parking requirements of the Athenaeum Building. The result of these discussions and analysis is that both ARE and TP&T have agreed that the proper number of parking spaces allocable to the Athenaeum Building in the 100 Binney Street Garage is 302 spaces. This represents a reduction of 30 spaces from the 332 spaces proposed for the

Athenaeum Building in ARE's initial PUD Development Proposal and Article 19 Project Review Special Permit application.

Accordingly, the initial overall proposed parking count for the Project of 1,932 parking spaces (1,290 net new) as reflected in ARE's prior submittals to the Planning Board shall be deemed reduced by 30 spaces to 1,902 parking spaces (1,260 net new).

Residential Parking – *We believe the parking for the residential units would be adequate at 0.8/unit based on surveys done for residential buildings close to transit. A reduction of residential parking from the current 1.0/unit to 0.8/unit would reduce the residential parking need by 44 spaces from 220 to 176.*

The Project's proposal of one (1) parking space per residential dwelling unit is consistent with and required by the zoning provisions applicable to the PUD parcel. Though the zoning applicable to the Project provides that the Planning Board may allow a reduction in this required parking ratio in response to a request by ARE for zoning relief in accordance with Section 6.35 of the Cambridge Zoning Ordinance, ARE has not made any such request.

As development progresses, ARE will work collaboratively with TP&T to analyze the residential parking demand at the time the Project's residential buildings are to be constructed, and if the results of the analysis support the consideration of a residential parking ratio of less than 1 space per dwelling unit, ARE will consider seeking a Special Permit authorizing such reduction, as provided for in said Section 6.35 of the Zoning Ordinance.

Shared residential/employee – *This project has an opportunity for shared parking between residents and employees that have peak parking demands at different times of the day. We have done surveys in the area that indicate that conservatively 40 percent of the residents use their car during the business day and those spaces could be available for project site employees commuting by car. Therefore the parking supply to meet the residential needs which is in a new garage serving both residents and employees can be further reduced by 70 spaces.*

TP&T has proposed shared parking between residential and R&D land uses by reducing the number of spaces needed for residential land use by 40 percent. Based on the proposed 220 space residential parking supply, this would result in a reduction of 88 spaces. The resulting parking supply, taking the 40 percent reduction into account, would be 132 spaces.

ARE is engaged in continuing discussions with TP&T in an effort to determine what, if any, would be an appropriate amount of shared parking for the Project. As development progresses, ARE will work collaboratively with TP&T to analyze the merits and feasibility of shared residential/employee parking at the Project, and if the results of the analysis support the consideration of some form of shared residential/employee parking program, ARE will work with TP&T to develop and implement an appropriate strategy relative thereto.

Phasing – *As the project is built-out, parking supply should be provided at parking ratios no greater than the final approved ratios for both existing and new buildings.*

Four garages will be constructed as part of the Project. The location of the garages and the approximate number of parking spaces to be contained therein is set forth below.

1. 100 Binney Street -- 665 spaces
2. 50 Binney Street -- 442 spaces
3. 75 Binney Street, 125 Binney Street and 270 Third Street (currently contemplated as a single garage, but may be constructed in phases or as separate garages) -- 518 spaces
4. 225 Binney Street -- 277 spaces

As the actual number of spaces are constructed in each garage, they will be counted against the total number of spaces authorized.

Given the nature of the phased development of the Project, the fact that parking garages will be constructed to serve more than one building within the PUD Parcel (such as the garage to be constructed beneath the buildings to be located at 75 and 125 Binney Street and 270 Third Street), and the fact that tenants and occupants of particular buildings may be assigned to park in any of the Project's garages at various times, it may be necessary at times to construct portions of the overall parking supply in advance of the construction of the buildings which are to be served by that supply. To address the concern raised in TP&T's traffic memorandum on this issue, to the extent that there are periods of time during which any parking supply is constructed in excess of the parking ratios provided in the zoning ordinance, all such excess parking shall be sectioned off and made unavailable for use until such parking ratios are met

Binney Street – *City departments have been working with the Alexandria team on changes to Binney that will add on-street parking, make the project an active retail/urban place and improve and enhance the pedestrian and bicycle environment. That work is not yet complete but the substantial progress has been made and on-street parking will be created on 3 of the 4 block faces along Binney Street. We will be continuing to resolve these issues so that the Board will be able to evaluate the project design in relation to these proposed improvements.*

As contemplated by the TP&T traffic memorandum, ARE has had ongoing detailed discussions with TP&T and appropriate City departments to further develop the conceptual design of Binney Street between First and Third Streets. The results of this analysis and cooperative effort is the emergence of the mutually approved conceptual design for Binney Street reflected in the Revised PUD Graphic Materials submitted together with and as part of this Final Development Plan.

All other public streets in the project – *As building designs are finalized and building permits are prepared the City will determine with the Alexandria team what curb line changes or parking regulatory changes will occur on the public rights of way to support the development.*

The Project team will work with the City to determine curb line changes and on-street parking layouts as the team moves forward with building designs and requests for individual building permits.

New multimodal transportation node - *The new multimodal transportation node on Second Street, proposed by Alexandria is a great component of the project. A new multimodal transportation node will enliven the pedestrian environment and support bicycling and transit. It could include a sheltered bus waiting area, bicycle parking, transportation information, and other amenities that enhance the transportation services.*

The proposed Project will contain the Mixed-Mode Transportation Hub within the 100 Binney Street and 41 Linskey Way site. The transportation hub will provide a sheltered bus stop waiting area, shuttle bus stop on Second Street, car-share program and bicycle facilities proximate to below grade parking.

Traffic signal improvements – *The project has LOS exceedances at Binney Street and Third Street. This combined with the changes to Binney make coordination of the signals along Binney and communication back to a controller center important. We believe Alexandria should upgrade traffic signal and communication equipment such as new controllers, cabinets, signal heads, loops and count stations at Galileo Galilei/Broadway, Third Street/Binney Street and Binney Street/First Street and traffic signal communications such as fiber optic cable connection to the Police Headquarters. We will be working with Alexandria on the details of these improvements.*

ARE will, as part of the Project, upgrade traffic signal and communication equipment such as new controllers, cabinets, signal heads, loops at the Third Street/Binney Street intersection and at the

Binney Street/First Street intersection, and traffic communications such as fiber optic cable connection to the Police Headquarters.

ARE has had ongoing discussions with TP&T with respect to the Project's impact on the intersection of Broadway and Galileo Way. The result of these discussions and analysis is that both ARE and TP&T are in agreement that the Project does not significantly impact the intersection of Broadway and Galileo Way, and accordingly TP&T has elected to remove this intersection from the requested list of traffic signal improvements.

Land Boulevard/Binney Street Double Left-Turn – *We believe Alexandria should create 25% design for a double left turn, pavement marking and signal improvements at Land Boulevard/Binney Street intersection and work with us to obtain DCR (or the agency who has ownership of the road if different) approval for the design. If approved, Alexandria would get the change implemented. This improvement will mitigate AM peak period queue exceedance at this intersection.*

ARE will work with TP&T to prepare and submit 25% design drawings to DCR for the proposed improvements at the Binney Street/Land Boulevard intersection. ARE will work with TP&T and DCR to establish an appropriate schedule for the submittal of the design drawings and the implementation of the improvements contemplated thereby.

Bicycle Parking – *It appears that the zoning minimum for bicycle parking is less than what the analysis in the TIS would require. The project proposes 281 bike spaces, which will meet zoning minimum, but the TIS indicated that the project will generate 750 bicycle trips which could require a minimum of 375 bike spaces. This number could also be conservative as use of bicycling grows. We think 375-400 bicycle spaces may be needed including both short and long-term spaces, especially since there is evidence of the increasing reliance on bicycling as a mode of transportation in Cambridge, with double the number of people bicycling in the past few years, and 65% of households in one neighborhood having one or more bicycles. Some of this bicycle parking could be installed on the public sidewalks where appropriate.*

As noted above, the Transportation Impact Study provided a proposed bicycle parking supply of 281 spaces, which is the minimum allocation based on the City's zoning provisions governing bicycle parking. Since the TIS was submitted, the Project team has added a significant amount of additional bicycle parking to the Project as the design concept has advanced. Current plans for the Project now call for a total of 435 bicycle parking spaces in a combination of bicycle racks below grade in garages, in the location of the Mixed-Mode Transportation Hub and outdoors adjacent to building entrances and retail areas. Bicycle parking will be provided at all building sites, and outdoor racks will be installed in appropriate locations, such as building entries, retail locations and through-block connectors.

Bicycle and Pedestrian Counts – *Because the pedestrian and bicycle counts in the TIS were conducted on split days and during rain for some counts, the counts should be retaken in April 2010.*

ARE has agreed to redo these pedestrian and bicycle counts in April of 2010 to provide the City with the requested updated data. ARE will coordinate the timing of these counts with TP&T to ensure that the data requested is addressed in the counts provided to the City.

Neighborhood Traffic Monitoring Program – *We think Alexandria should design and implement an annual traffic monitoring program similar to Cambridge Research Park's (CRP) neighborhood traffic monitoring program. The program would measure the accuracy of estimated project traffic assignments in the TIS. The two monitoring programs can be combined into a single shared program. If project trips into the East Cambridge residential neighborhood west of Third Street and north of Binney Street are greater than what was assumed in the TIS, Alexandria should implement neighborhood protection measures. We will work with Alexandria on the scope of the program.*

ARE will continue to work collaboratively with TP&T to develop a mutually acceptable Traffic Monitoring Plan to be implemented in connection with the Project.

Urban Design

1. *The Development Proposal shows a common Streetscape Type to be applied to both Third Street and Second Street. In the Final Development Plan, consider that these two streets may have differences in character, due to planned retail on Third Street, anticipated pedestrian traffic patterns and other considerations. Account for these factors in planning the sidewalk width and streetscape design of the two respective streets.*

ARE concurs with this comment, in particular that the streetscape for Third Street should be planned with careful consideration for retail. To better address this issue, the Project team has developed an additional streetscape type, Streetscape Type 2A—Local Streets: Third Street, which was not included among the streetscape types listed in the PUD Initial Development Proposal for the Project. Streetscape Type 2A addresses not only the retail issue, but also other considerations related to the differences in character between Third and Second Streets, including on-street parking, a zone for street trees and a minimum sidewalk width of eight feet (8') beyond the street tree zone. To accommodate these streetscape elements, the anticipated residential building will incorporate a setback of four feet (4') for the first two stories, measured from the street line along Third Street. Floors or bays above the first two floors will be allowed to project up to the street line (i.e., property line). The characteristics of this additional Streetscape Type 2A are illustrated in Figures 16A and 17A of the revised PUD Graphic Materials submitted in connection with and as part of this Final Development Plan.

2. *Continue to work with Community Development Department staff to further refine and develop the proposed streetscape and façade types identified in the Development Proposal.*

As noted above, in response to comments from the Planning Board and CDD, ARE has refined and further developed its approach to Streetscape Type 2, specifically by creating the sub-category, Streetscape Type 2A—Local Streets: Third Street, to address the distinctive Third Street retail character. In addition to this refinement, there will be ample and meaningful opportunity during the Design Approval processes for each of the buildings to be constructed in the PUD parcel, for CDD and ARE to refine and further develop specific strategies on issues such as the treatment of building façades within the context of the Design Approach presented in the Final Development Plan. ARE anticipates and welcomes that collaborative dialogue.

3. *Describe the intended use(s) of the through-block passageway spaces indicated in the Development Proposal. Describe the level of pedestrian and bicycle flow that will be accommodated along with features such as street furniture, trees, planted areas, bicycle parking, outdoor retail/restaurant uses, and other active or passive uses. Identify potential conflicts among users, or between users and physical impediments, and discuss how those conflicts will be addressed or mitigated.*

The through-block passageways are designed to increase north-south connectivity of the pedestrian realm through the Project, thereby creating a contiguous series of public open spaces connecting the East Cambridge neighborhood and the Rogers Street Park to the north and the public spaces of

Cambridge Research Park and the Broad Canal to the south. These connectors are designed for pedestrians only, and their design will encourage cyclists to walk their bikes when using them. An organic network of paths, small plaza spaces, and rich plantings would create a relaxed pedestrian environment, different from but complementary to the sidewalks, where pausing, sitting and having small gatherings would be encouraged by the use of benches, lighting, and other site furniture. Activity from the nearby retail and restaurant uses will be encouraged in the design to spill out into the connector spaces, enlivening the pedestrian realm around the new buildings.

4. *Further refine the design treatment of the streetscape around the designated "Triangle Park" space. Consider how the space will be accessed by pedestrians and bicyclists. Given traffic conditions in the area, access to the space may be challenging.*

The Triangle Park and sidewalks immediately around it will be designed by the City, and ARE will coordinate with that effort in an effort to maximize the Project's connectivity to the park. Bicycle access will be from the bike lane on the south side of Binney Street between First Street and Land Boulevard. A new active gathering space on the east side of the Building to be located at 50 Binney Street will face the Triangle Park, and will present a wide landscape area connected to the sidewalk, new street trees and other plantings, and the ability to accommodate retail or restaurant uses outdoors. Two existing crosswalks across First Street on the south sides of Binney Street and Linskey Way, as well as a proposed (potentially raised) crosswalk on the north side of Linskey Way, will provide strong connections to the Triangle Park and help calm the traffic on First Street. Additionally, new on-street parking on the west side of First Street will help protect the public realm from traffic and will encourage retail activity at 50 Binney.

5. *Specifically describe the level of public access anticipated in each of the spaces designated as "Courtyard Spaces" in the Development Proposal.*

Two "Courtyard Spaces" are shown on Figure 29 of the Graphic Materials. The first is the courtyard space behind the preserved building at 161 First Street, which may be visible from the street but is not intended for public use. Instead, it is intended for the secure appurtenant use by the residents of the residential building which will surround that space. The second courtyard space shown in the Development Proposal is the space near the corner of Binney Street and Fifth Street, which is anticipated to be a publicly accessible space intimate in scale.

6. *Describe the strategy for achieving the stated goal that "The architecture of the new buildings will be varied and distinguished."*

The Design Approach for the Binney Street Project is a framework for setting broad objectives and opportunities that will support high-quality building design. The submission materials for the design of 100 Binney Street are intended to demonstrate how the urban design goals outlined in the Design Approach can create the foundation for distinctive and original architecture. During the course of the build-out, each individual building's architect will be expected to continually expand the palette of material and architectural expression.

Retail/Merchandising

Further develop and refine the retail and merchandising plan in the Final Development Plan.

The zoning applicable to the Project, specifically Section 13.59.34 of the Ordinance, requires that ARE prepare, submit and implement a Marketing and Merchandising Plan in order to support Active Uses in the development of the Project. Given that the Marketing and Merchandising Plan is the vehicle through which these retail and Active Use strategies will be implemented, each of the Planning Board's comments listed below is addressed in and incorporated into the revised Marketing and Merchandising Plan included as Section 5 of this Final Development Plan. This revised Marketing and Merchandising Plan replaces and supersedes the original Marketing and Merchandising Plan initially submitted to the Planning Board on December 17, 2009 as Attachment C to the PUD Development Proposal. For ease of reference, we have provided cross-references to the section(s) of the revised Marketing and Merchandising Plan in which the various comments below are addressed.

Provide detailed responses to the following questions:

1. *What is the strategy for leasing the 20,000 square feet of "first generation" retail space required in the Zoning Ordinance? Discuss whether the amount and placement of this retail will be sufficient to achieve the stated goal of creating "a thriving, mixed-use neighborhood, rich with daytime and evening activity."*

See Marketing and Merchandising Plan Sections II.A and II.B.

2. *What is the long-range plan for programming the approximate 40,000 square feet of potential "second generation" retail space? How will the use of this space be determined? If it is not initially used for retail, how will this space be programmed in the interim to ensure that it could be converted into retail space over time?*

Second generation space for retail is anticipated to occupy up to 20,000 square feet on the street level of the commercial and residential buildings in addition to the 20,000 square feet identified in the Final Development Plan for first generation retail. ARE anticipates that it will take significant time, perhaps a decade or two, for the area to generate sufficient interest and customer base to be able to lease this additional second generation space to retailers. Accordingly, during the period before the demand for retail use of this additional 20,000 square feet is sufficient to attract retail users, that space will most likely be used by tenants on the upper floors of the buildings for uses related to their main functions in the building.

See also Section I.B of the Marketing and Merchandising Plan for additional information regarding the manner in which the ground floors of buildings are being designed with future retail uses in mind.

3. *How are the economics of retail being accounted for in the retail plan? Make note of past experiences in trying to establish ground-floor retail in the area, identify the challenges that need to be overcome for retail to be successful, and describe how those challenges will be addressed.*

See Marketing and Merchandising Plan Sections IV and V.

4. *What types of retail are being considered and what users will those businesses serve? Consider the radius from which different types of businesses typically draw customers, accounting for residents, employees and visitors to the area.*

The types of uses that are expected to locate in the Binney Street Project include a small neighborhood grocer, sandwich/coffee shop, pharmacy, wine/beer/cheese shop, café/bistro, bar/restaurant, small restaurants, bakery/confectionary, specialty stores (e.g., bike shop, technology oriented merchandise store, etc.), personal service tenants (e.g., shoemaker, dry cleaner, hairdresser, etc.), and/or news stand.

The radius from which anticipated customers are to be drawn is a function of the type of use being considered. Many retailers will depend on the customer base in the Binney Street Project itself and its immediate vicinity—the employees and residents in the buildings nearby, construction workers during the buildout period, tenants in nearby commercial and residential buildings, as well as commuters moving through the area to the public transit stations and on EZ Ride. Some other first floor tenants may be more “magnet” type retailers, likely to draw from a broader geographic area because of some unique aspect of their merchandise or the interest they can generate.

ARE will provide prospective tenants with available data about the customer base and will work with the Kendall Square Association and the CDD’s Economic Development Division to take advantage of effective marketing techniques used elsewhere in the area.

5. *How will the timing of the retail plan align with the overall phasing of the development plan? When in the project phasing will there be critical mass to support different types and amounts of retail?*

First generation retail will be phased in to the Project with the opening of each individual building containing such space, as shown in the Graphic Materials, until the initial 20,000 square feet of retail space required in the plan is open for business. In the build-out period and years subsequent, ARE will actively market the ground floor retail space and the buildings in which such space is contained in an effort to achieve occupancy and viability of the initial retail component. The customer base needs of the later retail tenants will be a function of how well the first generation retail has performed, the type of customers sought, and the evolution of the image and identity of the area as a desirable place to locate and do business.

6. *What types of leasing strategies will be employed to ensure that the retail space remains filled with businesses that support the project goals? How will rents be established in order to ensure that viable, desired businesses are not faced with prohibitively high rental prices?*

See Marketing and Merchandising Plan Sections II, III, IV and V.

7. *What is the strategy for incorporating local retailers into the business mix?*

ARE has organized its leasing strategy to include the specific goal of identifying local retailers and encouraging them to locate in the Binney Street Project. The strategy will be responsive and sensitive to evolving market conditions, but will include identifying and contacting desirable retailers in the Cambridge and greater Boston areas, working with them to determine their needs and then, when a good tenant opportunity emerges, presenting the right combination of incentives in that particular market climate and retail strata to make their operation in this Project successful.

Other Issues

1. *In the Final Development Plan, include a phasing strategy for landscape improvements, traffic mitigation, and retail marketing/leasing.*

As described in the PUD Development Proposal, the Project's multiple phases may be pursued either independently or simultaneously depending upon market conditions at the time of such development. As a result, proposed on- and off-site infrastructure systems and landscaping improvements that directly correspond to and support a particular phase of the development sequence will be implemented simultaneously with the construction of the development phase which those improvements support and to which they correspond.

With respect to traffic and roadway improvements, ARE anticipates that the improvements to be made to that portion of Binney Street between First and Third Streets will be performed at a single time, rather than over the course of multiple phases of development or in connection with the construction of specific buildings adjacent to a portion of such roadway. Specifically, it is anticipated that the need for the contemplated improvements to Binney Street between First and Third Streets will be triggered in the first instance by the demand for on-street parking to serve and support the emerging retail components of the Project. Prior to the construction of the on-street parking contemplated to be provided through the redesign of Binney Street, it is anticipated that there will be sufficient interim surface parking options available within the existing PUD parcel to provide retail parking proximate to the retail locations such parking will serve. One potential example of this, following the construction of the building and subsurface garage at 100 Binney Street, might be the use of a portion of the existing surface parking lot at 195 First Street to provide interim parking to support the retail tenants at the adjacent block containing 100 Binney Street and 41 Linskey Way. ARE is currently engaged in ongoing discussions with TP&T to determine and coordinate an appropriate strategy relative to the timing of constructing the Binney Street traffic improvements that is consistent with and responsive to anticipated traffic impacts and that provides support for the anticipated needs of the commercial, retail and residential components of the Project.

ARE's phasing strategy relative to the retail marketing and leasing components of the Project is discussed in more detail in the Retail/Merchandising section above, and in the Marketing and Merchandising Plan included with this Final Development Plan as Section 5.

2. *In the Final Development Plan, address the water and electrical/streetlight improvements recommended by the Cambridge Water Department and the City Electrician.*

The Water Department has identified several water lines, specifically on Rogers Street and a portion of the line on Third Street, that it believes should be replaced. ARE is amenable to this scope of work and will discuss the recommended replacements with the Water Department to determine the phasing, scheduling, locations, procedures and actual lengths of water pipes to be replaced.

The Electrical Department has recommended that existing street lights be restored or replaced along Binney Street and that the wood poles and lights along Second Street and Linskey Way be replaced with City-approved lighting. ARE is amenable to this approach and will work with the City Electrician to select the appropriate light poles, luminary types and conduit and handhole locations. It is

anticipated that the restoration and replacement of the light poles and fixtures will be phased to coincide with the construction of the new buildings and associated site, sidewalk and street work.

ARE will continue to work together with the Department of Public Works, the Water Department and the City Electrician in connection with the development of its design in order to address the City's comments.

3. *Describe the schedule by which soil testing will be conducted for Phase 1 project sites. Based on the history of the area and the predicted depth to which excavation will be required, describe any anticipated issues that may need to be addressed during construction.*

Man-made fill is common not only in the Project area but also across much of East Cambridge, and both this fill and the underlying native soils will be characterized to the extent necessary to allow for redevelopment and for export of excess soil. Issues of concern will be addressed accordingly. ARE will conduct appropriate environmental monitoring as the Project parcels are redeveloped, and will incorporate compliance with redevelopment activities in the ordinary course.

No groundwater contamination is currently known to exist on the Project parcels. However, there is the potential to encounter previously unidentified groundwater impacts anywhere in East Cambridge, given the area's extended industrial/commercial history. Any such impacts identified during either preliminary assessments or construction will be addressed as appropriate in accordance with the MCP.

Section 5

Revised Marketing and Merchandising Plan

BINNEY STREET PROJECT
Alexandria Real Estate Equities
Cambridge Planning Board File #243

NOTE: *The following is the current draft of ARE's Marketing and Merchandising Plan based on current and anticipated market conditions as of the submission date of the applications for a PUD Special Permit and a Project Review Special Permit. This plan is intended to supersede and replace the Conceptual Marketing and Merchandising Plan included as Attachment C to the Applicant's PUD Development Proposal submitted on December 17, 2009. This plan will be modified and further developed in response to and in conjunction with developing market trends and demands.*

MARKETING AND MERCHANDISING PLAN

This Plan has been prepared in response to the provisions in the Binney Street Project Zoning, specifically Section 13.59.34 of the Ordinance, that call for a Marketing and Merchandising Plan to be submitted and implemented over the life of the Special Permit for the Project.

ARE is committed to the implementation of this Plan as herein proposed and as it will be amended over time as conditions in the area suggest. This Plan should be considered a living document that will be modified as the Project is built out to incorporate strategies and embrace actions that will help ARE achieve not only full occupancy of all required Active Use space but also a thriving mixed use neighborhood, rich with daytime and evening activity.

The Plan will be revisited annually for a specified period –until the later of a) 3 years after full occupancy of all required active use space and b) 10 years after issuance of the first building permit for a building in the PUD-- in a report by ARE to the Community Development Department that documents the results of the on-going retail marketing and leasing efforts described herein and any other information that indicates how compliance with the Active Use objectives of the zoning is being pursued.

I. CREATING AN ACTIVE PLACE

A. Binney Street Project Image and Identity

The Binney Street Project is a long-term development plan that establishes a New Place in the Kendall Square area. Located in the heart of a neighborhood of distinctive, independent character and a wealth of history, the Project will link the areas North and South of Binney that have previously been divided by the Binney Street truck route to create a unified urban district. The goal is to build an ongoing exchange among the long-standing, close-knit residential community, nearby cutting edge innovative and entrepreneurial businesses, and preeminent technological scholarship. Such collaboration will fuel creativity and problem solving, and spawn the next generation of innovation.

With a long, rich history of being on the cutting edge of industry, the Kendall area has always been—and continues to be—commercially modern. It looks to the future, leads the way to what's next. The creativity and industry that flow from Kendall Square represent a unique way of working and thinking that breaks down silos and fosters collaboration. The exchange of the ideas and inspiration fostered here plays a vital role in community life. The creativity, innovation, and problem solving that are well-recognized in the commerce and entrepreneurialism of the Kendall area will find their place in the Binney Street Project and become a signature way of life here.

The Binney Street Project will be infused with aesthetic and commercial elements that celebrate local heritage, look ahead to the future, and invite interaction. Selected existing buildings of interest

will be preserved and actively reused, as contemplated by the Zoning Ordinance and memorialized in the Development Proposal. New buildings will reflect the best forward thinking in urban design and planning all aimed at generating a lively street life. Also, possibilities for various types of public art (see Section VI.D of this Plan) may bring opportunity to engage people --- inviting strangers to talk, prompting children to ask questions, and calming a hurried life.

The Binney Street Project will extend the connections among those who live, work, and study here. New businesses, residences, restaurants, shops, services, and public spaces will address the lifestyle needs of workers, students, and residents, giving them good reasons to spend more time enjoying the benefits of the neighborhood. Convenience, comfort, and warmth will characterize the environment --- places to pause, sit, gather, shop, and eat. A fresh look at green spaces, pedestrian walkways, and bikeways will better serve a highly active population and result in a vital place.

B. Street Level Building Design

Ground floor facades in the Binney Street Project will be designed from the outset to highlight the “first generation” retail activity introduced into each new building and to anticipate adding active ground floor uses along the street frontage into adjacent space over time.

A significant portion of ground floor space in the Project’s buildings on Binney Street and Third Street is being designed to have the potential to accommodate retail uses in the base building by providing the following:

- a) 15 ft floor-to-floor heights or more where feasible
- b) full glazing on the street façade
- c) ability to introduce separate entries off the street
- d) designing retail specific infrastructure into the base building
- e) seeking guidance from retail experts as to other infrastructure needs that different types of retail activity require.

The design of the ground floor of new buildings is predicated on the need to scale the elements of building façades so that retail uses are visually prominent and will attract the passersby.

Design options for Binney Street Project buildings to achieve the appropriately scaled street level treatment for retail include:

- a) a two-story retail podium that is highly differentiated from the floors above;
- b) a single- story building base whose design, materials, fenestration, signage etc. express unambiguously the active purpose of the uses to be located there;
- c) a retail pavilion at the corner of Second and Binney whose design will signal its singular purpose as a locus for active uses; it will not be part of a larger commercial building but may be attached to the existing building at 41 Linskey Way;
- d) storefronts that feature elements along the street that provide interest and variety, such as visually engaging signage, protective awnings and canopies, transparency to the interior and visual connections to other retail; and
- e) Outdoor seating, introduced where appropriate.

C. Pedestrians and Cyclists Emphasized in the Streetscape Design

Pedestrians and cyclists are key contributors to the active quality desired for the Binney Street Project. So, to generate substantial walking and biking, ARE is designing the streets, sidewalks and pathways within the Project with them in mind. Sidewalks and pathways will be used to enhance and connect to existing desire lines for movement from all of the areas surrounding the Project in particular, to nearby subway stops at Kendall and Lechmere Stations and, Kendall Square and the Charles River, which we hope attracts people from a wide radius beyond the Project itself.

Improvements that will generate this condition include:

- a) Reinforcement of pedestrian desire lines from work and home to the Kendall and Lechmere stations along Third Street and First Street;
- b) The Mixed-Mode Transportation Hub will generate additional pedestrian activity on Second Street
- c) Through-block connectors allow walkers to meander between buildings and take short-cuts to other destinations.
- d) Narrowing the width of Binney Street at Second and Third Streets makes that crossing safer and more manageable.
- e) Sidewalks and connectors will be planted with trees, flowering shrubs and herbaceous plants for seasonal variety and visual pleasure.
- f) Sidewalks will be equipped with bicycle racks, benches, trash receptacles, and pedestrian-scale lighting.

D. On-Street Parking

Small scale retail needs convenient on-street parking to generate and support business. When short term curbside parking is available, a shopper will seize the opportunity to make a purchase or stop for coffee. The long-term program for activating the streets in the Binney Street Project is predicated, among other measures, on introducing curbside parking along Binney Street between First and Third Streets on the south side and between Second and Third Streets on the north side.

Depending on the final re-design of Binney Street, approximately 28 on-street parking spaces will be provided. Not only does the on-street parking help make the retail viable economically, the parked cars also serve as a buffer to pedestrians on the adjacent sidewalks. Given the high volumes of traffic on Binney Street, especially at rush hours, the parked cars provide a separation that reduces the impact of that traffic on the enjoyment of the pedestrian experience.

II. MARKETING RETAIL SPACE

A. Leasing Strategy

Leasing retail space in the multi-phase Binney Street Project is of necessity an incremental process. ARE is creating a whole new district that will emerge over a decade or two—in which the retail is critically important. At one and the same time, we will be faced with creating a NEW Place, establishing its identity building by building, and attracting new retailers and customers.

Recruiting Local Retailers

In addition to its own corporate and contracted resources that will be directed to the leasing effort for this area, ARE will coordinate closely with the Economic Development Division of the Cambridge Community Development Division to take advantage of the services, programs and incentives they offer, to build on their knowledge of and relationships with local retailers and to benefit from their experience in other retail areas throughout the City.

The signature approach of the Project's marketing strategy is to identify specific retailers and pursue them actively—preferably local businesses that are ready to add another location or to relocate – that are a good fit for the stage of project development for which they are being targeted. Several potential tenants within the same retail category as well as several in different categories

will be identified and contacted for each opportunity. At each successive phase, ARE will look for tenants who complement the existing tenants and/or can expand the mix of uses and number of customers.

ARE has already started its marketing and leasing program for the Binney Street Project. The objective of this early effort is to create awareness in the retail community and ultimately potential customers of the possibilities and the opportunities for introducing a successful retail business here.

Michelle Lower, Senior Director at ARE, has been charged with managing ARE's active tenant outreach and in that role, among other responsibilities, she will oversee retail brokers engaged to identify retail tenant prospects. Ms Lower will be supported by Lena Sharp, the Senior Marketing Director and other members of the ARE team.

The availability of on-street parking is another important component to achieving success with the Project's retail space. Our ability to effectively sell this untested retail location will depend to some extent on the amount of on-street parking (or, in interim conditions, convenient surface parking proximate to the retail locations) to facilitate parking for impulse purchases and for the convenience of the commuter and passer-by.

B. Amount and Placement of Retail

The proposed 20,000 SF of "first generation" retail at the Binney Street Project represents a substantial infusion of retail activity into an area whose retail identity is only beginning to emerge. ARE will contribute to and benefit from the retail presence being introduced along Third Street and more generally within the Kendall Square/Binney Street area to create critical mass and to further establish the locality as a place to eat, shop and find entertainment.

ARE will join forces with the Kendall Square Association (KSA) and nearby property owners to reinforce the retail activities located in the vicinity—such as the new restaurants at the Watermark, and anticipated new retailers at Cambridge Research Park, etc.

Pre-development Retail at 300 Third Street

ARE is currently pursuing local independent retailers for the 2500 SF of ground floor retail space at 300 Third Street. While not within the bounds of the Binney Street Project, this building presents an opportunity to introduce retail activity to the neighborhood even before the first building in the Project goes into construction. A new retail use here will reinforce the emerging retail presence in existing buildings along Third Street and will introduce a new retail presence at the intersection of Third with Binney.

First Project Building

Currently, it is anticipated that 100 Binney Street will be the first building constructed in the Project. At completion, 100 Binney is slated to have about 1500 SF of retail space on its ground floor and will be complemented with about 1000 SF of additional retail space at the corner of Second and Binney in a pavilion adjacent to the Maple Sugar Building at 41 Linskey Way where a Mixed-Mode Transportation Hub will be located. The underground parking garage serving the 100 Binney building, as well as employees and visitors to the nearby Atheneum Building and residents at River Court and Esplanade, should generate a stream of pedestrians to patronize these retailers as will the bus riders and cyclists using the Hub.

Potential Retail Tenant Categories

ARE is in the process of compiling a list of desired uses and potential tenants---and welcomes recommendations from others --- that will be appropriate for the size and location of each retail space well before it is under construction.

The following types of retail tenants (in no particular order) have been identified as targets to be pursued for retail space in the Project. Specific local retailers and restaurants have been identified but will not be named publicly until they have been contacted and given an opportunity to express interest.

- Small/Neighborhood Grocer
- Sandwich /Coffee Shop
- Pharmacy
- Wine/Beer/ Cheese shop
- Café/Bistro
- Small Restaurants
- Bakery/Confectionary
- Specialty stores –e.g., Bike shop to build on bicycle emphasis within Project, technology oriented merchandise store, etc.
- Personal Service tenants: dry cleaners, hairdresser, etc.
- Newsstand

Later Buildings

The success of the overall Marketing and Merchandising Plan will result from a variety of factors including the design of the buildings-- with emphasis on an inviting street level--as well as the adjacent sidewalks, and also from the dynamic created among the retail offerings within the Project. For that reason the list of target uses for later buildings will be regularly updated to reflect trends, demands and opportunities.

III. Long-range plan for Additional Retail

As the Project approaches its last few buildings and one can see how the area is taking shape from a retail and street-life perspective, ARE will begin to frame its leasing plan for the prospect of adding more retail tenants in ground floor space, especially along Binney Street.

Because much of the first floor space will have already been built out with appropriate infrastructure to accommodate retail users, when the time is right, additional retailers can be welcomed into Project buildings without costly retrofits. Provisions for length of term and termination rights in leases will reflect the likely timing of turnover to retail use.

IV. Retail Challenges and Opportunities

The Binney Street Project's program for introducing retail and activating the streets and sidewalks in the vicinity of its buildings starts with the recognition that this part of the East Cambridge/Kendall area needs an identity of its own that will distinguish it and offer a clear destination not only for the residents and employees in the buildings nearby but also to draw patrons from greater Boston and elsewhere in Cambridge.

With the completion of several residential buildings nearby, a larger local market of patrons is emerging and a few new retail offerings have been introduced to serve them. ARE's marketing program aims to complement and substantially add to the work begun by others to introduce a variety of retailers that can satisfy a broad array of needs—day and night, weekdays and weekends. Successful retail depends on this type of synergy; stand-alone retail rarely survives.

The buildout of the Binney Street Project will take many years to complete. For that reason the marketing program needs to start by introducing uses that will build familiarity with the neighborhood and that will fill niches with strong demand.

For each building, the target retail user list will be fine-tuned to reflect the needs and opportunities of that moment.

V. Economic Realities of Retail

ARE's approach is different from those who put up "For Lease" signs in finished buildings and then hire retail brokers to find a suitable retail tenant. From the very start of this Project, the amount and locations for retail space and ground floor design have been the subject of close attention. Indeed the requirements of retail along the street have driven building design to the extent that the retail space has prominence and is not "absorbed" into the overall façade elements of the building above.

As stated above, ARE intends to be pro-active in seeking out retail tenants from before the first building is built and well after the last one is fully occupied.

For the first decade or two of the life of the Project any retailer moving into the Binney area will be seen as a "pioneer" and, as we know, only a few enterprises are up for pioneering. ARE intends to make every effort to find them.

Retail Incentives program

For retail to be established and to be sustained successfully over time and to have its intended effect of enlivening the district, it may be desirable or necessary to offer retailers, especially early tenants, incentives that can reduce their risk and increase their viability. While ARE will use incentives and benefits that have been proven to be effective elsewhere or that make sense to try here, it is likely that ARE will need to negotiate special packages for individual retailers tailored to address the specific needs of his/her business.

ARE will put together a toolkit of economic incentives to be combined in different ways for potential tenants as necessary to help them achieve business success, including but not limited to:

- a) rent concessions—reduced rent or no rent for a period of time
- b) contribution to fitting out the interior of the space
- c) marketing and advertising support
- d) promotions and specials—targeted to particular audiences, such as building tenants, nearby residential neighbors, young professionals, etc.
- e) events/openings, "social media" generated events, bicycle events, etc
- f) others, to be determined

It should be noted that while rent is an important factor in determining the attractiveness and affordability of a retail space, it is only one of a number of variables that a tenant considers when choosing to lease a site. Often equally or more important considerations are:

1. pedestrian volumes in the area and in front of the building,
2. visibility of the location
3. success of other retailers in the vicinity
4. convenience
5. on-street parking.

If some or all of these conditions are lacking, a low rent or no rent cannot alone guarantee a successful retail operation. This plan aims to address these five items and to work hard to create the conditions that make retail work.

VI. Street Activation Plan

The components of ARE's street activation plan include an array of elements that will individually and in combination contribute to activating the Project area.

A. RETAIL

The street level retail program described in detail above—both the 20,000 SF of first generation retailers and the successive generations of retail that could add up to 20,000 SF of additional retail

and other active uses at the ground level of Project buildings --is the cornerstone of the Street Activation Plan.

However, the retail program must very deliberately contribute to activating the streets in the area by spilling out onto the sidewalks to make the retail presence visible. Eye-catching signage will help define that presence. Lighting features will add energy and call attention to stores, restaurants and outdoor activities.

B. SIDEWALKS

Sidewalks are being designed to accommodate these “spill-outs” as are some of the hardscape spaces between buildings.

Sidewalks will also have benches and conveniently located bike racks so that people can take their coffee outside, stop and chat, or read the paper, use their laptops and patronize the nearby retailers.

Sidewalk seating for restaurants and cafes is a must for as many months of the year as possible. Merchandising on the sidewalk in ways that are attractive and enticing also generates customer interest.

Other more passive but nonetheless welcoming elements that encourage active use of the streets in the area include pedestrian scale lighting, attractive plantings and shade trees.

C. PUBLIC SPACES

The outdoor public spaces --such as the through block connectors and spaces between buildings -- are expected to provide seating, will be lit and landscaped and can be used for seasonal activities such as Christmas tree sales, ice cream vendors or a pumpkin and cider fair. They will be suited to browsing along book stalls or art shows too.

Pop-up activities such as the low-cost, high-quality truck food phenomenon that is generating great response in LA and other cities will be investigated. We anticipate using social media to generate spontaneous activities -- e.g., the snowball “fight” in Dupont Circle during the recent record-breaking snowstorms in Washington, DC where 5000 people turned out, having been notified on social media sites. Programmed activities will also be welcomed, such as sidewalk dramas--skits and shows that draw on urban life. We will look for local talent to participate.

ARE will coordinate with other owners in the area and the KSA so that both programmed and spontaneous activities can reach the broadest audiences and the activities in different places in the Kendall/Binney area can create a synergy that benefits everyone.

D. PUBLIC ART

Public Art can take many different forms and can be a magnet for people whether it takes the form of a permanent installation or a temporary feature. Public art can also serve a practical purpose; note the whimsical artist -designed bike racks that can be found around the city.

ARE is looking to incorporate public art in many different forms ranging from sculpture of many kinds, dramatic paving, interactive installations, wall murals, to using construction fencing as a canvas, distinctive types of signs and typography, and imaginative lighting features and fixtures.

One idea worth further exploration might be to use some of the ground level window expanses for changing programmable images and/or messages which can add a curiosity factor to the area-- “What are they showing now?” Perhaps the window lighting designs could be chosen from ideas submitted by tenants, residents, or other participants--and thus become a signature feature for the area.

E. TRANSPORTATION HUB

The Mixed-Mode Transportation Hub at Second and Binney Streets will generate pedestrian activity as employees make their way through the area to and from the bus stop. Since this facility is expected to be built early in the Project, ARE intends to capitalize on the concentration of people as a way to jump-start its retail and active street program around this Hub.

F. ON-STREET PARKING

The presence of on-street parking is beneficial to activating the streets and sidewalks –especially along Binney where there is substantial traffic. The parked cars provide a buffer for pedestrians making them feel safer as they walk along and diminish the effects of traffic as they sit and enjoy a cup of coffee or a meal at a sidewalk café.

Section 6

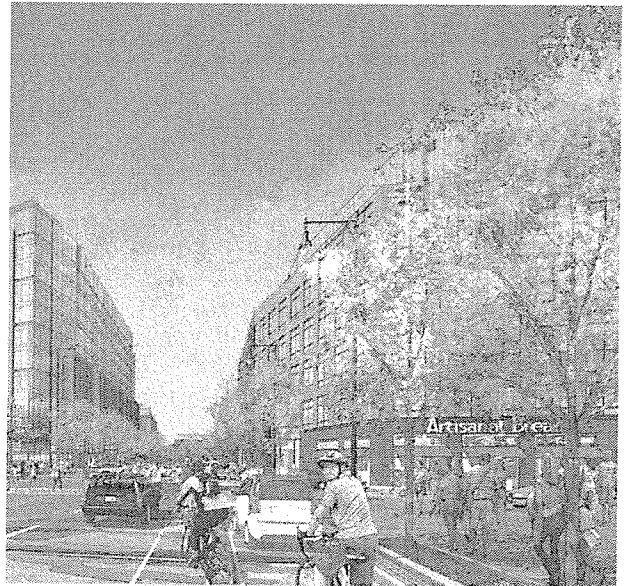
PUD Development Proposal

**Planned Unit Development
Special Permit Application
(Development Proposal)**

Binney Street Project

December 17, 2009

Submitted by:
ALEXANDRIA REAL ESTATE EQUITIES INC



**Planned Unit Development
Special Permit Application
(Development Proposal)**

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ALEXANDRIA REAL ESTATE EQUITIES INC

Architecture and Urban Design

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Transportation

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Permitting

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Planning

Catherine Donaher + Associates

Structural Engineering

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Acoustics

Cavanaugh Tocci Associates, Inc.

Legal

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WilmerHale

BINNEY STREET PROJECT – PUD APPLICATION AND DEVELOPMENT PROPOSAL

This Planned Unit Development (PUD) Application is submitted in accordance with Article 12 and Article 13 of the City of Cambridge Zoning Ordinance, as noted below.

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Attachment A: Graphic Materials—Binney Street Project Development Proposal

Attachment B: Legal Description of Development Parcel

Attachment C: Conceptual Marketing and Merchandising Plan

Attachment D: Conceptual LEED Checklist—100 Binney Street

I. INTRODUCTION

The Binney Street Project (the "Project") arises out of a unique development opportunity that responds to the City's and the neighborhood's goals for planning and development in East Cambridge. These goals were first articulated in the 1970's, and several subsequent neighborhood planning and zoning efforts have continued to shape the evolution of East Cambridge development in the three decades since.

The development proposal set forth in this application meets many of the City's and the neighborhood's current priorities, as expressed in the Eastern Cambridge Planning Study ("ECaPS"):

- it will create new jobs and reinforce Cambridge's primacy as a leader in the life science and technology fields;
- it will complement the large increment of recent residential development in the area and contribute to the opportunity to create a 21st century live/work district;
- it will add considerably to the City's tax base; and
- it will provide a significant amount of new public open space.

The Project presents several interconnected sites for commercial, residential and retail development which, when developed as proposed, will contribute to the dynamic urban district emerging in the former industrial area of Kendall Square/East Cambridge. The proposed development is comprised of five (5) new state-of-the-art sustainable buildings to provide technical office and laboratory space for life science and technology companies and two (2) new residential buildings. The buildings will be located along Binney and Rogers Streets and are expected to bring with them many new workers and residents to enliven the district and, through a deliberate urban design sensibility, add a distinctive character to the Binney Street area. The buildings will be high-quality, well-designed structures meeting LEED Silver standard as a minimum, and in their design and function will be respectful of the context in which they are located.

Retail and restaurant uses are expected to occupy street level space at critical intersections, and will serve existing and new residents and the employee population in the East Cambridge area. Building design at street level and the character of the sidewalks and overall streetscape are being designed with a deliberate focus on activating the streets and intersections within the Project.

The residential component of the Project will create approximately 220 housing units, of which 80 will be affordable. This housing component, together with the fact that a large proportion of the underground parking will be accessed from the street and that amenities will be designed and provided to support transit and bicycle commuting, is expected to ensure that the development establishes and supports a steady current of pedestrian activity in the Project area throughout the day and evening.

More than 11 acres have been assembled for the development site, over 2.5 acres of which will be reserved for public parks as an integral aspect of the Project, including a full-block park on the north side of Rogers Street that will be designed and built by the City using funds provided by the developer. In addition to the creation of much needed park space, the Project will promote the preservation of public open space in the East Cambridge area through the developer's commitment to provide the City with a significant monetary contribution to be used specifically for the design, acquisition and construction of public open space. The Project will also enhance the existing community fabric through the dedication to the City of an existing building to be used for municipal and community activities.

Lastly, the proposed large public open space between Rogers and Bent Streets introduces an appropriate neighborhood-oriented transition between the lower scale residential district to the north and the

commercial/residential districts to the south. Views and pathways along the streets and through-corridors between proposed buildings create and maintain visual and pedestrian connections throughout the district to further emphasize a humane and lively pedestrian experience.

Ultimately, the Project will transform an underutilized urban area characterized by surface parking lots, lower density, and fairly uniform uses, into a thriving, mixed-use neighborhood, rich with daytime and evening activity and safe and attractive new public open spaces, complete with transportation improvements designed to provide a balance between accommodations for pedestrians, cyclists, transit riders and motorists. This transformation is consistent with and responsive to the planning principles and long-term goals established by the City and the neighborhood for East Cambridge, as embodied in the recently approved zoning for the Project area (the so-called "Binney Street Zoning"), as described in more detail below.

12.34.3(1)(a)

Legal description of the total development parcel proposed for development including exact location and a statement of present and proposed ownership

II. EXISTING CONDITIONS

A. Development Parcel Description and Ownership

The development parcel for the Project (the "Project Site") is located in East Cambridge, generally north of Kendall Square, south of Lechmere Station and west of the Charles River. In particular, the Project's building and park parcels are bounded by Linskey Way to the south, Land Boulevard to the east, the American Twine property to the north and Sixth Street to the west. The entire Project Site is currently owned and controlled by the entities listed below, each of which is a Delaware limited liability company wholly-owned by Alexandria Real Estate Equities, Inc. ("AREE, Inc."), and each of which owns the land opposite its name below. The entities listed below, together with their successors and assigns, are collectively referred to herein as "ARE". AREE, Inc., a national real estate investment trust, is a leading national provider of high-quality, environmentally sustainable real estate, technical infrastructure and services to the life science industry.

<u>ARE ENTITY</u>	<u>ARE LAND</u>
ARE-MA Region No. 21, LLC	161 First Street (Parcel 16-20)
ARE-MA Region No. 32, LLC	54, 56, 57, 60, 61, 64, 65, 67, 68, 69, 71, 72, 74, 75, 79, 80, 83 and 84 Rogers Street; 87, 95, 101, 107, 80-122 and 143 Binney Street; 264, 270 and 276 Third Street; 167, 173 and 179 Second Street; 61 Rear Rogers Street; 50 Rogers/200 Second Street; and 242-248 Third Street (Parcel 16-25, Parcel 16-27, Parcel 16-15, Parcel 16-21, Parcel 16-22, Parcel 15-26; and Parcel 16-1)
ARE-MA Region No. 34, LLC	241 Binney Street, 126-144 Rogers Street (Parcel 28-23)
ARE-MA Region No. 37, LLC	41 Linskey Way (Parcel 15-11)
ARE-MA Region No. 39, LLC	182-198 First Street (Parcel 11-32), 200 First Street (Parcel 11-46)
ARE-MA Region No. 40, LLC	195 First Street (Parcel 15-28)
ARE-MA Region No. 42, LLC	77 William "Doc" Linskey Way (Parcel 15-25)

Existing conditions and a locus map are shown in the Graphic Materials, Figures 1 through 3, 5, 7 and 8. A legal description of the parcels comprising the Project Site is included as Attachment B.

For the purposes of this application, the parcels comprising the Project Site are sometimes referred to by the proposed street addresses for the buildings to be constructed thereon. Figure 6 of the Graphic Materials attached hereto illustrates the number and location of the various building sites and the proposed street addresses thereof.

12.34.3(1)(b)

Statement of development concept, including the planning objectives and the character of the development to be achieved through the PUD

III. PROPOSED PLANNED UNIT DEVELOPMENT

A. Binney Street Project Overview

The Project includes the construction of new buildings as well as new open space and the preservation of several existing buildings within the City of Cambridge. As illustrated in Figure 9 of the Graphic Materials, ARE is proposing to develop five (5) new buildings providing technical office and laboratory space and two (2) new residential buildings, totaling approximately 1,753,200 square feet of gross floor area. Specifically, the new buildings will accommodate approximately 1,513,200 square feet of technical office and laboratory space, approximately 220,000 square feet of residential space, and approximately 20,000 square feet of ground floor retail space. The Project will also include approximately 1,932 (1,290 net new) parking spaces, no more than 60 of which shall be above-grade, and will preserve a limited number of the City's existing surface parking spaces to be located where feasible along Binney Street to activate the streetscape and enhance the Project's vibrant ground floor retail component.

B. Project Commitments and Community Benefits

i) Creation of New Park Areas:

A critical component of the Project is its creation of a unique opportunity for the City to design, develop and own two significant new public parks adjacent to residential areas on parcels of land to be conveyed by ARE to the City. The Rogers Street Park, which will consist of approximately 2.25 acres, will be located on the block bounded by Rogers Street, Third Street, Second Street and the American Twine property. In addition to the Rogers Street Park, ARE has agreed to donate two parcels of land containing approximately 0.32 acres, bounded generally by Land Boulevard, First Street and Binney Street, which when combined with adjacent parcels will result in the potential for a new 0.75 acre park. Figure 9 of the Graphic Materials provides a depiction of the location of the proposed parks. As part of its commitment to the City pursuant to a commitment letter delivered in connection with the adoption of the Binney Street Zoning (the "ARE Commitment Letter"), ARE has agreed to contribute \$1,000,000 to the City to enable the City to plan and design improvements at these two parks, such contribution to be made no later than the issuance of the first building permit for a commercial building in the Project. In addition, ARE has agreed to contribute another \$8,500,000 to the City for the construction of improvements at the parks, such contribution to be made not later than the issuance of the base building certificate of occupancy for the first commercial building in the Project. The donation of these park parcels to the City is a condition to the issuance of certain Certificates of Occupancy for the development, as more particularly described in Section IV below and as set forth in the Binney Street Zoning and the ARE Commitment Letter, which through the adoption of the Binney Street Zoning now has the force of law. ARE's commitments under the ARE Commitment Letter are subject to certain key conditions, including (a) the absence, or favorable resolution, of any challenge to the validity of the Binney Street Zoning, (b) the approval of, and commencement of construction under, a Final Development Plan for at least 1,530,000 square feet of commercial space, (c) the absence, or favorable resolution, of any challenges to the zoning approvals and permits necessary for the buildings authorized by the Final Development Plan, including Article 19 approvals and the PUD Special Permit, and (d) the absence of any City-initiated or City-supported zoning changes that would adversely affect the development contemplated herein.

ii) Transportation Improvements

a Mixed-Mode Transportation Hub.

The Project will preserve the existing building located at 41 Linskey Way, a portion of which may be renovated and reused as part of the Mixed-Mode Transportation Hub contemplated in the vicinity of the intersection of Second and Binney Streets by the Binney Street Zoning. Transit access, car-sharing, carpooling, pedestrian accessibility and bicycle facilities will all be enhanced by virtue of the Mixed-Mode Transportation Hub and the designation of the Second/Binney intersection as the central focal point of the Project Site. The Mixed-Mode Transportation Hub is planned to include the EZ ride shuttle bus stop, the future Urban Ring BRT stop, retail conveniences, and a protected passenger waiting area. An external entrance to the garage to be located on the block containing 100 Binney Street and 41 Linskey Way may be provided in a location proximate to the Mixed-Mode Transportation Hub, in order to facilitate pedestrian activity at ground level with access to car sharing, carpooling and tenant parking.

b Binney Street Pedestrian Improvements.

As part of the Project, sidewalks along the site frontage on Binney Street will be widened to improve the pedestrian experience, and sidewalks adjacent to the Site's buildings will be upgraded to comply with the City's sidewalk design standards and ADA accessibility requirements. Tree plantings, street furniture and signage will be provided to improve the streetscape. Binney Street will be designed to allow the City to add on-street parking where possible to further animate the street. The intersection of Second Street and Binney Street will be designed to provide shorter crossing distances across Binney Street for pedestrians and to increase recognition by vehicle drivers that the site is a major pedestrian crossing. The Project expands and enhances the through-block connection between the existing 300 Third Street building and the proposed 100 Binney Street building. The 50 Binney Street, 100 Binney Street, 75 Binney Street and 125 Binney Street sites will also be designed to accommodate through access by pedestrians. These connections, together with the implementation of improved bicycle accommodations along Binney Street and supporting on-site amenities, will be designed to encourage both pedestrian and bicycle activity along key Project corridors. Each of these design measures aims to extend existing pedestrian networks from the surrounding streets to and through the Project area. See Figure 51 of the Graphic Materials.

c Connections to Transit; Urban Ring.

Good connections to transit services, constrained parking, the mixed-use nature of the proposed land uses, the close proximity of the Project to residential neighborhoods and ARE's implementation of an aggressive transportation demand management (TDM) program will result in low drive-alone mode share both for commuters to the site and for Project residents commuting to their workplaces. Specifically, the Project's proximity to the Kendall Square Red Line MBTA Station (an approximately 7-minute walk south), and the Lechmere Green Line MBTA Station (an approximately 7-minute walk north) enables convenient pedestrian access, which will be enhanced and supported by the Mixed-Mode Transportation Hub. The Mixed-Mode Transportation Hub allows for the concentration of shuttle bus services, car-share, bicycle facilities, and concentrated below-grade parking at a single location. See Figure 1 of the Graphic Materials.

The Urban Ring is a proposed new bus rapid transit (BRT) system connecting the communities surrounding downtown Boston, the implementation of which involves three proposed phases. The Binney Street Project area is anticipated to be part of the First Implementation Stage of that project, known as the Northern Tier, which connects from Logan West Garage at Logan Airport to Kendall Square. Bus lanes on First Street and a short bus-way connection between Third Street and Main Street near Kendall Square are proposed. Urban Ring Service would be available on two BRT routes which overlap between Kendall Square and Lechmere Station. It is anticipated that a BRT bus stop will be located on Binney Street or Second Street, and the Mixed-Mode Transportation Hub is being designed to potentially accommodate this future transit service.

d Bicycle Accommodations.

The Project will be served by multiple bicycle facilities, with bike lanes provided on several corridors connecting through and beyond the Project Site. As part of the Project, both sides of Binney Street between First Street and Third Street will have new bicycle accommodations to accentuate and enhance

the bicyclist's interaction with the Project Site. In addition, all Project buildings will provide the required amount of bicycle parking pursuant to the Cambridge City Zoning Ordinance.

iii) Infrastructure Upgrades

ARE will construct a new storm drainage system as part of the development, portions of which will be connected to a new infiltration system to be constructed and located beneath the Rogers Street Park. The Project will connect to the existing water and sewer systems presently adjacent to the Project Site. Due to installation of the new storm system and the removal of existing service connections to the combined Binney Street system, flows to the existing combined sewer and storm system in Binney Street will be reduced. ARE anticipates that the Project will require infrastructure improvements primarily associated with the new stormwater conveyance system. These improvements include the construction of pipes connecting the Project Site to the City's system in Binney Street at the intersection of Binney Street and Land Boulevard, all as described in more detail below. In order to facilitate the proper maintenance and operation of the infiltration system to be located beneath the Rogers Street Park, ARE will reserve appropriate subsurface utility easements in the Rogers Street Park parcels to be conveyed to the City.

iv) Affordable Housing

Consistent with the terms of the Binney Street Zoning, of the approximately 220,000 square feet of residential space to be created in connection with the Project, a minimum of 47,000 square feet will be comprised of housing affordable to households whose total income does not exceed 120 percent of the area median income for the Boston area, and at least 33,000 square feet will be comprised of housing affordable to households whose total income does not exceed 80 percent of the area median income for the Boston area.

v) East Cambridge Open Space Fund Contribution

Pursuant to the ARE Commitment Letter, ARE has also agreed to make a significant contribution to the City of Cambridge at a rate of \$12.00 per square foot (up to \$6,000,000) for each square foot of gross floor area ("GFA") of space in the Project for which certificates of Occupancy are issued in excess of the first 1,000,000 square feet in a Final Development Plan (excluding residential GFA). ARE's contribution is to be restricted to design, land acquisition and construction of Public Open Space under the Ordinance within the Eastern Cambridge Study Area.

vi) Donation of an Existing Building for Municipal/Community Uses

Consistent with the terms of the Binney Street Zoning, ARE has agreed as part of the Project to cause a transfer in the ownership of the existing building located at 101 Rogers Street (also know as the Foundry Building) to the City of Cambridge, with a preference for its use for municipal or community uses. This donation is designed to enhance and support municipal and community activity in the vicinity of the Project by providing a critical gathering place for such uses, thereby further contributing to the active community fabric intended to be created and fostered by the Project's development. The transfer of this building to the City is to take place on or before January 1, 2012, provided that ARE has commenced construction of a building in the Project pursuant to the Final Development Plan. Figure 5 illustrates the location of the 101 Rogers Street building.

vii) Preservation and Adaptive Re-Use of Existing Buildings

Consistent with the requirements of the Binney Street Zoning, ARE's development proposal includes the preservation and adaptive re-use of four (4) existing buildings located within the Project area, namely: (1) 140-146 Rogers Street (at the corner of Sixth and Rogers Streets), (2) 213 Binney Street (at the corner of Binney and Fifth Streets), (3) 161 First Street (excluding the three story rear addition), and (4) 41 Linskey Way (which, as noted above, may be re-used as part of a Mixed Mode Transportation Hub,

including the development of an ancillary commercial structure located adjacent to the existing building). Figure 6 shows the location of these buildings.

viii) Potential Tax Revenue:

It is anticipated that, when fully developed, the Project will generate significant additional real estate tax revenues, currently estimated between \$9,000,000 and \$12,000,000 per year.

C. Consistency with Zoning and Planning Principles

The development program strictly adheres to the planning principles and long-term goals embodied in the recently approved Binney Street Zoning as well as the Eastern Cambridge Design Guidelines. Specifically, the Project has been designed in accordance with the PUD-3a and PUD-4c zoning districts described in the Cambridge Zoning Ordinance (the "Ordinance" or "CZO"), including Sections 13.40 and 13.50. ARE's vision for the Project was developed in close consultation and collaboration with various Cambridge government and community groups. ARE participated in an extensive consultation process with a variety of parties in interest over the course of nearly twelve (12) months, in order to develop the Binney Street Zoning by which the Project will ultimately be governed, including nine meetings with the East Cambridge Planning Team ("ECPT"), four meetings with the Cambridge Planning Board, seven hearings with the Cambridge Ordinance Committee, and five meetings with the ECPT Steering Committee. The participation of local community and government groups throughout the course of these meetings has generated strong support for the Project at both the local and the government levels, and culminated in the overwhelmingly favorable adoption of the Binney Street Zoning by the Cambridge City Council in February 2009 by a vote of 8-1.

i) FAR and Use

The Ordinance, in Sections 13.43.1(2) and 13.53.1(4), establishes an FAR of 3.0 for all non-residential uses where the Final Development Plan meets the requirements of Ordinance Section 13.59. The proposed development program is consistent with these requirements. As set forth in more detail in Section 13.59.10 of the Ordinance, upon ARE's conveyance to the City of the building and lot located at 101 Rogers Street, and, if applicable, a portion of the lot known as 249 Third Street, ARE will be entitled to up 59,446 square feet of additional Gross Floor Area in its Final Development Plan.

ii) Building Height

The Ordinance establishes base building height zones for PUD-3a and PUD-4c and identifies opportunities for greater height where the Final Development Plan meets the requirements of Ordinance Section 13.59. The proposed development program is consistent with these requirements.

iii) Gross Floor Area and Parking

As mentioned above, ARE is proposing five (5) new buildings for technical office and laboratory space and two (2) new residential buildings totaling 1,753,200 Gross Floor Area (GFA) with underground garages providing parking at a rate of 0.9/1,000 square feet for the commercial uses and 1/dwelling unit for residential uses. Separately, the commercial component equals 1,533,200 GFA and the residential component 220,000 GFA. The underground garages will also provide parking for the users of the Athenaeum Building located at 215 First Street. The total number of parking spaces provided will be 1,932, no more than 60 of which may be located at grade and none of which will be dedicated. There will be bicycle parking for 281 bicycles, in accordance with Section 6 of the Ordinance. Consistent with the terms of Section 13.59.5 of the Ordinance, to the extent that the location, layout and/or design of any parking facilities to be located in the Project deviate from the requirements of Article 6 of the Ordinance, the Planning Board may approve such deviations. In addition, pursuant to Section 13.59.51 of the Ordinance, ARE shall have the right to provide on-grade open parking on an interim basis in anticipation

of later construction of underground structured parking sufficient to meet all applicable parking requirements. Figure 50 shows a conceptual depiction of the Project's parking access.

iv) Sustainability

The Ordinance requires that the Project's buildings be planned, designed and constructed to be eligible to achieve at least the level 'Silver' using the applicable LEED Rating System of the United States Green Building Council in effect on January 1, 2009. The proposed development program is consistent with these requirements. A conceptual LEED checklist for the first building in the Project is included with this application as Exhibit D, and a checklist will be completed for each additional building when final design review is sought for those buildings.

v) Active Uses

The Ordinance requires that portions of the ground floors be planned for Active Uses, with a minimum of 20,000 square feet located within the Project for such uses. These uses are essential to creating the pedestrian experience and sense of neighborhood continuity that will define Binney Street. Accordingly, the Ordinance identifies locations of particular importance for these uses, such as at the Binney Street intersections of Third and Second Streets and also along First Street where a portion of the Project faces the Triangle Park. The Ordinance further requires that entrances for the Active Uses be separate from the principal entrance to the building within which they are located. The proposed development program is consistent with all of these requirements. Lastly, the Ordinance requires that a marketing and merchandising plan be developed and implemented over the life of the permit in order to support Active Uses within the Project, and provides that such plan be revised as necessary by the permittee in order to achieve occupancy of the Active Use space within a reasonable period of time. The current conceptual draft of ARE's Marketing and Merchandising Plan has been included together with this application as Attachment C, which plan will be modified and continuously developed in response to and in conjunction with developing market trends and demands. See Figure 51 for anticipated locations of Active Uses within the Project.

vi) Open Space

The Ordinance requires the Project to include an aggregate of at least 20% of open space as a proportion of the total area of development. The development parcel has a total area of 11.3 acres, and a total area of open space of 3.2 acres, or approximately 28%, which is well in excess of the requirement. The open space will consist of 2.6 acres of required Public Open Space that will be dedicated to the City of Cambridge as provided in the zoning ordinance, and an additional 0.6 acres of publicly accessible space around the Project's buildings. This publicly accessible space includes a landscaped enhancement of the existing pedestrian passage to the east of the existing 300 Third Street building, a new pedestrian passage east of the proposed residential building on Third Street, and additional outdoor gathering spaces. The proposed development program is consistent with these requirements. Pursuant to Section 13.59.91 of the Ordinance, the Public Open Spaces required under the Final Development Plan shall be dedicated to the City by transfer of fee ownership, following which the City will be able to ensure its protection and availability for continued public use. In the event the City elects not to accept such ownership, ARE shall hold the land as Public Open Space available to the public in perpetuity for all uses and activities contemplated for Public Open Space by the Ordinance. Figure 21 of the Graphic Materials provides an illustration of the location and layout of the Project's open spaces.

D. Binney Street Project Concept

A fundamental goal of the Project is to become a seamless piece of the City that is integrated with the fabric of the neighborhood. Rogers Street Park serves as the hinge between the Project's commercial and residential buildings and the residential neighborhood to the north. The park offers an attractive amenity for the neighborhood and serves as a transition between two distinct areas of East Cambridge. The Project will also be notable for its active street life throughout the day and night, on both weekdays and weekends, in keeping with the Binney Street Zoning's emphasis on providing substantial retail space,

well designed and ample sidewalks, a variety of public spaces with different characters and functions and routes through the Project that allow far superior north/south connections than those that exist today. The Project will be a model of sustainable practices, including improvements to sewer infrastructure, stormwater infiltration, noise mitigation and design and development of buildings that meet Leed Silver standards at a minimum. The architecture of the new buildings will be varied and distinguished. Overall, the Project aims to be a critical and noteworthy addition to both the City of Cambridge and the East Cambridge Neighborhood.

i) Emphasis on Public Realm

The Project's layout is driven in large part by the desire to structure an integrated and contiguous public realm. The streets, sidewalks, bicycle accommodations, public parks, connective spaces and courtyards are all designed to hold together as a single network of great variety, while seamlessly integrating the Project with the balance of the neighborhood. Landscape design will accentuate the contrast between lively streets and the relative calm of spaces away from traffic. The diversity of neighborhood users—whether residents, office workers, or visitors—will be reflected in the variety of the landscape elements.

As illustrated in Figures 10 through 43 and 53 through 57 of the Graphic Materials, the public realm throughout the Project will be enriched by the proposed public parks, attractive pedestrian passages and numerous places to sit along the sidewalks; by the publicly accessible spaces around the buildings, diverse in character and scale; by paved plazas for outdoor eating and performances; and by building facades that are attractive and eye-catching and that represent high-quality design.

The Project will foster the kind of pedestrian vitality encouraged by the Eastern Cambridge Design Guidelines. The Project's proximity to the Kendall Square Red Line MBTA Station to the south and the Lechmere Green Line MBTA Station to the north will allow and invite many pedestrians to complete their commute to the Project on foot. The Mixed-Mode Transportation Hub contemplated at the intersection of Second and Binney Streets is intended to be the destination of the users of the shuttle service, car-share program, bicycle facilities, and below-grade parking, and (as noted above) will be designed to accommodate the future Urban Ring Transit service. Retail and other active uses will be located at three of the four corners of this intersection, with the fourth corner being the site of the Church of the Latter Day Saints Meeting House currently under construction.

Pedestrian routes are also supported by passageways between buildings that, in accordance with the Binney Street Zoning, allow pedestrians to cut through large city blocks. These connectors may also be augmented by passages through the large buildings south of Binney Street, which ARE will consider in connection with the Project's development. For instance, a second entry/connector may be particularly advantageous for the 100 Binney Street site, where the south façade opens to a direct route from the skating rink park to Kendall Square past neighboring research and development buildings.

Bicycle travel will also be given prominence in the development, through the addition of new bike travel improvements, potential storage, service, changing and shower facilities and bike racks. A bicycle sharing program may be introduced at the Mixed-Mode Transportation Hub. The design of streets and sidewalks will reflect and support the needs of walkers, bicyclists, café patrons, employees, shoppers and the many other people who will live, work and come to this area as a destination.

In addition, measurable environmental benefits will accrue to the public realm by measures such as building design features meeting the Leed Silver standard or better, stormwater collection, shading of paved areas to decrease the heat island effect, and the extensive use of native or adapted plant species to support biodiversity.

ii) Design Approach

The Design Approach for the Project provides a set of parameters for designers that emphasizes quality of design for every component of the development, keen attention to the pedestrian experience, and

variety of architectural expressions. A broad range of architectural styles is desired to allow Project buildings to build on the mosaic nature of East Cambridge's existing fabric. The public realm will provide the unifying elements so that the area coheres as an identifiable place.

The realization of the Design Approach will be accomplished by coordinating with the City stakeholders to accomplish the design objectives. For example, on Binney Street, setting buildings back from the parcel lines in some locations will allow the sidewalk to extend beyond the public way. By doing so, space is created for on-street parking, more generous sidewalks, improved bicycle accommodations and safer pedestrian crossings at intersections along Binney Street. The fulfillment of this opportunity and other urban design goals outlined in the Eastern Cambridge Design Guidelines is intended to result from the design parameters that follow. As provided in the Binney Street Zoning, the Final Development Plan for the Project shall be generally consistent with the guidance provided in the Eastern Cambridge Design Guidelines, subject to any applicable deviations in the event the Binney Street Zoning conflicts with such Design Guidelines. As contemplated by the Binney Street Zoning, application of the Eastern Cambridge Design Guidelines may vary within the context of specific building proposals within the Project, provided that such application respects the intent of such Design Guidelines and the Ordinance. Specifically, the Binney Street Zoning allows for the approval of variations from the Eastern Cambridge Design Guidelines where the alternative approach serves as well or better the objectives of the PUD-3A and PUD-4C Districts or creates positive design opportunities which may not have been envisioned in the Eastern Cambridge Design Guidelines. In its simultaneous application for approval under Article 19 for all buildings in the Final Development Plan, ARE has requested that the Planning Board, as authorized under Section 13.59.6 of the Binney Street Zoning, approve buildings for which physical design information is being presented in conceptual form, subject to later design review and approval by the Planning Board and a finding that final design of such buildings is consistent with the Eastern Cambridge Design Guidelines, and such other design goals as are set forth in the Ordinance and the Special Permit approving the Final Development Plan.

The Design Approach for the Project has been articulated through the development of the following typologies for Streetscapes, Urban Spaces and Streetwalls, including Massing, Storefront Design, Service Access and Exterior Lighting.

a Streetscape Types

The streets within and adjacent to the Project will be designed to complement adjacent land uses and circulation patterns, and to reinforce connections to Kendall Square and the riverfront.

As illustrated by Figure 11 of the Graphic Materials, three Streetscape Types are being developed to define pedestrian, bicycle and vehicular zones within the development parcels and the public ways that abut them—Binney Street, Local Streets and Park Edge Streets. The features introduced here aim to mirror the goals of the Eastern Cambridge Design Guidelines, and fulfillment of these goals will be pursued through close coordination with the City throughout the Project's buildout, as these Streetscape Types address concepts for advancing design elements on both sides of the property lines to yield a seamless and integrated public realm.

Today, Binney Street privileges motor vehicle traffic over pedestrians and bicycle activity. As a result of this Project, Binney Street will be transformed from a wide barrier separating Kendall Square from the residential neighborhood to the north, to a pedestrian and bicycle friendly street with ground-level retail and other active uses. Other streets within the Project will also be designed to serve the day and nighttime populations and to provide for service functions for the buildings.

1 Streetscape Type 1: Binney Street

Binney Street is an existing arterial street and truck route that was designed with cars, trucks and buses in mind, and it operates as an acknowledged barrier to north-south movement through the area. ARE proposes to transform Binney Street between First and Third Streets in order to create a more pedestrian

and bicycle-friendly street that supports neighborhood-scale connections and street level uses without a significant reduction in traffic capacity. The aim is to animate Binney Street, to make it a more humane and bustling city street rather than the traffic conduit it is today. All of the proposed improvements to Binney Street—ground floor retail, building entrances, on-street parking, street tree plantings, wider sidewalks, street furniture and improved bicycle accommodations—have this goal in mind and respond to the goals of the Eastern Cambridge Design Guidelines. Figures 12 through 15 of the Graphic Materials provide examples of this streetscape type.

West of Third Street, Binney Street is defined on both sides by handsome street trees. This character will be extended through the Project area to the east to Land Boulevard. While some existing street trees on Binney may need to be removed to accommodate the course of the Project's development, the resulting number of trees will be greater as a result of this change.

2 Streetscape Type 2: Local Streets

Local streets included in the Project include the relevant lengths of First, Second, Third, Fifth, and Sixth Streets, Rogers Street (except between Second and Third) and Linskey Way. Sidewalks on these local streets will be reconstructed so as to knit the area together and create a unified public fabric. A consistent palette of materials and furniture, street tree plantings, on-street parking and improved lighting will upgrade the character of these streets and provide a more pleasant environment. Sidewalk bulb-outs at intersections will be added where possible to improve the safety and ease of street crossings, similar to improvements made to neighborhood streets in recent years in response to the Eastern Cambridge Design Guidelines. Figures 16 and 17 of the Graphic Materials provide examples of this streetscape type.

3 Streetscape Type 3: Park Edge Streets

Park Edge Streets include the relevant lengths of Rogers Street, First Street, and Linskey Way across from the proposed parks. These types of edges are specifically addressed in the Built Form provisions of the Eastern Cambridge Design Guidelines, which call for sensitivity in the design of buildings facing public parks. At First Street facing the Triangle Park, the potential for an outdoor restaurant terrace or other outdoor seating will contribute to activity in and around the park. At Rogers Street and Linskey Way, building service zones will be carefully designed, both in terms of visual impact from the parks and to maintain pedestrian continuity along the sidewalks. Figures 18 through 19 of the Graphic Materials provide examples of this streetscape type.

b Urban Space Types

Urban spaces of different sizes and uses will enhance the public realm within and adjacent to the Binney Street Project. These spaces will include large public parks, active connector spaces for pedestrian passage, active gathering spaces and semi-private courtyard spaces. These spaces will use a variety of materials and will be a mix of hardscape and greenscape areas. As illustrated by Figure 21 of the Graphic Materials, the types of urban space that comprise the public realm of the Binney Street Project are Public Parks, Through-Block Connectors, Active Gathering Spaces and Courtyards.

1 Urban Space Type 1: Public Parks

As noted above, the Binney Street Zoning and the ARE Commitment Letter provide that ARE shall not only convey title to various parcels of land to be used as public parks by the City, but that it shall also provide significant monetary compensation to the City to fund the design and development of those parks, which will be city-owned, developed and operated. The location and size of both the Rogers Street Park and the Triangle Park play an important role in integrating the Project with its urban context. The Rogers Street Park performs a primary role as a neighborhood park, and will be a common ground where residents from the neighborhood will be able to interact with and meet employees and residents from the new buildings. The Triangle Park serves as a gateway to the redesigned Binney Street area and will

provide a connecting space between the Project area and the river to the east. Figures 22 and 23 of the Graphic Materials provide examples of this urban space type.

2 Urban Space Type 2: Through-Block Connectors

The Through-Block Connectors will allow public access and pedestrian flow between buildings, thus creating permeability through the Project in a north-south direction and overcoming the current limitations of north/south movement across Binney Street. By interrupting the street wall created by the buildings on Binney Street and providing nodes of interest, the Through-Block Connectors will humanize and add variety to the site.

The Through-Block Connectors will have a more intimate character than the surrounding streets. Some may open out to wider paved plazas, particularly close to retail activities, encouraging open-air café seating and other activities recommended by the Eastern Cambridge Design Guidelines. The connectors will be planted with trees for shade, and flowering shrubs and herbaceous plants for seasonal variety. These spaces will be equipped with bicycle racks, benches, trash receptacles, pedestrian-scale lighting and other furniture. In landscape terms, the Through-Block Connectors will be vital in giving the public realm of the Project a strong and unique identity. Figures 24 and 25 of the Graphic Materials provide examples of this urban space type.

3 Urban Space Type 3: Active Gathering Spaces

The Active Gathering Spaces refer to delineated outdoor spaces that directly complement interior uses, such as outdoor terraces for café seating associated with an adjacent restaurant use and transition spaces between historic and new buildings such as the proposed space on the west side of the 50 Binney building, in front of First Street looking towards Triangle Park, and on the Sixth Street frontage of 225 Binney Street, connecting that frontage with the preserved existing building at the intersection of Sixth Street and Rogers Street. These places are expected to be active through the day and into the evening, consistent with the vision of the Eastern Cambridge Design Guidelines. Figures 26 and 27 of the Graphic Materials provide examples of this urban space type.

4 Urban Space Type 4: Courtyards

The Project's courtyards are smaller in scale and more intimate than other landscape spaces in the Project. They are typically interior to blocks but visually connected to adjacent sidewalks. The courtyards may, but will not necessarily, be open to the public. These spaces create visual permeability and interest, particularly along Binney Street, where they can modulate the building streetwall. The Eastern Cambridge Design Guidelines encourage visually accessible residential courtyards. Figures 28 and 29 of the Graphic Materials provide examples of this urban space type.

c Streetwalls and Massing

Buildings in the Binney Street Project will represent a variety of architectural design expressions to provide visual interest and produce a distinct identity for the area. Taking advantage of solar orientation could result in large areas of glass fenestration on north-facing facades in contrast to greater use of masonry on south-facing facades, and a dynamic mix of transparent and opaque materials on east- and west-facing facades. Address-specific setbacks, the preservation of existing structures and the scale of adjacent open spaces require architectural responses that make for richer, more complex buildings. Ground floor active uses and building entries will have high glass-to-solid ratios, enlivening the streetscape. Further, retail uses will have canopies, signage and lighting specific to the retailer.

The buildings will adhere to the maximum heights set by zoning. The buildings south of Binney Street will be 140'-0" tall, a height similar to those in Cambridge Research Park and at the Esplanade and Rivercourt Residences. The commercial buildings north of Binney Street, between Second and Third Streets will be 78'-0", stepping down to 65'-0" facing the Rogers Street Park, thereby minimizing the

impacts of shadows on the park. The new portion of the residential building on First Street will be 65'-0", and attach to an existing building at 161 First Street, which stands 48'-0", while the residential building on Third Street will be 85'-0" tall. The research and development building north of Binney Street, between Fifth and Sixth Streets will be 75'-0", similar to the surrounding buildings located at 301 Binney, the AT&T building, and the Archstone Kendall Square apartment building.

Streetwall Types address building façade designs that support active streetscapes and public spaces and result in distinctive architectural and material expression. The Streetwall Types for the Binney Street Project are intended to achieve consistency with the Eastern Cambridge Design Guidelines and the satisfy all requirements of the Binney Street Zoning, such as a minimum LEED Silver certifiable requirement for all buildings. Whereas the Urban Space Types and Streetscape Types engage the public realm, the Streetwall Types affect actions taken within the private development parcels. Figure 31 of the Graphic Materials illustrates the location of the various streetwall types in the Project. Figures 44 through 49 demonstrate conceptual massing for each of the proposed buildings in the Project.

Ground floor facade areas are required to allow for expansion of active ground floor uses—such as retail—into adjacent spaces along the ground floor. Ground floor facades should be distinguished from upper floors as a one or two story base, and should define a retail podium in which individual retail tenants will construct an identity (see Storefront Design).

At the top of the buildings, mechanical penthouses and mechanical screens will be designed as part of a comprehensive acoustical strategy to fulfill the noise mitigation requirements of the Binney Street Zoning. Penthouses and screens will be integrated into the building expression of the facade and create interest at a higher elevation: the edge between building and sky.

1 Streetwall Type 1: South Side of Binney Street

This Streetwall type will occur along the north facing facades of 50 Binney and 100 Binney on the south side of Binney Street. Broad expanses of clear glazing may be desirable here, as these facades are largely protected from solar glare. Abundant glazing on these facades can sustainably contribute to interior daylighting strategies and can promote connection to the streetscape through transparency. A 10' setback between 78'-85' will set a datum line for the buildings, aligning to the building at 300 Third Street, thus introducing variety to the massing of these facades. See Figures 32 and 33 of the Graphic Materials.

2 Streetwall Type 2: North Side of Binney Street

This Streetwall type will occur along the south facing facades of 75 Binney, 125 Binney and 225 Binney on the north side of Binney Street. It is anticipated that these facades will be articulated with architectural elements that emphasize the corners of cross streets. A material palette that combines glazed openings with opaque materials – such as masonry, metals and terracotta - will limit solar heat gain on these south-facing facades. See Figures 34 and 35 of the Graphic Materials.

3 Streetwall Type 3: Residential

The primary location for this Streetwall type will be along the easterly side of Third Street between Binney and Rogers Streets. Along Third Street, street level retail and active uses are anticipated, and should support a high volume of pedestrian traffic and include uses such as shops, cafes, restaurants and community spaces. Outdoor café seating is encouraged. Transparent materials and interior lighting are anticipated to be used to maximize visibility at street level, supporting activity throughout the day and evening. Retail entries should be located at the corners, where possible. (See Storefront Design).

Materials such as terracotta and masonry are expected to be incorporated with vertical or horizontal shading devices to mitigate solar heat gain on this west-facing façade. Dimensional variation of the

façade may be promoted through the use of varied roof lines, recessed and projected bays, canopies, awnings and architectural elements.

Type 3 Streetwalls will also occur along Binney and Rogers Streets and along the north side of Binney Street and the south side of Rogers Street, between First and Second Streets. These street level facades will likely accommodate residential uses and should include entries, stoops, porches or gardens. Upper floors are anticipated to include small set-backs for balconies or projected bays, where appropriate. See Figures 36 and 37 of the Graphic Materials.

4 Streetwall Type 4: Park Facades

Type 4 Streetwalls will face the southern side of Rogers Street Park, the western side of Triangle Park and the northern side of the North Plaza in Cambridge Research Park. A premium will be placed on facades that complement the design of the parks. Provisions include (a) a high level of transparency in the lower floors of the buildings to avoid blank walls, (b) ground floor uses that provide an active environment and increase safety for park users, and (c) shaping the mass of the buildings with setbacks to signal visual acknowledgment and orientation to the parks.

The facades on Rogers Street, in particular, are expected to consider broad expanses of clear glazing, as these facades are north facing. Largely protected from solar glare, abundant glazing on these facades can sustainably contribute to interior daylighting strategies and can promote connection to the park through transparency. See Figures 38 and 39 of the Graphic Materials.

d Storefront Design

Storefront design focuses on those components of the retail environment that provide the desired levels of interest and variety to the urban realm. Retail locations will require visually engaging signage, protective awnings and canopies, high degrees of transparency to interiors and visual connections to other retail. Outdoor seating will be encouraged where appropriate. Storefront Design is predicated on the need to guide the scalar elements of the building façades to allow retail uses to be visually prominent at the street level of large buildings. Among the available concepts for Storefront Design to achieve the desired street level treatment for retail are the following alternatives: (i) two-story retail podium, (ii) single-story building base, and (iii) retail pavilion. Figures 40 through 42 of the Graphic Materials illustrate the various Storefront Design concepts.

e Service Access Design

The mix of building uses, sizes and parcel configurations anticipated for the Binney Street Project will involve a range of solutions for designing loading, service and parking ramps. These functions will likely front on local streets, as there is no “back door” or hidden face to the development. Conscientious design treatment of these elements will be utilized to maintain the pedestrian-friendly environment. See Figures 43 and 50 of the Graphic Materials.

f Exterior Lighting

Exterior lighting is an important aspect of public realm design. Particularly in northern latitudes, it plays a key role in extending the usefulness and appeal of outdoor spaces, contributing to the sense of security and safety and reinforcing the pedestrian scale. There are a number of components of exterior lighting.

Street lighting will be designed to provide visibility for vehicles but also to enhance the pedestrian use of the streets. The City of Cambridge’s standards will be used in the design and selection of street lighting. Lighting in the pedestrian passages, courtyards and other pedestrian areas will be appropriately scaled and used to accent particular areas and reinforce pathways.

Building lighting will highlight entrances, public areas and key architectural features, and in retail areas, special attention will be given to window displays and signage lighting

g Approach to Design Approvals

The Design Approach for the Project is intended to provide the framework for site and building design that shapes the public realm. This approach addresses components of the Project on both sides of the property lines, acknowledging that close coordination with City stakeholders will be essential over the anticipated twenty-year course of the build-out (or sooner if market conditions permit).

h Noise Mitigation Strategy

Sound emanating from rooftop mechanical equipment on buildings within the Project, consistent with the requirements of the Binney Street Zoning, will be minimized by the adoption of best available and feasible practices regarding the location and sizing of equipment, the selection of equipment, and sound attenuation measures. Any noise or vibration emanating from buildings within the Project shall, at a minimum, not be perceptible at ground level without instruments at a distance of 100 feet from the source lot line, and shall in all events comply with the City of Cambridge Noise Ordinance.

In order to enforce and comply with these requirements, and in addition to the submittal of a noise mitigation narrative required as part of the Article 19.00 review process, the Binney Street Zoning requires ARE to submit the following acoustical reports, prepared by a professional acoustical engineer, at the following times: (1) as a condition to the issuance of the first Certificate of Occupancy for a new building, an acoustical report with field measurements demonstrating the building's compliance with all applicable noise requirements, and (2) prior to obtaining any building permit to add any equipment with more than a 5 horsepower capacity to any rooftop, a narrative report demonstrating the building's continued compliance with all applicable noise requirements after such addition, and upon completion of such addition and as a condition to the operation thereof, an acoustical report with field measurements demonstrating such compliance.

i Infrastructure System

The City of Cambridge has confirmed that the City's sanitary sewer system in the area has adequate capacity to serve the Project. Additionally, based on the results of fire flow tests, there are adequate flows in the existing water system to supply the Project.

The existing stormwater system servicing the Project area, however, is severely limited, in that it is not completely separated, does not have a stormwater outfall, has very limited capacity, and does not provide water quality treatment. In response to these conditions, ARE has developed an approach which will meet all design objectives by providing a new, completely separated stormwater trunk line that will service five of the six proposed building sites. The new self-contained system will be connected to an existing outfall to the Charles River, that is more particularly described in Section VII—Utilities.

12.34.3(1)(c)

Development schedule indicating the appropriate date when construction of the PUD can be expected to begin and be completed, including initiation and completion dates of separate stages of a phased development

IV. DEVELOPMENT SCHEDULE AND PHASING

It is expected that the Project will be developed over a period of twenty (20) years (or sooner if market conditions permit) and will be undertaken in eight (8) phases. Each phase will involve the construction of a single building (or, in the case of 41 Linskey Way, the renovation of an existing building and the construction of an ancillary adjacent structure) on one of the following building sites: 50 Binney Street, 75 Binney Street, 100 Binney Street, 41 Linskey Way, 125 Binney Street, 225 Binney Street, 161 First Street and 270 Third Street. It is anticipated that the Project will include four (4) subsurface parking garages, to be located below the 50 Binney Street site, the 100 Binney Street site, the block on which 75 Binney Street, 125 Binney Street and 270 Third Street will be located, and the 225 Binney Street site. The precise sequencing of the phases has not yet been finally determined and will depend in part upon market conditions and demand. ARE anticipates that it may pursue the development of one or more phases of the Project simultaneously during the course of the Project's build out.

A possible development program for the first two phases of the Project involves the construction of the buildings to be located at 100 Binney Street and 75 Binney Street. As noted above, these and other distinct phases may be pursued simultaneously depending upon market conditions. For purposes of the traffic analysis, the "Phase 1 Build Condition" of the Project is described as the construction and occupancy of both the 100 Binney Street and the 75 Binney Street development sites. Proposed on- and off-site infrastructure systems and traffic and roadway improvements that directly correspond to and support a particular phase of the development sequence will be implemented simultaneously with the construction of that phase.

Various ARE commitments to the City and community benefits to be derived from the Project are linked to specific milestones in the Project's development. Critical among these commitments is the timing of ARE's obligation to construct the residential components of the Project. In particular, the ARE Commitment Letter and the Binney Street Zoning function together to ensure that construction of the first 70,000 square feet of Gross Floor Area of residential uses shall commence prior to the issuance of a building permit allowing commercial Gross Floor Area in excess of 767,000 square feet in the aggregate, while construction of the remaining 150,000 square feet of Gross Floor Area of residential uses shall commence prior to the later of (i) the issuance of a building permit allowing commercial Gross Floor Area in excess of 1,000,000 square feet in the aggregate, or (ii) eight years after the grant of a Special Permit approving the Final Development Plan. In addition, pursuant to the ARE Commitment Letter and the Binney Street Zoning, (a) the \$1,000,000 payment by ARE to the City for the planning and design of the Rogers Street Park and the Triangle Park shall be made no later than the issuance of the first building permit for a commercial building in the Project, (b) the \$8,500,000 payment by ARE to the City to enable construction of the two parks and the deed conveying the Rogers Street Park to the City shall be delivered no later than the issuance of the base building Certificate of Occupancy for the first commercial building in the Project, (c) the deed conveying the Triangle Park to the City shall be delivered by ARE no later than the issuance of Certificates of Occupancy for commercial buildings that contain at least 700,000 square feet of Gross Floor Area in the aggregate, (d) the deed conveying the 101 Rogers Street building to the City shall be delivered by ARE on or before January 1, 2012, provided that ARE has commenced construction of a building in the Project pursuant to the Final Development Plan, and (e) ARE's contribution to the City for the design, acquisition and construction of Public Open Space in the East Cambridge Study Area shall be made at the rate of \$12 per square foot (up to \$6,000,000) for each square foot of Gross Floor Area for which Certificates of Occupancy are issued in the Final Development Plan in excess of 1,000,000 square feet (excluding Gross Floor Area for residential uses). Taken together, these milestones and requirements provide a general timeline for the development of the Project's numerous component parts, while providing ARE with the necessary flexibility to sequence the individual phases of the Project in accordance with then-current market demands.

12.34.3(1)(d)

Statement of intentions regarding the future selling or leasing of all or portions of the PUD, such as land area, dwelling units and public facilities

V. FUTURE OWNERSHIP

ARE intends to develop the Project proposed in this PUD application and hold the ownership interests in the long-term, while leasing the developed space to third-party users and occupants. It is possible that one or more parcels, buildings, or portions thereof will ultimately be converted and sold as condominium units. It should be noted that while portions of the Project may be developed or owned by ARE's successors or assigns in interest, the ARE Commitment Letter provides that its terms shall be binding upon and inure to the benefit of any successor owners of the land comprising the Project Site. Additionally, the Binney Street Zoning requires ongoing compliance with the terms of the ARE Commitment Letter as a condition to the issuance of building permits and certificates of occupancy for the Project, regardless of whether ARE is the owner of the land. In addition, as described in more detail above, the land to be conveyed by ARE to create the Rogers Street Park and the Triangle Park will ultimately be owned by the City of Cambridge.

12.34.3(1)(e)

Statement of financing plan, including projected sources and amounts of funds

VI. FINANCING PLAN

To date, ARE has funded all predevelopment costs. Predevelopment costs include the entitlement process, master planning, architectural, engineering, marketing and administrative expenditures.

ARE plans to develop the Project in phases according to market conditions, and may fund project construction through a combination of equity, debt, construction financing, infrastructure financing, funds from its significant credit facility and joint venture capital. ARE intends to fund the construction costs on a phase-by-phase basis.

ARE may place permanent financing on each completed phase of the Project.

The budget amounts for the predevelopment and construction periods are as follows:

Predevelopment	\$ 1,500,000
Construction (inclusive of parking)	
Residential	\$ 44,800,000
Commercial	\$ 509,200,000
Infrastructure	\$ 3,000,000
Total Construction Cost	\$ 558,500,000

12.34.3(1)(f)

Statement of how utilities and other public works will be provided, including design standards

VII. UTILITIES

A. Water Supply

i) Existing Water Supply

Potable water is supplied to the area via several 6-, 8- and 12-inch distribution lines owned and operated by the City of Cambridge Water Department. Water is available on all sides of the Project area. There are no dedicated fire protection lines in the area and no dedicated transmission mains.

Hydrants are located throughout the area. During the month of September 2009, Fire Flow tests were completed on representative 6-, 8- and 12-inch lines in the area. The results of the tests indicate that sufficient pressure is available in the lines to provide adequate fire flow protection. Figure WAT-1 shows the existing water distribution system in the area.

ii) Proposed Connections to Existing Water Supply System

No new water mains are proposed for this Project. Water consumption for the Project has been estimated from the anticipated wastewater generation rates calculated in the Sanitary Sewer section. The Project's water demand has been estimated at 180,000 gallons per day, or a net increase of 168,000 gallons per day above current usage.

ARE has met with the Cambridge Water Department and found that there are no known capacity issues with the 8- and 12-inch distribution lines. Therefore, the distribution system has adequate capacity to supply the proposed buildings in the Project area. There is no need for the installation of new water lines. The attached Figure WAT-2 shows the proposed water modifications.

B. Wastewater

i) Existing Sanitary Sewer System

The existing sanitary sewer system is owned and operated by the City of Cambridge. As discussed in the Stormwater Management section, currently the area is served by a 29-inch by 25-inch sanitary sewer and a 96-inch by 100-inch combined sewer and storm drain pipe, both in Binney Street. Side streets contain variously sized dedicated sewer and drain pipes. The 29-inch by 25-inch sewer flows in a westerly direction along Binney, collecting the side street flows and ultimately discharging to the Cardinal Medeiros Interceptor in Cardinal Medeiros Avenue. Flows in the 96-inch by 100-inch pipe are described in the Stormwater Management section. Figure SAN-1 shows the existing sewer infrastructure in the area.

ii) Proposed Sanitary Sewer Connections

Using wastewater generation rates from Title V of the Massachusetts State Environmental Code, the Project at full build-out is estimated to generate a net increase in flows of 152,600 gallons per day of wastewater. The majority of the building space will be laboratory/office space, with a mix of residential and commercial space. Currently, lab space generation rates are not included in Title V. Therefore the generate rates for office space (75 gallons per day), per 310 CMR 15.203 were used in the calculation.

ARE met with the City of Cambridge Sewer Maintenance Department on several occasions to discuss the Project, the anticipated flows and the capacity of the existing sewer system. The City has informed ARE that there are no capacity problems in the area and that the existing 29-inch by 25-inch sanitary sewer

line can accommodate the anticipated net increase of 152,600 gallons per day. The proposed sewer modifications are shown in Figure SAN-2.

The Project will be served by separate sewer and storm drain systems. As discussed in the Stormwater Management section, ARE will be installing a separate, dedicated stormwater system to convey stormwater flows from the Project sites to the Charles River and remove these flows from the combined system currently in Binney Street.

C. Stormwater Management

i) Existing Conditions

The building sites that make up the Project are located within the area of the city designated as CAM 017 by the Department of Public Works. Binney Street forms an east-west utility spine running between and along the six building sites. Most streets within CAM 017, including those in the Project area, are serviced by separate public stormwater and sanitary sewer pipes. However, the systems are interconnected, primarily in Binney Street, such that the overall stormwater network receives sanitary sewer flows and therefore is a combined sewer system. There is no existing dedicated stormwater outfall servicing the Project area.

Within Binney Street is a large 96-inch x 100-inch combined sewer conduit which begins west of the Project area. The 96-inch x 100-inch flows easterly through the Project area to a diversion structure (CAM 017 diversion structure) in Land Boulevard, near the Charles River. The CAM 017 diversion structure contains a weir that prevents combined flows from flowing out to the River under normal flow condition, but provides hydraulic relief during periods of heavy flow. During large rainfall events the 96-inch x 100-inch Binney street conduit becomes backed up. When this back up occurs, flows over top the weir in the diversion structure and flow out the 90-inch x 96-inch outfall to the Charles River.

Within the diversion structure the 96-inch x 100-inch combined sewer conduit is connected to the Cambridge Marginal Conduit that carries normal flows north to the MWRA's Prison Point CSO Treatment Facility.

The six proposed building sites have frontage on Binney Street, and have either Rogers Street or Linskey Way as rear abutting streets. Following is a brief description of existing stormwater pipes in the vicinity of each proposed building site. The Binney Street system has been described above. The existing stormwater infrastructure is shown in Figure SW-1.

50 Binney Street: The one existing 8- inch separate stormwater pipe is insufficient in size to provide any practical service.

75 and 125 Binney Street: The existing stormwater pipes in Rogers Street between Third Street and Second Street are 12 and 15 inches in diameter, but have a nearly flat gradient, and therefore have no excess capacity. A 30-inch pipe, located in Second Street, appears to have excess capacity, but discharges to the combined 96-inch x 100-inch in Binney Street.

100 Binney Street: A short 12-inch diameter pipe section is located in Linskey Way, but this pipe flows into the insufficient 8-inch stormwater pipe in Second Street.

225 Binney Street: Along the southern curb line of Binney Street, a 24-inch dedicated storm drain flows westerly to a manhole at the intersection of the Binney and Sixth. The 24-inch pipe continues down Sixth Street and ultimately connects to the Broad Canal.

161 First Street: The pipes in Rogers Street between Second and First Streets have been abandoned. A 15-inch diameter pipe is located in First Street and discharges to the Binney Street combined sewer.

ii) Proposed Conditions

The City of Cambridge currently requires that new development in the City be designed to control the 25-year, 24-hour rainfall event. The Project will satisfy all applicable stormwater regulations. The entire existing Project area is developed, and is largely impervious area consisting of buildings and parking lots. Therefore, the Project is considered Redevelopment and must comply with the City Stormwater Standards. Proposed stormwater modifications are shown in Figure SW-2.

The stormwater design objectives for the Project include:

- Reduce post-development 25-year runoff rates to 2-year pre-development levels
- Comply with the 10 standards of the current Massachusetts Stormwater Handbook
- Peak rate attenuation and water quality treatment, to meet the required standards, will be achieved on the individual building sites.

iii) Off-Site Stormwater Management Features

The existing stormwater system servicing the Project area is severely limited as a result of the combined nature of the system, having very limited capacity, and not providing water quality treatment. Therefore, after evaluating numerous alternatives, ARE has developed an approach which will meet all design objectives by providing a new completely separated stormwater trunk line that will service five of the six proposed building sites. The new system will discharge to the existing 90-inch x 96-inch outfall to the Charles River. The remaining building site, 225 Binney Street, will be best serviced by an existing 24-inch separated storm drain that flows south on Sixth Street, eventually discharging to the Broad Street Canal.

This new stormwater trunk line will be sized with sufficient capacity to handle and mitigate the 25-year runoff from the proposed Project sites. The new trunk line is shown in Figure SW-2. The system will begin within the 75 and 125 Binney Street parcels. Stormwater from the roofs and site of 75 Binney Street, 125 Binney Street and 270 Third Street will be collected, treated and conveyed to a manhole located between 75 Binney Street and 125 Binney Street. Runoff from smaller rainfall events will be diverted to an infiltration system that will be constructed below the Rogers Street Park.

Runoff from larger storm events will flow across Binney Street in a 15-inch pipe to a manhole located on the 100 Binney Street parcel. Within this manhole, treated stormwater from the 100 Binney Street parcel will be combined and discharged to a 15-inch pipe that crosses Second Street flowing in an easterly direction to a manhole located on the 50 Binney Street parcel. The trunk line will collect the treated stormwater from the 50 Binney Street parcel and then enter a manhole proposed to be located in the southern lane (westerly direction) of Binney Street. Treated stormwater from the 161 First Street parcel will also discharge to the manhole located in Binney Street. The stormwater from the five sites will travel in a new pipe eastward in Binney Street to the intersection with Land Boulevard where it will discharge just downstream of the existing diversion structure. From this point the stormwater will continue to flow another 265 feet eastward through the existing 90-inch x 96-inch outfall to the Charles River.

iv) On-Site Stormwater Management Features

Peak runoff rate attenuation will be achieved at each of the six building sites using rooftop detention and/or tanks constructed below parking garage ramps. At the two parks, Rogers Street Park, and the Triangle Park, reduction of impervious surfaces will be the primary method of reducing runoff rates. Rooftop detention will be achieved by detaining rainwater that is collected on the building roofs. Flow control devices will be used at roof drains, so that rain water on the roof drains continuously, but at a limited rate. When rainfall intensity is greater than the rate draining from the roof, water will begin to pond. The system will be designed such that during the maximum design storm, the 25-year, 24-hour

event, a maximum water depth of 5-inches will be held for no more than several hours. Any water that collects above the 5-inch design depth will overflow and drain from the roof immediately. Since the proposed building roofs will make up a large percentage of each parcel's overall surface area, sufficient detention can be provided by the roofs alone, allowing the ground level runoff to discharge undetained.

Water quality enhancement features will include deep sumps in all catchbasins and manholes for total suspended solids (TSS) removal, oil and water separator outlets for collection of floatable hydrocarbons and debris, and sand or proprietary filter systems for phosphorus and TSS reduction. Infiltration will also be a key component for meeting the water quality criteria, specifically for 75 Binney Street, 125 Binney Street, 270 Third Street and 161 First Street.

Groundwater recharge for the overall Project will be consolidated and provided at two locations. The first is at the Rogers Street Park, and the second is within the courtyard of the 161 First Street building as described below. Recharge facilities at both locations will be in the form of underground leaching chamber systems, surrounded by crushed stone, which will provide storage volume and infiltration.

The elements of the stormwater management system that will be located on the individual sites and that will become the property and responsibility of the property owner(s) are described below. In general, ARE anticipates that peak run-off attenuation will be achieved using rooftop detention, surface storage and/or storage tanks. Where practical at each site, landscaping and grading will incorporate best management practices such as sunken planting beds with drain inlets raised above surrounding grade to create a shallow sump.

50 Binney Street, 100 Binney Street, and 225 Binney Street: Water quality features will include deep sump catchbasins and manholes for TSS reduction and oil and water separation. A sand or proprietary filtration system will be designed for TSS and phosphorus reduction.

75 and 125 Binney Street: Water quality features will include deep sump catchbasins and manholes and infiltration for TSS removal and oil and water separation. The water quality volume and recharge volume from these sites will be routed across Rogers Street to the Rogers Street Park where they will be further treated and discharged to the subsurface infiltration system. A high level overflow will be provided from the infiltration system to the existing 15-inch drain in Rogers Street.

161 First Street: Water quality features will include deep sump catchbasins and manholes for TSS removal and oil and water separation. The water quality volume and recharge volume will be treated and discharged to a subsurface infiltration system to be located in the building courtyard. A high level overflow will be provided from the infiltration system to the new stormwater trunk line in Binney Street.

Rogers Street Park: The park will be designed, constructed, owned and maintained by the City. Therefore, stormwater management will be the responsibility of the City. The proposed park will accommodate a substantially sized infiltration system which will recharge the majority of the required recharge volume for the overall Project. The infiltration system will also infiltrate the required water quality volume from 75 and 125 Binney Street.

Calculations of peak runoff rates and a description of how the Project will comply with the ten stormwater management policy standards are set forth in the following section.

All current designs have been closely coordinated with the Cambridge Public Works Department.

v) Peak Runoff Rate Attenuation

The following table provides a summary of pre and post development runoff rates proposed for each site. A preliminary hydrologic analysis was performed to demonstrate that the DPW's design criteria of reducing the 25-year post-development runoff rates down to the pre-development 2-year runoff rates can be met. This is achieved by using the proposed roof detention systems on each of the six building sites.

Table SW1. Summary of Peak Runoff Rates

Site	Total Area (acres)	Roof Area (acres)	Other Imp. Area (acres)	Total Imp. Area (acres)	Total Perv. Area (acres)	2-Yr Pre runoff (cfs)	unmitigated 25-Yr post runoff (cfs)	Roof Det. 25-Yr post runoff (cfs)
1	1.47	1.17	0.12	1.29	0.18	4.71	8.34	2.53
2	1.48	1.08	0.16	1.24	0.24	4.74	8.32	2.94
3	1.14	0.82	0.12	0.94	0.20	3.65	6.41	2.29
4	1.66	1.08	0.20	1.28	0.38	5.32	9.22	3.79
5	2.03	1.77	0.10	1.87	0.16	6.42	11.45	2.83
6	1.06	0.80	0.10	0.90	0.16	3.40	5.96	1.98
Rogers Park	2.26	0.00	0.45	0.45	1.81	7.62	7.96	7.96
Triangle Park	0.41	0.00	0.00	0.00	0.41	0.64	1.54	1.54
Total	11.51	6.72	1.25	7.97	3.54	36.50	59.20	25.86

The final designed peak runoff rate reduction may vary slightly, and will be determined by evaluating the impacts of each building site's runoff rate on the pipe sizes required for the proposed stormwater trunk line. The final cumulative post-development peak runoff rate will be determined in coordination with the City.

The proposed roof detention system will limit the discharge rate and reduce the peak runoff. Wherever practical, site level runoff from impervious surfaces will be disconnected from the stormwater collection system by vegetative filter strips, and by grading impervious surfaces towards landscape areas where the runoff will be collected in sunken planting beds with drain inlets raised above surrounding grade to create a shallow sump, provide some settling of heavy sediments, and promote recharge in the planting beds.

vi) Compliance with Mass DEP's Stormwater Management Policy Standards

Standard 1 - No new untreated stormwater discharges to wetlands or waters: All stormwater discharges from the proposed Project will be treated in compliance with applicable Massachusetts stormwater requirements.

Standard 2 - Match pre development runoff rates: The design criteria for new development in the City of Cambridge require reduction of post development runoff rates from the 25-year storm to match pre development runoff rates from the 2-year storm. This requirement is more onerous than the Massachusetts Department of Environmental Protection's (DEP's) requirement, and will be met.

Standard 3 - Ensure no loss of annual recharge: Per current DEP stormwater standards, the Project would be required to meet this recharge standard to the maximum extent practicable since it is a redevelopment. The required redevelopment volume will be calculated for the overall Project, but recharge of the volume will be achieved at the two proposed infiltration systems, one of which will be located at the Rogers Street Park, and the other at 161 First Street.

Standard 4 - Provide Total Suspended Solids (TSS) removal: The water quality volume for this standard will be calculated as 0.5 inch of rainfall over post development impervious surfaces. The Project proposes to meet the 80% TSS removal rate for the water quality volume to the maximum extent practicable. This will be achieved by good housekeeping and maintenance, including regular inspection and cleaning of stormwater collection sumps in catchbasins and manholes, and by the use of sand or proprietary filtration systems which are being used for TMDL reduction of phosphorus.

This standard also requires that a long-term (post-construction) Stormwater Pollution Prevention Plan be prepared for implementation by the property owner. This plan will be prepared and submitted with the final Stormwater Management Report.

Standard 5 - Land uses with higher potential pollutant loads: The proposed land use for this Project will include office buildings, landscaped areas, and a public park. Therefore, this standard does not apply to this Project.

Standard 6 - Stormwater discharges to critical areas: Stormwater from the proposed Project will discharge to the Charles River via an existing City of Cambridge outfall. The Charles River is not designated as a critical area or outstanding resource water. Therefore, this standard does not apply.

Standard 7 - Redevelopment Projects: The existing Project area is entirely developed, and composed of office buildings, converted warehouses, and parking lots. The proposed Project is considered a redevelopment, and will therefore be subject to this standard. The proposed stormwater management design will meet all standard requirements either fully, or to the maximum extend practicable, as described in this listing. The proposed Project will greatly improve stormwater management on all of the Project building sites, in terms of quantity, recharge, and water quality treatment.

Standard 8 - Control plan for construction-related erosion and pollution: The proposed design will incorporate sedimentation and erosion prevention measures which will include established limits of work, silt fencing around disturbed areas, restrictions on stockpiling and snow removal areas, protection and cleaning of all stormwater collection elements, construction vehicle wash-off pads, and operational procedures that the contractor will be required to comply with throughout construction. These measures will be included as details and notes in the final construction documents. This Project is also subject to an EPA NPDES General Construction Permit, and as part of that submission, a Construction Stormwater Pollution Prevention Plan (SWPPP) will be prepared. The contractor will be responsible for implementing the plan.

Standard 9 - Long-term Operations and Maintenance Plan (O&M Plan): As part of the proposed stormwater management design, an O&M Plan will be prepared showing long term (post-construction) inspection and maintenance requirements for each BMP or system element. In addition, a field check list will be prepared which will list all inspections and maintenance duties, with approximate dates and frequencies, to be used by the owner. The property owner will be responsible for the implementation of the O&M Plan.

Standard 10 - Elimination of illicit discharges: The proposed Project will eliminate any existing illicit discharges that may be present in the existing buildings. The proposed Project will provide complete separation of sanitary sewer from stormwater flows.

vii) Stormwater Management Plan

As part of the proposed design, a comprehensive Stormwater Management Report will be prepared to describe the objectives and methods used in the stormwater management system and to fully document compliance with the requirements and design standards of the City of Cambridge, DEP, and the United States Environmental Protection Agency. Construction documents, including plans and specifications, will be prepared with sufficient detail to convey the design of the proposed system, and for submission to the appropriate permitting agencies.

12.34.3(1)(g)

The impact of the development on existing City services outside the development

VIII. IMPACT ON CITY SERVICES

A. Services to Development in the City of Cambridge

i) Public Safety

The Project's buildings will be constructed from newer materials, will meet current life/safety codes and include sprinkler systems and other life/safety enhancements as appropriate. ARE has met with representatives of the Cambridge Fire Department regarding the proposed Project.

ii) Schools

While it is not anticipated that there will be a heavy demand on the schools, given the Project's residential component, it is anticipated that a portion of the Project's residential population will consist of school-age children.

iii) Infrastructure

Infrastructure demands and servicing are discussed in Section VII—Utilities above.

12.34.3(2)

The impact of the development on existing City services outside the development

IX. QUANTITATIVE DATA

a.	Parcel size	491,320 sf	11.3 acres
b.	Proposed lot coverage of structures	281,000 sf	6.5 acres
c.	Floor Area Ratio	3.0	
d.	Total amount of usable open space, both public and private		
	public	2.6 acres	
	private	0.6 acres	
	total	3.2 acres	
e.	Total number and type of dwelling units by number of bedrooms	220 dwelling units	
f.	Projected rent levels or selling price by unit size	See Section X	
g.	Approximate gross residential densities	19.5 du/acre	
h.	Total amount in square footage of nonresidential construction by type of use		
	Technical Office	1,513,200 sf	
	Retail	20,000 sf	
	Total	1,533,200 sf	
i.	Economic feasibility or market analysis including projected market area and proposed rent levels for commercial development	See Section X	
j.	Number of parking spaces to be provided by use		
	Commercial (Technical Office+Retail)	1,380 spaces	
	Residential	220 spaces	
	Athenaeum Building	332 spaces	
	Total	1,932 spaces	
k.	Total length of streets to be conveyed to the city government	None	
l.	Total length of streets to be held as private ways within the development	None	
m.	Total length by type of other public works to be conveyed to the city government	None	
n.	Number and type of public facilities	See Section III.B	

X. MARKET ANALYSIS

A. Residential Market

i) Overview

The residential portion of the Project is being planned to address long term market demand for urban, transit-oriented housing. The Project's location at the heart of the innovation hub of Greater Boston, its excellent accessibility to transit, interstate highways and an international airport, and the mixed use nature of the Binney Street development will enhance the evolving vibrancy of the Kendall Square area and the desirability of the Project as a housing location.

The Project's housing will be developed in response to market demand at the time of construction. Consistent with the requirements of the Binney Street Zoning, of at least 33,000 square feet of gross floor area devoted to units designated as affordable (<80% of median income) and at least 47,000 square feet of gross floor area will be devoted to middle income households (<120% of median income). The pricing of the remaining residential units will be responsive to market conditions.

The housing component will also be developed to take advantage of the urban amenities that are located in the immediate area, including transit, local universities, cultural attractions, and the proximity to Boston proper, and will be an important link between the established residential neighborhoods to the north and east and the newly developed residential properties to the south in Kendall Square.

ii) Existing Market

The Cambridge residential market has historically been very strong for both apartments and condominiums. In fact, during the current economic recession Cambridge has remained comparatively strong, even experiencing a slight increase in prices, despite the overall softness in the Greater Boston residential market. The general outlook for the Cambridge residential market is positive due to the constrained residential supply, a dearth of developable residential sites and an increasing demand for well located, transit-oriented, urban, amenity rich residential units.

iii) Feasibility

The residential component of the Project was included in the Binney Street Zoning in an effort to continue to enhance the evolving vibrant, 24-hour, mixed-use district in the Kendall Square and East Cambridge neighborhoods. The locations of the residential components of the Project were chosen specifically to act as transitions from the more commercial Binney Street corridor to the established neighborhoods to the north (East Cambridge) and to the east (Rivercourt and the Esplanade).

ARE will analyze residential market dynamics at the time of construction and build units that will not only enhance the neighborhood, but will be attractive to the demand drivers at the time. It is anticipated that the Project's location, amenities, and accessibility will make the residential units desirable.

B. Office/Lab Market

i) Overview

As one of the largest innovation clusters in the country, due in part to the presence of local universities, venture capital sources, and a culture of entrepreneurship, Cambridge has historically been one of the healthiest submarkets in Greater Boston. However, similar to trends experienced throughout national commercial real estate markets, the current economic recession has negatively affected the Cambridge office and laboratory markets. Over the first six months of 2009, office and laboratory fundamentals remained soft across most segments of the Cambridge market. Supply remained steady with 10.7 million square feet of space in the office market and 7.2 million square feet in the laboratory market, with 650 East Kendall Street, a laboratory building, the lone building under construction.

ii) Outlook

The Project is located in the heart of Cambridge's key laboratory and office sector, just minutes from downtown Boston and with unparalleled access to one of the world's preeminent education and life science populations, including universities such as MIT and Harvard. These positive characteristics are anticipated to translate into a continuing steady demand for high quality office and laboratory space. In the long term, asking rents are expected to hold steady in direct vacancies. While the Cambridge office market may continue to soften in the near term, ARE's development timeline should position the Project well to respond to Cambridge's long-term office and laboratory needs as an innovation hub anchored by leading life science and education institutions. Projected rent levels for commercial space within the Project will be responsive to market conditions.

XI. ATTACHMENTS

Attachment A: Graphic Materials-- Binney Street Project Development Proposal

Attachment B: Legal Description of Development Parcel

Attachment C: Conceptual Marketing and Merchandising Plan

Attachment D: Conceptual LEED Checklist—100 Binney Street

Attachment A

Graphic Materials—Binney Street Project Development Proposal

(Materials Submitted Under Separate Cover with Application)

Attachment B

Legal Description of Development Parcel

DEVELOPMENT PARCEL DESCRIPTION

Building Site 1—50 Binney Street

195 First Street

A certain parcel of land with the buildings thereon, in Cambridge, Middlesex County, Massachusetts, bounded and described as follows:

Commencing at the intersection of the northerly line of William "Doc" Linskey Way and the easterly line of Second Street, said point being the southwest corner of the parcel herein described:

Thence running: N 09°27'26" E, along said easterly line of Second Street, a distance of 150.10 feet, to a point of curvature;

Thence running: Northeasterly on a curve to the right, having a radius of 10.00 feet, an arc distance of 15.72 feet, to a point of tangency on the southerly line of relocated Binney Street;

Thence running: S 80°28'24" E, along said southerly line of relocated Binney Street, a distance of 370.14 feet, to a point of curvature;

Thence running: Southeasterly, on a curve to the right, having a radius of 20.00 feet, an arc distance of 31.44 feet, to a point of tangency on the westerly line of First Street;

Thence running: S 09°36'28" W, along said westerly line of First Street, a distance of 135.87 feet to a point;

Thence running: N 88°05'44" W along the northerly line of William "Doc" Linskey Way, a distance of 30.27 feet to a point;

Thence running: N 80°30'11" W, along said northerly line of William "Doc" Linskey Way, a distance of 369.76 feet, to the Point of Beginning.

Building Site 2—100 Binney Street

80-100 Binney Street

Two certain parcels of land with the buildings thereon situate in said Cambridge, bounded and described as follows:

First Parcel

Beginning at a point one hundred and fifty (150) feet westerly of the westerly line of Second Street and running westerly by the northerly line of Munroe Street one hundred (100) feet; thence running Northerly by a line parallel with the said westerly line of Second Street two hundred (200) feet to Binney Street; thence

Easterly by the southerly line of Binney Street one hundred (100) feet; thence running Southerly by a line parallel with and one hundred (100) feet from the westerly line of the premises now or formerly of Concrete Steel Company and by land now or late of the New England Maple Syrup Company two hundred (200) feet to the point of beginning, be said measurements more or less, containing twenty thousand (20,000) square feet more or less.

Second Parcel

Easterly by Second Street one hundred (100) feet, Northeasterly by Binney Street one hundred and fifty (150) feet, Westerly by land now or late of the Concrete Steel Products Company one hundred (100) feet, and

Southerly by land now or late of the New England Maple Syrup Company one hundred and fifty (150) feet, containing fifteen thousand (15,000) square feet, more or less.

But excluding therefrom so much of said First and Second Parcels as was taken by the Commonwealth of Massachusetts, Department of Public Works for the layout and alteration of Binney Street (Layout No. 6963) dated August 8. 1990, recorded with the Middlesex South District Registry of Deeds, Book 20727, Page 13.

77 William "Doc" Linskey Way

A certain parcel of land situated in Cambridge, Middlesex County, Massachusetts, bounded and described as follows:

Commencing at a point on the southerly line of relocated Binney Street, said point being S 80° 56' 28" E and a distance of 227.67 feet from a point of curvature of a corner rounding into Third Street;

Thence running S 80° 56' 28" E along said southerly line of relocated Binney Street, a distance of 28.31 feet to an angle point;

Thence running S 80° 28' 24" E continuing along said southerly line of relocated Binney Street, a distance of 121.90 feet to a point;

Thence turning and running S 09° 27' 24" W by land now or formerly of Leon B. Newman, Tr. of William Crane Revocable Trust, a distance of 160.08 feet to a point on the northerly line of William "Doc" Linskey Way (formerly Munroe Street);

Thence running N 80° 28' 06" W, along said northerly line of William "Doc" Linskey Way, a distance of 150.42 feet to a point;

Thence running N 09° 31' 56" E, by lands now or formerly of Robert Tonon and Leon B. Newman, Tr. of William Crane Properties Trust, a distance of 159.83 feet to the point of beginning.

The above described land contains 24,058 square feet more or less, and is part of Land Court Plan 23628A.

41 William "Doc" Linskey Way

That certain parcel of land with the buildings and improvements thereon, situated at the northwest intersection of William Linskey Way (formerly Monroe Street) and Second Street in that part of Cambridge, Middlesex County, Massachusetts, called Cambridgeport, bounded and described as follows:

Southeasterly on said Second Street, one hundred and 00/100 (100.00) feet;

Southwesterly on William Linskey Way, one hundred fifty and 00/100 (150.00) feet;

Northwesterly on land now or formerly of Henry M. Whitney by a line parallel with Second Street, one hundred and 00/100 (100.00) feet; and

Northeasterly on land now or formerly of Henry M. Whitney by a line parallel with said William Linskey Way, one hundred fifty and 00/100 (150.00) feet.

Building Sites 3 and 4—75 Binney Street, 125 Binney Street and 270 Third Street

52-82 Rogers Street (also known as 81-143 Binney Street)

Two certain parcels of registered land with the buildings thereon, situate in said Cambridge, bounded and described as follows:

First Parcel

Southerly by Binney Street, two hundred fifty and 61/100 feet;
Westerly by Third Street, two hundred six and 45/100 feet;
Northerly by Rogers Street, two hundred three and 44/100 feet; and
Easterly by lot B as shown on the plan hereinafter mentioned, two hundred and 69/100 feet.

Said parcel is shown as Lot A on said Plan No. 8093C.

Second Parcel

Southerly by Binney Street, three hundred seventy-nine and 36/100 feet;
Westerly by Lot A as shown on the plan hereinafter mentioned, two hundred and 69/100 feet;
Northerly by Rogers Street, three hundred seventy-nine and 36/100 feet and
Easterly by the Westerly line of Second Street, two hundred and 04/100 feet.

Said parcel is shown as Lot B on said Plan No. 8093C.

All of said boundaries are determine by the Court to be located as shown on a subdivision plan, as approved by the Court, filed In the Land Registration Office, a copy of which is filed in the Registry of Deeds for the South Registry District of Middlesex County In Registration Book 113, Page 313, with Certificate of Title No. 16913.

Building Site 5—225 Binney Street

241 Binney Street/126-144 Rogers Street

The land with the buildings thereon, in the City of Cambridge, County of Middlesex and Commonwealth of Massachusetts.

PARCEL 1

Tract 1

NORTHERLY by Rogers Street; 75 feet;
EASTERLY by Fifth Street, 200 feet;
SOUTHERLY by Binney Street, 75 feet; and
WESTERLY by land of the Grantor, 200 feet.

Tract 2

NORTHERLY by Rogers Street, 95 feet;
EASTERLY by land now owned by Grantor, 200 feet;
SOUTHERLY by Binney Street, 95 feet; and
WESTERLY by land now or formerly of Atwood Realty
Trust, 200 feet.

Parcel 2

The land in Cambridge, Middlesex County, Massachusetts, together with the buildings thereon, more or less, bounded and described as follows:

NORTHERLY by Rogers Street, 230 feet;
EASTERLY by land now or late of the Galena Signal Oil Company, 200 feet;
SOUTHERLY by Binney Street, 230 feet; and
WESTERLY by Sixth Street, 200 feet.

Building Site 6—161 First Street

161 First Street

That certain parcel of land with the buildings thereon situated on First Street, Binney Street and Rogers Street in said Cambridge, Middlesex County, Commonwealth of Massachusetts, and bounded and described as follows:

NORTHERLY By Rogers Street, two hundred (200) feet;

EASTERLY By First Street, one hundred and ninety-nine and $74/100$ (199.74) feet;

SOUTHERLY By Binney Street, one hundred ninety-nine and $71/100$ (199.71) feet;

WESTERLY By land now or formerly of Leon B. Newman, Trustee, one hundred ninety-nine and $87/100$ (199.87) feet.

Portion of 200 Second/50 Rogers

A certain parcel of land being shown as Lot 2 on Land Court Plan No. 35661B, said plan approved by the Court, and filed with the Land Registration Office, a copy of which is filed with the Middlesex South Registry District of the Land Court with Certificate of Title No. 238095.

Containing 9,994 sq. ft.

Rogers Street Park

242-248 Third Street

The following certain parcel of land in Cambridge, Middlesex County South District, Massachusetts shown as Lot B on a plan entitled "Plan of Land in Cambridge, Massachusetts surveyed for Worthington Place Associates Limited Partnership", dated June 12, 1997, prepared by Design Consultants, Inc. (DCI), recorded with the Middlesex County Registry of Deeds as Plan No. 645 of 1997 (the "Registry"), said Lot B being further bounded and described as follows:

Beginning at a point on the easterly line of Third Street, said point being the northwesterly corner of the herein described premises;

Thence, running S 80° 03' 50" E along land now or formerly of American Twine Limited Partnership a distance of 199.88 feet to a point;

Thence, running S 10° 20' 00" W along land now or formerly of The Cambridge East Trust a distance of 78.01 feet to a point;

Thence, running S 09° 47' 55" W along land now or formerly of The Cambridge East Trust a distance of 22.00 feet to a point;

Thence, running N 80° 03' 50" W along land now or formerly of The Cambridge East Trust a distance of 222.47 feet to a point on the easterly line of Third Street; and

Thence running N 22° 55' 56" E along the easterly line of Third Street a distance of 102.63 feet to the point of beginning.

65-83 Rogers Street

Four certain parcels of registered land with the buildings thereon, situate in said Cambridge bounded and described as follows:

First Parcel

Southwesterly by the Northeasterly line of Rogers Street, sixty feet;

Northwesterly by Lot B as shown on the plan hereinafter mentioned, one hundred feet;

Northeasterly by land now or formerly of the Independent Ice Company, Sixty feet; and

Southeasterly by said Company land, one hundred feet.

Said parcel is shown as Lot A on said Plan No. 3879B.

All of said boundaries are determined by the Court to be located as shown on a subdivision plan, as approved by the Court filed in the Land Registration Office, a copy of which is filed in the Registry of Deeds for the South Registry District of Middlesex County in Registration Book 70, Page 237, with Certificate of Title No. 10357.

There is appurtenant to said Lot A a right of way over Rogers Street in common with others entitled thereto, and also the benefit of the restrictions set forth in a deed given by Anna W.H Nichols to the independent Ice Company, dated June 2, 1913, recorded with Middlesex South District Deeds, Book 3811, Page 504, as modified by Document No. 156265.

Second Parcel

Southerly by the Northerly line of Rogers Street, two and 50/100 Feet;
Westerly one hundred feet; and
Southerly one hundred ten feet by land now or formerly of Anna W.H. Nicholas;
Westerly by land now or formerly of Sarah A. Conlan, seventy-seven and 85/100 feet;
Northerly by lands now or formerly of Robert H. Sanderson and of Enterprise Moakler Co. Inc., one hundred eleven and 75/100 feet; and
Easterly by Lot A as shown on the plan hereinafter mentioned, one hundred seventy-seven and 97/100 feet.

Said parcel is shown as Lot B on said Plan No. 17039A.

All of said boundaries are determined by the court to be located as shown on a plan, as modified and approved by the Court, filed In the Land Registration Office, a copy of a portion of which is filed in the Registry of Deeds

for the South Registry District of Middlesex County In Registration Book 282, Page 533, with Certificate of Title No. 44388.

Third Parcel

Southwesterly by the Northeasterly line of Rogers Street, two hundred fifty and 65/100 feet;
Northwesterly by Third Street, eighty and 05/100 feet;
Northeasterly by land now or formerly of Sarah A. Conlan, two hundred twenty-two and 47/100 feet;
Northwesterly by said Conlan land, twenty-two feet;
Northeasterly by land now or formerly of the Independent Ice Company, ten feet; and
Southeasterly by Lot C as shown on the plan hereinafter mentioned, one hundred feet

Said parcel shown as Lot D on said Plan No. 3879C.

Fourth Parcel

Southwesterly by the Northeasterly line of Rogers Street, forty feet;
Northwesterly by Lot Das shown on the plan hereinafter mentioned, one hundred feet;
Northeasterly by land now or formerly of the Independent Ice Company, forty feet; and

Southeasterly by Lot A on said plan, one hundred feet.

Said parcel is shown as Lot C on said Plan no. 3879C.

All of said boundaries are determined by the Court to be located as shown on a Subdivision plan, as approved by the Court filed in the Land Registration Office, a copy of which is filed in the Registry of Deeds for the South Registry District of Middlesex County in Registration Book 212; Page 453, with Certificate of Title No. 32728;

There is appurtenant to said Lots C and D a right of way over Rogers Street in common with others entitled thereto, and also the benefit of the restrictions set forth in a deed given by Anna W.H. Nichols to the Independent Ice Company, dated June 2, 1913, recorded with Middlesex South District Deeds, Book 3811,

Page 504 as modified by an Agreement between Williams Crane Inc. and Gridley Banking Co. et al, Document No. 156285.

167-179 Second Street

That certain parcel of registered land with the buildings thereon situate in said Cambridge, bound and described as follows:

Easterly by the Westerly line of Second Street, one hundred seventy-eight and 25/100 feet;

Southerly by the northerly line of Rogers Street, two hundred seventeen and 62/100 feet;

Westerly by Lot B as shown on the plan hereinafter mentioned, one hundred seventy-seven and 97/100 feet; and

Northerly by land now or formerly of Enterprise Moakler Co. Inc., two hundred seventeen and 63/100 feet.

Said parcels shown as Lot A on said Plan No. 17039A.

All of said boundaries are determined by the Court to be located as shown on a plan, as modified and approved by the Court, filed in the Land Registration Office, a copy of a portion of which is filed in the Registry of Deeds for the South Registry District in Registration Book 282, Page 533, with Certificate of Title No. 44388.

Triangle Park

182-198 First Street

A certain parcel of land with the buildings thereon, situated in Cambridge, Middlesex County, Massachusetts, and bounded as follows:

NORTHEASTERLY by Binney Street, one hundred and two feet;

SOUTHEASTERLY by Lot B as shown on plan hereinafter mentioned, sixty-one and 80/100 feet;

SOUTHWESTERLY by said Lot B, one hundred and two feet; and

NORTHWESTERLY by First Street, sixty-one and 80/100 feet.

Said parcel is shown as Lot A on Plan No. 18392B.

All of said boundaries are determined by the Court to be located as shown on a subdivision plan as approved by the Court. filed in the Land Registration Office, a copy of which is filed in the Middlesex South Registry District of the Land Court with Certificate of Title No. 56878.

EXCEPTING and EXCLUDING land as set forth in Taking in fee and easement by the Commonwealth of Massachusetts, Department of Public Works, recorded in Book 20727, Page 13, filed as Document No. 828134.

Another parcel of land situated in Cambridge, bounded and described as follows:

SOUTHERLY and SOUTHWESTERLY by Munroe Street, by two lines measuring together ninety-one and 03/100;

NORTHWESTERLY by First Street, one hundred six and 09/100 feet;

NORTHEASTERLY by Lot A as shown on plan hereinafter mentioned, eighty-nine and 79/100; and

SOUTHEASTERLY by Lot B3 on said plan, ninety-four and 18/100 feet;

Said Parcel is shown as Lot B2 on Plan No. 18329C.

All of said boundaries are determined by the Court to be located as shown on a subdivision plan as approved by the Court. filed in the Land Registration Office, a copy of which is filed with the Middlesex South Registry District of the Land Court with Certificate of Title No. 57004.

200 First Street

The land with the buildings thereon situated in Cambridge, Middlesex County, Massachusetts, more particularly bounded and described as follows:

Northerly by Monroe Street extension, about 72 feet, more or less;

Northwesterly by First Street, about 52 feet, more or less;

Southwesterly by land now or formerly of Robert A. Jones and K. George Najarian, Trustees of Atheneum Realty Nominee Trust, about 44 feet, more or less;

Southeasterly about 64 feet, more or less.

Attachment C

Conceptual Marketing and Merchandising Plan

(See Following Page)

NOTE:

This Attachment C has been superseded by the Revised Marketing and Merchandising Plan included in Section 5 of Final Development Plan submitted March 15, 2010

Attachment D

Conceptual LEED Checklist—100 Binney Street



LEED for Core and Shell v2.0 Registered Project Checklist

Project Name: 100 Binney Street
Project Address: Cambridge, Massachusetts

Yes	?	No	Sustainable Sites		15 Points
10	1	4			
1			Prereq 1	Construction Activity Pollution Prevention	Required
1			Credit 1	Site Selection	1
1			Credit 2	Development Density & Community Connectivity	1
1			Credit 3	Brownfield Redevelopment	1
1			Credit 4.1	Alternative Transportation: Public Transportation Access	1
1			Credit 4.2	Alternative Transportation: Bicycle Storage & Changing Rooms	1
1			Credit 4.3	Alternative Transportation: Low-Emitting and Fuel-Efficient Vehicles	1
1			Credit 4.4	Alternative Transportation: Parking Capacity	1
1			Credit 5.1	Site Development: Protect or Restore Habitat	1
1			Credit 5.2	Site Development: Maximize Open Space	1
1			Credit 6.1	Stormwater Design: Quantity Control	1
1			Credit 6.2	Stormwater Design: Quality Control	1
1			Credit 7.1	Heat Island Effect, Non-Roof	1
1			Credit 7.2	Heat Island Effect, Roof	1
1			Credit 8	Light Pollution Reduction	1
1			Credit 9	Tenant Design & Construction Guidelines	1
2	3		Water Efficiency		5 Points
1			Credit 1.1	Water Efficient Landscaping: Reduce by 50%	1
1			Credit 1.2	Water Efficient Landscaping: No Potable Use or No Irrigation	1
1			Credit 2	Innovative Wastewater Technologies	1
1			Credit 3.1	Water Use Reduction: 20% Reduction	1
1			Credit 3.2	Water Use Reduction: 30% Reduction	1
6	6		Energy & Atmosphere		14 Points
1			Prereq 1	Fundamental Commissioning of the Building Energy Systems	Required
1			Prereq 2	Minimum Energy Performance	Required
1			Prereq 3	Fundamental Refrigerant Management	Required
Note for FABC: All LEED for Core and Shell projects registered after June 26th, 2009 are required to achieve at least two (2) points under this					
4			Credit 1	Optimize Energy Performance	1 to 6
			<input type="checkbox"/>	10.5% New Buildings or 3.6% Existing Building Renovations	1
			<input type="checkbox"/>	14% New Buildings or 7% Existing Building Renovations	2
			<input type="checkbox"/>	17.5% New Buildings or 10.5% Existing Building Renovations	3
			<input checked="" type="checkbox"/>	21% New Buildings or 14% Existing Building Renovations	4
			<input type="checkbox"/>	24.5% New Buildings or 17.5% Existing Building Renovations	5
			<input type="checkbox"/>	28% New Buildings or 21% Existing Building Renovations	6
			<input type="checkbox"/>	31.5% New Buildings or 24.5% Existing Building Renovations	7
			<input type="checkbox"/>	35% New Buildings or 28% Existing Building Renovations	8
			Credit 2	On-Site Renewable Energy	1
1			Credit 3	Enhanced Commissioning	1
1			Credit 4	Enhanced Refrigerant Management	1
1			Credit 5.1	Measurement & Verification - Base Building	1
			Credit 5.2	Measurement & Verification - Tenant Sub-metering	1
			Credit 6	Green Power	1

Conceptual LEED Checklist—100 Binney Street (cont.)

3	8	Materials & Resources	11 Points
		Prereq 1 Storage & Collection of Recyclables	Required
	1	Credit 1.1 Building Reuse: Maintain 25% of Existing Walls, Floors & Roof	1
	1	Credit 1.2 Building Reuse: Maintain 50% of Existing Walls, Floors & Roof	1
	1	Credit 1.3 Building Reuse: Maintain 75% of Interior Non-Structural Elements	1
1		Credit 2.1 Construction Waste Management: Divert 50% from Disposal	1
1		Credit 2.2 Construction Waste Management: Divert 75% from Disposal	1
	1	Credit 3 Materials Reuse: 1%	1
1		Credit 4.1 Recycled Content: 10% (post-consumer + 1/2 pre-consumer)	1
	1	Credit 4.2 Recycled Content: 20% (post-consumer + 1/2 pre-consumer)	1
	1	Credit 5.1 Regional Materials: 10% Extracted, Processed & Manufactured Regionally	1
	1	Credit 5.2 Regional Materials: 20% Extracted, Processed & Manufactured Regionally	1
	1	Credit 6 Certified Wood	1
7	2	Indoor Environmental Quality	11 Points
		Prereq 1 Minimum IAQ Performance	Required
		Prereq 2 Environmental Tobacco Smoke (ETS) Control	Required
1		Credit 1 Outdoor Air Delivery Monitoring	1
	1	Credit 2 Increased Ventilation	1
1		Credit 3 Construction IAQ Management Plan: During Construction	1
1		Credit 4.1 Low-Emitting Materials: Adhesives & Sealants	1
1		Credit 4.2 Low-Emitting Materials: Paints & Coatings	1
1		Credit 4.3 Low-Emitting Materials: Carpet Systems	1
	1	Credit 4.4 Low-Emitting Materials: Composite Wood & Agrifiber Products	1
1		Credit 5 Indoor Chemical & Pollutant Source Control	1
1		Credit 6 Controllability of Systems: Thermal Comfort	1
	1	Credit 7 Thermal Comfort: Design	1
	1	Credit 8.1 Daylight & Views: Daylight 75% of Spaces	1
	1	Credit 8.2 Daylight & Views: Views for 90% of Spaces	1
2	5	Innovation & Design Process	5 Points
1		Credit 1.1 Innovation in Design: Donation of parks and ex. building to the City	1
		Credit 1.2 Innovation in Design: Provide Specific Title	1
		Credit 1.3 Innovation in Design: Provide Specific Title	1
		Credit 1.4 Innovation in Design: Provide Specific Title	1
1		Credit 2 LEED® Accredited Professional	1
30	3	Totals (pre-certification estimates)	81
Certified: 23 to 27 points, Silver: 28 to 33 points, Gold: 34 to 44 points, Platinum: 45 to 61 points			

Addendum A

*Revised PUD Graphic Materials
(Submitted under Separate Cover)*