

# Boston Post Road Redevelopment Sudbury, MA





# **Environmental Notification Form**

February 16, 2016

#### SUBMITTED TO

Executive Office of Energy and Environmental Affairs

Massachusetts Environmental Policy Act Office

#### A PARTNERSHIP OF

**BPR Sudbury Development LLC** 





# PREPARED BY



101 Walnut Street PO Box 9151 Watertown, Massachusetts 02471

#### IN ASSOCIATION WITH

Tata & Howard Sanborn, Head & Associates Goulston & Storrs



February 16, 2016

Ref: 13125.00

Matthew A. Beaton, Secretary Executive Office of Energy and Environmental Affairs 100 Cambridge Street, Suite 900 Boston, MA 02114

Re: Environmental Notification Form 526 and 528 Boston Post Road Redevelopment Sudbury, MA

Dear Secretary Beaton:

On behalf of BPR Sudbury Development LLC, a joint venture of National Development and AvalonBay Communities, Inc. affiliates (collectively the "Proponent"), VHB is pleased to submit the enclosed Environmental Notification Form (ENF) for the redevelopment of the former Raytheon site in Sudbury, MA (the "Project"). The Project proposes to transform an obsolete and aging office, research and development complex into a vibrant mixed-use development with retail, active-adult residential condominiums, a memory care assisted living community, and mixed-income residential apartment homes.

The Project brings countless benefits to the community and the region including new jobs, a variety of housing opportunities, additional open space and new village-style retail/grocery and dining options. The proposed development program provides a broad range of housing options that advance the Town's affordable housing interests for the site and address the specific goals identified in various local and regional planning documents, including the 2001 Sustainable Sudbury Plan, the 2012 Sudbury Housing Production Plan, the 2012 Route 20 business district Project Evaluation Report, and the Route 20 Corridor Study. In addition to providing a broad spectrum of much needed housing options and new retail space, the Project will improve environmental conditions on the Site through a reduction in impervious area and the enhancement of existing Site infrastructure and systems (including modernizing the on-site wastewater treatment plan), and by the replacement of inefficient and antiquated buildings with high-efficiency buildings and fixtures.

The redevelopment Project is consistent with local and regional planning efforts and will, as a redevelopment project, result in net environmental benefits. The Project does not exceed any MEPA Environmental Impact Report thresholds. Notwithstanding this fact, the Proponent has provided a substantially higher level of analysis in this document than is typically required in an ENF in an effort to

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Matthew A. Beaton, Secretary Ref: 13125.00 February 16, 2016 Page 2



fully document the existing and proposed conditions on the Project Site. This additional documentation is intended to support the ongoing local review of the Project, and to provide an opportunity for the community to better understand the potential impacts, corresponding mitigation, and numerous benefits of the proposed Project.

We respectfully request the EOEEA Publish notice of availability of the ENF for public review in the February 24<sup>th</sup> edition of the *Environmental Monitor*. Based upon this tentative schedule, public comments will be due by March 15, and a decision will be due March 25, 2015. We look forward to your review of this Project. Please don't hesitate to contact me at (617) 607-2973 or via email at slattrell@vhb.com if you have any questions or need any additional information

Sincerely,

Seth Lattrell

Environmental Planner slattrell@vhb.com

CC: Distribution List



# 526 and 528 Boston Post Road Redevelopment

# Sudbury, Massachusetts

SUBMITTED TO Executive Office of Energy and Environmental Affairs

**Massachusetts Environmental Policy Act Office** 

100 Cambridge St., Suite 900

Boston, MA 02114

PROPONENT BPR Sudbury Development LLC

2310 Washington Street Newton Lower Falls

MA 02462

PREPARED BY VHB

101 Walnut Street Watertown, MA 02472

In association with:

Tata & Howard

Sanborn, Head & Associates

Goulston & Storrs

February 16, 2016



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# Commonwealth of Massachusetts

**Executive Office of Energy and Environmental Affairs Massachusetts Environmental Policy Act (MEPA) Office** 

# **Environmental Notification Form**

For Office Use Only	
EEA#:	
MEPA Analyst:	
The information requested on the	nis form must be completed in order to submit a document

The information requested on this form must be completed in order to submit a document electronically for review under the Massachusetts Environmental Policy Act, 301 CMR 11.00.

Project Name: 526 and 528 Boston Po	st Road	Redevelopment	
Street Address: 526 and 528 Boston P		•	
Municipality: Sudbury	Watershed: Co	oncord (SuAsCo)	
Universal Transverse Mercator Coord	linates:	Latitude: 42.36	3804
205,615.64m, 901,477.17m		Longitude: -71	.431824
Estimated commencement date: Apri	l 2016	Estimated com	pletion date: Dec. 2018
Project Type: Mixed-Use (commercial,	, retail,	Status of proje	ect design: 50 %complete
residential)			
Proponent: BPR Sudbury Developmen	t LLC		
Street Address: 2310 Washington Stre	eet		
Municipality: Newton Lower Falls		State: MA	Zip Code: <b>02462</b>
Name of Contact Person: Seth Lattrel	l	<del>,</del>	
Firm/Agency: <b>VHB</b>		Street Address	: 101 Walnut Street
Municipality: Watertown		State: MA	Zip Code: <b>02472</b>
Phone: <b>617-728-7777</b>	Fax: N	I/A	E-mail: slattrell@vhb.com
Does this project meet or exceed a mandal Yes No  If this is an Expanded Environmental Notin Notice of Project Change (NPC), are you  a Single EIR? (see 301 CMR 11.06(8)) a Special Review Procedure? (see 301 CMR 12 a Waiver of mandatory EIR? (see 301 CMR 11.11) (Note: Greenhouse Gas Emissions analysis of Which MEPA review threshold(s) does the 301 CMR 11.03(6)(b)13.: Generation of 2,000 single location.	fication I requesti 11.09) 1.11) nust be ir	Form (ENF) (see 30 ng:  Yes No Yes No Yes No Yes No He Since No He	o1 CMR 11.05(7)) or a  nded ENF.) (see 301 CMR 11.03)?
<b>301 CMR 11.03(5)(b)3.a.:</b> Construction of on an Expansion in the flow to a wastewater treat	ment and	d/or disposal facility	y by 10% of existing Capacity;
<b>301 CMR 11.03(5)(b)4.c.i.:</b> New discharge or gpd of sewage within an area, zone or district	•		

appropriate to protect a public drinking water supply, an area established to protect a nitrogen sensitive embayment, an area within 200 feet of a tributary to a public surface drinking water supply, or an area within 400 feet of a public surface drinking water supply;

Which State Agency Permits will the project require?

Vehicle Access Permit from the Massachusetts Department of Transportation (MassDOT), Superseding Order of Conditions from the Massachusetts Department of Environmental Protection (MassDEP) (if required), Groundwater Discharge Permit Application (Modification) from MassDEP.

Identify any financial assistance or land transfer from an Agency of the Commonwealth, including the Agency name and the amount of funding or land area in acres:

The Proponent will receive bond financing from the Massachusetts Housing Partnership. The amount has not yet been determined.

Summary of Project Size	Existing	Change	Total
& Environmental Impacts			
LAND			
Total site acreage	50±		
New acres of land altered	-0-	-0*-	
Acres of impervious area	28.8±	(2.5)±	26.3±
Square feet of new bordering vegetated wetlands alteration		<5000 sf (temp)**	
Square feet of new other wetland alteration		-0-	
Acres of new non-water dependent use of tidelands or waterways		-0-	
STRUCTURES			
Gross square footage	563,300±	37,000±	600,000±
Number of housing units	-0-	358±	358±
Maximum height (feet)	44 ± (BELTRAN)	16±	60±
TRANSPORTATION			
Vehicle trips per day	5,110±	2,810±	7,920±
Parking spaces	2,040±	(740)±	1,300±
WASTEWATER			
Water Use (Gallons per day)***	42,200 GPD±	Up to 47,800 GPD±	Up to 90,000 GPD±
Water withdrawal (GPD)****	0	35,000±	35,000±
Wastewater generation/treatment (GPD)*****	50,000 GPD±	Up to 40,000 GPD±	Up to 90,000 GPD±
Length of water mains (miles) *Project includes only privately- owned on-site water mains	0.9 MILES±	0.5 MILES±	1.4 MILES±

Length of sewer mains (miles) *Project includes only privately- owned on-site sewer mains	0.3 MILES±	0.5 MILES±	0.8 MILES±
Has this project been filed with MEPA  ☐ Yes (EEA #) ⊠No	before?		
Has any project on this site been filed ☐ Yes (EEA #) ⊠No	with MEPA before	?	

- \*\*\* Existing and proposed water usage is based on Title V wastewater estimates.
- \*\*\*\* Water withdrawal is a preliminary estimate for potential irrigation wells on the Site.
- \*\*\*\*\*Existing wastewater generation is assumed to be the equivalent of the permitted flow for the existing treatment plant.

# <u>GENERAL PROJECT INFORMATION – all proponents must fill out this section</u>

#### **PROJECT DESCRIPTION:**

Describe the existing conditions and land uses on the project site:

The Project Site totals approximately 50 acres and is bordered by Boston Post Road (Route 20) to the south, to the east by commercial properties, to the west by an agricultural use and open space and to the north by a former railroad right of way. Refer to Figure 1 for a Site location map and Figure 2 for Project context. The Site currently contains over 563,300 square feet of building consisting of a mix of office and research and development space.

The two existing main office buildings fronting Boston Post Road (Route 20) are composed of several smaller connected structures with buildings 2, 3 and 4 to the west, and buildings 1 and 5 to the east. There is also a separate smaller building in the westernmost portion section of the Site which is referred to as the Beltran building. The northern portion of the Site consists of two large parking lots providing a combined 2,040 parking spaces straddling a vegetated area, retention pond, wastewater treatment plant, and helipad. In the northwest corner of the Site there are several small buildings/structures that were previously used for research and development. Refer to Figure 3 for an existing conditions site plan.

Describe the proposed project and its programmatic and physical elements:

The Proponent, BPR Sudbury Development LLC, is proposing to redevelop the existing 50 acre Raytheon parcel with a mixed-use development (the Project). The Project is programmed to include a mix of village- style commercial/retail space, mixed-income residential apartment homes, agerestricted condominiums, and a memory care assisted living community. Refer to Figure 4 for the proposed conditions site plan.

The Project also includes local roadway improvements including pedestrian and bicycle accommodations and a new signalized intersection at the main Site entrance on Route 20, major upgrades to the on-site streetscape and landscaping, new and enhanced public open spaces, improved water quality, and creative integration of existing environmental resources that form the framework for the development. Refer to Figure 5 for the proposed open space and pedestrian connections.

<sup>\*</sup> Entire Project Site has been previously altered

<sup>\*\*</sup> No impact anticipated. See the wetlands section below for additional information.

The Project is uniquely positioned to provide substantial benefits to the community through the redevelopment and environmental improvement of a heavily developed office and Rsite. The proposed development program will introduce a mix of uses including new retail/grocery opportunities, provide a broad range of new housing options, and assist the Town in meeting the requirements of the Commonwealth's M.G.L. Chapter 40B housing requirements. The change in use on the Project Site, coupled with roadway and intersection improvements is anticipated to noticeably improve traffic conditions on Boston Post Road in part due to reductions in weekday peak hour traffic. Refer to Attachment D for the complete transportation analysis. New open space, reduced impervious area and improvement of adjacent natural resources will lead to a substantially cleaner, active, and sustainable development.

The Project also benefits from the reuse of an existing private on-site wastewater treatment facility that will be improved and modernized to accommodate the new site uses while implementing enhanced water treatment. A key benefit of the proposed on-site treatment system is that it recharges treated wastewater back into the underlying aquifer instead of transferring water from one watershed to another as is common in a public or municipal sewer system. This benefits the underlying aquifer and regional watershed, as well as minimizes potential impacts on the adjacent wetland resources areas.

Please refer to Section 1 of the attached narrative for additional information on the Project and associated benefits.

NOTE: The project description should summarize both the project's direct and indirect impacts (including construction period impacts) in terms of their magnitude, geographic extent, duration and frequency, and reversibility, as applicable. It should also discuss the infrastructure requirements of the project and the capacity of the municipal and/or regional infrastructure to sustain these requirements into the future.

Describe the on-site project alternatives (and alternative off-site locations, if applicable), considered by the proponent, including at least one feasible alternative that is allowed under current zoning, and the reasons(s) that they were not selected as the preferred alternative:

Please refer to Section 1 of the attached narrative for an analysis of Project alternatives.

**NOTE**: The purpose of the alternatives analysis is to consider what effect changing the parameters and/or siting of a project, or components thereof, will have on the environment, keeping in mind that the objective of the MEPA review process is to avoid or minimize damage to the environment to the greatest extent feasible. Examples of alternative projects include alternative site locations, alternative site uses, and alternative site configurations.

Summarize the mitigation measures proposed to offset the impacts of the preferred alternative:

The Project is anticipated to improve environmental conditions at the Project Site, provide new retail/grocery opportunities, and create a variety of new housing options, including affordable rental apartments in furtherance of the Town's Housing Production Plan, and M.G.L. Chapter 40B requirements. With improvements in stormwater management, wastewater treatment, pedestrian and bicycle accommodations and connectivity, new open spaces and enhanced wetland buffers, the Project will provide environmental enhancements, provide new community recreational opportunities, and create a meaningful and environmentally beneficial redevelopment in close proximity to the commercial center of Sudbury.

The proposed development program provides a broad range of housing options that advance the

Town's M.G.L. 40B needs and address the specific goals identified in several local and regional planning documents including the 2001 Sustainable Sudbury Plan, the 2012 Sudbury Housing Production Plan, the 2012 Route 20 business district Project Evaluation Report, and the Route 20 Corridor Study. In addition to providing a broad spectrum of much needed housing options and new retail space, the Project will enhance existing site infrastructure and systems (including modernizing the on-site wastewater treatment plan), and replace inefficient and antiquated buildings with higherfficiency buildings and fixtures

The change in use and substantial investment to improve adjacent roadway and intersections, including the construction of a new signalized intersection at the Project's primary access drive, will benefit local and regional traffic conditions by spreading vehicle trips out throughout the day/week to minimize roadway congestion during the busiest times of the day. To further minimize traffic impacts, a robust Transportation Demand Management (TDM) plan has been developed to reduce the overall traffic impact by minimizing the demand for vehicle trips. The plan includes incentives to encourage ridesharing and transit usage, bicycle/pedestrian enhancements, and offers coordination services to residents and visitors of the development.

For additional information on Project mitigation and benefits please refer to Section 1 of the attached narrative.

If the project is proposed to be constructed in phases, please describe each phase:

Construction of the various elements of the Project is planned to occur concurrently; however based on the time required to construct certain components of the Project, as well as existing lease commitments to the current tenant, parts of the Project will start and be completed at different times, described generally as follows.

Subject to receipt of the required permits, site preparation and construction of the Project is anticipated to commence in the Spring of 2016 with building demolition and construction of the grocery store. Once the existing tenant vacates Building 1 and 5 at the end of 2016, construction of the residential uses and the remaining commercial buildings is envisioned to begin. The grocery store opening date is anticipated to be late summer 2017, with the remainder of the Project construction concluding at the end of 2018. Off-site improvements proposed at the site frontage with Boston Post Road, including the traffic signal work, will be constructed as part of the Project's retail/grocery store phase and are expected to be substantially complete concurrent with the grocery store opening.

The overall Project is anticipated to be complete by December 2018.

HISTORICAL /ARCHAEOLOGICAL RESOURCES:  Does the project site include any structure, site or district listed in the State Register of Historic Place or the inventory of Historic and Archaeological Assets of the Commonwealth?  Yes (Specify
If yes, does the project involve any demolition or destruction of any listed or inventoried historic or archaeological resources?   Yes (Specify)   No
WATER RESOURCES:  Is there an Outstanding Resource Water (ORW) on or within a half-mile radius of the project site?Yes X_No; if yes, identify the ORW and its location
(NOTE: Outstanding Resource Waters include Class A public water supplies, their tributaries, and bordering wetlands; active and inactive reservoirs approved by MassDEP; certain waters within Areas of Critical Environmental Concern, and certified vernal pools. Outstanding resource waters are listed in the Surface Water Quality Standards, 314 CMR 4.00.)
Are there any impaired water bodies on or within a half-mile radius of the project site?Yes X No; if yes, identify the water body and pollutant(s) causing the impairment:
Is the project within a medium or high stress basin, as established by the Massachusetts Water Resources Commission?Yes $\underline{\mathbf{X}}$ No
STORMWATER MANAGEMENT:
Generally describe the project's stormwater impacts and measures that the project will take to comply with the standards found in MassDEP's Stormwater Management Regulations:
The Project will comply with the MassDEP Stormwater Management regulations through the following improvements:
<ul> <li>Increasing open space and groundwater recharge to contribute to re-establishing components of a more natural water cycle (evapotranspiration, groundwater recharge and runoff) on the Site.</li> </ul>
<ul> <li>Improving the surface water and groundwater quality will further protect the watershed of critical environmental resources.</li> </ul>
<ul> <li>Protecting and minimizing disruption to existing wetland resource areas and wildlife habitat corridors through the maintenance and enhancement of existing vegetative protective buffers.</li> </ul>
<ul> <li>Implementing a comprehensive temporary and permanent erosion control system and Long Term Operations and Maintenance Plan.</li> </ul>
Please see Section 3 of the attached narrative for a summary of compliance with specific stormwater standards.
MASSACHUSETTS CONTINGENCY PLAN: Has the project site been, or is it currently being, regulated under M.G.L.c.21E or the Massachusetts Contingency Plan? Yes _X_ No; if yes, please describe the current status of the site (including Release Tracking Number (RTN), cleanup phase, and Response Action Outcome classification):

Three MCP sites are located in the Project Site area. These have achieved either Temporary or

#### Permanent Solutions and are summarized below:

RTN 3-3037, 528 Boston Post Road – Pending No Further Action – August 1997 RTN 3-17106, 528 Boston Post Road – Class A-2 RAO filed in September 1998 RTN 3-27243, 528 Boston Post Road – Class C-1 RAO filed in November 2008

Please see Section 2 of the attached narrative for additional information.

Is there an Activity and Use Limitation (AUL) on any portion of the project site? Yes $\underline{\underline{X}}$ ; if yes, describe which portion of the site and how the project will be consistent with the AUL:
Are you aware of any Reportable Conditions at the property that have not yet been assigned an RTN?  Yes No _X_; if yes, please describe:

#### **SOLID AND HAZARDOUS WASTE:**

If the project will generate solid waste during demolition or construction, describe alternatives considered for re-use, recycling, and disposal of, e.g., asphalt, brick, concrete, gypsum, metal, wood:\_

Demolition of existing on-site buildings will be required for the Project. The Project Construction Manager will implement a waste management plan to divert Project-related construction waste material from landfills through recycling and salvaging where practicable. Existing pavement will either be processed on-site for re-use as structural fill or shipped off-site to an asphalt recycling facility.

Should excess soil be generated during construction that requires off-site disposal, analytical testing of the soil will be required so that it can be properly disposed of at an off-site facility. Materials will be handled according to all applicable federal, state, and municipal environmental laws and regulations. In the event that subsurface contamination exceeding MCP reporting thresholds is encountered (although based on thorough analysis and historic monitoring of the Site, none is expected) MassDEP will be notified and the contamination managed in accordance with the MCP, and as outlined in the Release Abatement Measures Plan.

(NOTE: Asphalt pavement, brick, concrete and metal are banned from disposal at Massachusetts landfills and waste combustion facilities and wood is banned from disposal at Massachusetts landfills. See 310 CMR 19.017 for the complete list of banned materials.)

Will your project disturb asbestos containing materials? Yes <u>X</u> No <u>\_\_\_</u>; if yes, please consult state asbestos requirements at <a href="http://mass.gov/MassDEP/air/asbhom01.htm">http://mass.gov/MassDEP/air/asbhom01.htm</a>

A hazardous building materials survey was performed for the Project by TRC on in June of 2015. The survey identified detectable levels of hazardous materials on building components, as is typical in buildings of this era. Asbestos and hazardous building materials abatement will be performed prior to demolition of the existing Site buildings in accordance with applicable laws and regulations.

Describe anti-idling and other measures to limit emissions from construction equipment:

The Project will comply with the requirements of the Clean Construction Equipment Initiative to the extent reasonably practicable, including retrofitting diesel construction vehicles, or utilizing vehicles that use alternative fuels, such as ultra-low-sulfur diesel fuel to reduce emissions during temporary construction activities. In addition, the Commonwealth of Massachusetts anti-idling law will be enforced during the construction phase of the Project with the installation of on-site anti-idling signage.

## **DESIGNATED WILD AND SCENIC RIVER:**

Is this project site located wholly or partially within a defined river corridor of a federally designated Wild and Scenic River or a state designated Scenic River? Yes No _X_; if yes, specify name of river and designation:
If yes, does the project have the potential to impact any of the "outstandingly remarkable" resources of a federally Wild and Scenic River or the stated purpose of a state designated Scenic River?
Yes No; if yes, specify name of river and designation:;
if yes, will the project will result in any impacts to any of the designated "outstandingly remarkable"
resources of the Wild and Scenic River or the stated purposes of a Scenic River.
Yes No ;
if yes,describe the potential impacts to one or more of the "outstandingly remarkable" resources or
stated purposes and mitigation measures <u>proposed</u> .

## **ATTACHMENTS:**

1. List of all attachments to this document.

#### **See Table of Contents**

2. U.S.G.S. map (good quality color copy, 8-½ x 11 inches or larger, at a scale of 1:24,000) indicating the project location and boundaries.

#### See Figure 1

3.. Plan, at an appropriate scale, of existing conditions on the project site and its immediate environs, showing all known structures, roadways and parking lots, railroad rights-of-way, wetlands and water bodies, wooded areas, farmland, steep slopes, public open spaces, and major utilities.

## **See Figure 3**

Plan, at an appropriate scale, depicting environmental constraints on or adjacent to the project site such as Priority and/or Estimated Habitat of state-listed rare species, Areas of Critical Environmental Concern, Chapter 91 jurisdictional areas, Article 97 lands, wetland resource area delineations, water supply protection areas, and historic resources and/or districts.

#### See Figures 2 and 7

5. Plan, at an appropriate scale, of proposed conditions upon completion of project (if construction of the project is proposed to be phased, there should be a site plan showing conditions upon the completion of each phase).

#### See Figure 4

6. List of all agencies and persons to whom the proponent circulated the ENF, in accordance with 301 CMR 11.16(2).

#### **See Attachment C**

7. List of municipal and federal permits and reviews required by the project, as applicable. **See Table 1.2, Section 1.** 

# <u>LAND SECTION</u> – all proponents must fill out this section

	Permits roject meet or exceed any r No; if yes, specify each three		ted to <b>land</b> (see	301 CMR 11.03(1)
II. Impacts and P	<b>'ermits</b> n acres, the current and pro	nosed character of th	a project site as	follows:
A. Describe, ii	racies, the current and pro	Existing	Change	Total
Footprint	of buildings	_8.8 AC±_	0.3 AC±_	8.5 AC±
Internal re		4.7 AC±	0.4 AC±	5.1 AC±
	ind other paved areas	15.3 AC±	-2.6 AC±	12.7 AC±
Other alte	ered areas	20.7 AC±	_2.5 AC±_	23.2 AC±_
	ped areas	0 AC±	0 AC±	0 A±
Total: Pr	oject Site Acreage	_49.5 AC±_	0 AC±	_49.5 AC±_
Ý	art of the project site been in es X_No; if yes, how man important agricultural soils)	y acres of land in agri	cultural use (with	n prime state or
Y indicat	of the project site currently es X No; if yes, please due whether any part of the separtment of Conservation a	escribe current and pite is the subject of a	roposed forestry	activities and
accord	part of the project involve co dance with Article 97 of the a urpose not in accordance wi	Amendments to the C	Constitution of the	e Commonwealth to
restric Yes_X	of the project site currently tion, agricultural preservation [Variable]. The project if yes, describe:	on restriction or waters	shed preservatio	n restriction?
	roject require approval of a existing urban redevelopmente:			
	roject require approval of a g urban renewal plan undel			
III. Consistency				
A. Identify t	he current municipal compr Sustainable Sudbury – 20		an	
	e the project's consistency vectoristic development adequacy of infrastructure	vith that plan with reg	ard to:	

The 2001 Master Plan specifically identifies the Project Site as a key location for redevelopment and expansion once vacated by Raytheon to maintain the tax base and

compatibility with adjacent land uses

open space impacts

3)

capitalize on the existing infrastructure available on the Site. The plan notes that the infrastructure, including the wastewater treatment plant, is in place to support continued and expanded development on the Site.

The Project is consistent with the planning goals to preserve open space by redeveloping a previously developed site, and is consistent and compatible with the adjacent land uses. The Project also supports the plan's goal of encouraging a greater diversity of housing opportunities in Sudbury to meet the needs of a changing and diversified population with respect to age, household size and income. The Site is specifically designated as an appropriate location to develop multifamily housing pursuant to M.G.L Ch. 40B and the Project advances this goal.

С.	Identify the current Regional Policy Plan of the applicable Regional Planning Agency (RPA)
	RPA: Metropolitan Area Planning Council (MAPC)

Title: MetroFuture Date May 2008

- D. Describe the project's consistency with that plan with regard to:
  - 1) economic development
  - 2) adequacy of infrastructure
  - 3) open space impacts

The Town of Sudbury has identified the Site as a preferred location for redevelopment with an expressed desire to include a mix of commercial and residential uses including affordable housing.

Refer to Section 1.8 for additional information.

# **RARE SPECIES SECTION**

I.	Thresholds / Permits  A. Will the project meet or exceed any review thresholds related to rare species or habitat (see 301 CMR 11.03(2))? Yes _X_No; if yes, specify, in quantitative terms:
	(NOTE: If you are uncertain, it is recommended that you consult with the Natural Heritage and Endangered Species Program (NHESP) prior to submitting the ENF.)
	B. Does the project require any state permits related to <b>rare species or habitat</b> ? YesX_No
	C. Does the project site fall within mapped rare species habitat (Priority or Estimated Habitat?) in the current Massachusetts Natural Heritage Atlas (attach relevant page)? Yes _X_No.
	D. If you answered "No" to <u>all</u> questions A, B and C, proceed to the <b>Wetlands, Waterways, and Tidelands Section</b> . If you answered "Yes" to <u>either</u> question A or question B, fill out the remainder of the Rare Species section below.

# WETLANDS, WATERWAYS, AND TIDELANDS SECTION

	A.	esholds / Permits Will the project meet or exceed any relands (see 301 CMR 11.03(3))?	eview thresholds related _ Yes <u>X</u> No; if yes, sp	d to wetlands, waterways, and becify, in quantitative terms:
	wat	Does the project require any state peterways, or tidelands? <u>X</u> Yes cal Order of Conditions and, if requ	No; if yes, specify wh	nich permit:
	C. If you answered "No" to <u>both</u> questions A and B, proceed to the <b>Water Supply Section</b> . If you answered "Yes" to <u>either</u> question A or question B, fill out the remainder of the Wetlands, Waterways, and Tidelands Section below.			
II.	II. Wetlands Impacts and Permits A. Does the project require a new or amended Order of Conditions under the Wetlands Protection Act (M.G.L. c.131A)? <u>X</u> Yes No; if yes, has a Notice of Intent been filed? <u>X</u> Yes No yes, list the date and MassDEP file number: <u>10/30/15 (301-1169)</u> ; if yes, has a local Order of Conditions been issued? <u>X</u> Yes No; Was the Order of Conditions appealed? <u>X</u> Yes No. Will the project require a Variance from the Wetlands regulations? Yes <u>X</u> No.			of Intent been filed? <b>X</b> Yes No; if1169); if yes, has a local Order of f Conditions appealed? <b>X</b> Yes
		Describe any proposed permanent of project site:	r temporary impacts to v	vetland resource areas located on
	wet wit cor imp	e Project as currently designed is not tlands or waterways. Temporary im the the roadway improvements on Bustruction best practices to minimize pacted wetland areas upon completed.  Estimate the extent and type of imparts.	pacts due to construct oston Post Road. The a ce construction related tion of construction.	tion may occur in association applicant will utilize
	Coa	icate whether the impacts are tempor astal Wetlands	Area (square feet) or	Temporary or
	Lar Des Coa Bar Coa Roo Sal Lar Lar Fisl	·	Area (square feet) or Length (linear feet)	

	Riverfront Area
	* No impact anticipated
	<ul> <li>D. Is any part of the project: <ol> <li>proposed as a limited project?Yes _X_No; if yes, what is the area (in sf)?</li> <li>the construction or alteration of a dam?Yes _X_No; if yes, describe:</li> <li>fill or structure in a velocity zone or regulatory floodway?Yes _X_No</li> <li>dredging or disposal of dredged material?Yes _X_No; if yes, describe the volume of dredged material and the proposed disposal site:</li> <li>a discharge to an Outstanding Resource Water (ORW) or an Area of Critical Environmental Concern (ACEC)?Yes _X_No</li> <li>subject to a wetlands restriction order?Yes _X_No; if yes, identify the area (in sf):</li> <li>located in buffer zones? _X_YesNo; if yes, how much (in sf) 330,000_SF±*</li> </ol> </li> </ul>
	*This calculation includes areas were state jurisdictional buffer zones are redeveloped (i.e. new parking or buildings replace old parking lots,) AND where existing pervious and impervious developed areas are replaced with new open space areas. Overall the Project will improve wetland quality by enhancing buffer zones and reducing impervious coverage on the Site.
	<ul> <li>E. Will the project:</li> <li>1. be subject to a local wetlands ordinance or bylaw? X Yes No</li> <li>2. alter any federally-protected wetlands not regulated under state law? Yes X No; if yes, what is the area (sf)?</li> </ul>
III	A. Does the project site contain waterways or tidelands (including filled former tidelands) that are subject to the Waterways Act, M.G.L.c.91? Yes _X_ No; if yes, is there a current Chapter 91 License or Permit affecting the project site? Yes No; if yes, list the date and license or permit number and provide a copy of the historic map used to determine extent of filled tidelands:
	B. Does the project require a new or modified license or permit under M.G.L.c.91?Yes _X_No; if yes, how many acres of the project site subject to M.G.L.c.91 will be for non-water-dependent use? Current Change Total If yes, how many square feet of solid fill or pile-supported structures (in sf)?
	C. For non-water-dependent use projects, indicate the following:  Area of filled tidelands on the site:  Area of filled tidelands covered by buildings:  For portions of site on filled tidelands, list ground floor uses and area of each use:  Does the project include new non-water-dependent uses located over flowed tidelands?  Yes No  Height of building on filled tidelands  Also show the following on a site plan: Mean High Water, Mean Low Water, Water-dependent Use Zone, location of uses within buildings on tidelands, and interior and exterior areas and facilities dedicated for public use, and historic high and historic low
	water marks.  D. Is the project located on landlocked tidelands? Yes _X_No; if yes, describe the project's impact on the public's right to access, use and enjoy jurisdictional tidelands and describe

measures the project will implement to avoid, minimize or mitigate any adverse impact:

<ul> <li>E. Is the project located in an area where low groundwater levels have been identified by a municipality or by a state or federal agency as a threat to building foundations?Yes _X_No; if yes, describe the project's impact on groundwater levels and describe measures the project will implement to avoid, minimize or mitigate any adverse impact:</li> </ul>
F. Is the project non-water-dependent <b>and</b> located on landlocked tidelands <b>or</b> waterways or tidelands subject to the Waterways Act <b>and</b> subject to a mandatory EIR? Yes _X_ No;
(NOTE: If yes, then the project will be subject to Public Benefit Review and Determination.)
G. Does the project include dredging? Yes <b>_X</b> No; if yes, answer the following questions:  What type of dredging? Improvement Maintenance Both
What is the proposed dredge volume, in cubic yards (cys)
What is the proposed dredge footprintlength (ft)width (ft)depth (ft);
Will dredging impact the following resource areas?
Intertidal Yes No; if yes, sq ft
Outstanding Resource Waters Yes No; if yes, sq ft
Other resource area (i.e. shellfish beds, eel grass beds) Yes No; if yes sq ft
If yes to any of the above, have you evaluated appropriate and practicable steps
to: 1) avoidance; 2) if avoidance is not possible, minimization; 3) if either
avoidance or minimize is not possible, mitigation?
If no to any of the above, what information or documentation was used to support
this determination?
Provide a comprehensive analysis of practicable alternatives for improvement dredging in accordance with 314 CMR 9.07(1)(b). Physical and chemical data of the
sediment shall be included in the comprehensive analysis.
Sediment Characterization
Existing gradation analysis results?YesNo: if yes, provide results.
Existing chemical results for parameters listed in 314 CMR 9.07(2)(b)6?YesNo; if yes, provide results.
Do you have sufficient information to evaluate feasibility of the following management
options for dredged sediment? If yes, check the appropriate option.
Beach Nourishment
Unconfined Ocean Disposal
Confined Disposal:
Confined Aquatic Disposal (CAD) Confined Disposal Facility (CDF)
Landfill Reuse in accordance with COMM-97-001
Shoreline Placement
Upland Material Reuse
In-State landfill disposal
Out-of-state landfill disposal
(NOTE: This information is required for a 401 Water Quality Certification.)
IV. Consistency:
A. Does the project have effects on the coastal resources or uses, and/or is the project located within the Coastal Zone? Yes _X_ No; if yes, describe these effects and the projects consistency
with the Policies of the Office of Coastal Zone Management:
B. Is the project located within an area subject to a Municipal Harbor Plan? Yes _X_ No; if yes, identify the Municipal Harbor Plan and describe the project's consistency with that plan:

# **WATER SUPPLY SECTION**

# I. Thresholds / Permits A. Will the project meet or exceed any review thresholds related to water supply (see 301 CMR)

11.03(4))? Yes X No; if yes, specify, in quantitative terms:

- B. Does the project require any state permits related to **water supply**? \_\_\_\_ Yes \_X\_No; if yes, specify which permit:
- C. If you answered "No" to <u>both</u> questions A and B, proceed to the **Wastewater Section**. If you answered "Yes" to <u>either</u> question A or question B, fill out the remainder of the Water Supply Section below.

#### **WASTEWATER SECTION**

#### I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **wastewater** (see 301 CMR 11.03(5))? **X**Yes \_\_\_\_ No; if yes, specify, in quantitative terms:

**301 CMR 11.03(5)(b)3.a.:** Construction of one or more New sewer mains that will result in an Expansion in the flow to a wastewater treatment and/or disposal facility by 10% of existing Capacity;

**301 CMR 11.03(5)(b)4.c.i.:** New discharge or Expansion in discharge to groundwater of 10,000 or more gpd of sewage within an area, zone or district established, delineated or identified as necessary or appropriate to protect a public drinking water supply, an area established to protect a nitrogen sensitive embayment, an area within 200 feet of a tributary to a public surface drinking water supply, or an area within 400 feet of a public surface drinking water supply;

B. Does the project require any state permits related to **wastewater**? **X** Yes .... No; if yes, specify which permit:

Groundwater Discharge Permit Application (Modification) from MassDEP

C. If you answered "No" to <u>both</u> questions A and B, proceed to the **Transportation -- Traffic Generation Section**. If you answered "Yes" to <u>either</u> question A or question B, fill out the remainder of the Wastewater Section below.

#### **II. Impacts and Permits**

A. Describe the volume (in gallons per day) and type of disposal of wastewater generation for existing and proposed activities at the project site (calculate according to 310 CMR 15.00 for septic systems or 314 CMR 7.00 for sewer systems):

Discharge of sanitary wastewater Discharge of industrial wastewater TOTAL	Existing	Change	Total
	50,000 GPD	40,000 GPD	90,000 GPD*
	N/A	N/A	N/A
	50,000 GPD	40,000 GPD	90,000 GPD*
Discharge to groundwater Discharge to outstanding resource water Discharge to surface water Discharge to municipal or regional wastewater	Existing 50,000 GPD N/A N/A	<u>Change</u> 40,000 GPD <u>N/A</u> <u>N/A</u>	Total 90,000 GPD* N/A N/A
facility TOTAL	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
	50,000 GPD	40,000 GPD	90,000 GPD*

<sup>\*</sup>Existing wastewater generation is assumed to be the equivalent of the permitted flow for the existing treatment plant. Wastewater generation for the Project is estimated to be 82k GPD based on Title V estimates for the proposed Project uses. The Proponent is seeking to permit up to 90k GPD of flow (based on Title V estimates) for the enhanced wastewater treatment plant to allow limited additional flexibility within the commercial portion of the Project where tenants have not been identified. Through the use of water conservation measures, it is anticipated that the actual wastewater generation will be substantially less

percent based on Title V rates, depending on the use.				
B. Is the existing collection system at or near its capacity? YesX_ No; if yes, then describe the measures to be undertaken to accommodate the project's wastewater flows:				
A new collection system will be const and uses. The system will be consiste dramatically reduce the potential for	nt with curren	t standards and	as such will ser	ve to
C. Is the existing wastewater disposal facility at or near its permitted capacity? X Yes No; if yes, then describe the measures to be undertaken to accommodate the project's wastewater flows:				
The Project proposes to improve and The upgrades will provide system red effective and resilient system, and to for additional information on Project	undancy and t protect adjace	reatment enhai nt water resour	ncements to ma	intain an
D. Does the project site currently conta wastewater disposal facility, or will the p No; if yes, describe as follows:				
	<u>Permitted</u>	Existing Avg Daily Flow	Project Flow	<u>Total</u>
Wastewater treatment plant capacity (in gallons per day) *Per Title V estimates.	50,000 GPD	42,200 GPD*	90,000 GPD**	90,000 GPD
E. If the project requires an interbasin t direction of the transfer, and is the interl			sins are involved	d, what is the
Not applicable, the Project does not r	equire an inter	basin transfer	of wastewater.	
F. Does the project involve new sewer service by the Massachusetts Water Resources Authority (MWRA) or other Agency of the Commonwealth to a municipality or sewer district? YesX_ No.				
G. Is there an existing facility, or is a new facility proposed at the project site for the storage, treatment, processing, combustion or disposal of sewage sludge, sludge ash, grit, screenings, wastewater reuse (gray water) or other sewage residual materials? X Yes No; if yes, what is the capacity (tons per day):				
Storage	Existin <b>N/A</b>	ig <u>Chang</u> <b>N/A</b>	ge <u>Total</u> <b>N/A</b>	
Treatment	N/A	N/A	N/A	
Processing Combustion	<u>N/A</u> N/A	<u>N/A</u> N/A		
Disposal (treated wastewater)	0.05			
H. Describe the water conservation me wastewater mitigation, such as infiltration			project, and other	er

Water conservation will be implemented throughout the Project to minimize the use of

potable water and subsequent generation of wastewater with an estimated reduction of 20-40% compared to Title V rates. In addition, the construction of new watertight sewer pipes throughout the Site will eliminate any old cracked pipes that may be contributing to inflow and infiltration into the existing system. Refer to Section 3 for additional information.

#### III. Consistency

A. Describe measures that the proponent will take to comply with applicable state, regional, and local plans and policies related to wastewater management:

The Proponent will prepare and submit a Hydrogeological Evaluation Report to the MassDEP, followed by an application to modify the existing Groundwater Discharge Permit. Through these filings the Proponent will detail compliance with all applicable state, regional, and plans and policies related to wastewater management.

B. If the project requires a sewer extension permit, is that extension included in a comprehensive wastewater management plan? \_\_\_\_ Yes\_ X \_ No; if yes, indicate the EEA number for the plan and whether the project site is within a sewer service area recommended or approved in that plan:

# TRANSPORTATION SECTION (TRAFFIC GENERATION)

#### I. Thresholds / Permit

A. Will the project meet or exceed any review thresholds related to **traffic generation** (see 301 CMR 11.03(6))? X Yes No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **state-controlled roadways**? X Yes No; if yes, specify which permit:

#### Vehicle Access Permit from MassDOT

C. If you answered "No" to <u>both</u> questions A and B, proceed to the **Roadways and Other Transportation Facilities Section**. If you answered "Yes" to <u>either</u> question A or question B, fill out the remainder of the Traffic Generation Section below.

#### **II. Traffic Impacts and Permits**

A. Describe existing and proposed vehicular traffic generated by activities at the project site:

	<u>Existing</u>	<u>Change</u>	<u> Total</u>
Number of parking spaces	2,040 ±	(740) ±	1,300 ±
Number of vehicle trips per day	5,110	2,810	7,920
ITE Land Use Code(s):	710, 760, 140	- * -	820, 220, 252, 254

#### \* All existing LUCs are replaced by the new LUCs shown in the "Total" category

B. What is the estimated average daily traffic on roadways serving the site?

<u>Roadway</u>	<u>Existing</u>	<u>Change</u>	<u>Total</u>
1. Boston Post Rd (Route 20)	20,500	5,200± *	25,700±

<sup>\*</sup> Based on "unadjusted" trip generation estimates (does not include internal capture and pass-by adjustments)

C. If applicable, describe proposed mitigation measures on state-controlled roadways that the project proponent will implement:

The full-build Project involves the implementation of multi-modal improvement measures (passenger vehicles, trucks, emergency responders, pedestrians and cyclists). Specifically, the Project's retail/grocery store phase will include a signalized Site access that will also improve access for the existing retail plaza across the street (presently unsignalized), geometric improvements, traffic signal coordination, installation of a fire station preemption signal and bicycle and pedestrian measures.

#### Please see the attached TIAS in Attachment D for details.

D. How will the project implement and/or promote the use of transit, pedestrian and bicycle facilities and services to provide access to and from the project site?

Off-site mitigation measures will comply with the requirements of the Heathy
Transportation Policy Directive. Specifically, improvement measures associated with the
Project's retail/grocery store phase will include new sidewalk, bicycle and signalized
crosswalk enhancement on Boston Post Road along the Site frontage that are presently
lacking. The Project will also make allowances for an internal pedestrian connection to an

adjacent commercial property as well as potential connections to the future Mass Central Rail Trail.

#### Please see the attached TIAS in Attachment D for details.

C.	Is there a Transportation Management Association (TMA) that provides transportation demand management (TDM) services in the area of the project site? X Yes No; if yes, describe if and how will the project will participate in the TMA:
D.	Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation facilities? YesX_ No; if yes, generally describe:
E.	If the project will penetrate approach airspace of a nearby airport, has the proponent filed a Massachusetts Aeronautics Commission Airspace Review Form (780 CMR 111.7) and a Notice of Proposed Construction or Alteration with the Federal Aviation Administration (FAA) (CFR Title 14 Part 77.13, forms 7460-1 and 7460-2)?

## Not applicable

#### III. Consistency

Describe measures that the proponent will take to comply with municipal, regional, state, and federal plans and policies related to traffic, transit, pedestrian and bicycle transportation facilities and services:

The improvement measures proposed in connection with this Project are consistent with the Town of Sudbury's Route 20 Corridor Study findings as well as MassDOT's Healthy Transportation Policy Directive.

See Section 1 of the attached narrative for additional information.

# TRANSPORTATION SECTION (ROADWAYS AND OTHER TRANSPORTATION FACILITIES)

I.	Thresholds  A. Will the project meet or exceed any review thresholds related to <b>roadways or other transportation facilities</b> (see 301 CMR 11.03(6))? YesX_ No; if yes, specify, in quantitative terms:
	B. Does the project require any state permits related to <b>roadways or other transportation facilities?</b> Yes _X_ No; if yes, specify which permit:

C. If you answered "No" to <u>both</u> questions A and B, proceed to the **Energy Section**. If you answered "Yes" to <u>either</u> question A or question B, fill out the remainder of the Roadways Section below.

# **ENERGY SECTION**

# I. Thresholds / Permits

- A. Will the project meet or exceed any review thresholds related to **energy** (see 301 CMR 11.03(7))? Yes **X** No; if yes, specify, in quantitative terms:
- B. Does the project require any state permits related to **energy**? \_\_\_ Yes  $\underline{\mathbf{X}}$  No; if yes, specify which permit:
- C. If you answered "No" to <u>both</u> questions A and B, proceed to the **Air Quality Section**. If you answered "Yes" to <u>either</u> question A or question B, fill out the remainder of the Energy Section below.

# **AIR QUALITY SECTION**

#### I. Thresholds

- A. Will the project meet or exceed any review thresholds related to **air quality** (see 301 CMR 11.03(8))? \_\_\_\_ Yes \_**X**\_ No; if yes, specify, in quantitative terms:
- B. Does the project require any state permits related to **air quality**? \_\_\_\_ Yes \_**X**\_ No; if yes, specify which permit:
- C. If you answered "No" to <u>both</u> questions A and B, proceed to the **Solid and Hazardous Waste Section**. If you answered "Yes" to <u>either</u> question A or question B, fill out the remainder of the Air Quality Section below.

# **SOLID AND HAZARDOUS WASTE SECTION**

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **solid or hazardous waste** (see 301 CMR 11.03(9))? \_\_\_\_ Yes \_X\_ No; if yes, specify, in quantitative terms:

E. Does the project require any state permits related to **solid and hazardous waste**? \_\_\_\_ Yes \_**X**\_ No; if yes, specify which permit:

C. If you answered "No" to <u>both</u> questions A and B, proceed to the **Historical and Archaeological Resources Section**. If you answered "Yes" to <u>either</u> question A or question B, fill out the remainder of the Solid and Hazardous Waste Section below.

# HISTORICAL AND ARCHAEOLOGICAL RESOURCES SECTION

I.	Thresholds / Impacts  A. Have you consulted with the Massachusetts Historical Commission? Yes _X_ No; if yes, attach correspondence. For project sites involving lands under water, have you consulted with the Massachusetts Board of Underwater Archaeological Resources? Yes No; if yes, attach correspondence
	B. Is any part of the project site a historic structure, or a structure within a historic district, in either case listed in the State Register of Historic Places or the Inventory of Historic and Archaeological Assets of the Commonwealth? Yes _X_ No; if yes, does the project involve the demolition of all or any exterior part of such historic structure? Yes No; if yes, please describe:
	C. Is any part of the project site an archaeological site listed in the State Register of Historic Places or the Inventory of Historic and Archaeological Assets of the Commonwealth? Yes _X_ No; if yes, does the project involve the destruction of all or any part of such archaeological site? Yes No; if yes, please describe:
	D. If you answered "No" to <u>all parts of both</u> questions A, B and C, proceed to the <b>Attachments and Certifications</b> Sections. If you answered "Yes" to <u>any part of either</u> question A or question B, fill out the remainder of the Historical and Archaeological Resources Section below.

# **CERTIFICATIONS:**

1. The Public Notice of Environmental Review has been/will be published in the following newspapers in accordance with 301 CMR 11.15(1):

# Sudbury Town Crier on February 18, 2016

2. This form has been circulated to Agencies and Persons in accordance with 301 CMR 11.16(2).

	Signatures:	
2/1	3/16 Stephen Clema	Sulfan
	Date Signature of Responsible Officer or Proponent	Date Signature of person preparing NPC (if different from above)
	STEPHEN C. SENNA	Seth Lattrell
	Name (print or type)	Name (print or type)
	BPR Sudbury Development LLC Firm/Agency	VHB Firm/Agency
	2310 Washington Street	101 Walnut Street
	Street	Street
	Newton Falls/MA/02462 Municipality/State/Zip	Watertown/MA/02472 Municipality/State/Zip
	617-527-9800	617-728-7777
	Phone	Phone



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# **Project Description and Alternatives**

# 1.1 Introduction

Pursuant to the regulations of the Massachusetts Environmental Policy Act (MEPA), BPR Sudbury Development LLC, a joint venture of National Development and AvalonBay Communities, Inc. affiliates (the "Proponent") submits this Environmental Notification Form (ENF) for the redevelopment of the former Raytheon site in Sudbury, MA (the "Project"). The Project Site totals approximately 50 acres bordered by Boston Post Road (Route 20) to the south, to the east by commercial properties, to the west by an agricultural use and open space and to the north by a former railroad right of way (the "Project Site" or the "Site"). Refer to Figure 1 for a Site location map and Figure 2 for project context.

The mixed-use redevelopment Project will reinvigorate the Site and introduce new grocer, shopping and dining options, public uses, a variety of housing options, open space, and environmental benefits. The Project consists of demolition of the existing buildings and construction of a new mixed-use development including retail, active-adult residential condominiums, a memory care assisted living community, and mixed-income residential apartment homes developed pursuant to Chapter 40B of the Massachusetts General Laws (M.G.L.).¹ Included in the new retail space is a 45,000 square foot village-style grocery store and 35,000 square feet of restaurant/commercial space.

The Project brings myriad benefits to the community and the region including new jobs, housing opportunities and retail/grocery options. The proposed development program provides a broad range of housing options, including affordable rental apartments that advance the Town's M.G.L. Chapter 40B needs and address the specific goals identified in various local and regional planning documents including the 2001 Sustainable Sudbury Plan, the 2012 Sudbury Housing Production Plan, the 2012 Route 20 business district Project Evaluation Report, and the Route 20 Corridor Study. In addition to providing a broad spectrum of much needed housing options and new retail space, the Project will enhance existing Site infrastructure and systems (including modernizing the

<sup>▼</sup> 

<sup>&</sup>lt;sup>1</sup> M.G.L. Chapter 40B is a state statute that enables local Zoning Boards of Appeals to approve affordable housing developments.

on-site wastewater treatment plan), and replace inefficient and antiquated buildings with highefficiency buildings and fixtures

# 1.2 Existing Site Conditions

The Project Site is approximately 50 acres in size and located at 526 and 528 Boston Post Road in Sudbury. Approximately 46 acres are zoned Limited Industrial (LID), and the remainder of the Site is zoned Residential A (RESA). The Site is bounded to the south by Boston Post Road (Route 20) and to the north by a former railroad right of way, with commercial and agricultural properties to the east and west. Figure 3 illustrates the existing site conditions.

The existing buildings, totaling 563,300 square feet, were constructed in several phases throughout the latter half of the 20<sup>th</sup> century, and beginning around 1958 by the former owner Raytheon (the "Former Owner"). The two main buildings are located on the industrially zoned portion of the property, and an approximately 7,000-square foot building (the Beltran building) is located on the residential portion of the Site. The remainder of the Site includes impervious parking surfaces (2,040 spaces), stormwater control features, landscaped areas and jurisdictional wetlands. Currently, approximately 28 acres of the 50-acre property is impervious area, comprised of buildings, parking areas and related infrastructure

According to the most recently available data provided by the Massachusetts Natural Heritage and Endangered Species Program<sup>2</sup> (NHESP), the Site is not located within any Priority Habitat of Rare Species and Estimated Habitat of Rare Wildlife. There are no certified or potential vernal pools located on or adjacent to the Site. No portion of the Site is located within an Area of Critical Environmental Concern (ACEC). According to DEP, the Site is not located in an area designated as an Outstanding Resource Water<sup>3</sup>. The Site is subject to the Massachusetts Contingency Plan and there are three previously reported Release Tracking Numbers for the Site. Refer to Section 2 *Environmental Conditions* of this ENF for further details.

The most recently issued Flood Insurance Rate Map (FIRM)<sup>4</sup> for the area (FEMA Floodway Map Number 25017C0506F, Panel 506, dated July 7, 2014, produced by the Federal Emergency Management Agency (FEMA)), indicates that the Project Site is not located within a 100- or 500-year floodplain.

# 1.3 Project Description

The following section presents the proposed development program and other project components, and the construction schedule.

<sup>&</sup>lt;sup>2</sup> NHESP, 2008. Massachusetts Natural Heritage Atlas. 13th Edition.

DEP, 2010. Designated Outstanding Resource Waters of Massachusetts.
 Federal Emergency Management Agency, National Hazard Flood Layer, Digital Flood Insurance Rate Map (DFIRM).

# 1.3.1 Development Program

As illustrated in the table below, the Project consists of several independent components which collectively will comprise a vibrant mixed-use development with new open space, retail and restaurants that will transform an obsolete and aging office, research and development site. In addition to these on-site amenities, the development provides walkable access to adjacent retail, office, and other services along Boston Post Road. The final development program may be subject to modification based upon tenant or user demands as well as the completion of the necessary entitlement processes. The new uses will contribute to a vibrant mixed-use community, which is consistent with local planning and housing initiatives and will act as a catalyst for future planned development of the Route 20 corridor. The Project also includes local roadway improvements, major upgrades to the streetscape and landscaping, improved water quality and creative integration of existing environmental resources that form the framework of the development.

**TABLE 1.1 PROPOSED DEVELOPMENT PROGRAM** 

Use	Size
Avalon	
Residential Apartment Homes	250 Homes
	Anticipated to be approximately 50% 1
	bedroom, 40% 2 bedroom 10% 3
	bedroom
Leasing Office	6,000 sf
Maintenance Shop	1,500 sf
National Development	
Memory Care Assisted Living (Bridges)	48 Units – 54 Beds
Community	
Active Adult Residential Condominium	Up to 60 condo units
Retail	Up to 80,000 sf total
	- 45k village grocery
	- 35k dry goods and restaurants
Total	600,000 SF±

As illustrated in Figure 4, the retail component of the Project will abut Boston Post Road and serve as the main entrance to the development. Positioned behind the retail space and surrounding a central pond feature is the memory care assisted living community and active adult condominiums to the east and the mixed-income residential apartment community to the west. The development program may be subject to modification based on tenant/user demands and the completion of all necessary entitlement process. The current vision/program for the various components are described in further detail below.

#### **Residential Apartments**

The residential apartment community is anticipated to include approximately 250 new homes in a combination of building types, including 2- and 3-story townhouse buildings, containing approximately 54 units, and 3-story walk-up buildings containing 196 units. All of the homes are envisioned to have private entries and attached garages. A separate clubhouse building and leasing center includes a clubroom, fitness center, outdoor barbeque area, and swimming pool. Parking spaces are provided, located primarily in garages or surface lots behind buildings, with some additional spaces provided on-streets in front of the proposed buildings.

The proposed site plan design gives priority to a range of outdoor landscaped open spaces and pedestrian-friendly residential streets. A new green at the main entrance to the residential community evokes traditional residential greens, defined by the clarity of the surrounding streets and buildings. The new green draws on the public realm of the proposed market and retail development to the south and provides a 'front door' to the residential community. A new street, lined with 2- and 3-story townhouses and direct-entry buildings with expansive front porches, connects the entry green to the proposed 1-story clubhouse beyond. Centrally located, the clubhouse building serves as a focal point for the development, providing the primary recreational amenity for residents. The plan introduces a new street and sidewalk network across the Site reducing the scale of the 17.4-acre parcel to a comfortable residential scale. Unit entry doors and porches face the new street, contributing to a walkable neighborhood. On-street parallel parking is proposed, serving to slow passing vehicular traffic and also, together with the street trees, providing a buffer between the moving vehicles and pedestrians.

#### Retail

The retail component of the Project will feature up to 80,000 square feet of village-style mixed retail including a 45,000 square foot Whole Foods Market grocery store as the anchor retail tenant. The Whole Foods is anticipated to be constructed ahead of the rest of the retail area, and will serve to help maintain tax revenues generated from the Project Site during the transition period between the existing and proposed uses. In this role, the grocery store will serve as the catalyst for the redevelopment of the Project Site in accordance with the Town's planning goals.

Massing of the remaining buildings along Boston Post Road (Route 20) and the primary site entry drive are aimed at creating an activated streetscape with pedestrian amenities framed by buildings. Pedestrian walkways throughout the retail area will connect the commercial buildings to Boston Post Road and the other buildings on the Site, creating a walkable environment for visitors and residents. The retail area streetscape will be enhanced by trees and other plantings, benches and outdoor seating areas, as well as outdoor seating areas for the restaurants within the Site. The retail area will also engage the central green area, which is an open space amenity available to all further described below. These strategies are aimed to be in line with the Town's planning goals for the corridor and to help transform the character of the Route 20 corridor by limiting the view of larger parking lots, also in furtherance of the Town's planning goals.

#### **Active-Adult Community**

The active-adult community will consist of 60 for-sale residences, including 21 townhomes and 39 garden-style condos. The townhomes are proposed within two, three, and four-unit buildings and the garden-style cone within one 39-unit building. As an age-restricted community, every residence will be occupied by at least one person age 55 or older. Consistent with Low Impact Development (LID) design practices, the Project minimizes impervious area by utilizing a compact design approach and surface parking is minimized through the use of garage parking beneath the garden building and within the townhomes. The layout has been crafted in a manner that contains the proposed impervious footprint within the limits of the existing parking lot, and the design will result in an overall reduction of impervious area and enhancements to stormwater quality.

The proposed community will create an environment of residents of like-age looking to enjoy independent retirement living. Their location on the Site will afford many opportunities to engage with other 55+ residents, or with other residents of the project. Ample opportunities will exist to enjoy the outdoor spaces created by the Project; Residents will retire, relax, and rejuvenate without the worries that can come from living alone and maintaining a single family home.

#### **Memory Care Assisted Living (Bridges)**

The proposed memory care assisted living community is a 48 unit (54 bed) memory care assisted living complex focused on enhancing the health, well-being and overall quality of life for seniors suffering from Alzheimer's disease and memory loss. Modelled after a similar state of the art facility developed by National Development and EPOCH Senior Living, the complex features an open but secure floor plan with ample natural light. The Building will be organized into three distinct "households" each with private apartments and dedicated common areas including secure outdoor areas. Residents live in a family-like setting with supportive staff and programs.

The building orientation is designed to provide physical and visual separation between the main site entrance and the rest of the Site. This is intended to provide a sense of privacy for residents and users of the public open spaces, including views overlooking the central pond.

Residents of the memory care assisted living community receive specialized care designed specifically for individuals with memory challenges. With researched-based programming and specialized care teams on-site 24/7, the program provides a high quality level of care with personalized and individualized service. In addition to providing top-tier state of the art service and facilities, the community will be designed and programmed to encourage a social and engaging environment that supports healthy living and well-being.

### 1.3.2 Open Space and Landscaping

The open space and landscaping for the Project Site seeks to create an interconnected network of open spaces, varying in scale and use, both within the Project Site and to the adjacent off-site network. These interconnected areas are intended to serve both active and passive needs and be connected by a series of multimodal sidewalks and walking paths.

#### On-Site

The circulation network provides a dynamic connection between the planned mixed-uses for the Site and surrounding areas. This network will be buffered and softened by new edge plantings that adapt and change depending on the environments they travel through. A mix of wetland buffer restoration plantings and naturalized sweeps of native grasses will transition to traditional streetscape plantings of trees and shrubs, then will shift to a more traditional commercial/retail planting scheme of parking lot trees, stormwater treatment Low Impact Development plantings and ornamental grasses and screening shrubs. These multimodal circulation corridor will provide passage for residents, visitors, and animals within and across the Site.

The circulation corridor is intended to connect the future bike path planned for the right-of-way north of the Site through the parks, communities, and open spaces to the on-site retail to the roadway. The circulation corridor continues through to the off-site improvements discussed in detail below. The goal of the interconnected circulation corridor is to create new opportunities for active recreation, as well as to encourage walking/biking as an alternative to vehicle use.

Unique elements of the open space design on the Project are the opportunity to engage visually with the naturalized feature of the existing pond, as well as the opportunity to create usable open spaces within the Project for the passive or active enjoyment of residents and visitors. A new green, centrally located and framed by the retail area to the south and the residential apartment homes and memory care assisted living community to the north, is a modest park or green area. This programming of this space is in a preliminary state, but it is intended to provide an outdoor gathering space and amenity for residents and visitors.

#### Off-Site

The new layout will provide seamless visual, vehicular and pedestrian connections to the surrounding context by aligning the new intersection with the existing Shaw's Plaza across Boston Post Road (Route 20), and reinforcing the new intersection with an improved active streetscape that provides an anchor to Route 20. The roadway improvements will include new sidewalks on both sides of Boston Post Road, as well as bike lanes to tie the adjacent commercial areas into the on-site circulation corridor.

This open space will include elements such as a new sidewalk that runs through the Site to the property lines, street trees and select landscape with a variety of seasonal interest, and activated open spaces. The streetscape is further reinforced by a strong building edge with iconic architectural features and well landscaped parking lots that include parking lot trees, ornamental grasses, evergreen buffering shrubs and trees, landscaped stormwater treatment areas, and clean and functional site amenities.

### 1.3.3 Sustainability

As discussed below, the Proponent intends to implement sustainable design and construction principles and practices for the Project, which include energy efficient development.

#### **Planning and Site Design**

The Project location utilizes a developed property in close proximity to major commercial and retail amenities including grocery stores, pharmacies, restaurants and medical services. By utilizing an existing previously disturbed property, the Project avoids new environmental impacts, and instead will improve environmental conditions in and around the Site. The mixed-use nature of the Project will provide residents with on-site retail and entertainment to reduce vehicle trips and limit residents' dependency on car usage.

Site layout and landscaping treatment is designed with well-defined pedestrian ways leading to public spaces to promote walking, bicycling, and other active transportation options. With two bicycle trails planned within close proximity to the Site, the Mass Central Trail along the northern edge of the property and the Bruce Freeman Rail Trail approximately 1/4 mile away, the Site is well served by nearby recreational opportunities that encourage alternatives to motorized transportation.

#### **Building Design and Operation**

The individual components of the Project are designed separately, each with their own sustainability goals or certifications, however all buildings will be designed with energy saving building envelopes, fixtures, and appliances aimed toward limiting consumption and waste and reducing greenhouse gas emissions. The Project also will include water conserving measures aimed at reducing the potable water demand by at least 20% as compared to Title V flows.

Additionally, the Proponent has explored potential alternative energy sources such as rooftop solar power within the commercial uses. The Proponent has a proven record of environmental stewardship and responsibility, and is fully committed to exploring additional sustainability initiatives as the Project design progresses.

In addition to the direct sustainability initiatives of the Project, the retail partners of the Project will implement their own plans and programs geared toward sustainability. For example, the future grocer, Whole Foods, has a composter for sustainably managing food waste where food wasted is collected from the different departments within the grocery store, sorted in a collection table and ground into a slurry. The slurry is then held in a subsurface storage tank located outside the building. The tank is emptied regularly and the slurry is transferred to an anaerobic digester where it can generate electricity. The specific recipient of the slurry has not been identified yet for this specific Project, but with other Whole Foods stores, the recipients are typically farms who use it to create green electricity to run the farm operations or to sell back to the electric grid.

### **Massachusetts Stretch Energy Code**

As part of the Green Communities Act of 2008, Massachusetts developed an optional building code that gives cities and towns the ability to choose stronger energy performance in buildings than the state building code (the "Stretch Energy Code"). Codified by the Board of Building Regulations and Standards as 780 CMR Appendix 115.AA of the 8th edition Massachusetts Building Code, the Stretch Energy Code is an appendix to the Massachusetts building code, based on further amendments to the International Energy Conservation Code (IECC). The Stretch Energy Code increases the energy efficiency code requirements for new construction and major residential renovations or additions in municipalities that adopt it. The Stretch Energy Code applies to both residential and commercial buildings and, specifically, for new commercial buildings over 5,000 square feet in size, including multi-family residential buildings over three (3) stories.

In 2010, the Town of Sudbury was designated a Green Community under the Green Communities Designation and Grant Program—an initiative of the Massachusetts Department of Energy Resources. In order to be designated a Green Community and, therefore, eligible for grant money available annually, communities are required to meet five rigorous qualification criteria one of which includes minimizing life-cycle costs, such as adopt and implement the Stretch Energy Code. The goal of the grant program is for a municipality to use grant money to assist residents, businesses, and the municipality departments/facilities reduce energy use or install renewable energy systems.

The current Stretch Energy Code requires projects to achieve at minimum a 20 percent energy efficiency compared to the state's energy code (the "Base Energy Code") by either meeting the performance standard of 20 percent better than ASHRAE 90.1-2007, or using a prescriptive energy code. On July 1, 2014, the IECC2009 and ASHRAE 90.1-2007 ceased to be a code option for non-Stretch Energy Code communities, and the IECC 2012 and ASHRAE standard 90.1-2010 became the new/updated state-wide Base Energy Code. The Project is committed to achieving or exceeding Stretch Energy Code requirements applicable to the Project at the time of construction.

# 1.4 Project Benefits

This section summarizes the mitigation, improvements and benefits of the Project. Each of these mitigations and benefits is described in greater detail in the sections and appendices following this section.

#### 1.4.1 Land

- > By siting the Project on previously developed land, the Project avoids alteration of any undisturbed land.
- ➤ The Project will create new open space and a network of pedestrian pathways throughout the 50-acre site with connections anticipated for future planned trail systems.

➤ The Project will reduce the overall impervious area on the Site by 2-3 acres by reducing the total number of parking spaces and replacing vast surface lots with a mix of surface, garage, and street parking in the residential portion of the Project.

#### 1.4.2 Natural Resources Benefits

- ➤ The Project will incorporate measures to increase the function of these resources by enhancing the upland buffers where practicable.
- ➤ There are no state-listed Priority Habitats of Rare Species, no state Estimated Habitats of Rare Wildlife, and no Certified Vernal Pools located within the Project Site.
- ➤ Impacts to wetland resources associated with proposed roadway upgrades are anticipated to be minimal. The current design avoids any permanent impacts to wetland resources, however temporary impacts may occur during construction access, or modification to existing stormwater inlets and outfalls.
- ➤ The net environmental improvement of the site will help restore the functions of the onsite and off-site resource areas.

#### 1.4.3 Site Environmental Conditions

- ➤ After extensive analysis by the current and Former Owner, no contamination in soil or groundwater that could pose a health risk to future residents has been identified based on the proposed redevelopment plan.
- ➤ Extensive analysis indicates that no impacts to neighboring properties or Town public water supply wells.
- > The Proponent has engaged an LSP to develop a Release Abatement Measure Plan to identify and address any unanticipated conditions that could arise during the redevelopment of the site.

### 1.4.4 Stormwater and Water Quality

- ➤ Increasing open space and groundwater recharge to contribute to re-establishing components of a more natural water cycle (evapotranspiration, groundwater recharge and runoff) on the Site.
- ➤ Improving the surface water and groundwater quality will further protect the watershed of critical environmental resources.
- Protecting and minimizing disruption to existing wetland resource areas and wildlife habitat corridors through the maintenance and enhancement of existing vegetative protective buffers.
- ➤ Implementing a comprehensive temporary and permanent erosion control system and Long Term Operations and Maintenance Plan.

#### 1.4.5 Water/Wastewater

The overall goal of the water and wastewater systems are to minimize the use of water and benefit the underlying aquifer by:

- ➤ Minimizing the potable water demand and corresponding wastewater discharge through the implementation of water-conservation measures such as low-flow fixtures, high efficiency appliances, individual metering of residential units where practicable, and limiting the use of potable water for irrigation purposes.
- ➤ Increasing recharge to the underlying aquifer through the upgrades of the existing wastewater treatment plant (WWTP).
- ➤ Avoiding inter-basin transfer by utilizing Town-supplied potable water from wells in Sudbury combined with the on-site WWTP.
- ➤ Enhancing the quality of the water discharged from the WWTP and reliability of the WWTP to provide additional benefits and protection of the underlying groundwater aquifer and public drinking water supply.

### 1.4.6 Transportation

- ➤ Improvements are consistent with the town's Route 20 Corridor Study and MassDOT's Healthy Transportation Policy Directive.
- ➤ Project is expected to generate less traffic during the weekday morning and weekday evening peak hours as compared to the existing use.
- ➤ Reduction in the peak hour traffic volumes is expected to have a noticeable beneficial effect on the area roadway weekday traffic operations.
- ➤ Improved safety at Site intersections by the implementation of traffic safety improvements on Boston Post Road.
- ➤ Includes Transportation Demand Management (TDM) measures.
- ➤ In connection with the Project's retail/grocery store phase, improved pedestrian accommodations by widening the existing sidewalk on the north side of Boston Post Road along the Site frontage and extending the limits of the existing sidewalk on the south side of Boston Post Road.
- > Subject to right of way availability and in connection with the Project's retail/grocery store phase, addition of five-foot paved shoulders (which could become part of future bike lanes) on either side of Boston Post Road within the limits of the roadway improvements.

Refer to Attachment D for the full Traffic Impact and Access Study for analysis and supporting documentation.

#### 1.4.7 Construction

Construction impacts are temporary in nature and will be minimized to the extent feasible through the implementation of a Construction Management Plan which will be reviewed by the Town. Mitigation associated with the plan is listed below:

- ➤ An Erosion Control and Sedimentation Plan to control construction-related land disturbance activities will be implemented, in accordance with the National Pollutant Discharge Elimination System (NPDES) General Permit requirements.
- The Proponent is committed to working with public officials to help ensure that appropriate traffic maintenance and protection measures are in place during construction.
- ➤ The Proponent will work to recycle building materials during demolition to the fullest extent practicable, except wallboard, fabric material, and insulation.
- Hazardous materials recovered during demolition will be disposed of in accordance with Massachusetts Department of Environmental Protection (DEP) requirements.
- > The Proponent has engaged a third-party industrial hygienist to oversee the abatement contractor to preserve air quality.
- The Proponent has engaged an LSP who will develop and implement Release Abatement Measures Plans which are intended to identify and address any unknown conditions that may arise during construction.
- > The Proponent will require on-site construction vehicles to use ultra-low-sulfur diesel fuel in vehicles, to the extent practicable, and will implement a no idling policy for on-site construction delivery vehicles.

### 1.4.8 Meeting Housing Demand

In regards to housing for the Town of Sudbury and the region, the Project will:

- ➤ Assist the Town in meeting its housing goals by providing affordable and alternative housing opportunities, in accordance with the Housing Production Plan approved by the Board of Selectmen on May 17, 2011, which specifically targets the site for such housing development.
- ➤ In addition to providing affordable housing, the Project will provide a housing mix that meets the needs of the community, by furnishing a range of sizes, styles, and rental as well as home ownership options that will cater to a variety of consumers including empty nesters, working families, working professionals, young families, retirees, and residents with memory care needs.

# 1.5 Construction Schedule/Phasing

Construction of the various elements of the Project is planned to occur concurrently; however based on the time required to construct certain components of the Project, as well as existing lease commitments to the current tenant, parts of the Project will start and be completed at different times, described generally as follows.

Subject to receipt of the required permits, site preparation and construction of the Project is anticipated to commence in the spring of 2016 with building demolition and construction of the grocery store. Once the existing tenant vacates Building 1 and 5 at the end of 2016, construction of the residential uses and the remaining commercial buildings is envisioned to begin. The

grocery store opening date is anticipated to be late summer 2017, with the remainder of the Project construction concluding at the end of 2018. Off-site improvements proposed at the Site frontage with Boston Post Road, including the traffic signal work, will be constructed as part of the Project's retail/grocery store phase and are expected to be substantially complete concurrent with the grocery store opening.

The overall Project is anticipated to be complete by December 2018.

# 1.6 Anticipated Permits/Approvals

Table 1.2 lists the anticipated permits and approvals from state and local governmental agencies, which are anticipated to be required for the Project.

**TABLE 1.2 ANTICIPATED PROJECT PERMITS** 

Agency/Department	Permit
Federal	
U.S. Environmental Protection Agency	National Pollutant Discharge Elimination System (NPDES) Construction General Permit
State	
Executive Office of Energy and Environmental Affairs	MEPA Certificate
Massachusetts Department of Environmental Protection	Groundwater Discharge Permit Modification
Massachusetts Department of Environmental Protection	Superseding Order of Conditions
Massachusetts Department of Transportation	Vehicle Access Permit
Local	
Sudbury Conservation Commission	Order of Conditions
Sudbury Zoning Board of Appeals	Major Commercial Project Special Permit, Signage Permits, Comprehensive Permit M.G.L. Ch. 40B (encompasses all local approvals required for the Project's multi-family phase)
Sudbury Town Meeting	Amendment to the Town of Sudbury Zoning By-Law
Sudbury Planning Board	Site Plan Review, Stormwater Permit, Consistency Review
Design Review Board	Architectural and Signage Design Review, Landscape Review
Sudbury Board of Health	Irrigation Well Permit

## 1.7 Project Alternatives

#### 1.7.1 No Build

The No-Build Alternative considers the reoccupation of the existing 563,300 square feet of office space by other office/R&D tenants. The No-Build Alternative does not consider the practical obsolescence of the existing buildings/facilities and the lack of market demand for this scale and building type. Nor does it include the site improvements or amenities needed to attract future clients and does not meet the identified mixed-use redevelopment goals or housing needs of the Town. The benefits associated with improvements to the stormwater management system, reduction in impervious coverage, enhancements to pedestrian accommodations and upgrades to the wastewater treatment plan would not be realized in this scenario. Please refer to Figure 3 for the Existing Conditions Plan.

### 1.7.2 As-of-Right Alternative

The As-of-Right Alternative includes 80,000 sf of retail space, 260,000 square feet of office space, and 230,000 square feet of research and development and warehouse space, consistent with the current Limited Industrial Zoning District. In an As-of-Right scenario, many of the Town's planning goals would not be realized, which is why the Route 20 Corridor Study and the Sudbury Housing Production Plan, as discussed in Section 1.8, suggest a mixed-use overlay zone for this parcel. As with the No-Build Alternative, the As-of-Right Alternative does not consider the practical market limitations associated with this development program and its failure to advance the Town's identified housing needs. Please refer to Figure 12 the As-of-Right Alternative Plan.

#### 1.7.3 Preferred Alternative

The Preferred Alternative represents the Project, as described previously above (shown in Figure 4) and analyzed in this ENF. Overall the Preferred Alternative aims to provide for a mix of uses which support and enhance the community, and reflect the nature and character of the Town. The Preferred Alternative will also serve the needs of the community by satisfying the existing affordable housing gap. Please refer to Figure 4.

	No – Build Alternative	As-of Right Alternative	Preferred Alternative
Impervious Cover	No change	No change	Reduction
Peak Hour Trips	Re-tenanting of the existing buildings for office/R&D uses would generate more impacts on weekdays than the proposed use	Similar to the No-Build alternative, with the added intensity of the retail traffic	Substantially lower weekday peak hour traffic impacts when compared to the re-tenanting and as-of- right alternatives. Additionally, this alternative will include pedestrian and

			roadway improvements and better time/day of week distribution to disperse impacts of the mixed-use development.
Number of Parking Spaces	2040	+/-1850	Decrease in parking spaces to 1,300
Wastewater Generation/ Water Usage	No change required (50kgpd)	No change required, (50kgpd) No WWTP upgrades	Increase in total useage (82-90k GPD) results inmore recharge to aquifer, improvements to the WWTP
Stormwater Quality	No change	Improved SW system	Improved SW system
Energy Usage/ Sustainability	Existing inefficient buildings will remain	Modern buildings with energy saving features	Modern buildings with energy saving features

### 1.7.4 Comparison of Impacts

#### Land

While the No-Build Alternative would not result in new land alternation or create new impervious area, it does not provide for upgraded stormwater management facilities and, therefore, would not improve water quality. Under the No-Build Alternative, stormwater runoff would continue to be served by the existing stormwater management system on the Site. While some recent improvements have been made to the existing system, stormwater treatment and stormwater quality would not be in compliance with current DEP standards.

Because the Project Site is already developed, from a coverage perspective, neither build alternative would result in significant new land alteration. The As-of-Right build alternative would increase the quantity of pavement on the Site and, therefore, would be unlikely to reduce the impervious surface area. The Preferred Alternative on the other hand minimizes paved parking areas, utilizes garage parking for much of the residential parking areas, and actually reduces impervious coverage on the Site by a few acres. Both build alternatives would be retrofitted with new drainage infrastructure that meets the current MassDEP Stormwater Management Policy to the maximum extent practicable. The new drainage system will provide enhanced stormwater treatment and improved groundwater recharge, relative to existing conditions that would otherwise remain in the No-Build Alternative.

#### **Water and Wastewater**

The As-of-Right build alternative would not necessarily increase water demand or wastewater generation compared to the No-Build Alternative, and would consequently not include the

proposed upgrades to the waste water treatment facility which benefit the underlying aquifer. Furthermore, as part of the Preferred Alternative, the overall potable water demand will be mitigated by the continued use of water efficient irrigation systems utilizing well water, and installation of low-flow fixtures for the residential and commercial spaces, where practicable. The No-build alternative would not provide that benefit in that there would not be any reduction in the existing demand from new systems.

#### **Traffic & Parking**

The Preferred Alternative is anticipated to generate less traffic during the weekday morning and weekday evening peak hours as compared to the existing use (No-Build). The reduction in traffic is a result of the shift from predominately office uses to a broad mix of uses. Under the As-of-Right alternative, the traffic generation and associated air quality impacts would be greater than both the Preferred and No-Build alternatives due to the relatively greater intensity of the office/research and development use of the Site. In addition to causing greater impacts than the Preferred Alternative, the No-Build Alternative would not provide the safety accommodations, pedestrian improvement, and roadway improvements that were implemented under the Preferred Alternative.

#### 1.7.5 Conclusion

The No-Build Alternative does not provide for the much needed site improvements and building upgrades, nor does it introduce new uses to create a more vibrant and accessible site in response to the community's identified goals for a mix of uses on the Site. The No-Build Alternative also fails to satisfy the affordable housing needs identified by the Town.

While the As-of-Right Alternative would implement upgrades to the stormwater management system, it would not necessarily provide the enhanced wastewater treatment system or the increased groundwater recharge associated with a reduction in impervious area and increased wastewater generation/ infiltration. It would also fail to achieve goals identified in the Town's Planning studies including activating the Route 20 streetscape and contributing to the affordable housing stock in furtherance of its designation as an appropriate site for such housing options under the Housing Production Plan. The Preferred Alternative, on the other hand, does meet these objectives. Lastly, the mixed-use nature of the Preferred Alternative improves traffic conditions on the surrounding roadways by distributing traffic throughout the day which would not be realized in either of the other alternatives.

## 1.8 Consistency with Applicable Plans and Policies

### 1.8.1 Local

#### **Town of Sudbury Housing Production Plan**

Prepared by the Town of Sudbury, the Housing Production Plan (HPP), which was unanimously approved by the Board of Selectmen on May 17, 2011, is intended to identify community housing

needs and to develop a strategy to meet the 10% threshold of M.G.L Ch. 40B. The HPP identifies the following eight goals:

- 1. Promote a diversity of housing types in Sudbury to meet the needs of a changing and diversified population, particularly with increased production of rental units, development of multi-family buildings, duplexes, and single-family attached dwellings, in addition to conversion of existing market rate homes to affordable.
- 2. Creating more affordable rental and homeownership units for eligible households making less than 80% of the area median income, with preference given for households with local ties.
- 3. Increase diversity of housing options by enabling housing in business districts including apartments above commercial space.
- 4. Preserve affordability restrictions on existing units for the longest period possible.
- 5. Leverage local Community Preservation Act funds and Sudbury Housing Trust funds and other local resources towards affordable housing production.
- 6. Preserve existing small homes and dwellings
- 7. Maintain and advance capacity with planning and advocacy
- Through town policy, regulations, and local funding, encourage creation of workforce
  housing-units that are affordable to middle income households making between 80% and
  120% of the area median income.

The HPP specifically identifies the Project Site as one of the top six preferred sites for development of affordable housing. The Project will advance the goals of the Sudbury HPP, and will provide a balance of assisted living, age-restricted residential, and a mix of 1-3 bedroom residential apartments to maintain the character of the community. The Project also meets the HPP's strategy of seeking mixed-use development to better activate the Site and to provide convenient community shopping amenities.

#### **Town of Sudbury Master Plan**

Completed in 2001, *Sustainable Sudbury* specifically identifies the Project Site as a key location for potential redevelopment and expansion to maintain the Town's tax base and capitalize on the existing infrastructure available on the Site. The plan notes that the infrastructure, including the wastewater treatment plant, is already in place to support continued and expanded development on the Site. The Project is consistent with the planning goals to preserve open space by redeveloping a previously developed site, instead of locating the Project on previously undisturbed land, and the proposed uses are consistent and compatible with the adjacent land uses. The Project also supports the plan's goal of encouraging a greater diversity of housing opportunities in Sudbury to meet the needs of a changing and diversified population with respect to age, household size, and income.

One of the action items identified in Sustainable Sudbury was for the Planning Board to create a plan for the future use of the Site. The outcome of this action item is most clearly summarized in a joint letter from the Board of Selectmen and the Planning Board to T. Bradley Duffin of the

Raytheon Company dated February 25, 2015. As noted in the letter the Town of Sudbury, acting through the Board of Selectmen, held several meetings to discuss the Town's goals and priorities as they related to the Site. The letter notes that from the Town's perspective, the Site is well suited for a mixed-use project with a focus on residential with supporting retail. The Town's stated objectives for the Site include:

- Create at least 240 affordable rental apartments to satisfy Sudbury's affordable housing gap
- Include age-restricted housing to minimize impacts on the school system and provide diversity in the housing stock for the growing senior population
- Provide a congregate care and assisted living facilities
- Introduce retail uses to complement the area and provide convenient services to the new residents

The Project, as proposed, satisfies all of these objectives and is in line with the Town's goals.

The letter further states that as with any project, there is an expectation that impacts to the Town will be mitigated. The Project includes substantial mitigation and environmental improvements, many of which were specifically noted in the letter, including;

- > Access to the abutting future rail trail
- > Opportunities for active and/or passive recreation within the Site
- > Streetscape improvements within the Site
- Mitigation of project impacts with respect to traffic through the proposed transportation and environmental improvements on the Site

#### **Town of Sudbury Project Evaluation Report**

Completed for the Town of Sudbury in June of 2012, the purpose of the Project Evaluation Report was to investigate wastewater options for the Route 20 business district. The Plan provided recommendations intended to protect existing water resources and to improve public health and the environment. The Project Site is uniquely positioned throughout the study as it contains its own wastewater treatment facility and does not impact or present additional demand on the wastewater management needs of the surrounding area. The existing sequencing batch reactor secondary treatment facility on the Project Site provides nitrogen reduction and groundwater disposal through open sand beds. The evaluation report considers utilizing some of the capacity of the existing facility to address Town wastewater concerns, however the alternative was rejected due to the inherent risk of the Town taking ownership of an existing system.

Consistent with the plan, the Project will utilize and improve the existing on-site facility to provide the necessary capacity and to enhance the protection of surrounding water resources. Modernizing the decentralized system will improve wastewater treatment and water quality in the surrounding area.

### **Sudbury Route 20 Zoning Project**

In December of 2012, at the request of the Town of Sudbury, the Metropolitan Area Planning Council published the Route 20 Zoning Project, which was intended to assist the town in developing land use controls along a portion of Boston Post Road (Route 20). The plan recommendations were based on a combination of community involvement and regulatory review. The community meeting identified three key themes;

- 1. The most desired uses for Route 20 are restaurants, offices, hair salons, spas, continuing care facilities
- 2. 69% of attendees were in favor of a mixed-use development
- 3. 43% of attendees were in support of multi-family uses

The Project will meet these key community goals by providing new restaurants, retail space, and continuing care facilities in a mixed-use development along with multi-family uses to address the Town's affordable housing deficit.

#### **Route 20 Corridor Study**

The Route 20 Corridor Study was completed by *The Cecil Group* in March of 2015 to assist the Town of Sudbury in evaluating potential changes in zoning for the commercial districts along Boston Post Road (Route 20) and Union Avenue. During the course of the Cecil Groups study, Raytheon publicly announced their intent to close their operations and vacate the Site, however The Cecil Group, on behalf of the Sudbury Planning Board, specifically identifies the Project Site as a location particularly well-suited for retail and related mixed-uses.

Although development potential of the Site was not specifically discussed, the Project meets the goals and objectives of the study by redeveloping the Site with mixed-uses, new pedestrian connections, new open space and new stormwater improvements, as well as by focusing that development within the Route 20 Corridor.

#### 1.8.2 Regional Planning

#### **Metropolitan Area Planning Council**

The Town of Sudbury is located within the Metropolitan Area Planning Council (MAPC) planning area. In May 2008, the MAPC issued its *MetroFuture: Making a Greater Boston Region.* MetroFuture is MAPC's plan for Greater Boston to better the lives of the people who live and work in the region through the year 2030. MetroFuture includes detailed goals for development and preservation, and specific strategies to equitably distribute the benefits and burdens of growth. A key goal of MetroFuture is to focus growth where infrastructure already exists in order to preserve natural resources. Other goals include the following:

<sup>▼</sup> 

MetroFuture: Making a Greater Boston Region, Massachusetts Area Planning Council, May 2008 (updated December 2008).

- > Sustainable Growth Patterns: Population and job growth will be focused in developed areas already well-served by infrastructure.
- Housing Choices: A diverse array of housing choices will meet the needs of the region's residents.
- > **Healthy Communities:** Residents will be safe, healthy, well-educated, and engaged in their community.
- Regional Prosperity: A globally-competitive regional economy will provide opportunity for all the region's workers.
- > Transportation Choices: An efficient transportation system will offer more choices and make it easier to get around.
- ➤ **Healthy Environment:** Natural resources will be protected thanks to a strong "environmental ethic."

The Project accomplishes many of the smart growth principles recommended by MAPC, including:

- Redevelopment of an outdated suburban development with existing infrastructure;
- Re-use of existing disturbed site and repurposed paved parking areas resulting in reduced site disturbance;
- New employment opportunities;
- ➤ A broad range of new housing opportunities, including affordable options;
- Transportation Demand Management measures to reduce single-occupancy vehicles; and
- > Sustainable/green building features, including energy and water efficient building systems; thereby, reducing the Project's impacts on the environment.

#### 1.8.3 Commonwealth of Massachusetts

### **Executive Order 385 – Planning for Growth**

Generally, Executive Order 385 (EO 385) aims "...to actively promote sustainable economic development practices by advocating for state activities that are supported by adequate infrastructure and that are designed in such a way so that they do not adversely impact the natural environment." The Project is consistent with EO 385 because its design aims to redevelop a previously developed site with improvements to existing infrastructure; therefore, avoiding environmental impacts, such as new impervious surface, and new land alteration. The Project will improve water quality through proposed modifications/upgrades to the stormwater management system. The Project will create a vibrant mix of activity on the site and provides for new employment opportunities, including the creation of hundreds of construction jobs in all trades over the multi-year construction period and new employment opportunities (permanent part-time and full-time jobs) within the new facilities proposed on the Site — all of which will support the local and state economy. Furthermore, as demonstrated in this ENF, the Project will minimize any unavoidable environmental impacts through the implementation of mitigation measures, to the extent feasible.

### **Commonwealth's Sustainable Development Principles**

The Project is consistent with several of the Office of Commonwealth Development's Sustainable Development Principles.<sup>6</sup> The following lists the smart growth principles that the Project is consistent with.

- > Concentrate Development and Mix Uses. The Project best fits this principle because it consists of redevelopment of an existing property with improvements proposed to existing infrastructure and will result in a vibrant mixed-use development along the Route 20 corridor.
- Advance Equity. The Project will advance equity in the Town of Sudbury by providing an affordable housing option and address the need for affordable rental housing for community members in one of the most affluent communities in the Commonwealth
- > Make Efficient Decisions. A key goal of the Project is to utilize the existing developed area on the Site to the extent practicable in order to limit site work. The 40B process will be used to develop housing through a streamlined entitlement process and in a cost-effective manner in order to create affordable rental housing on the Site as part of the Project.
- > **Protect Land and Ecosystems.** The Site is currently developed with office and research and development buildings and large surface parking lots. By redeveloping the Site, as opposed to developing in a greenfield site, this Project does not have an adverse impact on the land and ecosystems.
- > **Use Natural Resources Wisely.** The Project promotes sustainable planning by the inclusion of design elements, such as energy and water efficient building systems and operations, reduced construction and operational waste, and environmentally-preferable materials.
- > **Expand Housing Opportunities.** Professionally managed market rate and affordable housing will expand housing opportunities in Sudbury. 25% of the apartment homes within the Project permitted under M.G.L. Chapter 40B will be restricted to households earning no more than 80% of the Area Median Income. The addition of this Project component will increase Sudbury's affordable housing inventory with a new diverse housing stock and offer handicap accessible apartment homes, as well as homes equipped for the hearing impaired.
- Provide Transportation Choices. The Site convenient access to I-95/128 and I-495 via Route 20 and I-90 via Landham Rd and Nobscot Rd. In addition, nearby commuter rail service connects the Site to Boston via both the Fitchburg and Worcester Lines.
- Increase Job and Business Opportunities. The Project provides for new employment opportunities (hundreds of construction jobs in all trades and new permanent part-time and full-time jobs ion all components of the mixed-use redevlopment).

<sup>▼</sup> 

Commonwealth of Massachusetts Sustainable Development Principles (website link: http://www.mass.gov/Agov3/docs/smart\_growth/patrick-principles.pdf)

- > **Promote Clean Energy.** The Project will be energy efficient and, therefore, will reduce stationary source Greenhouse Gas (GHG) emissions by approximately 20 percent when compared to conventional building design. The Proponent will construct appropriate buildings as "solar ready" so as to permit the installing an array of solar panels in the future, and is committed to evaluating alternative energy sources as design advances.
- > **Plan Regionally.** The Project was developed taking into consideration regional context, access, market area, and economics and is consistent with the goals of the MAPC's *MetroFuture* plan for the region.

#### **Governor's Clean Energy and Climate Plan**

The Global Warming Solutions Act of 2008 requires the Secretary of Energy and Environmental Affairs (EEA) to establish a statewide limit on GHG emissions of between 10 percent and 25 percent below 1990 levels for 2020 - on the way toward an 80 percent reduction in emissions by 2050 - along with a plan to achieve the 2020 target. In 2010, Secretary Ian A. Bowles issued the state-wide Clean Energy and Climate Plan for 2020, which contains the measures necessary to meet these limits. 7 A key goal of the plan is to assist and encourage businesses, households, municipalities, and institutions to better manage their energy needs by incorporating renewable and alternative sources of energy. The Project supports the state's Clean Energy and Climate plan by incorporating energy efficient building systems and significant upgrades to existing buildings to reduce the overall energy use and associated GHG emissions.

Secretary of the Executive Office of Energy and Environmental Affairs, Massachusetts Clean Energy and Climate Plan for 2020, December 29, 2010.

2

# **Environmental Conditions**

### 2.1 Introduction

This section describes the existing environmental conditions on the Project Site, as well as an analysis of the proposed environmental conditions. Environmental resources on the Site were reviewed using available data from GIS, property records and on-site investigations.

The Project proposes to redevelop a 50 acre parcel in Sudbury, currently occupied by the Raytheon office park, into a vibrant mixed-use project. The Site currently includes paved parking areas, internal roadways and office/research and development buildings. The Project will take place predominantly within previously developed areas. The natural resources present on the Site consist of landscaped areas and wetland features that receive stormwater runoff from the Site. There are also wetland features on adjacent properties that include regulated buffer zones that extend into the subject property. The natural resources on the Site, anticipated effects of the Project, and regulatory jurisdiction are described below.

### 2.1.1 Key Findings and Benefits

The Site is entirely developed or previously disturbed land and, as such, the Project offers a unique opportunity to enhance overall environmental conditions at the Site. The Site includes several vegetated wetland resources surrounded by narrow buffers of vegetated upland and paved parking areas. Due to the large amount of paved surfaces on the property, the wetlands on-site now function predominantly as stormwater management features which limit their ability to provide significant wildlife functions and values.

The Site is the location of three previously reported Massachusetts Contingency Plan (MCP) Release Tracking Numbers (RTNs). The site has been subject to thorough environmental review and will be redeveloped in accordance with the MCP requirements under the evaluation of a Licensed Site Professional. Refer to Attachment E for the LSP's site evaluation letter. Sanborn, Head & Associates, Inc. (Sanborn Head) will provide Licensed Site Professional (LSP) services for the Project. Based on the available information, it is Sanborn Head's opinion that the proposed redevelopment project will not pose a health, environmental or natural resource risk to future residents, neighbors or the community.

#### **Natural Resources Benefits**

Redevelopment of the Site affords the opportunity to enhance the natural resources on the Site and provide an overall environmental benefit.

- > The Project will incorporate measures to increase the function of adjacent resources by enhancing the upland buffers where possible.
- ➤ The Project restores components of the buffer zone on-site.
- ➤ There are no state-listed Priority Habitats of Rare Species, no state Estimated Habitats of Rare Wildlife, and no Certified Vernal Pools located within the Project Site.
- ➤ Impacts to wetland resources associated with proposed roadway upgrades are anticipated to be minimal. The current design avoids any permanent impacts to wetland resources, however temporary impacts may occur during construction access, or modification to existing stormwater inlets and outfalls.
- ➤ The net environmental improvement of the Site will help improve the conditions of resource areas and advance the interests protected under the Wetlands Protection Act.

#### **Site Environmental Conditions**

The Site environmental conditions have been thoroughly examined and, while the Site has been the location of three previously recorded MCP RTNs, the redevelopment will not pose health, environmental or natural resource risk to future residents, neighbors or the community. Furthermore, the Project will be undertaken in accordance with the MCP requirements under the direction of an LSP.

- ➤ After extensive analysis by the Proponent and Former Owner of the Site, no contamination in soil or groundwater that could pose a health risk to future residents has been identified based on the proposed redevelopment plan.
- ➤ Over 20 years of monitoring data indicates that on-site groundwater contamination is gradually decreasing and has not significantly impacted off-site receptors.
- ➤ Water infiltration associated with the reduction in impervious area, wastewater treatment/disposal, and construction activity is not anticipated to have any impact on residual contamination due to its depth below ground and/or size of the Site.
- ➤ Construction within the RTN boundary will be performed under a Release Abatement Measure Plan in accordance with the MCP.
- ➤ The Proponent has engaged an LSP to develop a Release Abatement Measure Plan to identify and address any unanticipated conditions.

### 2.2 Natural Resources

The Project Proponent has enhanced environmental conditions by siting the Project within a previously developed area. The following sections describe the resources on the Site and adjacent to the proposed work.

#### 2.2.1 Wetland Resources

Wetland resources areas on the Project Site, regulated as Areas Subject to Protection under the Massachusetts Wetlands Protection Act (WPA) (310 CMR 10.00), include Bordering Vegetated Wetland, Bank, and Isolated Land Subject to Flooding. The Sudbury Wetlands Administration Bylaw also regulates these wetlands. In addition to the wetlands located on the subject property, there are several wetlands on adjacent properties that have a regulated 100-foot buffer zone that extends onto the Site. The proposed development has been carefully planned to avoid permanent impacts to wetland resources. The majority of the work proximate to wetland resource areas would be limited to the 100-foot buffer zone, however roadway work associated with the redevelopment may involve minor wetland impacts. The Project is in the conceptual phase and will require continued coordination with the Massachusetts Department of Transportation for roadway and sidewalk layouts. It is anticipated that multiple Notices of Intent for the various Project components will be filed with the Sudbury Conservation Commission for work within buffer zone and wetlands.

#### State Regulated Resource Areas

VHB environmental scientists delineated wetlands on and adjacent to the Site on September 15 and 24, 2015 in accordance with methods developed by the Massachusetts Department of Environmental Protection and the U.S. Army Corps of Engineers. These resources are also regulated under the Sudbury Wetlands Bylaw.

In general, due to the expansive existing development on the Site, wetlands on the Project Site are limited and consist of forested or scrub-shrub wetland communities with some elements of emergent marsh and open water. Dominant species throughout the wetlands on-site include silky dogwood (*Cornus amomum*), red maple (*Acer rubrum*), glossy buckthorn (*Frangula alnus*), sensitive fern (*Onoclea sensibilis*), soft rush (*Juncus effuses*), and cattail (*Typha latifolia*). Vegetated ditches convey seasonal flow to wetlands on-site. Several wetlands drain to a large stormwater basin in the center of the Site through underground pipes.

A majority of the uplands within the state-regulated 100-foot buffer zone have been previously developed and consist of paved driveway/parking lot and the sewage treatment leaching beds located in the center of the Site. Undeveloped adjacent upland areas consist of mowed grass, landscaped plantings, and small areas of established mid-successional vegetation including shrubs and young trees.

### **Anticipated Effects**

Reconfiguration of the section of Boston Post Road (Route 20) to the south of the Site to meet MassDOT Complete Streets guidelines would result in a slight widening of the overall paved footprint of the roadway. Wetlands are present to the north and south of Boston Post Road. The Proponent is coordinating with MassDOT to ensure that the roadway and sidewalk accommodations best meet the Complete Streets guidelines, while minimizing impacts to the adjacent wetlands. If necessary, retaining walls are proposed to avoid placement of fill within the resource areas. Any temporary impacts to wetland resource areas that are unavoidable due to construction would be restored to preconstruction conditions upon the completion of work. If the final roadway design requires unavoidable impacts to wetlands, the Project will provide an wetland replication area at least equal to that of the area lost as required by the WPA General Performance Standards for work under 5,000 square feet within BVW (310 CMR 10.55(4)(b)(1)). Impacts (both temporary and permanent) are anticipated to be less than 5,000 square feet and the Proponent is striving to avoid all permanent impacts to resources, if possible. If permanent impacts are unavoidable, wetland replication would be required to reproduce all functions and values of the original wetland as required by the WPA. Construction controls and best practices would be implemented throughout the Project Site to avoid secondary impacts to wetland resources.

Natural enhancements to improve functions and values of uplands surrounding the wetland areas on-site will be incorporated into the Project design with input from the Sudbury Conservation Commission.

#### 2.2.2 Rare Species

#### **State-Listed Species**

According to the Massachusetts Natural Heritage Atlas (13th Edition), there are no Massachusetts listed Priority Habitats of Rare Species, no Estimated Habitats of Rare Wildlife, and no Certified Vernal Pools located within the Project Site.

#### **Federally Listed Species**

The northern long-eared bat (*Myotis septentrionalis*) is federally listed as threatened throughout the entire Commonwealth of Massachusetts as established in the Federal Register on April 2, 2015 by the U.S. Fish and Wildlife Service (USFWS)<sup>1</sup>. During the summer, northern long-eared bats roost singly or in colonies underneath bark, in cavities or in crevices of trees. The Project Site is predominantly developed with limited areas of open space and mature trees. Tree clearing for the proposed redevelopment will be limited to the area at the southern portion of the Site, between the existing buildings and Boston Post Road, around the Beltran Building and single trees located

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<sup>&</sup>lt;sup>1</sup> Endangered and Threatened Wildlife and Plants: Threatened Species Status for the Northern Long-Eared Bat With 4(d) Rule, 50 CFR Part 17

on islands within the parking area. The easternmost portion of the Site has mature trees at its border and is contiguous with a larger forested area offsite. This portion of the Site will not be developed as part of this Project and the trees will remain.

#### **Anticipated Effects**

The Project requires less than an acre of tree clearing. The Proponent will consult with the relevant agency – in this case NHESP – to confirm there are no issues related to the Northern Long Eared bat. In the unlikely event there are potential impacts, the Project will comply with the federal conservation methods restricting tree clearing during June and July when bats would be most impacted.

### 2.3 Site Characteristics

The Site consists of approximately 50 acres and was owned and operated by the Raytheon Company (the "Former Owner") since 1958 until the sale of the Site at the end of 2015. The Site has been used primarily for office space, although some research and development of microwave and radar components and limited scale manufacturing for prototype development has been performed.

The Site is the location of three MCP release sites, the status of which are described thoroughly in the LSP Letter provided in Attachment E. The Former Owner has performed numerous rounds of sampling over the past 20 years, and data has been further confirmed by the Proponent's LSP. In addition to the work previously performed by the Former Owner, the LSP, Sanborn Head, also performed a Phase I Environmental Site Assessment with Subsurface Investigation for the Site in August 2015. This included advancement of ten soil borings and installation of two monitoring wells. Six soil samples and seven groundwater samples were collected (one from each of the new wells and five from existing wells). Based on the data collected, Sanborn Head did not identify any new Recognized Environmental Conditions at the Site. A Site Plan showing the key existing Site features and boring locations is shown on Figure 11.

### 2.3.1 MCP Compliance

Under the supervision of the LSP, the work will be performed in accordance with MCP requirements. Construction activities within the boundary of RTNs 3-27243 and 3-3037 will be performed in accordance with a Release Abatement Measure (RAM) Plan, which will include a Soil and Groundwater Management Plan that will be prepared and submitted to the DEP prior to construction activities. Given the lack of any soil contamination on-site (and the depth and low levels of contamination of isolated areas of deep groundwater), no unusual measures would be anticipated. Soil excavated during construction will be handled according to all applicable federal, state, and municipal environmental laws and regulations.

Despite extensive testing over 20 years by both the previous owner and the Proponent, no contamination in soil that would pose a health risk to future residents has been identified.

However, in the event that subsurface contamination exceeding MCP reporting thresholds is encountered, MassDEP will be notified and the contamination managed in accordance with the MCP. Excess soil generated during construction that requires off-site disposal will be tested so that it can be properly disposed of at an appropriate type of off-site landfill facility.

Depending on the depth of the proposed excavation for the new development, construction dewatering may be required. Such activities would be performed in accordance with the MCP and Environmental Protection Agency (EPA) National Pollutant Discharge Elimination System (NPDES) permits, as applicable.

Please refer to Attachment E for additional information on the Site conditions.

# **Water Resources**

### 3.1 Introduction

This Section provides an overview of the water resources as they relate to the 526 and 528 Boston Post Road Redevelopment. Wetland resource areas and the underlying aquifer which helps to support the Town's drinking water supply, are important existing natural resources on the Site. The following chapter presents the stormwater management, water supply and wastewater systems employed by the Project that will preserve, protect and improve;

- Surface water quantity and quality;
- > Groundwater quality and recharge;
- > Wetlands resource areas and water features.

As part of the review processes, detailed design plans for individual components of the Project will be completed and the preliminary analyses presented in this ENF will be further refined based on more advanced design work. Design of the wastewater aspect of the Project will also be subject to detailed technical review as part of the Massachusetts Department of Environmental Protection (MassDEP) Groundwater Discharge Permit process.

### 3.1.1 Key Findings and Benefits

#### **Stormwater Management**

An overall goal of the Project is to protect environmental resources both on the Site and downstream, including wetland resource areas and the aquifer supporting the Raymond Road drinking water well field. The Project will, vastly improve the existing conditions on the Site through the implementation of a comprehensive Stormwater Management Plan including the use of Low Impact Development (LID) Techniques, Best Management Practices (BMPs) and a comprehensive permanent and temporary erosion control system. These goals will be achieved by implementing the following:

- > Increasing open space and groundwater recharge to contribute to re-establishing components of a more natural water cycle (evapotranspiration, groundwater recharge and runoff) on the Site.
- > Improving the surface water and groundwater quality will further protect the watershed of critical environmental resources.
- Protecting and minimizing disruption to existing wetland resource areas and wildlife habitat corridors through the maintenance and enhancement of existing vegetative protective buffers.
- ➤ Implementing a comprehensive temporary and permanent erosion control system and Long Term Operations and Maintenance Plan.

#### **Water and Wastewater**

The overall goal of the water and wastewater systems are to minimize the use of water and benefit the underlying aquifer by:

- Minimizing the potable water demand and corresponding wastewater discharge through the implementation of water-conservation measures such as low-flow fixtures, high efficiency appliances, individual metering of residential units where feasible, and limiting the use of potable water for irrigation purposes.
- ➤ Increasing recharge to the underlying aquifer through the upgrades of the existing wastewater treatment plant (WWTP).
- ➤ Avoiding inter-basin transfer by utilizing Town-supplied potable water from wells in Sudbury combined with the on-site WWTP.
- > Enhancing the quality of the water discharged from the WWTP, adding equipment redundancy, and improving reliability of the WWTP to provide additional benefits and protection of the underlying groundwater aquifer and public drinking water supply.

# 3.2 Stormwater Management

### 3.2.1 Existing Site and Drainage Conditions

The approximately 50-acre commercial site is currently developed and consists of predominately impervious surfaces including several buildings, most notably two large buildings and associated paved parking areas, with generally flat topography sloping southeasterly. The Site also includes two smaller research buildings, and a wastewater treatment plant. Pervious surfaces on the site include a centrally located vegetated area including lawn areas surrounding the larger buildings, a manmade stormwater retention pond and a series of wetlands which were originally constructed as stormwater conveyances.

The Site lies within the Town of Sudbury's Nobscot sub-watershed, which flows via an unnamed stream to Landham Brook and Wash Brook and eventually to the Sudbury River. The Site consists of two major catchment areas; on-site and off-site areas tributary to the centrally located retention

basin and an area that drains via a closed pipe system to the municipal stormwater system. On the southwestern perimeter of the site, stormwater swales and wetlands also collect and convey water to the retention pond, which accepts stormwater from a majority of the site area. Outflows from the retention pond combine with the closed drainage system located on the southern portion of the site through an existing piping network, which ultimately discharges to a wetland on the southern side of Boston Post Road, east of the Sudbury Plaza.

The site currently contains a stormwater management system that was constructed prior to the current DEP Stormwater Management Standards and as such is a "grandfathered" existing condition. Raytheon recently undertook a significant maintenance effort, with approval of the Sudbury Conservation Commission, to re-establish and enhance the functional characteristics of the on-site stormwater management system. While the system is compliant as an existing condition, the water quality treatment is not consistent with current state stormwater management standards that would be applicable to new developments.

### 3.2.2 Proposed Drainage Conditions

The Project will include the removal of 8.3 acres of existing buildings and associated large paved parking areas, construction of a mixed-use redevelopment including a grocery store, various retail/restaurant buildings, mixed-income apartments, active adult condominiums, and a memory care assisted living complex. The Project proposes to demolish all of the existing buildings and parking on site (other than the 15,000 sf Beltran Building located in the rear of the property along the westerly property line), and will maintain/upgrade the wastewater treatment plant.

The Project provides a unique opportunity to enhance the existing on-site stormwater management system. The forthcoming analysis will demonstrate compliance with current standards developed to improve the existing conditions through the implementation of an environmentally sensitive design that optimizes open space features, provides a pleasant pedestrian experience, and protects critical environmental receptors.

As proposed, the Project will maintain the existing retention pond and other wetlands throughout the site, and will reduce impervious cover on a net basis by approximately 2 to 3 acres. The stormwater management system will result in further attenuation of peak rates of runoff, improved water quality and balanced hydrologic conditions to existing wetland resource areas through the implementation of supplemental Low Impact Development techniques including decentralized stormwater BMPs. The addition of stormwater BMP's will aid to treat the site runoff before discharging to the closed drainage system and introduce the opportunity for additional groundwater recharge to the underlying aquifer. The Project will also incorporate appropriate temporary and permanent erosion controls and a comprehensive stormwater management operations and maintenance plan to enable the long-term functionality of the drainage system and associated BMPs.

The Project site design incorporates a progressive and comprehensive stormwater management system that has been developed in accordance with the Massachusetts Stormwater Handbook to improve water quality and groundwater recharge. Low Impact Development (LID) techniques and

stormwater BMPs implemented into the Project site design include reduction of impervious area, addition of grassed swales, deep-sump and hooded catch basins, water quality units, subsurface infiltration equipped with isolator rows, bioretention ponds, and other treatment BMPs. All treatment BMPs will be designed to provide a minimum of 80% removal of Total Suspended Solids (TSS). In accordance with MassDEP requirements for stormwater BMPs within a Zone II including separation of recharge BMPs from groundwater, sizing for the one-inch water quality volume and 44% pretreatment prior to infiltration will also be incorporated into the design.

As each development area of the Project advances, the Proponent will provide detailed technical analyses demonstrating compliance with the MassDEP Stormwater Management Standards.

### 3.2.3 Compliance with Stormwater Management Regulations

The following state and federal stormwater related regulations and guidelines apply to the proposed site development:

- Massachusetts State Stormwater Management Performance Standards and Guidelines, Department of Environmental Protection and Office of Coastal Zone Management (DEP/CZM, 2008).
- ➤ Environmental Protection Agency (EPA) National Pollutant Discharge Elimination System (NPDES) Stormwater Permit for Construction Activities disturbing greater than one acre (EPA, Federal Register, December 8, 1999 and amendments).

Compliance with these regulations is described in the following sections.

#### **Massachusetts DEP Stormwater Management Standards**

As stated previously, the stormwater management system for the Project will be designed and constructed in accordance with the MassDEP Stormwater Management Standards required by the Wetlands Protection Act (WPA) regulations (310 CMR 10.05(6)(k)) as further defined and specified in the Massachusetts Stormwater Handbook (January 2008). Specifically, the methods for compliance with the ten stormwater performance standards developed by MassDEP are summarized below.

- 1. No new stormwater conveyances may discharge untreated stormwater directly to or cause erosion in wetlands or waters of the Commonwealth.
  - The temporary and permanent stormwater management systems will be implemented to eliminate sources of untreated stormwater discharging to, or causing erosion in wetlands or water bodies.
- 2. Stormwater management systems shall be designed so that post-development peak discharge rates do not exceed pre-development peak discharge rates.

The stormwater management system for the Project is designed to further attenuate the post-development peak discharge rates resulting in a net reduction in the predevelopment discharge rates for the Site.

3. Loss of annual recharge to ground water shall be eliminated or minimized through the use of infiltration measures including environmentally sensitive site design, low impact development techniques, stormwater best management practices, and good operation and maintenance. At a minimum, the annual recharge from the post-development site shall approximate the annual recharge from pre-development conditions based on soil type. This Standard is met when the stormwater management system is designed to infiltrate the required recharge volume as determined in accordance with the Massachusetts Stormwater Handbook.

The Project storwmwater design will meet the recharge requirements through the reduction of impervious coverage on the site, and will also implement LID techniques and traditional stormwater BMPs including vegetated swales, bio-retention basins and subsurface infiltration, where feasible, to further promote groundwater recharge.

- 4. Stormwater management systems shall be designed to remove 80 percent of the average annual post-construction load of Total Suspended Solids (TSS). This Standard is met when:
  - Suitable practices for source control and pollution prevention are identified in a longterm pollution prevention plan, and thereafter are implemented and maintained;
  - Structural stormwater best management practices are sized to capture the required water quality volume determined in accordance with the Massachusetts Stormwater Handbook; and
  - Pretreatment is provided in accordance with the Massachusetts Stormwater Handbook.

The Project's stormwater management system is designed to remove a minimum of 80 percent of the average annual post-construction load of TSS and will be in compliance with the design and pre-treatment requirements for the selected BMPs and specific land use.

5. For land uses with higher potential pollutant loads, source control and pollution prevention shall be implemented in accordance with the Massachusetts Stormwater Handbook to eliminate or reduce the discharge of stormwater runoff from such land uses to the maximum extent practicable. If through source control and/or pollution prevention all land uses with higher potential pollutant loads cannot be completely protected from exposure to rain, snow, snow melt, and stormwater runoff, the proponent shall use the specific structural stormwater BMPs determined by the Department to be suitable for such uses as provided in the Massachusetts Stormwater Handbook. Stormwater discharges from land uses with higher potential pollutant loads shall also comply with the requirements of the Massachusetts Clean Waters Act, M.G.L. c. 21, §§ 26-53 and the regulations promulgated there under at 314 CMR 3.00, 314 CMR 4.00 and 314 CMR 5.00.

Any components of the Project which involve land uses with higher potential pollutant loads, such as parking lots with high-intensity-uses, will comply with requirements for such areas, with a focus on source control and BMPs to treat the subject-pollutants. Detailed design of these areas will be presented to the Town as the designs of these areas are

finalized.

6. Stormwater discharges within the Zone II or Interim Wellhead Protection Area of a public water supply and stormwater discharges near or to any other critical area require the use of the specific source control and pollution prevention measures and the specific structural stormwater best management practices determined by the Department to be suitable for managing discharges to such areas as provided in the Massachusetts Stormwater Handbook. A discharge is near a critical area, if there is a strong likelihood of a significant impact occurring to said area, taking into account site-specific factors. Stormwater discharges to Outstanding Resource Waters and Special Resource Waters shall be removed and set back from the receiving water or wetland and receive the highest and best practical method of treatment. A "storm water discharge" as defined in 314 CMR 3.04(2) (a) 1 or (b) to an Outstanding Resource Water or Special Resource Water shall comply with 314 CMR 3.00 and 314 CMR 4.00. Stormwater discharges to a Zone I or Zone A are prohibited unless essential to the operation of public water supply.

The Project is located within a Zone II Interim Wellhead Protection Area and within the Town of Sudbury water resource protection overlay district<sup>1</sup>. Specific source control and pollution prevention measures and the specific structural stormwater BMPs will be employed to prevent an adverse impact to these water supply sources. This includes treatment of the 1-inch water quality volume and pre-treatment requirements prior to infiltration.

- 7. A redevelopment project is required to meet the following Stormwater Management Standards only to the maximum extent practicable: Standard 2, Standard 3, and the pretreatment and structural best management practice requirements of Standards 4, 5, and 6. Existing stormwater discharges shall comply with Standard 1 only to the maximum extent practicable. A redevelopment project shall also comply with all other requirements of the Stormwater Management Standards and improve existing conditions.
  - Based on the historic site usage, the Project is considered a redevelopment project. Notwithstanding, the Project will be designed to be substantially compliant with the MassDEP Stormwater Management Standards for new development except where impractical due to existing site constraints (for example, depth to groundwater) and will result in significant stormwater enhancements relative to the existing Site conditions.
- 8. A plan to control construction related impacts including erosion, sedimentation and other pollutant sources during construction and land disturbance activities (construction period erosion, sedimentation, and pollution prevention plan) shall be developed and implemented.
  - During the Site Plan Review process for the Project with the Town of Sudbury, an erosion control plan will be formulated for each phase of construction which will limit the impacts of erosion, sedimentation and other pollutant sources during construction and land disturbance activities. The Project will also employ LID measures, which will contribute to

<sup>&</sup>lt;sup>↑</sup> DEP, 2012. Approved Wellhead Protection Areas (Zone II).

minimizing these construction related impacts. These efforts will be finalized for the Project in future filings with the Sudbury Conservation Commission and/or Planning Board. The Project will require the preparation of a Stormwater Pollution Prevention Plan (SWPPP) for Construction Activities in compliance with the NPDES regulations and the Town's Stormwater Regulations. The SWPPP will include the details of the erosion, sedimentation and pollution prevention plan implementation.

9. A long-term operation and maintenance plan shall be developed and implemented to ensure that stormwater management systems function as designed.

A long-term operation and maintenance plan will be developed and implemented for the Project during the Town of Sudbury review processes, as part of future filings. The property owner will be ultimately responsible for long term maintenance of the stormwater management system. Both the multi-family and retail components of the Project are anticipated to retain management personnel who can take an active role in implementing the site and stormwater maintenance obligations.

10. All illicit discharges to the stormwater management system are prohibited.

A long-term Pollution Prevention Plan will include measures to prevent known illicit discharges of sanitary sewer and stormwater drainage remaining from previous development that are part of the Site to be removed or will be incorporated into updated sanitary sewer and separate stormwater systems. Detailed design plans will be submitted during future filings for the Project, which will include components in full compliance with current standards.

The Stormwater Management Policy issued by the MassDEP in January 2008 states that the "use of the standards should prevent or minimize adverse environmental impacts due to unmanaged stormwater while limiting undue costs and recognizing site constraints."

#### Federal NPDES Construction-Related General Stormwater Permit Compliance

The Project will result in the disturbance of more than one acre of land and thus requires the preparation and implementation of a Stormwater Pollution Prevention Plan (SWPPP) by the site contractor and owner in accordance with the Environmental Protection Agency's (EPA's) National Pollutant Discharge Elimination System (NPDES) General Permit Program for Stormwater Discharges from Construction Sites. Standard recommended components of the Stormwater Pollution Prevention Plan for construction phases of the development to be prepared and implemented by the site contractor include perimeter erosion controls such as straw bales, silt fences and stone tracking pads, combined with elements such as diversion swales and temporary sedimentation basins.

# 3.3 Water Supply

### 3.3.1 Existing Water Supply System

The Town of Sudbury is served by the Sudbury Water District, an independent municipal entity established by an Act of the Massachusetts Legislature in 1934, responsible for the water supply system and water distribution through the Town of Sudbury municipal water system. The Site is serviced by two existing 8" water mains and one 3" connection connected to a recently constructed 12" water main located within the Boston Post Road right-of-way. Raytheon has historically been a consumer of water on the Site.

### 3.3.2 Proposed Water Supply System

In the proposed conditions, the Site will continue to rely upon water as supplied by the Sudbury Water District, via the 12" water main located within Boston Post Road. The Project proposes to construct a network of new redundant 8" water mains and fire hydrants throughout the Site, which will be adequately sized for the domestic and fire flows associated with the Project. Water usage will be reduced through the use of low flow water fixtures and other water conservation measures. Hydrant flow tests performed on the main indicate that adequate pressures and flows are available to serve the Project.

### 3.3.3 Proposed Water Conservation Measures and Mitigation Measures

Estimates of unadjusted maximum projected water demand have been determined conservatively assuming water use equivalent to wastewater flows calculated in accordance with 310 CMR 15.203 (Title V). In all cases, the Town's water distribution system is believed to have sufficient capacity to meet the normal daily peak demands of the Project. The Proponent has met with the Town of Sudbury municipal officials and Sudbury Water District to discuss the Project's water demands.

The projected unadjusted water consumption rates assume water use to be equivalent to wastewater flows calculated in accordance with the DEP Wastewater Design Flow Guidelines in 310 CMR 15.203 (Title V), generally as follows:

Apartments: 110 gallons per day per bedroom

Senior Living: 150 gallons per day per two bedroom unit

Retail: 50 gallons per day per 1,000 square feet

Restaurant: 35 gallons per day per seat

The MassDEP wastewater design flows are considered very conservative in relation to actual flow volumes, therefore, no increase in water consumptive rates have been applied to these figures. Furthermore, potable water use will be minimized by implementing the following water conservation measures:

- ➤ Installing low-flow plumbing fixtures and high efficiency appliances;
- ➤ Metering and sub-metering of water usage, for example, residents will be responsible for their own water usage;
- > Serving multi-family units with efficient water heating systems which utilize less water;

- Selecting drought-tolerant plants and optimizing irrigation through the use of water efficient irrigation systems including rain sensors; and
- ➤ Limiting the use of potable water for irrigation.

The projected water demand adjusted to account for the aforementioned water conservation commitments is anticipated to lower the maximum unadjusted water demand by approximately a minimum of 20%. Accordingly based on this project, the Project water demand is anticipated to be approximately 65,600 gpd.

### 3.4 Wastewater

The Site is currently serviced by a private wastewater collection, treatment and disposal system. The Town of Sudbury does not provide municipal wastewater service to the area. In the future condition, all wastewater collection, treatment, and disbursement will continue to be handled entirely by the on-site systems. Discharge of highly treated effluent on-site to sand beds will increase groundwater recharge and benefit the underlying aquifer by contributing to the aquifer, thereby eliminating the detrimental effects of a potential inter-basin transfer.

### 3.4.1 Existing Wastewater Supply System

Wastewater from the existing on-site buildings is collected via a mix of gravity and force sewer mains prior to being treated and discharged to an on-site wastewater treatment plant (WWTP), as described herein.

Prior to 1990, wastewater treatment on site at the Raytheon facility was achieved using a package extended aeration plant followed by chlorination with disposal of treated wastewater to open sand beds via infiltration. Around 1990, the Raytheon replaced the aging package treatment plant with an advanced form of secondary treatment referred to as a sequencing batch reactor (SBR), which would be capable of achieving a discharge limitation of less than 5 milligrams per liter (mg/l) of nitrate nitrogen. The upgrade also included the addition of ultraviolet (UV) disinfection to replace the chlorination process.

A second round of upgrades to the WWTP completed in 2009 included rehabilitation of the influent pump station; replacement of the aeration blowers for the flow equalization tanks (FETs), the SBR, and the sludge holding tank; replacement of the decanter in the SBR; upgrade of the UV disinfection system; installation of a cloth disk filter; installation of chemical addition systems; and installation of a Supervisory Control and Data Acquisition (SCADA) system with process control instrumentation.

The existing facility has continued the practice of disposing treated effluent to three open sand beds via infiltration to the ground. The WWTP and the disposal of treated effluent are currently permitted to discharge up to 50,000 gallons per day (gpd) under the Groundwater Discharge Permit (GWDP) issued by the MassDEP.

### 3.4.2 Proposed Wastewater Supply System

Wastewater from the proposed on-site buildings will be collected via a mix of newly constructed gravity and force sewer mains prior to being discharged to the upgraded on-site wastewater treatment plant (WWTP), as described herein.

Based on 310 CMR 15.203 (Title V) estimates for the proposed uses are expected to be approximately 82,000 gpd. Once adjusted to reflect the aforementioned water conservation measures, the total water demand and wastewater generation is estimated to be further reduced by a minimum of 20% from Title V rates to approximately 65,600 gpd. The actual net incremental flow will be approximately 15,600 gpd or less when compared to the existing former use and permitted discharge rate

As part of the GWDP Modification Process, a hydrogeological evaluation is currently being conducted to determine the capacity of the sand beds to accommodate the additional flow or identify the need for supplemental measures to provide a total capacity of up to 90,000 gpd. The specific design of the WWTP upgrades are dependent on the quantity of wastewater effluent the current sand beds will accommodate. The Proponent will work closely with MassDEP during this process, and proposed upgrades will be designed to comply with the current regulations for groundwater discharge and redundancy. Any additional capacity will provide some flexibility that may be necessary to accommodate the final programming of the site (i.e., an additional restaurant would increase the design flow).

### 3.4.3 Proposed Wastewater Conservation Measures and Mitigation Measures

The on-site WWTP will dose the highly treated effluent into on-site leaching fields. The on-site dosing fields overlay the Town of Sudbury's Nobscot sub basin of the SuAsCo watershed. As noted above, water conservation measures will be implemented throughout the project to minimize the use of potable water and the subsequent generation of wastewater. The wastewater generation estimates included herein for the Project are based on the Title V generation rates. Actual generation rates are typically significantly lower than Title V rates, which include a factor of safety and pre-date many of the water conservation measures generally used in new construction projects. For example, similar Avalon projects in Acton and Cohasset generate and average of 60 GPD per bedroom, whereas Title V estimates 110 GPD per bedroom. As noted above, the projected wastewater generation, 65,600 gpd (a 20% overall reduction from Title V) is forecasted to be consistent with the water demand as adjusted to reflect the commitment to provide water conservation measures and the flow rates determined from existing similar projects.

In addition to the water conservation measures, the construction of new, watertight sewer pipes throughout the site will replace older pipes that may be contributing to inflow and infiltration in the existing system.

4

# **Transportation**

### 4.1 Introduction

This section is summarizes the findings of the recently completed Traffic Impact and Access Study (the "Study"). The analysis concludes that the Project will have comparable, if not improved operations on weekdays at the study locations when compared to reoccupation of the existing 563,300 square foot office and research and development buildings. The operational impacts of the limited additional new traffic on Saturdays is also expected to be nominal.

For the full report, please see Attachment D.

### 4.1.1 Key Findings and Benefits

Key Project findings and benefits related to transportation include:

- ➤ Improvements are consistent with the town's Route 20 Corridor Study and MassDOT's Healthy Transportation Policy Directive.
- > Project is expected to generate less traffic during the weekday morning and weekday evening peak hours as compared to the existing use.
- > Reduction in the peak hour traffic volumes is expected to have a noticeable beneficial effect on the area roadway weekday traffic operations.
- Improved safety at Site intersections.
- ➤ Includes Transportation Demand Management (TDM) measures.
- ➤ In connection with Project's retail/grocery store phase, improved pedestrian accommodations by widening the existing sidewalk on the north side of Boston Post Road along the Site frontage and extending the limits of the existing sidewalk on the south side of Boston Post Road.
- > Subject to right of way availability and In connection with Project's retail/grocery store phase, addition of five-foot paved shoulders (which could become part of future bike lanes) on either side of Boston Post Road within the limits of the roadway improvements.

# 4.2 Traffic Summary

Compared to the re-use of the existing facilities on the Site by a new office and research and development tenant, the Project is expected to generate less traffic during the weekday morning and weekday evening peak hours. Specifically, in comparison to a 563,300± sf office/R&D user that would generate 765 weekday morning peak hour trips and 710 weekday evening peak hour trips, the Project would generate 63 percent and 37 percent fewer trips during the same peak hours, respectively. Due to the mixed-use nature of the development, distribution of Site traffic is expected to occur over the course of the day rather than being focused during just the peak commute hours, and the lower traffic intensity of the proposed uses contributes to the peak hour trip reduction during the weekdays. Such a significant reduction in the peak hour traffic volumes can be expected to have a noticeable beneficial effect on the area roadway weekday traffic operations.

Due to the introduction of a retail component in the proposed development plan, the Project is estimated to generate 365 net new additional vehicular trips per hour during the Saturday midday peak hour when compared to an office/R&D use. Distributed over the study area roadway network, this total hourly increase corresponds to an increase in the range of five (5) to 85 vehicle trips per hour at different locations/directions.

Detailed capacity analysis indicates that even without the implementation of any capacity improvements, the Project will have comparable, if not improved operations on weekdays at the study locations when compared to a  $563,300 \pm sf$  office/R&D tenant on the Site. The operational impact due to the limited additional new traffic on Saturdays is also expected to be nominal.

Nonetheless, the Proponent plans to implement multiple improvements as part of the grocery store portion of the project to help further reduce the impact of the Project and improve existing conditions. An outline of the improvement measures is presented below.

- Construction of a new traffic signal on Boston Post Road by aligning the primary Site driveway with the westerly driveway for Sudbury Plaza and Highland Avenue (a private way). This would also include the construction of designated left turn lanes on Boston Post Road, a new actuated pedestrian crosswalk and bicycle accommodations at the intersection that will also benefit the retail plaza across Route 20;
- > Improved safety through the elimination of traffic control by a police officer at the primary Site driveway during the weekday evening peak hour;
- ➤ In connection with Project's retail/grocery store phase, improved pedestrian accommodations by widening the existing sidewalk on the north side of Boston Post Road along the Site frontage and extending the limits of the existing sidewalk on the south side of Boston Post Road;
- > Implementation of a time-based coordinated signal system between the new signalized Site driveway, Nobscot Road and Union Avenue intersections on Boston Post Road to better manage vehicular queues and improve progression of through traffic at multiple intersections;

- Construction of a new emergency preemption signal at the fire station located along the Site frontage and integration of the signal into the new traffic signal at the primary Site driveway;
- Subject to right-of-way availability and in connection with the Project's retail/grocery store phase, addition of five-foot paved shoulders (which could become part of future bike lanes) on either side of Boston Post Road within the limits of the roadway improvements; and,
- > Implementation of a robust Traffic Demand Management (TDM) program as part of the full build-out of the Project, underpinned by a significant investment in on-site circulation enhancements.

Please see Attachment D for the complete traffic impact and access study. The supporting documentation for the analysis is provided in a CD on the back cover of the ENF.

## 4.3 Transportation Alternatives

The Project will employ a Traffic Demand Management (TDM) program to reduce the overall traffic impact. The program will implement measures aimed at affecting the demand side of the transportation equation, rather than the supply side. By their very nature, TDM programs attempt to change people's behavior, and to be successful, they must rely on incentives or disincentives to make these shifts in behavior attractive to the commuter. TDM programs are designed to maximize the people-moving capability of the existing transportation infrastructure by increasing the number of persons in a vehicle, providing alternate modes of travel, or influencing the time of, or need to, travel.

In addition to the roadway and traffic signal improvements, the Proponent is considering the implementation of various TDM services on the Site. The TDM plan will be aimed at minimizing the use of single-occupant vehicles and reducing peak hour vehicular demands. This program, which will be available to all residents, retail customer and employees of the Site, includes the following components:

- > Designation of a Transportation Coordinator
- MetroWest/495 Transportation Management Association (TMA) Membership
- Ridesharing Programs
- > Transit Service
- Bicycle and Pedestrian Enhancements

<sup>▼</sup> 

Implementing Effective Traffic Demand Management Measures: Inventory of Measures and Synthesis of Experience, prepared by Comsis Corporation and the Institute of Transportation Engineers, for the U.S. Department of Transportation, DOT-T-94-02, September, 1993, p. I-1.

### 4.3.1 Transportation Coordinator

The Proponent will designate a transportation coordinator to prepare and implement the TDM program for the Site. This person will be available to provide residents, employees and customers with information regarding their commuting options and will coordinate the implementation of the TDM programs. This person will also be responsible for coordinating with the Metrowest/495 TMA, MassRides, and the MWRTA.

### 4.3.2 Metrowest/495 TMA Membership

The Proponent will explore membership opportunities with the Metrowest/ 495 Transportation Management Association (TMA). The TMA serves the commuting needs of member communities in the MetroWest region (Framingham, Natick, Marlborough, Hudson, Southborough, Ashland, Sudbury, Wayland, Holliston, Hopkinton, Sherborn, Westborough, and Northborough) including those located along Interstate 495, by advocating for community interests relating to area wide transportation, aiming to relieve traffic congestion and broadening commuting options for residents of the towns it serves.

### 4.3.3 Ridesharing Programs

The Proponent will encourage residents and employees on the Site to participate in ridesharing programs to promote trip reduction and travel demand management during peak commuting hours. Ridesharing refers to encouraging commuters to ride in vehicles with other commuters, rather than drive alone. The most common forms of ridesharing are carpools and vanpools. The benefits of such programs include less congestion, reduced fuel consumption and better air quality. These programs are generally available to members of the TMA.

#### 4.3.4 Transit Service

The nearest MWRTA bus service in the area is currently located approximately three miles to the west in Marlborough and three miles to the south in Framingham.

A recently completed Comprehensive Service Assessment by the MWRTA indicates that services gaps have been identified and their resolution could service specific mobility needs in the region. Specifically, the assessment refers to the extension of the current weekday service along Route 7C in Marlborough to include Sudbury and Wayland along Boston Post Road as a new service recommendation. The route, when extended, would provide hourly service along Boston Post Road between 6:00 AM and 8:00 PM. Additionally, the potential for extending MWRTA Routes 2 and 3 that currently serve Nobscot Shopping Center in Framingham to Boston Post Road in Sudbury has been noted as means to open up the system to the significant growth along the Boston Post Road corridor. The Proponent met with representatives of the MWRTA to gain a better understanding of the MWRTA's long-term growth plans and to ensure that the proposed roadway improvements and/or Site design could accommodate MWRTA vehicles if service is expanded to the study area in the future.

### 4.3.5 Bicycle and Pedestrian Enhancements

The proposed redevelopment plans for the Site reflects a conscious effort to make the overall Site more pedestrian and bicycle friendly. The bicycle/pedestrian enhancements proposed as part of the Project are listed below. The enhancements within and along Boston Post Road are anticipated to be completed concurrent with the off-site roadway improvement project implemented in conjunction with the Grocery store construction.

- > Widening of the existing sidewalk on the north side of Boston Post Road within the limits of the roadway improvements and extending of the limits of the existing sidewalk on the south side of Boston Post Road.
- > Subject to right-of-way availability and in connection with Project's retail/grocery store phase, the introduction of five-foot paved shoulders on either side of Boston Post Road within the limits of the improvements. These shoulders would become part of future bicycle lanes that may be implemented by others along the corridor in the future.
- Construction of a fully actuated pedestrian crosswalk at the proposed signalized Site driveway.
- ➤ Installation of bicycle detection at the signalized intersection.
- Secure bicycle parking at convenient locations on the Site.
- ➤ A well planned network of sidewalks throughout the Site.
- Accommodation of future connections to the planned Mass Central rail trail that would run along the north side of the Site.
- ➤ A potential pedestrian connection to the adjacent property on the east side of the Site has been discussed with the abutter.

Please see Attachment D for the complete traffic impact and access study which incorporates review comments from the Town of Sudbury's traffic peer review consultant.

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# **Construction**

### 5.1 Introduction

Construction impacts are temporary in nature and will be minimized through the implementation of a Construction Management Plan that will be reviewed by the Town. The following section describes the potential temporary impacts due to construction activities and proposed mitigation measures to reduce these impacts. Due to market conditions and the operational needs of the existing occupants, Project components will be sequenced as discussed herein.

### 5.1.1 Key Findings and Benefits

Key findings and benefits related to construction include:

- ➤ An Erosion Control and Sedimentation Plan to control construction-related land disturbance activities will be implemented, in accordance with the National Pollutant Discharge Elimination System (NPDES) General Permit requirements.
- > The Proponent is committed to working with public officials to help ensure that appropriate traffic maintenance and protection measures are in place during construction.
- > The Proponent will work to recycle building materials during demolition to the fullest extent practicable, except wallboard, fabric material, and insulation.
- ➤ Hazardous materials recovered during demolition will be disposed of in accordance with Massachusetts Department of Environmental Protection (DEP) requirements.
- ➤ The Proponent has engaged a third-party industrial hygienist to oversee the abatement contractor to preserve air quality.
- ➤ The Proponent has engaged an LSP who will develop and implement a Release Abatement Measures Plan which are intended to identify and address any unknown conditions that may arise during construction.
- > The Proponent will require on-site construction vehicles to use ultra-low-sulfur diesel fuel in vehicles, to the extent practicable, and will implement a no idling policy for on-site construction delivery vehicles.

### 5.2 Construction Schedule

Construction of the various elements of the Project is planned to occur concurrently; however based on the time required to construct certain components of the Project, as well as existing lease commitments to the current tenant, parts of the Project will start and be completed at different times, described generally as follows.

Subject to receipt of the required permits, site preparation and construction of the Project is anticipated to commence in the spring of 2016 with building demolition and construction of the grocery store. Once the existing tenant vacates Building 1 and 5 at the end of 2016, construction of the residential uses and the remaining commercial buildings is envisioned to begin. The grocery store opening date is anticipated to be late summer 2017, with the remainder of the Project construction concluding at the end of 2018. Off-site improvements proposed at the site frontage with Boston Post Road, including the traffic signal work, will be constructed as part of the Project's retail/grocery store phase and are expected to be substantially complete concurrent with the grocery store opening.

The overall Project is anticipated to be complete by December 2018.

## 5.3 Site Preparation and Staging

#### 5.3.1 Erosion and Sedimentation Control

The Project will comply with all local, state, and federal regulations regarding construction phase erosion and sedimentation control. A Storm Water Pollution Prevention Plan (SWPPP) will be prepared for each phase of construction in accordance with Environmental Protection Agency (EPA) requirements under the National Pollutant Discharge Elimination System (NPDES) program. A Notice of Intent (NOI) will be filed with the EPA for coverage under Construction General Permit. The SWPPP will address stormwater management Best Management Practices to be implemented during construction. Several requirements of the SWPPP address erosion of sediment by both forces of water and wind. In general, erosion and sedimentation control will include the following measures:

- ➤ Disturbed areas will be protected from stormwater runoff. Runoff will be diverted from flowing over disturbed areas by means of temporary diversion swales.
- ➤ BMPs including silt fences and hay bales will be installed down gradient of construction areas.
- > Catch basins will be fitted with silt sacks to prevent runoff impact and will be cleaned regularly and after any rain/storm event.
- Erosion and sedimentation control measures will be in place prior to the commencement of any site work or earth work operations, will be maintained during construction, and remain in place until all site work is complete and groundcover is established.

- ➤ All erosion control measures will be routinely inspected, cleaned and repaired or replaced as necessary throughout all phases of construction. Daily field reports will be kept during site work activities and available for inspection by federal and local authorities.
- ➤ Erosion control measures will be inspected prior to any forecasted significant storm event and repaired as necessary.
- ➤ Erosion control measures will be inspected after any significant storm event and repaired as necessary.
- ➤ Earthwork activity on the site will be done in a manner such that runoff is directed to the existing drainage system.
- Dewatering, if required during construction, shall discharge into a temporary sedimentation basin and be directed to treatment in accordance with the U.S. EPA Remediation General Permit.

In addition to the previously described measures, all on-site drainage and adjacent roadway drainage will be maintained in proper working condition during and after construction. Sediment will be removed from structures when they accumulate to a depth of 1/3 of the structure's height or as recommended by the manufacturer or local authority having jurisdiction. Structures will be repaired or replaced as needed. The Proponent will require contractor(s) to attend a preconstruction meeting to discuss the erosion and sedimentation control plan and how it relates to the intended construction schedule and expectations for compliance with federal, state, and local requirements.

# 5.4 Dust and Air Quality

Dust generated from earthwork and other construction activities will be controlled by spraying with water. If necessary, other dust suppression methods will be implemented to ensure minimization of the off-site transport of dust, including hydroseeding or covering with antierosion mats any stockpiled material that is anticipated to be stored for greater than 30 days. There also will be regular sweeping of the pavement of adjacent roadway surfaces during the construction period as appropriate and necessary to minimize the potential for vehicular traffic to kick up dust and particulate matter. A construction tracking mat will be installed at locations of exiting site work vehicles so that tires will not track soils off-site and vehicles will be required to wash tires of excess soil before leaving the Project Site.

The Proponent will contractually require the construction contractors to adhere to all applicable regulations regarding control of construction vehicle-related emissions. This will include, but not be limited to, maintenance of all motor vehicles, machinery, and equipment associated with construction activities and proper fitting of equipment with mufflers or other regulatory-required emissions control devices. The Commonwealth of Massachusetts anti-idling law will be enforced during the construction phase of the Project with the installation of on-site anti-idling signage.

The Project will comply with the requirements of the Clean Construction Equipment Initiative to the extent reasonably practicable. This initiative is aimed at reducing air emissions from diesel-

powered construction equipment. Oxidation catalysts and catalyzed particulate filters may be utilized on all construction vehicles and equipment to reduce air quality degradation caused by emissions from heavy-duty, diesel-powered construction equipment. All pre-2007 diesel construction vehicles working on the Project may be retrofitted using retrofit technologies approved by the EPA. Additionally, ultra-low-sulfur diesel fuel (15 parts per million) may be used for all off-road diesel equipment.

### 5.5 Construction Traffic

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

#### 5.5.1 Truck Traffic

The construction involves the use of designated routes for all associated construction truck traffic. No construction vehicles will be allowed to use residential streets. Designated routes will be identified for each component to limit disruption to neighbors and completed portions of the project by using routes that provide the most direct routes for construction traffic in and out of the Project Site.

The Proponent has initiated discussions with the Sudbury Fire Department regarding the Project, and has committed to working closely with the Fire officials regarding impact of construction and specifically construction phase traffic on the operations at the fire station along the Site's frontage.

#### 5.5.2 Traffic Maintenance

The Proponent is committed to working with public officials to provide appropriate traffic maintenance and protection measures are in place throughout construction. It is expected that any off-site work required for utility connections will limit disruption during peak travel periods and only one side of the roadway at any given time, if required by authorities having jurisdiction. It is anticipated that traffic patterns would be maintained on affected roadways at all times and that there would be no need for any full road closures or detours during the period of construction of improvements. Police or traffic control officers will be utilized, as necessary or required.

### 5.6 Construction Noise

The construction activity associated with the Project may temporarily increase nearby sound levels due to the use of heavy machinery. Heavy machinery is expected to be used intermittently throughout the Project's construction phases during daytime periods. The construction phases that will generate the highest sound levels include the demolition of existing buildings, site excavation and grading, and construction of the foundations for the proposed buildings.

### 5.7 Hazardous Materials and Solid Waste

### 5.7.1 Construction Waste Management

Demolition of existing on-site buildings will be required for the Project. The Project Construction Manager will implement a waste management plan to divert Project-related construction waste material from landfills through recycling and salvaging to the extent feasible. Existing pavement will either be processed on-site for re-use as structural fill or shipped off-Site to an asphalt recycling facility.

Should excess soil be generated during construction that requires off-Site disposal, analytical testing of the soil will be required so that it can be properly disposed of at an off-site facility. Materials will be handled according to all applicable federal, state, and municipal environmental laws and regulations. In the event that subsurface contamination exceeding MCP reporting thresholds is encountered, MassDEP will be notified and the contamination managed in accordance with the MCP

A hazardous building materials survey was performed for the Project by TRC in June of 2015. The survey identified detectable levels of hazardous materials on various building components. Asbestos and hazardous building materials abatement will be performed prior to demolition of the existing site buildings in accordance with applicable laws and regulations.

Waste containers will be provided in sufficient size and quantities to contain all construction waste. Containers will be inspected to ensure no waste material has overflowed and will be emptied on a regular basis. Waste collection containers will be provided for construction and demolition waste as well as packaging and domestic waste from workers on-site.

### 5.7.2 Spill Prevention

A spill prevention plan will be implemented to prevent and respond to leaks, spills, and other releases. The spill prevention plan will comply with all local, state, and federal regulations.

- > Address appropriate storage, handling, and disposal of construction products and materials such as paints, petroleum products, and landscaping materials (pesticides, fertilizers, etc.).
- ➤ Equipment necessary to quickly attend to inadvertent spills or leaks will be stored on-site in a secure but accessible location.
- > Spills or leaks will be treated properly according to material type, volume of spillage, and location of the spill. Mitigation will include preventing further spillage, containing the spilled material in a safe and environmentally sound manner, and remediating any damage done to the environment.
- ➤ After perimeter site erosion control measures are installed, but before any further site work occurs, a 55-gallon spill containment kit will be maintained on-site throughout the construction period.

### 5.7.3 Soil/Groundwater Management

The Proponent has engaged an LSP for the Project, and the work will be performed in accordance with Massachusetts Contingency Plan requirements. Construction activities within the boundary of RTNs 3-27243 and 3-3037 will be performed in accordance with a Release Abatement Measure (RAM) Plan, which will include a Soil and Groundwater Management Plan that will be prepared and submitted to the DEP prior to construction activities. Given the low concentration and depth and lack of any soil contamination, no unusual measures would be anticipated. Soil excavated during construction will be handled according to all applicable federal, state, and municipal environmental laws and regulations.