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CITY OF CAMBRIDGE  
COMMUNITY DEVELOPMENT DEPARTMENT

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BRIAN MURPHY  
Assistant City Manager for  
Community Development

IRAM FAROOQ  
Deputy Director for  
Community Development

To: Planning Board  
From: CDD Staff  
Date: September 10, 2014  
Re: **Case #286 – 75 New Street Continued Review**

**Background**

This case was heard by the Planning Board on March 4 and July 22, 2014. At the previous hearing, Board members expressed a generally favorable view of the proposal conceptually, but put forth a set of questions and items to be addressed at a future hearing:

- Further discussion of sidewalk and streetscape plans, including street trees
- Careful look at feasibility of planting beds as they are designed
- Connections from the site (without stairs) to a future pedestrian/bicycle path
- Review of final site plans and elevations (previous presentation materials were “soft”)
- Review of mechanical equipment, penthouses, etc.
- Discussion of whether a roof terrace is feasible
- Acoustic study of noise impacts from adjacent shopping center
- Discussion of what happens with New Street if shopping center is redeveloped
- Accommodation of visitor parking and bicycle parking on-site (designated an area where additional short-term bicycle parking can be provided if needed over time)
- Explanation of how Traffic Impact Study accounted for other development projects in the area

In addition to these issues put forth by the Board, community members had raised questions about the presence of contaminants in the soil of the existing property and how that would be managed when construction occurs. The City’s Department of Public Works (DPW) and Public Health Department have been reviewing this issue and a report is attached.

The Applicant provided supplemental materials in which these topics are addressed. The remainder of this memo, along with a memo prepared by the Traffic, Parking and Transportation Department (TPT), provides comment from staff.

### **Sidewalk and Streetscape Plans**

Discussion around this proposal has prompted the City to take a more comprehensive look at the design of New Street in its entirety. The Department of Public Works will lead a community process, beginning in the fall, to develop a design for the street that includes enhancements for pedestrians and cyclists, street trees and vehicular access. That process is described in an attached memo, which was transmitted to the City council in July.

The Applicant has agreed to construct the sidewalk adjacent to the 75 New Street site and the existing 87 New Street building according to the results of the City's design process. The same standards would be applied to future sites on New Street that are redeveloped in the future, and improvements to other sections would be undertaken by the City.

### **Connections to Future Bicycle/Pedestrian Path**

The Applicant has suggested two ways of connecting to a future multiuse path that is planned to occur (and encouraged by zoning) along the unused railroad line to the northwest of the site. First, the submitted material suggests dedicating a five-foot corridor along the southwest property line to serve as a future public pedestrian/bicycle connection if a complementary path is provided on the lot to the south. The Applicant has also committed, in discussions with TPT, to accommodate a private connection from the bicycle area in the building itself to the future multiuse path when it is completed. The latter suggestion is addressed in the attached TPT memo.

Regarding the proposed public connection on the southwest edge, staff are generally supportive of the proposal, but additional measures should be considered to facilitate its implementation. Ultimately, a path at least ten feet in width would be desirable, but at this time project staff would recommend that the owner provide a usable path at least five feet wide, using permeable pavement, ending at the property boundary. If the adjacent lot is redeveloped and subject to Planning Board review, the path could be widened, but if a multiuse path is created before the adjacent lot is redeveloped, a usable connection could still be made. Additionally, legal instruments should be put in place to guarantee safe public access (including lighting if needed) and ongoing maintenance of the connection if it connects to a public multiuse path in the future. The design of the connection and any legal instruments should be reviewed and approved by the City prior to issuance of a building permit for the project.

### **Site Design/Landscaping**

Changes have been made at the site planning level to address the Planning Board's comments. Specifically, some additional planting space and a bluestone seat wall is provided in front of the building entry. The planting bed has been splayed to align with the street, which when combined with the seat wall, will help to celebrate the entry point and provide a more comfortable pedestrian environment. Street trees are also proposed, which will soften the visual impact of the building and help to integrate the site into the local street network. Landscaping adjacent to parking on the northwest side of the lot has been revised to climbing vines along the fence. While more substantial planting was initially proposed this will still have a screening effect and will help to visually soften the hardscape. No information has been provided on plant species thus far.

### **Building Design**

The proponent has submitted a detailed section of the south elevation and a series of details showing refinements, which are considered positive improvements. A full set of dimensioned plans and elevations, which were requested by the Planning Board, have not been provided to staff thus far.

On the provided section, recessed walls are proposed to articulate the façade where the metal shingles meet the fiber-cement siding. The proposed wall setback is approximately six (6) inches, which helps to distinguish the change in material. This could perhaps be enhanced to create more of a sense of relief, and more depth and shadow across the façade. It would be preferable to review fully detailed and dimensioned plans to be certain of all proposed setbacks and recessed wall planes. Fenestration has been improved with transom windows proposed, providing more of a residential feel to the building. Mechanical vent hoods are to be systematically organized into groups across the façade, which assists to create a finer grain scale and texture.

The majority of mechanical equipment, being located along the middle of the roof and being less than three (3) feet in height, will be either below the parapet line or beyond sightlines from the sidewalk. Only the stair/elevator penthouse and corridor HVAC units will crest above the parapet line. These are proposed to complement the design of the building through use of metal shingle cladding used elsewhere on the elevations. The stair/elevator penthouse will be the most prominent, however the central cedar framing device associated with the potential roof deck and trellis will provide a layered screening result.

There are some inconsistencies with the locations of rooftop mechanical equipment shown on the submitted plans and supplemental information that should be resolved. Additionally, it remains unclear whether the proposed roof terrace will be viable, though in the narrative the Applicant has indicated that a variance would be sought if it is not allowable as-of-right.

### **Acoustical Study**

The supplemental materials indicate that an acoustical consultant has been retained and that a study will be undertaken. The Planning Board could consider conditions requiring that the results of that study and any design changes made pursuant to that study must be reviewed and approved by the Board or CDD staff.

### **Future Plans for Fresh Pond Shopping Center**

The owner of the shopping center has not recently shown interest in redeveloping the site, but this was a key consideration in the Concord-Alewife Plan and will continue to be a topic of further exploration for CDD staff and the Planning Board.

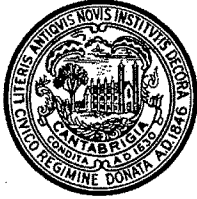
In the short term, the City will engage with the owner of the property to discuss improved pedestrian connections from the retail strip itself to adjacent roadways, including Alewife Brook Parkway and New Street. A pedestrian connection linking the shopping center to those streets could provide an alternate pedestrian route from New Street to Alewife Brook Parkway and thence to Alewife Station, and would also benefit retail customers accessing the shopping center by foot.

**Soil Remediation**

Comments relating to soil remediation have been provided by the City's environmental consultant and by Sam Lipson, the Director of Environmental Health in the Cambridge Public Health Department, who will also be present at the September 16 meeting to answer any questions.

As is typical of many large projects, staff would recommend that the Planning Board include as a condition of the special permit a requirement to submit and follow a Construction Management Plan that would be reviewed, approved and overseen by the Department of Public Works and the Department of Public Health, working with other relevant City departments. Such a plan would establish the precautions, monitoring and mitigation measures to be taken, and will serve as a written commitment to the completion of the clean-up and development of this site in a safe, responsible manner that will have as little impact on abutters and neighbors as possible. A review of a draft Construction Management Plan by appropriate City staff before the final plan is accepted will ensure that sufficient detail is provided to allow reasonable oversight of the project until its completion.

*Additional items are discussed in the attached TPT memo.*



**CITY OF CAMBRIDGE**  
**Traffic, Parking and Transportation**  
344 Broadway  
Cambridge, Massachusetts 02139

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Susan E. Clippinger, Director  
Brad Gerratt, Deputy Director

Phone: (617) 349-4700  
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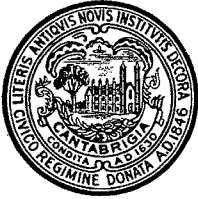
## MEMORANDUM

**To:** Cambridge Planning Board  
**From:** Susan E. Clippinger, Director  
**Date:** September 9, 2014  
**Re:** 75 New Street Residential Project

The Traffic, Parking & Transportation (TP&T) Department received material on September 3, 2014 for AbodeZ + Acorn Holding's 75 New Street project's Planning Board hearing on September 16. We reviewed the material and have the following comments.

1. We support the creation of 4 visitor parking spaces in the front of the building. However, all of the Project's parking needs, including, residents, visitors (including multi day duration), car share, and building management staff, need to be accommodated on-site (e.g. any visitor parking needs beyond the 4 spaces in the front or overnight visitors must be accommodated in the garage or in the surface parking lot).
2. We recommend and the Proponent has committed to providing a ramp in the rear of the building to access the future bike path from the bicycle parking in the garage. Conceptual plans for the ramp should be completed prior to the building permit and approved by TPT. Final ramp design shall occur when the future path location and grade is known. The ramp should be open when the bike path is completed.
3. We recommend and the Proponent has agreed to create a cross-easement or access agreement with any future owners of 87 New Street if that project is sold, to provide future access to moving trucks and guest parking from the 87 New Street driveway. The driveway must always serve both 87 and 75 New Street in the future.
4. We reviewed the supplemental information dated August 29, 2014 from VHB, Inc. that updated the TIS with the 88 Cambridgepark Drive and Concord/Wheeler Street Phase II projects. It's an accurate update of the TIS. The trips from the two projects will not be on New Street. They will add 28 and 24 AM and PM peak hour trips, respectively to the Sozio Rotary, (approximately 1 vehicle trip every 2 minutes or about 2.6 to 3.4 seconds of delay). The number of Planning Board Exceedences, which is zero for the project, will not change.
5. TPT's memo to the Planning Board, dated December 17, 2013, includes a list of TDM measures agreed to by the Proponent. Our memo is attached.

Cc: Iram Farooq, Susanne Rasmussen, Stuart Dash, Roger Boothe, Cara Seiderman, Stephanie Groll, CDD; Adam Shulman, TPT; Kin Lau, Phil Terzis, AbodeZ Development.



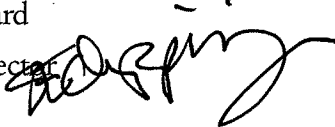
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## MEMORANDUM

**To:** Cambridge Planning Board  
**From:** Susan E. Clippinger, Director   
**Date:** December 17, 2013  
**Re:** 75 New Street Residential Project

The Traffic, Parking & Transportation (TP&T) Department has reviewed the Transportation Impact Study (TIS) for the proposed 75 New Street Residential Project by AbodeZ Development. The Project will replace an approximately 30,000 s.f. J&C Adams warehouse facility with 93 rental housing units, 94 vehicle parking spaces, 98 long-term bicycle parking spaces, and 10 short-term bicycle parking spaces. We certified the TIS as complete and reliable on August 26, 2013.

The Project will generate a total of:

- 268 daily vehicle trips including, 33 AM and 22 PM peak hour vehicle trips,
- 192 daily transit trips (15 AM Peak/18 PM Peak hour transit trips),
- 34 daily pedestrian trips (3 AM/3 PM Peak hour transit trips) and
- 40 daily bicycle trips (3AM/3 PM Peak hour bicycle trips).

The TIS indicated no Planning Board Special Permit Transportation Criteria were exceeded. The full TIS summary sheets are attached. The TIS was also conservative because it did not subtract existing J&C Adams vehicle trips which will be eliminated. Below are our comments for the Project:

- **Automobile Parking.** The Project proposes 94 parking spaces for 93 units which meets the minimum zoning parking requirement. We also believe parking will be more than sufficient to meet the Project needs based on the following:
  - The Project is about a 15 minute or less walk to Alewife Station and bus routes 74, 75, and 78.
  - There is an average of 0.94 vehicles per rental housing unit in the Project's Census Tract based on the 2007-2011 American Community Survey.
  - A peak parking utilization study at the adjacent 87 New Street residential building found a maximum of 0.78 vehicles per unit at 11:30 PM on Tuesday July 30, 2013.

We recommend that the project be obligated to accommodate every resident's vehicle or vehicles, visitor vehicles and any building management staff vehicles on site (e.g. some residents will have one vehicle, some will have no vehicle, some will have two vehicles; all vehicles must be accommodated on-site).

- **Bicycle Parking.** The project will meet the zoning requirements for long-term and short-term bicycle parking spaces. The City is also exploring a future multi-use path along the rail-road right-of-way behind the building. We recommend that prior to the issuance of a Building Permit, the Proponent should demonstrate to TP&T and CDD how the Project will connect directly to the rail-road right of way without needing to carry a bicycle up or down stairs.

- **Residential TDM.** Lastly, to minimize project traffic impacts we recommend that the Proponent implement Transportation Demand Management (TDM) measures to encourage walking, bicycling, and transit, instead of driving. The Proponent should:
  - Make available at least one parking space on site for a carsharing vehicle. The best on-site location would be in the proposed drop-off area which would make the carshare vehicle(s) accessible to the Proposed Project, adjacent 87 New Street residents building, and the public.
  - Provide an MBTA Bike Charlie Card, with the value of a combined bus/subway pass (currently set at \$70 but is subject to MBTA fare increases) to each adult member of a new household during the first month of initial occupancy of a new household. Up to two Charlie Cards total per household are required. This requirement renews each time a new household moves in to incentivize new households to use public transportation.
  - Post information in an area that is central, visible, convenient, and accessible to all residents and visitors such as:
    - Available pedestrian and bicycle facilities in the vicinity of the Project site.
    - MBTA maps, schedules, and fares.
    - Area shuttle (i.e. EZ-Ride Shuttle) map and schedule.
    - “Getting Around in Cambridge” map (available at the Cambridge Community Development office).
    - Bicycle parking.
    - Ride-matching and Car-sharing information.
    - Other pertinent transportation information.
  - Provide air pumps and other bicycle tools, such as a “fix-it” stand in the bicycle storage areas.
  - Designate a Transportation Coordinator (TC) for the site to manage the TDM program. The TC will also oversee the marketing and promotion of transportation alternatives to all residents at the site in a variety of ways including posting information in prominent locations, Project’s web site and property newsletter, and responding to individual requests for information.
  - The TC should participate in any TC trainings offered by the City of Cambridge or local Transportation Management Associations.
  - Join local Transportation Management Association (TMA) if one is created in the area.

Cc: Susanne Rasmussen, Stuart Dash, Roger Boothe, Cara Seiderman, Stephanie Groll, CDD; Adam Shulman, TPT; Kin Lau, AbodeZ Development.

**Planning Board Permit Number:** \_\_\_\_\_

**Project Name:** 75 New Street Residential Development

**Total Data Entries = 19**

**Total Number of Criteria Exceedences = 0**

**a. Project Vehicle Trip Generation**

Time Period	Criteria (trips)	Build	Exceeds Criterion?
Weekday Daily	2,000	268	No
Weekday AM Peak Hour	240	33	No
Weekday PM Peak Hour	240	22	No

**b. Level of Service (VLOS) at Signalized Intersections**

There are no signalized study intersections

**c. Traffic on Residential Streets**

Roadway	Reviewed Segment	Amount of Residential	AM Peak Hour			PM Peak Hour		
			Existing (2013)	Project Trips	Exceeds Criteria?	Existing (2013)	Project Trips	Exceeds Criteria?
Concord Avenue	Between Sozio Rotary and Fern Street	>1/3 but <1/2	1,249	2	N	984	5	N
New Street	Between Bay State Road and Danehy park	1/3 or less	414	30	N	716	20	N
Bay State Road	Between New Street and Fern Street	1/2 or more	396	8	N	586	2	N

**d. Lane Queue (for signalized intersections critical lane)**

There are no signalized study intersections

**e. Pedestrian and Bicycle Facilities**

Intersection	Crosswalk	AM Peak			PM Peak		
		Existing 2013	Build 2013	Exceeds Criterion?	Existing 2013	Build 2013	Exceeds Criterion?
Sozio Rotary	North (east side)	A	A	N	A	A	N
	North (west side)	A	A	N	A	A	N
Concord Avenue Crossing	west of Sozio Rotary (signalized)	C	C	N	C	C	N
Concord Avenue Crossing	east of Sozio Rotary (signalized)	C	C	N	C	C	N

Adjacent Street	Link	Sidewalks or Walkways Present?	Exceeds Criteria	Bicycle Facilities or Right of Ways Present?	Exceeds Criteria
New Street	Adjacent to the Site 75 New Street	Y	N	Y	N



**CITY OF CAMBRIDGE**  
**Special Permit Transportation Impact Study (TIS)**

Planning Board Permit Number: \_\_\_\_\_

**PROJECT NAME:** 75 New Street Residential Development  
 Address: 75 New Street, Cambridge MA  
 Owner/Developer Name: AbodeZ Development  
 Contact Person: Kin Lau  
 Contact Address: 277 Broadway, Cambridge, MA 02139  
 Contact Phone: 617-945-8100

**SIZE:**  
 ITE sq. ft.: 93 residential rental units  
 Zoning sq. ft.: 96,049  
 Land Use Type: Residential

**PARKING:**  
 Existing Parking Spaces: 31 Use: Commercial  
 New Parking Spaces: 93 (+ 4 short-term) Use: Residential  
 (Net addition, 66 spaces)  
 Date of Parking Registration Approval: N/A

**TRIP GENERATION:**

	Daily	AM Peak Hour	PM Peak Hour
Total Trips	534	54	46
Vehicle	268	33	22
Transit	192	15	18
Pedestrian	34	3	3
Bicycle	40	3	3

**MODE SPLIT (PERSON TRIPS):**

Vehicle (SOV): 37%      Bicycle: 6%  
 Rideshare (HOV): 8%      Pedestrian: 5%  
 Transit: 29%      Work at Home/Other: 15%

**TRANSPORTATION CONSULTANT:**

Company Name: Vanasse Hangen Brustlin, Inc.  
 Contact Name: David Black/Erica Guidoboni, P.E.  
 Phone: 617.728.7777

Date of Building Permit Approval: \_\_\_\_\_



**Memorandum**

To: Susan E. Clippinger, Director  
Adam Shulman  
Cambridge Traffic, Parking and  
Transportation Department

Date: August 29, 2014

Project No.: 12087.00

From: David Black  
Meghan Houdlette, PE

Re: 75 New Street TIS  
Background Projects

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At the Planning Board Hearing for 75 New Street on July 22, 2014, a member of the Planning Board asked that the TIS, which was certified on August 26, 2013, should be updated or revised to include projects currently being constructed or permitted in the area. VHB has reviewed the TIS to respond to this request, and this memorandum summarizes our findings, in particular with regard to the Planning Board Criteria.

**TIS Scope**

The 75 New Street TIS was performed in accordance with TP&T's scoping letter dated July 9, 2013, and included a background growth rate of 0.5 percent per year for five years for the 2018 Future conditions. In addition, trips associated with the following specific planned projects in the area were incorporated into the future 2018 analysis:

- 160 Cambridgepark Drive
- 130 Cambridgepark Drive
- 70 Fawcett Street
- Tyler Green
- 603 Concord Avenue
- 165 Cambridgepark Drive
- Faces Project (Vox on Two)

**Additional Planned Projects**

Since the July 2013 scoping and the August 2013 TIS certification, the following two additional planned projects in the study area have received TIS certification:

- 88 Cambridgepark Drive
- Concord Avenue/Wheeler Street Phase 2 Mixed Use-Development.

**Increase in Future Trips at Sozio Rotary**

Some trips from the 88 Cambridgepark Drive and Concord Avenue/Wheeler Street Phase 2 projects are expected to pass through one of the 75 New Street TIS study intersections, specifically the Sozio Rotary at New Street and Concord Avenue. The peak hour trips for those project, based on their TIS analyses, are summarized in Table 1 below.

**Table 1: Projected Background Trips at Sozio Rotary  
88 Cambridgepark Drive and Concord/Wheeler Phase 2 Projects**

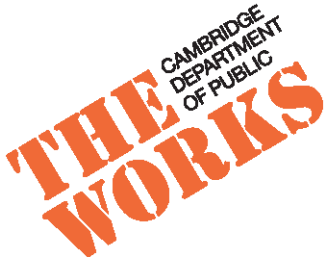
	AM Peak Hour	PM Peak Hour
Fresh Pond Parkway	2	7
Concord Avenue West	1	4
Concord Avenue East	25	13
<b>Total</b>	<b>28</b>	<b>24</b>

As shown, future 2018 traffic volumes at the Sozio rotary would be increased by 28 and 24 vehicle trips for the AM and PM peak hours, respectively with the addition of the 88 Cambridgepark Drive and Concord Avenue/Wheeler Street Phase 2 projects. This increase is equivalent to just under 1 vehicle trip every 2 minutes. By comparison, the background growth included in the 75 New Street TIS future 2018 analysis added approximately 99 and 93 trips in the AM and PM peak hours, respectively, at the Sozio rotary. In practice, therefore, it is likely that the two additional projects are already accounted for largely in the general background growth incorporated in the TIS analysis.

**Vehicular Capacity Analysis/Planning Board Criteria**

The level of service analysis presented in the 75 New Street TIS indicates that the Sozio rotary operates at a LOS F, during both the morning and evening peak hours, throughout existing, build and future 2018 conditions. With the additional trips associated with the two more recent development projects, over and above the general background growth, the Sozio Rotary is expected to continue to operate at a LOS F under all scenarios.

As the Planning Board Criteria compare Existing Conditions to Build Conditions (Existing plus project traffic), and there would continue to be no change in LOS grades at the Sozio rotary, the evaluation of the Planning Board Criteria in the 75 New Street TIS is not impacted by the addition of the 88 Cambridgepark Drive and Concord Avenue/Wheeler Street Phase 2 projects. The number of exceedences therefore remains at zero.



# City of Cambridge Department of Public Works

Owen O'Riordan, Commissioner

147 Hampshire Street  
Cambridge, MA 02139  
theworks@cambridgema.gov

Voice: 617 349 4800

TDD: 617 499 9924

July 21, 2014

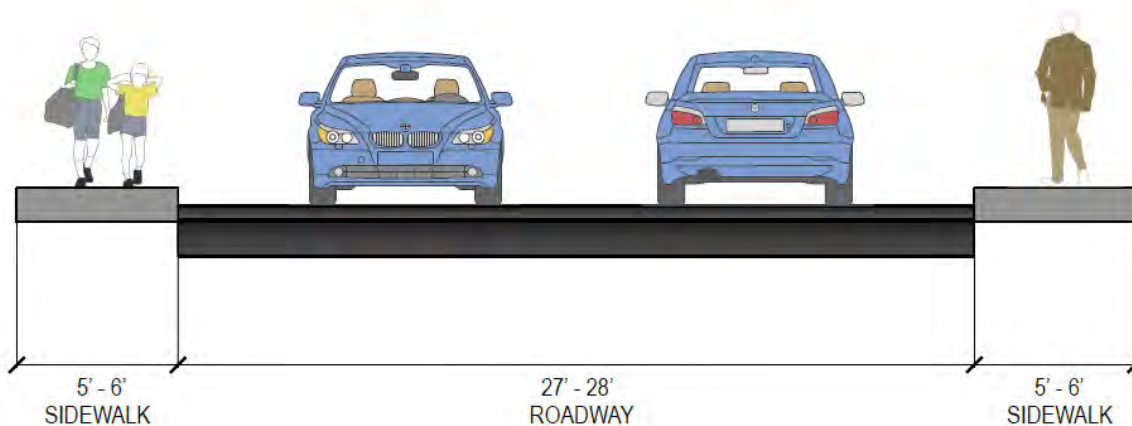
To: Richard C. Rossi  
City Manager

From: Owen O'Riordan, Commissioner, DPW  
Brian Murphy, Assistant City Manager, Community Development Department  
Susan Clippinger, Director, Traffic, Parking and Transportation Department

Re: Council Order O-6, dated June 2, 2014 regarding New Street Improvements

## Existing Conditions on New Street

New Street is a two-way public street with a roadway width of 27-to-28-foot with 5-to-6-foot sidewalks on either side of the road. The sidewalks are narrow, do not provide sufficient width for street trees and are in generally poor condition. There are currently no bicycle lanes on the street.



## Changing Uses on New Street

Through the 1970s, New Street was part of a larger industrial area that included the Concord-Alewife "Triangle" and "Quadrangle" and the present site of Danehy Park, which was the site of the City Dump until that time. New Street itself was primarily an access road serving the dump and other industrial uses along the railroad line. As the uses in the area have changed – more residential development, completion of Danehy Park, increased pedestrian and bicycle

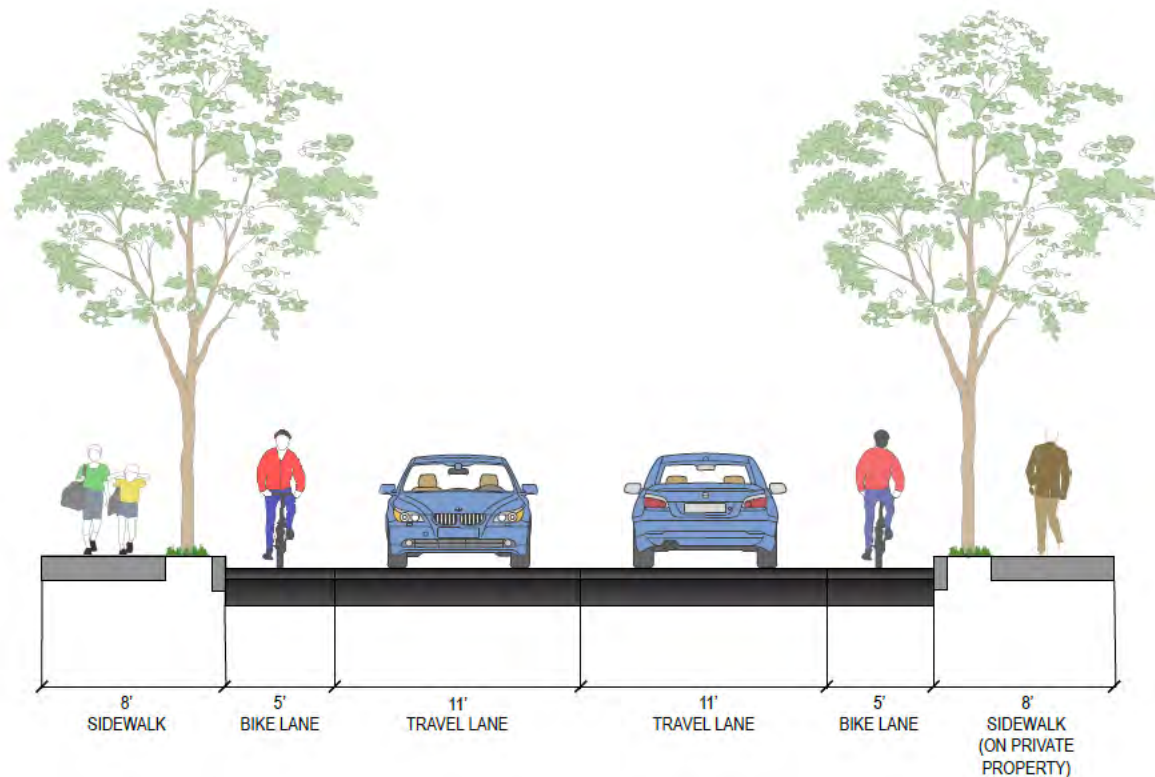


usage – the layout and design of New Street no longer meets the needs of the users.

### Improvements on New Street

The design of New Street has been evaluated in conjunction with individual development projects, but it is important that the full length of New Street be thought of more comprehensively. To that end, city staff will begin a community process this fall for New Street. The focus will be developing a design for the street which includes enhancements for pedestrians and cyclists, street trees and vehicular access. A series of meetings will be held to identify concerns, solicit ideas, develop concepts and finalize a design for the entirety of the street. City staff will work collaboratively with residents, property owners and the larger community throughout the process.

To initiate the discussion about how New Street could be improved, city staff developed a concept plan, which includes wider sidewalks (8'), bike lanes and street trees.



This layout assumes that the 8' sidewalk on the even side of the street is on private property. The lots are much deeper on this side of the street and the improvements would be implemented in conjunction with future development projects. The section of sidewalk adjacent to Danehy Park would be constructed between the existing trees and the methane trench, in the open space outside the fence.



## **Implementation of Improvements**

Similar to other streets undergoing redevelopment, the public infrastructure improvements would be phased to leverage private investment.

- Developer of 75 New Street will construct sidewalk improvements in front of 75 and 87 New Street.
- City will construct sidewalk improvements adjacent to Danehy Park.
- Through the community design process, city staff will determine how best to provide a continuous pedestrian connection to Fresh Pond Parkway (likely on the non-Danehy Park side).
- As future developments proceed on New Street, additional improvements will be constructed.





September 9<sup>th</sup>, 2014

**Environmental status of the 75 New Street parcel and surrounding properties**

The attached summary lists the state environmental regulatory status of all parcels in the immediate vicinity of the proposed development at 75 New Street. State oversight of **oil and hazardous material releases (OHMs)** that are regulated under the **Massachusetts Contingency Plan (MCP)** mandates the submission of detailed site assessment and remediation reports, as well as site-derived soil and groundwater data that was generated to comply with this regulation. The state has established a minimum reportable volume or concentration of oil or hazardous material (OHM) that trigger a legal requirement to notify the **Massachusetts Department of Environmental Protection (MDEP)** if released (or found to have been previously released) into the environment. Any visual evidence or odors that could indicate a release of OHM must be investigated by the owner or responsible party and reported to MDEP by a qualified environmental engineer, who holds a license establishing their qualifications for site assessment reporting (a **Licensed Site Professional or LSP**). The site then enters into state oversight.

**Summary of state oversight of properties where oil or hazardous materials have been released**

When a property is developed the owner or responsible party is legally obliged to review any history of OHM releases and must abide by any conditions placed on the portion of that site where the OHMs are known to be present in exceedance of established standards. It is also a standard condition of commercial real estate mortgages or loans that a site characterization or “environmental due diligence” must be completed so that the lender can assess their own financial risk in making the loan.

A restriction on soil disturbance (called and **Activity and Use Limitation or AUL**) may be sought by a property owner if they believe that contaminated materials are immobile and will not pose an exposure risk if left in place. An AUL, once approved, may apply within one designated area or it may apply to the entire parcel. As long as that soil remains undisturbed and there are no changes to the site that would produce additional risk of exposure to contaminants in the ground the site is considered to be in compliance with the MCP. MDEP allows any AUL to be lifted from a property with the safe removal of contaminated soil or groundwater in strict compliance with state regulation (MCP). So an AUL does not limit or prohibit development of a site, but it does require that contaminants above the allowable threshold for that use (residential vs. commercial) be properly managed during site excavation and be removed only under conditions established by state regulation.

One of the most important oversight powers under the MCP is the authority held by MDEP to audit any site that is considered to pose a higher public health or environmental risk. Under current enforcement policy all sites with AULs attached to their deeds will be audited. So AULs establish conditions necessary to create assurance that the site will not pose a future risk as a result of development or soil-disturbing activity and they also trigger greater scrutiny under this audit program. MDEP usually allows an owner to have any AUL lifted, though the agency may place limits on how much contamination can be safely removed on highly contaminated sites.



When a site falls under MCP regulation because a “reportable concentration” of a regulated OHM was found, the owner has several courses of action available to be in compliance. They can:

- 1) remove the material that exceeds the allowable threshold for its use (commercial vs. residential) and have the site formally “closed out” or declared clean to below state limits for each regulated chemical or material;
- 2) leave some or all OHM (oil/hazardous materials) in place, provided that there is no feasible exposure pathway (often meaning below three feet of soil) and the material is not at risk of migrating with groundwater to other parts of the site or off-site. This results in an AUL and may be subject to reversal, but is also put at the highest priority for audit.
- 3) A more complex method is available to the owner that allows them to hire an LSP (licensed site professional) to use sufficient soil and groundwater data to complete a comprehensive risk assessment that will determine if there would be a risk under any realistic circumstances or allowable uses to the most vulnerable individual (usually assuming the presence of children). This sort of risk assessment must follow criteria and assumptions delineated within the MCP and it is intended to assume worst-case conditions and scenarios regarding contact with soil, hours spent within any building that could be impacted, age of resident, etc. This is intended to determine whether there is a lifetime risk beyond existing risk associated with that illness, with a likelihood of greater than 1 in 100,000, to anyone living on that property and resulting from all potentially harmful materials or chemicals present.

In providing reasonable assurance to the public that these standards will protect current and future residents from combined risks posed by all potentially harmful substances under “precautionary” assumptions (e.g. that an individual spends 24 hours a day in the residence or that a child is likely to eat a certain amount of dirt in an areas where they play) this risk assessment process is critical. If the owner or their agents intend to use such risk calculations rather than adhering to the standards set by the state, all assumptions about behavior of residents and use of the property must be clearly stated and lifetime risk must be calculated in a transparent fashion to show that it complies with the requirements of the MCP.

#### City of Cambridge role in oversight of properties under state regulation

Although this system of site assessment, site remediation, site clean-up, and risk assessment falls entirely under the authority of MDEP, the City of Cambridge has often engaged community stakeholders, property owners and developers, and state regulators to address sites that pose greater concerns due to complex histories of contamination or because the scale of the potential risk is elevated. The purpose of this added layer of scrutiny, when it is warranted, is to serve as a check against an underestimation of risk or an incomplete understanding of all the uses and risk factors that may be relevant to a particular site.

The right of the public to access these site records also provides an opportunity for neighbors, concerned parents, or anyone with a motivation to see more complete information about the status of a release of oil or hazardous material to pursue their own concerns. When the concerns, data



## CAMBRIDGE PUBLIC HEALTH DEPARTMENT



Cambridge Health Alliance

gaps, or other uncertainties appear to pose a significant risk to residents and are not being properly addressed by the owners the City can serve as a resource to residents so that reasonable expectations for assurance are met. This assistance may be in the form of a review of one or more sites by City-contracted LSPs or through direct meetings with trained staff at the Public Health Department and/or Public Works and/or Community Development.

The development at 75 New Street is located in an area with a complex history of hazardous material releases and is immediately adjacent to a property with significant historic contamination (87 New Street). It also lies on or near the footprint of the former municipal dump. The Cambridge Public Health Department proposes to convene a discussion with concerned neighbors, the developers' environmental consultants, and the state regulators assigned to these cases ("release tracking numbers") to achieve a clearer understanding of the current regulatory status of several properties, including 75 and 87 New Street. Although this meeting could not be arranged before the date of this Planning Board meeting, it can certainly be scheduled within the next month.



## MEMORANDUM

TO: Katherine Watkins, City Engineer/ DPW Assistant Commissioner  
Martha Zirbel, LSP, Kleinfelder

FROM: Rachel Patenaude, Kleinfelder

CC: Michael Cunningham, Kleinfelder  
Angus O'Leary, Kleinfelder  
John Struzziery, Kleinfelder

DATE: September 9, 2014

**SUBJECT: Environmental Conditions Assessment – New Street, Cambridge, MA  
Project No.: 20120256**

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This memorandum presents the results of Kleinfelder environmental conditions assessment of environmental conditions in the vicinity of New Street in Cambridge, Massachusetts. The City of Cambridge will be reconstructing New Street and associated sidewalks and AbodeZ has proposed the development of a 93-unit apartment building on the parcel at 75 New Street.

This environmental conditions assessment included a review of the Massachusetts Department of Environmental Protection (MassDEP) searchable Site database; a review of historical maps; a site reconnaissance; and data collected during subsurface soil and groundwater sampling and analysis programs in the vicinity. This memorandum also provides guidance on potential liabilities to the City of Cambridge.

### **FINDINGS**

#### **Land Uses**

The site history of the New Street area indicates that the area consisted of wetlands identified as "Brickyard Swamp," part of the "Great Swamp" associated with Fresh Pond and Alewife Brook. A section of New Street extending from Concord Avenue was present as early as 1886. The area was sparsely developed in 1886 with buildings adjacent to Concord Avenue and to the west of New Street between railroad tracks and New Street.

Since the early 1900's, the area has largely been developed for commercial use. Based on an 1886 Hopkins Atlas and an 1894 Bromley Atlas, the area was occupied by brickyards and associated clay pits. A 1903 Atlas shows a large clay pit pond present east of New Street in the location of the current Danehy Park. The same clay pit was used as the Old City Dump beginning in the 1950s, the limits of which are provided in Figure 1. The dump was later closed and developed into Danehy Park by the City of Cambridge. The closed landfill may also be a source of landfill gas which has the potential to migrate. Methane gas has been reported at Briston Arms, a multi-unit residence located off Garden Street adjacent to the landfill and at the residential complex at 87 New Street, as discussed below.

Aerial photos indicate the following: Until 1955, New Street extended northward from Sozio Rotary as far as the south end of the 75 New Street parcel. New Street was extended northward to its current configuration at sometime between 1955 and 1969. The warehouse and parking lot comprising 75 New Street were built in their current configuration between 1969 and 1971. Prior to 1969, the aerial photos indicate that the property was undeveloped but undergoing grading consistent with the abutting Old City



Dump and appeared to be a part of it. A 1955 air photo shows a small building occupying the southern end of the 75 New Street property. A 1938 aerial photo appears to indicate that the property lay within the limits of the clay pit associated with the Old City Dump. Therefore it is possible that waste materials associated with the dump may be located on the 75 New Street property.

A review of the Massachusetts Department of Environmental Protection (MassDEP) Site database indicated the following MCP Disposal sites or environmental conditions in proximity to New Street. The approximate limits of the MCP Disposal Sites or the properties on which they are located are shown in Figure 1.

### **Site Reconnaissance**

The parcel located at 75 New Street consists of a warehouse and parking lot to the north of it. Based on City Assessors plans, a portion of the parking lot appears to be part of the 87 New Street parcel. Based on City Assessors data base it is owned by the J&C Adams Company, which supplies doors and windows. Development along New Street is primarily commercial. To the northeast is a 54-unit apartment building, located at 87 New Street. To the east, beyond New Street, is Danehy Park. Danehy Park is a 50-acre parcel, which includes football and soccer fields.

South-southeast of 75 New Street, is a mix of commercial and residential properties. The block bounded by Birch Street, Concord Avenue, Bay State Road, and Birch Street is primarily occupied by newly constructed condominiums, with several commercial properties near Sozio Circle (the rotary at the intersection of Concord Avenue and Fresh Pond Parkway). The area north of Bay State Road is occupied by commercial properties.

Concord Lane, which serves as an access road to Fresh Pond Mall, is primarily commercial and located to the southwest of 75 New Street. An office building and restaurant are located at the intersection with Concord Avenue. A hotel, computer services company, and the Fresh Pond Mall abut Concord Lane.

### **Massachusetts Contingency Plan (MCP) Disposal Sites**

A review of the MassDEP Site database indicated the following MCP Disposal Sites in proximity to the project area as shown on Figure 1:

**Release Tracking Number (RTN) 3-32213, 75 New Street** is the location of arsenic, lead, barium, TPH, and PAHs in soil exceeding RCS-1 standards. Based on records available on the MassDEP Waste Site Reportable Release LookUp database, RTN 3-32213 was assigned to the release in June 2014.

**RTN 3-19082, 22-48 New Street.** CVOCs were detected in groundwater at the property in March, 2000. Site investigations conducted by others determined that contaminant concentrations on Site did not pose an Imminent Hazard (IH) or require Immediate Response Actions (IRA). A Downgradient Property Status (DPS) was filed for the Site, attributing the contamination to the 23 Bay State Road property or "other upgradient properties." Groundwater was determined to flow towards City of Cambridge pump station to the southeast, away from the 75 New Street property.

**RTN 3-23991, Catch Basins CB3 & CB4 in New Street,** refers to methane detected at potentially explosive concentrations in catch basins located at the north end of New Street in 2004. The presence of methane was attributed to migration of landfill gas. An IRA was implemented. Based on records available on the MassDEP Waste Site Reportable Release Lookup database, an A-2 RAO was submitted in September 2004; however, the A-2 RAO was not available for review on the MassDEP Waste Site Reportable Release Lookup database.

**RTN 3-28725, 87 New Street,** is the location of a recently constructed 45-unit residential condominium complex with an underground garage. Prior to this use, the Site had been owned by a brick manufacturer. Fill, including materials excavated during construction of the MBTA subway line in Cambridge, was



placed on the property in the 1980's during the development of Danehy Park. Site investigations indicated the presence of substantial filling to a depth of 40 feet below ground surface. Soil samples collected in 2009 indicated the presence of lead and PAHs greater than RCS-1 standards as well as petroleum-related volatile organic compounds (VOCs). A RAM was conducted in 2009 and 2010 to excavate and remove impacted soils associated with construction. In total 8,950 cubic yards was removed from the site. Soil sampling associated with the RAM indicated lead concentrations as high as 13,000 mg/kg. TCLP testing of stockpile sampling indicated the soil was characteristically hazardous for lead and required stabilization prior to disposal.

Elevated concentrations of arsenic, barium, cadmium, and chromium, exceeding the RCS-1 concentrations, were also detected in soil samples. PCBs were detected at concentrations less than RCS-1 concentrations. Groundwater sampling and analysis indicated that total lead was detected in groundwater at a concentration exceeding the Method 1 Risk Assessment GW-3 criteria but the results were attributed to particulates in the groundwater. Soil vapor sampling and monitoring of catch basins and structures detected elevated methane and carbon dioxide levels and depressed oxygen levels, indicating the presence of landfill gas. Combustible gas monitoring indicated that the mix of gases exceeded the reportable limit of 10% of the lower explosive limit (10% LEL) in some locations. A subslab vapor barrier was installed in the building. An AUL was implemented to control site exposures by residents; a risk characterization concluded there was a condition of no significant risk under the terms of the AUL. An A-3 RAO was prepared by Woodard & Curran and submitted to MassDEP in February 2011. Relevant to the proposed work, the 2011 A-3 RAO stated that one area where the most heavily impacted soils remain is beneath pavement along the southern and western portions of the Site. Groundwater was stated to flow in a southwesterly direction, towards 75 New Street. Low concentrations of VPH fractions, PAHs, arsenic, barium, and lead were detected in groundwater at 87 New Street.

**RTN 3-1655, Old City Dump**, was assigned a RTN by the MassDEP but is considered adequately regulated under Massachusetts Solid Waste Regulations. The property has been developed into Danehy Park, but undergoes regular post-closure perimeter monitoring of groundwater and landfill gas. The limits of waste material associated with the Old City Dump may extend beyond the limits of Danehy Park, as described in other Site reports.

**RTN 3-24566, 3-31279, 3-23991, Methane Migration from Danehy Park/Old City Dump.** The presence of methane gas is monitored on a regular basis as part of landfill post-closure monitoring. Methane has occasionally been reported at levels exceeding 10% LEL in catch basins in and adjacent to New Street resulting in notifications to MassDEP under the MCP. Methane gas was also detected at 87 New Street, as described above.

**RTN 3-17932, Pump Station and Storage Tank-New Street**, is the location of a Utility-Related Abatement Measure (URAM) performed on behalf of Cambridge DPW to support construction of piping and utilities in New Street and a pump station on the adjacent property behind 22-48 New Street. The URAM was triggered in 2000 when excavation encountered soil contaminated with TPH, PAHs, and the metals lead and antimony exceeding RCS-1 limits and TCLP lead exceeding regulatory limits. Vinyl chloride and TCE were detected at concentrations greater than RCGW-1 criteria. Soil contamination was attributed to solid waste and fill material used to fill the former clay pits. Soil from the pump station area was observed to contain debris consisting of glass, brick, cans, scrap metal and wood. Soil determined to be characteristically hazardous for lead was treated in a container to remove the toxicity characteristic.

Soil from the New Street ROW was reported to contain large amounts of unspecified debris. Groundwater contamination was attributed to a release at 57 Bay State Road. During excavation, groundwater was treated using a bag filter to remove solids and granular activated carbon units (GAC) prior to discharge to the Massachusetts Water Resources Authority (MWRA) system. Clay dams, concrete, or flowable fill were placed along pipelines to minimize migration of contamination in groundwater. Dust monitoring was conducted during soil management activities.

**RTN 3-25347, 42-46 Concord Lane**, is located within the Fresh Pond Mall Property in the Concord Lane alignment. A release of OHM was reported in 2005 when excavation for the installation of a hydrant by



the Cambridge Water Department encountered oily soil and groundwater at the rear of the property building. A subsurface investigation indicated elevated concentrations of volatile petroleum hydrocarbons (VPH), extractable petroleum hydrocarbons (EPH), and polycyclic aromatic hydrocarbons (PAHs). A Release Abatement Measure (RAM) was conducted in 2006 to excavate petroleum contaminated soils. The excavation extended to an area of approximately 30 by 20 feet and to a depth of 5 to 6 feet and removed a total of approximately 125 tons of soil. Stockpile samples generated during the RAM were found to have up to 24,200 mg/kg total lead and 98.5 mg/l Toxicity Characteristic Leaching Procedures (TCLP) lead, well above the limit of 5 mg/l for a Resource Conservation and Recovery Act (RCRA) characteristically hazardous waste. Characteristically hazardous waste soil was transported to a hazardous waste landfill in New York for disposal. On site testing and confirmation sampling indicated that petroleum contamination had been removed. The petroleum contamination was attributed to a former underground storage tank (UST) and remote fill pipe removed in in the 1990's. Residual lead and PAH contamination was attributed to ash and fill. Based on the results of a Risk characterization, a Class A-2 Response Action Outcome (RAO) was submitted for the site.

**RTN 3-1752, 186 Alewife Brook Parkway**, is the location of the Fresh Pond Mall Property. The property was listed as a "location to be investigated" in 1993 but a specific release was not reported. Prior to the 1960's, the property was the location of Presto-O-Lite Corporation, which generated calcium hydroxide as part of its manufacturing process and disposed of the material on the property. The material, which is described as "chalky", was encountered during these investigations. The presence of underground storage tanks used for petroleum was also evaluated. The investigations noted that prior to the 1930's the property was the location of a clay pit. Following various site investigations between 1985 and 1993, a Licensed Site Professional (LSP) opinion filed in 1995 concluded that the property was not a disposal site but could potentially be impacted by oil tanks located on other properties and contaminant migration from the Old City Dump to the east.

**RTN 3-26367, 200-210 Alewife Brook Parkway**, is located within the Fresh Pond Mall Property near the Concord Lane alignment. A release of OHM was reported in 2006 when soil with elevated concentrations of lead (up to 15,300 mg/kg) were encountered during test pit excavation prior to installation of an electrical duct bank being installed for an addition at the south end of the Fresh Pond Mall Building. A Release Abatement Measure (RAM) was performed to remove and dispose of the soil off-site at a hazardous waste landfill in Michigan. Confirmatory sampling following the completion of the RAM indicated that some samples had concentrations of over the (current) MCP Reportable Concentration RCS-1 limit of 300 mg/kg with several over 1,000 mg/kg. Groundwater sampling and analysis for lead indicated that concentrations of dissolved lead and total lead were intermittently detected in on-site monitoring wells. Based on the results of a Risk Characterization, a Class A-2 RAO was submitted for the site.

**RTN 3-20815 and RTN 3-23925, 220 Alewife Brook Parkway**, is the location of the Tria Hotel. RTN 3-20815 applies to the entire property; a Class A-3 RAO with an Activity and Use Limitation was recorded for the property. Contamination is associated with the presence of PAHs attributed to the historic fill. Disposal site 3-23925 is associated with the presence of gasoline-related compounds in groundwater, attributed to a historical gasoline storage tank on an upgradient property at 545 Concord Avenue. During construction-related site investigations in 2008 and 2009, arsenic was detected at a concentration of 53 mg/kg, above the RCS-1 criteria. Lead was detected in in-situ samples adjacent to Concord lane at concentrations above the TCLP lead limit. The documents for this site also indicate that properties adjacent to Concord Lane at 545 Concord Avenue and 527-529 Concord Avenue were the sites of historical filling stations.

**RTN 3-27170 and 3-27549, 517-527, Concord Avenue**, is located in proximity to Concord Lane and is the location of a subsurface release of petroleum hydrocarbons related to historic filling of the property. Soil and groundwater are both impacted. EPH fractions, PAHs, petroleum-related VOCs, and arsenic and lead were detected in soil at concentrations exceeding RCS-1 concentrations. The highest concentrations were located within 5 feet of the surface. RTN 3-27549 is specifically related to petroleum contamination in groundwater which is attributed to former underground storage tanks use for oil storage at an



upgradient source at 515 Concord Avenue. A Class B-1 RAO concluded that there was a condition of no significant risk related to soil contamination and no remediation was conducted.

**RTN 3-19521, 3-20577, and 3-25331, 515 Concord Avenue**, is the location of a retail gasoline station and the location of three reported petroleum releases. RTN 3-19521 is related to detections of petroleum-related compounds in groundwater in 2000. RTN 3-20577 is associated with a 2001 2-hour notification following a release of 40 gallons of hydraulic oil from a hydraulic lift in a service bay. An Immediate Response Action (IRA) was performed to excavate contaminated soil and repair piping. RTN 3-25331 is associated with a release of hydraulic fluid from a second hydraulic lift, resulting in an IRA which removed 20 cubic yards of impacted soil, an abandoned hydraulic fluid UST, and 5,000 gallons of impacted groundwater. Investigation activities were conducted between 2001 and 2010. Contamination was reported to extend into Concord Avenue. Non-aqueous phase petroleum product (NAPL) was detected in monitoring wells on the property. In 2008, a RAM was conducted to manage impacted soil and groundwater encountered during an upgrade of the hydraulic lift system. Phase V Remedy Operation Status (ROS) activities consisting of groundwater monitoring were conducted between 2008 and 2010.

Lead and cadmium attributed to the presence of historical fill soils containing ash have been detected in soil at concentrations above the RCS-1 criteria. PAHs have been detected at concentrations exceeding RCS-1 criteria and have also been partially attributed to historical fill and the nearby rail alignment. In groundwater, VPH, EPH, benzene and methyl tertiary butyl ether (MTBE) have been detected above Method 1 GW-1 standards at the site. Lead was also detected above the Method 1 GW-1 criteria, but was attributed to particulate in the groundwater sample. A Class C-1 RAO was submitted for the site in 2010, demonstrating that contaminant sources had been controlled, that a temporary solution had been achieved, that there was no substantial hazard associated with groundwater, and that there was not a significant risk to human health, safety, public welfare or the environment associated with exposure to soil.

**RTN 3-959 and RTN 3-12881, 445 Concord Avenue** is the location of the Former Midland Ross Company and currently operates as Cambridge Self Storage. This Site occupies the entire block between Birch Street and Fern Street, and extends east of Fern Street towards Corporal Burns Road. Uses of the property by the Midland Ross Corporation, an electronics manufacturer, prior to 1986 resulted in releases of chlorinated solvents and petroleum to the subsurface. Additionally, Site soils have been noted to contain brick, cinders, glass, wood, rubber and metal, as well as peat. Since 1988, the most prevalent compounds detected at the Site were the chlorinated volatile organic carbons (CVOCs) trichloroethylene (TCE), dichloroethene (DCE) and vinyl chloride (VC). The highest concentrations of CVOC contamination, which includes dense non-aqueous phase liquid (DNAPL), is located in the northern portion of Fern Street, with DNAPL located on top of a clay layer at about 10 feet below grade; soil impacts have been identified from the surface to approximately 15 feet below grade. As of the last status report published for the Site, up to 1.2 feet of DNAPL are present in Site well GEI-211, located under Fern Street. A DNAPL recovery system was installed in 1992, and currently operates with one pump in GEI-211. Volatile petroleum hydrocarbons (VPH), extractible petroleum hydrocarbons (EPH) and multiple types of light non-aqueous phase liquid (LNAPL) are also present. These contaminants are concentrated in the center of the block between Fern Street and Birch Street. Hand bailing of LNAPL is performed regularly. Plans, produced by GeoHydroCycle, as a consultant to the property owner, for Site monitoring reports, showing Site monitoring well locations and the extent of NAPL, are attached. A Class C-1 Response Action Outcome (RAO) was filed for the Site on February 7, 2006. In March 2009, MassDEP audited the Site and issued a Notice of Noncompliance. Violations included failure to demonstrate No Substantial Hazard and failure to provide a monitoring plan and regular status reports. The most recent status report for the Site was filed on August 29, 2011. According to that report, NAPL at greater than ½ inch thickness persists at the Site in some locations, pumping of DNAPL is ongoing, and indoor air monitoring is being performed at a residence at 74 Field Street and at the offices at the storage facility.



**RTN 3-15863, 23 Bay State Road** is the location of polycyclic aromatic hydrocarbons (PAHs), and tetrachloroethene (PCE) identified in soil excavated during construction of a building addition at a property formerly owned by 3M. The RTN was assigned in 1997 and a Release Abatement Measure (RAM) was implemented to manage soils from the excavation. PCE (41 mg/kg) and TCE were identified in the soils; CVOCs were detected in groundwater on the northwest side of the property. Measured groundwater elevations indicated a significant flow gradient toward the New Street Pump Station northeast of the property. The LSP for that Site concluded that the pump station capture limited the off-site migration of contaminated groundwater from the Site. An A-2 RAO was submitted in 2001. In July 2003, 3M Corporation (as a Potentially Responsible Party (PRP)) performed additional sampling at the Site prior to the sale of the property to 23 Bay State Road Limited Partnership. A MassDEP audit in 2009 indicated that the submittal was invalid and additional assessment work was required. 3M, which remains the primary PRP for the Site, responded with a technical justification for not performing additional groundwater monitoring, based largely on the limited potential for groundwater migration based on the influence of the New Street Pump Station. A meeting held in May 2011 between 3M and MassDEP focused on the potential future risk to indoor air posed by a residential use scenario. During this meeting, the possibility of recording an activity and use limitation (AUL) on the property, and/or the installation of sub-slab depressurization system, was discussed. A Notice of AUL was recoded at the South Registry District of Middlesex County in June 2014. A Class A-3 RAO pertaining to indoor air exposure was submitted to MassDEP in June 2014 by Weston Solutions, Inc. The 2014 A-3 RAO concluded that a level of No Significant Risk pertaining to a potential future indoor air exposure pathway at the Site with the implementation of an AUL.

Based on available records, the most heavily impacted soil on this Site has been removed, and impacted groundwater has been identified on the northeast portion of the property, only. Based on the Site limits as presented in publicly available reports, conditions related to RTN 3-15863 are unlikely to impact Project activities. However, Kleinfelder/MWH notes that data was collected from a limited number of points on the property, and that CVOCs, which may be from the same or from a different source than those reported under RTN 3-15863, have been detected on several neighboring properties, indicating that CVOCs may be present along Bay State Road.

CVOC-impacted soil and groundwater may also be subject to disposal as RCRA F-listed hazardous waste, depending on the concentrations encountered. Soil removed from the lateral limits of excavation with concentrations of CVOCs above S-1/GW-1 MCP risk characterization standards would be classified as a listed RCRA Waste. Soils in this category, once removed from the lateral limits of excavation may not be replaced in the excavation.

Since an AUL has been implemented at the Site, work within the boundaries of the AUL, if required, must be completed as a RAM in lieu of a URAM.

**RTN 3-13307, 57 Bay State Road** is the location of VC identified in groundwater. The finding was reported to MassDEP in 1996. A DPS opinion was submitted in 1996, attributing the presence of CVOCs to leachate from the Cambridge Landfill. This conclusion was based on a 1995 monitoring report by Camp Dresser McKee (CDM) that identified CVOCs in groundwater in the landfill. Compounds detected on the property included VC (up to 790 µg/L) and 1,1-dichloroethene (up to 60 µg/L), as well as TCE, PCE and several other CVOCs below applicable standards.

**RTN 3-10176, 3-12068, 247 Garden Street**, is the location of the Briston Arms Apartments. RTN 3-10176 was assigned in 1993, following the detection of combustible gas at greater than 10% of the lower explosive limit (LEL) in two water shutoff pipes. The Notice of Responsibility issued by MassDEP required Briston Arms to conduct a combustible gas sampling program. Briston Arms initiated the gas monitoring program, and installed a passive sewer ventilation system in 1994. In January, 1995, two monitoring points were found to contain combustible gas over 10% of the LEL. The manholes were vented and



subsequent sampling did not identify potentially explosive levels of combustible gas. The source of the methane was determined to be the former Cambridge Landfill, now Danehy Park. The Site is currently regulated under Administrative Consent Order ACO-NE-94-9003-34.

**RTN 3-2382, 480 Fresh Pond Parkway**, is the location of a release of gasoline discovered during a UST replacement conducted in 1988. At the time of the UST removal, 1550 cubic yards of soil were excavated and removed from the Site, and soil and groundwater investigations were performed. Benzene, toluene, ethylbenzene and xylenes (BTEX) were detected in groundwater. NAPL was detected downgradient of the UST location. A NAPL recovery system was installed in 1990 but is no longer in use. During monitoring activities conducted in 1994 and 1996, NAPL was not detected on Site, but BTEX and methyl tertiary butyl ether (MTBE) were still detected in several wells. In 2001, work in Sozio Circle was performed as a URAM by the City of Cambridge when petroleum contaminated soils were encountered in utility trenches. A Class C-2 RAO, indicating that a Temporary Solution was achieved for the Site, but that a condition of No Significant Risk had not yet been achieved, was filed in November 2012. Recent sampling results have indicated that petroleum compounds persist in Sozio Circle, possibly from a source other than RTN 3-2382.

### **Discussion**

Based on documentation available for RTN 3-19082, groundwater along New Street has the potential to be impacted by CVOCs. In addition, there are several Sites to the southeast of 75 New Street with documented CVOCs in soil and groundwater. MCP site RTN 3-959, located between Fern Street and Birch Street, with documented CVOC DNAPL, as discussed above.

Soil in the vicinity of 75 New Street may have been emplaced during historic filling, which could include municipal waste, coal, ash, and other debris. This type of fill is often contaminated with metals and/or PAHs. As discussed under RTN 3-32213, concentrations of arsenic, lead, barium, TPH, and PAHs exceeded RCS-1 standards at 75 New Street. In addition, as discussed under RTN 3-19802 above, one area which remained heavily contaminated after remediation activities at the 87 New Street property is located on the southern and western portions of the Site, which are located just north of 75 New Street.

The developer for 75 New Street has begun remedial actions under the MCP as discussed in RTN 3-32213 above. The developer intends to excavate impacted soil from the property, as stated in the letter from AbodeZ dated July 30, 2014 to the City of Cambridge Community Development Department and Planning Board. However, several Sites in the vicinity of 75 New Street have documented methane migration from the former City Dump. This includes the property to the north (87 New Street), which required the installation of a vapor barrier in the residential condominium building to mitigate landfill gas migration into the building. Therefore, based on documents for 87 New Street, excavation of impacted soil at 75 New Street may not be enough to mitigate landfill gas migration from the former City Dump and similar measures to those implemented at 87 New Street may be required at 75 New Street.





## **ATTACHMENTS**



**Figure 1**

CONCORD LANE  
ENVIRONMENTAL LOCATION PLAN

