

Davis Square Lab

231-249 Elm Street and 6-8 & 12 Grove Street
Somerville, Massachusetts

PREPARED FOR

Scape Davis Square LLC
88 Black Falcon Pier, Suite 301
Boston, MA, 02118

Contact:
Steven Ng, VP Design & Construction
Scape USA
978-423-7317 (m)
Steven.ng@scape.com

PREPARED BY



99 High Street, 10th Floor
Boston, MA 02110-2354
617.924.1770

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Project Information

The Davis Square Lab project, the proposed redevelopment of the properties at 231-249 Elm Street and 6-8 & 12 Grove Street, will consist of a new, multi-story commercial building with an underground parking garage and ground-level retail/restaurant space. As proposed, the project is adding approximately 102,190 square feet of laboratory (lab) and research and development (R&D) space while maintaining much of the ground floor retail/restaurant uses present today. To minimize the need for vehicle trips to the site, the project is providing on-site amenities and transportation demand management (TDM) measures that support and encourage the use of sustainable transportation modes, such as transit, bicycling, and walking, for trips made to/from the site.

Project Address

The property is located at 231-249 Elm Street and 6-8 & 12 Grove Street, Somerville, Massachusetts 02144 (the "Development Site"), in the Davis Square area of the city. (Refer to Figure 1 for a site context map.)

Property Owner and Contact Information

Property Owner

The property owner is Scape Davis Square, LLC.

Designated Contact

Steven Ng
 VP Design & Construction, Scape USA
 88 Black Falcon Pier, Suite 301
 Boston, MA, 02118
 Phone number: 978-423-7317
 Email address: Steven.Ng@scape.com

Project Description

Development Program

The proposed development, called Davis Square Lab, will consist of the following:

- › $\approx 102,190 \pm$ sf of lab/research & development space (a new use)
- › $\approx 21,670 \pm$ sf of retail space (an existing use)
- › Parking garage (underground), with up to 120 spaces (replaces the existing 20-space surface lot and supports the new development)

(Refer to Table 1 for program elements and Figure 2 for a conceptual site plan.)

The approximately 0.78-acre project site is in Somerville's Davis Square neighborhood. The Project Site is bounded by apartment buildings to the northeast, Grove Street to the southeast, Elm Street to the southwest, and the 255 Elm Street building to the northwest. The proposed project includes the construction of an approximately 183,044 SF building (including the parking garage and mechanical space/penthouse) consisting of three stories of lab space, ground floor retail space, and an underground parking garage, while maintaining the Burren, an existing dining establishment on the northern edge of the site.

Table 1 **Project Summary**

Project Component	Detail/Description
Vehicle Parking Spaces	<ul style="list-style-type: none"> › 120 spaces in an underground garage › 6 designated for carpool and vanpool vehicles › 30 spaces equipped for electric vehicle (EV) charging, and the remaining spaces will be EV-ready. EV spaces will be located as preferred parking spaces and at ADA and ADA van spaces.

Project Component	Detail/Description
Bicycle Parking Spaces	<ul style="list-style-type: none"> › 26 long-term spaces (inside building) › 28 short-term spaces (outside of building)
Square Footage of Building	<ul style="list-style-type: none"> › 183,044 gross sf, inclusive of the commercial uses, parking garage, and mechanical spaces/penthouse › Commercial uses include: <ul style="list-style-type: none"> 102,190± sf of lab/research & development space 21,670± sf of retail space (an existing use)
Estimated Number of Employees	<ul style="list-style-type: none"> › (low end) 255 employees for the lab/R&D use (estimated at 2.5 employees per 1,000 sf) › (high end) 511 employees for the R&D use (estimated at 5.0 employees per 1,000 sf)
Estimated Daily Vehicle Trips	› 720 (net-new trips)
Estimated Daily Transit Trips	› 336 (net-new trips)
Estimated Daily Bicycling and Walking Trips	› 278 (net-new trips)

Source: Estimated trips are from the calculations presented in the project's TIS scoping request letter, dated January 24, 2022. The calculations are based on ITE trip generation rates, adjusted for the area's mode share.

Vehicle Parking Supply

The project is planning to construct up to 120 motor vehicle parking spaces in an underground, 2-level garage underneath the commercial building. The parking garage will be access-controlled (through gating, ticketing, and/or reader cards).

The proposed parking supply falls under the maximum parking ratios allowed for the uses in a Commercial Core district for a property within a transit area. For the lab/R&D use, the parking supply limit is 102 spaces (at 1 space per 1000 sf); for the retail (food & beverage) use, the parking supply limit is 72 spaces (at 1 space per 300 sf). These uses will share the parking garage, which supports the new lab/R&D uses and incorporates the number of spaces provided in the existing public parking lot located on the Development Site.

As detailed in Chapter 3, the parking supply will allow the property manager/owner to manage parking demand to limit the number of vehicle trips to the Development Site.

The Project is not changing the street curbside allocation adjacent to its Development Site. There is a parking lane on Elm Street along the southwestern frontage of the Site with spaces that have either a 15-minute or 30-minute time limit. Across Grove Street from the Development Site is a municipal/public parking lot (Grove Street Lot). Two other municipal lots are located within a tenth of a mile: at the corner of Grove Street and Highland Avenue, and at the corner of Summer Street at Cutter Avenue. These are pay-by-space (metered) lots, with fees in effect from 8 AM to 8 PM.

Bicycle Parking Supply

The Project will include 26 long-term and 28 short-term bicycle parking storage spaces, in compliance with the Somerville Zoning Ordinance. The interior long-term bicycle parking

spaces will be on the P1 parking level of the garage, adjacent to elevators, and the short-term bicycle racks within 50 feet of the building's entrances. Further details of the amenities that support bicyclists are provided in *Chapter 4, Mobility Management Commitments*.

Site and Property Access

Parking Garage Access

Please refer to Figure 3 for a site plan showing how passenger vehicles are expected to arrive at the site and access the building.

The existing vehicle access to the Development Site consists of two curb cuts on the southeastern boundary of the Site along Grove Street, leading to an existing municipal surface parking lot. Proposed site access is provided for passenger vehicles at a curb cut located on the southeastern corner of the building. This entrance will connect to the below-grade parking garage situated under the building, which will replace the existing surface lot and support the new development. Passenger vehicles will exit the Development Site via the same curb cut, then proceed either left or right onto Grove Street.

Loading and Services Operations

Please refer to Figure 4 for a site plan showing how service vehicles are expected to arrive at the site and access the building. The site plan is oriented such that service vehicles serving the Project will enter the Development Site and access the loading dock via Grove Street, at a new curb cut located on the southeastern corner of the building. Service vehicles will back in to the loading dock entrance, and pull forward to exit the Site using the same curb cut onto Grove Street.

Bicycling and Walking Connections

This section provides figures that depict how employees and visitors are expected to arrive at the Development Site and access the building by bicycling and walking. Information on the local transportation facilities and services are provided in Chapter 2, *Local Transportation*.

Please refer to Figure 5 and Figure 6 for a site plan showing how bicycles and pedestrians, respectively, are expected to navigate the site and access the property's entrances.

Figure 7 and Figure 8 depict local bicycling and walking routes from the Development Site to the area's bicyclist and pedestrian facilities, including access to/from MBTA transit stops, the Somerville Community Path, and bicycle lanes.



2

Local Transportation

Transit Services

Existing MBTA Services

Ample public transportation services by the Massachusetts Bay Transportation Authority (MBTA) currently are provided in the study area. A summary of existing public transportation amenities in the area is provided in Table 2 below.

The Project study area is currently served by the MBTA Red Line at Davis station, six MBTA bus routes within a quarter-mile of the Development Site, and another two MBTA bus routes within a half-mile of the Site. The existing public transit services are shown graphically in Figure 9.

Within the Project area, MBTA bus Routes 87, 88, and 90 travel along Highland Avenue, Elm Street, and Holland Street. Bus Routes 89, 94, and 96 travel along College Avenue and Elm Street. The Project is served by bus stops located at Elm Street at Chester Street (across the street from the Development Site), Grove Street at Highland Avenue, and nearby at Davis station busway and at College Avenue at Highland Avenue.

Bus Routes 77 and 83 travel along Massachusetts Avenue. The closest stop for those services to the Development Site is located about 0.3 miles walking distance at Rindge Avenue at Massachusetts Avenue (near Chester Street).

Ridership for each MBTA bus route in Fall 2019, which is reflective of typical pre-pandemic conditions, is summarized in Table 3.

Table 2 Project Area MBTA Transit Services

Transit Service	Origin/ Destination	Peak Hour Headways	Closest Stop to Project Site	Distance from Project Site (walk time)
Subway (within ¼-mile)				
Red Line	Alewife – Ashmont/Braintree	11	Davis Station	<0.2 miles (3 minutes)
Bus (within ¼-mile)				
87	Clarendon Hill or Arlington Center – Lechmere Station	16-20	Elm St @ Chester St (Inbound)	68 feet (1 minute)
88	Clarendon Hill – Lechmere Station	16-20		
89	Clarendon Hill or Davis Station – Sullivan Square Station	15-25	Grove St @ Highland Ave (Outbound)	0.1 mile (2 minutes)
90	Davis Station – Assembly Row	35		
94	Medford Square – Davis Station	15-30		
96	Medford Square – Harvard Station	20-30		
Bus (within ½-mile)				
77	Arlington Heights – Harvard Station	15	Massachusetts Ave @ Rindge Ave	0.3 miles (6 minutes)
83	Rindge Avenue – Central Square	20-30	Rindge Ave @ Massachusetts Ave	0.3 miles (6 minutes)

Source: Winter 2021 MBTA Schedule

Table 3 Project Area MBTA Bus Service Ridership (Fall 2019)

Bus Route	Origin/ Destination	Direction	Weekday	Saturday	Sunday
77	Arlington Heights – Harvard Station	Inbound	3209	2316	1563
		Outbound	<u>3442</u>	<u>2274</u>	<u>1749</u>
		Total	6652	4590	3313
83	Rindge Avenue – Central Square	Inbound	897	468	260
		Outbound	<u>931</u>	<u>472</u>	<u>300</u>
		Total	1828	940	560
87	Clarendon Hill or Arlington Center – Lechmere Station	Inbound	1804	1184	635
		Outbound	<u>1878</u>	<u>1295</u>	<u>672</u>
		Total	3681	2480	1307
88	Clarendon Hill – Lechmere Station	Inbound	1929	1113	661
		Outbound	<u>1884</u>	<u>1015</u>	<u>737</u>
		Total	3813	2128	1398
89	Clarendon Hill or Davis Station – Sullivan Square Station	Inbound	1713	901	491
		Outbound	<u>1766</u>	<u>813</u>	<u>478</u>
		Total	3479	1714	969
90	Davis Station – Assembly Row	Inbound	549	265	186
		Outbound	<u>524</u>	<u>299</u>	<u>143</u>
		Total	1073	564	330
94	Medford Square – Davis Station	Inbound	788	354	251
		Outbound	<u>740</u>	<u>279</u>	<u>241</u>
		Total	1528	634	493
96	Medford Square – Harvard Station	Inbound	1077	385	246
		Outbound	<u>1011</u>	<u>474</u>	<u>294</u>
		Total	2088	859	540

Source: MBTA Open Data Portal; Fall 2019 MBTA Ridership data, total line boardings; reflective of pre-COVID-19 pandemic conditions

Anticipated MBTA Service Changes

Red Line Service Improvements

By 2024, the MBTA's the *Red Line Transformation Program*¹ (the agency's Red Line systemwide capital improvement program), will result in the replacement and expansion of the existing Red Line fleet (to 252 cars, adding 34 more cars to the fleet) with new, greater capacity cars. The program is also implementing signal and track upgrades that will help the Red Line service achieve more frequent headways during peak periods, which are expected to be as frequent as every 3 minutes, a 50 percent capacity improvement over the current 4.5-minute headways.

¹ www.mbta.com/projects/red-line-transformation-program

MBTA Bus Network Redesign

The MBTA's ongoing Bus Network Redesign initiative², which stems from the MBTA's Better Bus Project, is scheduled to release its study recommendations in 2022, followed by a phased implementation of changes over the subsequent four years. The proposed changes will address route design, frequency of service, span of service, bus stop spacing, and coverage area. The Redesign project has not released any proposals for how the bus services in the study area may change.

Pedestrian and Bicycling Infrastructure

Sidewalks and Paths

All streets adjacent to the Site, including Elm Street, Grove Street, and Highland Avenue, have sidewalks and crosswalks at intersections (see Figure 10). At Davis Square, there is a public plaza with tables and benches. Additionally, several businesses on Elm Street, such as the Burren, have outdoor seating adjacent to the sidewalk.

The Somerville Community Path, a shared path for cyclists and pedestrians, is located one-tenth of a mile from the Project Site and may be accessed by continuing north from the Site on Grove Street. The path connects Lowell Street to the east (in Somerville) with Alewife Station to the west (in Cambridge) and runs adjacent to the Davis Station MBTA Red Line stop.

The *Davis Square Neighborhood Plan* lays out several possibilities for future infrastructure improvements to the pedestrian realm. The redesign of the Davis Square intersection is proposed, which is anticipated to add a new, permanent pedestrian plaza to replace the existing Highland Avenue to Elm Street slip lane. Another potential improvement is to close off Elm Street to vehicles, so that only pedestrians and cyclists are permitted. The expansion of Kenney Park (at the corner of Grove Street and Highland Avenue) further south into what is currently the Grove Street public parking lot, is also being considered. Additionally, there is a proposal to transform the Summer Street slip lanes and public parking lot at the intersection of Elm Street, Cutter Avenue, and Summer Street into a new pedestrian plaza.

Bicycle Lanes

Adjacent to the Site, Elm Street and Grove Street do not currently have dedicated bicycle infrastructure. Cutter Avenue, southeast of the Site, and Highland Avenue, to the North, have marked on-street bicycle lanes. Massachusetts Avenue, south of the Site, also has a marked bicycle lane in both directions.

See Figure 11 for a map of existing bicycle infrastructure in the vicinity of the Project.

² www.mbta.com/projects/bus-network-redesign

Nearby Bikeshare Docks/Stations

There are two Bluebikes stations located close to the Project Site (see Figure 12 for a map). The station/dock at Grove Street at Community Path is approximately one-tenth of a mile (or a 2-minute walk) away and contains 15 bicycle docks. The Bluebikes station at the MBTA's Davis station is located approximately within a 2-minute walk from the Development Site and contains 23 bicycle docks.



3

Project Trip Generation

Trip Generation

The Project consists of approximately 102,190 SF of lab/R&D and 21,670 SF of retail/restaurant space, yet the trip generation estimate reflects only the new/added land use component, the lab/R&D use. (The ground floor portion of the Project is maintaining its retail/restaurant land use—with an approximately 6,730 SF reduction in space while maintaining the same number of establishments.) Trip generation estimates for the Project are based on standard data from the Institute of Transportation Engineers (ITE)³ and adjusted to account for the neighborhood's mode shares, reflecting the availability of transit, bicycle paths, and walkability.

Mode Share

Mode shares are applied to distinguish between vehicular, transit, bike, walk, and other trips to and from the Project Site. Mode shares were determined by Journey-to-Work data obtained from the U.S. Census American Community Survey (ACS) from 2012-2016 for those working in the Davis Square area (Census Tract 3509). The mode shares expected based on these data are presented in Table 4.

³ *Trip Generation Manual – 11th Edition*; Institute of Transportation Engineers (Washington, D.C.); 2021.

The combination of on-site amenities supporting public transit use, walking, and biking, the limited parking supply, and the implementation of the MMP commitments, are anticipated to help decrease the percentage of trips made by automobile to 50 percent or less.

Table 4 Existing Mode Share

Vehicle	Transit	Bike	Walk
58%	23%	4%	15%

Source: U.S. Census Bureau, American Community Survey 2012-2016 Five-year estimates. Special Tabulation: Census Transportation Planning Product (CTPP)

Notes: Person trips by travel mode. *Other*, which includes work-from-home and other modes, totaled 5 percent and was distributed proportionally amongst the travel modes listed. *Vehicle* includes single-occupant vehicle and high-occupant vehicles. Numbers are rounded.

Project-Generated Trips

The mode shares are applied to the net person trip estimate (based on ITE trip rates and detailed below) to generate the *adjusted* Project person trips by mode. To reflect the number of vehicle trips generated by the Site, the adjusted person trips are converted to vehicle trips by applying the national average vehicle occupancy rates (VOR). Table 5 summarizes the anticipated Project trips by mode.

Table 5 Project Trip Generation – Estimate of New Trips by Mode

Time Period	Vehicle Trips	Transit	Person Trips	
			Bike	Walk
Weekday Daily				
Enter	360	168	29	110
<u>Exit</u>	<u>360</u>	<u>168</u>	<u>29</u>	<u>110</u>
Total	720	336	58	220
Weekday Morning Peak Hour				
Enter	55	26	4	17
<u>Exit</u>	<u>12</u>	<u>6</u>	<u>1</u>	<u>4</u>
Total	67	32	5	21
Weekday Evening Peak Hour				
Enter	10	5	1	3
<u>Exit</u>	<u>54</u>	<u>25</u>	<u>4</u>	<u>17</u>
Total	64	30	5	20

Unadjusted ITE Vehicle Trips

Specifically, trip generation estimates for the proposed land uses were first projected using ITE trip generation rates for LUC 760 (Research & Development Center), based on the space for the lab/R&D use. These produce an *unadjusted* (or gross) vehicle trip estimate because it does not account for the setting of this project in an urban environment with great multimodal travel options. These raw estimates are presented in Table 6.

Person Trips

The *unadjusted* vehicle trips estimated using the ITE data were subsequently converted into person trips by applying average vehicle occupancy rates (VORs) based on national data. The national average vehicle occupancy rate applied was 1.18 persons/vehicle. The national rates are applied when converting to person trips to be consistent with ITE data, which is also based on national data.

The project-generated person trips are shown in Table 6 below.

Table 6 Estimating Project (Lab/R&D) Trips – Gross (Unadjusted) Trips and Net Person Trips

Time Period	Gross Trips ¹	Person Trips
Weekday Daily		
Enter	620	732
<u>Exit</u>	<u>620</u>	<u>732</u>
Total	1,240	1,464
Weekday Morning		
Enter	95	112
<u>Exit</u>	<u>21</u>	<u>25</u>
Total	116	137
Weekday Evening		
Enter	18	21
<u>Exit</u>	<u>93</u>	<u>110</u>
Total	111	131

¹ Based on ITE LUC 760 (Research & Development Center), for 102.2 ksf, using regression equations (peak of adjacent street). Gross trips are adjusted using an average vehicle occupancy rate of 1.18 persons/vehicle to estimate person trips.

Existing Site-Generated Traffic

Per the Somerville TIS Guidelines, existing trips may be subtracted from new trips to generate a net-new vehicle trip total with Mobility Division approval. However, since the ground floor portion of the Project is to maintain its retail land use—with an approximately 6,730 SF reduction in space while maintaining the same number of retail establishments—it is not expected that there will be a significant change in retail trips. Therefore, the ground-floor retail component has been excluded from the proposed trip generation analysis and no trip credit has been taken for the proposed reduction in retail space.

Entering and exiting vehicle counts from the existing parking lot are not available. Due to the lack of data, trip credits are not expected to be taken for the removal/replacement of this lot.

Trip Distribution

The directional distribution of the traffic approaching and departing the Development Site is a function of population densities, the location of employment opportunities, existing travel patterns, and the efficiency of the roadway system. Trips made to and from the proposed Lab/R&D space during the peak hours are expected to be predominantly home-to-work and work-to-home trips in the morning and evening peak hours, respectively. Accordingly, the trip distribution for the proposed development has been derived from the 5-year American Community Survey (ACS) data (2012-2016) for U.S. Census Tract 3509. Table 7 presents the anticipated trip distribution of Project-generated traffic; these are depicted in Figure 13.

Table 7 Project Trip Distribution on Local Area Roadway Network

Roadway	% In	% Out
College Avenue (from/to the north/east)	24%	24%
Holland Street (from/to the north/west)	18%	18%
Elm Street (from/to the south/east)	13%	11%
Summer Street (to the south/east)	-	7 %
Highland Avenue (from/to the east)	27%	27%
Russell Street/Cutter Avenue (from the west/Rt. 2A)	13%	-
Day Street (from the west/Rt. 2A)	5%	-
Dover Street (to the west/Rt. 2A)	-	13%
Total	100%	100%

Estimated based on American Community Survey (ACS) (2012-2016) data for U.S. Census tract 3509.

Vehicle Parking Demand

Based on reasonable assumptions for the estimated employee population and mode shares for driving alone (SOV) and carpooling (HOV), we find that the proposed parking supply supports achieving SomerVision's mode share goals. To achieve a 50 percent vehicle mode share, the project would require a parking supply ranging between about 107-214 spaces, which is higher than the supply proposed for the project's garage. (Please refer to Table 8.) Parking pricing and TDM measures/incentives are needed to manage parking demand and limit the number of employees using an automobile to drive and park at the Development Site. The parking supply will also help support lower automobile mode shares. For example, parking demand at a 37.5 percent vehicle mode share is about 78-156 spaces.

Table 8 Estimated Vehicle Parking Demand Based on Expected Employees and Targeted Automobile Mode Shares

Employees per 1,000 GSF	Employees	Applied Mode Share	Automobile Use Percentage (Vehicle Mode Share)	Parking Demand ¹
2.5	255	2012-2016: ACS 5-Year Estimates Data Profiles	0.52 SOV / 0.07 HOV	126 spaces
5.0	511			253 spaces
2.5	255	SomerVision 50 percent vehicle mode share goal	0.43 SOV / 0.07 HOV	107 spaces
5.0	511			214 spaces
2.5	255	SomerVision 37.5 percent vehicle mode share goal	0.31 SOV / 0.07 HOV	78 spaces
5.0	511			156 spaces
2.5	255	SomerVision 25 percent vehicle mode share goal	0.18 SOV / 0.07 HOV	48 spaces
5.0	511			99 spaces

¹ Space requirements calculated as SOV (drive alone) rate + half of HOV (carpool) rate; adjusted by 0.90 to account for employee absence on any given day. Carpool/HOV rate is assumed to remain the same.

Supporting Assumptions:

- Employee estimate is based on a range between a low occupancy for Laboratory or R&D of 400 GSF per employee (or 2.5 employees per 1000 GSF⁴) and a high occupancy of 200 GSF per employee (or 5 employees per 1000 GSF).
- Mode shares are based on the average journey-to-work mode share of U.S. Census tract 3509, from the 2012-2016 ACS 5-Year Estimates Data Profiles.
- A factor of 0.90 is applied to represent the likelihood of employees not reporting to work on any given day, considering absences such as paid time off (vacation or sick day) and off-site work appointments (business travel).

⁴

U.S. Green Building Council, LEED v4 (2019), Building Design and Construction: New Construction, Appendix 2, Table 1. www.usgbc.org/credits/new-construction-existing-buildings-commercial-interiors-core-and-shell-schools-new-constr-3



4

Mobility Management Commitments

The Proponent aims to support the City's goals stated in SomerVision (Somerville's comprehensive plan) for prioritizing walking, biking, and transit use, including the City's goal to limit automobile trips to less than 50 percent mode share. Presented herein are the commitments by the Proponent and the property's tenants that constitute a comprehensive transportation demand management (TDM) program that aims to reduce travel by single-occupant automobiles.

Project Proponent / Property Owner Commitments

The Proponent/Property Owner is committed to control the percentage of trips made by automobile at 50 percent or less. The mobility management programs and services (including the management of parking supply) presented in this MMP intend to meet this goal. If annual monitoring and reporting identifies a shortfall in meeting this goal, the Proponent/Property Owner commits to implement modifications to (or additional) mobility management programs and services. Furthermore, the Proponent/Property Owner commits to undertake reasonable efforts to control the percentage of trips made to the development site by motor vehicle at 37.5 percent or less by 2030 and at 25 percent or less by 2040 to meet the city's SomerVision 2040 goals.

Property Owner Responsibilities

TDM/Transportation Coordinator

The Property Owner (or its manager) will designate an on-site TDM/transportation coordinator to oversee the MMP's ongoing TDM programs and commitments, including the dissemination of transportation information. A representative from an approved Mobility Management Association (aka Transportation Management Association) or a representative from the property management firm may be appointed in place of an on-site TDM coordinator.

The work location and contact information for the TDM Coordinator will be provided to the Director of Mobility Division prior to the issuance of a Certificate of Occupancy.

The TDM/Transportation Coordinator will be responsible for the following:

- › Act as a **liaison with site employers** and any respective on-site transportation coordinators for those tenant employers with 50 employees or more.
- › Disseminate information on non-SOV transportation modes to all tenants and develop **transportation-related marketing and education** materials, including a website. These materials will highlight transit services and nearby stops, pedestrian, and bicycling access to and from the Development Site.
- › Ensure that transportation-related marketing and education materials are posted in a common area(s) of the building for tenants, employees, and visitors, and that these materials are current and up to date.
- › Host occasional (no less than annually) **transportation-related events** to promote the use of commuting alternatives to driving alone. This may include a mobility management educational meeting for tenants (and their employees) and/or a transportation fair hosted on site.
- › Assist site employees with **ride matching and trip planning** using non-SOV modes.
- › Oversee the **monitoring of the effectiveness of TDM measures** through surveys and other tools, as detailed in Chapter 5, Monitoring and Reporting.
- › **Complete and file a regulatory report** to the City of Somerville, as detailed in Chapter 5, *Monitoring and Reporting*.
- › Develop and **implement new and modified TDM measures** to ensure compliance with the goal of reducing vehicle travel to the property.

Building/Property Amenities

The Property Owner is providing various amenities in the building and on the property site that facilitate and support the use of public transit, walking, and bicycling:

In the Building

- › **Actionfigure/TransitScreen (or similar dynamic transportation information display) in the building lobby.** This display provides building employees and visitors a customized,

real-time messages and information on nearby transportation services, including bikeshare station availability and real-time public transit service and alerts.

- › **Bicycle storage, lockers, and showers.** Employees will have access to a secure bike parking storage room with capacity for 26 bicycles, lockers for personal belongings, changing rooms, and showers.
- › **Bicycle repair station.** Bicyclists will have access to a repair station for basic bike repair tools and air pump.

Building Adjacent

- › **Bicycle parking racks.** Outside the building, 14 bicycle parking racks (for parking 28 bicycles) will be installed for the building's users and visitors and patrons of the retail and restaurant establishments. These racks will be installed in the furnishing zone of the sidewalk area along Grove Street and Elm Street, and installed according to Somerville's design guidelines for Davis Square and the *Davis Square Neighborhood Plan*.

Parking Management

The Property Owner (or its manager) will implement the following measures associated with vehicle parking to restrict the use of vehicle trips to the property.

- › **Unbundle parking pricing.** The Property Owner will negotiate a lease term and contract for the use of the building's parking garage and spaces that is separate from the building's space lease. The price shall be based on market rates for on-site (off-street) parking spaces.

A tenant shall have the option to offer short-term parking lease arrangements for their employees. Tenants will charge full market rate price for the use of the parking garage.

- › **Preferential parking.** Six parking spaces in the garage (5 percent of spaces) will be designated for carpool and vanpool vehicles. These spaces are in areas close or convenient to the building's elevators and staircases to the upper floors.

The Property Owner may designate a limited number of parking spaces in the garage as reserved; following City requirements, these spaces would be subject to a price premium.

Tenant Lease Requirements

The Property Owner will require in each tenant's lease agreement that the tenant provide the following for their employees:

- › Qualified transportation fringe benefits, including the use of pre-tax dollars by employees for the purchase of MBTA transit passes and other approved commuting expenses. Also referred to as "commuter tax benefit" this pre-tax purchase is free from both federal and state income and payroll taxes.
- › A guaranteed ride home program, which provides direct, subsidized transportation home for an employee for an emergency or unexpected personal/family event

In addition to the terms above, for tenants with fifty (50) or more employees, the Property Owner will require in their lease agreement that the tenant:

- › submit their own Mobility Management Plan
- › provide their own on-site Transportation Coordinator and to identify the work space location or office and contact information for the on-site Transportation Coordinator prior to occupancy of the building
- › provide for their employees the following services, as required by the Somerville Zoning Ordinance:
 - post and distribute mobility management information, including information pertaining to walking, cycling and transit access to the property
 - host an annual mobility management education meeting (e.g., a transportation fair)
- › charge employees the full market rate price (i.e., not subsidize) of garage parking (thereby passing on to their employees the full market rate cost charged by the property owner or their designated property manager)
- › provide subsidized transportation expenses for those employees who do not regularly use the parking garage (at the discretion of each employer, these may be in the form of discounted transit passes, Bluebikes memberships, and/or parking cash-out programs)

The Property Owner shall provide a copy of the lease agreement language specifying such measures to the Mobility Director for review prior to the issuance of the tenant's buildout Certificate of Occupancy.

Tenant Responsibilities

As noted, tenants with fifty or more employees must designate an on-site staff contact to coordinate with the building's TDM/Transportation Coordinator on various transportation initiatives concerning the building's employees. The tenant's Transportation Coordinator will work with the property's Transportation Coordinator on the implementation of the MMP's TDM programs and services, including to:

- › disseminate transportation information to employees, including information on transportation fringe benefits, financial incentives, and the guaranteed ride home program
- › assist in the administration of employee commute surveys
- › participate in an annual mobility management education meeting(s)
- › assist in ride-matching for carpools and vanpools

Tenants with fifty or more employees must also follow through with their lease agreement to provide the required transportation demand measures for their employees, as detailed above under *Tenant Lease Requirements*.



5

Monitoring and Reporting

On behalf of the Property Owner, the Property Manager will implement a transportation monitoring program to ascertain the level of success of the mobility management plan in limiting the use of vehicle trips to the site. Annually, the Property Manager will submit to the City of Somerville's Mobility Division a report on the monitoring results and the status of the TDM measures in effect.

Reporting

Annually, the Property Manager will submit to the City of Somerville's Mobility Director a summary report that documents the results of any new mobility data collection, including from a commute/travel survey and traffic monitoring counts (detailed next). The report will also present a status of the MMP initiatives that are in place or that were implemented in the reporting year. If monitoring identifies a shortfall in meeting the MMP's commitments to limit vehicle trips, the Property Manager will propose and implement adjustments to the TDM programs and services or implement additional measures.

The report will include a current list of employer tenants and their number of employees who report to work on-site.

Monitoring

Travel Choice Survey

Annually, the Property Manager will conduct a travel (commute) choice survey of the building tenants and their employees to determine the number of employees who commute by using public transportation, private automobile, ride-hailing services, bicycling, or walking.

These surveys will be developed through consultation with the City of Somerville Mobility Division and will be administered by (or with the assistance of) the on-site TDM coordinator(s). Surveys are intended to complement the parking occupancy and vehicle trip counts by providing a qualitative understanding of how well the elements of the MMP and its TDM measures are working. The survey will at a minimum (1) ask employees to identify the type and frequency of modes of transportation used in their commute to the building in a typical week, (2) explore reasons behind driving alone, and (3) gauge awareness of TDM-related incentives and site amenities.

The surveys will be administered to achieve a statistically valid sample of the property's occupants (employees). The aim is to conduct the surveys in either the spring or fall season of a given year (April-May or September-October), in a period that coincides with the parking occupancy data collection. The survey will be completed during a week without any holidays and when area schools are in session.

The surveys may be conducted by mail (hard copy questionnaire) and/or email (online or web-based questionnaire). Regardless of the type of survey ultimately used, a high degree of follow-up is recommended to achieve a statistically significant response rate.

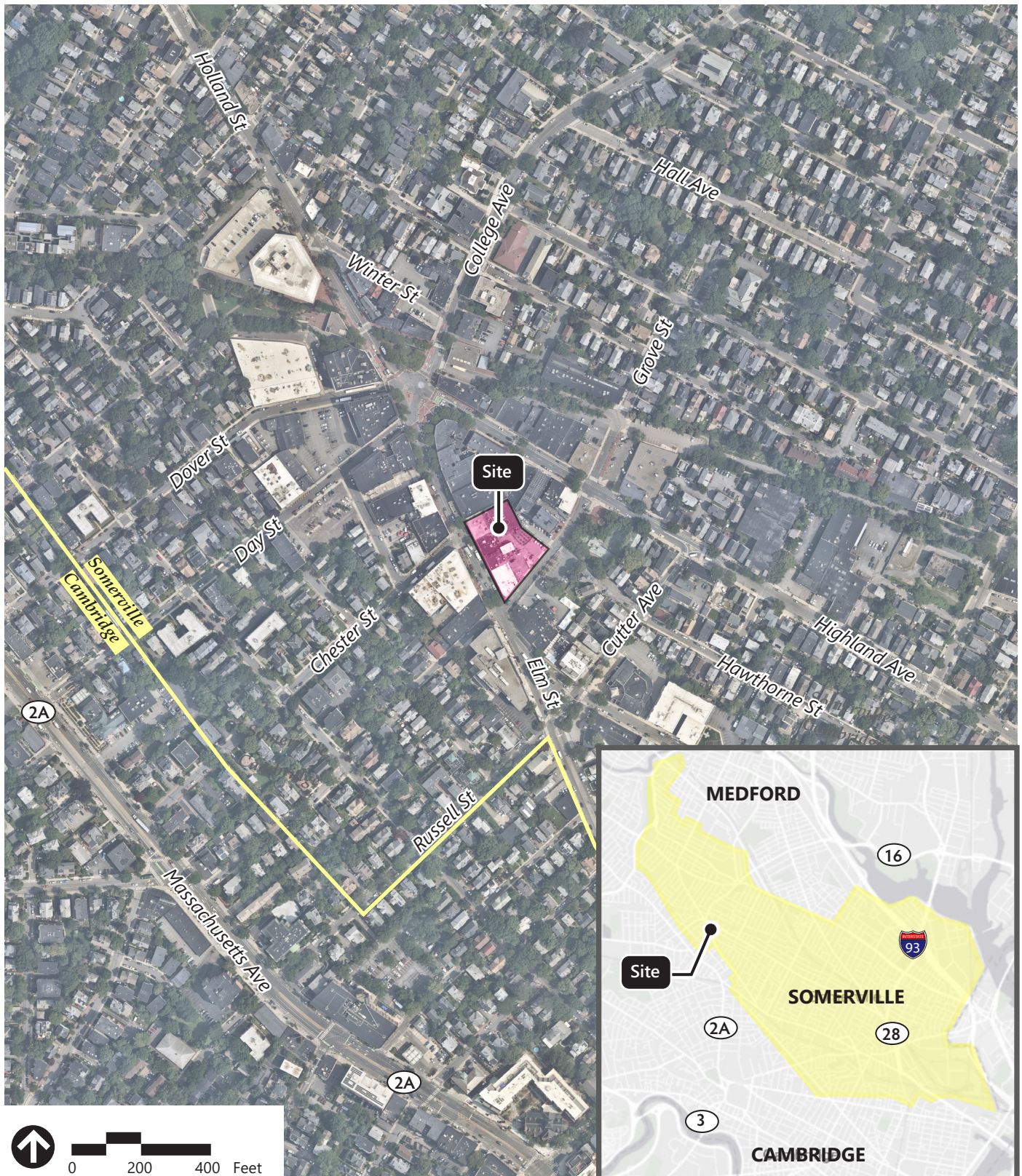
Transportation Activity Counts

Within one year of the issuance of the Certificate of Occupancy and tenant occupancy of the Project, the Property Manager will conduct the first of its transportation activity observations/counts, consisting of the following:

- Annually, conduct a review of cars/motor vehicle parking occupancy at the Development Site's parking garage. Motor vehicle counts are expected to be collected through the parking garage's revenue control system, producing time-stamped ins/outs of vehicles, coupled with an observed occupancy count. A continuous week of data will be reviewed to determine peak parking demand and usage patterns.
- Annually, in concert with the review of parking garage activity, record the volume of the property's entering and exiting vehicular traffic on a typical weekday.
- Annually, conduct observations of bicycle parking occupancy at the Development Site, for the tenant and visitor parking locations, via a field count at a midday period that represents a peak parking demand.

Data collection activities will be conducted during a week without any holidays and when area schools are in session. The data collection activities should occur on the same day(s) and coincide with the travel mode choice survey.

- Figure 1 Site Location Map**
- Figure 2 Conceptual Site Plan**
- Figure 3 Motor Vehicle Access Plan**
- Figure 4 Service Vehicle Access Plan**
- Figure 5 Bicycle Parking Access Plan**
- Figure 6 Pedestrian Access Plan**
- Figure 7 Bicycle Access and Local Connections**
- Figure 8 Pedestrian Access and Local Connections**
- Figure 9 Existing Public Transportation Services**
- Figure 10 Existing Pedestrian Facilities**
- Figure 11 Existing Bicycle Facilities**
- Figure 12 Existing Bike Share and Car Share Locations**
- Figure 13 Trip Distribution on Local Area Network**

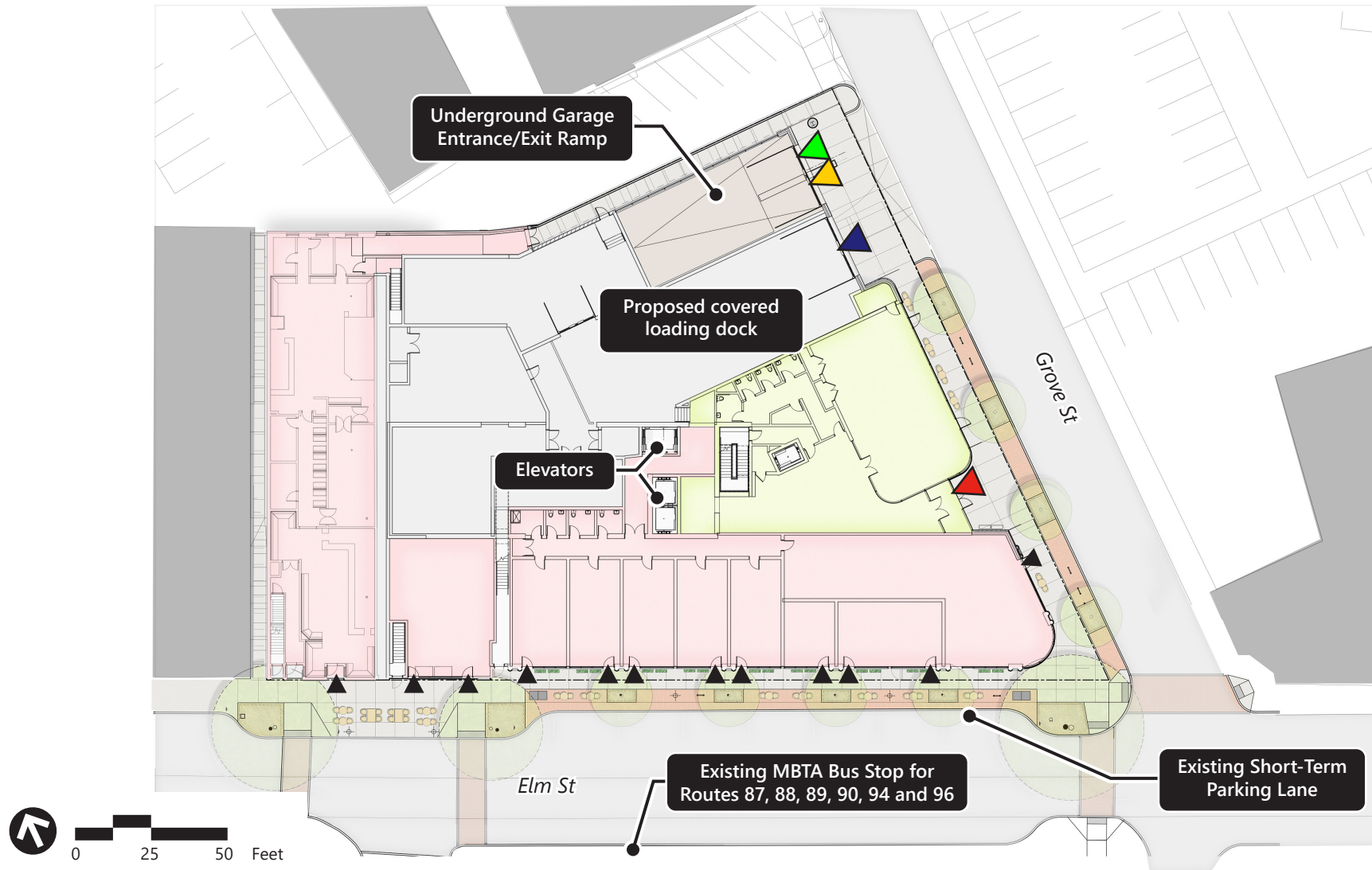


Source: Nearmap Aerial



Figure 1
Site Location Map

Davis Square Lab
Somerville, Massachusetts



Source: Base Image / Site Plan by Utile

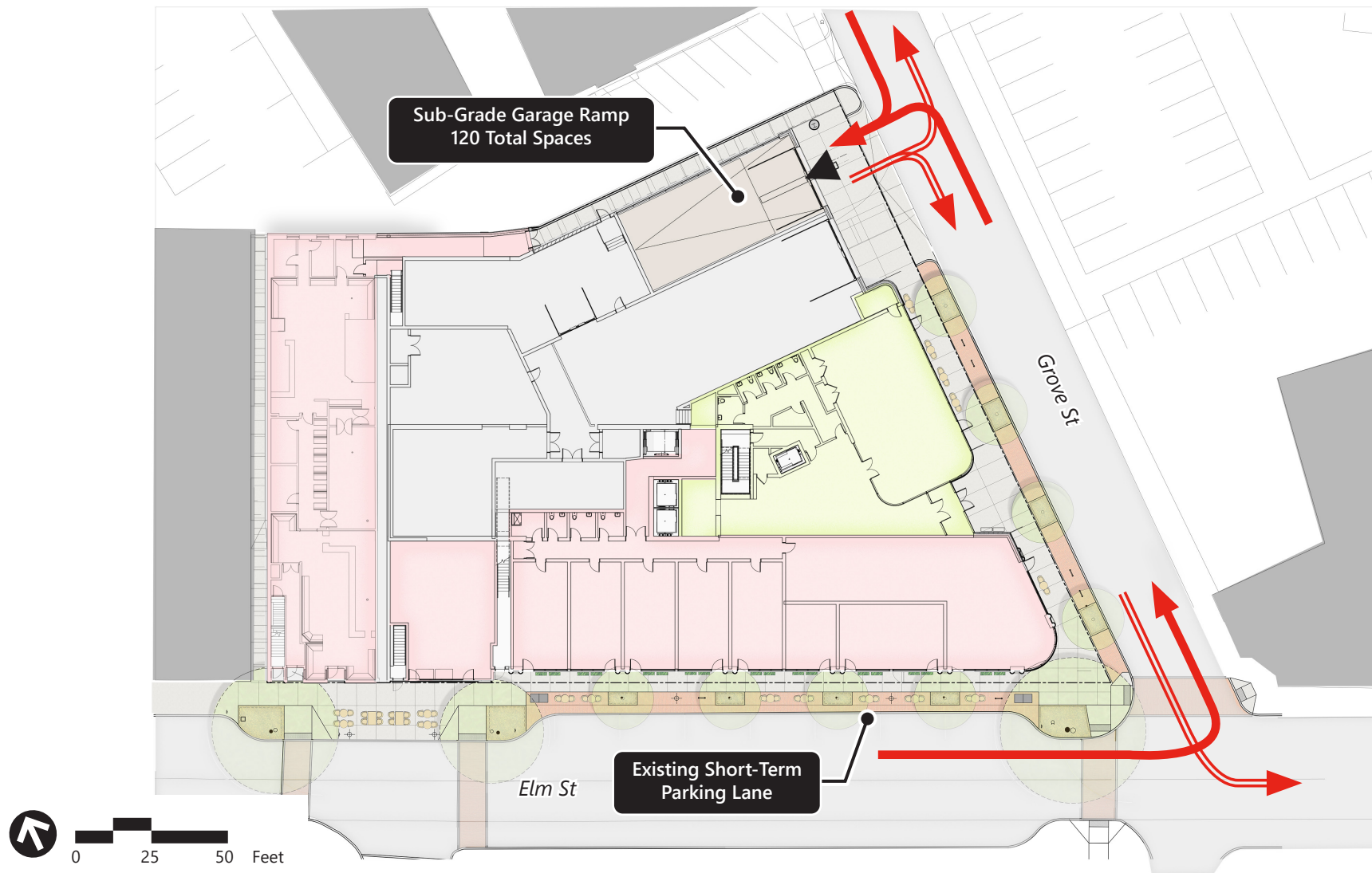
- ▲ Lab Space Pedestrian Access / Building Lobby Entrance
- ▲ Retail, Food & Beverage Space Entrance
- ▲ Garage Access
- ▲ Loading Dock
- ▲ Bike Room Access

- Retail, Food & Beverage Space
- Lobby/Multi-Purpose Room
- Back of House / Building Operations



Figure 2
Conceptual Site Plan




Davis Square Lab
Somerville, Massachusetts



Source: Base Image / Site Plan by Utile



Figure 3
Motor Vehicle Access Plan

-  Parking Garage Entrance
-  Vehicle Access to Site Parking
-  Vehicle Egress from Site Parking

Davis Square Lab
Somerville, Massachusetts



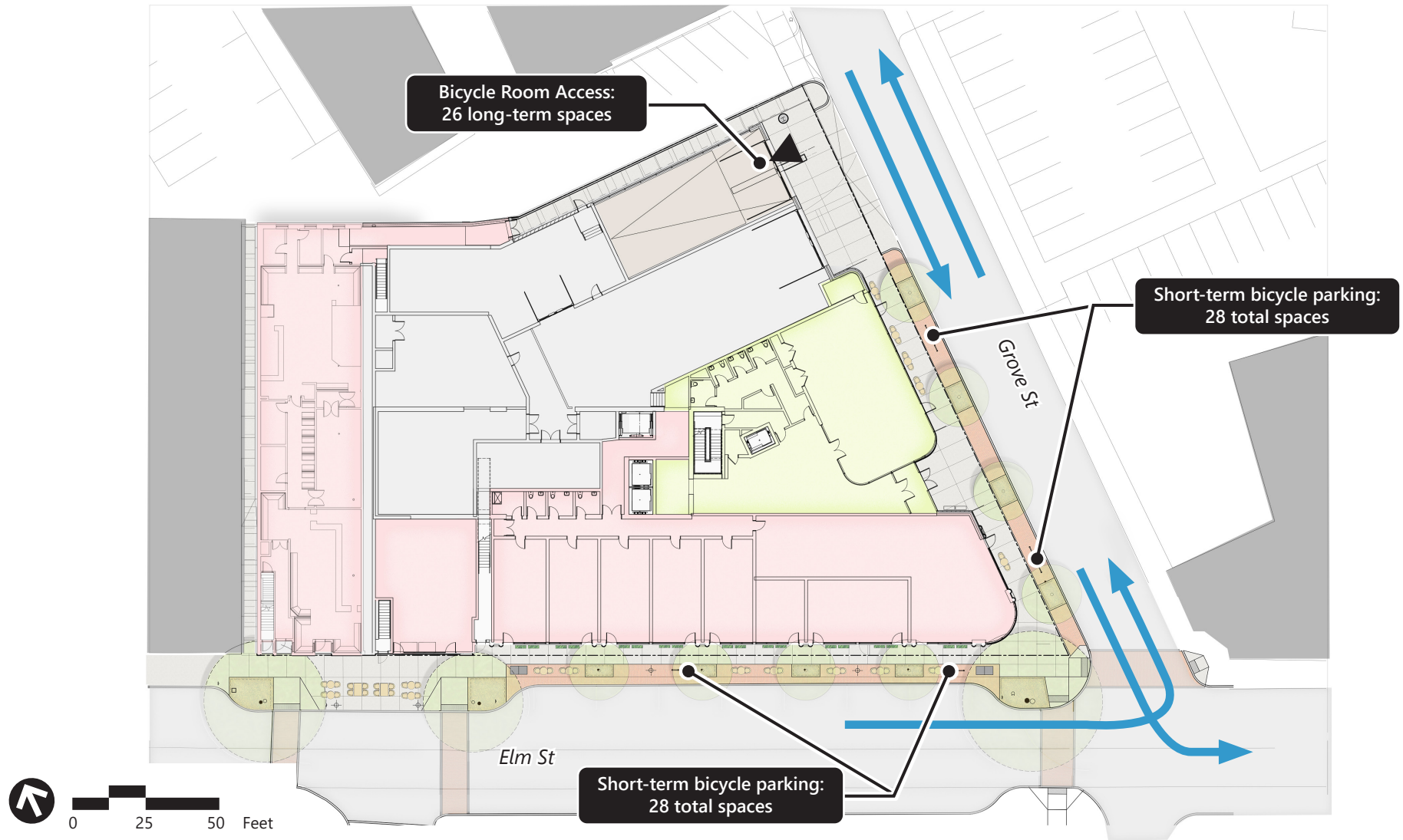
Source: Base Image / Site Plan by Utile



Figure 4
Service Vehicle Access Plan

- ▲ Loading Dock
- Service Vehicle Access
- == Service Vehicle Egress

Davis Square Lab
Somerville, Massachusetts



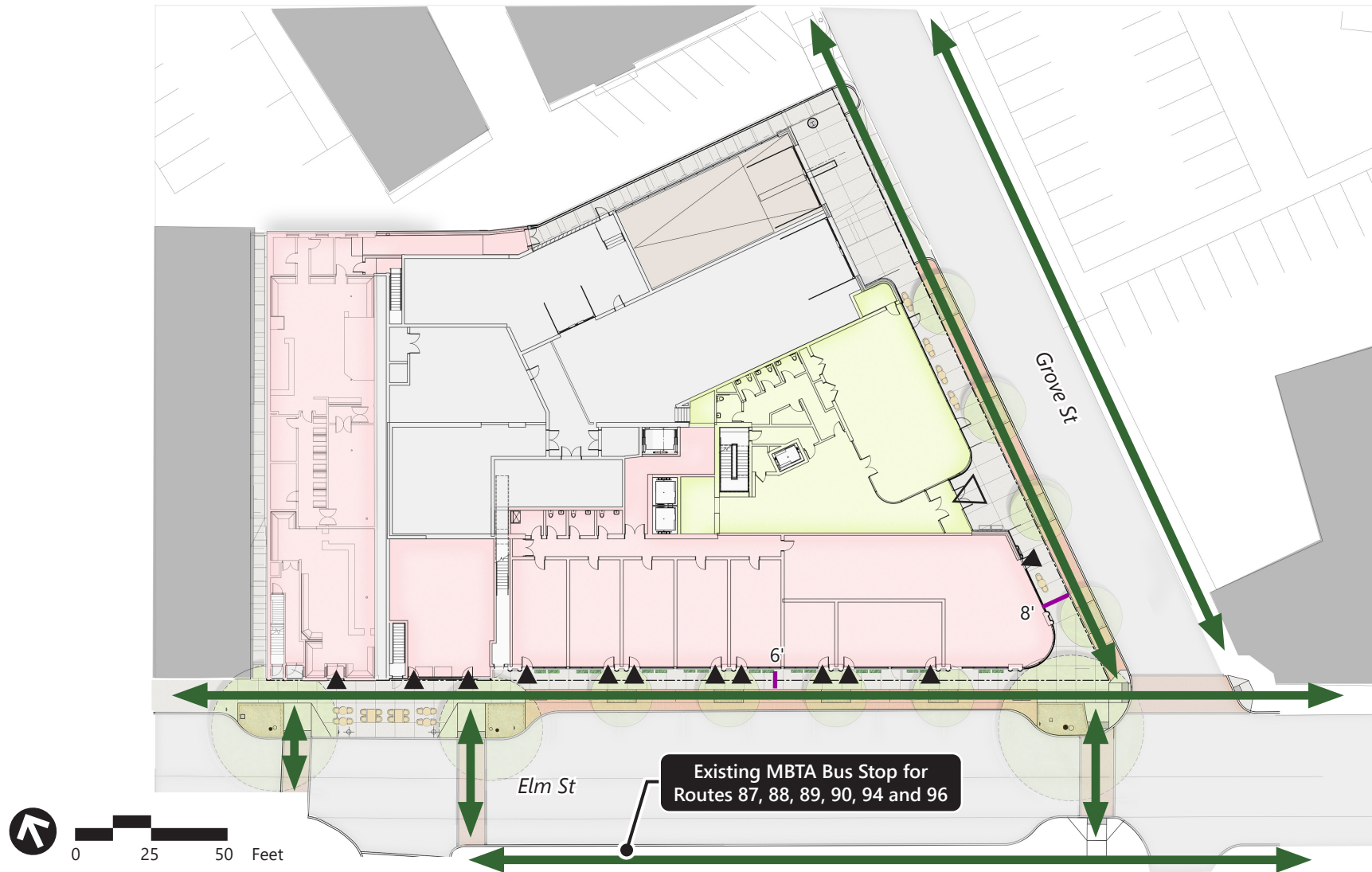
Source: Base Image / Site Plan by Utile



Figure 5
Bicycle Parking Access Plan

- ▲ Access to Bicycle Room
- Permitted Bicycle Movement




Davis Square Lab
Somerville, Massachusetts



Source: Base Image / Site Plan by Utile



Figure 6
Pedestrian Access Plan

-  Lab Space Pedestrian Access / Building Lobby Entrance
-  Retail, Food & Beverage Space Entrance
-  Pedestrian Pathway

Davis Square Lab
Somerville, Massachusetts



Source: Nearmap Aerial



Figure 7

Bicycle Access and Local Connections

Davis Square Lab
Somerville, Massachusetts



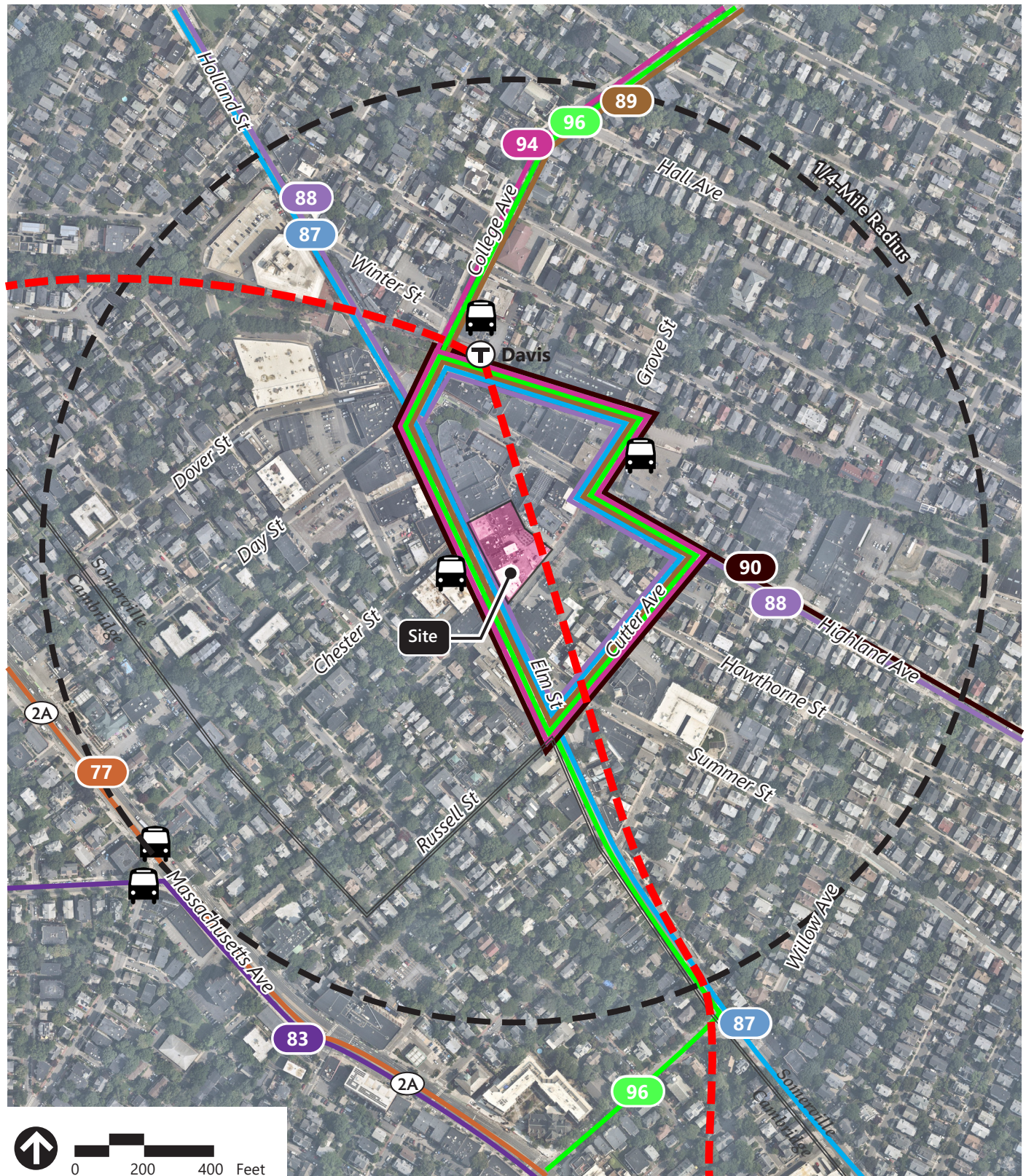
Source: Nearmap Aerial



Figure 8

Pedestrian Access and Local Connections

**Davis Square Lab
Somerville, Massachusetts**



Source: Nearmap Aerial, MBTA Website





-  Existing MBTA Bus Route
-  MBTA Red Line
-  Existing MBTA Bus Stop
-  Existing MBTA Subway Station



Figure 9

Existing Public Transportation Services

**Davis Square Lab
Somerville, Massachusetts**



Source: Nearmap Aerial and Field Observations

- Sidewalks
- Crosswalks
- Shared-Use Path



Figure 10

Existing Pedestrian Facilities

**Davis Square Lab
Somerville, Massachusetts**



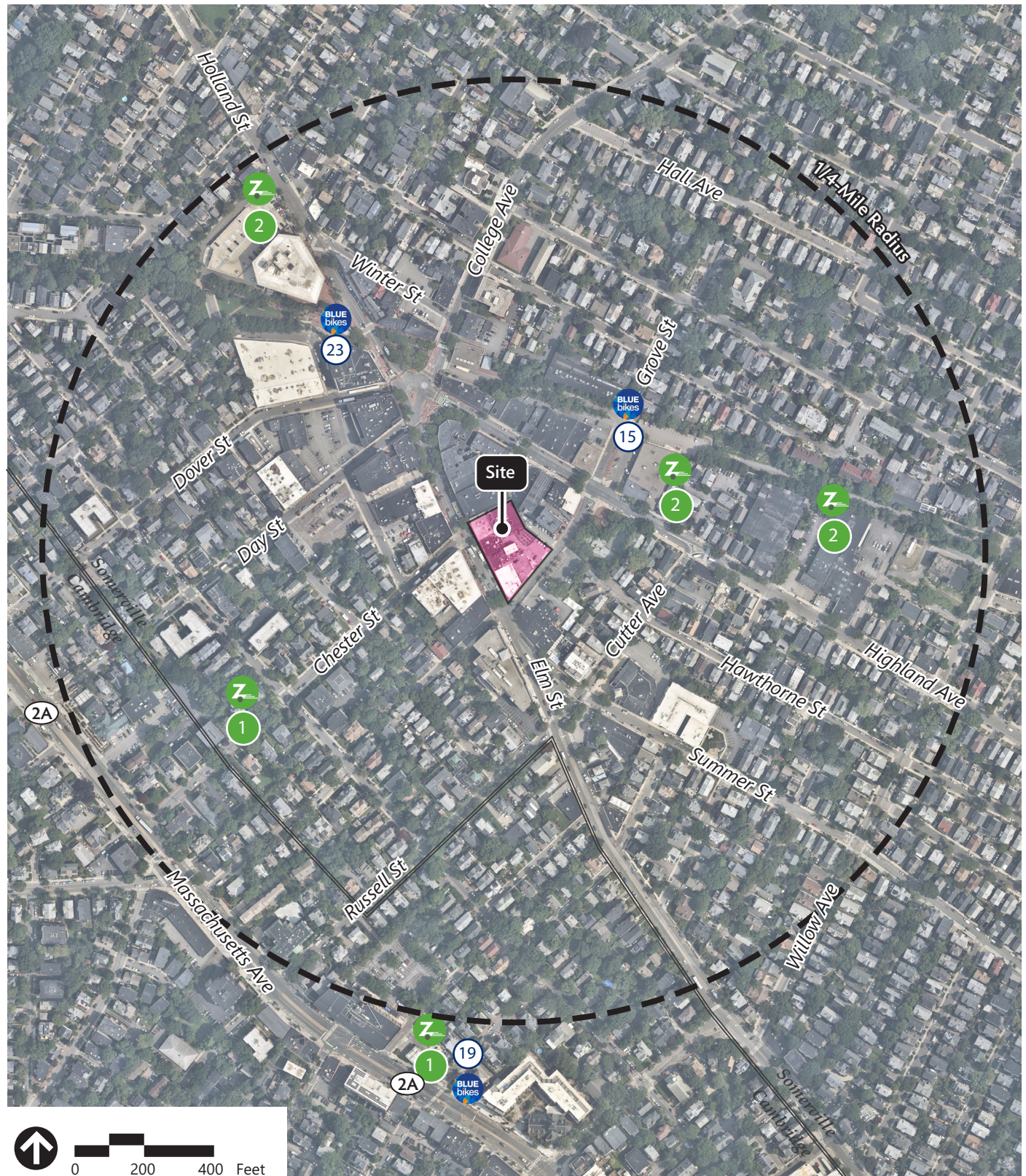
Source: Nearmap Aerial, Somerville Bikes Map (Feb 2021)

- Bike Lanes
- Sharrows Pavement Markings
- Shared-Use Path



Figure 11
Existing Bicycle Facilities

Davis Square Lab
Somerville, Massachusetts



Source: Nearmap Aerial





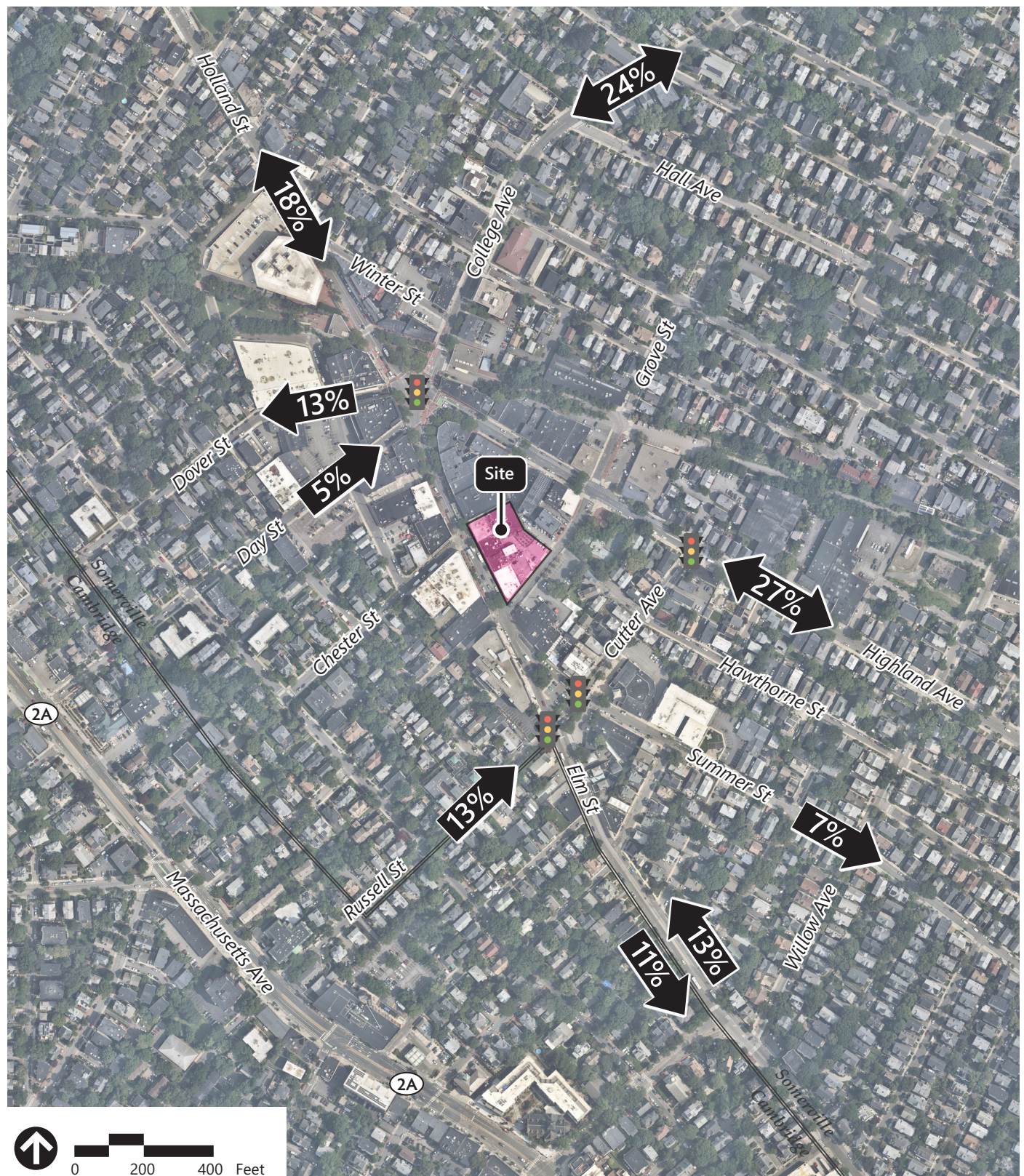
-  BlueBikes Station
-  Number of Docks
-  ZipCar Location
-  Number of Vehicles



Figure 12

Existing Bike Share and Car Share Locations

**Davis Square Lab
Somerville, Massachusetts**



Source: Nearmap Aerial, ACS Journey-to-Work data (2012-2016)



Signalized Intersection



Figure 13

Trip Distribution on Local Area Network

**Davis Square Lab
Somerville, Massachusetts**