CITY OF SOMERVILLE

Transportation Access Plan

599 Somerville Avenue

Prepared for
City of Somerville

Prepared by
Howard Stein Hudson

November 2021

HOWARD STEIN HUDSON

Engineers + Planners

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Appendices

Project Summary

Howard Stein Hudson (HSH) has prepared the Transportation Access Plan (TAP) with Site Plans and the following narrative for the 599 Somerville Avenue redevelopment (the "Project" or "Site") on behalf of the 599 Somerville Ventures LLC (the "Proponent"). The Project is in Somerville's Spring Hill neighborhood at the corner of Somerville Avenue and Spring Street. The Project consists of the demolition of the existing building and the construction of a new three-story laboratory/life science research building consisting of approximately 43,200 square feet (sf) that may include 500 sf of ground floor retail. The Project will provide an underground parking garage with approximately 33 parking spaces as well as 10 covered, secure bicycle parking spaces in the garage and four outdoor bicycle racks for eight bicycles.

The Project development site address is:

599 Somerville Avenue (Mid-Rise)

Site Access and Plans

The Project is bound by Somerville Avenue to the south, Spring Street to the east, and existing residential and commercial buildings to the north and west. The Project Site will maintain the existing curb cut on Spring Street along the east side of the building. The driveway will serve as the access point for all vehicular movements including access to the Project's underground garage as well as loading and service operations. Spring Street is generally a one-way southbound roadway; however, two-way traffic is allowed between Somerville Avenue and the Site driveway, which minimizes vehicular circulation through the neighborhood. Multiple entrances to the building will be provided along Somerville Avenue.

Illustrative Site Plan

The Illustrative Site Plan shown in Exhibit A.1 (**Appendix A**) depicts the general ground level floor plan and site landscape plan. On the ground level there will be an accessory tenant retail space, the lobby area, and laboratory space. Additional laboratory/life science research space will be located on the two upper floors. The ground level will also consist of space for building operations. Ten covered, secure bicycle parking spaces will be located on the garage level.

Transportation Elements Plan

The Transportation Elements Plan is shown in Exhibit A.2 (**Appendix B**). This plan identifies existing transportation elements to remain in grey, items to be removed in red, and proposed transportation elements in blue.

The Site frontage on Somerville Avenue has an existing Massachusetts Bay Transportation Authority (MBTA) bus stop serving the 83 and 87 buses. The Proponent will commit to improving the accessibility and comfort of the MBTA bus stop in front of the Project Site in coordination with the City and MBTA. The existing stop is a far-side stop that serves MBTA bus #83 and #87. Improvements will include a new ADA-compliant stop consistent with MBTA Bus Stop Design Guidelines. The Project will coordinate with the City and the MBTA on final placement of the bus stop. The westbound on-street bicycle lane will be relocated as a cycle track next to the sidewalk.

Proposed changes to signage will primarily consist of on-street parking modifications along the northern curb of Somerville Avenue where two-hour parking on the north side of the road is proposed to be removed to improve existing bus stop operations and construct a raised crosswalk across Somerville Avenue at Spring Street/Kent Street.

Bicycle improvements include relocating the on-street bicycle lane to a separated, raised cycle track adjacent to the site. The raised cycle track will be four feet wide. Proposed street furniture, street trees, streetlights, and a parklet are included along the sidewalks adjacent to the site. Other transportation elements are further discussed in subsequent sections.

Pedestrian Access Plan

Multiple pedestrian access points into the Project are proposed along Somerville Avenue. Access points lead to the lobby areas and are internally connected as shown on Exhibit A.3 (**Appendix C**).

The sidewalk along the north side of Somerville Avenue adjacent to the site is proposed at a width of 13 feet. The sidewalk abutting the site on Spring Street on the east side of the Project is proposed at a width of 14 feet. The wider sidewalks are consistent with the mid-rise district requirements and provide an improved level of comfort for the public realm.

The Project proposes a 12-foot north-south crosswalk across Somerville Avenue between Kent Street and Spring Street for additional connectivity. The Project proposes ADA-compliant ramps across Spring Street. For added pedestrian safety and to create a slow-speed environment on Somerville Avenue, the crosswalk will be raised and level with the sidewalk.

Bicycle Parking Plan

Bicycle parking design and layout references and complies with the Somerville Zoning Ordinance[1], as well as the City of Somerville's *Bicycle Parking Guide* and the Association of Pedestrian and Bicycle Professionals' (APBP's) *Bicycle Parking Guidelines*. Bicycle parking, short- and long-term, will be provided at no cost or fee to users of the Project.

This Project will provide at least the minimum short-term and long-term bicycle parking spaces for the proposed land used and size of the Project. As shown in Exhibit A.4, (**Appendix D**) the proposed bicycle parking will consist of four outdoor bicycle racks to accommodate short-term parking for eight bicycles. Short-term bicycle parking will be provided on outdoor bicycle racks located near the building's primary entrance. The Project will construct 10 secure, covered bicycle parking spaces that will be available for employees in the underground garage. The Project is exceeding the minimum requirements for bicycle parking.

Bicycle parking will be secured via key-fob access or similar and protected by security/monitoring. The bicycle storage room will be located on the garage level. Cyclists are likely to access the bicycle storage room from Spring Street and the garage entry ramp.

A bicycle repair facility will be provided for tenant employees in a convenient location such as the bicycle storage room. Locker rooms with shower facilities will be provided for tenant employees.

Motor Vehicle Parking Plan

The Project will provide 33 parking spaces in an underground garage (see Exhibit A.5. in **Appendix E**). As a shared district garage, the garage for the Project will be commercially operated and open to the public. Motor vehicle parking will be unbundled from any commercial tenant leases as required. Parking will be provided in accordance with the Somerville Zoning Ordinance (Article 11: Parking & Mobility) as well as requirements specific to the land use district to minimize parking supply and encourage alternative modes of transportation. The proposed parking results in an average ratio of 0.76 space per 1,000 sf of laboratory space for the overall development. This parking rate is less than the City's parking minimum for projects outside the transit area; however, the project is one-block away from the transit area where a parking maximum would be required. The project is below the parking maximum if the project was located one block to the west and was within a transit area (44 spaces).

[1] Somerville Zoning Ordinance; Strategic Planning & Community Development; Somerville, MA; Dec. 12, 2019.

The parking spaces will be 8 feet wide and 16 feet long. The drive aisle will be 20 feet wide. Two spaces will be ADA-accessible and marked accordingly. Parking dimensions are consistent with the minimums required by the Somerville Zoning Ordinance.

EV PARKING

The Project proposes to sign, designate, and reserve 25% of vehicle parking spaces as electric vehicle (EV) charging spaces per LEED platinum requirements. The remaining 75% of garage vehicle parking spaces will be EV Ready spaces. EV Ready spaces will be equipped with Level 2 chargers (or then current technology) as demand warrants.

CARPOOL/VANPOOL PARKING

Two spaces (5% of spaces) will be signed, designated, and reserved for carpool/vanpool and be located in preferential locations close to building entrances, provided the tenants have active carpooling in the building. Additional spaces will be provided as demand warrants. The building's Transportation Coordinator will be responsible for ensuring that if an existing or incoming tenant will have an active employee carpool, then up to two spaces will be reserved for that use in the garage.

CAR SHARE PARKING

Two spaces (5% of spaces) will be signed, designated, and reserved and made available for car share vehicles to a car share service provider for use by tenants of the property only. Notification of available spaces to car share service providers must be documented prior to the issuance of any Certificate of Occupancy and in annual reporting. Applicant may choose instead to provide their own vehicles and reservation system for on-site car sharing spaces.

Vehicle Movement Plan

Loading and service operations will occur in the designated loading area in the northeast corner of the building. Vehicles will back into the loading bay via the driveway along Spring Street to the east. The loading bay will be approximately 20 feet wide and accommodate a single WB-40 truck or two smaller vehicles. All vehicle movements exiting the loading area will also be forward-out, with a right-turn to Spring Street southbound. As shown in Exhibit A.6 (**Appendix F**), the largest vehicles expected to use the loading area are WB-40 trucks.

The loading bay will also provide access to the trash room to remove waste and recycling, as well as an elevated loading dock, a freight elevator, and a service corridor for effortless distribution of deliveries within the building. Garbage pick-up activity will also take place in the loading area with garbage trucks pulling onto Spring Street front-first from Somerville Avenue before backing into the loading area.

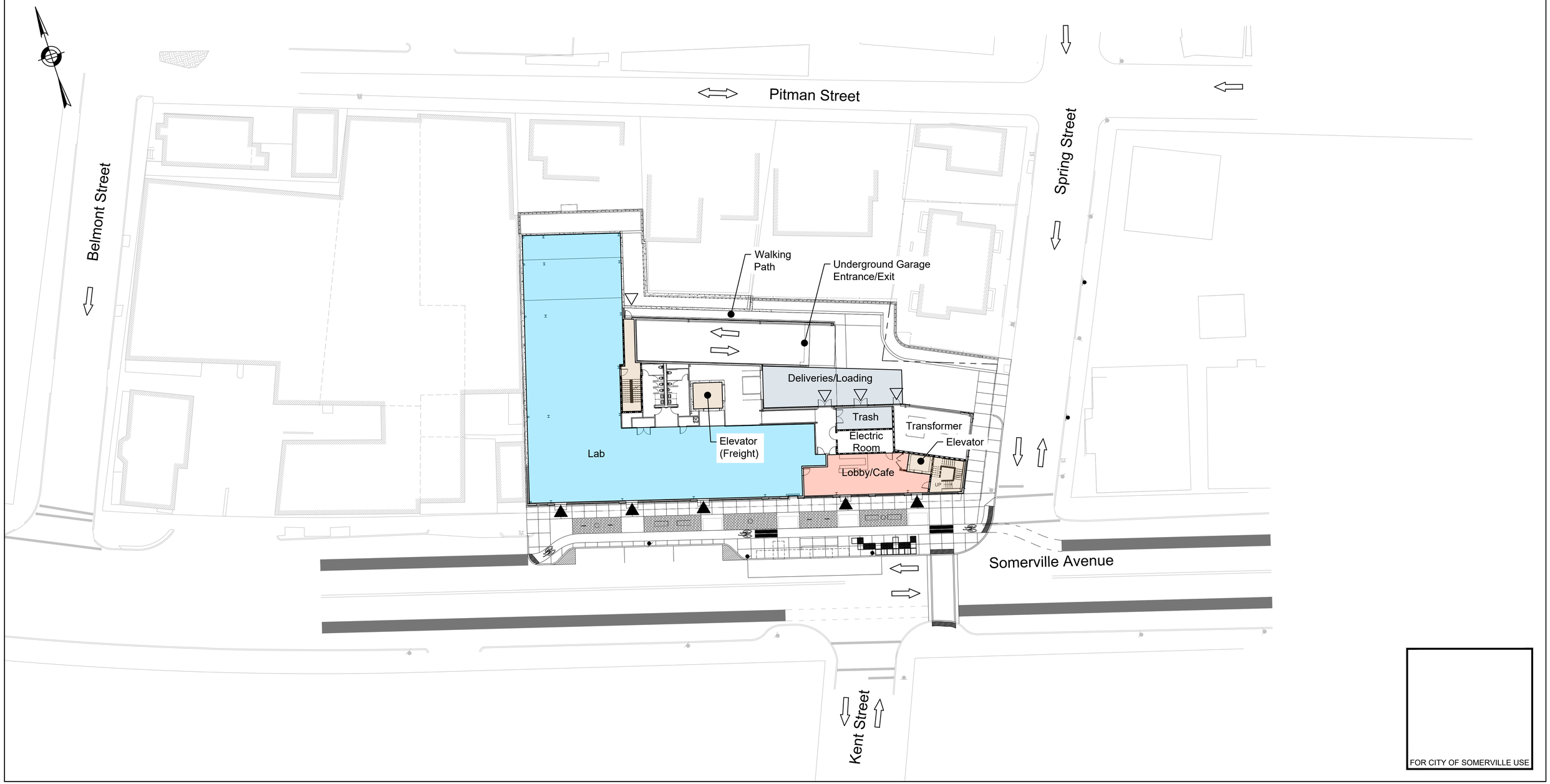
Passenger car movements to and from the garage shall be accommodated via the curb cut on Spring Street. The proposed garage will have two-way circulation throughout the garage level. Stairway and elevator access is provided from the garage level to the lobby. The garage facility is not expected to have high turnover, the parking space dimensions in the garage are consistent with the minimums outlined in the Somerville Zoning Ordinance.

HOWARD STEIN HUDSON

Engineers + Planners

Appendix A

Illustrative Site Plan



FOR CITY OF SOMERVILLE USE

0 10 20 40 80 FEET

NOT FOR CONSTRUCTION

- Travel Lane
- Primary Access
- Secondary Access
- Property Line
- Retail
- Lab
- Circulation
- Delivery/Trash Areas

Notes
1. Existing Lot No. 44-I-7

FINAL DESIGN PER

COMMONWEALTH OF MASSACHUSETTS
KERI PYKE CIVIL No. 47252 REGISTERED PROFESSIONAL ENGINEER
11/1/2021

TRANSPORTATION ACCESS PLAN

599 SOMERVILLE AVENUE

ILLUSTRATIVE SITE PLAN

EXHIBIT A.1

HOWARD STEIN HUDSON
11 Beacon Street, Suite 1010
Boston, MA 02108
www.hshassoc.com

Date: November 2021

Scale: 1" = 20'-0"

SITE PLAN IS SUBJECT TO REVISIONS BY CITY OF SOMERVILLE

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HOWARD STEIN HUDSON

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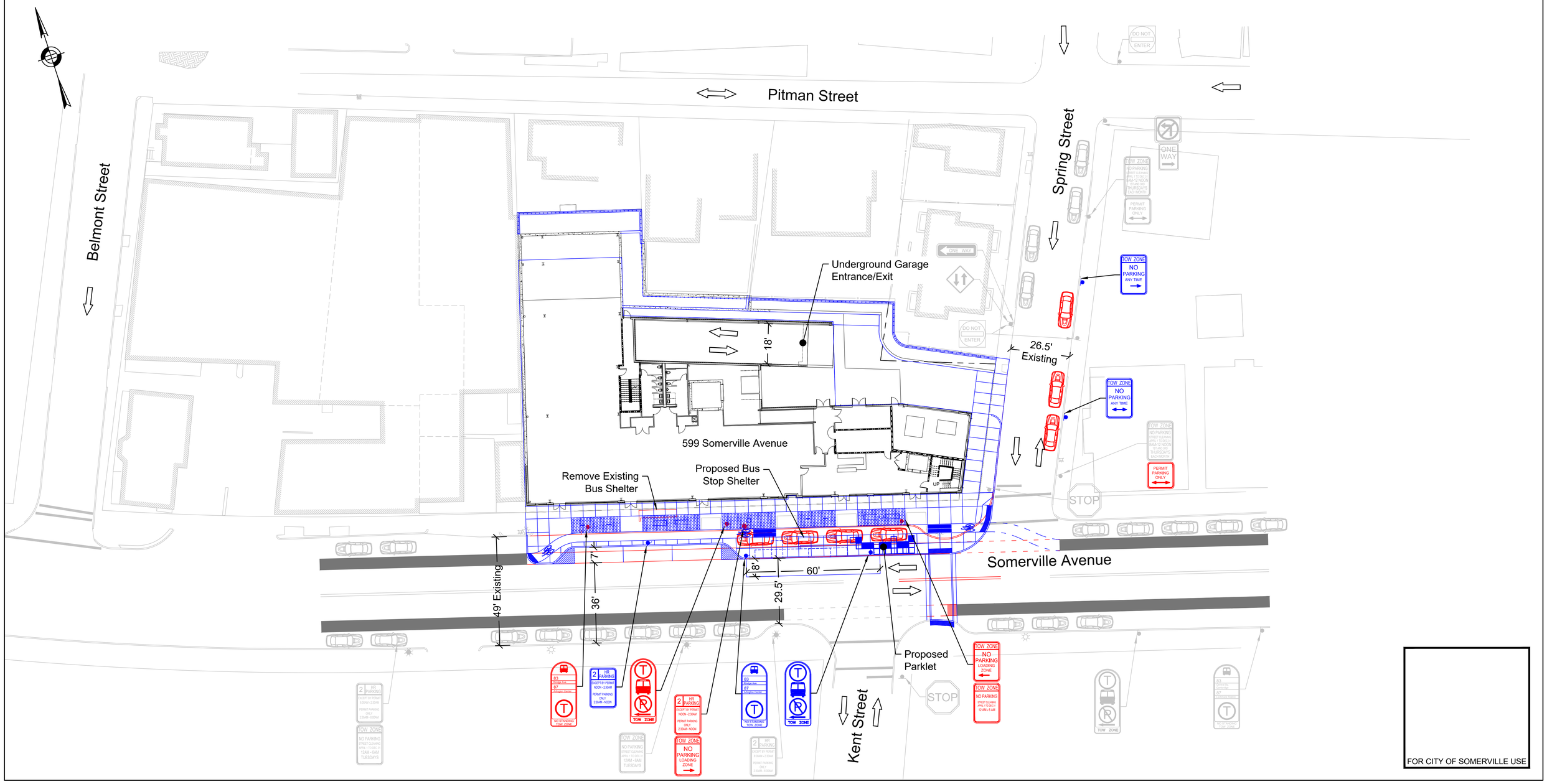
Appendix B

Transportation Elements Plan



FOR CITY OF SOMERVILLE USE

0 10 20 40 80 FEET

NOT FOR CONSTRUCTION

- Existing Elements to be Removed
- Existing Elements to Remain
- Proposed Elements
- Sign to be Removed
- Sign to Remain
- Proposed Sign
- Parking to be Removed
- Existing Parking
- Proposed Bicycle Rack
- Proposed Bench
- Existing Street Light
- Travel Lane
- Property Line

Notes

1. Existing Lot No. 44-I-7

FINAL DESIGN PER

COMMONWEALTH OF MASSACHUSETTS
KERI PYKE CIVIL No. 47252 REGISTERED PROFESSIONAL ENGINEER
11/1/2021

TRANSPORTATION ACCESS PLAN

599 SOMERVILLE AVENUE

TRANSPORTATION ELEMENTS PLAN

EXHIBIT A.2

HOWARD STEIN HUDSON
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Date: November 2021

Scale: 1" = 20'-0"

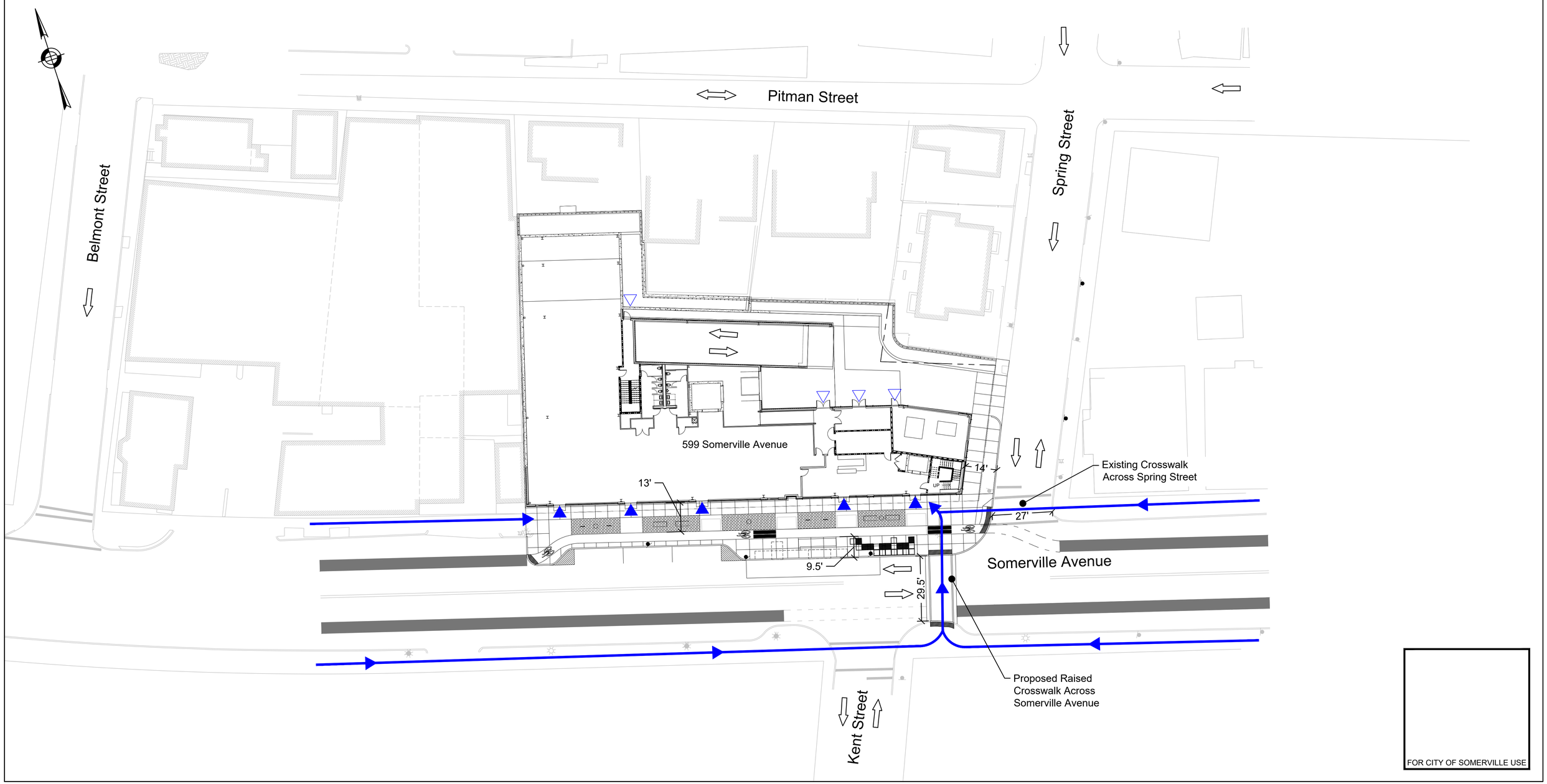
SITE PLAN IS SUBJECT TO REVISIONS BY CITY OF SOMERVILLE

HOWARD STEIN HUDSON

Engineers + Planners

Appendix C

Pedestrian Access Plan



FOR CITY OF SOMERVILLE USE

NOT FOR CONSTRUCTION

0 10 20 40 80 FEET

- Travel Lane
- Pedestrian Path of Travel
- Primary Access (Public)
- Secondary Access (Employees)
- Property Line

Notes
1. Existing Lot No. 44-I-7

FINAL DESIGN PER

COMMONWEALTH OF MASSACHUSETTS
KERI PYKE
CIVIL
No. 47252
REGISTERED PROFESSIONAL ENGINEER
11/1/2021

TRANSPORTATION ACCESS PLAN

599 SOMERVILLE AVENUE

PEDESTRIAN ACCESS PLAN

EXHIBIT A.3

HOWARD STEIN HUDSON
11 Beacon Street, Suite 1010
Boston, MA 02108
www.hshassoc.com

Date: November 2021

Scale: 1" = 20'-0"

SITE PLAN IS SUBJECT TO REVISIONS BY CITY OF SOMERVILLE

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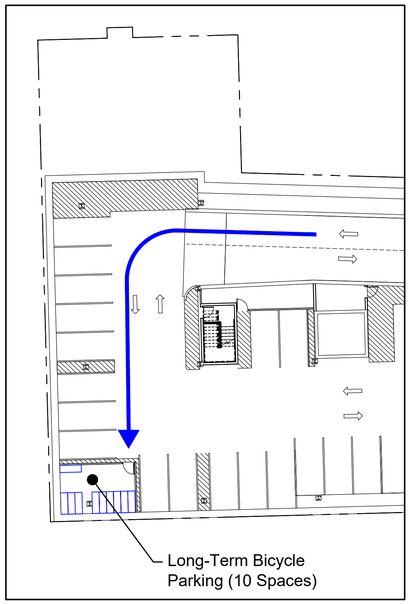
HOWARD STEIN HUDSON

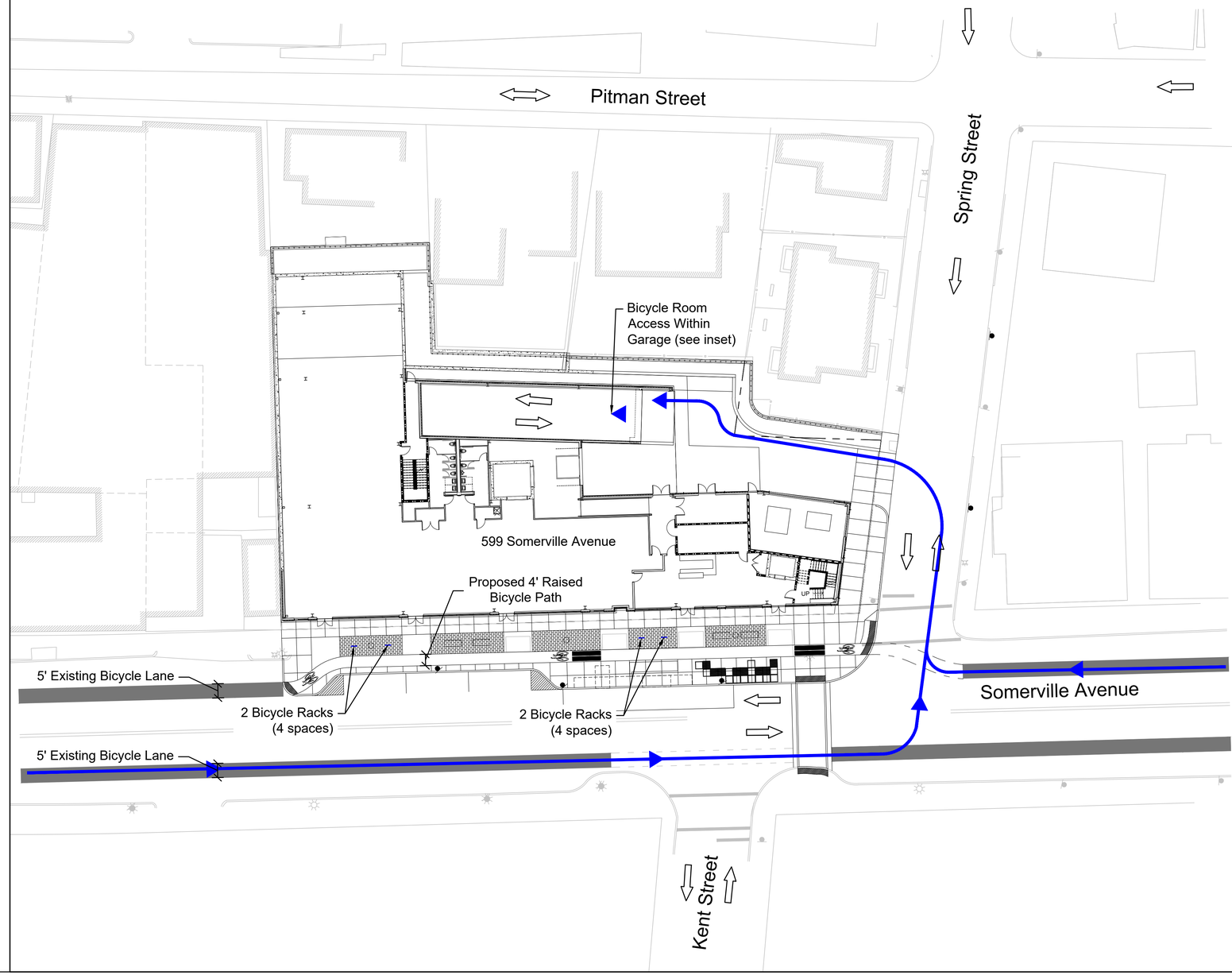
Engineers + Planners

Appendix D

Bicycle Parking Plan

Bicycle Parking on Lower Level (Garage)





FOR CITY OF SOMERVILLE USE

NOT FOR CONSTRUCTION

0 10 20 40 80 FEET

Travel Lane

Bicycle Path of Travel

Bicycle Storage Point of Access

Proposed Bike Rack

Property Line

Bicycle Parking Zoning Requirements			Total Bicycle Parking Provided	
	Short-term/Visitor	*Long Term*	*Short-term/Visitor*	*Long Term*
Retail:	1 space per 2,500 sf (1)	1 space per 10,000 sf (1)	8 spaces	10 spaces
R&D/Lab:	1 space per 20,000 sf (2)	1 space per 5,000 sf (8)		

Notes

1. Existing Lot No. 44-I-7

FINAL DESIGN PER

COMMONWEALTH OF MASSACHUSETTS
KERI PYKE CIVIL No. 47252 REGISTERED PROFESSIONAL ENGINEER
11/1/2021

TRANSPORTATION ACCESS PLAN

599 SOMERVILLE AVENUE

BICYCLE PARKING PLAN

EXHIBIT A.4

HOWARD STEIN HUDSON
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Date: November 2021

Scale: 1" = 20'-0"

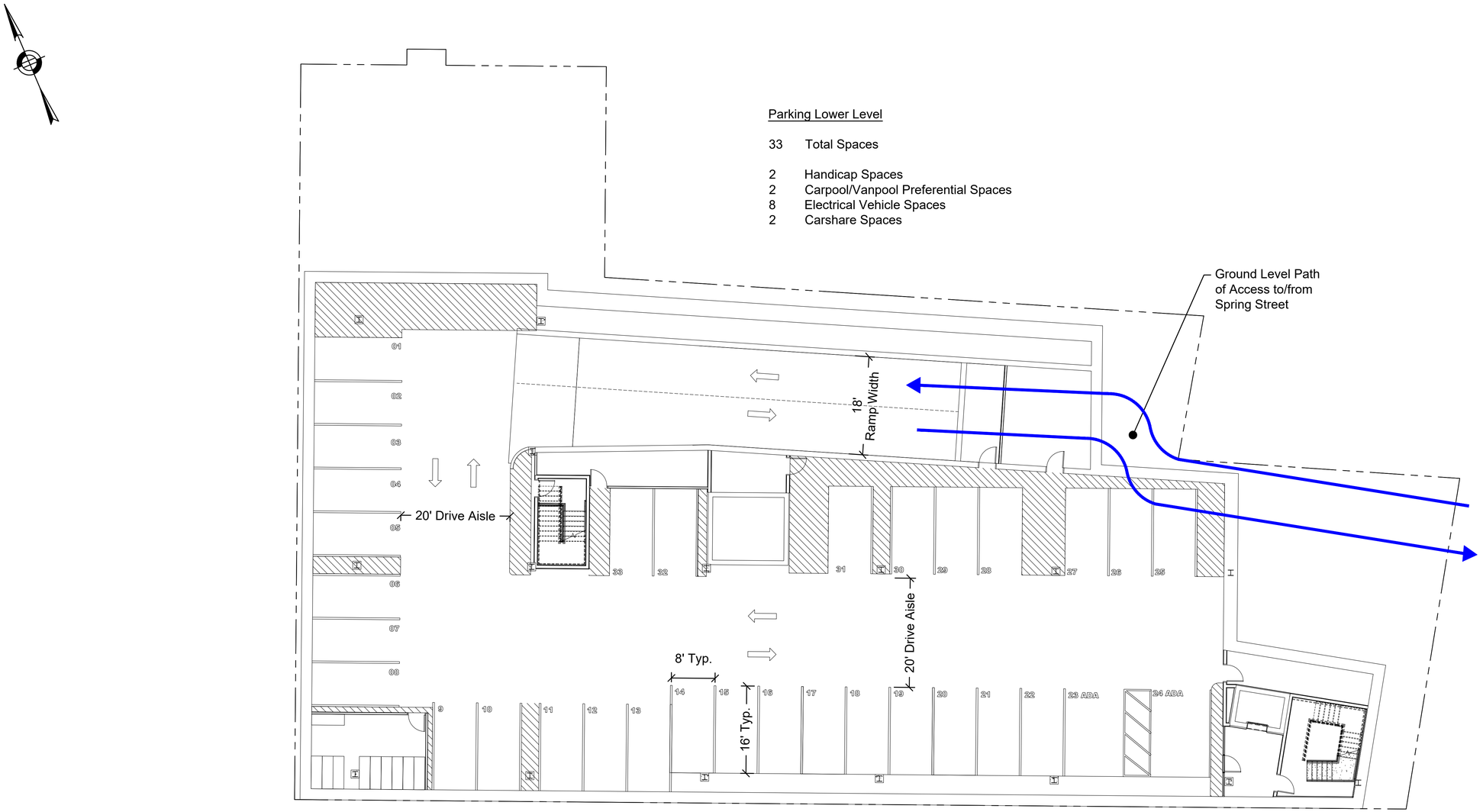
SITE PLAN IS SUBJECT TO REVISIONS BY CITY OF SOMERVILLE

HOWARD STEIN HUDSON

Engineers + Planners

Appendix E

Motor Vehicle Parking Plan



FOR CITY OF SOMERVILLE USE

NOT FOR CONSTRUCTION

0 5 10 20 40 FEET

Flow of Travel

Vehicle Access

Property Line

Notes
1. Existing Lot No. 44-I-7

FINAL DESIGN PER

COMMONWEALTH OF MASSACHUSETTS
KERI PYKE CIVIL No. 47252 REGISTERED PROFESSIONAL ENGINEER
11/1/2021

TRANSPORTATION ACCESS PLAN

599 SOMERVILLE AVENUE

MOTOR VEHICLE PARKING PLAN

EXHIBIT A.5

HOWARD STEIN HUDSON
11 Beacon Street, Suite 1010
Boston, MA 02108
www.hshassoc.com

Date: November 2021

Scale: 1" = 10'-0"

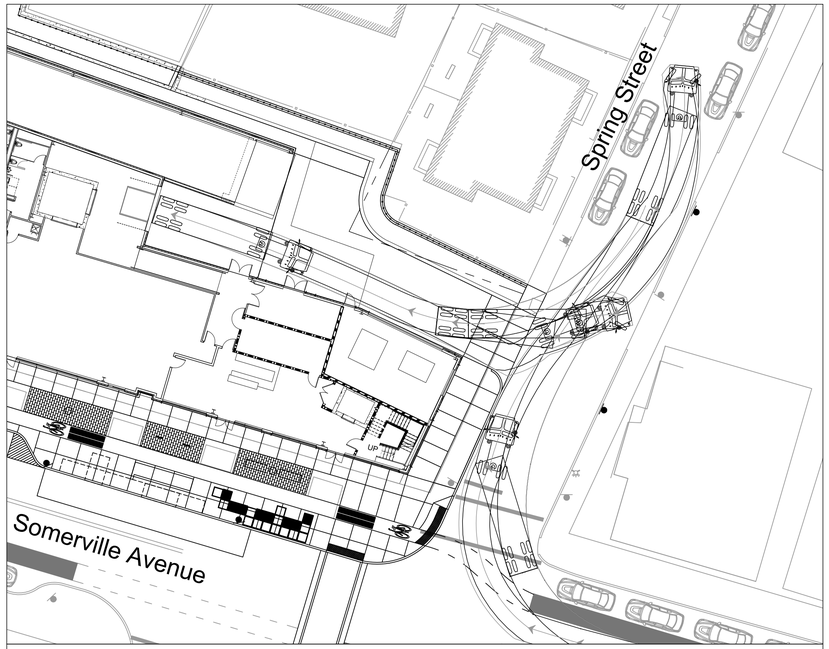
SITE PLAN IS SUBJECT TO REVISIONS BY CITY OF SOMERVILLE

HOWARD STEIN HUDSON

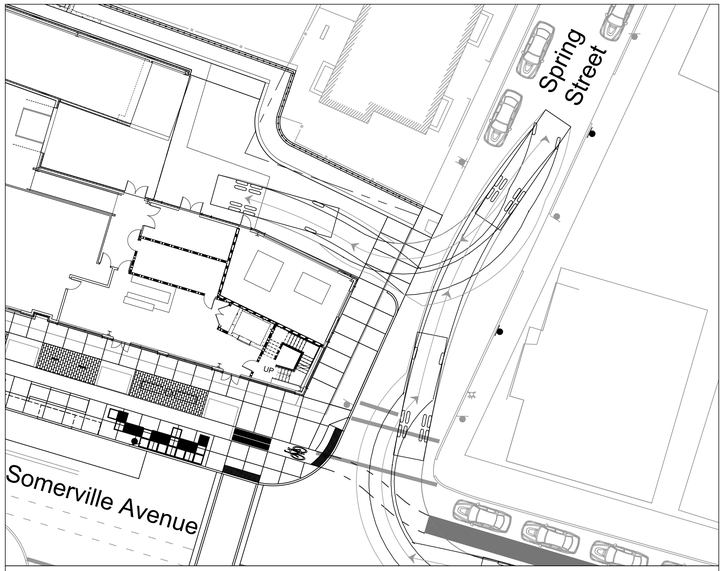
Engineers + Planners

Appendix F

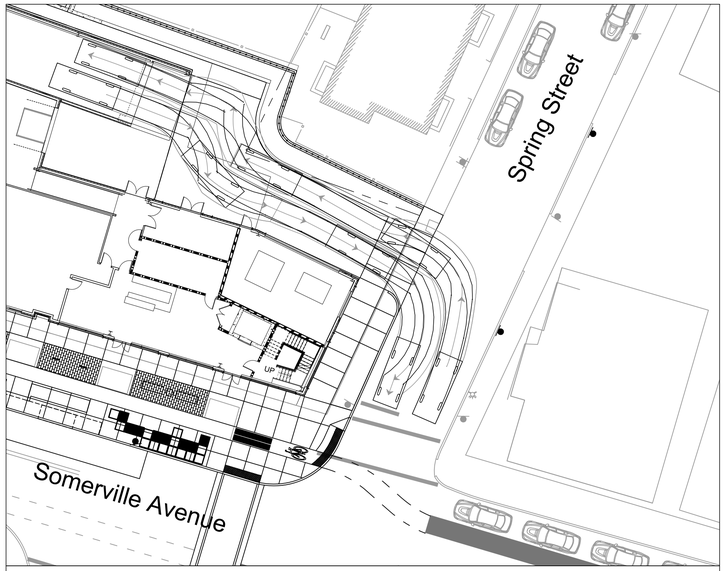
Vehicle Movement Plan



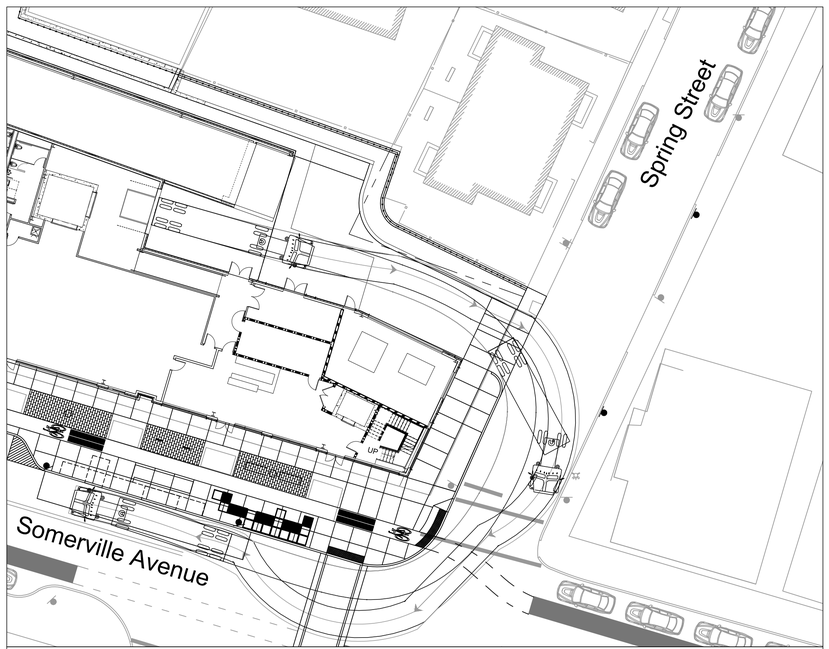
WB40 - ENTERING LOADING DOCK



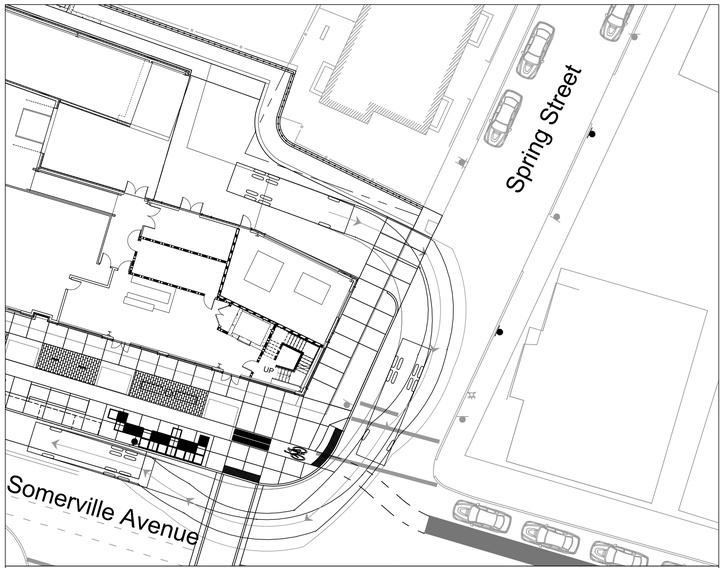
GARBAGE TRUCK - ENTERING LOADING AREA



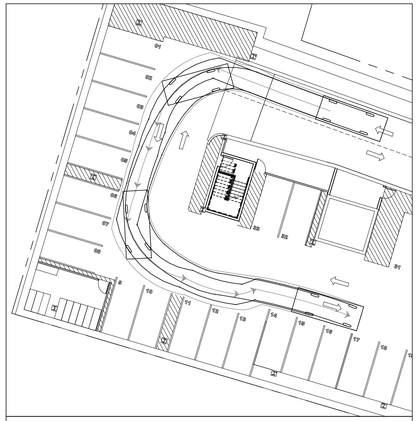
PASSENGER CAR - ENTERING AND EXITING GARAGE



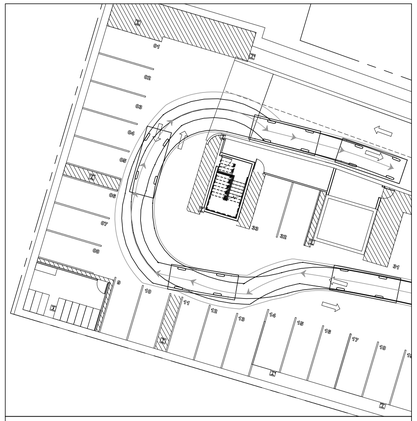
WB40 - EXITING LOADING DOCK



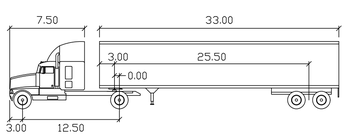
GARBAGE TRUCK - EXITING LOADING AREA



PASSENGER CAR - ENTERING

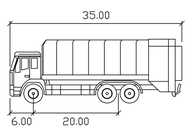


PASSENGER CAR - EXITING



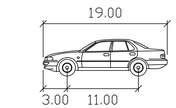
WB-40

	feet		
Tractor Width	: 8.00	Lock to Lock Time	: 6.0
Trailer Width	: 8.00	Steering Angle	: 20.3
Tractor Track	: 8.00	Articulating Angle	: 70.0
Trailer Track	: 8.00		



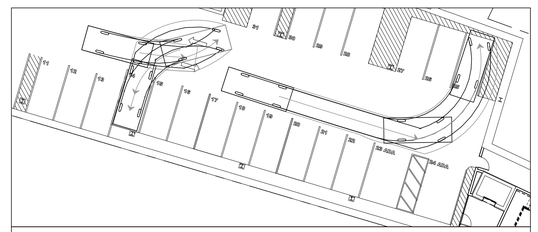
HEAVY GARBAGE

	feet
Width	: 8.50
Track	: 8.50
Lock to Lock Time	6.0
Steering Angle	: 40.0



AASHTO 2018 PASSENGER

	feet
Width	: 7.00
Track	: 6.00
Lock to Lock Time	6.0
Steering Angle	: 31.6



PASSENGER CAR - PARKING

0 10 20 40 80 FEET

1" = 20'-0"

FOR CITY OF SOMERVILLE USE

FINAL DESIGN PER

COMMONWEALTH OF MASSACHUSETTS
KERI PYKE CIVIL No. 47252 REGISTERED PROFESSIONAL ENGINEER
11/1/2021

TRANSPORTATION ACCESS PLAN

599 SOMERVILLE AVENUE

VEHICLE MOVEMENT PLAN

EXHIBIT A.6

HOWARD STEIN HUDSON
11 Beacon Street, Suite 1010
Boston, MA 02108
www.hshassoc.com

Date: November 2021

Scale: 1" = 20'-0"

SITE PLAN IS SUBJECT TO REVISIONS BY CITY OF SOMERVILLE

HOWARD STEIN HUDSON

11 Beacon Street, Suite 1010
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