CITY OF SOMERVILLE

Transportation Access Plan

50 Webster Avenue

Prepared for
US Union Square D3.1 Owner LLC

Prepared by
Howard Stein Hudson

REVISED AUGUST 2022

HOWARD STEIN HUDSON

Engineers + Planners

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Project Summary

Howard Stein Hudson (HSH) has prepared the Transportation Access Plan (TAP) with Site Plans and the following narrative for the 50 Webster Avenue redevelopment (the "Project" or "Site") on behalf of US Union Square D3.1 Owner LLC (the "Proponent"). The Project is consistent with the approved Coordinated Development Special Permit (CDSP) for the Union Square Redevelopment Area. A Mobility Management Plan (MMP) was submitted and approved as part of the Union Square Redevelopment CDSP Application. An MMP for the Project was submitted as required by the Somerville Zoning Ordinance as part of the Design and Sight Plan Review (DSPR).

The Project is in Somerville's Union Square overlay district sub-area. The Project consists of demolishing the existing building and surface parking lot and constructing an approximately 280,000 gross square-foot (gsf) building containing laboratory/life science uses, office uses, and ground-floor retail.

The Project will provide an underground parking garage with approximately 270 parking spaces at least 71 covered, secure bicycle parking spaces in the garage and outdoor bicycle racks for at least 18 bicycles.

The Project development site address is:

Parcel D3.1
50 Webster Avenue
Somerville, MA 02143

Site Access and Plans

The Project is bounded by Massachusetts Bay Transportation Authority (MBTA) tracks to the north, a one-story commercial laundry facility to the south and east (future sites of D3.2 and D3.3), and Prospect Street and Webster Avenue to the west.

The Project is consistent with Somerville master planning throughfares and intends to create an east-west access route from Webster Avenue to the east. Vehicular site access is proposed to the Site at an existing curb cut on Webster Street to be improved into a new thoroughfare. A two-way ramp to the underground garage and a ground floor level loading/service area will both be accessed from the new thoroughfare.

Pedestrian entrances to the lobby will be located on the plaza and thoroughfare. Pedestrian access to the ground floor retail uses will be from the plaza and entrances facing Prospect Street. A porte cochere for pick-up and drop-off to the building lobby is adjacent to the thoroughfare.

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 lobby, retail spaces and one of the two bicycle storage rooms. The ground level will also consist of space for building operations, such as mechanical rooms and storage. Laboratory/research space will be located on the eight upper floors. Parking will be provided in a four-level, 270-space underground garage with at least 71 sheltered and secured bicycle parking spaces provided within the building.

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 Proponent will commit to improving the safety and comfort of pedestrians and bicyclists in front of the Project Site in coordination with the City. The Project will continue to work with the City of Somerville to coordinate improvements at the intersection of Prospect Street and Webster Avenue such as improved bicycle facilities and enhanced connections to transit facilities. No modifications are proposed by the Project to the bus stop (MBTA #85) on Webster Avenue. The sidewalk adjacent to Prospect Street will benefit from its adjacency to a new public space, reaching a minimum of 12 feet in width. The sidewalk adjacent to Webster Avenue will also achieve a minimum of 12 feet in width. ADA-compliant ramps will be provided adjacent and within to the Site. The Project will coordinate with the City on final Webster Avenue improvements.

Proposed changes to signage will primarily consist of installation of a stop sign on the thoroughfare westbound approach; no signage changes are proposed on Prospect Street or Webster Avenue. Proposed street furniture, street trees, and streetlights, are included along the sidewalks adjacent to the site on Webster Avenue. Other transportation elements are further discussed in subsequent sections.

Pedestrian Access Plan

The pedestrian entrances to the lobby will be located on both the plaza and the thoroughfare, accessed from Webster Avenue, as shown on Exhibit A.3 (**Appendix C**). The sidewalk along the southeast side of Prospect Street adjacent to the site is currently 12 feet and proposed to remain at 12 feet for the path travel along the road. This path is adjacent to a large pedestrian plaza. The sidewalk along the northeast side of Webster Avenue adjacent to the site is also proposed at a width of twelve feet. The wider sidewalk is consistent with the high-rise district requirements and provides an improved level of comfort for the public realm. The plaza provides additional pedestrian accommodations and amenities along this critical connection between the Boynton Yards subdistrict and the Union Square Green Line Station.

Bicycle Parking Plan

Sheltered and secure bicycle parking has been planned in accordance with the requirements of the Union Square Overlay District Zoning (section 6.7.13.C.4). Bicycle parking design and layout references and complies with the Somerville Zoning[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 short-term and long-term bicycle parking spaces according to the proposed land uses and size of the Project, per Somerville Zoning requirements. As shown in Exhibit A.4, (**Appendix D**) the Project will provide at least 18 short-term bicycle parking spaces. Short-term bicycle parking will be provided on outdoor bicycle racks located near the building's primary entrances. The Project will construct at least 71 secure, covered bicycle parking spaces that will be available for employees. Bicycle storage will be provided in two storage rooms, one on the ground level with access from the thoroughfare and secondary room on the P1 garage level with direct elevator access from the lower lobby. Bicycle parking for the Project will meet or exceed the minimum requirements for bicycle parking.

Bicycle parking will be secured via key-fob access or similar and protected by security/monitoring. Cyclists will access the bicycle storage directly from the exterior or by way of a secondary lobby and designated elevator to the P1 level. Access to and from the subgrade parking facility requires no lifting of carrying of a bicycle over any steps or stairs.

[1] Union Square Zoning (June 9, 2017)

Motor Vehicle Parking Plan

The Project will provide up to 270 parking spaces in a three-level 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. Although no minimum off-street parking is required by the Union Square Overlay District Zoning, the Project supports the City of Somerville's goal to-minimize parking supply and encourage alternative modes of transportation.

The Project proposes to sign, designate, and reserve 15% of vehicle parking spaces as Level 2 electric vehicle (EV) charging spaces (42 spaces) and the remaining 85% of garage vehicle parking spaces will be EV-ready spaces. The Project proposes to sign, designate, and reserve two parking spaces for car share vehicles. Fourteen spaces (5%) will be signed, designated, and reserved for carpool/vanpool on weekdays before 10:00 a.m. at preferential locations. If these spaces are not used for a carpool/vanpool by that time, they will be available for general use.

Vehicle Movement Plan

Loading and service operations will occur in the designated loading area in the northeast corner of the building. Vehicles will enter the loading area from the thoroughfare. The loading area will provide space for vehicles to back into the loading bays without impacting the garage access. The loading area will have two doorways. One 30-foot door will provide access to two bays and will accommodate two WB-40 trucks. The other door will be 25-feet-wide and provide access to the trash compactor and one bay for one smaller box truck (SU-30). All vehicle movements exiting the loading area will be forward-out onto the thoroughfare. 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 the thoroughfare front-first from Webster Avenue before backing into the appropriate loading bay.

Passenger car movements to and from the garage shall be accommodated via the curb cut on the thoroughfare. The proposed garage will have two-way circulation throughout the garage level. Stairway and elevator access is provided from the garage levels 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 (§9.11 Dimensions of Parking Space and

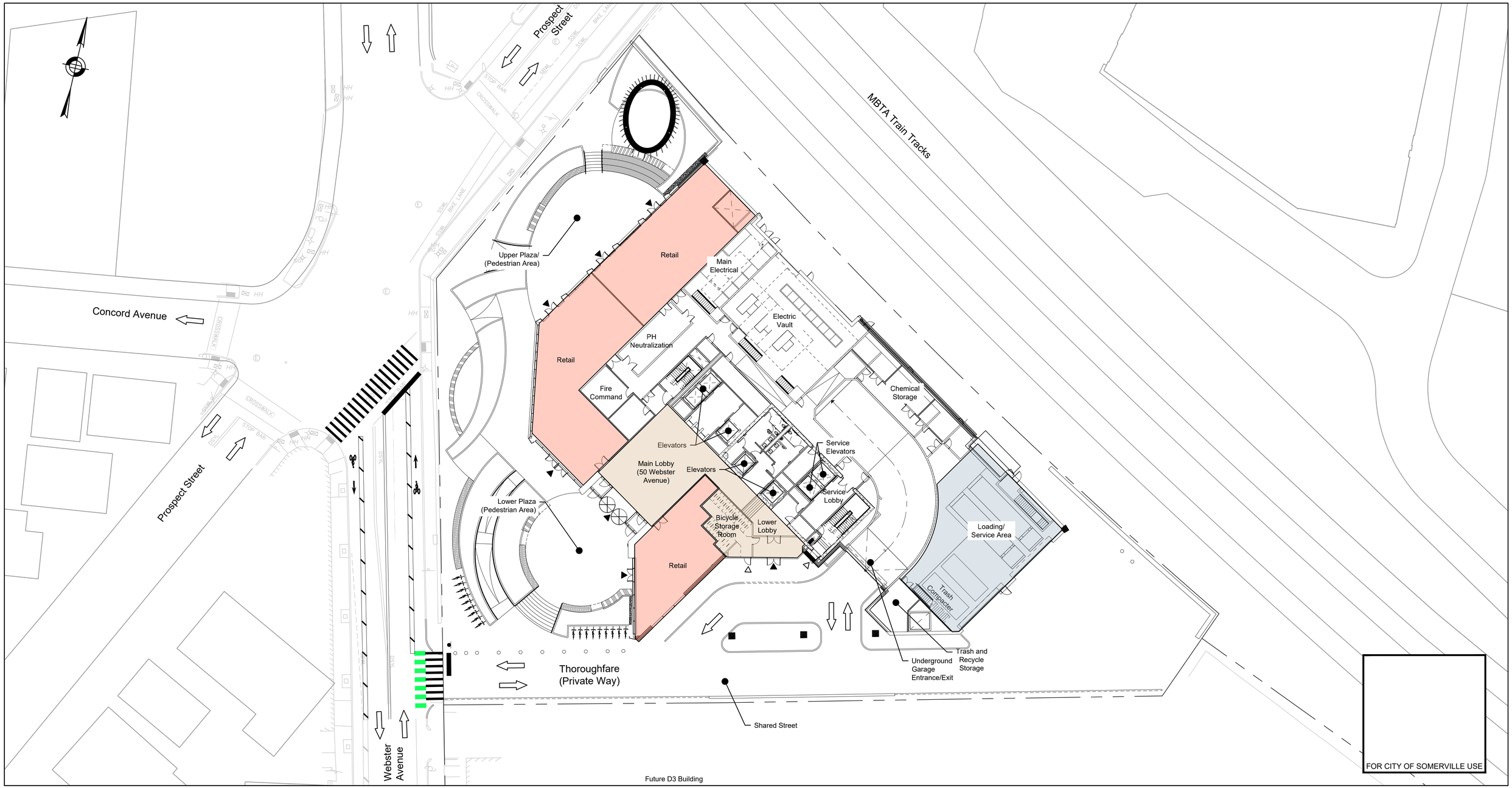
Maneuvering Aisles). The parking spaces will generally be 8.5 feet wide and 18 feet long. The drive aisles will be 25 feet wide or more. Eleven spaces will be ADA-accessible and marked accordingly. Parking dimensions are consistent with the Somerville Zoning Ordinance.

HOWARD STEIN HUDSON

Engineers + Planners

Appendix A

Illustrative Site Plan



NOT FOR CONSTRUCTION

0 10 20 40 80 FEET

1" = 20'-0"

Travel Lane		Retail	
Primary Entrance		Office/Lab	
Secondary Entrance		Common Areas	
Property Line		Delivery/Trash Areas	

Notes

1. Existing Lot: 96-A-1

FINAL DESIGN PER

COMMONWEALTH OF MASSACHUSETTS
IAN A. MCKINNON
CIVIL
No. 52942
REGISTERED PROFESSIONAL ENGINEER
8/24/22

TRANSPORTATION ACCESS PLAN

50 WEBSTER AVENUE

ILLUSTRATIVE SITE PLAN

EXHIBIT A.1

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

Date: August 2022

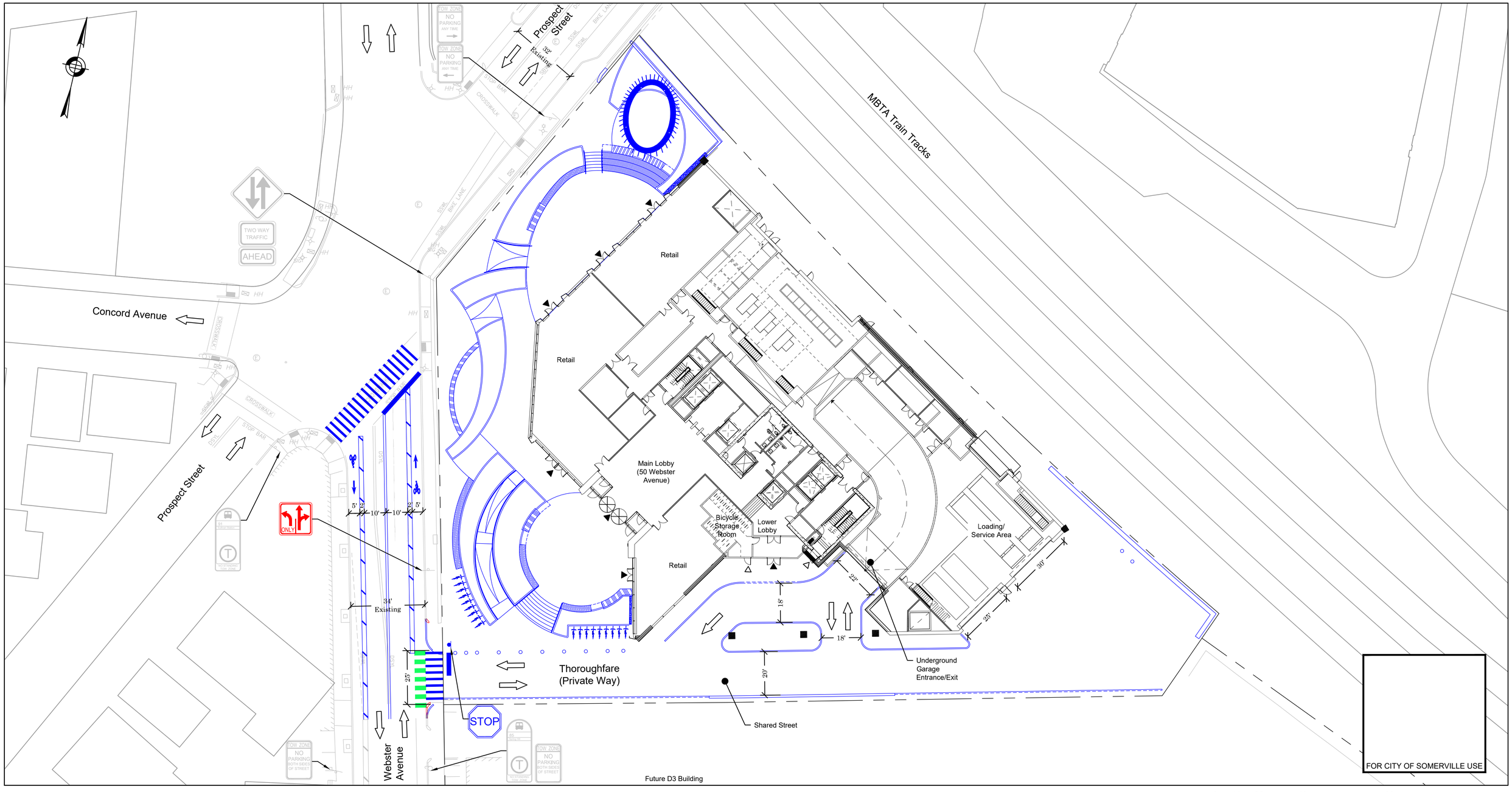
Scale: 1" = 20'-0"

HOWARD STEIN HUDSON

Engineers + Planners

Appendix B

Transportation Elements Plan



NOT FOR CONSTRUCTION

0 10 20 40 80 FEET

1" = 20'-0"

- Travel Lane
- Primary Entrance
- Secondary Entrance
- Property Line
- Blue = Proposed Improvements
- Grey = Existing Conditions (To Remain)
- Red = Elements To Be Removed
- Black = Proposed Site

Notes

1. Existing Lot: 96-A-1

FINAL DESIGN PER

COMMONWEALTH OF MASSACHUSETTS IAN A. MCKINNON CIVIL No. 52942 REGISTERED PROFESSIONAL ENGINEER 8/24/22

TRANSPORTATION ACCESS PLAN

50 WEBSTER AVENUE

TRANSPORTATION ELEMENTS PLAN

EXHIBIT A.2

HOWARD STEIN HUDSON
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Boston, MA 02108
www.hshassoc.com

Date: August 2022

Scale: 1" = 20'-0"

SITE PLAN IS SUBJECT TO REVISIONS BY CITY OF SOMERVILLE

HOWARD STEIN HUDSON

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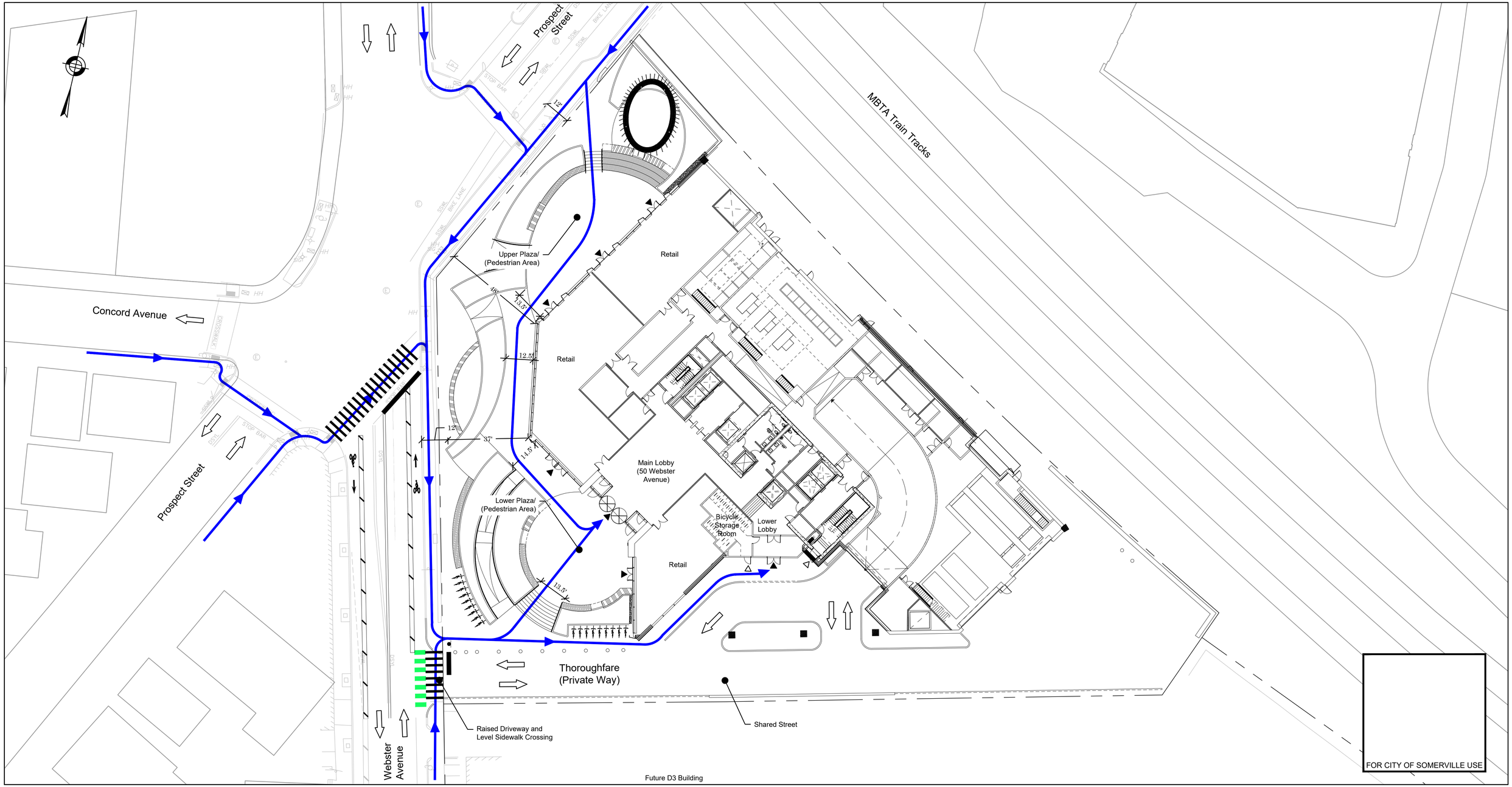
Appendix C

Pedestrian Access Plan



NOT FOR CONSTRUCTION

0 10 20 40 80 FEET

1" = 20'-0"

- Travel Lane
- Pedestrian Path of Travel
- Primary Entrance
- Secondary Entrance
- Property Line

Notes

1. Existing Lot: 96-A-1

FINAL DESIGN PER

COMMONWEALTH OF MASSACHUSETTS
IAN A. MCKINNON
CIVIL
No. 52942
REGISTERED PROFESSIONAL ENGINEER
8/29/22

TRANSPORTATION ACCESS PLAN

50 WEBSTER AVENUE

PEDESTRIAN ACCESS PLAN

EXHIBIT A.3

HOWARD STEIN HUDSON
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www.hshassoc.com

Date: August 2022

Scale: 1" = 20'-0"

SITE PLAN IS SUBJECT TO REVISIONS BY CITY OF SOMERVILLE

HOWARD STEIN HUDSON

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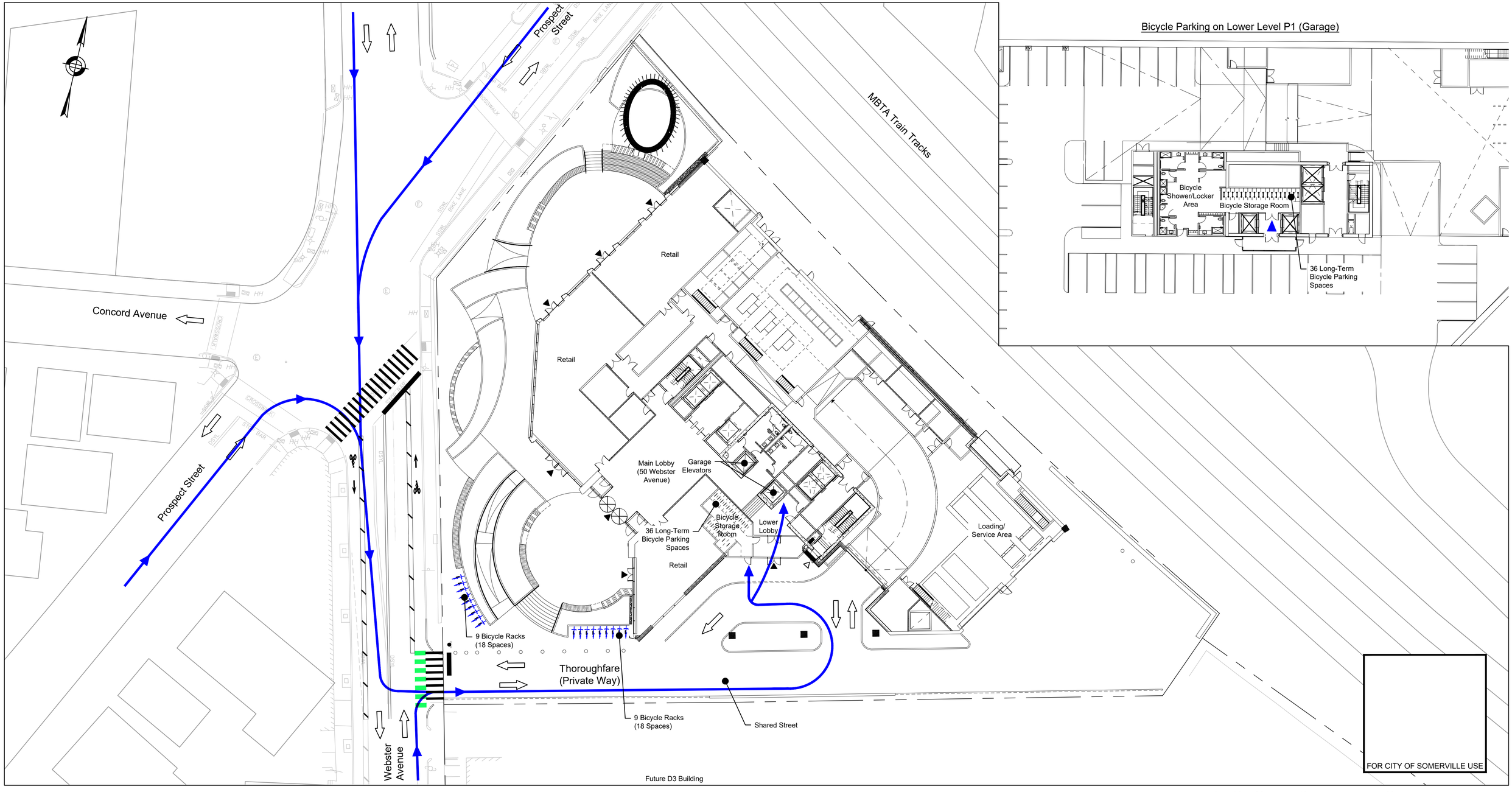
Appendix D

Bicycle Parking Plan



Bicycle Parking on Lower Level P1 (Garage)

NOT FOR CONSTRUCTION

0 10 20 40 80 FEET

1" = 20'-0"

Travel Lane

Bicycle Path of Travel

Bicycle Storage Point of Access

Proposed Bike Rack

Property Line

Bicycle Parking Zoning Requirements	*Short-term/Visitor*	*Long Term*
Retail:	1 space per 2,500 sf (3)	1 space per 10,000 sf (1)
Office:	1 space per 20,000 sf (6)	1 space per 3,000 sf (37)
R&D/Lab:	1 space per 20,000 sf (9)	1 space per 5,000 sf (33)

Total Bicycle Parking Provided	
Short-term/Visitor	*Long Term*
36 spaces	72 spaces

Notes

1. Existing Lot: 96-A-1

FINAL DESIGN PER

COMMONWEALTH OF MASSACHUSETTS IAN A. MCKINNON CIVIL No. 52942 REGISTERED PROFESSIONAL ENGINEER 8/24/22

TRANSPORTATION ACCESS PLAN

50 WEBSTER AVENUE

BICYCLE PARKING PLAN

EXHIBIT A.4.1

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

Date: August 2022

Scale: 1" = 20'-0"

SITE PLAN IS SUBJECT TO REVISIONS BY CITY OF SOMERVILLE

LONG-TERM BICYCLE PARKING PLANS

LONG-TERM BICYCLE PARKING

PROGRAM	REQUIRED	PROPOSED,
Retail	1.0 / 10,000 sf	7,000 sf / 10,000 sf 1 space required
Office	1.0 / 3,000 sf	109,200 sf / 3,000 sf 37 spaces required
Lab / R&D	1.0 / 5,000 sf	163,800 sf / 5,000 sf 33 spaces required
TOTAL		**71 SPACES REQUIRED**

Notes:
- Bicycle parking to be in accordance with The Association of Pedestrian and Bicycle Professionals Bicycle Parking Guidelines
- Each bicycle parking space must be 2′ x 6′ in size
- No more than 25% of spaces may be provided as racks that require bicycles to be hung or lifted off the ground
- When 20 or more spaces are provided, a minimum of 5% of spaces must accommodate tandem or trailers (3′ x 8′ in size)
- Access aisle of 5′-0″ min. wide to allow for manuevering

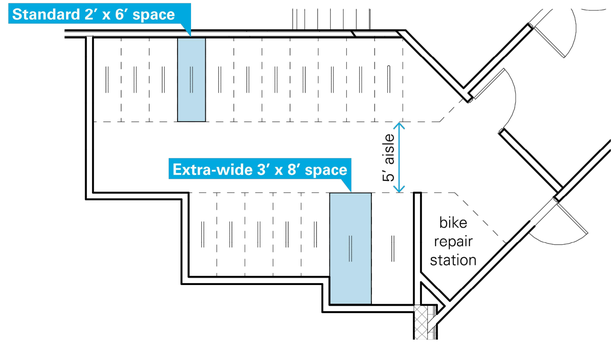
BICYCLE PARKING TYPES

PARKING TYPES	REQUIRED	SPACES
Wall Mounted	Max 25%	15 spaces
Extra-wide	Min 3%	4 spaces
Floor Mounted	Remainder	52 spaces
TOTAL		**71 SPACES**

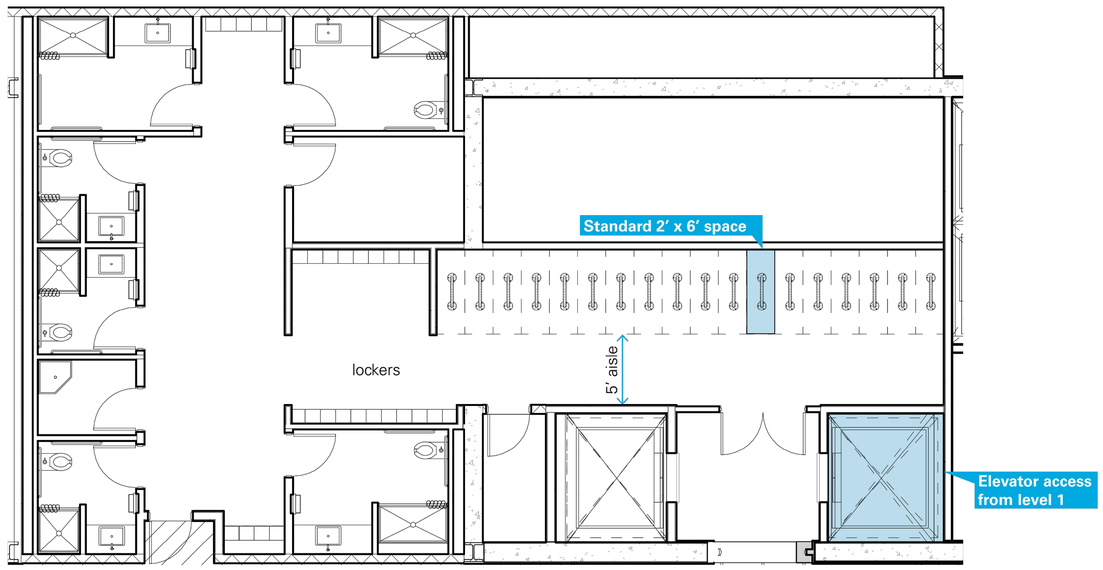
PROPOSED LONG-TERM BICYCLE PARKING

PARKING TYPES	LEVEL 1	LEVEL P1	TOTAL
Wall Mounted	0 spaces	0 spaces	0 spaces
Extra-wide	4 spaces	0 spaces	4 spaces
Floor Mounted	32 spaces	36 spaces	68 spaces
TOTAL	**36 SPACES**	**36 SPACES**	**72 SPACES**

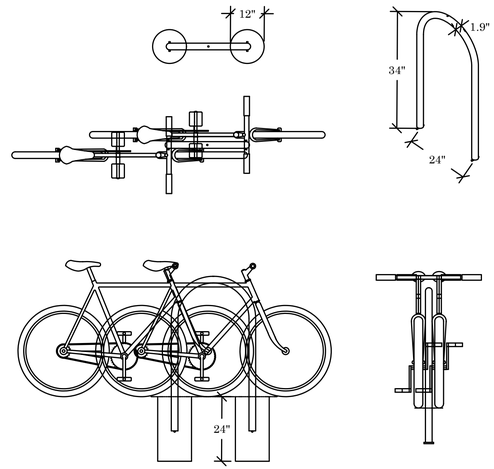
LEVEL 1



LEVEL P1



Hoop Rack Details
Not to Scale



Notes

1. Bicycle racks shall be the *Dero Hoop Rack* or equivalent for each of the standard (indoor/outdoor) and extra wide spaces.
2. Each rack has a capacity of 2 bikes.
3. Racks materials shall be 1.5" schedule 40 pipe (1.9" OD).
4. Rack finish shall be the powder coat. The powder coat finish assures a high level of adhesion and durability by following these steps: (a) Sandblast, (b) Epoxy primer electrostatically applied, (c) final thick TGIC polyester powder coat.
5. Racks shall be in-ground mounted embedded into concrete base.

FOR CITY OF SOMERVILLE USE

NOT FOR CONSTRUCTION

0 10 20 40 80 FEET
1″ = 20′–0″

Travel Lane

Bicycle Storage Point of Access

Property Line

Notes
1. Existing Lot: 96-A-1

FINAL DESIGN PER

COMMONWEALTH OF MASSACHUSETTS
IAN A. MCKINNON
CIVIL
No. 52942
REGISTERED PROFESSIONAL ENGINEER
8/29/22

TRANSPORTATION ACCESS PLAN

50 WEBSTER AVENUE

BICYCLE PARKING PLAN

EXHIBIT A.4.2

HOWARD STEIN HUDSON
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www.hshassoc.com

Date: August 2022

Scale: 1" = 10'-0"

SITE PLAN IS SUBJECT TO REVISIONS BY CITY OF SOMERVILLE

HOWARD STEIN HUDSON

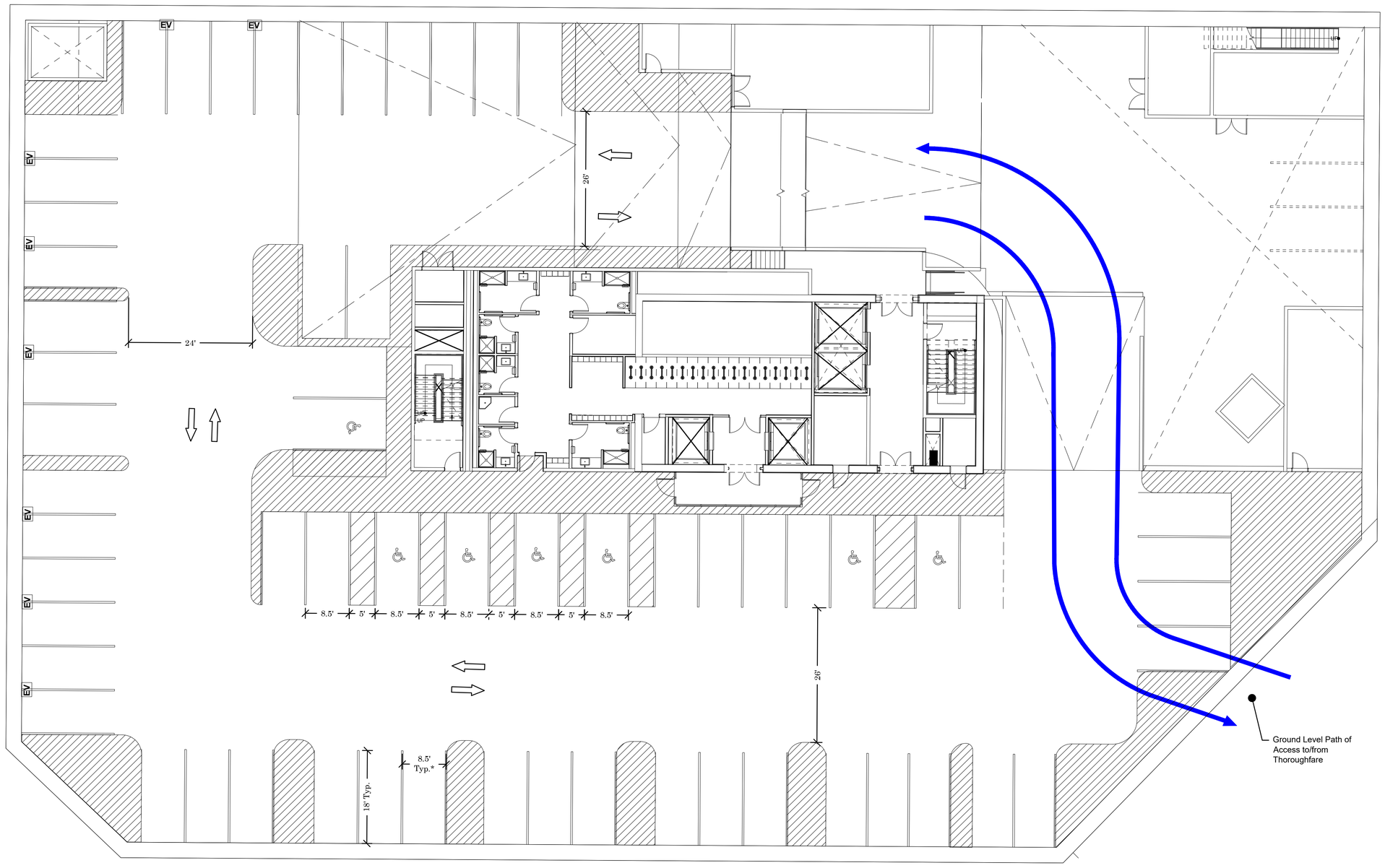
Engineers + Planners

Appendix E

Motor Vehicle Parking Plan

PARKING LEVEL 1
270 Total Garage Spaces

6 Handicap Spaces



* Select spaces may be 9' or wider. All spaces are at least 8.5'.

FOR CITY OF SOMERVILLE USE

NOT FOR CONSTRUCTION

0 10 20 40 80 FEET
1" = 20'-0"

Flow of Travel
Vehicle Access
Property Line
EV Electric Vehicle Charging Station

NOT FOR CONSTRUCTION - GARAGE STRUCTURAL COORDINATION AND FINAL LAYOUT ONGOING

Notes
1. Existing Lot: 96-A-1

FINAL DESIGN PER

COMMONWEALTH OF MASSACHUSETTS
IAN A. MCKINNON
CIVIL
No. 52942
REGISTERED PROFESSIONAL ENGINEER
8/29/22

TRANSPORTATION ACCESS PLAN

50 WEBSTER AVENUE

MOTOR VEHICLE PARKING PLAN

EXHIBIT A.5.1

HOWARD STEIN HUDSON
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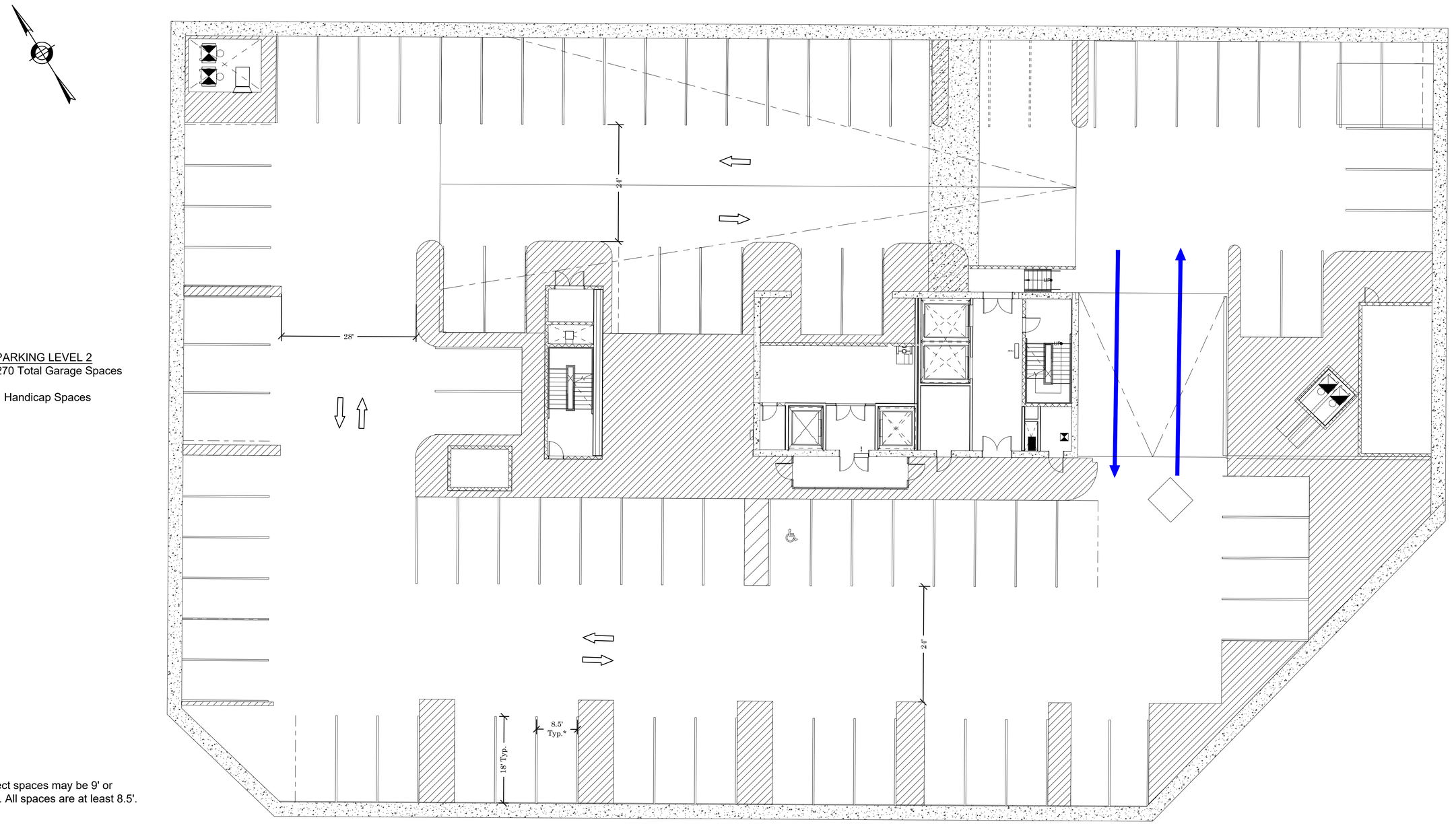
Boston, MA 02108
www.hshassoc.com

Date: August 2022

Scale: 1" = 20'-0"

SITE PLAN IS SUBJECT TO REVISIONS BY CITY OF SOMERVILLE



PARKING LEVEL 2
270 Total Garage Spaces

1 Handicap Spaces

* Select spaces may be 9' or wider. All spaces are at least 8.5'.

FOR CITY OF SOMERVILLE USE

NOT FOR CONSTRUCTION

0 10 20 40 80 FEET
1" = 20'-0"

Flow of Travel
Vehicle Access
Property Line
EV Electric Vehicle Charging Station

NOT FOR CONSTRUCTION - GARAGE STRUCTURAL COORDINATION AND FINAL LAYOUT ONGOING

Notes
1. Existing Lot: 96-A-1

FINAL DESIGN PER

IAN A. MCKINNON CIVIL No. 52942 REGISTERED PROFESSIONAL ENGINEER
COMMONWEALTH OF MASSACHUSETTS
8/29/22

TRANSPORTATION ACCESS PLAN

50 WEBSTER AVENUE

MOTOR VEHICLE PARKING PLAN

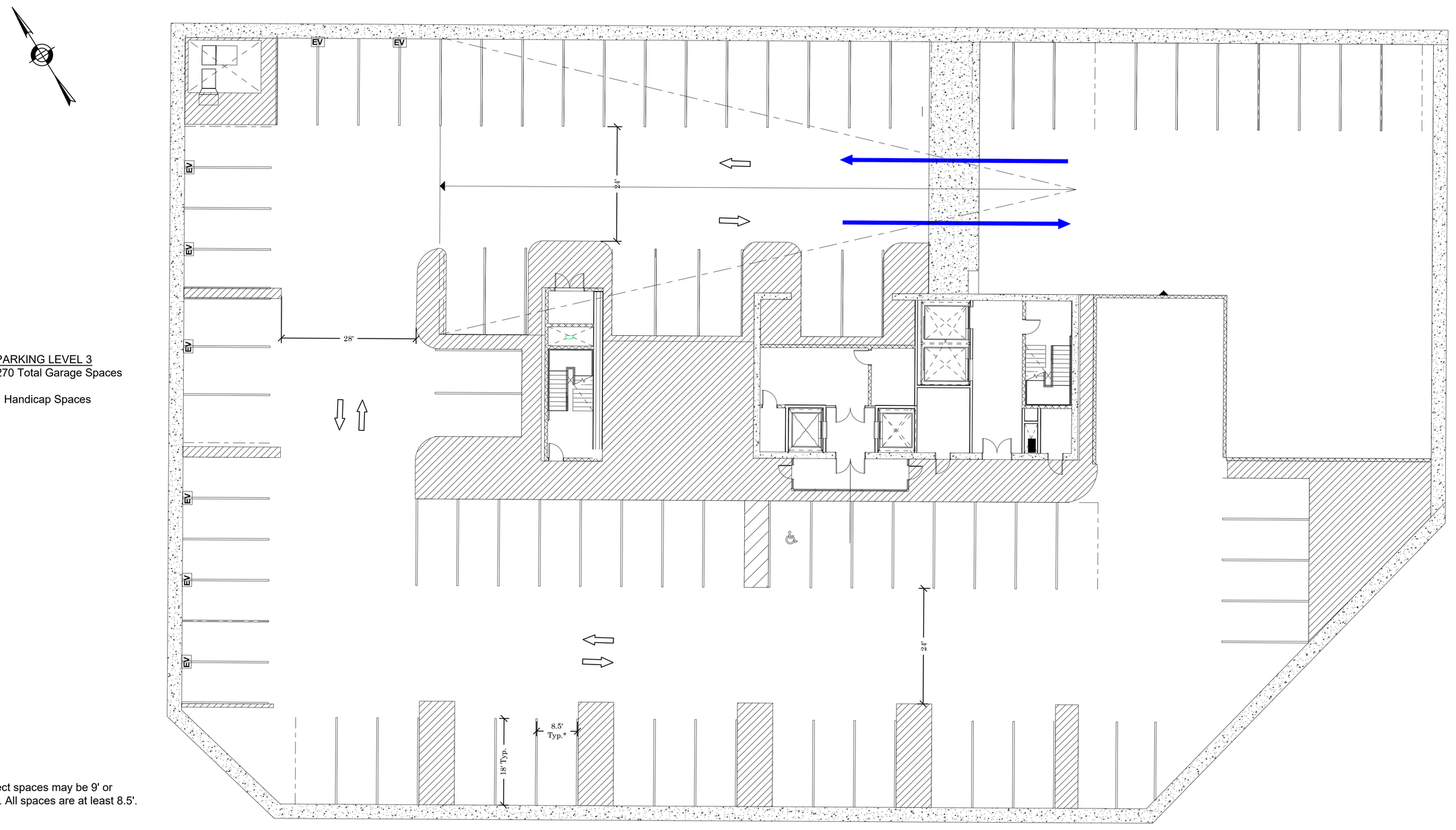
EXHIBIT A.5.2

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

Date: August 2022

Scale: 1" = 20'-0"

SITE PLAN IS SUBJECT TO REVISIONS BY CITY OF SOMERVILLE



PARKING LEVEL 3
270 Total Garage Spaces

1 Handicap Spaces

* Select spaces may be 9' or wider. All spaces are at least 8.5'.

FOR CITY OF SOMERVILLE USE

NOT FOR CONSTRUCTION

0 10 20 40 80 FEET

1" = 20'-0"

Flow of Travel

Vehicle Access

Property Line

EV Electric Vehicle Charging Station

NOT FOR CONSTRUCTION - GARAGE STRUCTURAL COORDINATION AND FINAL LAYOUT ONGOING

Notes

1. Existing Lot: 96-A-1

FINAL DESIGN PER

COMMONWEALTH OF MASSACHUSETTS
IAN A. MCKINNON
CIVIL
No. 52942
REGISTERED PROFESSIONAL ENGINEER
8/29/22

TRANSPORTATION ACCESS PLAN

50 WEBSTER AVENUE

MOTOR VEHICLE PARKING PLAN

EXHIBIT A.5.3

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

Date: August 2022

Scale: 1" = 20'-0"

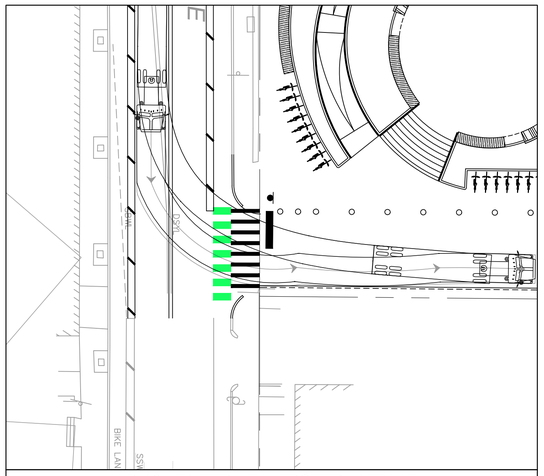
SITE PLAN IS SUBJECT TO REVISIONS BY CITY OF SOMERVILLE

HOWARD STEIN HUDSON

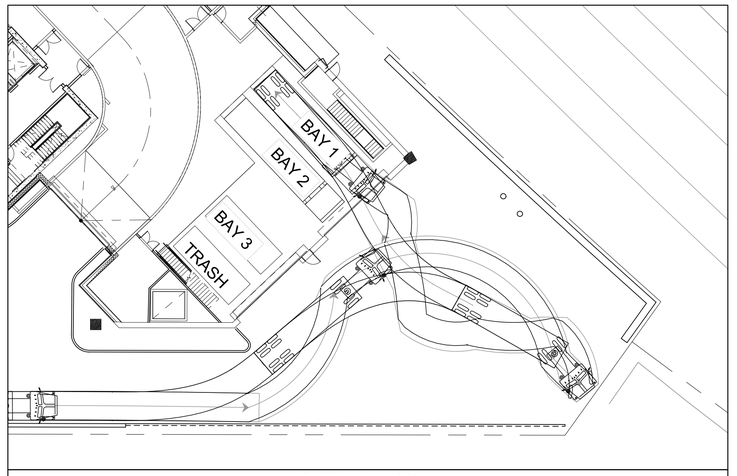
Engineers + Planners

Appendix F

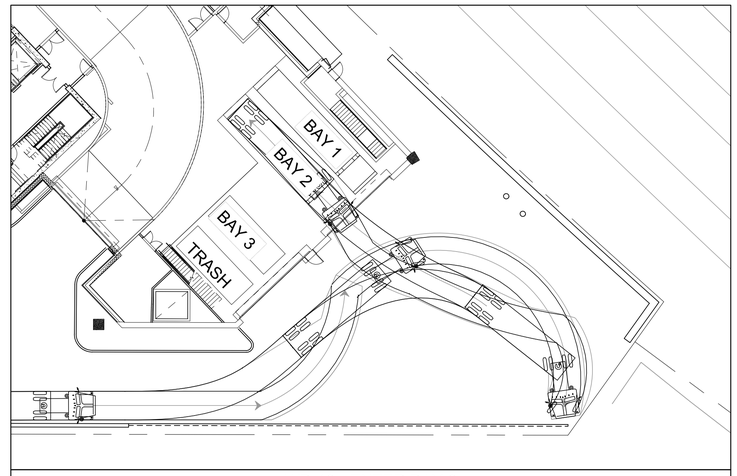
Vehicle Movement Plan



WB-40 - ENTER AT WEBSTER AVENUE



WB-40 - ENTER BAY 1



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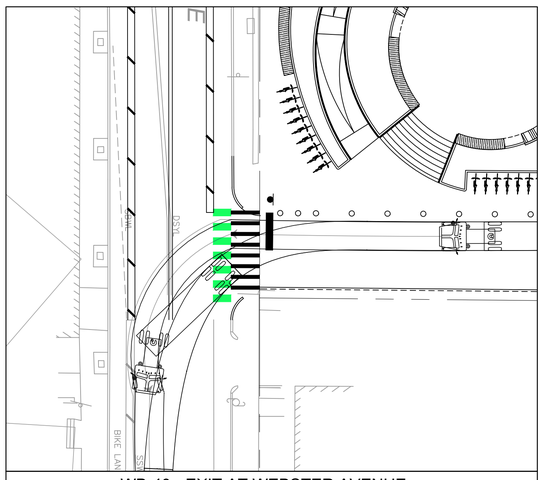
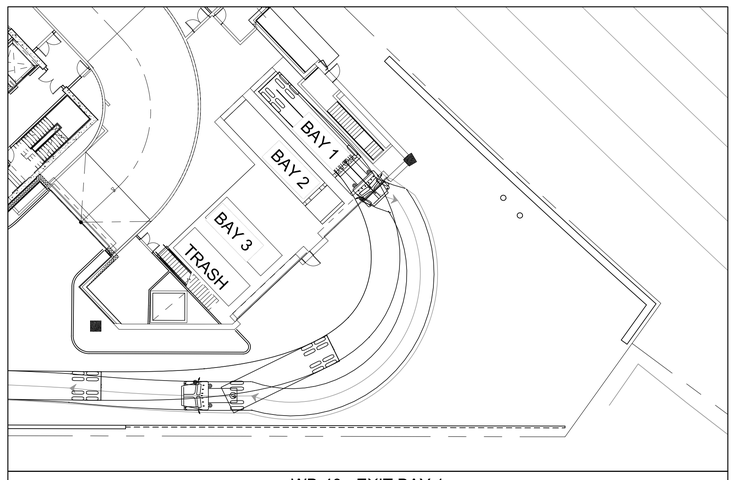


WB-40 - EXIT AT WEBSTER AVENUE



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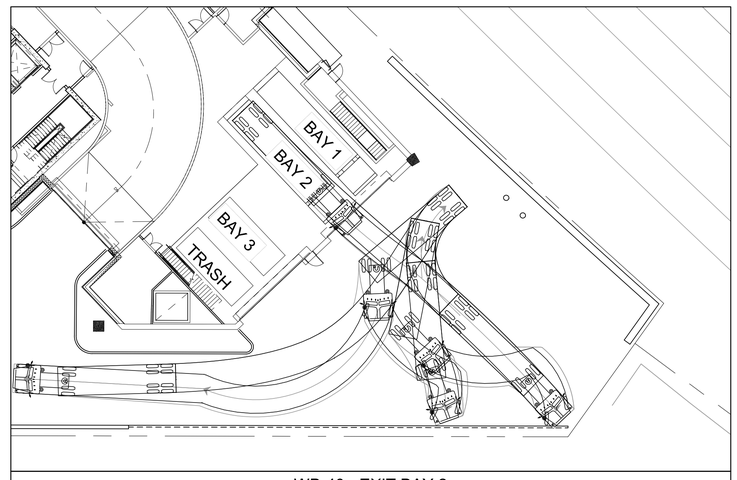

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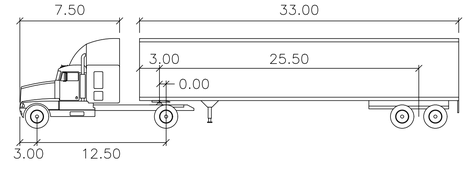
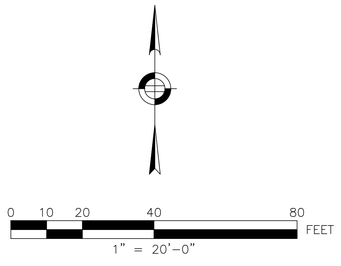


WB-40

	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		



FOR CITY OF SOMERVILLE USE

FINAL DESIGN PER

COMMONWEALTH OF MASSACHUSETTS
IAN A. MCKINNON
CIVIL
No. 52942
REGISTERED PROFESSIONAL ENGINEER
8/29/22

TRANSPORTATION ACCESS PLAN

50 WEBSTER AVENUE

VEHICLE MOVEMENT PLAN

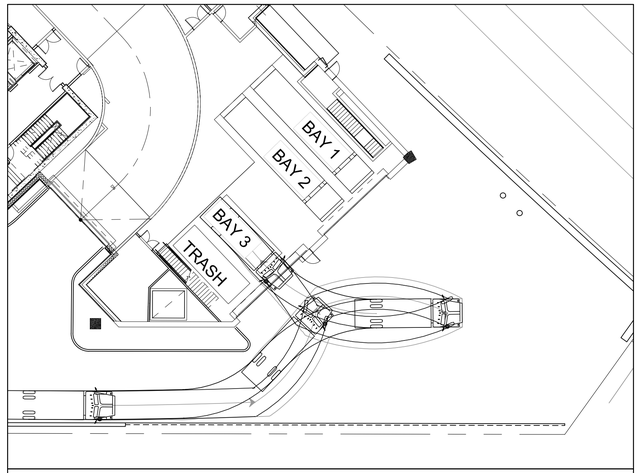
EXHIBIT A.6.1

HOWARD STEIN HUDSON
11 Beacon Street, Suite 1210
Boston, MA 02108
www.hshassoc.com

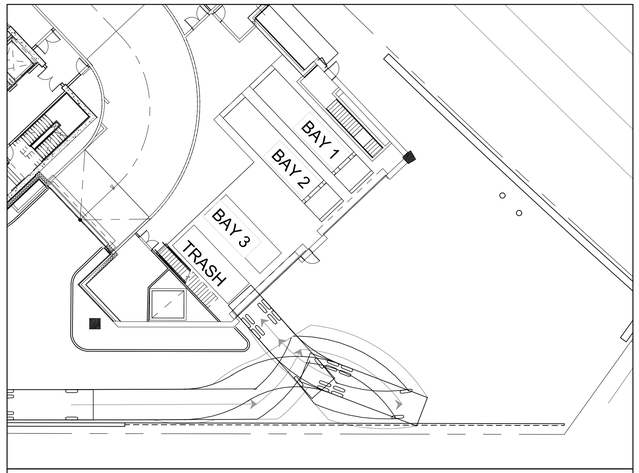
Date: August 2022

Scale: 1" = 20'-0"

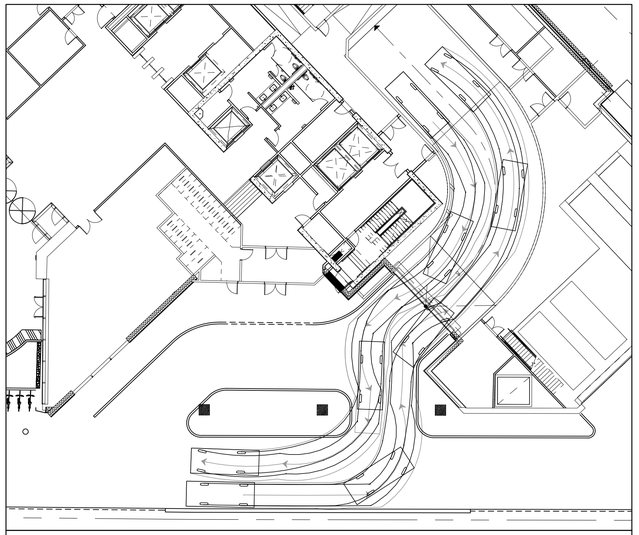
SITE PLAN IS SUBJECT TO REVISIONS BY CITY OF SOMERVILLE



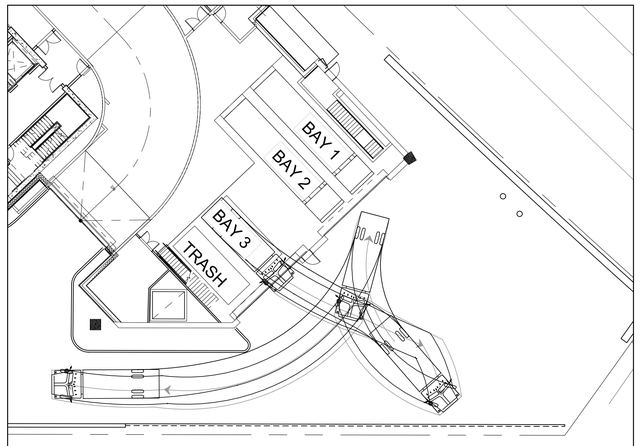
SU-30 - ENTER BAY 3



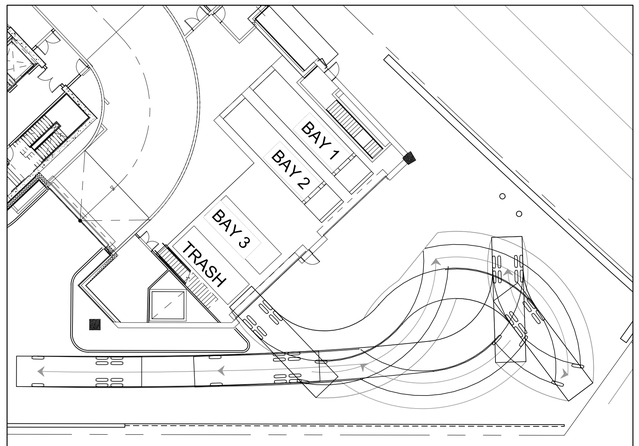
GARBAGE TRUCK - ENTER TRASH BAY



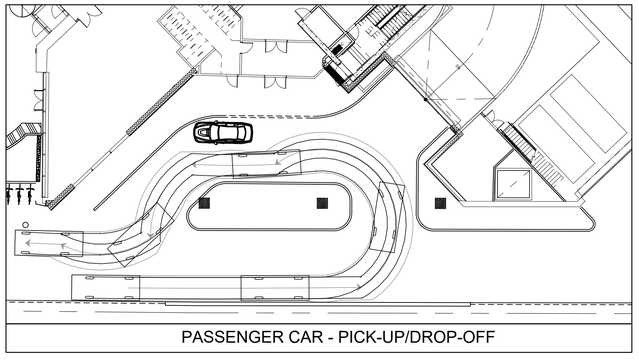
PASSENGER CAR - ENTER AND EXIT GARAGE



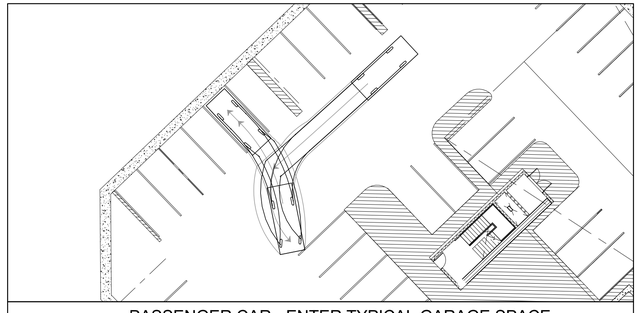
SU-30 - EXIT BAY 3



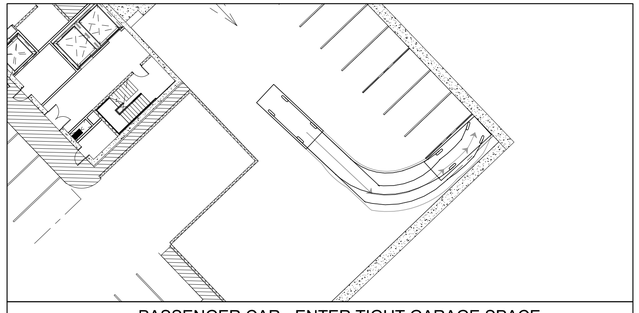
GARBAGE TRUCK - EXIT TRASH BAY



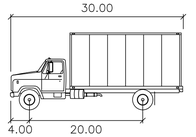
PASSENGER CAR - PICK-UP/DROP-OFF



PASSENGER CAR - ENTER TYPICAL GARAGE SPACE

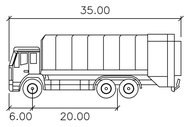


PASSENGER CAR - ENTER TIGHT GARAGE SPACE



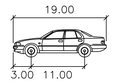
SU-30

	feet
Width	: 8.00
Track	: 8.00
Lock to Lock Time	: 6.0
Steering Angle	: 31.8



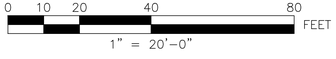
HEAVY GARBAGE

	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



FOR CITY OF SOMERVILLE USE

FINAL DESIGN PER

TRANSPORTATION ACCESS PLAN

50 WEBSTER AVENUE

VEHICLE MOVEMENT PLAN

EXHIBIT A.6.2

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

Date: August 2022

Scale: 1" = 20'-0"

SITE PLAN IS SUBJECT TO REVISIONS BY CITY OF SOMERVILLE

HOWARD STEIN HUDSON

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