



Memorandum

To: Mayor's Office of Strategic Planning
and Community Development,
Mobility Division
City of Somerville
93 Highland Avenue
Somerville, MA 02143

Date: August 17, 2021

Project #: 14906.00

From: Brian K. Fairbanks, PE
Senior Project Manager

Re: **Transportation Access Plan (TAP)**
13-21 McGrath Highway ("15 McGrath")
Somerville, Massachusetts

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Senior Transportation Planner/PM
Transportation Planning &
Operations

The following information is being provided to document the draft Transportation Access Plan (TAP) for the proposed 15 McGrath Highway (the "Project"), located at 13-21 McGrath Highway in Somerville, Massachusetts (the "Development Site"). The TAP will be issued as a final document upon review and approval by the City of Somerville (the "City"), following any required revisions and/or additional information from that review. This document and accompanying information depict the proposed Development Site access for automobiles, service/delivery trucks, bicyclists, and pedestrians.

The Project will be developed on an approximately 1-acre site bounded by a Massachusetts Bay Transportation Authority (MBTA) parcel (for use by the future Green Line Extension) to the north, McGrath Highway to the south, a car wash lot to the east at 1 McGrath (proposed for redevelopment by others as a hotel), and a data storage/warehouse facility at 35 McGrath and Life Storage building at 51 McGrath to the west. The proposed development will host a mixture of laboratory (lab) and research and development (R&D) space, its associated office space, and arts and creative enterprise space, with associated parking facilities and infrastructure improvements. The Project consists of the construction of one building containing up to approximately 242,000 square feet (SF) of gross floor area (GFA), with office, research and development, and lab enabled uses, and up to 274 structured below-grade parking spaces.

Site Plans

The existing conditions plan and conceptual ground floor Development Site plans with proposed utility improvements for the Project have been attached for reference in Figures 1.a through 1.c.

Illustrative Site Plan

Refer to Figure 2 for a Conceptual Site plan depicting the ground floor level and site landscaping.

The Project's site plan does not preclude access improvements or changes to the adjacent development parcels or further improvements to the intersection. The 15 McGrath Project's Site Plan is designed to function independently of the timing of any redevelopment of the adjacent properties and it accounts for MassDOT's planned improvements for McGrath Highway (see next section).



Transportation Elements Plan

Refer to Figure 3 for the plan depicting the on-site transportation elements, including the Development Site driveway, the Project's bicycle and pedestrian accommodations, and related street furniture, including a proposed bus shelter along McGrath Highway at the existing bus stop along the south edge of the Project Development Site. This bus shelter will serve the "floating" bus stop proposed by MassDOT as part of its plan to resurface McGrath Highway (see next section) and may be relocated to the bus stop island, upon further review by MassDOT and the MBTA. (Refer to Figures 4.a through 4.c for a depiction of off-site transportation elements along McGrath Highway at the intersection of with the Development Site and Rufo Road. These are discussed next.)

Site Access

Access to the Development Site occurs via McGrath Highway (sometimes referred to as McGrath Boulevard), a public way that falls under MassDOT jurisdiction (it is designated as Massachusetts State Route 28). (The McGrath Highway roadway is named Monsignor O'Brien Highway east of the Development Site within the City of Cambridge city limits.)

McGrath Highway Existing Conditions

At the Development Site, McGrath Highway runs generally east/west and is intersected by Rufo Road from the South and two existing driveways from the North, including the driveway entrance to the Development Site. McGrath Highway, Rufo Road, the Project's Development Site driveway, and the neighboring site driveway intersect to form a five-way, fully-actuated signalized intersection. The McGrath Highway eastbound approach consists of three through-traffic lanes and an exclusive right-turn lane that transitions into a signalized slip lane. The McGrath Highway westbound approach consists of three through-traffic lanes and an exclusive left-turn lane. Departing the intersection, McGrath Highway consists of three receiving lanes for either approach. The curbside lane operates as a vehicle travel lane and no on-street parking is provided on McGrath Highway near the Development Site.

McGrath Highway Resurfacing Project (MassDOT)

Near the Development Site, MassDOT is implementing changes to both O'Brien Highway to the east and McGrath Highway near/adjacent to the Development Site, which will soon configure McGrath/O'Brien Highway to introduce bicycle lanes and other changes to the roadway.¹ As of spring 2021, final design documents for the resurfacing and restriping of McGrath Highway indicate that a buffer-separated bike lane will be provided for bicyclists on each side of McGrath Highway NB between Third/Winter Street (to the southeast of the site) and over the bridge (to the northwest) toward Poplar Street, connecting to the separated bike lane on McGrath Highway NB frontage road approaching the Washington Street interchange. Further southeast of the Development Site, a separated bike lane will be provided on each side of Monsignor O'Brien Highway (Route 28), from Third/Winter Street to Land Boulevard/Charlestown Avenue. Along the Development Site frontage, one travel lane will be removed in each direction from McGrath Highway. Design documents also indicate that the sidewalk immediately adjacent to the Development Site will be reconstructed, and that "floating" bus stops will be constructed both adjacent to the Development Site and across from the Development Site. Recent conversations with MassDOT representatives from

¹ MassDOT, Cambridge – Somerville – Resurfacing and Related Work on Route 28, Project Number 608482.



District 6 directed the Project that these design plans should be treated as “existing conditions” for McGrath Highway. Please refer to Figure 4.a for an illustration of the plans for McGrath Highway at the Development Site.

McGrath-Rufo Road Intersection (Planned and Proposed Changes)

The Proponent is working with MassDOT and the City of Somerville to review other changes to McGrath Highway that may further modify the MassDOT resurfacing and restriping plans at the Development Site and intersection with Rufo Road. Furthermore, the Proponent and the property owner of the adjacent site at 1 McGrath Highway are exploring intersection design options that would provide new pedestrian and bicycle connections and protected crosswalks at the intersection of McGrath Highway to Rufo Road. The developers are collaborating with the Friends of the Community Path and the Friends of the Grand Junction Path (together the “Path Friends”) to ensure that the intersection design supports the proper safety and connectivity to a proposed Community Path Extension (CPX) connector ramp on the 1 McGrath site, including the provision of a two-way cycle track along the frontage of 1 McGrath. This cooperation is reflected in a Memorandum of Agreement between the two developers and Path Friends (see attached).

For the 15 McGrath Project, the Proponent intends to implement the initial elements of the intersection improvements, while the remaining elements are implemented by the other parties to the agreement or jointly depending on the timing of the two projects. The 15 McGrath Project will seek a MassDOT Access Permit that (1) introduces a new crosswalk at this intersection along the east side crossing of McGrath, (2) adds a left-turn bay for vehicles entering the Site from the south-eastbound approach of McGrath by removing a section of the curbed median, (3) modifies the west side crosswalk to introduce channelized islands that shorten the overall McGrath crossing distance, and (4) implements the associated relocation or installation of traffic signal equipment. Furthermore, in anticipation of a future phase improvements to the public realm and access, the Proponent proposes to relocate the face of curb in front of the Development Site to accommodate a westbound protected bicycle lane that will be elevated to curb-height at/along the pedestrian island/floating bus stop. These proposed modifications are shown in Figure 4.b.

The intersection design would incorporate features that adhere to standards and guidance conveyed in the MassDOT Separated Bike Lane Planning & Design Guide. The concept design plans will be reviewed by the City of Somerville and final design and implementation is subject to MassDOT review/approval via an access permit.

Future Phase Public Realm and Access Improvements

Please refer to Figure 4.c for an illustration of the plans for the intersection of McGrath at Rufo Road as envisioned by the agreement between the Proponent, the owner of 1 McGrath, and the Path Friends.

If the proposed hotel on the adjacent property at 1 McGrath is approved and advances to construction, the Owner’s agreement with the property owner of 1 McGrath simplifies the access driveway to the two properties by consolidating the existing two curb cuts into a single curb cut. This modification to create a single, shared egress driveway from these properties at the intersection accomplishes three important elements: (1) allows for the space necessary to accommodate a proposed 14’ clear width of the Community Path connector ramp on the Hotel site, (2) eliminates a phase from the signal timing, and (3) reduces the pedestrian and bicycling crossing width across the driveways.



If the hotel at 1 McGrath is built and funding for the CPX Spur construction has been secured, the final elements to connect the bicycling paths would be implemented. The key elements include (1) constructing the CPX connector ramp, (2) extending the curb along the 1 McGrath frontage out into McGrath to create two-way cycle track to the base of future ramp, and (3) associated bike crossing/markings at the intersection.

Development Site Driveways

The existing site vehicle access at the east end of the Development Site will be maintained. This driveway provides access/egress at the signalized intersection that also serves Rufo Road across McGrath Highway from the Development Site. This Site's access driveway along the eastern edge of the building (the "East Driveway") will connect to a below-grade parking garage and to a service loading area at the rear of the building. The Owner and the property owner of the neighboring Hotel Project at 1 McGrath Highway have entered into a contingent agreement that if both the Project and the Hotel Project are approved and constructed, the East Driveway will serve as a shared egress driveway for both projects.

Approximately 120 feet northwest of this driveway is another curb cut from McGrath Highway that provides access to a MassDOT-owned paved parcel (often referred to as the "Jug Handle"). The Jug Handle currently provides access to the Development Site and the data storage and warehouse buildings (35 and 51 McGrath Highway, respectively) to the west of the Development Site.

Two driveways will provide access from the Jug Handle to the Development Site. The first driveway off the Jug Handle parcel, at the front of the building (the "South Driveway"), will function as a passenger pick-up/drop-off area for the building and preserve the access easement for the 51 McGrath property. The South Driveway will be a one-way driveway from the Jug Handle to East Driveway. The second driveway off the Jug Handle, along the west side the Development Site (the "West Driveway"), will provide access from the service loading zone at the rear of the building.

Both passenger vehicles arriving to park and service vehicles are expected to use the East Driveway, from which they may access the parking garage ramp, located on the east side of the building, or the loading docks, located at the rear (north side) of the building. Passenger vehicles arriving for curbside drop-off/pick-up are expected to enter via the Jug Handle parcel and use the South Driveway along the front of the building. Passenger vehicles will primarily egress the site via the East Driveway and signalized intersection at McGrath Highway / Rufo Road, although it is also possible for passenger vehicles to exit the site by proceeding counterclockwise around the building via the West Driveway to reach the Jug Handle, which exits directly onto McGrath Highway (for north/west bound travel). Service vehicles may exit the site by proceeding counterclockwise around the building and using the Jug Handle or continuing through the South Driveway to reach the East Driveway and signalized intersection.

Future 35 McGrath Service Access

The Owner/Proponent has entered into a contingent agreement with the property owner of the data center at 35 McGrath Highway related to use of the West Driveway, which states that, if both the Project and a new development at 35 McGrath Highway are constructed, 35 McGrath will be allowed to use the West Driveway on the Development Site for trucks serving the 35 McGrath site's loading/service area. (The redevelopment plans for 35 McGrath are not known at this time.) Thus, the West Driveway may operate as a limited use, two-way driveway from the Jug Handle to the rear of the Development Site.



Parking Supply

The Project is providing a four-level below-grade parking structure under the proposed building, with a total of up to 274 vehicle parking spaces. The parking garage will have 17 ADA accessible spaces; 9 preferential carpool/vanpool parking spaces; and 6 electric vehicle (EV) charging stations (or 17 EV-ready spaces).

Multimodal Site Access and Circulation Plans

To supplement the Project's Site plans, the following series of graphics are provided to highlight the planned access and circulation paths for bicyclists, pedestrians, and motor vehicles:

Bicycle Parking and Access Plan

Refer to Figure 5 for the bicycle access and parking plan. The Project proposes a minimum of 53 interior secured bicycle parking spaces located on the ground level of the proposed building. The Project will also provide 14 short-term bicycle parking spaces within 50 feet of the building's side entrance, located along the East Driveway, underneath the building's overhang.

Pedestrian Access Plan

Refer to Figure 6 for a plan depicting the Project sidewalk network and primary building entrance locations.

Motor Vehicle Access Plans

Refer to Figure 7.a and Figure 7.b for plans showing the vehicular access into (and egress from) the Development Site from McGrath Highway, and the on-site circulation to the loading dock and below-grade parking garage.

Tenants arriving by motor vehicle to park on-site are expected to use the East Driveway at the intersection of McGrath Highway and Rufo Road to access the parking garage entrance on the east side of the building. Those employees and visitors arriving by motor vehicle for curbside drop-off/pick-up are expected to use the Jug Handle to enter the South Driveway along the front of the building. Both tenants and those arriving for drop-off/pick-up can use either the East Driveway or the West Driveway/Jug Handle to exit the Site onto McGrath Highway.

Service vehicles are expected to use the East Driveway to access the loading dock on the north side of the building, and they may exit the site via either the East Driveway or the Jug Handle.

Motor Vehicle Parking Plan

Individual plans of each floor of the proposed garage are provided in Figures 8.a through 8.c.

Vehicle Movement Plans

Parking

Refer to Figure 9 for vehicle movement tracking paths that demonstrate the ability of a standard passenger vehicle to pull in to and out of a typical parking spot in the below-ground parking garage.



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Servicing and Loading

Refer to Figures 10.a through 10.c for vehicle movement tracking diagrams that demonstrate the ability of a large vehicle to navigate in and out of the Project site from the building's loading facilities. A WB-40-sized intermediate tractor trailer is the largest vehicle accommodated with the site's dimensions.

The exact number and timing of deliveries will vary depending on the nature of the standard laboratory or research and development activity.



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ATTACHMENTS

- Memorandum of Agreement between 15 McGrath Hwy Owner LLC, Somerbridge Hotel LLC, and Path Friends

FIGURES

- Development Site Plans
- Illustrative Site Plan
- Transportation Elements Plan
- McGrath Highway Resurfacing Project and Rufo Road Intersection
- Bicycle Parking and Access Plan
- Pedestrian Access Plan
- Motor Vehicle Access Plans
- Vehicle Parking Plan (Garage)
- Vehicle Movement Tracking Diagrams
 - Parking garage
 - Loading area

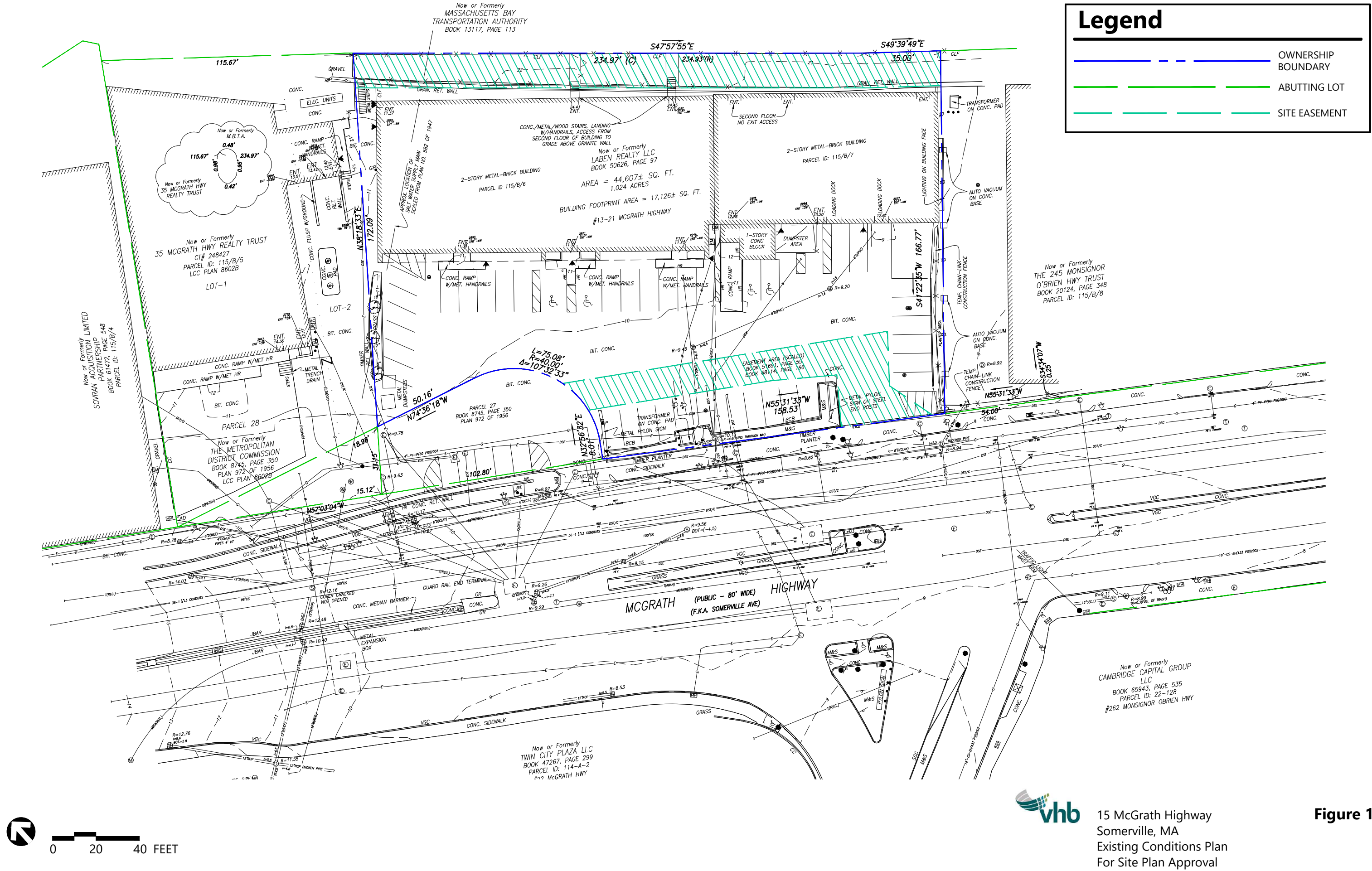
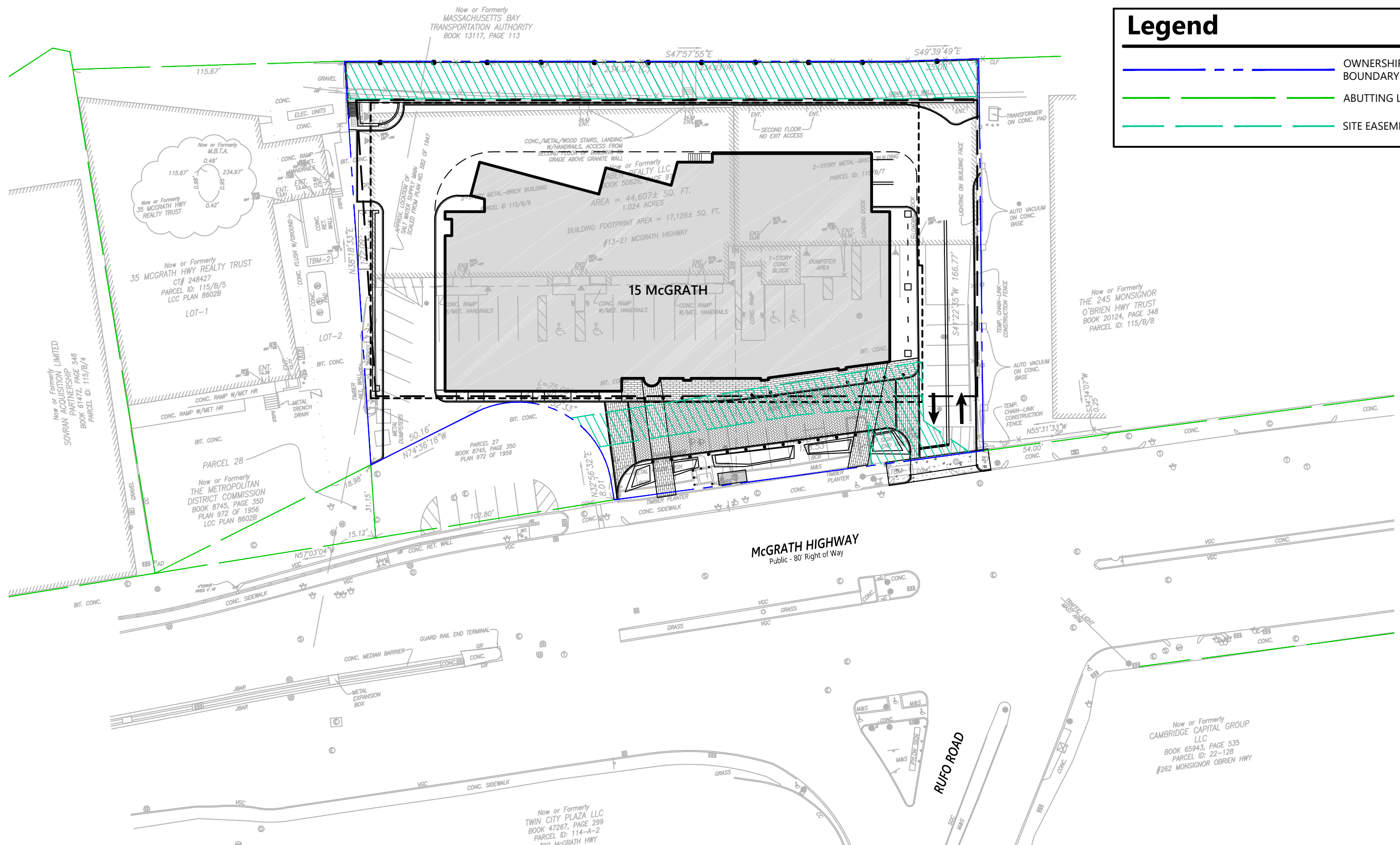
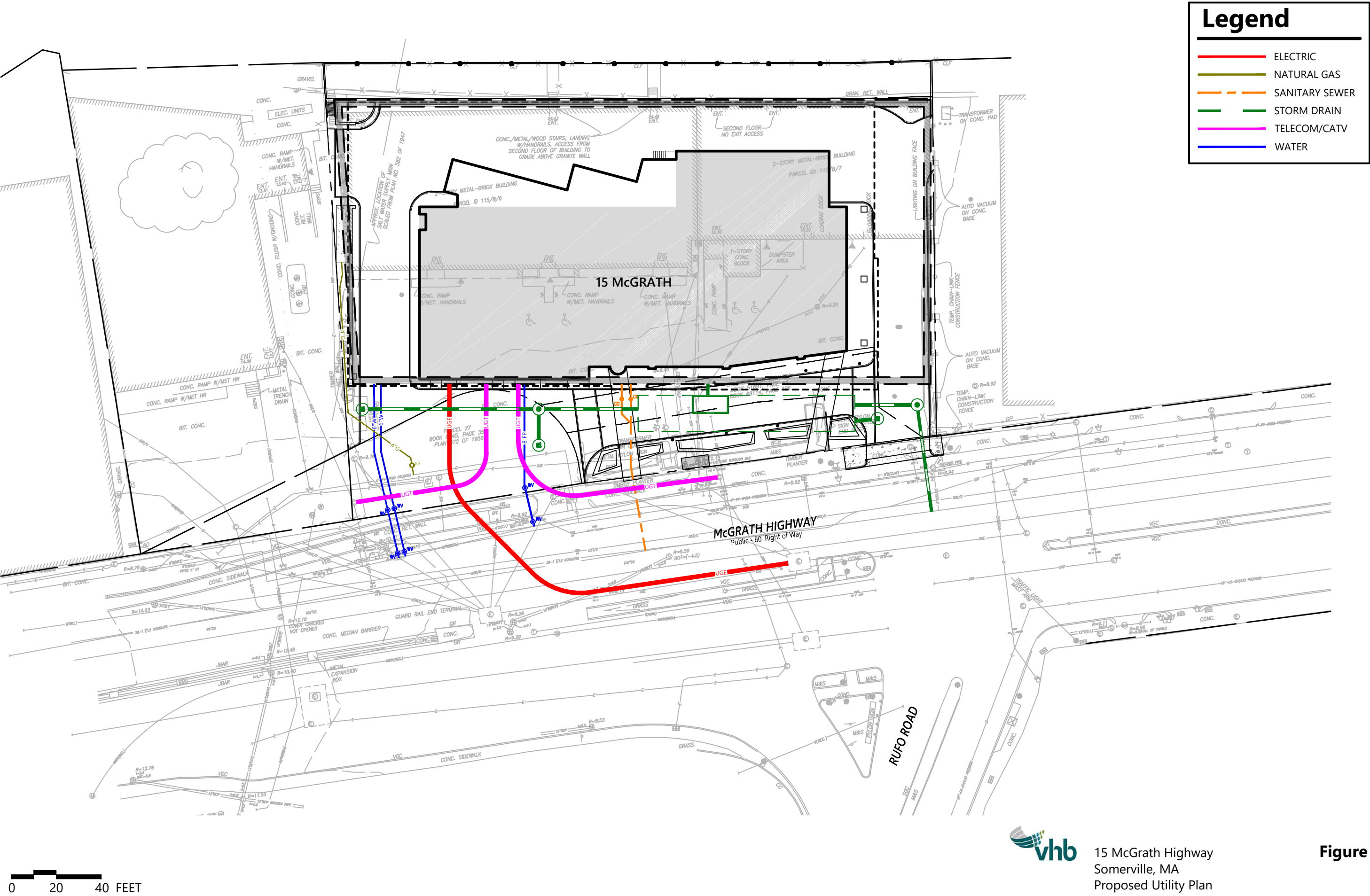
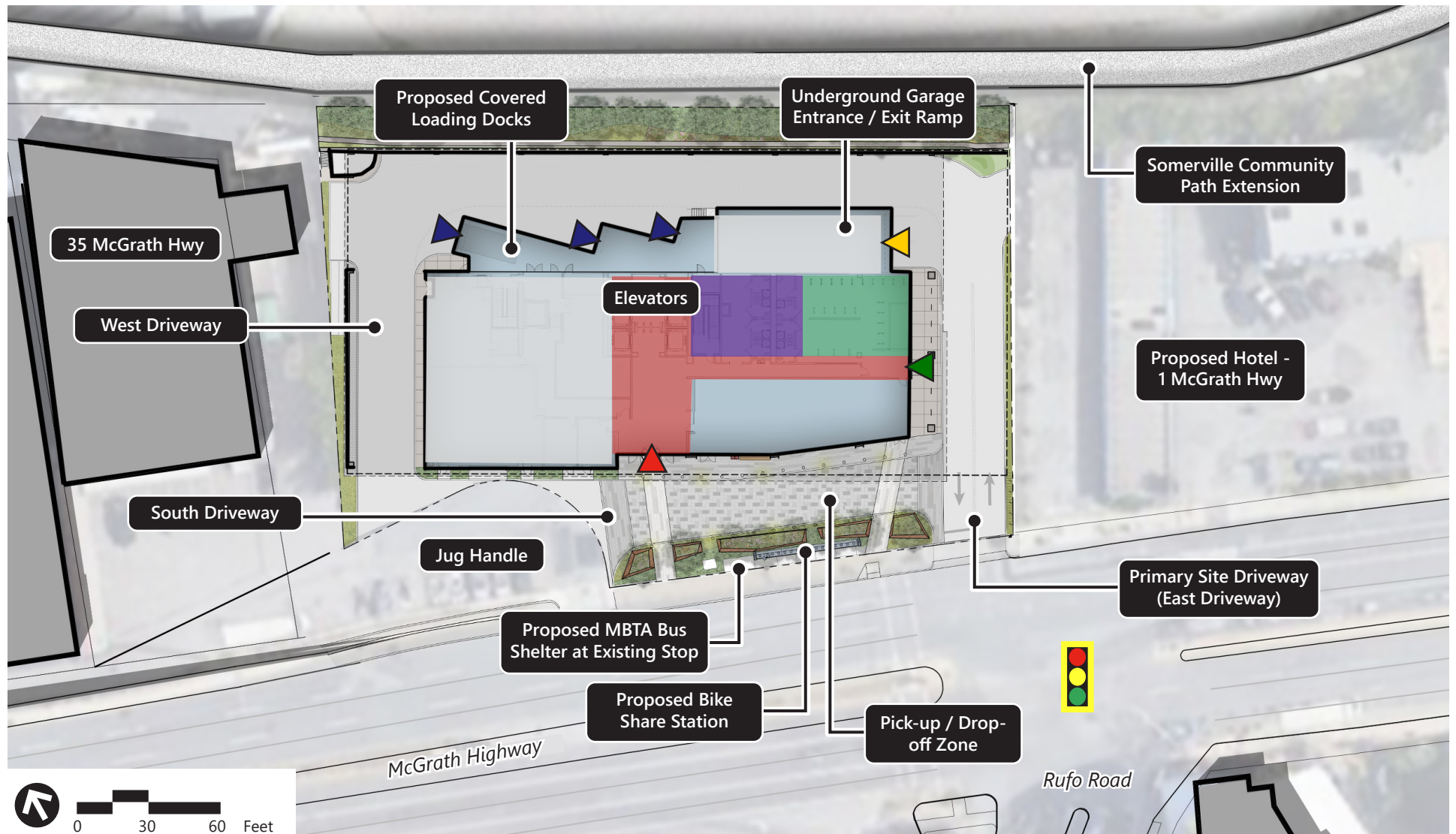






Figure 1.a







Source: Base Image / Site Plan by SGA

-  Pedestrian Access / Building Lobby Entrance
-  Garage Access
-  Loading Dock
-  Bike Room Access






-  Back of House / Building Operations
-  Bicycle Room
-  Lobby
-  Retail or Creative Enterprise Space
-  Showers / Changing / Restrooms



Figure 2
Illustrative Site Plan

13-21 McGrath Highway
Somerville, Massachusetts

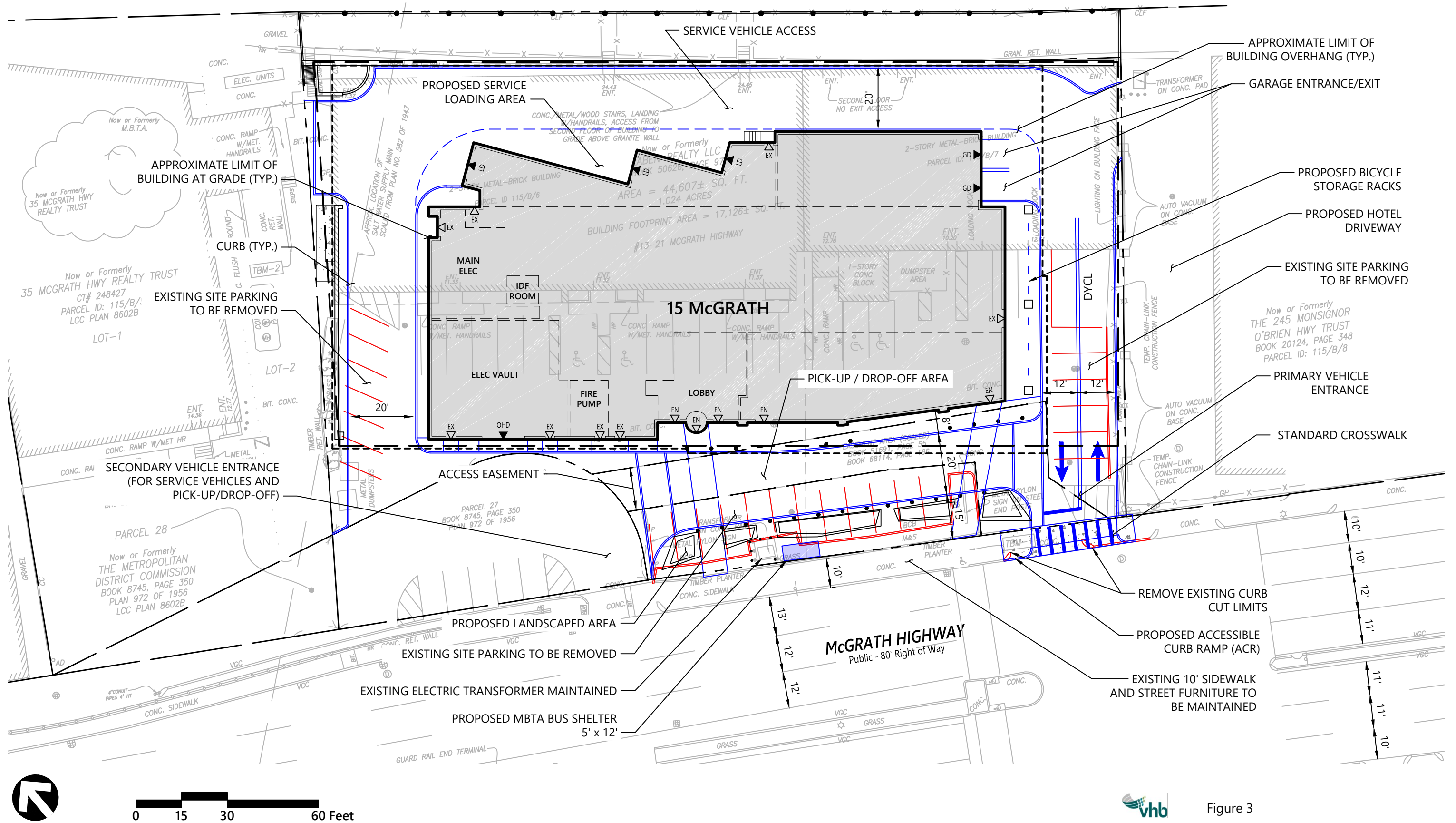
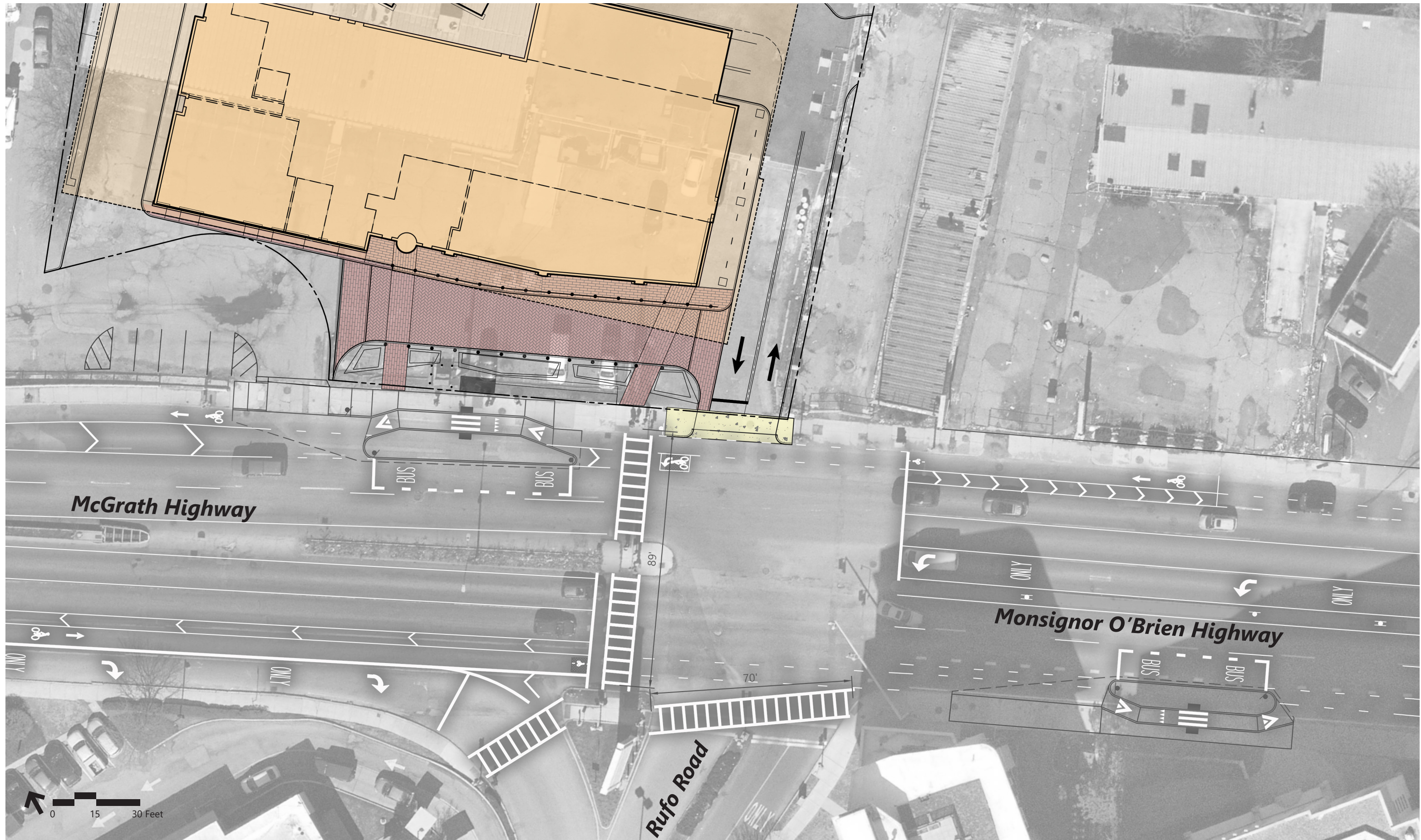


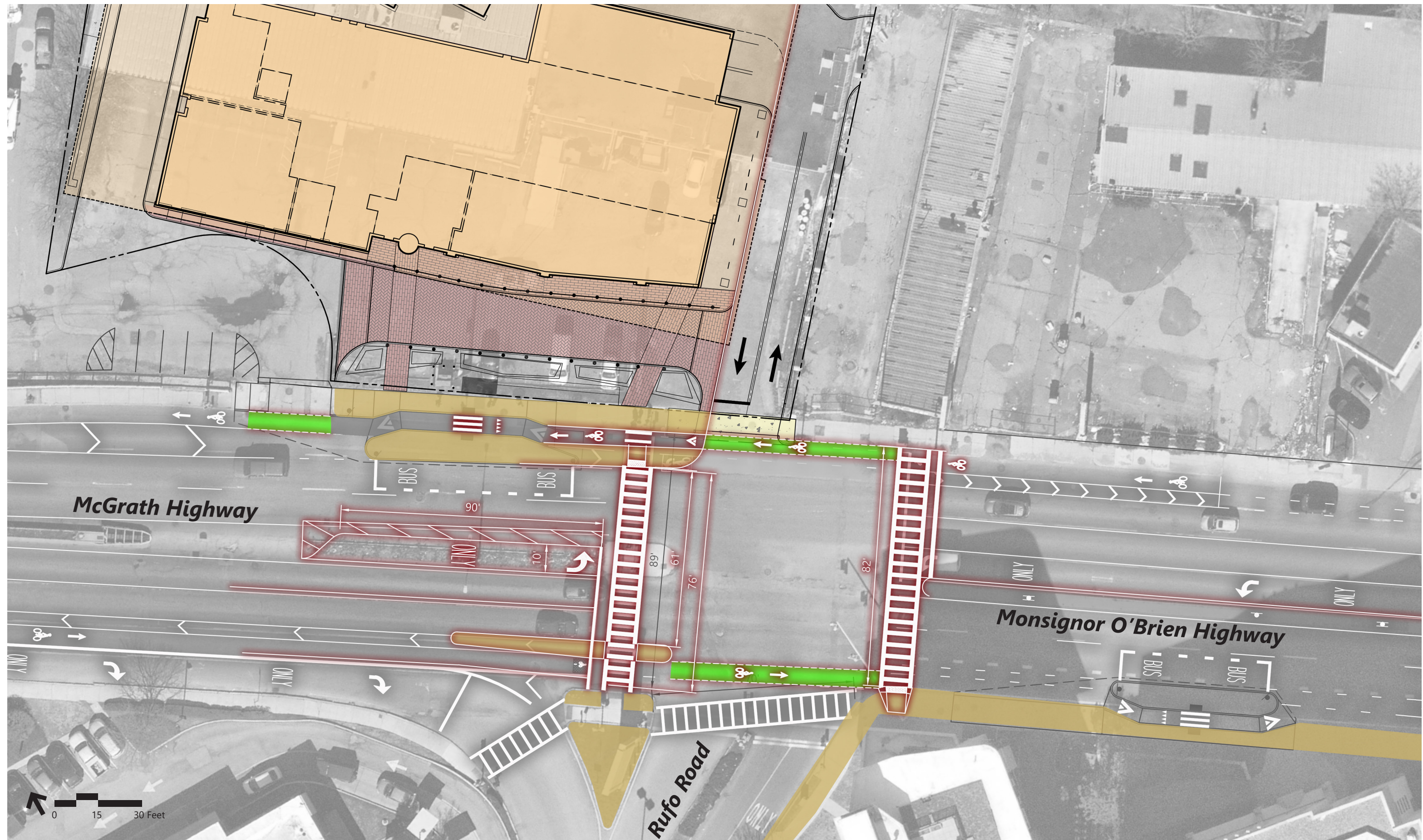
Figure 3
Transportation Access Plan (TAP)
On-Site Transportation Elements Plan
13-21 McGrath Highway
Somerville, Massachusetts



— MassDOT Pavement Markings



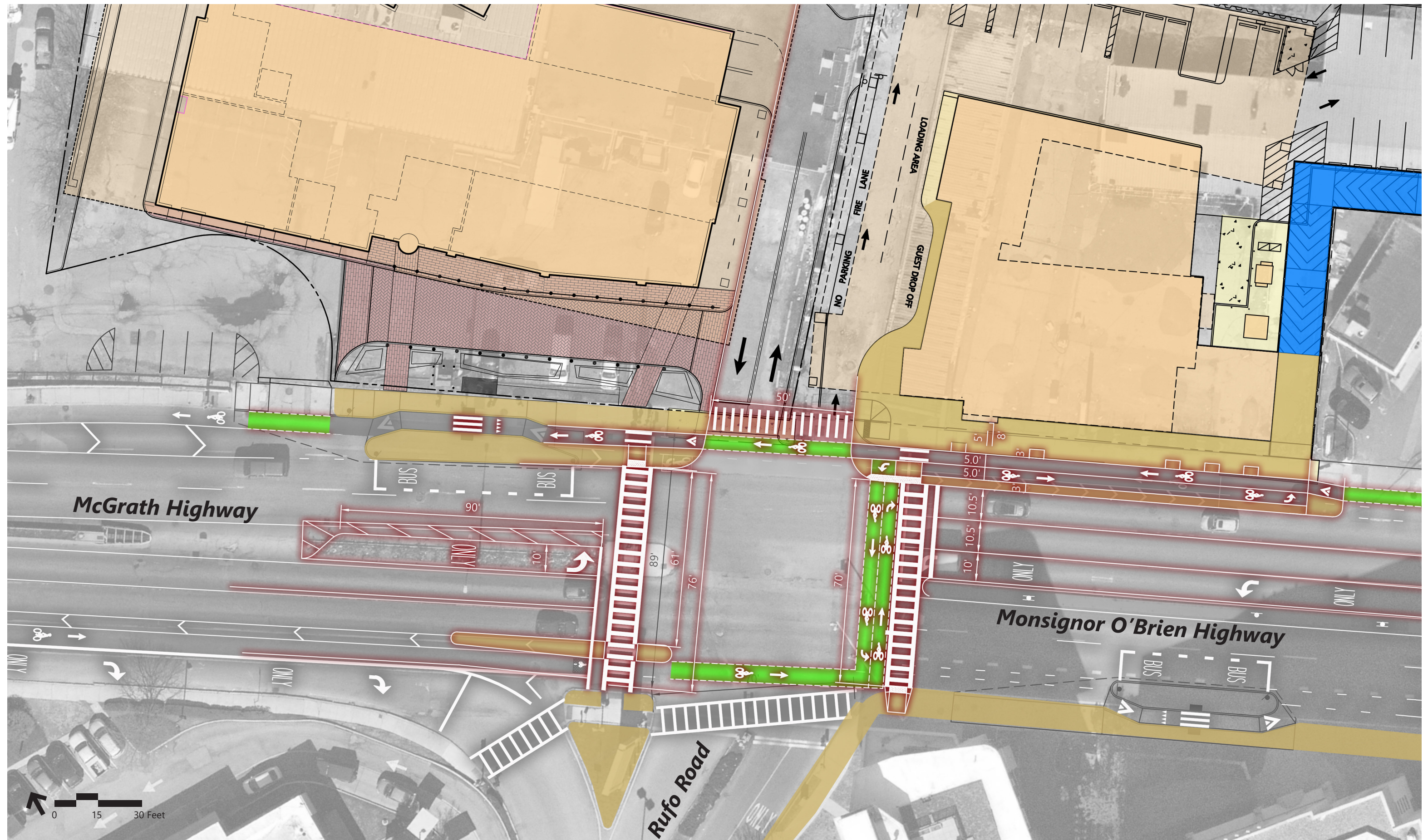
Figure 4.a
Planned MassDOT Resurfacing Project Changes to McGrath Highway at Rufo Road



- MassDOT Pavement Markings
- 15 McGrath Proposed Options



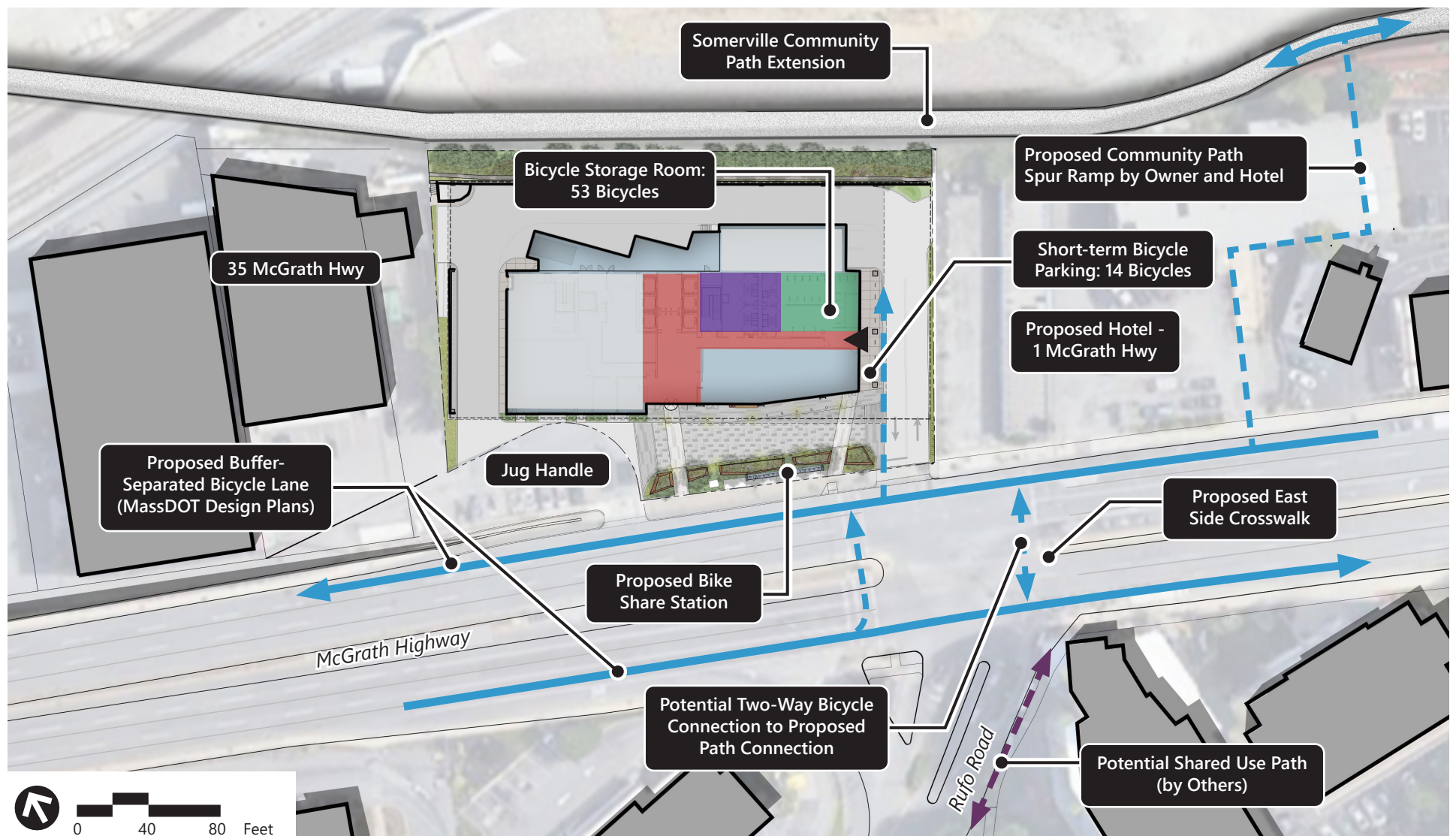
Figure 4.b
Proposed Changes to McGrath Highway
at Rufo Road



- MassDOT Pavement Markings
- - - 15 McGrath / 1 McGrath Joint Proposed Options



Figure 4.c
Proposed Changes to McGrath Highway
at Rufo Road (Full Vision)



Source: Base Image / Site Plan by SGA

Note: Proposed buffer-separated bicycle lanes are referenced in Spring 2021 design documents for the Resurfacing of McGrath Highway.



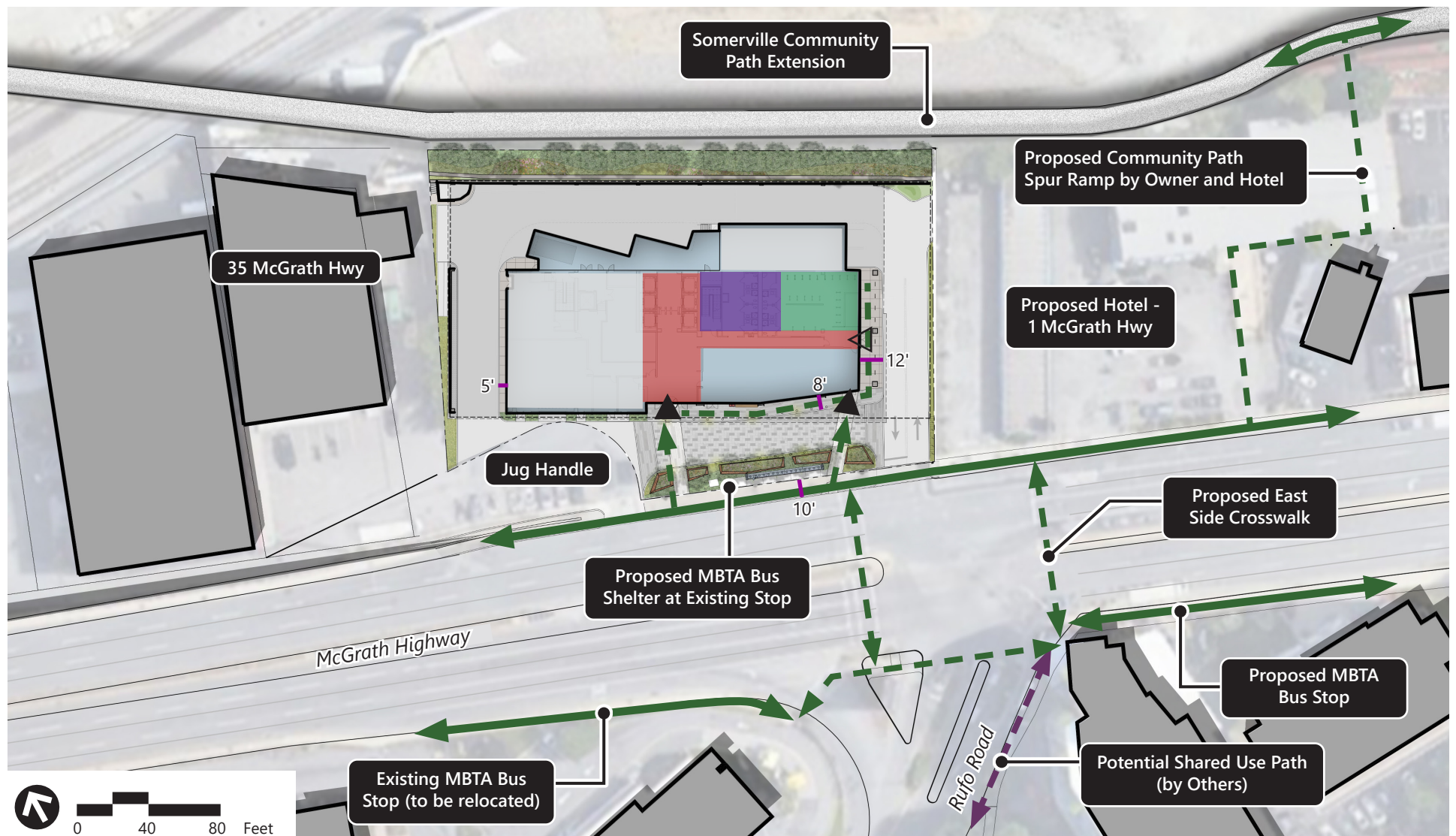
Figure 5

Bicycle Parking, Access & Connectivity Plan

**13-21 McGrath Highway
Somerville, Massachusetts**

▲ Bicycle Room Entrance

— Bicycle Connection



Source: Base Image / Site Plan by SGA

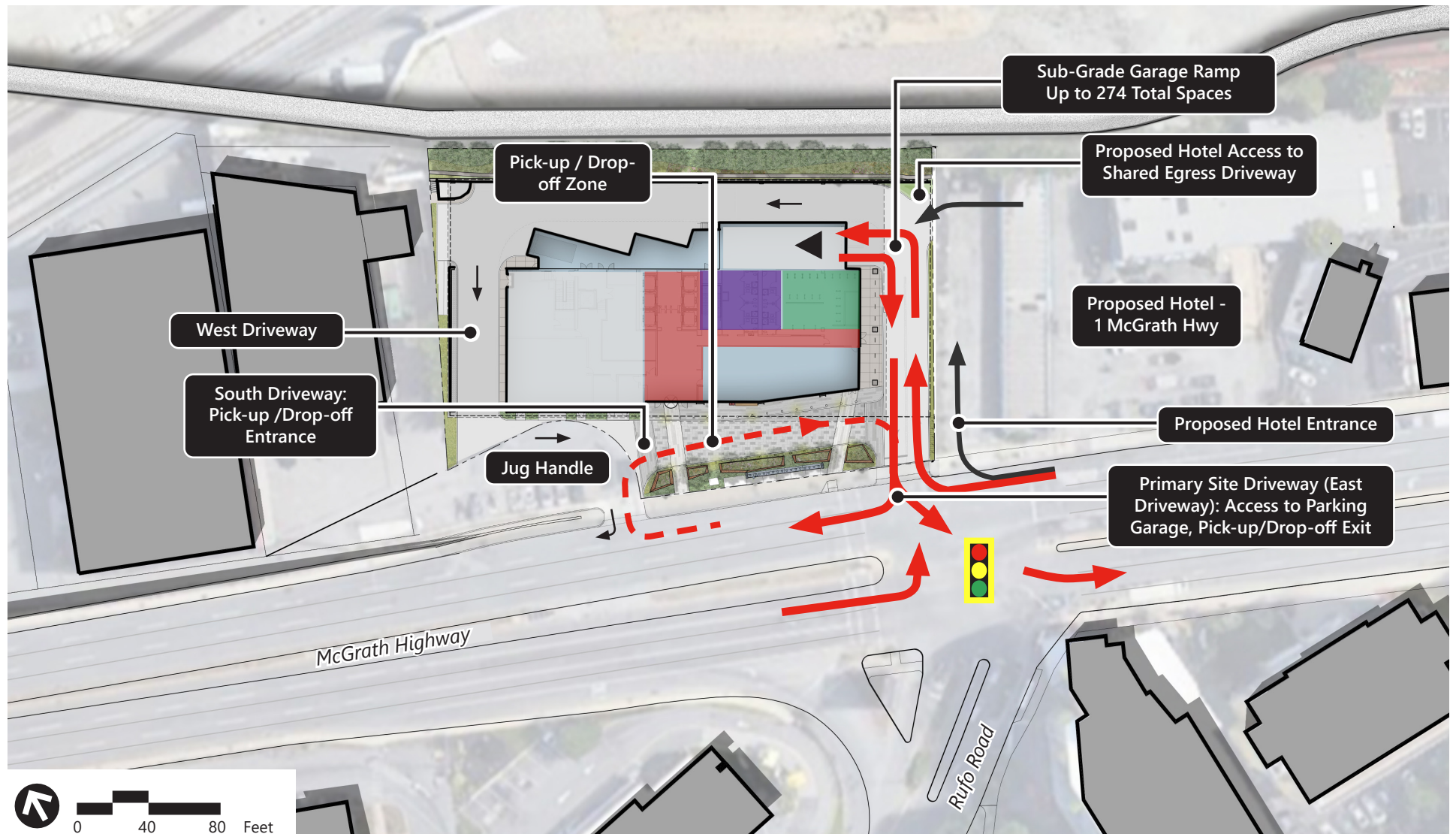
- ▲ Primary Pedestrian Entrance
- △ Secondary Pedestrian Entrance
- Primary Pedestrian Pathway
- - Pedestrian Connection



Figure 6

Pedestrian Access &
Connectivity Plan

**13-21 McGrath Highway
Somerville, Massachusetts**



Source: Base Image / Site Plan by SGA





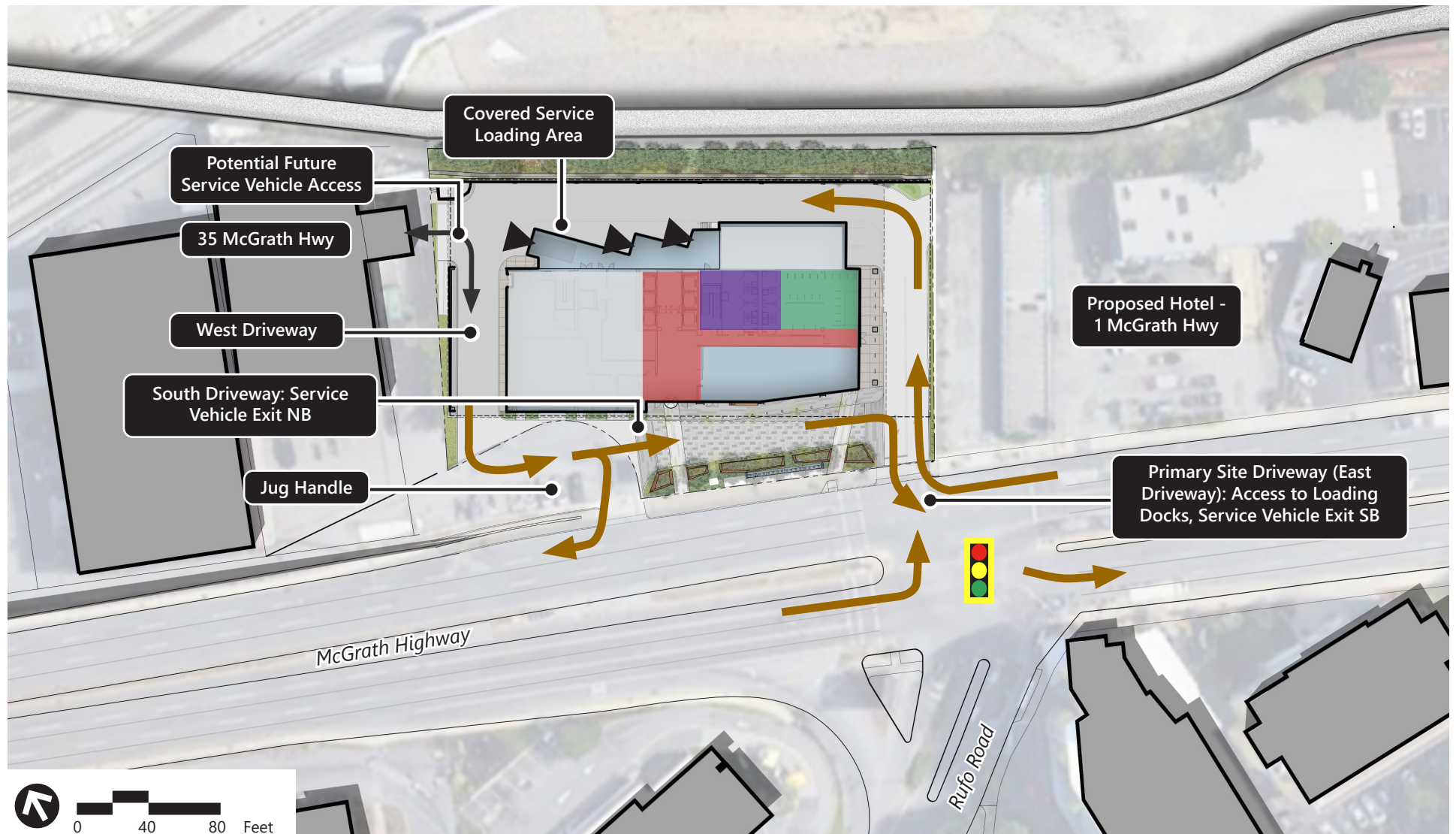
-  Parking Garage Entrance
-  Vehicle Access to Site Parking
-  Vehicle Access to Pick-up / Drop-off
-  Vehicle Access to Proposed Hotel by Others



Figure 7.a

Motor Vehicle Access & Parking Plan

**13-21 McGrath Highway
Somerville, Massachusetts**



Source: Base Image / Site Plan by SGA

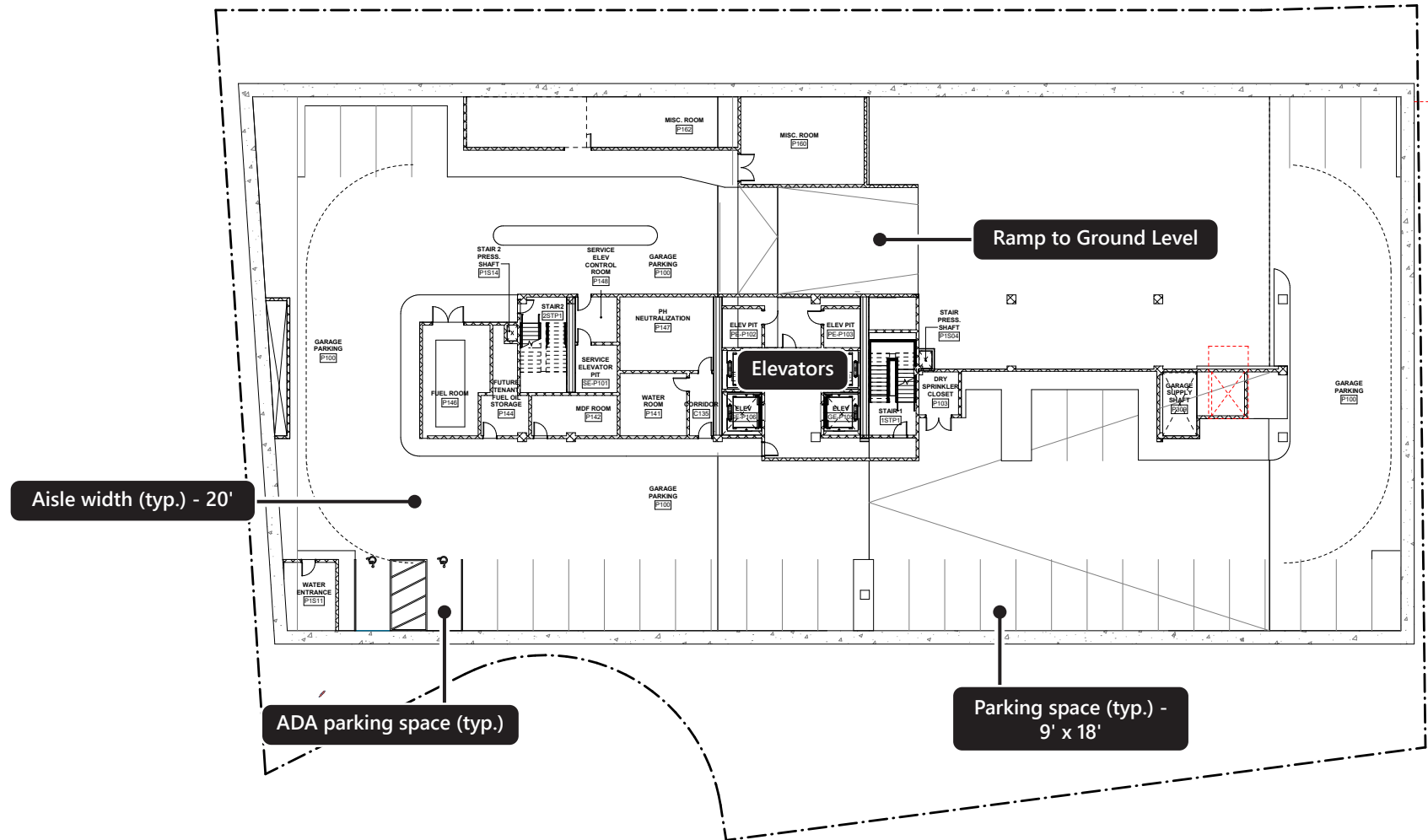
- ▲ Loading Dock
- Service Vehicle Access
- Service Vehicle Access to 35 McGrath Hwy (by Others)



Figure 7.b

Service Vehicle Access Plan

**13-21 McGrath Highway
Somerville, Massachusetts**



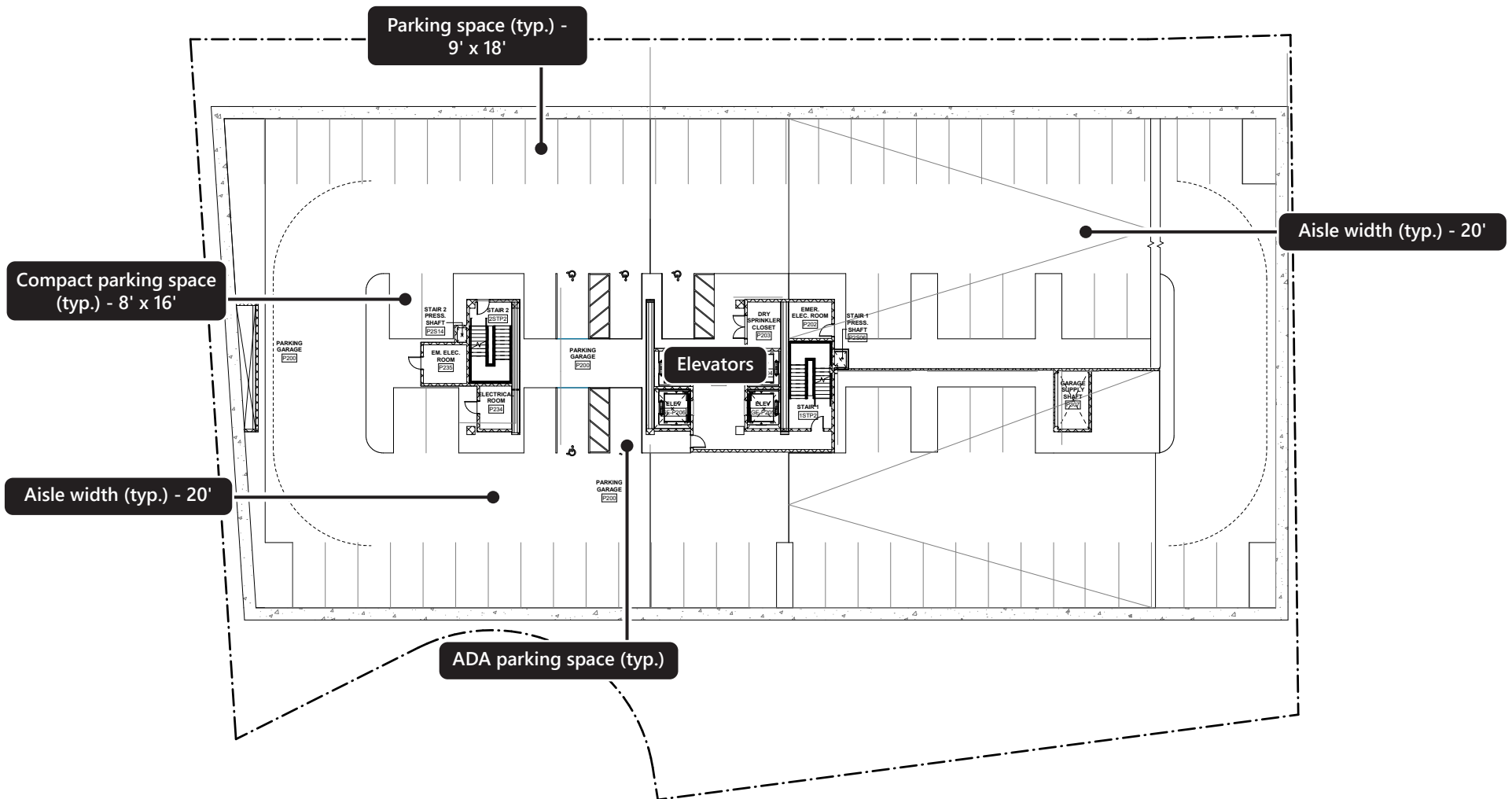
Source: Site Plan by SGA



Figure 8.a

Parking Plan - Levels P1

**13-21 McGrath Highway
Somerville, Massachusetts**

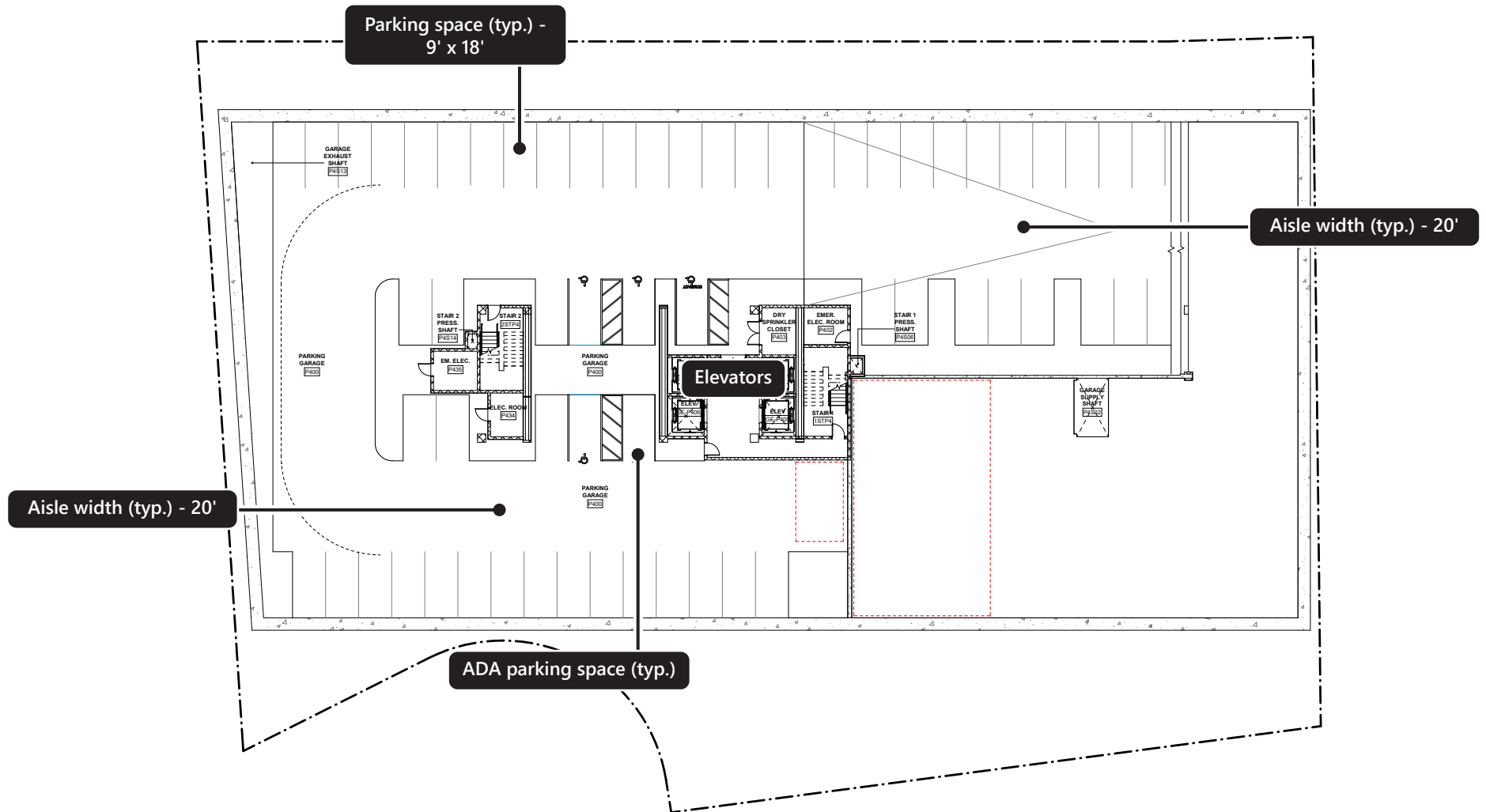


Source: Site Plan by SGA



Figure 8.b
Parking Plan - Levels P2 & P3

13-21 McGrath Highway
Somerville, Massachusetts

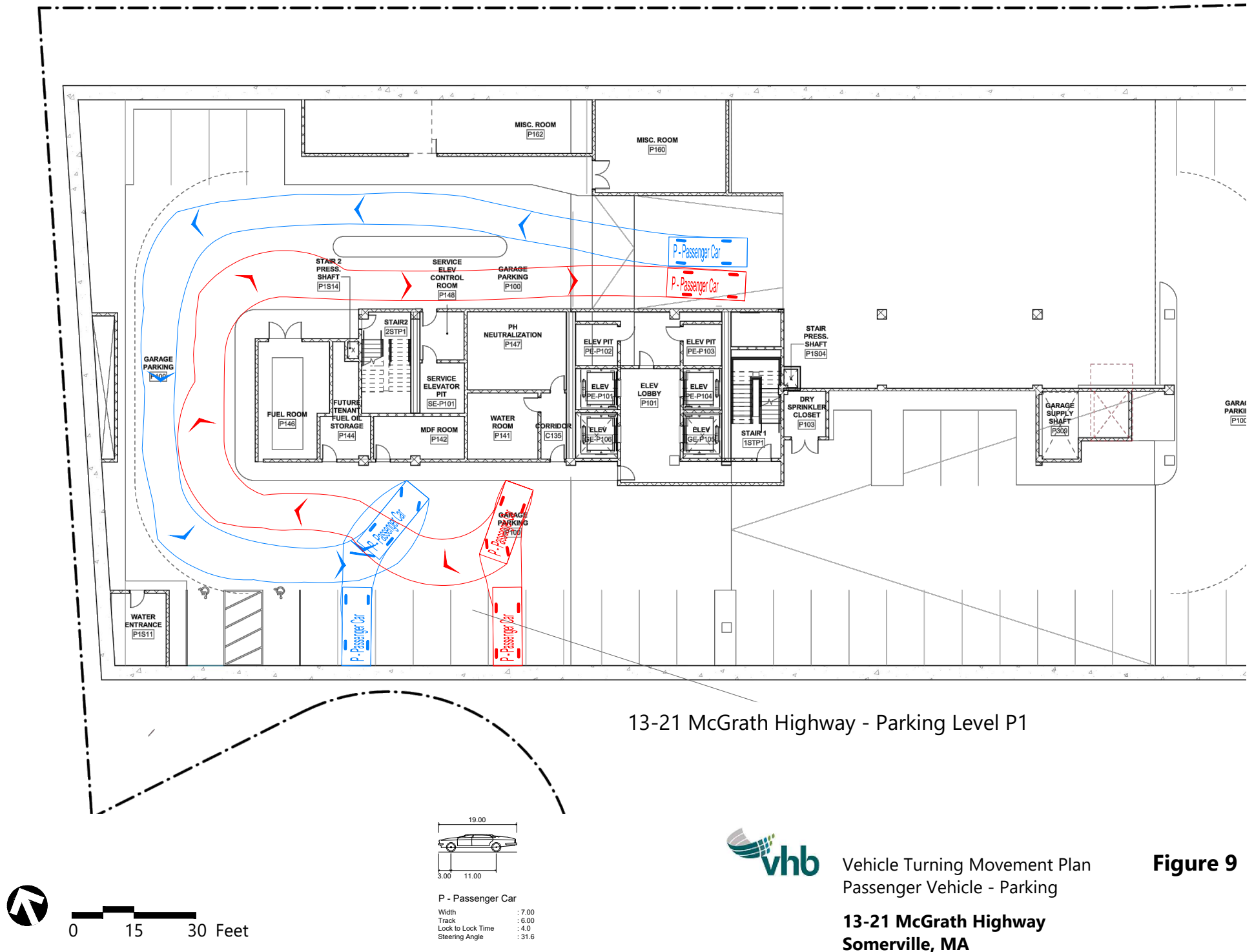


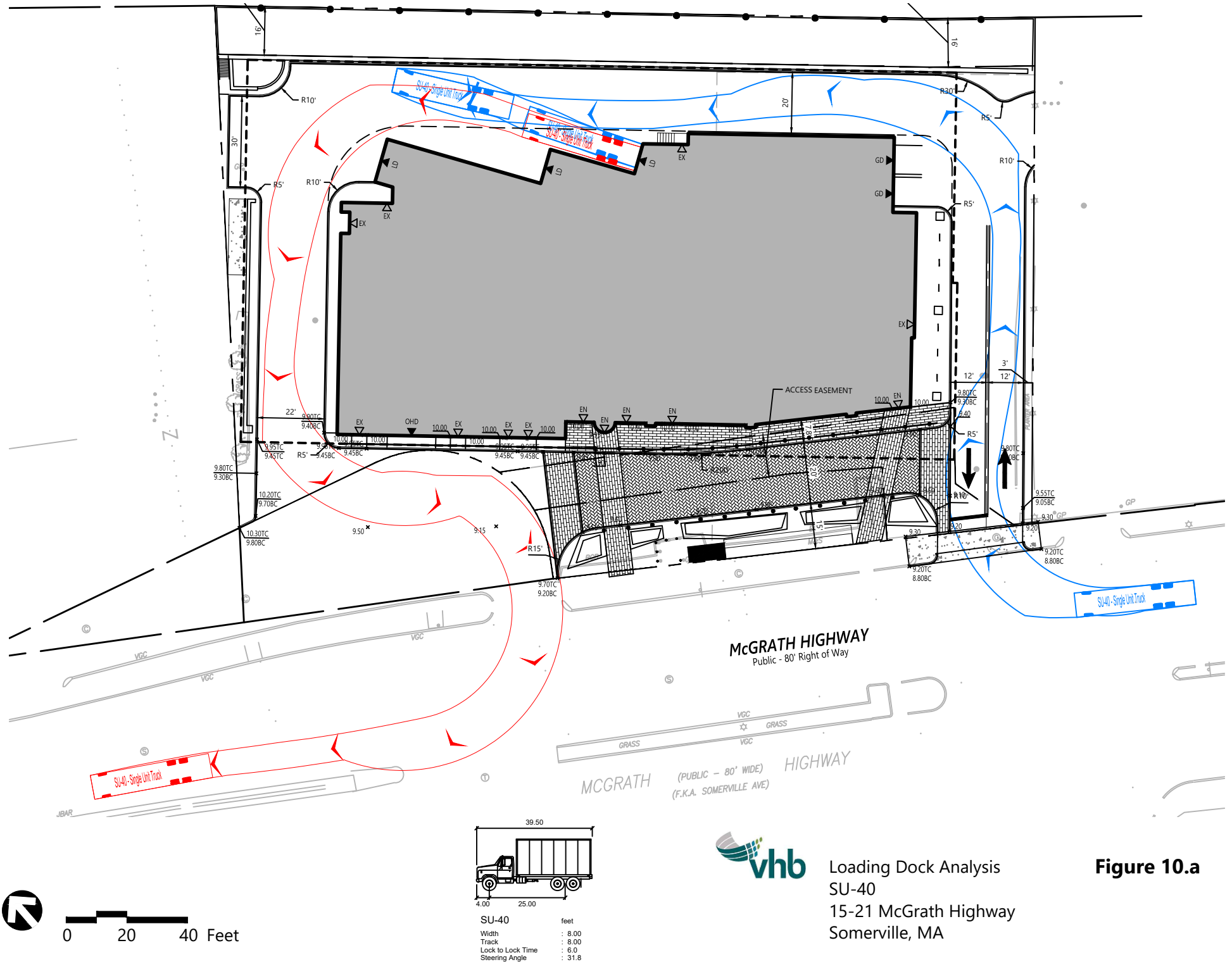
Source: Site Plan by SGA



Figure 8.c
Parking Plan - Level P4

13-21 McGrath Highway
Somerville, Massachusetts





Loading Dock Analysis
SU-40
15-21 McGrath Highway
Somerville, MA

Figure 10.a

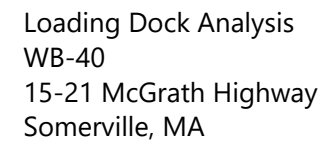
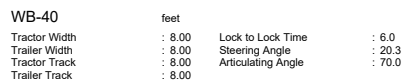
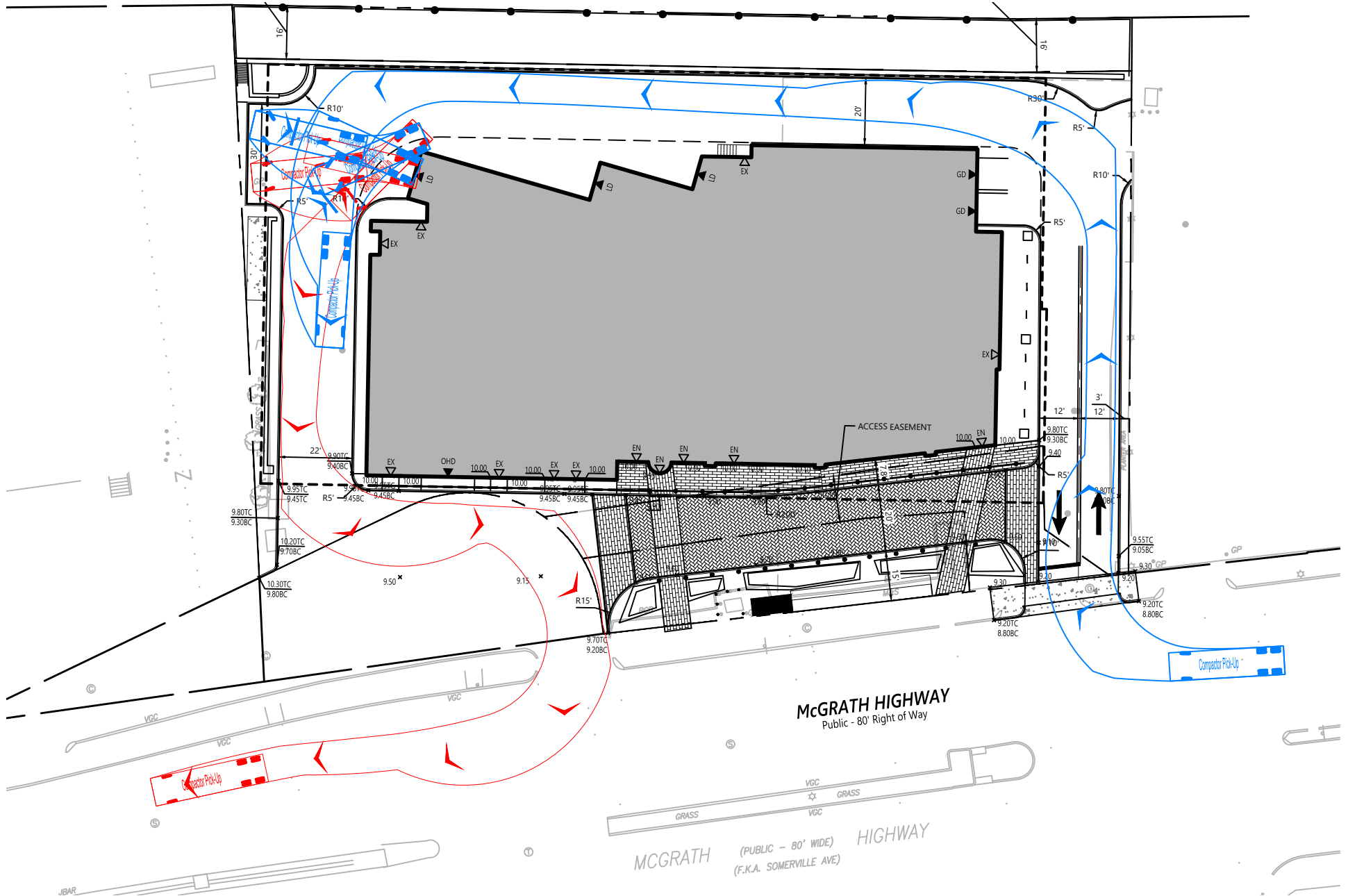
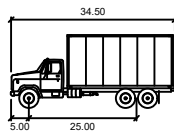


Figure 10.b



0 20 40 Feet



Compactor Pick-Up
Width : 8.50
Track : 8.50
Lock to Lock Time : 6.0
Steering Angle : 40.0



Loading Dock Analysis
Compactor Pick-up
15-21 McGrath Highway
Somerville, MA

Figure 10.c