



HOWARD STEIN HUDSON

Engineers + Planners

Construction Management Plan

440 Granite Ave

Milton, MA 02186

Prepared for

Town of Milton

Developer

Oranmore Enterprises, LLC

Construction Manager

Brenco Construction Company

Prepared by

Howard Stein Hudson

Date

March 30, 2023





General Information

On behalf of Oranmore Enterprises, LLC (The Developer) and Brenco Construction Company (The Contractor), in collaboration with Howard Stein Hudson (HSH), the attached Construction Management Plan (CMP) has been developed for review and approval by the Town of Milton. This CMP includes the following:

- Written agreement describing construction activities;
- Construction Management Plans, *dated March 30, 2023*, and;
- Construction Schedule.

Developer: Brenco Construction / Oranmore Enterprises, LLC

Michael Moore
36 Central Ave Unit 2C
Milton, MA 02186
617-259-5166

Contractor: Brenco Construction Company

Michael Moore
36 Central Ave Unit 2C
Milton, MA 02186
617-296-4548

Project Description

The Project is located at 440 Granite Avenue in Milton, MA. The proposed mixed used, multi-unit residential and commercial building will consist of a 4-story, residential building with underground parking. The site is bound by residential and commercial buildings to the north, Mechanic St to the east, and Granite Ave to the west and south.



Construction Phasing and Scheduling

To minimize impacts on the surrounding roadway network and to provide a safe pedestrian environment, it is expected that construction would occur in three phase:

- 1) Site Demolition
- 2) Site Excavation and Concrete Foundation
- 3) Structural, Interior Fit-Out, & Exterior Facade

WORK HOURS

Work Period	Time Period
Typical (Monday – Friday)	7:00 AM – 6:00 PM
Saturday	7:00 AM – 6:00 PM

It is expected that the overall construction duration should last approximately 20 months. If night work or weekend work becomes necessary, approval shall be obtained from the Town of Milton and other relevant departments.

Phase I: Site Demolition (ref. CMP-006)

Phase I involves the demolition of the existing structures. The Demo GC will perform a pre-existing survey on neighbor's property - 23 Mechanic St, The Demolishing will be performed by a large Excavator and the material will be loaded into a dumpster and removed from Site. The site will be surrounded by 72" chain link fence on the north side of the site. Along the south and east side of the site on Mechanic Street and Granite Ave, temporary concrete barriers MASH TL-2 with 36-inch chain link fence will be utilized. For pedestrian safety, pedestrians will be detoured onto the east side of Mechanic St at Adams Street. On Granite Ave, pedestrians will be detoured to the north along the east side of Mechanic Street to Adams Street. A minimum of 20-feet will remain on Mechanic Street throughout.

Trucks will access the site via the 20-foot swing gate A and exit via the 20-foot swing gate B on Granite Ave. On Mechanic Street, 20-foot swing gate C will be utilized to access the underground parking level once completed. Hazardous material assessment will be performed on each property and any abatement will be complete prior to removal. The dumpster will be loaded on trucks and



removed from site, via Mechanic St to Granite Ave to Adams St, Bryant Ave and I-93 South. This Material will go to all State Waste in Brockton.

Dust Control will be performed by hosing water on the waste material during demolition.

Phase II: Site Excavation and Concrete Foundation (ref. CMP-007)

During this phase, excavators, dump trucks, concrete pumps, and other support equipment will be used to excavate to the subsurface level and pour the concrete foundation. All staging including fence, barriers, pedestrian detours, and signage will remain from Phase I. Deliveries and hauling from the site will continue to occur using Granite Ave. Police detail officers will be required to assist with vehicular and pedestrian safety.

Phase III: Structural, Interior Fit-Out, Exterior Facade (ref. CMP-008)

During this phase, boom lifts, material delivery trucks, mobile crane, and other support equipment will be used to erect the building structure, install all interior features, and construct the exterior facade. All staging including fence, barriers, pedestrian detours, and signage will remain from Phase I. Deliveries from the site will continue to occur using Granite Ave. Police detail officers will be required to assist with vehicular and pedestrian safety.

Perimeter Protection/Public Safety

Brenco Construction Company will work to ensure the staging areas minimize impact to pedestrian and vehicular flow. Secure fencing and barricades will be used to isolate construction areas from pedestrian traffic around the site. In addition, sidewalk areas and walkways near construction activities will be well marked to protect pedestrians and ensure their safety. Proper signage as required by the Town of Milton will be installed and regularly updated as site conditions change during the construction process.

Construction procedures will be designed to meet all Occupational Safety and Health Administration (OSHA) safety standards for specific site construction activities.

Construction equipment will be staged in the basement once it is excavated, and the concrete poured. Construction worker parking has been secured at 610 Adams Street.



Safety on Site

All subcontractors working on site shall provide and maintain all safety measures, procedures, and documentation as required by governing agencies. The jobsite will be enclosed by temporary fencing. Brenco Construction Company will meet with Town Officials to review the proposed traffic management plan to ensure acceptance and compliance with local jurisdiction. Prior to the start of work by any subcontractor a Hazardous Risk Assessment Plan is reviewed. During this review all potential hazardous work requirements and the safety plans required to mitigate these risks are confirmed. Construction procedures will be designed to meet all Occupational Safety and Health Administration (OSHA) safety standards for specific site construction activities. With the support of Brenco Construction Company, all subcontractors will implement and manage their own Health and Safety program for the project. All site personnel will be subject to follow the safety orientation and identification guidelines and processes established by Brenco Construction Company.

Access to the site for emergency vehicles will be maintained at all times with a dedicated and marked point of access. All other site points of access will be maintained for a secondary access as needed. The proposed site logistic and traffic plans are designed to isolate the construction while providing safe access for pedestrians and automobiles during normal day to day activities and emergencies.

A trailer will not be located on site and upon completion of the structural steel, Brenco Construction Company will have a site office in the new commercial space.

Abutter and Agency Coordination

Brenco Construction Company recognizes the challenges of building construction in an urban setting and the importance of responding to the needs of adjacent businesses and residents. The abutting properties shall be informed of the scheduled start of construction and will be updated on the development during its construction as needed.

As appropriate, Brenco Construction Company, has coordinated construction activities with the Town of Milton and other on-going construction projects in the area to help minimize the impacts to the community.



Emergency Vehicle Access

Access to the site for emergency vehicles will be maintained at all times. The proposed staging plan is designed to isolate the construction while providing safe access for pedestrians and automobiles during normal day to day activities and emergencies.

All construction material delivery trucks will be loaded and unloaded inside the construction fence throughout the course of the project. Trucks and equipment will follow the designated truck route and be staged at the designated areas on the CMP.

Utility Connections

There will be multiple utility connections on this project, all utilities will be located onsite, on Granite Ave, or Mechanic Street. This will necessitate coordination with each respective utility company and the Town of Milton Department of Public Works. Road closures and street opening permits will be submitted for approval accordingly prior to the start of each task. All right-of-way utility work will conform to the Town of Milton's utility standards and moratorium dates respectfully and as indicated per Town of Milton.

Police detail officers should be present to facilitate traffic for work within the Town of Milton right of way. Upon completion of each work period, the utility trenches shall be steel-plated, and the lanes will be reopened to daily traffic. If work occurs during the winter moratorium, utility trenches shall be backfilled, compacted, and paved with hot mix asphalt at the end of each workday. Steel plates shall not be used during the winter moratorium.

Truck Movements During Construction

Trucks are needed for material removal and delivery from and to the site as the project proceeds. Truck traffic related to this construction site shall vary considerably throughout the construction period.

Any deliveries that need to be completed outside of the work period will need direct approval from the Town of Milton prior to deliveries.

Trucks coming to and from the site are required to use major arterial roadways or highways and not local streets. The selection of proposed truck routes is based on the following criteria:



- Minimizing truck activity in the residential neighborhoods;
- Designating specific roads where trucks are permitted; and
- Providing access to and from the major arteries (e.g. Interstate 93, 90)

A detailed Truck Routing Plan is shown on Sheet CMP-012 and the individual truck maneuvers for entering and exiting the site are shown on Sheets CMP-009 and CMP-011 of the attached CMP.

Dust Control

Construction activities generate fugitive dust that will result in localized increases in airborne particulate levels. To reduce emissions of fugitive dust and minimize impacts on the local environment, strictly enforced mitigation measures will be employed, including:

- Wetting agents will be used regularly to control and suppress dust that may come from construction activities.
- Trucks used for the transportation of construction debris will be covered before exiting the project site.
- Streets and sidewalks will be cleaned regularly using mechanical street sweepers to minimize accumulations.
- Trucks tires shall be hosed down prior to entering public streets.

Snow Removal

Brenco Construction Company shall be responsible for removing snow from all public sidewalk and temporary pedestrian routes affected by their work. This will be done daily and continuously to ensure that all sidewalks are clear of snow and ice. Under no condition will the removed snow be disposed of on public property.

Rodent Control

Town of Milton has declared that the infestation of rodents in the Town is a serious problem. In order to control this infestation, the Town enforces the requirements established under the Massachusetts State Sanitary Code, Chapter 11, 105 CMR 410.550 and the State Building Code, Section 108.6.



Brenco Construction Company will implement a rodent control program to be administered by a licensed pest control contractor. Rodent control measures will be in-place prior to, during, and following construction activities. The program will include performance of extermination and control procedures on a bi-weekly basis, and the placement of tamper resistant bait boxes around the perimeter of the site.

Emergency Contacts

A 24-hour emergency contact list will be provided to all parties involved in the project prior to start of construction and maintained throughout construction.

Oranmore Enterprises, LLC

Contact: Michael Moore 617-259-5166

Brenco Construction Company

Contact: Seamus Moore 617-719-2110



Signatures and Approvals

Submitted By:

Michael Moore
Brenco Construction Company

Approved By:

Town of Milton

Signature

Date

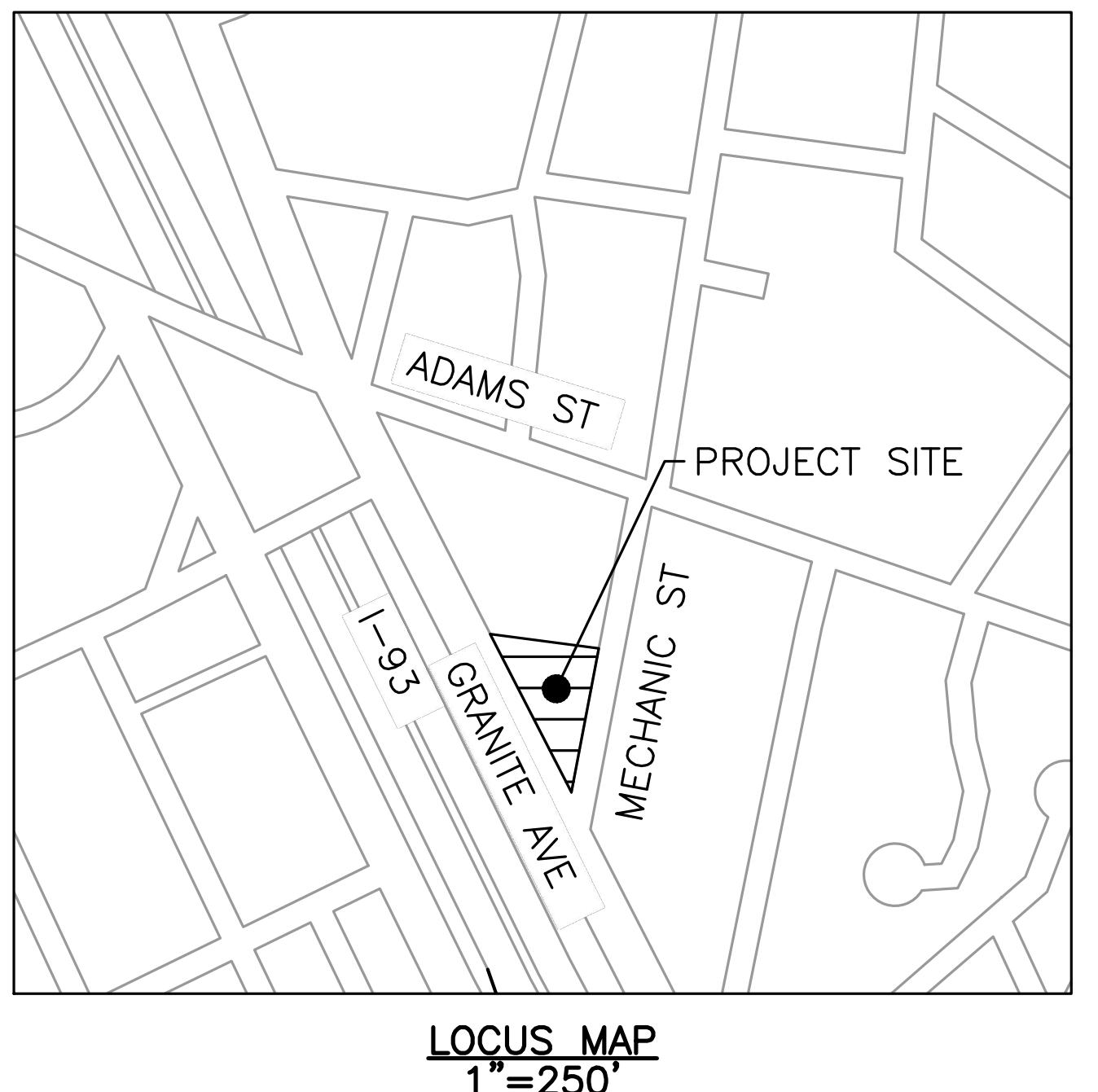
Signature

Date

CONSTRUCTION MANAGEMENT PLANS FOR 440 GRANITE AVE MILTON, MA.

SHEET INDEX

CMP-001	COVER SHEET
CMP-002	GENERAL NOTES, LEGEND, AND SCHEDULE
CMP-003	TEMPORARY TRAFFIC CONTROL DEVICES I
CMP-004	TEMPORARY TRAFFIC CONTROL DEVICES II
CMP-005	EXISTING CONDITIONS
CMP-006	SITE DEMOLITION
CMP-007	SITE EXCAVATION AND CONCRETE FOUNDATION
CMP-008	STRUCTURAL, INTERIOR FIT-OUT, & EXTERIOR FACADE
CMP-009	TRUCK TURNING MANEUVERS I
CMP-010	TRUCK TURNING MANEUVERS II
CMP-011	TRUCK TURNING MANEUVERS III
CMP-012	TRUCK ROUTING PLAN
CMP-013	SIGN SUMMARY



ALL WORK SHALL CONFORM TO THESE PLANS, THE 2020 MASSACHUSETTS HIGHWAY DEPARTMENT STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES (ENGLISH EDITION), THE 2017 CONSTRUCTION STANDARDS, THE CURRENT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS (MUTCD) WITH LATEST REVISIONS, THE 1990 STANDARD DRAWINGS FOR SIGNS AND SUPPORTS, THE 1968 STANDARD DRAWINGS FOR TRAFFIC SIGNALS AND HIGHWAY LIGHTING, AND THE AMERICAN STANDARD FOR NURSERY STOCK CURRENT EDITION (ANSI Z-60.1-2004).

PREPARED FOR:



440 GRANITE AVE
MILTON, MASSACHUSETTS, 02186
NORFOLK COUNTY

ISSUED FOR
CONSTRUCTION

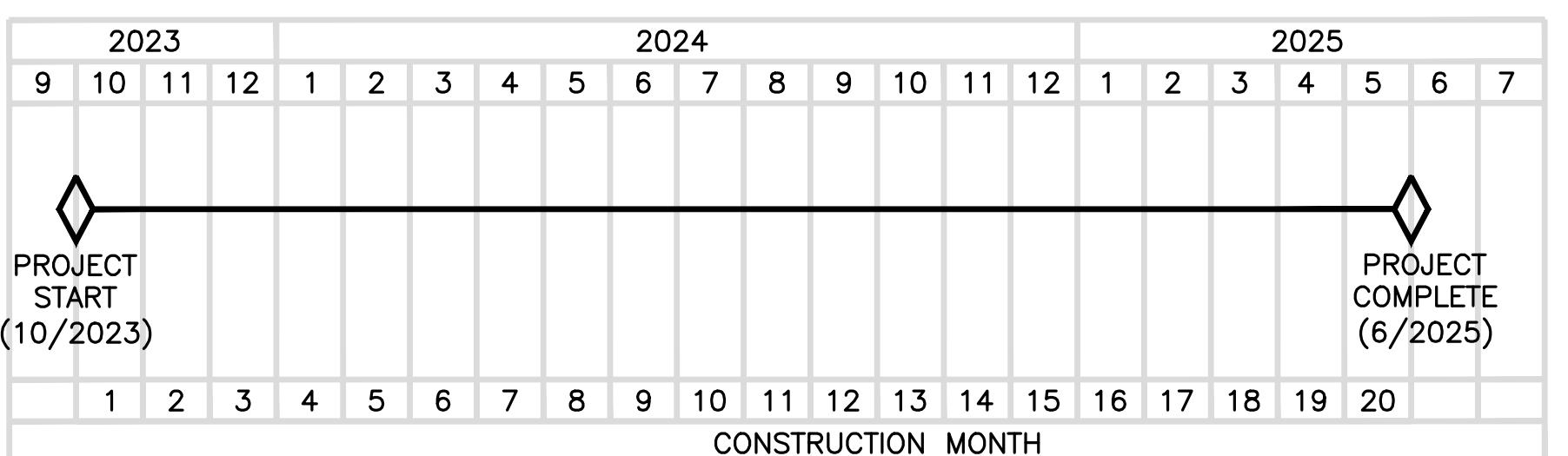
COVER

DATE:	MARCH 30, 2023
PROJECT NUMBER:	2021153
DESIGNED BY:	M.KHARAKH
DRAWN BY:	M.KHARAKH
CHECKED BY:	K.MARTIN

GENERAL NOTES

1. THESE PLANS ARE NOT INTENDED TO LIMIT THE CONTRACTOR'S RIGHT TO SCHEDULE THE WORK BUT TO OUTLINE ONE WAY OF PROGRESSING. THE CONTRACTOR IS EXPECTED TO USE KNOWLEDGE AND EXPERIENCE TO PERFORM THE WORK IN THE MOST SAFE AND EFFICIENT MANNER IN COMPLIANCE WITH THE DRAWINGS AND SPECIFICATIONS AND MEETING THE REQUIREMENTS OF THE TOWN OF MILTON.
2. CONTRACTOR SHALL SUBMIT FOR APPROVAL BY THE CITY, CONSTRUCTION MANAGEMENT PLANS FOR ANY WORK OUTSIDE OF THE WORK ZONES INDICATED IN THESE DRAWINGS.
3. ALTERNATIVE PHASING OR MODIFICATIONS TO ANY ASPECT OF THE CONSTRUCTION MANAGEMENT PLANS AND THE CONSTRUCTION STAGING PLANS WILL BE SUBJECT TO REVIEW FOR ACCEPTANCE BY THE CITY PRIOR TO COMMENCEMENT OF WORK. THE CONTRACTOR SHALL BEAR ALL COSTS ASSOCIATED WITH THE SUBMISSION AND REVIEW OF ALTERNATIVE CONSTRUCTION MANAGEMENT PLANS AND CONSTRUCTION STAGING PLANS, INCLUDING PRESENTATION TO THE CITY AND THE NEIGHBORHOOD IF NEEDED, VEHICULAR AND PEDESTRIAN TRAFFIC MODELING, LEVEL OF SERVICE (LOS) ANALYSES, AND OTHER ASSOCIATED EFFORTS. ALTERNATIVE CONSTRUCTION MANAGEMENT AND CONSTRUCTION STAGING PLANS SHALL NOT CAUSE AN INTERFERENCE WITH ADJACENT CONTRACTS OR DELAY THE SCHEDULE OR INCREASE THE COST OF THIS OR ANY ADJACENT CONTRACTS. LEVEL OF SERVICE ANALYSIS SHALL BE DEFINED BY THE "HIGHWAY CAPACITY MANUAL."
4. THE CONSTRUCTION MANAGEMENT PLANS REQUIRE THAT SPECIFIC SIDEWALK WIDTHS BE MAINTAINED DURING THE VARIOUS STAGES OF CONSTRUCTION TO FACILITATE ACCEPTABLE PEDESTRIAN LEVEL OF SERVICE (LOS) MOVEMENTS ALONG TRAVEL WAYS TO AND FROM ABUTTING BUILDING AND BUSINESSES WITHIN THE PROJECT LIMITS. THE MINIMUM SIDEWALK WIDTHS SHOWN ON THE TRAFFIC MANAGEMENT PLANS ARE BASED ON ENGINEERING ANALYSIS AND ARE LOCATED ON THE PLANS AROUND TEMPORARY FIXED BARRICADED WORK ZONES AT SITE SPECIFIC POINTS OF CONSTRUCTION. THE SIDEWALK WIDTHS SHOWN ON THE CONSTRUCTION MANAGEMENT PLANS SHALL NOT BE DEVIATED FROM WITHOUT THE PERMISSION OF THE CITY. WHEN SPECIFIC DIMENSIONS ARE NOT SHOWN, THE CONTRACTOR SHALL MAINTAIN A MINIMUM 4-FOOT PASSAGE.
 - A. CONTRACTOR SHALL PROVIDE AND MAINTAIN A TEMPORARY PEDESTRIAN ROUTE ACCESSIBLE TO DISABLED PERSONS AROUND BLOCKAGES TO AN EXISTING PEDESTRIAN ROUTE (E.G., SIDEWALKS, CROSSWALKS, PEDESTRIAN CURB RAMPS, ETC.). BLOCKAGES INCLUDE, BUT ARE NOT LIMITED TO, CONSTRUCTION WORK, EXCAVATIONS, EQUIPMENT AND VEHICLES, TEMPORARY WATER AND UTILITY LINES.
 - B. SIDEWALK AREAS SHALL REMAIN OPEN AND FREE FROM SAFETY CONTROL DEVICES AND CONSTRUCTION DEBRIS THROUGHOUT THE DURATION OF THE CONSTRUCTION. PEDESTRIAN DETOURING SHALL NOT OCCUR UNLESS APPROVED BY THE CITY.
5. CONTRACTOR SHALL SECURE WORK AREAS TO ENSURE PUBLIC SAFETY AND CONVENIENCE. THIS SHALL INCLUDE ENSURING THAT ALL EXCAVATIONS ARE PROTECTED AT ALL TIMES.
6. ALL CONSTRUCTION SIGNING, DRUMS, BARRICADES AND OTHER DEVICES SHALL CONFORM WITH THE CURRENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AS AMENDED AND MILTON DEPARTMENT OF PUBLIC WORKS SIGN STANDARDS.
7. CHANNELIZATION WILL BE ACCOMPLISHED THROUGH THE USE OF RELECTORIZIED PLASTIC DRUMS OR APPROVED EQUAL IN ACCORDANCE WITH THE MUTCD.
8. CONTRACTOR SHALL COORDINATE WITH THE CITY TO ACCOMMODATE ACCESS NEEDS OF ABUTTING PROPERTIES NOT SPECIFIED IN THE PLANS.
9. CONTRACTOR SHALL MAINTAIN EMERGENCY PASSAGE AT ALL TIMES TO BUILDINGS WITHIN THE PROJECT LIMITS. CONTRACTOR SHALL MAINTAIN 24-HOUR EMERGENCY VEHICLE ACCESS TO AND THROUGH CONSTRUCTION AREAS.
10. CONTRACTOR SHALL PROVIDE POLICE DETAILS DURING WORK HOURS FOR TRAFFIC CONTROL.
11. SAFETY SIGNS PROPOSED FOR LOCATIONS OTHER THAN ERECTED ON TEMPORARY BARRICADES MAY BE ERECTED ON EXISTING LIGHTPOLES, SIGN POSTS, AND OTHER EXISTING FEATURES AS APPROVED BY THE CITY.
12. LOCATIONS OF SIGNS SHOWN ARE APPROXIMATE. EXACT LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR IN THE FIELD. THE CONTRACTOR SHALL ENSURE THAT SIGNS ARE PLACED SO MAXIMUM VISIBILITY IS OBTAINED.
13. EXISTING SIGNAGE WHICH CONFLICTS WITH PROPOSED SIGNING SHALL BE REMOVED AND STACKED OR COVERED AS DETERMINED BY THE CITY. IF NECESSARY, AT THE END OF CONSTRUCTION THE CONTRACTOR SHALL RESTORE THE SIGNAGE TO ORIGINAL.
14. THE MILTON POLICE, FIRE, AND TRANSPORTATION DEPARTMENTS SHALL BE ADVISED OF THE SCHEDULE OF CONSTRUCTION AS WELL AS OF ANY DETOURS OR ALTERNATE ROUTES.
15. CONTRACTOR SHALL NOT REMOVE PARKING METER HEADS AND SHALL COORDINATE WITH TOWN OF MILTON FOR THEIR REMOVAL.
16. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION, AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR AND THE INFORMATION FURNISHED TO THE CITY FOR RESOLUTION OF THE CONFLICT.
17. THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR THE ALTERATION AND ADJUSTMENT OF ELECTRIC, TELEPHONE, AND ANY OTHER PRIVATE UTILITIES BY THE UTILITY COMPANIES AT NO ADDITIONAL COST TO THE CITY. IF THE CONTRACTOR ADJUSTS UTILITY COVERS IT SHALL BE DEEMED PART OF THE WORK AND THERE WILL BE NO ADDITIONAL COMPENSATION.
18. ALL UTILITY COMPANIES, PUBLIC AND PRIVATE, MUST BE NOTIFIED, INCLUDING THOSE IN CONTROL OF UTILITIES NOT SHOWN ON THIS PLAN, (SEE CHAPTER 370, ACTS OF 1963, MASSACHUSETTS) PRIOR TO EXCAVATING, BLASTING, INSTALLING, BACKFILLING GRADING, PAVEMENT RESTORATION, OR REPAVING.
19. THE ACCURACY AND COMPLETENESS OF UNDERGROUND UTILITIES ARE NOT GUARANTEED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT LOCATION, SIZE, TYPE, ETC. OF ALL UNDERGROUND UTILITIES THAT MAY BE AFFECTED BY THE WORK. AT LEAST 72 HOURS BEFORE DIGGING BEGINS, THE CONTRACTOR IS REQUIRED TO CALL DIG SAFE AT (888)344-7233. ALL CITY OWNED UTILITY STRUCTURES WITHIN AREAS AFFECTED BY THE WORK SHALL BE ADJUSTED TO NEW LINE AND GRADE AS DIRECTED BY THE ENGINEER. ANY UTILITY POLES AND/OR GUY POLES WITHIN AREAS AFFECTED BY THE WORK SHALL BE REMOVED AND RESET BY THE RESPECTIVE UTILITY COMPANY. ALTERATIONS TO UTILITIES NOT OWNED BY THE CITY SHALL BE MADE BY THE RESPECTIVE UTILITY OWNERS.
20. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR CONSTRUCTION MANAGEMENT EFFORTS OUTSIDE OF THE SITE PLANS AND TO COMPLY WITH CONDITIONS OUTLINED WITHIN THE PLANS AND SPECIFICATIONS USING APPROVED METHODS.
21. AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS, INCLUDING STAGING AREAS, SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.
22. THE CONTRACTOR IS HEREBY NOTIFIED THAT ADDITIONAL WORK WITHIN THE PROJECT LIMITS MAY BE PERFORMED BY OTHERS.
23. THE CONTRACTOR SHALL FIELD VERIFY CONDITIONS AND DIMENSIONS PRIOR TO CONSTRUCTION.

BAR SCHEDULE



CMP LEGEND

	SIGN
	CONSTRUCTION GATE
	ROLLING GATE
	PERMANENT CHAIN LINK FENCE
	MOVEABLE CHAIN LINK FENCE
	CONSTRUCTION DRUM
	TRAFFIC FLOW
	PEDESTRIAN FLOW
	POLICE DETAIL
	SIGNALIZED INTERSECTION
	PORTABLE PRECAST CONCRETE BARRIER
	CHAIN LINK FENCE ON CONCRETE BARRIER
	PORTABLE PRECAST CONCRETE BARRIER WITH HANDRAIL
	TAPERED END BARRIER
	IMPACT ATTENUATOR
	WATER-FILLED TEMPORARY BARRIER
	TEMPORARY WHEELCHAIR RAMP (SIDE APRONS)
	TEMPORARY PARALLEL WHEELCHAIR RAMP
	TEMPORARY PERPENDICULAR WHEELCHAIR RAMP
	BUILDING ACCESS POINTS

440 GRANITE AVE
MILTON, MASSACHUSETTS, 02186
NORFOLK COUNTY

PREPARED FOR:



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

ISSUED FOR
CONSTRUCTION

GENERAL NOTES
LEGEND AND
SCHEDULE

DATE:	MARCH 30, 2023
PROJECT NUMBER:	2021153
DESIGNED BY:	M.KHARAKH
DRAWN BY:	M.KHARAKH

CMP-002



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



440 GRANITE AVE
MILTON, MASSACHUSETTS, 02186
NORFOLK COUNTY

MILTON, MASSACHUSETTS, NORFOLK COUNTY

NORFOLK COUNTY



10'-0"

2" DIA. LIFT HOLE (TYP.)

18"

2'-0"

JOINT CONNECTION TUBE

PLAN

Architectural elevation drawing showing a rectangular structure. The total width is 10' - 0". The entrance is 40" wide and is flanked by two 2" wide columns. The side walls are 3" thick.

TEMPORARY CONCRETE BARRIER
MASH TL-2

The diagram illustrates a mechanical connection between two horizontal plates. A central vertical bolt is being tightened with a wrench, as indicated by the curved arrow. A 1-1/4 inch hex nut is shown being tightened onto the bolt. The text '1-1/4" HEX NUT' is positioned to the left of the bolt, and the word 'CONNECTION' is centered below the bolt.

The figure consists of two parts. The left part is a 'END VIEW' technical drawing of a structural component. It shows a trapezoidal shape with a base width of 24", a top width of 12", and a height of 22". The top edge has three vertical segments: two of length 5" and one of length 9 1/4". The right part is a detailed view of a connection pin. It is a vertical steel bar with a hexagonal nut at the top. The nut is labeled '1-1/4" HEX NUT'. The bar is labeled '1-1/4" DIA. STEEL BAR ASTM A36'. The total height of the pin is 24".

A diagram consisting of several black lines. It features a large rectangle with a small gap at the bottom center. A vertical line is positioned inside the rectangle, aligned with the top and bottom gaps. A horizontal line is located at the bottom of the rectangle, centered horizontally. The lines are thin and black, forming a simple geometric shape.

10'-0"

11-1/2" GAUGE
GALVANIZED FENCE FABRIC
WITH 2-1/4" MESH.
FABRIC ONLY ON
WORKZONE SIDE.

ALUMINUM TIE WIRES

FRONT

NOTE:
A PERMANENT CHAIN LINK FENCE SHALL HAVE THE SAME SPECIFICATIONS AS SHOWN FOR A MOVEABLE CHAIN LINK FENCE, HOWEVER THE POSTS SHALL BE CORED INTO THE PAVEMENT.

MOVABLE CHAIN LINK FENCE

The image contains two technical drawings. The left drawing, labeled 'PROFILE', shows a vertical assembly. It consists of a base with a width of 16", a central vertical column with a height of 42", and a top section with a height of 4". The top section features three horizontal bands: a top band labeled 'ORANGE', a middle band labeled 'REFLECTORIZED BANDS', and a bottom band. The width of the central column is 8". The right drawing, labeled 'BASE', shows a hexagonal base with a central circular hole. The overall width of the base is 16", and the height from the bottom edge to the top of the base is 16". The base is labeled 'BLACK RUBBER'.

Diagram illustrating the profile of a ReflectORIZED DRUM. The total height is 36". The top section is 18" high and features two white reflectorized bands, with a 2" gap between the top of the white bands and the bottom of the black section. The middle section is 6" high and features two orange reflectorized bands. The bottom section is 23" high. The word "PROFILE" is centered below the diagram.

A diagram showing a diamond-shaped 'ROAD WORK AHEAD' sign mounted on a vertical pole. The sign is positioned above a horizontal line representing the curb. A dimension line with arrows indicates a minimum distance of 2' from the curb to the sign. Another dimension line with arrows indicates a minimum height of 7' from the curb to the top of the sign. Labels 'CURB' and 'WALKWA' (partially cut off) are shown with leader lines pointing to the curb and the walkway respectively.

SIGN MOUNTING DETAIL (WITH CURB)

REFLECTORIZED STACKER CONE

A diagram showing a 'ROAD WORK AHEAD' sign mounted on a post. The sign is tilted at an angle. A horizontal line extends from the top of the sign to the left, labeled 'TRAVEL LANE'. Another horizontal line extends from the bottom of the sign to the right, labeled 'SHOULDER'. A vertical dimension line with arrows at both ends is positioned below the sign, indicating a height of '1 FT MIN. ABOVE TRAVELED WAY'. A small arrow points to the right along the bottom line.

SIGN MOUNTING DETAIL (HIGHWAY SHOULDER)

ISSUED FOR
CONSTRUCTION

TEMPORARY TRAFFIC CONTROL DEVICES I

DATE:	MARCH 30, 2023
PROJECT NUMBER:	2021112
DESIGNED BY:	M.KHARAKH
DRAWN BY:	M.KHARAKH
CHECKED BY:	K.MARTIN

CMP-003

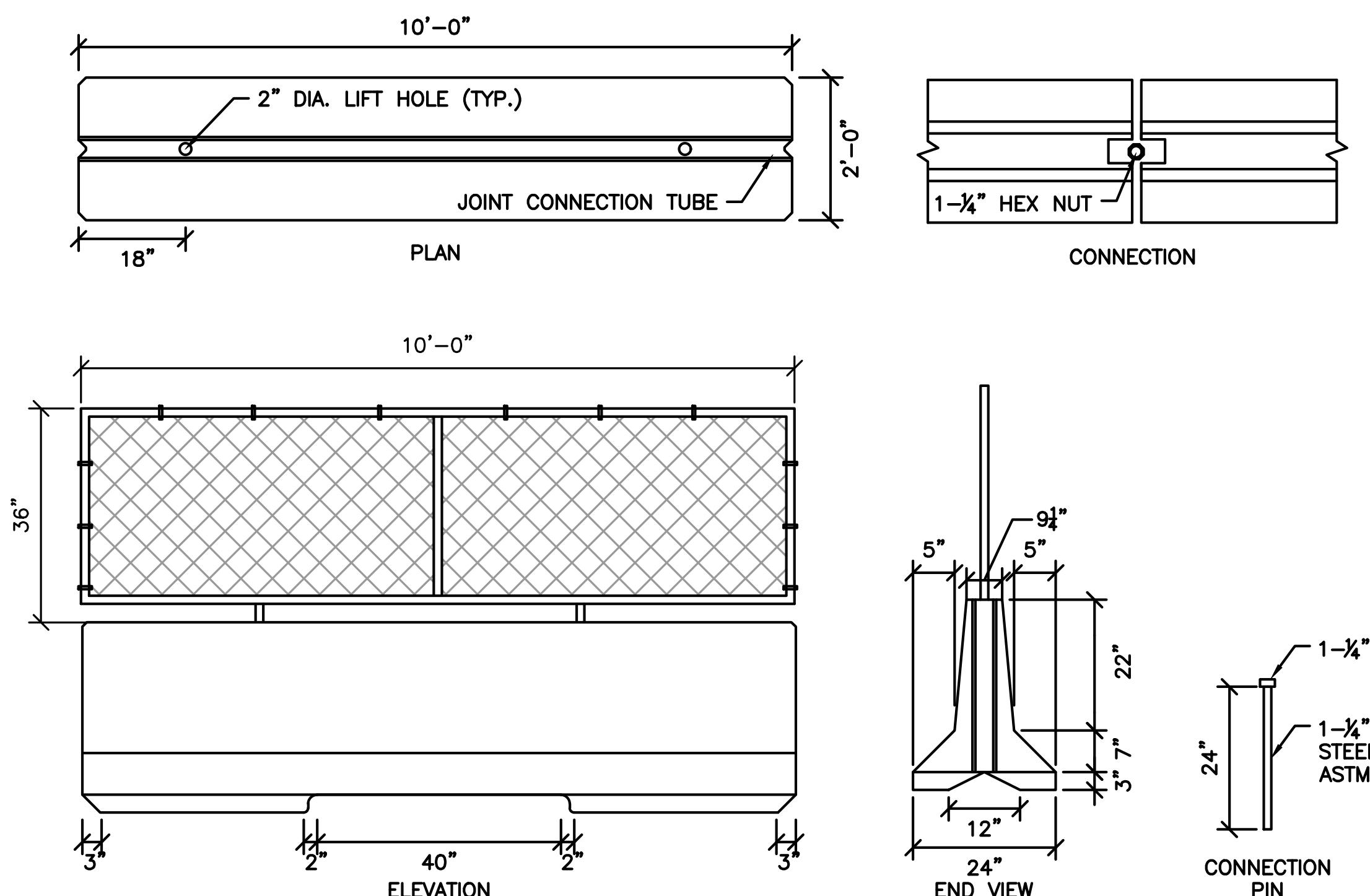


HOWARD STEIN HUDSON
11 Beacon Street, Suite 1010
Boston, MA 02108
www.hshassoc.com

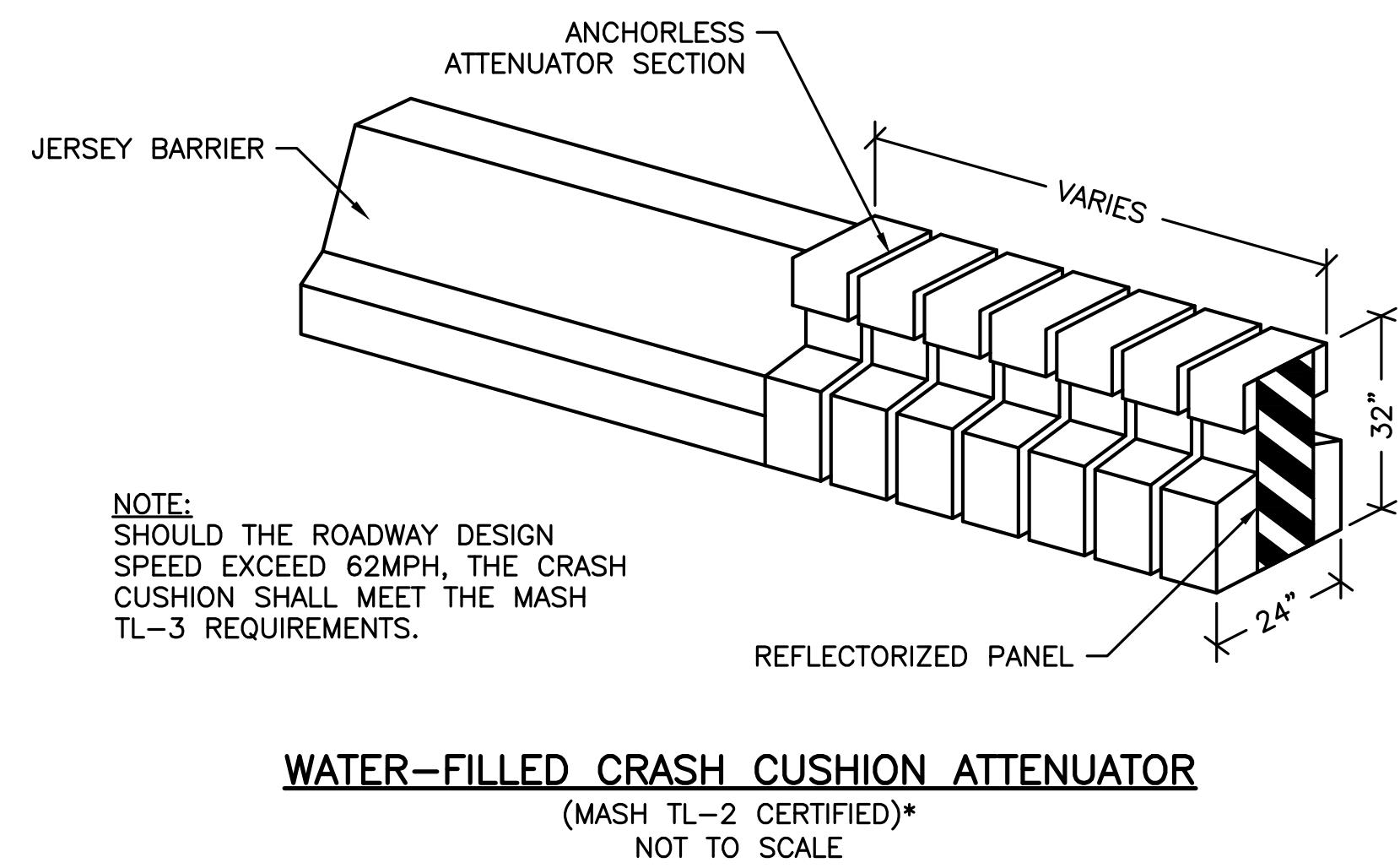
PREPARED FOR:



440 GRANITE AVE
MILTON, MASSACHUSETTS, 02186
NORFOLK COUNTY

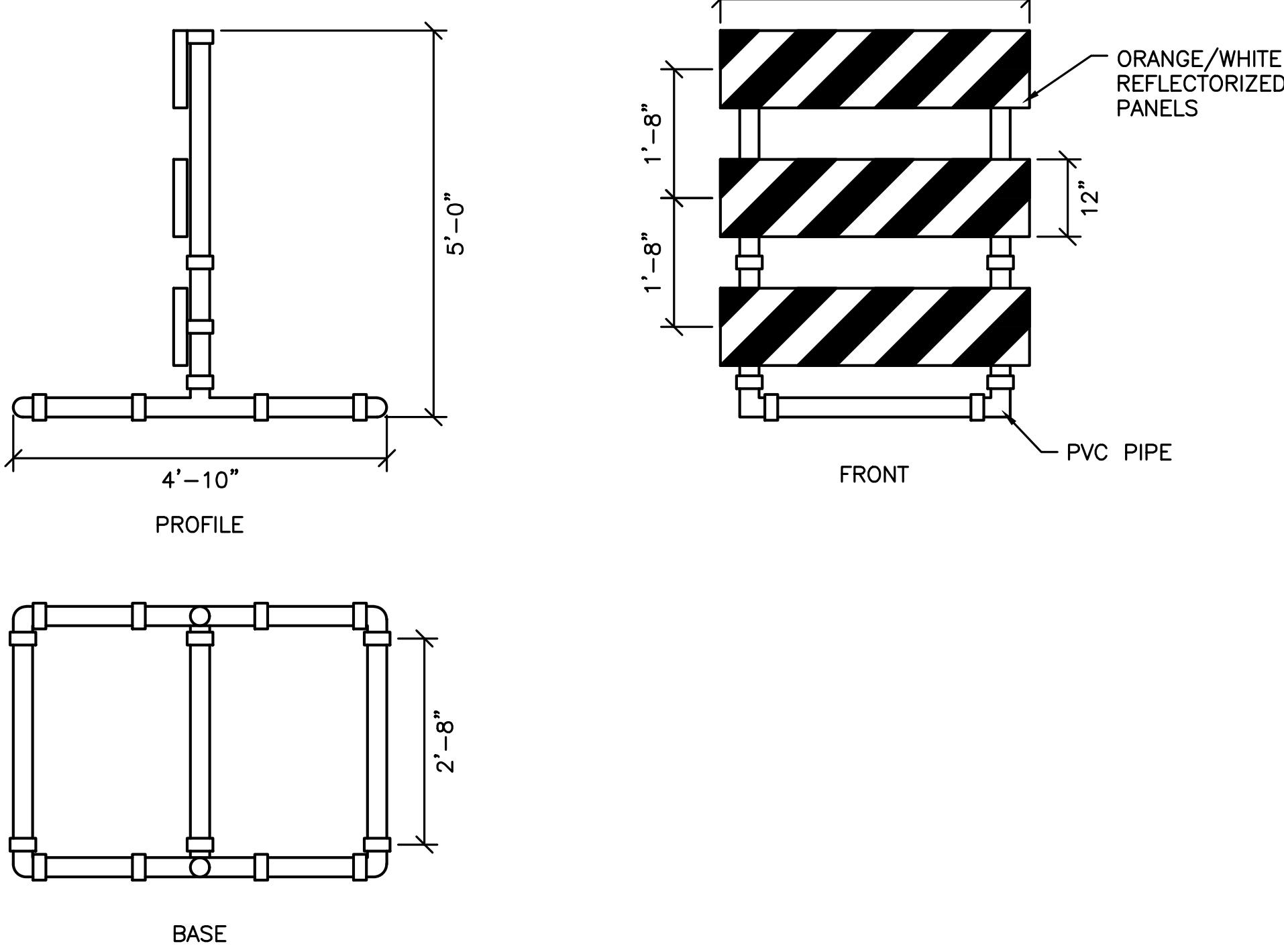


TEMPORARY CONCRETE BARRIER MASH TL-2 WITH 36" CHAIN LINK FENCE



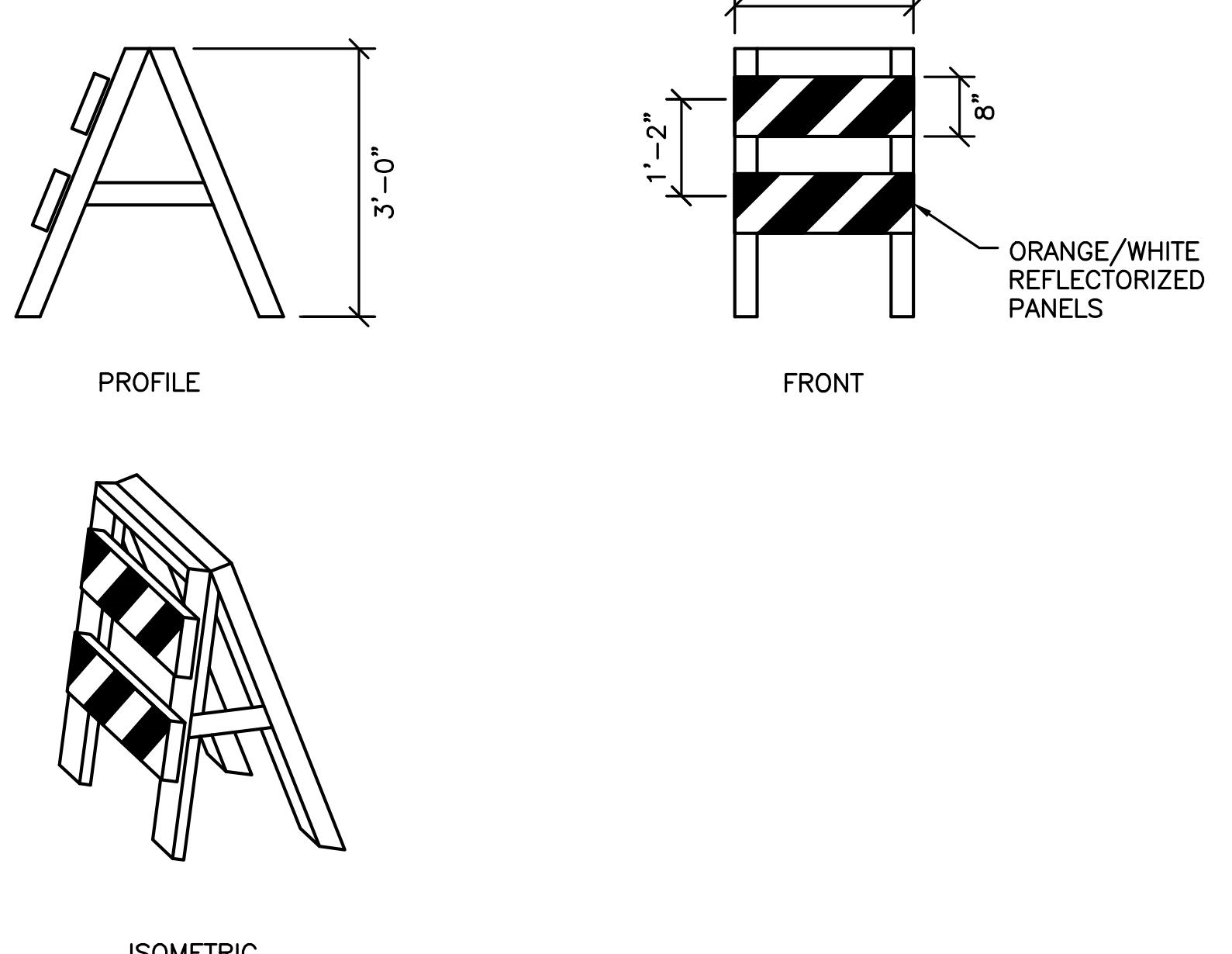
NOTE:
SHOULD THE ROADWAY DESIGN SPEED EXCEED 62MPH, THE CRASH CUSHION SHALL MEET THE MASH TL-3 REQUIREMENTS.

WATER-FILLED CRASH CUSHION ATTENUATOR
(MASH TL-2 CERTIFIED)*
NOT TO SCALE



TYPE III BARRICADE

TYPE III BARRICADES SHALL MEET MUTCD REQUIREMENTS (CURRENT EDITION)



TYPE II BARRICADE

VISIONS:

ISSUED FOR
CONSTRUCTION

TEMPORARY TRAFFIC CONTROL DEVICES II

DATE: MARCH 20, 2023

DATE: MARCH 18, 2023

REQUEST NUMBER: 2021112

DESIGNED BY: M.R.KHAKARI

KAWN BT. M.KHANAKHANI

© 2014 Kuta Software LLC



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

REARED FOR:

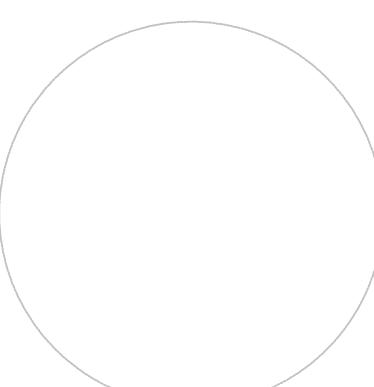


440 GRANITE AVE
MILTON, MASSACHUSETTS, 02186
NORFOLK COUNTY

MILTON, MASSACHUSETTS NORFOLK COUNTY

NURFULA COUNTRY

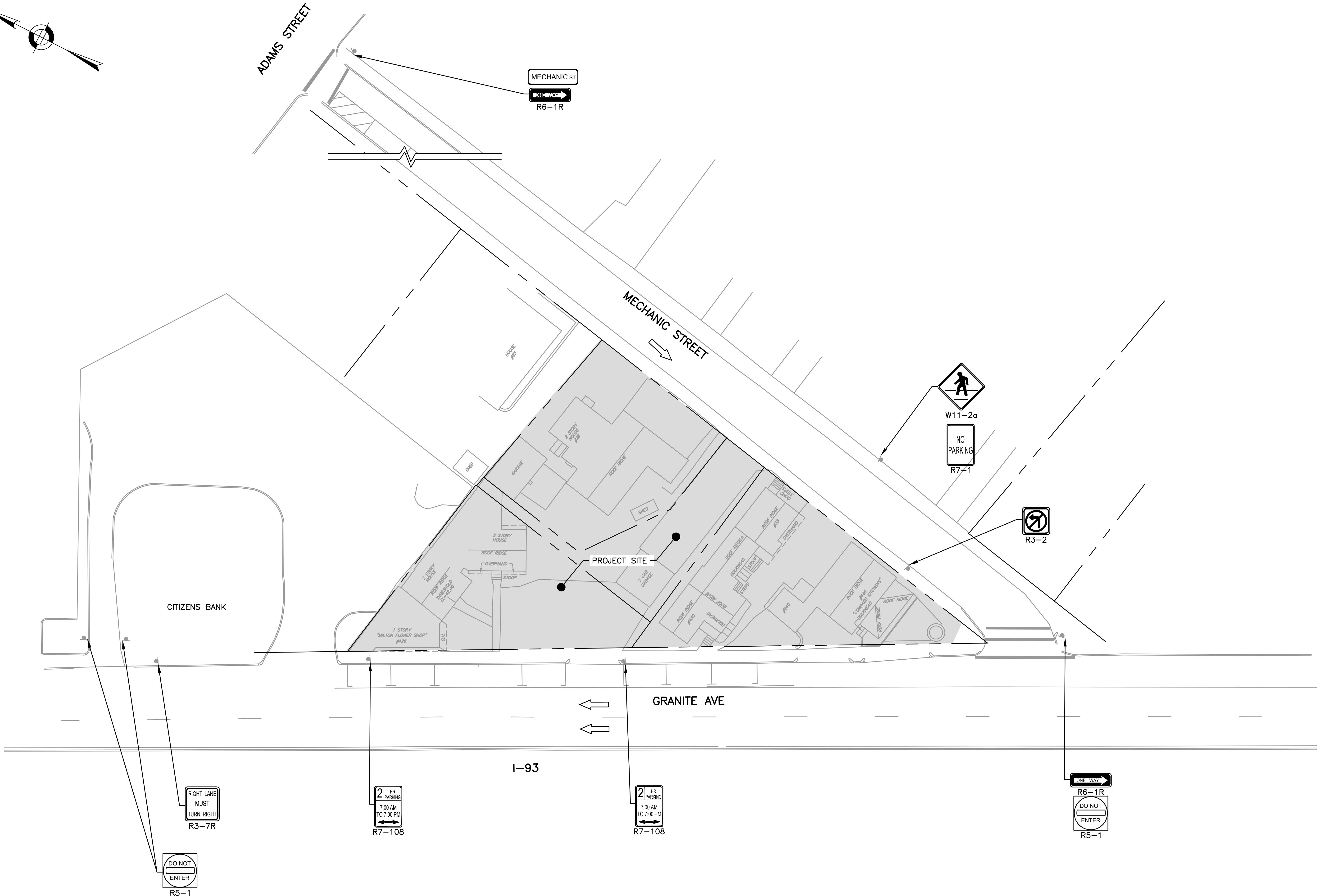
REVISED:



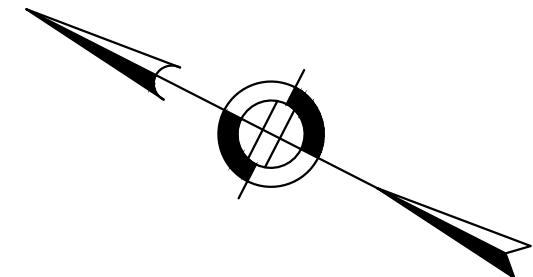
ISSUED FOR CONSTRUCTION

EXISTING CONDITIONS

DATE:	MARCH 30, 2023
PROJECT NUMBER:	2021153
DESIGNED BY:	M.KHARAKH
DRAWN BY:	M.KHARAKH
CHECKED BY:	K.MARTIN



CMP-005



The diagram illustrates a Type II Barricade setup on Adams Street. A solid grey line represents the curb, and a dashed grey line represents the street centerline. A grey ramp leads from the sidewalk up to the curb. A grey Type II barricade is positioned across the street, with its top edge aligned with the curb. A black arrow points from the barricade towards the ramp. A sign on the left indicates 'SIDEWALK CLOSED AHEAD' with an arrow pointing towards the crossing point. The text 'ADAMS STREET' is written vertically along the ramp. At the bottom left, the text 'R9-11L' and 'TYPE II BARRICADE' is printed.

WORK TO BE COMPLETED:

1. ERECT SITE FENCE, BARRIERS, AND SIGNAGE.

NOTES:

1. SEE SHEETS 9–11 FOR TRUCK TURNING MANEUVERS.
2. CONTRACTOR TO COORDINATE THE REMOVAL OF THE HYDRANT WITH THE TOWN OF MILTON AND THE MILTON FIRE DEPARTMENT. SEE UTILITY PLANS FOR NEW HYDRANT LOCATION.



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

PREPARED FOR:



440 GRANITE AVE
MILTON, MASSACHUSETTS, 02186
NORFOLK COUNTY

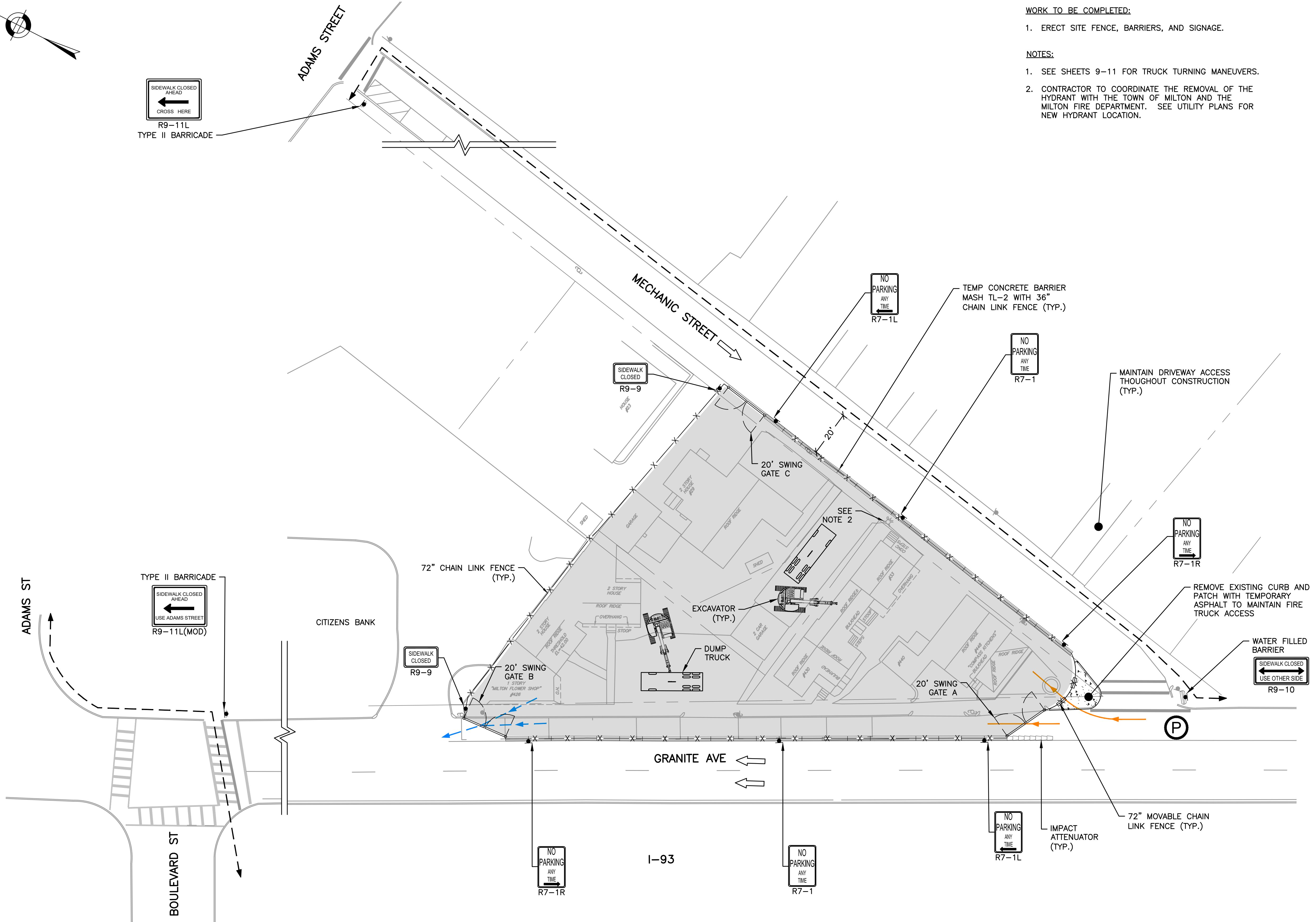
A large, empty circle outline is centered on the page. It is drawn with a thin black line and occupies the right half of the frame. To the left of the circle, there is a thick black vertical bar.

ISSUED FOR
CONSTRUCTION

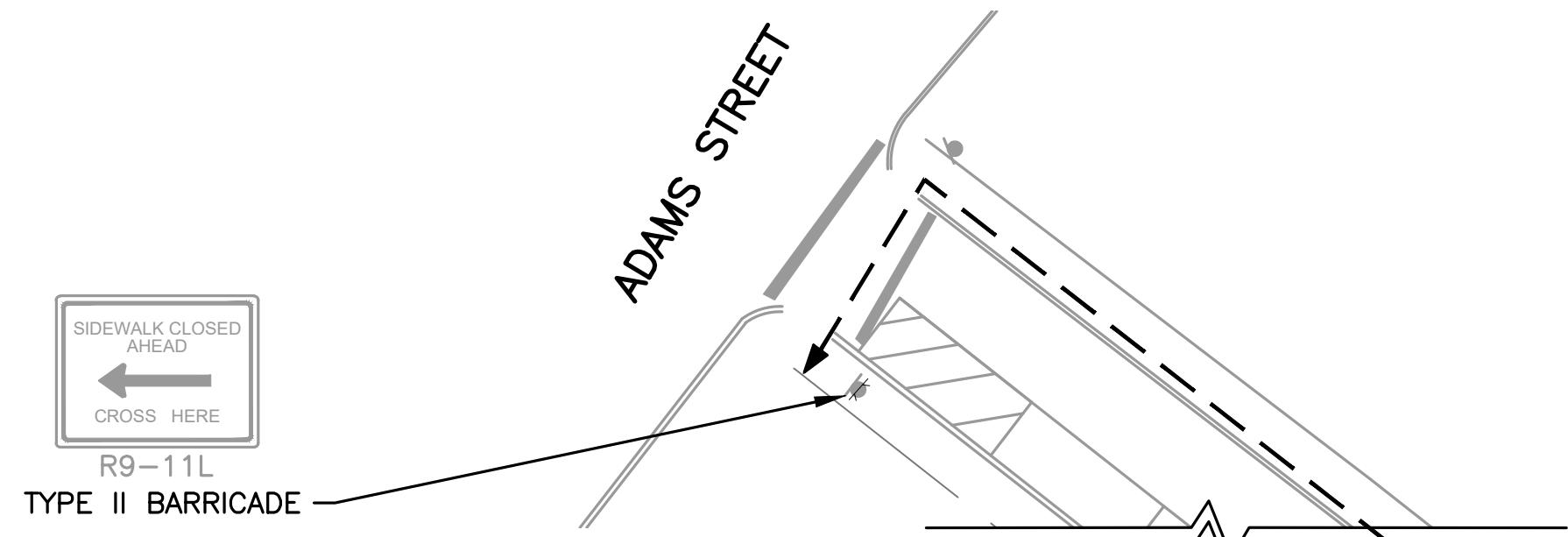
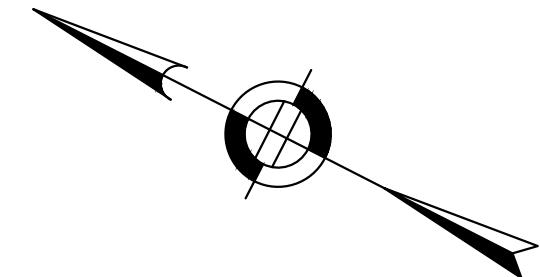
DATE:	MARCH 30, 2023
PROJECT NUMBER:	2021153
DESIGNED BY:	M.KHARAKH
DRAWN BY:	M.KHARAKH
CHECKED BY:	K.MARTIN

SLIET-6.QE.1

SHEET 6 OF 11



An engineering scale diagram showing a horizontal line with tick marks at 0, 10, 20, 40, and 80. The segments between the tick marks are labeled with their respective values. Below the line, the text "ENGINEERING SCALE" is written in a bold, sans-serif font, with "FEET" in all-caps at the end.



ADAMS STREET

MECHANIC STREET

ADAMS ST



CITIZENS BANK

TYPE II BARRICADE

SIDEWALK CLOSED AHEAD

USE ADAMS STREET

R9-11L(MOD)

20' SWING GATE B

SIDEWALK CLOSED

R9-9

72" CHAIN LINK FENCE (TYP.)

20' SWING GATE C

SIDEWALK CLOSED

R9-9

20 YD DUMPSTER

EXCAVATOR (TYP.)

CONCRETE PUMP

CONCRETE TRUCK

IMPACT ATTENUATOR (TYP.)

R7-1L

NO PARKING ANY TIME

R7-1R

NO PARKING ANY TIME

R7-1

NO PARKING ANY TIME

R7-1R

NO PARKING ANY TIME

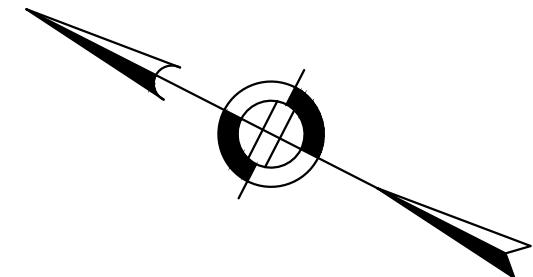
R7-1

NO PARKING ANY TIME

R7-1R

NO PARKING ANY TIME

R7-1



A diagram showing a Type II Barricade at Adams Street. The barricade is a grey structure with diagonal hatching, positioned across a street. A dashed line extends from the barricade across the road. A sign on the left reads "SIDEWALK CLOSED AHEAD" with an arrow pointing to "CROSS HERE". The text "R9-11L" is at the bottom left. The street is labeled "ADAMS STREET" in large letters.

WORK TO BE COMPLETED:

1. ERECT BUILDING STRUCTURE.
2. INSTALL ALL EXTERIOR FACADE AND INTERIOR FIT-OUT FEATURES.

NOTES

1. SEE SHEETS 9-11 FOR TRUCK TURNING MANEUVERS.



440 GRANITE AVE
MILTON, MASSACHUSETTS, 02186
NORFOLK COUNTY

PREPARED FOR:

ISSUED FOR
CONSTRUCTION

STRUCTURAL, INTERIOR FIT-OUT, & EXTERIOR FACADE

DATE:	MARCH 30, 2023
PROJECT NUMBER:	2021153
DESIGNED BY:	M.KHARAKH
DRAWN BY:	M.KHARAKH
CHECKED BY:	K.MARTIN

CMP-008

This detailed construction site plan for I-93 shows the layout of the work area, traffic control measures, and surrounding streets. The site is bounded by ADAMS ST to the west, BOULEVARD ST to the south, and MECHANIC STREET to the north. The construction area is primarily on GRANITE AVE, with a prop building overhang (TYP.) extending over the road. Key features include:

- Construction Equipment:** MOBILE CRANE, BOOM LIFT (TYP.), and MATERIAL DELIVERY TRUCK (TYP.).
- Access and Driveway:** MAINTAIN DRIVeway ACCESS THOUGHOUT CONSTRUCTION (TYP.).
- Temporary Barriers:** TEMP CONCRETE BARRIER MASH TL-2 WITH 36" CHAIN LINK FENCE (TYP.), 72" MOBILE CHAIN LINK FENCE (TYP.), and WATER FILLED BARRIER.
- Signage:** NO PARKING ANY TIME signs are located at R7-1L, R7-1, R7-1R, and R7-1L. SIDEWALK CLOSED signs are located at R9-9 and R9-11L(MOD). A circular sign with a 'P' is located on the right side of the site.
- Structures:** CITIZENS BANK is located to the west of the site. A 72" CHAIN LINK FENCE (TYP.) runs along the north side of the site.
- Other:** Impact attenuator (TYP.) is located on the right side of the site.

The plan also includes a legend for symbols and a scale bar.

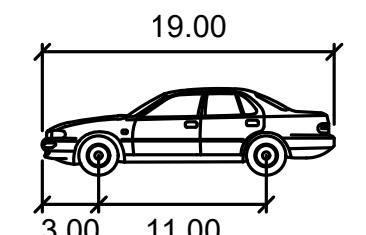
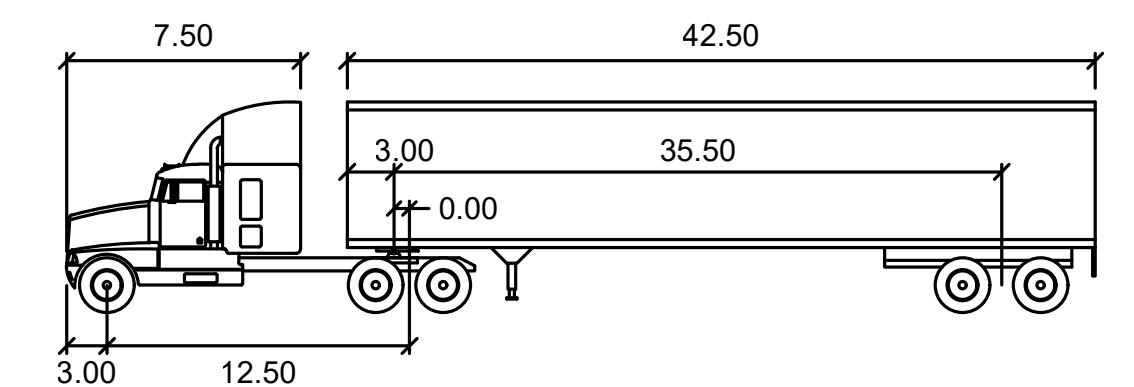
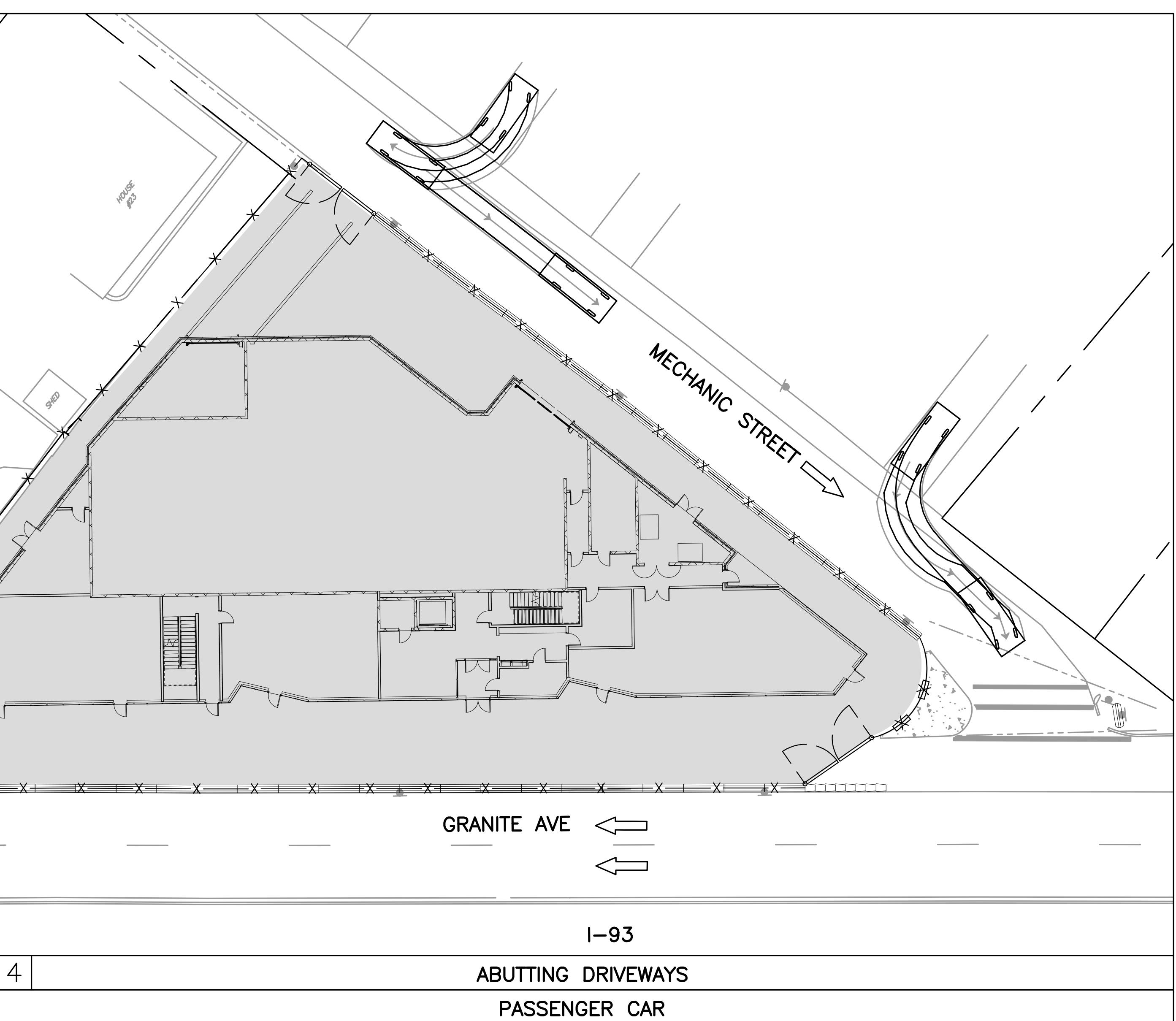
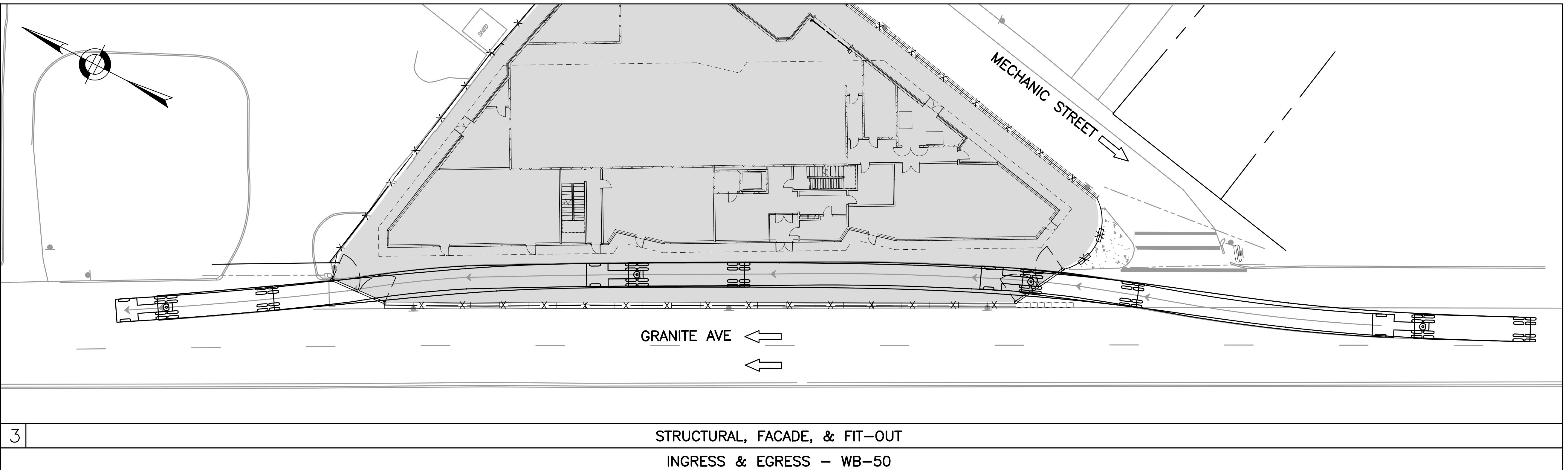


HOWARD STEIN HUDSON
11 Beacon Street, Suite 1010
Boston, MA 02108
www.hshassoc.com

PREPARED FOR:



440 GRANITE AVE
MILTON, MASSACHUSETTS, 02186
NORFOLK COUNTY



ISSUED FOR CONSTRUCTION

TRUCK TURNING
MANUEVERS II

DATE: MARCH 30, 2023

PROJECT NUMBER: 2021153

DESIGNED BY: M.KHARAKH

DRAWN BY: M.KHARAKH

CHECKED BY: K.MARTIN

CMP-010

SHEET 10 OF 13

0 10 20 40 80 FEET
ENGINEERING SCALE



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

PREPARED FOR:



440 GRANITE AVE
MILTON, MASSACHUSETTS, 02186
NORFOLK COUNTY

MILTON, MASSACHUSETTS NORFOLK COUNTY

NORFOLK COUNTY

REVISIONS:			
NO	BY	DATE	DESCRIPTION

ISSUED FOR
CONSTRUCTION

TRUCK TURNING MANEUVERS III

Page 1 of 1

DATE: MARCH 30, 2023

PROJECT NUMBER: 2027100
DESIGNED BY: MIKHAIL

DRAWN BY: MIKHAIL KUZNETSOV

CHECKED BY: K MARTIN

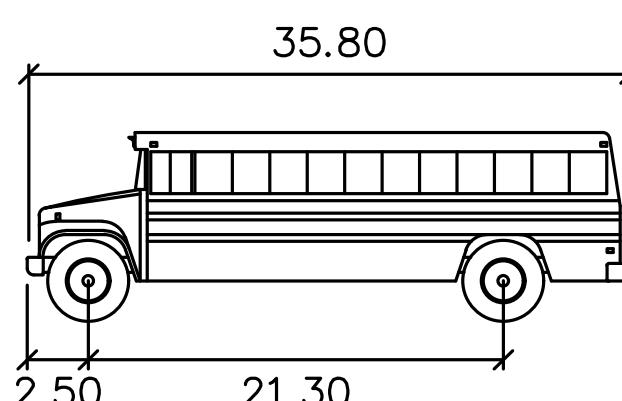
CMB 011

SHEET 11 OF 13

© 2013 Pearson Education, Inc. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. Due to electronic rights, some third party content may be suppressed from the eBook and/or eChapter(s). Editorial review has determined that any suppressed content does not materially affect the overall learning experience. Pearson Education, Inc. reserves the right to remove additional content at any time if subsequent rights restrictions require it.

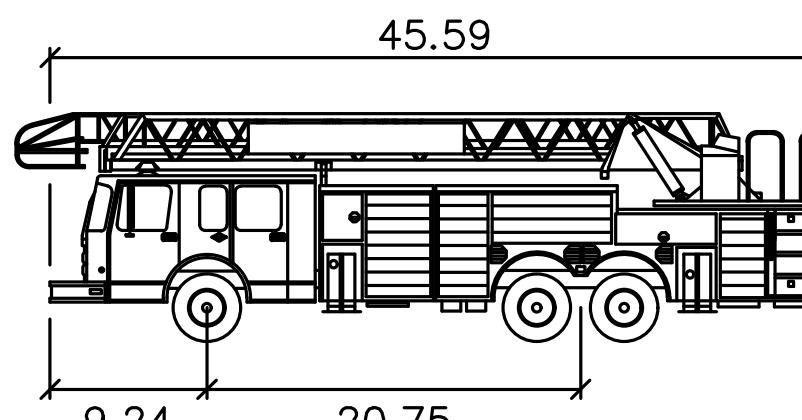
A detailed black and white architectural site plan showing two parallel sections of a property. The plan includes streets labeled "MECHANIC STREET" and "GRANITE AVE", a house labeled "HOUSE #23", a "SHED", and a circular driveway. The property is divided into two sections by a vertical line, with the left section showing a more detailed building footprint and the right section showing a simplified outline. Arrows indicate property boundaries and various features like trees and utility poles. A north arrow is located in the top left corner.

5 MECHANIC STREET
SCHOOL BUS



SCHOOL BUS	fe
Width	:
Track	:
Lock to Lock Time	:
Steering Angle	:

6 MECHANIC STREET
FIRE TRUCK



FIRE TRUCK	feet
Width	: 8.00
Track	: 8.00
Lock to Lock Time	: 6.0
Steering Angle	: 25.4

A horizontal scale bar for engineering drawings, ranging from 0 to 80 feet. The scale is marked at 0, 10, 20, 40, and 80. The word "FEET" is written in capital letters at the end of the scale. Below the scale, the words "ENGINEERING SCALE" are written in capital letters.



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

PREPARED FOR:



440 GRANITE AVE
MILTON, MASSACHUSETTS, 02186
NORFOLK COUNTY

MILTON, MASSACHUSETTS, 0 NORFOLK COUNTY

NORFOLK COUNTY

ISSUED FOR CONSTRUCTION

TRUCK ROUTING PLAN

DATE: MARCH 30, 2023

PROJECT NUMBER: 2021153

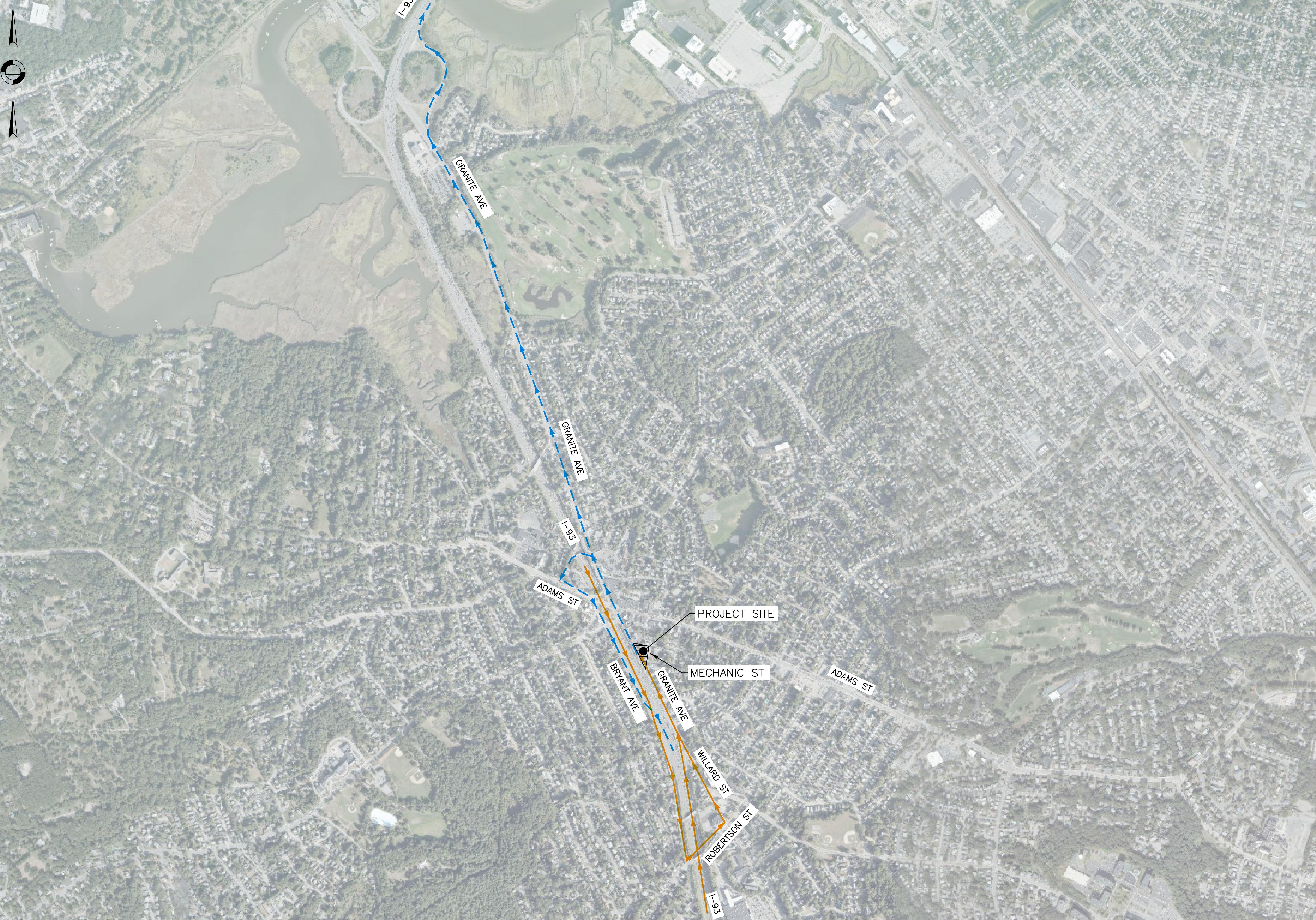
DESIGNED BY: M.KHARAKH

DRAWN BY: M.KHARAKH

CHECKED BY: K.MARTIN

CMP-012

HEET 12 OF 13



ENTERING

EXITING



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

PREPARED FOR:



440 GRANITE AVE
MILTON, MASSACHUSETTS, 02186
NORFOLK COUNTY

SIGN SUMMARY

IDENTIF- ICATION NUMBER	SIZE OF SIGN (INCHES)		UNIT AREA SF	TEXT	TEXT DIMENSIONS	NUMBER OF SIGNS REQUIRED	COLOR	POST SIZE AND NUMBER REQUIRED PER SIGN	AREA IN SQUARE FEET
	WIDTH	HEIGHT							
M4-10R	24"	8"	1.33		SEE THE MUTCD STANDARD DETAIL	1	SEE MUTCD STANDARD DETAIL	MUTCD SPEC. MOUNT ON MAST ARM/POST	1.33
R7-1	12"	18"	1.50			2			3.00
R7-1L	12"	18"	1.50			2			3.00
R7-1R	12"	18"	1.50			2			3.00
R9-9	24"	12"	2.00			2			4.00
R9-10	24"	12"	2.00			1			2.00
R9-11L	24"	18"	3.00			1			3.00
R9-11L(MOD)	24"	18"	3.00			1			3.00
R11-2	48"	30"	10.00			1			10.00
R11-4	60"	30"	12.50			1			12.50

ISSUED FOR
CONSTRUCTION

SIGN SUMMARY

DATE:	MARCH 30, 2023
PROJECT NUMBER:	2021153
DESIGNED BY:	M.KHARAKH
DRAWN BY:	M.KHARAKH
CHECKED BY:	K.MARTIN

CMP-013