

DESIGN REVIEW BOARD

Monday, May 16, 2022

7:30 p.m.

Virtual Meeting using Zoom

Meeting ID: 845-1987-6965

(Instructions for accessing below)

Under Governor Baker's Act "Extending Certain COVID-10 Measures Adopted During the State of Emergency", extending the "Executive Order Suspending Certain Provisions of the Open Meeting Law G.L. c. 30A, S20," issued June 16, 2021, and in effect until April 1, 2022, meeting of public bodies may be conducted virtually provided that adequate access is provided to the public. Recently the Governor signed into law (Chapter 22 of the Acts of 2022) an extension to the temporary provisions that allow for remote public meetings to continue through July 15, 2022.

To view and participate in this virtual meeting on your phone, download the "Zoom Cloud Meetings" app in any app store or at www.zoom.us. At the above date and time, click on "Join a Meeting" and enter the following Meeting ID: 845-1987-6965

Link: <https://us02web.zoom.us/j/84519876965>

To view and participate in this virtual meeting on your computer, at the above date and time, go to www.zoom.us click "Join a Meeting" and enter the following ID: 845-1987-6965

APPLICANTS:

Steve Schwede, FastSigns representing Needham Upholstery located at 81 Chapel Street and applying for signage.

557 Highland Avenue LLC, The Bulfinch Companies owner of 557 Highland Avenue and applying for Site Plan Review.

REVIEW

No review of minutes till 6/6/2022 meeting.

Next Public Meeting – June 6, 2022 at 7:30pm via Zoom Webinar



TOWN OF NEEDHAM

DESIGN REVIEW BOARD

Public Service Administration Building

500 Dedham Avenue

Needham, MA 02492

Application and Report

Location: 81 Chapel Street, Needham MA Date: 5/1/22

Owner: Gatto Family Ltd Partnership

Address: 85 Chapel Street Needham MA 02492
Street City State Zip

Telephone: 781.444.0503

Applicant: Needham Upholstery

Address: 81 Chapel Street Needham MA 02494
Street City State Zip

Telephone: 207.838.5480

Designer/Installer: Fastsigns of Needham

Address: 15 Kearney Road Needham MA 02494
Street City State Zip

Telephone: 781-444-4889

Type of Application
☒ Sign
☐ Minor Project
☐ Exterior Alterations
Major Project
☐ - preliminary
☐ - final
☐ Flexible Subdivision
☐ Planned Residential Development
☐ Residential Compound

Brief description of sign or project:

24"x96" Aluminum Bar Frame Sign with 3-Dimensional logo / lettering

PRIMARY SIGN

Mounted flush to wall with galvanized hardware

Primary Signage

Tel 781-444-4889 Fax 781-444-8577 • 310@fastsigns.com

Needham Upholstery
Aluminum Bar Frame with 3D Logo
81 Chapel Street
Needham, MA
02492



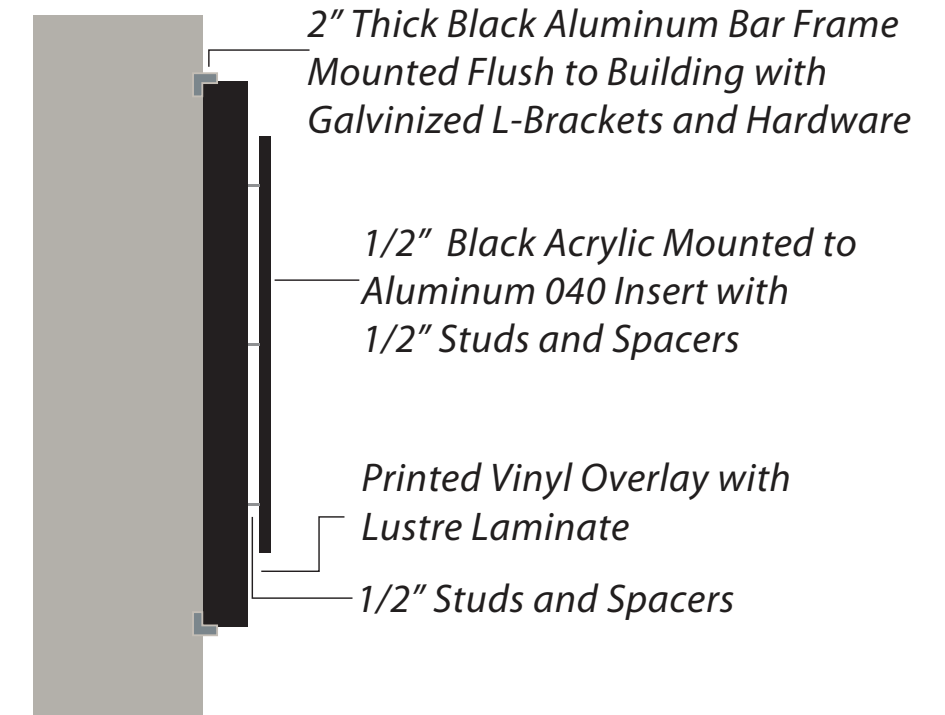
Needham "N" Height = 4.4in
Logo Dimensions = 14.2in x 18.5in
Sign Height = 24in
Sign Width = 96in
Square Footage = 16sq'
Top of Sign to Grade = 162in

Black Aluminum Bar Frame with Alu 040 Insert, Printed Overlay with Lustre Lam,
 1/2" Black Acrylic Logo and Letters with Studs and 1/2" Spacers to face of Aluminum 040,
 Logo with Printed Face with Gloss Lam,
 Whole Sign Mounted Flush to Building Facade with Hidden Galvanized L-Brackets

COLORS:

-  26% Rich Black
-  Glossy Black

Overall Depth



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Primary Signage

Needham Upholstery
Aluminum Bar Frame with 3D Logo
81 Chapel Street
Needham, MA
02492



Prior Tenant Facade



Current Facade

Proposed Signage

Top of sign to Grade = 162"

Reference Page 1 for Details

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Neighborhood View

Needham Upholstery
Aluminum Bar Frame with 3D Logo
81 Chapel Street
Needham, MA
02492

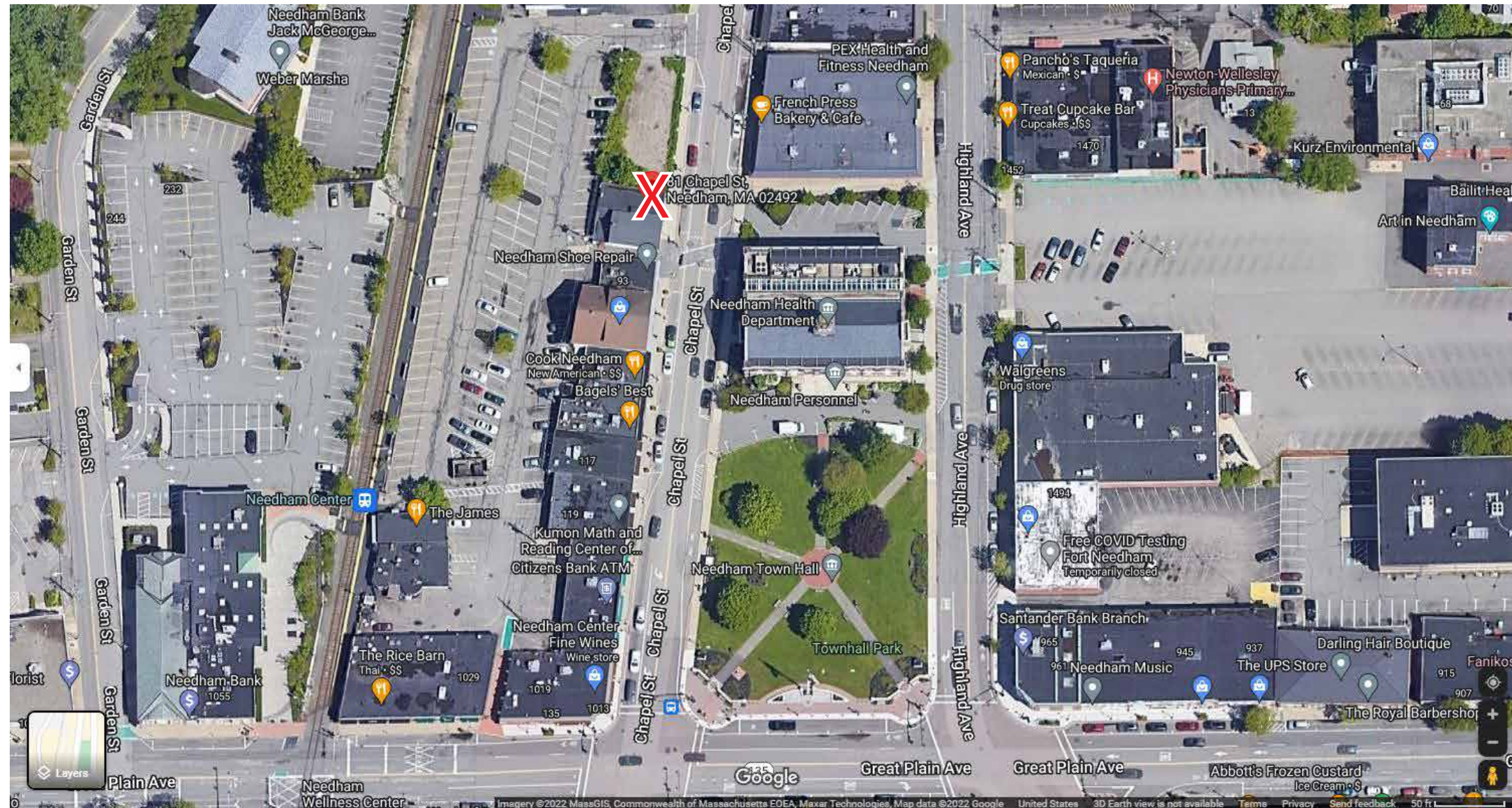


81 Chapel Street, Needham MA

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Aerial View

Needham Upholstery
 Aluminum Bar Frame with 3D Logo
 81 Chapel Street
 Needham, MA
 02492



81 Chapel Street, Needham MA

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TOWN OF NEEDHAM

DESIGN REVIEW BOARD

Public Service Administration Building
500 Dedham Avenue
Needham, MA 02492

Application and Report

Property Location: 557 Highland Avenue, Needham **Date:** 5/6/2022

Owner: 557 Highland, LLC

Address: c/o The Bulfinch Companies, 116 Huntington Ave. Suite 600, Boston, MA 02116

Telephone: 617-607-2147

Applicant: 557 Highland, LLC

Address: c/o The Bulfinch Companies, 116 Huntington Ave. Suite 600, Boston, MA 02116

Telephone: 617-607-2147

Designer/Installer: Stantec Architecture

Address: 311 Summer Street, 6th floor Boston, MA 02210

Telephone: 617-234-3100

Type of Application
☐ Sign
☐ Minor Project
☐ Exterior Alterations
☒ Major Project (Site Plan Review)
☐ - preliminary
☐ - final
☐ Flexible Subdivision
☐ Planned Residential Development
☐ Residential Compound

Brief description of sign or project:

The Applicant is proposing to build a new ground-up office/laboratory building complex on the former site of the Muzi Ford and Chevrolet Dealership. The Project will feature an office/laboratory research facility with below-grade parking in addition to a stand-alone parking structure. The new building and landscape improvements are intended to attract office and life science tenants, with ancillary retail, café, daycare, and fitness amenities subject to market demand.

Please email completed application to elitchman@needhamma.gov

Highland Innovation Center

557 Highland Ave, Needham MA



Design Review Board
May 16, 2022

Bulfinch

 Stantec

PROJECT TEAM

Bulfinch

 **Stantec**

 **PAUL FINGER ASSOCIATES**
Landscape Architects • Planners
Civil Engineers • Wetland Scientists

 **vhb**

 **McPHAIL**

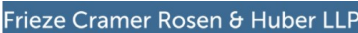
 **AHA**
CONSULTING
ENGINEERS

 **SGH**

 **MORIARTY**

 **ACENTECH**

 **goulston&storrs**

 **Frieze Cramer Rosen & Huber LLP**

 **ATTORNEY AT LAW**
ROBERT T. SMART, JR.

 **DAIN | TORPY**

 **DLA PIPER**

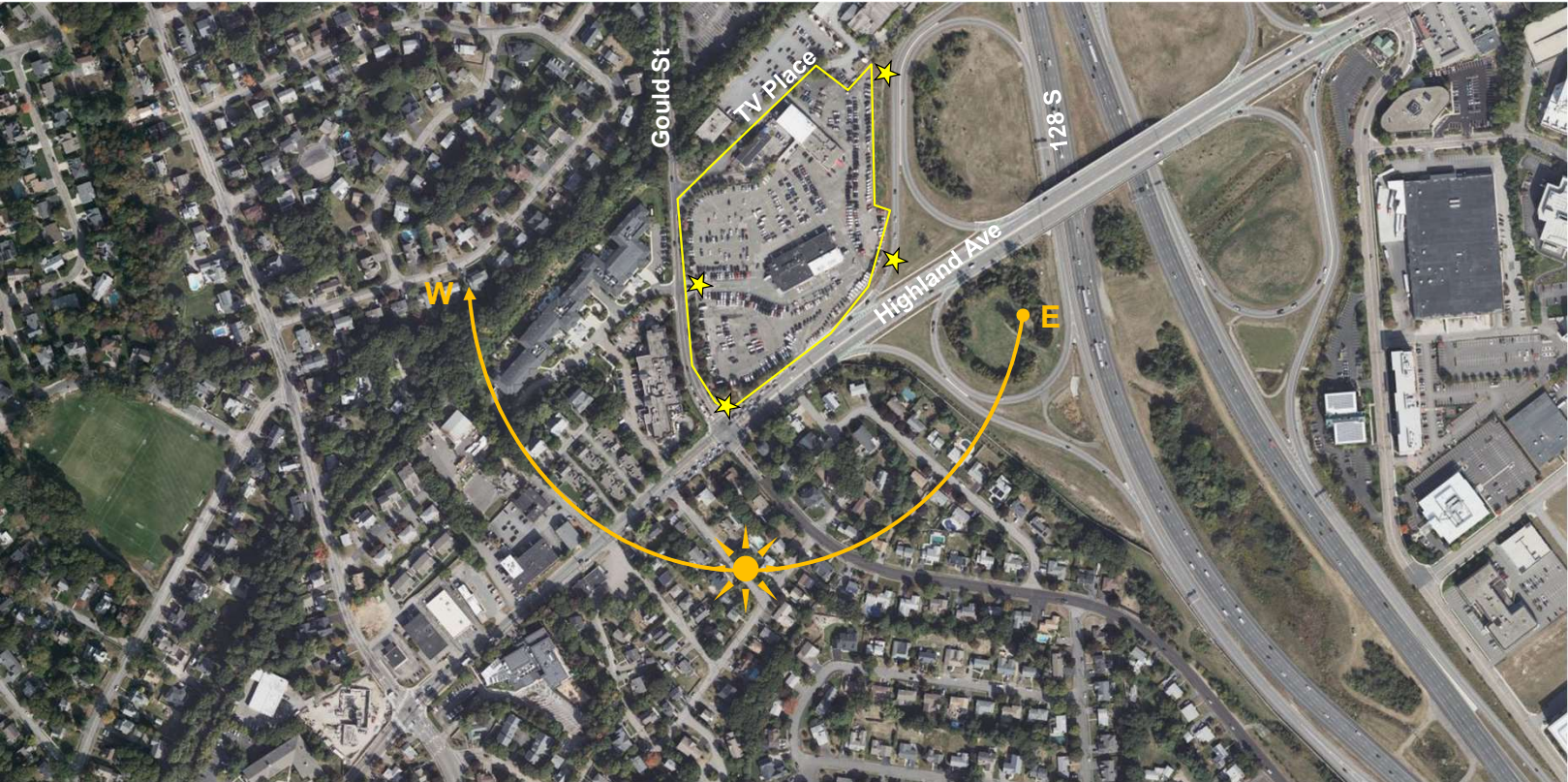
 **SAFETY PARTNERS**
Hands-on Workplace Safety

 **ENVIRONMENTAL HEALTH
& ENGINEERING, INC.**

CURRENT SITE CONDITION



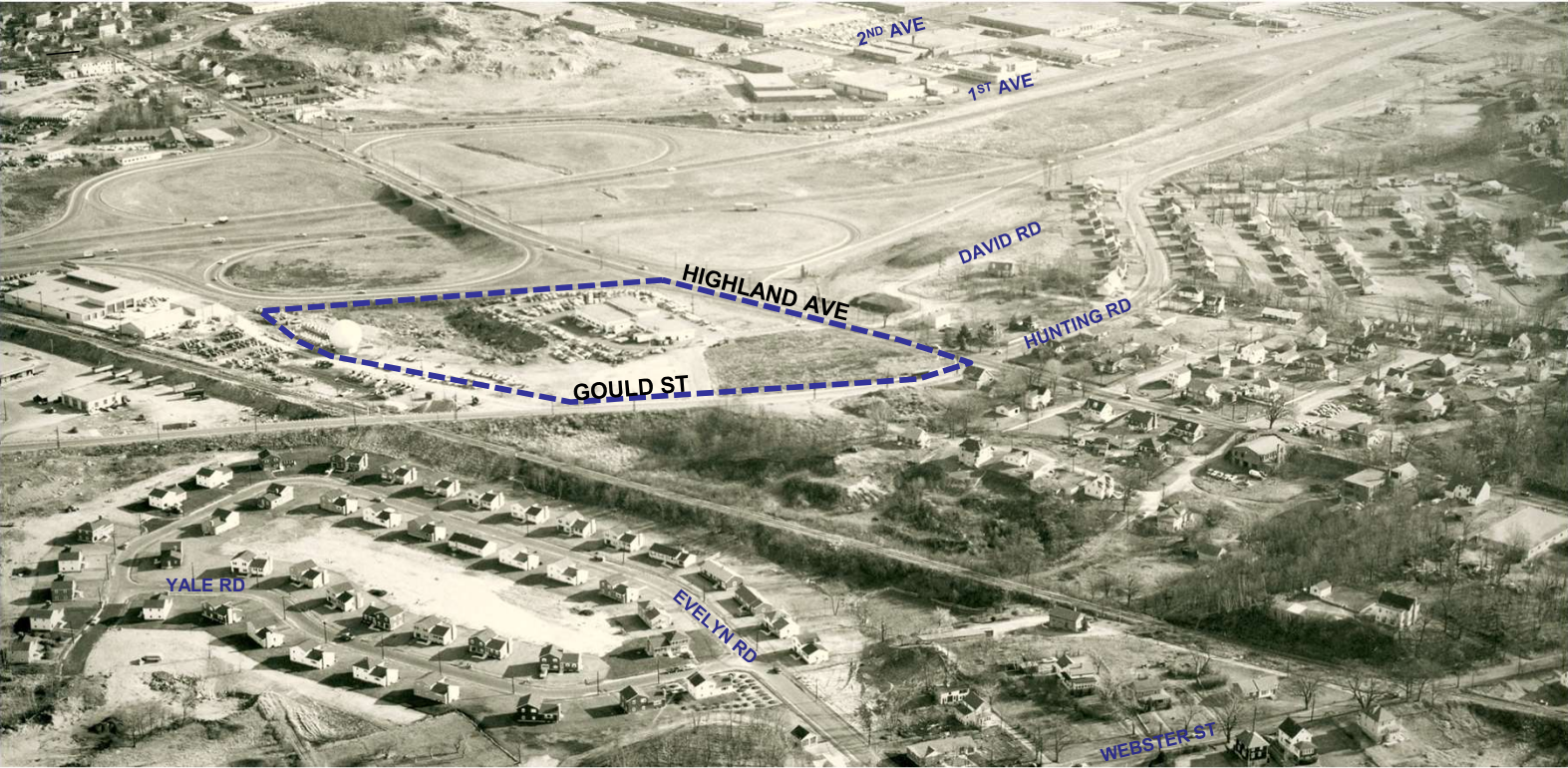
SITE INFLUENCES



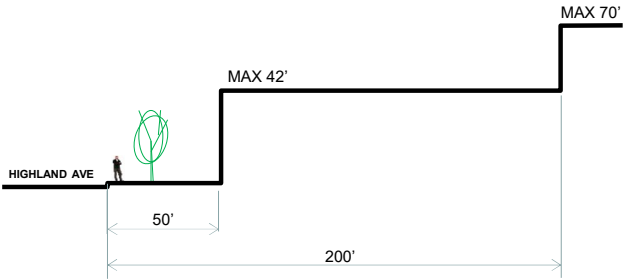
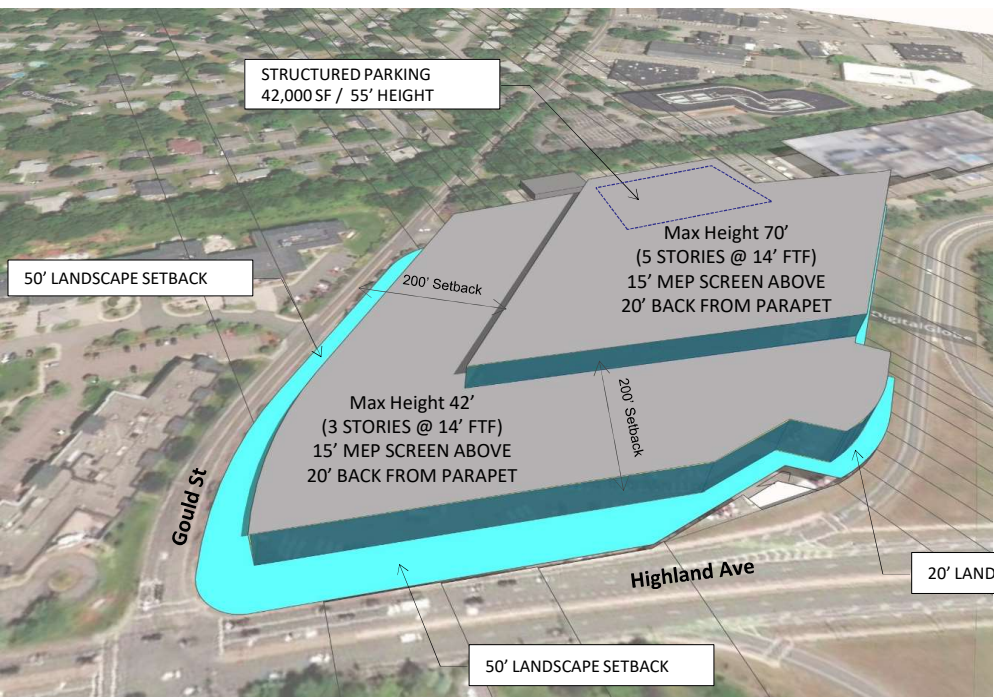
HIGHLAND FRONTAGE



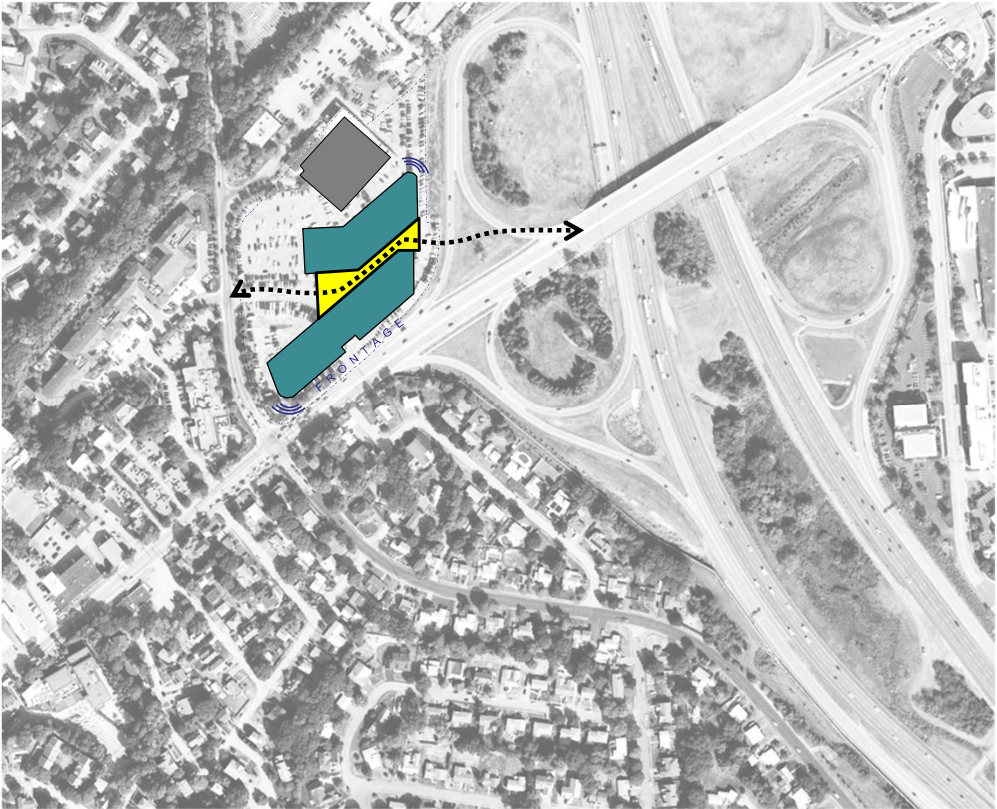
1950'S AERIAL IMAGE



MAXIMUM ZONING ENVELOPE (HC-1) 1.35 FAR BY SPECIAL PERMIT



CONCEPTUAL DIAGRAM



AERIAL LOOKING EAST



SITE PLAN



NEIGHBORHOOD AMENITY (FITNESS / WALKING LOOP)

FITNESS TRAIL LAYOUT CONCEPT



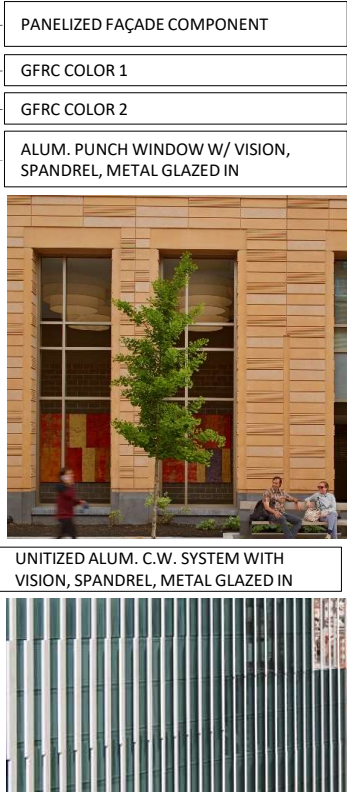
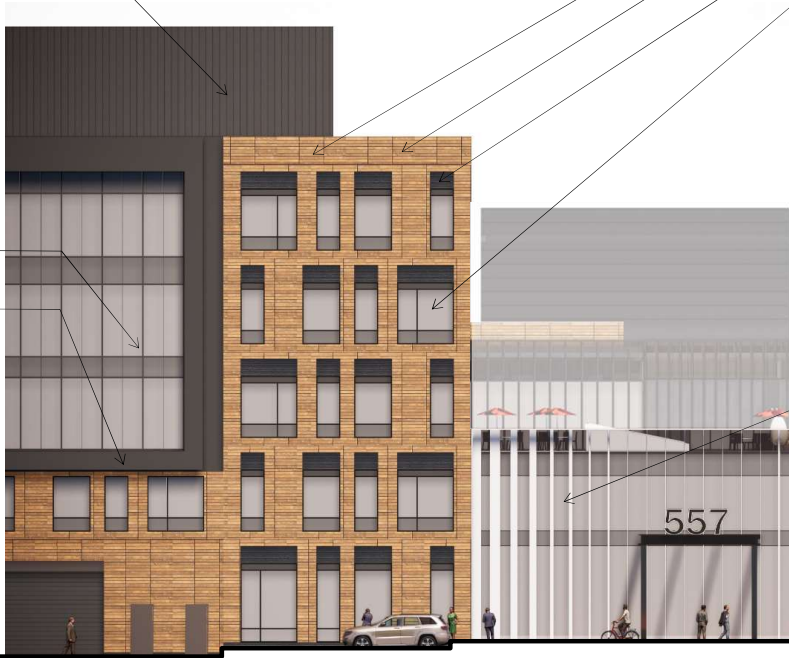
ENTRANCE DRIVE VIEW



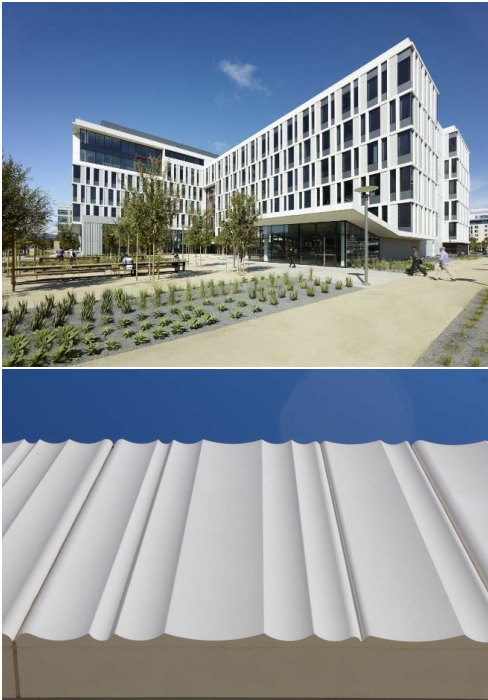
GOULD STREET HEADING SOUTH



BUILDING EXTERIOR MATERIAL PALETTE



GFRC PANELIZED PRECEDENT



GARAGE EXTERIOR MATERIAL PALETTE

STRUCTURAL PRECAST SPANDERLS / COL'S



ALUMINUM C.W. SYSTEM W/ VISION & SPANDREL GLAZING



FABRIC BANNER

PERFORATED ALUM SCREEN



AERIAL LOOKING WEST



HIGHLAND ELEVATION



AERIAL LOOKING SOUTH



FITNESS PATH / WALKING LOOP VIEW



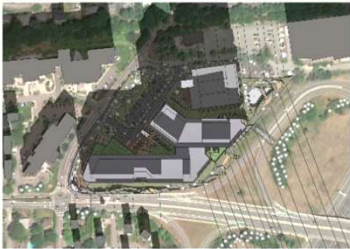
SHADOW STUDY

SUMMER SOLSTICE (JUNE 21)

EQUINOX (MARCH/SEPTEMBER 21)

WINTER SOLSTICE (DECEMBER 21)

9:00 AM



12:00 PM

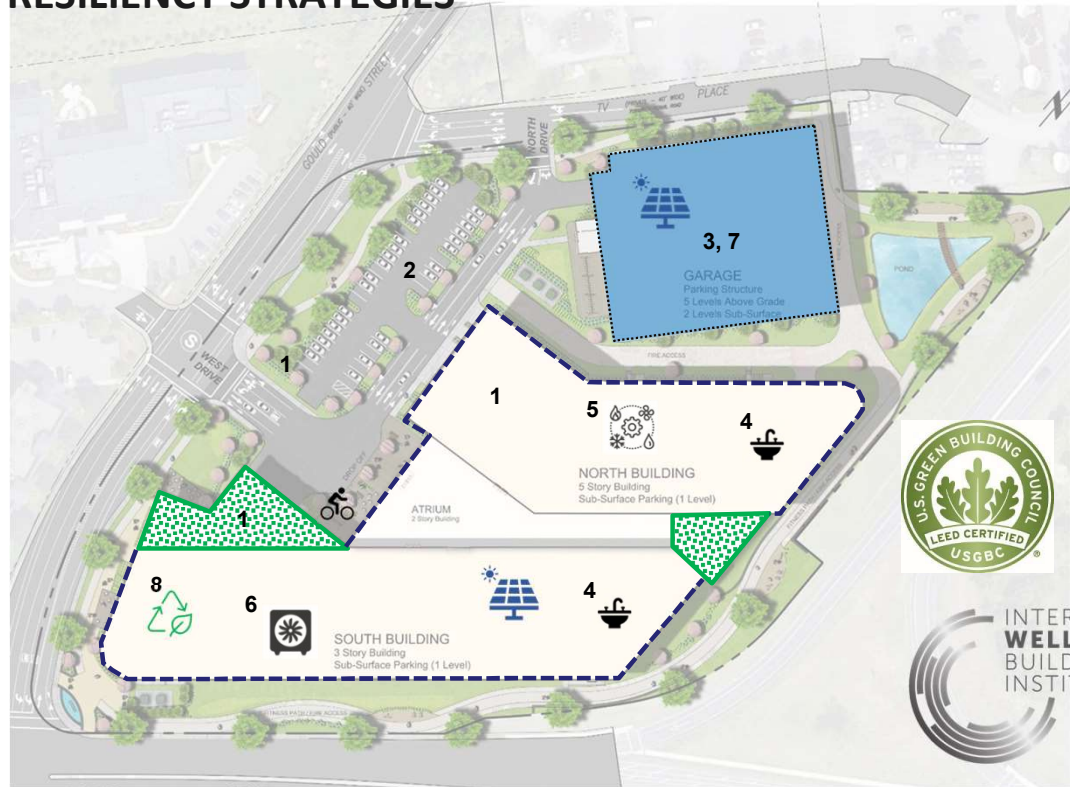


3:00 PM



SUSTAINABILITY / RESILIENCY STRATEGIES

1. Heat island reduction
2. Brownfield remediation
3. Electric vehicle charging
4. Rainwater reuse
5. High performance building envelope and mechanical
6. Hybrid electric heating for 80% reduction emissions
7. Garage solar canopy
8. Reduced carbon building materials
9. Renewable Energy



LEED CHECKLIST



LEED v4 for BD+C: Core and Shell Project Checklist

Project Name:
Date:

557 Highland Ave, Needham MA
Monday, April 25 2022

Y	?	N			
1			Credit	Integrative Process	1
9	0	11		Location and Transportation	20
			Credit	LEED for Neighborhood Development Location	20
2			Credit	Sensitive Land Protection	2
3			Credit	High Priority Site	3
2	4		Credit	Surrounding Density and Diverse Uses	6
	6		Credit	Access to Quality Transit	6
1			Credit	Bicycle Facilities	1
1			Credit	Reduced Parking Footprint	1
1			Credit	Green Vehicles	1
4	0	7		Sustainable Sites	11
Y			Prereq	Construction Activity Pollution Prevention	Required
1			Credit	Site Assessment	1
2			Credit	Site Development - Protect or Restore Habitat	2
1			Credit	Open Space	1
3			Credit	Rainwater Management	3
2			Credit	Heat Island Reduction	2
1			Credit	Light Pollution Reduction	1
1			Credit	Tenant Design and Construction Guidelines	1
9	0	2		Water Efficiency	11
Y			Prereq	Outdoor Water Use Reduction	Required
Y			Prereq	Indoor Water Use Reduction	Required
Y			Prereq	Building-Level Water Metering	Required
1	1		Credit	Outdoor Water Use Reduction	2
6			Credit	Indoor Water Use Reduction	6
1	1		Credit	Cooling Tower Water Use	2
1			Credit	Water Metering	1
18	4	10		Energy and Atmosphere	33
Y			Prereq	Fundamental Commissioning and Verification	Required
Y			Prereq	Minimum Energy Performance	Required
Y			Prereq	Building-Level Energy Metering	Required
Y			Prereq	Fundamental Refrigerant Management	Required
5			Credit	Enhanced Commissioning	6
8	4	6	Credit	Optimize Energy Performance	18
1			Credit	Advanced Energy Metering	1
2			Credit	Demand Response	2
3			Credit	Renewable Energy Production	3
1			Credit	Enhanced Refrigerant Management	1
2			Credit	Green Power and Carbon Offsets	2

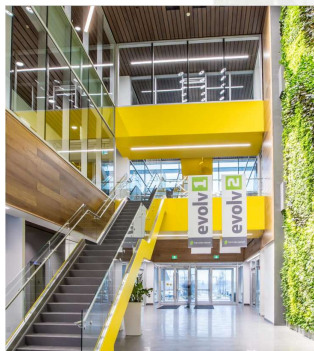
7	1	6		Materials and Resources	14
Y			Prereq	Storage and Collection of Recyclables	Required
Y			Prereq	Construction and Demolition Waste Management Planning	Required
2	1	3	Credit	Building Life-Cycle Impact Reduction	6
1	1		Credit	Building Product Disclosure and Optimization - Environmental Product Declarations	2
1	1		Credit	Building Product Disclosure and Optimization - Sourcing of Raw Materials	2
1	1		Credit	Building Product Disclosure and Optimization - Material Ingredients	2
2			Credit	Construction and Demolition Waste Management	2
6	1	3		Indoor Environmental Quality	10
Y			Prereq	Minimum Indoor Air Quality Performance	Required
Y			Prereq	Environmental Tobacco Smoke Control	Required
2			Credit	Enhanced Indoor Air Quality Strategies	2
3			Credit	Low-Emitting Materials	3
1			Credit	Construction Indoor Air Quality Management Plan	1
3			Credit	Daylight	3
1			Credit	Quality Views	1
6	0	0		Innovation	6
5			Credit	Innovation	5
1			Credit	LEED Accredited Professional	1
3	0	1		Regional Priority	4
1			Credit	Regional Priority: Rainwater Management	1
1			Credit	Regional Priority: Optimize Energy Performance	1
1			Credit	Regional Priority: High Priority Site	1
1			Credit	Regional Priority: Indoor Water Use Reduction	1
63	6	40		TOTALS	Possible Points: 110

Certified: 40 to 49 points, Silver: 50 to 59 points, Gold: 60 to 79 points, Platinum: 80 to 110



WELLNESS STRATEGIES

1. Bicycle Use / Storage
2. Outdoor Plaza
3. Health / Fitness Trail
4. Outdoor Roof Terraces
5. Fitness Facility
6. Healthy Eating
7. Accessible Stairs
8. Biophilia Feature



PROMOTE A SITE AND BUILDING DESIGN WITH FOCUS ON
AIR – WATER – NOURISHMENT – LIGHT – FITNESS – COMFORT – MIND



Bulfinch



557 Highland Ave
Needham, MA 02494

Needham Special Permit Package
03/30/2022

Bulfinch

 **Stantec**



Proposed Site Plan



Aerial – Looking North



Aerial – Looking West



Aerial – Looking South



Aerial – West Entry Drive

Site Aerial - Proposed



Gould Street – Looking North-East



Fitness Loop – Looking South

Street View – Proposed

557 HIGHLAND AVE
NEEDHAM, MA 02494



PROJECT TEAM

OWNER:
BULFINCH
116 HUNTINGTON AVE, SUITE 600
BOSTON, MA 02116
Contact:
ROBERT SCHLAGER
tel: 781.707.4122
email: RAS@Bulfinch.com

CONSTRUCTION MANAGER:
JOHN MORIARTY & ASSOCIATES
3 CHURCH STREET #2
WINCHESTER, MA 01890
Contact:
NOAH LUSKIN
tel:
email: nluskin@jm-a.com

ARCHITECT:
STANTEC
Stantec Architecture and Engineering P.C.
311 Summer Street
Boston, MA 02210-1723
Contact:
ERIC WEYANT
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email: eric.veyant@stantec.com

LANDSCAPE ARCHITECT:
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14 SPRING ST.
WALTHAM, MA 02451
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PAUL FINGER
tel: 781.647-4900 x480
email: pfinger@pfai.net

INTERIOR DESIGN:
STANTEC
Stantec Architecture and Engineering P.C.
311 Summer Street
Boston, MA 02210-1723
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JEN DUNN
tel: (617) 234-3100
email: jen.dunn@stantec.com

STRUCTURAL ENGINEER:
SGH
800 BOYLSTON STREET, SUITE 2320
BOSTON, MA 02199
Contact:
PEDRO SIFRE
tel: 781.907.9377
email: pjsifre@sgn.com

CIVIL ENGINEER:
VHB
99 HIGH STREET, 10TH FLOOR
BOSTON, MA 02110
Contact:
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email: nskoly@vnb.com

CODE CONSULTANT:
REMMER CONSULTING
18 JOHN STREET PLACE
WORCESTER, MA 01609
Contact:
NORTON REMMER
tel: 508-756-2777
email: norton@remmerconsulting.net

ACOUSTICAL CONSULTANT:
ACENTECH
33 MOULTON STREET
CAMBRIDGE, MA 02138
Contact:
MIKE BAHTIARIAN
tel: 617.499.8058
email: mbahtiarian@acentech.com

GEOTECH ENGINEER:
MCPHAIL ASSOCIATES, LLC
2269 MASSACHUSETTS AVE
CAMBRIDGE, MA 02140
Contact:
BRENDAN O'NEIL
tel: 617-868-1420 x311
email: boneil@mcphailgeo.com

MEPFP ENGINEER:
AHA CONSULTING ENGINEERS INC.
18 TREMONT ST., SUITE 1040
BOSTON, MA 02108
Contact:
ROBERT ANDREWS
tel: 781-372-3001
email: robert_andrews@aha-engineers.com

SPECIFICATIONS:
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21 ELIOT STREET
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email: jford@kalinassociates.com

LEGAL:
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cleray@daintorpy.com

ROBERT T. SMART, JR.
Contact:
ROBERT SMART
bob@robertsmart.net

TIMOTHY SULLIVAN
Contact:
TIMOTHY SULLIVAN
tsullivan@goulstonstorr.com

DRAWING INDEX-SUBMISSION MATRIX	
DRAWING NUMBER	DRAWING NAME
GENERAL	
G-000	COVER SHEET
G-010	ZONING GROSS AREA PLANS
CIVIL	
C-01	LEGEND AND GENERAL NOTES
C-02	OVERALL SITE PLAN
C-03	DRAINAGE AND EROSION CONTROL PLAN
C-04	UTILITY PLAN
C-05	SITE DETAILS
C-06	SITE DETAILS II
LANDSCAPE	
L-1.0	SITE LAYOUT & MATERIALS PLAN
L-2.0	SITE GRADING PLAN
L-3.0	SITE PLANTING PLAN
L-4.0	SITE LIGHTING PLAN
L-5.0	SITE DETAILS I
L-5.1	SITE DETAILS II
ARCHITECTURAL	
A-10001	GARAGE LEVEL 01 - OVERALL PLAN
A-101	LEVEL 1 - OVERALL PLAN
A-102	LEVEL 2 - OVERALL PLAN
A-103	LEVEL 3 - OVERALL PLAN
A-104	LEVEL 4 - OVERALL PLAN
A-105	LEVEL 5 - OVERALL PLAN
A-106	LEVEL 6 - OVERALL PLAN

DRAWING INDEX-SUBMISSION MATRIX	
DRAWING NUMBER	DRAWING NAME
A-107	ROOF PLAN
A-201	BUILDING ELEVATIONS - LOCATOR ELEVATIONS
A-202	BUILDING ELEVATIONS - NORTH BLDG - NORTH
A-203	BUILDING ELEVATIONS - NORTH BLDG - SOUTH & EAST
A-204	BUILDING ELEVATIONS - NORTH BLDG (SOUTHWEST) & SOUTH BLDG (SOUTH)
A-205	BUILDING ELEVATIONS - NORTH BLDG (WEST) & SOUTH BLDG (NORTH & WEST)
A-206	BUILDING ELEVATIONS - SOUTH BLDG - NORTH & EAST
A-211	BUILDING SECTIONS - OVERALL
A-212	BUILDING SECTIONS - NORTH BLDG
A-213	BUILDING SECTIONS - NORTH BLDG
ARCHITECTURAL - GARAGE	
AG-100 B2	GARAGE LEVEL B2
AG-100 B1	GARAGE LEVEL B1
AG-101	GARAGE LEVEL 1
AG-102	GARAGE LEVEL 2
AG-103	GARAGE LEVEL 3 (LEVEL 4.5 SIM)
AG-106	GARAGE LEVEL 6
AG-211	GARAGE SECTIONS
AG-212	GARAGE SECTIONS
AG-301	ELEVATIONS
AG-302	ELEVATIONS

Saved: Tuesday, March 29, 2022 1:15:52 PM D:\H&M\Q Printed: Tuesday, March 29, 2022 1:54:56 PM David Hennes Rodriguez

C:\DWG\1\SET1\ARCH1

F
E
D
C
B

Legend			
Exist.	Prop.	Exist.	Prop.
		PROPERTY LINE	
		PROJECT LIMIT LINE	
		RIGHT-OF-WAY/PROPERTY LINE	
		EASEMENT	
		BUILDING SETBACK	
		PARKING SETBACK	
		BASELINE	
		CONSTRUCTION LAYOUT	
		ZONING LINE	
		TOWN LINE	
		LIMIT OF DISTURBANCE	
		WETLAND LINE WITH FLAG	
		FLOODPLAIN	
		BORDERING LAND SUBJECT TO FLOODING	
		WETLAND BUFFER ZONE	
		NO DISTURB ZONE	
		200' RIVERFRONT AREA	
		GRAVEL ROAD	
		EDGE OF PAVEMENT	
		BITUMINOUS BERM	
		BITUMINOUS CURB	
		CONCRETE CURB	
		CURB AND GUTTER	
		EXTRUDED CONCRETE CURB	
		MONOLITHIC CONCRETE CURB	
		PRECAST CONC. CURB	
		SLOPED GRAN. EDGING	
		VERT. GRAN. CURB	
		LIMIT OF CURB TYPE	
		SAWCUT	
		BUILDING	
		BUILDING ENTRANCE	
		LOADING DOCK	
		BOLLARD	
		DUMPSTER PAD	
		SIGN	
		DOUBLE SIGN	
		STEEL GUARDRAIL	
		WOOD GUARDRAIL	
		PATH	
		TREE LINE	
		WIRE FENCE	
		FENCE	
		STOCKADE FENCE	
		STONE WALL	
		RETAINING WALL	
		STREAM / POND / WATER COURSE	
		DETENTION BASIN	
		HAY BALES	
		SILT FENCE	
		SILT SOCK / STRAW WATTLE	
		MINOR CONTOUR	
		MAJOR CONTOUR	
		PARKING COUNT	
		COMPACT PARKING STALLS	
		DOUBLE YELLOW LINE	
		STOP LINE	
		CROSSWALK	
		ACCESSIBLE CURB RAMP	
		ACCESSIBLE PARKING	
		VAN-ACCESSIBLE PARKING	

Abbreviations	
General	
ABAN	ABANDON
ACR	ACCESSIBLE CURB RAMP
ADJ	ADJUST
APPROX	APPROXIMATE
BIT	BITUMINOUS
BS	BOTTOM OF SLOPE
BWLL	BROKEN WHITE LANE LINE
CONC	CONCRETE
DYCL	DOUBLE YELLOW CENTER LINE
EL	ELEVATION
ELEV	ELEVATION
EX	EXISTING
FDN	FOUNDATION
FFE	FIRST FLOOR ELEVATION
GRAN	GRANITE
GTD	GRADE TO DRAIN
LA	LANDSCAPE AREA
LOD	LIMIT OF DISTURBANCE
MAX	MAXIMUM
MIN	MINIMUM
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
PERF	PERFORATED
PROP	PROPOSED
REM	REMOVE
RET	RETAIN
R&D	REMOVE AND DISPOSE
R&R	REMOVE AND RESET
SWEL	SOLID WHITE EDGE LINE
SWLL	SOLID WHITE LANE LINE
TS	TOP OF SLOPE
TYP	TYPICAL
Utility	
CB	CATCH BASIN
CMP	CORRUGATED METAL PIPE
CO	CLEANOUT
DCB	DOUBLE CATCH BASIN
DMH	DRAIN MANHOLE
CIP	CAST IRON PIPE
COND	CONDUIT
DND	DUCTILE IRON PIPE
FES	FLARED END SECTION
FM	FORCE MAIN
F&G	FRAME AND GRATE
F&C	FRAME AND COVER
GI	GUTTER INLET
GT	GREASE TRAP
HDPE	HIGH DENSITY POLYETHYLENE PIPE
HH	HANDHOLE
HW	HEADWALL
HYD	HYDRANT
INV	INVERT ELEVATION
I=	INVERT ELEVATION
LP	LIGHT POLE
MES	METAL END SECTION
PV	POST INDICATOR VALVE
PWW	PAVED WATER WAY
PVC	POLYVINYLCHLORIDE PIPE
RCP	REINFORCED CONCRETE PIPE
R=	RIM ELEVATION
RIM=	RIM ELEVATION
SMH	SEWER MANHOLE
TSV	TAPPING SLEEVE, VALVE AND BOX
UG	UNDERGROUND
UP	UTILITY POLE

- ### Notes
- #### General
- CONTRACTOR SHALL NOTIFY "DIG-SAFE" (1-888-344-7233) AT LEAST 72 HOURS BEFORE EXCAVATING.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SECURITY AND JOB SAFETY. CONSTRUCTION ACTIVITIES SHALL BE IN ACCORDANCE WITH OSHA STANDARDS AND LOCAL REQUIREMENTS.
 - ACCESSIBLE ROUTES, PARKING SPACES, RAMPS, SIDEWALKS AND WALKWAYS SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE FEDERAL AMERICANS WITH DISABILITIES ACT AND WITH STATE AND LOCAL LAWS AND REGULATIONS (WHICHEVER ARE MORE STRINGENT).
 - AREAS DISTURBED DURING CONSTRUCTION AND NOT RESTORED WITH IMPERVIOUS SURFACES (BUILDINGS, PAVEMENTS, WALKS, ETC.) SHALL RECEIVE 6 INCHES LOAM AND SEED.
 - WITHIN THE LIMITS OF THE BUILDING FOOTPRINT, THE SITE CONTRACTOR SHALL PERFORM EARTHWORK OPERATIONS REQUIRED UP TO SUBGRADE ELEVATIONS.
 - WORK WITHIN THE LOCAL RIGHTS-OF-WAY SHALL CONFORM TO LOCAL MUNICIPAL STANDARDS. WORK WITHIN STATE RIGHTS-OF-WAY SHALL CONFORM TO THE LATEST EDITION OF THE STATE HIGHWAY DEPARTMENTS STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES.
 - UPON AWARD OF CONTRACT, CONTRACTOR SHALL MAKE NECESSARY CONSTRUCTION NOTIFICATIONS AND APPLY FOR AND OBTAIN NECESSARY PERMITS, PAY FEES, AND POST BONDS ASSOCIATED WITH THE WORK INDICATED ON THE DRAWINGS, IN THE SPECIFICATIONS, AND IN THE CONTRACT DOCUMENTS. DO NOT CLOSE OR OBSTRUCT ROADWAYS, SIDEWALKS, AND FIRE HYDRANTS, WITHOUT APPROPRIATE PERMITS.
 - TRAFFIC SIGNAGE AND PAVEMENT MARKINGS SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
 - AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.
 - IN THE EVENT THAT SUSPECTED CONTAMINATED SOIL, GROUNDWATER, AND OTHER MEDIA ARE ENCOUNTERED DURING EXCAVATION AND CONSTRUCTION ACTIVITIES BASED ON VISUAL, OLFACTORY, OR OTHER EVIDENCE, THE CONTRACTOR SHALL STOP WORK IN THE VICINITY OF THE SUSPECT MATERIAL TO AVOID FURTHER SPREADING OF THE MATERIAL, AND SHALL NOTIFY THE OWNER IMMEDIATELY SO THAT THE APPROPRIATE TESTING AND SUBSEQUENT ACTION CAN BE TAKEN.
 - CONTRACTOR SHALL PREVENT DUST, SEDIMENT, AND DEBRIS FROM EXITING THE SITE AND SHALL BE RESPONSIBLE FOR CLEANUP, REPAIRS AND CORRECTIVE ACTION IF SUCH OCCURS.
 - DAMAGE RESULTING FROM CONSTRUCTION LOADS SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO OWNER.
 - CONTRACTOR SHALL CONTROL STORMWATER RUNOFF DURING CONSTRUCTION TO PREVENT ADVERSE IMPACTS TO OFF SITE AREAS, AND SHALL BE RESPONSIBLE TO REPAIR RESULTING DAMAGES, IF ANY, AT NO COST TO OWNER.
 - THIS PROJECT DISTURBS MORE THAN ONE ACRE OF LAND AND FALLS WITHIN THE NPDES CONSTRUCTION GENERAL PERMIT (CGP) PROGRAM AND EPA JURISDICTION. PRIOR TO THE START OF CONSTRUCTION CONTRACTOR IS TO FILE A CGP NOTICE OF INTENT WITH THE EPA AND PREPARE A STORMWATER POLLUTION PREVENTION PLAN IN ACCORDANCE WITH THE NPDES REGULATIONS. CONTRACTOR SHALL CONFIRM THE OWNER HAS ALSO FILED A NOTICE OF INTENT WITH THE EPA.

- #### Utilities
- THE LOCATIONS, SIZES, AND TYPES OF EXISTING UTILITIES ARE SHOWN AS AN APPROXIMATE REPRESENTATION ONLY. THE OWNER OR ITS REPRESENTATIVE(S) HAVE NOT INDEPENDENTLY VERIFIED THIS INFORMATION AS SHOWN ON THE PLANS. THE UTILITY INFORMATION SHOWN DOES NOT GUARANTEE THE ACTUAL EXISTENCE, SERVICEABILITY, OR OTHER DATA CONCERNING THE UTILITIES. NOR DOES IT GUARANTEE AGAINST THE POSSIBILITY THAT ADDITIONAL UTILITIES MAY BE PRESENT THAT ARE NOT SHOWN ON THE PLANS. PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL VERIFY AND DETERMINE THE EXACT LOCATIONS, SIZES, AND ELEVATIONS OF THE POINTS OF CONNECTIONS TO EXISTING UTILITIES AND, SHALL CONFIRM THAT THERE ARE NO INTERFERENCES WITH EXISTING UTILITIES AND THE PROPOSED UTILITY ROUTES, INCLUDING ROUTES WITHIN THE PUBLIC RIGHTS OF WAY.
 - WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, OR EXISTING CONDITIONS DIFFER FROM THOSE SHOWN SUCH THAT THE WORK CANNOT BE COMPLETED AS INTENDED, THE LOCATION, ELEVATION, AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED IN WRITING TO THE OWNER'S REPRESENTATIVE FOR THE RESOLUTION OF THE CONFLICT AND CONTRACTOR'S FAILURE TO NOTIFY PRIOR TO PERFORMING ADDITIONAL WORK RELEASES OWNER FROM OBLIGATIONS FOR ADDITIONAL PAYMENTS WHICH OTHERWISE MAY BE WARRANTED TO RESOLVE THE CONFLICT.
 - SET CATCH BASIN RIMS, AND INVERTS OF SEWERS, DRAINS, AND DITCHES IN ACCORDANCE WITH ELEVATIONS ON THE GRADING AND UTILITY PLANS.
 - PAVEMENTS AND CONCRETE SURFACES: FLUSH
 - ALL SURFACES ALONG ACCESSIBLE ROUTES: FLUSH
 - LANDSCAPE, LOAM AND SEED, AND OTHER EARTH SURFACE AREAS: ONE INCH ABOVE SURROUNDING AREA AND TAPER EARTH TO THE RIM ELEVATION.
 - RIM ELEVATIONS FOR DRAIN AND SEWER MANHOLES, WATER VALVE COVERS, GAS GATES, ELECTRIC AND TELEPHONE PULL BOXES, AND MANHOLES, AND OTHER SUCH ITEMS, ARE APPROXIMATE AND SHALL BE SET/RESET AS FOLLOWS:
 - WATER PIPES SHALL BE CLASS 52 CEMENT LINED DUCTILE IRON (CLDI).
 - SANITARY SEWER PIPES SHALL BE SDR 35 POLYVINYL CHLORIDE (PVC).
 - STORM DRAINAGE PIPES SHALL BE HIGH DENSITY POLYETHYLENE (HDPE).
 - PIPE INSTALLATION AND MATERIALS SHALL COMPLY WITH THE STATE PLUMBING CODE WHERE APPLICABLE. CONTRACTOR SHALL COORDINATE WITH LOCAL PLUMBING INSPECTOR PRIOR TO BEGINNING WORK.
 - CONTRACTOR SHALL COORDINATE WITH ELECTRICAL CONTRACTOR AND SHALL FURNISH EXCAVATION, INSTALLATION, AND BACKFILL OF ELECTRICAL FURNISHED STEWOK RELATED ITEMS SUCH AS PULL BOXES, CONDUITS, DUCT BANKS, LIGHT POLE BASES, AND CONCRETE PADS. SITE CONTRACTOR SHALL FURNISH CONCRETE ENCASMENT OF DUCT BANKS IF REQUIRED BY THE UTILITY COMPANY AND AS INDICATED ON THE DRAWINGS.
 - CONTRACTOR SHALL EXCAVATE AND BACKFILL TRENCHES FOR GAS IN ACCORDANCE WITH GAS COMPANY'S REQUIREMENTS.
 - ALL DRAINAGE AND SANITARY STRUCTURE INTERIOR DIAMETERS (4" MIN.) SHALL BE DETERMINED BY THE MANUFACTURER BASED ON THE PIPE CONFIGURATIONS SHOWN ON THESE PLANS AND LOCAL MUNICIPAL STANDARDS. FOR MANHOLES THAT ARE 20 FEET IN DEPTH AND GREATER, THE MINIMUM DIAMETER SHALL BE 5 FEET.

- #### Layout and Materials
- DIMENSIONS ARE FROM THE FACE OF CURB, FACE OF BUILDING, FACE OF WALL, AND CENTER LINE OF PAVEMENT MARKINGS, UNLESS OTHERWISE NOTED.
 - CURB RADII ARE 3 FEET UNLESS OTHERWISE NOTED.
 - CURBING SHALL BE VERTICAL GRANITE WITHIN THE SITE UNLESS OTHERWISE INDICATED ON THE PLANS.
 - SEE ARCHITECTURAL DRAWINGS FOR EXACT BUILDING DIMENSIONS AND DETAILS CONTIGUOUS TO THE BUILDING, INCLUDING SIDEWALKS, RAMPS, BUILDING ENTRANCES, STAIRWAYS, UTILITY PENETRATIONS, CONCRETE DOOR PADS, COMPACTOR PAD, LOADING DOCKS, BOLLARDS, ETC.
 - PROPOSED BOUNDS AND ANY EXISTING PROPERTY LINE MONUMENTATION DISTURBED DURING CONSTRUCTION SHALL BE SET OR RESET BY A PROFESSIONAL LAND SURVEYOR.
 - PRIOR TO START OF CONSTRUCTION, CONTRACTOR SHALL VERIFY EXISTING PAVEMENT ELEVATIONS AT INTERFACE WITH PROPOSED PAVEMENTS, AND EXISTING GROUND ELEVATIONS ADJACENT TO DRAINAGE OUTLETS TO ASSURE PROPER TRANSITIONS BETWEEN EXISTING AND PROPOSED FACILITIES.

- #### Demolition
- PROJECT PRESENTED HEREIN IS THE ADAPTIVE REUSE OF AN EXISTING SITE. TO THE EXTENT REQUIRED TO BUILD THE PROJECT, CONTRACTOR SHALL REMOVE AND DISPOSE OF EXISTING MANMADE SURFACE FEATURES WITHIN THE LIMIT OF WORK INCLUDING BUILDINGS, STRUCTURES, PAVEMENTS, SLABS, CURBING, FENCES, UTILITY POLES, SIGNS, ETC. UNLESS INDICATED OTHERWISE ON THE DRAWINGS. REMOVE AND DISPOSE OF EXISTING UTILITIES, FOUNDATIONS, AND UNSUITABLE MATERIAL BENEATH AND FOR A DISTANCE OF TEN (10) FEET BEYOND THE PROPOSED BUILDING FOOTPRINT INCLUDING EXTERIOR COLUMNS.
 - EXISTING UTILITIES SHALL BE TERMINATED, UNLESS OTHERWISE NOTED, IN CONFORMANCE WITH LOCAL, STATE AND INDIVIDUAL UTILITY COMPANY STANDARD SPECIFICATIONS AND DETAILS. THE CONTRACTOR SHALL COORDINATE UTILITY SERVICE DISCONNECTS WITH THE UTILITY REPRESENTATIVES.
 - CONTRACTOR SHALL DISPOSE OF DEMOLITION DEBRIS IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS, ORDINANCES AND STATUTES.
 - THE DEMOLITION LIMITS DEPICTED IN THE PLANS IS INTENDED TO AID THE CONTRACTOR DURING THE BIDDING AND CONSTRUCTION PROCESS AND IS NOT INTENDED TO DEPICT EACH AND EVERY ELEMENT OF DEMOLITION. THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING THE DETAILED SCOPE OF DEMOLITION BEFORE SUBMITTING ITS BID/PROPOSAL TO PERFORM THE WORK AND SHALL MAKE NO CLAIMS AND SEEK NO ADDITIONAL COMPENSATION FOR CHANGED CONDITIONS OR UNFORESEEN OR LATENT SITE CONDITIONS RELATED TO ANY CONDITIONS DISCOVERED DURING EXECUTION OF THE WORK.
 - UNLESS OTHERWISE SPECIFICALLY PROVIDED ON THE PLANS OR IN THE SPECIFICATIONS, THE ENGINEER HAS NOT PREPARED DESIGNS FOR AND SHALL HAVE NO RESPONSIBILITY FOR THE PRESENCE, DISCOVERY, REMOVAL, ABATEMENT OR DISPOSAL OF HAZARDOUS MATERIALS, TOXIC WASTES OR POLLUTANTS AT THE PROJECT SITE. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR ANY CLAIMS OF LOSS, DAMAGE, EXPENSE, DELAY, INJURY OR DEATH ARISING FROM THE PRESENCE OF HAZARDOUS MATERIAL AND CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ANY CLAIMS MADE IN CONNECTION THEREWITH. MOREOVER, THE ENGINEER SHALL HAVE NO ADMINISTRATIVE OBLIGATIONS OF ANY TYPE WITH REGARD TO ANY CONTRACTOR AMENDMENT INVOLVING THE ISSUES OF PRESENCE, DISCOVERY, REMOVAL, ABATEMENT OR DISPOSAL OF ASBESTOS OR OTHER HAZARDOUS MATERIALS.

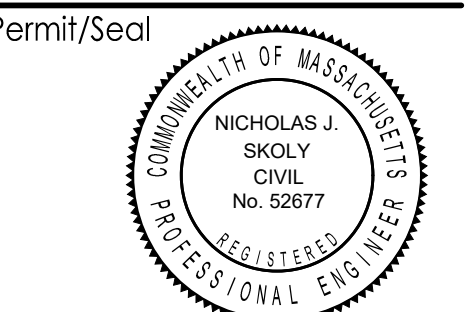
- #### Erosion Control
- PRIOR TO STARTING ANY OTHER WORK ON THE SITE, THE CONTRACTOR SHALL NOTIFY APPROPRIATE AGENCIES AND SHALL INSTALL EROSION CONTROL MEASURES AS SHOWN ON THE PLANS AND AS IDENTIFIED IN FEDERAL, STATE, AND LOCAL APPROVAL DOCUMENTS PERTAINING TO THIS PROJECT.
 - CONTRACTOR SHALL INSPECT AND MAINTAIN EROSION CONTROL MEASURES ON A WEEKLY BASIS (MINIMUM) OR AS REQUIRED PER THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP). THE CONTRACTOR SHALL ADDRESS DEFICIENCIES AND MAINTENANCE ITEMS WITHIN TWENTY-FOUR HOURS OF INSPECTION. CONTRACTOR SHALL PROPERLY DISPOSE OF SEDIMENT SUCH THAT IT DOES NOT ENCUMBER OTHER DRAINAGE STRUCTURES AND PROTECTED AREAS.
 - CONTRACTOR SHALL BE FULLY RESPONSIBLE TO CONTROL CONSTRUCTION SUCH THAT SEDIMENTATION SHALL NOT AFFECT REGULATORY PROTECTED AREAS, WHETHER SUCH SEDIMENTATION IS CAUSED BY WATER, WIND, OR DIRECT DEPOSIT.
 - CONTRACTOR SHALL PERFORM CONSTRUCTION SEQUENCING SUCH THAT EARTH MATERIALS ARE EXPOSED FOR A MINIMUM OF TIME BEFORE THEY ARE COVERED, SEEDDED, OR OTHERWISE STABILIZED TO PREVENT EROSION.
 - UPON COMPLETION OF CONSTRUCTION AND ESTABLISHMENT OF PERMANENT GROUND COVER, CONTRACTOR SHALL REMOVE AND DISPOSE OF EROSION CONTROL MEASURES AND CLEAN SEDIMENT AND DEBRIS FROM ENTIRE DRAINAGE AND SEWER SYSTEMS.

- #### Existing Conditions Information
- BASE PLAN: THE PROPERTY LINES AND EXISTING CONDITIONS ARE SHOWN BASED ON "ALTA/NSPS LAND TITLE SURVEY 557 HIGHLAND AVENUE", PREPARED BY FELDMAN LAND SURVEYORS, DATED 12/09/2021.
 - TOPOGRAPHY: ELEVATIONS ARE BASED ON NAVD88.
 - GEOTECHNICAL DATA INCLUDING TEST PIT AND BORING LOCATIONS AND ELEVATIONS WERE OBTAINED FROM A MEMO ENTITLED "PRELIMINARY EVALUATION OF SOIL HYDRAULIC CONDUCTIVITY", PREPARED BY MCPHAIL ASSOCIATES, DATED MARCH 18, 2022.

- #### Document Use
- THESE PLANS AND CORRESPONDING CADD DOCUMENTS ARE INSTRUMENTS OF PROFESSIONAL SERVICE AND SHALL NOT BE USED, IN WHOLE OR IN PART, FOR ANY PURPOSE OTHER THAN FOR WHICH IT WAS CREATED WITHOUT THE EXPRESSED, WRITTEN CONSENT OF VHB. ANY UNAUTHORIZED USE, REUSE, MODIFICATION OR ALTERATION, INCLUDING AUTOMATED CONVERSION OF THIS DOCUMENT SHALL BE AT THE USER'S SOLE RISK WITHOUT LIABILITY OR LEGAL EXPOSURE TO VHB.
 - CONTRACTOR SHALL NOT RELY SOLELY ON ELECTRONIC VERSIONS OF PLANS, SPECIFICATIONS, AND DATA FILES THAT ARE OBTAINED FROM THE DESIGNERS, BUT SHALL VERIFY LOCATION OF PROJECT FEATURES IN ACCORDANCE WITH THE PAPER COPIES OF THE PLANS AND SPECIFICATIONS THAT ARE SUPPLIED AS PART OF THE CONTRACT DOCUMENTS.
 - SYMBOLS AND LEGENDS OF PROJECT FEATURES ARE GRAPHIC REPRESENTATIONS AND ARE NOT NECESSARILY SCALED TO THEIR ACTUAL DIMENSIONS OR LOCATIONS ON THE DRAWINGS. THE CONTRACTOR SHALL REFER TO THE DETAIL SHEET DIMENSIONS, MANUFACTURERS' LITERATURE, SHOP DRAWINGS AND FIELD MEASUREMENTS OF SUPPLIED PRODUCTS FOR LAYOUT OF THE PROJECT FEATURES.



100 Walnut Street PO Box 9151 Watertown, MA 02471 617.924.1770	By: Issued/Revision
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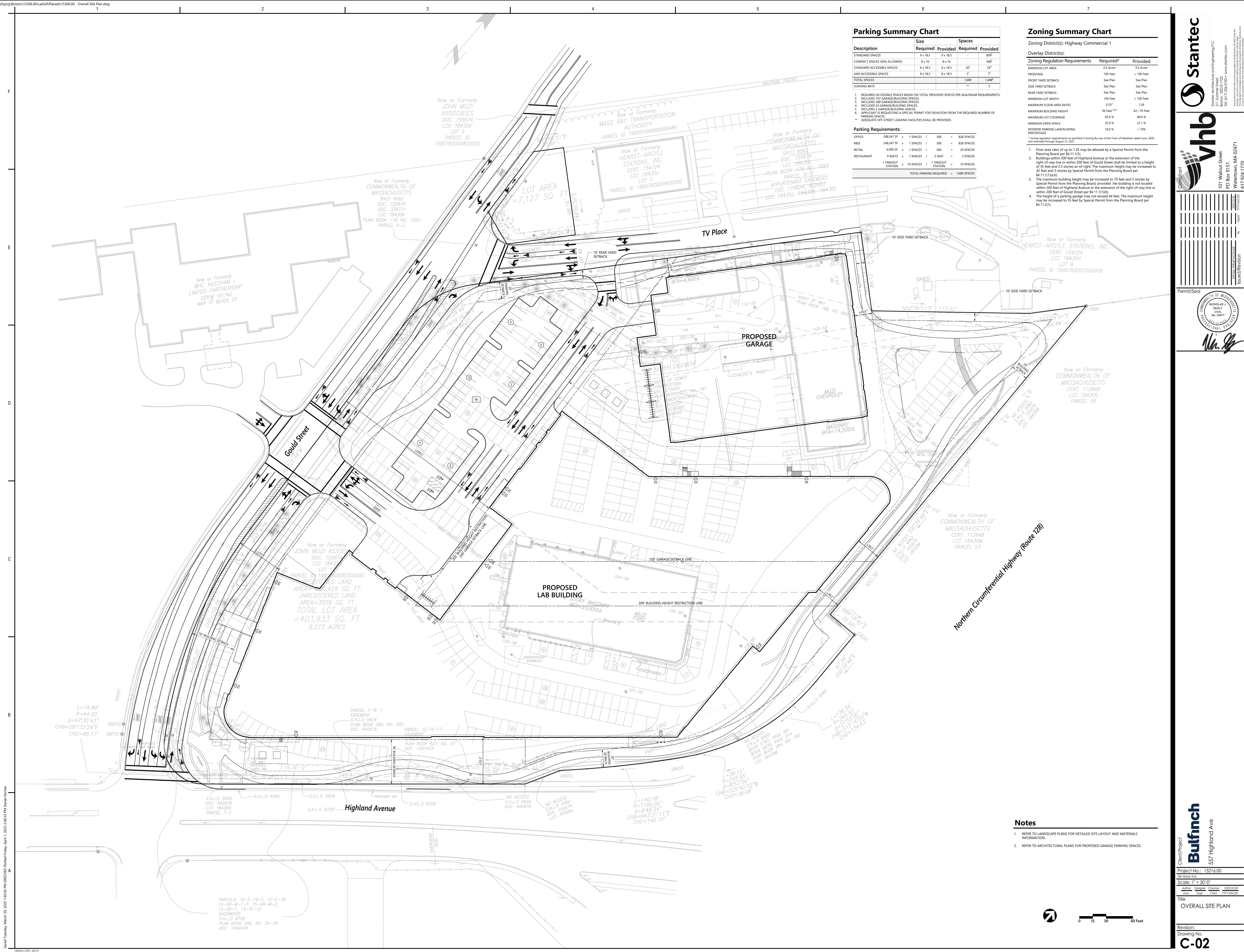
Permit/Seal

Client/Project
Bulfinch
557 Highland Ave

Project No.: 15216.00
Scale:
Author: [blank] Designer: [blank] Checker: [blank] 2022.03.30
Date: [blank] Date: [blank] Date: [blank] YYYY/MM/DD

Title
LEGEND AND
GENERAL NOTES

Revision:
Drawing No.:
C-01



Parking Summary Chart

Description	Size		Spaces	
	Required	Provided	Required	Provided
STANDARD SPACES	9 x 18.5	9 x 18.5	-	809'
COMPACT SPACES (50% ALLOWED)	8 x 16	8 x 16	-	568'
STANDARD ACCESSIBLE SPACES	8 x 18.5	8 x 18.5	20'	24'
VAN ACCESSIBLE SPACES	8 x 18.5	8 x 18.5	5'	7'
TOTAL SPACES			1,889	1,408'
LOADING BAYS			22	5

1. REQUIRED ACCESSIBLE SPACES BASED ON TOTAL PROVIDED SPACES PER ADA/MAAS REQUIREMENTS.
2. INCLUDES 787 GARAGE/BUILDING SPACES.
3. INCLUDES 568 GARAGE/BUILDING SPACES.
4. INCLUDES 24 GARAGE/BUILDING SPACES.
5. INCLUDES 5 GARAGE/BUILDING SPACES.
6. APPLICANT IS REQUESTING A SPECIAL PERMIT FOR DEVIATION FROM THE REQUIRED NUMBER OF PARKING SPACES.
7. ADEQUATE OFF-STREET LOADING FACILITIES SHALL BE PROVIDED.

Parking Requirements:

OFFICE	248,347 SF	x	1 SPACES	/	300	=	828 SPACES
R&D	248,347 SF	x	1 SPACES	/	300	=	828 SPACES
RETAIL	6,000 SF	x	1 SPACES	/	300	=	20 SPACES
RESTAURANT	9 SEATS	x	1 SPACES	/	3 SEAT	=	3 SPACES
1 TAKEOUT STATION	x	10 SPACES	/	1 TAKEOUT STATION	=	10 SPACES	
TOTAL PARKING REQUIRED							= 1,689 SPACES

Zoning Summary Chart

Zoning District(s): Highway Commercial 1		
Overlay District(s):		
Zoning Regulation Requirements	Required*	Provided
MINIMUM LOT AREA	0.5 Acres	9.3 Acres
FRONTAGE	100 Feet	> 100 Feet
FRONT YARD SETBACK	See Plan	See Plan
SIDE YARD SETBACK	See Plan	See Plan
REAR YARD SETBACK	See Plan	See Plan
MINIMUM LOT WIDTH	100 Feet	> 100 Feet
MAXIMUM FLOOR AREA RATIO	0.70'	1.26
MAXIMUM BUILDING HEIGHT	56 Feet ^{14.4}	42 / 70 Feet
MAXIMUM LOT COVERAGE	65.0 %	48.0 %
MINIMUM OPEN SPACE	25.0 %	27.1 %
INTERIOR PARKING LANDSCAPING PERCENTAGE	10.0 %	> 10%

* Zoning regulation requirements as specified in Zoning By-Law of the Town of Needham dated June, 2002, and amended through August 1, 2021.

1. Floor area ratio of up to 1.35 may be allowed by a Special Permit from the Planning Board per §4.11.1(1).
2. Buildings within 200 feet of Highland Avenue or the extension of the right-of-way line or within 200 feet of Gould Street shall be limited to a height of 35 feet and 2.5 stories as-of-right. The maximum height may be increased to 42 feet and 3 stories by Special Permit from the Planning Board per §4.11.1(1)(a)(b).
3. The maximum building height may be increased to 70 feet and 5 stories by Special Permit from the Planning Board, provided the building is not located within 200 feet of Highland Avenue or the extension of the right-of-way line or within 200 feet of Gould Street per §4.11.1(1)(b).
4. The height of a parking garage may not exceed 44 feet. The maximum height may be increased to 55 feet by Special Permit from the Planning Board per §4.11.2(1).

Stantec

Vhb

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Permit/Seal

NICHOLAS J. ROCKY
CIVIL ENGINEER
No. 85877
ISSUED FOR REVIEW
BY: [Signature]

Client/Project

Bulfnch

557 Highland Ave

Project No.: 15216.00

Scale: 1" = 30'-0"

Author: [Name] Designer: [Name] Checker: [Name] Date: 2022.03.30

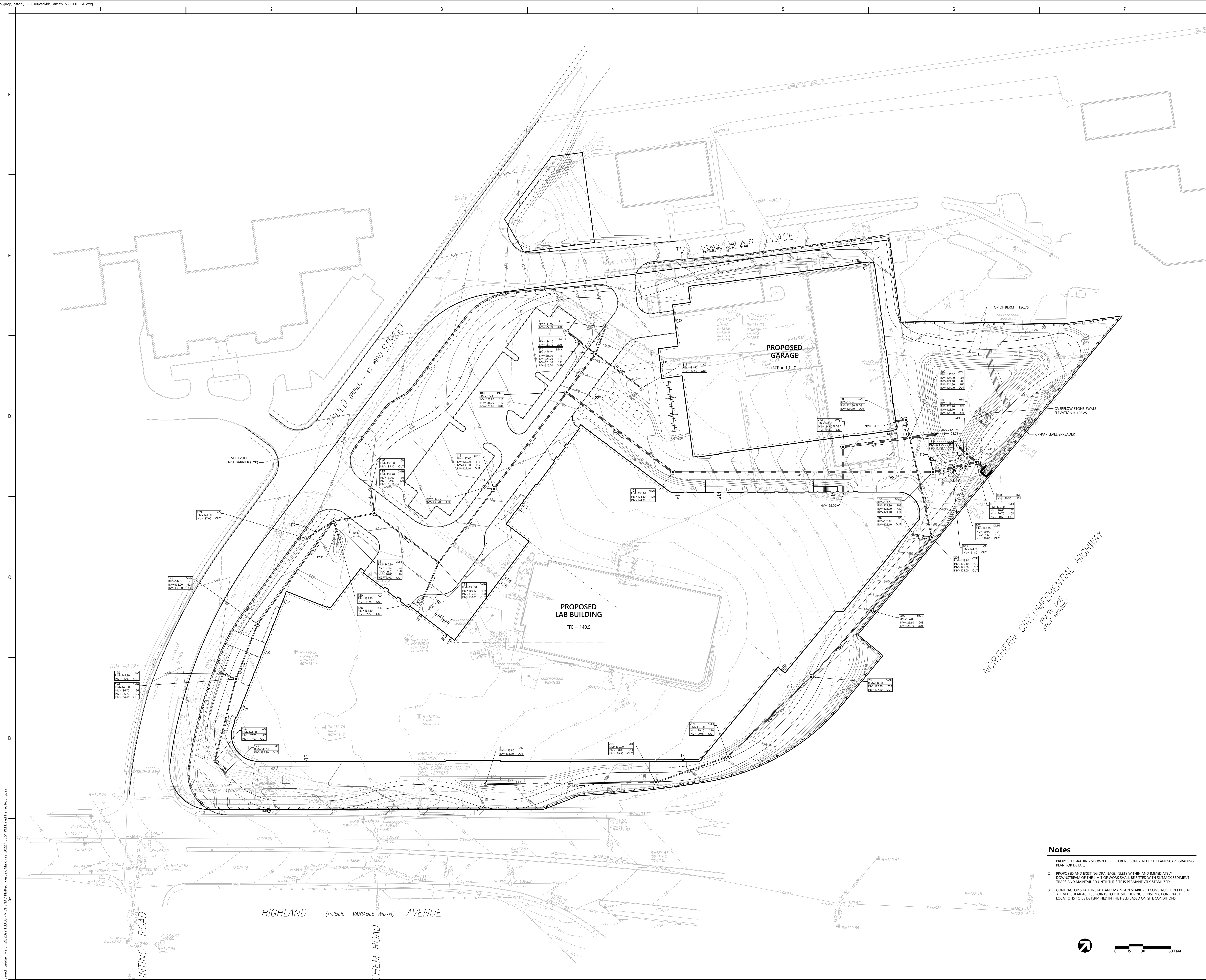
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Revision: [Number]

Drawing No.: C-02

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ORIGIN: SHEET: ARCHT



Notes

1. PROPOSED GRADING SHOWN FOR REFERENCE ONLY. REFER TO LANDSCAPE GRADING PLAN FOR DETAIL.
2. PROPOSED AND EXISTING DRAINAGE INLETS WITHIN AND IMMEDIATELY DOWNSTREAM OF THE LIMIT OF WORK SHALL BE FITTED WITH SILTSACK SEDIMENT TRAPS AND MAINTAINED UNTIL THE SITE IS PERMANENTLY STABILIZED.
3. CONTRACTOR SHALL INSTALL AND MAINTAIN STABILIZED CONSTRUCTION EXITS AT ALL VEHICULAR ACCESS POINTS TO THE SITE DURING CONSTRUCTION. EXACT LOCATIONS TO BE DETERMINED IN THE FIELD BASED ON SITE CONDITIONS.



0 15 30 60 Feet

Client/Project
Bulfnch
557 Highland Ave

Project No.: 15216.00

Scale: 1" = 30'-0"

Author Designer Checker 2022.03.30

Drawn Dgn. Chkd YYYYMMDD

Title
DRAINAGE AND EROSION CONTROL PLAN

Revision:
Drawing No.

C-03

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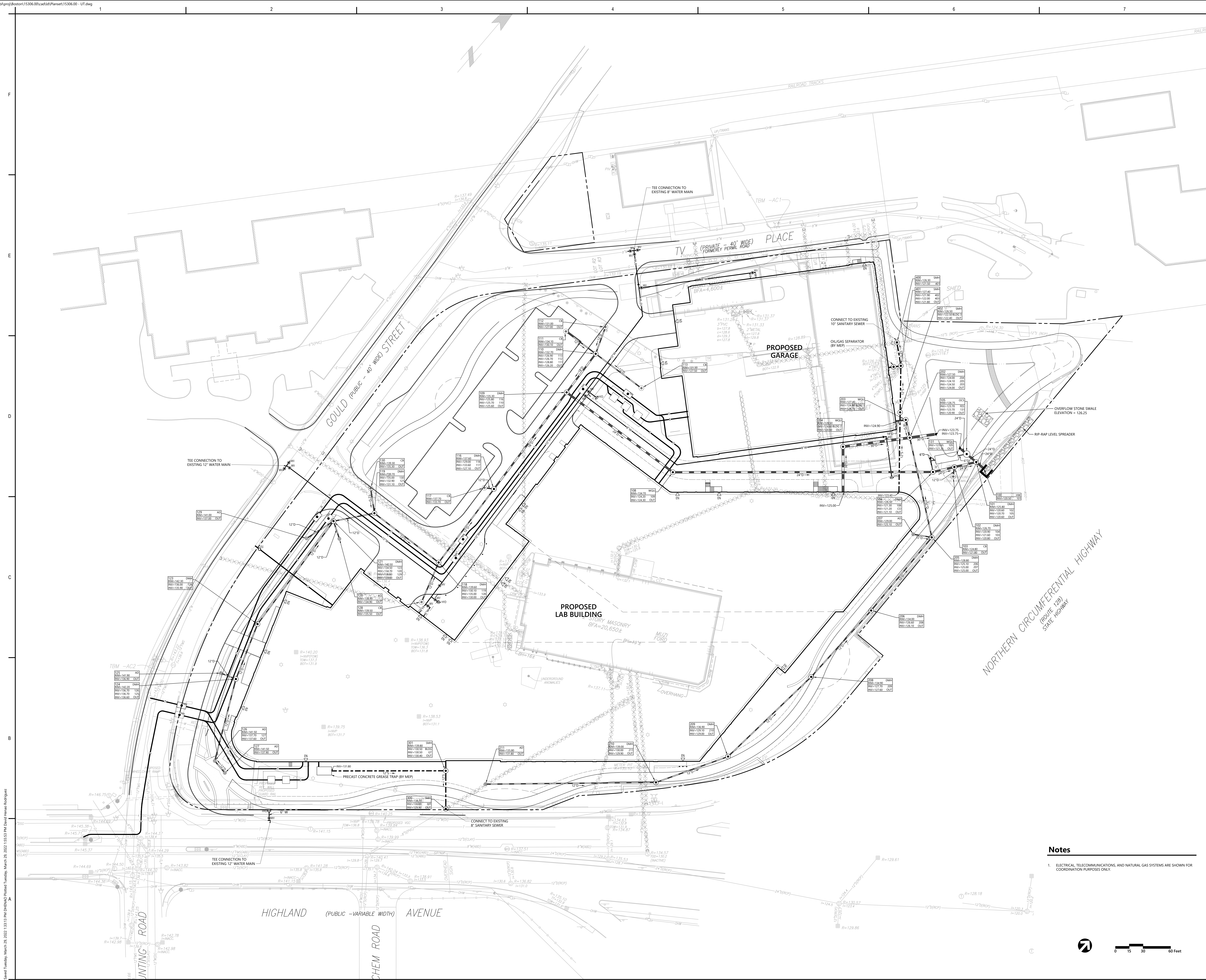
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Nicholas J. Sicily

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Notes

1. ELECTRICAL, TELECOMMUNICATIONS, AND NATURAL GAS SYSTEMS ARE SHOWN FOR COORDINATION PURPOSES ONLY.

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Bulfnch

557 Highland Ave

Project No.: 15216.00

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Author: Designer: Checker: 2022.03.30

Date: Drawn: Checked: YYYY/MM/DD

Title

UTILITY PLAN

Revision:

Drawing No.

C-04

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NICHOLAS J. SCULLY
CIVIL
No. 5877
Professional Engineer
State of Massachusetts
Issued/Revision
By: PTH/MAL/DO
Date: 03/29/22

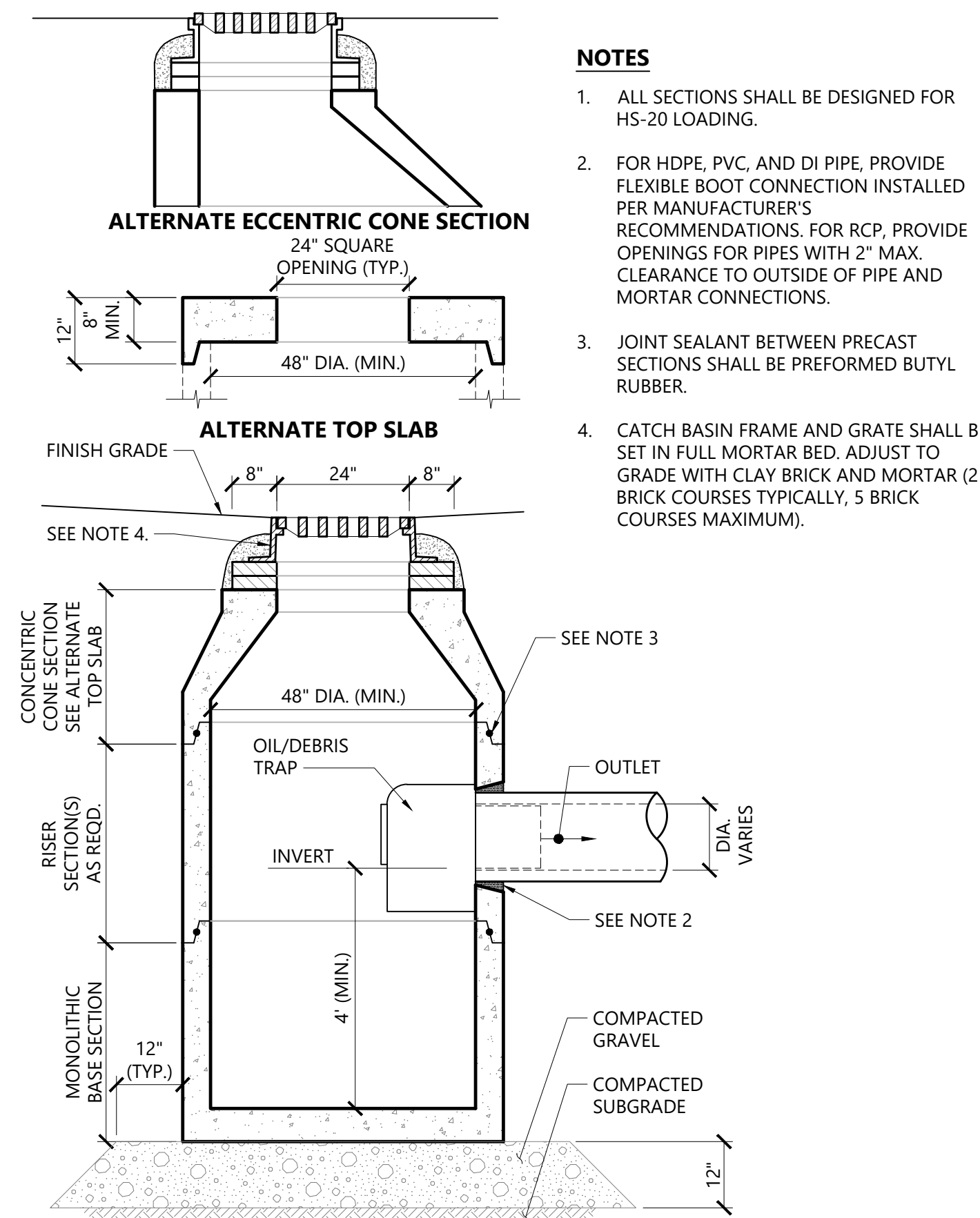
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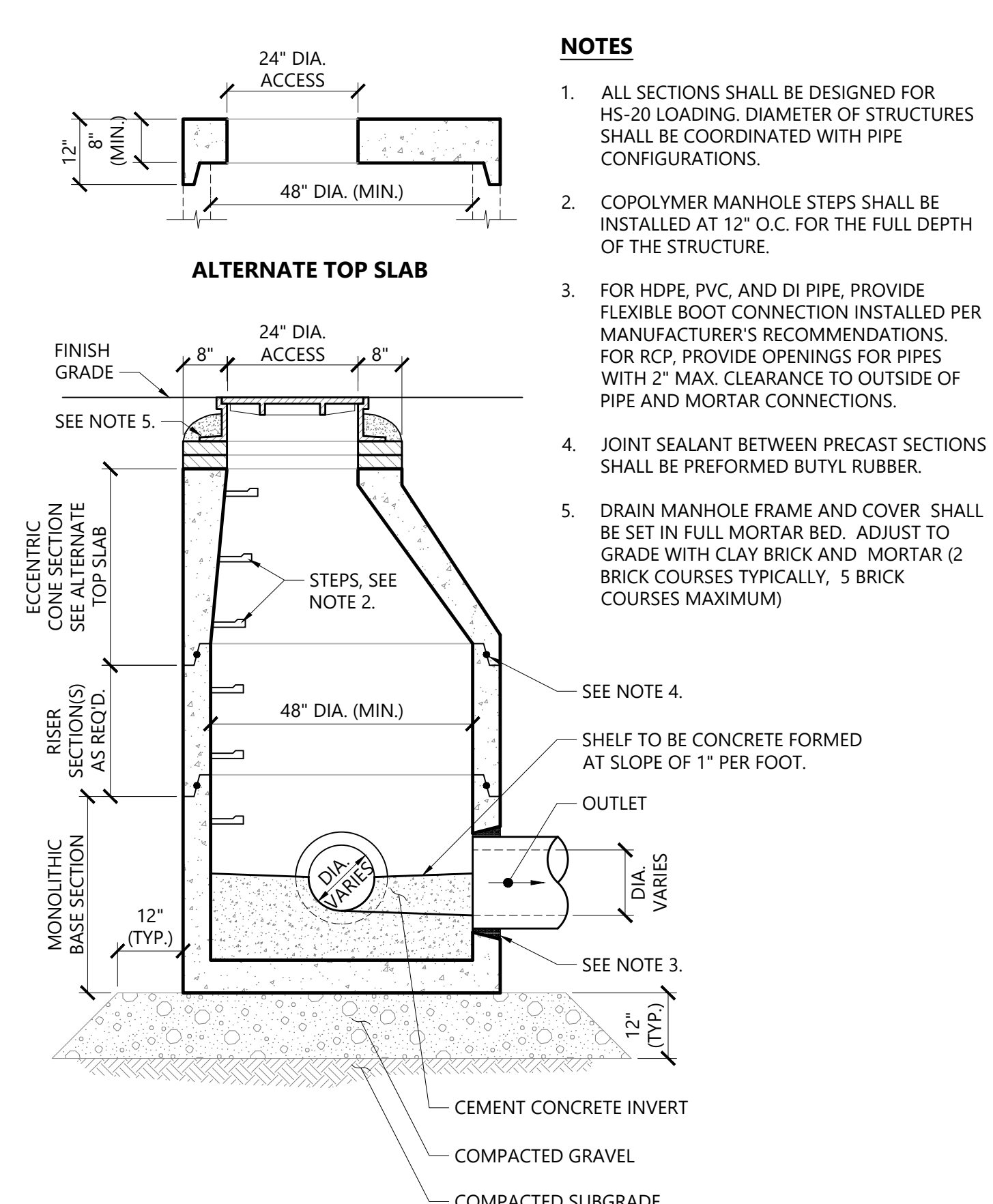
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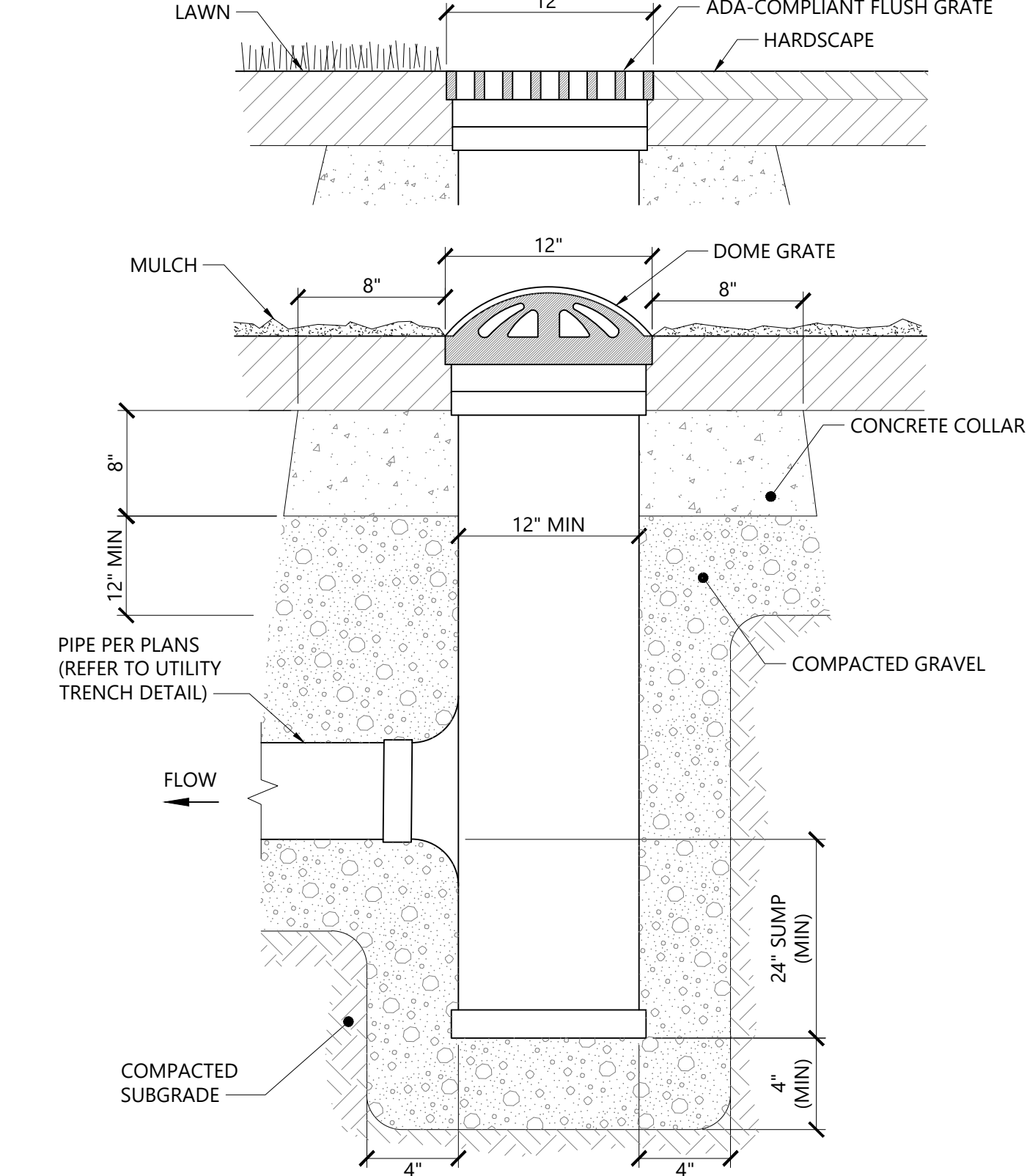
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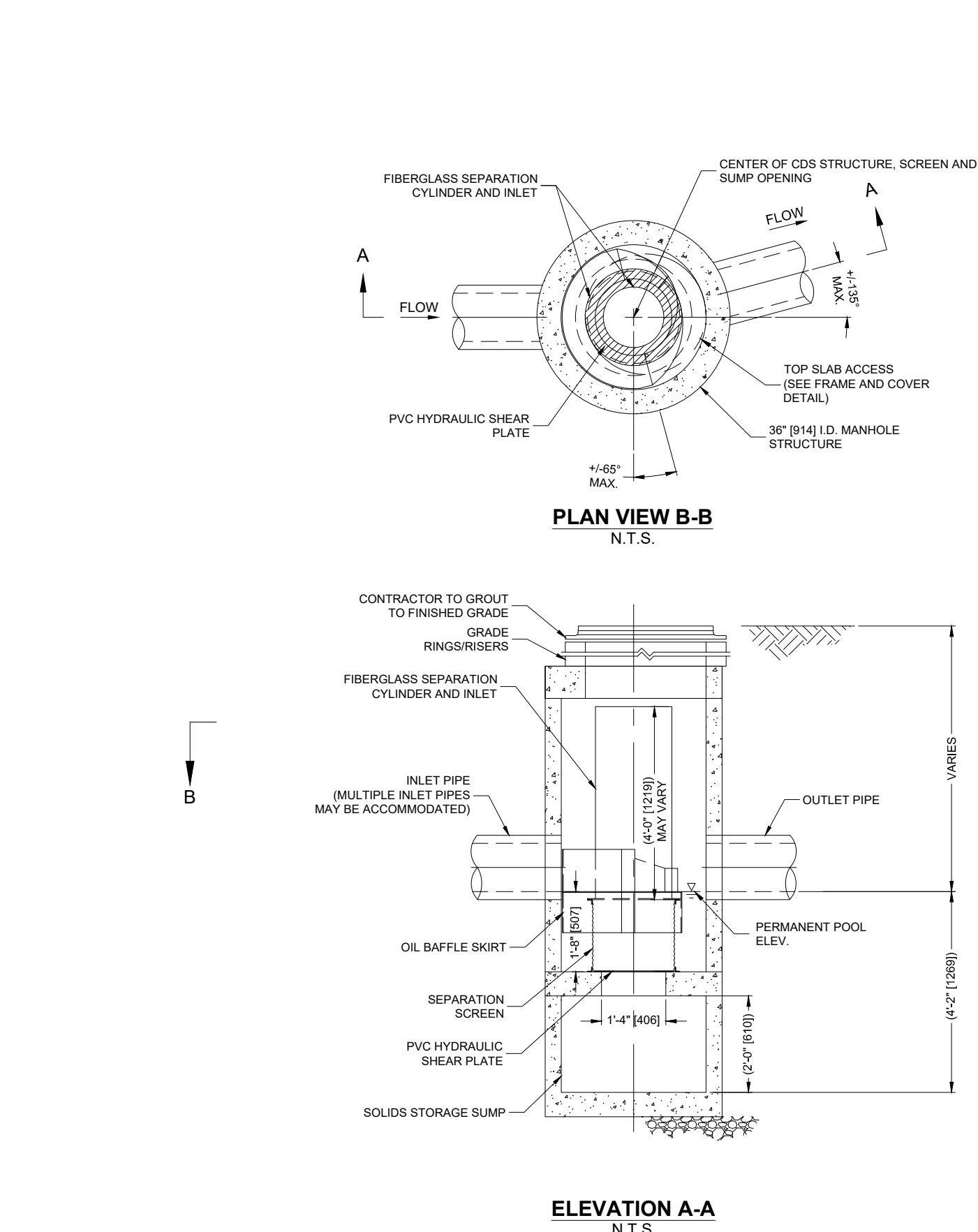
Catch Basin (CB) With Oil/Debris Trap
N.T.S. Source: VHB 3/21 LD_101



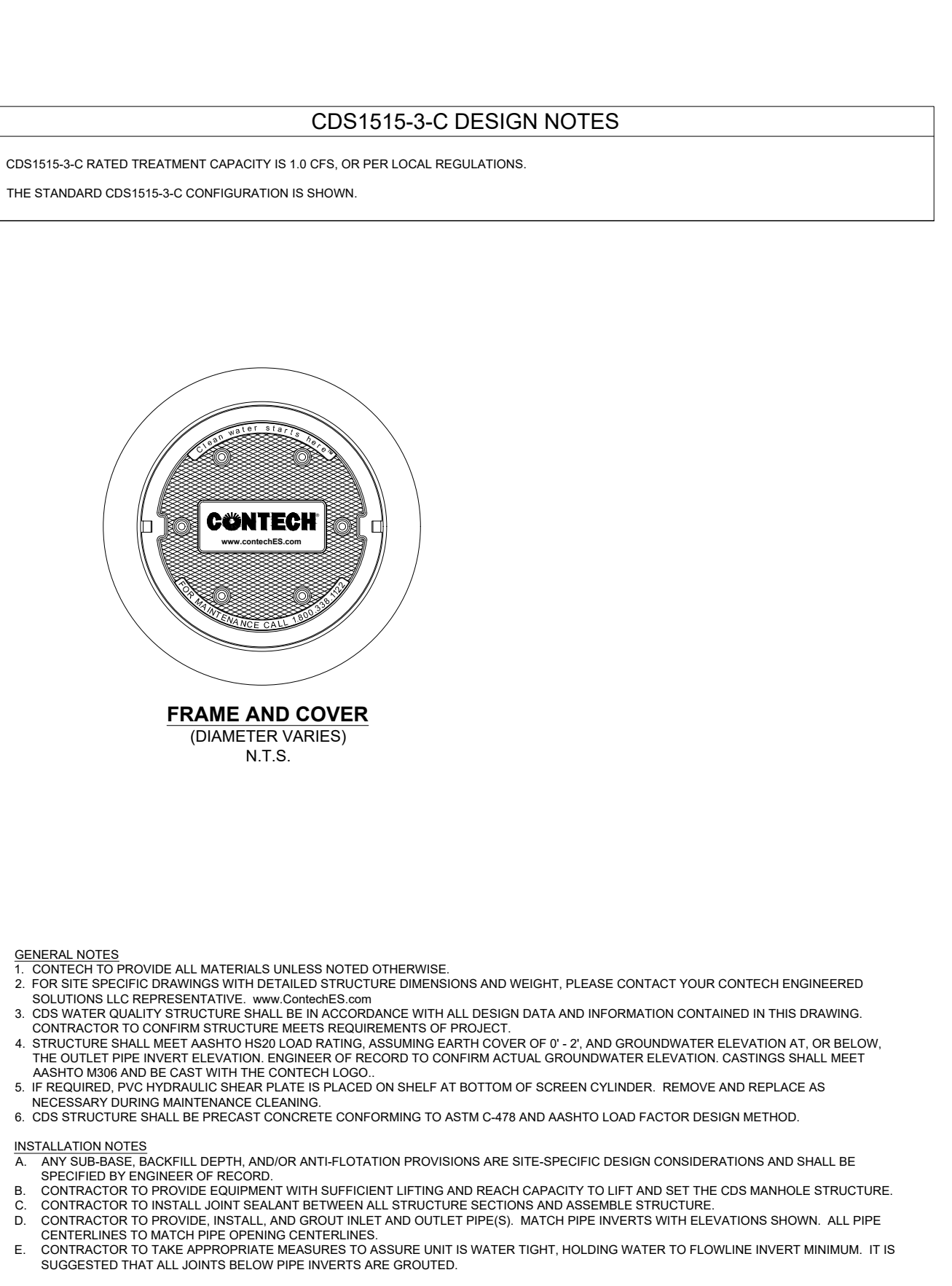
Drain Manhole (DMH)
N.T.S. Source: VHB 11/19 LD_115



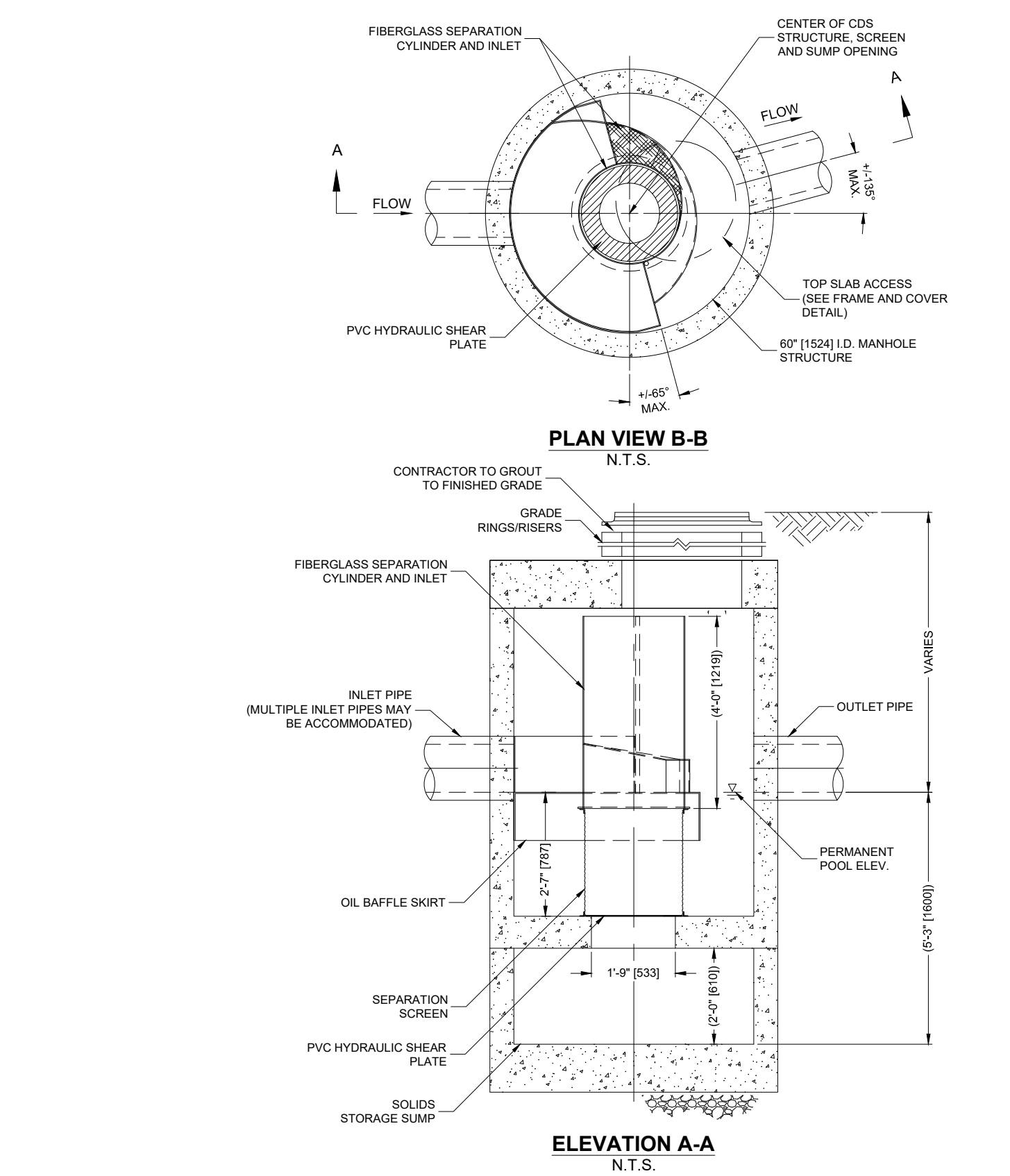
Area Drain (AD) Type 1
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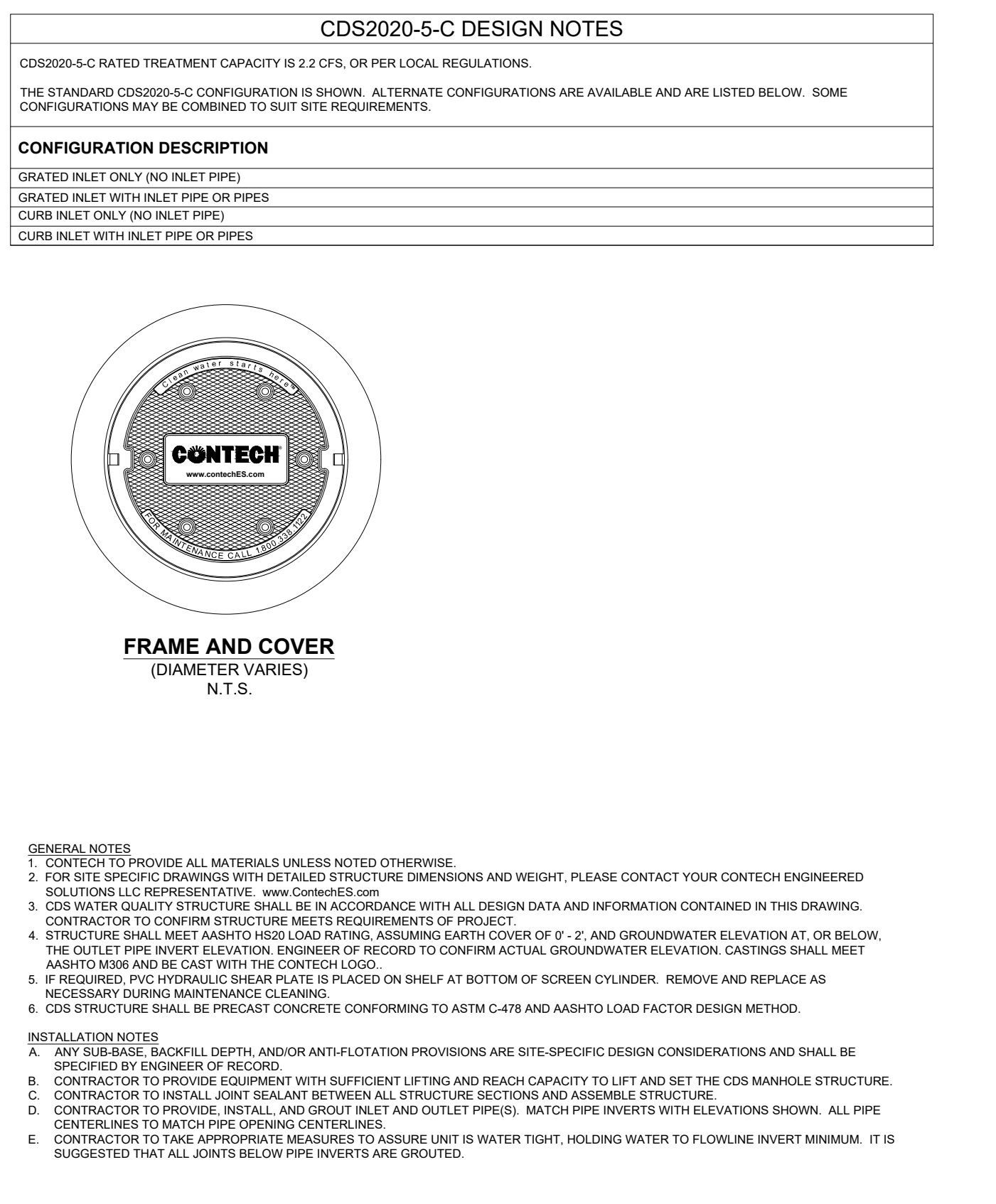
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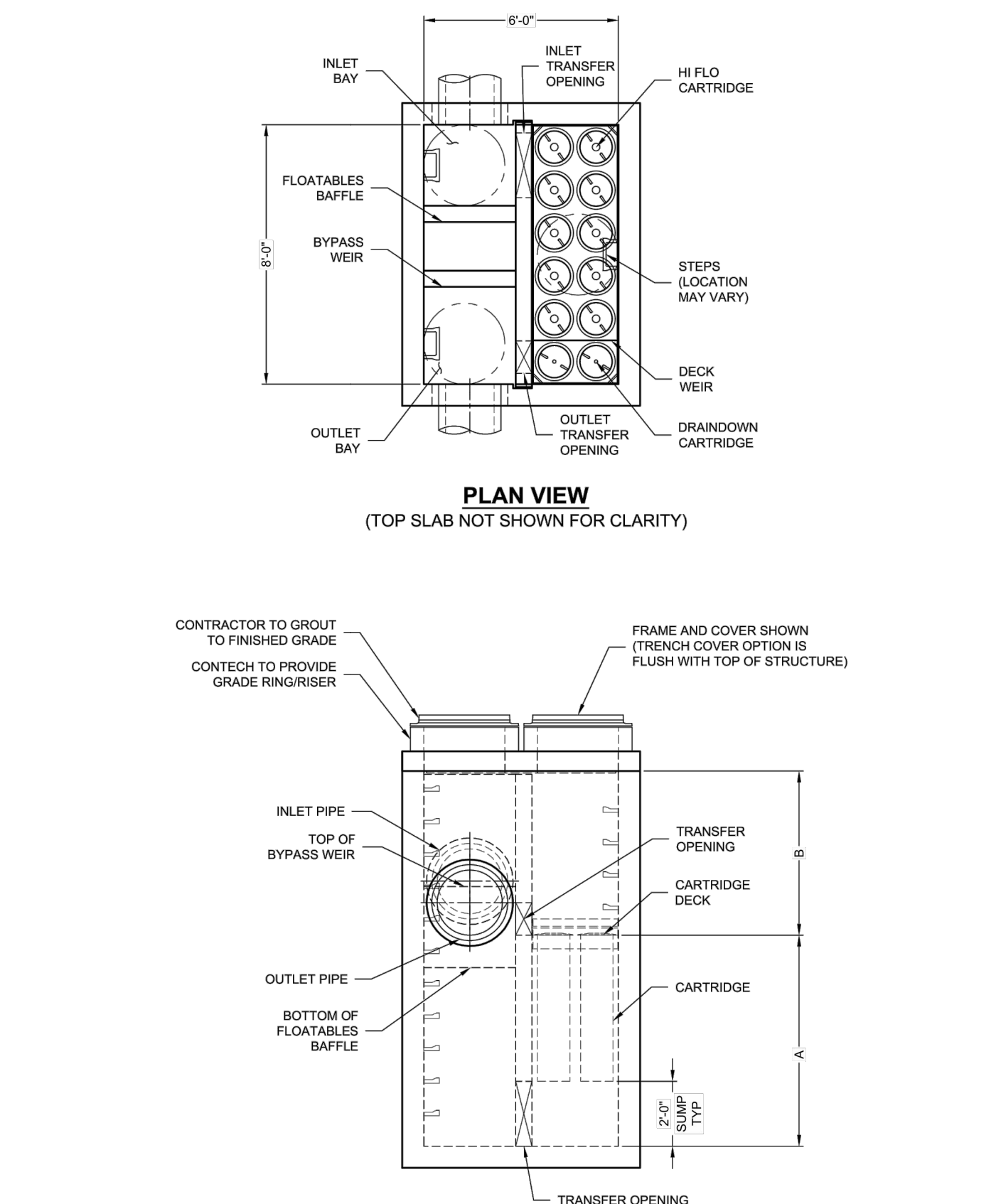
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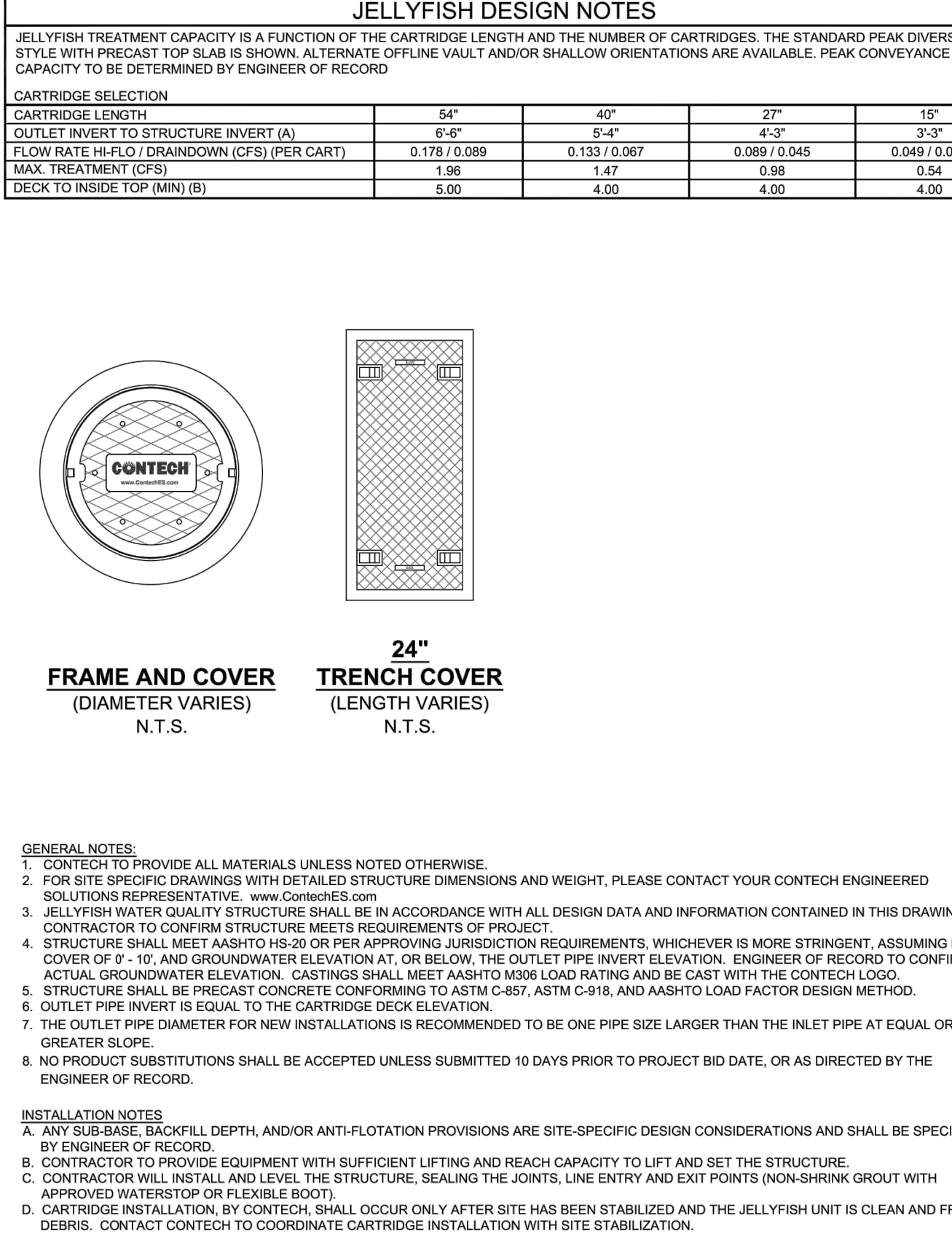
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N.T.S. Source: Contech



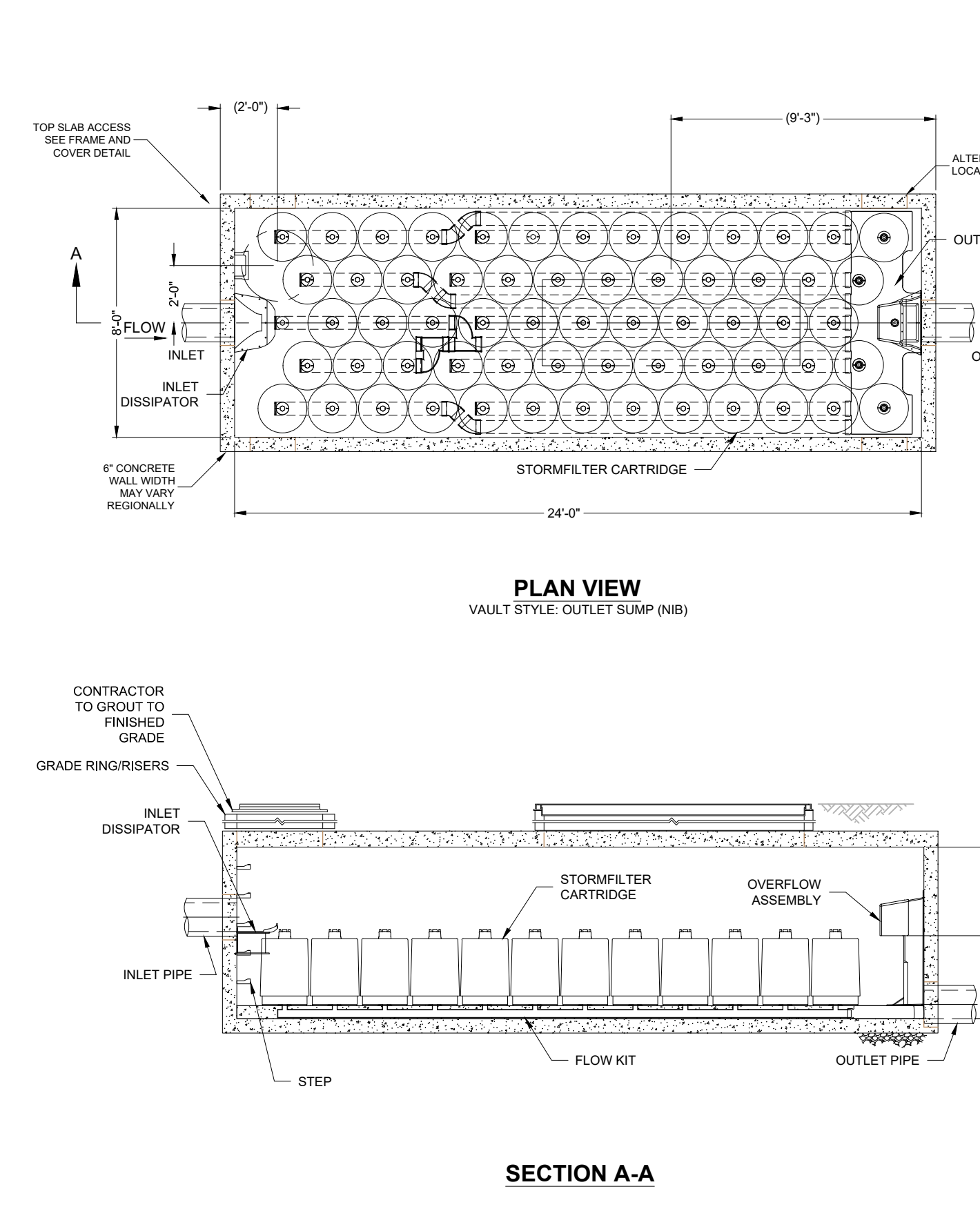
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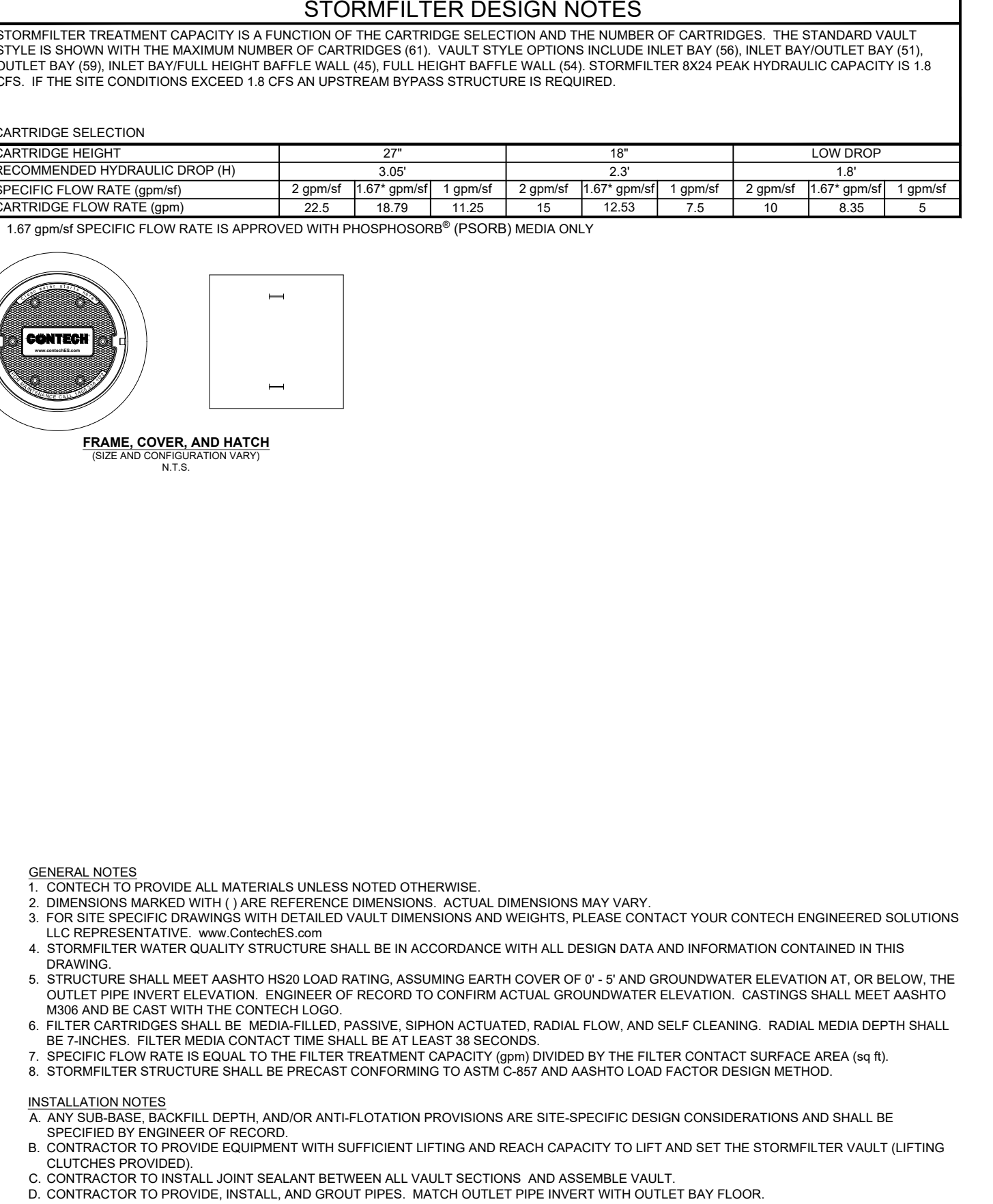
WQU-108 (Jellyfish JFPD0806-8-2)
N.T.S. Source: Contech



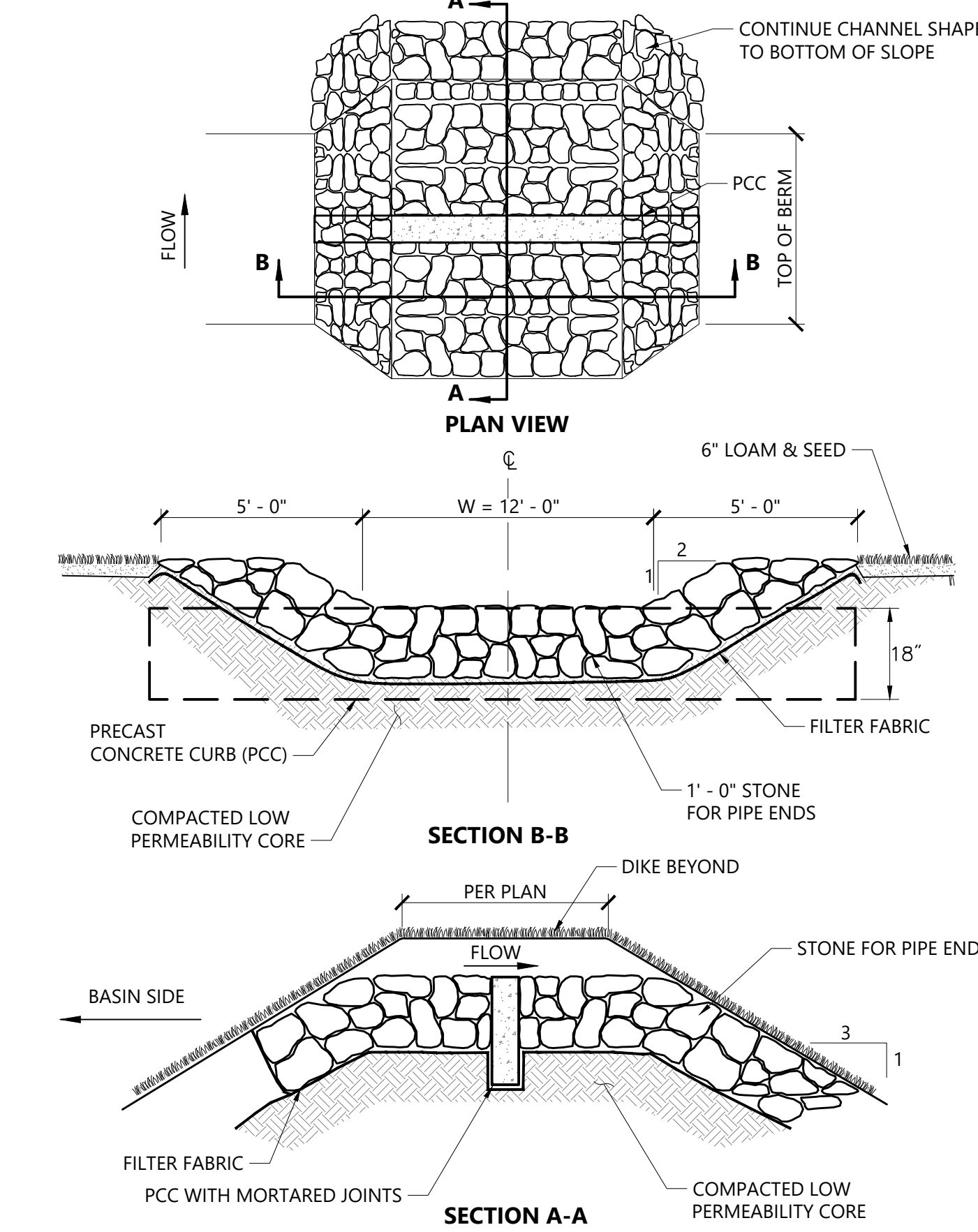
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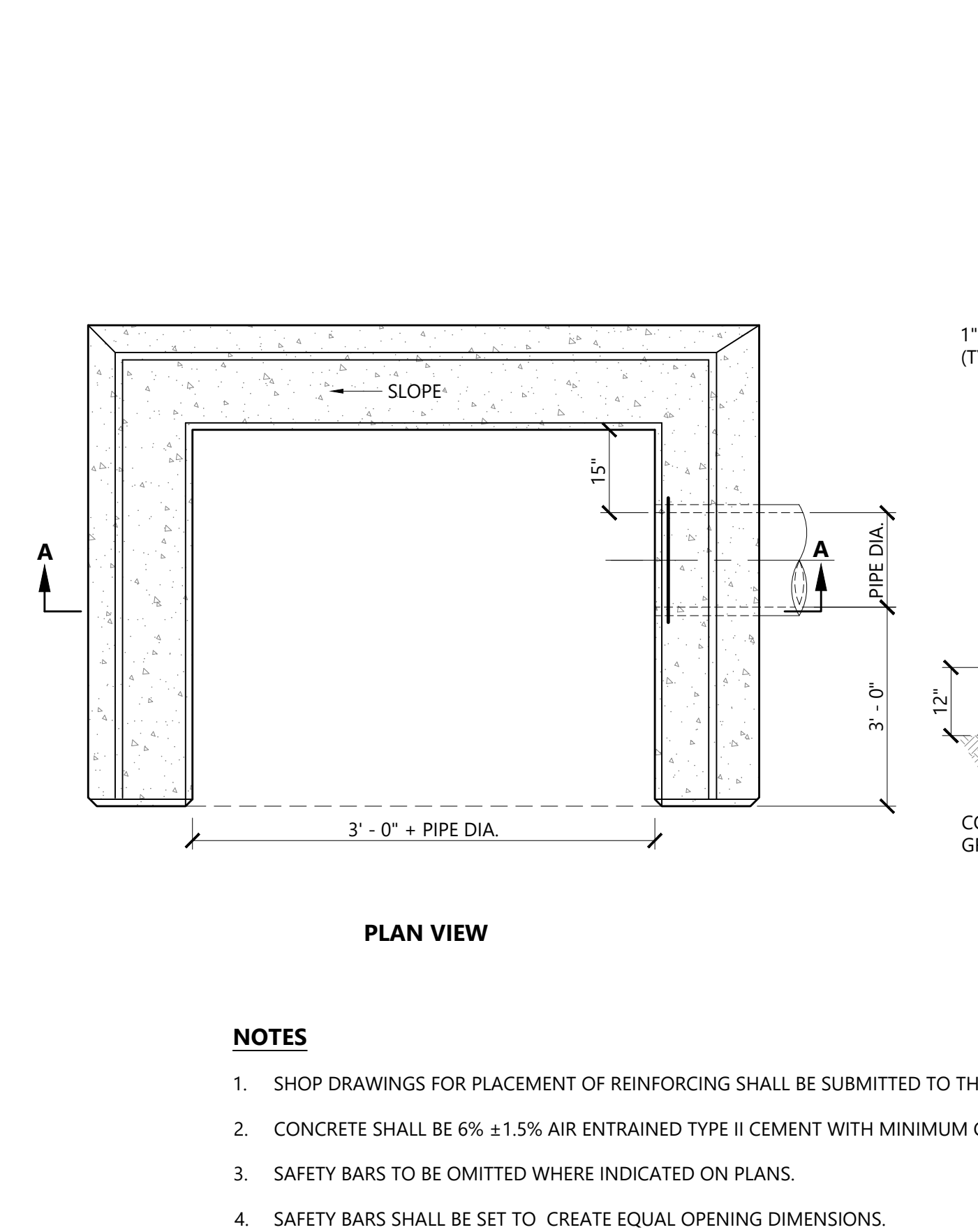
WQU-131 (StormFilter SF0824 with 57-18" Cartridges)
N.T.S. Source: Contech



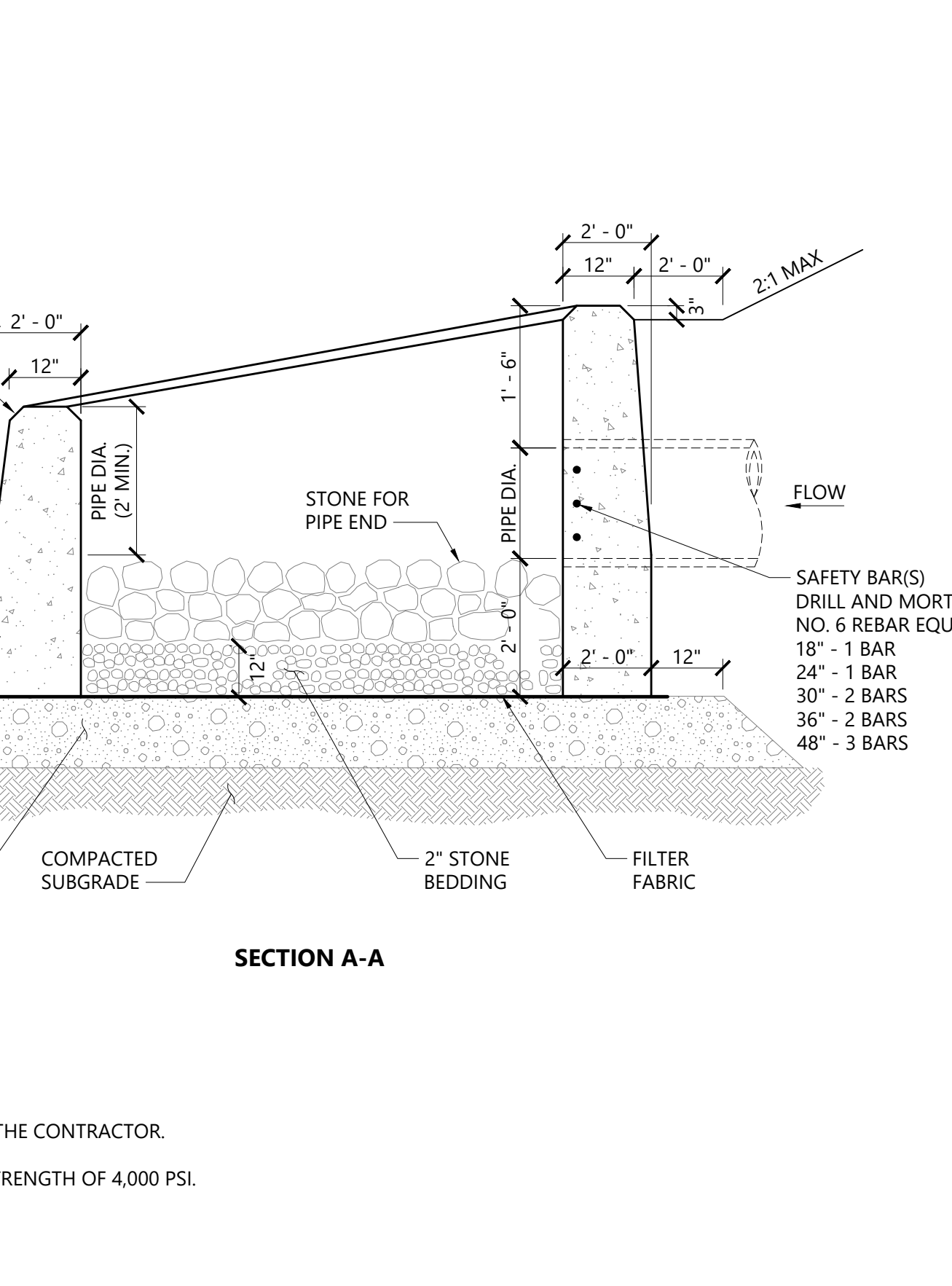
WQU-131 (StormFilter SF0824 with 57-18" Cartridges)
N.T.S. Source: Contech



Overflow Stone Swale
N.T.S. Source: VHB 1/16 LD_161



Directional Headwall
N.T.S. Source: VHB 10/20 LD_135



Directional Headwall
N.T.S. Source: VHB 10/20 LD_135

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Watertown, MA 02471
Tel: (617) 234-1770

Permit/Seal

Nicholas Skelly
Professional Engineer
No. 52871
State of Massachusetts

Client/Project

Bulfnch
557 Highland Ave

Project No.: 15216.00

Scale:

Author: Designer: Checker: 2022.03.30
Date: Date: Date: YYYYMMDD

Title

Site Details

Revision:

Drawing No:

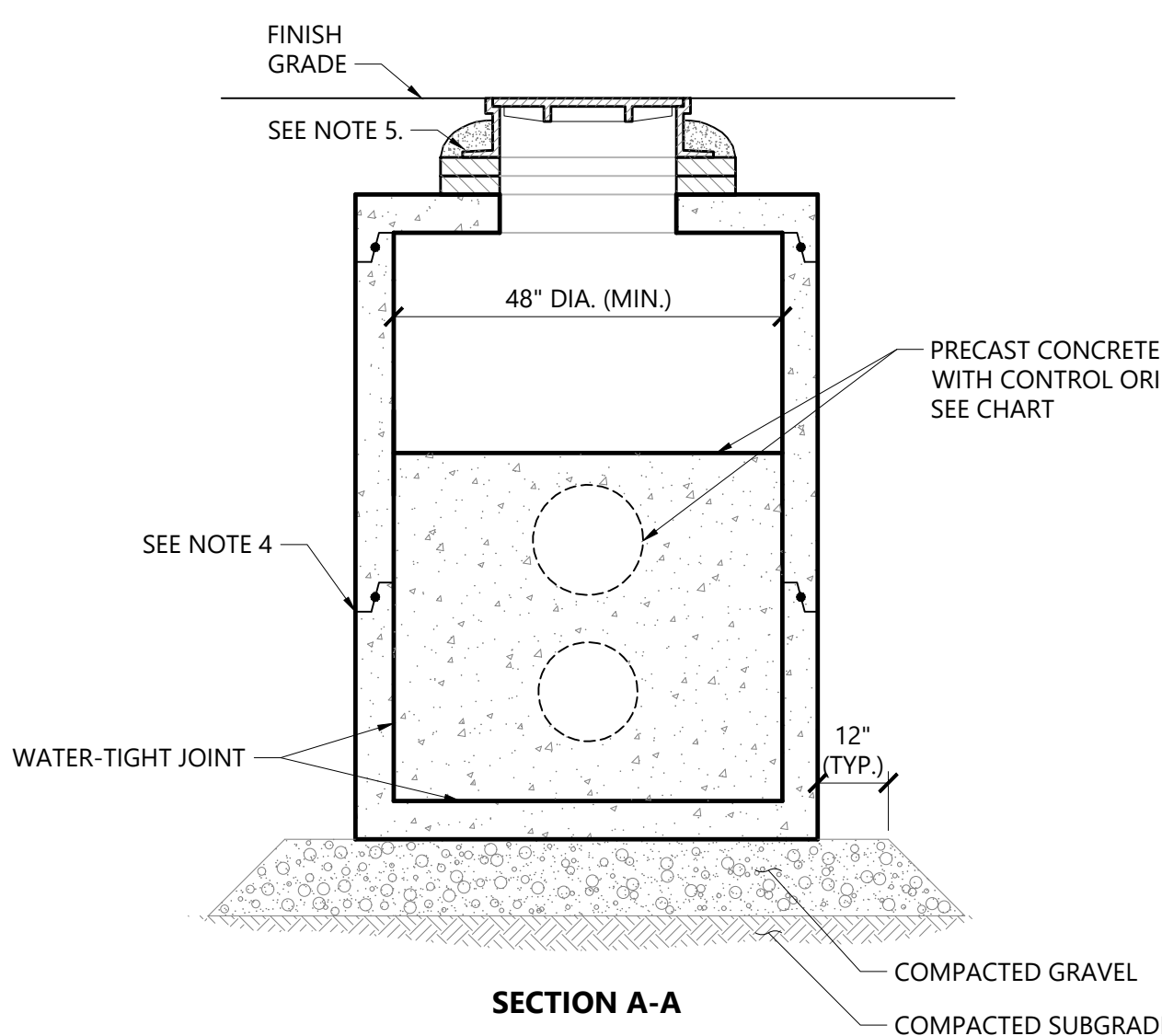
C-05

\\vhb\gh\proj\Boston\15306.00\cad\ld\Parset\15306.00 - DT.dwg
Saved: Tuesday, March 29, 2022 1:40:25 PM D:\E\H&E\Plotted: Tuesday, March 29, 2022 1:56:16 PM David Henne Rodriguez
ORIGINAL SHEET ARCHIT

F
E
D
C
B

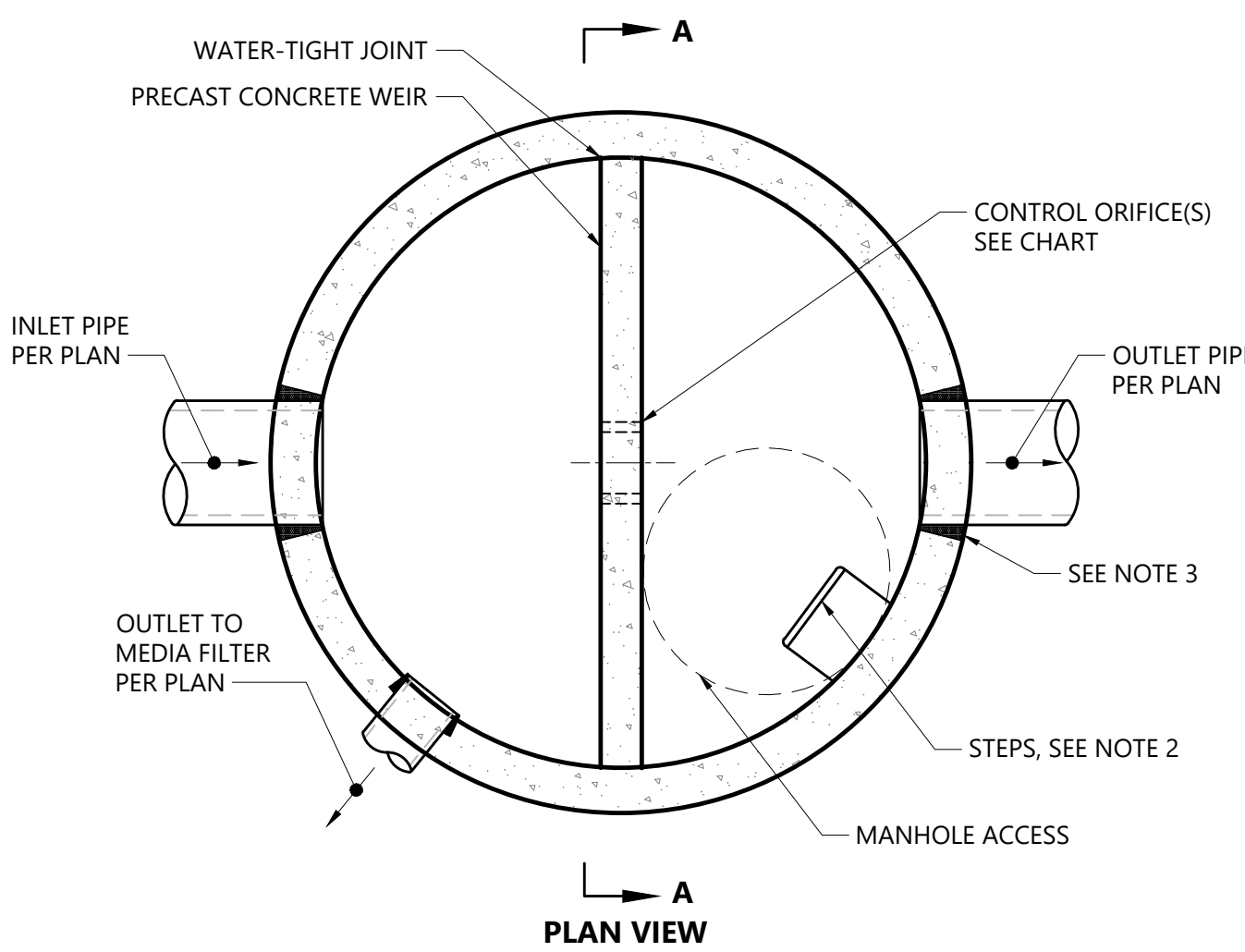
OUTLET STRUCTURE CHART

DETENTION BASIN	STRUCTURE NUMBER	TOP OF WEIR ELEVATION	DIMENSIONS INVERT ORIFICE A	DIMENSIONS INVERT ORIFICE B
P1	105	125.0	N/A	N/A



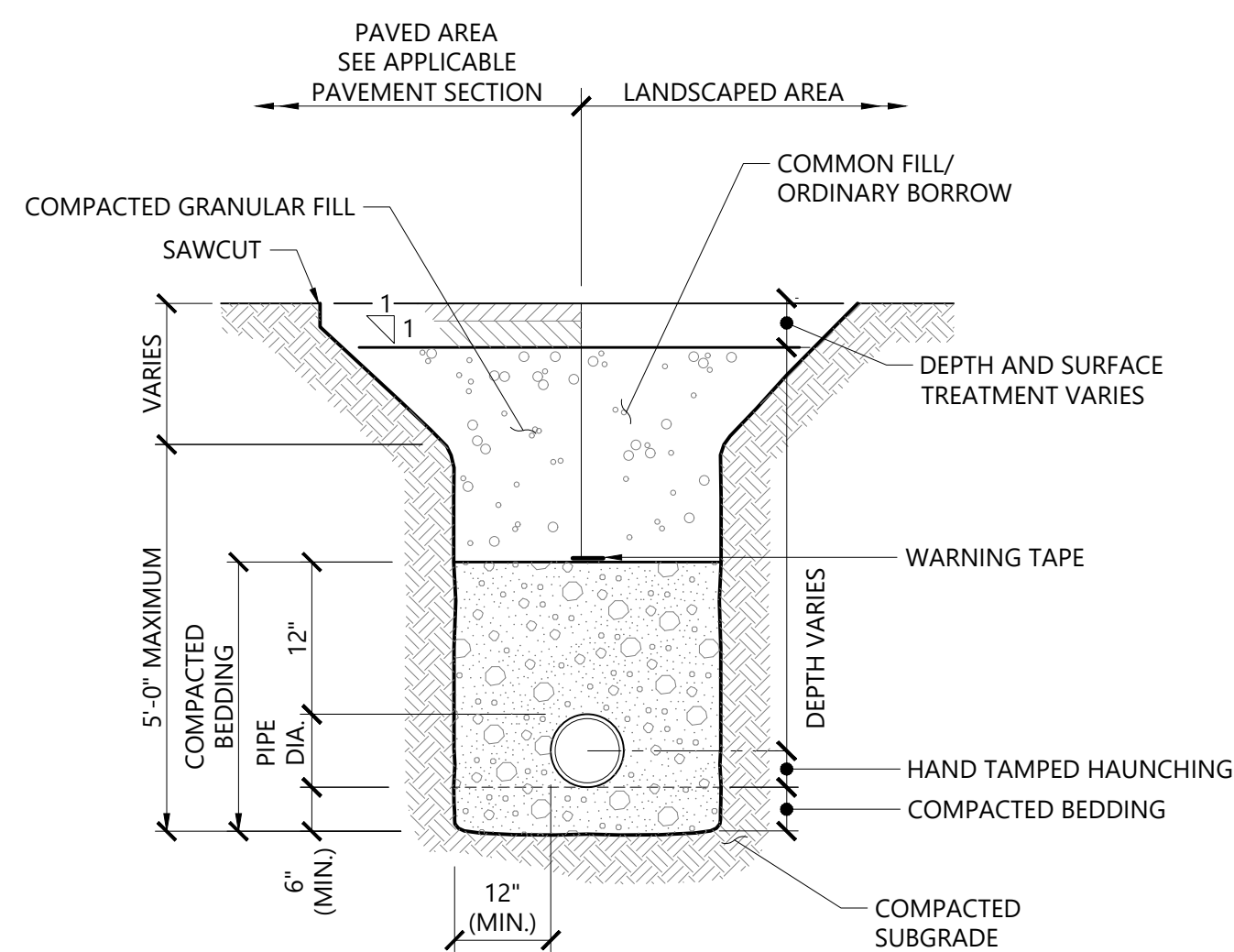
Outlet Control Structure with Weir (OCS)

N.T.S. Source: VHB 3/20 REV LD_162A



NOTES

- ALL SECTIONS SHALL BE DESIGNED FOR HS-20 LOADING. DIAMETER OF STRUCTURES SHALL BE COORDINATED WITH PIPE CONFIGURATIONS.
- COPOLYMER MANHOLE STEPS SHALL BE INSTALLED AT 12" O.C. FOR THE FULL DEPTH OF THE STRUCTURE.
- FOR HDPE, PVC, AND DI PIPE, PROVIDE FLEXIBLE BOOT CONNECTION INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. FOR RCP, PROVIDE OPENINGS FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE AND MORTAR CONNECTIONS.
- JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PREFORMED BUTYL RUBBER.
- DRAIN MANHOLE FRAME AND COVER SHALL BE SET IN FULL MORTAR BED. ADJUST TO GRADE WITH CLAY BRICK AND MORTAR (2 BRICK COURSES TYPICALLY, 5 BRICK COURSES MAXIMUM).

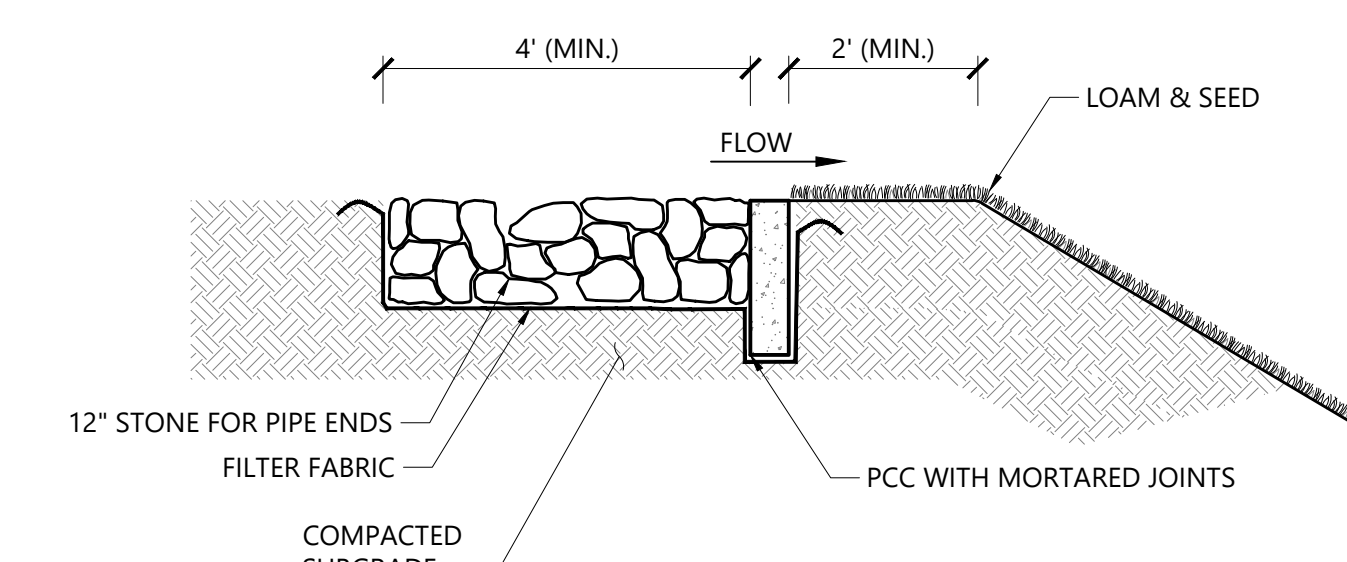


NOTES

- WHERE UTILITY TRENCHES ARE CONSTRUCTED THROUGH DETENTION BASIN BERMS OR OTHER SUCH SPECIAL SECTIONS, PLACE TRENCH BACKFILL WITH MATERIALS SIMILAR TO THE SPECIAL SECTION REQUIREMENTS.
- USE METALLIC TRACING/WARNING TAPE OVER ALL PIPES.
- COMPACTED GRANULAR FILL MAY CONSIST OF GRAVEL, CRUSHED STONE, SAND, OR OTHER MATERIAL AS APPROVED BY ENGINEER.

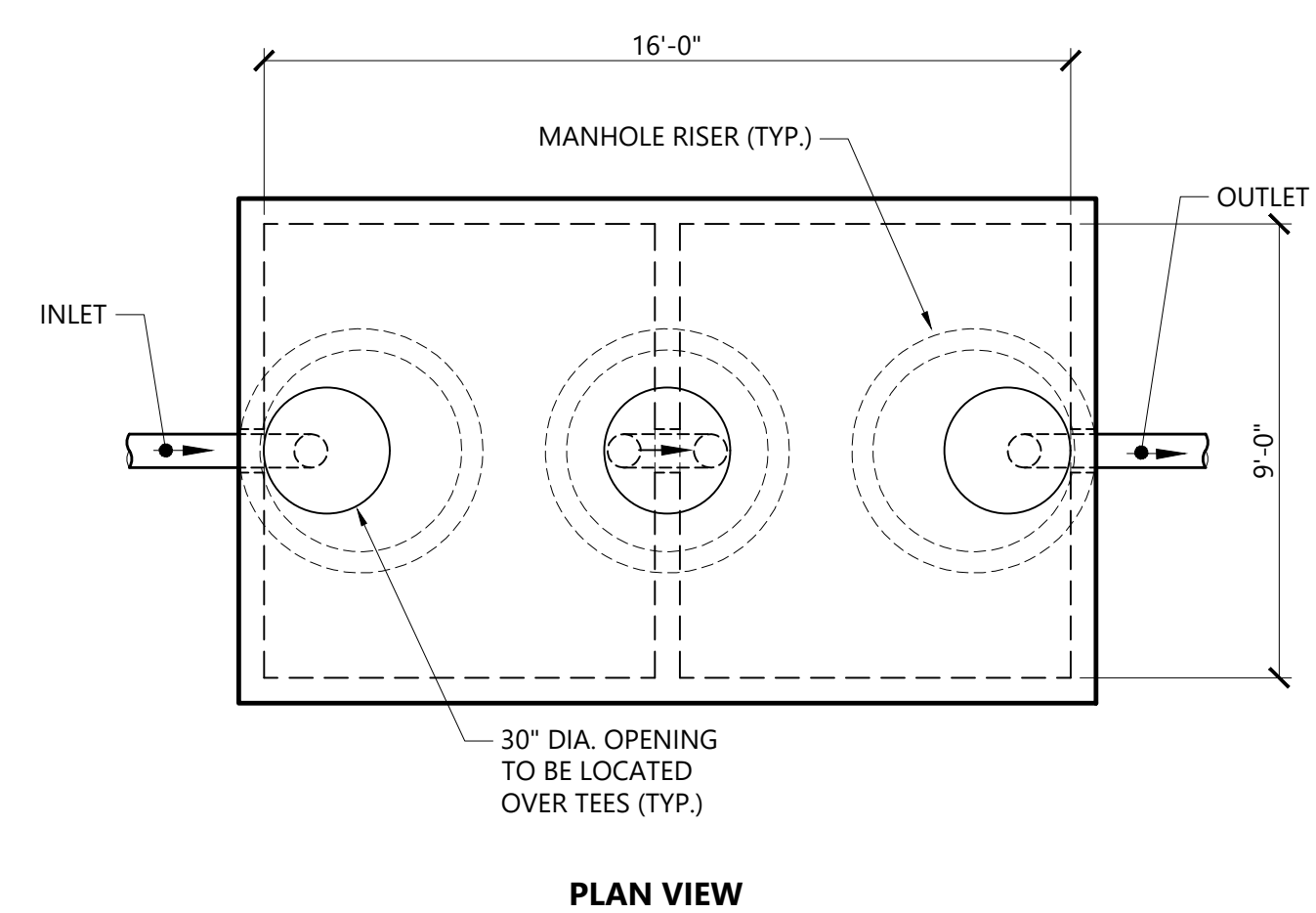
Utility Trench

N.T.S. Source: VHB 11/19 LD_300



Level Spreader Section

N.T.S. Source: VHB

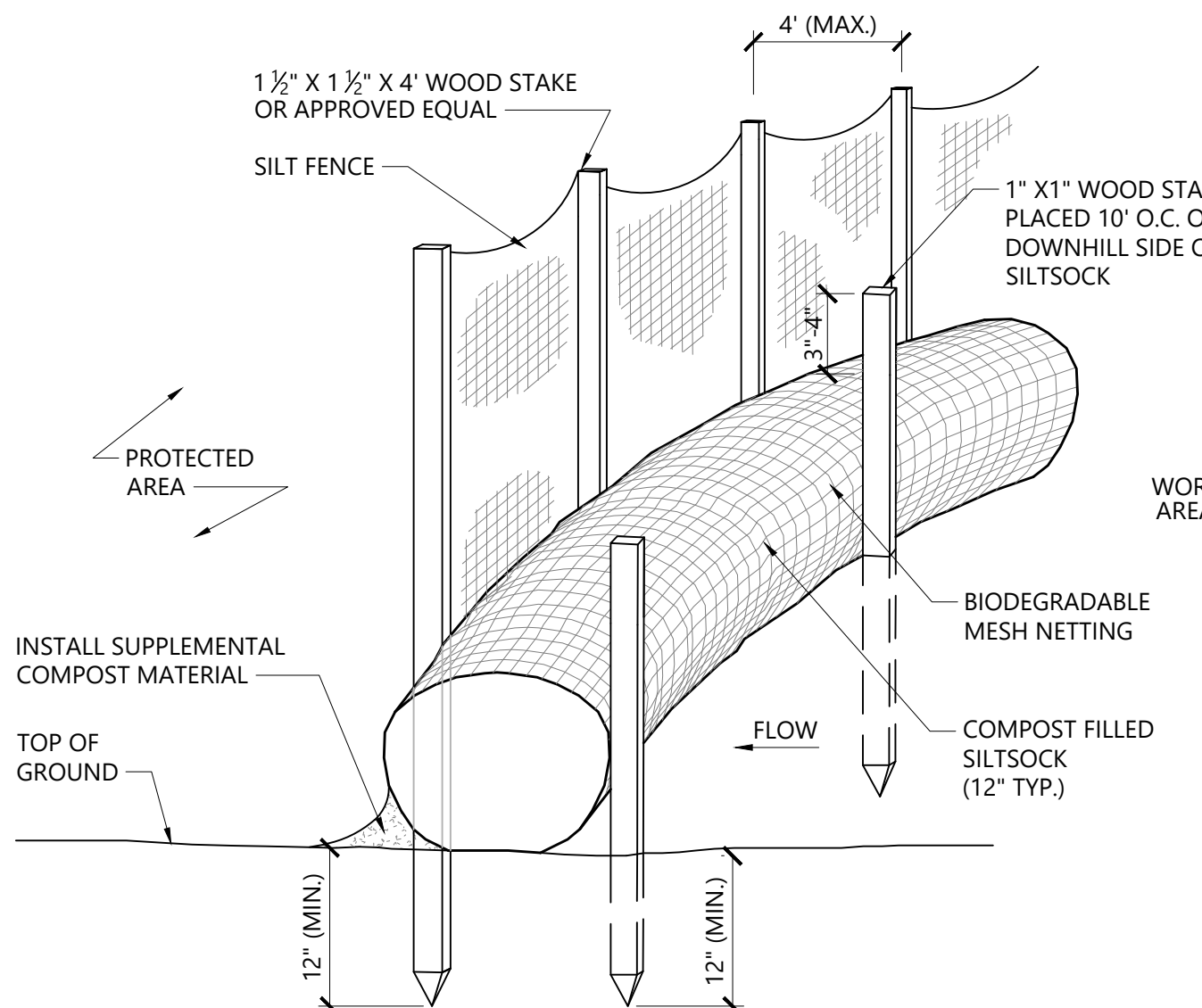


NOTES

- STRUCTURE SHALL BE DESIGNED FOR HS-20 LOADING.
- EXTERIOR SURFACES SHALL BE GIVEN TWO COATS OF BITUMINOUS WATER-PROOFING MATERIAL.
- JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PREFORMED BUTYL RUBBER.
- STANDARD 30-INCH SEWER MANHOLE FRAME AND COVER SHALL BE LOCATED OVER CROSSES AND SET IN FULL MORTAR BED. ADJUST TO GRADE WITH SEWER BRICK AND MORTAR (2 BRICK COURSES TYPICALLY, 5 BRICK COURSES MAXIMUM).
- PIPING SHALL BE SCH 40 PVC WITH SOLVENT WELDED JOINTS. INTERNAL PIPE DIAMETER SHALL BE SAME SIZE AS OUTLET PIPE.
- FINAL DESIGN OF GREASE TRAP TO BE BY PLUMBING ENGINEER.
- THE INSTALLATION OF GREASE TRAP, THE PIPING TO AND 10 FEET BEYOND IS BY PLUMBER.

Precast Concrete Grease Trap (GT)

N.T.S. Source: VHB 12/19 LD_211

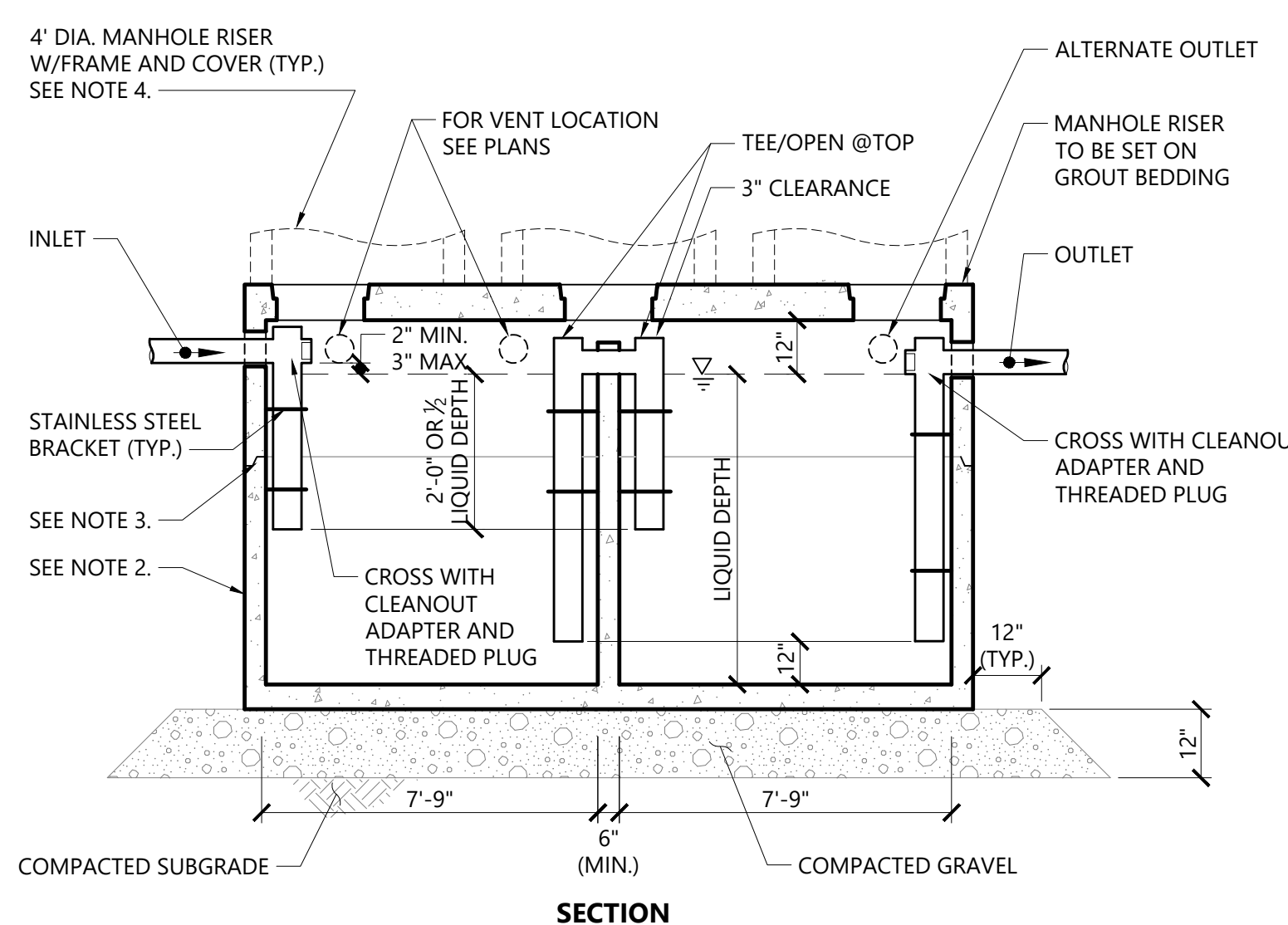


NOTES

- SILT SOCK SHALL BE FILTREXX SILT SOCK, OR APPROVED EQUAL.
- SILT SOCKS SHALL OVERLAP A MINIMUM OF 12 INCHES.
- SILT SOCK SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS, AND REPAIR OR REPLACEMENT SHALL BE PERFORMED PROMPTLY AS NEEDED.
- UPON SITE STABILIZATION, COMPOST MATERIAL SHALL BE DISPERSED ON SITE, AS DETERMINED BY THE ENGINEER.
- IF NON BIODEGRADABLE NETTING IS USED THE NETTING SHALL BE COLLECTED AND DISPOSED OF OFF SITE.

Siltsock / Silt Fence Barrier

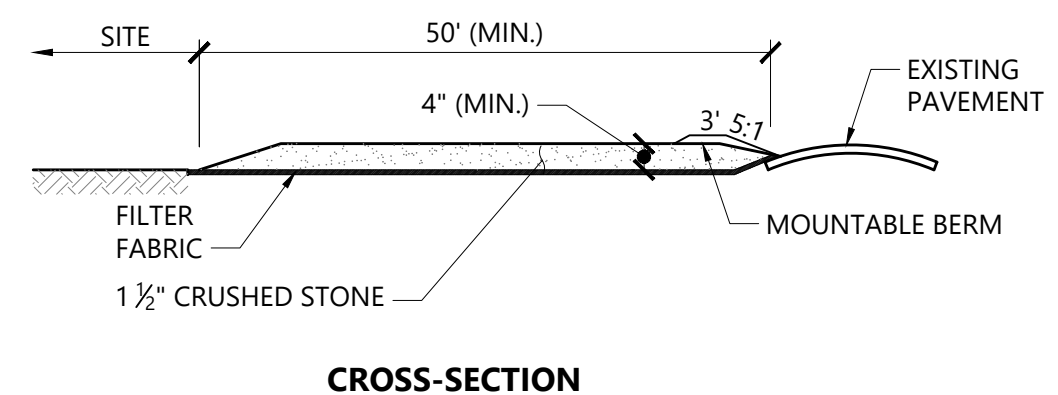
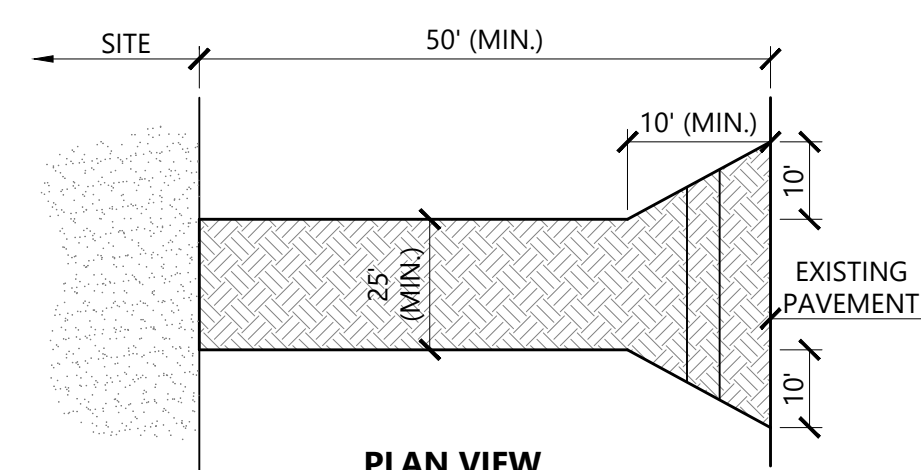
N.T.S. Source: VHB 10/20 LD_658-A



SIZE (GAL.)	LIQUID DEPTH
4,000	4'-0"
5,000	5'-0"
6,000	6'-0"
7,000	7'-0"
8,000	8'-0"
9,000	9'-0"
10,000	10'-0"

Sanitary Sewer Manhole (SMH)

N.T.S. Source: VHB 1/16 LD_200

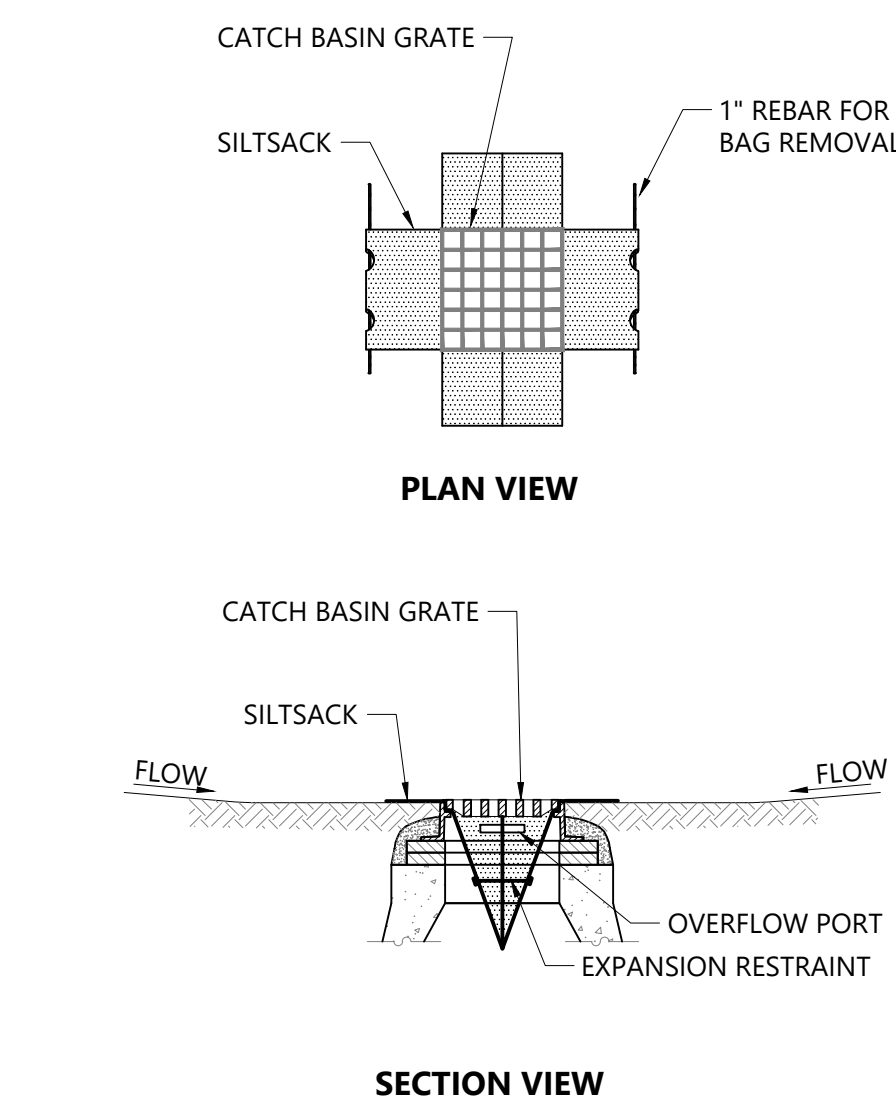


NOTES

- EXIT WIDTH SHALL BE A TWENTY-FIVE (25) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
- THE EXIT SHALL BE MAINTAINED IN A CONDITION WHICH SHALL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY. BERM SHALL BE PERMITTED. PERIODIC INSPECTION AND MAINTENANCE SHALL BE PROVIDED AS NEEDED.
- STABILIZED CONSTRUCTION EXIT SHALL BE REMOVED PRIOR TO FINAL FINISH MATERIALS BEING INSTALLED.

Stabilized Construction Exit

N.T.S. Source: VHB 1/16 LD_682

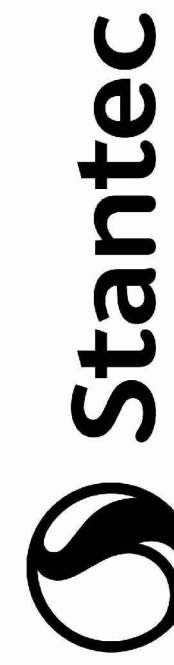


NOTES

- INSTALL SILT SACK IN ALL CATCH BASINS WHERE INDICATED ON THE PLAN BEFORE COMMENCING WORK OR IN PAVED AREAS AFTER BINDER COURSE IS PLACED AND MOW BALES HAVE BEEN REMOVED.
- GRATE TO BE PLACED OVER SILT SACK.
- SILT SACK SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS AND CLEANING OR REPLACEMENT SHALL BE PERFORMED PROMPTLY AS NEEDED. MAINTAIN UNTIL UPSTREAM AREAS HAVE BEEN PERMANENTLY STABILIZED.

Siltsock Sediment Trap

N.T.S. Source: VHB 1/20 LD_674



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101 Walnut Street
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Permit/Seal

Seal of the State of Massachusetts
Professional Engineer
No. 98877
Exp. 12/31/2023

Signature of Engineer

Signature of Engineer

Signature of Engineer

Signature of Engineer

Signature of Engineer

Signature of Engineer

Signature of Engineer

Signature of Engineer

Signature of Engineer

Signature of Engineer

Signature of Engineer

Signature of Engineer

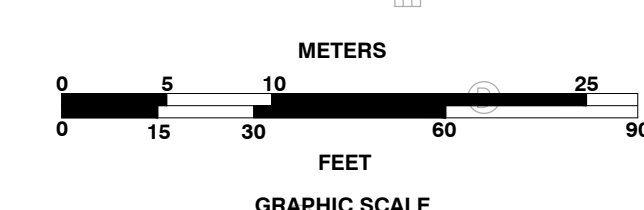
Signature of Engineer

Signature of Engineer

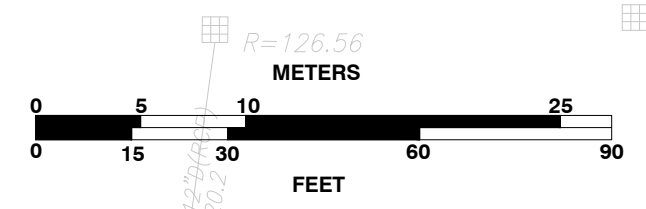
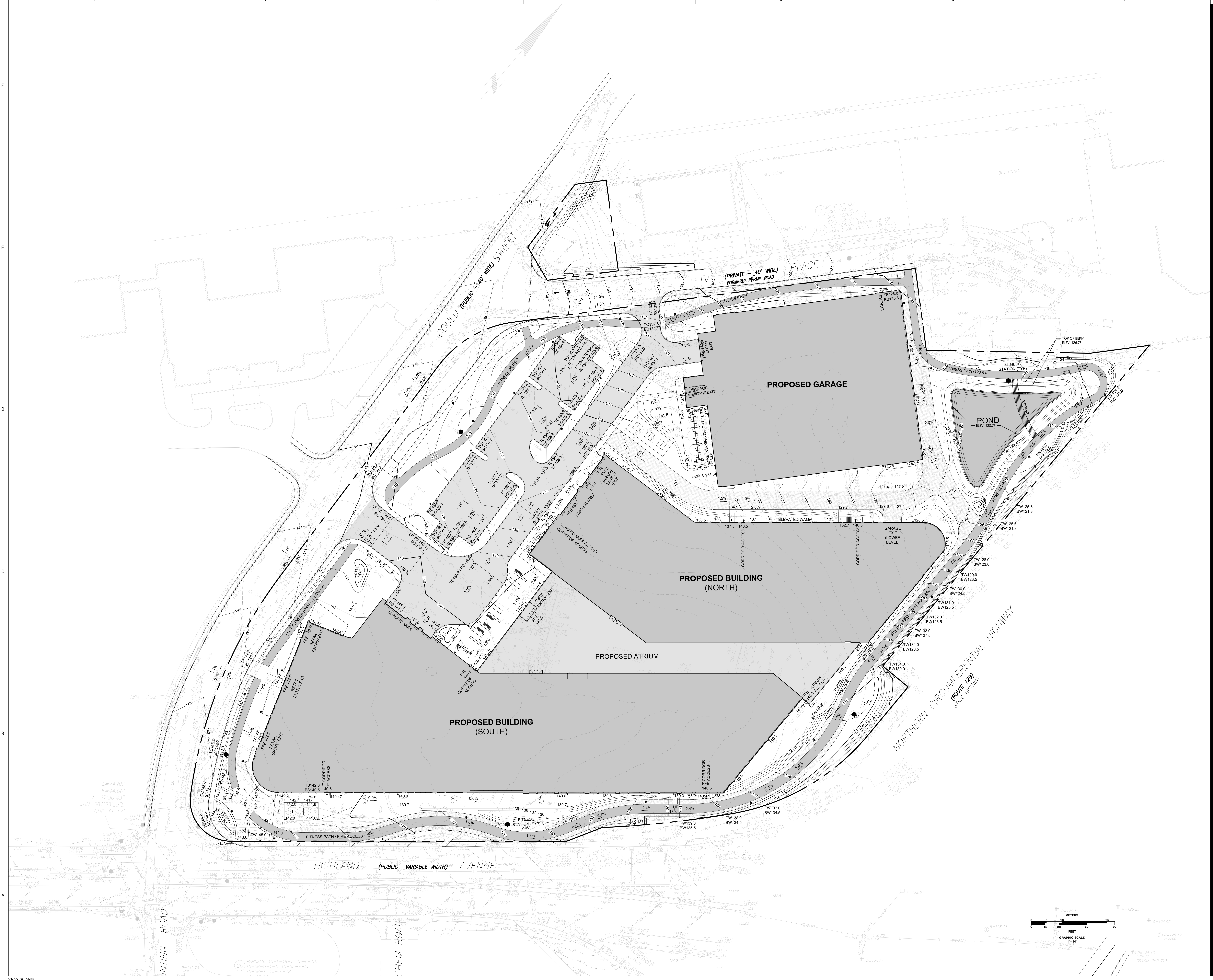
Signature of Engineer

Signature of Engineer

Signature of Engineer



NOTES:
1. ALL CURB RADII ARE 3' UNLESS OTHERWISE NOTED.



Client/Project
Bulfnch
 557 HIGHLAND AVE
 NEEDHAM, MA 02464

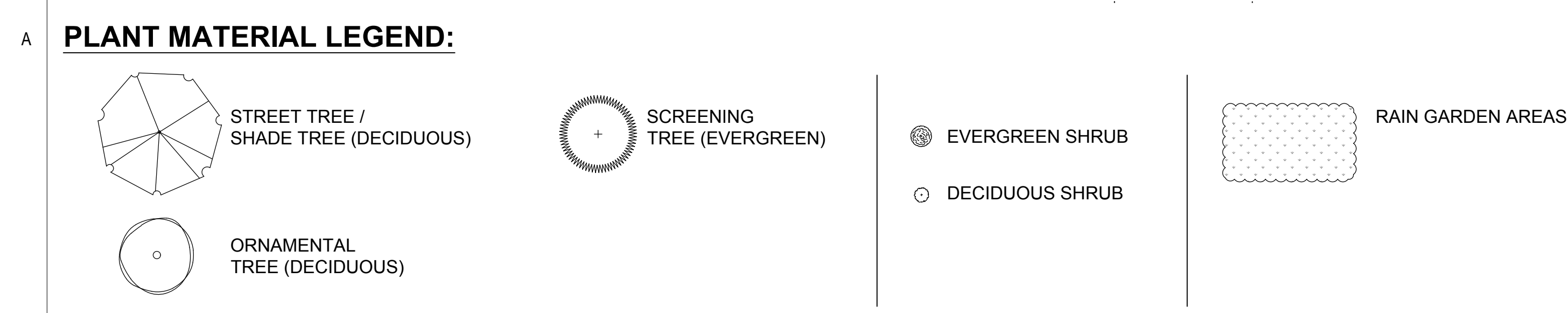
Project No.: 218421343
 Revision:
 Scale: 1" = 30'-0"

Drawn: [blank] Dgn: [blank] Chkd: [blank] YYYY/MM/DD
 Title
SITE GRADING PLAN
 Revision:
 Drawing No.

Consultant

PAUL FINGER ASSOCIATES
 1000 Washington Street
 Needham, Massachusetts 02459
 Tel: (617) 552-5800
 Fax: (617) 552-5801
 Email: info@pfa.com

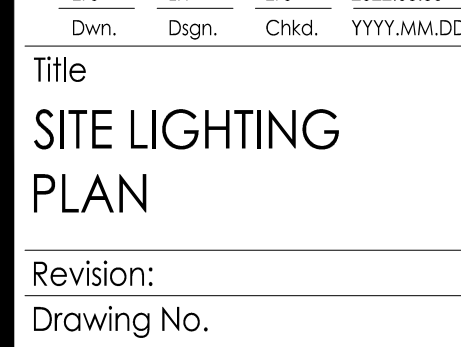
Permit/Seal



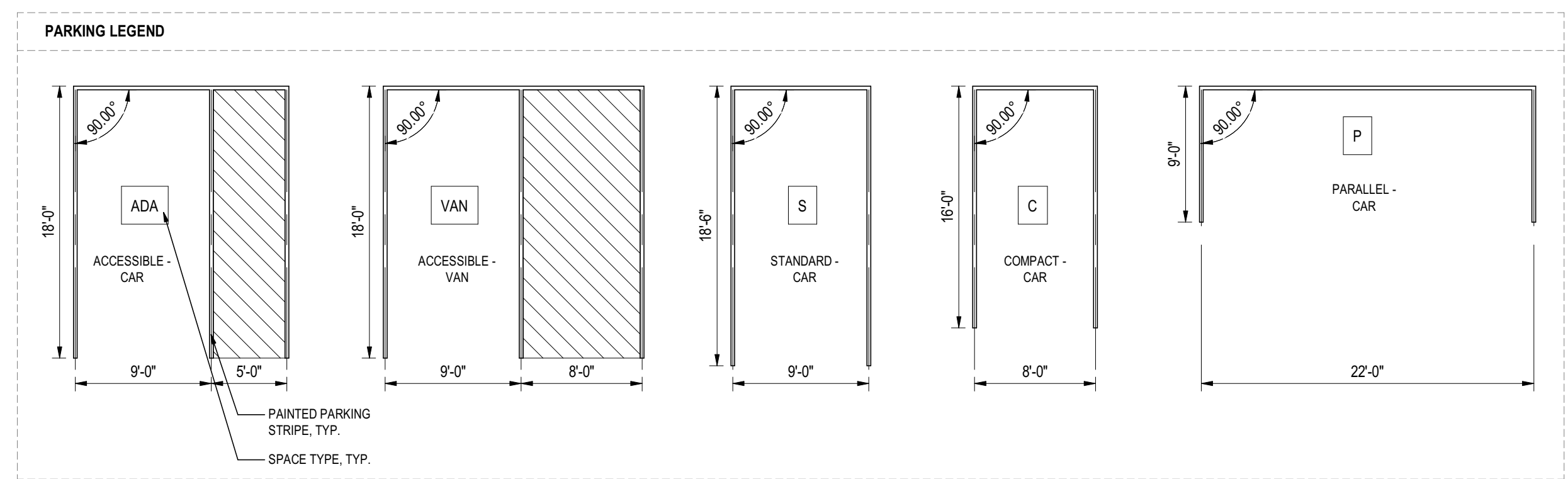
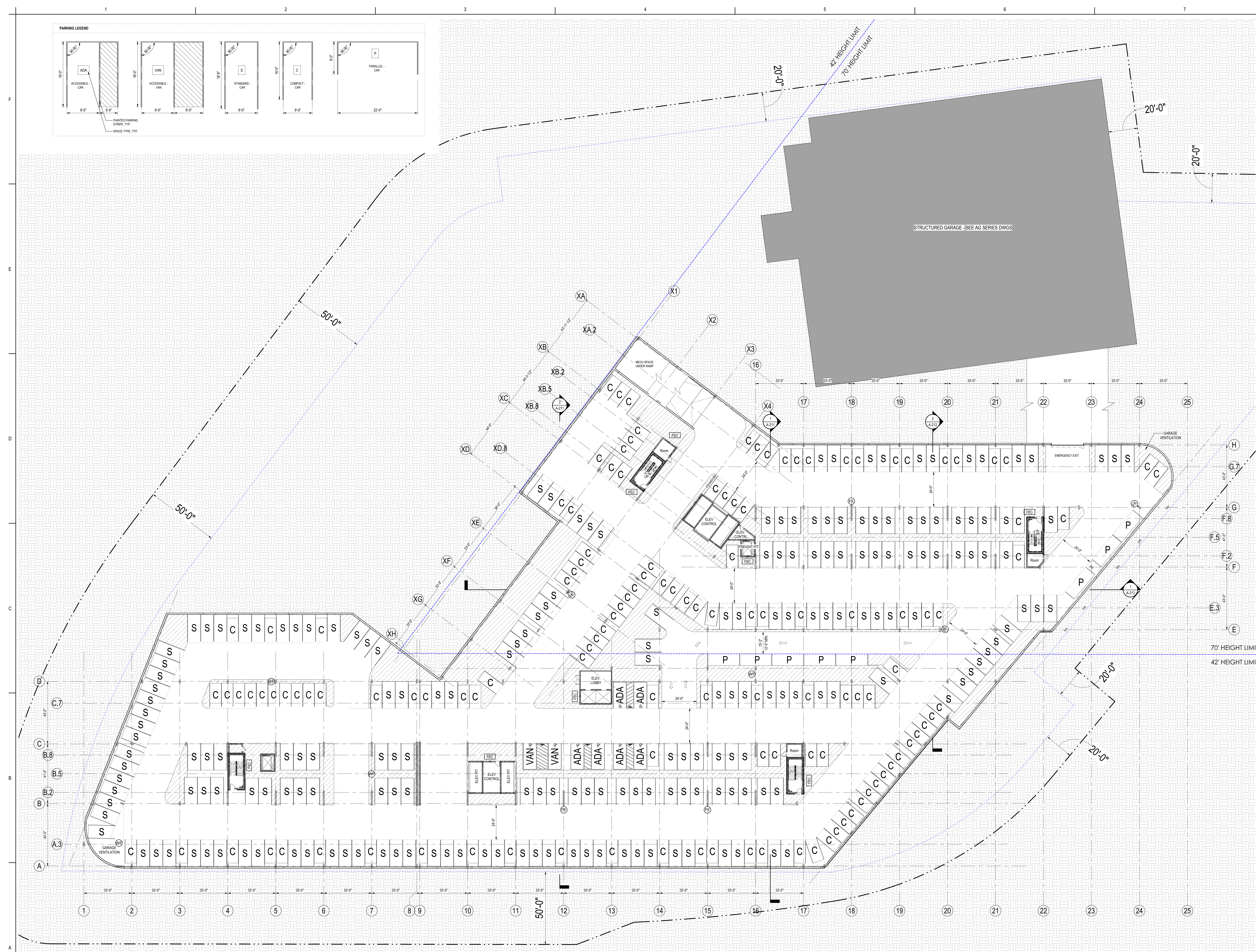
Virginia Wild Yew (*Taxus virginiana*) Little Bluet (*Schizanthus luteolum*), Big Bluet (*Anodonta perovensis*), Red Fescue (*Festuca rubra*), Switch Grass (*Panicum virgatum*), Partula Plant (*Chamaecrista fasciculata*), Partridgefoot (*Lysichiton plantaginifolia*), Indian Grass (*Echinochloa crus-galli*), Virginia Vervain (*Veronica hastata*), Butterfly Milkwort (*Asclepias tuberosa*), Black Eyed Susan (*Rudbeckia hirta*), Yellow Pimpernel (*Linum catharticum*), Heath Aster (*Aster polyphyllus*/synonymyphorum complex), Early Geranium (*Geranium macranthum*).

NEW ENGLAND WETLAND MIX

Fox Sedge (*Carex vaginolata*), Lurid Sedge (*Carex lurida*), Blunt Brown Sedge (*Carex scoparia*), Blue Vervain (*Verbena hastata*), Foal Bluggans (*Poa palustris*), Horn Sedge (*Carex lasiocarpa*), Green Bulrush (*Scirpus americanus*), Creeping Soft Rush (*Eleocharis palustris*), Fringed Sedge (*Carex crinita*), Soft Rush (*Juncus effusus*), Spotted Reed or Pig Weed (*Equisetum hyemale*), Rattlesnake Grass (*Oenochloa distachya*), Swamp Aster (*Aster pilosus*), Blueling (*Trillium vesiculosum*), Swamp Milkweed (*Asclepias incarnata*), Statured stamony Flower (*Mimulus ringens*).



Calculation Summary						
Label	Units	Avg	Max	Min	Avg/Min	Max/Min
SITE_Planar	Fc	0.71	39.4	0.0	N.A.	N.A.
Retail Plaza	FC	2.89	39.4	0.1	28.90	394.00
Surface Parking	FC	1.38	10.2	0.1	13.80	102.00



1 GARAGE LEVEL G1 PLAN
A-100G1 1" = 20'-0"

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311 Summer Street
Boston, MA 02108
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NO.	DATE	BY	APP'D	REVISION
1	2023.03.30	YMM		ISSUED FOR PERMIT

Permit/Seal

KEY PLAN

BUILDING BELOW GRADE PARKING

Type	Comments	Count
LEVEL G1		
ACCESSIBLE		6
ACCESSIBLE VAN		2
COMPACT		122
PARALLEL		8
STANDARD		200
LEVEL G1 - 343		343
GRAND TOTAL		343

LEGEND

- WHEELED FIRE EXTINGUISHER
- FIRE EXTINGUISHER BRACKET WALL MTD
- FIRE EXTINGUISHER CABINET WALL MTD

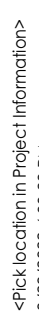
12'-0" MAX DISTANCE PER CODE, TYP.

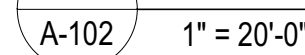
Client/Project
Bulfnch
557 HIGHLAND AVE
NEEDHAM, MA 02464

Project No.: 218421343
File Name: A-100G1
Scale: As Indicated
Author: Designer: Checker: 2023.03.30
Dwn: Dgn: Chkd: YMM/MMD

Title
GARAGE LEVEL G1 - OVERALL PLAN

Revision:
Drawing No.
A-100G1



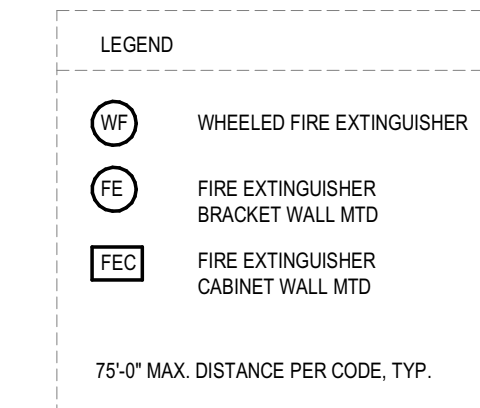
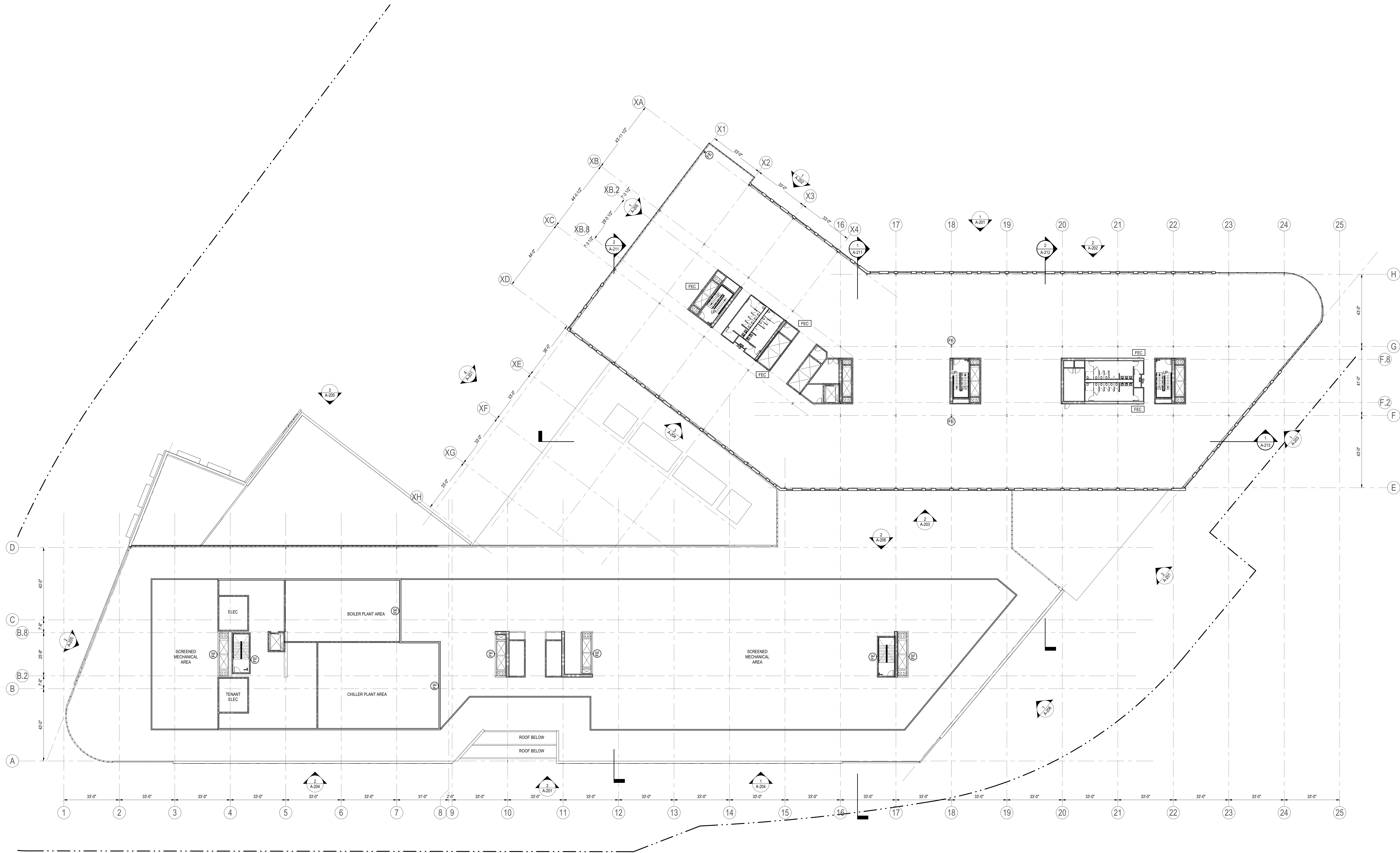




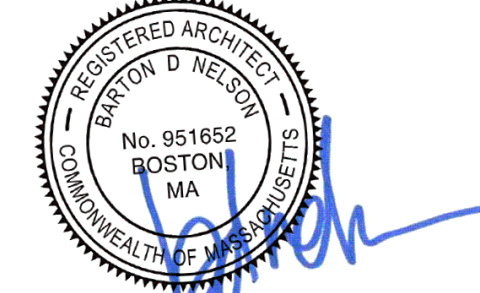
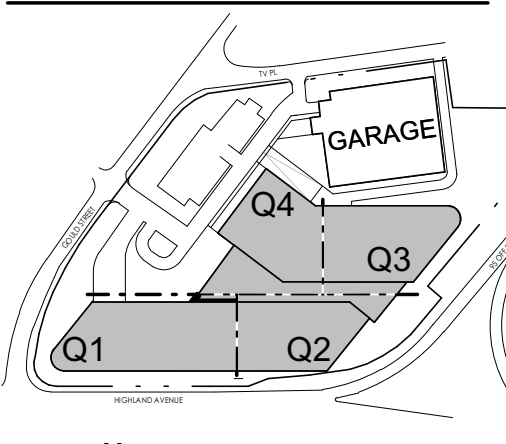
1
A-104

LEVEL 4 - FULL PLAN

1" = 20'-0"



KEY PLAN

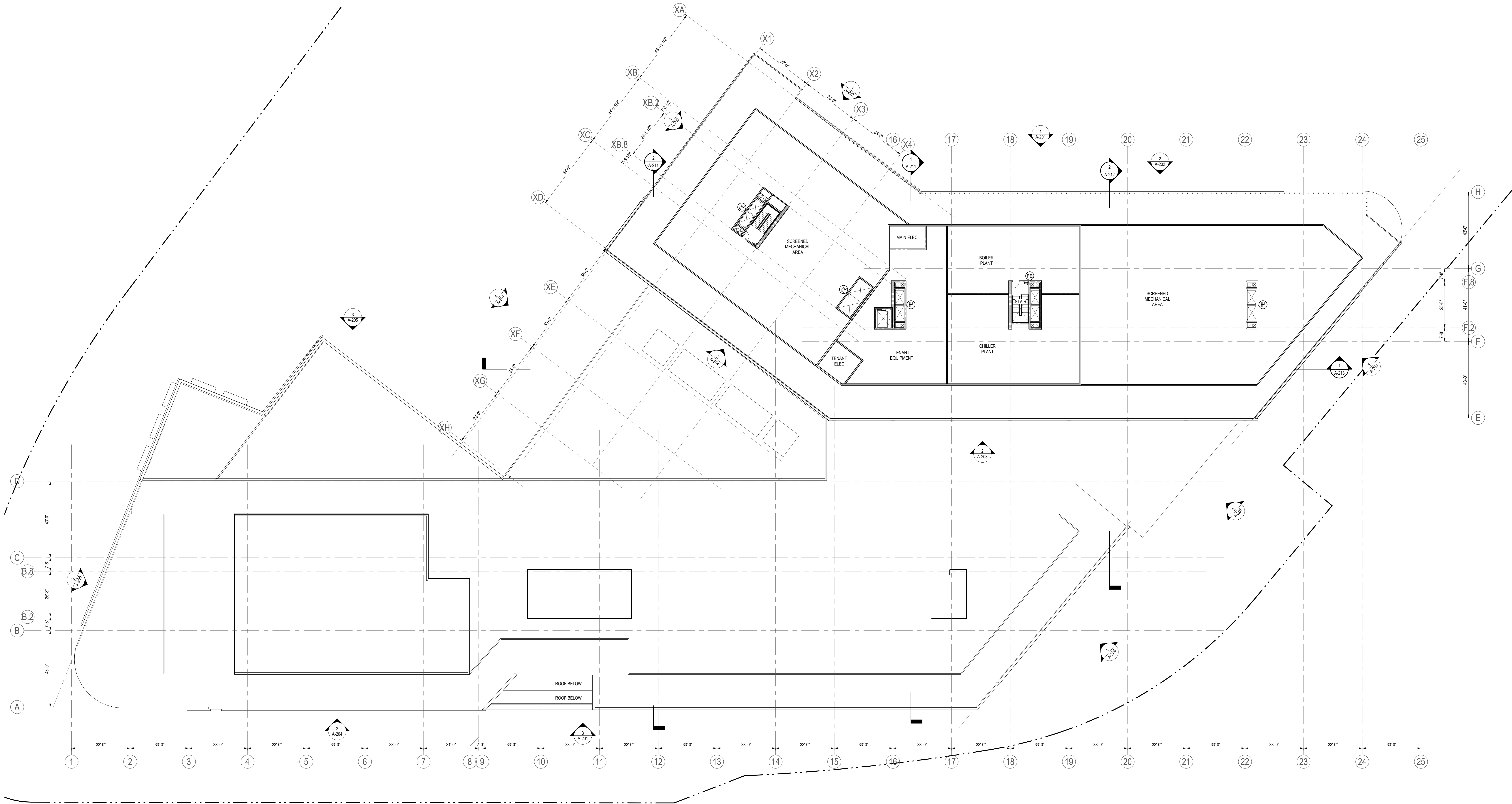


Permit/Seal

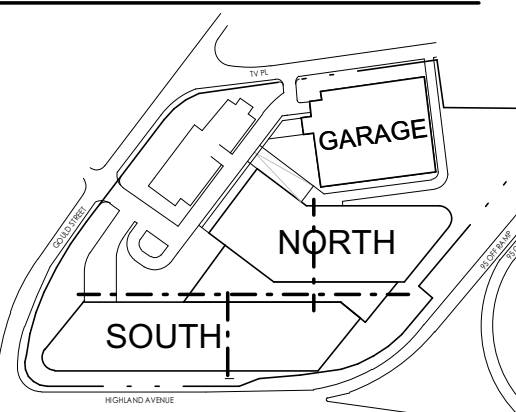
ISSUED/REVISION	BY	DATE
SPECIAL EMERGENCY	MM	YYYYMMDD

Consultant

1 PENTHOUSE - NORTH
A-106 1" = 20'-0"



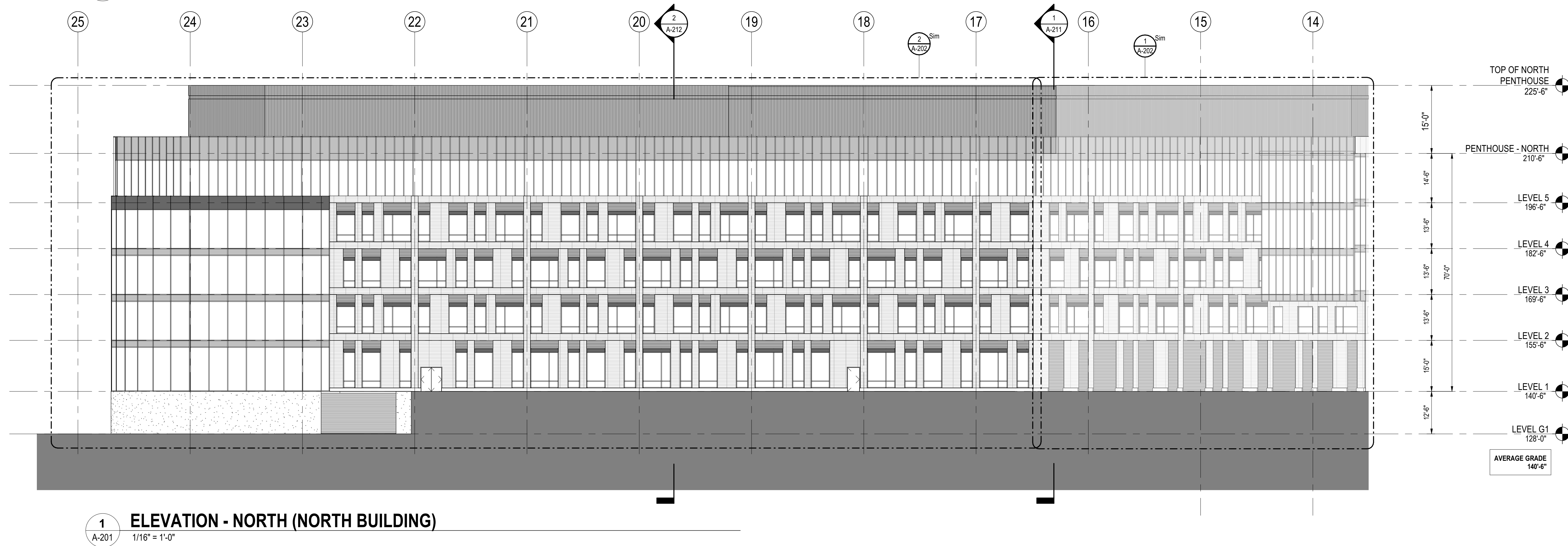
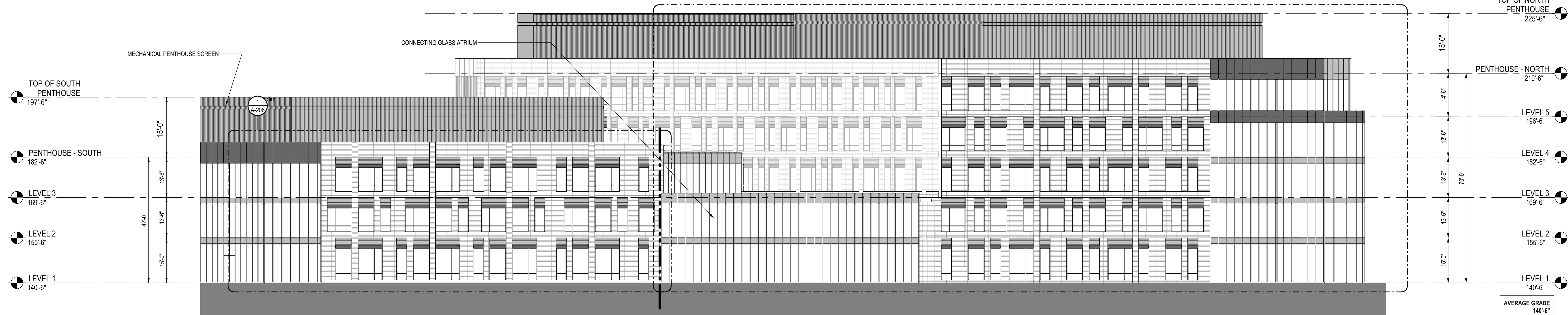
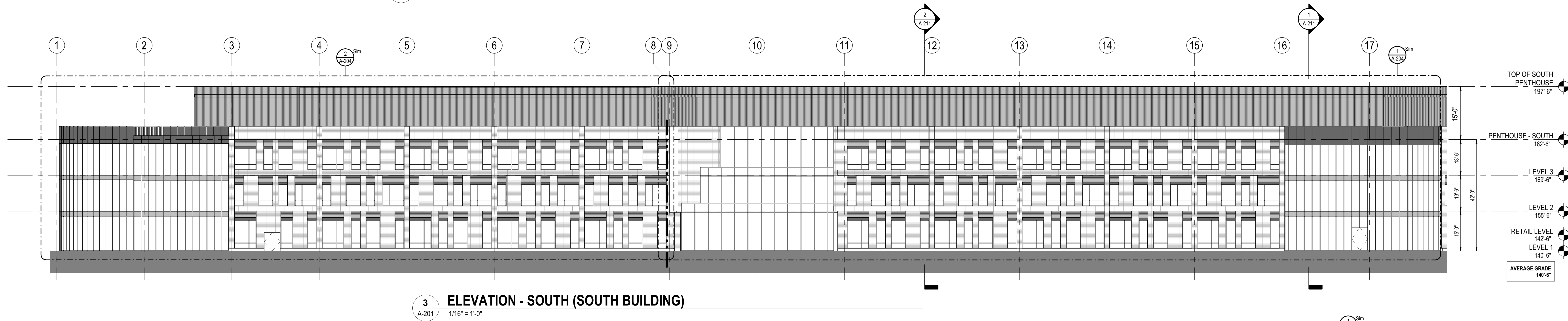
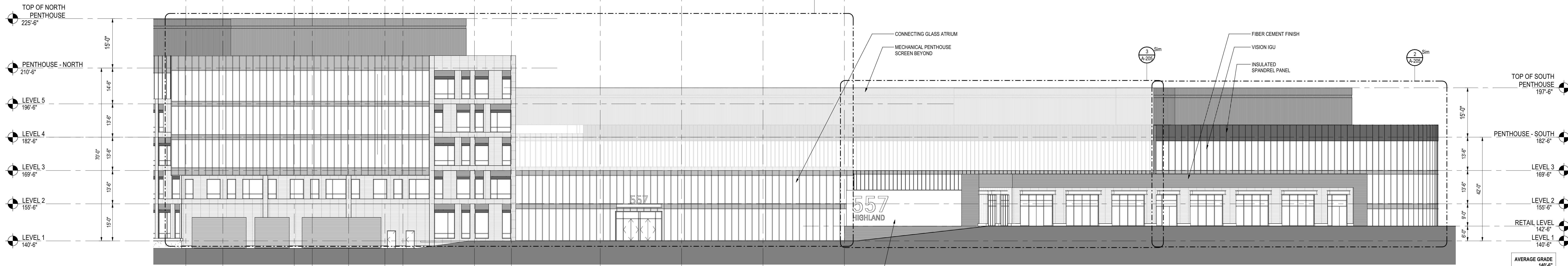
LEGEND	
(M)	WHEELED FIRE EXTINGUISHER
(FE)	FIRE EXTINGUISHER BRACKET WALL MTD
(FEC)	FIRE EXTINGUISHER CABINET WALL MTD
75'-0" MAX. DISTANCE PER CODE, TYP.	

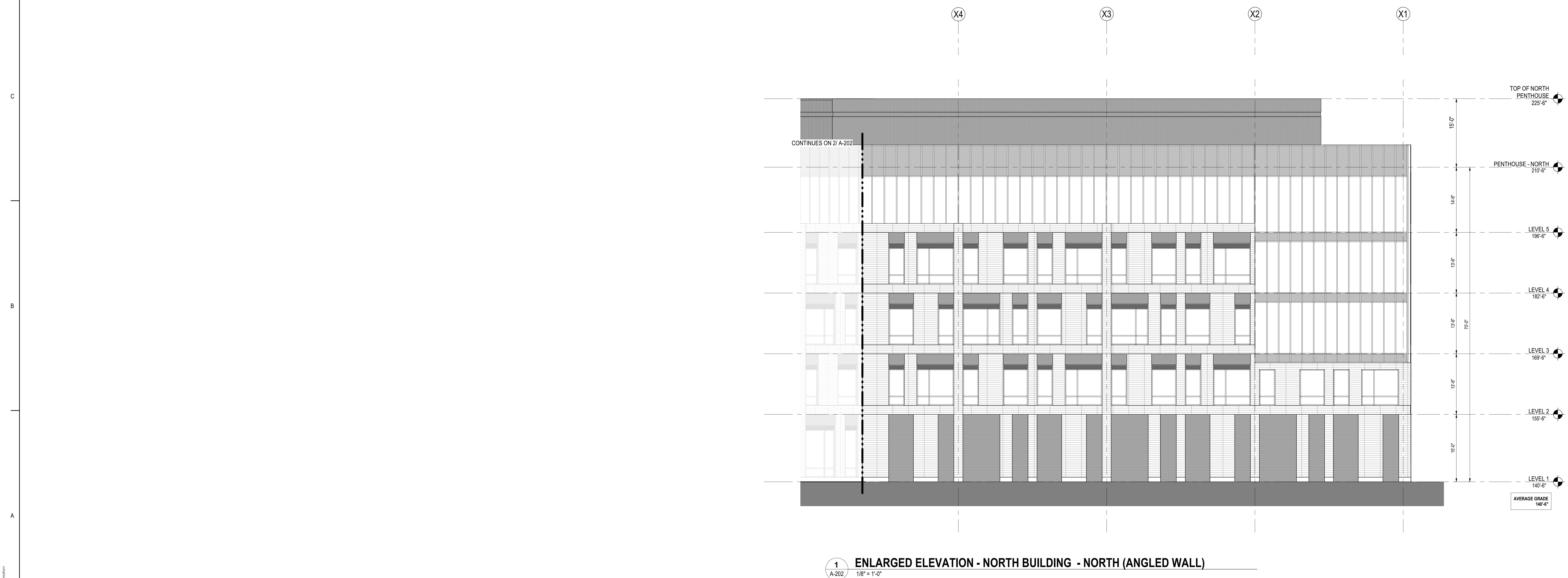
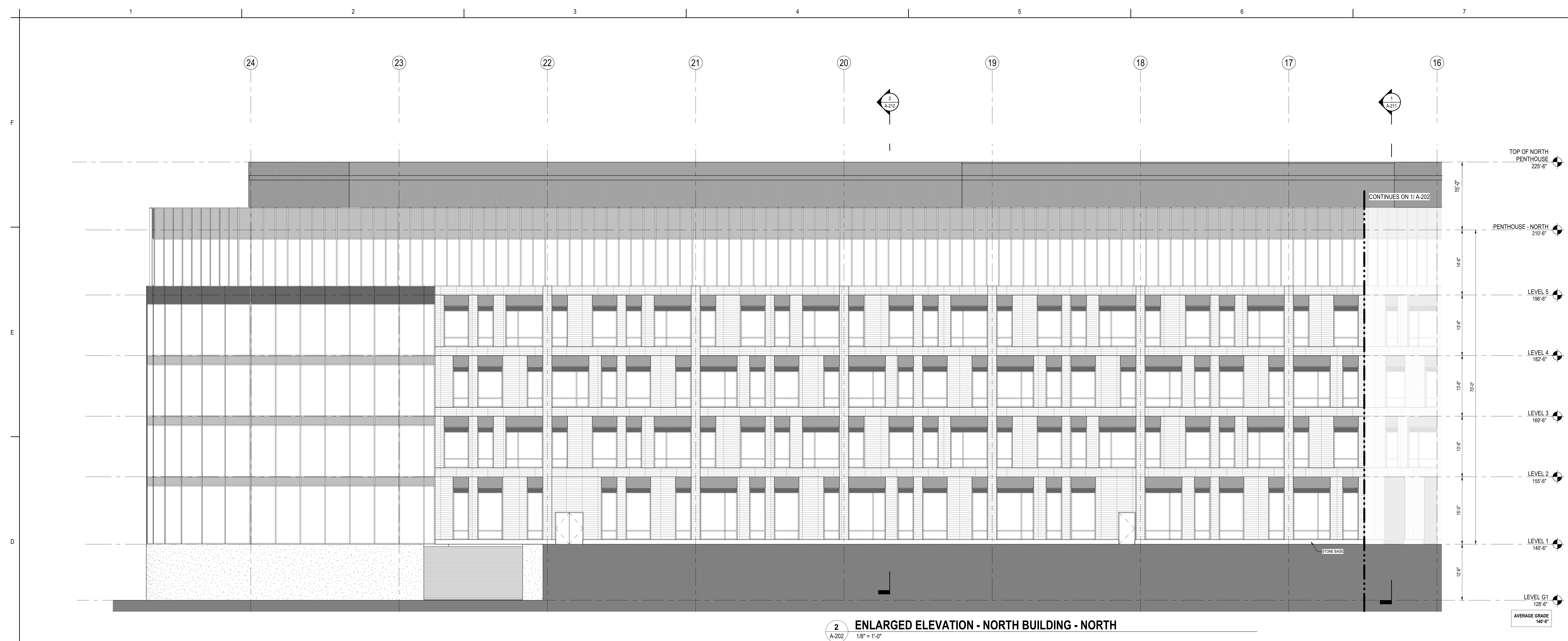
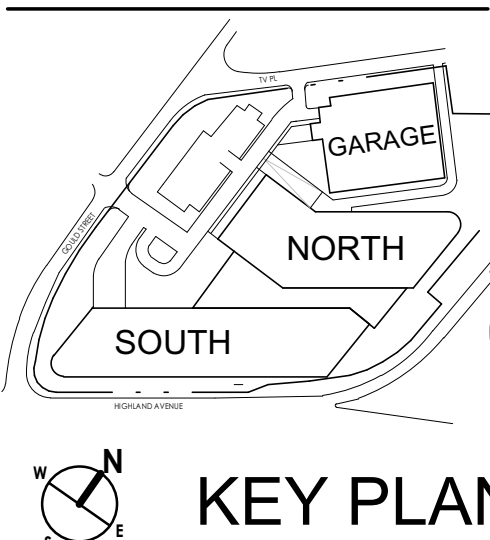


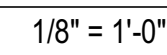
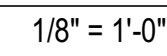
Permit/Seal

SPECIAL REVISION	
By	Appr
2022.03.30	YYYYMMDD

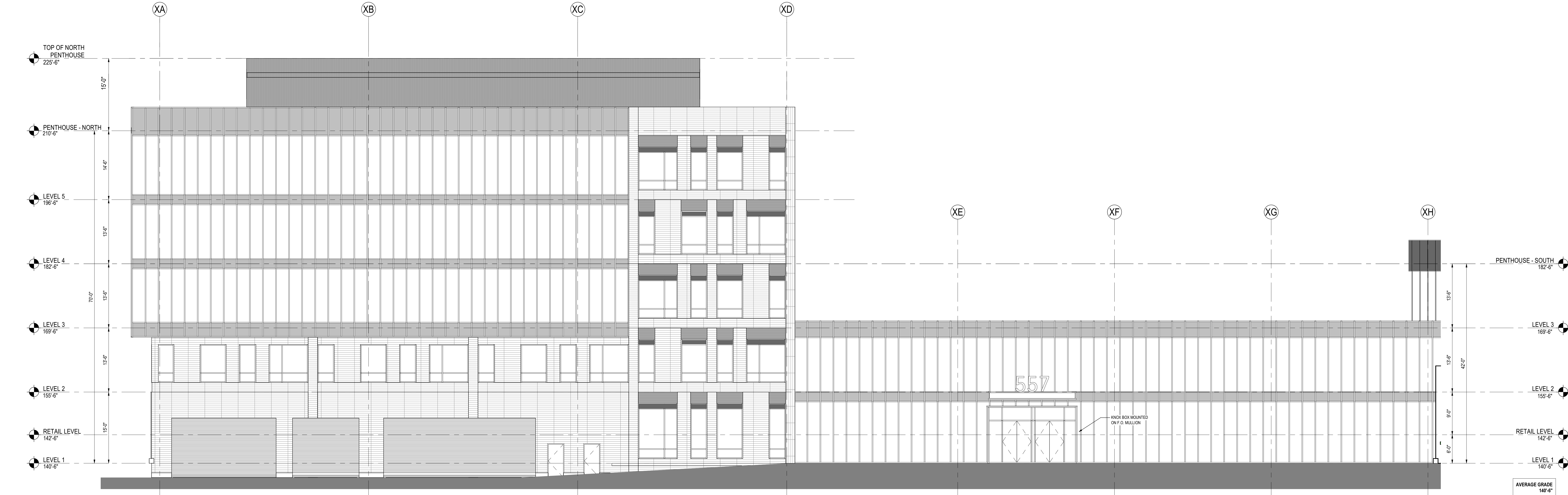
Consultant



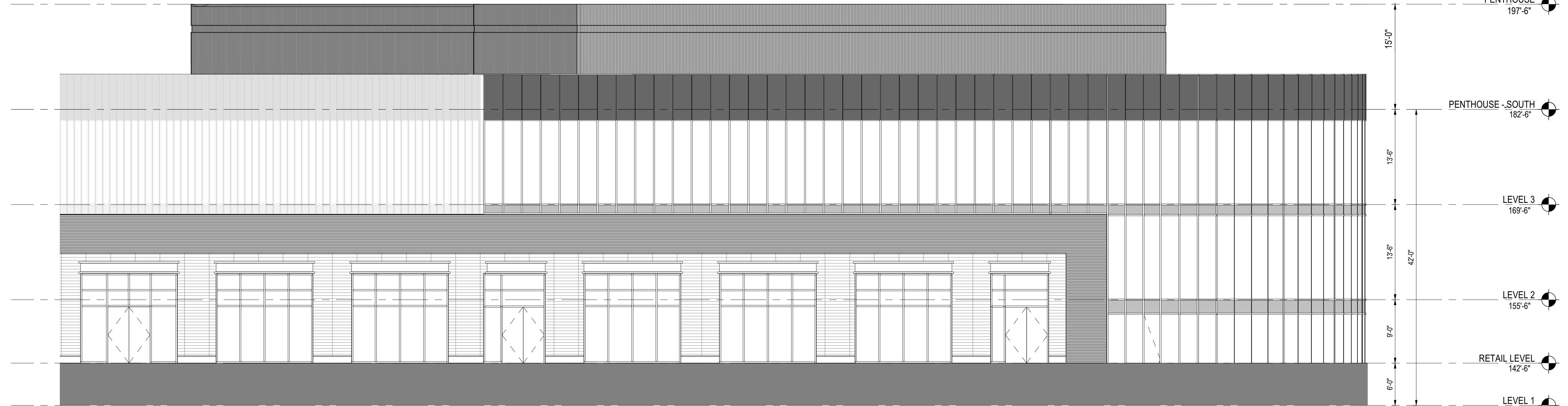
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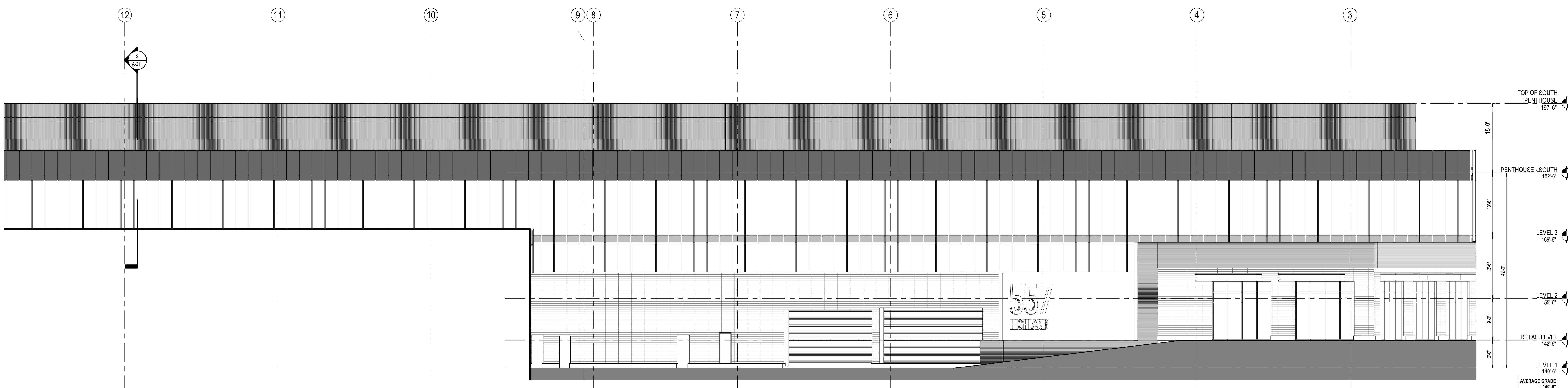




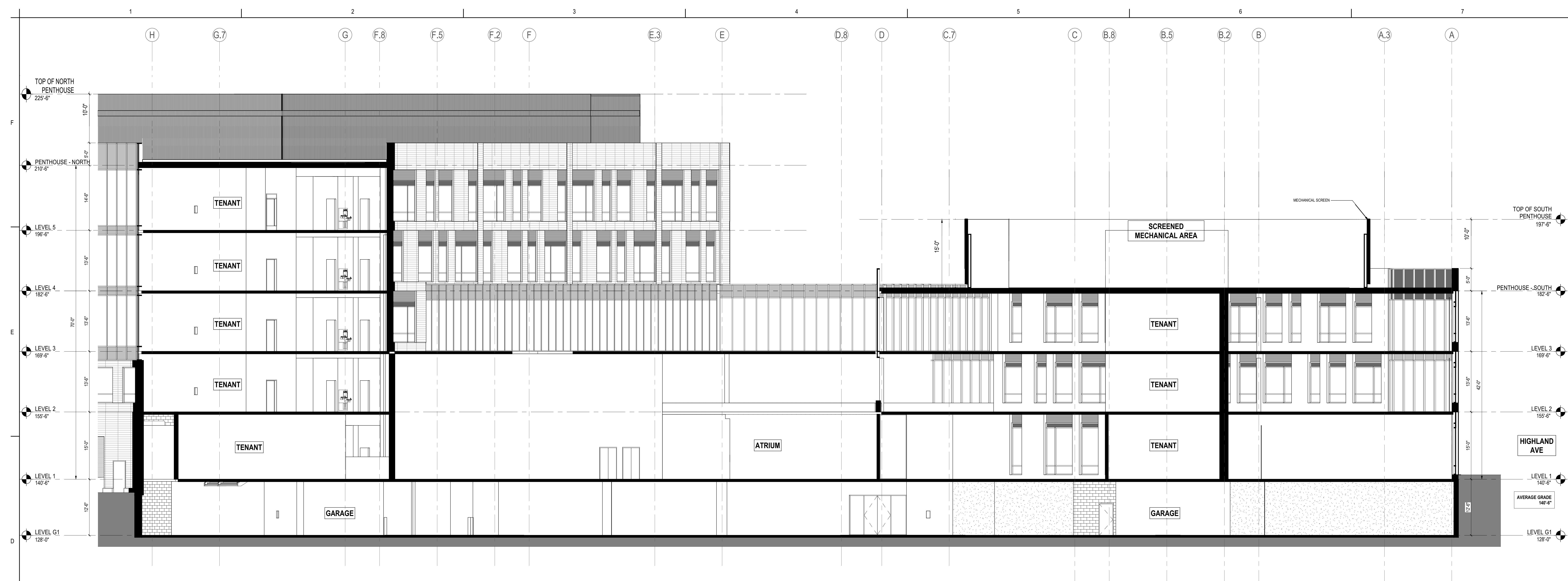
1 ENLARGED ELEVATION - NORTH BUILDING - WEST
A-205 1/8" = 1'-0"



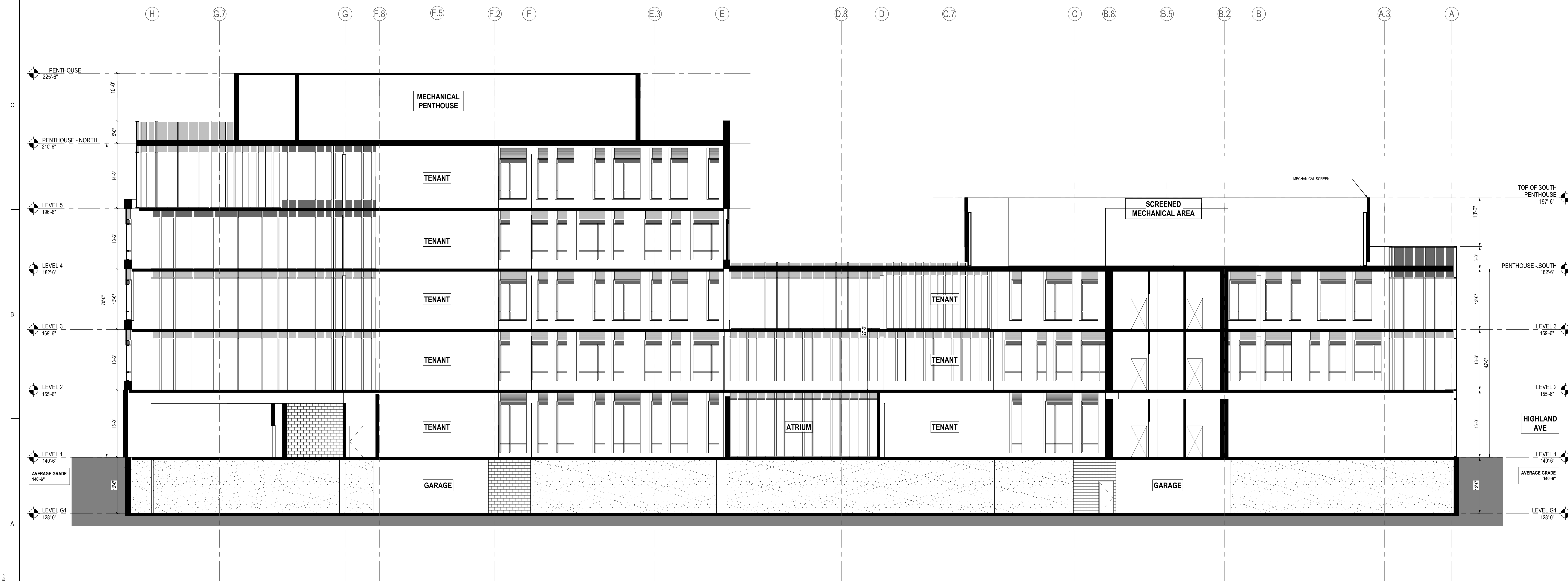
2 ENLARGED ELEVATION - SOUTH BUILDING - WEST
A-205 1/8" = 1'-0"



3 ENLARGED ELEVATION - SOUTH BUILDING - NORTH (1)
A-205 1/8" = 1'-0"



2 SECTION - N-S NEAR GRID 12
A-211 1/8" = 1'-0"



1 SECTION - N-S NEAR GRID 16
A-211 1/8" = 1'-0"

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Consultant

By	Date	Issued/Revision
MM	MM/DD	YYMMDD

Permit/Seal

JEFFREY M. MADSEN
No. 951952
MASSACHUSETTS
REGISTERED PROFESSIONAL ENGINEER

KEY PLAN

Client/Project

Bulfnch
557 HIGHLAND AVE
NEEDHAM, MA 02464

Project No.: 218421343

File Name: N/A

Scale: 1/8" = 1'-0"

Author	Designer	Checker	Date
MM	MM	MM	MM/DD

Title

BUILDING SECTIONS - OVERALL

Revision:

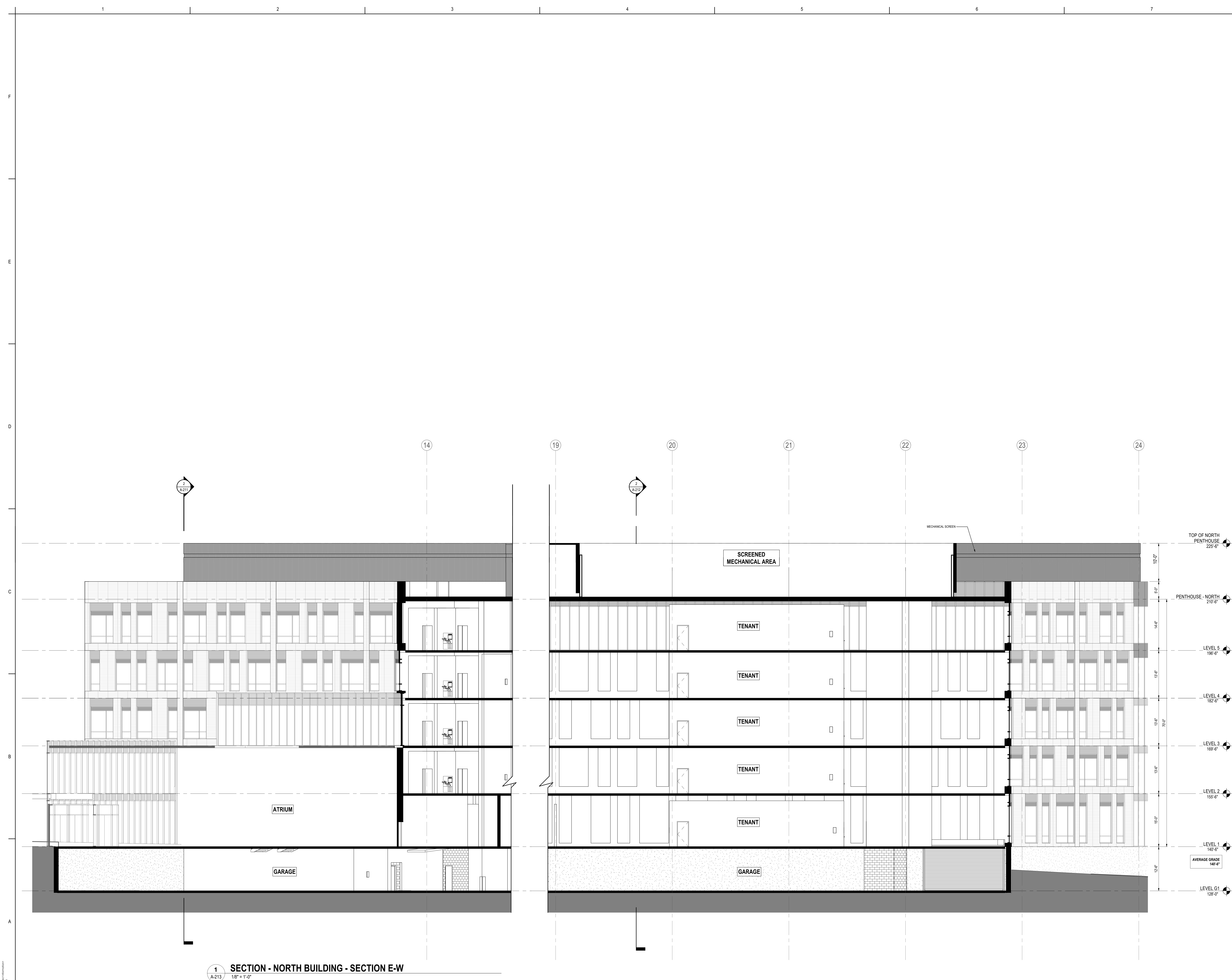
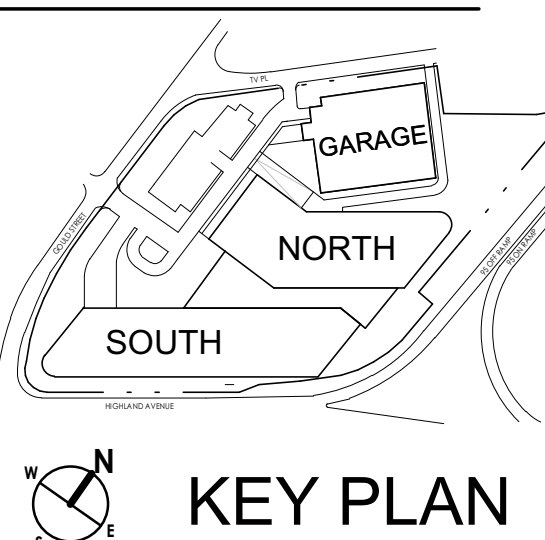
Drawing No.

A-211



[illegible]

Permit/Seal



1 SECTION - NORTH BUILDING - SECTION E-W
A-213 1/8" = 1'-0"

Client/Project

Bulfinch
557 HIGHLAND AVE

NEEDHAM MA 02494

Project No.:218421343

File Name: N/A

Author	Designer	Chp
--------	----------	-----

Down. Design. Ch

title
BUILDING 25

BUILDING SE
NORTH BLDG

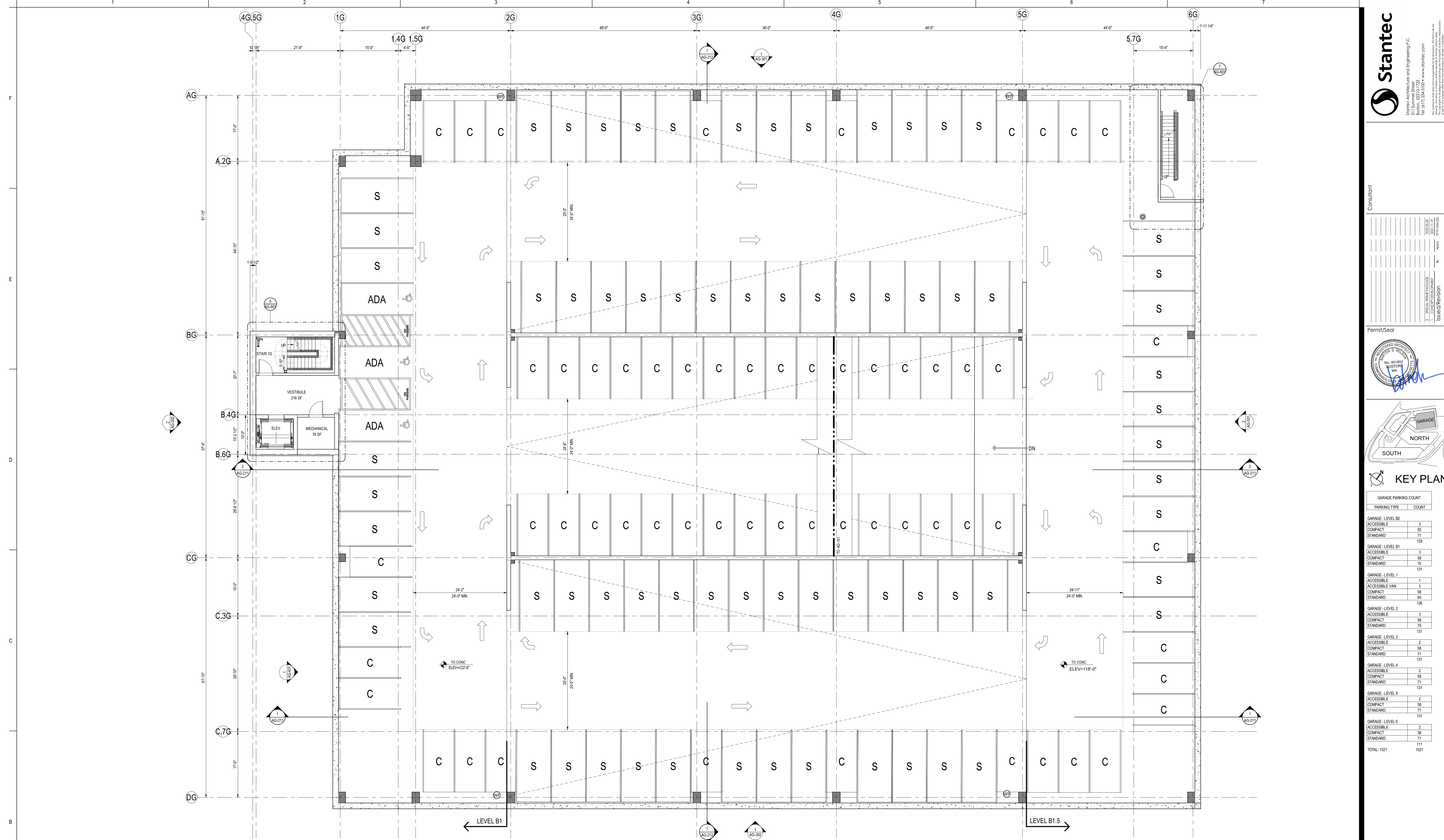
NORTH BEDS

Revision:

Drawing No.

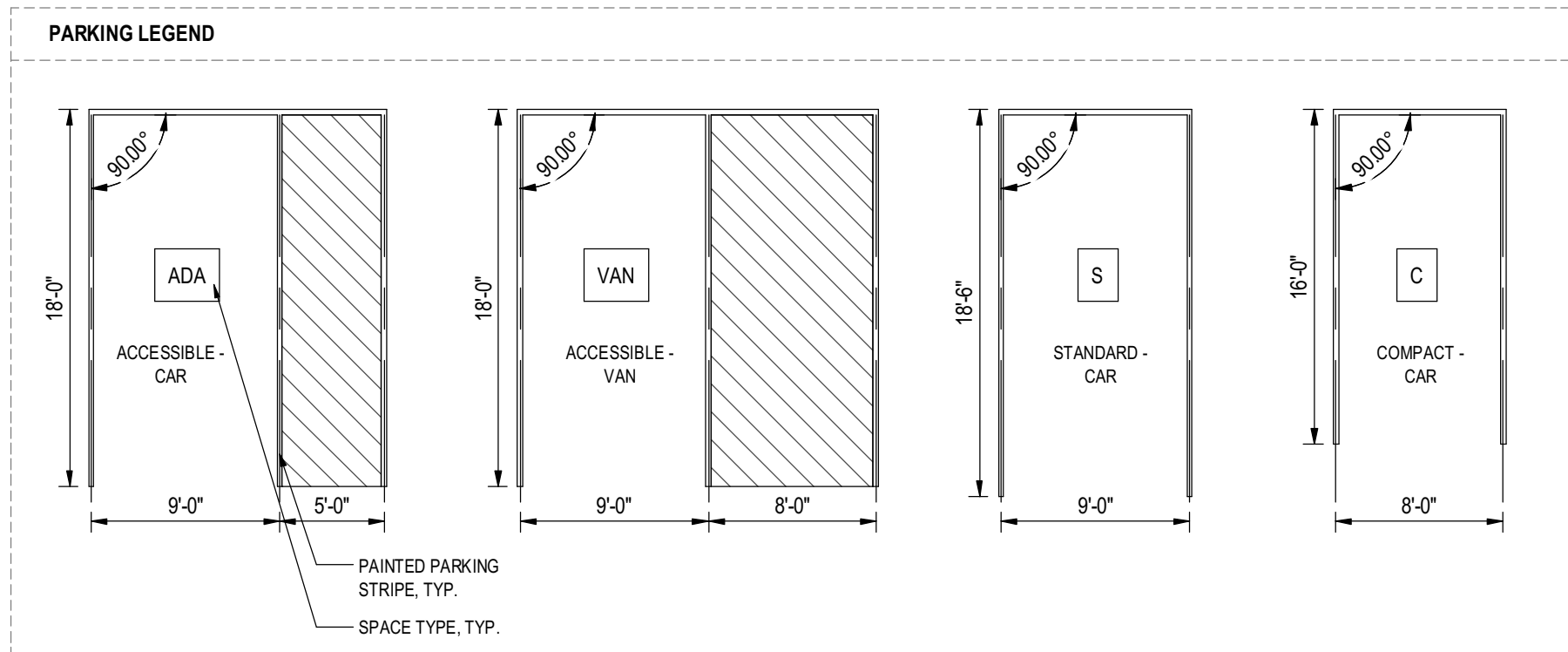
A 213

A-215



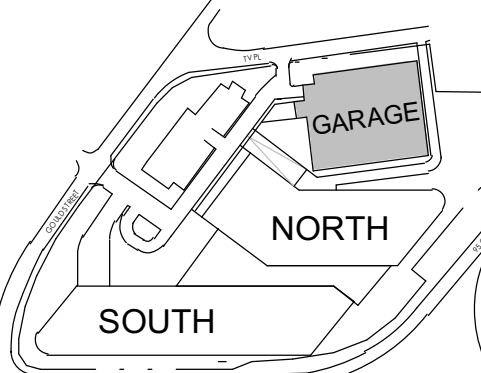
1 GARAGE - LEVEL B1
AG-100.B1 1/8" = 1'-0"

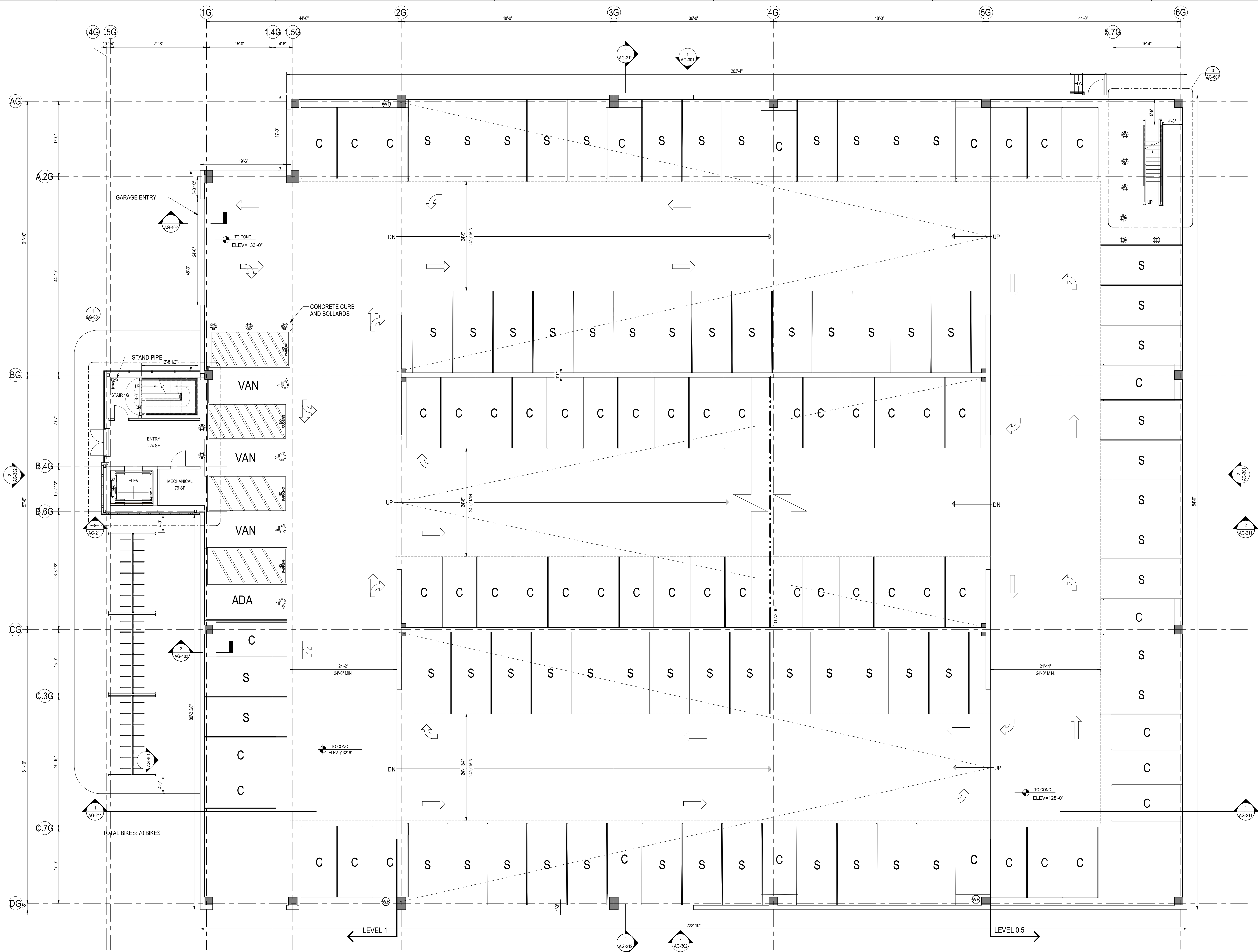
LEGEND
WHEELED FIRE EXTINGUISHER
75'-0" MAX. DISTANCE PER CODE, TYP.



Consultant

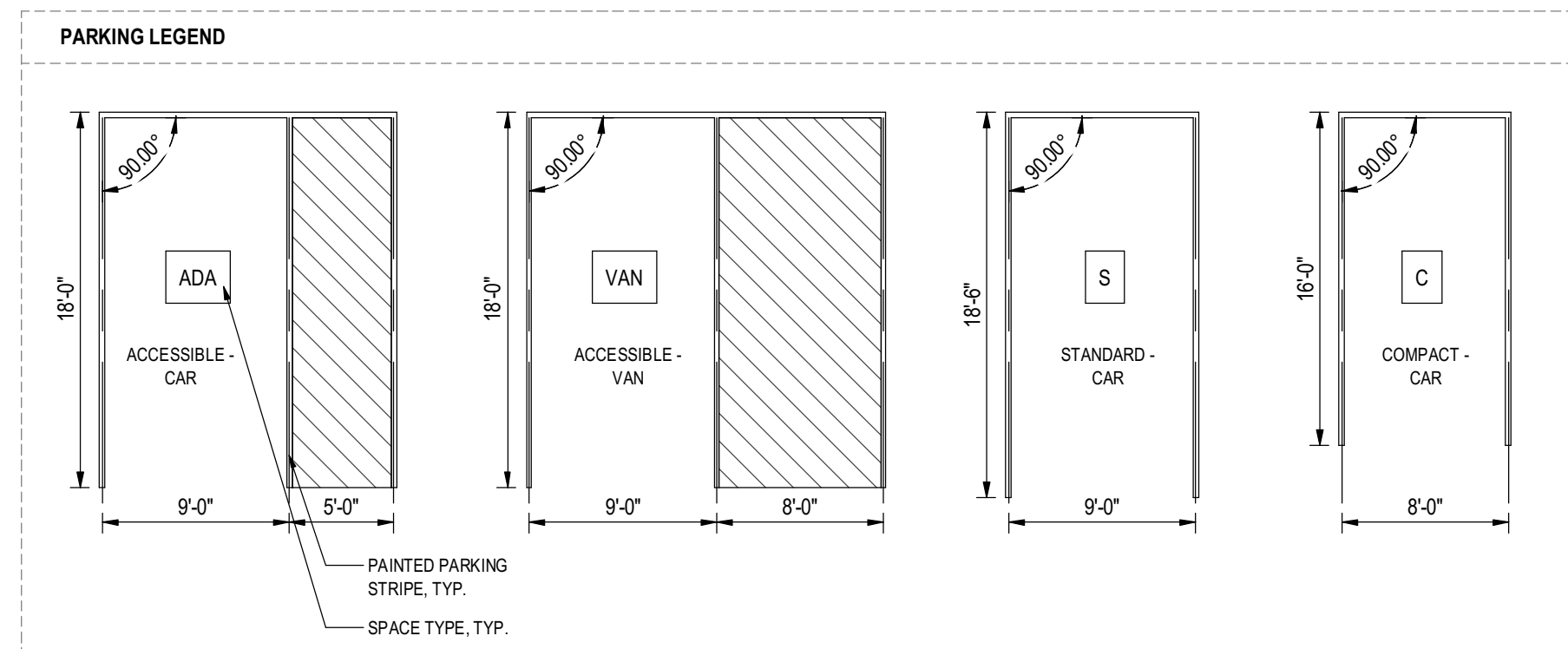
NO.	DATE	BY	APP'D	REVISION
1	10/20/2022	YMY	MM/DD	ISSUED FOR PERMIT



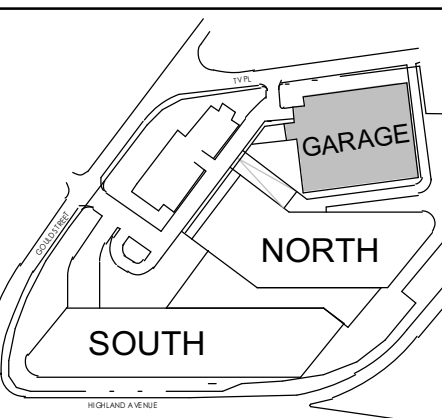
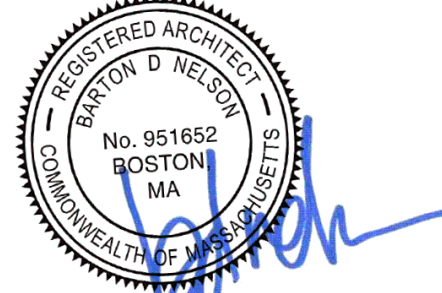


1 GARAGE - LEVEL 1-
1/8" = 1'-0"

LEGEND
WHEEL FIRE EXTINGUISHER
75'-0" MAX. DISTANCE PER CODE, TYP.



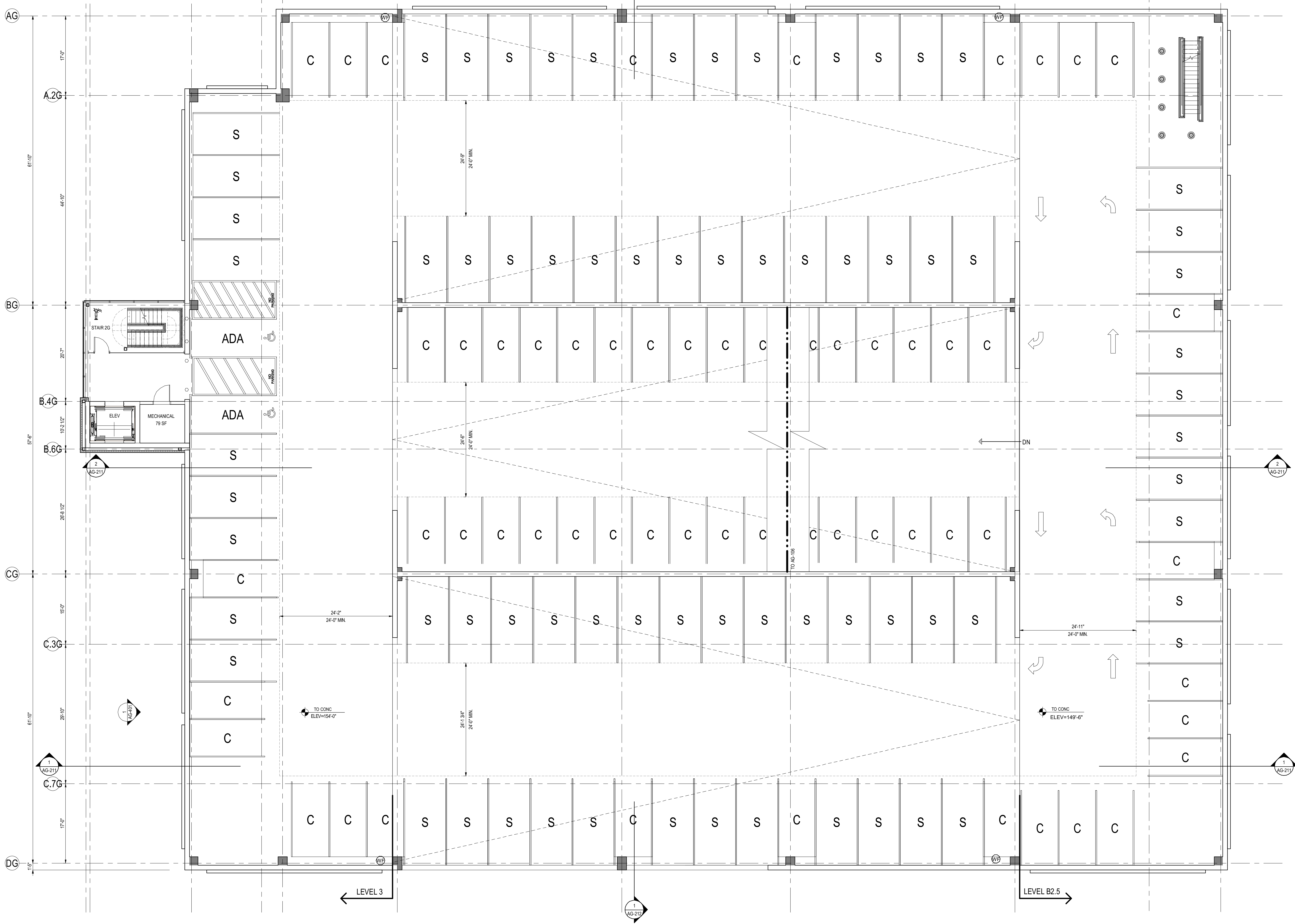
NO.	DATE	BY	APP'D	REVISION
1	2023.11.17	MMJ		ISSUED FOR PERMIT



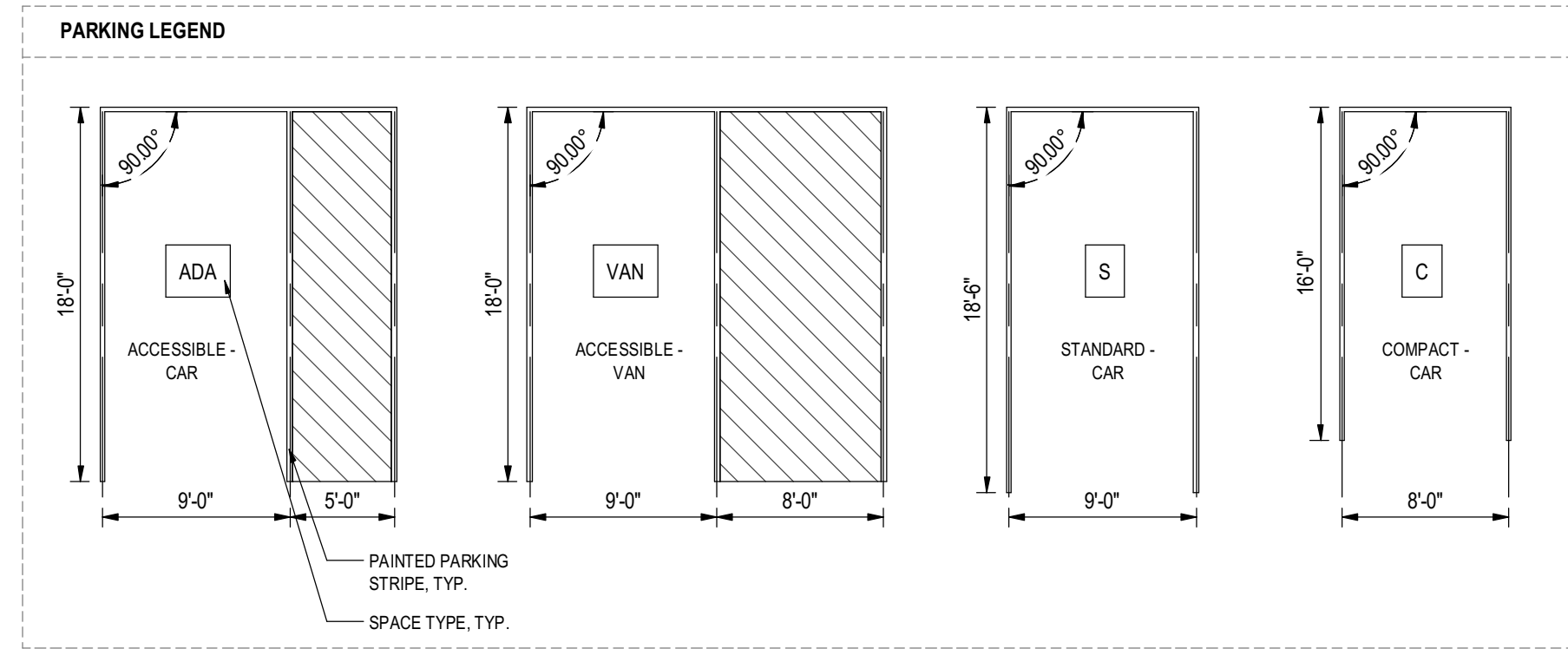
KEY PLAN

GARAGE PARKING COUNT	
PARKING TYPE	COUNT
GARAGE - LEVEL R2	
ACCESSIBLE	3
COMPACT	55
STANDARD	71
TOTAL	129
GARAGE - LEVEL B1	
ACCESSIBLE	3
COMPACT	58
STANDARD	70
TOTAL	131
GARAGE - LEVEL 1	
ACCESSIBLE	1
ACCESSIBLE VAN	3
COMPACT	58
STANDARD	64
TOTAL	126
GARAGE - LEVEL 2	
ACCESSIBLE	3
COMPACT	58
STANDARD	70
TOTAL	131
GARAGE - LEVEL 3	
ACCESSIBLE	2
COMPACT	58
STANDARD	71
TOTAL	131
GARAGE - LEVEL 4	
ACCESSIBLE	2
COMPACT	58
STANDARD	71
TOTAL	131
GARAGE - LEVEL 5	
ACCESSIBLE	2
COMPACT	58
STANDARD	71
TOTAL	131
GARAGE - LEVEL 6	
ACCESSIBLE	2
COMPACT	58
STANDARD	71
TOTAL	131
TOTAL 1021	

1 GARAGE - LEVEL 3
1/8" = 1'-0"



LEGEND	
AG-212	WHEELED FIRE EXTINGUISHER
75'-0" MAX. DISTANCE PER CODE, TYP.	



GARAGE PARKING COUNT	
PARKING TYPE	COUNT
GARAGE - LEVEL B2	
ACCESSIBLE	3
COMPACT	55
STANDARD	71
129	
GARAGE - LEVEL B1	
ACCESSIBLE	3
COMPACT	58
STANDARD	70
131	
GARAGE - LEVEL 1	
ACCESSIBLE	1
ACCESSIBLE VAN	3
COMPACT	58
STANDARD	64
126	
GARAGE - LEVEL 2	
ACCESSIBLE	3
COMPACT	58
STANDARD	70
131	
GARAGE - LEVEL 3	
ACCESSIBLE	2
COMPACT	58
STANDARD	71
131	
GARAGE - LEVEL 4	
ACCESSIBLE	2
COMPACT	58
STANDARD	71
131	
GARAGE - LEVEL 5	
ACCESSIBLE	2
COMPACT	58
STANDARD	71
131	
GARAGE - LEVEL 6	
ACCESSIBLE	2
COMPACT	58
STANDARD	71
131	
TOTAL 1021	

Client/Project
Bulfnch
557 Highland Ave
HIGHLAND GARAGE

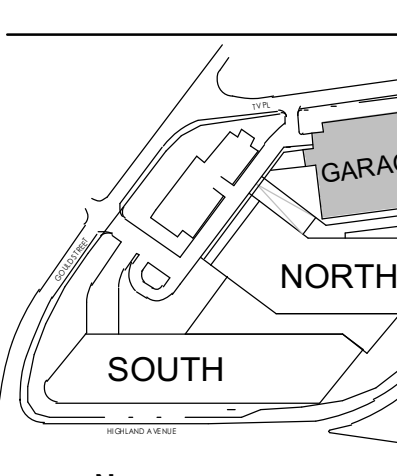
Project No.: 218421343
Title: HIGHWAY
Scale: 1/8" = 1'-0"
Author: Designer: Checker: 2023.03.30
Date: Design: Check: YYYY.MM.DD

Title
GARAGE LEVEL 3
(LEVEL 4-5 SIM.)

Revision: 1
Drawing No.

AG-103
GARAGE

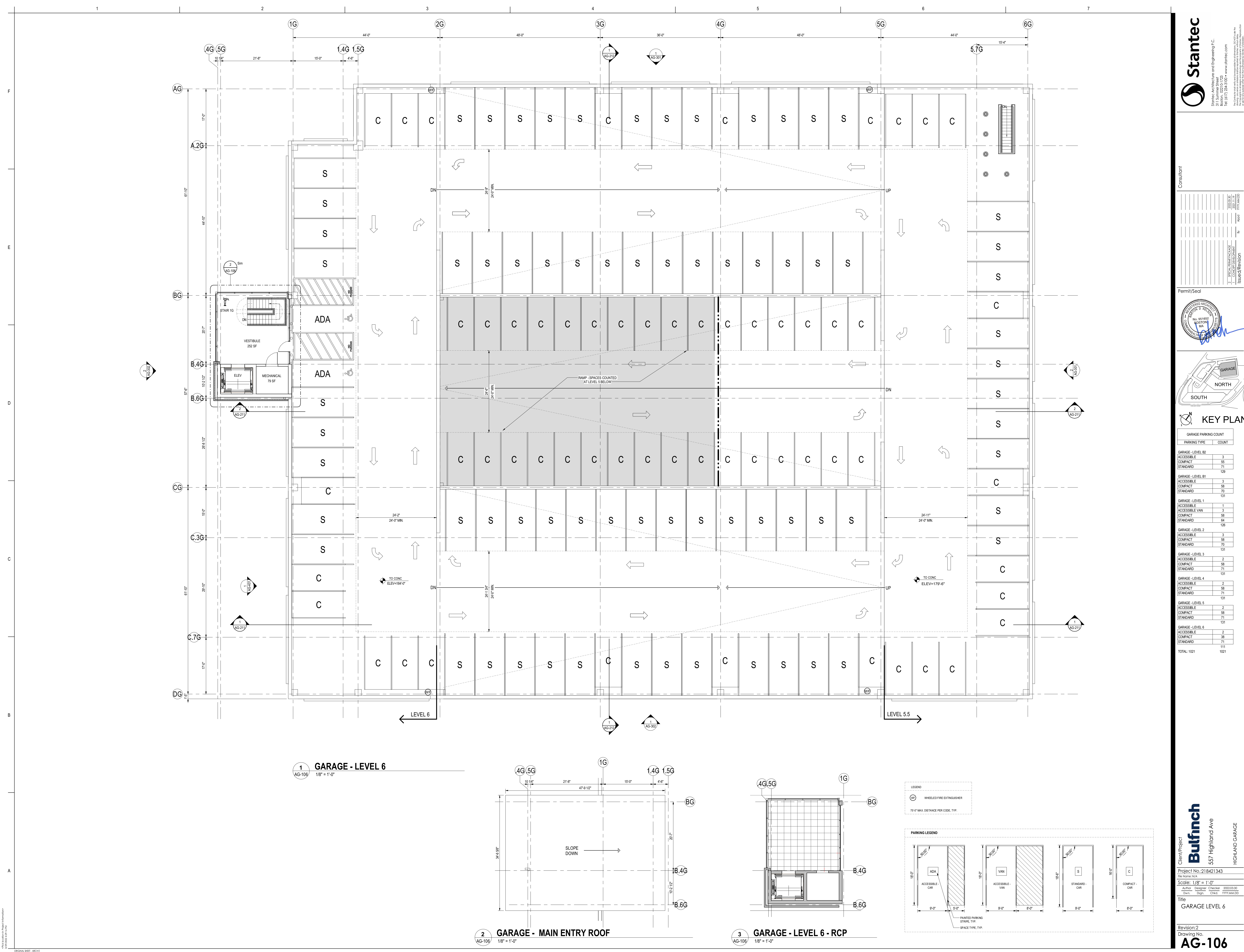
Consultant	
1	SPECIAL REVIEW PACKAGE
2	ISSUED/REVISION
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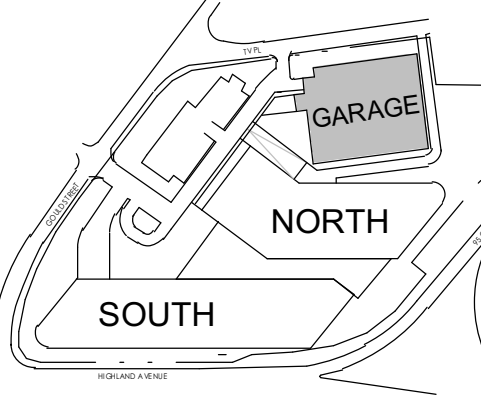
KEY PLAN

GARAGE PARKING COUNT	
PARKING TYPE	COUNT

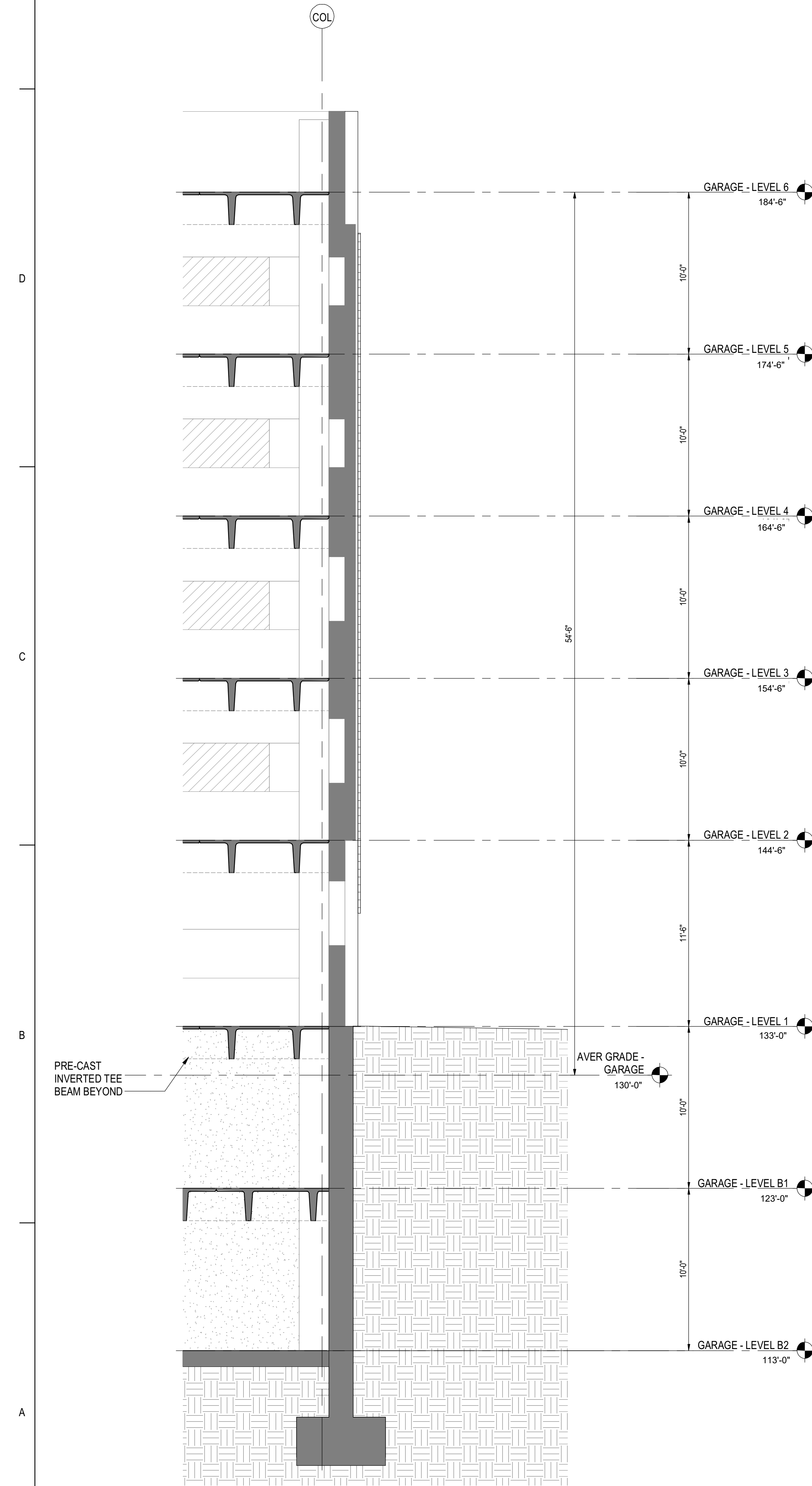
GARAGE - LEVEL B2	
ACCESSIBLE	3
COMPACT	55
STANDARD	71
129	
GARAGE - LEVEL B1	
ACCESSIBLE	3
COMPACT	58
STANDARD	70
131	
GARAGE - LEVEL 1	
ACCESSIBLE	1
ACCESSIBLE VAN	3
COMPACT	58
STANDARD	64
126	
GARAGE - LEVEL 2	
ACCESSIBLE	3
COMPACT	58
STANDARD	70
131	
GARAGE - LEVEL 3	
ACCESSIBLE	2
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GARAGE - LEVEL 4	
ACCESSIBLE	2
COMPACT	58
STANDARD	71
131	
GARAGE - LEVEL 5	
ACCESSIBLE	2
COMPACT	58
STANDARD	71
131	
GARAGE - LEVEL 6	
ACCESSIBLE	2
COMPACT	58
STANDARD	71
131	
TOTAL 1021	



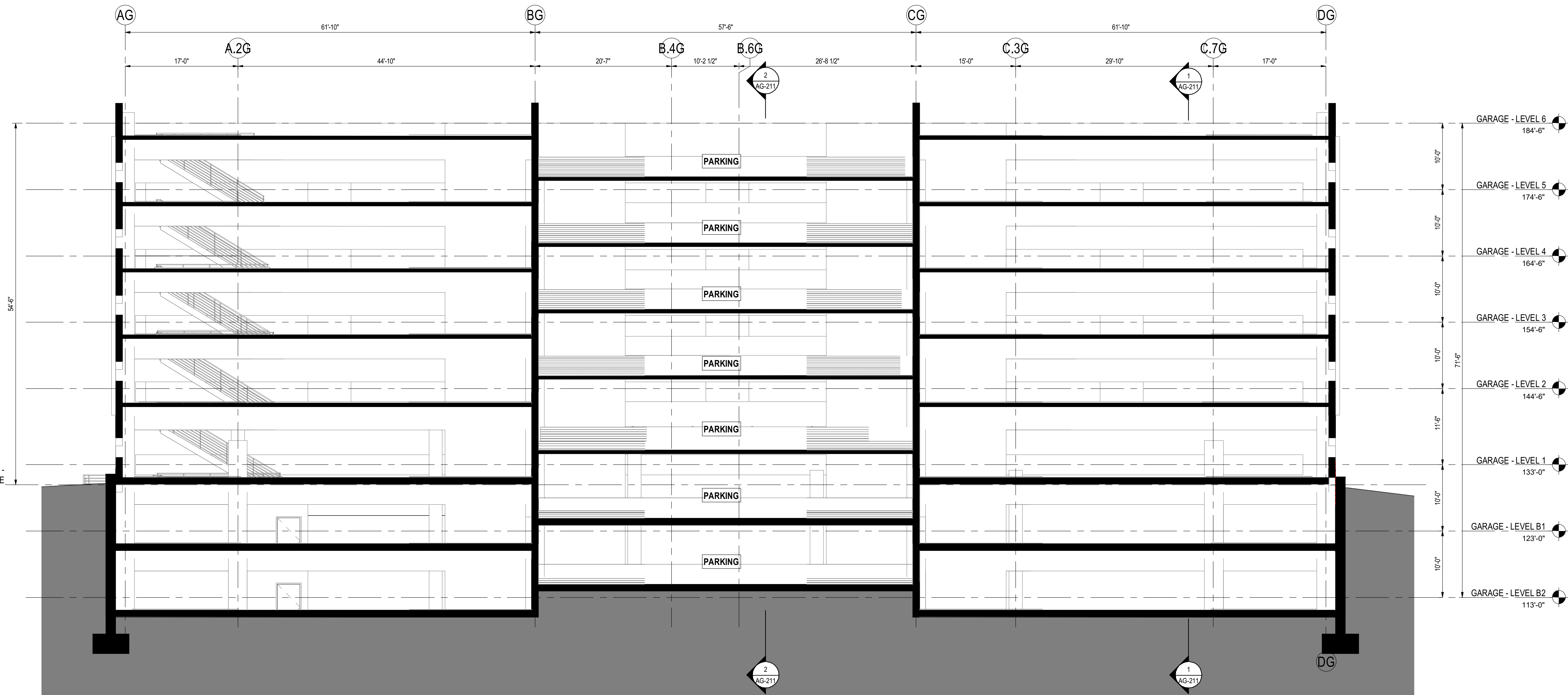
Permit/Seal	
PROJECT NO.	2022.03.30
DATE	2022.03.30
BY	YMY/MM/DD
ISSUED/REVISION	



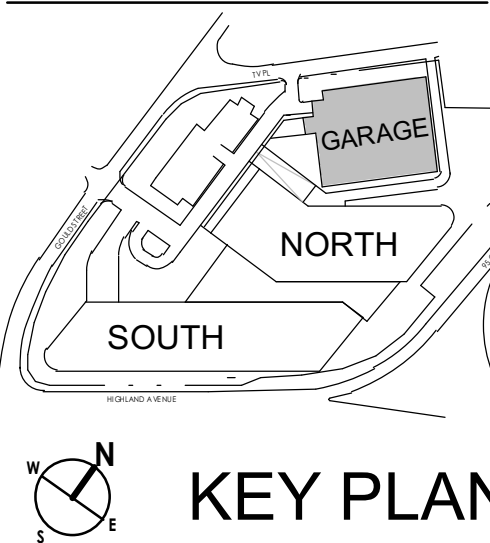
GARAGE PARKING COUNT	
PARKING TYPE	COUNT
GARAGE - LEVEL R2	
ACCESSIBLE	3
COMPACT	55
STANDARD	71
GARAGE - LEVEL B1	
ACCESSIBLE	3
COMPACT	58
STANDARD	70
GARAGE - LEVEL 1	
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COMPACT	58
STANDARD	71
GARAGE - LEVEL 4	
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COMPACT	58
STANDARD	71
GARAGE - LEVEL 5	
ACCESSIBLE	2
COMPACT	58
STANDARD	71
GARAGE - LEVEL 6	
ACCESSIBLE	2
COMPACT	58
STANDARD	71
TOTAL	1021



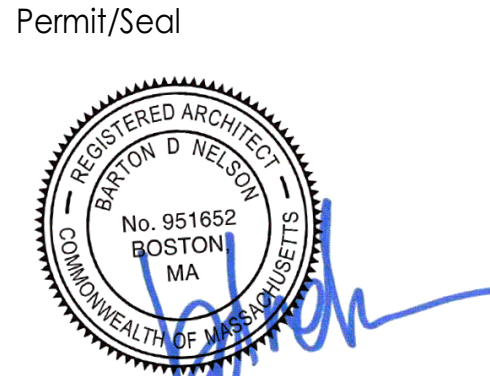
2 TYP. BAY SECTION - FOUNDATION OUTBOARD
1/4" = 1'-0"



1 GARAGE SECTION CC - Transverse
1/8" = 1'-0"



KEY PLAN



Permit/Seal

Issue/Revision	By	Date
1	YTY/MM/DD	2024.03.30
2	YTY/MM/DD	2024.05.01

Consultant



