

ABBREVIATIONS

GENERAL

AADT	ANNUAL AVERAGE DAILY TRAFFIC
ABAN	ABANDON
ADA	AMERICANS WITH DISABILITIES ACT
ADJ	ADJUST
APPROX	APPROXIMATE
AC	ASPHALT CONCRETE
ACCM PIPE	ASPHALT COATED CORRUGATED METAL PIPE
ASSF	AREA SUBJECT TO STORM FLOWAGE
ATD	ASPHALT TURNDOWN
ATG	ADJUST TO GRADE
BB	BITUMINOUS BERM
BC	BOTTOM OF CURB (FINISHED GRADE ON LOW SIDE OF CURB)
BD	BOUND
BIT	BITUMINOUS
BL	BASELINE
BLDG	BUILDING
BM	BENCHMARK
BMP	BEST MANAGEMENT PRACTICE
BO	BY OTHERS
BOL	BOLLARD
BOS	BOTTOM OF SLOPE
BOT	BOTTOM
BPM	BLACKOUT PAVEMENT MARKING
BR	BRIDGE
BS	BOTTOM OF STAIR (FINISHED GRADE AT BOTTOM STAIR)
BW	BOTTOM OF WALL (FINISHED GRADE ON LOW SIDE OF WALL)
BWL	BROKEN WHITE LINE
BYL	BROKEN YELLOW LINE
C=	CURVE LENGTH
CB	CATCH BASIN
CBCI	CATCH BASIN WITH CURB INLET
CC	CEMENT CONCRETE
CCM	CEMENT CONCRETE MASONRY
CCW	CEMENT CONCRETE WALK
CD	CHECK DAM
CE	CONSTRUCTION ENTRANCE
CEM	CEMENT
CFS	COMPOST FILTER SOCK
CG	CLEAR AND GRUB VEGETATION
CH	CHORD LENGTH
CI	CURB INLET
CIP	CAST IRON PIPE
CJ	CONSTRUCTION JOINT
CL	CENTERLINE
CLDI	CEMENT-LINED DUCTILE IRON
CLF	CHAIN LINK FENCE
CLSM	CONTROLLED LOW STRENGTH MATERIAL
CLR	CLEAR
CLS	CLASS
CM	SAWCUT AND MATCH
CMP	CORRUGATED METAL PIPE
CO	CLEANOUT
CONC	CONCRETE
CONT	CONTINUOUS
CONST	CONSTRUCTION
CP	CONCRETE PAD
CR GR	GROWN GRADE
CSP	CORRUGATED STEEL PIPE
CSTR	CONCRETE STAIRS
CTE	CONNECT TO EXISTING
CW	CROSSWALK
DEMO	DEMOLITION
DET	DETECTABLE
DHV	DESIGN HOURLY VOLUME
DI	DROP INLET
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DIV	DIVERSION
DMH	DRAIN MANHOLE
DTP	DRIPLINE TREE PROTECTION
DWL	DOTTED WHITE LINE
DWLEx	DOTTED WHITE LINE EXTENSION
DBWL	DOUBLE WHITE LINE
DWP	DETECTABLE WARNING PAVER
DYL	DOTTED YELLOW LINE
DYLEx	DOTTED YELLOW LINE EXTENSION
DBYL	DOUBLE YELLOW LINE
DW	STEADY DONT WALK - PORTLAND ORANGE
DWY	DRIVEWAY
EJ	EXPANSION JOINT
ELEV (or EL)	ELEVATION
EMB	EMBANKMENT
EMH	ELECTRIC MANHOLE
EOP	EDGE OF PAVEMENT
ETR	EXISTING TO REMAIN. PROTECT DURING CONSTRUCTION.

EXIST (or EX)

EXIST	EXISTING
EXC	EXCAVATION
F&C	FRAME AND COVER
F&G	FRAME AND GRATE
FDC	FIRE DEPARTMENT CONNECTION
FDN	FOUNDATION
FES	FLARED END SECTION
FFE	FINISH FLOOR ELEVATION
FLDSTN	FIELDSTONE
FND	FOUND
FT	FOOT
GAR	GARAGE
GD	GROUND
GG	GAS GATE
GI	GUTTER INLET
GIP	GALVANIZED IRON PIPE
GRAN	GRANITE
GRAV	GRAVEL
GRD	GRADE
GTD	GRADE TO DRAIN
GV	GATE VALVE
HCPS	HANDICAP ACCESSIBLE PARKING SIGN
HDBC	HEAVY DUTY BITUMINOUS CONCRETE
HDPE	HIGH DENSITY POLYETHYLENE PIPE
HDP5	HANDICAP ACCESSIBLE PARKING SIGN
HDW	HEADWALL
HMA	HOT MIX ASPHALT
HMAW	HOT MIXED ASPHALT WALKWAY
HOR	HORIZONTAL
HPR	HEADWALL PROTECTION RACK
HYD	HYDRANT
ID	INSIDE DIAMETER
INV	INVERT
JCT	JUNCTION
L=	LENGTH OF CURVE
LB	LEACH BASIN
LOD	LIMIT OF DISTURBANCE
LP	LOW POINT
LPR	LICENSE PLATE READER
LS	LOAM AND SEED
LSOD	LOAM AND SOD
LT	LEFT
LTP	LIGHT POLE
MAX	MAXIMUM
MB	MAILBOX
MCW	MONOLITHIC CONCRETE WALK
MH	MANHOLE
MIN	MINIMUM
MON	MONITORING
MUTCD	MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION
NIC	NOT IN CONTRACT
NO	NUMBER
NTS	NOT TO SCALE
OCS	OUTLET CONTROL STRUCTURE
OD	OUTSIDE DIAMETER
OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
OWS	OIL WATER SEPARATOR
PCC	POINT OF CURVATURE
PCFES	PRECAST CONCRETE FLARED END SECTION
PCTC	PRECAST CONCRETE TRANSITION CURB
PCR	PEDESTRIAN CURB RAMP
PE	POLYETHYLENE
PERF	PERFORATED
PGL	PROFILE GRADE LINE
PHMA	POROUS HOT MIXED ASPHALT PAVEMENT
PI	POINT OF INTERSECTION
PIV	POST INDICATOR VALVE
POC	POINT ON CURVE
POT	POINT ON TANGENT
PM	PAVEMENT MARKING
PRC	POINT OF REVERSE CURVATURE
PROJ	PROJECT
PROP	PROPOSED
PSB	PLANTABLE SOIL BORROW
PT	POINT OF TANGENCY
PVC	POINT OF VERTICAL CURVATURE
PVCH	POLYVINYL CHLORIDE
PVI	POINT OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENCY
PVMT	PAVEMENT
PWW	PAVED WATER WAY
OPA	QUALIFYING PERVIOUS AREA
R&D	REMOVE AND DISPOSE
R&R	REMOVE AND RESET
R&S	REMOVE AND STACK
R=	RADIUS
RA	RAILING

RCP

RCP	REINFORCED CONCRETE PIPE
RDWY	ROADWAY
REM	REMOVE
RET	RETAIN
RET WALL	RETAINING WALL
RRLS	RIPRAP LEVEL SPREADER
ROW	RIGHT OF WAY
RR	RAILROAD
RRS	RIPRAP SLOPE
RS	RIPRAP SPILLWAY
RT	RIGHT
RTAD	REFER TO ARCHITECTURAL DRAWINGS
RTED	REFER TO ELECTRICAL DRAWINGS
RTFPD	REFER TO FIRE PROTECTION DRAWINGS
RTLD	REFER TO LANDSCAPE DRAWINGS
RTMD	REFER TO MECHANICAL DRAWINGS
RTPD	REFER TO PLUMBING DRAWINGS
RTSD	REFER TO STRUCTURAL DRAWINGS
S=	SLOPE
SB	SAND BAG EROSION CONTROL BARRIER
SOR	STANDARD DIMENSIONAL RATIO
SED	SEDIMENT
SESC	SOIL EROSION AND SEDIMENT CONTROL
SFL	STATE FREEWAY LINE
SFCD	SEDIMENT FOREBAY CHECK DAM
SG	SWING GATE
SHL	STATE HIGHWAY LINE
SHLD	SHOULDER
SHLO	STATE HIGHWAY LAYOUT
SHP	HANDICAP PARKING PAVEMENT MARKING
SM	SEDIMENT MARKER
SMH	SEWER MANHOLE
SSD	STOPPING SIGHT DISTANCE
ST	STREET
STA	STATION
SW	SIDEWALK
SWL	SINGLE SOLID WHITE LINE
SWR	SEWER
SYL	SINGLE SOLID YELLOW LINE
T=	TANGENT DISTANCE OF CURVE/TRUCK %
TAN	TANGENT
TD	TEMPORARY DIVERSION
TEMP	TEMPORARY
TC	TOP OF CURB
TDS	TEMPORARY DIVERSION SWALE
TGP	TREE GROUP PROTECTION
TIP	TEMPORARY INLET PROTECTION
TMH	TELEPHONE MANHOLE
TOS	TOP OF SLOPE
TP	TEST PIT
TRAN	TRANSITION
TRM	TURF REINFORCEMENT MAT
TS	TOP OF STAIR (FINISHED GRADE OF TOP STAIR)
TST	TEMPORARY SEDIMENT TRAP
TSW	TEMPORARY SWALE
TW	TOP OF WALL
TYP	TYPICAL
UP	UTILITY POLE
VAR	VARIES
VERT	VERTICAL
VCC	VERTICAL CONCRETE CURB
VCP	VEHICULAR CONCRETE PAVEMENT
VFC	VITRIFIED CLAY
VEG	VEGETATION
VEH	VEHICULAR
VFS	VEGETATED FILTER STRIP
VGC	VERTICAL GRANITE CURB
VGTC	VERTICAL GRANITE TRANSITION CURB
VLF	VINYL FENCE
w/	WITH
WG	WATER GATE
WIP	WROUGHT IRON PIPE
WM	WATER METER/WATER MAIN
WMH	WATER MANHOLE
WPM	WATER PAINT MARK
X-SECT	CROSS SECTION
YD	YARD DRAIN
4DY	4" DOUBLE YELLOW EPOXY RESIN PAVEMENT MARKING
4W	4" SOLID WHITE EPOXY RESIN PAVEMENT MARKING
12W	12" SOLID WHITE EPOXY RESIN PAVEMENT MARKING

MASSACHUSETTS ABBREVIATIONS

<u>GENERAL</u>	
CMR	CODE OF MASSACHUSETTS REGULATIONS
MASSDEP	MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION
MASSDOT	MASSACHUSETTS DEPARTMENT OF TRANSPORTATION
MA STD.	MASSACHUSETTS STANDARD
MHB	MASSACHUSETTS HIGHWAY BOUND

CONSTRUCTION NOTES - MASSDOT STANDARDS

106.3.0	=	METHOD OF SETTING VERTICAL CURB - MA STD. 106.3.0
107.2.0	=	WHEELCHAIR RAMPS LESS THAN 12"4" SIDEWALK - MA STD. 107.2.0
107.2.1	=	WHEELCHAIR RAMP ON NARROW SIDEWALK WITH DETECTABLE WARNING PANEL - MA STD. 107.2.1
107.6.0	=	WHEELCHAIR RAMPS FOR ONE CONTINUOUS DIRECTION OF PEDESTRIAN TRAVEL - MA STD. 107.6.0
107.6.5	=	DETECTABLE WARNING PANEL FOR WHEELCHAIR RAMPS - MA STD. 107.6.5
107.6.9	=	WHEELCHAIR RAMP WITH LANDSCAPING STRIP - MA STD. 107.6.9
107.9.0	=	CURB TRANSITION LENGTH FOR WHEELCHAIR RAMPS - MA STD. 107.9.0
201.4.0M	=	PRECAST CONCRETE CATCH BASIN - MA STD. 201.4.0
201.6.0	=	CATCH BASIN FRAME - MA STD. 201.6.0
201.11.0	=	DROP INLET GRATE - MA STD. 201.11.0
201.12.0	=	CATCH BASIN HOOD - MA STD. 201.12.0
202.4.0	=	PRECAST CONCRETE MANHOLES 9" OR LESS IN DEPTH - MA STD. 202.4.0
204.2.0	=	GUTTER INLET - MA STD. 204.2.0
206.8.0	=	REINFORCED CONCRETE PIPE FLARED ENDS - MA STD. 206.8.0
209.1.0	=	SUBDRAIN - MA STD. 209.1.0

EXISTING	LEGEND	PROPOSED
—————	PROPERTY LINE	—————
—————	SETBACKS	—————
—————	EASEMENT LINE	—————
—————	CONTOUR	—————
—————	SPOT ELEVATION	—————
—————	DRAINAGE LINE	—————
—————	WATER LINE	—————
—————	FIRE WATER LINE	—————
—————	SANITARY SEWER LINE	—————
—————	GAS LINE	—————
—————	ELECTRIC	—————
—————	TELEPHONE LINE	—————
—————	OVERHEAD ELECTRIC LINE	—————
—————	LIMIT OF DISTURBANCE	—————
—————	LIMIT OF DISTURBANCE/COMPOST FILTER SOCK	—————
■	CATCH BASIN	■
⊕	HYDRANT	⊕
⊙	DRAINAGE MANHOLE	⊙
⊙	SEWER MANHOLE	⊙
⊙	UTILITY POLE	⊙
⊙	WATER VALVE	⊙
⊙	GAS GATE	⊙
⊙	LIGHT POLE	⊙
⊙	TREE LINE	⊙
⊙	CHAIN LINK FENCE	⊙
⊙	WIRE FENCE	⊙
⊙	WOOD FENCE	⊙
⊙	FENCE	⊙
⊙	CURBING	⊙
⊙	EDGE OF PAVEMENT	⊙
⊙	SAWCUT LINE	⊙
⊙	SIGN	⊙
⊙	COMPOST FILTER SOCK	⊙
⊙	SAND BAGS	⊙
⊙	NO. OF PARKING SPACES	⊙

Revision Schedule		
Number	Revision	Date

Registrations

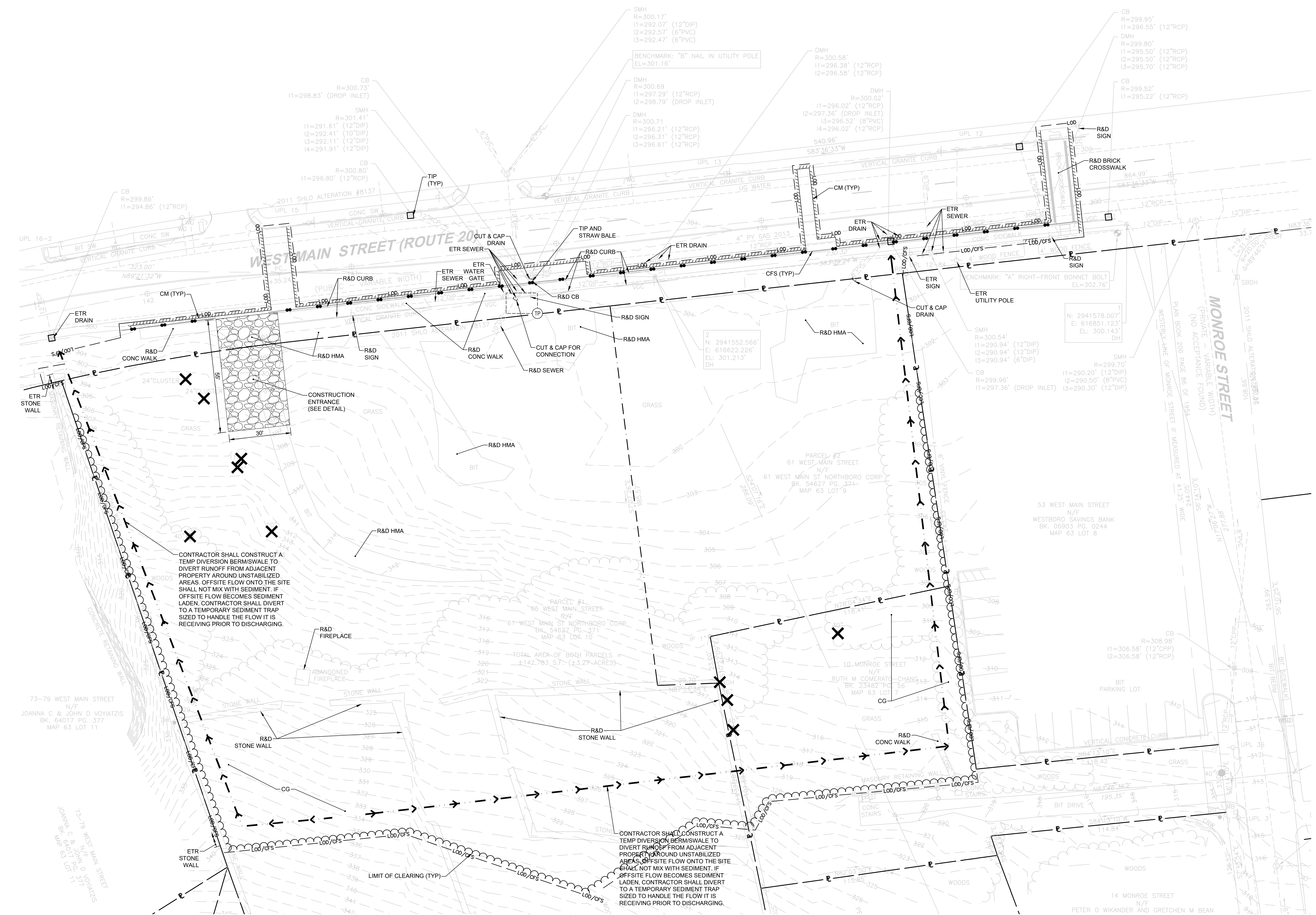
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Project
NORTHBOROUGH FIRE STATION
63 WEST MAIN STREET
TOWN OF NORTHBOROUGH, MA

LEGEND

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DEMOLITION NOTES:

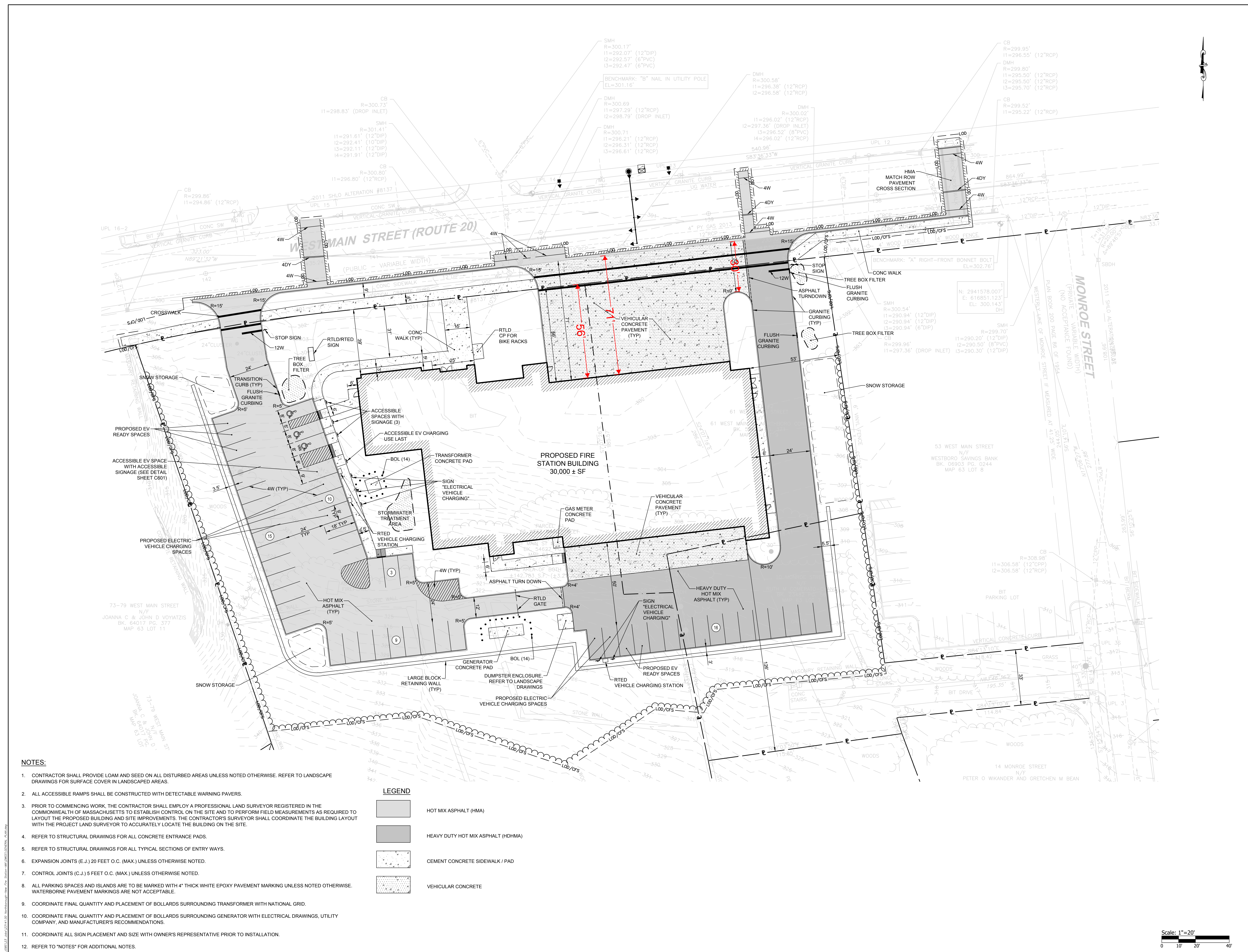
- UTILITY SERVICE TO THE FACILITY SHALL NOT BE INTERRUPTED DUE TO UTILITY WORK SHOWN HEREON. ALL UTILITIES SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.
- PRIOR TO COMMENCING SITE WORK IN ANY AREA, THE CONTRACTOR SHALL LOCATE EXISTING UTILITIES WITH THE PROJECT AREA USING GROUND-PENETRATING RADAR OR OTHER NONDESTRUCTIVE SURVEY METHODS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY EXISTING UTILITIES OR STRUCTURES WITHIN THE PROJECT AREA DEPICTED AND NOT DEPICTED ON THE PLANS. ANY DAMAGE TO EXISTING WORKING UTILITIES OR STRUCTURES NOT INTENDED TO BE REMOVED SHALL BE RESTORED TO ORIGINAL CONDITION AT NO ADDITIONAL COST TO THE OWNER.
- PRIOR TO ANY UTILITY AND/OR DRAINAGE SYSTEM DEMOLITION, PROVISIONS FOR MAINTAINING THE UTILITY SHALL BE APPROVED BY THE OWNER OR THE OWNER'S REPRESENTATIVE BEFORE ANY RELATED WORK MAY COMMENCE.
- ALL TEMPORARILY CUT UTILITIES SHALL BE PROTECTED FROM SEDIMENTATION UNTIL IT IS CONNECTED IN ITS POST-CONSTRUCTION POSITION.
- REFER TO ELECTRICAL SITE PLAN FOR ALL ELECTRICAL AND TELECOMMUNICATIONS WORK, INCLUDING DEMOLITION.
- REFER TO "NOTES" FOR ADDITIONAL NOTES.

EROSION AND SEDIMENT CONTROL NOTES:

- THE EROSION AND SEDIMENTATION CONTROLS SHOWN ON THE PLANS ARE INTENDED TO REPRESENT THE MINIMUM CONTROLS NECESSARY TO MEET ANTICIPATED SITE CONDITIONS. ADDITIONAL MEASURES SHALL BE IMPLEMENTED AS CONDITIONS WARRANT OR AS DIRECTED BY THE OWNER OR OWNER'S REPRESENTATIVE.
- THE CONTRACTOR SHALL FURNISH, INSTALL, AND MAINTAIN SILT SACKS IN ALL EXISTING AND NEWLY INSTALLED CATCH BASINS UNTIL THE UPSTREAM AREA IS STABILIZED.
- CONTRACTOR SHALL INSTALL AND MAINTAIN CONSTRUCTION ENTRANCES AT ALL POINTS OF EGRESS FROM THE SITE THROUGHOUT CONSTRUCTION.
- THE CONTRACTOR SHALL MAINTAIN EROSION CONTROLS THROUGHOUT CONSTRUCTION. THE CONTRACTOR SHALL REPLACE DAMAGED EROSION CONTROLS AT THE OWNER AND ENGINEER'S REQUEST AT NO ADDITIONAL EXPENSE TO THE OWNER.
- THE CONTRACTOR SHALL NOT LEAVE DISTURBED AREAS UNSTABILIZED FOR PERIODS MORE THAN 14 DAYS. PROVIDE TEMPORARY SEED OR MULCH ON DISTURBED AREAS THAT WILL REMAIN EXPOSED FOR GREATER THAN 14 DAYS.
- INSTALL EROSION CONTROLS DOWNSTREAM OF ANY DISTURBED AREAS TO REDUCE POTENTIAL FOR EROSION. CONTRACTOR SHALL INDICATE LOCATIONS OF EROSION CONTROLS FOR REVIEW WITH GENERAL CONTRACTOR AND OWNER'S REPRESENTATIVE PRIOR TO COMMENCING WORK.
- REFER TO "NOTES" FOR ADDITIONAL NOTES.

LEGEND:

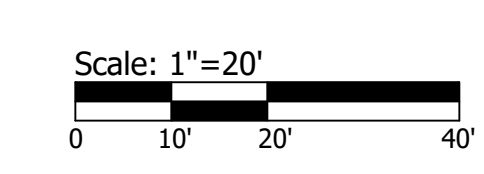
- REMOVE & DISPOSE TREE, DISPOSE OF TREE AND STUMP OFF-SITE.
- PROTECT EXISTING TREE TO REMAIN.
- PRIOR TO COMMENCING WORK, CONTRACTOR SHALL EXCAVATE TEST PIT TO CONFIRM LOCATION, ELEVATION, AND SIZE OF UTILITY. PROVIDE INFORMATION TO ENGINEER.
- TDS - TEMPORARY DIVERSION SWALE/BERM
- TST - TEMPORARY SEDIMENT TRAP
- TST LIMITS OF WET STORAGE AREA
- TST LIMITS OF DRY STORAGE AREA



- NOTES:**
- CONTRACTOR SHALL PROVIDE LOAM AND SEED ON ALL DISTURBED AREAS UNLESS NOTED OTHERWISE. REFER TO LANDSCAPE DRAWINGS FOR SURFACE COVER IN LANDSCAPED AREAS.
 - ALL ACCESSIBLE RAMPS SHALL BE CONSTRUCTED WITH DETECTABLE WARNING PAVERS.
 - PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL EMPLOY A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE COMMONWEALTH OF MASSACHUSETTS TO ESTABLISH CONTROL ON THE SITE AND TO PERFORM FIELD MEASUREMENTS AS REQUIRED TO LAYOUT THE PROPOSED BUILDING AND SITE IMPROVEMENTS. THE CONTRACTOR'S SURVEYOR SHALL COORDINATE THE BUILDING LAYOUT WITH THE PROJECT LAND SURVEYOR TO ACCURATELY LOCATE THE BUILDING ON THE SITE.
 - REFER TO STRUCTURAL DRAWINGS FOR ALL CONCRETE ENTRANCE PADS.
 - REFER TO STRUCTURAL DRAWINGS FOR ALL TYPICAL SECTIONS OF ENTRY WAYS.
 - EXPANSION JOINTS (E.J.) 20 FEET O.C. (MAX.) UNLESS OTHERWISE NOTED.
 - CONTROL JOINTS (C.J.) 5 FEET O.C. (MAX.) UNLESS OTHERWISE NOTED.
 - ALL PARKING SPACES AND ISLANDS ARE TO BE MARKED WITH 4" THICK WHITE EPOXY PAVEMENT MARKING UNLESS NOTED OTHERWISE. WATERBORNE PAVEMENT MARKINGS ARE NOT ACCEPTABLE.
 - COORDINATE FINAL QUANTITY AND PLACEMENT OF BOLLARDS SURROUNDING TRANSFORMER WITH NATIONAL GRID.
 - COORDINATE FINAL QUANTITY AND PLACEMENT OF BOLLARDS SURROUNDING GENERATOR WITH ELECTRICAL DRAWINGS, UTILITY COMPANY, AND MANUFACTURER'S RECOMMENDATIONS.
 - COORDINATE ALL SIGN PLACEMENT AND SIZE WITH OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.
 - REFER TO "NOTES" FOR ADDITIONAL NOTES.

LEGEND

	HOT MIX ASPHALT (HMA)
	HEAVY DUTY HOT MIX ASPHALT (HDHMA)
	CEMENT CONCRETE SIDEWALK / PAD
	VEHICULAR CONCRETE



Revision Schedule		
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Registrations

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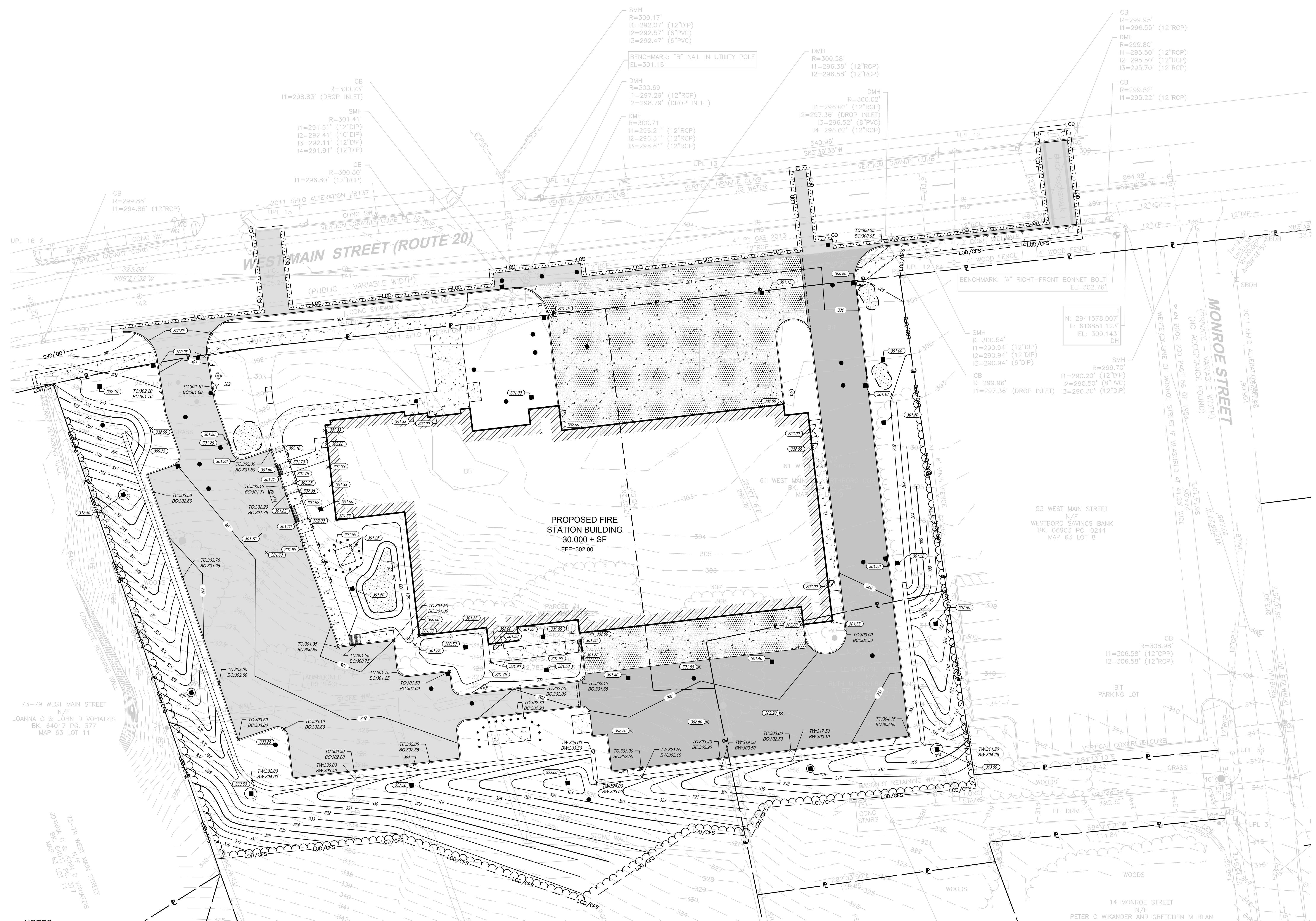
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Project
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TOWN OF NORTHBOROUGH, MA

GRADING PLAN

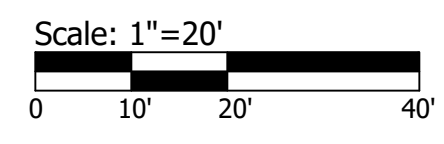
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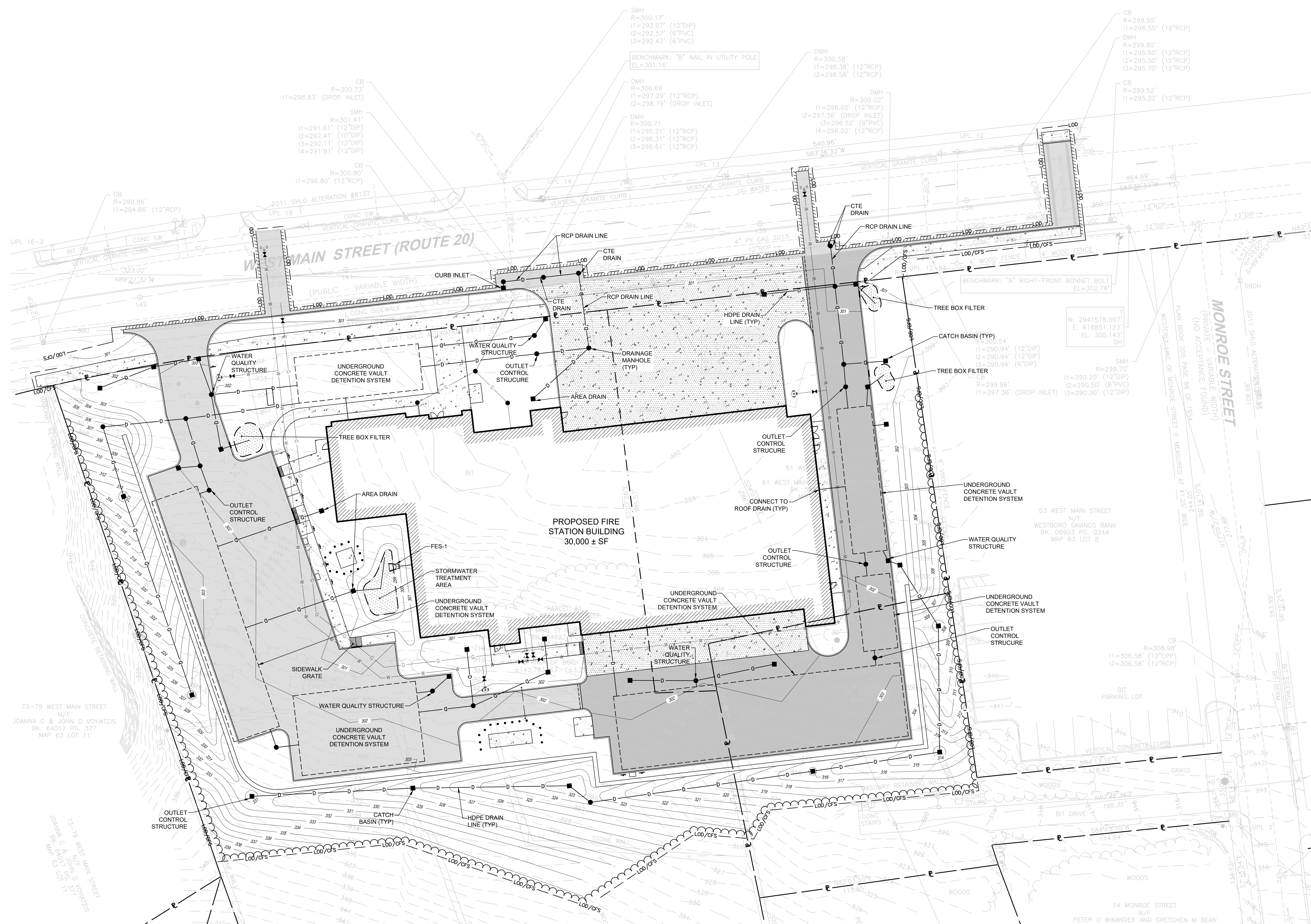


NOTES:

1. AT ALL LOCATIONS WHERE EXISTING CURBING OR PAVEMENT ABUT NEW CONSTRUCTION, THE EDGE OF THE EXISTING CURB OR PAVEMENT SHALL BE SAW CUT TO A CLEAN, SMOOTH EDGE. BLEND NEW PAVEMENT AND CURBS SMOOTHLY INTO EXISTING BY MATCHING LINES, GRADES AND JOINTS.
2. ALL UTILITY COVERS, GRATES, ETC. SHALL BE ADJUSTED TO BE FLUSH WITH THE SURROUNDING SURFACE OR PAVEMENT FINISH GRADE. RIM ELEVATIONS OF STRUCTURES AND MANHOLES ARE APPROXIMATE. FINAL ELEVATIONS ARE TO BE SET FLUSH AND CONSISTENT WITH THE GRADING PLANS.
3. PITCH EVENLY BETWEEN SPOT GRADES. ALL PAVED AREAS MUST PITCH TO DRAIN AT A MIN. OF 1/8" PER FOOT UNLESS SPECIFIED.
4. THE PROPOSED WALKWAYS SHALL HAVE A MAXIMUM CROSS SLOPE OF 2% AND A MAXIMUM RUNNING SLOPE OF 5% AS SHOWN ON CONSTRUCTION DETAILS.
5. ALL GRADING AT ACCESSIBLE ROUTES SHALL COMPLY WITH THE RULES AND REGULATIONS OF THE AMERICANS WITH DISABILITIES ACT (ADA) OF 2010, LATEST EDITION.
6. BASIN BERM SHALL BE CONSTRUCTED WITH COMMON BORROW PLACED IN 12" LEFTS AND COMPACTED TO 95% TO FINISH GRADE. REMOVE ALL EXISTING TOPSOIL AND ORGANIC MATERIAL PRIOR TO CONSTRUCTING BASIN BERM.
7. TURF REINFORCEMENT MAT (TRM) SHALL BE INSTALLED ON ALL SLOPES 3:1 OR GREATER.
8. REFER TO "NOTES" FOR ADDITIONAL NOTES.

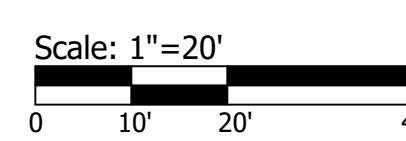


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NOTES:

1. ALL CATCH BASINS AND DRAIN MANHOLES SHALL BE 4' DIA. PRECAST CONCRETE UNLESS NOTED OTHERWISE.
2. ALL DRAIN PIPES SHALL BE SMOOTH INTERIOR CORRUGATED HIGH DENSITY POLYETHYLENE UNLESS NOTED OTHERWISE.
3. REINFORCED CONCRETE PIPE (RCP) SHALL BE CLASS III UNLESS NOTED OTHERWISE.
4. ALL SLOPES PROVIDED ARE FT/FT.
5. ALL CATCH BASINS AND AREA DRAINS SHALL BE INSTALLED WITH A SUMP AND OUTLET HOOD PER THE DETAIL.
6. REFER TO "NOTES" FOR ADDITIONAL NOTES.



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Registrations

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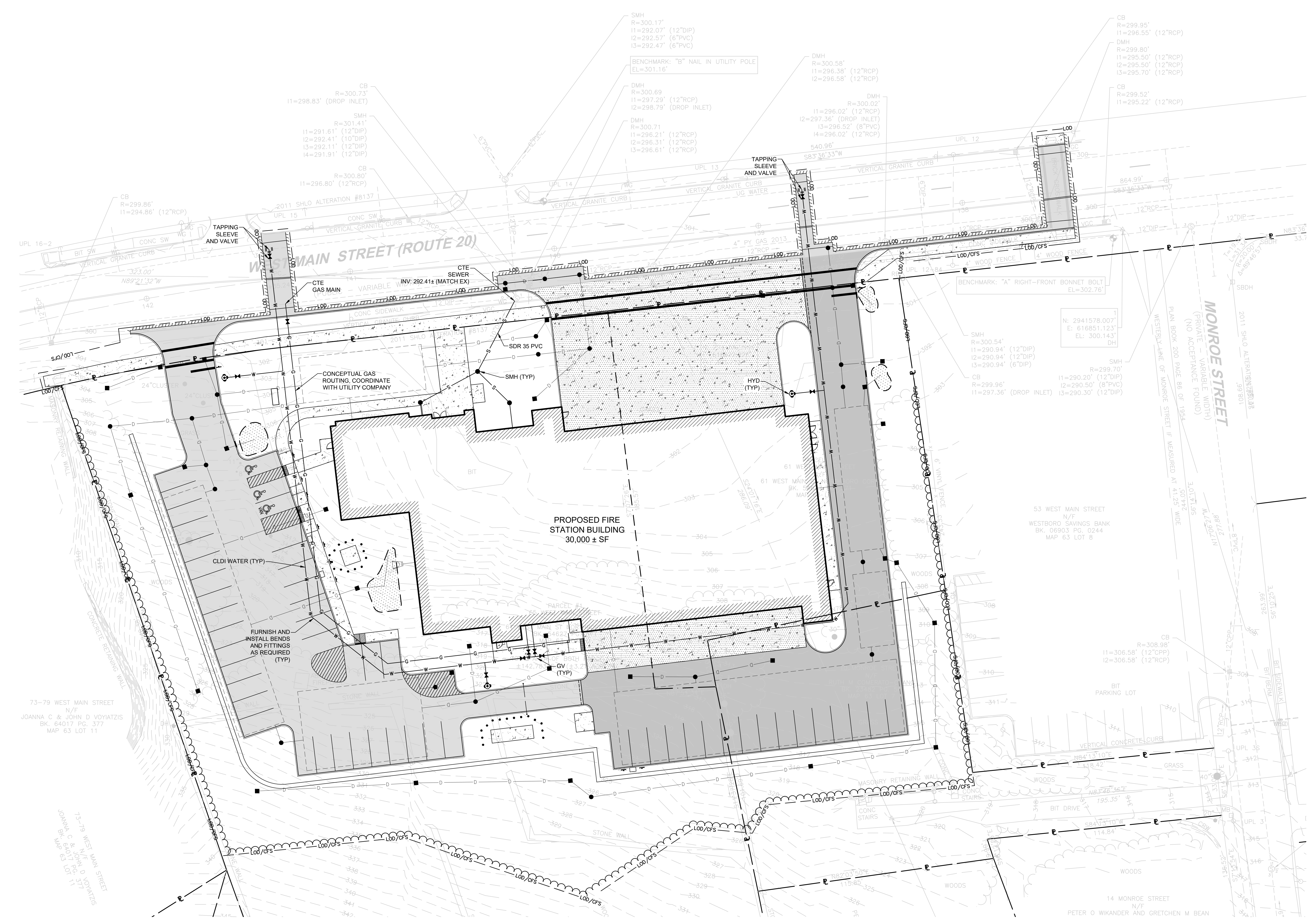
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Project
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UTILITIES PLAN

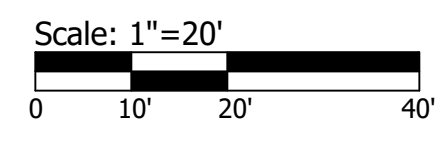
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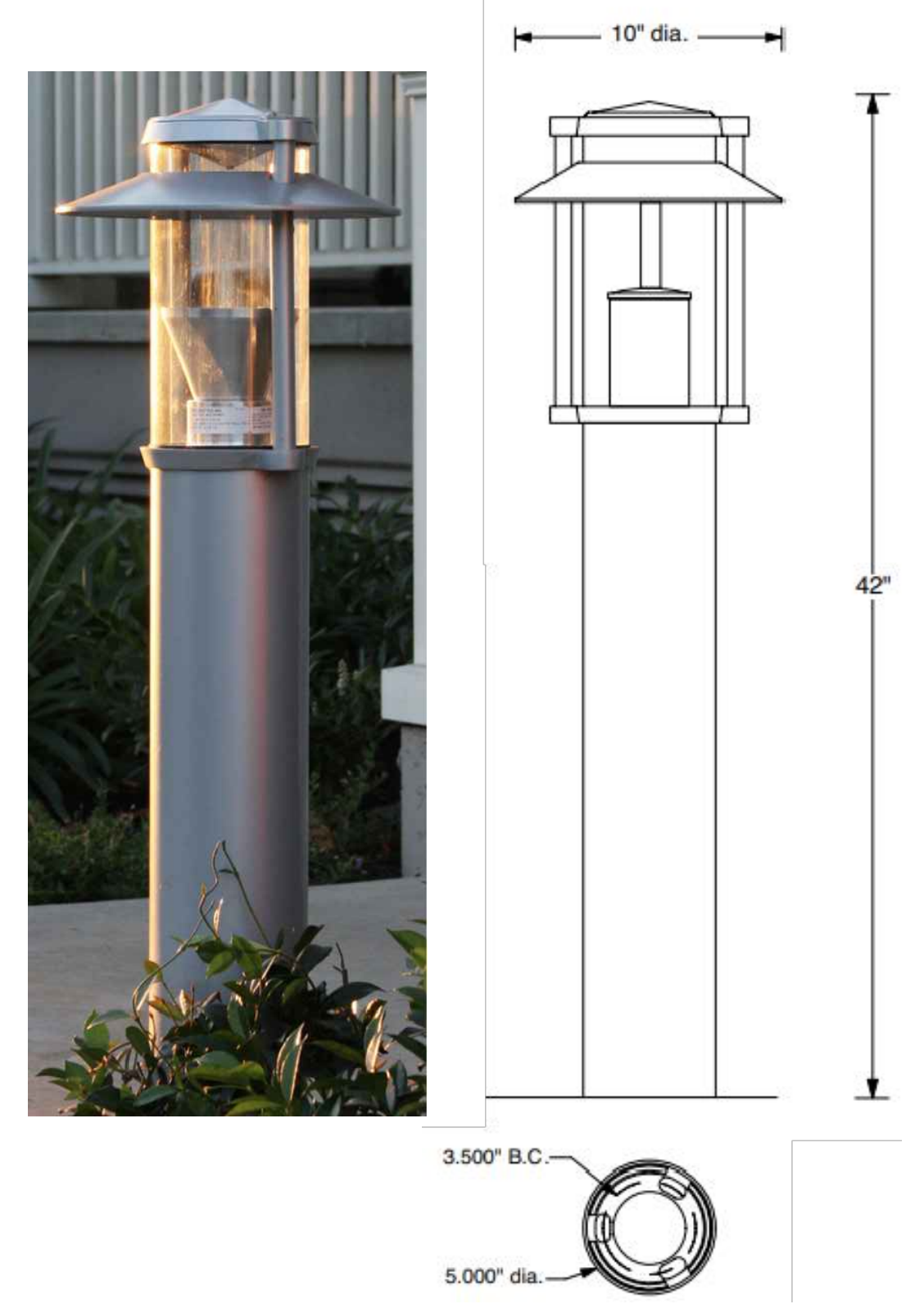
NOTES:

1. REINFORCED CONCRETE PIPE (RCP) SHALL BE CLASS III UNLESS NOTED OTHERWISE.
2. ALL SLOPES PROVIDED ARE FT/FT.
3. ALL SEWER MANHOLES SHALL BE 4' DIA. UNLESS NOTED OTHERWISE.
4. REFER TO ELECTRICAL DRAWINGS FOR INFORMATION ON ELECTRIC AND TEL/DATA DUCT BANKS AND STRUCTURES. ALL ELECTRICAL FACILITIES DISPLAYED FOR REFERENCE ONLY.
5. REFER TO "NOTES" FOR ADDITIONAL NOTES.

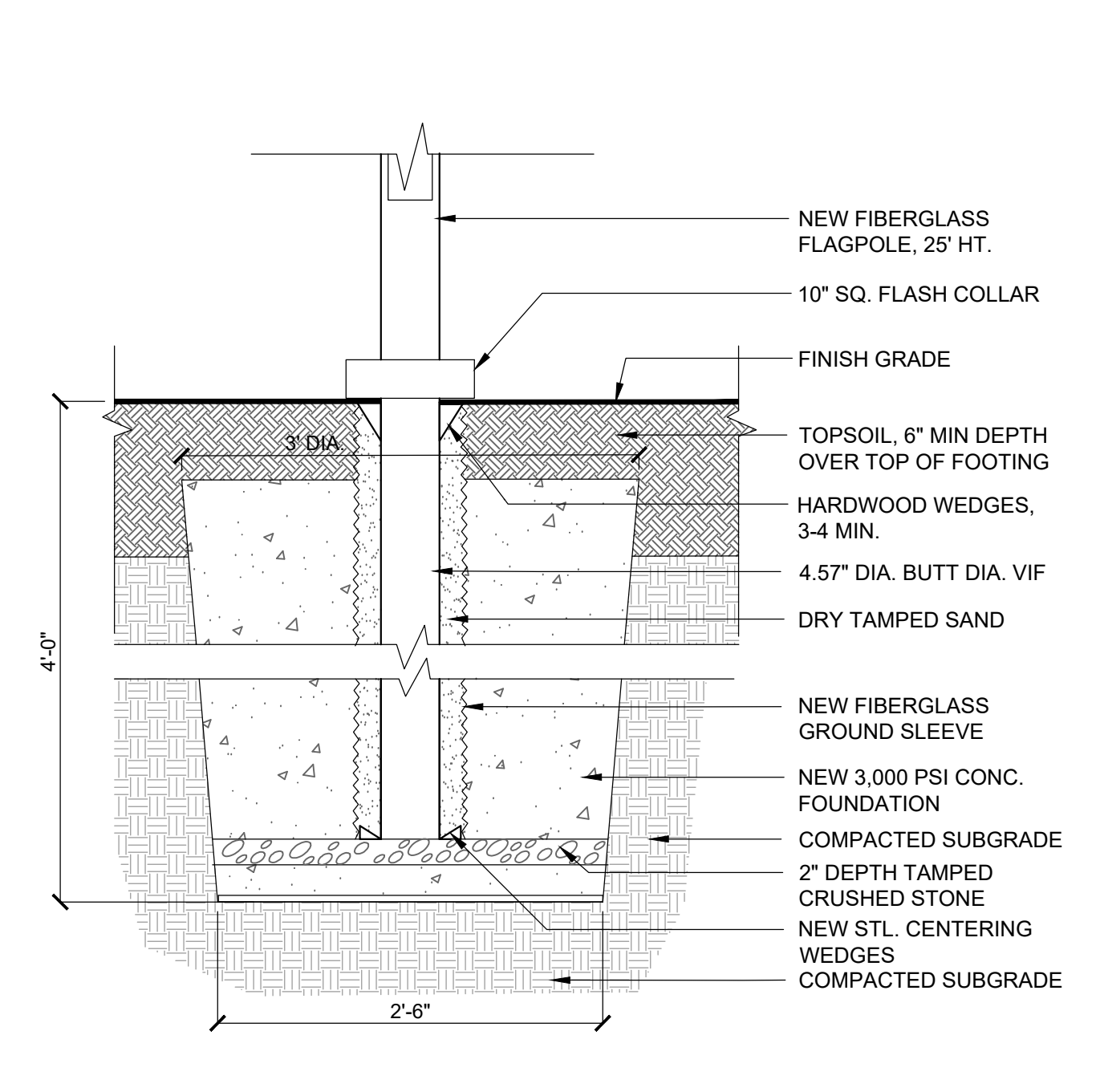


PLANT LIST					
KEY	QTY	BOTANICAL NAME	COMMON NAME	MIN. SIZE	REMARKS
TREES					
AC	9	ABIES CONCOLOR	WHITE FIR	6-7' HT.	B&B
AF	4	ACER FREEMANII 'ARMSTRONG'	ARMSTRONG MAPLE	3" CAL	B&B
AL	1	AMELANCHIER LAEVIS	ALLEGHENY SERVICEBERRY	6-7' HT.	B&B
AR	1	ACER RUBRUM 'RED SUNSET'	RED MAPLE	3" CAL	B&B
CC	2	CERCIS CANADENSIS	EASTERN REDBUD	7-8' HT.	B&B
LS	1	LIQUIDAMBAR STRYACIFLUA	SWEET GUM	3" CAL	B&B
PS	3	PINUS STROBUS	EASTERN WHITE PINE	6-7' HT.	B&B
QC	2	QUERCUS COCCINEA	SCARLET OAK	3" CAL	B&B
QM	3	QUERCUS MACROCARPA 'JFS-KW3'	URBAN PINNACLE BUR OAK	3" CAL	B&B
UA	3	ULMUS AMERICANA 'PRINCETON'	PRINCETON ELM	3" CAL	B&B
SHRUBS					
CA	22	CLETHRA ALNIFOLIA 'HUMMINGBIRD'	SWEET PEPPERBUSH	#3 CONT	3" OC
DL	35	DIERVILLA LONICERA	BUSH HONEYSUCKLE	#2 CONT	3.5" OC
IG	11	ILEX GLABRA	INKBERRY	#3 CONT	4" OC
IV	14	ILEX VERTICILLATA 'MARYLAND BEAUTY'	WINTERBERRY	#3 CONT	3" OC
VC	9	VACCINIUM CORYMBOSUM 'ZF06-079'	PINK ICING BLUEBERRY	#2 CONT	4" OC
PERENNIALS, GRASSES AND VINES					
AG	71	ANDROPOGON GERARDII 'RAIN DANCE'	RAIN DANCE BIG BLUESTEM	#2 CONT	2" OC
PT	25	PARTHENOCISSUS TRICUSPIDATA 'FENWAY PARK'	FENWAY PARK BOSTON IVY	#3 CONT	19" OC
SH	135	SPOROBOLUS HETEROLEPIS	PRAIRIE DROPSEED	#1 CONT	2" OC
SS	36	SCHIZACHYRIUM SCOPARIUM	LITTLE BLUESTEM	#2 CONT	2" OC
RAIN GARDEN					
AI	328	ASCLEPIAS INCARNATA	SWAMP MILKWEED	5" PLUG	12" OC
EM	204	EUTROCIUM MACULATUM	JOE PYE WEED	5" PLUG	12" OC
MF	171	MONARDA FISTULOSA	WILD BERGAMOT	5" PLUG	12" OC
SG	182	SOLIDAGO GRAMINIFOLIA	GRASS-LEAVED GOLDENROD	5" PLUG	12" OC
ZA	127	ZIZIA AUREA	GOLDEN ALEXANDER	5" PLUG	12" OC

LEGEND	
	NEW SHADE TREE
	NEW STREET TREE
	NEW EVERGREEN TREE
	NEW SHRUBS
	NEW MOWN SEEDED LAWN
	NEW SWALE SEED MIX
	NEW SLOPE MEADOW SEED MIX
	NEW ANNUAL FLOWER BED
	NEW GRASSES & PERENNIALS
	NEW VINE



8 BOLLARD LIGHT - DETAIL
SCALE: NTS



6 FLAGPOLE - SECTION
SCALE: 1"=1'-0"

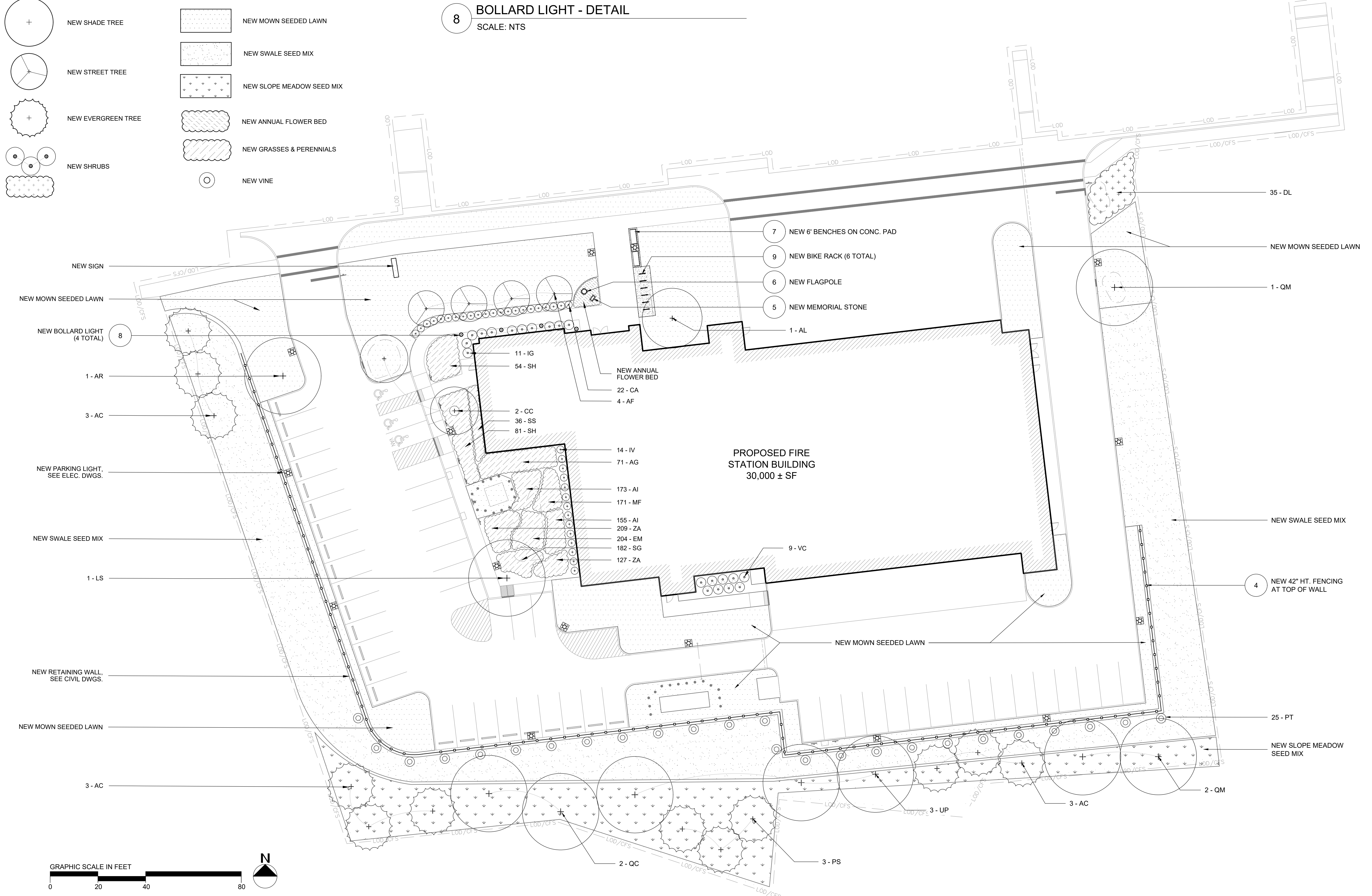


9 BIKE RACK - DETAIL
SCALE: NTS

- PLANTING NOTES:**
- ALL NEW TREES AND SHRUBS SHALL BE MULCHED WITH 2" MIN. DEPTH OF MULCH.
 - SEED ALL DISTURBED AREAS.
 - FOR LIMIT OF WORK, REFER TO CIVIL DRAWINGS.



7 BENCH - DETAIL
SCALE: NTS



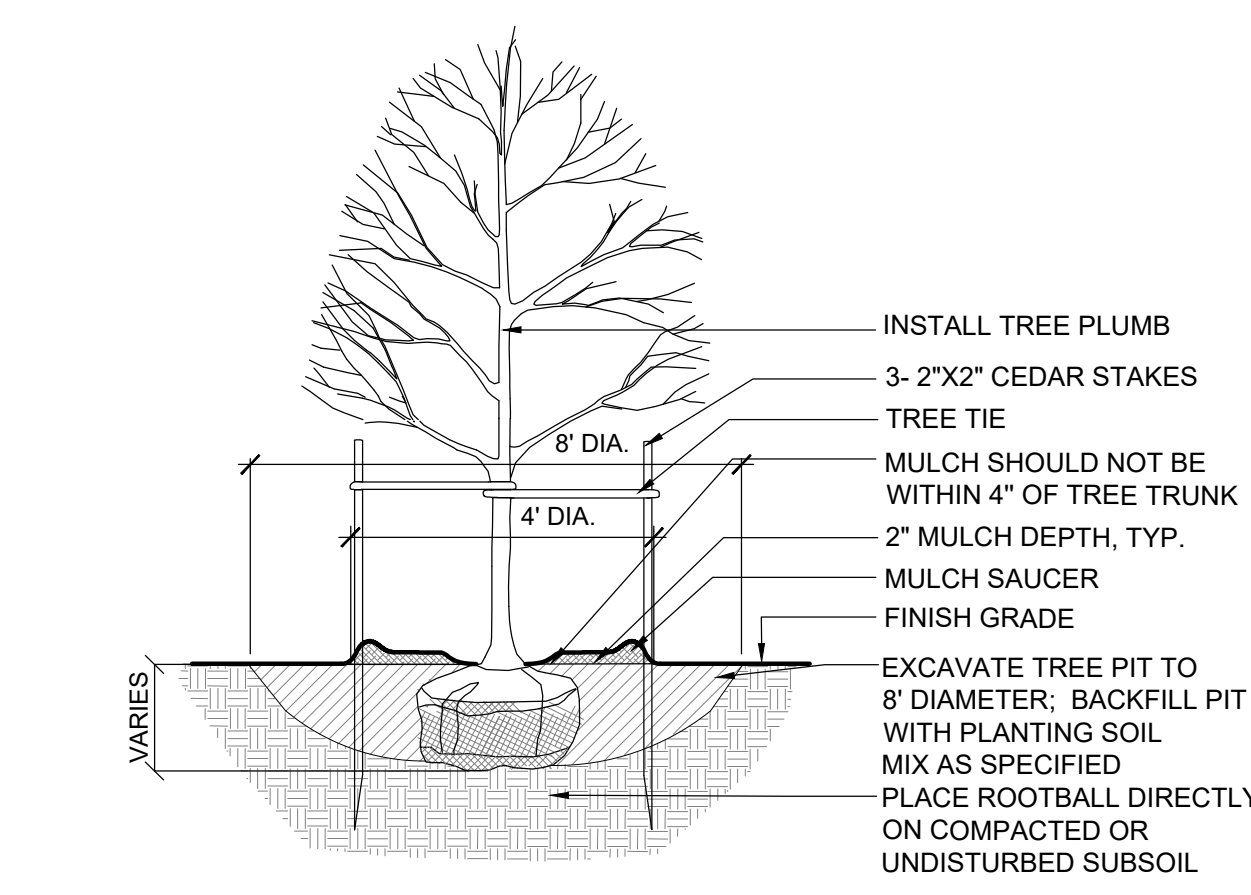
1 LANDSCAPE PLAN
SCALE: 1"=20'-0"



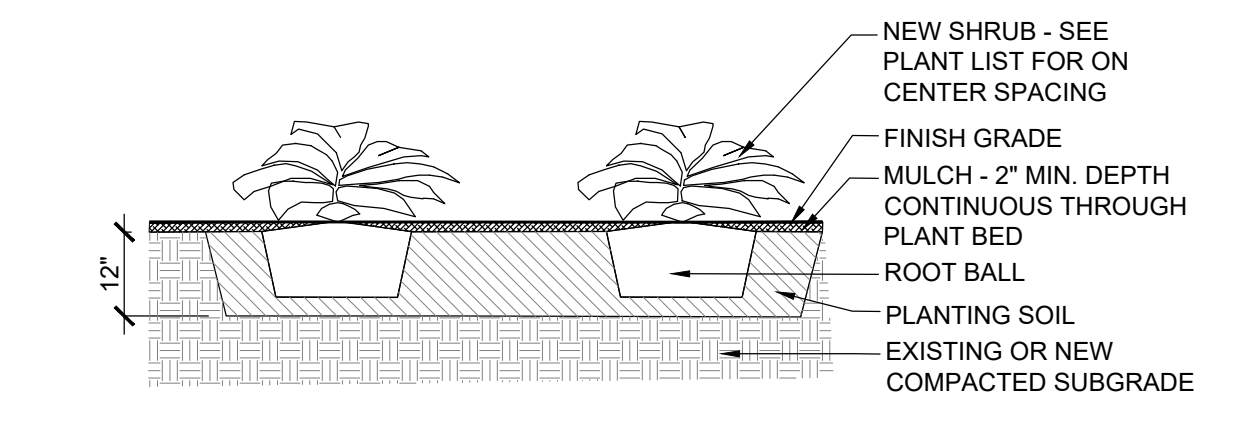
5 MEMORIAL STONE - DETAIL
SCALE: NTS



4 FENCE - DETAIL
SCALE: NTS



3 TREE PLANTING - SECTION
SCALE: NTS



2 SHRUB PLANTING - SECTION
SCALE: NTS



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Revision Schedule		
NO.	Revision	Date

Registrations

Consultants
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179 GREEN STREET
BOSTON, MA 02130
617-524-6265 T

Project
NORTHBOROUGH FIRE STATION
 63 WEST MAIN STREET
 TOWN OF NORTHBOROUGH, MA

Drawing Title
LANDSCAPE PLAN
 Drawn by
 NL SD RD
 02/22/2024
 Checked by
 Date
 22314
 Job number
 SCHEMATIC DESIGN PRICING
 Drawing set
 Drawing number
L-1

NO.	Revision	Date

Registrations

Consultants

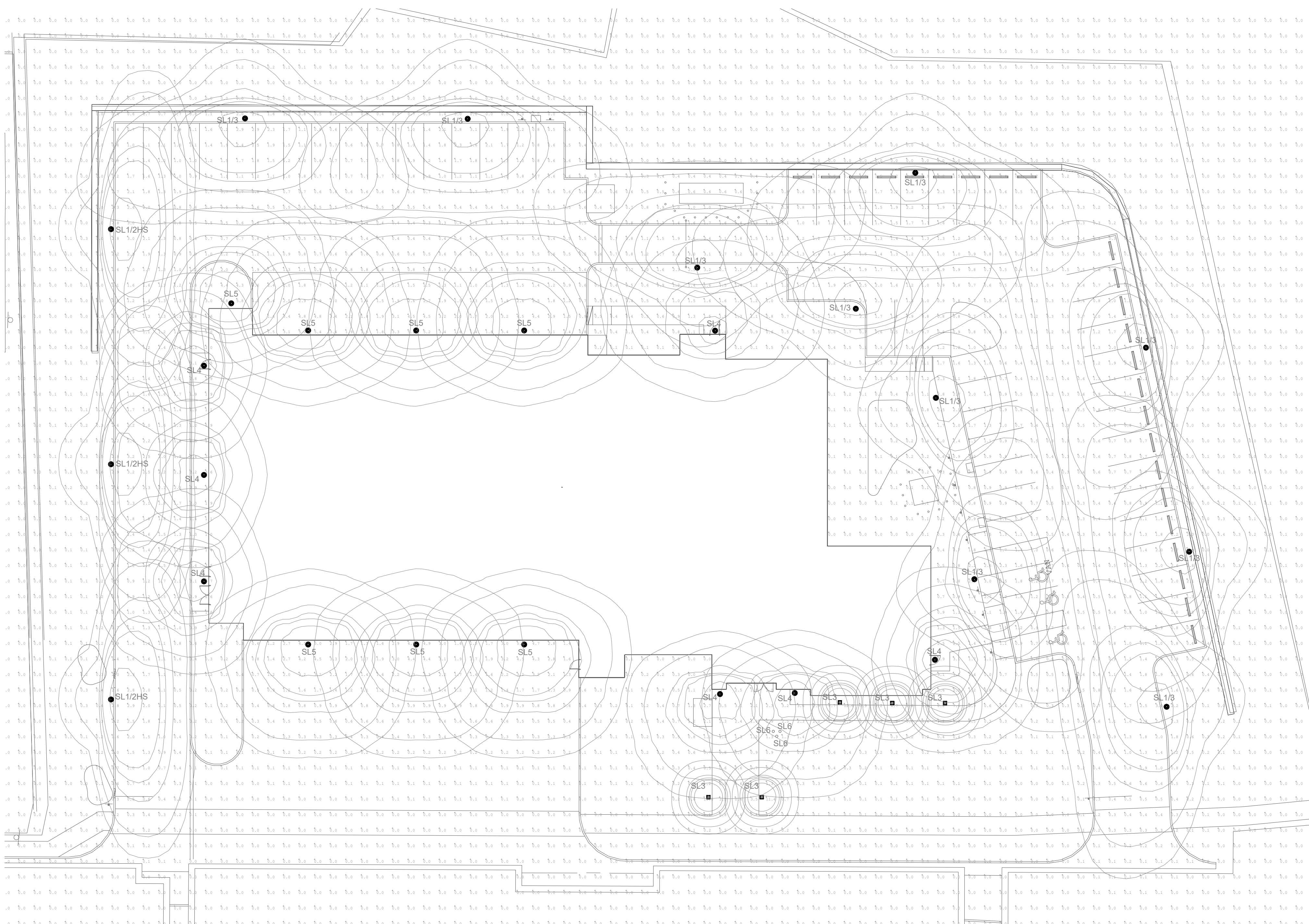


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Project
NORTHBOROUGH FIRE STATION
63 WEST MAIN STREET
TOWN OF NORTHBOROUGH, MA

Drawing Title
PHOTOMETRIC SITE PLAN AND DETAILS

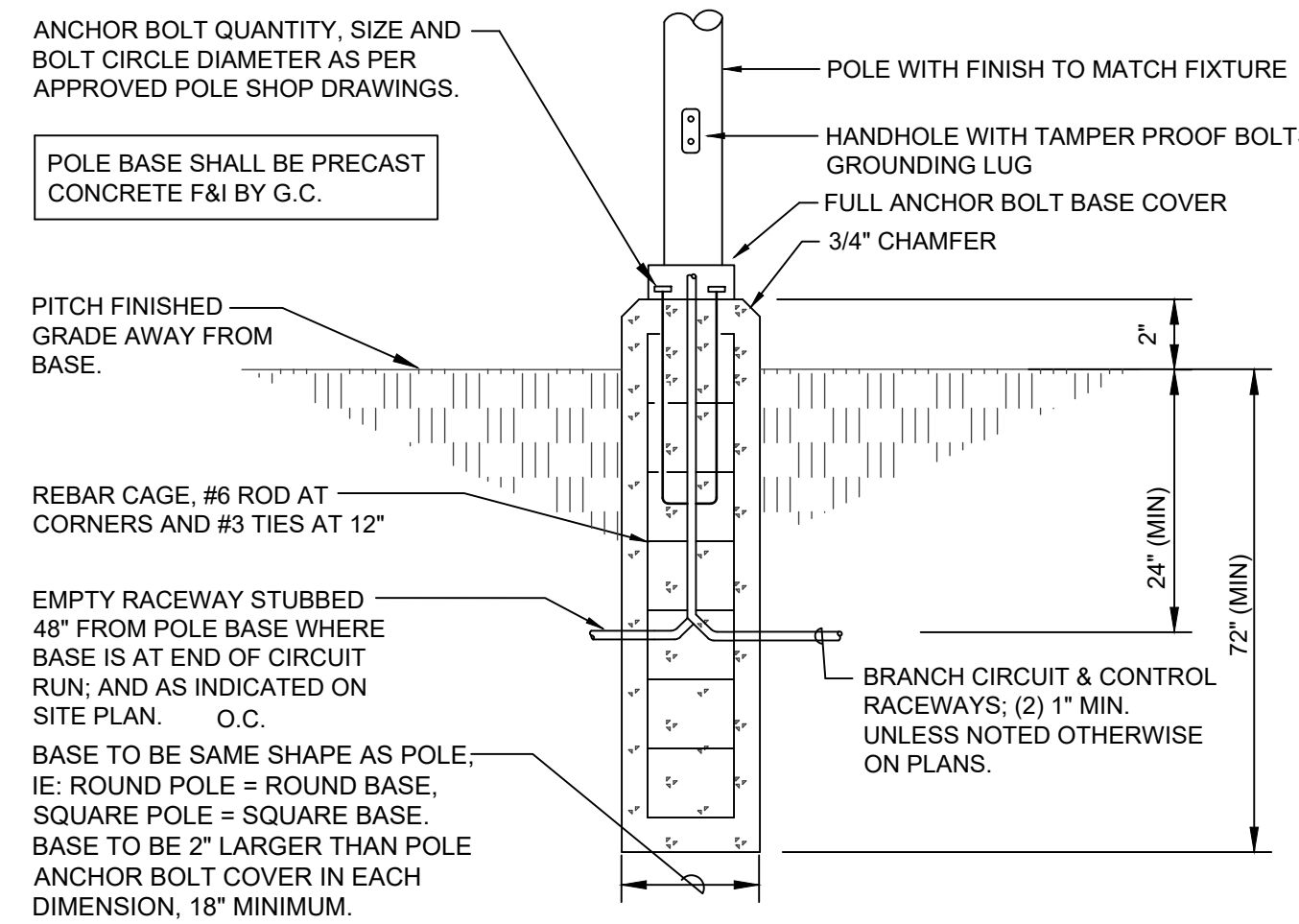
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Drawn by
2/21/2024 Checked by
Date
22314
Job number
DESIGN REVIEW
Drawing set



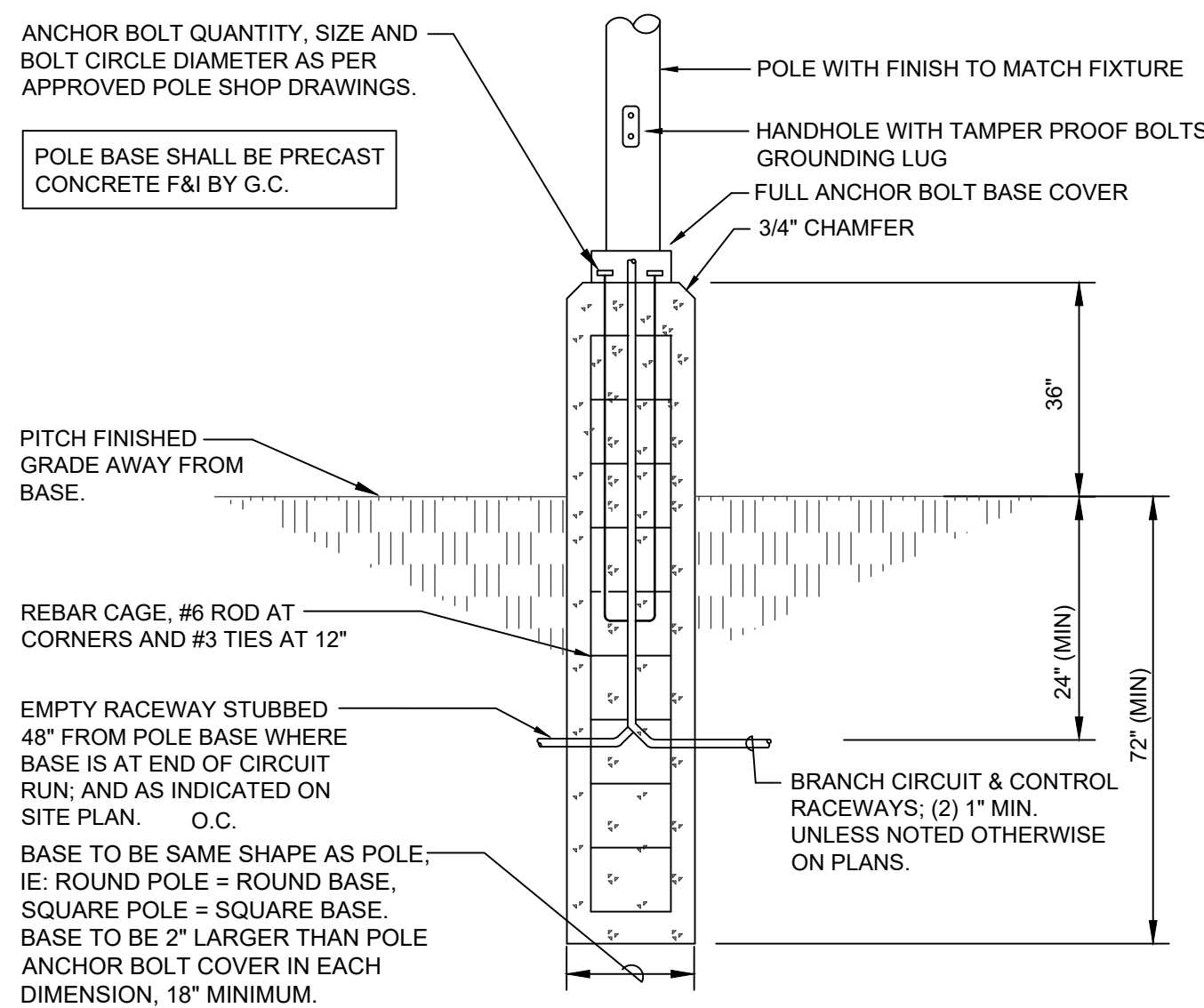
1
LC1.0
SITE PHOTOMETRIC PLAN
SCALE: 1" = 20'-0"

TYPE	MANUFACTURER	MODEL / SERIES NUMBER	MTG.	VOLTAGE	LIGHTING SOURCE			DESCRIPTION	MOUNTING HEIGHT ABOVE FINISHED GRADE (A.F.G.)
					LUMENS	WATTS	SOURCE/CCT		
SL1/3	SIGNIFY LIGHTING	DOS-30W16LED4K-T-LE3F	POLE	UNIVERSAL	3129	38	LED/4000K	SINGLE HEAD POLE MOUNTED FIXTURE WITH TYPE III DISTRIBUTION MOUNTED ON ROUND TAPERED ALUMINUM POLE RATED FOR 110MPH WIND CONDITIONS.	(16'-0") A.F.G.
SL1/2HS	SIGNIFY LIGHTING	DOS-30W16LED4K-T-LE2F-HS	POLE	UNIVERSAL	2677	38	LED/4000K	SINGLE HEAD POLE MOUNTED FIXTURE WITH TYPE II DISTRIBUTION AND HOUSE SIDE SHIELD MOUNTED ON ROUND TAPERED ALUMINUM POLE RATED FOR 110MPH WIND CONDITIONS.	(16'-0") A.F.G.
SL2	SPECTRA LIGHTING	ELE-B-FA-30-4K-120-277	BOL	UNIVERSAL	869	12	LED/4000K	LED LOW LEVEL DECORATIVE BOLLARD FIXTURE WITH SYMMETRIC LIGHTING DISTRIBUTION AND 0-10V DIMMING CAPABLE DRIVER.	(3'-6") A.F.G.
SL4	CLS LIGHTING	CAL-S-XX-XX-T2-16L-35-40K-UNV-VM	W	UNIVERSAL	1932	18	LED/4000K	LED SLIM PROFILE WALL MOUNTED WEDGE FIXTURE PROVIDED WITH TYPE II DISTRIBUTION AND 0-10V DIMMING CAPABILITY.	(10'-0") A.F.G.
SL5	CLS LIGHTING	CAL-S-XX-XX-T4-16L-53-40K-UNV-VM	W	UNIVERSAL	2968	28	LED/4000K	LED SLIM PROFILE WALL MOUNTED WEDGE FIXTURE PROVIDED WITH TYPE IV DISTRIBUTION AND 0-10V DIMMING CAPABILITY.	(10'-0") A.F.G.
SL6	TARGETTI	KPL-41-ZM-L2-40 + 1DU2XX + 1DUXXX + 1DU2530 + 1E2496 + 1E2496 + 1E0388 + XX	IGM	UNIVERSAL	2261	36	LED/4000K	LED IP68 RATED FIXTURE SUITABLE FOR USE IN GRADE. FIXTURE CAPABLE OF ADJUSTING BOTH DISTRIBUTION ANGLE AND AIMING.	IN-GRADE

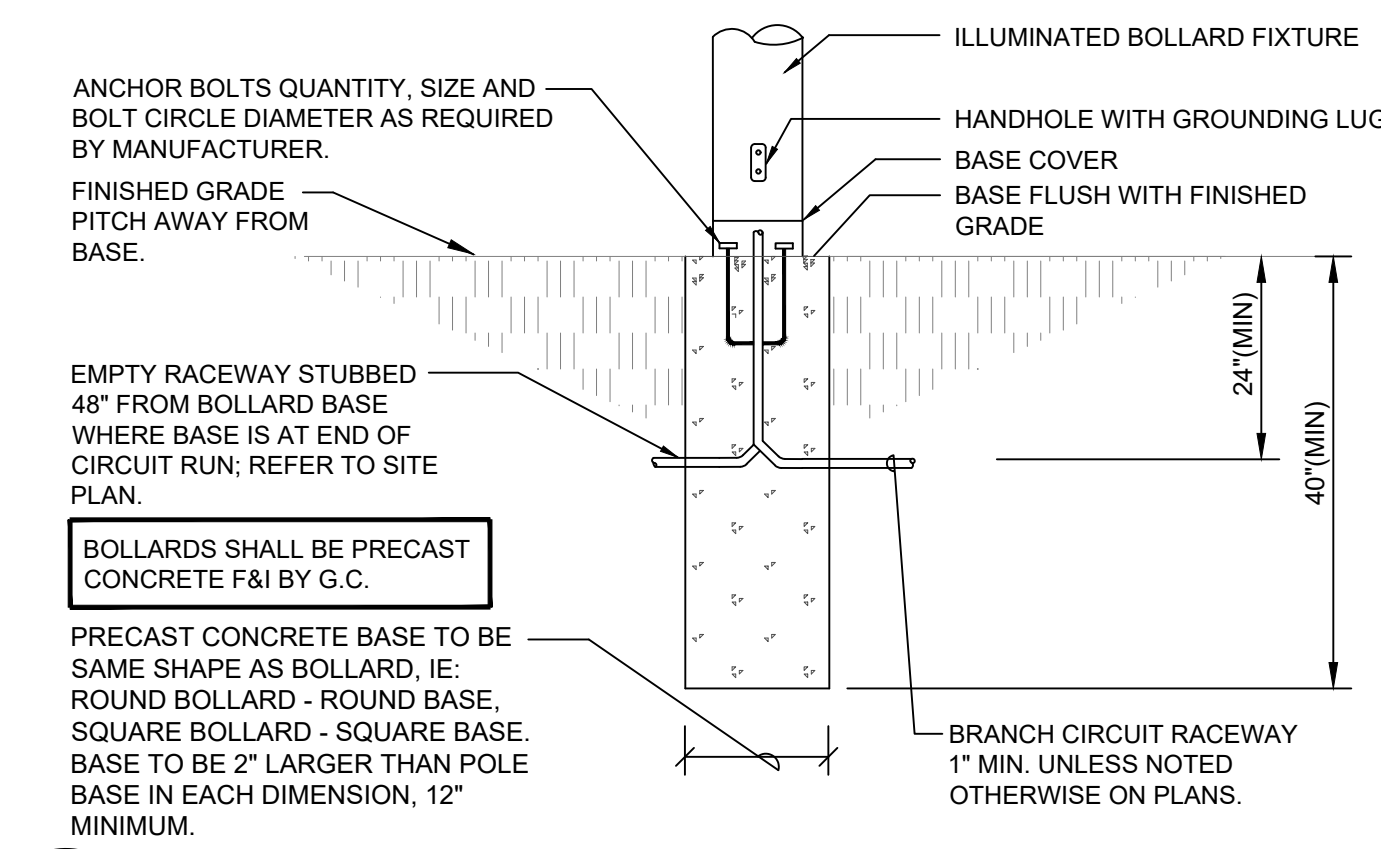
POLE	POLE	U	UNIVERSAL
BOL	BOLLARD	W	WALL
R	RECESSED	IGM	IN-GRADE



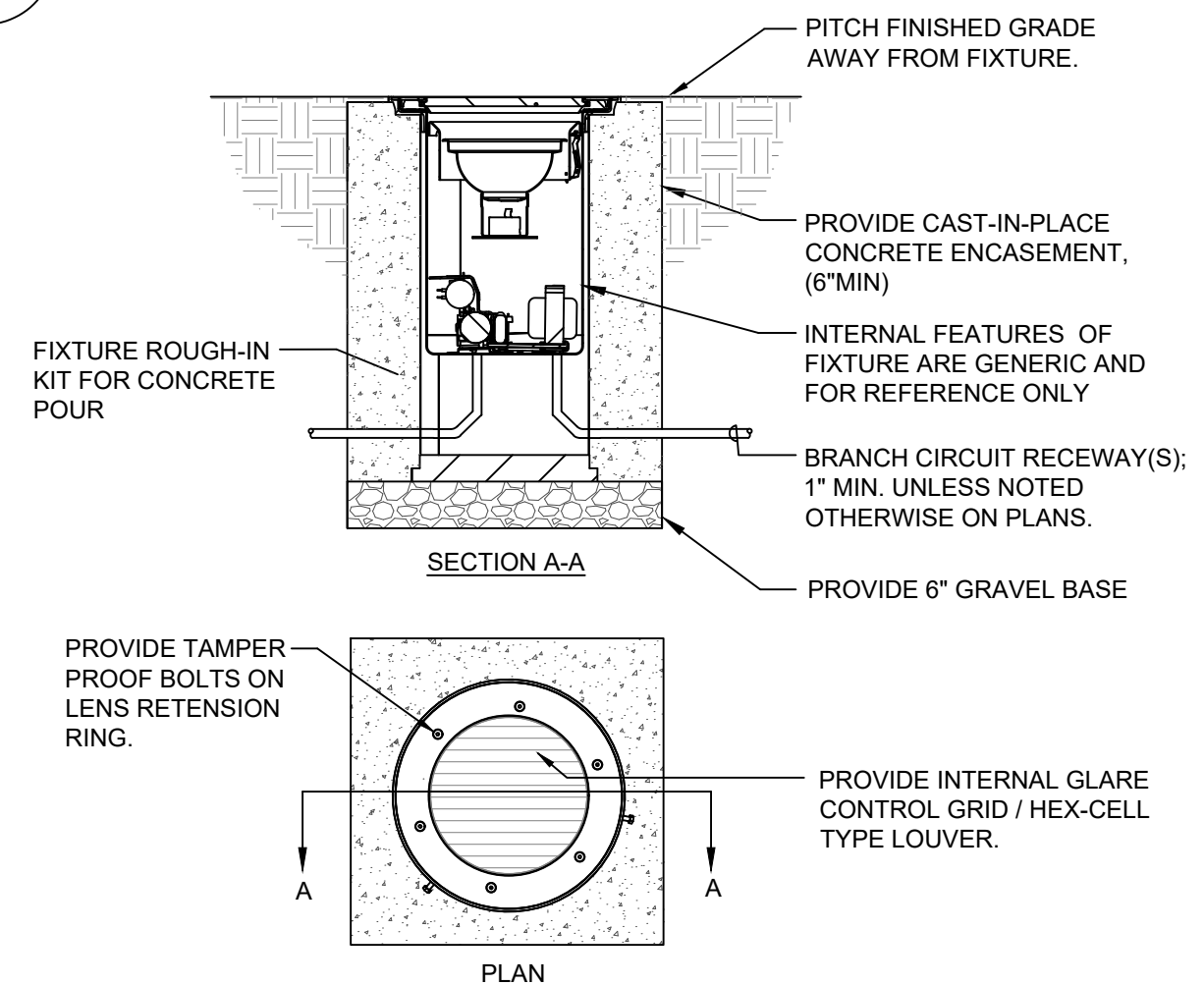
2
LC1.0
LIGHTING POLE BASE DETAIL BEHIND CURBING
SCALE:T.S.



3
LC1.0
LIGHTING POLE BASE DETAIL IN PARKING AREAS
SCALE:T.S.



4
LC1.0
SITE LIGHTING BOLLARD BASE DETAIL
SCALE:T.S.



5
LC1.0
IN GRADE FIXTURE MOUNTING DETAIL
SCALE:T.S.



6
LC1.0
POLE AREA LIGHTING FIXTURE
SCALE:T.S.



7
LC1.0
WALL MOUNTED LIGHTING FIXTURE
SCALE:T.S.



8
LC1.0
BOLLARD FIXTURE
SCALE:T.S.



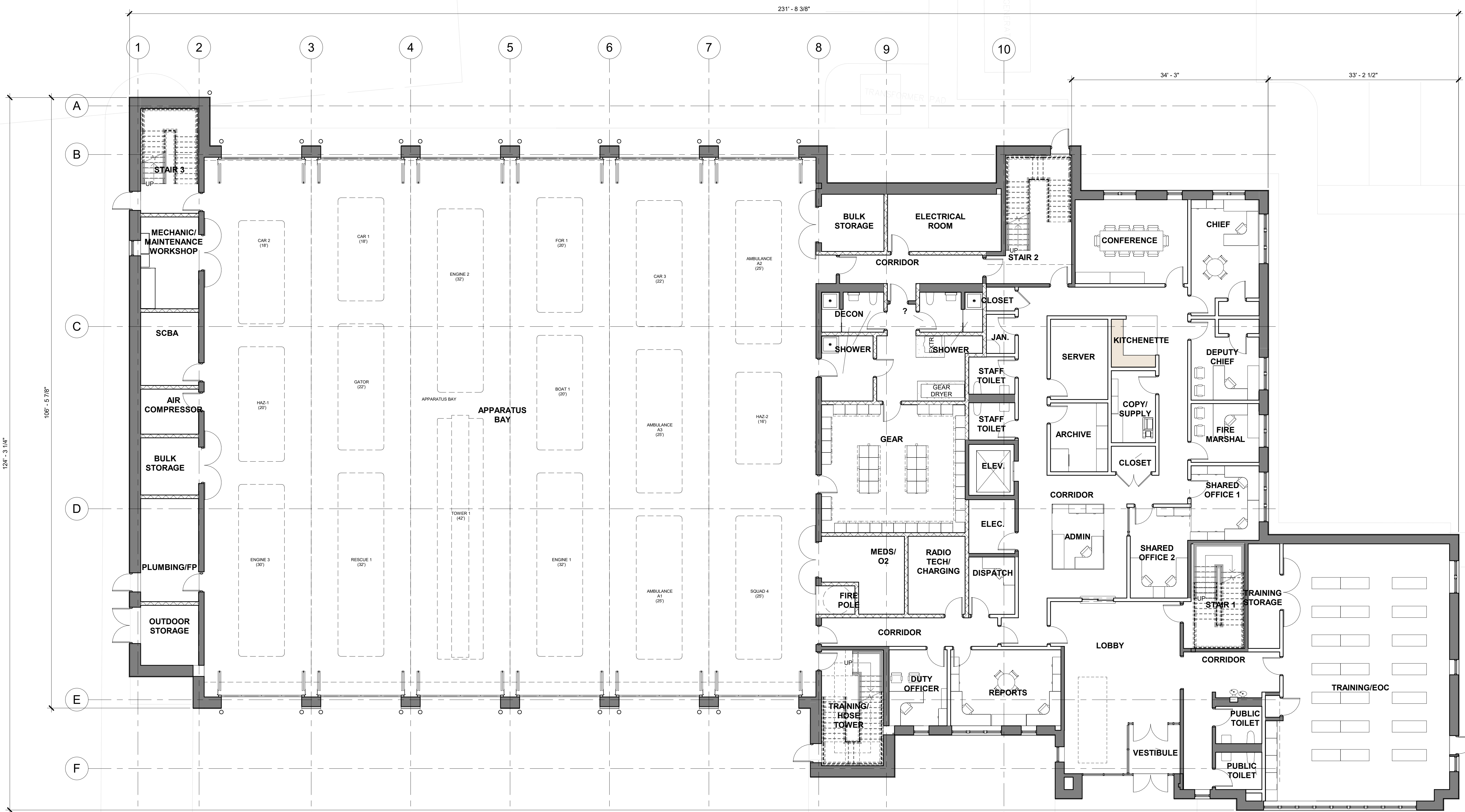
9
LC1.0
IN-GRADE FLAG POLE FIXTURE
SCALE:T.S.

NOTES:
1. THIS DETAIL SHALL BE TYPICAL FOR FIXTURE TYPE SL6 & SL7

NO.	Revision	Date

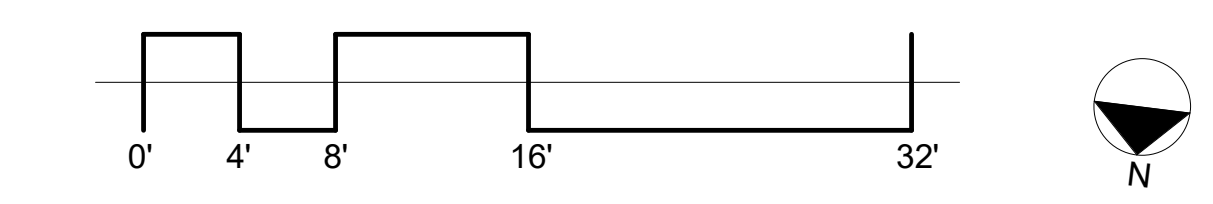
Registrations

Consultants



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

1



Project
NORTHBOROUGH FIRE STATION
63 WEST MAIN STREET
TOWN OF NORTHBOROUGH, MA

Drawing Title
FLOOR PLAN LEVEL 1

Author
Drawn by
1/31/2024
Date
22314
Job number
SCHEMATIC DESIGN PRICING
Drawing set

Drawing number
A101

Revision Schedule

NO.	Revision	Date

Registrations

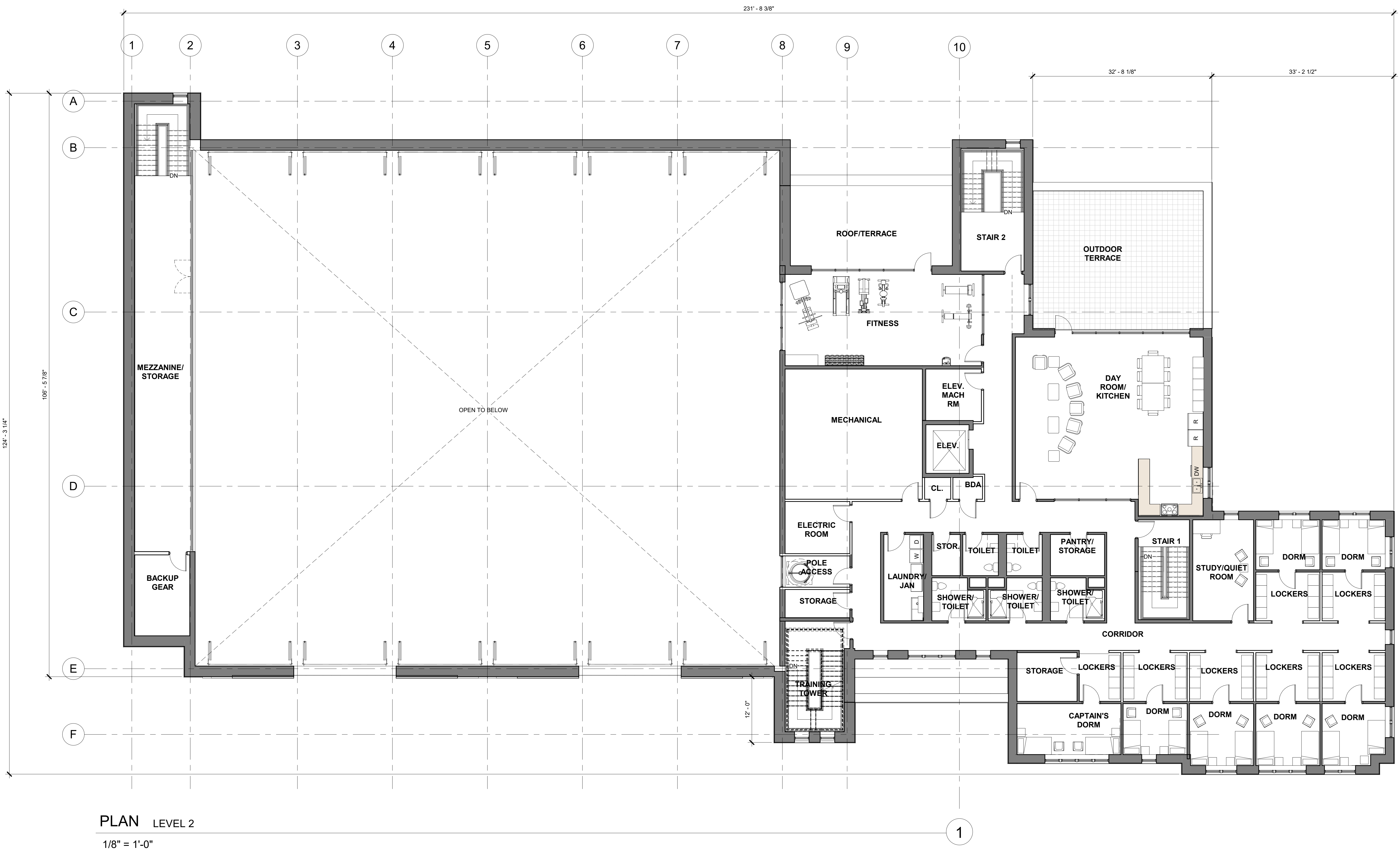
Consultants

Project
NORTHBOROUGH FIRE STATION
63 WEST MAIN STREET
TOWN OF NORTHBOROUGH, MA

Drawing Title
FLOOR PLAN LEVEL 2

Author
Drawn by
1/31/2024
Date
22314
Job number
SCHEMATIC DESIGN PRICING
Drawing set
Drawing number

A102



PLAN LEVEL 2
1/8" = 1'-0"

1



NORTH ELEVATION



WEST ELEVATION

Project
NORTHBOROUGH FIRE STATION
63 WEST MAIN STREET
TOWN OF NORTHBOROUGH, MA

Drawing Title
EXTERIOR ELEVATIONS

Author
Drawn by
1/31/2024
Date
22314
Job number
SCHEMATIC DESIGN PR
Drawing set

Drawing number

A301

Revision Schedule		
NO.	Revision	Date

Registrations

Consultants



VIEW FROM NORTHWEST



VIEW FROM NORTHEAST



VIEW FROM SOUTHEAST



VIEW FROM SOUTHWEST

Project
NORTHBOROUGH FIRE STATION
63 WEST MAIN STREET
TOWN OF NORTHBOROUGH, MA

Drawing Title
EXTERIOR VIEWS

Author _____
Checked by _____
Date 1/31/2024
Job number 22314
Drawing set SCHEMATIC DESIGN PRICING

Drawing number
A303

Revision Schedule		
NO.	Revision	Date

Registrations

Consultants



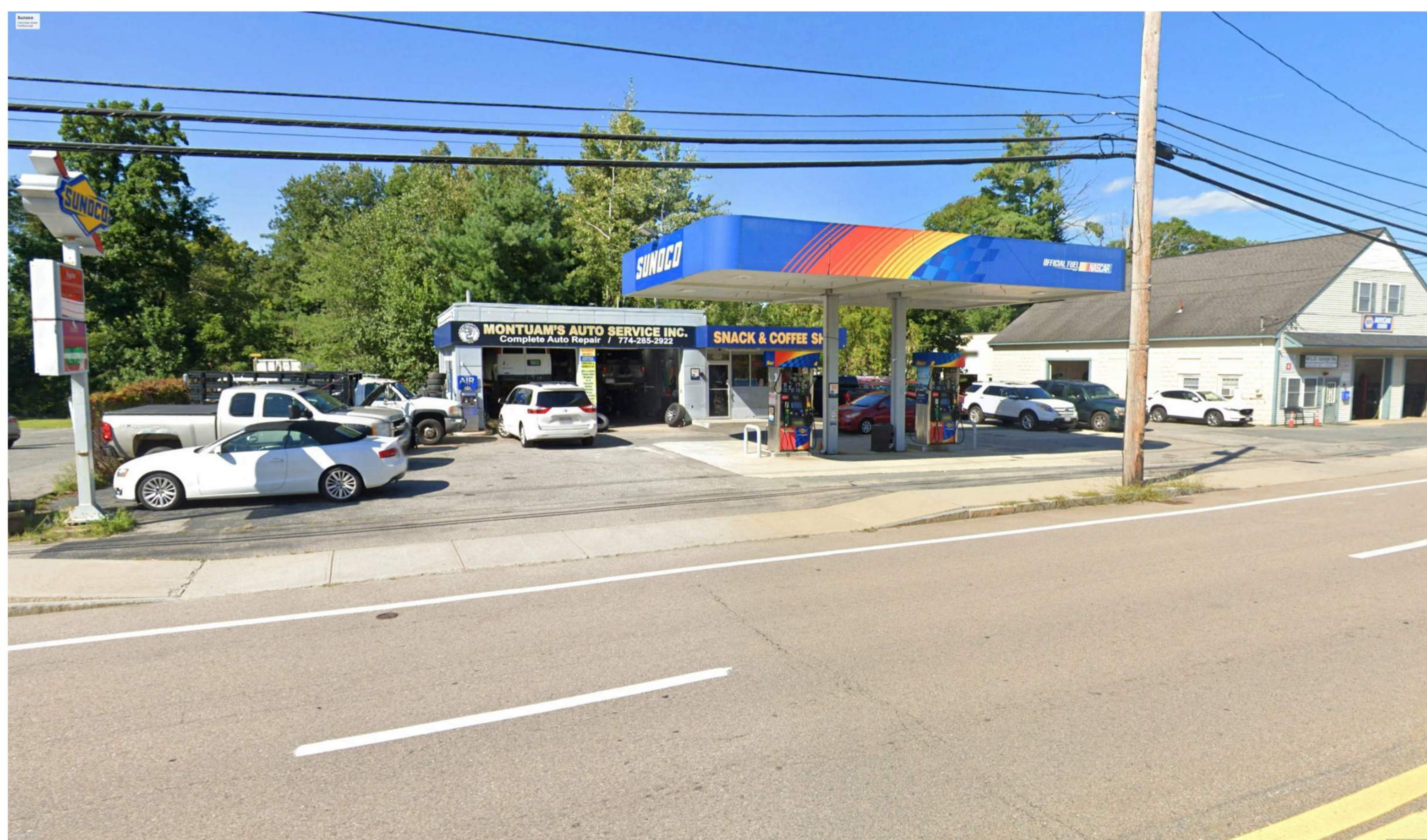
70 WEST MAIN STREET



62 WEST MAIN STREET



54 WEST MAIN STREET



48 WEST MAIN STREET

Project
NORTHBOROUGH FIRE STATION
63 WEST MAIN STREET
TOWN OF NORTHBOROUGH, MA

Drawing Title
CONTEXT PHOTOS ACROSS STREET

Author
Drawn by
1/31/2024
Date
22314
Job number
SCHEMATIC DESIGN PRICING
Drawing set

Drawing number
A305