

ATTLEBORO WATER DEPARTMENT
ATTLEBORO, MASSACHUSETTS

WADING RIVER WATER TREATMENT PLANT

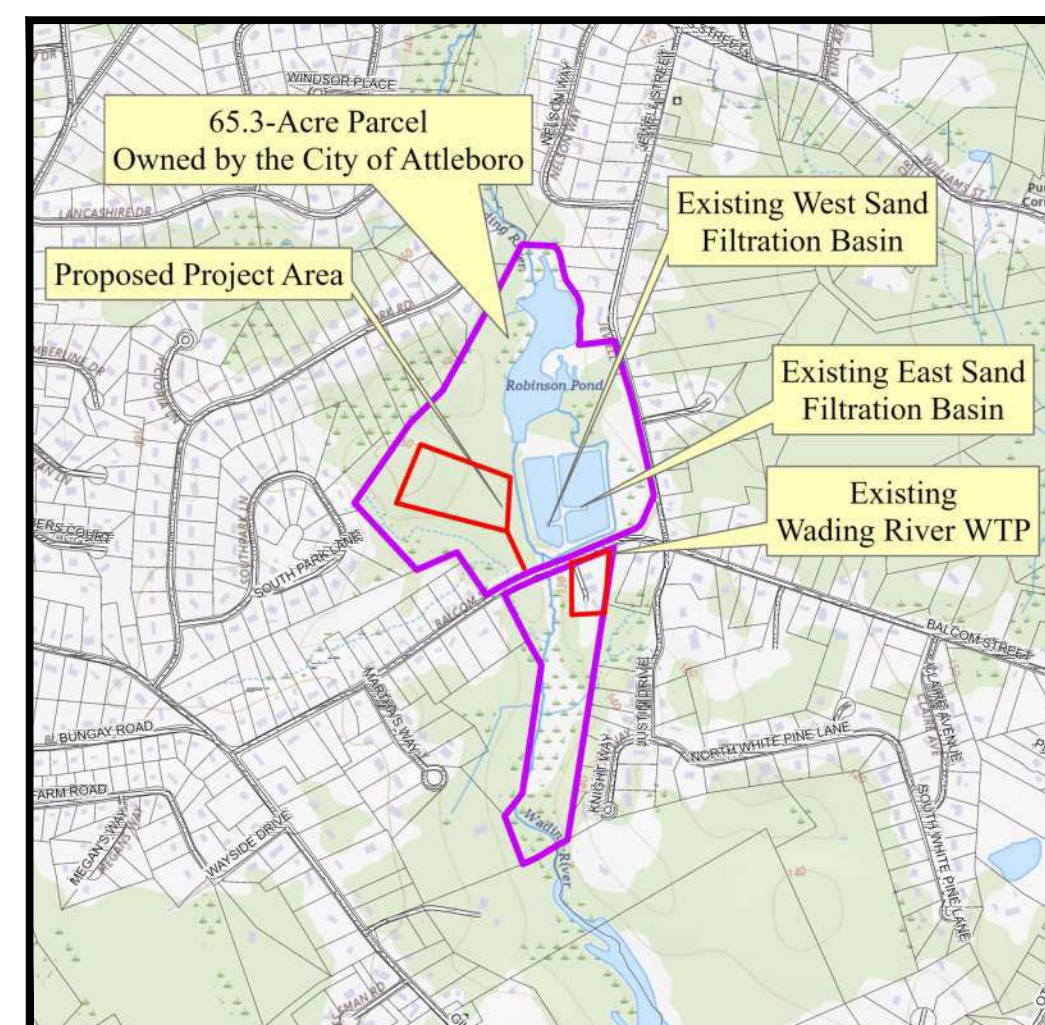
DWSRF ID NO. 16764
CONTRACT NO. 10

MAYOR

CATHLEEN DESIMONE

WATER DEPARTMENT

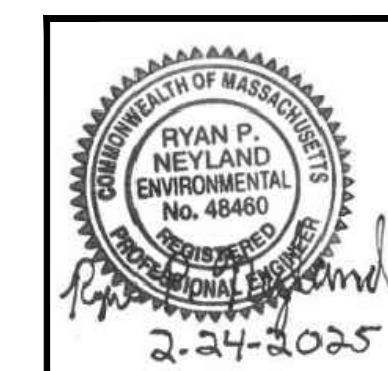
MATTHEW CROTTY, ACTING WATER SUPERINTENDENT



LOCUS MAP
NO SCALE



TATA & HOWARD



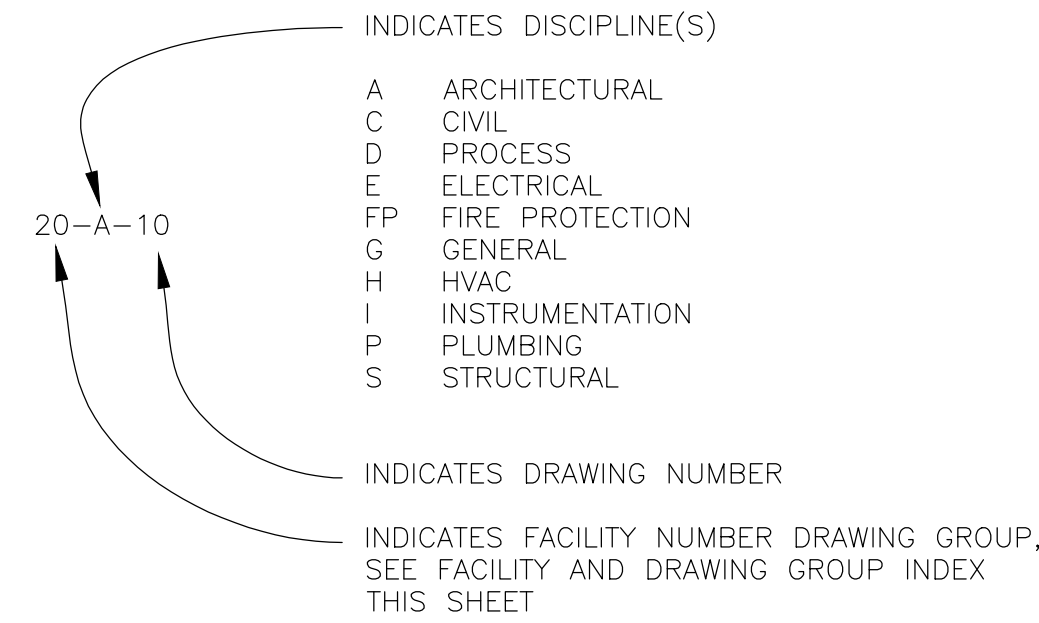
TATA & HOWARD, INC. • CONSULTING ENGINEERS • MARLBOROUGH, MA

SHEET INDEX

SHEET NUMBER	SHEET TITLE
GENERAL	
01-G-1	SHEET INDEX
01-G-2	PROCESS FLOW DIAGRAM
CIVIL	
02-C-1	LEGEND, ABBREVIATIONS, AND GENERAL NOTES
02-C-2	EXISTING CONDITIONS SITE PLAN
02-C-3	PROPOSED DEMOLITION AND SITE IMPROVEMENTS PLAN (ADDITIVE ALTERNATE A)
02-C-4	CONSTRUCTION PHASE SITE PLAN
02-C-5	SITE IMPROVEMENTS AND GRADING PLAN
02-C-6	SITE UTILITIES PLAN
02-C-7	STORMWATER CONTROLS PLAN
02-C-8	BUFFER ENHANCEMENT PLAN
99-C-1	WATER MAIN DETAILS
99-C-2	STORMWATER AND ENVIRONMENTAL CONTROLS DETAILS SHEET 1
99-C-3	STORMWATER AND ENVIRONMENTAL CONTROLS DETAILS SHEET 2
99-C-4	SITE DETAILS
99-C-5	LAGOON DETAILS
99-C-6	BRINE WASTE HOLDING UNDERGROUND FRP TANK DETAILS
99-C-7	SEPTIC SYSTEM DETAILS
ARCHITECTURAL	
01-A-1	CODE REVIEW, LOCUS MAP, GENERAL NOTES, AND ABBREVIATIONS
01-A-2	EGRESS PLANS
01-A-3	DOOR AND WINDOW SCHEDULES, AND WALL TYPES
20-A-1	BASEMENT CONSTRUCTION PLAN
20-A-2	FIRST FLOOR CONSTRUCTION PLAN
20-A-3	MEZZANINE CONSTRUCTION PLAN
20-A-4	BASEMENT FINISH PLAN
20-A-5	FIRST FLOOR FINISH PLAN
20-A-6	MEZZANINE FINISH PLAN
20-A-7	ROOF PLAN
20-A-8	BASEMENT REFLECTED CEILING PLAN
20-A-9	FIRST FLOOR REFLECTED CEILING PLAN
20-A-10	MEZZANINE REFLECTED CEILING PLAN
20-A-11	EXTERIOR ELEVATIONS
20-A-12	EXTERIOR ELEVATIONS
20-A-13	INTERIOR ELEVATIONS
20-A-14	INTERIOR ELEVATIONS
20-A-15	ENLARGED PLANS
20-A-16	STAIR DETAILS
20-A-17	SECTIONS
20-A-18	WALL SECTIONS
99-A-1	ENLARGED DETAILS
99-A-2	ENLARGED DETAILS
99-A-3	TYP. CASEWORK DETAILS
STRUCTURAL	
01-S-01	GENERAL NOTES
20-S-1	FOUNDATION PLAN
20-S-1a	FOUNDATION PLAN
20-S-1b	FOUNDATION PLAN
20-S-1c	BASEMENT CONCRETE PAD AND PIPE PENETRATION PLAN
20-S-2	FIRST FLOOR FRAMING PLAN
20-S-2a	SLAB ZONE 1 - DESIGN LAYOUT PLAN
20-S-2b	SLAB ZONE 2 - DESIGN LAYOUT PLAN
20-S-2c	FIRST FLOOR JOINT LAYOUT PLAN
20-S-2d	FIRST FLOOR CONCRETE PAD AND PIPE PENETRATION PLAN
20-S-3	FIRST FLOOR MASONRY PLAN
20-S-4	MEZZANINE LEVEL FLOOR FRAMING PLAN
20-S-5	MEZZANINE CEILING FRAMING PLAN
20-S-6	ROOF FRAMING PLAN
20-S-7	SECTIONS AND DETAILS
20-S-8	SECTIONS AND DETAILS
20-S-9	SECTIONS AND DETAILS
20-S-10	SECTIONS AND DETAILS
20-S-11	SECTIONS AND DETAILS
20-S-12	SECTIONS AND DETAILS
20-S-13	SECTIONS AND DETAILS
20-S-14	SECTIONS AND DETAILS
20-S-15	SECTIONS AND DETAILS
20-S-16	SECTIONS AND DETAILS
20-S-17	SECTIONS AND DETAILS
20-S-18	SECTIONS AND DETAILS
20-S-19	SECTIONS AND DETAILS
20-S-20	JOIST AND ROOF DECK SECTIONS AND DETAILS
20-S-21	SECTIONS AND DETAILS
20-S-22	SECTIONS AND DETAILS
20-S-23	SECTIONS AND DETAILS
20-S-24	ADDITIONAL OPENING REINFORCING PLANS
20-S-25	ADDITIONAL OPENING REINFORCING PLANS
20-S-26	ADDITIONAL OPENING REINFORCING PLANS
20-S-27	SECTIONS AND DETAILS
20-S-28	SECTIONS AND DETAILS
20-S-29	SECTIONS AND DETAILS
20-S-30	REINFORCEMENT DETAIL AT TANK WALL PENETRATIONS

SHEET NUMBER	SHEET TITLE
PROCESS	
20-D-1	FIRST FLOOR PLAN
20-D-2	BASEMENT PLAN
20-D-3	MEZZANINE PLAN
20-D-4	SECTION VIEWS I
20-D-5	SECTION VIEWS II
20-D-6	SECTION VIEWS III
20-D-7	SECTION VIEWS IV
20-D-8	SECTION VIEWS V
20-D-9	SECTION VIEWS VI
20-D-10	SECTION VIEWS VII
20-D-11	MIEX AREA SMALL DIAMETER PIPING PARTIAL PLAN
20-D-12	CHEMICAL FEED AREA SMALL DIAMETER PIPING PARTIAL PLAN
20-D-13	BASEMENT SMALL DIAMETER PIPING PLAN AND TABLE
20-D-14	PUMP STATION DEMOLITION PLAN (ADDITIVE ALTERNATE A)
20-D-15	PUMP STATION DEMOLITION PLAN PHOTOS (ADDITIVE ALTERNATE A)
20-D-16	TEMPORARY PFAS BUILDING DEMOLITION AND RELOCATION PLAN
99-D-1	CHEMICAL FEED SYSTEM SCHEMATICS SHEET 1
99-D-2	CHEMICAL FEED SYSTEM SCHEMATICS SHEET 2
99-D-3	WATER PIPING DETAILS
99-D-4	ANALYZER DETAILS
HVAC	
20-H-1	FIRST FLOOR PLAN
20-H-2	BASEMENT LEVEL AND MEZZANINE PLAN
99-H-1	SCHEDULES AND NOTES
99-H-2	DETAILS
PLUMBING	
20-P-1	FIRST FLOOR PLAN
20-P-2	BASEMENT LEVEL AND MEZZANINE PLAN
99-P-1	SCHEDULES AND NOTES
99-P-2	DETAILS
FIRE PROTECTION	
01-FP-1	SITE PLAN, LEGEND, DETAILS & NOTES
20-FP-1	BASEMENT SPRINKLER PLAN
20-FP-2	FIRST FLOOR SPRINKLER PLAN
20-FP-3	MEZZANINE SPRINKLER PLAN
20-FP-4	UPPER CEILING SPRINKLER PLAN
INSTRUMENTATION	
04-I-1	LEGEND AND NOTES
04-I-2	PROCESS AND INSTRUMENTATION DIAGRAM
04-I-3	PROCESS AND INSTRUMENTATION DIAGRAM II
04-I-4	I/O TABLE AND CONDUIT SCHEDULE
04-I-5	FILTER CONTROL VALVE AND FLOW METER WIRING DIAGRAM
20-I-1	FIRST FLOOR PLAN
20-I-2	BASEMENT PLAN
20-I-3	MEZZANINE AND BRINE WASTE HOLDING TANK PLAN
99-I-1	DETAILS
ELECTRICAL	
01-E-1	ELECTRICAL NOTES AND LEGEND
02-E-1	ELECTRICAL SITE PLAN
02-E-2	ELECTRICAL DUCT BANK SCHEDULE WITH DUCT BANK SECTIONS AND DETAILS
02-E-3	ELECTRICAL SITE PLAN DETAILS
02-E-4	ELECTRICAL SITE PLAN DETAILS
20-E-1	WTP ONE-LINE DIAGRAM
20-E-2	MCC-A ONE-LINE DIAGRAM
20-E-3	ELECTRICAL EQUIPMENT ELEVATIONS
20-E-4	WTP FIRST FLOOR POWER PLAN
20-E-5	WTP BASEMENT AND MEZZANINE POWER PLANS
20-E-6	WTP FIRST FLOOR LIGHTING PLAN
20-E-7	WTP BASEMENT AND MEZZANINE LIGHTING PLANS
20-E-8	WTP FIRST FLOOR FIRE & SECURITY ALARM PLAN
20-E-9	WTP BASEMENT AND MEZZANINE FIRE & SECURITY ALARM PLANS
99-E-1	LIGHTING AND PANEL SCHEDULES
99-E-2	WIRING DIAGRAMS AND DETAILS
99-E-3	WIRING DIAGRAMS AND DETAILS
99-E-4	WIRING DIAGRAMS AND DETAILS
99-E-5	WIRING DIAGRAMS AND DETAILS
99-E-6	WIRING DIAGRAMS AND DETAILS
99-E-7	WIRING DIAGRAMS AND DETAILS
99-E-8	WIRING DIAGRAMS AND DETAILS
99-E-9	WIRING DIAGRAMS AND DETAILS
99-E-10	WIRING DIAGRAMS AND DETAILS

SHEET NUMBER DESIGNATION



FACILITY/DRAWING GROUP NUMBER

- 01
- 02
- 04
- 10
- 20
- 99

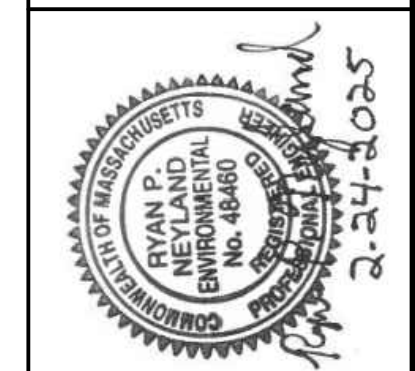
FACILITY/DRAWING GROUP NUMBER

- GENERAL
- CIVIL/SITE
- INSTRUMENTATION
- EXISTING WATER TREATMENT PLANT
- PROPOSED WATER TREATMENT PLANT
- STANDARD DETAILS

ATTLEBORO WATER DEPT.
 ATTLEBORO, MA
 WADING RIVER
 WATER TREATMENT PLANT

GENERAL SHEET INDEX

Rev.	Date	Description

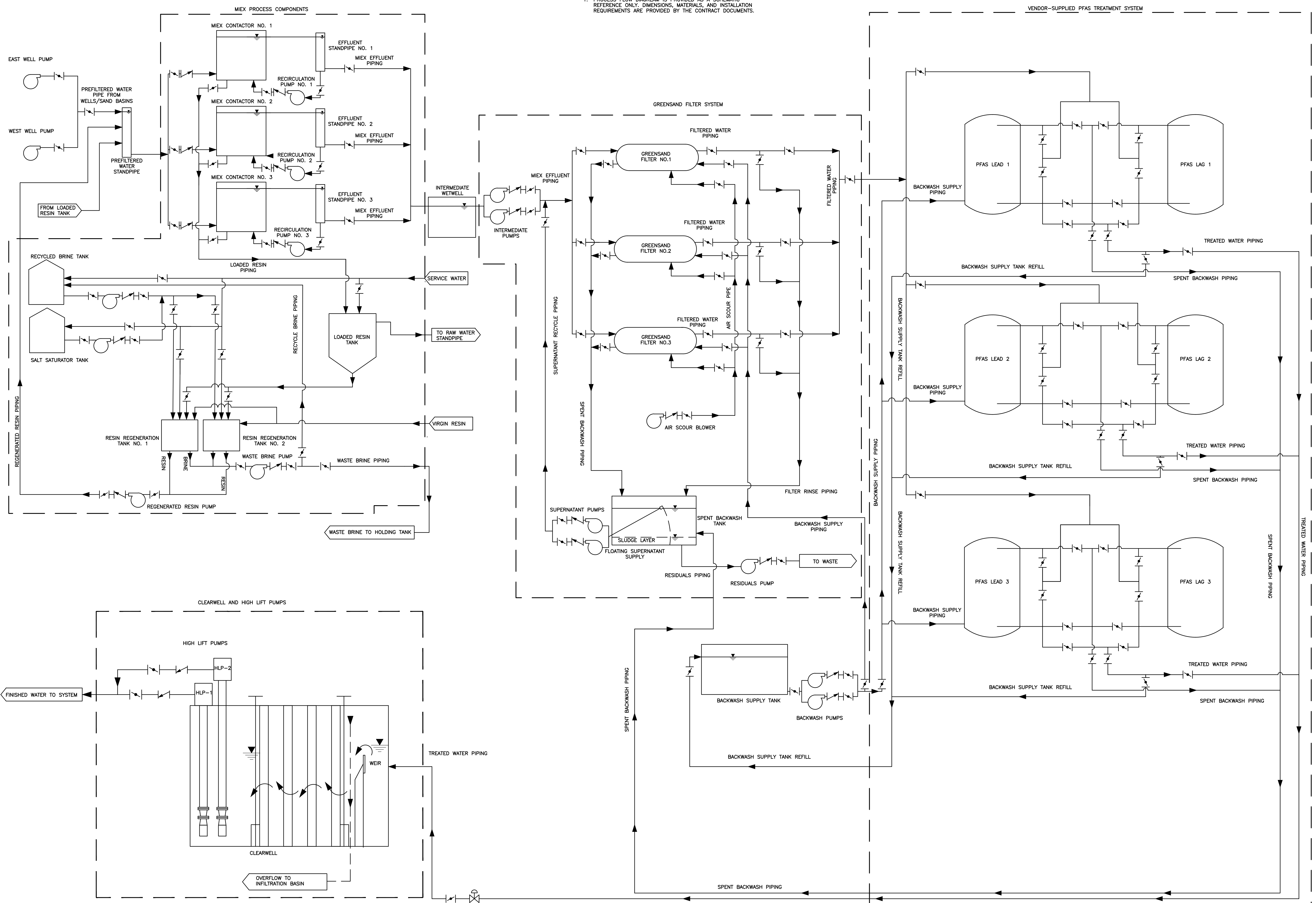


T&H NO.: 6193
 DATE: FEBRUARY 2025
 SCALE: AS NOTED

01-G-1

P:\Attleboro\6193_Wading River WTP Design\CADD\Sheets\01-G-2-PFD.dwg 2/27/2025 12:22 PM AFOR/MA

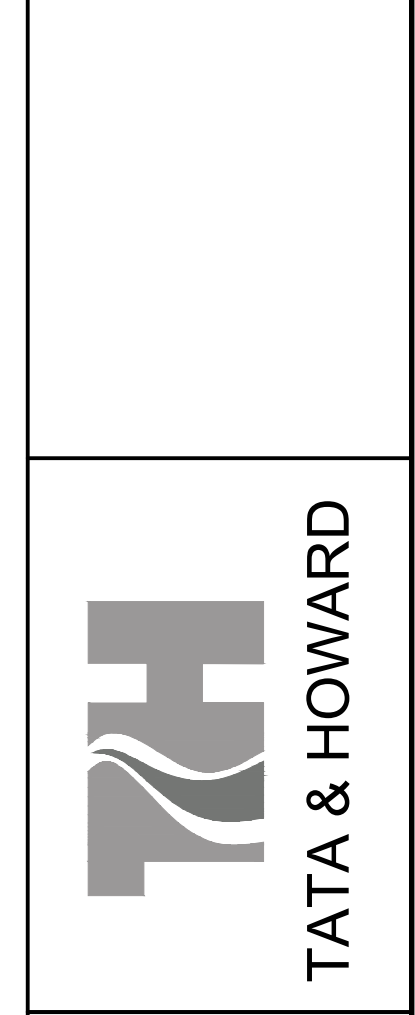
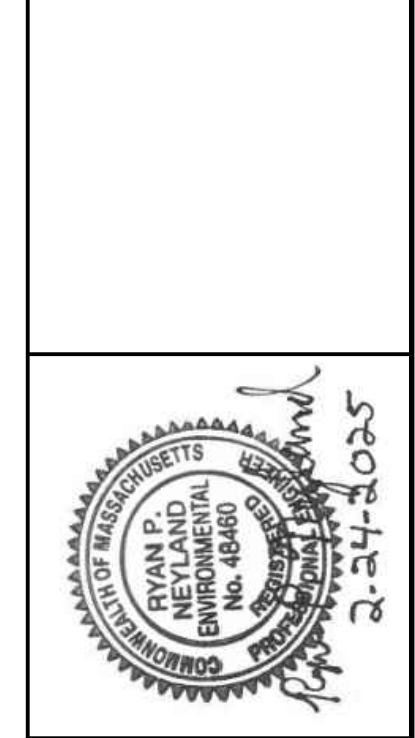
NOTES:
 1. PROCESS FLOW DIAGRAM IS PROVIDED AS A SCHEMATIC REFERENCE ONLY. DIMENSIONS, MATERIALS, AND INSTALLATION REQUIREMENTS ARE PROVIDED BY THE CONTRACT DOCUMENTS.



ATTLEBORO WATER DEPT.
 ATTLEBORO, MA
 WADING RIVER
 WATER TREATMENT PLANT

GENERAL
 PROCESS FLOW DIAGRAM

Rev.	Date	Description



T&H NO.: 6193
 DATE: FEBRUARY 2025
 SCALE: AS NOTED

01-G-2

Designed By: RSP
 Drawn By: MJT
 Checked By: MVM
 Approved By: KLG

GENERAL NOTES

- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF ATTLEBORO. ALL EXCAVATION AND RESTORATION SHALL MEET CITY SPECIFICATIONS.
- THE ENGINEER MAY DIRECT THE CONTRACTOR TO VARY THE PROPOSED WORK DURING CONSTRUCTION TO MEET EXISTING CONDITIONS.
- THE CONTRACTOR SHALL ESTABLISH A STAGING AREA OUTSIDE OF THE 100-FOOT WETLANDS BUFFER ZONE AND 200-FOOT RIVERFRONT, FOR THE OVERNIGHT STORAGE OF EQUIPMENT AND STOCKPILING OF MATERIALS. NO STORAGE OF GASOLINE, OIL OR OTHER FUEL OR HAZARDOUS MATERIALS IS PERMITTED WITHIN 100- FEET OF THE WETLANDS BUFFER ZONE. STAGING AREA LOCATIONS SHALL BE COORDINATED WITH AND APPROVED BY THE OWNER.
- STOCKPILES SHALL BE LOCATED AS NEEDED, WITHIN THE LIMIT OF WORK, IN AREAS OF MINIMAL IMPACT.
- IF SEASON OR ADVERSE WEATHER CONDITIONS DO NOT ALLOW THE ESTABLISHMENT OF VEGETATION, TEMPORARY MULCHING WITH HAY, TACKIFIELD WOOD CHIPS OR OTHER METHODS SHALL BE PROVIDED.
- THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES AND SHALL PROVIDE ALL NECESSARY CONTINUOUS BARRIERS OF SUFFICIENT TYPE, SIZE AND STRENGTH TO PREVENT ACCESS TO ALL OPEN EXCAVATIONS AT THE COMPLETION OF EACH WORK DAY.
- THE CONTRACTOR AT HIS EXPENSE SHALL BRACE UTILITY POLES IF REQUIRED, AND REPAIR ANY DAMAGE TO EXISTING SIDEWALKS, CURBS, PAVING, SHRUBS, TREES, STONE WALLS, LAWNS, ETC. ALL EXCAVATED MATERIALS SHALL BE RETURNED TO EQUAL OR BETTER THAN PRIOR CONDITION BY THE CONTRACTOR.
- ALL EXISTING CONCRETE AND ASPHALT PAVEMENT SHALL BE SAW-CUT PRIOR TO EXCAVATION IN ORDER TO PROVIDE UNIFORM ASPHALT REPLACEMENT.
- PIPE PENETRATIONS THROUGH THE WALL/FLOORS OF A NEW CONCRETE UTILITY STRUCTURE SHALL UTILIZE A MECHANICAL JOINT END-PLAIN END WALL PIPE, UNLESS OTHERWISE NOTED, WITH AN INTEGRALLY CAST COLLAR, CAST INTO THE NEW CONCRETE UTILITY STRUCTURE.
- PLUMBING CONTRACTOR SHALL PROVIDE ALL SANITARY WASTE, LP GAS, AND OTHER PIPING AS SHOWN ON THE PLUMBING DRAWINGS WITHIN TEN (10) FEET OF THE BUILDING UNLESS OTHERWISE NOTED. GENERAL CONTRACTOR SHALL FURNISH AND INSTALL PIPING TO EXTEND PLUMBING TO ITS TERMINATION POINT. DIVISION OF RESPONSIBILITY BETWEEN THE GENERAL CONTRACTOR AND PLUMBING CONTRACTOR SHALL BE AS NOTED ON THE PLUMBING DRAWINGS AND CIVIL DRAWINGS.
- CLEAR AND GRUB THE AREA DIRECTLY WITHIN THE BUILDING FOOTPRINT AND WITHIN THE PATH OF THE WATER MAIN TRENCH. REMOVE ADDITIONAL TREES AS SHOWN ON THE PLANS AND LOAM AND SEED TO RESTORE THESE AREAS. ALL OTHER TREES SHALL BE PROTECTED.

SURVEY NOTES

- BASE PLANS AND PROPERTY LINE DETERMINATIONS WERE PREPARED BY GUERRIERE & HALNON (55 WEST CENTRAL STREET, FRANKLIN, MA 02038) USING AN ON-GROUND SURVEY.
- DELINEATION OF BORDERING VEGETATED WETLANDS, EDGE OF BANK MEAN ANNUAL HIGH WATER, AND RIVERFRONT AREA WERE DETERMINED BY ECOTEC, INC. (102 GROVE STREET, WORCESTER, MA 01605)
- THE LOCATION OF THE EXISTING UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE AND ARE INTENDED TO ADVISE THE CONTRACTOR OF THEIR PRESENCE. CALL "DIG SAFE" (1-888-344-7233) FOR FIELD LOCATIONS OF ALL EXISTING UTILITIES.
- BENCHMARKS HAVE BEEN ESTABLISHED BY THE SURVEYOR PRIOR TO THE START OF CONSTRUCTION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN ALL BENCHMARKS THROUGHOUT CONSTRUCTION. ANY COST TO RE-ESTABLISH ITEMS THAT ARE DAMAGED, MOVED, OR OTHERWISE AFFECTED BY CONSTRUCTION WILL BE AT NO COST TO THE OWNER.

EROSION & SEDIMENT CONTROL NOTES

- THE CONTRACTOR SHALL DEVELOP AND IMPLEMENT A STORMWATER POLLUTION PREVENTION PLAN IN ACCORDANCE WITH THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM.
- THE CONTRACTOR IS RESPONSIBLE FOR THE MAINTENANCE AND REPAIR OF ALL EROSION CONTROL DEVICES ON-SITE INCLUDING SILT FENCE INSTALLED UNDER THIS CONTRACT, REGARDLESS OF WHETHER THE MEASURES ARE SPECIFIED. ALL EROSION CONTROL DEVICES SHALL BE REGULARLY INSPECTED. ANY SEDIMENTS REMOVED FROM THE CONTROL DEVICES SHALL BE DISPOSED OF ON THE UPLAND SIDE OF THE EROSION CONTROL LINE.
- IN THE STAGING AREA, THE CONTRACTOR SHALL HAVE A STOCKPILE OF MATERIALS REQUIRED TO CONTROL EROSION ON-SITE TO BE USED TO SUPPLEMENT OR REPAIR EROSION CONTROL DEVICES. THESE MATERIALS SHALL INCLUDE, BUT ARE NOT LIMITED TO, STRAW BALES, SILT FENCE AND CRUSHED STONE.
- ALL EXISTING TOPSOIL FOR AREAS TO BE DISTURBED SHALL BE STOCKPILED ON SITE AND SHALL BE SURROUNDED WITH SILT FENCE OR SHALL BE COVERED WITH A SOLID WOVEN FABRIC OR TARP TO PREVENT EROSION OR LOSS OF USABLE TOP SOIL MATERIALS. THE REMOVAL OF TOPSOIL FROM THE SITE IS PROHIBITED.
- IF A STOCKPILE IS LOCATED ON A SLOPE, THE RUNOFF SHALL BE DIRECTED AWAY FROM THE PILE. STOCKPILES SHALL BE CONTAINED WITHIN STRAW DIKES.
- PRIOR TO CONSTRUCTION, AN EROSION CONTROL BARRIER (SILT FENCE, HAY BALE DIKE, OR SILTATION BARRIER) SHALL BE INSTALLED UPGRADIENT OF THE DRAINAGE SWALE AS SHOWN ON THE SITE PLAN. THESE BARRIERS SHALL REMAIN IN PLACE UNTIL ALL TRIBUTARY SURFACES HAVE BEEN FULLY STABILIZED. THE EROSION CONTROL BARRIERS ARE THE MINIMUM REQUIRED TO PROTECT THE SENSITIVE AREAS.
- AT NO TIME SHALL SILT-LADEN WATER BE ALLOWED TO ENTER SENSITIVE AREAS (WETLANDS, RIVERS, OFF-SITE AREA AND DRAINAGE SYSTEMS). ANY RUNOFF FROM DISTURBED SURFACES SHALL BE DIRECTED THROUGH SETTLING BASINS AND EROSION CONTROL BARRIERS PRIOR TO ENTERING ANY SENSITIVE AREAS.
- NO MATERIALS SHALL BE DISPOSED OF INTO ANY WETLANDS, RIVERS, OR EXISTING OR PROPOSED DRAINAGE SYSTEMS.
- CONTRACTOR SHALL UTILIZE A VARIETY OF SLOPE STABILIZATION METHODS AND MATERIALS, WHICH SHALL BE ADJUSTED TO THE SITE CONDITIONS. EROSION CONTROL BLANKETS OR MIRAFI MIRAMAT (OR SIMILAR PRODUCTS) SHALL BE AVAILABLE ON SITE.
- WATER SHALL NOT BE ALLOWED TO ENTER PIPES FROM UNSTABILIZED SURFACES.
- THE DRAINAGE SYSTEM SHALL BE INSTALLED FROM THE DOWNSTREAM END UP. SEDIMENT SHALL NOT BE ALLOWED TO ENTER THE SYSTEM.
- RIP RAP SHALL BE INSTALLED AT THE PIPE INLETS AND OUTLETS IMMEDIATELY UPON THE PLACEMENT OF THE PIPE. SILT FENCES SHALL BE INSTALLED AT THE OUTFALLS OF THE DETENTION BASIN. THEY SHALL REMAIN IN PLACE UNTIL ALL TRIBUTARY AREAS ARE STABILIZED.
- IF INTENSE RAINFALL IS ANTICIPATED, THE INSTALLATION OF SUPPLEMENTAL STRAW DIKES, SILT FENCES, OR ARMORED DIKES SHALL BE UTILIZED. ADDITIONAL TEMPORARY SETTLING BASINS ARE REQUIRED TO BE LOCATED WITHIN THE DISTURBED AREA TO MINIMIZE IMPACTS TO THE TRIBUTARY AREAS.

WATER MAIN NOTES

- THE CONTRACTOR SHALL MAKE EVERY EFFORT NOT TO DISTURB THE EXISTING WATER SYSTEM. NO ADDITIONAL PAYMENT SHALL BE MADE FOR DAMAGE CREATED FOR THE CONVENIENCE OF THE CONTRACTOR.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEARING & GRUBBING TREES WHERE THEY CONFLICT WITH THE PROPOSED WATER MAIN INSTALLATION.
- UNLESS OTHERWISE NOTED OR APPROVED BY THE ENGINEER, THE NEW WATER MAIN SHALL PASS UNDER EXISTING UTILITIES.
- ALL WATER MAINS ARE TO BE LAID WITH A MINIMUM OF 5'-0" COVER.
- ALL BENDS, TEE, CAPS AND HYDRANTS SHALL BE BACKED WITH CONCRETE THRUST BLOCKS AS INDICATED ON THE CONTRACT DRAWINGS. ALL BENDS, TEE, CAPS, VALVES AND MISCELLANEOUS FITTINGS SHALL BE RESTRAINED AS SPECIFIED.
- CONTRACTOR SHALL USE A WATER TIGHT PLUG DURING THE WATER MAIN INSTALLATION. PLUG SHALL REMAIN IN PLACE AT ALL TIMES.
- THE CONTRACTOR SHALL NOT CONNECT NEW WATER MAIN TO THE EXISTING WATER MAIN UNTIL IT HAS BEEN PRESSURE TESTED AND CHLORINATED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- THE CONTRACTOR SHALL PROVIDE ADDITIONAL TAPS IF REQUIRED FOR CHLORINATING AND HYDROSTATIC TESTING AT ITS EXPENSE. TAPS SHALL BE REMOVED AND THE WATER MAIN PLUGGED AFTER TESTING IS COMPLETE.

GEOTECHNICAL NOTES

- BORING AND TEST PIT LOCATIONS ARE SHOWN ON THE PLANS AND BORING AND TEST PIT LOGS ARE IN THE GEOTECHNICAL DATA REPORT BOUND IN APPENDIX A OF THE SPECIFICATIONS.
- FOR EARTH EXCAVATION, BACKFILL, FILL AND GRADING, SEE SPECIFICATION 02200.
- FOR DEWATERING SEE SPECIFICATION 02140.
- FOR TEMPORARY EXCAVATION SUPPORT SYSTEM SEE SPECIFICATION 02160.

LEGEND

EXISTING	DESCRIPTION	PROPOSED
FW	FINISHED WATER	FW
PFW	PREFILTERED WATER	PFW
OF	OVERFLOW PIPE	OF
X	GATE VALVE	X
v	BUTTERFLY VALVE	v
	REDUCER	□
	SOLID SLEEVE	□
	TRANSITION COUPLING	
	PIPE FITTINGS	┌┐└└┘┘┐┐
	CAP	┌┐└└┘┘┐┐
	FIRE HYDRANT	┌┐└└┘┘┐┐
	CATCH BASIN	□
UGE	ELEC. UNDERGROUND	UGE
⊕	ELEC. HANDHOLE	⊕
OHE	ELEC. OH. WIRE	OHE
→	STORMWATER FLOW DIRECTION	→
⊕	DRAIN MANHOLE	⊕
□	CATCH BASIN	□
○	LEACHING CATCH BASIN	○
SD	STORM DRAIN	SD
D	DRAIN LINE	D
S	SEPTIC/SANITARY PIPING	S
RD	RESIDUALS DRAIN	RD
○	CLEANOUT	○
○	RIP RAP	○
○	UTILITY POLE	○
*	LIGHT	*
*	GUY WIRE	*
—	TREE LINE	—
—	TREE	—
—	SHRUB	—
—	ROCK	—
—	WETLANDS	—
—	FEMA REGULATORY FLOODWAY	—
25'B	25-FT WETLAND NO-DISTURB ZONE	25'B
100'B	100-FT WETLAND BUFFER ZONE	100'B
—	200-FT RIVERFRONT AREA	—
—	WELLHEAD PROTECTION AREA	—
—	100-YEAR FEMA FLOOD ZONE	—
—	WETLAND FLAG	—
100	5' CONTOUR	100
102	1' CONTOUR	102
10.0x	SPOT ELEVATION	10.0x
○	BENCH MARK	○
○	CHAIN LINK FENCE	○
—	SIGN POST	—
—	BITUMINOUS CONCRETE	—
—	GRAVEL AREA	—
—	CONCRETE BUILDING	—
—	PROPERTY LINE	—
—	RIGHT OF WAY	—
○	BOLLARD	○
○	BORING/PROBE	○
SB-1	TEST PIT	SB-1
—	LIMIT OF WORK	—
—	EROSION CONTROL SOCK	—

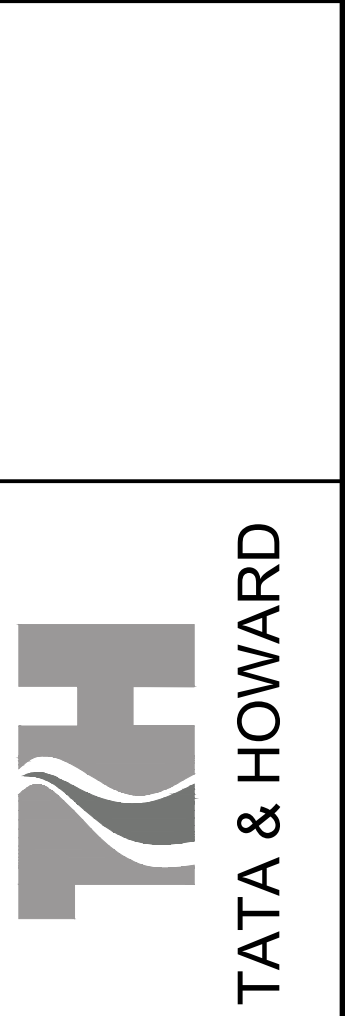
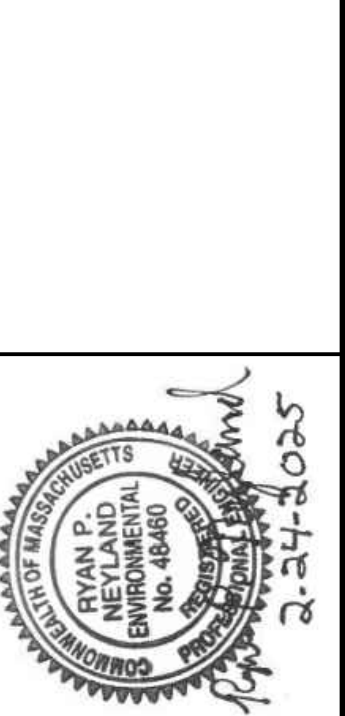
ABBREVIATIONS

APPROX.	APPROXIMATE
ABS	ACRYLONITRILE BUTADIENE STYRENE
BC	BITUMINOUS CURB
BFV	BUTTERFLY VALVE
BMK	BENCHMARK
BOW	BOTTOM OF WALL
CB	CATCH BASIN
CI	CAST IRON
CONC.	CONCRETE
CMP	CORRUGATED METAL PIPE
CNM	COULD NOT MEASURE
CNO	COULD NOT OPEN
CPP	CORRUGATED PLASTIC PIPE
DI	DUCTILE IRON
DIA.	DIAMETER
DMH	DRAIN MANHOLE
DWGS	DRAWINGS
DYL	DOUBLE YELLOW LINE
EOC	EDGE OF CONCRETE
EOG	EDGE OF GRAVEL
ELEV.	ELEVATION
FFE	FINISHED FLOOR ELEVATION
FM	FORCE MAIN
FW	FINISHED WATER
GV	GATE VALVE
HDD	HORIZONTAL DIRECTIONAL DRILLING
HDPE	HIGH DENSITY POLYETHYLENE
HYD	HYDRANT
INV.	INVERT
LR	LONG RADIUS
MAX.	MAXIMUM
MIEX	MAGNETIC ION EXCHANGE SYSTEMS
MIN.	MINIMUM
MJ	MECHANICAL JOINT
PE	POLYETHYLENE
PFW	SLOW SAND PREFILTERED WATER MAIN
PP	POLYPROPYLENE
PSI	POUNDS PER SQUARE INCH
PVC	POLYVINYL CHLORIDE
(R)	RECORD INFORMATION
RD	RESIDUALS DRAIN
RCP	REINFORCED CONCRETE PIPE
ROW	RIGHT-OF-WAY
SMH	SEWER MANHOLE
SWL	SOLID WHITE LINE
TOW	TOP OF WALL
TYP.	TYPICAL
VERT.	VERTICAL

ATTLEBORO WATER DEPT.
ATTLEBORO, MA
WADING RIVER
WATER TREATMENT PLANT

CIVIL
LEGEND, ABBREVIATIONS
AND GENERAL NOTES

Description	Date	Rev.



T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE: AS NOTED

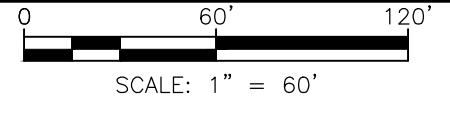
02-C-1

P:\Attboro\6193_Wading River WTP Design\CAD\Sheets\02-C-1-General Notes.dwg 2/27/2025 12:22 PM MBARRY

P:\Attleboro\6193-Wading River WTP Design\CADD\Sheets\02-C-2-Existing Conditions Site Plan.dwg 2/27/2025 12:19 PM MTB/BRETT/S



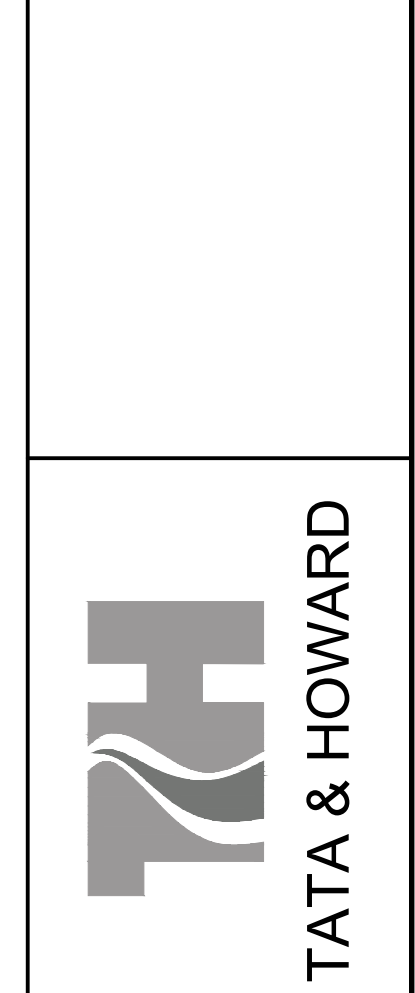
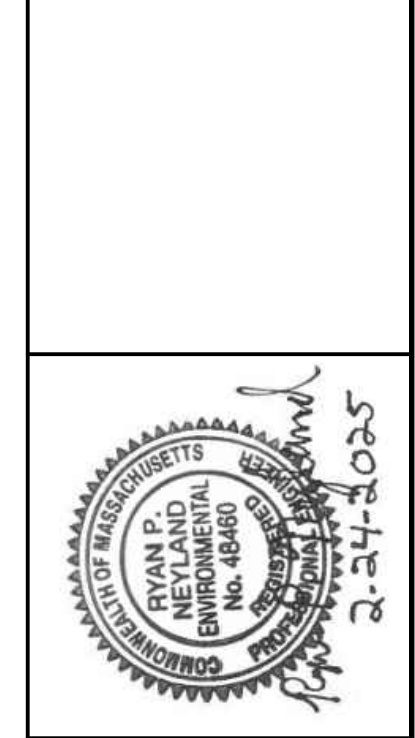
EXISTING CONDITIONS SITE PLAN



ATTLEBORO WATER DEPT.
ATTLEBORO, MA
WADING RIVER
WATER TREATMENT PLANT

CIVIL
EXISTING CONDITIONS
SITE PLAN

Rev.	Date	Description

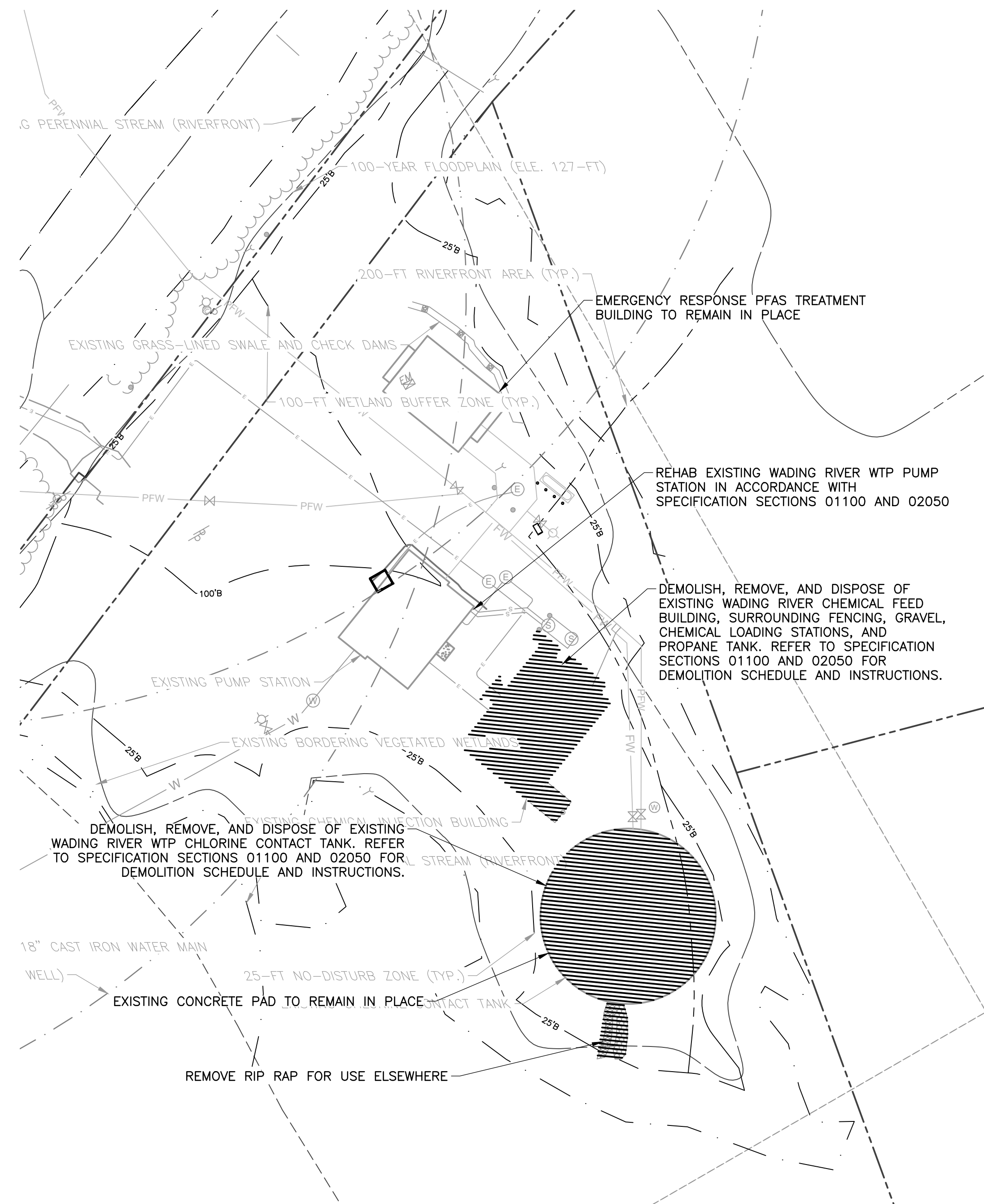


T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE: AS NOTED

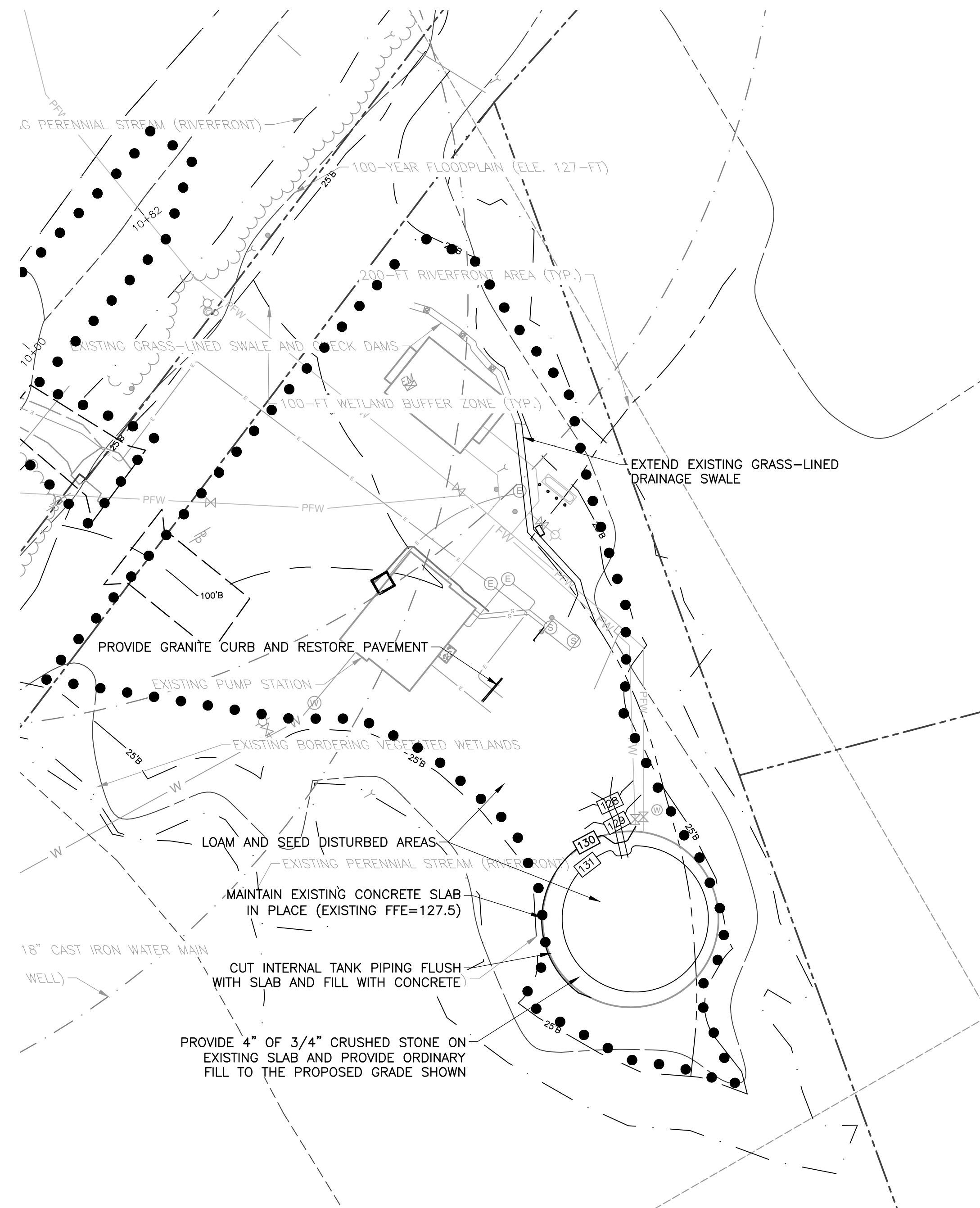
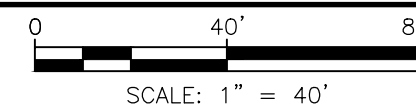
02-C-2

Designed By: MSB
Drawn By: M/J/7/20
Checked By: M/M

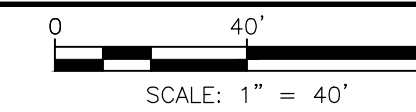
THIS DOCUMENT IS THE PROPERTY OF T&H & HOWARD, INC. AND ITS CLIENT. REPRODUCTION OR MODIFICATION WITHOUT WRITTEN CONSENT IS PROHIBITED.



**PROPOSED DEMOLITION SITE PLAN
(ADDITIVE ALTERNATE A)**



**PROPOSED GRADING AND SITE IMPROVEMENTS
(ADDITIVE ALTERNATE A)**



P:\Attleboro\6193_Wading_River_WTP_Design\CADD\Sheets\02-C-3-Proposed_Demolition_Site_Plan.dwg 2/27/2025 12:19 PM MBARRY

ATTLEBORO WATER DEPT.
ATTLEBORO, MA
WADING RIVER
WATER TREATMENT PLANT

CIVIL
PROPOSED DEMOLITION AND
SITE IMPROVEMENTS PLAN
(ADDITIVE ALTERNATE A)

Rev.	Date	Description

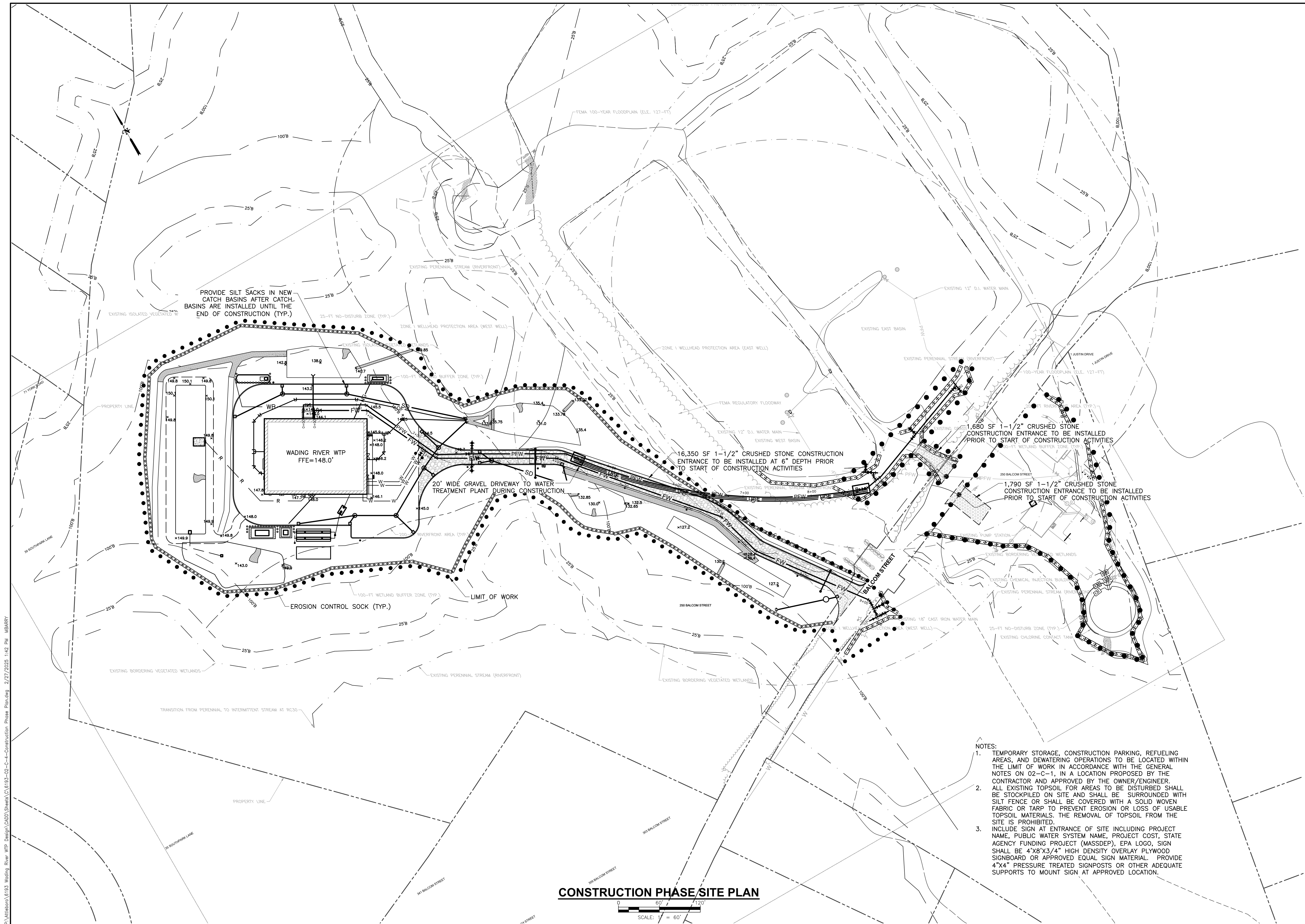


T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE: AS NOTED

02-C-3

Drawn By: MJK/ALD
Designed By: MSB
Checked By: MVM
Approved By: KLG

THIS DOCUMENT IS THE PROPERTY OF TATA & HOWARD, INC. AND ITS SUBSIDIARIES. REPRODUCTION OR MODIFICATION WITHOUT WRITTEN CONSENT IS PROHIBITED.



P:\Attleboro\6193-Wading River WTP Design\CAD\Sheets\02-C-4-Construction Phase Plan.dwg 2/27/2025 1:42 PM MBARRY

CONSTRUCTION PHASE SITE PLAN

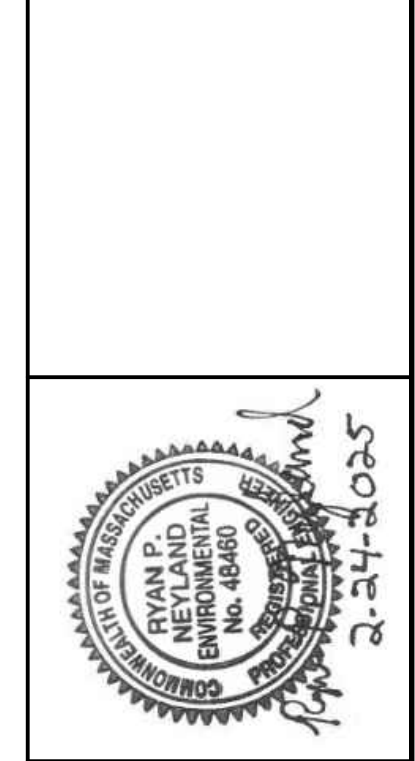


- NOTES:
- TEMPORARY STORAGE, CONSTRUCTION PARKING, REFUELING AREAS, AND DEWATERING OPERATIONS TO BE LOCATED WITHIN THE LIMIT OF WORK IN ACCORDANCE WITH THE GENERAL NOTES ON 02-C-1, IN A LOCATION PROPOSED BY THE CONTRACTOR AND APPROVED BY THE OWNER/ENGINEER.
 - ALL EXISTING TOPSOIL FOR AREAS TO BE DISTURBED SHALL BE STOCKPILED ON SITE AND SHALL BE SURROUNDED WITH SILT FENCE OR SHALL BE COVERED WITH A SOLID WOVEN FABRIC OR TARP TO PREVENT EROSION OR LOSS OF USABLE TOPSOIL MATERIALS. THE REMOVAL OF TOPSOIL FROM THE SITE IS PROHIBITED.
 - INCLUDE SIGN AT ENTRANCE OF SITE INCLUDING PROJECT NAME, PUBLIC WATER SYSTEM NAME, PROJECT COST, STATE AGENCY FUNDING PROJECT (MASSDEP), EPA LOGO, SIGN SHALL BE 4'X8'X3/4" HIGH DENSITY OVERLAY PLYWOOD SIGNBOARD OR APPROVED EQUAL SIGN MATERIAL. PROVIDE 4"X4" PRESSURE TREATED SIGNPOSTS OR OTHER ADEQUATE SUPPORTS TO MOUNT SIGN AT APPROVED LOCATION.

ATTLEBORO WATER DEPT.
ATTLEBORO, MA
WADING RIVER
WATER TREATMENT PLANT

CIVIL
CONSTRUCTION PHASE
SITE PLAN

Rev.	Date	Description



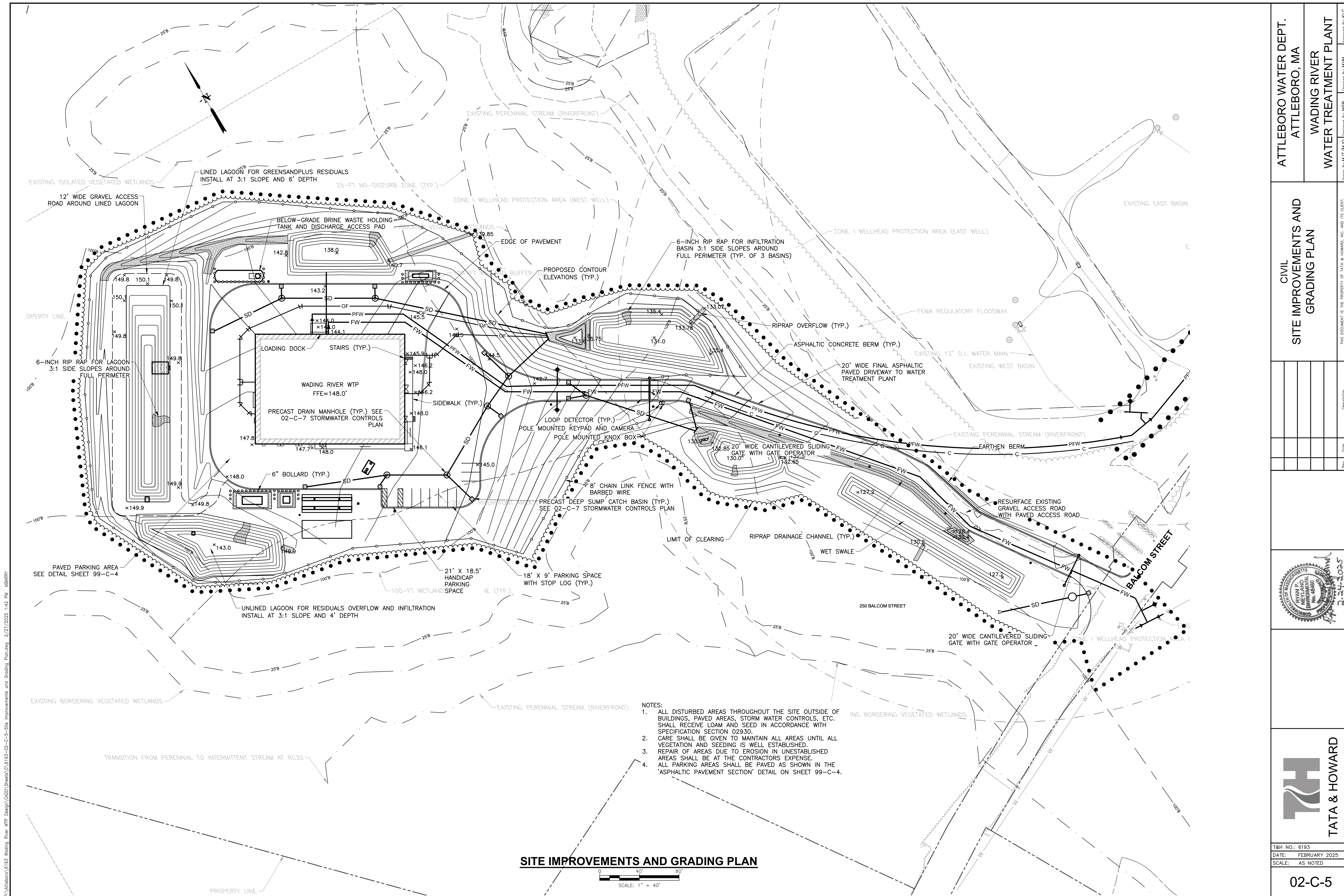
TATA & HOWARD

T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE: AS NOTED

02-C-4

Designed By: MSB
Drawn By: MJT/MLO
Checked By: MVM
Approved By: KLG

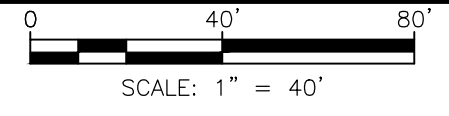
THIS DOCUMENT IS THE PROPERTY OF TATA & HOWARD, INC. AND ITS CLIENT. REPRODUCTION OR MODIFICATION WITHOUT WRITTEN CONSENT IS PROHIBITED.



P:\Attboro\6193_Wading River WTP Design\CADD\Sheets\02-C-5-Site Improvements and Grading_Plan.dwg 2/27/2025 1:42 PM MBARRY

- NOTES:**
1. ALL DISTURBED AREAS THROUGHOUT THE SITE OUTSIDE OF BUILDINGS, PAVED AREAS, STORM WATER CONTROLS, ETC. SHALL RECEIVE LOAM AND SEED IN ACCORDANCE WITH SPECIFICATION SECTION 02930.
 2. CARE SHALL BE GIVEN TO MAINTAIN ALL AREAS UNTIL ALL VEGETATION AND SEEDING IS WELL ESTABLISHED.
 3. REPAIR OF AREAS DUE TO EROSION IN UNESTABLISHED AREAS SHALL BE AT THE CONTRACTORS EXPENSE.
 4. ALL PARKING AREAS SHALL BE PAVED AS SHOWN IN THE 'ASPHALTIC PAVEMENT SECTION' DETAIL ON SHEET 99-C-4.

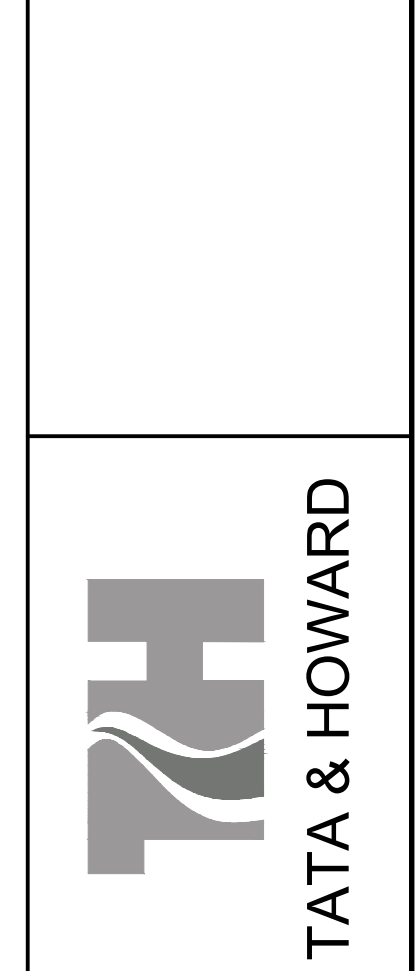
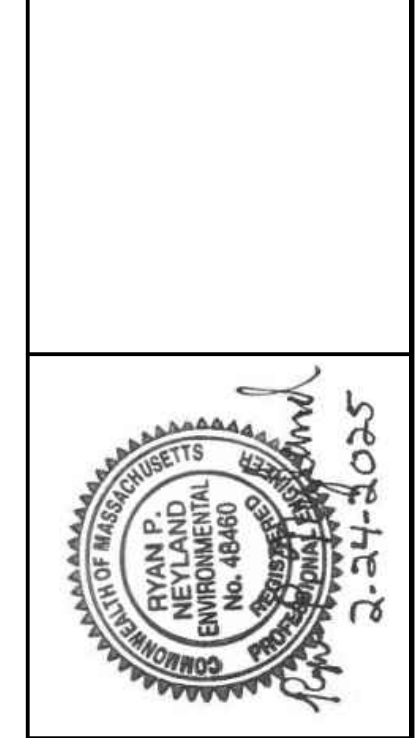
SITE IMPROVEMENTS AND GRADING PLAN



ATTLEBORO WATER DEPT.
 ATTLEBORO, MA
 WADING RIVER
 WATER TREATMENT PLANT

CIVIL
 SITE IMPROVEMENTS AND
 GRADING PLAN

Rev.	Date	Description

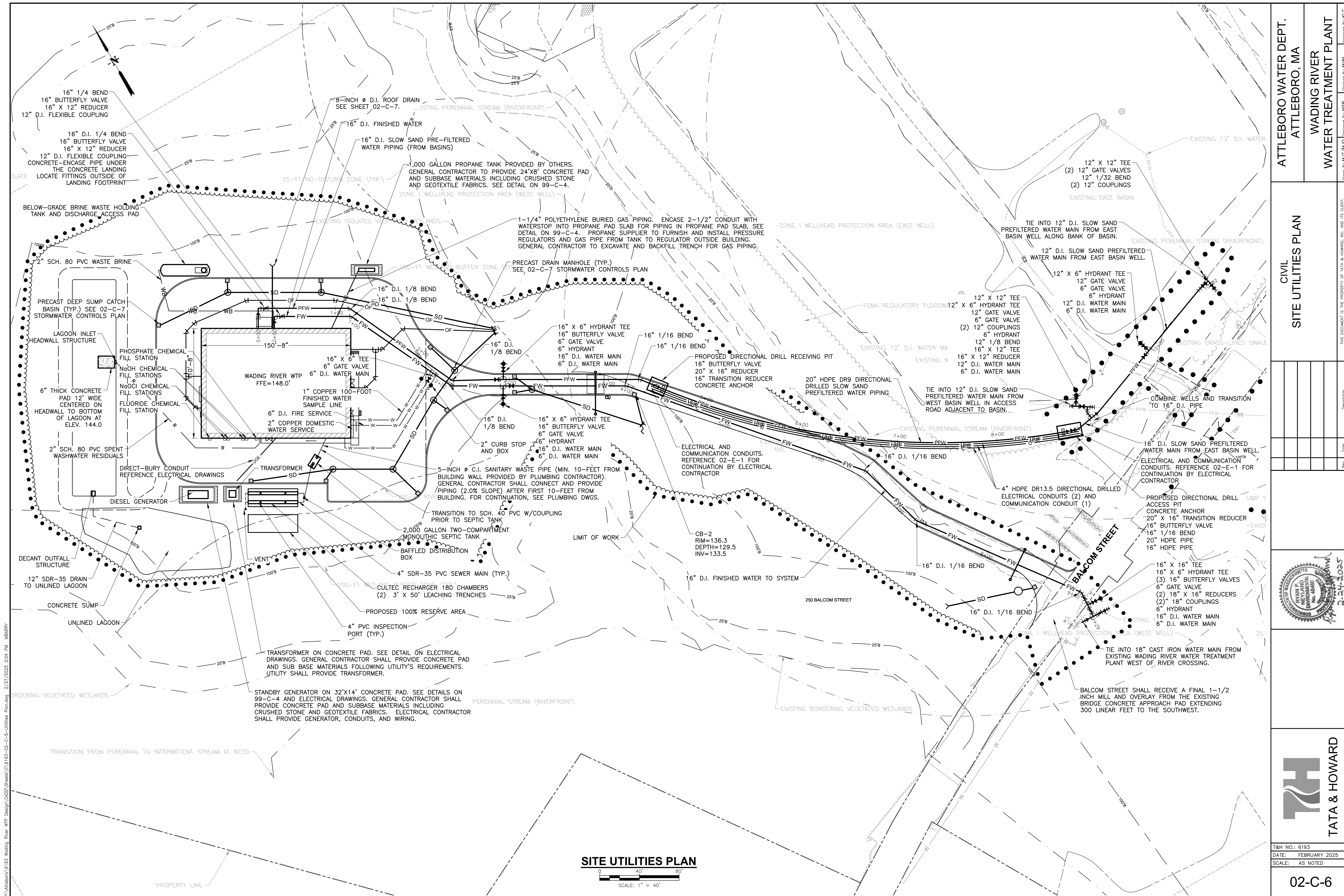


T&H NO.: 6193
 DATE: FEBRUARY 2025
 SCALE: AS NOTED

02-C-5

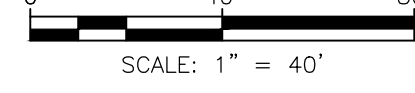
Drawn By: MUT/ALO Designed By: MSB Checked By: MWM Approved By: KLG

THIS DOCUMENT IS THE PROPERTY OF TATA & HOWARD, INC. AND ITS CLIENT. REPRODUCTION OR MODIFICATION WITHOUT WRITTEN CONSENT IS PROHIBITED.



P:\Attleboro\6193 - Wading River WTP Design\CAD\Sheets\02-C-6-Utilities Plan.dwg 2/27/2025 2:04 PM MBARRY

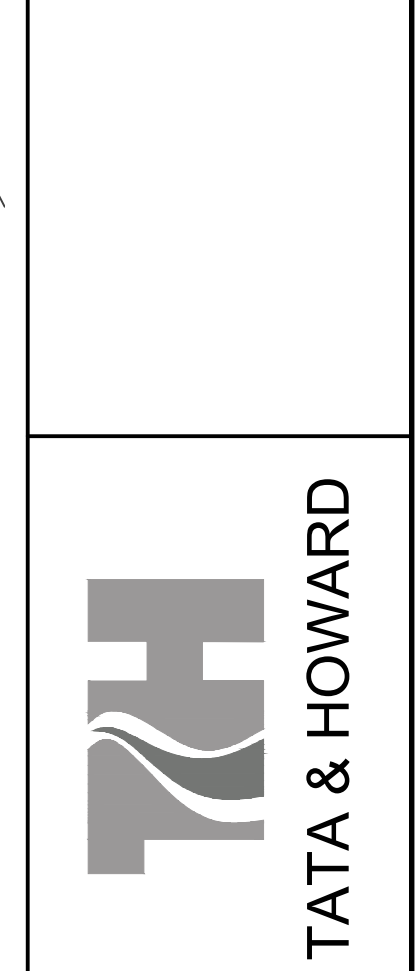
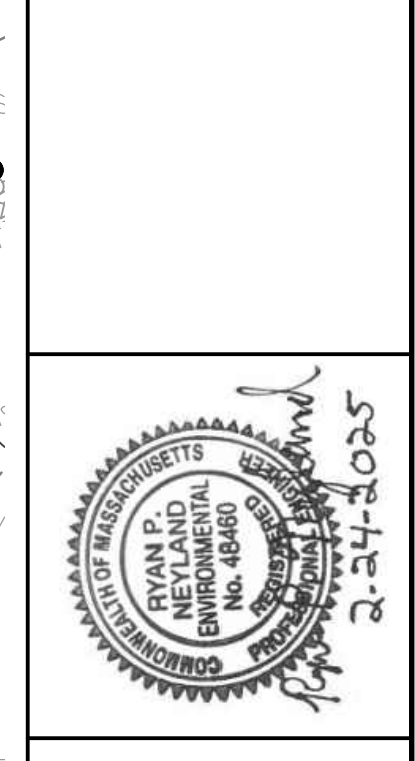
SITE UTILITIES PLAN



ATTLEBORO WATER DEPT.
 ATTLEBORO, MA
 WADING RIVER
 WATER TREATMENT PLANT

CIVIL
 SITE UTILITIES PLAN

Rev.	Date	Description

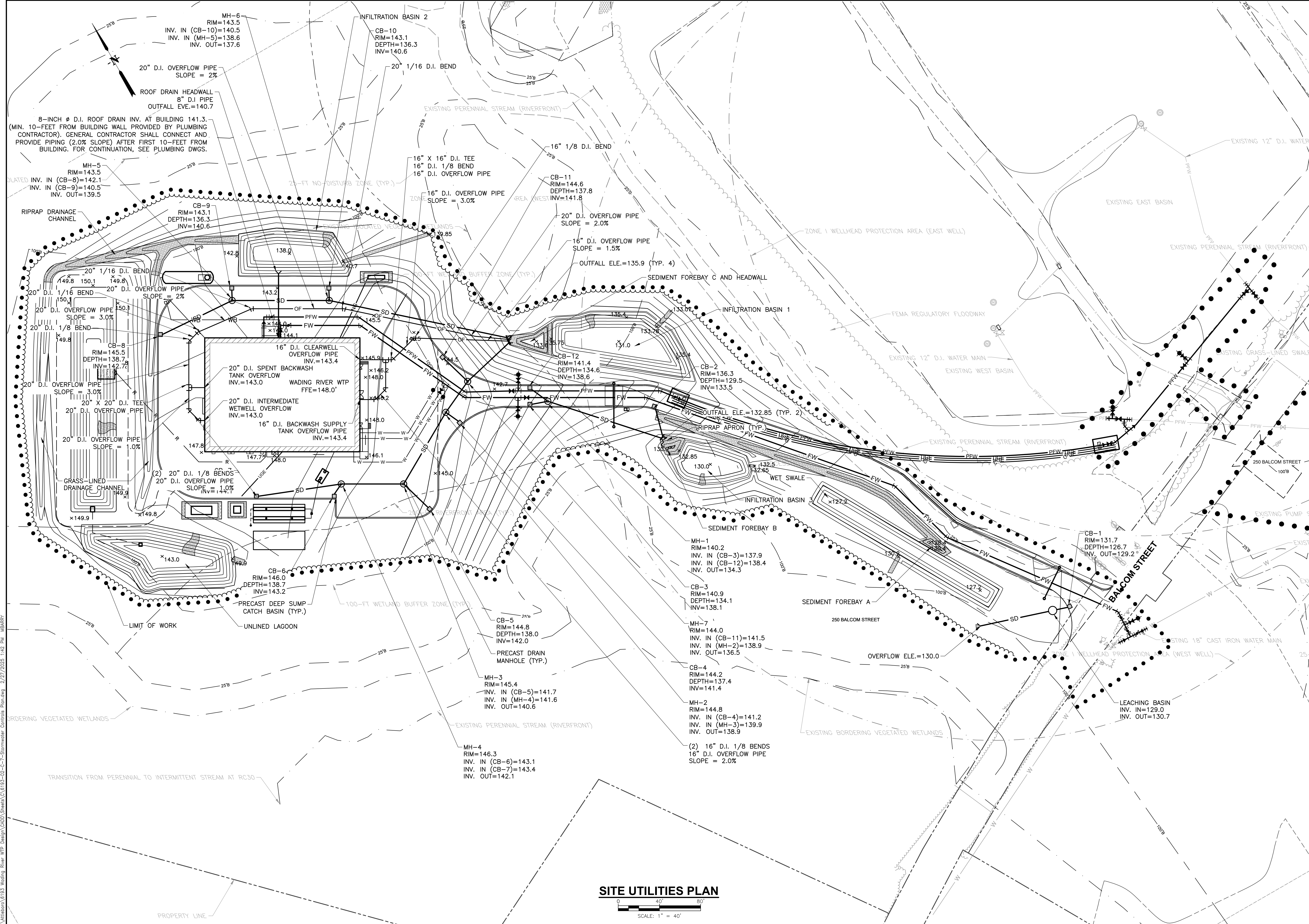


T&H NO.: 6193
 DATE: FEBRUARY 2025
 SCALE: AS NOTED

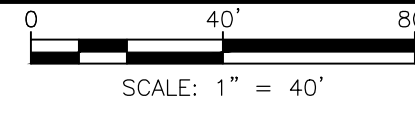
02-C-6

Drawn By: MJK/ALO
 Designed By: MSB
 Checked By: MWM

THIS DOCUMENT IS THE PROPERTY OF TATA & HOWARD, INC. AND ITS CLIENT. REPRODUCTION OR MODIFICATION WITHOUT WRITTEN CONSENT IS PROHIBITED.



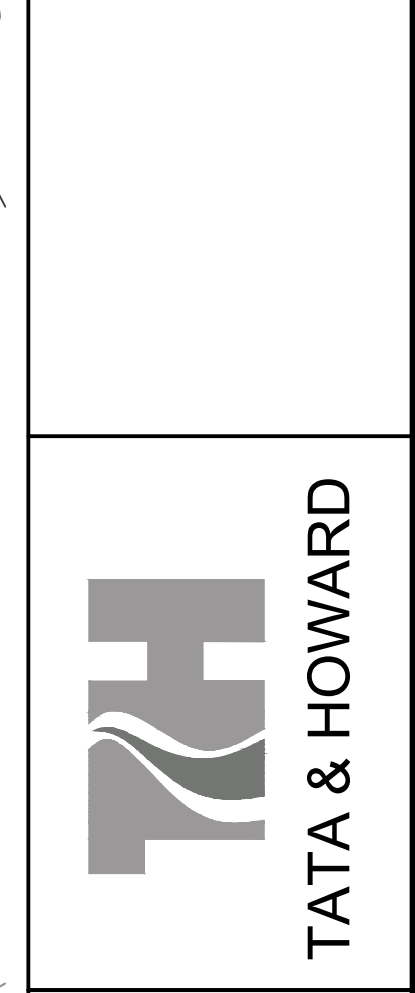
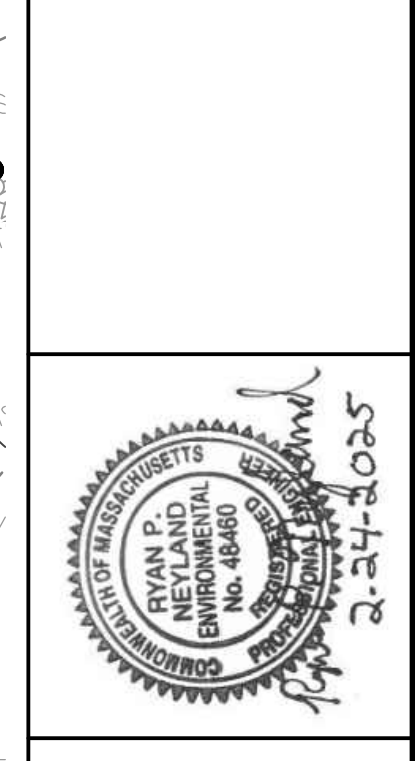
SITE UTILITIES PLAN



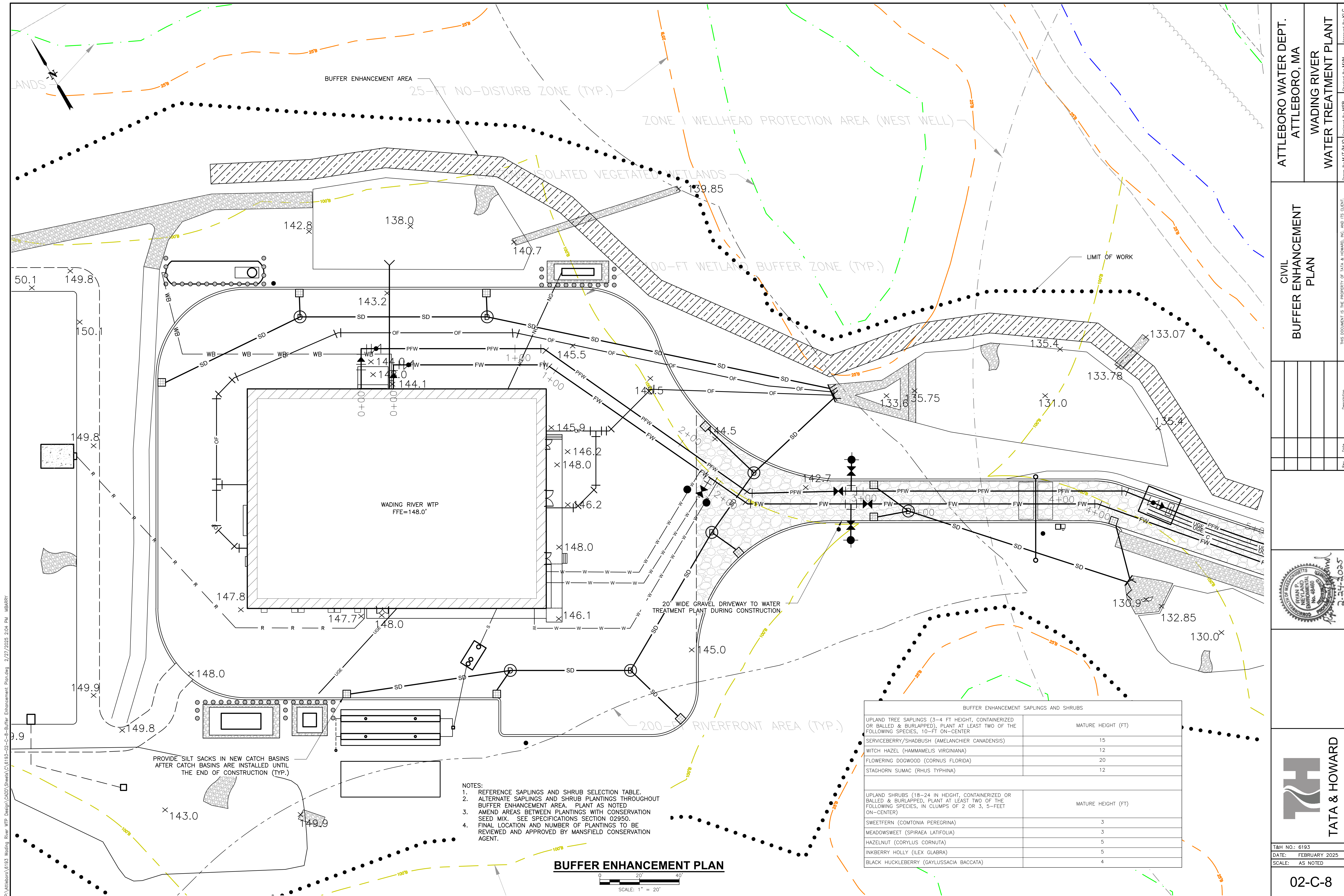
ATTLEBORO WATER DEPT.
ATTLEBORO, MA
WADING RIVER
WATER TREATMENT PLANT

CIVIL
STORMWATER
CONTROLS PLAN

Rev.	Date	Description



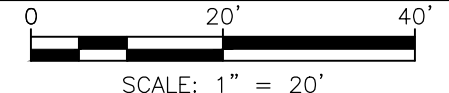
T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE: AS NOTED
02-C-7



P:\Attboro\6193-Wading River WTP Design\0200\Sheets\02-C-8-Buffer Enhancement Plan.dwg 2/27/2025 2:04 PM MBARRY

- NOTES:
1. REFERENCE SAPLINGS AND SHRUB SELECTION TABLE.
 2. ALTERNATE SAPLINGS AND SHRUB PLANTINGS THROUGHOUT BUFFER ENHANCEMENT AREA. PLANT AS NOTED.
 3. AMEND AREAS BETWEEN PLANTINGS WITH CONSERVATION SEED MIX. SEE SPECIFICATIONS SECTION 02950.
 4. FINAL LOCATION AND NUMBER OF PLANTINGS TO BE REVIEWED AND APPROVED BY MANSFIELD CONSERVATION AGENT.

BUFFER ENHANCEMENT PLAN

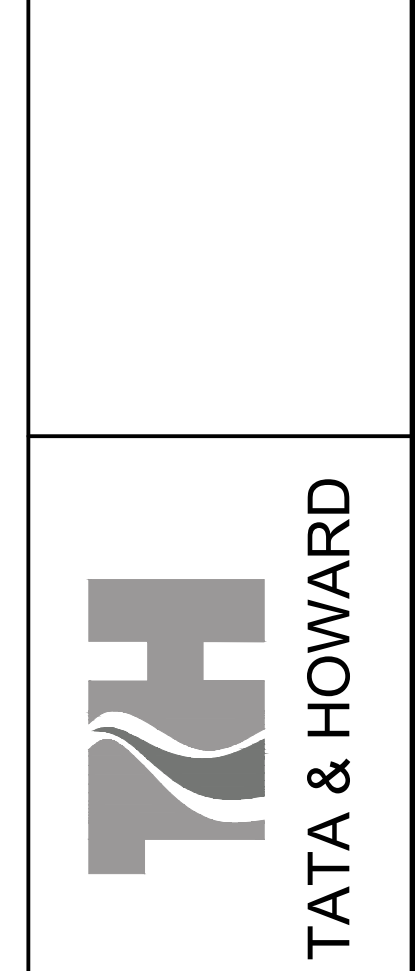
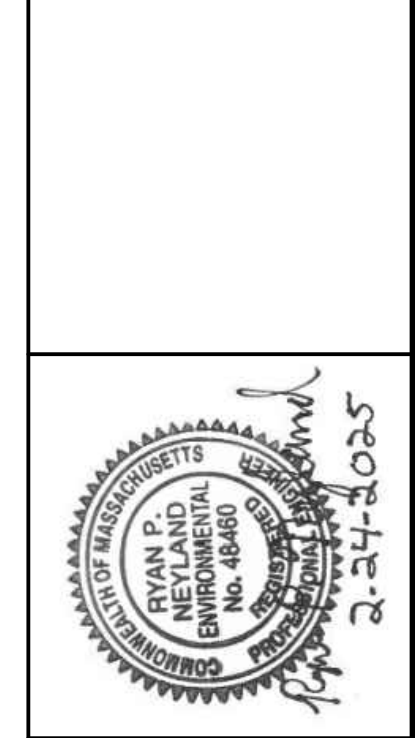


BUFFER ENHANCEMENT SAPLINGS AND SHRUBS	
UPLAND TREE SAPLINGS (3-4 FT HEIGHT, CONTAINERIZED OR BALLED & BURLAPPED), PLANT AT LEAST TWO OF THE FOLLOWING SPECIES, 10-FT ON-CENTER	MATURE HEIGHT (FT)
SERVICEBERRY/SHADBUSH (AMELANCHIER CANADENSIS)	15
WITCH HAZEL (HAMMAMELIS VIRGINIANA)	12
FLOWERING DOGWOOD (CORNUS FLORIDA)	20
STAGHORN SUMAC (RHUS TYPHINA)	12
UPLAND SHRUBS (18-24 IN HEIGHT, CONTAINERIZED OR BALLED & BURLAPPED), PLANT AT LEAST TWO OF THE FOLLOWING SPECIES, IN CLUMPS OF 2 OR 3, 5-FEET ON-CENTER	MATURE HEIGHT (FT)
SWEETFERN (COMTONIA PEREGRINA)	3
MEADOWSWEET (SPIRAEA LATIFOLIA)	3
HAZELNUT (CORYLUS CORNUTA)	5
INKBERRY HOLLY (ILEX GLABRA)	5
BLACK HUCKLEBERRY (GAYLUSSACIA BACCATA)	4

ATTLEBORO WATER DEPT.
 ATTLEBORO, MA
 WADING RIVER
 WATER TREATMENT PLANT

CIVIL
 BUFFER ENHANCEMENT
 PLAN

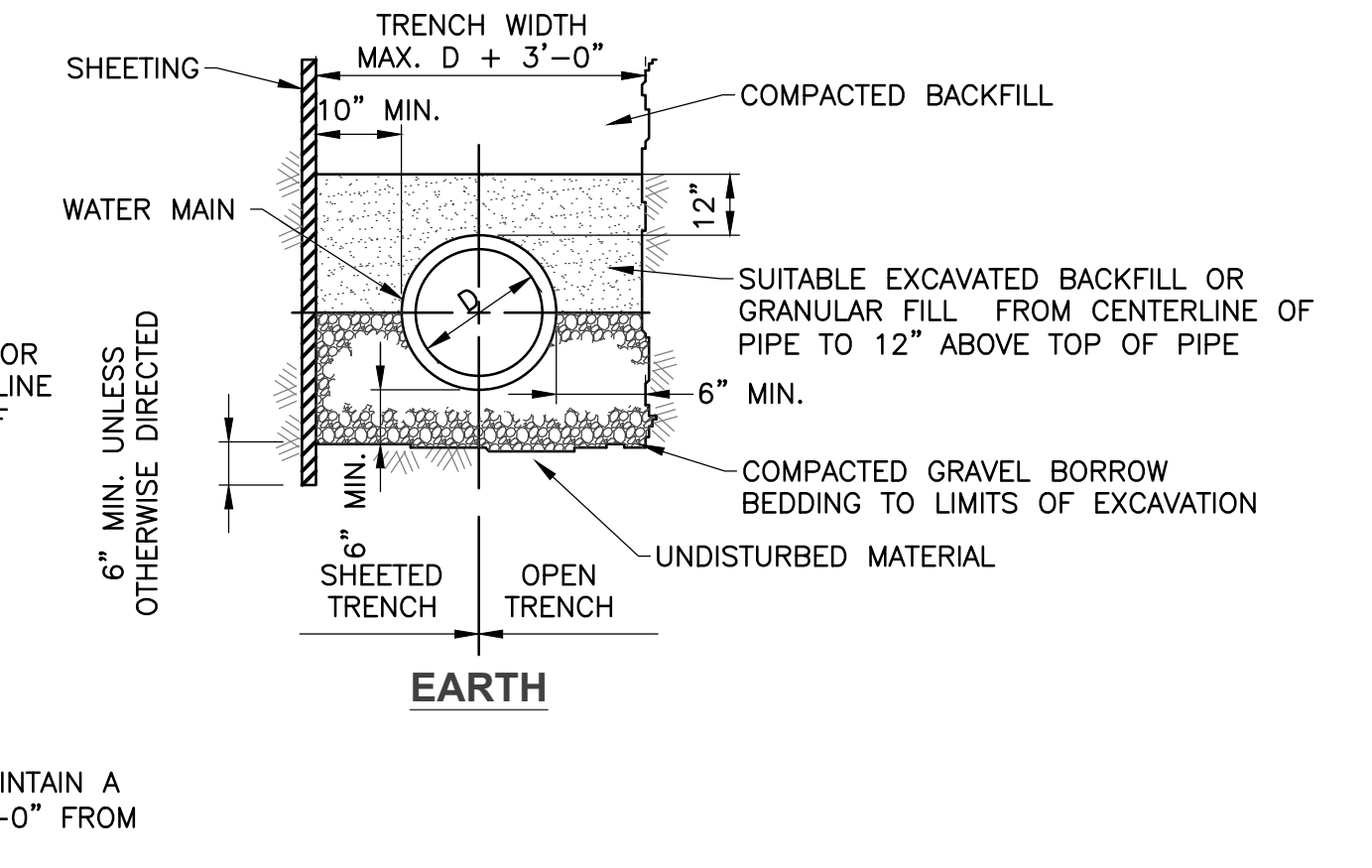
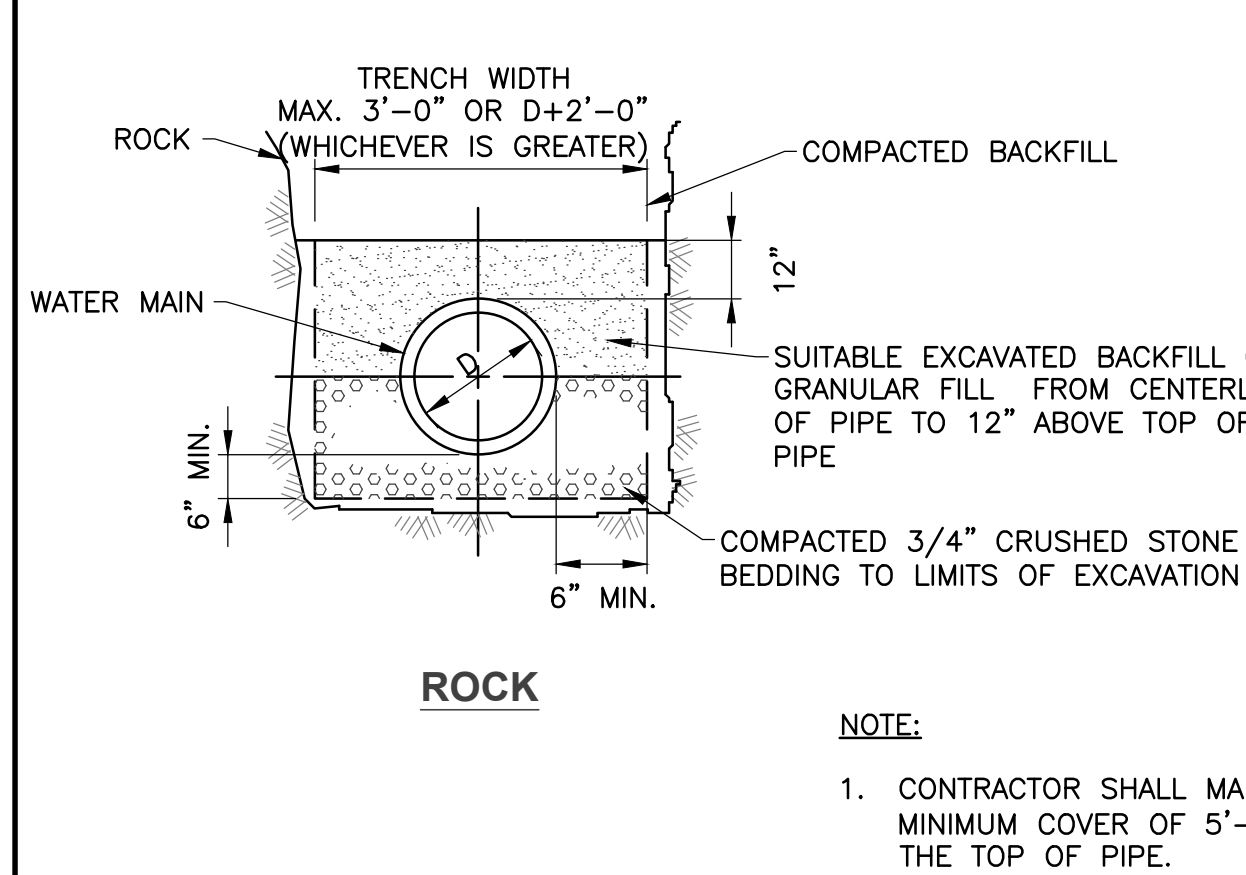
Rev.	Date	Description



T&H NO.: 6193
 DATE: FEBRUARY 2025
 SCALE: AS NOTED

02-C-8

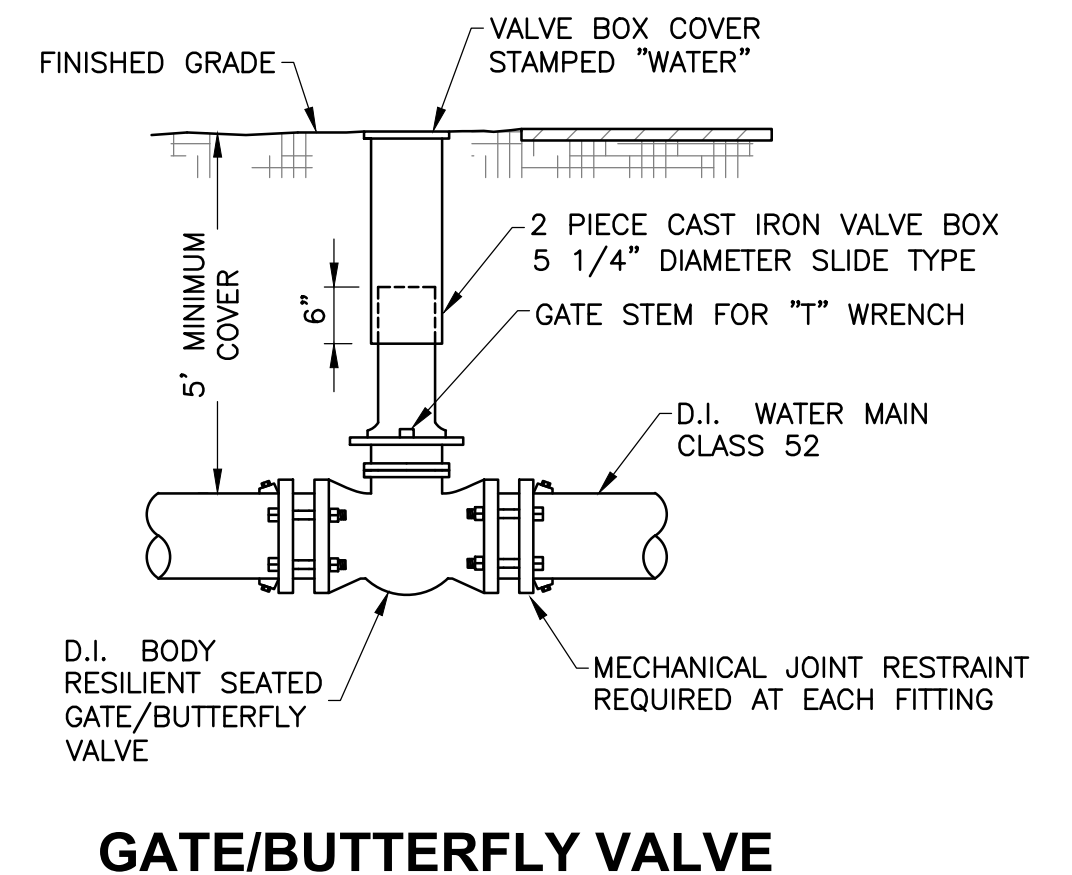
Drawn By: M.J.T/M.L.O. Design By: M.M.B. Approved By: K.L.G.



NOTE:
1. CONTRACTOR SHALL MAINTAIN A MINIMUM COVER OF 5'-0" FROM THE TOP OF PIPE.

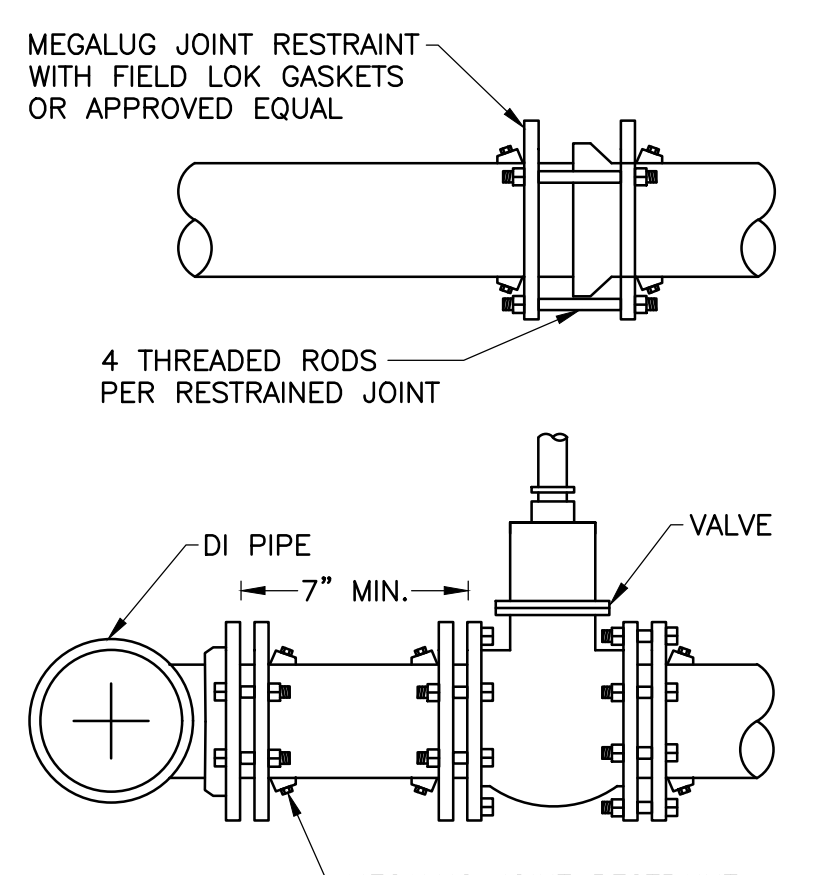
TYPICAL WATER MAIN TRENCH SECTIONS

SCALE: NONE



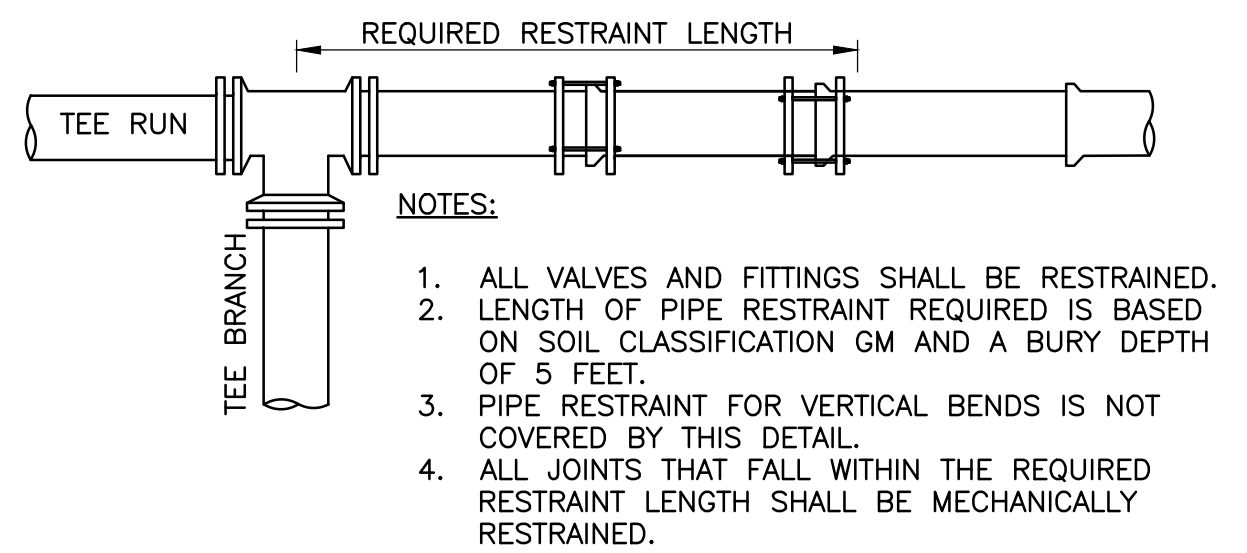
GATE/BUTTERFLY VALVE

SCALE: NONE



MECHANICAL JOINT RESTRAINT

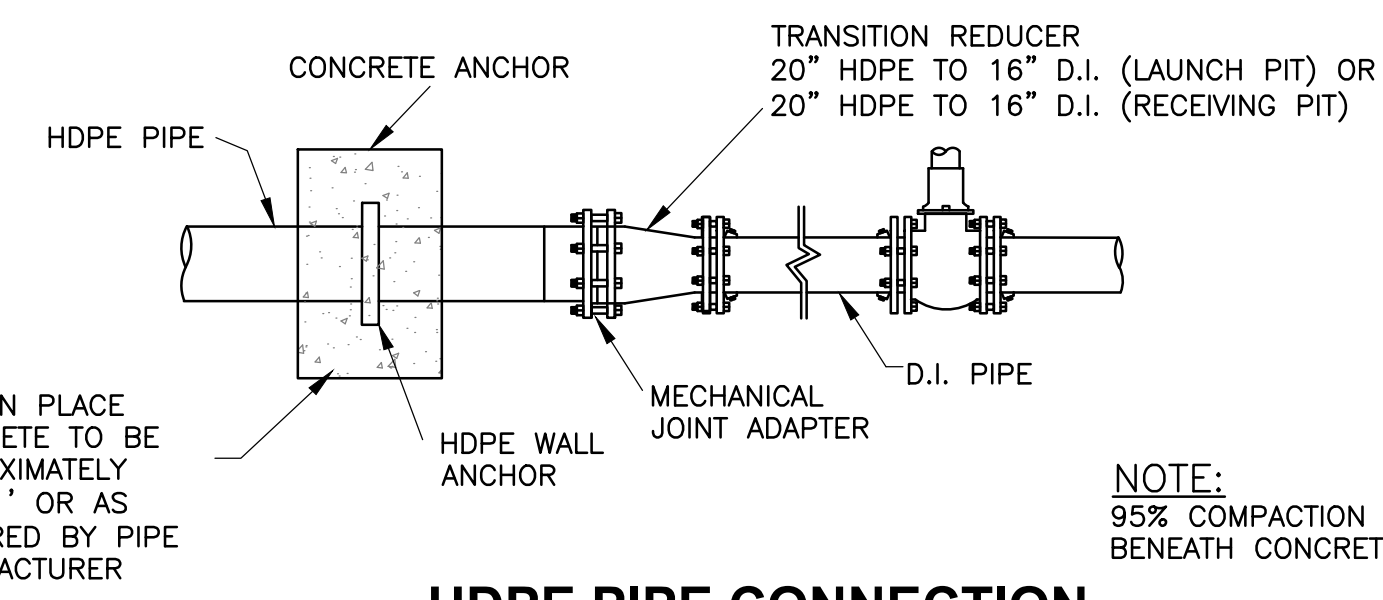
SCALE: NONE



- NOTES:**
1. ALL VALVES AND FITTINGS SHALL BE RESTRAINED.
 2. LENGTH OF PIPE RESTRAINT REQUIRED IS BASED ON SOIL CLASSIFICATION GM AND A BURY DEPTH OF 5 FEET.
 3. PIPE RESTRAINT FOR VERTICAL BENDS IS NOT COVERED BY THIS DETAIL.
 4. ALL JOINTS THAT FALL WITHIN THE REQUIRED RESTRAINT LENGTH SHALL BE MECHANICALLY RESTRAINED.

MINIMUM LENGTH OF PIPE TO BE RESTRAINED (IN FEET)									
PIPE SIZE (IN)	1/4 BEND (90°)	1/8 BEND (45°)	1/16 BEND (22°)	PLUG/ CAP	TEE* (2')	TEE* (5')	TEE* (10')	TEE* (15')	TEE* (20')
6"	12	5	3	21	18	10	1	1	1
8"	16	7	4	28	24	16	4	1	1
12"	22	10	5	40	37	28	16	4	1
16"	29	12	6	51	48	39	27	15	3
20"	37	16	8	87	78	66	45	25	4
24"	43	18	9	102	93	81	60	39	18
36"	59	25	12	144	136	123	101	79	58

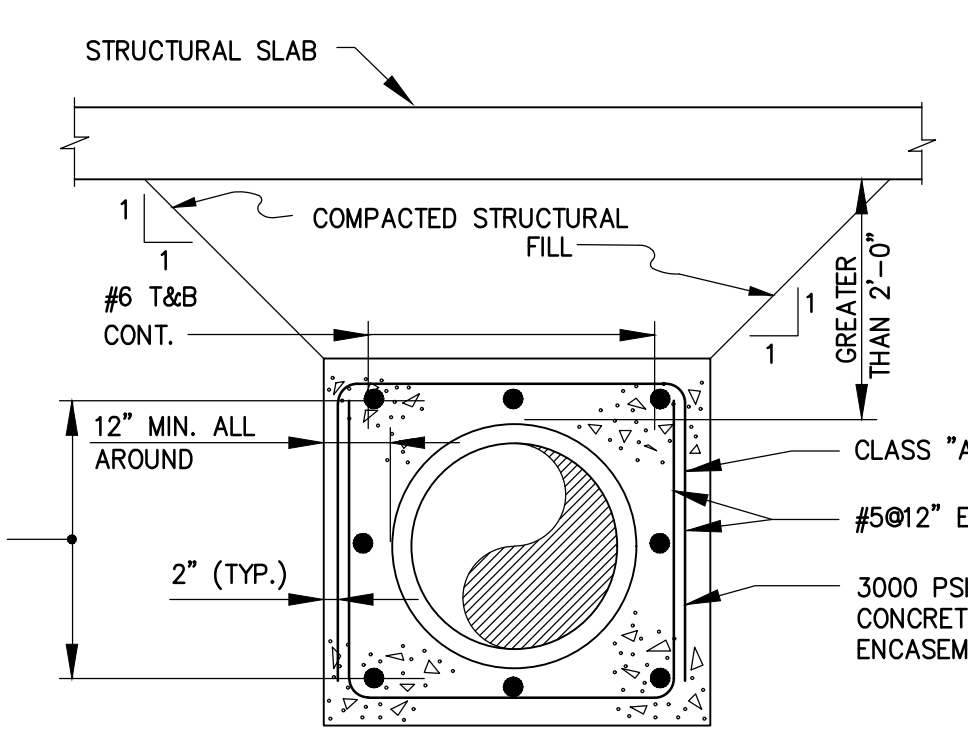
*The values in parenthesis (X) indicate the required restraint length for each side of the Tee Run. The values in the column are the required restraint length for the Tee Branch.



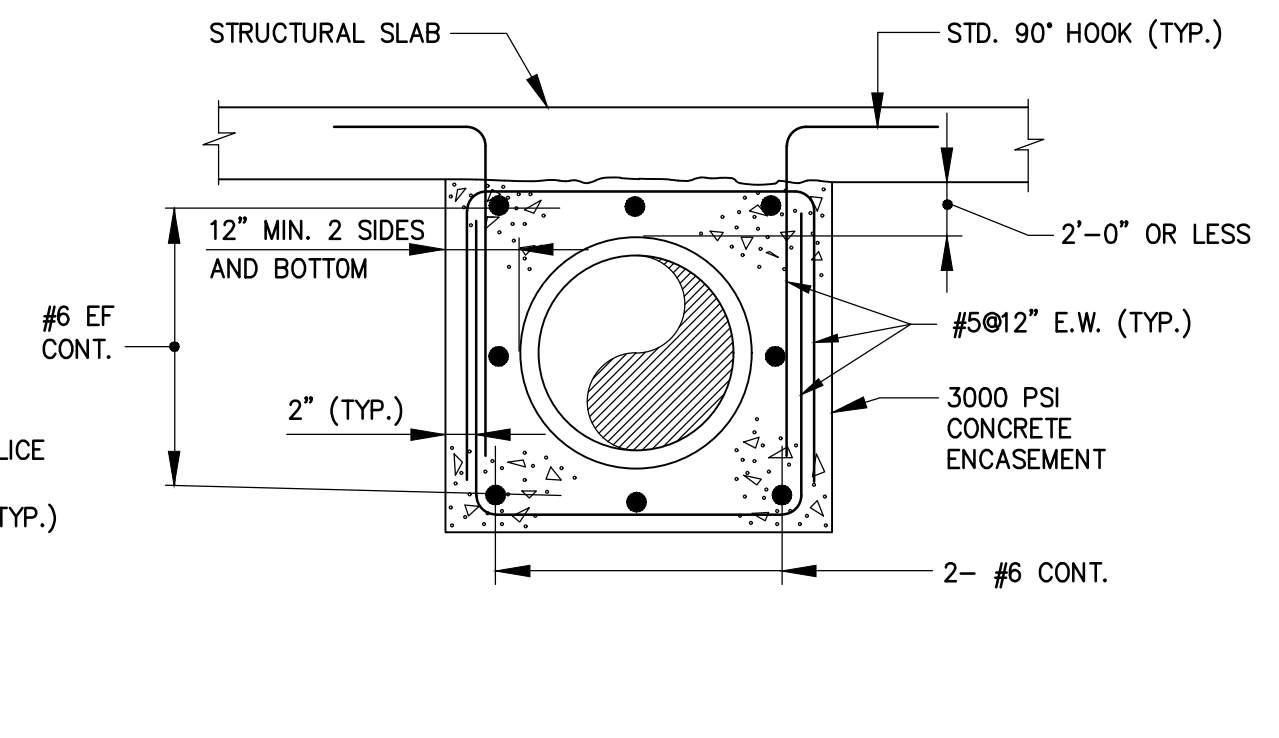
HDPE PIPE CONNECTION

SCALE: NONE

NOTE:
95% COMPACTION REQUIRED BENEATH CONCRETE ANCHORS.



ENCASEMENT FOR PIPES DEEPER THAN 2'-0" BELOW SLAB



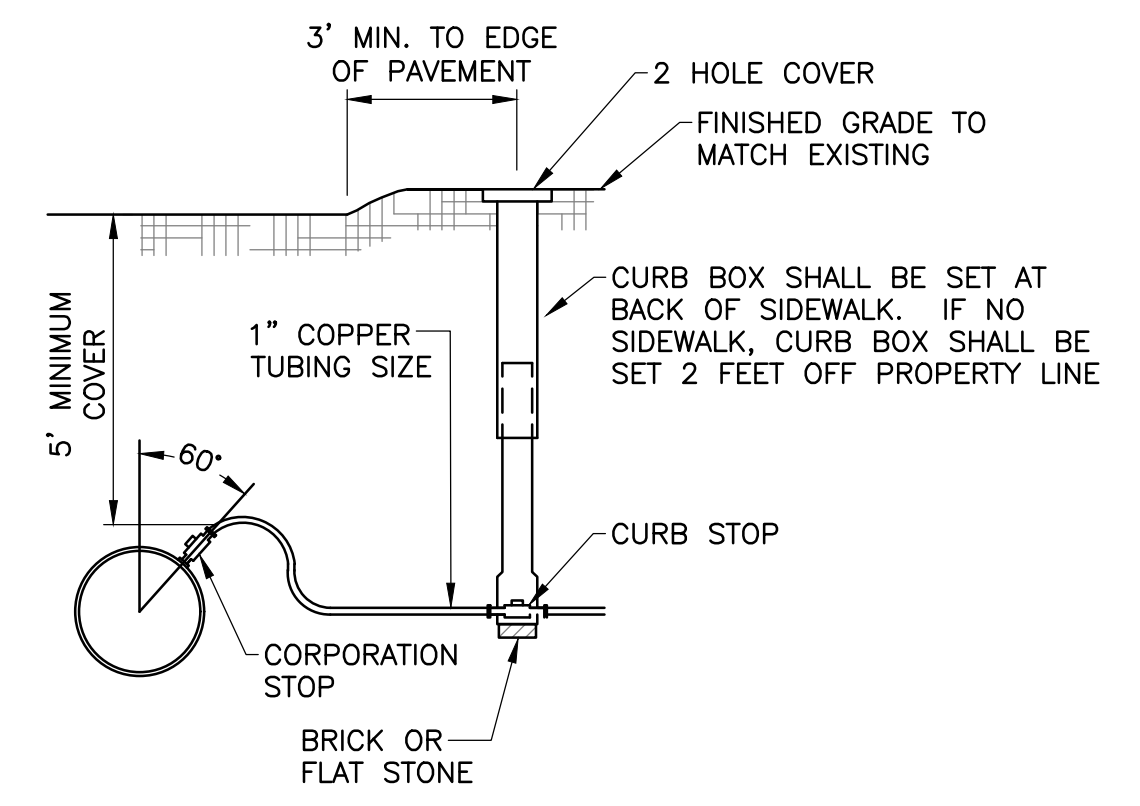
ENCASEMENT FOR PIPE 2'-0" OR LESS BELOW SLAB

CONCRETE PIPE ENCASEMENT DETAILS

SCALE: NONE

MINIMUM BEARING FACE AREA (SQ. FT.)				
PIPE SIZE (IN)	1/4 BEND (90°)	1/8 BEND (45°)	1/16 BEND (22°)	PLUG/ TEE
6"	6.0	3.0	2.5	4.5
8"	9.0	5.0	2.5	6.5
12"	13.3	6.7	3.7	9.6
16"	24.0	11.8	3.7	17.0
20"	26.2	14.2	7.2	18.5
24"	35.0	16.0	10.0	25.0
36"	85.0	46.0	23.4	60.7

- NOTES:**
1. CONCRETE SHALL BE 3,000 PSI MINIMUM AT 28 DAYS.
 2. THRUST BLOCKS SHALL BE PLACED AGAINST UNDISTURBED MATERIAL WHENEVER POSSIBLE.
 3. ALL FITTINGS SHALL BE SUPPORTED IN CONCRETE.
 4. POURED CONCRETE NOT TO COME WITHIN 6" OF MECHANICAL JOINTS.
 5. BEARING FACE AREA CALCULATED ASSUMING 250 PSI AND 1.5 TON/S.F. ALLOWABLE SOIL BEARING CAPACITY.

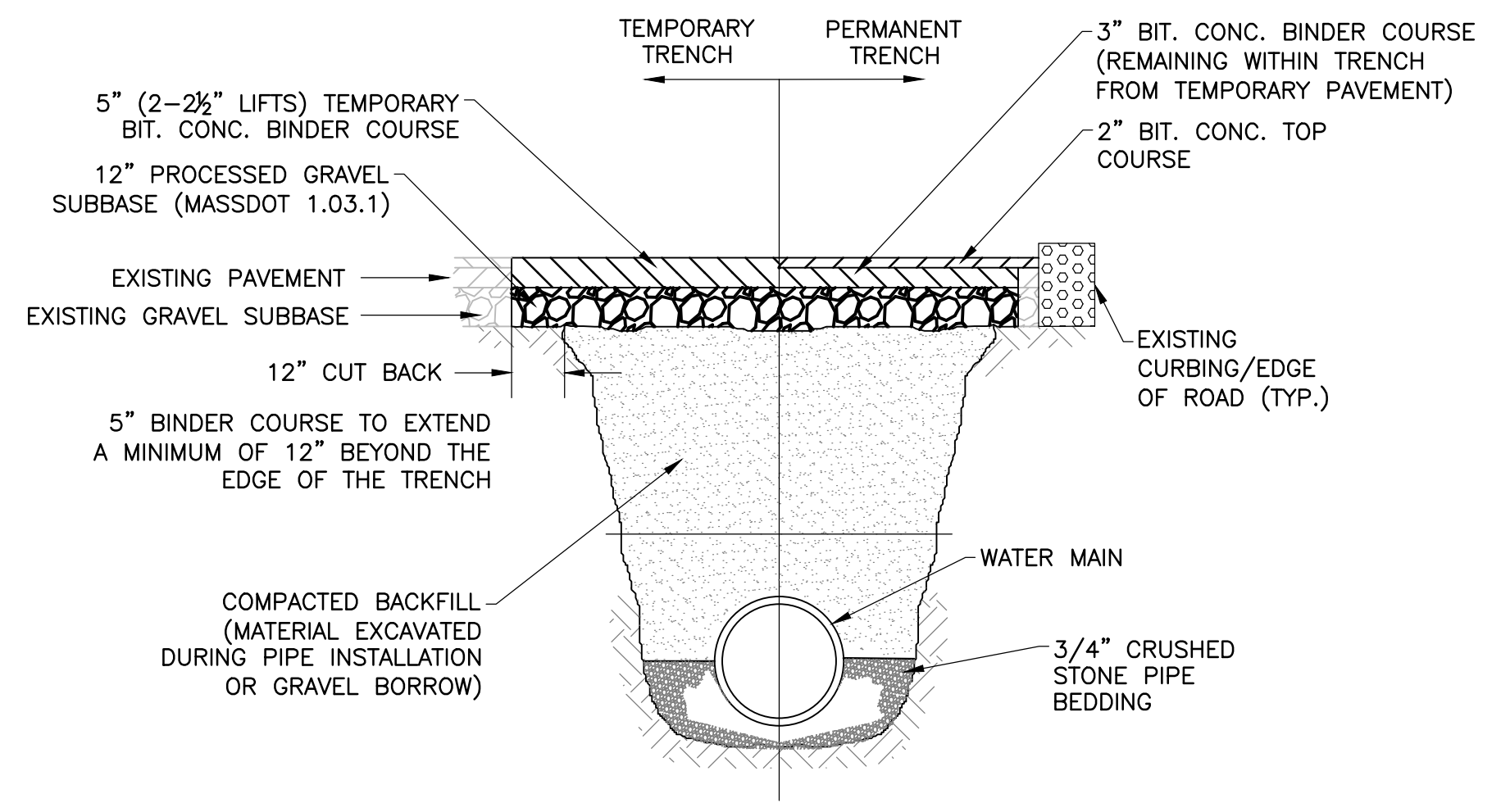


NOTES:

1. SERVICES 1-INCH AND GREATER IN D.I. MAINS WITH A DIAMETER OF 12-INCHES OR GREATER SHALL BE DIRECT TAP.

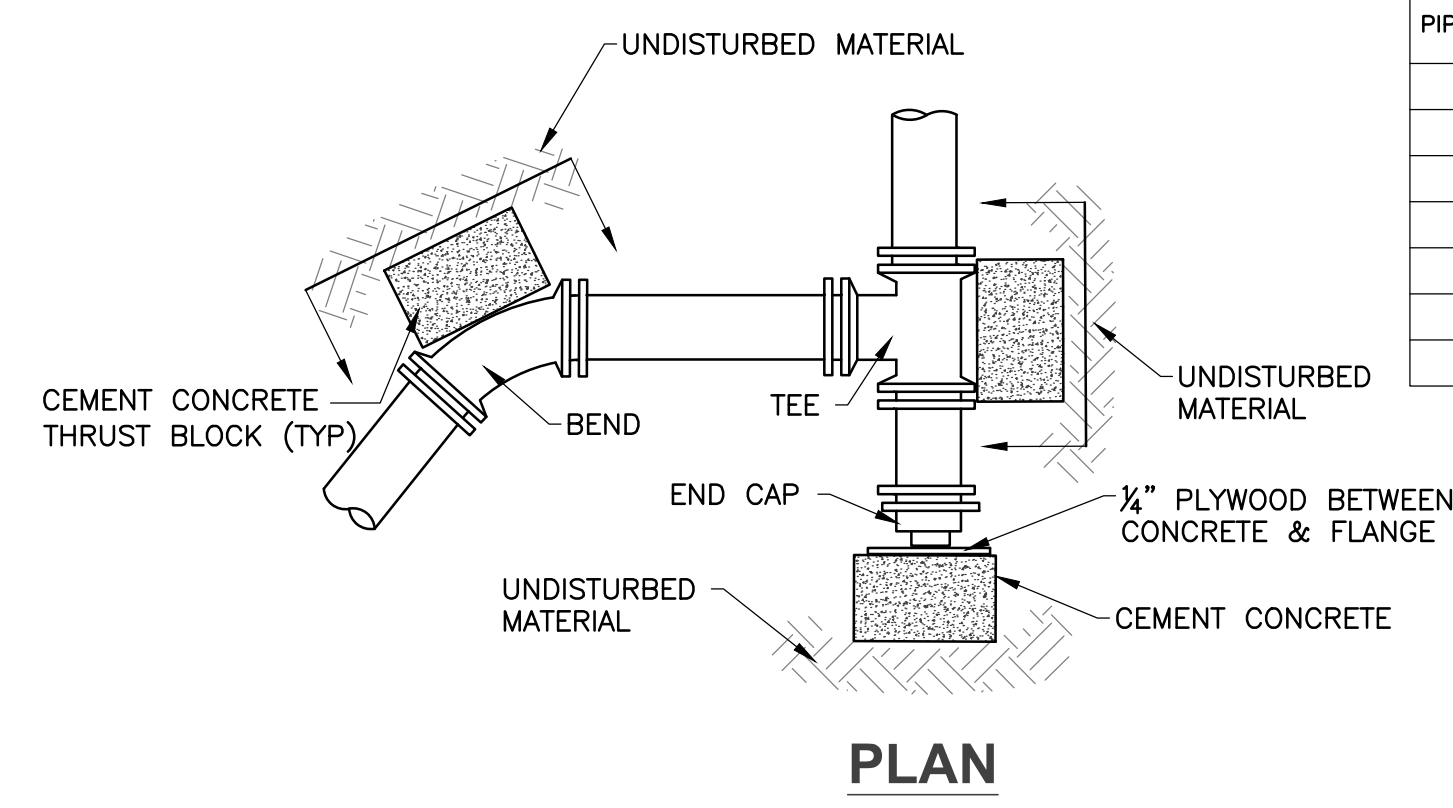
SERVICE CONNECTION (COPPER)

SCALE: NONE



TRENCH PAVEMENT

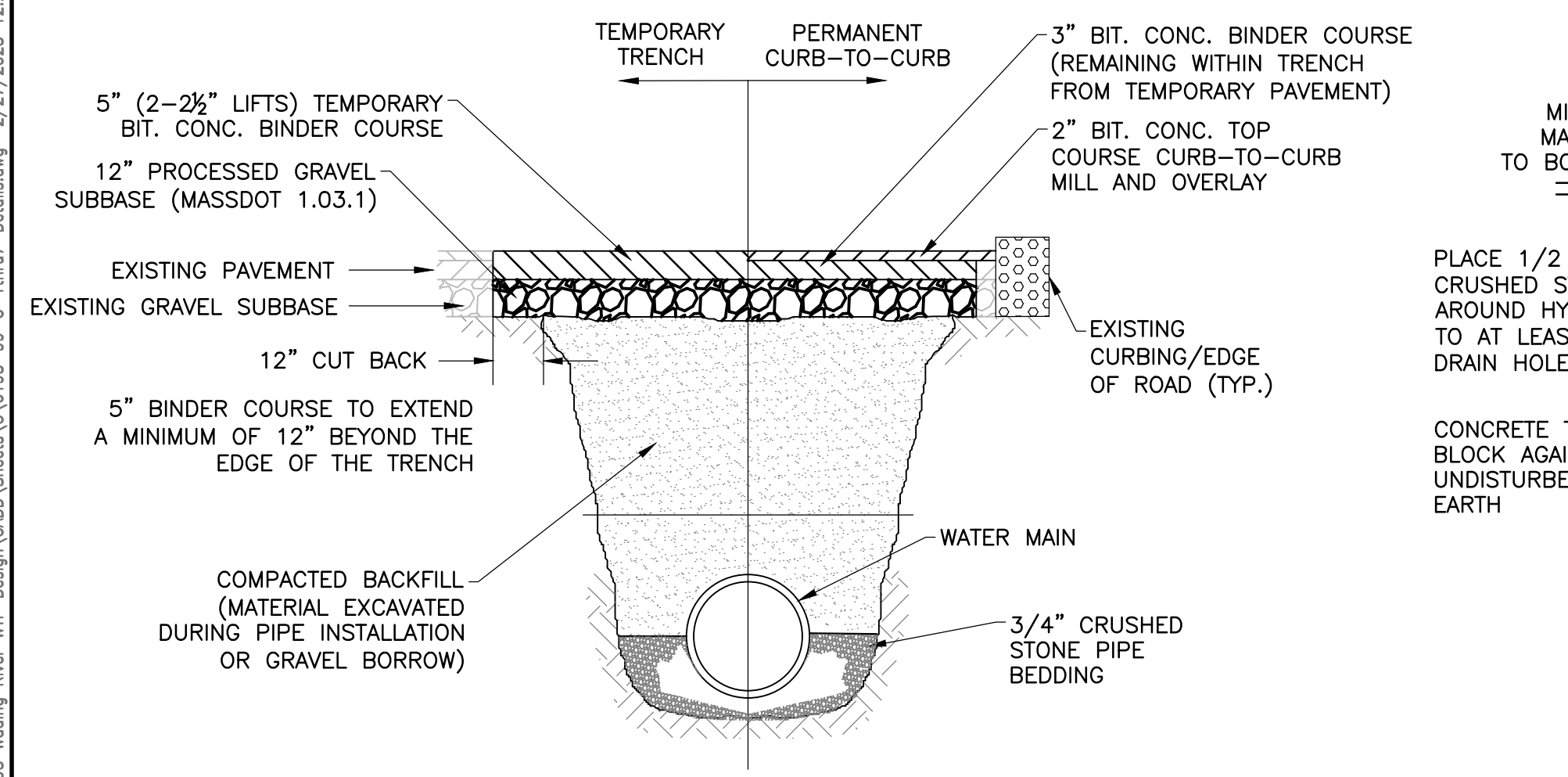
SCALE: NONE



PLAN

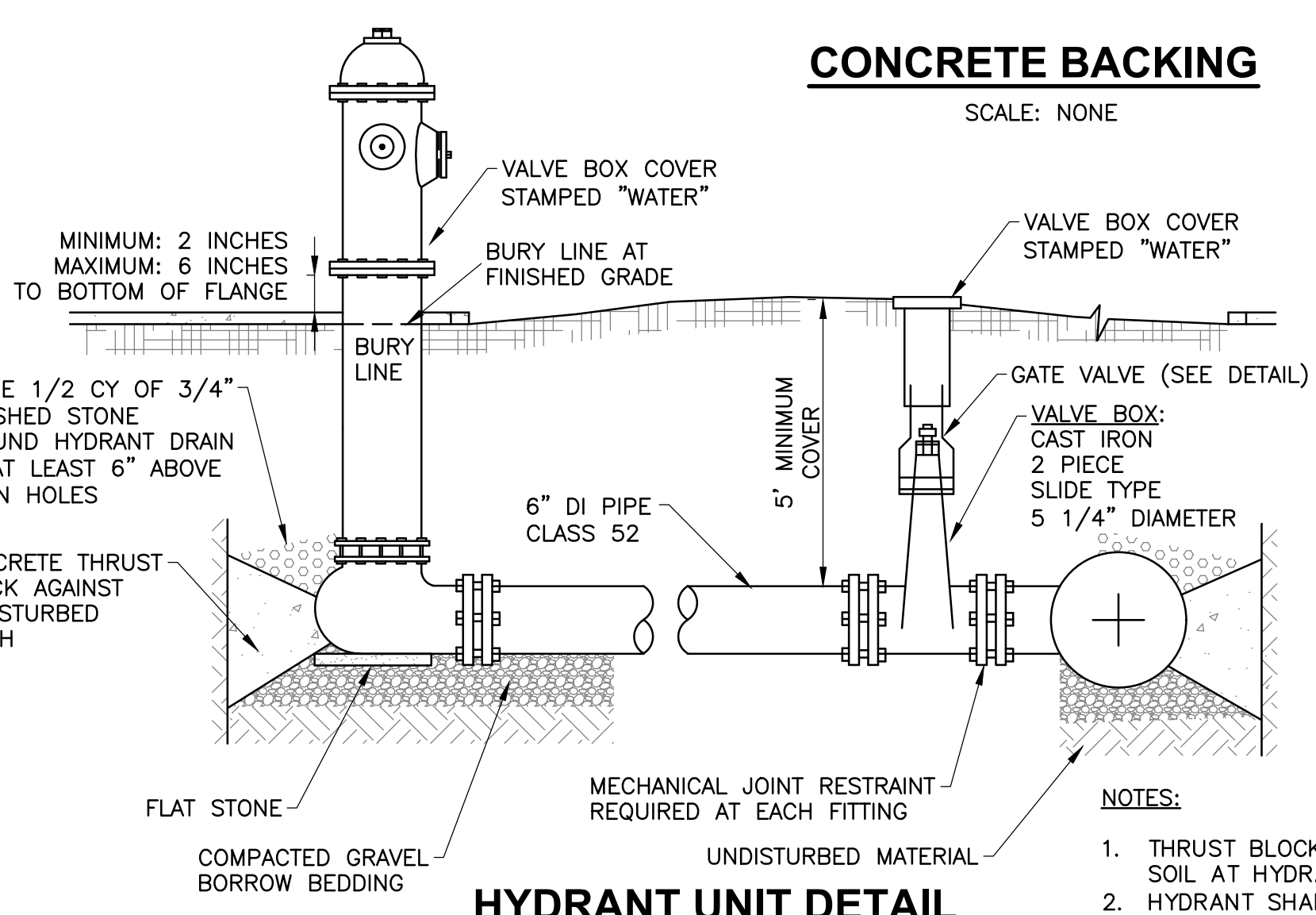
CONCRETE BACKING

SCALE: NONE



CURB TO CURB MILL AND OVERLAY

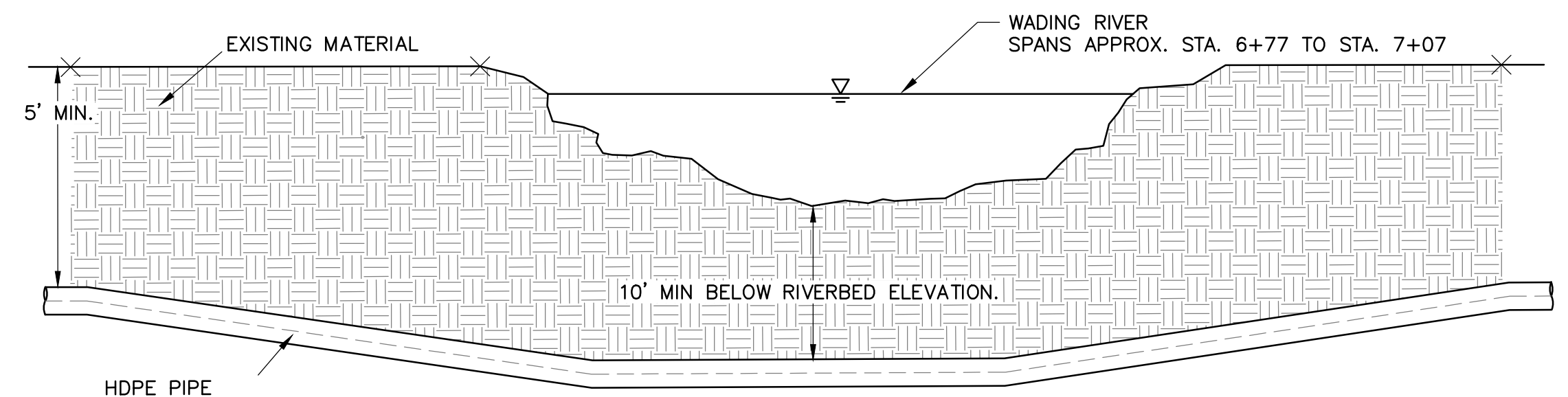
SCALE: NONE



HYDRANT UNIT DETAIL

SCALE: NONE

- NOTES:**
1. THRUST BLOCKS BACKED AGAINST UNDISTURBED SOIL AT HYDRANT & ANCHOR TEE.
 2. HYDRANT SHALL BE A MINIMUM OF 5'-0" FROM EDGE OF TRAVELED WAY (WHERE POSSIBLE).
 3. ALL HYDRANTS SHALL HAVE RETAINER GLANDS.
 4. ALL COMPACTION SHALL BE BY MECHANICAL MEANS.



DIRECTIONAL DRILL WATER MAIN AND CONDUITS BENEATH WADING RIVER

SCALE: NONE

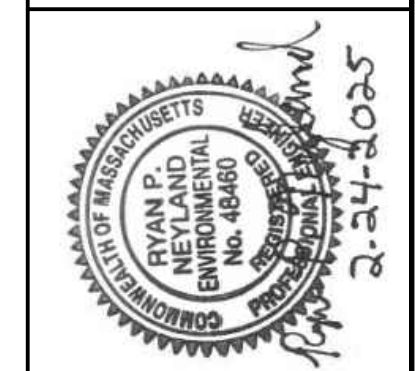
NOTES:

1. REFERENCE PLAN VIEW ON 02-C-6 UTILITIES PLAN.
2. TOP OF PIPE SHALL BE AT LEAST 10'-0" BELOW THE BOTTOM RIVERBED ELEVATION.
3. OUTSIDE OF THE RIVERBED, THE TOP OF PIPE SHALL BE AT LEAST 5'-0" BELOW THE FINISHED GRADE.
4. DRILL FROM APPROX. STA 8+83 TO 4+42.

ATTLEBORO WATER DEPT.
ATTLEBORO, MA
WADING RIVER
WATER TREATMENT PLANT

CIVIL
WATER MAIN DETAILS

Rev.	Date	Description



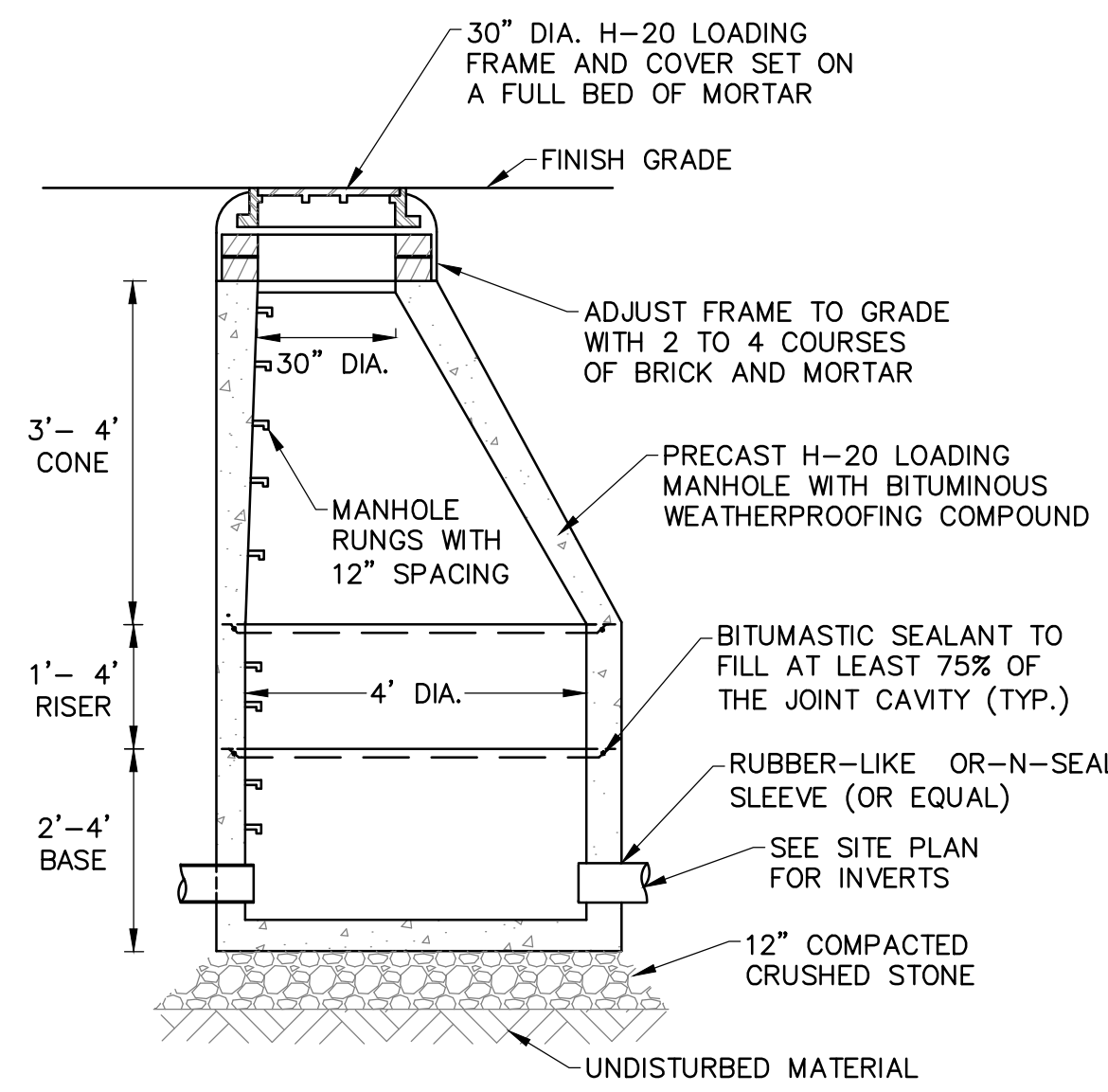
T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE: AS NOTED

99-C-1

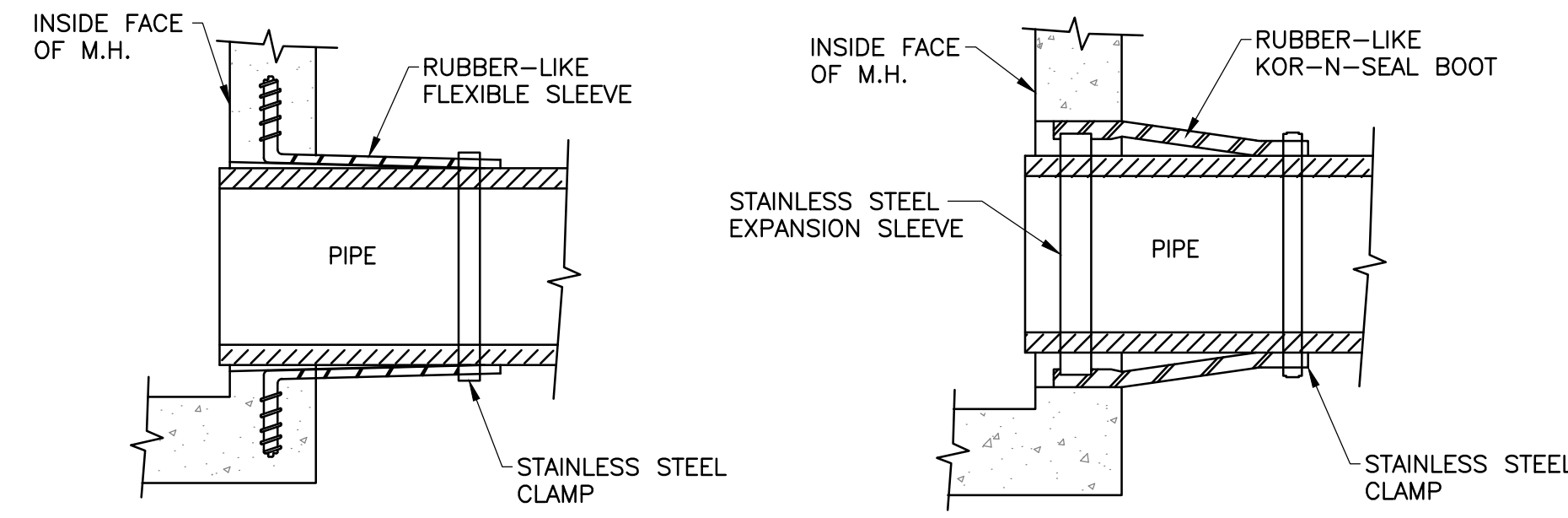
P:\Attboro_6193_WTP_Design\CADD\Sheets\0193-C-99-C-11007-detailed.dwg 2/27/2025 12:20 PM MBARRY

Drawn By: MJM
Designed By: MSB
Checked By: KLG

THIS DOCUMENT IS THE PROPERTY OF TATA & HOWARD, INC. AND ITS CLIENT. REPRODUCTION OR MODIFICATION WITHOUT WRITTEN CONSENT IS PROHIBITED.



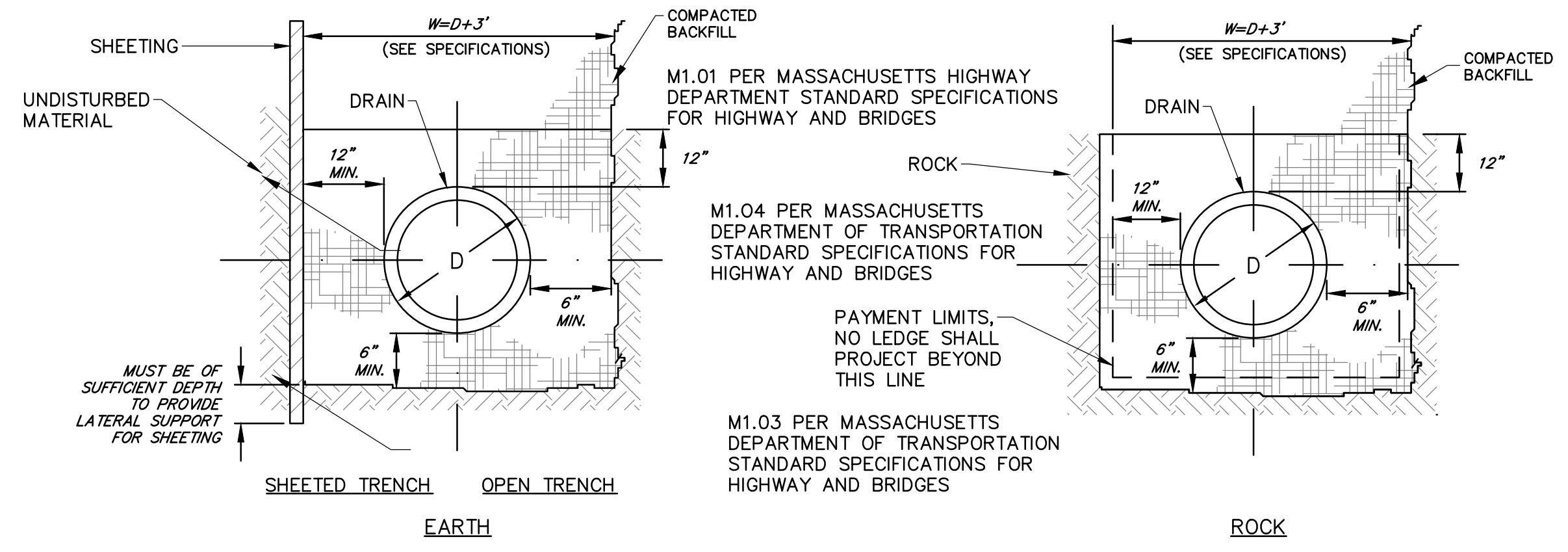
PRECAST DRAIN MANHOLE
SCALE: NONE



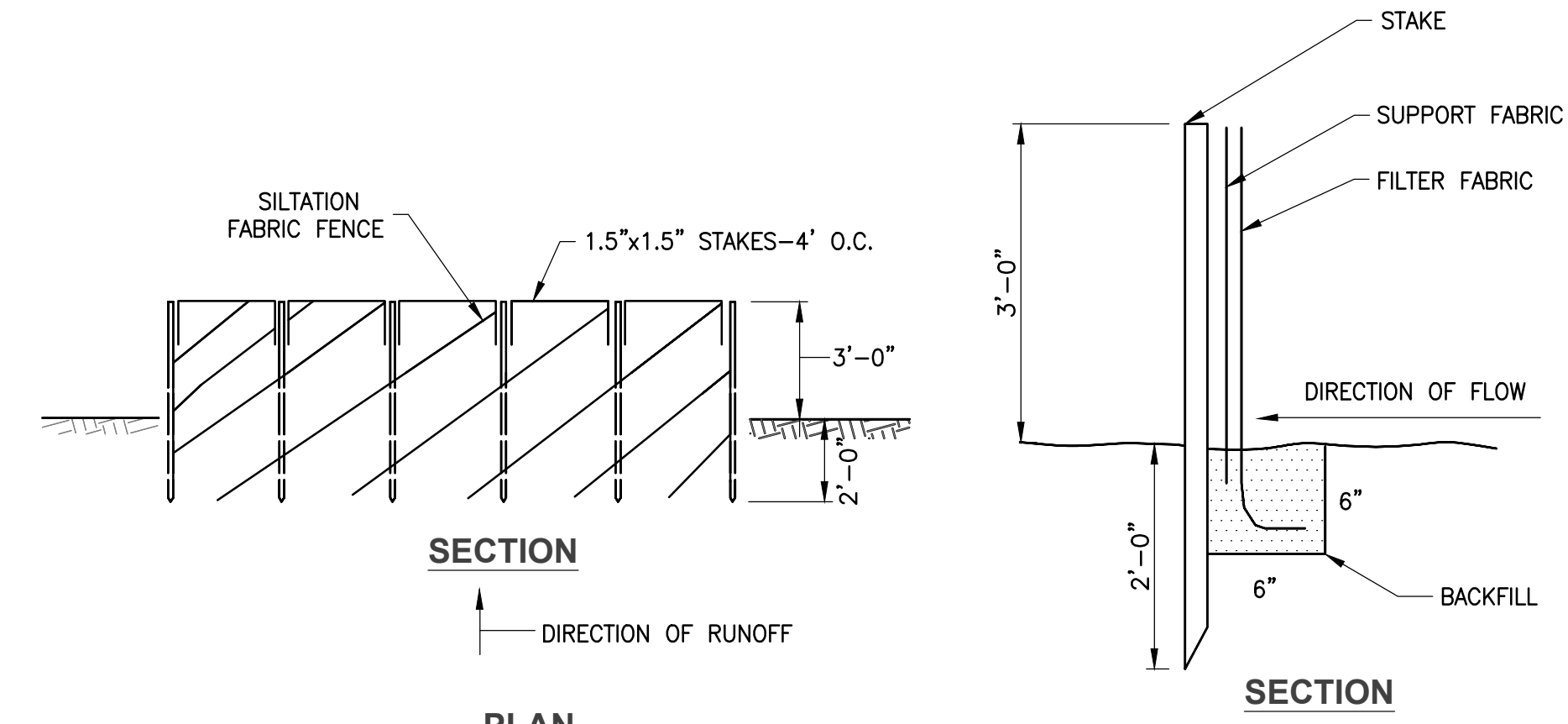
LOCK-JOINT FLEXIBLE M.H. SLEEVE
(OR EQUAL)

KOR-N-SEAL SLEEVE
(OR EQUAL)

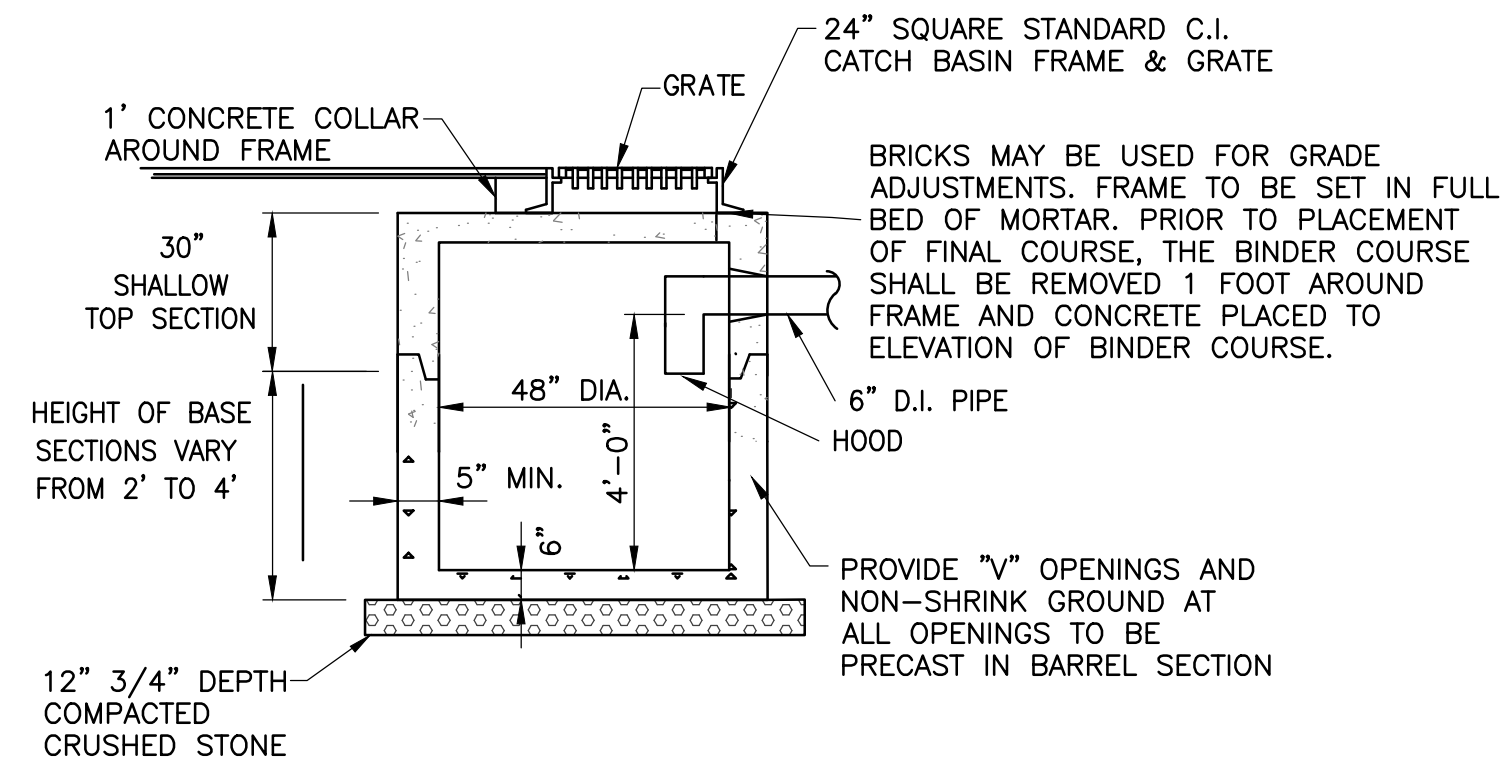
SLEEVE FOR MANHOLE WALL PENETRATION
SCALE: NONE



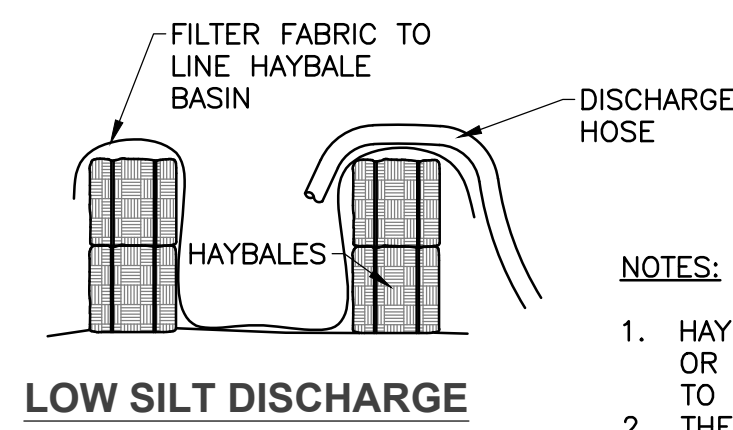
CORR. HDPE DRAINAGE LINE TRENCH SECTIONS
NOT TO SCALE



SILT FENCE EROSION CONTROL

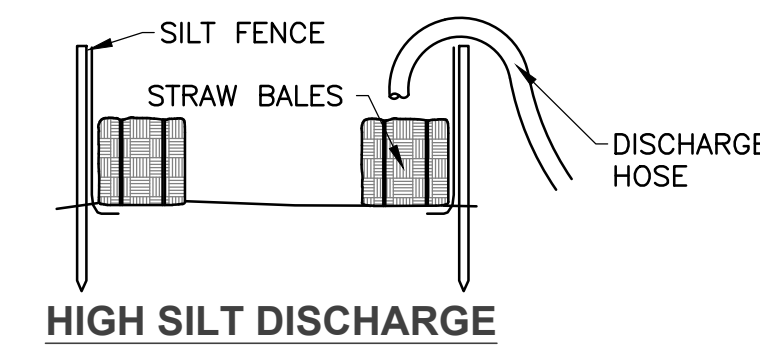


GRATE INLET DEEP SUMP CATCH BASIN
SCALE: NONE



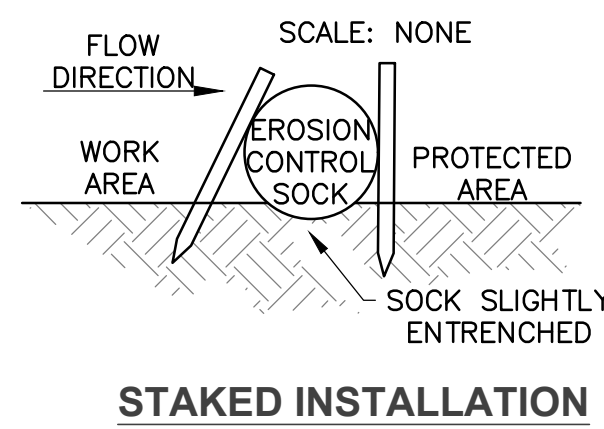
LOW SILT DISCHARGE

- NOTES:**
1. HAYBALES SHALL BE STACKED 1 OR 2 ROWS HIGH AS REQUIRED TO MITIGATE THE FLOW.
 2. THE BASIN SHALL BE SIZED TO FILTER THE FLOW BEING DISCHARGED TO THE BASIN.



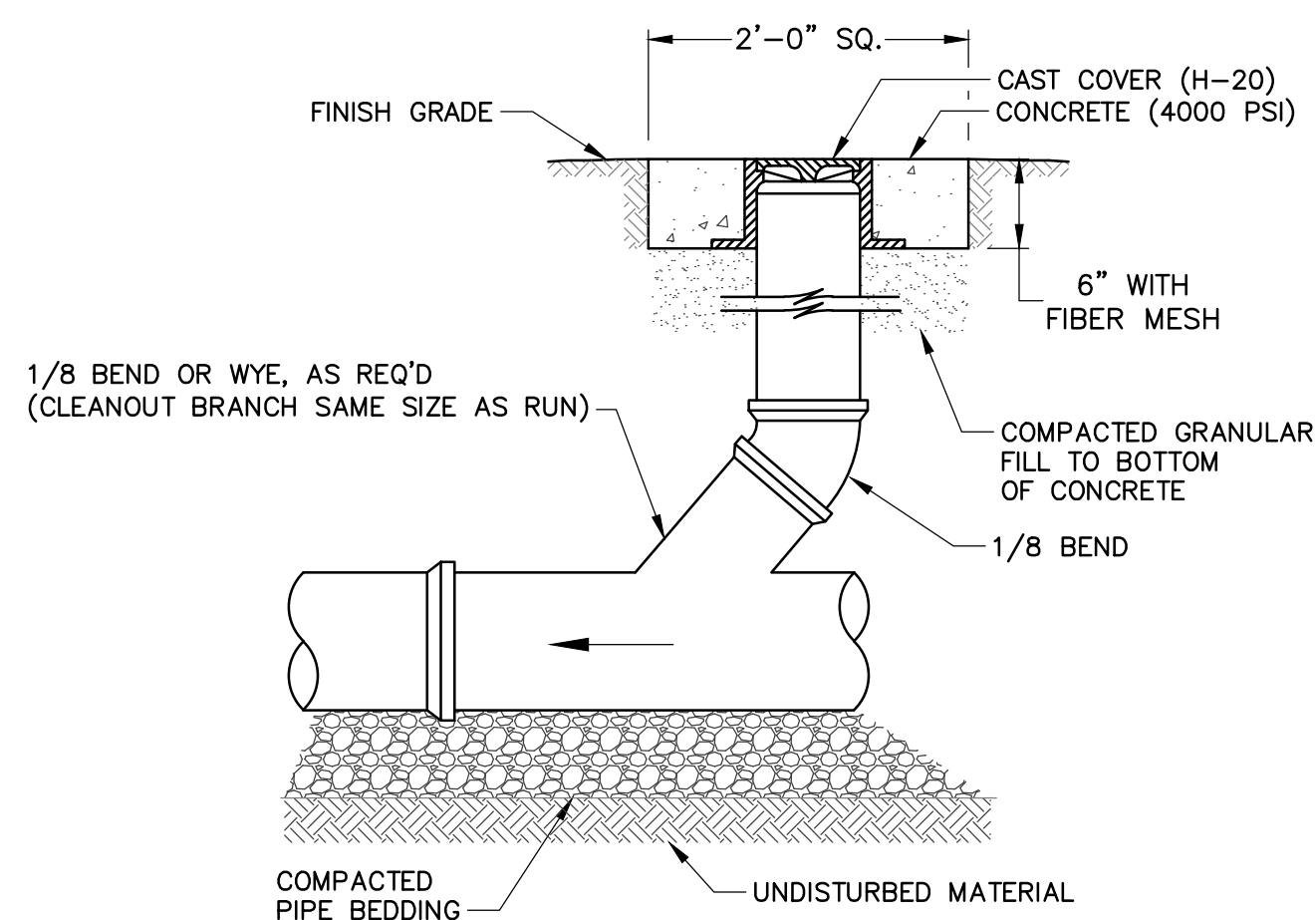
HIGH SILT DISCHARGE

SEDIMENTATION DISCHARGE CONTROL BASIN
SCALE: NONE

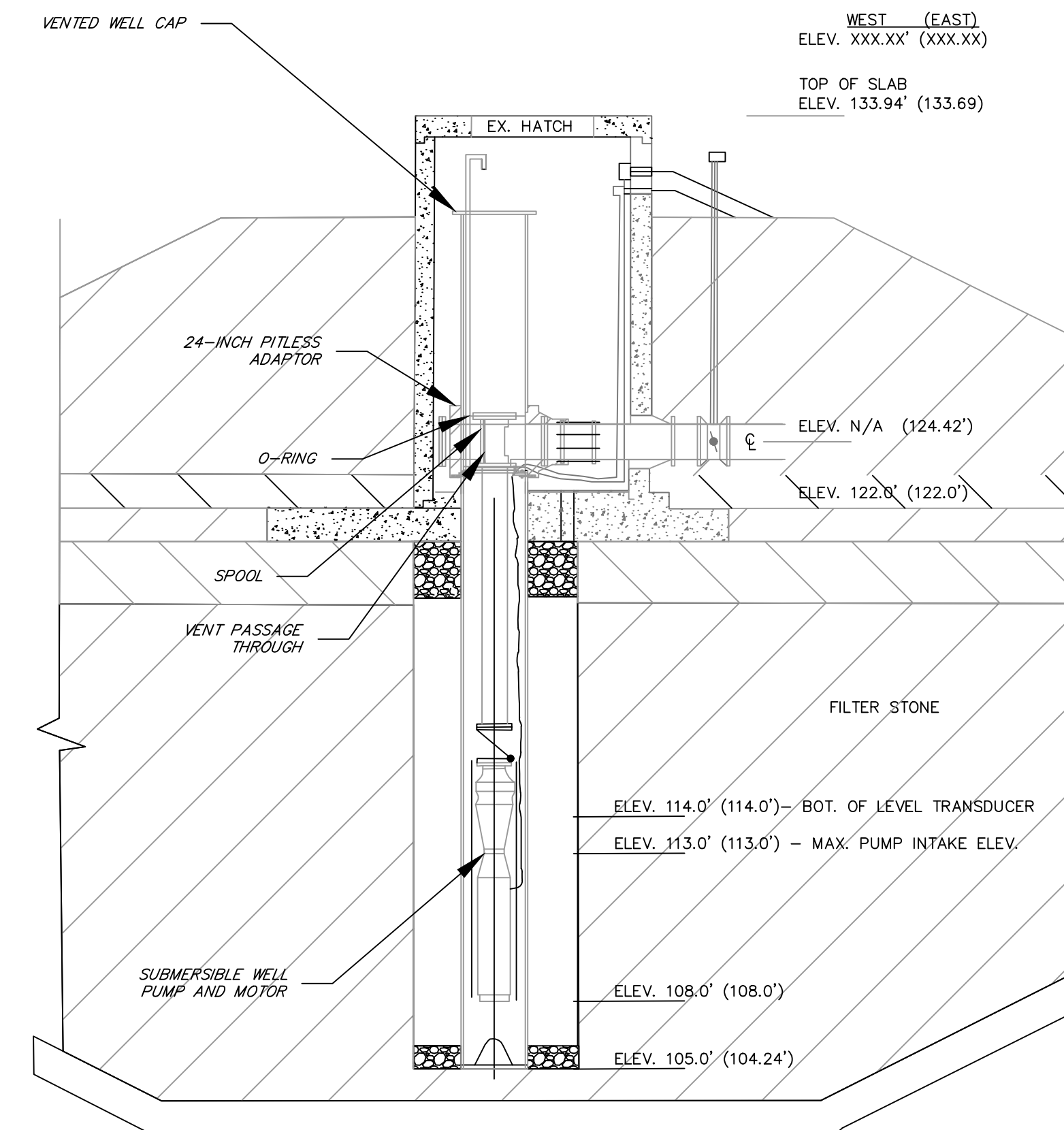


- NOTES:**
1. FINAL INSTALLATION TECHNIQUES SHALL BE AS RECOMMENDED BY THE MANUFACTURER AND AS DIRECTED BY THE ENGINEER.

EROSION CONTROL SOCK
SCALE: NONE

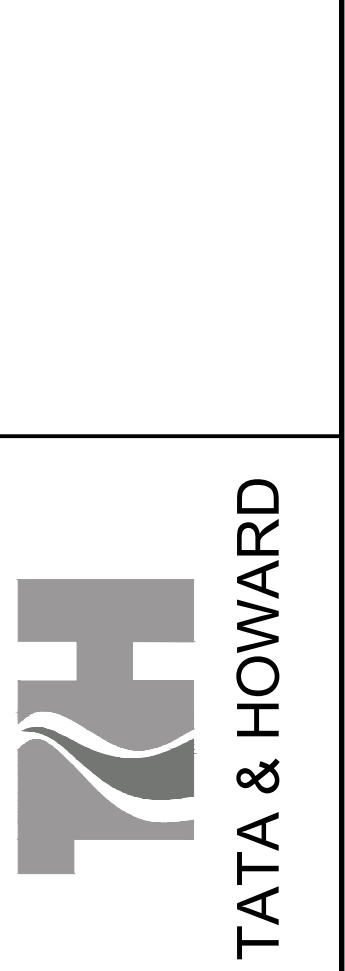
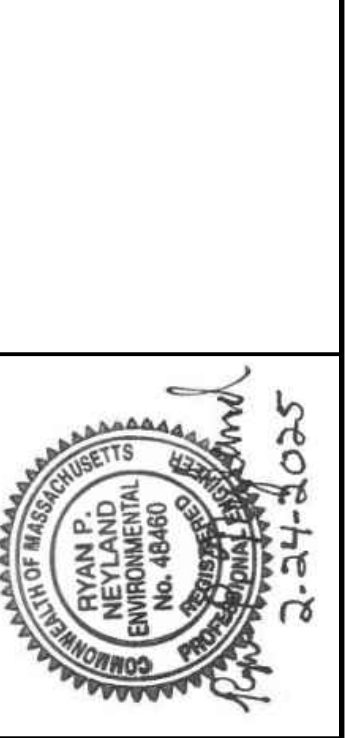


CLEANOUT DETAIL
NOT TO SCALE

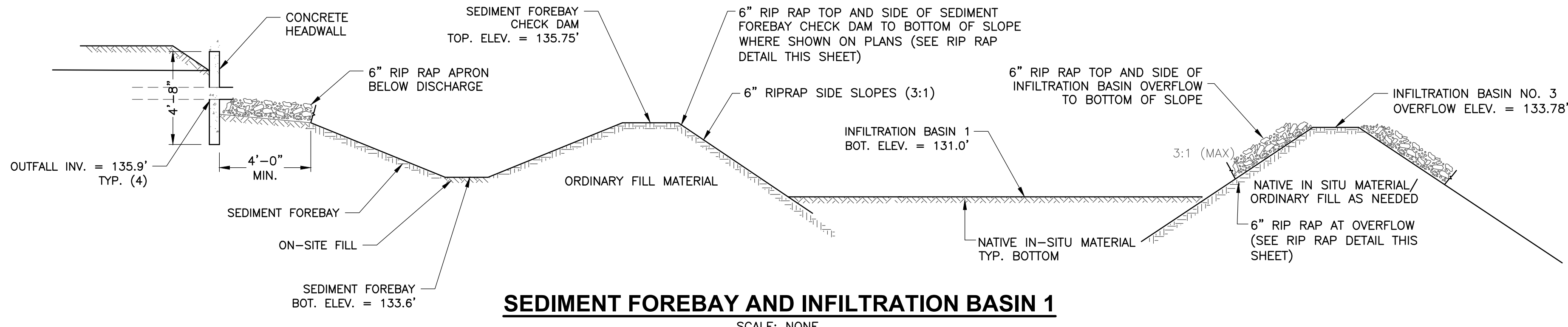


WEST BASIN WELL EXISTING CONDITION ELEVATION
SCALE: NONE

Rev.	Date	Description

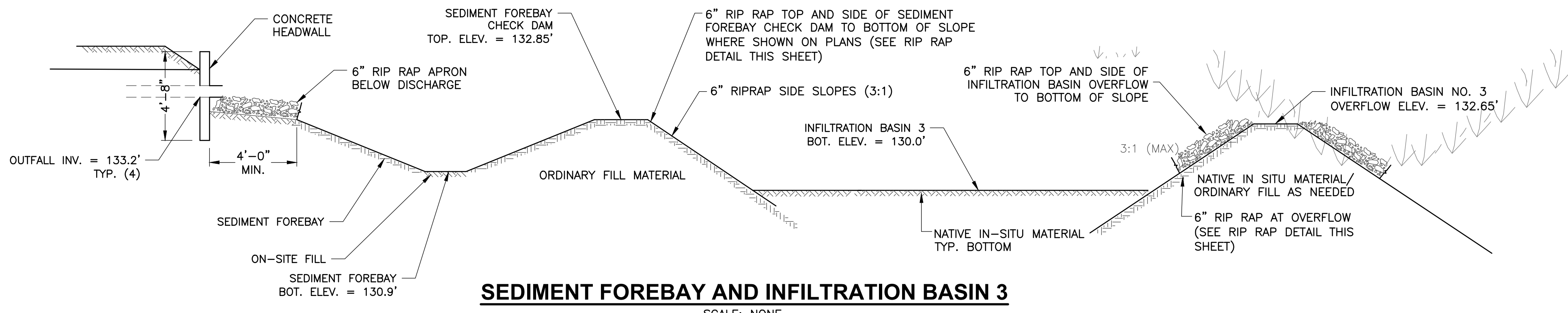


P:\Attboro\6193_Wading_River_WTP_Design\CADD_Sheets\6193-99-C-11.mxd - Details.dwg 2/27/2025 12:20 PM MBARRY



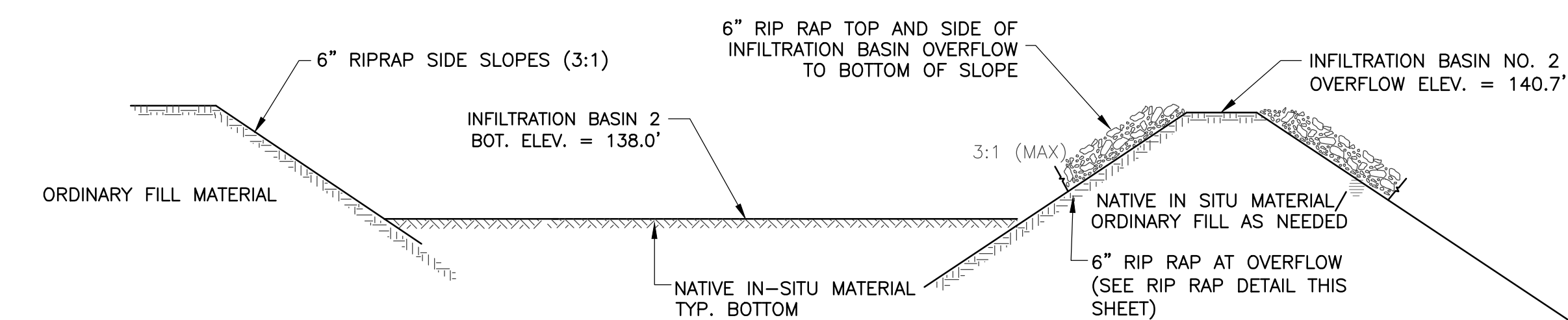
SEDIMENT FOREBAY AND INFILTRATION BASIN 1

SCALE: NONE



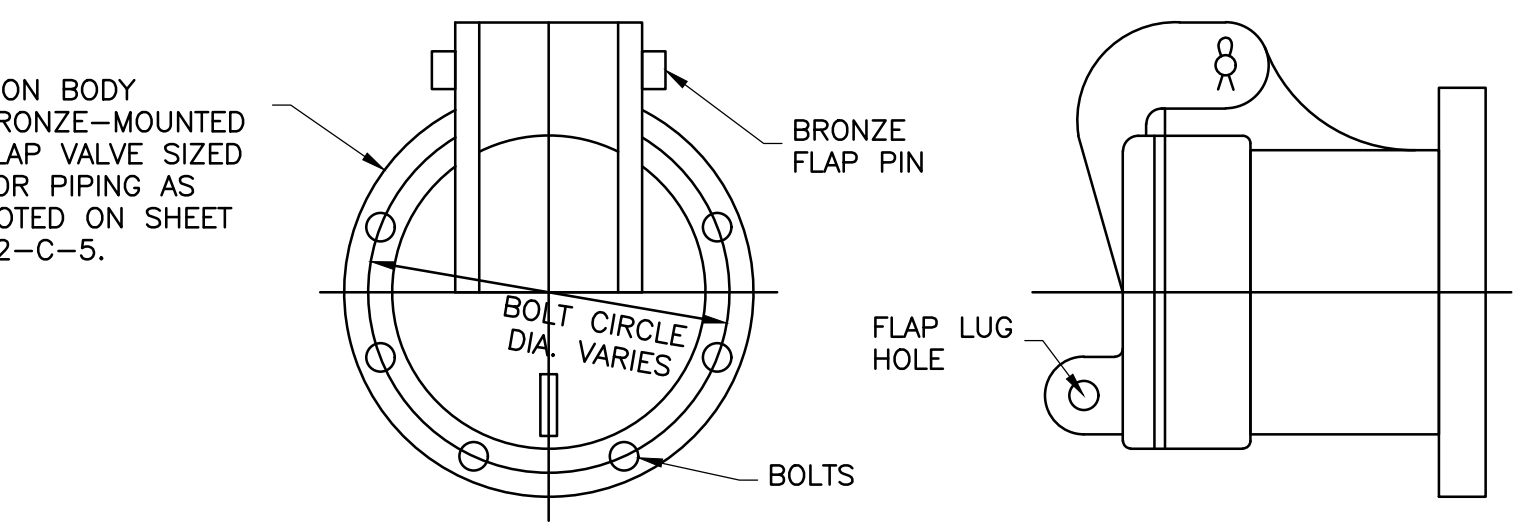
SEDIMENT FOREBAY AND INFILTRATION BASIN 3

SCALE: NONE



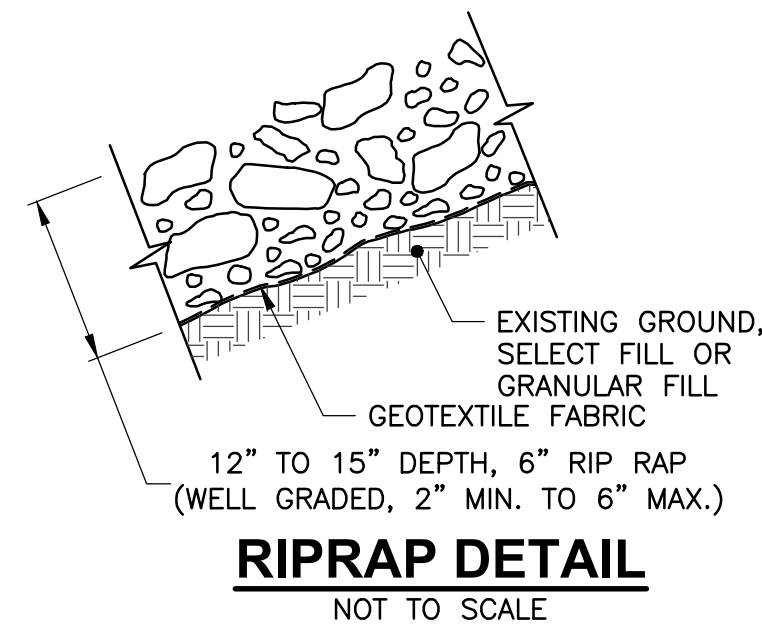
SEDIMENT FOREBAY AND INFILTRATION BASIN 2

SCALE: NONE



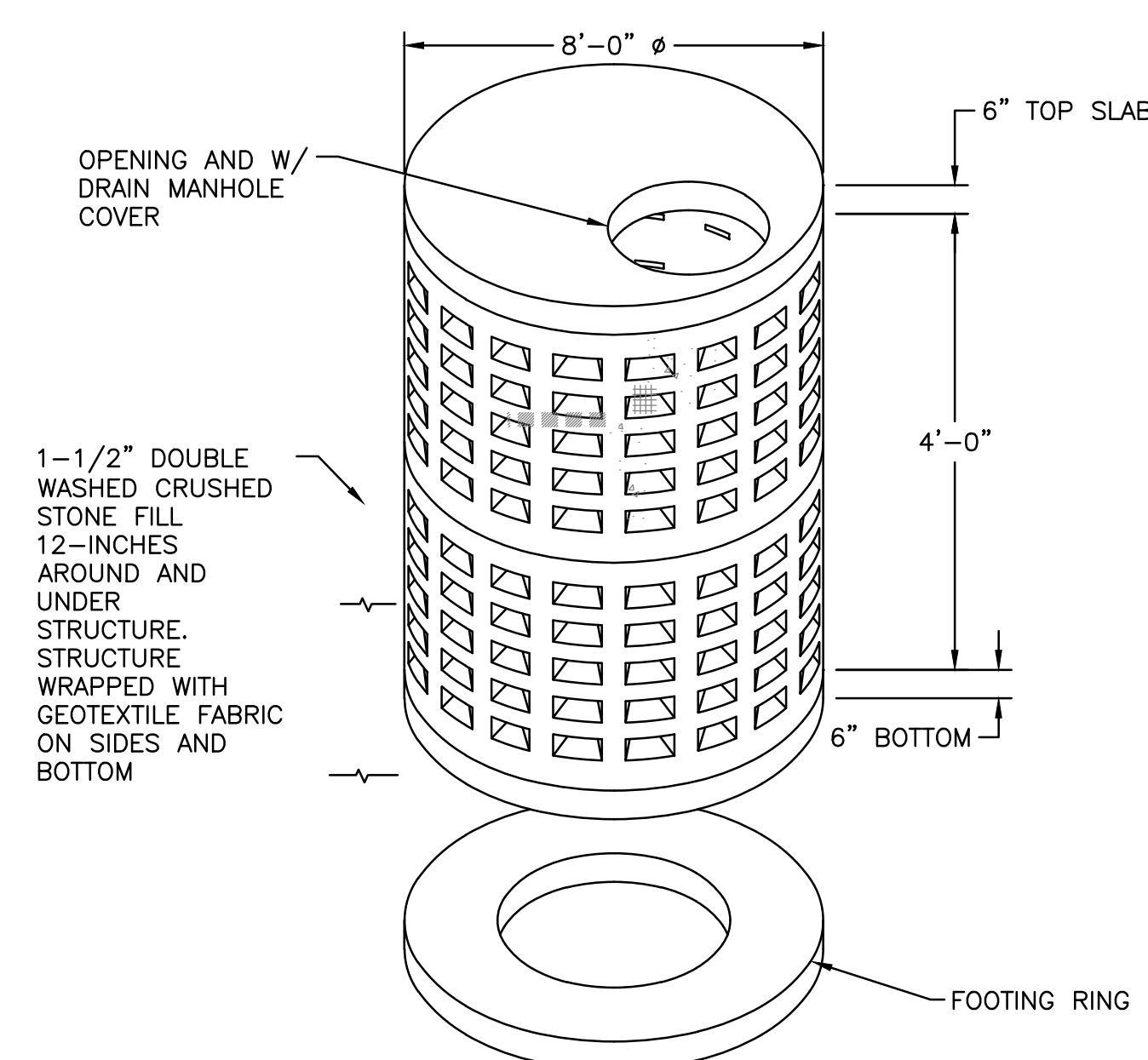
OVERFLOW PIPE FLAP VALVE

NOT TO SCALE



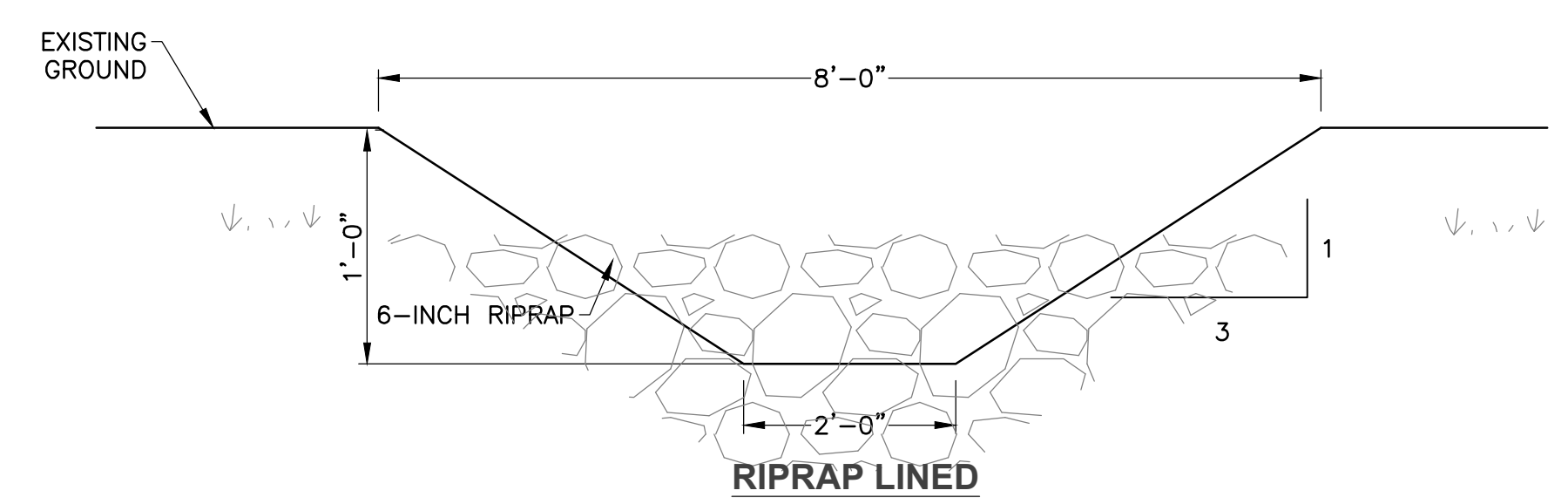
RIPRAP DETAIL

NOT TO SCALE

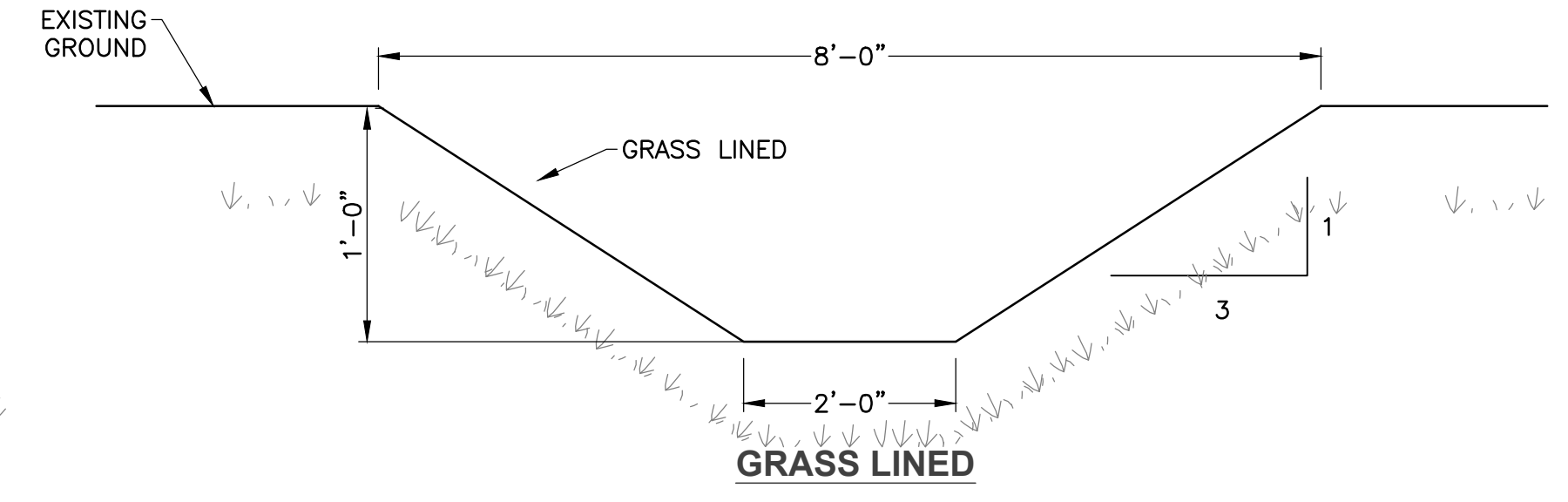


LEACHING BASIN

SCALE: NONE



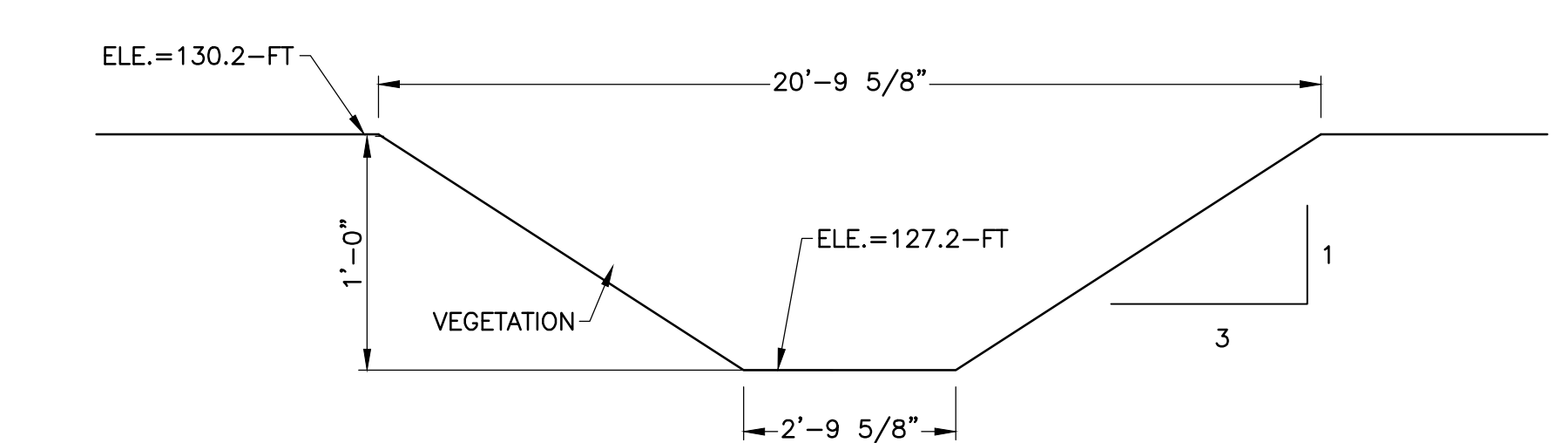
RIPRAP LINED



GRASS LINED

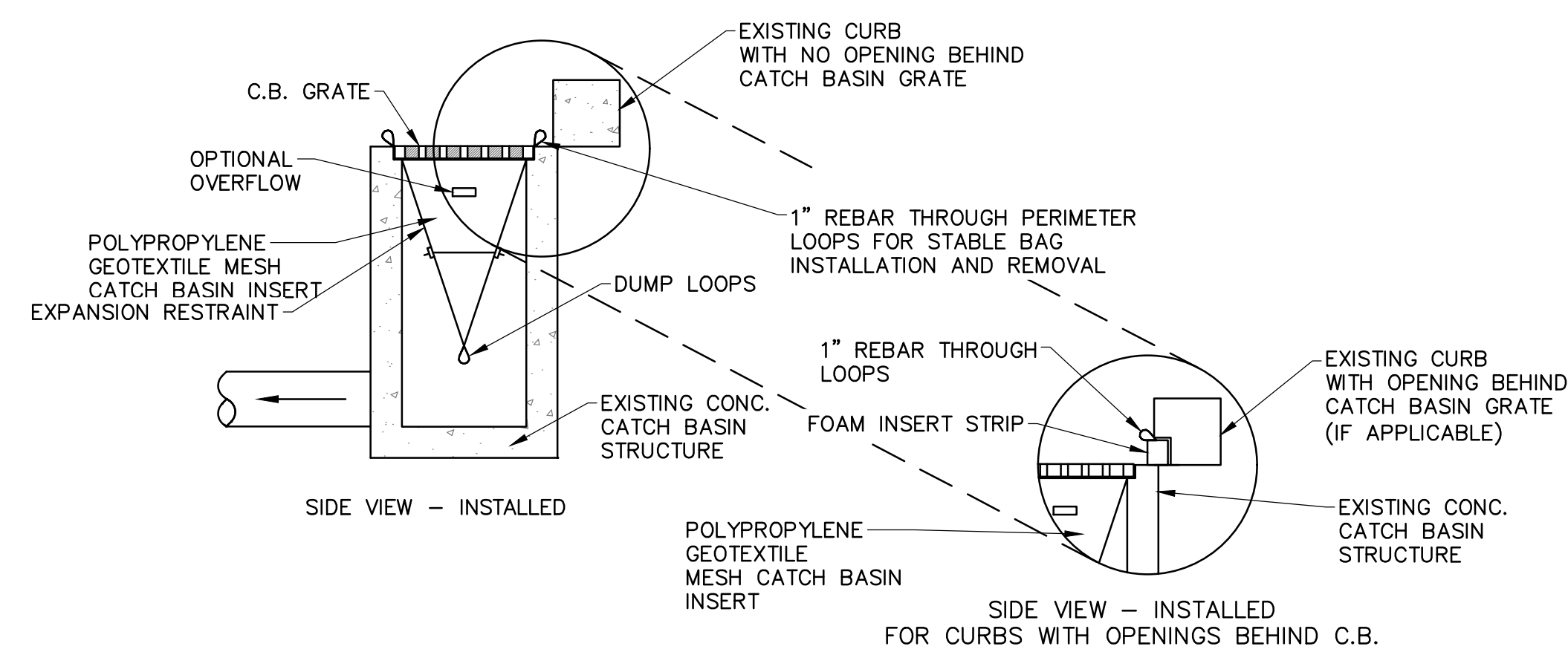
DRAINAGE CHANNEL

SCALE: NONE



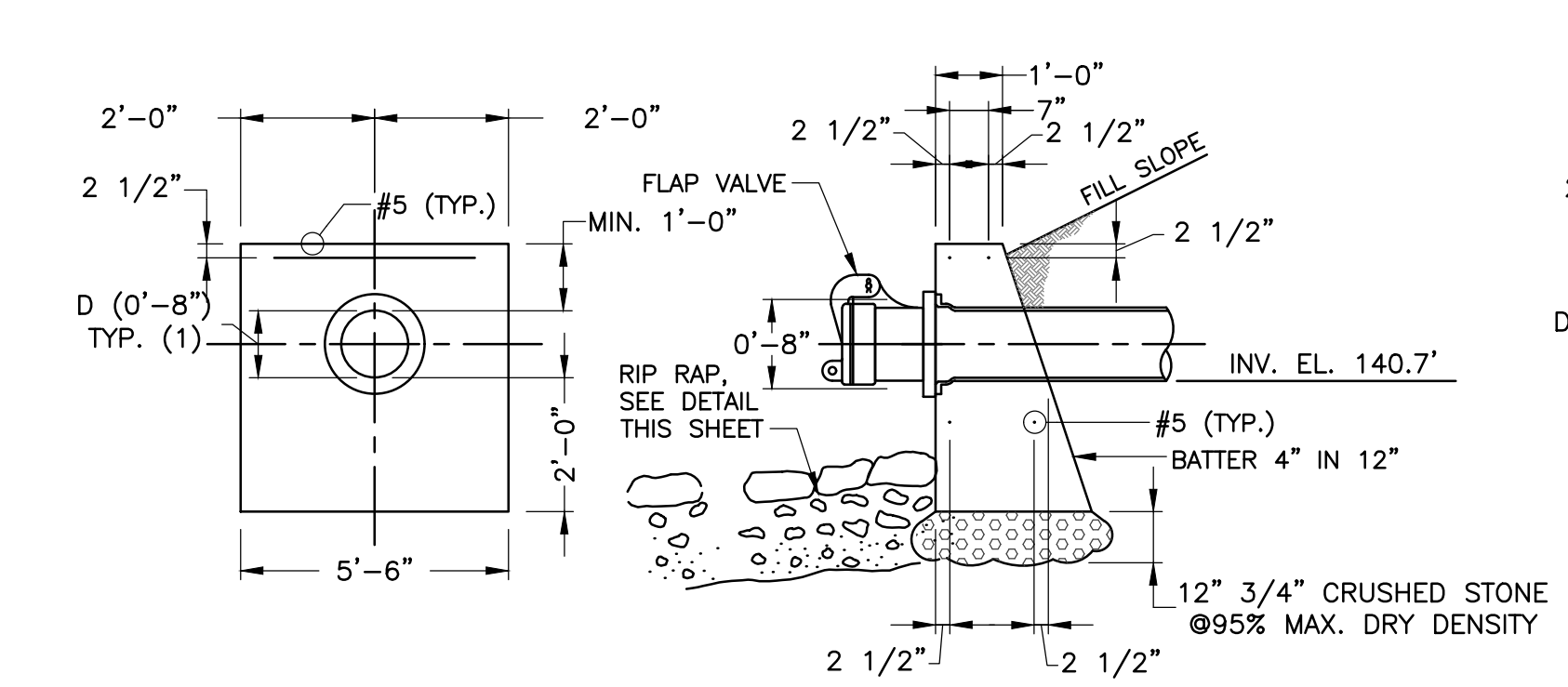
WATER QUALITY SWALE (WET)

SCALE: NONE



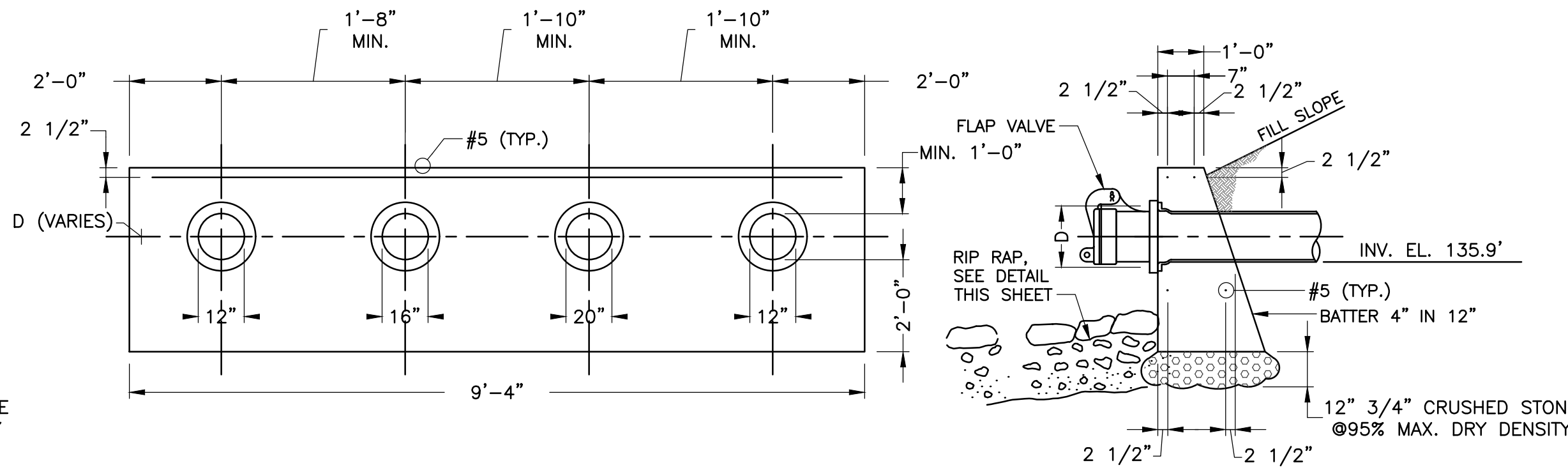
CATCH BASIN SILTATION CONTROL INSERT

SCALE: NONE



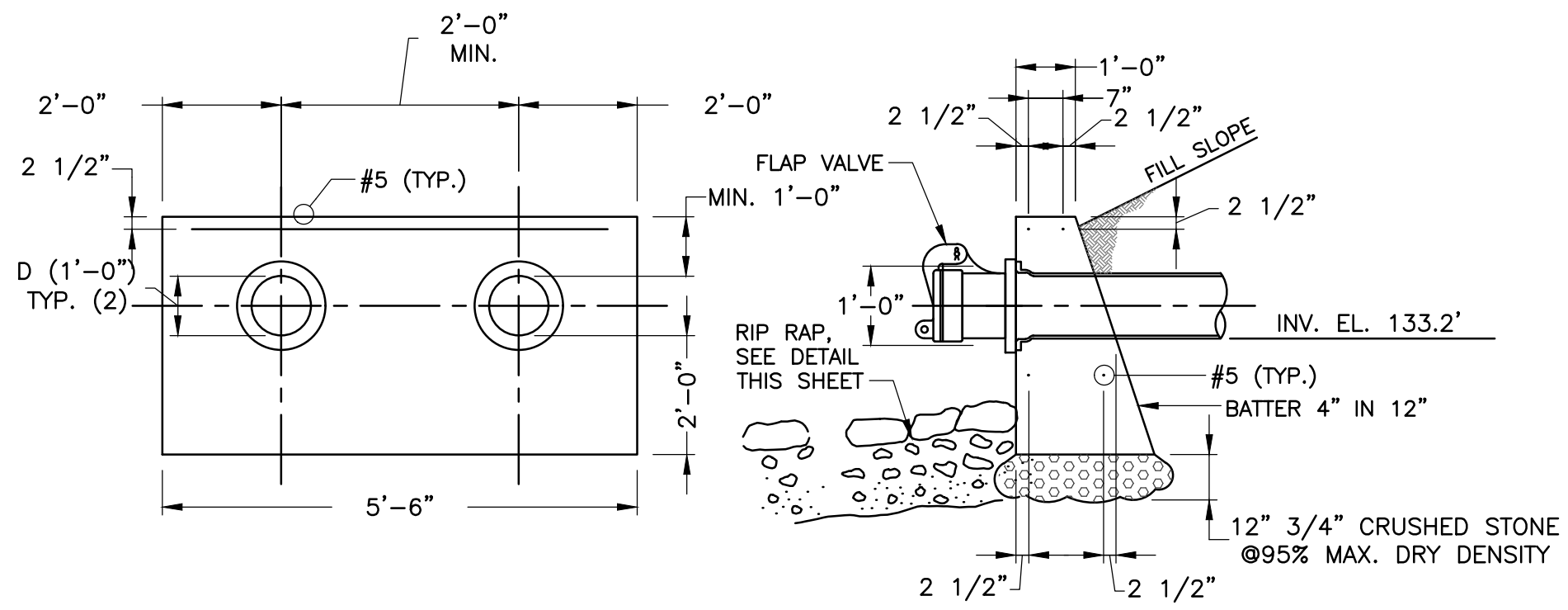
CONCRETE HEADWALL DETAIL - INFILTRATION BASIN 2

NOT TO SCALE



CONCRETE HEADWALL DETAIL - INFILTRATION BASIN 1

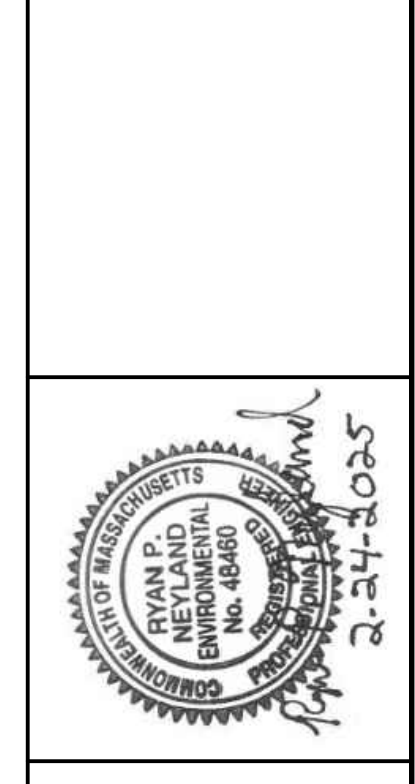
NOT TO SCALE



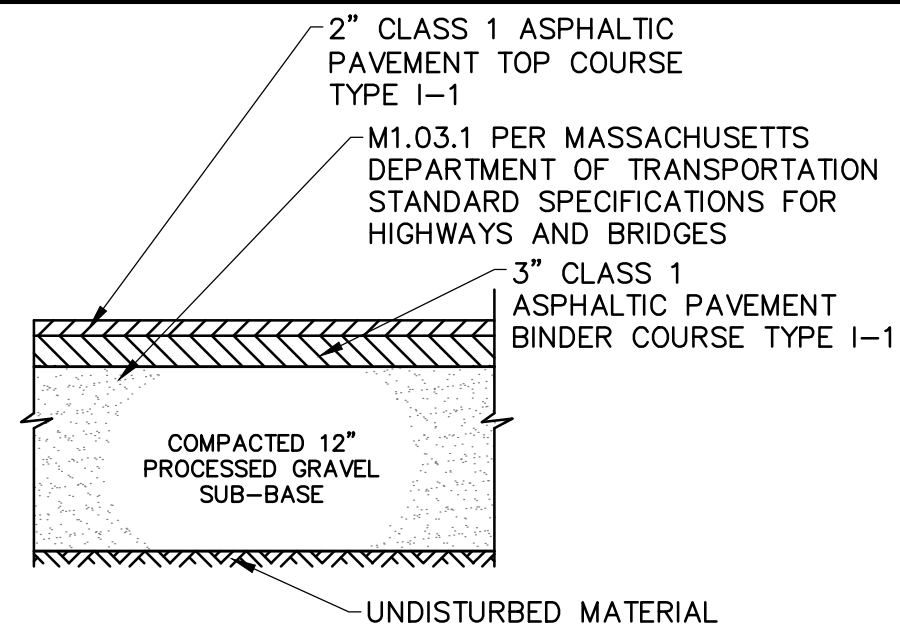
CONCRETE HEADWALL DETAIL - INFILTRATION BASIN 3

NOT TO SCALE

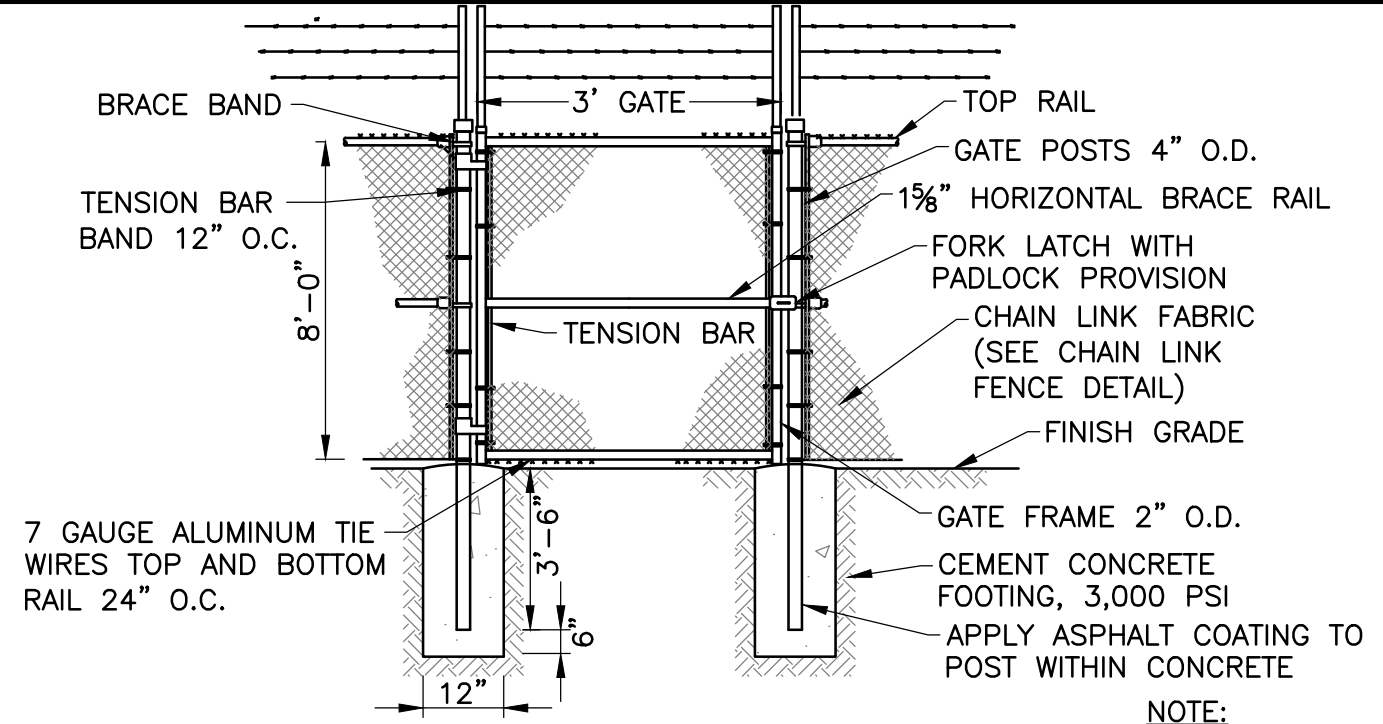
Rev.	Date	Description



P:\Attboro\6193_Wading_River_WTP_Design\CADD_Sheets\6193-99-C-3\11m07-dtbls.dwg 2/27/2025 12:20 PM MBARRY

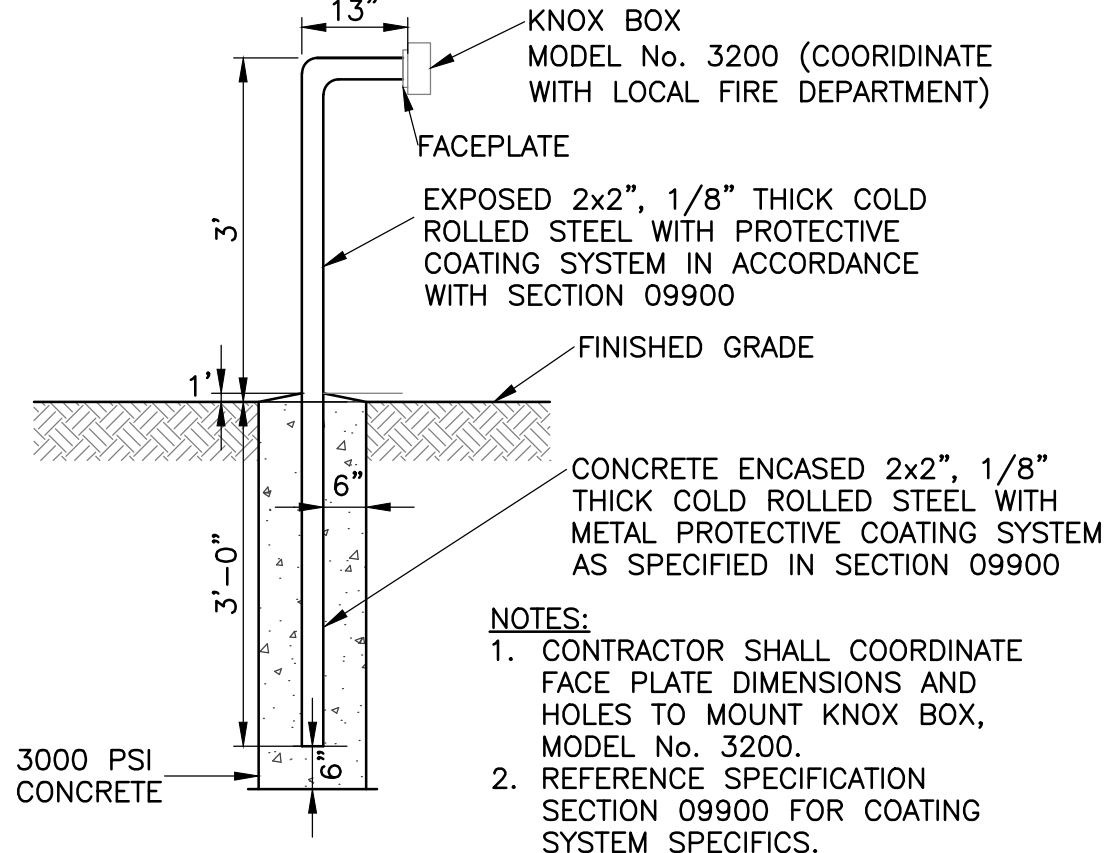


ASPHALTIC PAVEMENT SECTION

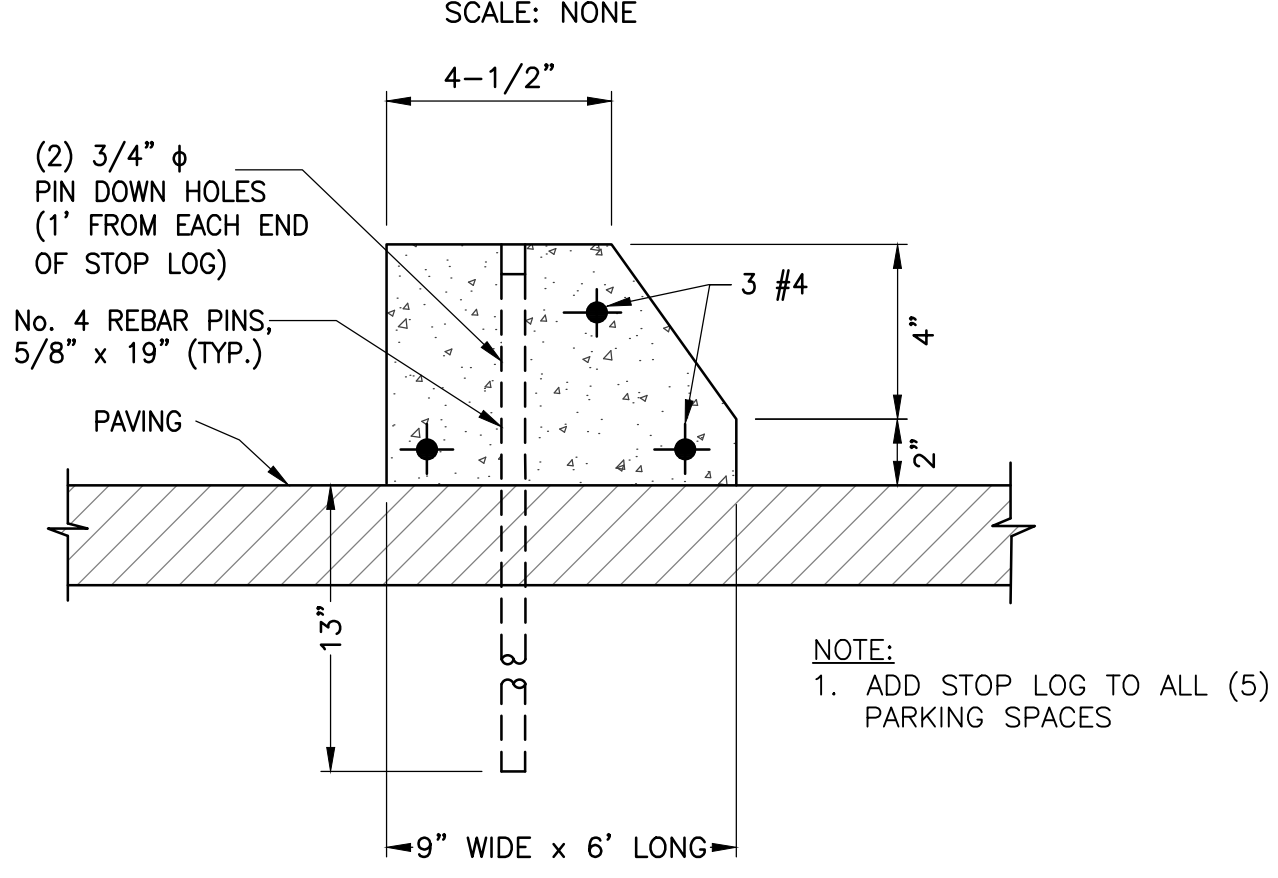


SINGLE GATE WITH BARBED WIRE

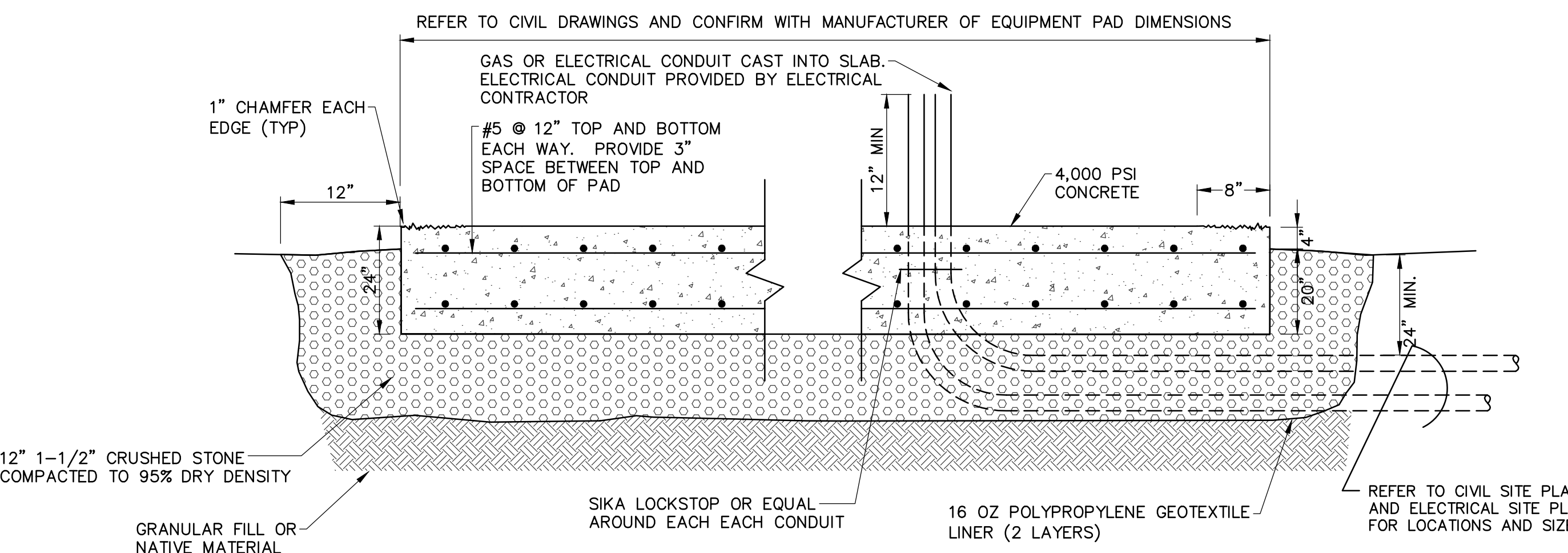
NOTE:
ALL GATES ARE WELDED CONSTRUCTION.



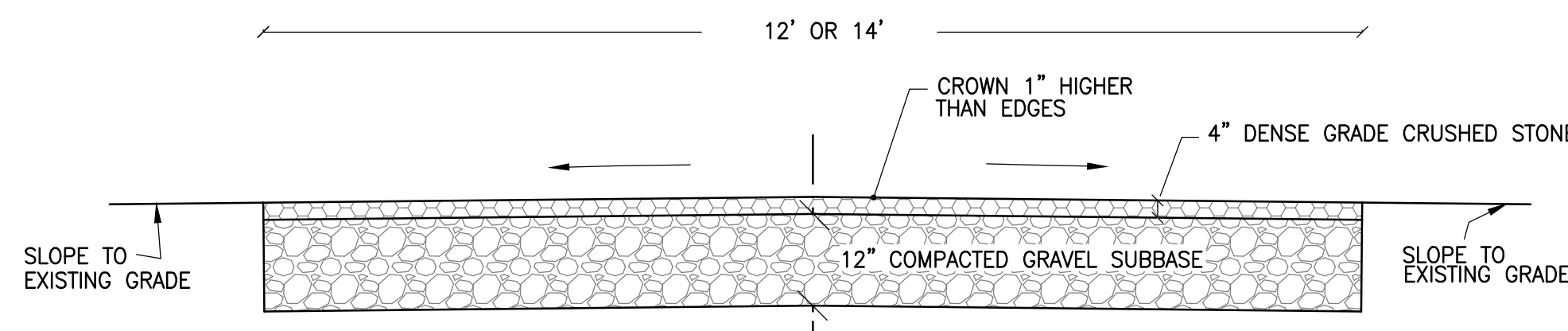
KNOX BOX POLE-MOUNT



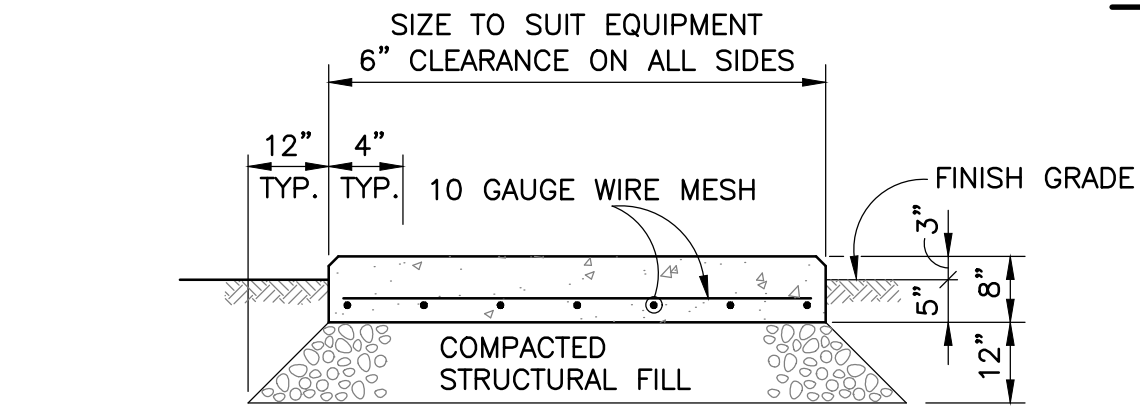
CONCRETE STOP LOG



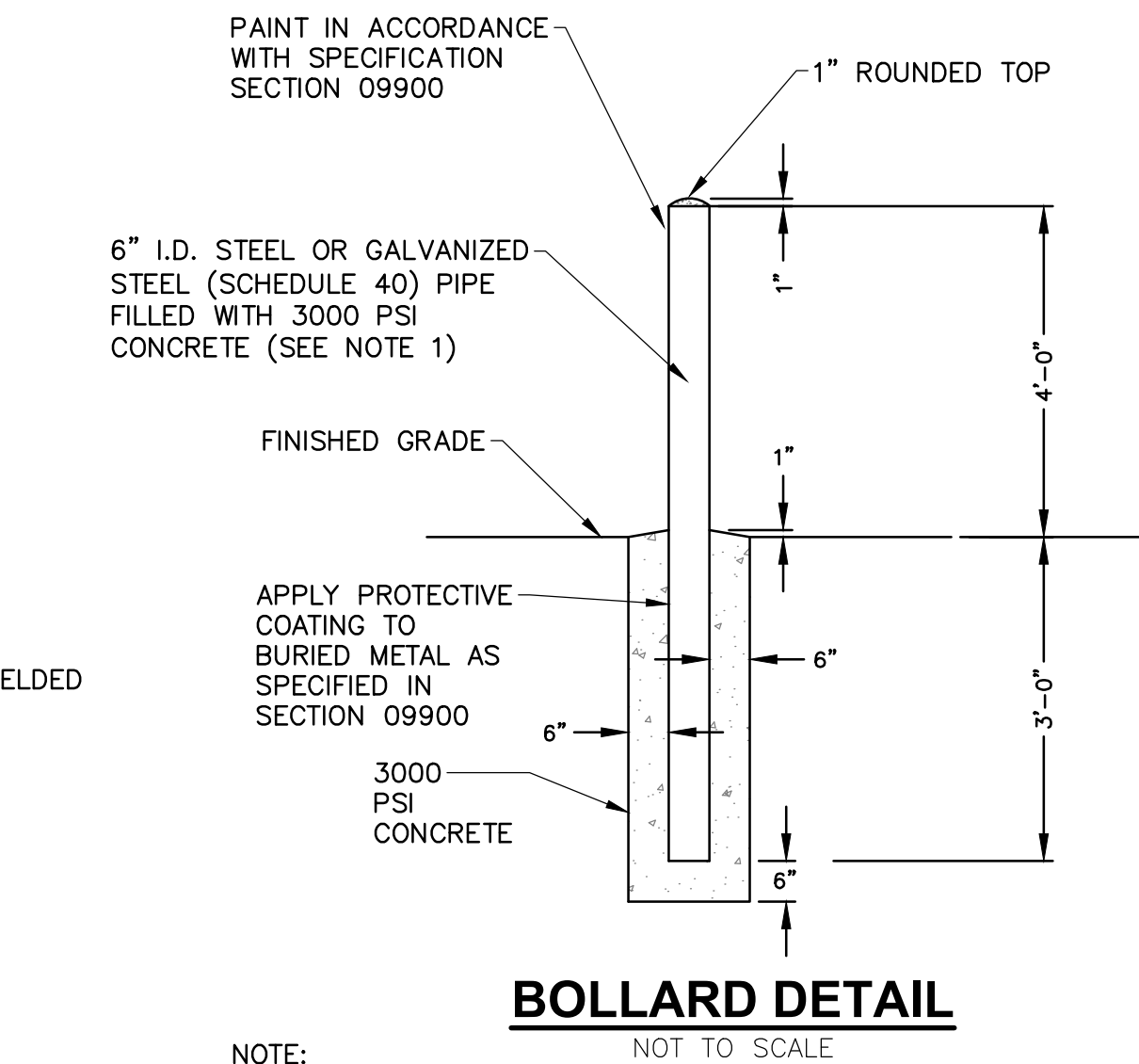
CONCRETE UTILITY PAD DETAIL (GENERATOR AND PROPANE TANK)



TYPICAL GRAVEL ACCESS ROADWAY SECTION

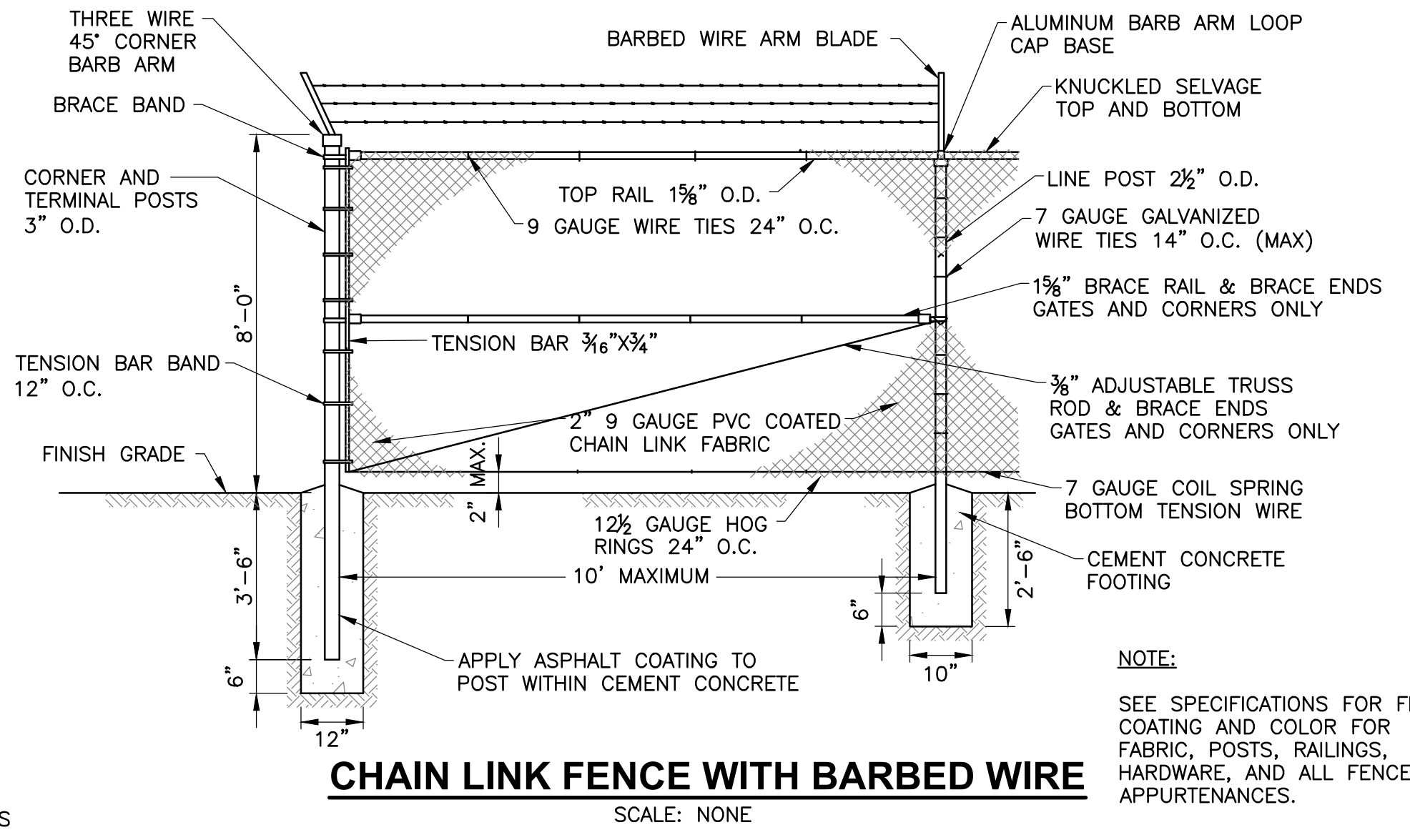


EXTERIOR CONCRETE EQUIPMENT PAD DETAIL



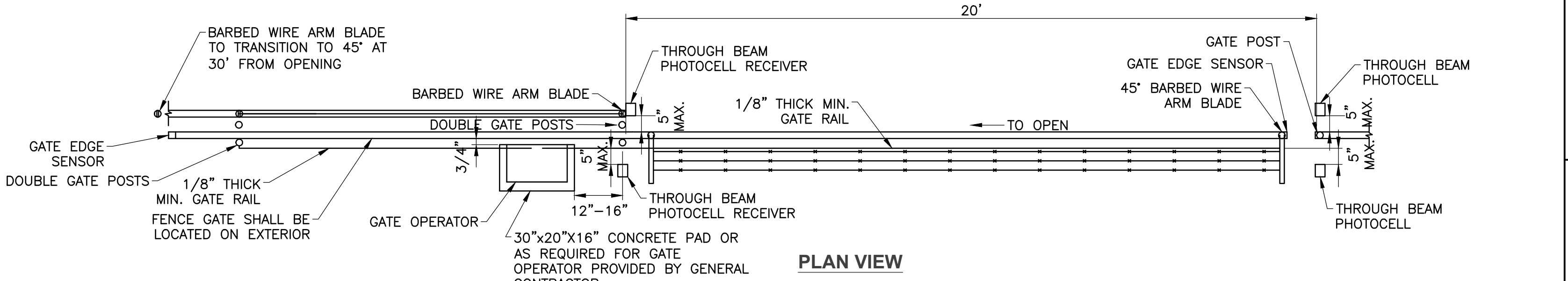
BOLLARD DETAIL

NOTE:
1. FOR BOLLARDS SURROUNDING ELECTRICAL TRANSFORMER, PROVIDE GALVANIZED STEEL BOLLARDS. ALL OTHER BOLLARDS SHALL BE STEEL (NON-GALVANIZED) BOLLARDS.

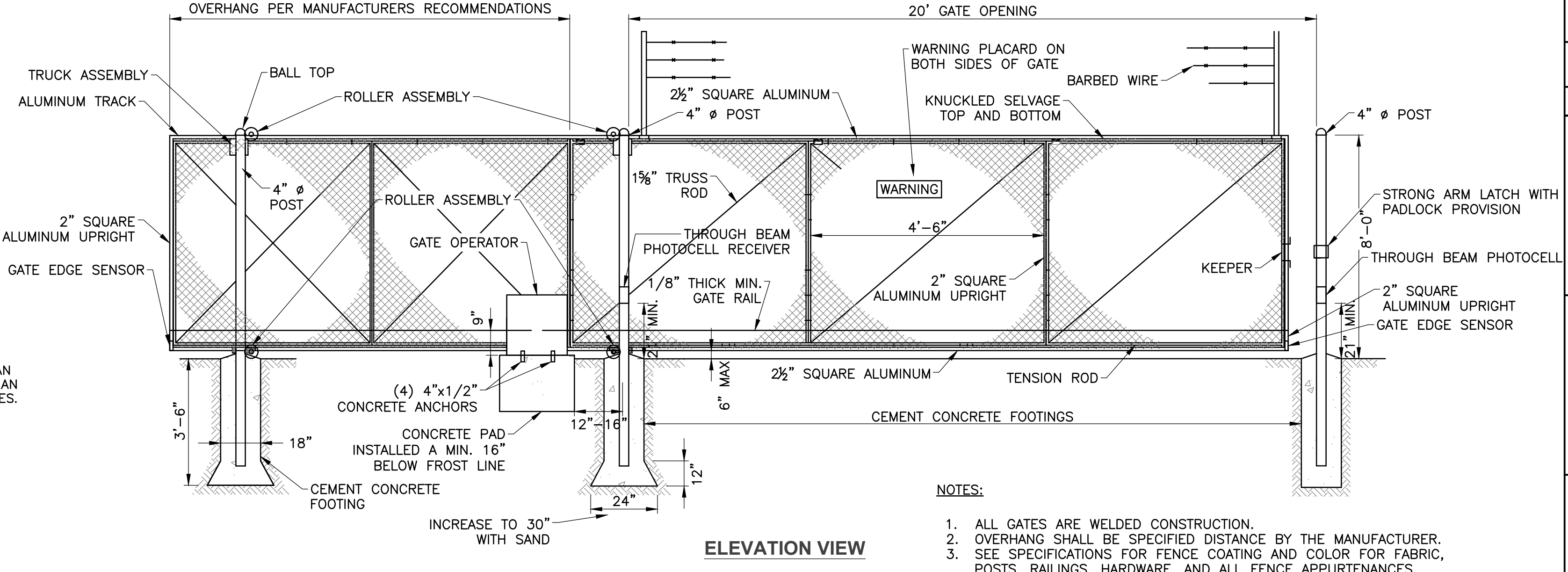


CHAIN LINK FENCE WITH BARBED WIRE

NOTE:
SEE SPECIFICATIONS FOR FENCE COATING AND COLOR FOR FABRIC, POSTS, RAILINGS, HARDWARE, AND ALL FENCE APPURTENANCES.



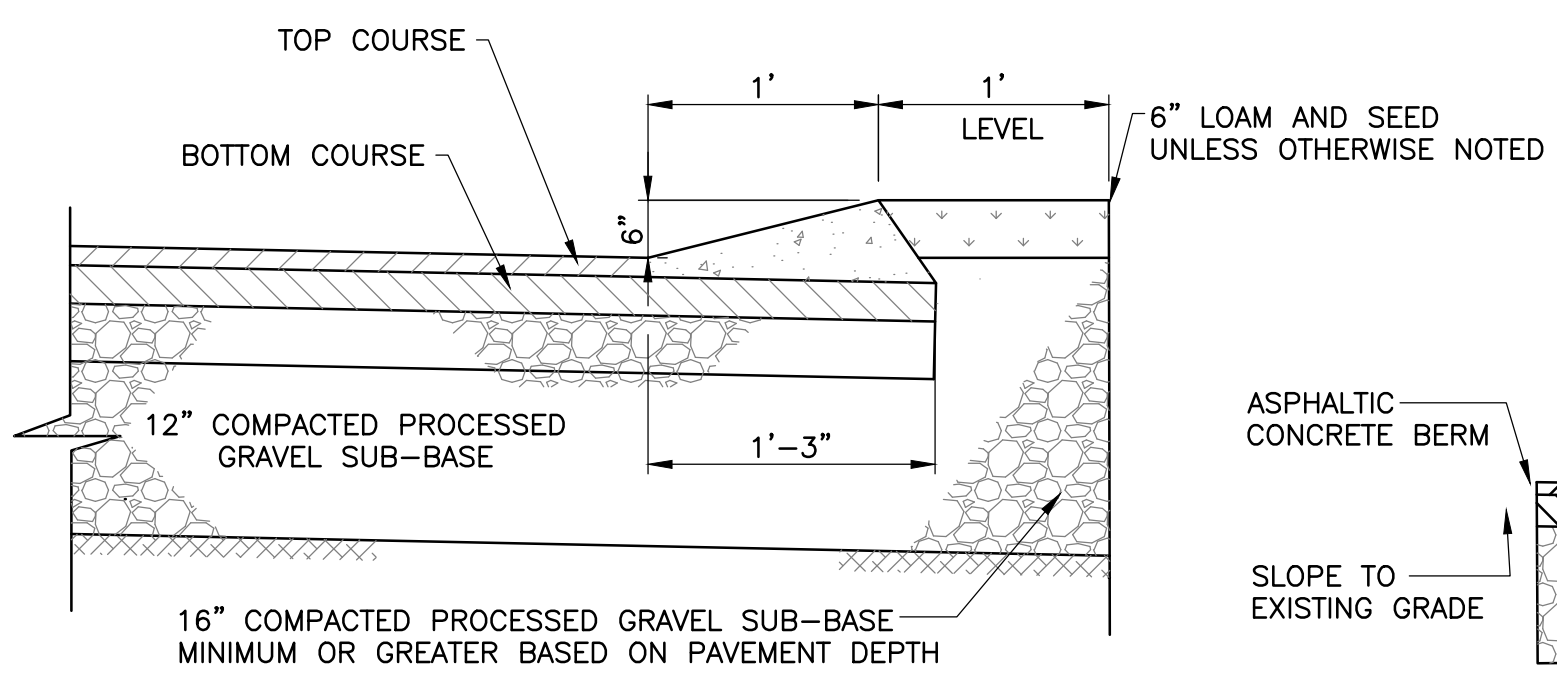
PLAN VIEW



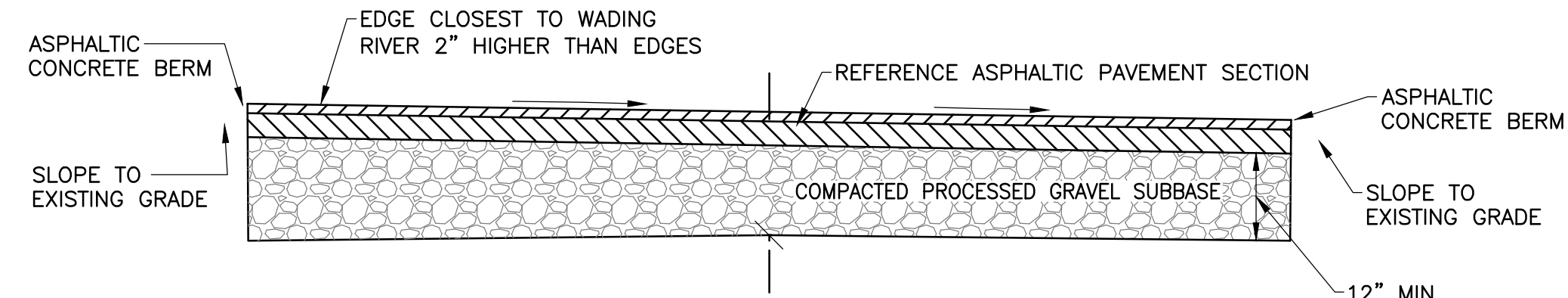
ELEVATION VIEW

NOTES:
1. ALL GATES ARE WELDED CONSTRUCTION.
2. OVERHANG SHALL BE SPECIFIED DISTANCE BY THE MANUFACTURER.
3. SEE SPECIFICATIONS FOR FENCE COATING AND COLOR FOR FABRIC, POSTS, RAILINGS, HARDWARE, AND ALL FENCE APPURTENANCES.

CANTILEVERED SLIDING GATE WITH GATE OPERATOR



ASPHALTIC CONCRETE BERM



TYPICAL ASPHALTIC ACCESS ROADWAY SECTION

ATTLEBORO WATER DEPT.
ATTLEBORO, MA
WADING RIVER
WATER TREATMENT PLANT

CIVIL
SITE DETAILS

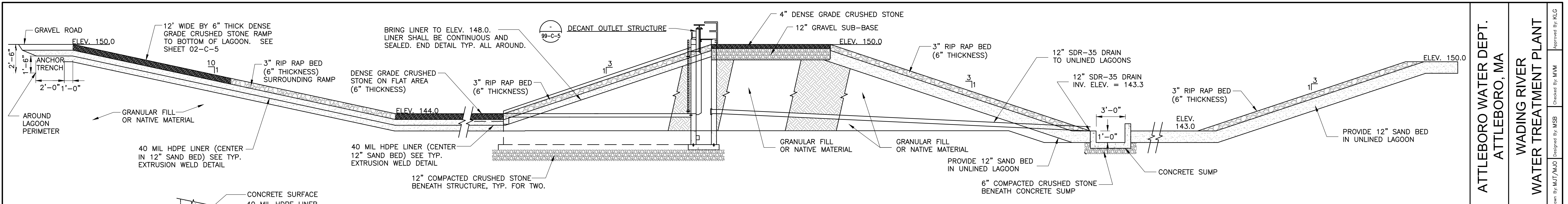
Rev.	Date	Description



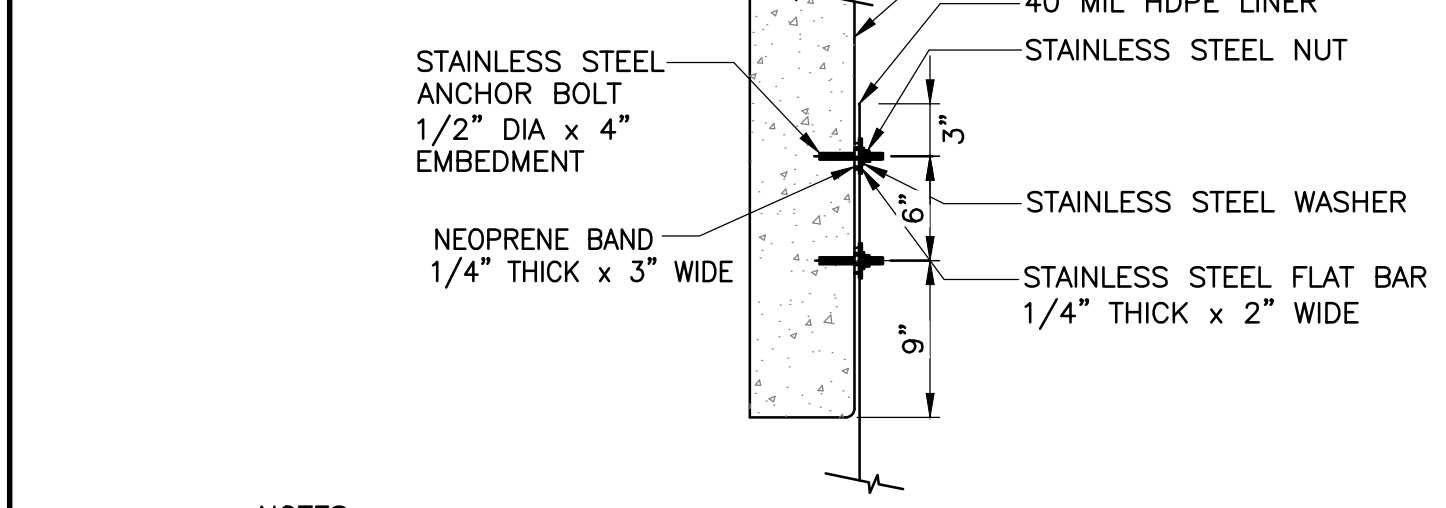
T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE: AS NOTED

99-C-4

P:\Attboro\6193 - Wading River WTP Design\CAD\Sheets\6193-99-C-4-11m.dwg 2/27/2025 12:20 PM MBARRY

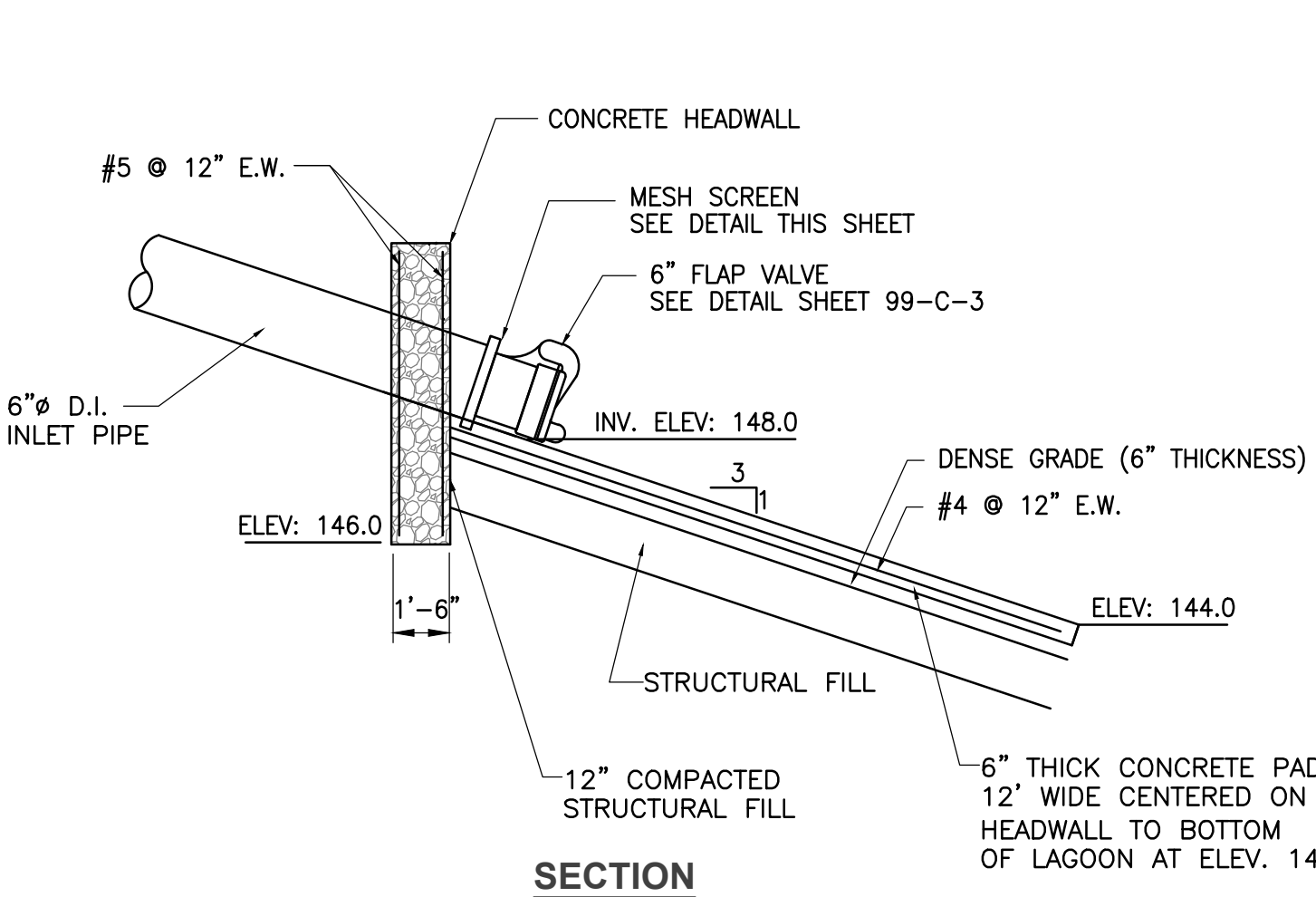


LAGOON PROFILE THROUGH HEADWALL AND WEIR

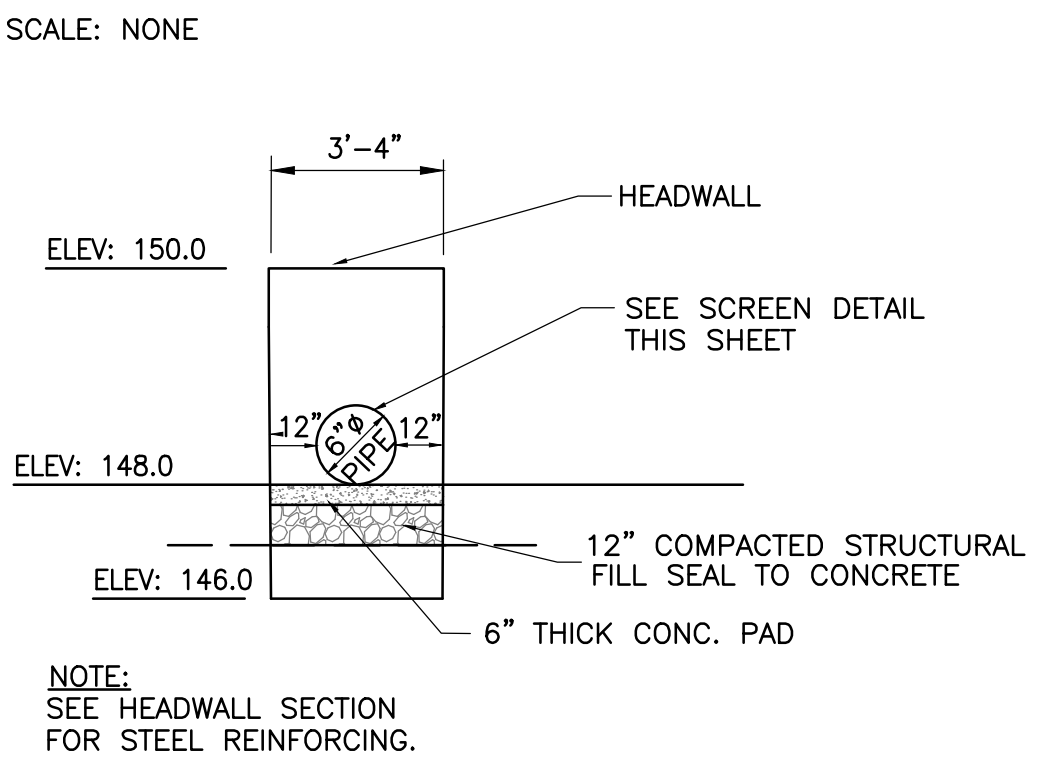


- NOTES:**
1. THE NEOPRENE BAND AND STAINLESS STEEL FLAT BAR WILL BE CONTINUOUS AROUND THE CONCRETE STRUCTURE.
 2. PROVIDE 6" OVERLAP FOR NEOPRENE BAND. NO OVERLAP REQUIRED FOR STAINLESS STEEL FLAT BAR.
 3. CONCRETE EDGES AND CORNERS TO BE SMOOTH AND ROUNDED TO PREVENT LINER DAMAGE.
 4. BOLTS WILL BE INSTALLED AT A SPACING OF 6" ALONG THE LENGTH OF THE CONCRETE STRUCTURE.
 5. BOLTS TO BE INSTALLED 4" BACK FROM CORNERS OF THE CONCRETE.
 6. PROVIDE WATERTIGHT CONNECTION OF HDPE WITH CONCRETE.
 7. ALL STAINLESS STEEL TO BE TYPE 316.

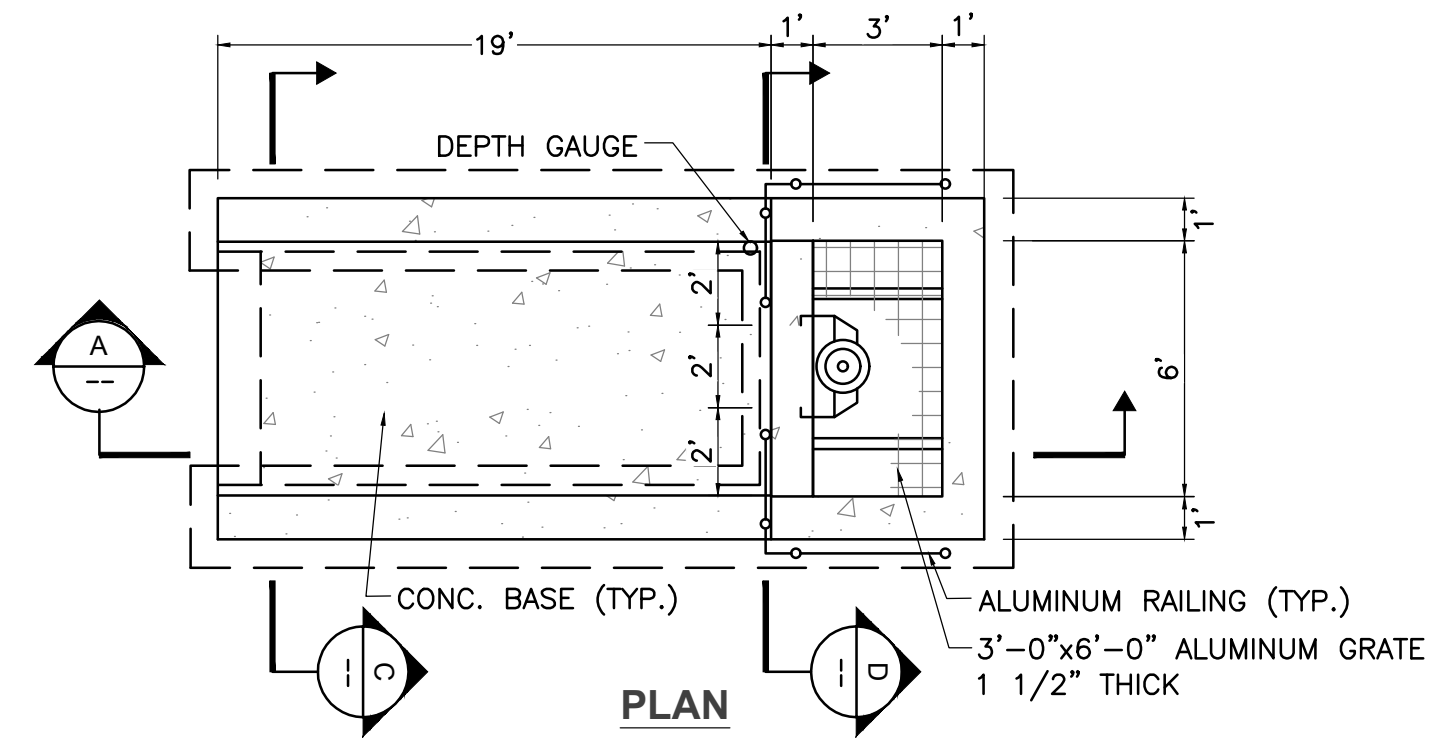
TYPICAL CONNECTION OF HDPE LINER WITH CONCRETE



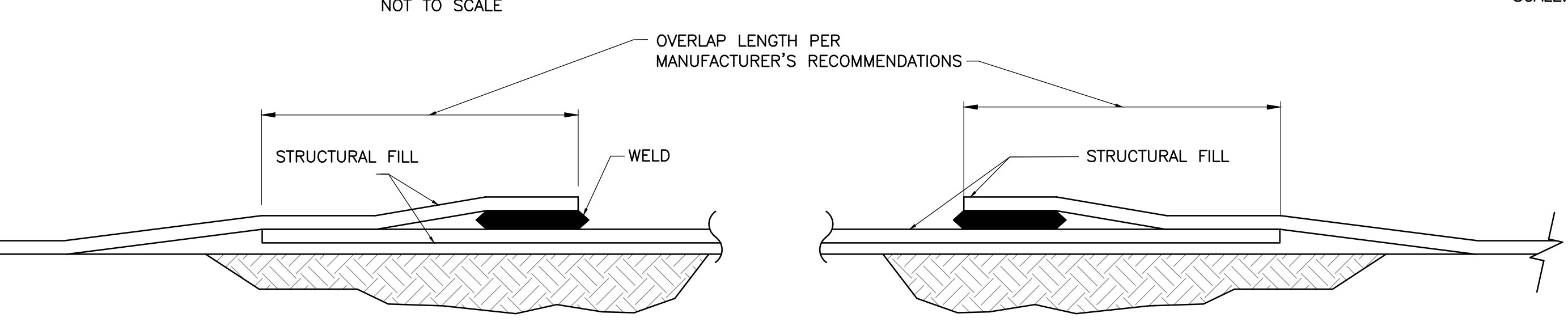
LAGOON INLET HEADWALL



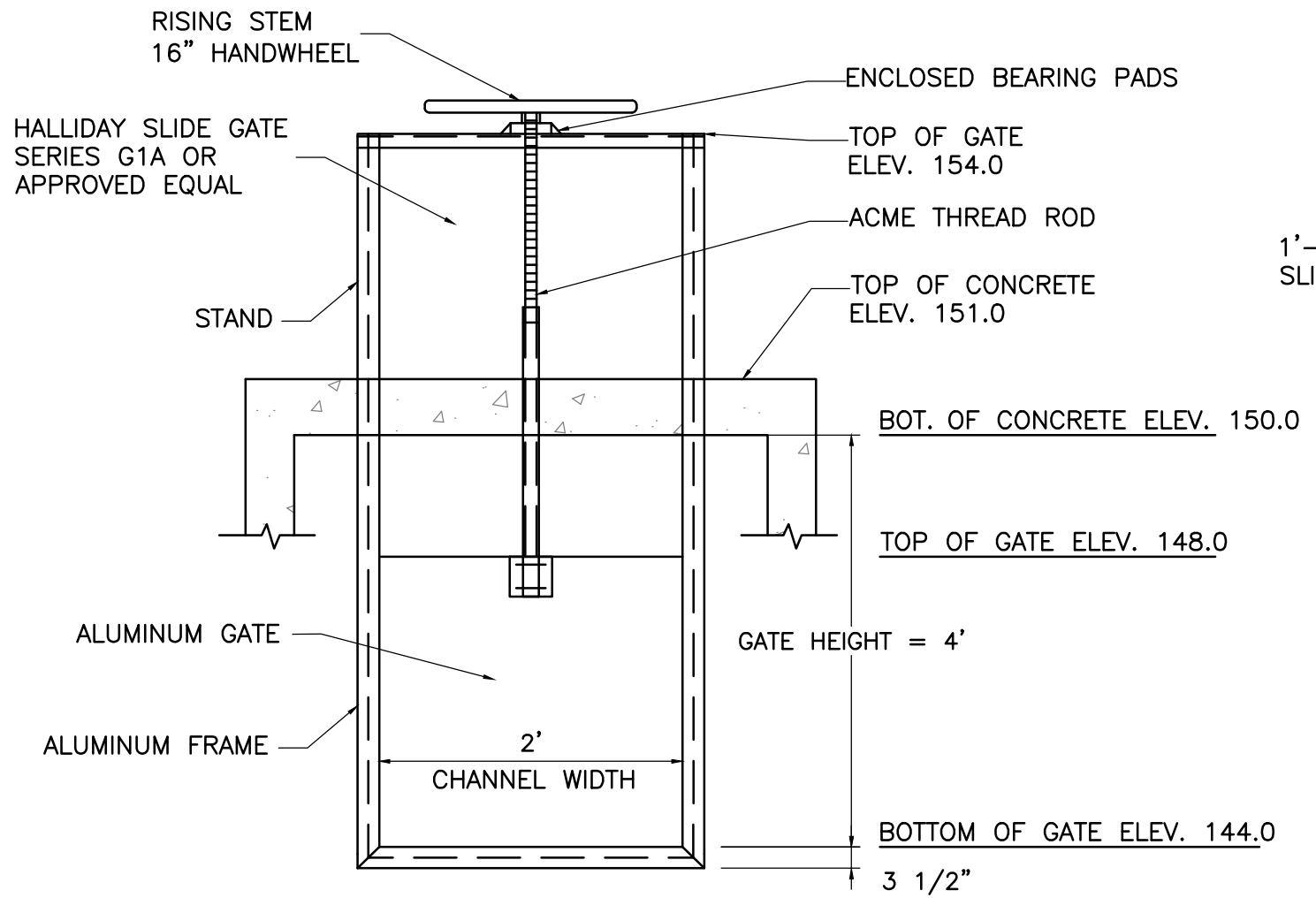
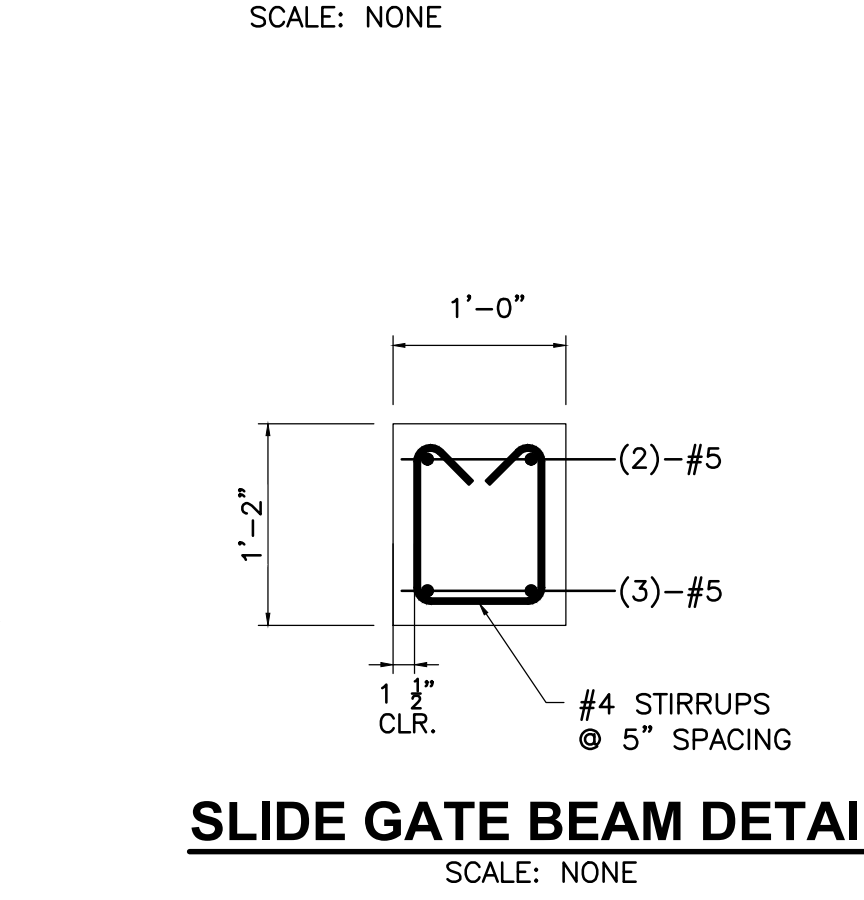
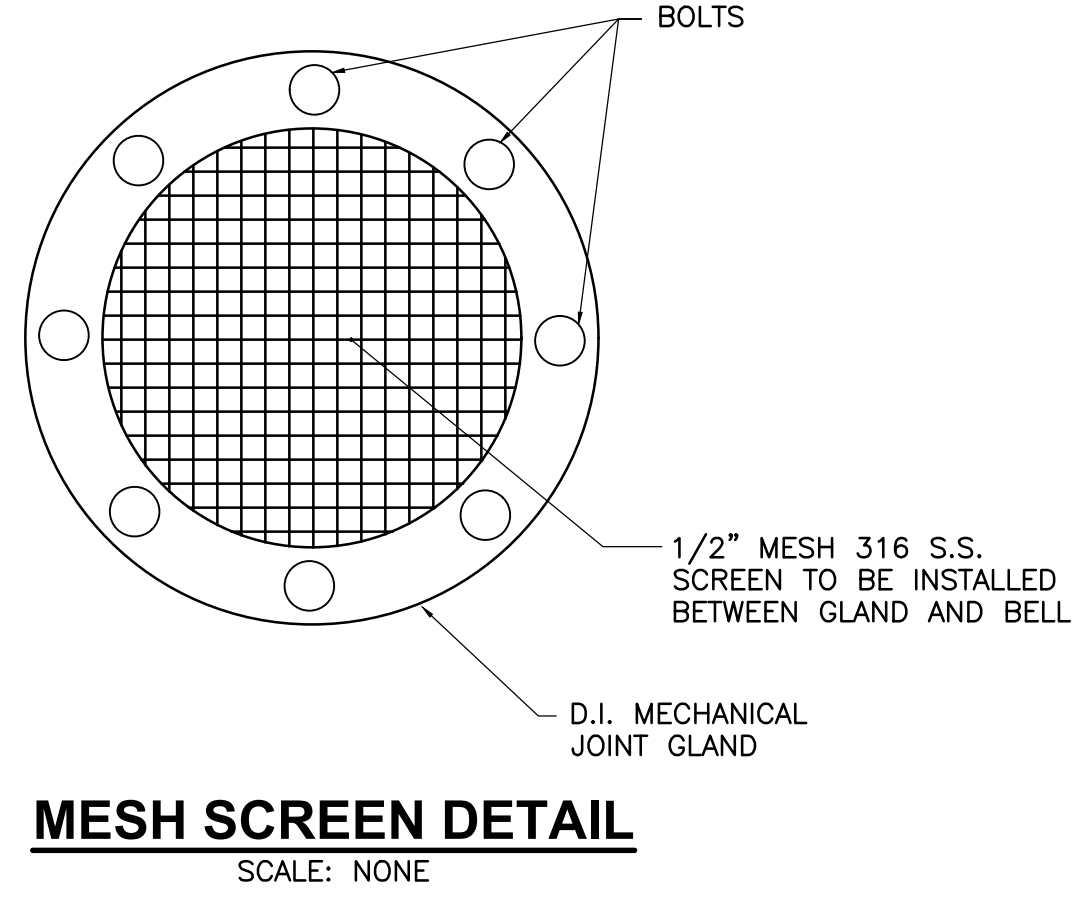
- NOTE:** SEE HEADWALL SECTION FOR STEEL REINFORCING.



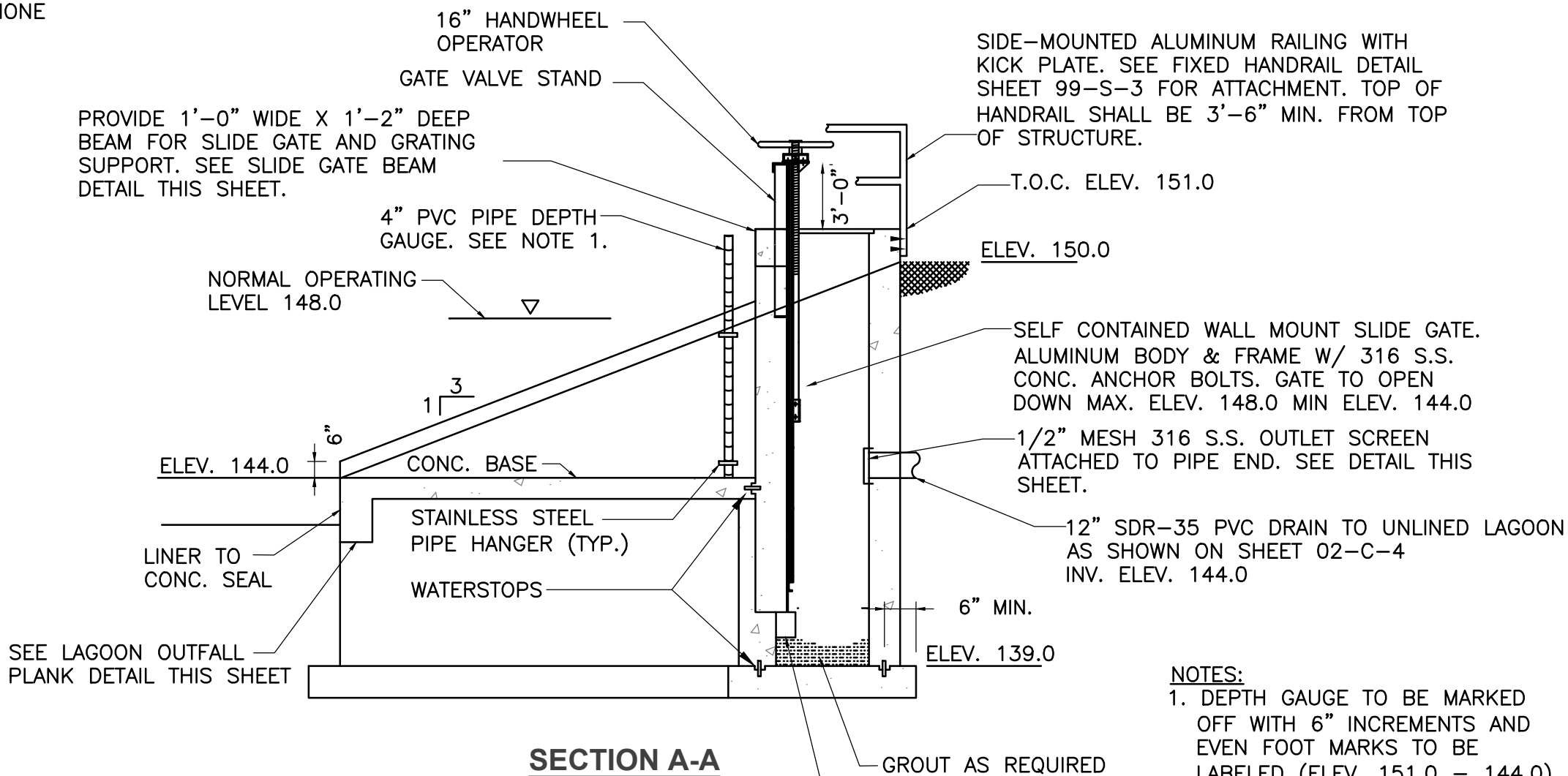
LAGOON DECANT OUTFALL STRUCTURE



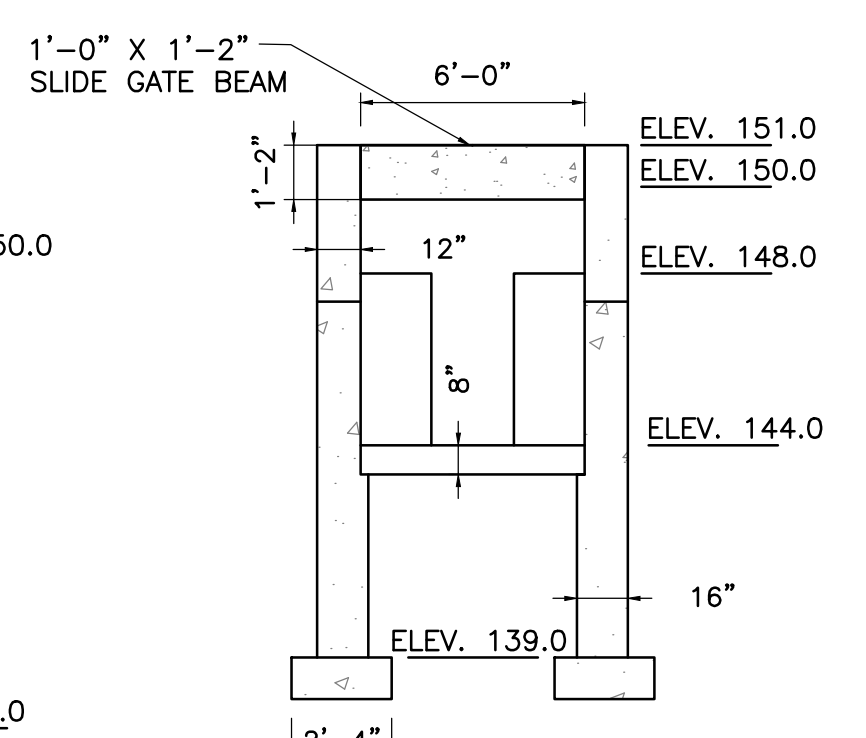
TYPICAL EXTRUSION WELD DETAILS



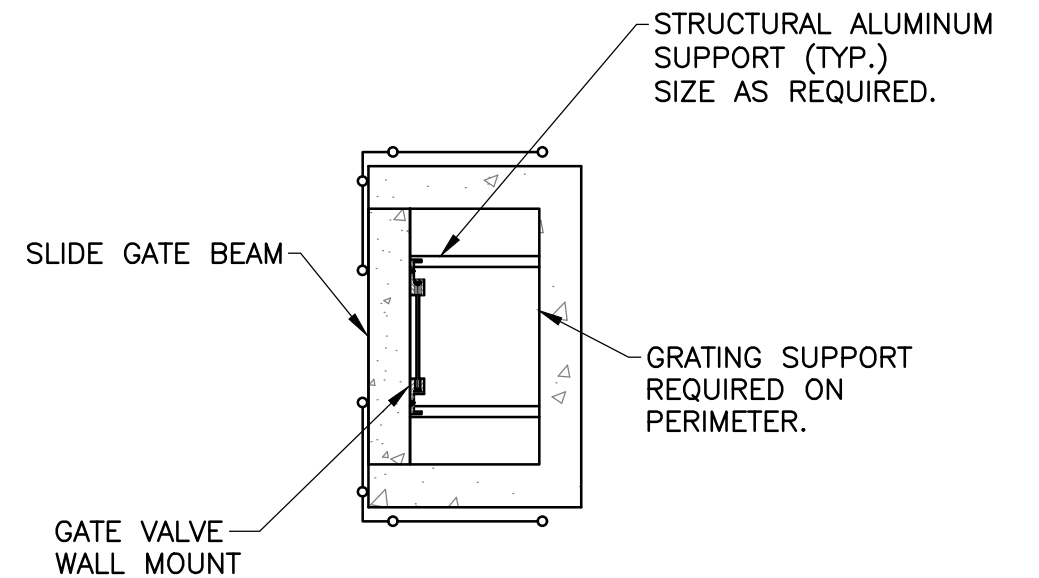
SLIDE GATE DETAIL



SECTION A-A



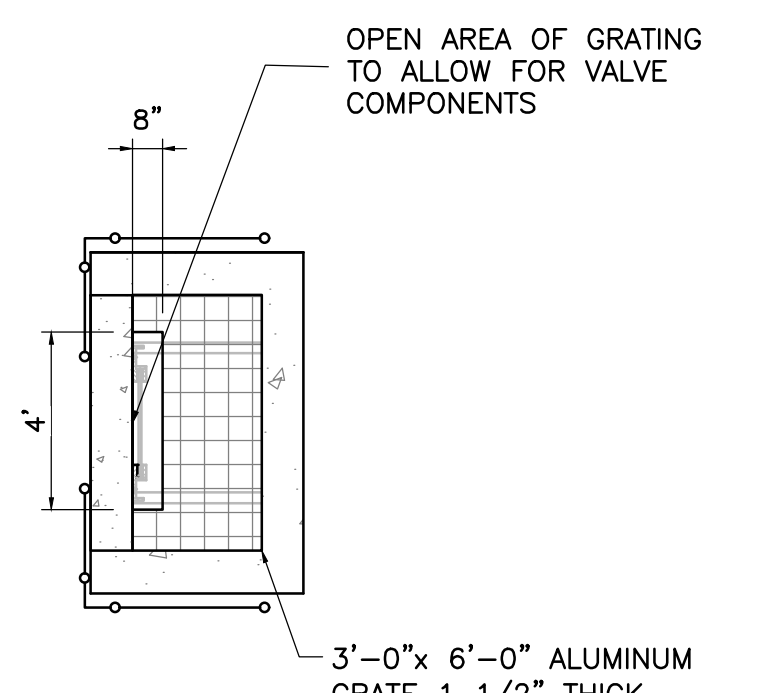
SECTION C-C



SECTION D-D

- NOTES:**
1. DEPTH GAUGE TO BE MARKED OFF WITH 6" INCREMENTS AND EVEN FOOT MARKS TO BE LABELED (ELEV. 151.0 - 144.0)
 2. ALL REINFORCING IN CONCRETE FOOTINGS, SLABS AND WALLS TO BE #5 @ 12" E.W. E.F.

- NOTES:**
1. CONTRACTOR TO COORDINATE SLIDE GATE ATTACHMENT AND BASE REQUIREMENTS WITH SLIDE GATE MANUFACTURER RECOMMENDATION.
 2. PROVIDE EMBEDDED ANGLE AT TOP OF WALL FOR GRATING SUPPORT.



LAGOON OUTFALL PLANK DETAIL

ATTLEBORO WATER DEPT.
ATTLEBORO, MA
WADING RIVER
WATER TREATMENT PLANT

CIVIL
LAGOON DETAILS

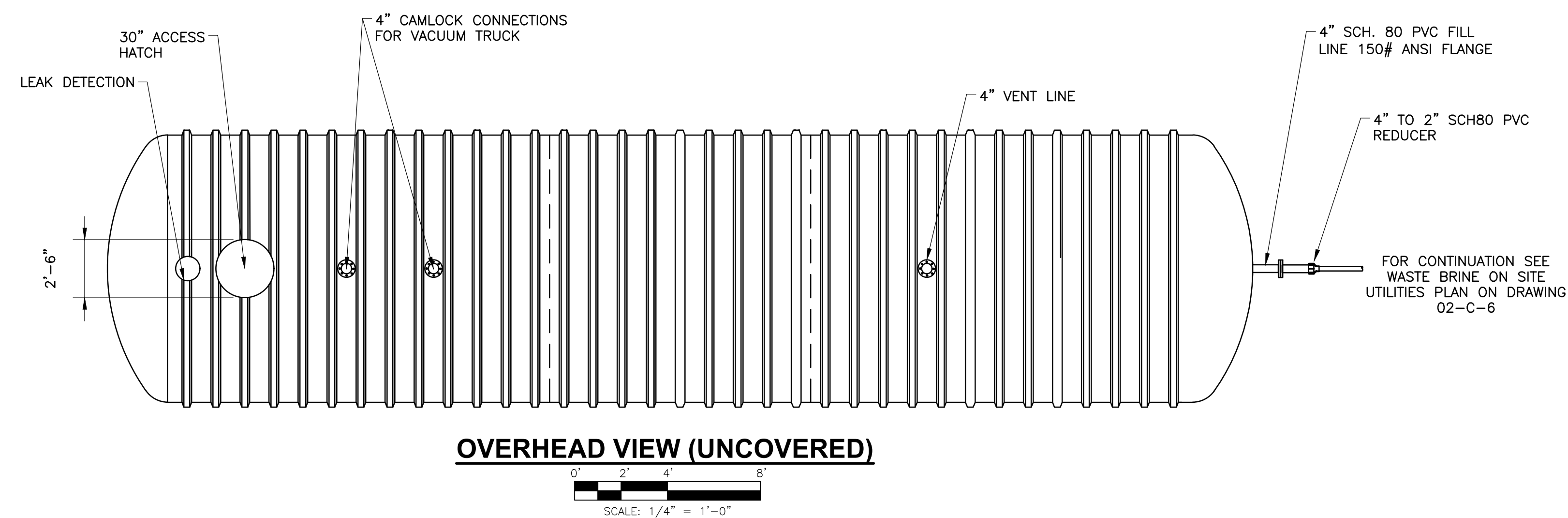
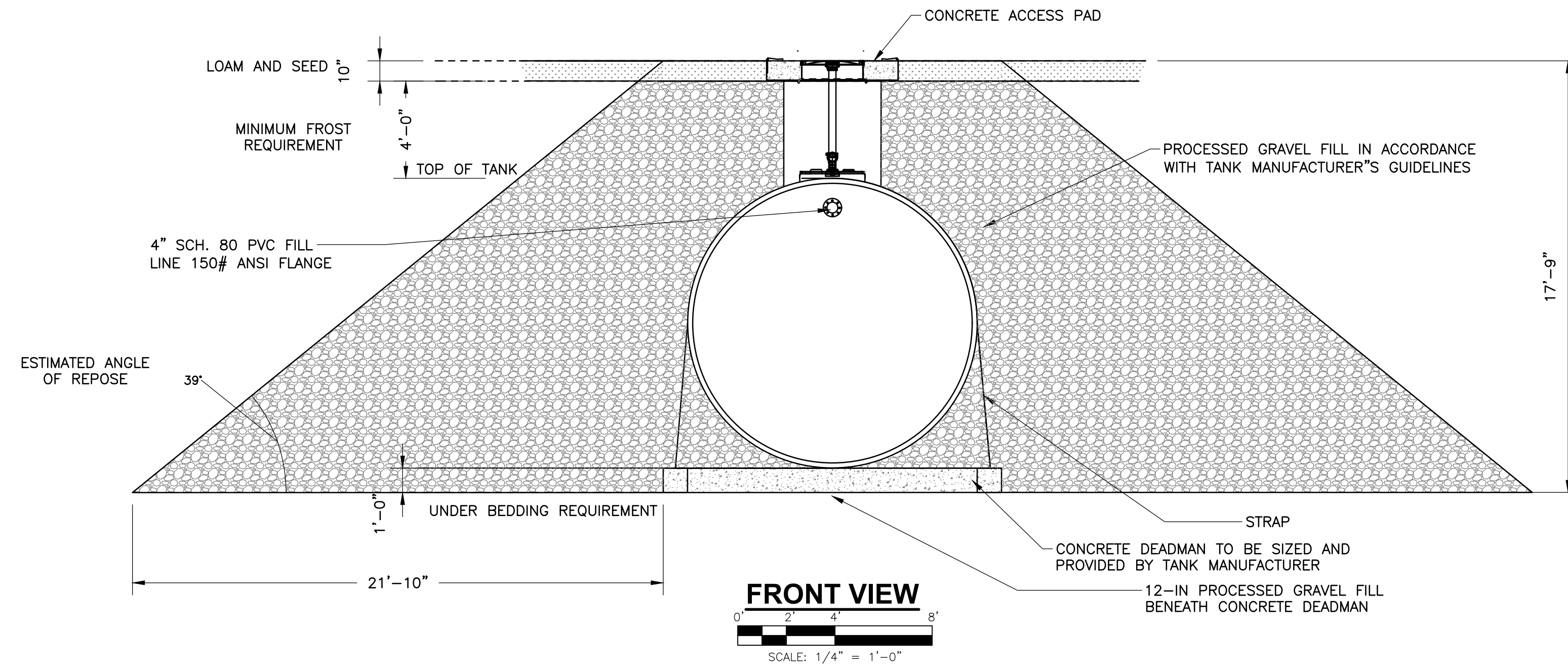
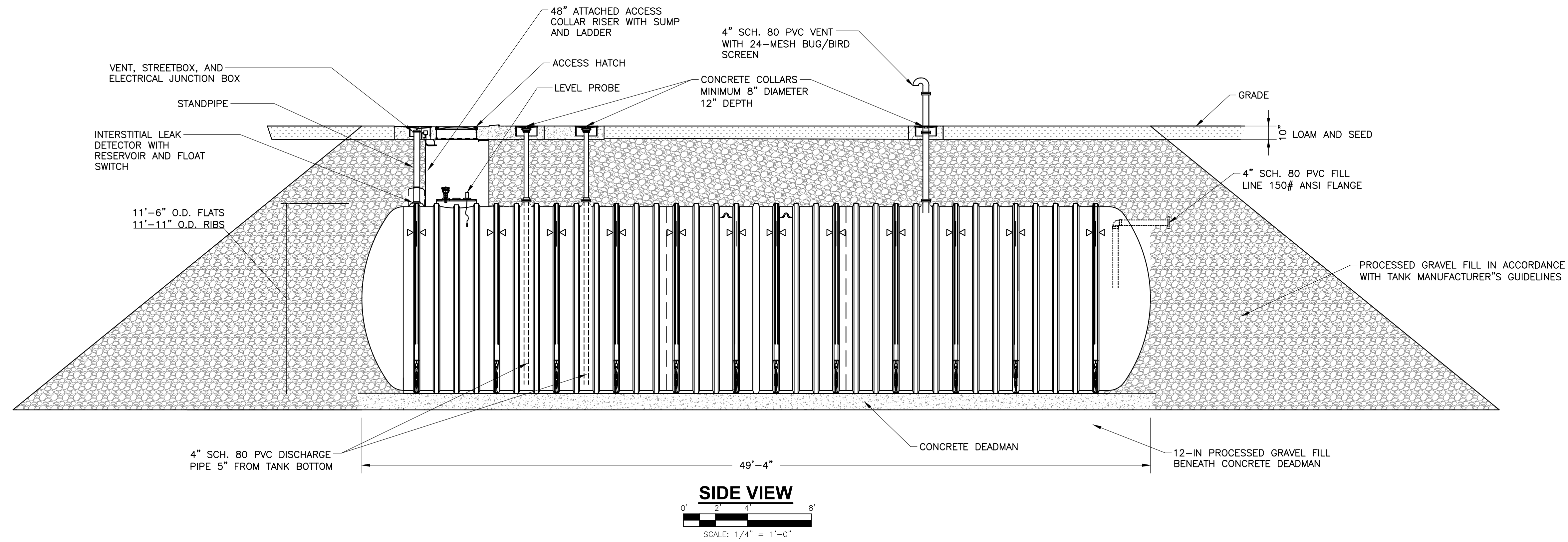
Rev.	Date	Description



T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE: AS NOTED

99-C-5

P:\Attboro\6193 - Wading River WTP Design\CAD\Sheet\99-C-5-11.mxd - Details.dwg 2/27/2025 12:20 PM MBARRY



NOTES:

1. TANK MANUFACTURER TO CONFIRM DEADMEN SIZE BASED ON REVIEW OF SITE CONDITIONS.
2. STRAPS TO BE FURNISHED FROM TANK MANUFACTURER.
3. IF SHORING EXCAVATION, TANK MANUFACTURER TO CONFORM EXCAVATION DEPTH, WIDTH, AND CLEARANCES.
4. ALL BACKFILL THAT IS TO BE COMPACTED MUST BE COMPACTED WITH A HAND GUIDED VIBRATING-PLATE, MECHANICAL COMPACTOR FOLLOWING TANK MANUFACTURER'S INSTALLATION GUIDELINES.
5. SEE SPECIFICATION SECTION 11612 FOR TANK SPECIFICATIONS.

ATTLEBORO WATER DEPT.
ATTLEBORO, MA
WADING RIVER
WATER TREATMENT PLANT

CIVIL
BRINE WASTE HOLDING
UNDERGROUND FRP
TANK DETAILS

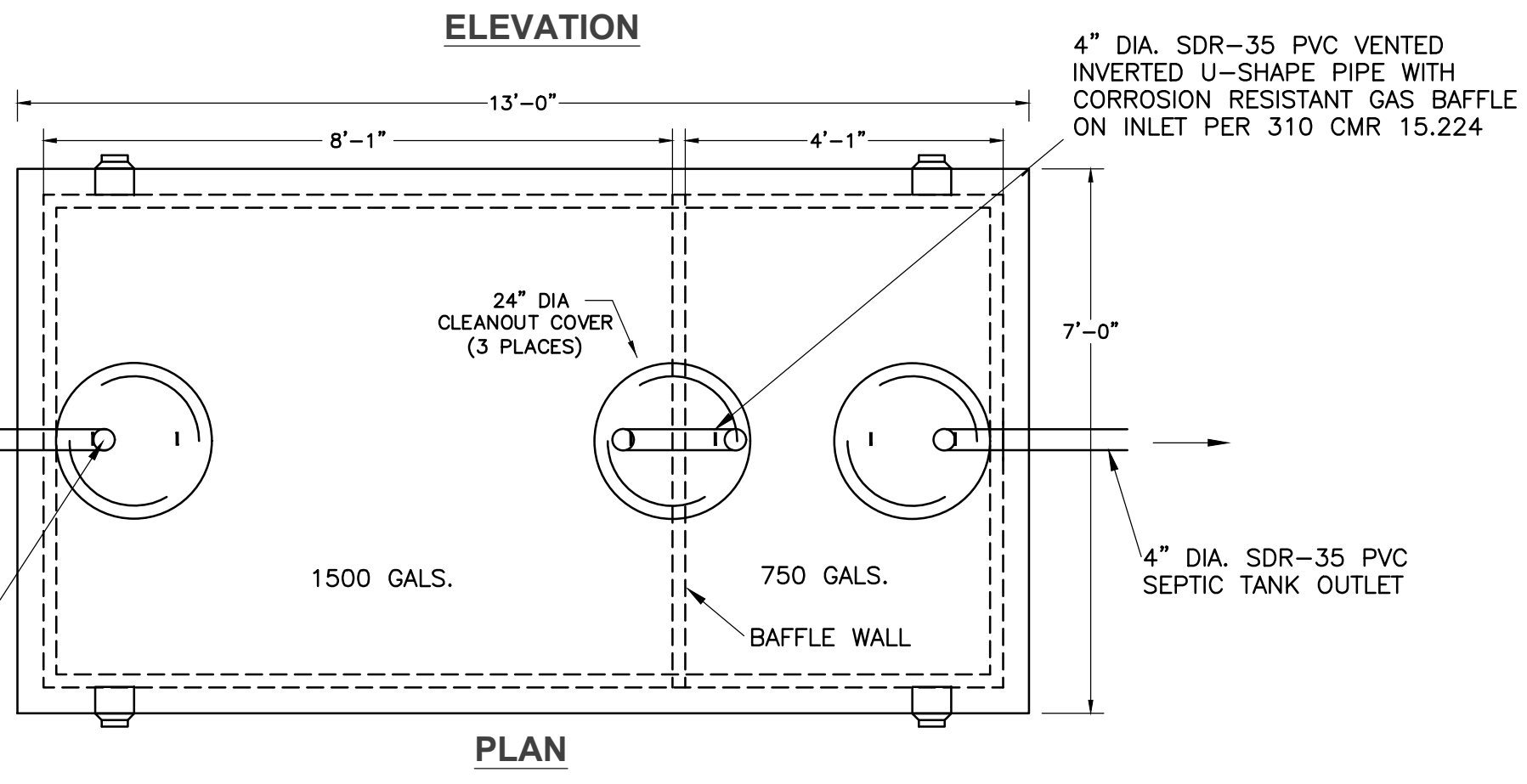
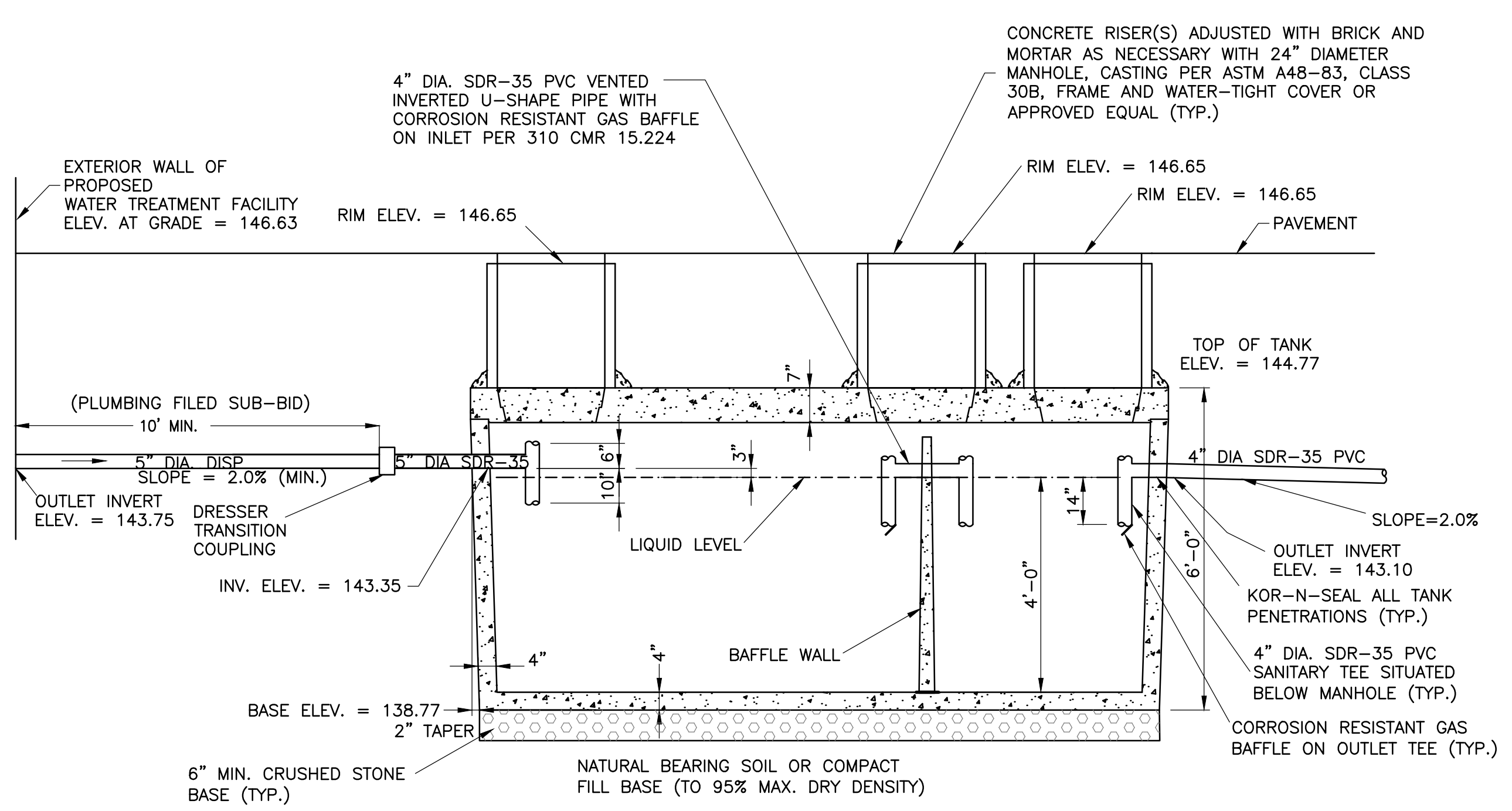
Rev.	Date	Description



T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE: AS NOTED

99-C-6

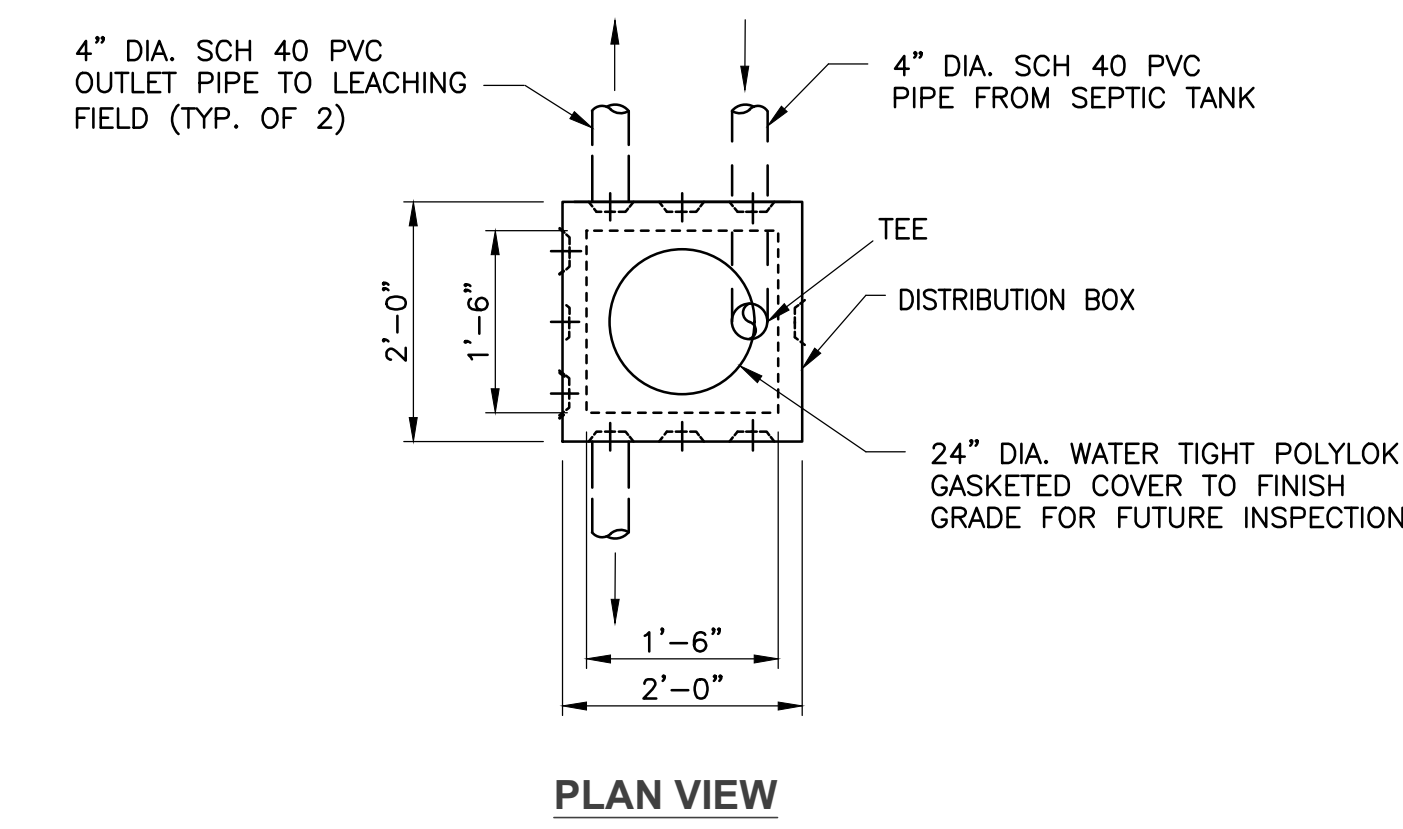
P:\Attboro\6193 - Wading River WTP Design\CADD\Sheets\6193-99-C-6-11ho.rvt - Details.dwg 2/27/2025 12:20 PM MBARRY



2,000 GALLON NOMINAL MONOLITHIC TWO COMPARTMENT SEPTIC TANK

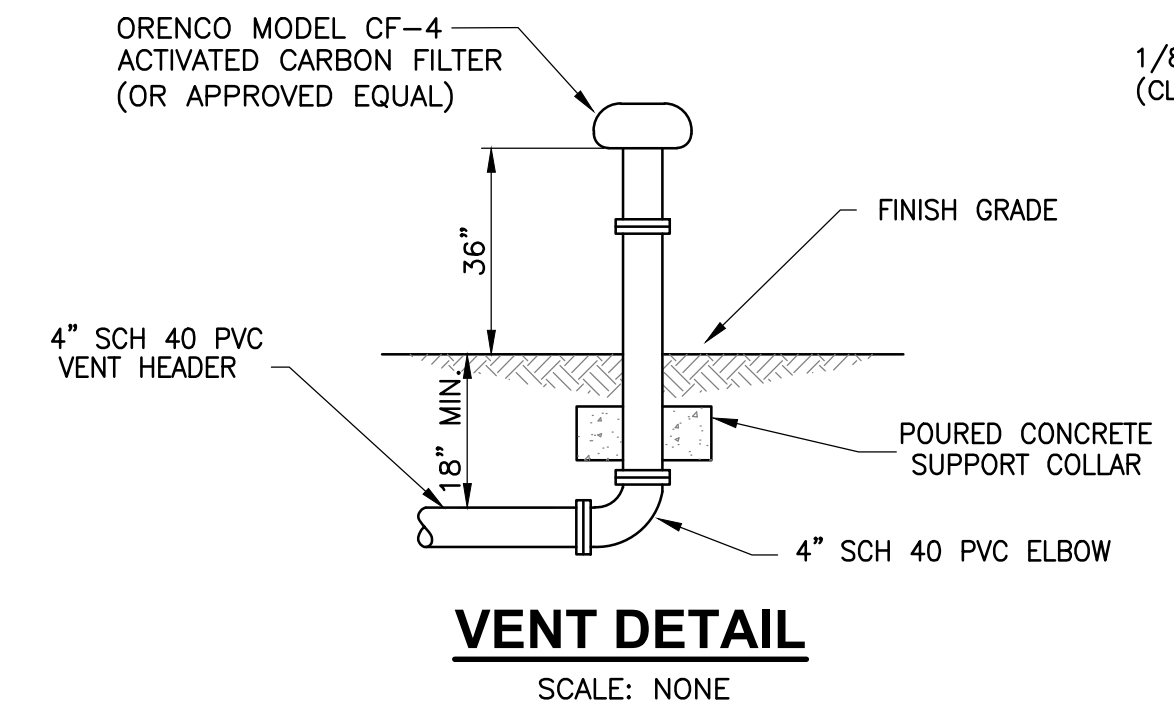
TANK AND CASTINGS SHALL MEET H20-LOADING OR APPROVED EQUAL. SEE SPECIFICATIONS FOR DETAILS.

- NOTES:**
1. CONCRETE: 5,000 PSI MINIMUM AFTER 28 DAYS.
 2. DESIGN CONFORMS WITH 310 CMR 15.00, DEP TITLE 5 REGS, FOR SEPTIC TANKS
 3. ALL REINFORCEMENT PER ASTM C1227.
 4. DESIGNED FOR AASHTO HS-20 LOADING, 1 TO 5 FT COVER.
 5. AS MANUFACTURED BY SHEA CONCRETE PRODUCTS, ITEM NO. TK-M20002CH OR APPROVED EQUAL.
 6. SET AND ADJUST MANHOLE FRAMES AND COVERS PER SPECIFICATION SECTION 02700.

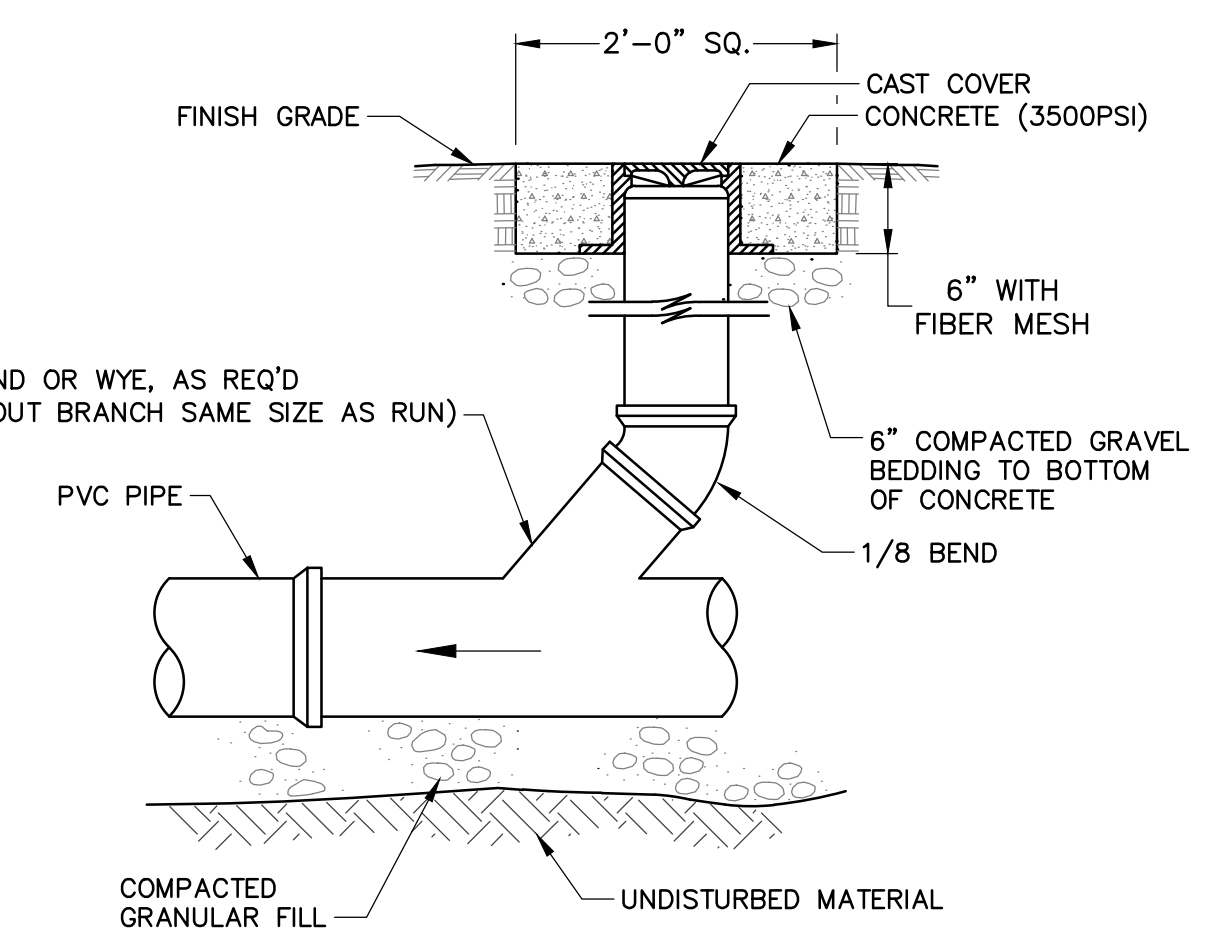


DISTRIBUTION BOX
SCALE: NONE

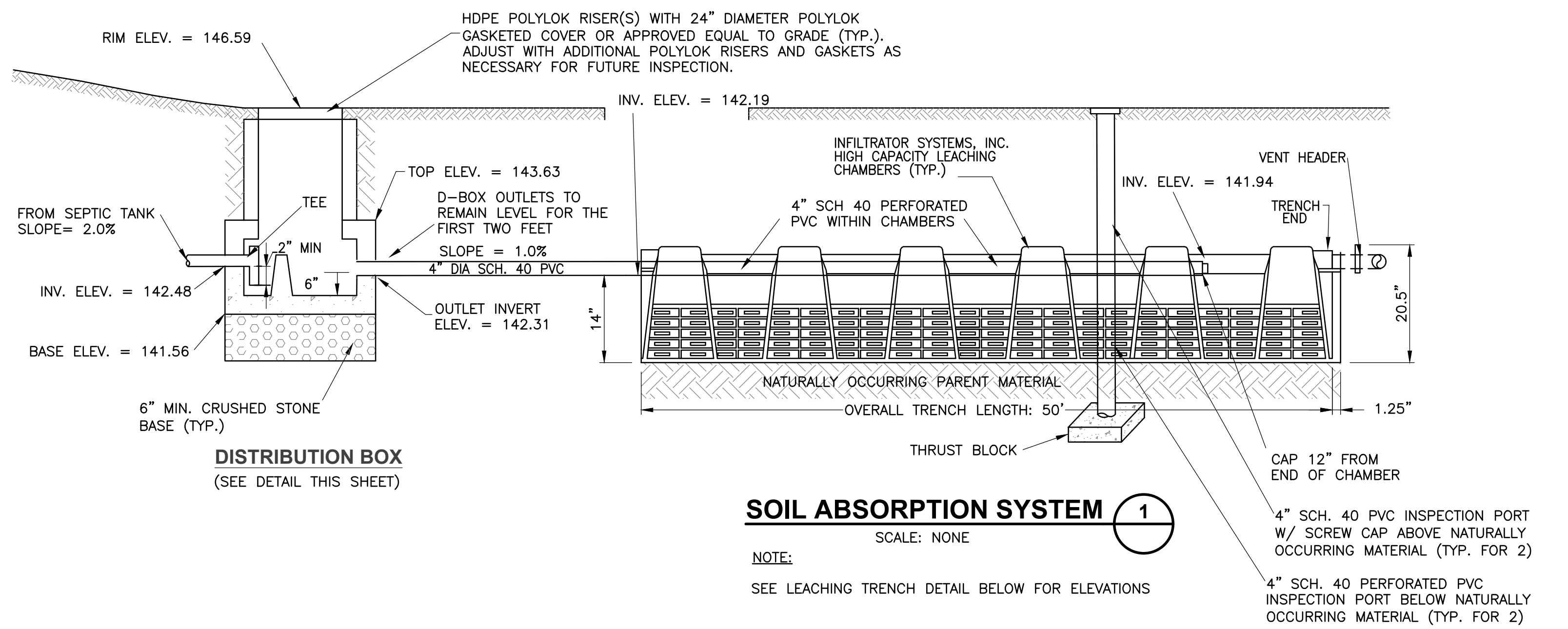
- DISTRIBUTION BOX NOTES:**
1. DISTRIBUTION BOX TO BE HEAVY DUTY MODEL B-9DBR12 AS MANUFACTURED BY E.F. SHEA OR APPROVED EQUAL.
 2. MORTAR ALL UNUSED KNOCKOUTS IN THE DISTRIBUTION BOX.
 3. PRECAST CONCRETE RISER TO BE INSTALLED WITH A RUBBER GASKET AND CONCRETE GROUT TO ENSURE WATERTIGHT SEAL.
 4. DISTRIBUTION BOXES TO BE INSTALLED ON 6\"/>



VENT DETAIL
SCALE: NONE

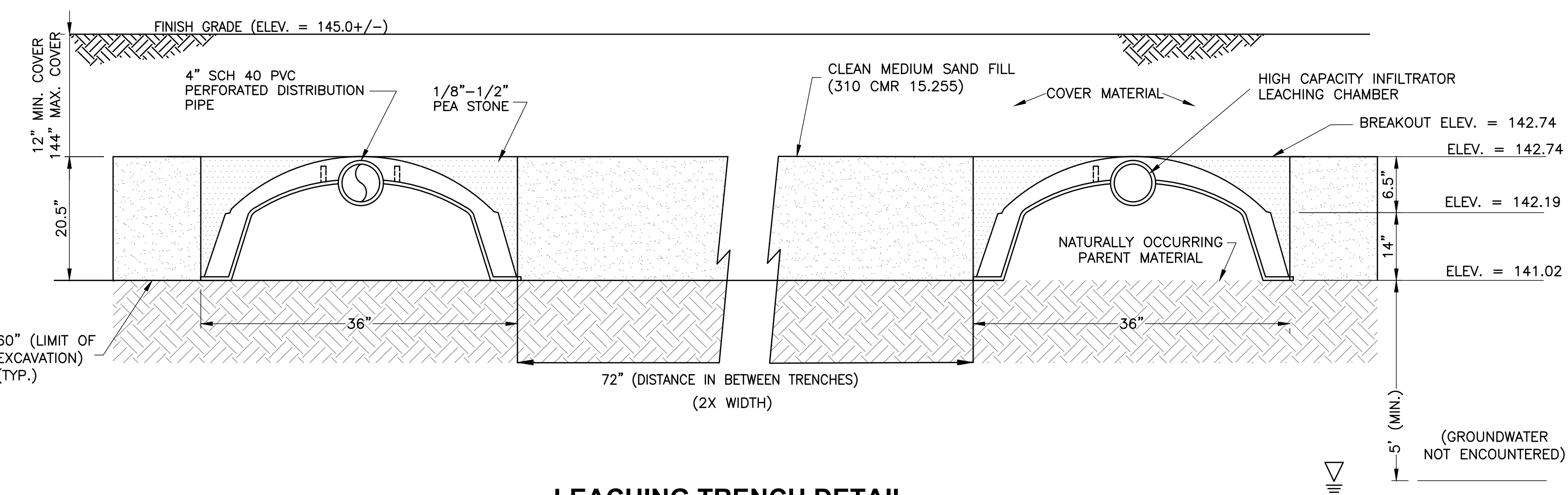


CLEANOUT DETAIL
NOT TO SCALE

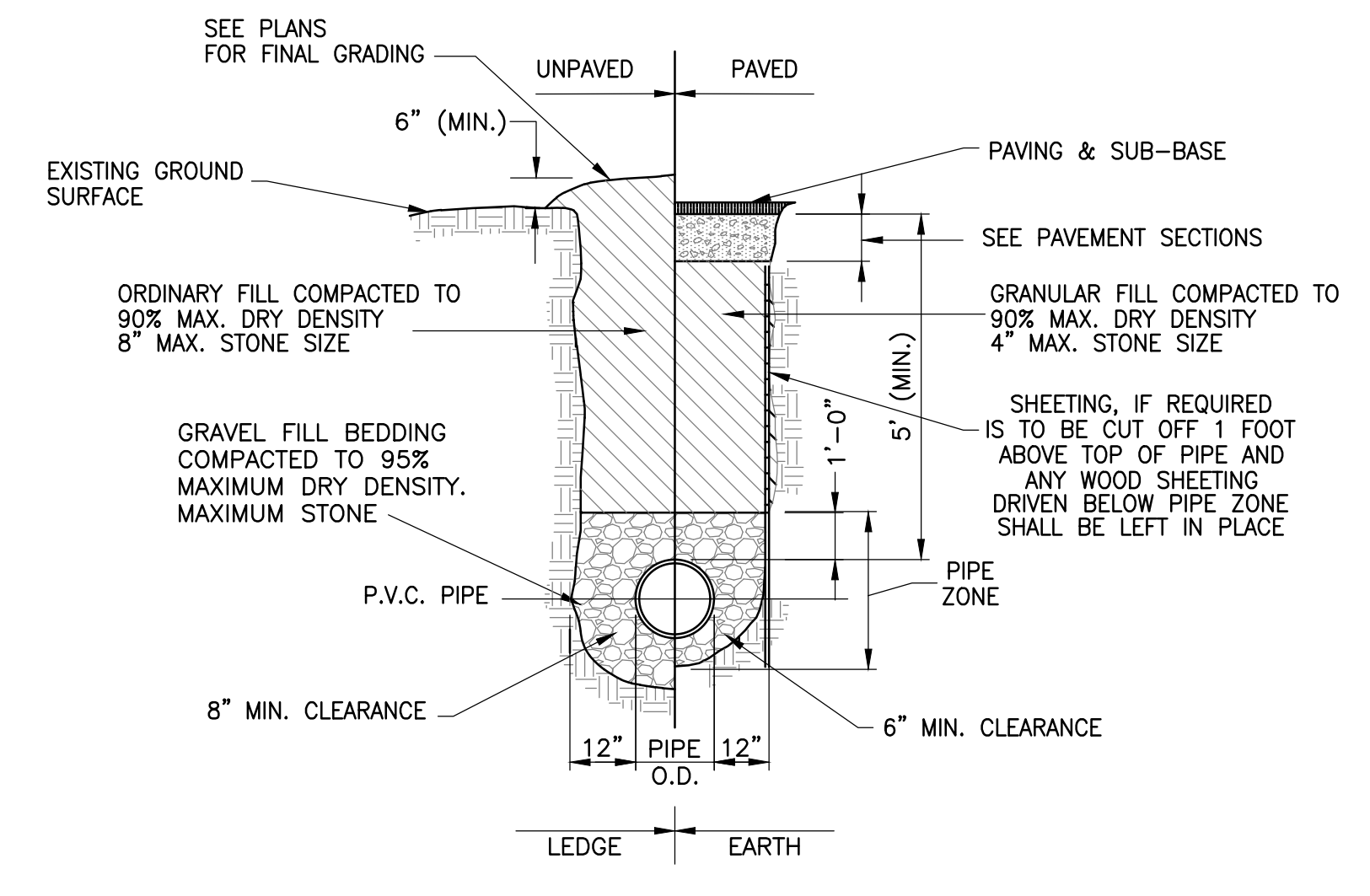


SOIL ABSORPTION SYSTEM 1
SCALE: NONE

NOTE:
SEE LEACHING TRENCH DETAIL BELOW FOR ELEVATIONS



LEACHING TRENCH DETAIL
SCALE: NONE



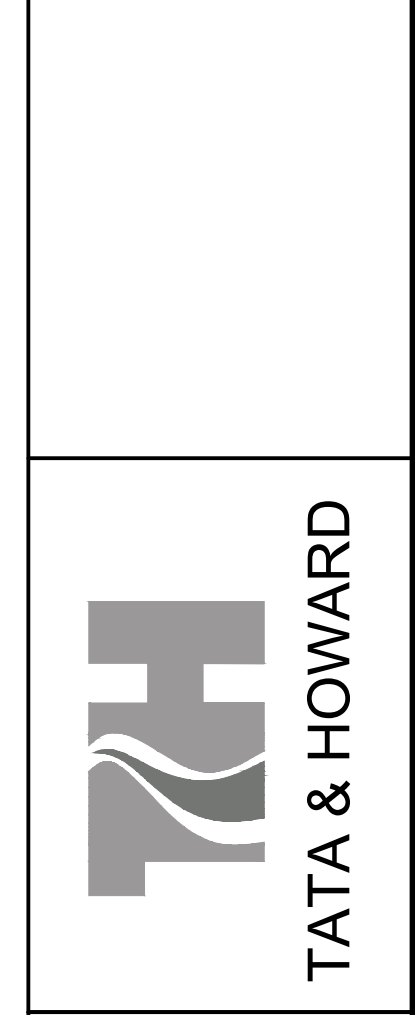
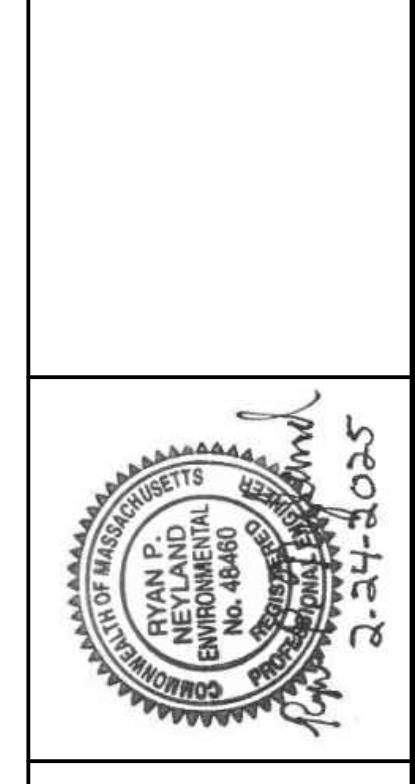
PVC PIPE TRENCH DETAIL
SCALE: NONE

NOTE:
REFER TO SPECIFICATIONS FOR GRADATION REQUIREMENTS.

ATTLEBORO WATER DEPT.
ATTLEBORO, MA
WADING RIVER
WATER TREATMENT PLANT

CIVIL
SEPTIC SYSTEM DETAILS

Rev.	Date	Description



T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE: AS NOTED

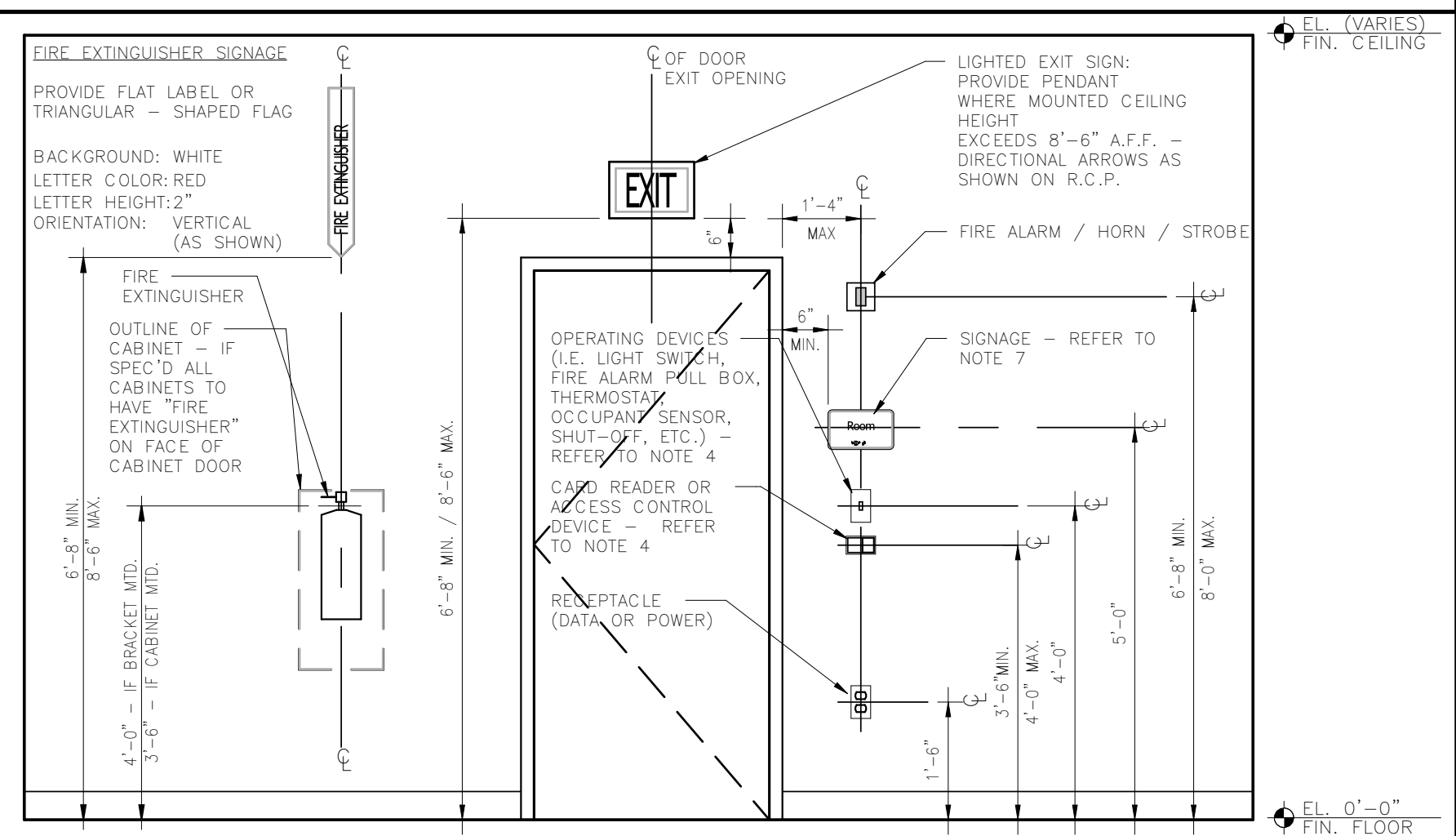
99-C-7

P:\Attboro\6193_Wading River WTP Design\CAD\Sheet\0193-99-C-7.dwg 2/27/2025 12:20 PM MBARRY

GENERAL LEGEND

GRAPHIC SYMBOLS	ABBREVIATIONS	MATERIAL SYMBOLS
	A COLUMN BUBBLE	
	SECTION DETAIL	
	PLAN DETAIL	
	INTERIOR ELEVATION	
	EXTERIOR ELEVATION	
	ROOM NAME / ROOM NUMBER	
	ELEVATION MARKER	
	DOOR NUMBER	
	WALL TYPE	
	NOTE	
	NOTE	
	NOTE/REVISION	
	OBJECT TYPE	
	MATCH LINE	
	LIMIT OF WORK	
	LIMIT / EXTENTS OF	

TYPICAL MOUNTING HEIGHTS



- NOTES:
- ALL MOUNTING HEIGHTS SHALL BE MEASURED FROM FINISHED FLOOR TO CENTERLINE OF DEVICE EXCEPT AT EXIT SIGNS WHERE HEIGHTS SHALL BE MEASURED TO BOTTOM OF SIGNAGE FRAME.
 - ALL DEVICES SHALL BE INSTALLED ON A COMMON VERTICAL CENTERLINE AS SHOWN ABOVE WHEREVER POSSIBLE.
 - ALL DEVICES SHALL BE INSTALLED AT MOUNTING HEIGHTS AS INDICATED ON THIS DETAIL UNLESS OTHERWISE NOTED. COORDINATE HEIGHTS AND LOCATIONS OF ALL DEVICES AND EQUIPMENT WITH MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS. ALL CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER.
 - ALL OPERATING DEVICES SHALL BE INSTALLED AT MOUNTING HEIGHTS AND CENTERLINES AS INDICATED ON THIS DETAIL AS MEASURED FROM THE OUTER EDGE OF FRAME AT DOORS, SIDELIGHTS, GLAZING, ETC. UNLESS NOTED OR DIRECTED OTHERWISE. THE PREFERRED LOCATION FOR FIRE ALARM PULL BOXES, CARD READERS, AND ACCESS CONTROL DEVICES SHALL BE THE LATCH SIDE OF DOOR. AT AREAS WITH MULTIPLE DEVICES OR LOCATION CONFLICTS, COORDINATE DEVICE LOCATION WITH INTERIOR ELEVATIONS, PLUMBING, MECHANICAL, AND ELECTRICAL DRAWINGS, AND THE ARCHITECT/ENGINEER OF RECORD.
 - REVIEW AND CONFIRM ALL FIRE EXTINGUISHER TYPES, SIZES, AND LOCATIONS WITH AUTHORITY HAVING JURISDICTION, UNLESS NOTED OR DIRECTED OTHERWISE ELSEWHERE IN DRAWING SET. FIRE EXTINGUISHERS SHALL BE LOCATED AS FOLLOWS:
- | TYPE OF FIRE / HAZARD | EXTINGUISHER TYPE | MAX. TRAVEL DISTANCE / SPACING |
|-------------------------|-------------------|---|
| TYPE 'A' | TYPE 2-A | 75' MAX. TRAVEL / ONE (1) EXTINGUISHER FOR EVERY 3000 SQ.FT. |
| TYPE 'B' / LIGHT HAZARD | TYPE 10-B | 50' MAX. TRAVEL |
| TYPE 'B' / MOD. HAZARD | TYPE 20-B | 50' MAX. TRAVEL |
| TYPE 'B' / HIGH HAZARD | TYPE 40-B | 30' MAX. TRAVEL |
| TYPE 'C' | --- | --- |
| TYPE 'D' | CLASS 'D' | TYPE AND SPACING IS BASED ON CLASS 'A' OR 'B' RATING WHERE ENERGIZED EQUIPMENT IS IN USE. |
| TYPE 'K' | CLASS 'K' | NOT MORE THAN 75' FROM THE HAZARD |
| | | 30' MAX. TRAVEL |
- 7.) SIGNAGE FONTS SHALL BE 5/8" TO 2" HIGH. BRAILLE CELLS SHALL BE 0.059" IN DIAMETER. THE VERTICAL SEPARATION BETWEEN CELLS SHALL BE AT LEAST 0.395" AND THE HORIZONTAL SEPARATION SHALL BE AT LEAST 0.241".

CODE ANALYSIS

Project	Wading River WTP for Attleboro, MA 250 Bacon Street Attleboro, MA 02703	
Applicable Building Code	780 CMR: Massachusetts State Building Code, 10 th Edition International Building Code 2021 w/ Massachusetts Amendments International Energy Conservation Code 2021 w/ Massachusetts Amendments (Stretch Code)	
Applicable Access Codes	521 CMR: Architectural Access Board Rules and Regulations 28 CFR Part 36: ADA Accessibility Guidelines	
Applicable Plumbing Code	248 CMR: Fuel Gas and Plumbing Code, 12/8/23	
Life Safety Code	NFPA 101 Life Safety Code	
Applicable Electric Code	NFPA 70 National Electric Code	
Project Summary	The Wading River WTP is an approximately 31,600 gross SF new construction on the site of the existing water treatment plant which will be removed. This new construction will have a U-Utility use group classification. The building will be considered a single story with mezzanine, as the floor below grade is unoccupied and only contains mechanical equipment and water storage. The building will consist of CMU veneer block with a CMU back-up wall steel structure will support a flat roof. Construction type will be Type III-B Unprotected. The building will be fully sprinkled.	
Basic Building Characteristics		
Plan Building Area	(U-Utility)	Basement Level - 15,800 SF (includes unoccupiable Clearwalks and Tanks) Ground Floor Level - 15,800 SF Mezzanine Level - 2,735 SF (not included in building area calculation)
Number of Floors	1 Story above grade plan with Mezzanine	
Construction Classification III-B - Unprotected (non-combustible exterior materials and interior building materials are of any material permitted by this code)		
General Building Heights and Areas (Chapter 5)		
Building Area	Utility - U Tabular = 34,000 SF Allowed = 34,000 SF	
Building Height (Table 504.3)	Allowed = 75 ft. Actual = 31'-4" ft. (Complies)	
Building Stories (Table 504.4)	Allowed = 3 Stories Actual = 1 Story (Complies)	
Fire-Resistance Rating Requirements for Building Elements (Table 601)		
Primary Structural Frame	0 hour	
Bearing Walls	2 HR	
Exterior	2 HR	
Interior	0 HR	
Nonbearing Interior Walls	0 HR	
Exterior wall openings (Table 705.6)	No Limit allowable opening area No Limit allowable opening area No Limit allowable opening area No Limit allowable opening area	
Floor Construction and secondary members	0 hours	
Roof Construction and secondary members	0 hours	
Fire Protection Systems (Chapter 9) and Massachusetts General Law		
Sprinkler System	Section	Use Group
MGL 14B Section 29D	All	Every building which totals, in the aggregate, more than 7,500 gross square feet in floor area shall be protected throughout with an adequate system of automatic sprinklers in accordance with the provisions of the state building code.
Note: The building will be fully sprinkled and therefore fully complies with the above regulations		
Egress (Chapter 10)		
Length of Exit Access Travel (Table 1017.2)	With Fire Sprinkler System	Occupancy U 400' max.
Occupancy Capacity of Exits and Number of Exits		
Occupant Load (1004)	15,800 of @ 100 gross = 158 Occupants	Utility - U (Mezzanine Level) 2,735 of @ 100 gross = 27 Occupants
Egress Width Capacity (1005.2.3)	Downways @ 0.1750c = 23.7' provided (Complies)	Stairways @ 0.2700c = 5.4' 30' provided (Complies)
No. of Exits Required (1006)	2 Required 3 Provided (Complies)	1 Required (Table 1006.2.1) 1 Provided (Complies)
Remoteness (1007)	Diagonal 103' = 182'-6" B = 103' = 60'-10" min. Remoteness Proposed Exit: 82'-0" Remoteness (Complies)	
Common Path of Travel (1009)	75 Feet, max. (Actual 52'-0" - Complies)	
Exit access corridor (1009.2)	Minimum width: 44" Stairway (1011.2): 44" Egress door (1010.1.1): 32" clear	
Energy Conservation Section C402 (IECC 2021)		
TABLE C402.1.3 & C402.4 BUILDING ENVELOPE REQUIREMENTS		
Climate Zone 5A - (Section C301.1)		
Opaque Thermal Envelope Assembly Maximum Requirements, U-Factor Method - Table C402.1.4		
Location	U-Factor	Notes
Above Grade Walls - Mass Walls	U-0.090	This building contains approximately 17,700 SF of conditioned and occupiable space. Backwash tanks and clearwalks in basement level are not included. Per IECC 2021 C401.2.1.1 the building will utilize the Prescriptive Compliance Pathway.
Roofs - Insulation mirror above deck - Connector	U-0.080	
Roofs - Attic and other - Man Addition	U-0.081	
Exterior Windows and Below-Grade Wall	U-0.300 (U-0.119)	
Optical Glazing	U-0.37	
Storage Doors	U-0.31	
Windows	U-0.30 (max)	
	SEW 38 SHGC (max) - N 40 SHGC (max)	
Plumbing (248CMR)		
The local Plumbing Inspector shall approve the building population, however, the building population can generally be based on the designer's determination of actual number of people expected in the building.		
Industrial Facilities	Water Closets	Lavatories
Minimum Facilities	1 per 40 Females 1 per 20 Males	1 per 15 Both 1 per each set of restrooms
Proposed Facilities: 3 Single User Gender Neutral Bathing Rooms	3 toilets @ 20 occupants = 60 Occupants	3 sinks @ 15 occupants = 45 Occupants
		1 provided per floor
		3 showers @ 20 occupants = 60 Occupants
		1 per floor
The Building Population is limited by the proposed lavatory count (see bolded above), the total building population cannot exceed 45 occupants.		
Estimated building population to be under 10 occupants.		
Massachusetts Architectural Access Board (521 CMR)		
521 CMR 3.1 SCOPE	All work performed on public buildings or facilities, including construction, reconstruction, alterations, remodeling, additions, and changes of use shall conform to 521 CMR	
521 CMR 3.2 NEW CONSTRUCTION	All new construction of public buildings/facilities shall comply fully with 521 CMR	

GENERAL REQUIREMENTS

- THESE DRAWINGS ARE PREPARED AS A GUIDE TO THE CONTRACTOR AND MAY NOT COMPREHENSIVELY INDICATE ALL WORK REQUIRED. THE CONTRACTOR SHALL COORDINATE FULL PROJECT SCOPE WITH THE OWNER AND THE ENGINEER.
- ANY CHANGES TO THE SCOPE OF WORK AS DESCRIBED IN THIS DOCUMENT PACKAGE MUST BE APPROVED IN WRITING BY THE ENGINEER OF RECORD PRIOR TO PERFORMING WORK.
- PRIOR TO THE START OF WORK, THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND APPROVALS. ALL WORK SHALL CONFORM TO THE APPLICABLE LAWS, CODES, STANDARDS, AND ORDINANCES WITHIN THE LOCAL JURISDICTION OF THE INSTALLATION.
- PRIOR TO THE START OF WORK, THE CONTRACTOR SHALL PREPARE AND SUBMIT A WORK SCHEDULE FOR REVIEW AND APPROVAL BY THE OWNER AND THE ENGINEER OF RECORD. THE CONTRACTOR SHALL COORDINATE THE PHASING OF WORK WITH THE OCCUPANCY AND USE OF THE SITE BY THE OWNER.
- PRIOR TO THE START OF WORK, THE CONTRACTOR SHALL VISUALLY INSPECT THE SITE TO DETERMINE THE CONDITION OF ANY EXISTING CONSTRUCTION AND FAMILIARIZE THEMSELVES WITH THE PROPOSED WORK. THE CONTRACTOR IS FULLY RESPONSIBLE FOR THE PREPARATION OF ALL AREAS AND SURFACES AND FOR THE INSTALLATION OF ALL MATERIALS, UTILITIES, SYSTEMS, ETC. AS INDICATED IN THIS DOCUMENT PACKAGE, OR AS SPECIFIED OR REQUIRED.
- PRIOR TO THE START OF WORK, THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES, DIG SAFE, AND THE LOCAL MUNICIPALITY TO VERIFY THE LOCATION, DEPTH, AND SIZES OF ALL EXISTING UTILITIES AND SHALL OBTAIN CONNECTION PERMITS.
- PRIOR TO THE START OF WORK, THE CONTRACTOR SHALL ESTABLISH A COMPREHENSIVE SITE ACCESS PLAN WITH THE OWNER AND ENGINEER OF RECORD THAT INCLUDES THE REMOVAL OF DEMOLITION ITEMS AND DEBRIS, RECEIVING AND STORAGE OF MATERIALS, VEHICLE PARKING, AND SITE SECURITY. THE CONTRACTOR SHALL CONFIRM WITH THE OWNER ALL ROUTES FOR VEHICLES AND PERSONNEL THROUGH ALL INTERIOR AND EXTERIOR AREAS OF THE PROPERTY.
- PRIOR TO THE START OF WORK, THE CONTRACTOR SHALL TEST EXISTING MATERIALS TO BE CUT, REMOVED, OR DEMOLISHED FOR THE PRESENCE OF HAZARDOUS MATERIALS, SUCH AS ASBESTOS, LEAD, MERCURY, ETC. THE CONTRACTOR SHALL SAFELY, LEGALLY, AND PROPERLY ABATE AND DISPOSE OF ANY HAZARDOUS OR CONTAMINATED MATERIALS THAT ARE ENCOUNTERED DURING PROJECT WORK ACTIVITY.
- PRIOR TO THE START OF WORK, THE CONTRACTOR SHALL COORDINATE WITH THE OWNER AND ENGINEER TO IDENTIFY ITEMS TO BE DEMOLISHED, SALVAGED, REMOVED, OR REMAIN IN PLACE. THE CONTRACTOR SHALL CAREFULLY STORE REMOVED AND SALVAGED ITEMS, AND SHALL FULLY PROTECT ITEMS TO REMAIN IN PLACE PRIOR TO COMMENCEMENT OF PROJECT WORK ACTIVITY. ALL DEMOLITION DEBRIS IS TO BE REMOVED AND DISPOSED OF IN A LEGAL MANNER.
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AT THE SITE AND RESOLVE ANY DISCREPANCY BEFORE ORDERING MATERIAL OR PROCEEDING WITH INSTALLATION.
- AT ALL TIMES, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTROLLING DUST AND DEBRIS TO THE SATISFACTION OF OWNER. THE CONTRACTOR SHALL CLEAN ALL WORK AREAS DAILY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL SUBCONTRACTOR'S DEMOLITION, CUTTING, PATCHING, ETC.
- THE CONTRACTOR SHALL PROVIDE ADEQUATE SHORING AND BRACING FOR ALL WORK DURING CONSTRUCTION.
- ANY DAMAGE TO THE SITE CAUSED BY THE CONTRACTOR'S PROJECT WORK ACTIVITY SHALL BE REPAIRED BY THE CONTRACTOR AT THEIR OWN COST AND TO THE SATISFACTION OF THE OWNER AND ENGINEER OF RECORD.
- THE CONTRACTOR SHALL PROVIDE THE OWNER WITH A DETAILED AS-BUILT RECORD OF INSTALLATION THAT INCLUDES PHOTOGRAPHS, REFERENCE NOTES, AND AS-BUILT DRAWINGS. THE AS-BUILT RECORD SHALL BE SUBMITTED TO THE ENGINEER OF RECORD FOR REVIEW OF ITS COMPLETENESS PRIOR TO DELIVERY TO THE OWNER.

LOCUS PLAN



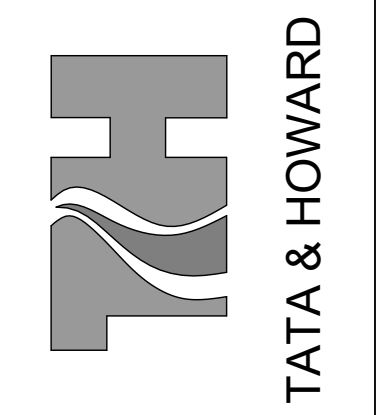
ATTLEBORO WATER DEPT.
ATTLEBORO, MA
WADING RIVER
WATER TREATMENT PLANT

ARCHITECTURAL
CODE REVIEW, LOCUS MAP,
GENERAL NOTES, AND
ABBREVIATIONS

Rev.	Date	Description

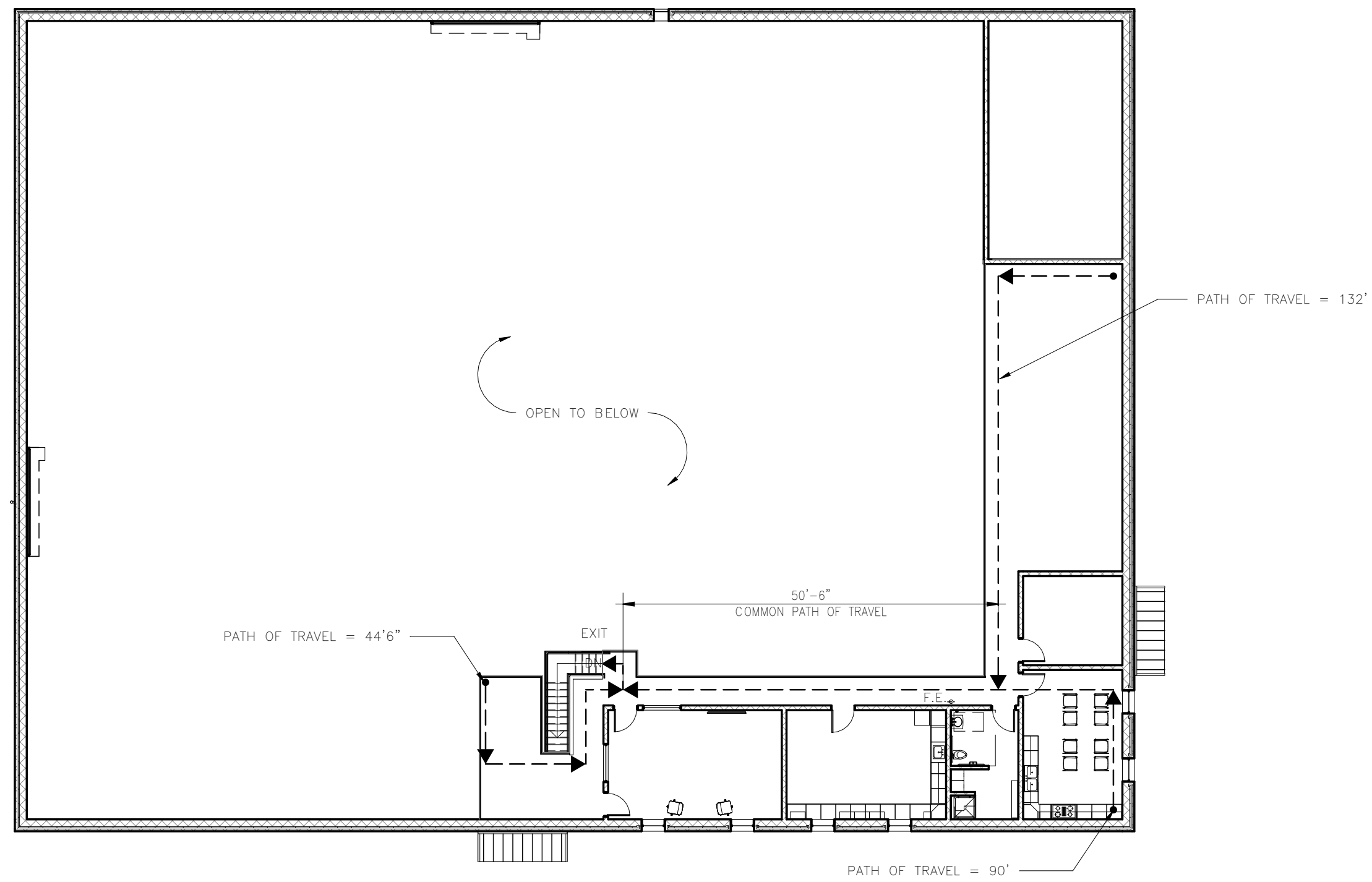


G | R | L | A
Gordon Richardson Lewis Architects
239 South Street - Hopkinton, MA 01748
www.grla.com

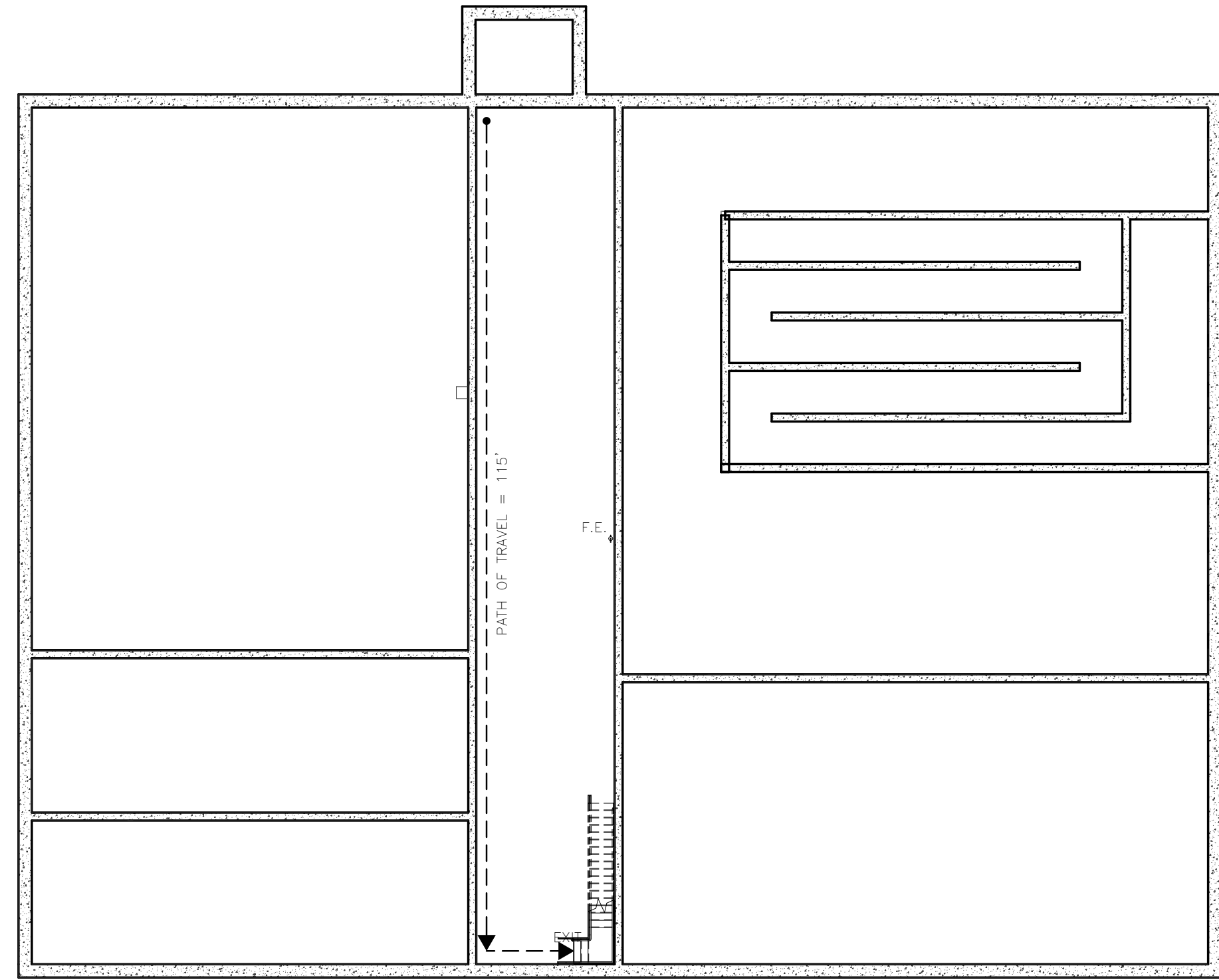


T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE: AS NOTED

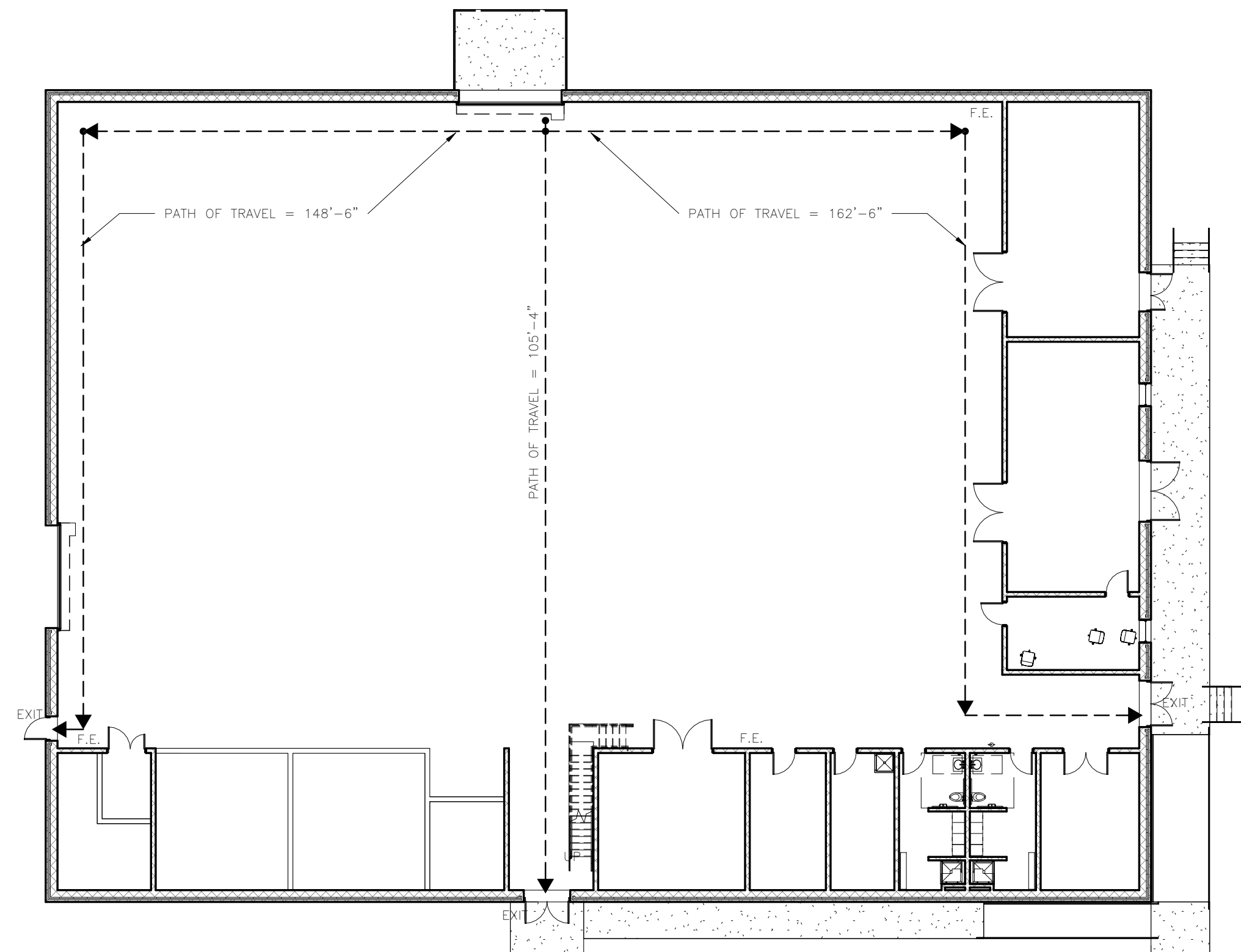
P:\Attorney\1933 Wading River - RFP - Design\CAD\Sheet\AREA\1933-X-Title Block.dwg 4/29/2016 1:55 PM RBRETT



3 MEZZANINE EGRESS PLAN
SCALE: 1/16" = 1'-0"



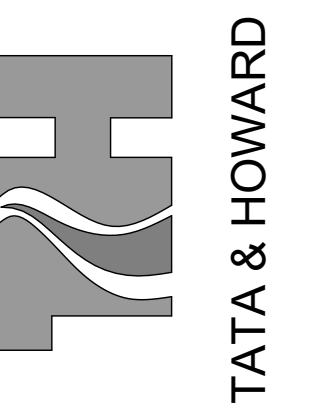
1 BASEMENT EGRESS PLAN
SCALE: 1/16" = 1'-0"



2 FIRST FLOOR EGRESS PLAN
SCALE: 1/16" = 1'-0"



G | R | L | A
Cormac Richardson Lewis Architects
239 South Street Hingham, MA 01748
www.grla.com



T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE: AS NOTED

ATTLEBORO WATER DEPT.
ATTLEBORO, MA
WADING RIVER
WATER TREATMENT PLANT

ARCHITECTURAL
EGRESS PLANS

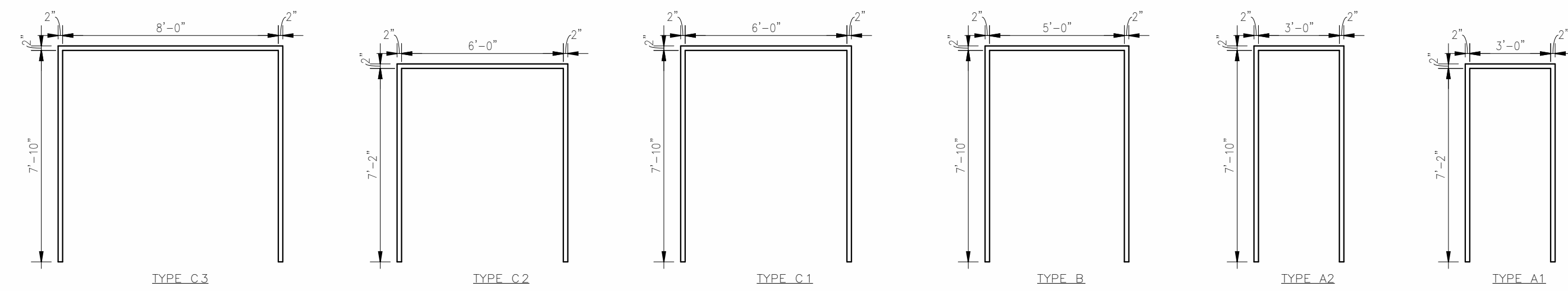
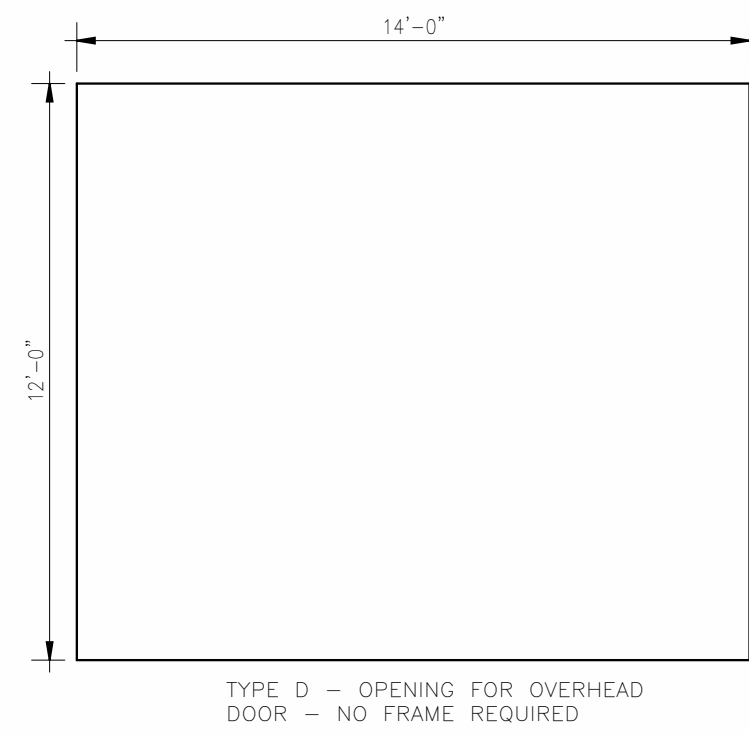
Rev.	Date	Description

THIS DOCUMENT IS THE PROPERTY OF TATA & HOWARD, INC. AND ITS CLIENT. REPRODUCTION OR APPLICATION WITHOUT WRITTEN CONSENT IS PROHIBITED.

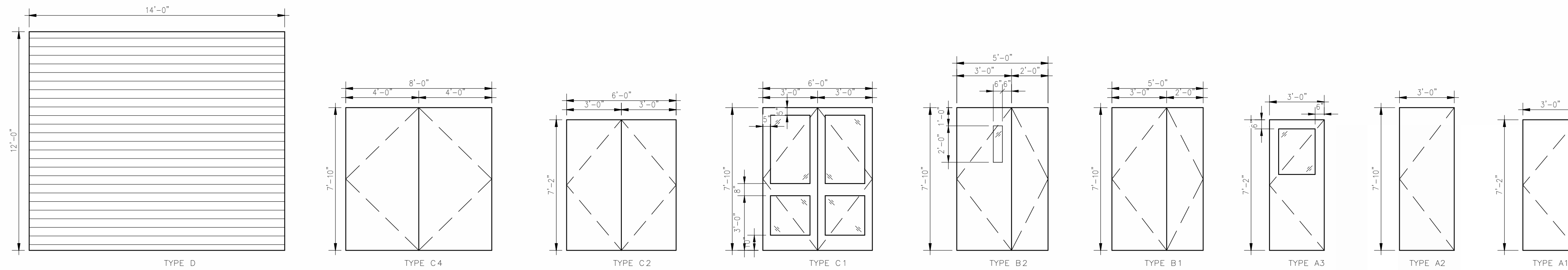
DOOR NOTES

- CONTRACTOR SHALL SUBMIT PRODUCT INFORMATION FOR ALL DOOR HARDWARE TO ENGINEER PRIOR TO INSTALLATION AS DESCRIBED IN THE GENERAL REQUIREMENTS NOTES ON SHEET 01-A-1
- ALL HARDWARE SHALL CONFORM TO ANSI A156.2 AND SHALL MEET ALL ACCESSIBILITY REQUIREMENTS, INCLUDING ADA AND MAAB 521CMR.
- DOORS THAT OPEN TO THE EXTERIOR AND WITH EGRESS HARDWARE SETS SHALL HAVE AN EXTERIOR HANDLESET WITH LOCKING FUNCTION THAT CONFORMS TO ALL APPLICABLE LIFE SAFETY CODES.
- HOLLOW METAL AND FRP DOORS AND FRAMES SHALL BE PROVIDED BY THE GENERAL CONTRACTOR IN ACCORDANCE WITH SPECIFICATION SECTIONS 08100 AND 08302 AND THE DRAWINGS.
- GLASS AND GLAZING FOR THE DOORS SHALL BE PROVIDED BY THE GLASS AND GLAZING CONTRACTOR IN ACCORDANCE WITH SPECIFICATION SECTION 08600

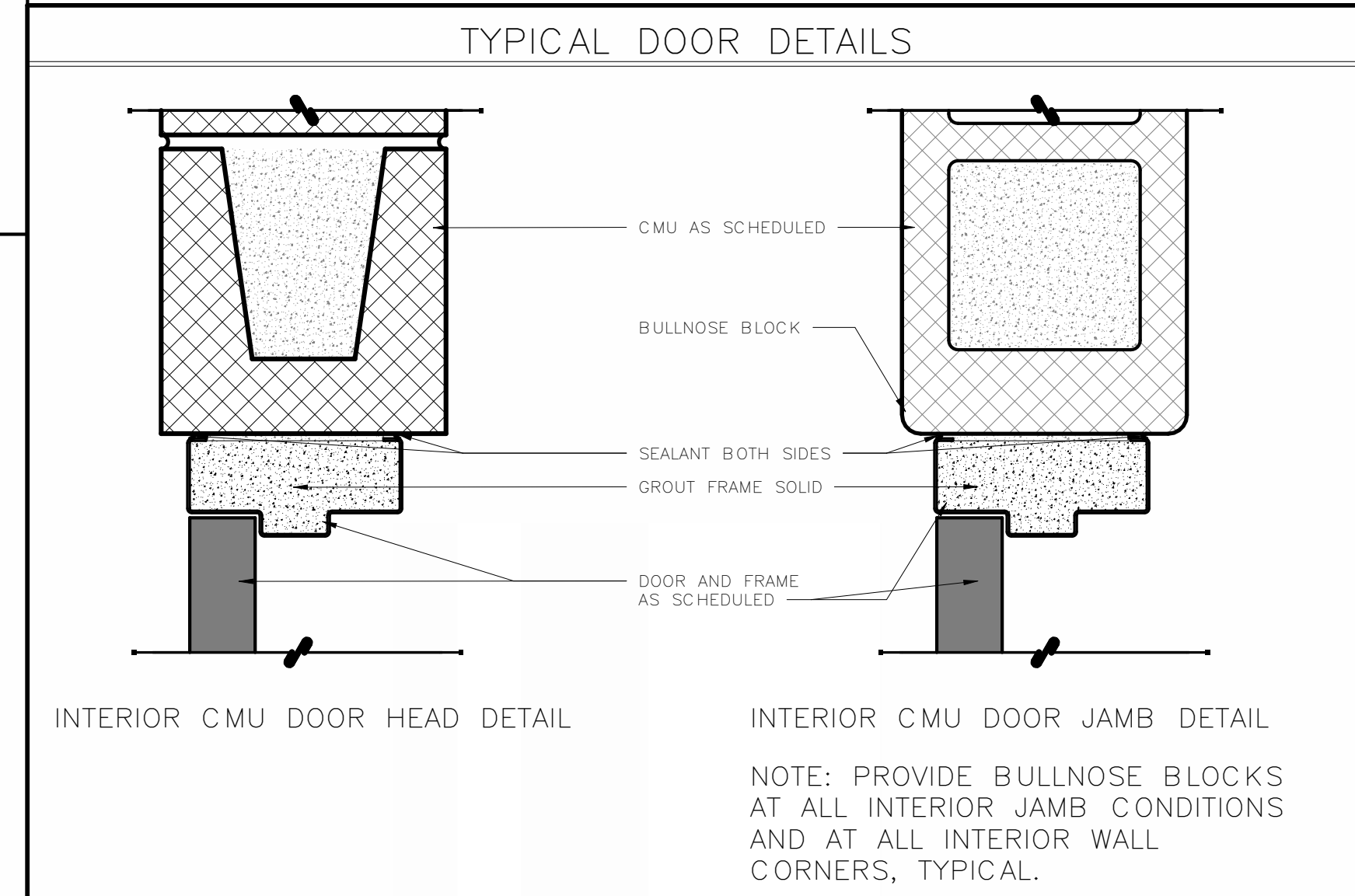
LOCATION DOOR NUMBER	ROOMS				DOOR SLAB						FRAME				NOTES / REMARKS	
	FROM		INTO		SIZE			RATING	ELEV.	MATL.	FINISH	HARDWARE	FRAME			
	NAME	NO.	NAME	NO.	WIDTH	HEIGHT	THK						RATING	ELEV.		MATL.
FIRST FLOOR																
100	PIPE GALLERY	001	EXTERIOR	208	6'-0"	7'-10"	1 3/4"					HW-1	C1	HM	PT	EXTERIOR
100.1	FILTER	100	EXTERIOR	208	3'-0"	7'-10"	1 3/4"					HW-2	A2	HM	PT	EXTERIOR
100.2					14'-0"	14'-0"						(none)	D	N/A	N/A	14' x 14' OVERHEAD COILING DOOR, NO FRAME REQUIRED
100.3					14'-0"	14'-0"						(none)	D	N/A	N/A	14' x 14' OVERHEAD COILING DOOR, NO FRAME REQUIRED
100.4	FILTER	100	EXTERIOR	208	6'-0"	7'-10"	1 3/4"					HW-1	C1	HM	PT	EXTERIOR
101	FILTER	100	ELEC	101	8'-0"	7'-10"	1 3/4"					HW-7	C3	HM	PT	
102	FILTER	100	STOR	102	3'-0"	7'-2"	1 3/4"					HW-5	A1	HM	PT	
103	FILTER	100	JAN	103	3'-0"	7'-2"	1 3/4"					HW-5	A1	HM	PT	
104	TLT 1	104	FILTER	100	3'-0"	7'-2"	1 3/4"					HW-6	A1	HM	PT	
105	FILTER	100	TLT 2	105	3'-0"	7'-2"	1 3/4"					HW-6	A1	HM	PT	
106	FILTER	100	MAINT. STOR	106	6'-0"	7'-2"	1 3/4"					HW-9	C2	HM	PT	
107	OFFICE	107	FILTER	100	3'-0"	7'-2"	1 3/4"					HW-4	A1	HM	PT	
108	WORKSHOP	108	FILTER	100	8'-0"	7'-10"	1 3/4"					HW-9	C3	HM	PT	
108.1	OFFICE	107	WORKSHOP	108	3'-0"	7'-2"	1 3/4"					HW-4	A1	HM	PT	
108.2	WORKSHOP	108	EXTERIOR	208	8'-0"	7'-10"	1 3/4"					HW-1	C3	HM	PT	EXTERIOR
109	PUMP ROOM	109	FILTER	100	8'-0"	7'-10"	1 3/4"					HW-7	C3	HM	PT	
109.1	PUMP ROOM	109	EXTERIOR	208	5'-0"	7'-10"	1 3/4"					HW-3	B	HM	PT	EXTERIOR, 3'-0" ACTIVE LEAF / 2'-0" PASSIVE LEAF
110	CHEM FEED	110	FILTER	100	5'-0"	7'-10"	1 3/4"					HW-8	B	FRP	PT	3'-0" ACTIVE LEAF / 2'-0" PASSIVE LEAF
MEZZANINE																
201	MEZZANINE BALCONY	207	OFFICE/ CONTROL ROOM	201	3'-0"	7'-2"	1 3/4"					HW-4	A1	HM	PT	
201.1	MEZZANINE BALCONY	207	OFFICE/ CONTROL ROOM	201	3'-0"	7'-2"	1 3/4"					HW-4	A1	HM	PT	
202	MEZZANINE BALCONY	207	LAB	202	3'-0"	7'-2"	1 3/4"					HW-4	A1	HM	PT	
204	MEZZANINE BALCONY	207	TLT 3	204	3'-0"	7'-2"	1 3/4"					HW-6	A1	HM	PT	
205	MEZZANINE BALCONY	207	BREAK ROOM	205	3'-0"	7'-2"	1 3/4"					HW-4	A1	HM	PT	
206	MEZZANINE BALCONY	207	STORAGE	206	3'-0"	7'-2"	1 3/4"					HW-5	A1	HM	PT	



FRAME ELEVATIONS



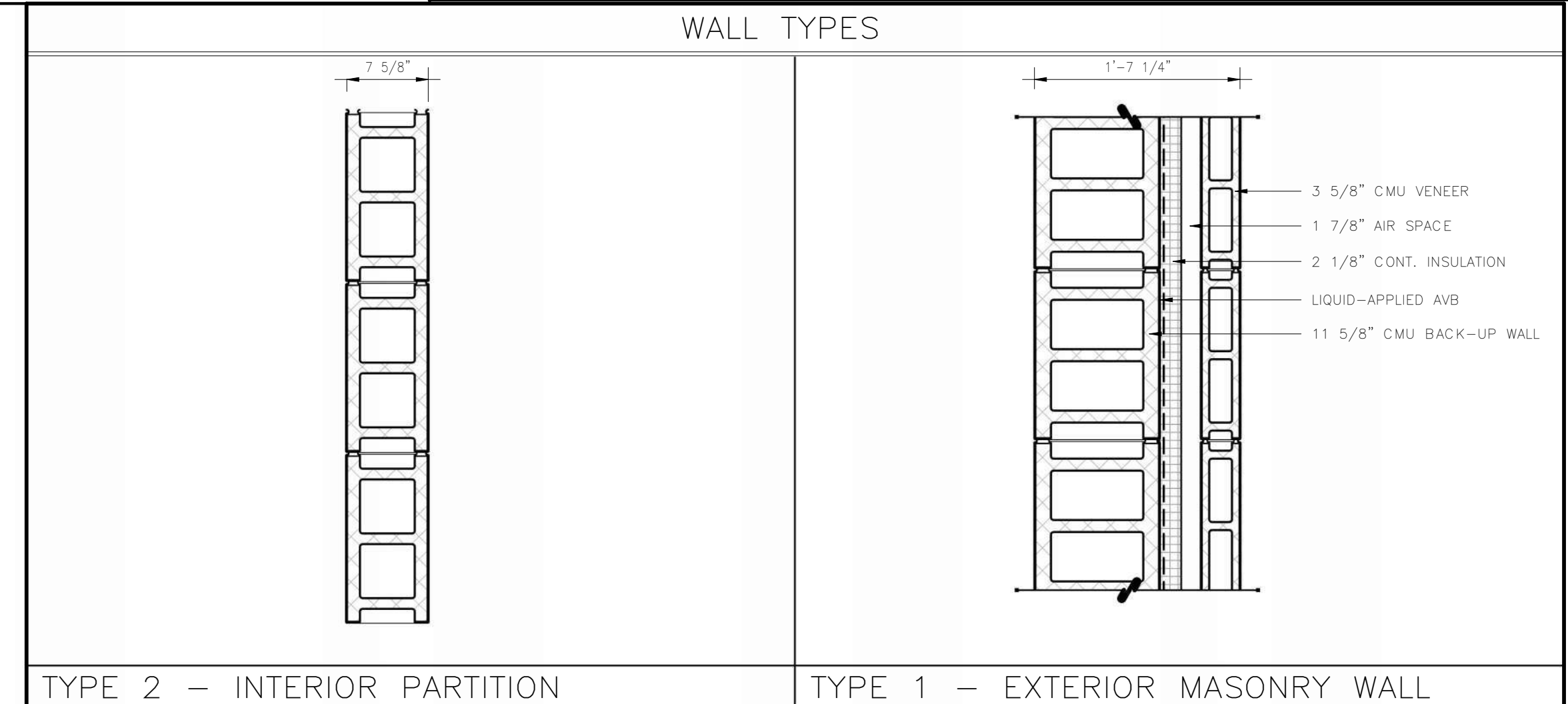
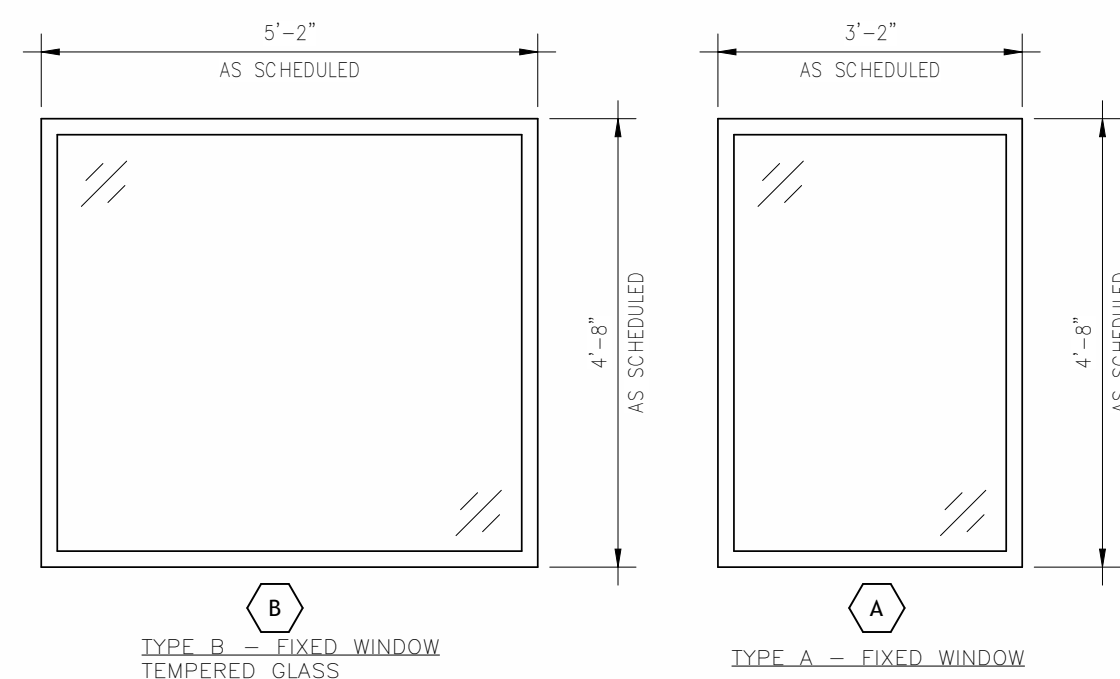
DOOR SLAB ELEVATIONS



WINDOW SCHEDULE									
MARK	TYPE	COUNT	WINDOW		UNIT DIMENSION		UNIT R.O.		NOTES / REMARKS
			MFR.	MODEL	HEIGHT	WIDTH	HEIGHT	WIDTH	
A	FIXED	8	SEE SPECIFICATION	SEE SPECIFICATION	4'-8"	3'-2"	4'-8 3/8"	3'-2 3/8"	1/4" TEMPERED GLASS PANEL
B	FIXED	2	SEE SPECIFICATION	SEE SPECIFICATION	4'-8"	3'-2"	4'-8 3/8"	3'-2 3/8"	

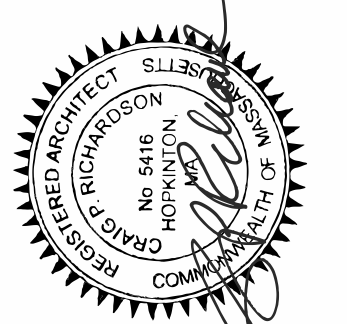
WINDOW NOTES

- ALUMINUM WINDOWS SHALL BE PROVIDED BY THE METAL WINDOWS CONTRACTOR IN ACCORDANCE WITH SPECIFICATION SECTION 08250.
- GLASS AND GLAZING FOR METAL WINDOWS SHALL BE PROVIDED BY THE GLASS AND GLAZING CONTRACTOR IN ACCORDANCE WITH SPECIFICATION SECTION 08600.

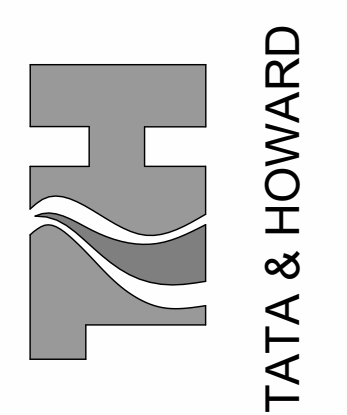


ATTLEBORO WATER DEPT.
ATTLEBORO, MA
WADING RIVER
WATER TREATMENT PLANT

ARCHITECTURAL
DOOR AND WINDOW
SCHEDULES AND WALL
TYPES



G | R | L | A
Corman Richardson Lewis Architects
239 South Street Hopkinton, MA 01748
www.grla.com

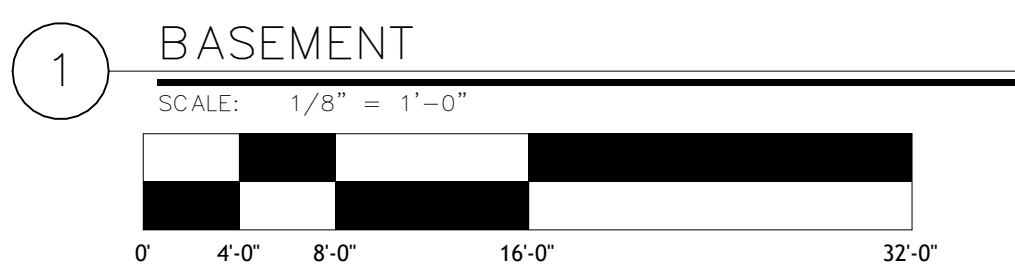
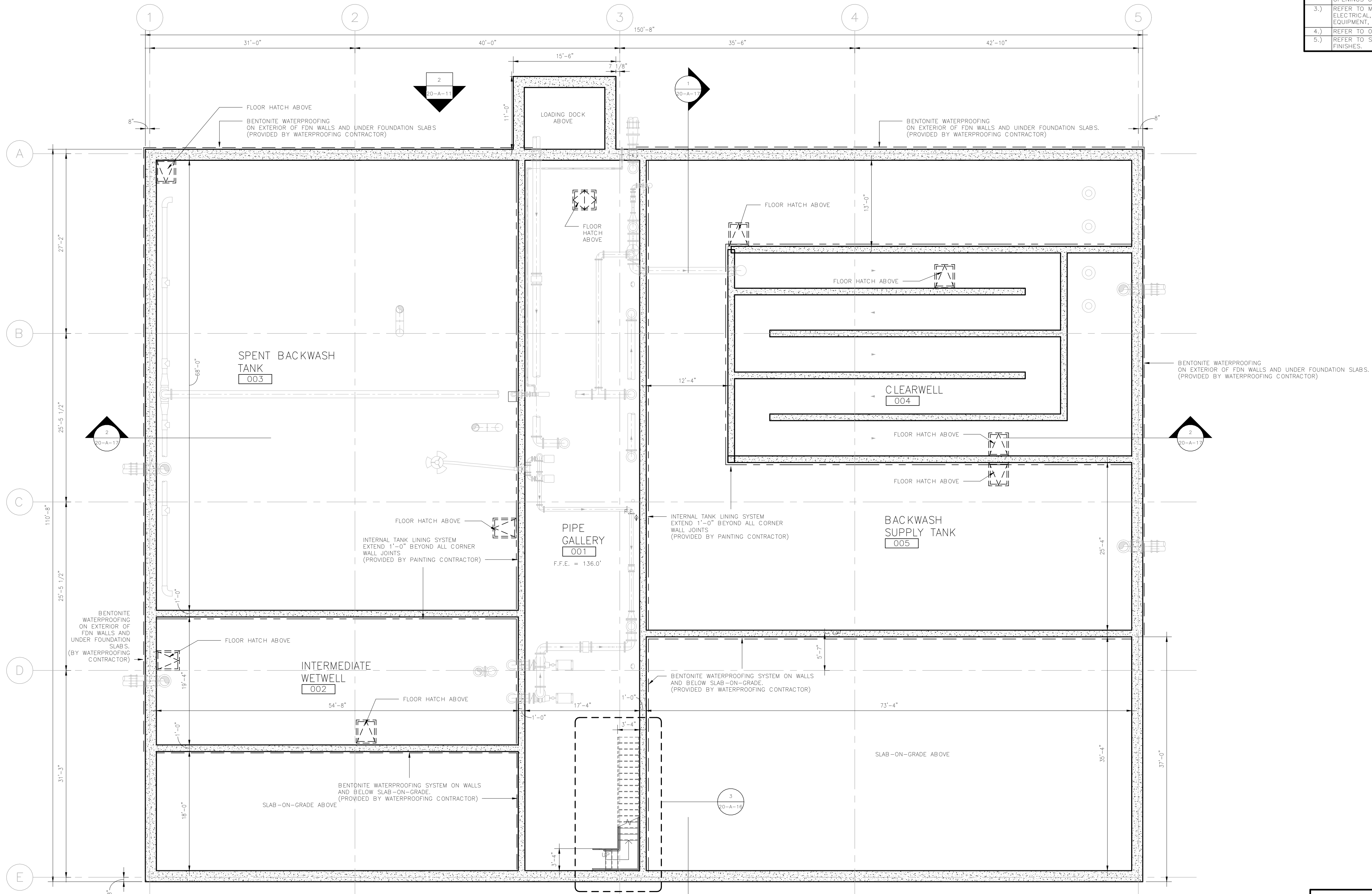


T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE: AS NOTED

01-A-3

P:\Attboro\0193 Wading River WTP Design\CADD\Sheet\A\01-A-3-Title Block.dwg 4/29/2016 1:35 PM BJB/BJT

- GENERAL PLAN NOTES**
- 1.) ALL WORK SHALL CONFORM TO THE LATEST EDITION OF THE COMMONWEALTH OF MASSACHUSETTS BUILDING CODE AND ANY OTHER APPLICABLE CODES AND REGULATIONS.
 - 2.) ALL DIMENSIONS ARE TO THE FACE OF EXISTING WALL AND CENTERLINE OF INTERIOR STUD WALL OR OPENINGS UNLESS OTHERWISE NOTED.
 - 3.) REFER TO MEP DRAWINGS FOR LOCATIONS OF ALL ELECTRICAL, MECHANICAL & FIRE DETECTION EQUIPMENT, ETC.
 - 4.) REFER TO 01-A-3 FOR WALL TYPES AS DESIGNATED.
 - 5.) REFER TO SHEETS 20-A-4 THROUGH 20-A-6 FOR FINISHES.



PLAN LEGEND

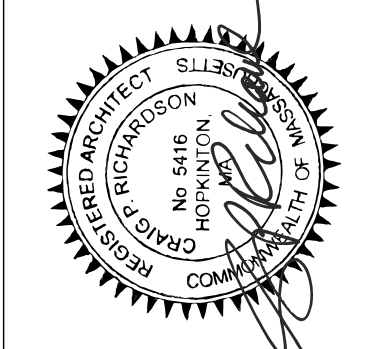
	NEW DOOR
	NEW WINDOW
	NEW WALL
	NEW STAIR
	NEW FIRE EXTINGUISHER
	LIMIT OF FLOOR FINISH
N.I.C.	NOT IN CONTRACT

ATTLEBORO WATER DEPT.
ATTLEBORO, MA
WADING RIVER
WATER TREATMENT PLANT

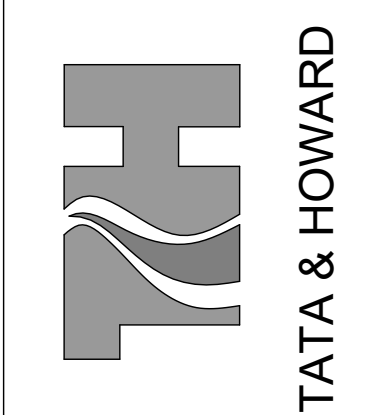
ARCHITECTURAL
BASEMENT CONSTRUCTION
PLAN

Rev.	Date	Description

THIS DOCUMENT IS THE PROPERTY OF TATA & HOWARD, INC. AND ITS CLIENT. REPRODUCTION OR ADAPTATION WITHOUT WRITTEN CONSENT IS PROHIBITED.



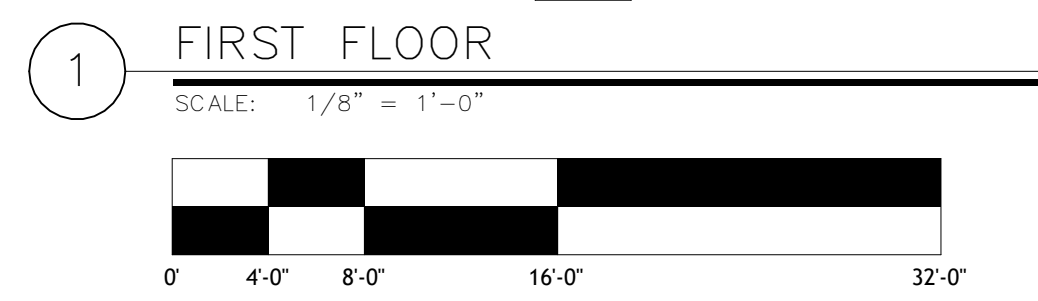
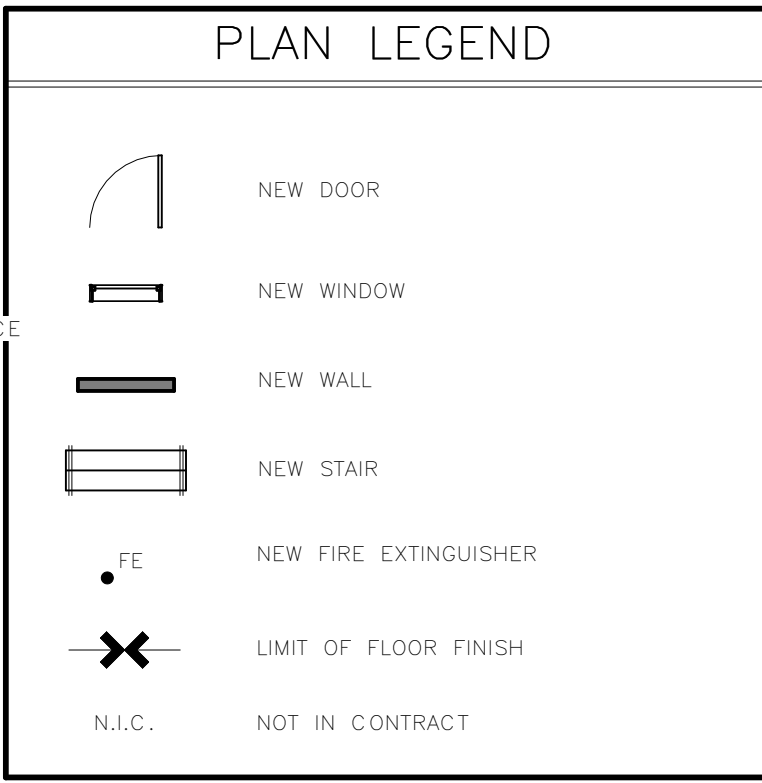
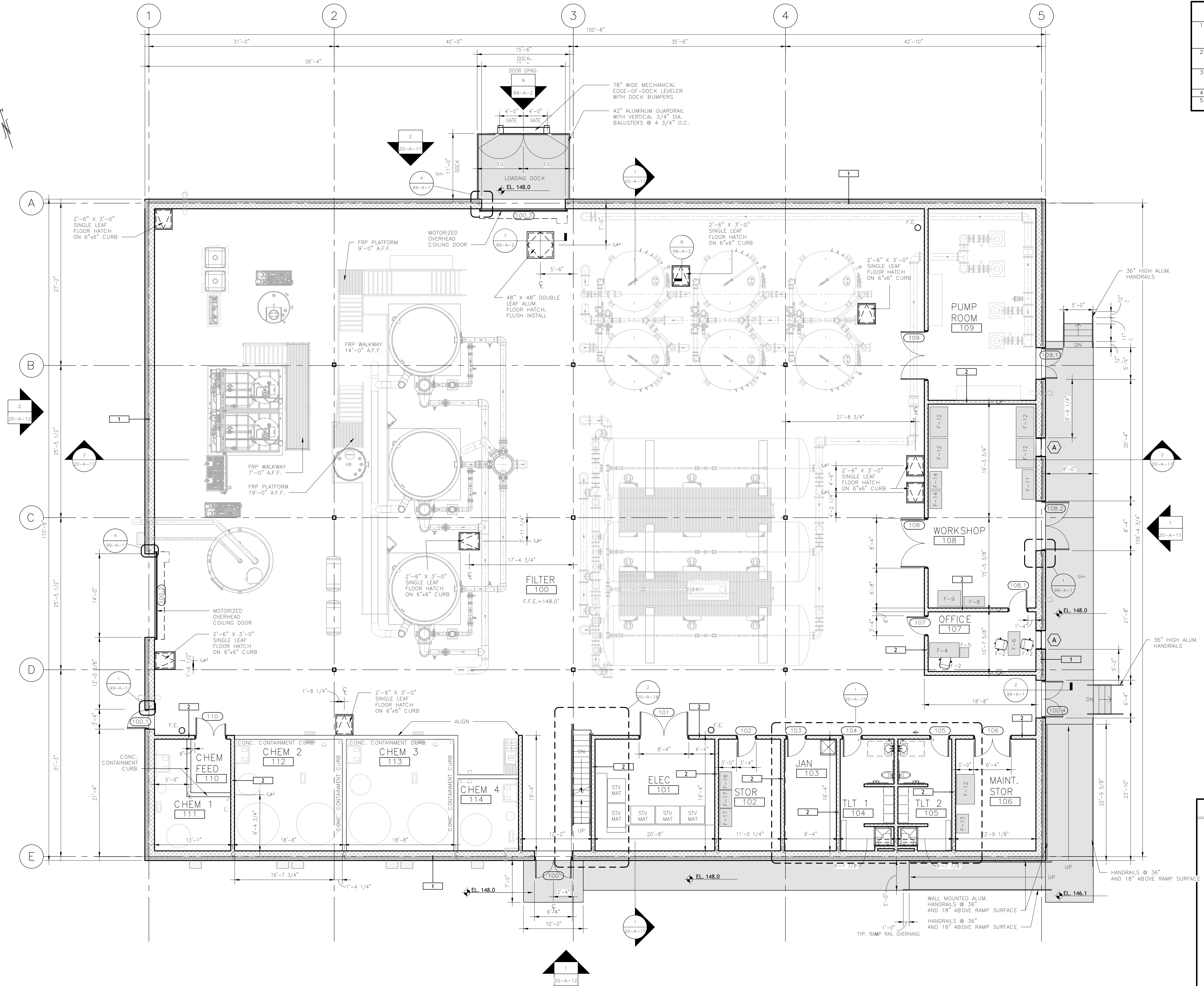
G | R | L | A
Corman Richardson Lewis Architects
239 South Street Hopedkton, MA 01748
www.grlarchitects.com



T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE: AS NOTED

20-A-1

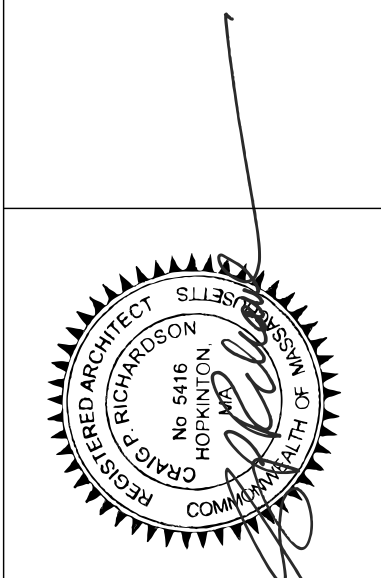
- GENERAL PLAN NOTES**
- 1.) ALL WORK SHALL CONFORM TO THE LATEST EDITION OF THE COMMONWEALTH OF MASSACHUSETTS BUILDING CODE AND ANY OTHER APPLICABLE CODES AND REGULATIONS.
 - 2.) ALL DIMENSIONS ARE TO THE FACE OF EXISTING WALL AND CENTERLINE OF INTERIOR STUD WALL OR OPENINGS UNLESS OTHERWISE NOTED.
 - 3.) REFER TO MEP DRAWINGS FOR LOCATIONS OF ALL ELECTRICAL, MECHANICAL & FIRE DETECTION EQUIPMENT, ETC.
 - 4.) REFER TO 01-A-3 FOR WALL TYPES AS DESIGNATED.
 - 5.) REFER TO SHEETS 20-A-4 THROUGH 20-A-6 FOR FINISHES.



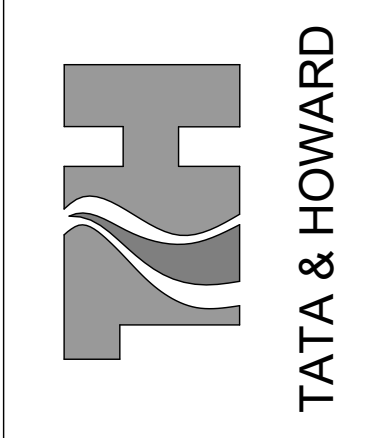
ATTLEBORO WATER DEPT.
ATTLEBORO, MA
WADING RIVER
WATER TREATMENT PLANT

ARCHITECTURAL
FIRST FLOOR
CONSTRUCTION PLAN

Rev.	Date	Description



G | R | L | A
Cormac Richardson Lewis Architects
239 South Street Hingham, MA 01948
www.grla.com

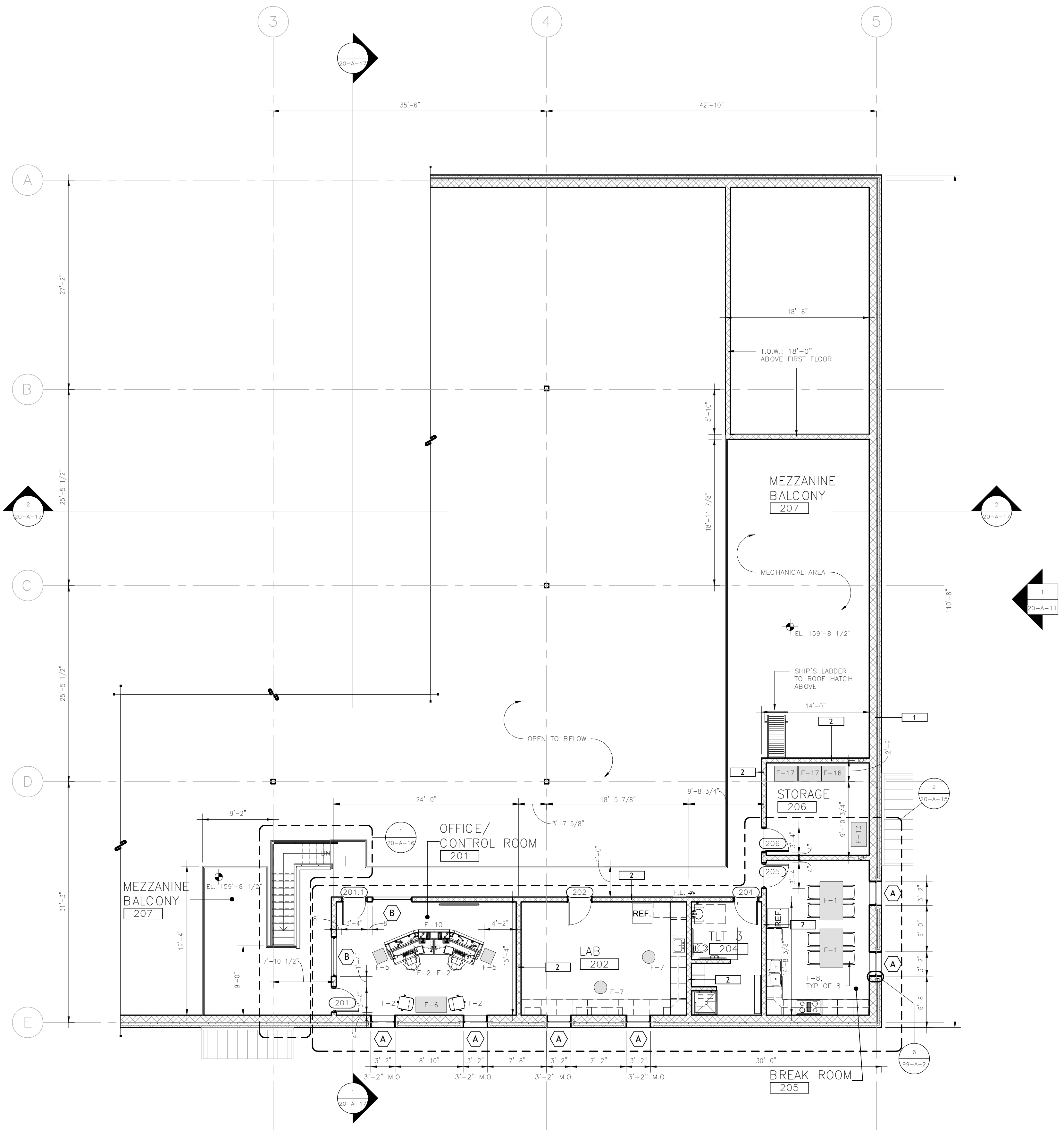


T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE: AS NOTED

20-A-2

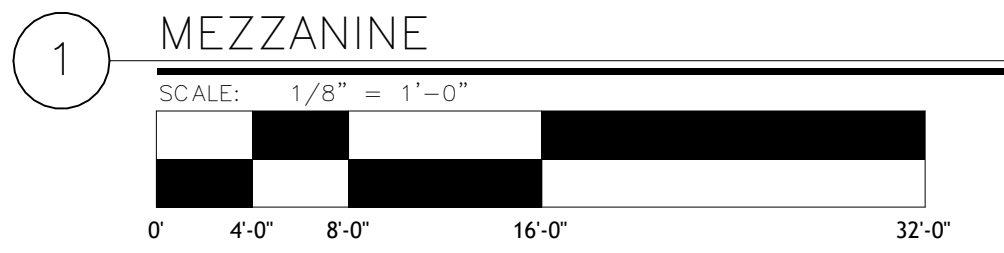
P:\Attiboro\1933 Wading River WTP Design\CADD\Sheet\AREA\1933-1-116 Block.dwg 4/29/2016 1:25 PM BRB/BETTS

- GENERAL PLAN NOTES**
- 1.) ALL WORK SHALL CONFORM TO THE LATEST EDITION OF THE COMMONWEALTH OF MASSACHUSETTS BUILDING CODE AND ANY OTHER APPLICABLE CODES AND REGULATIONS.
 - 2.) ALL DIMENSIONS ARE TO THE FACE OF EXISTING WALL AND CENTERLINE OF INTERIOR STUD WALL OR OPENINGS UNLESS OTHERWISE NOTED.
 - 3.) REFER TO MEP DRAWINGS FOR LOCATIONS OF ALL ELECTRICAL, MECHANICAL & FIRE DETECTION EQUIPMENT, ETC.
 - 4.) REFER TO 01-A-3 FOR WALL TYPES AS DESIGNATED.
 - 5.) REFER TO SHEETS 20-A-4 THROUGH 20-A-6 FOR FINISHES.



PLAN LEGEND

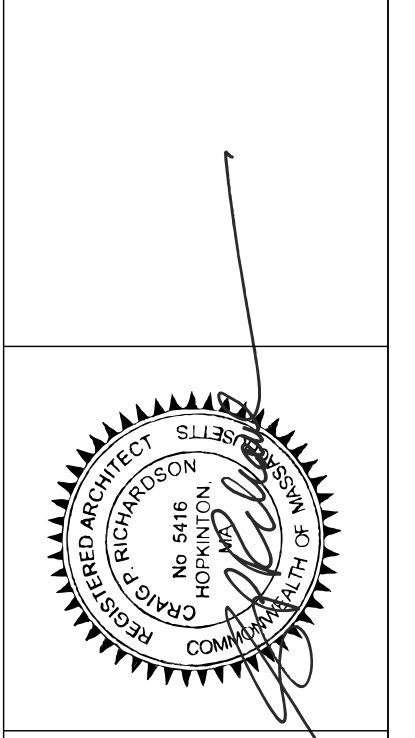
	NEW DOOR
	NEW WINDOW
	NEW WALL
	NEW STAIR
	NEW FIRE EXTINGUISHER
	LIMIT OF FLOOR FINISH
	N.I.C. NOT IN CONTRACT



ATTLEBORO WATER DEPT.
 ATTLEBORO, MA
 WADING RIVER
 WATER TREATMENT PLANT

ARCHITECTURAL
 MEZZANINE CONSTRUCTION
 PLAN

Rev.	Date	Description
1		



G | R | L | A
 Corman Richardson Lewis Architects
 239 South Street, Hopkinton, MA 01748
 www.grla.com

TATA & HOWARD

T&H NO.: 6193
 DATE: FEBRUARY 2025
 SCALE: AS NOTED

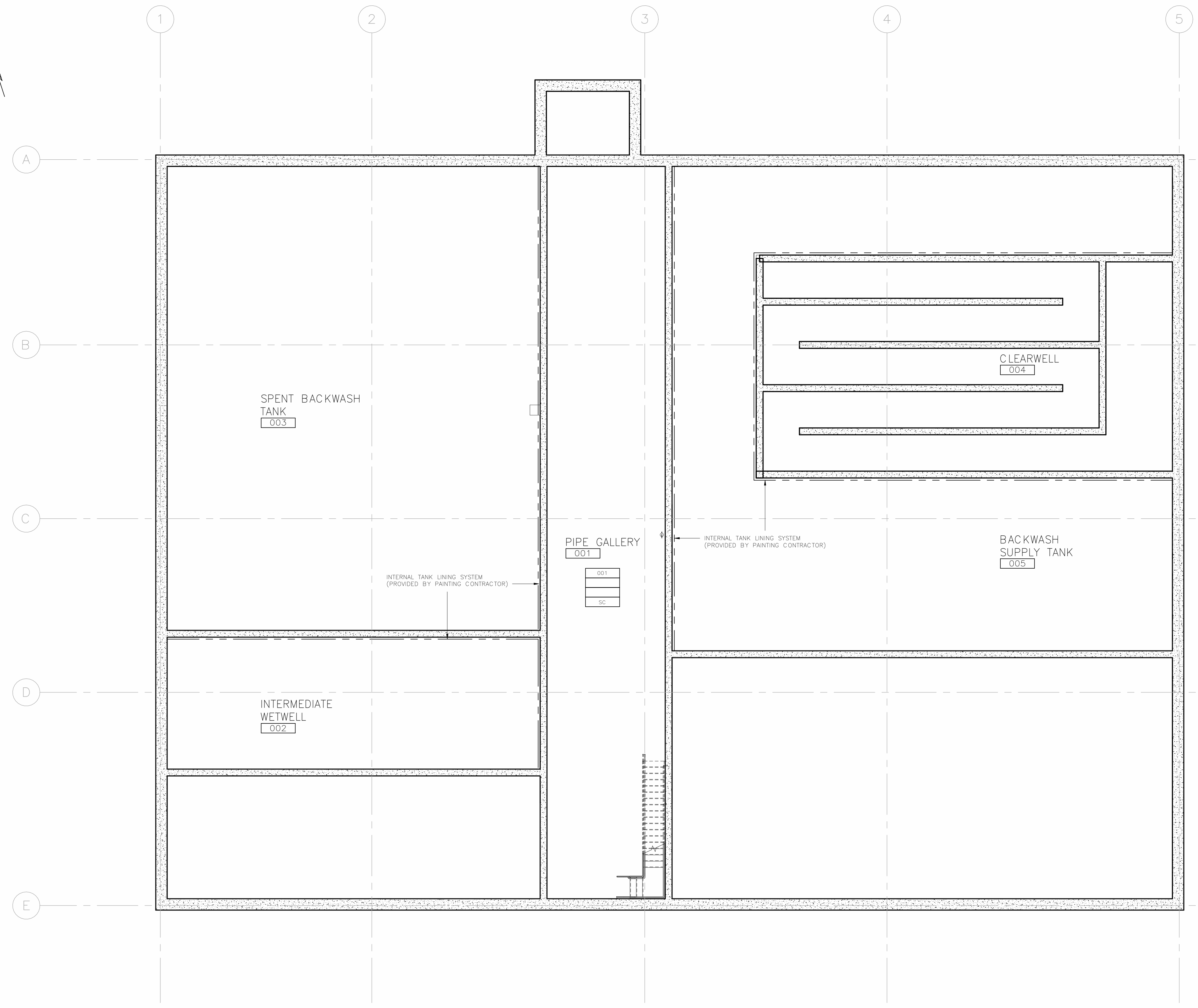
20-A-3

P:\Attiboro\193 Wading River WTP Design\CADD\Sheet\AREA\103-X-Tile Block.dwg 4/29/2016 1:55 PM BJB:BTJ

GENERAL FINISH NOTES	
1.)	WALL SURFACES BEING PREPARED FOR PAINT SHALL HAVE PAINT APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S LATEST SPECIFICATIONS.
2.)	ALL PAINTED TRIM TO MATCH ADJACENT WALL COLOR WITH 10% DILUTION, TYPICAL. FINISH TO BE SEMI-GLOSS UNLESS OTHERWISE NOTED.
3.)	PAINT ALL WALLS WITH PT-1 UNLESS OTHERWISE NOTED.
4.)	PROVIDE 2% ATTIC STOCK OF ALL FINISHES - REVIEW QUANTITY AND PRODUCT WITH OWNER PRIOR TO ORDERING MATERIALS.
5.)	WALL BASE SHALL BE ROLLED GOODS UNLESS OTHERWISE NOTED. STRAIGHT AT CARPETED AREAS AND COVE AT TILE AND/OR RESILIENT FLOORING.

FINISH SYMBOL LEGEND	
101	ROOM NUMBER
Wall Finish	WALL FINISH: ALL WALLS U.O.N.
Base Finish	BASE FINISH
Floor Finish	FLOOR FINISH THROUGHOUT U.O.N.
XXX	MISCELLANEOUS FINISH AS DESIGNATED
N.I.C.	NOT IN CONTRACT
X	FLOORING TRANSITION MATERIAL TRANSITIONS TO BE: XXX
SC	SEALED CONCRETE
CTB	CERAMIC TILE/BASE
PT	PAINT
RES	RESILIENT FLOORING
VB	VINYL BASE
STV	STATIC CONTROL VINYL

FINISH LEGEND	
FLOORING:	
CT-1	CERAMIC TILE - COLOR: TBD BY OWNER
SC	SEALED CONCRETE - COORDINATE REQUIREMENTS WITH ENGINEER AND OWNER
STV	ESD STATIC CONTROL VINYL - COLOR: TBD BY OWNER - 12X12
RES-1	RESILIENT SAFETY FLOORING, ROLLED SHEET - COLOR: TBD BY OWNER
VCT-1	VINYL COMPOSITION TILE, 12" x 12" - COLOR: TBD BY OWNER
WALL:	
PT-1	PAINT - TNEEC - COLOR: TBD BY OWNER
PT-2	SECONDARY CONTAINMENT LINING SYSTEM - COLOR: TBD BY OWNER
BASE:	
VB	4" VINYL BASE - COLOR: TBD BY OWNER - HARBOR COVE
CTB-1	3" CERAMIC TILE BASE - BULLNOSE - COLOR: TBD BY OWNER - 3X12
RB	RESILIENT BASE - INTEGRAL COVE BASE - COLOR: TBD BY OWNER

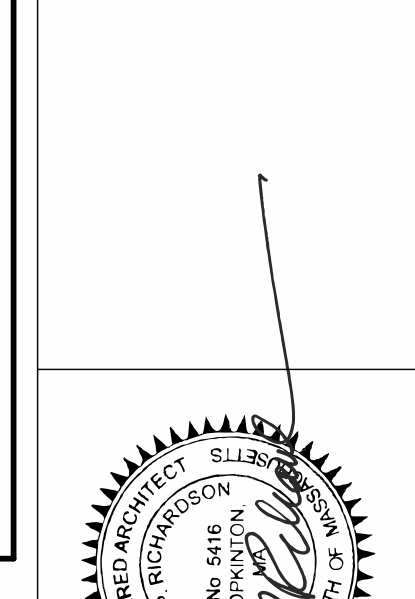


1 BASEMENT FINISH PLAN
 SCALE: 1/8" = 1'-0"

ATTLEBORO WATER DEPT.
 ATTLEBORO, MA
 WADING RIVER
 WATER TREATMENT PLANT

ARCHITECTURAL
 BASEMENT FINISH PLAN

Rev.	Date	Description



G | R | L | A
 Gorman Richardson Lewis Architects
 239 South Street Hopedon, MA 01748
 www.grlarchitects.com

TATA & HOWARD

T&H NO.: 6193
 DATE: FEBRUARY 2025
 SCALE: AS NOTED

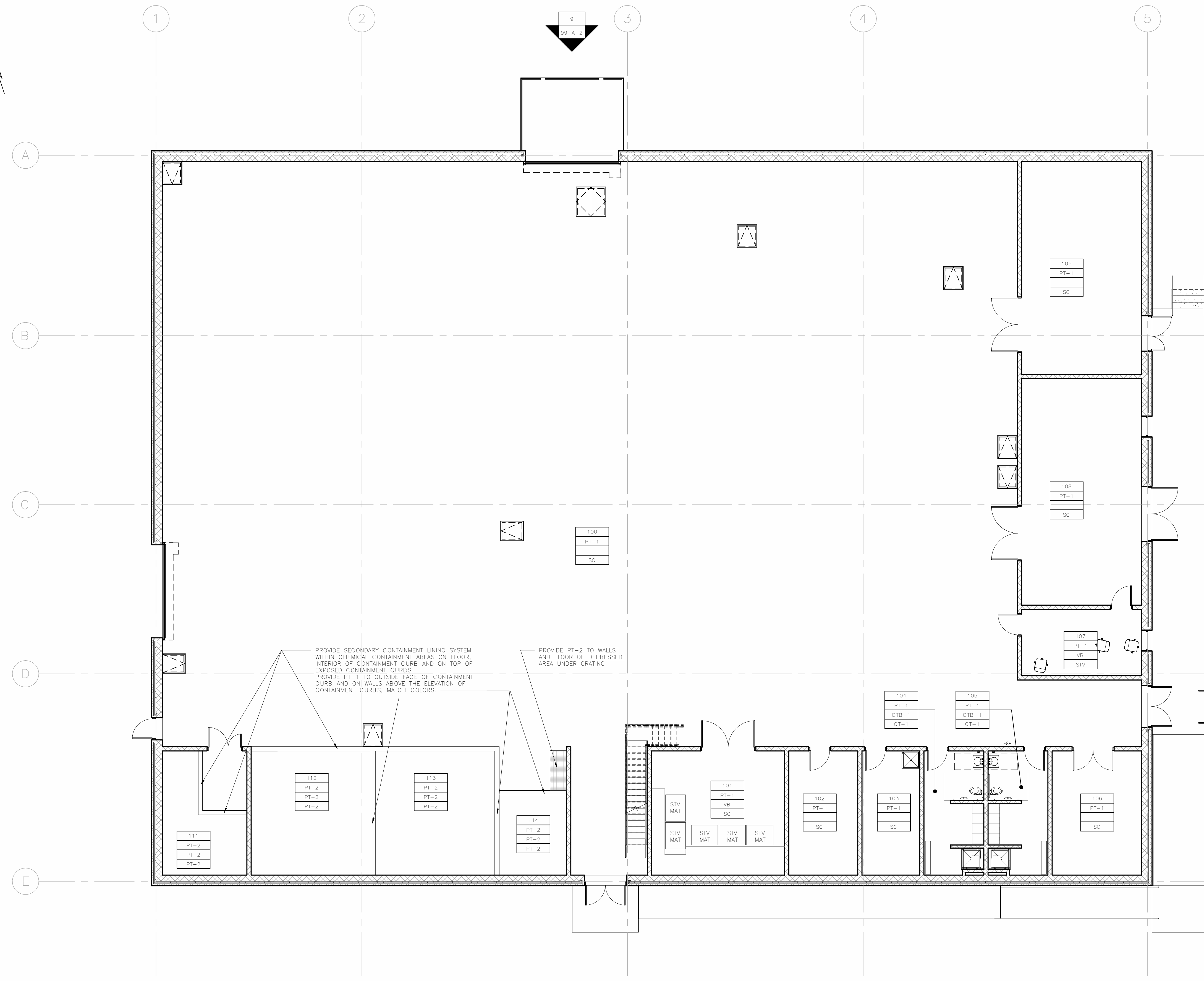
20-A-4

P:\Attiboro\193 Wading River WTP Design\CADD\Sheet\AREA\102-X-Tile Block.dwg 4/29/2016 1:55 PM BJB/BETTS

GENERAL FINISH NOTES	
1.)	WALL SURFACES BEING PREPARED FOR PAINT SHALL HAVE PAINT APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S LATEST SPECIFICATIONS.
2.)	ALL PAINTED TRIM TO MATCH ADJACENT WALL COLOR WITH 10% DILUTION, TYPICAL. FINISH TO BE SEMI-GLOSS UNLESS OTHERWISE NOTED.
3.)	PAINT ALL WALLS WITH PT-1 UNLESS OTHERWISE NOTED.
4.)	PROVIDE 2% ATTIC STOCK OF ALL FINISHES - REVIEW QUANTITY AND PRODUCT WITH OWNER PRIOR TO ORDERING MATERIALS.
5.)	WALL BASE SHALL BE ROLLED GOODS UNLESS OTHERWISE NOTED. STRAIGHT AT CARPETED AREAS AND COVE AT TILE AND/OR RESILIENT FLOORING.

FINISH SYMBOL LEGEND	
101	ROOM NUMBER
Wall Finish	WALL FINISH: ALL WALLS U.O.N.
Base Finish	BASE FINISH
Floor Finish	FLOOR FINISH THROUGHOUT U.O.N.
XXX	MISCELLANEOUS FINISH AS DESIGNATED
N.I.C.	NOT IN CONTRACT
X	FLOORING TRANSITION MATERIAL TRANSITIONS TO BE: XXX
SC	SEALED CONCRETE
CTB	CERAMIC TILE/BASE
PT	PAINT
RES	RESILIENT FLOORING
VB	VINYL BASE
STV	STATIC CONTROL VINYL

FINISH LEGEND	
FLOORING:	
CT-1	CERAMIC TILE - COLOR: TBD BY OWNER
SC	SEALED CONCRETE - COORDINATE REQUIREMENTS WITH ENGINEER AND OWNER
STV	ESD STATIC CONTROL VINYL - COLOR: TBD BY OWNER - 12X12
RES-1	RESILIENT SAFETY FLOORING, ROLLED SHEET - COLOR: TBD BY OWNER
VCT-1	VINYL COMPOSITION TILE 12" x 12" - COLOR: TBD BY OWNER
WALL:	
PT-1	PAINT - TNE-MEC - COLOR: TBD BY OWNER
PT-2	SECONDARY CONTAINMENT LINING SYSTEM - COLOR: TBD BY OWNER
BASE:	
VB	4" VINYL BASE - COLOR: TBD BY OWNER - HARBOR COVE
CTB-1	3" CERAMIC TILE BASE - BULLNOSE - COLOR: TBD BY OWNER - 3X12
RB	RESILIENT BASE - INTEGRAL COVE BASE - COLOR: TBD BY OWNER



PROVIDE SECONDARY CONTAINMENT LINING SYSTEM WITHIN CHEMICAL CONTAINMENT AREAS ON FLOOR, INTERIOR OF CONTAINMENT CURB AND ON TOP OF EXPOSED CONTAINMENT CURBS.
 PROVIDE PT-1 TO OUTSIDE FACE OF CONTAINMENT CURB AND ON WALLS ABOVE THE ELEVATION OF CONTAINMENT CURBS. MATCH COLORS.

PROVIDE PT-2 TO WALLS AND FLOOR OF DEPRESSED AREA UNDER GRATING

1 FIRST FLOOR FINISH PLAN
 SCALE: 1/8" = 1'-0"
 0 4'-0" 8'-0" 16'-0" 32'-0"

ATTLEBORO WATER DEPT.
 ATTLEBORO, MA
 WADING RIVER
 WATER TREATMENT PLANT

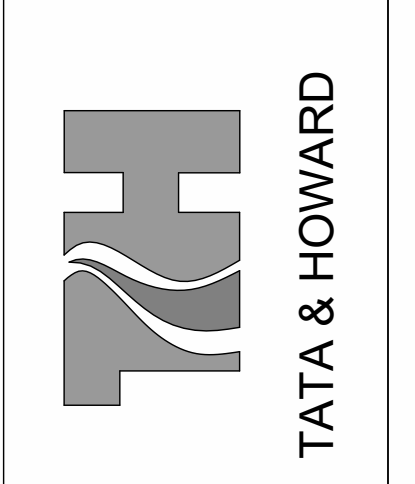
ARCHITECTURAL
 FIRST FLOOR FINISH PLAN

Rev.	Date	Description

THIS DOCUMENT IS THE PROPERTY OF TATA & HOWARD, INC. AND ITS CLIENT. REPRODUCTION OR ADAPTATION WITHOUT WRITTEN CONSENT IS PROHIBITED.



G | R | L | A
 Corman Richardson Lewis Architects
 239 South Street Hopedon, MA 01748
 www.grla.com



T&H NO.: 6193
 DATE: FEBRUARY 2025
 SCALE: AS NOTED

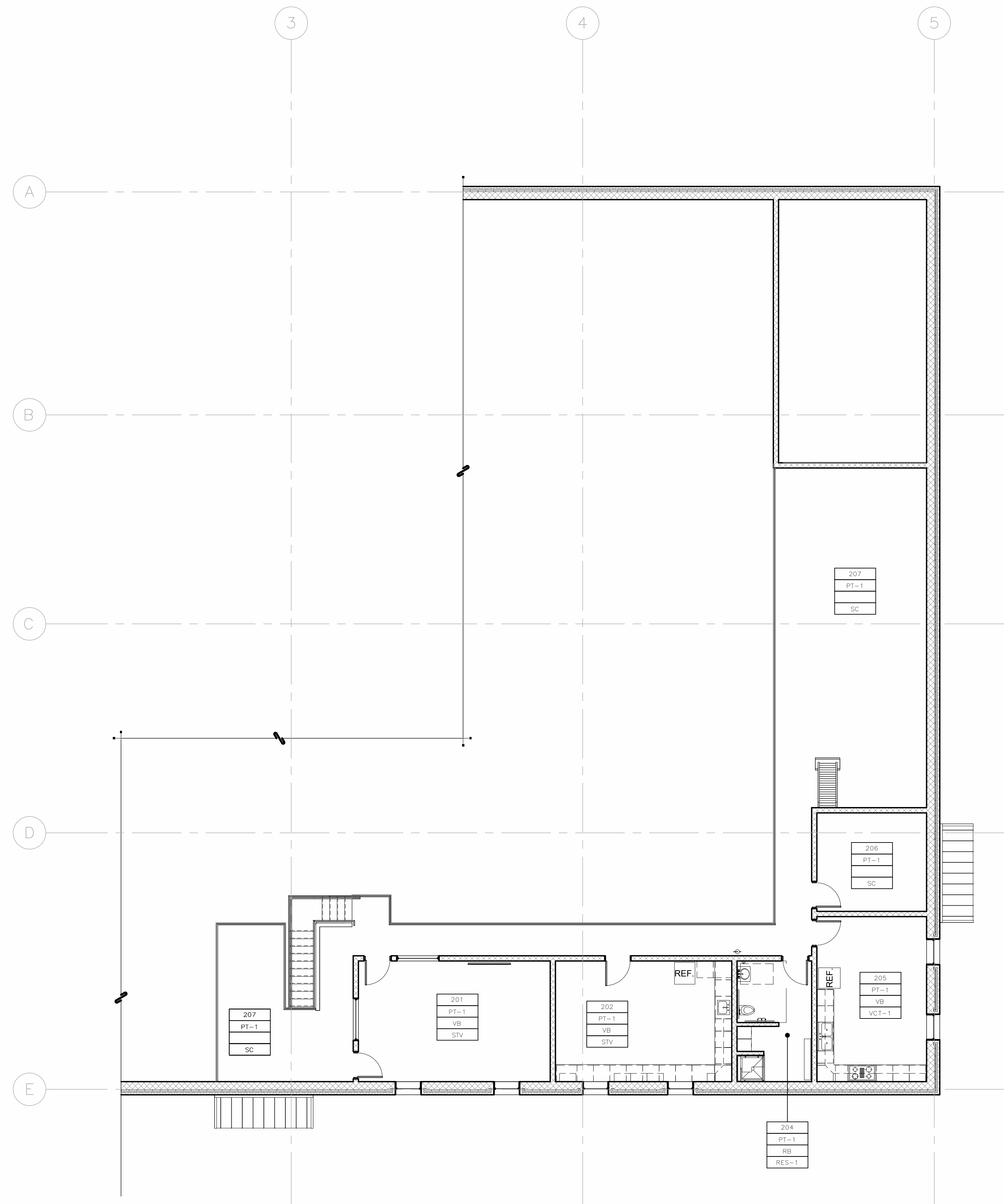
20-A-5

P:\Attiboro\193 Wading River WTP Design\CAD\Sheet\AREA\103-X-Tile Block.dwg 4/29/2016 1:55 PM BJB/BETTS

GENERAL FINISH NOTES	
1.)	WALL SURFACES BEING PREPARED FOR PAINT SHALL HAVE PAINT APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S LATEST SPECIFICATIONS.
2.)	ALL PAINTED TRIM TO MATCH ADJACENT WALL COLOR WITH 10% DILUTION, TYPICAL. FINISH TO BE SEMI-GLOSS UNLESS OTHERWISE NOTED.
3.)	PAINT ALL WALLS WITH PT-1 UNLESS OTHERWISE NOTED.
4.)	PROVIDE 2% ATTIC STOCK OF ALL FINISHES - REVIEW QUANTITY AND PRODUCT WITH OWNER PRIOR TO ORDERING MATERIALS.
5.)	WALL BASE SHALL BE ROLLED GOODS UNLESS OTHERWISE NOTED. STRAIGHT AT CARPETED AREAS AND COVE AT TILE AND/OR RESILIENT FLOORING.

FINISH SYMBOL LEGEND	
101	ROOM NUMBER
Wall Finish	WALL FINISH: ALL WALLS U.O.N.
Base Finish	BASE FINISH
Floor Finish	FLOOR FINISH THROUGHOUT U.O.N.
XXX	MISCELLANEOUS FINISH AS DESIGNATED
N.I.C.	NOT IN CONTRACT
X	FLOORING TRANSITION MATERIAL TRANSITIONS TO BE: XXX
SC	SEALED CONCRETE
CTB	CERAMIC TILE/BASE
PT	PAINT
RES	RESILIENT FLOORING
VB	VINYL BASE
STV	STATIC CONTROL VINYL

FINISH LEGEND	
FLOORING:	
CT-1	_CERAMIC TILE - COLOR: TBD BY OWNER
SC	_SEALED CONCRETE - COORDINATE REQUIREMENTS WITH ENGINEER AND OWNER
STV	_ESD STATIC CONTROL VINYL - COLOR: TBD BY OWNER - 12X12
RES-1	_RESILIENT SAFETY FLOORING, ROLLED SHEET - COLOR: TBD BY OWNER
VCT-1	_VINYL COMPOSITION TILE, 12" x 12" - COLOR: TBD BY OWNER
WALL:	
PT-1	_PAINT - TNEMC - COLOR: TBD BY OWNER
PT-2	_SECONDARY CONTAINMENT LINING SYSTEM - COLOR: TBD BY OWNER
BASE:	
VB	_4" VINYL BASE - COLOR: TBD BY OWNER - HARBOR COVE
CTB-1	_3" CERAMIC TILE BASE - BULLNOSE - COLOR: TBD BY OWNER - 3X12
RB	_RESILIENT BASE - INTEGRAL COVE BASE - COLOR: TBD BY OWNER

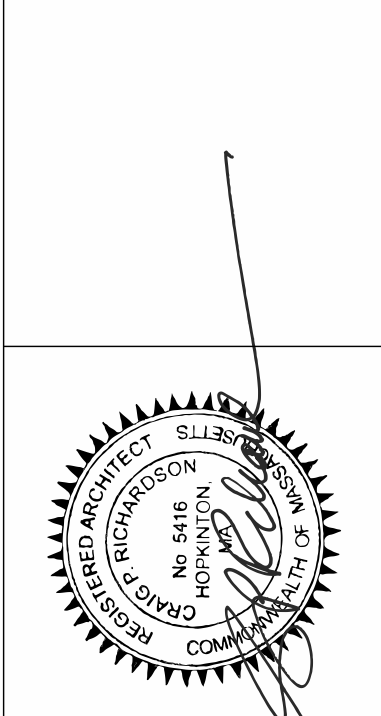


1 MEZZANINE FINISH PLAN
 SCALE: 1/8" = 1'-0"
 0 4'-0" 8'-0" 16'-0" 32'-0"

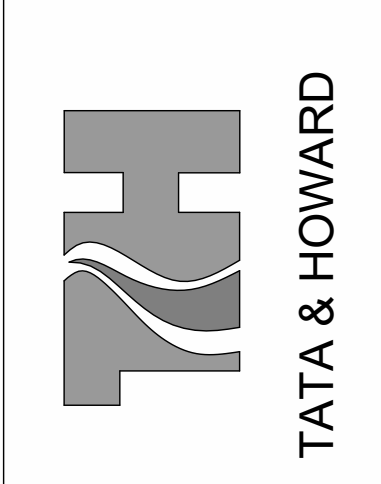
ATTLEBORO WATER DEPT.
 ATTLEBORO, MA
 WADING RIVER
 WATER TREATMENT PLANT

ARCHITECTURAL
 MEZZANINE FINISH PLAN

Rev.	Date	Description



G | R | L | A
 Gorman Richardson Lewis Architects
 239 South Street, Hopkinton, MA 01748
 www.grlarchitects.com

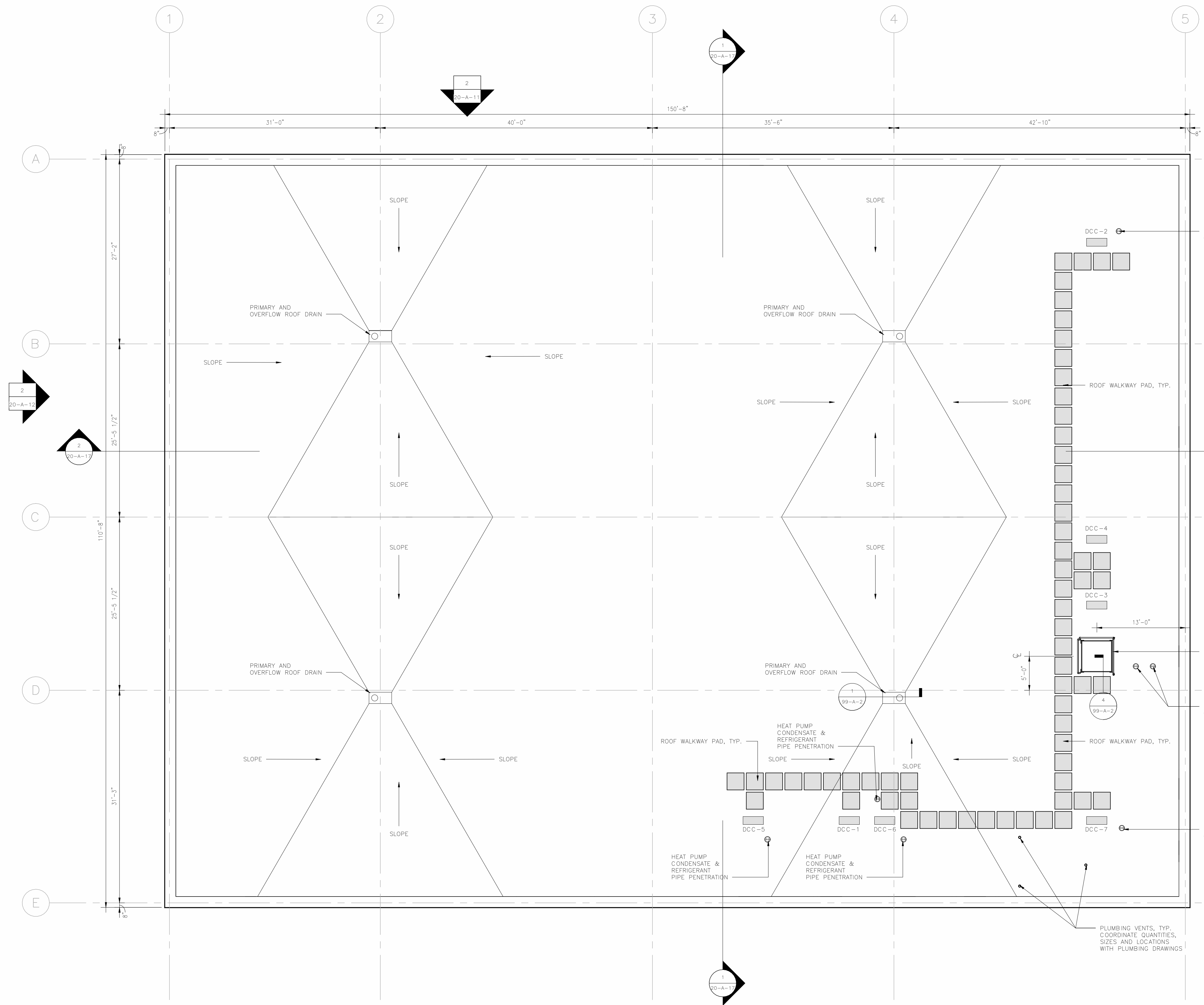


T&H NO.: 6193
 DATE: FEBRUARY 2025
 SCALE: AS NOTED

20-A-6

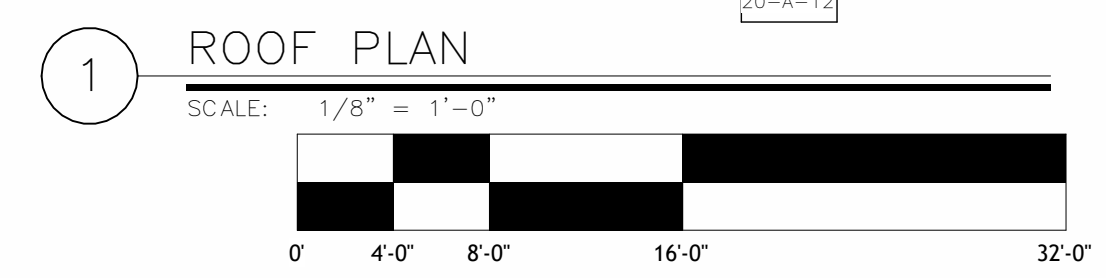
P:\Attiboro\193 Wading River WTP Design\CADD\Sheet\AREA\103-X-Tile Block.dwg 4/29/2016 1:55 PM BJB/BETTS

- GENERAL PLAN NOTES**
- 1.) ALL WORK SHALL CONFORM TO THE LATEST EDITION OF THE COMMONWEALTH OF MASSACHUSETTS BUILDING CODE AND ANY OTHER APPLICABLE CODES AND REGULATIONS.
 - 2.) ALL DIMENSIONS ARE TO THE FACE OF EXISTING WALL AND CENTERLINE OF INTERIOR STUD WALL OR OPENINGS UNLESS OTHERWISE NOTED.
 - 3.) REFER TO MEP DRAWINGS FOR LOCATIONS OF ALL ELECTRICAL, MECHANICAL & FIRE DETECTION EQUIPMENT, ETC.
 - 4.) REFER TO 01-A-3 FOR WALL TYPES AS DESIGNATED.
 - 5.) REFER TO SHEETS 20-A-4 THROUGH 20-A-6 FOR FINISHES.
- ROOF NOTES**
1. ROOF DRAINS SHALL BE FURNISHED BY PLUMBING CONTRACTOR AND INSTALLED BY THE GENERAL CONTRACTOR IN ACCORDANCE WITH THE DETAIL ON 99-A-2.
 2. GENERAL CONTRACTOR SHALL COORDINATE WITH THE PLUMBING CONTRACTOR AND ROOFING CONTRACTOR TO CONFIRM LOCATIONS AND PLACEMENT.
 3. PIPING EXTENDING FROM ROOF DRAINS SHALL BE PROVIDED BY THE PLUMBING CONTRACTOR



PLAN LEGEND

	NEW DOOR
	NEW WINDOW
	NEW WALL
	NEW STAIR
	NEW FIRE EXTINGUISHER
	LIMIT OF FLOOR FINISH
	N.I.C. NOT IN CONTRACT

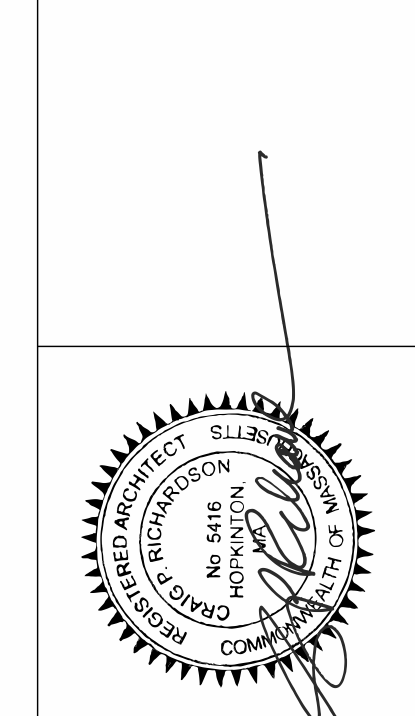


ATTLEBORO WATER DEPT.
ATTLEBORO, MA
WADING RIVER
WATER TREATMENT PLANT

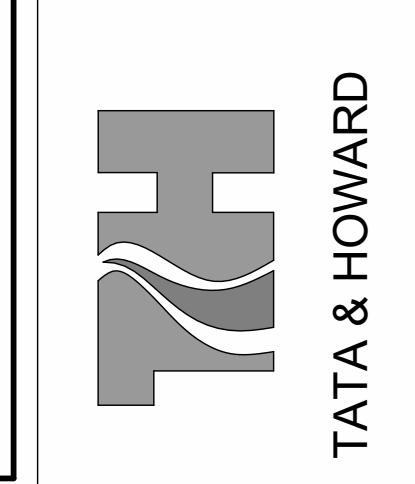
Designed By: JB/SR
Checked By: SR
Approved By: SR

ARCHITECTURAL ROOF PLAN

Rev.	Date	Description

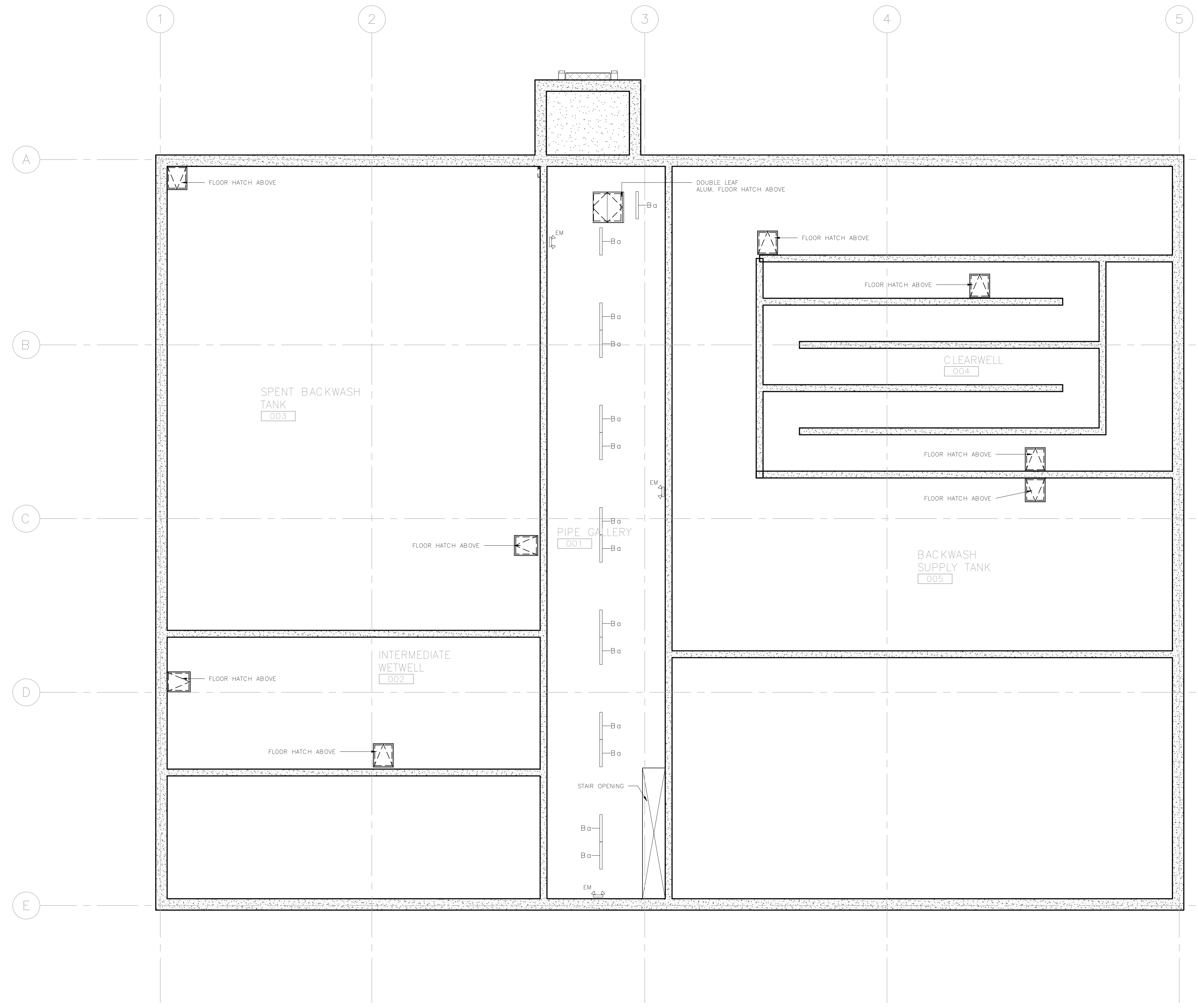
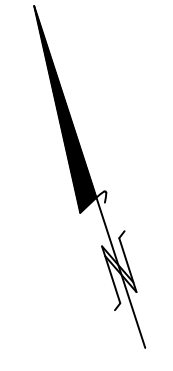


G | R | L | A
Corman Richardson Lewis Architects
239 South Street, Hopkinton, MA 01748
www.grla.com



T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE: AS NOTED
20-A-7

P:\Attboro\193 Wading River WTP Design\A020\Sheet\A020-11.dwg - Title Block.dwg 4/29/2016 1:55 PM BJB/BETTS



- GENERAL RCP NOTES**
- COORDINATE ALL MEP/FA/FP EQUIPMENT AND UTILITIES MOUNTED IN AND ABOVE CEILINGS. MEP/FA/FP DRAWINGS, ARCHITECTURAL DRAWINGS COORDINATE LOCATIONS. IF THERE IS A CONFLICT BETWEEN DRAWINGS, NOTIFY THE ENGINEER. ORDER OF PRIORITY IS SPRINKLER, LIGHTING, HVAC.
 - ALL FIELD CUT TILES TO BE SEALED USING COMPATIBLE EDGING MATERIAL.
 - CEILING HEIGHTS AS NOTED. ACT TILES SHALL BE CENTERED IN ROOM UNLESS OTHERWISE NOTED AND/OR SHOWN ON PLANS.
 - THE CONTRACTOR SHALL ENSURE ALL LIGHT FIXTURES HAVE A CONSISTENT COLOR TEMPERATURE AS SPECIFIED ON ELECTRICAL FIXTURE SCHEDULE, UNLESS OTHERWISE NOTED.
 - FOR LIGHT FIXTURE TYPES, I.E. "A", REFER TO ELECTRICAL DRAWINGS.

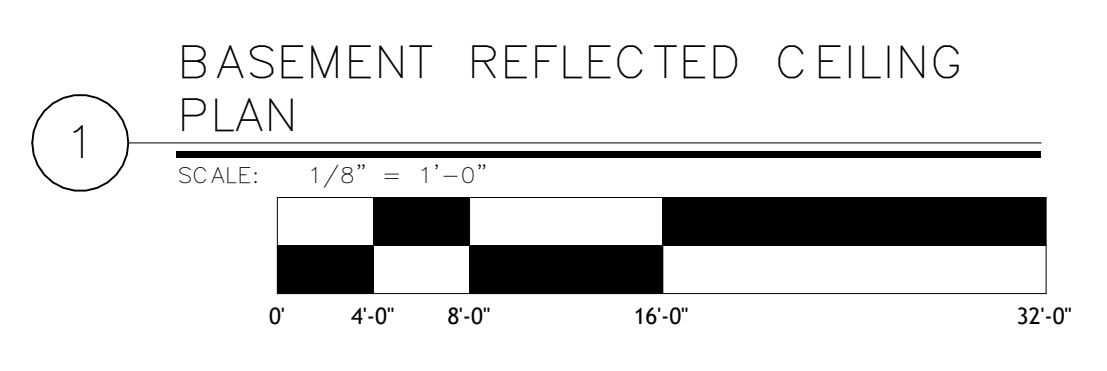
CEILING FIXTURES LEGEND

- A - LED HIGH BAY PENDANT LIGHT
- B - LED SUSPENDED LINEAR LIGHT
- B1 - LED SUSPENDED LINEAR LIGHT
- Bα - LED SUSPENDED LINEAR LIGHT
- C - LED EXTERIOR WALL PACK
- D - 2X4 LED PANEL - RECESSED
- D1 - 2X2 LED PANEL - RECESSED
- EM - EMERGENCY LIGHTS
- EMX - EMERGENCY EXIT LIGHTS

NOTE: FIXTURES SHOWN FOR REFERENCE ONLY AND SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR. REFER TO ELECTRICAL DRAWINGS FOR MORE INFORMATION AND FIXTURE SCHEDULE WITH ADDITIONAL INFORMATION.

- EF - EXHAUST FAN
- EUH - ELECTRIC UNIT HEATER
- DAC - DUCTLESS CASSETTE

NOTE: FIXTURES SHOWN FOR REFERENCE ONLY AND SHALL BE PROVIDED BY THE HVAC CONTRACTOR. REFER TO HVAC DRAWINGS FOR MORE INFORMATION AND FIXTURE SCHEDULE WITH ADDITIONAL INFORMATION.



ATTLEBORO WATER DEPT.
 ATTLEBORO, MA
 WADING RIVER
 WATER TREATMENT PLANT

Designed By: JB/SR
 Checked By: SR
 Approved By: SR

ARCHITECTURAL

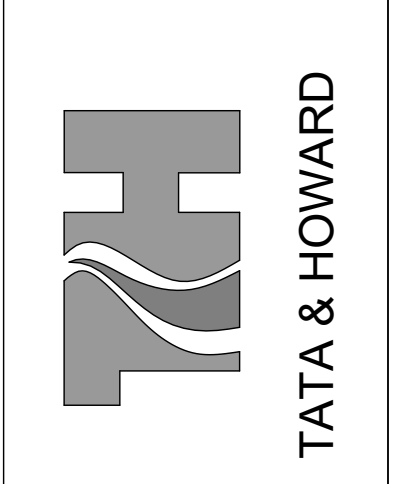
BASEMENT REFLECTED CEILING PLAN

Rev.	Date	Description

THIS DOCUMENT IS THE PROPERTY OF TATA & HOWARD, INC. AND ITS CLIENT. REPRODUCTION OR ADAPTATION WITHOUT WRITTEN CONSENT IS PROHIBITED.



G | R | L | A
 Corman Richardson Lewis Architects
 239 South Street Hopedkton, MA 01748
 www.grla.com



T&H NO.: 6193
 DATE: FEBRUARY 2025
 SCALE: AS NOTED

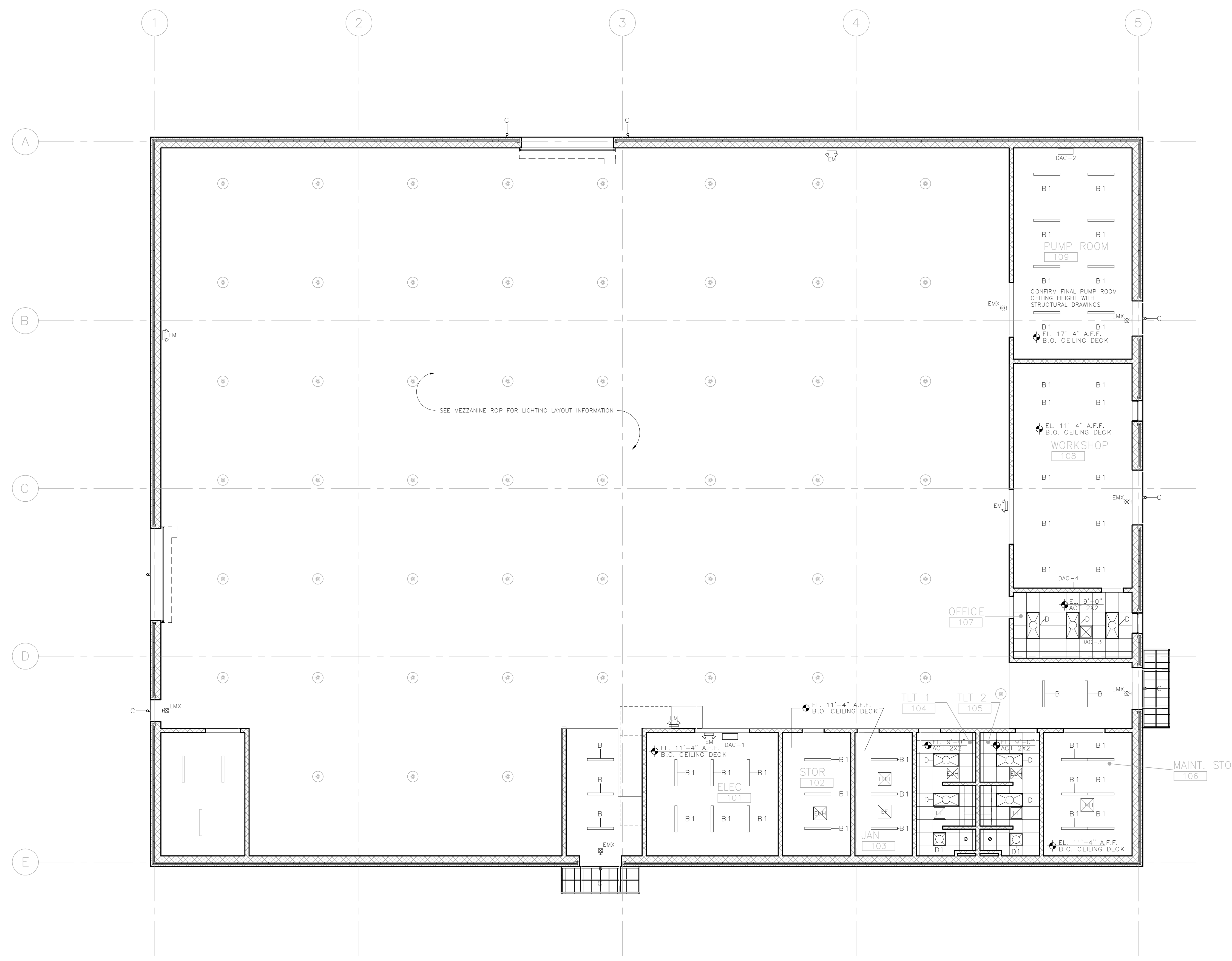
P:\Attiboro\193 Wading River RFP Design\CAD\Sheet\WRE\193-x-Tile Block.dwg 4/27/2016 1:55 PM BJB/RETS

- ### GENERAL RCP NOTES
- COORDINATE ALL MEP/FA/FP EQUIPMENT AND UTILITIES MOUNTED IN AND ABOVE CEILINGS. MEP/FA/FP DRAWINGS, ARCHITECTURAL DRAWINGS COORDINATE LOCATIONS. IF THERE IS A CONFLICT BETWEEN DRAWINGS, NOTIFY THE ENGINEER. ORDER OF PRIORITY IS SPRINKLER, LIGHTING, HVAC.
 - ALL FIELD CUT TILES TO BE SEALED USING COMPATIBLE EDGING MATERIAL.
 - CEILING HEIGHTS AS NOTED. ACT TILES SHALL BE CENTERED IN ROOM UNLESS OTHERWISE NOTED AND/OR SHOWN ON PLANS.
 - THE CONTRACTOR SHALL ENSURE ALL LIGHT FIXTURES HAVE A CONSISTENT COLOR TEMPERATURE AS SPECIFIED ON ELECTRICAL FIXTURE SCHEDULE, UNLESS OTHERWISE NOTED.
 - FOR LIGHT FIXTURE TYPES, I.E. "A", REFER TO ELECTRICAL DRAWINGS.

CEILING FIXTURES LEGEND

	A - LED HIGH BAY PENDANT LIGHT
	B - LED SUSPENDED LINEAR LIGHT
	B1 - LED SUSPENDED LINEAR LIGHT
	Ba - LED SUSPENDED LINEAR LIGHT
	C - LED EXTERIOR WALL PACK
	D - 2X4 LED PANEL - RECESSED
	D1 - 2X2 LED PANEL - RECESSED
	EM - EMERGENCY LIGHTS
	EMX - EMERGENCY EXIT LIGHTS
	EF - EXHAUST FAN
	EUH - ELECTRIC UNIT HEATER
	DAC - DUCTLESS CASSETTE

NOTE: FIXTURES SHOWN FOR REFERENCE ONLY AND SHALL BE PROVIDED BY THE HVAC CONTRACTOR. REFER TO HVAC DRAWINGS FOR MORE INFORMATION AND FIXTURE SCHEDULE WITH ADDITIONAL INFORMATION.

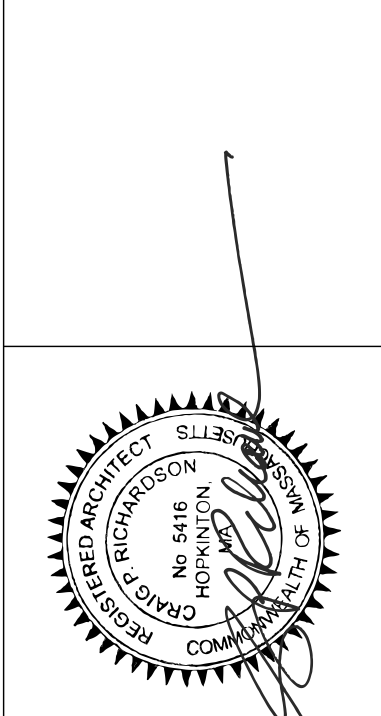


FIRST FLOOR REFLECTED CEILING PLAN
 SCALE: 1/8" = 1'-0"

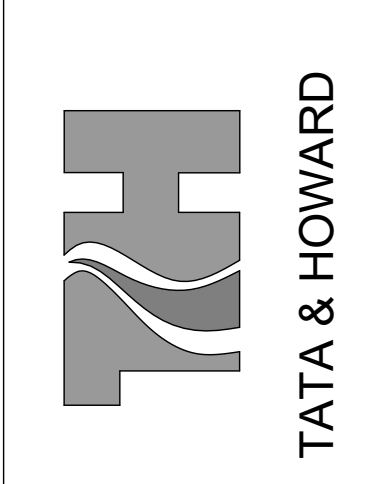
ATTEBORO WATER DEPT.
 ATTEBORO, MA
 WADING RIVER
 WATER TREATMENT PLANT

ARCHITECTURAL
FIRST FLOOR REFLECTED CEILING PLAN

Rev.	Date	Description

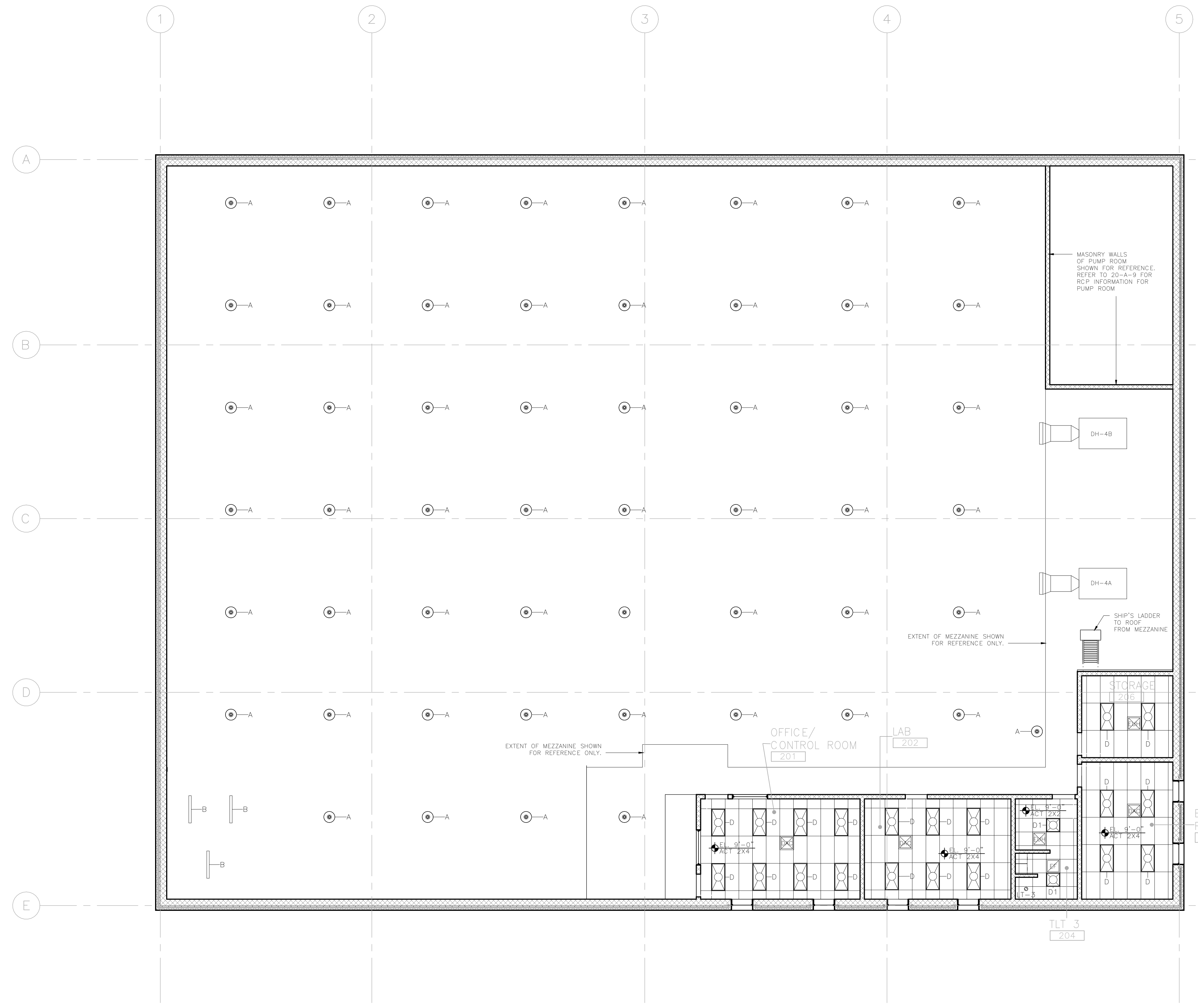
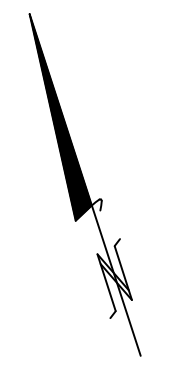


G | R | L | A
 Curran Richardson Lewis Architects
 239 South Street Hopedknot, MA 01748
 www.grlarchitects.com



T&H NO.: 6193
 DATE: FEBRUARY 2025
 SCALE: AS NOTED

P:\Attboro\193 Wading River RFP Design\CAD\Sheet\WRE\101-106-1.rvt 4/27/2016 1:55 PM RB/BJT



- GENERAL RCP NOTES**
- COORDINATE ALL MEP/FA/FP EQUIPMENT AND UTILITIES MOUNTED IN AND ABOVE CEILINGS. MEP/FA/FP DRAWINGS, ARCHITECTURAL DRAWINGS COORDINATE LOCATIONS. IF THERE IS A CONFLICT BETWEEN DRAWINGS, NOTIFY THE ENGINEER. ORDER OF PRIORITY IS SPRINKLER, LIGHTING, HVAC.
 - ALL FIELD CUT TILES TO BE SEALED USING COMPATIBLE EDGING MATERIAL.
 - CEILING HEIGHTS AS NOTED. ACT TILES SHALL BE CENTERED IN ROOM UNLESS OTHERWISE NOTED AND/OR SHOWN ON PLANS.
 - THE CONTRACTOR SHALL ENSURE ALL LIGHT FIXTURES HAVE A CONSISTENT COLOR TEMPERATURE AS SPECIFIED ON ELECTRICAL FIXTURE SCHEDULE, UNLESS OTHERWISE NOTED.
 - FOR LIGHT FIXTURE TYPES, I.E. "A", REFER TO ELECTRICAL DRAWINGS.

CEILING FIXTURES LEGEND

- A - LED HIGH BAY PENDANT LIGHT
- B - LED SUSPENDED LINEAR LIGHT
- B1 - LED SUSPENDED LINEAR LIGHT
- Bα - LED SUSPENDED LINEAR LIGHT
- C - LED EXTERIOR WALL PACK
- D - 2X4 LED PANEL - RECESSED
- D1 - 2X2 LED PANEL - RECESSED
- EM - EMERGENCY LIGHTS
- EMX - EMERGENCY EXIT LIGHTS
- EF - EXHAUST FAN
- EUH - ELECTRIC UNIT HEATER
- DAC - DUCTLESS CASSETTE

NOTE: FIXTURES SHOWN FOR REFERENCE ONLY AND SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR. REFER TO ELECTRICAL DRAWINGS FOR MORE INFORMATION AND FIXTURE SCHEDULE WITH ADDITIONAL INFORMATION.

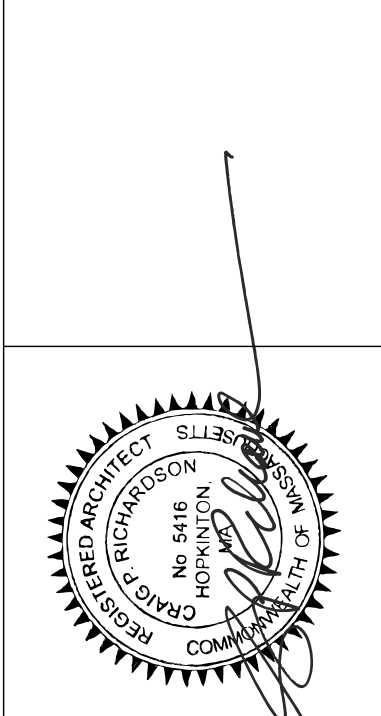
NOTE: FIXTURES SHOWN FOR REFERENCE ONLY AND SHALL BE PROVIDED BY THE HVAC CONTRACTOR. REFER TO HVAC DRAWINGS FOR MORE INFORMATION AND FIXTURE SCHEDULE WITH ADDITIONAL INFORMATION.

ATTLEBORO WATER DEPT.
 ATTLEBORO, MA
 WADING RIVER
 WATER TREATMENT PLANT

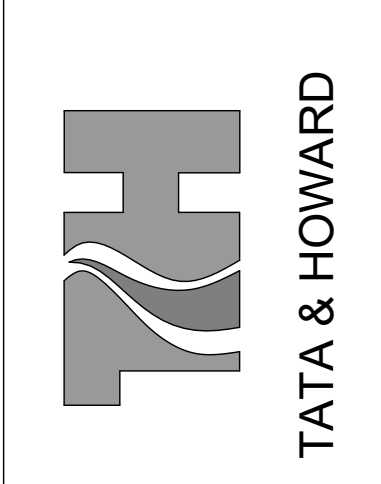
ARCHITECTURAL

MEZZANINE REFLECTED CEILING PLAN

Rev.	Date	Description



G | R | L | A
 Corbett Richardson Lewis Architects
 239 South Street Hopedknot, MA 01748
 www.grla.com



T&H NO.: 6193
 DATE: FEBRUARY 2025
 SCALE: AS NOTED

20-A-10

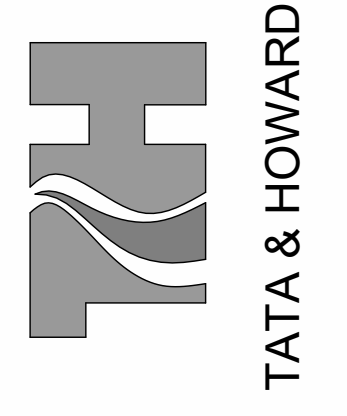
1 MEZZANINE REFLECTED CEILING PLAN

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

P:\Attiboro\193 Wading River WTP Design\CADD\Sheet\WRT\103-x-Tile Block.dwg 4/23/2016 1:55 PM BJB/BETTS

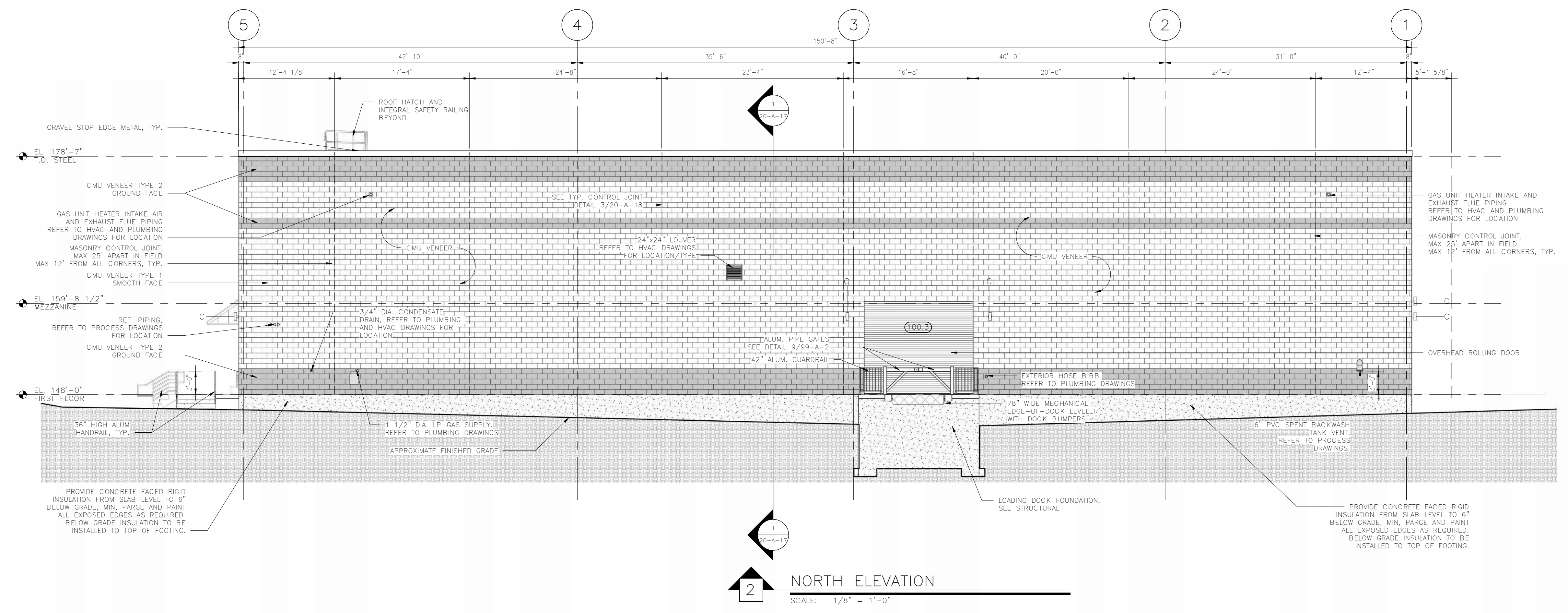
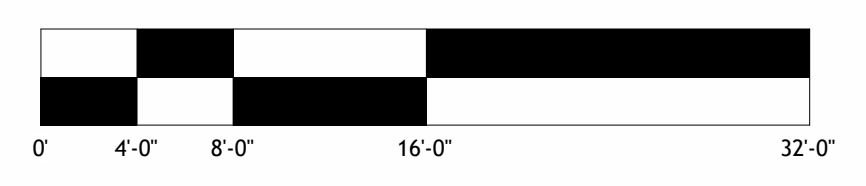


G | R | L | A
Cormac Richardson Lewis Architects
239 South Street Hopedon, MA 01748
www.grlarchitects.com

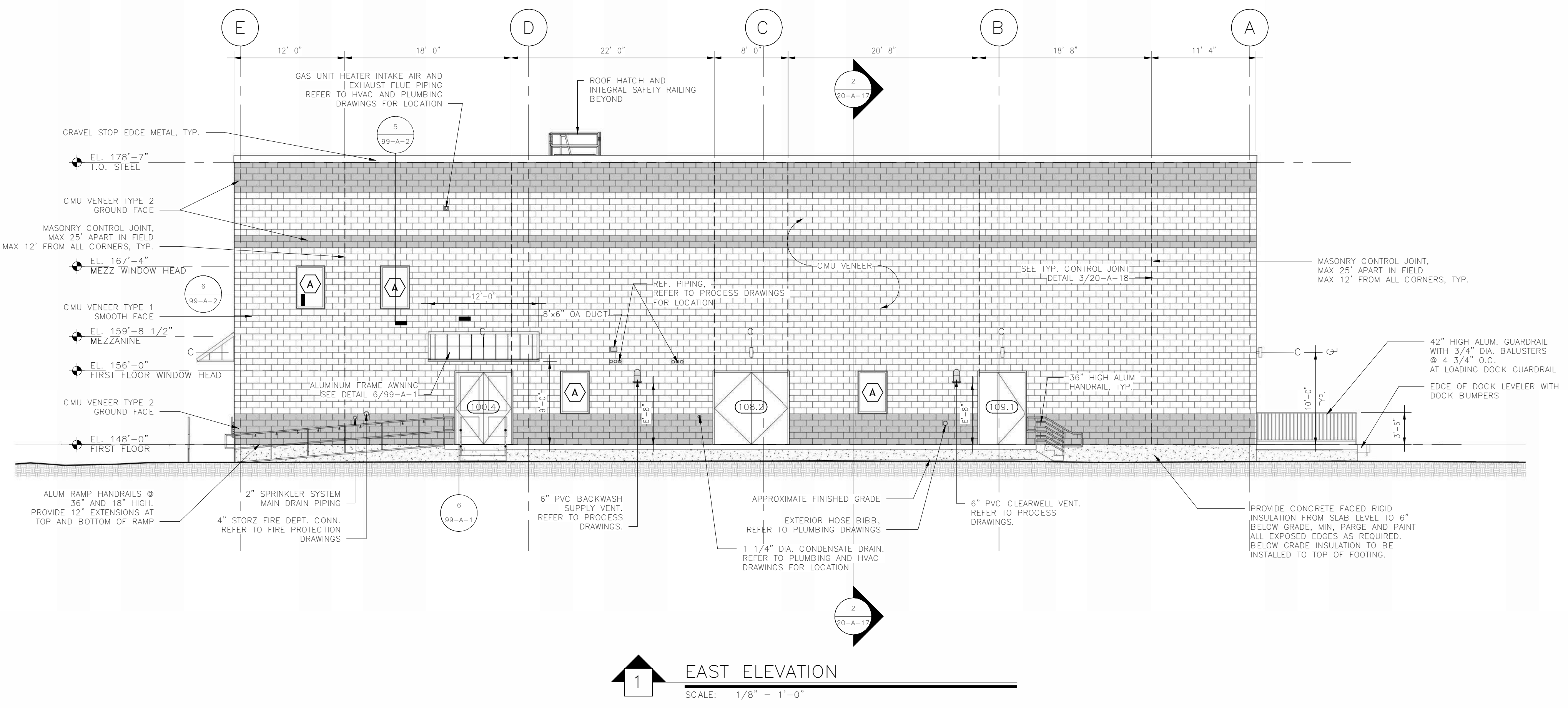


T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE: AS NOTED

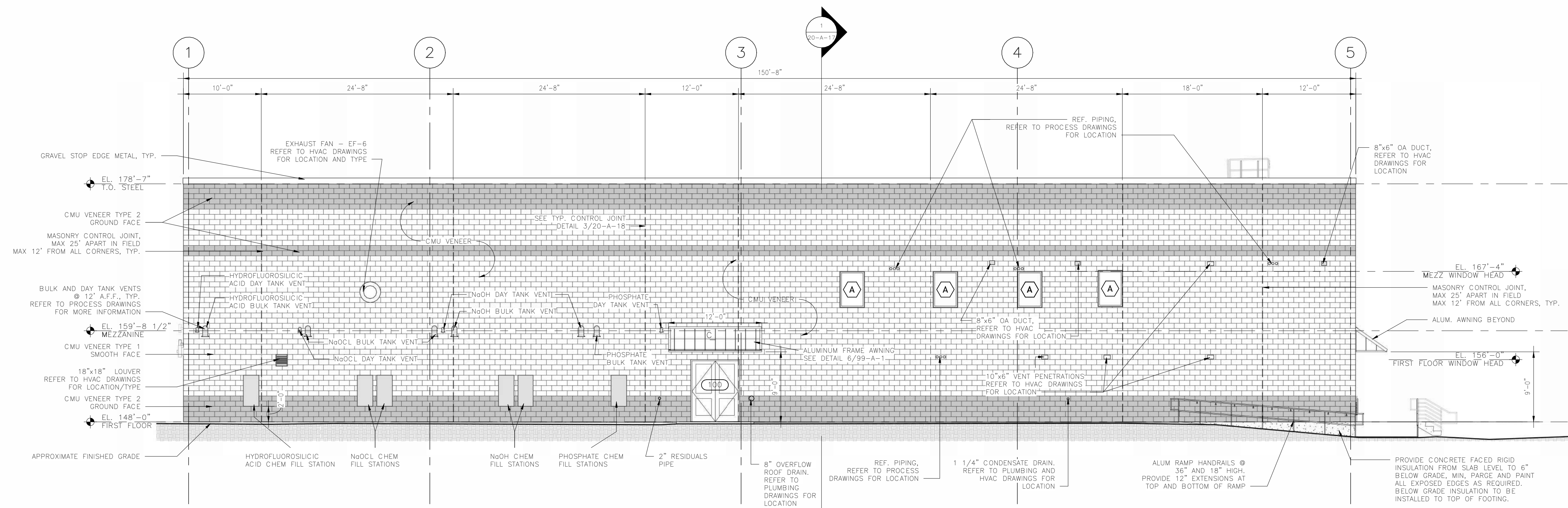
20-A-11



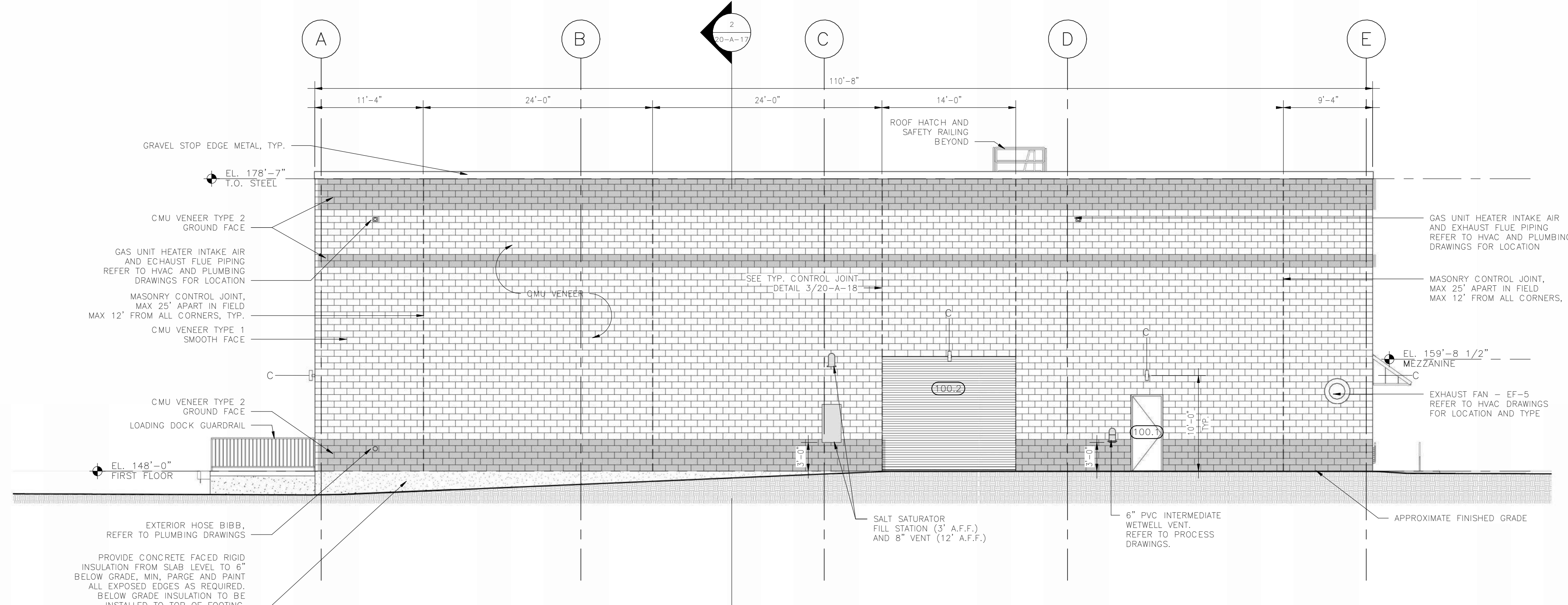
2 NORTH ELEVATION
SCALE: 1/8" = 1'-0"



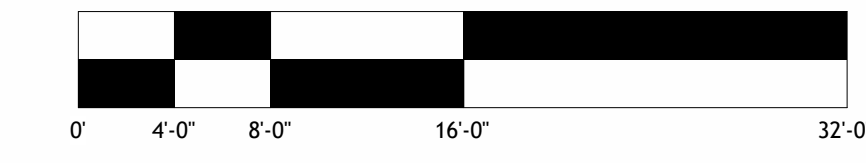
1 EAST ELEVATION
SCALE: 1/8" = 1'-0"



1 **SOUTH ELEVATION**
 SCALE: 1/8" = 1'-0"



2 **WEST ELEVATION**
 SCALE: 1/8" = 1'-0"

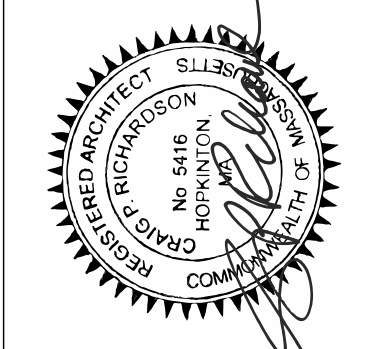


ATTLEBORO WATER DEPT.
ATTLEBORO, MA
WADING RIVER
WATER TREATMENT PLANT

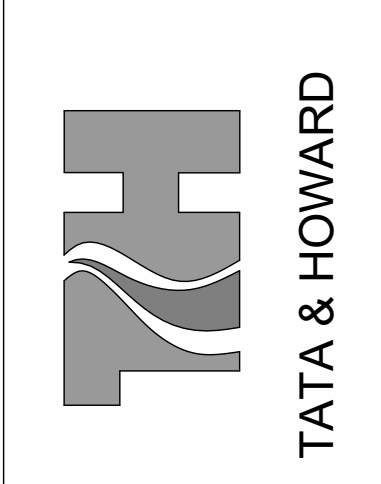
ARCHITECTURAL
EXTERIOR ELEVATIONS

Rev.	Date	Description

THIS DOCUMENT IS THE PROPERTY OF TATA & HOWARD, INC. AND ITS CLIENT.
 REPRODUCTION OR ADAPTATION WITHOUT WRITTEN CONSENT IS PROHIBITED.



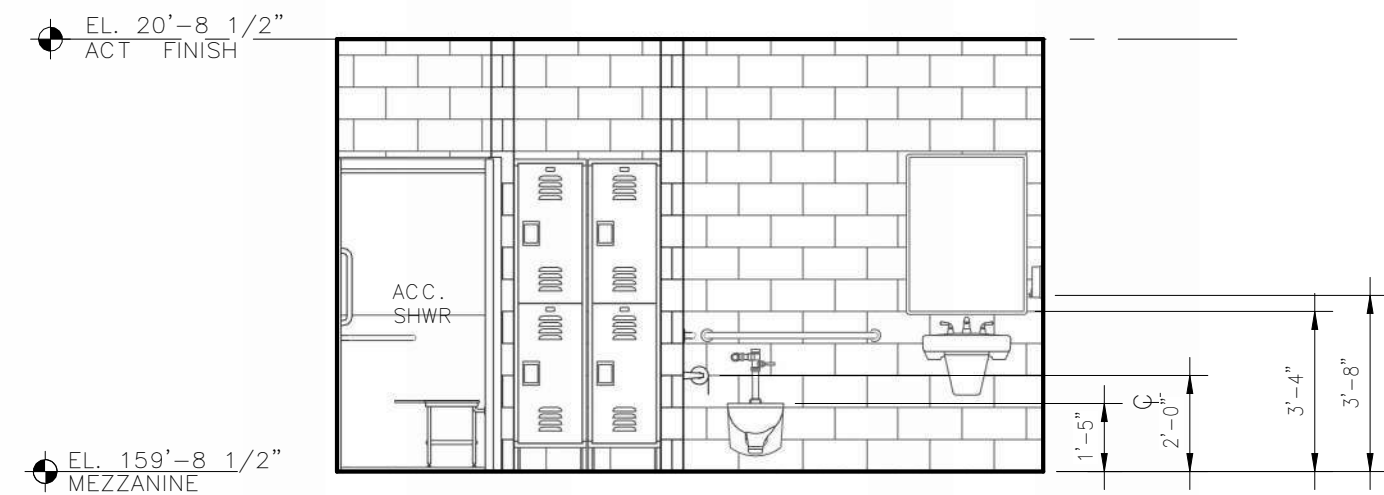
G | R | L | A
 Corman Richardson Lewis Architects
 239 South Street | Hopkinton, MA 01748
 www.grlarchitects.com



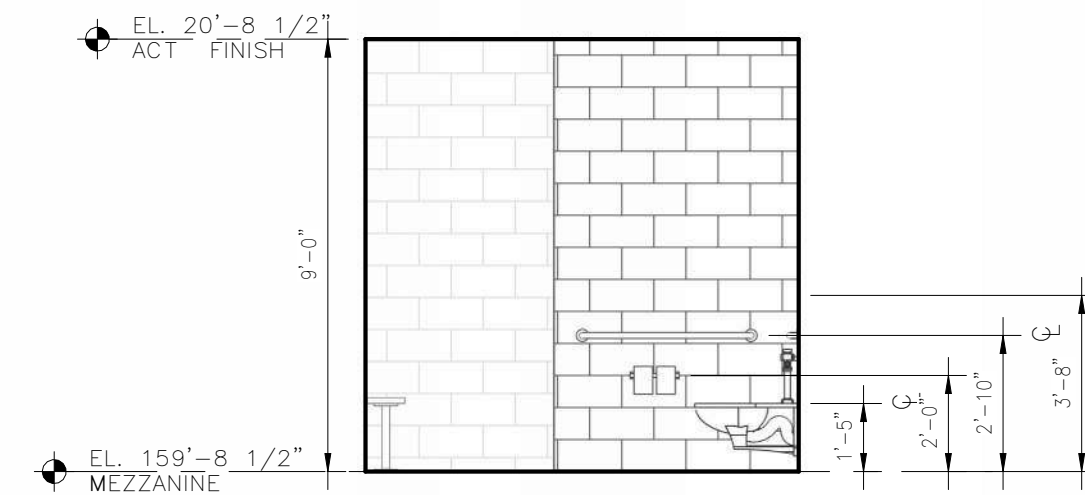
T&H NO.: 6193
 DATE: FEBRUARY 2025
 SCALE: AS NOTED

20-A-12

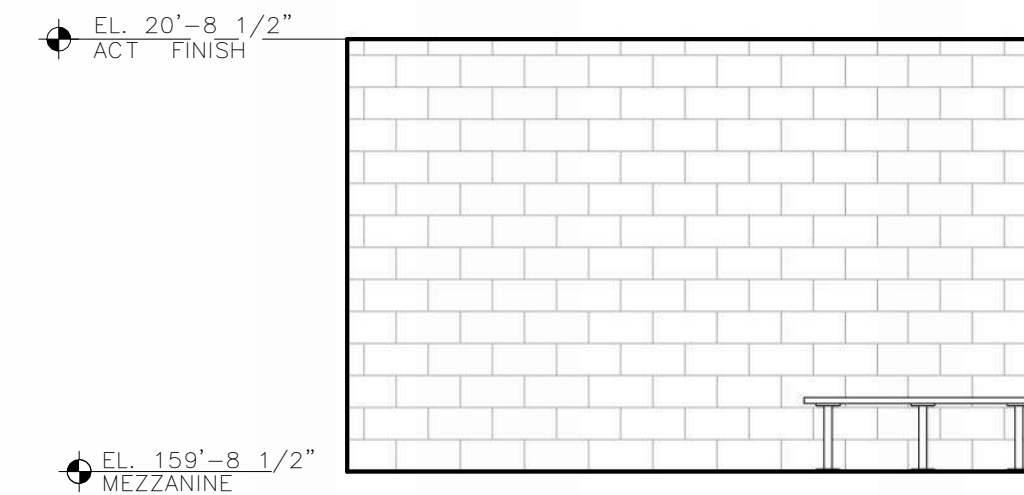
P:\Attiboro\0193 Wading River WTP Design\CAD\Sheet\WRE\1013-X-Tile Block.dwg 4/23/2016 1:35 PM BJB:RETS



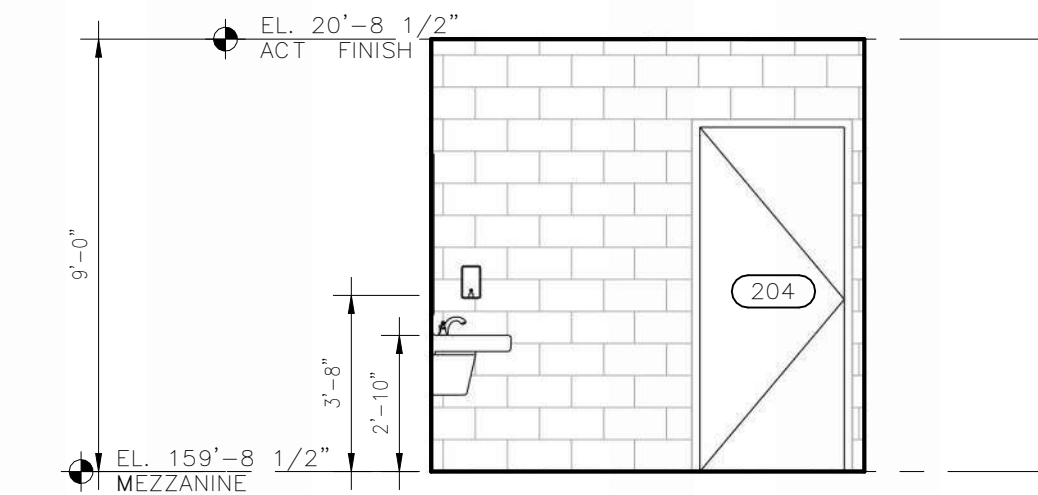
12 TLT 204 - INT. ELEV. 4
SCALE: 1/4" = 1'-0"



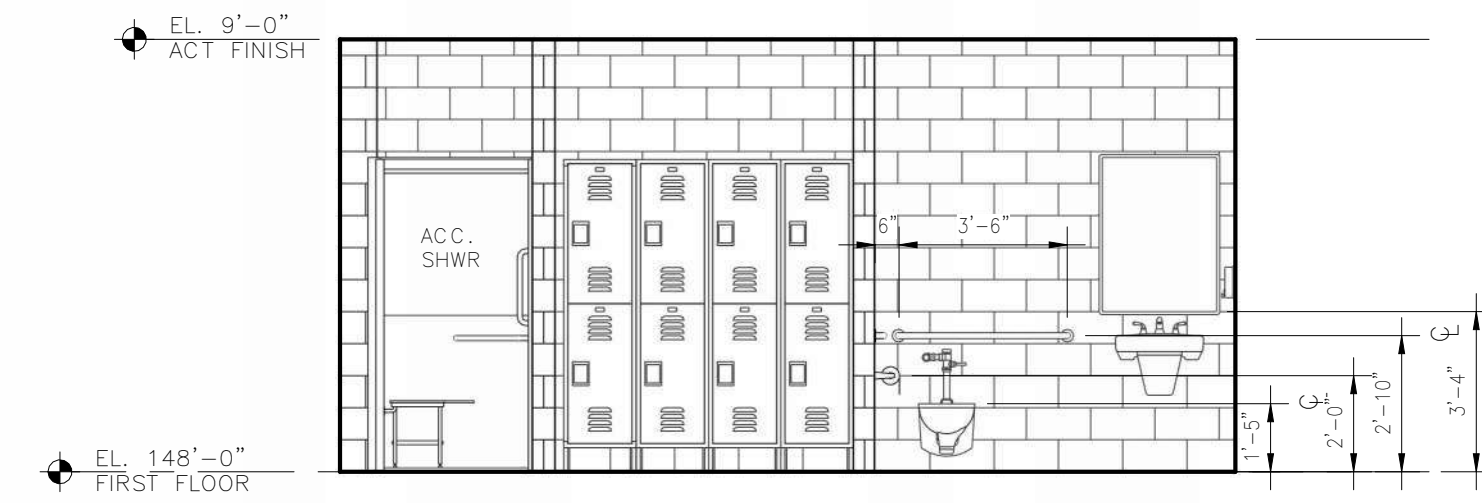
11 TLT 204 - INT. ELEV. 3
SCALE: 1/4" = 1'-0"



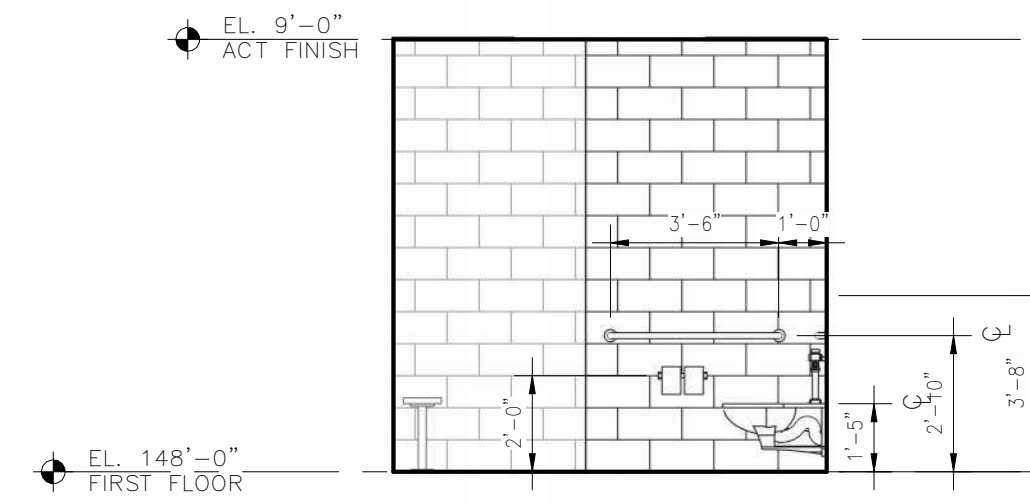
10 TLT 204 - INT. ELEV. 2
SCALE: 1/4" = 1'-0"



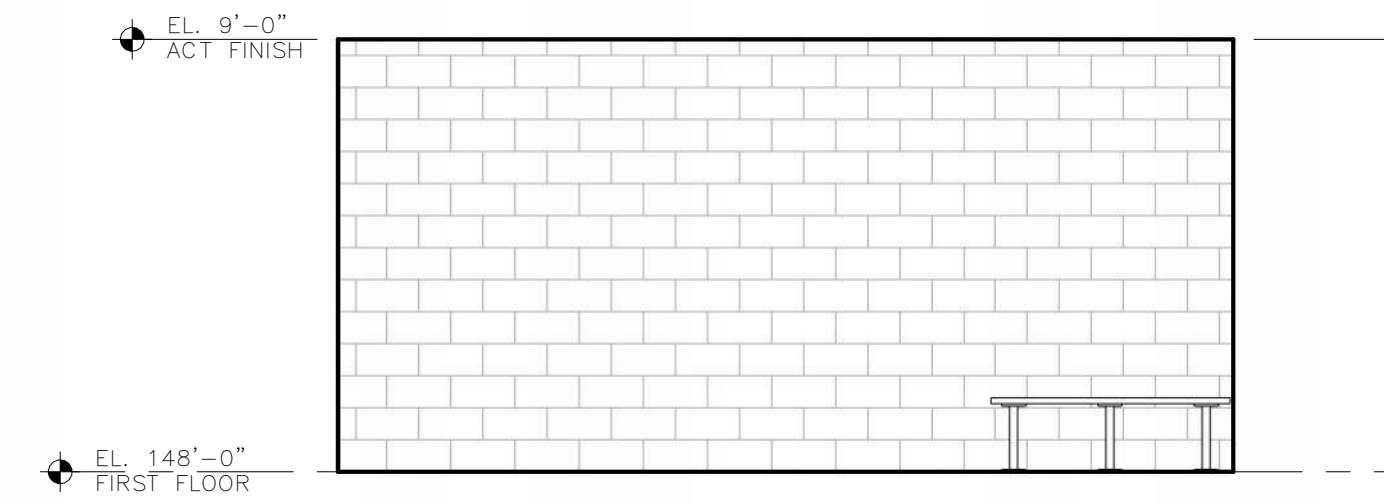
9 TLT 204 - INT. ELEV. 1
SCALE: 1/4" = 1'-0"



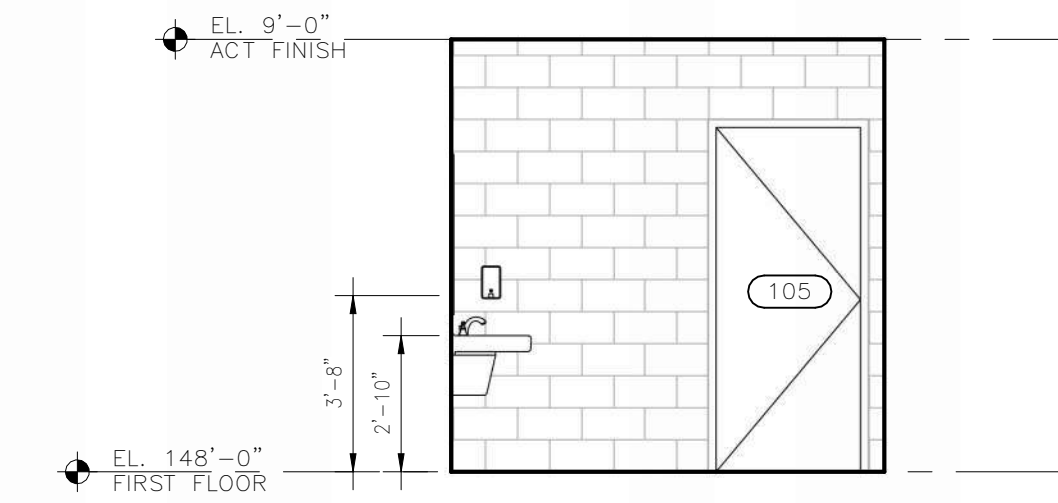
8 TLT 105 - INT. ELEV. 4
SCALE: 1/4" = 1'-0"



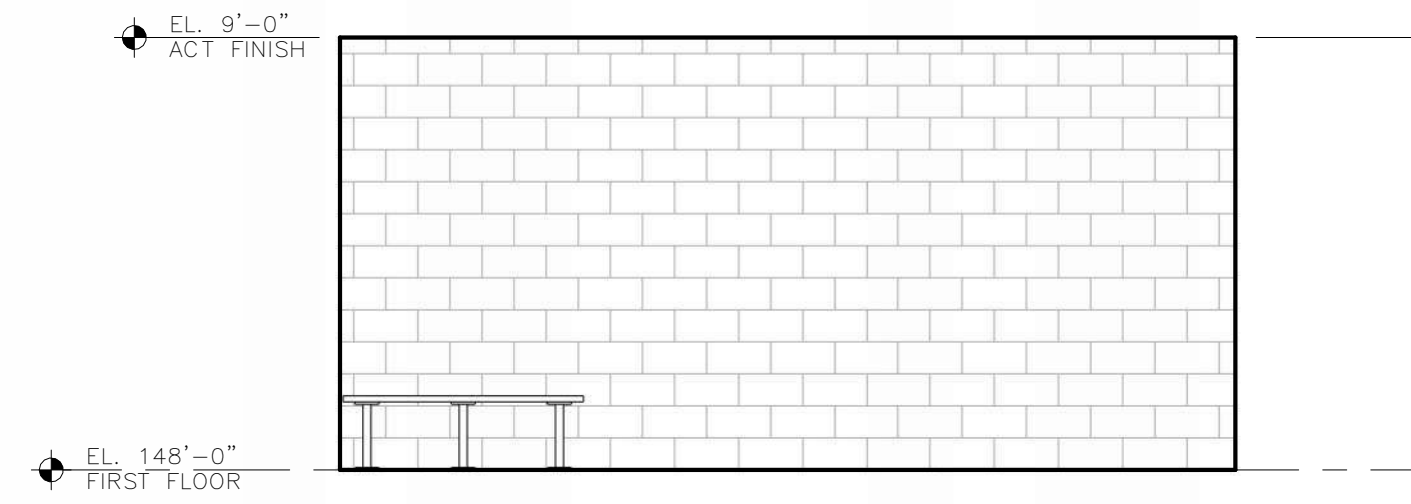
7 TLT 105 - INT. ELEV. 3
SCALE: 1/4" = 1'-0"



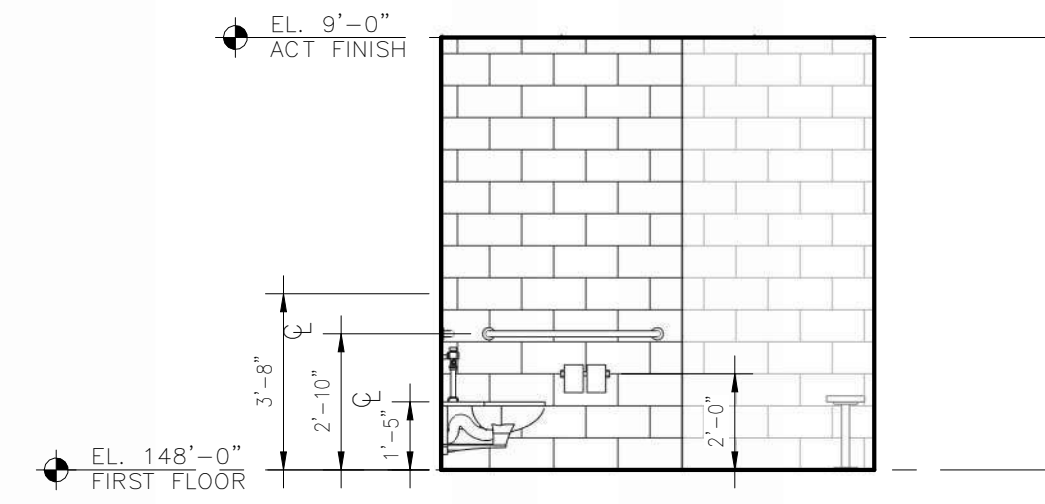
6 TLT 105 - INT. ELEV. 2
SCALE: 1/4" = 1'-0"



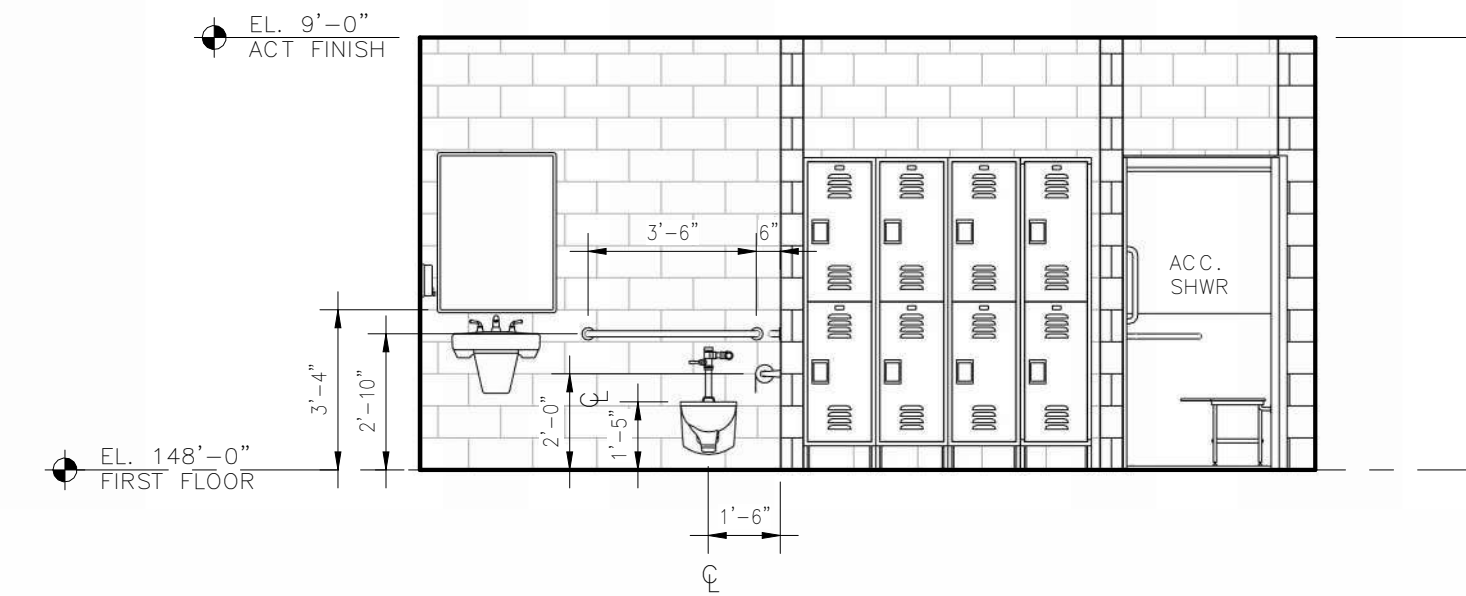
5 TLT 105 - INT. ELEV. 1
SCALE: 1/4" = 1'-0"



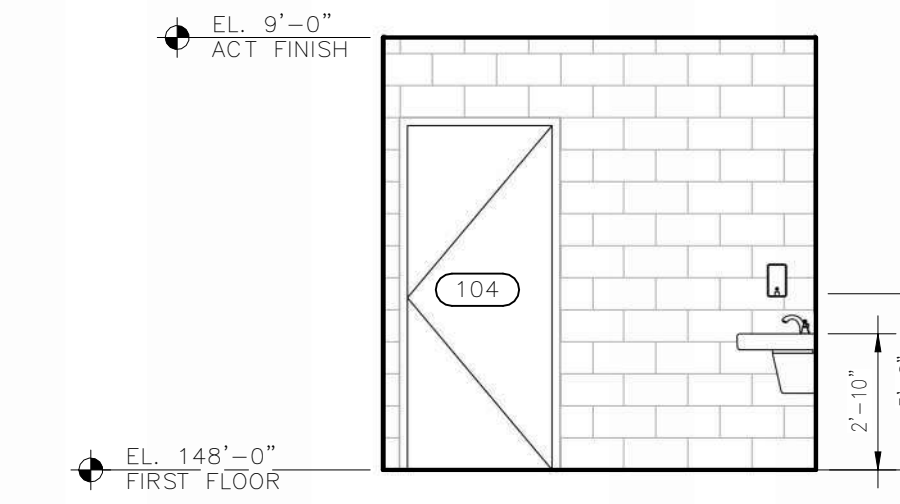
4 TLT 104 - INT. ELEV. 4
SCALE: 1/4" = 1'-0"



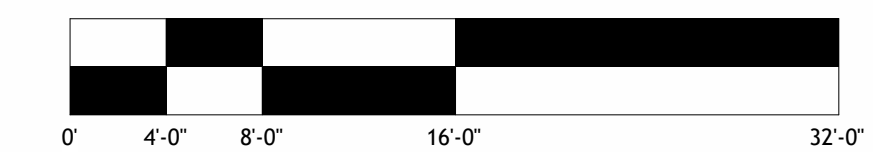
3 TLT 104 - INT. ELEV. 3
SCALE: 1/4" = 1'-0"



2 TLT 104 - INT. ELEV. 2
SCALE: 1/4" = 1'-0"



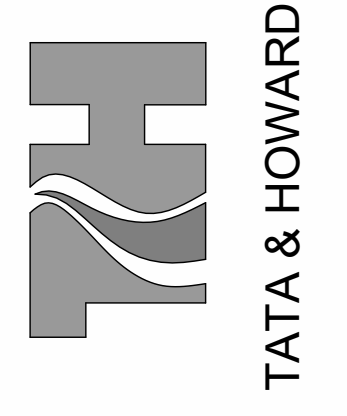
1 TLT 104 - INT. ELEV. 1
SCALE: 1/4" = 1'-0"



Rev.	Date	Description



G | R | L | A
Corman Richardson Lewis Architects
239 South Street - Hingham, MA 01948
www.grla.com

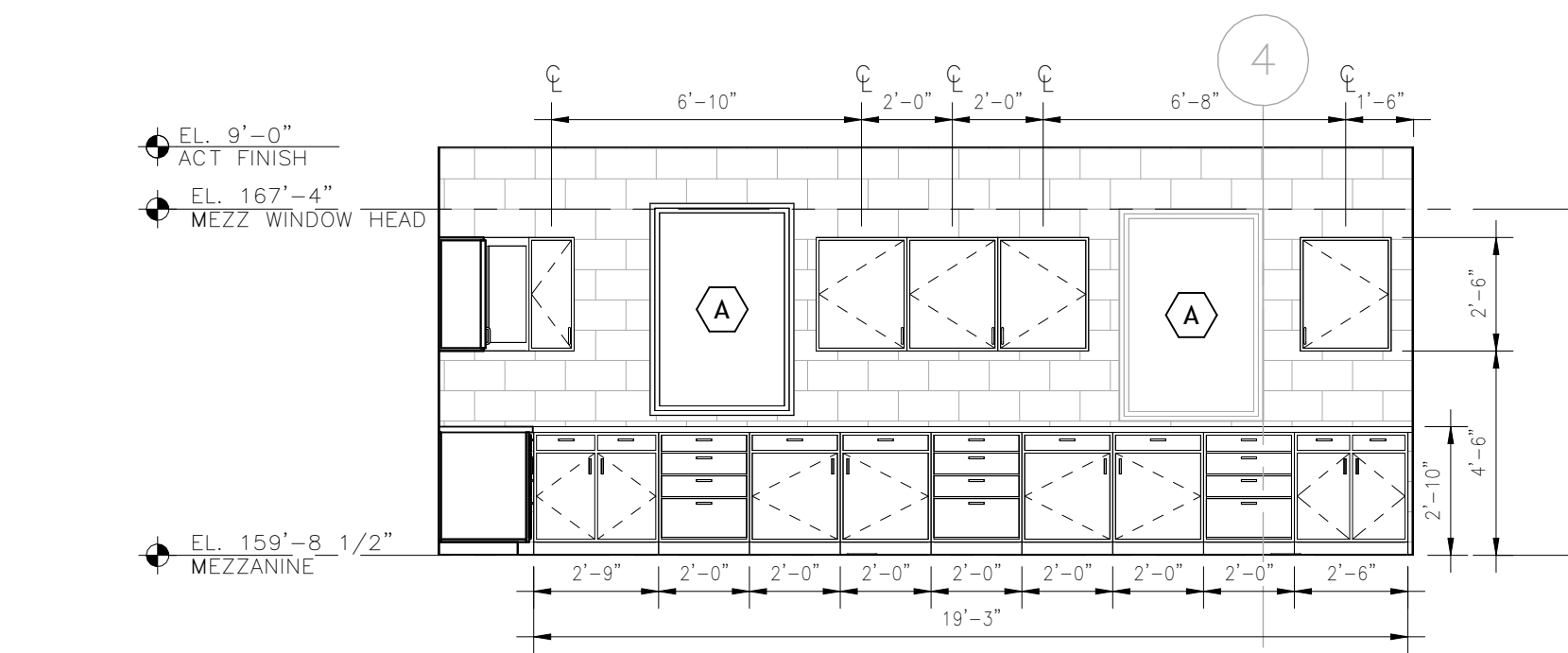


T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE: AS NOTED

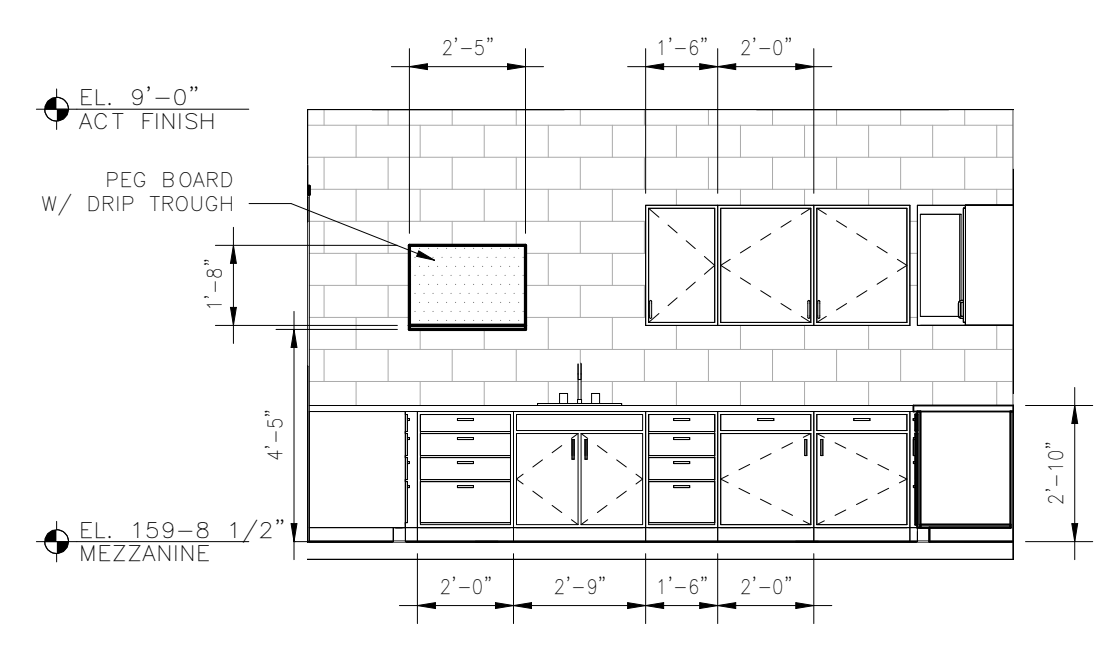
ATTLEBORO WATER DEPT.
ATTLEBORO, MA
WADING RIVER
WATER TREATMENT PLANT
Designed By: JB
Checked By: SR
Approved By: SR

ARCHITECTURAL
INTERIOR ELEVATIONS
THIS DOCUMENT IS THE PROPERTY OF TATA & HOWARD, INC. AND ITS CLIENT. REPRODUCTION OR MODIFICATION WITHOUT WRITTEN CONSENT IS PROHIBITED.

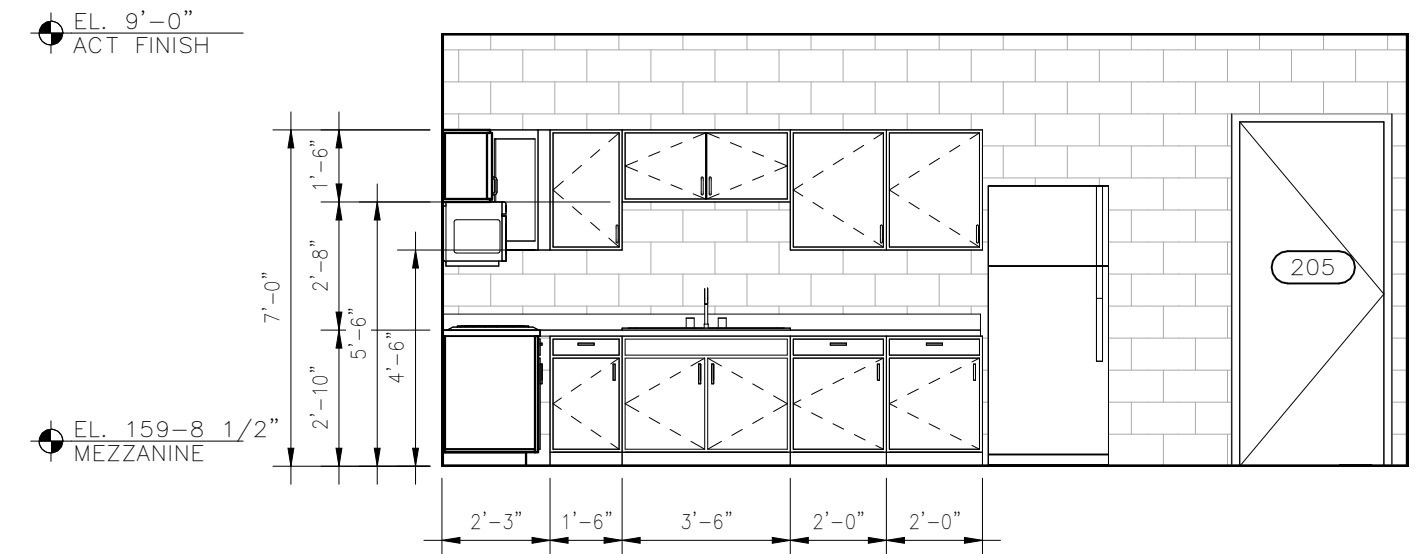
P:\Attiboro\193 Attiboro River WTP Design\CADD\Sheet\WRETA\193-xx-Tile Block.dwg 4/29/2016 1:55 PM RBRETT



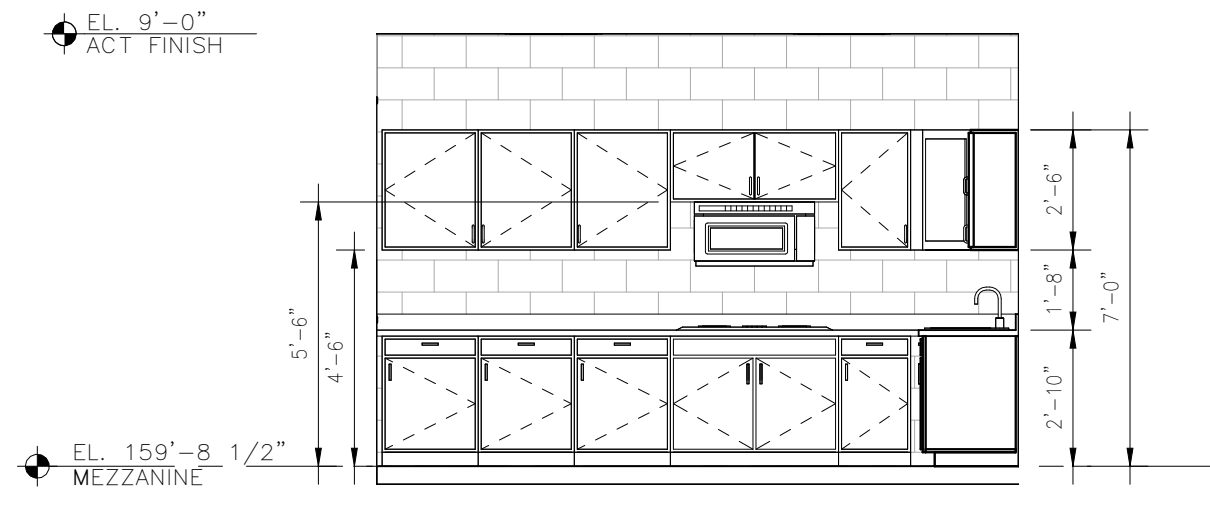
4 LAB INT. ELEV. 2
SCALE: 1/4" = 1'-0"



3 LAB INT. ELEV. 1
SCALE: 1/4" = 1'-0"



2 BREAKROOM INT. ELEV. 2
SCALE: 1/4" = 1'-0"



1 BREAKROOM INT. ELEV. 1
SCALE: 1/4" = 1'-0"



G | R | L | A
Francis Richardson Lewis Architects
239 South Street, Hopkinton, MA 01748
www.grla.com



T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE: AS NOTED

20-A-14

ARCHITECTURAL
INTERIOR ELEVATIONS

ATTLEBORO WATER DEPT.
ATTLEBORO, MA
WADING RIVER
WATER TREATMENT PLANT

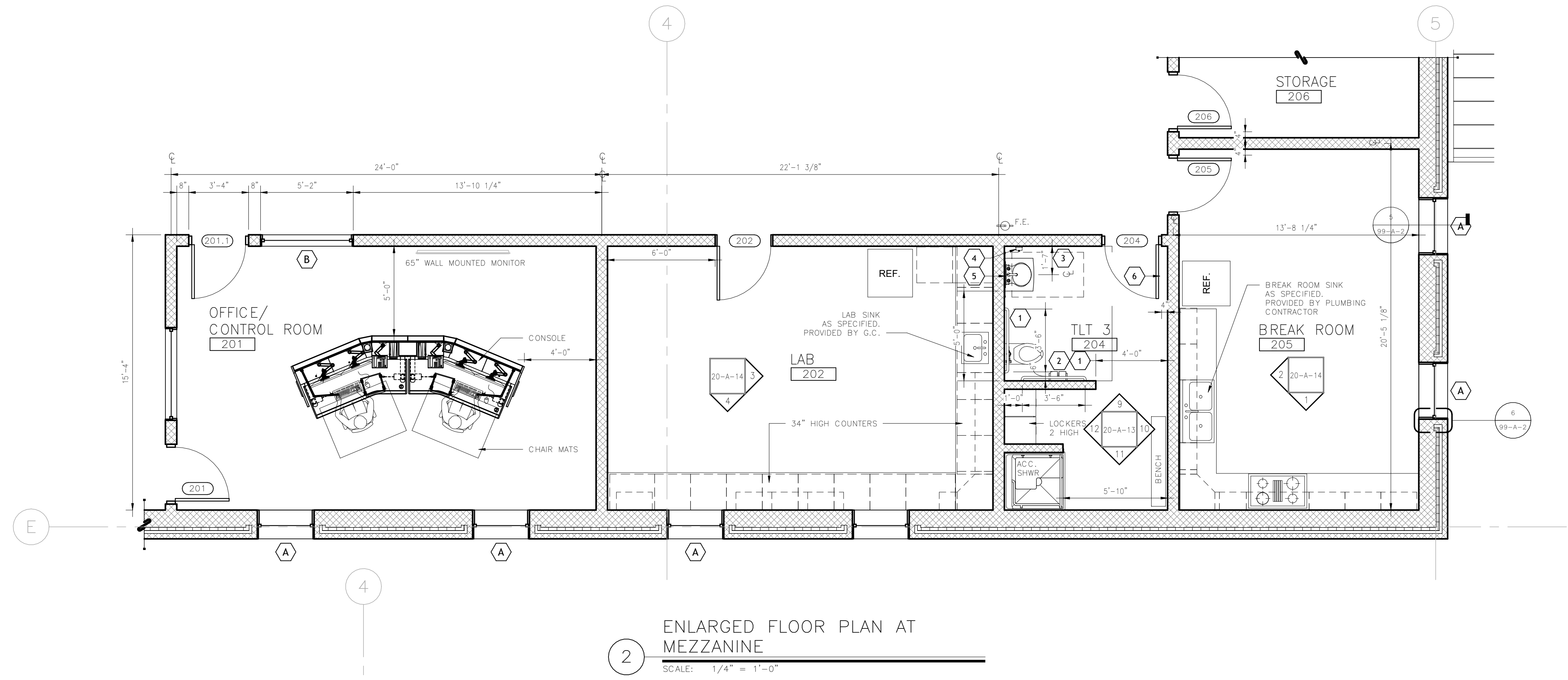
THIS DOCUMENT IS THE PROPERTY OF TATA & HOWARD, INC. AND ITS CLIENT. REPRODUCTION OR APPLICATION WITHOUT WRITTEN CONSENT IS PROHIBITED.

Designed By: JB / SR | Checked By: SR | Approved By: SR

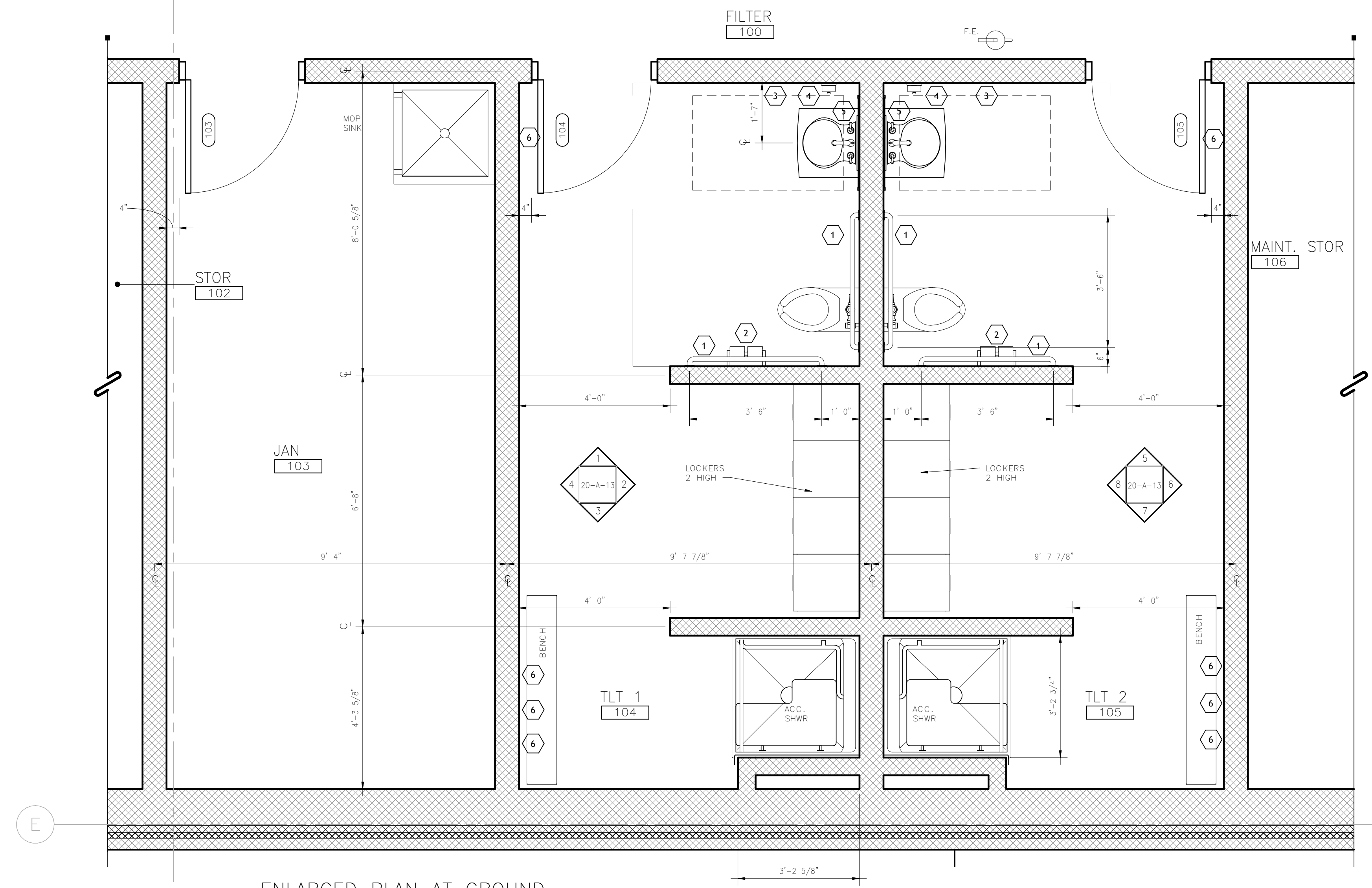
Rev.	Date	Description

TOILET ACCESSORIES		
1	GRAB BARS (42")	BRADLEY 812-2
2	TOILET PAPER DISPENSER	BOBRICK 5106-52 SURFACE MOUNT TOILET TISSUE DISPENSER
3	PAPER TOWEL DISPENSER	BRADLEY 250-15 SURFACE MOUNTED PAPER TOWEL DISPENSER
4	SOAP DISPENSER	BRADLEY 901-60 SURFACE MOUNTED SOAP
5	MIRROR	FRAMED MIRROR, 24" X 36"
6	COAT HOOKS	BRADLEY 9119. MOUNT ON DOOR
P1	WATER CLOSET	ADA-COMPLIANT WATER CLOSET. SEE PLUMBING DRAWINGS
P2	LAVATORY	WALL HUNG ADA-COMPLIANT LAVATORY AND FAUCET. SEE PLUMBING DRAWINGS

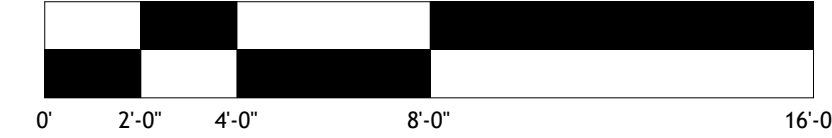
1. PROVIDE ADEQUATE FASTENERS IN CMU WALLS AS NEEDED FOR INSTALLATION AND FASTENING OF ALL EQUIPMENT, ETC. G.C. TO VERIFY LOCATIONS.
2. REFER TO TYPICAL MOUNTING HEIGHT DETAIL ON SHEET 99-A-2. CONFIRM WITH ARCHITECT REGARDING ANY CONFLICTS IN FIELD.



2 ENLARGED FLOOR PLAN AT MEZZANINE
SCALE: 1/4" = 1'-0"



1 ENLARGED PLAN AT GROUND FLOOR TOILETS
SCALE: 1/2" = 1'-0"



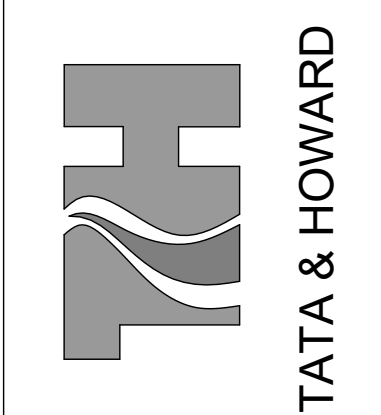
ATTLEBORO WATER DEPT.
ATTLEBORO, MA
WADING RIVER
WATER TREATMENT PLANT

ARCHITECTURAL
ENLARGED PLANS

Rev.	Date	Description



G | R | L | A
Corman Richardson Lewis Architects
239 South Street Hopedkton, MA 01748
www.grla.com

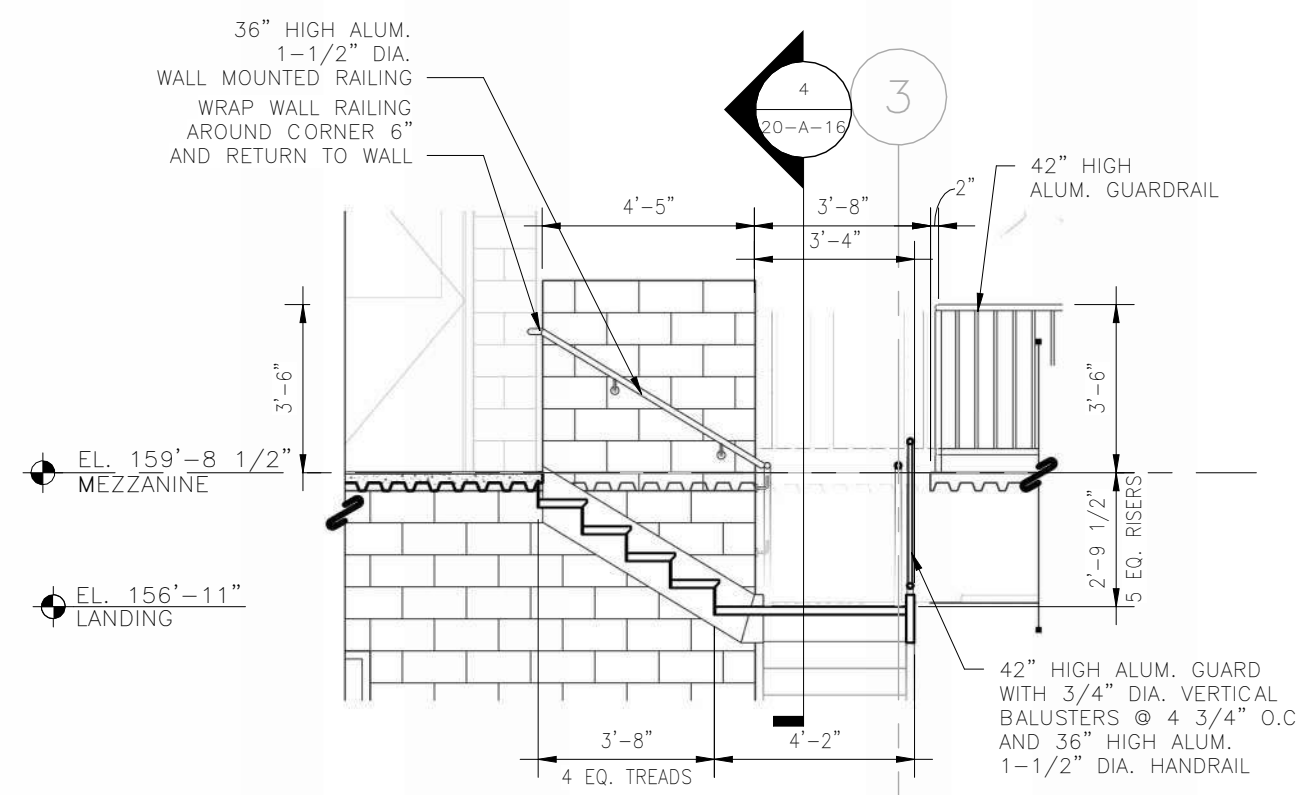


T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE: AS NOTED

20-A-15

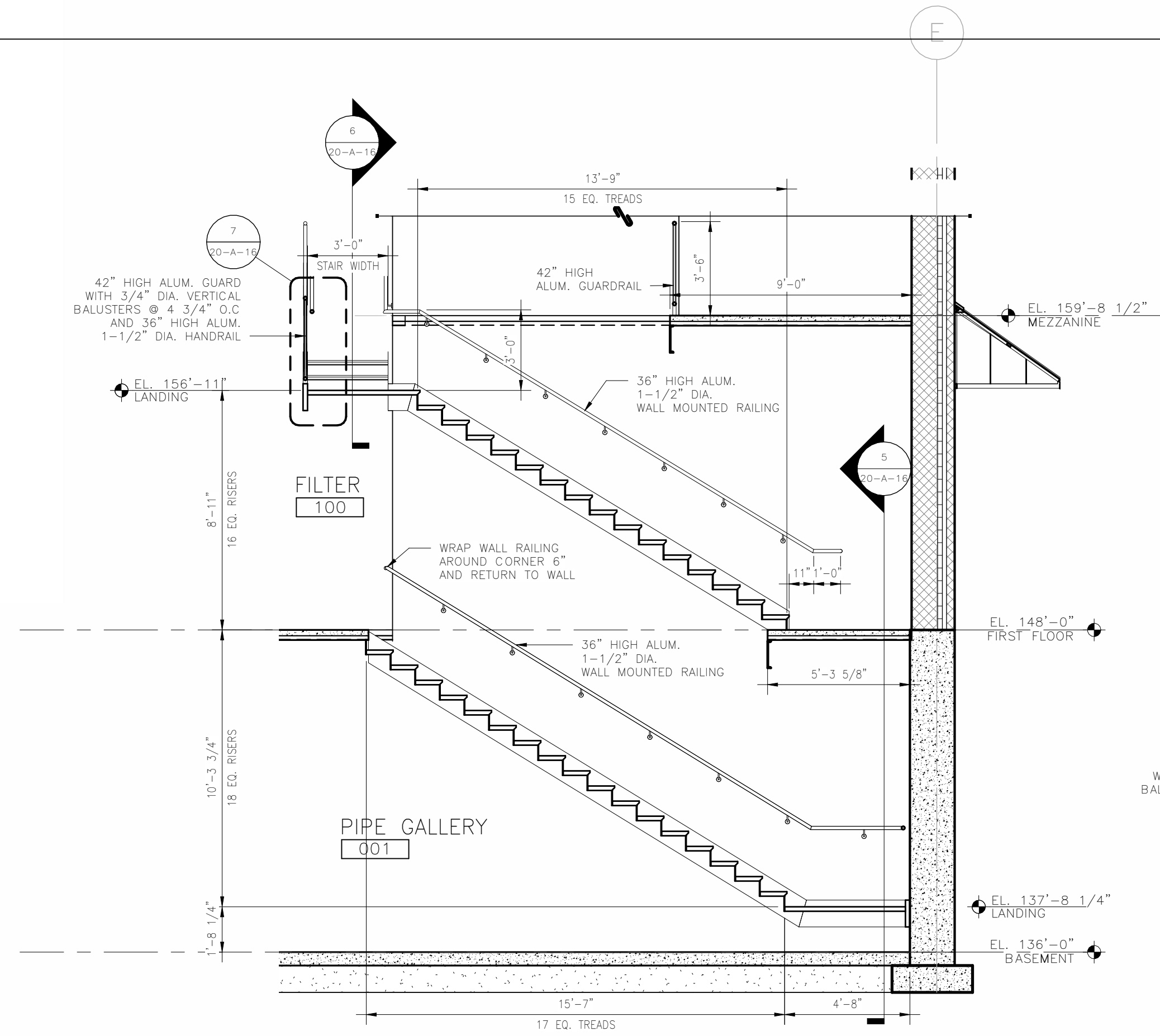
P:\Attiboro\193 Wading River WTP Design\CADD\Sheet\A013-X-Tile Block.dwg 4/29/2016 1:55 PM RBRETT

P:\Attiboro\01933 Wading River WTP Design\CADD\Sheet\WRE\103-x-Tile Block.dwg 4/29/2016 1:55 PM BJB/BETTS



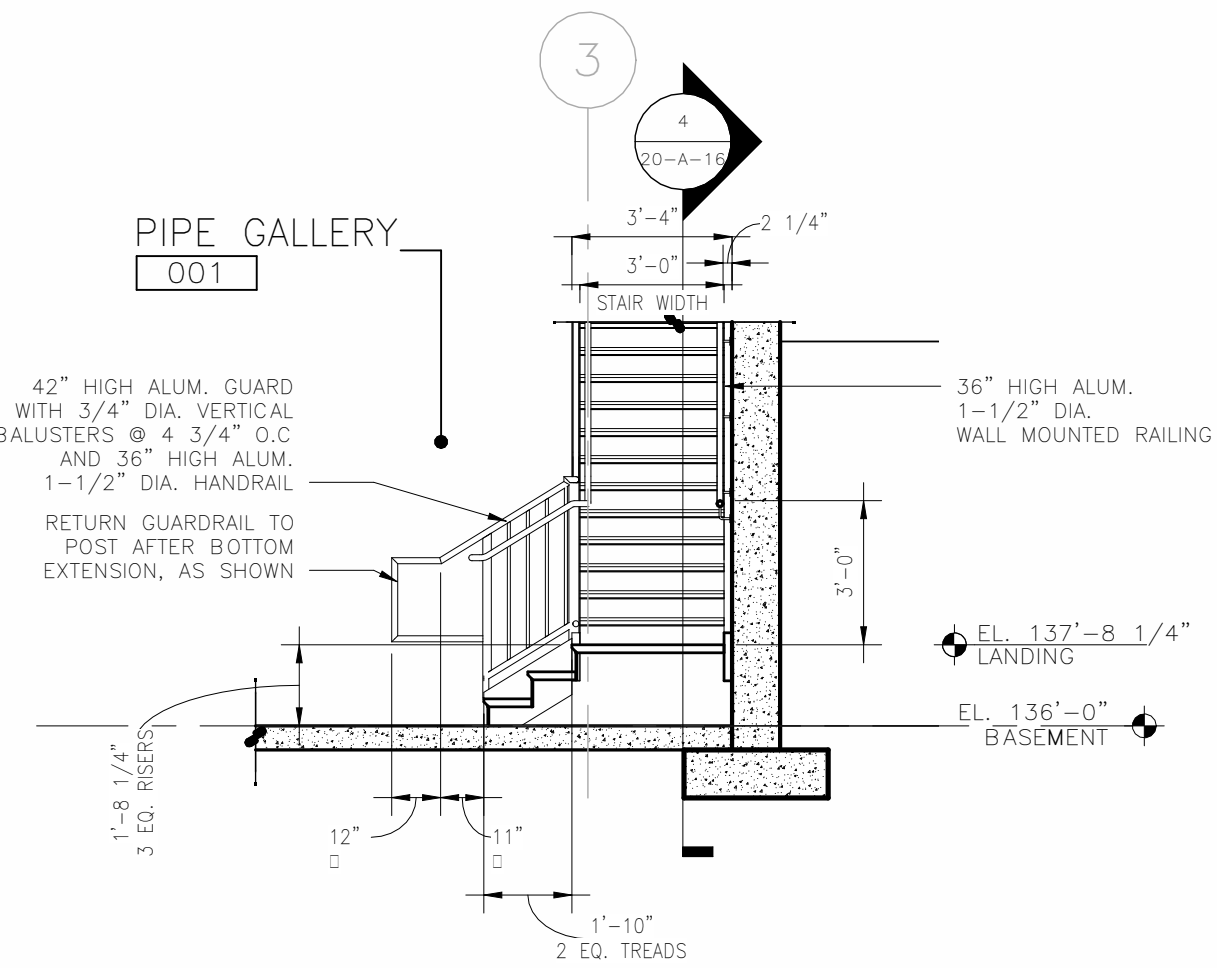
SECTION THROUGH MEZZANINE STAIR

SCALE: 1/4" = 1'-0"



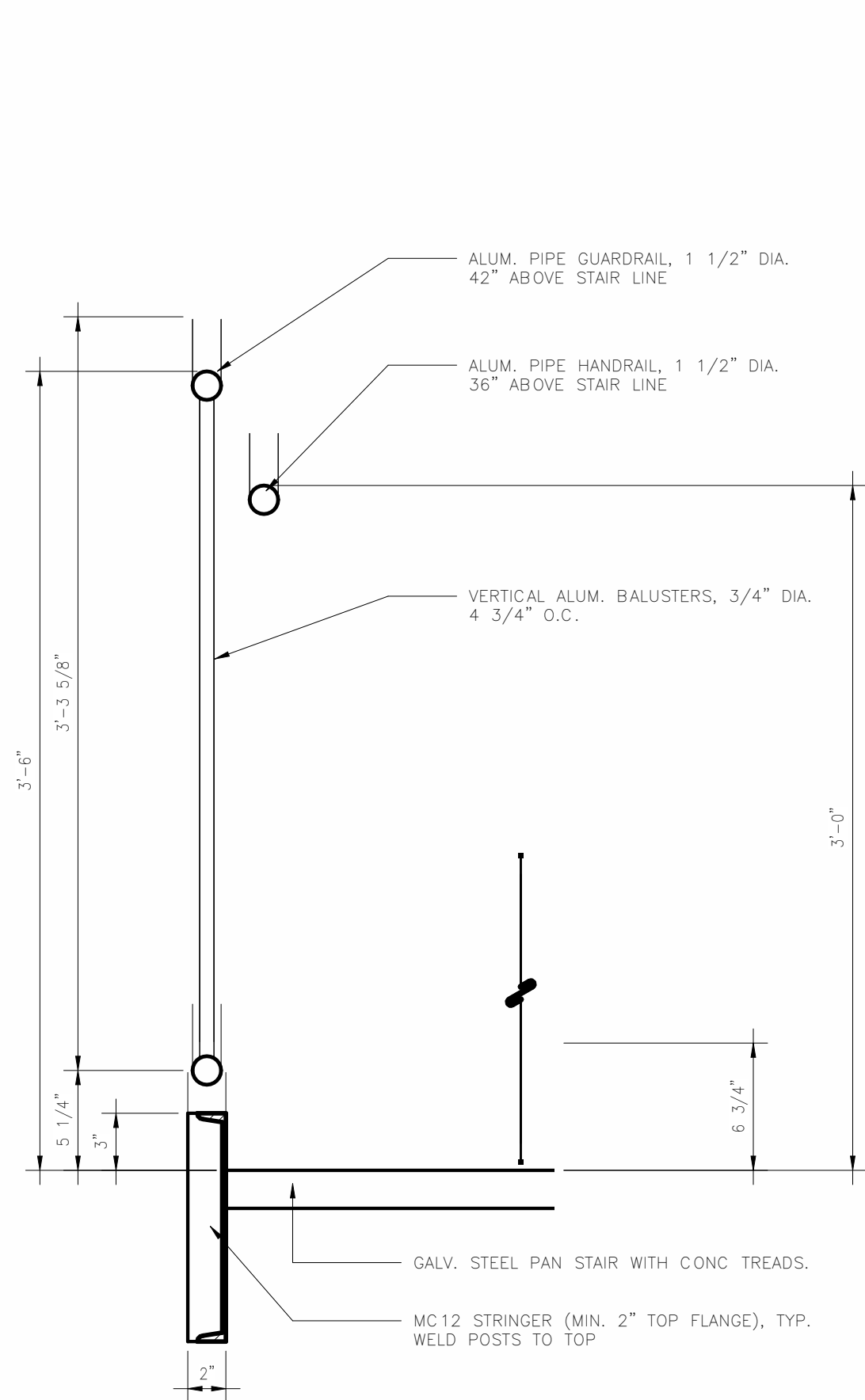
SECTION THROUGH BASEMENT STAIR - 1

SCALE: 1/4" = 1'-0"



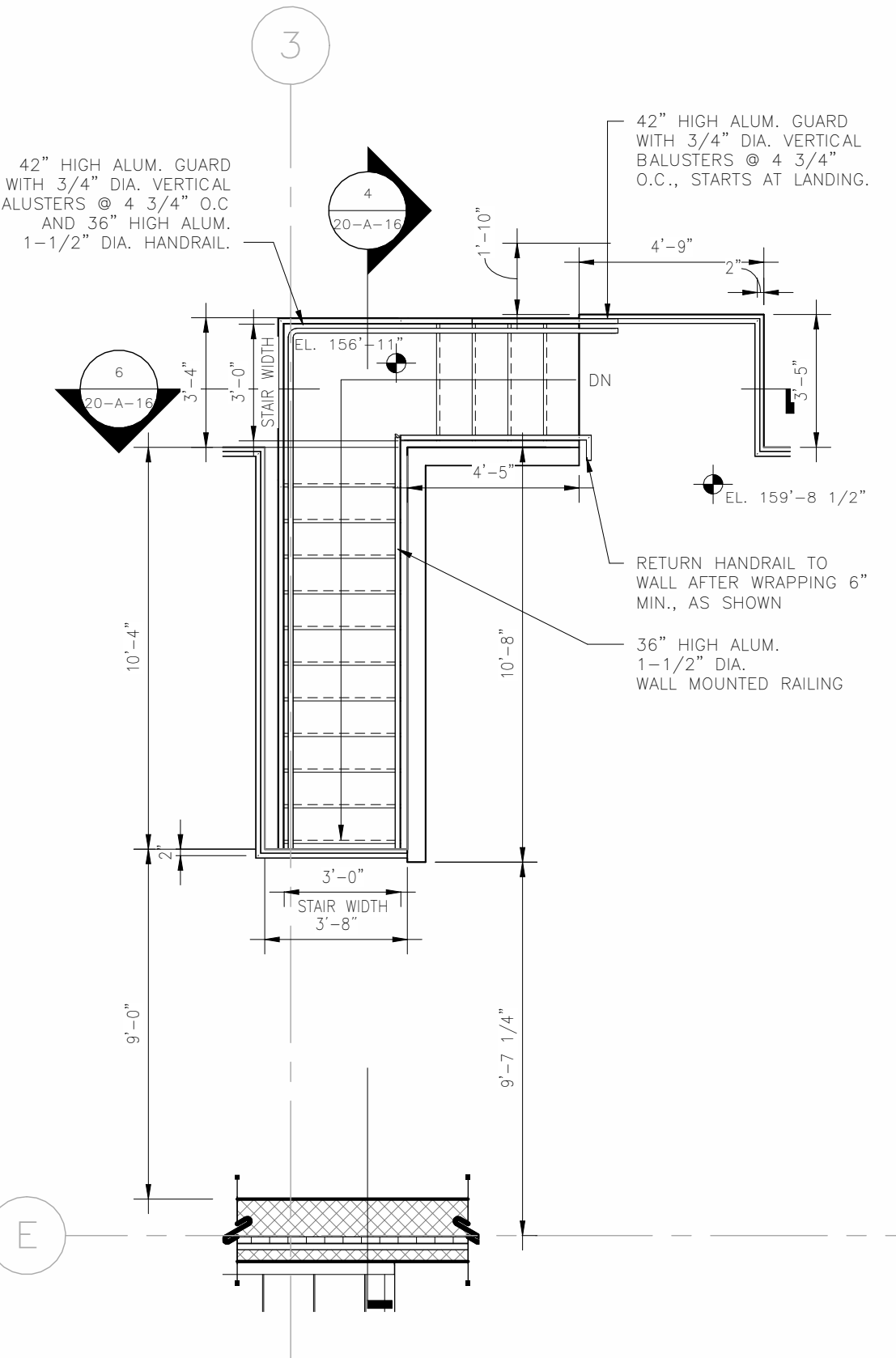
SECTION THROUGH BASEMENT STAIR - 2

SCALE: 1/4" = 1'-0"



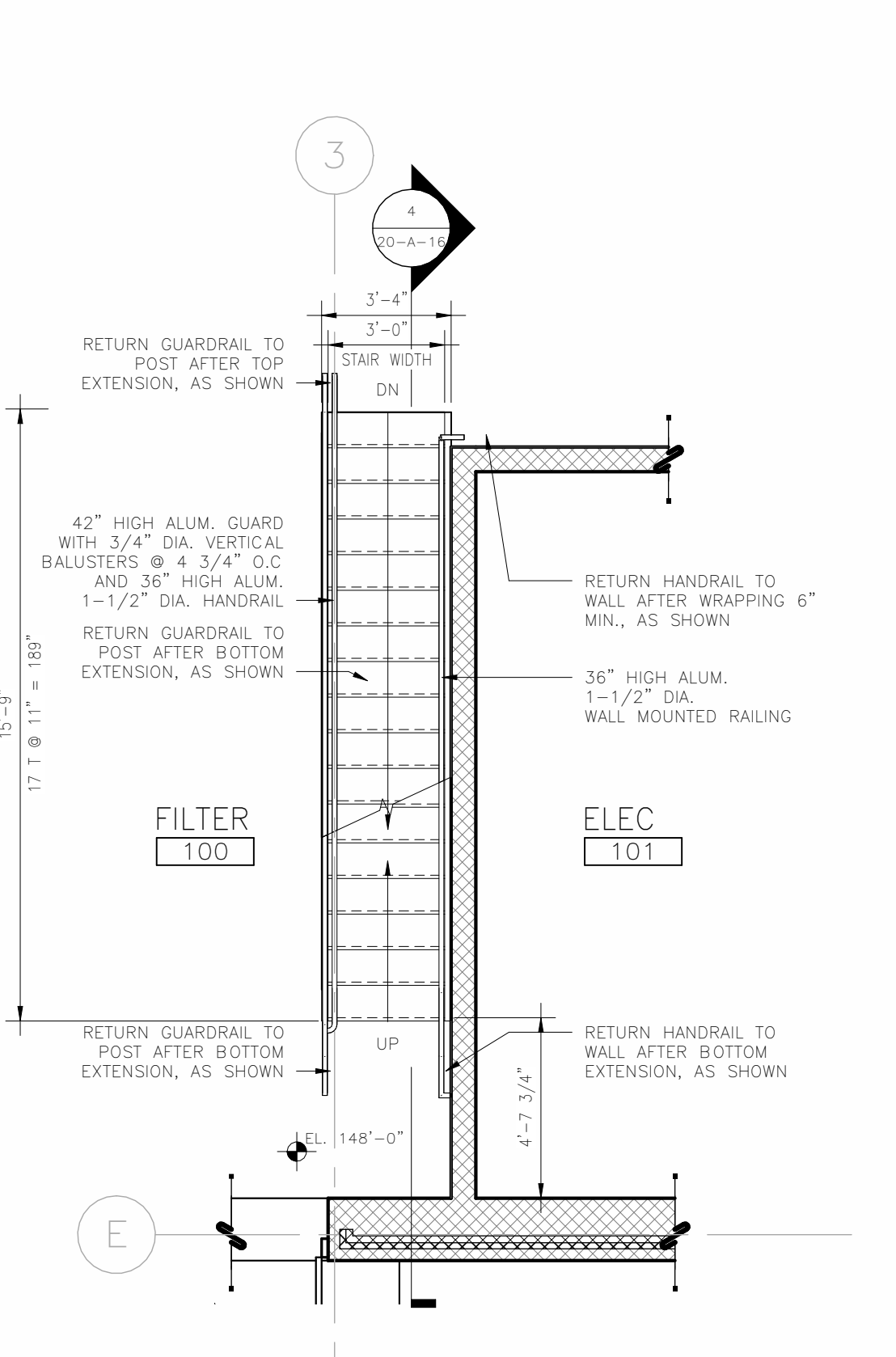
TYPICAL SECTION THROUGH STAIR RAILING

SCALE: 1 1/2" = 1'-0"



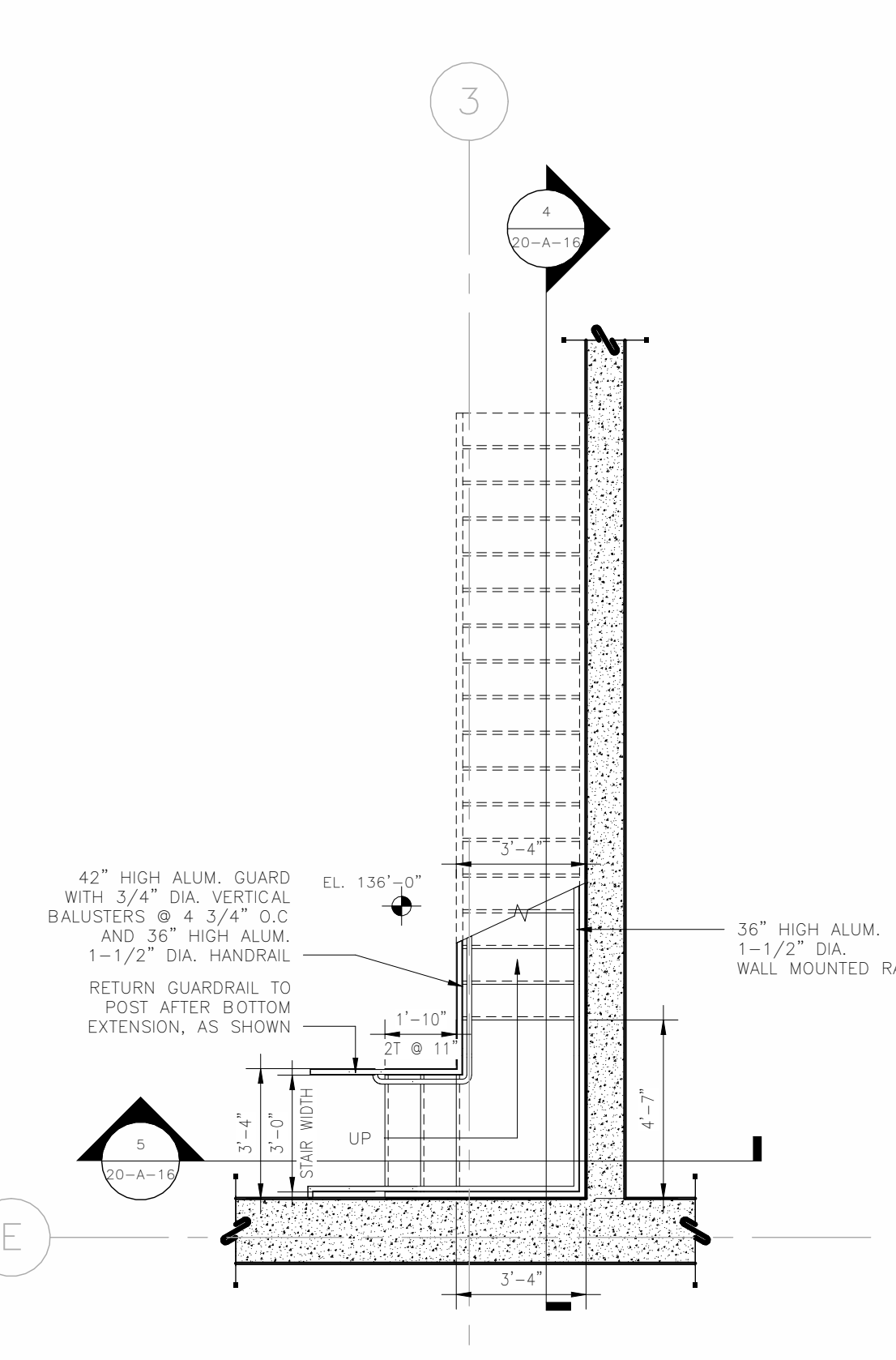
ENLARGED STAIR PLAN - MEZZANINE

SCALE: 1/4" = 1'-0"



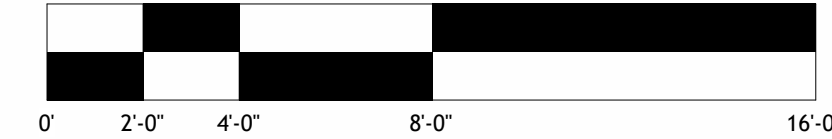
ENLARGED STAIR PLAN - GROUND FLOOR

SCALE: 1/4" = 1'-0"



ENLARGED STAIR PLAN - BASEMENT

SCALE: 1/4" = 1'-0"



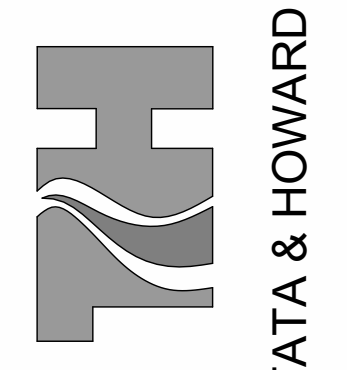
ATTLEBORO WATER DEPT.
ATTLEBORO, MA
WADING RIVER
WATER TREATMENT PLANT

ARCHITECTURAL
STAIR DETAILS

Rev.	Date	Description



G | R | L | A
Gorman Richardson Lewis Architects
239 South Street Hopedkton, MA 01748
www.grlarchitects.com



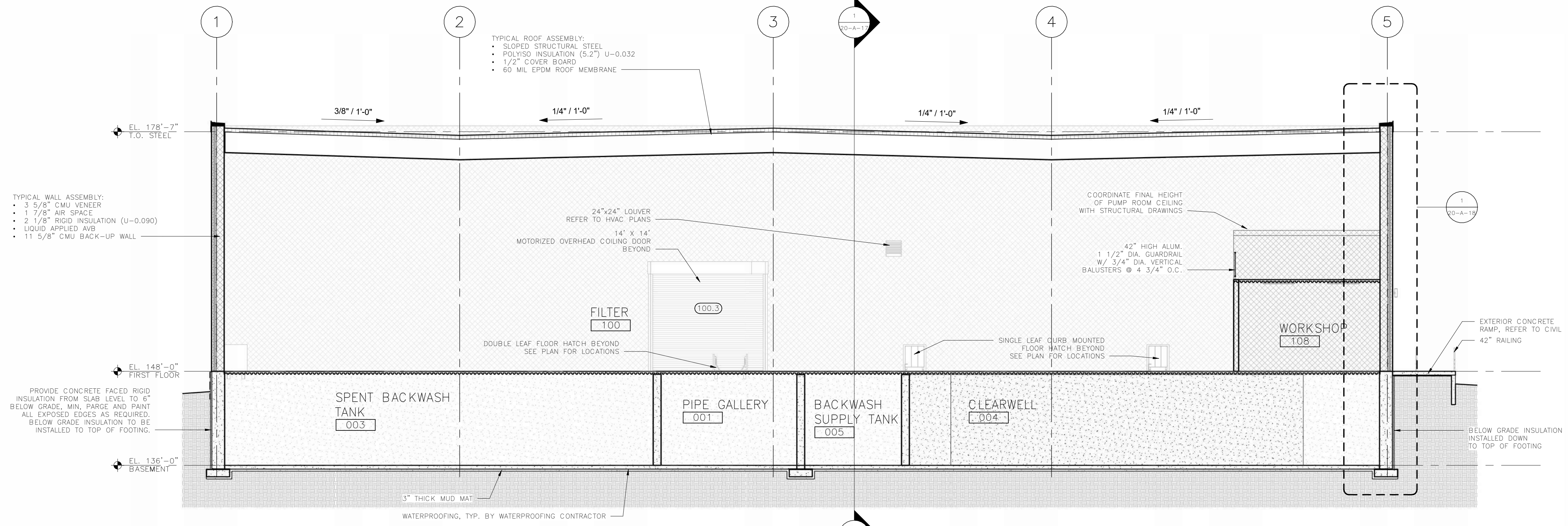
T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE: AS NOTED

20-A-16

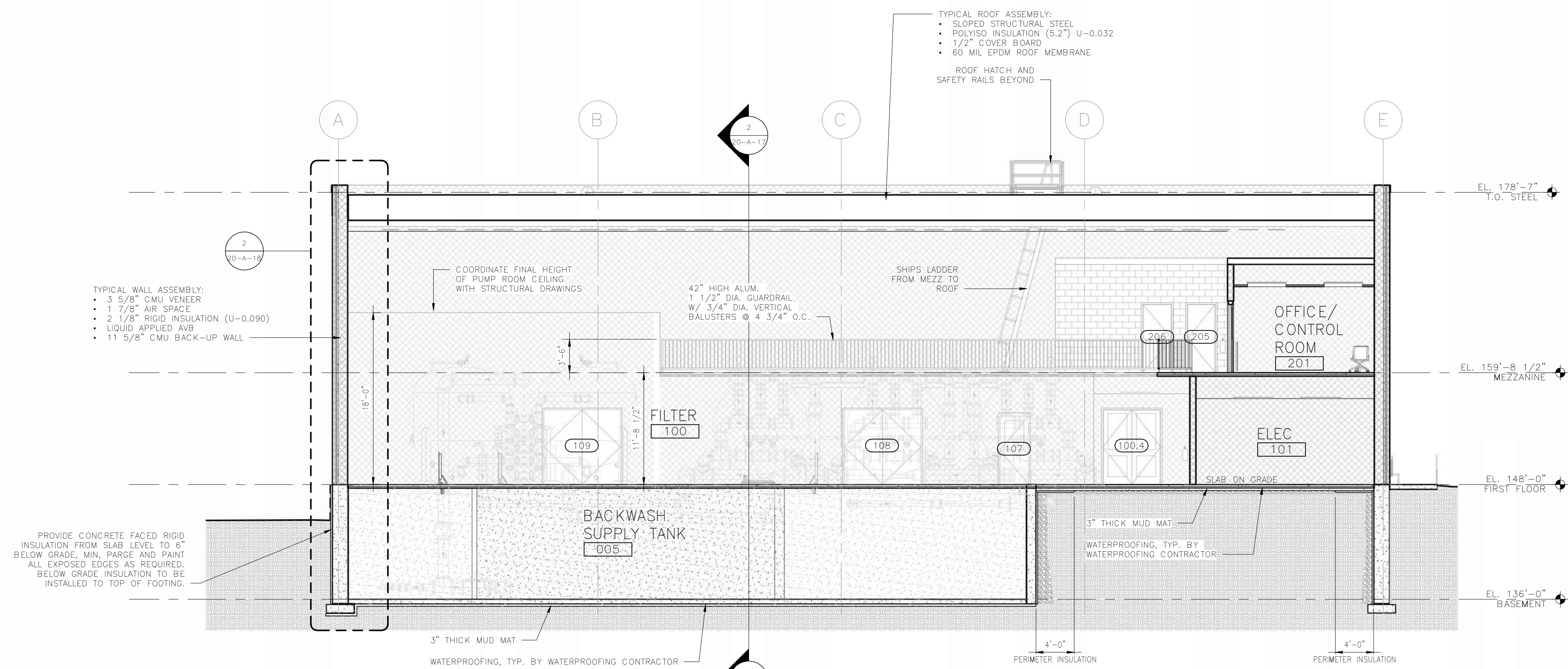
Approved By: SR
Checked By: SR
Designed By: JB/SR

THIS DOCUMENT IS THE PROPERTY OF TATA & HOWARD, INC. AND ITS CLIENT. IT IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREIN. REUSE OR REPRODUCTION WITHOUT WRITTEN CONSENT IS PROHIBITED.

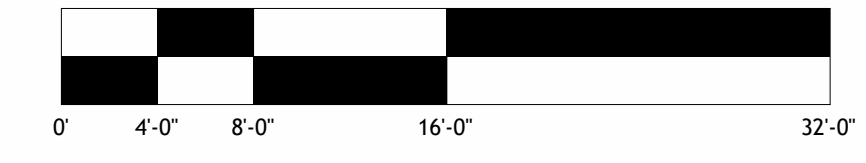
P:\Attiboro\1931 Wading River WTP Design\A020 Sheets\A020-1931-103-104-105-106-107-108-109-110-111-112-113-114-115-116-117-118-119-120-121-122-123-124-125-126-127-128-129-130-131-132-133-134-135-136-137-138-139-140-141-142-143-144-145-146-147-148-149-150-151-152-153-154-155-156-157-158-159-160-161-162-163-164-165-166-167-168-169-170-171-172-173-174-175-176-177-178-179-180-181-182-183-184-185-186-187-188-189-190-191-192-193-194-195-196-197-198-199-200-201-202-203-204-205-206-207-208-209-210-211-212-213-214-215-216-217-218-219-220-221-222-223-224-225-226-227-228-229-230-231-232-233-234-235-236-237-238-239-240-241-242-243-244-245-246-247-248-249-250-251-252-253-254-255-256-257-258-259-260-261-262-263-264-265-266-267-268-269-270-271-272-273-274-275-276-277-278-279-280-281-282-283-284-285-286-287-288-289-290-291-292-293-294-295-296-297-298-299-300-301-302-303-304-305-306-307-308-309-310-311-312-313-314-315-316-317-318-319-320-321-322-323-324-325-326-327-328-329-330-331-332-333-334-335-336-337-338-339-340-341-342-343-344-345-346-347-348-349-350-351-352-353-354-355-356-357-358-359-360-361-362-363-364-365-366-367-368-369-370-371-372-373-374-375-376-377-378-379-380-381-382-383-384-385-386-387-388-389-390-391-392-393-394-395-396-397-398-399-400-401-402-403-404-405-406-407-408-409-410-411-412-413-414-415-416-417-418-419-420-421-422-423-424-425-426-427-428-429-430-431-432-433-434-435-436-437-438-439-440-441-442-443-444-445-446-447-448-449-450-451-452-453-454-455-456-457-458-459-460-461-462-463-464-465-466-467-468-469-470-471-472-473-474-475-476-477-478-479-480-481-482-483-484-485-486-487-488-489-490-491-492-493-494-495-496-497-498-499-500-501-502-503-504-505-506-507-508-509-510-511-512-513-514-515-516-517-518-519-520-521-522-523-524-525-526-527-528-529-530-531-532-533-534-535-536-537-538-539-540-541-542-543-544-545-546-547-548-549-550-551-552-553-554-555-556-557-558-559-560-561-562-563-564-565-566-567-568-569-570-571-572-573-574-575-576-577-578-579-580-581-582-583-584-585-586-587-588-589-590-591-592-593-594-595-596-597-598-599-600-601-602-603-604-605-606-607-608-609-610-611-612-613-614-615-616-617-618-619-620-621-622-623-624-625-626-627-628-629-630-631-632-633-634-635-636-637-638-639-640-641-642-643-644-645-646-647-648-649-650-651-652-653-654-655-656-657-658-659-660-661-662-663-664-665-666-667-668-669-670-671-672-673-674-675-676-677-678-679-680-681-682-683-684-685-686-687-688-689-690-691-692-693-694-695-696-697-698-699-700-701-702-703-704-705-706-707-708-709-710-711-712-713-714-715-716-717-718-719-720-721-722-723-724-725-726-727-728-729-730-731-732-733-734-735-736-737-738-739-740-741-742-743-744-745-746-747-748-749-750-751-752-753-754-755-756-757-758-759-760-761-762-763-764-765-766-767-768-769-770-771-772-773-774-775-776-777-778-779-780-781-782-783-784-785-786-787-788-789-790-791-792-793-794-795-796-797-798-799-800-801-802-803-804-805-806-807-808-809-810-811-812-813-814-815-816-817-818-819-820-821-822-823-824-825-826-827-828-829-830-831-832-833-834-835-836-837-838-839-840-841-842-843-844-845-846-847-848-849-850-851-852-853-854-855-856-857-858-859-860-861-862-863-864-865-866-867-868-869-870-871-872-873-874-875-876-877-878-879-880-881-882-883-884-885-886-887-888-889-890-891-892-893-894-895-896-897-898-899-900-901-902-903-904-905-906-907-908-909-910-911-912-913-914-915-916-917-918-919-920-921-922-923-924-925-926-927-928-929-930-931-932-933-934-935-936-937-938-939-940-941-942-943-944-945-946-947-948-949-950-951-952-953-954-955-956-957-958-959-960-961-962-963-964-965-966-967-968-969-970-971-972-973-974-975-976-977-978-979-980-981-982-983-984-985-986-987-988-989-990-991-992-993-994-995-996-997-998-999-1000



2 LONG SECTION
SCALE: 1/8" = 1'-0"



1 CROSS SECTION
SCALE: 1/8" = 1'-0"



ATTLEBORO WATER DEPT.
ATTLEBORO, MA
WADING RIVER
WATER TREATMENT PLANT

ARCHITECTURAL
SECTIONS

Rev.	Date	Description



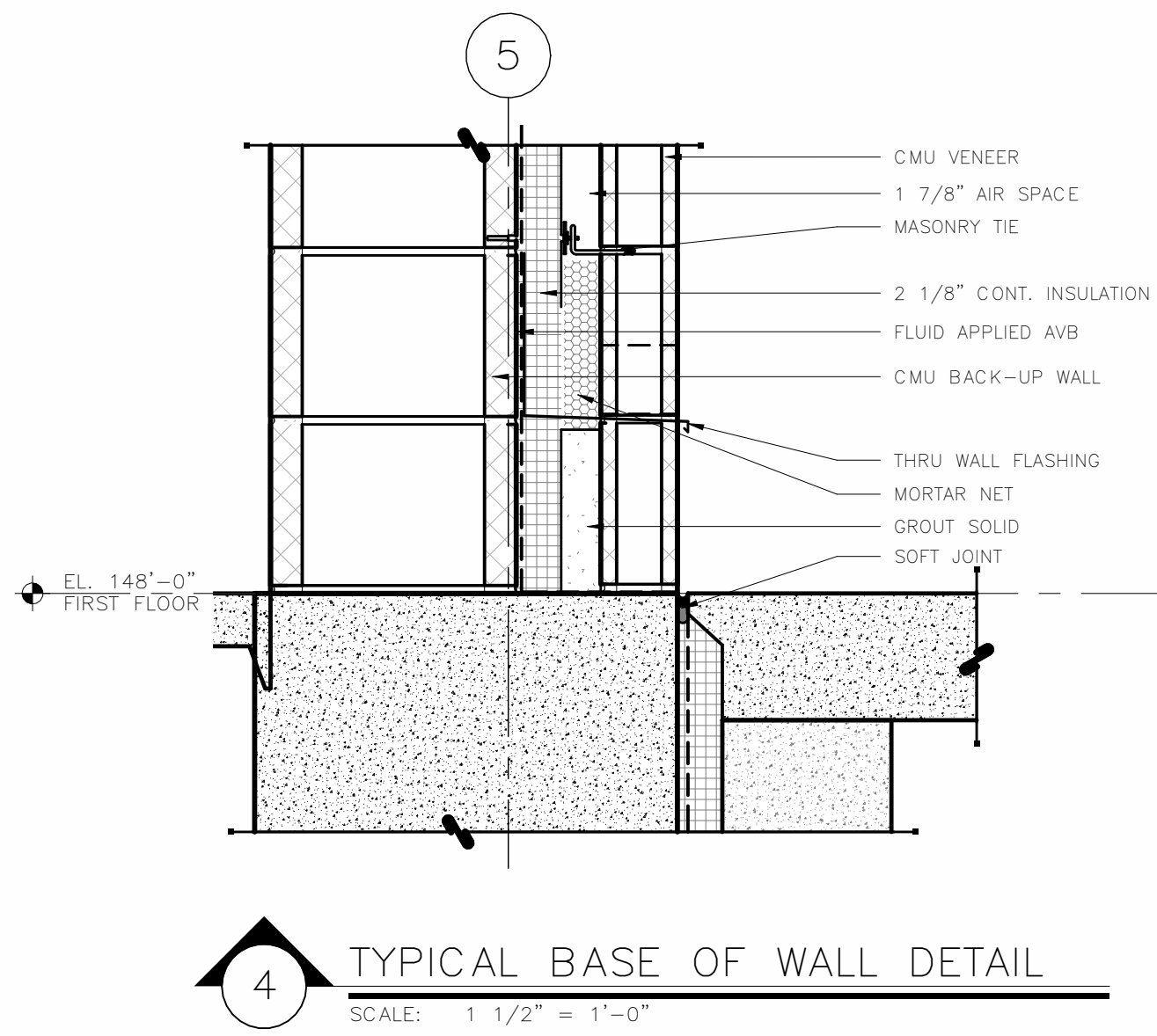
G | R | L | A
Cormac Richardson Lewis Architects
239 South Street Hopedkton, MA 01748
www.grlarchitects.com

TATA & HOWARD

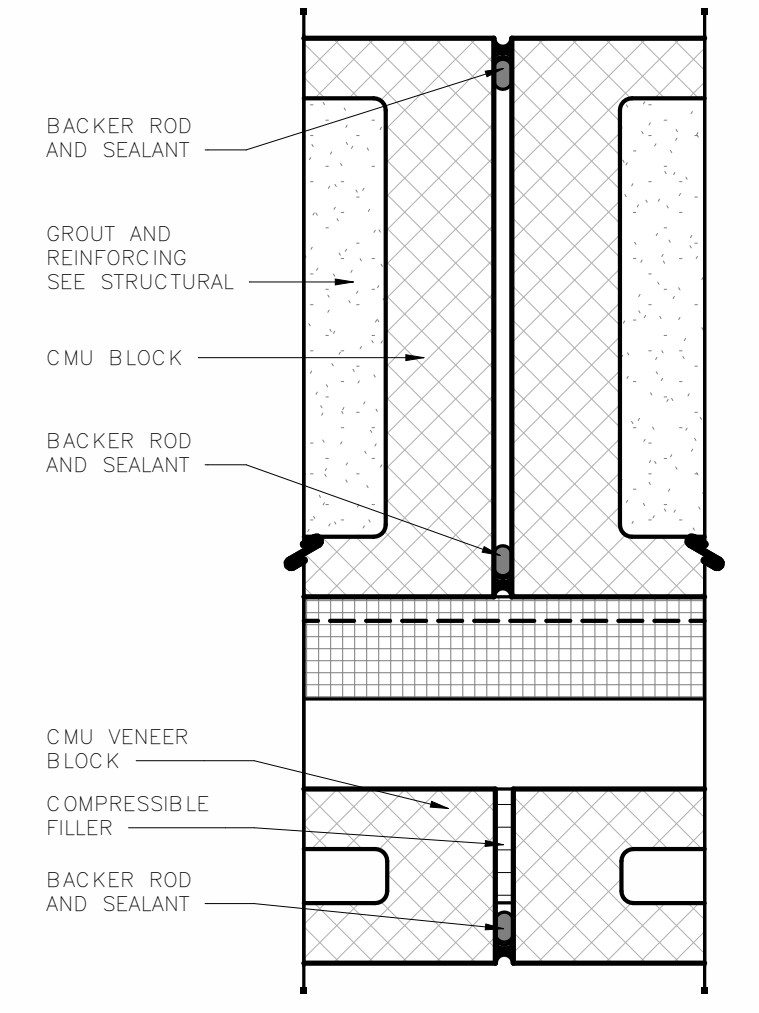
T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE: AS NOTED

20-A-17

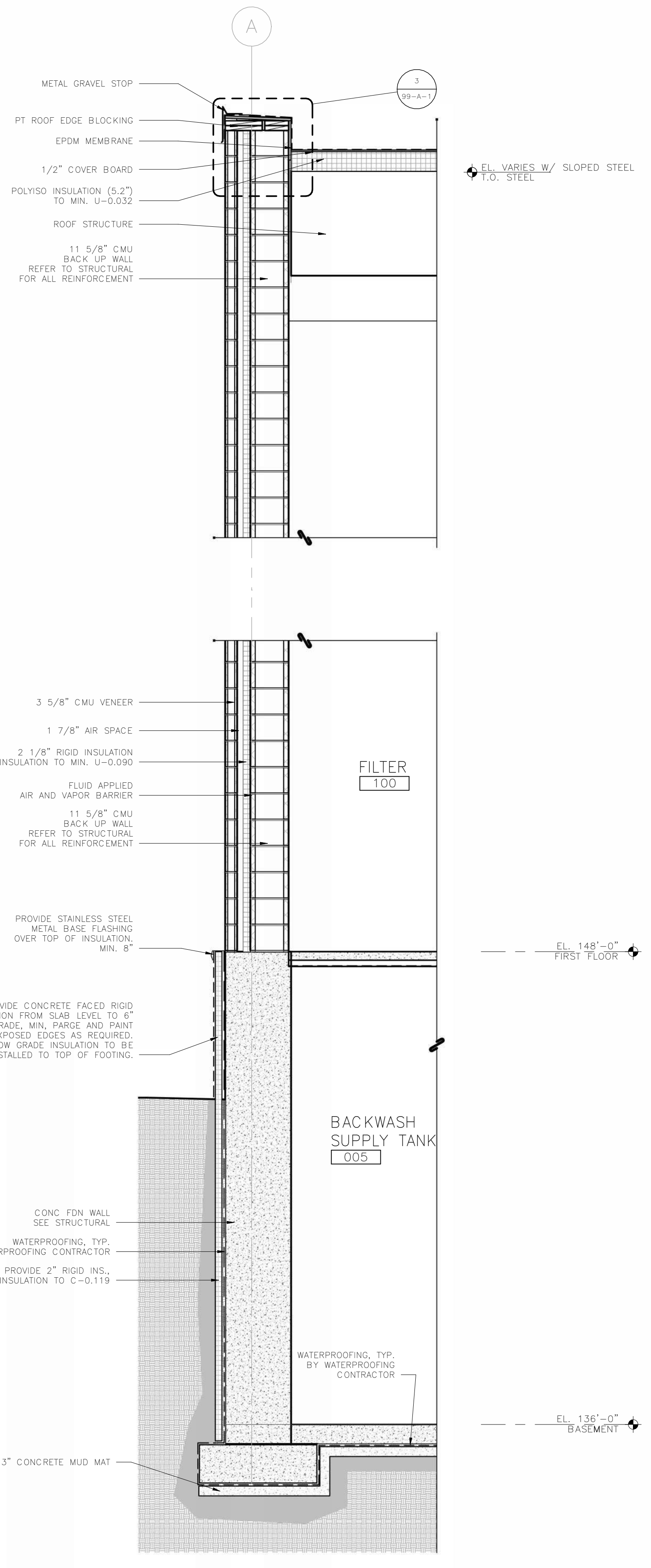
THIS DOCUMENT IS THE PROPERTY OF TATA & HOWARD, INC. AND ITS CLIENT. APPROPRIATE USE OR REPRODUCTION WITHOUT WRITTEN CONSENT IS PROHIBITED.
 Drawn By: JB
 Checked By: JSR
 Approved By: SR



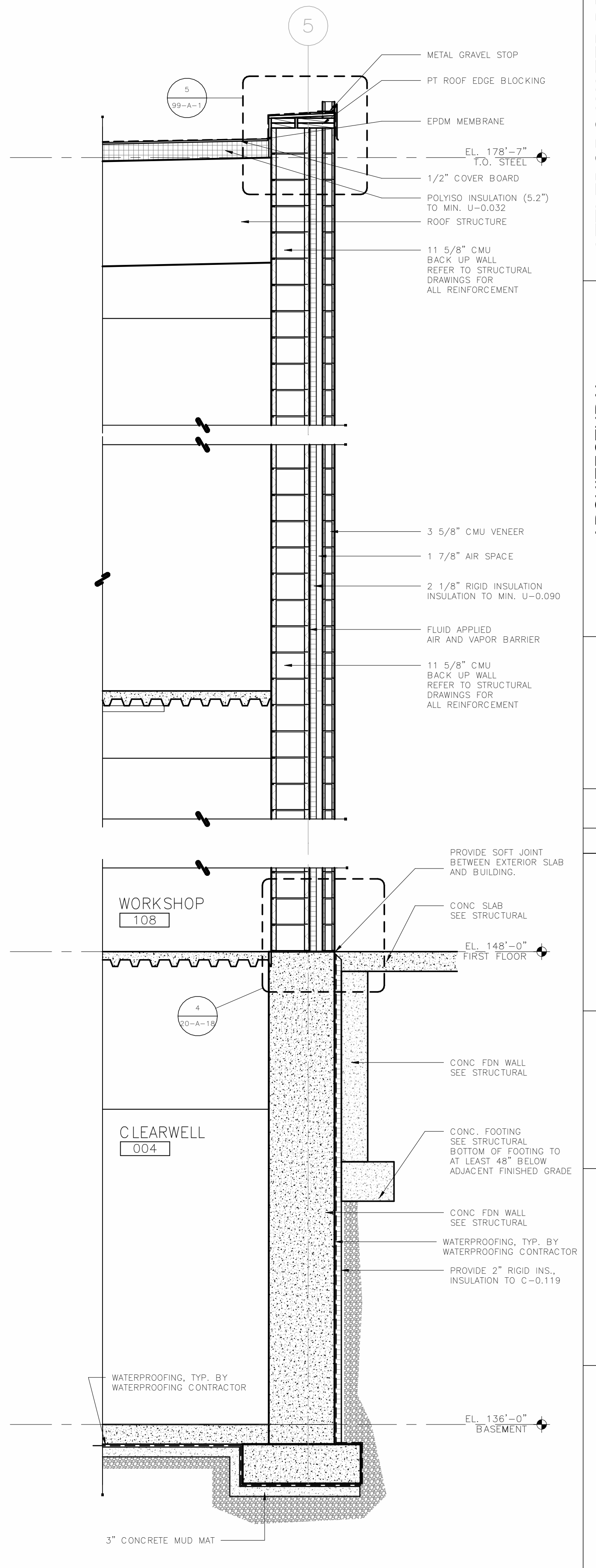
4 TYPICAL BASE OF WALL DETAIL
SCALE: 1 1/2" = 1'-0"



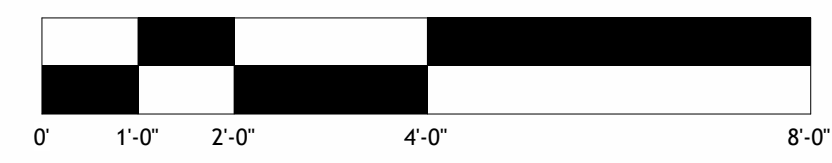
3 TYPICAL CONTROL JOINT
SCALE: 3" = 1'-0"



2 WALL SECTION - JOIST GIRDER
SCALE: 1/2" = 1'-0"



1 WALL SECTION - JOISTS
SCALE: 1/2" = 1'-0"



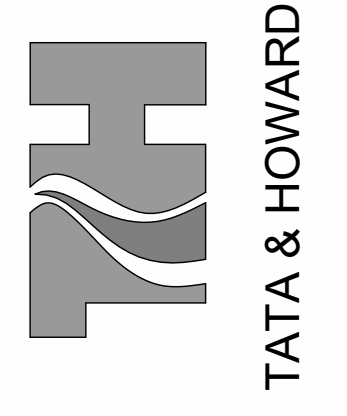
ATTLEBORO WATER DEPT.
ATTLEBORO, MA
WADING RIVER
WATER TREATMENT PLANT

ARCHITECTURAL
WALL SECTIONS

Rev.	Date	Description



G | R | L | A
Corman Richardson Lewis Architects
239 South Street Hopedkton, MA 01748
www.grlarchitects.com



T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE: AS NOTED

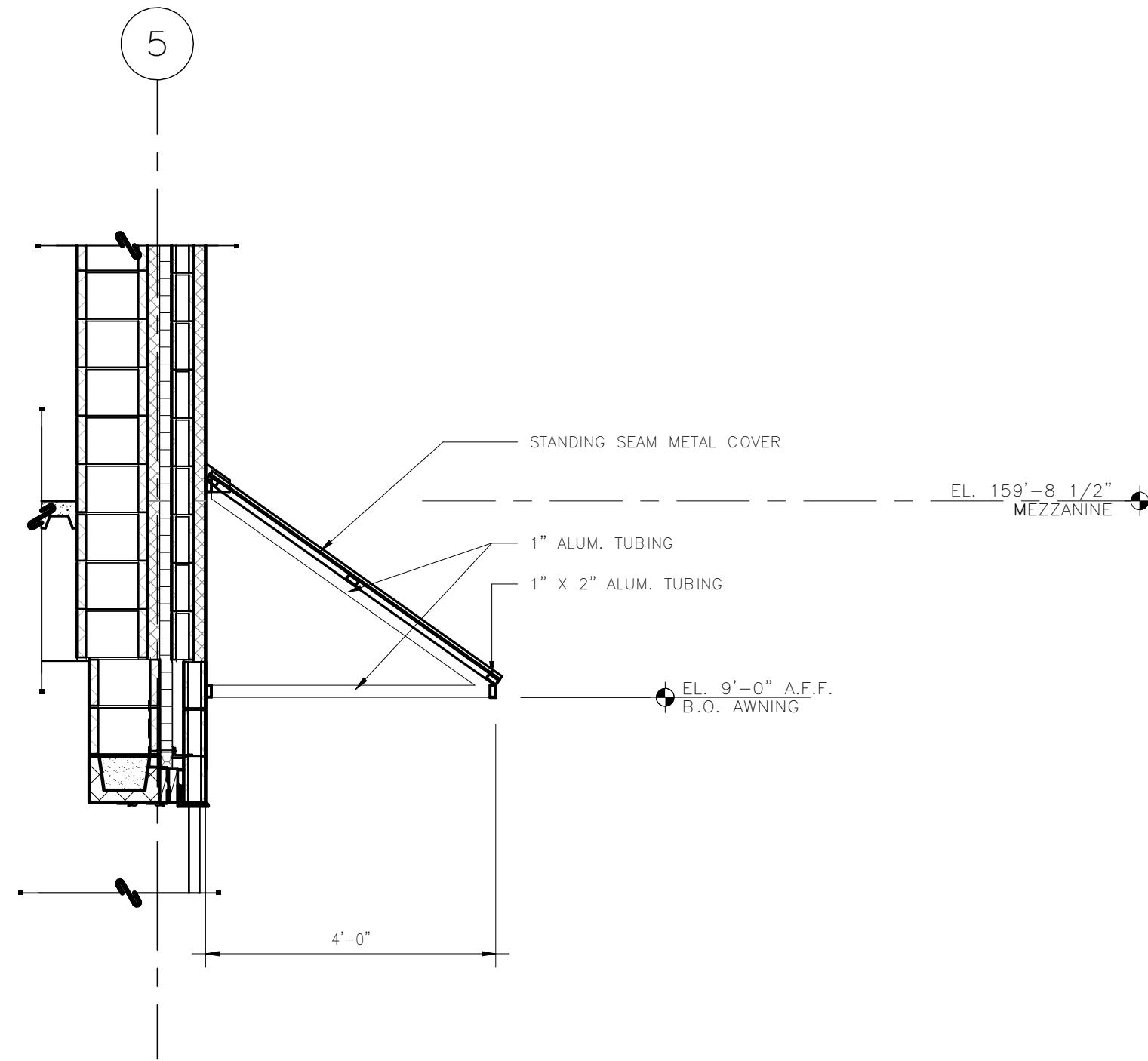
20-A-18

THIS DOCUMENT IS THE PROPERTY OF TATA & HOWARD, INC. AND ITS CLIENT. REPRODUCTION OR ADAPTATION WITHOUT WRITTEN CONSENT IS PROHIBITED.

Designed By: JB/SR Checked By: SR
Drawn By: JB

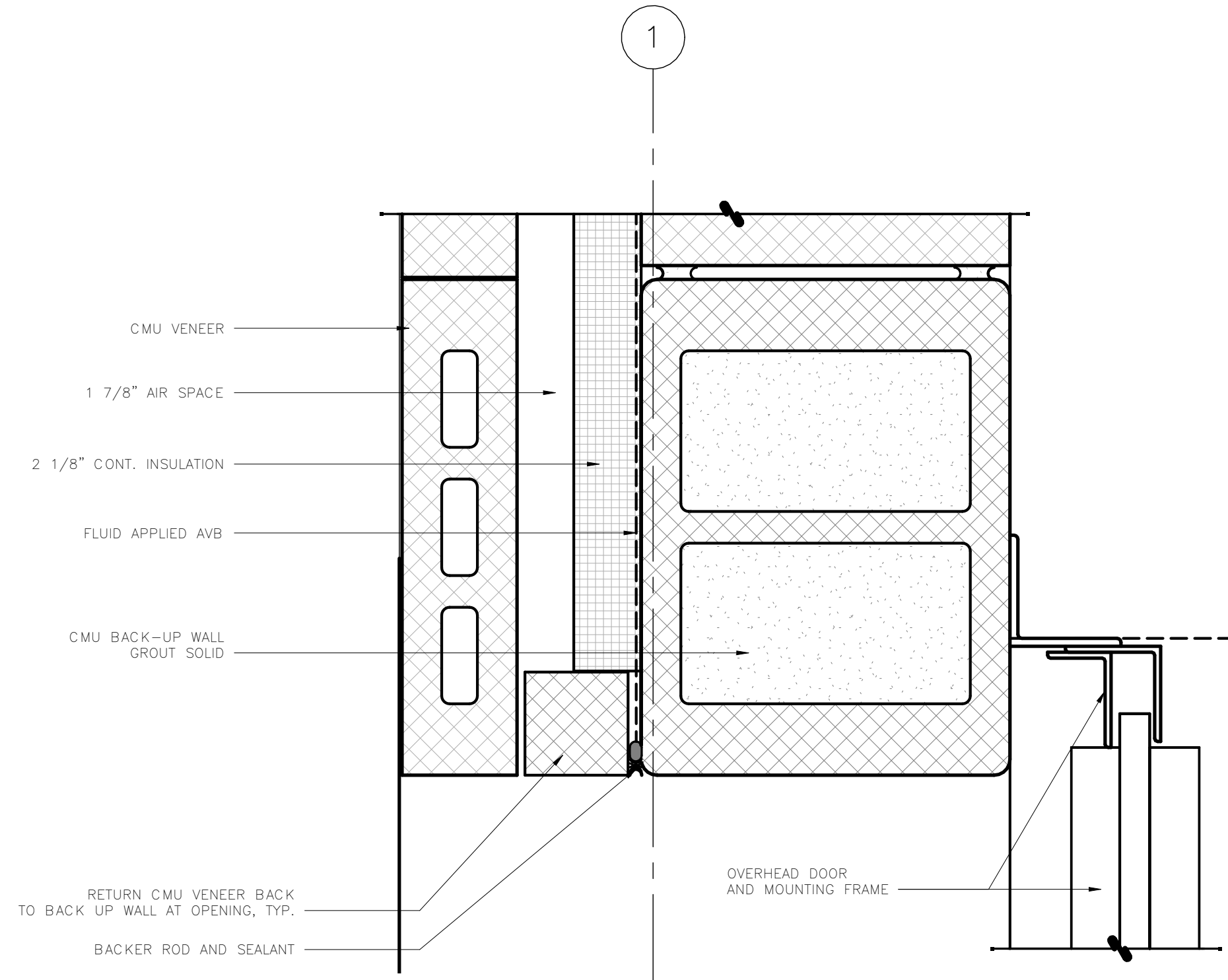
Approved By: SR

P:\Attiboro\0193_Wading River WTP_Design\CADD\Sheet\AREA\0193-WR-Tile_Block.dwg 4/29/2016 1:55 PM BJB/BETTS



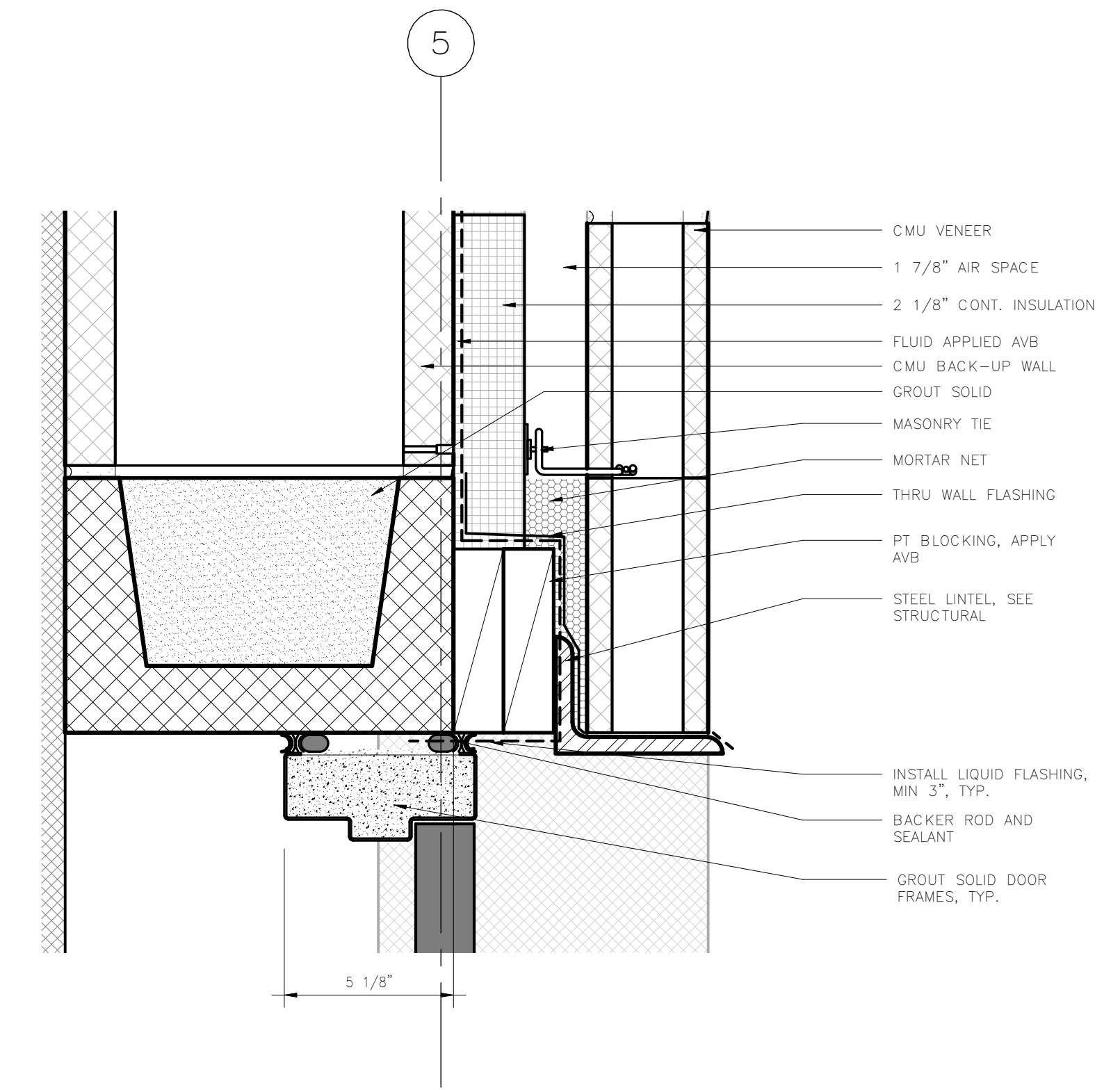
6 TYPICAL METAL AWNING DETAIL

SCALE: 1/2" = 1'-0"



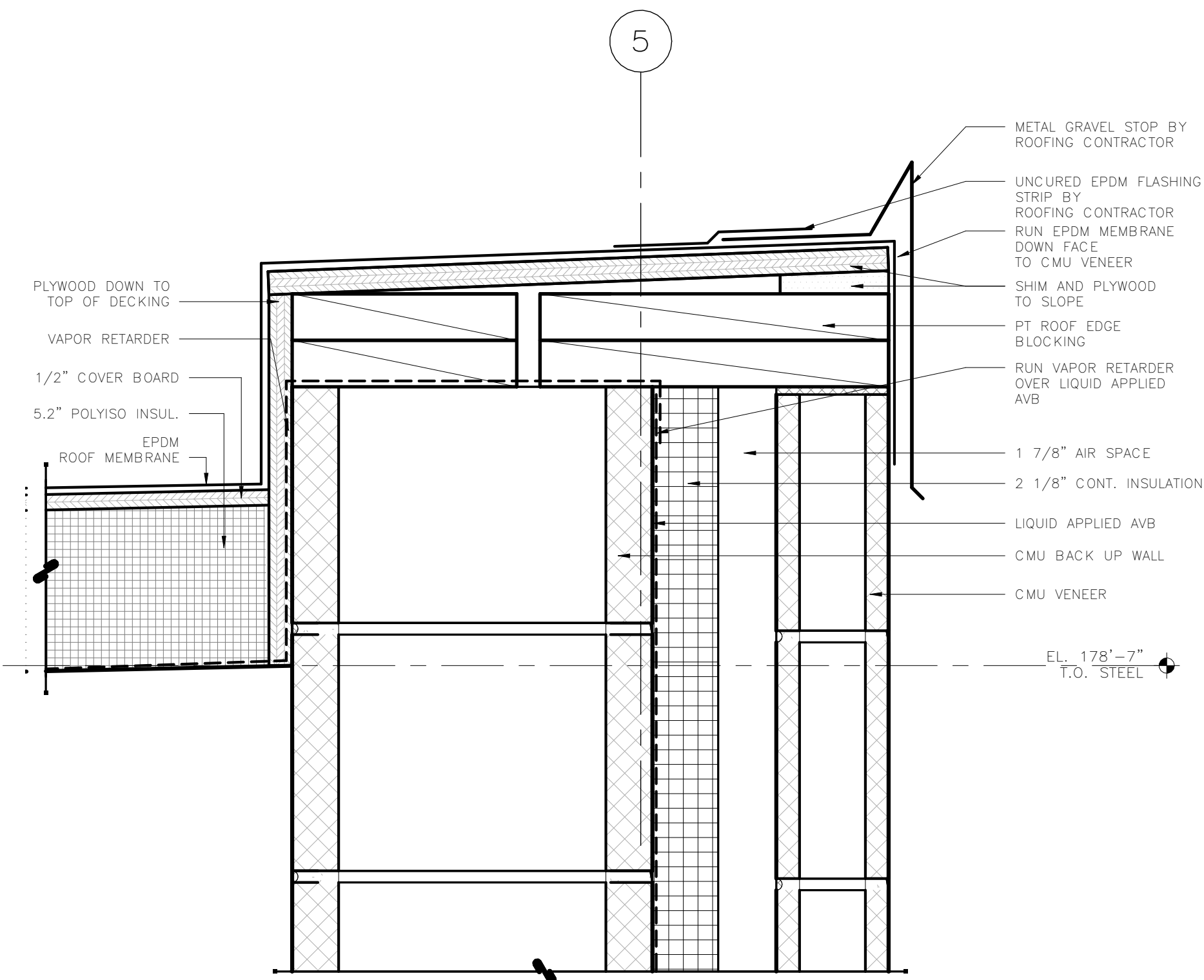
4 TYPICAL OVERHEAD DOOR JAMB DETAIL

SCALE: 3" = 1'-0"



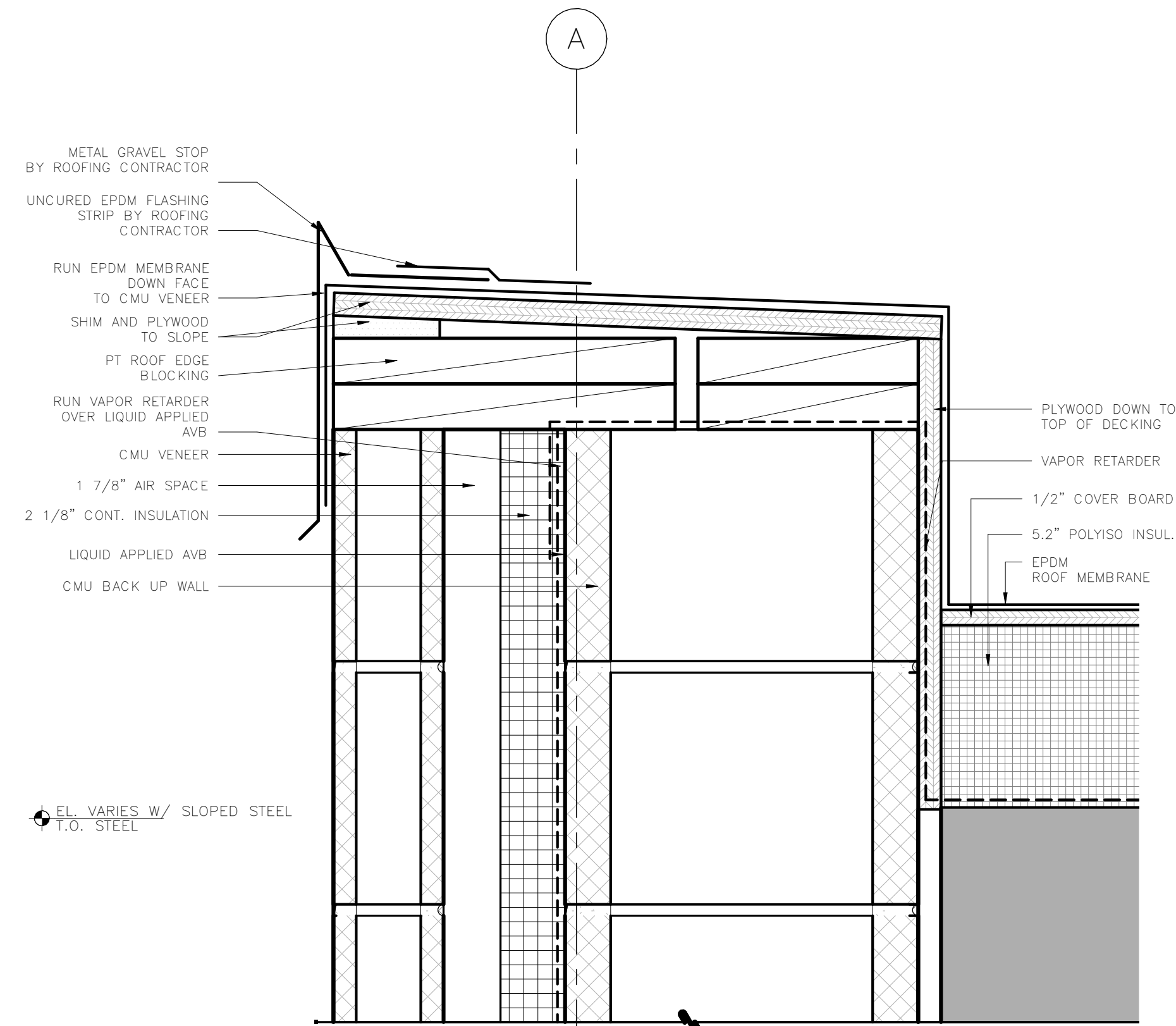
2 DETAIL AT EXTERIOR DOOR HEAD, TYP.

SCALE: 3" = 1'-0"



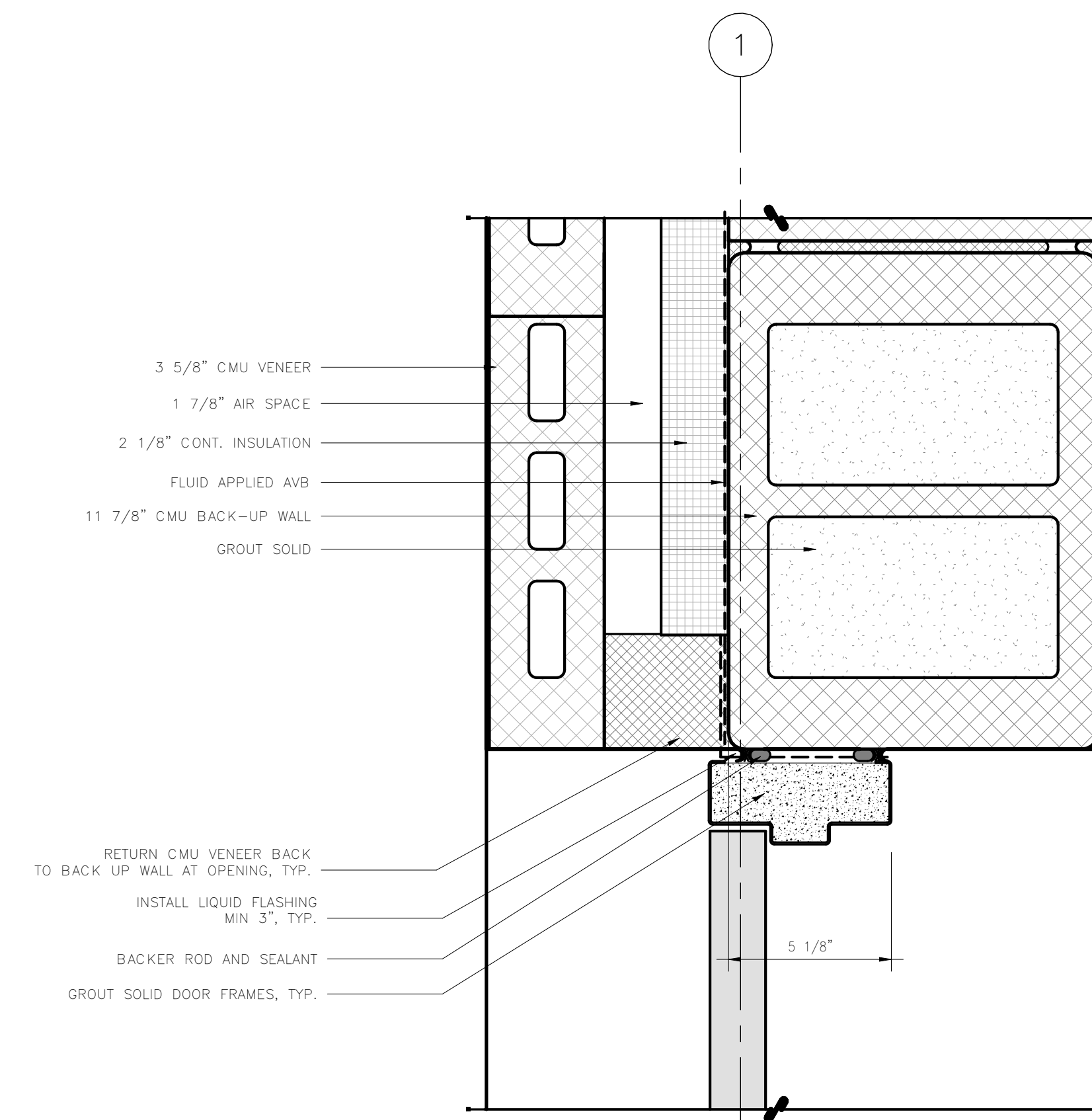
5 ROOF EDGE DETAIL AT JOISTS

SCALE: 3" = 1'-0"



3 ROOF EDGE DETAIL AT JOIST GIRDER

SCALE: 3" = 1'-0"



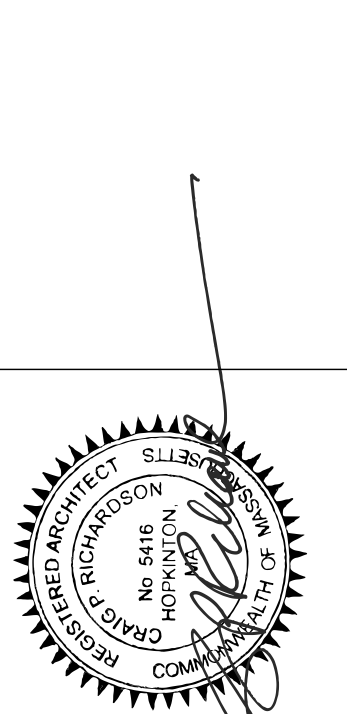
1 TYPICAL EXTERIOR DOOR JAMB DETAIL

SCALE: 3" = 1'-0"

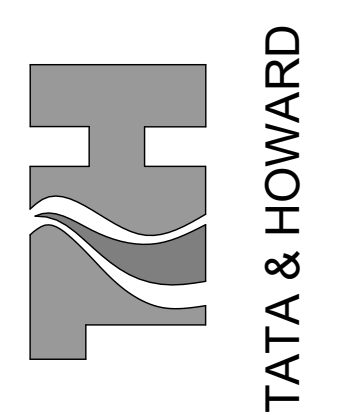
ATTLEBORO WATER DEPT.
ATTLEBORO, MA
WADING RIVER
WATER TREATMENT PLANT

ARCHITECTURAL
ENLARGED DETAILS

Rev.	Date	Description



G | R | L | A
Corman Richardson Lewis Architects
239 South Street Hopedkote, MA 01748
www.grlarch.com

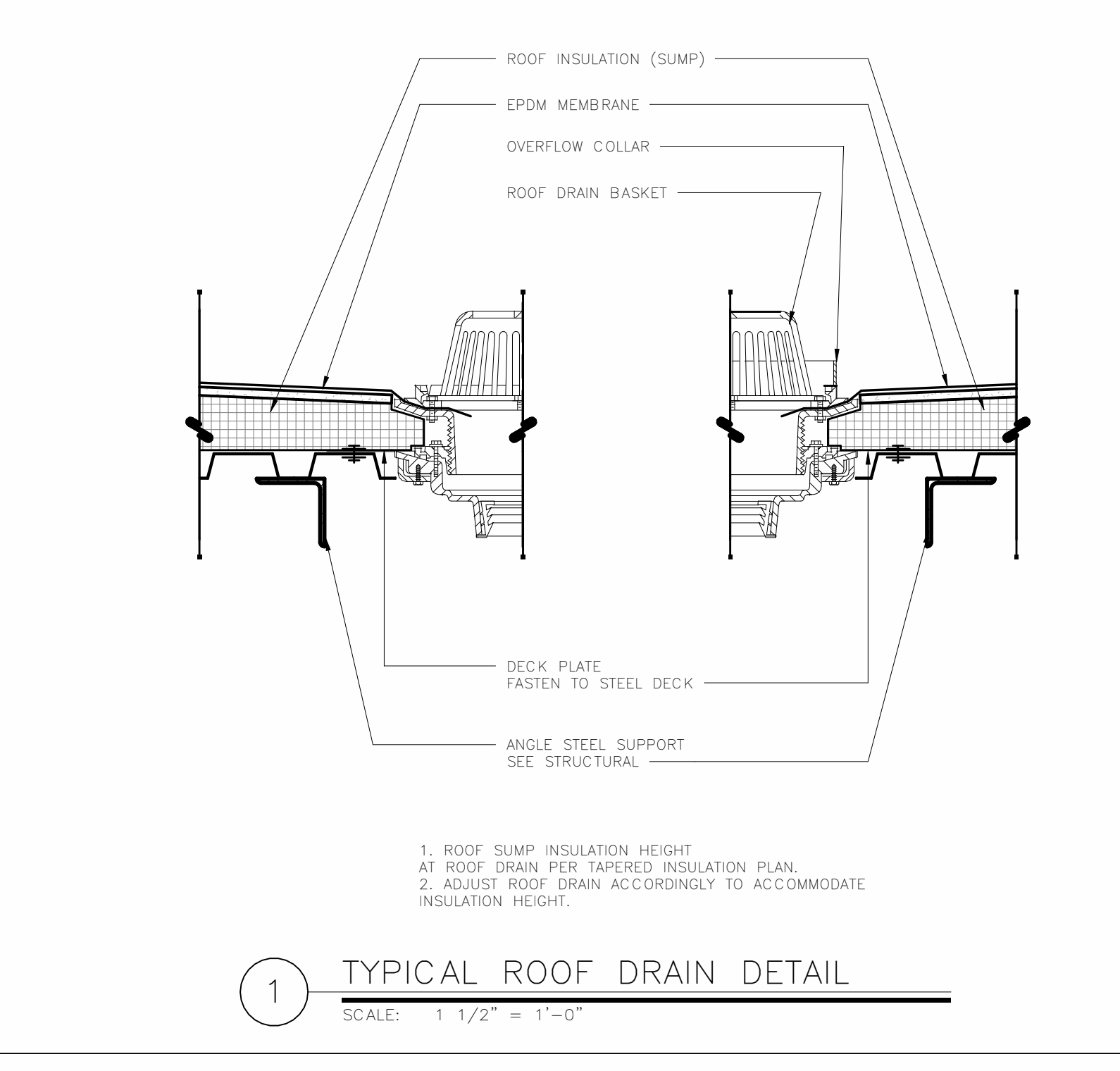
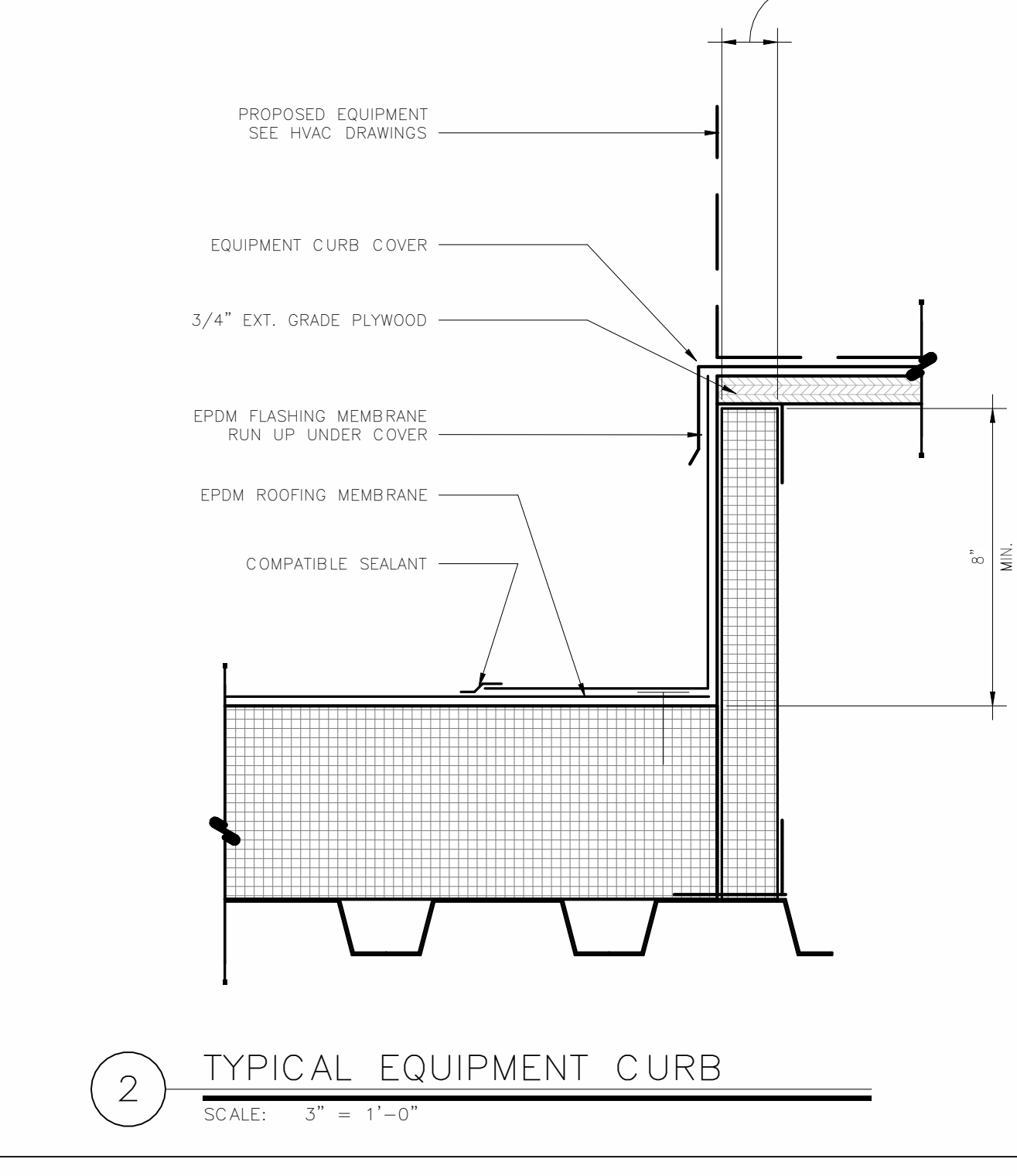
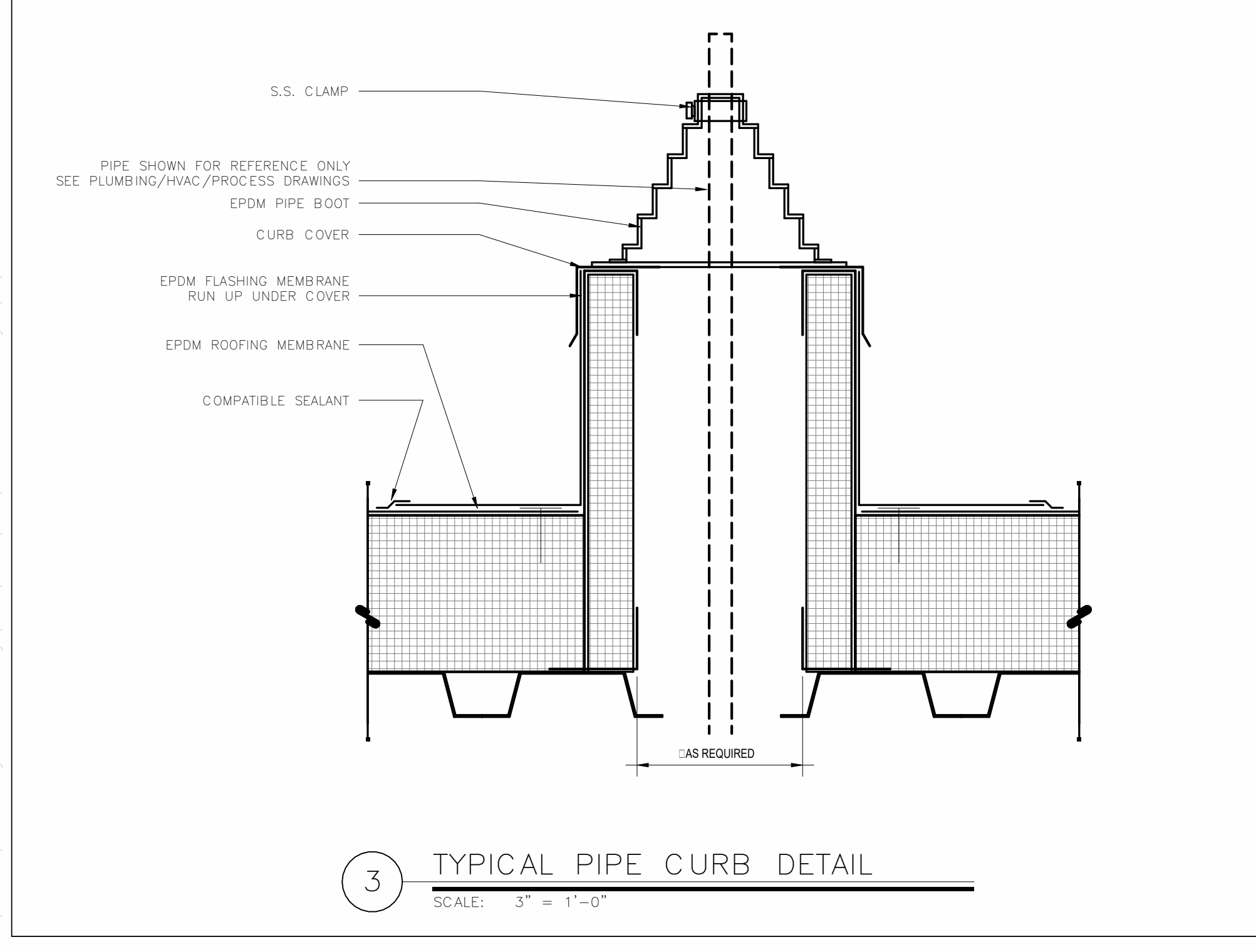
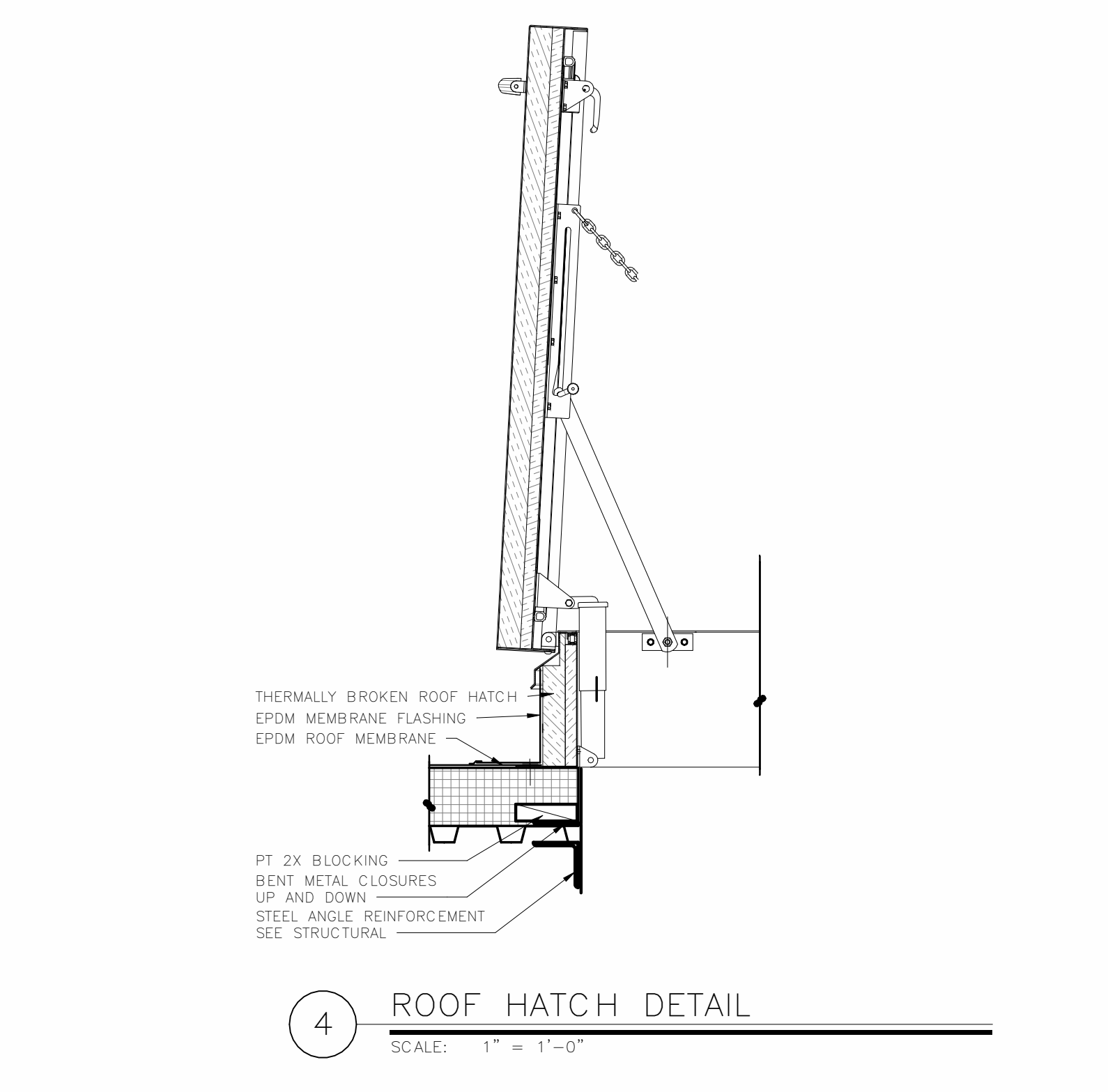
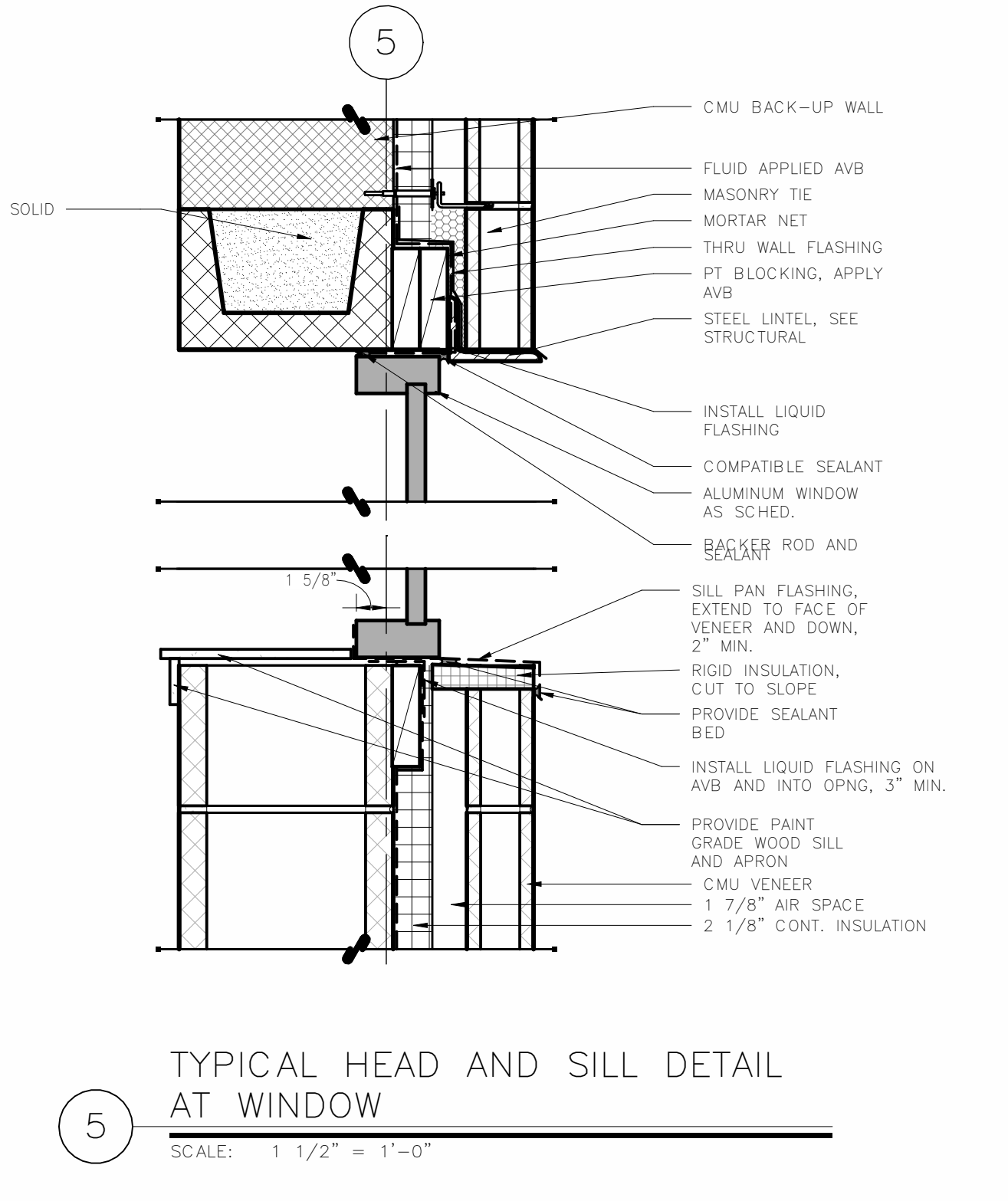
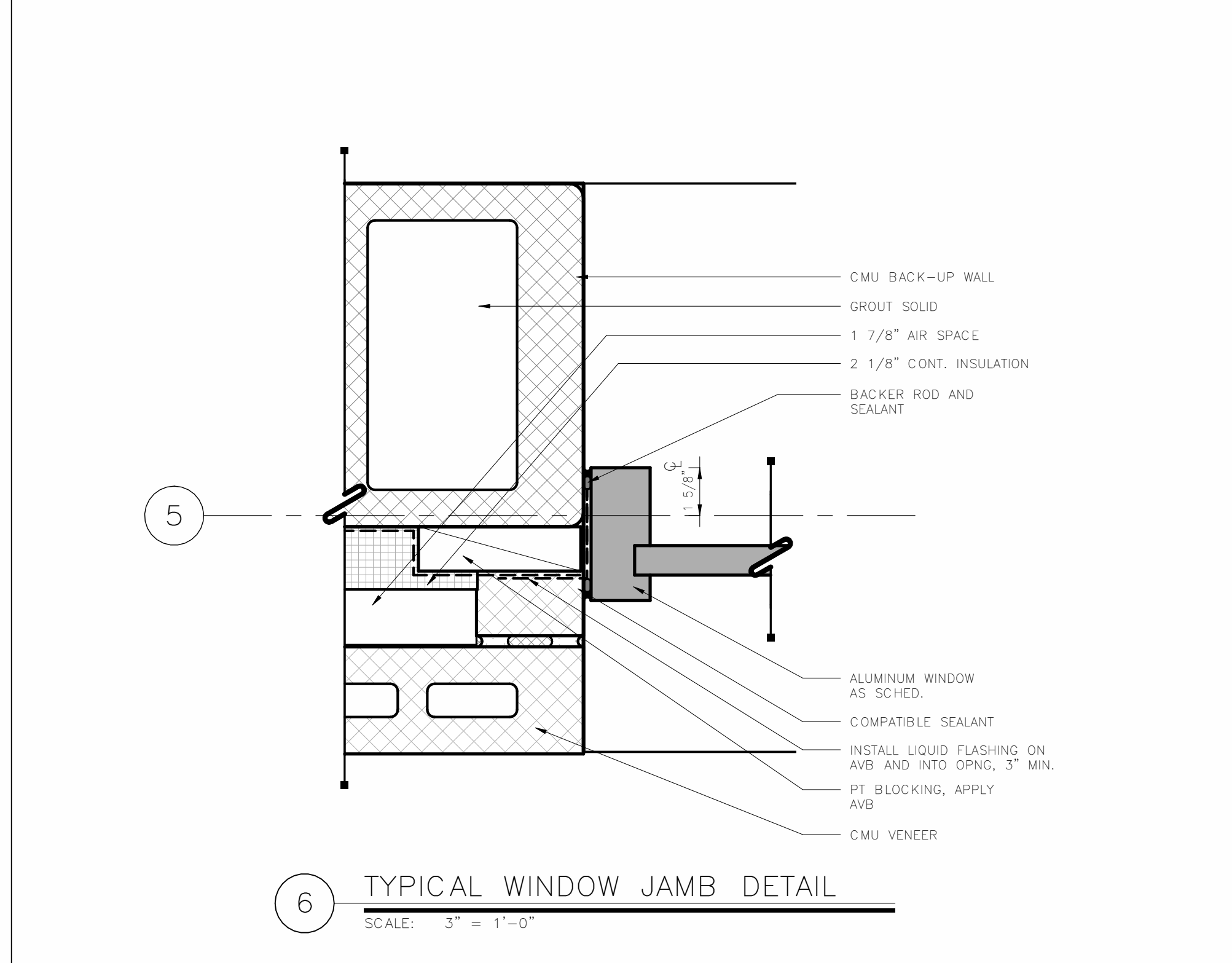
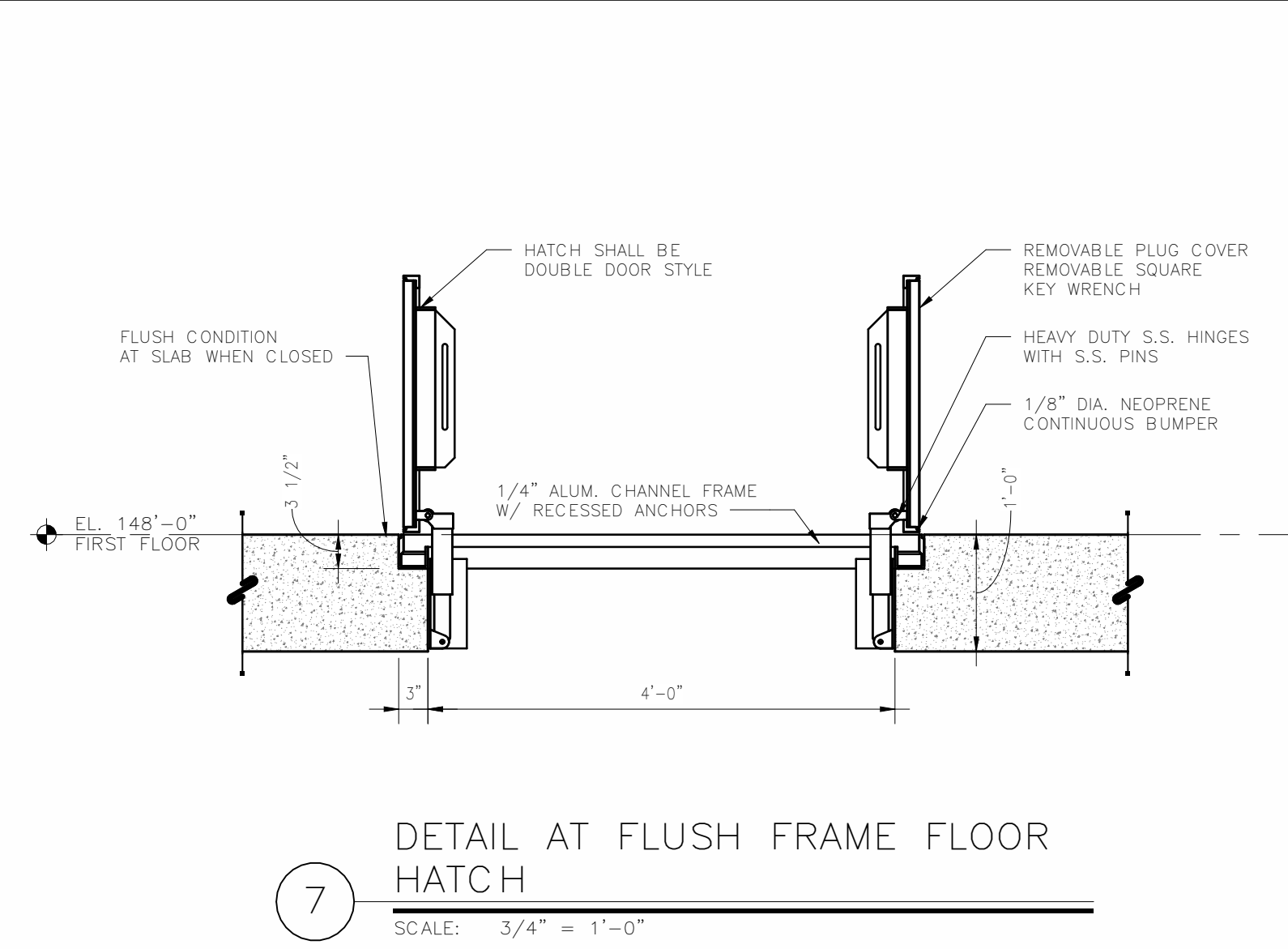
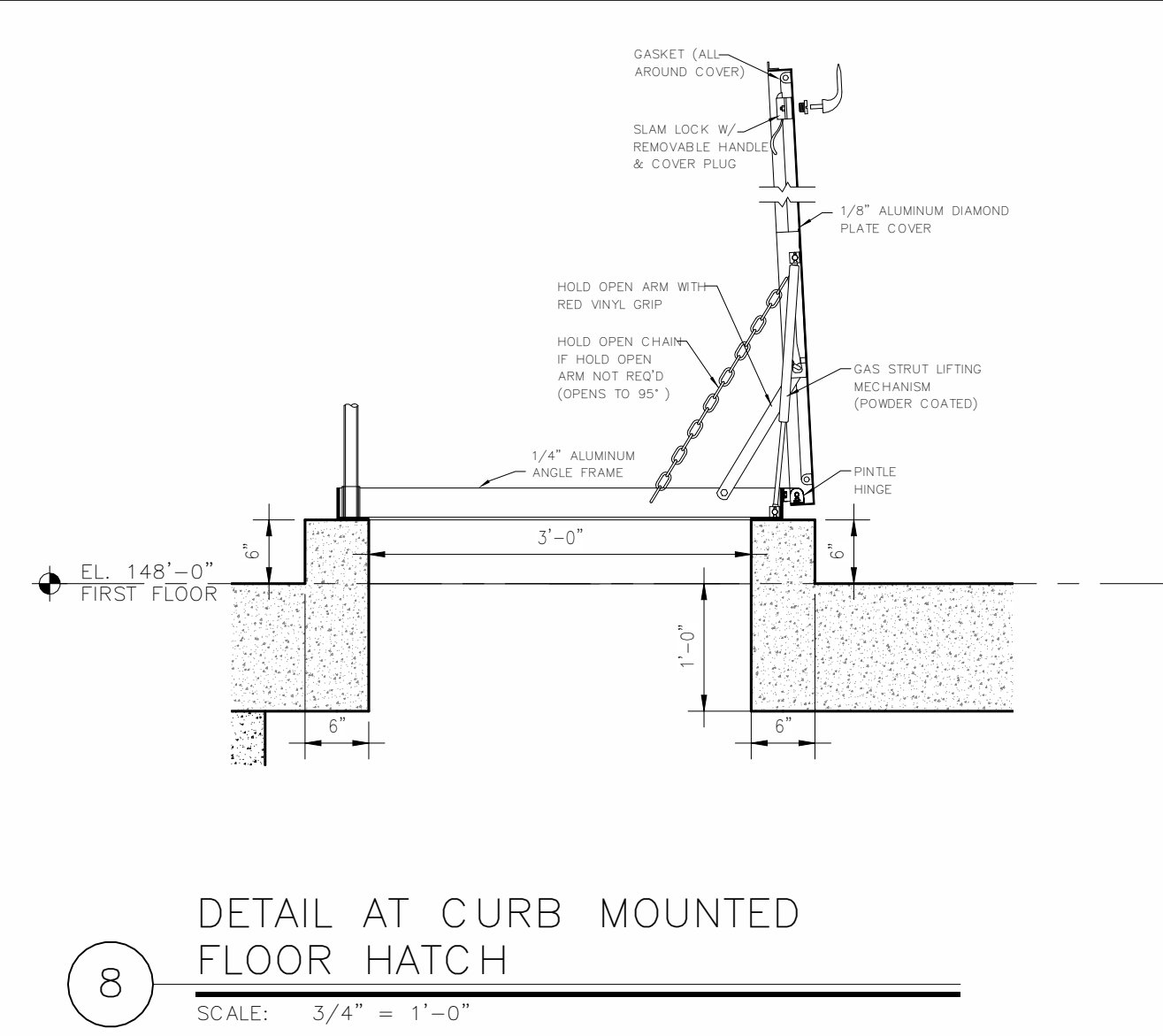
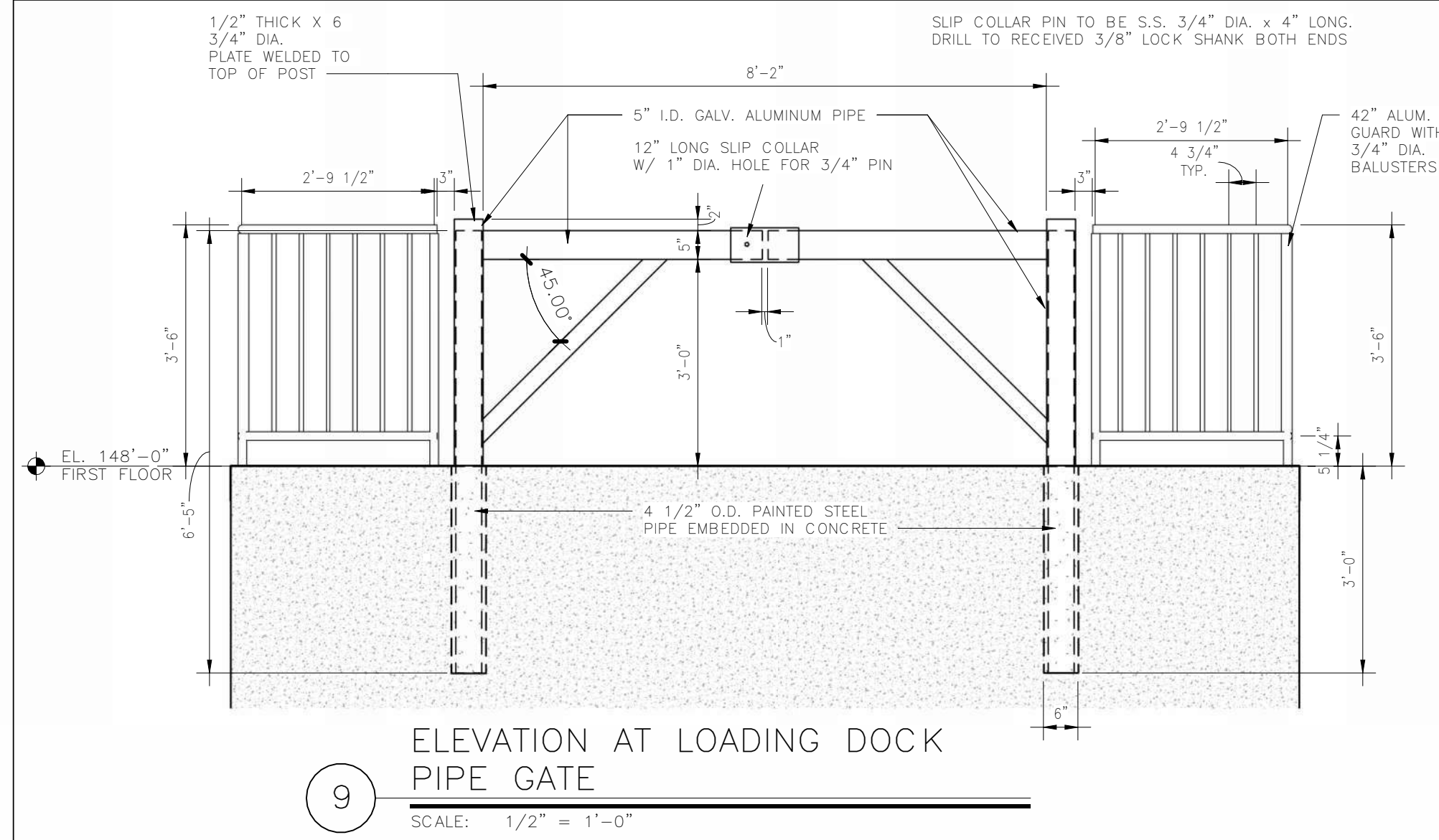


T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE: AS NOTED

99-A-1

P:\Attiboro\193 Wading River WTP Design\CAD\Sheet\AREA\193-XX-Tile Block.dwg 4/29/2016 1:55 PM RB/RETS

THIS DOCUMENT IS THE PROPERTY OF TATA & HOWARD, INC. AND ITS CLIENT. REPRODUCTION OR APPLICATION WITHOUT WRITTEN CONSENT IS PROHIBITED.
Designed By: JB/SR | Checked By: SR | Approved By: SR
Drawn By: JB



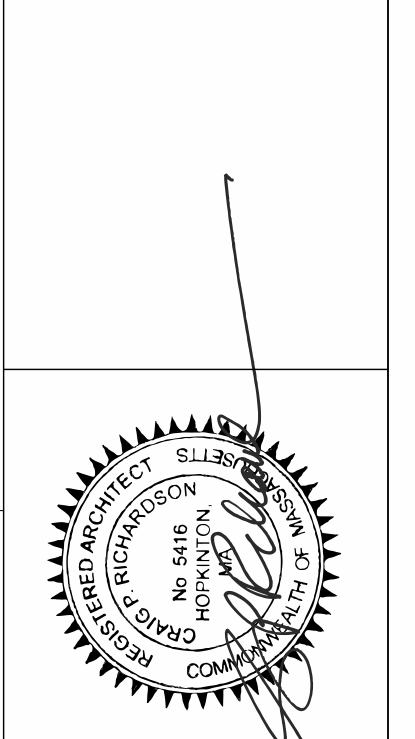
ATTLEBORO WATER DEPT.
ATTLEBORO, MA
WADING RIVER
WATER TREATMENT PLANT

Designed By: JB/SR
Checked By: SR
Approved By: SR

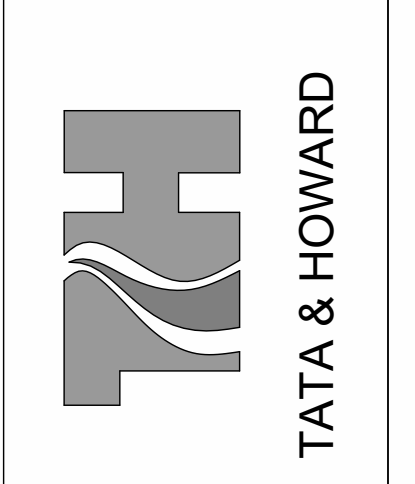
ARCHITECTURAL
ENLARGED DETAILS

THIS DOCUMENT IS THE PROPERTY OF TATA & HOWARD, INC. AND ITS CLIENT. REPRODUCTION OR APPLICATION WITHOUT WRITTEN CONSENT IS PROHIBITED.

Rev.	Date	Description

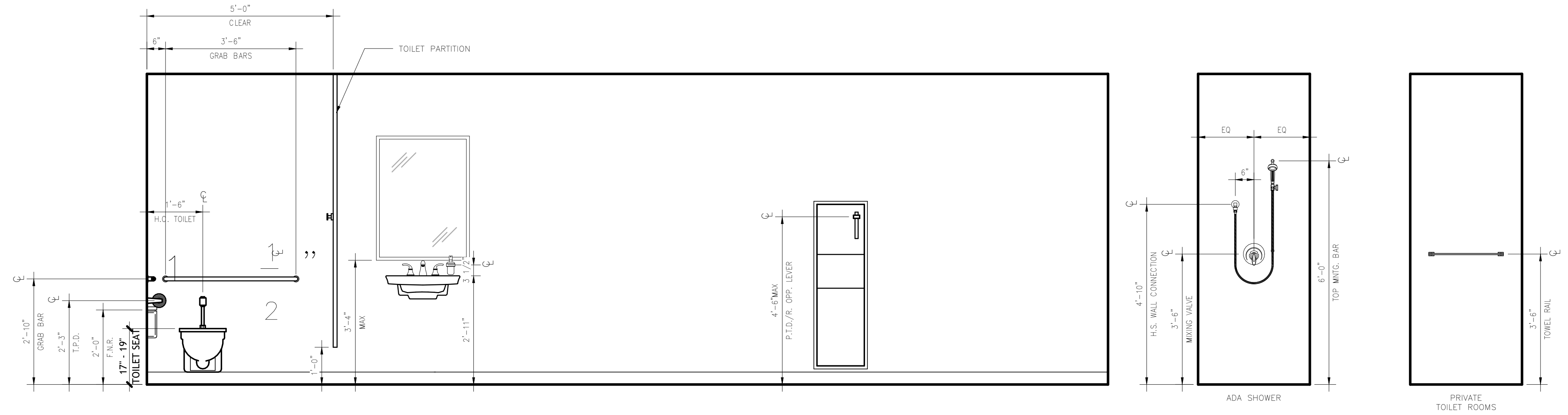


G | R | L | A
Cormac Richardson Lewis Architects
239 South Street Hopkinton, MA 01748
www.grlarchitects.com

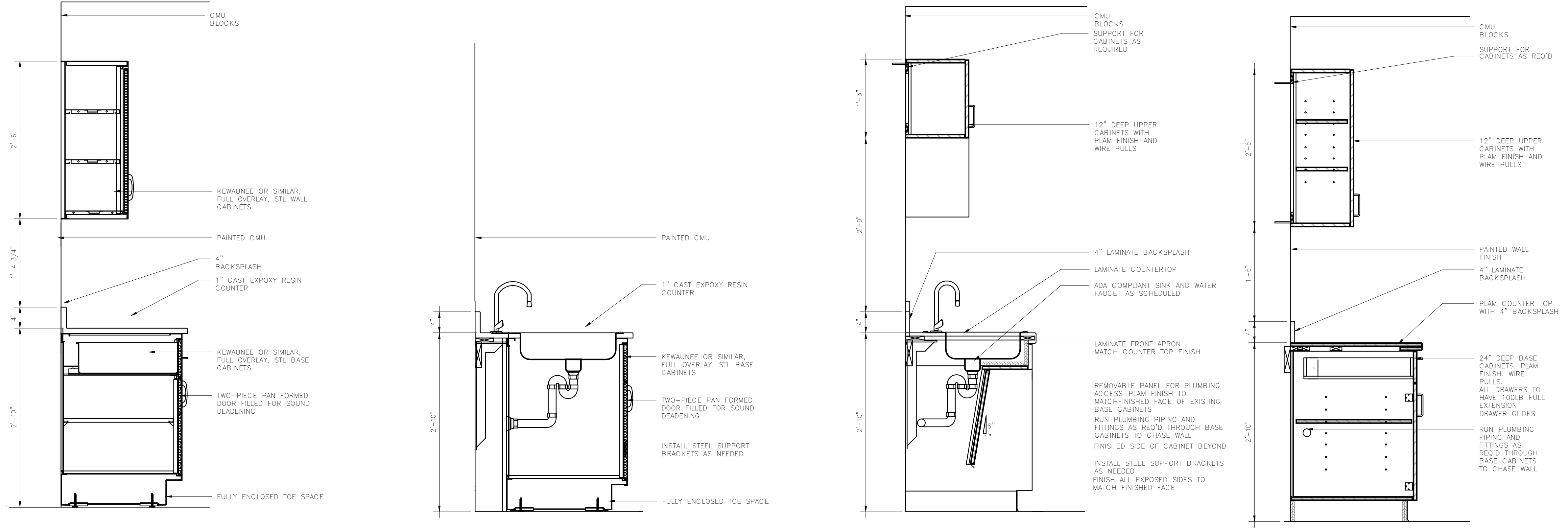


T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE: AS NOTED
99-A-2

P:\Attboro\0193_Wading River_WTP_Design\CADD\Sheet\AREA\103-X-Tile_Block.dwg 4/29/2016 1:35 PM BJB/BETTS



1 PLUMBING FIXTURE TYPICAL MOUNTING HEIGHTS
 SCALE: 1/2" = 1'-0" SHOWN FOR REFERENCE ONLY



2 TYPICAL CASEWORK DETAILS
 SCALE: 1" = 1'-0" SHOWN FOR REFERENCE ONLY

ATTLEBORO WATER DEPT.
 ATTLEBORO, MA
 WADING RIVER
 WATER TREATMENT PLANT

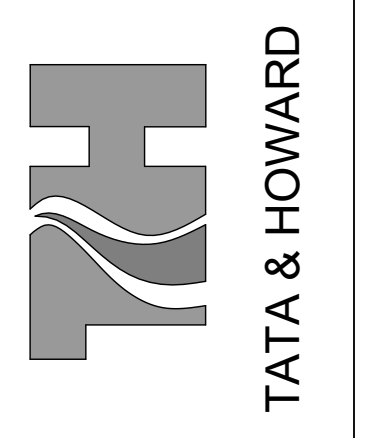
ARCHITECTURAL
 TYP. CASEWORK DETAILS

Rev.	Date	Description

THIS DOCUMENT IS THE PROPERTY OF TATA & HOWARD, INC. AND ITS CLIENT. REPRODUCTION OR APPLICATION WITHOUT WRITTEN CONSENT IS PROHIBITED.



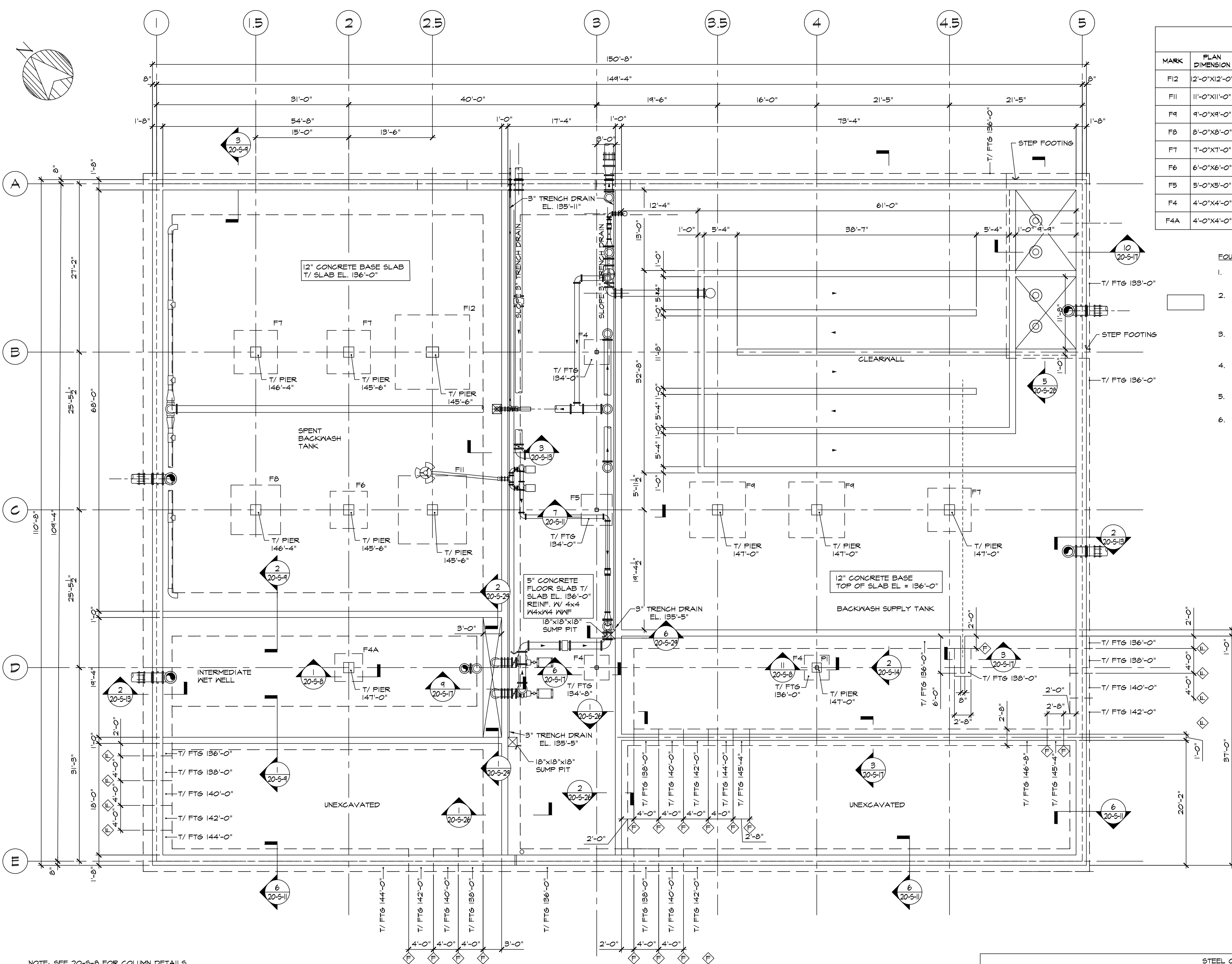
G | R | L | A
 Corman Richardson Lewis Architects
 239 South Street Hopkinton, MA 01748
 www.grlarchitects.com



T&H NO.: 6193
 DATE: FEBRUARY 2025
 SCALE: AS NOTED

P:\Attiboro\193 Wading River WTP Design\CADD\Sheet\AREA\193-X-Tile Block.dwg 4/29/2016 1:55 PM RBRETT

C:\Users\jasonwinne\OneDrive - Documents\Public Drawings\2024\Wabara Wading River WTP.dwg 2/28/2025 3:53 PM JASWINNE



FOOTING SCHEDULE					
MARK	PLAN DIMENSION	THICKNESS	BOTTOM BARS	TOP BARS	NOTES
F12	2'-0"X12'-0"	2'-2"	(14)-#8 EACH WAY		BUILD INTEGRAL W/ TANK SLAB
F11	11'-0"X11'-0"	1'-0"	(10)-#8 EACH WAY		BUILD INTEGRAL W/ TANK SLAB
F9	9'-0"X9'-0"	1'-8"	(10)-#7 EACH WAY		BUILD INTEGRAL W/ TANK SLAB
F8	8'-0"X8'-0"	1'-6"	(4)-#5 EACH WAY		BUILD INTEGRAL W/ TANK SLAB
F7	7'-0"X7'-0"	1'-2"	(6)-#7 EACH WAY		BUILD INTEGRAL W/ TANK SLAB
F6	6'-0"X6'-0"	1'-0"	(6)-#6 EACH WAY		BUILD INTEGRAL W/ TANK SLAB
F5	5'-0"X5'-0"	1'-2"	(5)-#6 EACH WAY		BUILD INTEGRAL W/ TANK SLAB
F4	4'-0"X4'-0"	1'-0"	(4)-#5 EACH WAY		BUILD INTEGRAL W/ TANK SLAB
F4A	4'-0"X4'-0"	1'-0"	(4)-#5 EACH WAY		BUILD INTEGRAL W/ TANK SLAB

- FOUNDATION WALL NOTES:**
- WHERE WALLS HAVE EARTH BACKFILL ON BOTH SIDES, BACKFILL ON BOTH SIDES SIMULTANEOUSLY.
 - WHERE WALLS HAVE BACKFILL ON ONE SIDE WITH STRUCTURAL SLAB ON TOP, DO NOT BACKFILL UNTIL SLAB IS IN PLACE AND CURED TO FULL DESIGN STRENGTH.
 - AT HORIZONTAL CONSTRUCTION JOINTS BETWEEN WALLS AND FOOTINGS, AND BETWEEN WALLS AND SLABS, INTENTIONALLY ROUGHEN SURFACE TO ± 1/4" AMPLITUDE.
 - INSTALL WATERSTOPS AT ALL TANK WALL JOINTS, AND AT BASE SLAB JOINTS, AND AT ELEVATED SLABS OVER TANKS.
 - REFER TO SHEET 20-5-1a FOR FOUNDATION WALL ELEVATIONS AND CONSTRUCTION JOINT LOCATIONS.
 - REFER TO DETAIL 1 SHEET 20-5-30 FOR REINFORCEMENT DETAILS AT TANK WALL PENETRATIONS.

NOTE: SEE 20-5-8 FOR COLUMN DETAILS

CONCRETE COLUMN SCHEDULE						
GRID	PLAN DIMENSIONS	VERTICAL BARS	REINFORCEMENT CONFIGURATION	SPACING FOR #4 TIES	NOTES	
B-1.5	1'-8"X1'-8"	(12)-#6	2	1'-0"		
B-2	1'-8"X1'-8"	(12)-#6	2	1'-0"		
B-2.5	1'-8"X2'-0"	(14)-#8	1	1'-4"		
C-1.5	1'-8"X1'-8"	(12)-#6	2	1'-0"		
C-2	1'-8"X1'-8"	(12)-#6	2	1'-0"		
C-2.5	1'-8"X2'-0"	(14)-#8	1	1'-4"		
C-3.5	2'-0"X2'-0"	(12)-#7	2	1'-2"		
C-4	2'-0"X2'-0"	(12)-#7	2	1'-2"		
C-4.5	1'-8"X1'-8"	(12)-#6	2	1'-0"		
D-2	1'-6"X1'-6"	(8)-#6	3	1'-0"		

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

NOTE: SEE 20-5-8 FOR COLUMN DETAILS

STEEL COLUMN SCHEDULE							
GRID	SIZE	BOTTOM ELEVATION	TOP ELEVATION	BASE DETAIL	TOP DETAIL	INTERMEDIATE DETAIL	COMMENTS
B-2	HSS12X12X4	148'-0"	176'-10"	748/ 20-5-8	5/20-5-20		CUT COLUMN LENGTH AFTER SLAB SURVEY
C-2	HSS12X12X4	148'-0"	177'-9"	748/ 20-5-8	5/20-5-20		CUT COLUMN LENGTH AFTER SLAB SURVEY
D-2	HSS12X12X4	148'-0"	176'-10"	748/ 20-5-8	5/20-5-20		CUT COLUMN LENGTH AFTER SLAB SURVEY
B-3	HSS12X12X4	134'-1"	177'-9"	8/20-5-17	5/20-5-20	9 & 10 / 20-5-8	
C-3	HSS12X12X4	134'-1"	177'-9"	8/20-5-17	5/20-5-20	9 & 10 / 20-5-8	
D-3	HSS12X12X4	134'-9"	177'-9"	8/20-5-17	5/20-5-20	9 & 10 / 20-5-8	
B-4	HSS12X12X4	148'-0"	176'-10"	748/ 20-5-8	5/20-5-20		CUT COLUMN LENGTH AFTER SLAB SURVEY
C-4	HSS12X12X4	148'-0"	177'-9"	748/ 20-5-8	5/20-5-20		CUT COLUMN LENGTH AFTER SLAB SURVEY
D-4	HSS12X12X4	147'-1"	176'-10"	5/20-5-20	5/20-5-20		

ATTLEBORO WATER DEPT.
ATTLEBORO, MA
WADING RIVER
WATER TREATMENT PLANT

STRUCTURAL
FOUNDATION PLAN

Date	Description

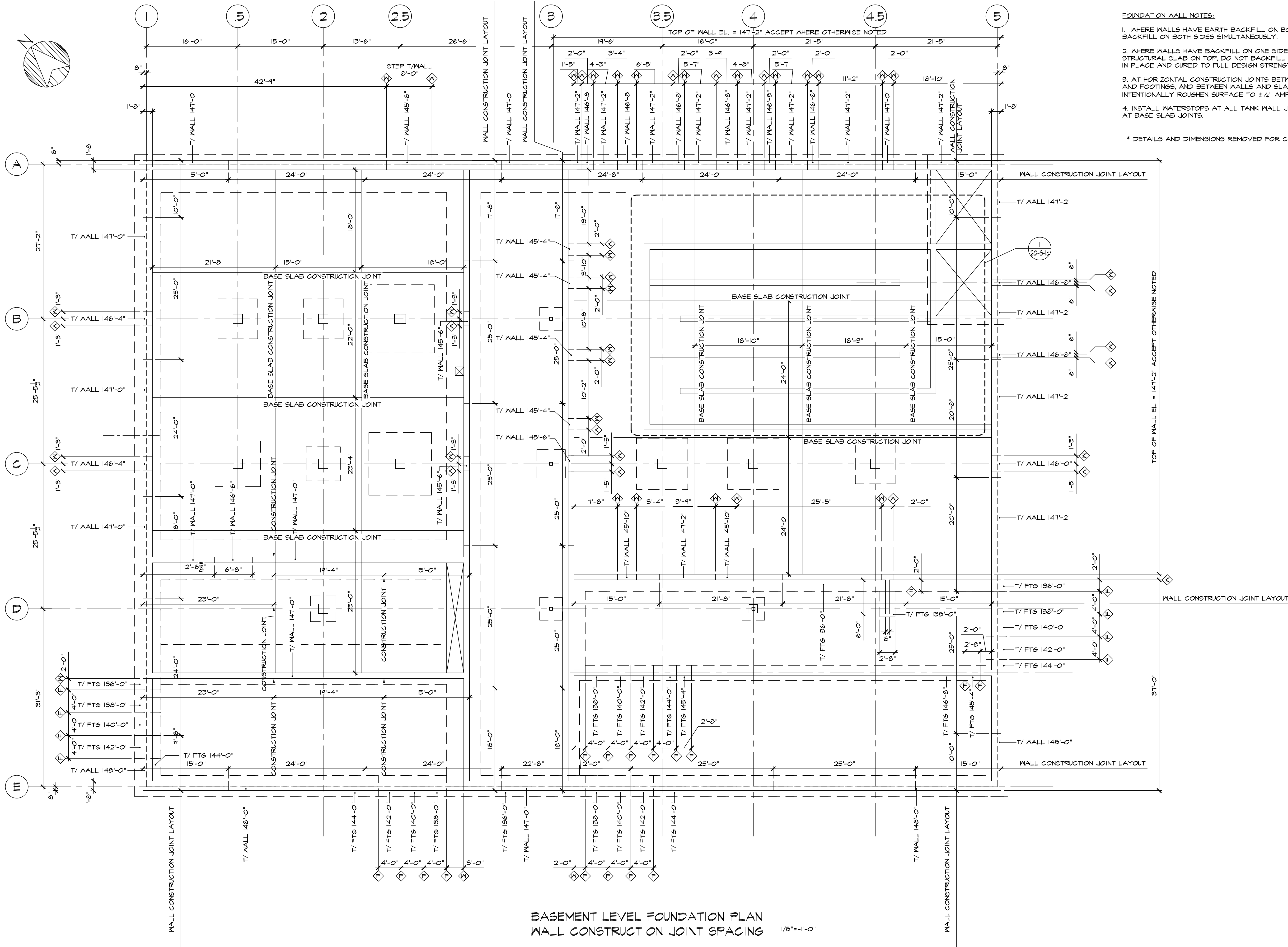
ISSUED FOR CONSTRUCTION



Lincoln / Haney
Engineering Associates, Inc.
100 State Street, 7th Floor
Boston, MA 02109
Phone: 202-729-1601 Fax: 202-729-2841



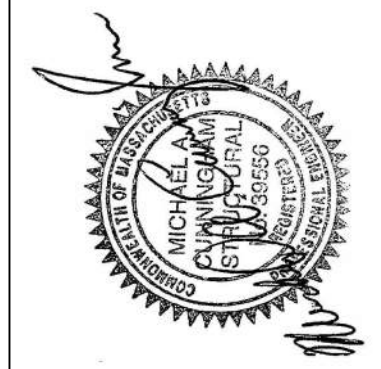
T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE:
20-S-1



STRUCTURAL
FOUNDATION PLAN

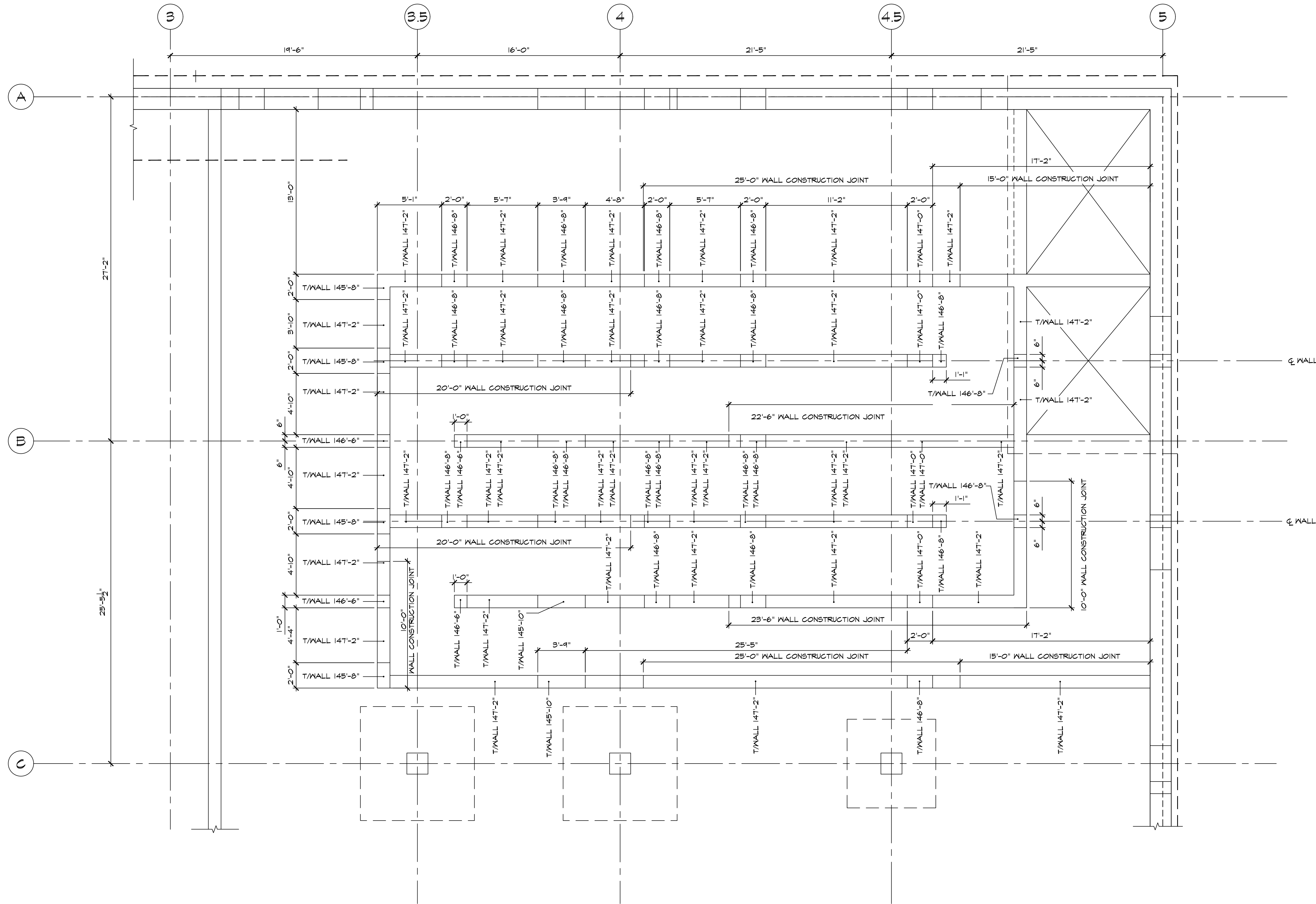
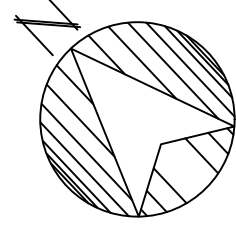
Rev.	Date	Description

ISSUED
FOR
CONSTRUCTION



Lincoln / Haney
Engineering Associates, Inc.
100 State Street
Suite 301, Box 7
Attleboro, MA 01915
Phone: 508-228-1601 Fax: 508-228-2841



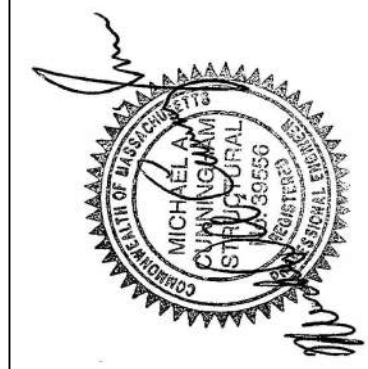


BASEMENT LEVEL FOUNDATION PLAN
WALL CONSTRUCTION JOINT SPACING 1/4"=1'-0"

* DETAILS AND DIMENSIONS REMOVED FOR CLARITY.



Lincoln / Haney
 Engineering Associates, Inc.
 1200 State Street, Suite 301, Box 7
 Attleboro, MA 01901
 Phone: 508-228-1601 Fax: 508-228-2841



ISSUED FOR CONSTRUCTION

Rev.	Date	Description

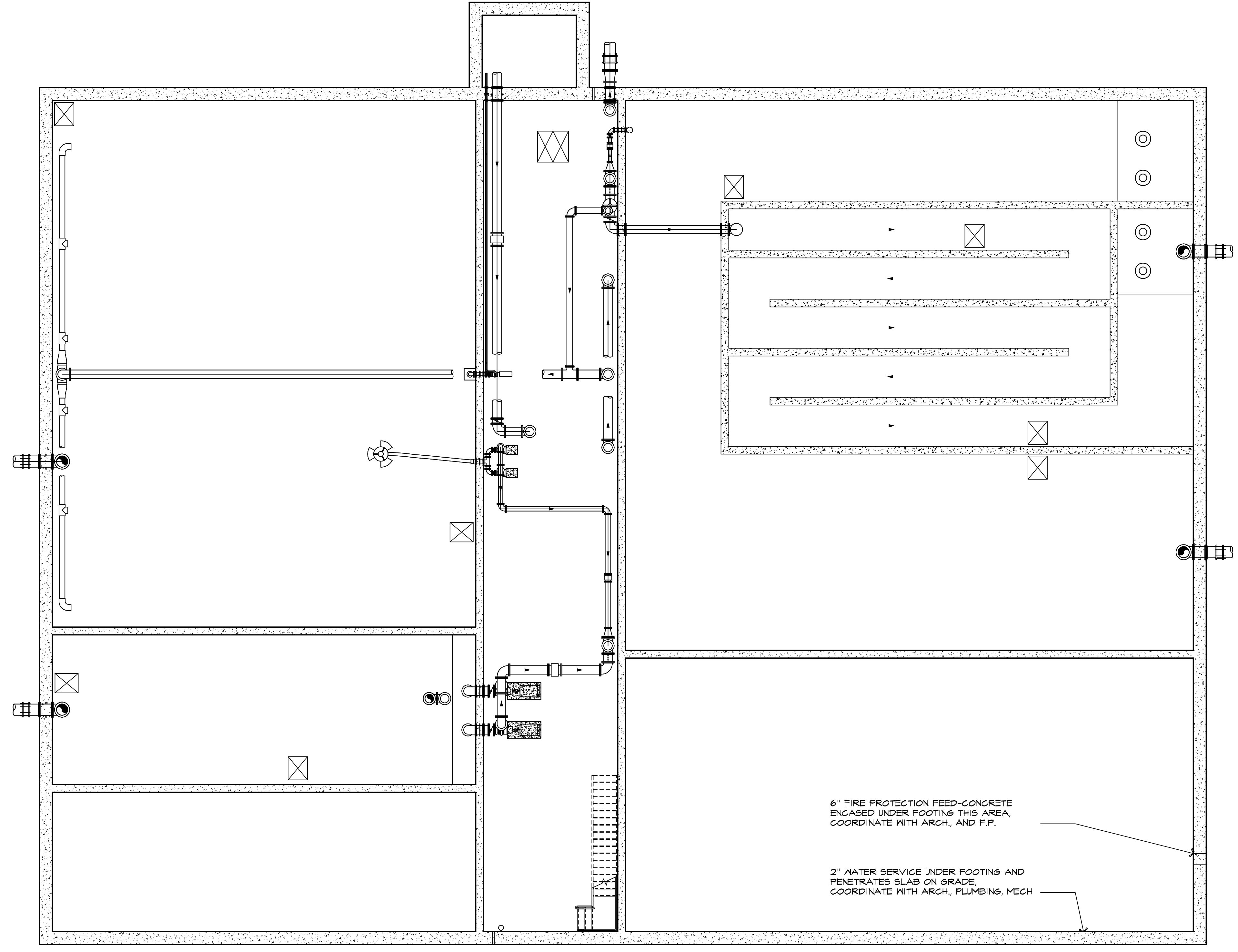
STRUCTURAL FOUNDATION PLAN

ATTLEBORO WATER DEPT.
ATTLEBORO, MA
WADING RIVER WATER TREATMENT PLANT

Designed By: SWW
 Checked By: MAC
 Approved By: [Signature]

T&H NO.: 6193
 DATE: FEBRUARY 2025
 SCALE:

20-S-1b



 = 4" HOUSEKEEPING PAD,
SEE DETAIL 8/20-S-30

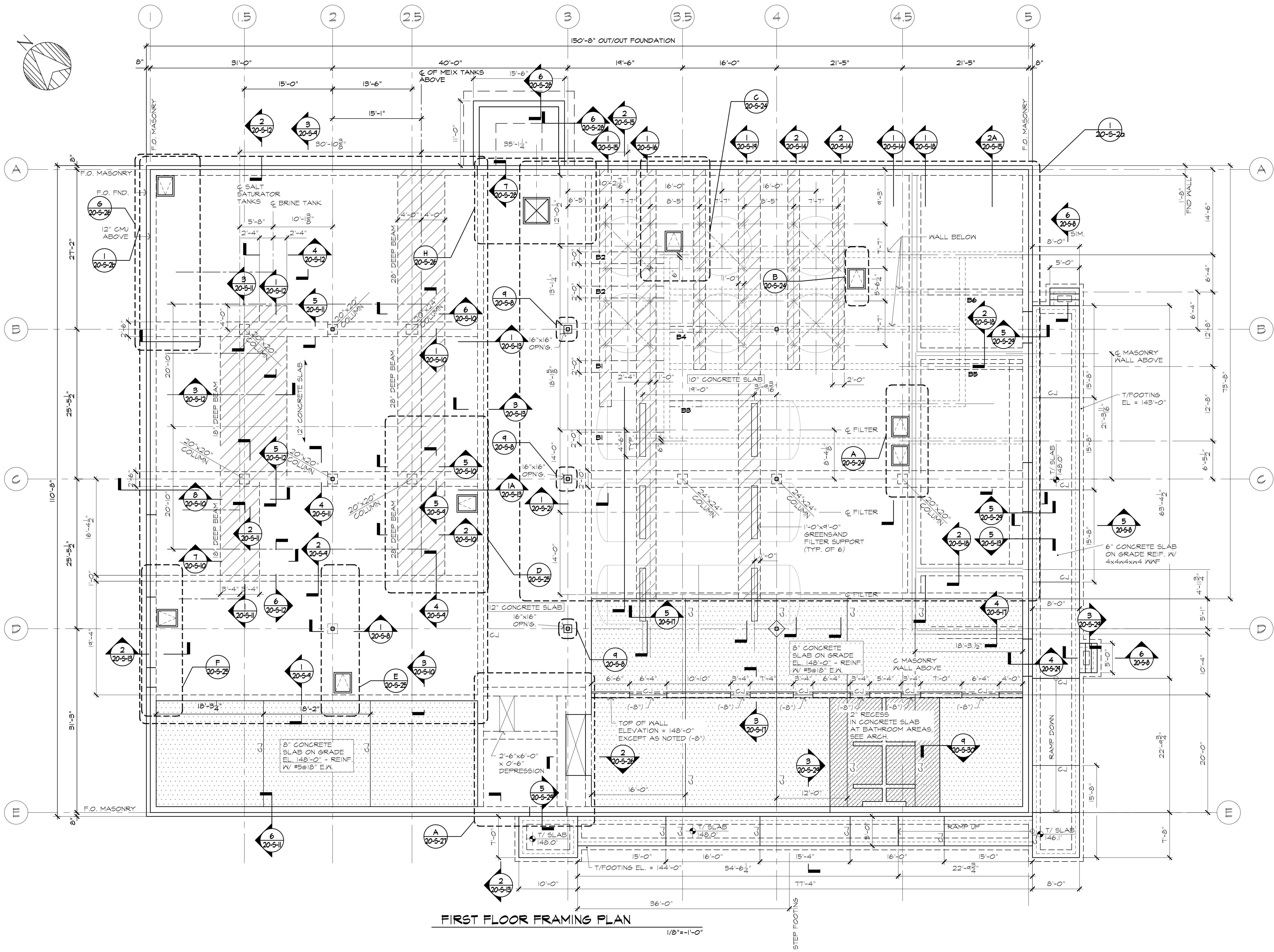
6" FIRE PROTECTION FEED-CONCRETE
ENCASED UNDER FOOTING THIS AREA,
COORDINATE WITH ARCH. AND F.P.

2" WATER SERVICE UNDER FOOTING AND
PENETRATES SLAB ON GRADE
COORDINATE WITH ARCH., PLUMBING, MECH

SEE TYPICAL WALL PENETRATION DETAIL
1/20-S-30 FOR REINFORCING STEEL DETAILS.
COORDINATE PAD AND PENETRATION
LOCATIONS WITH ARCH., MECH., PLUMBING,
FIRE PROOFING, AND HVAC.
* DETAILS AND DIMENSIONS REMOVED FOR CLARITY.

BASEMENT CONCRETE PAD AND PIPE PENETRATION PLAN 1/8"=1'-0"

<p>Lincoln / Haney Engineering Associates, Inc. 100 State Street, Suite 301, Attleboro, MA 01945 Phone: 508-228-1601 Fax: 508-228-2841</p>		<p>ATTLEBORO WATER DEPT. ATTLEBORO, MA</p>	
<p>ISSUED FOR CONSTRUCTION</p>		<p>WADING RIVER WATER TREATMENT PLANT</p>	
<p>Rev.</p>	<p>Date</p>	<p>Designed By: MAC</p>	<p>Checked By:</p>
<p>Description</p>	<p>DATE</p>	<p>Drawn By: SWW</p>	<p>Approved By:</p>
<p>STRUCTURAL BASEMENT CONCRETE PAD AND PIPE PENETRATION PLAN</p>		<p>THIS DOCUMENT IS THE PROPERTY OF TATA & HOWARD, INC. AND ITS CLIENT. REPRODUCTION OR ADAPTATION WITHOUT WRITTEN CONSENT IS PROHIBITED.</p>	
<p>T&H NO.: 6193</p>		<p>DATE: FEBRUARY 2025</p>	
<p>SCALE:</p>		<p>20-S-1c</p>	
<p>TATA & HOWARD</p>		<p>20-S-1c</p>	



FIRST FLOOR FRAMING PLAN

1/8"=1'-0"

STEP FOOTING



TATA & HOWARD

Lincoln / Haney
Engineering Associates, Inc.
300 Main Street
Attleboro, MA 01937
Phone: 508-228-1601 Fax: 508-228-2841



ISSUED FOR CONSTRUCTION

Rev.	Date	Description
2	1/17/24	REVISIONS

STRUCTURAL
FIRST FLOOR FRAMING PLAN

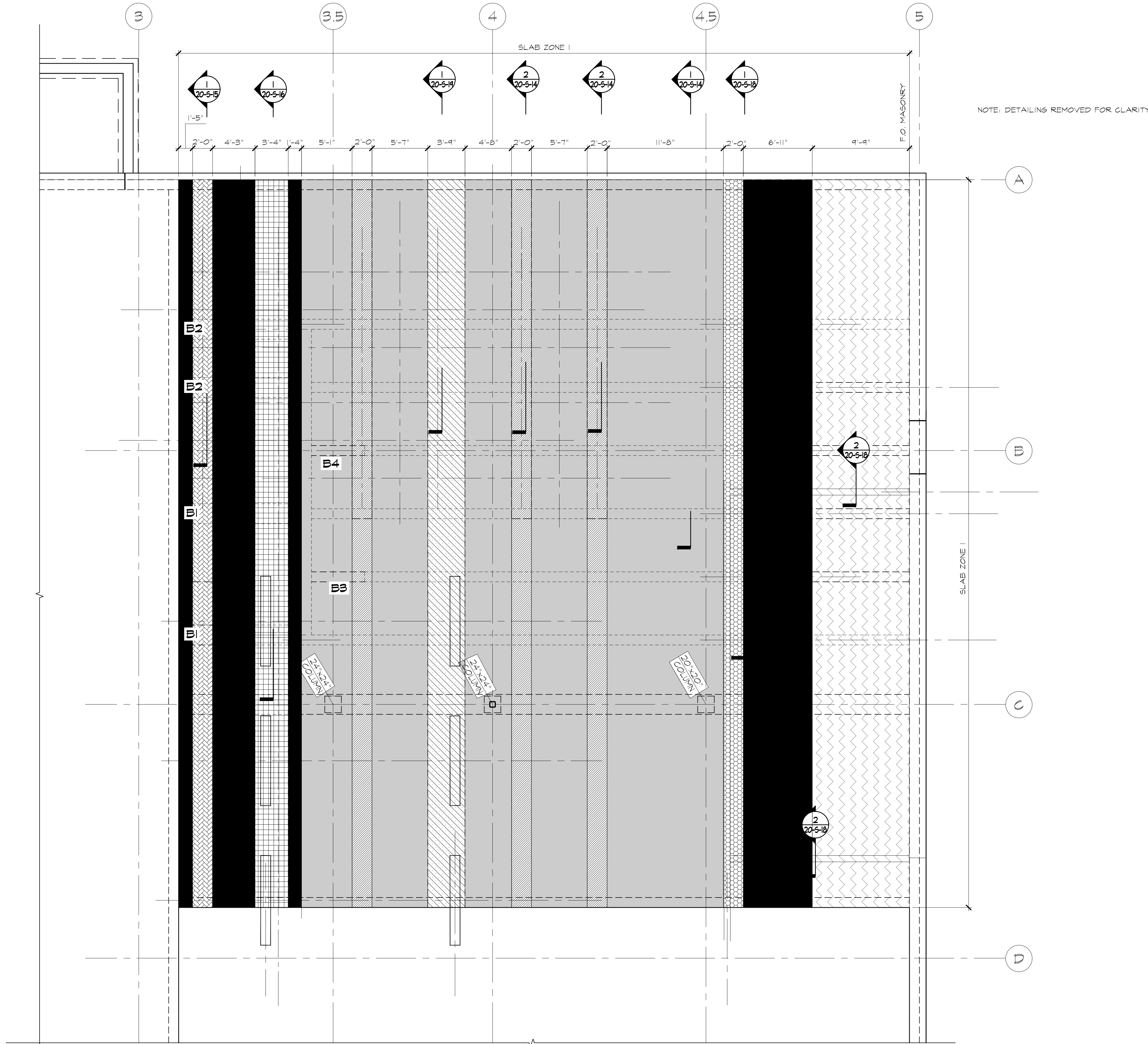
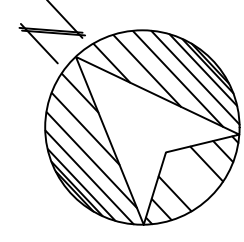
ATTLEBORO WATER DEPT.
ATTLEBORO, MA
WADING RIVER
WATER TREATMENT PLANT

T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE:

20-S-2

Designed By: SWW
Checked By: MAC
Approved By:

THIS DOCUMENT IS THE PROPERTY OF TATA & HOWARD, INC. AND ITS CLIENT. REPRODUCTION OR ADAPTATION WITHOUT WRITTEN CONSENT IS PROHIBITED.



1 SLAB ZONE I-DESIGN LAYOUT PLAN
3/16" = 1'-0"

SLAB ZONE I-DESIGN SECTION LEGEND

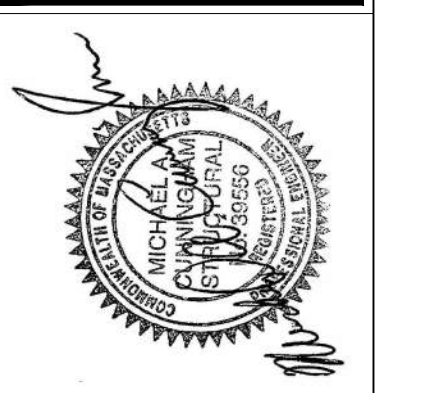
	1/20-5-15
	2/20-5-15
	1/20-5-16
	1/20-5-14
	2/20-5-14
	1/20-5-19
	1/20-5-18
	1/20-5-14 N/ 2/20-5-18 @ MASONRY PARTITIONS
	2A/20-5-15

ATTLEBORO WATER DEPT.
ATTLEBORO, MA
WADING RIVER
WATER TREATMENT PLANT

STRUCTURAL
SLAB ZONE 1-
DESIGN LAYOUT PLAN

Rev.	Date	Description

ISSUED
FOR
CONSTRUCTION



Lincoln / Haney
Engineering Associates, Inc.
100 State Street, Suite 301, Attleboro, MA 01945
Phone: 508-278-1601 Fax: 508-278-2841



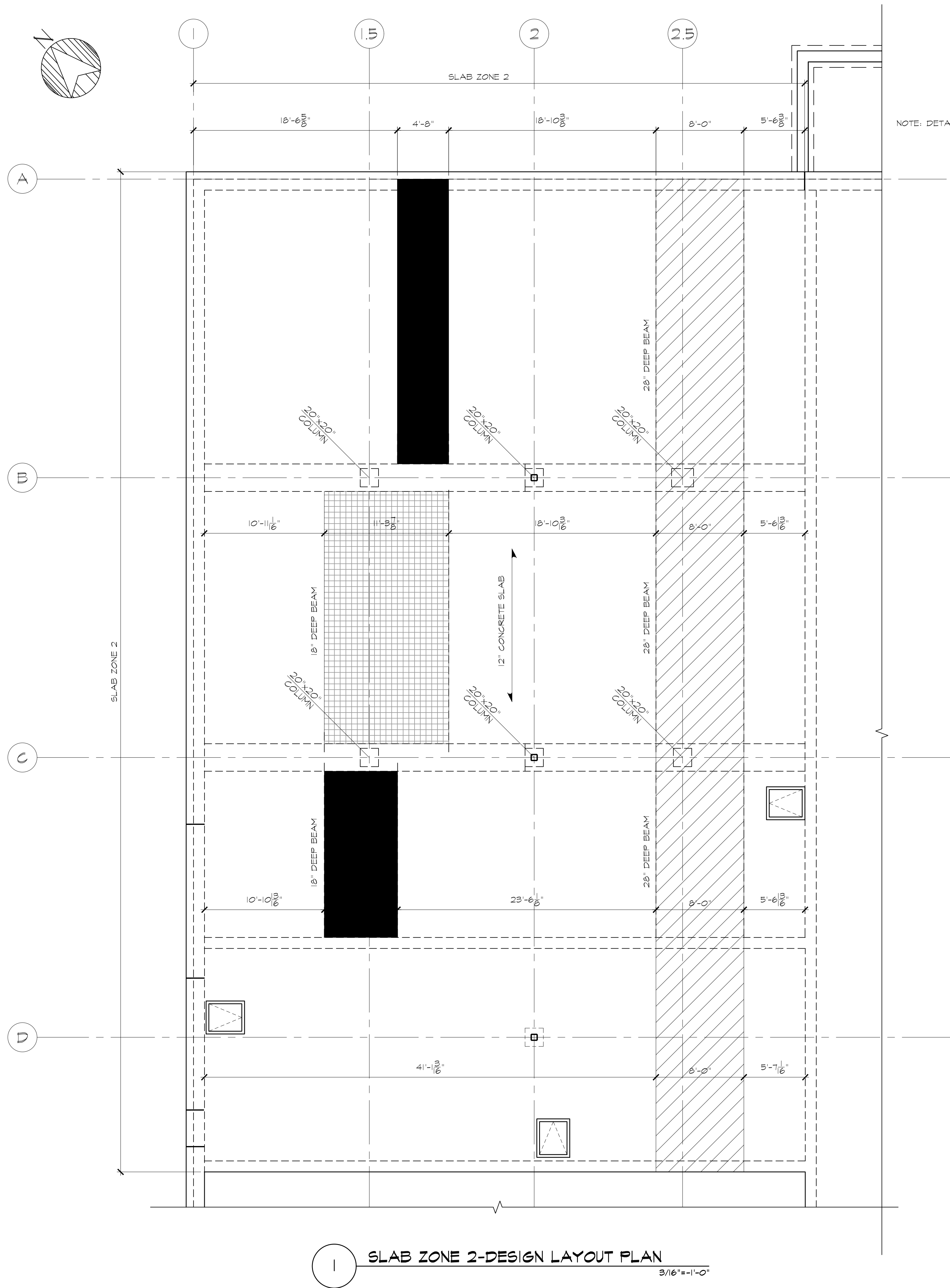
T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE:

20-S-2a

Designed By: SWW
Checked By: JAC
Approved By:

THIS DOCUMENT IS THE PROPERTY OF TATA & HOWARD, INC. AND ITS CLIENT. REPRODUCTION OR MODIFICATION WITHOUT WRITTEN CONSENT IS PROHIBITED.

C:\Users\vasanthk\OneDrive\Documents\Public Drawings\2024\Attleboro Wading River\WTP\2024\Attleboro Wading River WTP.dwg 2/28/2025 3:55 PM JASCHWINES



NOTE: DETAILING REMOVED FOR CLARITY

SLAB ZONE 2-DESIGN SECTION LEGEND

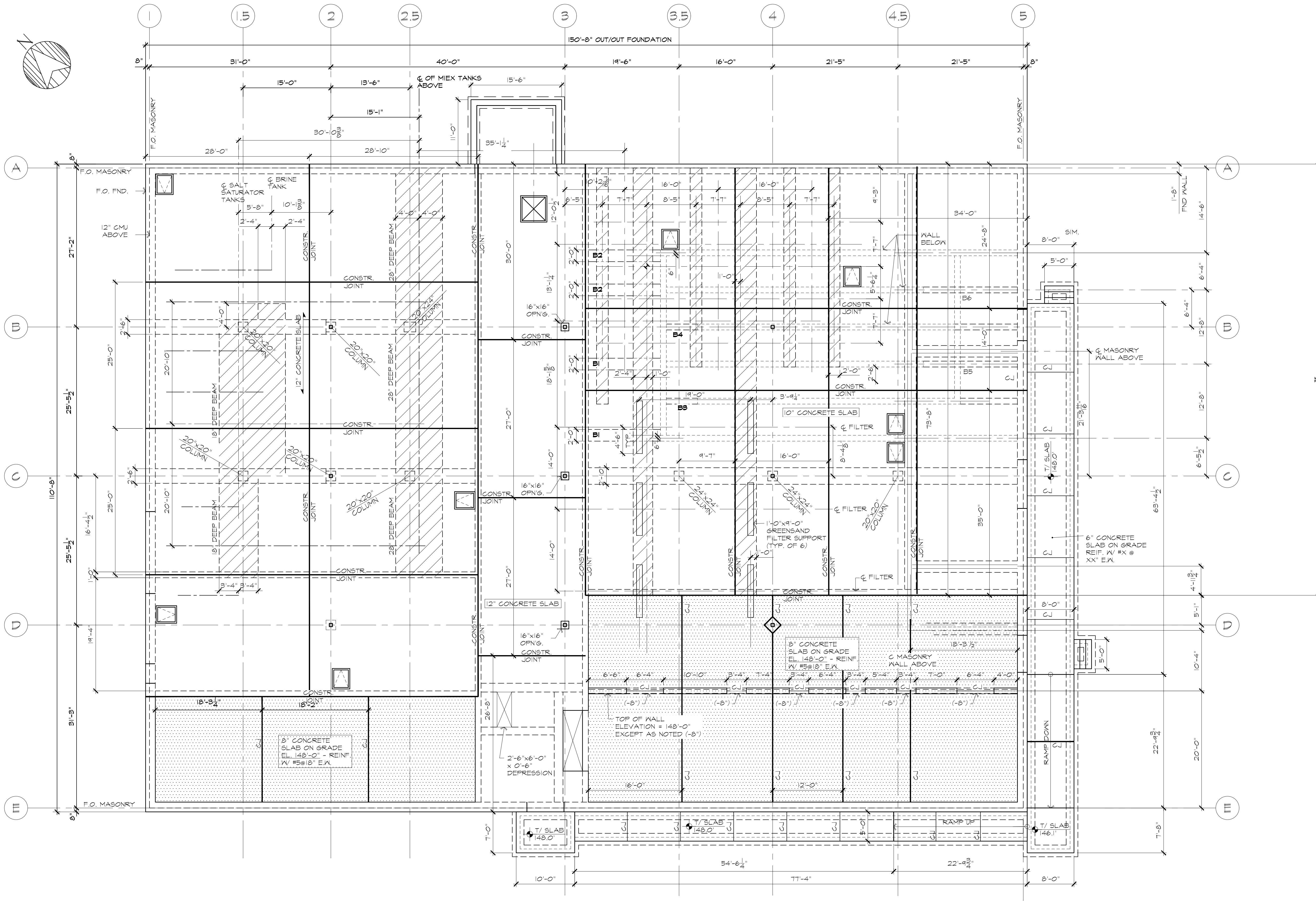
	2/20-S-12 4 1/20-S-12 4 4/20-S-12
	3/20-S-9, 5/20-S-11, 4/20-S-11, 2/20-S-9, 1/20-S-9
	1/20-S-12, 5/20-S-12, 3/20-S-12, 3/20-S-11, 2/20-S-11
	1/20-S-11, 2/20-S-11, 7/20-S-10, 8/20-S-10
	4/20-S-10, 1/20-S-10, 6/20-S-10, 5/20-S-9, 5/20-S-10, 4/20-S-9, 5/20-S-10

ELEVATED SERVICE PLATFORMS AND STAIRS NOTES:

- ELEVATED SERVICE PLATFORMS AND ACCESS STAIRS SHALL BE PROVIDED AS INDICATED FOR ACCESSING MIX TANKS AND REGENERATION SKID. ALL DESIGN AND CONSTRUCTION SHALL COMPLY WITH THE NINTH EDITION OF THE MASSACHUSETTS STATE BUILDING CODE IN ADDITION TO CRITERIA IDENTIFIED HEREIN.
- PLATFORMS AND STAIRS SHALL BE DESIGNED BY A STRUCTURAL ENGINEER, LICENSED TO PRACTICE IN MASSACHUSETTS. DESIGN DRAWINGS SHALL BE SUBMITTED FOR APPROVAL WITH THE STAMP OF THE ENGINEER RESPONSIBLE FOR THE DESIGN. SUBMITTALS SHALL INCLUDE ALL RELEVANT DETAILS FOR THE COMPLETE EVALUATION AND COORDINATION WITH SUPPORTING FRAMING. SUPPORT SLABS ARE HEAVILY REINFORCED IN THE VICINITY OF THE MIX TANKS AND REGENERATION SKID. THE USE OF POST-INSTALLED ANCHORS FOR SECURING FRAMING TO THE SLAB IS NOT PERMITTED. DRILLING INTO THE CAST CONCRETE IS NOT PERMITTED UNDER ANY CIRCUMSTANCES.
- PLATFORMS SHALL BE DESIGNED FOR THEIR INTENDED USE. AS A MINIMUM, PLATFORMS AND ACCESS STAIRS SHALL COMPLY WITH ASCET-10. MINIMUM LOADS ARE:
 - A. UNIFORM LOAD = 40 PSF.
 - B. CONCENTRATED LOAD = 300 LBS DISTRIBUTED OVER AN AREA 2'-6"X2'-6" APPLIED AT ANY LOCATION.
 - C. UNIFORM LOAD AND CONCENTRATED LOAD DO NOT NEED TO BE CONSIDERED CONCURRENTLY.
- ALL STAIRS AND PLATFORMS SHALL BE BRACED TO COMPLY WITH STABILITY PROVISIONS IN THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS AND SEISMIC PROVISIONS IN CHAPTER 15 OF ASCET-10.
- ALL STAIRS AND PLATFORMS SHALL INCLUDE RAILINGS TO COMPLY WITH OSHA. GUARDRAILS SHALL PROJECT A MINIMUM OF 42 INCHES ABOVE THE WALKING SURFACE. STAIRS SHALL HAVE HANDRAILS.
- ALL PLATFORM RAILINGS SHALL INCLUDE TOEBOARDS AT LEAST 4" WIDE.
- ALL STEEL WORK SHALL COMPLY WITH SPECIFICATIONS FOR STRUCTURAL STEEL, SECTION 05120.

1 SLAB ZONE 2-DESIGN LAYOUT PLAN
3/16" = 1'-0"

STRUCTURAL SLAB ZONE 2- DESIGN LAYOUT PLAN	ATTLBORO WATER DEPT. ATTLBORO, MA WADING RIVER WATER TREATMENT PLANT	THE DOCUMENT IS THE PROPERTY OF TATA & HOWARD, INC. AND ITS CLIENT. REPRODUCTION OR MODIFICATION WITHOUT WRITTEN CONSENT IS PROHIBITED.
Rev. Date Description	Designed By: MAC Checked By: SWW	Approved By:
ISSUED FOR CONSTRUCTION		
Lincoln / Haney Engineering Associates, Inc. 300 Main Street, Suite 301, Attleboro, MA 01945 Phone: 508-278-1601 Fax: 508-278-2841		
TATA & HOWARD		
T&H NO.: 6193 DATE: FEBRUARY 2025 SCALE:		
20-S-2b		



FIRST FLOOR SLAB - JOINT LAYOUT PLAN

1/8" = 1'-0"

- NOTE:
- "CJ" DESIGNATES JOINT IN SLAB ON GRADE. SLAB ON GRADE JOINTS MAY BE EITHER CONSTRUCTION JOINTS OR CONTROL JOINTS AT CONTRACTOR'S OPTION. SEE DETAILS 3/520-S-30, 4/20-S-30, 5/20-S-30, & 3/20-S-1.
 - JOINTS IN STRUCTURAL SLABS SHALL BE CONSTRUCTION JOINTS. CONTROL JOINTS ARE NOT PERMITTED. SEE DETAIL 1/20-S-1.
 - [Pattern] = CONCRETE SLAB ON GRADE.



TATA & HOWARD

Lincoln / Haney
Engineering Associates, Inc.
300 Main Street
Attleboro, MA 01915
Phone: 508-228-1601 Fax: 508-228-2841



ISSUED FOR CONSTRUCTION

Rev.	Date	Description

STRUCTURAL
FIRST FLOOR
JOINT LAYOUT PLAN

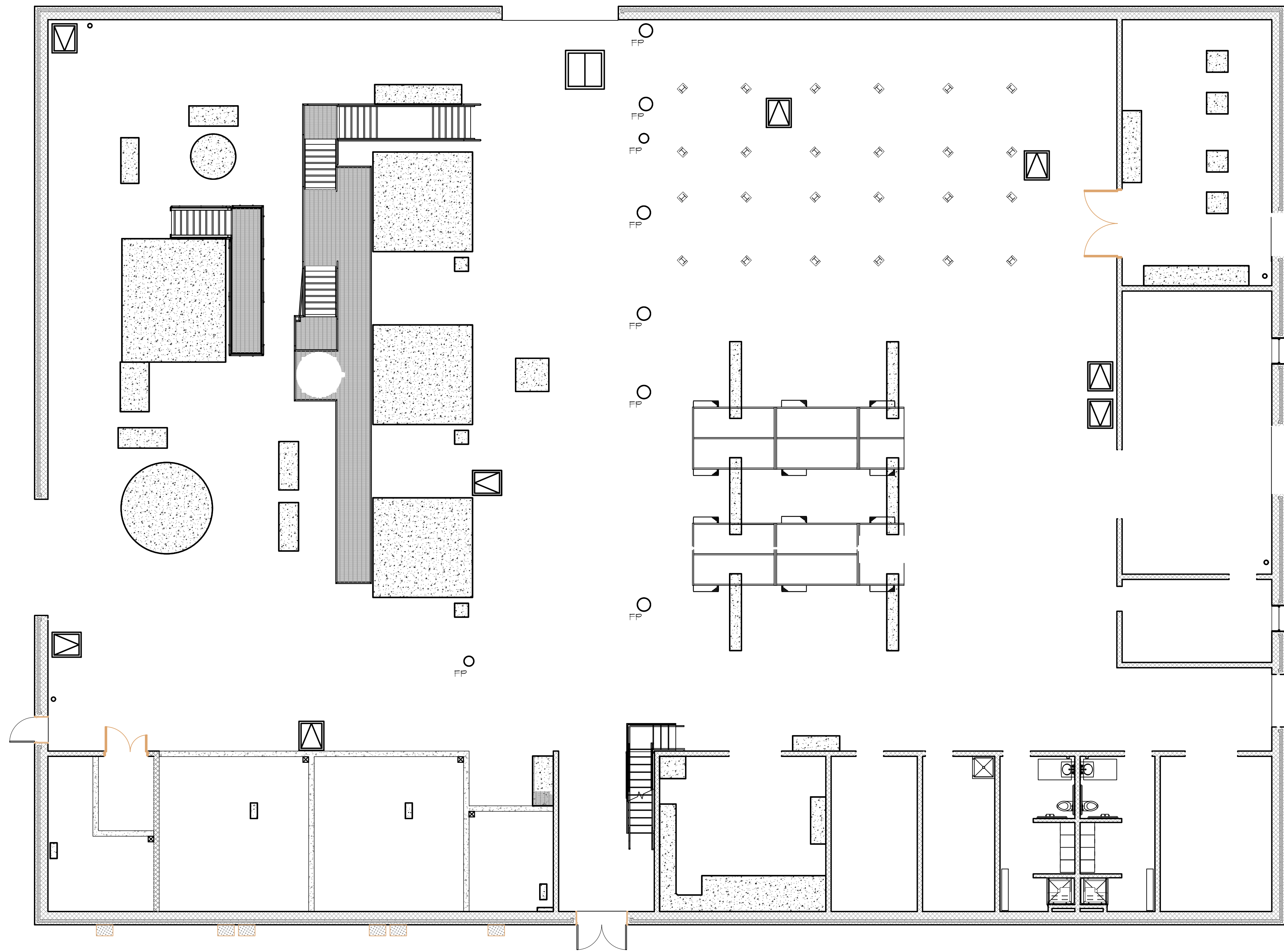
ATTLEBORO WATER DEPT.
ATTLEBORO, MA
WADING RIVER
WATER TREATMENT PLANT

Designed By: MAC
Checked By: SWW
Approved By:

T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE:

20-S-2c

C:\Users\jason@tata.com\Documents\Public Drawings\2024\Wabara Wading River WTP.dwg 2/28/2025 3:55 PM JAS@TATA



■ = 4" HOUSEKEEPING PAD,
SEE DETAIL 8/20-5-30

□ = PFAS CONTACTOR VESSEL SUPPORT COLUMNS
-SET ON 1" NON-SHRINK GROUT

F.P. = FLOOR PIPE PENETRATION,
SEE TYPICAL DETAIL 1/20-5-2d
FOR SLAB REINFORCEMENT.

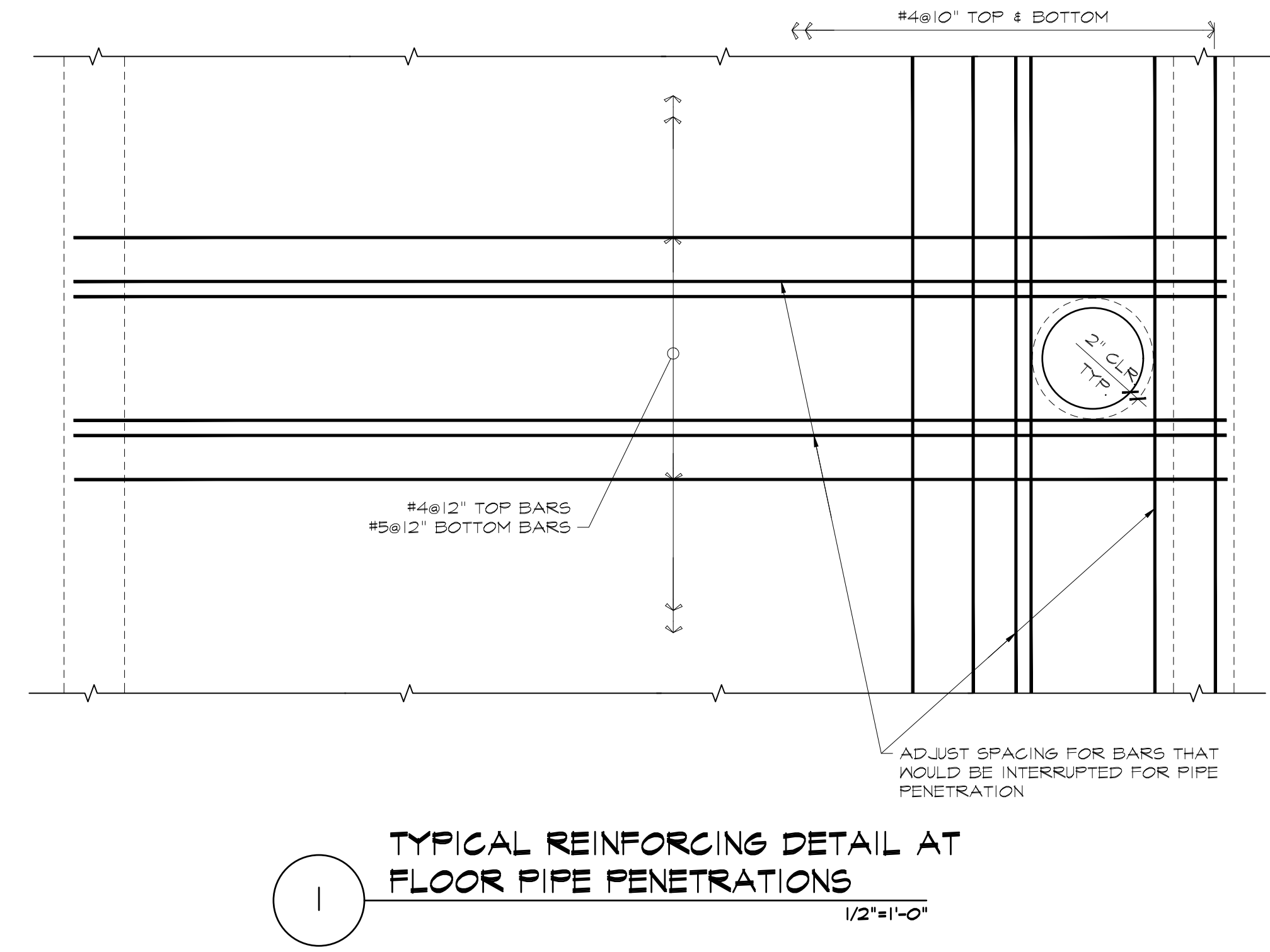
SEE TYPICAL WALL PENETRATION DETAIL
1/20-5-30 FOR REINFORCING STEEL DETAILS.

COORDINATE PAD AND PENETRATION
LOCATIONS WITH ARCH, MECH, PLUMBING,
FIRE PROOFING, AND HVAC.

* DETAILS AND DIMENSIONS REMOVED FOR CLARITY.

FIRST FLOOR CONCRETE PAD AND PIPE PENETRATION PLAN

1/8"=1'-0"



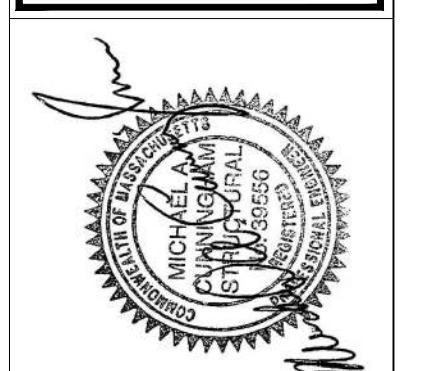
**TYPICAL REINFORCING DETAIL AT
FLOOR PIPE PENETRATIONS**
1/2"=1'-0"

ATTLEBORO WATER DEPT.
ATTLEBORO, MA
WADING RIVER
WATER TREATMENT PLANT

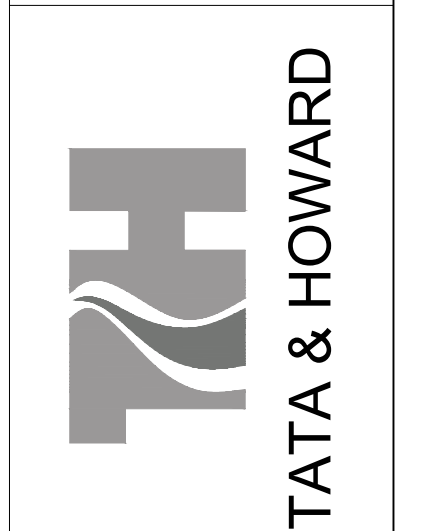
STRUCTURAL
FIRST FLOOR
CONCRETE PAD AND
PIPE PENETRATION PLAN

Rev.	Date	Description

ISSUED
FOR
CONSTRUCTION



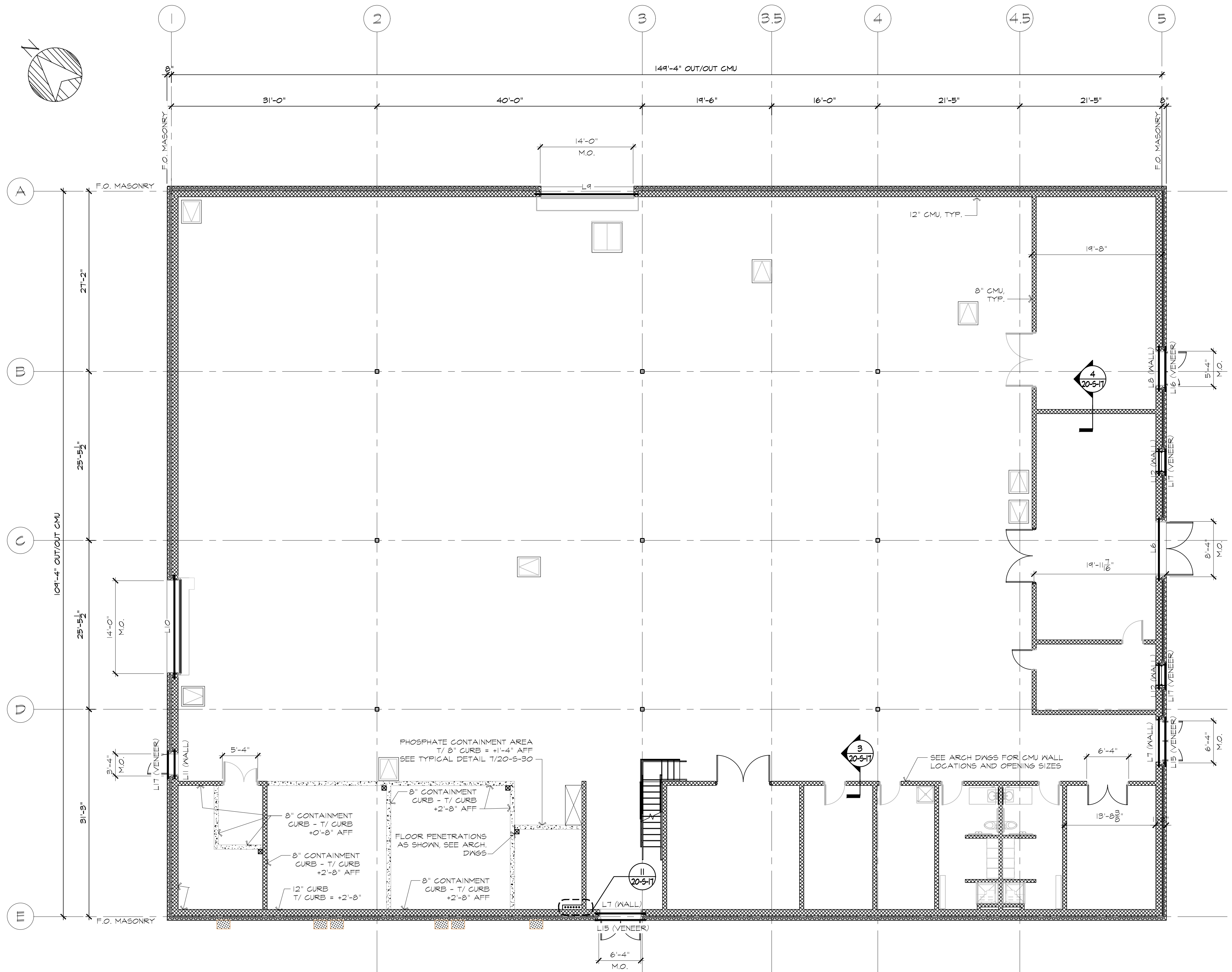
Lincoln / Haney
Engineering Associates, Inc.
100 State Street, Suite 301, Woburn, MA 01897
Phone: 781-235-1601 Fax: 781-235-1601



T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE:

20-S-2d

C:\Users\jason@hmc\OneDrive\Documents\Public Drawings\2024\Wabara Wading River WTP.dwg 2/28/2025 3:54 PM JASONHINES



FIRST FLOOR MASONRY PLAN

1/8" = 1'-0"

- NOTE:
- PERIMETER WALL AND VENEER LINTELS SHOWN FOR FIRST FLOOR WALL OPENINGS ONLY. SEE MEZZANINE CEILING FRAMING PLAN FOR UPPER LEVEL LINTELS. REFER TO SHEET 20-S-22 FOR LINTEL SCHEDULE.
 - WHERE CONCRETE CURBS ARE SPECIFIED AT MASONRY WALLS, PLACE MASONRY ON TOP OF CURBS. PROVIDE REINFORCEMENT STEEL DONNELS EMBEDDED IN SLAB AS SPECIFIED. FOR 8" HIGH CURBS PROVIDE 8" ADDED LENGTH TO DONNELS. FOR 16" AND HIGHER CURBS, LAP SPLICES IN THE CURB HEIGHT ARE ACCEPTABLE.



TATA & HOWARD
T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE:

20-S-3

Lincoln / Haney
Engineering Associates, Inc.
100 State Street, Suite 700
Boston, MA 02109
Phone: 202-729-1601 Fax: 202-729-2841



ISSUED FOR CONSTRUCTION

Rev.	Date	Description

STRUCTURAL
FIRST FLOOR MASONRY PLAN

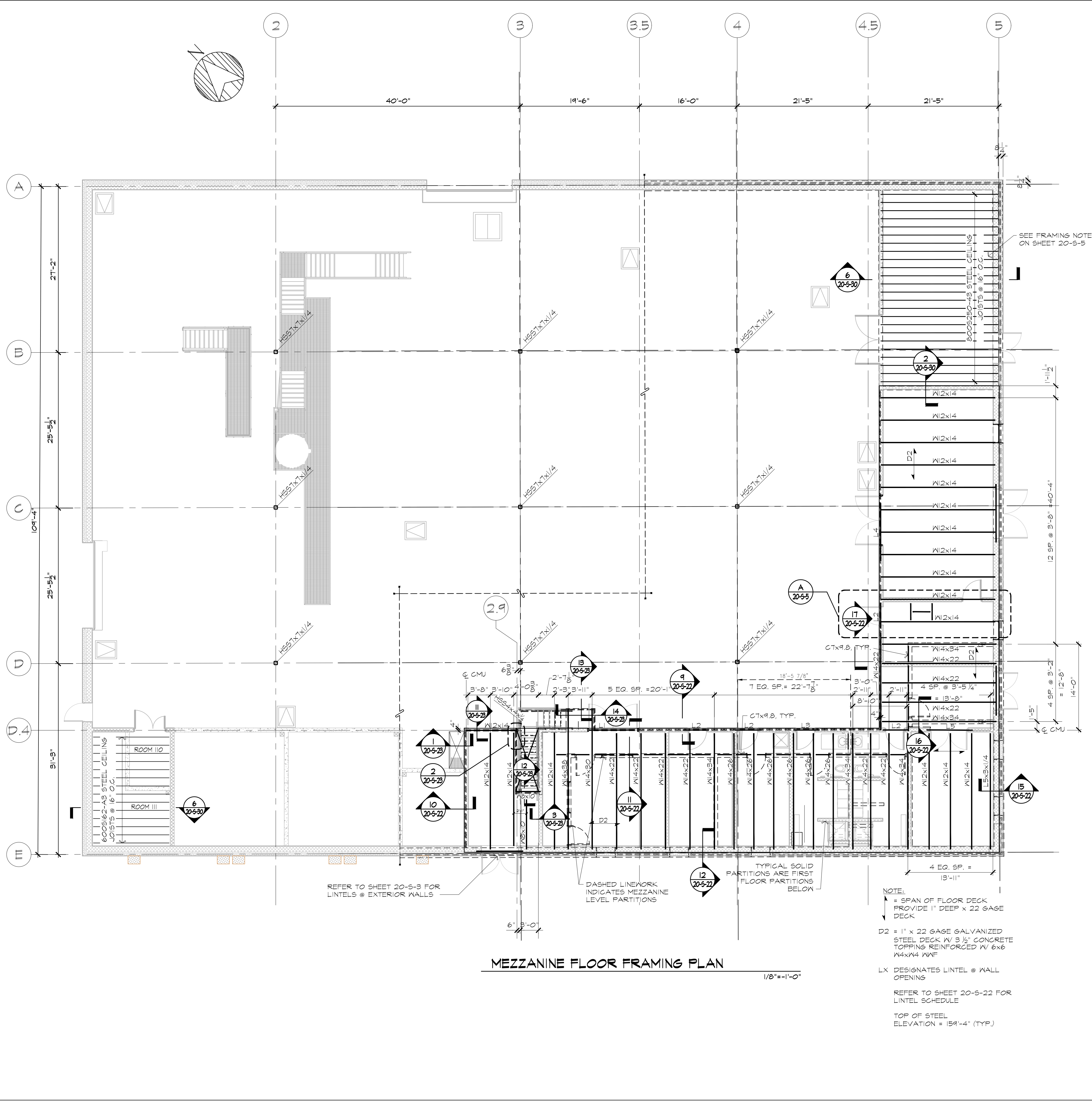
THIS DOCUMENT IS THE PROPERTY OF TATA & HOWARD, INC. AND ITS CLIENT. REPRODUCTION OR ADAPTATION WITHOUT WRITTEN CONSENT IS PROHIBITED.

ATTLEBORO WATER DEPT.
ATTLEBORO, MA

WADING RIVER
WATER TREATMENT PLANT

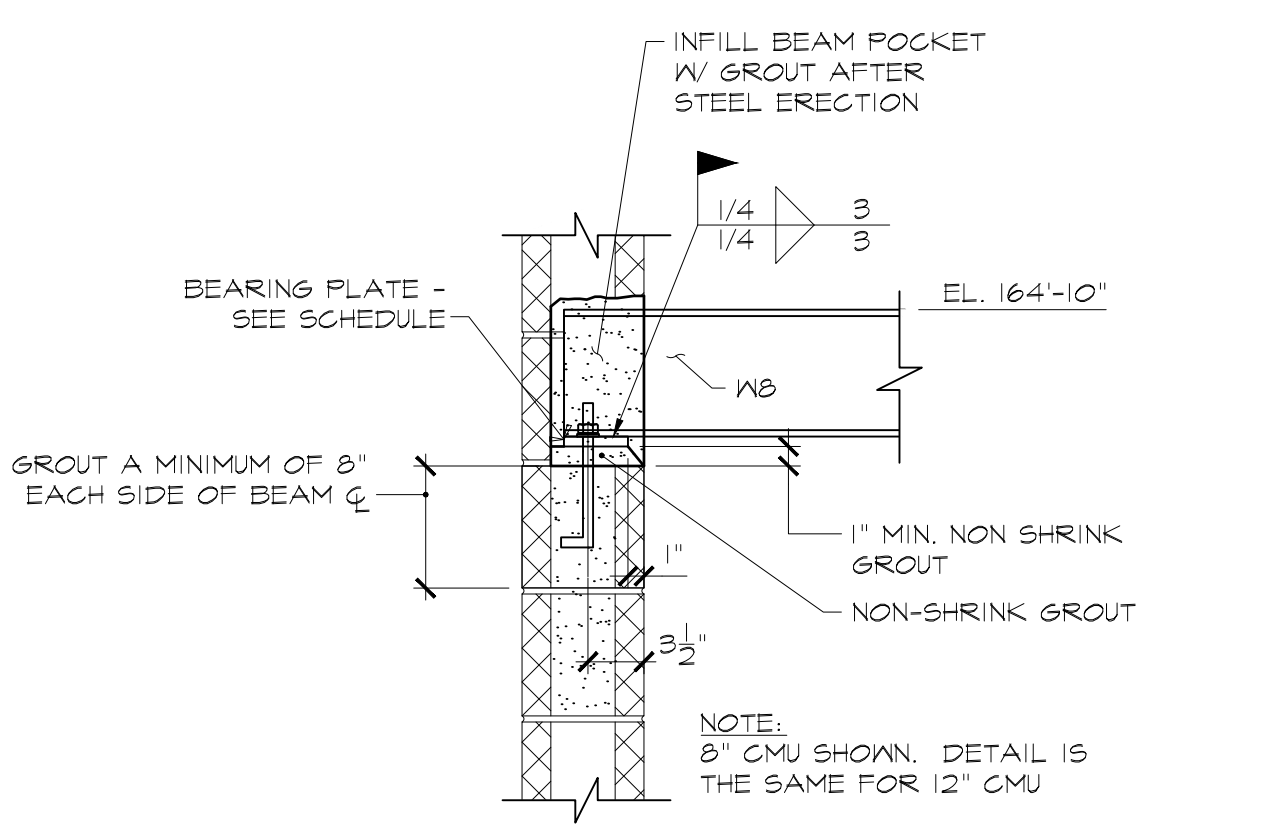
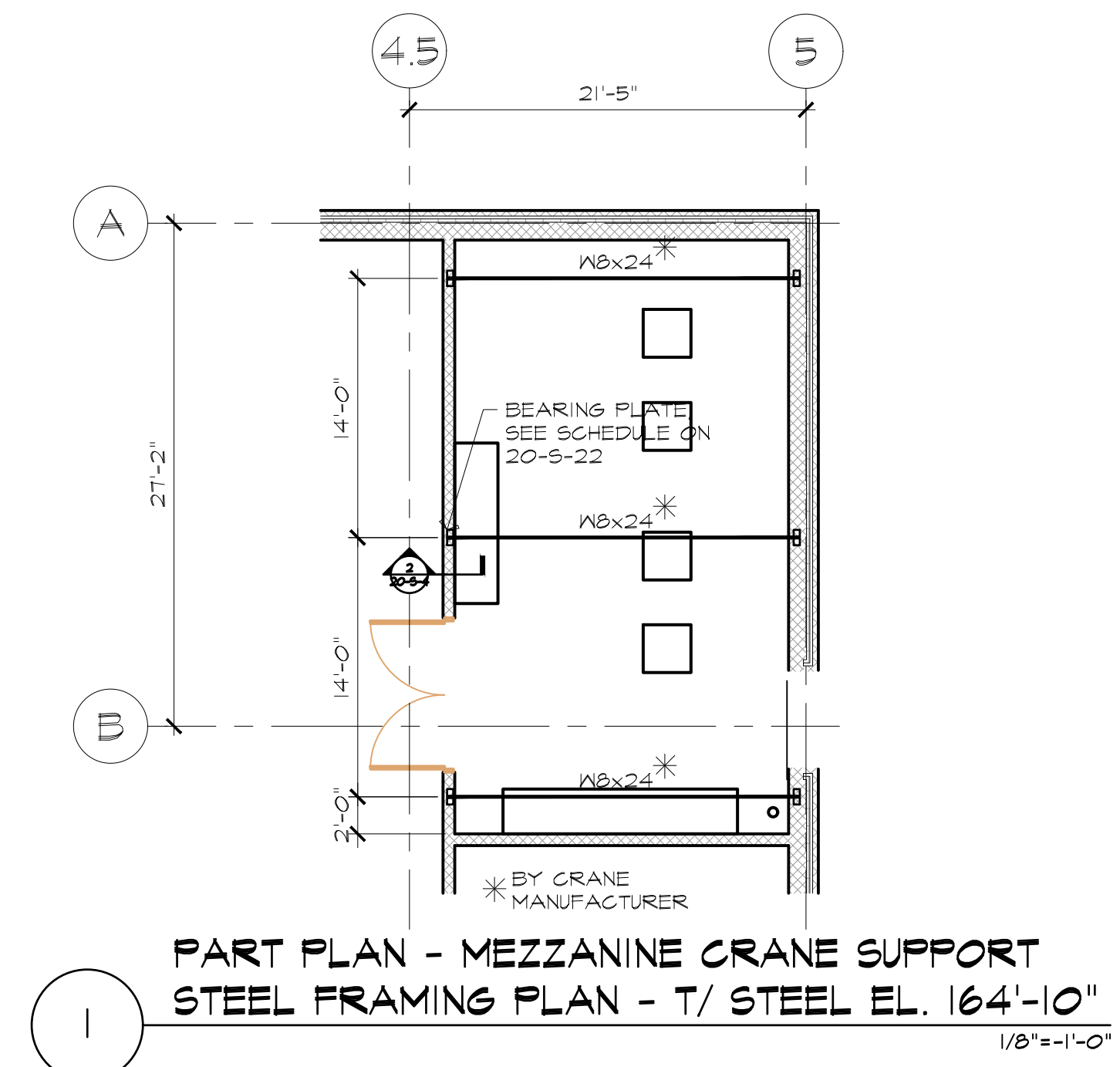
Designed By: JAC
Checked By: SWW
Approved By:

C:\Users\jason@haneys.com\Documents\Public Drawings\2024\Wabaco Wading River WTP.dwg 2/28/2025 3:54 PM JASON@HANEYS



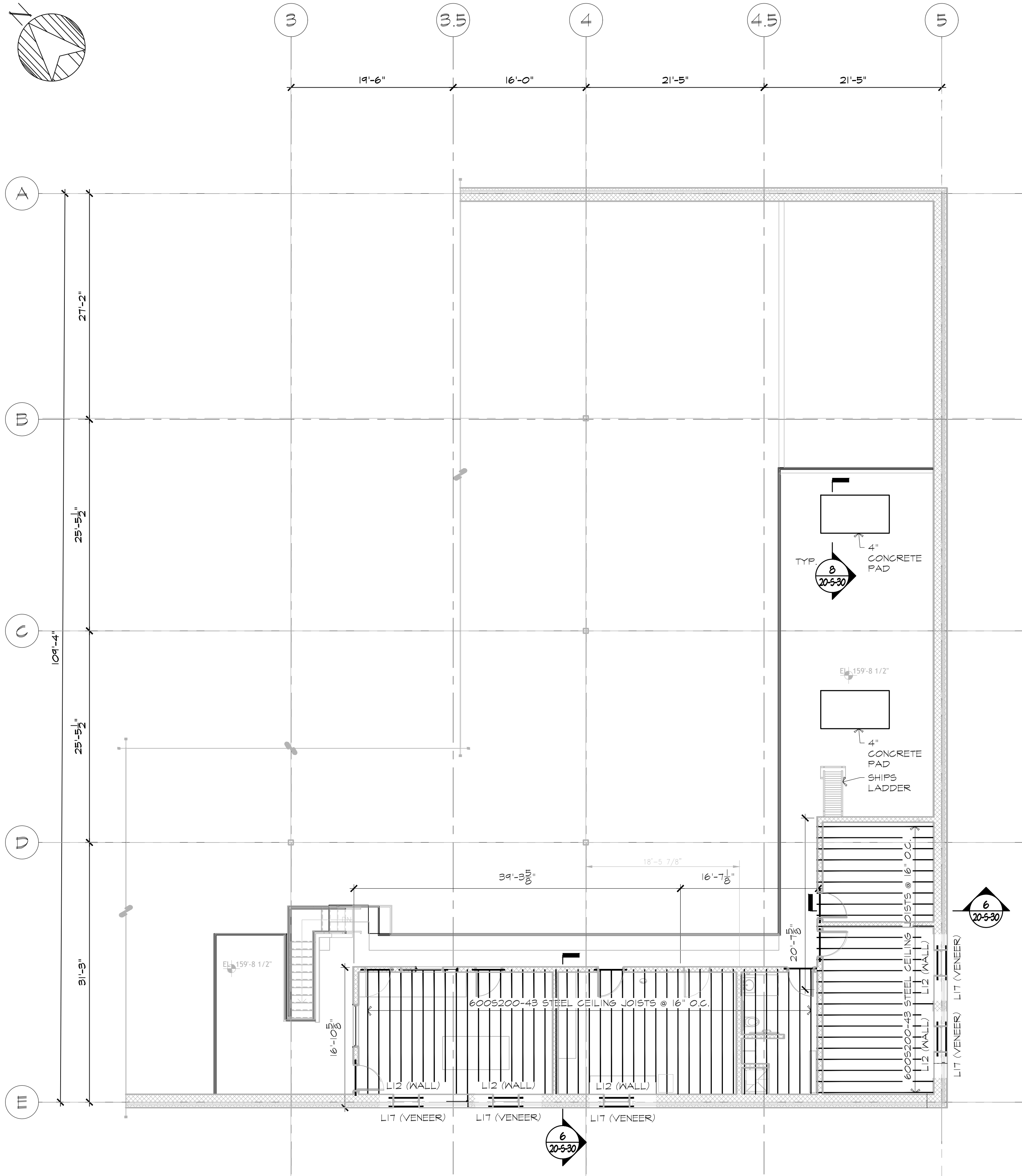
MEZZANINE FLOOR FRAMING PLAN
1/8" = 1'-0"

- ELEVATED SERVICE PLATFORMS AND STAIRS NOTES:**
- ELEVATED SERVICE PLATFORMS AND ACCESS STAIRS SHALL BE PROVIDED AS INDICATED FOR ACCESSING MIX TANKS AND REGENERATION SKID. ALL DESIGN AND CONSTRUCTION SHALL COMPLY WITH THE NINTH EDITION OF THE MASSACHUSETTS STATE BUILDING CODE IN ADDITION TO CRITERIA IDENTIFIED HEREIN.
 - PLATFORMS AND STAIRS SHALL BE DESIGNED BY A STRUCTURAL ENGINEER, LICENSED TO PRACTICE IN MASSACHUSETTS. DESIGN DRAWINGS SHALL BE SUBMITTED FOR APPROVAL WITH THE STAMP OF THE ENGINEER RESPONSIBLE FOR THE DESIGN. SUBMITTALS SHALL INCLUDE ALL RELEVANT DETAILS FOR THE COMPLETE EVALUATION AND COORDINATION WITH SUPPORTING FRAMING.
 - SUPPORT SLABS ARE HEAVILY REINFORCED IN THE VICINITY OF THE MIX TANKS AND REGENERATION SKID. THE USE OF POST-INSTALLED ANCHORS FOR SECURING FRAMING TO THE SLAB IS NOT PERMITTED. DRILLING INTO THE CAST CONCRETE IS NOT PERMITTED UNDER ANY CIRCUMSTANCES.
 - PLATFORMS SHALL BE DESIGNED FOR THEIR INTENDED USE. AS A MINIMUM, PLATFORMS AND ACCESS STAIRS SHALL COMPLY WITH ASCE7-10. MINIMUM LOADS ARE:
 - UNIFORM LOAD = 40 PSF.
 - CONCENTRATED LOAD = 300 LBS DISTRIBUTED OVER AN AREA 2'-6" X 2'-6" APPLIED AT ANY LOCATION.
 - UNIFORM LOAD AND CONCENTRATED LOAD DO NOT NEED TO BE CONSIDERED CONCURRENTLY.
 - ALL STAIRS AND PLATFORMS SHALL BE BRACED TO COMPLY WITH STABILITY PROVISIONS IN THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS AND SEISMIC PROVISIONS IN CHAPTER 15 OF ASCE7-10.
 - ALL STAIRS AND PLATFORMS SHALL INCLUDE RAILINGS TO COMPLY WITH OSHA. GUARDRAILS SHALL PROJECT A MINIMUM OF 42 INCHES ABOVE THE WALKING SURFACE. STAIRS SHALL HAVE HANDRAILS.
 - ALL PLATFORM RAILINGS SHALL INCLUDE TOEBOARDS AT LEAST 4" WIDE.
 - ALL STEEL WORK SHALL COMPLY WITH SPECIFICATIONS FOR STRUCTURAL STEEL, SECTION 05120.



- NOTE:**
- SPAN OF FLOOR DECK PROVIDE 1" DEEP x 22 GAGE DECK
 - D2 = 1" x 22 GAGE GALVANIZED STEEL DECK W/ 3 1/2" CONCRETE TOPPING REINFORCED W/ 6x6 W4xW4 WAF
 - LX DESIGNATES LINTEL @ WALL OPENING
- REFER TO SHEET 20-S-22 FOR LINTEL SCHEDULE
- TOP OF STEEL ELEVATION = 159'-4" (TYP.)

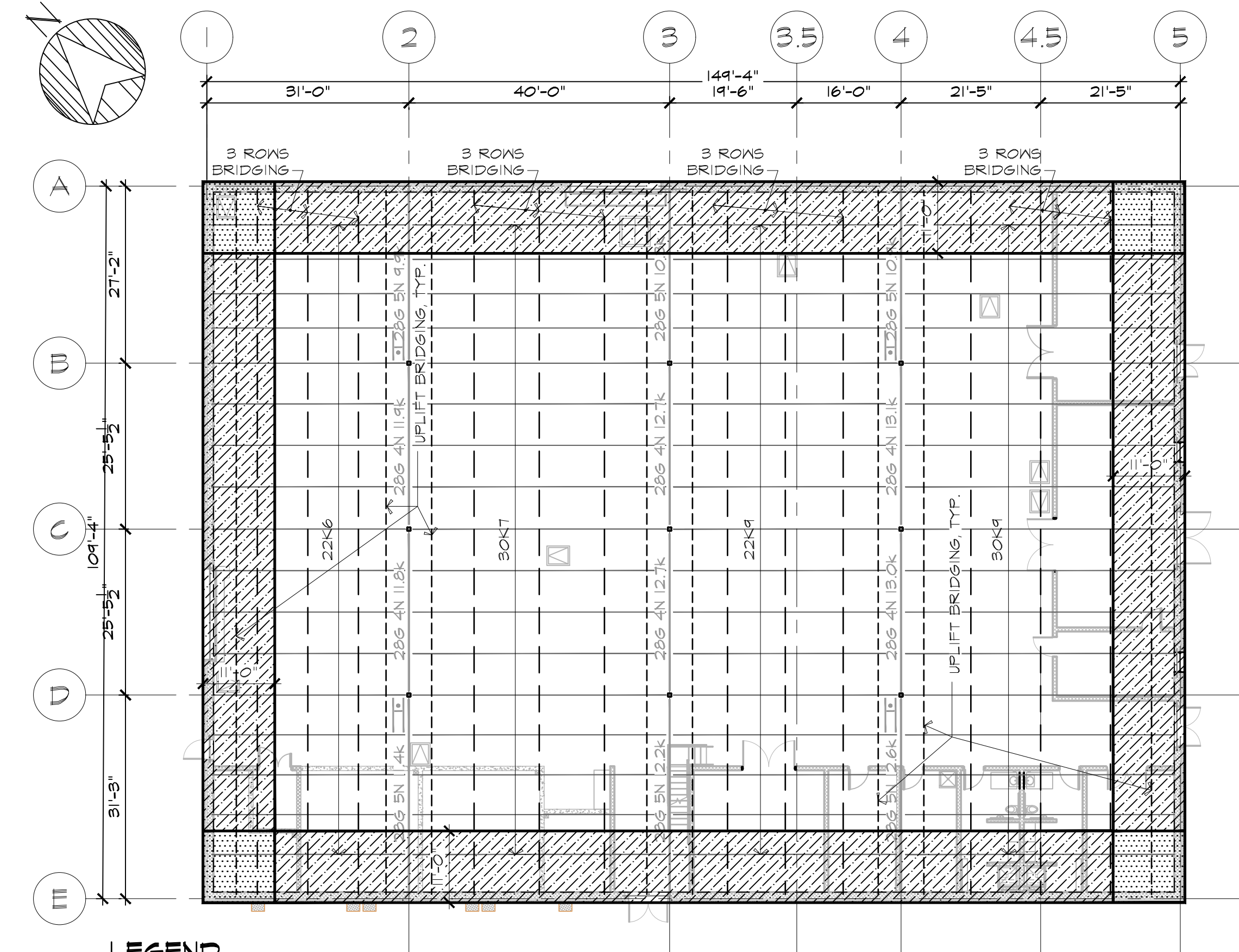
<p>ATTLEBORO WATER DEPT. ATTLEBORO, MA</p> <p>WADING RIVER WATER TREATMENT PLANT</p>	<p>Structural MEZZANINE LEVEL FLOOR FRAMING PLAN</p>	<p>THE DOCUMENT IS THE PROPERTY OF TATA & HOWARD, INC. AND ITS CLIENT. REPRODUCTION OR ADAPTATION WITHOUT WRITTEN CONSENT IS PROHIBITED.</p>	<p>Checked By: SAC</p> <p>Designed By: SWW</p> <p>Drawn By: SWW</p> <p>Approved By:</p>
	<p>ISSUED FOR CONSTRUCTION</p>	<p>Lincoln / Haneys Engineering Associates, Inc. 100 State Street, Suite 301, Woburn, MA 01897 Phone: 781-235-1601 Fax: 781-235-2841</p>	<p>TATA & HOWARD</p>
<p>T&H NO.: 6193</p> <p>DATE: FEBRUARY 2025</p> <p>SCALE:</p>		<p>20-S-4</p>	



MEZZANINE CEILING FRAMING PLAN
1/8"=1'-0"

- CEILING FRAMING NOTES:**
1. CEILING FRAMING IS LABELLED USING STEEL STUD MANUFACTURERS ASSOCIATION NOMENCLATURE. PROVIDE PRODUCTS WITH MINIMUM PROPERTIES IDENTIFIED IN THE SSMA 2015 PRODUCT TECHNICAL GUIDE.
 2. COVER CEILING FRAMING WITH 5/8" APA RATED SHEATHING. FASTEN WITH #6 SCREWS @ 12" O.C. @ EACH SUPPORT.

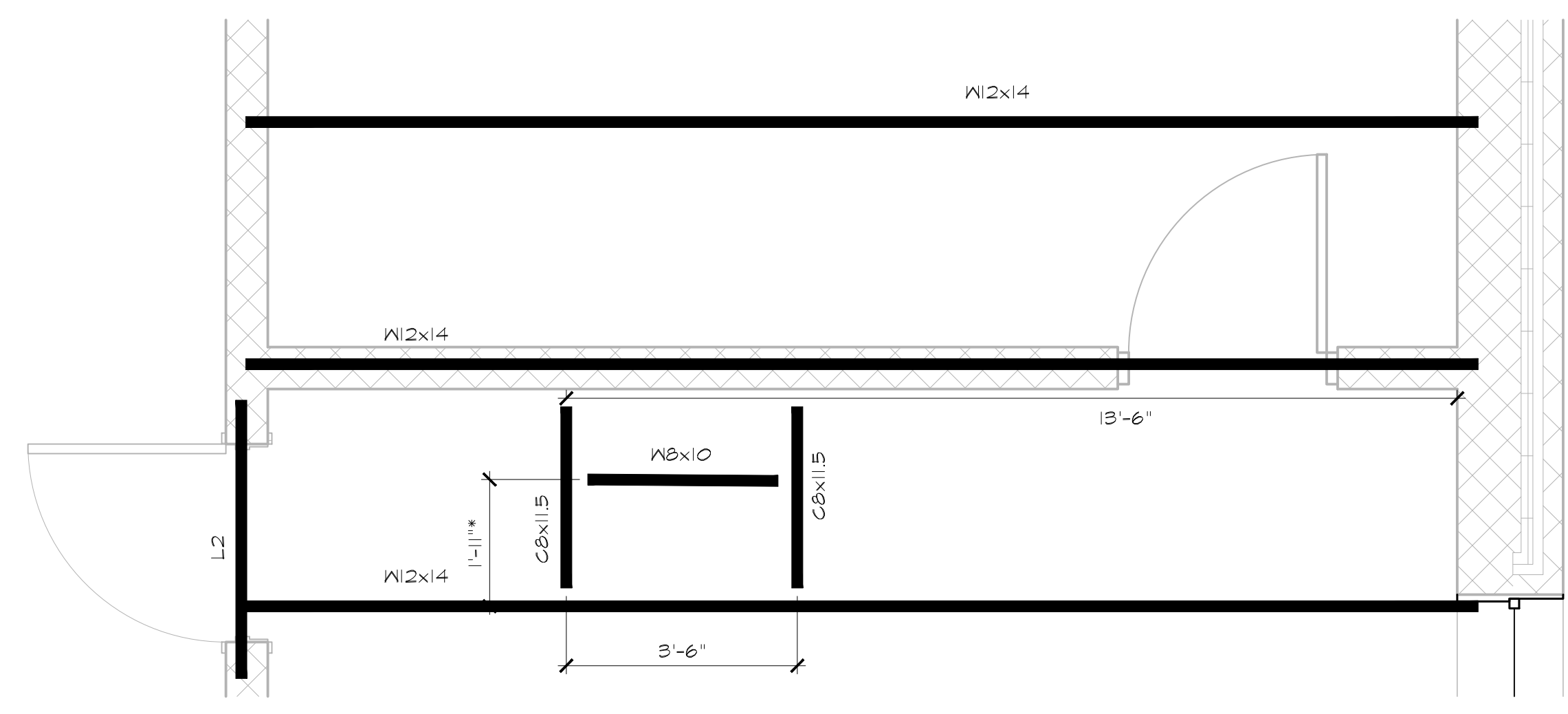
NOTE:
PERIMETER UPPER LEVEL OPENINGS, WALL AND VENEER LINTELS SHOWN. SEE FIRST FLOOR MASONRY PLAN FOR FIRST FLOOR OPENING LINTELS.



- LEGEND**
- [Hatched Pattern] = -55 PSF
 - [Diagonal Lines] = -36.5 PSF
 - [White Box] = -22 PSF

- UPLIFT NOTES:**
1. DESIGN JOIST TO RESIST WIND UPLIFT AS SHOWN. BRIDGING SHOWN IS MINIMUM. DESIGNER MAY INCREASE BRIDGING AS WARRANTED TO RESIST UPLIFT LOADS.
 2. COMBINE WIND UPLIFT WITH DEAD LOAD IN ACCORDANCE W/ LOAD COMBINATIONS IN ASCE 7-10.

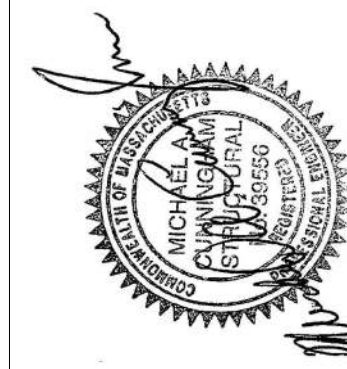
WIND UPLIFT LOAD DIAGRAM
1/16"=1'-0"



FRAMING AT SHIPS LADDERS BASE DETAIL
1/2"=1'-0"

* LOCATE AT SHIPS LADDER-COORDINATE WITH SHIPS LADDER DETAILS

ISSUED FOR CONSTRUCTION



Lincoln / Haney
Engineering Associates, Inc.
100 State Street, Suite 301, Boston, MA 02109
Phone: 202-729-1601 Fax: 202-729-2841



T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE:

20-S-5

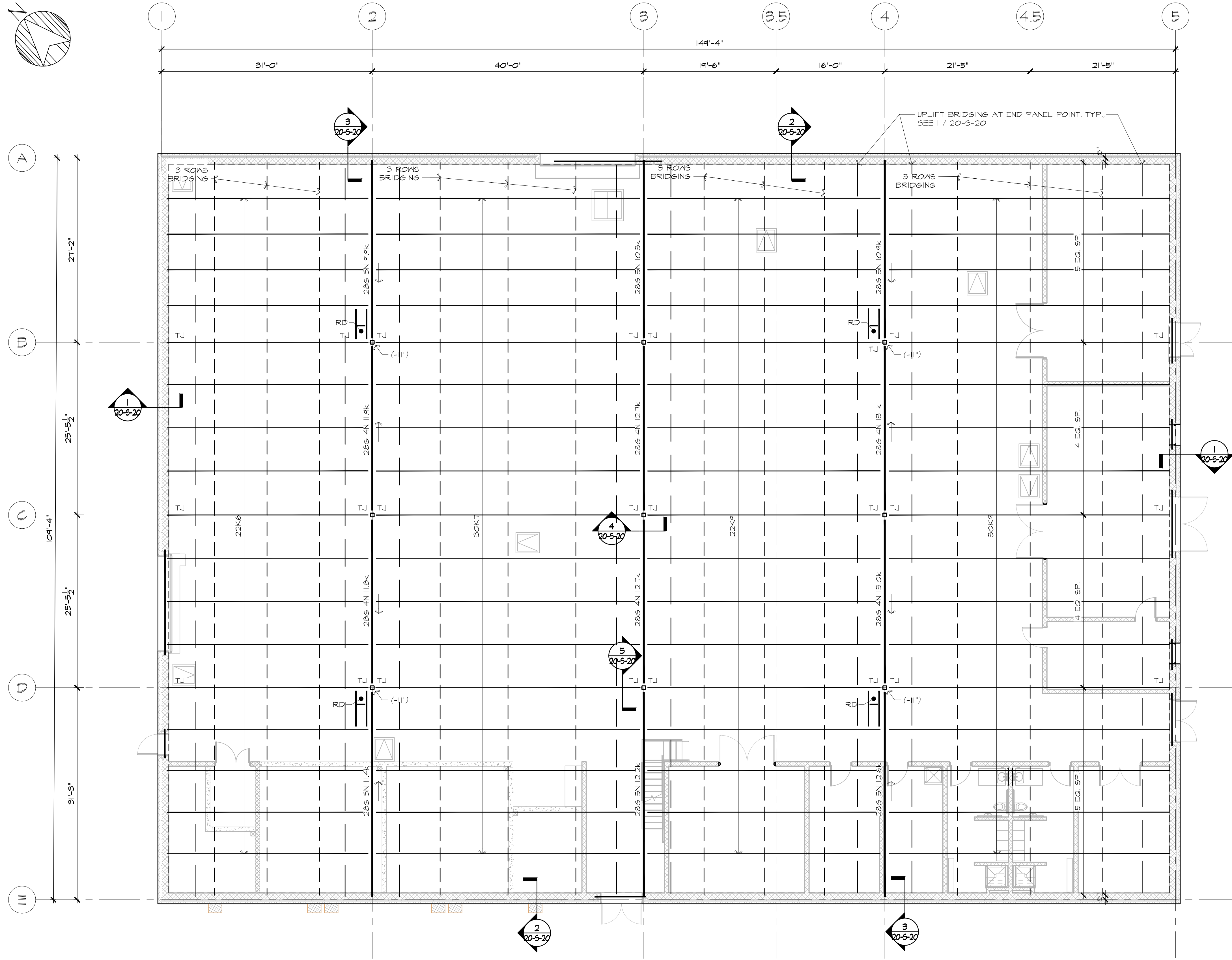
ATTLEBORO WATER DEPT.
ATTLEBORO, MA
WADING RIVER
WATER TREATMENT PLANT

STRUCTURAL
MEZZANINE CEILING
FRAMING PLAN

Rev.	Date	Description

THE DOCUMENT IS THE PROPERTY OF TATA & HOWARD, INC. AND ITS CLIENT. REPRODUCTION OR ADAPTATION WITHOUT WRITTEN CONSENT IS PROHIBITED.

Designed By: JAC
Checked By:
Drawn By: SWW
Approved By:



- NOTES:**
1. TOP OF JOIST GIRDERS SHALL BE EL. 178'-4 1/2" EXCEPT AS NOTED THUS (± X").
 2. TJ DESIGNATES TIE JOISTS. PROVIDE BOLTED CONNECTION FOR ERECTION. FIELD WELD TIE JOISTS AFTER ADJACENT JOISTS ARE WELDED.
 3. RD DESIGNATES ROOF DRAIN. PROVIDE RECESSED SUMP PAN WITH ANGLE FRAME AT DECK EDGES. SEE T/ 20-S-20.
 4. ARROWS (→) DESIGNATE ROOF SLOPE DIRECTION.

ROOF FRAMING PLAN
1/8" = 1'-0"

ATTLEBORO WATER DEPT.
ATTLEBORO, MA
WADING RIVER
WATER TREATMENT PLANT

**STRUCTURAL
ROOF FRAMING PLAN**

Rev.	Date	Description

ISSUED FOR CONSTRUCTION



Lincoln / Haney
Engineering Associates, Inc.
100 State Street, Suite 301, Attleboro, MA 01937
Phone: 508-228-1601 Fax: 508-228-2841



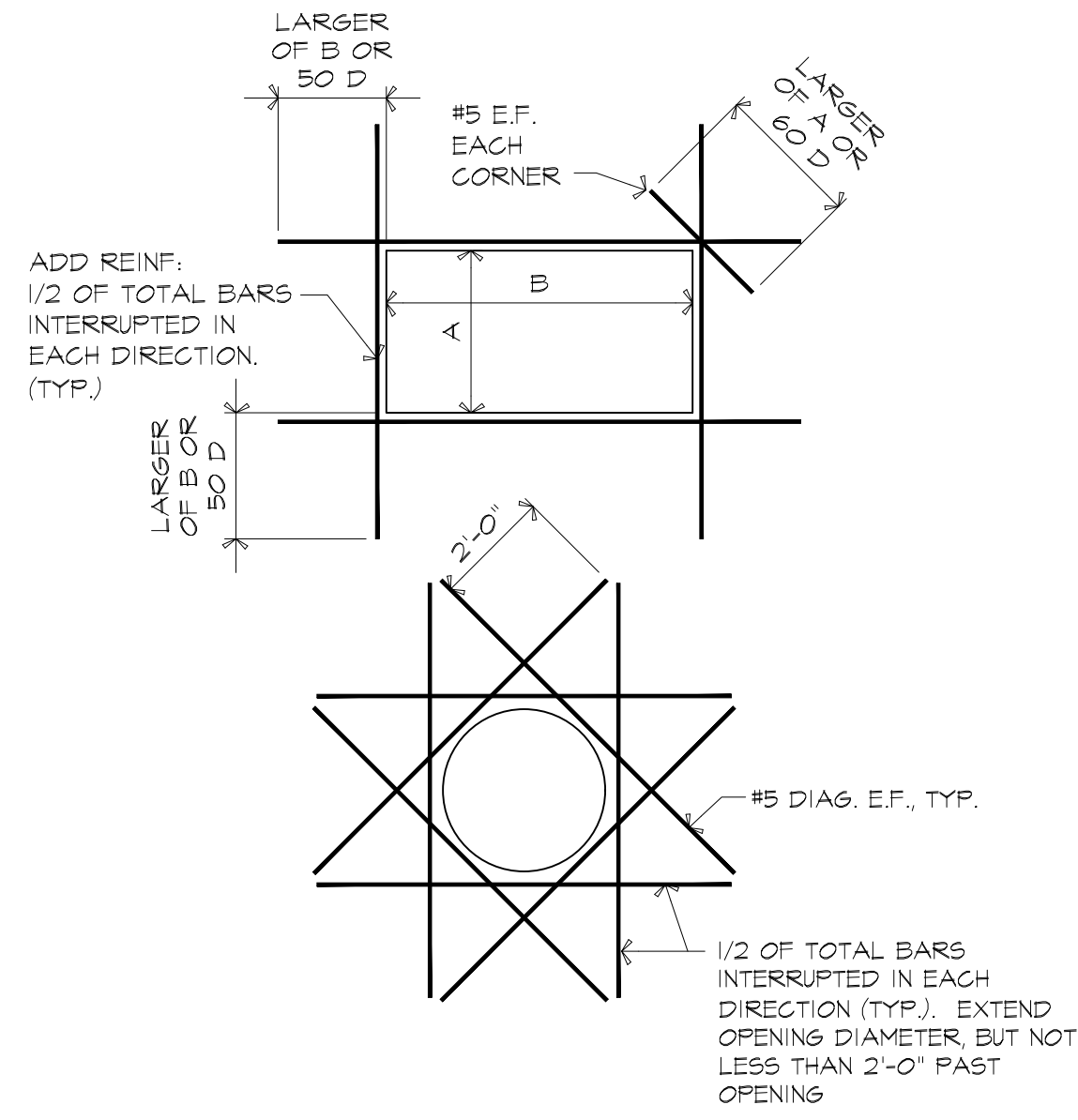
T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE:
20-S-6

Designed By: SWW
Checked By: SAC
Approved By:

THIS DOCUMENT IS THE PROPERTY OF TATA & HOWARD, INC. AND ITS CLIENT. REPRODUCTION OR ADAPTATION WITHOUT WRITTEN CONSENT IS PROHIBITED.

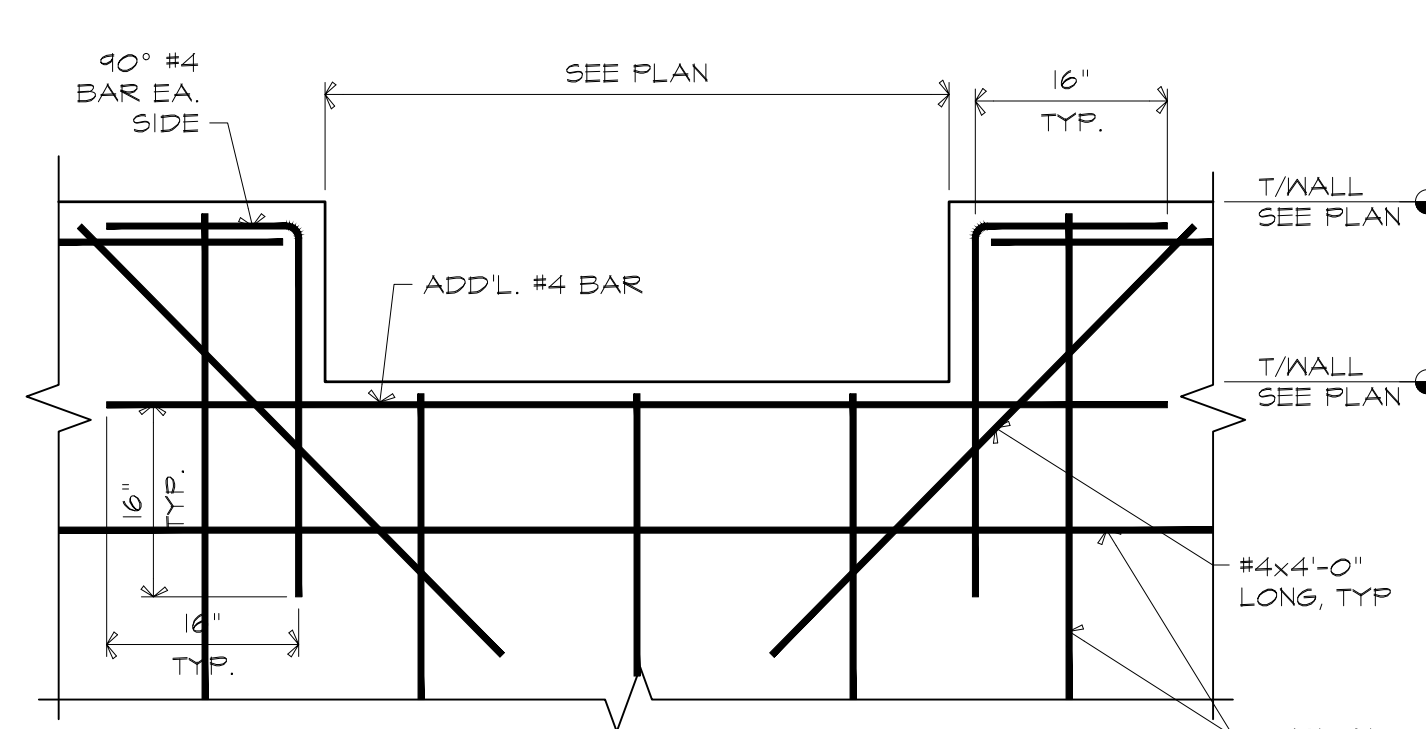
CAST IN PLACE CONCRETE - LAP SPLICE LENGTH SCHEDULE					
BAR SIZE	4000 PSI TOP BARS*	ALL OTHERS	4500 PSI TOP BARS*	ALL OTHERS	NOTES
#4	1'-4"	1'-3"	1'-8"	1'-2"	
#5	2'-2"	1'-7"	2'-1"	1'-6"	
#6	2'-8"	1'-11"	2'-6"	1'-4"	
#7	3'-10"	2'-4"	3'-7"	2'-7"	
#8	4'-4"	3'-1"	4'-1"	2'-11"	
#9	4'-11"	3'-6"	4'-7"	3'-4"	

* TOP BAR SPLICES ONLY APPLY TO TOP BARS IN BEAMS & SLABS DEEPER THAN 13"



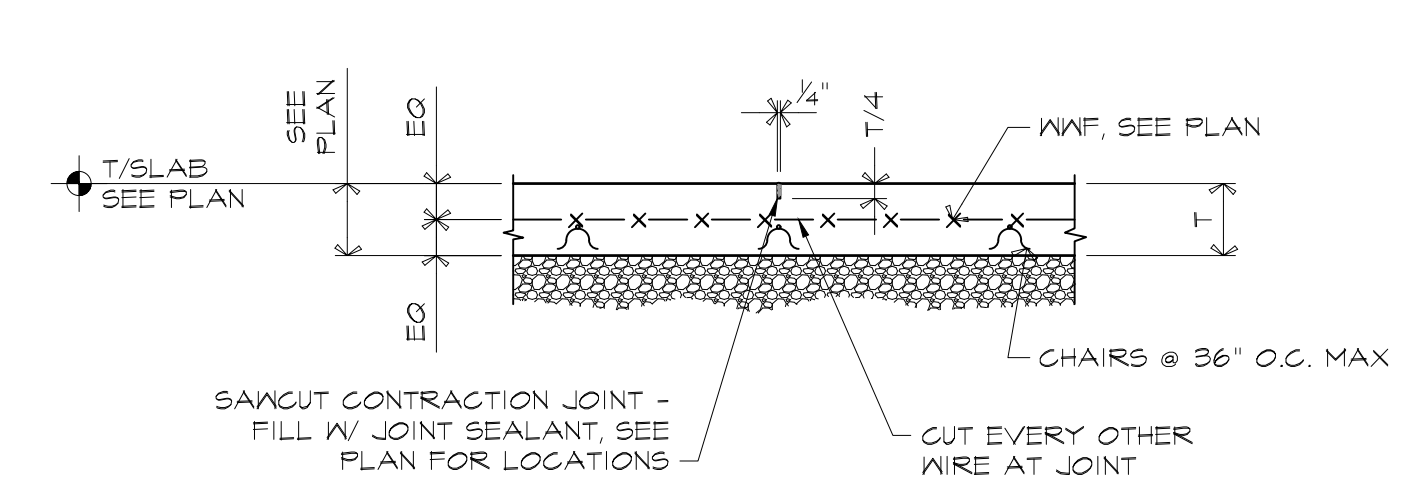
ADDITIONAL REINFORCEMENT AROUND OPENINGS GREATER THAN 1'-0"

NOTE: BOTH FACES N.T.S.



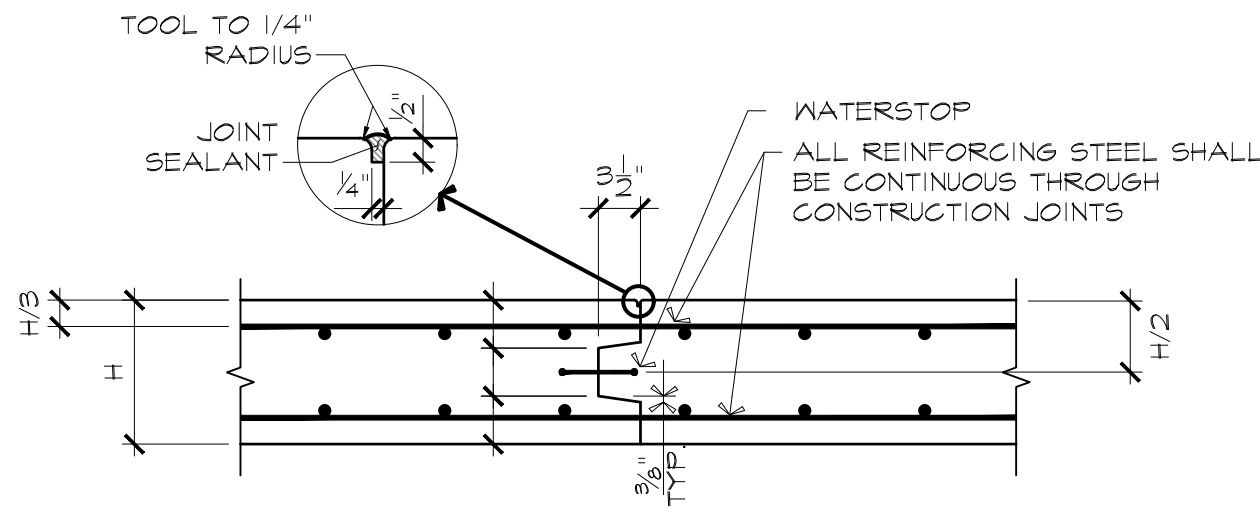
FOUNDATION WALL ELEVATION AT DOOR OPENING

3/4"=1'-0"



3 TYPICAL SAWCUT CONTROL JOINT AT SLAB ON GRADE FOR SLAB < 6" THICK

3/4"=1'-0"

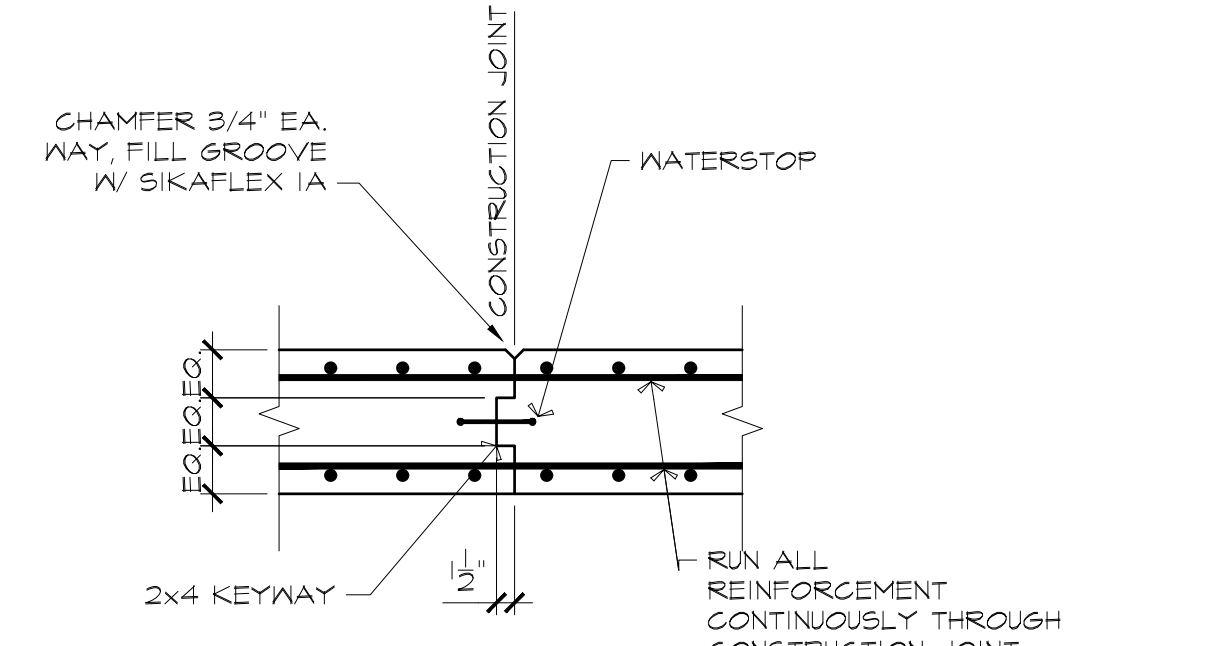


1 TYPICAL STRUCTURAL SLAB CONSTRUCTION JOINT DETAIL

3/4"=1'-0"

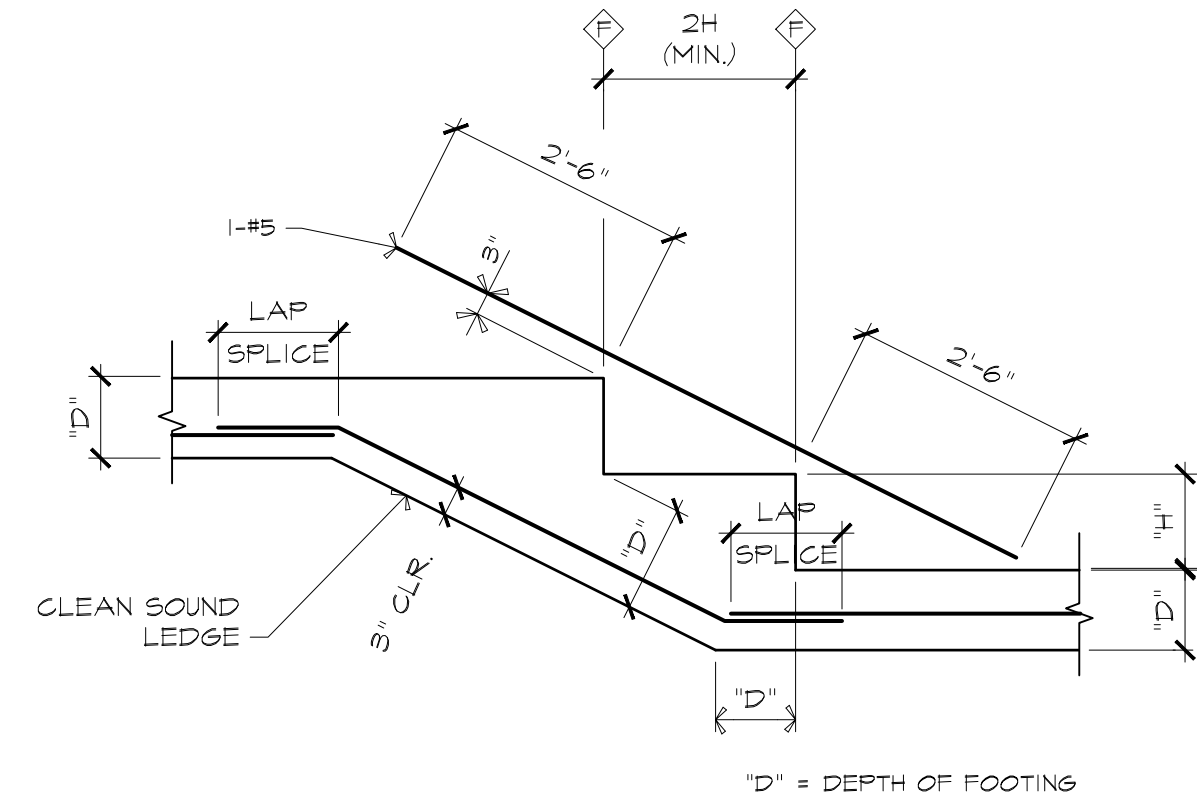
NOTE:

1. THIS DETAIL APPLIES TO SLAB & BEAM CONSTRUCTION AT FIRST FLOOR FRAMING
2. WHERE SECTIONS THICKEN @ BEAMS, WATERSTOP SHALL BE CONTINUOUS AT 1/2 SLAB DEPTH.



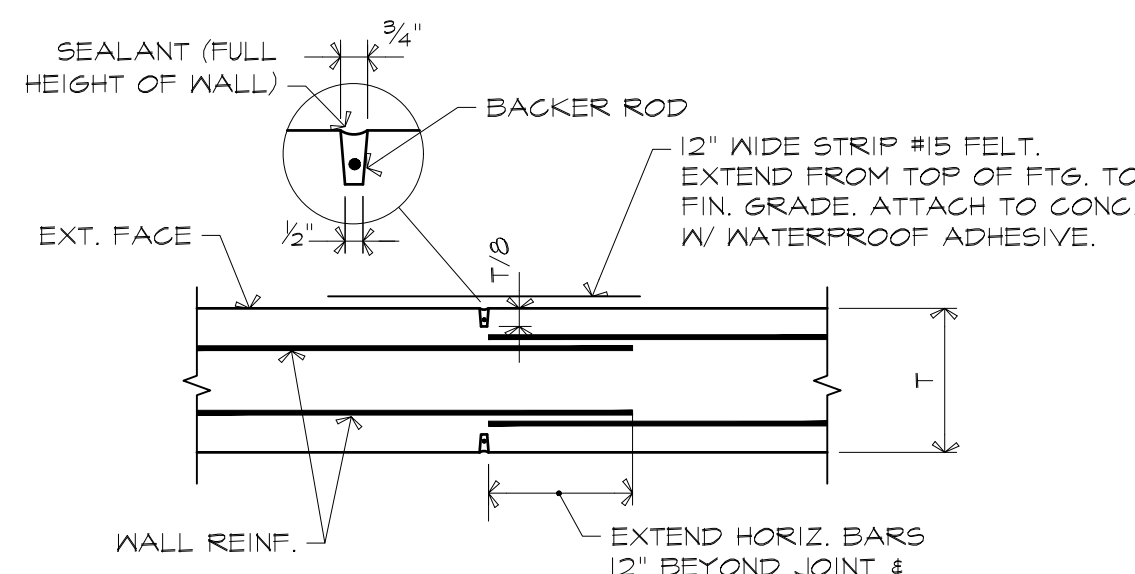
4 TYPICAL TANK WALL JOINT

N.T.S.



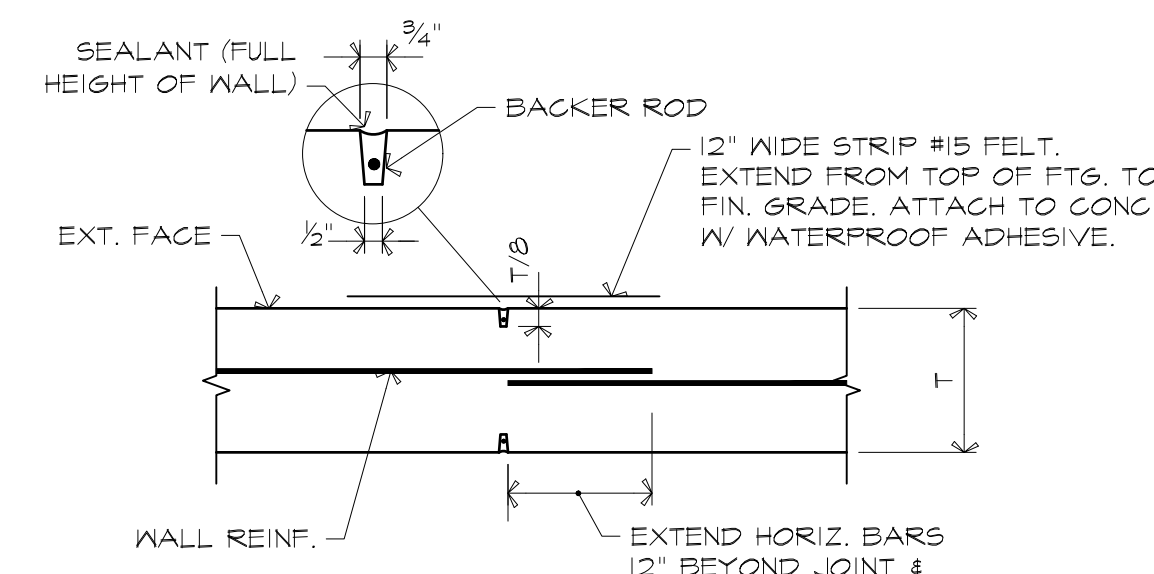
5 TYPICAL STEPPED FOOTING

N.T.S.



6 TYPICAL CONTROL JOINT IN WALL WITH DOUBLE MAT REINFORCEMENT

3/4"=1'-0"



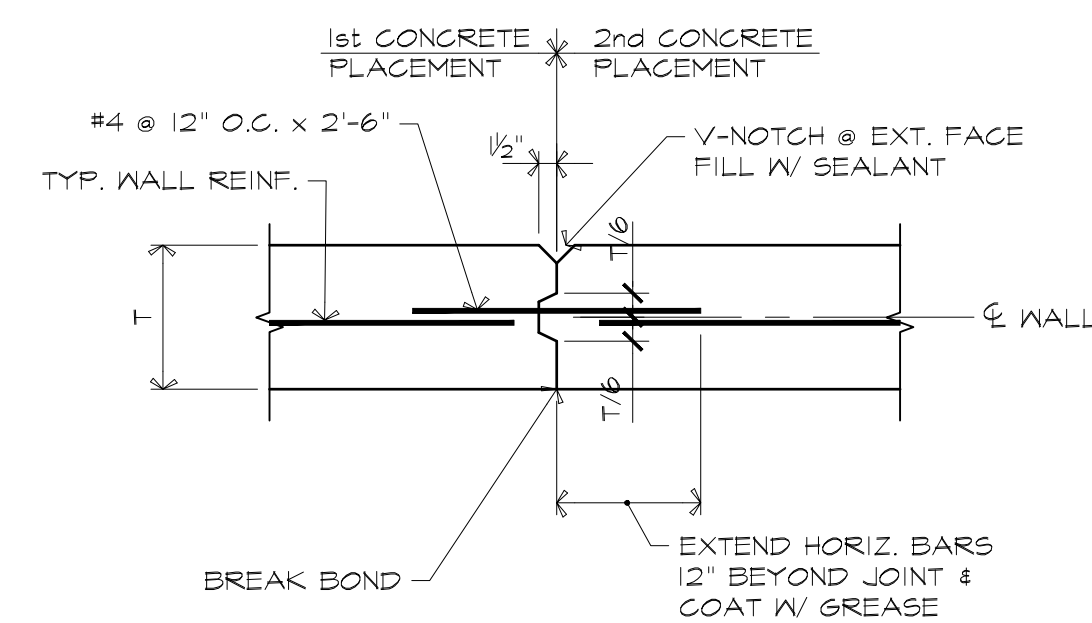
7 TYPICAL CONTROL JOINT IN WALL WITH SINGLE MAT REINFORCEMENT

3/4"=1'-0"

- NOTES:
1. MAX. SPACING BETWEEN JOINTS SHALL BE 30'-0"
 2. MAX. DISTANCE FROM BUILDING CORNER TO JOINT SHALL BE 15'-0"

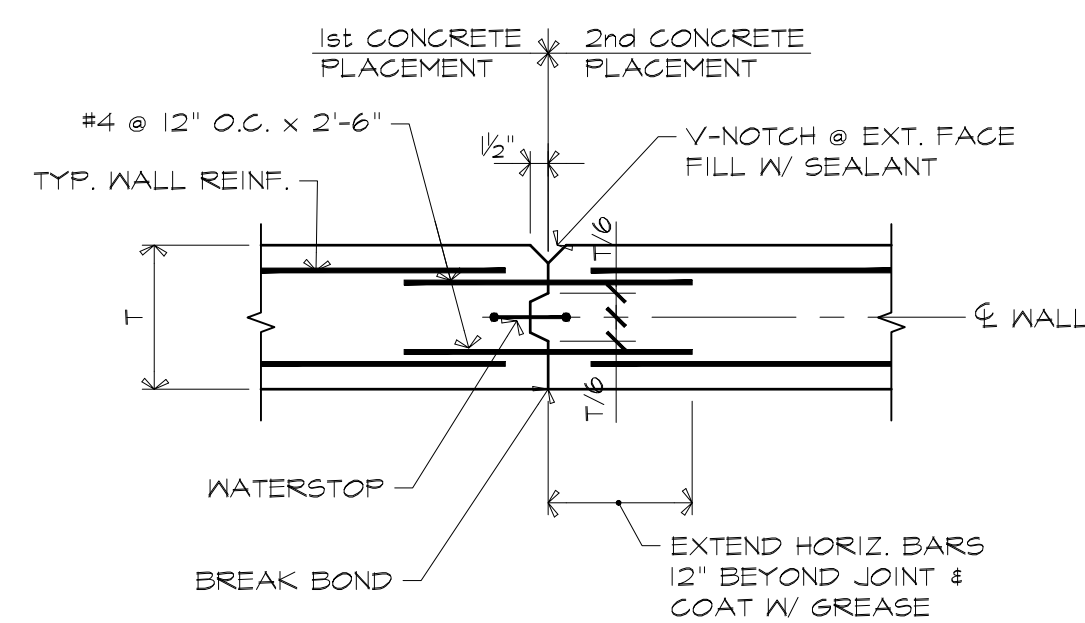
- NOTES:
1. MAX. SPACING BETWEEN JOINTS SHALL BE 30'-0"
 2. MAX. DISTANCE FROM BUILDING CORNER TO JOINT SHALL BE 15'-0"

NO CONTROL JOINTS IN TANK WALLS



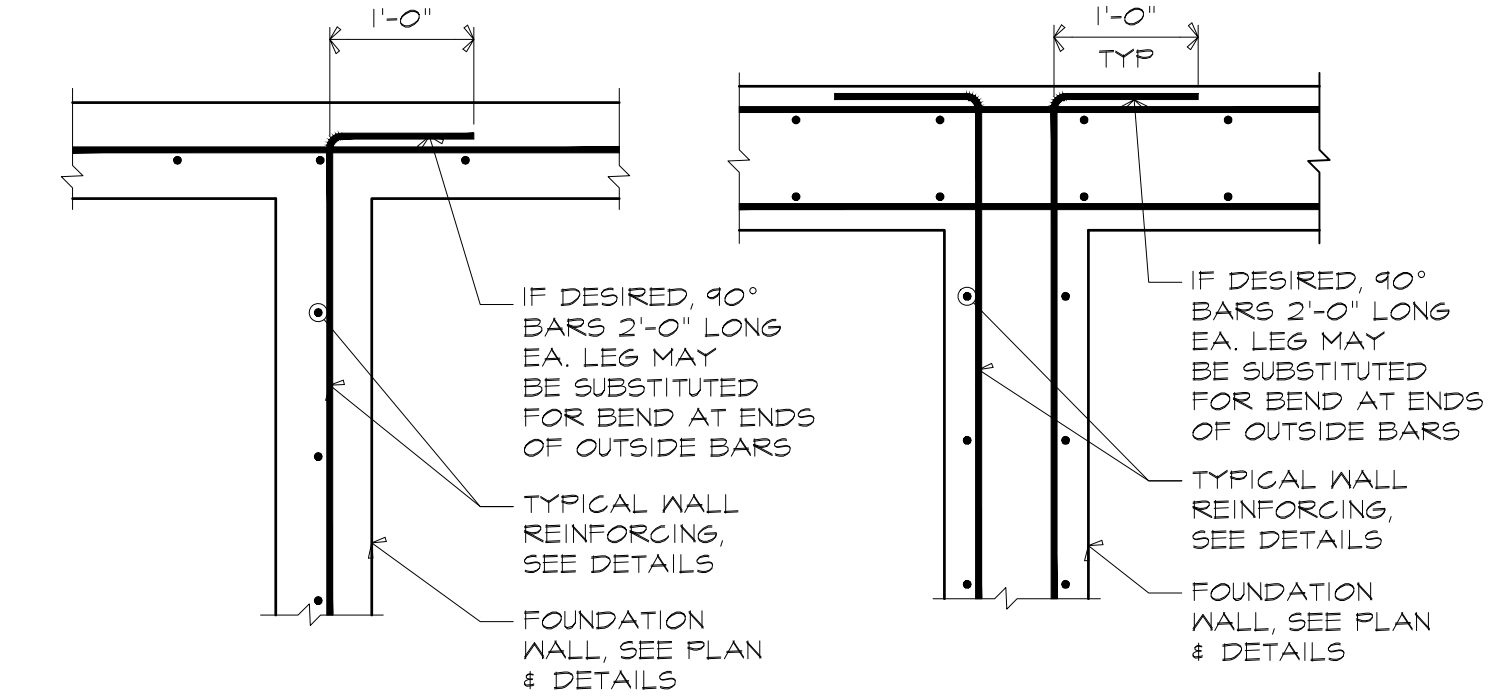
10 TYPICAL CONSTRUCTION JOINT IN WALL WITH SINGLE MAT REINFORCEMENT

3/4"=1'-0"



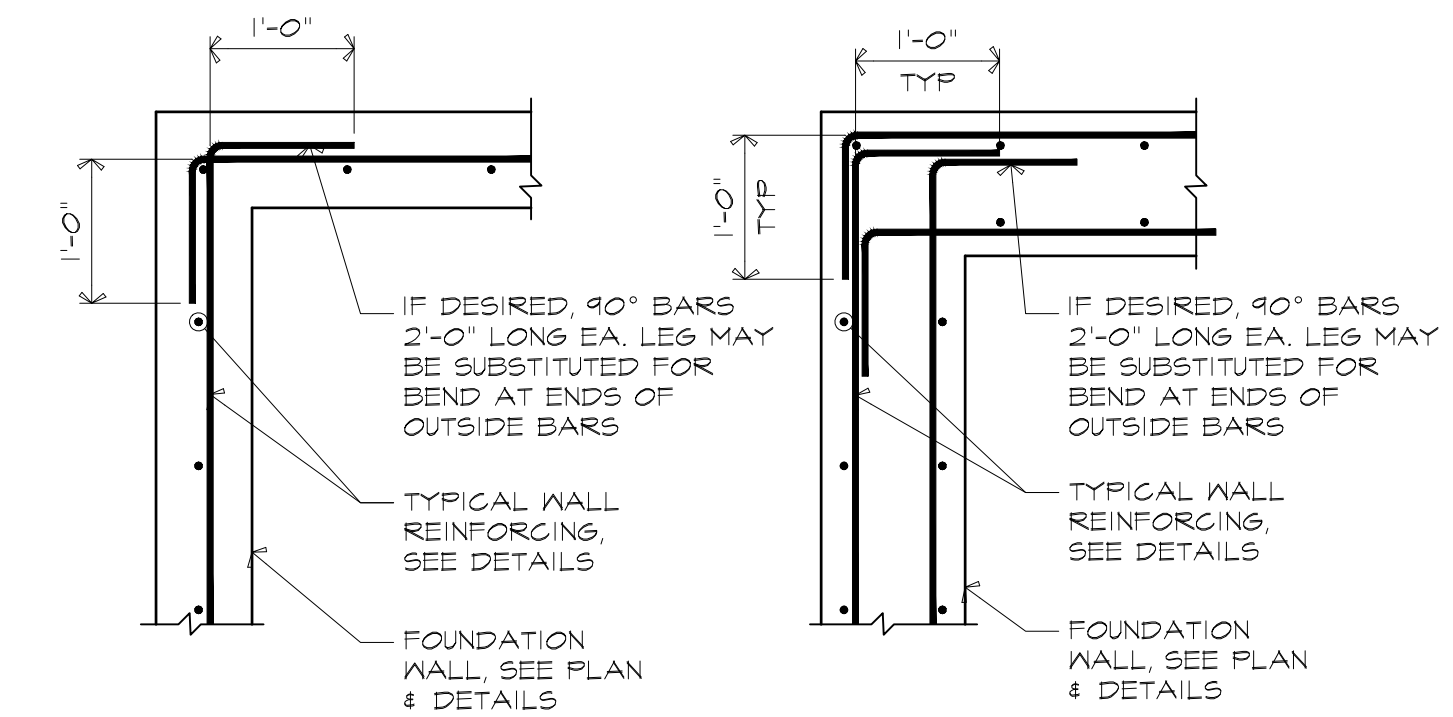
11 TYPICAL CONSTRUCTION JOINT IN WALL WITH DOUBLE MAT REINFORCEMENT

3/4"=1'-0"



9 TYPICAL FOUNDATION WALL INTERSECTION REINFORCEMENT

3/4"=1'-0"



13 TYPICAL FOUNDATION WALL CORNER REINFORCEMENT

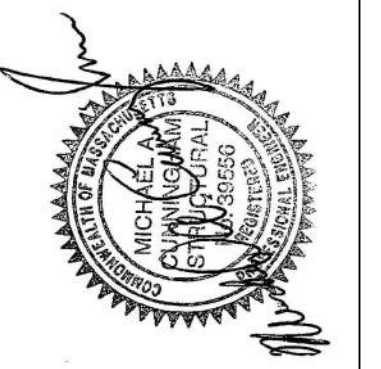
3/4"=1'-0"

ATLEBORO WATER DEPT.
ATLEBORO, MA
WADING RIVER
WATER TREATMENT PLANT

STRUCTURAL
SECTIONS AND DETAILS

Rev.	Date	Description

ISSUED FOR CONSTRUCTION



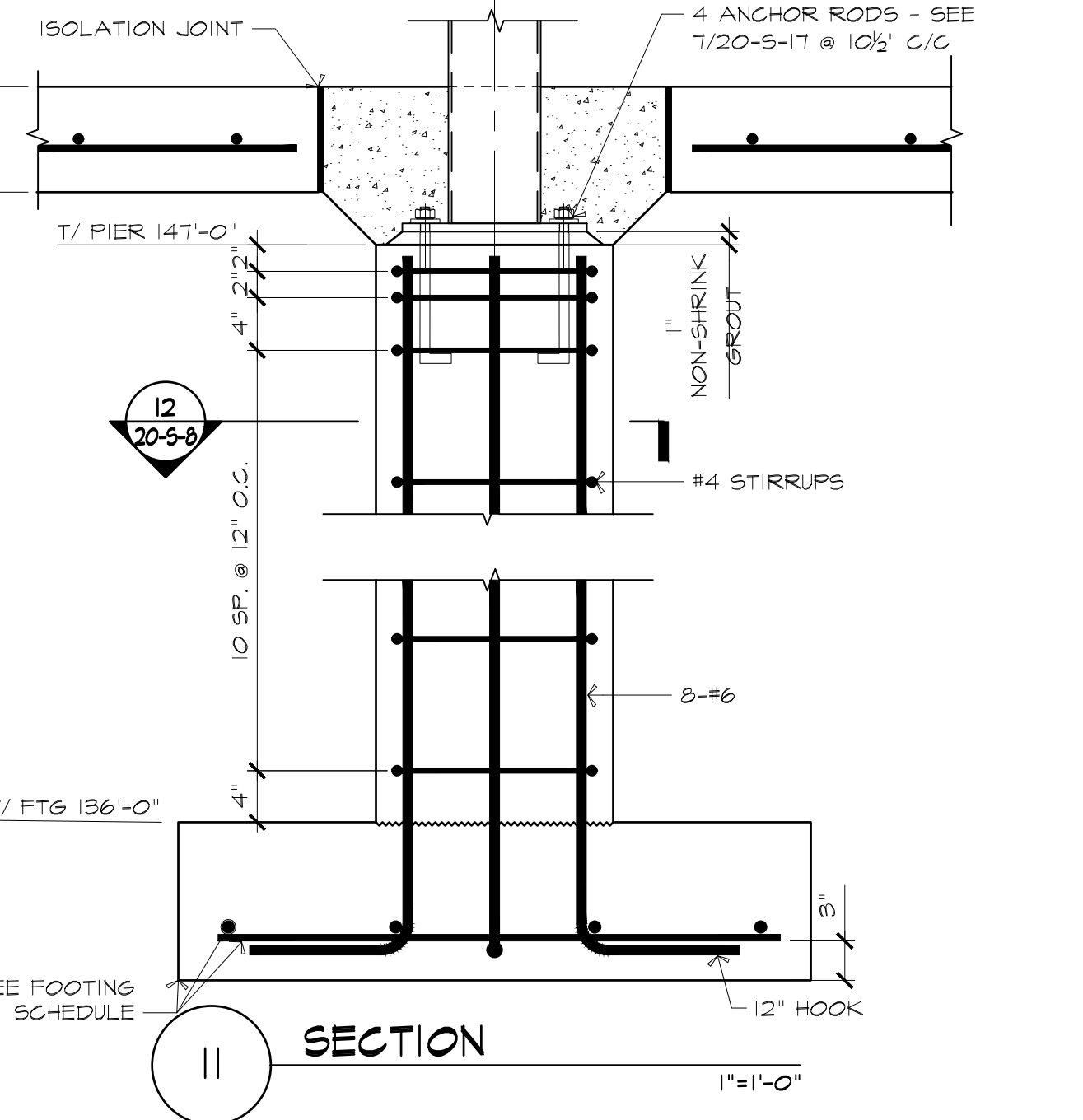
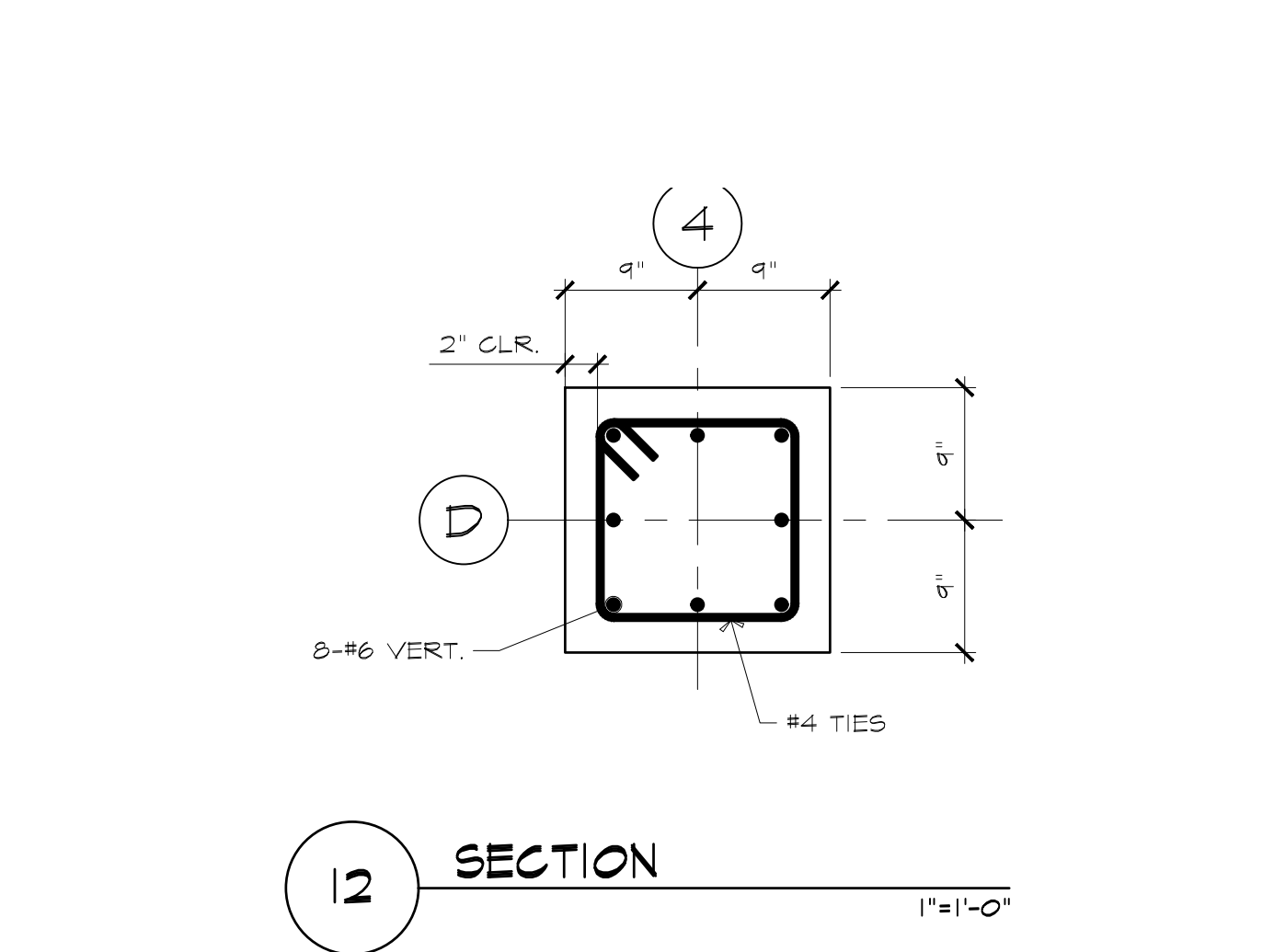
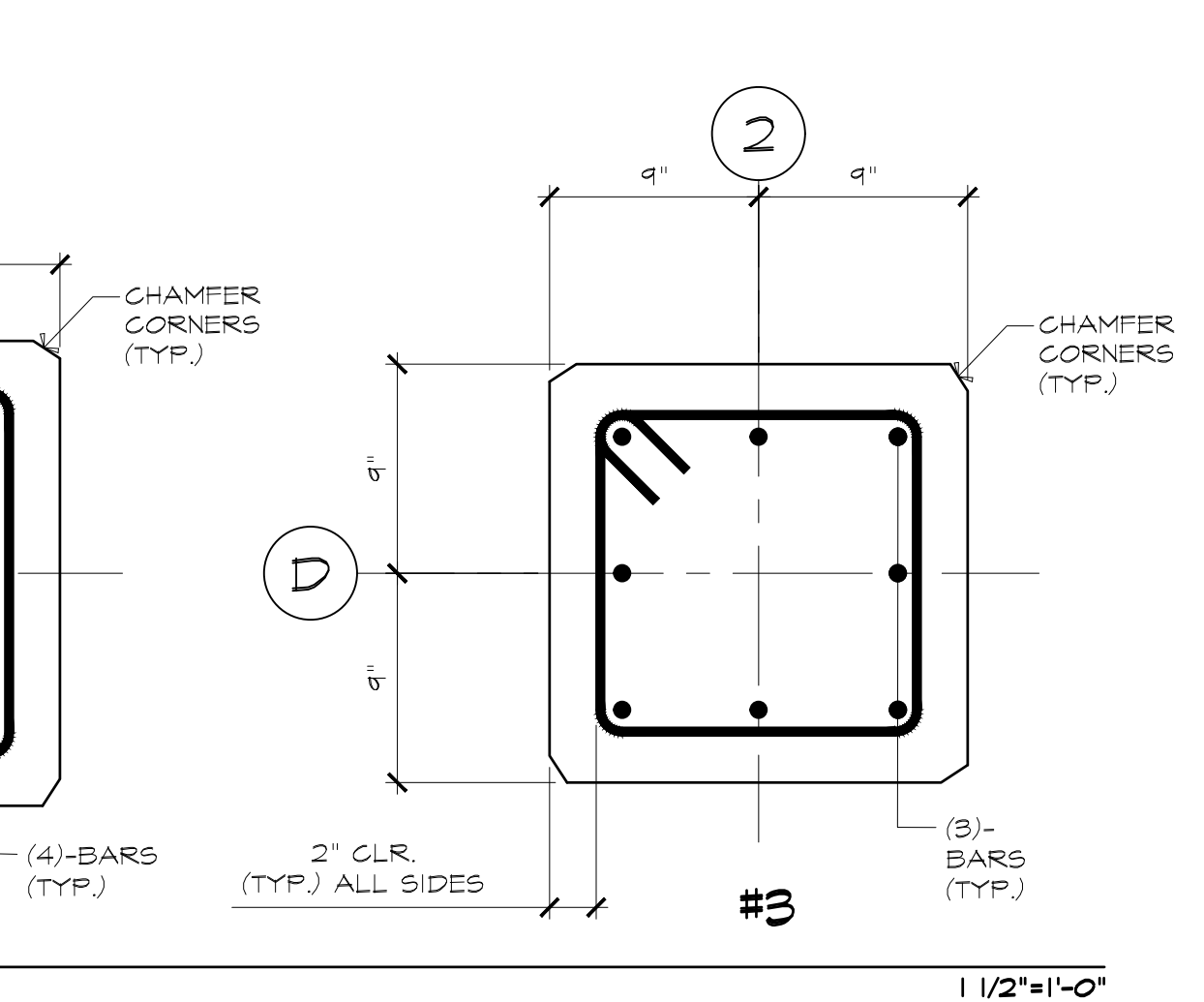
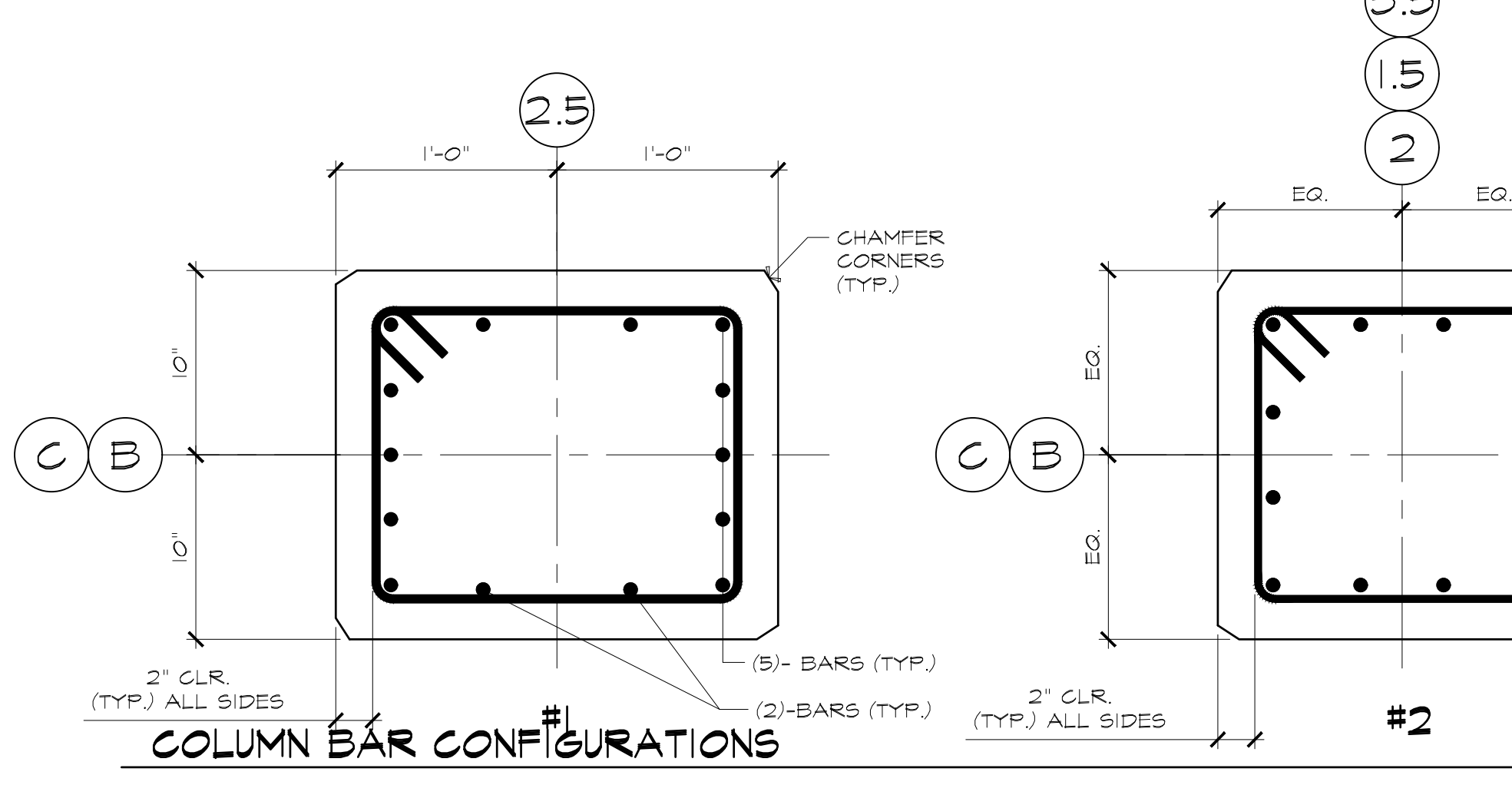
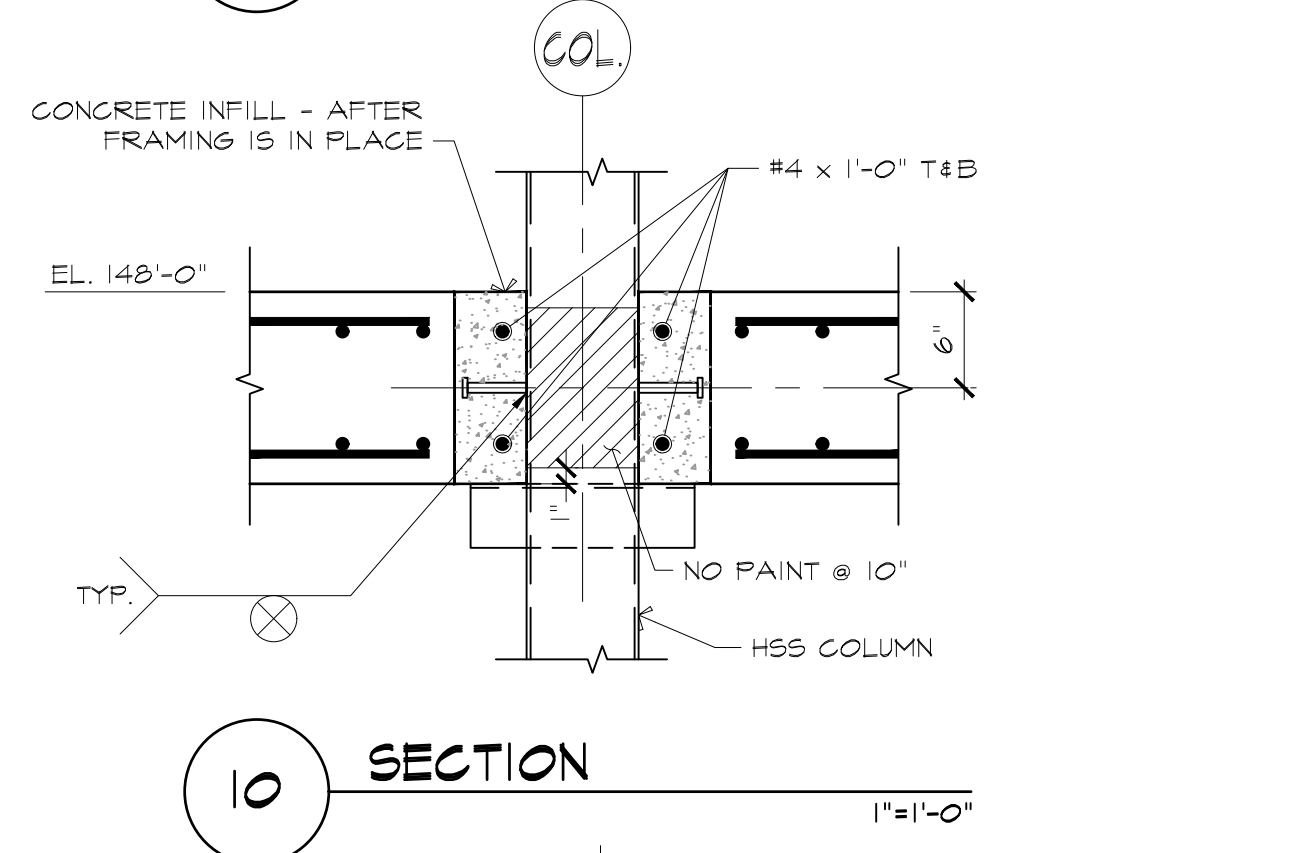
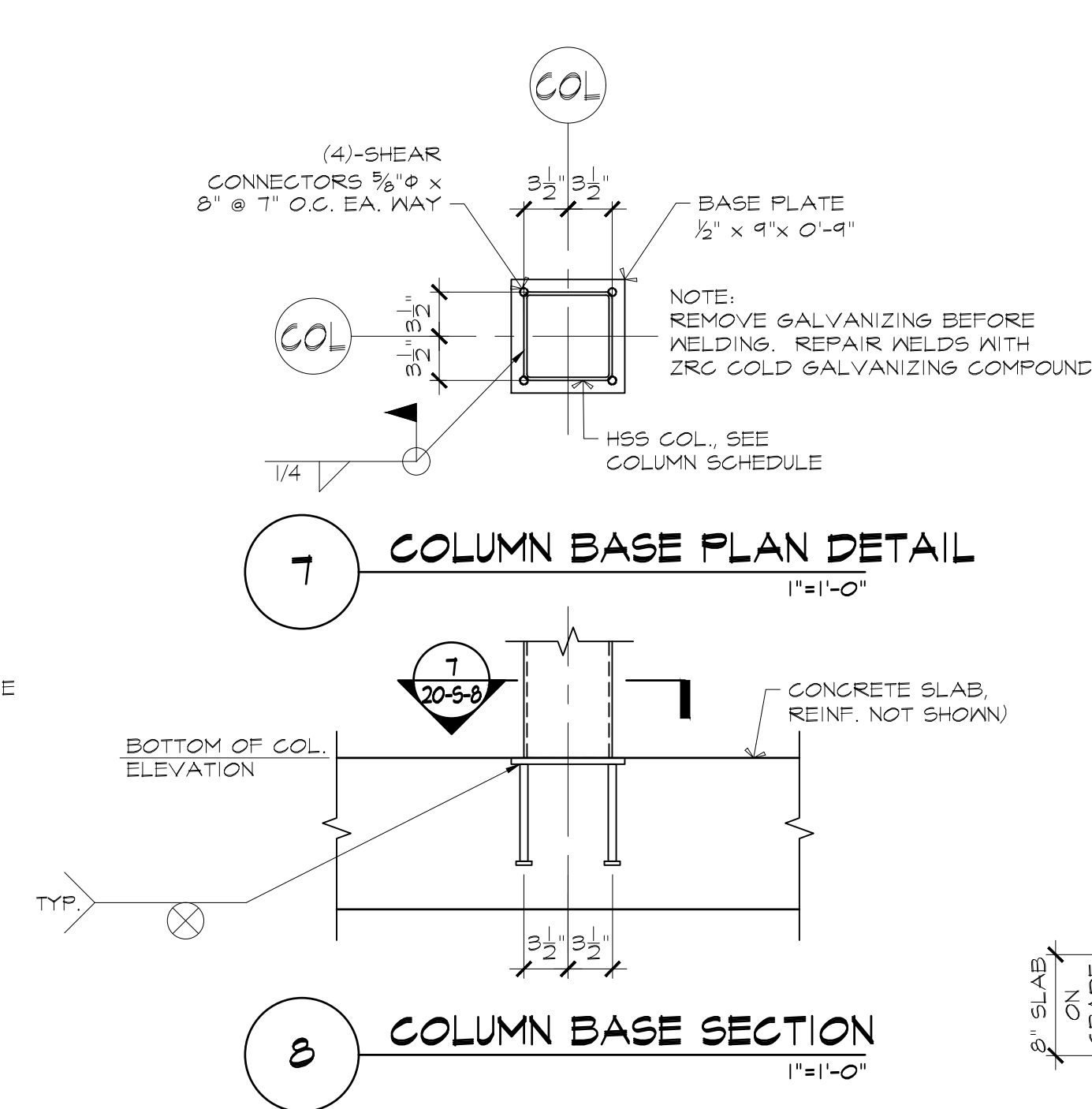
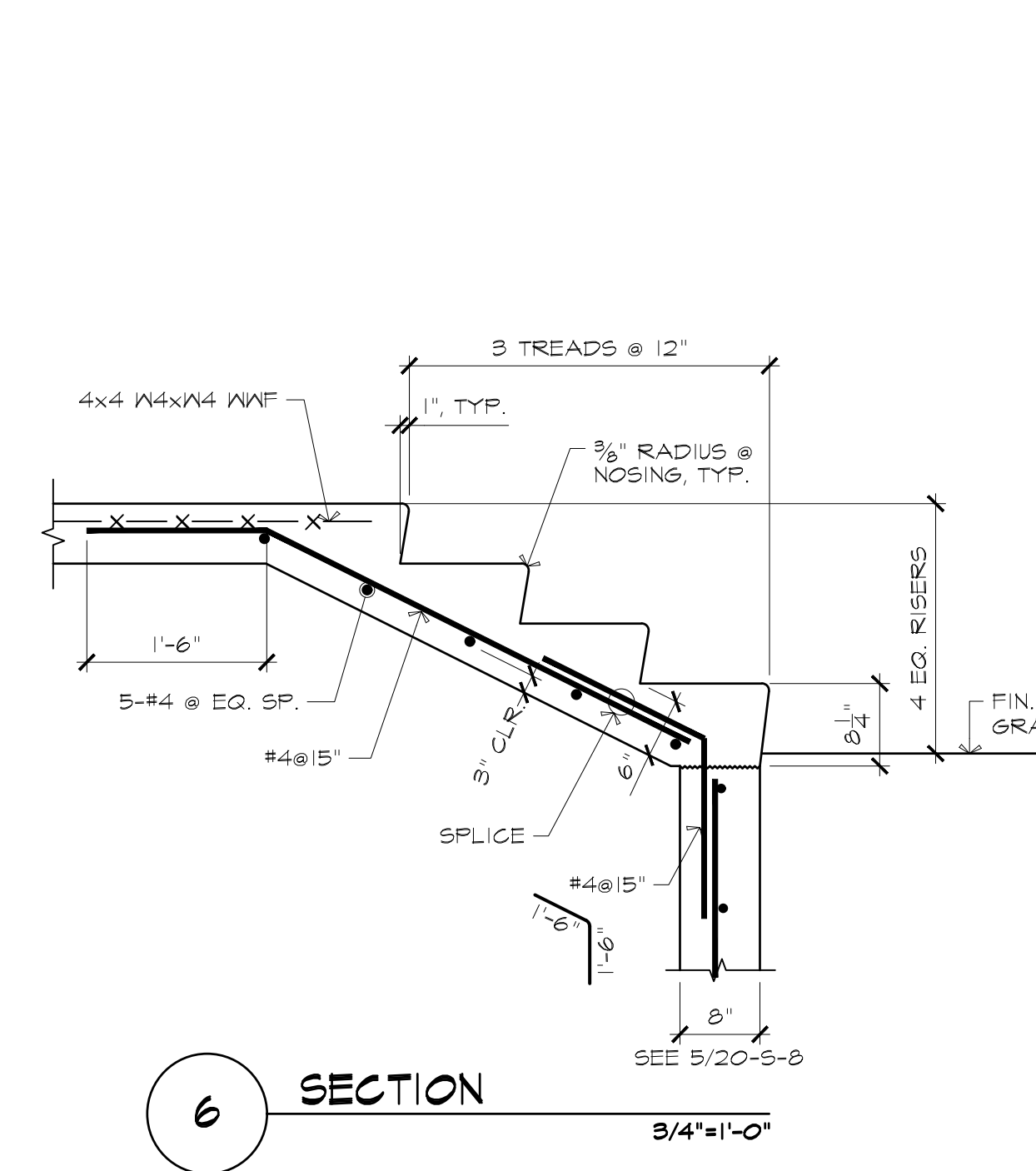
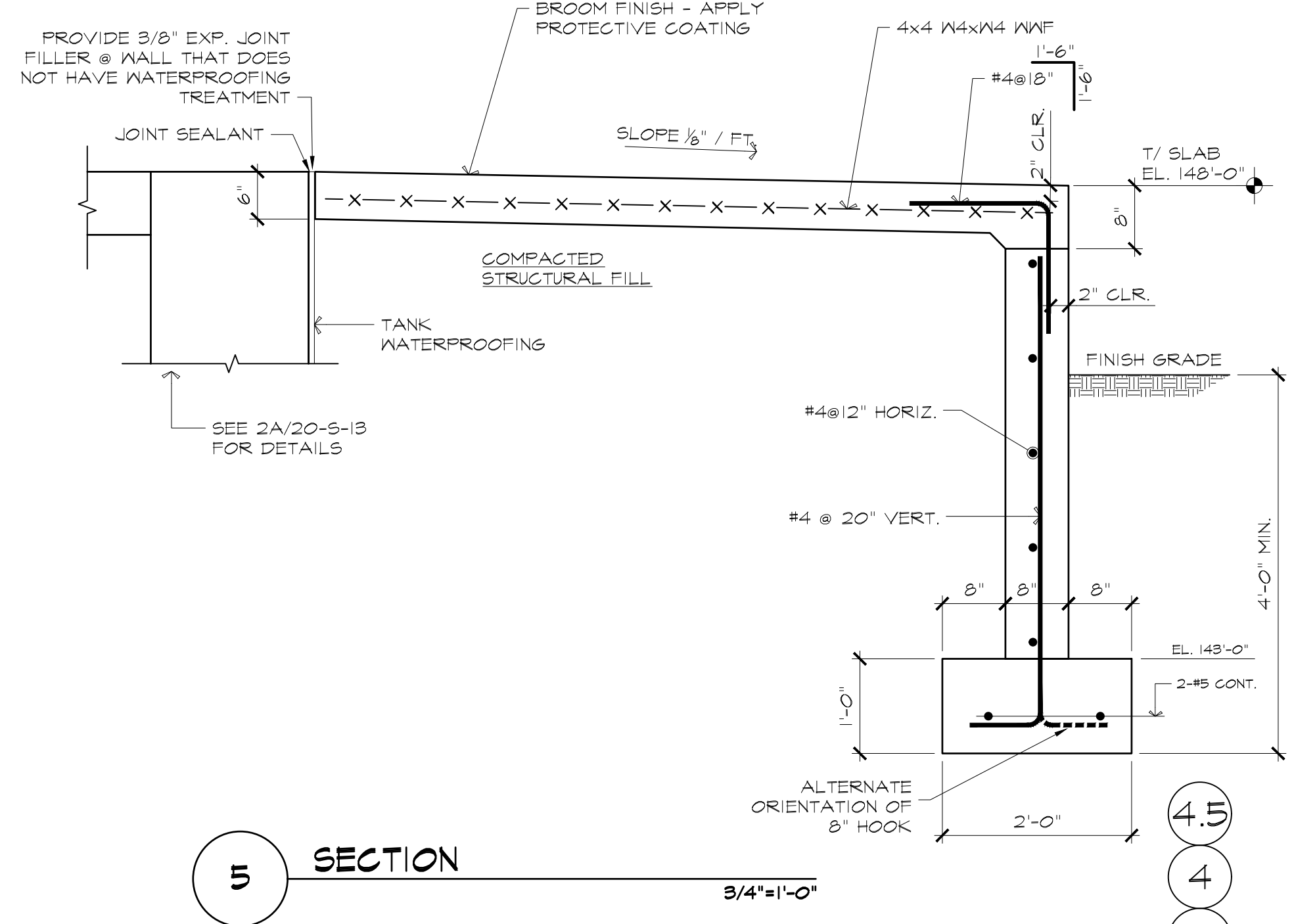
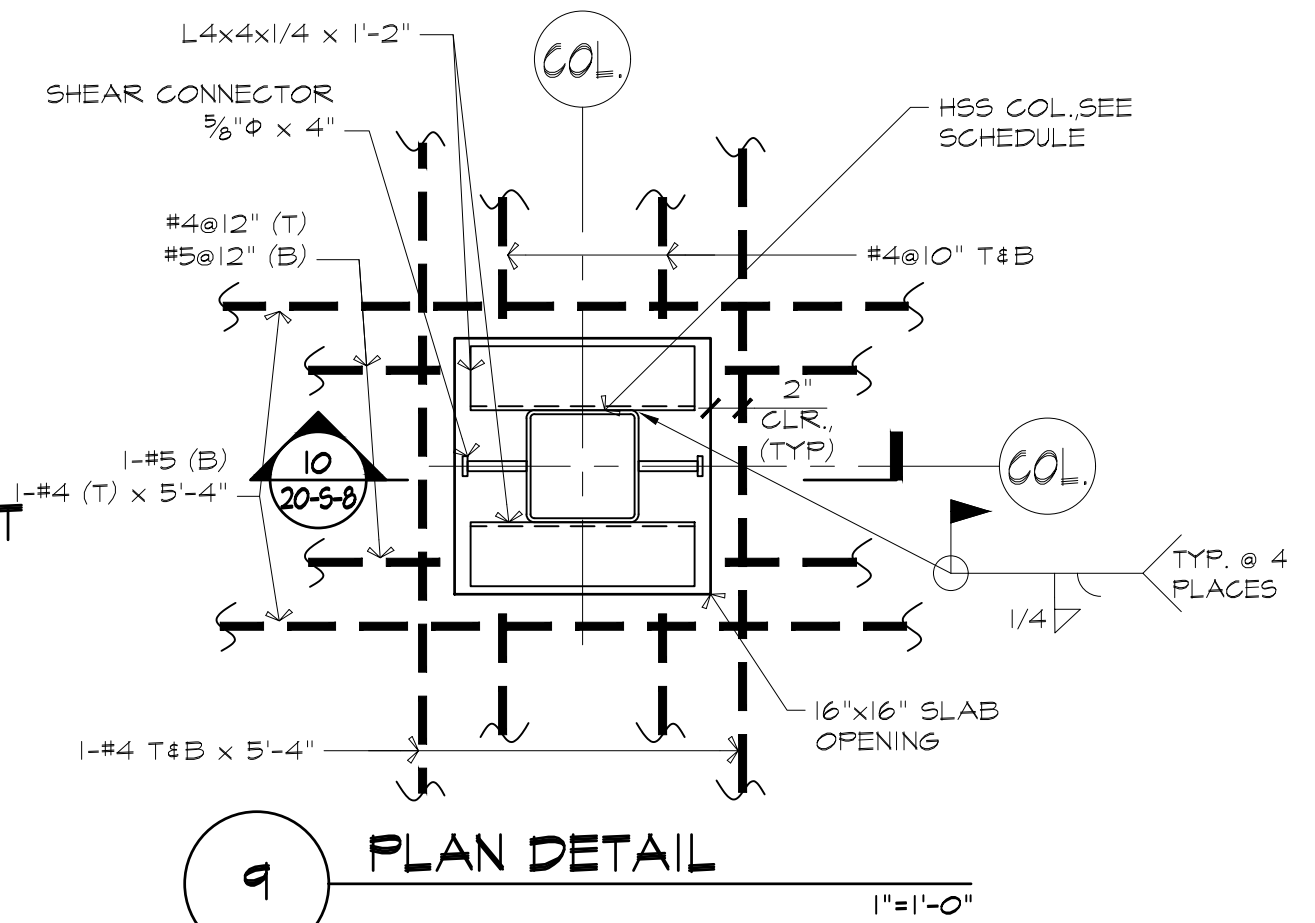
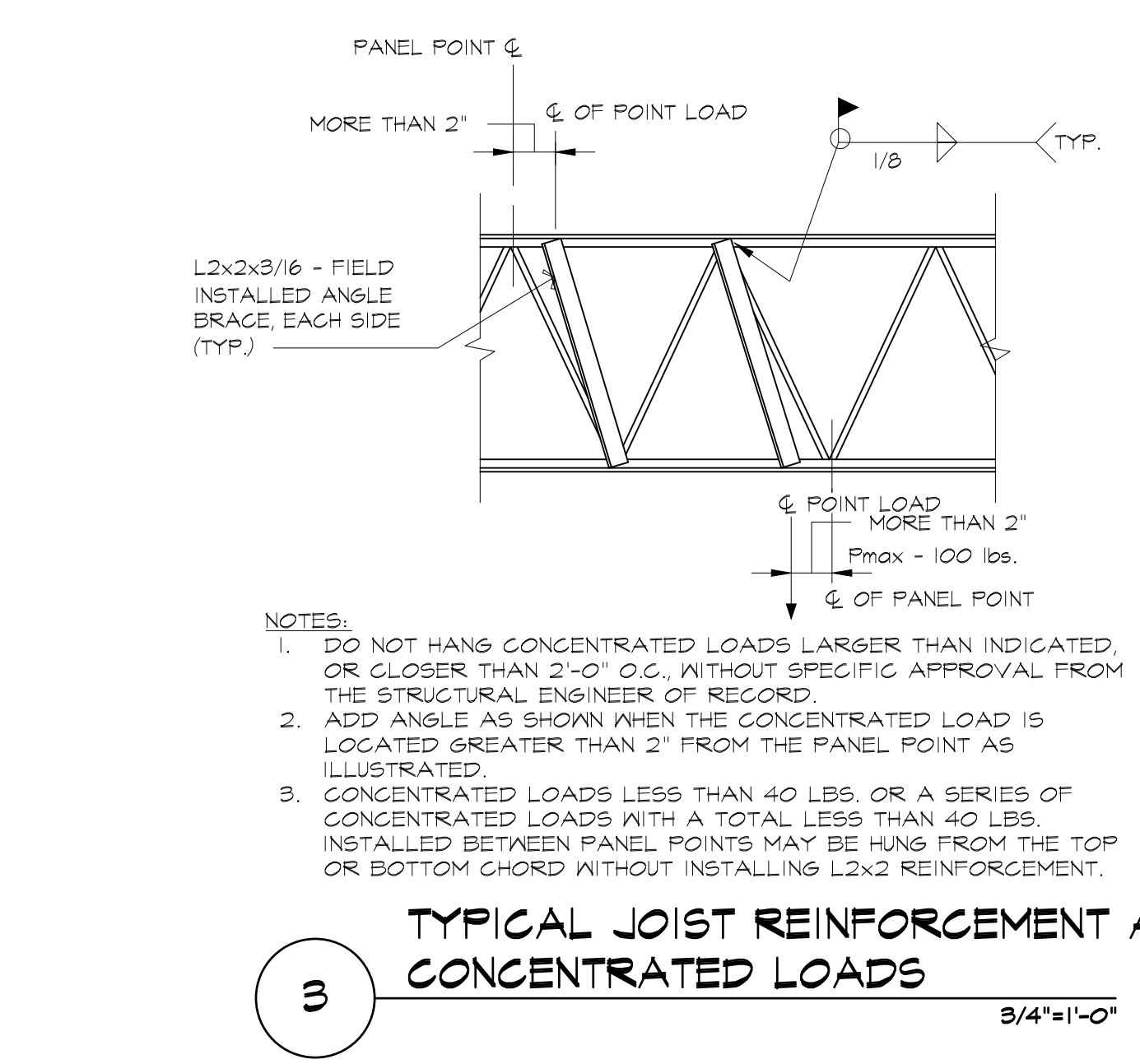
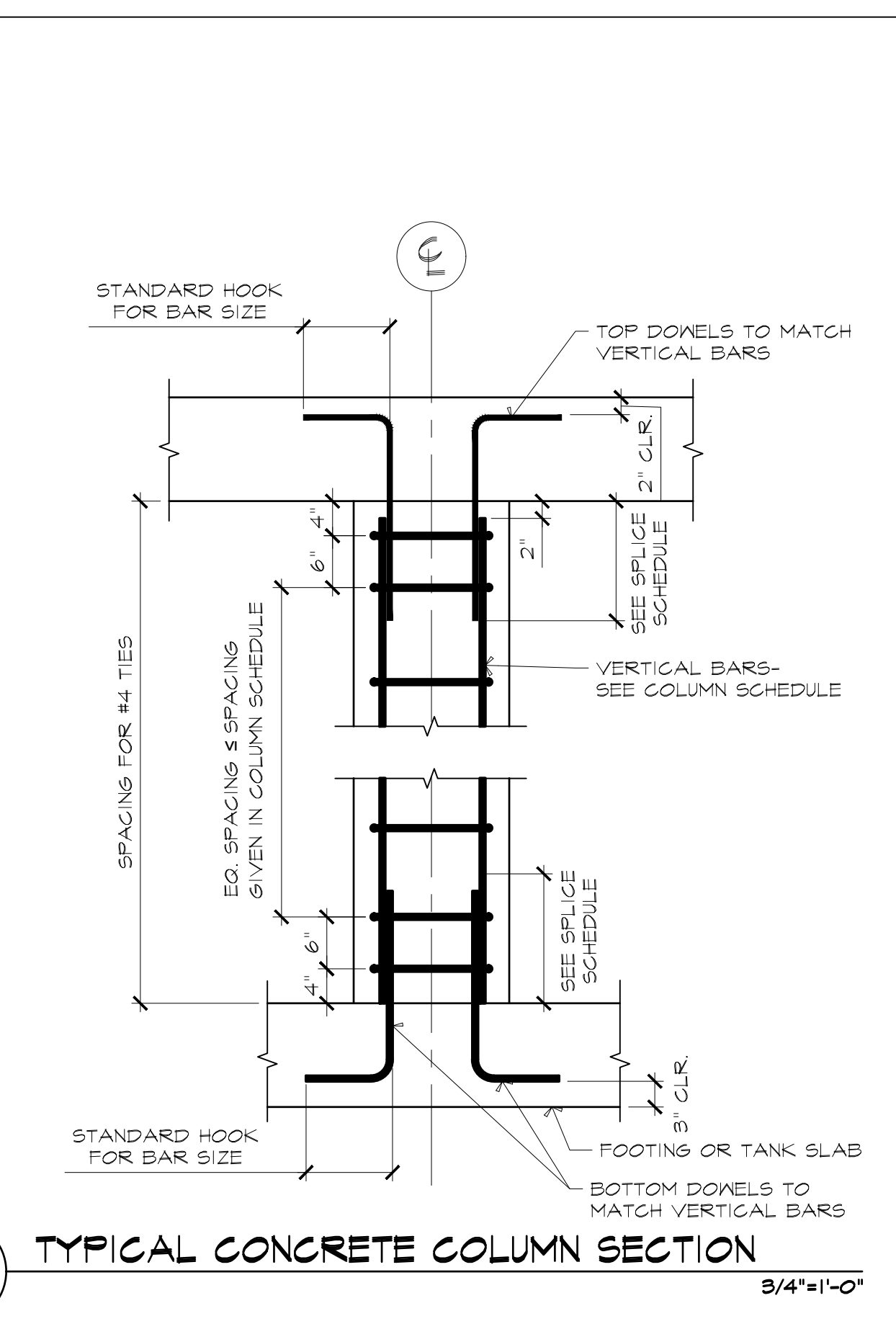
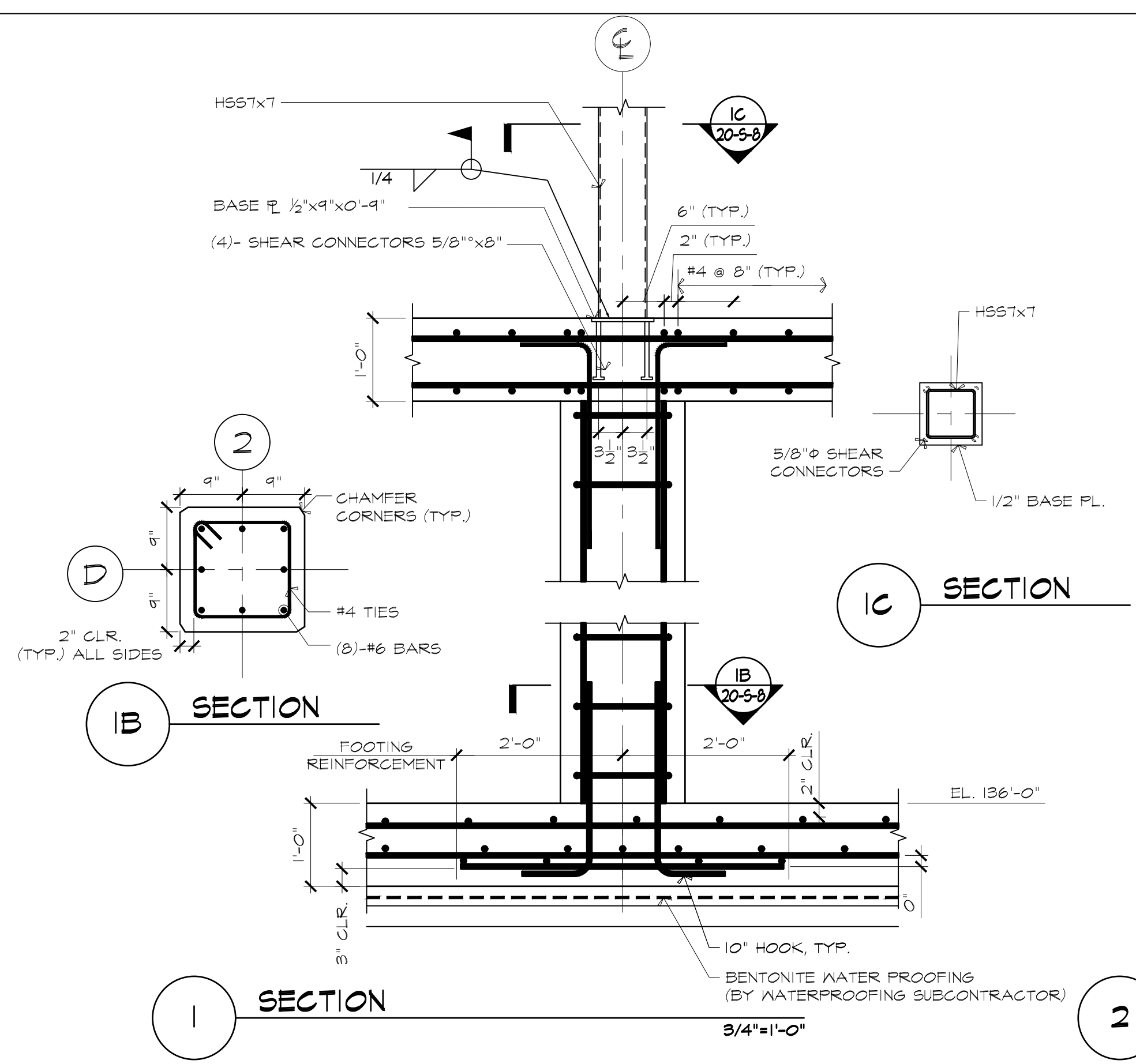
Lincoln / Haney
Engineering Associates, Inc.
100 State Street, 7th Floor
Boston, MA 02109
Phone: 202-729-2841 Fax: 202-729-2841



T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE:

20-S-7

C:\Users\jason\Documents\Public Drawings\2024\Attleboro Wading River WTP.dwg 2/28/2025 3:54 PM JASONW



ATTLEBORO WATER DEPT.
 ATTLEBORO, MA
 WADING RIVER
 WATER TREATMENT PLANT

STRUCTURAL
 SECTIONS AND DETAILS

ISSUED FOR CONSTRUCTION

Lincoln / Haney
 Engineering Associates, Inc.
 1000 Main Street
 Attleboro, MA 01911
 Phone: 508-252-1601 Fax: 508-252-2841

TATA & HOWARD

T&H NO.: 6193
 DATE: FEBRUARY 2025
 SCALE:

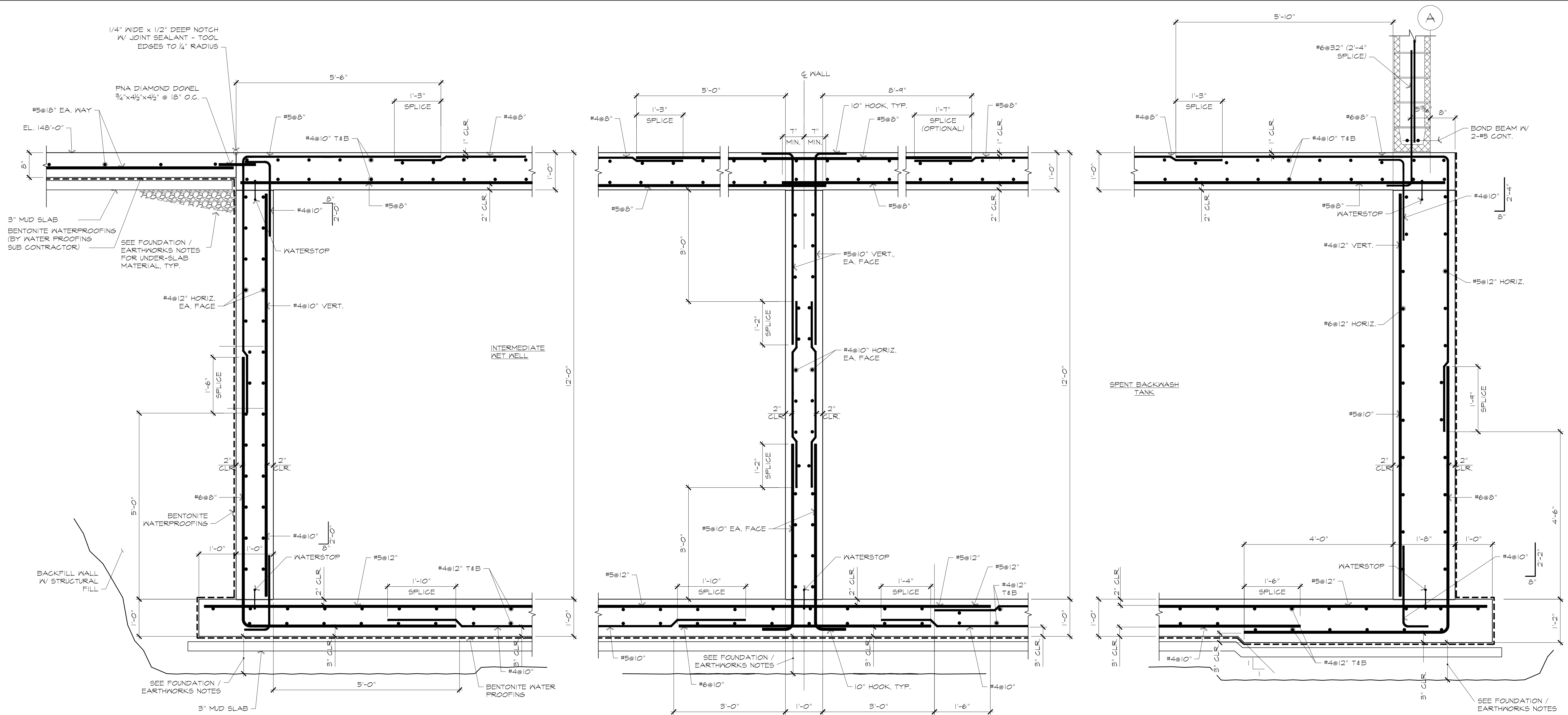
20-S-8

THE DOCUMENT IS THE PROPERTY OF TATA & HOWARD, INC. AND ITS CLIENT. REPRODUCTION OR MODIFICATION WITHOUT WRITTEN CONSENT IS PROHIBITED.

Design By: SWW
 Checked By: MAC
 Approved By:

11/2"=1'-0"

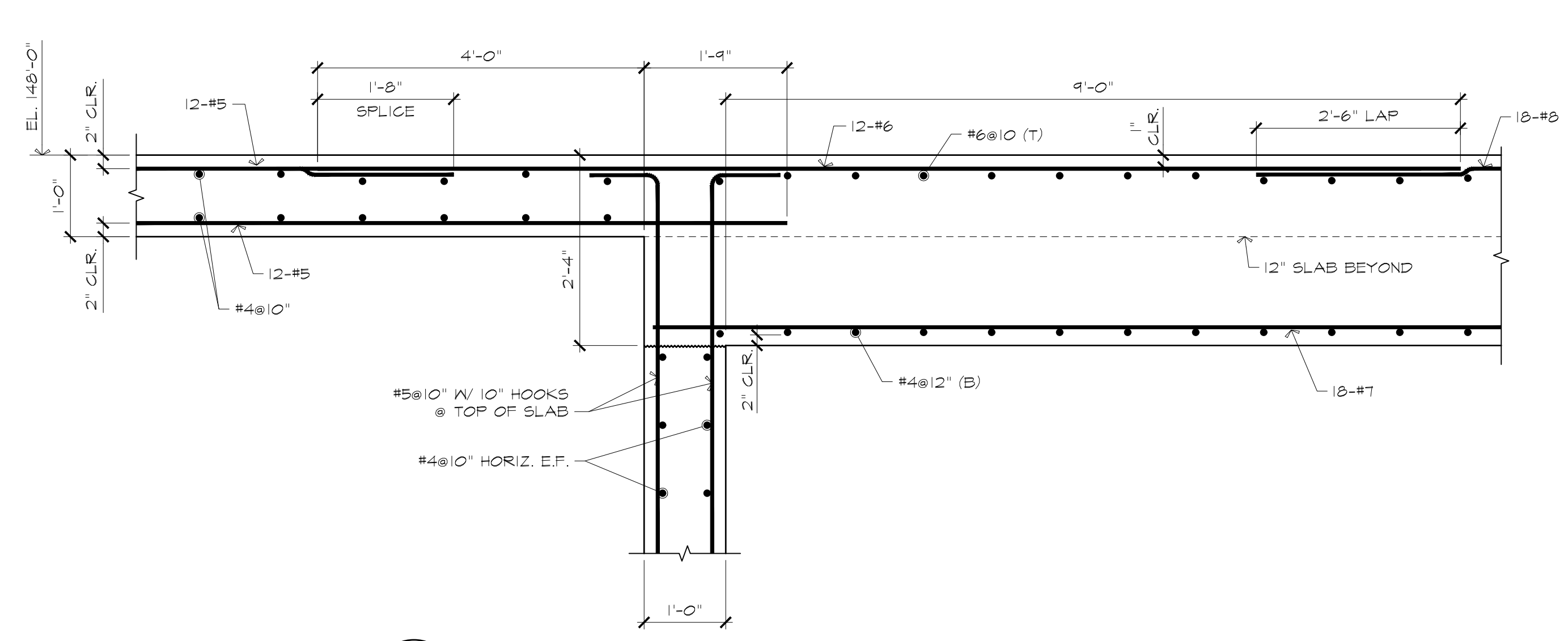
C:\Users\jason@hmc.com\Documents\Public Drawings\2024\Attleboro Wading River WTP.dwg 2/28/2025 3:55 PM JASOHNES



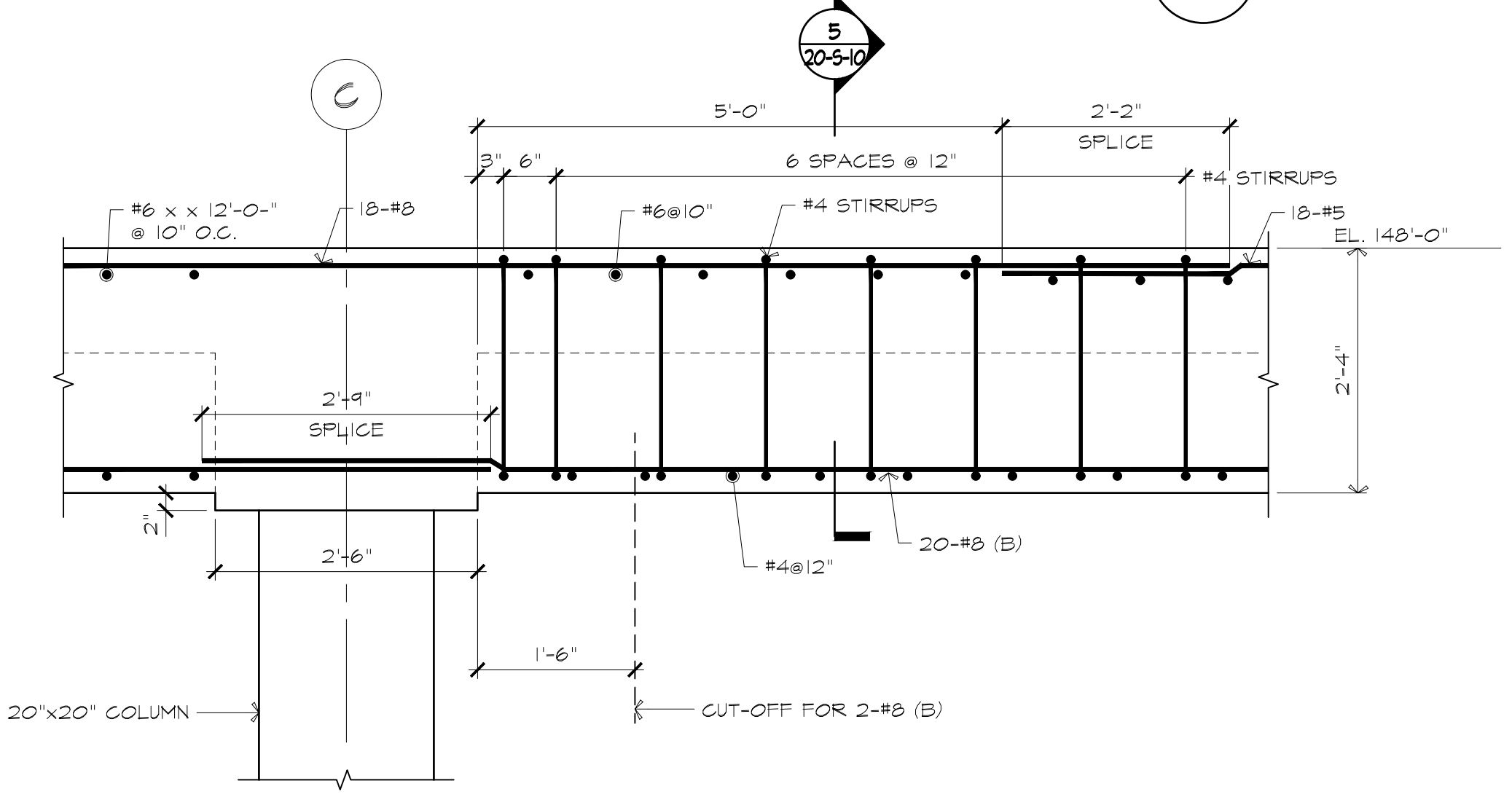
1 SECTION 3/4"=1'-0"

2 SECTION 3/4"=1'-0"

3 SECTION 3/4"=1'-0"



4 SECTION 3/4"=1'-0"



5 SECTION 3/4"=1'-0"

Rev.	Date	Description

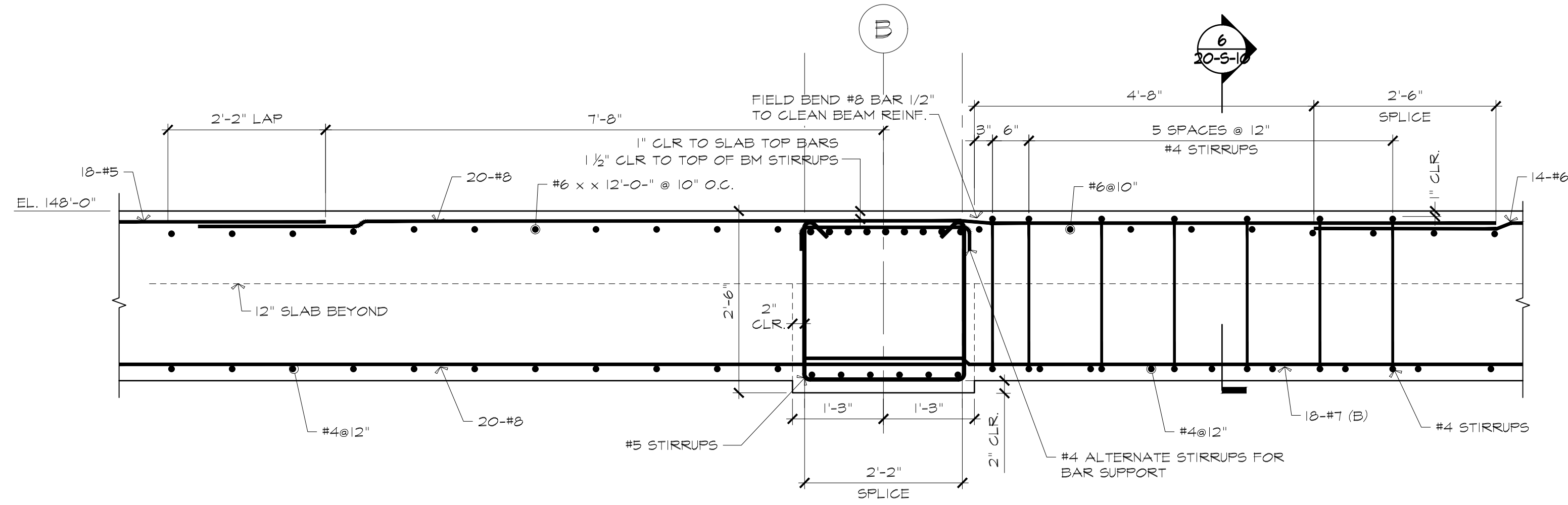
ISSUED FOR CONSTRUCTION



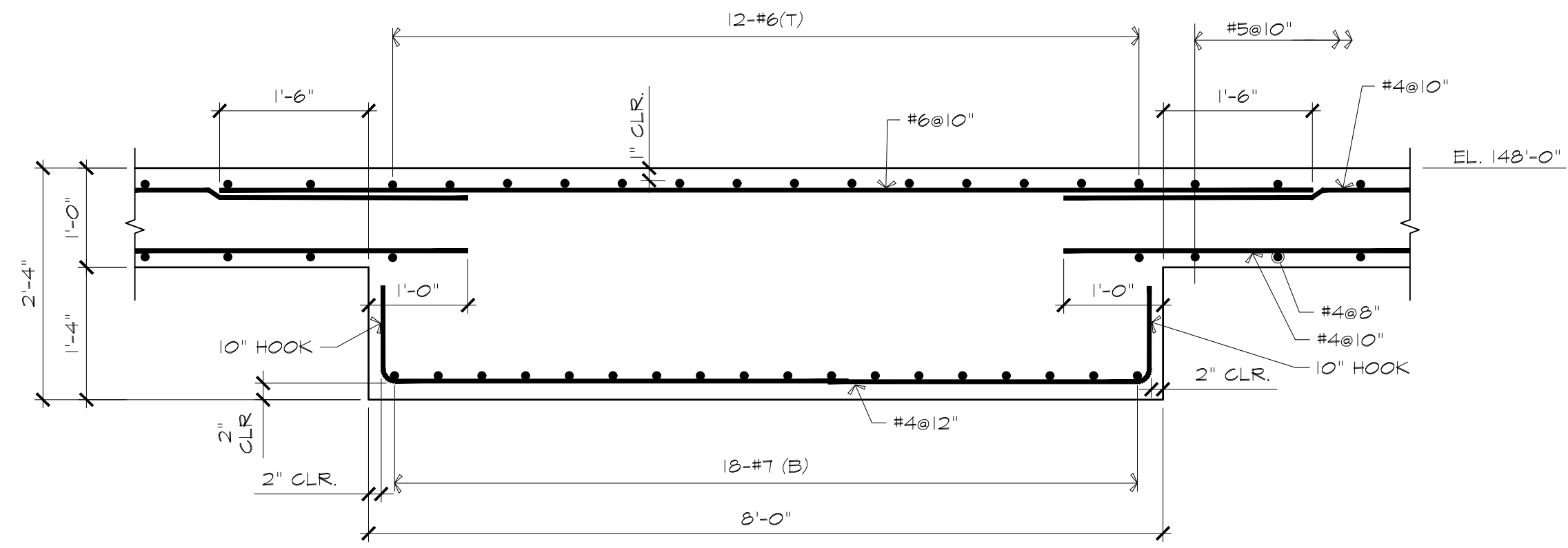
Lincoln / Haney
Engineering Associates, Inc.
1000 Main Street
Attleboro, MA 01911
Phone: 508-228-1601 Fax: 508-228-2841



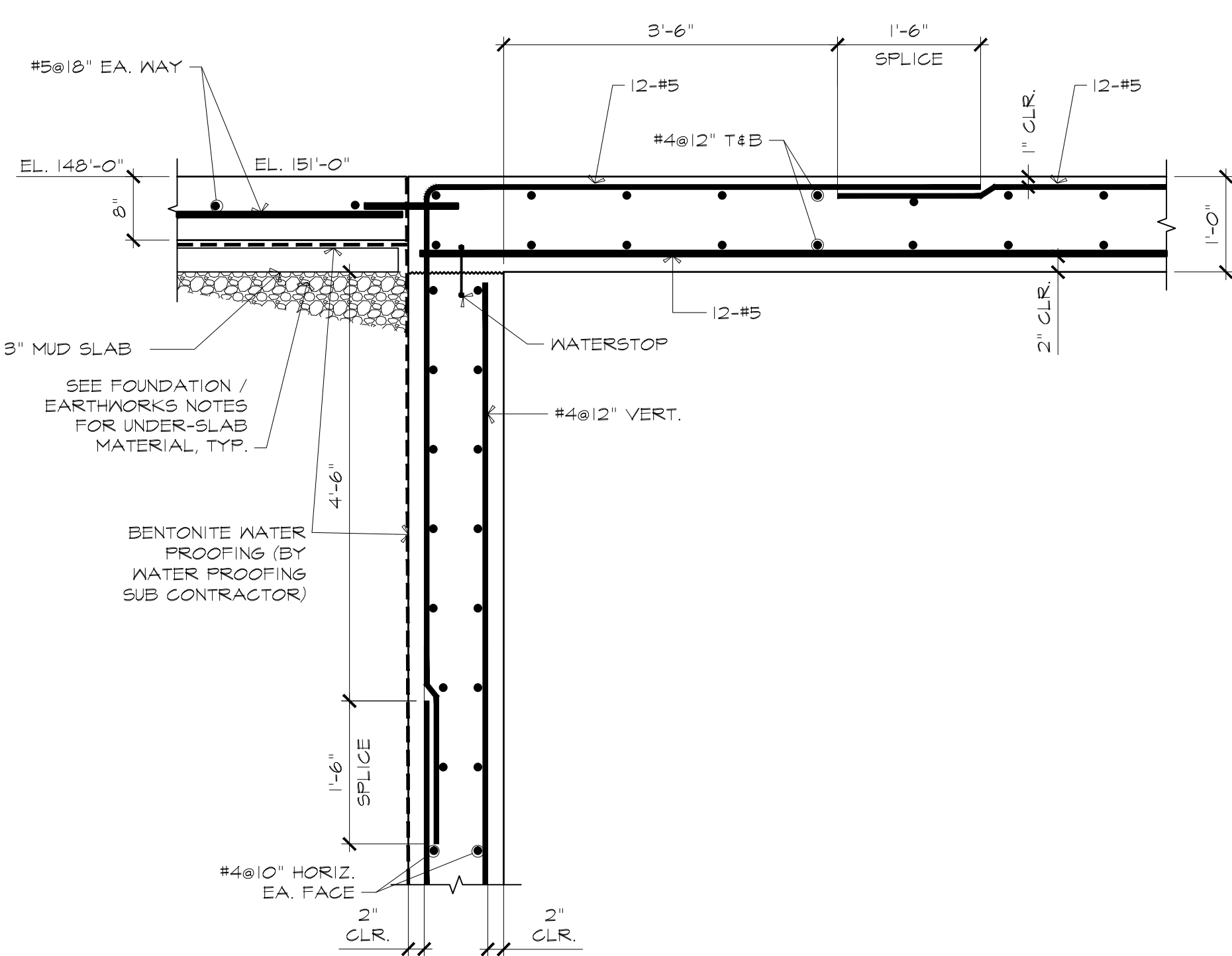
C:\Users\jasonm\OneDrive - Documents\Public Drawings\2024\Attleboro Wading River WTP.dwg 2/28/2025 3:55 PM JASONM



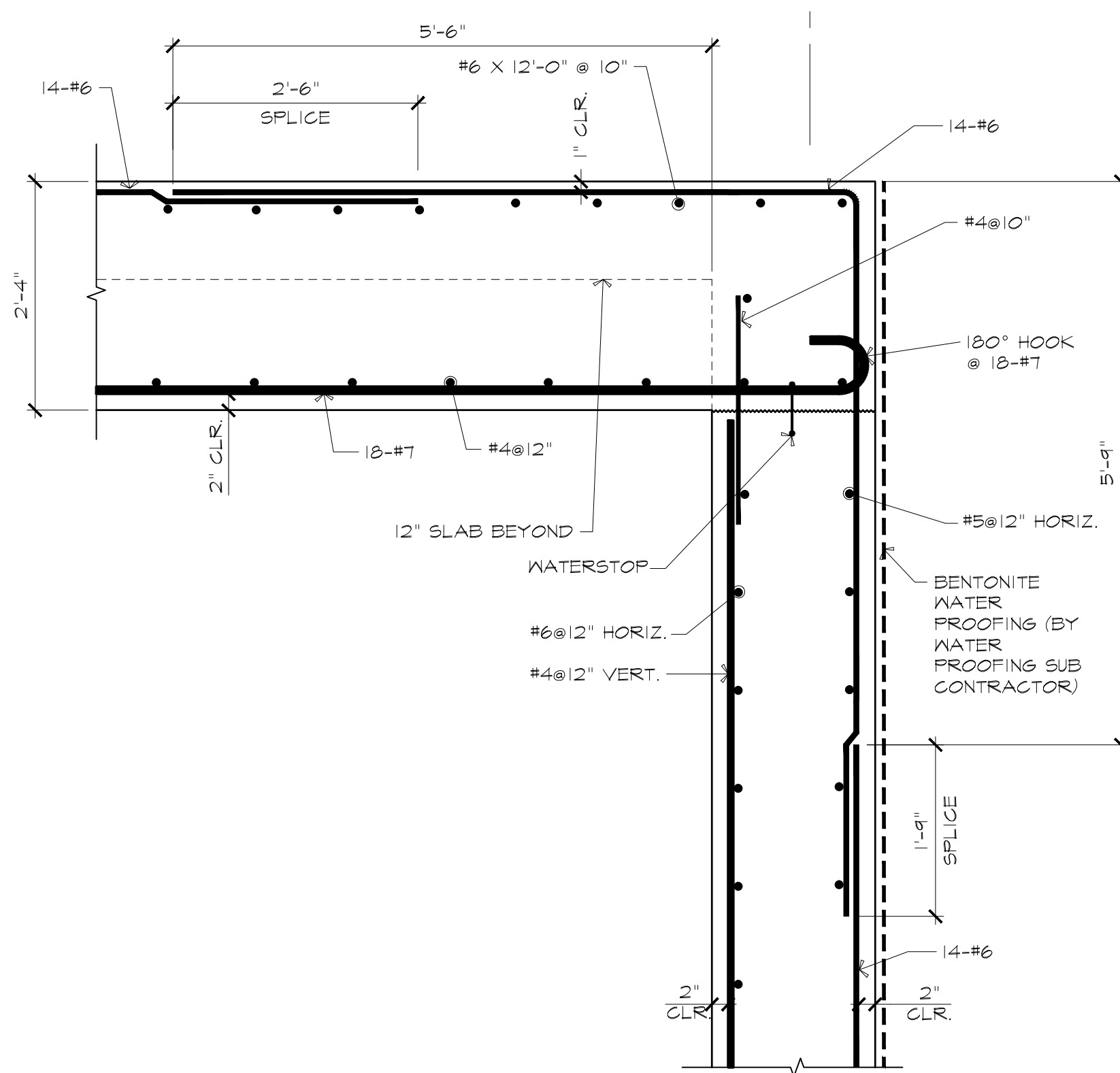
1 SECTION 3/4"=1'-0"



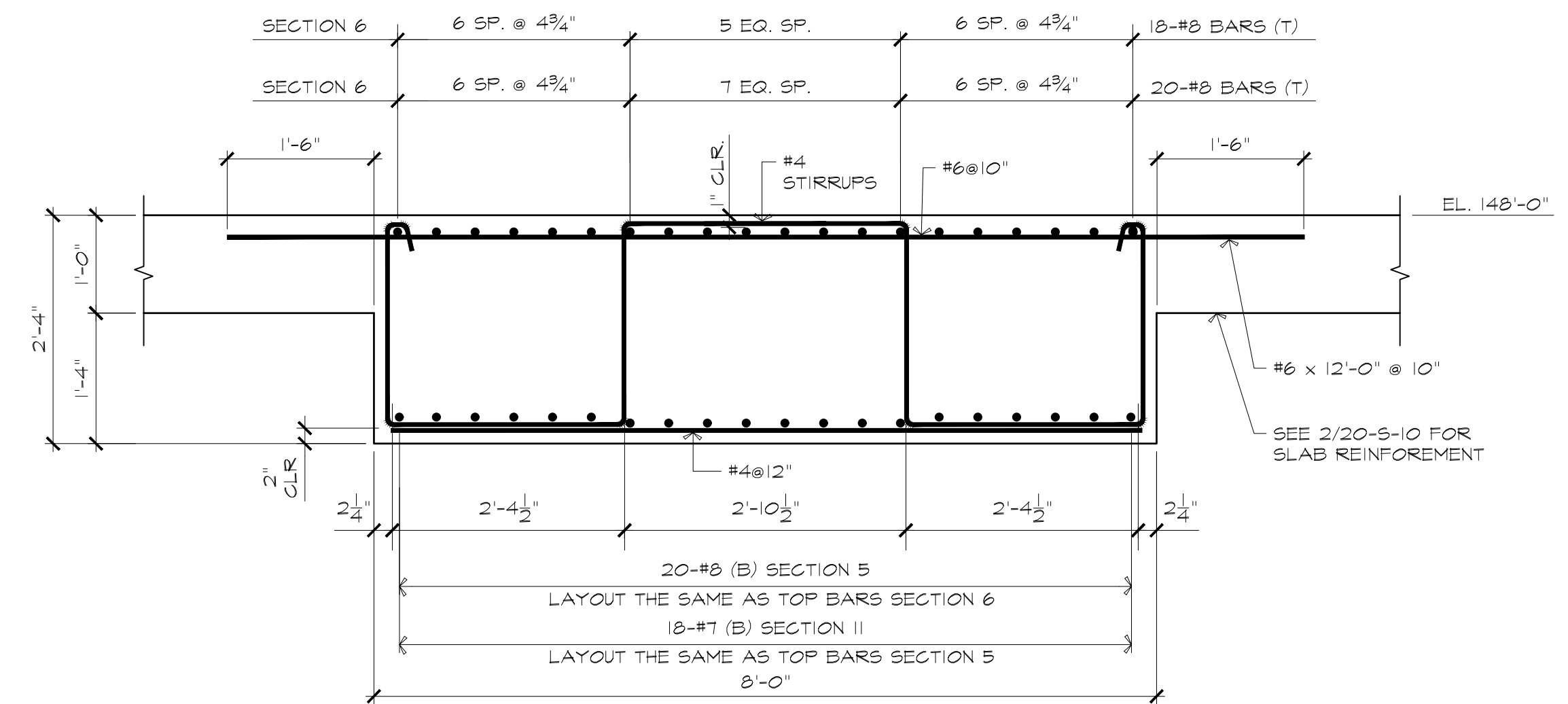
2 SECTION 3/4"=1'-0"



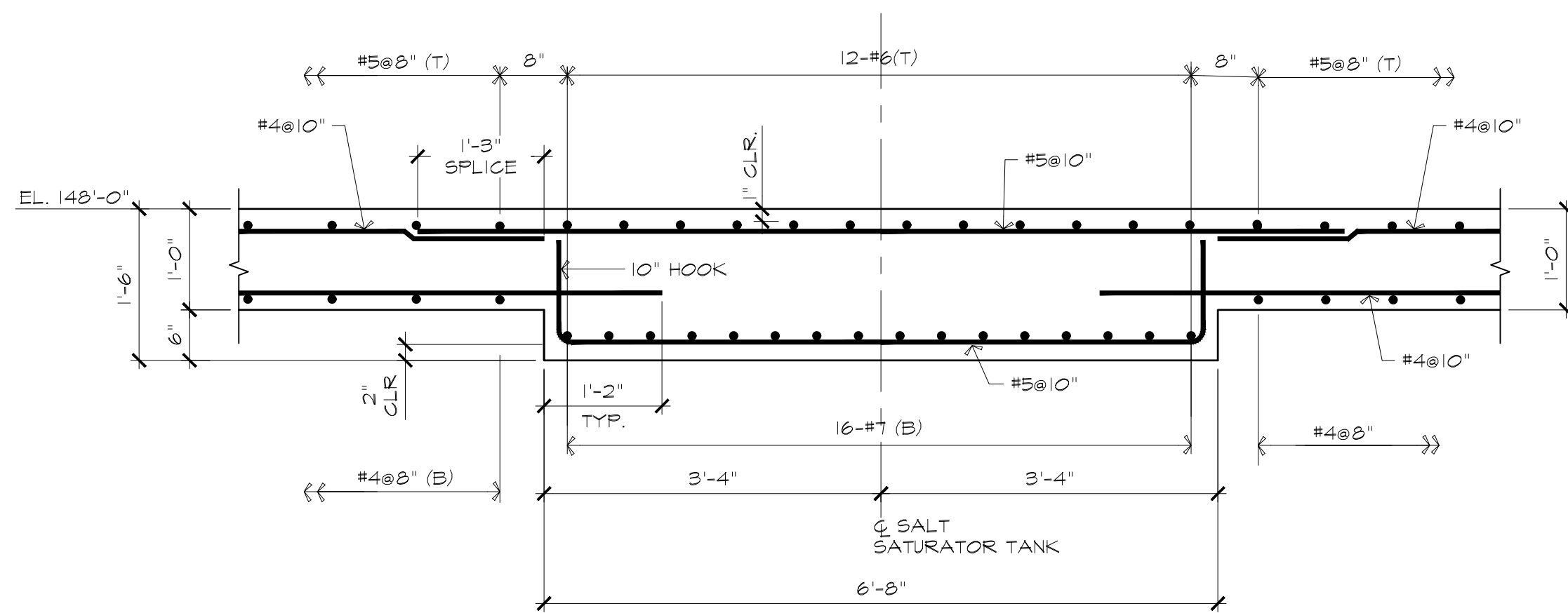
3 SECTION 3/4"=1'-0"



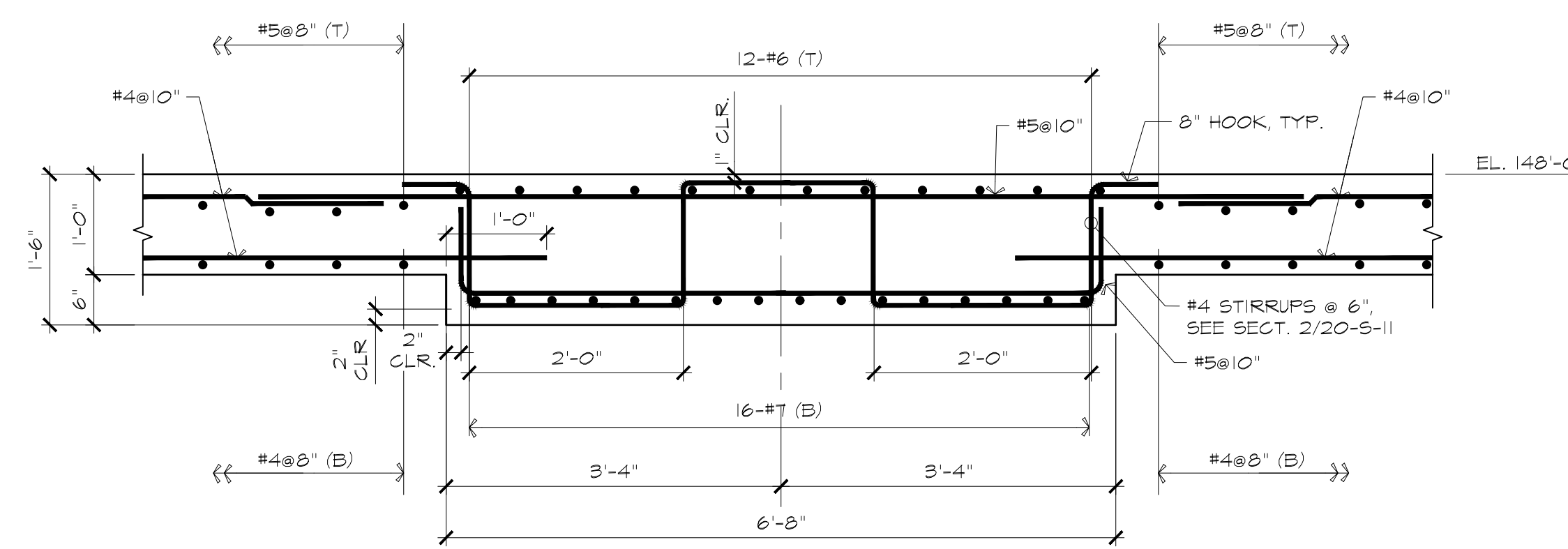
4 SECTION 3/4"=1'-0"



5 6 SECTION 3/4"=1'-0"



7 SECTION 3/4"=1'-0"



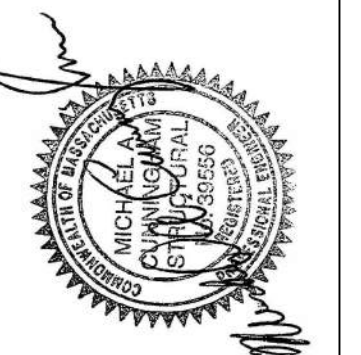
8 SECTION 3/4"=1'-0"

STRUCTURAL SECTIONS AND DETAILS

ATTLEBORO WATER DEPT.
ATTLEBORO, MA
WADING RIVER
WATER TREATMENT PLANT

Rev.	Date	Description

ISSUED FOR CONSTRUCTION



Lincoln / Haney
Engineering Associates, Inc.
1000 State Street, Suite 301, Attleboro, MA 01945
Phone: 202-729-1001 Fax: 202-729-2941



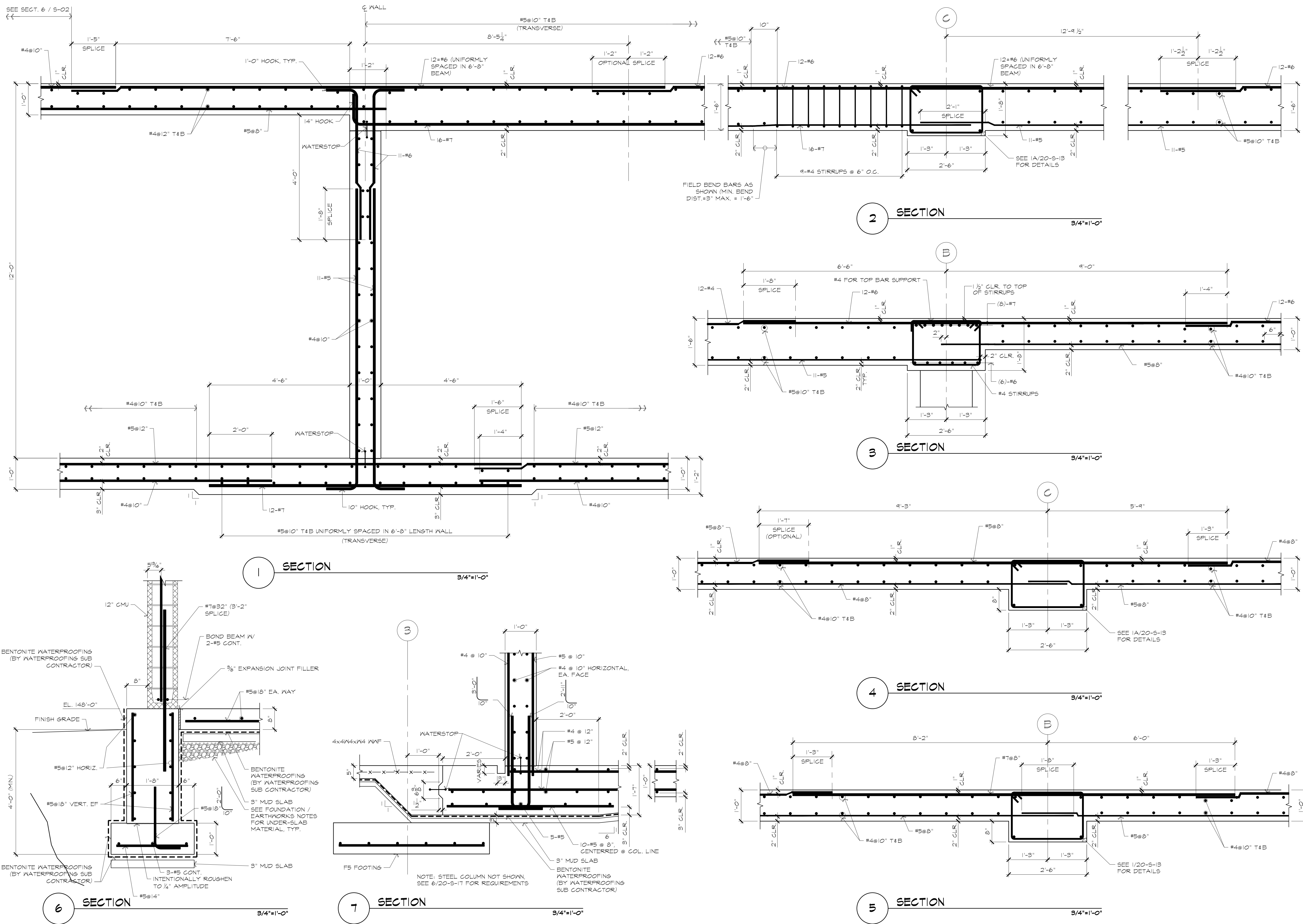
T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE:

20-S-10

Designed By: SWW
Checked By: SAC
Approved By:

THIS DOCUMENT IS THE PROPERTY OF TATA & HOWARD, INC. AND ITS CLIENT. REPRODUCTION OR ADAPTATION WITHOUT WRITTEN CONSENT IS PROHIBITED.

C:\Users\jason@hmc.com\Documents\Public Drawings\2024\Wading River WTP\2024\Wading River WTP.dwg 2/28/2025 3:55 PM JASDHINES



ATTLEBORO WATER DEPT.
ATTLEBORO, MA
WADING RIVER
WATER TREATMENT PLANT

STRUCTURAL
SECTIONS AND DETAILS

THE DOCUMENT IS THE PROPERTY OF TATA & HOWARD, INC. AND ITS CLIENT. REPRODUCTION OR MODIFICATION WITHOUT WRITTEN CONSENT IS PROHIBITED.

Rev.	Date	Description

ISSUED FOR CONSTRUCTION

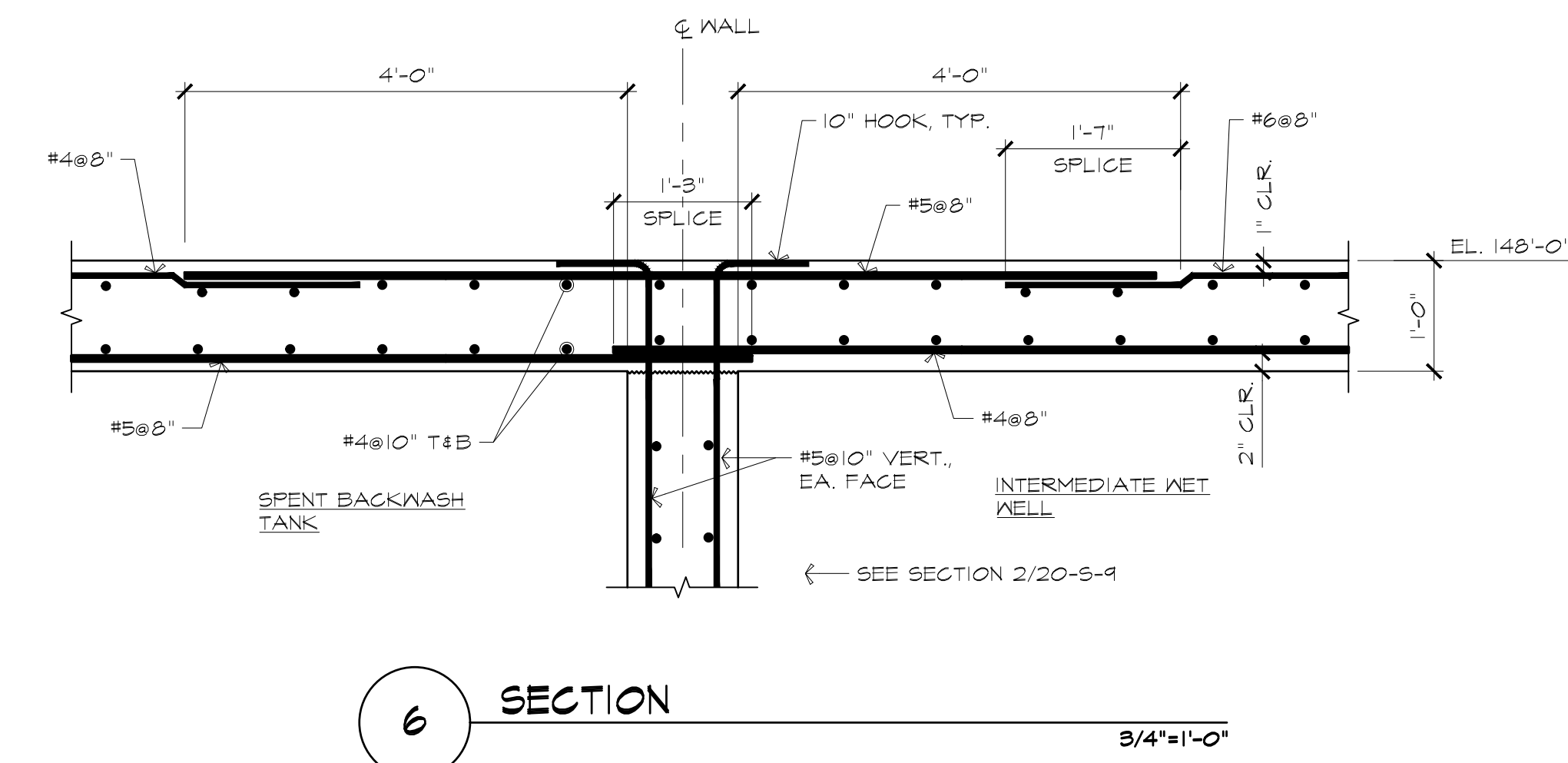
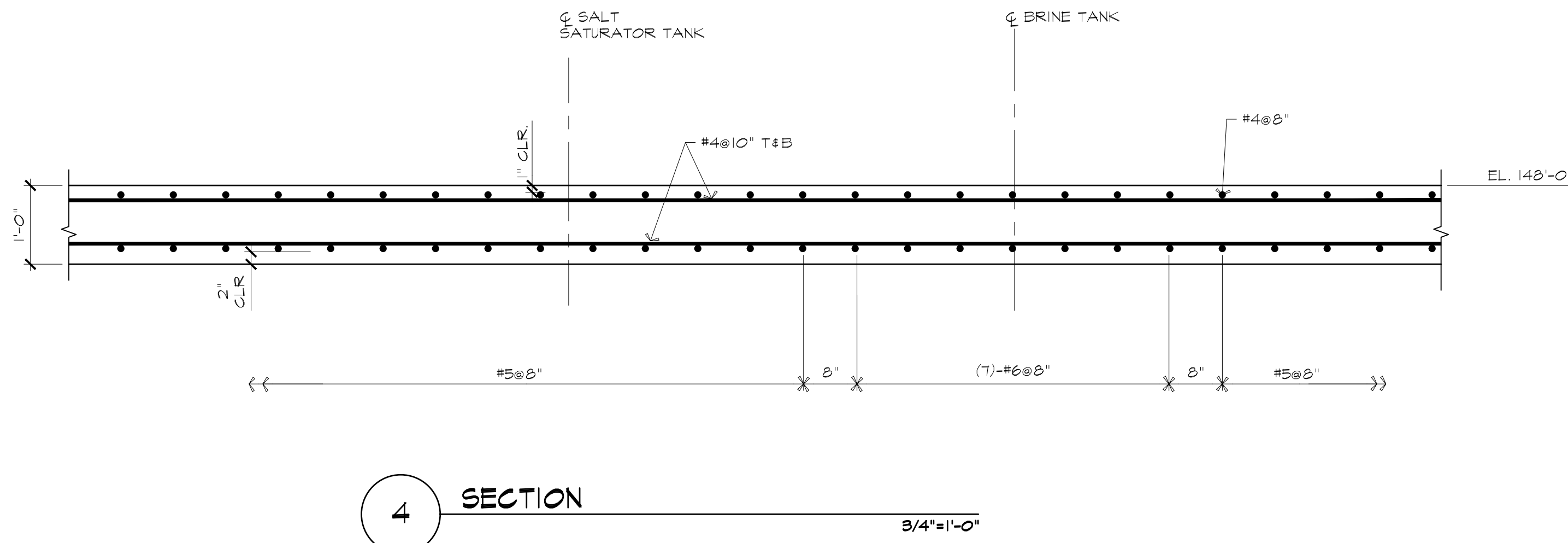
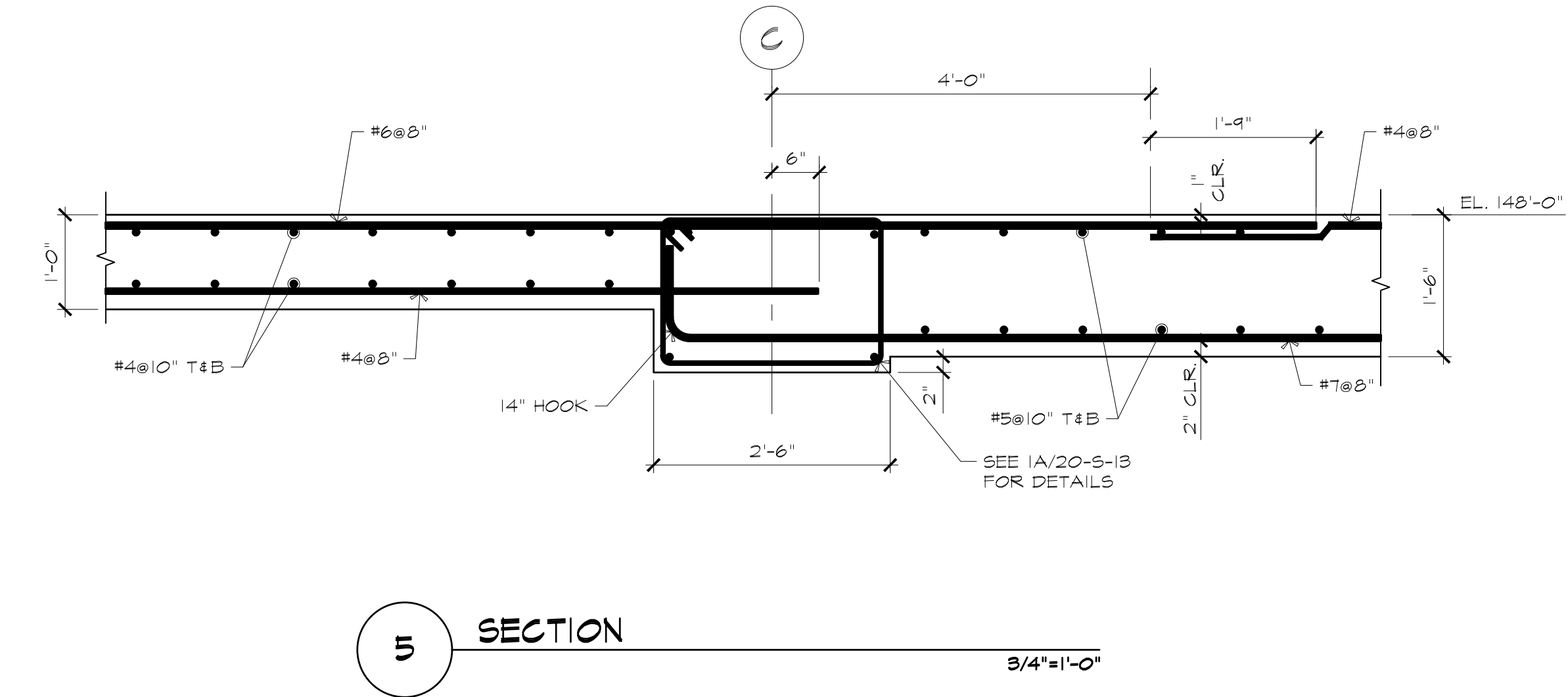
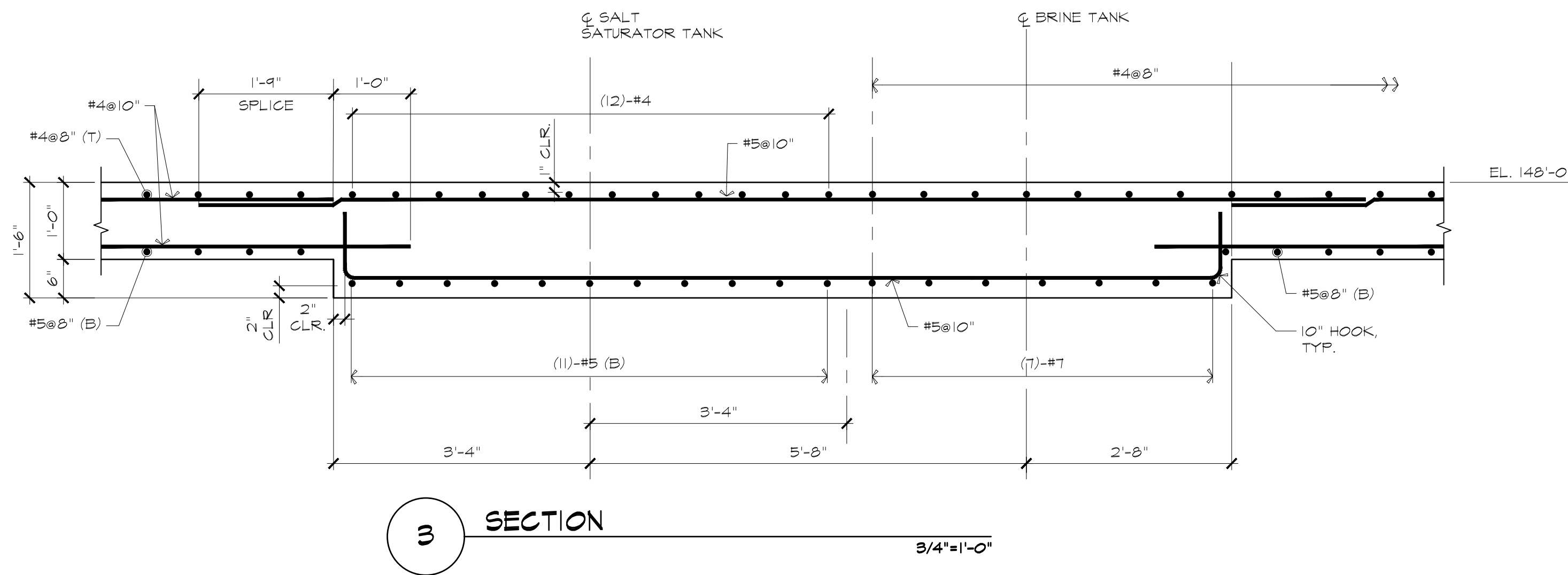
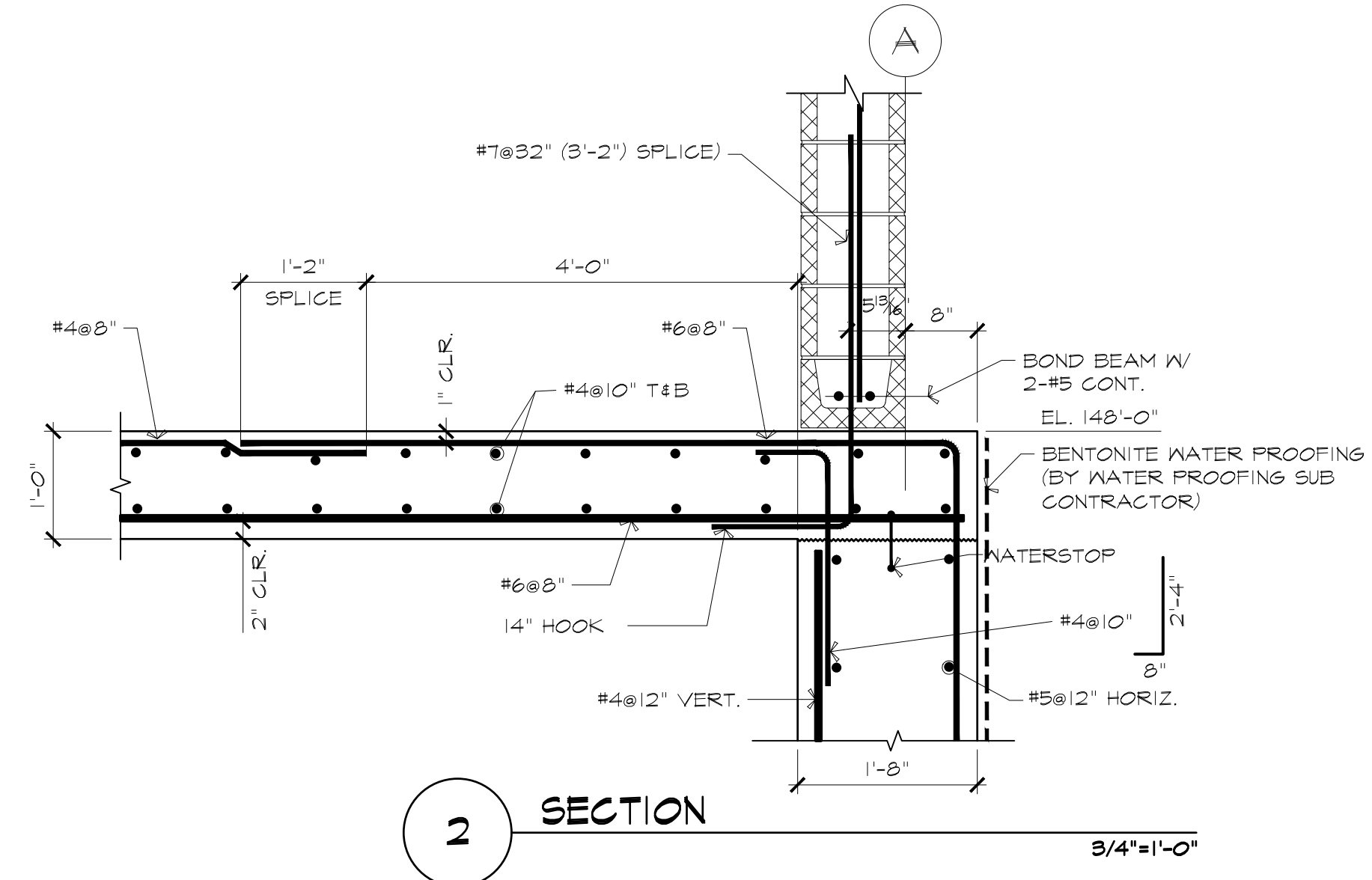
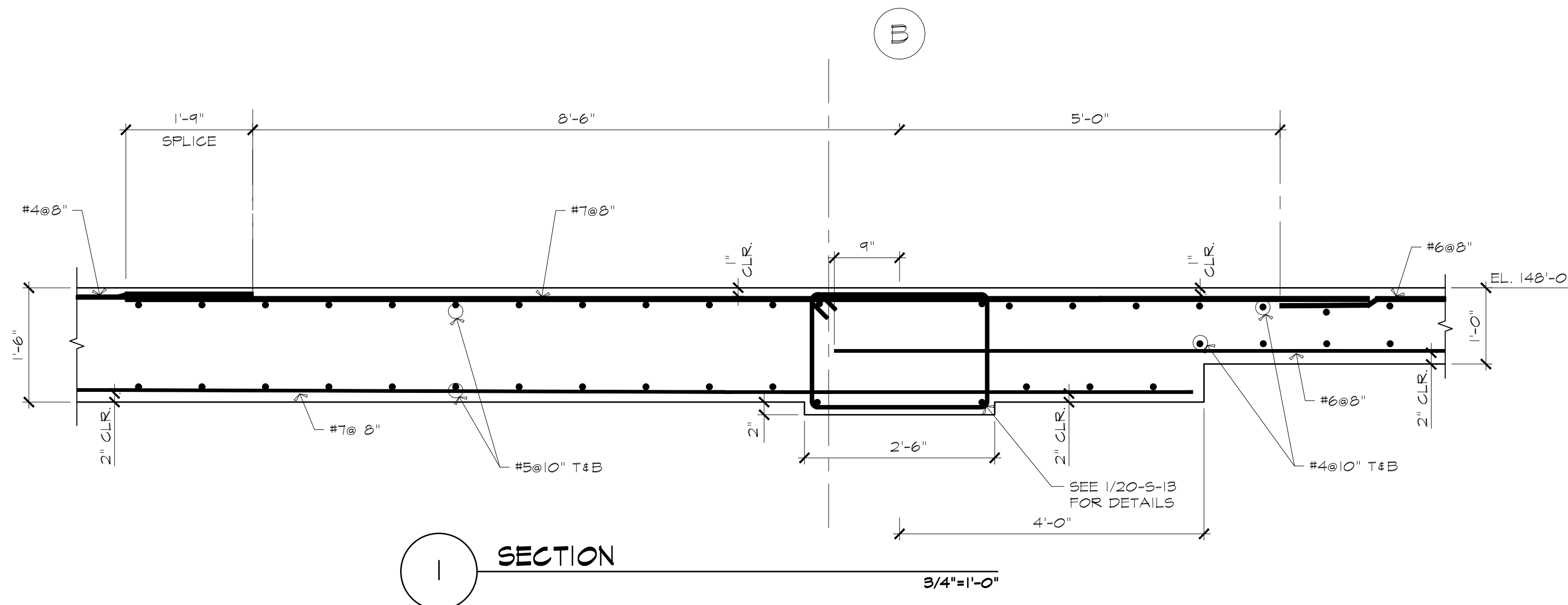
Lincoln / Haney
 Engineering Associates, Inc.
 300 Main Street, 7th Floor
 Attleboro, MA 01937
 Phone: 508-228-1601 Fax: 508-228-2841

TATA & HOWARD

T&H NO.: 6193
 DATE: FEBRUARY 2025
 SCALE:

20-S-11

Designed By: SWW
 Checked By: JAC



Rev.	Date	Description

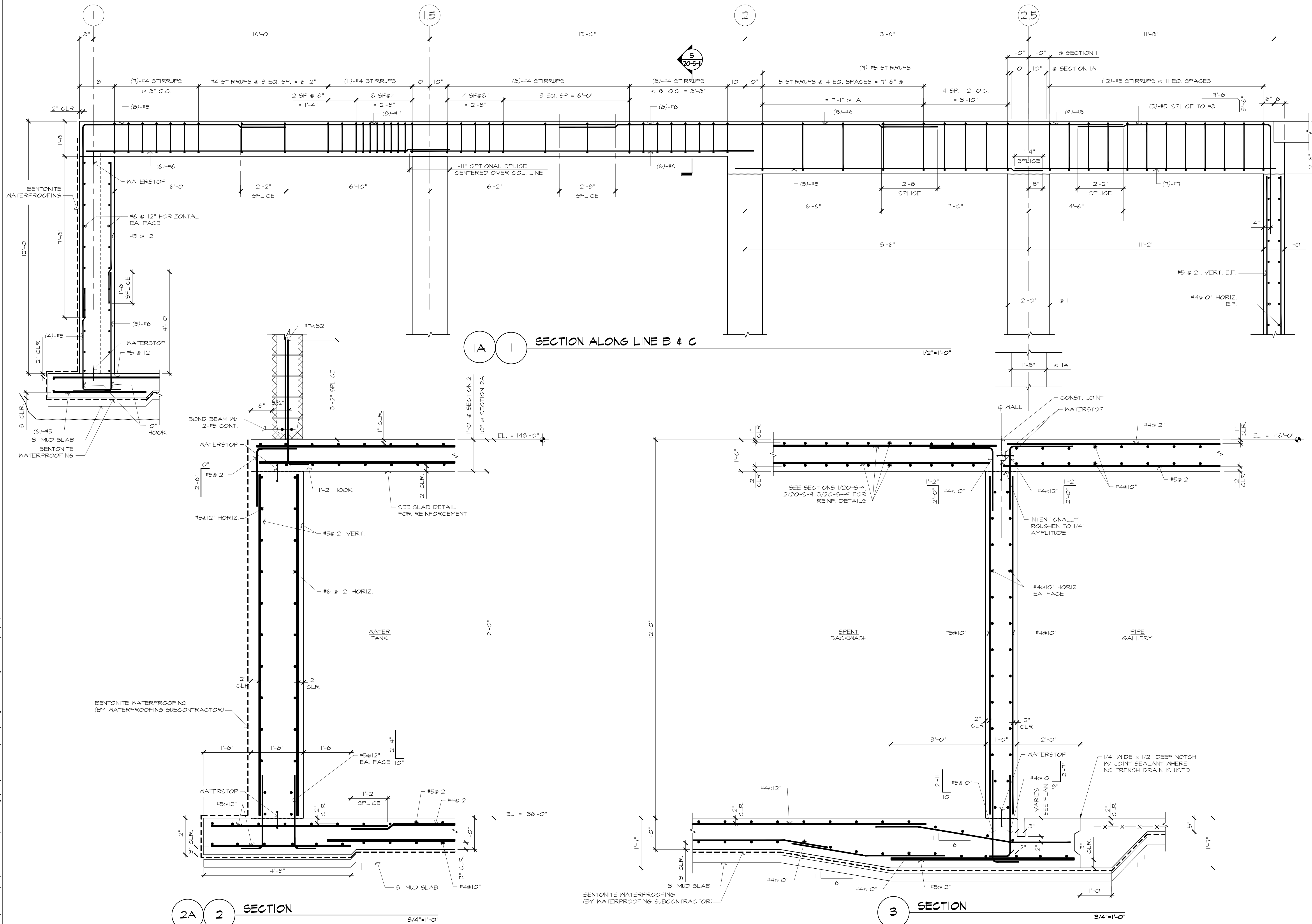
ISSUED FOR CONSTRUCTION



Lincoln / Haney
Engineering Associates, Inc.
125 State Street, Suite 301, Attleboro, MA 01901
Phone: 508-252-1601 Fax: 508-252-2841



C:\Users\jason@hane\OneDrive\Documents\Public Drawings\2024\Attleboro Wading River\WTP.dwg 2/28/2025 3:55 PM JASDHINES



ATTEBORO WATER DEPT.
ATTLEBORO, MA

WADING RIVER
WATER TREATMENT PLANT

STRUCTURAL
SECTIONS AND DETAILS

THE DOCUMENT IS THE PROPERTY OF TATA & HOWARD, INC. AND ITS CLIENT. REPRODUCTION OR ADAPTATION WITHOUT WRITTEN CONSENT IS PROHIBITED.

Rev.	Date	Description

ISSUED FOR CONSTRUCTION

Lincoln / Haney
 Engineering Associates, Inc.
 100 State Street, 7th Floor
 Attleboro, MA 01937
 Phone: 508-228-1601 Fax: 508-228-2841

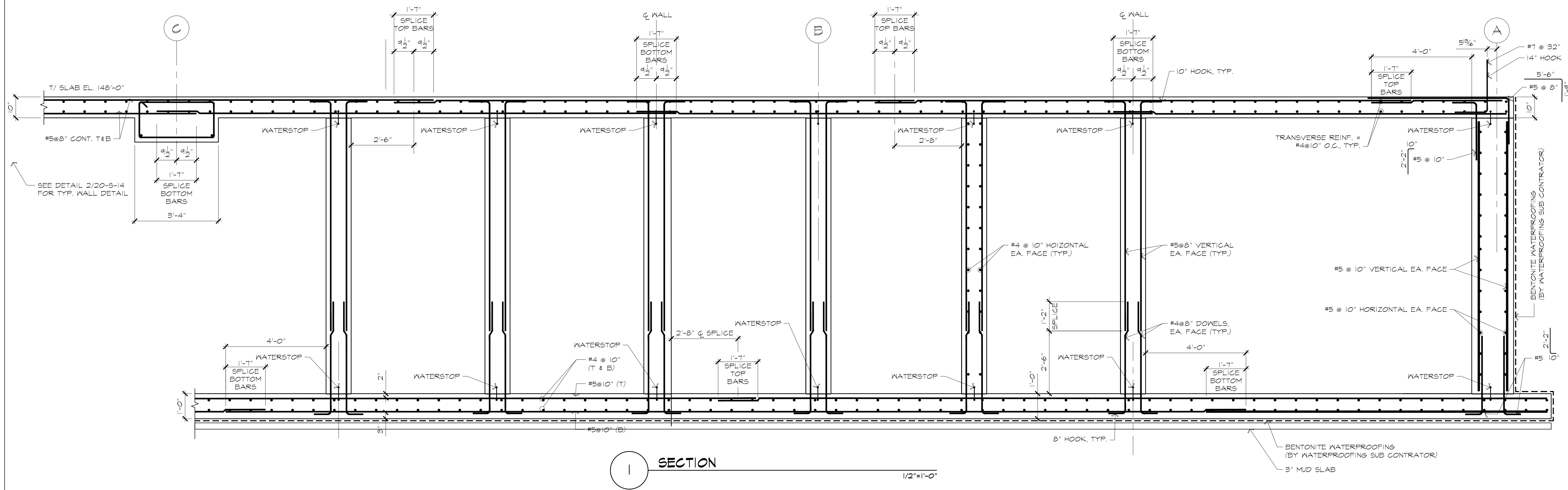
TATA & HOWARD

T&H NO.: 6193
 DATE: FEBRUARY 2025
 SCALE:

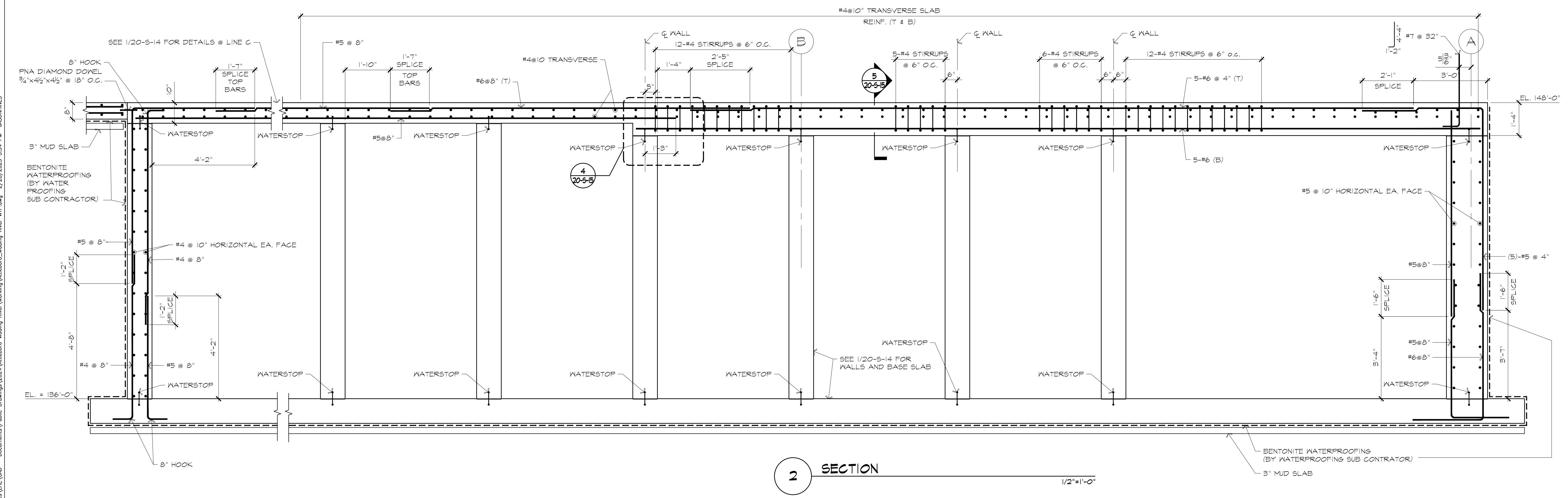
20-S-13

Designed By: SWW
 Checked By: SAC

C:\Users\jason@hmc\Documents\Public Drawings\2024\Attleboro Wading River\Attleboro Wading River WTP.dwg 2/28/2025 3:54 PM JASONHINES



1 SECTION 1/2"=1'-0"



2 SECTION 1/2"=1'-0"

ATTLEBORO WATER DEPT.
ATTLEBORO, MA
WADING RIVER
WATER TREATMENT PLANT

STRUCTURAL
SECTIONS AND DETAILS

Rev.	Date	Description

ISSUED FOR CONSTRUCTION



Lincoln / Haney
Engineering Associates, Inc.
125 Main Street
Attleboro, MA 01901
Phone: 508-228-1601 Fax: 508-228-2841

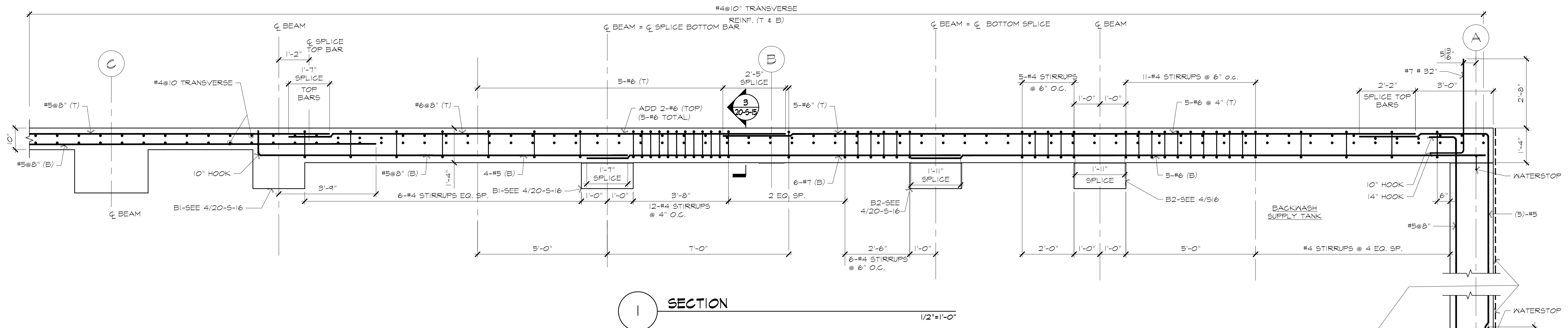


T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE:
20-S-14

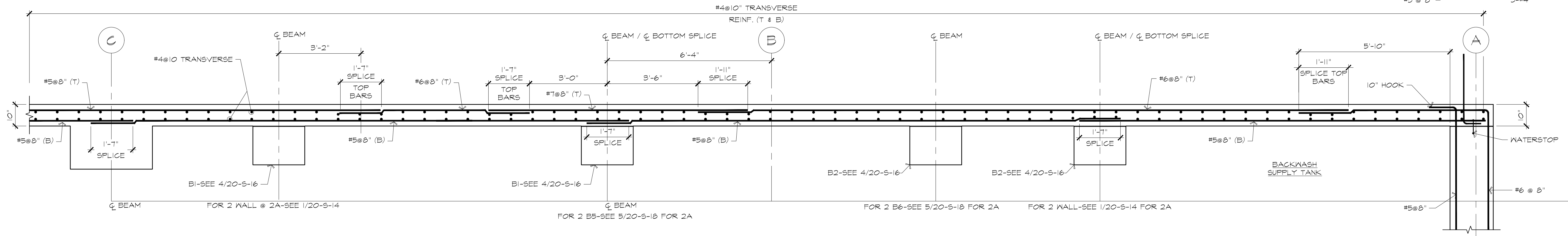
Designed By: SWW
Checked By: SAC
Approved By:

THIS DOCUMENT IS THE PROPERTY OF TATA & HOWARD, INC. AND ITS CLIENT. REPRODUCTION OR ADAPTATION WITHOUT WRITTEN CONSENT IS PROHIBITED.

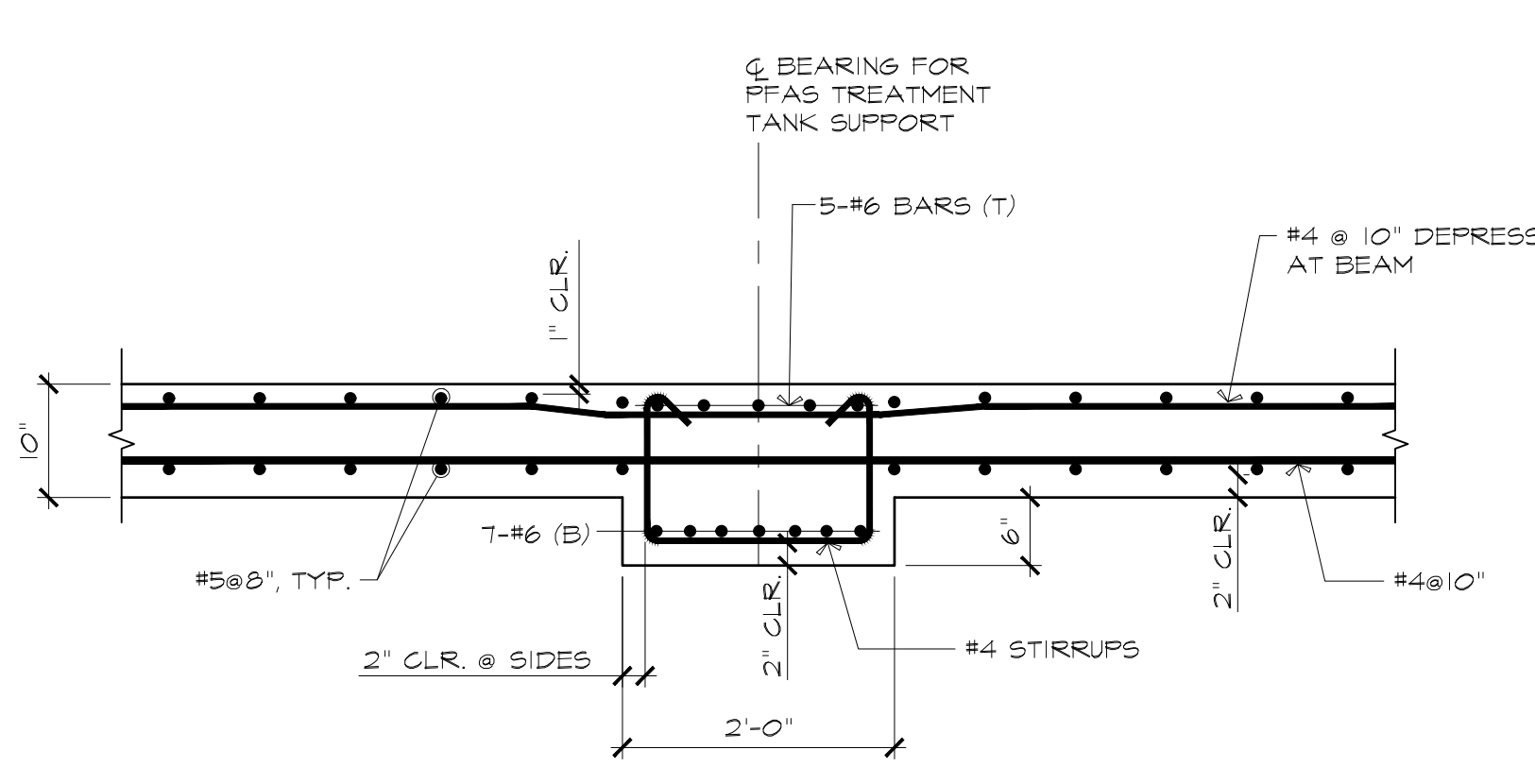
C:\Users\jason@hmc.com\Documents\Public Drawings\2024\Attleboro Wading River\Working\Attleboro Wading River WTP.dwg 2/28/2025 3:55 PM JASONHINES



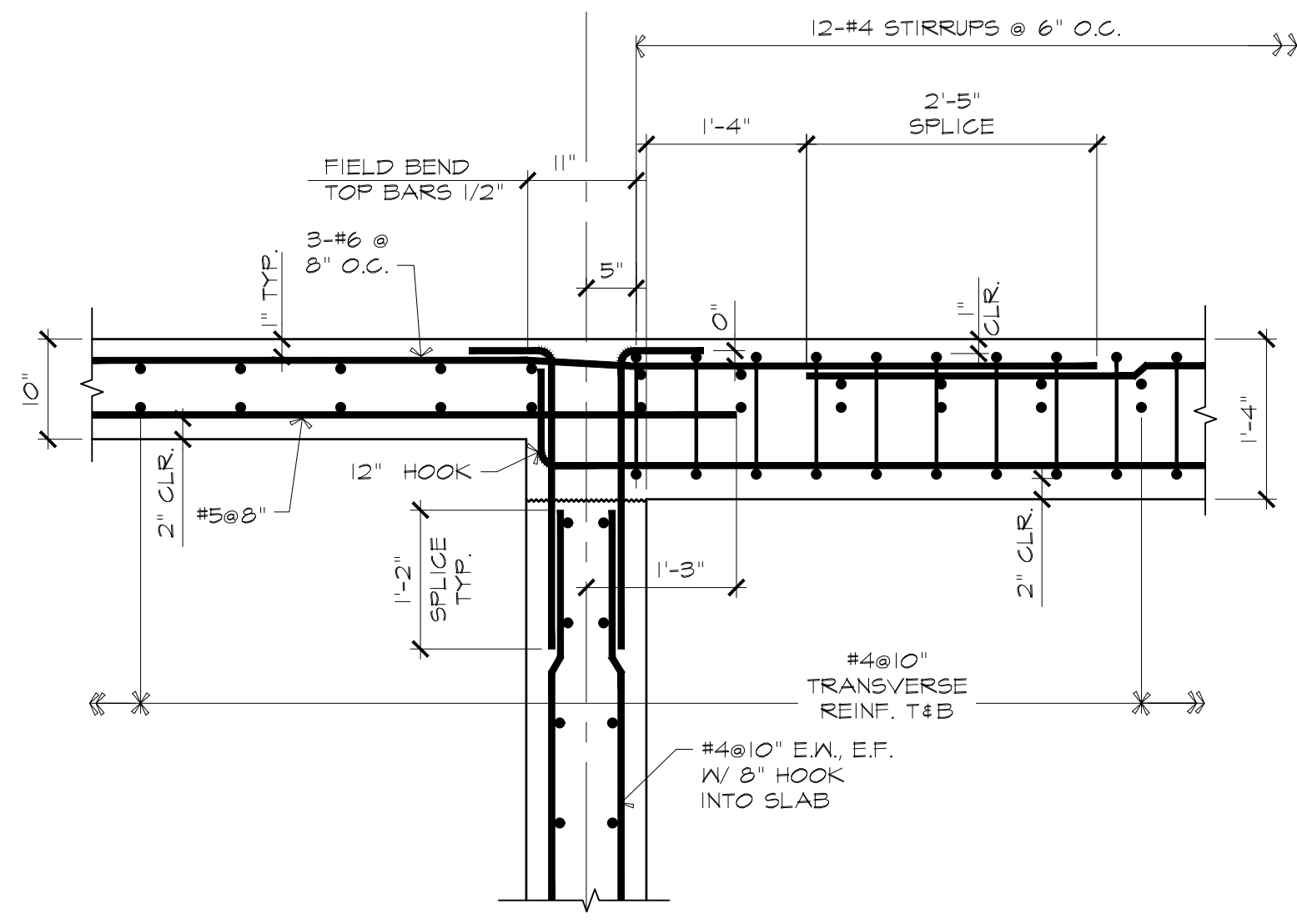
SECTION 1
1/2"=1'-0"



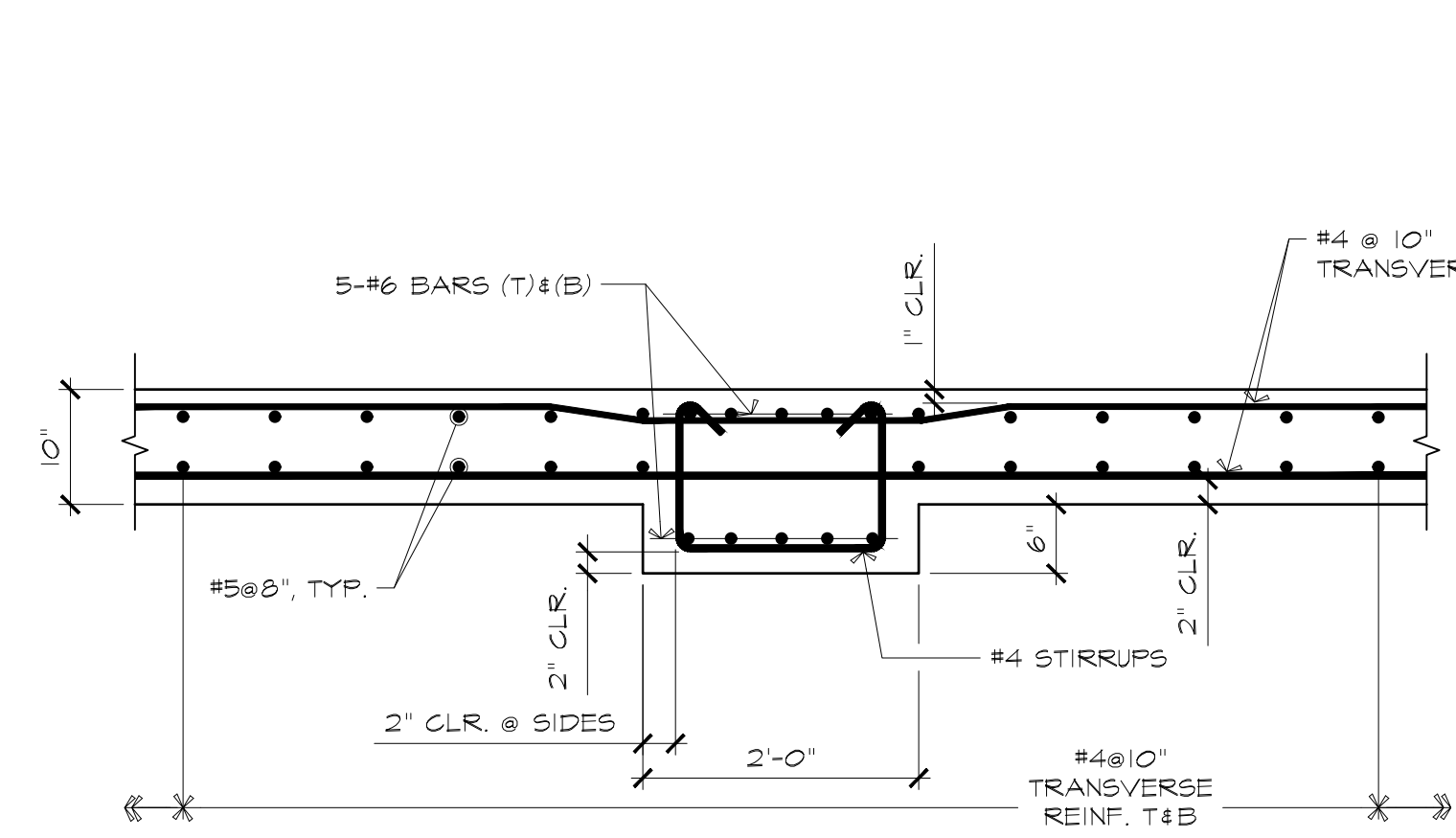
SECTION 2A
1/2"=1'-0"



SECTION 3
3/4"=1'-0"



SECTION 4
3/4"=1'-0"



SECTION 5
3/4"=1'-0"

ATTLEBORO WATER DEPT.
ATTLEBORO, MA
WADING RIVER
WATER TREATMENT PLANT

STRUCTURAL
SECTIONS AND DETAILS

Rev.	Date	Description

ISSUED FOR CONSTRUCTION

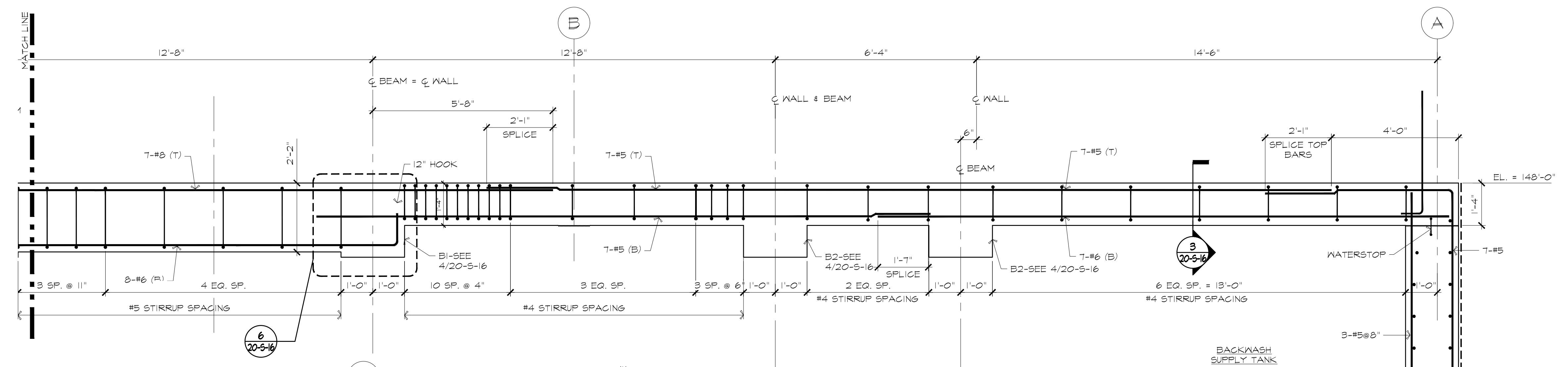


Lincoln / Haney
Engineering Associates, Inc.
1200 Main Street
Attleboro, MA 01901
Phone: 508-228-1601 Fax: 508-228-2841

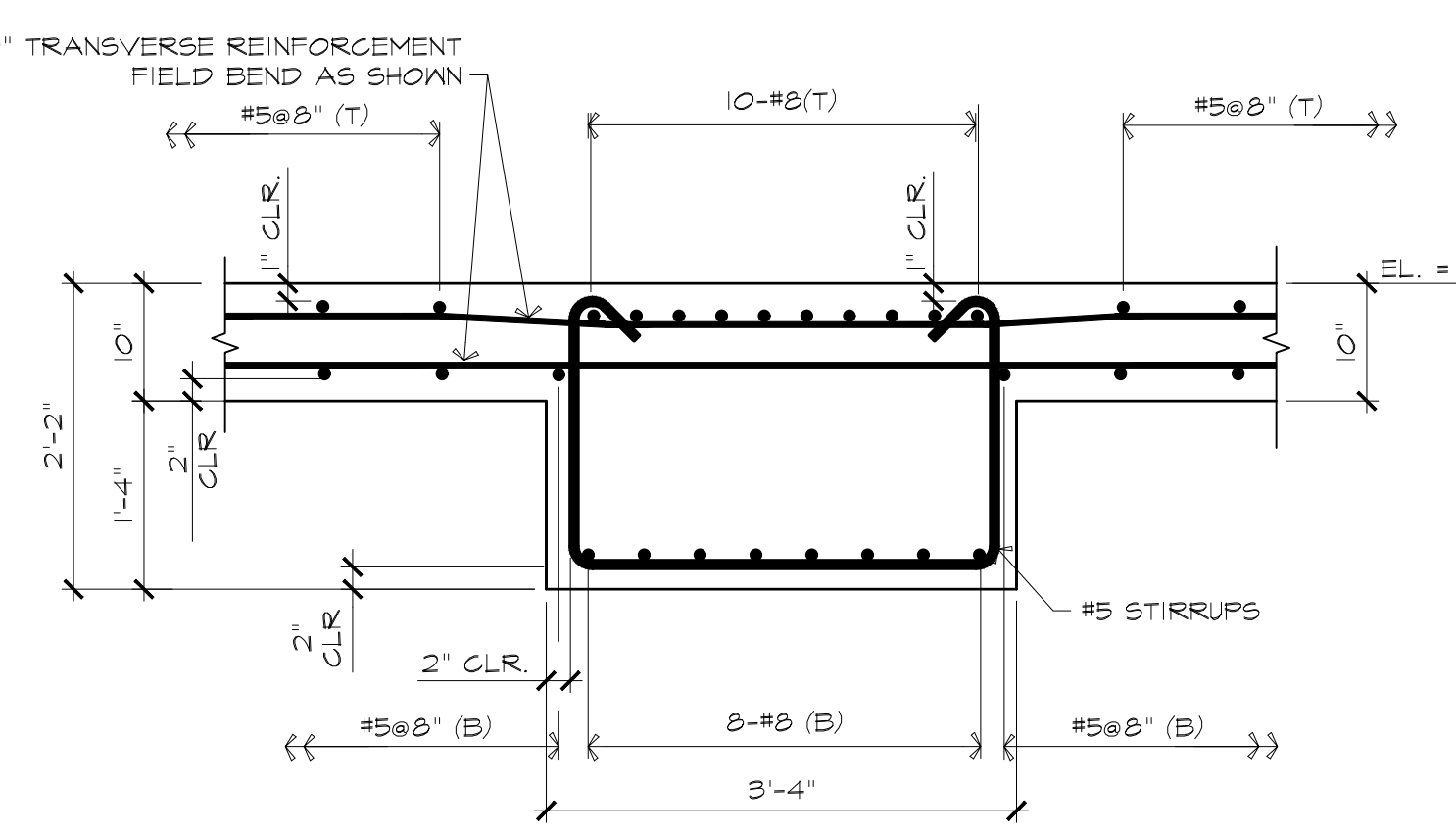


T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE:
20-S-15

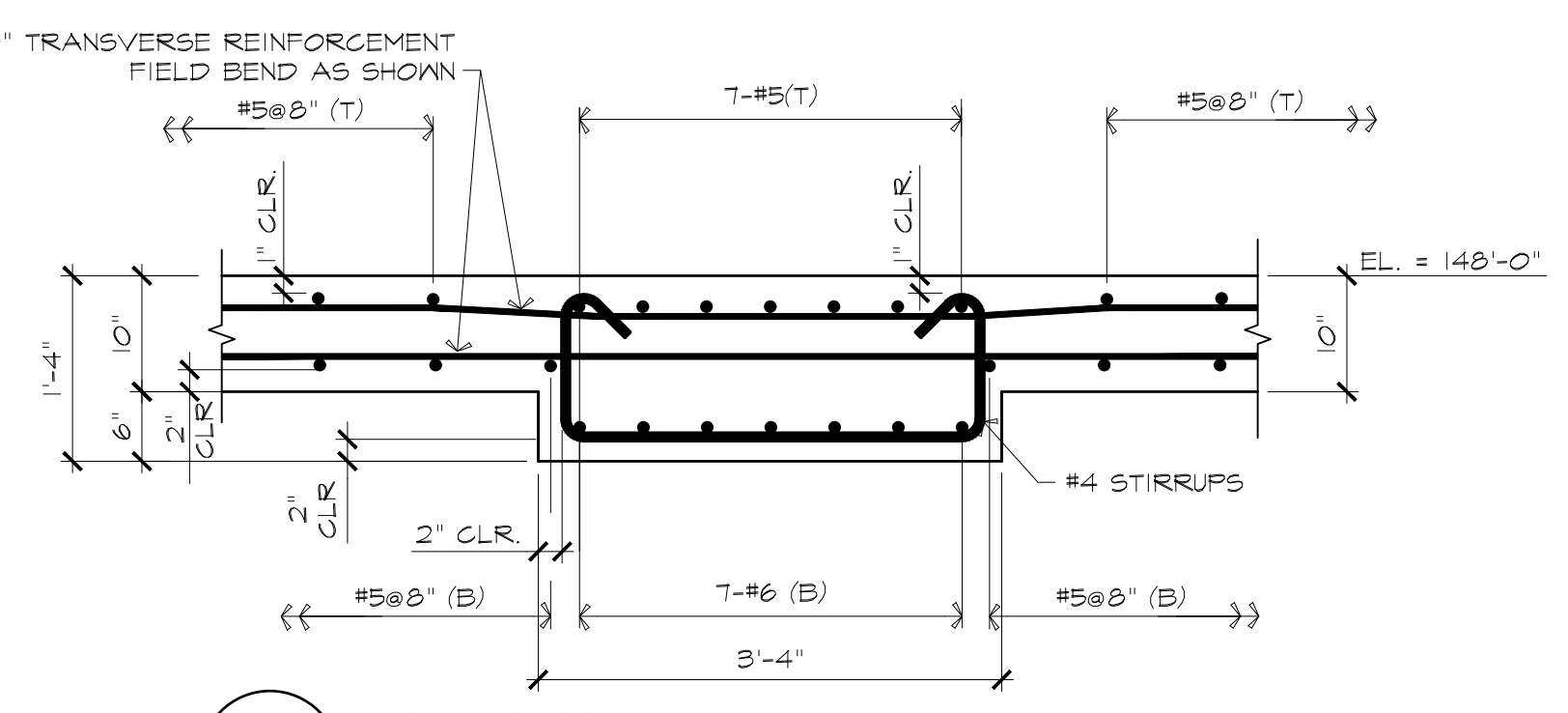
C:\Users\jason@hmc.com\Documents\Public Drawings\2024\Attleboro Wading River WTP.dwg 2/28/2025 3:55 PM JAS@HMC



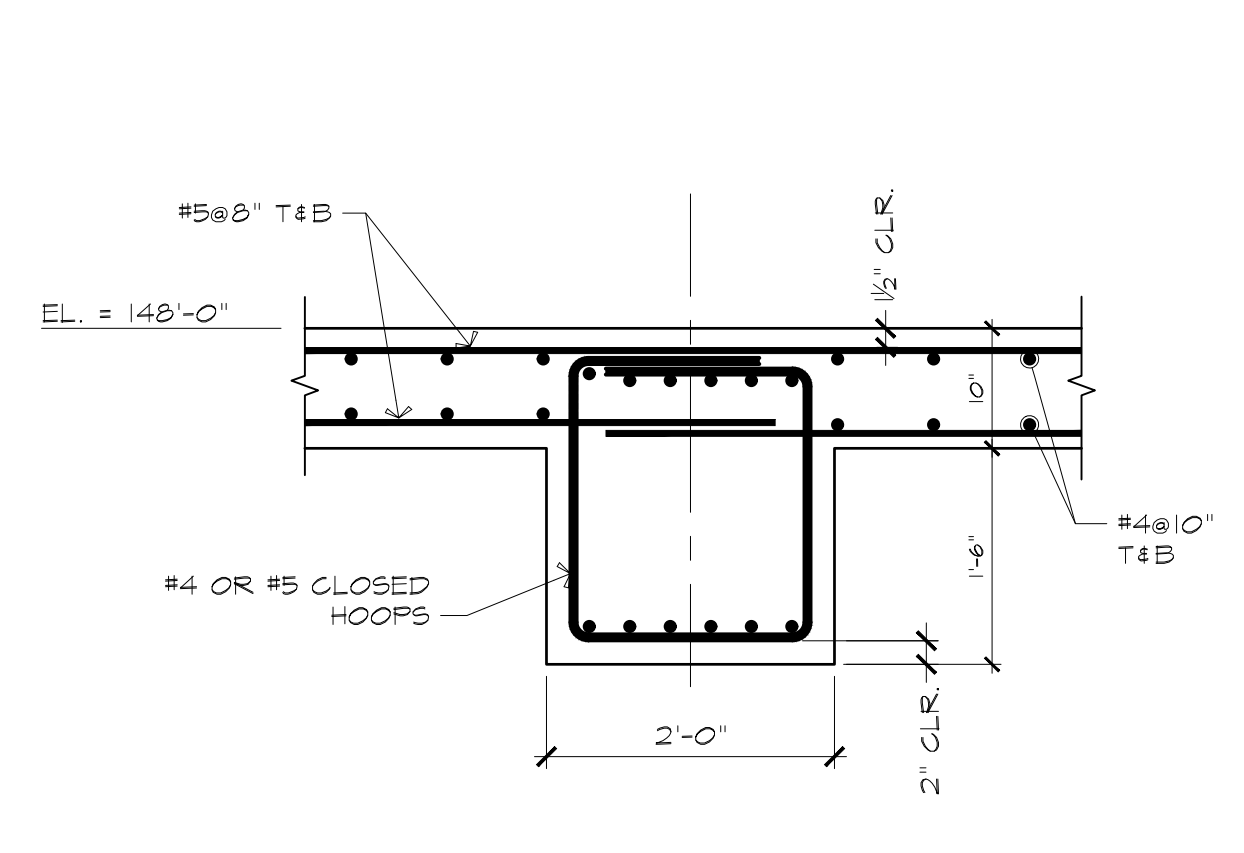
SECTION: PART A
1/2"=1'-0"



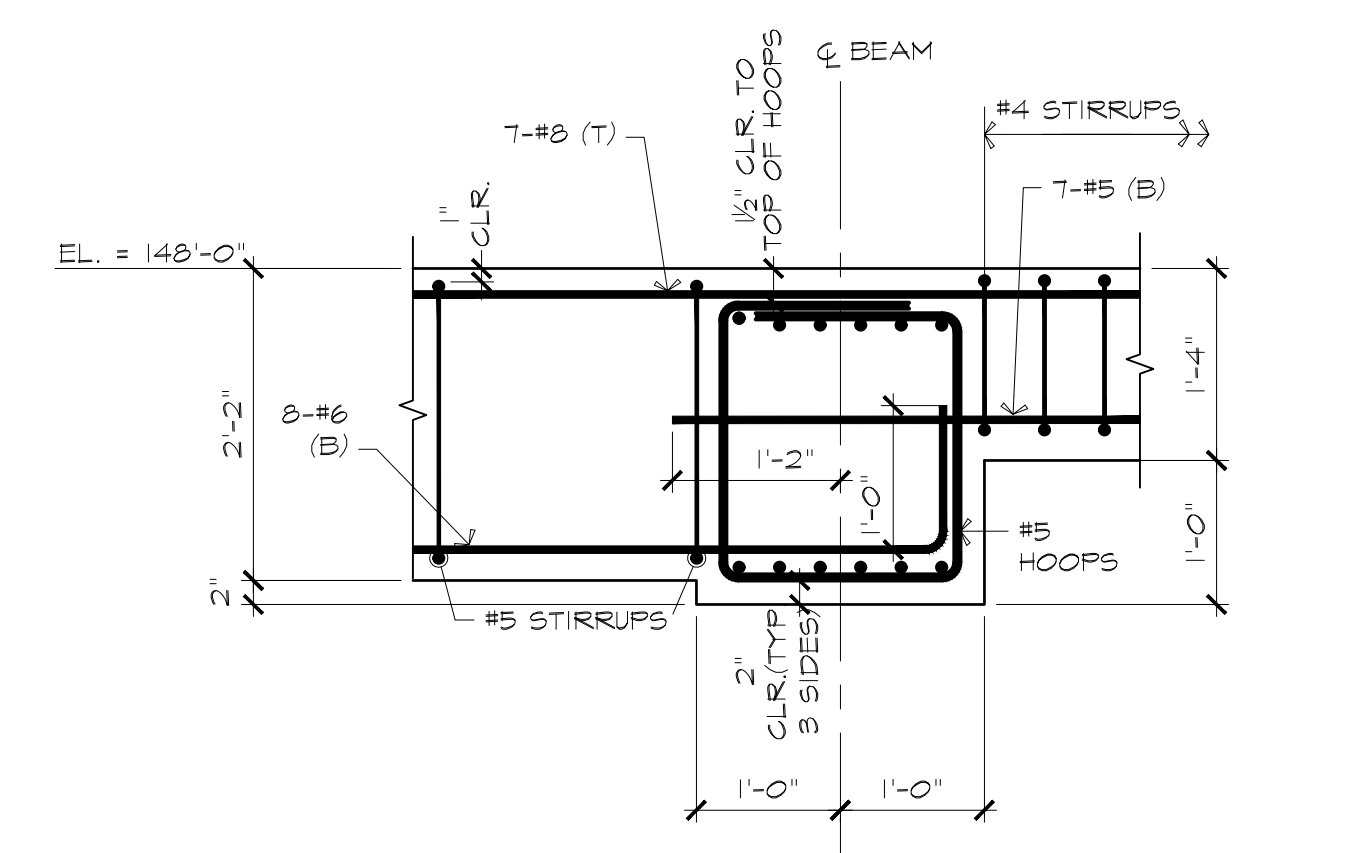
SECTION 2
3/4"=1'-0"



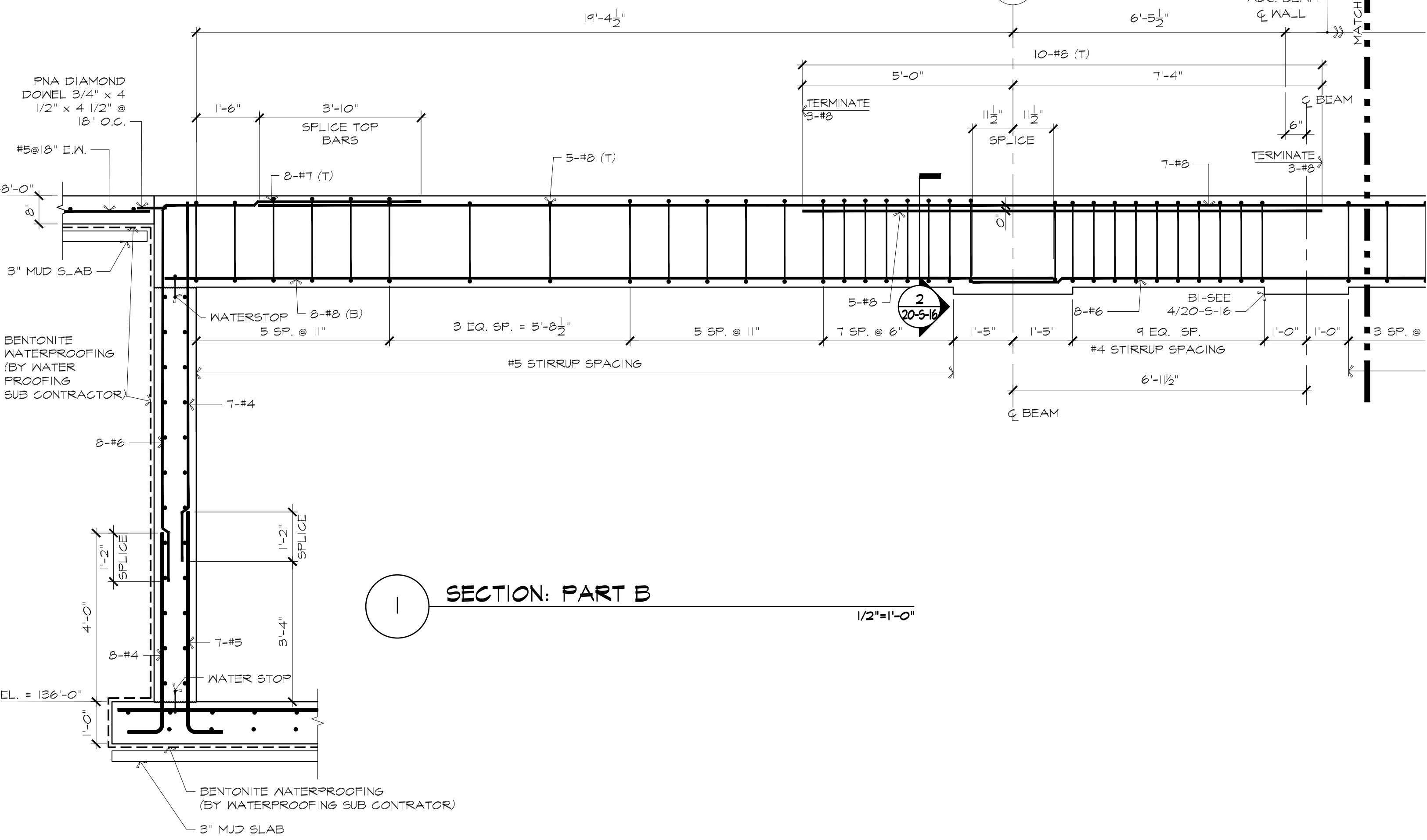
SECTION 3
3/4"=1'-0"



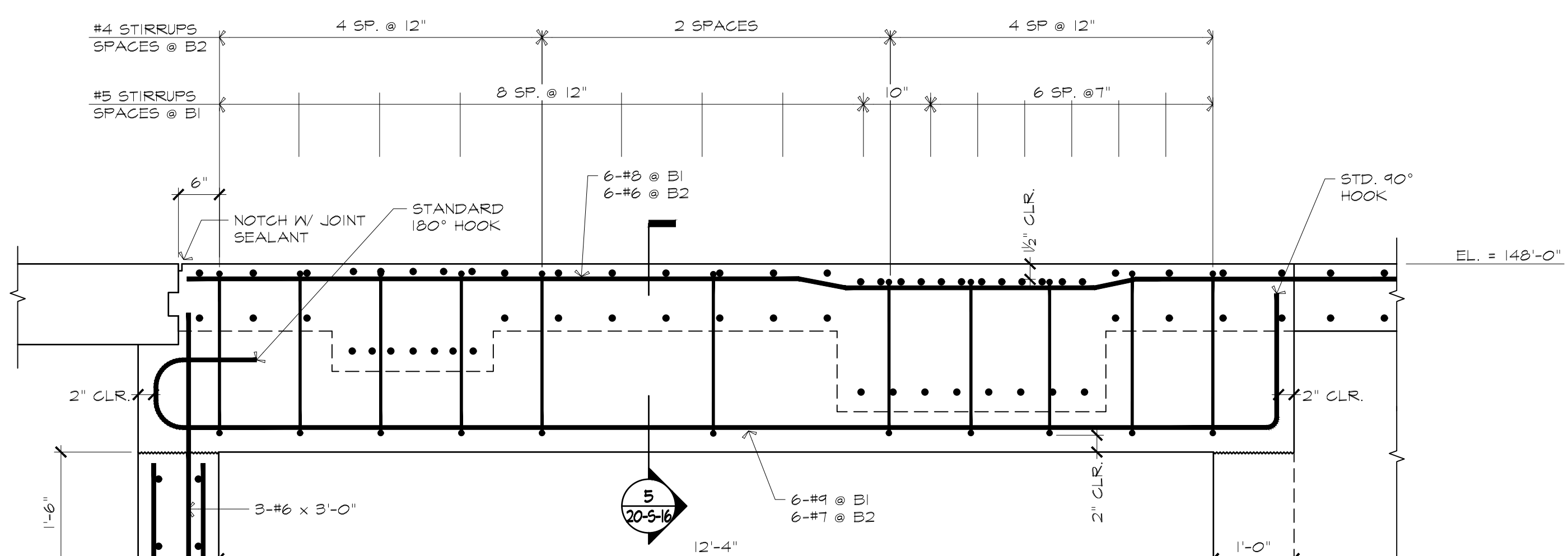
SECTION: BI AND B2
3/4"=1'-0"



DETAIL
3/4"=1'-0"



SECTION: PART B
1/2"=1'-0"



ELEVATION: BI AND B2
3/4"=1'-0"

Rev.	Date	Description

ISSUED FOR CONSTRUCTION

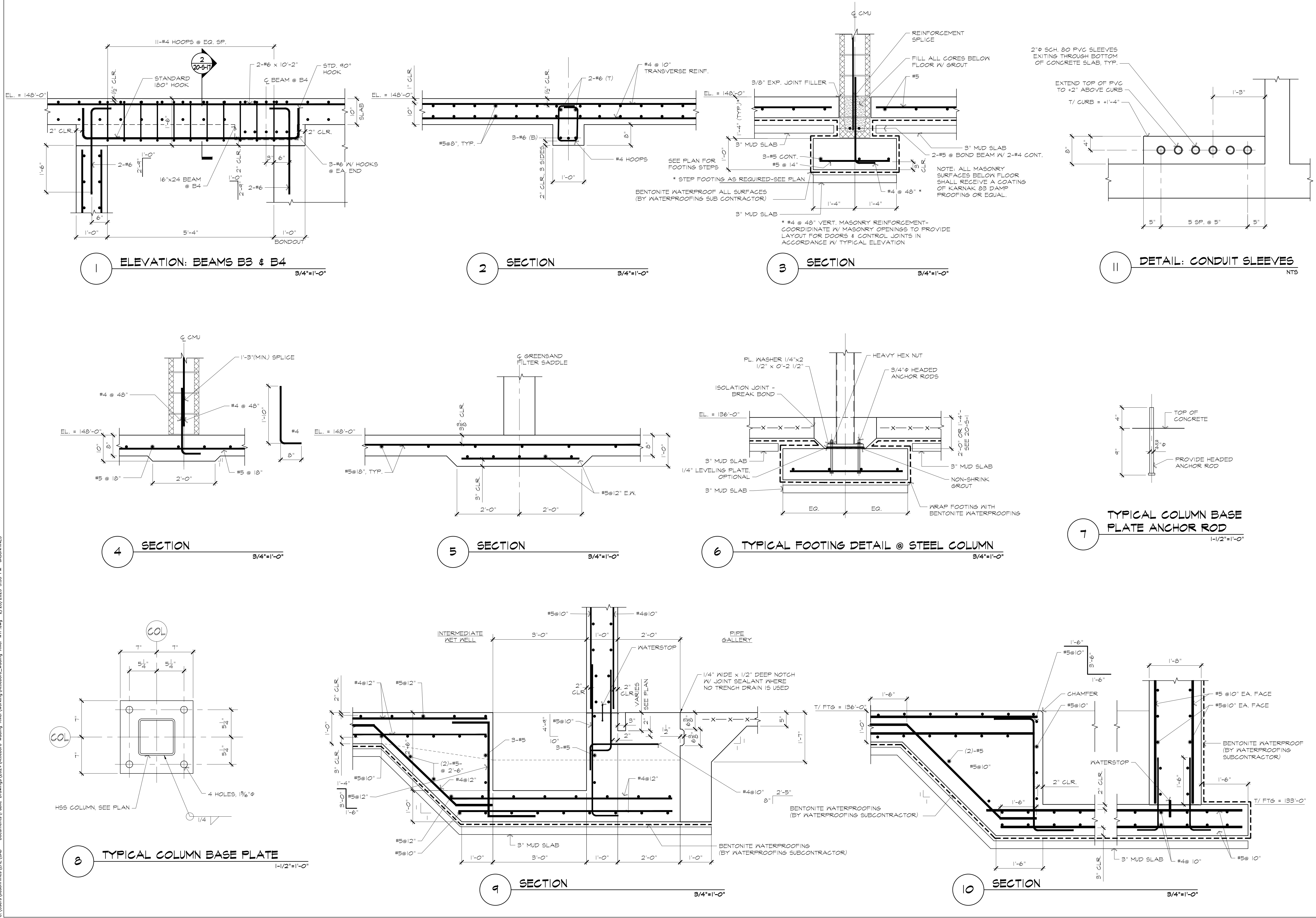


Lincoln / Haney
Engineering Associates, Inc.
1000 State Street, Suite 301, Attleboro, MA 01945
Phone: 508-228-1601 Fax: 508-228-2841



T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE:

C:\Users\jason@hane.com\Documents\Public Drawings\2024\Attleboro Wading River WTP\Attleboro Wading River WTP.dwg 2/28/2025 3:55 PM JASDHINES



ATTLEBORO WATER DEPT.
 ATTLEBORO, MA
 WADING RIVER
 WATER TREATMENT PLANT

STRUCTURAL
 SECTIONS & DETAILS

Rev.	Date	Description

ISSUED FOR CONSTRUCTION



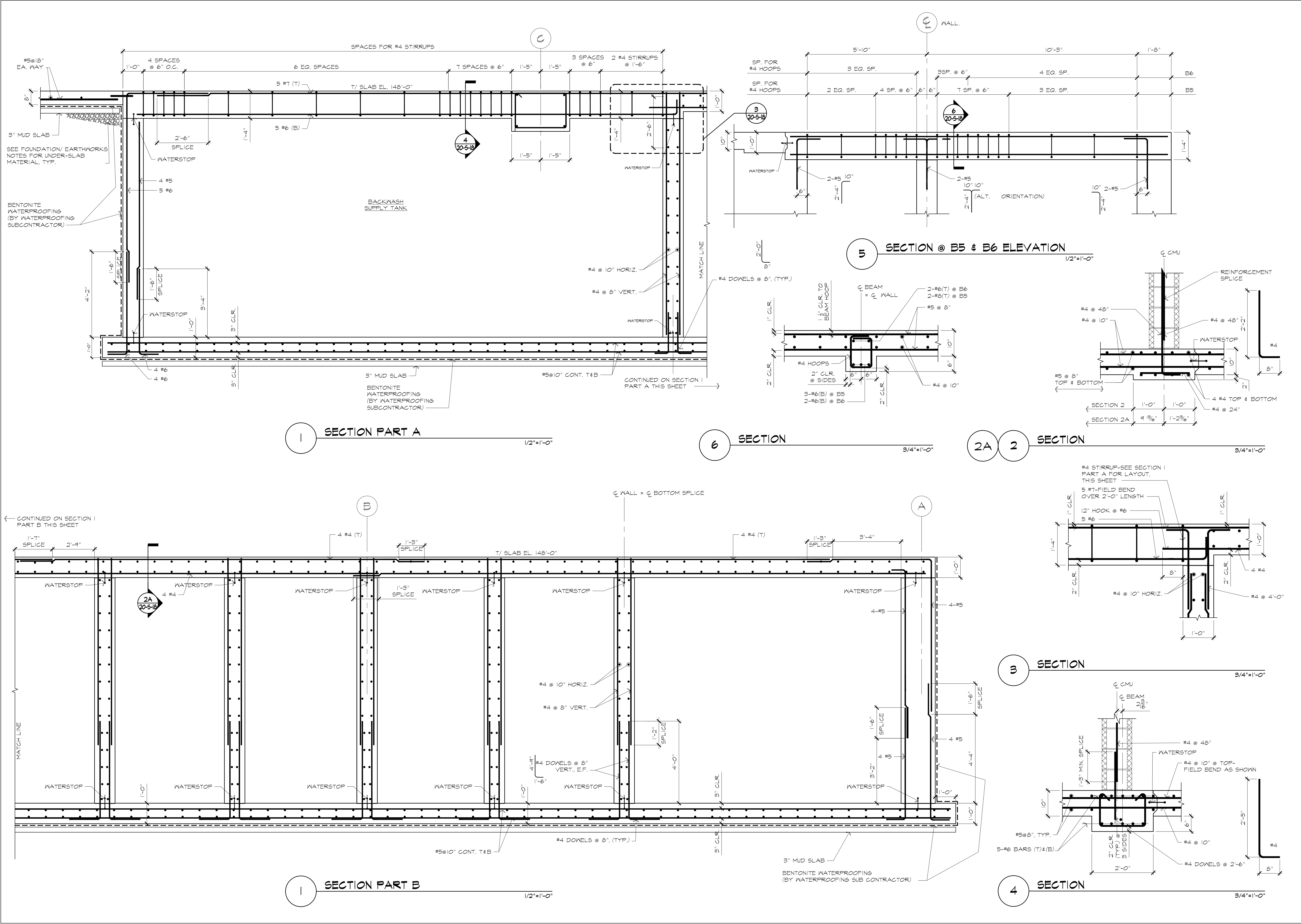
Lincoln / Hane
 Engineering Associates, Inc.
 100 Main St., 3rd Fl.
 Attleboro, MA 01915
 Phone: 508-229-1601 Fax: 508-229-2841



T&H NO.: 6193
 DATE: FEBRUARY 2025
 SCALE:
 20-S-17

Approved By: _____
 Checked By: SAC
 Designed By: SWW
 Drawn By: SWW

C:\Users\jason@hane.com\Documents\Public Drawings\2024\Attleboro Wading River\WTP.dwg 2/28/2025 3:54 PM JASONHINES



ATTELBORO WATER DEPT.
ATTELBORO, MA
WADING RIVER
WATER TREATMENT PLANT

STRUCTURAL
SECTIONS & DETAILS

THIS DOCUMENT IS THE PROPERTY OF TATA & HOWARD, INC. AND ITS CLIENT. REPRODUCTION OR ADAPTATION WITHOUT WRITTEN CONSENT IS PROHIBITED.

Rev.	Date	Description

Designed By: JAC
 Checked By: JAC
 Drawn By: SWW
 Approved By: JAC

ISSUED FOR CONSTRUCTION

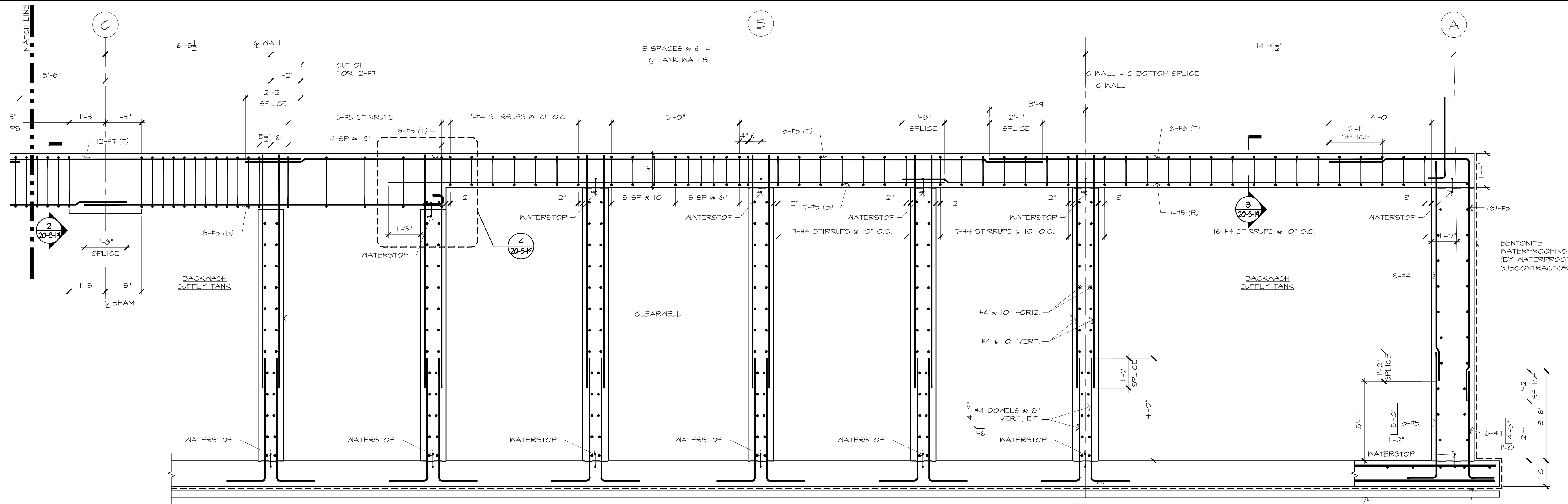
Lincoln / Haney
 Engineering Associates, Inc.
 100 State Street
 Suite 301, Box 7
 Attleboro, MA 01901
 Phone: 508-252-1601 Fax: 508-252-2841

TATA & HOWARD

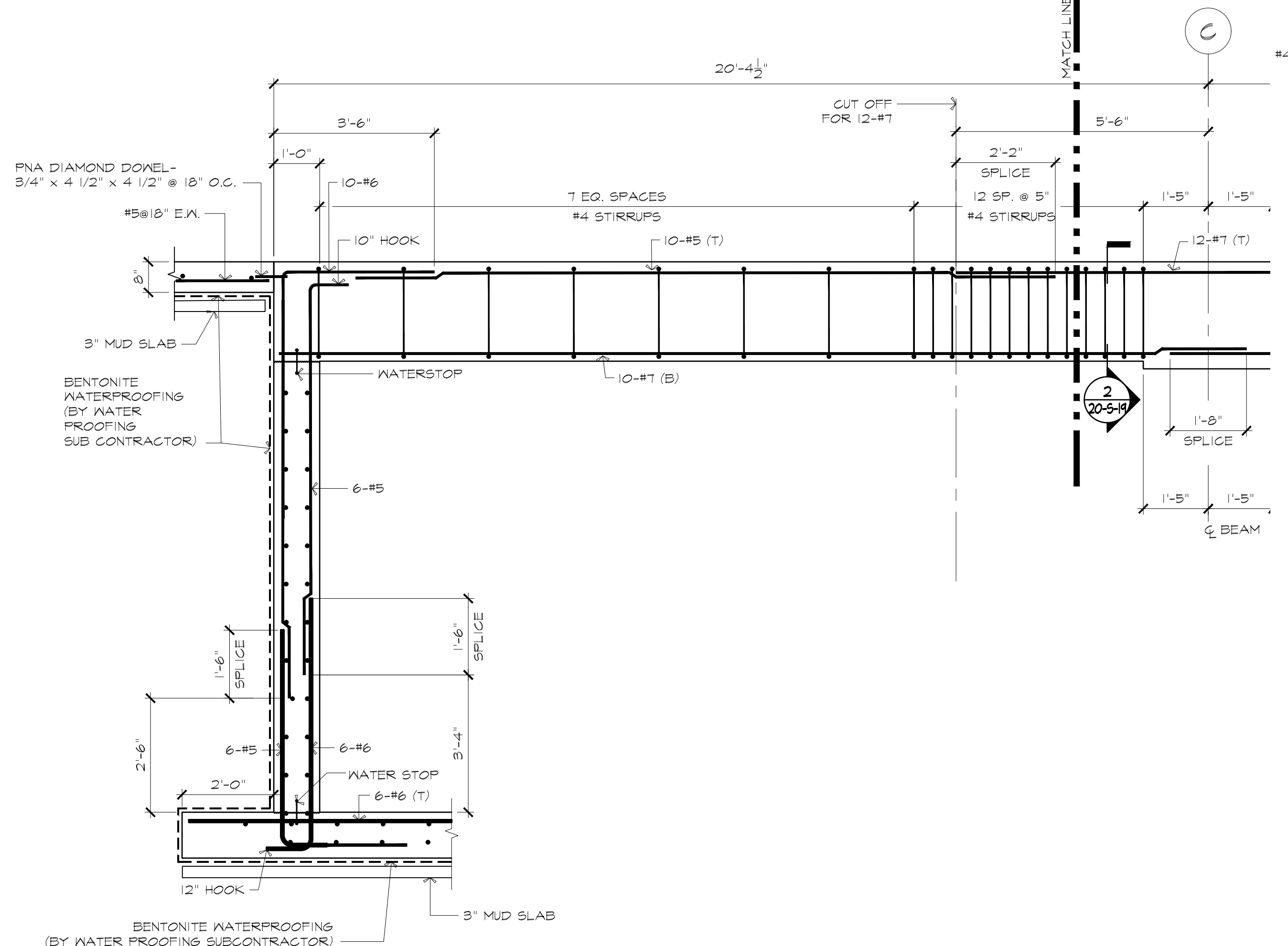
T&H NO.: 6193
 DATE: FEBRUARY 2025
 SCALE:

20-S-18

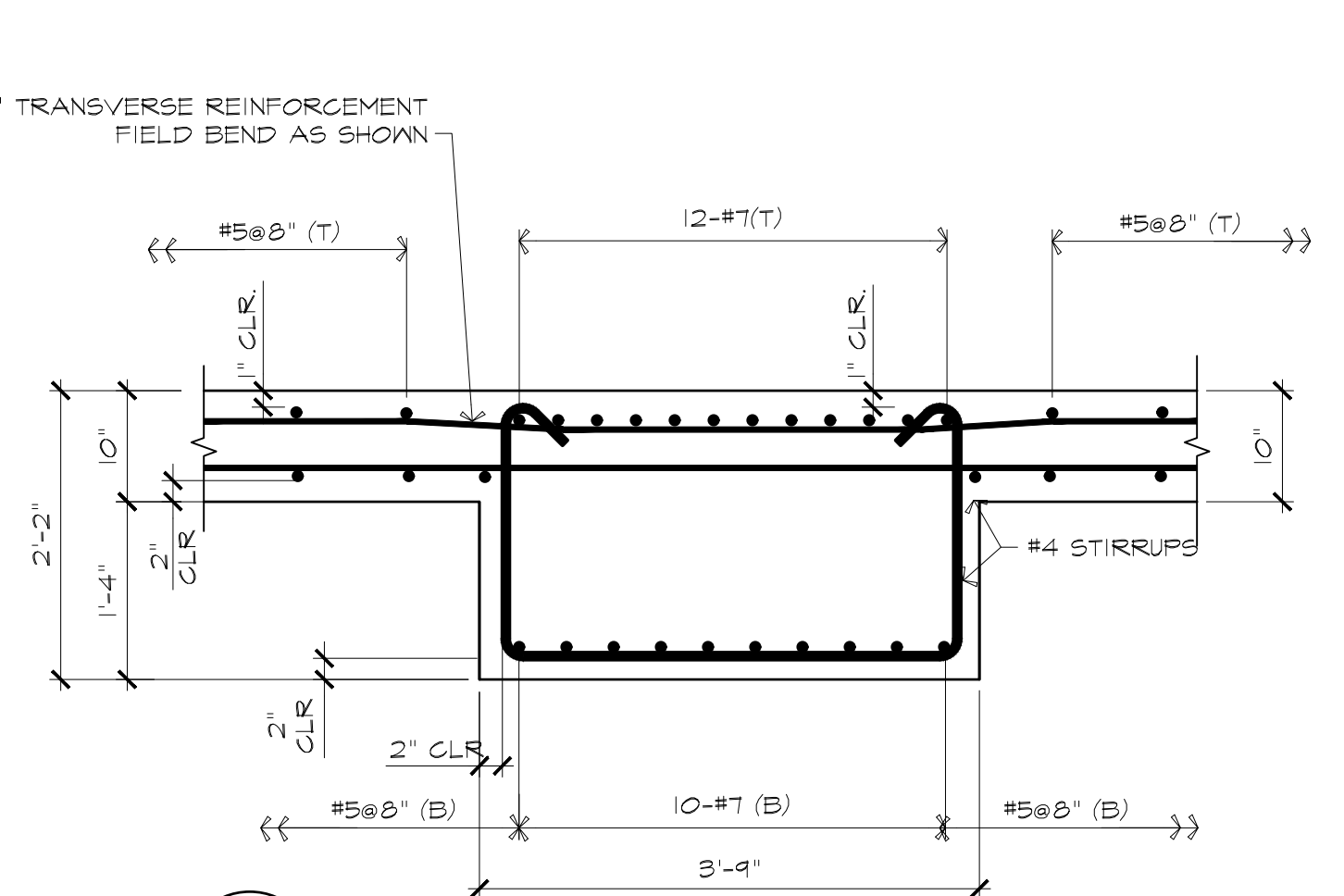
C:\Users\jason@hane\Documents\Public Drawings\2024\Attleboro Wading River WTP.dwg 2/28/2025 3:56 PM JASOHNES



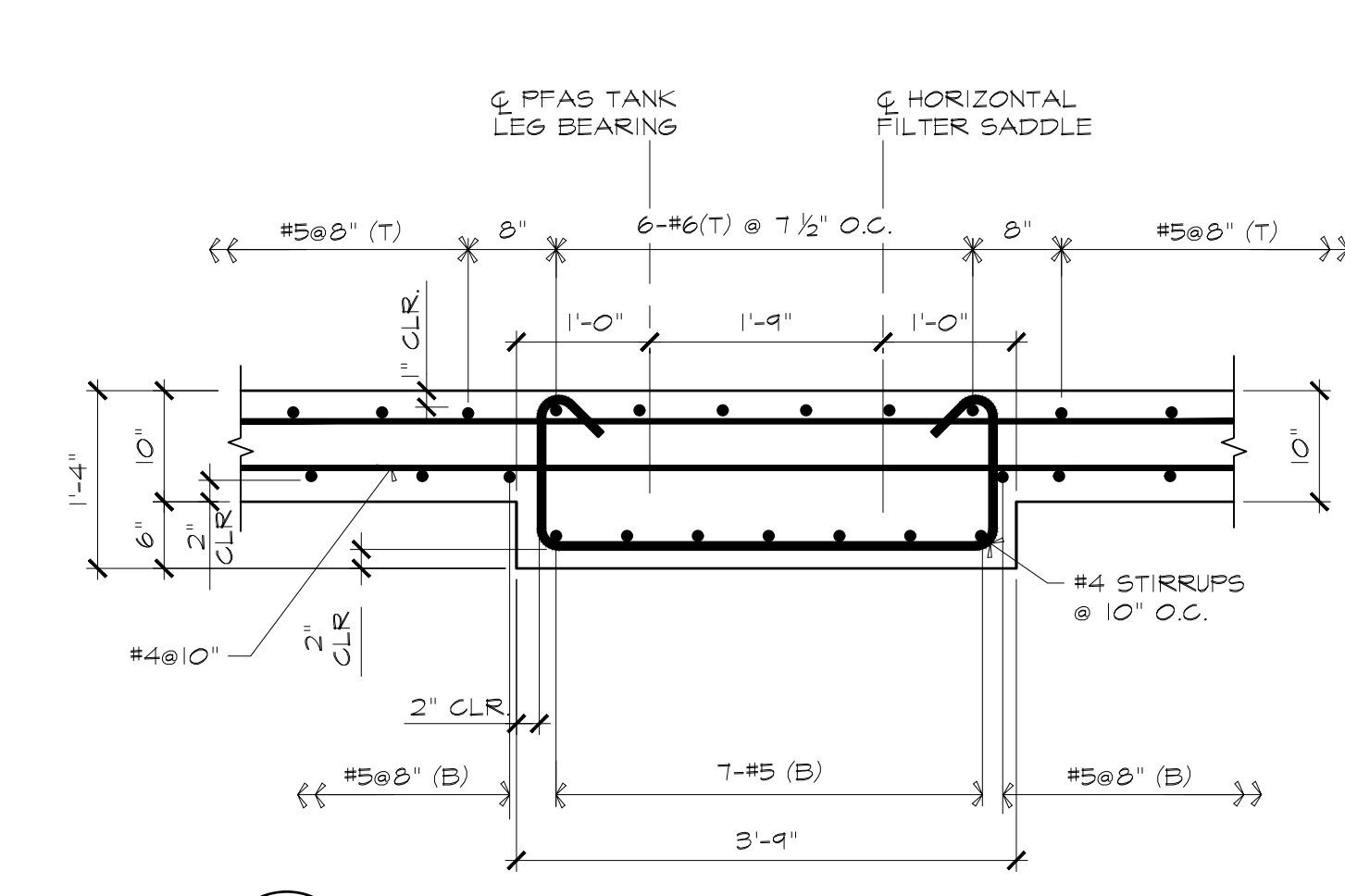
1 SECTION: PART A
1/2"=1'-0"



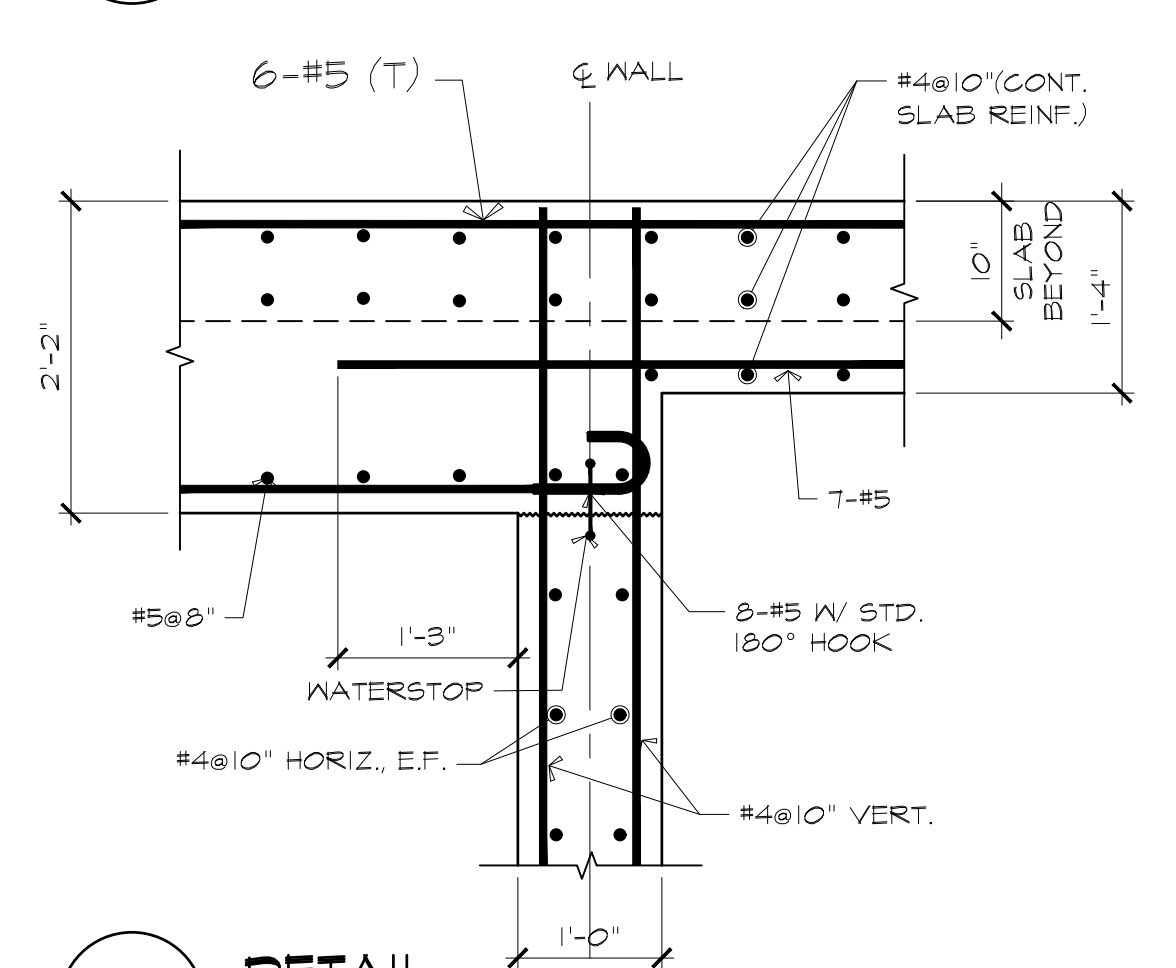
1 SECTION: PART B
1/2"=1'-0"



2 SECTION
3/4"=1'-0"

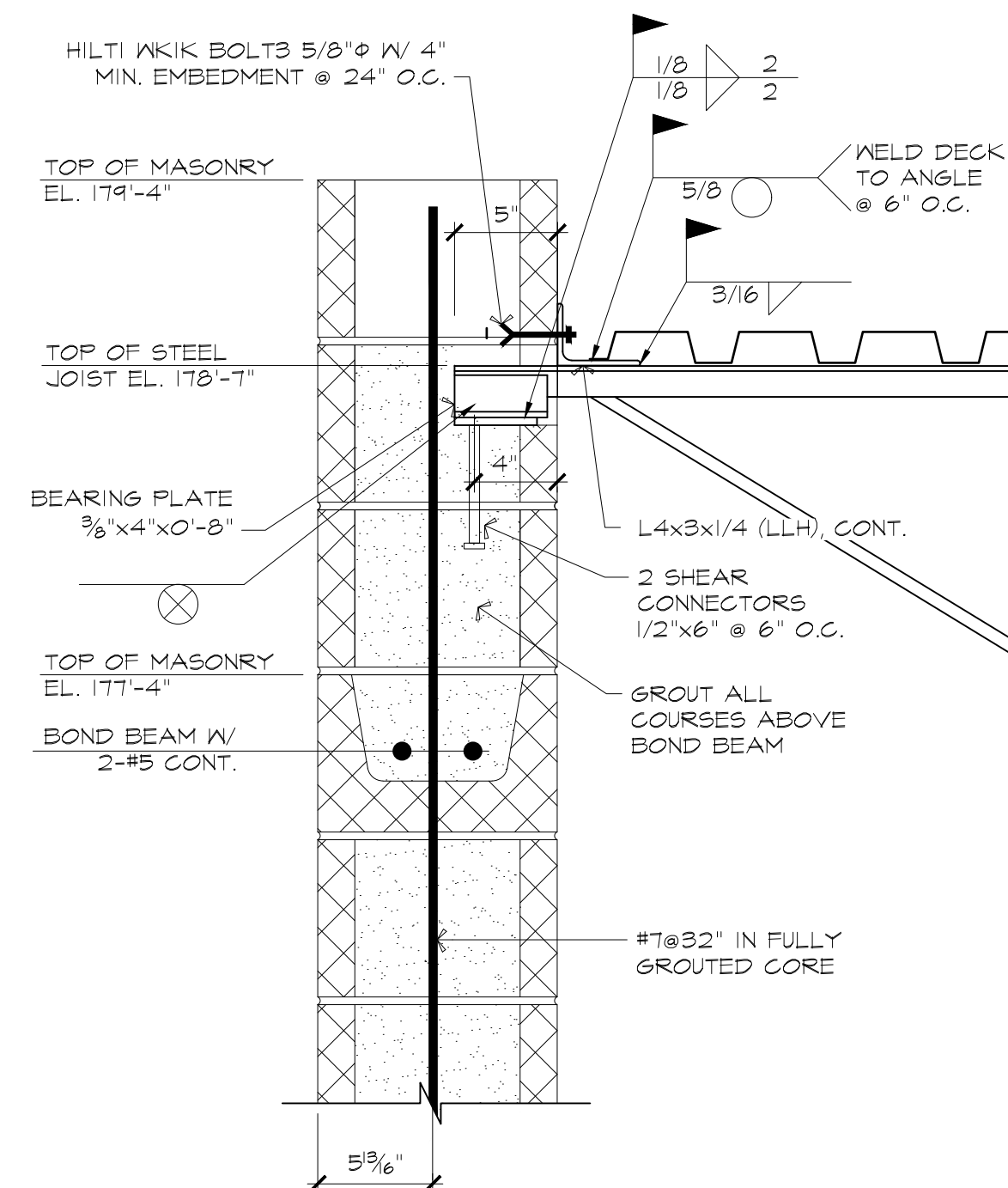


3 SECTION
3/4"=1'-0"

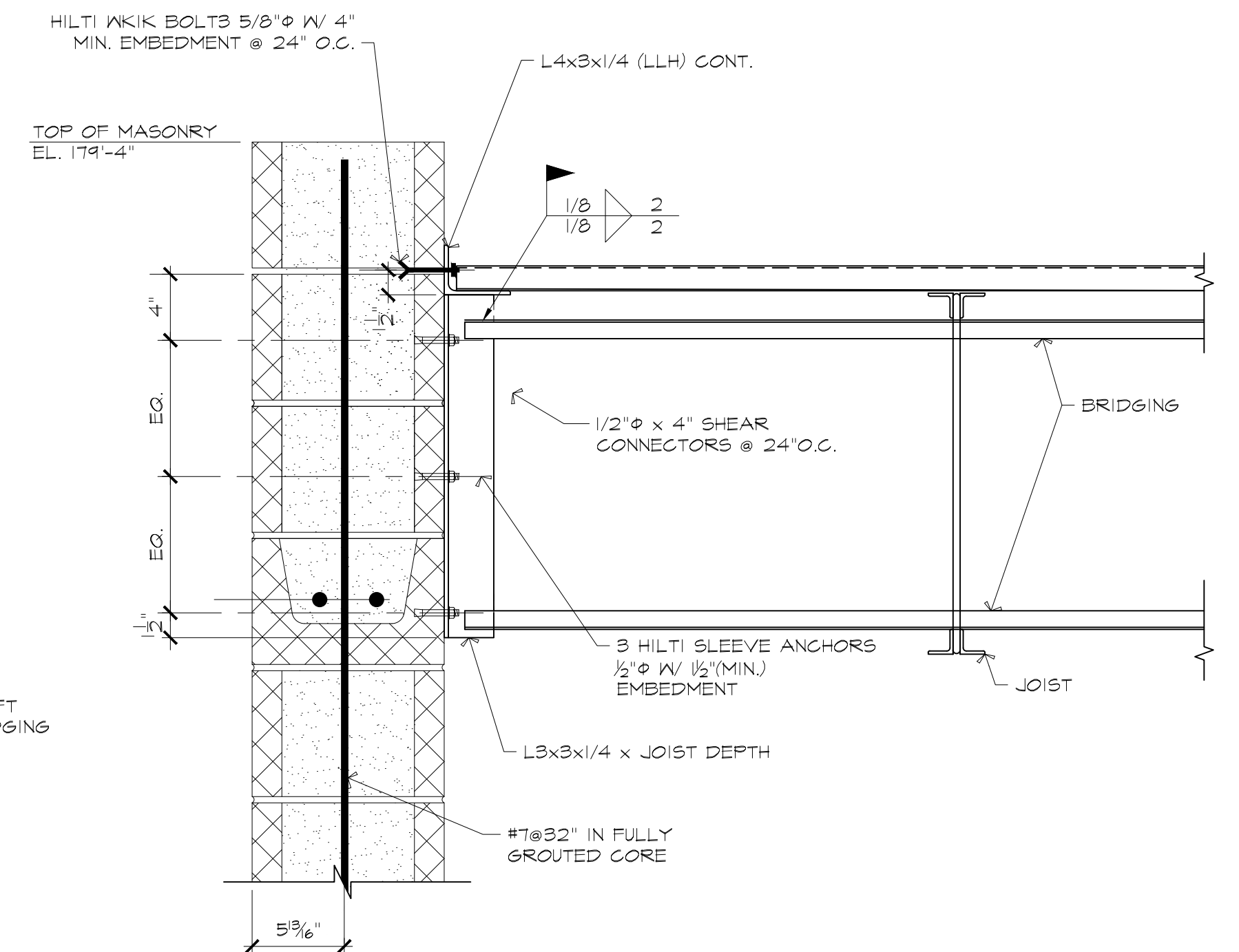


4 DETAIL
3/4"=1'-0"

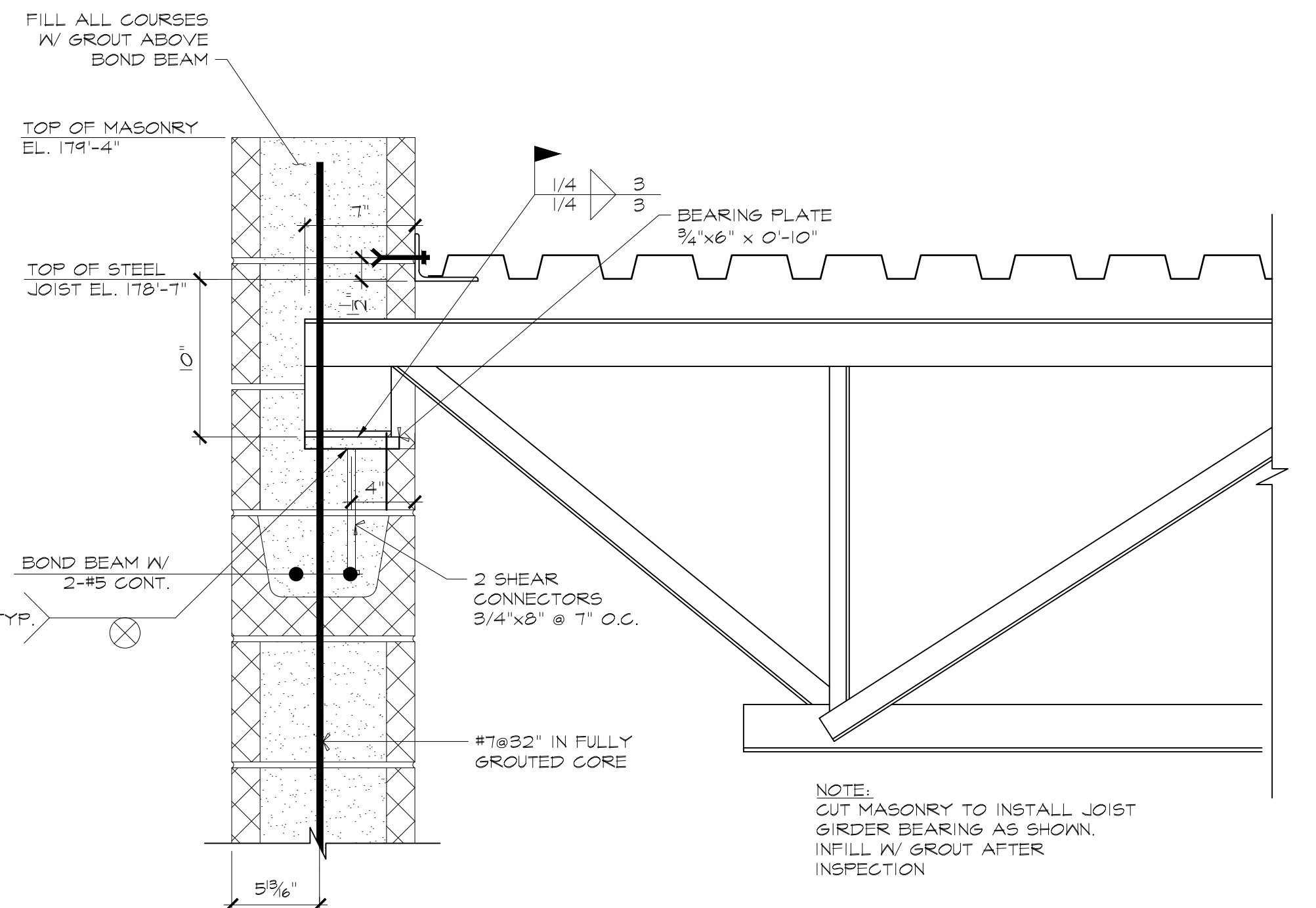
ATTLEBORO WATER DEPT. ATTLEBORO, MA		STRUCTURAL SECTIONS & DETAILS	THE DOCUMENT IS THE PROPERTY OF TATA & HOWARD, INC. AND ITS CLIENT. REPRODUCTION OR ADAPTATION WITHOUT WRITTEN CONSENT IS PROHIBITED.	Checked By: JAC
WADING RIVER WATER TREATMENT PLANT				Designed By: SWW
ISSUED FOR CONSTRUCTION		Rev.	Date	Description
Lincoln / Hane Engineering Associates, Inc. 100 State Street, 7th Floor Attleboro, MA 01930 Phone: 508-228-1601 Fax: 508-228-2841				
T&H NO.: 6193		DATE: FEBRUARY 2025		
SCALE:				
20-S-19				



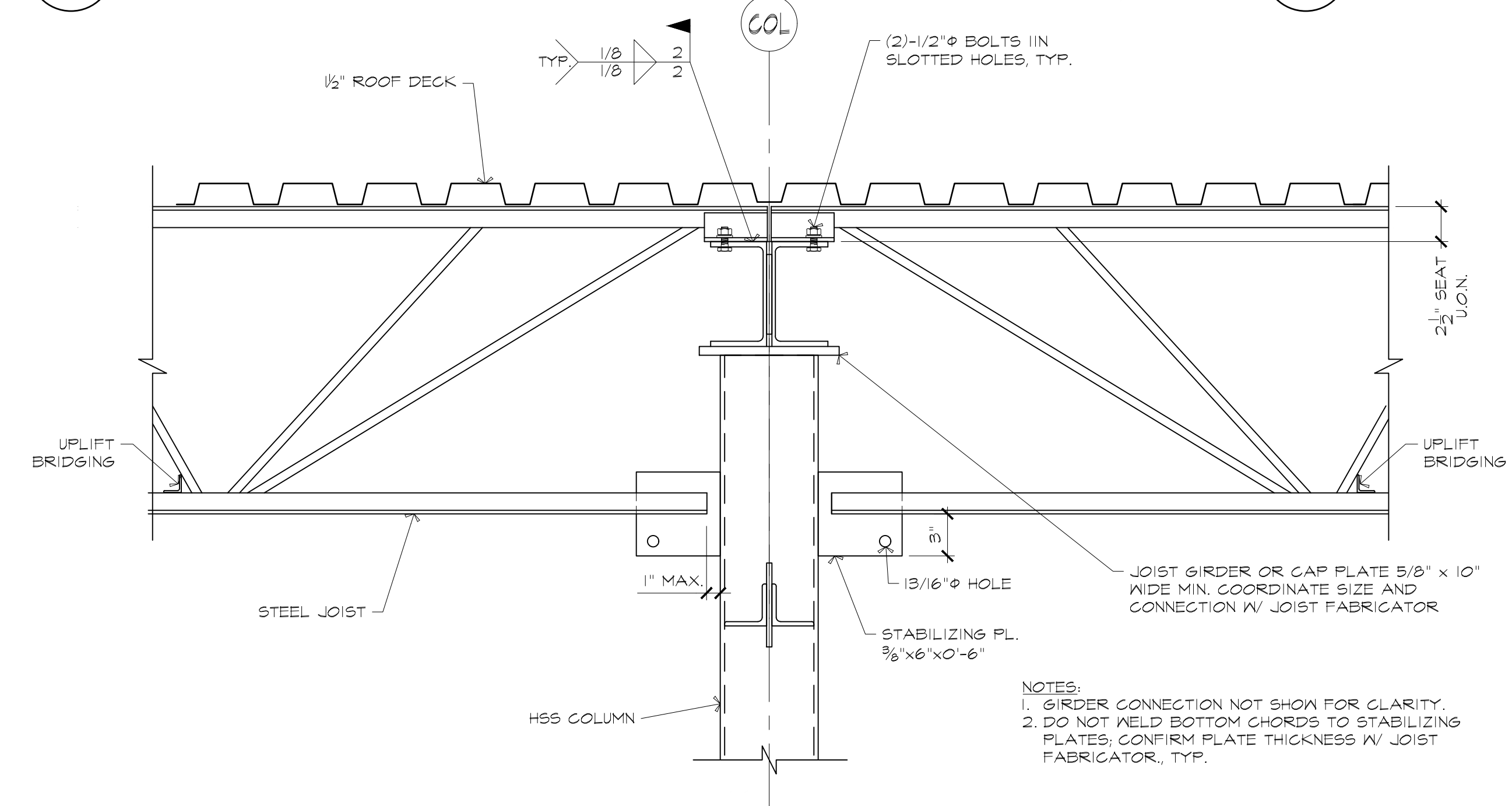
1 TYPICAL JOIST BEARING @ MASONRY 1 1/2"=1'-0"



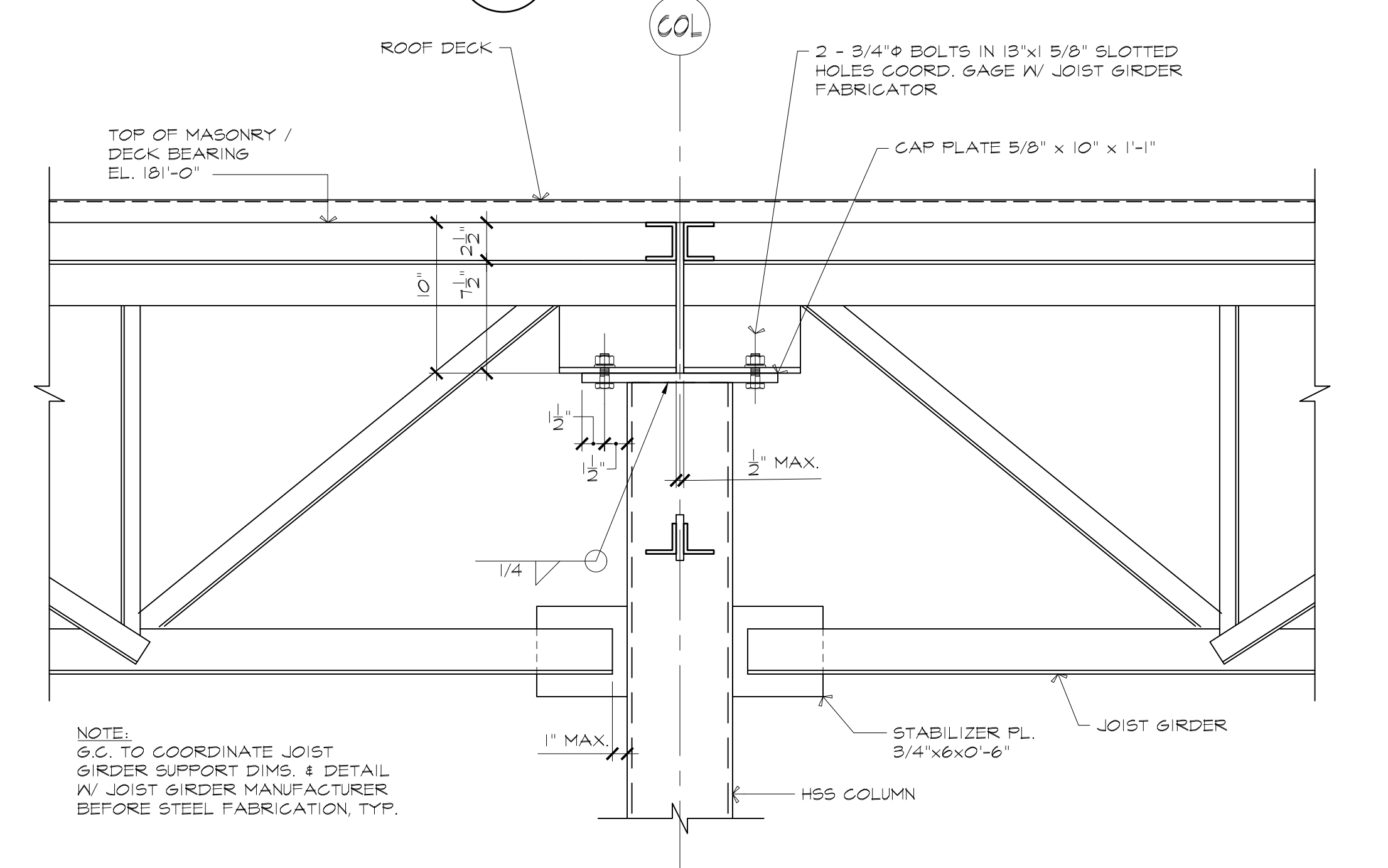
2 TYPICAL DECK BEARING @ MASONRY 1 1/2"=1'-0"



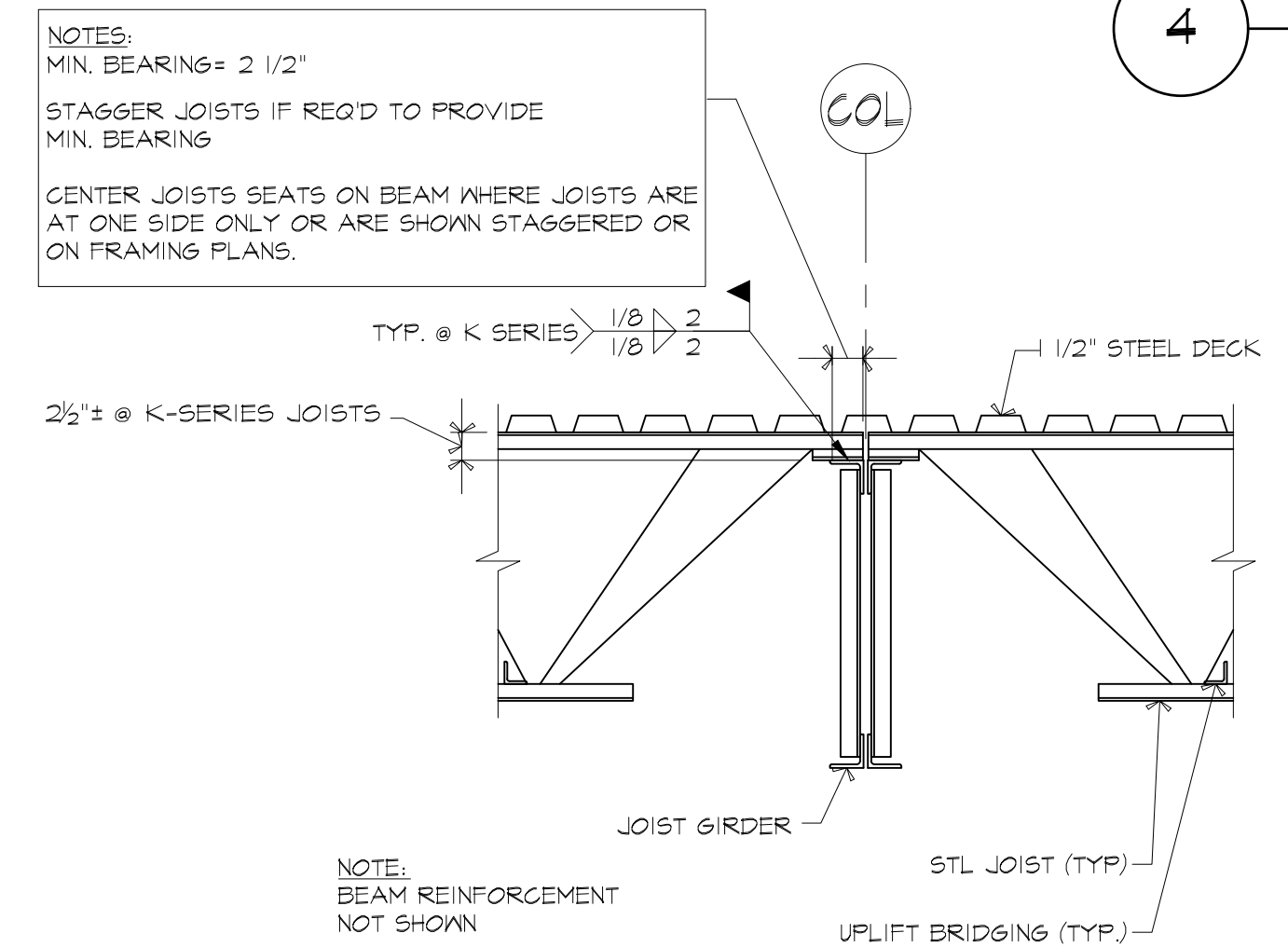
3 TYPICAL JOIST GIRDER BEARING @ MASONRY 1 1/2"=1'-0"



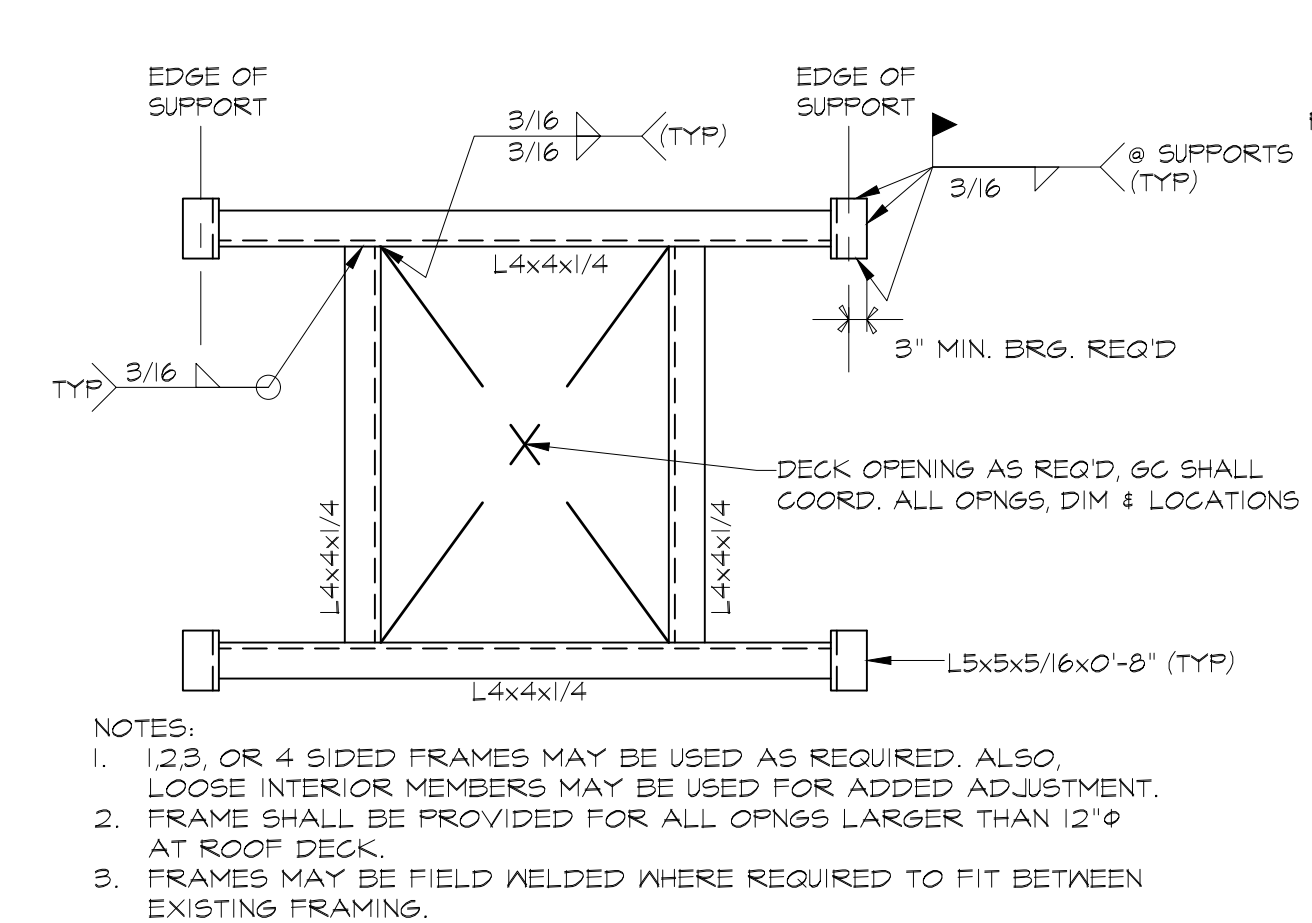
4 TYPICAL TIE JOIST DETAIL AT ROOF 1 1/2"=1'-0"



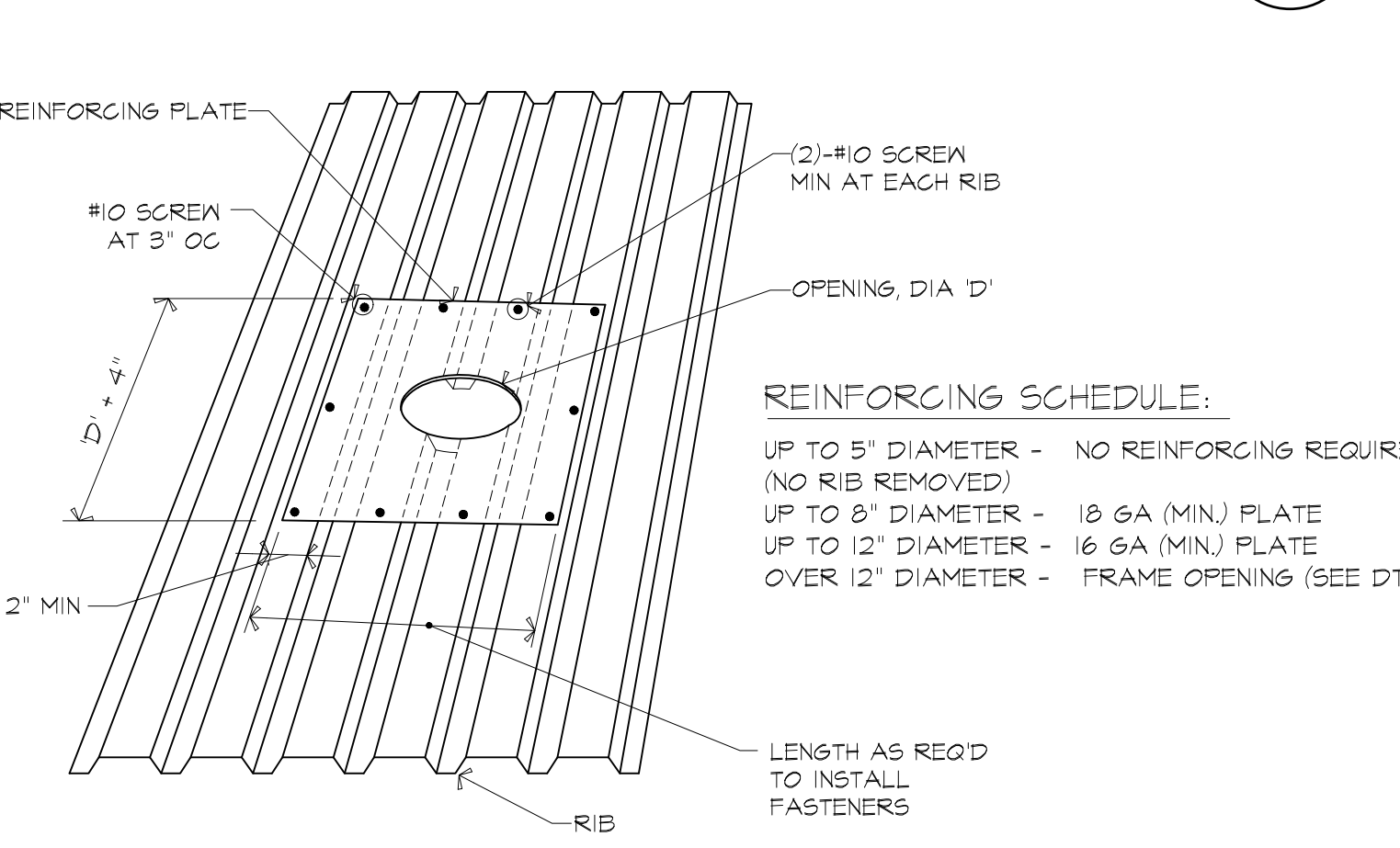
5 TYPICAL JOIST GIRDER ON INTERIOR COLUMN 1 1/2"=1'-0"



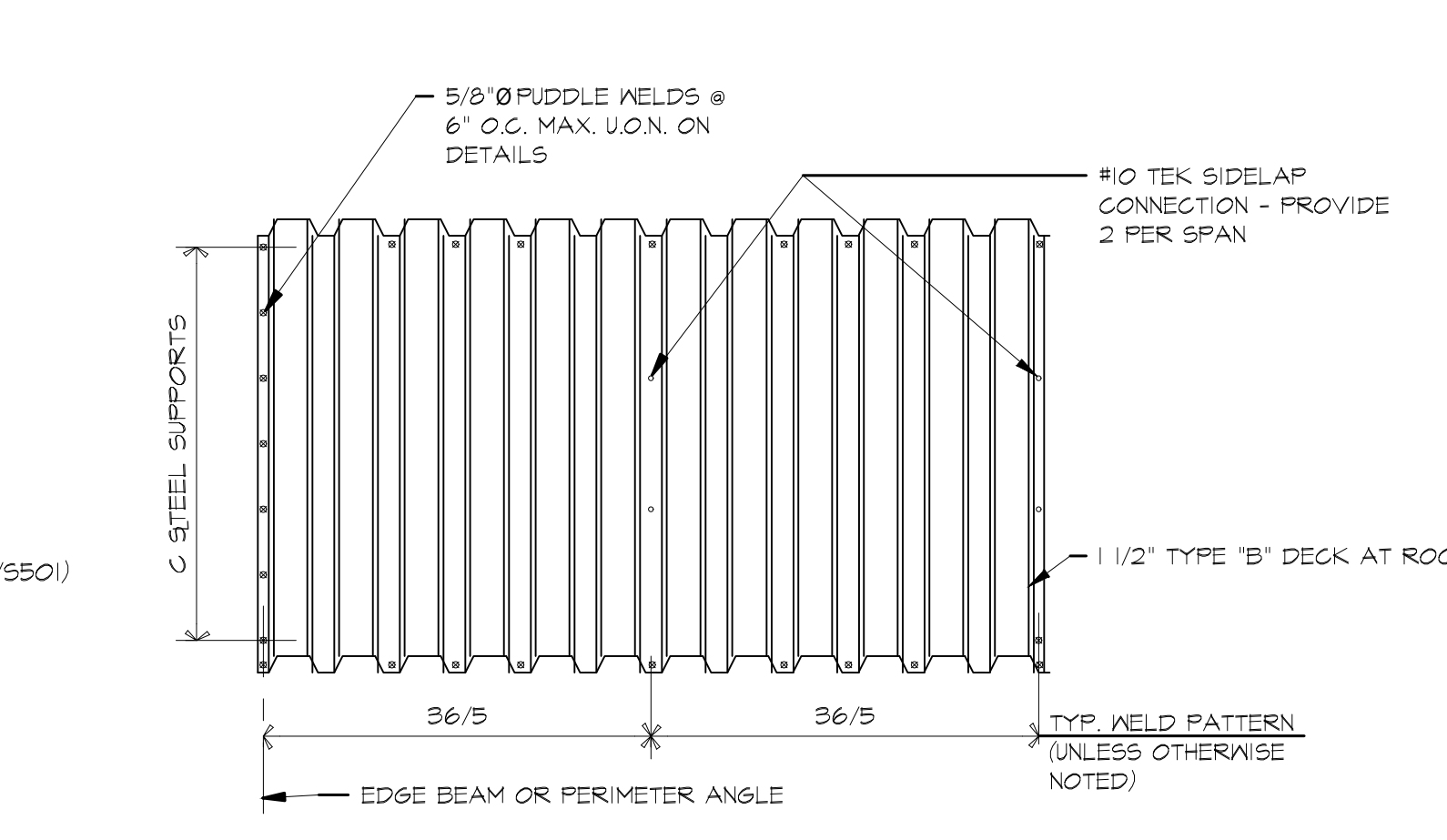
6 TYPICAL JOIST BEARING AT STEEL FRAME 3/4"=1'-0"



7 ROOF DECK OPENING FRAME 3/4"=1'-0"



8 TYPICAL ROOF DECK REINFORCEMENT DETAIL N.T.S.



9 TYPICAL ROOF DECK ATTACHMENT DETAIL N.T.S.

C:\Users\jason@lincoln.com\Documents\Public Drawings\2024\Attleboro Wading River WTP.dwg 2/28/2025 3:56 PM JASONHINES

ATTLEBORO WATER DEPT.
ATTLEBORO, MA

WADING RIVER
WATER TREATMENT PLANT

STRUCTURAL
JOIST AND ROOF DECK
SECTIONS AND DETAILS

ISSUED FOR CONSTRUCTION

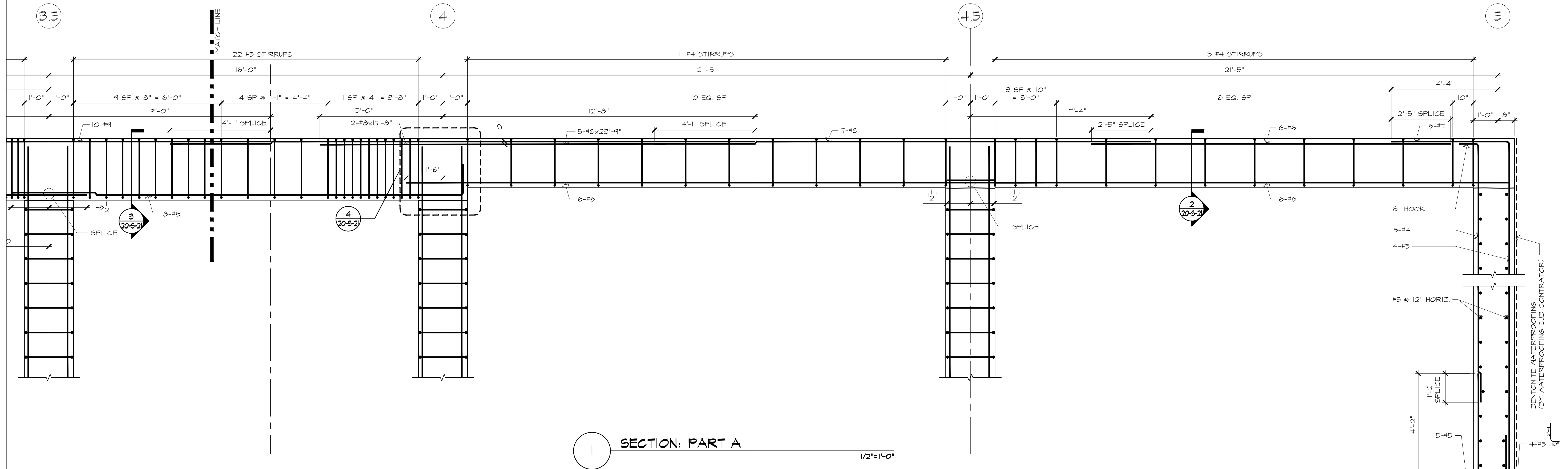
Lincoln / Haney
Engineering Associates, Inc.
300 Main Street
Attleboro, MA 01901
Phone: 508-252-1601 Fax: 508-252-2841

TATA & HOWARD

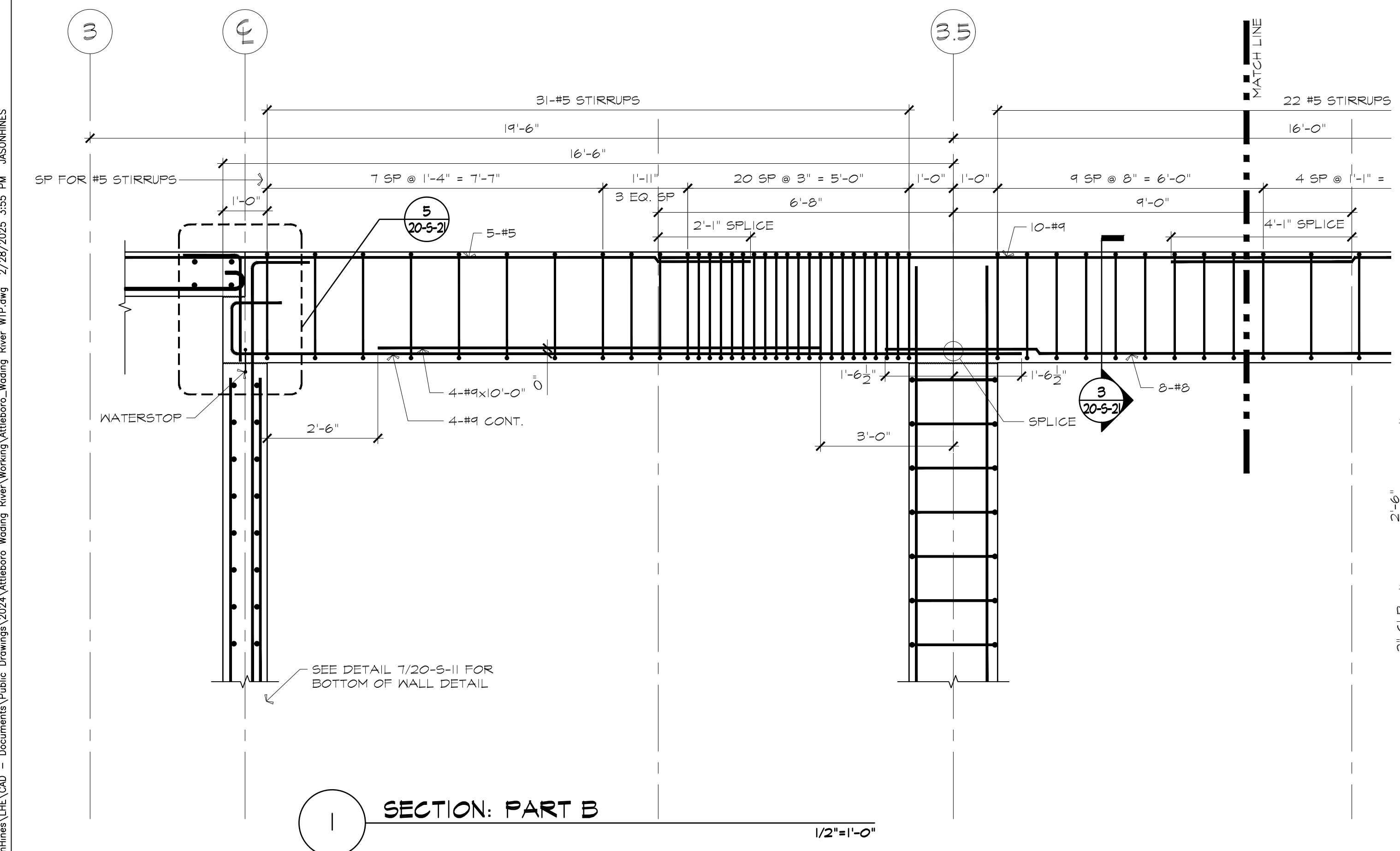
T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE:

20-S-20

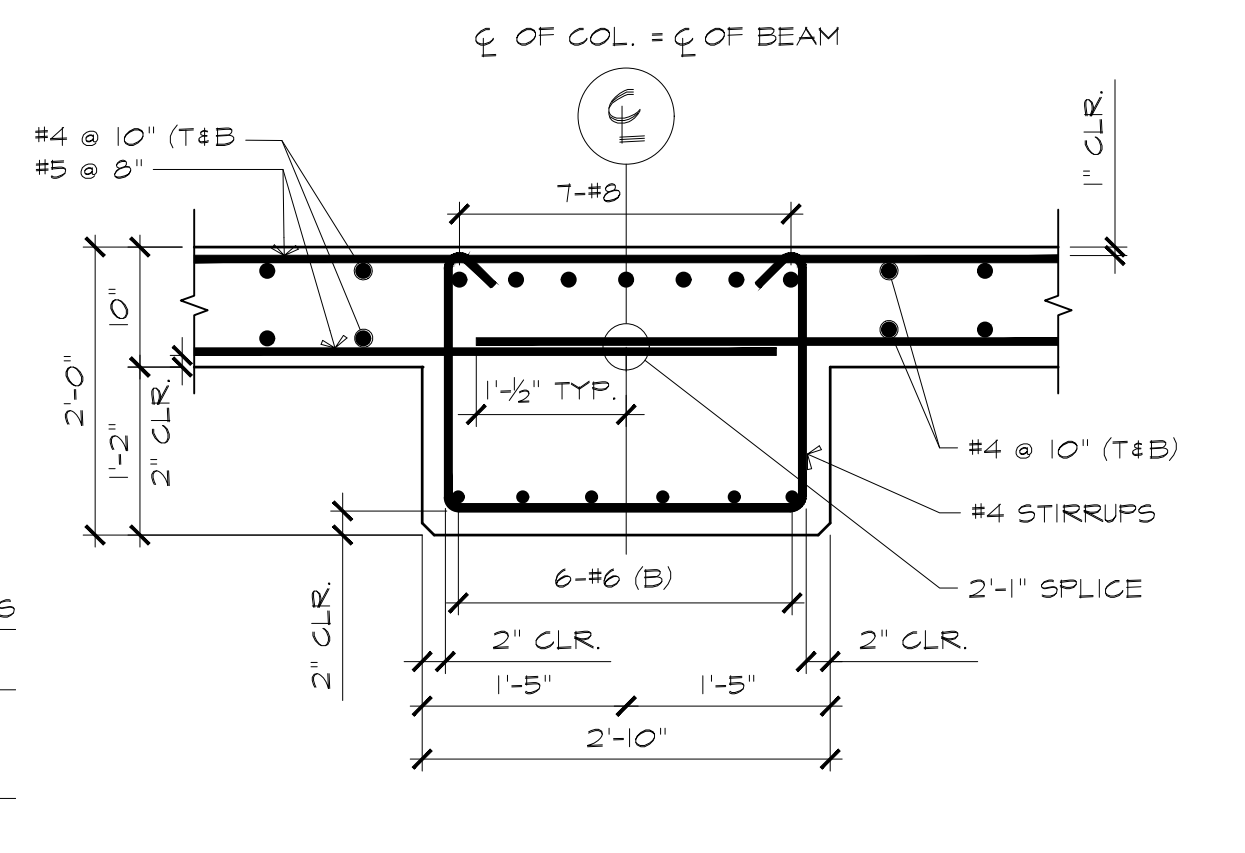
C:\Users\jason@lincoln-haney.com\Documents\Public Drawings\2024\Wading River WTP\2024-02-28 3:55 PM - JASON@LINCOLN-HANEY.COM



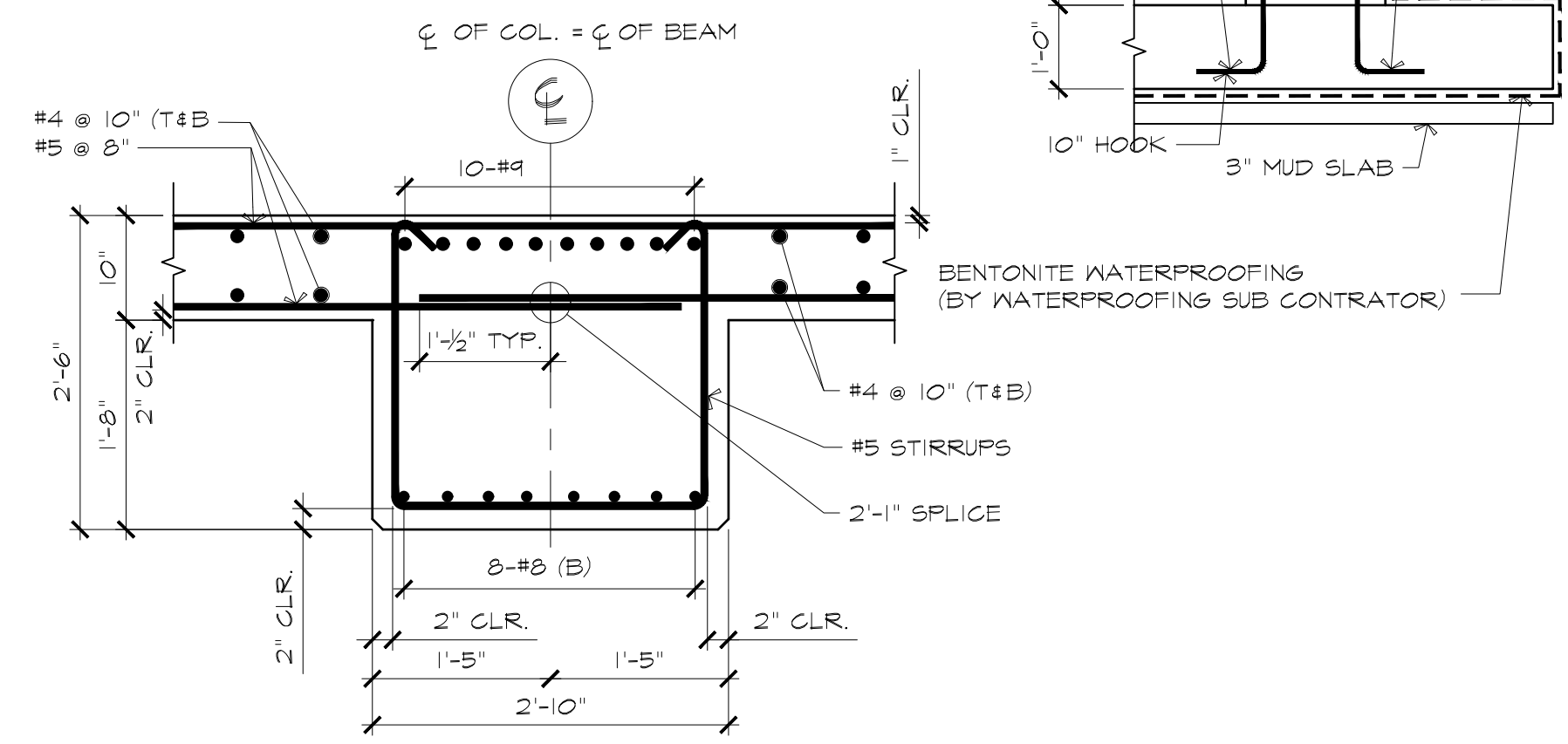
SECTION: PART A
1/2"=1'-0"



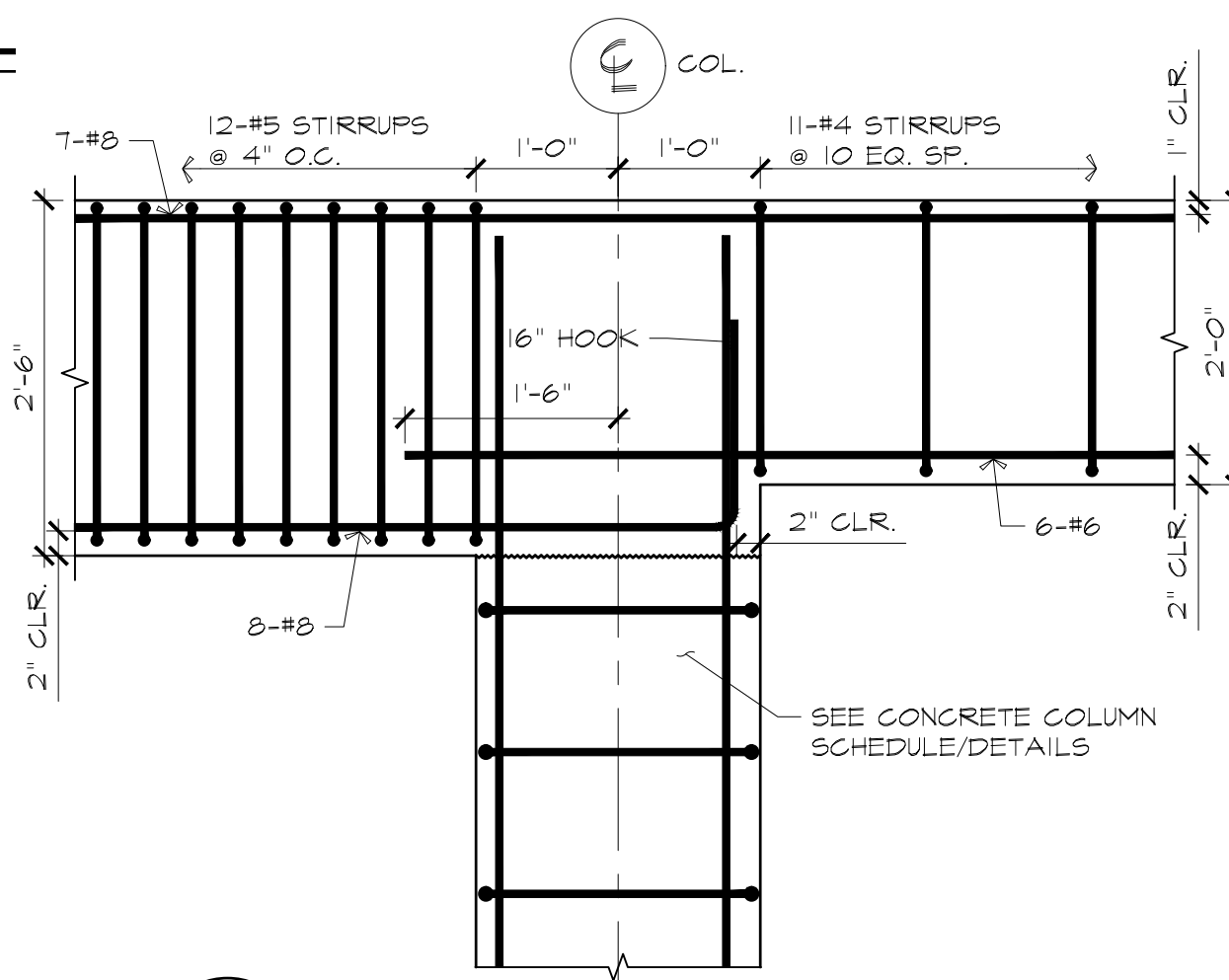
SECTION: PART B
1/2"=1'-0"



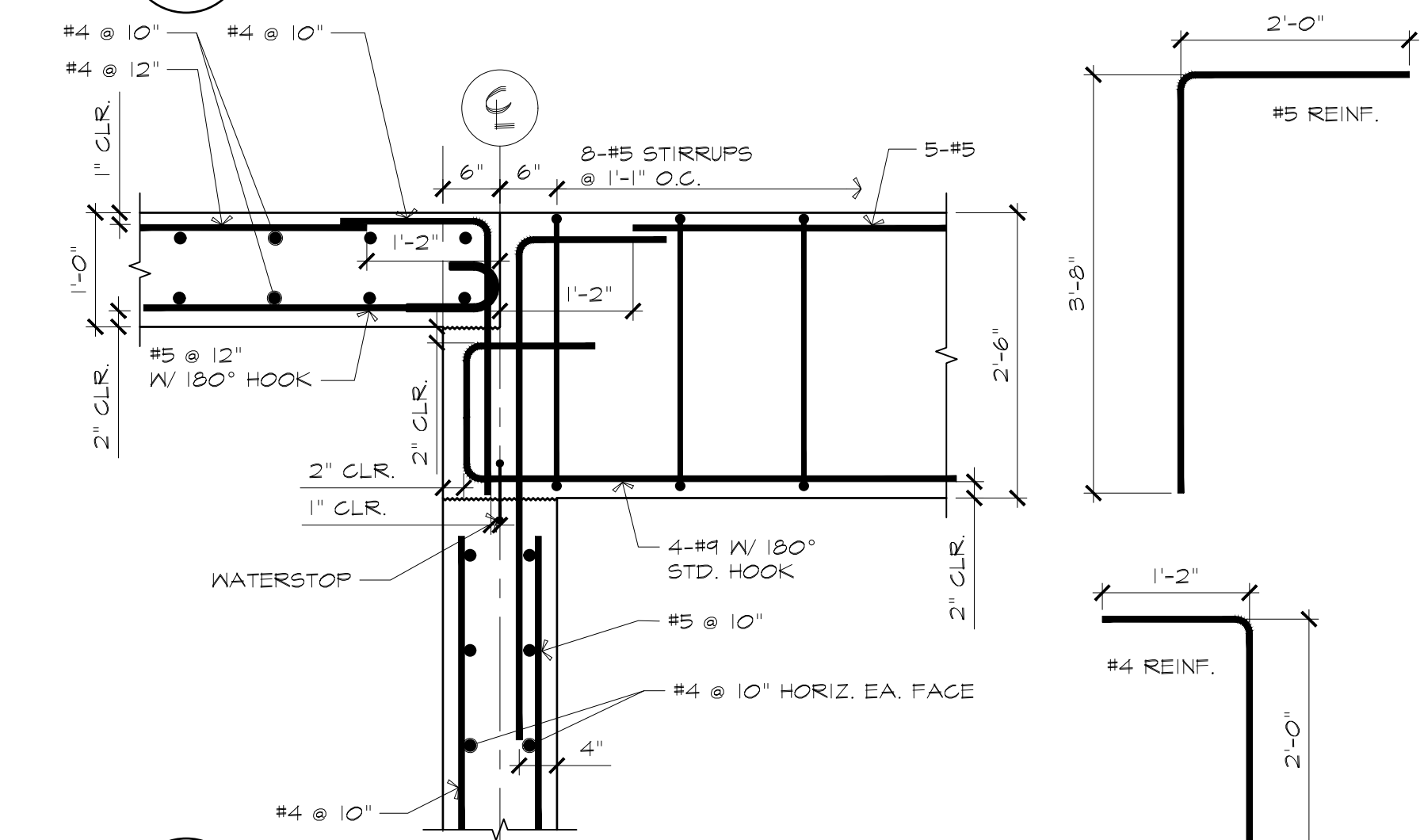
SECTION 2
3/4"=1'-0"



SECTION 3
3/4"=1'-0"



DETAIL 4
3/4"=1'-0"



DETAIL 5
3/4"=1'-0"

ATTLEBORO WATER DEPT.
ATTLEBORO, MA
WADING RIVER
WATER TREATMENT PLANT

STRUCTURAL
SECTIONS AND DETAILS

ISSUED
FOR
CONSTRUCTION



Lincoln / Haney
Engineering Associates, Inc.
300 Main Street
Attleboro, MA 01937
Phone: 508-228-1600 Fax: 508-228-2841



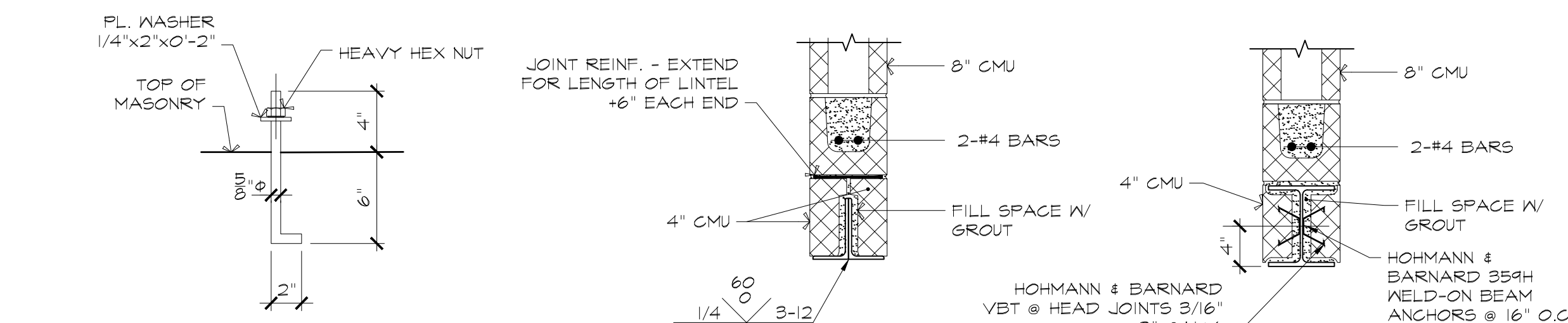
T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE:
20-S-21

THE DOCUMENT IS THE PROPERTY OF TATA & HOWARD, INC. AND ITS CLIENT. REPRODUCTION OR ADAPTATION WITHOUT WRITTEN CONSENT IS PROHIBITED.
Designed By: JAC
Checked By: JAC
Drawn By: SWW
Approved By:

MASONRY BEARING PLATE SCHEDULE				
BEAM SIZE	PLATE DIMENSIONS	DETAILS ON 20-S-22	ANCHOR RODS	COMMENTS
W12x14	3/8"x4"x0'-10"	8 & 12	(2) @ 7 1/2" O.C.	
W14x22	3/8"x4"x0'-11"	7 & 13	(2) @ 8 1/2" O.C.	
W14x26	3/8"x4"x0'-11"	7 & 13	(2) @ 8 1/2" O.C.	
W14x34	3/8"x4"x1'-1"	7 & 13	(2) @ 10 1/2" O.C.	
W14x38	3/8"x4"x1'-1"	7 & 13	(2) @ 10 1/2" O.C.	
W8x24	1/2"x4"x0'-10"	4 & 2/20-S-4	(2) @ 9 1/2" O.C.	

MASONRY LINTEL SCHEDULE				
LABEL	SIZE	DETAILS	COMMENTS	
L1	DBL L6x3x3/8	1 & 3 on 20-S-22		
L2	DBL L4x3x3/8	1 & 3 on 20-S-22		
L3	DBL L4x3x3/8	1 & 3 on 20-S-22		
L4	W8x24	2 & 4 on 20-S-22		
L5	DBL L6x4x3/8	1 & 3 on 20-S-22		
L6	W16x36	5 & 8 on 20-S-23		
L7	W8x28	6 & 9 on 20-S-23		
L8	W8x10	2 on 20-S-22 9 on 20-S-23		
L9	W16x45	5 & 8 on 20-S-23		
L10	W16x45	5 & 8 on 20-S-23		
L11	L6x4x3/8 & L5x3x3/8	4 & 7 on 20-S-23		
L12	8" MASONRY W/ (2) #5	16 & 18 on 20-S-23		
L15	L7x4x3/8	17 & 19 on 20-S-23		
L16	L6x4x3/8	17 & 19 on 20-S-23		
L17	L4x4x3/8	17 & 19 on 20-S-23		

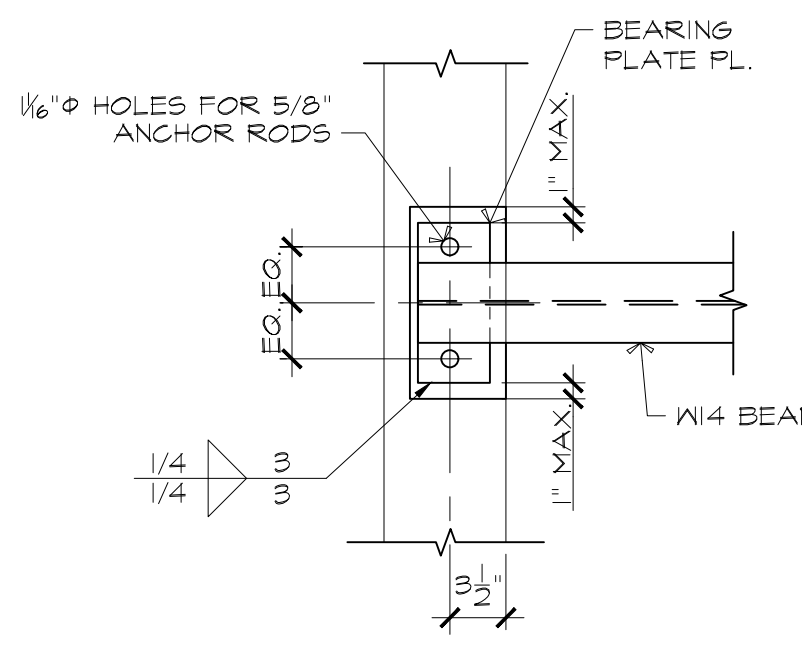
NOTES:
 1. ALL STEEL LINTELS SHALL BE HOT-DIP GALVANIZED.
 2. LINTELS IN 8" CMU WALLS IN THE ABOVE SCHEDULE PERTAIN TO LOAD-BEARING WALLS. SEE "TYPICAL PARTITION LINTEL DETAILS" FOR 8" NON-BEARING WALL LINTELS AND 6" MASONRY WALL LINTELS.



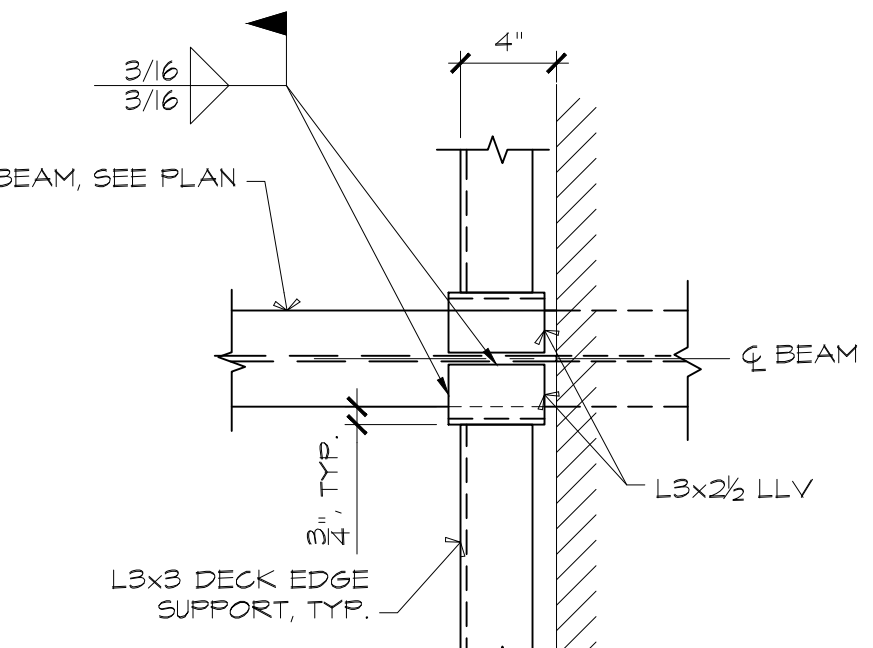
1 TYPICAL ANCHOR ROD AT BEAM BEARING PLATES 3"=1'-0"

2 LINTEL DETAIL @ L-1 & L-2 1"=1'-0"

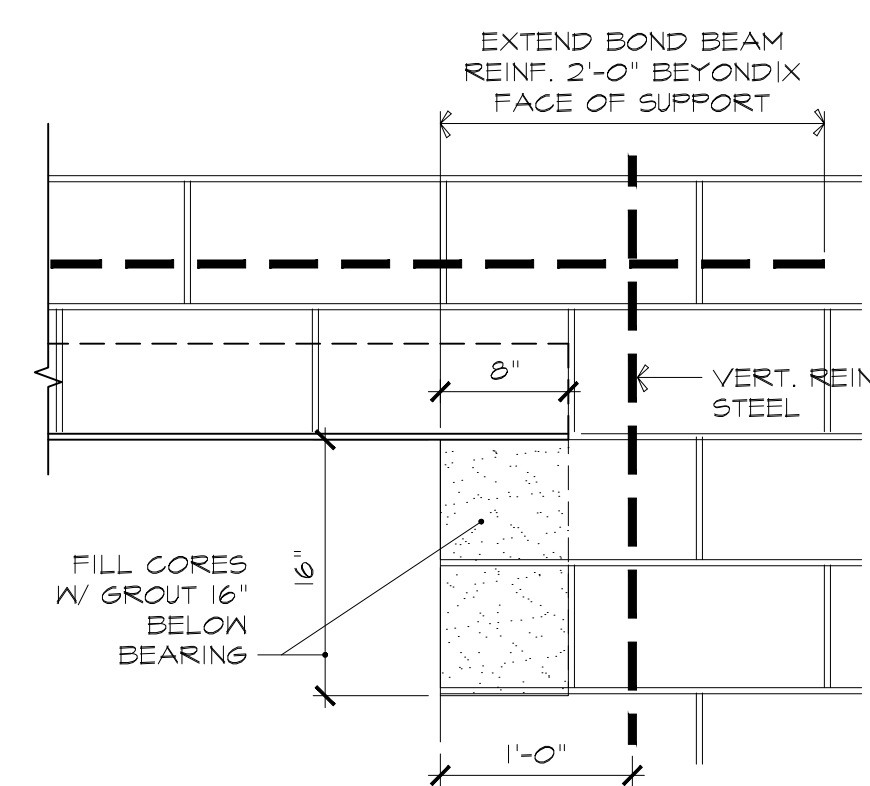
3 LINTEL DETAIL 1"=1'-0"



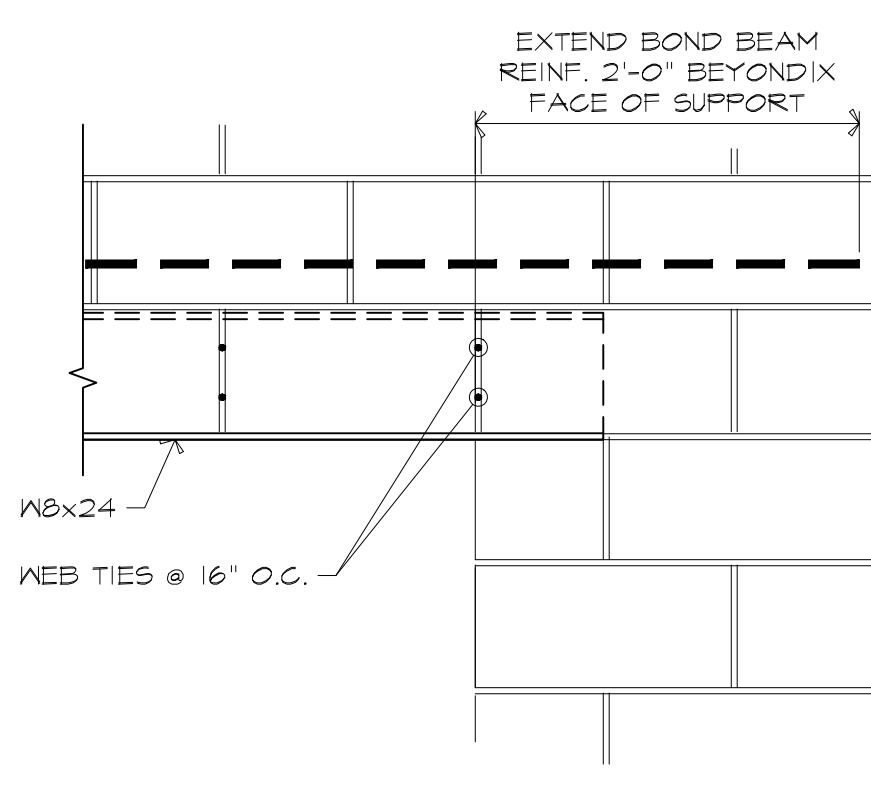
5 TYPICAL BEAM BEARING PLATE PLAN DETAIL 1"=1'-0"



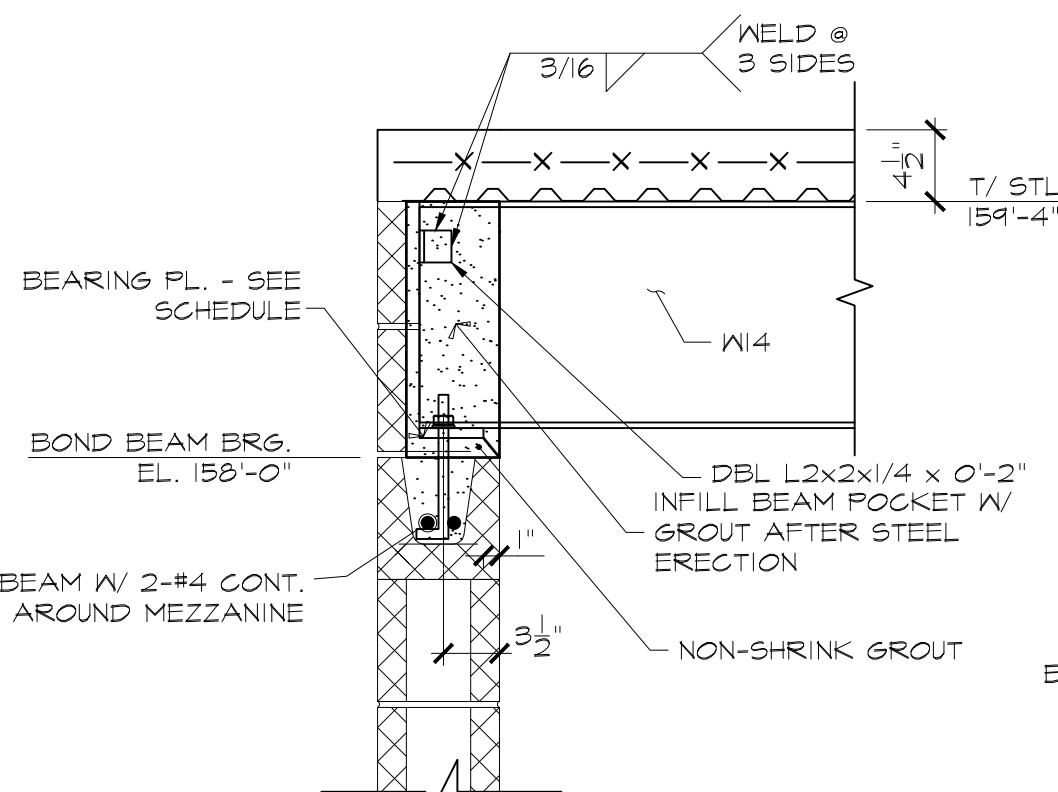
6 TYPICAL DECK EDGE SUPPORT DETAIL 3"=1'-0"



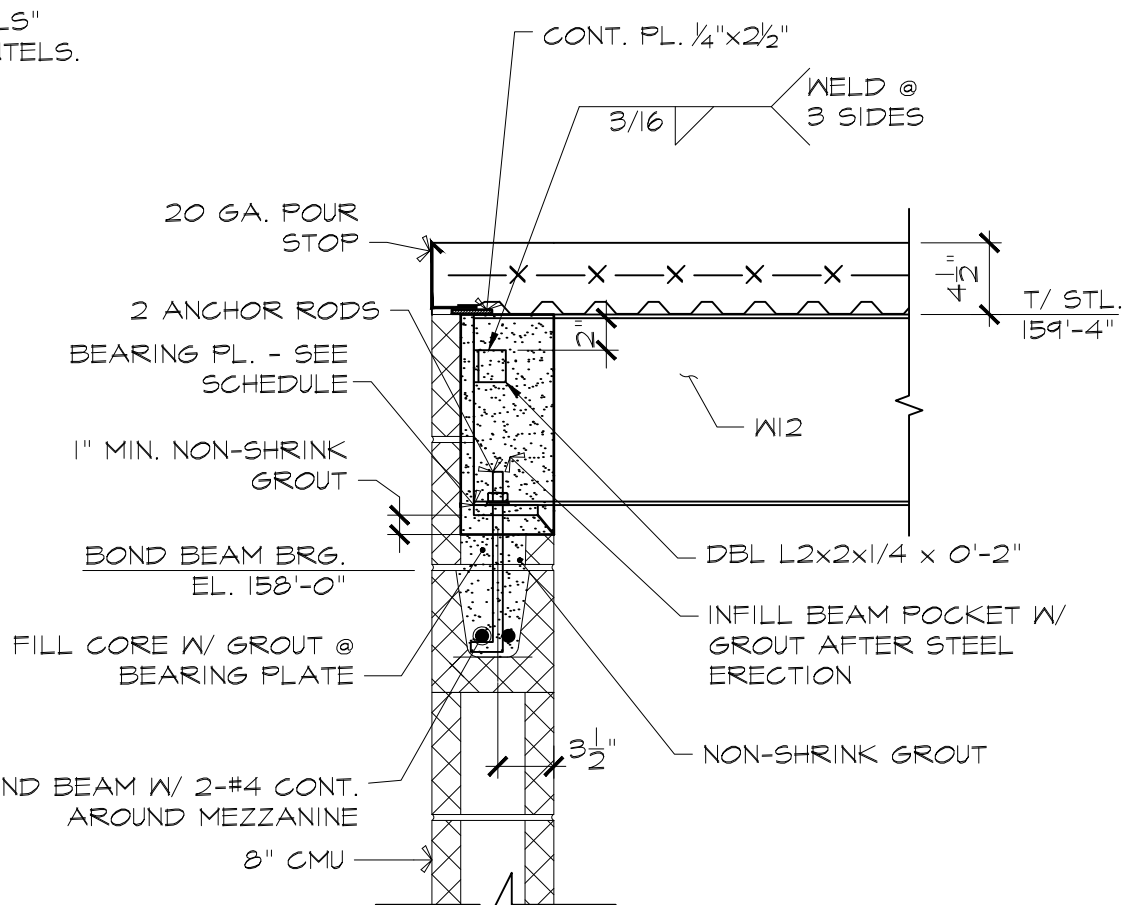
3 LINTEL L1 & L2 BEARING DETAIL 1"=1'-0"



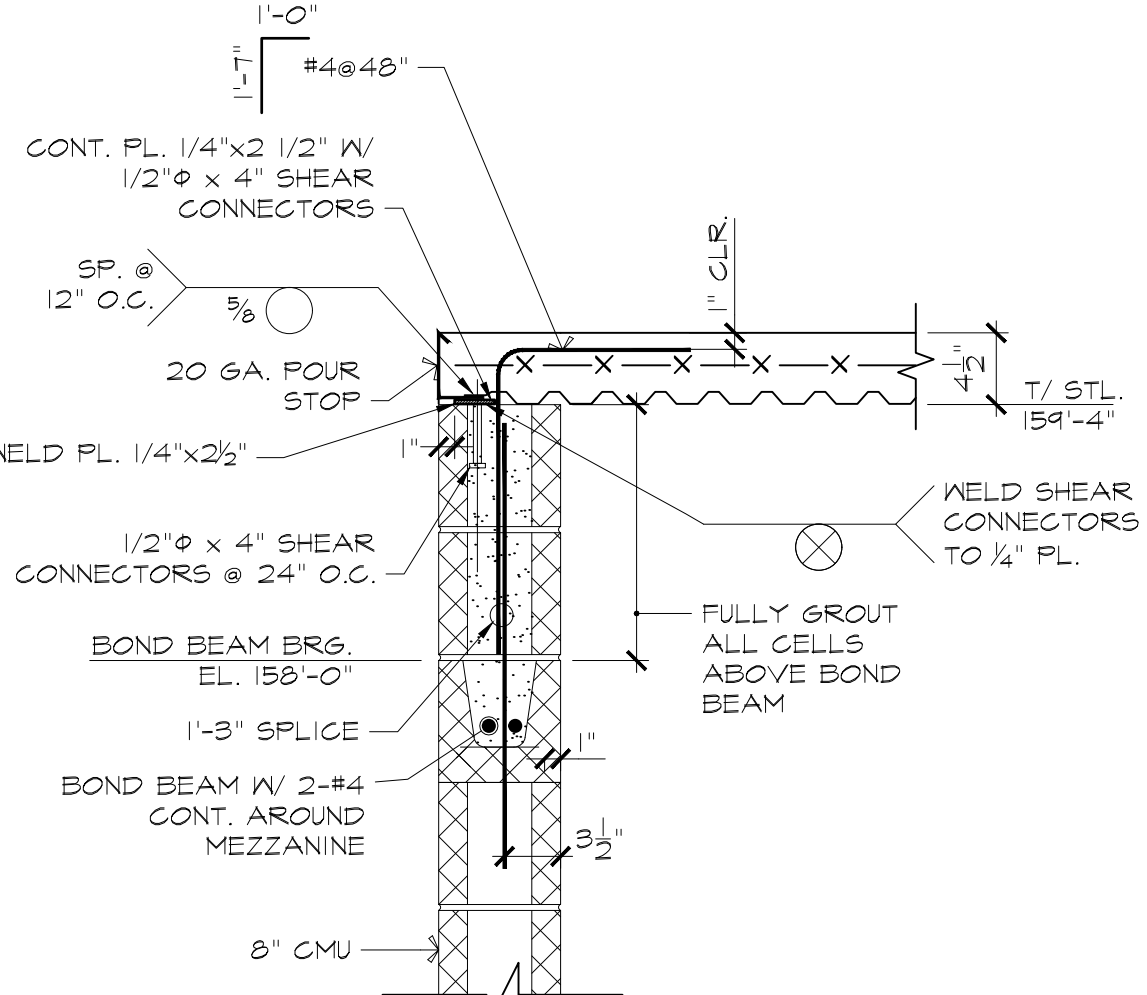
4 LINTEL DETAIL TYPICAL W8 BEARING 1"=1'-0"



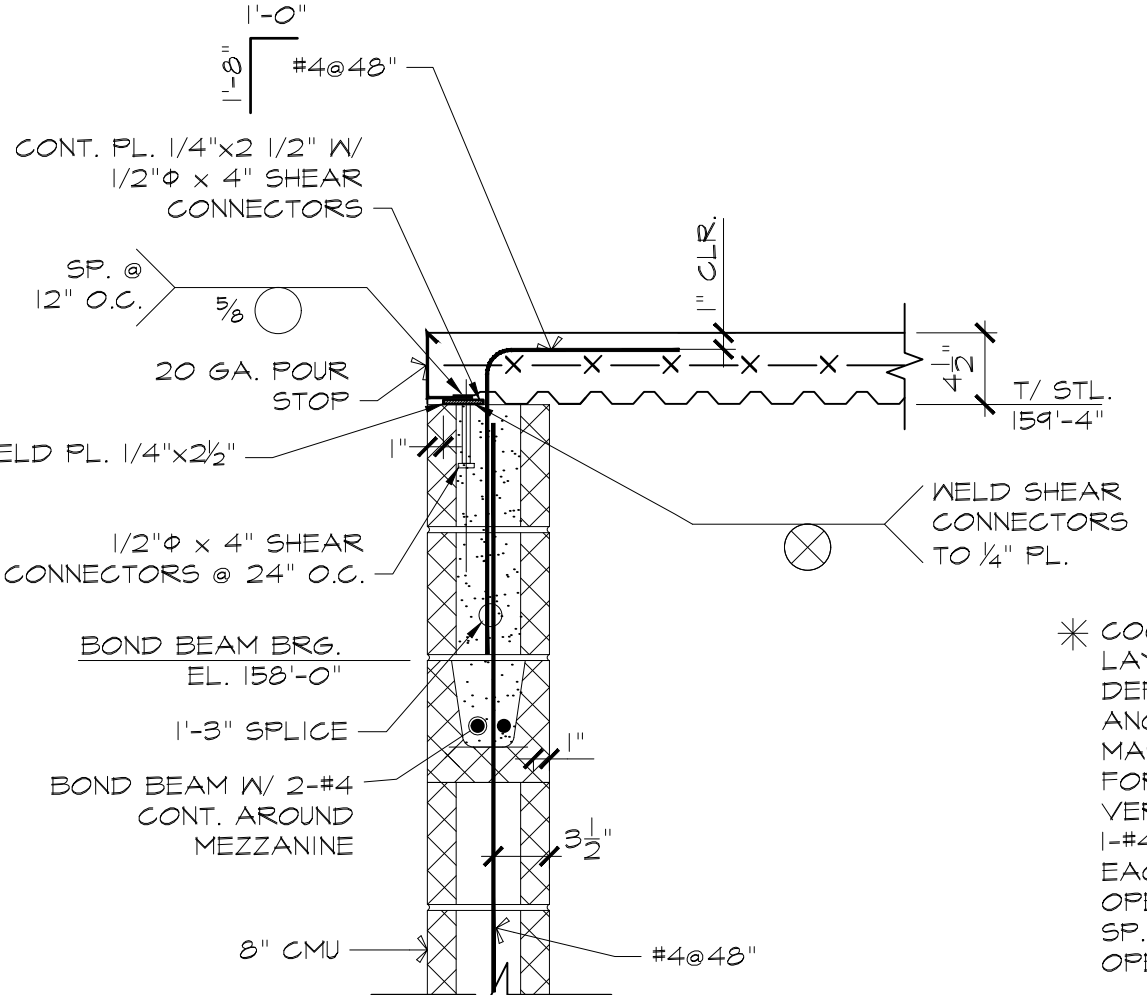
7 TYPICAL MEZZANINE BEAM BEARING AT INTERIOR WALL 1"=1'-0"



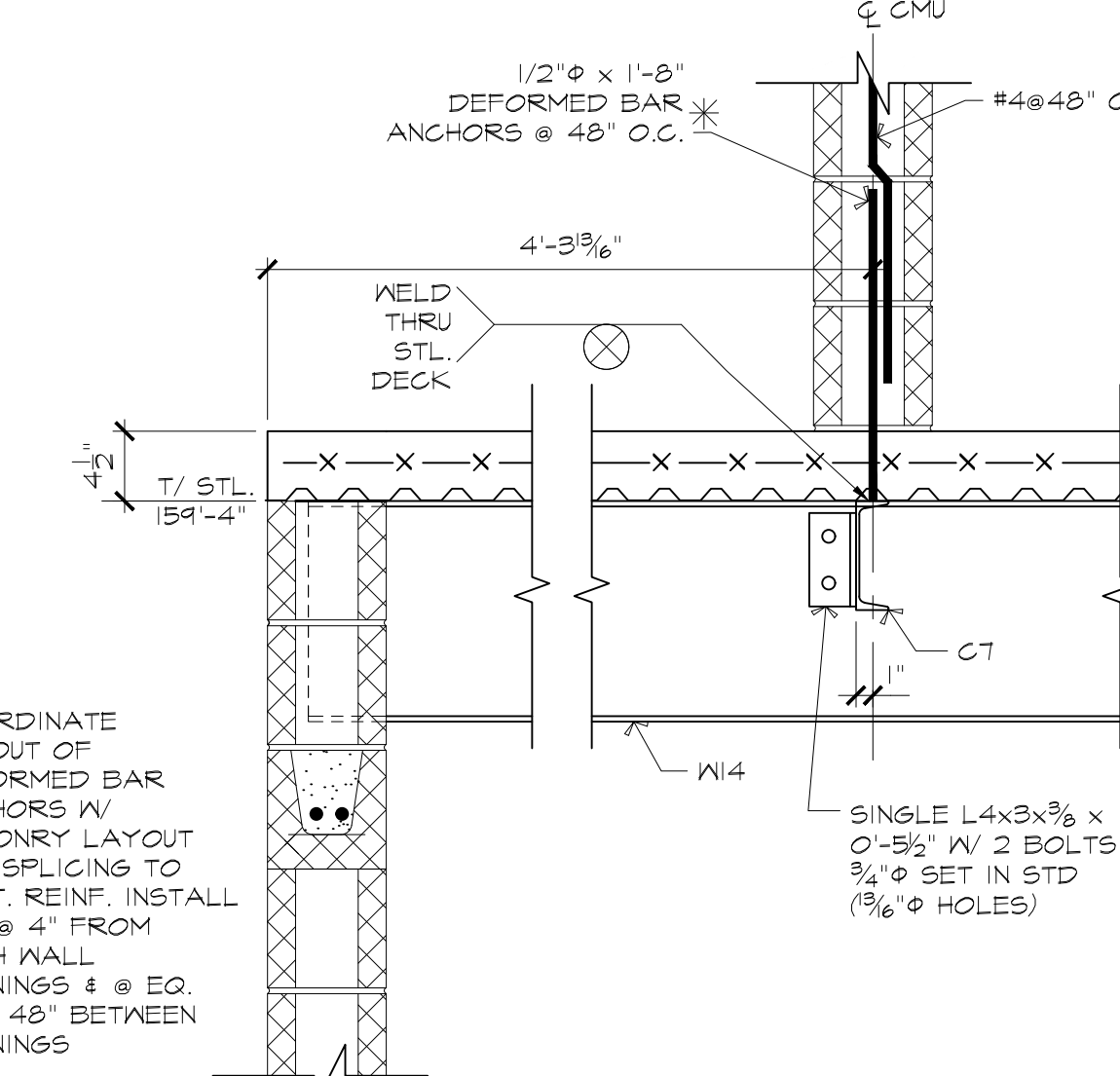
8 SECTION 1"=1'-0"



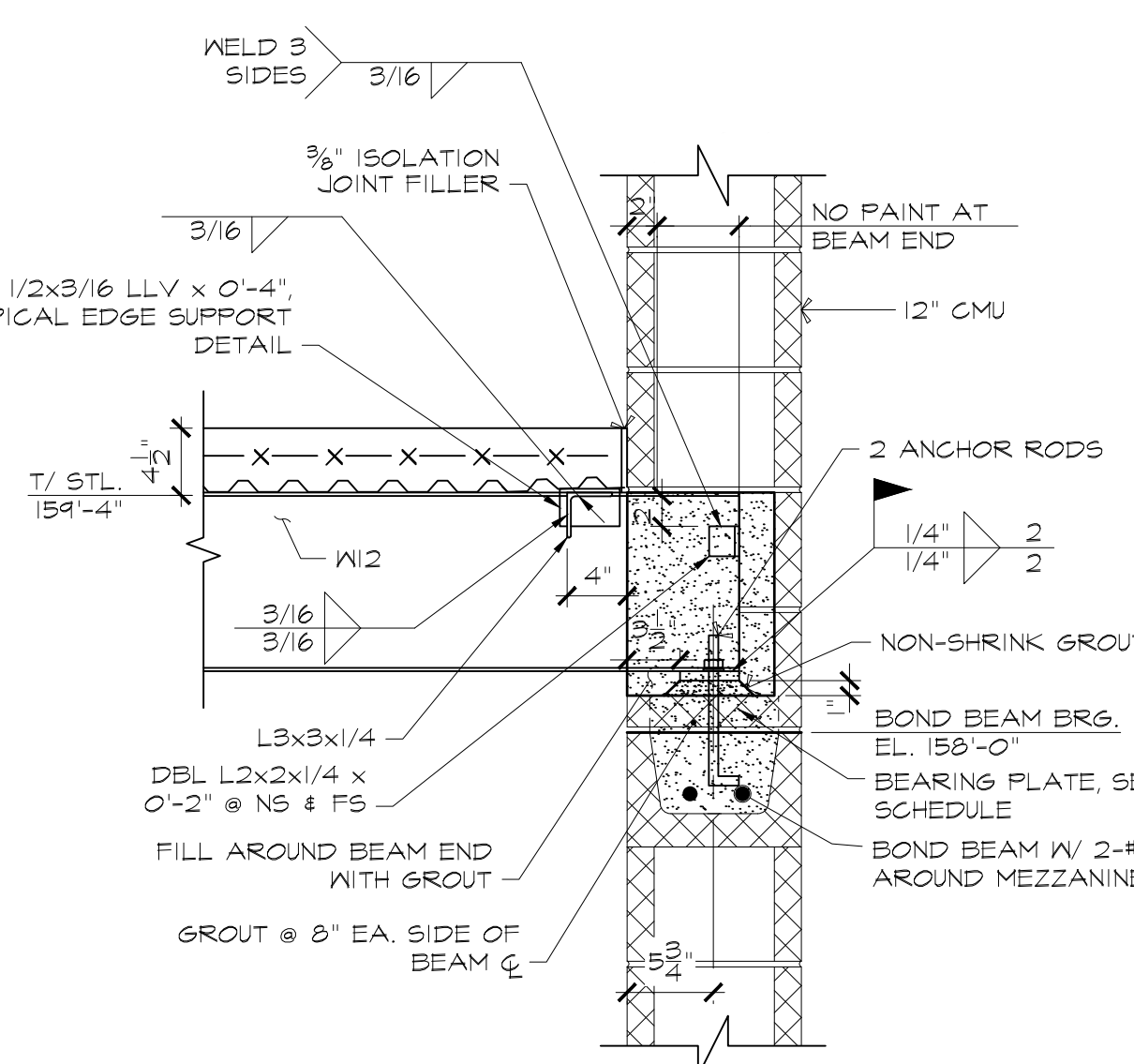
9 SECTION 1"=1'-0"



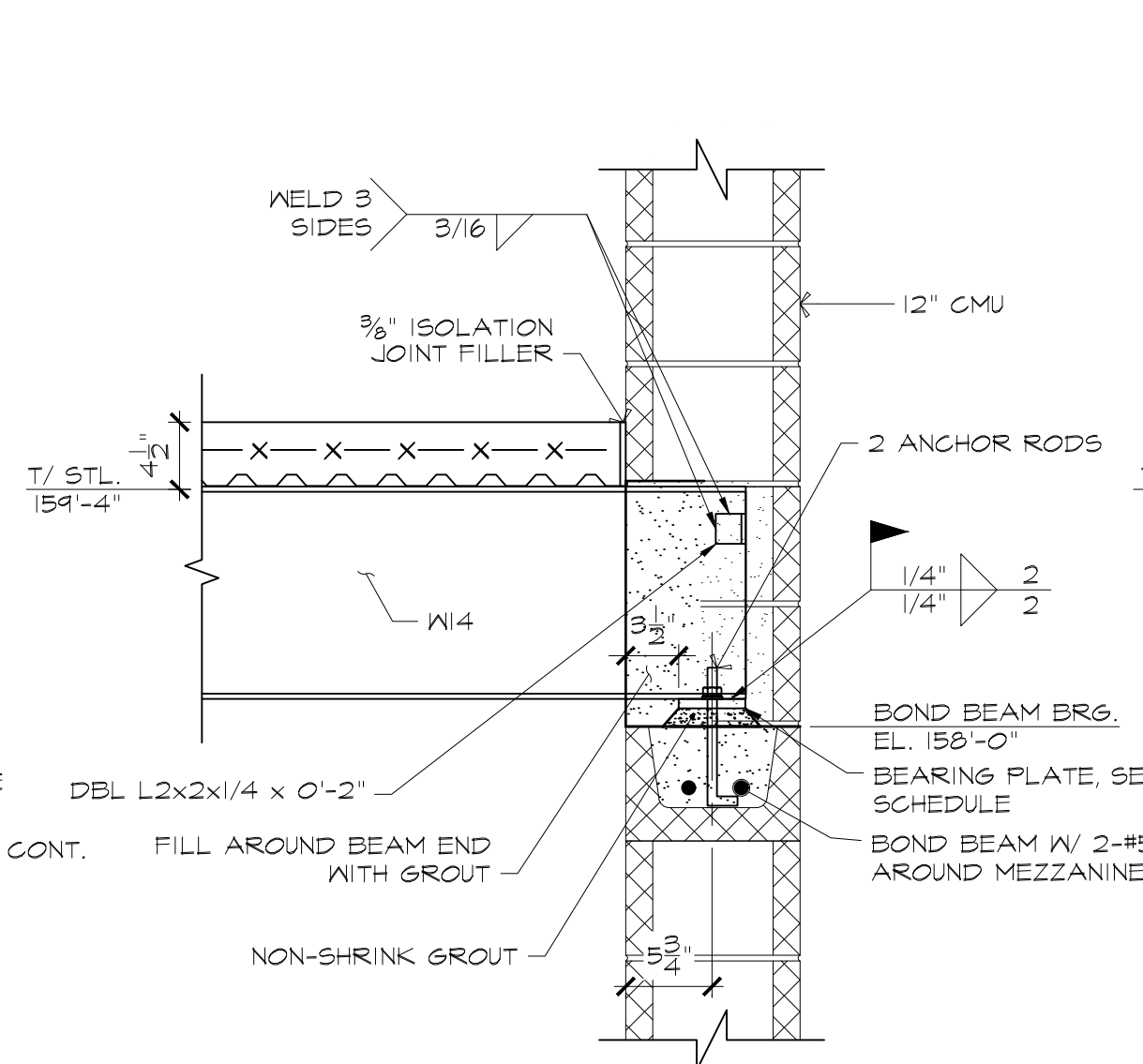
10 SECTION 1"=1'-0"



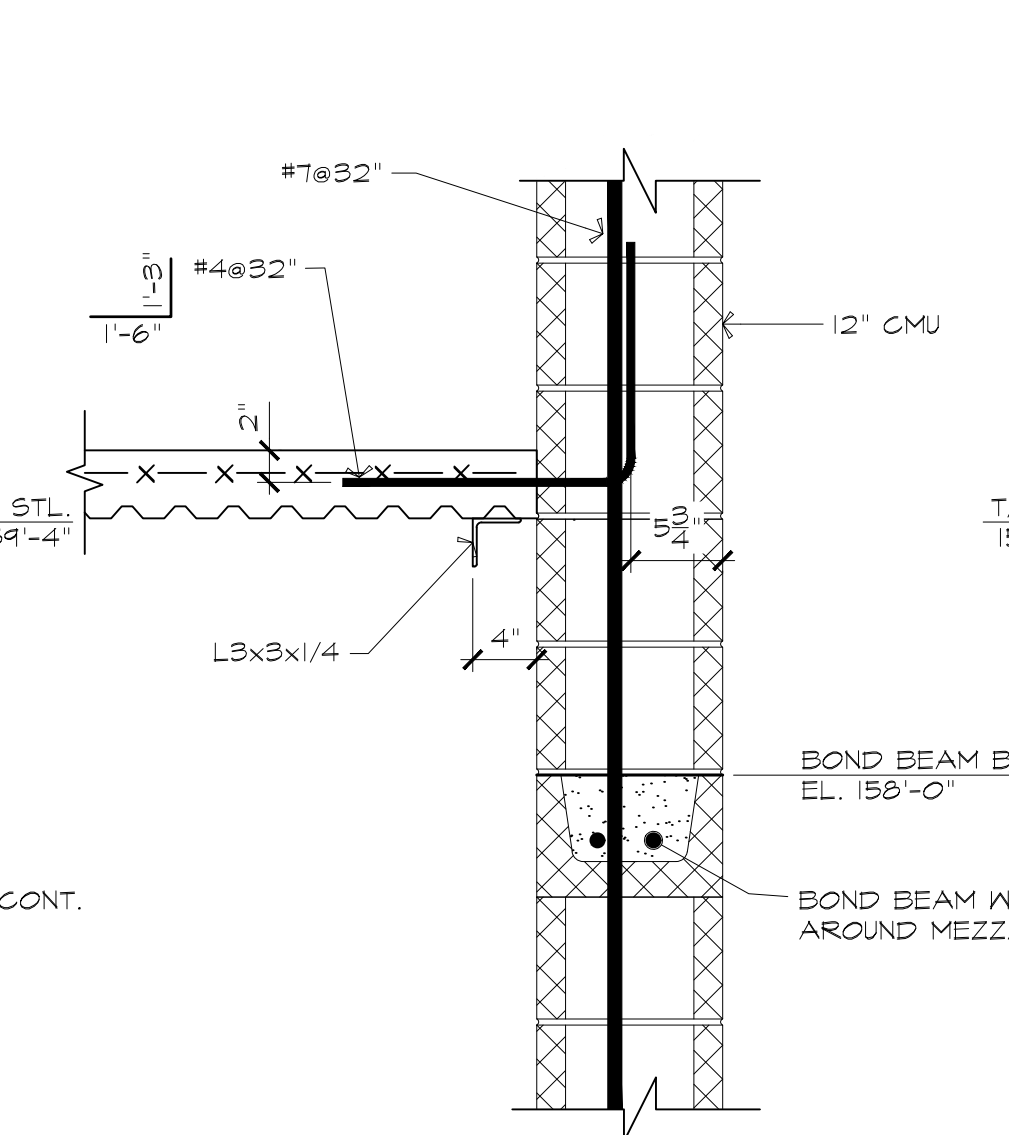
11 SECTION 1"=1'-0"



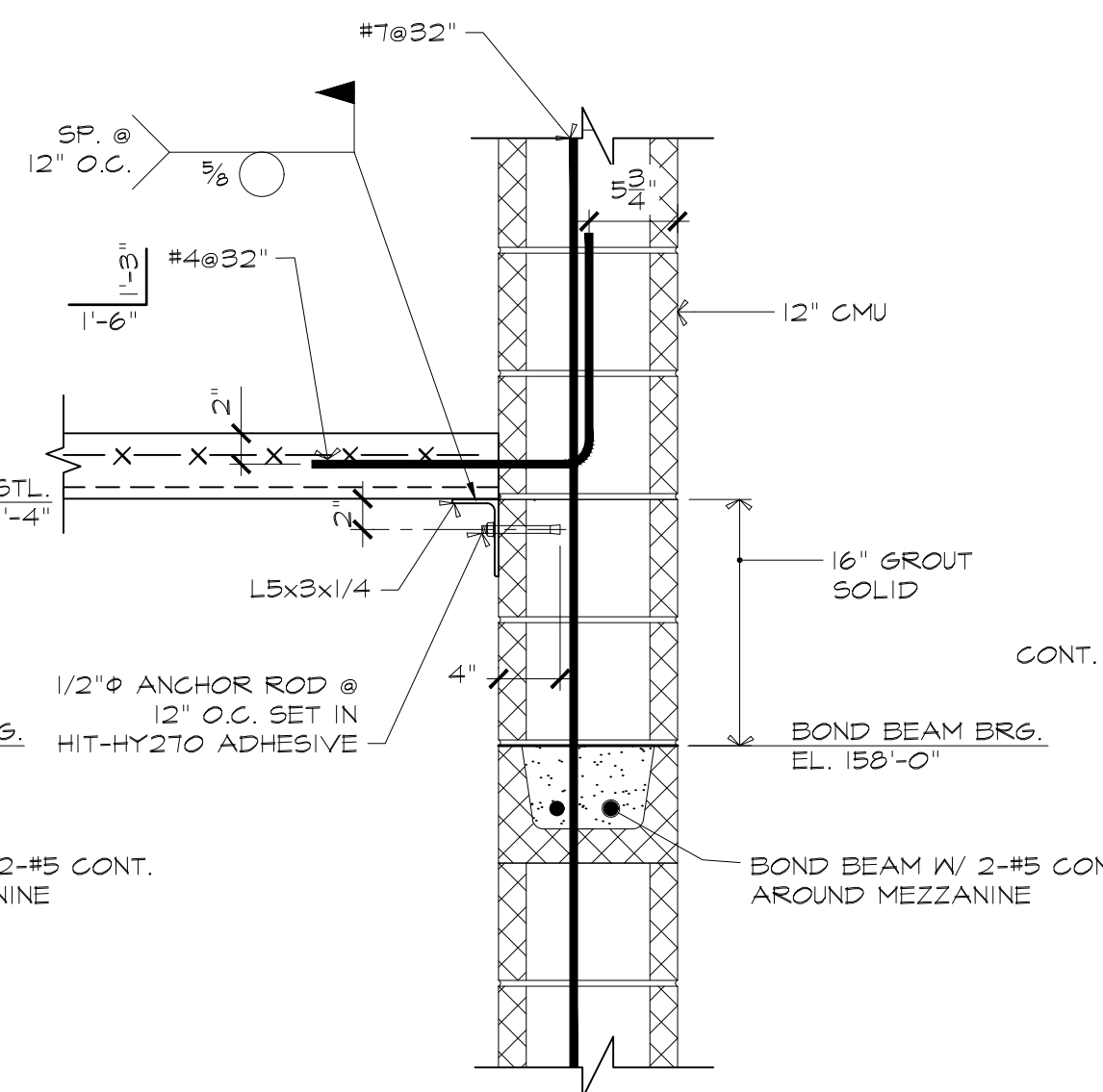
12 TYPICAL MEZZANINE BEAM BEARING AT EXTERIOR WALL 1"=1'-0"



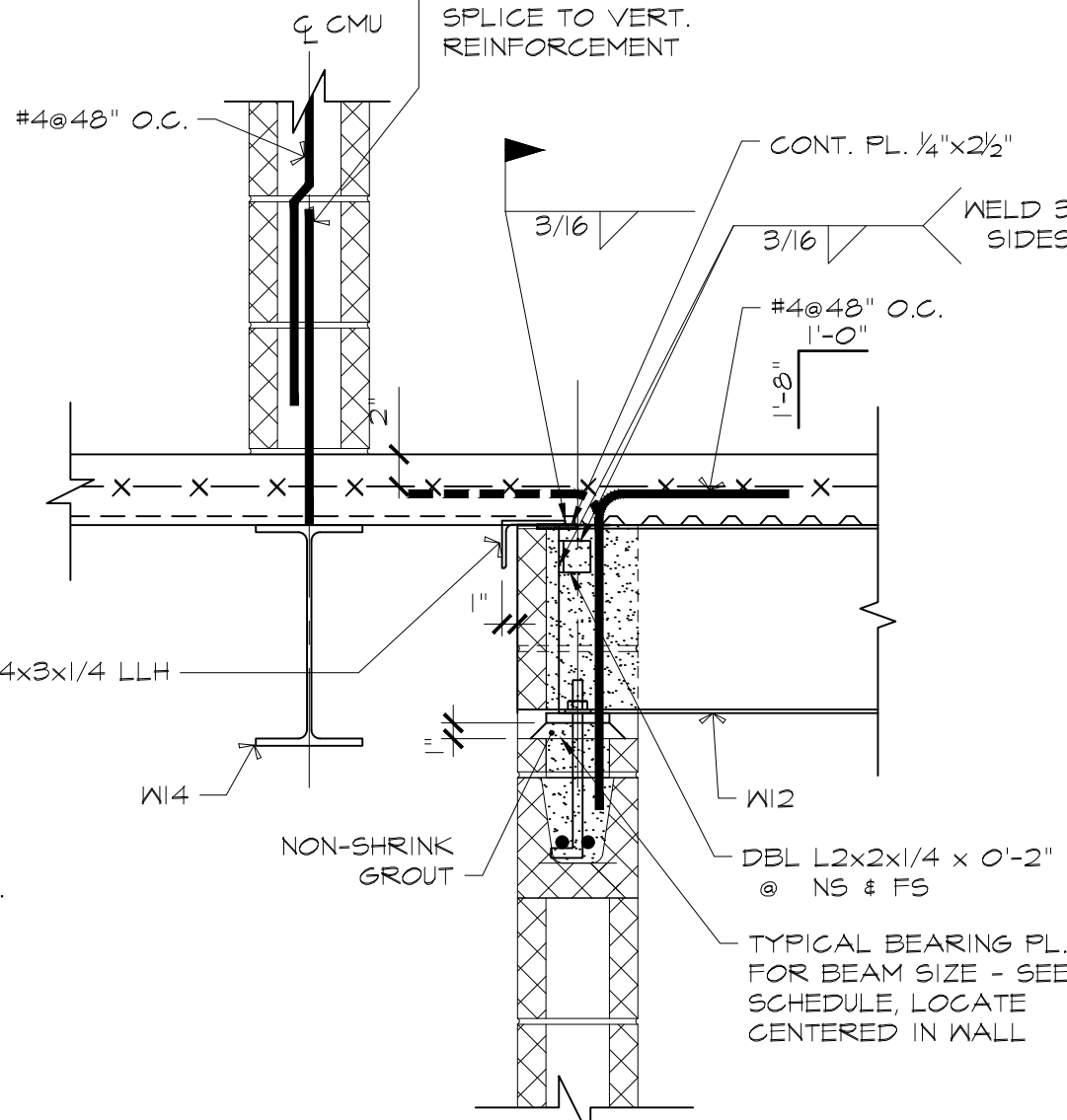
13 TYPICAL MEZZANINE BEAM BEARING AT EXTERIOR WALL 1"=1'-0"



14 SECTION 1"=1'-0"



15 SECTION 1"=1'-0"



16 SECTION 1"=1'-0"

ATTLEBORO WATER DEPT.
 ATTLEBORO, MA
 WADING RIVER
 WATER TREATMENT PLANT

STRUCTURAL
 SECTIONS AND DETAILS

THE DOCUMENT IS THE PROPERTY OF TATA & HOWARD, INC. AND ITS CLIENT. REPRODUCTION OR MODIFICATION WITHOUT WRITTEN CONSENT IS PROHIBITED.

ISSUED FOR CONSTRUCTION

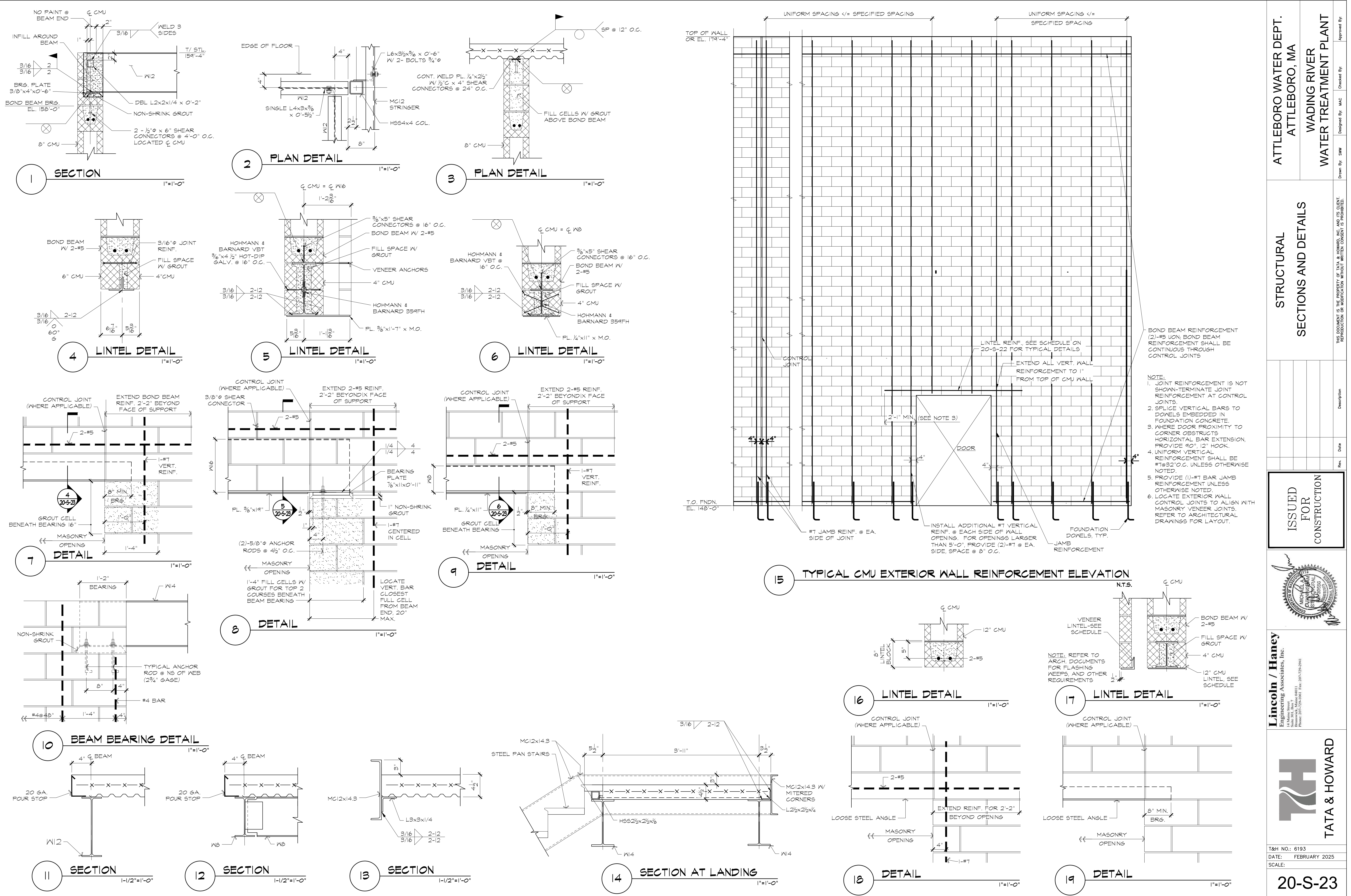


Lincoln / Haney
 Engineering Associates, Inc.
 300 West Street, Suite 301, Woburn, MA 01891
 Phone: 781-272-1601 Fax: 781-272-2941



T&H NO.: 6193
 DATE: FEBRUARY 2025
 SCALE:

20-S-22



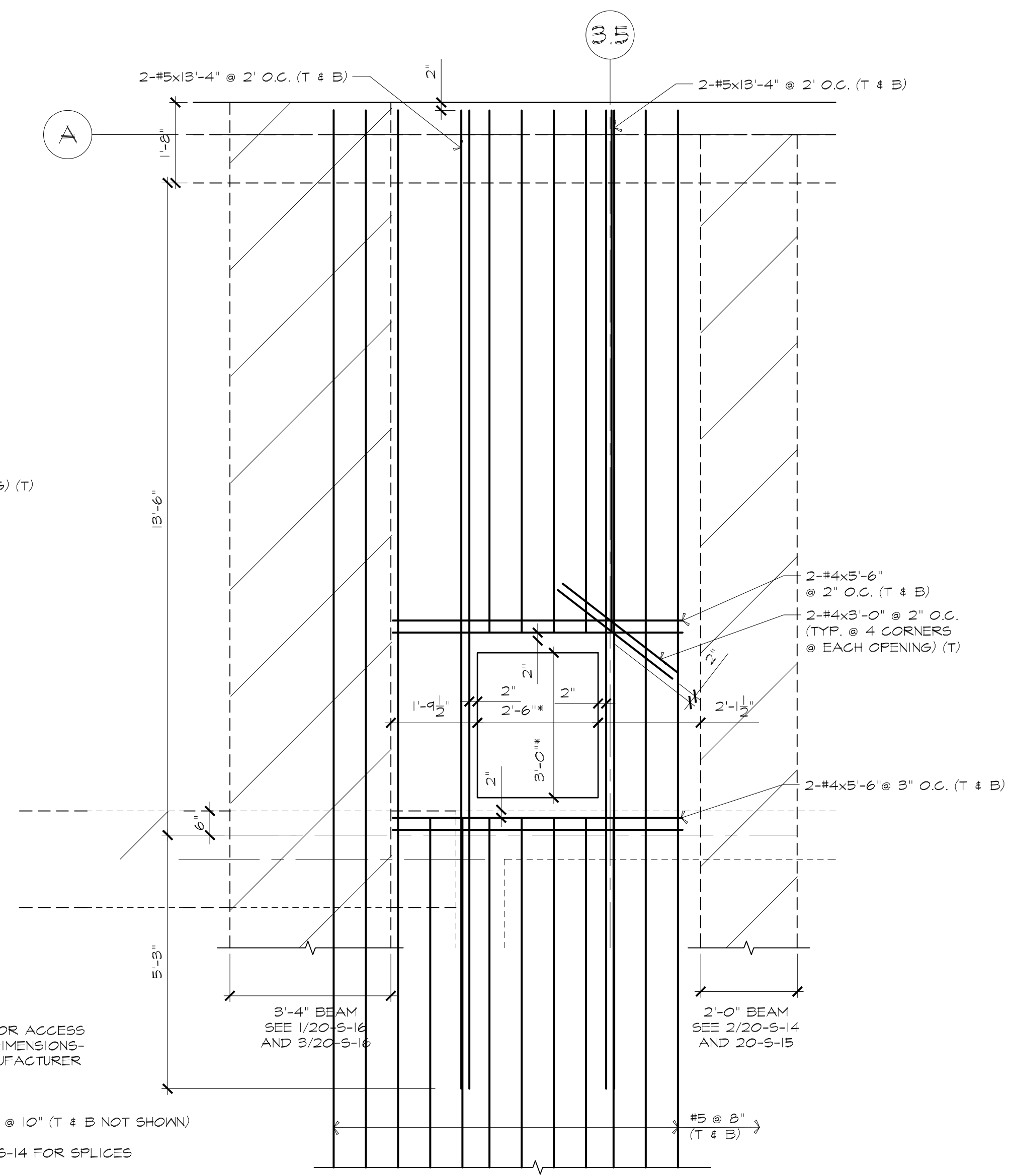
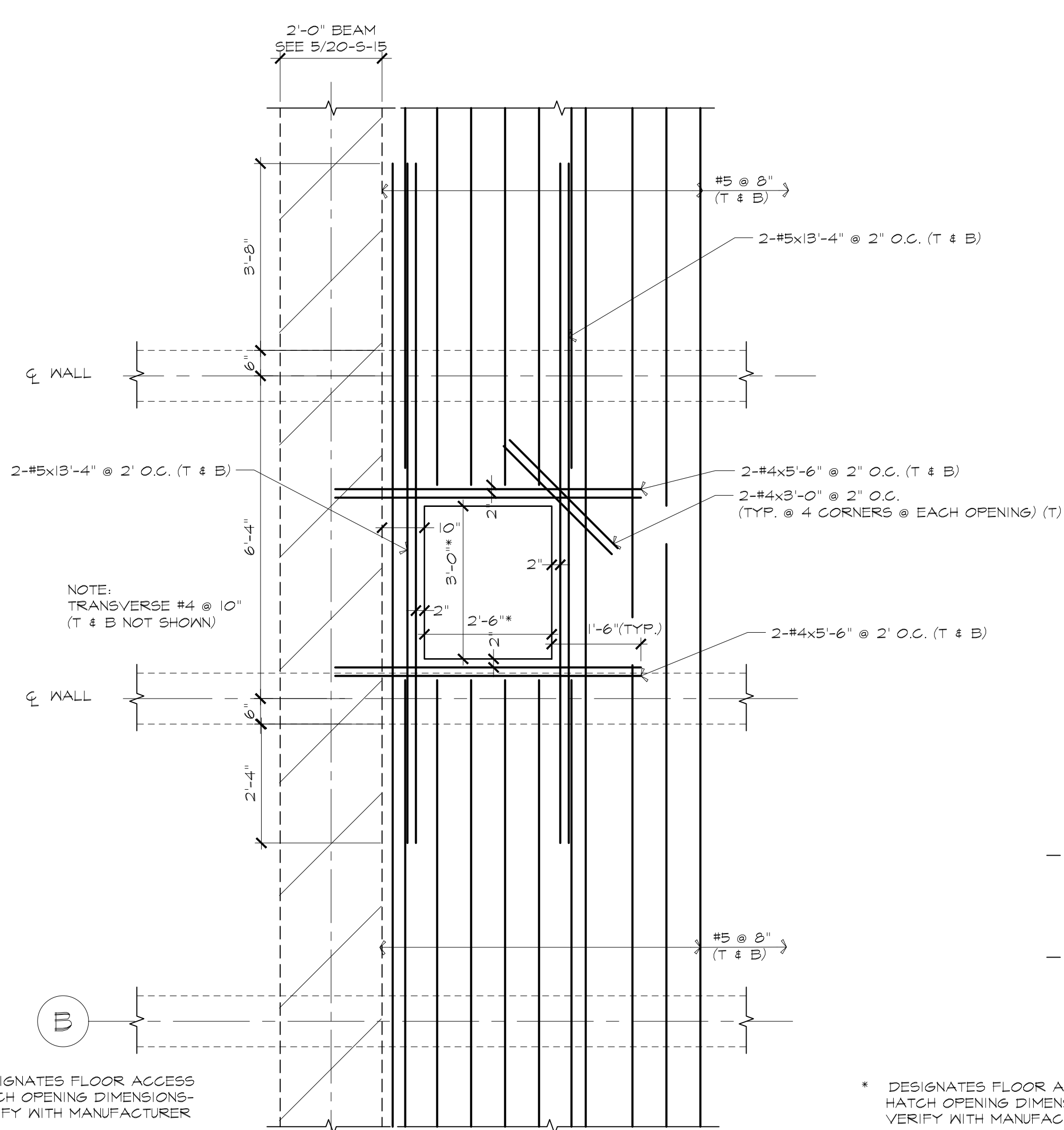
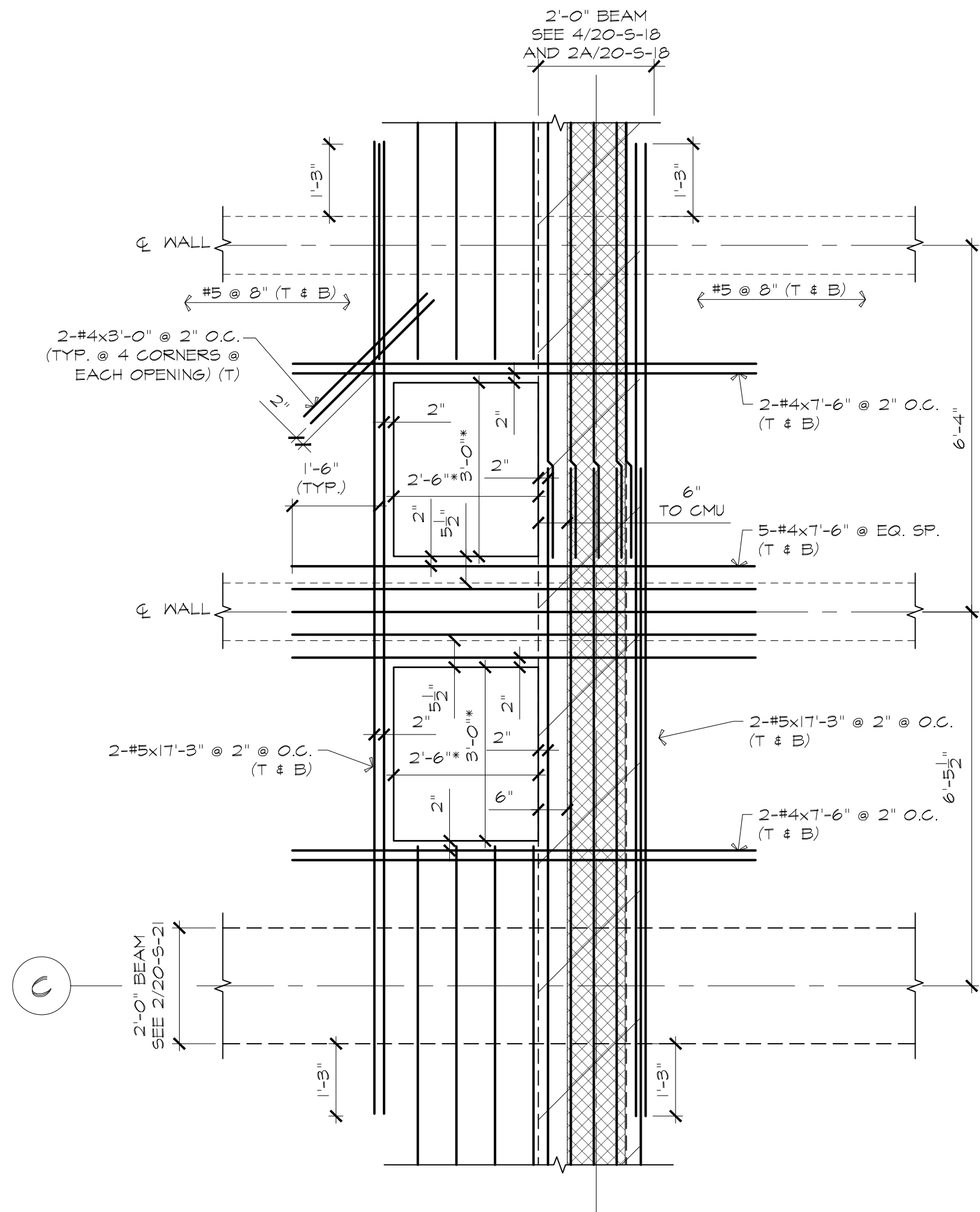
NOTE:

1. JOINT REINFORCEMENT IS NOT SHOWN. TERMINATE JOINT REINFORCEMENT AT CONTROL JOINTS.
2. SPLICE VERTICAL BARS TO DOWNELS EMBEDDED IN FOUNDATION CONCRETE.
3. WHERE DOOR PROXIMITY TO CORNER OBSTRUCTS HORIZONTAL BAR EXTENSION, PROVIDE 90° 12" HOOK.
4. UNIFORM VERTICAL REINFORCEMENT SHALL BE #7 @ 32" O.C. UNLESS OTHERWISE NOTED.
5. PROVIDE (1)-#7 BAR JAMB REINFORCEMENT UNLESS OTHERWISE NOTED.
6. LOCATE EXTERIOR WALL CONTROL JOINTS TO ALIGN WITH MASONRY VENEER JOINTS REFER TO ARCHITECTURAL DRAWINGS FOR LAYOUT.

ATTLEBORO WATER DEPT. ATTLEBORO, MA	WADING RIVER WATER TREATMENT PLANT	STRUCTURAL SECTIONS AND DETAILS	Design By: SWW Checked By: SAC
			THE DOCUMENT IS THE PROPERTY OF TATA & HOWARD, INC. AND ITS CLIENT. REPRODUCTION OR ADAPTATION WITHOUT WRITTEN CONSENT IS PROHIBITED.
ISSUED FOR CONSTRUCTION		Description:	Date:
		Lincoln / Haney Engineering Associates, Inc. 100 State Street, 7th Floor Boston, MA 02109 Phone: 202-729-1001 Fax: 202-729-2941	
		TATA & HOWARD	
T&H NO.: 6193 DATE: FEBRUARY 2025 SCALE:		20-S-23	

C:\Users\jason@tata.com\Documents\Public Drawings\2024\Wading River WTP\2025 3:54 PM JASONHINES

C:\Users\jason@hmc.com\Documents\Public Drawings\2024\Attleboro Wading River\WTP\Drawings\20-S-24 3:54 PM JASON@HMC.COM



* DESIGNATES FLOOR ACCESS HATCH OPENING DIMENSIONS - VERIFY WITH MANUFACTURER

NOTE:
 1. TRANSVERSE #4 @ 10" (T & B NOT SHOWN)
 2. REFER TO 1/20-S-14 FOR SPLICES
 3. SEE TYPICAL ACCESS HATCH CURB DETAIL SHEET 20-S-24

* DESIGNATES FLOOR ACCESS HATCH OPENING DIMENSIONS - VERIFY WITH MANUFACTURER

NOTE:
 1. TRANSVERSE #4 @ 10" (T & B NOT SHOWN)
 2. REFER TO 1/20-S-14 FOR SPLICES
 3. SEE TYPICAL ACCESS HATCH CURB DETAIL SHEET 20-S-24

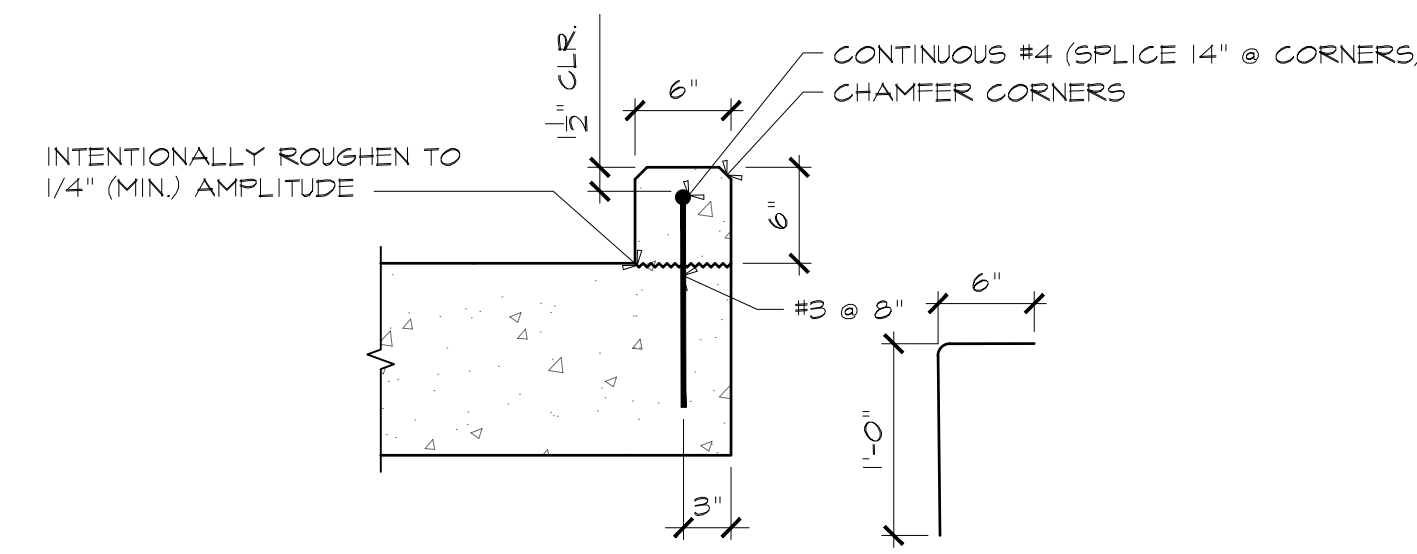
* DESIGNATES FLOOR ACCESS HATCH OPENING DIMENSIONS - VERIFY WITH MANUFACTURER

NOTE:
 1. TRANSVERSE #4 @ 10" (T & B NOT SHOWN)
 2. REFER TO 1/20-S-14 FOR SPLICES
 3. SEE TYPICAL ACCESS HATCH CURB DETAIL SHEET 20-S-24

A DETAIL-ADDITIONAL REINFORCEMENT @ OPENINGS 1/2"=1'-0"

B DETAIL-ADDITIONAL REINFORCEMENT @ OPENINGS 1/2"=1'-0"

C DETAIL-ADDITIONAL REINFORCEMENT @ OPENINGS 1/2"=1'-0"



TYPICAL ACCESS HATCH CURB DETAIL 1"=1'-0"

ATTLEBORO WATER DEPT.
 ATTLEBORO, MA
 WADING RIVER
 WATER TREATMENT PLANT

STRUCTURAL
 ADDITIONAL OPENING
 REINFORCING PLANS

Rev.	Date	Description

ISSUED FOR CONSTRUCTION



Lincoln / Haney
 Engineering Associates, Inc.
 1200 State Street, Suite 301, Attleboro, MA 01945
 Phone: 508-278-1601 Fax: 508-278-2841

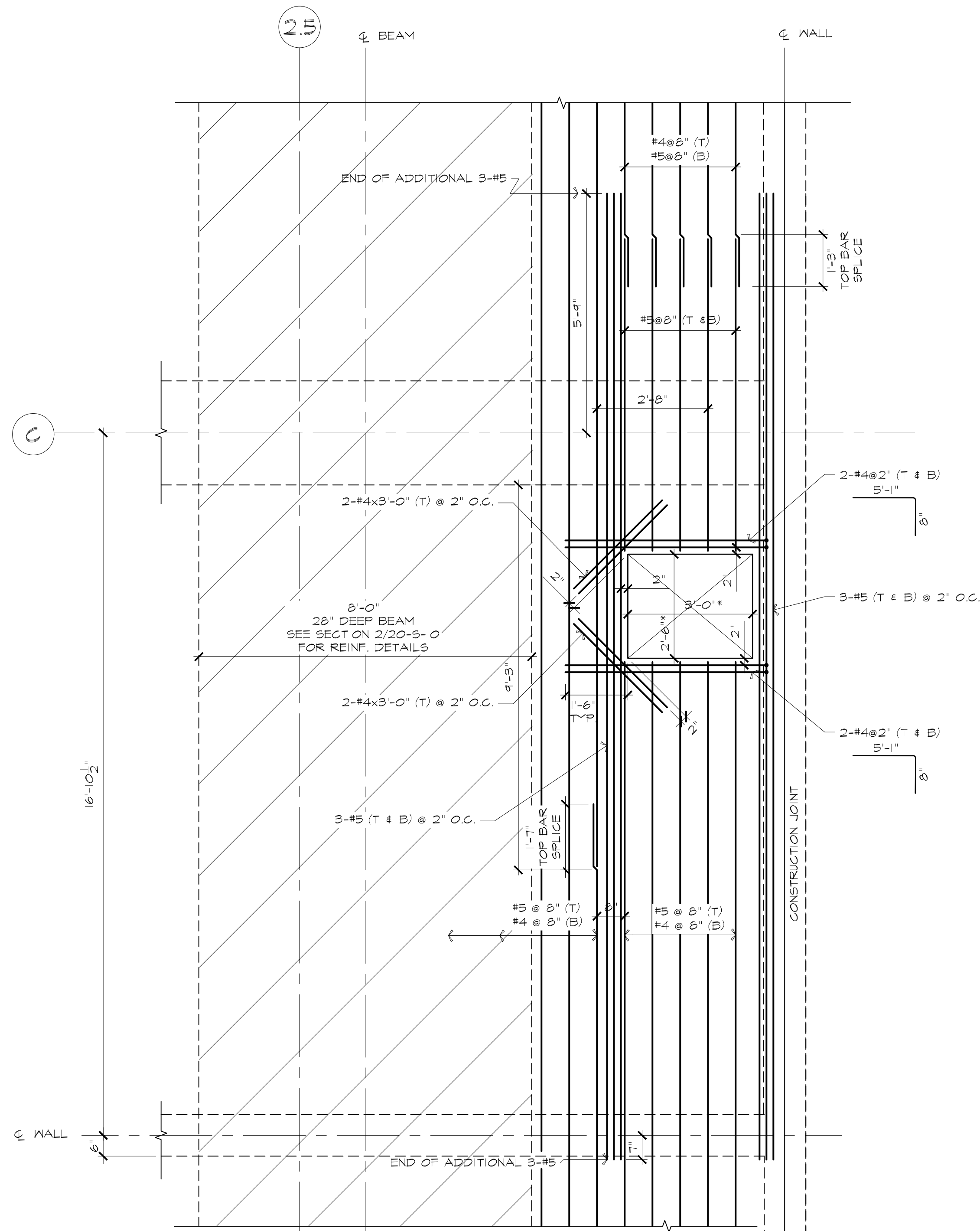


T&H NO.: 6193
 DATE: FEBRUARY 2025
 SCALE:
20-S-24

Designed By: SWW
 Checked By: JAC
 Approved By:

THIS DOCUMENT IS THE PROPERTY OF TATA & HOWARD, INC. AND ITS CLIENT. REPRODUCTION OR ADAPTATION WITHOUT WRITTEN CONSENT IS PROHIBITED.

C:\Users\jason@hmc\OneDrive\Documents\Public Drawings\2024\Wabara Wading River WTP\2025 3-54 PM JAS@HMC

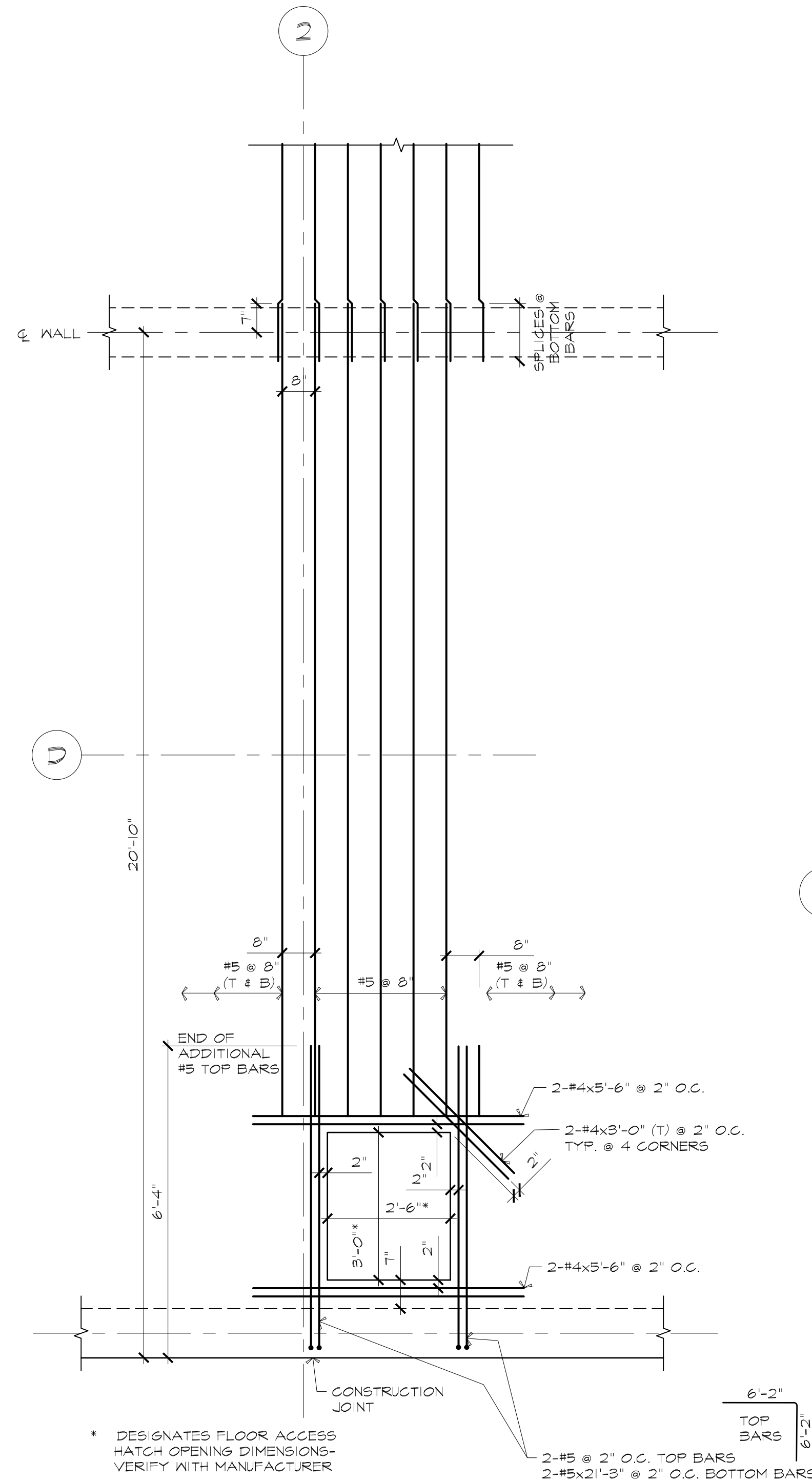


* DESIGNATES FLOOR ACCESS HATCH OPENING DIMENSIONS-VERIFY WITH MANUFACTURER

NOTE:

1. TRANSVERSE #4 @ 10" (T & B NOT SHOWN)
2. REFER TO 4/20-5-11 FOR SPLICES
3. SEE TYPICAL ACCESS HATCH CURB DETAIL SHEET 20-5-24

D DETAIL-ADDITIONAL REINFORCEMENT @ OPENINGS
1/2"=1'-0"

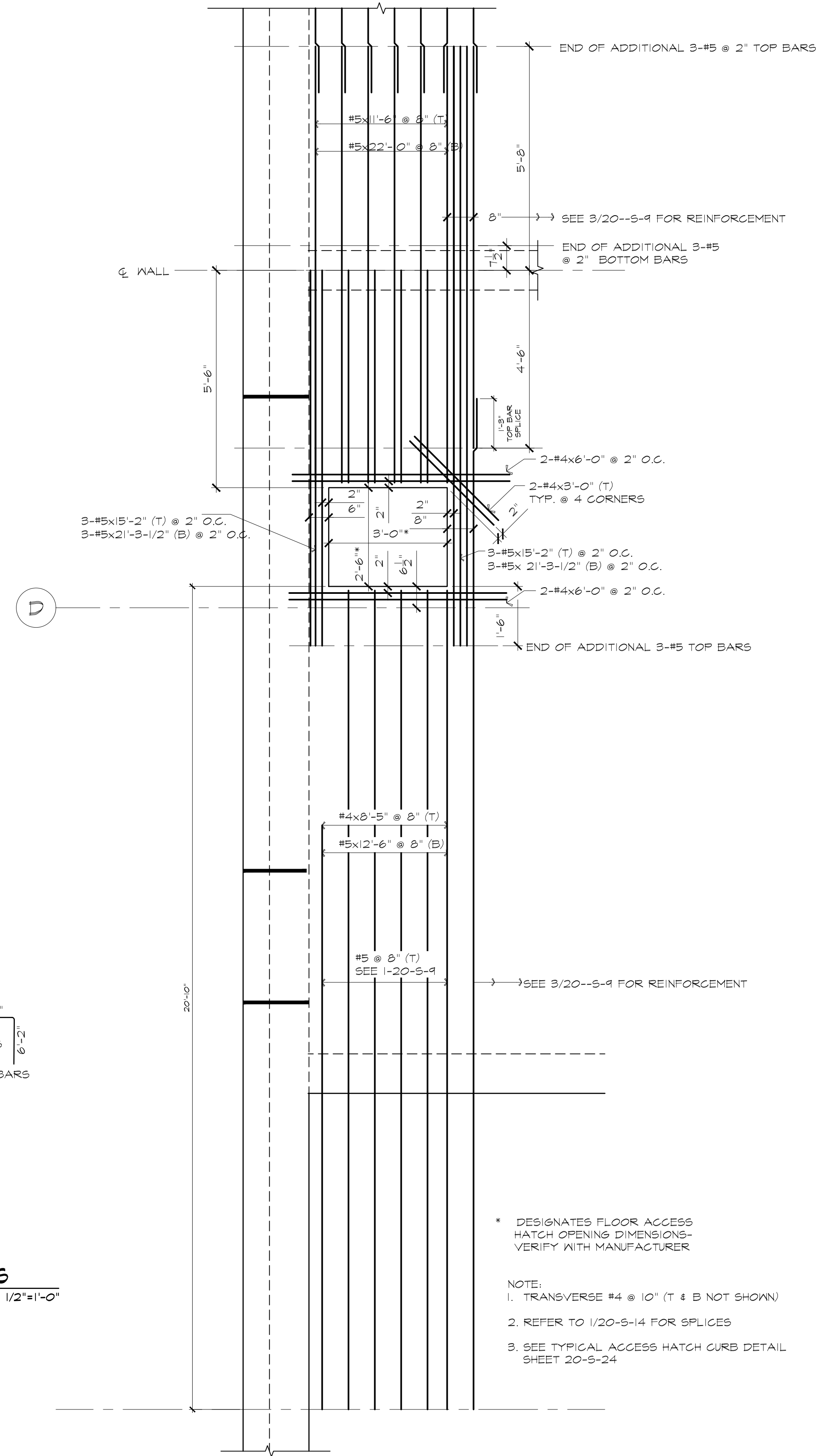


* DESIGNATES FLOOR ACCESS HATCH OPENING DIMENSIONS-VERIFY WITH MANUFACTURER

NOTE:

1. TRANSVERSE #4 @ 10" (T & B NOT SHOWN).
2. REFER TO 1/20-5-9 AND 2/20-5-9 FOR SPLICES.
3. SEE TYPICAL ACCESS HATCH CURB DETAIL SHEET 20-5-24.

E DETAIL-ADDITIONAL REINFORCEMENT @ OPENINGS
1/2"=1'-0"



* DESIGNATES FLOOR ACCESS HATCH OPENING DIMENSIONS-VERIFY WITH MANUFACTURER

NOTE:

1. TRANSVERSE #4 @ 10" (T & B NOT SHOWN)
2. REFER TO 1/20-5-14 FOR SPLICES
3. SEE TYPICAL ACCESS HATCH CURB DETAIL SHEET 20-5-24

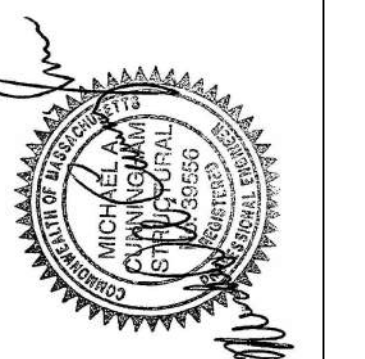
F DETAIL-ADDITIONAL REINFORCEMENT @ OPENINGS
1/2"=1'-0"

STRUCTURAL
ADDITIONAL OPENING
REINFORCING PLANS

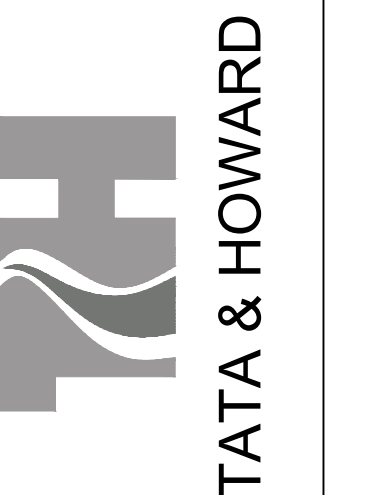
THIS DOCUMENT IS THE PROPERTY OF TATA & HOWARD, INC. AND ITS CLIENT. REPRODUCTION OR ADAPTATION WITHOUT WRITTEN CONSENT IS PROHIBITED.

Designed By: SWW
Checked By: JAC
Approved By:

ISSUED FOR CONSTRUCTION

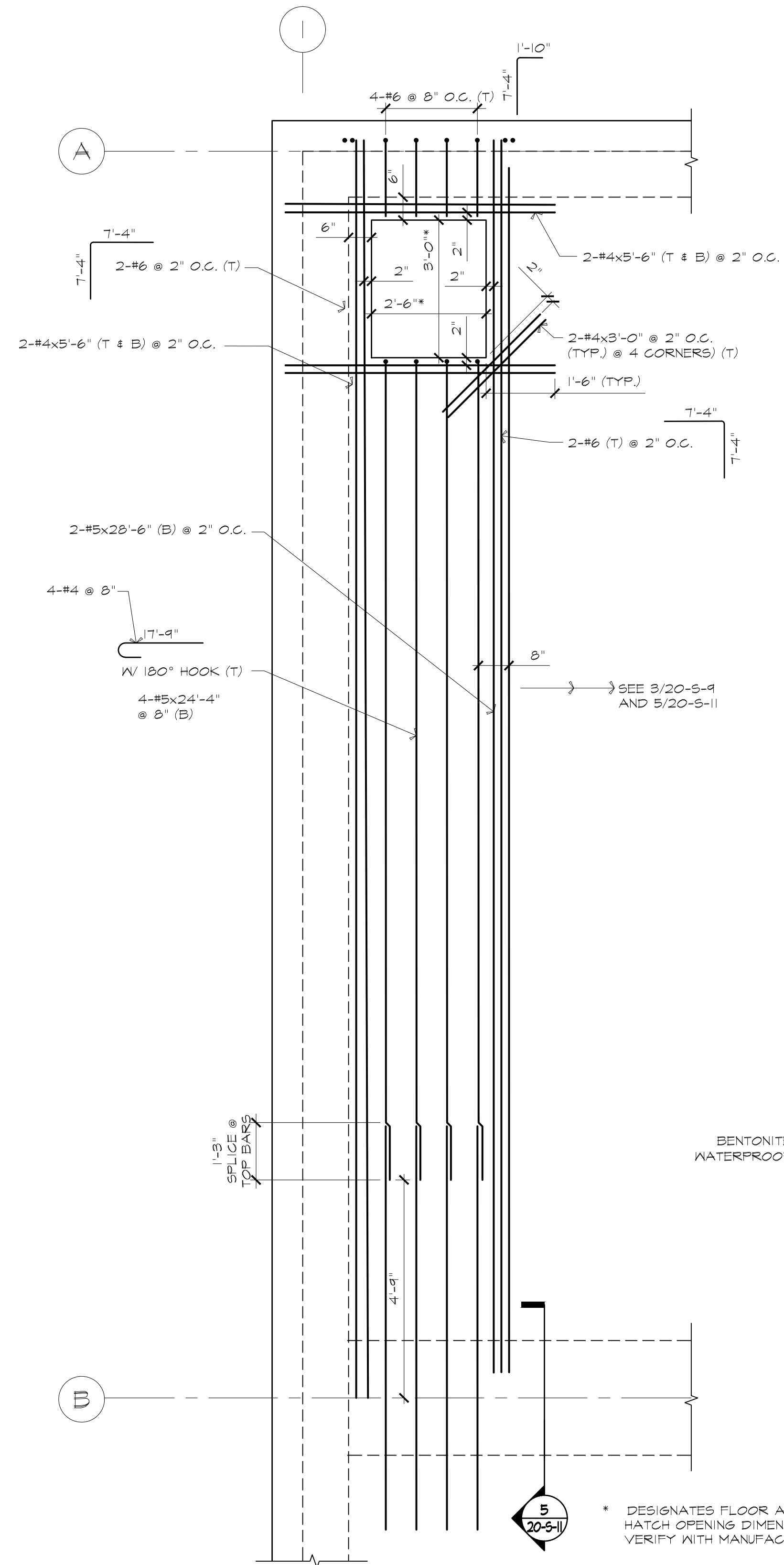


Lincoln / Haney
Engineering Associates, Inc.
1200 Main Street
Attleboro, MA 01901
Phone: 508-228-1601 Fax: 508-228-2841



T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE:

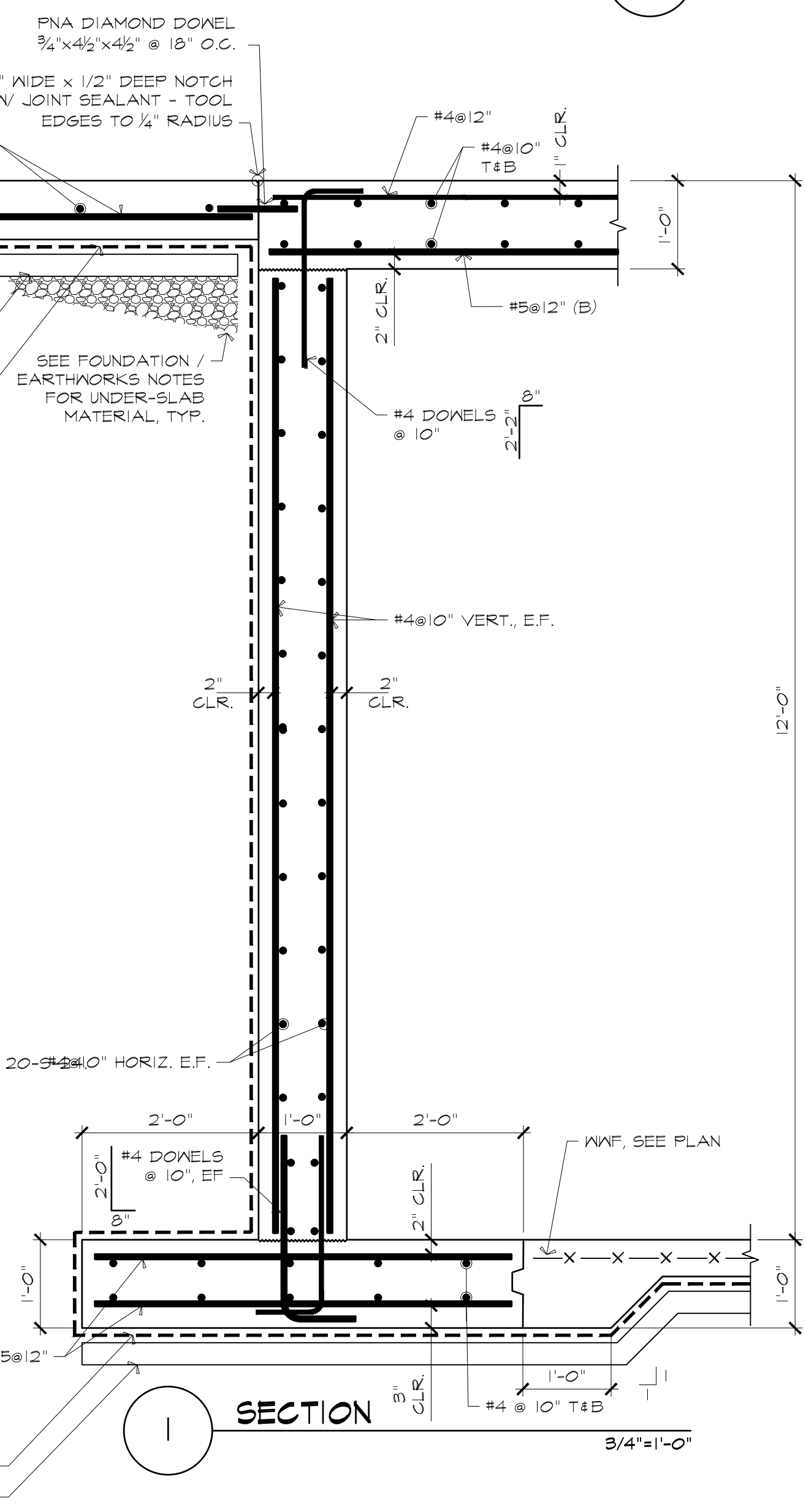
20-S-25



6 DETAIL-ADDITIONAL REINFORCEMENT @ OPENINGS
1/2"=1'-0"

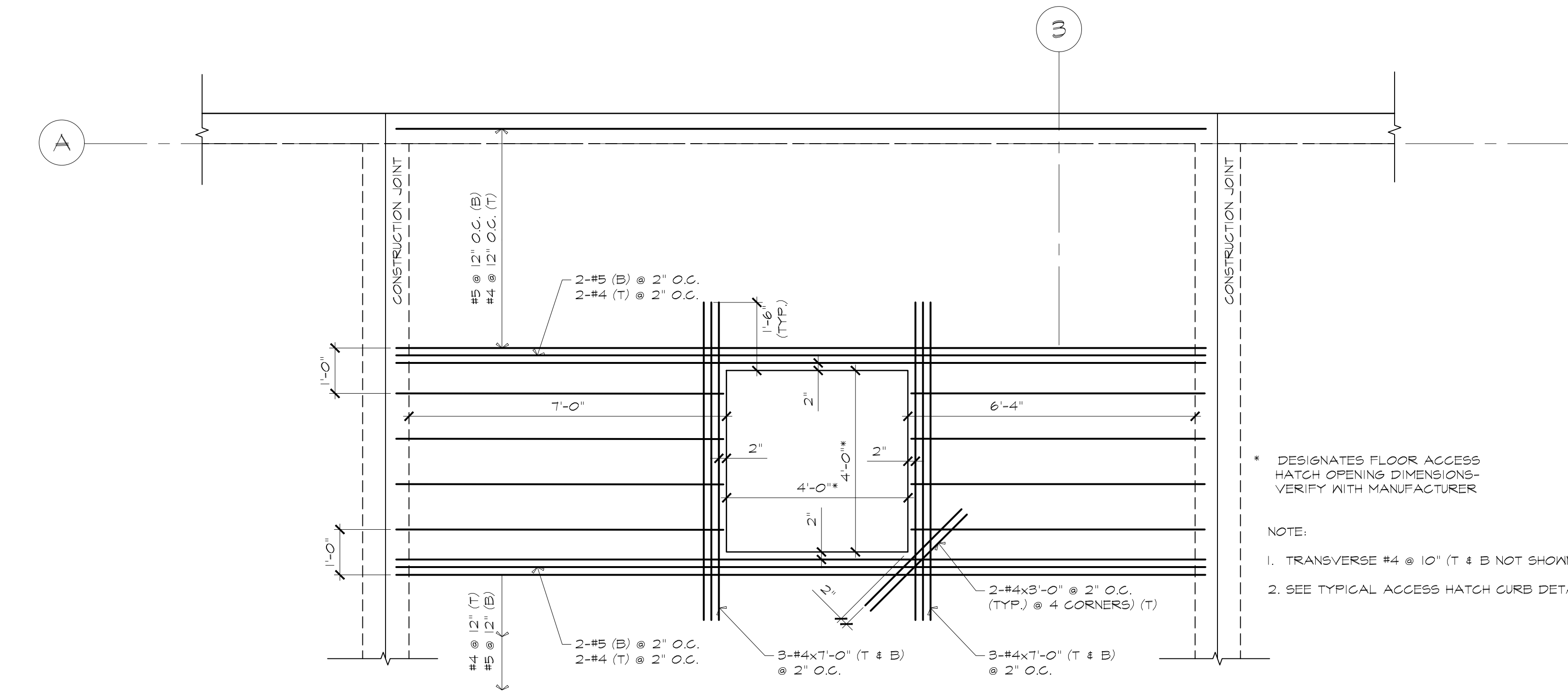
* DESIGNATES FLOOR ACCESS HATCH OPENING DIMENSIONS-VERIFY WITH MANUFACTURER

NOTE:
1. TRANSVERSE #4 @ 10" (T & B NOT SHOWN).
2. REFER TO 3/20-S-9 AND 5/20-S-11 FOR SPLICES.
3. SEE TYPICAL ACCESS HATCH CURB DETAIL SHEET 20-S-4 @ 10" HORIZ. E.F.



1 SECTION
3/4"=1'-0"

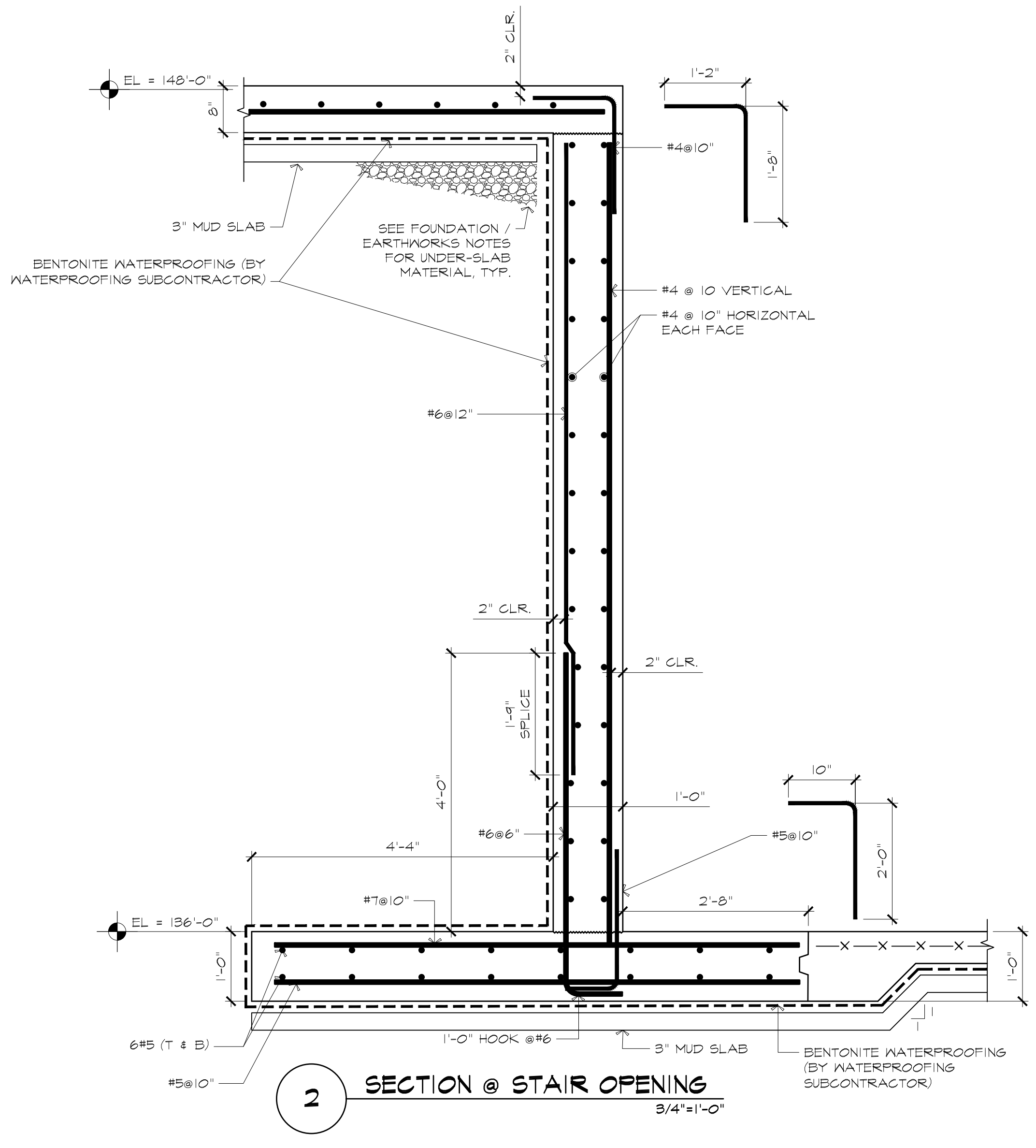
BENTONITE WATERPROOFING (BY WATERPROOFING SUBCONTRACTOR)
3" MUD SLAB



H DETAIL-ADDITIONAL REINFORCEMENT @ OPENINGS
1/2"=1'-0"

* DESIGNATES FLOOR ACCESS HATCH OPENING DIMENSIONS-VERIFY WITH MANUFACTURER

NOTE:
1. TRANSVERSE #4 @ 10" (T & B NOT SHOWN).
2. SEE TYPICAL ACCESS HATCH CURB DETAIL SHEET 20-S-24.

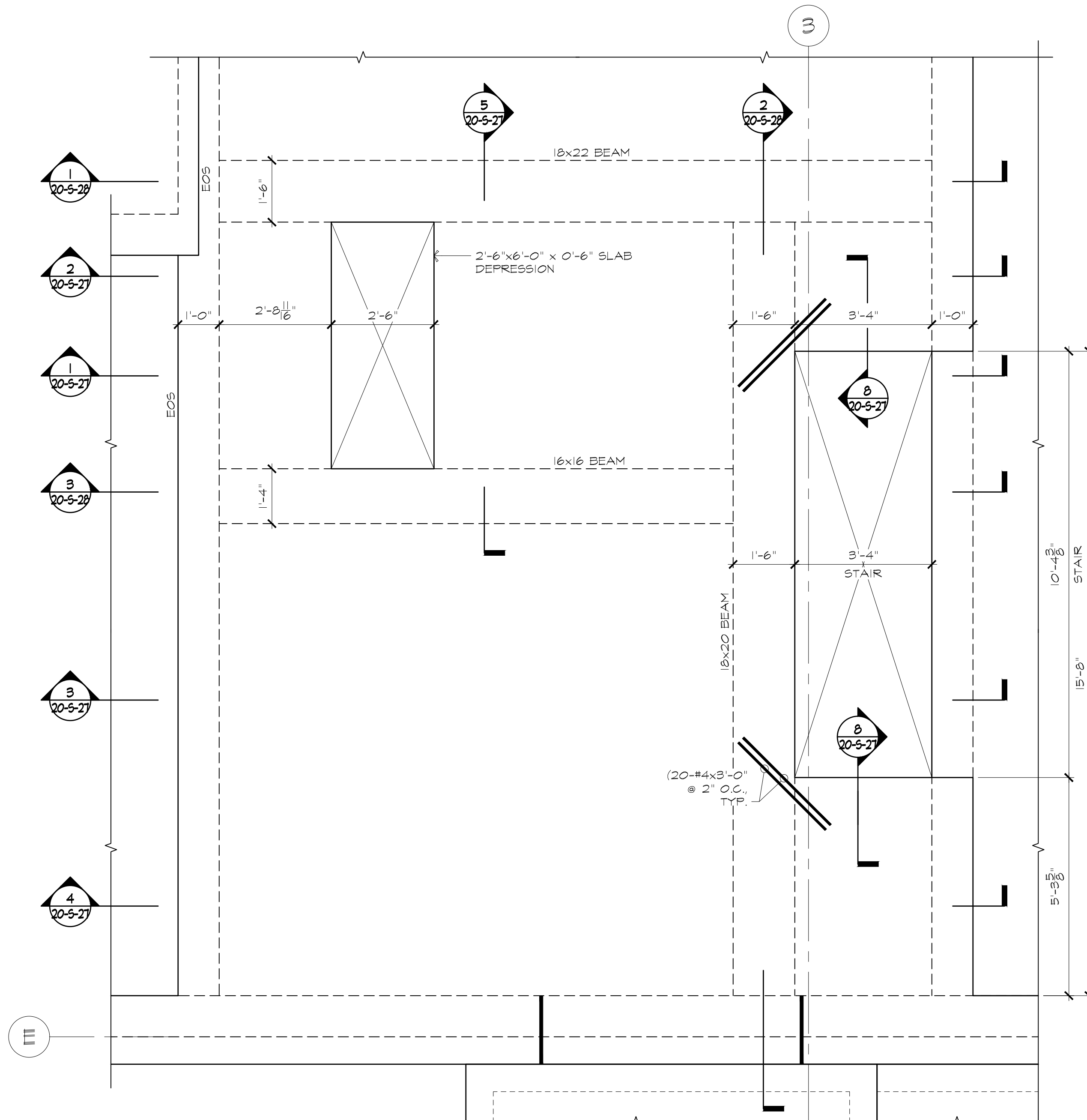


2 SECTION @ STAIR OPENING
3/4"=1'-0"

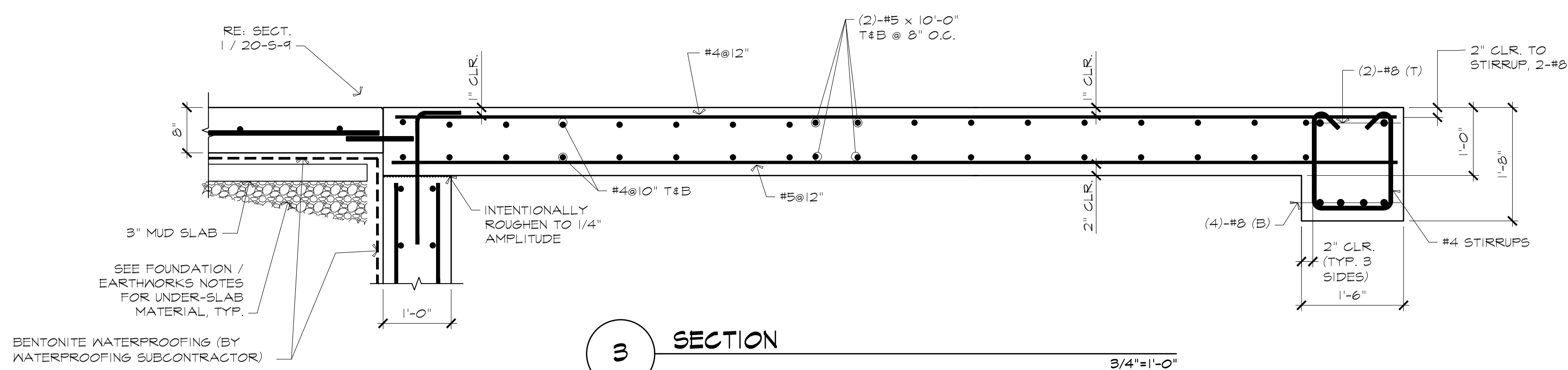
BENTONITE WATERPROOFING (BY WATERPROOFING SUBCONTRACTOR)
3" MUD SLAB

ATTLEBORO WATER DEPT. ATTLEBORO, MA		DESIGNED BY: MAC	CHECKED BY:
WADING RIVER WATER TREATMENT PLANT		DRAWN BY: SWW	APPROVED BY:
STRUCTURAL ADDITIONAL OPENING REINFORCING PLANS		THIS DOCUMENT IS THE PROPERTY OF TATA & HOWARD, INC. AND ITS CLIENT. REPRODUCTION OR ADAPTATION WITHOUT WRITTEN CONSENT IS PROHIBITED.	
Rev.	Date	Description	
ISSUED FOR CONSTRUCTION			
Lincoln / Haney Engineering Associates, Inc. 100 State Street, Suite 301, Box 7 Attleboro, MA 01937 Phone: 508-228-1601 Fax: 508-228-2841			
TATA & HOWARD			
T&H NO.: 6193			
DATE: FEBRUARY 2025			
SCALE:			
20-S-26			

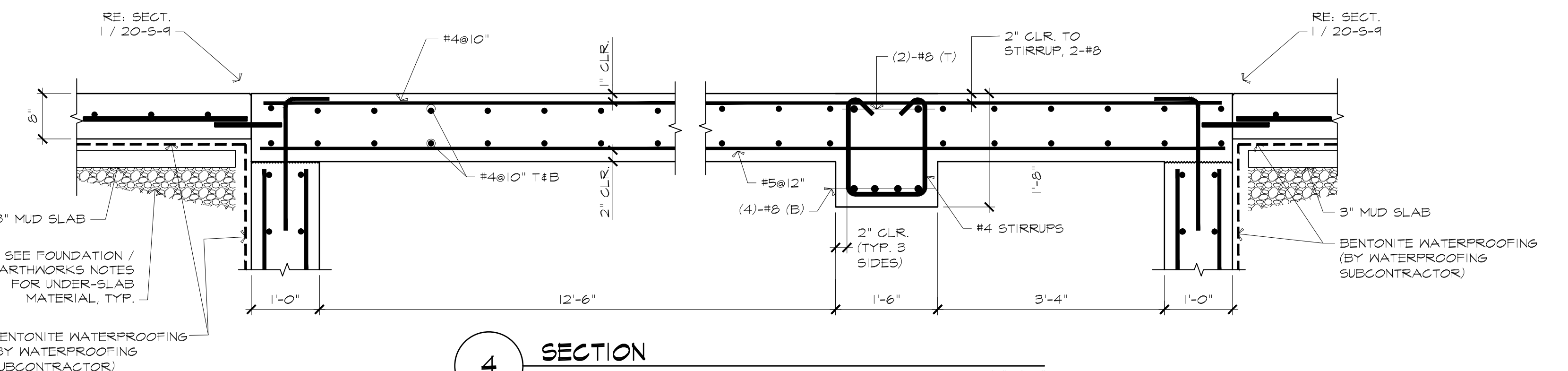
C:\Users\jason@hmc.com\Documents\Public Drawings\2024\Wabara Wading River WTP.dwg 2/28/2025 3:54 PM JASONHINES



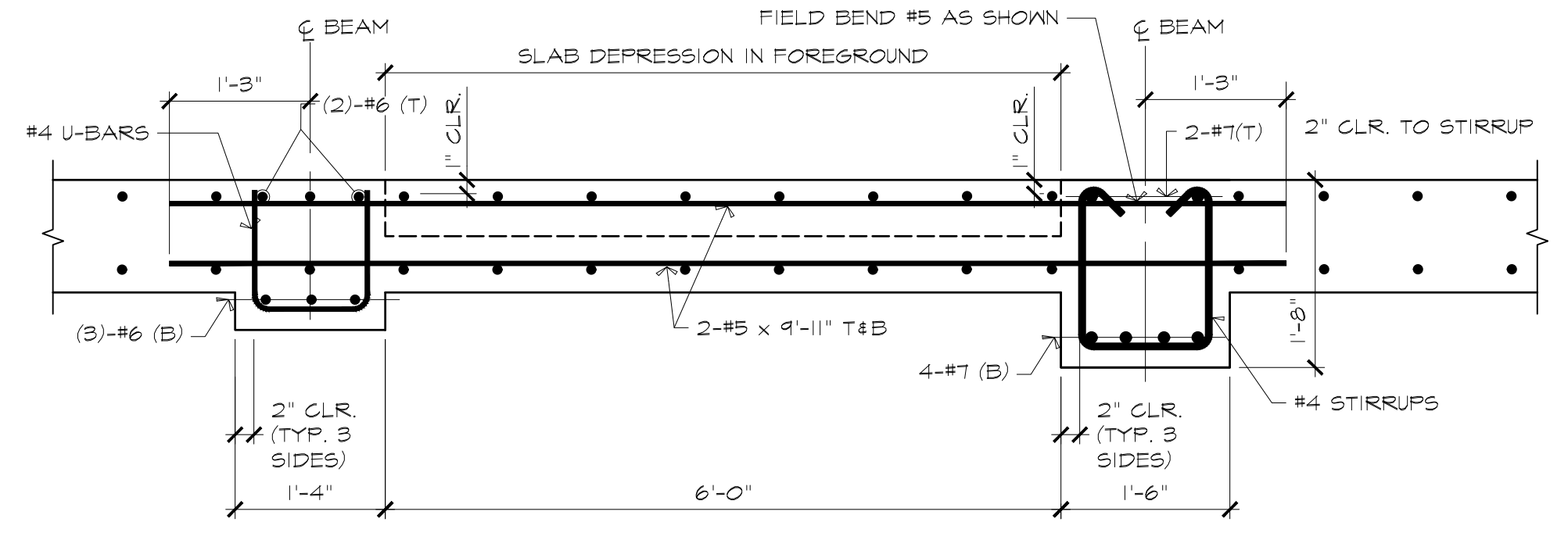
A PLAN DETAIL: SLAB DEPRESSION / STAIR OPENING
1/2"=1'-0"



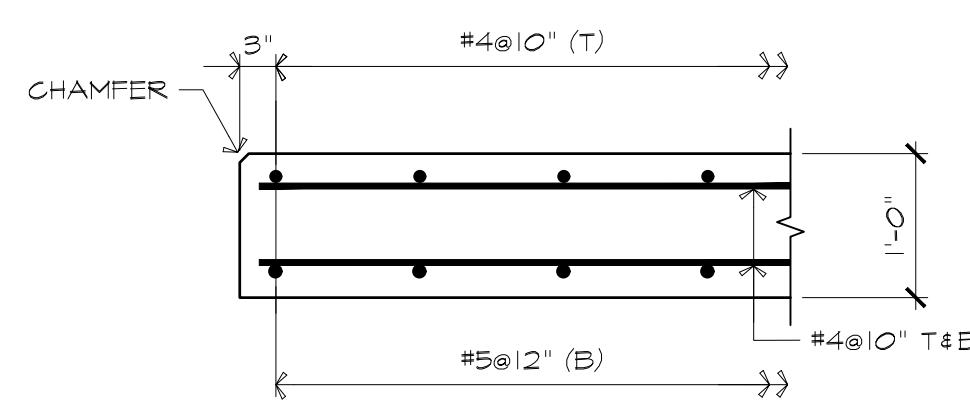
3 SECTION
3/4"=1'-0"



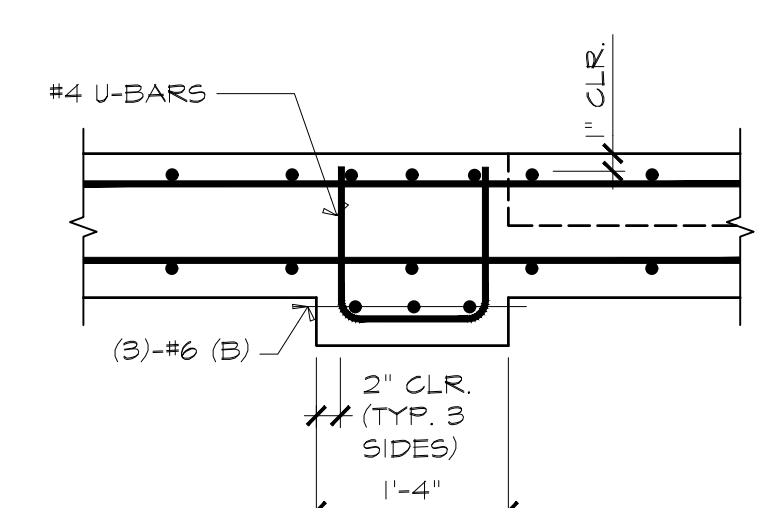
4 SECTION
3/4"=1'-0"



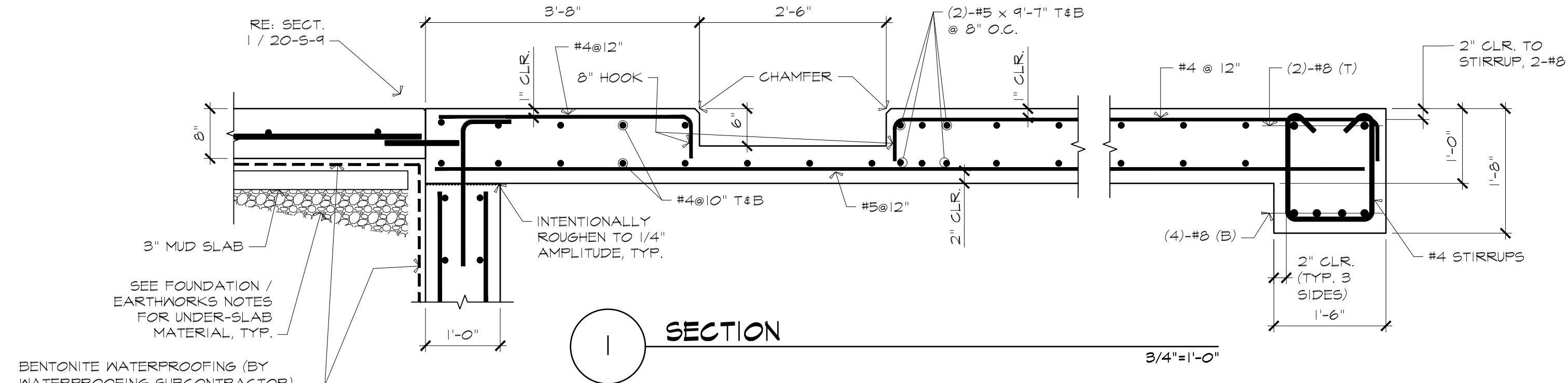
5 SECTION
3/4"=1'-0"



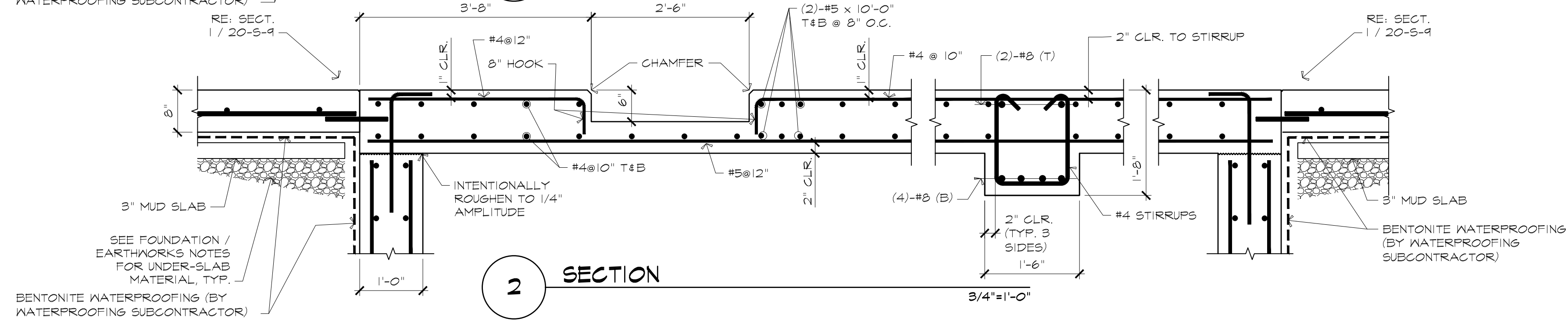
8 SECTION
3/4"=1'-0"



10 SECTION
3/4"=1'-0"



1 SECTION
3/4"=1'-0"



2 SECTION
3/4"=1'-0"

ATTLEBORO WATER DEPT.
ATTLEBORO, MA
WADING RIVER
WATER TREATMENT PLANT

STRUCTURAL
SECTIONS AND DETAILS

Rev.	Date	Description

ISSUED
FOR
CONSTRUCTION

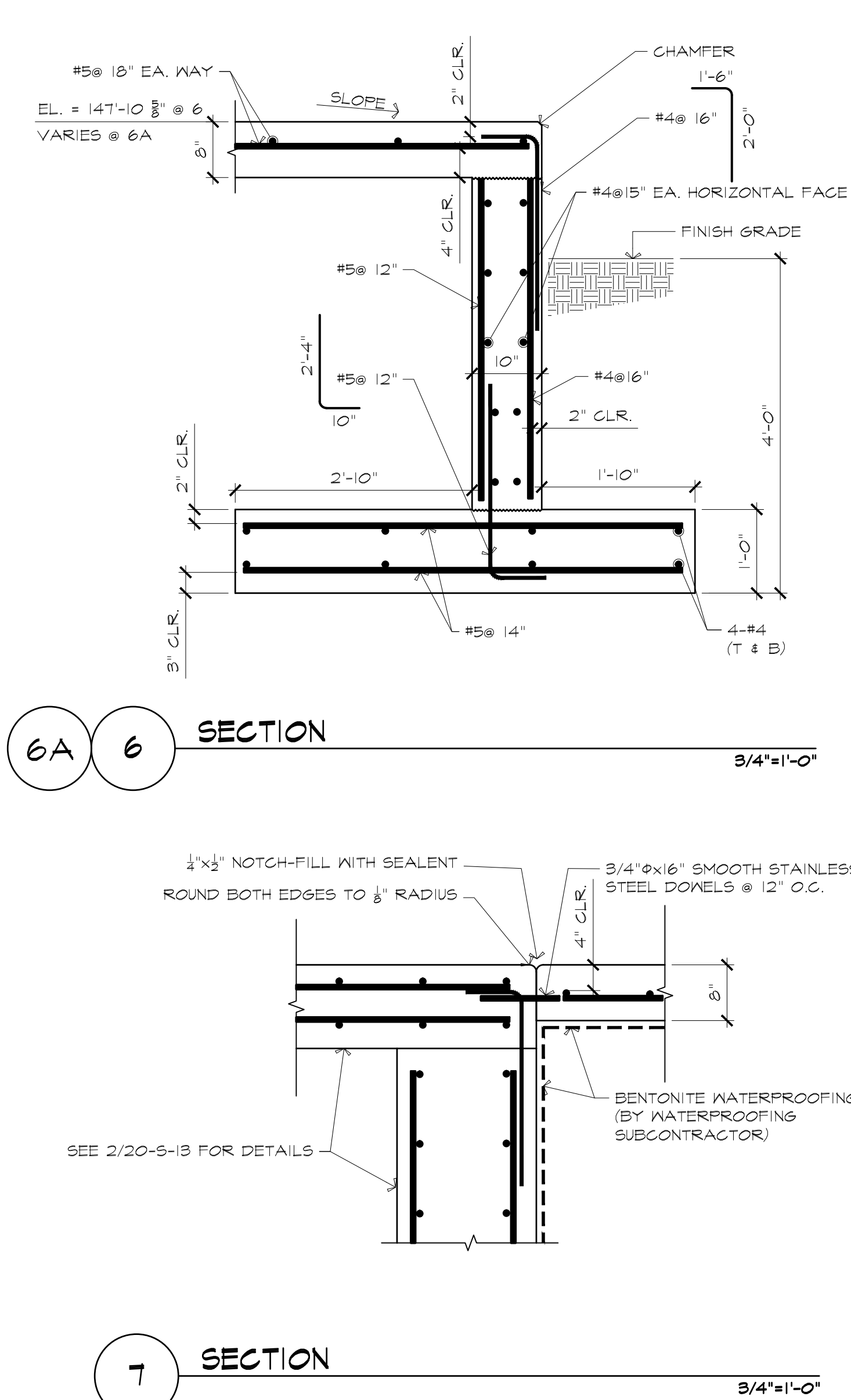
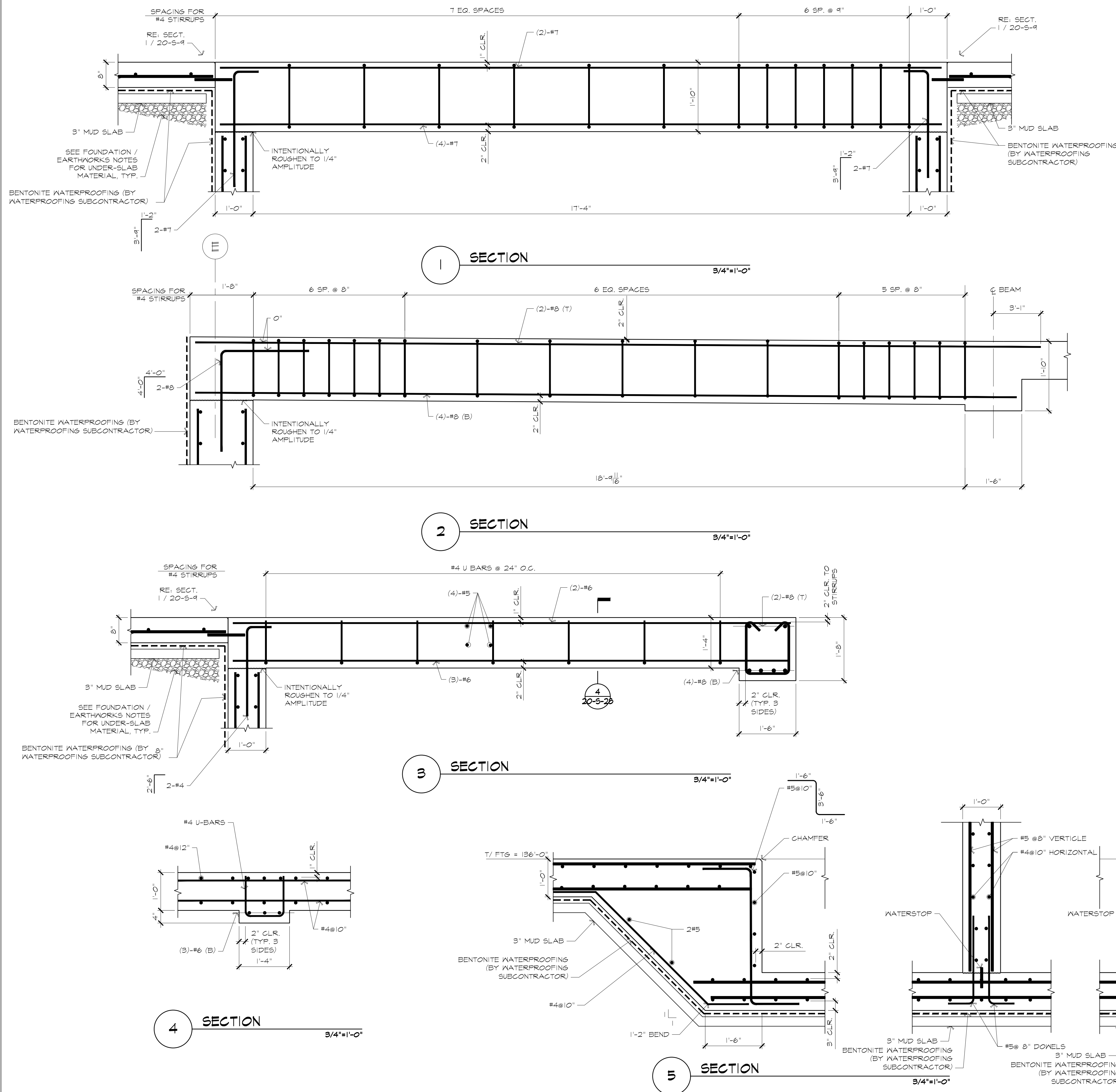


Lincoln / Haneey
Engineering Associates, Inc.
1000 State Street, Suite 301, Attleboro, MA 01945
Phone: 508-252-1601 Fax: 508-279-2841



T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE:
20-S-27

C:\Users\jason@hane\OneDrive\Documents\Public Drawings\2024\Wabara Wading River WTP.dwg 2/28/2025 3:54 PM JASONHINES

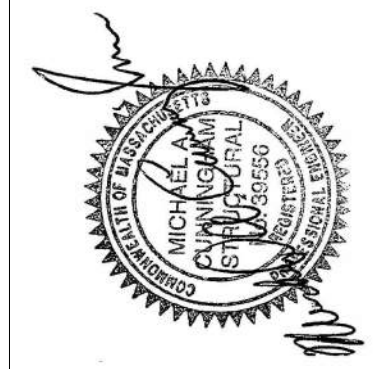


ATTLEBORO WATER DEPT.
ATTLEBORO, MA
WADING RIVER
WATER TREATMENT PLANT

STRUCTURAL
SECTIONS AND DETAILS

Rev.	Date	Description

ISSUED
FOR
CONSTRUCTION



Lincoln / Hane
Engineering Associates, Inc.
100 State Street, Suite 301, Attleboro, MA 01937
Phone: 508-252-1601 Fax: 508-252-2841

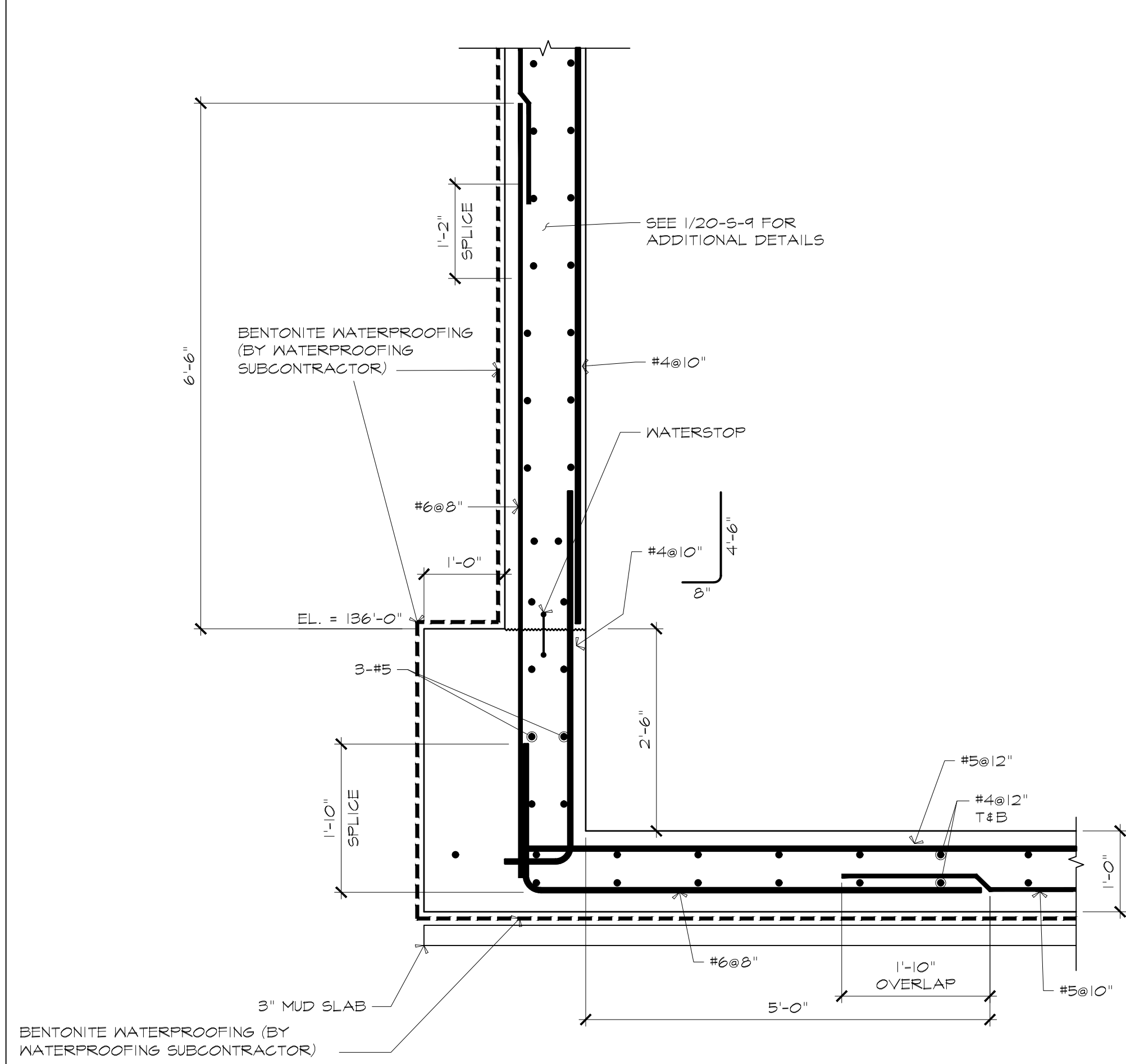


T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE:
20-S-28

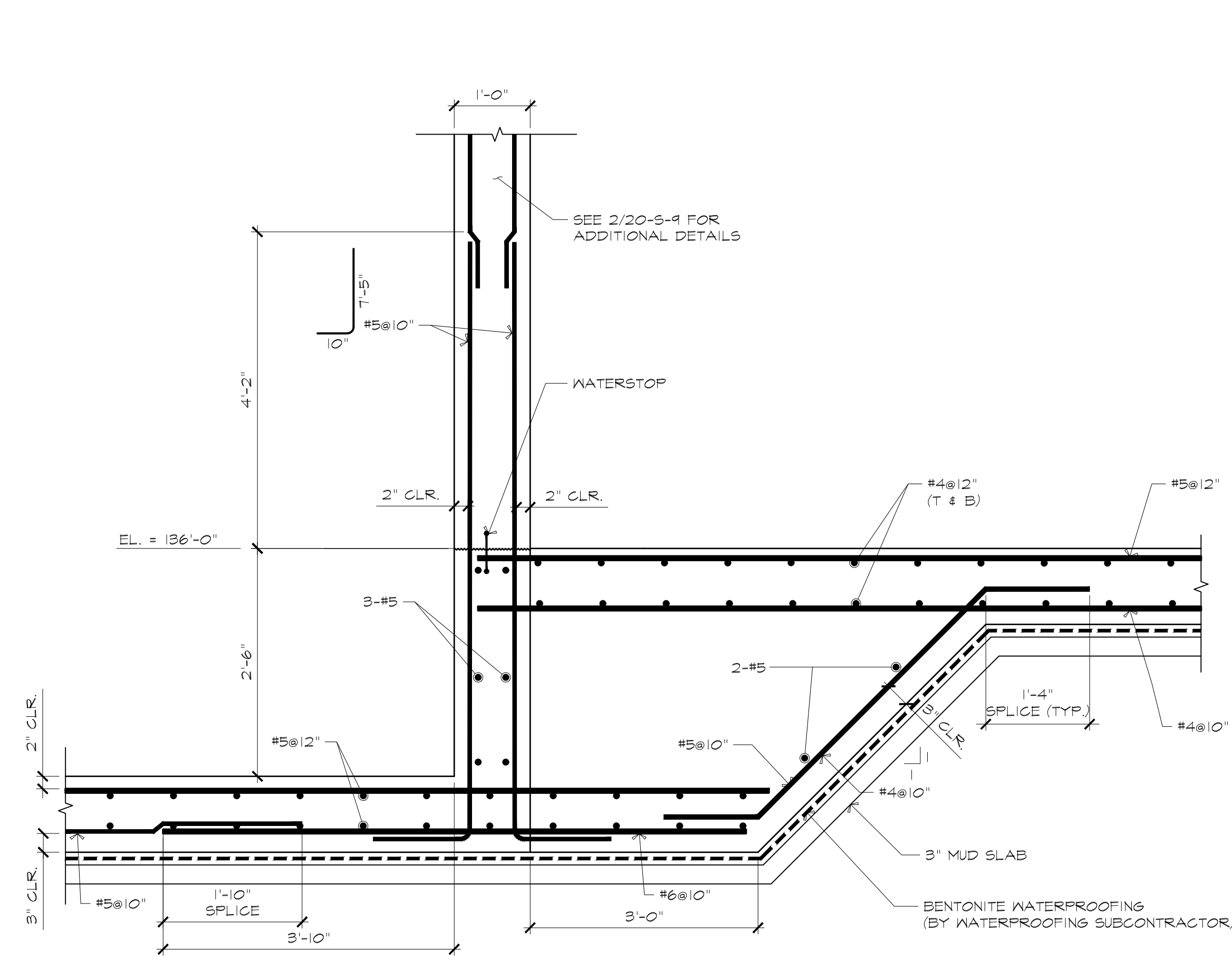
Designed By: SWW
Checked By: SAC
Approved By:

THIS DOCUMENT IS THE PROPERTY OF TATA & HOWARD, INC. AND ITS CLIENT. REPRODUCTION OR ADAPTATION WITHOUT WRITTEN CONSENT IS PROHIBITED.

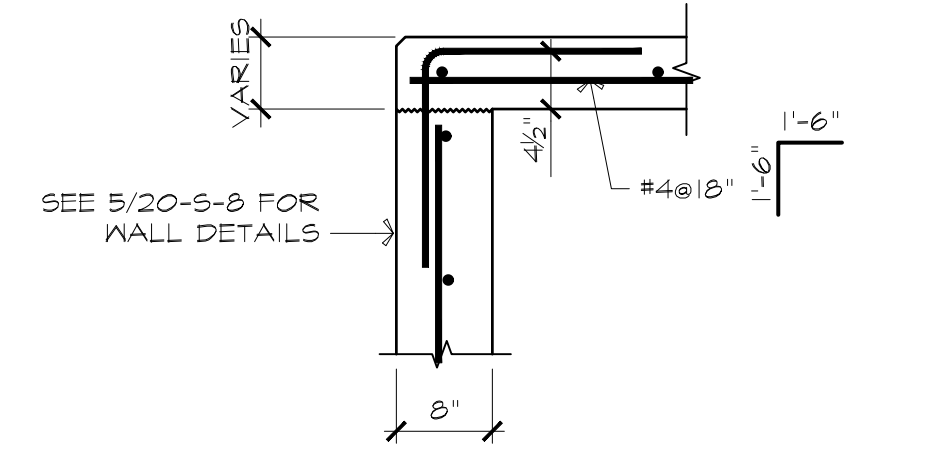
C:\Users\jason@tata.com\Documents\Public Drawings\2024\Attleboro Wading River\WTP.dwg 2/28/2025 3:55 PM JASCHWINES



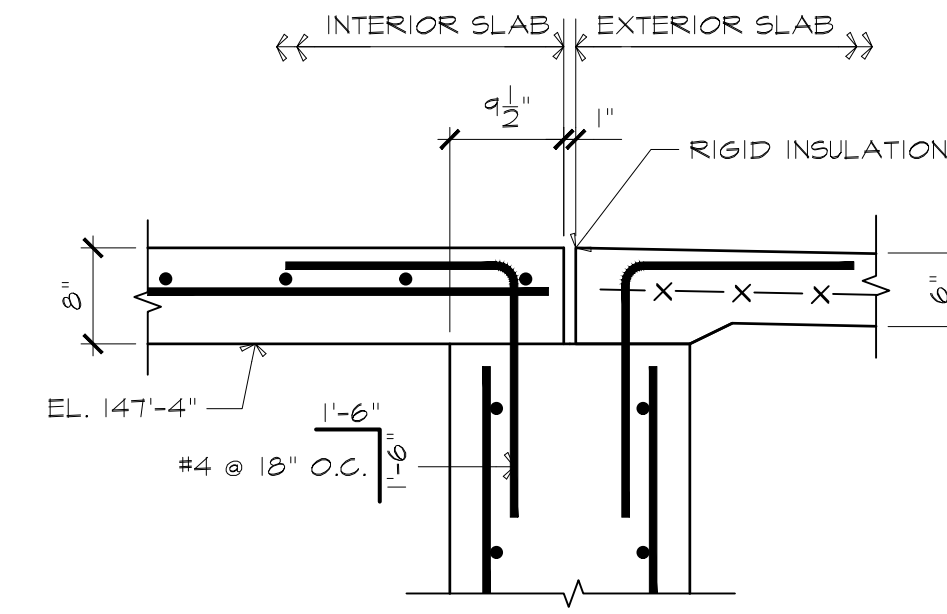
1 SECTION 3/4"=1'-0"



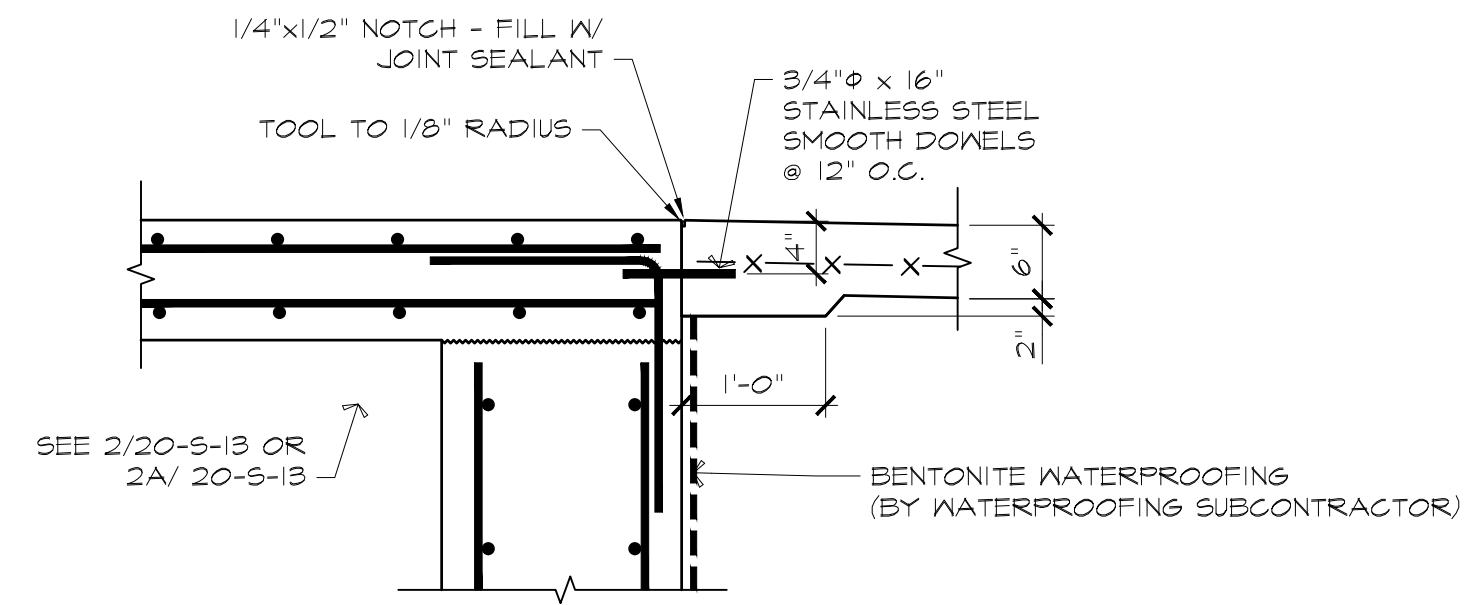
2 SECTION 3/4"=1'-0"



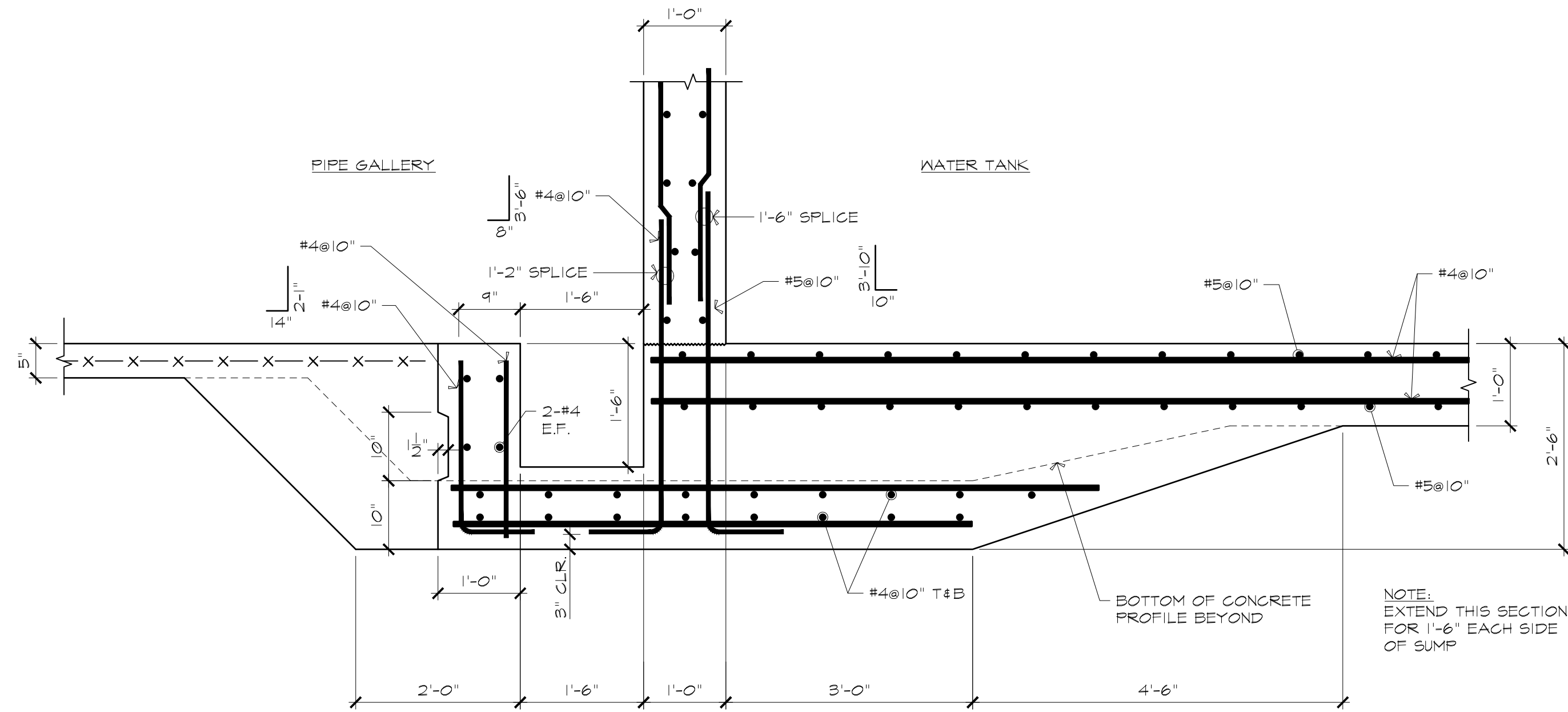
3 SECTION 3/4"=1'-0"



4 SECTION 3/4"=1'-0"



5 SECTION 3/4"=1'-0"



6 TYPICAL SECTION AT SUMP 3/4"=1'-0"

ATTLEBORO WATER DEPT.
ATTLEBORO, MA
WADING RIVER
WATER TREATMENT PLANT

STRUCTURAL
SECTIONS AND DETAILS

Rev.	Date	Description

ISSUED
FOR
CONSTRUCTION



Lincoln / Haney
Engineering Associates, Inc.
1200 State Street, Suite 301, Attleboro, MA 01945
Phone: 508-729-1601 Fax: 508-729-2941

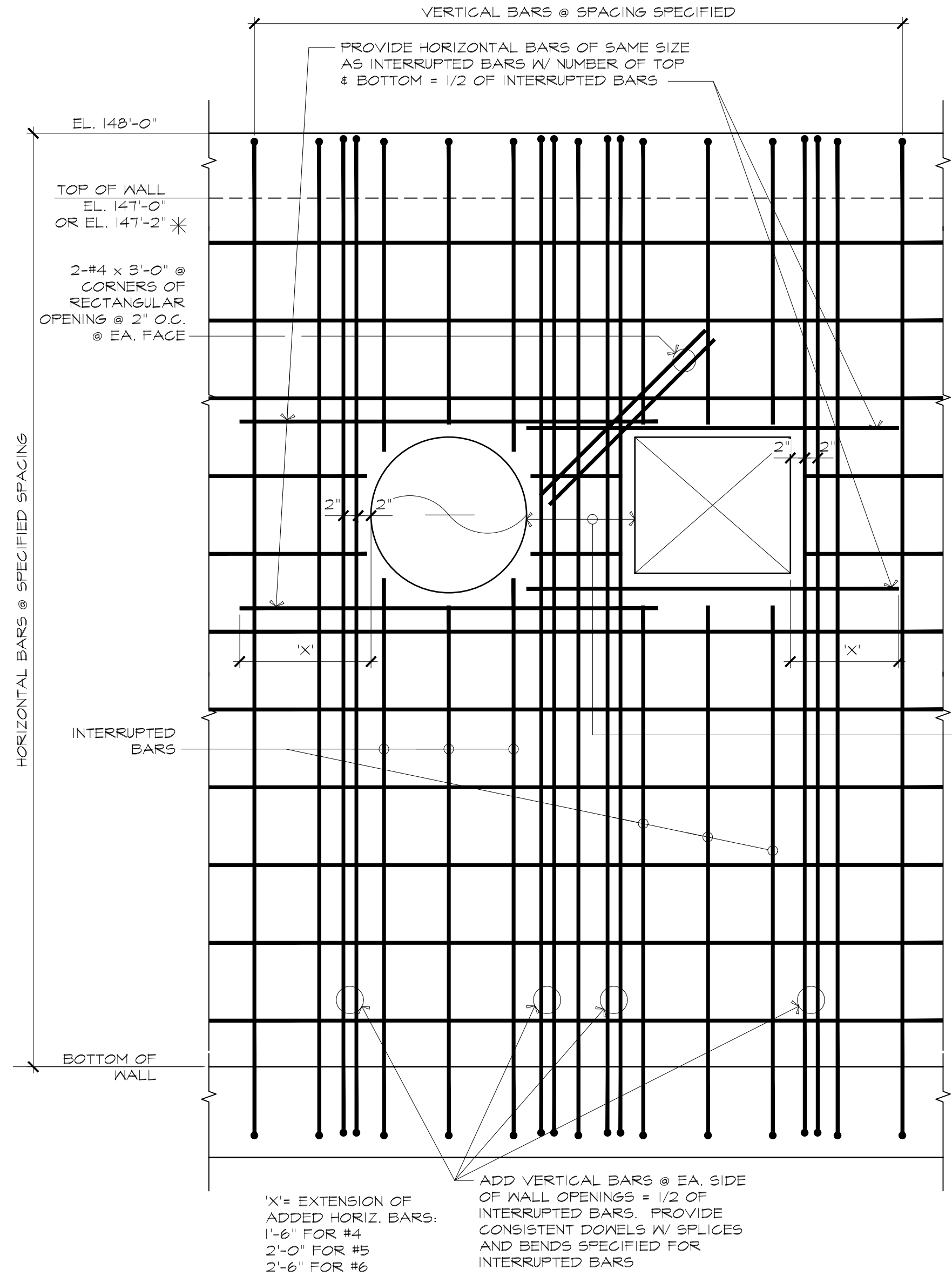


T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE:

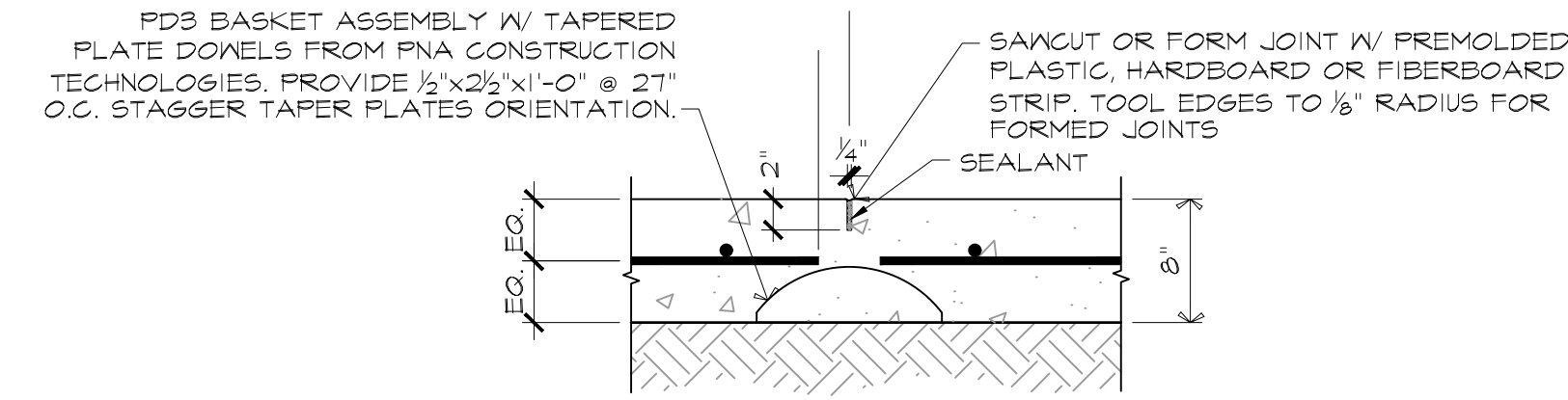
20-S-29

Designed By: SWW
Checked By: MAC
Approved By:

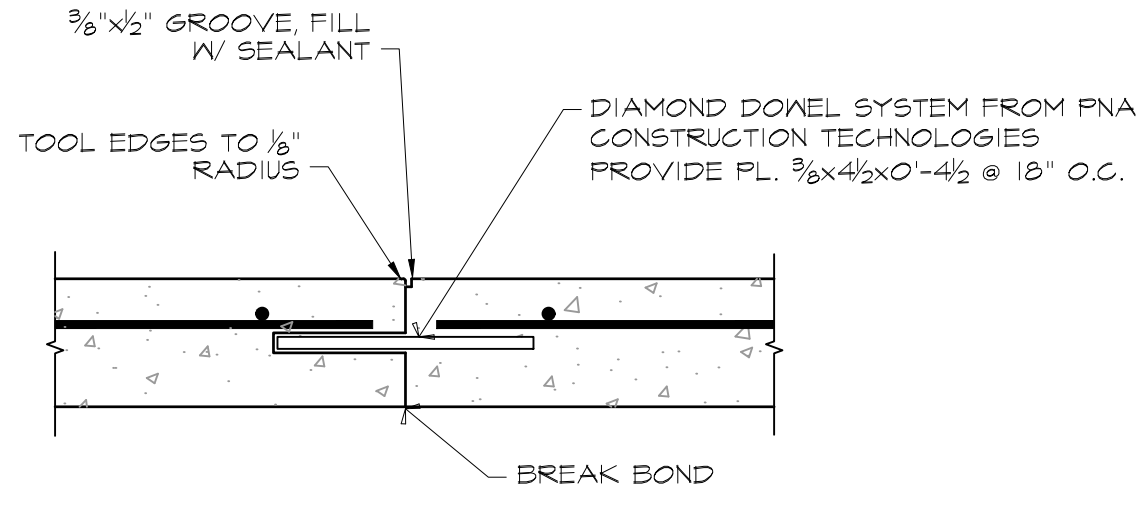
THIS DOCUMENT IS THE PROPERTY OF TATA & HOWARD, INC. AND ITS CLIENT. REPRODUCTION OR ADAPTATION WITHOUT WRITTEN CONSENT IS PROHIBITED.



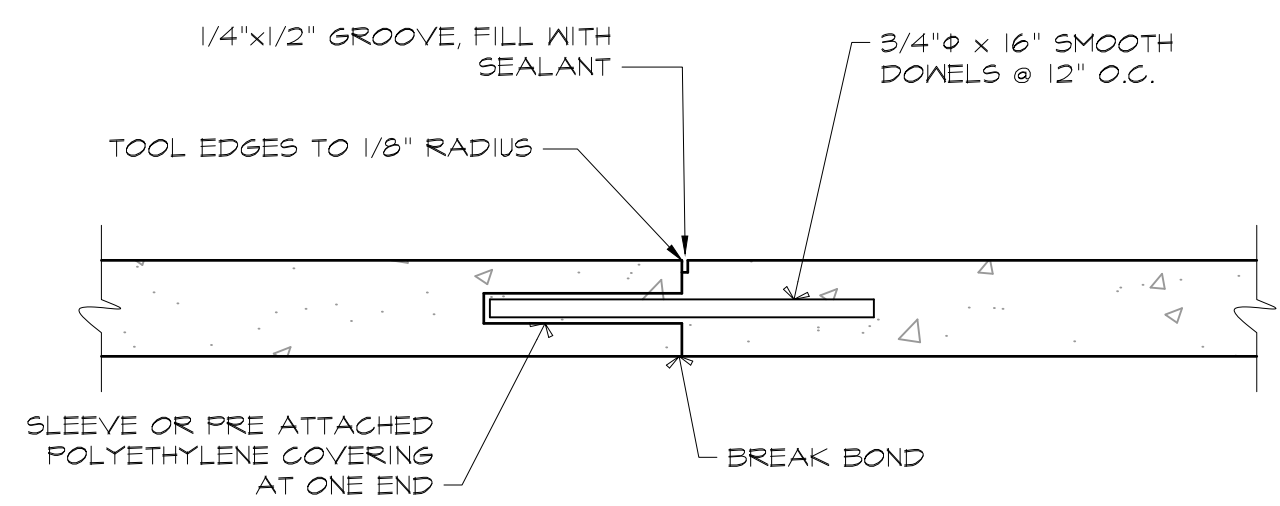
1 TANK WALL PENETRATION DETAIL 3/4"=1'-0"



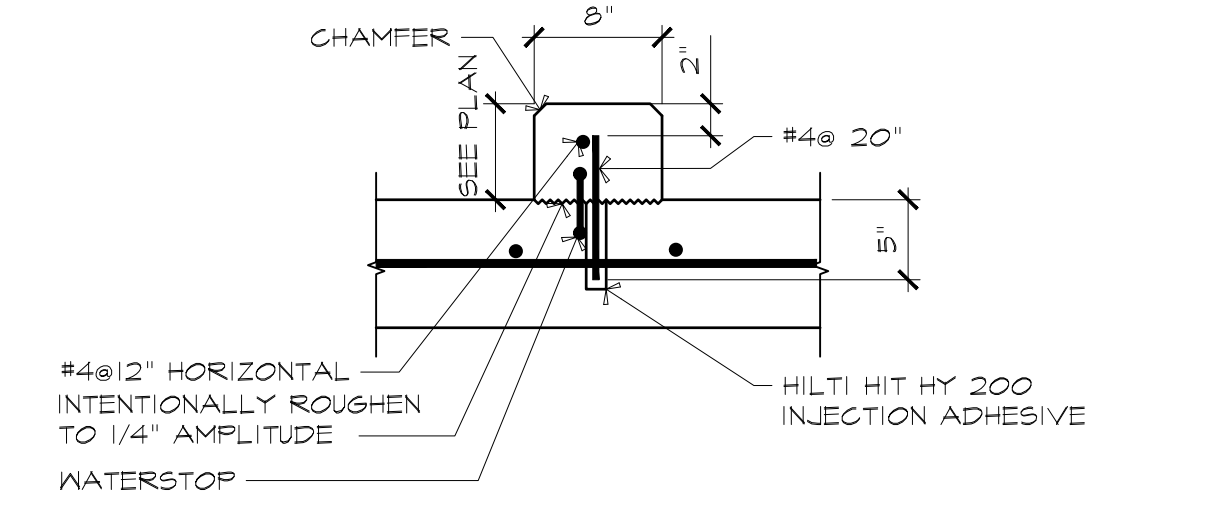
3 TYPICAL CONTROL JOINT FOR 8" SLAB ON GRADE 1"=1'-0"



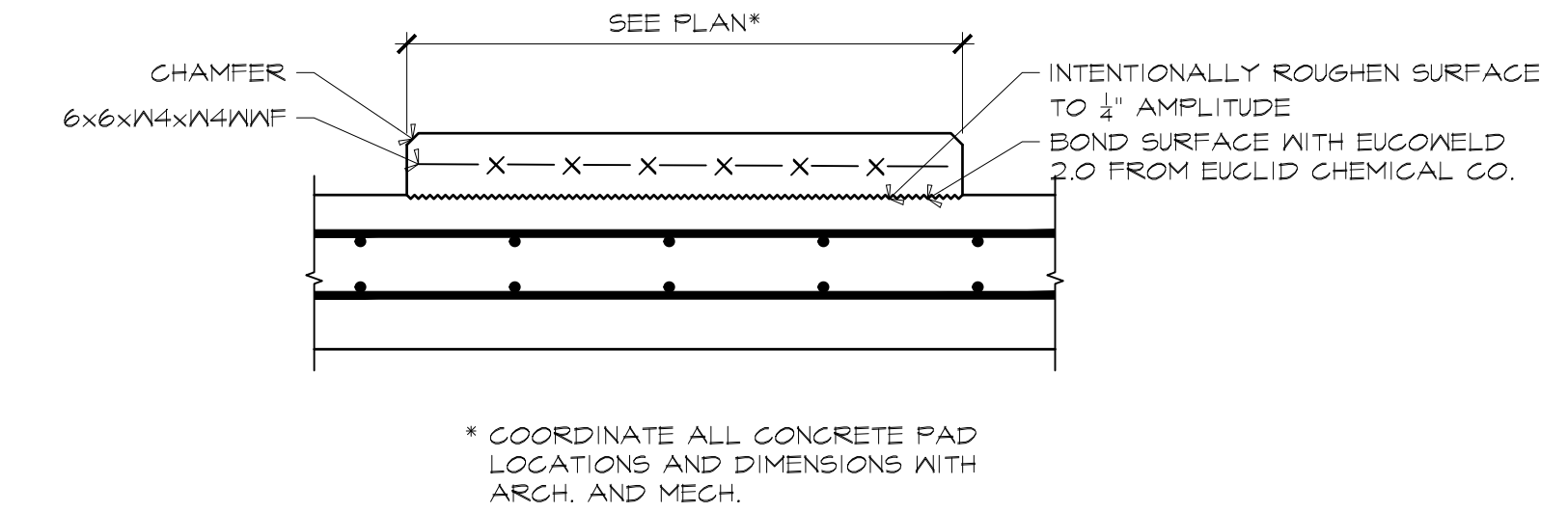
4 TYPICAL 8" SLAB ON GRADE CONSTRUCTION JOINT 1"=1'-0"



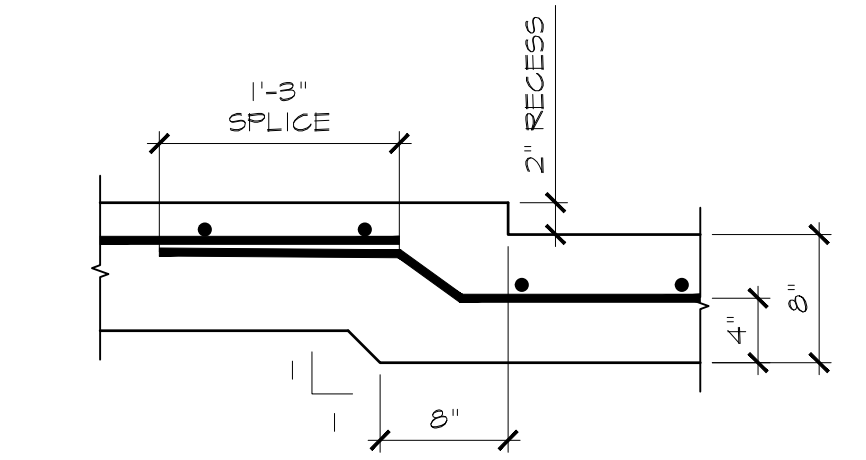
5 TYPICAL SLAB ON GRADE CONSTRUCTION JOINT FOR SLABS ≤ 6" 1-1/2"=1'-0"



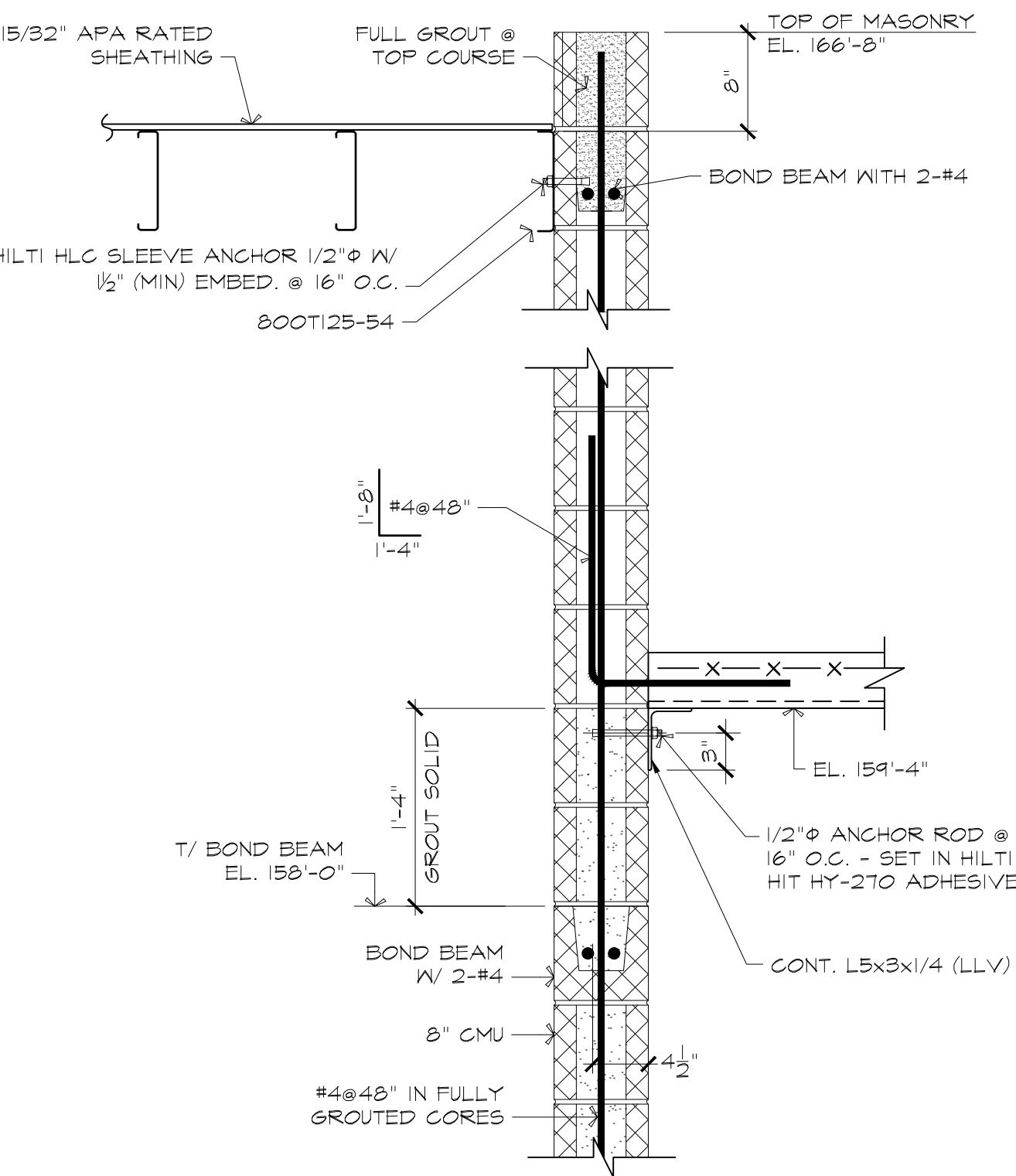
7 TYPICAL CHEMICAL CONTAINMENT CURB DETAIL 1"=1'-0"



8 TYPICAL EQUIPMENT PAD DETAIL 1"=1'-0"

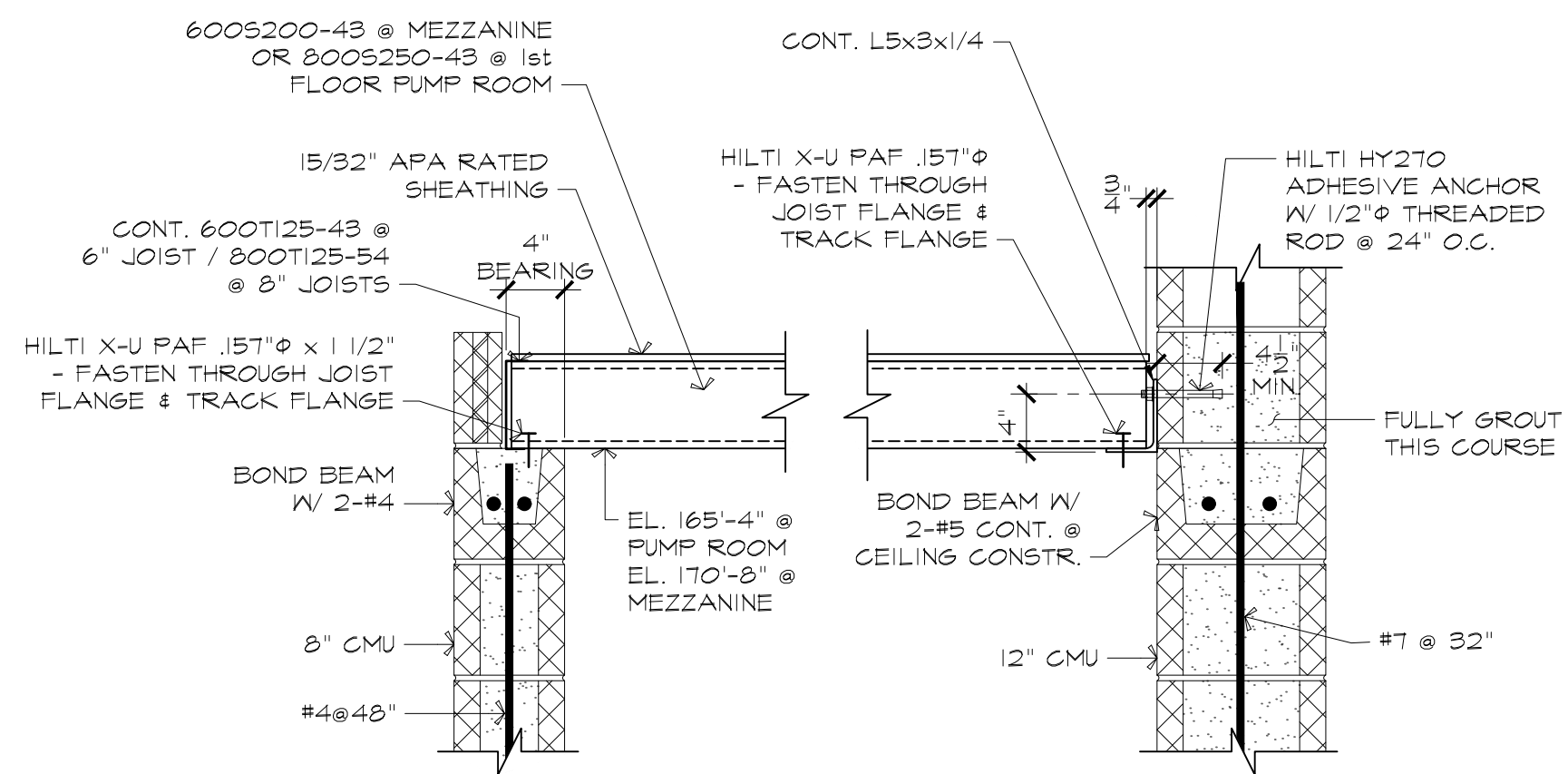


9 TYPICAL FLOOR RECESS DETAIL 1"=1'-0"



2 SECTION NTS

* NOTE: WALL PENETRATIONS SHALL BE LOCATED IN WALLS WHERE THE TOPS OF WALLS ARE UNIFORM AS SHOWN. DO NOT LOCATE OPENINGS W/ HORIZONTAL DIMENSION > 12" BENEATH TOP OF WALL STEPS FOR BEAM BEARING.



6 SECTION NTS

ATTELBORO WATER DEPT.
ATTELBORO, MA

WADING RIVER
WATER TREATMENT PLANT

STRUCTURAL
REINFORCEMENT DETAIL
AT TANK WALL PENETRATIONS

ISSUED FOR CONSTRUCTION

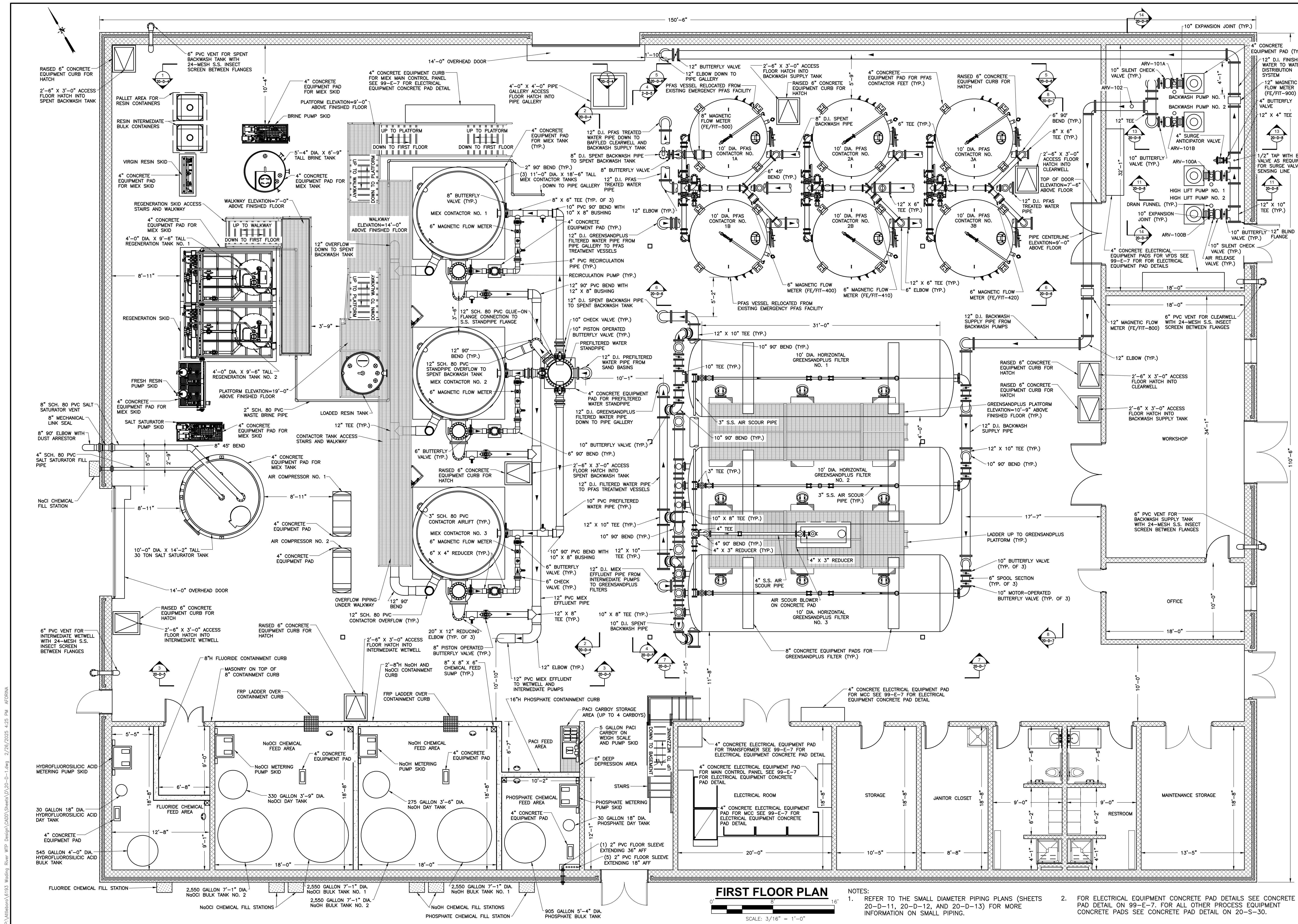
Lincoln / Haney
Engineering Associates, Inc.
300 Main Street, 7th Floor
Attleboro, MA 01901
Phone: 508-272-1601 Fax: 508-272-2841

T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE:

20-S-30

Approved By: _____
Checked By: SAC
Designed By: SWW
Drawn By: SWW

C:\Users\jason@linh.com\Documents\Public Drawings\2024\Attleboro Wading River WTP.dwg 2/28/2025 3:55 PM JASONHINES



FIRST FLOOR PLAN

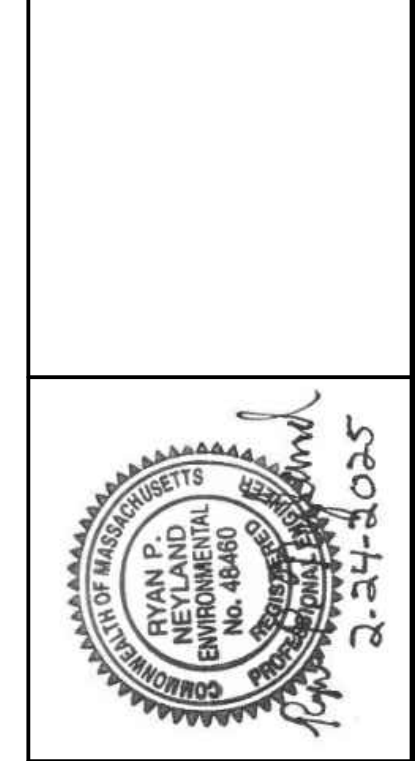
SCALE: 3/16" = 1'-0"

- NOTES:
- REFER TO THE SMALL DIAMETER PIPING PLANS (SHEETS 20-D-11, 20-D-12, AND 20-D-13) FOR MORE INFORMATION ON SMALL PIPING.
 - FOR ELECTRICAL EQUIPMENT CONCRETE PAD DETAILS SEE CONCRETE PAD DETAIL ON 99-E-7. FOR ALL OTHER PROCESS EQUIPMENT CONCRETE PADS SEE CONCRETE PAD DETAIL ON 20-S-30.

ATTLEBORO WATER DEPT.
 ATTLEBORO, MA
 WADING RIVER
 WATER TREATMENT PLANT

PROCESS
 FIRST FLOOR PLAN

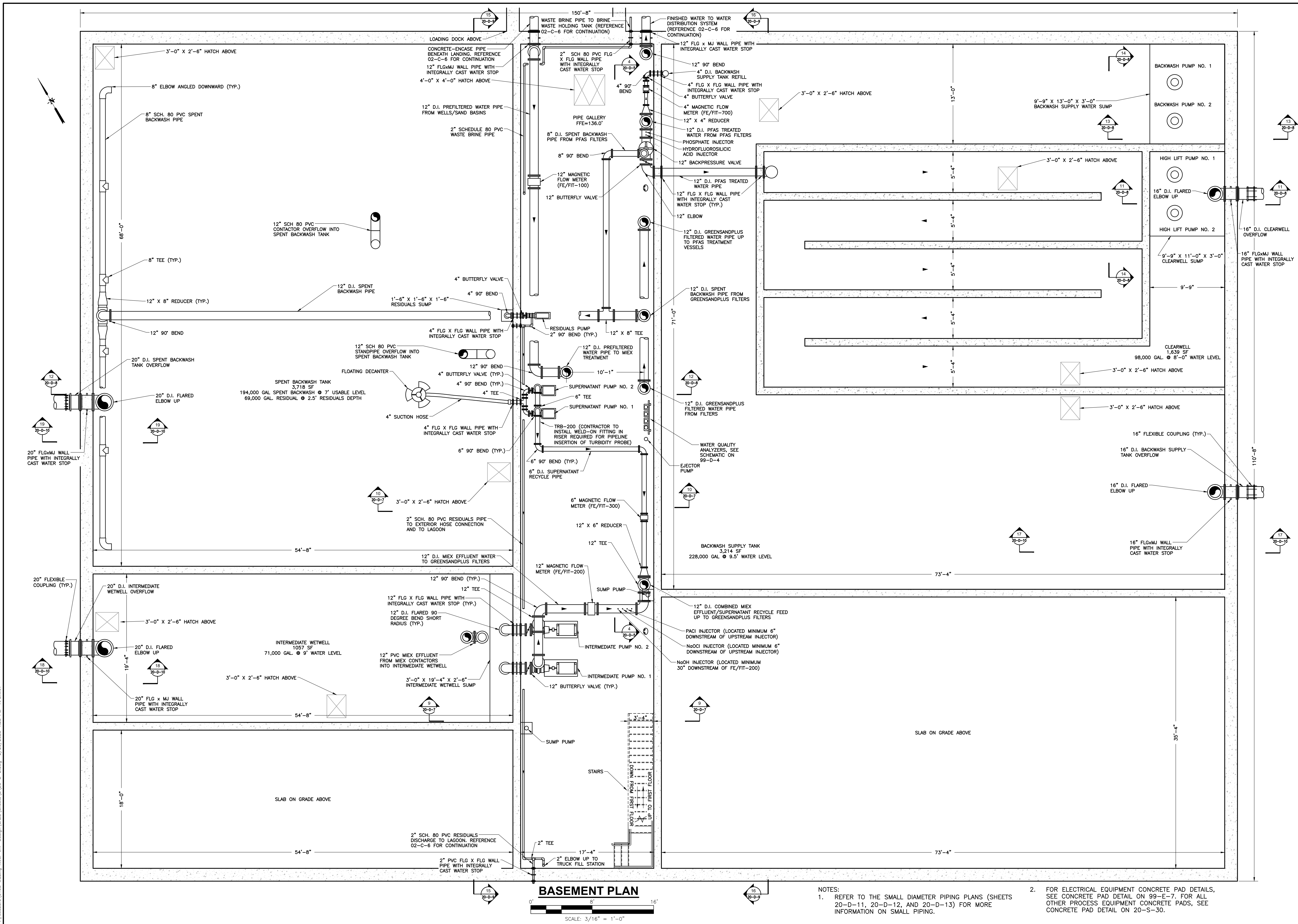
Date	Description



TATA & HOWARD

T&H NO.: 6193
 DATE: FEBRUARY 2025
 SCALE: AS NOTED
 20-D-1

P:\Attleboro\6193_Wading River WTP Design\CADD\Sheets\20-D-2.dwg 2/26/2025 4:25 PM AFORNA



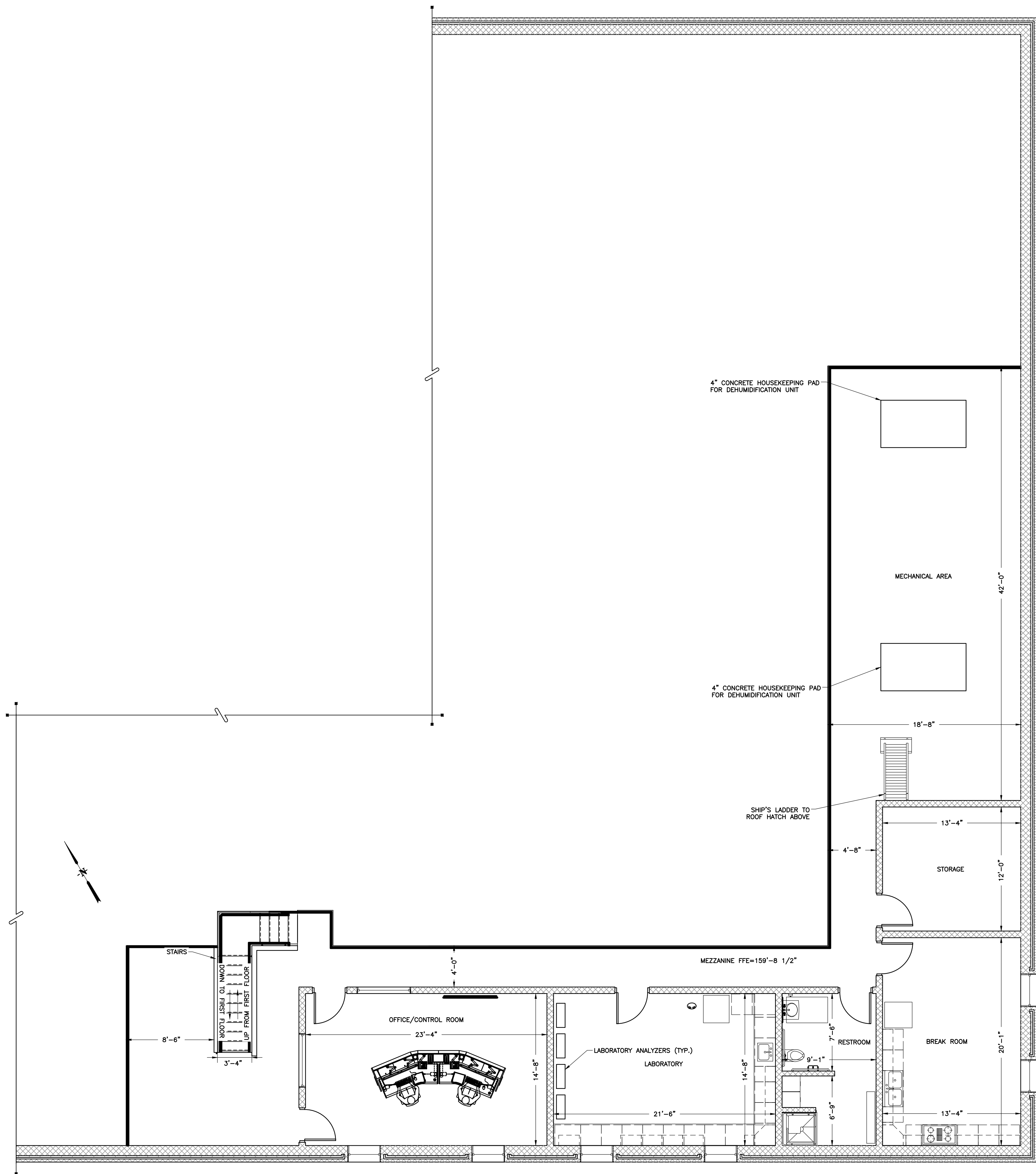
BASEMENT PLAN

SCALE: 3/16" = 1'-0"

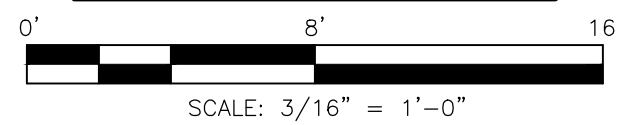
- NOTES:
- REFER TO THE SMALL DIAMETER PIPING PLANS (SHEETS 20-D-11, 20-D-12, AND 20-D-13) FOR MORE INFORMATION ON SMALL PIPING.
 - FOR ELECTRICAL EQUIPMENT CONCRETE PAD DETAILS, SEE CONCRETE PAD DETAIL ON 99-E-7. FOR ALL OTHER PROCESS EQUIPMENT CONCRETE PADS, SEE CONCRETE PAD DETAIL ON 20-S-30.

PROCESS BASEMENT PLAN	ATTLEBORO WATER DEPT. ATTLEBORO, MA WADING RIVER WATER TREATMENT PLANT
	Approved By: M/M Designed By: RSP Drawn By: MJT/RSP
Description Date Rev.	
T&H NO.: 6193 DATE: FEBRUARY 2025 SCALE: AS NOTED	20-D-2

P:\Attleboro\6193_Wading River WTP Design\CAD\Sheets\20-D-3.dwg 2/26/2025 4:26 PM AFORNA



MEZZANINE PLAN



NOTES:

1. REFER TO THE SMALL DIAMETER PIPING PLANS (SHEETS 20-D-11, 20-D-12, AND 20-D-13) FOR MORE INFORMATION ON SMALL PIPING.
2. FOR ELECTRICAL EQUIPMENT CONCRETE PAD DETAILS SEE CONCRETE PAD DETAIL ON 99-E-7. FOR ALL OTHER PROCESS EQUIPMENT CONCRETE PADS SEE CONCRETE PAD DETAIL ON 20-S-30.

ATTLEBORO WATER DEPT.
ATTLEBORO, MA
WADING RIVER
WATER TREATMENT PLANT

**PROCESS
MEZZANINE PLAN**

Rev.	Date	Description



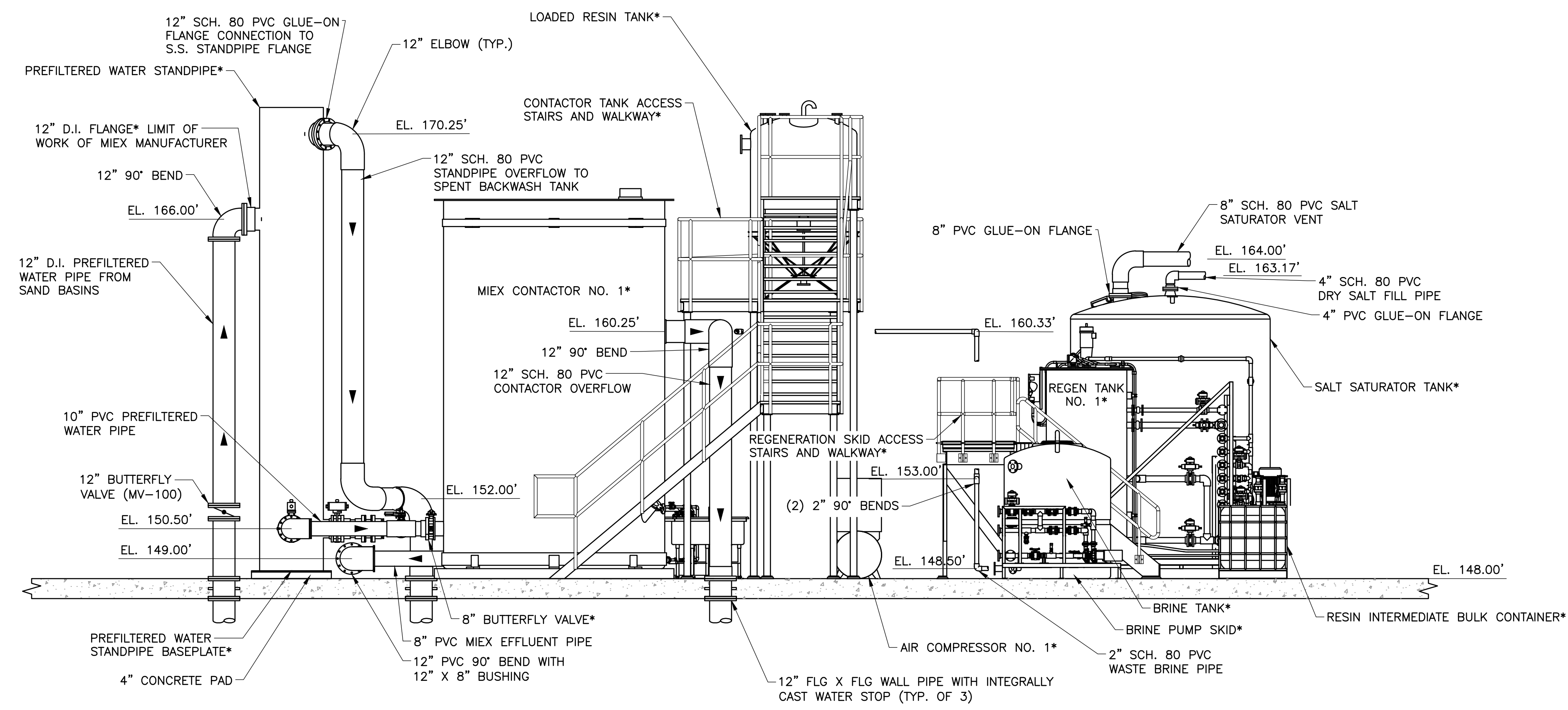
T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE: AS NOTED

20-D-3

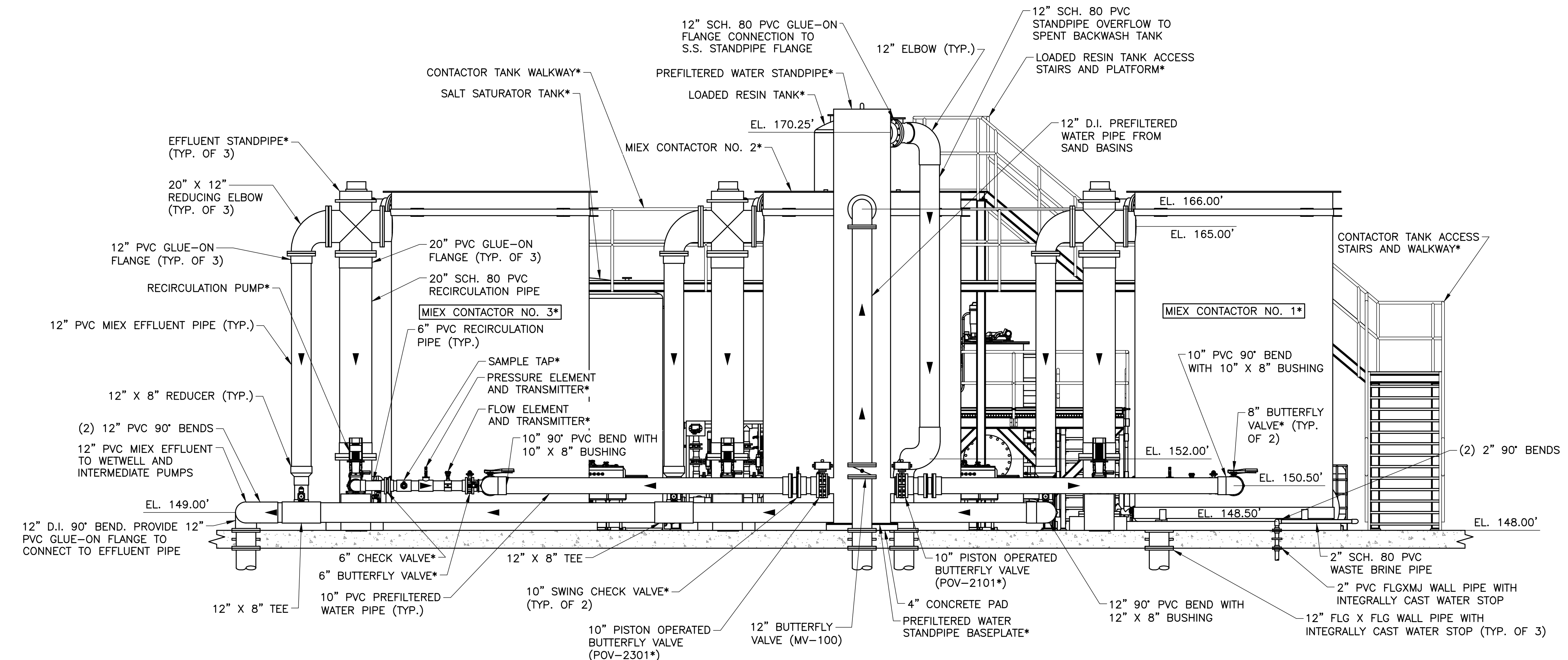
Drawn By: MJT/RSP | Designed By: RSP | Checked By: MWM | Approved By: KLG

THIS DOCUMENT IS THE PROPERTY OF TATA & HOWARD, INC. AND ITS REUSE, REPRODUCTION OR MODIFICATION WITHOUT WRITTEN CONSENT IS PROHIBITED.

- NOTES:
- REFER TO THE SMALL DIAMETER PIPING PLANS (SHEETS 20-D-11, 20-D-12, AND 20-D-13) FOR MORE INFORMATION ON SMALL PIPING NOT SHOWN ON THESE SECTION VIEWS.
 - ITEMS DENOTED WITH * ARE FURNISHED BY THE MIEX EQUIPMENT MANUFACTURER AND INSTALLED BY THE GENERAL CONTRACTOR. REFER TO SPECIFICATION SECTION 11610 FOR COMPLETE LIST OF ITEMS FURNISHED BY THE EQUIPMENT MANUFACTURER.



INTERIOR SECTION 1
 20-D-1
 SCALE: 1/4" = 1'-0"



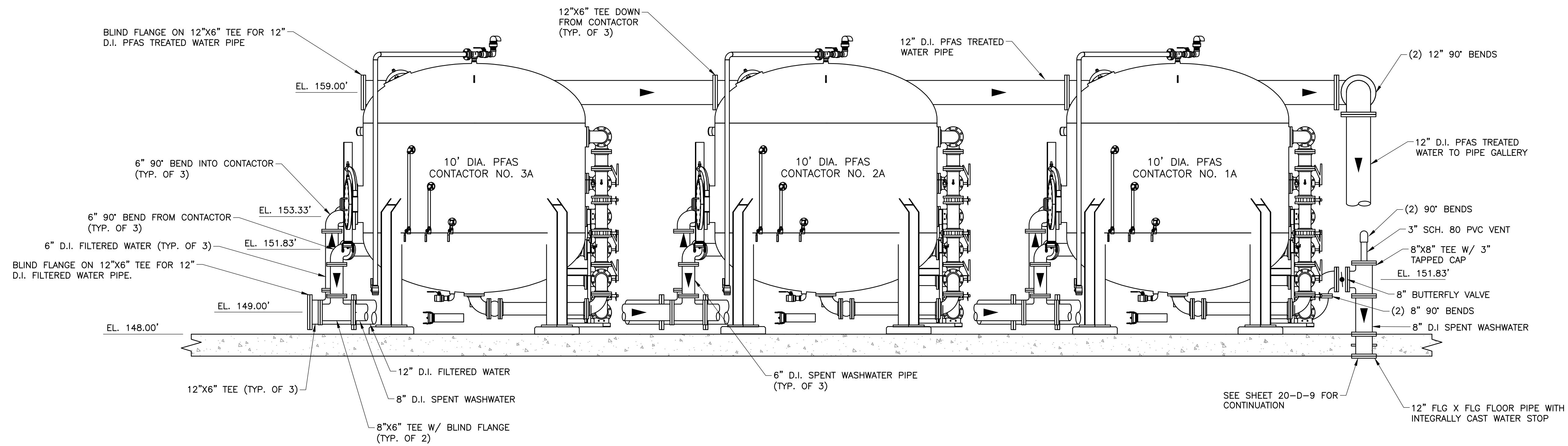
INTERIOR SECTION 2
 20-D-1
 SCALE: 1/4" = 1'-0"

Rev.	Date	Description

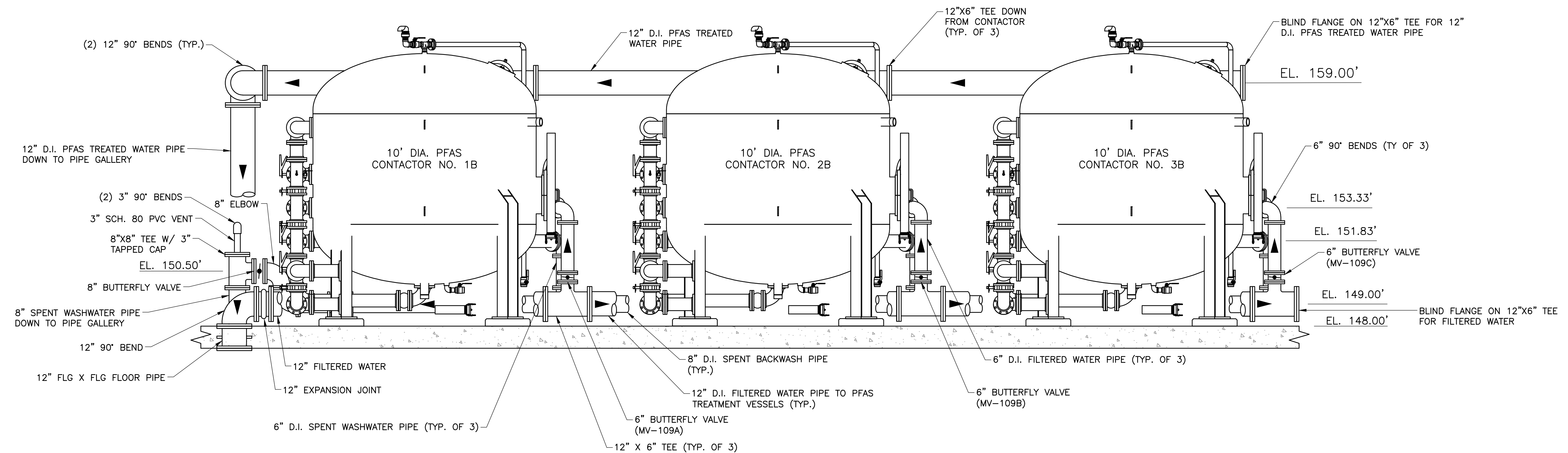


P:\Attboro\6193_Wading River WTP Design\CAD\Sheets\20-D-4.dwg 2/26/2025 4:25 PM MIBRETT

NOTES:
 1. REFER TO THE SMALL DIAMETER PIPING PLANS (SHEETS 20-D-11, 20-D-12, AND 20-D-13) FOR MORE INFORMATION ON SMALL PIPING NOT SHOWN ON THESE SECTION VIEWS.



INTERIOR SECTION 5
 20-D-1
 SCALE: 3/8" = 1'-0"



INTERIOR SECTION 6
 20-D-1
 SCALE: 3/8" = 1'-0"

ATTLEBORO WATER DEPT.
 ATTLEBORO, MA
 WADING RIVER
 WATER TREATMENT PLANT

PROCESS
 SECTION VIEWS III

Rev.	Date	Description

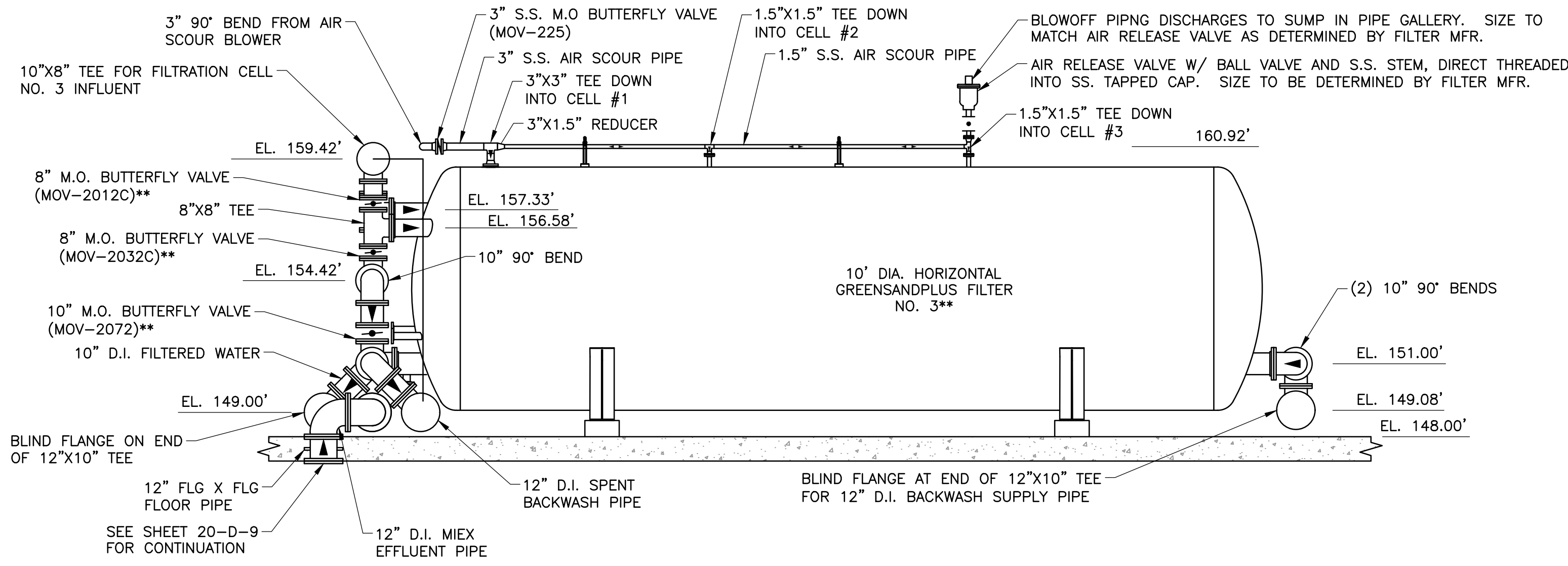


T&H NO.: 6193
 DATE: FEBRUARY 2025
 SCALE: AS NOTED

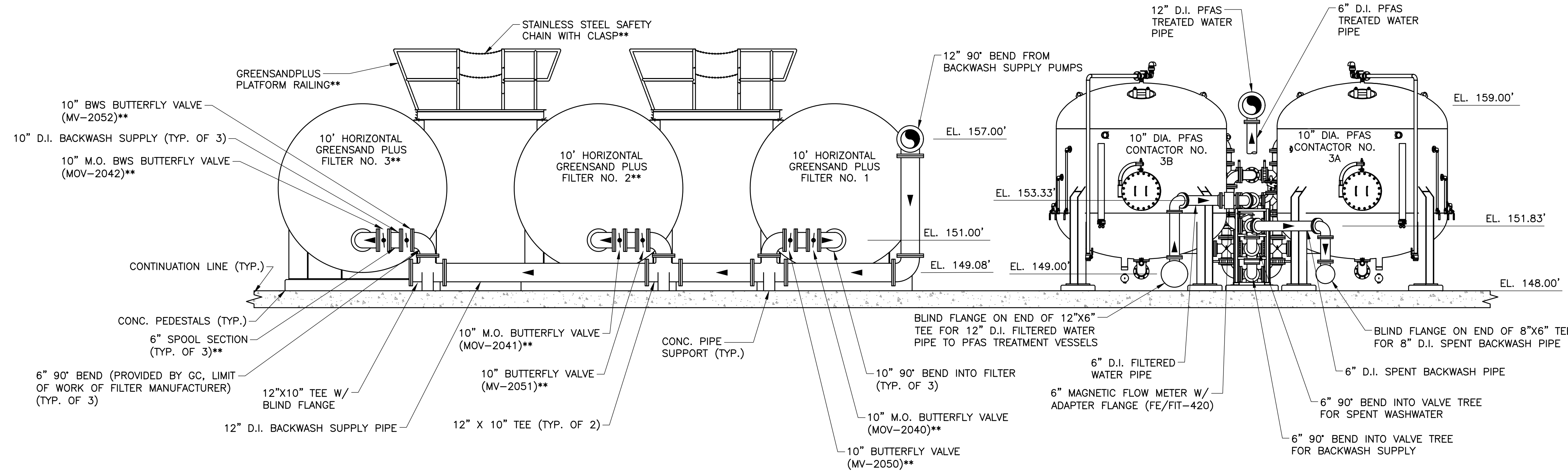
20-D-6

P:\Attleboro\6193_Wading_River_WTP_Design\CADD\Sheets\20-D-6.dwg 2/26/2025 4:26 PM MARGARELLI

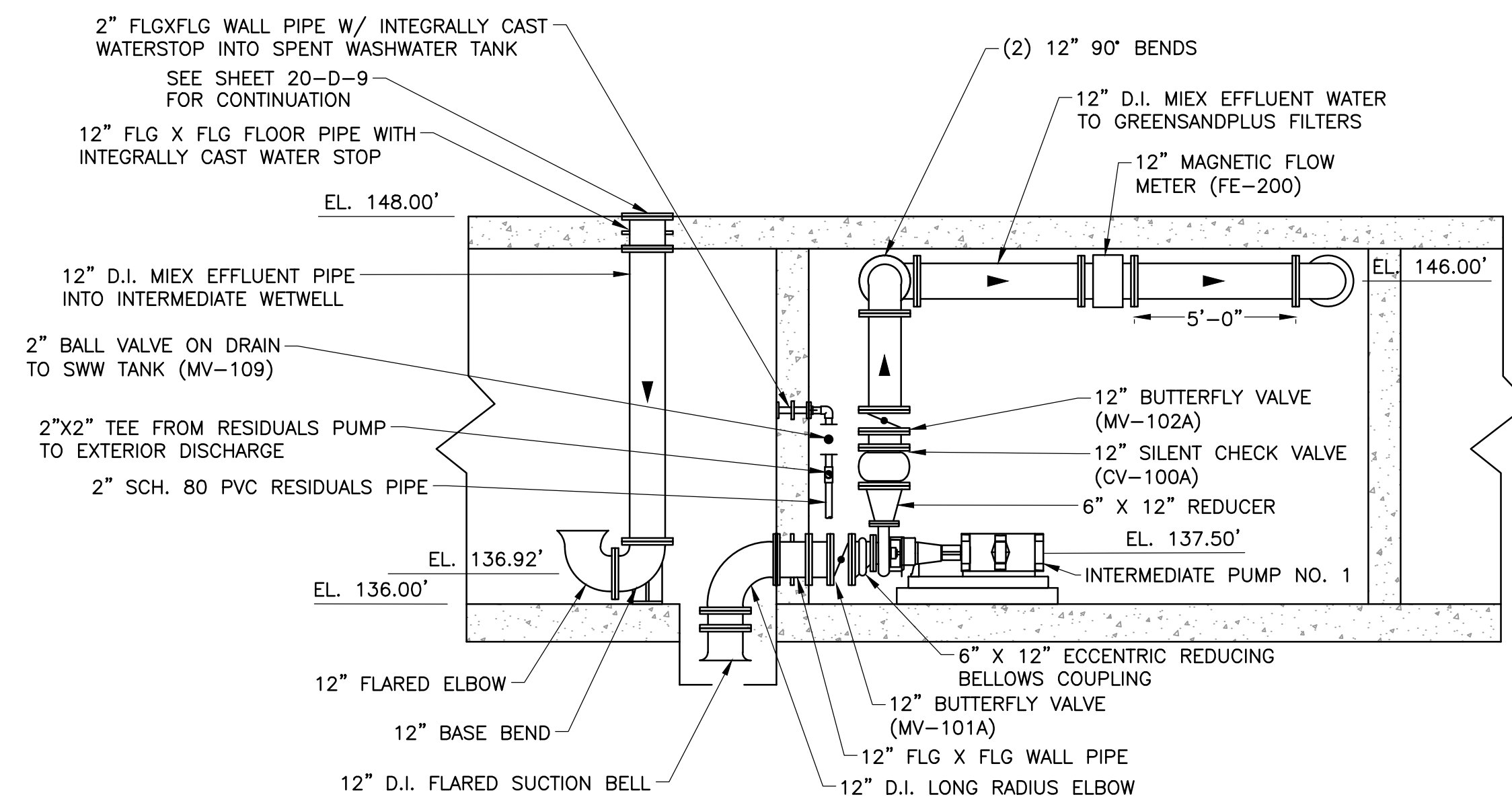
- NOTES:
- REFER TO THE SMALL DIAMETER PIPING PLANS (SHEETS 20-D-11, 20-D-12, AND 20-D-13) FOR MORE INFORMATION ON SMALL PIPING NOT SHOWN ON THESE SECTION VIEWS.
 - ITEMS DENOTED WITH ** ARE FURNISHED BY THE FILTER MANUFACTURER AND INSTALLED BY THE GENERAL CONTRACTOR. REFER TO SPECIFICATION SECTION 11240 FOR COMPLETE LIST OF ITEMS FURNISHED BY THE FILTER MANUFACTURER.



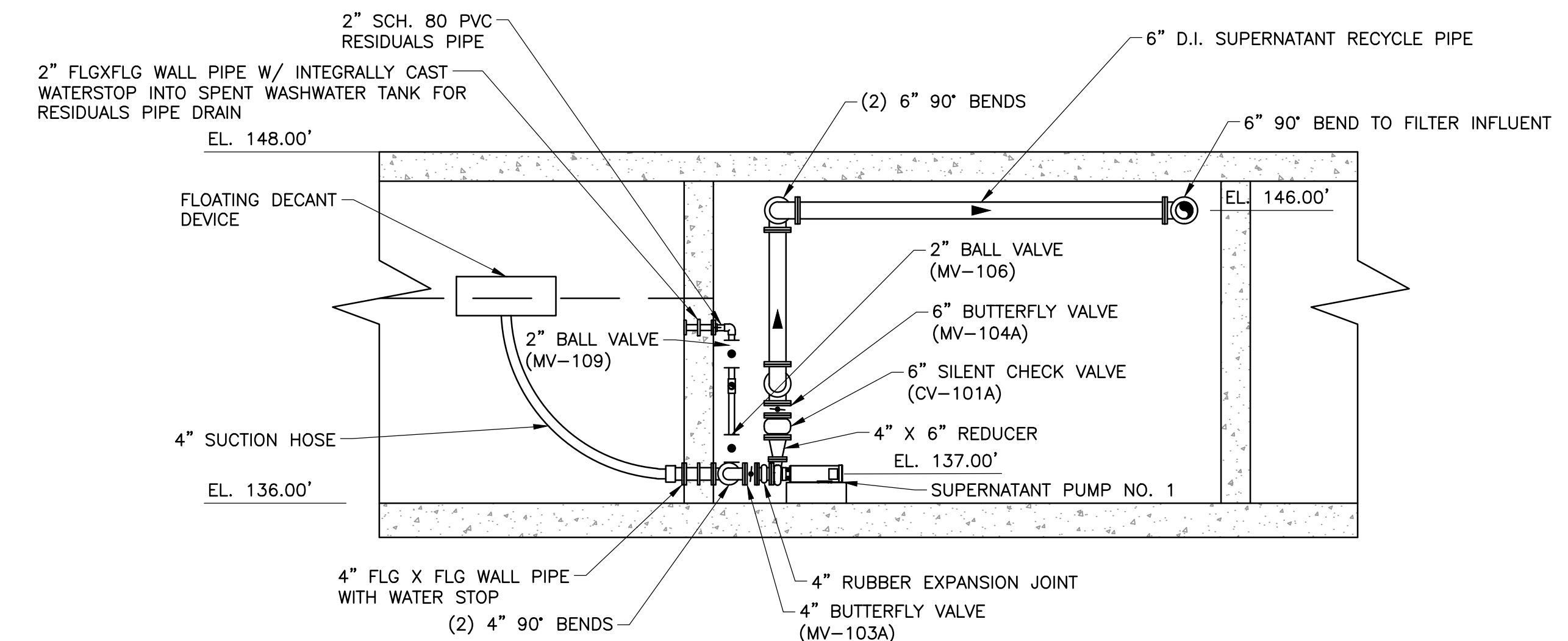
INTERIOR SECTION 7
 SCALE: 1/4" = 1'-0"



INTERIOR SECTION 8
 SCALE: 1/4" = 1'-0"



INTERIOR SECTION 9
 SCALE: 1/4" = 1'-0"

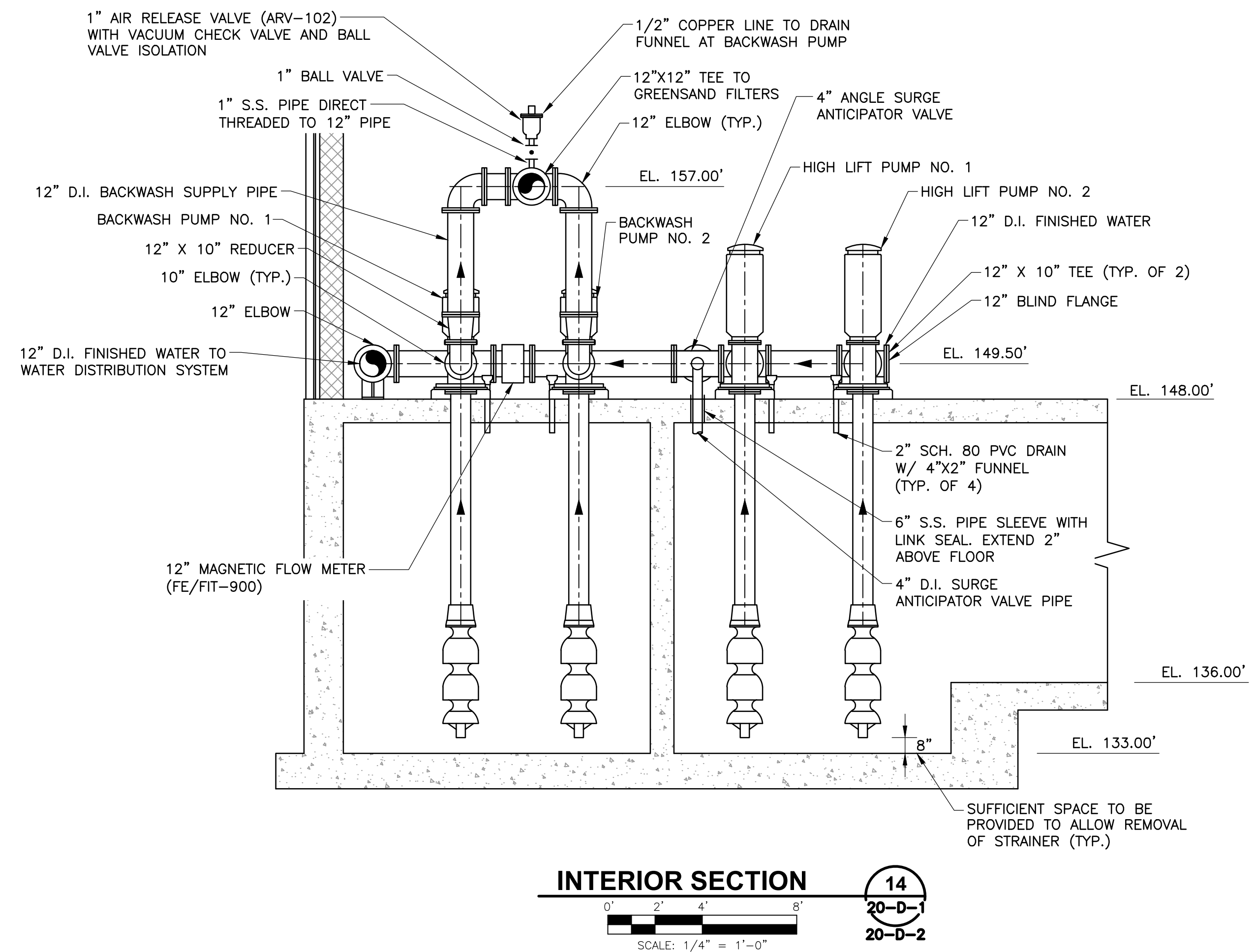
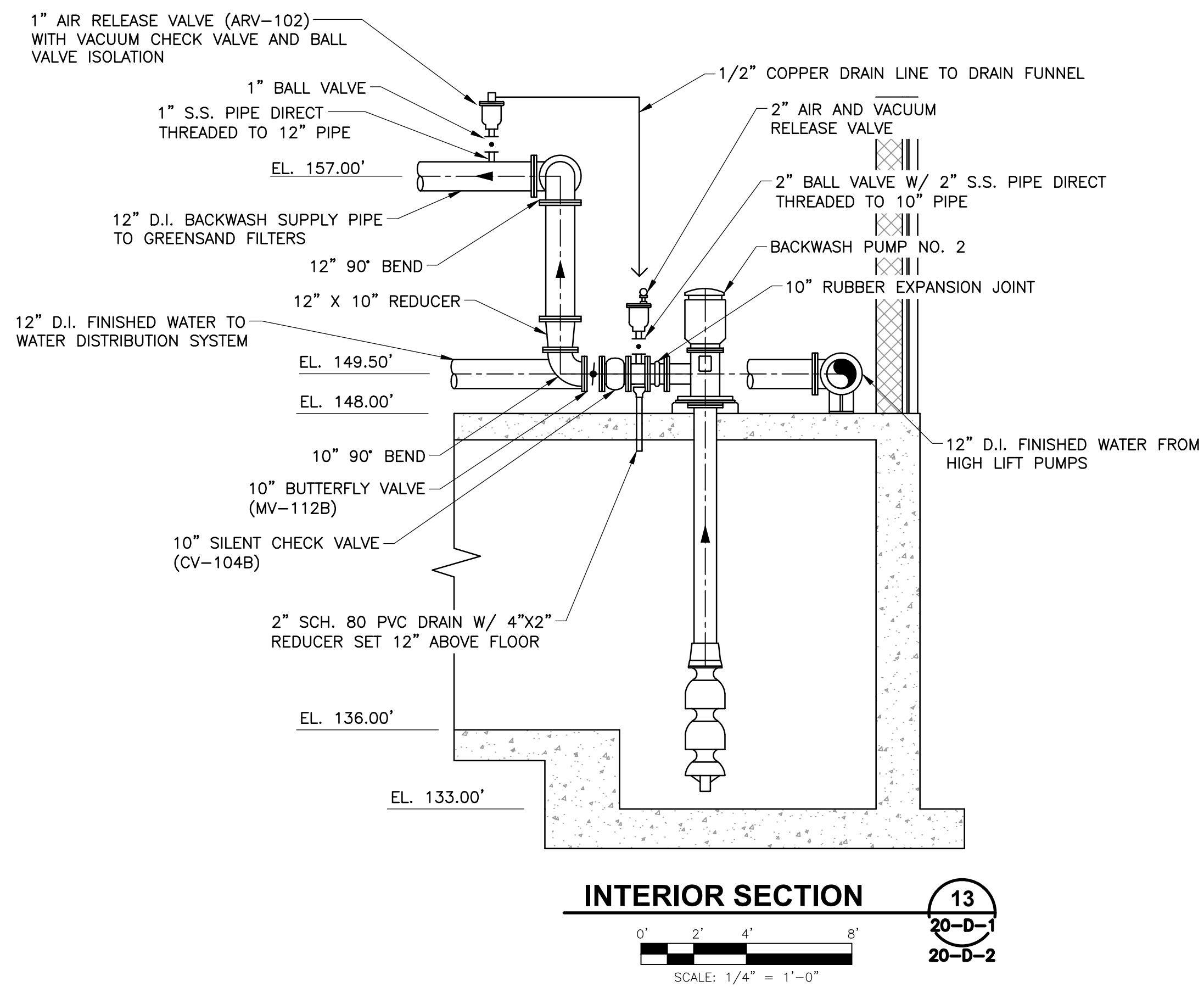
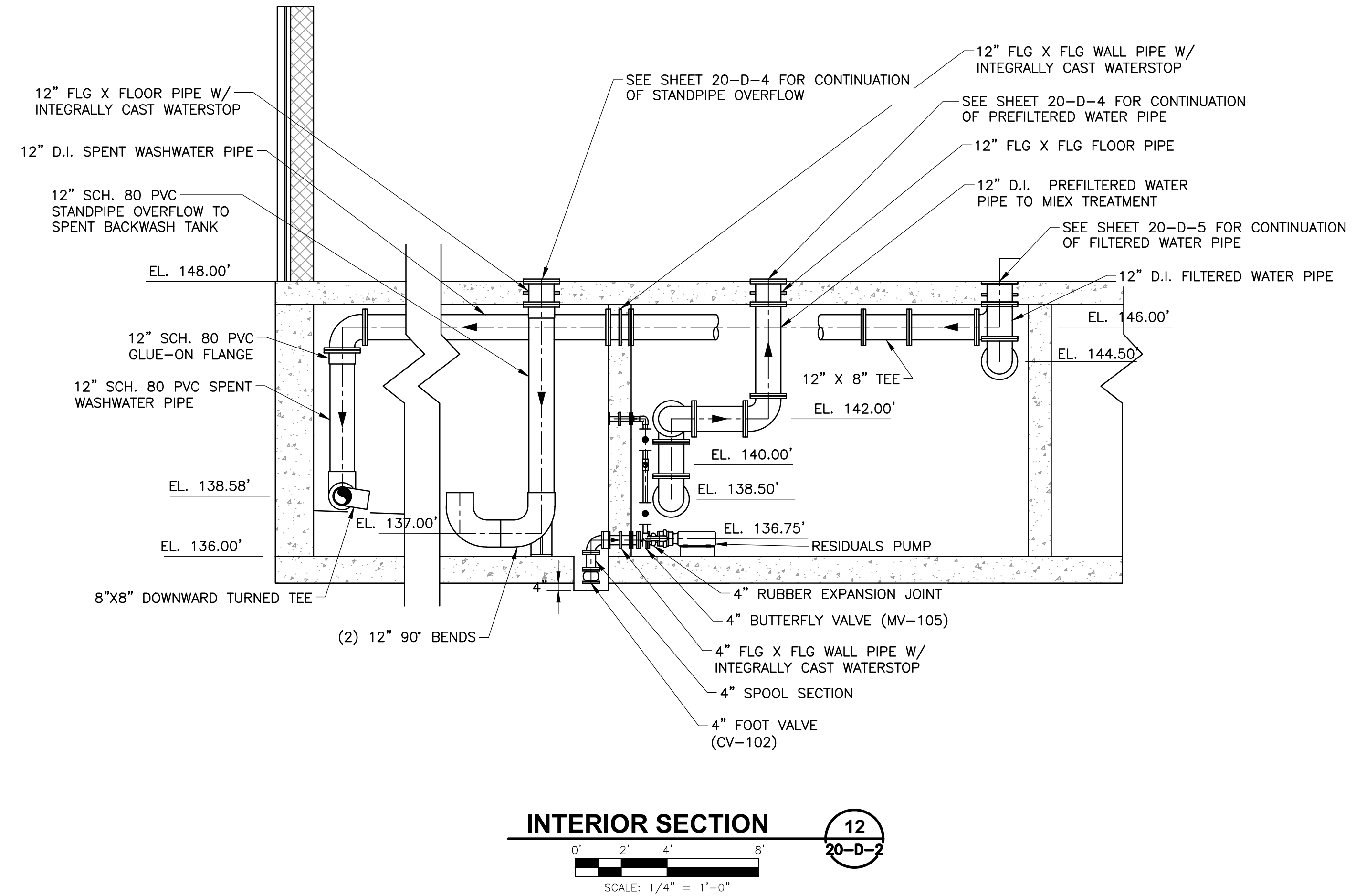
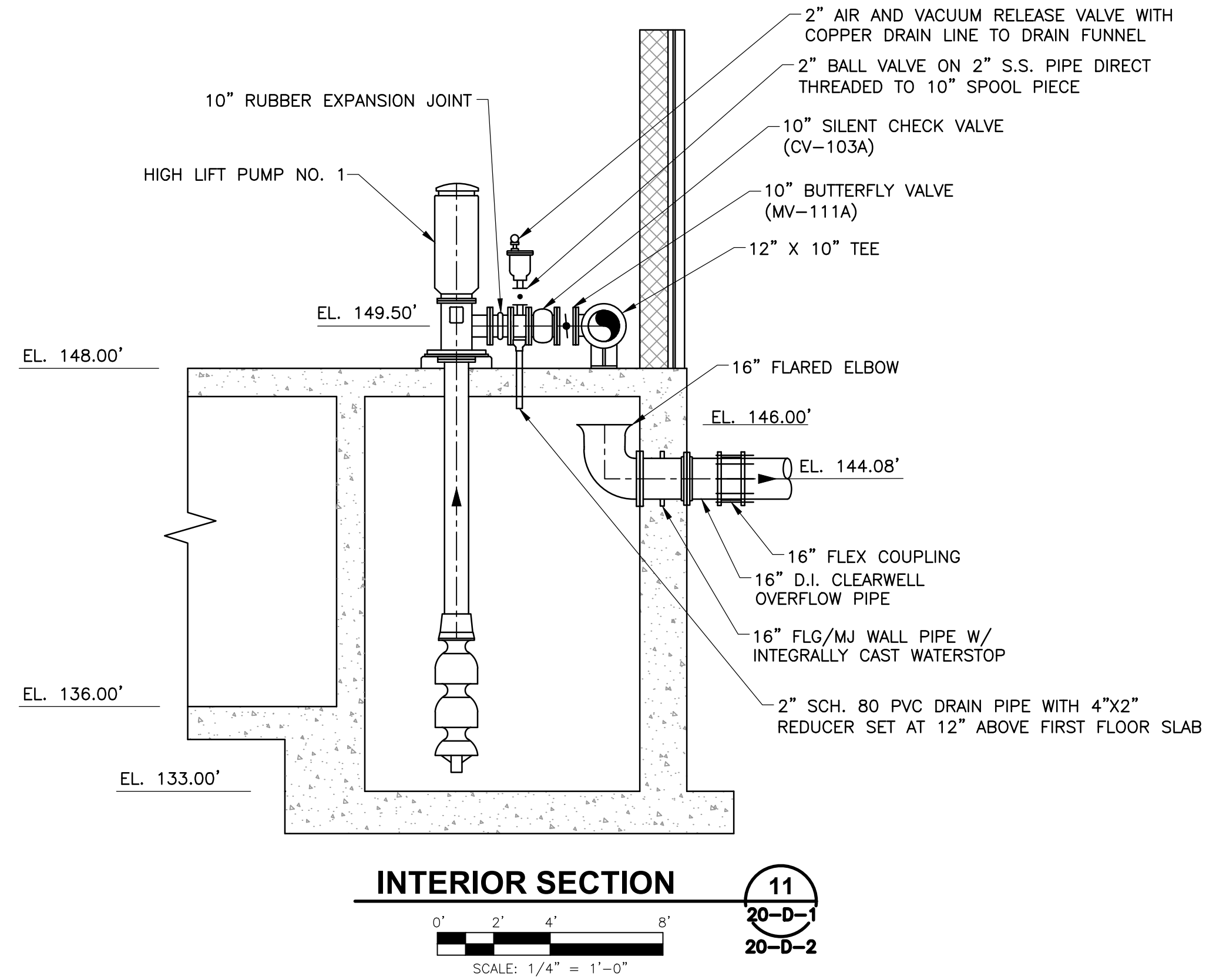


INTERIOR SECTION 10
 SCALE: 1/4" = 1'-0"

Rev.	Date	Description



NOTES:
 1. REFER TO THE SMALL DIAMETER PIPING PLANS (SHEETS 20-D-11, 20-D-12, AND 20-D-13) FOR MORE INFORMATION ON SMALL PIPING NOT SHOWN ON THESE SECTION VIEWS.



ATTLEBORO WATER DEPT.
 ATTLEBORO, MA
 WADING RIVER
 WATER TREATMENT PLANT

PROCESS
 SECTION VIEWS V

Rev.	Date	Description

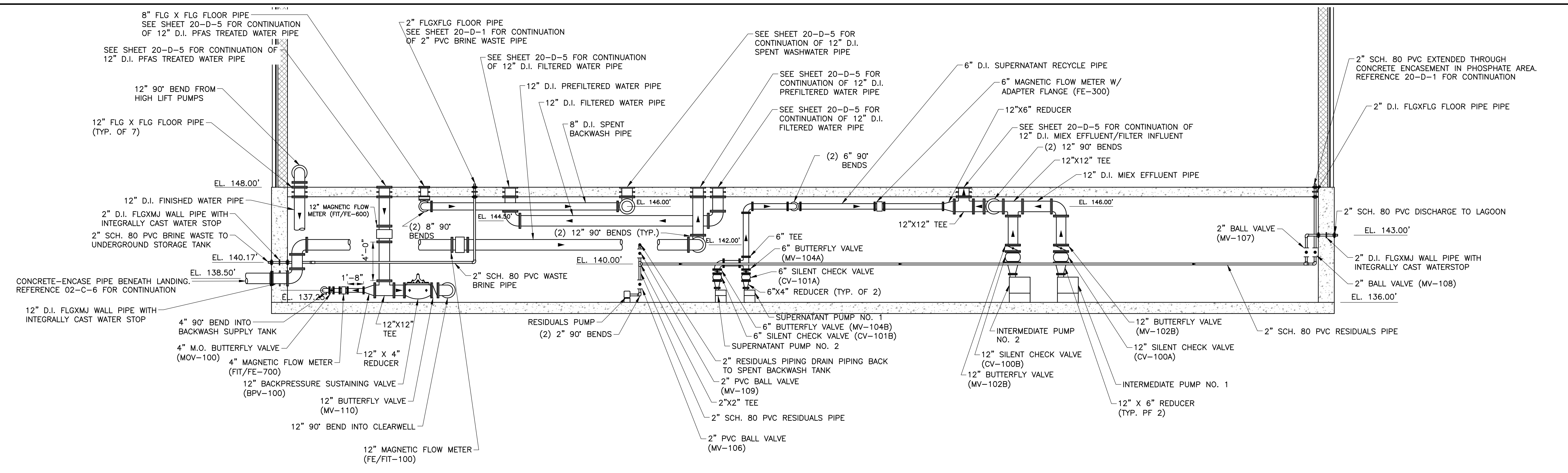
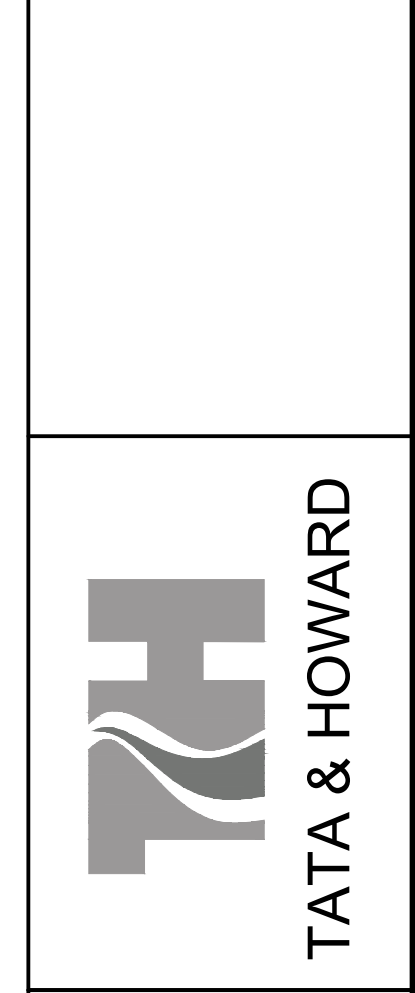
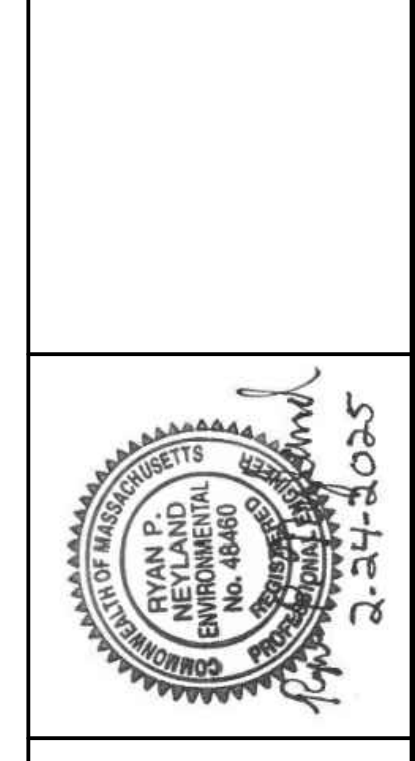


T&H NO.: 6193
 DATE: FEBRUARY 2025
 SCALE: AS NOTED

20-D-8

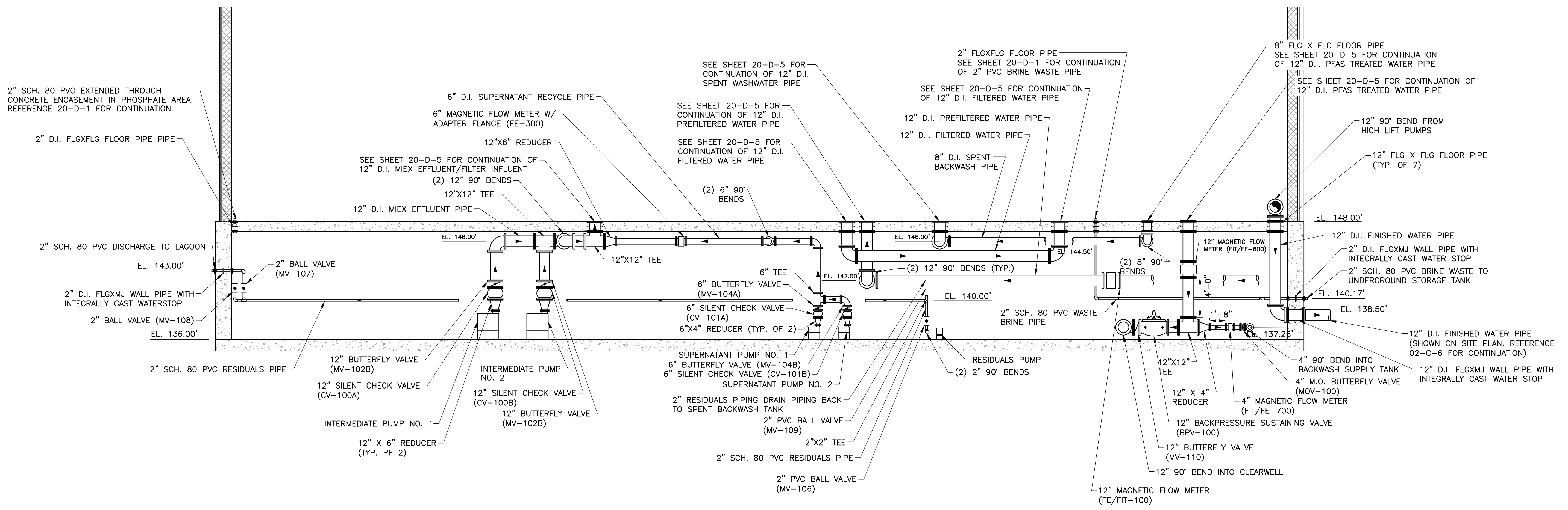
P:\Attleboro\6193_Wading River WTP Design\CADD\Sheets\20-D-8.dwg 2/26/2025 4:26 PM AFORNA

Rev.	Date	Description



INTERIOR SECTION 15
20-D-2
SCALE: 3/16" = 1'-0"

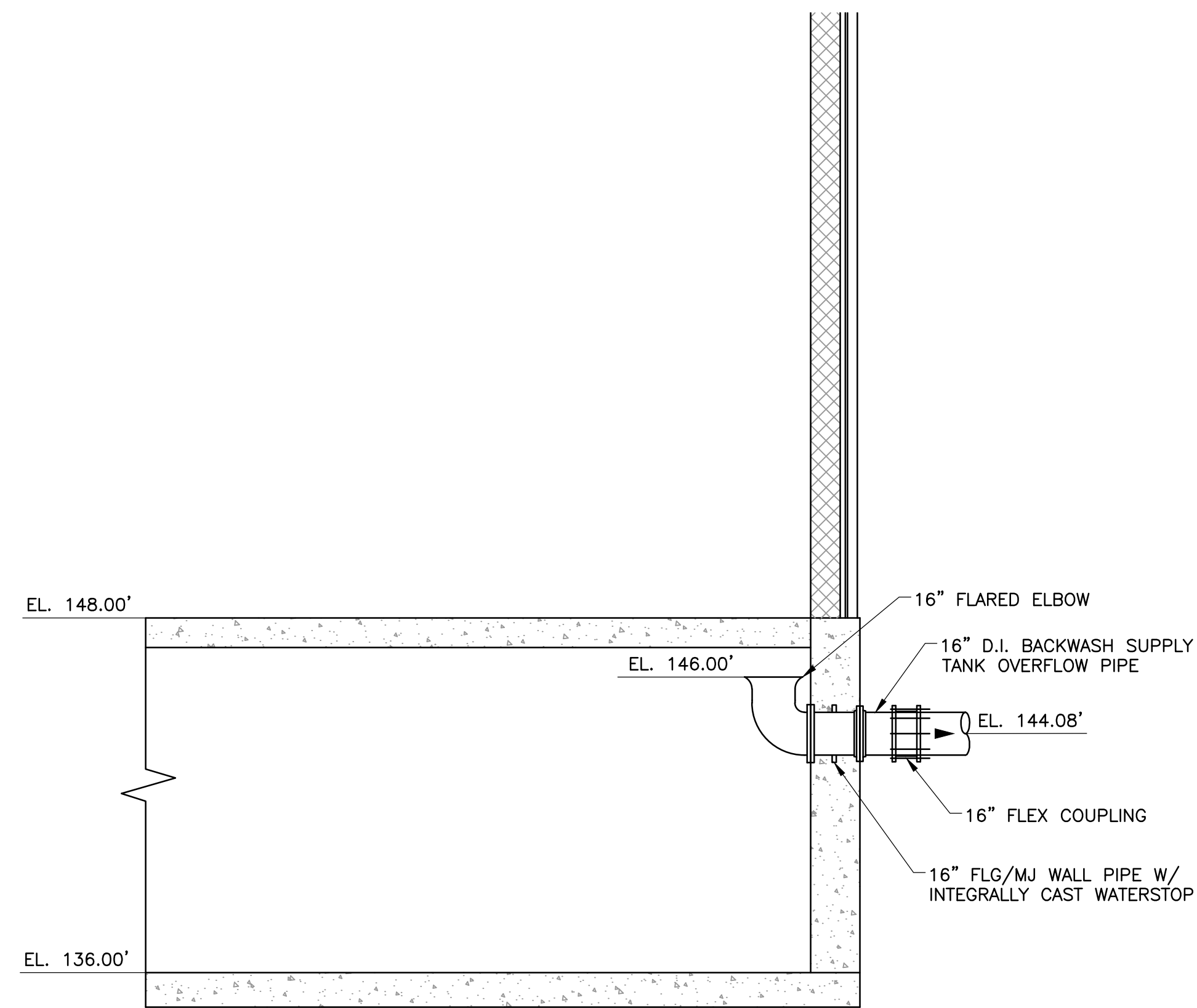
NOTES:
1. REFER TO THE SMALL DIAMETER PIPING PLANS (SHEETS 20-D-11, 20-D-12, AND 20-D-13) FOR MORE INFORMATION ON SMALL PIPING NOT SHOWN ON THESE SECTION VIEWS.



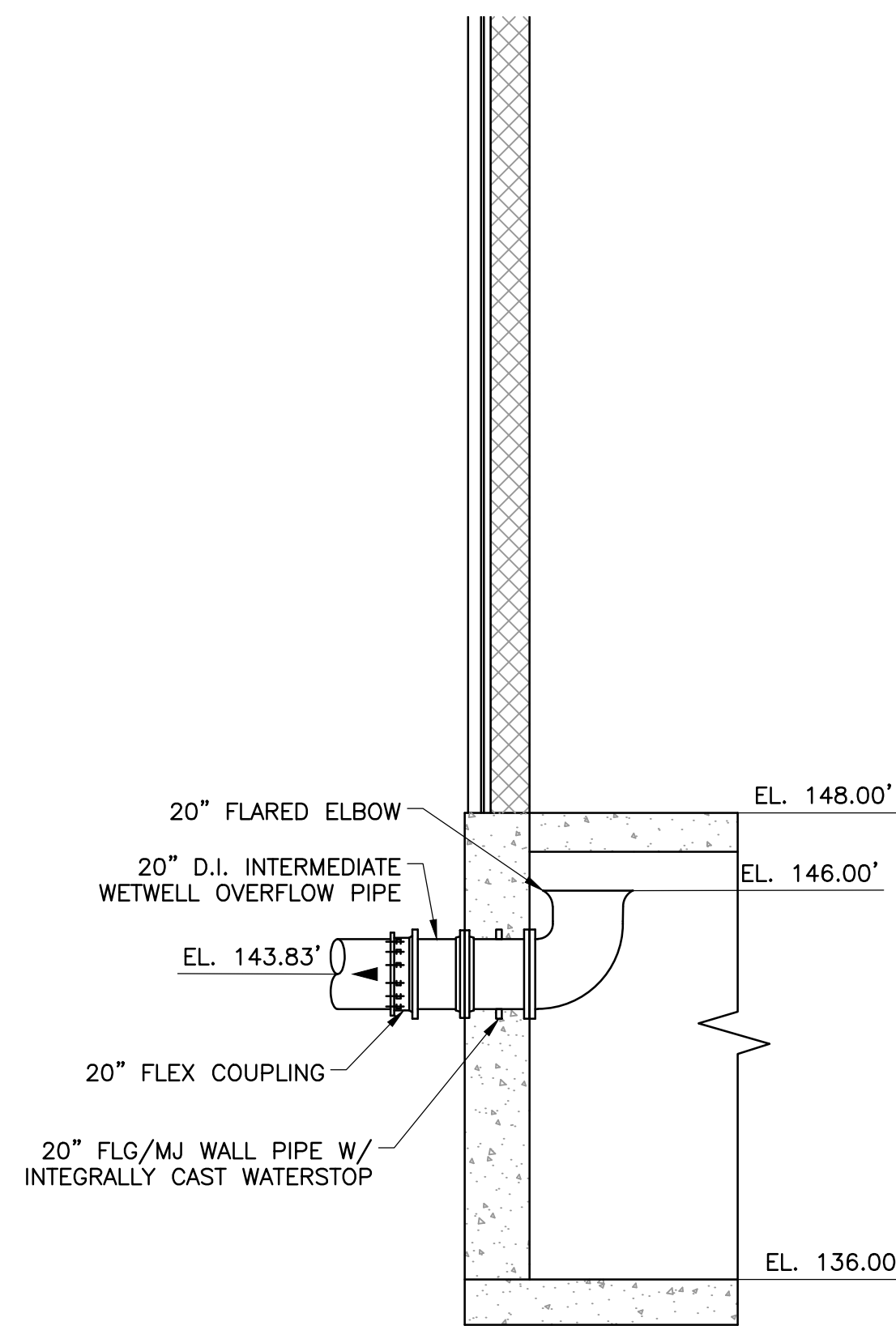
INTERIOR SECTION 16
20-D-2
SCALE: 3/16" = 1'-0"

P:\Attboro\6193_Wading River_WTP_Design\CADD\Sheets\20-D-9.dwg 2/26/2025 4:25 PM MTBIBETS

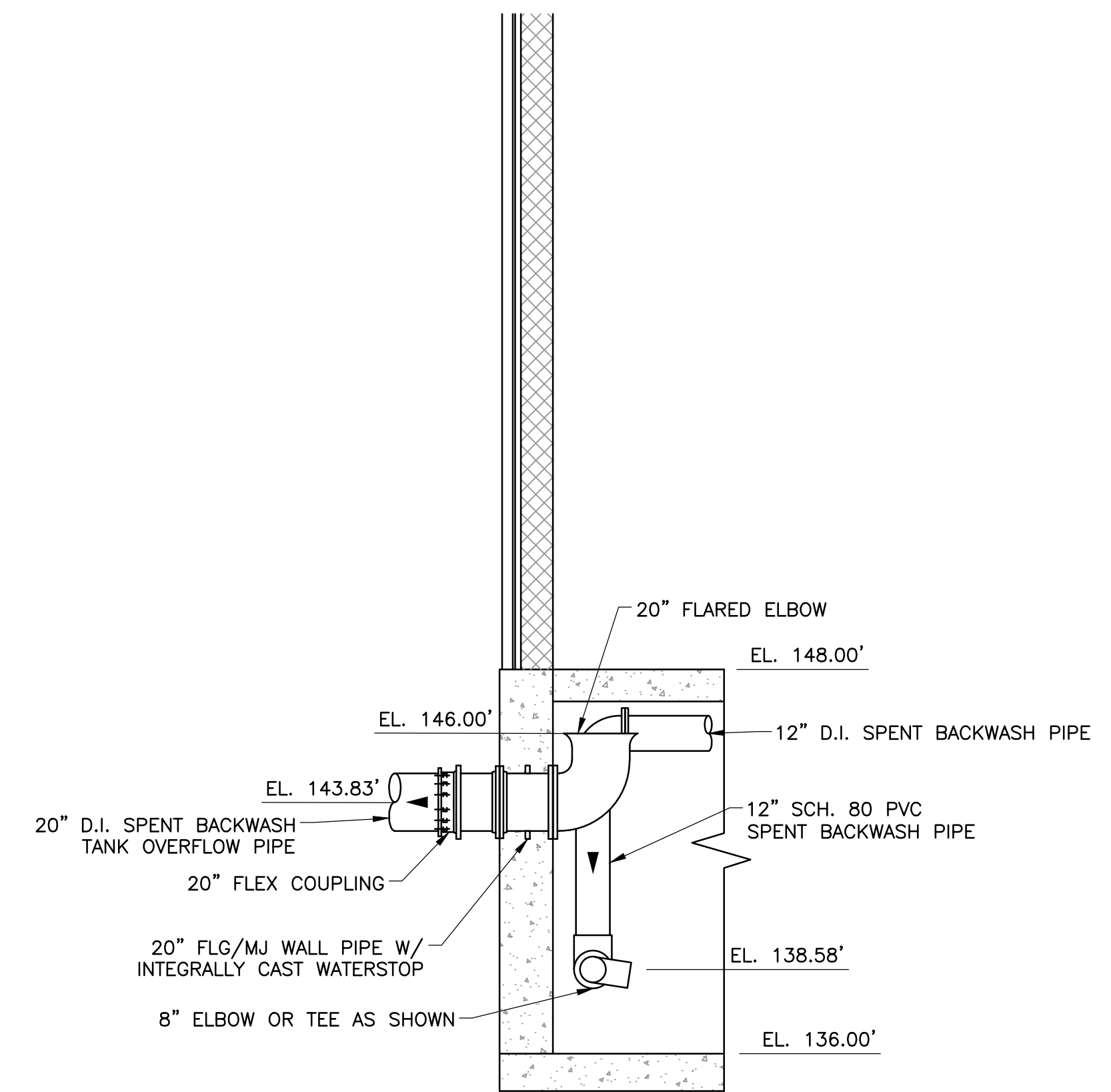
NOTES:
 1. REFER TO THE SMALL DIAMETER PIPING PLANS (SHEETS 20-D-11, 20-D-12, AND 20-D-13) FOR MORE INFORMATION ON SMALL PIPING NOT SHOWN ON THESE SECTION VIEWS.



INTERIOR SECTION 17
 20-D-2
 SCALE: 1/4" = 1'-0"



INTERIOR SECTION 18
 20-D-2
 SCALE: 1/4" = 1'-0"



INTERIOR SECTION 19
 20-D-2
 SCALE: 1/4" = 1'-0"

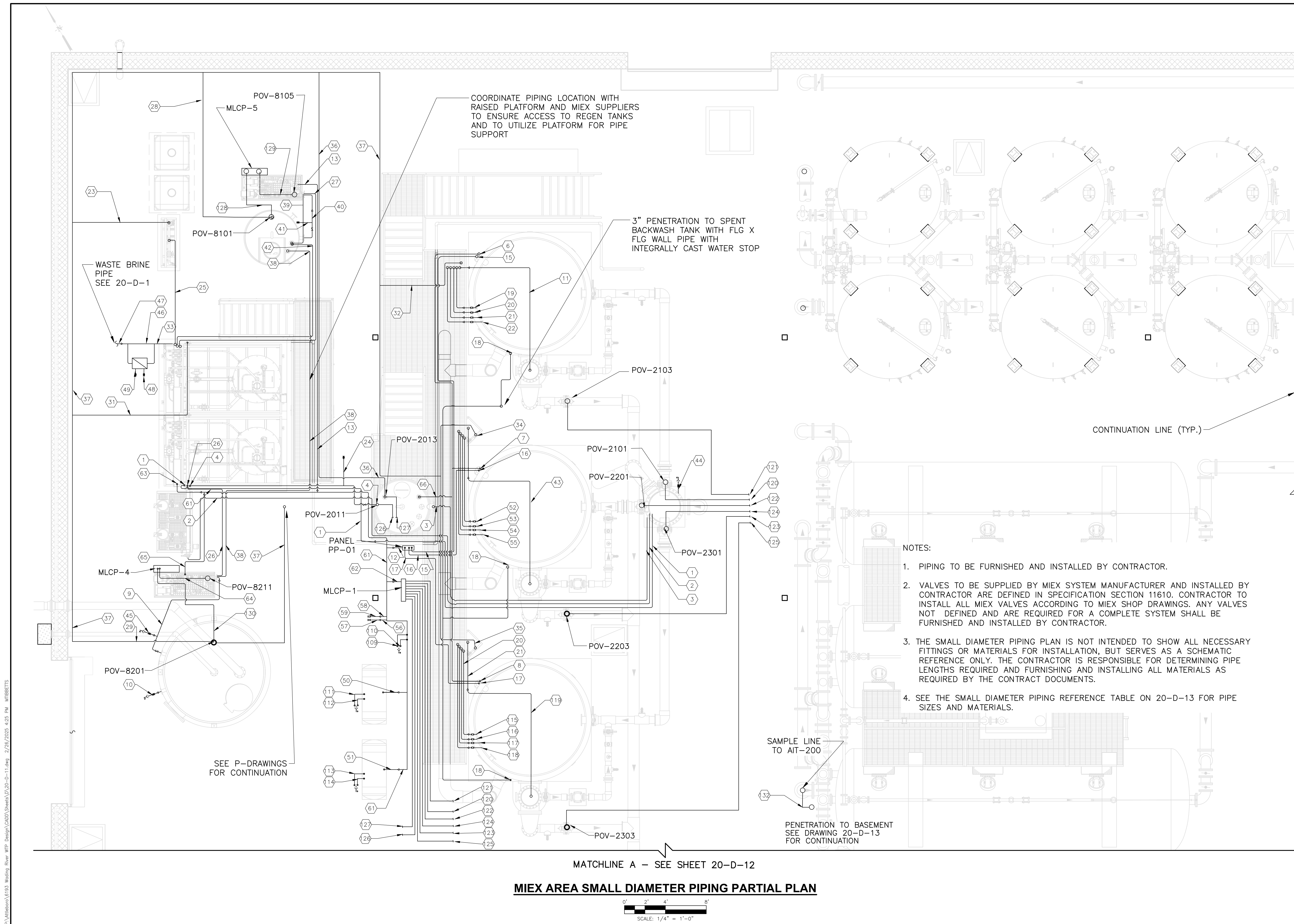
ATTLEBORO WATER DEPT.
 ATTBORO, MA
 WADING RIVER
 WATER TREATMENT PLANT

PROCESS
 SECTION VIEWS VII

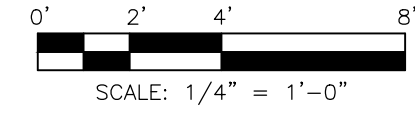
Rev.	Date	Description



T&H NO.: 6193
 DATE: FEBRUARY 2025
 SCALE: AS NOTED



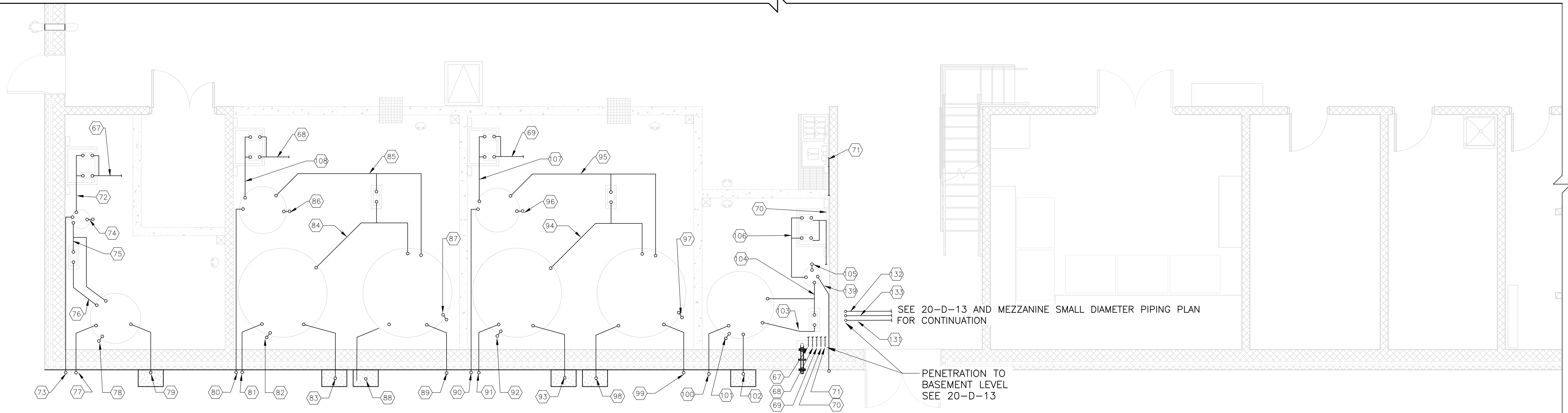
MIEX AREA SMALL DIAMETER PIPING PARTIAL PLAN



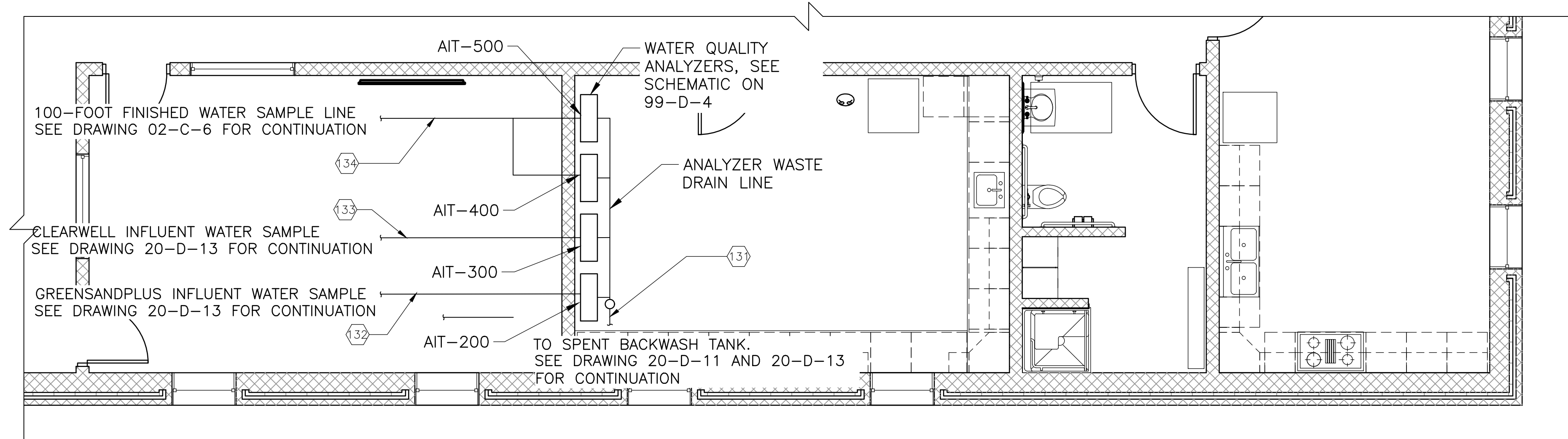
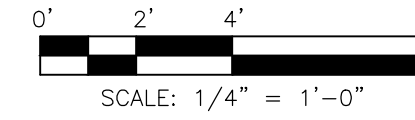
ATTLEBORO WATER DEPT. ATTLEBORO, MA	PROCESS MIEX AREA SMALL DIAMETER PIPING PARTIAL PLAN	DATE: FEBRUARY 2025
WADING RIVER WATER TREATMENT PLANT	DESCRIPTION	SCALE: AS NOTED
DESIGNED BY: RSP	DATE	
CHECKED BY: MUT/RSP		
APPROVED BY: KLG		
T&H NO.: 6193		
DATE: FEBRUARY 2025		
SCALE: AS NOTED		
20-D-11		

P:\Atleboro\6193_Wading River_WTP_Design\2000\Sheet\20-D-11.dwg 2/20/2025 4:25 PM MIBBETTS

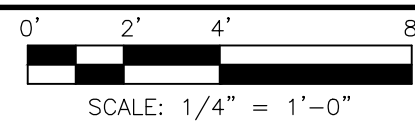
MATCHLINE A - SEE SHEET 20-D-11



CHEMICAL FEED AREA SMALL DIAMETER PIPING PLAN



MEZZANINE SMALL DIAMETER PIPING PLAN



ATTLEBORO WATER DEPT.
ATTLEBORO, MA
WADING RIVER
WATER TREATMENT PLANT

PROCESS
CHEMICAL FEED AREA
SMALL DIAMETER PIPING
PARTIAL PLAN

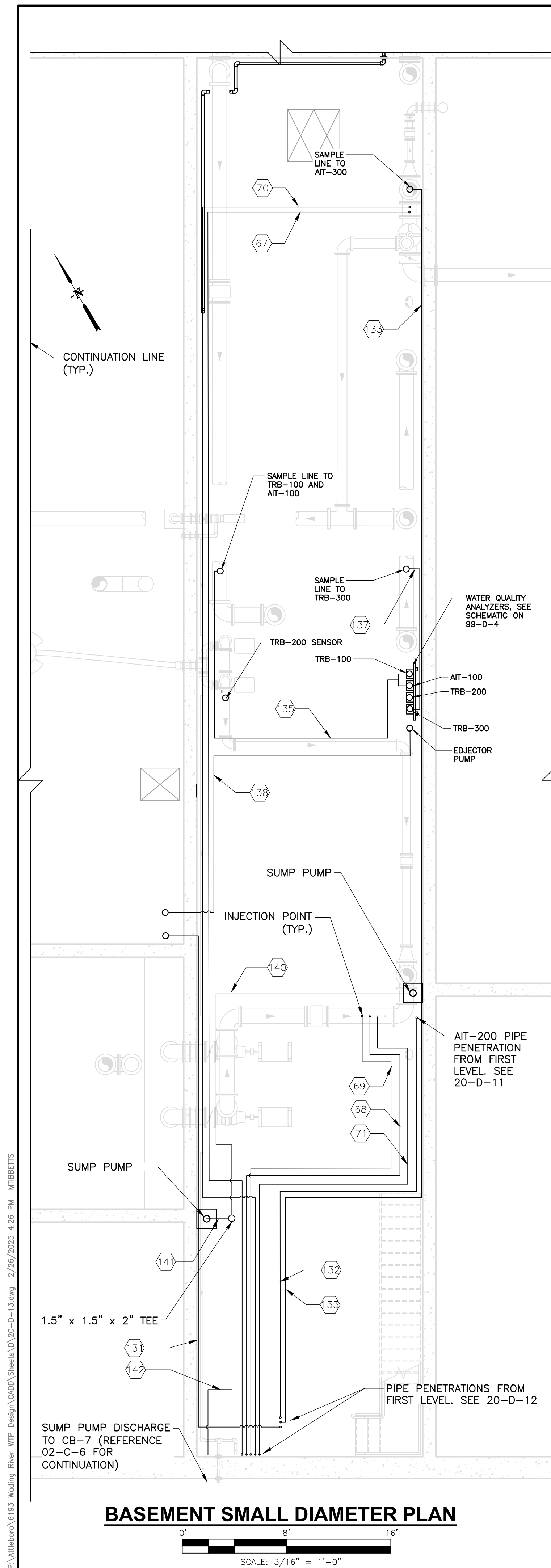
THIS DOCUMENT IS THE PROPERTY OF T&H & HOWARD, INC. AND ITS CLIENT. REPRODUCTION OR MODIFICATION WITHOUT WRITTEN CONSENT IS PROHIBITED.

Description
Date
Rev.



T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE: AS NOTED

20-D-12



SMALL DIAMETER PIPING REFERENCE TABLE							
NUMBER	PIPE DIAMETER	MATERIAL	DESCRIPTION	NUMBER	PIPE DIAMETER	MATERIAL	DESCRIPTION
1	2"	SCH 80 PVC	CARRIER WATER TO PREFILTERED WATER STANDPIPE	72	3/4"	SCH 80 PVC	HYDROFLUOROSILICIC ACID DAY TANK DISCHARGE
2	3"	SCH 80 PVC	FRESH RESIN TO PREFILTERED WATER STANDPIPE	73	2"	SCH 80 PVC	HYDROFLUOROSILICIC ACID DAY TANK VENT
3	4"	SCH 80 PVC	LOADED RESIN OVERFLOW	74	2-1/2"	SCH 80 PVC	HYDROFLUOROSILICIC ACID DAY TANK OVERFLOW
4	3"	SCH 80 PVC	LOADED RESIN TO REGEN	75	1"	SCH 80 CPVC	HYDROFLUOROSILICIC ACID TRANSFER PUMP DISCHARGE
5	NOT USED	NOT USED	NOT USED	76	1"	SCH 80 CPVC	HYDROFLUOROSILICIC ACID TRANSFER PUMP SUCTION
6	4"	SCH 80 PVC	LOADED RESIN FROM MIX CONTACTOR 1	77	4"	SCH 80 PVC	HYDROFLUOROSILICIC ACID BULK TANK VENT
7	4"	SCH 80 PVC	LOADED RESIN FROM MIX CONTACTOR 2	78	3"	SCH 80 PVC	HYDROFLUOROSILICIC ACID BULK TANK OVERFLOW
8	4"	SCH 80 PVC	LOADED RESIN FROM MIX CONTACTOR 3	79	2"	SCH 80 CPVC	HYDROFLUOROSILICIC ACID BULK TANK FILL
9	3"	SCH 80 PVC	BRINE FROM SATURATOR	80	2"	SCH 80 PVC	NaOCI DAY TANK VENT
10	3"	SCH 80 PVC	SATURATED SALT TANK DRAIN	81	4"	SCH 80 PVC	NaOCI BULK TANK No. 2 VENT
11	1"	SCH 80 PVC	SAMPLE SINK RETURN TO CONTACTOR 1	82	3"	SCH 80 PVC	NaOCI BULK TANK No. 2 OVERFLOW
12	1/2"	316 STAINLESS STEEL	AIR TO PP-01 PANEL	83	2"	SCH 80 CPVC	NaOCI BULK TANK No. 2 FILL
13	1/2"	316 STAINLESS STEEL	COMPRESSED AIR TO RECYCLE BRINE SKID	84	2"	SCH 80 CPVC	NaOCI TRANSFER PUMP SUCTION
14	1/4"	316 STAINLESS STEEL	RIQ2 PANEL VALVES	85	2"	SCH 80 CPVC	NaOCI TRANSFER PUMP DISCHARGE
15	1/2"	316 STAINLESS STEEL	AIR TO MIX CONTACTOR 1 AIRLIFT	86	2-1/2"	SCH 80 PVC	NaOCI DAY TANK OVERFLOW
16	1/2"	316 STAINLESS STEEL	AIR TO MIX CONTACTOR 2 AIRLIFT	87	3"	SCH 80 PVC	NaOCI BULK TANK No. 1 OVERFLOW
17	1/2"	316 STAINLESS STEEL	AIR TO MIX CONTACTOR 3 AIRLIFT	88	2"	SCH 80 CPVC	NaOCI BULK TANK No. 1 FILL
18	3"	SCH 80 PVC	MIX CONTACTOR DRAINS	89	4"	SCH 80 PVC	NaOCI BULK TANK No. 1 VENT
19	3/4"	SCH 80 PVC	CONTACTOR 1 - LOW-LOW SAMPLE TO SINK	90	2"	SCH 80 PVC	NaOH DAY TANK VENT
20	3/4"	SCH 80 PVC	CONTACTOR 1 - LOW SAMPLE TO SINK	91	4"	SCH 80 PVC	NaOH BULK TANK No. 2 VENT
21	3/4"	SCH 80 PVC	CONTACTOR 1 - HIGH SAMPLE TO SINK	92	3"	SCH 80 PVC	NaOH BULK TANK No. 2 OVERFLOW
22	3/4"	SCH 80 PVC	CONTACTOR 1 - HIGH-HIGH SAMPLE TO SINK	93	2"	SCH 80 CPVC	NaOH BULK TANK No. 2 FILL
23	2"	SCH 80 PVC	SERVICE WATER TO VIRGIN RESIN SKID	94	2"	SCH 80 CPVC	NaOH TRANSFER PUMP SUCTION
24	2"	SCH 80 PVC	VALVE FROM LOADED RESIN TANK	95	2"	SCH 80 CPVC	NaOH TRANSFER PUMP DISCHARGE
25	2"	SCH 80 PVC	VIRGIN RESIN TO REGEN TANKS	96	2-1/2"	SCH 80 PVC	NaOH DAY TANK OVERFLOW
26	2"	SCH 80 PVC	SATURATED BRINE TO REGEN TANKS	97	3"	SCH 80 PVC	NaOH BULK TANK No. 1 OVERFLOW
27	2"	SCH 80 PVC	RECYCLED BRINE TO REGEN TANKS	98	2"	SCH 80 CPVC	NaOH BULK TANK No. 1 FILL
28	2"	SCH 80 PVC	SERVICE WATER TO RECYCLE BRINE TANK	99	4"	SCH 80 PVC	NaOH BULK TANK No. 1 VENT
29	2"	SCH 80 PVC	SERVICE WATER TO SATURATOR	100	4"	SCH 80 PVC	PHOSPHATE BULK TANK VENT
30	NOT USED	NOT USED	NOT USED	101	3"	SCH 80 PVC	PHOSPHATE BULK TANK OVERFLOW
31	2"	SCH 80 PVC	SERVICE WATER TO REGEN TANKS	102	2"	SCH 80 CPVC	PHOSPHATE BULK TANK FILL
32	1"	SCH 80 PVC	SERVICE WATER TO SAMPLE SINK 1	103	1"	SCH 80 CPVC	PHOSPHATE TRANSFER PUMP SUCTION
33	2"	SCH 80 PVC	WASTE BRINE TO BE FILTERED	104	1"	SCH 80 CPVC	PHOSPHATE TRANSFER PUMP DISCHARGE
34	1"	SCH 80 PVC	SERVICE WATER TO SAMPLE SINK 2	105	2"	SCH 80 PVC	PHOSPHATE DAY TANK OVERFLOW
35	1"	SCH 80 PVC	SERVICE WATER TO SAMPLE SINK 3	106	3/4"	SCH 80 PVC	PHOSPHATE METERING PUMP SUCTION
36	2"	SCH 80 PVC	SERVICE WATER TO LOADED RESIN TANK	107	3/4"	SCH 80 PVC	NaOH METERING PUMP SUCTION
37	2"	SCH 80 PVC	SERVICE WATER MAIN	108	3/4"	SCH 80 PVC	NaOCI METERING PUMP SUCTION
38	2"	SCH 80 PVC	SATURATED BRINE TO RECYCLE BRINE TANK	109	1/4"	316 STAINLESS STEEL	PARTICLE FILTER DRAIN
39	2"	SCH 80 PVC	RECYCLED BRINE RECIRCULATION TO RECYCLE TANK	110	1/4"	316 STAINLESS STEEL	COALESCING FILTER DRAIN
40	3"	SCH 80 PVC	RECYCLED BRINE TO PUMP SKID SUCTION	111	1/4"	316 STAINLESS STEEL	COMPRESSOR No. 1 MOISTURE TRAP DRAIN
41	1"	SCH 80 PVC	RECYCLE BRINE PUMP SKID DRAIN	112	1/4"	316 STAINLESS STEEL	COMPRESSOR No. 1 AC DRAIN
42	2"	SCH 80 PVC	REGEN BRINE TO BRINE RECYCLE TANK	113	1/4"	316 STAINLESS STEEL	COMPRESSOR No. 2 MOISTURE TRAP DRAIN
43	1"	SCH 80 PVC	SAMPLE SINK RETURN TO CONTACTOR 2	114	1/4"	316 STAINLESS STEEL	COMPRESSOR No. 2 AC DRAIN
44	2"	SCH 80 PVC	FILTERED WATER STANDPIPE DRAIN	115	3/4"	SCH 80 PVC	CONTACTOR 3- LOW-LOW SAMPLE TO SINK
45	1"	SCH 80 PVC	SATURATED BRINE DRAIN	116	3/4"	SCH 80 PVC	CONTACTOR 3 - LOW SAMPLE TO SINK
46	2"	SCH 80 PVC	WASTE BRINE TO BE FILTERED	117	3/4"	SCH 80 PVC	CONTACTOR 3 - HIGH SAMPLE TO SINK
47	2"	SCH 80 PVC	FILTERED WASTE BRINE	118	3/4"	SCH 80 PVC	CONTACTOR 3 - HIGH-HIGH SAMPLE TO SINK
48	1/2"	SCH 80 PVC	WASTE BRINE DRAIN	119	1"	SCH 80 PVC	SAMPLE SINK RETURN TO CONTACTOR 2
49	1/4"	SCH 80 PVC	WASTE BRINE VENT	120	1/4"	POLYPROPYLENE AIR TUBING	PNEUMATIC LINE TO V2101
50	3/4"	316 STAINLESS STEEL	AIR DISCHARGE FROM COMPRESSOR 1	121	1/4"	POLYPROPYLENE AIR TUBING	PNEUMATIC LINE TO V2103
51	3/4"	316 STAINLESS STEEL	AIR DISCHARGE FROM COMPRESSOR 2	122	1/4"	POLYPROPYLENE AIR TUBING	PNEUMATIC LINE TO V2201
52	3/4"	SCH 80 PVC	CONTACTOR 2 - LOW-LOW SAMPLE TO SINK	123	1/4"	POLYPROPYLENE AIR TUBING	PNEUMATIC LINE TO V2203
53	3/4"	SCH 80 PVC	CONTACTOR 2 - LOW SAMPLE TO SINK	124	1/4"	POLYPROPYLENE AIR TUBING	PNEUMATIC LINE TO V2301
54	3/4"	SCH 80 PVC	CONTACTOR 2 - HIGH SAMPLE TO SINK	125	1/4"	POLYPROPYLENE AIR TUBING	PNEUMATIC LINE TO V2303
55	3/4"	SCH 80 PVC	CONTACTOR 2- HIGH-HIGH SAMPLE TO SINK	126	1/4"	POLYPROPYLENE AIR TUBING	PNEUMATIC LINE TO V2011
56	1"	316 STAINLESS STEEL	MIX COMPRESSOR SYSTEM BLEED	127	1/4"	POLYPROPYLENE AIR TUBING	PNEUMATIC LINE TO V2013
57	1/2"	316 STAINLESS STEEL	MIX COMPRESSOR SYSTEM BLEED	128	1/4"	POLYPROPYLENE AIR TUBING	PNEUMATIC LINE TO V8101
58	1"	316 STAINLESS STEEL	MIX COMPRESSOR SYSTEM PRESSURE TRANSMITTER	129	1/4"	POLYPROPYLENE AIR TUBING	PNEUMATIC LINE TO V8105
59	1/2"	316 STAINLESS STEEL	MIX COMPRESSOR SYSTEM PRESSURE TRANSMITTER	130	1/4"	POLYPROPYLENE AIR TUBING	PNEUMATIC LINE TO V8201
60	NOT USED	NOT USED	NOT USED	131	2"	SCH 80 PVC	LAB GRAVITY RETURN TO BACKWASH TANK
61	1"	316 STAINLESS STEEL	MIX COMPRESSED AIR HEADER	132	3/8"	316 STAINLESS STEEL	AIT-200 SAMPLE LINE
62	3/4"	316 STAINLESS STEEL	AIR TO MIX LOCAL CONTROL PANEL-1 (MLCP-1)	133	3/8"	316 STAINLESS STEEL	AIT-300 SAMPLE LINE
63	1/2"	316 STAINLESS STEEL	COMPRESSED AIR TO REGEN SKIDS	134	3/8"	316 STAINLESS STEEL	AIT-400 AND AIT-500 SAMPLE LINE
64	1/4"	POLYPROPYLENE AIR TUBING	PNEUMATIC LINE TO V8211	135	3/8"	316 STAINLESS STEEL	AIT-100 AND TURB-100 SAMPLE LINE
65	1/2"	316 STAINLESS STEEL	COMPRESSED AIR TO SATURATOR SKID	136	3/8"	316 STAINLESS STEEL	TURB-200 SAMPLE LINE
66	4"	SCH 80 PVC	LOADED RESIN TO LOADED RESIN TANK	137	3/8"	316 STAINLESS STEEL	TURB-300 SAMPLE LINE
67	1/2"	SCH 80 PVC	HYDROFLUOROSILICIC ACID METERING PUMP DISCHARGE	138	1"	SCH 80 PVC	EJECTOR PUMP TO BACKWASH TANK
68	1/2"	SCH 80 PVC	SODIUM HYPOCHLORITE METERING PUMP DISCHARGE	139	2"	SCH 80 CPVC	PHOSPHATE DAY TANK VENT
69	1/2"	316 STAINLESS STEEL	SODIUM HYDROXIDE METERING PUMP DISCHARGE	140	1-1/2"	SCH 80 CPVC	EAST SUMP PUMP DISCHARGE
70	1/2"	SCH 80 PVC	POLYPHOSPHATE METERING PUMP DISCHARGE	141	1-1/2"	SCH 80 CPVC	WEST SUMP PUMP DISCHARGE
71	1/2"	SCH 80 PVC	POLY-ALUMINUM CHLORIDE METERING PUMP DISCHARGE	142	2"	SCH 80 CPVC	COMBINED SUMP PUMP DISCHARGE

**ATTLEBORO WATER DEPT.
ATTLEBORO, MA**

PROCESS SMALL DIAMETER PIPING PLAN AND TABLE

WADING RIVER WATER TREATMENT PLANT

DATE: FEBRUARY 2025

SCALE: AS NOTED

T&H NO.: 6193

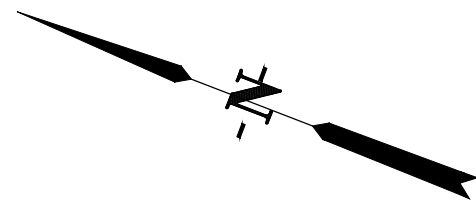
Designed By: MM

Drawn By: MJT/RSP

Checked By: KLG

TATA & HOWARD

2-24-2025

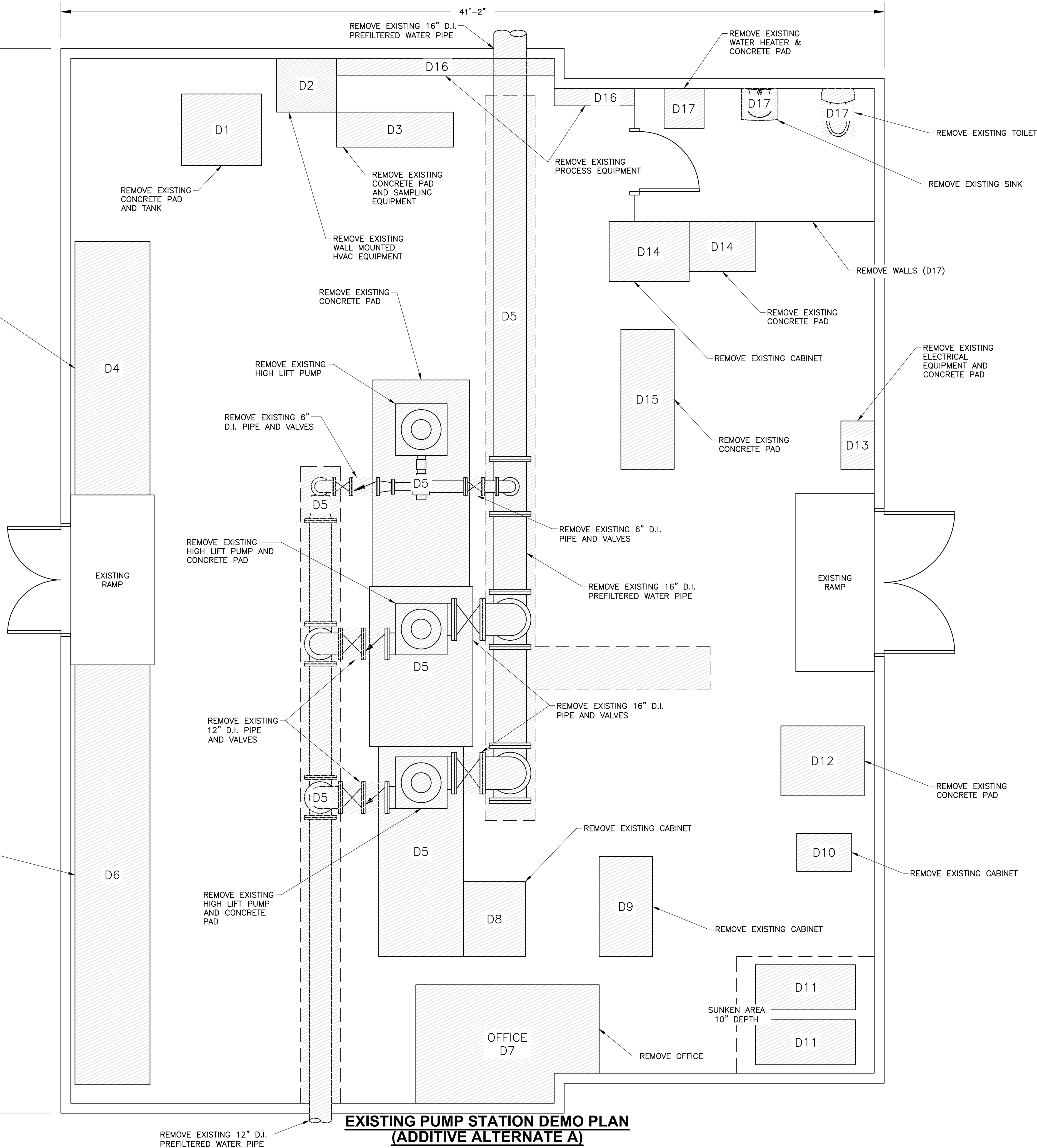


REMOVE EXISTING CONCRETE PAD AND EQUIPMENT

53'-3"

REMOVE EXISTING CONCRETE PAD AND EQUIPMENT

P:\Attleboro\6193_Wading River WTP Design\CAD\Sheets\03-D-1-Hdrns\5.dwg 2/26/2025 4:25 PM MBARRY



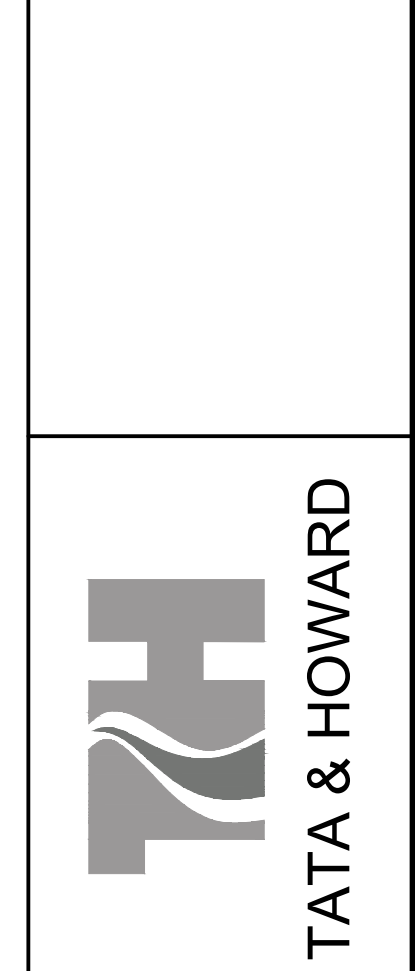
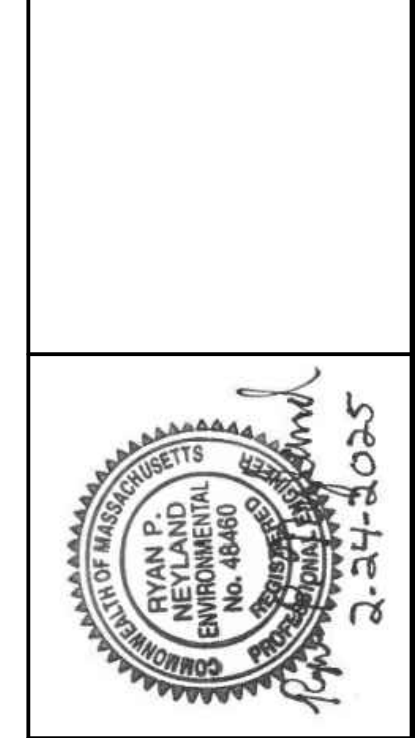
**EXISTING PUMP STATION DEMO PLAN
(ADDITIVE ALTERNATE A)**

SCALE: 3/8" = 1'-0"

ATTLEBORO WATER DEPT.
ATTLEBORO, MA
WADING RIVER
WATER TREATMENT PLANT

PROCESS
PUMP STATION
DEMOLITION PLAN
(ADDITIVE ALTERNATE A)

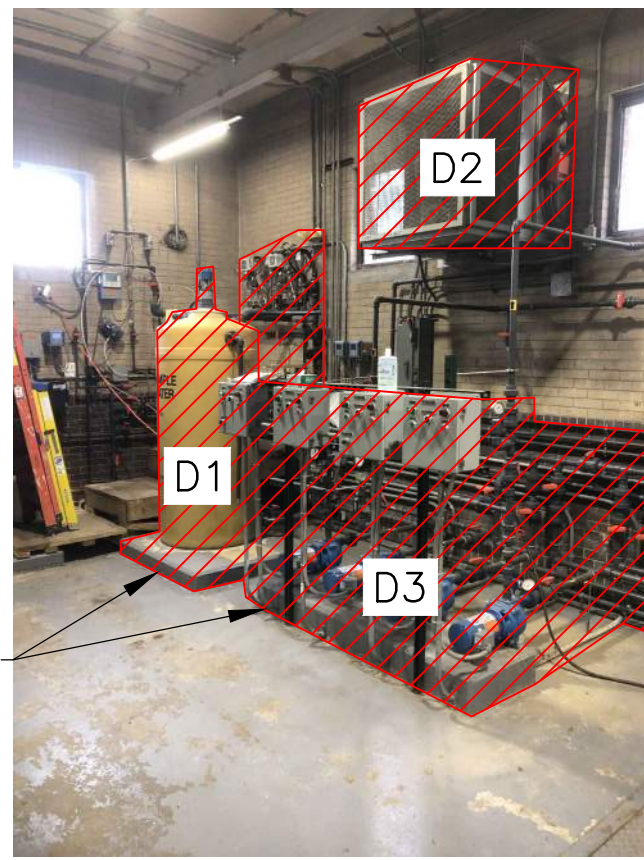
Rev.	Date	Description



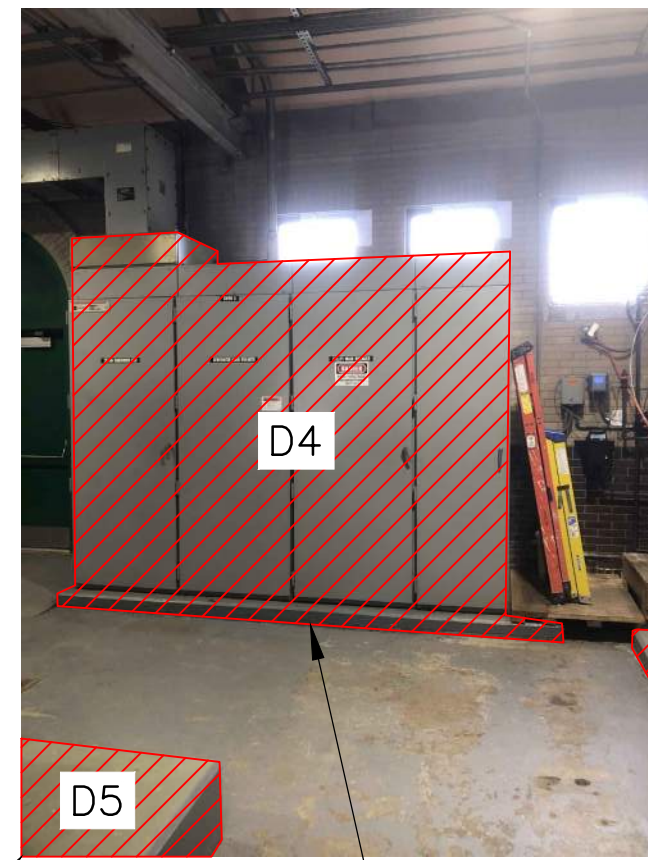
T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE: AS NOTED

20-D-14

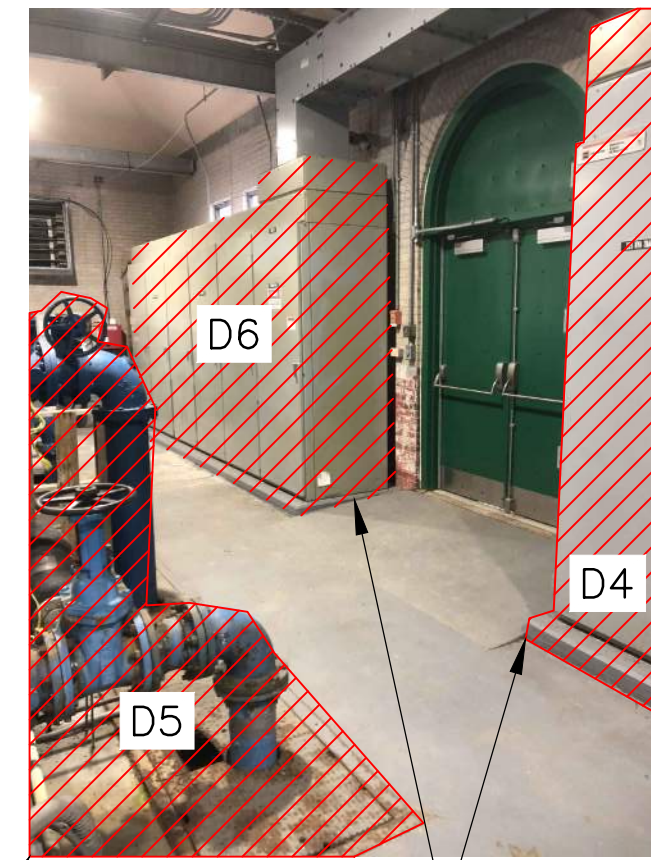
REMOVE EXISTING CONCRETE PAD AND SAMPLING EQUIPMENT



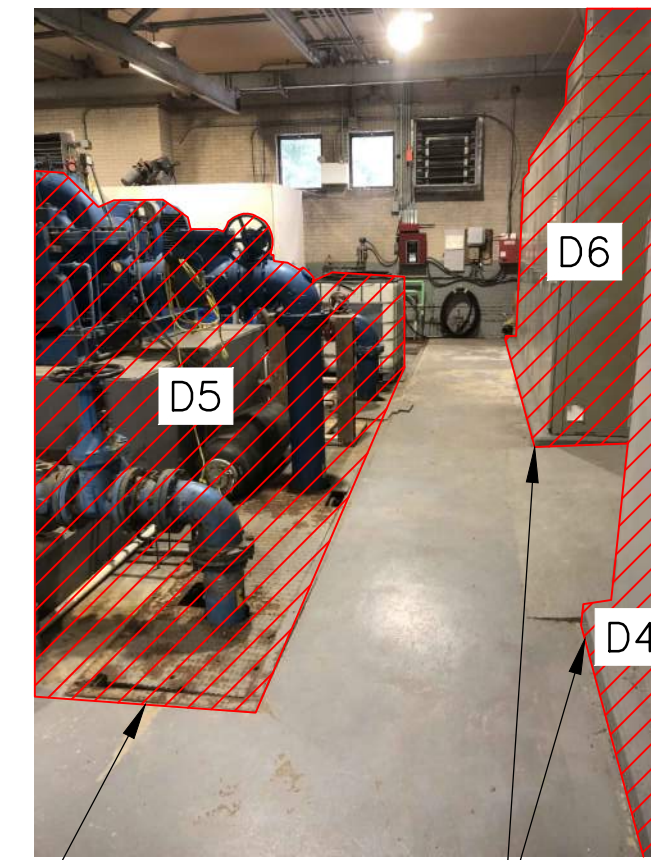
REMOVE EXISTING CONCRETE PAD
REMOVE EXISTING CONCRETE PAD AND EQUIPMENT



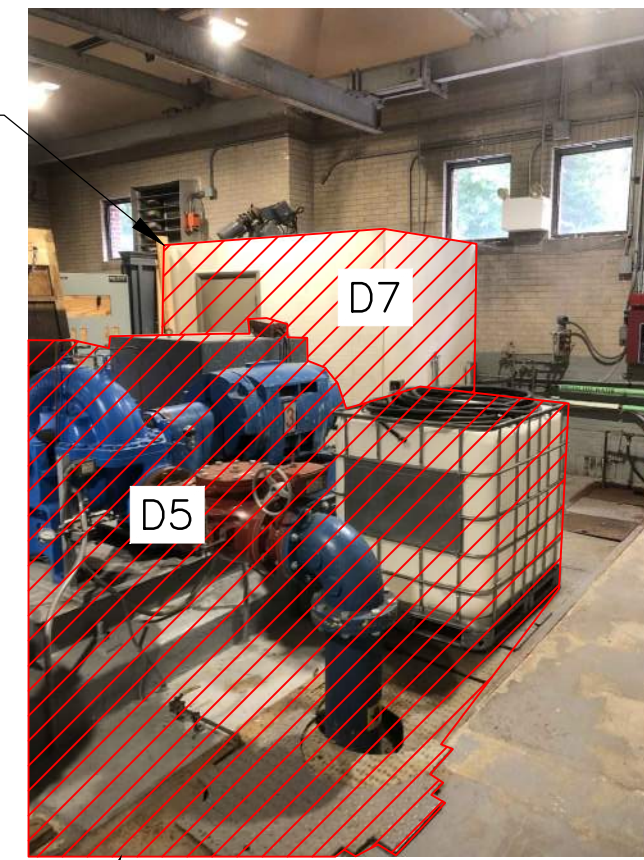
REMOVE EXISTING PUMPS, PIPING, AND VALVES
REMOVE EXISTING CONCRETE PAD AND EQUIPMENT



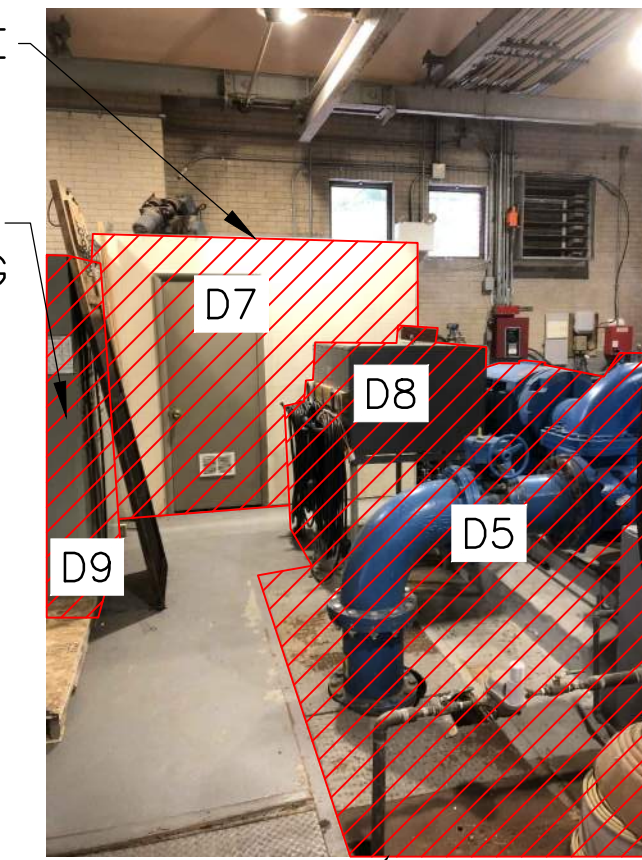
REMOVE EXISTING PUMPS, PIPING, AND VALVES
REMOVE EXISTING CONCRETE PAD AND EQUIPMENT



REMOVE EXISTING PUMPS, PIPING AND VALVES

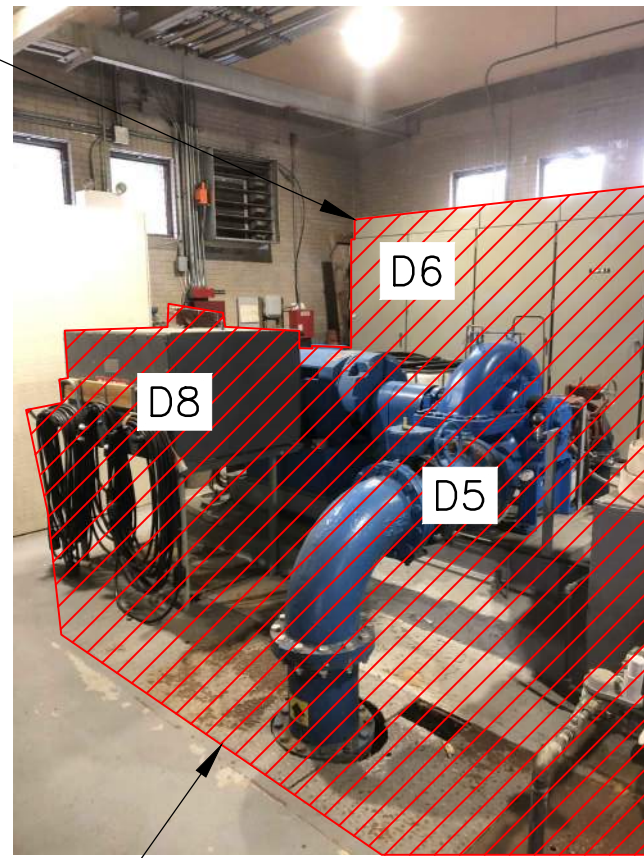


REMOVE OFFICE
REMOVE EXISTING CABINET



REMOVE EXISTING PUMPS, PIPING AND VALVES

REMOVE EXISTING CONCRETE PAD AND EQUIPMENT

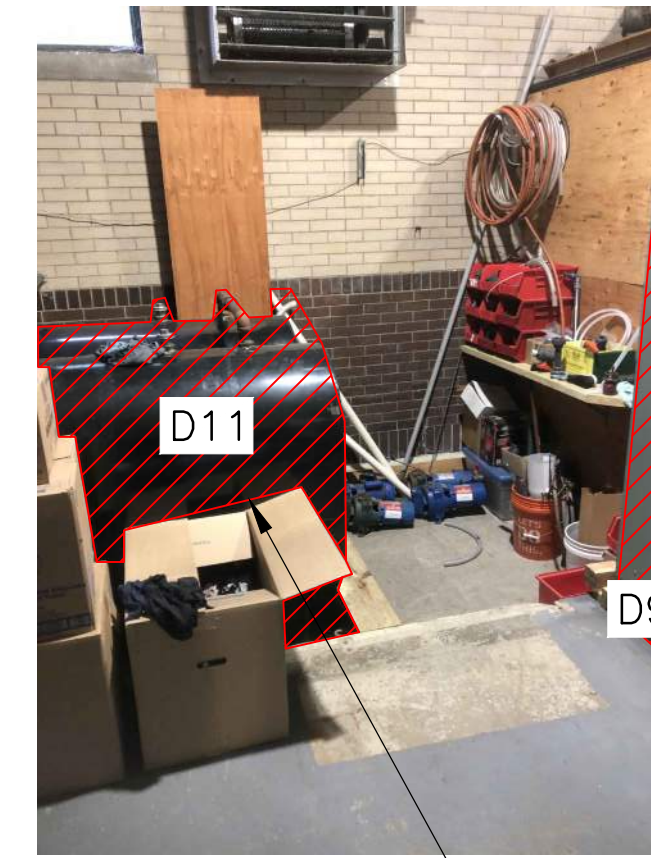


REMOVE EXISTING PUMPS, PIPING AND VALVES

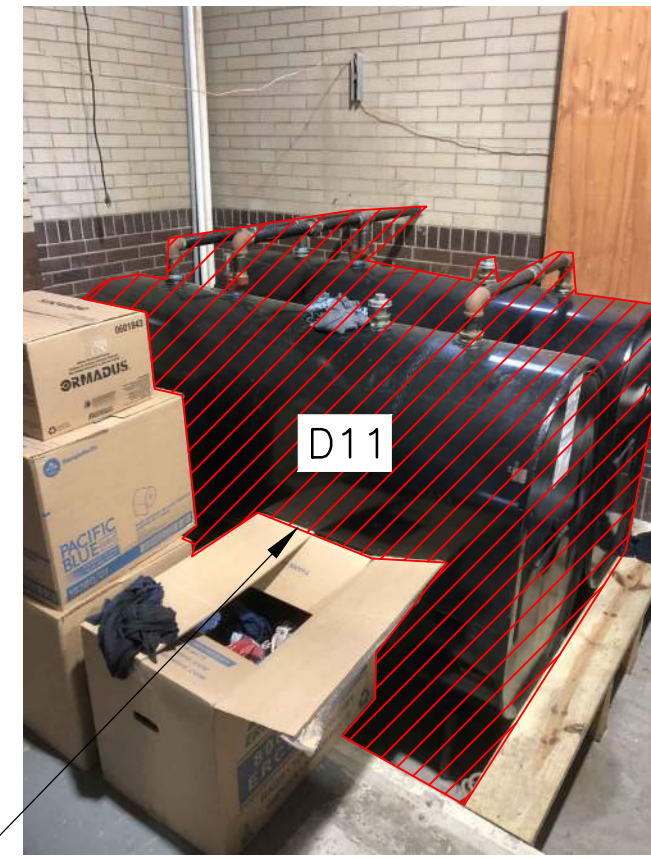
REMOVE EXISTING CONCRETE PAD AND EQUIPMENT
REMOVE EXISTING CABINET



REMOVE EXISTING EQUIPMENT IN SUNKEN AREA INCLUDING OIL TANKS AND ALL REMAINING OIL



REMOVE EXISTING CABINET



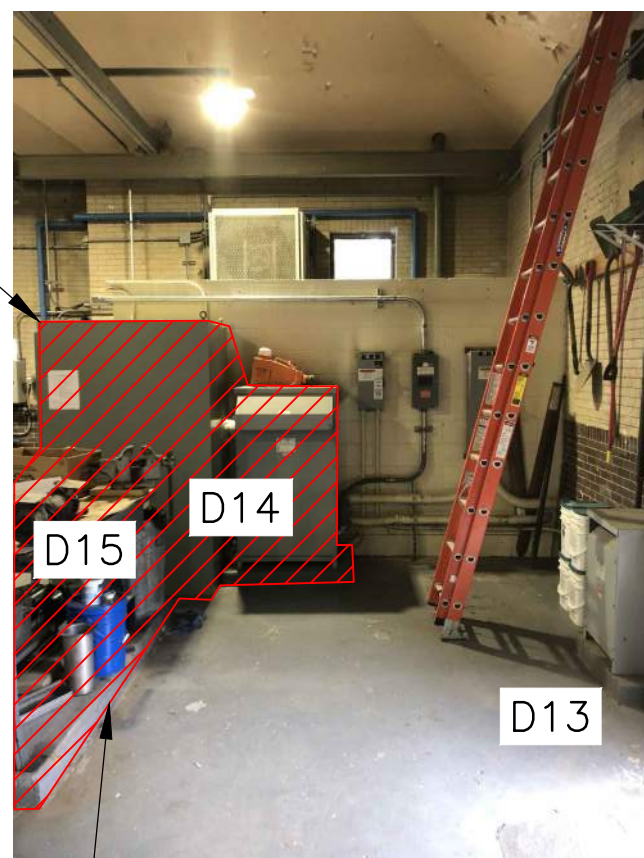
REMOVE EXISTING CONCRETE PAD AND EQUIPMENT



REMOVE EXISTING CONCRETE PAD AND EQUIPMENT

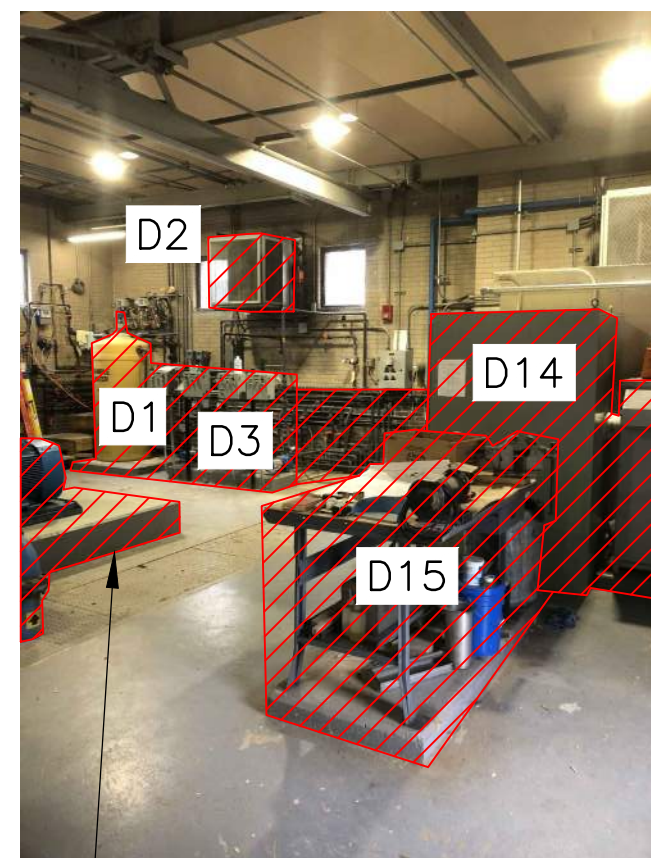


REMOVE EXISTING CABINET

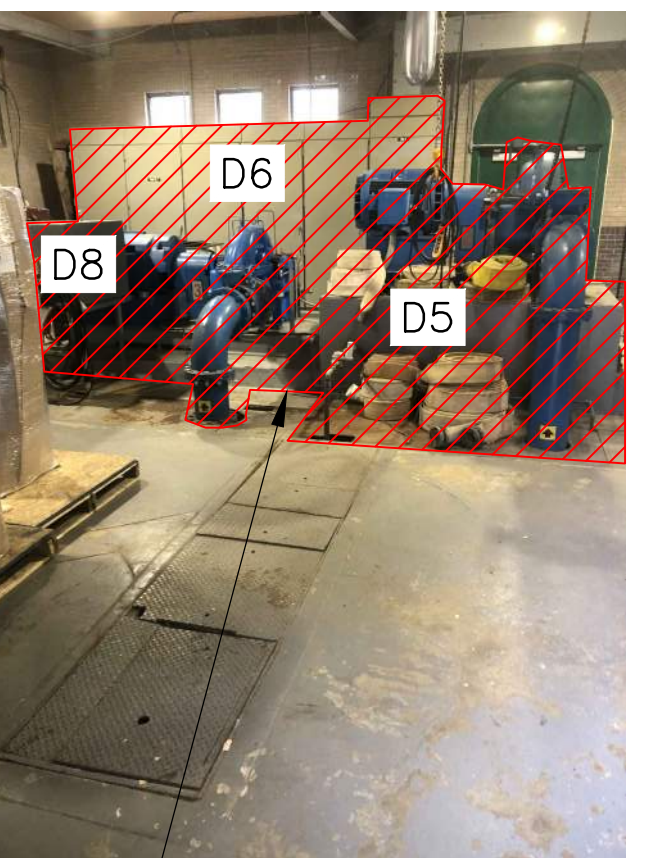


REMOVE EXISTING CONCRETE PAD AND EQUIPMENT

REMOVE EXISTING CONCRETE PAD AND EQUIPMENT



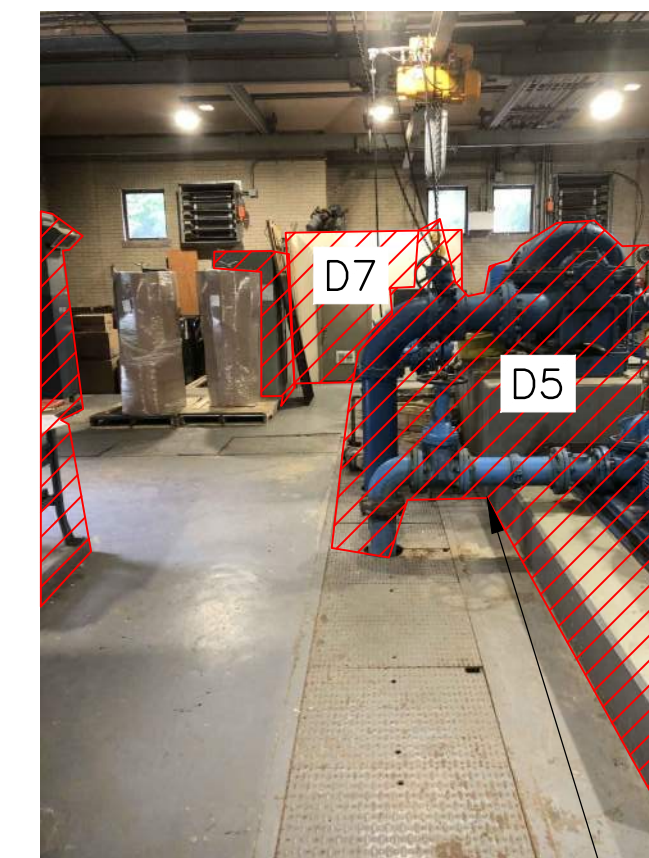
REMOVE EXISTING CONCRETE PAD, PUMPS, PIPING, VALVE, AND EQUIPMENT



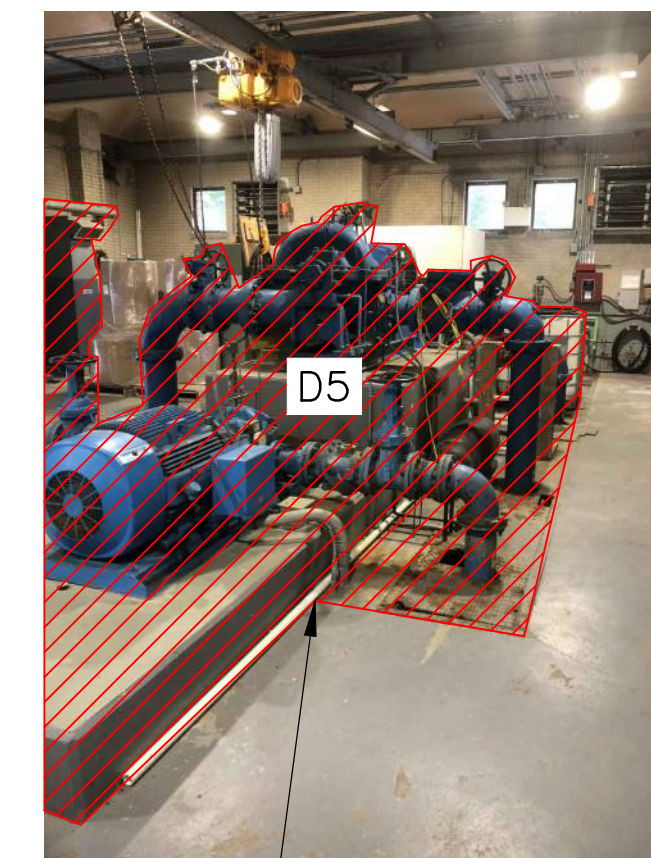
REMOVE PIPING



REMOVE EXISTING CONCRETE PAD, PUMPS, PIPING, VALVES, AND EQUIPMENT



REMOVE EXISTING CONCRETE PAD, PUMPS, PIPING, VALVES, AND EQUIPMENT



NOTES:

1. PALLETS, STORAGE ITEMS, BOXES, AND OTHER MISCELLANEOUS ITEMS WILL BE MOVED BY OWNER AND NOT BY THE CONTRACTOR.
2. ELECTRICAL SUB-CONTRACTOR SHALL DISCONNECT ALL EQUIPMENT PRIOR TO DEMOLITION FOR SAFE REMOVAL.

REMOVE EXISTING BATHROOM WALLS, SINK, TOILET, AND WATER HEATER

REMOVE EXISTING CABINET



**DEMO PLAN PHOTOS
(ADDITIVE ALTERNATE A)**

SCALE: NONE

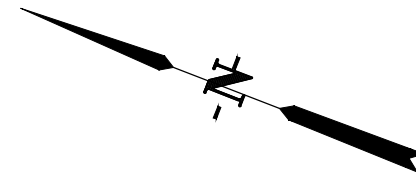
ATTLEBORO WATER DEPT.
ATTLEBORO, MA
WADING RIVER
WATER TREATMENT PLANT

PROCESS
PUMP STATION PHOTOS
(ADDITIVE ALTERNATE A)

Rev.	Date	Description

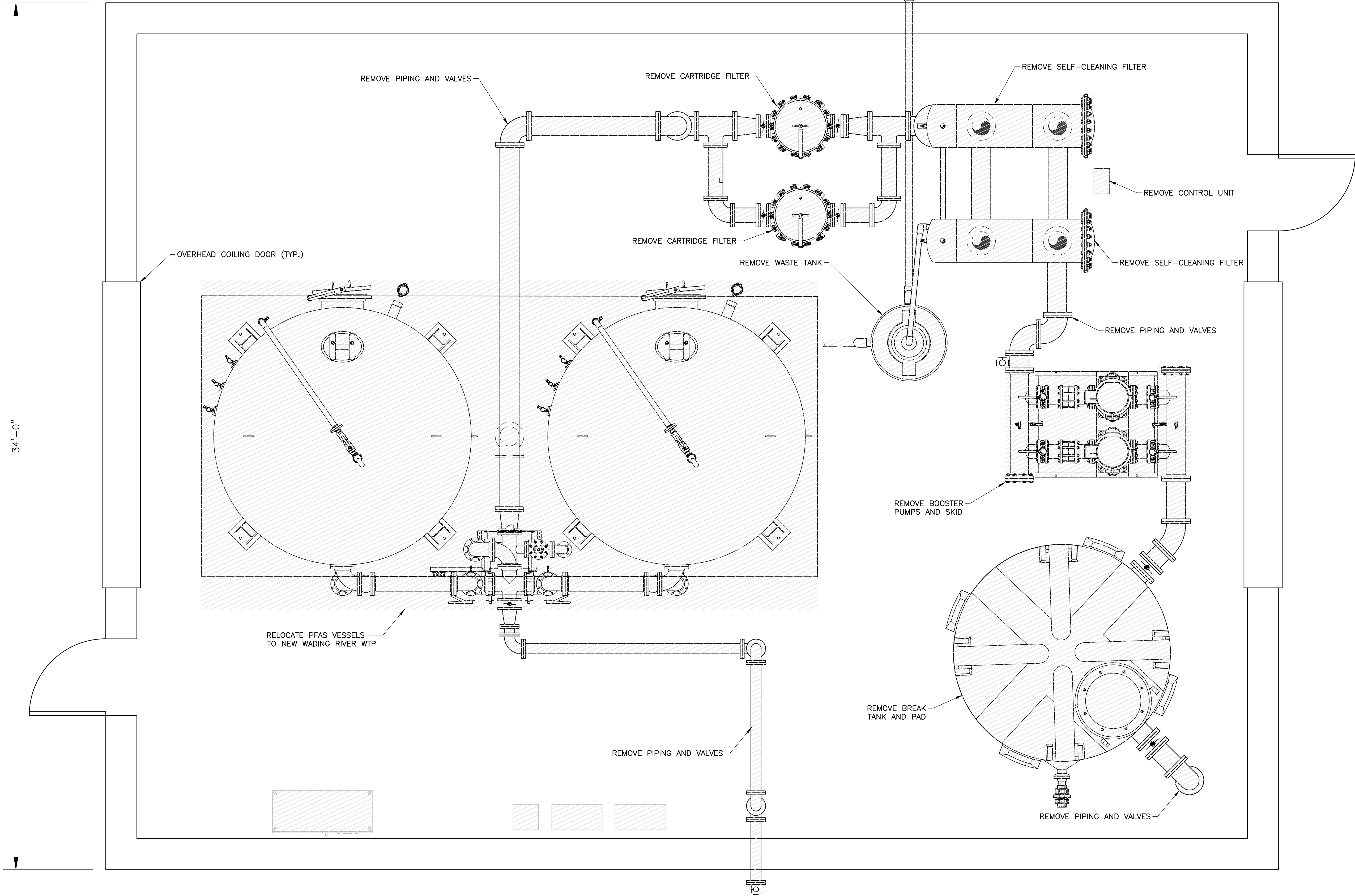


T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE: AS NOTED



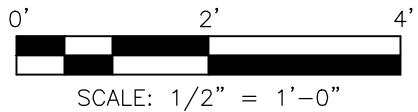
34'-0"

46'-0"



RELOCATE PFAS VESSELS TO NEW WADING RIVER WTP

TEMPORARY PFAS BUILDING DEMOLITION AND RELOCATION PLAN



ATTLEBORO WATER DEPT.
ATTLEBORO, MA
WADING RIVER
WATER TREATMENT PLANT

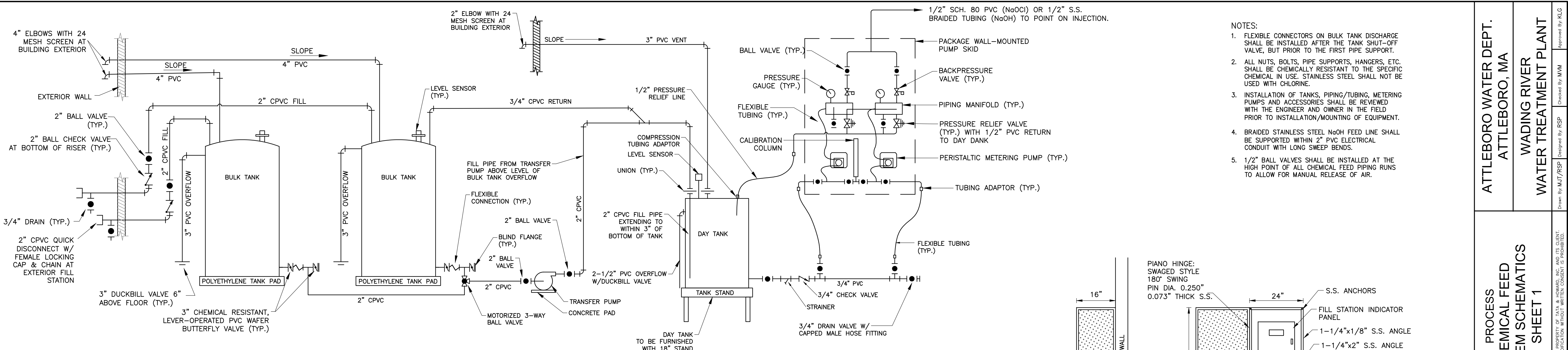
PROCESS
TEMPORARY PFAS
BUILDING DEMOLITION
AND RELOCATION PLAN

Rev.	Date	Description



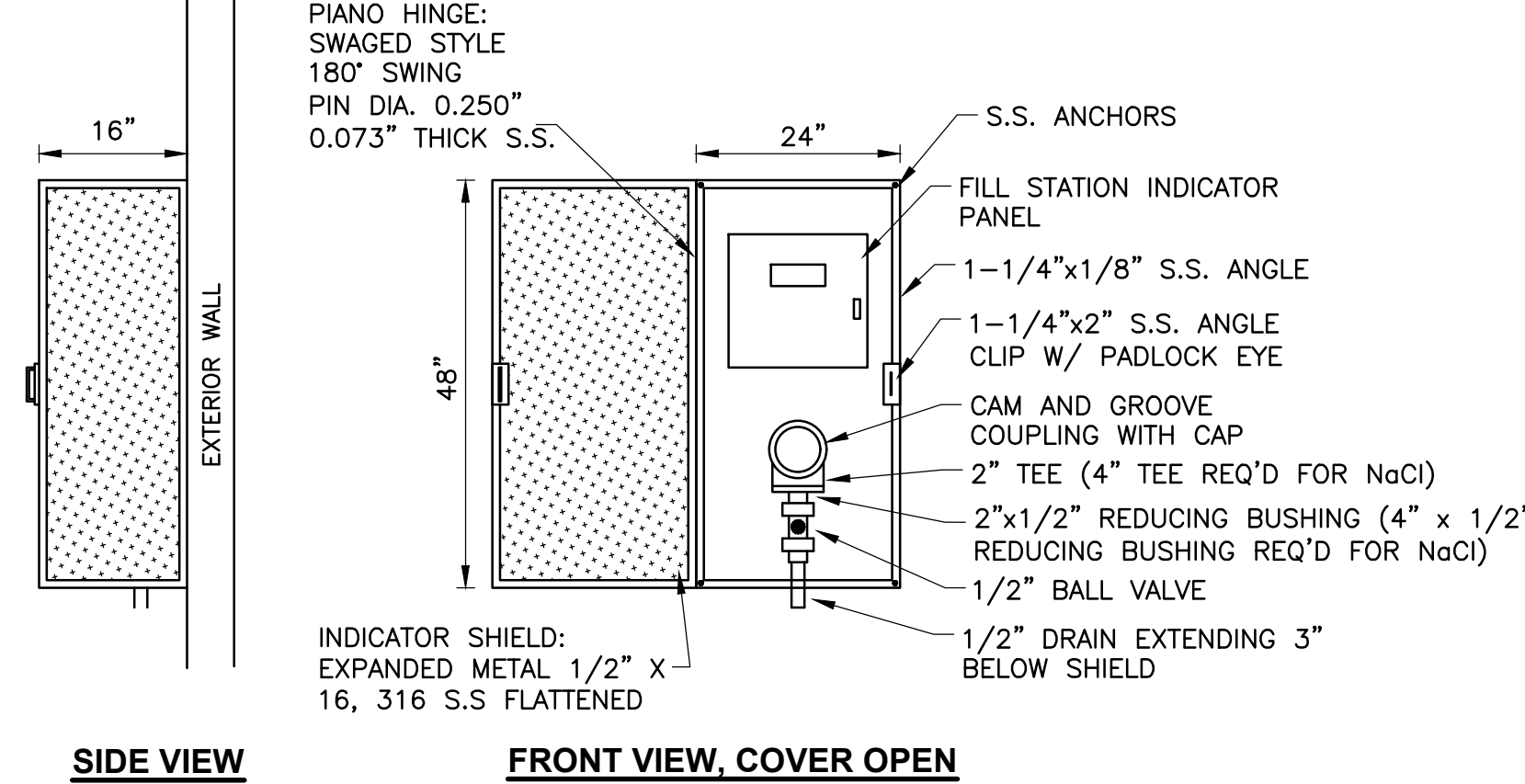
T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE: AS NOTED

20-D-16



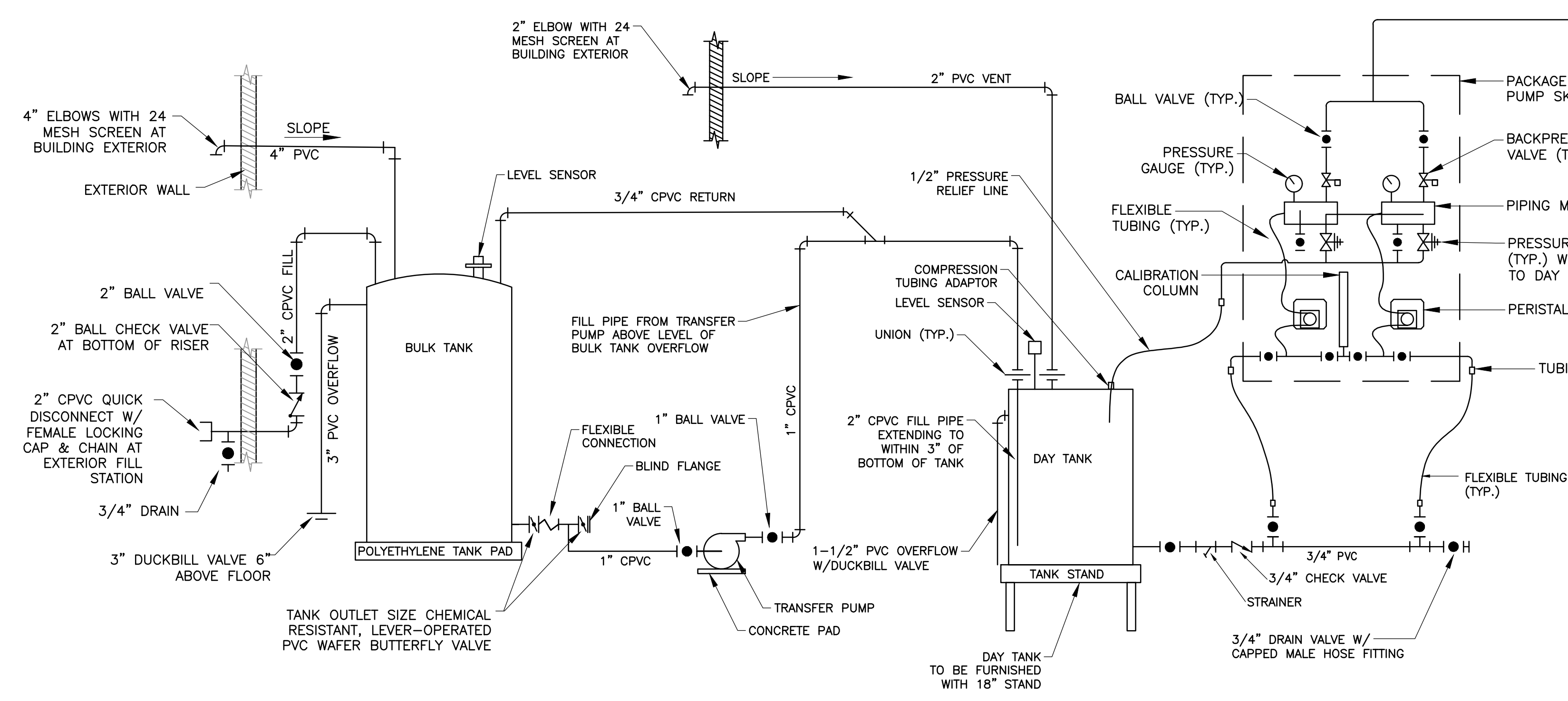
SODIUM HYDROXIDE (NaOH) & SODIUM HYPOCHLORITE FEED SYSTEM SCHEMATIC
NOT TO SCALE

- NOTES:
1. FLEXIBLE CONNECTORS ON BULK TANK DISCHARGE SHALL BE INSTALLED AFTER THE TANK SHUT-OFF VALVE, BUT PRIOR TO THE FIRST PIPE SUPPORT.
 2. ALL NUTS, BOLTS, PIPE SUPPORTS, HANGERS, ETC. SHALL BE CHEMICALLY RESISTANT TO THE SPECIFIC CHEMICAL IN USE. STAINLESS STEEL SHALL NOT BE USED WITH CHLORINE.
 3. INSTALLATION OF TANKS, PIPING/TUBING, METERING PUMPS AND ACCESSORIES SHALL BE REVIEWED WITH THE ENGINEER AND OWNER IN THE FIELD PRIOR TO INSTALLATION/MOUNTING OF EQUIPMENT.
 4. BRAIDED STAINLESS STEEL NaOH FEED LINE SHALL BE SUPPORTED WITHIN 2" PVC ELECTRICAL CONDUIT WITH LONG SWEEP BENDS.
 5. 1/2" BALL VALVES SHALL BE INSTALLED AT THE HIGH POINT OF ALL CHEMICAL FEED PIPING RUNS TO ALLOW FOR MANUAL RELEASE OF AIR.

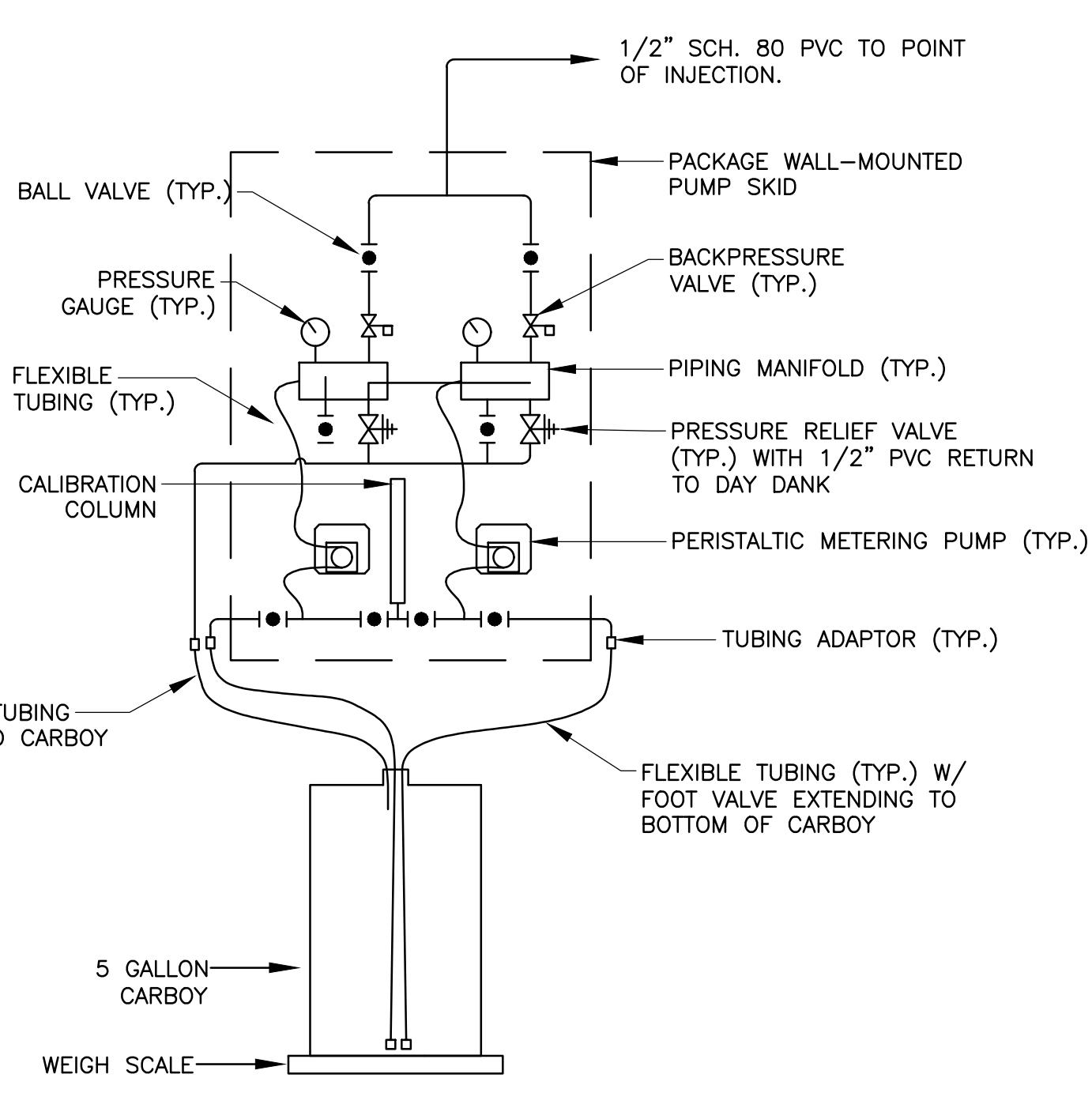


- NOTES:
1. DIMENSIONS SHOWN ARE APPROXIMATE. CONTRACTOR SHALL COORDINATE SHIELD DIMENSIONS WITH INDICATOR PANEL BEING PROVIDED.
 2. ALL MATERIALS OF FABRICATION, INCLUDING HARDWARE, SHALL BE TYPE 316 STAINLESS STEEL.
 3. FILL LINE COVER SHALL BE LABELED WITH APPROPRIATE CHEMICAL.
 4. A NAME PLATE (316 S.S.) SHALL BE PROVIDED FOR EACH FILL LINE INCLUDING CHEMICAL NAME, FORMULA, AND 4-DIGIT UN NUMBER.
 5. MISCELLANEOUS AND ORNAMENTAL IRON FILED SUB-BID SHALL PROVIDE INDICATOR SHIELDS COMPLETE INCLUDING ANGLES, ANCHORS, HINGES, AND CLIPS AROUND EACH CHEMICAL FILL PIPE/INDICATOR PANEL (TWO*)
- * (2) NaOH, (2) NaOCl, (1) PHOSPHATE, (1) HYDROFLUOROSILICIC ACID, (1) NaCl

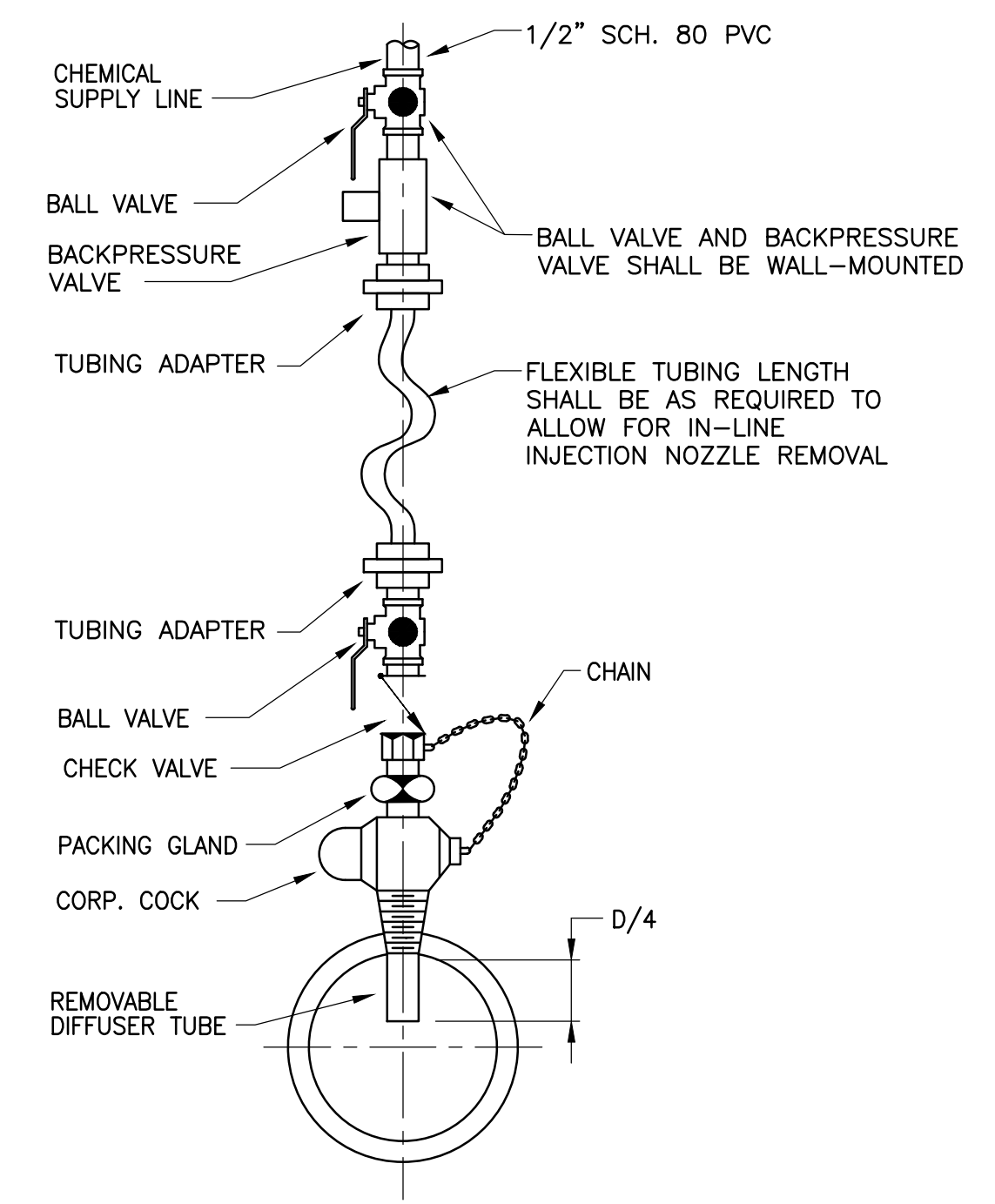
CHEMICAL FILL AND INDICATOR SHIELDS
SCALE: NONE



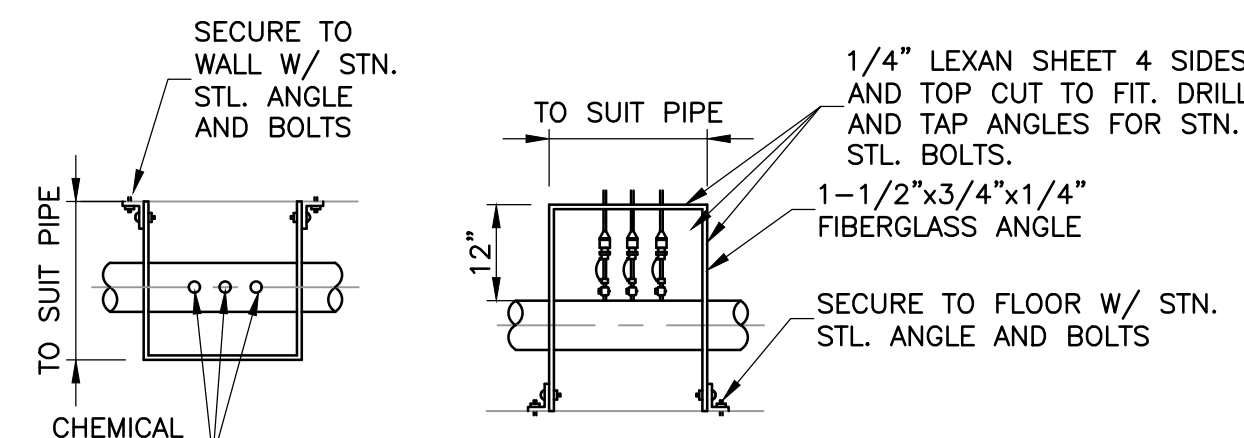
HYDROFLUOROSILICIC ACID FEED SYSTEM SCHEMATIC
NOT TO SCALE



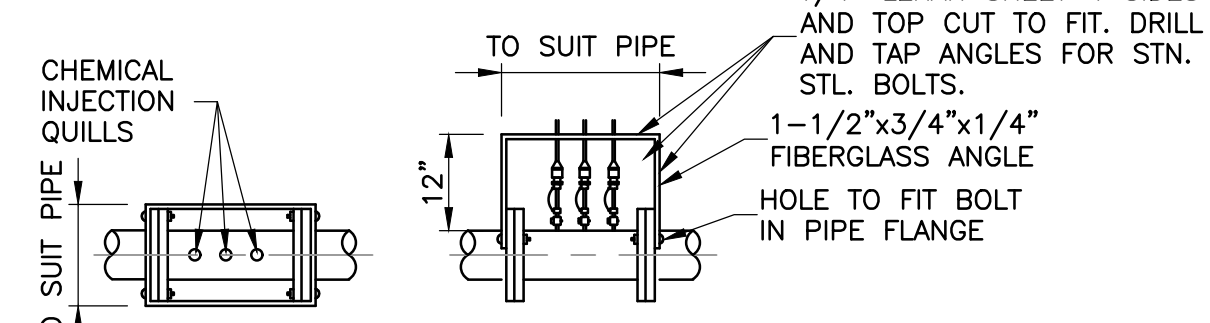
PACL FEED SYSTEM SCHEMATIC
SCALE: NONE



PIPE CHEMICAL DIFFUSER DETAIL
SCALE: NONE



WALL-MOUNTED CHEMICAL FEED CORPORATION GUARD FLOOR/WALL-MOUNTED
SCALE: NONE



CHEMICAL FEED CORPORATION GUARD PIPELINE-MOUNTED
SCALE: NONE

ATTLEBORO WATER DEPT.
ATTLEBORO, MA

PROCESS CHEMICAL FEED SYSTEM SCHEMATICS
SHEET 1

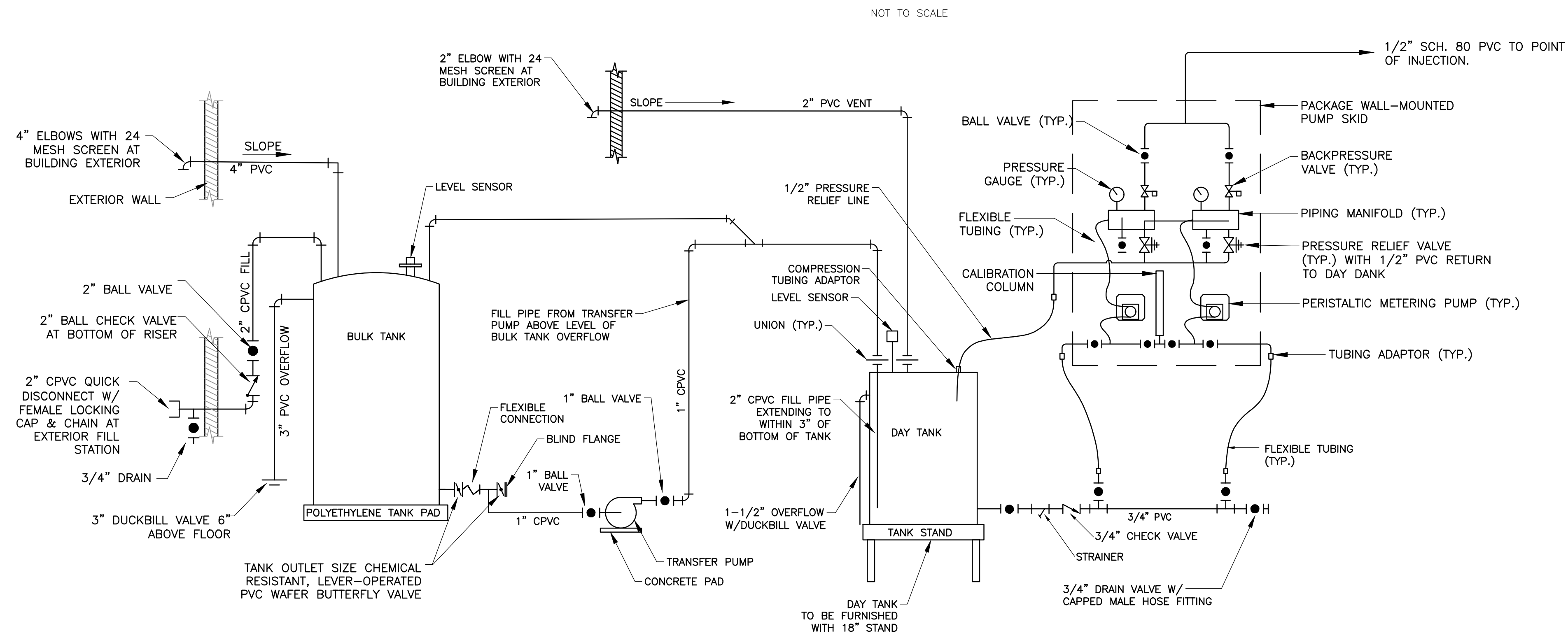
DESIGNED BY: MUM/RESP
DRAWN BY: MUM/RESP

DATE: FEBRUARY 2025
SCALE: AS NOTED

T&H NO.: 6193

99-D-1

TATA & HOWARD



PHOSPHATE FEED SYSTEM SCHEMATIC

NOT TO SCALE

ATTLEBORO WATER DEPT.
ATTLEBORO, MA
WADING RIVER
WATER TREATMENT PLANT

PROCESS
CHEMICAL FEED
SYSTEM SCHEMATICS
SHEET 2

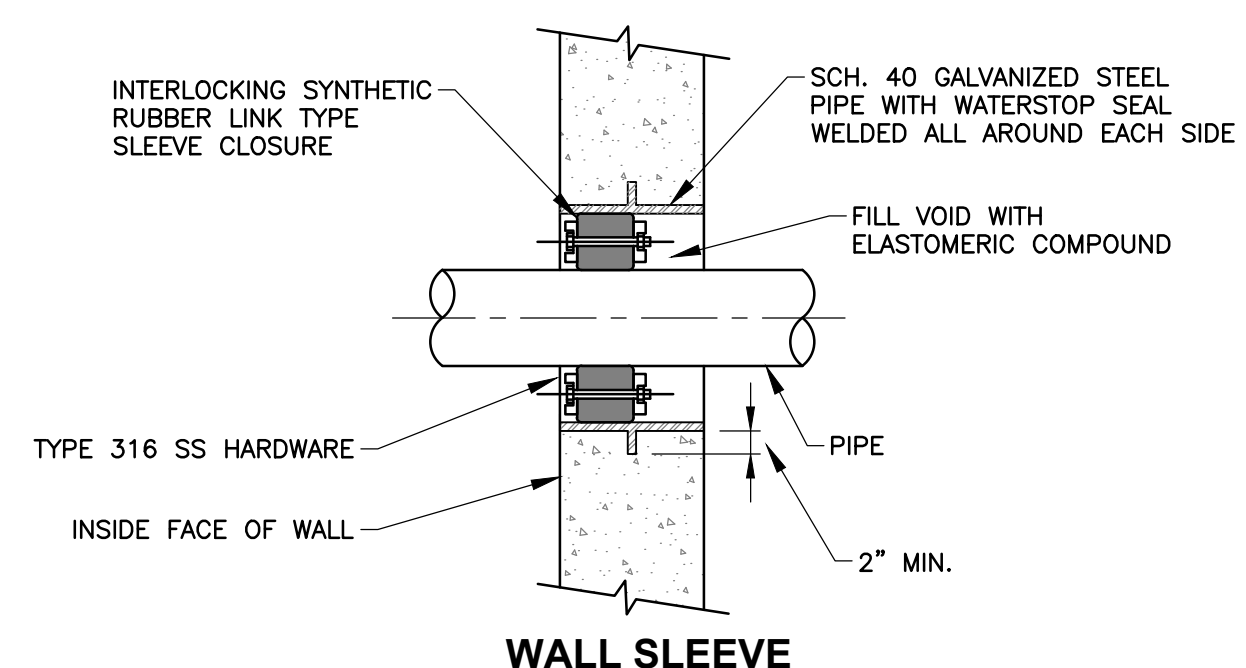
Rev.	Date	Description



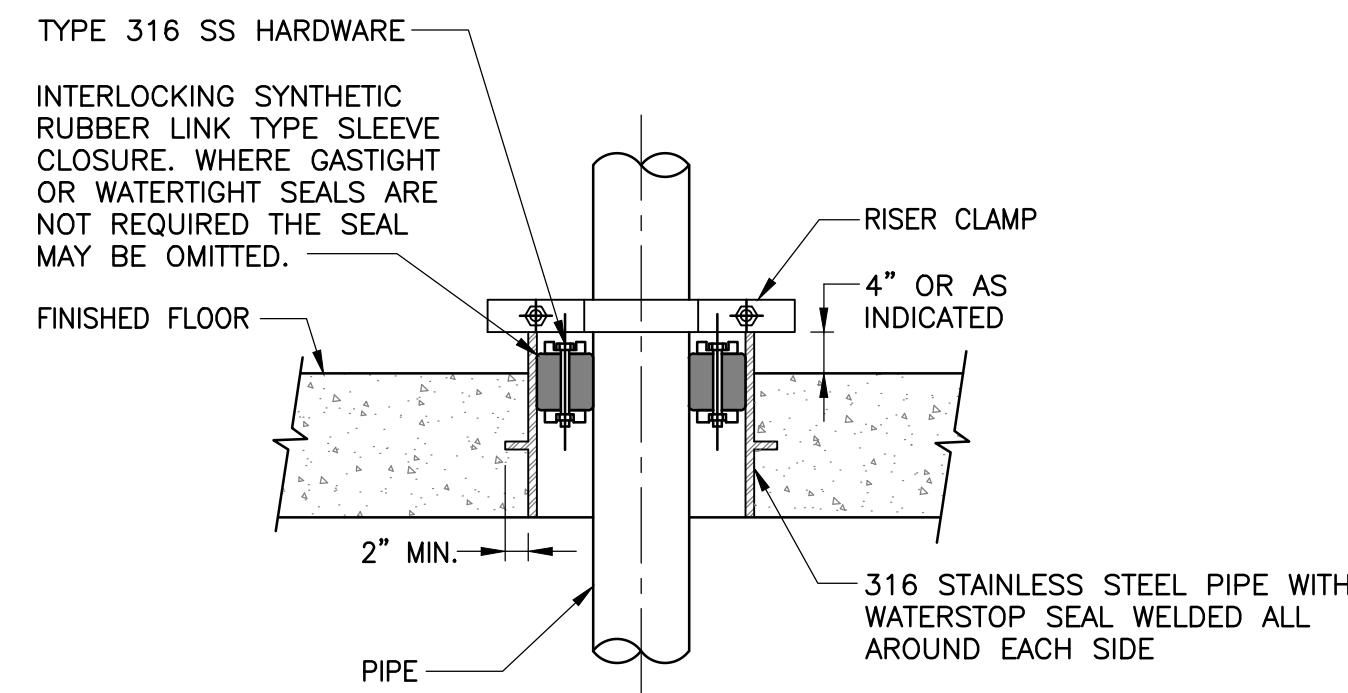
T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE: AS NOTED

99-D-2

P:\Attiboro\6193_Wading_River_WTP_Design\CADD\Sheet\99-D-2.dwg 2/26/2025 4:25 PM MBARRY



WALL SLEEVE

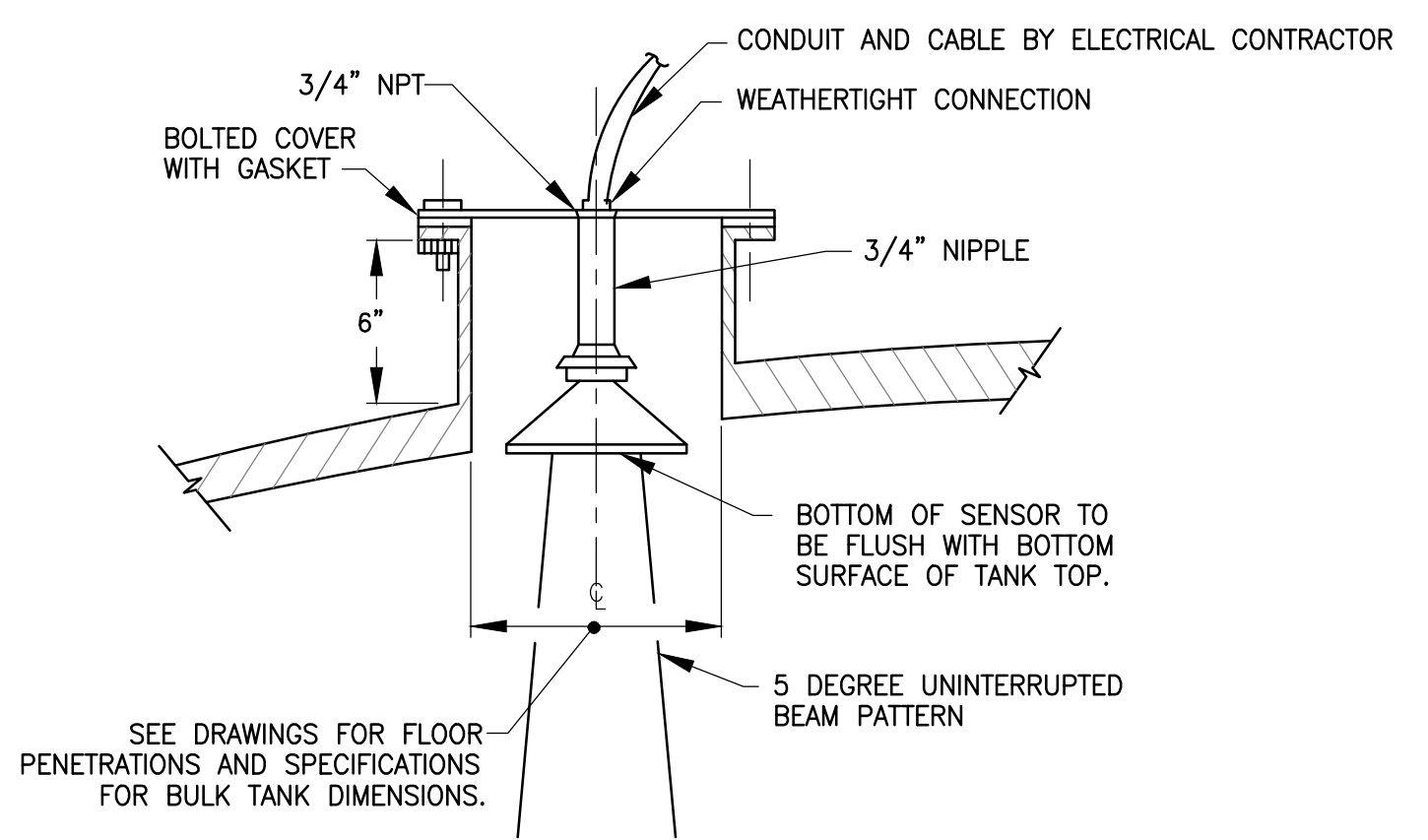


FLOOR SLEEVE

WALL AND FLOOR SLAB PIPE PENETRATION DETAIL

NOT TO SCALE

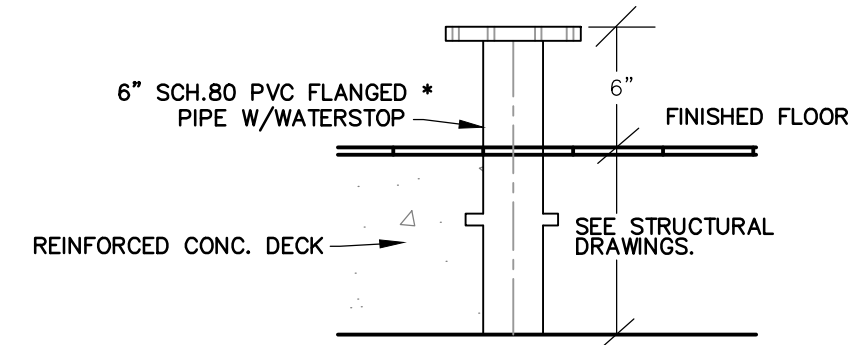
- NOTES:
1. WALL SLEEVES SHALL BE SIZED TO ALLOW FOR THE CORRECT LINK SEAL REQUIRED FOR THE CARRIER PIPE.



RADAR LEVEL SENSOR MOUNTING

NOT TO SCALE

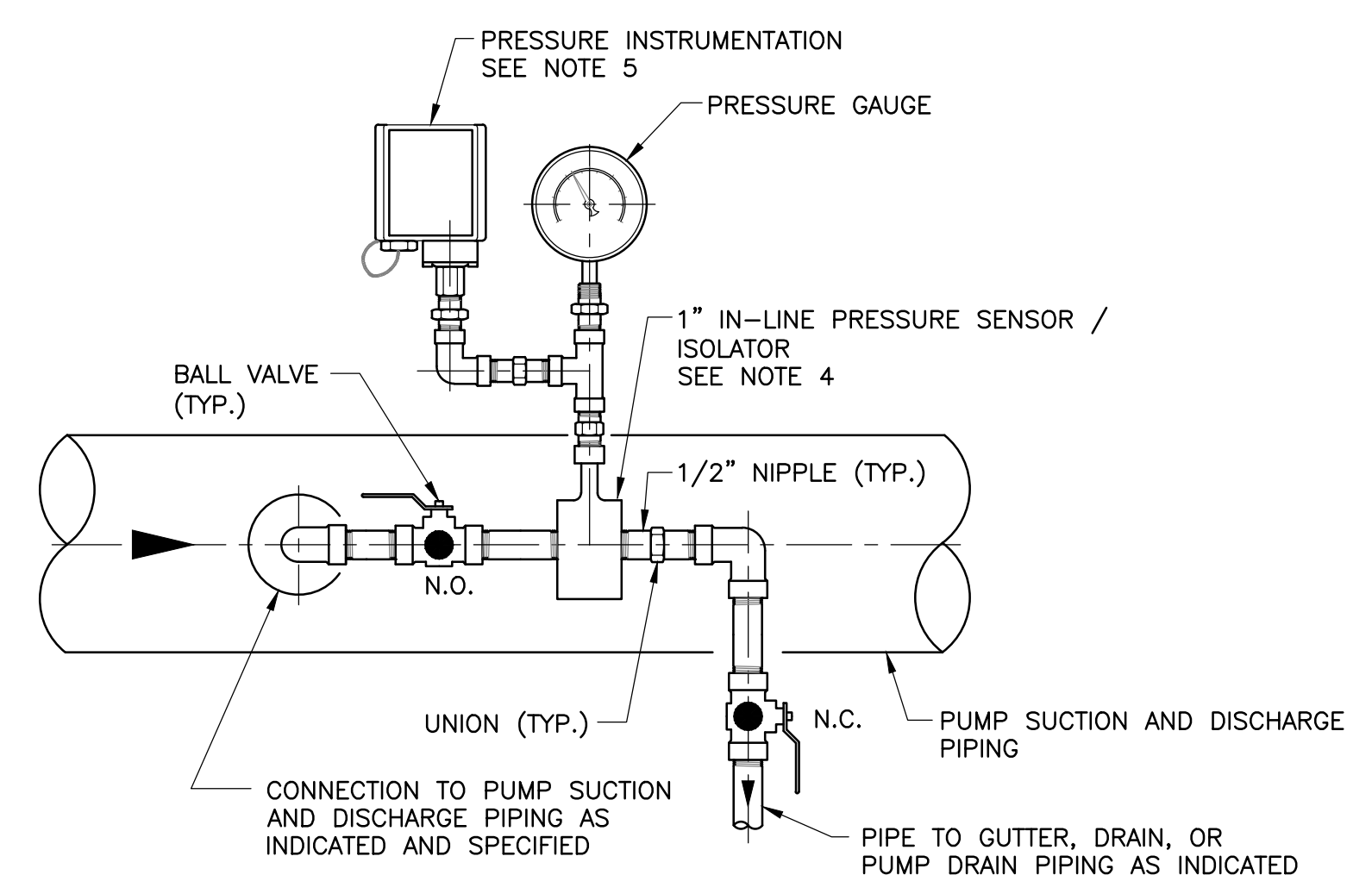
SEE DRAWINGS FOR FLOOR PENETRATIONS AND SPECIFICATIONS FOR BULK TANK DIMENSIONS.



DETAIL LEVEL TRANSMITTER/FLOAT SWITCH MOUNT

NO SCALE

* CONTRACTOR SHALL CONFIRM REQUIRED DIAMETER PIPE WITH LEVEL TRANSMITTER SUPPLIER TO MITIGATE SIDE WALL EFFECTS.

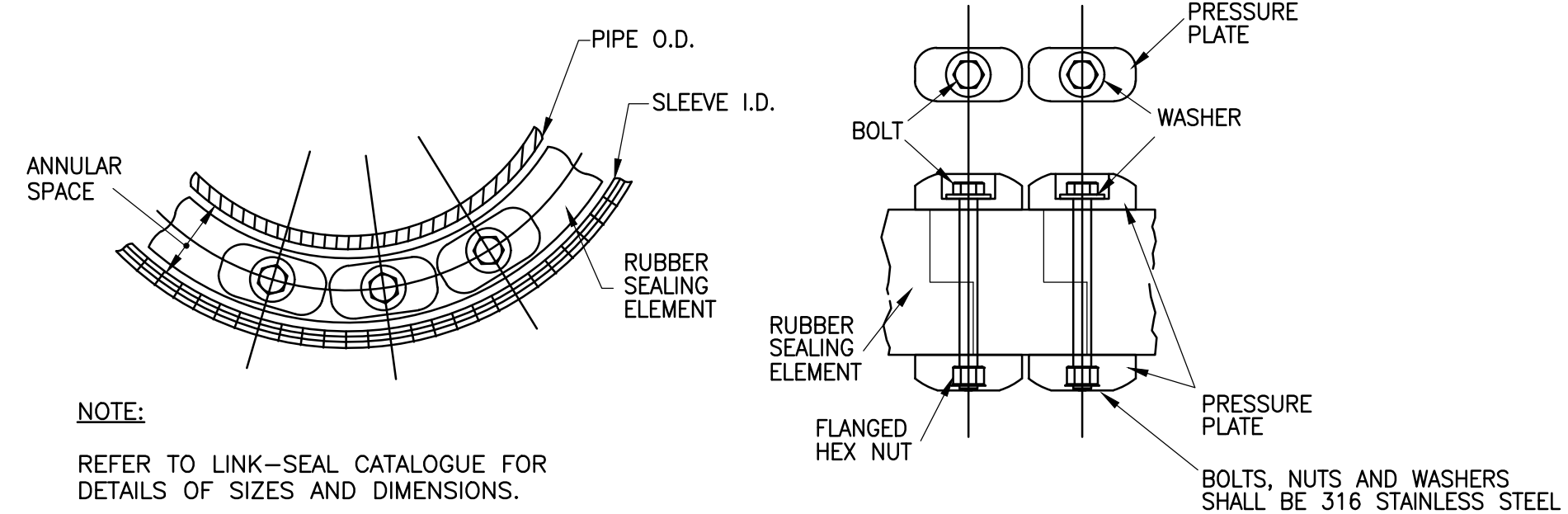


NOTES:

1. PIPING: TYPE 316L S.S.
2. VALVES: TYPE 316 S.S.
3. HARDWARE: TYPE 316 S.S.
4. FOR 300 CLASS ANSI USE FLANGED SENSOR
5. PROVIDE GAUGE AND PRESSURE INSTRUMENTATION (PIT, PS, ETC.) AS INDICATED AND SPECIFIED.

PRESSURE GAUGE / INSTRUMENT ASSEMBLY

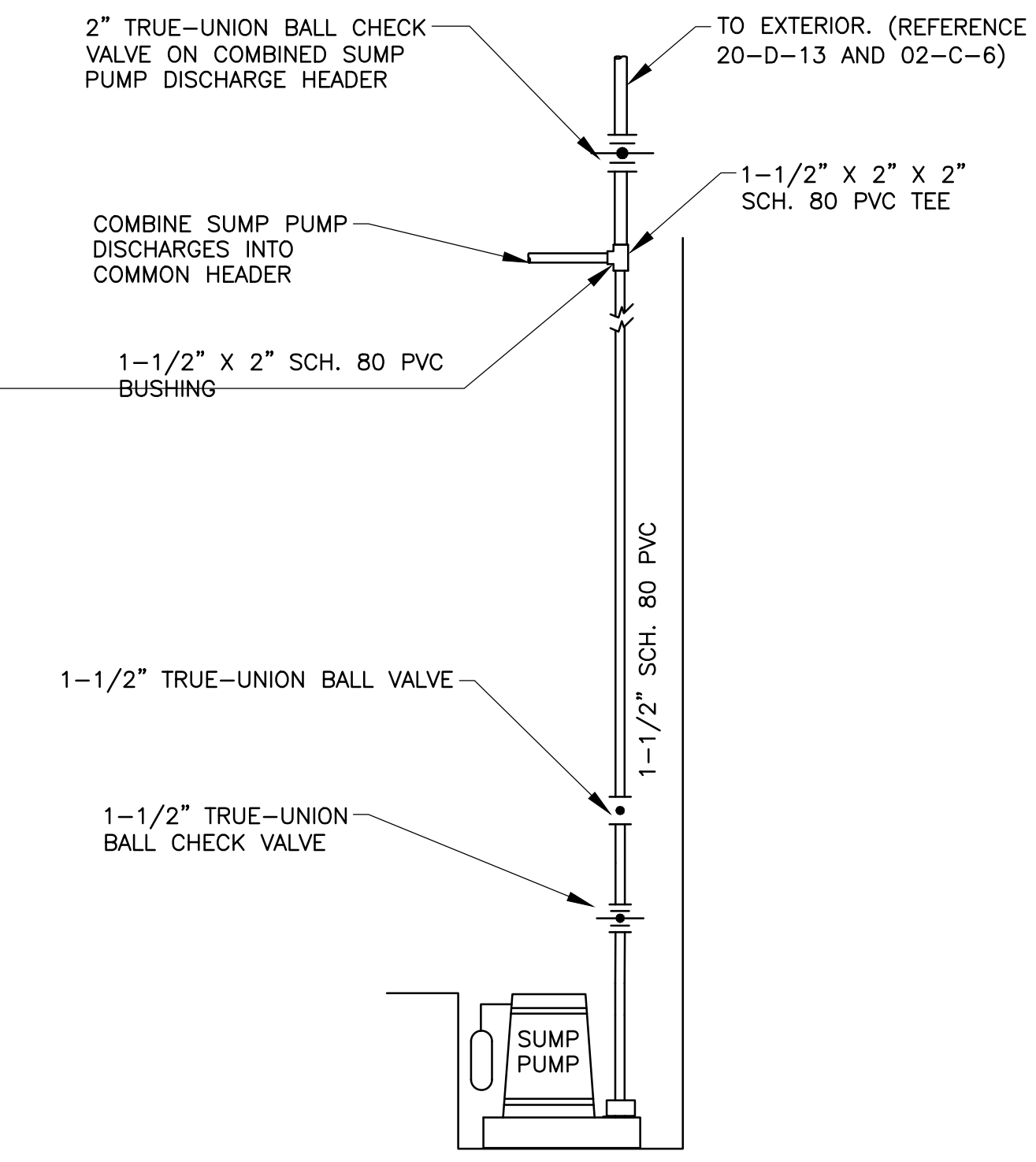
(FOR LIQUID CARRIER PIPING)
NOT TO SCALE



NOTE:
REFER TO LINK-SEAL CATALOGUE FOR DETAILS OF SIZES AND DIMENSIONS.

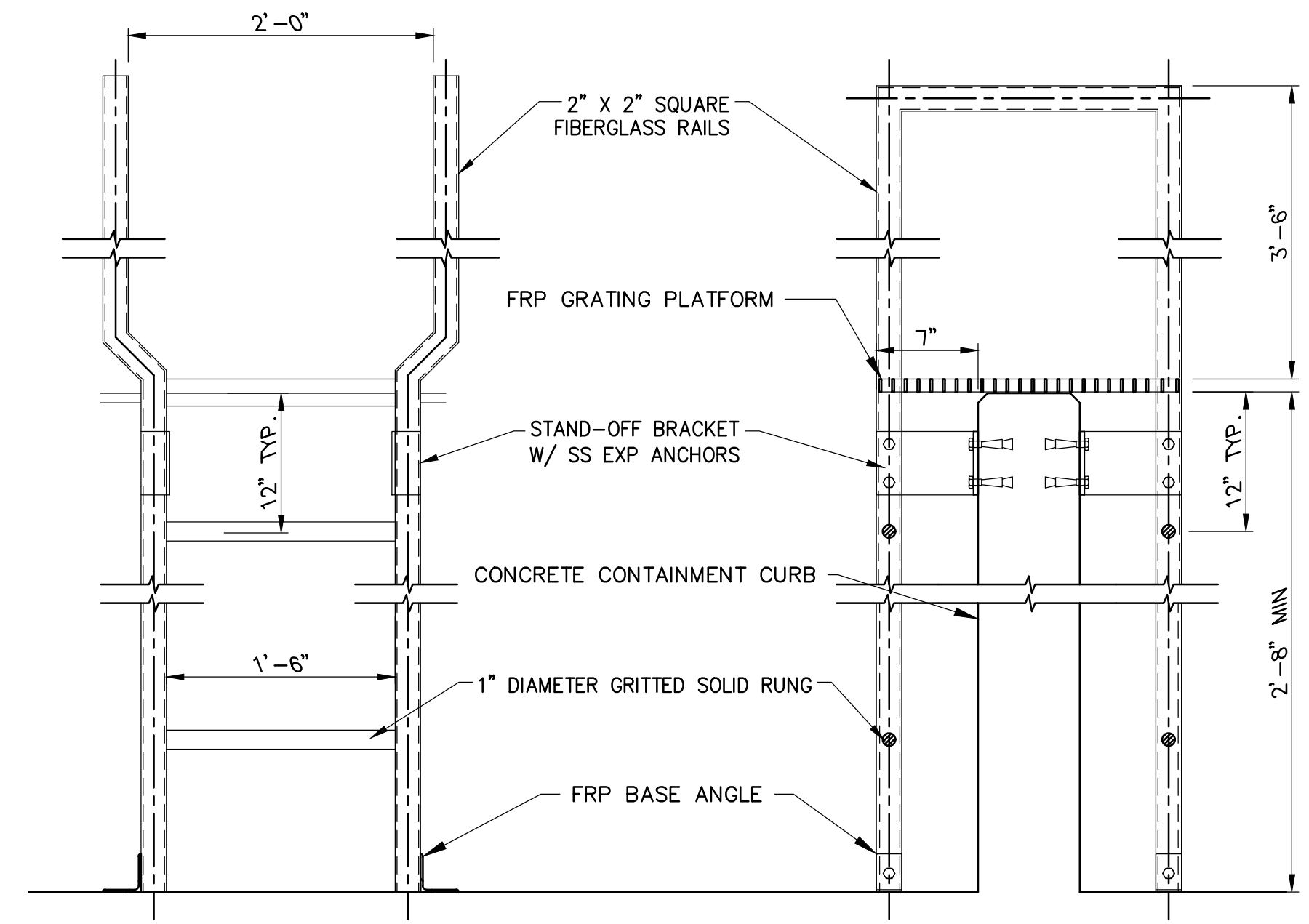
MECHANICAL LINK SEAL DETAIL

SCALE: NONE



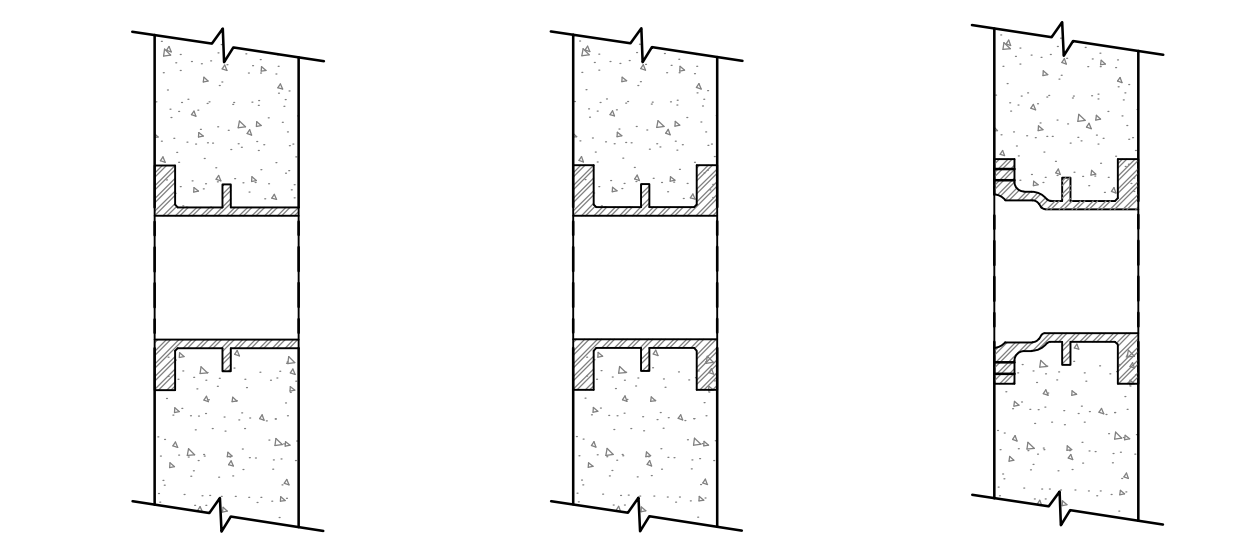
SUMP PUMP PIPING

NOT TO SCALE



FRP LADDER OVER CONTAINMENT CURB DETAIL

NOT TO SCALE



WALL PIPE AND FLOOR DETAILS

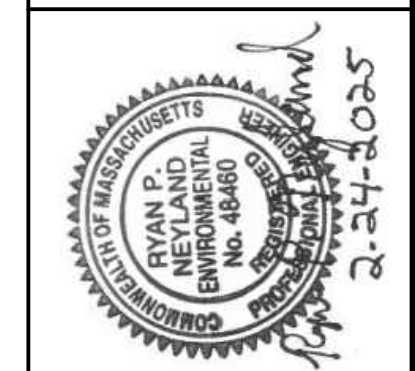
NOT TO SCALE

- NOTES:
1. ALL WALL PIPES SHALL HAVE INTEGRALLY CAST WATERSTOP.
2. BOLT HOLES SHALL BE TAPPED HOLES FOR STUDS.

ATTLEBORO WATER DEPT.
ATTLEBORO, MA
WADING RIVER
WATER TREATMENT PLANT

PROCESS
WATER PIPING DETAILS

Rev.	Date	Description

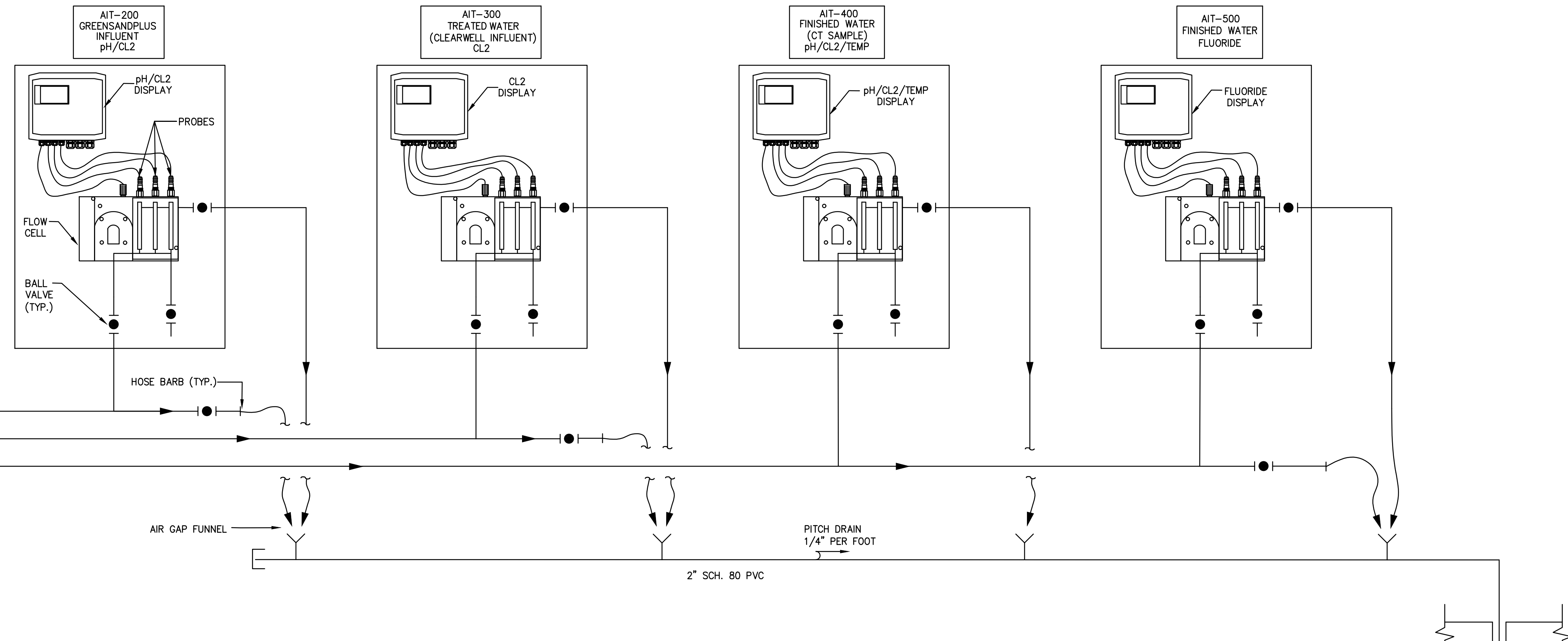


T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE: AS NOTED

99-D-3

NOTES:

1. MOUNT ALL INSTRUMENTS TO RIGID PVC SHEET (MINIMUM 3/4-IN.). ALL SWITCHES, VALVES, INSTRUMENT DISPLAYS, GRAB SAMPLE TAPS TO BE MOUNTED NO HIGHER THAN 5- FEET OFF FINISHED FLOOR.
2. PROVIDE UNIONS WHERE REQUIRED AND TO ALLOW FOR FUTURE REMOVAL OF INSTRUMENTS.
3. PROTECT GAUGES AND OTHER INSTRUMENTS WHILE PRESSURE TESTING THE SAMPLE PIPING SYSTEM.
4. SUPPORTS AND FASTENERS TO BE STAINLESS STEEL.
5. FURNISH TEE AND COMPRESSION-TYPE TUBING ADAPTOR WHERE ANALYZER DRAIN CONNECTS TO PVC DRAIN PIPE.
6. PROVIDE PLASTIC NAMEPLATES WITH BLACK BACKGROUND AND 1-IN HIGH ENGRAVED WHITE LETTERING. MECHANICALLY FASTEN NAMEPLATES WITH STAINLESS STEEL HARDWARE. ADHESIVE IS NOT ACCEPTABLE.
7. ALL SAMPLE LINE TUBING/PIPING, FITTINGS, AND JOINTING MATERIALS, BETWEEN THE TAP ON THE PIPELINE BEING SAMPLED AND THE ANALYZER/SAMPLE PORT, INCLUDING ANALYZER DRAIN LINES, SHALL BE TEFLON-FREE.

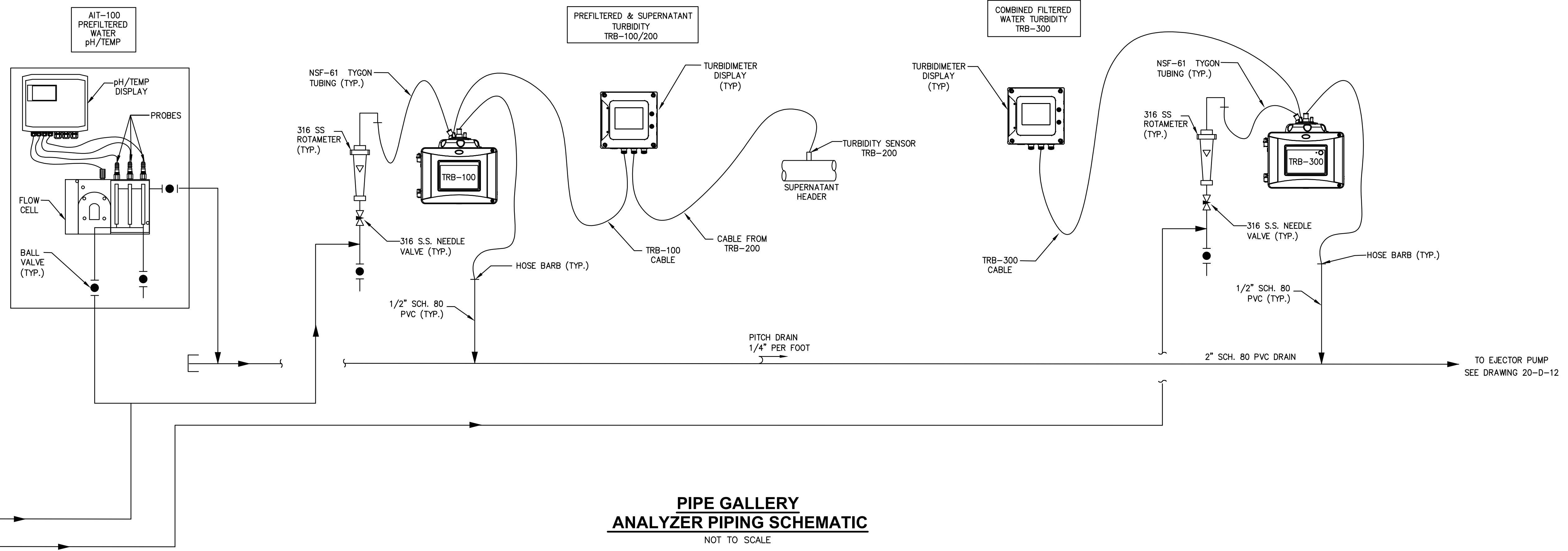


LABORATORY ANALYZER PIPING SCHEMATIC

NOT TO SCALE

- 3/8" SS - GREENSANDPLUS INFLUENT WATER SAMPLE
- 3/8" SS - TREATED WATER SAMPLE (CLEARWELL INFLUENT)
- 3/8" SS - FINISHED WATER SAMPLE (CT SAMPLE)

TO SPENT BACKWASH TANK SEE DRAWING 20-D-12



PIPE GALLERY ANALYZER PIPING SCHEMATIC

NOT TO SCALE

- 3/8" SS PREFILTERED WATER SAMPLE
- 3/8" SS COMBINED FILTERED WATER SAMPLE

ATTLEBORO WATER DEPT.
ATTLEBORO, MA

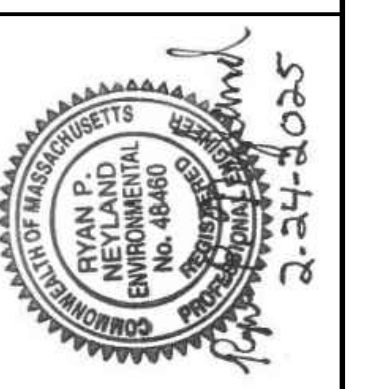
WADING RIVER
WATER TREATMENT PLANT

PROCESS
ANALYZER DETAILS

THIS DOCUMENT IS THE PROPERTY OF T&H & HOWARD, INC. AND ITS SUBSIDIARIES. REPRODUCTION OR MODIFICATION WITHOUT WRITTEN CONSENT IS PROHIBITED.

MASSDEP ANALYZER REVISIONS

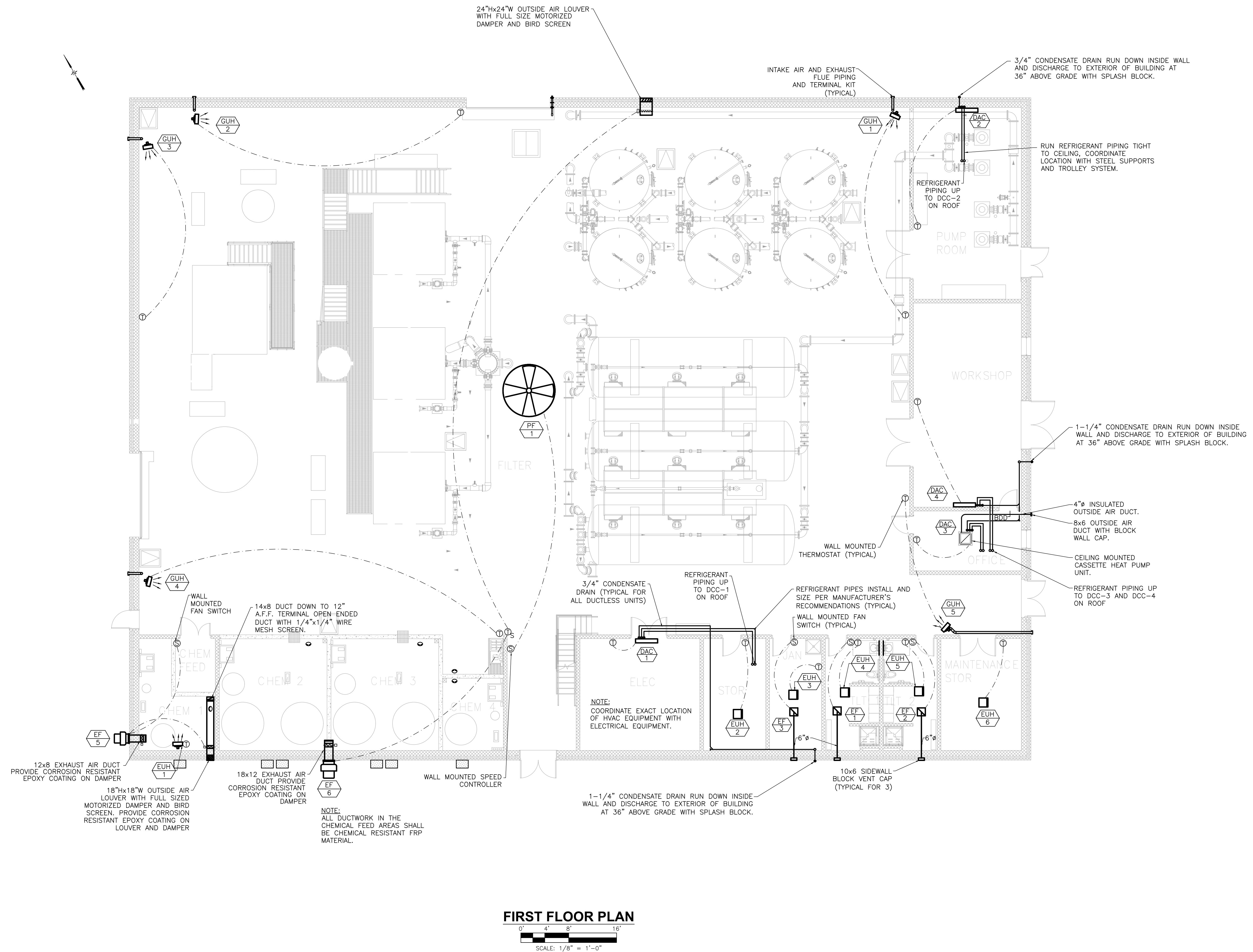
1 11/2024



T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE: AS NOTED

99-D-4

D:\jobfiles\Tatahoward\WadingRiver\WadingRiver\WadingRiver\HVAC-F (HVAC & Plumbing)\20-H-1-2.dwg 2/17/2025 8:37 AM TODD MASON



FIRST FLOOR PLAN

0' 4' 8' 16'

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

ATTLEBORO WATER DEPT.
ATTLEBORO, MA

WADING RIVER
WATER TREATMENT PLANT

Designed By: TMM
Drawn By: MW
Approved By: TMM

HVAC
FIRST FLOOR PLAN

THIS DOCUMENT IS THE PROPERTY OF T&H & HOWARD, INC. AND ITS CONTENTS ARE NOT TO BE REPRODUCED OR MODIFIED WITHOUT WRITTEN CONSENT. IT IS PROHIBITED.

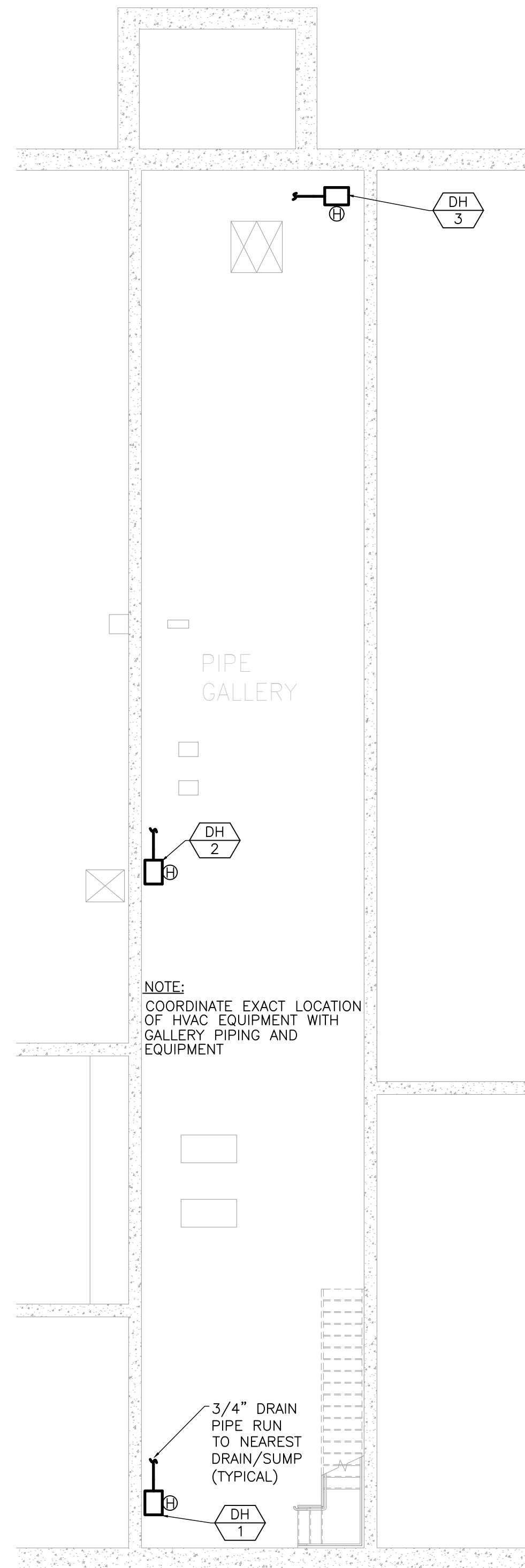
Rev.	Date	Description



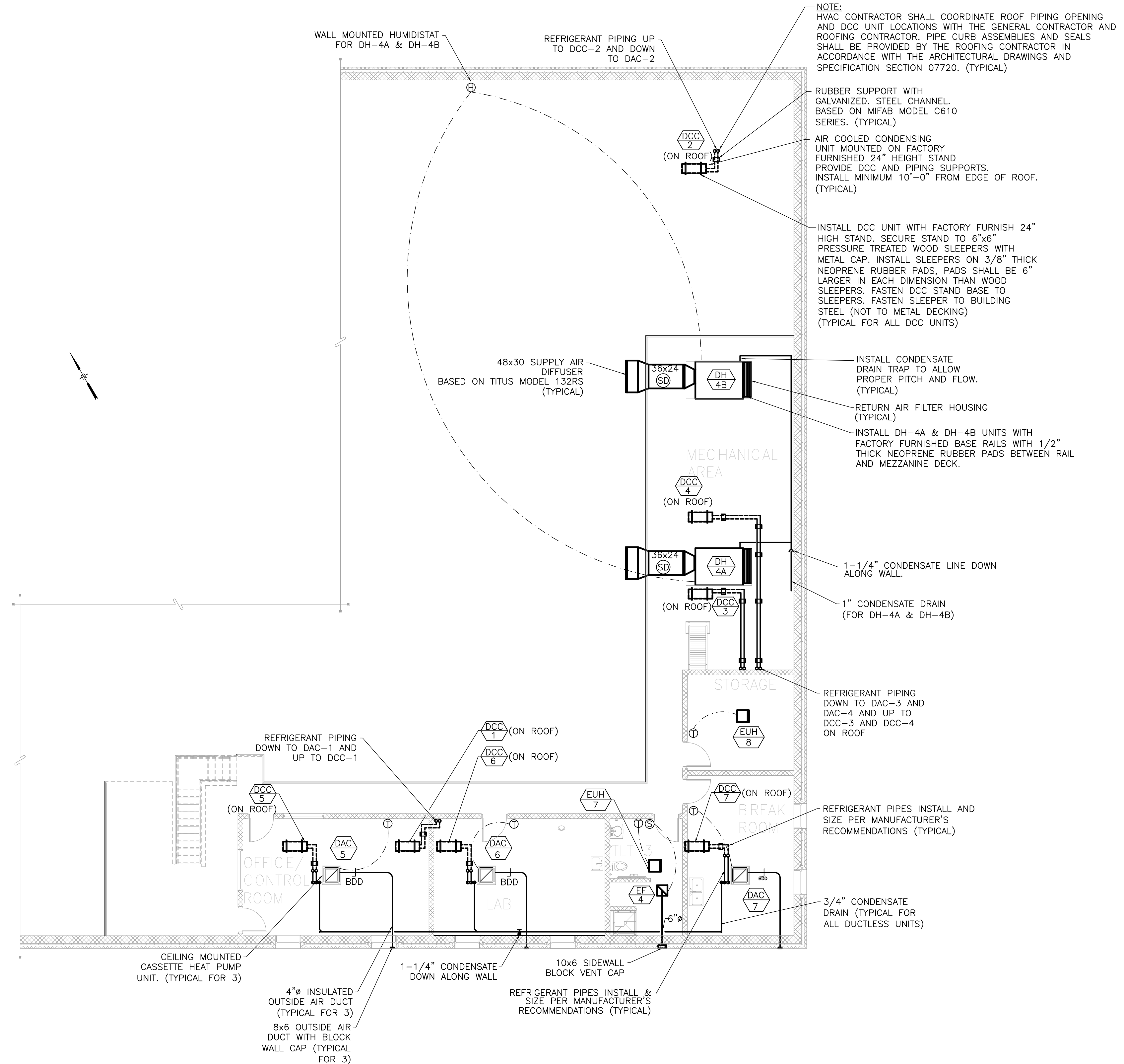
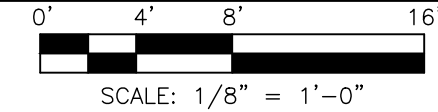
T&H & HOWARD

T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE: AS NOTED

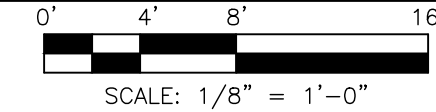
20-H-1



BASEMENT LEVEL PART PLAN



MEZZANINE PLAN



ATTLEBORO WATER DEPT.
ATTLEBORO, MA

HVAC
BASEMENT LEVEL
AND MEZZANINE PLAN

WADING RIVER
WATER TREATMENT PLANT

Designed By: TMM
Drawn By: MW

Approved By: TMM

THIS DOCUMENT IS THE PROPERTY OF T&H & HOWARD, INC. AND ITS SUBSIDIARIES. REPRODUCTION OR MODIFICATION WITHOUT WRITTEN CONSENT IS PROHIBITED.

Description

Date

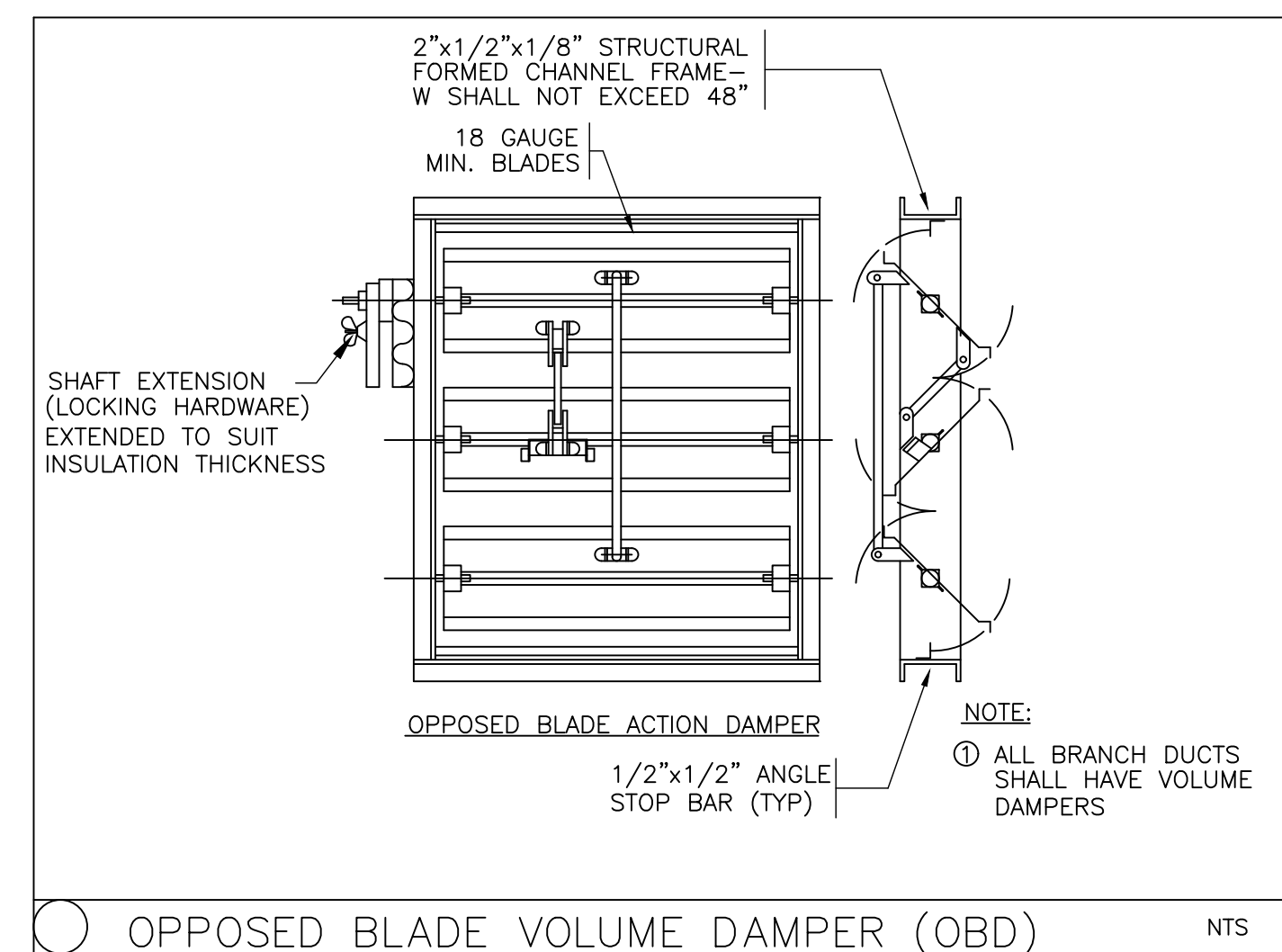
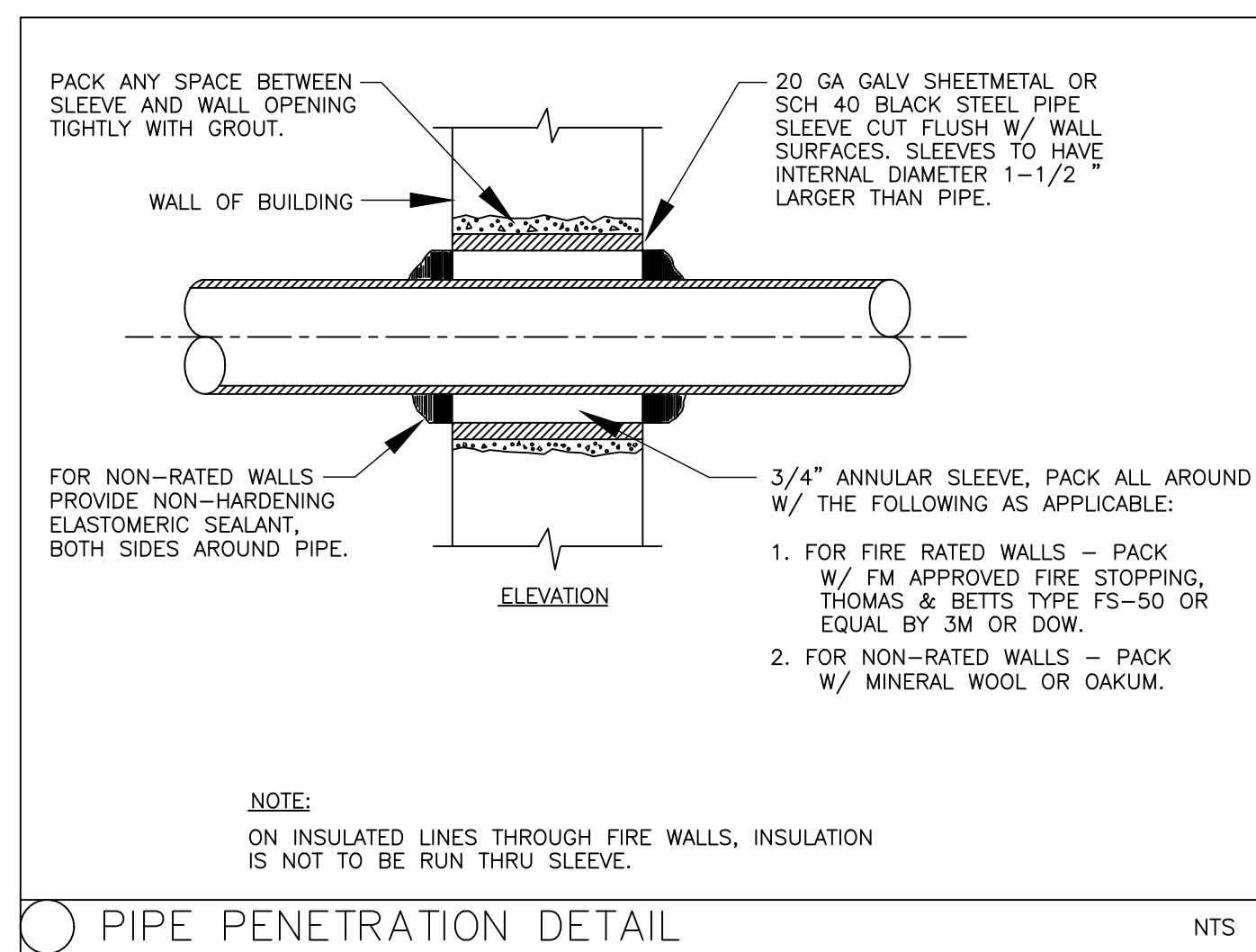
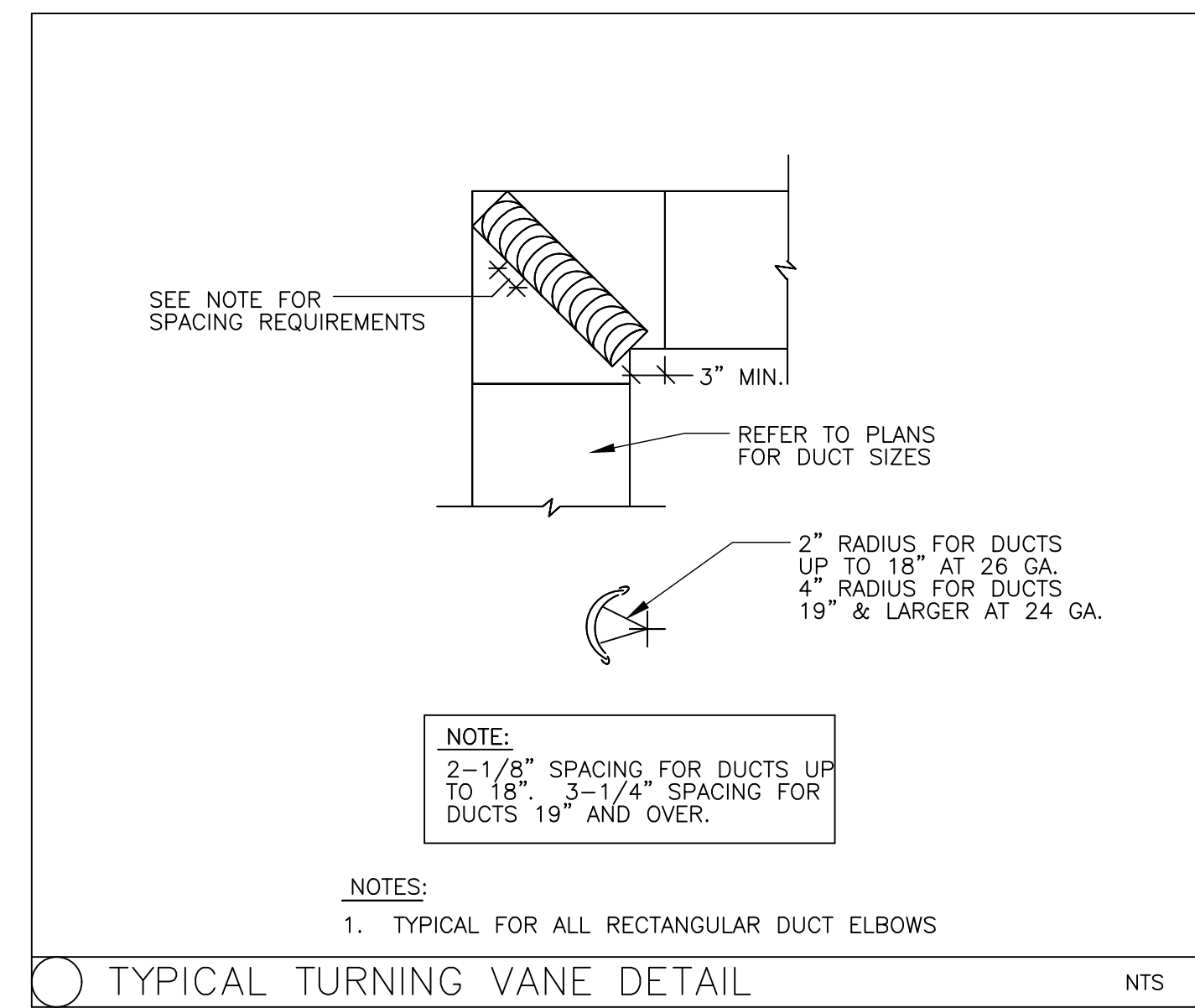
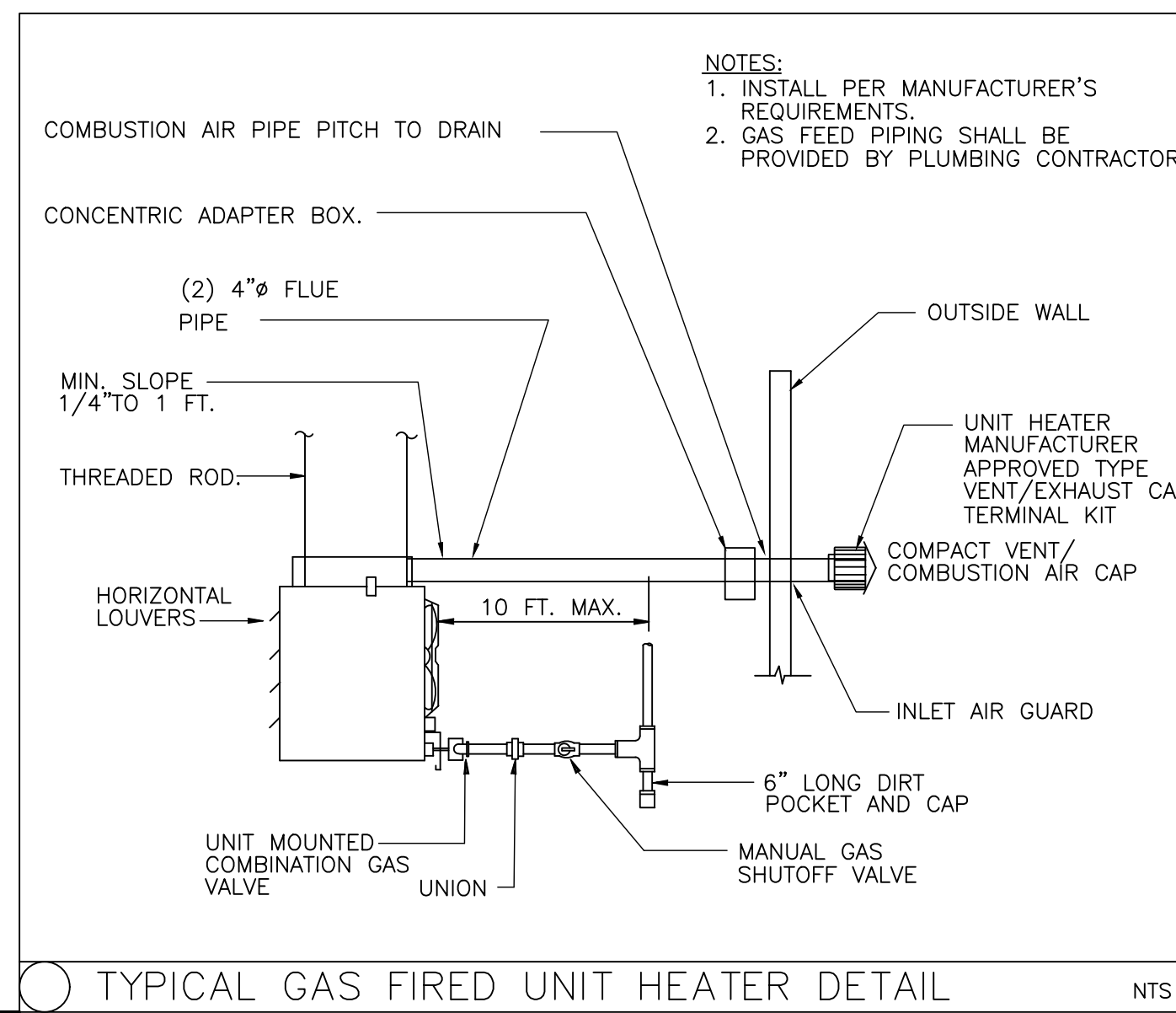
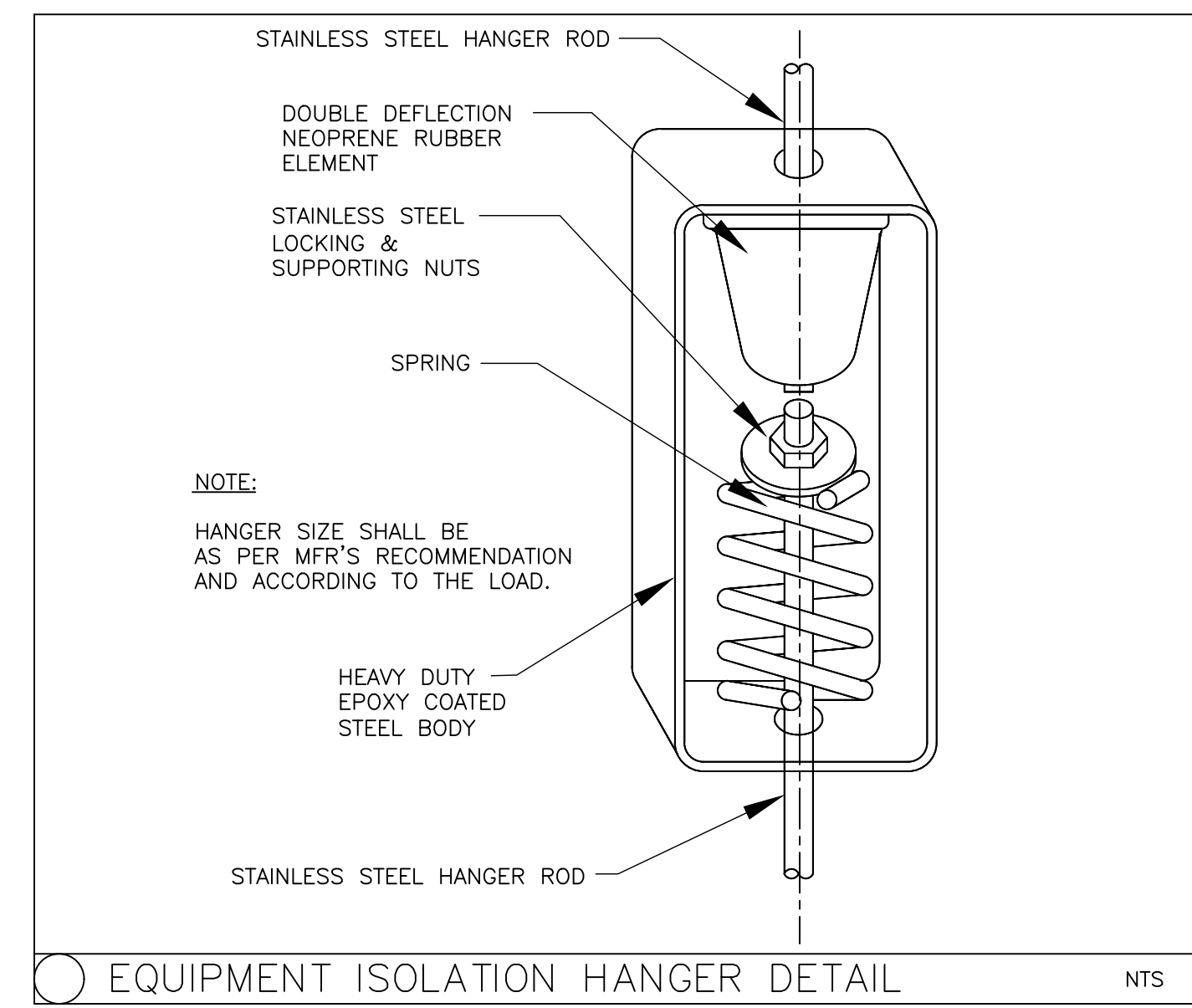
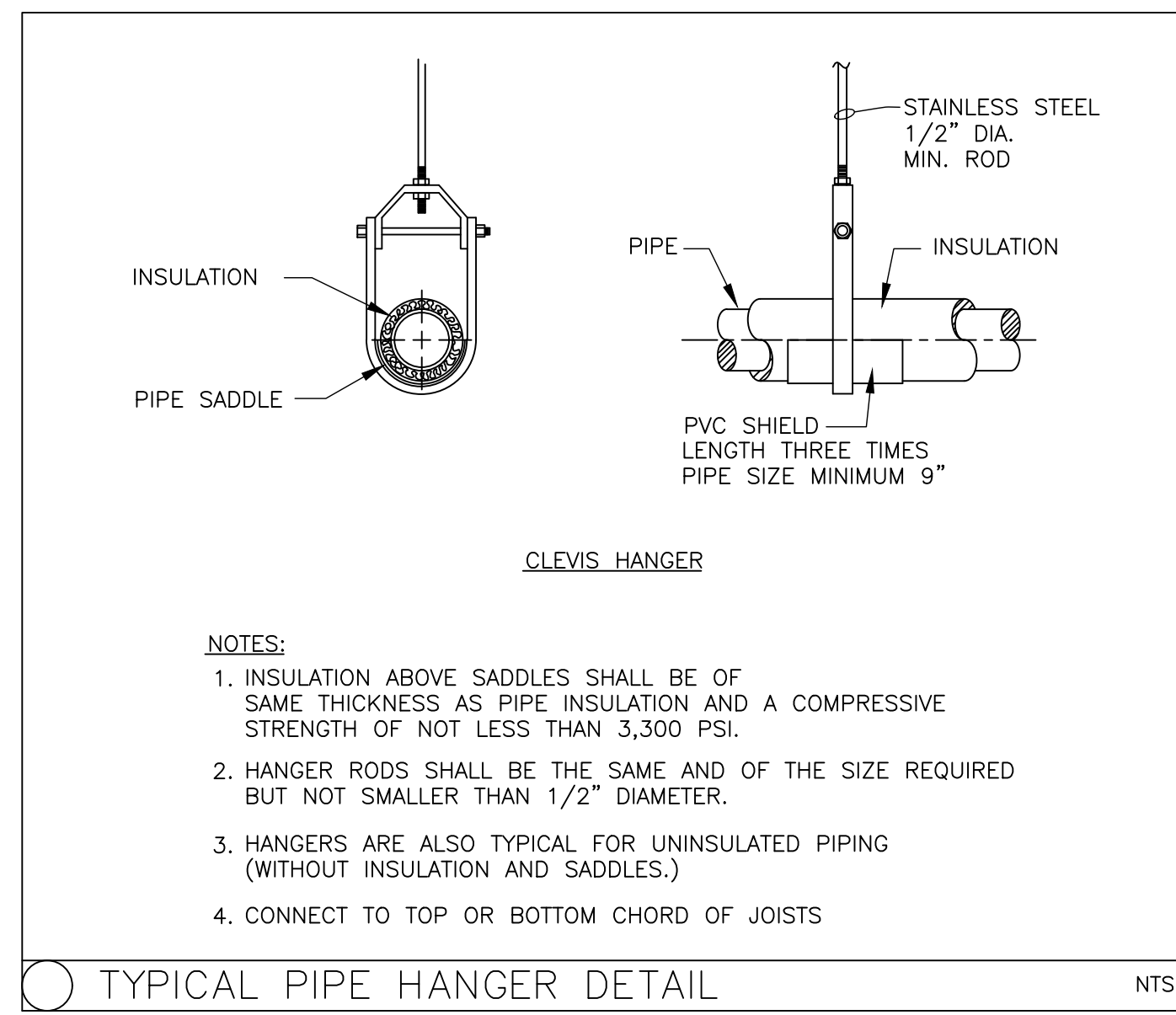
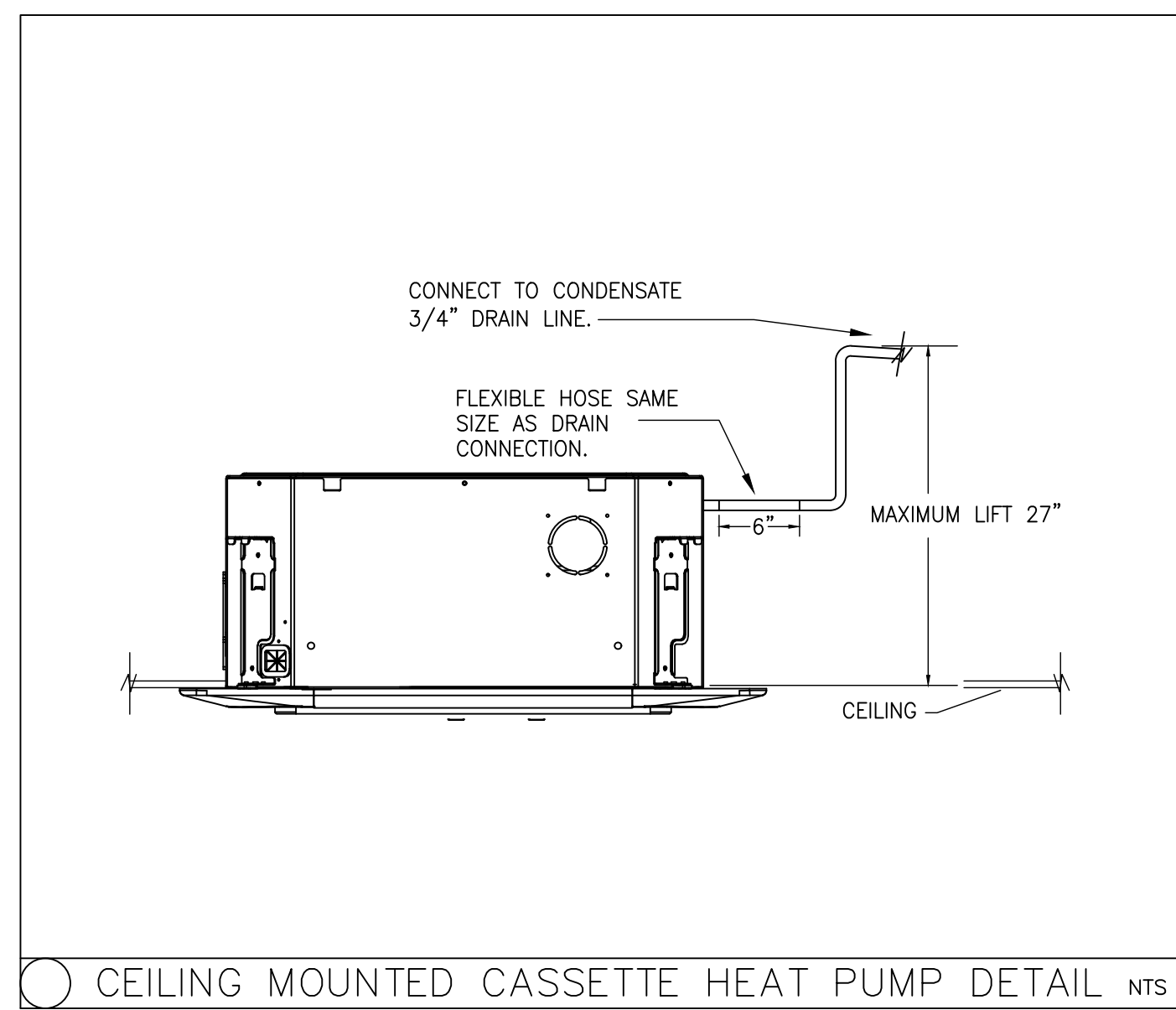
Rev.



T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE: AS NOTED

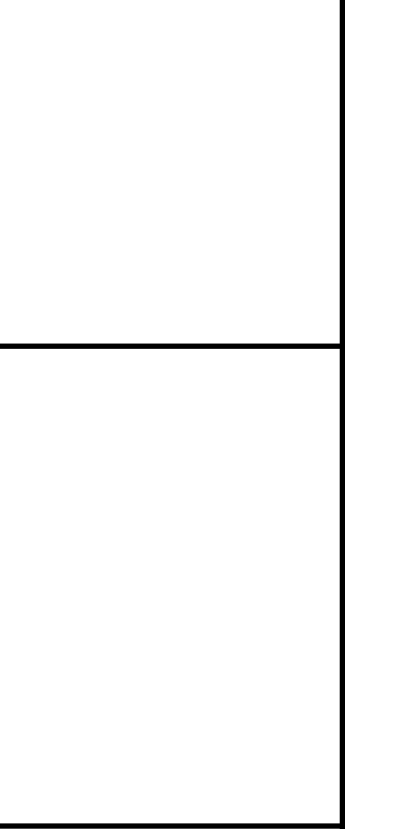
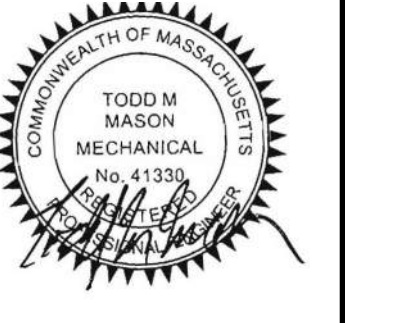
20-H-2

D:\jobfiles\TataHoward\WadingRiver\WTP\HVAC-P (HVAC & Plumbing)\30-H-1.dwg 2/17/2025 8:38 AM TODD MASON



HVAC
DETAILS

Description	Date	Rev.



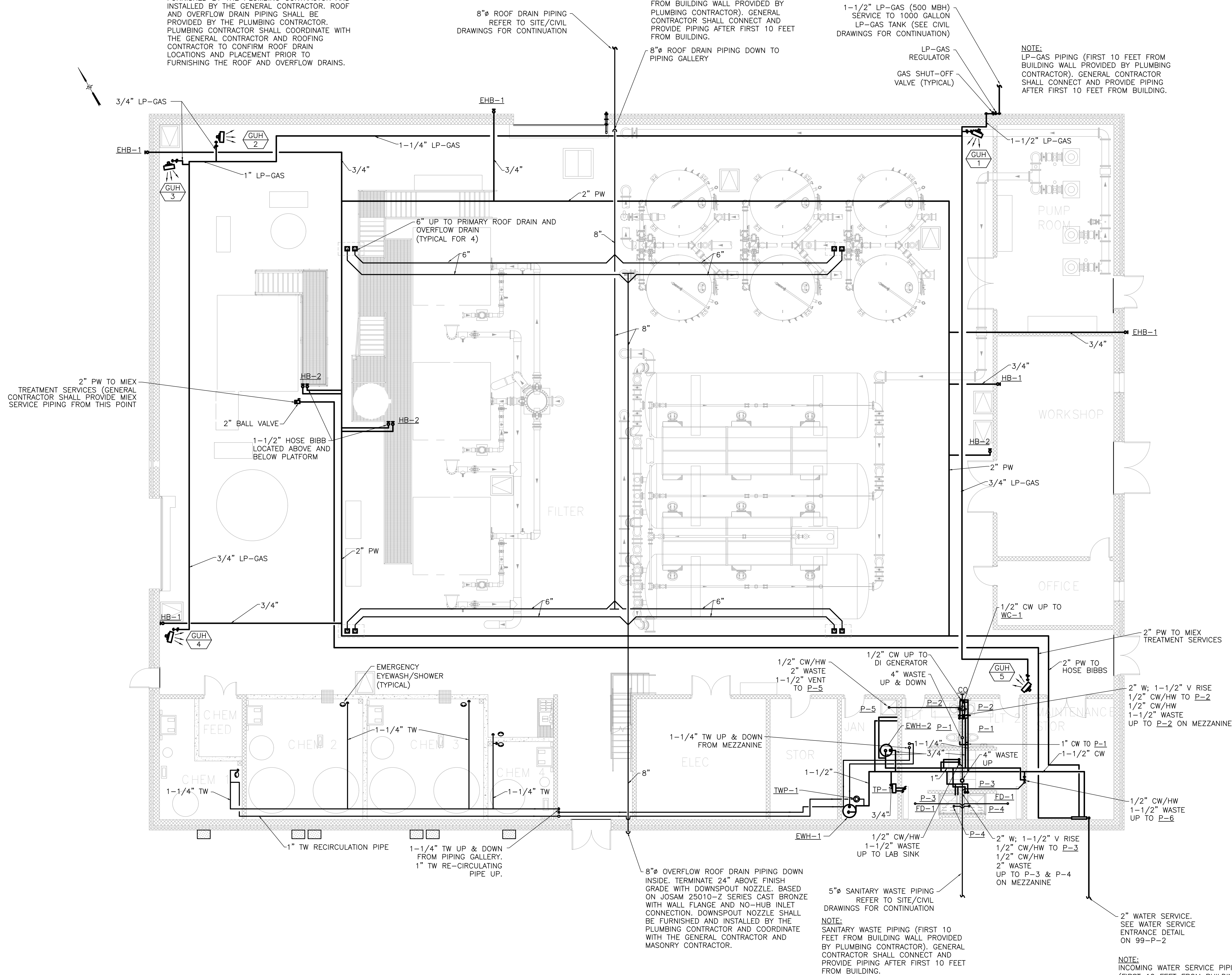
D:\jobfiles\Tatohoward\WadingRiver\WTP\HVAC-P (HVAC & Plumbing)\3D-H-2.dwg 2/17/2025 8:39 AM TODD MASON

NOTE:
ROOF AND OVERFLOW DRAIN SHALL BE FURNISHED BY THE PLUMBING CONTRACTOR AND INSTALLED BY THE GENERAL CONTRACTOR. ROOF AND OVERFLOW DRAIN PIPING SHALL BE PROVIDED BY THE PLUMBING CONTRACTOR. PLUMBING CONTRACTOR SHALL COORDINATE WITH THE GENERAL CONTRACTOR AND ROOFING CONTRACTOR TO CONFIRM ROOF DRAIN LOCATIONS AND PLACEMENT PRIOR TO FURNISHING THE ROOF AND OVERFLOW DRAINS.

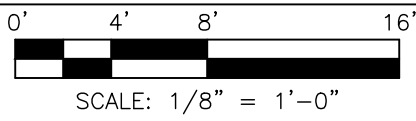
NOTE:
ROOF DRAIN PIPING (FIRST 10 FEET FROM BUILDING WALL PROVIDED BY PLUMBING CONTRACTOR). GENERAL CONTRACTOR SHALL CONNECT AND PROVIDE PIPING AFTER FIRST 10 FEET FROM BUILDING.

1-1/2" LP-GAS (500 MBH) SERVICE TO 1000 GALLON LP-GAS TANK (SEE CIVIL DRAWINGS FOR CONTINUATION)

NOTE:
LP-GAS PIPING (FIRST 10 FEET FROM BUILDING WALL PROVIDED BY PLUMBING CONTRACTOR). GENERAL CONTRACTOR SHALL CONNECT AND PROVIDE PIPING AFTER FIRST 10 FEET FROM BUILDING.



FIRST FLOOR PLAN



ATTLEBORO WATER DEPT.
ATTLEBORO, MA
WADING RIVER
WATER TREATMENT PLANT

PLUMBING
FIRST FLOOR PLAN

Rev.	Date	Description



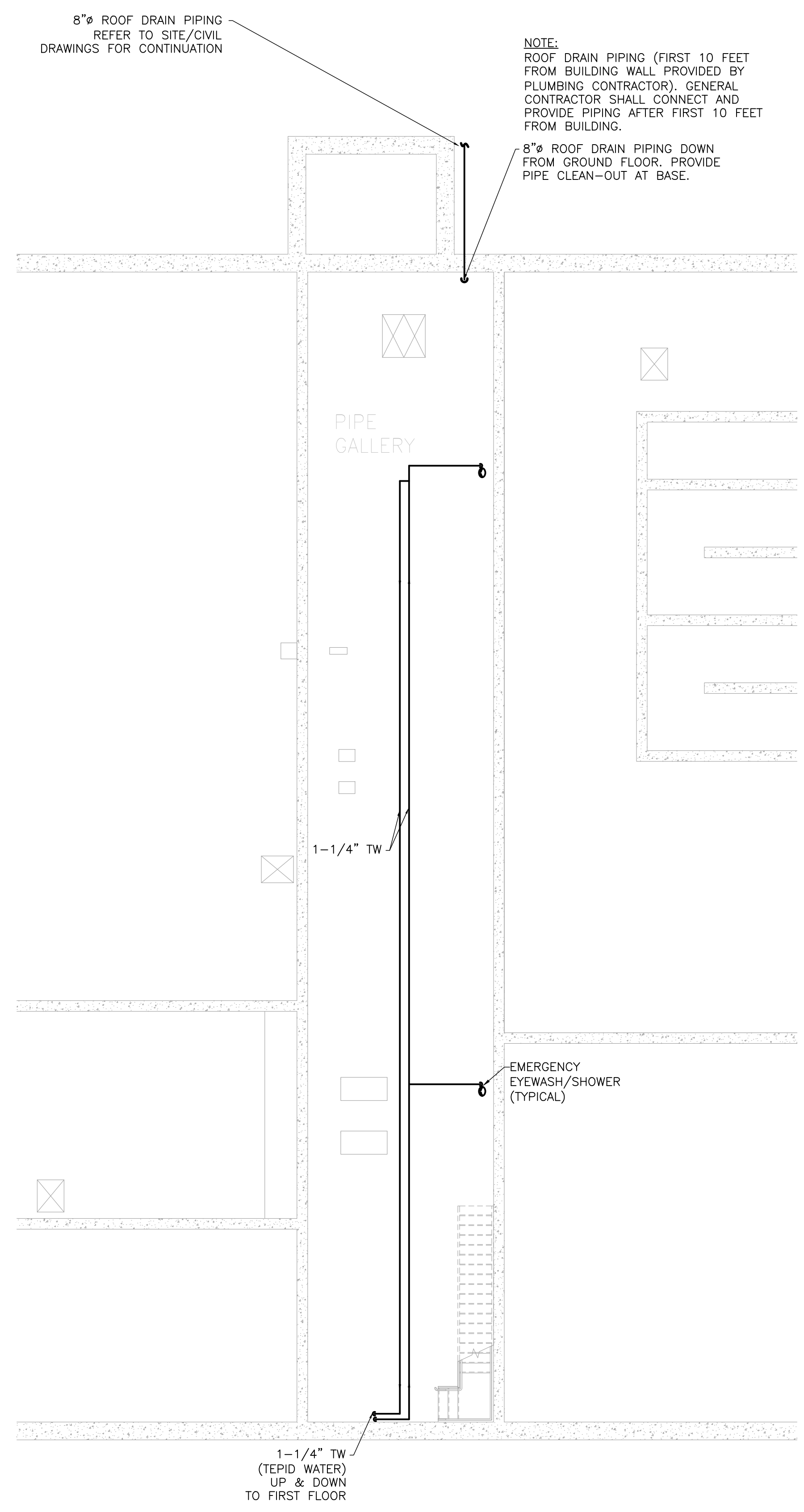
2" PW TO MIX TREATMENT SERVICES
2" PW TO HOSE BIBBS
2" W; 1-1/2" V RISE
1/2" CW/HW TO P-2
1/2" CW/HW
1-1/2" WASTE UP TO P-2 ON MEZZANINE
1-1/2" CW TO P-1
1-1/2" CW
1/2" CW/HW
1-1/2" WASTE UP TO P-6
2" WATER SERVICE. SEE WATER SERVICE ENTRANCE DETAIL ON 99-P-2



T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE: AS NOTED

20-P-1

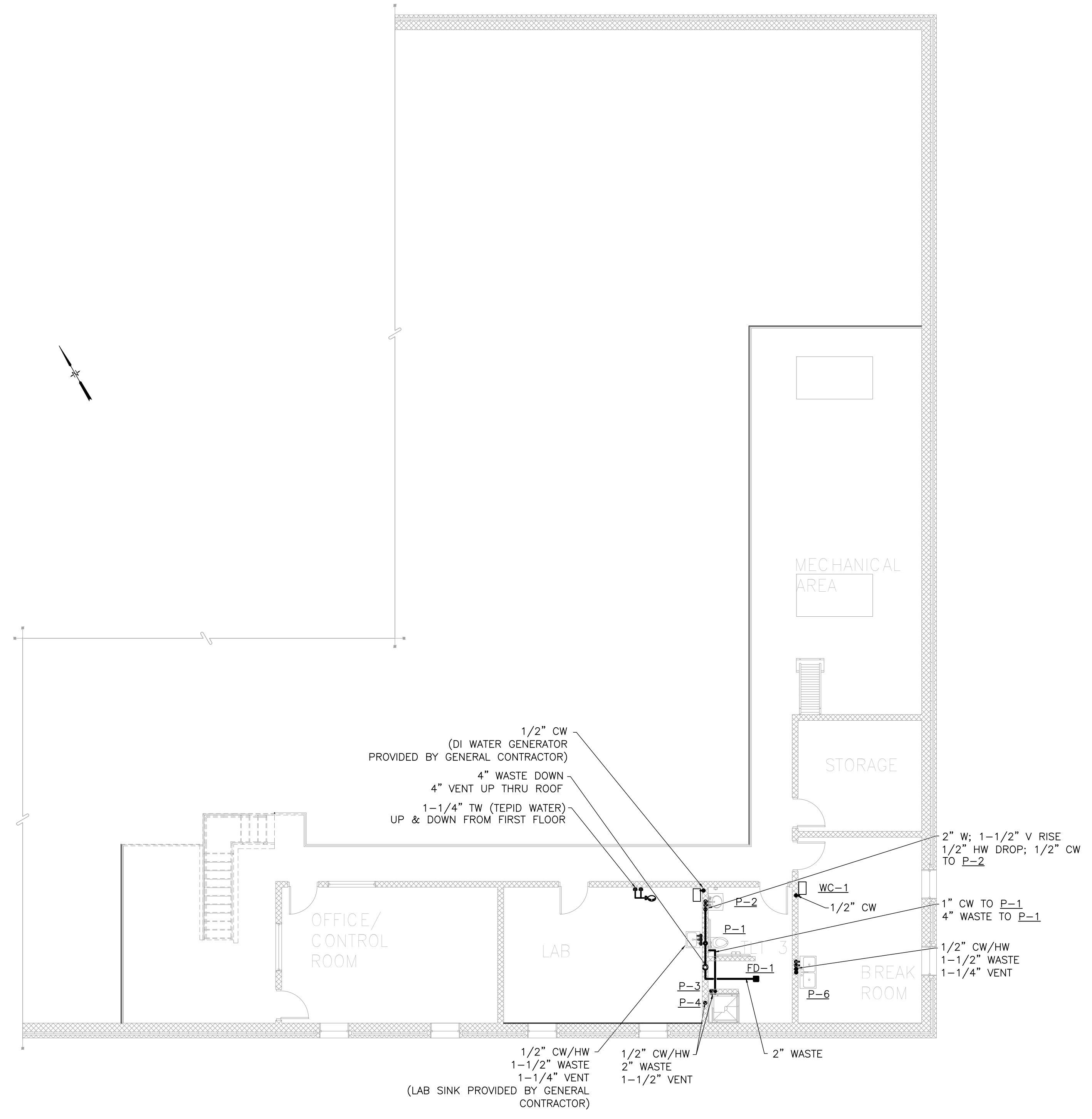
D:\jobfiles\TataHoward\Wading River WTP\HWAC-P (HWAC & Plumbing)\30-P-1.dwg 2/17/2025 8:40 AM TODD MASON



BASEMENT LEVEL PART PLAN

0' 4' 8' 16'

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



MEZZANINE PLAN

0' 4' 8' 16'

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

ATTLEBORO WATER DEPT. ATTLEBORO, MA		PLUMBING BASEMENT LEVEL AND MEZZANINE PLAN	THE DOCUMENT IS THE PROPERTY OF T&H & HOWARD, INC. AND ITS REPRODUCTION OR MODIFICATION WITHOUT WRITTEN CONSENT IS PROHIBITED.	Designed By: TMM	Drawn By: MW	Approved By: TMM
WADING RIVER WATER TREATMENT PLANT						
T&H NO.: 6193						
DATE: FEBRUARY 2025						
SCALE: AS NOTED						
20-P-2						

D:\jobfiles\TataHoward\WadingRiver\WTP\HVAC-P (HVAC & Plumbing)\30-P-1.dwg 2/17/2025 8:41 AM TODD MASON

PLUMBING-ELECTRICAL SCHEDULE																	
TAG	FIXTURE	SERVICE	MANUFACTURER	MODEL NO.	VOLTS	PHASE	HERTZ	KW	AMPS	CW	HW	TW	TANK STORAGE (GAL.)	BTU INPUT PER HOUR	RECOVERY RATE (GPH) AT 120' RISE	TEMPERATURE SETTING	NOTES
EWH-1	ELECTRIC TANK HEATER	EMERGENCY SHOWER	HUBBELL	EMV120-85-3SLRS	208	1	60	3.0	14.0	1-1/2	--	1-1/4	119	--	10.2	170°F	1,2
EWH-2	ELECTRIC TANK HEATER	BATHROOM CORE	HUBBELL	E55A-3-3SLRS	208	1	60	3.0	14.0	3/4	3/4	--	55	--	10.0	120°F	--
TP-1	TRAP PRIMING UNIT	BATHROOM CORE	PRECISION PLUMBING	MPB-500	120	1	60	--	5	3/4	--	--	--	--	--	--	--
TWP-1	TW PUMP	TW PIPING SYSTEM	TACO	009-FS	120	1	60	--	1.4	--	--	1"	--	--	--	--	3
WC-1	FREE STANDING WATER COOLER	CONTROL ROOM	BRIIO	CLPOU520UVF2	120	1	60	--	8.0	1/2	--	--	--	--	--	--	--

NOTES: 1. FACTORY MOUNTED MIXING VALVE OUTLET WATER TEMPERATURE IS MAINTAINED AT 85°F
2. HUBBELL MODEL EMV WATER HEATER IS A PACKAGED SYSTEM DESIGNED TO MEET THE REQUIREMENTS OF ANSI/ISEA Z358.1-2014 FOR TEPID WATER DELIVERY.
3. PUMP 1/8 HP, 3 GPM AT 25 FT HEAD.

PLUMBING FIXTURE SCHEDULE												
SYMBOL	FIXTURE				FITTING					TRAP	REMARKS	
	TYPE	MANUFACTURER	MODEL	SIZE	MANUFACTURER	TYPE	CW	HW	W			V
P-1	WATER CLOSET (ADA)	AMERICAN STANDARD	AFWALL 2294.011	---	---	---	1"	-	4"	2"	INTEGRAL	PROVIDE SUITABLE WALL CARRIER AND OPEN FRONT SEAT. PROVIDE MANUAL FLUSHOMETER VALVE 1.28 GPF
P-2	LAVATORY (ADA)	KOHLER	K-2035-8	18" X 22"	SYMONS	SLW5912PP-05	1/2"	1/2"	1-1/2"	1-1/2"	1 1/2" CP OFFSET P-TRAP	PROVIDE SUPPLIES WITH STOPS, GRID DRAIN ASSEMBLY AND SINK SHROUD. PROVIDE WALL MOUNTING BRACKET. PROVIDE 0.5 GPM FLOW RESTRICTOR OPTION.
P-3	SHOWER VALVE	---	SYMONS	---	TEMPROL S-96-1	---	1/2"	1/2"	-	-	---	---
P-4	SHOWER DRAIN	KOHLER	K-9135	28" X 28"	---	---	-	-	2"	1-1/2"	2" P-TRAP	2" TILE-IN DRAIN
P-5	JAN. SINK	FIAT	FL-7	24"x20"x13.38"	FIAT	---	1/2"	1/2"	2"	1-1/2"	2" P-TRAP	---
P-6	BREAK ROOM SINK	AMERICAN STANDARD	20DB.83322835	33" X 22" X 8"	AMERICAN STANDARD	7074.300	1/2"	1/2"	1-1/2"	1-1/4"	1-1/2" P-TRAP	STAINLESS STEEL DOUBLE SINK, 8" DEEP. FAUCET 8" GOOSENECK, COLONY PRO SINGLE HANDLE PULL DOWN DUAL SPRAY.
HB-1	INTERIOR HOSE BIBB	WOODFORD	3/4" 24-CP	----	---	---	3/4"	-	-	-	---	PROVIDE LOOSE TEE KEY.
HB-2	WASH-DOWN STATION	NIBCO	TI-8	1-1/2" BALL VALVE	---	---	1-1/2"	----	----	----	---	PROVIDE 1-1/2" 50FT. RED RUBBER NON-COLLAPSIBLE HOSE WITH BRASS FITTING, HOSE STORAGE REEL, AND 1-1/2" PISTOL GRIP SPRAY NOZZLE.
EHB-1	WALL HYDRANT	WOODFORD	3/4" B65-CP	----	---	---	3/4"	-	-	-	---	PROVIDE WITH SHUT OFF VALVE ON DROP, ACCESS PANEL, AND LOOSE TEE KEY.

DRAIN SCHEDULE						
TAG	FIXTURE	MANUFACTURER	MODEL NO.	WASTE	VENT	REMARKS
FD-1	FLOOR DRAIN	ZURN	ZB-415-6B	2"	1-1/2"	---
CO	CLEANOUT	ZURN	ZB-1400	-	-	---

PLUMBING GENERAL NOTES

- REFER TO ARCHITECTURAL DRAWINGS FOR FINISHED FLOOR ELEVATIONS.
- ALL WORK PERFORMED SHALL CONFORM TO ALL APPLICABLE LAWS, STATE AND LOCAL CODES AND SHALL BE SUBJECT TO CONTROL OF PUBLIC AUTHORITIES HAVING JURISDICTION.
- PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND BEARING COSTS OF NECESSARY PERMITS, BONDS AND FEES FOR WORK. SECURE AND PAY ALL FEES FOR PERMITS, UTILITY CONNECTIONS AND INSPECTION OF WORK.
- THE FINAL ARRANGEMENT OF THE WORK SHALL SUIT FIELD CONDITIONS.
- VERIFY ALL DIMENSIONS IN THE FIELD.
- EQUIPMENT & PIPING INSTALLATION SHALL BE COORDINATED WITH ALL OTHER BUILDING SYSTEMS AND BUILDING COMPONENTS. ALL WORK WHICH CAUSES INTERFERENCE DUE TO FAILURE OF COORDINATION SHALL BE REPAIRED AT PLUMBING CONTRACTOR'S EXPENSE.
- AFTER INSTALLATION ALL EQUIPMENT AND PIPING SYSTEMS SHALL BE TESTED TO DEMONSTRATE CAPABILITY TO PERFORM SATISFACTORILY. ANY DEFICIENCIES SHALL BE CORRECTED AND RETESTED. ALL EQUIPMENT, MATERIAL, AND LABOR REQUIRED FOR TESTING SHALL BE FURNISHED BY THE PLUMBING CONTRACTOR.
- PRIOR TO TESTING ALL PIPING SYSTEMS SHALL BE THOROUGHLY CLEANED AND BE IN PROPER CONDITION.
- ARCHITECTURAL BACKGROUND INFORMATION IS SHOWN FOR COORDINATION PURPOSES ONLY. REFER TO THE PROPER DRAWINGS FOR EXACT LOCATIONS, SIZES & QUANTITIES OF OTHER TRADES WORK.
- ABOVE SLAB PLUMBING PIPING SHALL BE HELD AS HIGH AS POSSIBLE.
- NO PLUMBING PIPING SHALL BE RUN IN OR THROUGH THE ELECTRICAL ROOMS.
- PLUMBING CONTRACTOR IS RESPONSIBLE FOR ALL FINAL CONNECTIONS TO SITE UTILITIES. COORDINATE EXACT LOCATION, INV., AND UTILITY MATERIALS IN FIELD.
- GAS PIPING SHALL BE SCHEDULE 40 BLACK IRON WITH SCREWED FITTING. PLUMBING CONTRACTOR TO FURNISH AND INSTALL AND CONNECT GAS PIPING TO GAS-FIRED EQUIPMENT AND COORDINATE WITH HVAC CONTRACTOR FOR EXACT LOCATION OF EQUIPMENT.
- SANITARY WASTE AND LP-GAS PIPING WITHIN 10 FEET OF THE BUILDING SHALL BE PROVIDED BY THE PLUMBING CONTRACTOR. PIPING AS SHOWN ON THE CIVIL DRAWINGS BEYOND 10 FEET OF THE BUILDING SHALL BE PROVIDED BY THE GENERAL CONTRACTOR.

GENERAL LEGEND		
	CO	CLEANOUT
	HB/EHB	HOSE BIBB EXTERIOR HOSE BIBB
	FCO	FLOOR CLEANOUT
		ELBOW UP OR RISE
		ELBOW DOWN OR DROP
		UNION
		PIPE CONTINUATION
		BALL VALVE
		GAS SHUT-OFF VALVE
	WH	WALL HYDRANT
		BACKFLOW PREVENTER

ABBREVIATIONS	
CW	COLD WATER
CO	CLEAN OUT
DN	DOWN
EHB	EXTERIOR HOSE BIBB
EWH	ELECTRIC WATER HEATER
FCO	FLOOR CLEANOUT
FD	FLOOR DRAIN
G	GAS
HB	HOSE BIBB
HW	HOT WATER
LP	LIQUEFIED PETROLEUM GAS
P-#	FIXTURE NUMBER
PW	PROCESS WATER
SD	STORM DRAIN
TYP	TYPICAL
TP	TRAP PRIMER
TW	TEPID WATER
V	VENT
VTR	VENT THRU ROOF
W	WASTE

PIPING LEGEND		
	CW	COLD WATER ABOVE SLAB
	HW	HOT WATER
	G	GAS
	S or W	SOIL OR WASTE ABOVE GROUND
	S or W	SOIL OR WASTE BELOW SLAB
	PW	PROCESS WATER
	TW	TEPID WATER
	SD	STORM DRAIN
	V	VENT ABOVE GROUND

ATTLEBORO WATER DEPT.
ATTLEBORO, MA
WADING RIVER
WATER TREATMENT PLANT

PLUMBING
SCHEDULES AND NOTES

Rev.	Date	Description

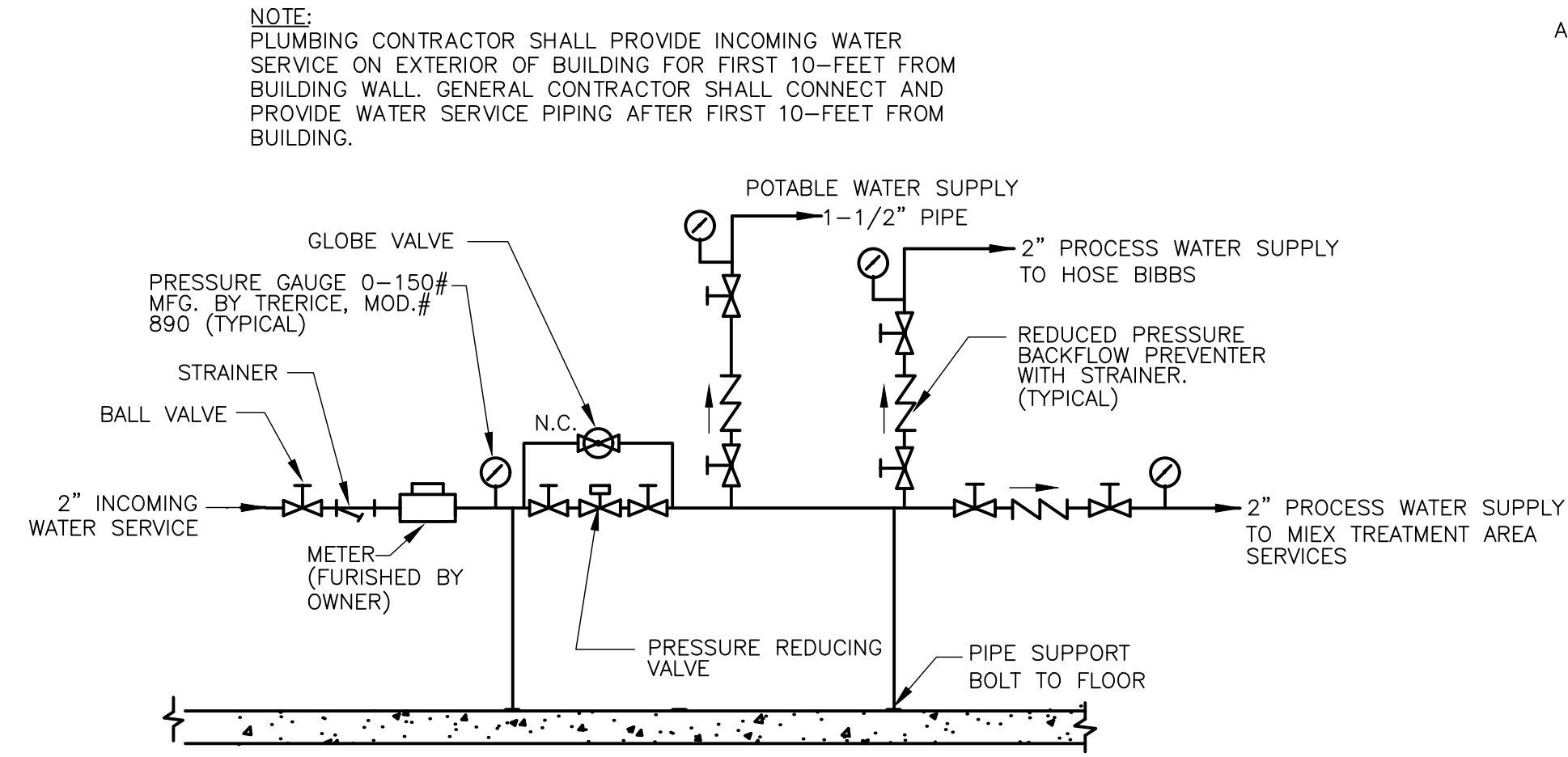


T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE: AS NOTED

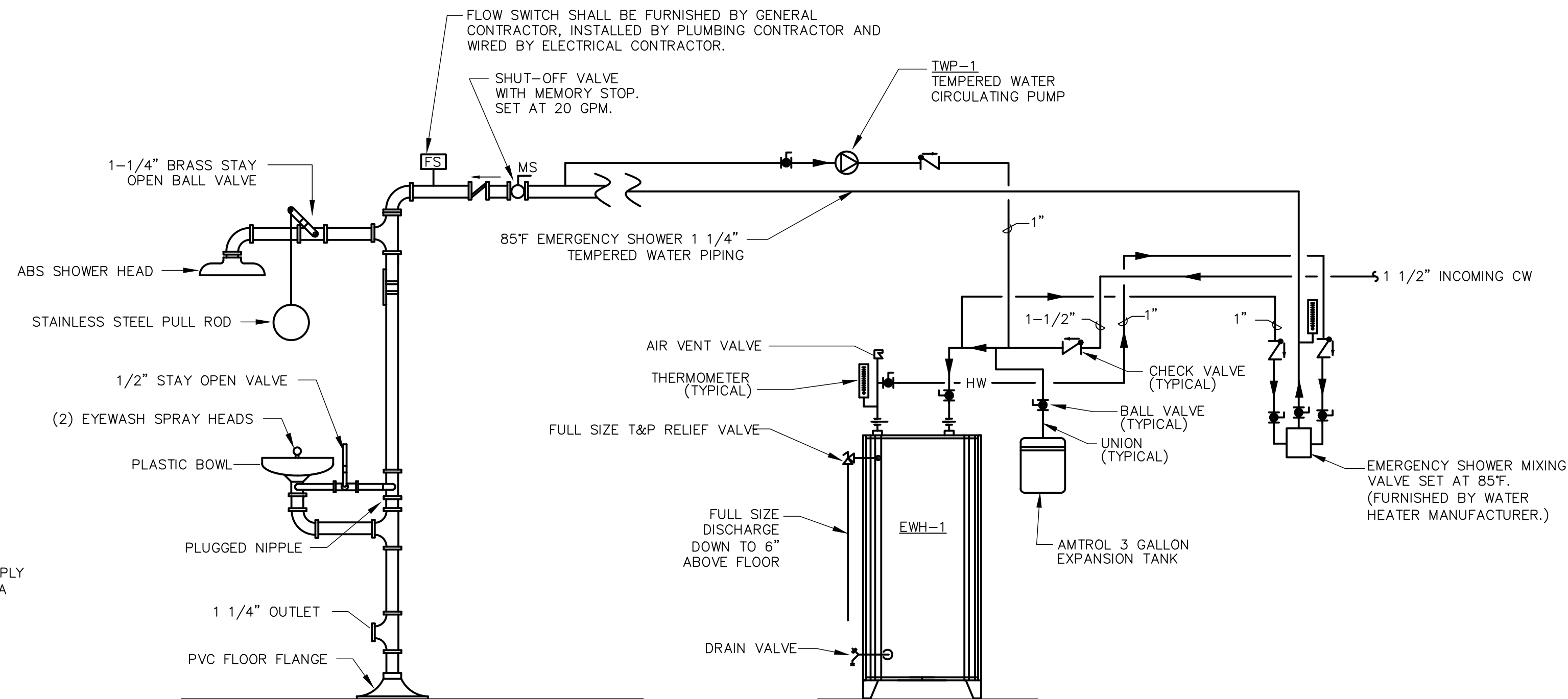


99-P-1

D:\jobfiles\Tatohoward\WadingRiver\WTP\HVAC-P (HVAC & Plumbing)\30-P-1.dwg 2/17/2025 8:41 AM TODD MASON

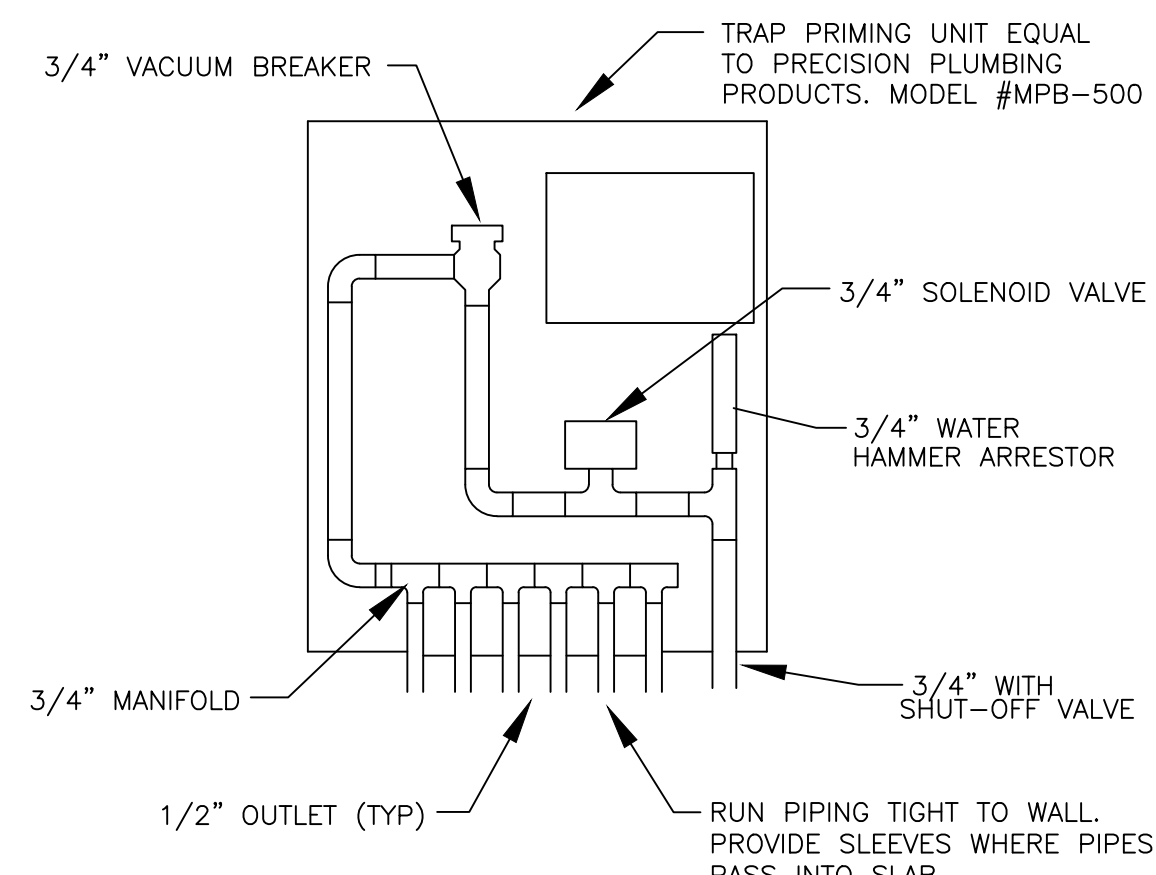


WATER SERVICE ENTRANCE
NOT TO SCALE

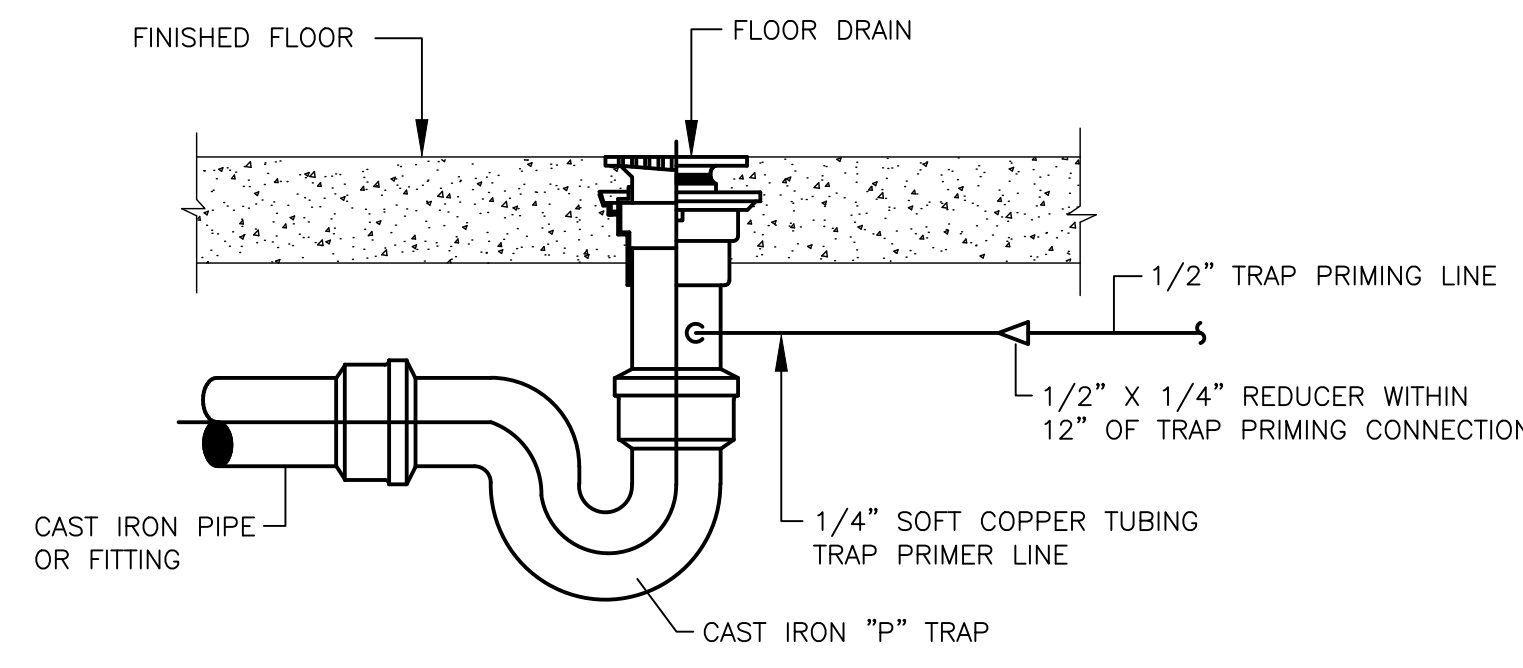


EMERGENCY SHOWER AND EYEWASH DETAIL
NOT TO SCALE

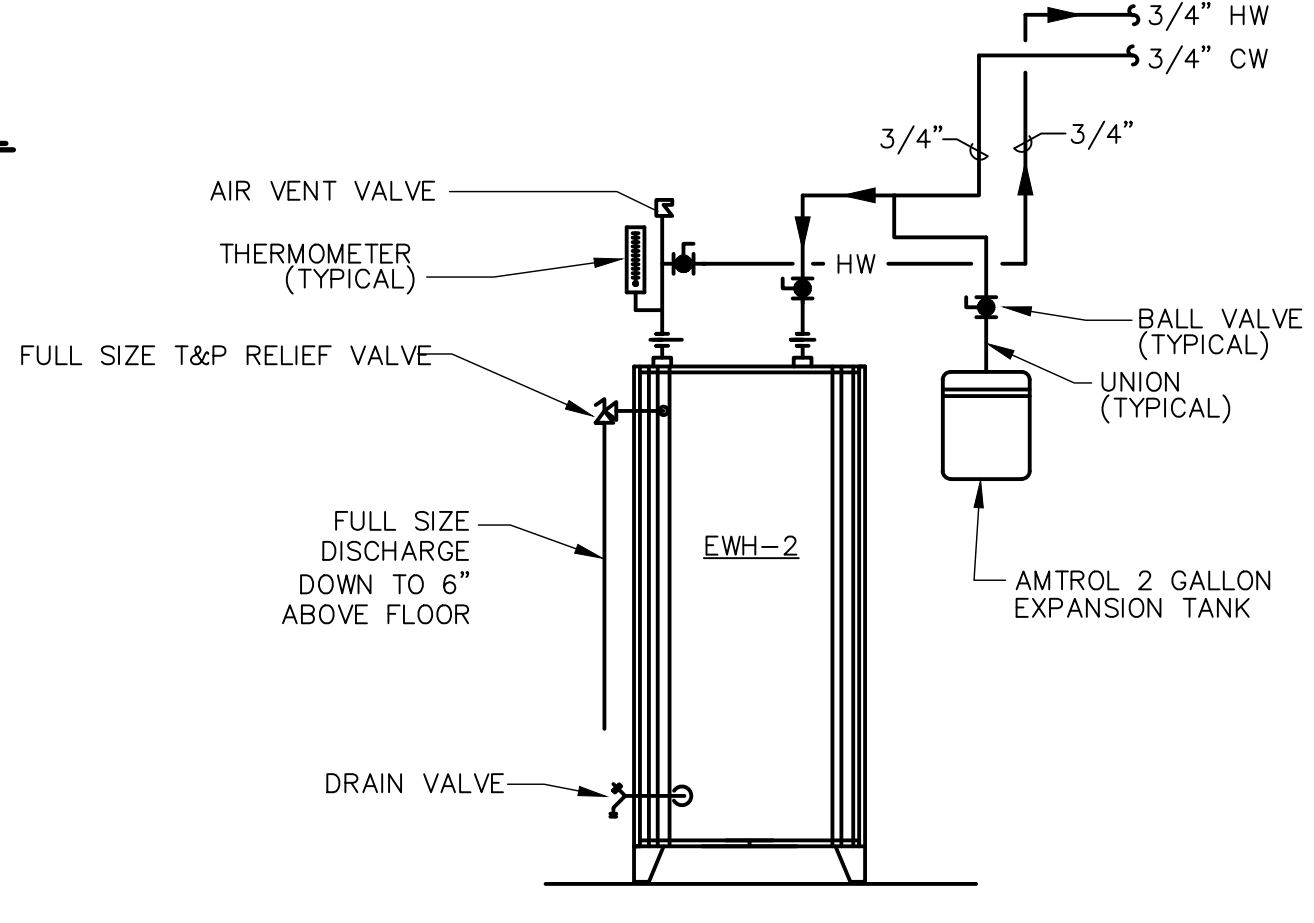
ELECTRIC WATER HEATER EWH-1 DETAIL
NOT TO SCALE



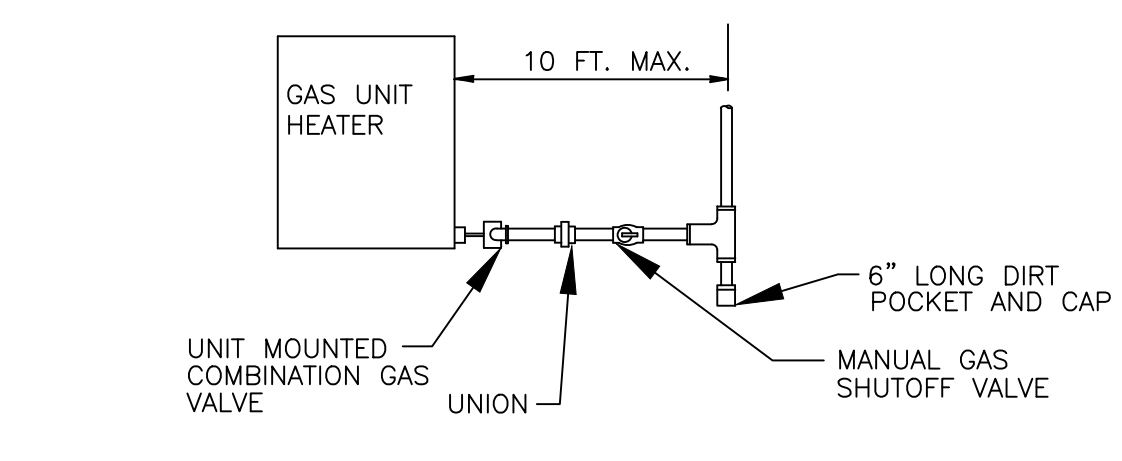
TRAP PRIMER DETAIL
NO SCALE



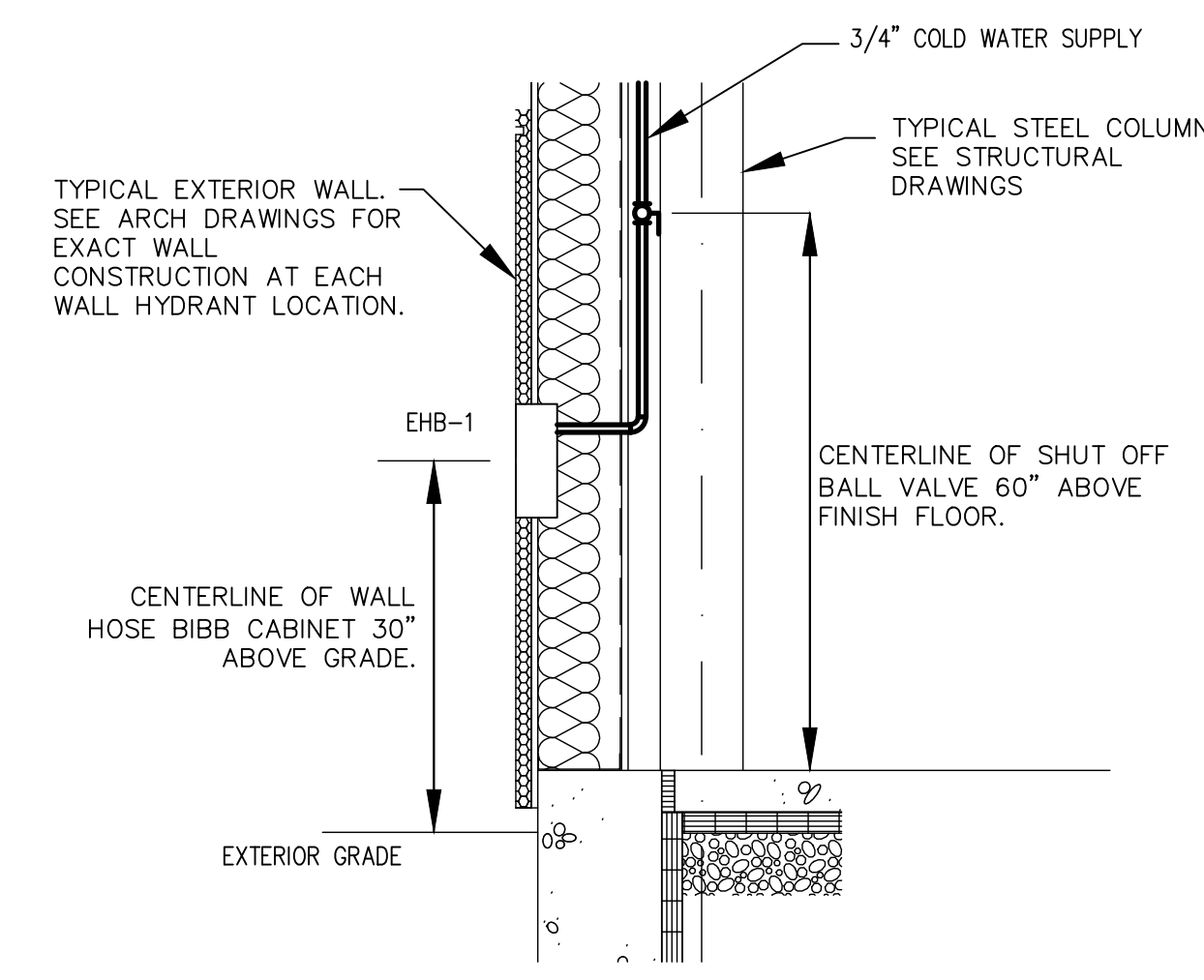
FLOOR DRAIN DETAIL
NO SCALE



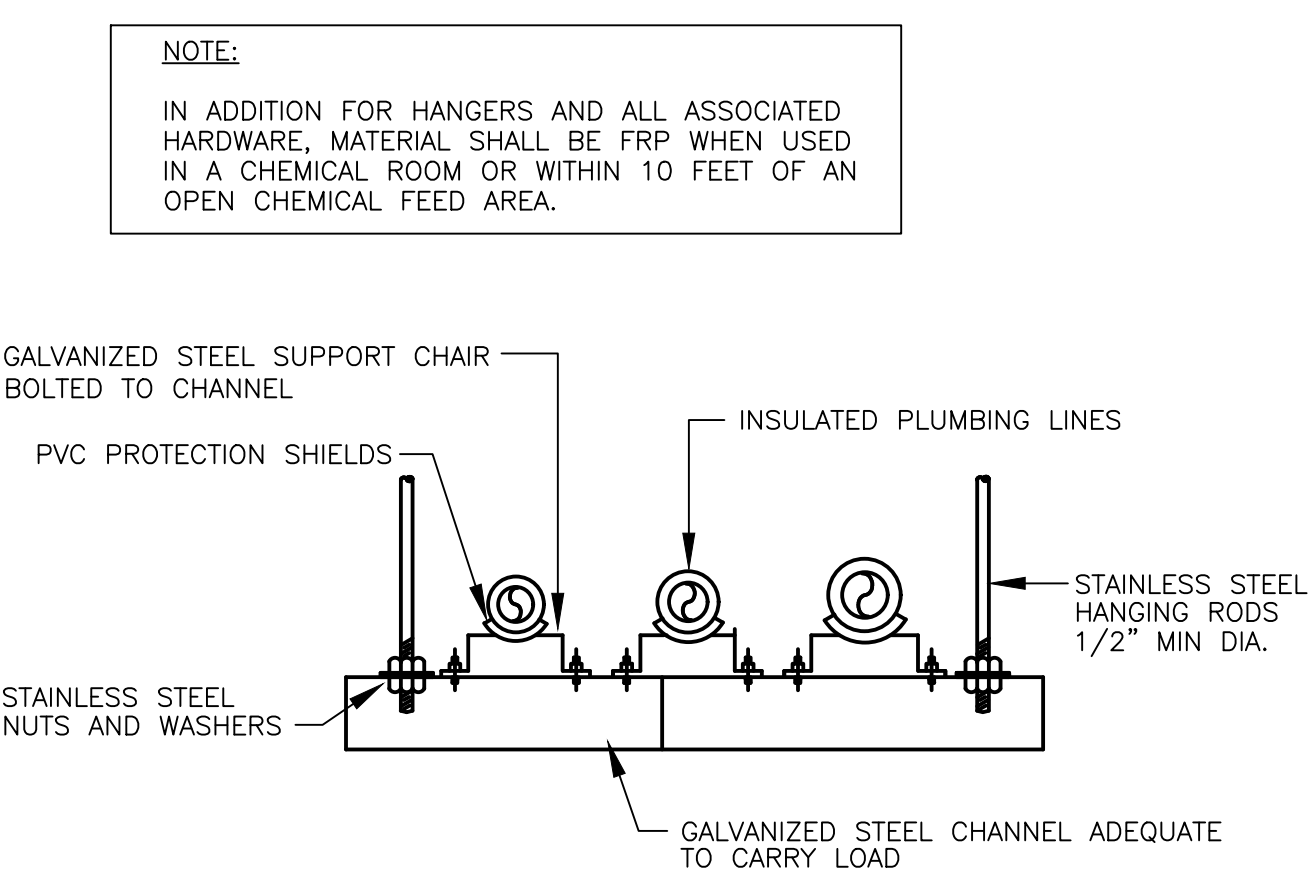
ELECTRIC WATER HEATER EWH-2 DETAIL
NOT TO SCALE



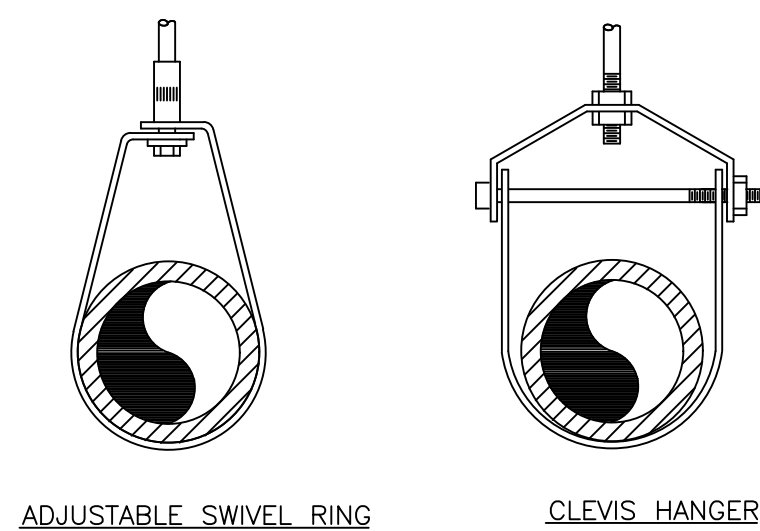
GAS CONNECTION DETAIL
NO SCALE



TYPICAL EXTERIOR HOSE BIBB DETAIL
NO SCALE



TRAPEZE HANGER DETAIL
NO SCALE



COPPER WATER PIPE HANGERS

PIPE SIZE	ROD SIZE	MAX SPACING
UP TO 1 1/4"	3/8"	6 FEET
1 1/2" - 2"	3/8"	10 FEET
2 1/2" - 4"	1/2"	10 FEET

PIPE HANGER DETAIL
NO SCALE

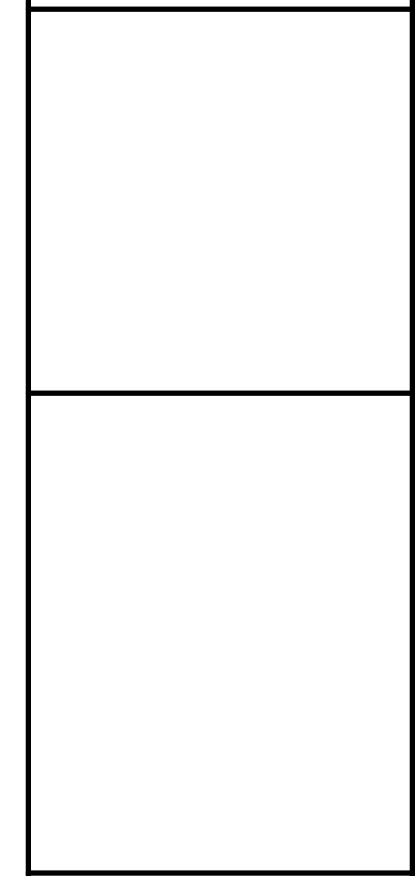
NOTE:
IN ADDITION FOR HANGERS AND ALL ASSOCIATED HARDWARE, MATERIAL SHALL BE FRP WHEN USED IN A CHEMICAL ROOM OR WITHIN 10 FEET OF AN OPEN CHEMICAL FEED AREA.

NOTE: PROVIDE INTERMEDIATE HANGING ROD SUPPORT WHERE NUMBER OF PIPES EXCEEDS FIVE (5).

ATTLEBORO WATER DEPT.
ATTLEBORO, MA
WADING RIVER
WATER TREATMENT PLANT

PLUMBING
DETAILS

Description	Date	Rev.



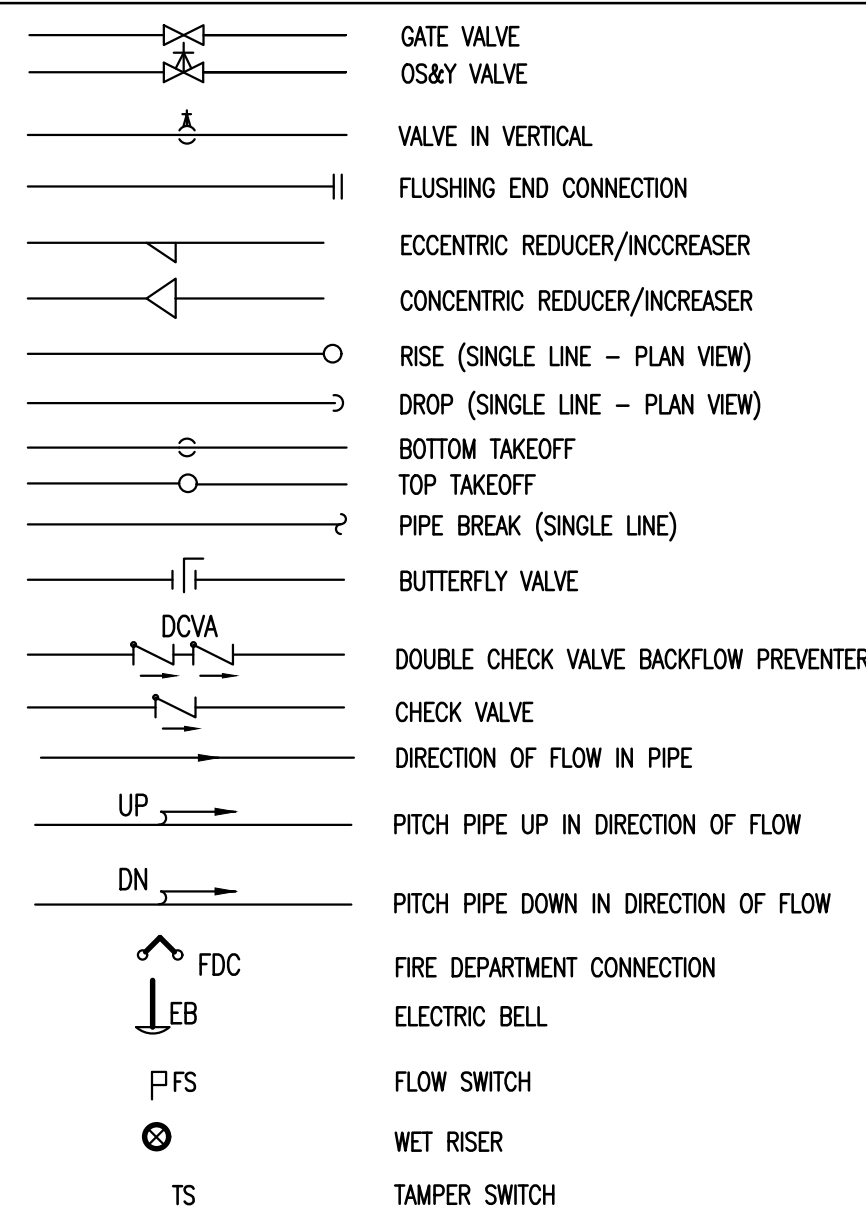
TATA & HOWARD

T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE: AS NOTED

99-P-2

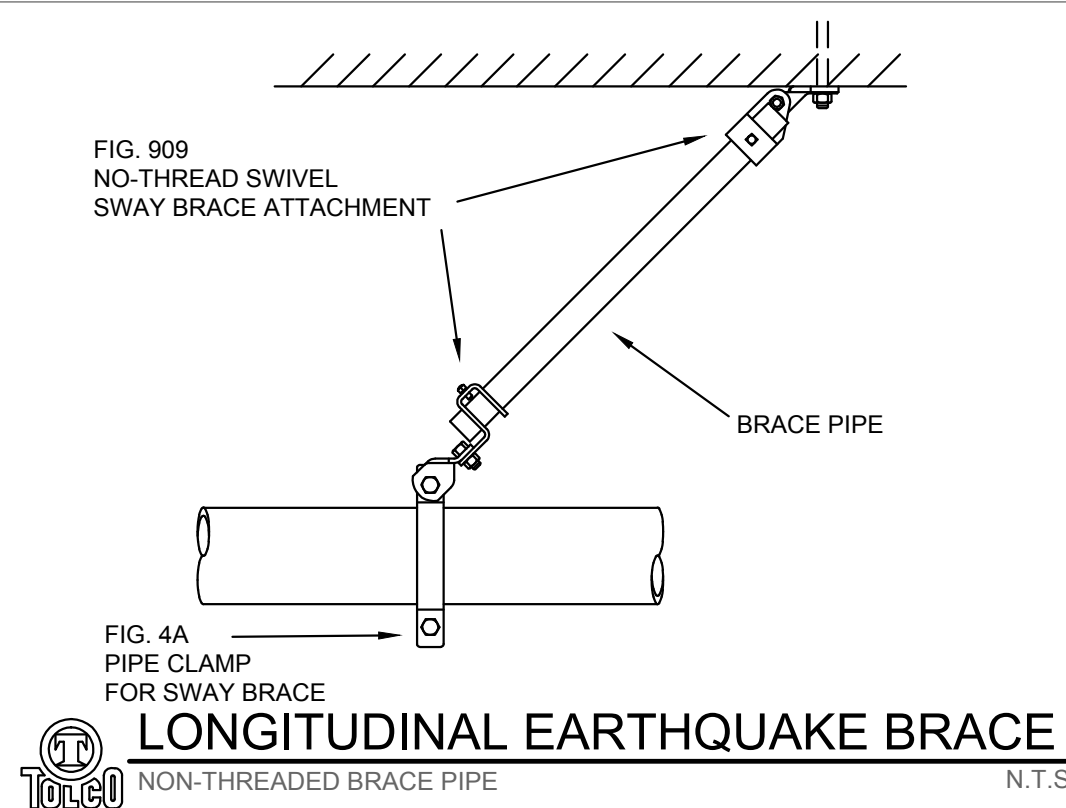
D:\jobfiles\tatohoward\wadingriver\wtp\hvac-p (hvac & plumbing)\30-p-1.dwg 2/17/2025 8:42 AM TODD MASON

LEGEND

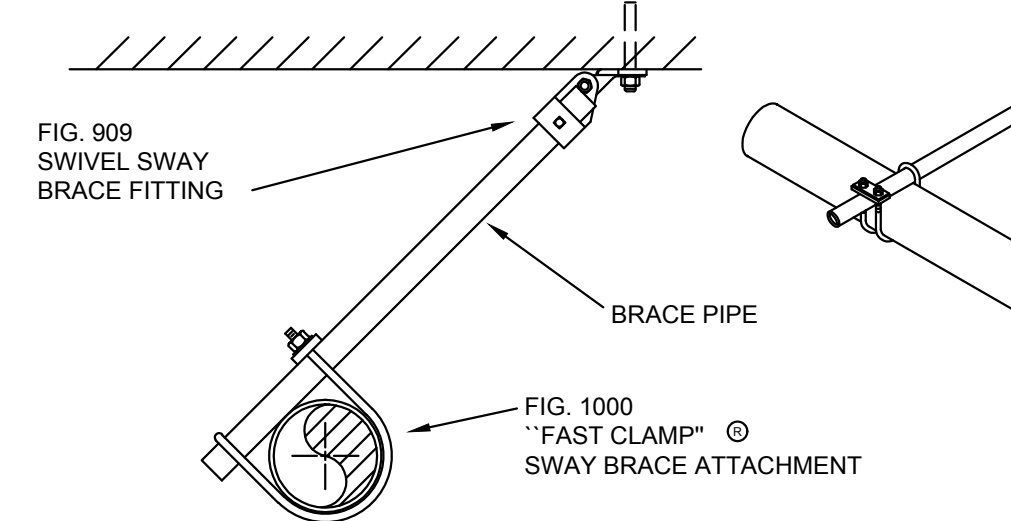


FIRE PROTECTION GENERAL NOTES:

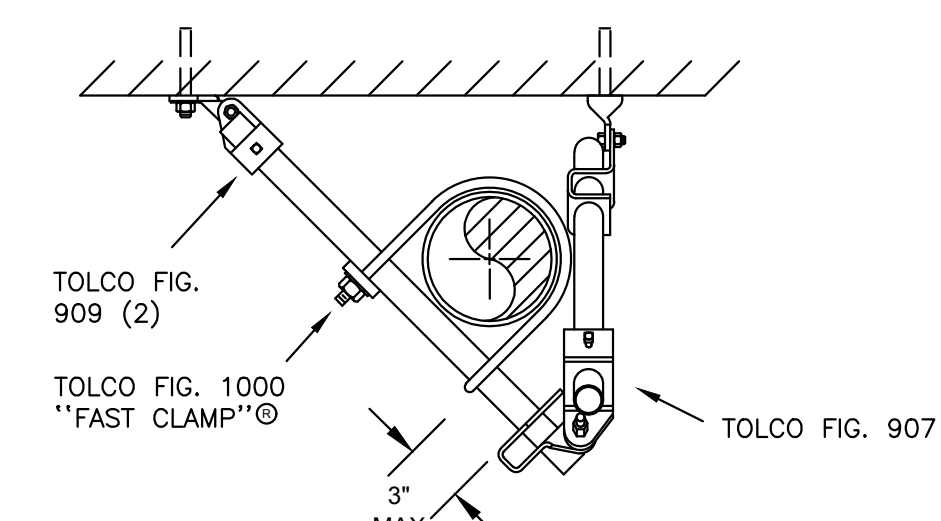
- ALL PIPING SHOWN IS DIAGRAMMATIC ONLY, EXACT LOCATION TO BE DETERMINED IN THE FIELD.
- CONTRACTOR SHALL REVIEW ALL CIVIL, STRUCTURAL, ARCHITECTURAL, HVAC, PROCESS AND PLUMBING DRAWINGS TO BE FAMILIAR WITH THE DETAILS OF CONSTRUCTION IN ADDITION TO COORDINATING WITH THE OTHER TRADES TO ELIMINATE CONFLICTS PRIOR TO INSTALLATION.
- FURNISH AND INSTALL ALL NECESSARY PIPING, EQUIPMENT, VALVES AND SUPPORTS REQUIRED TO PROVIDE A COMPLETE AND FUNCTIONING SYSTEM.
- REQUIRED FIRE RESISTANCE OF ALL FLOORS AND WALLS SHALL BE MAINTAINED WHERE PENETRATIONS OCCUR. FIRESTOPPING SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- ALL CONTROL VALVES SHALL BE PROVIDED WITH TAMPER SWITCHES. CONDUIT & WIRING TO FIRE ALARM CONTROL PANEL SHALL BE PROVIDED BY ELECTRICAL CONTRACTOR.
- ALL FIRE PROTECTION WORK SHALL BE IN ACCORDANCE WITH THE MASS STATE BUILDING CODE, NFPA-13 & NFPA-20, 2019ed, AND LOCAL ORDINANCES.
- COORDINATE HEAD LOCATIONS WITH STRUCTURAL ELEMENTS, LIGHTING FIXTURE AND DIFFUSER LAYOUT.
- ALL PIPING, FITTINGS, JOINTS, ETC., EXPOSED TO VIEW SHALL BE PAINTED IN ACCORDANCE WITH SECTION 09900 PAINTING BY THE PAINTING SUBCONTRACTOR.



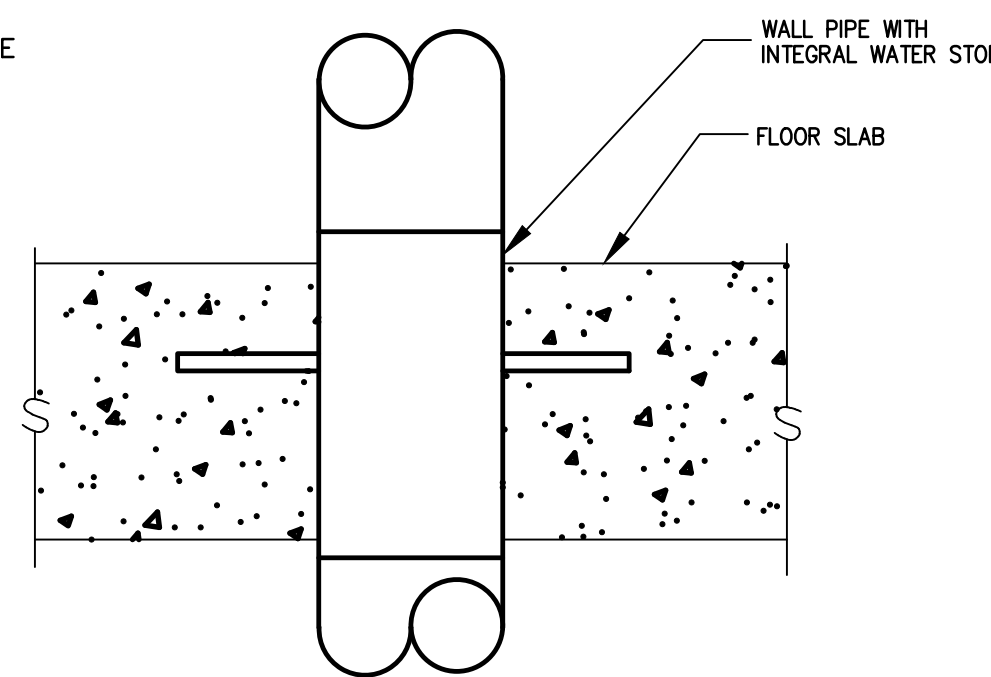
LONGITUDINAL EARTHQUAKE BRACE
N.T.S.



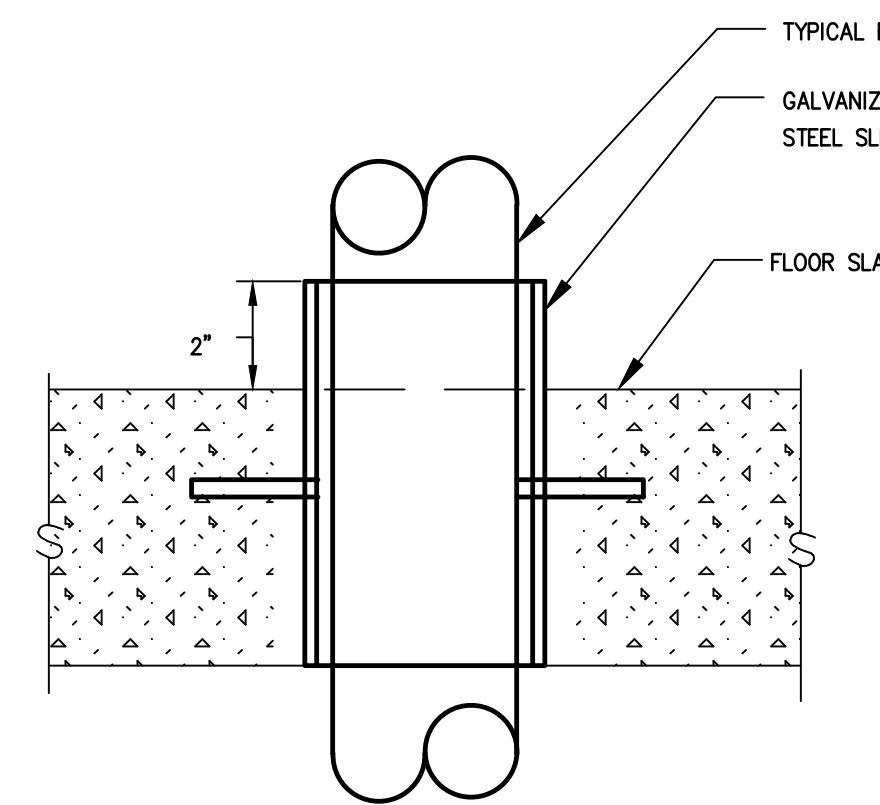
LATERAL EARTHQUAKE BRACE
N.T.S.



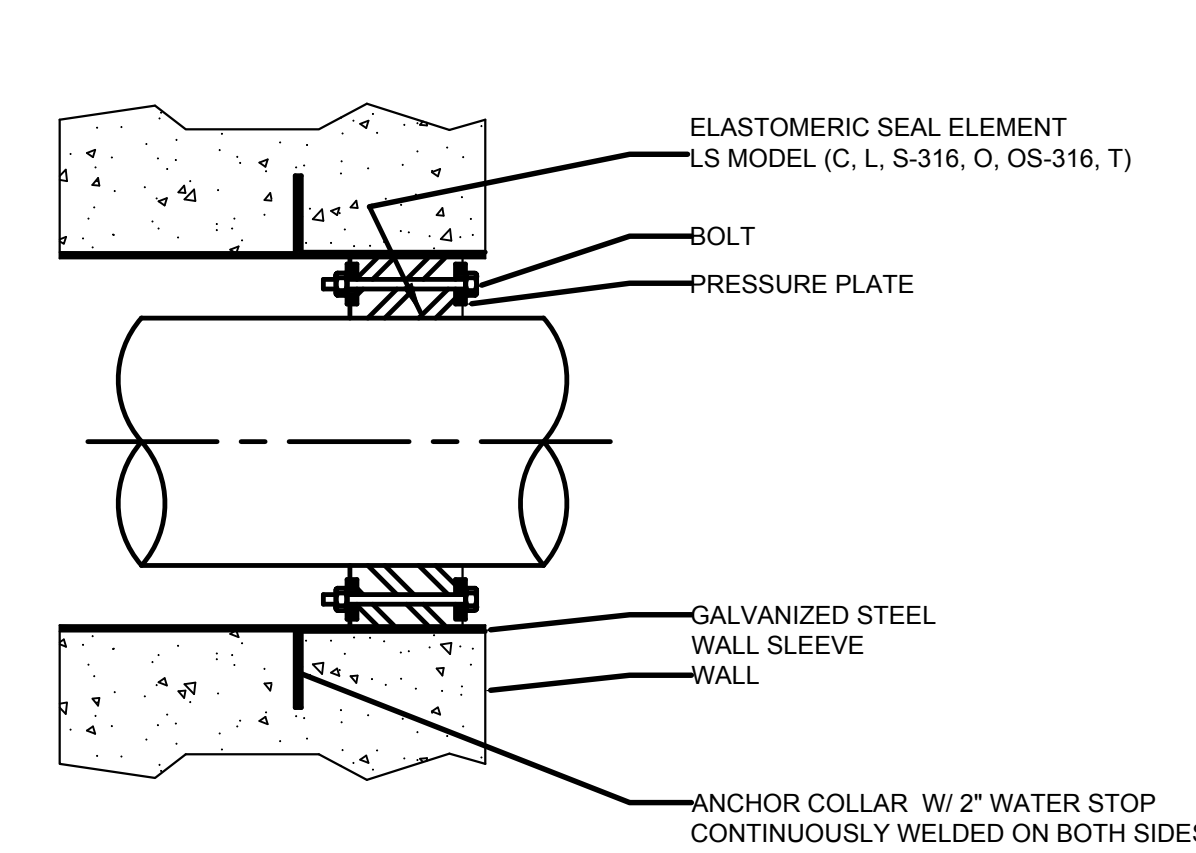
4 WAY EARTHQUAKE BRACE
LATERAL/LONGITUDINAL EARTHQUAKE BRACE N.T.S.



TYPICAL DETAIL FOR PIPE PASSING THRU SLAB ON GRADE / FOUNDATION WALL
- NO SCALE -

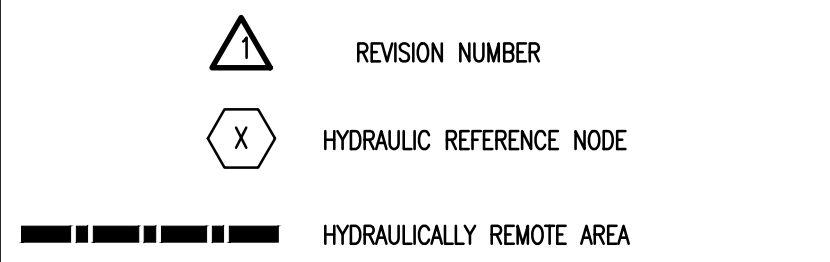


TYPICAL DETAIL FOR PIPE PASSING THRU ELEVATED FLOOR SLAB
- NO SCALE -



TYPICAL DETAIL FOR PIPE PASSING THRU EXTERIOR MASONRY WALL
- NO SCALE -

CALL OUT SYMBOLS



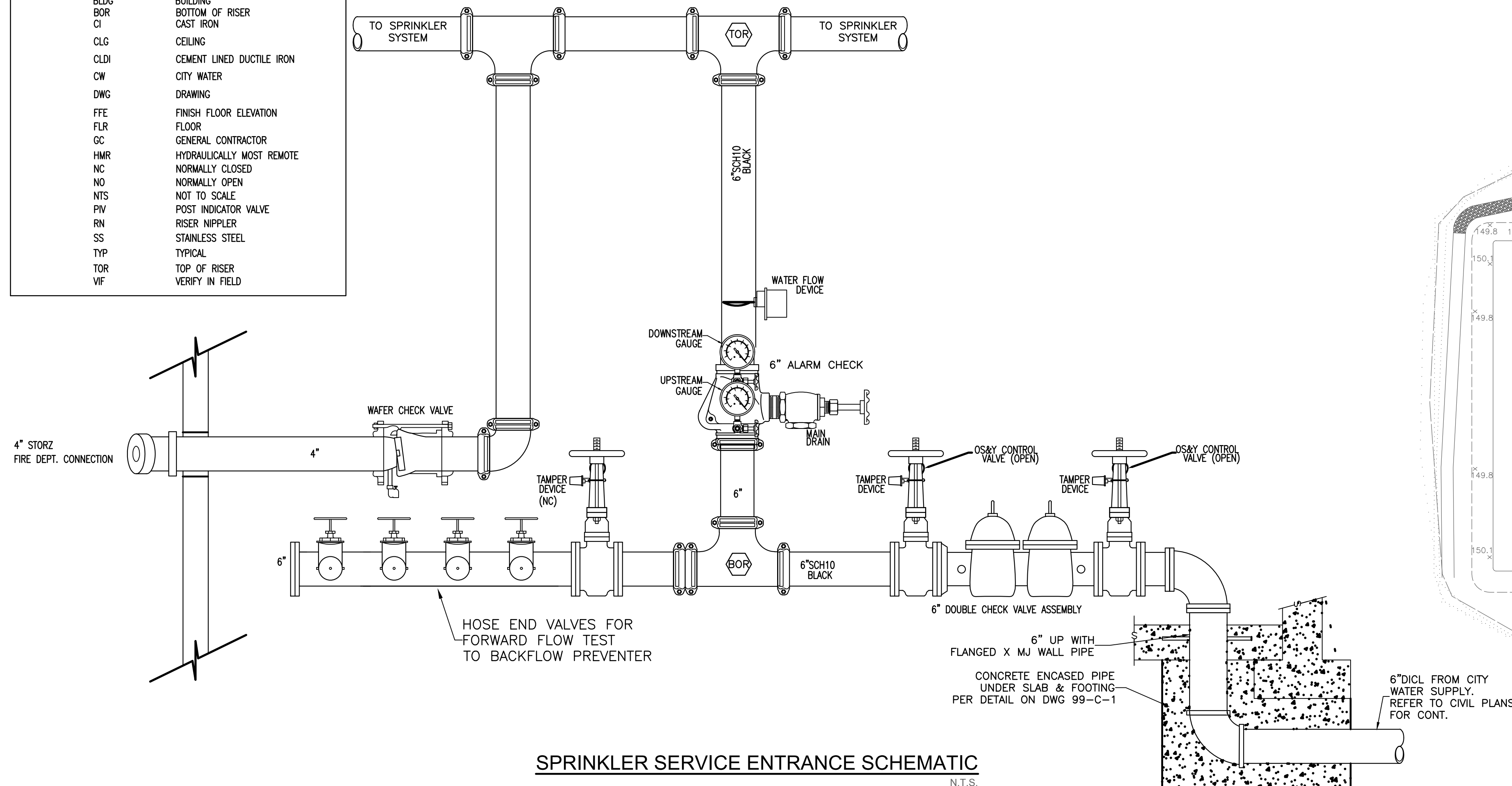
SPRINKLER SCHEDULE & LEGEND

SYMBOL	MFR	STYLE	K	TEMP	FINISH	QTY
●	ANY	SSP, QUICK RESP.	5.6	155	WHITE POLYESTER	22
○	ANY	SSU, QUICK RESP.	5.6	155	WHITE POLYESTER	26
⊗	ANY	SSP, STANDARD RESP.	8.0	286	WAX COATED	2
○	ANY	SSU, STANDARD RESP.	8.0	286	BRASS	184

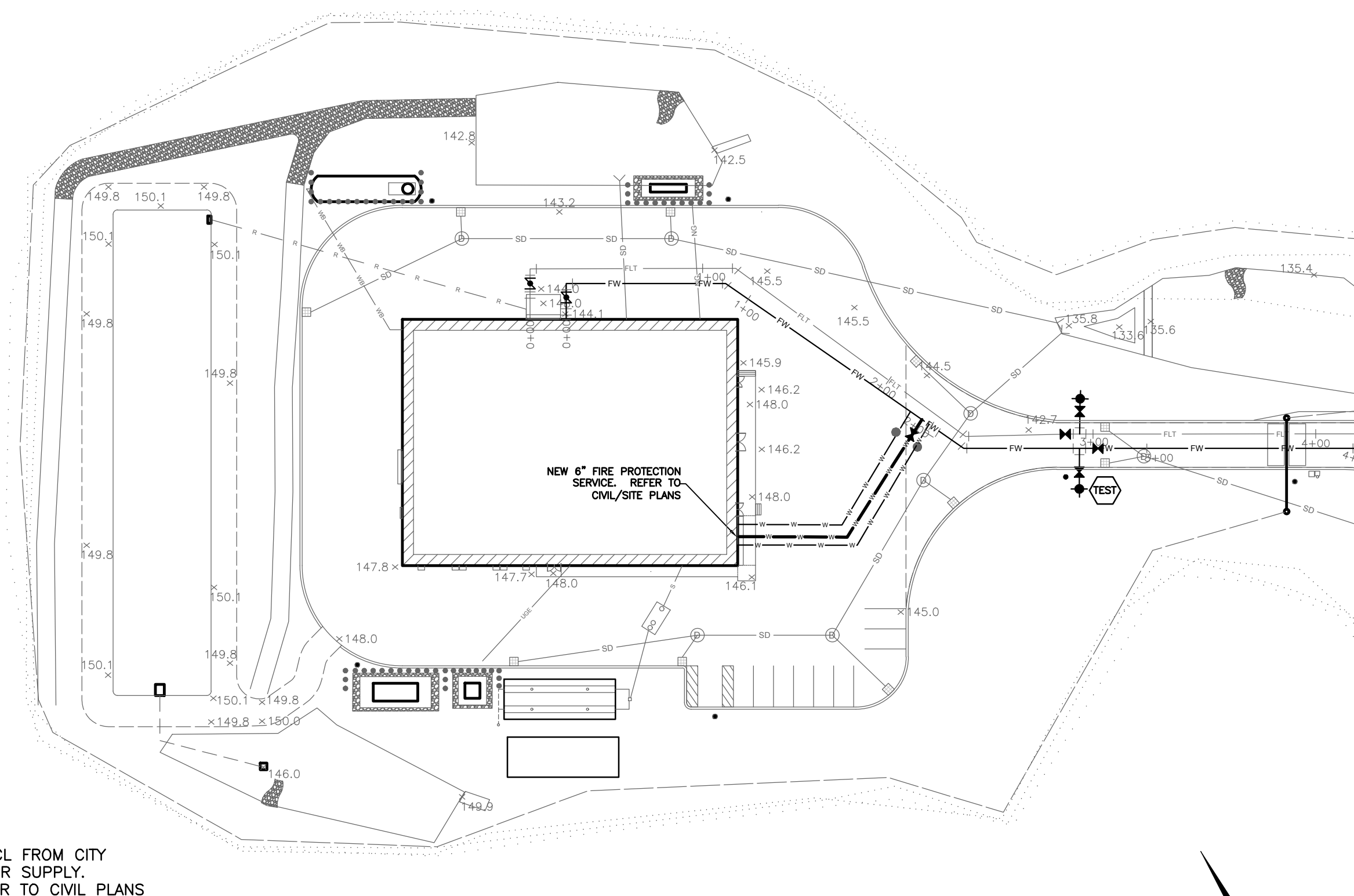
NOTE: SPRINKLERS SHALL BE UL LISTED AND MEET BABA REQUIREMENTS

ABBREVIATIONS

AFF	ABOVE FINISH FLOOR
BLDG	BUILDING
BOR	BOTTOM OF RISER
CI	CAST IRON
CLG	CEILING
CLDI	CEMENT LINED DUCTILE IRON
CW	CITY WATER
DWG	DRAWING
FFE	FINISH FLOOR ELEVATION
FLR	FLOOR
GC	GENERAL CONTRACTOR
HMR	HYDRAULICALLY MOST REMOTE
NC	NORMALLY CLOSED
NO	NORMALLY OPEN
NTS	NOT TO SCALE
PV	POST INDICATOR VALVE
RN	RISER NIPPLER
SS	STAINLESS STEEL
TYP	TYPICAL
TOR	TOP OF RISER
VIF	VERIFY IN FIELD



SPRINKLER SERVICE ENTRANCE SCHEMATIC
N.T.S.



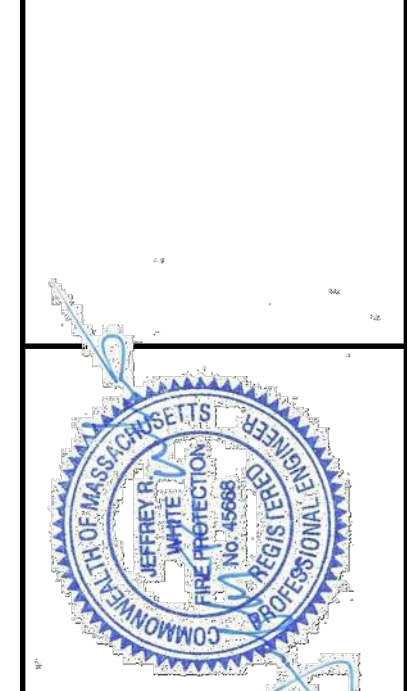
FIRE PROTECTION SITE PLAN

SCALE: 1"=50'0"
0' 25' 50' 100'

ATTLEBORO WATER DEPT.
ATTLEBORO, MA
WADING RIVER
WATER TREATMENT PLANT

FIRE PROTECTION
SITE PLAN,
LEGEND, DETAILS & NOTES

Description	Date	Rev.



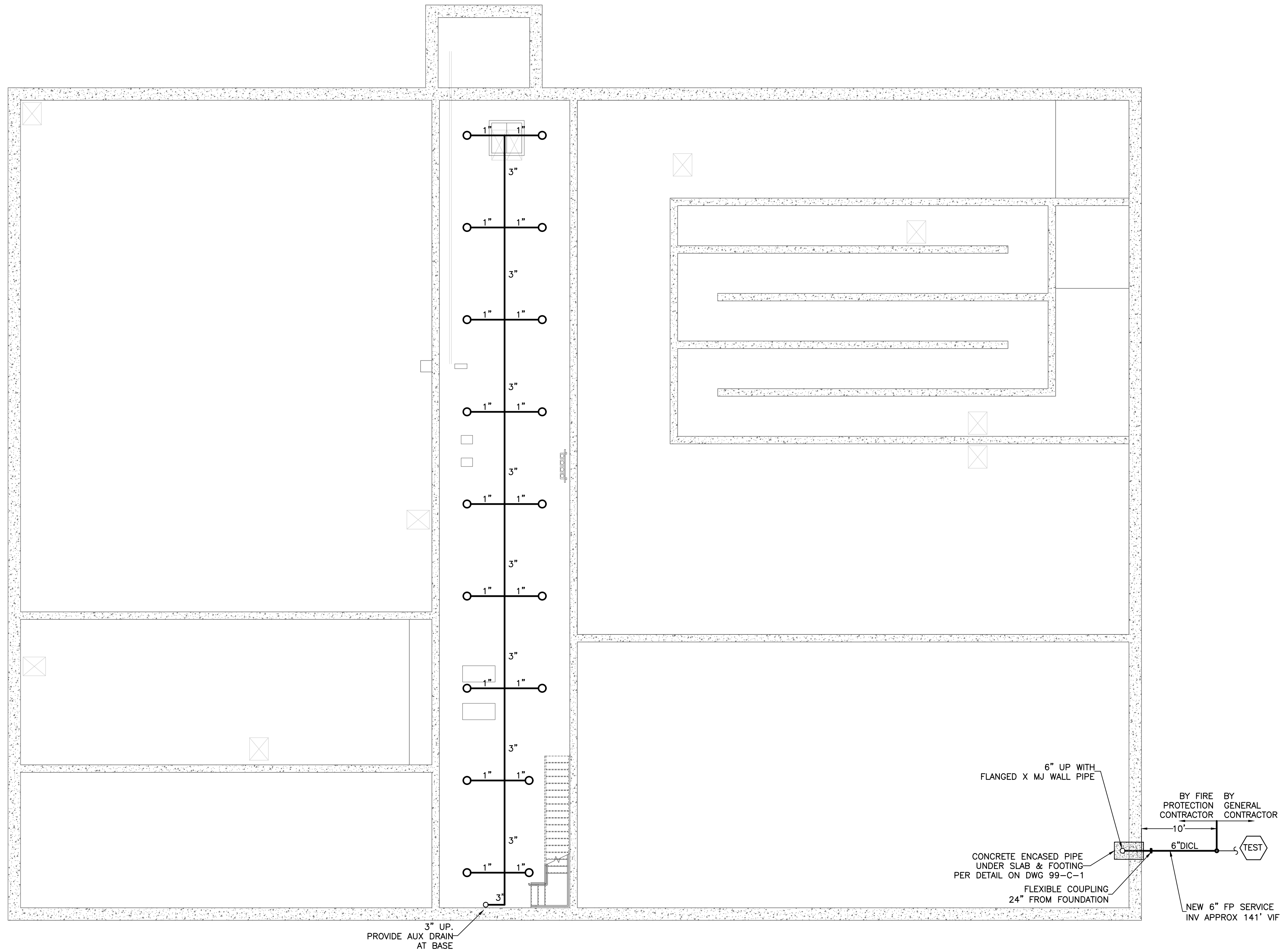
JBRW ENGINEERING
40 Town Farm Rd., Attleboro, MA 01906
Tel: (781) 857-0065
Email: jbrw@jbrw-engineer.com

T&H TATA & HOWARD

T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE: AS NOTED

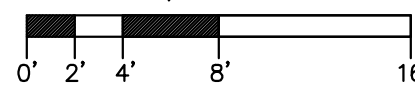
01-FP-1

/Users/jrhw/OneDrive/Documents/411's_Misc/misc/2024/Engineering/2024/2024-02-17/2025-10-32 AM - JETNHEE



BASEMENT FLOOR PLAN

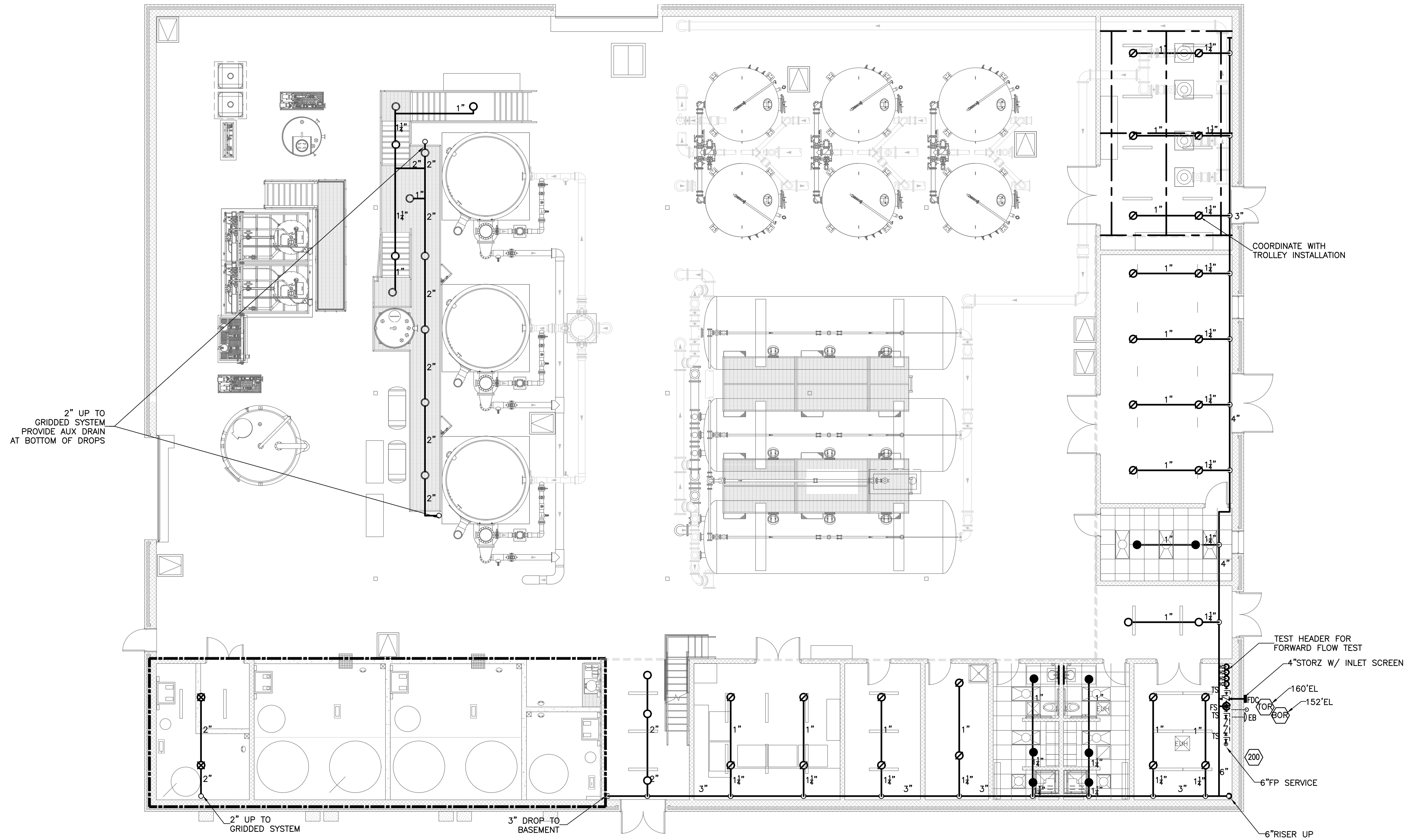
SCALE: 1/8"=1'0"



ATTLEBORO WATER DEPT. ATTLEBORO, MA		FIRE PROTECTION BASEMENT SPRINKLER PLAN	THIS DOCUMENT IS THE PROPERTY OF TATA & HOWARD, INC. AND ITS CLIENT. REPRODUCTION OR ADAPTATION WITHOUT WRITTEN CONSENT IS PROHIBITED.
WADING RIVER WATER TREATMENT PLANT			
T&H NO: 6193		DATE: FEBRUARY 2025	
SCALE: AS NOTED			
20-FP-1			

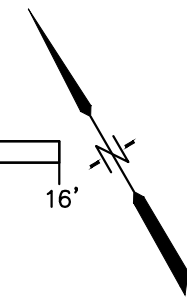
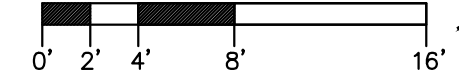
Approved By: JRW
 Checked By: JRW
 Designed By: JRW
 Drawn By: JRW

C:\Users\jrtambur\Documents\411's Map.mxd\DWG\Engineering\Jobs\2404 - Wading River WTP\F-1.dwg 2/17/2025 10:32 AM JEETWEE



FIRST FLOOR PLAN

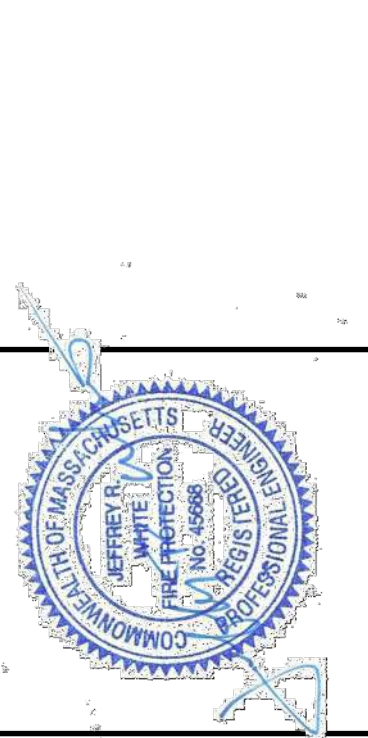
SCALE: 1/8" = 1'0"



ATTLEBORO WATER DEPT.
 ATTLEBORO, MA
 WADING RIVER
 WATER TREATMENT PLANT

FIRE PROTECTION
 FIRST FLOOR SPRINKLER PLAN

Rev.	Date	Description



JRW
 ENGINEERING
 40 Town Farm Rd., Brookfield, Massachusetts 01506
 Email: JRW@jrweng.com

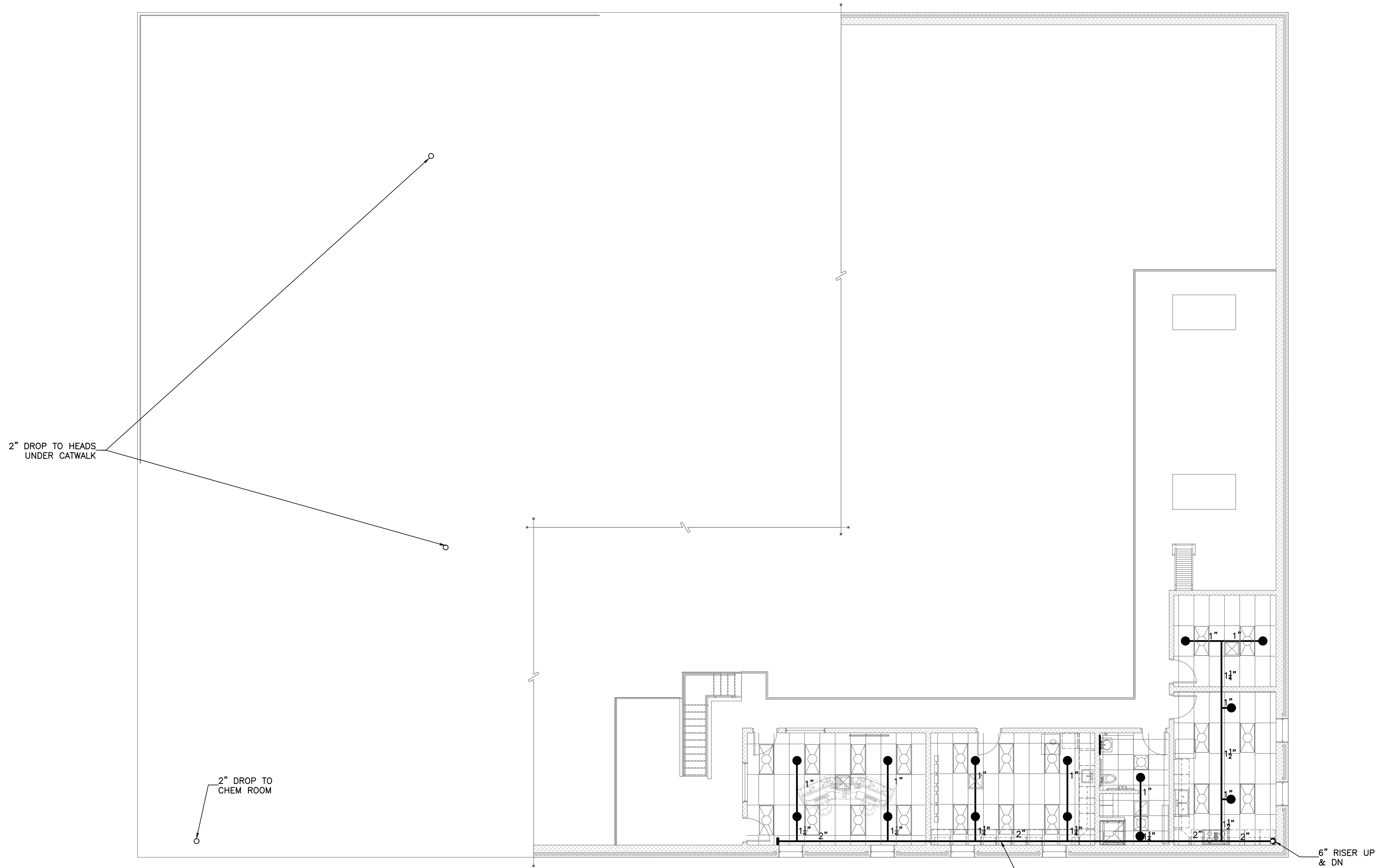


T&H NO: 6193
 DATE: FEBRUARY 2025
 SCALE: AS NOTED

20-FP-2

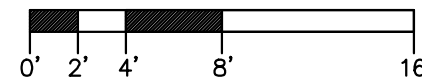
Designed By: JRW
 Checked By: JRW
 Approved By: JRW

Z:\Users\jrfahelu\Documents\dwg's_Misc_misc\JRW_Engineering\Jobs\2404 - Wading River WTP\F-1.dwg, 2/17/2025, 10:32 AM, JEETWITE



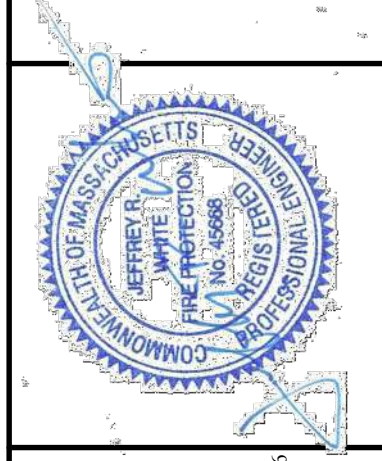
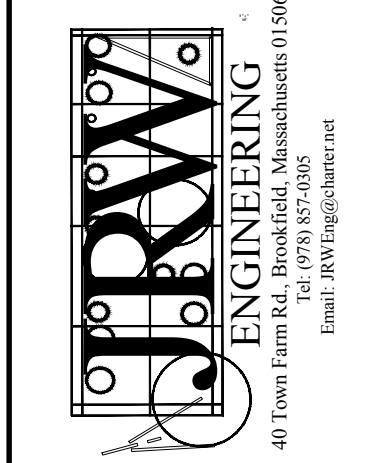

MEZZANINE PLAN

SCALE: 1/8"=1'0"

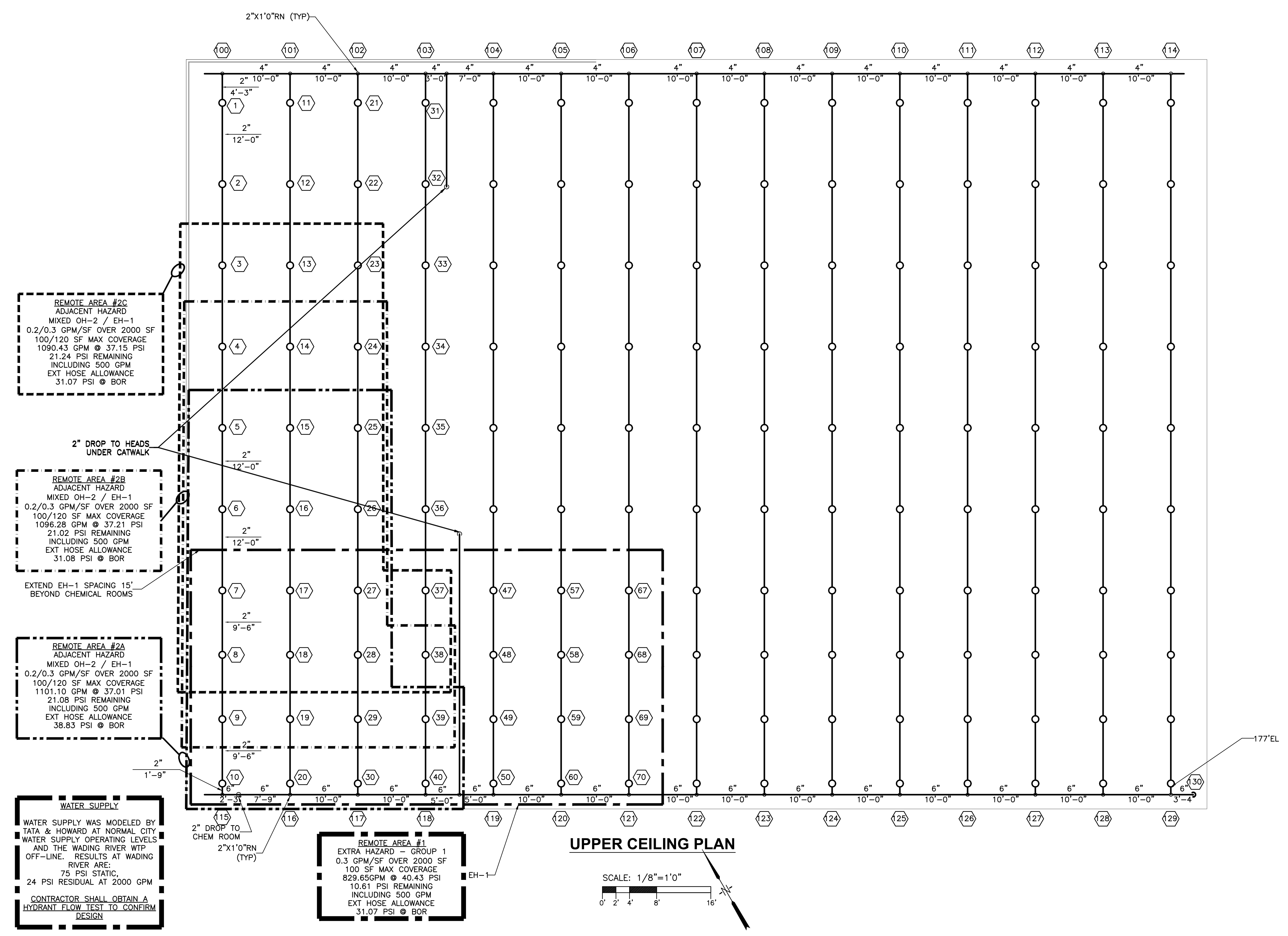


RUN PIPING ABOVE MEZZANINE
 DROP INTO MEZZ SPACES THROUGH
 CEILING (TYP)
 COORDINATE PENS WITH GC/SUBS TO
 AVOID CONFLICTS PRIOR TO CONSTRUCTION

6" RISER UP & DN

ATTLEBORO WATER DEPT. ATTLEBORO, MA	
WADING RIVER WATER TREATMENT PLANT	
FIRE PROTECTION MEZZANINE SPRINKLER PLAN	THIS DOCUMENT IS THE PROPERTY OF TATA & HOWARD, INC. AND ITS CLIENT. REPRODUCTION OR ADAPTATION WITHOUT WRITTEN CONSENT IS PROHIBITED.
	Description
	Date
	Rev.
	
	
	
T&H NO.: 6193	
DATE: FEBRUARY 2025	
SCALE: AS NOTED	
20-FP-3	
Designed By: JRW	Checked By: JRW
Down By: JRW	Approved By: JRW

Z:\Users\jforhan\Documents\Projects\2004 - Wading River WTP\F-1.dwg, 2/17/2025, 10:32 AM, JETRWITE



REMOTE AREA #2C
 ADJACENT HAZARD
 MIXED OH-2 / EH-1
 0.2/0.3 GPM/SF OVER 2000 SF
 100/120 SF MAX COVERAGE
 1090.43 GPM @ 37.15 PSI
 21.24 PSI REMAINING
 INCLUDING 500 GPM
 EXT HOSE ALLOWANCE
 31.07 PSI @ BOR

REMOTE AREA #2B
 ADJACENT HAZARD
 MIXED OH-2 / EH-1
 0.2/0.3 GPM/SF OVER 2000 SF
 100/120 SF MAX COVERAGE
 1096.28 GPM @ 37.21 PSI
 21.02 PSI REMAINING
 INCLUDING 500 GPM
 EXT HOSE ALLOWANCE
 31.08 PSI @ BOR

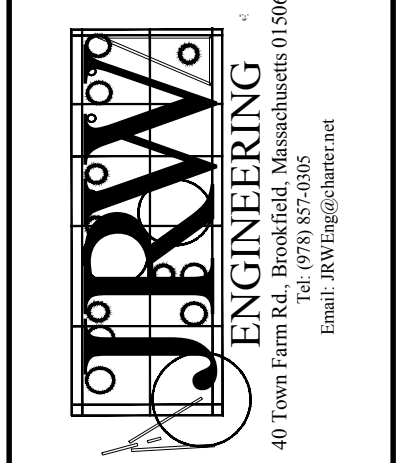
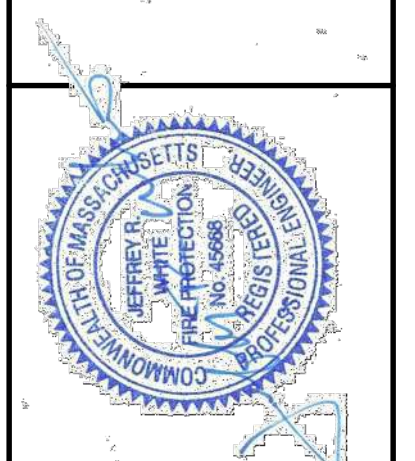
REMOTE AREA #2A
 ADJACENT HAZARD
 MIXED OH-2 / EH-1
 0.2/0.3 GPM/SF OVER 2000 SF
 100/120 SF MAX COVERAGE
 1101.10 GPM @ 37.01 PSI
 21.08 PSI REMAINING
 INCLUDING 500 GPM
 EXT HOSE ALLOWANCE
 38.83 PSI @ BOR

WATER SUPPLY
 WATER SUPPLY WAS MODELED BY
 TATA & HOWARD AT NORMAL CITY
 WATER SUPPLY OPERATING LEVELS
 AND THE WADING RIVER WTP
 OFF-LINE. RESULTS AT WADING
 RIVER ARE:
 75 PSI STATIC,
 24 PSI RESIDUAL AT 2000 GPM
 CONTRACTOR SHALL OBTAIN A
 HYDRANT FLOW TEST TO CONFIRM
 DESIGN

REMOTE AREA #1
 EXTRA HAZARD - GROUP 1
 0.3 GPM/SF OVER 2000 SF
 100 SF MAX COVERAGE
 829.65 GPM @ 40.43 PSI
 10.61 PSI REMAINING
 INCLUDING 500 GPM
 EXT HOSE ALLOWANCE
 31.07 PSI @ BOR

FIRE PROTECTION
 UPPER CEILING
 SPRINKLER PLAN

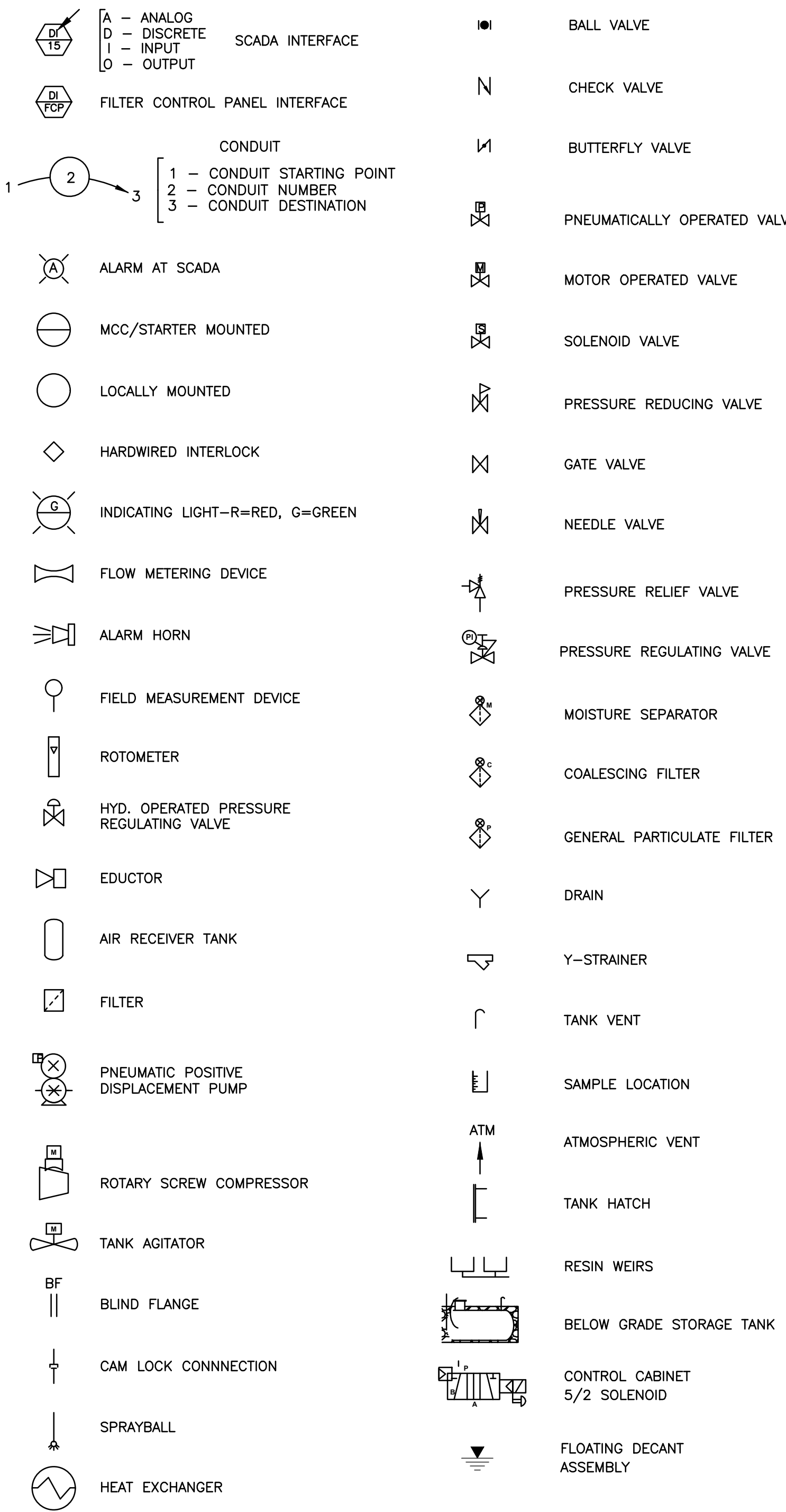
Rev.	Date	Description



Designed By: JPRW
 Checked By: JPRW
 Approved By: JPRW

THIS DOCUMENT IS THE PROPERTY OF TATA & HOWARD, INC. AND ITS CLIENT.
 REPRODUCTION OR ADAPTATION WITHOUT WRITTEN CONSENT IS PROHIBITED.

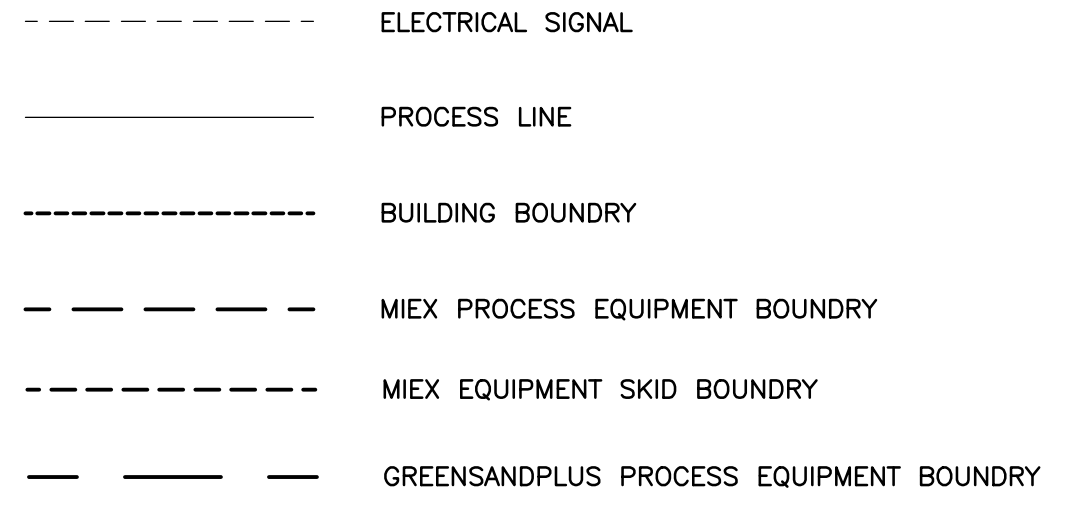
SYMBOL LEGEND



ABBREVIATION LEGEND

- AIT ANALYZER INDICATOR TRANSMITTER
- AS AIR SCOUR
- ATM ATMOSPHERE
- BWP BACKWASH PUMP
- BWS BACKWASH SUPPLY
- CA COMPRESSED AIR
- CL2 CHLORINE
- CI CONDUCTIVITY INDICATOR
- CP CONTROL PANEL
- CT CONDUCTIVITY TRANSMITTER
- dP DIFFERENTIAL PRESSURE SENSOR
- DPS DIFFERENTIAL PRESSURE SWITCH
- FACP FIRE ALARM CONTROL PANEL
- FCP FILTER CONTROL PANEL
- FCV FLOW CONTROL VALVE
- FE FLOW ELEMENT
- FI FLOW INDICATOR
- FIT FLOW INDICATOR/TRANSMITTER
- FLT FILTERED WATER
- FS FLOW SWITCH
- FTW FILTER TO WASTE
- FWP FINISHED WATER PUMP
- HFS HYDROFLUOROSILICIC ACID
- HLP HIGH LIFT PUMP
- HOA HAND-OFF-AUTO SWITCH
- HOR HAND-OFF-REMOTE SWITCH
- HS HAND SWITCH
- KI RUNNING TIME METER
- LI LEVEL INDICATOR
- LIT LEVEL INDICATOR/TRANSMITTER
- LS LEVEL SWITCH
- LT LEVEL TRANSMITTER
- MCC MOTOR CONTROL CENTER
- MCP MAIN CONTROL PANEL
- MMCP MIEX MAIN CONTROL PANEL
- ME MIEX EFFLUENT
- MLCP MIEX LOCAL CONTROL PANEL
- MOV MOTOR OPERATED VALVE
- MP METERING PUMP
- MV MANUALLY-OPERATED VALVE
- NaOCI SODIUM HYPOCHLORITE
- NaOH SODIUM HYDROXIDE
- OWS OPERATOR WORK STATION
- PFW PRE-FILTERED WATER
- PHOS PHOSPHATE
- PIT PRESSURE INDICATING TRANSMITTER
- POV PNEUMATIC OPERATED VALVE
- PR PRESSURE RELIEF
- PS PRESSURE SWITCH
- PT PRESSURE TRANSMITTER
- RES RESIDUALS
- ROA REMOTE-OFF-AUTO
- RSP RESIDUALS PUMP
- SACP SECURITY ALARM CONTROL PANEL
- SBW SPENT BACKWASH
- SD SMOKE DETECTOR
- SNP SUPERNATANT PUMP
- SR SUPERNATANT RETURN
- SV SOLENOID VALVE
- SWW SERVICE WATER
- TT TEMPERATURE TRANSMITTER
- TW TREATED WATER
- VFD VARIABLE FREQUENCY DRIVE

LINE LEGEND

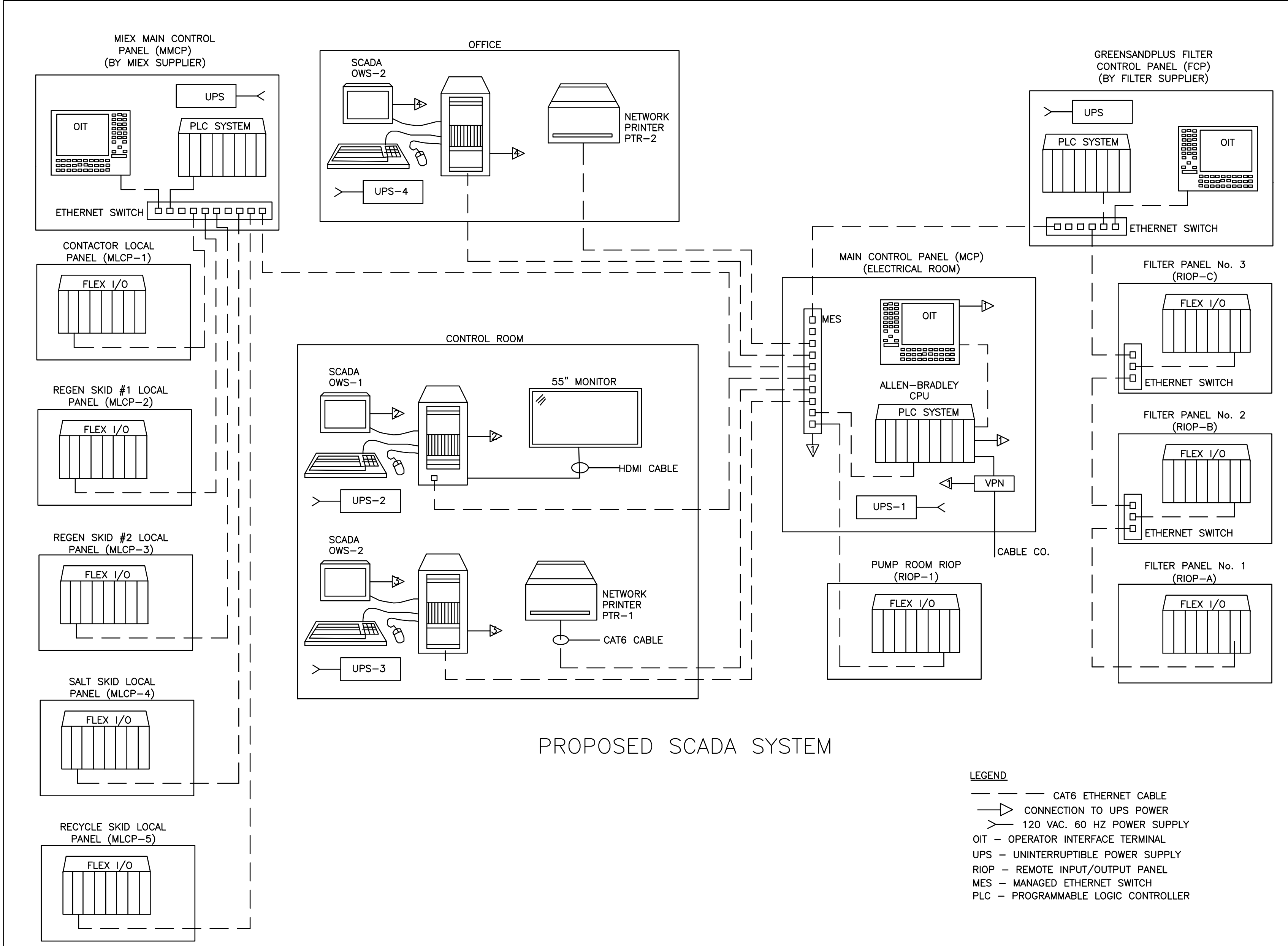
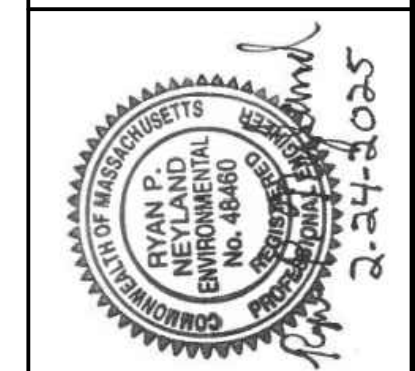


- NOTES:**
1. ALL DISCRETE SIGNALS SHALL BE 24 VOLT. ALL ANALOG SIGNAL SHALL BE 4-20mA.
 2. THE MAIN CONTROL PANEL (MCP), MIEX MAIN CONTROL PANEL (MMCP), REMOTE I/O PANEL (RIOP), FILTER CONTROL PANEL (FCP), SERVER RACK (SVR), AND OPERATOR WORK STATIONS (OWS) SHALL BE LINKED VIA ETHERNET.
 3. ALL MMCP AND FCP SCREENS SHALL BE PORTRAYED ON THE SCADA WORK STATION. ALL OPERATOR ADJUSTABLE MMCP AND FCP CONTROL SETPOINTS SHALL BE ACCESSIBLE VIA THE OIT ON THE RESPECTIVE MMCP AND FCP OWS.
 4. ALL PROCESS EQUIPMENT, AUTOMATIC CONTROL VALVES, INSTRUMENTATION, AND CONTROLS BOUNDED BY HEAVY DASHED LINES ARE BEING FURNISHED BY THE MIEX AND GREENSAND PLUS FILTER MANUFACTURERS FOR INSTALLATION BY THE GENERAL CONTRACTOR, EXCEPT FOR THE MMCP AND FCP WHICH ARE TO BE INSTALLED BY THE ELECTRICAL CONTRACTOR. ALL INTERCONNECTION PIPING IS TO BE FURNISHED AND INSTALLED BY THE GENERAL CONTRACTOR.
 5. ALL CONDUIT AND SIGNAL WIRING SHALL BE FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR, EXCEPT FOR THE PLC-TO-PLC INTERCONNECTING CABLING THAT WILL BE FURNISHED UNDER SECTION 13400 FOR INSTALLATION BY THE ELECTRICAL CONTRACTOR.

ATTLEBORO WATER DEPT.
ATTLEBORO, MA
WADING RIVER
WATER TREATMENT PLANT

INSTRUMENTATION
LEGENDS AND NOTES

Rev.	Date	Description

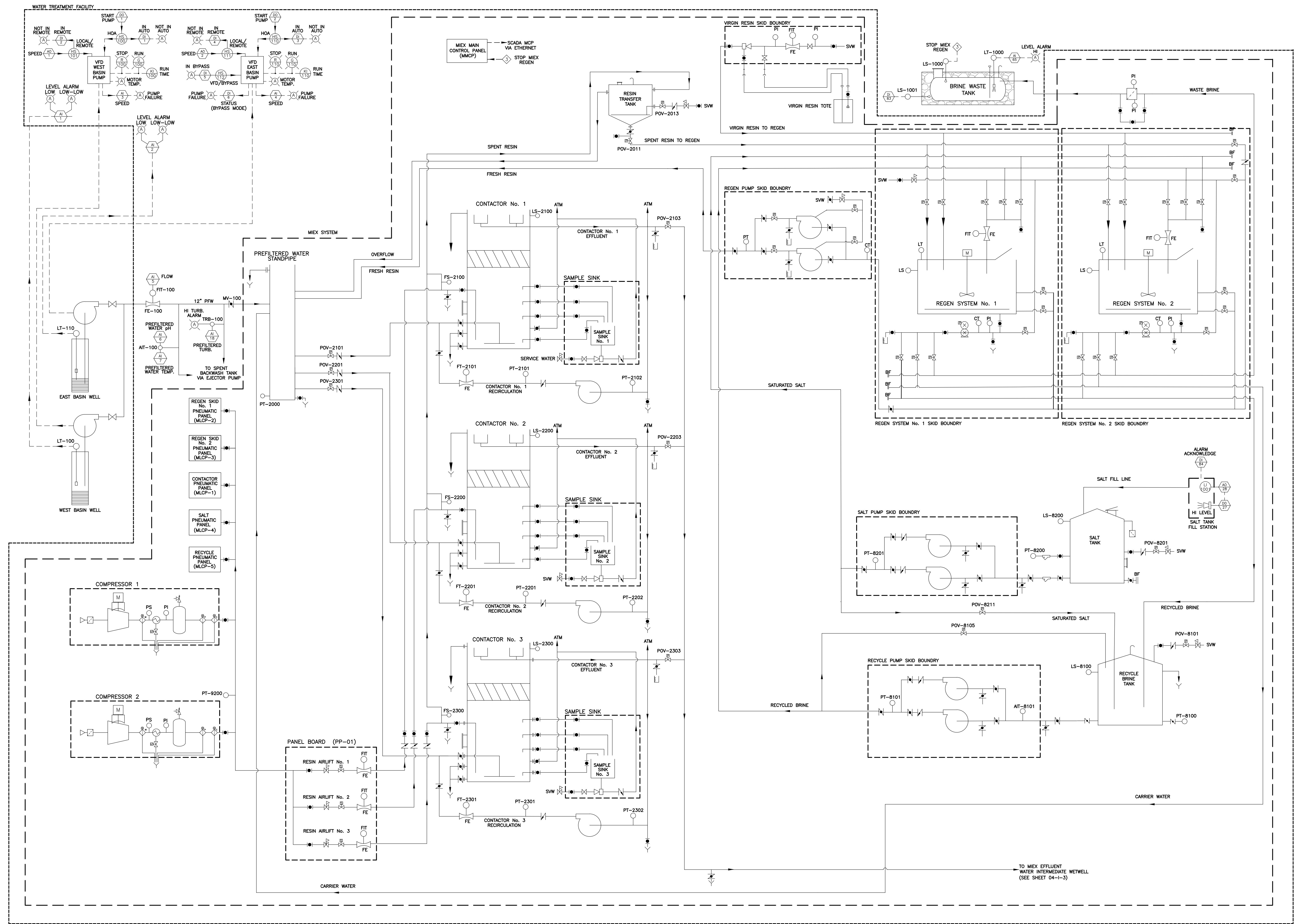


PROPOSED SCADA SYSTEM

- LEGEND**
- CAT6 ETHERNET CABLE
 - CONNECTION TO UPS POWER
 - 120 VAC, 60 HZ POWER SUPPLY
 - OIT - OPERATOR INTERFACE TERMINAL
 - UPS - UNINTERRUPTIBLE POWER SUPPLY
 - RIOP - REMOTE INPUT/OUTPUT PANEL
 - MES - MANAGED ETHERNET SWITCH
 - PLC - PROGRAMMABLE LOGIC CONTROLLER

NOTE: ALL MIEX LOCAL CONTROL PANELS BY MIEX SUPPLIER

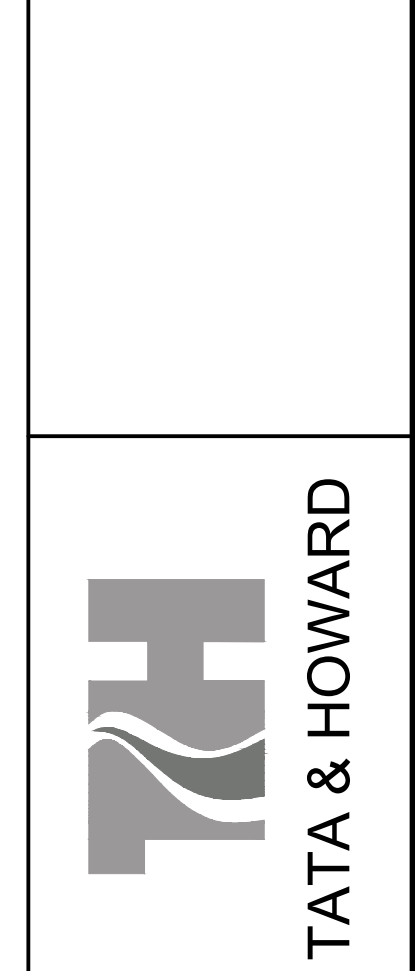
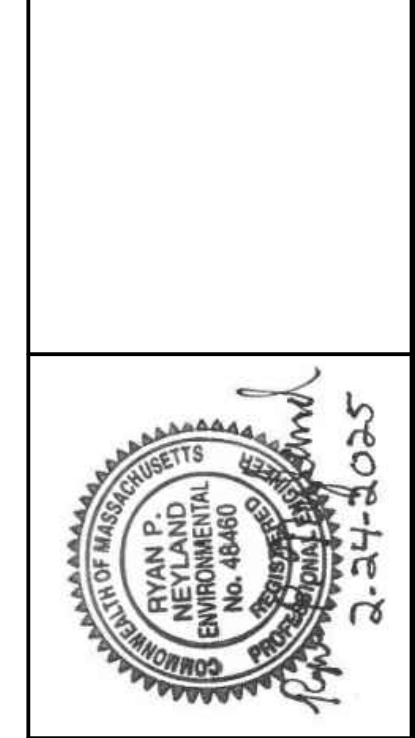
P:\Attiboro\6193_Wading River WTP Design\CADD\Sheets\DA-1-1.dwg 2/26/2025 3:57 PM ACRINA



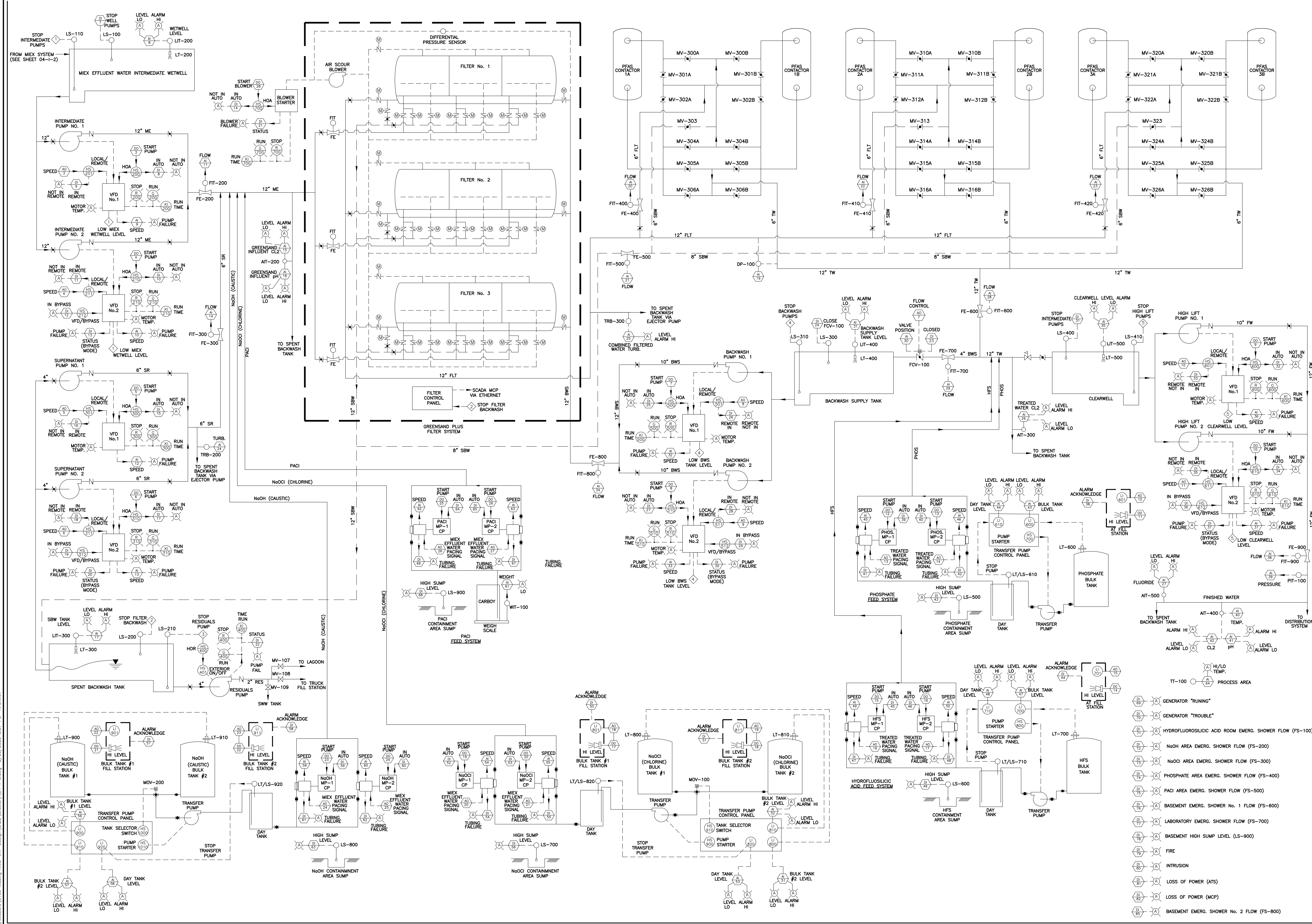
ATTLEBORO WATER DEPT.
ATTLEBORO, MA
WADING RIVER
WATER TREATMENT PLANT

INSTRUMENTATION
PROCESS AND
INSTRUMENTATION DIAGRAM

Rev.	Date	Description



T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE: AS NOTED



ATTLEBORO WATER DEPT.
 ATTLEBORO, MA
 WADING RIVER
 WATER TREATMENT PLANT

INSTRUMENTATION
 PROCESS AND
 INSTRUMENTATION DIAGRAM II

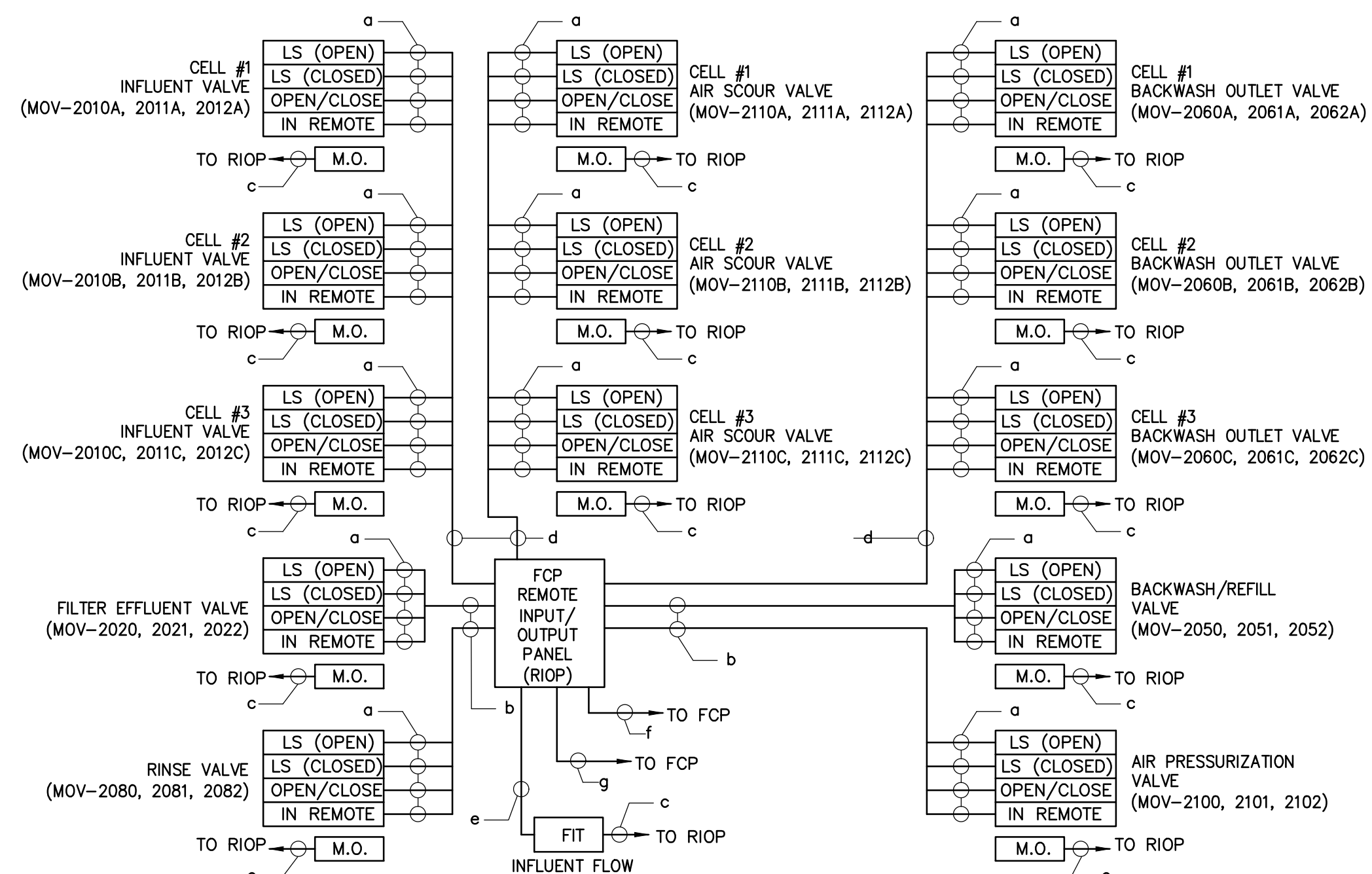
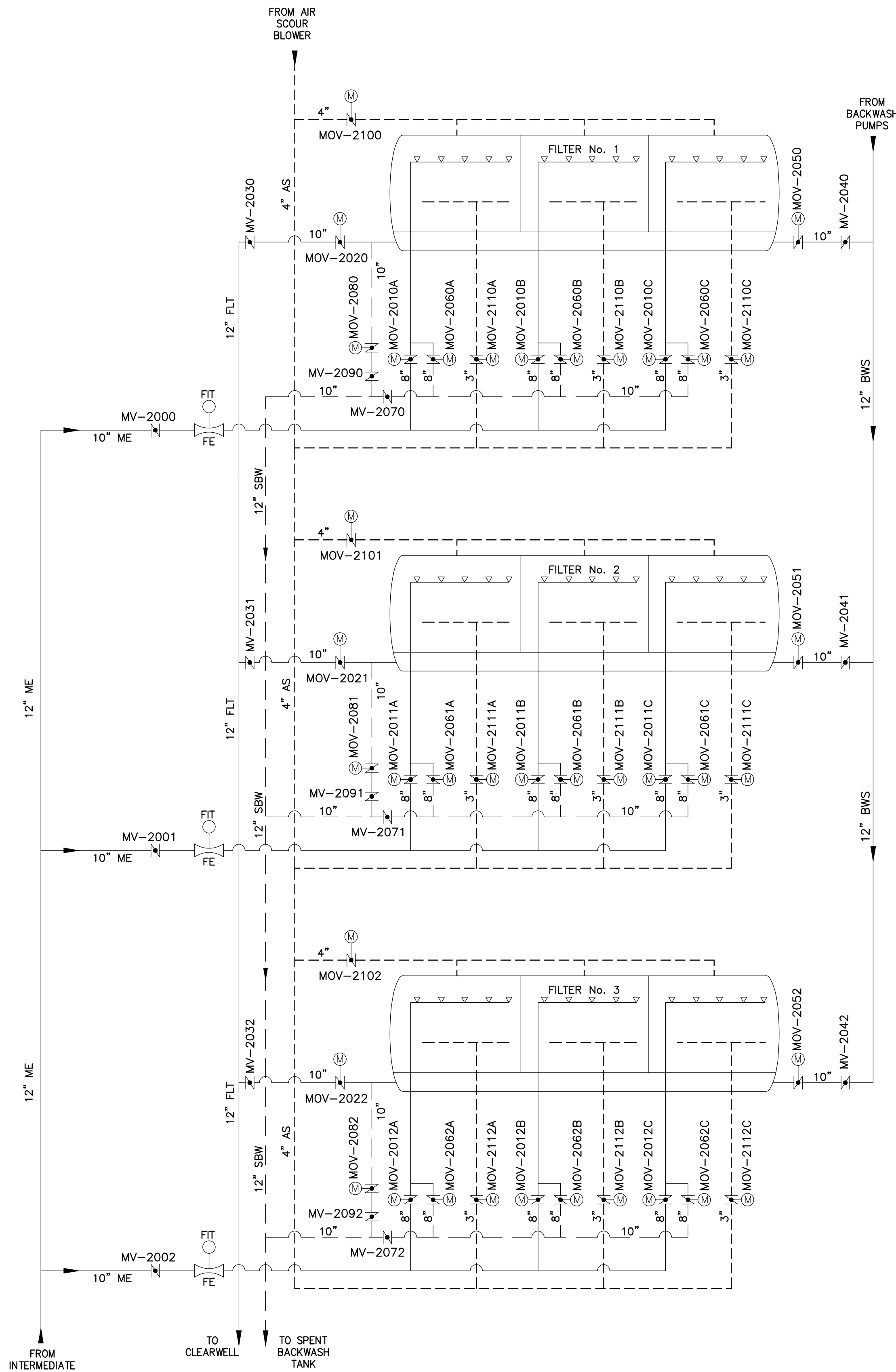
Rev.	Date	Description

TATA & HOWARD

T&H NO.: 6193
 DATE: FEBRUARY 2025
 SCALE: NONE

04-I-3

THE DOCUMENT IS THE PROPERTY OF TATA & HOWARD, INC. AND ITS SUBSIDIARIES. REPRODUCTION OR MODIFICATION WITHOUT WRITTEN CONSENT IS PROHIBITED.
 Drawn By: MUM/RESP
 Designed By: MUM
 Approved By: KLG



NOTE:
 REMOTE INPUT/OUTPUT PANELS, VALVES, AND FLOW METERS FURNISHED BY FILTER MANUFACTURER.
 GENERAL CONTRACTOR SHALL INSTALL VALVES, PIPING, AND FLOW METERS. REMOTE INPUT/OUTPUT PANELS
 TO BE INSTALLED BY ELECTRICAL CONTRACTOR. CONDUIT AND WIRING SHOWN TO BE PROVIDED BY
 ELECTRICAL CONTRACTOR.

- a = 2-#14, 3/4" C
- b = 8-#14, 3/4" C
- c = 2-#12, 1-#12 GND. 3/4" C (120V POWER)
- d = 24-#14, 2" C
- e = 2C/#18 TSP, 3/4" C
- f = CAT-6 CABLE
- g = 4-#12, 2-#12 GND. 3/4" C (120V POWER)
- M.O. = MOTOR OPERATOR
- LS = LIMIT SWITCH
- FIT = FLOW INDICATOR/TRANSMITTER

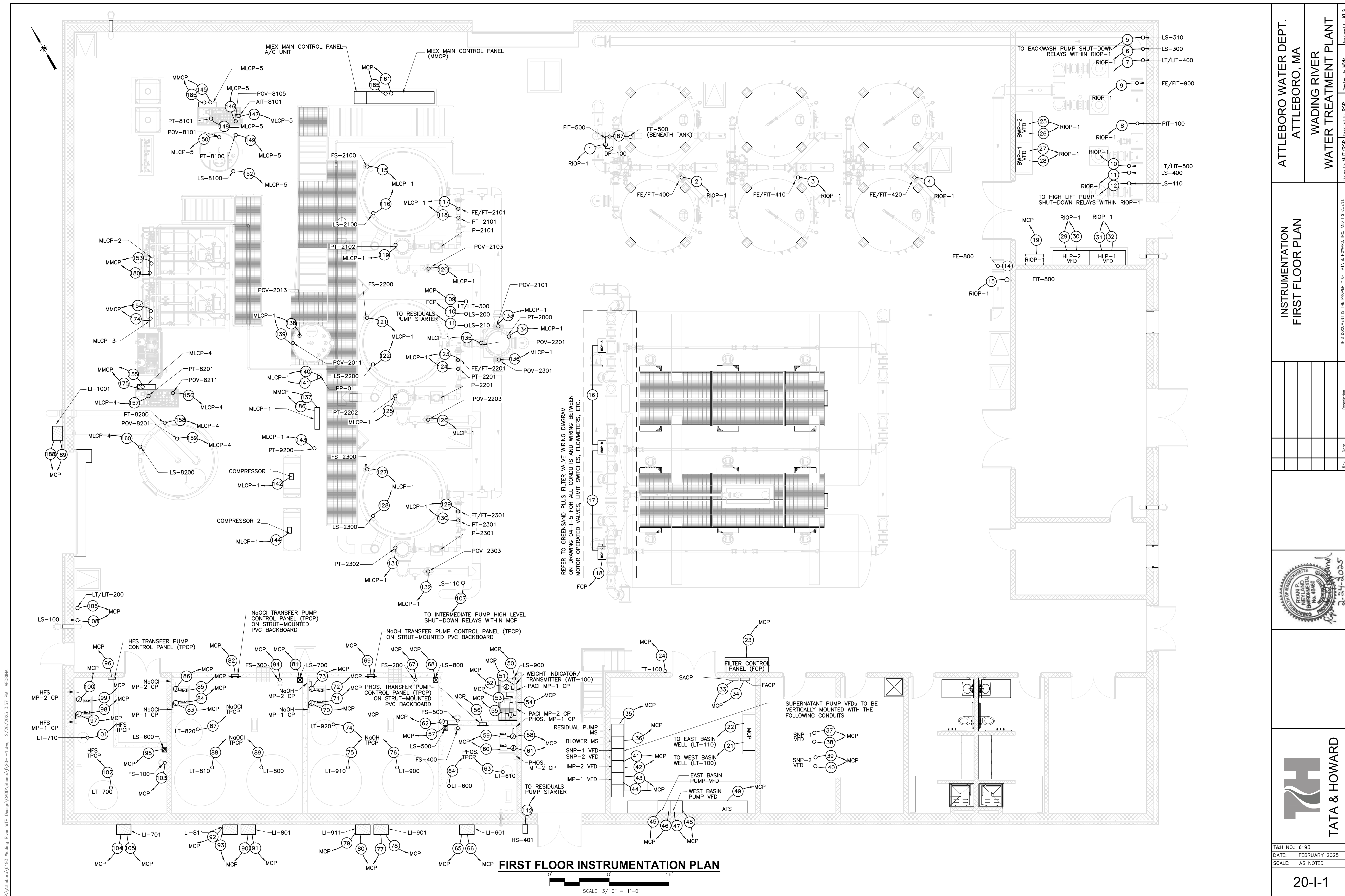
**FILTER CONTROL VALVE/FLOW
 METER WIRING
 TYPICAL, 3 FILTERS**

NOT TO SCALE

INSTRUMENTATION
 FILTER CONTROL VALVE
 AND FLOW METER
 WIRING DIAGRAM

Rev.	Date	Description





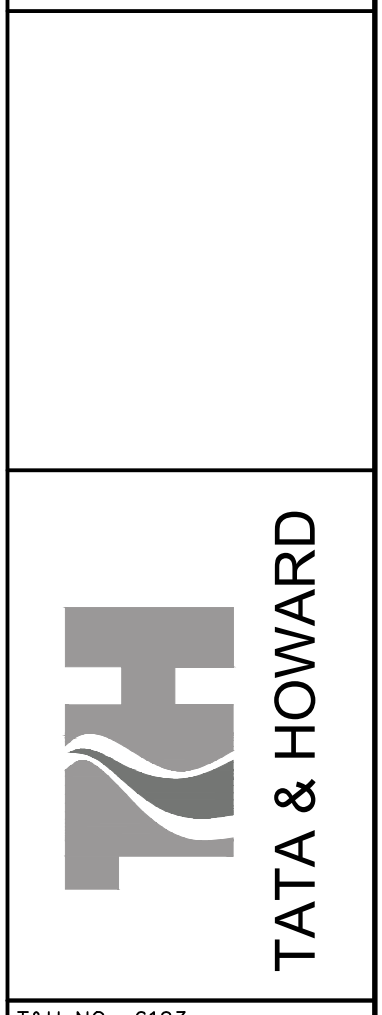
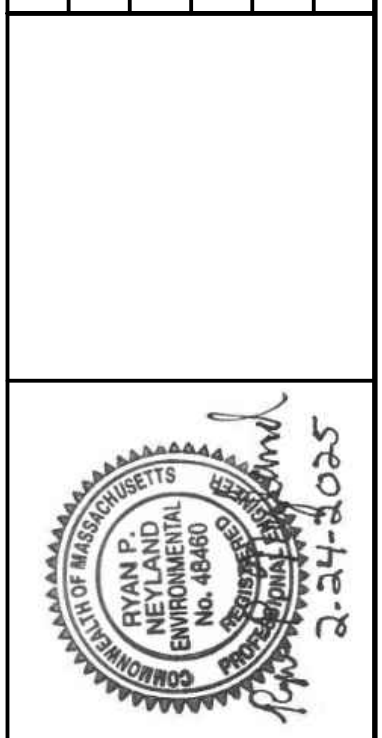
FIRST FLOOR INSTRUMENTATION PLAN

SCALE: 3/16" = 1'-0"

ATTEBORO WATER DEPT.
ATTEBORO, MA
WADING RIVER
WATER TREATMENT PLANT

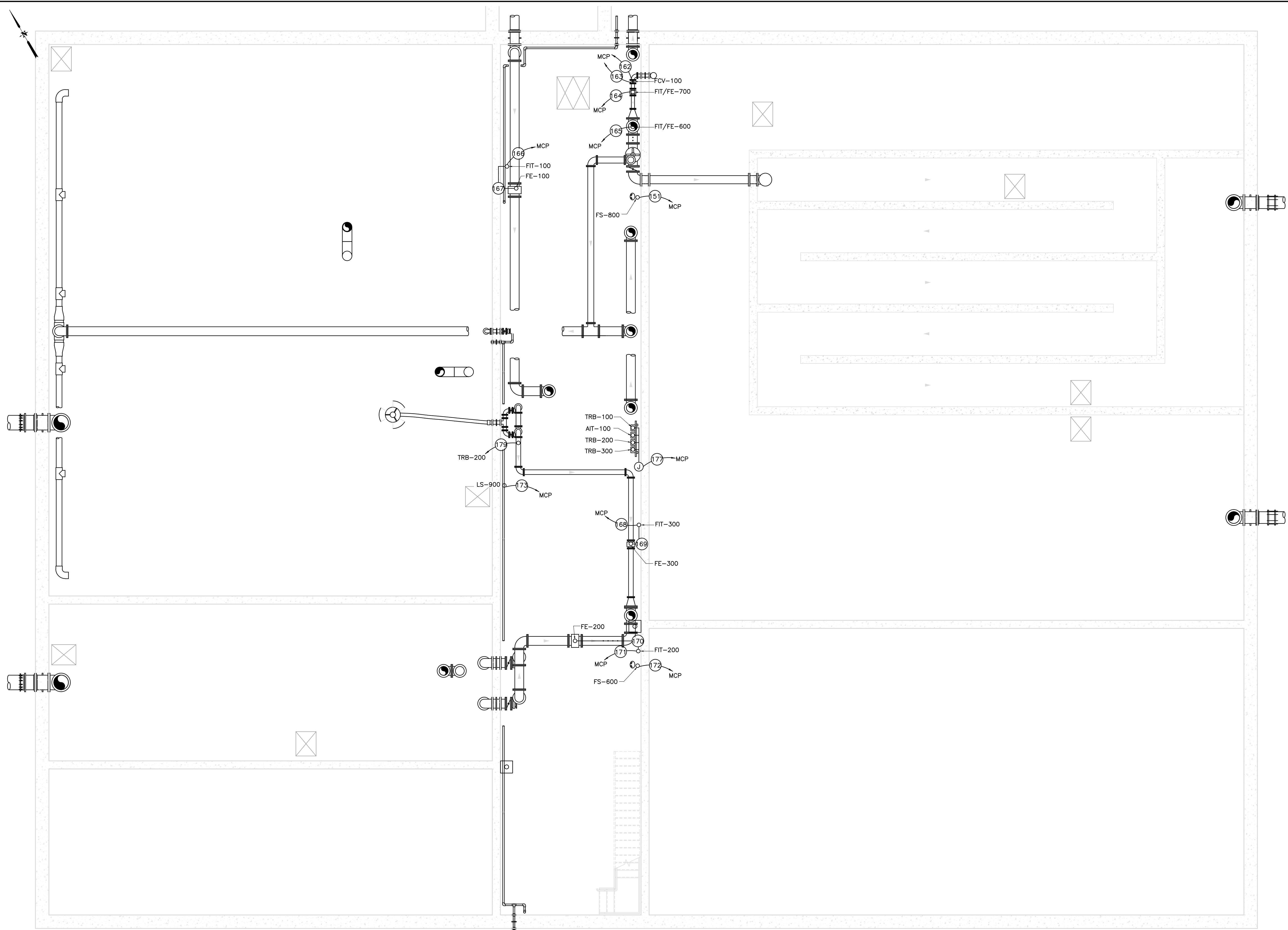
INSTRUMENTATION
FIRST FLOOR PLAN

Rev.	Date	Description

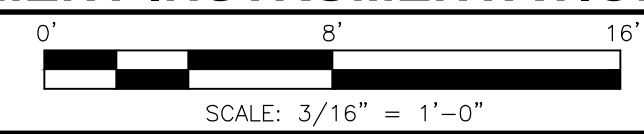


T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE: AS NOTED
20-I-1

P:\Attleboro\6193_Wading_River_WTP_Design\CADD\Sheet\20-1-2.dwg 2/26/2025 3:57 PM ACR/INA



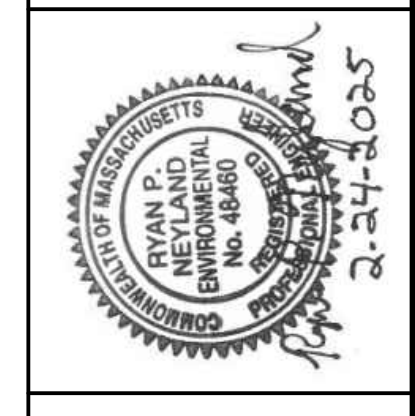
BASEMENT INSTRUMENTATION PLAN



ATTLEBORO WATER DEPT.
ATTLEBORO, MA
WADING RIVER
WATER TREATMENT PLANT

**INSTRUMENTATION
BASEMENT PLAN**

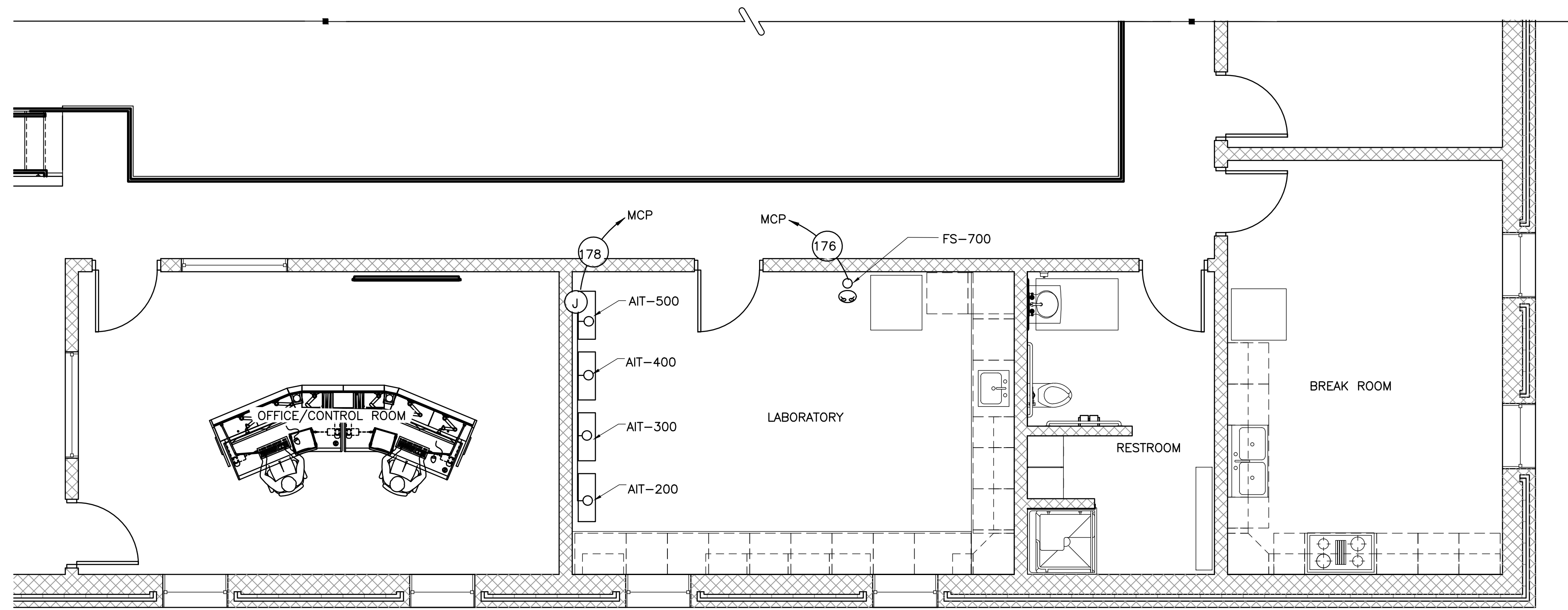
Rev.	Date	Description



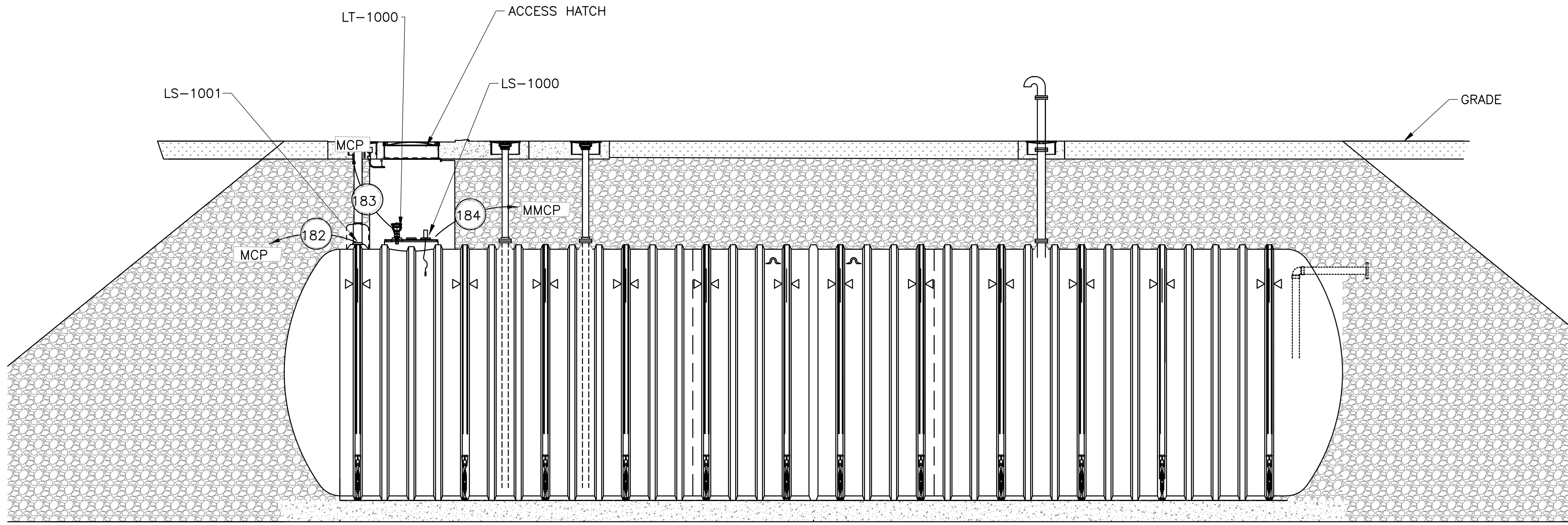
T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE: AS NOTED

20-1-2

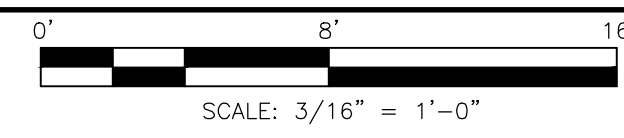
Drawn By: MJT/RSP
Designed By: RSP
Checked By: MVM
Approved By: KLG



MEZZANINE INSTRUMENTATION PLAN



BRINE WASTE TANK INSTRUMENTATION



ATTLEBORO WATER DEPT.
ATTLEBORO, MA
WADING RIVER
WATER TREATMENT PLANT

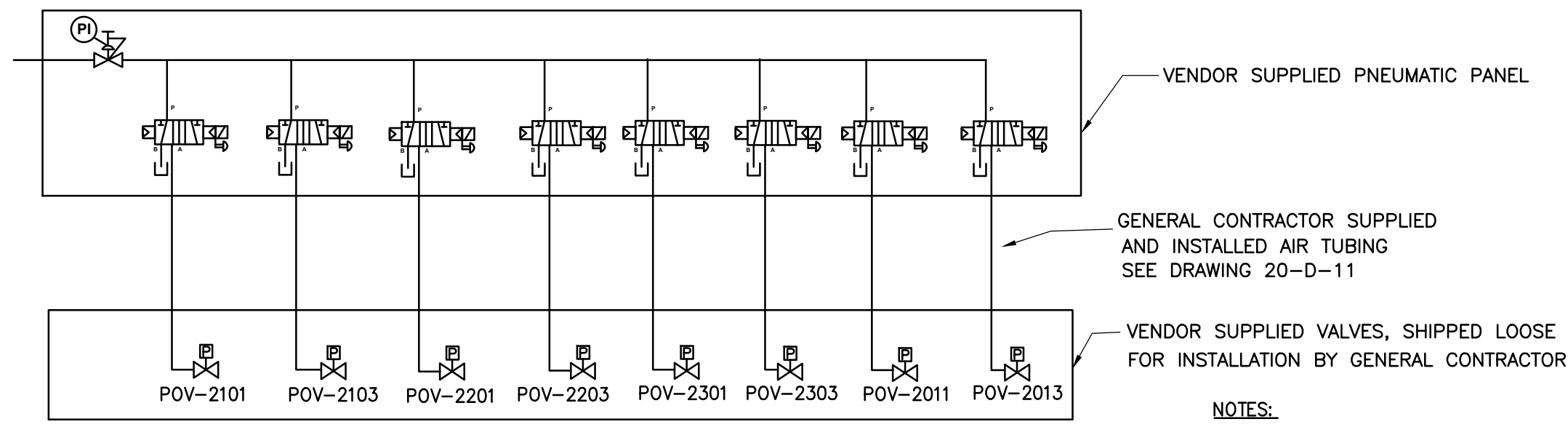
INSTRUMENTATION
MEZZANINE AND
BRINE WASTE HOLDING TANK
PLAN

Rev.	Date	Description



T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE: AS NOTED

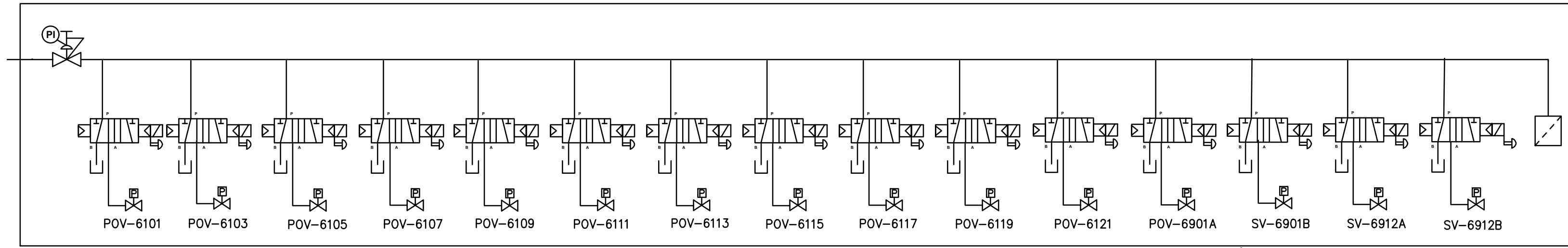
20-I-3



**MIEX CONTACTOR LOCAL CONTROL PANEL (MLCP-1)
PNEUMATIC PANEL AND INSTRUMENT AIR TUBING**

NOT TO SCALE

- NOTES:
1. VENDOR TO SUPPLY PNEUMATIC PANEL.
 2. VENDOR TO SUPPLY PNEUMATIC OPERATED PROCESS VALVES FOR CONTRACTOR INSTALLATION.
 3. GENERAL CONTRACTOR TO FURNISH AND INSTALL PNEUMATIC TUBING FROM PNEUMATIC PANELS TO VALVES.

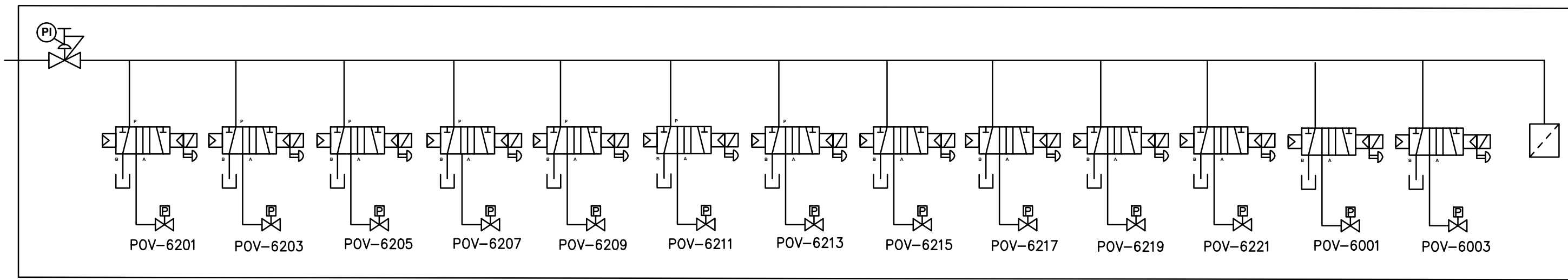


**MIEX REGEN SKID No. 1 LOCAL CONTROL PANEL (MCLP-2)
PNEUMATIC PANEL AND INSTRUMENT AIR TUBING**

NOT TO SCALE

- NOTES:
1. VENDOR TO SUPPLY PNEUMATIC PANEL.
 2. VENDOR TO SUPPLY PNEUMATIC OPERATED PROCESS VALVES FACTORY INSTALLED ON SKID.

VENDOR SUPPLIED PNEUMATIC PANEL
WITH VALVES AND TUBING FURNISHED AND INSTALLED
COMPLETE ON EQUIPMENT SKID

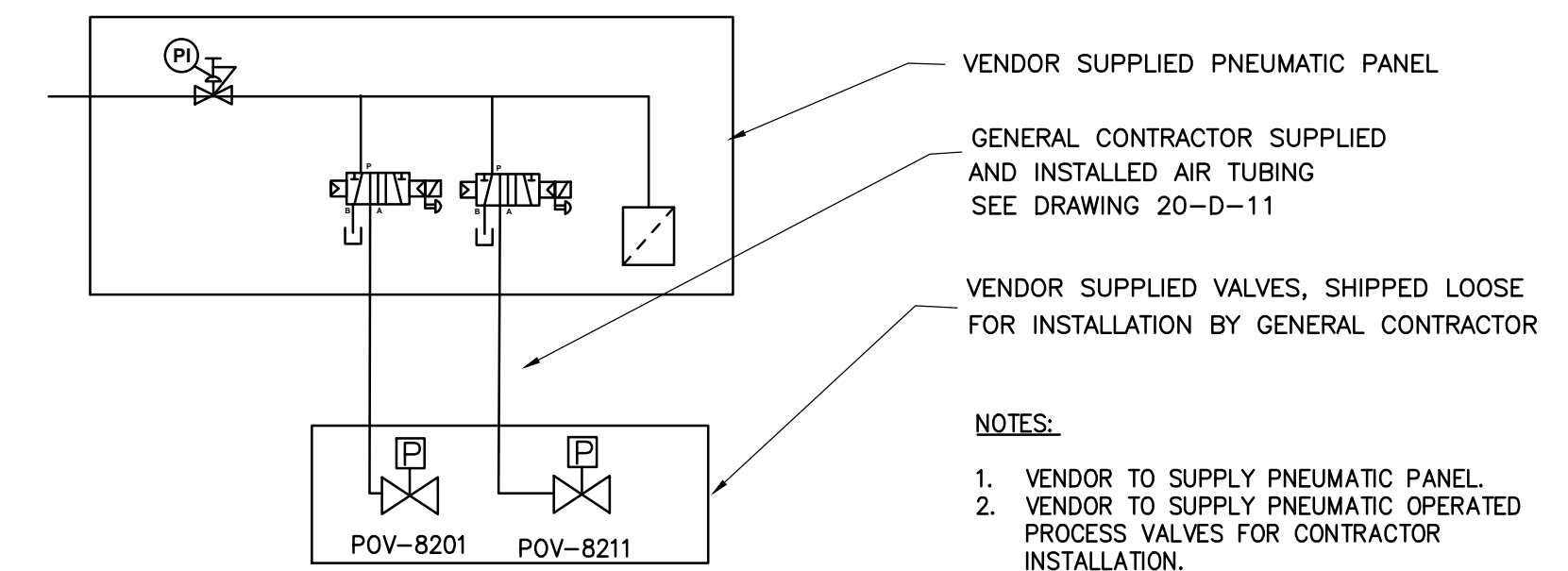


**MIEX REGEN SKID No. 2 LOCAL CONTROL PANEL (MCLP-3)
PNEUMATIC PANEL AND INSTRUMENT AIR TUBING**

NOT TO SCALE

- NOTES:
1. VENDOR TO SUPPLY PNEUMATIC PANEL.
 2. VENDOR TO SUPPLY PNEUMATIC OPERATED PROCESS VALVES FACTORY INSTALLED ON SKID.

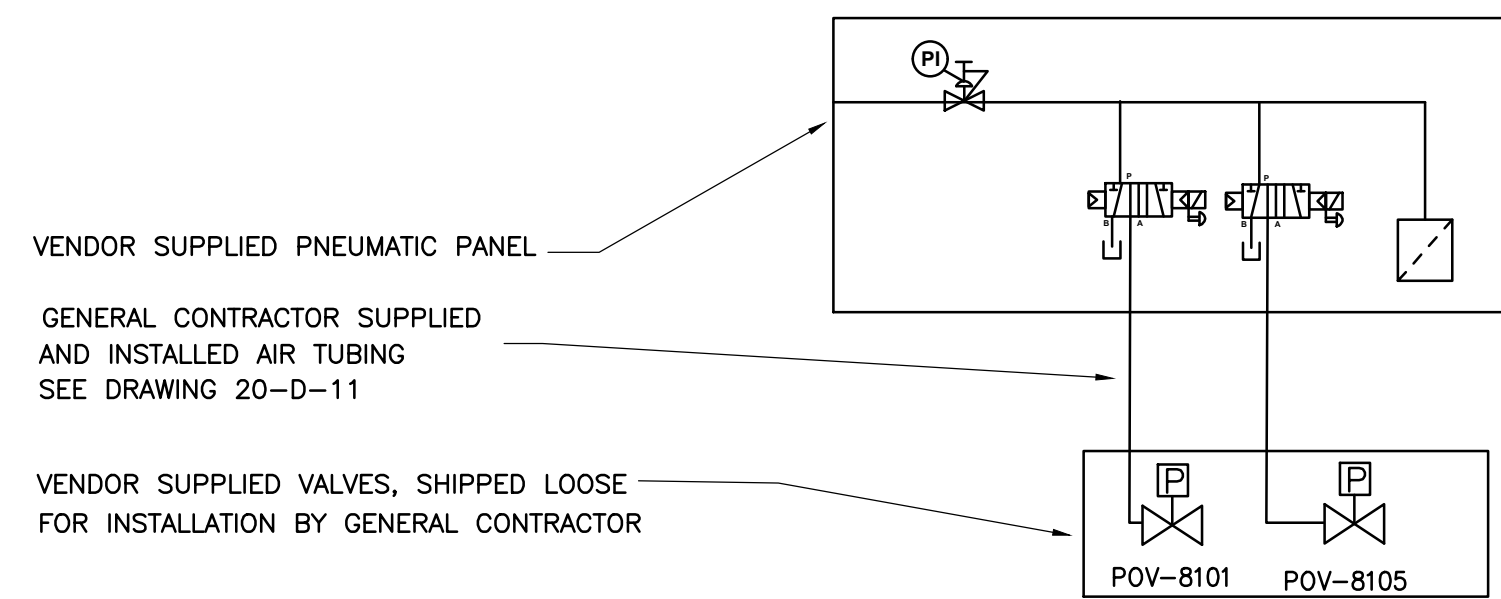
VENDOR SUPPLIED PNEUMATIC PANEL
WITH VALVES AND TUBING FURNISHED AND INSTALLED
COMPLETE ON EQUIPMENT SKID



**MIEX SALT SKID LOCAL CONTROL PANEL (MLCP-4)
AND INSTRUMENT AIR TUBING**

NOT TO SCALE

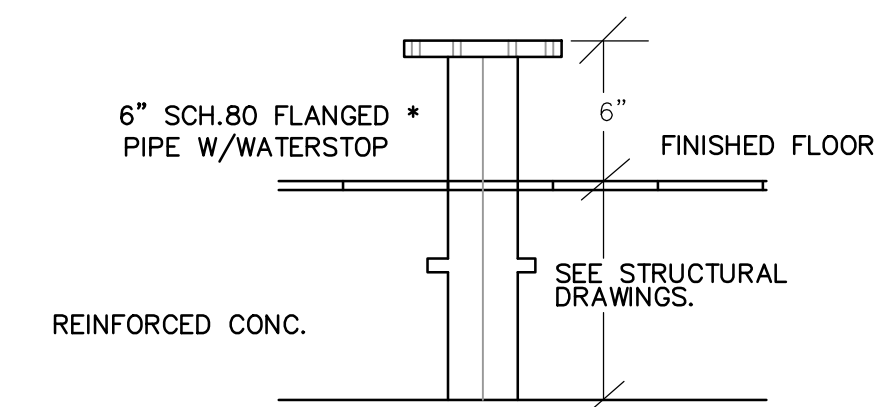
- NOTES:
1. VENDOR TO SUPPLY PNEUMATIC PANEL.
 2. VENDOR TO SUPPLY PNEUMATIC OPERATED PROCESS VALVES FOR CONTRACTOR INSTALLATION.
 3. GENERAL CONTRACTOR TO FURNISH AND INSTALL PNEUMATIC TUBING FROM PNEUMATIC PANELS TO VALVES.



**MIEX RECYCLE SKID LOCAL CONTROL PANEL (MLCP-5)
PNEUMATIC PANEL AND INSTRUMENT AIR TUBING**

NOT TO SCALE

- NOTES:
1. VENDOR TO SUPPLY PNEUMATIC PANEL.
 2. VENDOR TO SUPPLY PNEUMATIC OPERATED PROCESS VALVES FOR CONTRACTOR INSTALLATION.
 3. GENERAL CONTRACTOR TO FURNISH AND INSTALL PNEUMATIC TUBING FROM PNEUMATIC PANELS TO VALVES.



* CONTRACTOR SHALL CONFIRM REQUIRED DIAMETER PIPE WITH
LEVEL TRANSMITTER SUPPLIER TO MITIGATE SIDE WALL EFFECTS.

**DETAIL
LEVEL TRANSMITTER/FLOAT
SWITCH MOUNT**

NOT TO SCALE

ATTLEBORO WATER DEPT.
ATTLEBORO, MA
WADING RIVER
WATER TREATMENT PLANT

INSTRUMENTATION
DETAILS

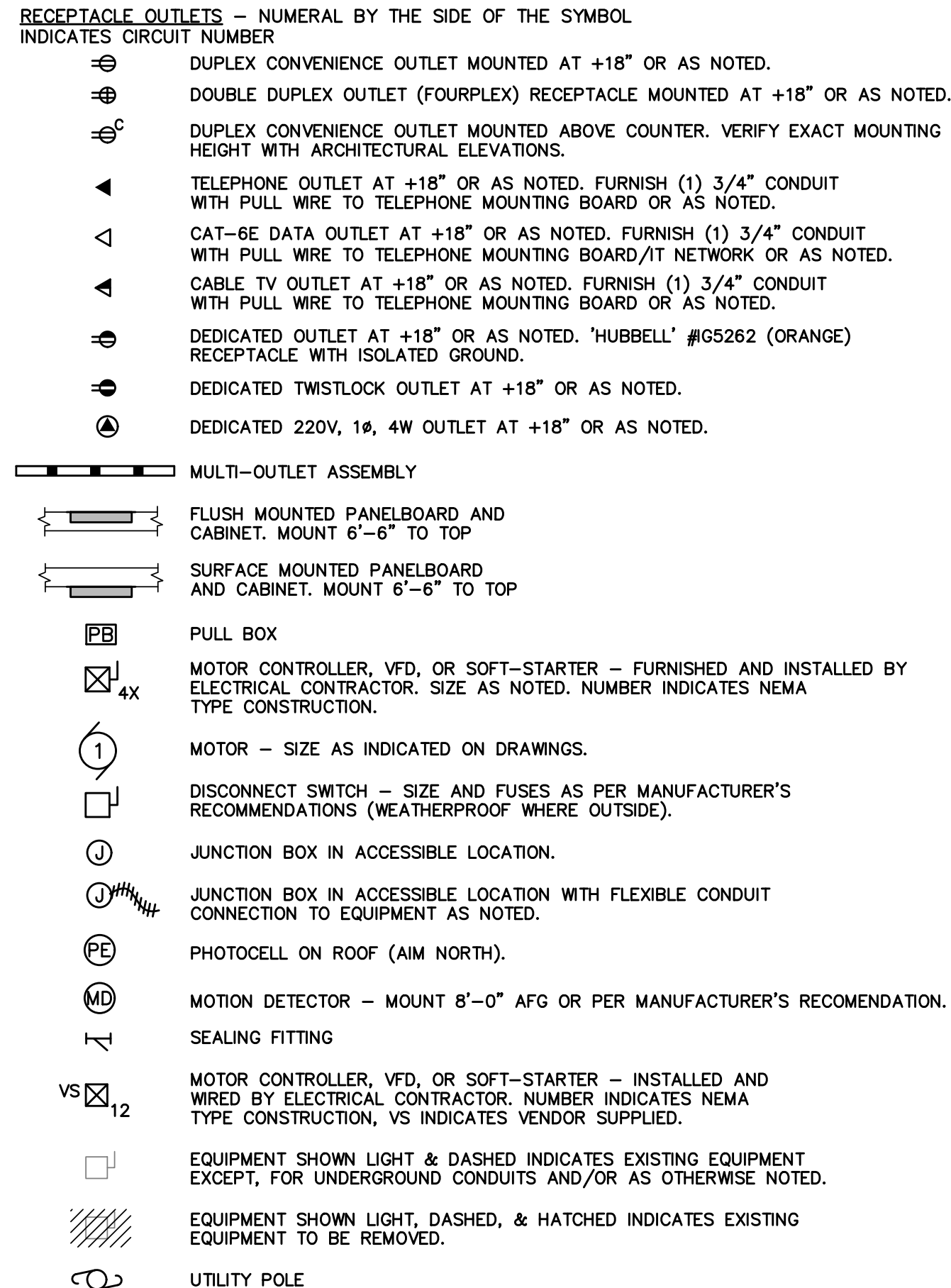
Rev.	Date	Description



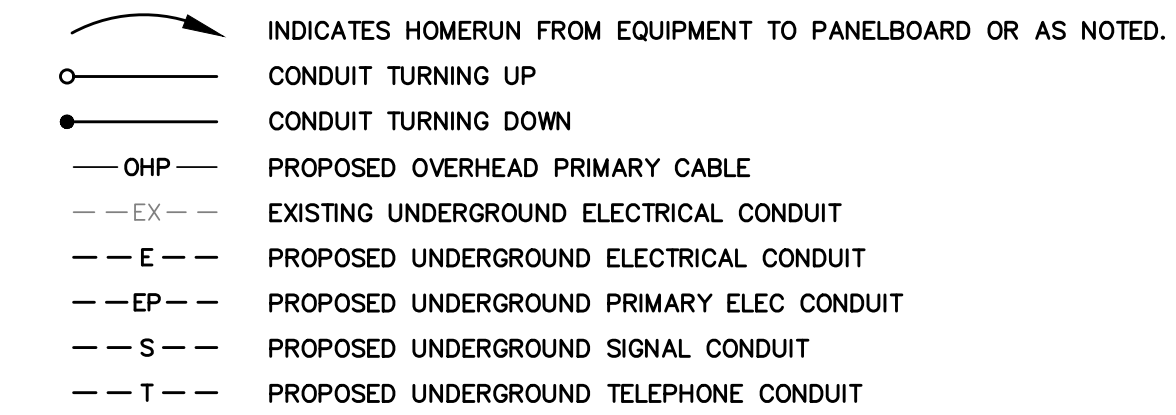
T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE: AS NOTED

FILE: C:\SMR\Engineering\Site & Howard\Attleboro MA\Wading River WPT\03-01-E1-01.dwg
C:\Users\j\OneDrive\Engineering\Site & Howard\Attleboro MA\Wading River WPT\03-01-E1-01.dwg
2/21/2025 11:16 AM - 62040

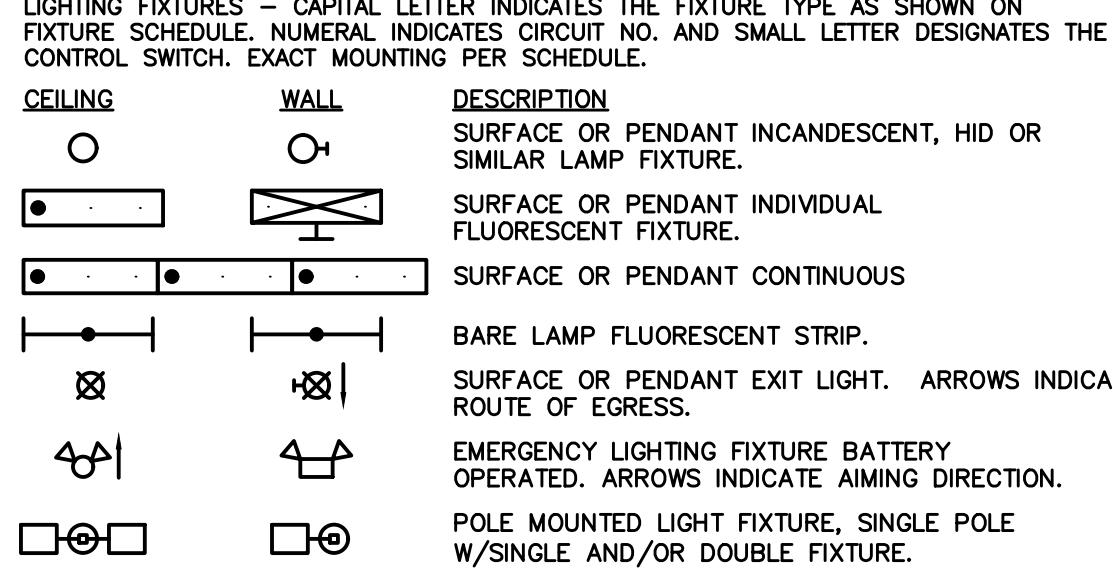
POWER LEGEND



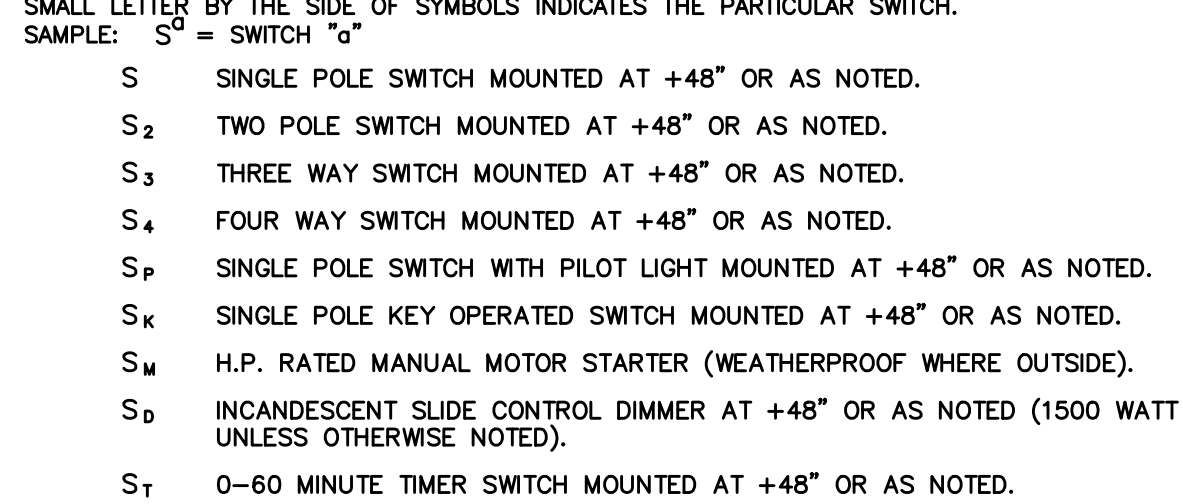
RACEWAYS AND CONDUITS



LIGHTING



SWITCHED OUTLET



ABBREVIATED LIST OF NEMA ENCLOSURE TYPES

- TYPE 1: GENERAL PURPOSE. INDOOR.
- TYPE 2: DRIP-PROOF. NONCORROSSIVE. INDOOR.
- TYPE 3: DUST-TIGHT. RAINTIGHT. OUTDOOR.
- TYPE 3R: RAINPROOF. OUTDOOR.
- TYPE 4: WATERTIGHT AND DUST-TIGHT. NONCORROSSIVE. INDOOR AND OUTDOOR.
- TYPE 4X: WATERTIGHT AND DUST-TIGHT. CORROSION RESISTANT. INDOOR AND OUTDOOR.
- TYPE 6: WATERTIGHT. DUST-TIGHT. SHORT-TIME SUBMERSIBLE. INDOOR AND OUTDOOR.
- TYPE 6P: WATERTIGHT. DUST-TIGHT. LONG-TIME SUBMERSIBLE. INDOOR AND OUTDOOR.
- TYPE 7: CLASS 1, GROUPS A, B, C, OR D. INDOOR.
- TYPE 8: CLASS 1, GROUPS A, B, C, OR D. INDOOR OR OUTDOOR.
- TYPE 9: CLASS II, GROUPS E OR G. INDOOR.
- TYPE 12: DUST-TIGHT. WATERTIGHT. NONCORROSSIVE LIQUID. INDOOR.
- TYPE 13: WATERTIGHT. DUST-TIGHT. OILTIGHT. NONCORROSSIVE LIQUID. INDOOR.

PROJECT GENERAL NOTES:

- 1. ALL WORK SHALL CONFORM TO THE MASSACHUSETTS ELECTRICAL CODE (M.E.C.) LATEST EDITION.
- 2. COORDINATE ALL ELECTRICAL EQUIPMENT LOCATIONS AND MECHANICAL APPURTENANCES WITH THE EXISTING CONDITIONS TO PROVIDE ADEQUATE WORKING AND ACCESS PER N.E.C. REQUIREMENTS.
- 3. WHERE EXISTING ELECTRICAL DEVICES AND PROCESS DEVICES ARE INDICATED THOSE LOCATIONS ARE APPROXIMATE AND NOT ALL ELECTRICAL DEVICES MAY BE INDICATED. (FIELD VERIFY ALL ELECTRICAL ITEMS WHERE POSSIBLE.)
- 4. CONDUITS, RACEWAYS AND CABLES SHALL BE PROPERLY AND SECURELY ATTACHED TO BUILDING STRUCTURAL COMPONENTS AS REQUIRED BY N.E.C. ALL FASTENERS AND HARDWARE SHALL BE APPROVED FOR THE INSTALLATION AND THE CONDITIONS ENCOUNTERED.
- 5. EACH JUNCTION IN ANY OF THE WIRING SYSTEMS SHALL BE MADE IN AN APPROVED JUNCTION BOX. SUCH BOX SHALL BE SUITABLE FOR THE SIZE AND NUMBER OF CONDUCTORS AND DEVICES TO BE INSTALLED, AS WELL AS THE CONDITION ENCOUNTERED. ALL SPICES SHALL BE MADE WITH APPROVED, MECHANICAL CONNECTORS.
- 6. CONTRACTOR SHALL VERIFY ALL STRUCTURAL, PROCESS AND MECHANICAL CONDITIONS PRIOR TO ROUGH-IN FOR ELECTRICAL WIRING AND EQUIPMENT.
- 7. ALL ELECTRICAL WORK SHALL BE CAREFULLY COORDINATED WITH THE ON-SITE CONDITIONS. WHERE CUTTING, DRILLING OR ALTERATION TO THE WORK OF OTHERS IS NECESSARY FOR THE PROPER INSTALLATION OF ELECTRICAL EQUIPMENT, SUCH WORK SHALL BE PLANNED IN ADVANCE AND SHALL BE CAREFULLY DONE. ANY DAMAGE TO THE BUILDINGS OR EQUIPMENT SHALL BE REPAIRED BY PROPERLY TRAINED PERSONNEL TO THE SATISFACTION OF THE OWNER AT NO ADDITIONAL COST TO THE OWNER.
- 8. DURING ROUGH-IN AND FINISHED STAGES OF CONSTRUCTION, THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE TO PROTECT AND KEEP CLEAN ALL ELECTRICAL EQUIPMENT, PANELS, FIXTURES AND DEVICES AS WELL AS ALL EXISTING EQUIPMENT AND RELATED WORK AREAS.
- 9. THE CONTRACTOR SHALL PROVIDE ALL INFORMATION ABOUT EQUIPMENT WHICH HE/SHE IS FURNISHING TO THE ENGINEER/OWNER FOR REVIEW PURPOSES. THE CONTRACTOR SHALL PROVIDE ALL INSTALLATION DETAILS AND SUPPORT COMPONENTS SO THAT THESE MAY BE BUILT INTO THE CONSTRUCTION IN A TIMELY MANNER.
- 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF THE FINAL LOCATIONS OF INSTRUMENTATION, CONTROL AND POWER CONNECTION DETAILS SO THAT THE ASSOCIATED ELECTRICAL WORK WILL BE PROPERLY COORDINATED AND INSTALLED.
- 11. EQUIPMENT LAYOUT AND EXACT LAYOUT OF NEW ELECTRICAL EQUIPMENT AND INSTRUMENTATION SHALL BE COORDINATED WITH PROCESS AND MECHANICAL ENGINEERING.
- 12. DRAWINGS SHOW A LAYOUT OF ELECTRICAL/INSTRUMENTATION SYSTEMS AND EQUIPMENT DIAGRAMMATICALLY. EXACT LOCATION OF EQUIPMENT AND ROUTING OF RACEWAYS SHALL BE DETERMINED BY FIELD CONDITIONS AND ROUTING OF RACEWAYS AND OWNER. BY SUBMITTING A BID, CONTRACTOR WARRANTS THAT HE HAS VISITED THE SITE WHERE WORK IS TO BE PERFORMED, AND HAS EXAMINED THE EXISTING CONDITIONS, AND EXTENT OF LABOR AND MATERIALS TO BE PROVIDED. COORDINATION WITH ALL TRADES, UTILITIES, ETC. SHALL BE PROVIDED. THE ENGINEER SHOULD BE NOTIFIED OF ANY DISCREPANCIES, OMISSIONS, CONFLICTS OR INTERFERENCES WHICH OCCUR BETWEEN VARIOUS DRAWINGS AND SPECIFICATIONS. IF SUCH NOTIFICATION IS NOT RECEIVED, THE INSTALLING CONTRACTOR(S) SHALL BE RESPONSIBLE FOR THEIR INTERPRETATIONS.

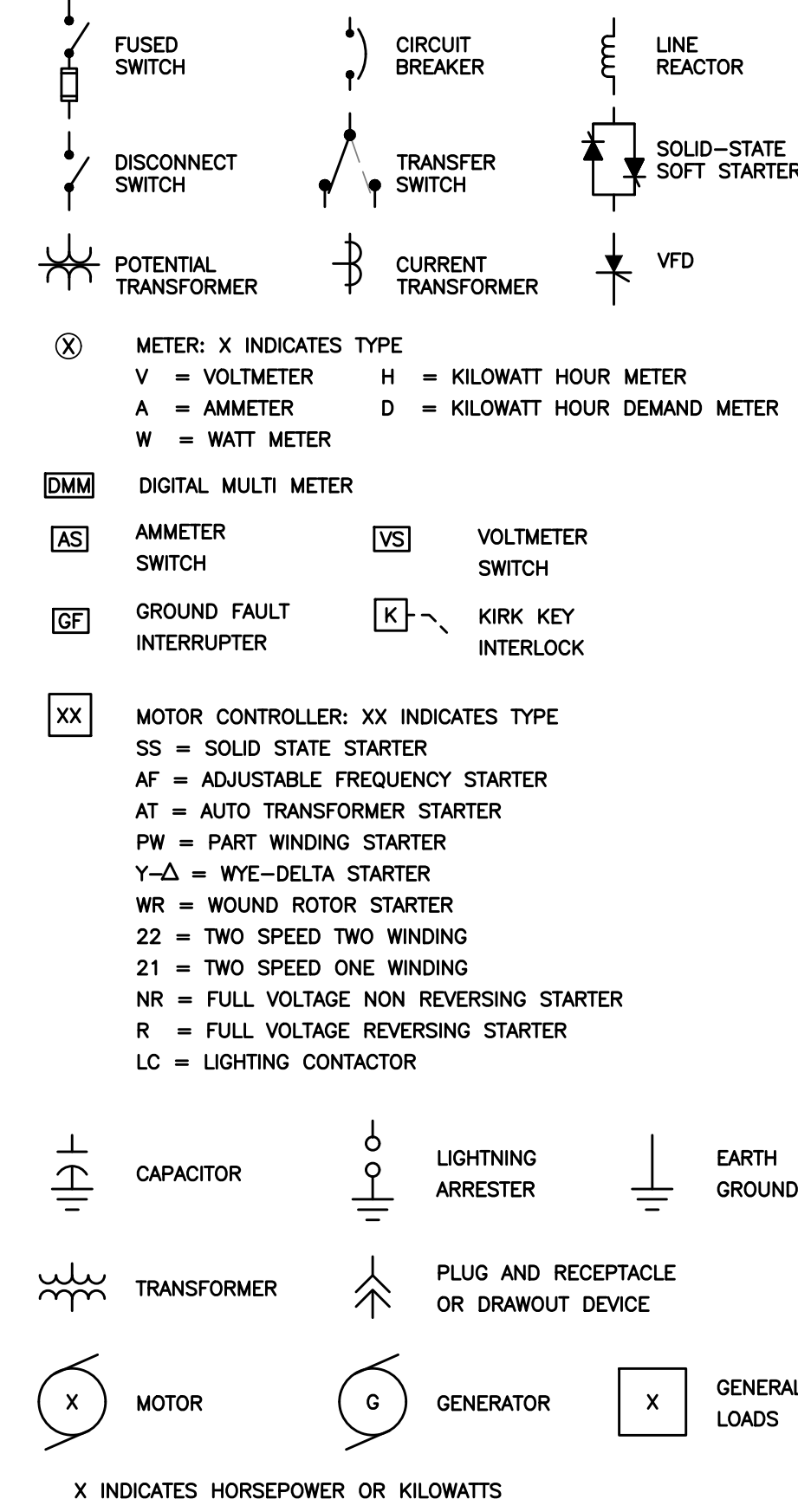
DEMOLITION GENERAL NOTES:

- 1. ANY DEMOLITION INDICATED ON THESE DRAWINGS IS SHOWN IN GENERAL TO INDICATE THE EXTENT OF DEMOLITION AND IS NOT TO BE CONSIDERED AS A RECORD DRAWING OF EXISTING CONDITIONS. ACCORDINGLY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLETE DEMOLITION OF ELECTRICAL WORK INDICATED INCLUDING ANY BURIED ITEMS OR EXISTING ITEMS NOT SHOWN ON THESE DRAWINGS. BEFORE DEMOLITION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR APPROPRIATE FIELD TESTING TO DETERMINE THE NATURE OF THE EXISTING WORK TO BE DEMOLISHED TO PROTECT EXISTING WORK REMAINING IN PLACE AND TO PROTECT THE PUBLIC.
- 2. REPAIR AND RESTORE TO ORIGINAL CONDITION ALL ITEMS OR PORTIONS OF ELECTRICAL WORK WHICH ARE NOT NOTED TO BE DEMOLISHED, BUT ARE DAMAGED BY WORK UNDER THIS CONTRACT. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTORS TO PROTECT AND RETAIN POWER TO ALL EXISTING ACTIVE EQUIPMENT WHICH SHALL REMAIN. ELECTRICAL CONTRACTOR SHALL RECONNECT ANY EQUIPMENT BEING DISTURBED BY THIS RENOVATION.
- 3. WHERE WORK BY THE GENERAL CONTRACTOR (WALL REMOVAL, NEW OR RELOCATED WALL OPENINGS), REQUIRES THE REMOVAL, RELOCATION, OR REFEEDING OF ELECTRICAL DEVICES OR LIGHTING FIXTURES, THE ELECTRICAL CONTRACTOR SHALL DISCONNECT AND MAKE SAFE OR RECONNECT AS REQUIRED ALL ACTIVE DEVICES REMAINING ON THAT CIRCUIT.
- 4. CONTRACTOR SHALL VERIFY ALL CIRCUIT IN EXISTING PANEL AFFECTED BY THIS ALTERATION, WHERE ADDITIONAL CIRCUITS ARE NEEDED, USE AVAILABLE SPARE BREAKERS IN THE PANEL. TIGHTEN ALL CONNECTIONS AS REQUIRED.
- 5. DO NOT PROCEED WITH DEMOLITION WITHOUT WRITTEN AUTHORITY TO PROCEED. PROCEED WITH DEMOLITION IN A SYSTEMATIC MANNER AND COORDINATE WITH ALL TRADES INVOLVED. COORDINATE AND SEQUENCE DEMOLITION SO AS NOT TO CAUSE A SHUTDOWN OF OPERATION OF SURROUNDING AREAS.
- 6. DISCONNECT OR SHUT OFF SERVICE TO AREAS WHERE ELECTRICAL WORK IS TO BE REMOVED. REMOVE ALL ELECTRICAL PANELS, EQUIPMENT, AND RELATED CONDUIT, AND WIRING WHICH ARE NOT A PART OF THE FINAL PROJECT IN ALL AREAS WHERE WORK OF THIS CONTRACT ARE TO BE PERFORMED. ALL REMOVED EQUIPMENT SHALL BE DISPOSED OF BY THIS CONTRACTOR UNLESS DIRECTED TO DO OTHERWISE BY THE OWNER. REMOVE ALL CONDUIT, WIRE, BOXES, AND FASTENING DEVICES AS REQUIRED TO AVOID ANY INTERFACE WITH NEW INSTALLATIONS. ABANDONED CIRCUITS TO BE CAPPED AT BOTH ENDS. REMOVE THE EXISTING WIRE NO LONGER IN USE FROM DEVICE LOCATION BACK TO PANEL.
- 7. ARRANGE TIMING SHUTDOWN PERIODS OF ALL-IN SERVICE PANELS WITH OWNER OR HIS/HER REPRESENTATIVE. DO NOT SHUT DOWN ANY UTILITY WITHOUT PRIOR WRITTEN APPROVAL.
- 8. WHERE EXISTING CIRCUITS ARE INDICATED TO BE REUSED, CONTRACTOR TO USE SENSING MEASURING DEVICES TO VERIFY THAT CIRCUITS FEEDING PROJECTS ARE OR ARE NOT IN USE.
- 9. EXISTING ELECTRICAL EQUIPMENT NECESSARY FOR EXISTING INSTALLATION TO REMAIN OPERATIONAL WILL HAVE TO BE PROTECTED DURING CONSTRUCTION.
- 10. THE ELECTRICAL CONTRACTOR SHALL TAKE INTO ACCOUNT IN FILING HIS/HER BID HIS/HER OBLIGATION TO PROVIDE FOR THE DISMANTLING AND REMOVAL OR MODIFICATION OF EXISTING ELECTRICAL EQUIPMENT, CONDUIT, WIRING AND RELATED ITEMS FOR THEIR REPLACEMENT OR MODIFICATION AS SPECIFIED.
- 11. CONTRACTOR SHALL COORDINATE WITH OWNER FOR POSSIBLE SALVAGE OF ANY OF THE ABOVE LISTED EQUIPMENT INCLUDING BUT NOT LIMITED TO MCC, STARTERS, GENERATORS, INSTRUMENTATION, PANELS, WIRING & CONDUIT.
- 12. THE CONTRACTOR SHALL UTILIZE EXISTING BRANCH CIRCUITS WHEREVER POSSIBLE. DISCONNECT CIRCUITS BACK TO LAST DEVICE (FIXTURE OR OUTLET) UNAFFECTED BY THE DEMOLITION. EXTEND CIRCUITS FROM LAST DEVICE TO NEW DEVICE LOCATIONS AND CIRCUIT AS SHOWN ON FLOOR PLAN.
- 13. THE ELECTRICAL DEVICES AND PROCESS EQUIPMENT INDICATED ON THIS DRAWING REPRESENT EQUIPMENT TAKEN FROM EXISTING PLANS FURNISHED BY THE OWNER AND SITE VISITS BY THE ENGINEER AND DO NOT REPRESENT ALL EQUIPMENT AND WIRING WITHIN THE DEMOLITION AREA. THESE DOCUMENTS HAVE BEEN PREPARED TO ASSIST THE CONTRACTOR IN PRICING DEMOLITION WORK. CONTRACTOR IS TO VISIT THE SITE AND EXAMINE ALL EXISTING CONDITIONS. NO EXTRA COMPENSATION OR TIME EXTENSION WILL BE PERMITTED BECAUSE OF LACK OF COMPLIANCE WITH THIS REQUIREMENT.

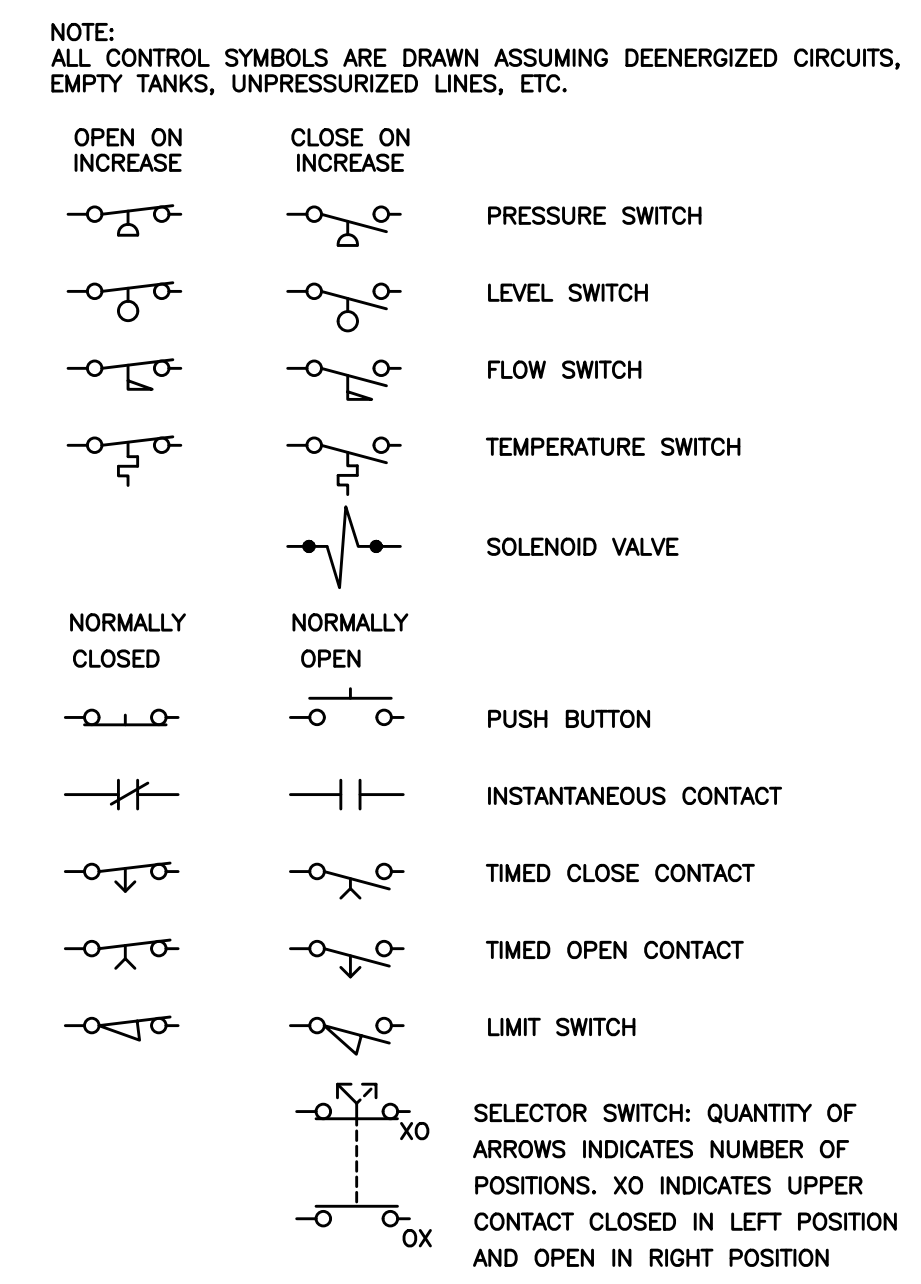
ABBREVIATIONS

- ACB AIR CIRCUIT BREAKER
- ALT ALTERNATE
- AC ALTERNATING CURRENT
- AL ALUMINUM
- AWG AMERICAN WIRE GAUGE
- A AMPERE(S)
- ATS AUTOMATIC TRANSFER SWITCH
- BW BUSWAY
- CLG CEILING
- CKT CIRCUIT
- CB CIRCUIT BREAKER
- CLOD CLOSED CIRCUIT TELEVISION CONDUIT (SEE RACEWAYS AND CONDUCTORS)
- C COND
- C CONN
- CP CONTROL PANEL
- CU CUPPER
- CT CURRENT TRANSFORMER
- DIM DIMMER SWITCH
- D.C. DIRECT CURRENT
- DISC DISCONNECT
- DPP DISTRIBUTION POWER PANEL
- DP DOUBLE POLE
- DT DOWN THROW
- DN DOWN
- E.E. ELECTRIC
- E.C. ELECTRICAL CONTRACTOR
- EJH ELECTRIC UNIT HEATER
- EWJ ELECTRIC WATER COOLER
- EMT ELECTRICAL METALLIC TUBING
- EM EMERGENCY
- ELR END LINE RESISTOR
- EXIST EXISTING
- XP EXPLOSION PROOF
- FDR FEEDER
- FA FIRE ALARM
- FACP FIRE ALARM CONTROL PANEL
- F.P.C. FIRE PROTECTION CONTRACTOR
- FLUOR FLUORESCENT
- FL FLOOR
- F.S.C. FOOD SERVICE CONTRACTOR
- HZ HERTZ
- F FUSE
- FS FUSIBLE SWITCH
- GEN GENERATOR
- G.C. GENERAL CONTRACTOR
- GRD GROUND
- GFCI GROUND FAULT CIRCUIT INTERRUPTER
- H.I.D. HIGHER INTENSITY DISCHARGE
- HP HORSEPOWER
- HOA HAND-OFF-AUTO
- H.P.S. HIGH PRESSURE SODIUM
- INC INCANDESCENT
- IC INTERCOM
- ISO ISOLATED NEUTRAL
- JB JUNCTION BOX
- K KEY OPERATED
- KV(KV) KILOVOLT(S)
- KVA KILOVOLT AMPERE(S)
- KW KILOWATT(S)
- LP LIGHTING PANEL
- L.P.S. LOW PRESSURE SODIUM
- LV LOW VOLTAGE
- MAGN MAGNETIC STARTER
- MCB MAIN CIRCUIT BREAKER
- ML MAIN LUGS ONLY
- MH MANHOLE
- MTS MANUAL TRANSFER SWITCH
- MC MECHANICAL CONTRACTOR
- MIKE MICROPHONE
- MTR MOTOR
- MCC MOTOR CONTROL CENTER
- KM THOUSAND CIRCULAR MIL(S)
- NC NOT USED
- NC NORMALLY CLOSED
- NO NORMALLY OPEN
- NOT TO SCALE
- NTS NOT IN CONTRACT
- N.I.C. OVERLOAD ELEMENT
- OC OVER COUNTER
- PANEL PANEL
- PILOT INDICATOR
- PVC POLYVINYL CHLORIDE
- P.L.C. POTENTIAL TRANSFORMER
- PF POWER FACTOR
- PP POWER PANEL
- PRI PRIMARY
- PS PULL SWITCH
- RECP RECEPTACLE
- R RELAY
- RC REMOTE CONTROL
- RGS RIGID GALVANIZED STEEL CONDUIT
- RWT REFLECTED WAVE TRAP
- S SIGNAL
- SEC SECONDARY
- SP SINGLE POLE
- ST SINGLE THROW
- SPK SPEAKER
- SMR SURFACE METAL RACEWAY
- SS SOLID STATE
- SW SWITCH
- SWDB SWITCHBOARD
- T.C. TEMPERATURE CONTROL CONTRACTOR
- TEMP TEMP.
- T TELEPHONE MOUNTING BOARD
- T TELEVISION
- TV TERMINAL BOX
- YFMR TRANSFORMER
- TYP TYPICAL
- UE UNDERGROUND ELECTRIC
- UG UNDERGROUND
- UH UNIT HEATER
- UNG UNGROUND
- UNP UNINTERRUPTED POWER SYSTEM
- UPS UNDERGROUND SIGNAL
- VP VAPORPROOF
- VAR REACTIVE VOLT AMPERES
- V(S) VOLT(S)
- VA VOLTAMP(S)
- VFD VARIABLE FREQUENCY DRIVE
- WATT(S) WATT(S)
- WF WEATHERPROOF

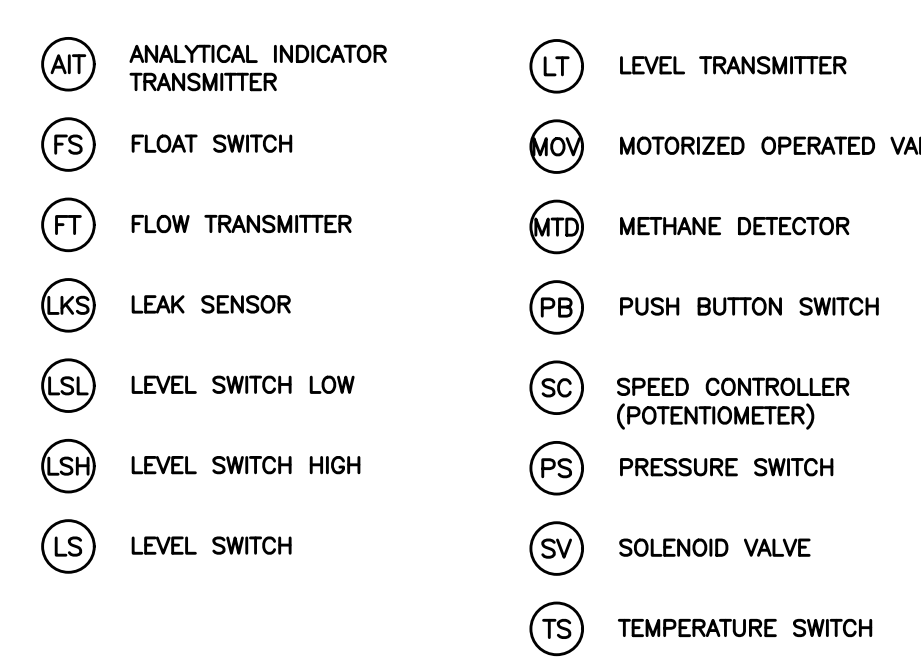
DIAGRAM SYMBOLS



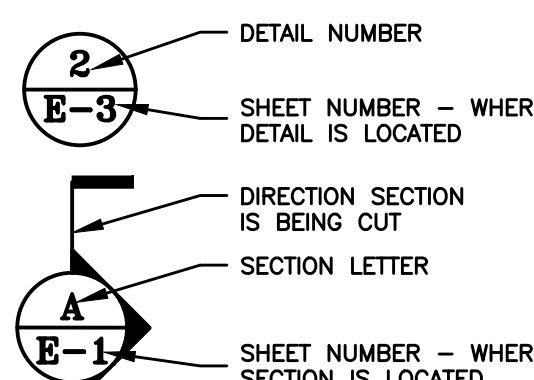
CONTROL DIAGRAM SYMBOLS



INSTRUMENTATION SYMBOLS



DETAIL & SECTION MARK LEGEND



DIRECTION OF NORTH



INSTRUMENTATION NOTES:

- 1. ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL ALL NECESSARY POWER AND SIGNAL WIRING WITH CONDUITS AS SHOWN ON ELECTRICAL AND INSTRUMENTATION DRAWINGS BETWEEN POWER PANELS, PLC'S, CONTROL PANELS, AND FIELD INSTRUMENTS AS REQUIRED.
- 2. MINIMUM SIZE CONDUIT TO BE 3/4".
- 3. MINIMUM SIZE CONTROL WIRING TO BE #14 AWG. SHIELDED CABLE TO BE 2/C#18 FOR LOOP POWERED DEVICES. 4/C#18 FOR 4-WIRE DEVICES.
- 4. WIRING MAY BE COMBINED IN SINGLE RACEWAYS FOR EACH OF THE FOLLOWING CATEGORIES. DO NOT MIX CATEGORIES IN A SINGLE CONDUIT:
 - A. 120V POWER WIRING
 - B. CONTROL AND DISCRETE OUTPUT SIGNALS (24VAC)
 - C. DISCRETE INPUT SIGNALS (24VDC)
 - D. ANALOG SIGNAL WIRING
- 5. LOCATION OF PROCESS EQUIPMENT, MOTORS, VALVES, INSTRUMENTS, ETC. SHOWN ON THE DRAWINGS ARE APPROXIMATE. REFER TO PROCESS AND MECHANICAL DRAWINGS FOR EXACT LOCATIONS. FINAL LOCATIONS TO BE DETERMINED IN FIELD TO MATCH EQUIPMENT SUPPLIED BY CONTRACTOR.
- 6. REFER TO POWER PLANS FOR INSTRUMENTATION POWER REQUIREMENTS.
- 7. IT IS THE INTENT OF DRAWINGS AND SPECIFICATIONS TO OBTAIN A COMPLETE AND SATISFACTORY INSTALLATION. AN ATTEMPT HAS BEEN MADE TO SEPARATE AND COMPLETELY DEFINE THE WORK OF THE CONTRACTOR. DRAWINGS ARE DIAGRAMMATIC, BUT SHALL BE FOLLOWED AS CLOSELY AS ACTUAL CONSTRUCTION OF THE FACILITY AND THE WORK OF OTHER TRADES WILL PERMIT. THE DRAWINGS OF NECESSITY UTILIZE SYMBOLS AND SCHEMATIC DIAGRAMS TO INDICATE VARIOUS ITEMS OF WORK. THEREFORE, NO INTERPRETATION WILL BE MADE FROM THE LIMITATION OF SYMBOLS AND DIAGRAMS THAT ANY ELEMENT NECESSARY FOR A COMPLETE INSTALLATION ARE EXCLUDED. THE ENGINEER SHOULD BE NOTIFIED OF ANY DISCREPANCIES, OMISSIONS, CONFLICTS OR INTERFERENCES WHICH OCCUR BETWEEN VARIOUS DRAWINGS AND SPECIFICATIONS. IF SUCH NOTIFICATION IS NOT RECEIVED, THE INSTALLING CONTRACTOR(S) SHALL BE RESPONSIBLE FOR THEIR INTERPRETATIONS.
- 8. DURING ROUGH IN AND FINISHED STAGES OF CONSTRUCTION, THE INSTRUMENTATION SUBCONTRACTOR SHALL BE RESPONSIBLE TO PROTECT AND KEEP CLEAN ALL INSTRUMENTATION EQUIPMENT, PANELS, FIXTURES AND DEVICES AS WELL AS ALL EXISTING EQUIPMENT AND RELATED WORK AREAS.
- 9. THE CONTRACTOR SHALL PROVIDE ALL INFORMATION ABOUT EQUIPMENT WHICH HE/SHE IS FURNISHING TO THE ENGINEER/OWNER FOR REVIEW PURPOSES. THE CONTRACTOR SHALL PROVIDE ALL INSTALLATION DETAILS AND SUPPORT COMPONENTS SO THAT THESE MAY BE BUILT INTO THE CONSTRUCTION IN A TIMELY MANNER.
- 10. ELECTRICAL CONTRACTOR AND/OR SUBCONTRACTOR TO OBTAIN ALL PERMITS AND INSPECTIONS.
- 11. CONTROL CIRCUITS SHALL BE ARRANGED TO USE SUPERVISED CONTACTS WHEREVER POSSIBLE. THIS MEANS THAT NORMALLY CLOSED CONTACTS WILL BE USED AND THE CONTACTS WILL OPEN WHEN A PROCESS TRANSITION OCCURS (E.G. HIGH LEVEL, LOW LEVEL, HIGH PRESSURE, ETC.)
- 12. REFER TO ELECTRICAL SERIES DRAWINGS FOR ADDITIONAL DETAILS FOR CONDUIT, DEVICE LOCATIONS, AND POWER CIRCUITS.
- 13. DRAWINGS SHOW A LAYOUT OF SCADA/INSTRUMENTATION SYSTEMS AND EQUIPMENT DIAGRAMMATICALLY. EXACT LOCATION OF EQUIPMENT AND ROUTING OF RACEWAYS SHALL BE DETERMINED BY FIELD CONDITIONS AND DIRECTION BY ENGINEER AND OWNER. BY SUBMITTING A BID, ELECTRICAL CONTRACTOR WARRANTS THAT HE HAS VISITED THE SITE WHERE WORK IS TO BE PERFORMED, AND HAS EXAMINED THE EXISTING CONDITIONS AND EXTENT OF LABOR AND MATERIALS TO BE PROVIDED. COORDINATION WITH ALL TRADES, UTILITIES, ETC. SHALL BE PROVIDED.

INSTRUMENTATION GROUNDING

- 1. SHIELD CONDUCTORS SHALL HAVE THEIR SHIELD WIRE CONNECTED TO GROUND AT ONE END ONLY.
- 2. CONTROL CABINETS SHALL BE PROVIDED WITH AN ISOLATED INSTRUMENT GROUND BUS FOR INSTRUMENTATION GROUND WIRE. THIS BUS SHALL BE TIED TO FACILITY GROUND AT A SINGLE POINT (BONDED).
- 3. EQUIPMENT & INSTRUMENT GROUNDS SHALL NOT BE INTERMIXED.
- 4. WHERE ANALOG SIGNALS ARE LACED FROM ONE DEVICE TO ANOTHER, THE SHIELD/DRAIN WIRE SHALL BE CONTINUOUS AND ONLY TIED TO GROUND AT ONE POINT.

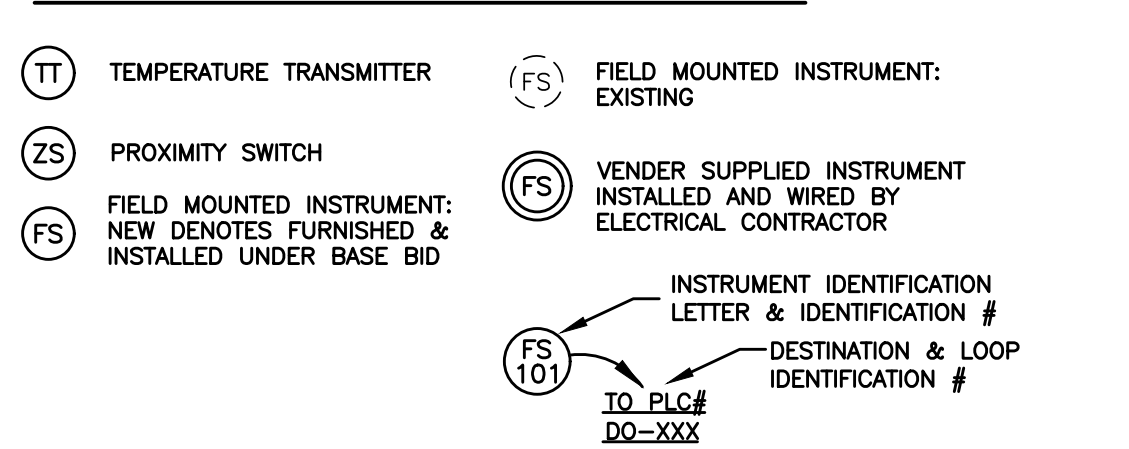
PROCESS SIGNAL SCALING & CALIBRATION

- 1. ALL INSTRUMENTS SHALL BE PROPERLY CALIBRATED BY THE INSTALLING CONTRACTOR. A CALIBRATION STICKER SHALL BE ATTACHED INDICATING CALIBRATION DATE AND THE INITIALS OF THE INDIVIDUAL WHO PERFORMED THE CALIBRATION.
- 2. ALL PROCESS ANALOG LOOPS SHALL BE PROPERLY CALIBRATED AND SCALED TO THE EXTENT POSSIBLE AND PRACTICAL. ANALOG INSTRUMENTS SHALL BE CALIBRATED TO READ THE ENTIRE OPERATING RANGE FOR THE PARAMETER BEING MONITORED.

INSTRUMENTATION PIPING & MOUNTING

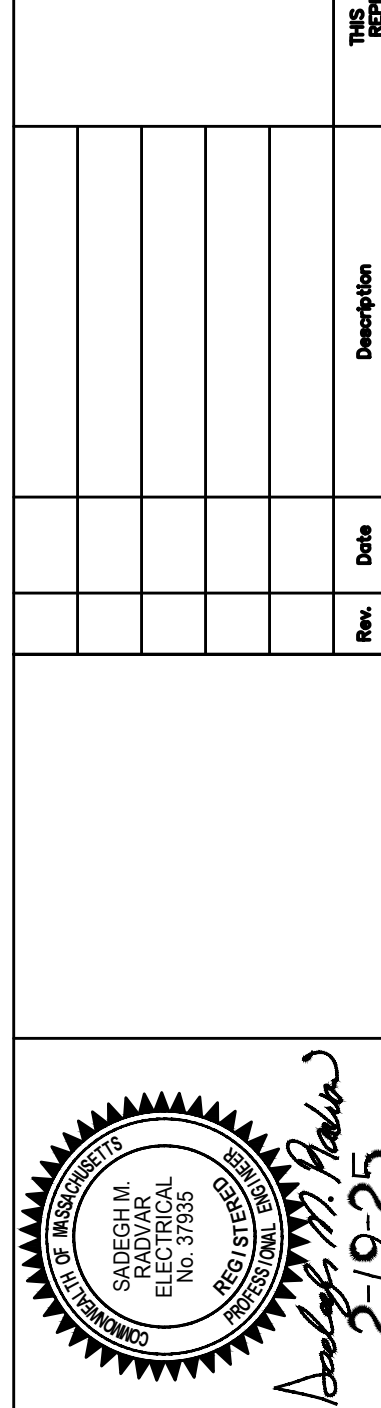
- 1. DIRECT READING INSTRUMENTS SHALL BE MOUNTED AT EYE HEIGHT, ~5 FT ABOVE FINISHED FLOOR, UNLESS PROCESS RESTRAINTS NECESSITATE OTHER MOUNTING ARRANGEMENTS, OR UNLESS OTHERWISE NOTED.
- 2. INSTRUMENTS SHALL BE SECURELY ANCHORED TO THE STRUCTURES OR MONITORED EQUIPMENT. PROPER MOUNTING HARDWARE SHALL BE UTILIZED. (BOLTS, NUTS, UNISTRUT, ETC.)
- 3. ALL INSTRUMENT TUBING SHALL BE STAINLESS STEEL UNLESS OTHERWISE NOTED. TUBING INSTALLATION SHALL PROVIDE ADEQUATE PROTECTION AND SUPPORT WHERE APPROPRIATE. TUBING AND PIPING ARRANGEMENTS SHALL BE PROPERLY SLOPED AND INSTALLED FOR THE FLUID BEING MONITORED.
- 4. ALL INSTRUMENT TAPS INTO PROCESS PIPING SHALL BE PROVIDED WITH AN ISOLATION VALVE. (NOMINAL 1/2" OR 3/4" BALL VALVE). ISOLATION VALVES SHALL BE CONSTRUCTED OF MATERIAL COMPATIBLE WITH THE MONITORED PROCESS FLUID.
- 5. ALL INSTRUMENTS WHICH REQUIRE PERIODIC CALIBRATION SHALL BE PROVIDED WITH MEANS TO CALIBRATE IN PLACE (E.G. CALIBRATION BLOCK AND/OR CALIBRATION VALVING).
- 6. VENTS AND DRAINS SHALL BE PROVIDED ON PROCESS EQUIPMENT AND INSTRUMENTATION AS REQUIRED TO SUPPORT ROUTINE AND MAINTENANCE OPERATIONS.

INSTRUMENTATION SYMBOLS CONT.



ATTLEBORO WATER DEPT.
ATTLEBORO, MA
WADING RIVER
WATER TREATMENT PLANT

ELECTRICAL
ELECTRICAL NOTES
AND LEGEND



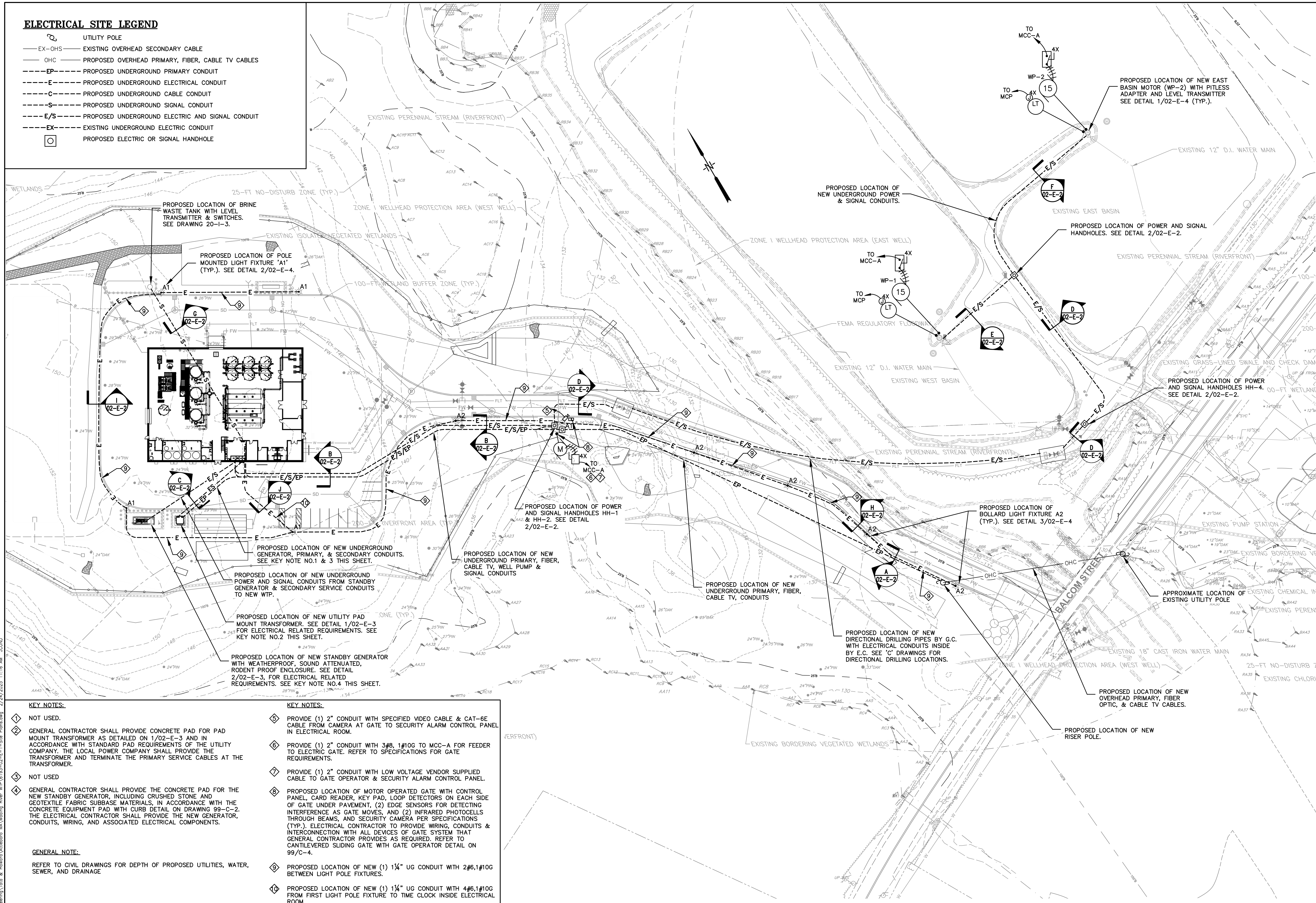
SMK ENGINEERING, PC
Electrical, Instrumentation & Control Systems Engineering
141 West Street, Suite 1000
Boston, MA 02108
Phone: 617-267-8888

TATA & HOWARD
INCORPORATED
380 Main Street
Boston, MA 02129
Phone: 617-452-4500

T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE: AS NOTED
01-E-1

ELECTRICAL SITE LEGEND

- UTILITY POLE
- EX-OHS EXISTING OVERHEAD SECONDARY CABLE
- OHC PROPOSED OVERHEAD PRIMARY, FIBER, CABLE TV CABLES
- EP--- PROPOSED UNDERGROUND PRIMARY CONDUIT
- E--- PROPOSED UNDERGROUND ELECTRICAL CONDUIT
- C--- PROPOSED UNDERGROUND CABLE CONDUIT
- S--- PROPOSED UNDERGROUND SIGNAL CONDUIT
- E/S--- PROPOSED UNDERGROUND ELECTRIC AND SIGNAL CONDUIT
- EX--- EXISTING UNDERGROUND ELECTRIC CONDUIT
- PROPOSED ELECTRIC OR SIGNAL HANDHOLE



KEY NOTES:

- ◇ NOT USED.
- ◇ GENERAL CONTRACTOR SHALL PROVIDE CONCRETE PAD FOR PAD MOUNT TRANSFORMER AS DETAILED ON 1/02-E-3 AND IN ACCORDANCE WITH STANDARD PAD REQUIREMENTS OF THE UTILITY COMPANY. THE LOCAL POWER COMPANY SHALL PROVIDE THE TRANSFORMER AND TERMINATE THE PRIMARY SERVICE CABLES AT THE TRANSFORMER.
- ◇ NOT USED
- ◇ GENERAL CONTRACTOR SHALL PROVIDE THE CONCRETE PAD FOR THE NEW STANDBY GENERATOR, INCLUDING CRUSHED STONE AND GEOTEXTILE FABRIC SUBBASE MATERIALS, IN ACCORDANCE WITH THE CONCRETE EQUIPMENT PAD WITH CURB DETAIL ON DRAWING 99-C-2. THE ELECTRICAL CONTRACTOR SHALL PROVIDE THE NEW GENERATOR, CONDUITS, WIRING, AND ASSOCIATED ELECTRICAL COMPONENTS.

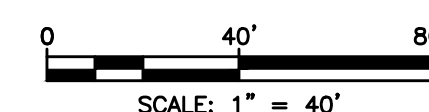
GENERAL NOTE:

REFER TO CIVIL DRAWINGS FOR DEPTH OF PROPOSED UTILITIES, WATER, SEWER, AND DRAINAGE

KEY NOTES:

- ◇ PROVIDE (1) 2" CONDUIT WITH SPECIFIED VIDEO CABLE & CAT-6E CABLE FROM CAMERA AT GATE TO SECURITY ALARM CONTROL PANEL IN ELECTRICAL ROOM.
- ◇ PROVIDE (1) 2" CONDUIT WITH 3#8, 1#10G TO MCC-A FOR FEEDER TO ELECTRIC GATE. REFER TO SPECIFICATIONS FOR GATE REQUIREMENTS.
- ◇ PROVIDE (1) 2" CONDUIT WITH LOW VOLTAGE VENDOR SUPPLIED CABLE TO GATE OPERATOR & SECURITY ALARM CONTROL PANEL.
- ◇ PROPOSED LOCATION OF MOTOR OPERATED GATE WITH CONTROL PANEL, CARD READER, KEY PAD, LOOP DETECTORS ON EACH SIDE OF GATE UNDER PAVEMENT, (2) EDGE SENSORS FOR DETECTING INTERFERENCE AS GATE MOVES, AND (2) INFRARED PHOTOCELLS THROUGH BEAMS, AND SECURITY CAMERA PER SPECIFICATIONS (TYP.). ELECTRICAL CONTRACTOR TO PROVIDE WIRING, CONDUITS & INTERCONNECTION WITH ALL DEVICES OF GATE SYSTEM THAT GENERAL CONTRACTOR PROVIDES AS REQUIRED, REFER TO CANTILEVERED SLIDING GATE WITH GATE OPERATOR DETAIL ON 99-C-4.
- ◇ PROPOSED LOCATION OF NEW (1) 1 1/4" UG CONDUIT WITH 2#6,1#10G BETWEEN LIGHT POLE FIXTURES.
- ◇ PROPOSED LOCATION OF NEW (1) 1 1/4" UG CONDUIT WITH 4#6,1#10G FROM FIRST LIGHT POLE FIXTURE TO TIME CLOCK INSIDE ELECTRICAL ROOM.

WATER TREATMENT PLAN ELECTRICAL SITE PLAN 1
SCALE: 1"=40'-0" (FULL SIZE DRAWING)



ATTEBORO WATER DEPT.
ATTEBORO, MA
WADING RIVER
WATER TREATMENT PLANT
Checked By: SHR
Designed By: JWC
Down By: JWC

ELECTRICAL
ELECTRICAL SITE PLAN

Rev.	Date	Description

THE DOCUMENT IS THE PROPERTY OF TATA & HOWARD, INC. AND ITS CLIENT. REPRODUCTION OR ADAPTATION WITHOUT WRITTEN CONSENT IS PROHIBITED.

2-19-25
Analyse M. Nolin

SMK ENGINEERING, PC
200 West Street, Suite 200
Attleboro, MA 01915
Phone: 508-351-1000
Fax: 508-351-1001
www.smk-engineering.com

TATA & HOWARD

T&H NO: 6193
DATE: FEBRUARY 2025
SCALE: AS NOTED

02-E-1

FILE: C:\SMK\Engineering\Tata & Howard\Attleboro MA\Wading River WTP\02-E-1-1-Site Plan.dwg 2/24/2025 11:16 AM JCOND
C:\SMK\Engineering\Tata & Howard\Attleboro MA\Wading River WTP\02-E-1-1-Site Plan.dwg 2/24/2025 11:16 AM JCOND

ELECTRICAL DUCT BANK SCHEDULE

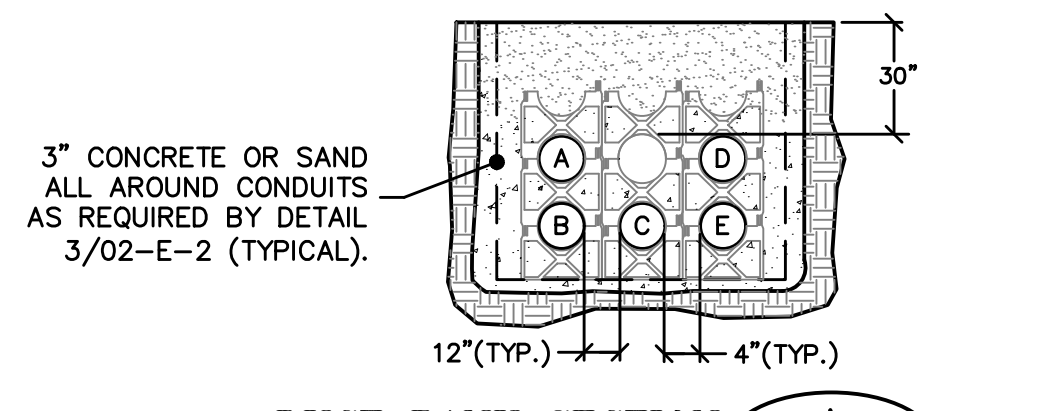
DUCT BANK SECTION NO.	CONDUIT	EQUIPMENT	WIRE	CONNECTION
A 02-E-2	(A) 5" PVC	PAD MOUNT TRANSFORMER	PRIMARY CABLE	PRIMARY CONDUIT FROM RISER POLE WITH POLE MOUNTED CUT-OUTS AND FUSES TO NEW UTILITY PAD MOUNT TRANSFORMER AT NEW WTP.
	(B) 5" PVC	SPARE	PULL ROPE	SPARE CONDUIT FROM RISER POLE WITH POLE MOUNTED CUT-OUTS AND FUSES TO NEW UTILITY PAD MOUNT TRANSFORMER AT NEW WTP.
	(C) 3" PVC	TELEPHONE SYSTEM	TELEPHONE CABLE	TELEPHONE CONDUIT FROM NEW UTILITY POLE TO NEW TELEPHONE TERMINAL BOARD AT NEW WTP.
	(D) 3" PVC	CABLE SYSTEM	TV CABLE	CABLE TV CONDUIT FROM NEW UTILITY POLE TO NEW CABLE TV TERMINAL BOARD AT NEW WTP.
	(E) 3" PVC	WAN SYSTEM	FIBER OPTIC CABLE	FIBER OPTIC CONDUIT FROM NEW UTILITY POLE TO NEW PATCH PANEL AT NEW WTP.
B 02-E-2	(A) 5" PVC	PAD MOUNT TRANSFORMER	PRIMARY CABLE	PRIMARY CONDUIT FROM RISER POLE WITH POLE MOUNTED CUT-OUTS AND FUSES TO NEW UTILITY PAD MOUNT TRANSFORMER AT NEW WTP.
	(B) 5" PVC	SPARE	PULL ROPE	SPARE CONDUIT FROM RISER POLE WITH POLE MOUNTED CUT-OUTS AND FUSES TO NEW UTILITY PAD MOUNT TRANSFORMER AT NEW WTP.
	(C) 3" PVC	TELEPHONE SYSTEM	TELEPHONE CABLE	TELEPHONE CONDUIT FROM NEW UTILITY POLE TO NEW TELEPHONE TERMINAL BOARD AT NEW WTP.
	(D) 3" PVC	CABLE SYSTEM	TV CABLE	CABLE TV CONDUIT FROM NEW UTILITY POLE TO NEW CABLE TV TERMINAL BOARD AT NEW WTP.
	(E) 3" PVC	WAN SYSTEM	FIBER OPTIC CABLE	FIBER OPTIC CONDUIT FROM NEW UTILITY POLE TO NEW PATCH PANEL AT NEW WTP.
	(F) 3" PVC	WELL NO.1	3#2, WITH GRD VFD RATED CABLE	FEEDER CONDUIT FROM VFD INSIDE MCC-A AT NEW WTP TO NEW WELL NO.1 PUMP MOTOR VIA UNDERGROUND CONDUIT.
	(G) 3" PVC	WELL NO.2	3#2, WITH GRD VFD RATED CABLE	FEEDER CONDUIT FROM VFD INSIDE MCC-A AT NEW WTP TO NEW WELL NO.2 PUMP MOTOR VIA UNDERGROUND CONDUIT.
	(H) 2" PVC	WELL NO.1 & 2 LEVEL TRANSMITTERS	(2) 2/C #16 SH., PR CABLE	SIGNAL CONDUIT FROM NEW WELL NO.1 & 2 LEVEL TRANSMITTERS VIA UNDERGROUND CONDUIT TO MCP PANEL INSIDE NEW WTP.
	(I) 2" PVC	CAMERA @ GATE	VIDEO & CAT-6E CABLES	SIGNAL CONDUIT FROM CAMERA AT GATE TO SECURITY CONSOLE & SECURITY ALARM CONTROL PANEL IN WTP.
	(J) 2" PVC	ELECTRIC GATE OPERATOR	3#8, 1#8G	FEEDER CONDUIT FROM ELECTRIC GATE OPERATOR TO MCC-A INSIDE WTP.
	(K) 2" PVC	ELECTRIC GATE OPERATOR	VENDOR SUPPLIED COMMUNICATIONS CABLE	SIGNAL CONDUIT FROM ELECTRIC GATE OPERATOR TO SECURITY ALARM CONTROL PANEL INSIDE WTP.
C 02-E-2	(A) 4" PVC	GENERATOR BREAKER	4#500 KCMIL, & 1#1G	FEEDER CONDUIT FROM STANDBY GENERATOR TO GENERATOR BREAKER INSIDE MAIN GEAR OF ELECTRICAL ROOM IN WTP.
	(B) 4" PVC	GENERATOR BREAKER	4#500 KCMIL, & 1#1G	FEEDER CONDUIT FROM STANDBY GENERATOR TO GENERATOR BREAKER INSIDE MAIN GEAR OF ELECTRICAL ROOM IN WTP.
	(C) 4" PVC	GENERATOR BREAKER	4#500 KCMIL, & 1#1G	FEEDER CONDUIT FROM STANDBY GENERATOR TO GENERATOR BREAKER INSIDE MAIN GEAR OF ELECTRICAL ROOM IN WTP.
	(D) 2" PVC	GENERATOR CONTROLS	8#14 & ALARM CABLE	SIGNAL CONDUIT FROM STANDBY GENERATOR TO GENERATOR ALARM PANEL & ATS @ MAIN GEAR OF ELECTRICAL ROOM IN WTP.
	(E) 1" PVC	COMMUNICATIONS	COMMUNICATIONS CABLE	SIGNAL CONDUIT FROM STANDBY GENERATOR TO GENERATOR ALARM PANEL @ MAIN GEAR OF ELECTRICAL ROOM IN WTP.
	(F) 1" PVC	BLOCK HEATER & BATTERY CHARGER	2#8, 2#12, & 1#10G	FEEDER CONDUIT FROM PANEL PPA INSIDE ELECTRICAL ROOM IN WTP TO BLOCK HEATER & BATTERY CHARGER INSIDE STANDBY GENERATOR.
	(G) 4" PVC	MCB	4#500 KCMIL	SERVICE CONDUIT FROM PAD MOUNT TRANSFORMER TO MCB INSIDE MAIN GEAR OF ELECTRICAL ROOM IN WTP.
	(H) 4" PVC	MCB	4#500 KCMIL	SERVICE CONDUIT FROM PAD MOUNT TRANSFORMER TO MCB INSIDE MAIN GEAR OF ELECTRICAL ROOM IN WTP.
	(I) 4" PVC	MCB	4#500 KCMIL	SERVICE CONDUIT FROM PAD MOUNT TRANSFORMER TO MCB INSIDE MAIN GEAR OF ELECTRICAL ROOM IN WTP.
	(J) 4" PVC	SPARE	PULL ROPE	SPARE CONDUIT FROM PAD MOUNT TRANSFORMER TO MCB INSIDE MAIN GEAR OF ELECTRICAL ROOM IN WTP.
	(K) 5" PVC	PAD MOUNT TRANSFORMER	PRIMARY CABLE	PRIMARY CONDUIT FROM RISER POLE WITH POLE MOUNTED CUT-OUTS AND FUSES TO NEW UTILITY PAD MOUNT TRANSFORMER AT NEW WTP.
D 02-E-2	(A) 3" PVC	WELL NO.1	3#2, WITH GRD VFD RATED CABLE	FEEDER CONDUIT FROM VFD INSIDE MCC-A AT NEW WTP TO NEW WELL NO.1 PUMP MOTOR VIA UNDERGROUND CONDUIT.
	(B) 3" PVC	WELL NO.2	3#2, WITH GRD VFD RATED CABLE	FEEDER CONDUIT FROM VFD INSIDE MCC-A AT NEW WTP TO NEW WELL NO.2 PUMP MOTOR VIA UNDERGROUND CONDUIT.
	(C) 2" PVC	WELL NO.1 & 2 LEVEL TRANSMITTERS	(2) 2/C #16 SH., PR CABLE	SIGNAL CONDUIT FROM NEW WELL NO.1 & 2 LEVEL TRANSMITTERS VIA UNDERGROUND CONDUIT TO MCP PANEL INSIDE NEW WTP.
	(A) 3" PVC	WELL NO.1	3#2, WITH GRD VFD RATED CABLE	FEEDER CONDUIT FROM VFD INSIDE MCC-A AT NEW WTP TO NEW WELL NO.1 PUMP MOTOR VIA UNDERGROUND CONDUIT.
E 02-E-2	(B) 2" PVC	WELL NO.1 LEVEL TRANSMITTER	(1) 2/C #16 SH., PR CABLE	SIGNAL CONDUIT FROM NEW WELL NO.1 LEVEL TRANSMITTER VIA UNDERGROUND CONDUIT TO MCP PANEL INSIDE NEW WTP.
	(A) 2" PVC	WELL NO.2 LEVEL TRANSMITTER	(1) 2/C #16 SH., PR CABLE	SIGNAL CONDUIT FROM NEW WELL NO.2 LEVEL TRANSMITTER VIA UNDERGROUND CONDUIT TO MCP PANEL INSIDE NEW WTP.
F 02-E-2	(A) 2" PVC	BRINE WASTE TANK LEVEL TRANSMITTER	(1) 2/C #16 SH., PR CABLE	SIGNAL CONDUIT FROM BRINE WASTE TANK LEVEL TRANSMITTER VIA UNDERGROUND CONDUIT TO MCP PANEL INSIDE NEW WTP.
	(B) 2" PVC	BRINE WASTE TANK LEVEL TSWITCHES	4#14 CABLES	SIGNAL CONDUIT FROM BRINE WASTE TANK LEVEL SWITCHES VIA UNDERGROUND CONDUIT TO MCP PANEL INSIDE NEW WTP.
H 02-E-2	(A) 1 1/4" PVC	LIGHT FIXTURES 'A1'	2#6, 1#10G	FEEDER CONDUIT FROM LIGHTING CONTACTOR INSIDE NEW WTP TO LIGHT FIXTURES 'A1'.
	(A) 1 1/4" PVC	LIGHT FIXTURES 'A2'	2#6, 1#10G	FEEDER CONDUIT FROM LIGHTING CONTACTOR INSIDE NEW WTP TO LIGHT FIXTURES 'A2'.
I 02-E-2	(A) 1 1/4" PVC	LIGHT FIXTURES 'A1' & 'A2'	4#6, 1#10G	FEEDER CONDUIT FROM LIGHTING CONTACTOR INSIDE NEW WTP TO LIGHT FIXTURES 'A1' & 'A2'.
	(A) 1 1/4" PVC	LIGHT FIXTURES 'A1' & 'A2'	4#6, 1#10G	FEEDER CONDUIT FROM LIGHTING CONTACTOR INSIDE NEW WTP TO LIGHT FIXTURES 'A1' & 'A2'.

UNDERGROUND CONDUIT NOTES:

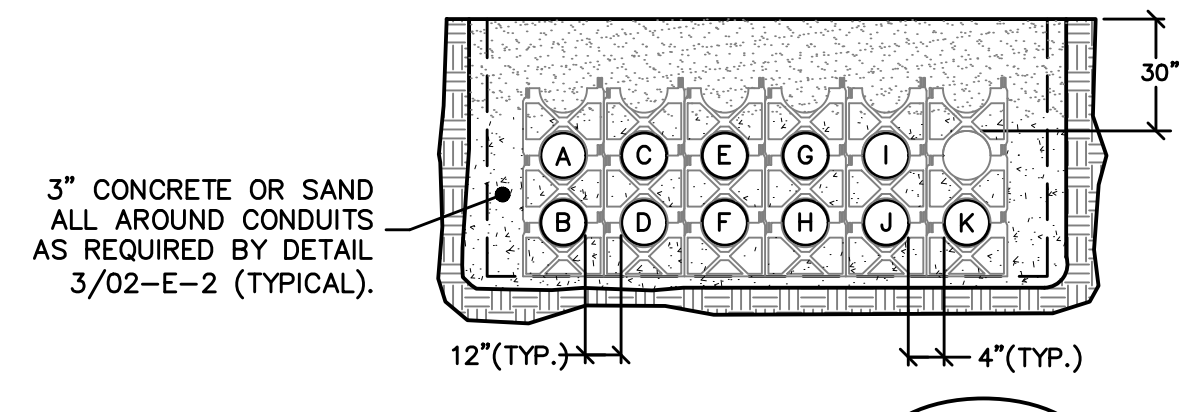
- PROVIDE RIGID GALVANIZED SWEEPS ON ALL 90° TURNS.
- COORDINATE NEW UNDERGROUND CONDUIT LOCATION WITH EXISTING UNDERGROUND ELECTRIC CONDUIT, PROCESS PIPING AND STRUCTURES PRIOR TO EXCAVATION.
- REPAIR EXISTING PAVED AND GRASSED AREAS TO CONDITION EXISTING PRIOR TO EXCAVATION.
- ALL UTILITY COMPANIES, PUBLIC AND PRIVATE, MUST BE NOTIFIED, INCLUDING THOSE IN CONTROL OF UTILITIES NOT SHOWN ON THIS PLAN, (SEE CHAPTER 370, ACTS OF 1963, MASSACHUSETTS GENERAL LAWS) PRIOR TO DESIGNING, EXCAVATING, BLASTING, INSTALLING, BACKFILLING, GRADING, PAVEMENT RESTORING OR REPAVING.
- REFER TO DETAIL 3/02-E-3 FOR TYPICAL TRENCHING DETAIL FOR ELECTRICAL/TELEPHONE/FIREALARM/CABLE CONDUITS.
- CONTRACTOR SHALL FURNISH AND INSTALL POLYESTER PULLING TAPE IN ALL SPARE CONDUITS RATED @ 2500 LBS, WITH FOOTAGE MARKINGS AS MANUFACTURED BY NEPT CO., MODEL# WP2500 OR APPROVED EQUAL.

ELECTRICAL DUCT BANK SCHEDULE WITH DUCT BANK SECTIONS

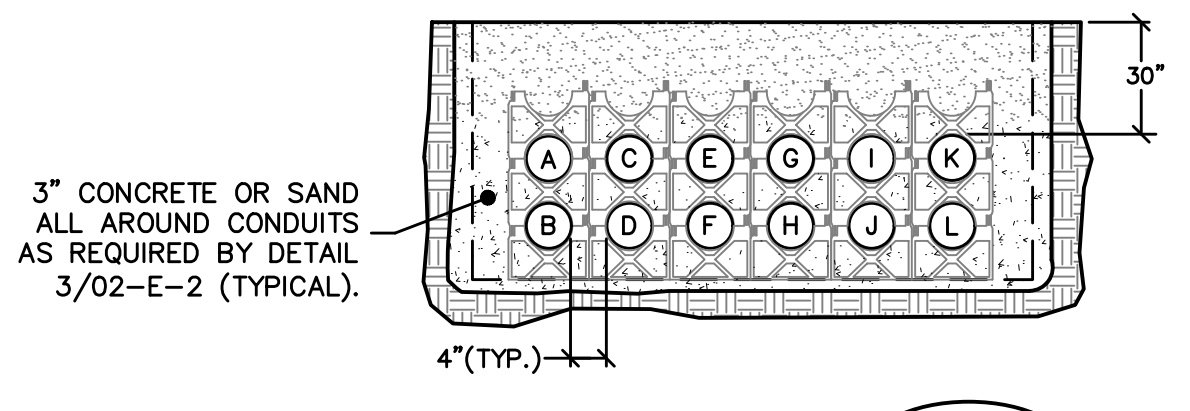
SCALE: NONE



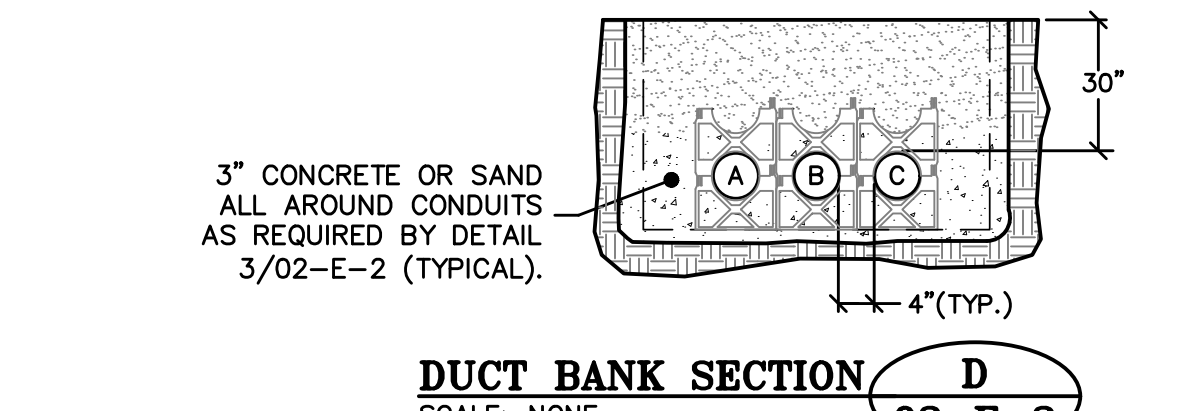
DUCT BANK SECTION A
SCALE: NONE



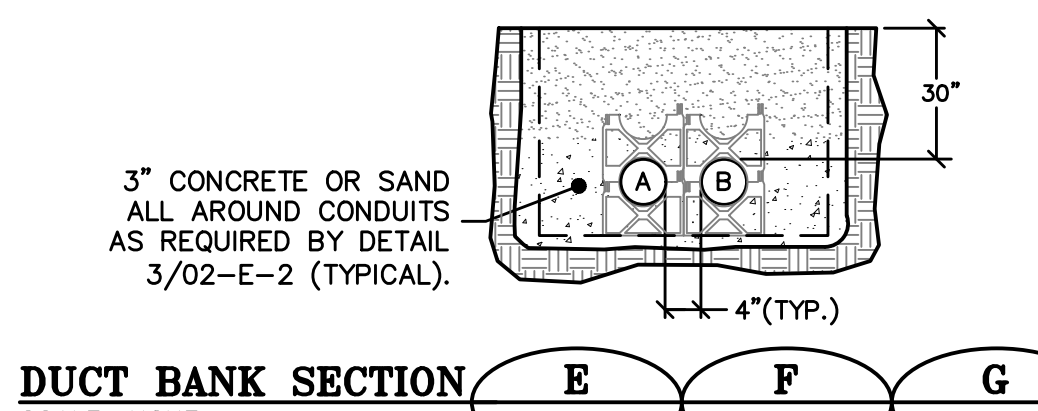
DUCT BANK SECTION B
SCALE: NONE



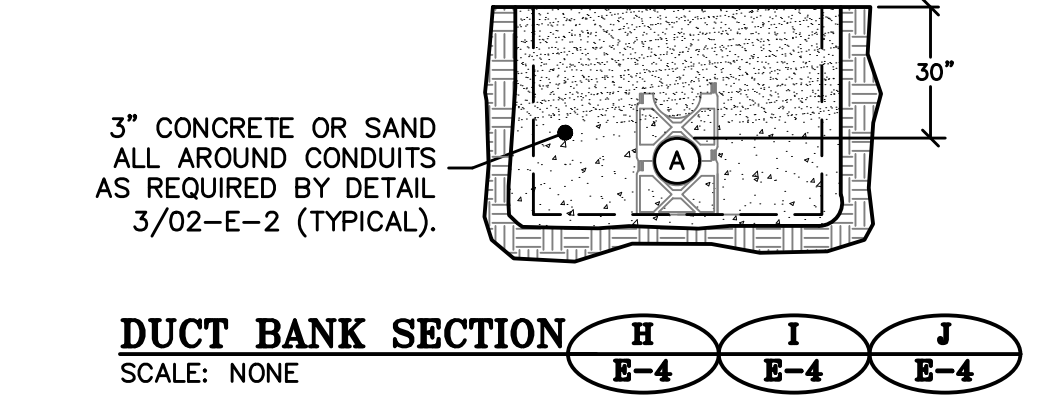
DUCT BANK SECTION C
SCALE: NONE



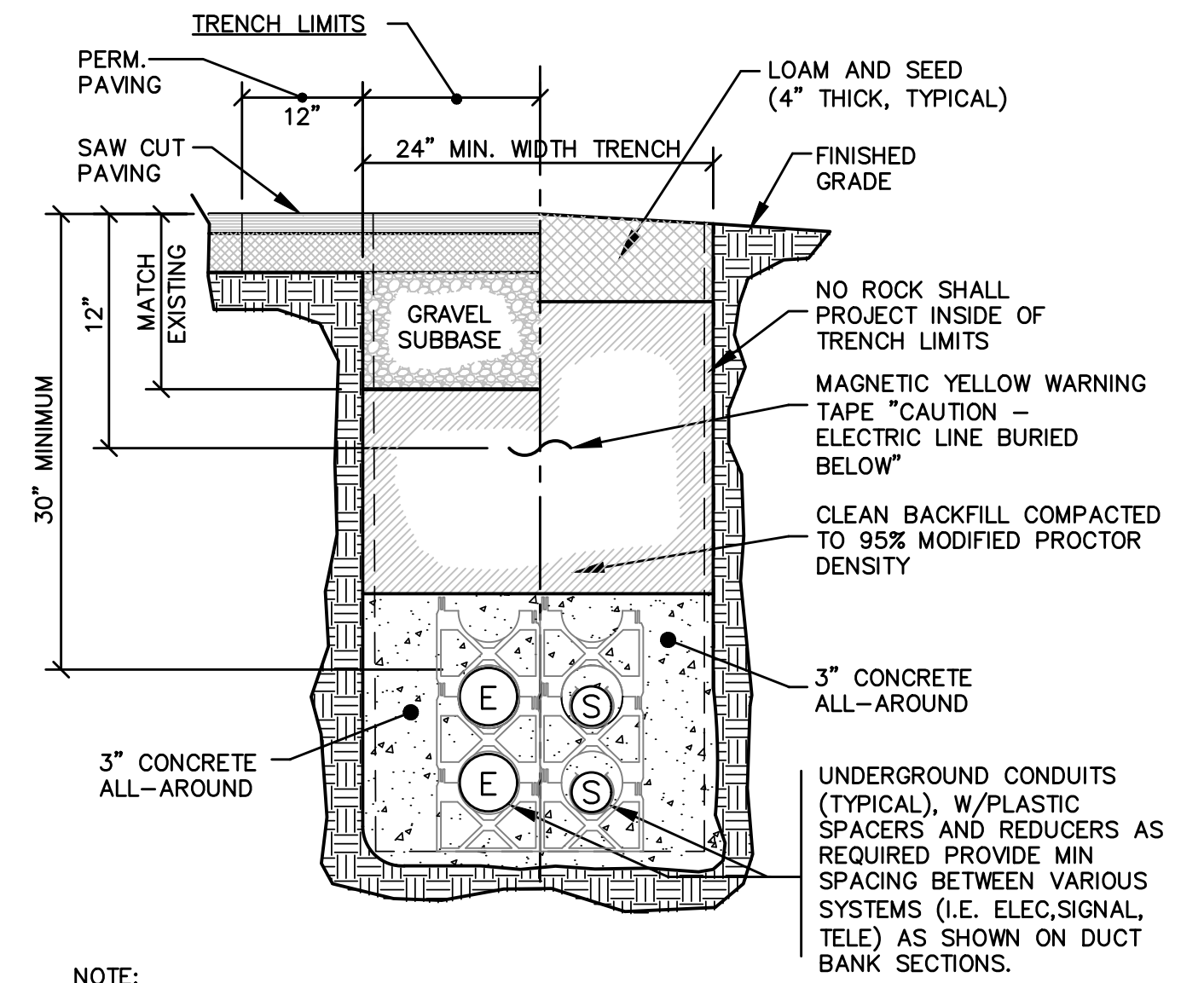
DUCT BANK SECTION D
SCALE: NONE



DUCT BANK SECTION E F G
SCALE: NONE



DUCT BANK SECTION H I J
SCALE: NONE

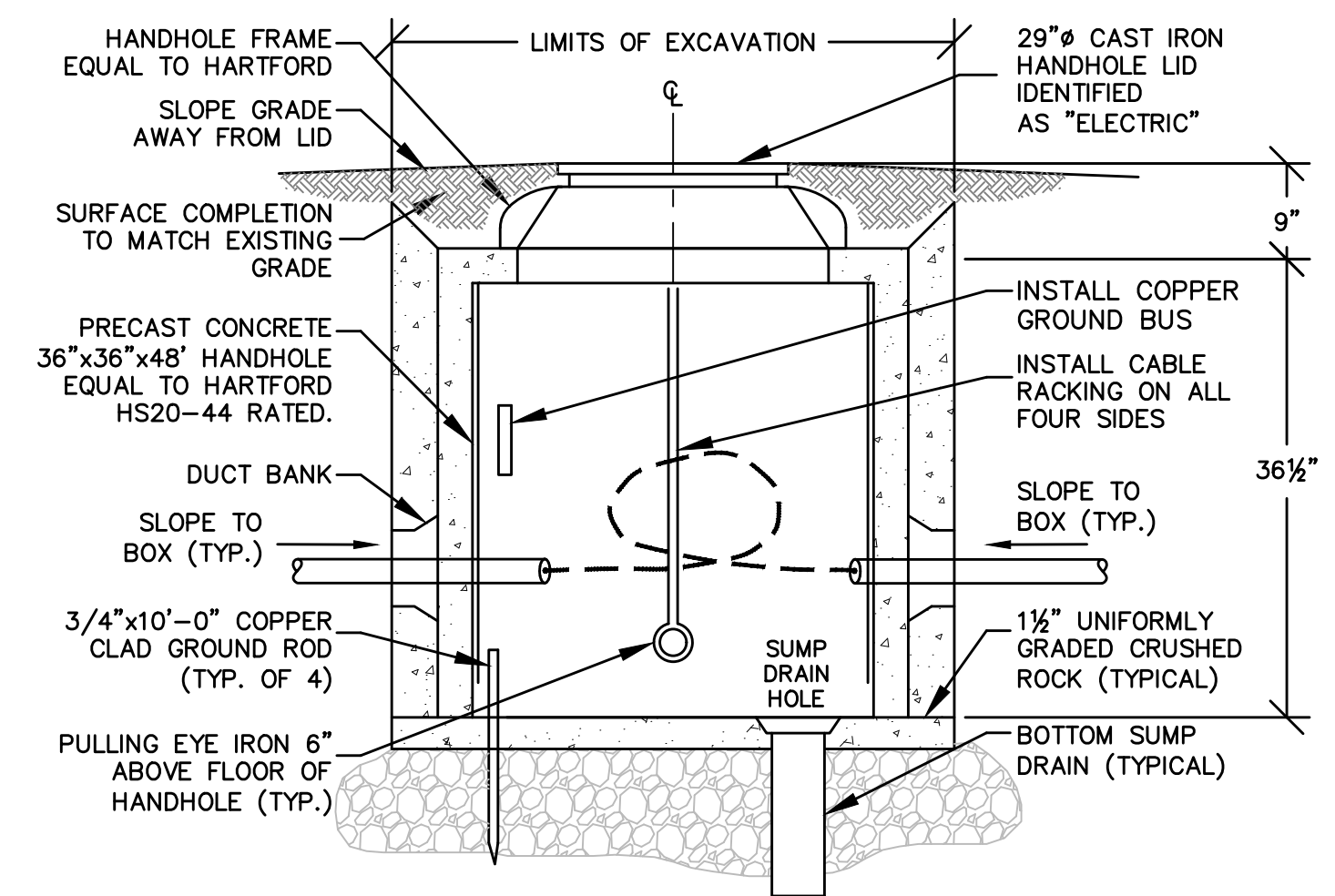


NOTE:
REFER TO ELECTRICAL SITE PLAN & DUCT BANK SCHEDULE FOR SPECIFIC REQUIREMENTS.

SUBSURFACE WORK NOTE:
THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN APPROXIMATE LOCATIONS AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTACT "DIG SAFE" AT (888)344-7233 (1(888)DIG-SAFE) AND COORDINATE ACTIVITIES PRIOR TO ANY EXCAVATIONS.

TYPICAL ELECTRICAL TRENCHING DETAIL 3

SCALE: NONE



ELECTRIC HANDHOLE SCHEDULE

HANDHOLE DESIGNATIONS	QUANTITIES	SIZE
HH-1 (POWER)	1	60" x 60" x 48" DEEP
HH-2 (SIGNAL)	1	48" x 48" x 48" DEEP
HH-3 (POWER)	1	36" x 36" x 48" DEEP
HH-4 (SIGNAL)	1	36" x 36" x 48" DEEP

NOTE:

- CONTRACTOR SHALL NOT MAKE SPLICES IN HANDHOLES, EXCEPT FOR TEMPORARY CONNECTIONS. (TYPICAL).
- PROVIDE METAL BARRIER BETWEEN POWER AND SIGNAL CABLES WITHIN HANDHOLE WHERE APPLICABLE.
- THE HANDHOLE DESIGN LOADING SHALL BE: AASHTO - HS-25.
- CONTRACTOR TO COORDINATE WITH LOCAL POWER COMPANY ON SIZE, QUANTITY AND INSTALLATION SPECIFICATIONS ON HANDHOLE HH-1 AS REQUIRED.

TYPICAL HANDHOLE INSTALLATION DETAIL 2

SCALE: NONE

ATTLEBORO WATER DEPT.
ATTLEBORO, MA
WADING RIVER
WATER TREATMENT PLANT

ELECTRICAL
ELECTRICAL DUCT BANK
SCHEDULE WITH DUCT BANK
SECTIONS AND DETAILS

Rev.	Date	Description

2-19-25
Anthony M. Nelson

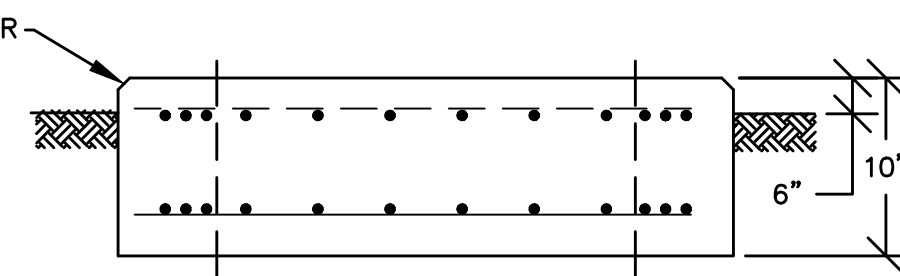
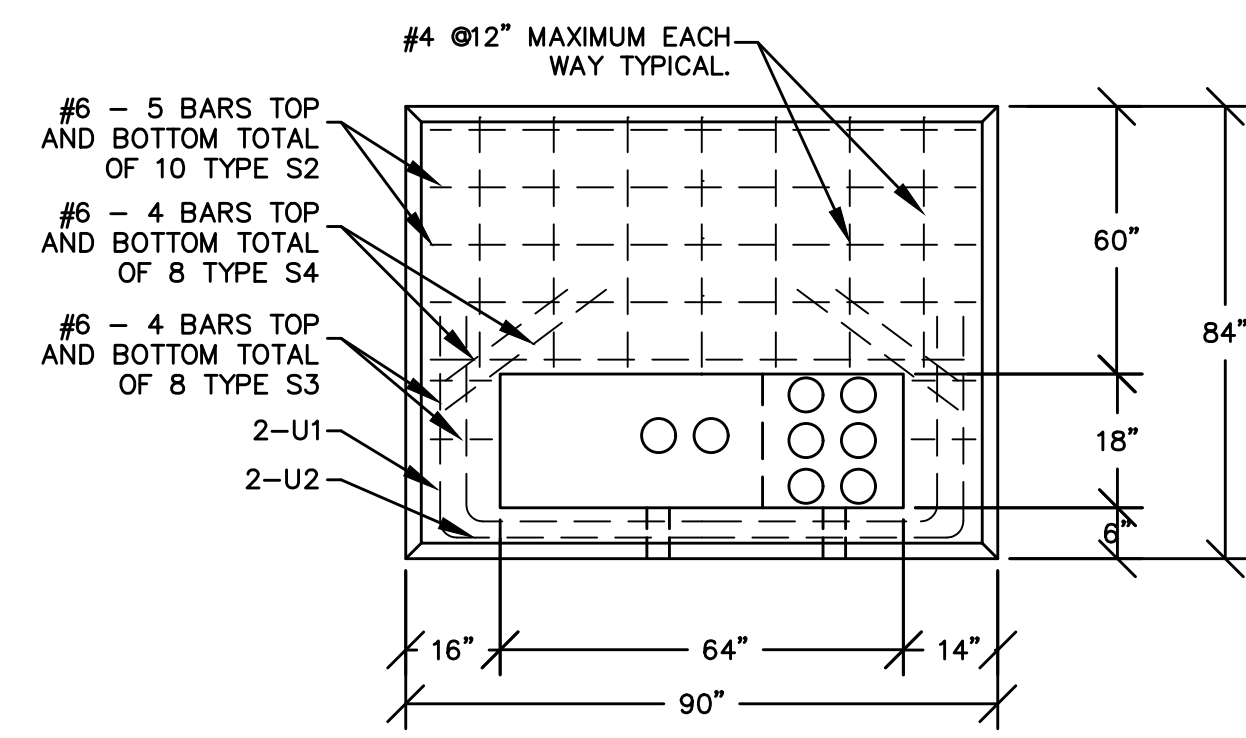


T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE: AS NOTED

02-E-2

NOTES:

- ONE 3/4" x 8'-0" GALVANIZED STEEL GROUND ROD TO BE INSTALLED AT EACH CORNER.
- REMOVE ALL ORGANIC TOPSOIL UNDER FOUNDATION AND COMPACT NATIVE MATERIAL BACKFILL, IF NECESSARY, WITH CLEAN WELL COMPACTED GRAVEL 12" MINIMUM.
- ALL REINFORCING BARS SHALL MEET A.S.T.M. #615 GRADE 60 SPECIFICATION FOR DEFORMED BARS.
- ALL REINFORCING SHALL BE TIED AS ONE UNIT.
- MINIMUM CONCRETE COVER OVER REINFORCING STEEL SHALL BE 3".
- TOP OF SLAB SHOULD BE NO MORE THAN 6" ABOVE GROUND LEVEL.
- GROUND RODS TO BE TIED TOGETHER WITH BARE 4/0 COPPER WIRE BURIED AT LEAST ONE FOOT IN THE GROUND. WIRE CONNECTIONS TO GROUND RODS TO BE EITHER CADWELD OR WEDGE TYPE CONNECTORS. (AMP CATALOG NO. 81228-1 OR EQUIVALENT).
- BOTH TAILS OF THE GROUND GRID SHOULD BE BROUGHT INTO THE PAD OPENING AT ONE END THRU 2-1" PLASTIC PIPES LOCATED IN A KNOCK OUT AND A MINIMUM OF 15' OF SLACK ON EACH TAIL. THE ENTRY POINT SHOULD BE PROPERLY SEALED WITH MORTAR OR NON-SHRINK GROUT TO PREVENT WATER FROM ENTERING.
- IF THE GROUND ROD HITS ROCK OR LEDGE IT MAY BE DRIVEN AT AN ANGLE BUT IT SHOULD NOT BE CUT OFF.
- TOP OF PAD TO BE REINFORCED TO SUPPORT HS20-44 WHEEL LOAD.
- GALVANIZED PULL EYES AND ADDITIONAL DUCT OPENINGS ON SPECIAL ORDER.
- SIX 4 1/2" DIAMETER HOLE IN LINE ON ALL FOUR SIDES WITH KNOCKOUTS 5/8" THICK MAXIMUM.
- MANUFACTURER'S NAME TO BE STENCILED ON VERTICAL WALL OF ACCESS CHIMNEY.
- ALL CONDUITS OPENINGS TO HAVE 4" BELL ENDS FLUSH WITH INSIDE WALL. PAD TO BE INSTALLED ON 12" BED OF CRUSHED STONE.
- THE TRANSFORMER PAD SHALL BE FURNISHED AND INSTALLED BY G.C.
- CONCRETE STRENGTH SHALL BE 5000 P.S.I. @ 28 DAYS.
CHAMFER ALL EXPOSED CONCRETE EDGES 1" @ 45°.
- STEEL REINFORCEMENT - ASTM - A615 - GRADE 60, 3" MINIMUM COVER.
- DESIGN LOADING - AASHTO - HS20-44
- THE TRANSFORMER PAD SHOWN IS INFORMATIONAL ONLY. ACTUAL PAD AND REQUIREMENTS AND LOCATION AS DIRECTED BY THE LOCAL POWER COMPANY.

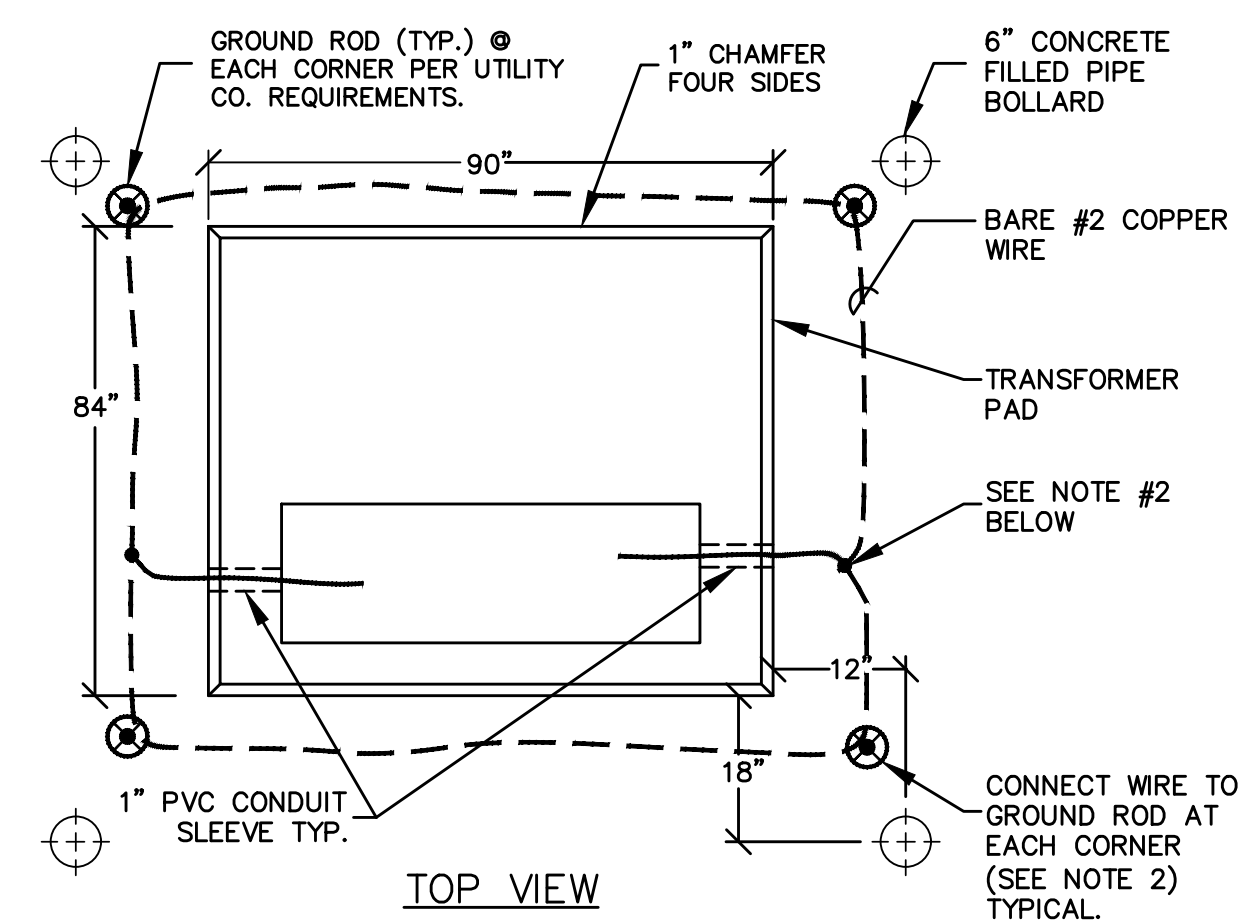


REINFORCING SCHEDULE

TYPE	NO.	LENGTH	TOTAL
S1	16	4'-6"	72'-0"
S2	10	7'-6"	75'-0"
S3	8	0'-6"	4'-0"
S4	8	2'-0"	16'-0"

CONC. VOLUME - 4.44 c.y.
TOP SECTION ONLY

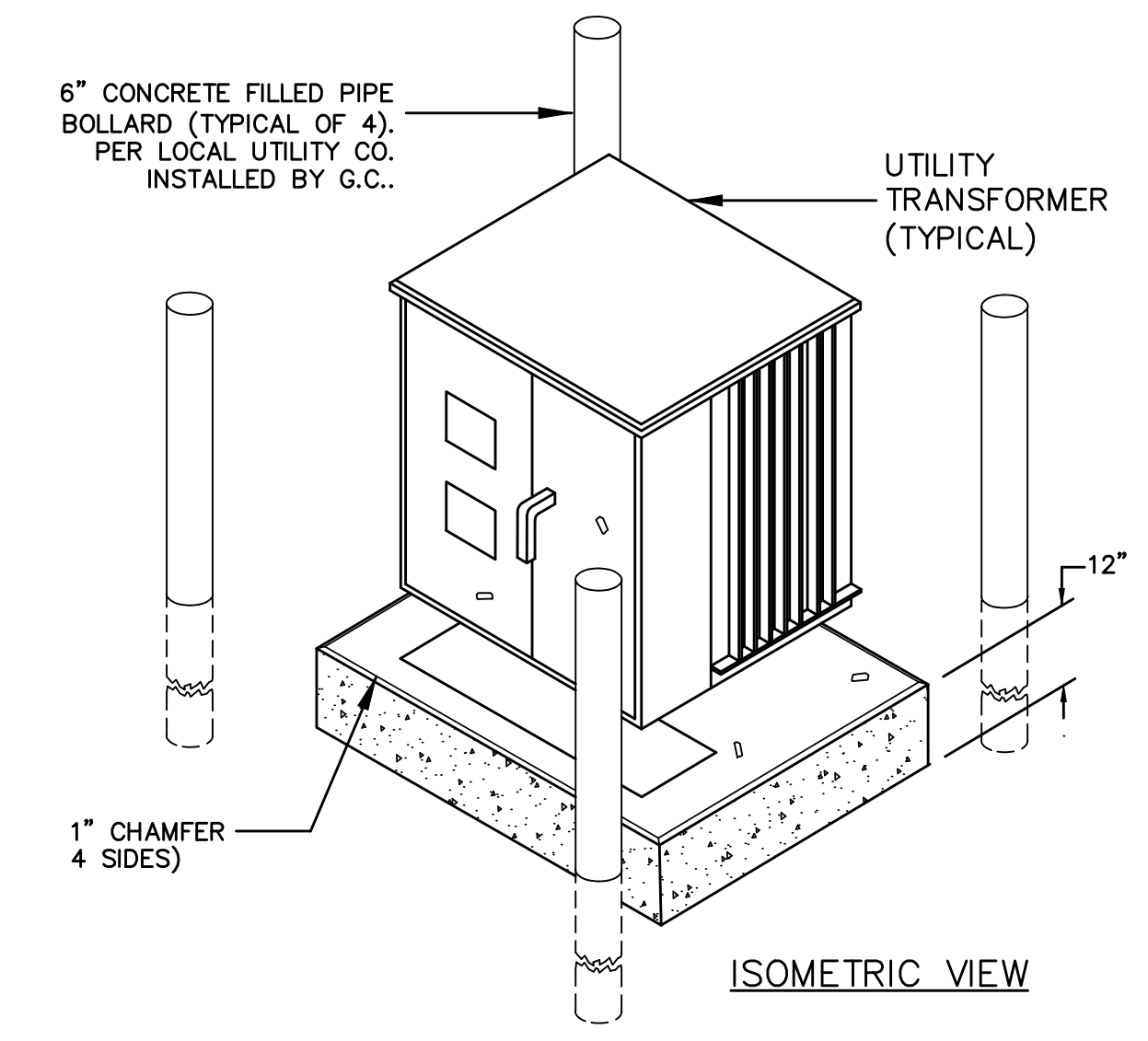
3Ø PAD MOUNTED TRANSFORMER SLAB DETAIL (PLAN VIEW)



NOTES:

- ONE 3/4" x 8'-0" COPPER GROUND ROD TO BE INSTALLED AT EACH CORNER.
- GROUND RODS TO BE TIED TOGETHER WITH BARE #4/0 COPPER WIRE BURIED AT LEAST ONE FOOT IN THE GROUND. WIRE CONNECTIONS TO GROUND RODS TO BE EITHER CADWELD OR WEDGE TYPE CONNECTORS. (AMP CATALOG NO. 81228-1 OR EQUIVALENT).
- BOTH TAILS OF THE GROUND GRID SHOULD BE BROUGHT INTO THE PAD OPENING AT ONE END THRU 2-1" PLASTIC PIPES LOCATED IN A KNOCK OUT AND A MINIMUM OF 15' OF SLACK ON EACH TAIL. THE ENTRY POINT SHOULD BE PROPERLY SEALED WITH MORTAR OR NON-SHRINK GROUT TO PREVENT WATER FROM ENTERING.
- IF THE GROUND ROD HITS ROCK OR LEDGE IT MAY BE DRIVEN AT AN ANGLE BUT IT SHOULD NOT BE CUT OFF.

TYPICAL FOR ALL TRANSFORMER PAD GROUND GRID DETAIL (PLAN VIEW)



TRANSFORMER PAD PROTECTION

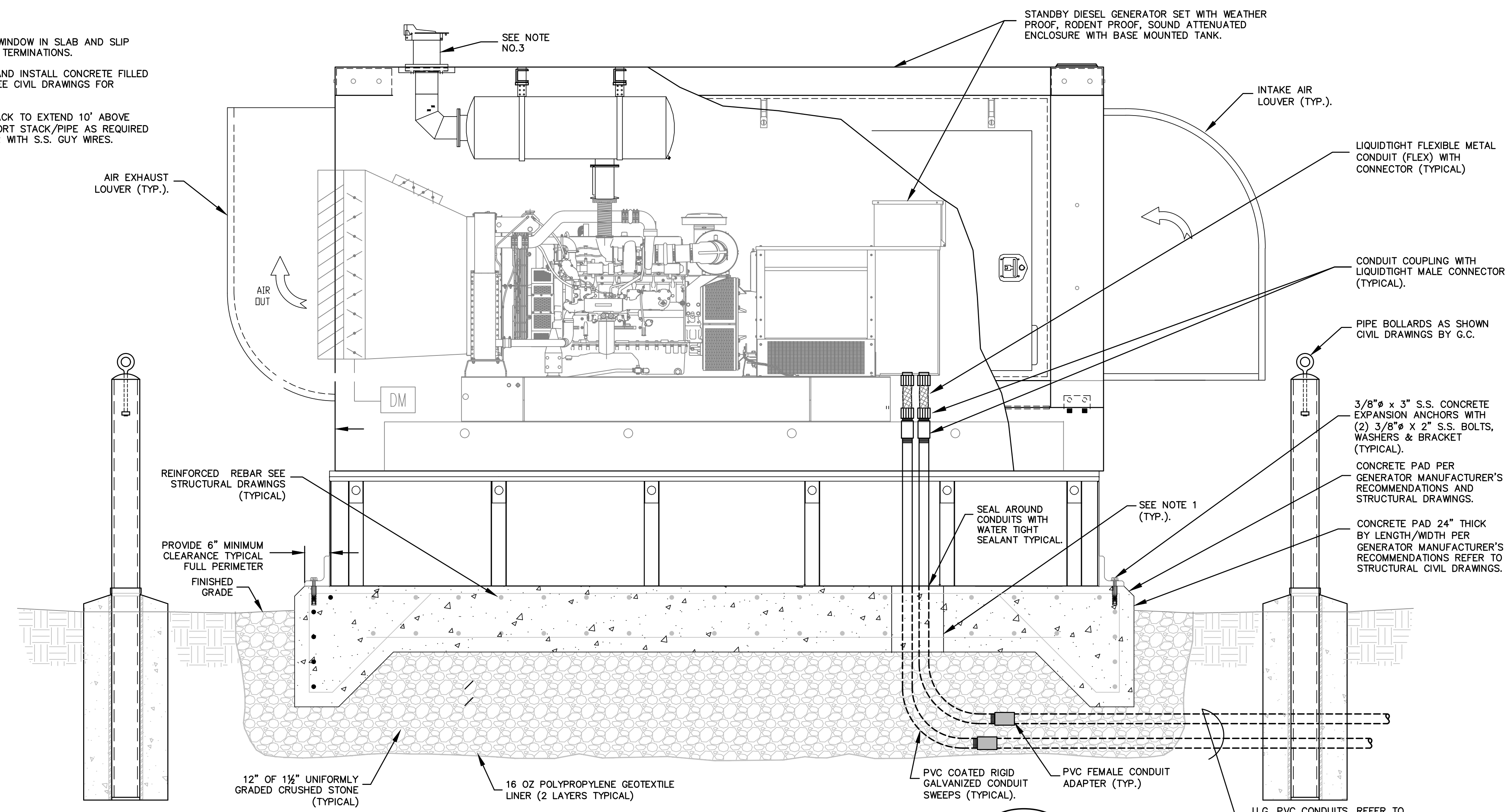
PAD MOUNT TRANSFORMER PAD INSTALLATION DETAIL 1

SCALE: NONE

02-E-3

NOTES:

- PROVIDE 24"x24" WINDOW IN SLAB AND SLIP JOINT AT CONDUIT TERMINATIONS.
- G.C. TO FURNISH AND INSTALL CONCRETE FILLED PIPE BOLLARDS. SEE CIVIL DRAWINGS FOR DETAILS.
- EXHAUST PIPE/STACK TO EXTEND 10' ABOVE ENCLOSURE. SUPPORT STACK/PIPE AS REQUIRED BY MANUFACTURER WITH S.S. GUY WIRES.



STANDBY GENERATOR ENCLOSURE PAD DETAIL WITH ELEVATION 2

SCALE: NONE

02-E-3

FILE: C:\SMK\Engineering\Tata & Howard\Attleboro MA\Wading River WTP\03-02-E-1-Site Plans.dwg 2/24/2025 11:16 AM JCOND

ATTEBORO WATER DEPT.
ATTEBORO, MA
WADING RIVER
WATER TREATMENT PLANT

ELECTRICAL
ELECTRICAL SITE PLAN
DETAILS

Rev.	Date	Description

THESE DRAWINGS ARE THE PROPERTY OF TATA & HOWARD, INC. AND ITS CLIENT. REPRODUCTION OR ADAPTATION WITHOUT WRITTEN CONSENT IS PROHIBITED.

SMK ENGINEERING, PC
Professional Engineer
2 Control Systems Engineering
1000 State Street, Suite 100
Attleboro, MA 01937
Phone: (508) 351-1000
Fax: (508) 351-1001
www.smk-engineering.com

TATA & HOWARD
TATA & HOWARD, INC.
Professional Engineer
1000 State Street, Suite 100
Attleboro, MA 01937
Phone: (508) 351-1000
Fax: (508) 351-1001
www.tataandhoward.com

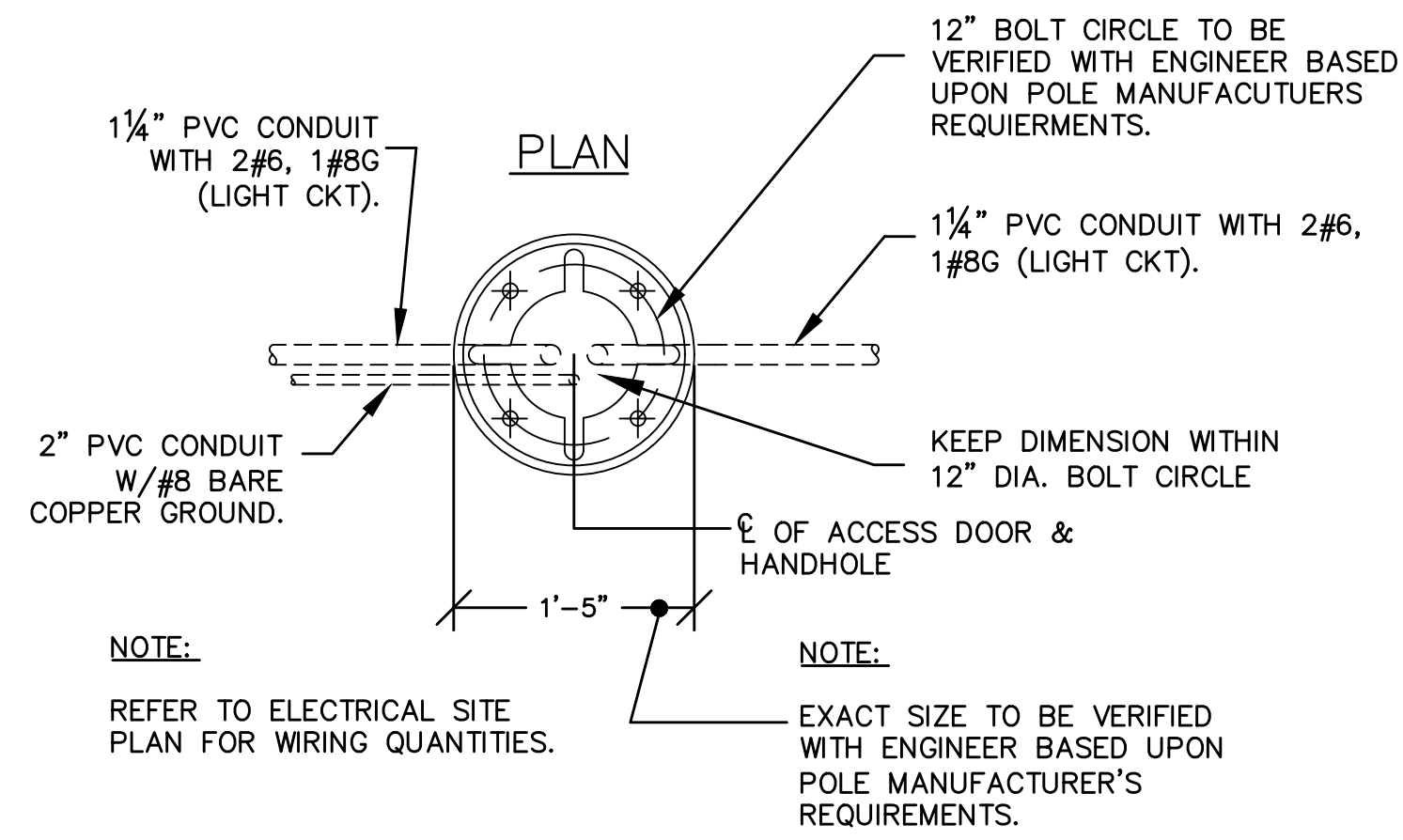
SMK ENGINEERING, PC
Professional Engineer
2 Control Systems Engineering
1000 State Street, Suite 100
Attleboro, MA 01937
Phone: (508) 351-1000
Fax: (508) 351-1001
www.smk-engineering.com

TATA & HOWARD
TATA & HOWARD, INC.
Professional Engineer
1000 State Street, Suite 100
Attleboro, MA 01937
Phone: (508) 351-1000
Fax: (508) 351-1001
www.tataandhoward.com

T&H NO: 6193
DATE: FEBRUARY 2025
SCALE: AS NOTED
02-E-3

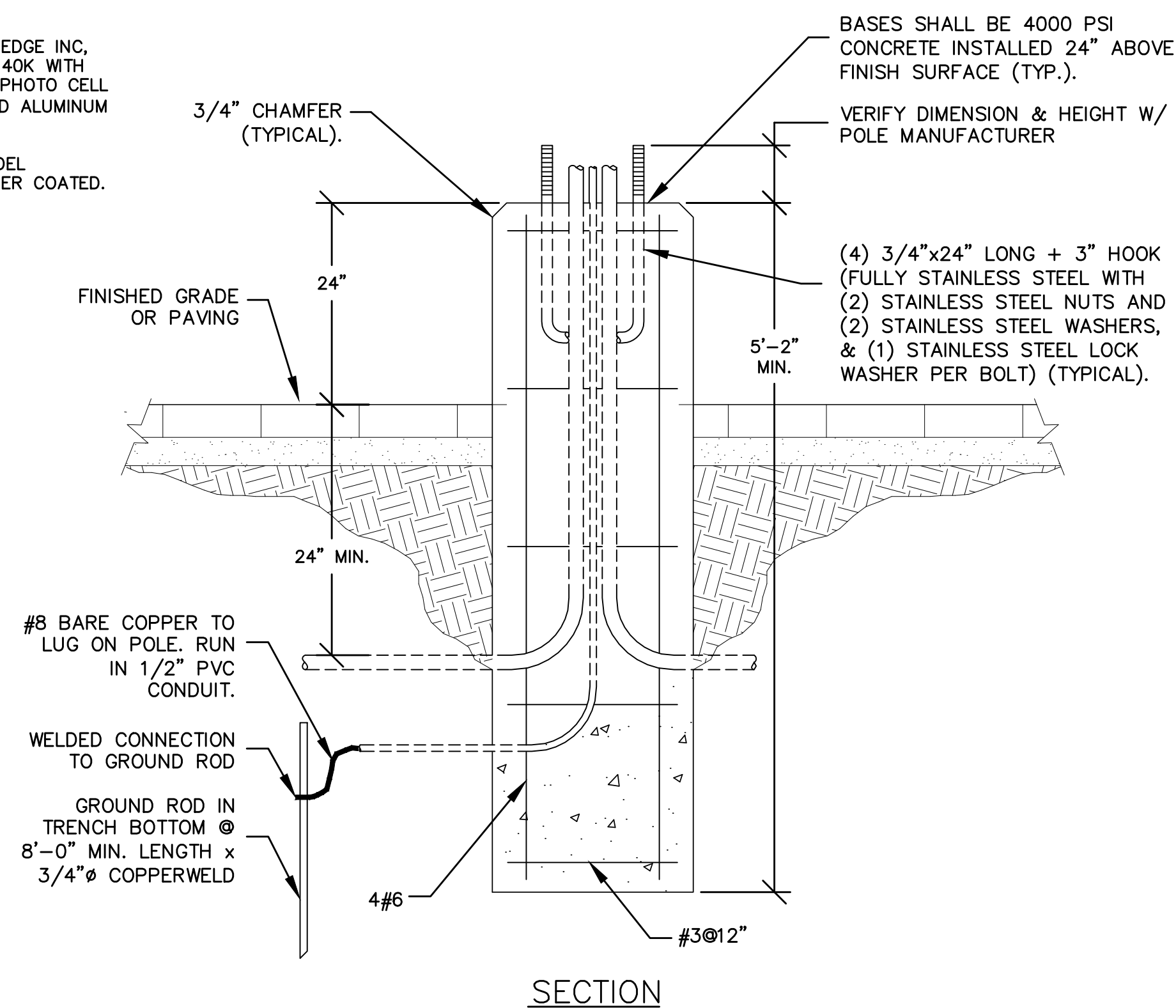
KEY NOTES:

- NO POLE SHALL BE INSTALLED WITHOUT A LUMINAIRE ALREADY ATTACHED.
- ANCHOR BASE AND ANCHOR BOLT DIMENSIONS ARE APPROXIMATE ONLY. ACTUAL DIMENSIONS AND REQUIREMENTS BY APPROVED SHOP DRAWINGS.
- ALL LIGHT POLES SHALL HAVE A BREAKAWAY DESIGN FEATURE UNLESS OTHERWISE NOTED ON THE PLANS. ALL LIGHT POLES WHICH ARE PROVIDED WITH A BREAKAWAY FEATURE SHALL CONFORM TO THE REQUIREMENTS OF THE AASHTO 1985 STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS, SECTION 7 AND SUBSEQUENT REVISIONS.
- LUMINAIRES SHALL MEET SPECIFICATIONS AS SHOWN ON THE PLANS.
- ALL ELECTRICAL MATERIAL AND ELECTRICAL WORK SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE AREA ELECTRICAL INSPECTOR AND/OR THE POWER COMPANY WITH JURISDICTION IN THE PROJECT AREA.
- ALL WORK MUST MEET THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE, AS WELL AS LOCAL AND STATE CODES.
- POLES, BASE PLATES, AND ARMS SHALL MEET THE SPECIFICATION OF THE LATEST EDITION OF AASHTO-AGC-ARTBA'S "GUIDE TO STANDARDIZED HIGHWAY LIGHTING POLE HARDWARE" OR AS OTHERWISE NOTED ON THE PLANS.
- ANCHOR BOLTS WILL BE ACCEPTABLE WITH EITHER ROLLED OR CUT-IN THREADS WITH MINOR VARIATIONS FROM THE SPECIFIED DIAMETER.
- ALL WELDS SHALL BE AT LEAST AS STRONG AS THE MATERIAL BEING WELDED.
- LUMINAIRE SUPPORT ARMS IN A LENGTH OF 8 FEET ARE AVAILABLE IN EITHER SINGLE MEMBER OR TRUSS TYPE. PLAN SHEET SHALL SPECIFY WHICH IS TO BE USED, IF NOT SPECIFIED, OPTIONAL, OR IF REPLACEMENT, MATCH EXISTING OR SURROUNDING TYPE.
- POLE OFFSET (FACE OF POLE TO BACK OF GUARDRAIL) SHALL BE EQUAL TO OR GREATER THAN THE DEFLECTION DISTANCE SHOWN IN THE CHART.



LIGHTING & POLE SPECS

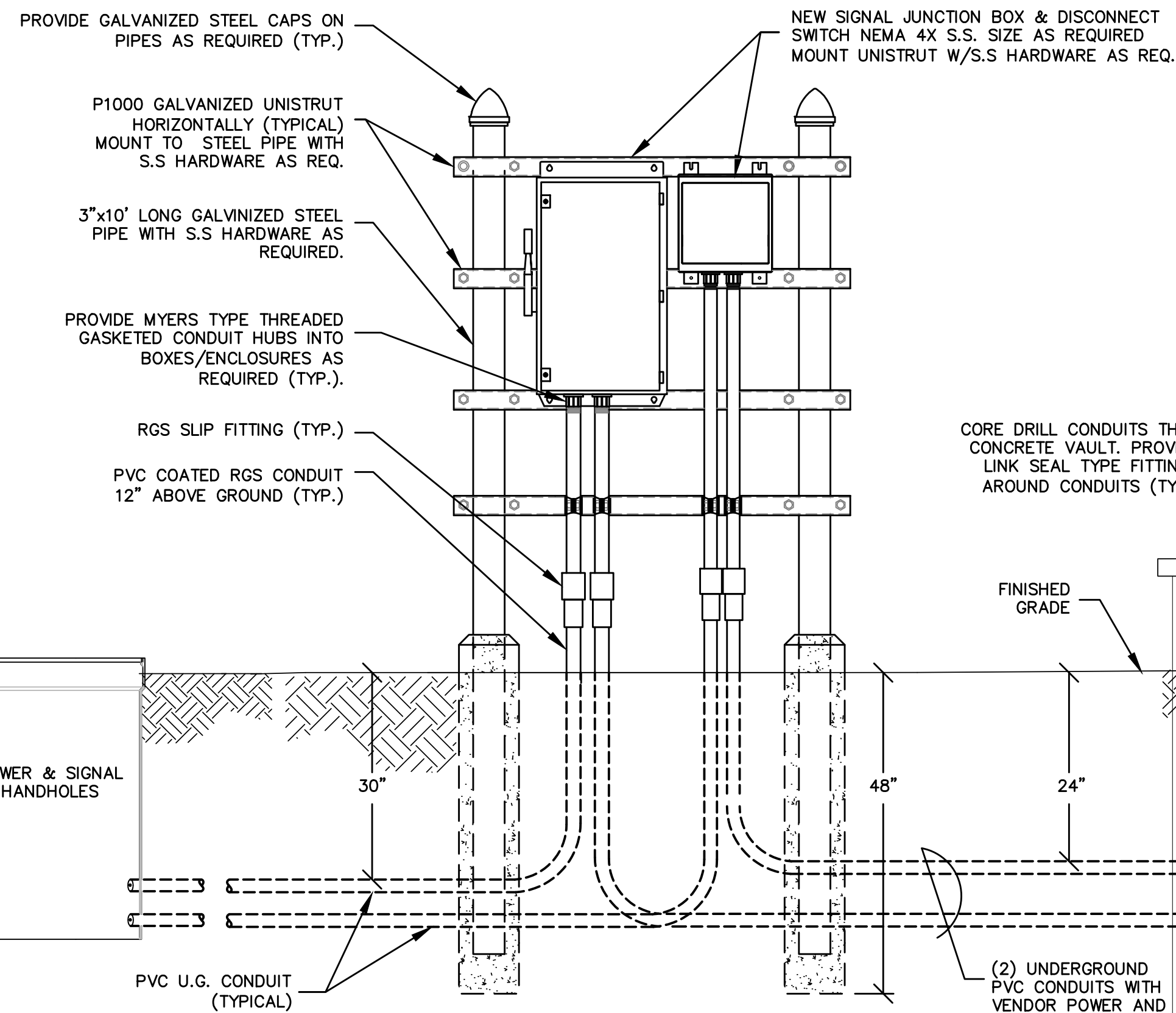
- THE LIGHTING FIXTURES SHALL BE BY CREE EDGE INC. MODEL: ARE-EDR-2M-DA-08-UL-BZ-525-40K WITH 2700K COLOR PRORATED 630 LUMENS AND PHOTO CELL WITH ARM BRACKET TO MOUNT ON 4" ROUND ALUMINUM POLE.
- THE POLES SHALL BE BY VALMONT INC. MODEL: 1508-406T-P-D1-DBB DARK BRONZE POWDER COATED.



POLE MOUNTED LIGHTING FIXTURE 'A1' INSTALLATION DETAIL (TYP.)

SCALE: NONE

2
02-E-4



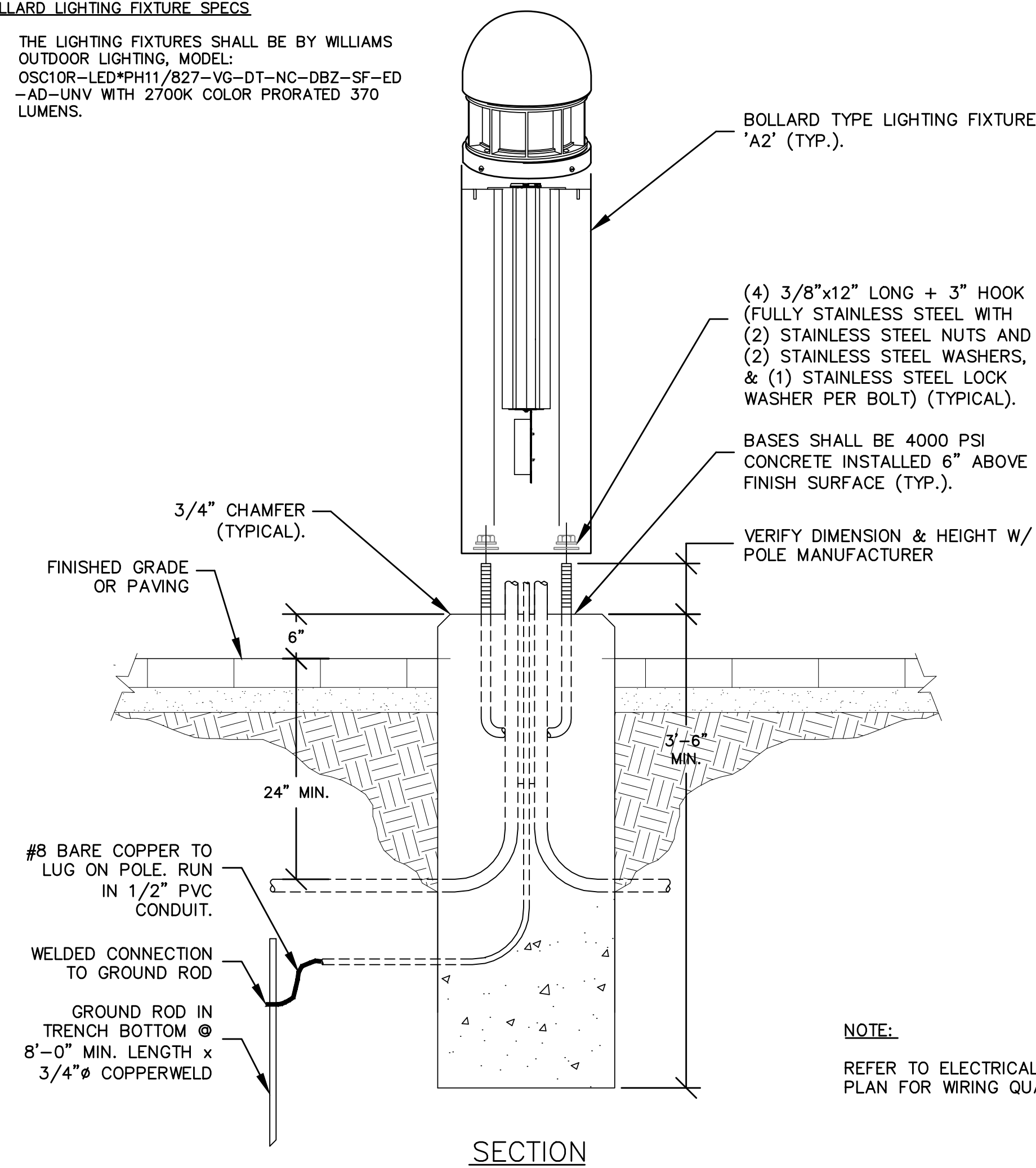
POWER & SIGNAL CONNECTIONS @ PITLESS ADAPTER DETAIL 1

SCALE: NONE

02-E-4

BOLLARD LIGHTING FIXTURE SPECS

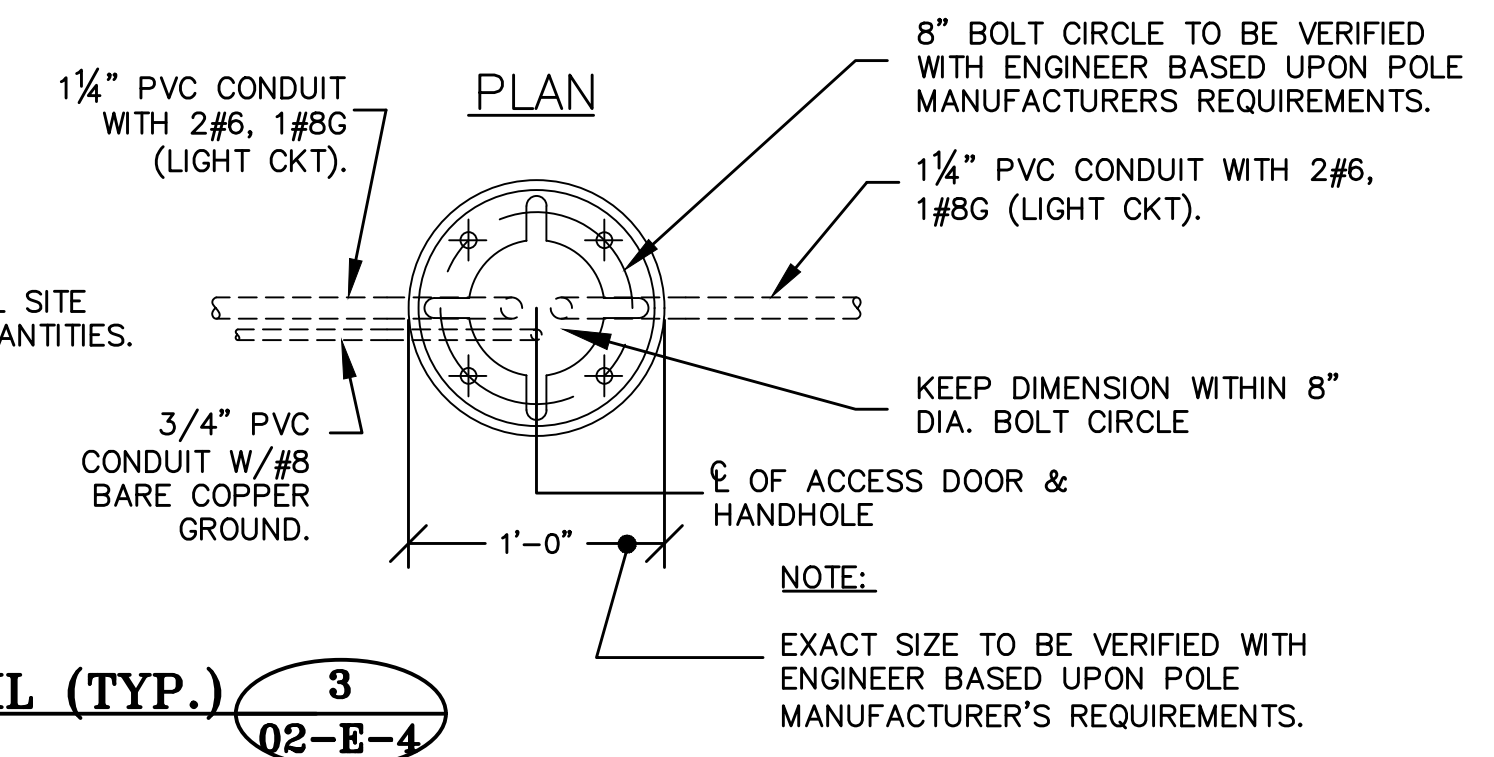
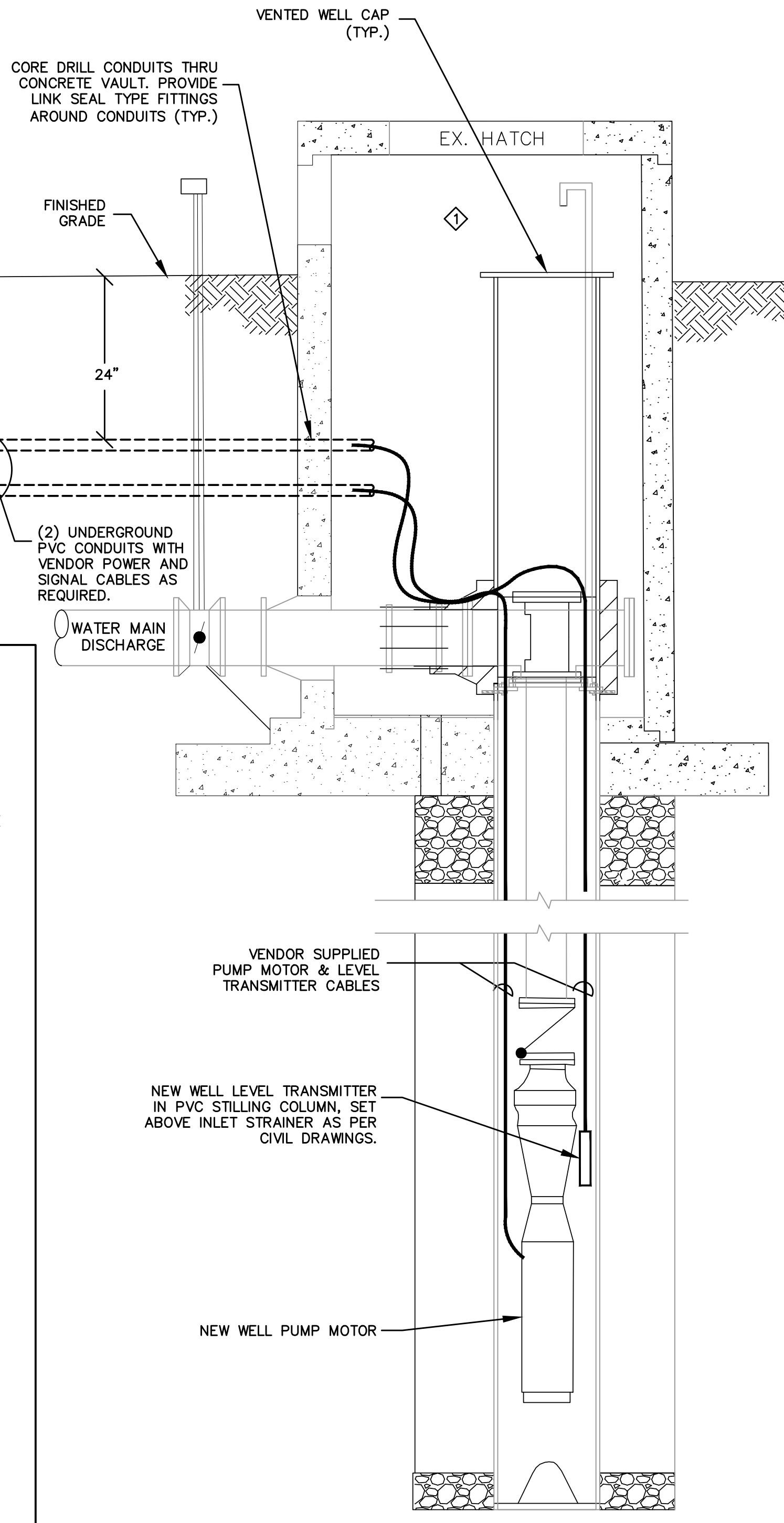
- THE LIGHTING FIXTURES SHALL BE BY WILLIAMS OUTDOOR LIGHTING, MODEL: OSC10R-LED*PH11/827-VG-DT-NC-DBZ-SF-ED -AD-UNV WITH 2700K COLOR PRORATED 370 LUMENS.



BOLLARD MOUNTED LIGHTING FIXTURE 'A2' INSTALLATION DETAIL (TYP.)

SCALE: NONE

3
02-E-4



NOTE: EXACT SIZE TO BE VERIFIED WITH ENGINEER BASED UPON POLE MANUFACTURER'S REQUIREMENTS.

ATTLEBORO WATER DEPT.
ATTLEBORO, MA

WADING RIVER
WATER TREATMENT PLANT

DESIGNED BY: JWC
CHECKED BY: SMR
DATE: FEBRUARY 2025

ELECTRICAL
ELECTRICAL SITE PLAN
DETAILS

THIS DOCUMENT IS THE PROPERTY OF TATA & HOWARD, INC. AND ITS CLIENT. REPRODUCTION OR ADAPTATION WITHOUT WRITTEN CONSENT IS PROHIBITED.

Rev.	Date	Description

SMK ENGINEERING, PC
Electrical, Instrumentation & Control Systems Engineering
1000 State Street, Attleboro, MA 01915
Phone: 508.351.1000
Fax: 508.351.1001
www.smkeng.com

TATA & HOWARD

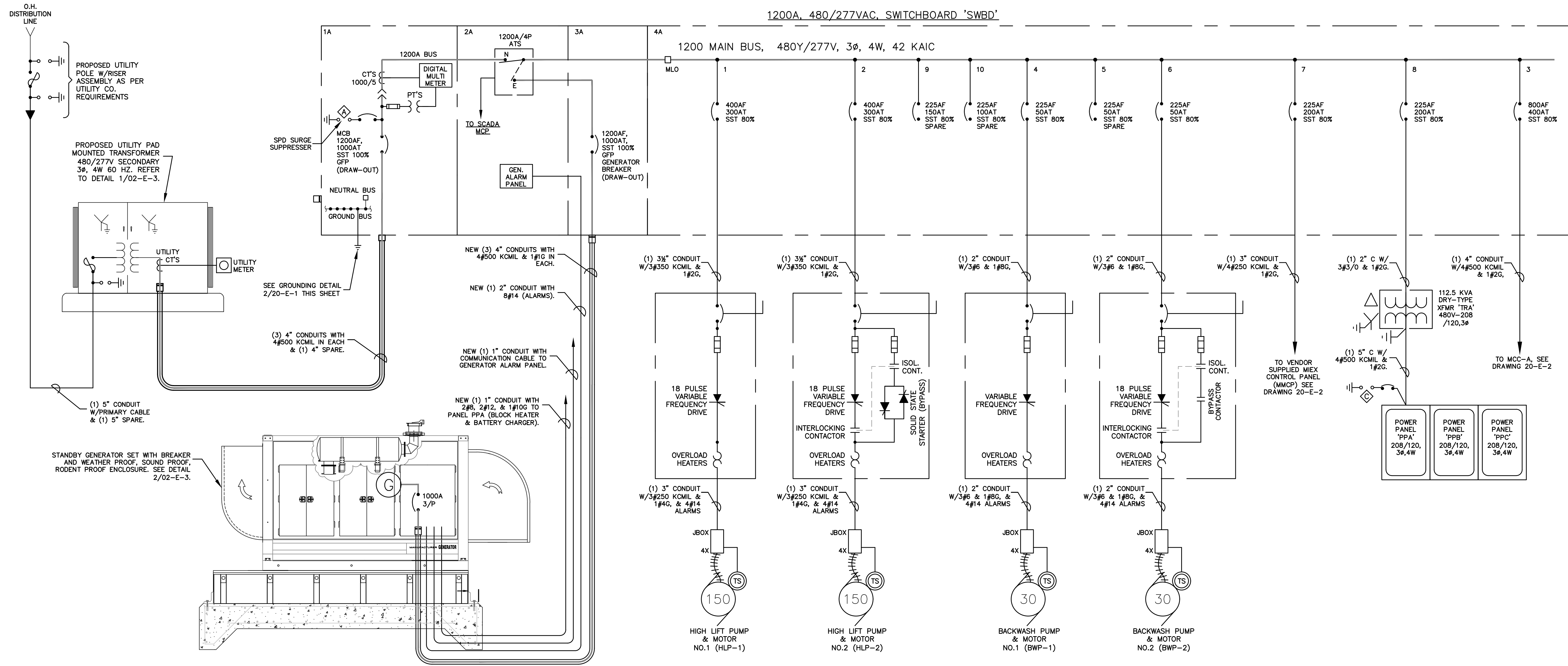
T&H NO: 6193
DATE: FEBRUARY 2025
SCALE: AS NOTED

02-E-4

FILE: C:\SMK\Engineering\Tata & Howard\Attleboro MA\Wading River WTP\03-02-E-1-Site Plans.dwg 2/24/2025 11:16 AM JCOND
C:\SMK\Engineering\Tata & Howard\Attleboro MA\Wading River WTP\03-02-E-1-Site Plans.dwg 2/24/2025 11:16 AM JCOND

FILE: C:\SMR\Engineering\Tata & Howard\Attleboro MA\Wading River WTP\0192-20-E1-One-Line.dwg Feb 24, 2025 - 11:16am
 C:\SMR\Engineering\Tata & Howard\Attleboro MA\Wading River WTP\0192-20-E1-One-Line.dwg 2/27/2025 11:16 AM JCD/NO

1200A, 480/277VAC. SWITCHBOARD 'SWBD'



PARTIAL SYMBOLS LEGEND:

DMM : DIGITAL MULTI-METER	CT'S : CURRENT TRANSFORMER
ES : EMERGENCY SHUTDOWN	PT'S : POTENTIAL TRANSFORMER
ST : SHUNT TRIP	SP : SURGE PROTECTOR (TVSS)
GFP : GROUND FAULT PROTECTION	SST : SOLID STATE TRIP
CT'S : CURRENT TRANSFORMER	RWT : REFLECTOR WAVE TRAP

GENERAL NOTES:

- MAIN CIRCUIT BREAKER AND FEEDER BREAKERS OF SWITCHBOARD SWBD SHALL BE OF SOLID STATE TYPE, AND PROVIDED WITH:
 - SHUNT TRIP
 - CURRENT SETTING
 - INSTANTANEOUS PICK-UP
 - LONG TIME PICK-UP
 - SHORT TIME PICK-UP
 - LONG TIME DELAY
 - SHORT TIME DELAY
 - GROUND FAULT
 - ZONE INTERLOCK

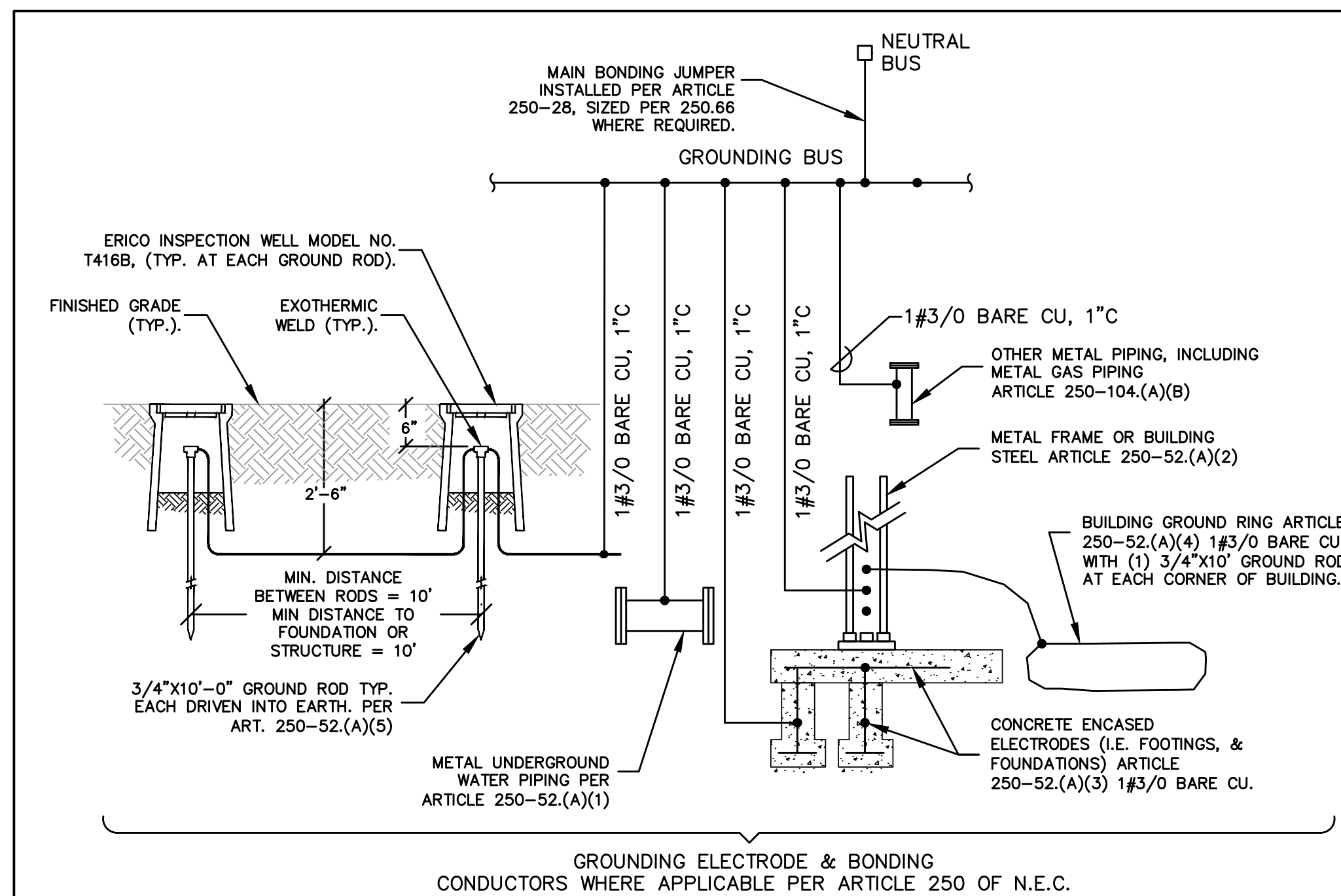
TRANSIENT VOLTAGE SURGE SUPPRESSER (TVSS) SCHEDULE:

LOCATION	MODEL NO.	SYSTEM VOLTAGE	PEAK SURGE CURRENT
SWBD	PTE300-3Y201-D	480/277V, 3Ø, 4W	300,000 AMPS PER Ø
MCC-A	PTE160-3Y201-L	480/277, 3Ø, 4W	160,000 AMPS PER Ø
PPA, PPB, PPC	PTE160-3Y101-L	208/120, 3Ø, 4W	160,000 AMPS PER Ø

NOTE:

- SURGE PROTECTORS SHALL BE MANUFACTURED BY INOVATIVE TECHNOLOGY OR APPROVED EQUAL.
- UNIT SHALL HAVE: 10 MODE MOV DESIGN, SINE-WAVE TRACKING, & INTERNAL CIRCUIT BREAKER.
- PROVIDE THE REQUIRED WIRING/CONDUIT BETWEEN TVSS AND ASSOCIATED PANEL.

PROPOSED WTP ONE-LINE DIAGRAM 1
 SCALE: NONE 20-E-1



PROPOSED GROUNDING & BONDING DETAIL 2
 SCALE: NONE 20-E-1

ATTLEBORO WATER DEPT.
 ATTLEBORO, MA
 WADING RIVER
 WATER TREATMENT PLANT

ELECTRICAL
 WTP ONE-LINE
 DIAGRAM

Rev.	Date	Description



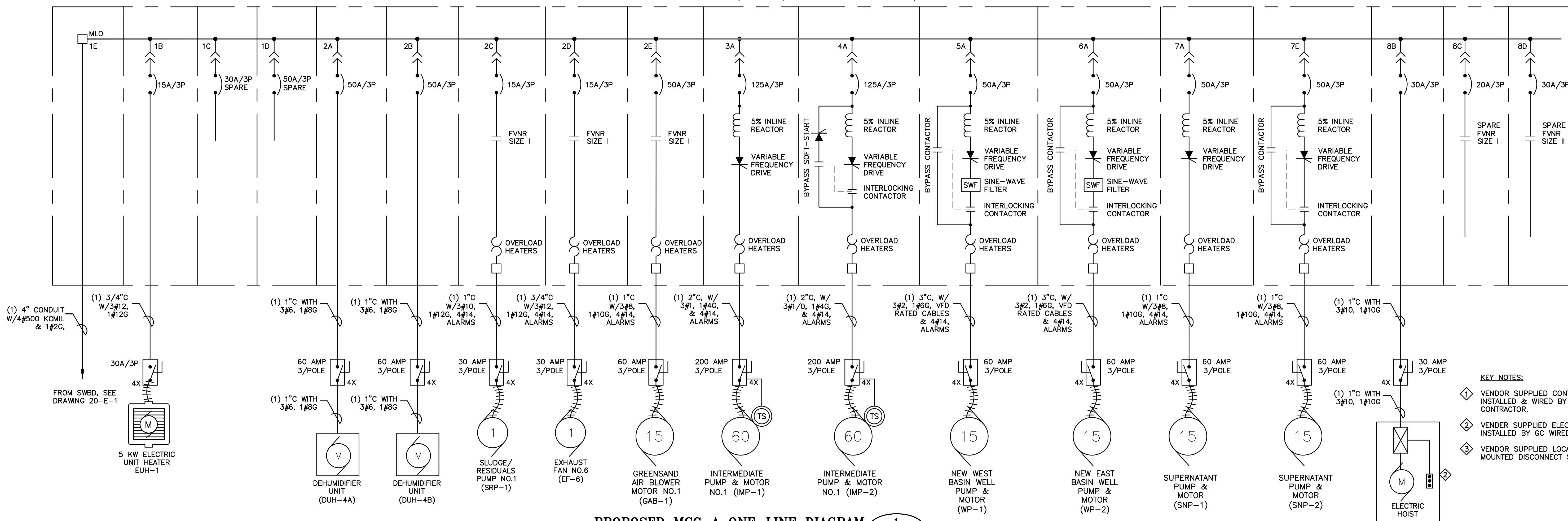
SMR ENGINEERING, INC.
 Electrical, Instrumentation & Control Systems Engineering
 100 North Street, Attleboro, MA 01915
 Phone: 508-851-1000
 Fax: 508-851-1001
 Website: www.smr-engineering.com

TATA & HOWARD

T&H NO.: 6193
 DATE: FEBRUARY 2025
 SCALE: AS NOTED

20-E-1

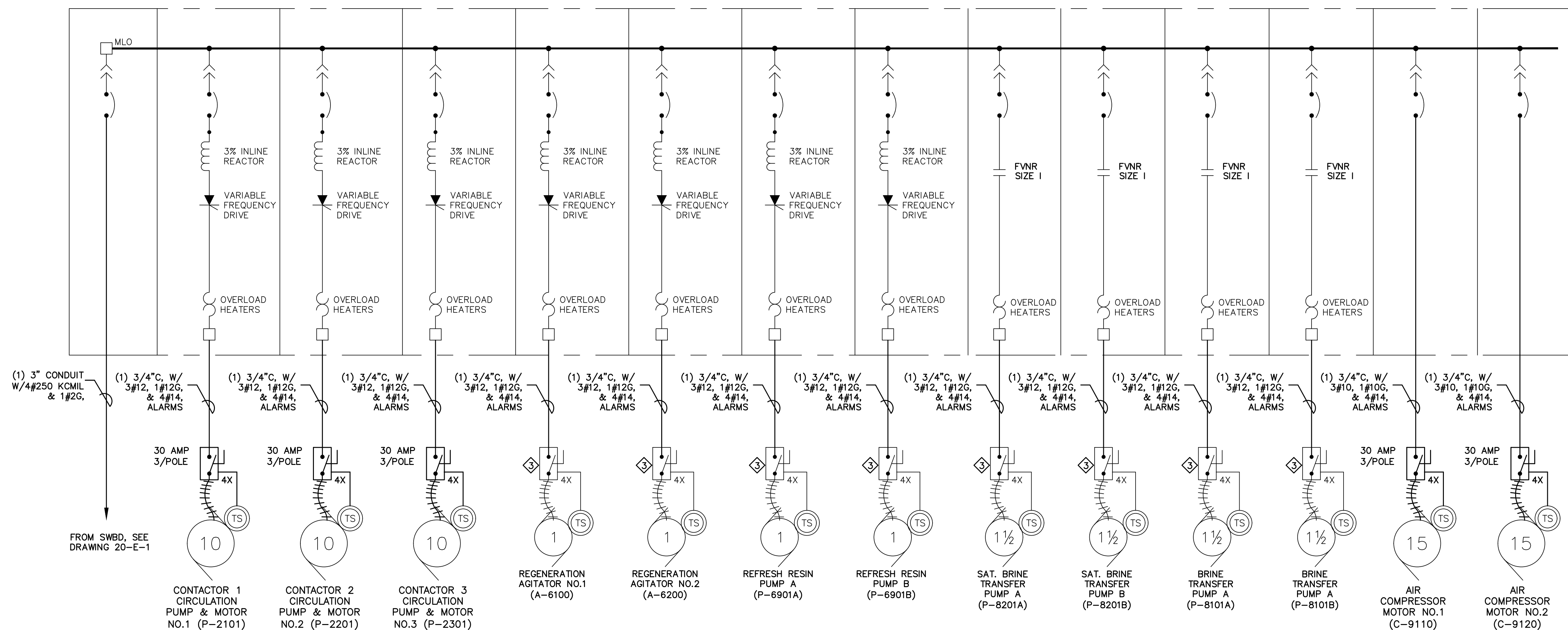
MOTOR CONTROL CENTER NO.A (MCC-A), 600AMP BUS, 480Y/277V, 3Ø, 4W, 42 KAIC



PROPOSED MCC-A ONE-LINE DIAGRAM 1
SCALE: NONE 20-E-2

- KEY NOTES:
- 1 VENDOR SUPPLIED CONTROL PAN INSTALLED & WIRED BY ELECTRIC CONTRACTOR.
 - 2 VENDOR SUPPLIED ELECTRIC HOIST INSTALLED BY GC WIRED BY E.C.
 - 3 VENDOR SUPPLIED LOCAL SKID MOUNTED DISCONNECT SWITCH.

VENDOR SUPPLIED MIEX MOTOR CONTROL PANEL (MMCP), 600AMP BUS, 480Y/277V, 3Ø, 4W, 42 KAIC



PROPOSED VENDOR SUPPLIED MIEX CONTROL PANEL PARTIAL ONE-LINE DIAGRAM 2
SCALE: NONE 20-E-2

ATTLEBORO WATER DEPT.
ATTLEBORO, MA

WADING RIVER
WATER TREATMENT PLANT

DESIGNED BY: SAIR
CHECKED BY: SAIR

DATE: FEBRUARY 2025

SCALE: AS NOTED

20-E-2

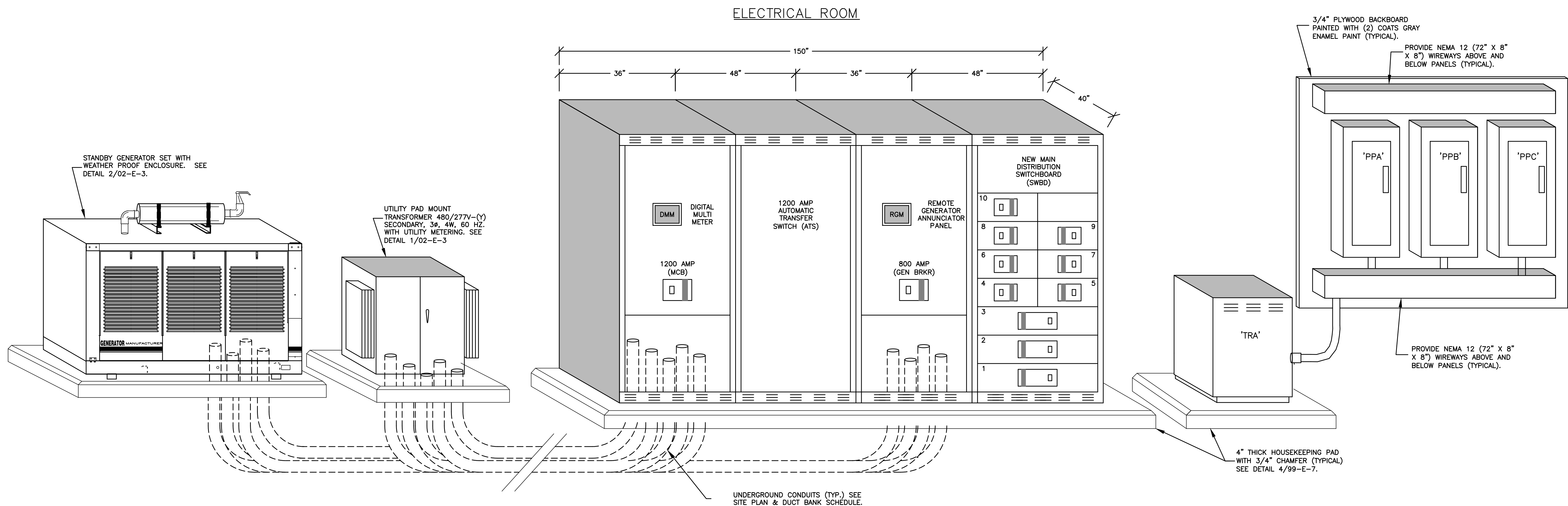
TATA & HOWARD

ENGINEERING, INC.
Electrical, Instrumentation & Control Systems Engineering
1000 North Main Street
Attleboro, MA 01915
Phone: 508-851-1000
Fax: 508-851-1001
www.tataandhoward.com

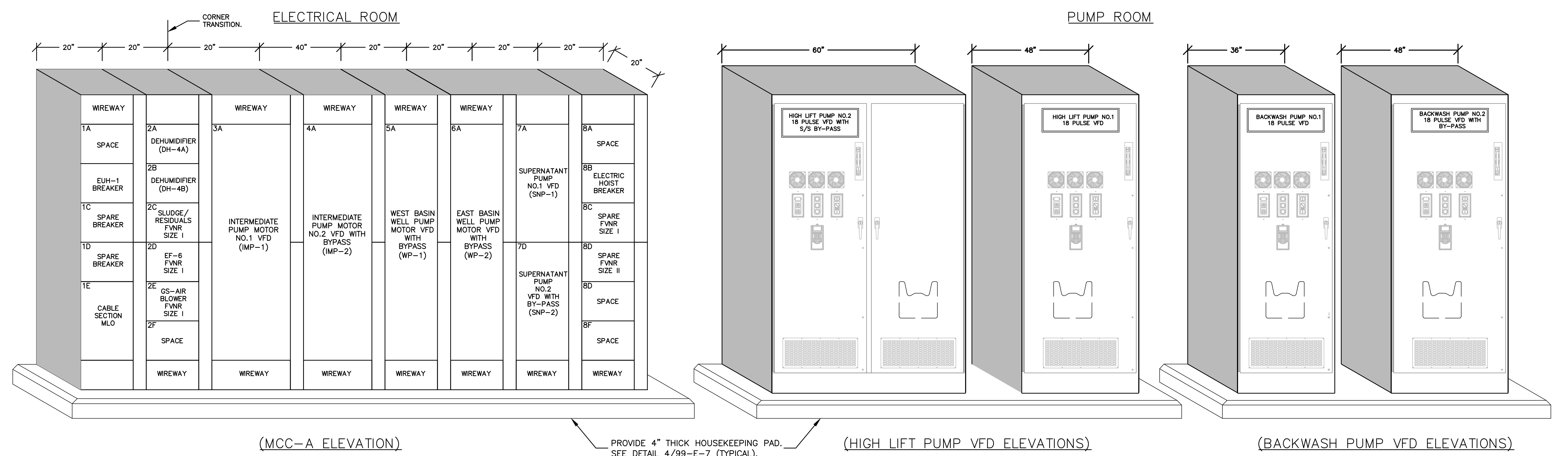
THE DRAWING FOR THIS PROJECT SHALL NOT BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT THE WRITTEN CONSENT OF TATA & HOWARD, INC. AND ITS CLIENT. REPRODUCTION OR ADAPTATION WITHOUT WRITTEN CONSENT IS PROHIBITED.

DATE: 2-19-25
ANALYST: M. Mahan

FILE: C:\SMR\Engineering\Date & Howard\Attleboro MA\Wading River WTP\0192-20-E-1-One-Line.dwg 2/27/2025 11:16 AM JCDND
C:\SMR\Engineering\Date & Howard\Attleboro MA\Wading River WTP\0192-20-E-1-One-Line.dwg 2/27/2025 11:16 AM JCDND



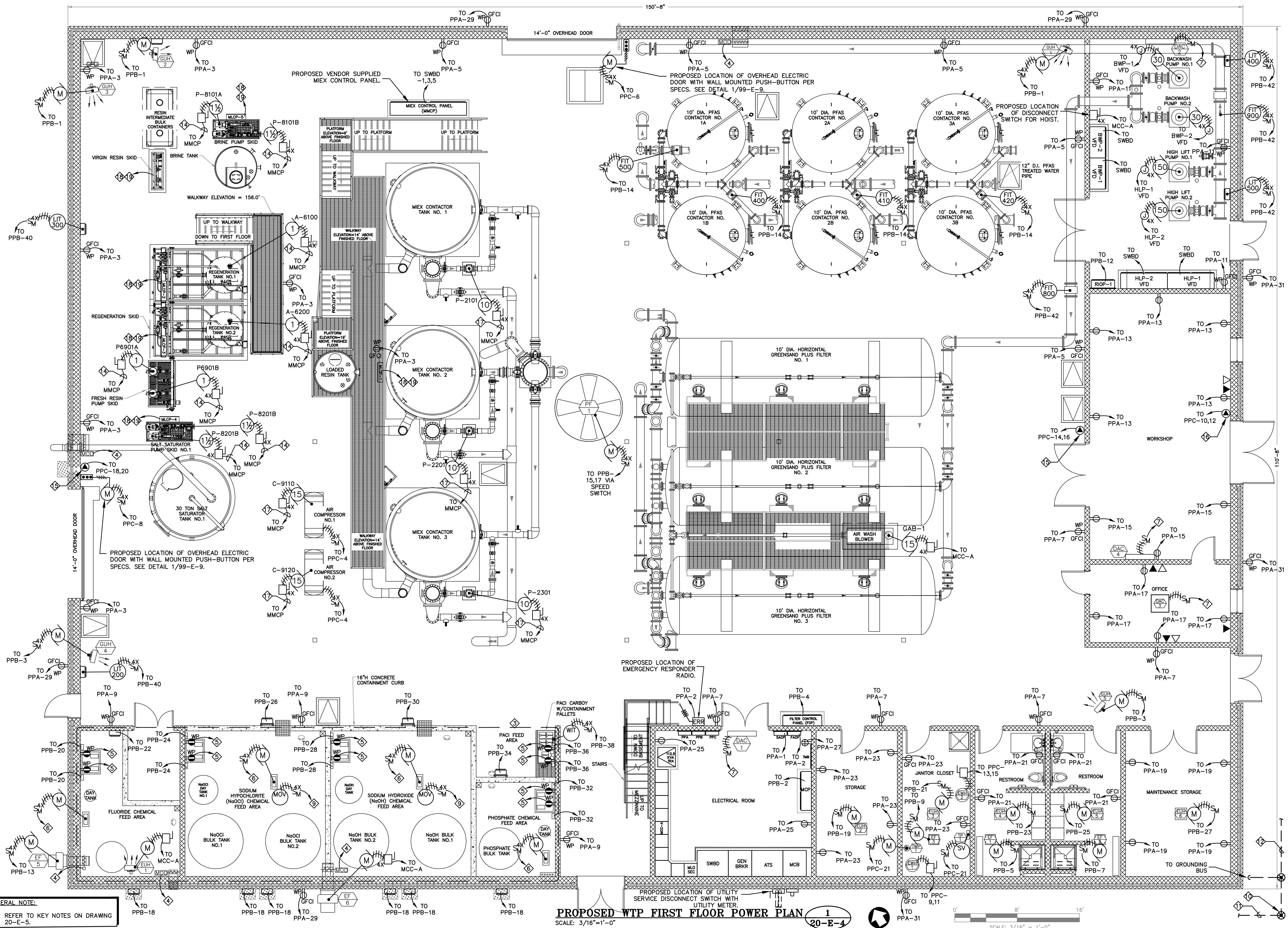
PROPOSED WTP MAIN ELECTRICAL EQUIPMENT ELEVATION 1
 SCALE: NONE 20-E-3



PROPOSED MCC-A & VFD ELECTRICAL EQUIPMENT ELEVATIONS 2
 SCALE: NONE 20-E-3

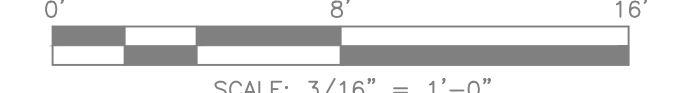
ATTLEBORO WATER DEPT. ATTLEBORO, MA	WADING RIVER WATER TREATMENT PLANT
ELECTRICAL ELECTRICAL EQUIPMENT ELEVATIONS	Checked By: SMR Designed By: JMC Down By: JMC
Description	Date
Rev.	Date
T&H NO: 6193	
DATE: FEBRUARY 2025	
SCALE: AS NOTED	
20-E-3	

FILE: C:\SMR\Engineering\Tata & Howard\Attleboro MA\Wading River WTP\0193-20-E1-One-Line.dwg Feb 24, 2025 - 11:16am
 C:\SMR\Engineering\Tata & Howard\Attleboro MA\Wading River WTP\0193-20-E1-One-Line.dwg 2/24/2025 11:16 AM JCOMB

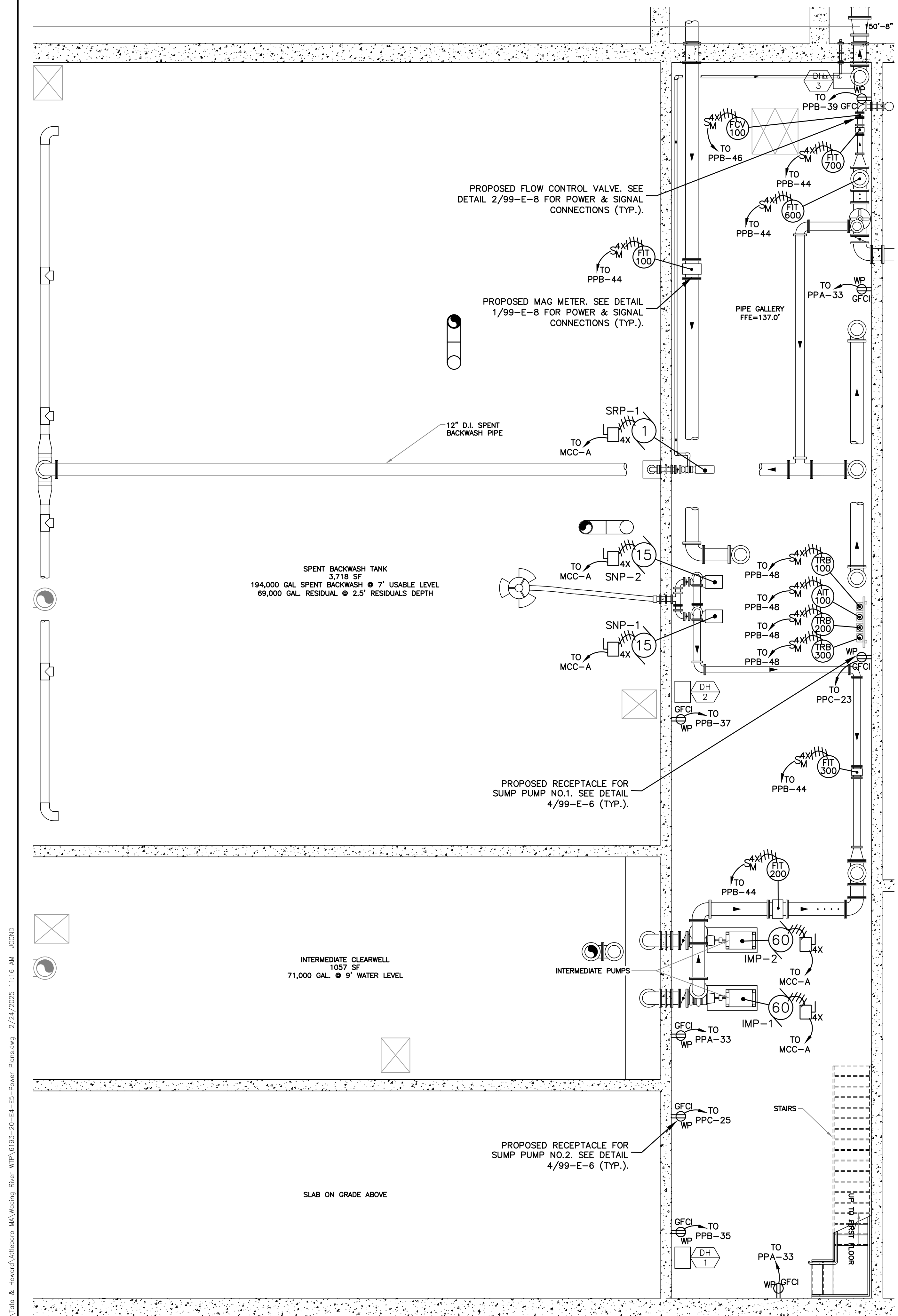


GENERAL NOTE:
 1. REFER TO KEY NOTES ON DRAWING 20-E-5.

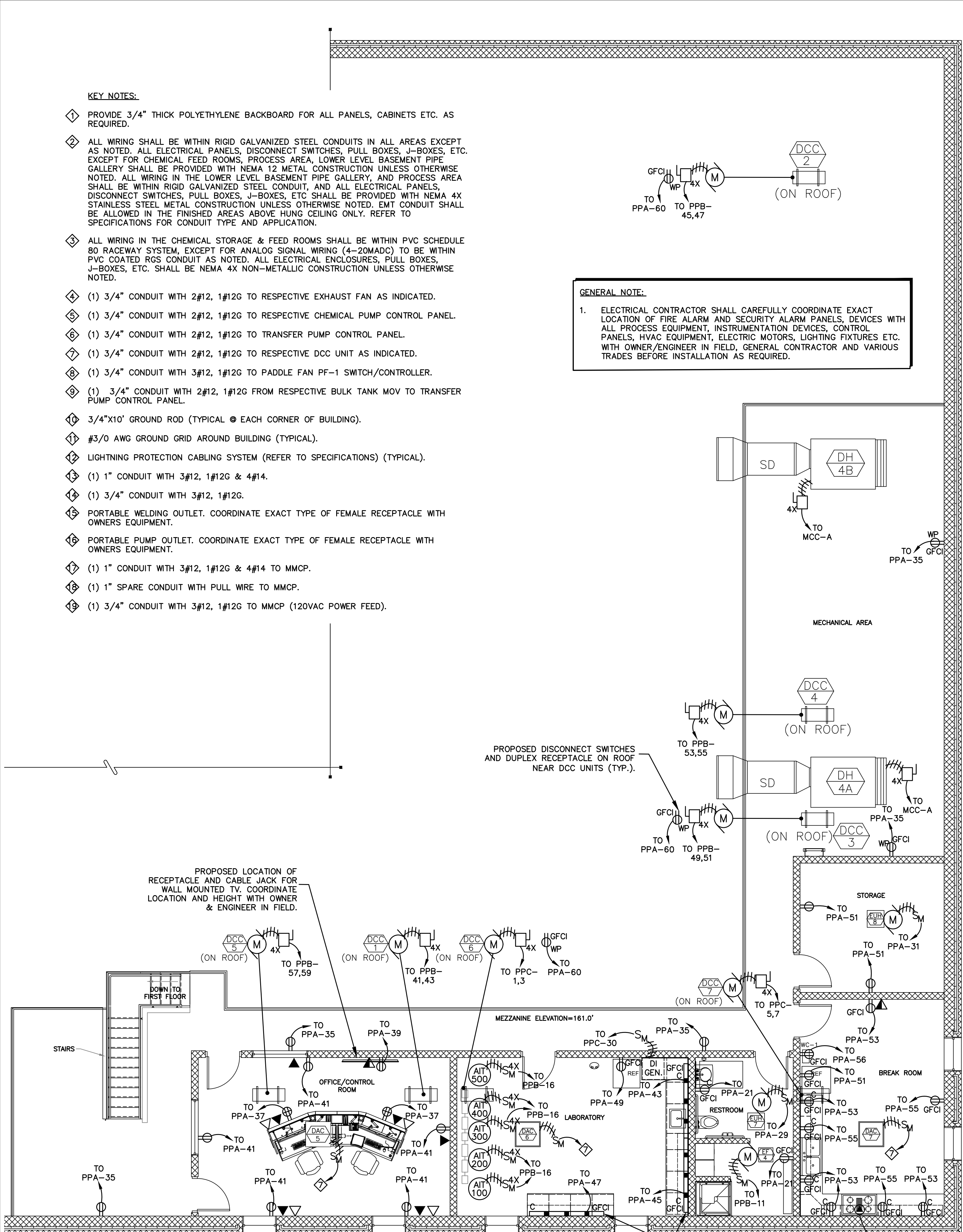
PROPOSED WTP FIRST FLOOR POWER PLAN
 SCALE: 3/16" = 1'-0"
 1
 20-E-4



ATTLEBORO WATER DEPT. ATTLEBORO, MA		
WATER TREATMENT PLANT		
ELECTRICAL WTP FIRST FLOOR PLAN POWER PLAN		THIS DOCUMENT IS THE PROPERTY OF TATA & HOWARD, INC. AND ITS CLIENT. REPRODUCTION OR ADAPTATION WITHOUT WRITTEN CONSENT IS PROHIBITED. Down By: JWC Checked By: SMR Approved By: KLG
Description		
Rev.	Date	
		TATA & HOWARD Electrical, Instrumentation & Control Systems Engineering 1000 North Main Street Attleboro, MA 01937 Phone: 508.351.2000 Fax: 508.351.2001 www.tataandhoward.com
T&H NO.: 6193		DATE: FEBRUARY 2025
SCALE: AS NOTED		SCALE: AS NOTED
20-E-4		2-19-25



PROPOSED WTP BASEMENT POWER PLAN 1
SCALE: 3/16"=1'-0" 20-E-5



PROPOSED WTP MEZZANINE POWER PLAN 1
SCALE: 3/16"=1'-0" 20-E-5

KEY NOTES:

- ◇ PROVIDE 3/4" THICK POLYETHYLENE BACKBOARD FOR ALL PANELS, CABINETS ETC. AS REQUIRED.
- ◇ ALL WIRING SHALL BE WITHIN RIGID GALVANIZED STEEL CONDUITS IN ALL AREAS EXCEPT AS NOTED. ALL ELECTRICAL PANELS, DISCONNECT SWITCHES, PULL BOXES, J-BOXES, ETC. EXCEPT FOR CHEMICAL FEED ROOMS, PROCESS AREA, LOWER LEVEL BASEMENT PIPE GALLERY SHALL BE PROVIDED WITH NEMA 12 METAL CONSTRUCTION UNLESS OTHERWISE NOTED. ALL WIRING IN THE LOWER LEVEL BASEMENT PIPE GALLERY, AND PROCESS AREA SHALL BE WITHIN RIGID GALVANIZED STEEL CONDUIT, AND ALL ELECTRICAL PANELS, DISCONNECT SWITCHES, PULL BOXES, J-BOXES, ETC. SHALL BE PROVIDED WITH NEMA 4X STAINLESS STEEL METAL CONSTRUCTION UNLESS OTHERWISE NOTED. EMT CONDUIT SHALL BE ALLOWED IN THE FINISHED AREAS ABOVE HUNG CEILING ONLY. REFER TO SPECIFICATIONS FOR CONDUIT TYPE AND APPLICATION.
- ◇ ALL WIRING IN THE CHEMICAL STORAGE & FEED ROOMS SHALL BE WITHIN PVC SCHEDULE 80 RACEWAY SYSTEM, EXCEPT FOR ANALOG SIGNAL WIRING (4-20MADC) TO BE WITHIN PVC COATED RGS CONDUIT AS NOTED. ALL ELECTRICAL ENCLOSURES, PULL BOXES, J-BOXES, ETC. SHALL BE NEMA 4X NON-METALLIC CONSTRUCTION UNLESS OTHERWISE NOTED.
- ◇ (1) 3/4" CONDUIT WITH 2#12, 1#12G TO RESPECTIVE EXHAUST FAN AS INDICATED.
- ◇ (1) 3/4" CONDUIT WITH 2#12, 1#12G TO RESPECTIVE CHEMICAL PUMP CONTROL PANEL.
- ◇ (1) 3/4" CONDUIT WITH 2#12, 1#12G TO TRANSFER PUMP CONTROL PANEL.
- ◇ (1) 3/4" CONDUIT WITH 2#12, 1#12G TO RESPECTIVE DCC UNIT AS INDICATED.
- ◇ (1) 3/4" CONDUIT WITH 3#12, 1#12G TO PADDLE FAN PF-1 SWITCH/CONTROLLER.
- ◇ (1) 3/4" CONDUIT WITH 2#12, 1#12G FROM RESPECTIVE BULK TANK MOV TO TRANSFER PUMP CONTROL PANEL.
- ◇ 3/4"x10' GROUND ROD (TYPICAL @ EACH CORNER OF BUILDING).
- ◇ #3/0 AWG GROUND GRID AROUND BUILDING (TYPICAL).
- ◇ LIGHTNING PROTECTION CABLING SYSTEM (REFER TO SPECIFICATIONS) (TYPICAL).
- ◇ (1) 1" CONDUIT WITH 3#12, 1#12G & 4#14.
- ◇ (1) 3/4" CONDUIT WITH 3#12, 1#12G.
- ◇ PORTABLE WELDING OUTLET. COORDINATE EXACT TYPE OF FEMALE RECEPTACLE WITH OWNERS EQUIPMENT.
- ◇ PORTABLE PUMP OUTLET. COORDINATE EXACT TYPE OF FEMALE RECEPTACLE WITH OWNERS EQUIPMENT.
- ◇ (1) 1" CONDUIT WITH 3#12, 1#12G & 4#14 TO MMCP.
- ◇ (1) 1" SPARE CONDUIT WITH PULL WIRE TO MMCP.
- ◇ (1) 3/4" CONDUIT WITH 3#12, 1#12G TO MMCP (120VAC POWER FEED).

GENERAL NOTE:

- ELECTRICAL CONTRACTOR SHALL CAREFULLY COORDINATE EXACT LOCATION OF FIRE ALARM AND SECURITY ALARM PANELS, DEVICES WITH ALL PROCESS EQUIPMENT, INSTRUMENTATION DEVICES, CONTROL PANELS, HVAC EQUIPMENT, ELECTRIC MOTORS, LIGHTING FIXTURES ETC. WITH OWNER/ENGINEER IN FIELD. GENERAL CONTRACTOR AND VARIOUS TRADES BEFORE INSTALLATION AS REQUIRED.

ATTLEBORO WATER DEPT.
ATTLEBORO, MA

WADING RIVER
WATER TREATMENT PLANT

DESIGNED BY: JMC
CHECKED BY: SMR
APPROVED BY: KLG

ELECTRICAL
WTP BASEMENT AND
MEZZANINE POWER PLANS

THIS DOCUMENT IS THE PROPERTY OF TATA & HOWARD, INC. AND ITS CLIENT. REPRODUCTION OR ADAPTATION WITHOUT WRITTEN CONSENT IS PROHIBITED.

Rev.	Date	Description

SALEM
REGISTERED PROFESSIONAL ENGINEER
No. 31935
MASSACHUSETTS

2-19-25

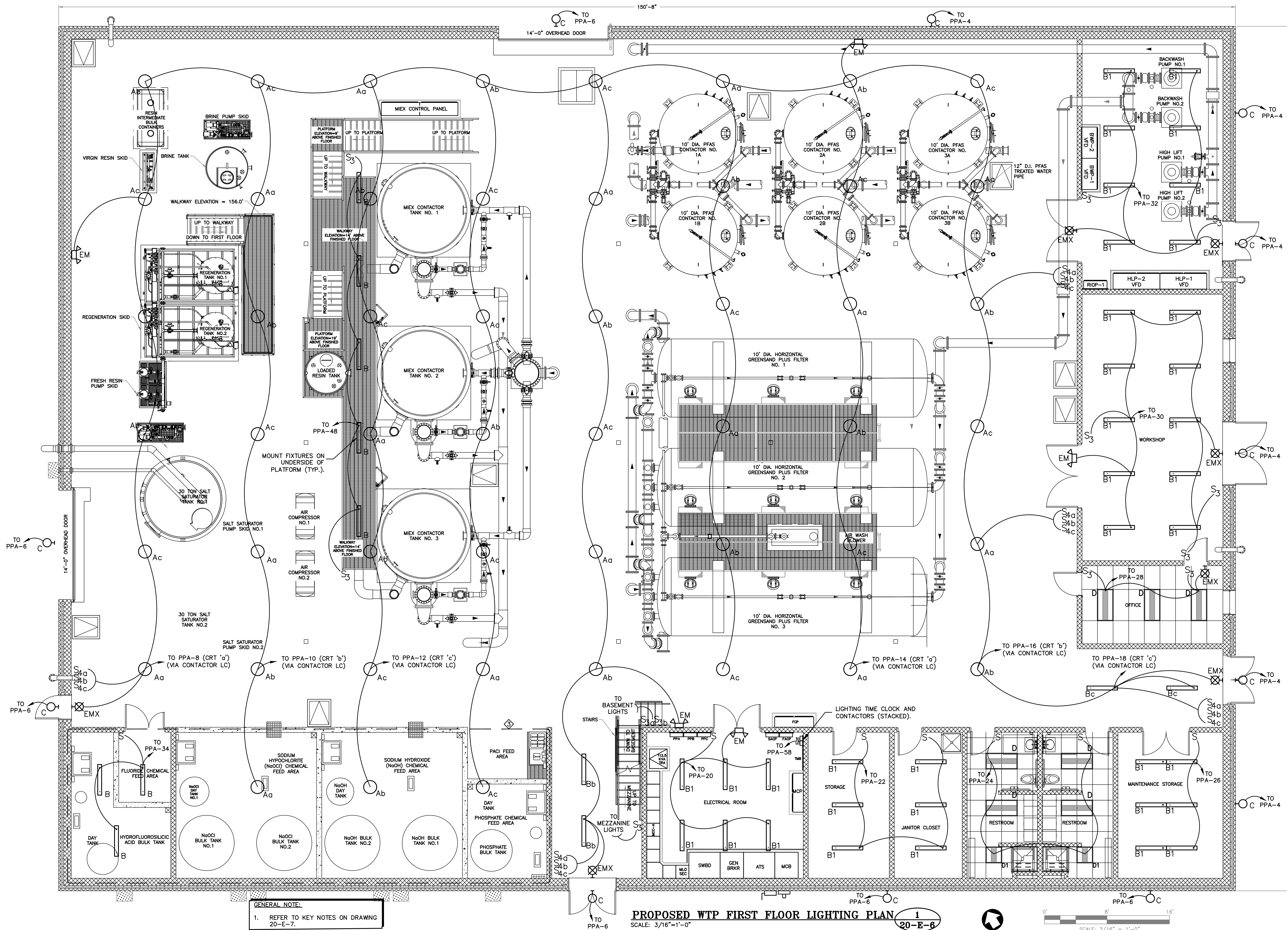
ENGINEERING, PC
Electrical, Instrumentation
& Control Systems Engineering
TATA & HOWARD, INC.
1000 ROUTE 1
MILFORD, MA 01860
PHONE: 978.686.1000
FAX: 978.686.1001
WWW.TATAHOWARD.COM

TATA & HOWARD

T&H NO: 6193
DATE: FEBRUARY 2025
SCALE: AS NOTED

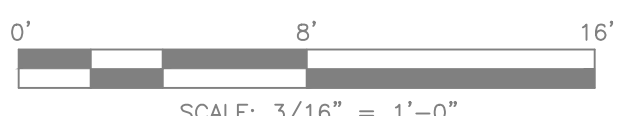
20-E-5

FILE: C:\SMK\Engineering\Tata & Howard\Attleboro MA\Wading River WTP\0193-20-E-6-E7-Lighting Plans.dwg Feb 24, 2025 - 11:16am
 C:\SMK\Engineering\Tata & Howard\Attleboro MA\Wading River WTP\0193-20-E-6-E7-Lighting Plans.dwg 2/24/2025 11:16 AM JCOND



GENERAL NOTE:
 1. REFER TO KEY NOTES ON DRAWING 20-E-7.

PROPOSED WTP FIRST FLOOR LIGHTING PLAN
 SCALE: 3/16"=1'-0"
 1
 20-E-6



ATTLEBORO WATER DEPT.
 ATTLEBORO, MA
 WADING RIVER
 WATER TREATMENT PLANT

ELECTRICAL
 WTP FIRST FLOOR
 LIGHTING PLAN

Rev.	Date	Description

THE DOCUMENT IS THE PROPERTY OF TATA & HOWARD, INC. AND ITS CLIENT. REPRODUCTION OR ADAPTATION WITHOUT WRITTEN CONSENT IS PROHIBITED.

SMK ENGINEERING, PC
 SPECIALTY ELECTRICAL CONSULTING
 100 STATE STREET
 BOSTON, MA 02109
 Phone: (617) 552-1100
 Fax: (617) 552-1101
 Website: www.smkeng.com

TATA & HOWARD
 ENGINEERING, PC
 200 STATE STREET
 BOSTON, MA 02109
 Phone: (617) 552-1100
 Fax: (617) 552-1101
 Website: www.tandh.com

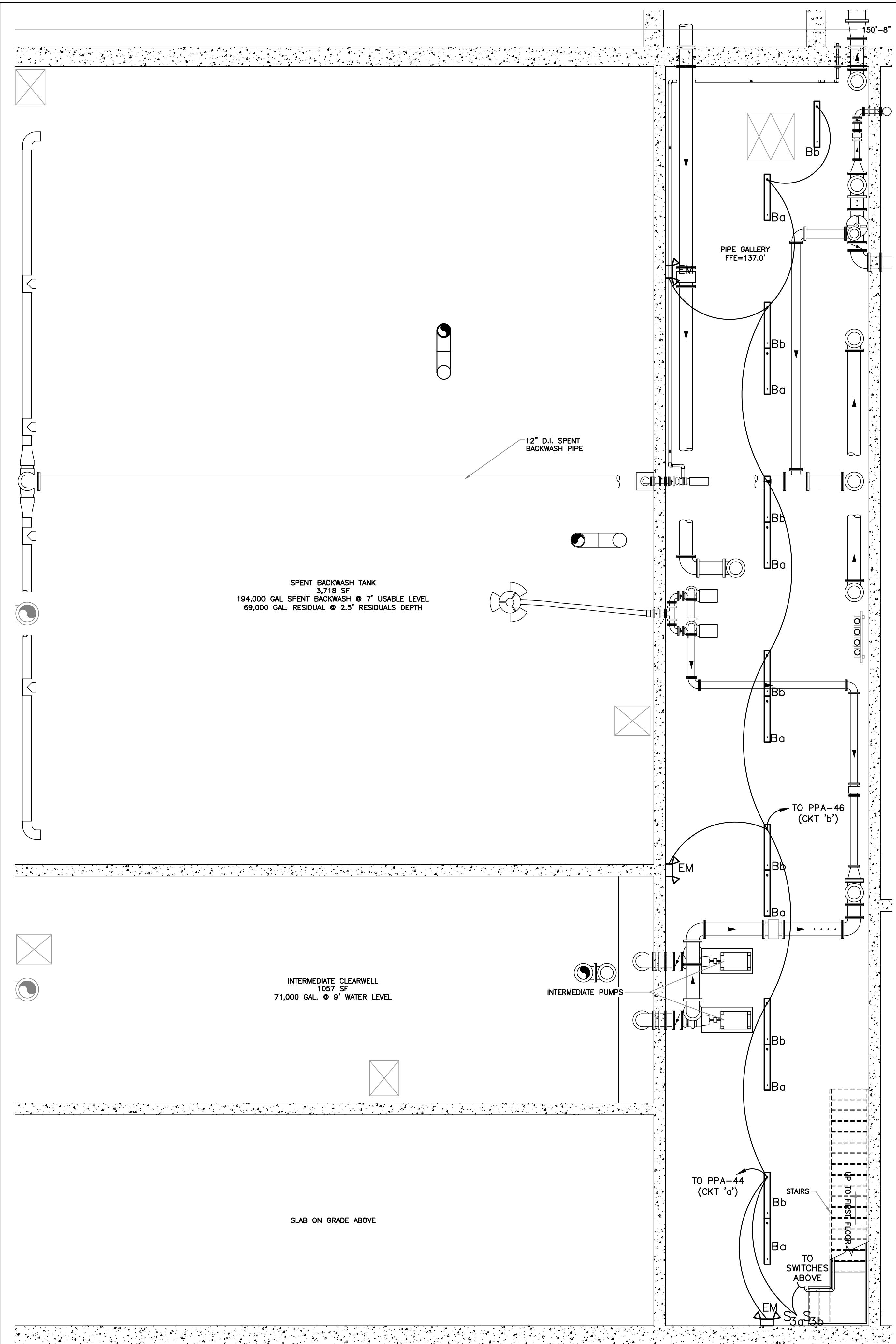
2-19-25

T&H NO.: 6193
 DATE: FEBRUARY 2025
 SCALE: AS NOTED

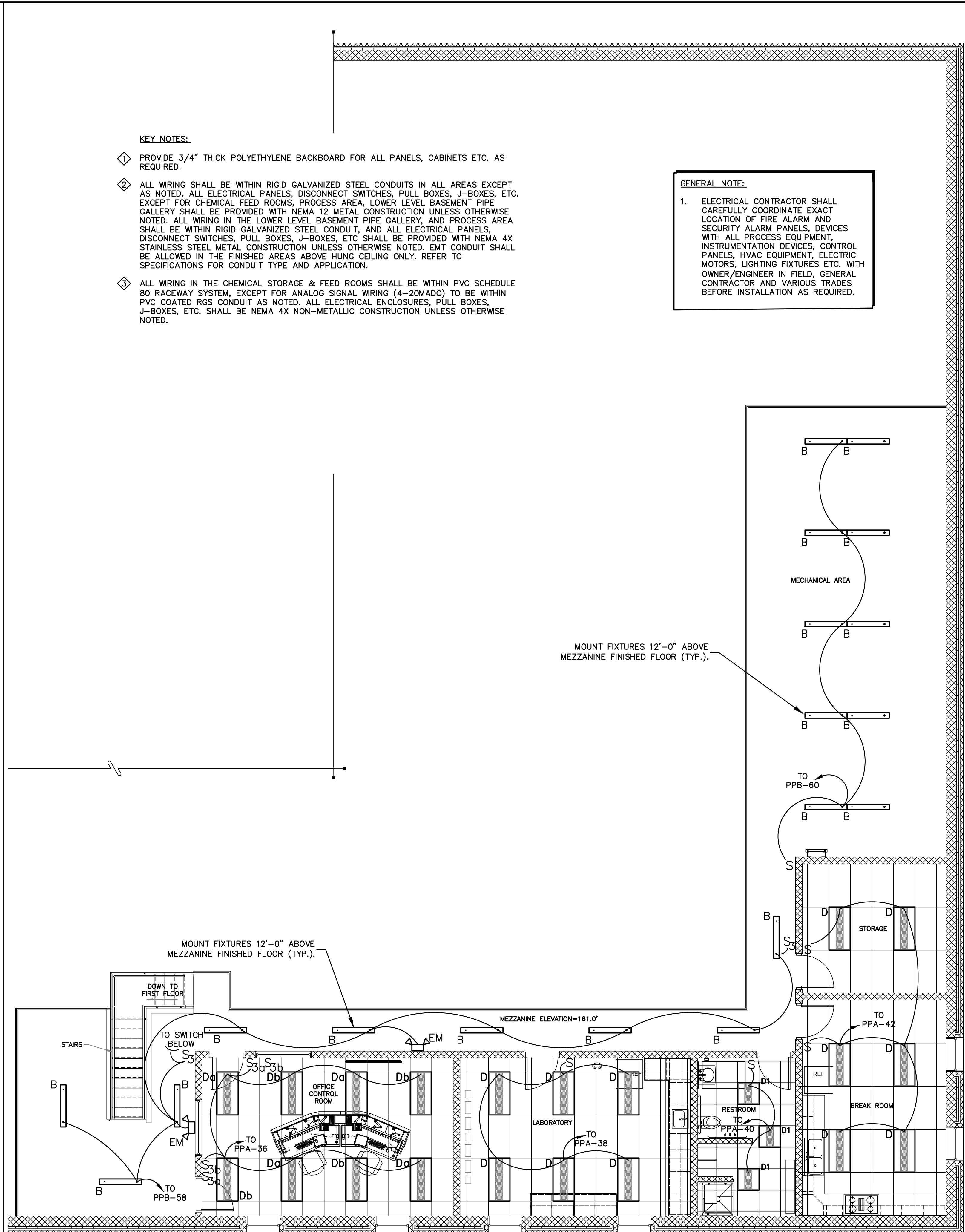
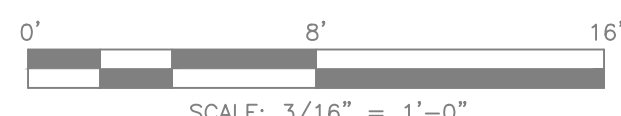
TATA & HOWARD

20-E-6

C:\SMB_Engineering\Tata & Howard\Wading River WTP\03-20-EE-ET-Lighting Plans.dwg 2/24/2025 11:15 AM JCOND



PROPOSED WTP BASEMENT LIGHTING PLAN 1
SCALE: 3/16"=1'-0" **20-E-7**



PROPOSED WTP MEZZANIE LIGHTING PLAN 1
SCALE: 3/16"=1'-0" **20-E-7**



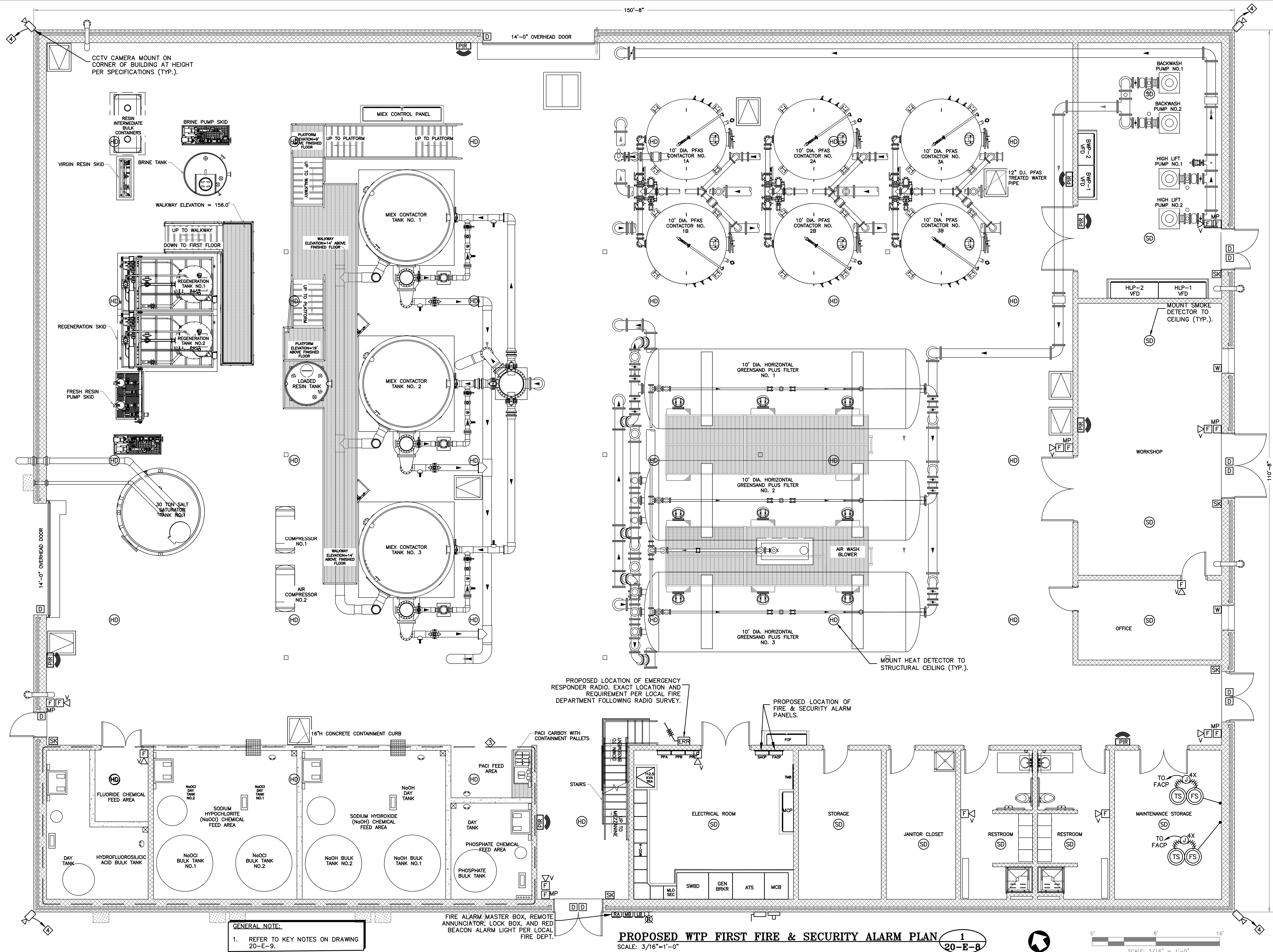
- KEY NOTES:**
- ◇ PROVIDE 3/4" THICK POLYETHYLENE BACKBOARD FOR ALL PANELS, CABINETS ETC. AS REQUIRED.
 - ◇ ALL WIRING SHALL BE WITHIN RIGID GALVANIZED STEEL CONDUITS IN ALL AREAS EXCEPT AS NOTED. ALL ELECTRICAL PANELS, DISCONNECT SWITCHES, PULL BOXES, J-BOXES, ETC. EXCEPT FOR CHEMICAL FEED ROOMS, PROCESS AREA, LOWER LEVEL BASEMENT PIPE GALLERY SHALL BE PROVIDED WITH NEMA 12 METAL CONSTRUCTION UNLESS OTHERWISE NOTED. ALL WIRING IN THE LOWER LEVEL BASEMENT PIPE GALLERY, AND PROCESS AREA SHALL BE WITHIN RIGID GALVANIZED STEEL CONDUIT, AND ALL ELECTRICAL PANELS, DISCONNECT SWITCHES, PULL BOXES, J-BOXES, ETC. SHALL BE PROVIDED WITH NEMA 4X STAINLESS STEEL METAL CONSTRUCTION UNLESS OTHERWISE NOTED. EMT CONDUIT SHALL BE ALLOWED IN THE FINISHED AREAS ABOVE HUNG CEILING ONLY. REFER TO SPECIFICATIONS FOR CONDUIT TYPE AND APPLICATION.
 - ◇ ALL WIRING IN THE CHEMICAL STORAGE & FEED ROOMS SHALL BE WITHIN PVC SCHEDULE 80 RACEWAY SYSTEM, EXCEPT FOR ANALOG SIGNAL WIRING (4-20MADC) TO BE WITHIN PVC COATED RGS CONDUIT AS NOTED. ALL ELECTRICAL ENCLOSURES, PULL BOXES J-BOXES, ETC. SHALL BE NEMA 4X NON-METALLIC CONSTRUCTION UNLESS OTHERWISE NOTED.

GENERAL NOTE:

1. ELECTRICAL CONTRACTOR SHALL CAREFULLY COORDINATE EXACT LOCATION OF FIRE ALARM AND SECURITY ALARM PANELS, DEVICES WITH ALL PROCESS EQUIPMENT, INSTRUMENTATION DEVICES, CONTROL PANELS, HVAC EQUIPMENT, ELECTRIC MOTORS, LIGHTING FIXTURES ETC. WITH OWNER/ENGINEER IN FIELD. GENERAL CONTRACTOR AND VARIOUS TRADES BEFORE INSTALLATION AS REQUIRED.

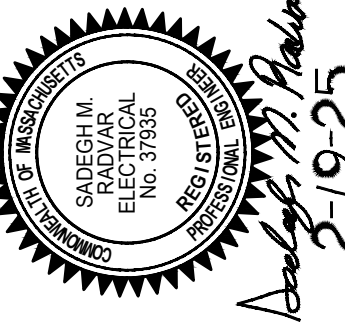

ATTLEBORO WATER DEPT. ATTLEBORO, MA	WADING RIVER WATER TREATMENT PLANT
ELECTRICAL WTP BASEMENT AND MEZZANINE LIGHTING PLANS	Down By: JWC Designed By: JWC Checked By: SMR Approved By: KLG
THIS DOCUMENT IS THE PROPERTY OF TATA & HOWARD, INC. AND ITS CLIENT. REPRODUCTION OR ADAPTATION WITHOUT WRITTEN CONSENT IS PROHIBITED.	Description
Rev.	Date
T&H NO: 6193	
DATE: FEBRUARY 2025	
SCALE: AS NOTED	
20-E-7	

FILE: C:\SMR\Engineering\Tata & Howard\Attleboro MA\Wading River WTP\03-20-20-20-E-8-Fire & Security Alarm Plans.dwg 2/24/2025 11:16 AM JCOND
 C:\SMR\Engineering\Tata & Howard\Attleboro MA\Wading River WTP\03-20-20-20-E-8-Fire & Security Alarm Plans.dwg 2/24/2025 11:16 AM JCOND

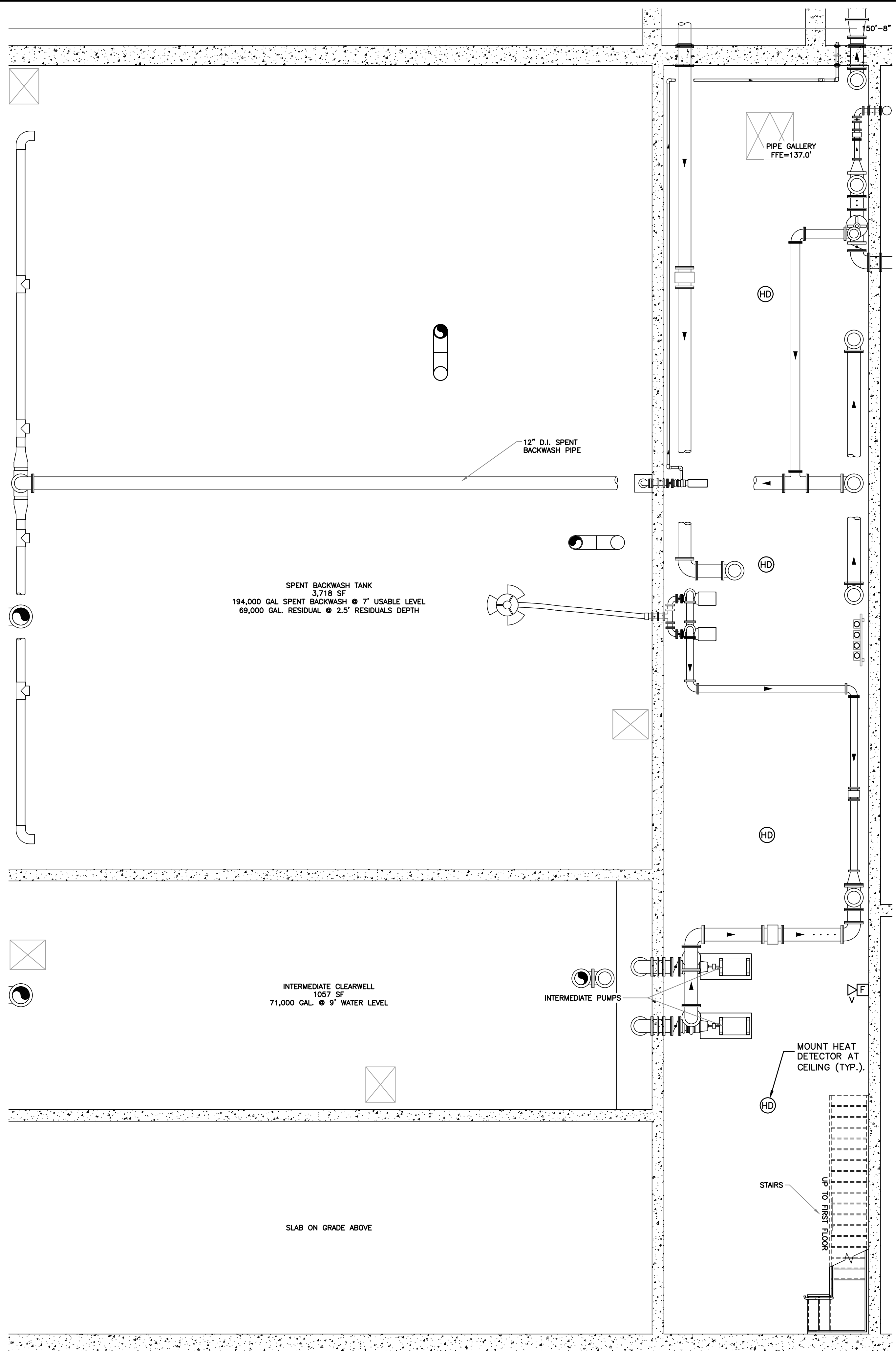


GENERAL NOTE:
 1. REFER TO KEY NOTES ON DRAWING 20-E-9.

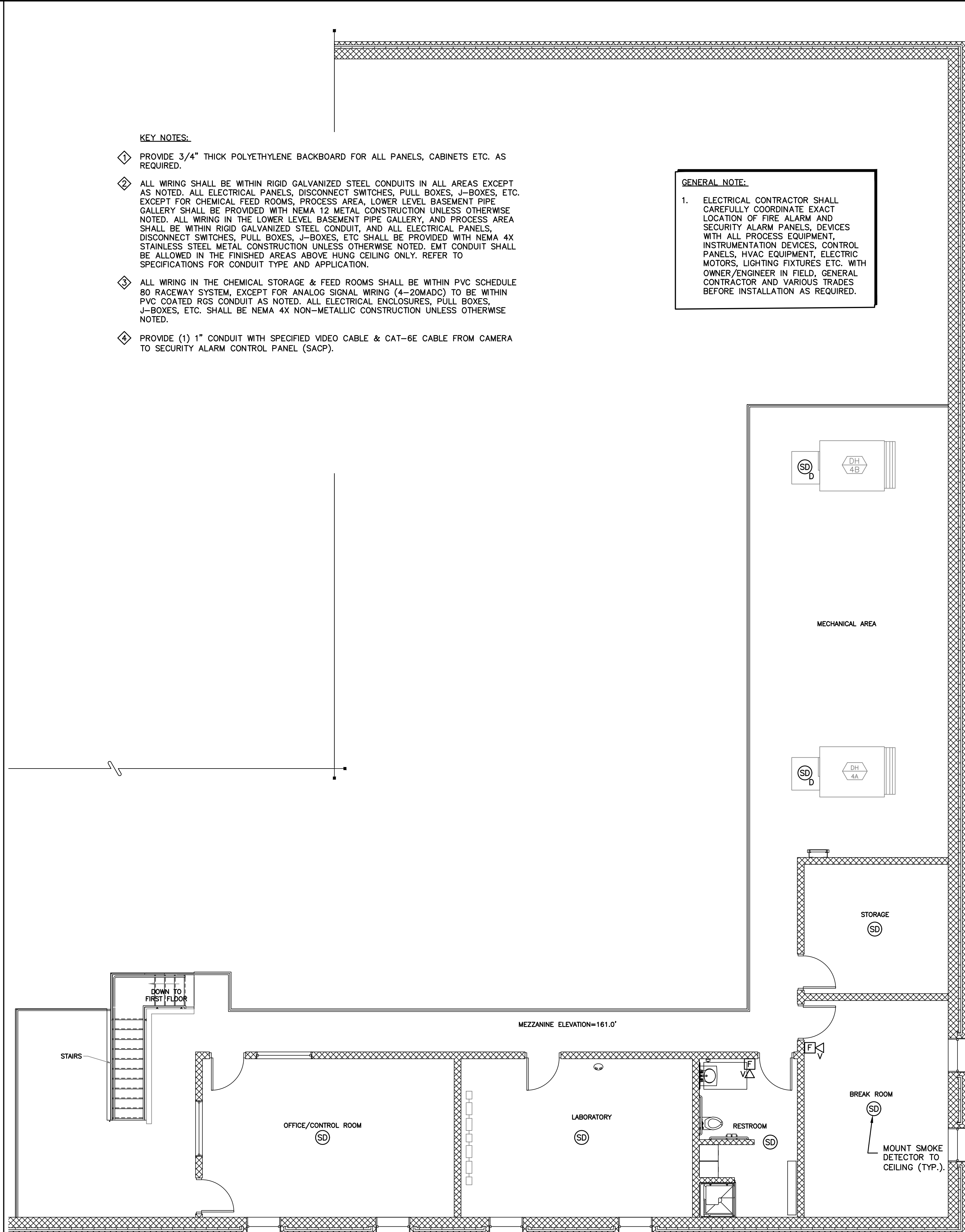
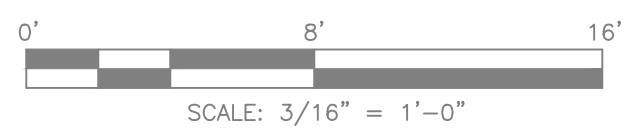
PROPOSED WTP FIRST FIRE & SECURITY ALARM PLAN
 SCALE: 3/16" = 1'-0"
 1
 20-E-8

ATTLEBORO WATER DEPT. ATTLEBORO, MA		 SMR ENGINEERING, INC. Electrical, Instrumentation & Control Systems Engineering 1000 Main Street, Attleboro, MA 01915 Phone: 508-851-1000 Fax: 508-851-1001 Website: www.smr-engineering.com	 TATA & HOWARD
WADING RIVER WATER TREATMENT PLANT			
ELECTRICAL WTP FIRST FLOOR FIRE & SECURITY ALARM PLAN		THE DOCUMENT IS THE PROPERTY OF TATA & HOWARD, INC. AND ITS CLIENT. REPRODUCTION OR ADAPTATION WITHOUT WRITTEN CONSENT IS PROHIBITED.	Description Date Rev.
Down By: JWC Checked By: SMR Approved By: KLG			
T&H NO.: 6193 DATE: FEBRUARY 2025 SCALE: AS NOTED		20-E-8	

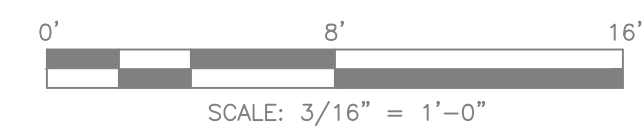
C:\SMB_Engineering\Tata & Howard\Wading River WTP\09-20-EB-ED-Fire & Security Alarm Plans.dwg 2/24/2025 11:16 AM JCOND



PROPOSED WTP FIRE & SECURITY ALARM PLAN 1
SCALE: 3/16"=1'-0" 20-E-9



PROPOSED WTP MEZZANINE FIRE & SECURITY ALARM PLAN 2
SCALE: 3/16"=1'-0" 20-E-9



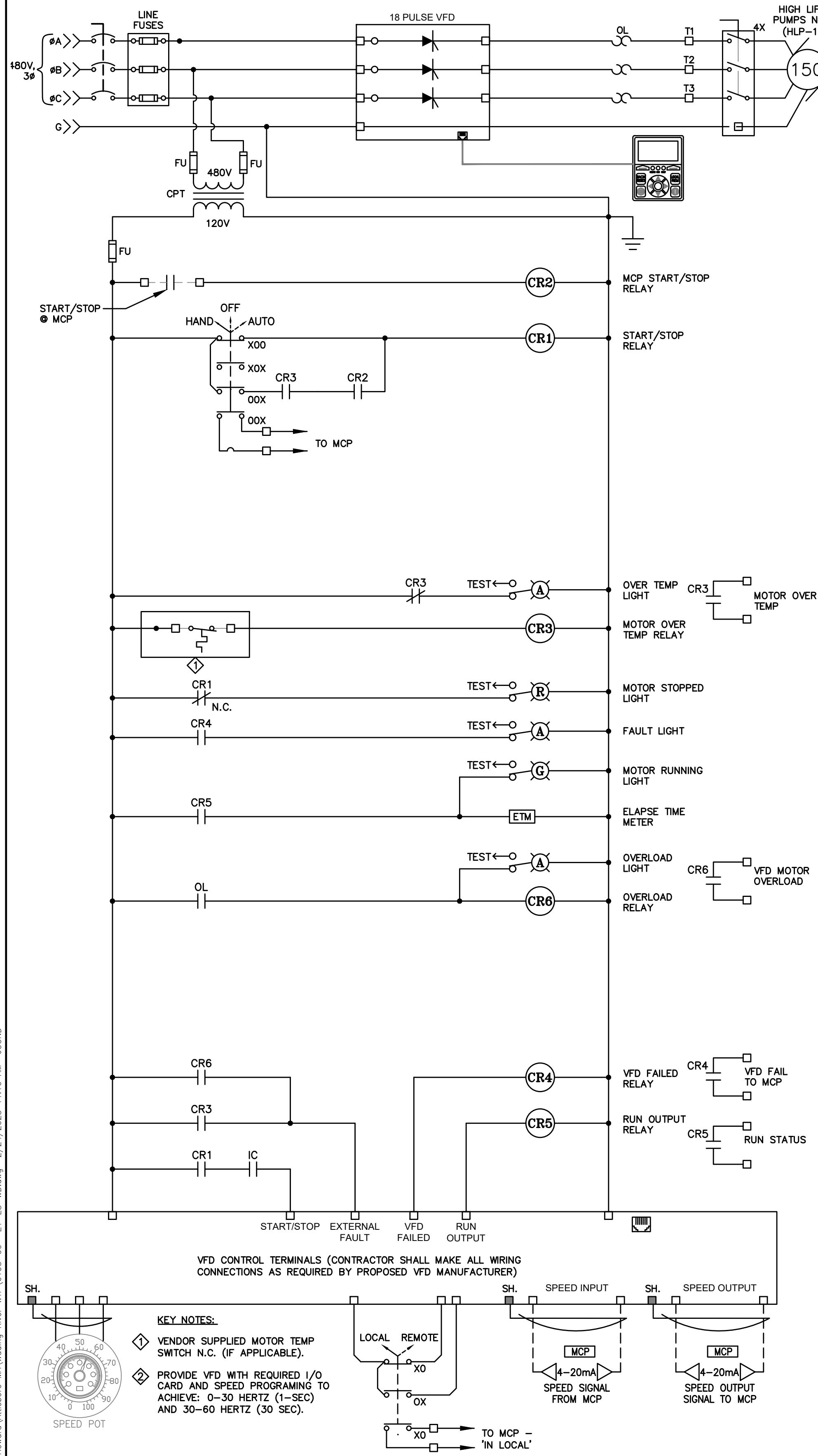
- KEY NOTES:**
- ◇ PROVIDE 3/4" THICK POLYETHYLENE BACKBOARD FOR ALL PANELS, CABINETS ETC. AS REQUIRED.
 - ◇ ALL WIRING SHALL BE WITHIN RIGID GALVANIZED STEEL CONDUITS IN ALL AREAS EXCEPT AS NOTED. ALL ELECTRICAL PANELS, DISCONNECT SWITCHES, PULL BOXES, J-BOXES, ETC. EXCEPT FOR CHEMICAL FEED ROOMS, PROCESS AREA, LOWER LEVEL BASEMENT PIPE GALLERY SHALL BE PROVIDED WITH NEMA 12 METAL CONSTRUCTION UNLESS OTHERWISE NOTED. ALL WIRING IN THE LOWER LEVEL BASEMENT PIPE GALLERY, AND PROCESS AREA SHALL BE WITHIN RIGID GALVANIZED STEEL CONDUIT, AND ALL ELECTRICAL PANELS, DISCONNECT SWITCHES, PULL BOXES, J-BOXES, ETC. SHALL BE PROVIDED WITH NEMA 4X STAINLESS STEEL METAL CONSTRUCTION UNLESS OTHERWISE NOTED. EMT CONDUIT SHALL BE ALLOWED IN THE FINISHED AREAS ABOVE HUNG CEILING ONLY. REFER TO SPECIFICATIONS FOR CONDUIT TYPE AND APPLICATION.
 - ◇ ALL WIRING IN THE CHEMICAL STORAGE & FEED ROOMS SHALL BE WITHIN PVC SCHEDULE 80 RACEWAY SYSTEM, EXCEPT FOR ANALOG SIGNAL WIRING (4-20MADC) TO BE WITHIN PVC COATED RGS CONDUIT AS NOTED. ALL ELECTRICAL ENCLOSURES, PULL BOXES, J-BOXES, ETC. SHALL BE NEMA 4X NON-METALLIC CONSTRUCTION UNLESS OTHERWISE NOTED.
 - ◇ PROVIDE (1) 1" CONDUIT WITH SPECIFIED VIDEO CABLE & CAT-6E CABLE FROM CAMERA TO SECURITY ALARM CONTROL PANEL (SACP).

GENERAL NOTE:

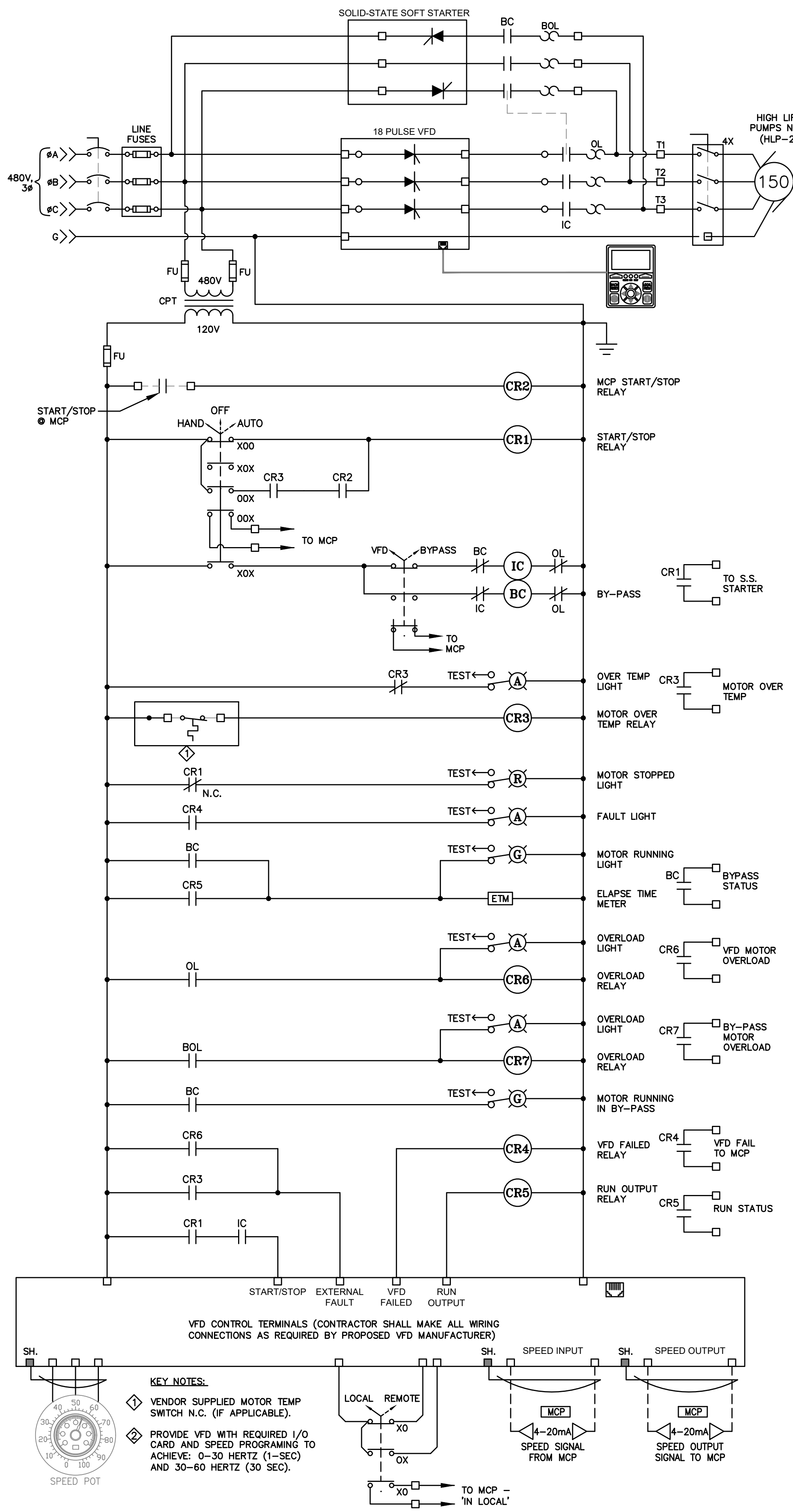
1. ELECTRICAL CONTRACTOR SHALL CAREFULLY COORDINATE EXACT LOCATION OF FIRE ALARM AND SECURITY ALARM PANELS, DEVICES WITH ALL PROCESS EQUIPMENT, INSTRUMENTATION DEVICES, CONTROL PANELS, HVAC EQUIPMENT, ELECTRIC MOTORS, LIGHTING FIXTURES ETC. WITH OWNER/ENGINEER IN FIELD. GENERAL CONTRACTOR AND VARIOUS TRADES BEFORE INSTALLATION AS REQUIRED.

ATTLEBORO WATER DEPT. ATTLEBORO, MA	WADING RIVER WATER TREATMENT PLANT	Down By: JWC Designed By: JWC Checked By: SMR Approved By: KLG
ELECTRICAL WTP BASEMENT AND MEZZANINE FIRE AND SECURITY ALARM PLANS		THIS DOCUMENT IS THE PROPERTY OF TATA & HOWARD, INC. AND ITS CLIENT. REPRODUCTION OR MODIFICATION WITHOUT WRITTEN CONSENT IS PROHIBITED.
Description		
Date		
Rev.		
T&H NO: 6193		
DATE: FEBRUARY 2025		
SCALE: AS NOTED		
20-E-9		

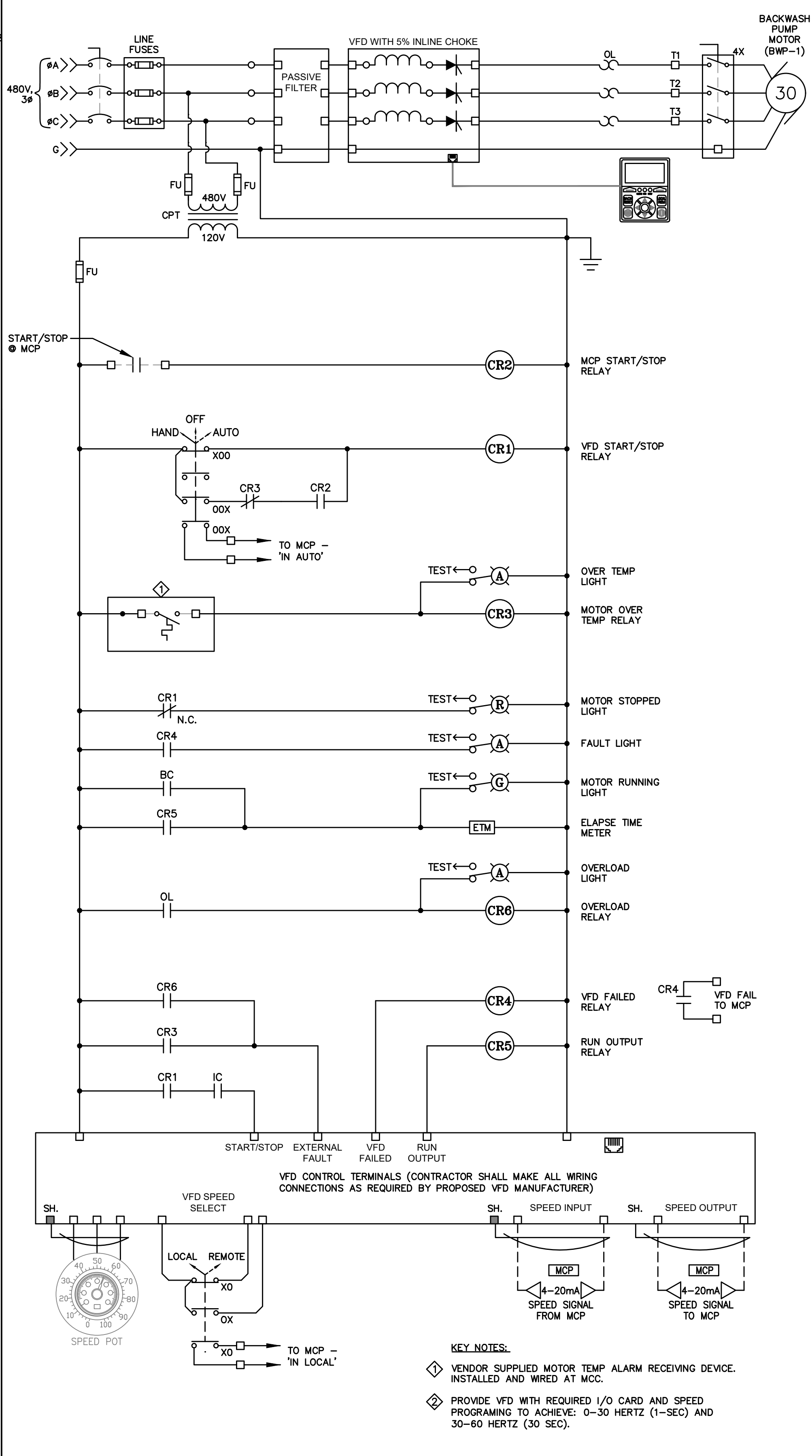
FILE: C:\SMR\Engineering\Tata & Howard\Attleboro MA\Wading River WTP\093-99- E1-EP-W04mg Feb 24, 2025 - 11:16am
 C:\SMR\Engineering\Tata & Howard\Attleboro MA\Wading River WTP\093-99- E1-EP-W04mg 2/24/2025 11:16 AM _COND



HIGH LIFT PUMP MOTOR NO.1 VFD W.D. (TYP. OF 1) 1
 SCALE: NONE 99-E-2



HIGH LIFT PUMP MOTOR NO.2 VFD W/BYPASS W.D. (TYP. OF 1) 2
 SCALE: NONE 99-E-2



BACKWASH PUMP MOTOR NO.1 VFD W.D. (TYP. OF 1) 3
 SCALE: NONE 99-E-2

ATTLEBORO WATER DEPT.
 ATTLEBORO, MA

WADING RIVER
 WATER TREATMENT PLANT

Approved By: SMR
 Down By: JWC
 Designed By: JWC

**ELECTRICAL
 WIRING DIAGRAMS
 AND DETAILS**

THIS DOCUMENT IS THE PROPERTY OF TATA & HOWARD, INC. AND ITS CLIENT. REPRODUCTION OR ADAPTATION WITHOUT WRITTEN CONSENT IS PROHIBITED.

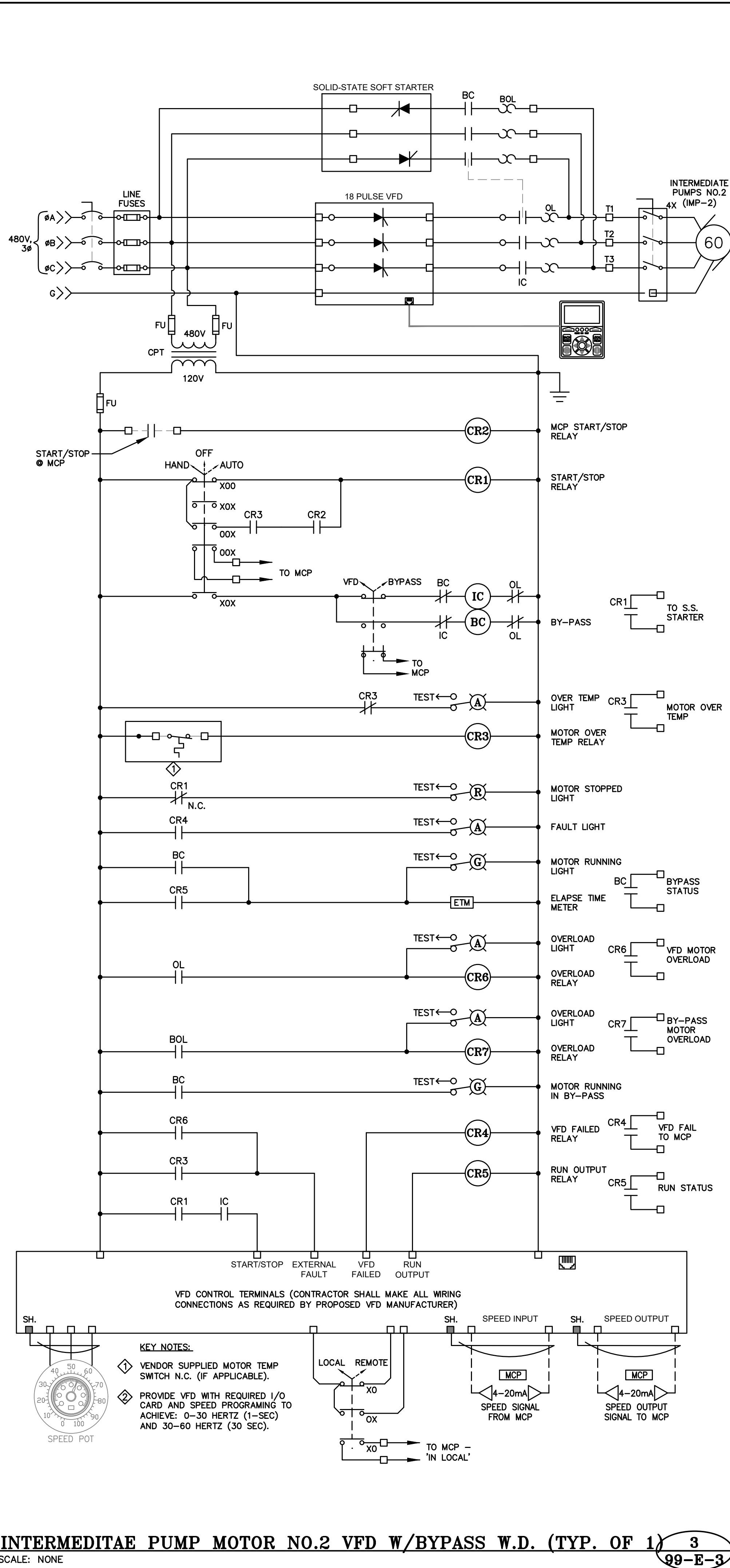
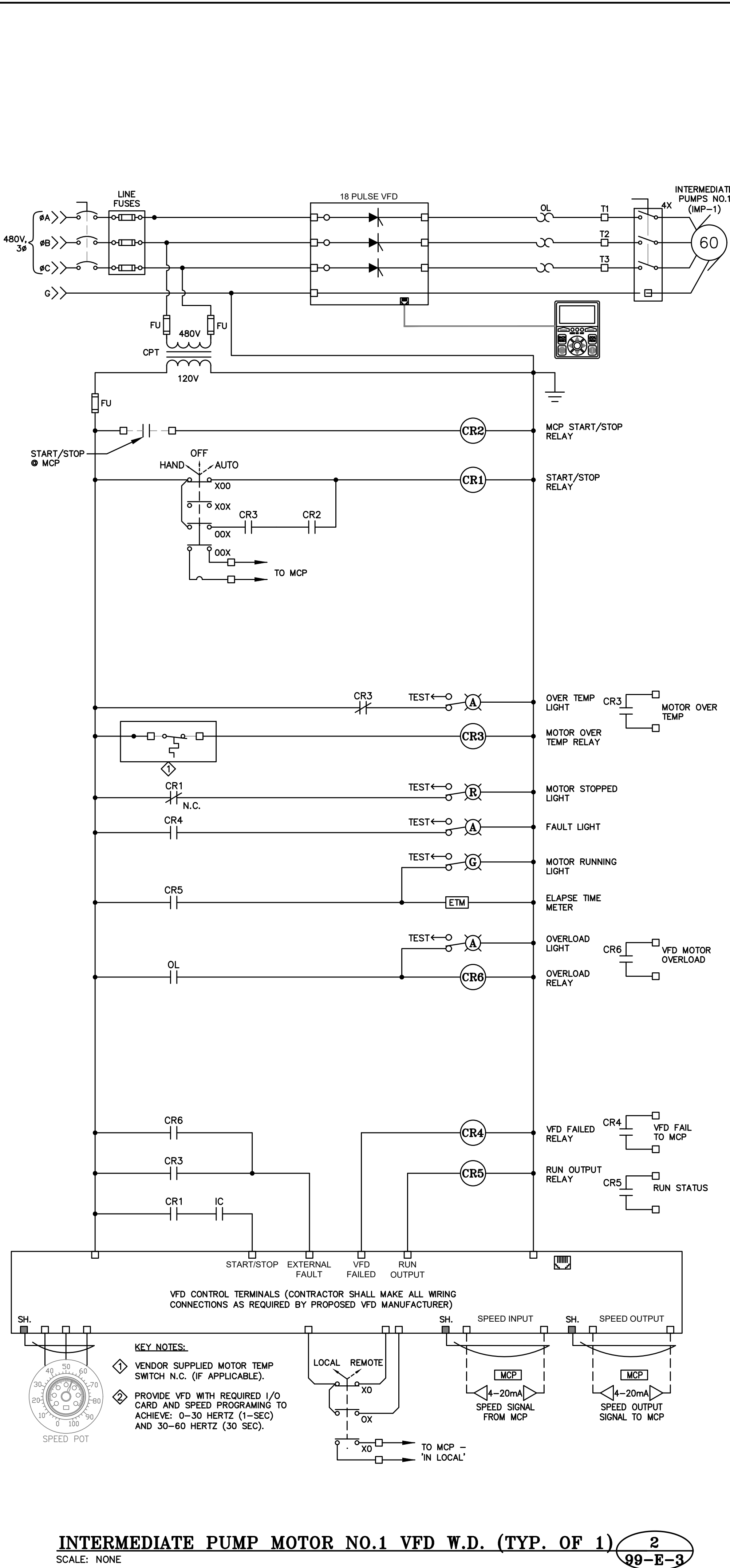
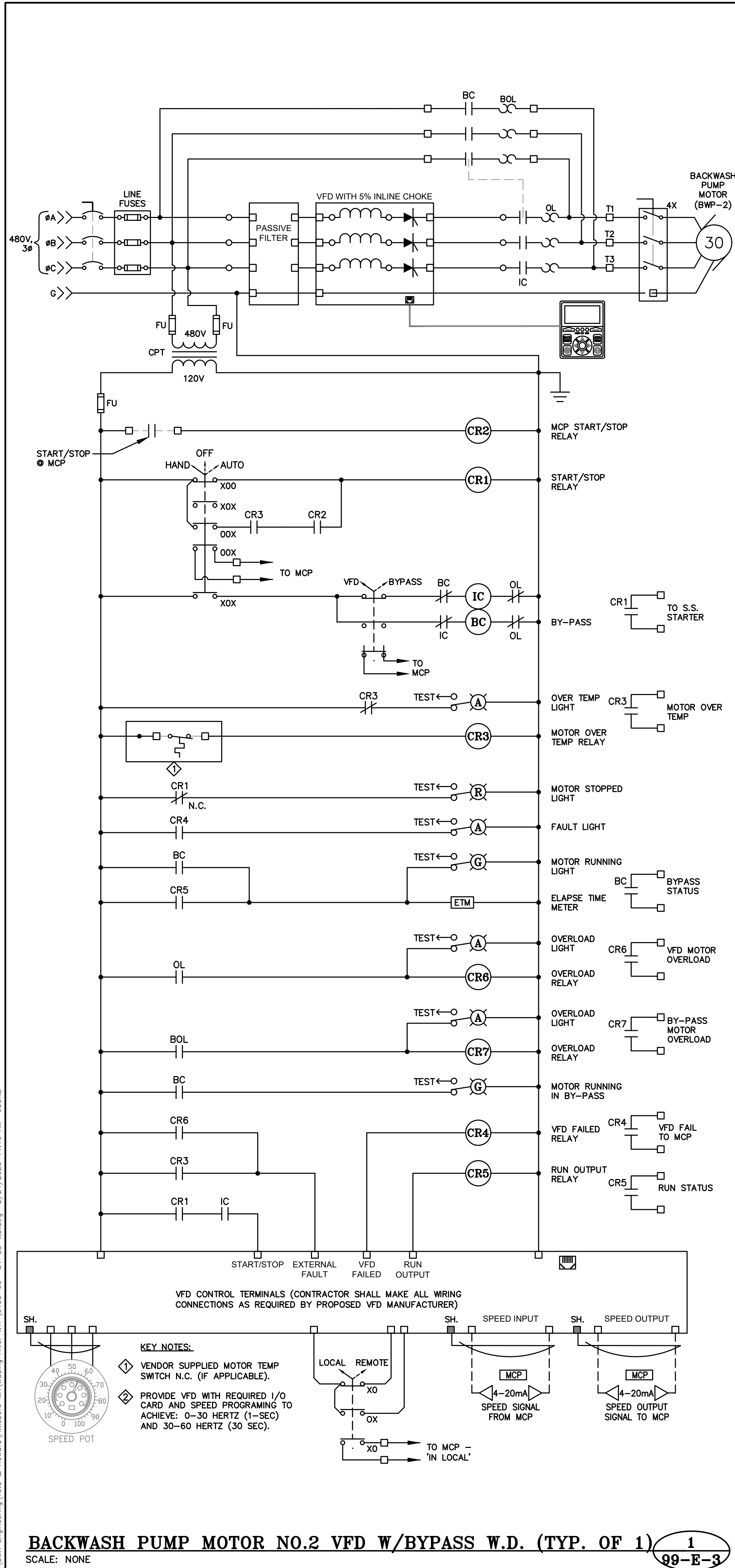
Rev.	Date	Description

SMK ENGINEERING, PC
 SPECIALTY ELECTRICAL CONSULTING
 Electrical, Instrumentation & Control Systems Engineering
 1000 North Main Street, Suite 200
 Attleboro, MA 01915
 Phone: 508-851-1111
 Fax: 508-851-1112
 Website: www.smkeng.com

TATA & HOWARD

T&H NO.: 6193
 DATE: FEBRUARY 2025
 SCALE: AS NOTED

99-E-2



FILE: C:\SMR\Engineering\Tata & Howard\Attleboro MA\Wading River WTP\03-99-E-1-99-W00.dwg Feb 24, 2025 - 11:16am
 C:\SMR\Engineering\Tata & Howard\Attleboro MA\Wading River WTP\03-99-E-1-99-W00.dwg 2/24/2025 11:16 AM JCOND

ATTLEBORO WATER DEPT.
 ATTLEBORO, MA
 WADING RIVER
 WATER TREATMENT PLANT

Electrical
 WIRING DIAGRAMS
 AND DETAILS

THE DOCUMENT IS THE PROPERTY OF TATA & HOWARD, INC. AND ITS CLIENT. REPRODUCTION OR ADAPTATION WITHOUT WRITTEN CONSENT IS PROHIBITED.

Rev.	Date	Description

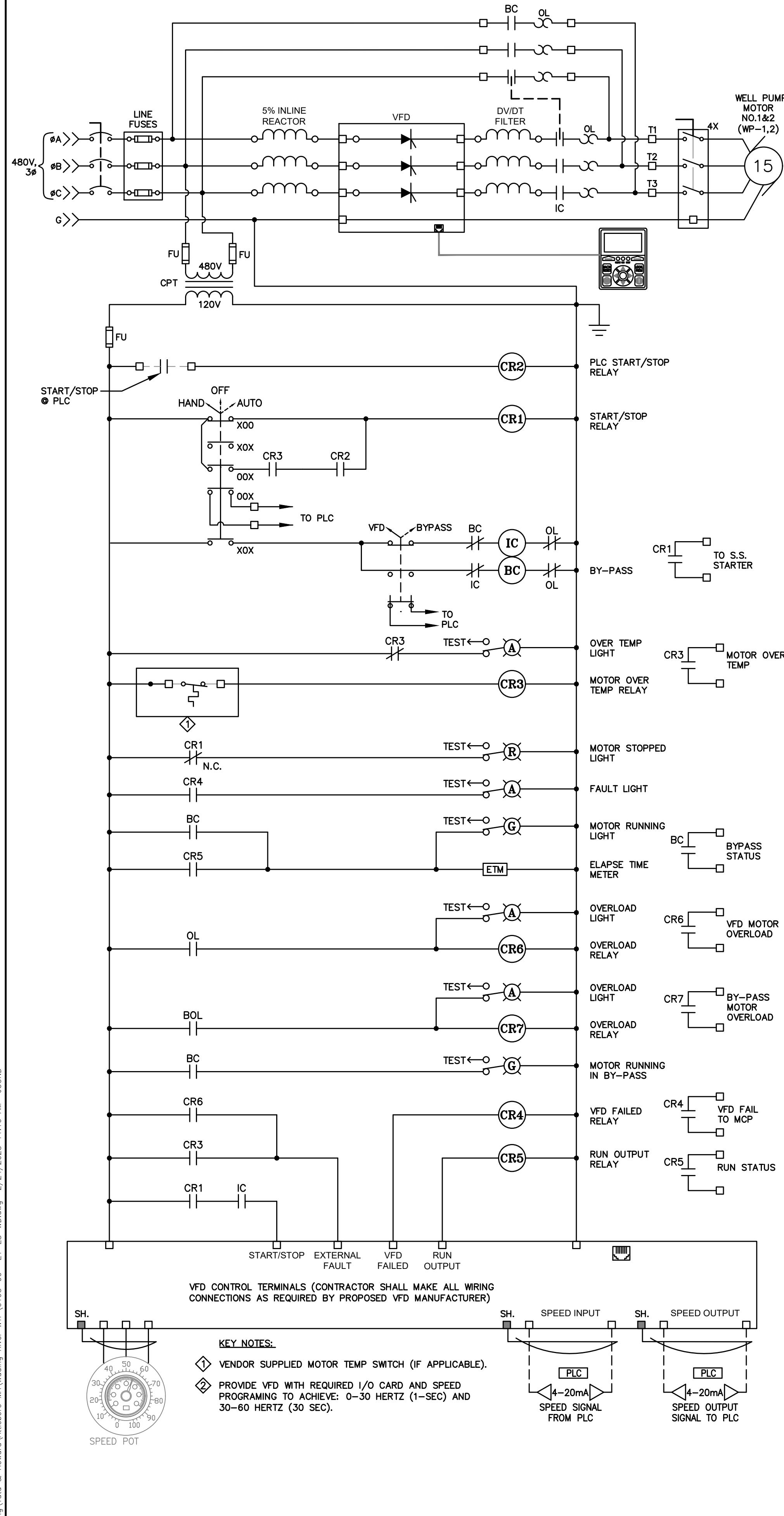
SMK ENGINEERING, PC
 Electrical, Instrumentation
 & Control Systems Engineering
 1000 North Main Street
 Attleboro, MA 01915
 Phone: 508-851-1000
 Fax: 508-851-1001
 E-MAIL: info@smkeng.com

TATA & HOWARD

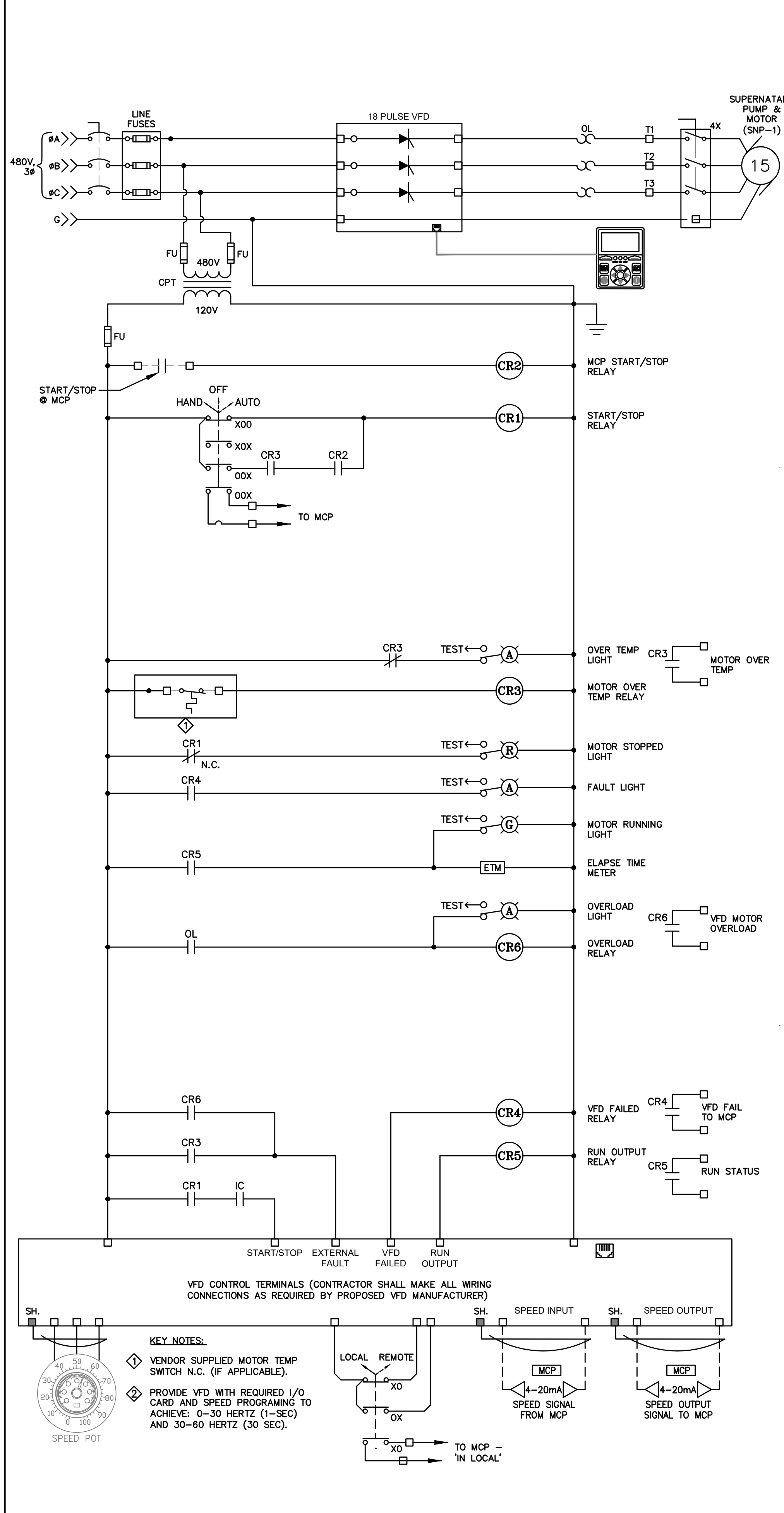
T&H NO: 6193
 DATE: FEBRUARY 2025
 SCALE: AS NOTED

99-E-3

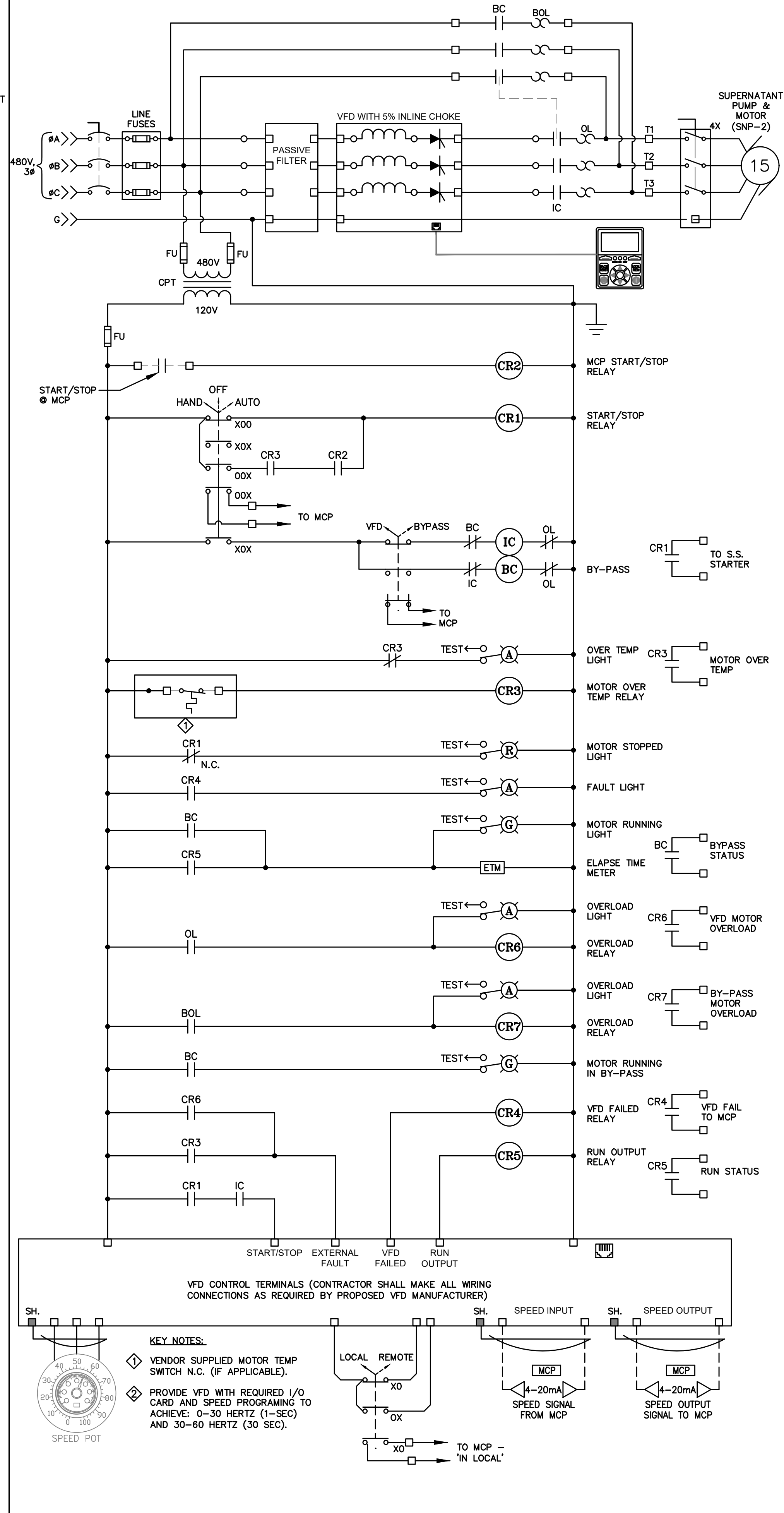
FILE: C:\SMK\Engineering\Tata & Howard\Attleboro MA\Wading River WTP\03-99-E-1-ES-W04mg Feb 24, 2025 - 11:16am
 C:\SMK\Engineering\Tata & Howard\Attleboro MA\Wading River WTP\03-99-E-1-ES-W04mg 2/24/2025 11:16 AM JCOND



WELL PUMP MOTORS 1 & 2 VFD WIRING DIAGRAM (TYP.) 1
 SCALE: NONE 99-E-4



SUPERNATANT PUMP MOTOR NO.1 VFD WIRING DIAGRAM (TYP.) 2
 SCALE: NONE 99-E-4



SUPERNATANT PUMP MOTOR NO.2 VFD WIRING DIAGRAM (TYP.) 3
 SCALE: NONE 99-E-4

ATTLEBORO WATER DEPT.
 ATTLEBORO, MA
 WADING RIVER
 WATER TREATMENT PLANT

Approved By: SMR
 Checked By: JWC
 Down By: JWC

ELECTRICAL WIRING DIAGRAMS AND DETAILS

THIS DOCUMENT IS THE PROPERTY OF TATA & HOWARD, INC. AND ITS CLIENT. REPRODUCTION OR ADAPTATION WITHOUT WRITTEN CONSENT IS PROHIBITED.

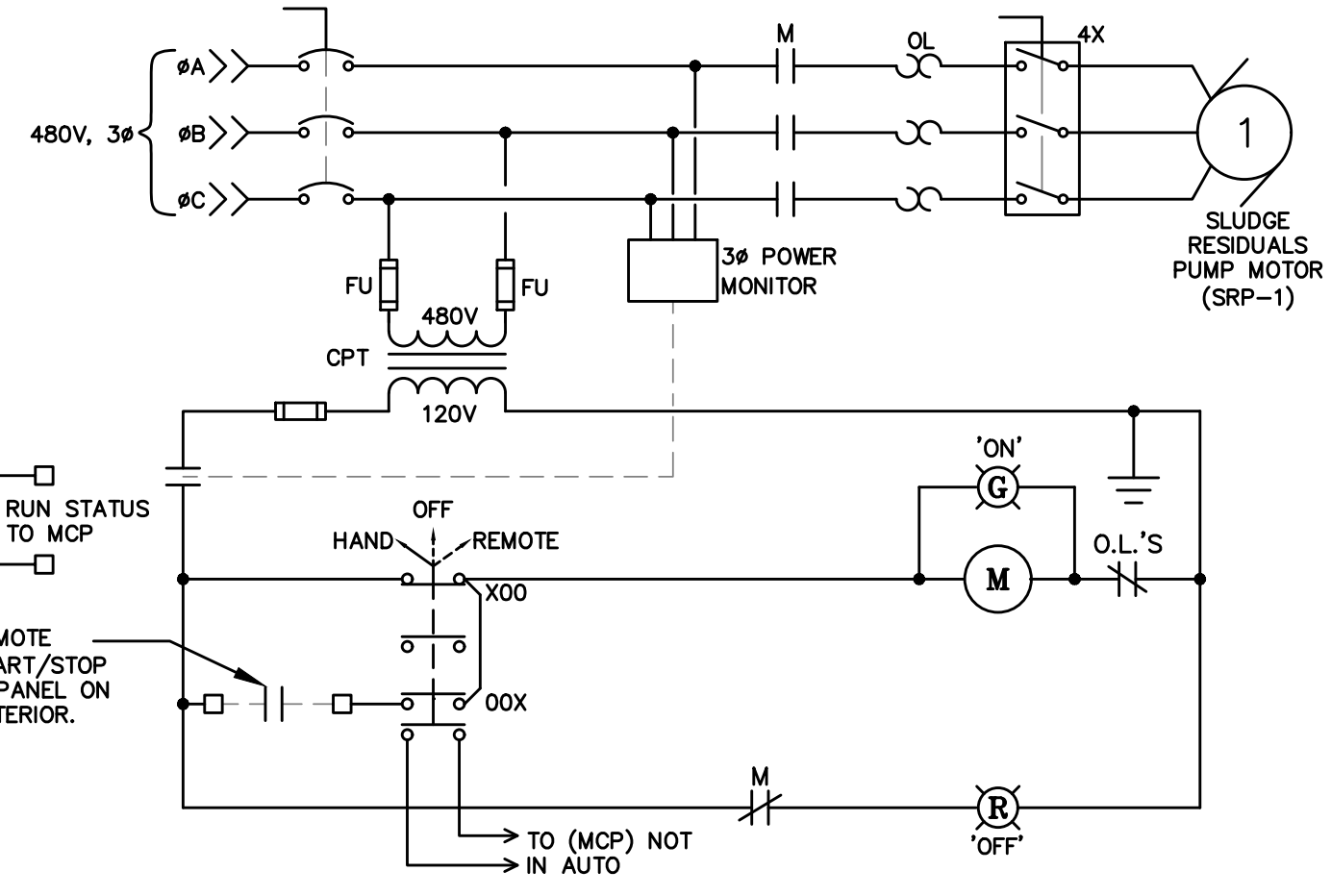
Rev.	Date	Description

SMK ENGINEERING, PC
 Electrical, Instrumentation & Control Systems Engineering
 100 North Main Street, Attleboro, MA 01915
 Phone: (508) 851-1000
 Fax: (508) 851-1001
 Website: www.smkeng.com

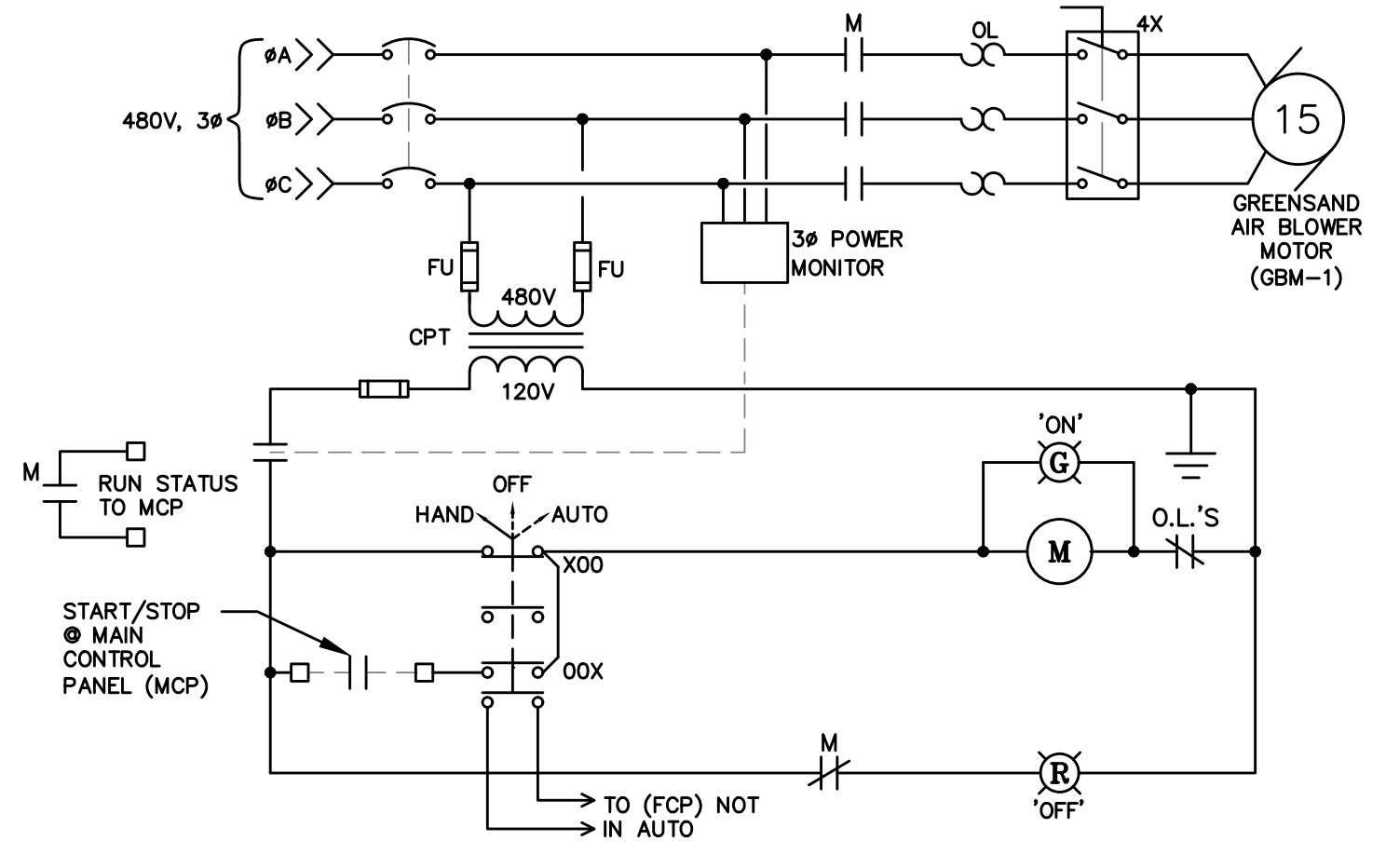
TATA & HOWARD

T&H NO: 6193
 DATE: FEBRUARY 2025
 SCALE: AS NOTED

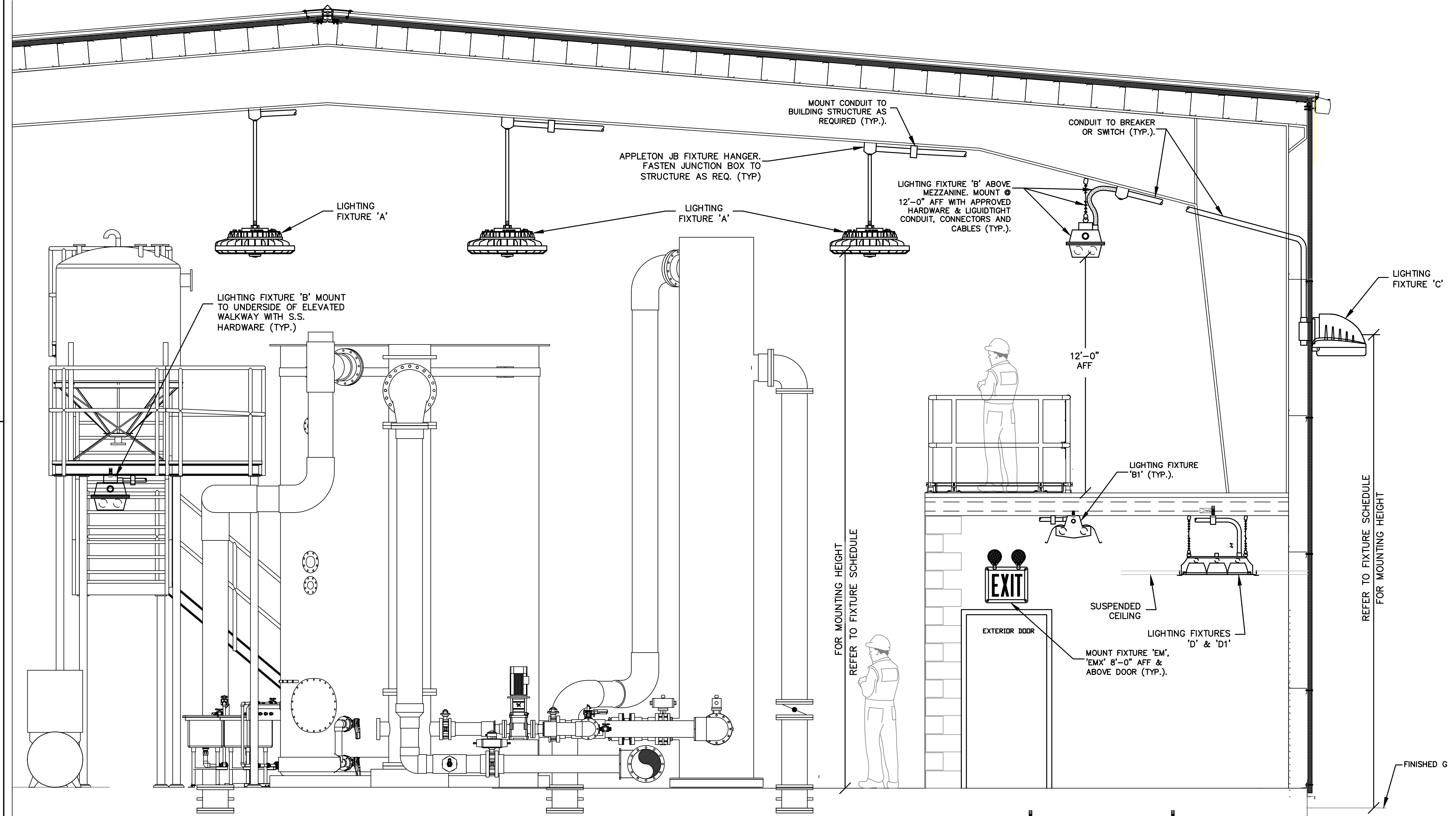
99-E-4



SLUDGE RESIDUAL PUMP MOTOR W.D. (TYP. OF 1) 3
SCALE: NONE 99-E-5



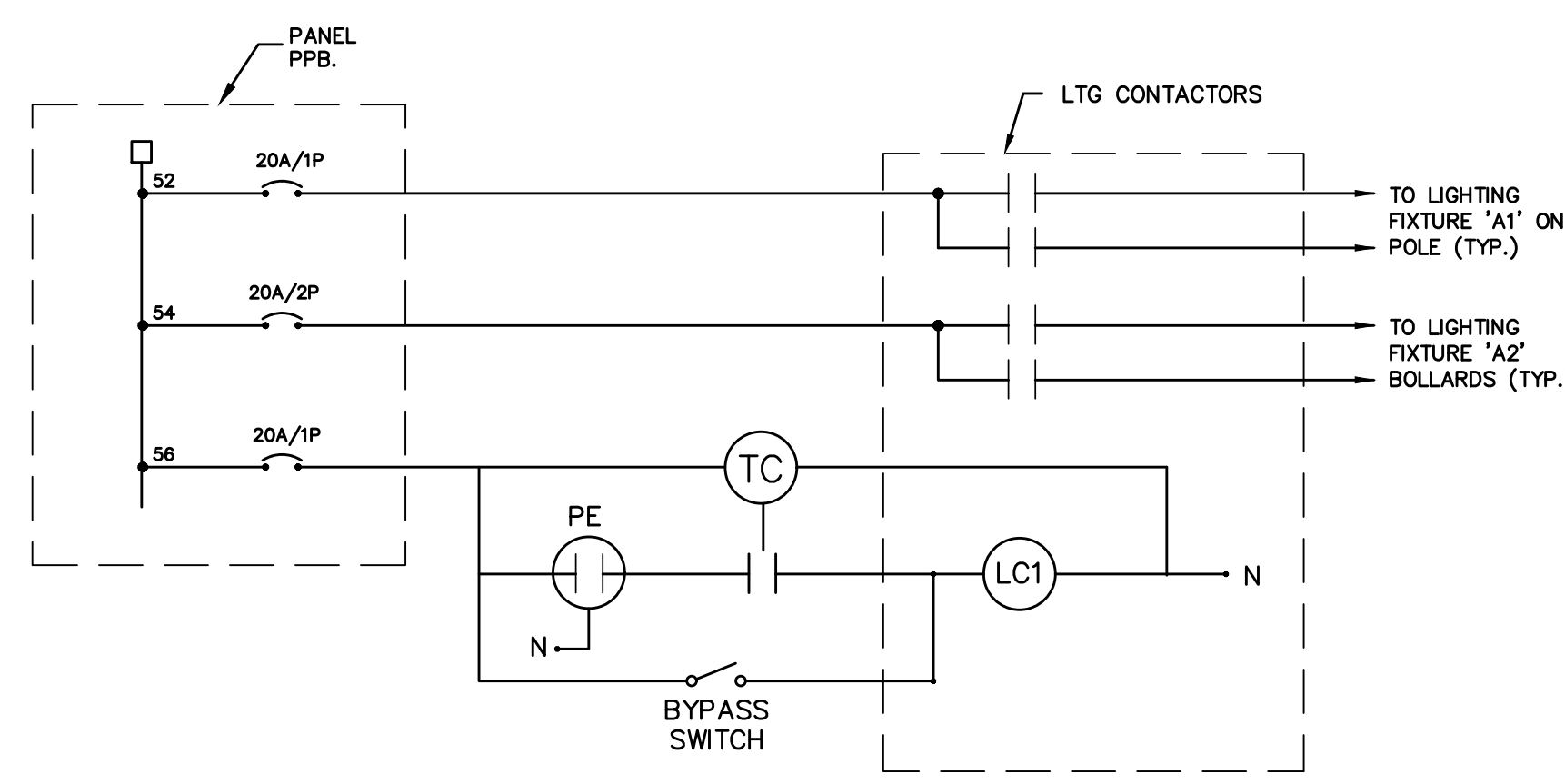
GREENSAND AIR BLOWER MOTOR W.D. (TYP. OF 1) 4
SCALE: NONE 99-E-5



LIGHTING FIXTURE MOUNTING DETAILS (TYP.) 1
SCALE: NONE 99-E-5

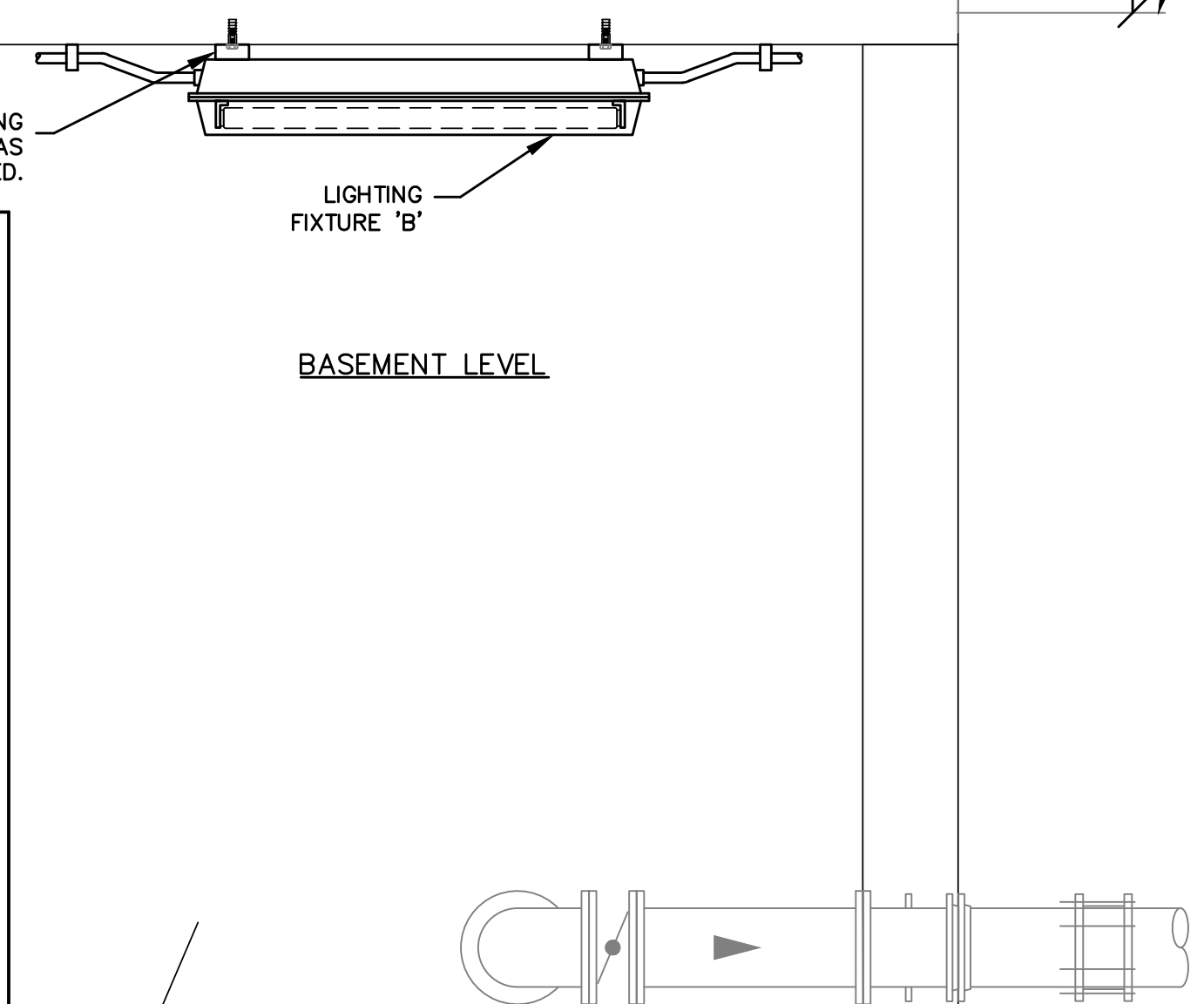
PROJECT LIGHTING FIXTURE SCHEDULE								
TYPE	MANUFACTURER	MODEL NO.	COLOR	LAMPS	MOUNTING	TYPE	VOLTAGE	REMARKS
A	HUBBELL	HBL-72LU-A2-35K-W-070-ND-GR-ENCG OR APPROVED EQUAL	WHITE	LED	PENDANT	LED	120	MOUNT 24'-0" ABOVE FINISHED FLOOR
A1	CREE EDGE INC	ARE-EDR-2M-DA-08-UL-BZ-525-40K WITH 2700K COLOR PRORATED 630 LUMENS.	BRONZE	LED	POLE	LED	120	MOUNT 16'-0" AFG WITH POLES BY VALMONT INC. MODEL 1508-406T-P-D1 -DDB DARK BRONZE POWDER COATED.
A2	WILLIAMS OUTDOOR LIGHTING	OSC1OR-LED*PH11/827-VG-DT-NC-DBZ-SF-ED-AD-UNV WITH 2700K COLOR PRORATED 370 LUMENS.	BRONZE	LED	BOLLARD	LED	120	MOUNT FIXTURES 6" AFG ON CONCRETE BASE.
B	HUBBELL	LXEM-440-VL-RFA-E-U-SSL OR APPROVED EQUAL	WHITE	LED	PENDANT	LED	120	(1) 4' FIXTURE (CORROSIVE AND WET LOCATIONS) COORDINATE WITH MECHANICAL, PROCESS, EQ.
B1	HUBBELL	LCS4-35-HL-EU-CSWG4 OR APPROVED EQUAL	WHITE	LED	PENDANT	LED	120	(1) 4' FIXTURE (DRY LOCATIONS) COORDINATE WITH MECHANICAL, PROCESS, EQ.
C	SPAULDING	LMC-30LU-3K-3-2-PC4 OR APPROVED EQUAL	BRONZE	LED	SURFACE/WALL	LED	120	PROVIDE WITH PHOTO CELL, & MANUAL SWITCH. MOUNT SURFACE ON WALL 12" ABOVE DOOR A.F.G.
D	FINELITE	HPR-LED-A-2X4-H-935-DCO-96LG-120-FC-10%-C1-96LC OR APPROVED EQUAL	WHITE	LED	RECESSED	LED	120	MOUNT IN DROP CEILING PROVIDE GRID AS REQUIRED
D1	FINELITE	HPR-LED-A-2X4-H-935-DCO-96LG-120-FC-10%-C1-96LC OR APPROVED EQUAL	WHITE	LED	RECESSED	LED	120	MOUNT IN DROP CEILING PROVIDE GRID AS REQUIRED
EM	CARPENTER	NX12-36-E-N1 OR APPROVED EQUAL	GRAY	LED	WALL AT 8'-0"	EMERGENCY	120	MOUNT SURFACE ON WALL ON SIDE OF DOOR AT 8' A.F.F. PROVIDE AN ADDITIONAL REMOTE HEAD.
EMX	CARPENTER	NXLED-EX-2H OR APPROVED EQUAL	GRAY	LED	WALL AT 8'-0"	EXIT WITH EMERGENCY	120	MOUNT SURFACE ON WALL ON SIDE OF DOOR AT 8' A.F.F. PROVIDE AN ADDITIONAL REMOTE HEAD.

LIGHTING FIXTURE SCHEDULE 2
SCALE: NONE 99-E-5



- SYMBOLS:**
- PE: PHOTOELECTRIC CELL, TORK MODEL 2100, INTERMATIC MODEL K4136M, RAB MODEL GTS00 OR APPROVED EQUAL.
 - TC: TIME CLOCK, 7-DAY DIGITAL WITH NEMA 1 ENCLOSURE. TORK MODEL D2S200A, INTERMATIC MODEL PE153P, RELIANCE MODEL 431, OR APPROVED EQUAL.
 - LC1: LIGHTING CONDUCTOR, 4-POLE WITH NEMA 1 ENCLOSURE. SQUARE 'D' TYPE 'LG', GE MODEL CR360L, ASCO MODEL 918, OR APPROVED EQUAL.

POLE & BOLLARED LIGHTING CONTROLS W.D. 5
SCALE: NONE 99-E-5



ATTLEBORO WATER DEPT.
ATTLEBORO, MA
WADING RIVER
WATER TREATMENT PLANT

ELECTRICAL
WIRING DIAGRAMS
AND DETAILS

THE DOCUMENT IS THE PROPERTY OF TATA & HOWARD, INC. AND ITS CLIENT. REPRODUCTION OR ADAPTATION WITHOUT WRITTEN CONSENT IS PROHIBITED.

1/2023 ADDENDUM NO.3

Rev. Date Description

1/2023 2-19-25

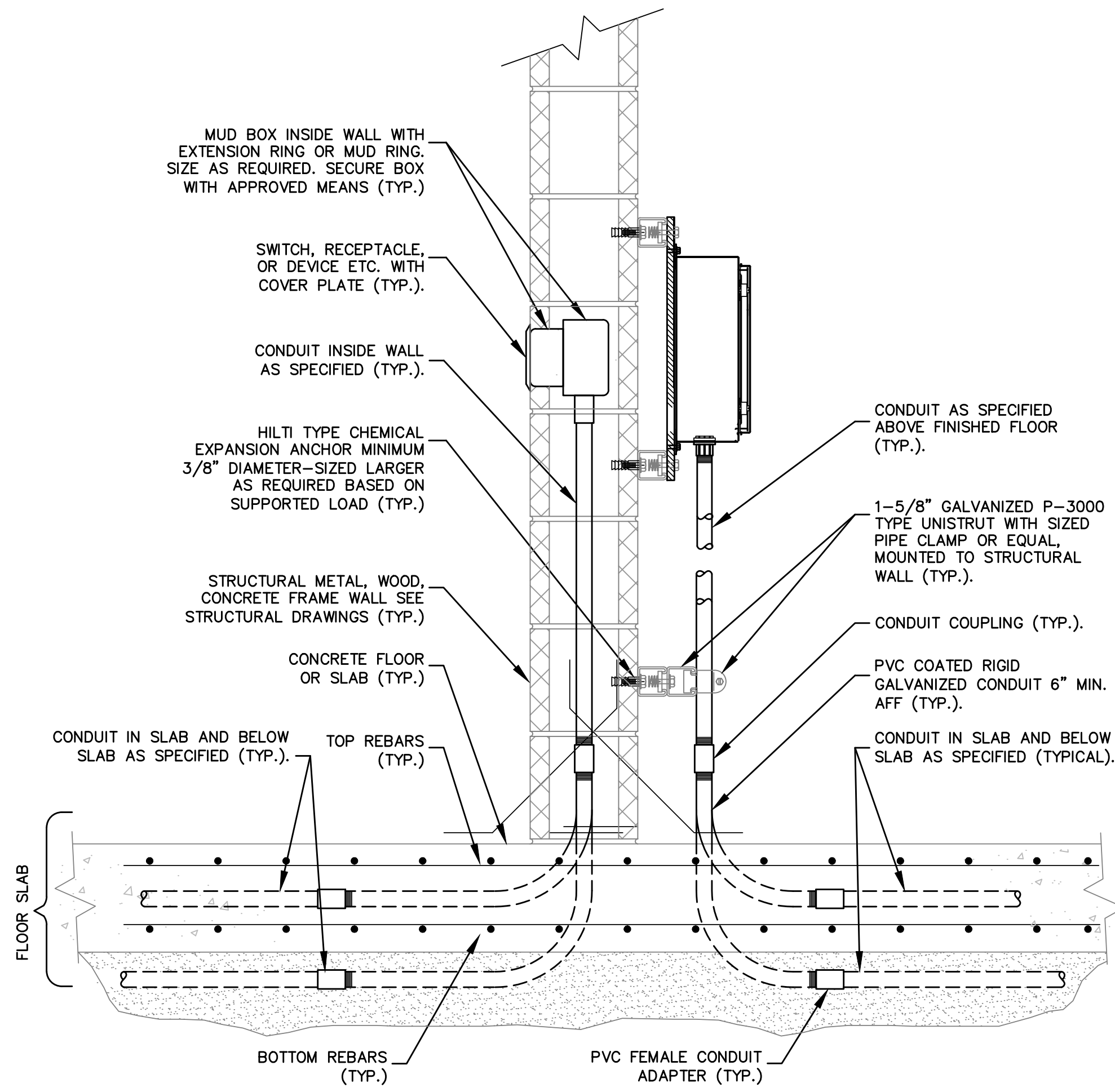
SMK ENGINEERING, PC
Electrical, Instrumentation & Control Systems Engineering
1000 Main Street, Attleboro, MA 01915
Phone: 508-851-1000
Fax: 508-851-1001
www.smk-engineering.com

TATA & HOWARD

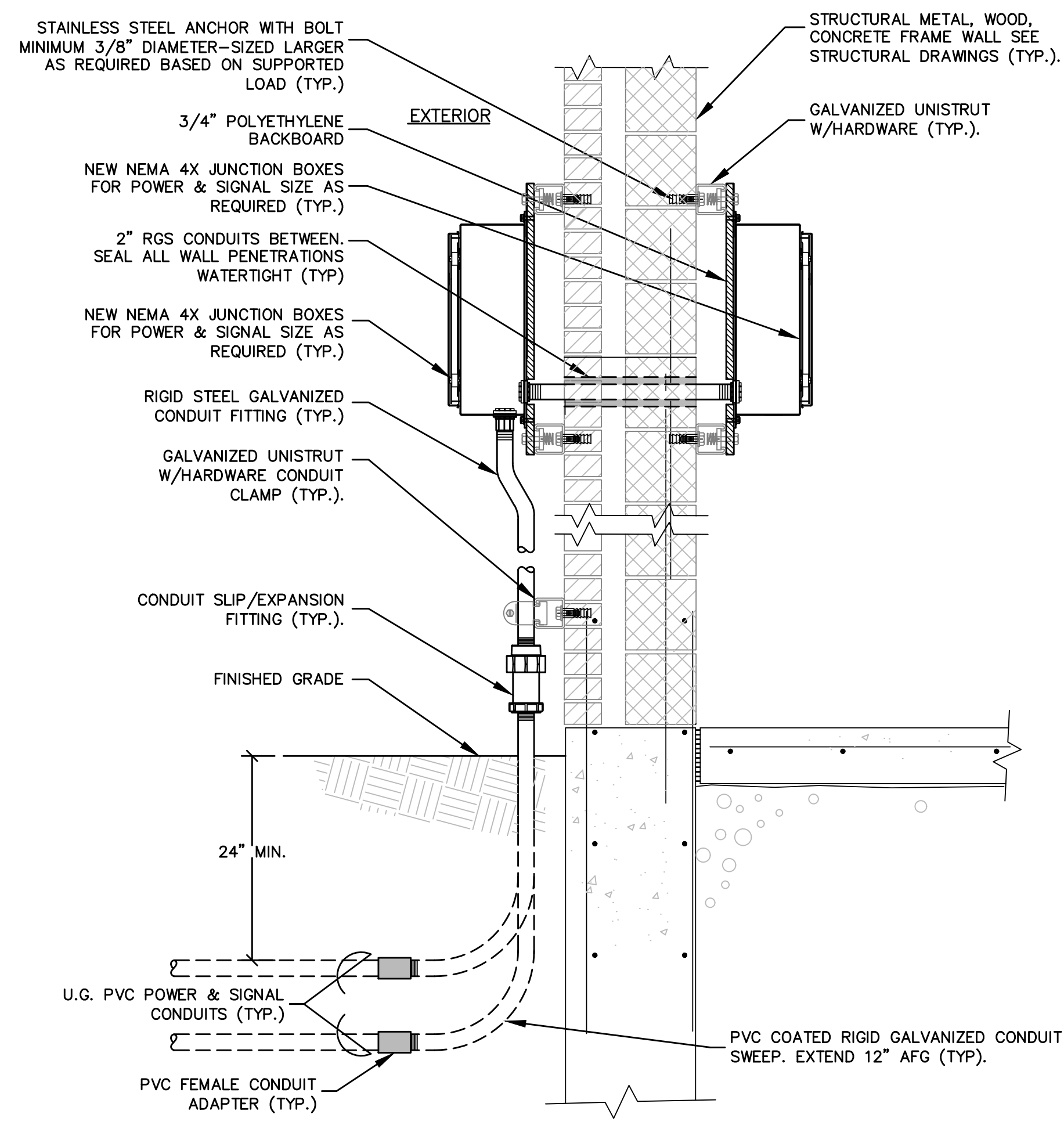
T&H NO.: 6193
DATE: FEBRUARY 2025
SCALE: AS NOTED

99-E-5

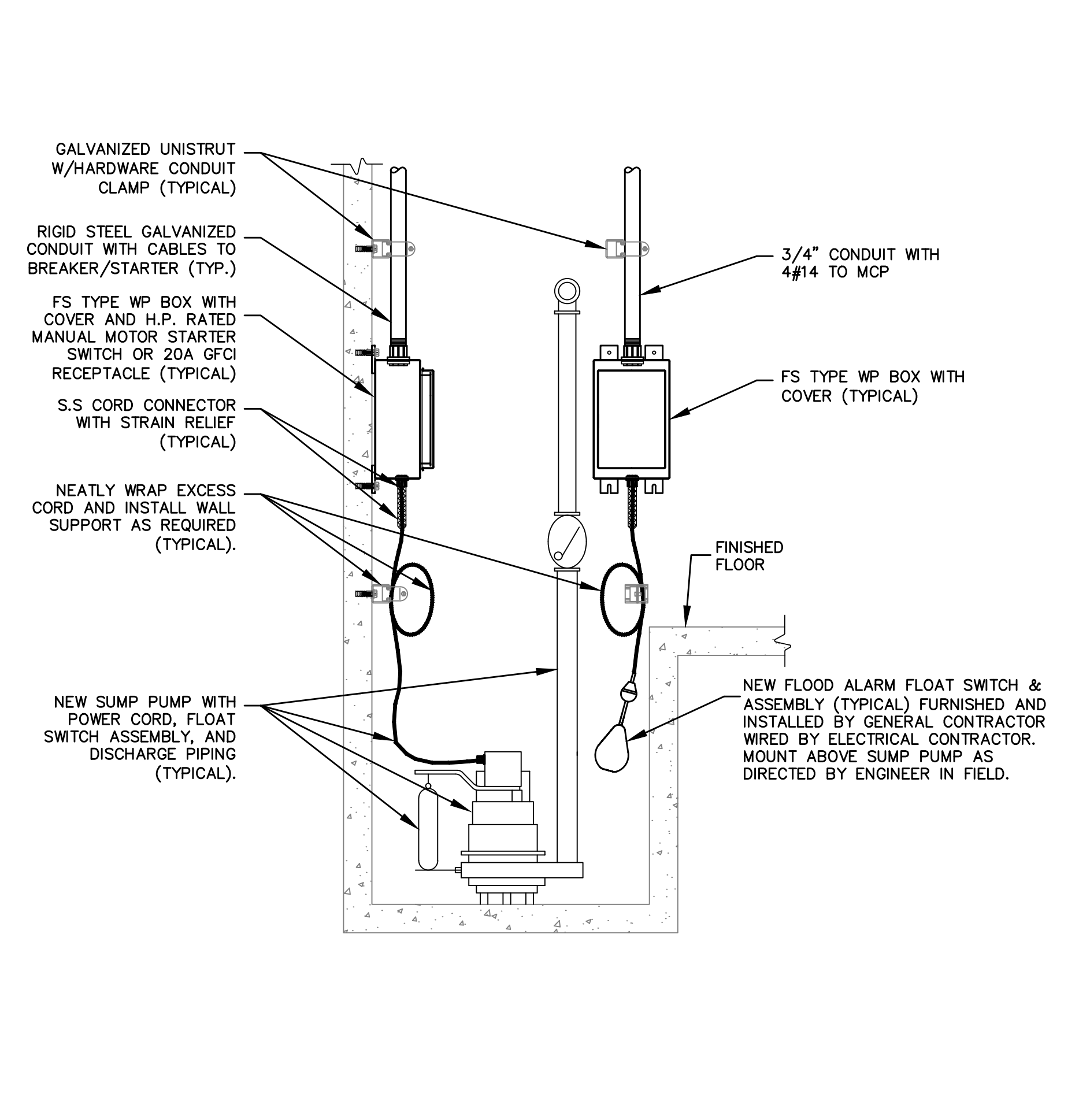
FILE: C:\SMK\Engineering\Tata & Howard\Attleboro MA\Wading River WTP\99-E-5-99-E-5-ET-EP-W00.dwg, Rev. 24, 2025 - 11:06am
C:\SMK\Engineering\Tata & Howard\Attleboro MA\Wading River WTP\99-E-5-99-E-5-ET-EP-W00.dwg, 2/24/2025 11:16 AM, JCOND



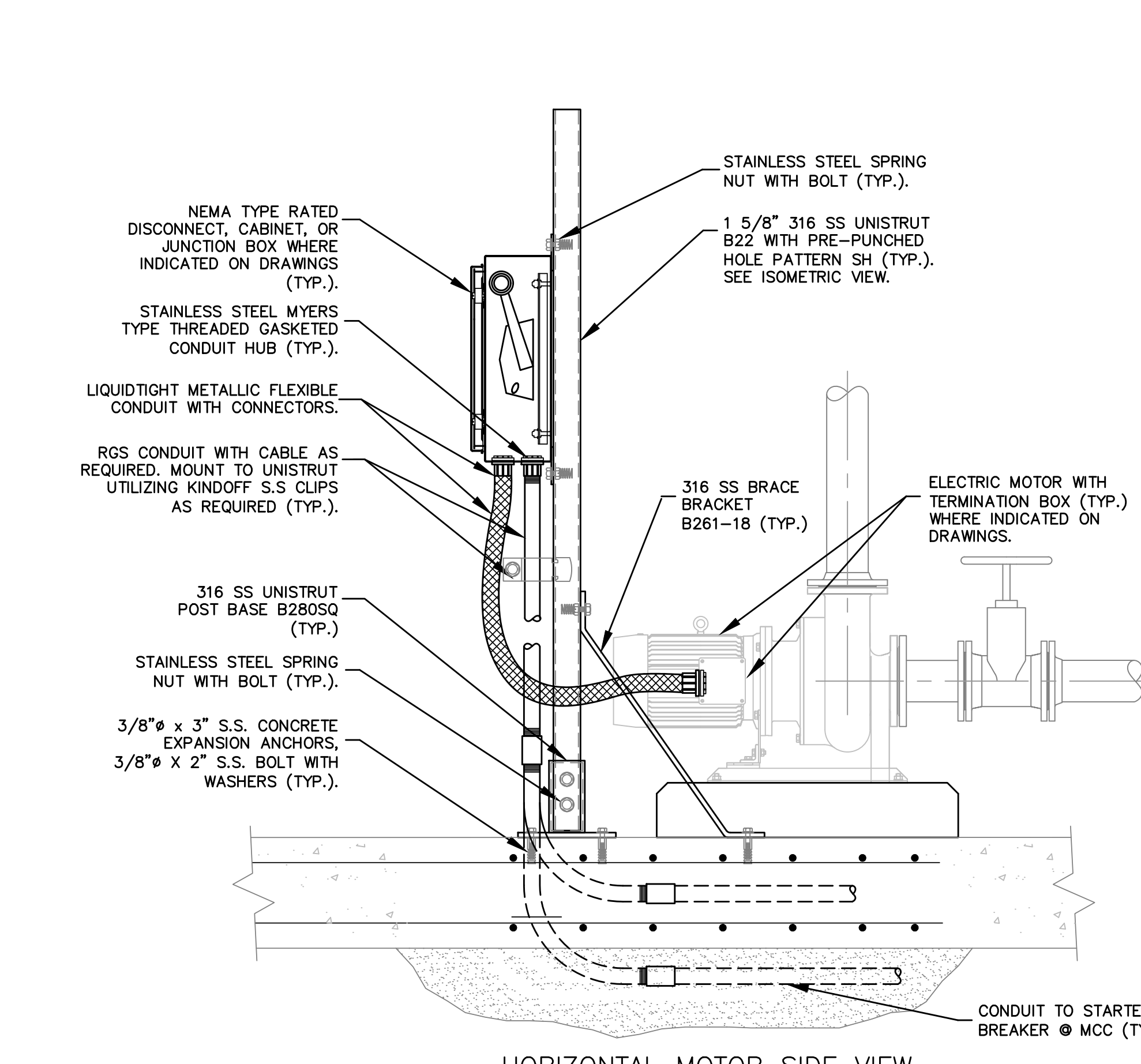
CONDUIT IN AND BELOW SLAB INSTALLATION DETAIL (TYP.) 1
 SCALE: NONE 99-E-6



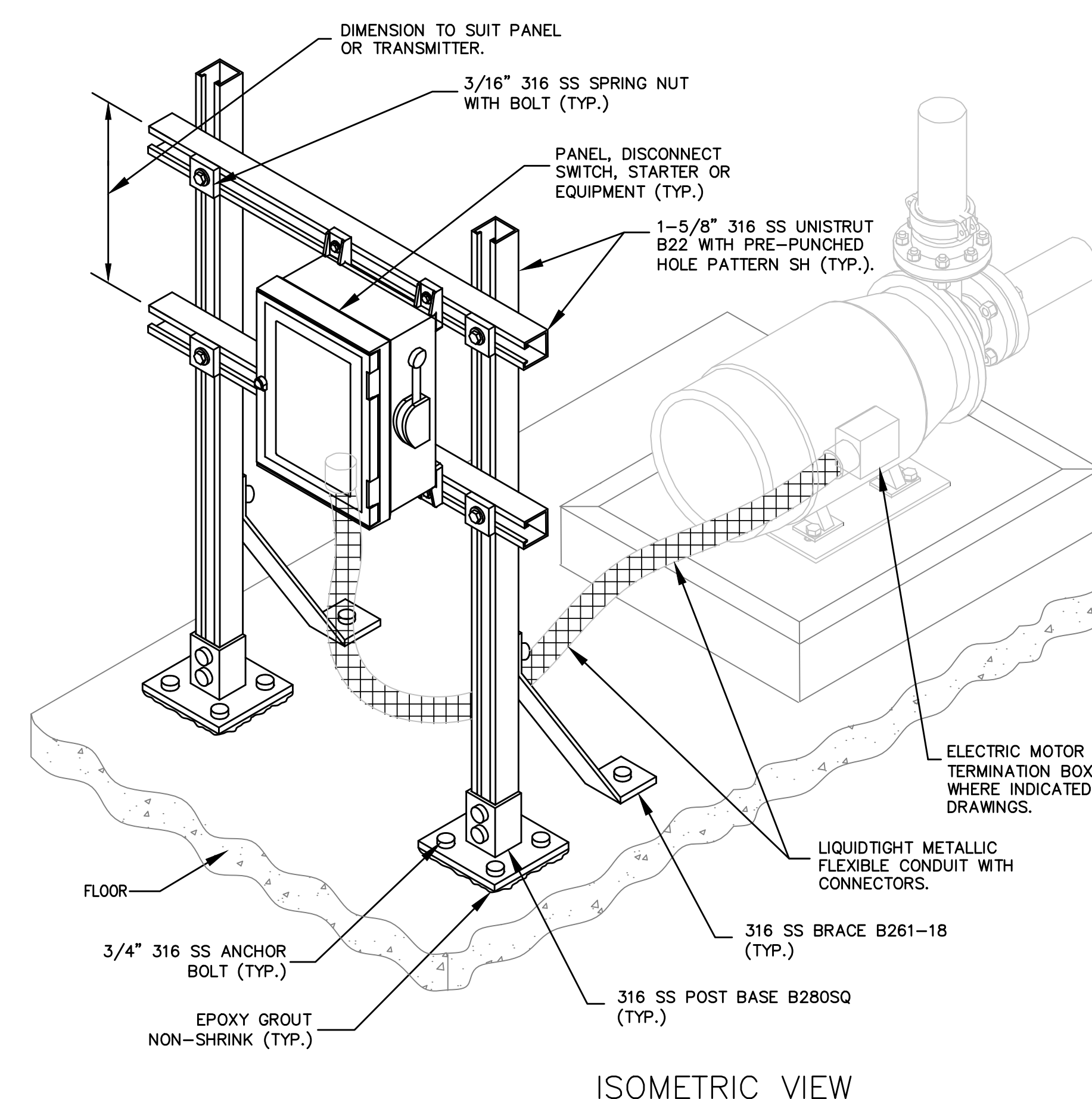
CONDUIT PENETRATION THRU EXTERIOR WALLS (TYP.) 2
 SCALE: NONE 99-E-6



POWER & SIGNAL CONNECTIONS @ SUMP PUMP (TYP.) 4
 SCALE: NONE 99-E-6

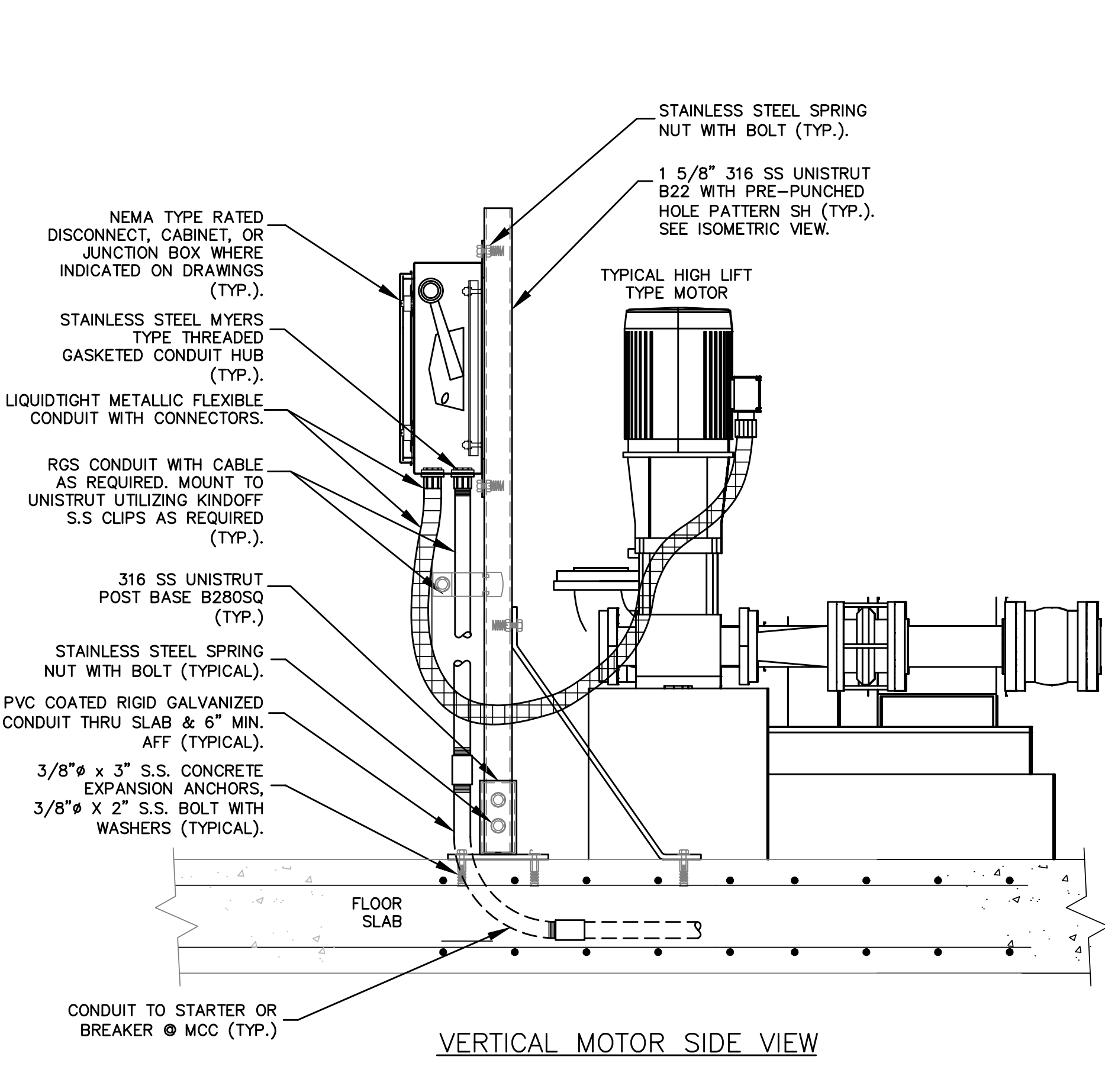


HORIZONTAL MOTOR SIDE VIEW



ISOMETRIC VIEW

ELECTRICAL CONNECTION DETAILS AT MOTORS (TYP.) 3
 SCALE: NONE 99-E-6



VERTICAL MOTOR SIDE VIEW

ATTLEBORO WATER DEPT.
 ATTLEBORO, MA
 WADING RIVER
 WATER TREATMENT PLANT

DESIGNED BY: JWC
 CHECKED BY: SMR
 APPROVED BY: SMR

THE DOCUMENT IS THE PROPERTY OF TATA & HOWARD, INC. AND ITS CLIENT. REPRODUCTION OR ADAPTATION WITHOUT WRITTEN CONSENT IS PROHIBITED.

Rev.	Date	Description

99-E-6

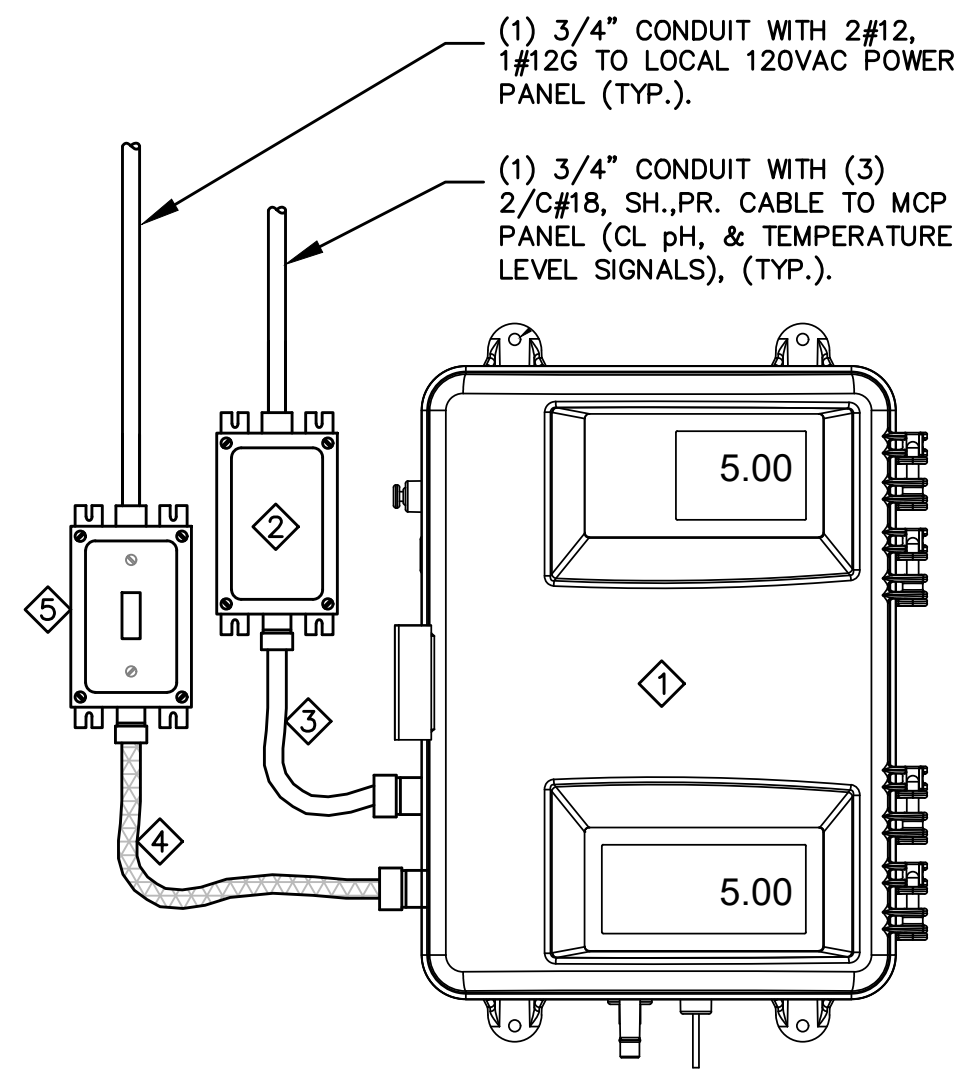
T&H NO: 6193
 DATE: FEBRUARY 2025
 SCALE: AS NOTED

TATA & HOWARD

SMK ENGINEERING, PC
 Electrical, Instrumentation & Control Systems Engineering
 1000 Main Street, Suite 200
 Attleboro, MA 01915
 Phone: 508-351-1000
 Fax: 508-351-1001
 Email: info@smkeng.com

2-19-25

FILE: C:\SMK\Engineering\Tata & Howard\Attleboro MA\Wading River WTP\0932-99-E-1-99-00.dwg - E1-99-00.dwg 2/24/2025 11:16 AM JCOND



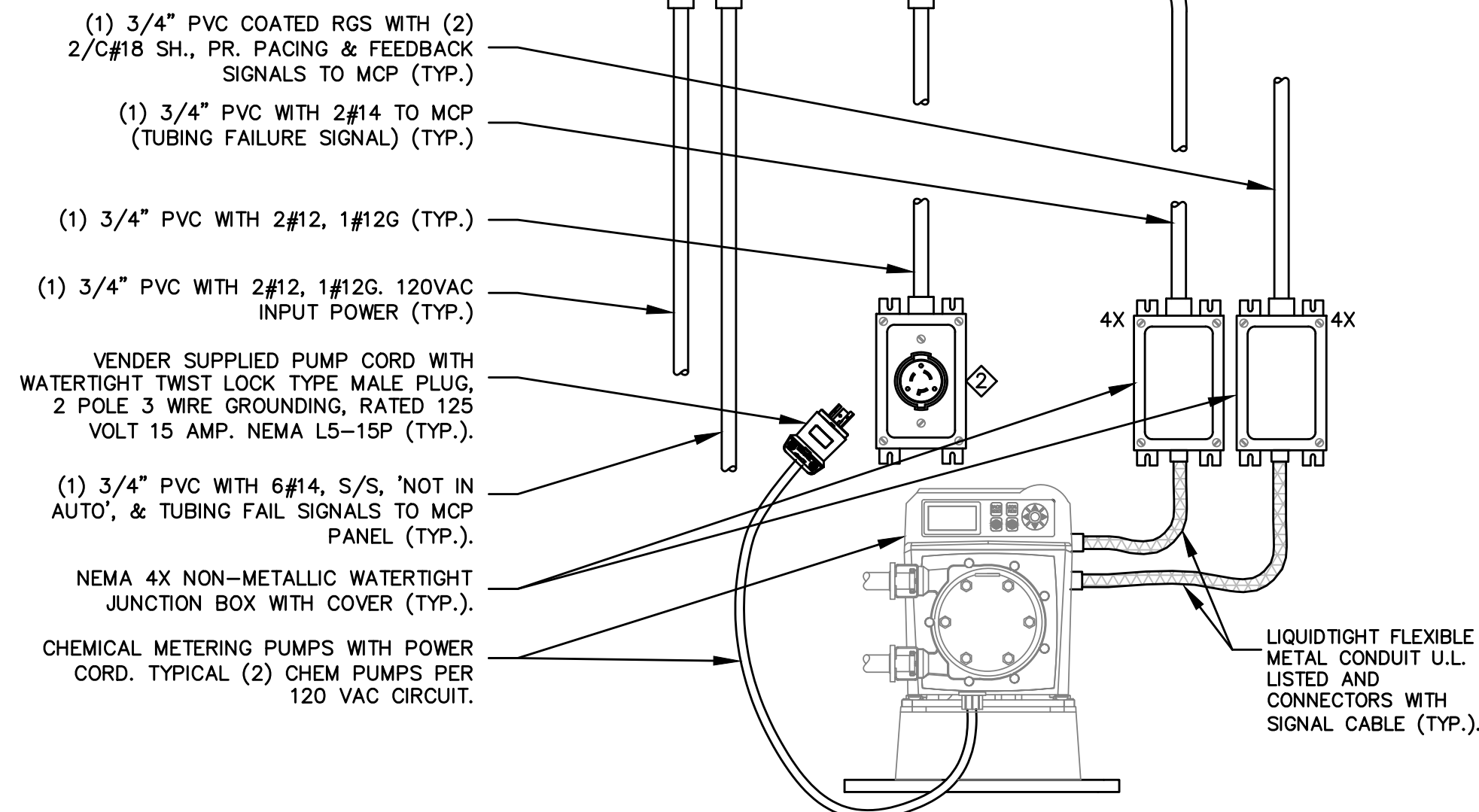
- KEY NOTES:**
- ① ANALYZER PANEL FURNISHED & INSTALLED BY GC. WIRED BY ELECTRICAL CONTRACTOR.
 - ② NEMA 4X JUNCTION BOX (TYP.), MOUNT TO WALL USING S.S. HARDWARE.
 - ③ LIQUIDTIGHT METALLIC FLEXIBLE CONDUIT WITH U.L. LISTED CONNECTORS AND SIGNAL CABLE (TYP.).
 - ④ LIQUIDTIGHT NON-METALLIC FLEXIBLE CONDUIT WITH U.L. LISTED CONNECTORS AND POWER CABLES (TYP.).
 - ⑤ NEMA 4X JUNCTION BOX WITH LOCAL 20 AMP RATED SINGLE POLE SWITCH (TYP.).
 - ⑥ COORDINATE WITH I/C DRAWINGS FOR EXACT NUMBER OF SIGNALS FOR EACH ANALYSER

POWER & SIGNAL CONNECTIONS @ ANALYZER (TYP.) 1
99-E-7

SCALE: NONE

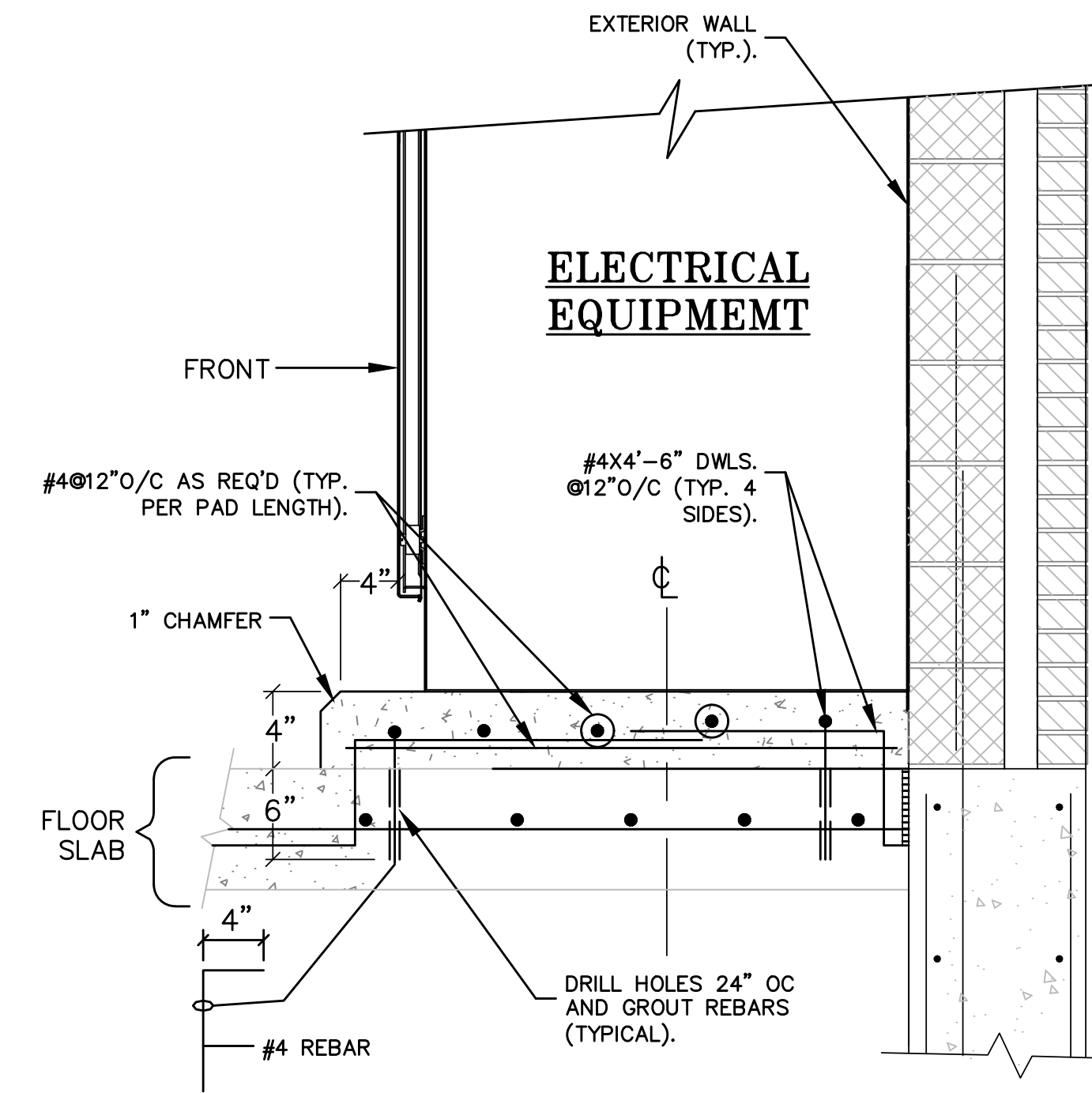
KEY NOTES:

- ① VENDOR SUPPLIED METERING PUMP CONTROL PANEL (TYP.), FURNISHED BY GENERAL CONTRACTOR, & INSTALLED WIRED BY ELECTRICAL CONTRACTOR.
- ② PROVIDE FEMALE TWIST LOCK TYPE SINGLE RECEPTACLE, RATED 125 VOLT 15 AMP, NEMA L5-15R WITH WATERTIGHT BOX AND SAFETY SHROUD COVER. FURNISHED, INSTALLED & WIRED BY ELECTRICAL CONTRACTOR. CONTRACTOR TO MATCH METERING PUMP MALE CORD END AS REQUIRED.



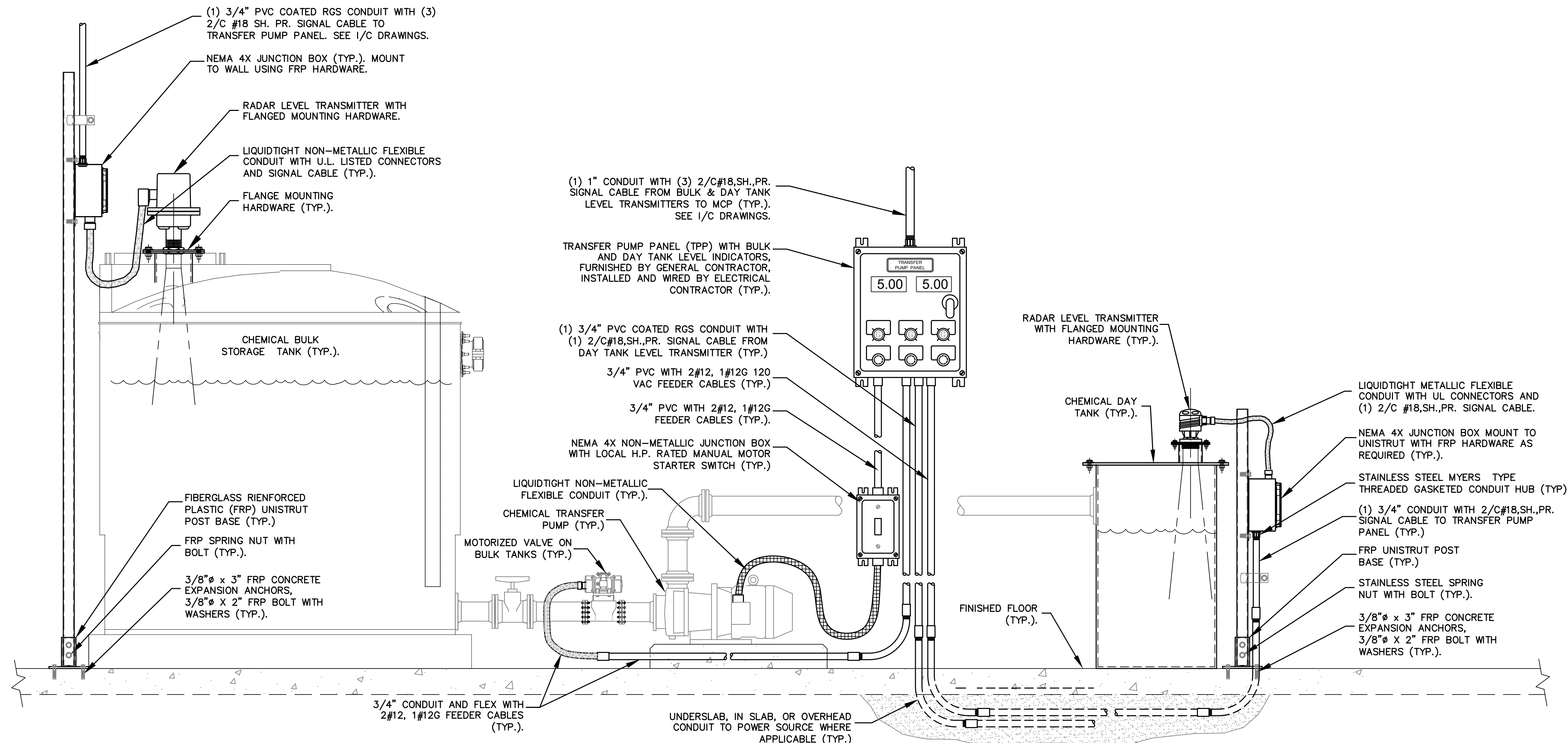
METERING PUMP INSTALLATION DETAIL (TYP.) 2
99-E-7

SCALE: NONE



4\"/>

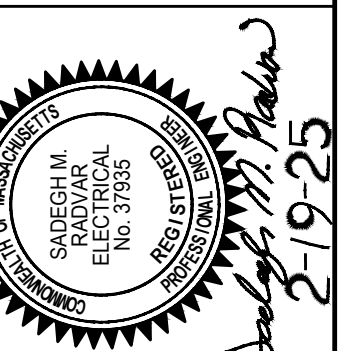
SCALE: NONE

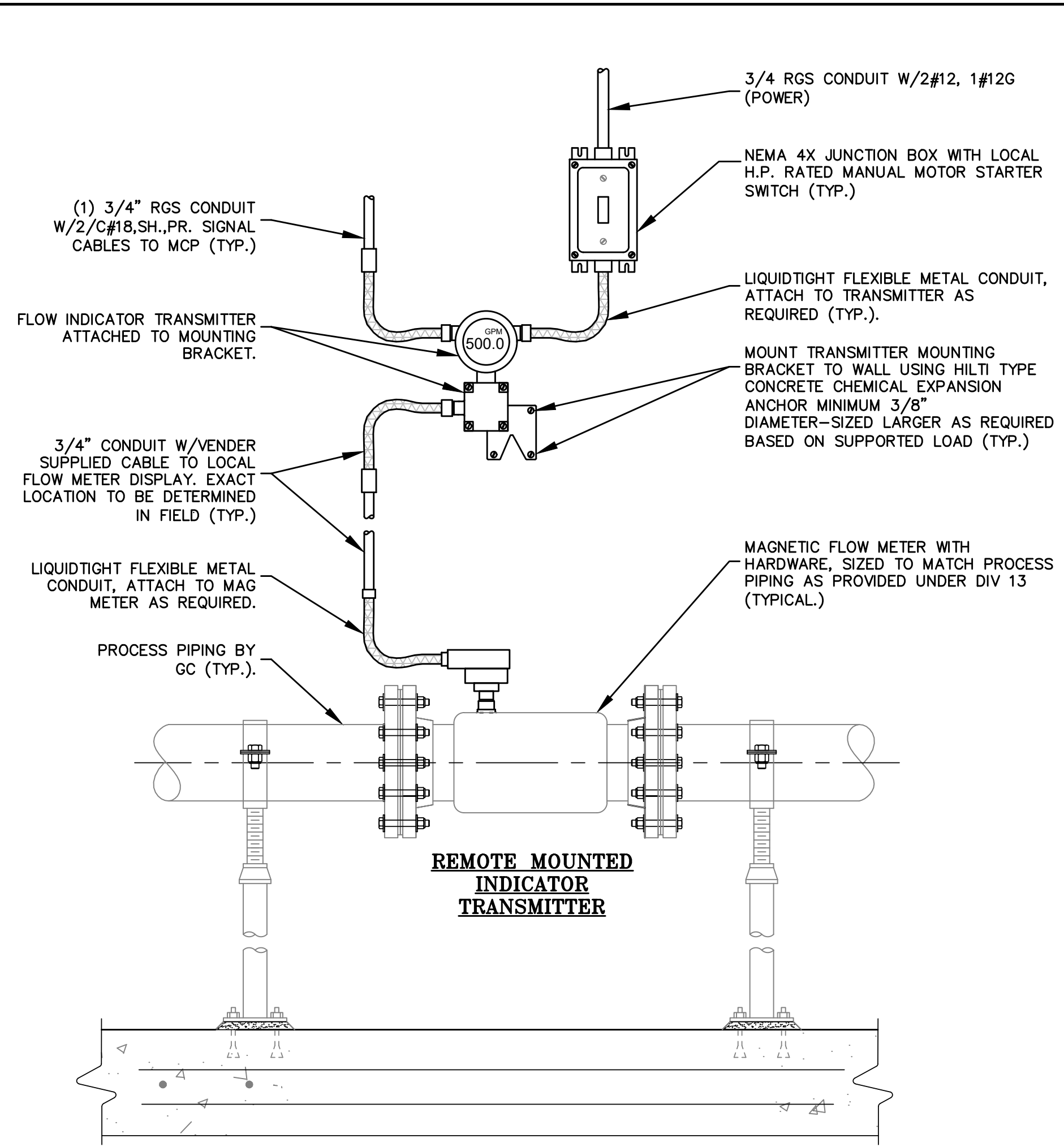


POWER AND SIGNAL CONNECTIONS AT CHEMICAL FEED SYSTEMS (TYP.) 3
99-E-7

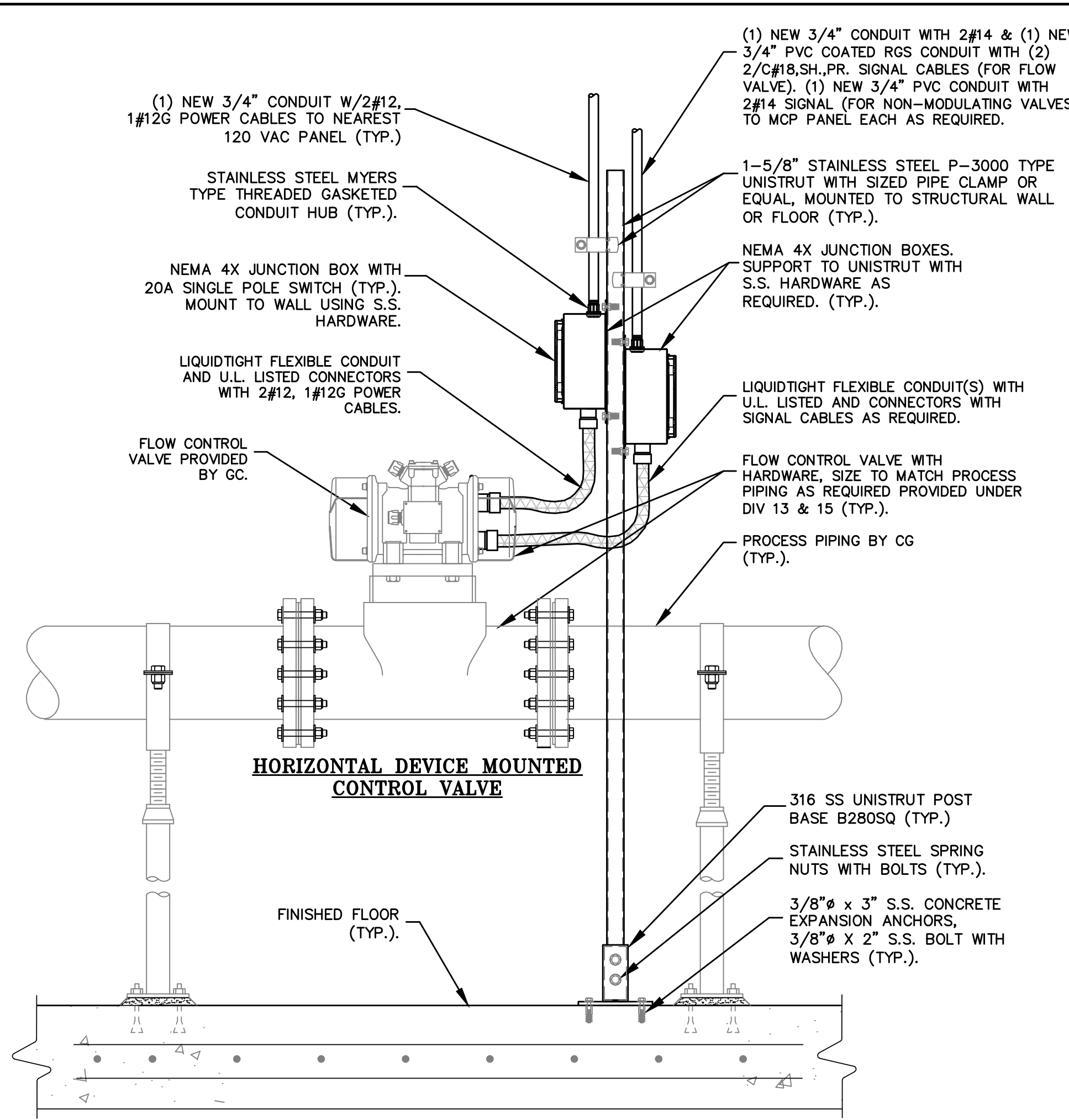
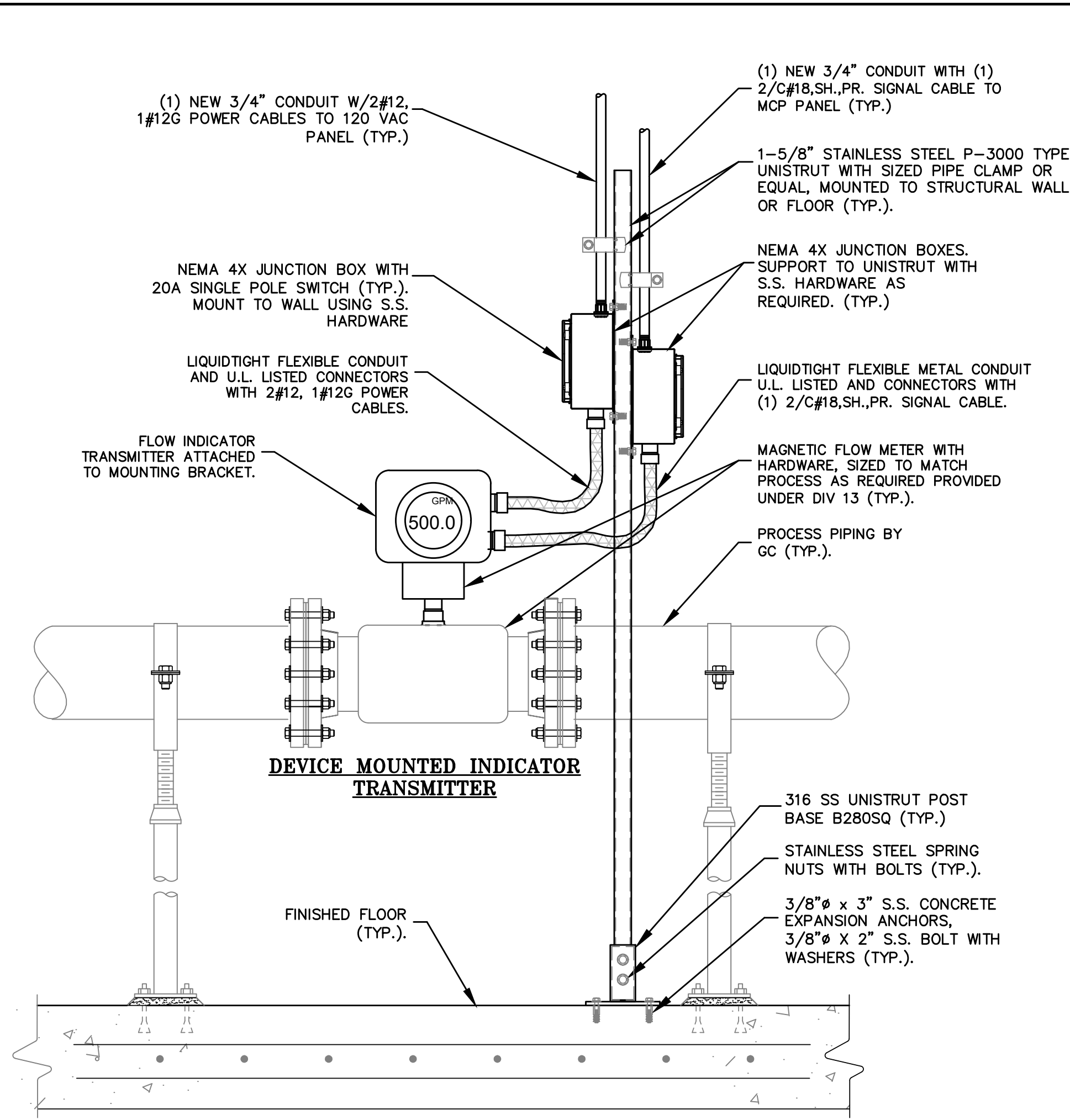
SCALE: NONE

Description	Date	Rev.

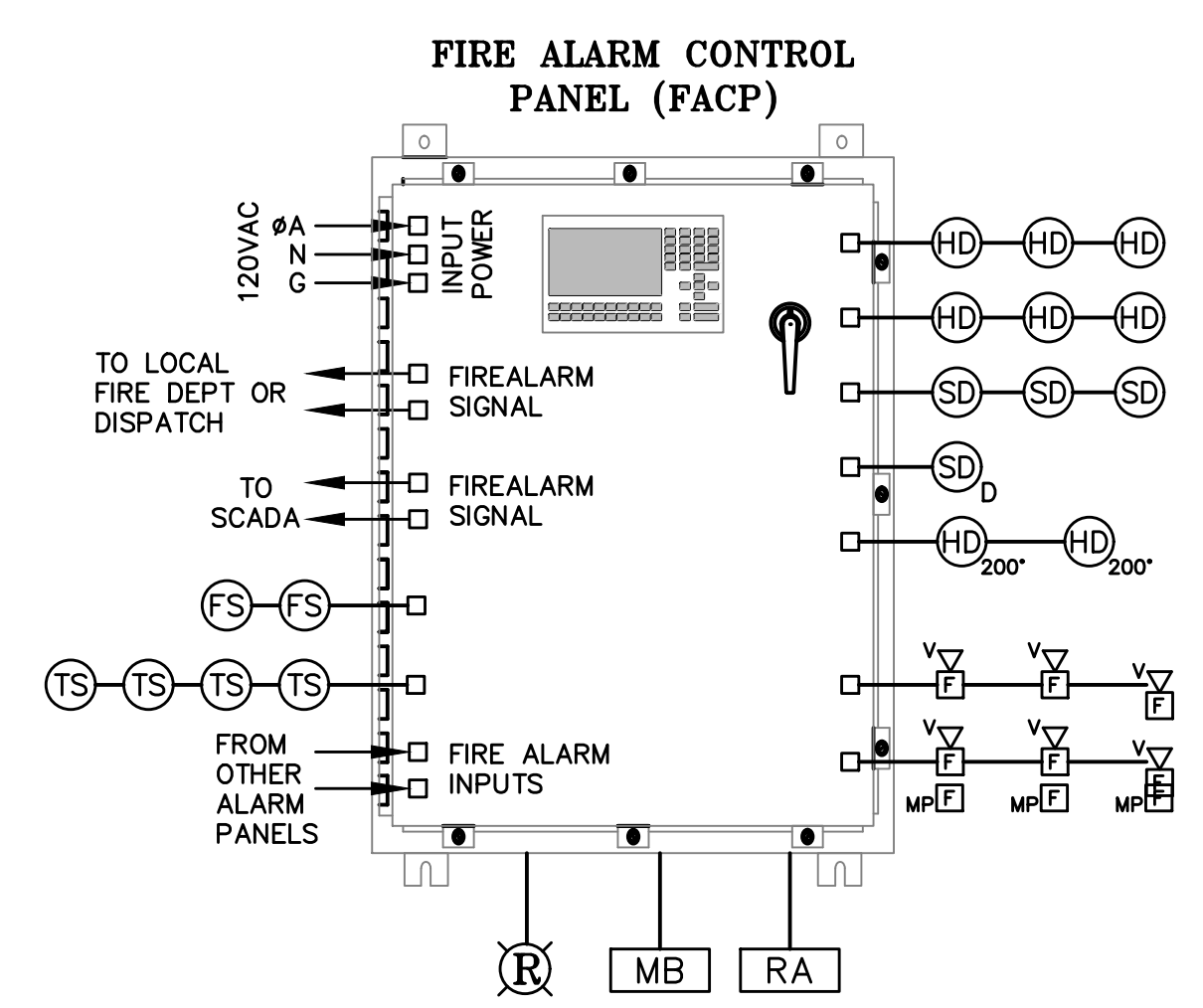




POWER & SIGNAL CONNECTION @ MAG METER (TYP.) 1
SCALE: NONE 99-E-8



POWER & SIGNAL CONNECTION @ VALVE (TYP.) 2
SCALE: NONE 99-E-8

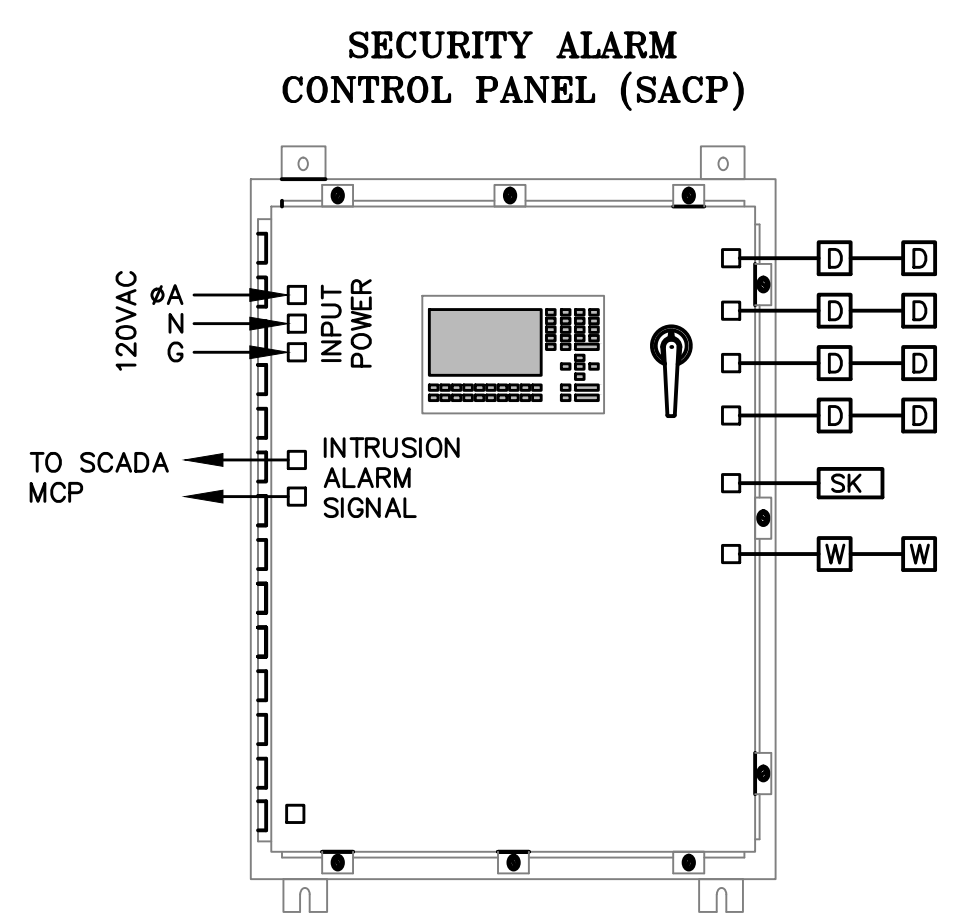


FIRE ALARM SYSTEM LEGEND:

- [FACP] FIRE ALARM CONTROL PANEL
- [SD] SMOKE DETECTOR
- [SD_D] DUCT TYPE SMOKE DETECTOR
- [HD] HEAT DETECTOR FIXED TEMPERATURE DETECTOR
- [HD_{135°}] HEAT DETECTOR W/TEMPERATURE RISE OF 200F
- [HD_{200°}] HEAT DETECTOR W/TEMPERATURE RISE OF 200F
- [MP] FIRE ALARM - MANUAL PULL STATION WITH LUMINOUS STYLE 3 DIMENSIONAL FIRE ALARM MARKER
- [F] FIRE ALARM - AUDIBLE/VISUAL SIGNAL
- [EOLD] END OF LINE DEVICE
- [FS] SPRINKLER FLOW SWITCH
- [TS] SPRINKLER TAMPER SWITCH
- [MB] MASTER BOX
- [RA] REMOTE ANNUNCIATOR PANEL
- [LB] REMOTE LOCK BOX
- [R] RED BEACON ALARM LIGHT, LOCATION PER LOCAL FIRE DEPARTMENT.
- [EB] ELECTRIC BELL, LOCATION PER LOCAL FIRE DEPARTMENT.

- SYSTEM NOTES:**
- EACH RISER DIAGRAM IS GENERIC AND DOES NOT SHOW ALL DEVICES REFER TO FLOOR PLANS FOR ALL EXACT LOCATIONS AND NUMBER OF FIRE ALARM & SECURITY DEVICES REQUIRED FOR COMPLETE SYSTEM.
 - FINAL LOCATION AND EXACT NUMBER OF DETECTION AND INDICATING DEVICES SHALL BE DETERMINED BY THE LOCAL AUTHORITY HAVING JURISDICTION CONTRACTOR SHALL COORDINATE WITH LOCAL FIRE DEPARTMENT PRIOR TO SUBMITTAL. PROVIDE ALL NECESSARY HARDWARE AND WIRING AS REQUIRED.
 - EACH ROOM AND SPACE WITHIN FACILITY SHALL BE PROVIDED WITH SEPARATE ZONE.
 - PROVIDE MASTER BOX WITH HARDWIRED OR WIRELESS COMMUNICATIONS INCLUDING BUT NOT LIMITED TO RADIO ANTENNA ASSEMBLY ETC. AS PER LOCAL FIRE DEPARTMENT REQUIREMENTS. EXACT LOCATION OF MASTER BOX SHALL BE DETERMINED BY LOCAL FIRE DEPARTMENT.
 - SACP SERVER SHALL INCLUDE INFINIAS SOFTWARE BY 3XLOGIC WITH MANAGED ETHERNET SWITCH FOR ALL CAT-6E CONNECTIONS INTO PANEL AS REQUIRED.

FIRE ALARM SYSTEM RISER DIAGRAM (TYP.) 3
SCALE: NONE 99-E-8



SECURITY SYSTEM LEGEND:

- [D] DOOR CONTACT
- [W] PASSIVE GLASS BREAK DETECTOR
- [RA] REMOTE ANNUNCIATOR PANEL (MTD @ 48" A.F.F.)
- [SK] SECURITY COMMUNICATOR 'KEY PAD' (MTD @ 48" A.F.F.)
- [SACP] SECURITY ALARM CONTROL PANEL
- [PIR] PASSIVE INFRARED MOTION DETECTOR
- [PIR] 360° PASSIVE INFRARED MOTION DETECTOR
- [W] SECURITY CAMERA

- SYSTEM NOTES:**
- RISER DIAGRAM IS GENERIC AND DOES NOT SHOW ALL DEVICES, REFER TO FLOOR PLANS FOR ALL EXACT LOCATIONS AND NUMBER OF SECURITY DEVICES REQUIRED FOR COMPLETE SYSTEM.

SECURITY ALARM SYSTEM RISER DIAGRAM (TYP.) 4
SCALE: NONE 99-E-8

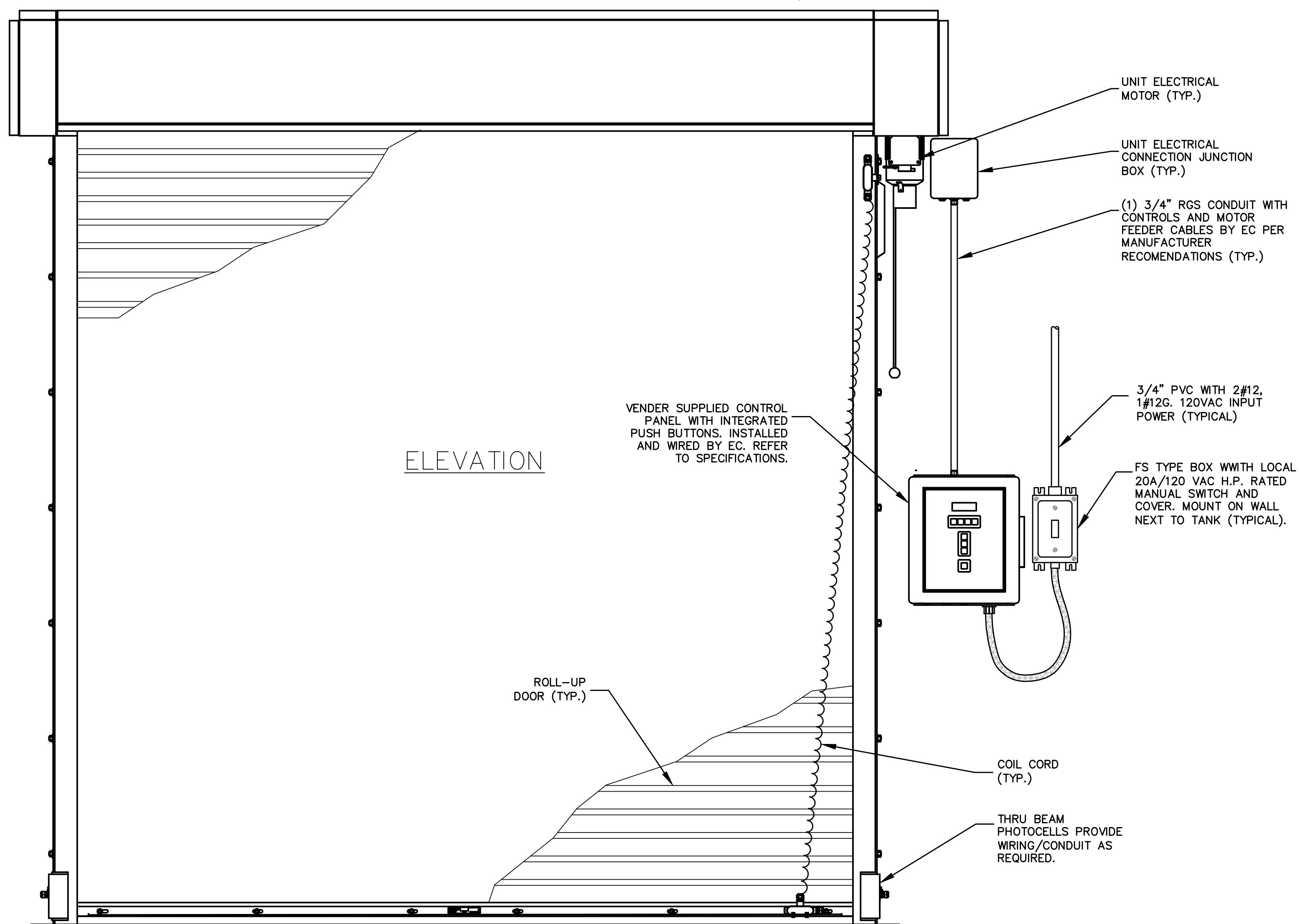
ATTLEBORO WATER DEPT. ATTLEBORO, MA	Checked By: SMR
WADING RIVER WATER TREATMENT PLANT	Designed By: JWC
ELECTRICAL WIRING DIAGRAMS AND DETAILS	THE DOCUMENT IS THE PROPERTY OF TATA & HOWARD, INC. AND ITS CLIENT. REPRODUCTION OR ADAPTATION WITHOUT WRITTEN CONSENT IS PROHIBITED.
	Description
Rev.	Date

SMK ENGINEERING, PC
Electrical, Instrumentation & Control Systems Engineering
1000 North Main Street, Attleboro, MA 01915
Phone: (508) 851-1111
Fax: (508) 851-1112
www.smkeng.com

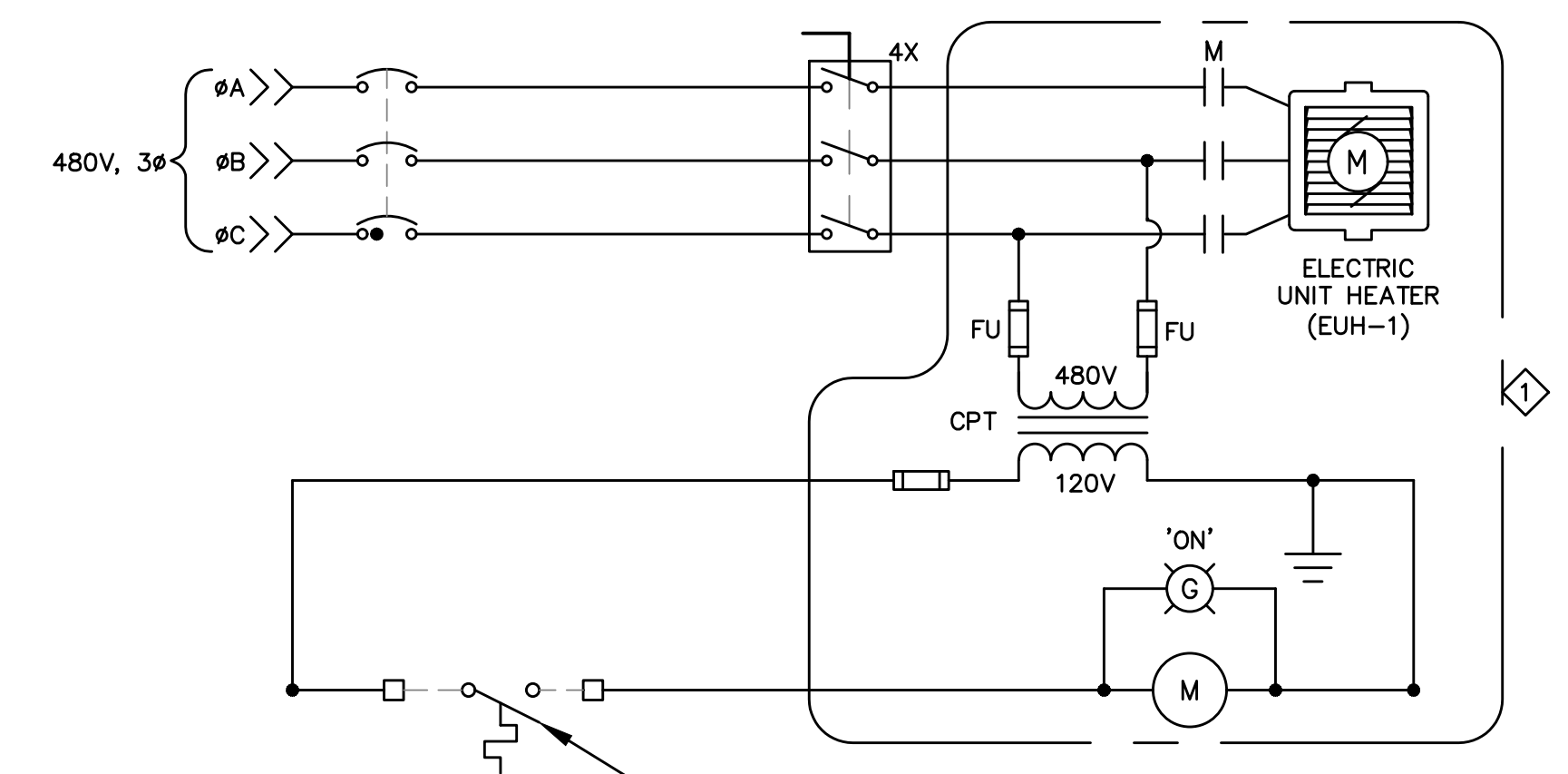
2-19-25

TATA & HOWARD

FILE: C:\SMK\Engineering\Tata & Howard\Attleboro MA\Wading River WTP\03-99-E-1-EP-W00.dwg, Feb 24, 2025 - 11:16am
C:\SMK\Engineering\Tata & Howard\Attleboro MA\Wading River WTP\03-99-E-1-EP-W00.dwg, 2/24/2025 11:16 AM, JCOND

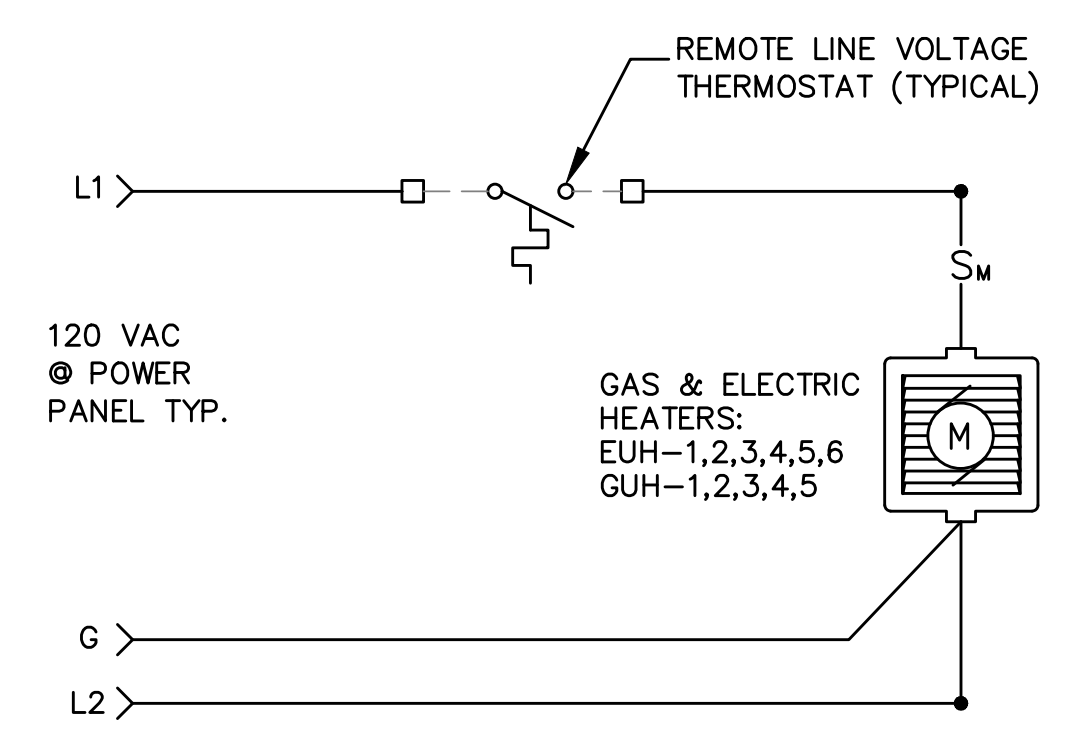


POWER & SIGNAL CONNECTION AT OVERHEAD DOOR (TYP.) 1
SCALE: NONE
99-E-9

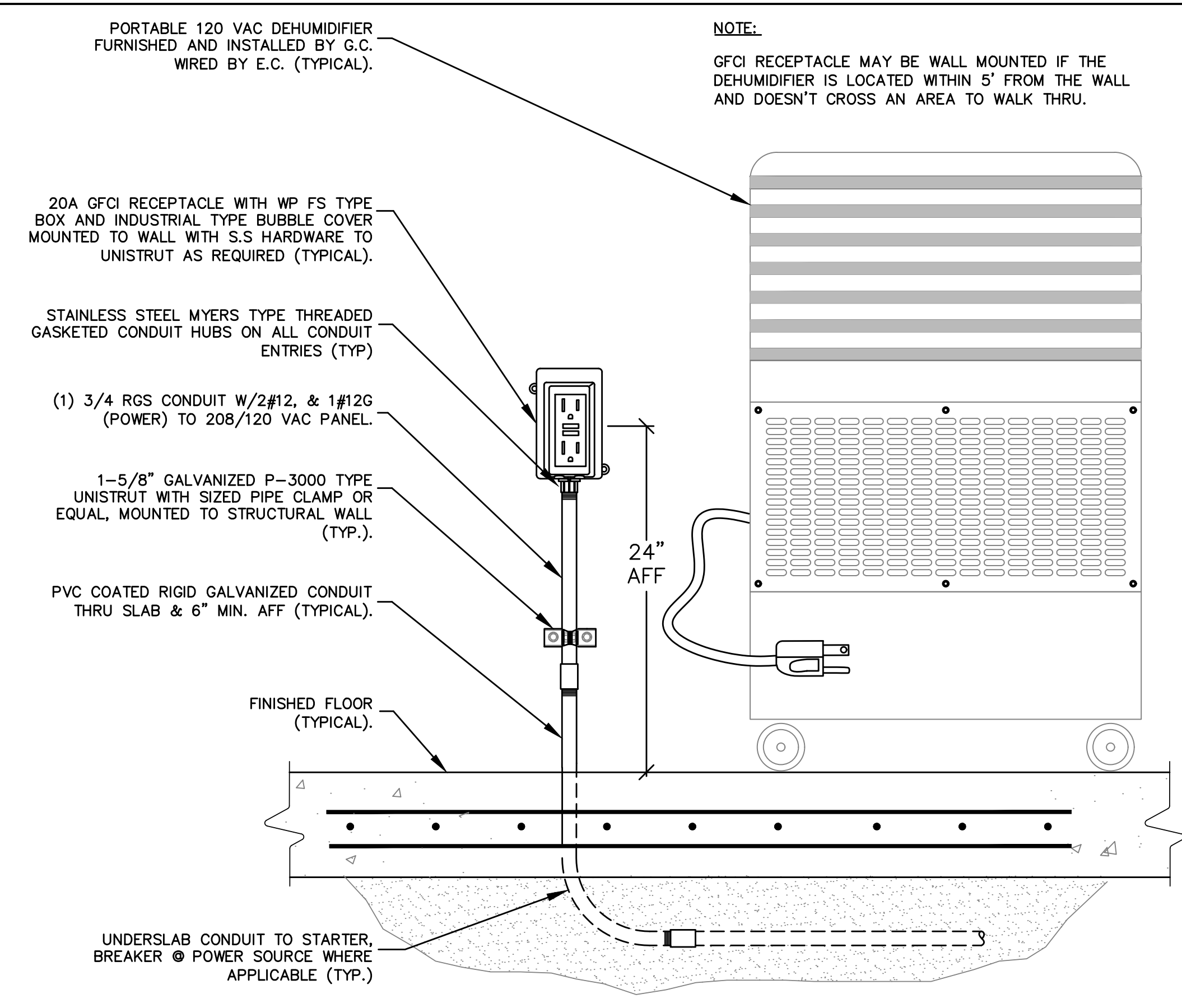


HEATER NOTES:
 1 HEATER EQUIPT WITH BUILT IN CONTACTS & CONTROLS.
 REMOTE THERMOSTAT WITH LOW VOLTAGE WIRING BY HVAC CONTRACTOR (TYPICAL).

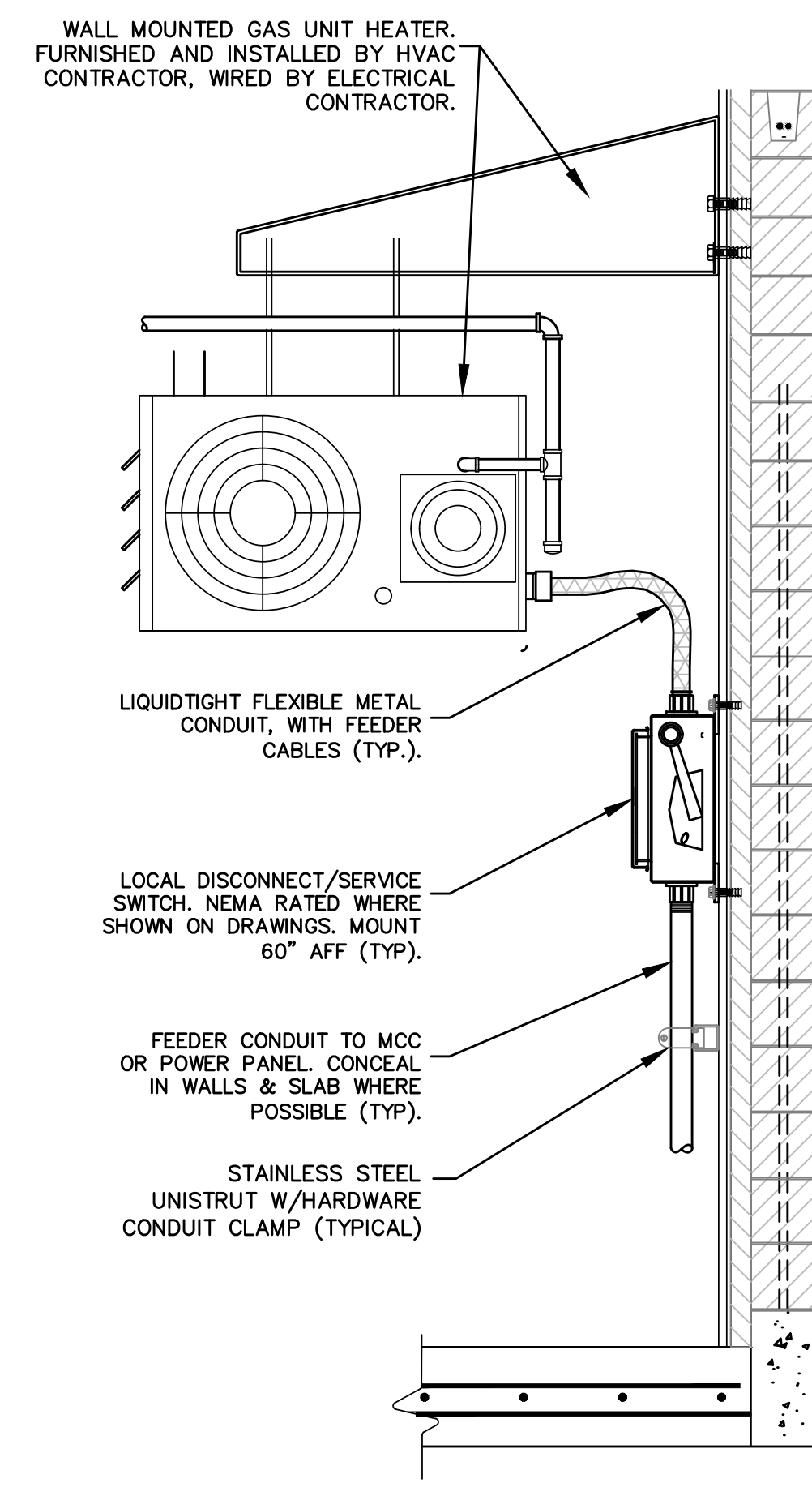
480 VAC 3 ϕ HEATERS (TYP.)



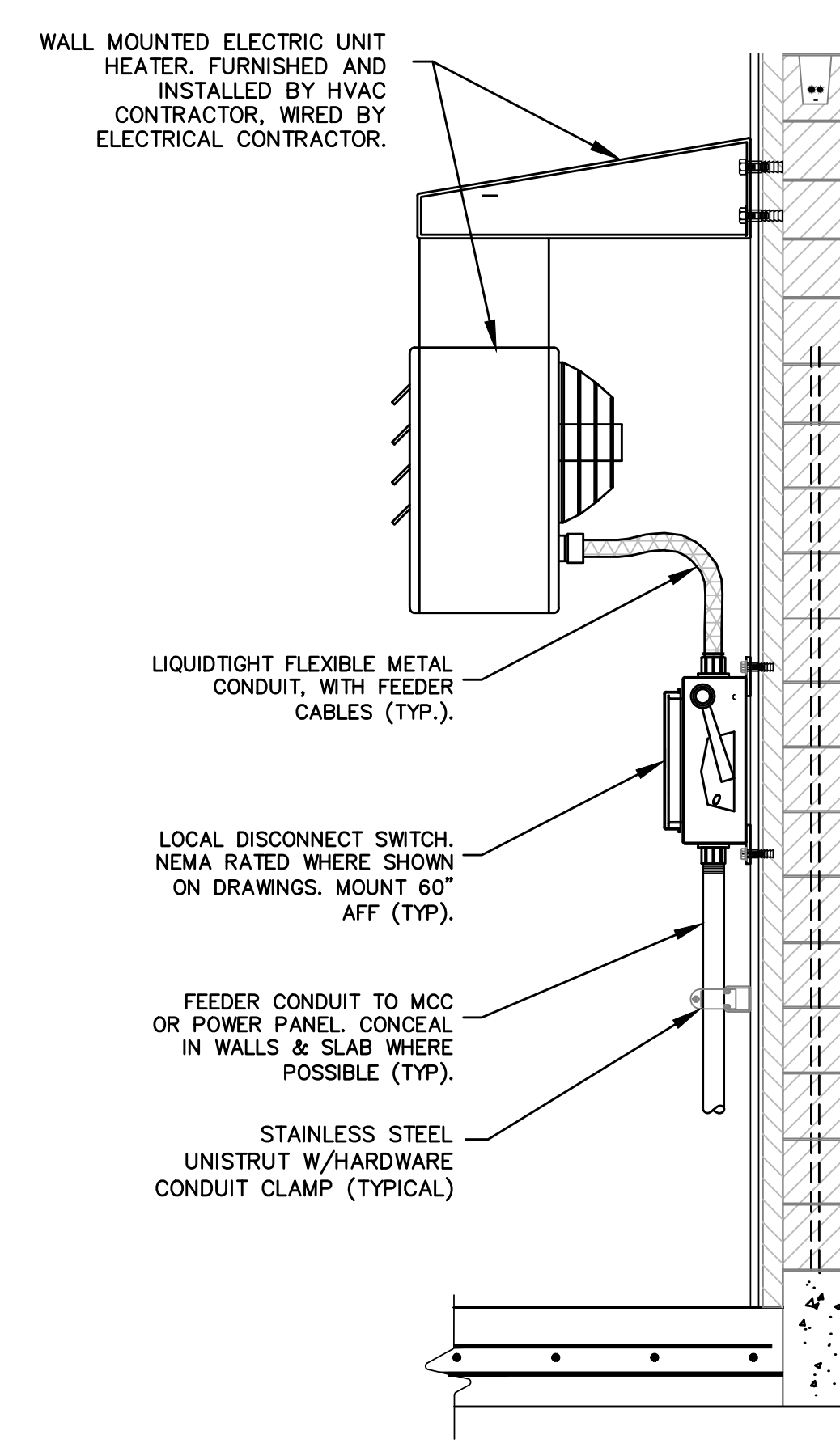
120 VAC 1 ϕ GAS & HEATERS (TYP.)



POWER CONNECTION AT DEHUMIDIFIER (TYP.) 3
SCALE: NONE
99-E-9



POWER CONNECTION AT HEATER UNITS (TYP.) 3
SCALE: NONE
99-E-9



ATTLEBORO WATER DEPT.
 ATTLEBORO, MA

WADING RIVER
 WATER TREATMENT PLANT

Approved By: SMR
 Designed By: JWC
 Drawn By: JWC

ELECTRICAL WIRING DIAGRAMS AND DETAILS

THIS DOCUMENT IS THE PROPERTY OF TATA & HOWARD, INC. AND ITS CLIENT. REPRODUCTION OR ADAPTATION WITHOUT WRITTEN CONSENT IS PROHIBITED.

Rev.	Date	Description

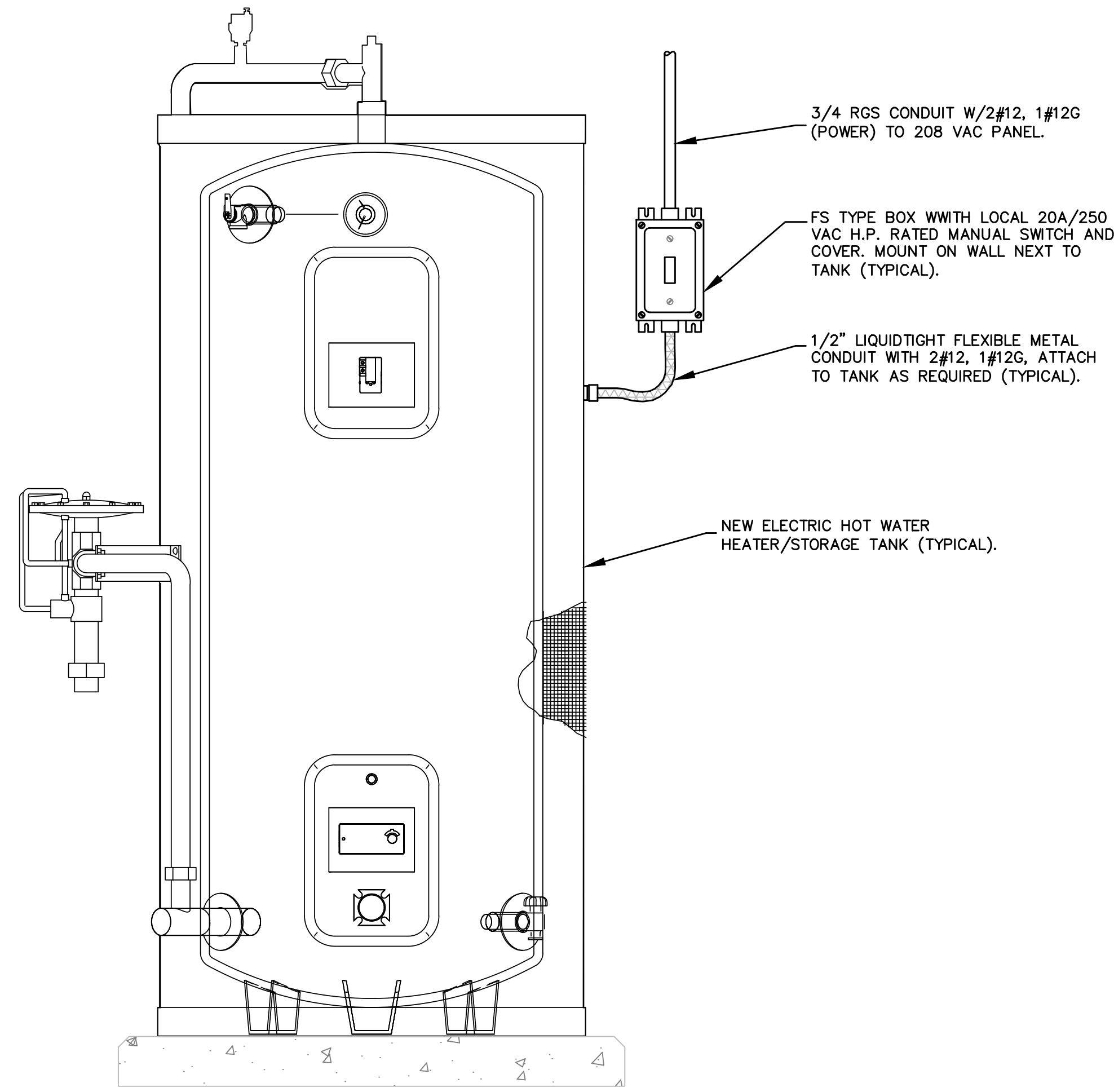
Signature: *2-19-25*

TATA & HOWARD
 ENGINEERING, PC
 Electrical, Instrumentation & Control Systems Engineering
 1000 North Main Street, Suite 200
 Attleboro, MA 01915
 Phone: 508-351-1000
 Fax: 508-351-1001
 Website: www.tataandhoward.com

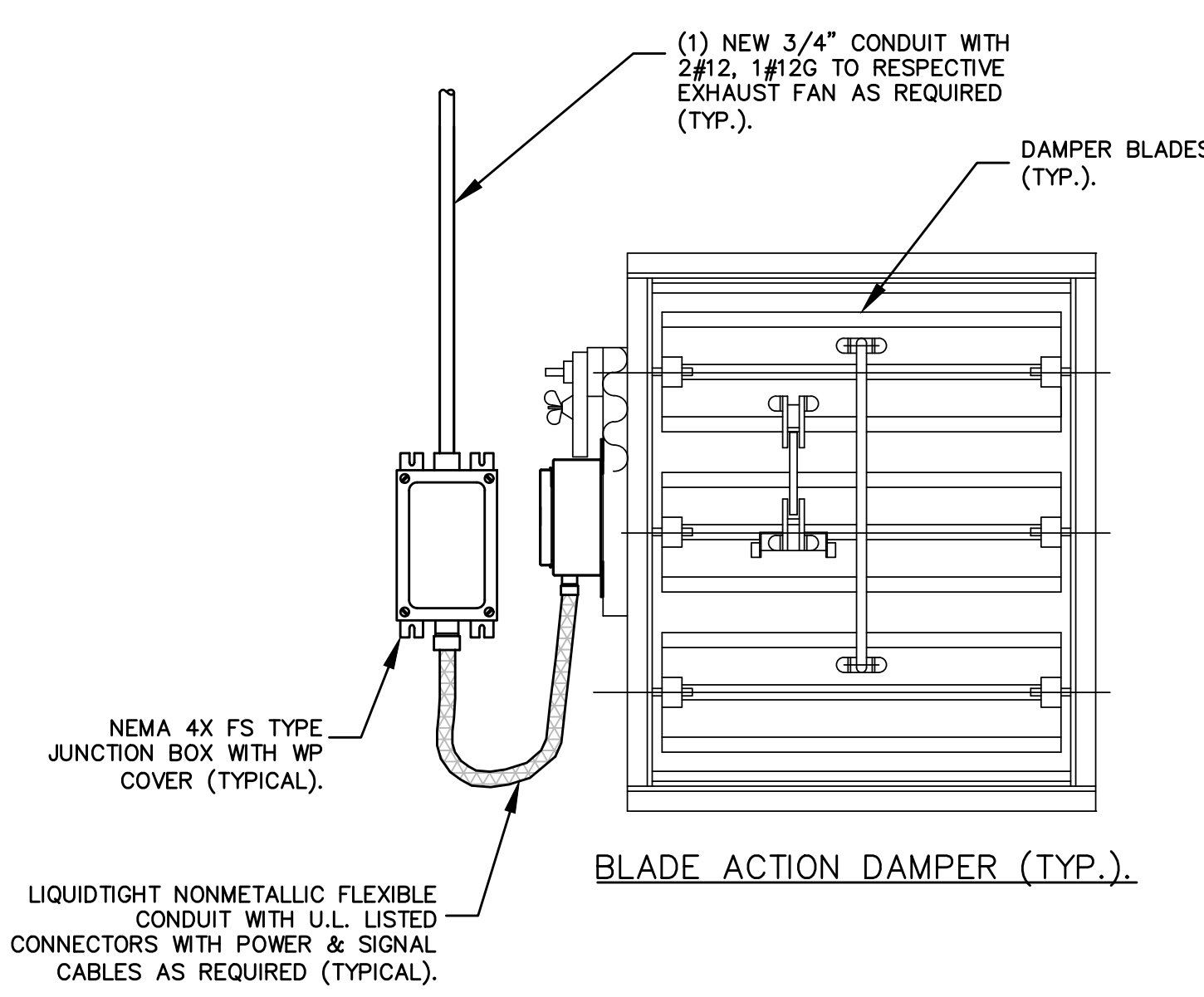
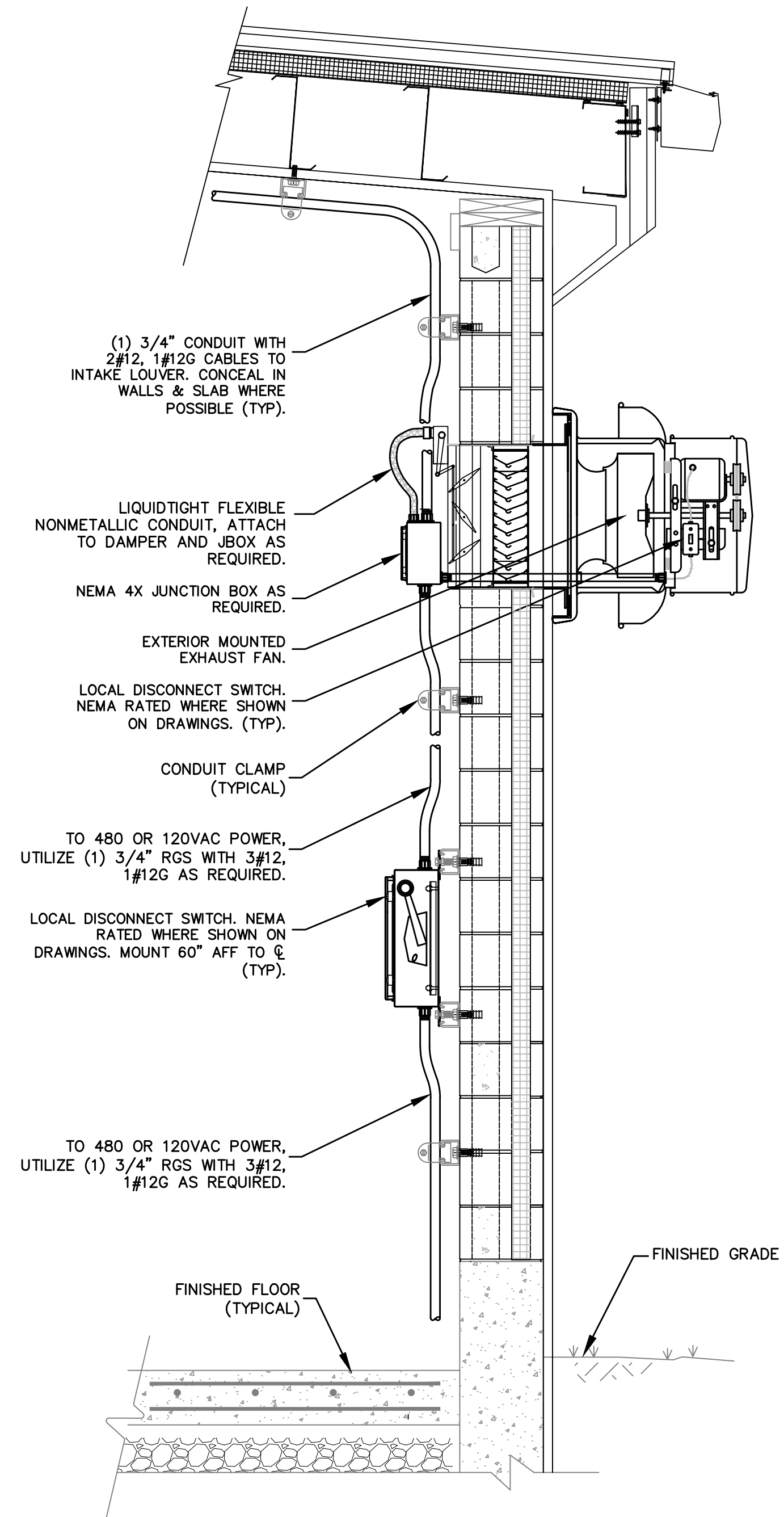
T&H NO: 6193
 DATE: FEBRUARY 2025
 SCALE: AS NOTED

99-E-9

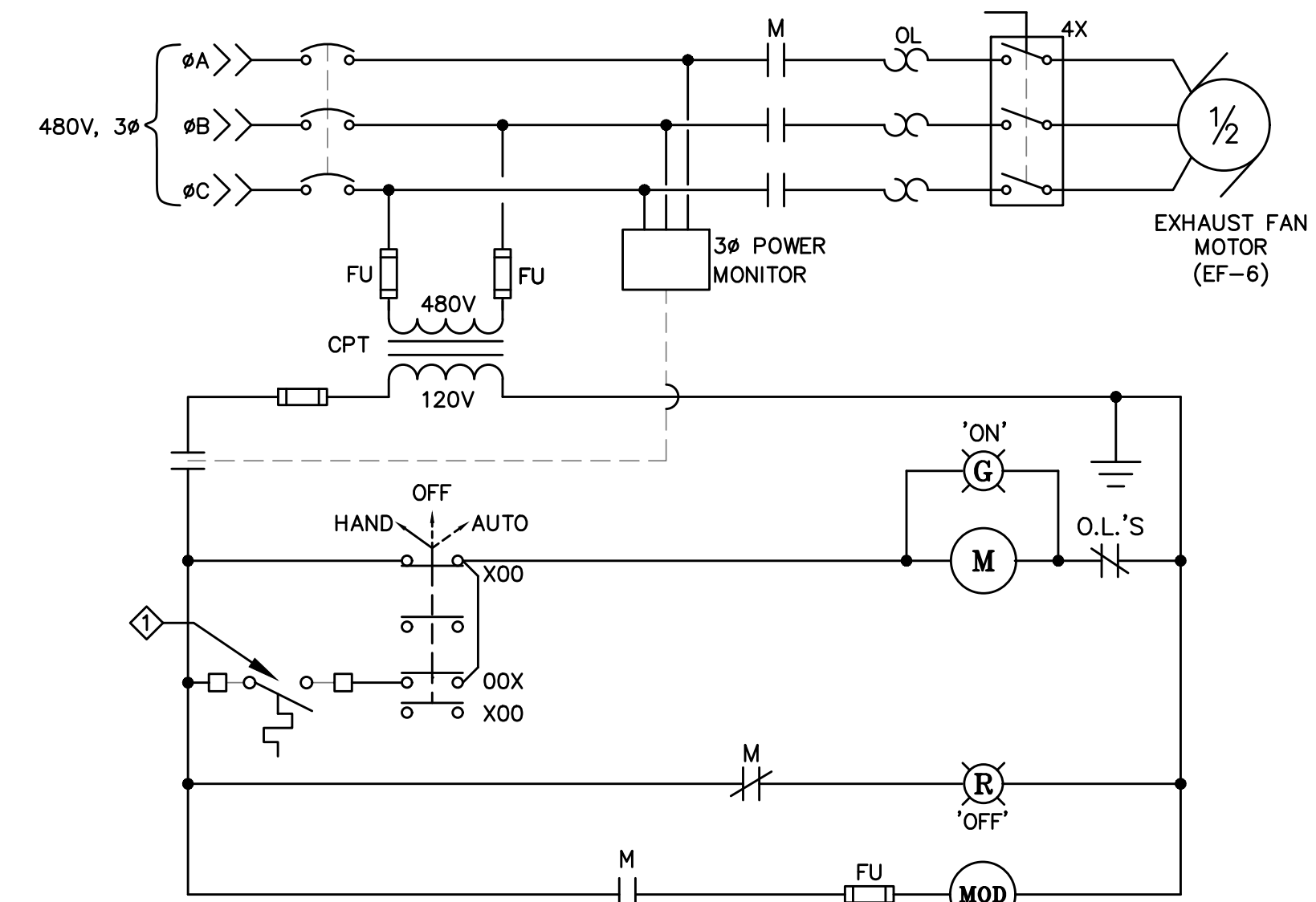
FILE: C:\SMR\Engineering\Tata & Howard\Attleboro MA\Wading River WTP\0193-99-E-1-EP-W00.dwg Feb 24, 2025 - 11:16am
 C:\SMR\Engineering\Tata & Howard\Attleboro MA\Wading River WTP\0193-99-E-1-EP-W00.dwg 2/24/2025 11:16 AM JCOND



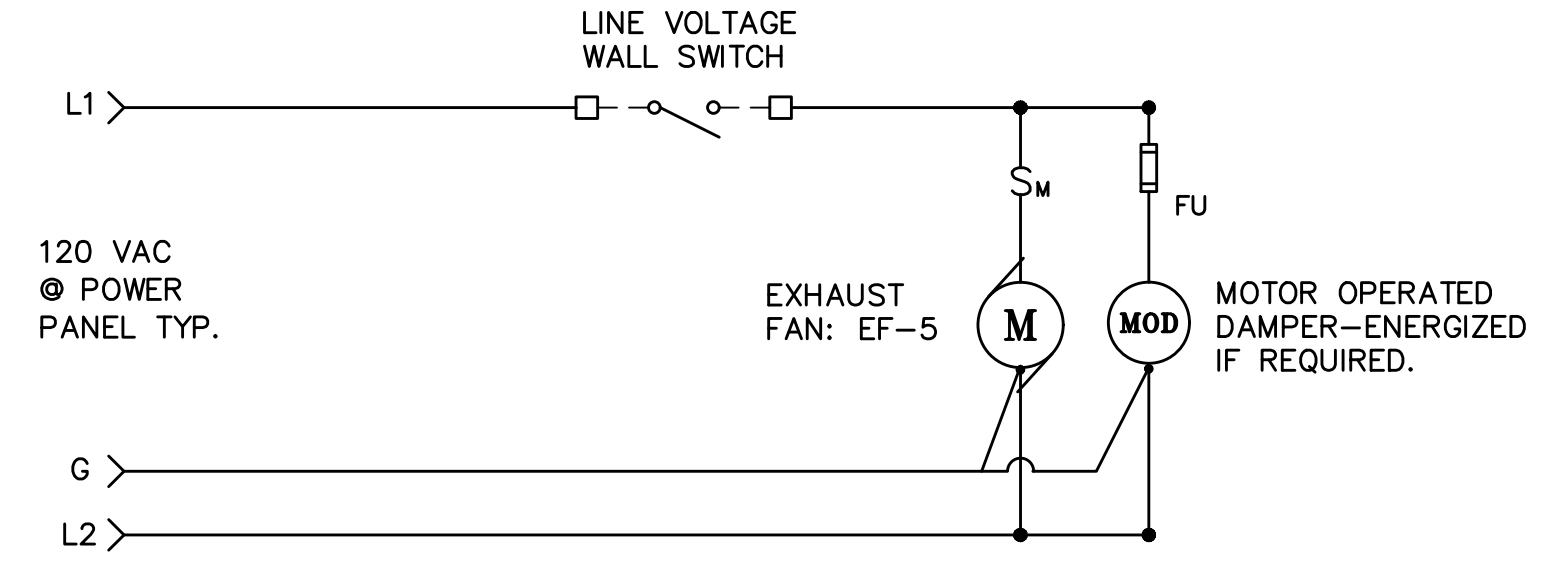
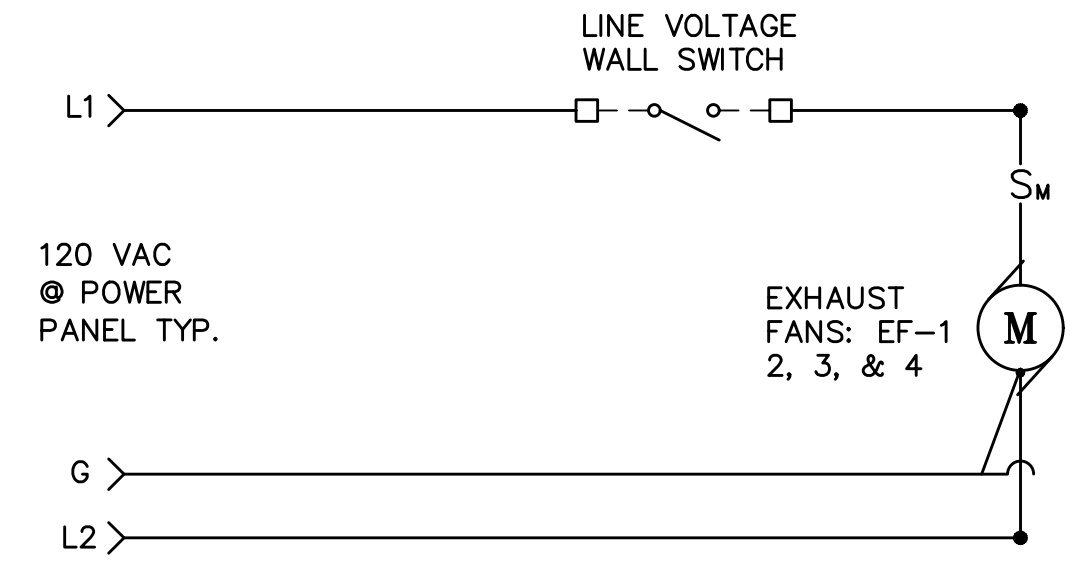
ELECTRICAL CONNECTION @ HOT WATER TANK (TYP.) 2
 SCALE: NONE 99-E-10



ELECTRICAL CONNECTIONS AND WIRING DIAGRAMS FOR EXHAUST FANS AND DAMPERS (TYP.) 1
 SCALE: NONE 99-E-10



KEY NOTES:
 1. AUTOMATIC START/STOP CONTACT @ THERMOSTAT OR REMOTE SWITCH.
 2. SIZE CPT TRANSFORMERS INSIDE MCC STARTER TO MATCH ELECTRICAL LOAD OF EACH INDIVIDUAL EXHAUST FAN MOTORIZED DAMPERS AS SHOWN ON HVAC DRAWINGS AS REQUIRED.



ATTEBORO WATER DEPT.
 ATTEBORO, MA
 WADING RIVER
 WATER TREATMENT PLANT

**ELECTRICAL
 WIRING DIAGRAMS
 AND DETAILS**

Rev.	Date	Description

THE DOCUMENT IS THE PROPERTY OF TATA & HOWARD, INC. AND ITS CLIENT. REPRODUCTION OR ADAPTATION WITHOUT WRITTEN CONSENT IS PROHIBITED.

SMK ENGINEERING, PC
 SPECIAL ELECTRICAL CONSULTING
 2-19-25

SMK ENGINEERING, PC
 Electrical, Instrumentation & Control Systems Engineering
 1000 North Main Street, Attleboro, MA 01915
 Phone: 508-351-1000
 Fax: 508-351-1001
 Website: www.smkeng.com

TATA & HOWARD

T&H NO.: 6193
 DATE: FEBRUARY 2025
 SCALE: AS NOTED
 99-E-10

FILE: C:\SMK\Engineering\Tata & Howard\Attleboro MA\Wading River WTP\0193-99-E-10-EP-W00.dwg Feb 24, 2025 - 11:16am
 C:\SMK\Engineering\Tata & Howard\Attleboro MA\Wading River WTP\0193-99-E-10-EP-W00.dwg 2/24/2025 11:16 AM _JCOND