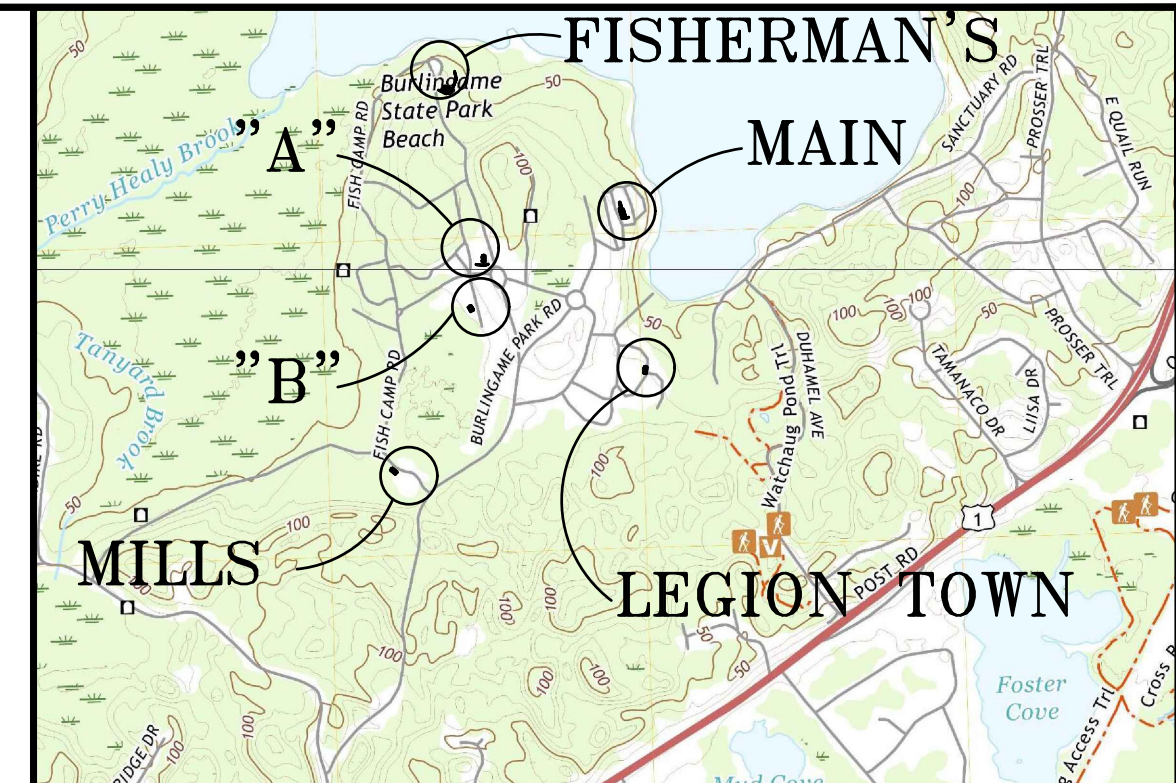
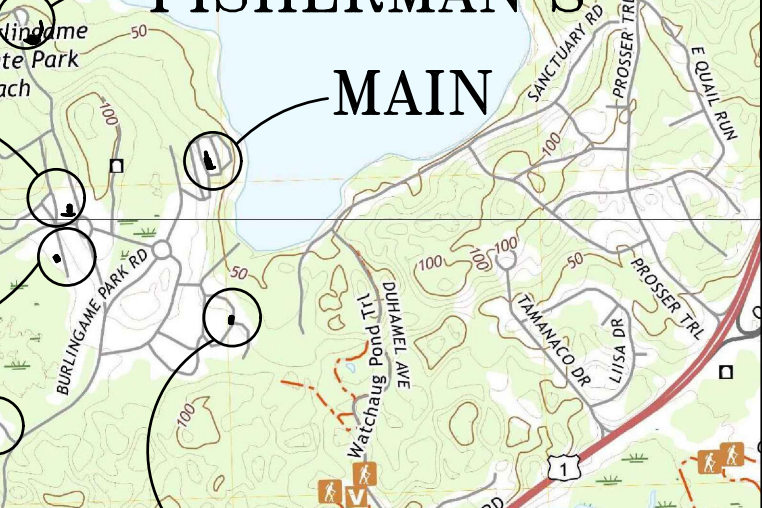
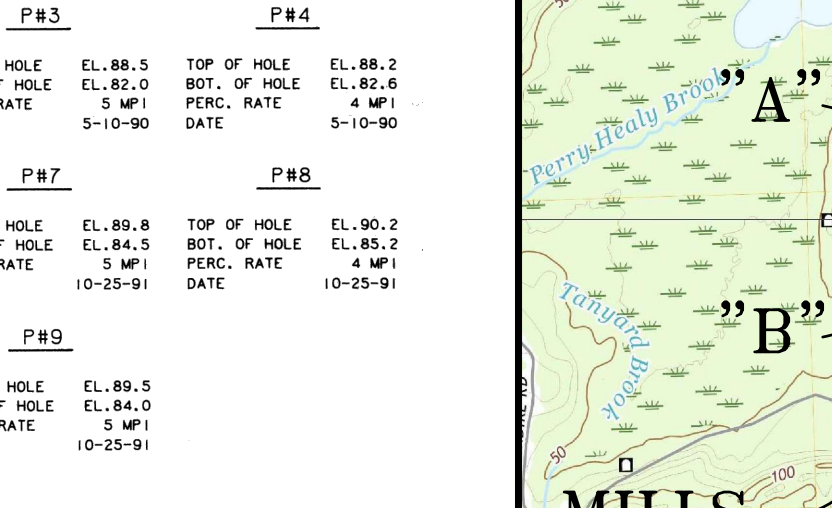
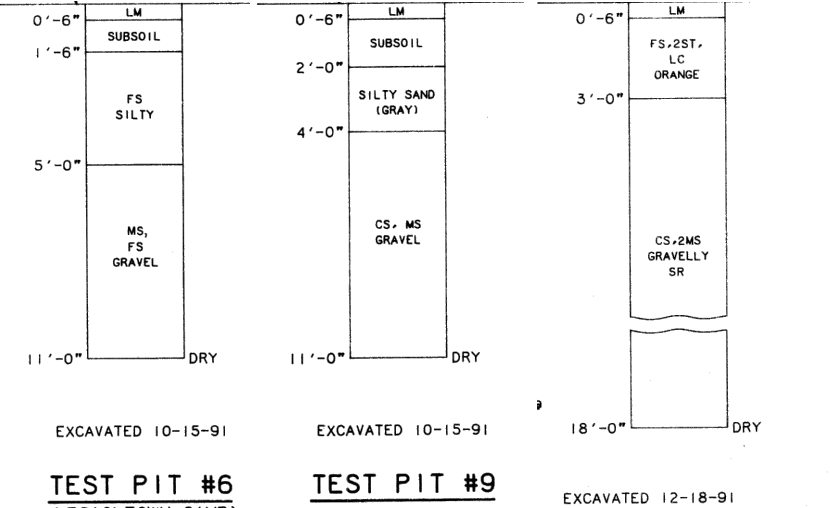
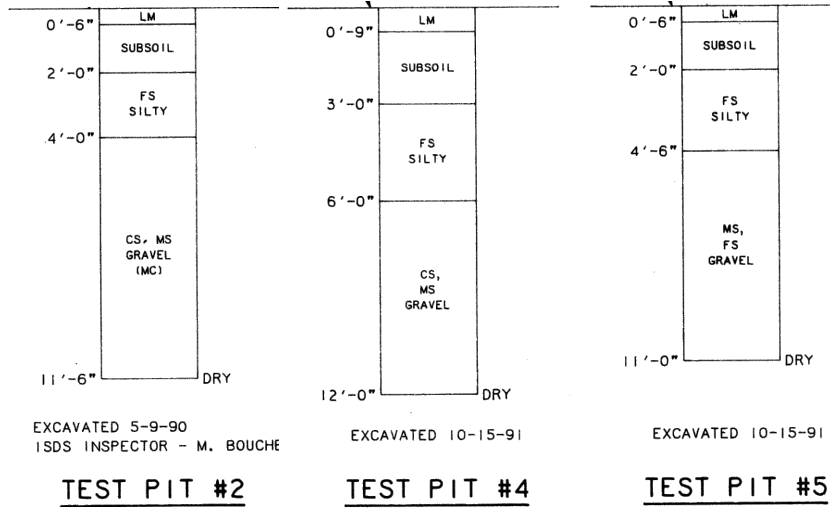


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TH-6A - GROUND ELEV. 74.1 - AUGUST 18, 2021										
HORIZON	DEPTH	DIST	TOPO	MATRIX	RE-DOX FEATURES	Ab. S. CONTR.	TEXTURE	STRUCTURE	CONSISTENCE	SOIL CATEGORY
Ap	0 - 9"	C	S	2.5YR 6/3			Ls	2gbd	Vfr	3
Bw	9" - 25"	C	W	10YR 5/6			Ls	2gbd	Fr	3
C1	25" - 40"	C	S	2.5YR 7/3			Ls	2gbd	Fr	3
C2	40" - 120"	C	S	2.5YR 7/3	5YR 4/4	M M P	Ls	2gbd	Fr	3
SOIL CLASS: B OBSERVED STANDING GROUNDWATER - NA ESTIMATED SEASONAL HIGH WATER TABLE - 40" (ELEV. 76.8) OBSERVED WEeping GROUNDWATER - NA PERFORMED BY: KAMAL HINGORANY										

TH-6B - GROUND ELEV. 70.5 - AUGUST 18, 2021										
HORIZON	DEPTH	DIST	TOPO	MATRIX	RE-DOX FEATURES	Ab. S. CONTR.	TEXTURE	STRUCTURE	CONSISTENCE	SOIL CATEGORY
Ap	0 - 16"	C	S	2.5YR 6/3			Ls	2gbd	Vfr	3
Bw	16" - 36"	C	W	10YR 5/6			Ls	2gbd	Fr	3
C1	36" - 42"	C	S	2.5YR 7/3			Ls	2gbd	Fr	3
C2	42" - 120"	C	S	2.5YR 7/3	5YR 4/4	M M P	Ls	2gbd	Fr	3
SOIL CLASS: B OBSERVED STANDING GROUNDWATER - NA ESTIMATED SEASONAL HIGH WATER TABLE - 42" (ELEV. 67.0) OBSERVED WEeping GROUNDWATER - NA PERFORMED BY: KAMAL HINGORANY										



LOCUS MAP

- NOTES:**
- ALL WORK SHALL CONFORM TO THE RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT, OFFICE OF WATER RESOURCES "RULES AND REGULATIONS ESTABLISHING MINIMUM STANDARDS RELATING TO LOCATION, DESIGN, CONSTRUCTION AND MAINTENANCE OF ON-SITE WASTEWATER TREATMENT SYSTEMS", LATEST EDITION.
 - THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO CAPUTO AND WICK LTD. FOR APPROVAL OF ALL PROPOSED CONSTRUCTION MATERIALS AND EQUIPMENT PRIOR TO ANY CONSTRUCTION.
 - EXISTING ON-SITE WASTEWATER TREATMENT SYSTEM (OWTS) PRECAST STRUCTURES ARE TO BE PUMPED OUT, RINSED WITH CLEAN WATER AND PUMPED OUT AGAIN. PUMPING MUST BE PERFORMED BY A STATE LICENSED SEPTIC HAULER AND THE CONTENTS OF THE TANK DISPOSED OF PROPERLY. AFTER PUMPING, THE EXISTING OWTS STRUCTURES MUST BE FILLED WITH FLOWABLE FILL OR REMOVED AND REPLACED WITH GRAVEL BORROW AND 4" LOAM AND SEED.
 - REMOVE ALL PORTIONS OF THE EXISTING OWTS WITHIN 5' OF THE GRAVEL SAND TREATMENT SYSTEM, AND ALL FILL, A HORIZON SOIL, B HORIZON SOIL, AND SCARIFY 3" OF THE C HORIZON SOIL BELOW THE GRAVEL SAND TREATMENT SYSTEM AND THOUGHLY MIX WITH ASTM C-33 SAND (SEE NOTE 16) TO INTERFACE THE FILL WITH THE SOIL, AND REPLACE ALL REMOVED SOIL WITH ASTM C-33 SAND. A AND B SOIL HORIZON LAYERS ARE TO BE REMOVED IN THIS APPLICATION DUE TO COMPACTION CAUSED BY PREVIOUS SYSTEM INSTALLATION AND FILL BEING PLACED ABOVE.
 - UNSATURABLE MATERIAL USED TO BACKFILL THE TEST HOLES SHALL BE REMOVED AND REPLACED WITH WITH ASTM C-33 SAND (SEE NOTE 16).
 - ASTM C-33 SAND (SEE NOTE 16) MUST BE PLACED ON SCARIFIED, RELATIVELY DRY NATURAL SOIL. THE CONTRACTOR SHALL PROVIDE FOR DEWATERING AS REQUIRED AND ALL WORK SHALL BE PERFORMED UNDER DRY CONDITIONS.
 - BUILDING SEWER PIPE TO BE 4" P. V. C. SCH. 40 UNLESS OTHERWISE NOTED.
 - PLACE 6" MINIMUM COMPACTED CRUSHED STONE UNDER SEPTIC TANK, ANOXIC TANK, RECIRCULATION TANK, PUMP CHAMBER, ADVANTEK TREATMENT TANKS AND SYSTEM STRUCTURES.
 - INLET AND OUTLET TEES FOR SEPTIC TANK, ANOXIC TANK, RECIRCULATION TANK AND PUMP CHAMBER ARE TO BE LOCATED DIRECTLY BELOW ACCESS COVERS.
 - SEPTIC TANK, ANOXIC TANK, RECIRCULATION TANK, PUMP CHAMBER AND ADVANTEK TREATMENT TANK RISERS/COVERS TO BE AT FINISH GRADE.
 - IF CONDITIONS ENCOUNTERED DURING CONSTRUCTION VARY SUBSTANTIALLY FROM THOSE SHOWN ON THIS PLAN, NOTIFY CAPUTO AND WICK, LTD. BEFORE PROCEEDING WITH CONSTRUCTION. IF IN DOUBT, ASK.
 - NEW SEPTIC TANK SHALL MEET ALL OF THE REQUIREMENTS OF 250-RICR-150-10-6-27.
 - INSPECTION OF THE SEPTIC TANK, ANOXIC TANK, RECIRCULATION TANK, PUMP CHAMBER AND ADVANTEK TREATMENT TANK SHALL BE PART OF THE MAINTENANCE SERVICE FOR THE OWTS AND ALL COMPONENTS SHALL BE CLEANED WHEN REQUIRED.
 - IT IS RECOMMENDED THAT THE SEPTIC TANK BE INSPECTED TWICE A YEAR, AND BE CLEANED WHEN THE SOLIDS EQUAL ONE THIRD THE LIQUID DEPTH.
 - MINIMUM PERIMETER INVERT ELEVATION = 73.00. NO FINISHED GRADE BELOW 73.00 FROM THE EDGE OF THE GRAVEL SAND TREATMENT SYSTEM FOR A 10 FEET MINIMUM.
 - THE SAND MEDIA USED IN CONSTRUCTION SHALL MEET THE ASTM C-33 SPECIFICATIONS. SIEVE ANALYSIS FROM PROPOSED SOURCE IS REQUIRED TO BE SUBMITTED TOGETHER WITH SHOP DRAWINGS. TESTING OF SAND MATERIAL, DELIVERED TO THE SITE IS REQUIRED.
 - OWTS INSTALLER MUST BE FAMILIAR WITH ADVANTEK PRODUCTS AND GRAVEL SAND TREATMENT SYSTEMS PROPOSED FOR THIS SITE. SEE ADVANTEK INSTALLATION MANUAL, GRAVEL SAND TREATMENT SYSTEM DESIGN AND INSTALLATION MANUAL, AND RIDEM GUIDELINES FOR ADDITIONAL DETAILS OF INSTALLATION.
 - INSTALLATION SHALL BE IN STRICT CONFORMANCE WITH THE ORENCO ADVANTEK INSTALLATION MANUAL AND GRAVEL SAND TREATMENT SYSTEM INSTALLATION MANUAL AND ALL OTHER APPLICABLE SECTIONS OF 250-RICR-150-6. THE INSTALLATION SHALL ONLY BE PERFORMED BY A RHODE ISLAND DEM LICENSED INSTALLER WHO HAS RECEIVED TRAINING AND IS AUTHORIZED IN WRITING BY THE VENDORS TO INSTALL THE SYSTEM. AUTHORIZATION FROM THE VENDORS SHALL BE SUBMITTED TO ENGINEER PRIOR TO ANY CONSTRUCTION.
 - REFER TO 250-RICR-150-10-6 AND RIDEM GUIDELINES FOR ADDITIONAL INFORMATION CONCERNING THE INSTALLATION, OPERATION AND MAINTENANCE OF THE SYSTEM. THE INSTALLER AND OWNER SHOULD REVIEW AND APPLY 250-RICR-150-10-6 AND RIDEM GUIDELINES. THE SYSTEM TO BE CONSTRUCTED BY A INSTALLER LICENSED BY RIDEM AND THOROUGHLY FAMILIAR WITH THE INSTALLATION OF ADVANTEK TREATMENT DEVICES AND GRAVEL SAND TREATMENT SYSTEMS.
 - THE CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH THE DESIGN ENGINEER IN ORDER TO FACILITATE WITNESSING THE REQUIRED PHASES OF THE SYSTEM INSTALLATION AS STATED IN 250-RICR-150-47 OF THE "REGULATIONS". FAILURE OF THE CONTRACTOR TO NOTIFY THE DESIGN ENGINEER IN A TIMELY MANNER MAY REQUIRE THE CONTRACTOR TO EXCAVATE AND EXPOSE SYSTEM COMPONENTS FOR OBSERVATION.
 - THE DESIGNER EXPRESSLY DISCLAIMS ANY RESPONSIBILITY FOR THE INSTALLATION AND MAINTENANCE OF THE SYSTEM. IT SHALL BE THE RESPONSIBILITY OF THE INSTALLER TO CONSTRUCT THE SYSTEM IN ACCORDANCE WITH THE ABOVE REFERENCED REGULATIONS.
 - CONTRACTOR SHALL CONTACT "DIG-SAFE" PRIOR TO CONSTRUCTION. LOCATION OF UTILITIES ON THIS PLAN ARE FROM EXISTING INFORMATION, BUT ARE ONLY TO BE CONSIDERED APPROXIMATE.
 - THERE ARE NO PUBLIC WELLS, EXISTING OR PROPOSED, FOUND TO BE LOCATED WITHIN 500 FEET OF THE PROPOSED OWTS EXCEPT AS SHOWN.
 - NO FRESHWATER WETLANDS OBSERVED WITHIN 200 FEET OF THE PROPOSED OWTS. THIS SITE DOES NOT LIE WITHIN A CRITICAL RESOURCE AREA.
 - I CERTIFY THAT THERE ARE NO WELLS FOUND TO BE LOCATED WITHIN 200 FEET OF THE PROPOSED LEACHING AREA, OTHER THAN AS SHOWN ON THIS PLAN. I ALSO CERTIFY THAT THERE ARE NO EXISTING OR PROPOSED DRAINS, FOUNDATION DRAINS OR SUB DRAINS FOUND TO BE LOCATED WITHIN 25 FEET OF THIS PROPOSED OWTS.
 - ALL PIPE JOINTS, PIPE CONNECTIONS AND ACCESS COVERS ARE TO BE WATER TIGHT.
 - PRESSURE PIPE SHALL BE INSTALLED TO MAINTAIN SLOPE BACK TO TANK/PUMP CHAMBER TO DRAIN BETWEEN PUMPING CYCLES. ELIMINATE ANY HIGH OR LOW POINTS THAT MAY PREVENT DRAINING AND/OR AIR POCKETS.
 - CONTRACTOR TO PAY ANY REQUIRED INSTALLATION FEES.
 - CONTROL PANEL AND ALARM TO BE MOUNTED INSIDE BUILDING IN A CONSPICUOUS LOCATION, EXACT LOCATION TO BE COORDINATED WITH OWNER. ALL CONTROL PANELS AND JUNCTION BOXES SHALL BE NEMA 4X.
 - THE PUMP DOSING CONTROLS WILL BE FIELD TESTED IN THE PRESENCE OF THE DESIGN ENGINEER AND ORENCO REPRESENTATIVE. ADJUSTMENT TO CONTROLS ARE THE CONTRACTORS RESPONSIBILITY. CONTRACTOR MUST MAKE WATER AVAILABLE FOR TESTING OF THE CONTROL FLOATS.
 - ALL TREES AND SHRUBS SHALL BE CLEAR AND NO NEW ONES SHALL BE PLANTED WITHIN 10' OF THE GRAVEL SAND TREATMENT SYSTEM.
 - THE GRAVEL SAND TREATMENT SYSTEM LOCATION SHALL BE STAKED OUT AND PROTECTED PRIOR TO ANY SITE PREPARATION ACTIVITIES.
 - NO IMPERVIOUS SURFACE IS TO BE PLACED ABOVE THE GST (LEACHING) SYSTEM.
 - MATERIAL AND EQUIPMENT FROM ALTERNATE MANUFACTURERS MAY BE USED IF EQUAL. APPROVAL FOR ALTERNATE MATERIAL AND/OR EQUIPMENT IS REQUIRED FROM THE OWNER AND ENGINEER. FULL SPECIFICATIONS FOR ALTERNATE EQUIPMENT MUST BE PROVIDED BY THE CONTRACTOR. IF ACCEPTABLE, THE CONTRACTOR MUST PREPARE AND SUBMIT FOR AN RIDEM OWTS CONSTRUCTION PERMIT BASED UPON THE REDESIGN.

DESIGN DATA

DAILY SEWAGE FLOW:
50 GPD/CAMPSITE x 156 CAMPSITES = 7800 GALLONS PER DAY (G.P.D.)
GROUND WATER TABLE: 40"
DEPTH TO IMPERVIOUS: NOT ENCOUNTERED
SOIL CLASS: B, SOIL CATEGORY: 3, LOADING RATE: 0.70 GAL/S.F./DAY
SEPTIC TANK REQUIREMENTS VOLUME = 2 X 7,800 G.P.D. = 15,600 GALLONS
LEACHING AREA REQUIREMENTS:
GRAVEL SAND TREATMENT (GST) SYSTEM WITH CATEGORY 1 TREATMENT
(ORENCO ADVANTEK TREATMENT AX100)
ASSIGNED EFFLUENT LOADING RATE = 3.5 GPD PER S. F.
SQUARE FOOTAGE OF GST REQUIRED = 7800 GPD / 3.5 GPD PER S.F. = 2,229 S.F.
LENGTH OF GST 6212 REQUIRED = 2,229 S.F. / 17.5 S.F./L.F. = 127 L.F.
LENGTH OF GST 6212 SPECIFIED: 280 L.F.
TOTAL GST SYSTEM CAPACITY = 280 L.F. X 17.5 S.F./L.F. X 3.5 G.P.D./S.F. = 17,150 GPD
17,150 GPD > 7,800 GPD - CAPACITY = 220% OF ANTICIPATED DESIGN FLOW

CERTIFICATION:

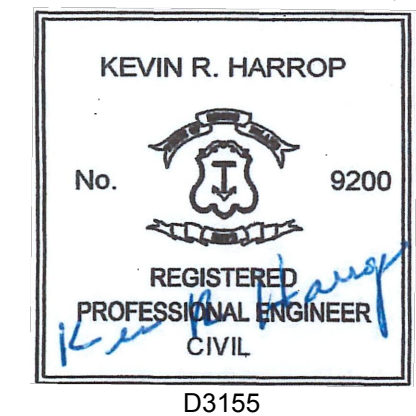
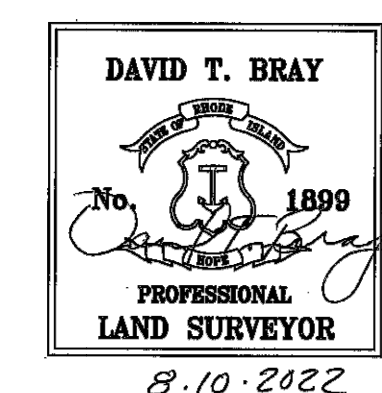
THIS SURVEY HAS BEEN CONDUCTED AND THE PLAN HAS BEEN PREPARED PURSUANT TO SECTION 4 OF THE RULES AND REGULATIONS ADOPTED BY THE RHODE ISLAND STATE BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS ON NOVEMBER 25, 2015, AS FOLLOWS:

TYPE OF BOUNDARY SURVEY:
LIMITED CONTENT BOUNDARY SURVEY
OTHER TYPE OF SURVEY:
DATA ACCUMULATION SURVEY (LOCATIONS)
TOPOGRAPHIC SURVEY ACCURACY

MEASUREMENT SPECIFICATION:
NOT A BOUNDARY SURVEY
CLASS II
T2 (IMMEDIATE AREA AROUND BATHHOUSE AND OWTS)

THE PURPOSE OF THIS SURVEY IS TO DEPICT THE EXISTING CONDITIONS IN THE PROJECT AREA FOR CONSTRUCTION AND THE DESIGN OF A NEW ON-SITE WASTEWATER TREATMENT SYSTEM.

David T. Bray 8/10/2022
DAVID T. BRAY PLS NO. 1989
CAPUTO AND WICK LTD., COA NO. A177



STATE OF RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
DIVISION OF PLANNING AND DEVELOPMENT

DEMOLITION AND REBUILD OF BATHHOUSES
BURLINGAME STATE PARK AND CAMPGROUND
CHARLESTOWN, RHODE ISLAND

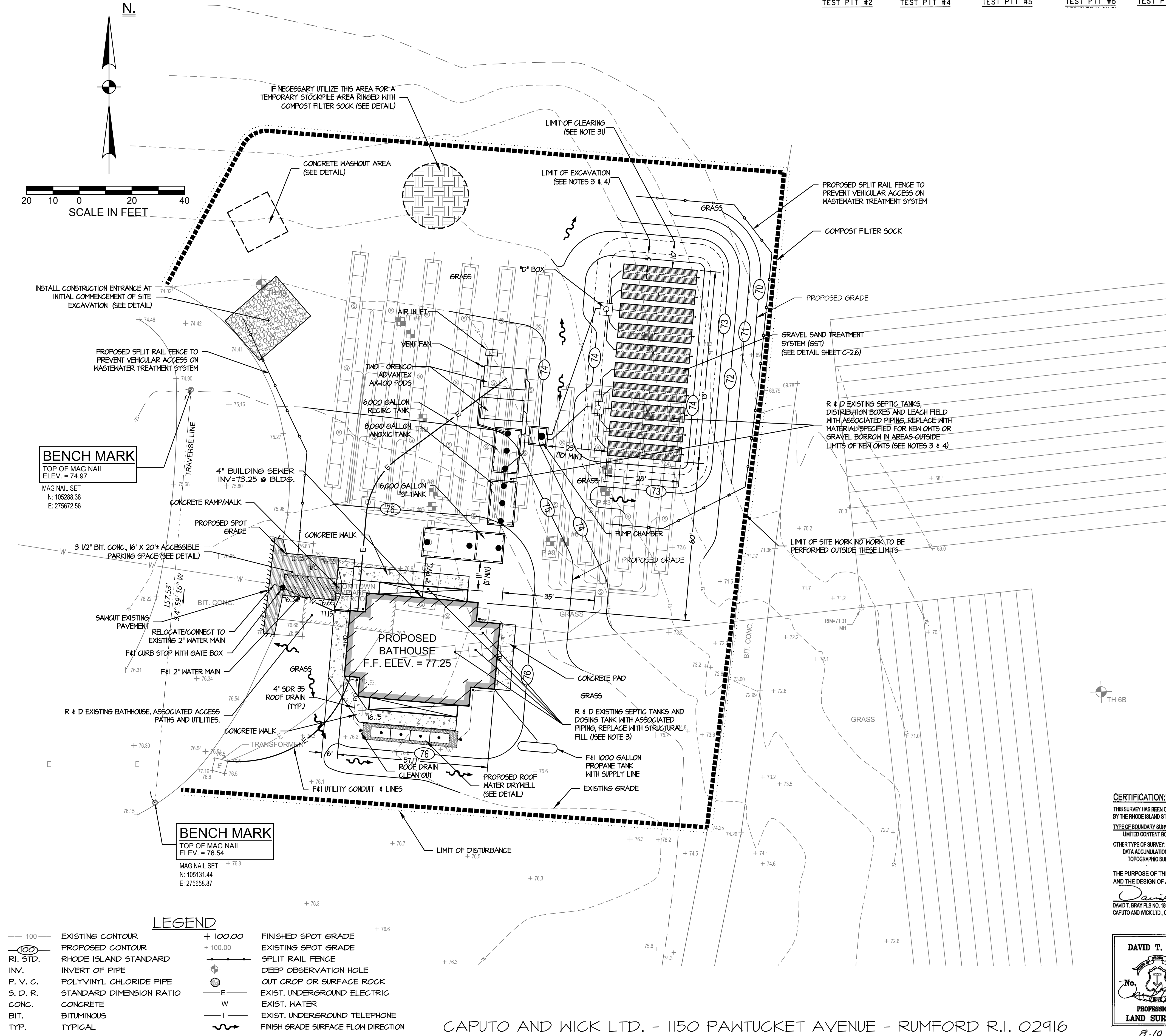
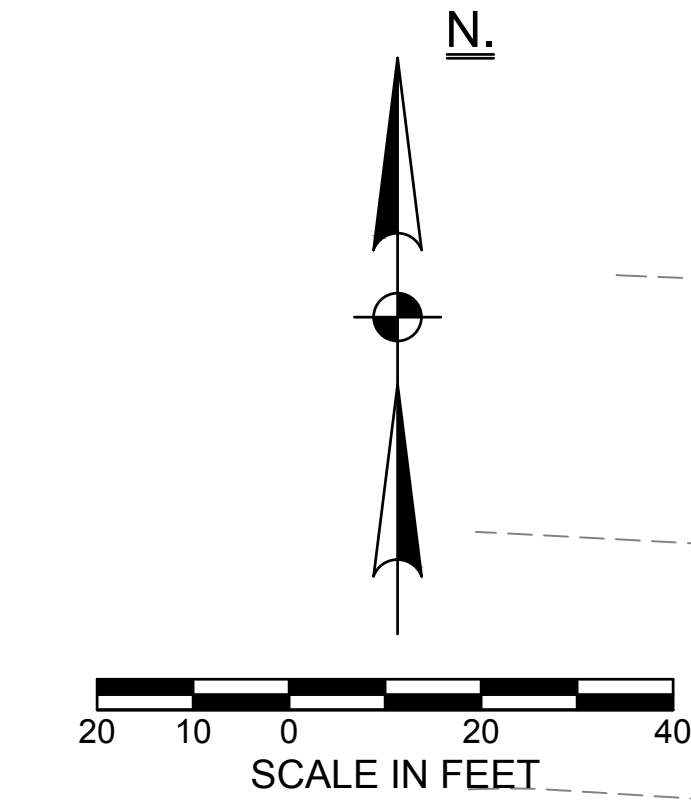
LEGIONTOWN CAMP BATHHOUSE - SITE PLAN

Dwg: Scale: 1" = 20'

Contract No. x Date: OCTOBER 6, 2023

C-1.6
14 OF 106

BURLINGAME STATE PARK AND CAMPGROUND

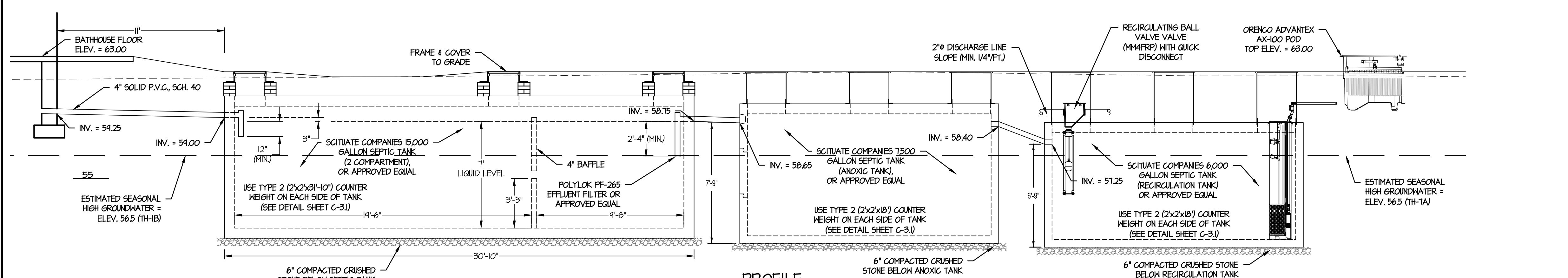


LEGEND

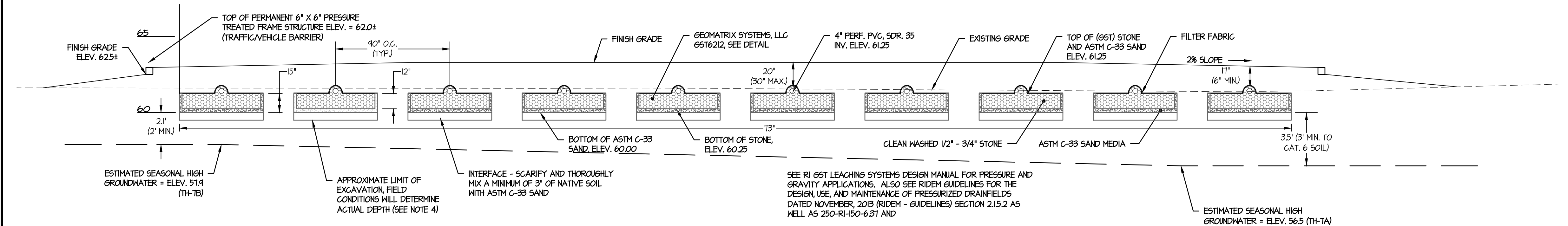
- | | | | |
|----------|--------------------------|----------|-------------------------------------|
| — 100 — | EXISTING CONTOUR | + 100.00 | FINISHED SPOT GRADE |
| — 100 — | PROPOSED CONTOUR | + 100.00 | EXISTING SPOT GRADE |
| RI, STD. | RHODE ISLAND STANDARD | — | SPLIT RAIL FENCE |
| INV. | INVERT OF PIPE | — | DEEP OBSERVATION HOLE |
| P. V. C. | POLYVINYL CHLORIDE PIPE | — | OUT CROP OR SURFACE ROCK |
| S. D. R. | STANDARD DIMENSION RATIO | — | EXIST. UNDERGROUND ELECTRIC |
| CONC. | CONCRETE | — | EXIST. WATER |
| BIT. | BITUMINOUS | — | EXIST. UNDERGROUND TELEPHONE |
| TYP. | TYPICAL | — | FINISH GRADE SURFACE FLOW DIRECTION |

CAPUTO AND WICK LTD. - 1150 PAWTUCKET AVENUE - RUMFORD R.I. 02916

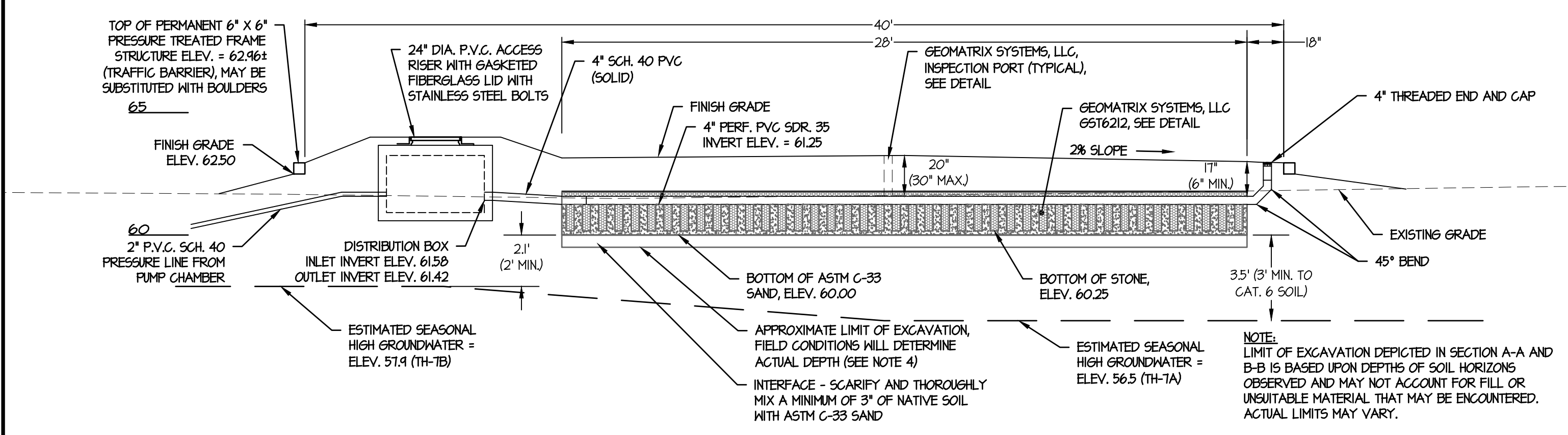
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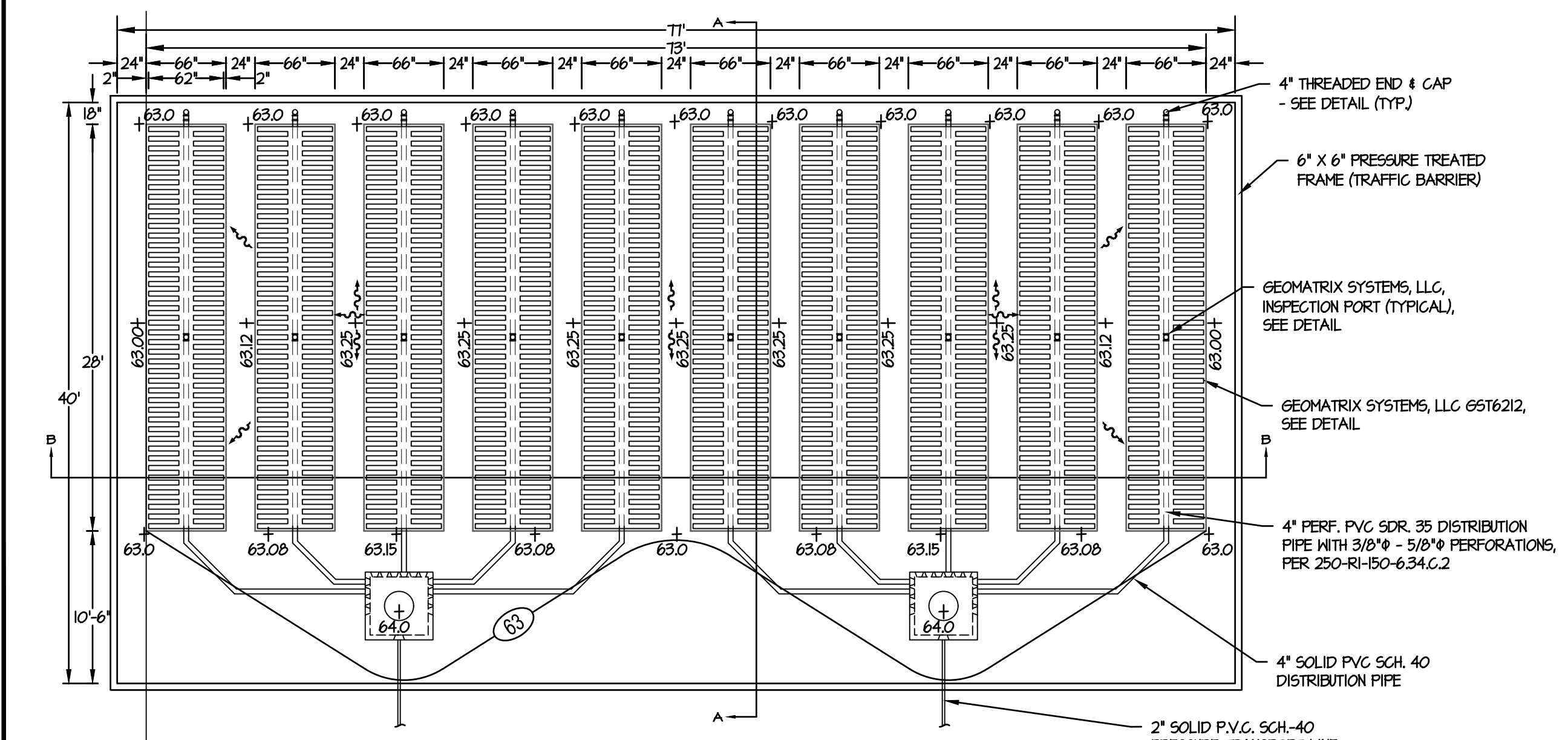
PROFILE
SCALE 1" = 4'



GRAVEL TREATMENT SYSTEM (GST) SECTION B-B
SCALE 1" = 4'



GRAVEL TREATMENT SYSTEM (GST) SECTION A-A
SCALE 1" = 4'



GRAVEL SAND TREATMENT SYSTEM (GST) PLAN VIEW
SCALE 1" = 8'

CAPUTO AND WICK LTD. - 1150 PAWTUCKET AVENUE - RUMFORD R.I. 02916

ELEVATION SCHEDULE		
DESCRIPTION		ELEVATION
INVERT AT FOUNDATION - TO SEPTIC TANK		54.25
INVERT IN - SEPTIC TANK		54.00
LIQUID LEVEL IN SEPTIC TANK		58.15
INVERT IN - ANOXIC TANK		58.65
INVERT OUT - ANOXIC TANK		58.40
INVERT IN RECIRC. TANK		51.25
TOP OF ADVANTECH AX-100		63.00
INVERT OUT - RECIRCULATION TANK TO PUMP BASIN		54.11
INV. IN PUMP BASIN		54.00
TOP OF PUMP BASIN RIM		62.25
ELEVATION HIGH LEVEL ALARM/ALT. PUMP		58.83
ELEVATION PUMP ON		58.61
ELEVATION PUMP OFF		56.83
ELEVATION LOW LEVEL ALARM		56.61
INV. 2" OUT PUMP BASIN		60.00
BOTTOM OF PUMP BASIN		53.50
INVERT INTO DISTRIBUTION BOX		61.58
INVERT OUT OF DISTRIBUTION BOX		61.42
ELEV. TOP OF COVER STONE ABOVE DISTRIBUTION PIPE		61.15
INV. 4" PERF. DISTRIBUTION PIPE GST		61.25
BOTTOM OF GST STONE		60.25
BASE OF GST SAND		60.00
EST. SEASONAL HIGH GW		51.4 (TH-TB)
MAX FINISHED GRADE AT GST		64.08
MIN FINISHED GRADE AT GST		62.08

PUMPING AND SYSTEM SPECIFICATIONS/DATA:

PUMP CHAMBER PUMP MODEL:
MYERS SRM4 SUBMERSIBLE SEWAGE PUMP
HORSEPOWER - 0.4; SINGLE PHASE
2" INCH DISCHARGE; 230 VOLTS; 60 HZ 6 AMPS
LIFT OUT (2)
MYERS SRA 200 WITH STAINLESS STEEL BRACKETS
CONTROL PANEL MODEL
MYERS GE-21DW ALTERNATING
ENCLOSURE - NEMA 1 (NEMA 4X IF EXPOSED TO WEATHER)
VOLTAGE - 230
HIGH LEVEL ALARM - VISUAL AND AUDIO
FLOATS MODEL
MYERS MODEL 20VM SJE OR EQUAL
PUMP CHAMBER DISCHARGE VOLUME PER CYCLE:
6" X 6" INTERIOR @ 1' - 10" = 66 CUBIC FEET X 7.48 GALLONS/CF = 494 GAL./CYCLE
2" PIPE DRAIN BACK: APPROXIMATELY 8 GAL.
494 GALLONS/CYCLE - 8 GALLONS = 486 GAL./CYCLE
7500 GPD/2 GST SYSTEMS = 3750 GPD/486 GAL./CYCLE = 7.7 ~ 8 CYCLES/DAY/GST
FLOATS - ON, OFF, HIGH AND LOW WATER:
HIGH WATER - ELEVATION 58.83
PUMP ON - ELEVATION 58.67
PUMP OFF - ELEVATION 56.83
LOW WATER - ELEVATION 56.67
ORENCO AX-100 TREATMENT SYSTEM DATA REVIEWED AND PROVIDED BY ATLANTIC SOLUTIONS
(CONTROL PANEL - TIME DOSED)
GRAVEL SAND TREATMENT (GST) SYSTEM DATA REVIEWED BY GEOMATRIX SYSTEMS LLC.

SEPTIC TANK TOP VIEW
ELEV. 62.01
ELEV. 60.42
ELEV. 59.16
ELEV. 59.08

SEPTIC TANK SIDE VIEW
ELEV. 62.01
ELEV. 60.07
ELEV. 59.16
ELEV. 59.08

BUOYANCY CALCULATIONS FOR 15,000 GALLON SEPTIC TANK
MUST SET IN DRY CONDITIONS
VOLUMES
TOP SLAB: 11.33' WIDE X 30.83' LONG X 0.61' THICK = 202.96 C.F. (CUBIC FOOT)
SIDES: 2 SIDES X 10.00' LONG X 8.00' HIGH X 0.61' WIDE = 106.61 C.F.
2 SIDES X 30.83' LONG X 8.00' HIGH X 0.61' WIDE = 328.84 C.F.
BOTTOM: 11.33' WIDE X 30.83' LONG X 0.61' THICK = 202.96 C.F.
BAFFLES: 10.00' LONG X 1.25' HIGH X 0.39' WIDE = 28.32 C.F.
TOTAL VOLUME OF CONCRETE FOR TANK = 425.40 C.F.
EARTH: 11.33' WIDE X 30.83' LONG X 1.50' THICK = 524.16 C.F.
CONSTANTS (HEIGHTS)
CONCRETE: 150 POUNDS/C.F.
EARTH: 100 POUNDS/C.F.
WATER: 62.4 POUNDS/C.F.
COUNTER HEIGHT: 2230.65 POUNDS (TYPE 2 - SEE SCHEDULE SHEET C-33)
HEIGHT OF TANK IN PLACE
CONCRETE: 425.40 C.F. X 150 POUNDS/C.F. = 136,810 POUNDS (EMPTY TANK)
COUNTER HEIGHT: 2230.65 POUNDS
EARTH: 524.16 C.F. X 100 POUNDS/C.F. = 52,416 POUNDS (EARTH COVER)
TOTAL HEIGHT OF TANK SET IN PLACE = 215,553 POUNDS (EMPTY TANK)
DETERMINE BUOYANCY POINT FOR EMPTY TANK PRIOR TO BACKFILL
BOTTOM SLAB AREA: 11.33' WIDE X 30.83' LONG = 349.44 S.F. (SQUARE FEET)
TANK: 349.44 S.F. X BP X 62.4 POUNDS/C.F. = 136,810 POUNDS (EMPTY TANK)
BP = 136,810 POUNDS ÷ 62.4 POUNDS/C.F. = 344.44 S.F.
BP = 6.31' ~ 6'-4" (ELEV. 57.45 - EMPTY TANK IS BUOYANT)
DETERMINE BUOYANCY POINT FOR EMPTY TANK IN PLACE
BP = 215,553 POUNDS ÷ 62.4 POUNDS/C.F. = 344.44 S.F.
BP = 6.31' ~ 6'-4" (ELEV. 57.45 - EMPTY TANK IS BUOYANT)

BUOYANCY CALCULATIONS FOR 7,500 ANOXIC TANK
MUST SET IN DRY CONDITIONS
VOLUMES
TOP SLAB: 10.00' WIDE X 17.00' LONG X 0.61' THICK = 103.93 C.F. (CUBIC FOOT)
SIDES: 2 SIDES X 4.00' LONG X 7.00' HIGH X 0.50' WIDE = 63.00 C.F.
2 SIDES X 17.00' LONG X 7.00' HIGH X 0.50' WIDE = 118.00 C.F.
BOTTOM: 10.00' WIDE X 17.00' LONG X 0.50' THICK = 85.00 C.F.
TOTAL VOLUME OF CONCRETE FOR TANK = 265.93 C.F.
EARTH: 10.00' WIDE X 17.00' LONG X 1.42' THICK = 306.40 C.F.
CONSTANTS (HEIGHTS)
CONCRETE: 150 POUNDS/C.F.
EARTH: 100 POUNDS/C.F.
WATER: 62.4 POUNDS/C.F.
COUNTER HEIGHT: 12614.4 POUNDS (TYPE 2 - SEE SCHEDULE SHEET C-33)
HEIGHT OF TANK
CONCRETE: 265.93 C.F. X 150 POUNDS/C.F. = 60,889 POUNDS (EMPTY TANK)
COUNTER HEIGHT: 12614.4 POUNDS
EARTH: 306.40 C.F. X 100 POUNDS/C.F. = 30,640 POUNDS (EARTH COVER)
TOTAL HEIGHT OF TANK SET IN PLACE = 106,204 POUNDS (EMPTY TANK)
DETERMINE BUOYANCY POINT FOR EMPTY TANK PRIOR TO BACKFILL
BOTTOM SLAB AREA: 10.00' WIDE X 17.00' LONG = 170.00 S.F. (SQUARE FEET)
TANK: 170.00 S.F. X BP X 62.4 POUNDS/C.F. = 60,889 POUNDS (EMPTY TANK)
BP = 60,889 POUNDS ÷ 62.4 POUNDS/C.F. = 110.00 S.F.
BP = 5.75' ~ 5'-9" (ELEV. 56.65 - EMPTY TANK IS BUOYANT)
DETERMINE BUOYANCY POINT FOR EMPTY TANK IN PLACE
BP = 106,204 POUNDS ÷ 62.4 POUNDS/C.F. = 110.00 S.F.
BP = 10.01' ~ 10'-0" (ELEV. 60.40)

BUOYANCY CALCULATIONS FOR 6,000 RECIRCULATION TANK
MUST SET IN DRY CONDITIONS
VOLUMES
TOP SLAB: 11.00' WIDE X 17.00' LONG X 0.61' THICK = 118.33 C.F. (CUBIC FOOT)
SIDES: 2 SIDES X 4.00' LONG X 7.00' HIGH X 0.50' WIDE = 63.00 C.F.
2 SIDES X 17.00' LONG X 7.00' HIGH X 0.50' WIDE = 118.00 C.F.
BOTTOM: 11.00' WIDE X 17.00' LONG X 0.50' THICK = 93.50 C.F.
TOTAL VOLUME OF CONCRETE FOR TANK = 274.83 C.F.
EARTH: 11.00' WIDE X 17.00' LONG X 1.42' THICK = 336.40 C.F.
CONSTANTS (HEIGHTS)
CONCRETE: 150 POUNDS/C.F.
EARTH: 100 POUNDS/C.F.
WATER: 62.4 POUNDS/C.F.
COUNTER HEIGHT: 12614.4 POUNDS (TYPE 2 - SEE SCHEDULE SHEET C-33)
HEIGHT OF TANK AND EARTH COVER
CONCRETE: 274.83 C.F. X 150 POUNDS/C.F. = 51,250 POUNDS (EMPTY TANK)
COUNTER HEIGHT: 12614.4 POUNDS
EARTH: 336.40 C.F. X 100 POUNDS/C.F. = 33,640 POUNDS (EARTH COVER)
TOTAL HEIGHT OF TANK SET IN PLACE = 106,204 POUNDS (EMPTY TANK)
DETERMINE BUOYANCY POINT FOR EMPTY TANK PRIOR TO BACKFILL
BOTTOM SLAB AREA: 11.00' WIDE X 17.00' LONG = 187.00 S.F. (SQUARE FEET)
TANK: 187.00 S.F. X BP X 62.4 POUNDS/C.F. = 51,250 POUNDS (EMPTY TANK)
BP = 51,250 POUNDS ÷ 62.4 POUNDS/C.F. = 110.00 S.F.
BP = 5.75' ~ 5'-9" (ELEV. 56.65 - EMPTY TANK IS BUOYANT)
DETERMINE BUOYANCY POINT FOR EMPTY TANK IN PLACE
BP = 106,204 POUNDS ÷ 62.4 POUNDS/C.F. = 110.00 S.F.
BP = 11.00' ~ 11'-0" (ELEV. 62.40)

BUOYANCY CALCULATIONS FOR PUMP CHAMBER
MUST SET IN DRY CONDITIONS
AREAS
TOP: 17.00' X 17.00' = 44 S.F. - (17 X 17) = 44 S.F.
VOLUMES
TOP SLAB: 44.00 S.F. X 0.50' THICK = 22.00 C.F. (CUBIC FOOT)
SIDES: 2 SIDES X 17.00' LONG X 17.00' HIGH X 0.50' WIDE = 44.00 C.F.
2 SIDES X 6.00' LONG X 17.00' HIGH X 0.50' WIDE = 42.00 C.F.
BOTTOM: 17.00' WIDE X 17.00' LONG X 0.50' THICK = 24.50 C.F.
TOTAL VOLUME OF CONCRETE FOR TANK = 112.50 C.F.
EARTH: 44.00 S.F. X 0.75' THICK = 33.00 C.F.
CONSTANTS (HEIGHTS)
CONCRETE: 150 POUNDS/C.F.
EARTH: 100 POUNDS/C.F.
WATER: 62.4 POUNDS/C.F.
HEIGHT OF TANK AND EARTH COVER
CONCRETE: 112.50 C.F. X 150 POUNDS/C.F. = 20,633 POUNDS (EMPTY TANK)
EARTH: 33.00 C.F. X 100 POUNDS/C.F. = 3,300 POUNDS (EARTH COVER)
TOTAL HEIGHT OF TANK SET IN PLACE = 23,933 POUNDS (EMPTY TANK)
DETERMINE BUOYANCY POINT FOR EMPTY TANK PRIOR TO BACKFILL
BOTTOM SLAB AREA: 17.00' WIDE X 17.00' LONG = 289 S.F.
CHAMBER: 44.00 S.F. X BP X 62.4 POUNDS/C.F. = 20,633 POUNDS (EMPTY TANK)
BP = 20,633 POUNDS ÷ 62.4 POUNDS/C.F. = 41.00 S.F.
BP = 6.19' ~ 6'-4" (ELEV. 60.25 - MUST BE SET IN DRY CONDITION)
DETERMINE BUOYANCY POINT FOR EMPTY TANK IN PLACE
BP = 23,933 POUNDS ÷ 62.4 POUNDS/C.F. = 41.00 S.F.
BP = 7.83' ~ 7'-10" (ELEV. 61.33)

STATE OF RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
DIVISION OF PLANNING AND DEVELOPMENT

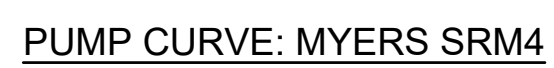
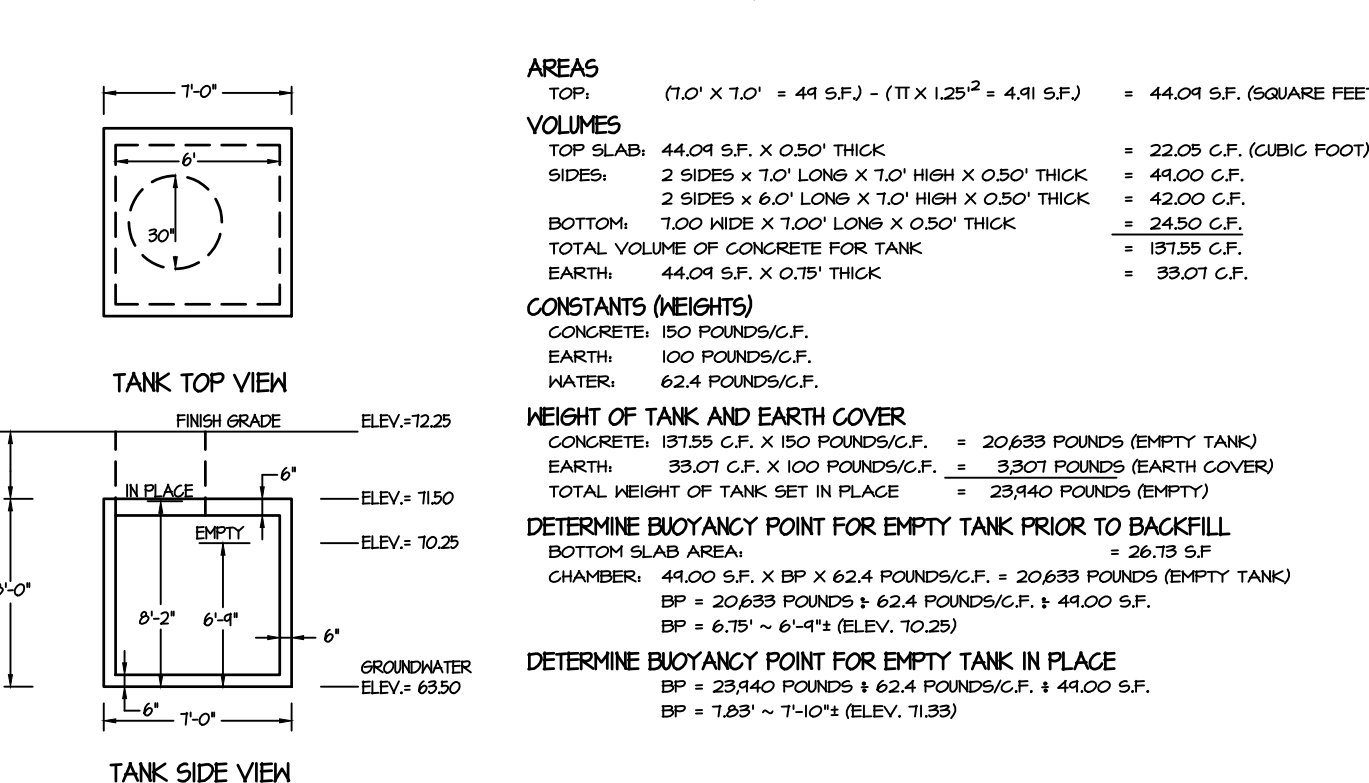
DEMOLITION AND REBUILD OF BATHHOUSES
BURLINGAME STATE PARK AND CAMPGROUND
CHARLESTOWN, RHODE ISLAND

MILLS CAMP BATHHOUSE - OWTS DETAILS

Dwg: Scale: 1" = 20'
Contract No. x Date: OCTOBER 6, 2023

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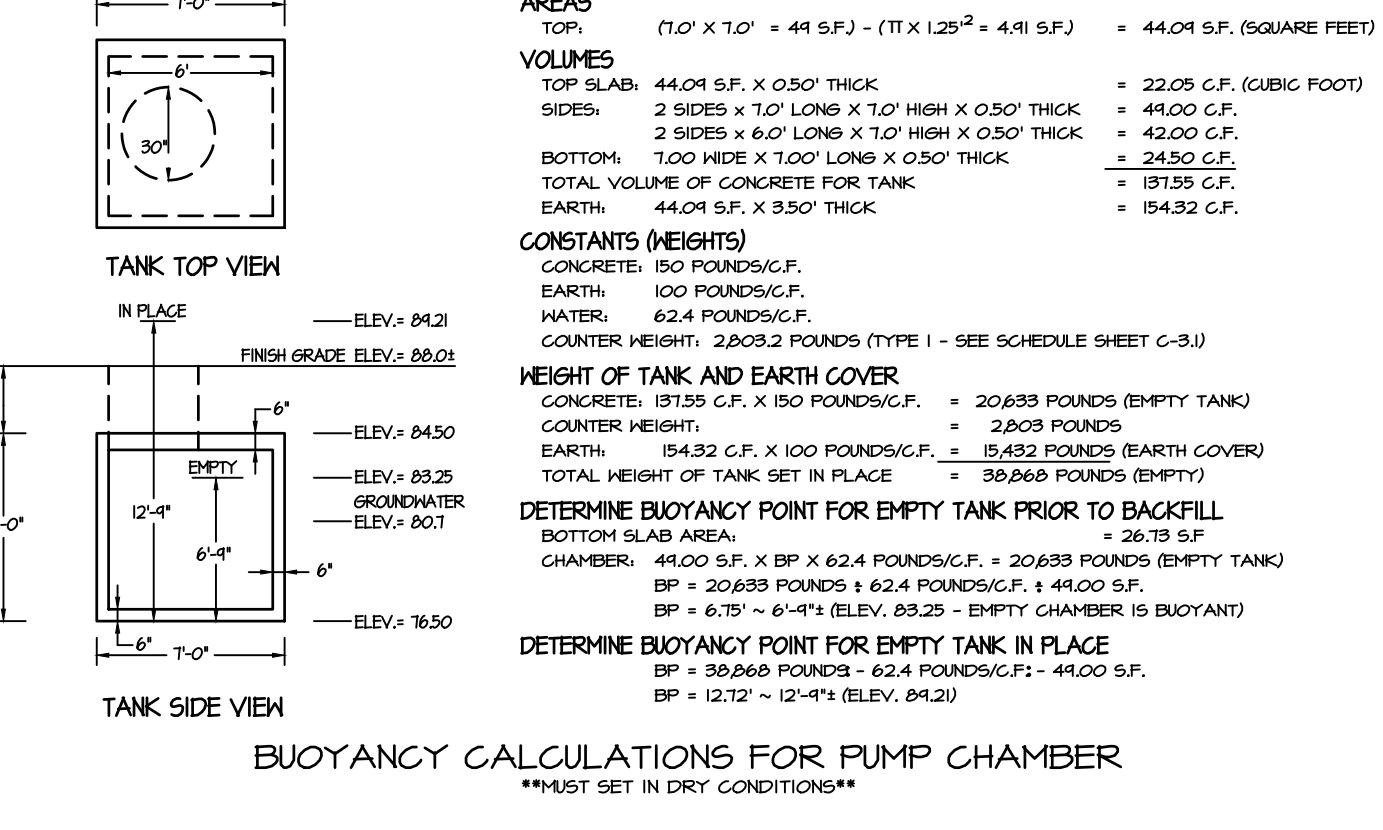
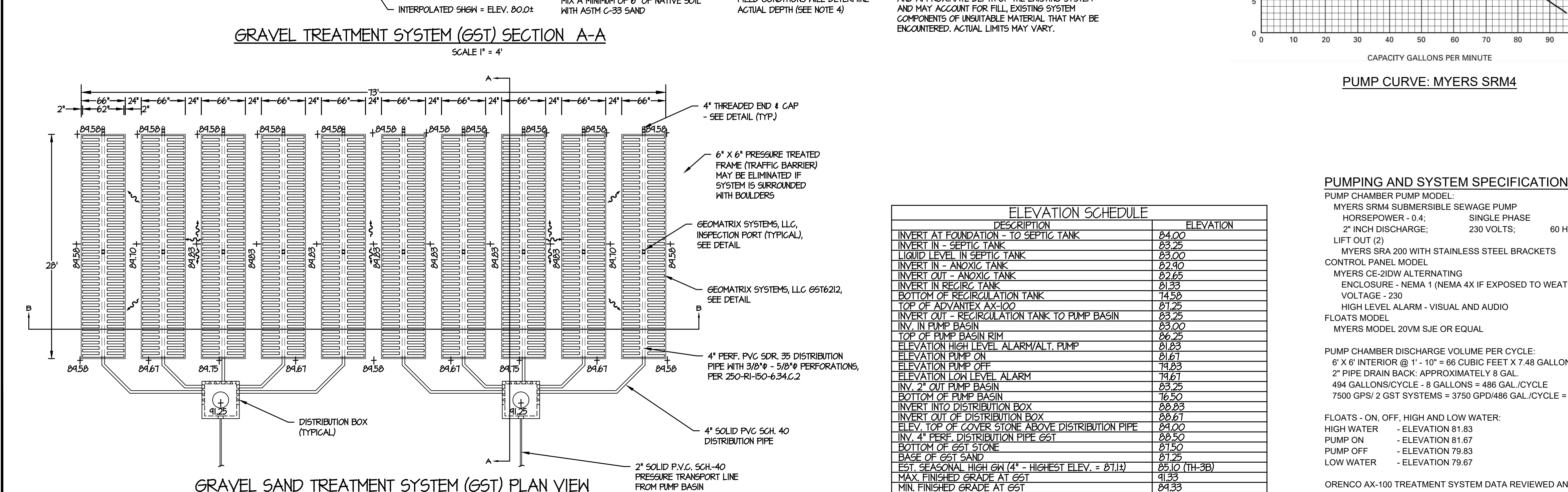
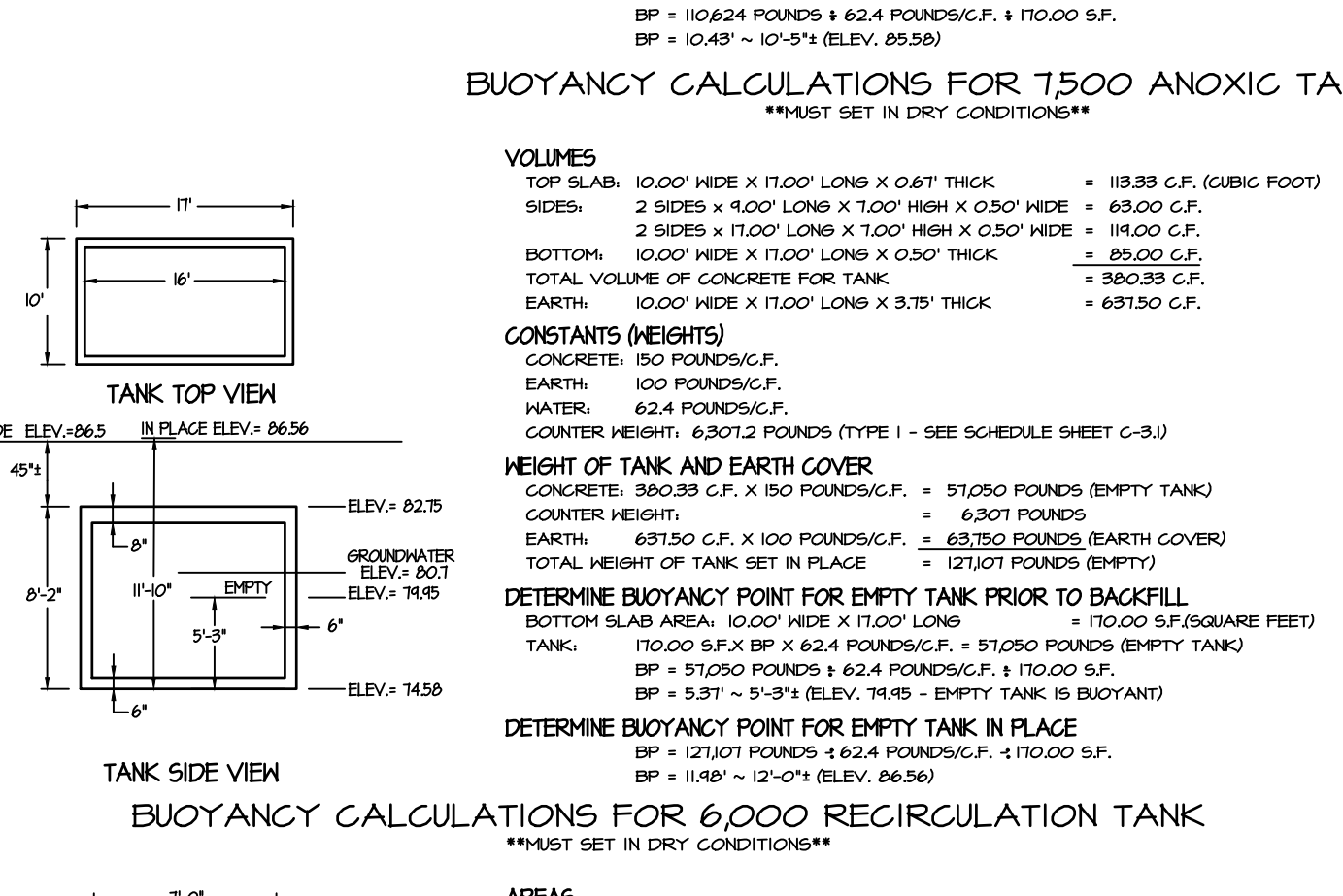
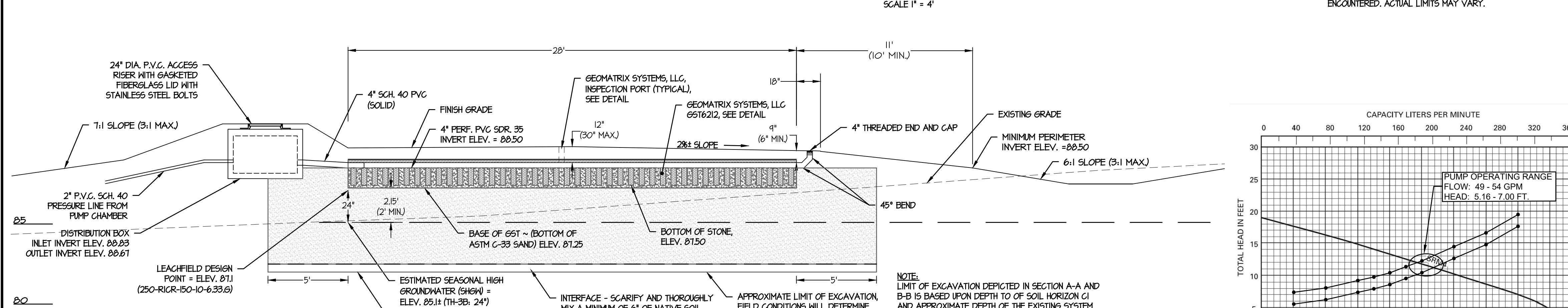
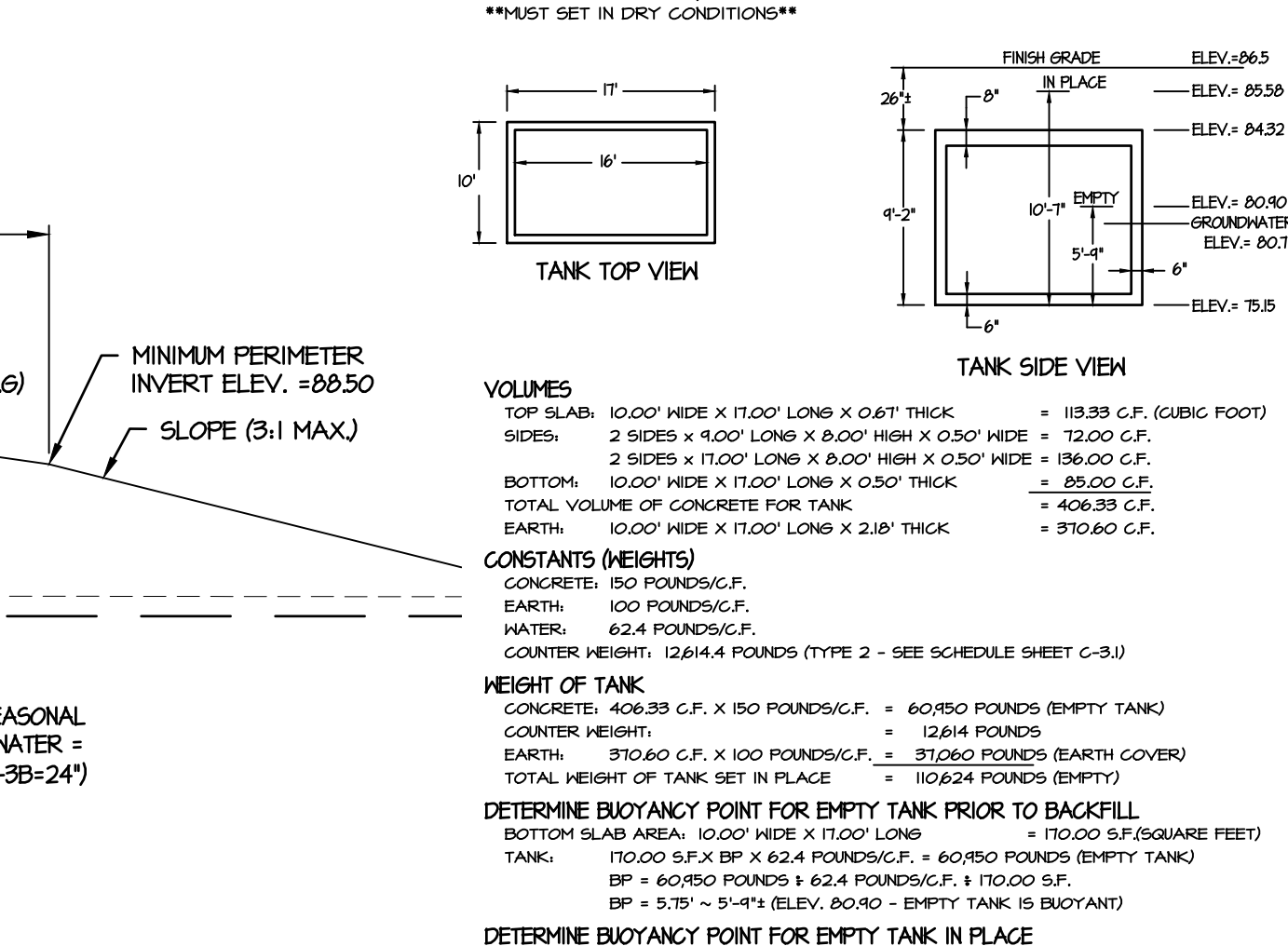
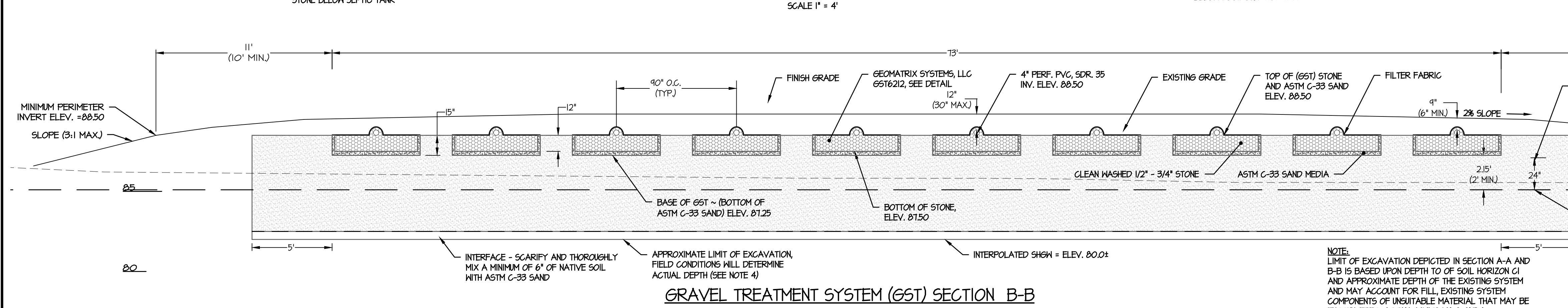
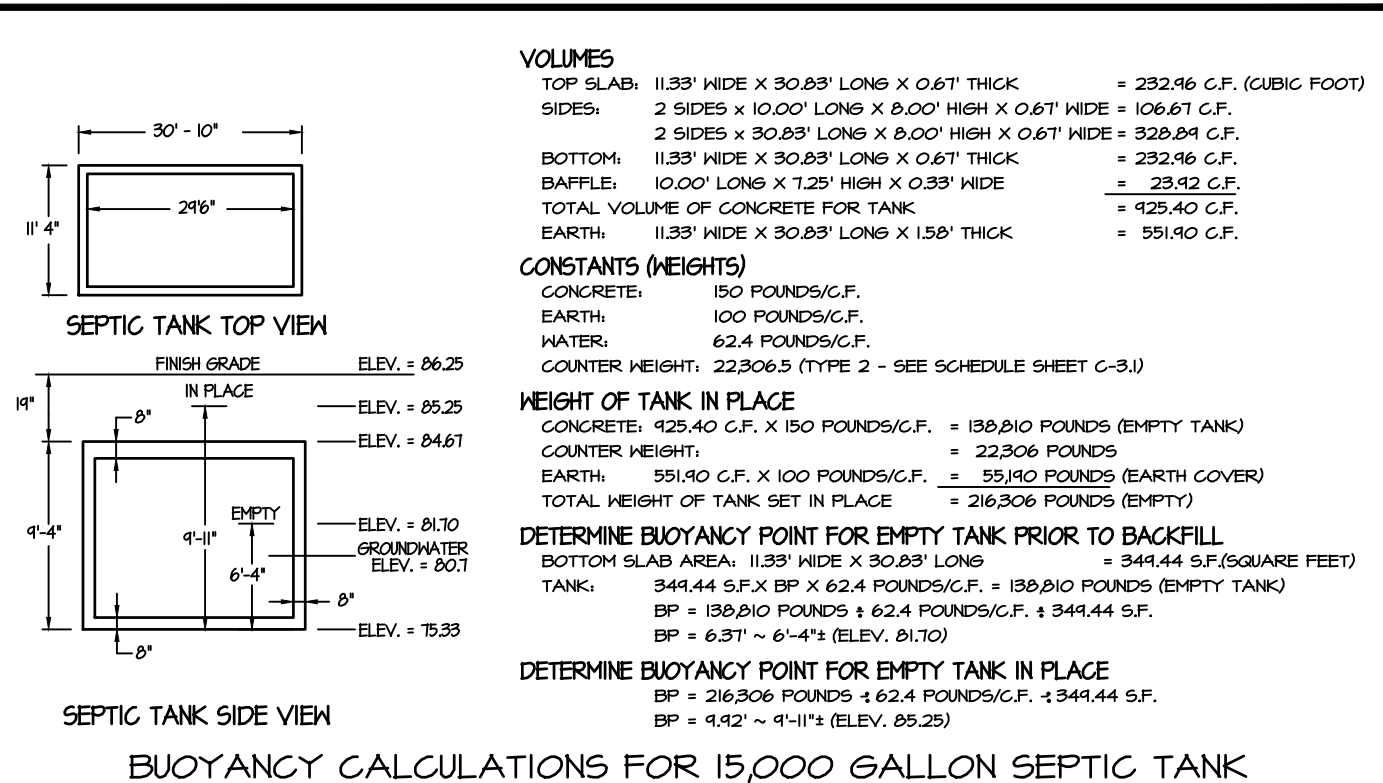
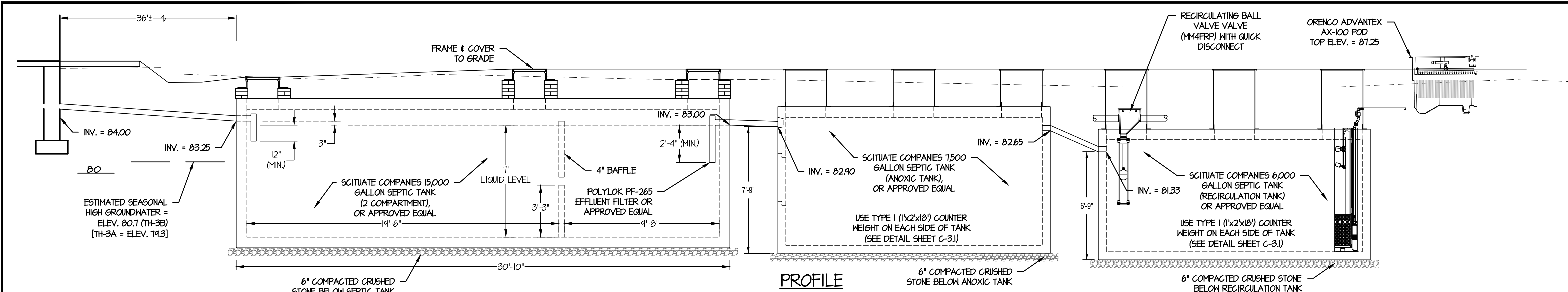
OCTOBER 6, 2023



GRAVEL SAND TREATMENT (GST) SYSTEM DATA REVIEWED BY GEOMATRIX SYSTEMS LLC.

ORENCO AX-100 TREATMENT SYSTEM DATA REVIEWED AND PROVIDED BY ATLANTIC SOLUTIONS
(CONTROL PANEL - TIME DOSED)





ELEVATION SCHEDULE	
DESCRIPTION	ELEVATION
INVERT AT FOUNDATION - TO SEPTIC TANK	84.00
INVERT IN - SEPTIC TANK	83.25
LIQUID LEVEL IN SEPTIC TANK	83.00
INVERT IN - ANOXIC TANK	82.90
INVERT OUT - ANOXIC TANK	82.65
INVERT IN RECIRC. TANK	81.33
BOTTOM OF RECIRCULATION TANK	81.50
TOP OF ADVANTEX AX-100	81.25
INVERT OUT - RECIRCULATION TANK TO PUMP BASIN	83.25
INV. IN PUMP BASIN	83.00
TOP OF PUMP BASIN RIM	86.25
ELEVATION HIGH LEVEL ALARM/ALT. PUMP	81.25
ELEVATION PUMP ON	81.61
ELEVATION PUMP OFF	81.25
ELEVATION LOW LEVEL ALARM	81.61
INV. 2" OUT PUMP BASIN	83.25
BOTTOM OF PUMP BASIN	86.50
INVERT INTO DISTRIBUTION BOX	88.50
INVERT OUT OF DISTRIBUTION BOX	88.61
ELEV. TOP OF COVER STONE ABOVE DISTRIBUTION PIPE	88.00
INV. 4" PERF. DISTRIBUTION PIPE GST	88.50
BOTTOM OF GST STONE	81.50
BASE OF GST SAND	81.25
EST. SEASONAL HIGH GW (4" - HIGHEST ELEV. = 81.19)	85.10 (TH-3B)
MAX FINISHED GRADE AT GST	81.33
MIN FINISHED GRADE AT GST	84.33

PUMPING AND SYSTEM SPECIFICATIONS/DATA:

PUMP CHAMBER PUMP MODEL:

MYERS SRM4 SUBMERSIBLE SEWAGE PUMP

HORSEPOWER - 0.4; SINGLE PHASE

2" INCH DISCHARGE; 230 VOLTS; 60 HZ 6 AMPS

LIFT OUT (2)

MYERS SRA 200 WITH STAINLESS STEEL BRACKETS

CONTROL PANEL MODEL:

MYERS CE-210W ALTERNATING

ENCLOSURE - NEMA 1 (NEMA 4X IF EXPOSED TO WEATHER)

VOLTAGE - 230

HIGH LEVEL ALARM - VISUAL AND AUDIO

FLOATS MODEL:

MYERS MODEL 20VM SJE OR EQUAL

PUMP CHAMBER DISCHARGE VOLUME PER CYCLE:

6' X 6' INTERIOR @ 1' - 10" = 66 CUBIC FEET X 7.48 GALLONS/CF = 494 GAL./CYCLE

2" PIPE DRAIN BACK: APPROXIMATELY 8 GAL.

494 GALLONS/CYCLE - 8 GALLONS = 486 GAL./CYCLE

7500 GPM/2 GST SYSTEMS = 3750 GPD/486 GAL./CYCLE = 7.7 ~ 8 CYCLES/DAY/GST

FLOATS - ON, OFF, HIGH AND LOW WATER:

HIGH WATER - ELEVATION 81.63

PUMP ON - ELEVATION 81.67

PUMP OFF - ELEVATION 79.83

LOW WATER - ELEVATION 79.67

ORENCO AX-100 TREATMENT SYSTEM DATA REVIEWED AND PROVIDED BY ATLANTIC SOLUTIONS (CONTROL PANEL - TIME DOSED)

GRAVEL SAND TREATMENT (GST) SYSTEM DATA REVIEWED BY GEOMATRIX SYSTEMS, LLC.

STATE OF RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
DIVISION OF PLANNING AND DEVELOPMENT

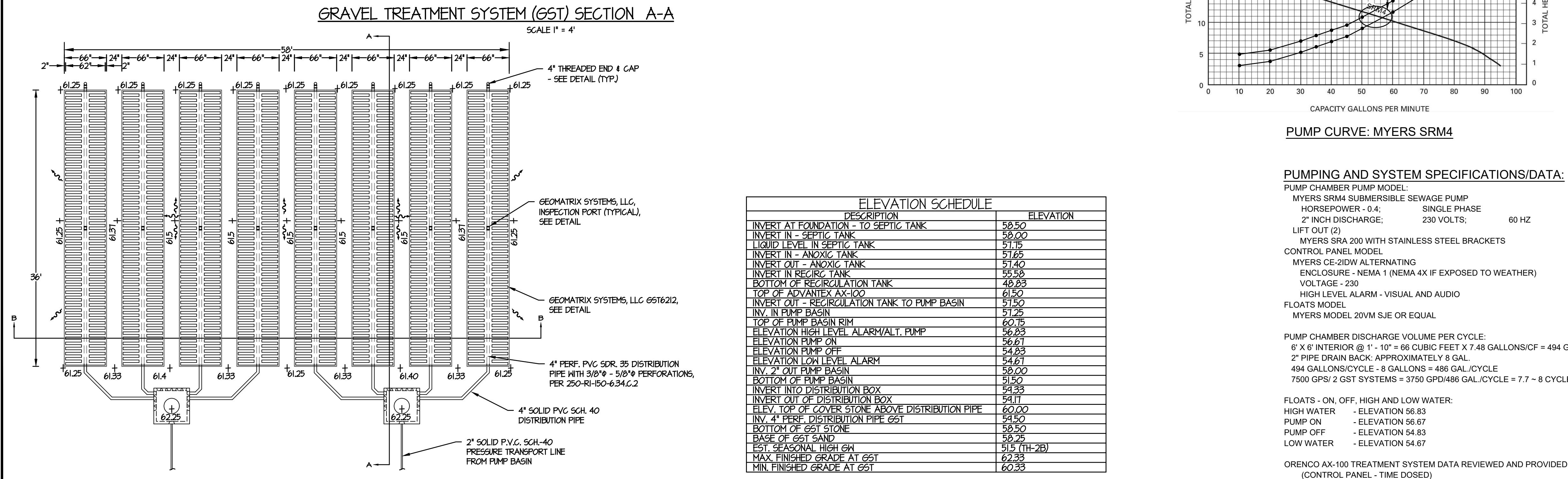
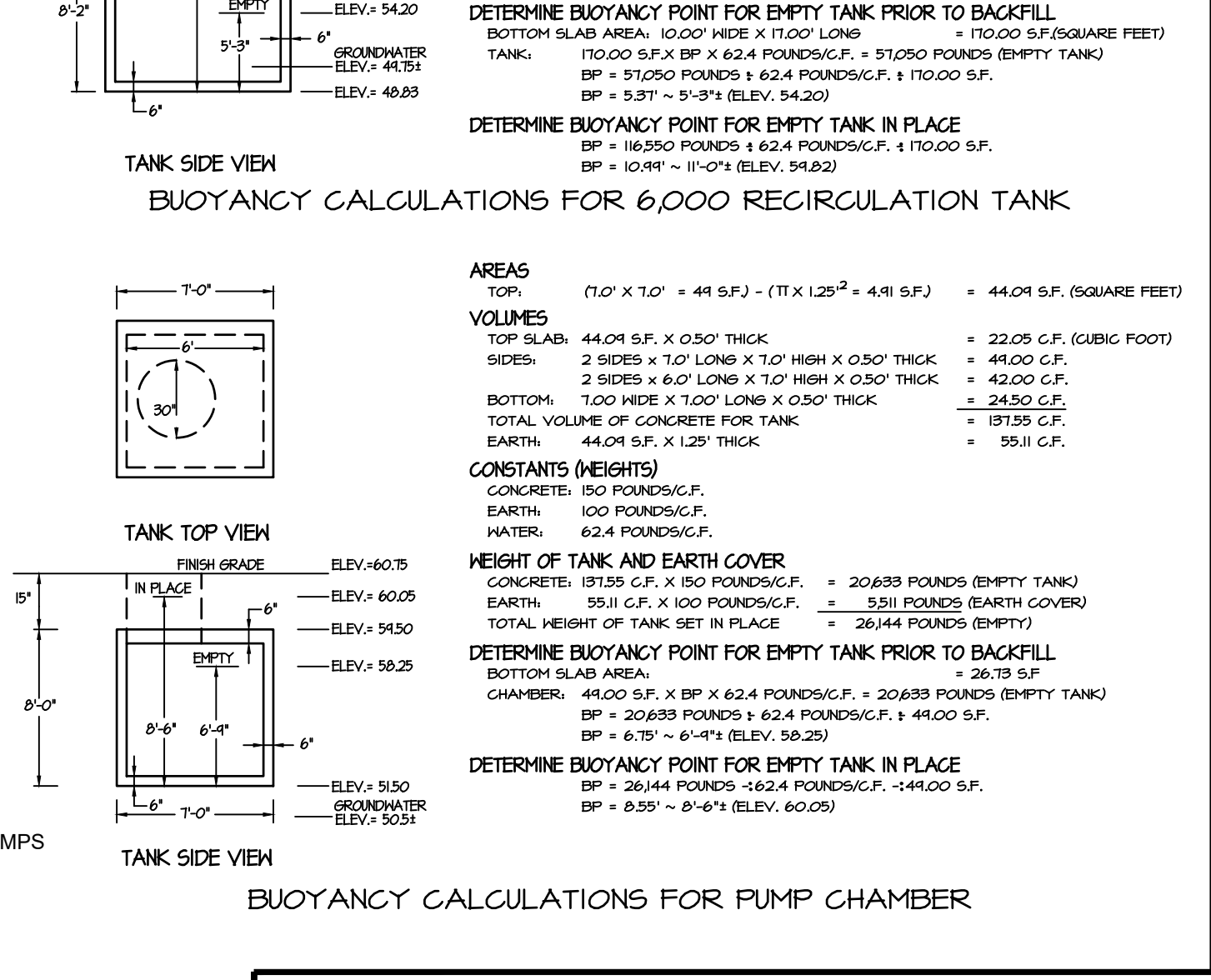
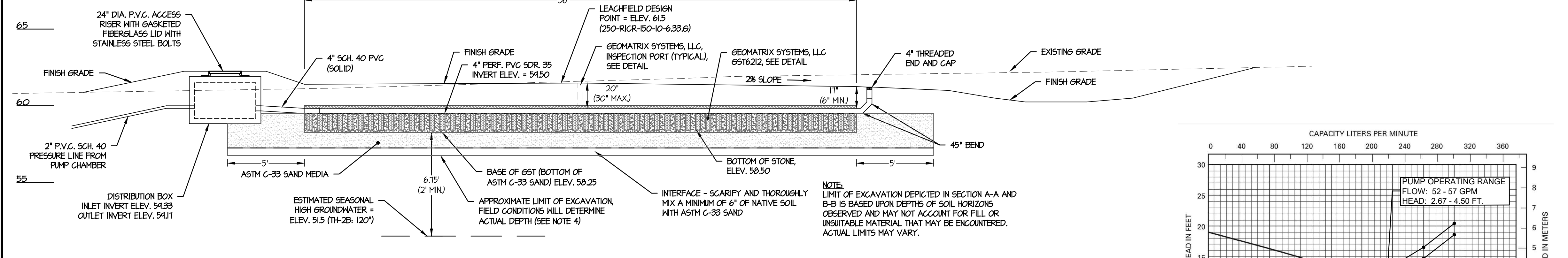
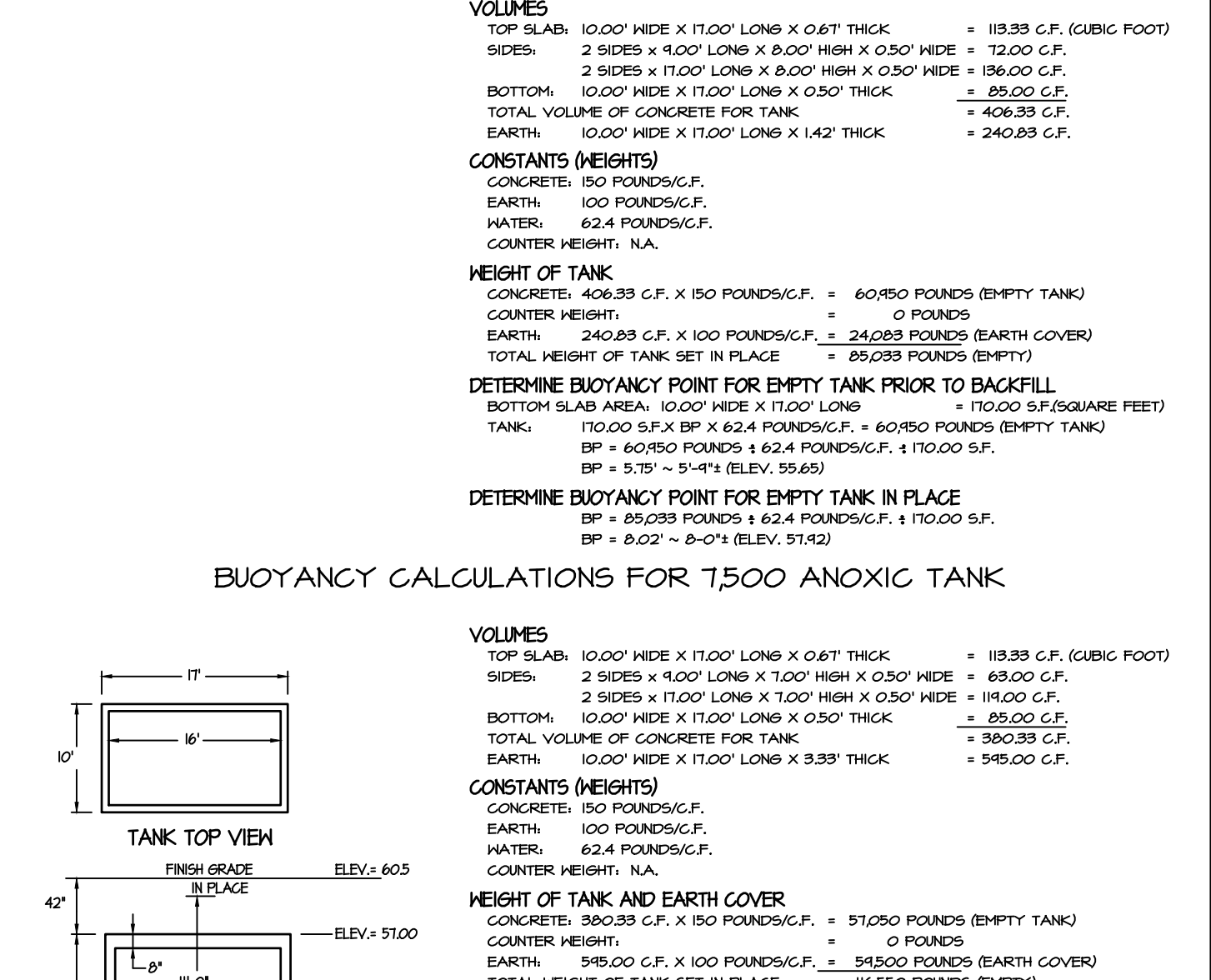
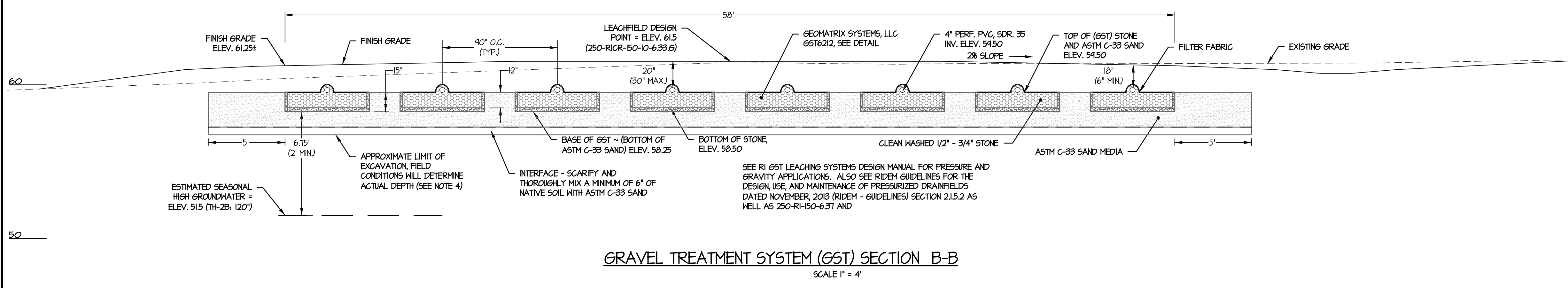
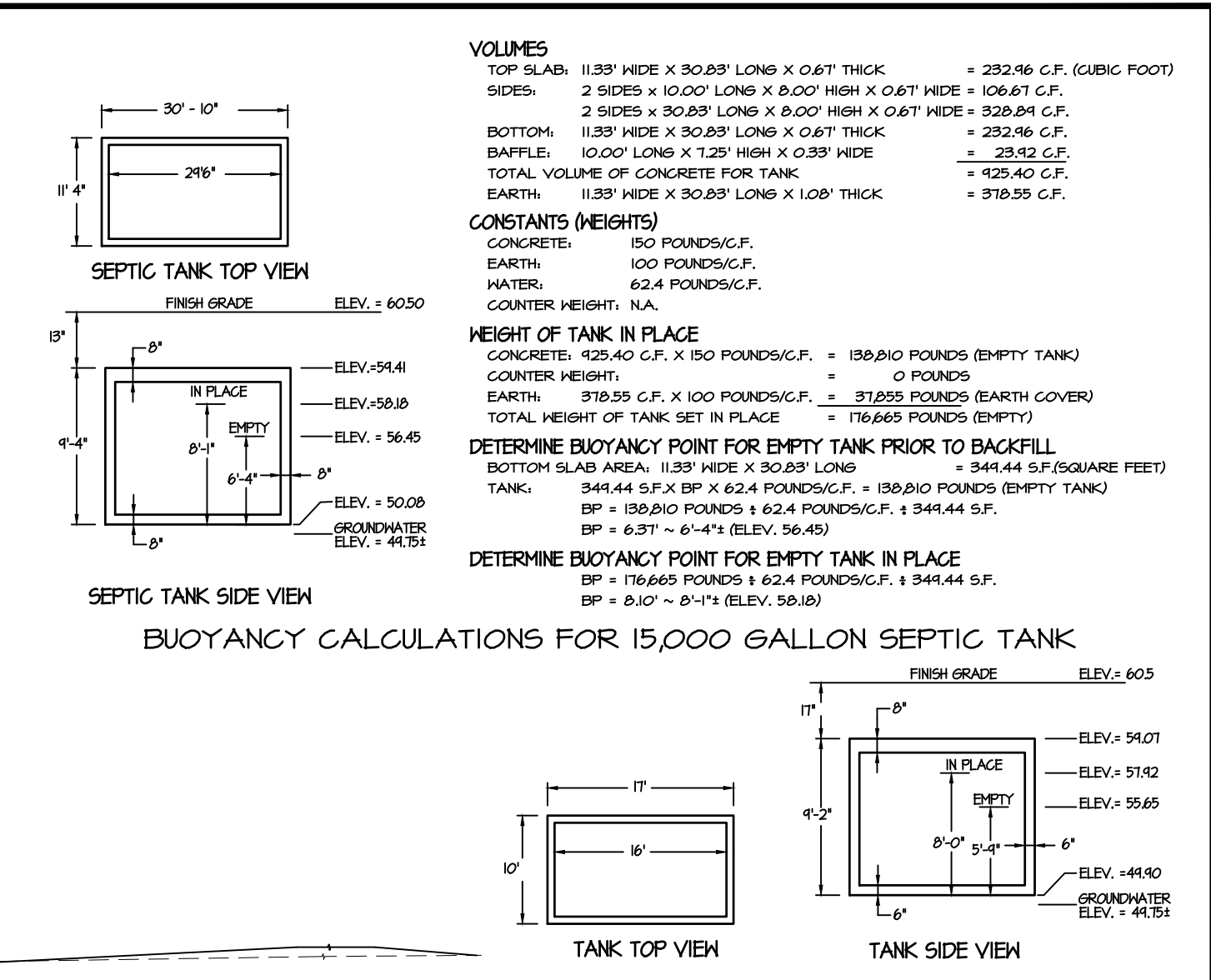
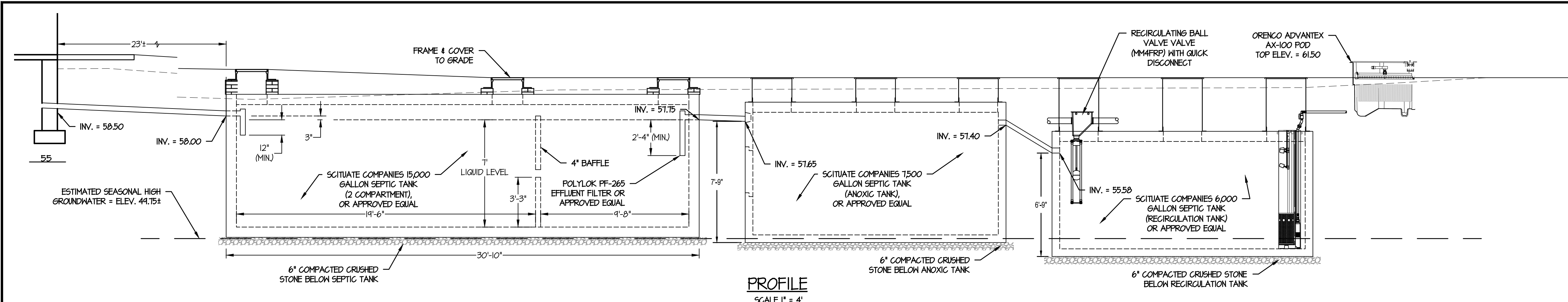
DEMOLITION AND REBUILD OF BATHHOUSES
BURLINGAME STATE PARK AND CAMPGROUND
CHARLESTOWN, RHODE ISLAND

BATHHOUSE "A" - OWTS DETAILS

Dwg: Scale: 1" = 20'

Contract No. x Date: OCTOBER 6, 2023

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ELEVATION SCHEDULE		
DESCRIPTION		ELEVATION
INVERT AT FOUNDATION - TO SEPTIC TANK		58.50
INVERT IN - SEPTIC TANK		58.00
LIQUID LEVEL IN SEPTIC TANK		57.15
INVERT IN - ANOXIC TANK		57.65
INVERT OUT - ANOXIC TANK		57.40
INVERT IN RECIRCULATION TANK		55.58
BOTTOM OF RECIRCULATION TANK		49.23
TOP OF ADVANTEX AX-100		61.50
INVERT OUT - RECIRCULATION TANK TO PUMP BASIN		57.50
INV. IN PUMP BASIN		57.25
TOP OF PUMP BASIN RIM		60.75
ELEVATION HIGH LEVEL ALARM/ALT. PUMP		56.83
ELEVATION PUMP ON		56.67
ELEVATION PUMP OFF		54.83
ELEVATION LOW LEVEL ALARM		54.67
INV. 2" OUT PUMP BASIN		58.00
BOTTOM OF PUMP BASIN		51.50
INVERT INTO DISTRIBUTION BOX		54.33
INVERT OUT OF DISTRIBUTION BOX		54.17
ELEV. TOP OF COVER STONE ABOVE DISTRIBUTION PIPE		60.00
INV. 4" PERFOR. DISTRIBUTION PIPE GST		54.50
BOTTOM OF GST STONE		58.50
BASE OF GST SAND		58.25
EST. SEASONAL HIGH GW		51.5 (TH-2B)
MAX. FINISHED GRADE AT GST		62.33
MIN. FINISHED GRADE AT GST		60.33

PUMP CURVE: MYERS SRM4

PUMPING AND SYSTEM SPECIFICATIONS/DATA:

PUMP CHAMBER PUMP MODEL:
MYERS SRM4 SUBMERSIBLE SEWAGE PUMP
HORSEPOWER - 0.4; SINGLE PHASE
2" INCH DISCHARGE; 230 VOLTS; 60 HZ
LIFT OUT (2)
MYERS SRA 200 WITH STAINLESS STEEL BRACKETS
CONTROL PANEL MODEL
MYERS GE-210W ALTERNATING
ENCLOSURE - NEMA 1 (NEMA 4X IF EXPOSED TO WEATHER)
VOLTAGE - 230
HIGH LEVEL ALARM - VISUAL AND AUDIO
FLOATS MODEL
MYERS MODEL 20VM SJE OR EQUAL

PUMP CHAMBER DISCHARGE VOLUME PER CYCLE:
6" X 6" INTERIOR @ 1' - 10" = 66 CUBIC FEET X 7.48 GALLONS/CF = 494 GAL./CYCLE
2" PIPE DRAIN BACK: APPROXIMATELY 8 GAL.
494 GALLONS/CYCLE - 8 GALLONS = 486 GAL./CYCLE
7500 GPD/ 2 GST SYSTEMS = 3750 GPD/486 GAL./CYCLE = 7.7 ~ 8 CYCLES/DAY/GST

FLOATS - ON, OFF, HIGH AND LOW WATER:
HIGH WATER - ELEVATION 56.83
PUMP ON - ELEVATION 56.67
PUMP OFF - ELEVATION 54.83
LOW WATER - ELEVATION 54.67

ORENCO AX-100 TREATMENT SYSTEM DATA REVIEWED AND PROVIDED BY ATLANTIC SOLUTIONS
(CONTROL PANEL - TIME DOSED)

GRAVEL SAND TREATMENT (GST) SYSTEM DATA REVIEWED BY GEOMATRIX SYSTEMS LLC.

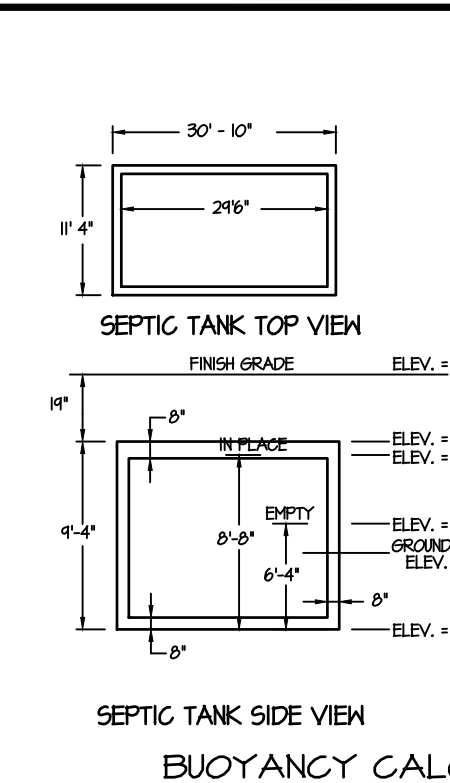
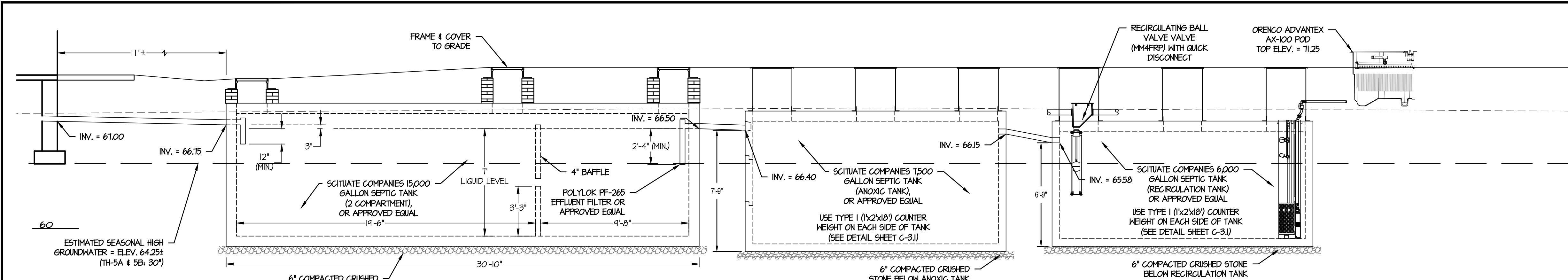
STATE OF RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
DIVISION OF PLANNING AND DEVELOPMENT

DEMOLITION AND REBUILD OF BATHHOUSES
BURLINGAME STATE PARK AND CAMPGROUND
CHARLESTOWN, RHODE ISLAND

FISH CAMP BATHHOUSE - OWTS DETAILS

Dwg: Scale: 1" = 20'
Contract No. x Date: OCTOBER 6, 2023

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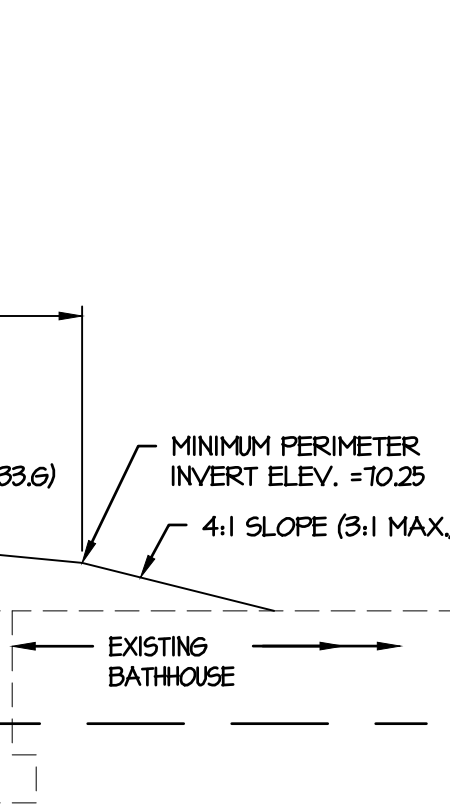
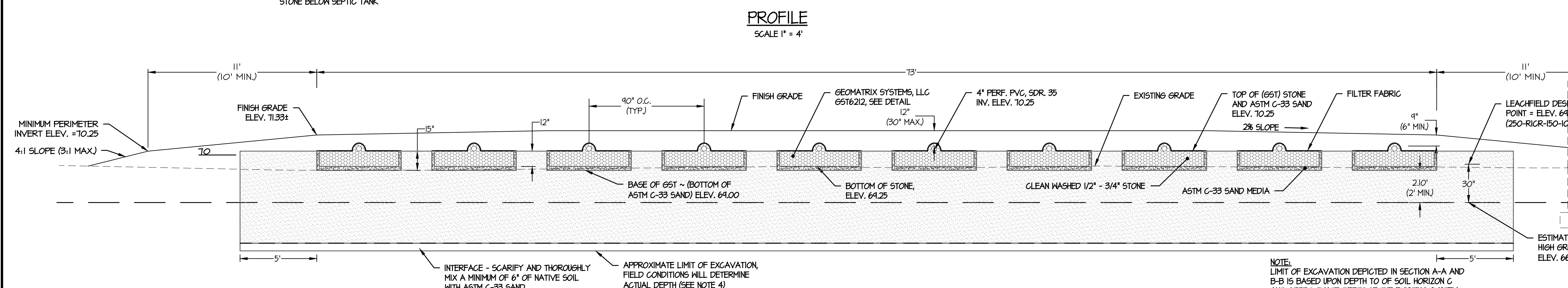
VOLUMES
TOP SLAB: 11.33' WIDE X 30.83' LONG X 0.67' THICK = 232.96 C.F. (CUBIC FOOT)
SIDES: 2 SIDES X 10.00' LONG X 8.00' HIGH X 0.67' WIDE = 106.67 C.F.
BOTTOM: 11.33' WIDE X 30.83' LONG X 0.67' THICK = 232.96 C.F.
BAFFLES: 10.00' LONG X 1.25' HIGH X 0.39' WIDE = 28.52 C.F.
TOTAL VOLUME OF CONCRETE FOR TANK = 425.40 C.F.
EARTH: 11.33' WIDE X 30.83' LONG X 1.50' THICK = 551.40 C.F.

CONSTANTS (HEIGHTS)
CONCRETE: 150 POUNDS/C.F.
EARTH: 100 POUNDS/C.F.
WATER: 62.4 POUNDS/C.F.
CONCRETE HEIGHT: N/A

HEIGHT OF TANK IN PLACE
CONCRETE: 925.40 C.F. X 150 POUNDS/C.F. = 138,810 POUNDS (EMPTY TANK)
EARTH: 551.40 C.F. X 100 POUNDS/C.F. = 55,140 POUNDS (EARTH COVER)
TOTAL HEIGHT OF TANK SET IN PLACE = 193,950 POUNDS (EMPTY TANK)

DETERMINE BUOYANCY POINT FOR EMPTY TANK PRIOR TO BACKFILL
BOTTOM SLAB AREA: 11.33' WIDE X 30.83' LONG = 349.44 S.F. (SQUARE FEET)
TANK: 349.44 S.F. X 62.4 POUNDS/C.F. = 21,785 POUNDS (EMPTY TANK)
BP = 138,810 POUNDS + 21,785 POUNDS = 160,595 POUNDS
BP = 6.37' - 6'4" (ELEV. 64.20 - EMPTY TANK IS BUOYANT)

DETERMINE BUOYANCY POINT FOR EMPTY TANK IN PLACE
BP = 193,950 POUNDS + 21,785 POUNDS = 215,735 POUNDS
BP = 8.50' - 8'11" (ELEV. 61.13)



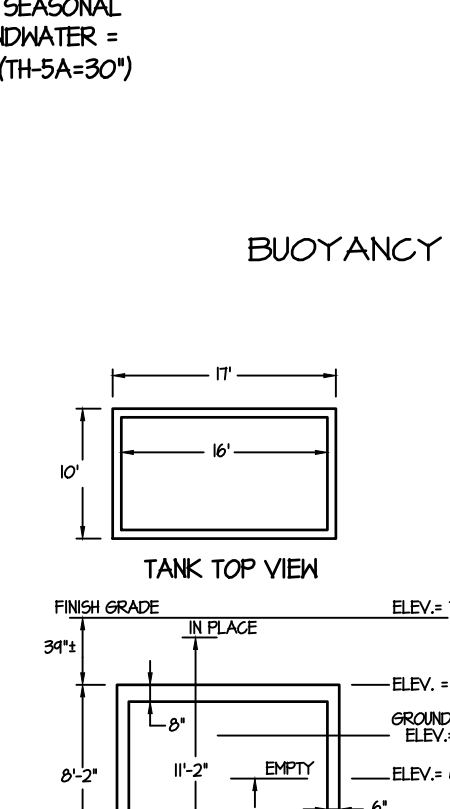
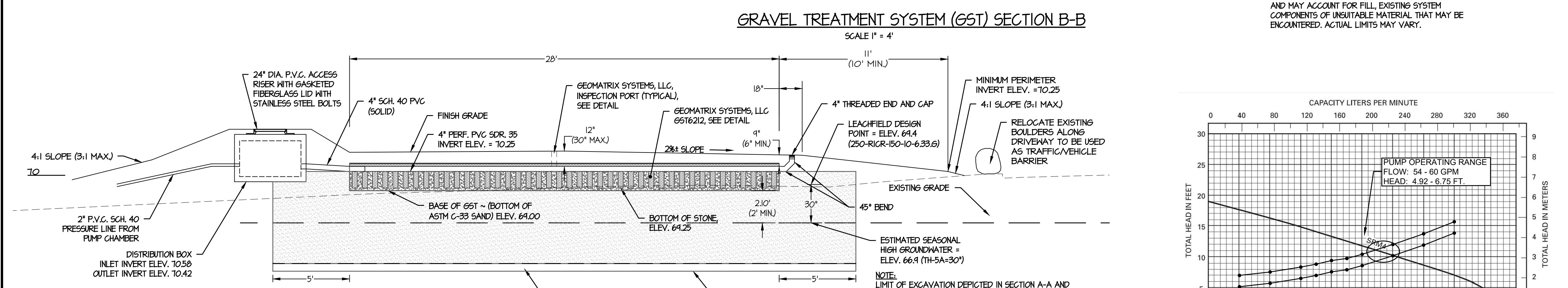
VOLUMES
TOP SLAB: 10.00' WIDE X 17.00' LONG X 0.67' THICK = 113.33 C.F. (CUBIC FOOT)
SIDES: 2 SIDES X 4.00' LONG X 8.00' HIGH X 0.50' WIDE = 72.00 C.F.
BOTTOM: 10.00' WIDE X 17.00' LONG X 0.50' WIDE = 85.00 C.F.
TOTAL VOLUME OF CONCRETE FOR TANK = 270.33 C.F.
EARTH: 10.00' WIDE X 17.00' LONG X 2.42' THICK = 414.00 C.F.

CONSTANTS (HEIGHTS)
CONCRETE: 150 POUNDS/C.F.
EARTH: 100 POUNDS/C.F.
WATER: 62.4 POUNDS/C.F.
CONCRETE HEIGHT: 6.30' (TYPE I - SEE SCHEDULE SHEET C-3)

HEIGHT OF TANK
CONCRETE: 406.33 C.F. X 150 POUNDS/C.F. = 60,950 POUNDS (EMPTY TANK)
EARTH: 414.00 C.F. X 100 POUNDS/C.F. = 41,400 POUNDS (EARTH COVER)
TOTAL HEIGHT OF TANK SET IN PLACE = 102,350 POUNDS (EMPTY TANK)

DETERMINE BUOYANCY POINT FOR EMPTY TANK PRIOR TO BACKFILL
BOTTOM SLAB AREA: 10.00' WIDE X 17.00' LONG = 170.00 S.F. (SQUARE FEET)
TANK: 170.00 S.F. X 62.4 POUNDS/C.F. = 10,608 POUNDS (EMPTY TANK)
BP = 60,950 POUNDS + 10,608 POUNDS = 71,558 POUNDS
BP = 5.75' - 5'4" (ELEV. 63.40 - EMPTY TANK IS BUOYANT)

DETERMINE BUOYANCY POINT FOR EMPTY TANK IN PLACE
BP = 102,350 POUNDS + 10,608 POUNDS = 112,958 POUNDS
BP = 10.21' - 10'2" (ELEV. 61.13)



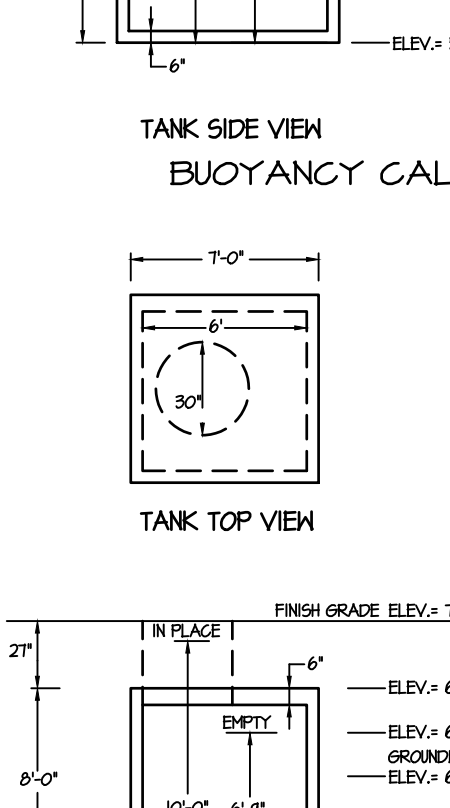
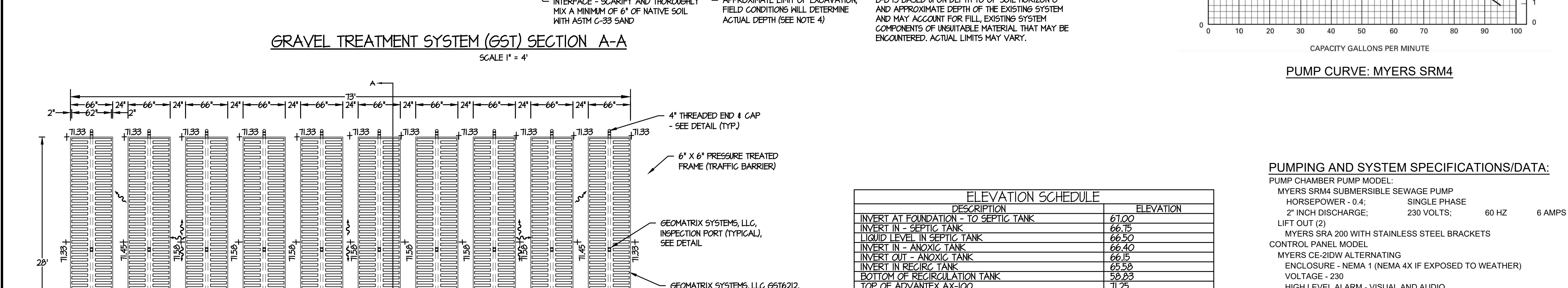
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SIDES: 2 SIDES X 4.00' LONG X 8.00' HIGH X 0.50' WIDE = 72.00 C.F.
BOTTOM: 10.00' WIDE X 17.00' LONG X 0.50' WIDE = 85.00 C.F.
TOTAL VOLUME OF CONCRETE FOR TANK = 270.33 C.F.
EARTH: 10.00' WIDE X 17.00' LONG X 2.42' THICK = 414.00 C.F.

CONSTANTS (HEIGHTS)
CONCRETE: 150 POUNDS/C.F.
EARTH: 100 POUNDS/C.F.
WATER: 62.4 POUNDS/C.F.
CONCRETE HEIGHT: 6.30' (TYPE I - SEE SCHEDULE SHEET C-3)

HEIGHT OF TANK
CONCRETE: 406.33 C.F. X 150 POUNDS/C.F. = 60,950 POUNDS (EMPTY TANK)
EARTH: 414.00 C.F. X 100 POUNDS/C.F. = 41,400 POUNDS (EARTH COVER)
TOTAL HEIGHT OF TANK SET IN PLACE = 102,350 POUNDS (EMPTY TANK)

DETERMINE BUOYANCY POINT FOR EMPTY TANK PRIOR TO BACKFILL
BOTTOM SLAB AREA: 10.00' WIDE X 17.00' LONG = 170.00 S.F. (SQUARE FEET)
TANK: 170.00 S.F. X 62.4 POUNDS/C.F. = 10,608 POUNDS (EMPTY TANK)
BP = 60,950 POUNDS + 10,608 POUNDS = 71,558 POUNDS
BP = 5.75' - 5'4" (ELEV. 63.40 - EMPTY TANK IS BUOYANT)

DETERMINE BUOYANCY POINT FOR EMPTY TANK IN PLACE
BP = 102,350 POUNDS + 10,608 POUNDS = 112,958 POUNDS
BP = 10.21' - 10'2" (ELEV. 61.13)



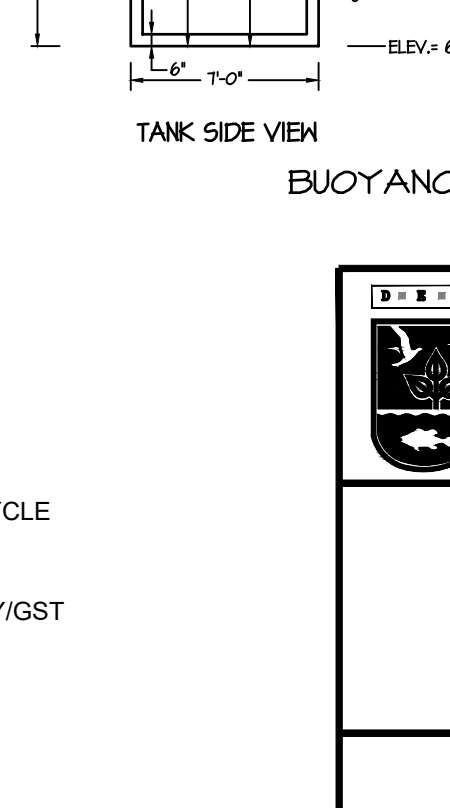
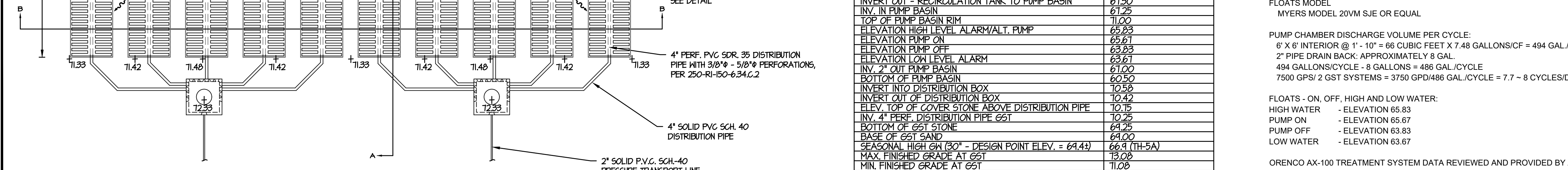
VOLUMES
TOP SLAB: 11.33' WIDE X 30.83' LONG X 0.67' THICK = 232.96 C.F. (CUBIC FOOT)
SIDES: 2 SIDES X 10.00' LONG X 8.00' HIGH X 0.67' WIDE = 106.67 C.F.
BOTTOM: 11.33' WIDE X 30.83' LONG X 0.67' THICK = 232.96 C.F.
BAFFLES: 10.00' LONG X 1.25' HIGH X 0.39' WIDE = 28.52 C.F.
TOTAL VOLUME OF CONCRETE FOR TANK = 425.40 C.F.
EARTH: 11.33' WIDE X 30.83' LONG X 1.50' THICK = 551.40 C.F.

CONSTANTS (HEIGHTS)
CONCRETE: 150 POUNDS/C.F.
EARTH: 100 POUNDS/C.F.
WATER: 62.4 POUNDS/C.F.
CONCRETE HEIGHT: N/A

HEIGHT OF TANK IN PLACE
CONCRETE: 925.40 C.F. X 150 POUNDS/C.F. = 138,810 POUNDS (EMPTY TANK)
EARTH: 551.40 C.F. X 100 POUNDS/C.F. = 55,140 POUNDS (EARTH COVER)
TOTAL HEIGHT OF TANK SET IN PLACE = 193,950 POUNDS (EMPTY TANK)

DETERMINE BUOYANCY POINT FOR EMPTY TANK PRIOR TO BACKFILL
BOTTOM SLAB AREA: 11.33' WIDE X 30.83' LONG = 349.44 S.F. (SQUARE FEET)
TANK: 349.44 S.F. X 62.4 POUNDS/C.F. = 21,785 POUNDS (EMPTY TANK)
BP = 138,810 POUNDS + 21,785 POUNDS = 160,595 POUNDS
BP = 6.37' - 6'4" (ELEV. 64.20 - EMPTY TANK IS BUOYANT)

DETERMINE BUOYANCY POINT FOR EMPTY TANK IN PLACE
BP = 193,950 POUNDS + 21,785 POUNDS = 215,735 POUNDS
BP = 8.50' - 8'11" (ELEV. 61.13)



VOLUMES
TOP SLAB: 11.33' WIDE X 30.83' LONG X 0.67' THICK = 232.96 C.F. (CUBIC FOOT)
SIDES: 2 SIDES X 10.00' LONG X 8.00' HIGH X 0.67' WIDE = 106.67 C.F.
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EARTH: 11.33' WIDE X 30.83' LONG X 1.50' THICK = 551.40 C.F.

CONSTANTS (HEIGHTS)
CONCRETE: 150 POUNDS/C.F.
EARTH: 100 POUNDS/C.F.
WATER: 62.4 POUNDS/C.F.
CONCRETE HEIGHT: N/A

HEIGHT OF TANK IN PLACE
CONCRETE: 925.40 C.F. X 150 POUNDS/C.F. = 138,810 POUNDS (EMPTY TANK)
EARTH: 551.40 C.F. X 100 POUNDS/C.F. = 55,140 POUNDS (EARTH COVER)
TOTAL HEIGHT OF TANK SET IN PLACE = 193,950 POUNDS (EMPTY TANK)

DETERMINE BUOYANCY POINT FOR EMPTY TANK PRIOR TO BACKFILL
BOTTOM SLAB AREA: 11.33' WIDE X 30.83' LONG = 349.44 S.F. (SQUARE FEET)
TANK: 349.44 S.F. X 62.4 POUNDS/C.F. = 21,785 POUNDS (EMPTY TANK)
BP = 138,810 POUNDS + 21,785 POUNDS = 160,595 POUNDS
BP = 6.37' - 6'4" (ELEV. 64.20 - EMPTY TANK IS BUOYANT)

DETERMINE BUOYANCY POINT FOR EMPTY TANK IN PLACE
BP = 193,950 POUNDS + 21,785 POUNDS = 215,735 POUNDS
BP = 8.50' - 8'11" (ELEV. 61.13)

ELEVATION SCHEDULE	
DESCRIPTION	ELEVATION
INVERT AT FOUNDATION - TO SEPTIC TANK	61.00
INVERT IN - SEPTIC TANK	66.75
LIQUID LEVEL IN SEPTIC TANK	66.50
INVERT IN - ANOXIC TANK	66.40
INVERT OUT - ANOXIC TANK	66.15
INVERT IN RECIRC. TANK	65.58
BOTTOM OF RECIRCULATION TANK	58.85
TOP OF ADVANTEX AX-100	71.25
INVERT OUT - RECIRCULATION TANK TO PUMP BASIN	61.50
INV. IN PUMP BASIN	61.25
TOP OF PUMP BASIN RIM	71.00
ELEVATION HIGH LEVEL ALARM/ALT. PUMP	65.83
ELEVATION PUMP ON	65.61
ELEVATION PUMP OFF	65.83
ELEVATION LOW LEVEL ALARM	63.61
INV. 2" OUT PUMP BASIN	61.00
BOTTOM OF PUMP BASIN	60.50
INVERT INTO DISTRIBUTION BOX	70.58
INVERT OUT OF DISTRIBUTION BOX	70.42
ELEV. TOP OF COVER STONE ABOVE DISTRIBUTION PIPE	70.15
INV. 4" PERF. DISTRIBUTION PIPE GST	70.25
BOTTOM OF GST STONE	64.25
BASE OF GST SAND	64.00
SEASONAL HIGH GW (30" - DESIGN POINT ELEV. = 64.43)	66.9 (TH-5A)
MAX FINISHED GRADE AT GST	73.08
MIN FINISHED GRADE AT GST	71.08

PUMPING AND SYSTEM SPECIFICATIONS/DATA:

PUMP CHAMBER PUMP MODEL:
MYERS SRM4 SUBMERSIBLE SEWAGE PUMP
HORSEPOWER - 0.4; SINGLE PHASE
2" INCH DISCHARGE; 230 VOLTS; 60 HZ 6 AMPS
LIFT OUT (2)
MYERS SRA 200 WITH STAINLESS STEEL BRACKETS
CONTROL PANEL MODEL
MYERS CE-210W ALTERNATING
ENCLOSURE - NEMA 1 (NEMA 4X IF EXPOSED TO WEATHER)
VOLTAGE - 230
HIGH LEVEL ALARM - VISUAL AND AUDIO
FLOATS MODEL
MYERS MODEL 20VM SJE OR EQUAL

PUMP CHAMBER DISCHARGE VOLUME PER CYCLE:
6' X 6' INTERIOR @ 1' - 10" = 66 CUBIC FEET X 7.48 GALLONS/CF = 494 GAL./CYCLE
2" PIPE DRAIN BACK: APPROXIMATELY 8 GAL.
494 GALLONS/CYCLE - 8 GALLONS = 486 GAL./CYCLE
7500 GPM/2 GST SYSTEMS = 3750 GPD/486 GAL./CYCLE = 7.7 ~ 8 CYCLES/DAY/GST

FLOATS - ON, OFF, HIGH AND LOW WATER:
HIGH WATER - ELEVATION 65.83
PUMP ON - ELEVATION 65.67
PUMP OFF - ELEVATION 63.83
LOW WATER - ELEVATION 63.67

ORENCO AX-100 TREATMENT SYSTEM DATA REVIEWED AND PROVIDED BY ATLANTIC SOLUTIONS
(CONTROL PANEL - TIME DOSED)

GRAVEL SAND TREATMENT (GST) SYSTEM DATA REVIEWED BY GEOMATRIX SYSTEMS LLC.



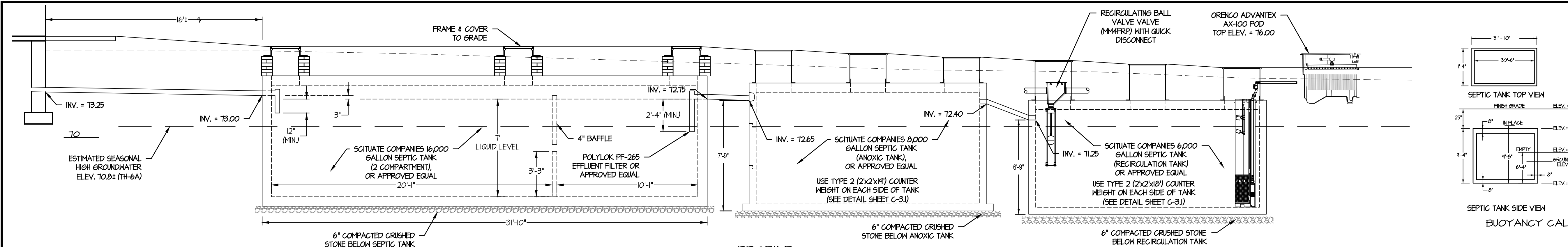
STATE OF RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
DIVISION OF PLANNING AND DEVELOPMENT

DEMOLITION AND REBUILD OF BATHHOUSES
BURLINGAME STATE PARK AND CAMPGROUND
CHARLESTOWN, RHODE ISLAND

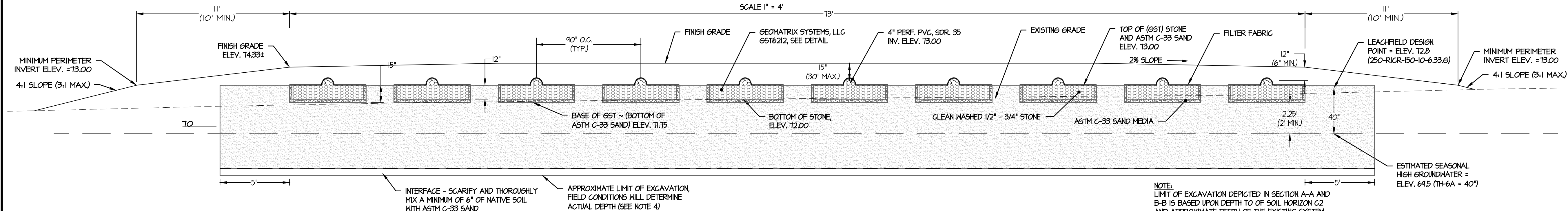
MAIN CAMP BATHHOUSE - OWTS DETAILS

Dwg: Scale: 1" = 20'
Contract No. x Date: OCTOBER 6, 2023

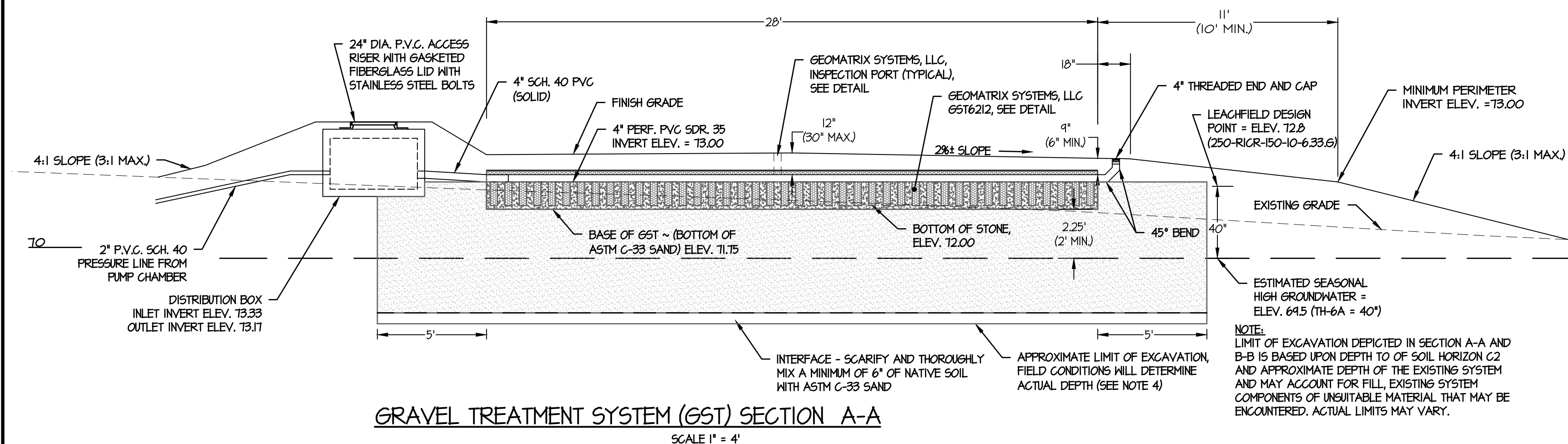
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19 OF 106



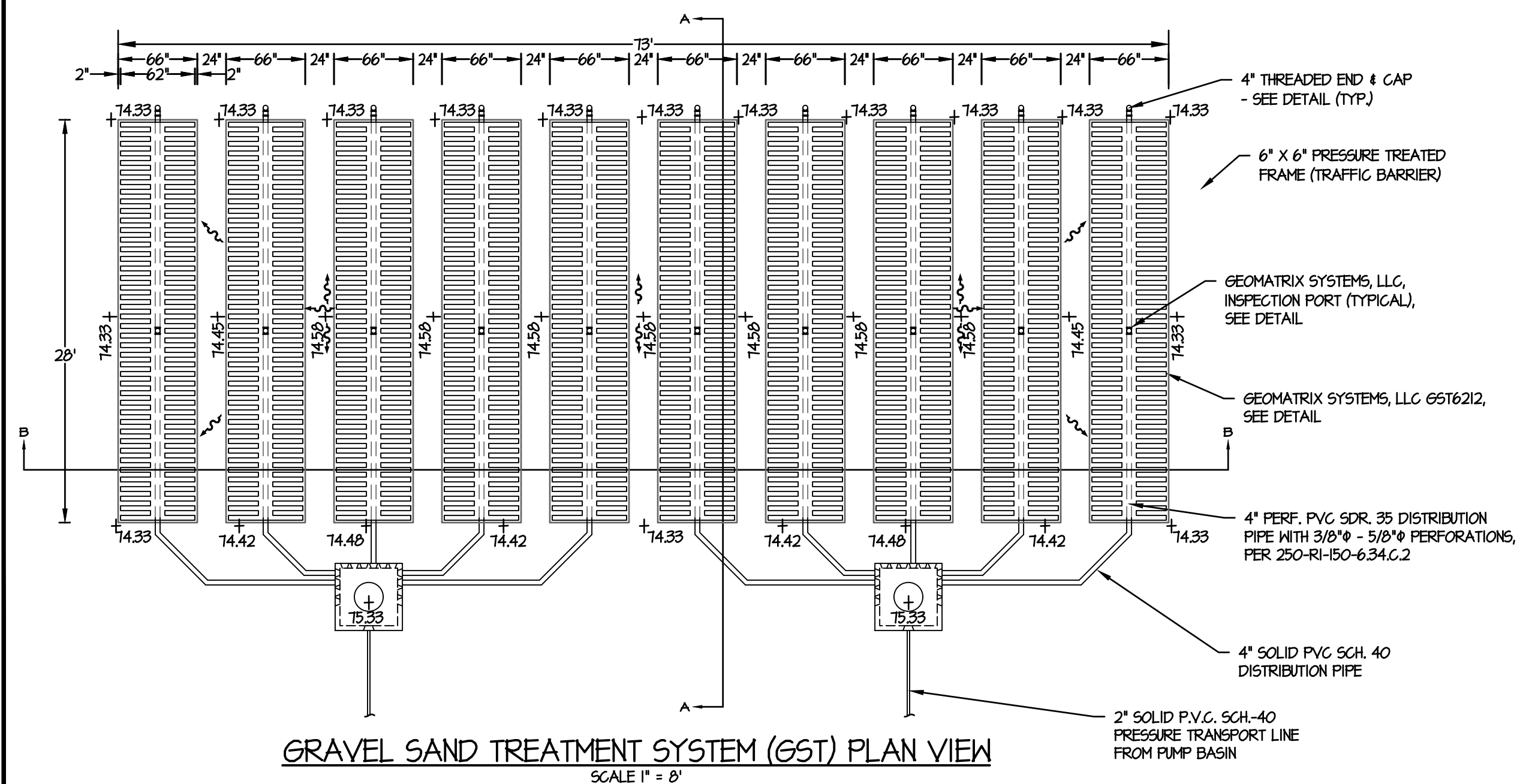
PROFILE
SCALE 1" = 4'



GRAVEL TREATMENT SYSTEM (GST) SECTION B-B
SCALE 1" = 4'



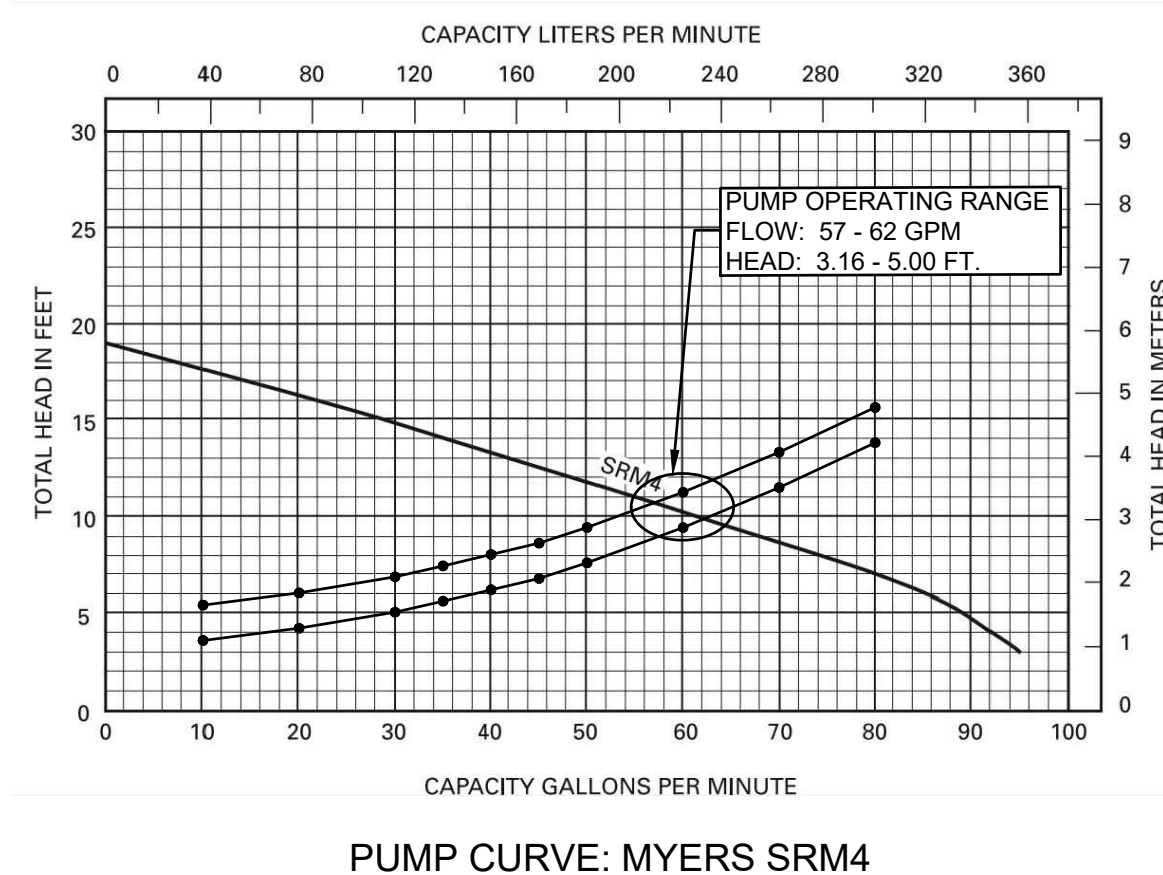
GRAVEL TREATMENT SYSTEM (GST) SECTION A-A
SCALE 1" = 4'



GRAVEL SAND TREATMENT SYSTEM (GST) PLAN VIEW
SCALE 1" = 8'

ELEVATION SCHEDULE		
DESCRIPTION		ELEVATION
INVERT AT FOUNDATION - TO SEPTIC TANK		13.25
INVERT IN - SEPTIC TANK		13.00
LIQUID LEVEL - IN SEPTIC TANK		12.15
INVERT IN - ANOXIC TANK		12.65
INVERT OUT - ANOXIC TANK		12.40
INVERT IN RECIRCULATION TANK		11.25
TOP OF ADVANTEK AX-100		16.00
INVERT OUT - RECIRCULATION TANK TO PUMP BASIN		13.11
INV. IN PUMP BASIN		11.50
TOP OF PUMP BASIN RIM		14.00
ELEVATION HIGH LEVEL ALARM/ALT. PUMP		10.33
ELEVATION PUMP ON		10.11
ELEVATION PUMP OFF		68.33
ELEVATION LOW LEVEL ALARM		68.11
INV. 2" OUT PUMP BASIN		11.00
BOTTOM OF PUMP BASIN		65.00
INVERT INTO DISTRIBUTION BOX		13.33
INVERT OUT OF DISTRIBUTION BOX		13.11
ELEV. TOP OF COVER STONE ABOVE DISTRIBUTION PIPE		13.50
INV. 4" PERF. DISTRIBUTION PIPE GST		13.00
BOTTOM OF GST STONE		12.00
BASE OF GST SAND		11.15
SEASONAL HIGH GW (40' - DESIGN POINT ELEV. = 12.81)		64.5 (TH-6A)
MAX FINISHED GRADE AT GST		15.83
MIN FINISHED GRADE AT GST		13.25

CAPUTO AND WICK LTD. - 1150 PAWTUCKET AVENUE - RUMFORD R.I. 02916



PUMP CURVE: MYERS SRM4

PUMPING AND SYSTEM SPECIFICATIONS/DATA:

PUMP CHAMBER PUMP MODEL:
MYERS SRM4 SUBMERSIBLE SEWAGE PUMP
HORSEPOWER - 0.4; SINGLE PHASE
2" INCH DISCHARGE; 230 VOLTS; 60 HZ 6 AMPS
LIFT OUT (2)
MYERS SRA 200 WITH STAINLESS STEEL BRACKETS
CONTROL PANEL MODEL
MYERS CE-210W ALTERNATING
ENCLOSURE - NEMA 1 (NEMA 4X IF EXPOSED TO WEATHER)
VOLTAGE - 230
HIGH LEVEL ALARM - VISUAL AND AUDIO
FLOATS MODEL
MYERS MODEL 20VM SJE OR EQUAL
PUMP CHAMBER DISCHARGE VOLUME PER CYCLE:
6' X 6' INTERIOR @ 1' - 10" = 66 CUBIC FEET X 7.48 GALLONS/CF = 494 GAL./CYCLE
2" PIPE DRAIN BACK: APPROXIMATELY 8 GAL.
494 GALLONS/CYCLE - 8 GALLONS = 486 GAL./CYCLE
7500 GPM/2 GST SYSTEMS = 3750 GPD/486 GAL./CYCLE = 7.7 - 8 CYCLES/DAY/GST
FLOATS - ON, OFF, HIGH AND LOW WATER:
HIGH WATER - ELEVATION 70.33
PUMP ON - ELEVATION 70.17
PUMP OFF - ELEVATION 68.33
LOW WATER - ELEVATION 68.17

ORENCO AX-100 TREATMENT SYSTEM DATA REVIEWED AND PROVIDED BY ATLANTIC SOLUTIONS
(CONTROL PANEL - TIME DOSED)

GRAVEL SAND TREATMENT (GST) SYSTEM DATA REVIEWED BY GEOMATRIX SYSTEMS LLC.

VOLUMES
TOP SLAB: 11.33' WIDE X 31.83' LONG X 0.61' THICK = 240.31 C.F. (CUBIC FOOT)
SIDES: 2 SIDES X 10.00' LONG X 8.00' HIGH X 0.61' WIDE = 106.61 C.F.
BOTTOM: 11.33' WIDE X 31.83' LONG X 0.61' THICK = 240.31 C.F.
BAFFLES: 10.00' LONG X 1.25' HIGH X 0.39' WIDE = 24.12 C.F.
TOTAL VOLUME OF CONCRETE FOR TANK = 448.42 C.F.
EARTH: 11.33' WIDE X 31.83' LONG X 2.08' THICK = 150.12 C.F.

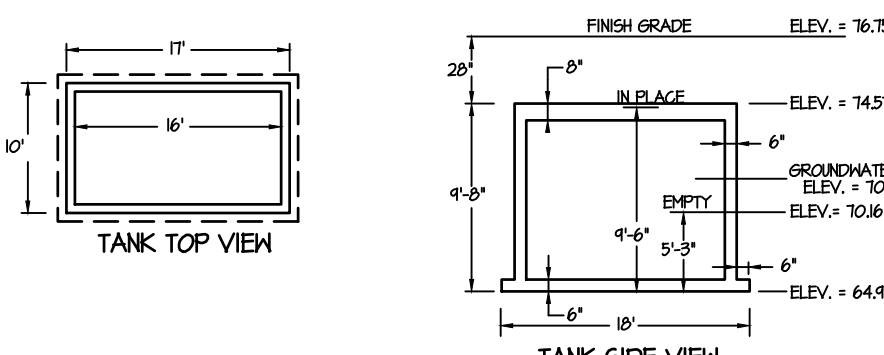
CONSTANTS (HEIGHTS)
CONCRETE: 150 POUNDS/C.F.
EARTH: 100 POUNDS/C.F.
WATER: 62.4 POUNDS/C.F.
CONCRETE HEIGHT: N/A

HEIGHT OF TANK IN PLACE
CONCRETE: 448.42 C.F. X 150 POUNDS/C.F. = 142,263 POUNDS (EMPTY TANK)
EARTH: 150.12 C.F. X 100 POUNDS/C.F. = 15,012 POUNDS (EARTH COVER)
TOTAL HEIGHT OF TANK SET IN PLACE = 217,275 POUNDS (EMPTY)

DETERMINE BUOYANCY POINT FOR EMPTY TANK PRIOR TO BACKFILL
BOTTOM SLAB AREA: 11.33' WIDE X 31.83' LONG = 360.71 S.F. (SQUARE FEET)
TANK: 360.71 S.F. X 62.4 POUNDS/C.F. = 42,524 POUNDS (EMPTY TANK)
BP = 42,524 POUNDS + 62.4 POUNDS/C.F. + 180.00 S.F.
BP = 6.32' - 6'4" (ELEV. 11.40)

DETERMINE BUOYANCY POINT FOR EMPTY TANK IN PLACE
BP = 217,275 POUNDS + 62.4 POUNDS/C.F. + 360.71 S.F.
BP = 6.45' - 6'5" (ELEV. 14.43)

BUOYANCY CALCULATIONS FOR 16,000 GALLON SEPTIC TANK



VOLUMES
TOP SLAB: 10.00' WIDE X 17.00' LONG X 0.61' THICK = 113.33 C.F. (CUBIC FOOT)
SIDES: 2 SIDES X 4.00' LONG X 8.50' HIGH X 0.50' WIDE = 16.50 C.F.
BOTTOM: 10.00' WIDE X 17.00' LONG X 0.50' WIDE = 14.50 C.F.
BAFFLES: 10.00' WIDE X 1.25' HIGH X 0.39' WIDE = 24.12 C.F.
TOTAL VOLUME OF CONCRETE FOR TANK = 438.33 C.F.
EARTH: 10.00' WIDE X 17.00' LONG X 2.38' THICK = 396.10 C.F.

CONSTANTS (HEIGHTS)
CONCRETE: 150 POUNDS/C.F.
EARTH: 100 POUNDS/C.F.
WATER: 62.4 POUNDS/C.F.
CONCRETE HEIGHT: 13.33' (TYPE 2 - SEE SCHEDULE SHEET C-3)

HEIGHT OF TANK
CONCRETE: 438.33 C.F. X 150 POUNDS/C.F. = 65,750 POUNDS (EMPTY TANK)
EARTH: 396.10 C.F. X 100 POUNDS/C.F. = 39,610 POUNDS (EARTH COVER)
TOTAL HEIGHT OF TANK SET IN PLACE = 105,360 POUNDS (EMPTY)

DETERMINE BUOYANCY POINT FOR EMPTY TANK PRIOR TO BACKFILL
BOTTOM SLAB AREA: 10.00' WIDE X 17.00' LONG = 170.00 S.F. (SQUARE FEET)
TANK: 170.00 S.F. X 62.4 POUNDS/C.F. = 42,524 POUNDS (EMPTY TANK)
BP = 42,524 POUNDS + 62.4 POUNDS/C.F. + 180.00 S.F.
BP = 5.26' - 5'3" (ELEV. 10.16 - EMPTY TANK IS BUOYANT)

DETERMINE BUOYANCY POINT FOR EMPTY TANK IN PLACE
BP = 105,360 POUNDS + 62.4 POUNDS/C.F. + 170.00 S.F.
BP = 6.34' - 6'4" (ELEV. 14.44)

BUOYANCY CALCULATIONS FOR 8,000 ANOXIC TANK
MUST SET IN DRY CONDITIONS

VOLUMES
TOP SLAB: 10.00' WIDE X 17.00' LONG X 0.61' THICK = 113.33 C.F. (CUBIC FOOT)
SIDES: 2 SIDES X 4.00' LONG X 1.00' HIGH X 0.50' WIDE = 6.00 C.F.
BOTTOM: 10.00' WIDE X 17.00' LONG X 0.50' WIDE = 14.50 C.F.
TOTAL VOLUME OF CONCRETE FOR TANK = 380.33 C.F.
EARTH: 10.00' WIDE X 17.00' LONG X 2.38' THICK = 438.60 C.F.

CONSTANTS (HEIGHTS)
CONCRETE: 150 POUNDS/C.F.
EARTH: 100 POUNDS/C.F.
WATER: 62.4 POUNDS/C.F.
CONCRETE HEIGHT: 12.44' (TYPE 2 - SEE SCHEDULE SHEET C-3)

HEIGHT OF TANK AND EARTH COVER
CONCRETE: 380.33 C.F. X 150 POUNDS/C.F. = 57,050 POUNDS (EMPTY TANK)
EARTH: 438.60 C.F. X 100 POUNDS/C.F. = 43,860 POUNDS (EARTH COVER)
TOTAL HEIGHT OF TANK SET IN PLACE = 100,910 POUNDS (EMPTY)

DETERMINE BUOYANCY POINT FOR EMPTY TANK PRIOR TO BACKFILL
BOTTOM SLAB AREA: 10.00' WIDE X 17.00' LONG = 170.00 S.F. (SQUARE FEET)
TANK: 170.00 S.F. X 62.4 POUNDS/C.F. = 42,524 POUNDS (EMPTY TANK)
BP = 42,524 POUNDS + 62.4 POUNDS/C.F. + 170.00 S.F.
BP = 5.31' - 5'3" (ELEV. 10.16 - EMPTY TANK IS BUOYANT)

DETERMINE BUOYANCY POINT FOR EMPTY TANK IN PLACE
BP = 100,910 POUNDS + 62.4 POUNDS/C.F. + 170.00 S.F.
BP = 6.10' - 6'1" (ELEV. 13.20)

BUOYANCY CALCULATIONS FOR 6,000 RECIRCULATION TANK
MUST SET IN DRY CONDITIONS

AREAS
TOP: 17.0' X 17.0' = 44.1 S.F. - (17' X 12.5' = 4.1 S.F.) = 44.01 S.F. (SQUARE FEET)
VOLUMES
TOP SLAB: 44.01 S.F. X 0.50' THICK = 22.00 C.F. (CUBIC FOOT)
SIDES: 2 SIDES X 1.00' LONG X 1.00' HIGH X 0.50' WIDE = 4.00 C.F.
BOTTOM: 17.00' WIDE X 1.00' LONG X 0.50' THICK = 24.50 C.F.
TOTAL VOLUME OF CONCRETE FOR TANK = 15.50 C.F.
EARTH: 44.01 S.F. X 1.00' THICK = 44.01 C.F.

CONSTANTS (HEIGHTS)
CONCRETE: 150 POUNDS/C.F.
EARTH: 100 POUNDS/C.F.
WATER: 62.4 POUNDS/C.F.
CONCRETE HEIGHT: N/A

HEIGHT OF TANK AND EARTH COVER
CONCRETE: 15.50 C.F. X 150 POUNDS/C.F. = 2,325 POUNDS (EMPTY TANK)
EARTH: 44.01 C.F. X 100 POUNDS/C.F. = 4,401 POUNDS (EARTH COVER)
TOTAL HEIGHT OF TANK SET IN PLACE = 6,726 POUNDS (EMPTY)

DETERMINE BUOYANCY POINT FOR EMPTY TANK PRIOR TO BACKFILL
BOTTOM SLAB AREA: 17.00' WIDE X 1.00' LONG = 17.00 S.F.
CHAMBER: 44.01 S.F. X 62.4 POUNDS/C.F. = 2,746 POUNDS (EMPTY TANK)
BP = 2,746 POUNDS + 62.4 POUNDS/C.F. + 17.00 S.F.
BP = 6.75' - 6'8" (ELEV. 11.75)

DETERMINE BUOYANCY POINT FOR EMPTY TANK IN PLACE
BP = 25,042 POUNDS + 62.4 POUNDS/C.F. + 44.01 S.F.
BP = 8.14' - 8'2" (ELEV. 13.15)

BUOYANCY CALCULATIONS FOR PUMP CHAMBER

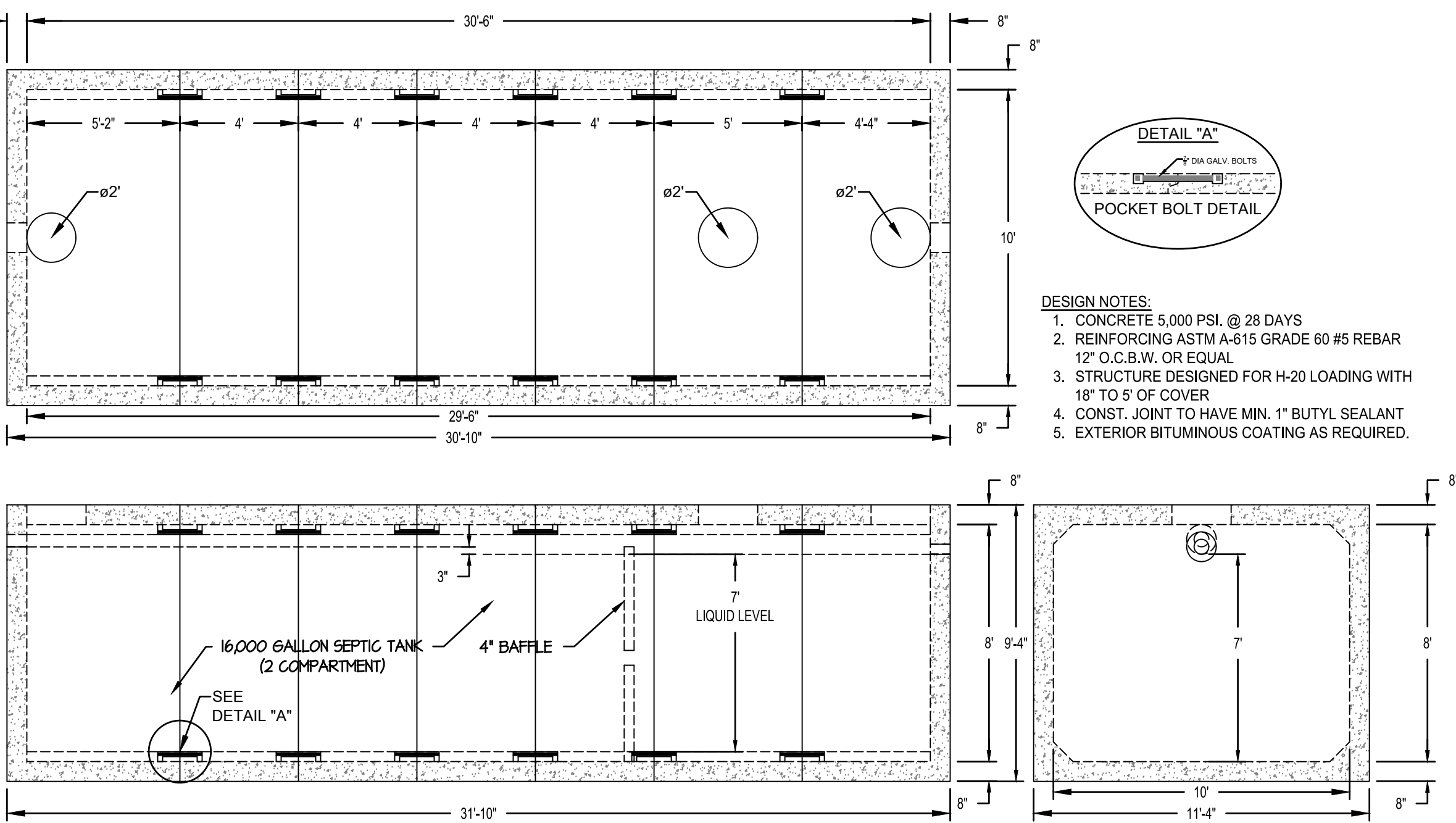
STATE OF RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
DIVISION OF PLANNING AND DEVELOPMENT

DEMOLITION AND REBUILD OF BATHHOUSES
BURLINGAME STATE PARK AND CAMPGROUND
CHARLESTOWN, RHODE ISLAND

LEGION TOWN BATHHOUSE - OWTS DETAILS

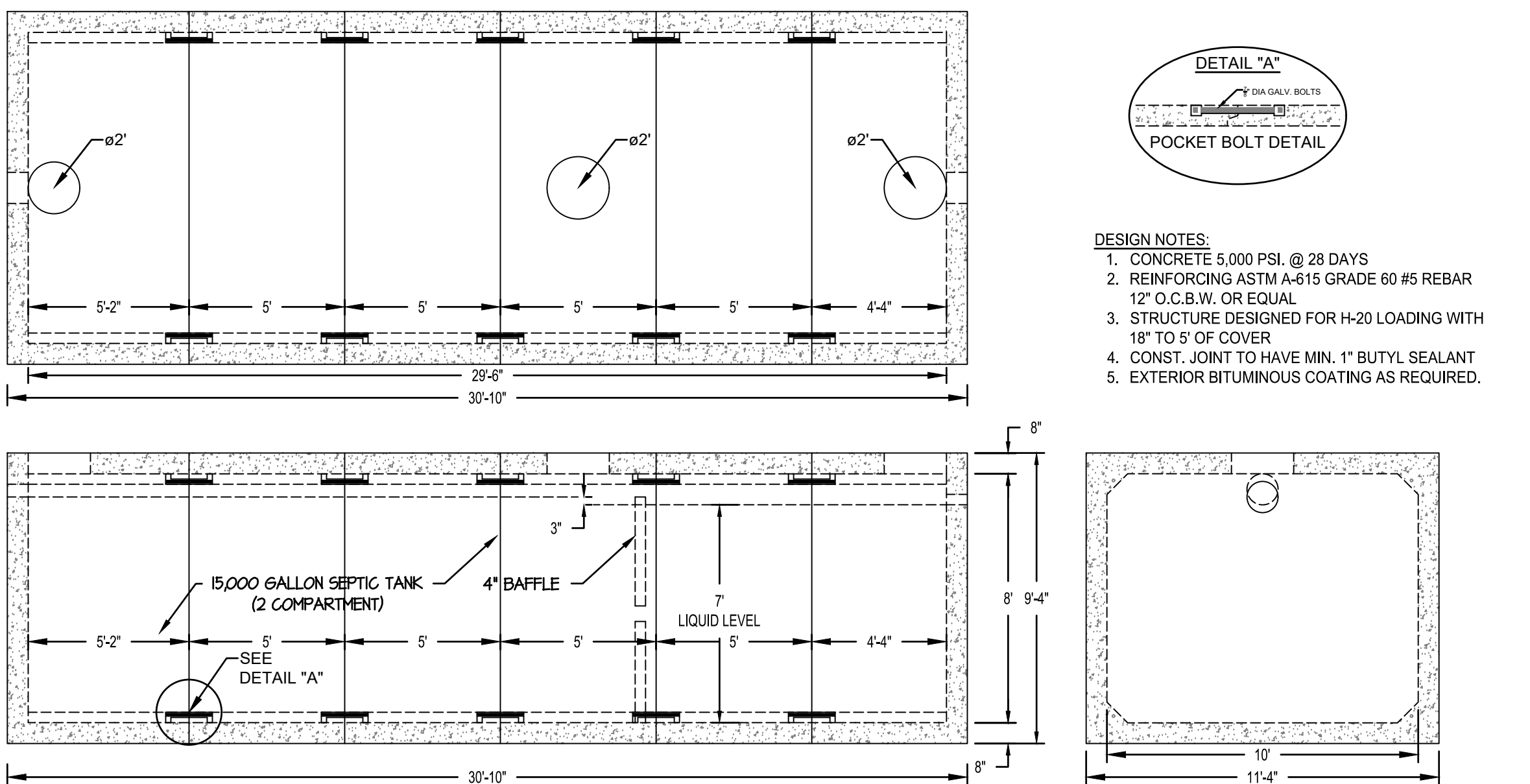
Dwg: Scale: 1" = 20'
Contract No. x Date: OCTOBER 6, 2023

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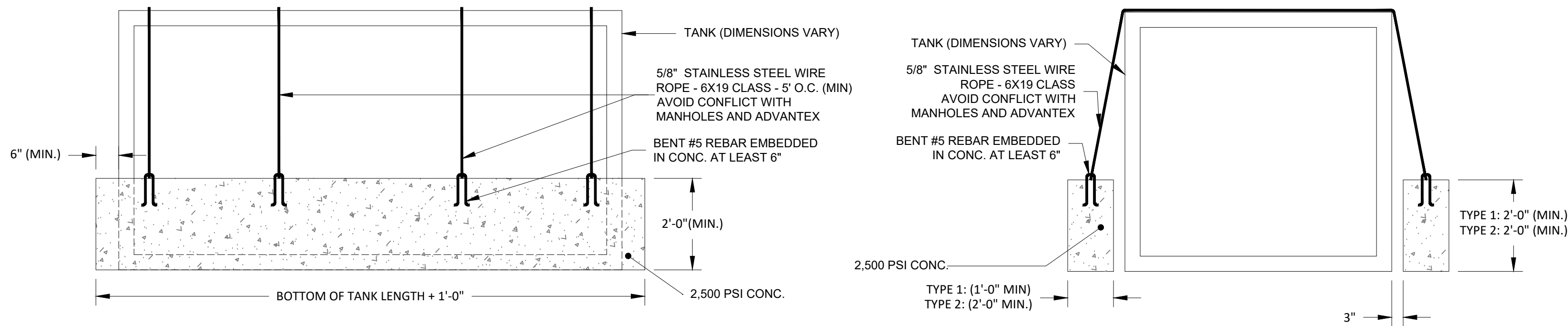
16,000 GALLON TWO COMPARTMENT H-20 TANK

SCALE 1" = 4'



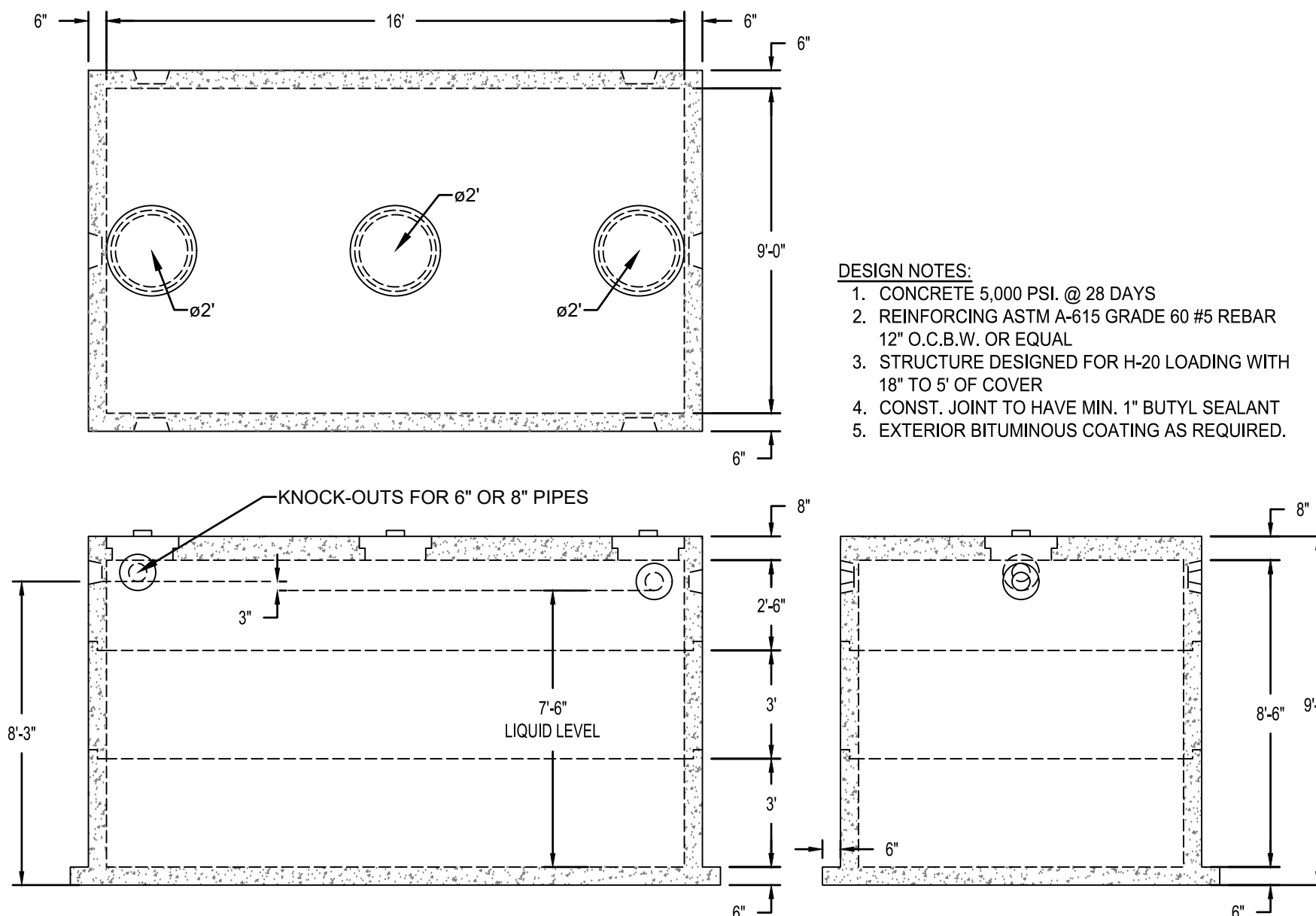
15,000 GALLON TWO COMPARTMENT SEPTIC TANK

SCALE 1" = 4'



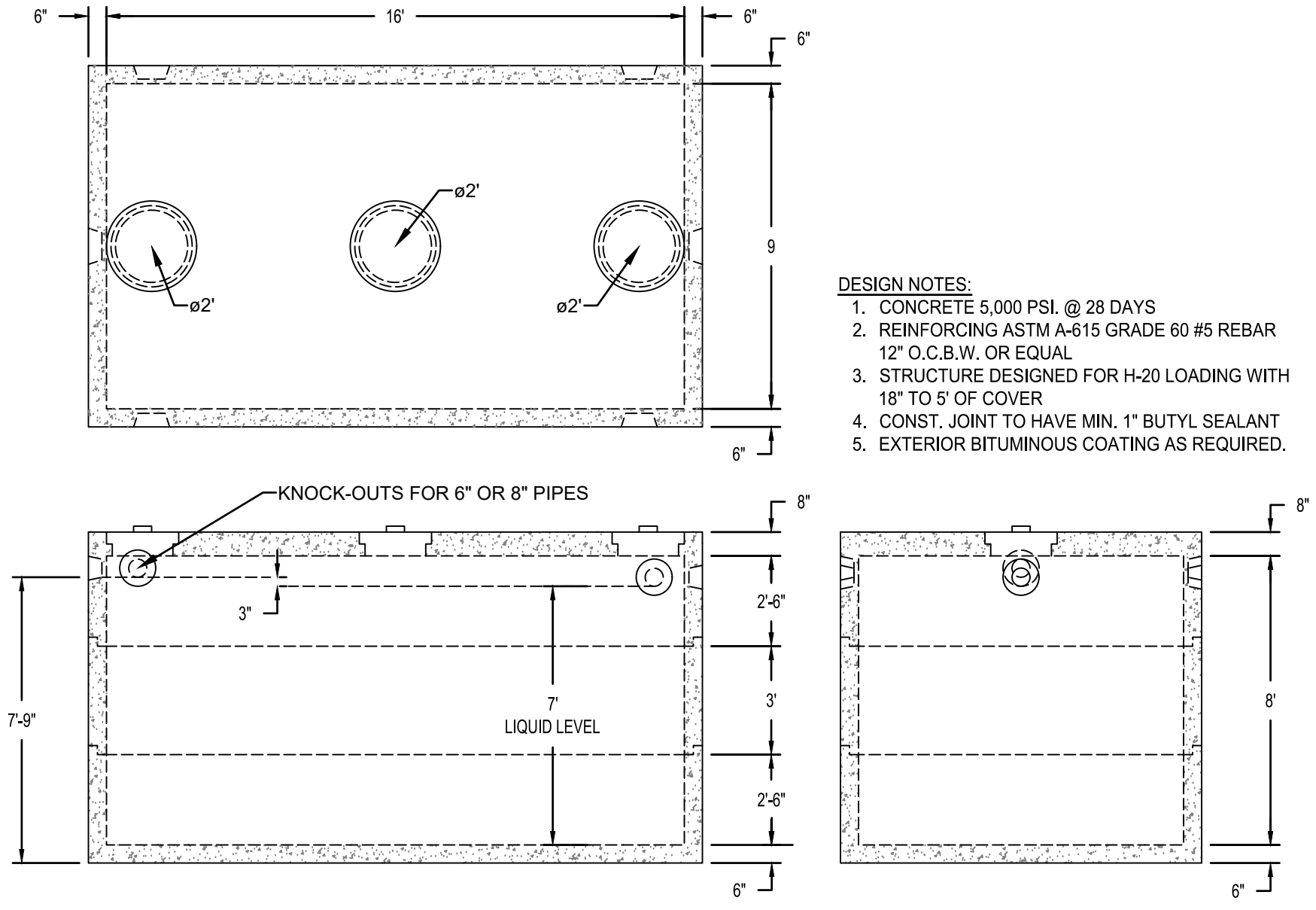
COUNTER WEIGHT: TANK ANTI-FLOATATION SECTIONS

SCALE 1" = 2'



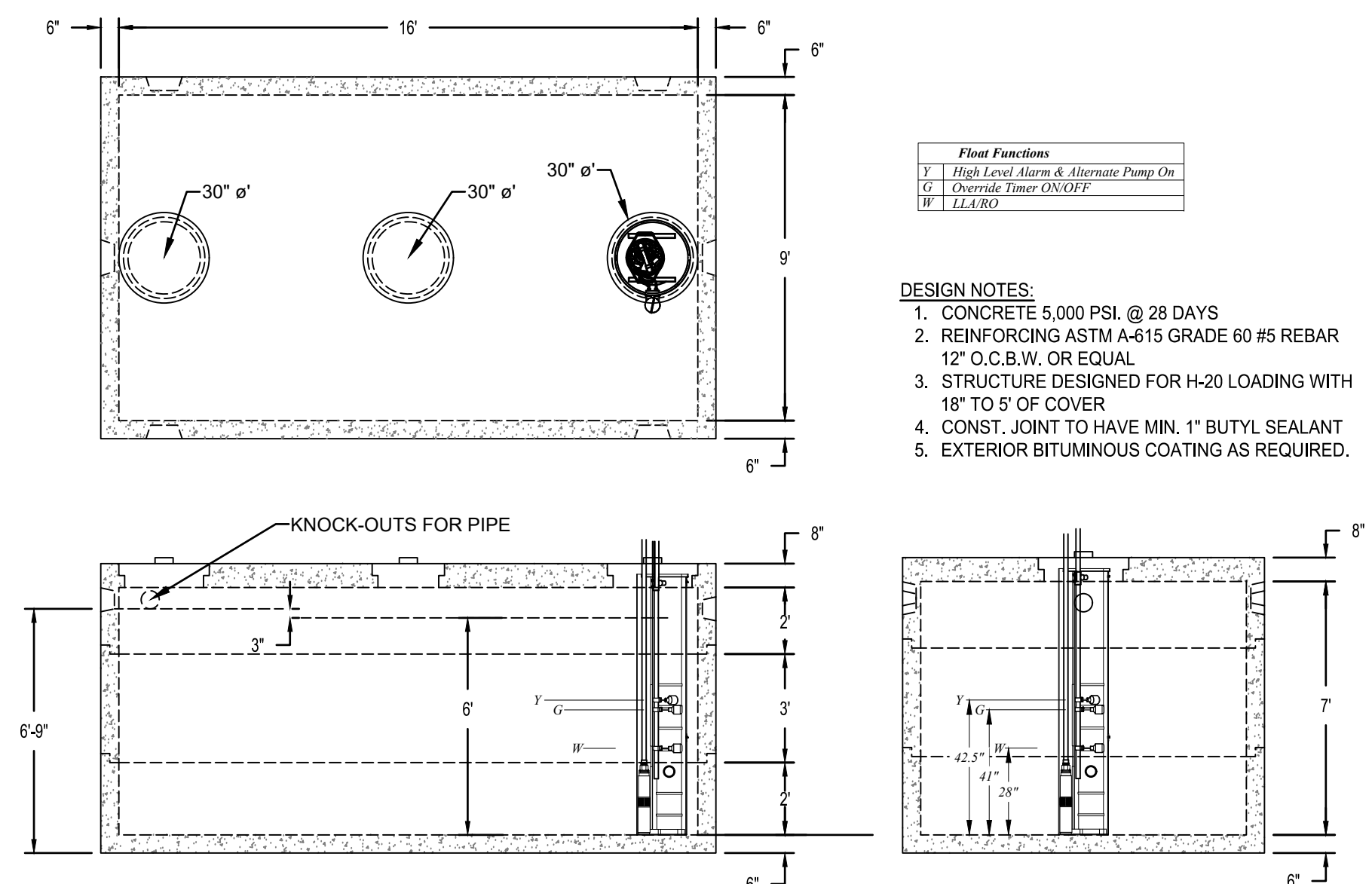
8,000 GALLON ANOXIC TANK

SCALE 1" = 4'



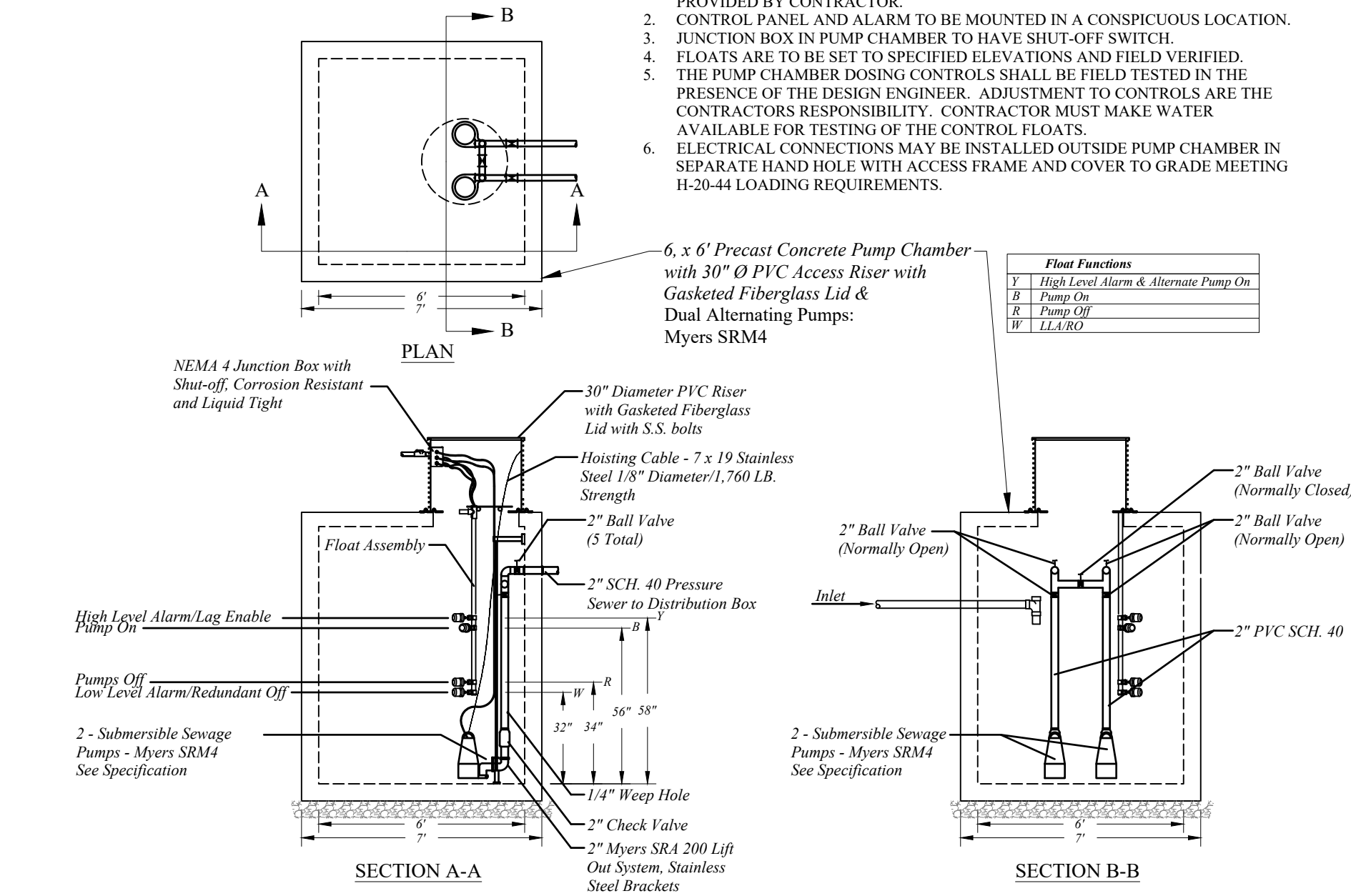
7,500 GALLON ANOXIC TANK

SCALE 1" = 4'



6,000 GALLON RECIRCULATION TANK

SCALE 1" = 4'



PUMP CHAMBER DETAIL

SCALE 1" = 4'

ANTI-FLOATATION AREA

16,000 GALLON TANK (TYPE 1):	2 SIDES x 32.83' LONG x 1.00' WIDE	= 65.66 S.F.
15,000 GALLON TANK (TYPE 1):	2 SIDES x 31.83' LONG x 1.00' WIDE	= 63.66 S.F.
15,000 GALLON TANK (TYPE 2):	2 SIDES x 31.83' LONG x 2.00' WIDE	= 127.32 S.F.
8,000 GALLON TANK (TYPE 1):	2 SIDES x 19.00' LONG x 1.00' WIDE	= 38 S.F.
8,000 GALLON TANK (TYPE 2):	2 SIDES x 19.00' LONG x 2.00' WIDE	= 76 S.F.
7,500 GALLON TANK (TYPE 1):	2 SIDES x 18.00' LONG x 1.00' WIDE	= 36 S.F.
7,500 GALLON TANK (TYPE 2):	2 SIDES x 18.00' LONG x 2.00' WIDE	= 72 S.F.
6,000 GALLON TANK (TYPE 1):	2 SIDES x 18.00' LONG x 1.00' WIDE	= 36 S.F.
6,000 GALLON TANK (TYPE 2):	2 SIDES x 18.00' LONG x 2.00' WIDE	= 72 S.F.
PUMP CHAMBER (TYPE 1):	2 SIDES x 8.00' LONG x 1.00' WIDE	= 16 S.F.
PUMP CHAMBER (TYPE 2):	2 SIDES x 8.00' LONG x 2.00' WIDE	= 32 S.F.

ANTI-FLOATATION VOLUMES

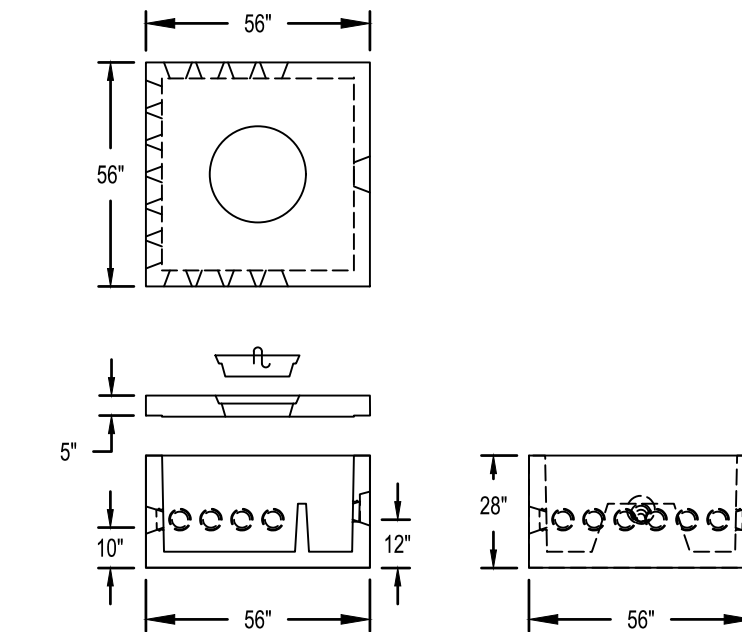
16,000 GALLON TANK (TYPE 1):	65.66 S.F. x 2.00' HIGH	= 131.32 C.F.
15,000 GALLON TANK (TYPE 1):	63.66 S.F. x 2.00' HIGH	= 127.32 C.F.
15,000 GALLON TANK (TYPE 2):	127.32 S.F. x 2.00' HIGH	= 254.64 C.F.
8,000 GALLON TANK (TYPE 1):	38 S.F. x 2.00' HIGH	= 76 C.F.
8,000 GALLON TANK (TYPE 2):	76 S.F. x 2.00' HIGH	= 152 C.F.
7,500 GALLON TANK (TYPE 1):	36 S.F. x 2.00' HIGH	= 72 C.F.
7,500 GALLON TANK (TYPE 2):	72 S.F. x 2.00' HIGH	= 144 C.F.
6,000 GALLON TANK (TYPE 1):	36 S.F. x 2.00' HIGH	= 72 C.F.
6,000 GALLON TANK (TYPE 2):	72 S.F. x 2.00' HIGH	= 144 C.F.
PUMP CHAMBER (TYPE 1):	16 S.F. x 2.00' HIGH	= 32 C.F.
PUMP CHAMBER (TYPE 2):	32 S.F. x 2.00' HIGH	= 64 C.F.

CONSTANTS (WEIGHTS)

CONCRETE:	150 POUNDS/C.F.
WATER:	8.33 POUNDS/C.F.
SUBMERGED CONCRETE:	81.67 POUNDS/C.F.

WEIGHT OF ANTI-FLOATATION IN PLACE

16,000 GALLON TANK (TYPE 1):	131.32 C.F. x 87.6 POUNDS/C.F.	= 11,503.6 POUNDS
15,000 GALLON TANK (TYPE 1):	127.32 C.F. x 87.6 POUNDS/C.F.	= 11,153.2 POUNDS
15,000 GALLON TANK (TYPE 2):	254.64 C.F. x 87.6 POUNDS/C.F.	= 22,306.5 POUNDS
8,000 GALLON TANK (TYPE 1):	76 C.F. x 87.6 POUNDS/C.F.	= 6,657.6 POUNDS
8,000 GALLON TANK (TYPE 2):	152 C.F. x 87.6 POUNDS/C.F.	= 13,315.2 POUNDS
7,500 GALLON TANK (TYPE 1):	72 C.F. x 87.6 POUNDS/C.F.	= 6,307.2 POUNDS
7,500 GALLON TANK (TYPE 2):	144 C.F. x 87.6 POUNDS/C.F.	= 12,614.4 POUNDS
6,000 GALLON TANK (TYPE 1):	72 C.F. x 87.6 POUNDS/C.F.	= 6,307.2 POUNDS
6,000 GALLON TANK (TYPE 2):	144 C.F. x 87.6 POUNDS/C.F.	= 12,614.4 POUNDS
PUMP CHAMBER (TYPE 1):	32 C.F. x 87.6 POUNDS/C.F.	= 2,803.2 POUNDS
PUMP CHAMBER (TYPE 2):	64 C.F. x 87.6 POUNDS/C.F.	= 5,606.4 POUNDS



DISTRIBUTION BOX WITH 14 OUTLETS

SCALE 1" = 4'

STATE OF RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
DIVISION OF PLANNING AND DEVELOPMENT

DEMOLITION AND REBUILD OF BATHHOUSES
BURLINGAME STATE PARK AND CAMPGROUND
CHARLESTOWN, RHODE ISLAND

OWTS PRECAST STRUCTURES DETAILS

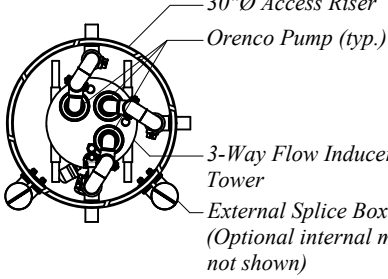
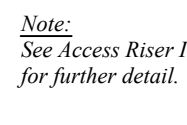
Dwg: Scale: 1" = 20'

Contract No. x Date: OCTOBER 6, 2023

C-3.1
21 OF 106

The treatment dosing conveyance system shown in this drawing is acceptable for the following conditions; less than 30 feet of static head and less than 100 feet of 2" dia. Sch. 40 PVC transport pipe.

For assistance on maximizing nitrogen reduction, contact Orenco Systems, Inc.



GST LEACHING SYSTEM
Plan View

6" (GST6206)
12" (GST6212)
18" (GST6218)

25"

12"

Distribution pipe

A

22"

4" 4"

B'

B

Clean, Washed $\frac{1}{4}$ - $\frac{3}{4}$ " Stone

ASTM C-33 Sand

A'

Native Soil or ASTM C-33 Sand

Detailed description: This is a plan view diagram of a GST Leaching System. It shows a rectangular layout with a central horizontal distribution pipe. The system is divided into sections by vertical lines. Dimensions are given in inches: 6, 12, and 18 for the vertical sections; 25 and 12 for the horizontal sections; 22 for the bottom section; and 4x4 for the bottom-most corner. Materials specified include clean, washed 1/4 to 3/4 inch stone, ASTM C-33 sand, and native soil or ASTM C-33 sand. The diagram is labeled with 'A' and 'A'' on the left and right sides, and 'B' and 'B'' at the top and bottom.

*H= 6" (GST6206)
12" (GST6212)
18" (GST6218)



stormwater away from system

Cover material depth shall be 6-30" and shall be uniform over distribution pipe

ASTM C-33 Sand

Filter Fabric

Distribution Pipe*

Clean, Washed 1/2-3/4" Stone

H

62"

22"

45"

Base of GST

Pressurized Distribution and Advanced Pretreatment

Septic Tank Effluent

24" SHWT

36" SHWT

45" SHWT

Septic Tank Effluent in critical resource areas

H= 6" (GST6206)
12" (GST612)
18" (GST612)

GGT LEACHING SYSTEM		B-B' Cross Section	
Geomatrix Systems, LLC, Old Saybrook, CT			
860-510-0730			
Scale	1:100	REV	0
Date	9-1-2018	ACAD No.	580-510-0730
Drawn By	SWP	Checked	SWP

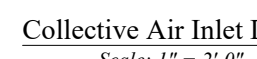
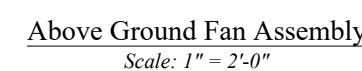
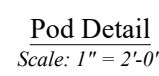


*H= 6" (GST6206)
12" (GST6212)
18" (GST6218)

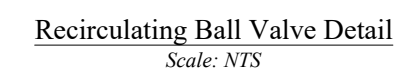
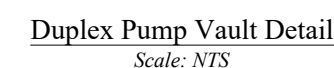


CUSTOM PLACARD THREADED PLUG
 SUPPLIED BY GEOMATRIX SYSTEMS LLC
 FEMALE ADAPTER
 SUPPLIED BY GEOMATRIX SYSTEMS LLC
 4" SDR35 PIPE (LENGTH BASED ON SYSTEM)
 SUPPLIED BY INSTALLER
 DRAIN GRATE EACH SIDE OF TEE
 SUPPLIED BY GEOMATRIX SYSTEMS LLC
 SUPPLIED BY GEOMATRIX SYSTEMS LLC

GST LEACHING SYSTEM Inspection Port Detail Geomatrix Systems, LLC, Old Saybrook, CT 860-510-0730			
Scale	None	REV	A
Date	6/22/2005	ACAD No.	GSTP.0005
Revised By:	ESB	Author	ESB



SCALE: VARIES



SCALE: VARIES

OWTS DETAILS

Scale: 1" = 20'

Date: OCTOBER 6, 2023

C-3.2
22 OF 106
OCTOBER 6, 2023

J:\RhodeIsland\Charlestown\RDDEM - Burlingame\009 - 025 and S-6 Site Design.dwg

SITE CONSTRUCTION NOTES:

GENERAL NOTES:

- ALL WORK AND MATERIALS SHALL CONFORM WITH THE PROVISIONS OF THE RIDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (2010), AND THE PROJECT SPECIFICATIONS.
- UNDERGROUND UTILITY INFORMATION SHOWN ON THE DRAWINGS HAS BEEN PLOTTED FROM FIELD OBSERVATIONS OR RECORD DATA AND MAY NOT BE CORRECT. PRIOR TO ANY EXCAVATION, CONTACT DIG SAFE OR A PRIVATE UTILITY LOCATING COMPANY TO ESTABLISH MORE PRECISE LOCATIONS ON THE GROUND.
- INSTALL 4 INCHES OF LOAM AND SEED IN ALL AREAS DISTURBED BY CONSTRUCTION THAT ARE NOT DESIGNATED FOR ANOTHER SURFACE TREATMENT.
- ANY DAMAGE TO EXISTING UTILITIES OR PRIVATE PROPERTY CAUSED BY THE CONTRACTOR SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO RIDEM.
- ALL CONSTRUCTION EQUIPMENT AND MATERIALS SHALL BE STORED AT APPROVED LOCATIONS WITHIN THE SITE. WALKS, PARKING AND ROADWAY AREAS MUST BE MAINTAINED TO AVOID INTERFERENCE WITH VEHICULAR OR PEDESTRIAN TRAFFIC.
- THE AREA OF THE PROPOSED ONSITE WASTEWATER TREATMENT SYSTEM LEACHING AREA SHALL BE PROTECTED FROM COMPACTION OF SOIL BEFORE, DURING, AND AFTER SYSTEM CONSTRUCTION. SEE DWTS PLANS.

GENERAL CONSTRUCTION REQUIREMENTS:

- ANY REFUELING OF CONSTRUCTION VEHICLES AND EQUIPMENT SHALL NOT OCCUR NEAR THE ENTRANCE TO ANY STORM DRAINAGE SYSTEM OR NEAR THE DOWNSLOPE PERIPHERY OF THE PROJECT AREA.
- ANY ON-SITE DISPOSAL OF SOLID WASTE, INCLUDING EARTH MATERIALS, SHALL OCCUR WITHIN THE CONSTRUCTION AREA (UNLESS OTHERWISE DESIGNATED). ANY MATERIAL NOT RE-USED ON SITE SHALL BE HAULED OFF SITE TO AN AUTHORIZED, LEGAL LOCATION.
- ALL CONTRACTORS AND SUBCONTRACTORS SHALL BE INFORMED THAT THE CLEANING OF EQUIPMENT IS PROHIBITED IN AREAS WHERE THE WASH-WATER WILL DRAIN DIRECTLY TO SITE DRAINAGE SYSTEMS.
- VEHICLE AND CONCRETE WASHOUT IS PROHIBITED ON PAVED SURFACES. IF REQUIRED ON SITE, ALL WASHOUT LOCATIONS MUST BE APPROVED BY THE ENGINEER PRIOR TO USE.
- THE CONTRACTOR IS RESPONSIBLE FOR DUST CONTROL. THIS OPERATION SHALL INCLUDE SWEEPING ALL PAVED SURFACES LOCATED IN THE SITE AREA AND ANY OFF-SITE AREAS THAT ARE IMPACTED BY SITE CONSTRUCTION ON A REGULAR BASIS.
- THE CONTRACTOR SHALL LIMIT OPERATIONS THAT RESULT IN THE GENERATION OF AIRBORNE SEDIMENT. ONLY CLEAN, POTABLE WATER SHALL BE USED TO CONTROL DUST.

SOIL STABILIZATION AND SEEDING NOTES:

- SEEDING SHALL OCCUR IMMEDIATELY FOLLOWING FINAL GRADING IN DISTURBED AREAS THAT WILL NOT BE SUBJECT TO FURTHER DISTURBANCE.
- AREAS THAT WILL BE SUBJECT TO FURTHER DISTURBANCE BUT WILL REMAIN IDLE FOR MORE THAN 21 DAYS SHALL BE SEEDDED WITH ANNUAL RYE OR OTHERWISE PROTECTED TO PROVIDE TEMPORARY STABILIZATION.
- ALL DISTURBED SLOPES SHALL BE IMMEDIATELY STABILIZED WITH APPROPRIATE METHODS AND MATERIALS AS APPROVED BY THE ENGINEER.
- IF ADVERSE WEATHER CONDITIONS DO NOT ALLOW PROPER GRASS GERMINATION AND GROWTH WHERE REQUIRED, THEN TEMPORARY MULCHING WITH STRAW OR EQUIVALENT METHOD SHALL BE UTILIZED.
- ALL DISTURBED SURFACES TO BE SEEDDED SHALL RECEIVE A MINIMUM OF 4" OF TOPSOIL WITH THE SURFACE FINE GRADED.
- FOR AREAS TO BE HYDROSEEDDED, THE HYDROSEED MIX SHALL CONTAIN AN APPROPRIATE TACIFYING AGENT.
- ALL DISTURBED SOILS EITHER NEWLY CREATED, OR EXPOSED, SHALL BE SEEDDED OR PROTECTED PRIOR TO OCTOBER 15 OF ANY CALENDAR YEAR. ANY AREAS THAT DO NOT HAVE ADEQUATE VEGETATIVE STABILIZATION BY NOVEMBER 15 OF THE SAME YEAR MUST BE STABILIZED BY INSTALLING EROSION CONTROL MATTING, STRAW MULCH, OR EQUIVALENT.
- SEED APPLICATION SHALL OCCUR IN ACCORDANCE WITH SUPPLIER SPECIFICATIONS AND RECOMMENDATIONS. RECOMMENDED SEED MIXTURES ARE LISTED BELOW.

SEEDING MATERIALS

- PERMANENT SEED MIXTURE
 - MOVED AREA (ALL FLATS OR SLOPES LESS THAN 3:1)

MIXTURE:	% BY WEIGHT:
RED FESCUE	70
KENTUCKY BLUEGRASS	15
PERENNIAL RYEGRASS	15

TOTAL 200 LBS./ACRE
SEEDING DATES: APRIL 1 - JUNE 15; AUGUST 15 - OCTOBER 15
 - UNMOWED AREA OR INFREQUENTLY MOWED (ALL SLOPES GREATER THAN 3:1 NOT STONE COVERED) INCLUDING DRAINAGE SWALE, GRASS CHANNELS, INFILTRATION BASIN, AND DETENTION BASIN

MIXTURE:	% BY WEIGHT:
RED FESCUE	70
KENTUCKY BLUEGRASS	15
BIRDFOOT TREFOIL	15

TOTAL 200 LBS./ACRE
SEEDING DATES: APRIL 1 - JUNE 15; AUGUST 15 - OCTOBER 15
 - QUALIFYING PERVIOUS AREA

MIXTURE:	% BY WEIGHT:
RED FESCUE	30
KENTUCKY BLUEGRASS	10
PERENNIAL RYEGRASS	20
LITTLE BLUESTEM	20
TIMOTHY	20

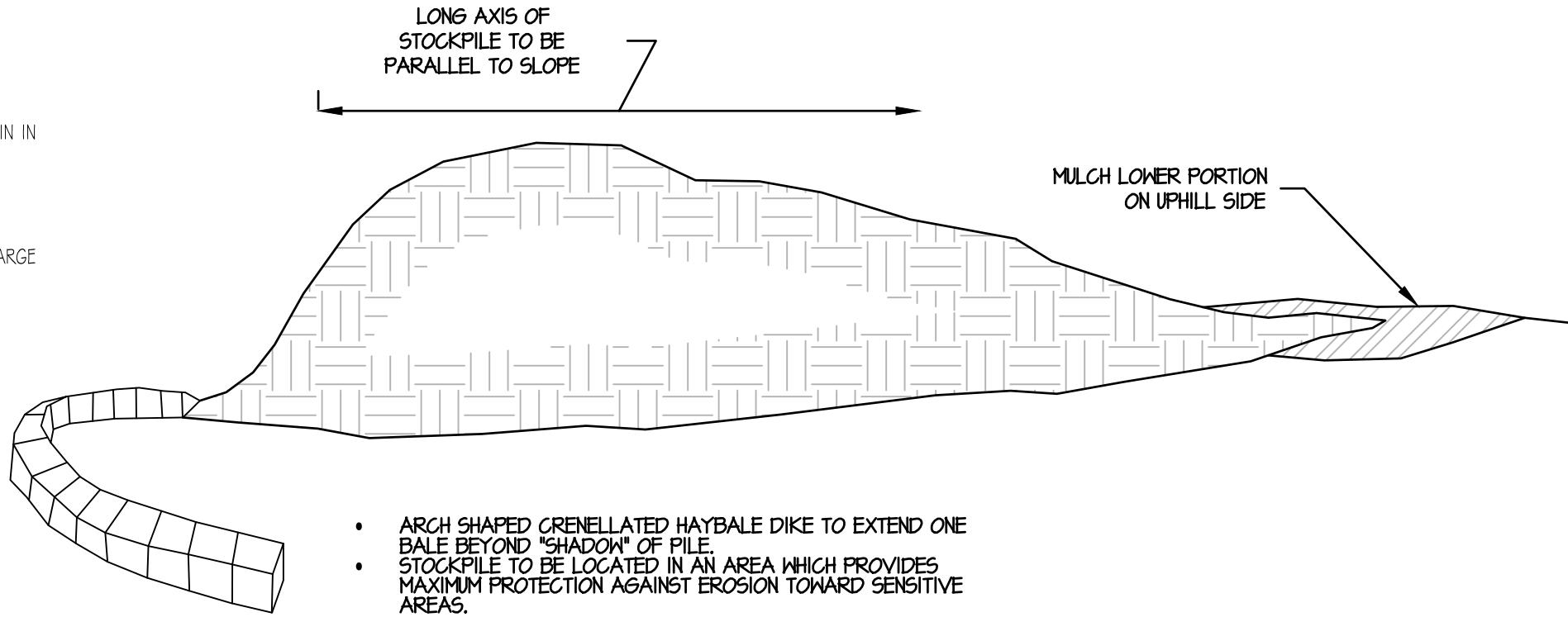
TOTAL 200 LBS./ACRE
SEEDING DATES: APRIL 1 - JUNE 15; AUGUST 15 - OCTOBER 15
- TEMPORARY SEED MIXTURE (CONSTRUCTION CONDITIONS)

MIXTURE:	LBS. / 1,000 S.F.	LBS. / AC.	SEEDING DATES:
ANNUAL RYEGRASS	1.0 - 1.5	40 - 60	1/11 - 6/1
PERENNIAL RYEGRASS	1.0 - 1.5	40 - 60	3/1 - 6/1
SUDAN GRASS	0.7 - 1.0	30 - 40	5/15 - 8/15
MILLET	0.7 - 1.0	30 - 40	5/15 - 8/15
WINTER RYE	3.0	120	1/1 - 6/15 or 10/15 - 12/31
OATS	0.5 - 5.0	86 - 120	3/1 - 6/15
WEAVING COVER GRASS	0.5 - 5.0	15 - 50	5/1 - 7/1

TEMPORARY TREATMENTS SHALL INCLUDE A STRAW, FIBER MULCH OR OTHER PROTECTIVE COVER SUCH AS A MAT OR FIBER COVER (BURLAP, JUTE, EXCELSIOR BLANKET, ETC.) STRAW APPLICATIONS SHOULD BE APPLIED AT 3,000 - 4,000 LBS/AC.

DEWATERING NOTES:

- EARTHEN MATERIAL EXCAVATED IN GROUNDWATER, OR OTHERWISE DETERMINED TO BE SATURATED, MUST BE PLACED IN DEWATERING AREAS ACCEPTED BY THE ENGINEER AND MUST REMAIN IN PLACE FOR A MINIMUM 72 HOURS IF IT IS TO BE HAULED OFF SITE. SEE DETAILS FOR DEWATERING BASIN.
- DEWATERED MATERIAL NOT TO BE REUSED AS PART OF THE ACTIVITIES PROPOSED UNDER THIS PROJECT IS TO BE RESPONSIBLY HAULED TO A LEGAL, NON-WETLAND DISPOSAL SITE.
- IF TRENCH DEWATERING IS REQUIRED, THEN PUMP WATERS MUST BE DIRECTED TO A STONE OR STRAW BALE ENCLOSURE, SILT BAG, SEDIMENT TRAP, OR EQUIVALENT. PUMP WATER DISCHARGE DIRECTLY TO A DRAINAGE INLET STRUCTURE OR BEYOND PROJECT LIMITS IS PROHIBITED AND WILL NOT BE AUTHORIZED UNDER ANY CIRCUMSTANCE.



TEMPORARY STOCKPILE
NOT TO SCALE

CAPUTO AND WICK LTD. - 1150 PAWTUCKET AVENUE - RUMFORD R.I. 02916

SITE CONSTRUCTION NOTES:

EROSION AND SEDIMENTATION CONTROL NOTES:

- THE CONTRACTOR IS RESPONSIBLE FOR PROPER EROSION CONTROL AND SHALL UTILIZE EROSION CONTROL MEASURES WHERE NEEDED, REGARDLESS OF WHETHER THE CONTROLS ARE SPECIFIED IN THE CONTRACT DOCUMENTS.
- APPROPRIATE PRECAUTIONS SHALL BE TAKEN TO PREVENT THE TRACKING OF SOIL FROM CONSTRUCTION EQUIPMENT ONTO PAVED SURFACES. THE STONE CONSTRUCTION ENTRANCES SHOWN ON THE PLANS MUST BE PROPERLY INSTALLED AND MAINTAINED. STONE IS TO BE REPLACED WHEN IT BECOMES LADEN WITH SEDIMENT AND LOOSES ITS EFFECTIVENESS.
- ALL PERIMETER EROSION AND SEDIMENTATION CONTROLS MUST BE INSTALLED PRIOR TO THE COMMENCEMENT OF EARTHWORK AT THE SPECIFIC AREAS INDICATED ON THE PLANS. ANY TREE AND SHRUB REMOVAL MAY OCCUR PRIOR TO INSTALLATION OF SUCH CONTROLS, BUT NO GRUBBING, STUMP REMOVAL, GRADING, FILLING, OR OTHER SOIL DISTURBANCE SHALL OCCUR PRIOR TO CONTROL INSTALLATION.
- ALL COMPOST FILTER SOCK AND SILT FENCE ARE TO BE INSTALLED IN ACCORDANCE WITH THE DETAILS. SILT FENCE IS TO REMAIN FIRMLY AND SECURELY TRENCHED AND WELL STAKED. COMPOST FILTER SOCK IS TO REMAIN WELL STAKED AND IN TIGHT GROUND CONTACT.
- ALL PERIMETER EROSION AND SEDIMENTATION CONTROLS MUST BE PROPERLY MAINTAINED AND MUST REMAIN IN PLACE UNTIL SOILS HAVE STABILIZED TO THE SATISFACTION OF THE ENGINEER, OR RIDEM. CONTROLS ARE TO BE INSPECTED WEEKLY AND IMMEDIATELY FOLLOWING ALL PRECIPITATION EVENTS THAT RESULT IN RAINFALL OF 0.25" OR MORE.
- THE CONTRACTOR SHALL PROVIDE ADDITIONAL COMPOST FILTER SOCK AND SILT FENCE IN ORDER TO PROVIDE ADEQUATE EROSION AND SEDIMENT CONTROL AS WORK IS SEQUENCED THROUGH THE VARIOUS STAGES OF SITE DEVELOPMENT.
- THE ENGINEER RESERVES THE RIGHT TO SPECIFY ADDITIONAL CONTROLS AS CONDITIONS MAY WARRANT. ACCESSIBLE RESERVES OF COMPOST FILTER SOCK, STRAW BALES, STAKES, AND 1.5/2 CRUSHED STONE ARE TO BE MAINTAINED ON SITE FOR ROUTINE MAINTENANCE AND IN THE EVENT OF UNANTICIPATED PROBLEMS REQUIRING IMMEDIATE RESPONSE.
- NO EARTHWORK IS TO OCCUR ON THE DOWNGRADE SIDE OF PERIMETER EROSION AND SEDIMENTATION CONTROLS UNLESS OTHERWISE SPECIFIED.
- STONES, CONSTRUCTION DEBRIS, LITTER, OR OTHER SUCH MATERIALS SHALL NOT BE DEPOSITED OUTSIDE OF DESIGNATED PROJECT LIMITS.
- ALL EARTHEN MATERIAL SHALL REMAIN AT LEAST ONE FOOT INSIDE OF ALL PERIMETER EROSION CONTROLS. UNDER NO CIRCUMSTANCE SHALL THE EROSION CONTROLS BE COVERED WITH EARTHEN MATERIAL. ANY EARTHEN MATERIAL THAT IS PLACED ON OR AGAINST EROSION CONTROLS SHALL BE IMMEDIATELY REMOVED.
- COMPOST FILTER SOCK OR STRAW BALE CHECK DAMS SHALL BE INSTALLED PERPENDICULAR TO THE PERIMETER CONTROLS AT THE BASE OF SLOPES AT ANY AREA WHERE STORM WATER TRAVELING ALONG THE PERIMETER CONTROLS IS BEGINNING TO SCOUR A CHANNEL DUE TO VELOCITY.
- SOIL STOCKPILES TO REMAIN IDLE MORE THAN 21 CALENDAR DAYS ARE TO BE RINGED WITH EITHER COMPOST FILTER SOCK OR STAKED STRAW BALES AND SEEDDED WITH A CONSERVATION GRASS MIX.
- ANY DISTURBED SOILS NOT DESIGNATED FOR OTHER SURFACE TREATMENT ALONG THE SITE PERIPHERY ARE TO BE LOAMED (MIN. 4 INCHES) AND SEEDDED IMMEDIATELY FOLLOWING FINAL GRADING.
- ALL CATCH BASINS AND DRAIN INLETS MUST BE ADEQUATELY PROTECTED FROM SEDIMENT INTRUSION AT LEAST UNTIL ALL AREAS TO BE PAVED IN THE CONTRIBUTING WATERSHEDS HAVE RECEIVED BINDER COAT.
- AT NO TIME DURING CONSTRUCTION SHALL TURBID STORMWATER BE ALLOWED TO FLOW BEYOND PROJECT LIMITS. IF ANY TURBID STORMWATER SHOULD TRAVEL BEYOND PERIMETER CONTROLS, THEN CORRECTIVE ACTION MUST BE IMPLEMENTED IMMEDIATELY.

WATER SUPPLY, SEWER AND SITE UTILITIES CONSTRUCTION NOTES:

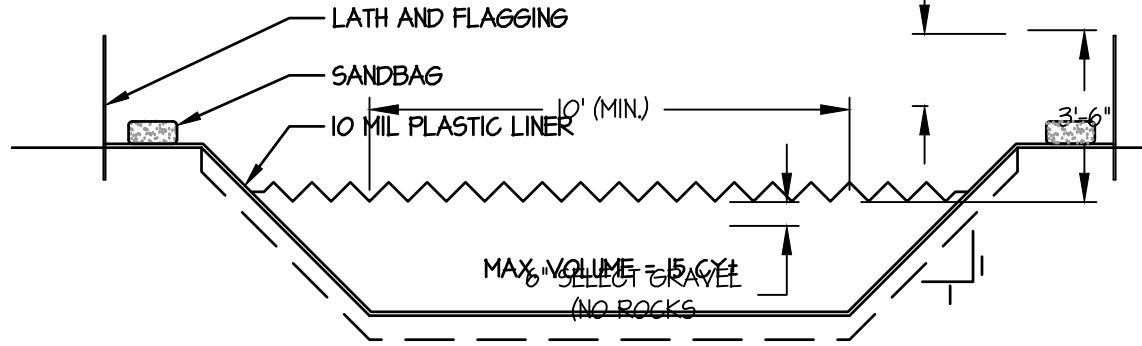
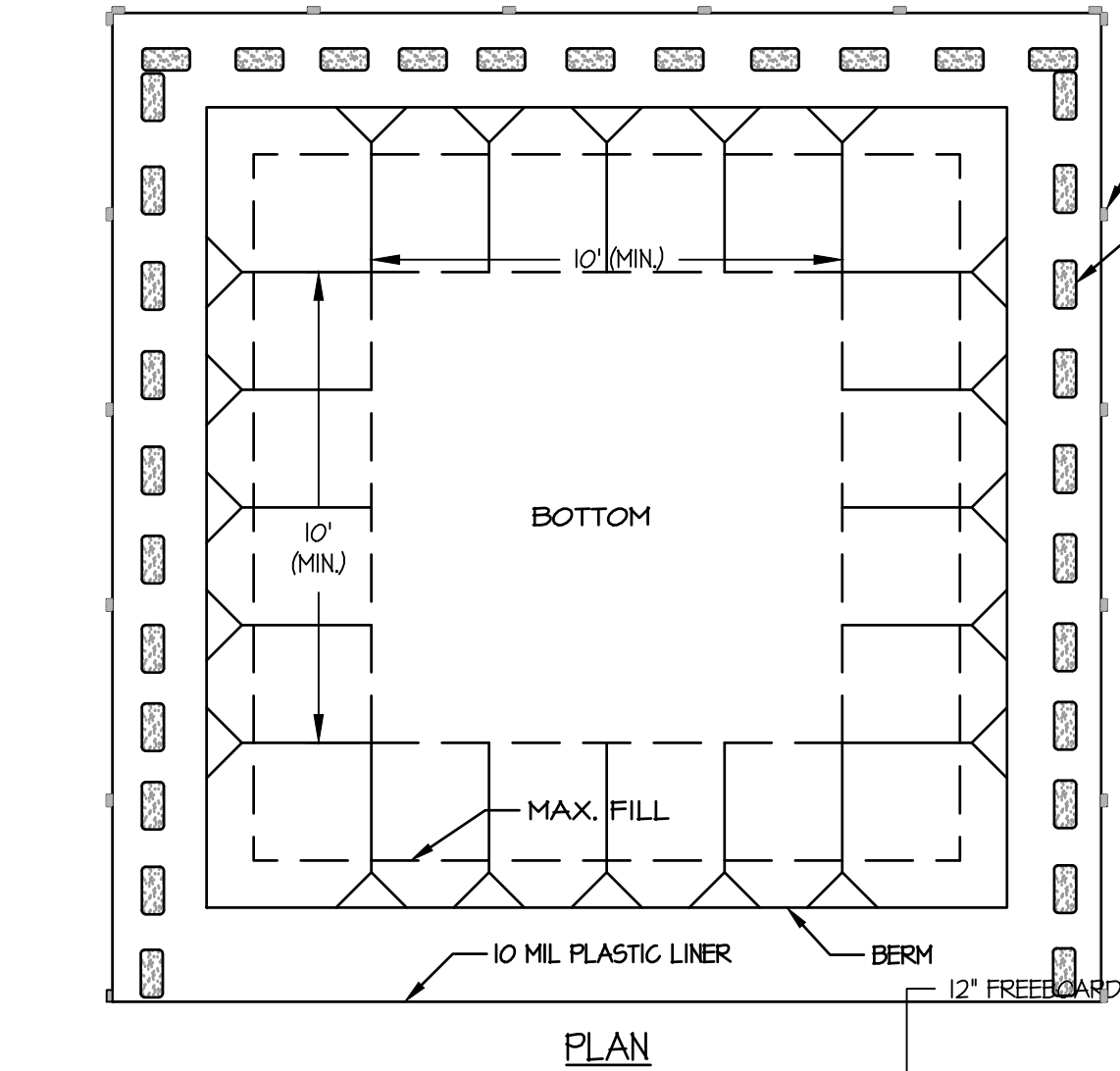
- CARE SHALL BE TAKEN TO ASSURE THAT UTILITY TRENCHES DO NOT CHANNELIZE RUNOFF TOWARDS SENSITIVE AREAS.
- WATER LINES AND APPURTENANCES SHALL BE INSTALLED IN ACCORDANCE WITH THE CONSTRUCTION SPECIFICATIONS.
- SEWER LINES, MANHOLES AND APPURTENANCES SHALL BE INSTALLED IN ACCORDANCE WITH THE CONSTRUCTION SPECIFICATIONS.

LANDSCAPING CONSTRUCTION NOTES:

- LANDSCAPING SHALL OCCUR AS SOON AS POSSIBLE AFTER GENERAL CONSTRUCTION OPERATIONS IN ORDER TO PROVIDE PERMANENT STABILIZATION OF DISTURBED SURFACES.
- THE CONTRACTOR SHALL UTILIZE SLOPE STABILIZATION METHODS AND MATERIALS THAT MAY BE ADJUSTED TO VARYING SITE CONDITIONS.
- IF THE SEASON OR ADVERSE WEATHER CONDITIONS DO NOT PERMIT PROPER GROWTH OF VEGETATION, TEMPORARY MULCHING WITH STRAW OR OTHER METHODS SHALL BE PROVIDED.
- ALL DISTURBED SURFACES TO BE PLANTED SHALL RECEIVE A MINIMUM OF 4" OF LOAM WITH THE SURFACE SMOOTHED TO THE SPECIFIED GRADES.
- SEED APPLICATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S DIRECTIONS.

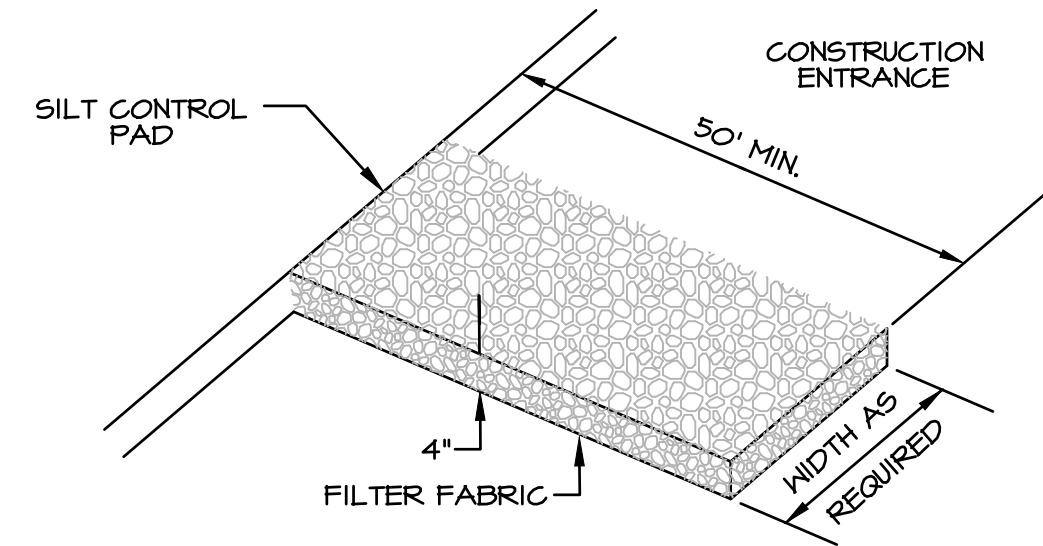
GENERAL MAINTENANCE:

- GRASSED SLOPES SHALL REMAIN WELL STABILIZED WITH CONTINUOUS GRASS COVER OR OTHER DESIGNATED SURFACE TREATMENT TO PREVENT EROSION AND CONSEQUENT SEDIMENT CONTRIBUTIONS TO DRAINAGE STRUCTURES. EXPOSED AREAS SHALL BE RESEED IMMEDIATELY TO STABILIZE EXPOSED SOILS.
- SHOULD PAVEMENT SEAL COATING AND CRACK REPAIR BE REQUIRED, THE USE OF COAL-TAR BASED SEALANTS SHALL BE PROHIBITED (DUE TO HIGH CONTENT OF POLYCYCLIC AROMATIC HYDROCARBONS (PAHS)). THE USE OF ASPHALT-BASED SEALANTS IS ACCEPTABLE.
- TRASH RECEPTACLES SHALL BE SITED AT LOCATIONS THAT ARE DISTANT FROM DRAIN INLETS AND SHALL BE EMPTIED REGULARLY AND FOLLOWING EVENTS.
- THE TRASH DUMPSTER TO BE LOCATED ON SITE SHALL REMAIN UNDER COVER AND SHALL BE EMPTIED ROUTINELY. OVERFLOW AND LEAKAGE ARE PROHIBITED.



- NOTES:
- LINER GEOMS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
 - WASHOUT TO BE LOCATED AT LEAST 50' FROM WETLAND EDGE, OPEN DRAINAGE CHANNELS, DOWNSREAM CATCH BASINS AND OTHER SENSITIVE AREAS.
 - SOIL BASE SHALL BE FREE OF ROCKS OR OTHER DEBRIS THAT MAY CAUSE TEARS OR HOLES IN THE PLASTIC LINER.
 - PLASTIC LINER MATERIAL SHALL BE A MINIMUM 10 MIL POLYETHYLENE SHEETING AND SHALL BE FREE OF HOLES, TEARS OR OTHER DEFECTS THAT COMPROMISE THE INTEGRITY OF THE MATERIAL.

CONCRETE WASHOUT DETAIL
SCALE 1"=4'

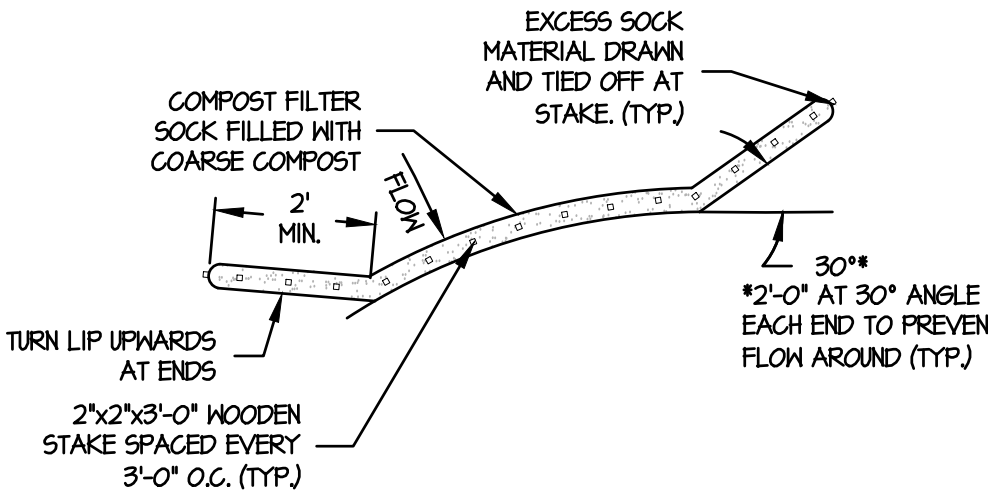
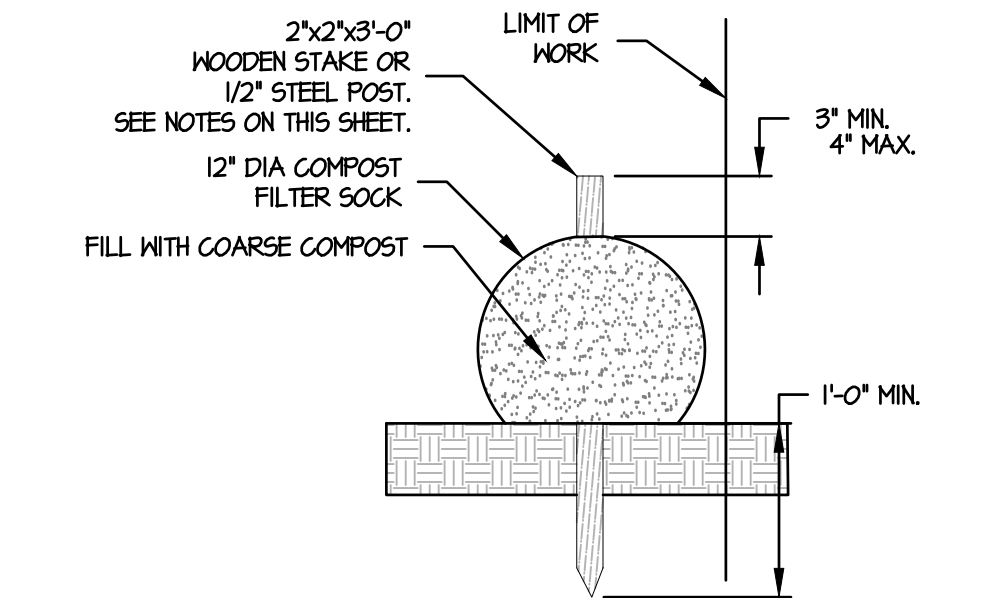


MATERIALS SIZE

SQUARE MESH SIEVES	2" CRUSHED STONE OR GRAVEL	ASTM C-33 NO.2	ASTM C-33 NO.3
	% FINER	% FINER	% FINER
2-1/2 INCHES	100	40-100	100
2 INCHES	95-100	35-100	90-100
1-1/2 INCHES	30-55	0-15	35-100
1-1/4 INCHES	0-25	-	-
1 INCH	0-5	-	0-15
3/4 INCH	-	0-5	-
1/2 INCH	-	-	0-5
3/8 INCH	-	-	-

NOTE:
SILT CONTROL PAD TO BE INSTALLED AND MAINTAINED IN CONFORMANCE WITH STANDARDS SET FORTH IN THE RHODE ISLAND SOIL EROSION AND SEDIMENT CONTROL HANDBOOK (1984 EDITION).

TEMPORARY SILT CONTROL PAD
NOT TO SCALE



GENERAL NOTES:

- FILTER SOCKS CAN BE PLACED AT THE TOP, ON THE FACE, AND AT THE TOE OF SLOPES AS SEDIMENT-TRAPPING DEVICES FOR SHEET FLOW RUNOFF AND SEDIMENT PER THESE NOTES AND COMPOST FILTER SOCK DETAILS, PLANS, AND SWPPP.
- FOR DITCH APPLICATIONS, MINIMUM INSTALLED HEIGHT OF SINGLE SOCK NOMINALLY. SOCKS ARE PLACED PERPENDICULAR TO FLOW OF WATER. FILTER SOCKS SHALL CONTINUE UP SIDE SLOPES TO TOP OF BANK OR MAXIMUM 3 FEET ABOVE INSTALLED HEIGHT. FILTER SOCKS SHALL REMAIN IN PLACE UNTIL ALL UPSTREAM AREAS ARE PERMANENTLY STABILIZED.
- INSPECT FILTER SOCKS AFTER EACH RUNOFF EVENT. REMOVE AND REPLACE IF SIGNS OF UNDERCUTTING OR DOWNSREAM RILLS ARE OBSERVED.
- REMOVAL SHALL BE ACCOMPLISHED BY CUTTING SOCK OPEN AND SPREADING THE FILL MATERIAL ON THE SITE. ALL NON-BIODEGRADABLE MATERIALS SHALL BE REMOVED. FILTER SOCKS APPLIED IN DITCHES SHALL BE COMPLETELY REMOVED ONCE VEGETATION IS ESTABLISHED.

COMPOST FILTER SOCK
NOT TO SCALE

STATE OF RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
DIVISION OF PLANNING AND DEVELOPMENT

DEMOLITION AND REBUILD OF BATHHOUSES
BURLINGAME STATE PARK AND CAMPGROUND
CHARLESTOWN, RHODE ISLAND

NOTES AND DETAILS

Dwg:	Scale: 1" = 20'	C-4.1 23 OF 106
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OCTOBER 6, 2023

BURLINGAME STATE PARK AND CAMPGROUND

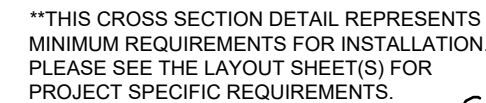
OCTOBER 6, 2023



OCTOBER 6 2023



NOT TO SCALE



NOT TO SCALE


$$G(A|E)^n = 2^n$$


SCALE 1" = 2'

PLEASE NOTE:

1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO #4) STONE".
2. STORMTIDE COMPACTION REQUIREMENTS ARE MET FOR "A" LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERSAGES WITH A VIBRATORY COMPACTOR.
3. COMPACTION OF MATERIALS CAN BE COMPROMISED BY COMPACTION. FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTIDE FOR COMPACTION REQUIREMENTS.
4. ONCE LAYER "C" IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER "D" UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER "C" OR "D" AT THE SITE DESIGN ENGINEER'S DISCRETION.

1. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418-16a "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
2. SC-740 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F7181 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
5. REQUIREMENTS FOR HANDLING AND INSTALLATION:
 - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
 - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2A.
 - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.9 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 550 LBS/IN. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

1. STORMTECH SC-740 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-180 CONSTRUCTION GUIDE".
2. THE USE OF CONSTRUCTION EQUIPMENT OVER SC-740 CHAMBERS IS LIMITED-NO EQUIPMENT IS ALLOWED ON BASE CHAMBERS.
 - NO NUMBER TIRE TRUCKS, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-180 CONSTRUCTION GUIDE".
 - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH SC-310/SC-740/DC-180 CONSTRUCTION GUIDE".
3. FILL 36" OF STABILIZED GRANULAR MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.
4. THE USE OF A DOZER TO PUSH EMBEDED STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO THE CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH WARRANTY PROGRAM.
5. CONTACT STORMTECH AT 1-888-942-3644 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.



SCALF 1" = 2'

 STATE OF RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
DIVISION OF PLANNING AND DEVELOPMENT

DEMOLITION AND REBUILD OF BATHHOUSES
BURLINGAME STATE PARK AND CAMPGROUND
CHARLESTOWN, RHODE ISLAND

Dwg: Scale: 1" = 20'

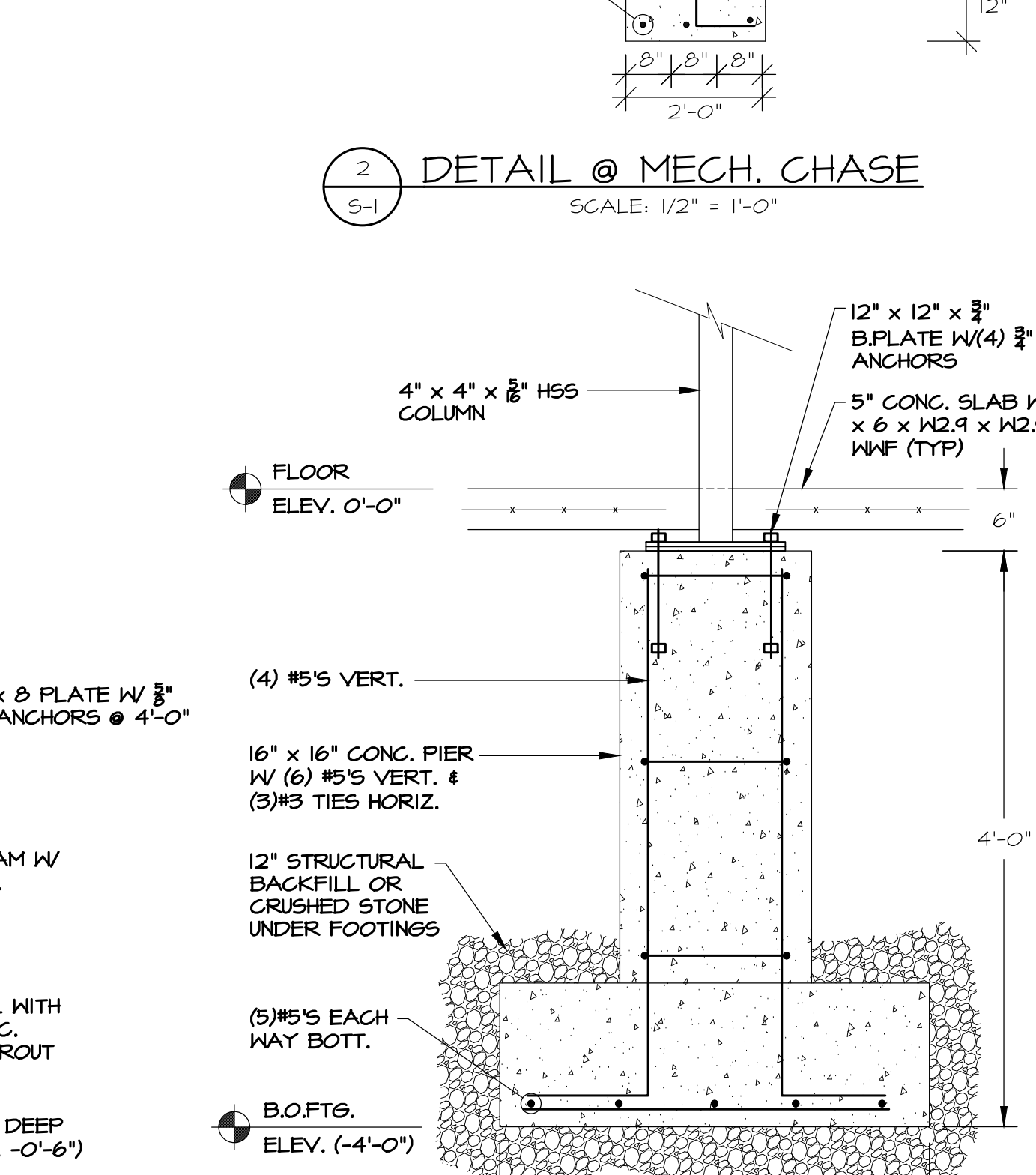
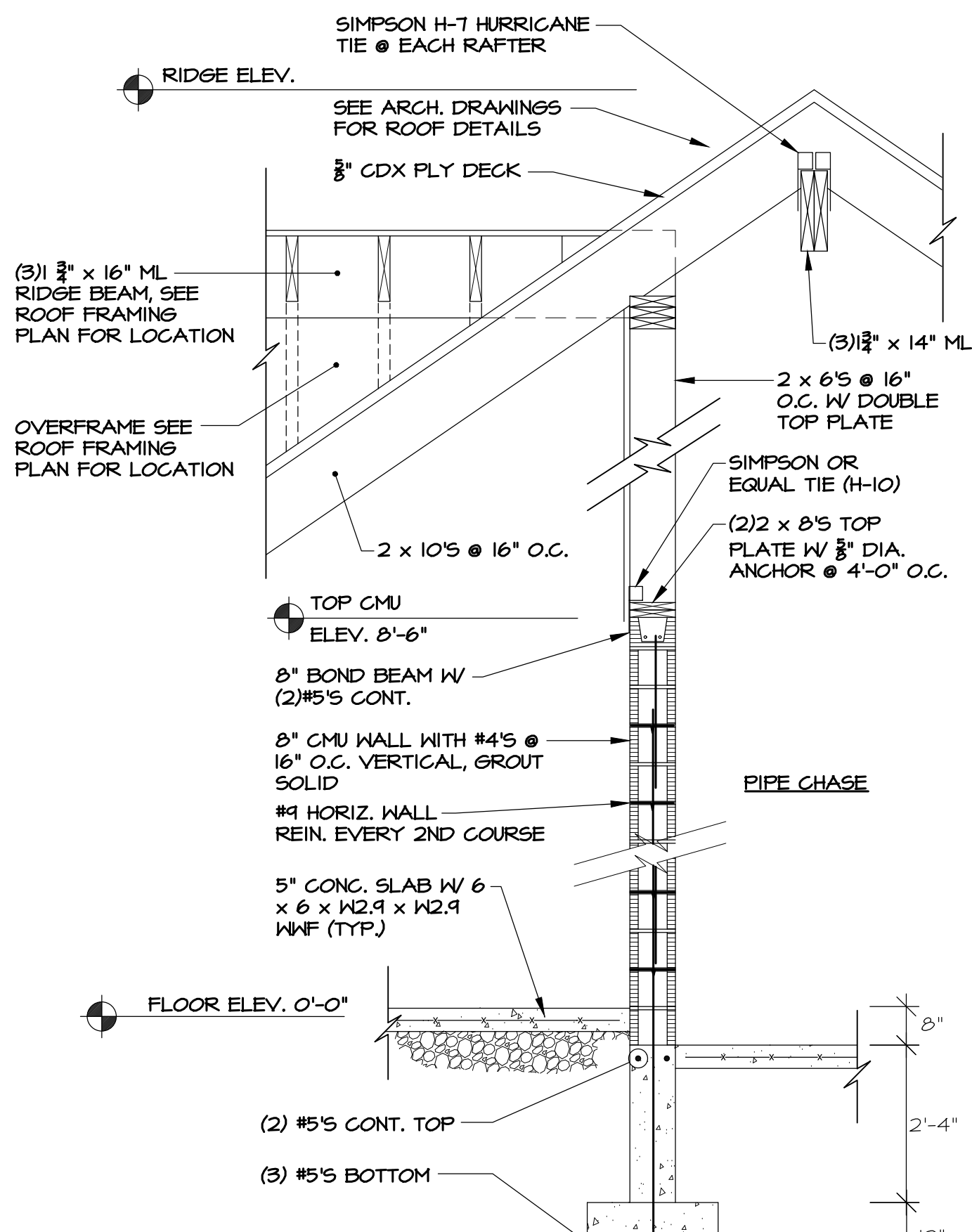
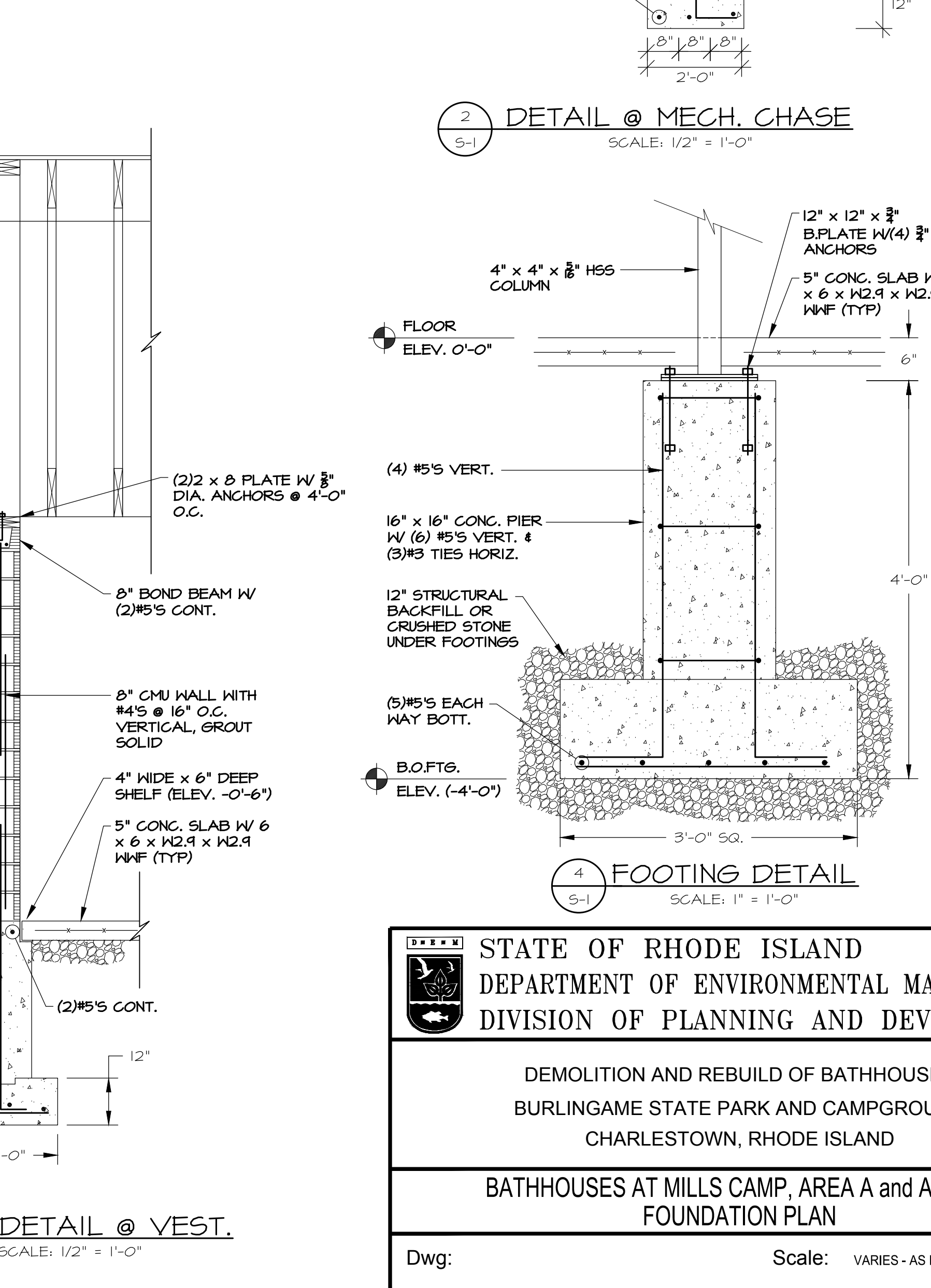
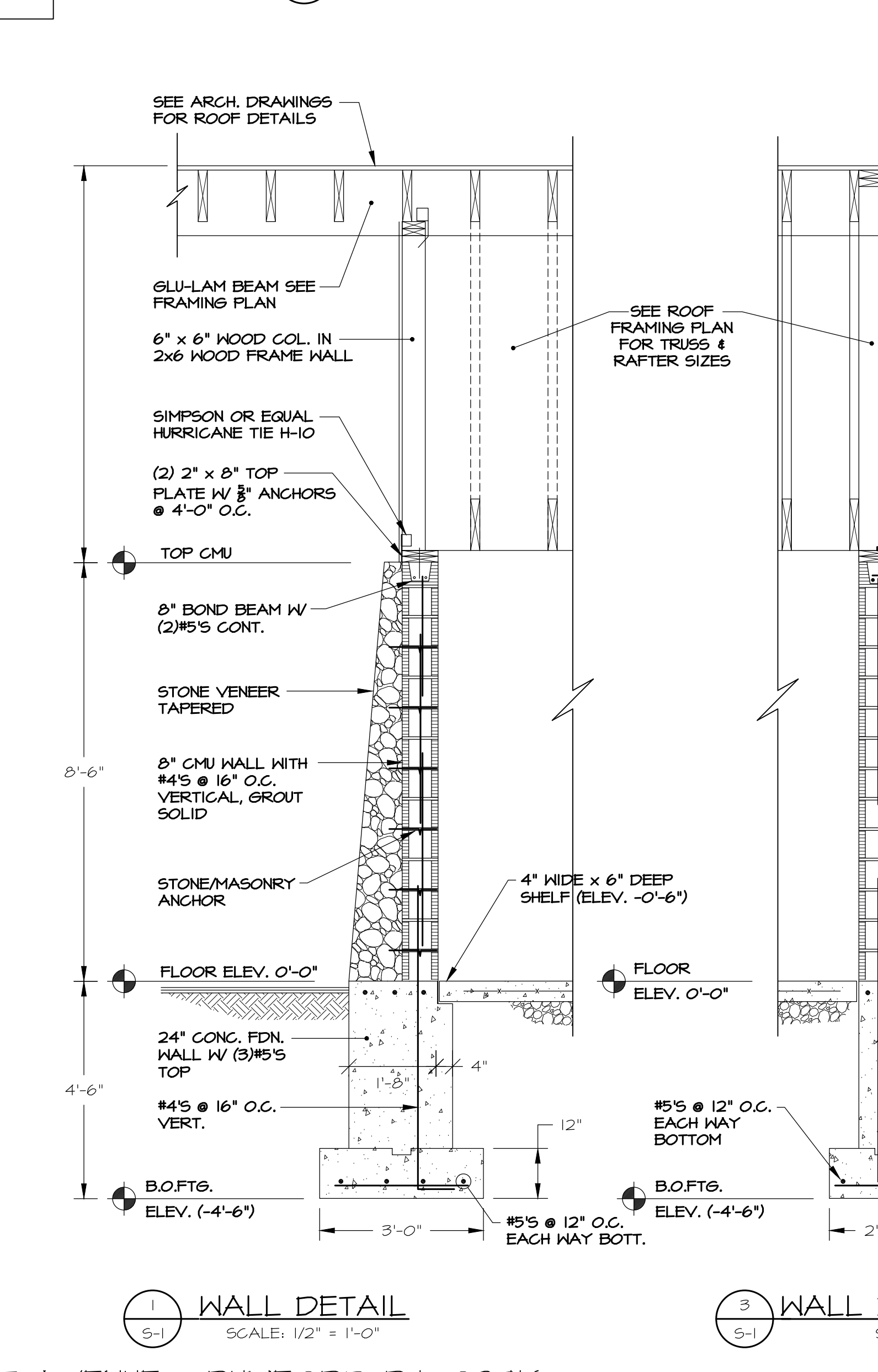
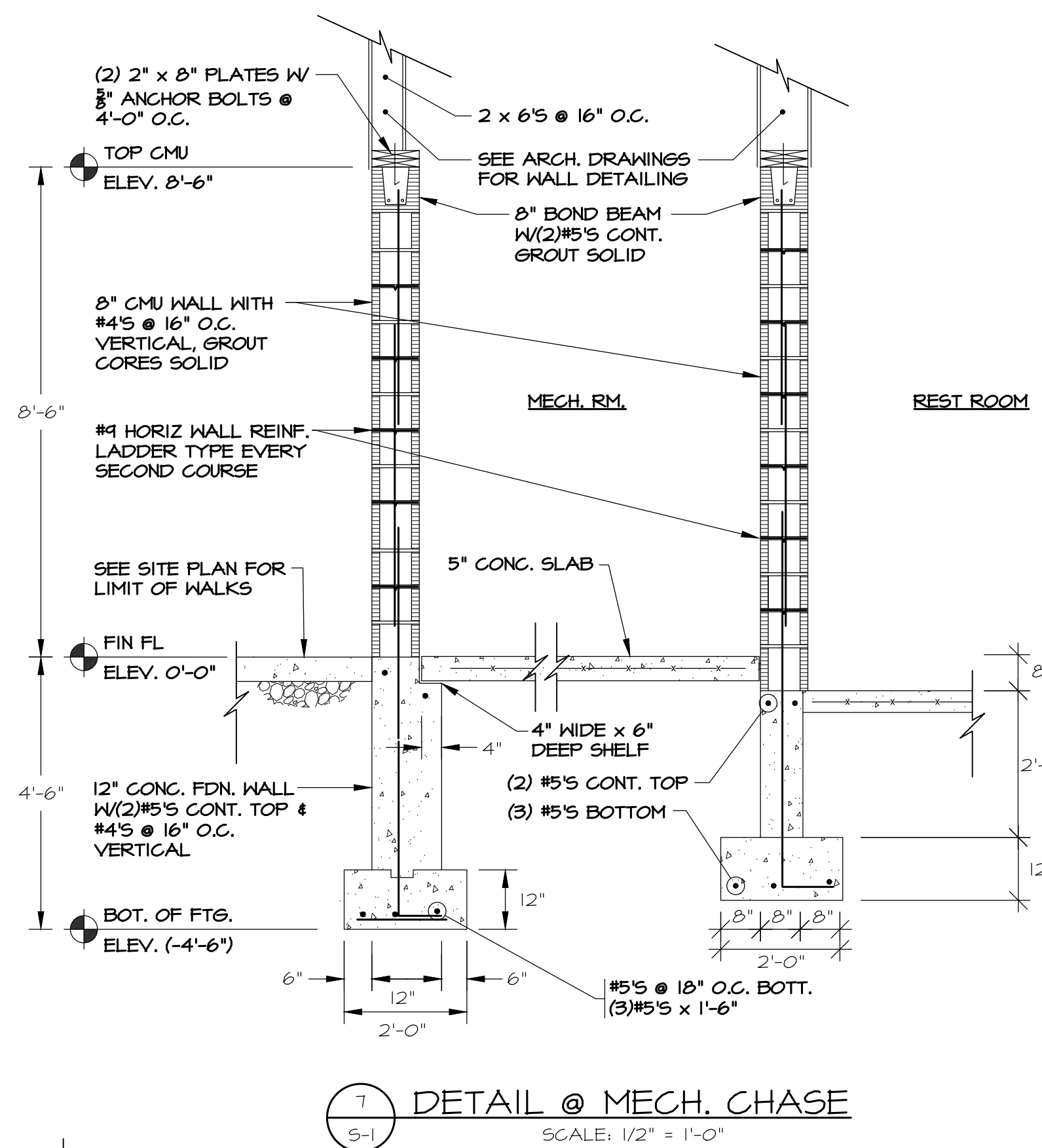
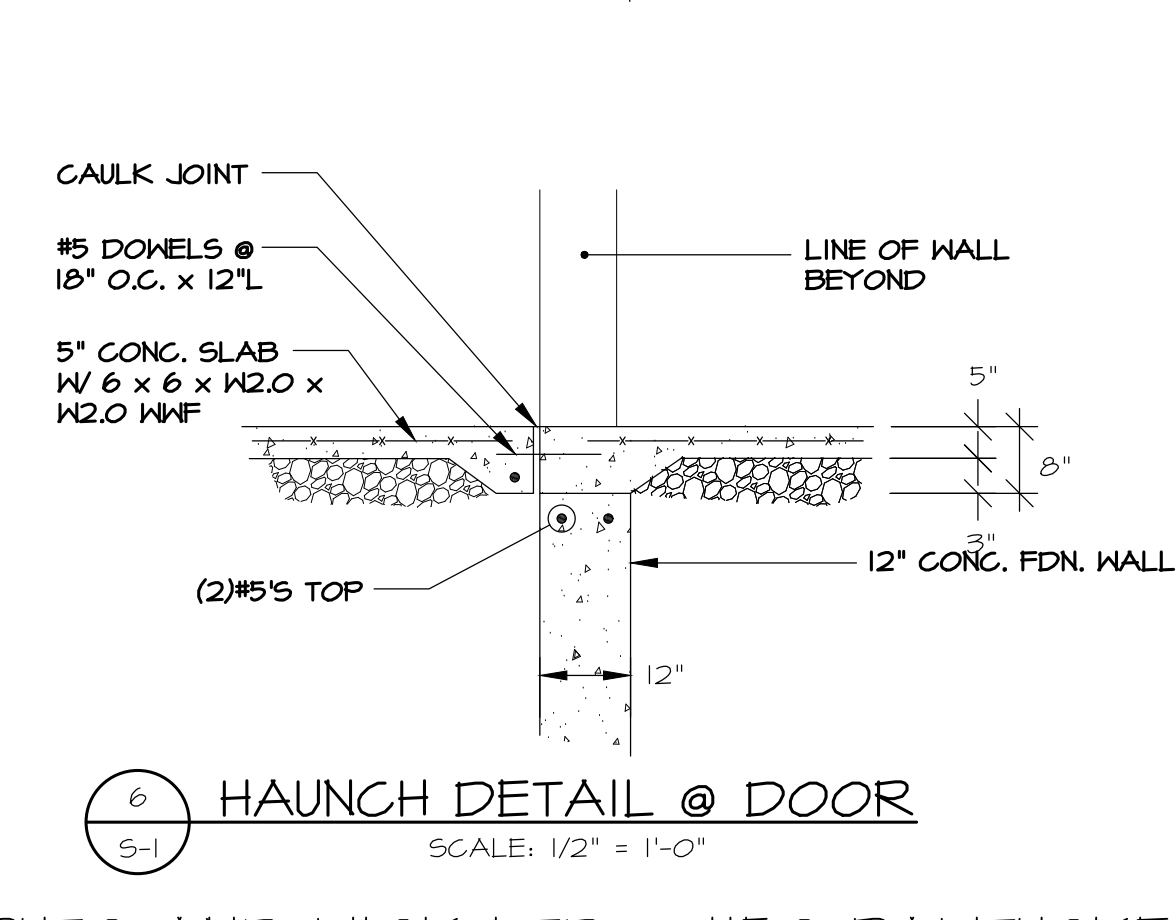
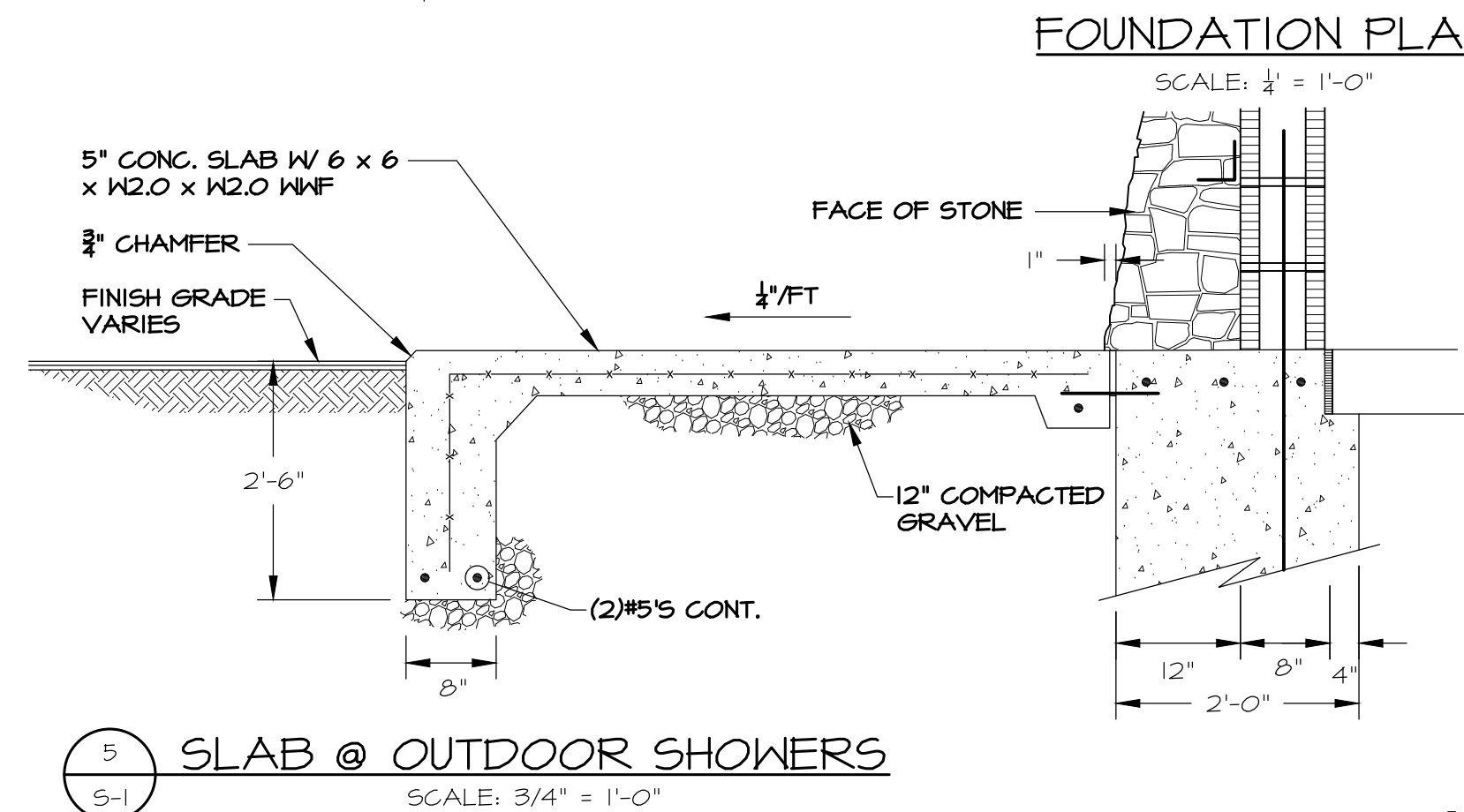
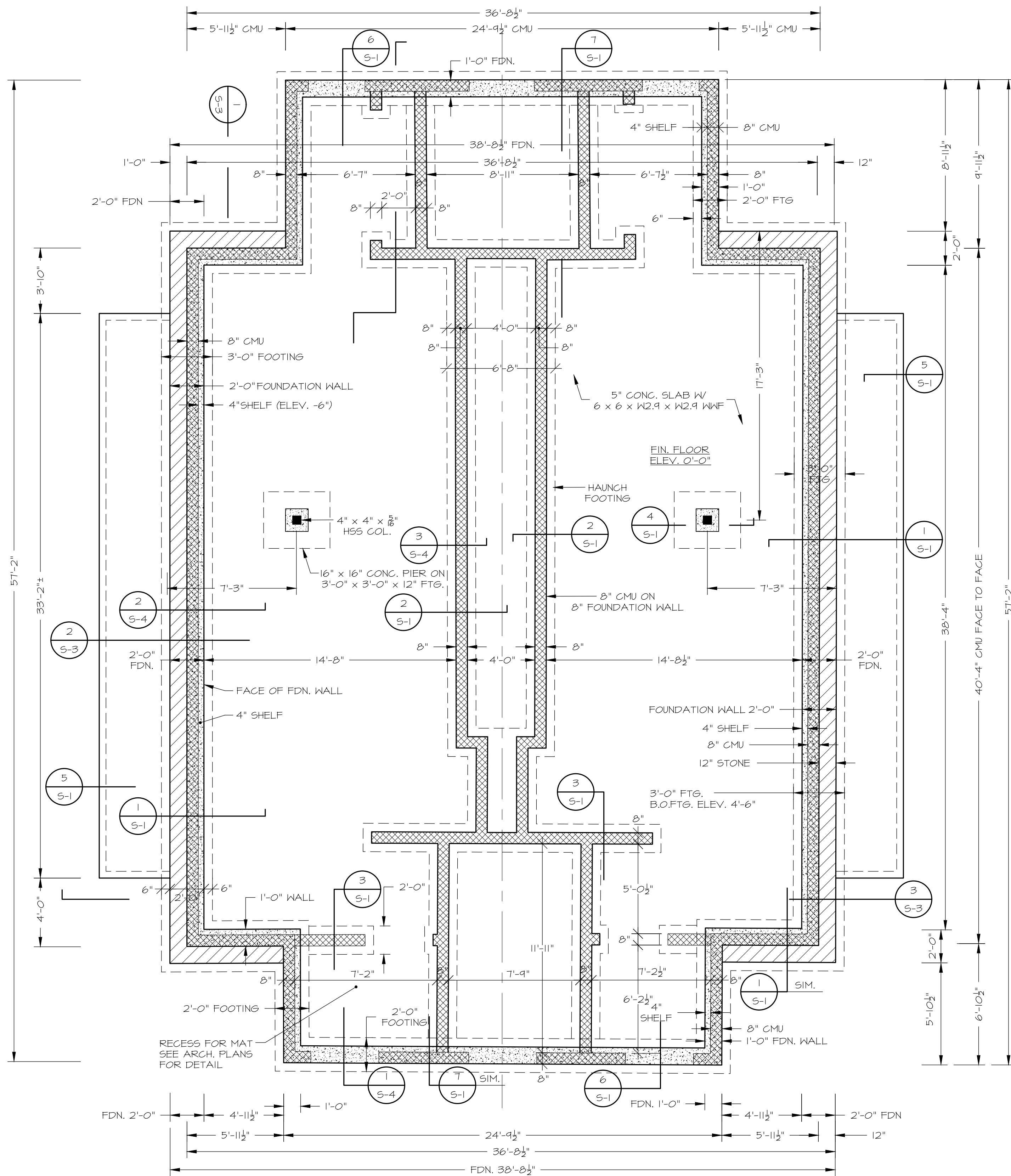
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Scale: 1" = 20'

Date: OCTOBER 6, 2023

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STATE OF RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
DIVISION OF PLANNING AND DEVELOPMENT

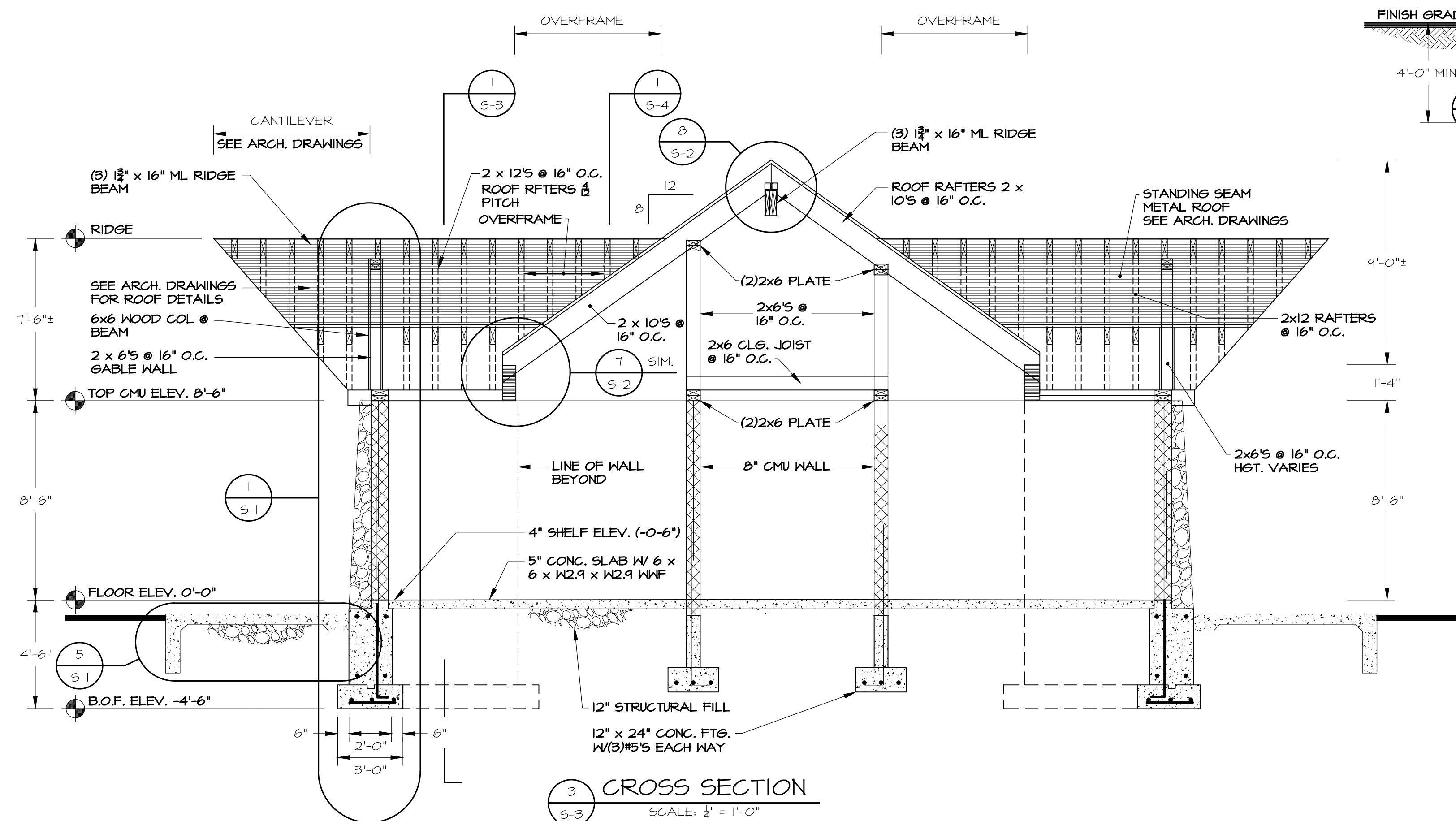
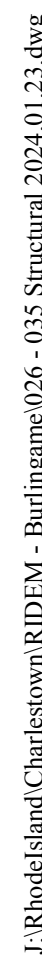
DEMOLITION AND REBUILD OF BATHHOUSES
BURLINGAME STATE PARK AND CAMPGROUND
CHARLESTOWN, RHODE ISLAND

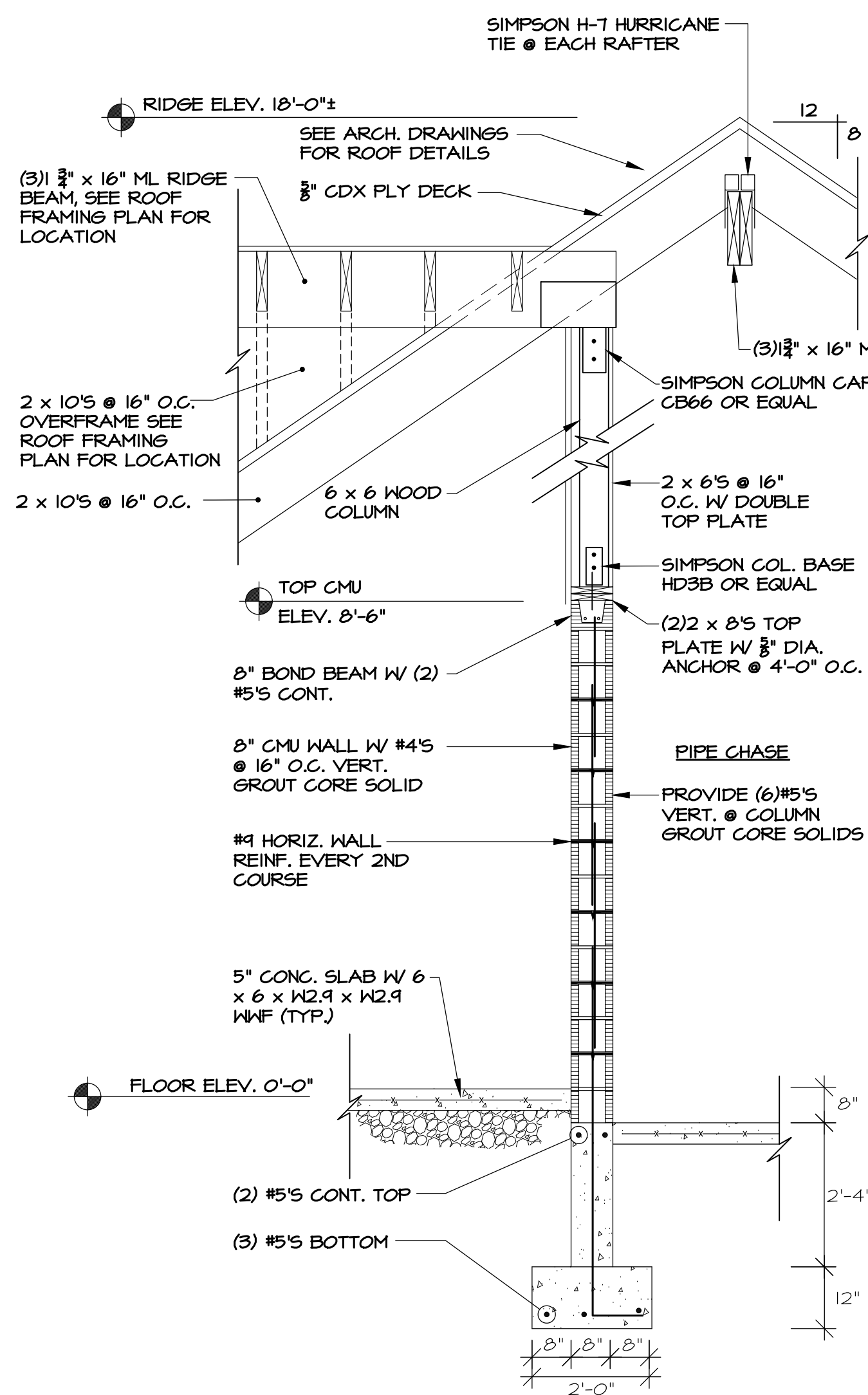
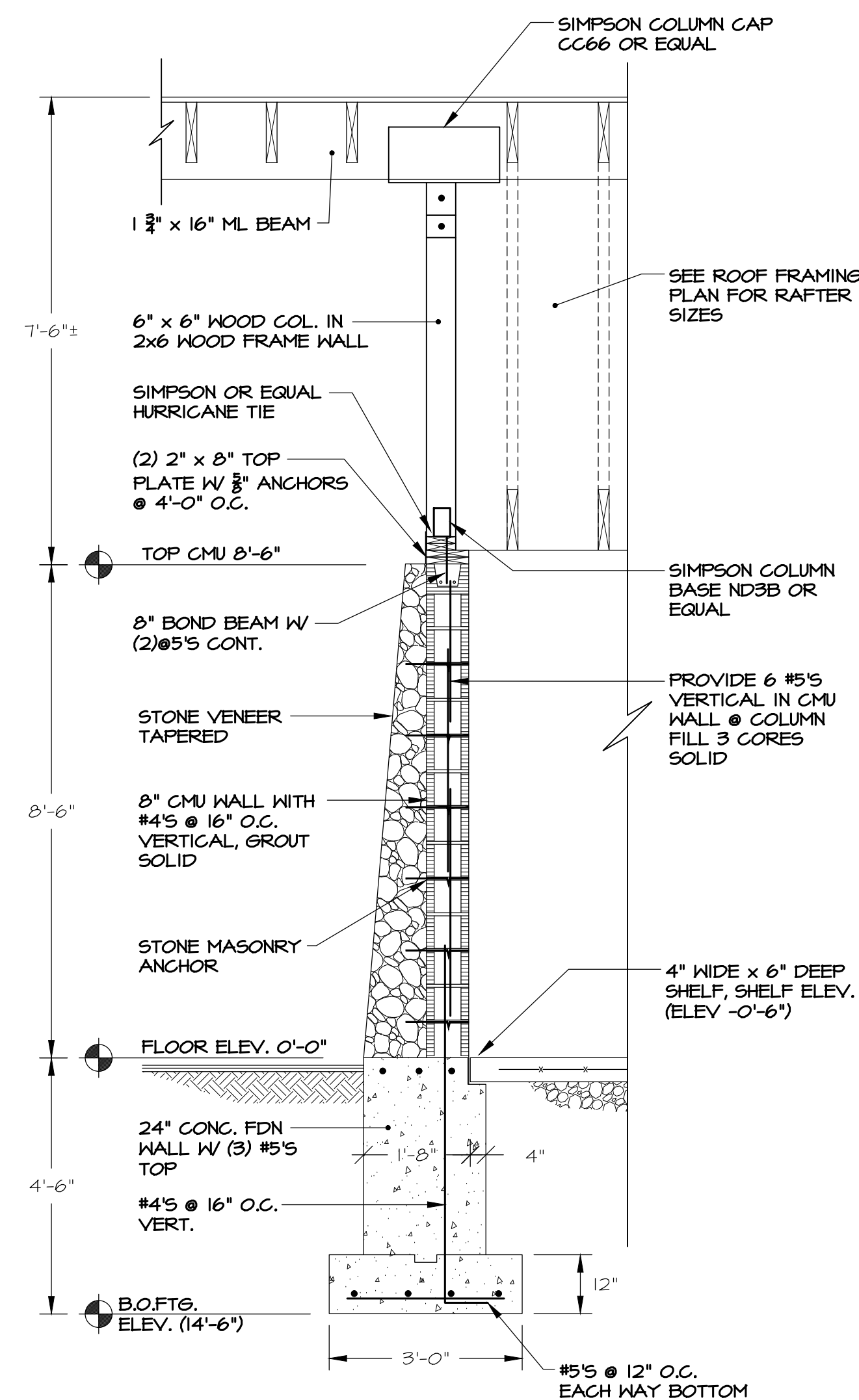
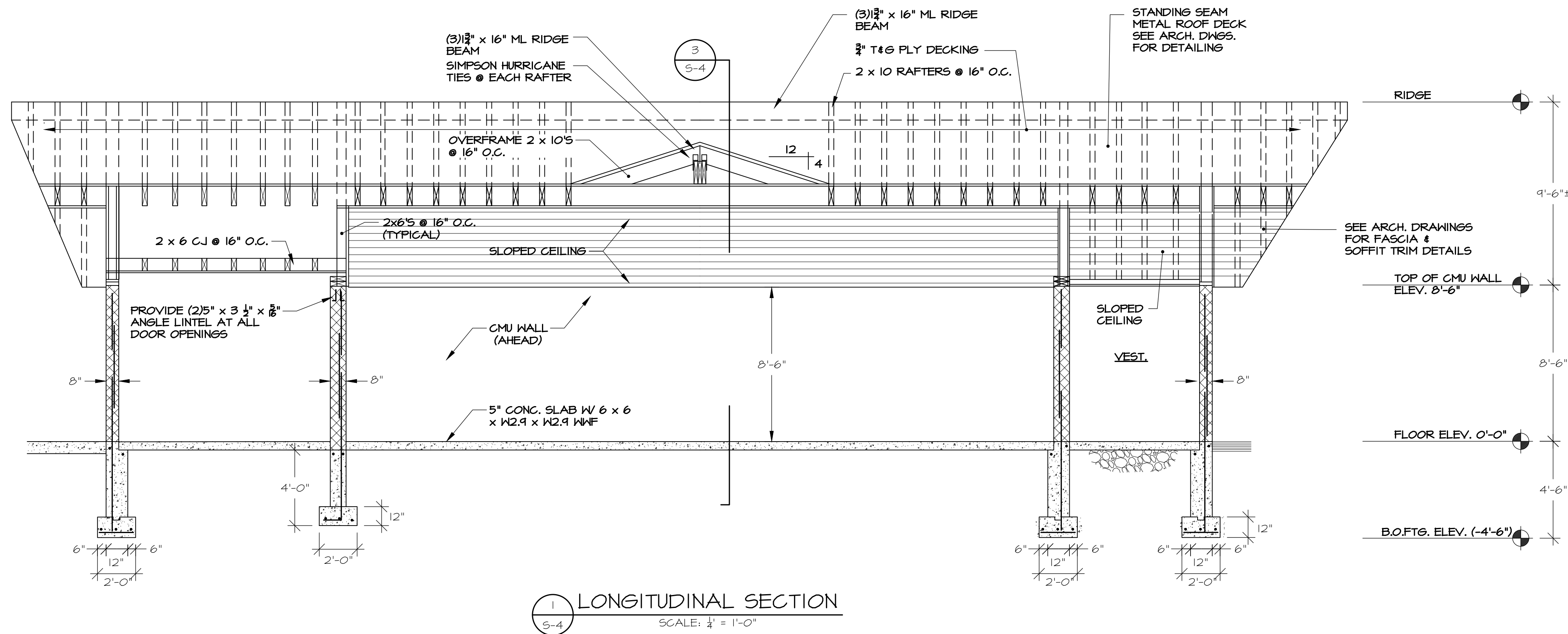
BATHHOUSES AT MILLS CAMP, AREA A and AREA B
FOUNDATION PLAN

Dwg: _____ Scale: VARIES - AS NOTED
Contract No. x _____ Date: MARCH 6, 2023

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SEPTEMBER 2023





NOTES:

GENERAL

- ALL WORK SHALL CONFORM TO THE RHODE ISLAND STATE BUILDING CODE, ITS APPLICABLE REFERENCED STANDARDS, AND LOCAL CODES.
- IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS AS THEY RELATE TO NEW CONSTRUCTION. REPORT TO THE ARCHITECT/ENGINEER ALL OBSERVATIONS AND ANY DISCREPANCIES BEFORE PROCEEDING WITH ANY WORK.
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- SUBMIT COMPLETE SHOP DRAWINGS AND SCHEDULES OF ALL STRUCTURAL ELEMENTS TO THE ENGINEER FOR APPROVAL PRIOR TO FABRICATION.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING DIG-SAFE PRIOR TO STARTING ANY WORK.
- REMOVE ALL TOPSOIL, EXISTING FILLS, ORGANIC MATERIALS, AND FROST DISTURBED SOILS PRIOR TO PLACING NEW FOOTINGS

CONCRETE

- ALL CONCRETE WORK SHALL CONFORM TO ACI 318 & 301 REQUIREMENTS. THIS SHALL INCLUDE PROPORTIONING OF CONCRETE MIX, CONCRETE TESTING, PLACEMENT OF CONCRETE, AND CURING PROCEDURES.
- CONCRETE SHALL HAVE THE FOLLOWING 28-DAY COMPRESSIVE STRENGTH:
 - EXTERIOR SLABS ON GRADE - 5,000 PSI
 - FOUNDATION WALLS - 5,000 PSI (L.W.)
 - ALL OTHER CONCRETE - 5,000 PSI
- CONCRETE REINFORCING SHALL BE IN ACCORDANCE WITH ASTM A615, GRADE 60. INSTALLATION SHALL BE IN ACCORDANCE WITH ACI 315 AND 318.
- WELDED WIRE FABRIC SHALL BE IN ACCORDANCE WITH ASTM A185.
- PROVIDE THE FOLLOWING MINIMUM REINFORCING COVER:
 - FOOTINGS - 3 INCHES
 - CONC. EXPOSED TO WEATHER OR EARTH - 2 INCHES
 - SLABS ON GRADE (STEEL BARS) - 2 INCHES
 - SLABS ON GRADE (W.W.F.) - SEE TYP. DETAILS
- FOUNDATIONS HAVE BEEN ASSUMED TO BEAR UPON VIRGIN SOIL OR COMPACTED ENGINEERED FILL HAVING A MINIMUM BEARING CAPACITY OF 1.5 TONS/S.F.
- ENGINEERED FILL UNDER BUILDING SHALL BE PLACED IN 8" LAYERS AND COMPACTED TO 95% MAX. DRY DENSITY.
- ENGINEERED FILL UNDER SLABS AND FOOTINGS SHALL CONSIST OF GRANULAR SOIL FREE OF ORGANIC MATTER AND CONFORMING TO THE FOLLOWING LIMITATIONS ON GRADATION:
 - MAXIMUM SIZE OF PARTICLES 3 INCHES
 - RETAINED ON " SIEVE 30% MAXIMUM
 - PASSING NO. 100 SIEVE 45% MAXIMUM
 - PASSING NO. 200 SIEVE 8% MAXIMUM
- PROVIDE CORNER BARS AT ALL WALL CORNERS & INTERSECTIONS MATCHING HORIZONTAL REINFORCEMENT WITH 2'-6" MINIMUM LAPS.
- LAP ALL BARS 40 DIAMETERS MINIMUM.
- COORDINATE LOCATION OF FOUNDATION WALL DEPRESSIONS AND OPENINGS WITH ARCHITECTURAL DRAWINGS.
- PROVIDE TOTAL AIR ENTRAINMENT OF 4% (4) FOR ALL CONCRETE EXPOSED TO WEATHER.

- MAXIMUM WATER/CEMENT RATIO - W/C = 0.45. (USE SUPER PLASTICIZER AS REQUIRED FOR WORKABILITY.)
- ALL SAW CUT JOINTS SHALL BE MADE WITHIN 4 HOURS OF CONCRETE PLACEMENT, FILL WITH JOINT SEALANT. (200 SF MAX)
- BOTTOMS OF ALL EXTERIOR FOOTINGS SHALL BE 3'-6" MINIMUM BELOW FINISH GRADE.
- FOOTINGS SHALL BE STEPPED AT A MAXIMUM SLOPE OF 3 HORIZONTAL TO 1 VERTICAL UNLESS NOTED OTHERWISE.
- ALL FOUNDATION WALLS SHALL BE BACK FILLED AFTER 28 DAYS OF CONCRETE PLACEMENT. (THIS TIME MAY BE REDUCED IF THE WALL IS ADEQUATELY BRACED) DURING BACKFILL OPERATIONS OF ALL FOUNDATION WALLS, THE FILL ON EITHER SIDE OF THE WALL SHALL NOT EXCEED A 2'-0" DIFFERENTIAL, UNLESS THE WALL IS DESIGNED FOR RETAINING ACTION.
- ALL RETAINING WALLS SHALL BE BACK FILLED AFTER 28 DAYS OF CONCRETE PLACEMENT.
- PROVIDE MATCHING DOWELS INTO FOUNDATION WALLS AT ALL VERTICAL REINFORCEMENT.
- PROVIDE 4-#6 VERTICALS UNDER ALL BEAM BEARING LOCATIONS (TYPICAL)

STRUCTURAL LUMBER

- ALL WORK SHALL BE IN CONFORMANCE WITH THE AMERICAN FOREST & PAPER ASSOC. STANDARDS AND SPECIFICATIONS, LATEST ADDITION.
- ALL LUMBER USED IN A STRUCTURAL CAPACITY SHALL BE 19% KILN DRIED HEM-FIR NO. 1 OR EQUAL, FB. 1200 PSI.
- ANY WOOD IN DIRECT CONTACT WITH CONCRETE OF MASONRY, EXPOSED TO UNHEATED BASEMENT AND CRAWL SPACES, OR EXPOSED TO THE EXTERIOR SHALL BE PRESSURE TREATED.
- ALL FASTENERS SHALL BE IN CONFORMANCE WITH THE FASTENING SCHEDULE IN THE RHODE ISLAND STATE BUILDING CODE. FASTENERS EXPOSED TO THE WEATHER SHALL BE GALVANIZED OR STAINLESS STEEL.
- ALL BEAM TO BEAM CONNECTIONS SHALL BE GALV. FLANGE HANGERS. SUBMIT SHOP DRAWINGS FOR REVIEW.
- ALL WOOD ROOF CAPS AND BASE CONNECTIONS SHALL BE APPROVED GALV. (SIMPSON OR EQUAL) POST CAP AND BASE PREFABRICATED ASSEMBLIES. SUBMIT SHOP DRAWINGS FOR REVIEW.
- TJI, TJC, OR OPEN WEB TRUSS JOIST AND "PARALLUM" (PARALLEL STRAND LUMBER) FRAMING INDICATED ON DRAWINGS ARE DESIGNED AND MANUFACTURED BY "TRUS-JOIST" OR APPROVED EQUAL.
- THE FRAMING SIZES, SPACING, AND FRAMING DETAILS INDICATED ARE THE MINIMUM REQUIRED. PROVIDE DESIGN AND FRAMING DETAILS AS PER LOADS INDICATED.
- HORIZONTAL BRIDGING SHALL BE PROVIDED WITH DESIGN AND CONNECTION DETAILS. ALL BRIDGING SHALL BE INSTALLED BEFORE ANY CONSTRUCTION LOADS ARE PLACED ON THE JOISTS. THE ENDS OF ALL BRIDGING LINES TERMINATING AT WALLS OR BEAMS SHALL BE ANCHORED THERETO.
- THE ENDS OF ALL JOISTS BEARING ON BEAMS OR BEARING PLATES SHALL EXTEND 4" MINIMUM OVER THE SUPPORT.

STRUCTURAL STEEL

- ALL WORK SHALL CONFORM TO THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION SPECIFICATIONS AND ITS CODE OF STANDARD PRACTICE.
- ALL WELDING OPERATIONS SHALL BE PERFORMED BY AWS CERTIFIED WELDERS IN CONFORMANCE WITH ALL APPLICABLE REQUIREMENTS.
- ALL NEW STRUCTURAL STEEL SHALL BE GIVEN ONE COAT OF AN APPROVED SHOP PAINT, APPLIED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS, UNLESS NOTED OTHERWISE. SHOP PAINTING OF STRUCTURAL STEEL SHALL CONFORM TO SSPC-PS 101.
- AFTER ERECTION IS COMPLETE, TOUCHUP ALL SHOP PRIMED COATS DAMAGED DURING TRANSPORTATION AND ERECTION, AND PRIME ALL FIELD WELDS USING THE SAME PAINT USED FOR SHOP PRIMING.
- APPLY BITUMINOUS PAINT TO ALL COLUMNS BELOW GRADE, WHERE APPLICABLE.
- UNLESS NOTED OTHERWISE, PROVIDE A 1/2"x8"x8" BASE PLATE W/2-3/4"DIA. BOLTS (TYPICAL) UNDER ALL STEEL BEAMS.
- ALL CONNECTIONS SHALL BE SELECTED, COMPLETED, DESIGNED, AND DETAILED BY THE FABRICATOR'S REGISTERED DESIGN PROFESSIONAL (RDP) IN RESPONSIBLE CHARGE OF THE DEVELOPMENT OF FABRICATION AND ERECTION DRAWINGS. CONNECTIONS SHALL BE DESIGNED BY THE FABRICATOR IN ACCORDANCE WITH THE GOVERNING AISC SPECIFICATION. SUBMIT CALCULATIONS BEARING THE RDP'S SEAL AND SIGNATURE PRIOR TO, OR ALONG WITH, PIECE DETAILS.

STEEL DECKS

- ALL STEEL DECKING SHALL CONFORM TO THE STEEL DECK INSTITUTE (SDI) APPLICABLE REQUIREMENTS. INSTALLATION SHALL BE PER THE MANUFACTURER'S RECOMMENDATIONS IN ACCORDANCE WITH SDI SPECIFICATIONS.
- STEEL DECK SHALL TYPICALLY BE STORED OFF THE GROUND AT THE JOBSITE AND BE PROTECTED FROM THE ELEMENTS WITH A WATER-PROOF COVERING WHERE REQUIRED.
- DECK SHEETS SHALL BE PLACED IN ACCORDANCE WITH APPROVED ERECTION LAYOUT DRAWINGS (INCLUDING FASTENING SCHEDULE) SUPPLIED BY THE DECK MANUFACTURER AND IN CONFORMANCE WITH THE MANUFACTURER'S STANDARDS. UNLESS NOTED OTHERWISE, END LAPS SHALL OCCUR OVER SUPPORTS AND SHALL NOT BE LESS THAN 2 INCHES.
- METAL ROOF DECK TO BE 1-1/2" DEEP, 20 GA WIDE RIB METAL DECK OR 2 1/2" DEEP DECK BY EPIC METALS, SEE PLANS FOR LOCATIONS.
- FLOOR DECK TO BE 1 1/2" LOK. FLOOR COMPOSITE FLOOR DECK, 20 GAGE GALV. METAL DECK BY U.S.D. OR EQUAL.

MASONRY CONSTRUCTION

- ALL MASONRY UNITS SHALL CONFORM TO ASTM C-90 TYPE N-1 WITH THE STRENGTH OF UNITS AND MORTAR BEING SUCH THAT THE () VALUES INDICATED ARE SATISFIED.
- GROUT AND MORTAR SHALL CONFORM TO ASTM C476.
- ALL MASONRY WORK, INCLUDING CURING, ERECTION, AND WEATHER PROTECTION, SHALL CONFORM TO THE NCMA AND ACI-531 REQUIREMENTS AND STANDARDS.
- PROVIDE GALVANIZED HORIZONTAL REINFORCEMENT @ 16" O.C. MIN. UNLESS OTHERWISE NOTED.
- UNLESS NOTED OTHERWISE, PROVIDE A MINIMUM OF #5 @ 48" O.C. VERTICAL REINFORCEMENT IN ALL MASONRY WALLS.
- PROVIDE ADDITIONAL VERTICAL REINFORCEMENT @ JAMBS OF ALL WALL OPENINGS, WALL ENDS, STEEL BEAMS AND ANGLE BEARING LOCATIONS. MINIMUM REINFORCEMENT SHALL BE 2-#6 VERTICALS UNLESS NOTED OTHERWISE.

SHEAR WALL FRAMING

M202.3

ROOF NAILING: ROOF ATTACHMENT SHALL BE ACCOMPLISHED WITH MINIMUM 8D NAILS AS FOLLOWS:

- IN THE 4 FOOT PERIMETER EDGE ZONE ALONG THE EDGES:
 - 6" O.C. TO THE INTERMEDIATE SUPPORTS WITHIN THE 4' PERIMETER EDGE ZONE.
 - 6" O.C. ALONG THE GABLE END WALL OR RAKE.
 - 4" O.C. ALL OTHER AREA.
 - 6" O.C. EDGE.
 - 12" O.C. INTERMEDIATE.
- ALL SHEATHING EDGES WITHIN THE 4 FOOT PERIMETER EDGE ZONE SHALL BE BLOCKED WITH 2X3 MINIMUM INCLUDING THE RIDGE LINE AND SOFFIT/FACIA AREA. PROVISIONS FOR VENTILATION AIR SHALL BE MAINTAINED.
- EXCEPTION: 2X3 INTERMEDIATE BLOCKING CAN BE ELIMINATED PROVIDED ALL SHEATHING IS 5/8" NOMINAL TONGUE AND GROOVE STRUCTURAL PANELS. (BLANKET VARIANCE 14 (BV-14).

M202.04

RIDGE STRAPS: RIDGE STRAPS 1-1/4" X 20" GAUGE SHALL BE ATTACHED TO EACH PAIR OF OPPOSING RAFTERS WITH 5-8D NAILS AT EACH END INTO THE FRAMING MEMBER.

M203.1

WALL SHEATHING: WALL SHEATHING SHALL BE A MINIMUM 7/16" STRUCTURAL PANEL. NAILING SHALL BE IN ACCORDANCE WITH TABLE R602.3(i) AND THE FOLLOWING:

- AT THE TOP PLATE OR PLATES, THE SHEATHING SHALL EXTEND FROM THE TOP OF THE PLATE TO A MINIMUM OF 16" BEYOND THE STUD-TO-BOTTOM OF THE TOP PLATE CONNECTION. A MINIMUM OF 4 NAILS SHALL BE USED AT EACH STUD FASTENING, AND EDGE-NAILED TO EACH PLATE AT 6" O.C. ALTERNATE: PREFABRICATED AND PRE-ENGINEERED CONNECTION STRAPS APPROVED BY THE BUILDING OFFICIAL.
- IF THE STUDS ARE NOT CONTINUOUS TO THE FOUNDATION PLATE SUCH AS AT AN INTERMEDIATE FLOOR, THE WALL SHEATHING SHALL BE CONTINUOUS AND UNINTERRUPTED FOR A DISTANCE OF 16" BEYOND FROM TOP OF BOTTOM WALL PLATE TO 16" BEYOND BOTTOM OF BOTTOM WALL TOP PLATE BELOW WITH A MINIMUM OF 4 NAILS AT EACH STUD, FIELD-NAILED AT 6" O.C. TO FLOOR JOIST HEADER FRAMING. ALTERNATE: PREFABRICATED AND PRE-ENGINEERED CONNECTION ANCHORS OR FASTENERS APPROVED BY THE BUILDING OFFICIAL.
- AT THE BOTTOM OF THE WALL ASSEMBLY TO THE FOUNDATION SILL PLATE, THE WALL SHEATHING SHALL BE CONTINUOUS FROM POINT 26" ABOVE THE TOP OF THE BOTTOM WALL PLATE TO THE BOTTOM OF THE FOUNDATION SILL, WITH A MINIMUM OF 4 NAILS AT EACH STUD. 6" FIELD NAILED AND EDGE NAILED TO THE FOUNDATION SILL PLATE AT 6" O.C. ALTERNATE: PREFABRICATED AND PRE-ENGINEERED CONNECTION ANCHORS OR FASTENERS APPROVED BY THE BUILDING OFFICIAL.

M203.2

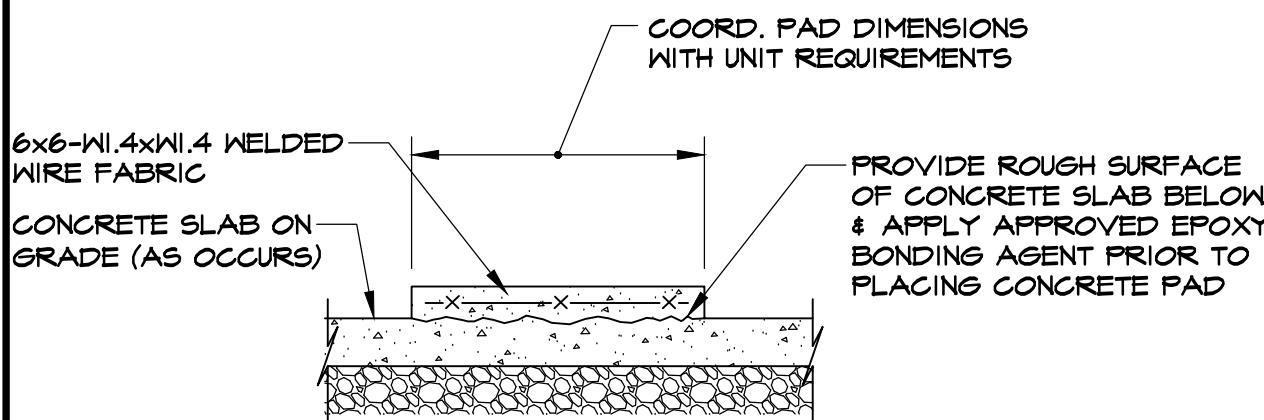
SHEAR WALLS: A 4' SEGMENT OF WALL SHEATHING SHALL BE DESIGNATED AS A SHEAR WALL AT EACH CORNER OF THE STRUCTURE AT EACH FLOOR, AND NO MORE THAN 24' APART ALONG A WALL LENGTH. THE FOLLOWING ADDITIONAL REQUIREMENTS APPLY:

- NO OPENINGS ARE PERMITTED WITHIN THIS 4' SECTION. EXCEPTION: WINDOW OPENINGS ARE ALLOWED NO CLOSER THAN 2' TO CORNER PROVIDING THE LENGTH OF THAT SHEAR PANEL IS INCREASED TO 8'.
- ALL EDGES SHALL BE BLOCKED AND NAILED AT 6" O.C. AND FIELD NAILED AT 6" O.C.
- STUDS SHALL BE DOUBLED AT EACH END OF THE SHEAR PANEL.

M203.3

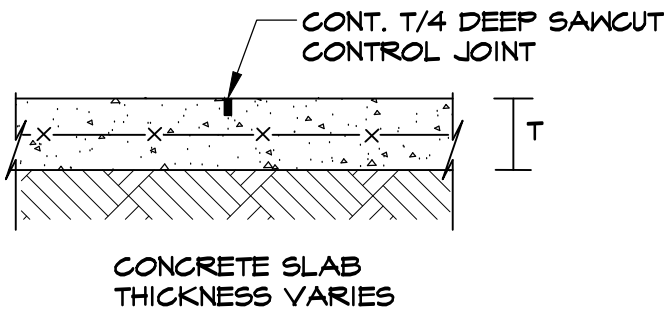
FOUNDATION ANCHOR BOLTS: ANCHOR BOLTS SHALL BE INSTALLED IN ACCORDANCE WITH SECTION R403.1.6 AND THE FOLLOWING:

- 1 & 2 STORY BUILDINGS - 1/2" STORY BUILDINGS - 1/2" @ 48" O.C. OR 5/8" @ 12" O.C.



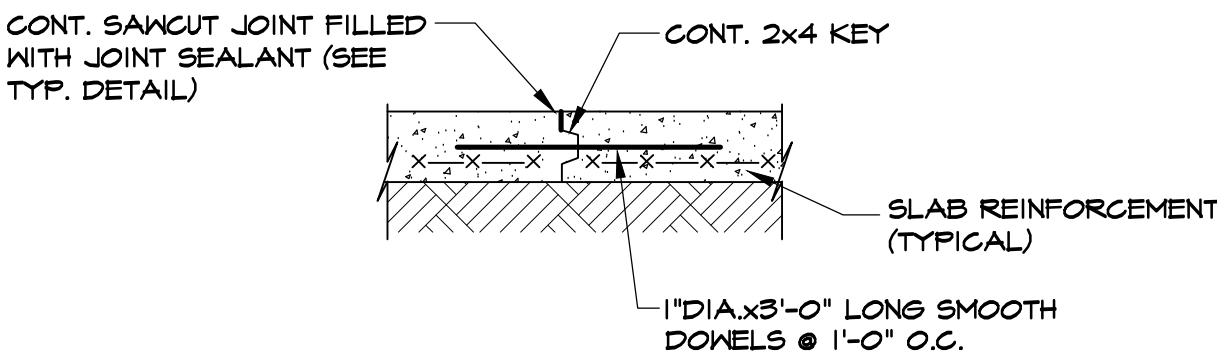
COORDINATE ALL HOUSEKEEPING PAD REQUIREMENTS, INCLUDING QUANTITIES, SIZES, LOCATIONS, EMBEDDED ITEMS, ETC. WITH MEP AND ARCHITECTURAL DRAWINGS.

TYPICAL EQUIPMENT HOUSEKEEPING PAD DETAIL
SCALE : NTS



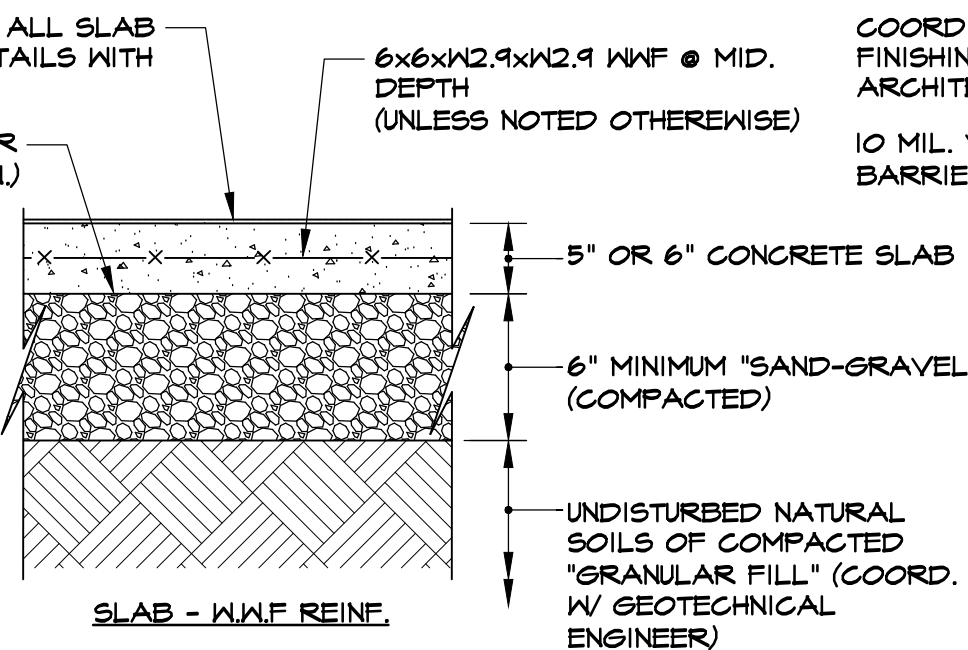
NOTE: ALL SAWCUT JOINTS SHALL BE MADE WITHIN 4 HOURS OF CONCRETE PLACEMENT. FILL WITH JOINT SEALANT.

TYPICAL SLAB CONTROL JOINT DETAIL
SCALE : NTS

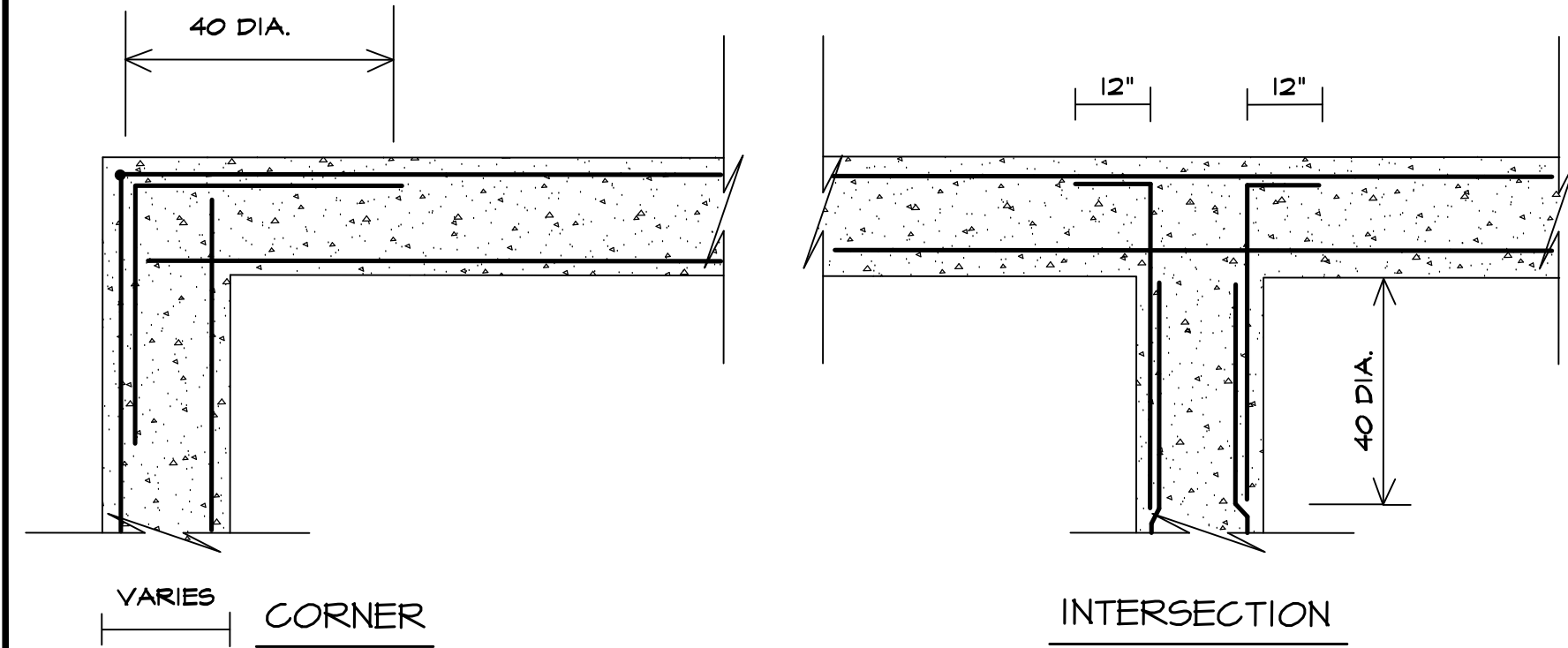
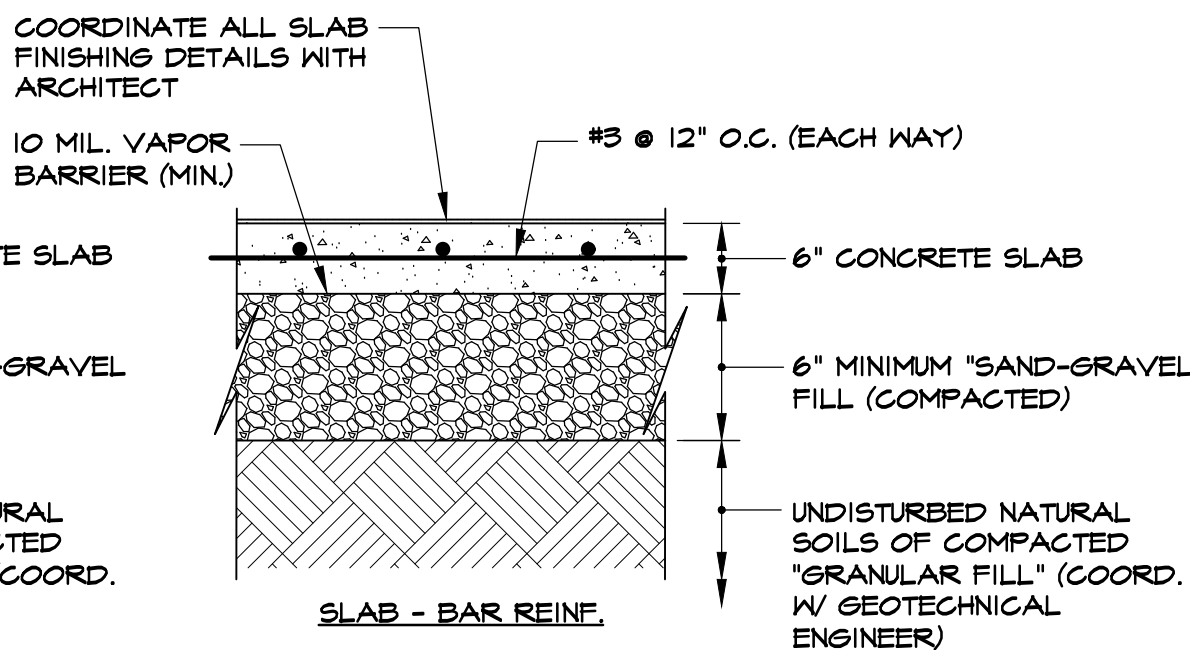


NOTE: SUBMIT CONSTRUCTION JOINT LOCATIONS FOR APPROVAL

TYPICAL SLAB ON GRADE CONSTRUCTION JOINT DETAIL
SCALE : NTS

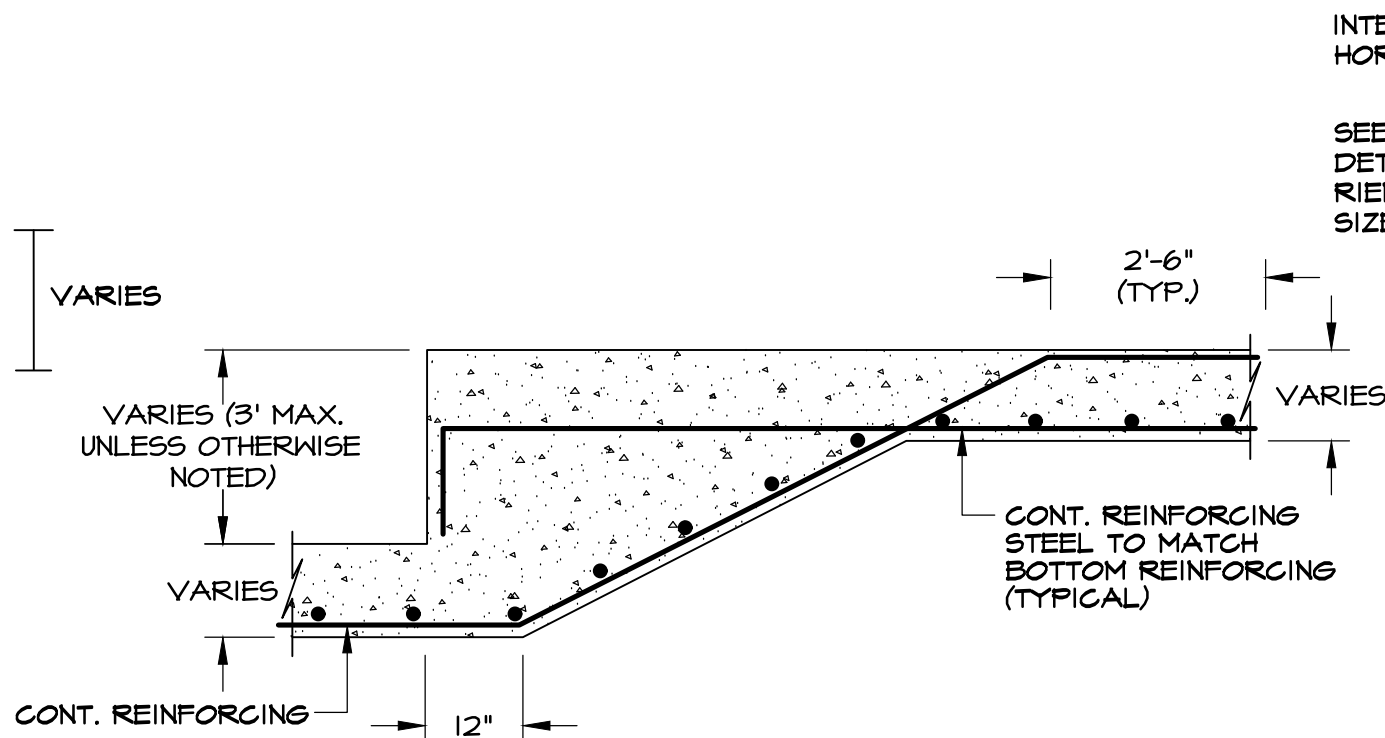


TYPICAL CONCRETE SLAB ON GRADE DETAILS
SCALE : NTS

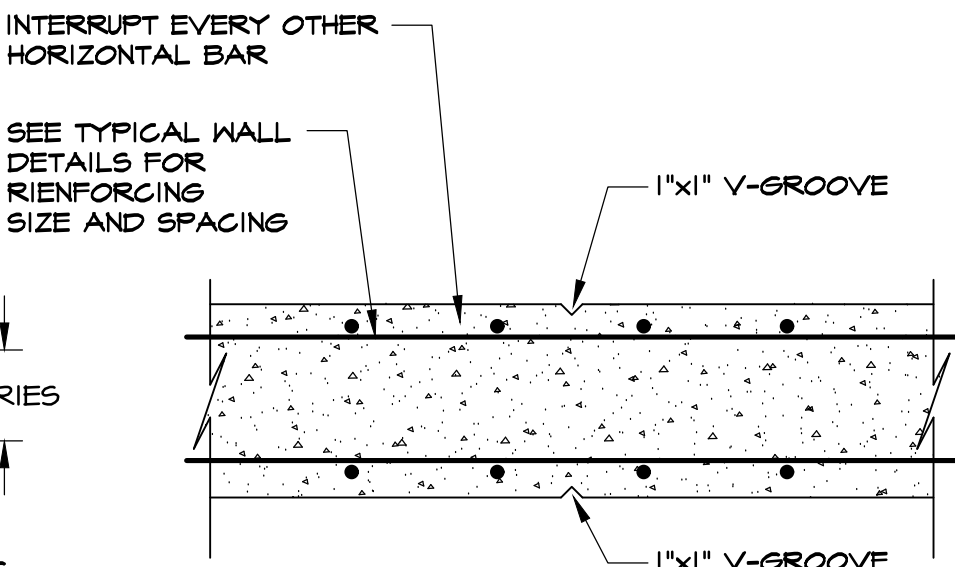


DOWELS TO BE SAME SIZE & SPACING AS HORIZ. REINF.

TYPICAL WALL DETAILS
SCALE : 1/2" = 1'-0"

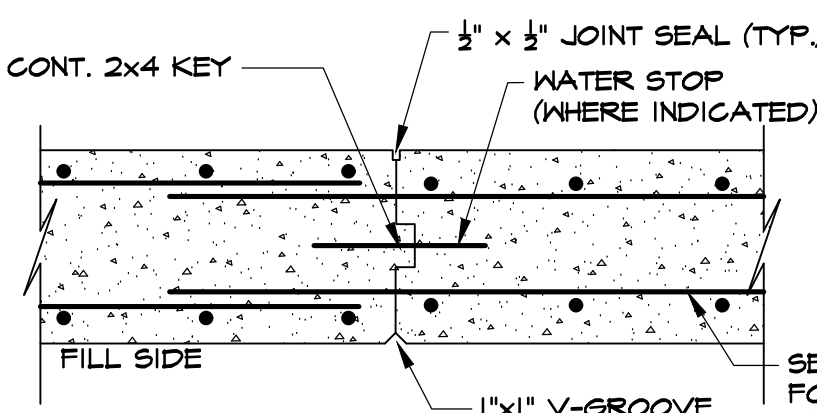


TYPICAL STEPPED FOOTING DETAIL
SCALE : NTS



NOTE: PROVIDE CONTROL JOINTS @ 20'-0" O.C. MAX @ ALL CONC. WALLS EXPOSED 24" OR GREATER ABOVE FINISH GRADE

TYPICAL CONCRETE WALL JOINT DETAILS
SCALE : NTS



NOTE: MAXIMUM PLACEMENT BETWEEN WALL CONSTR. JOINTS (FOR CONT. WALLS) SHALL BE (50) FEET, UNLESS NOTED OTHERWISE.

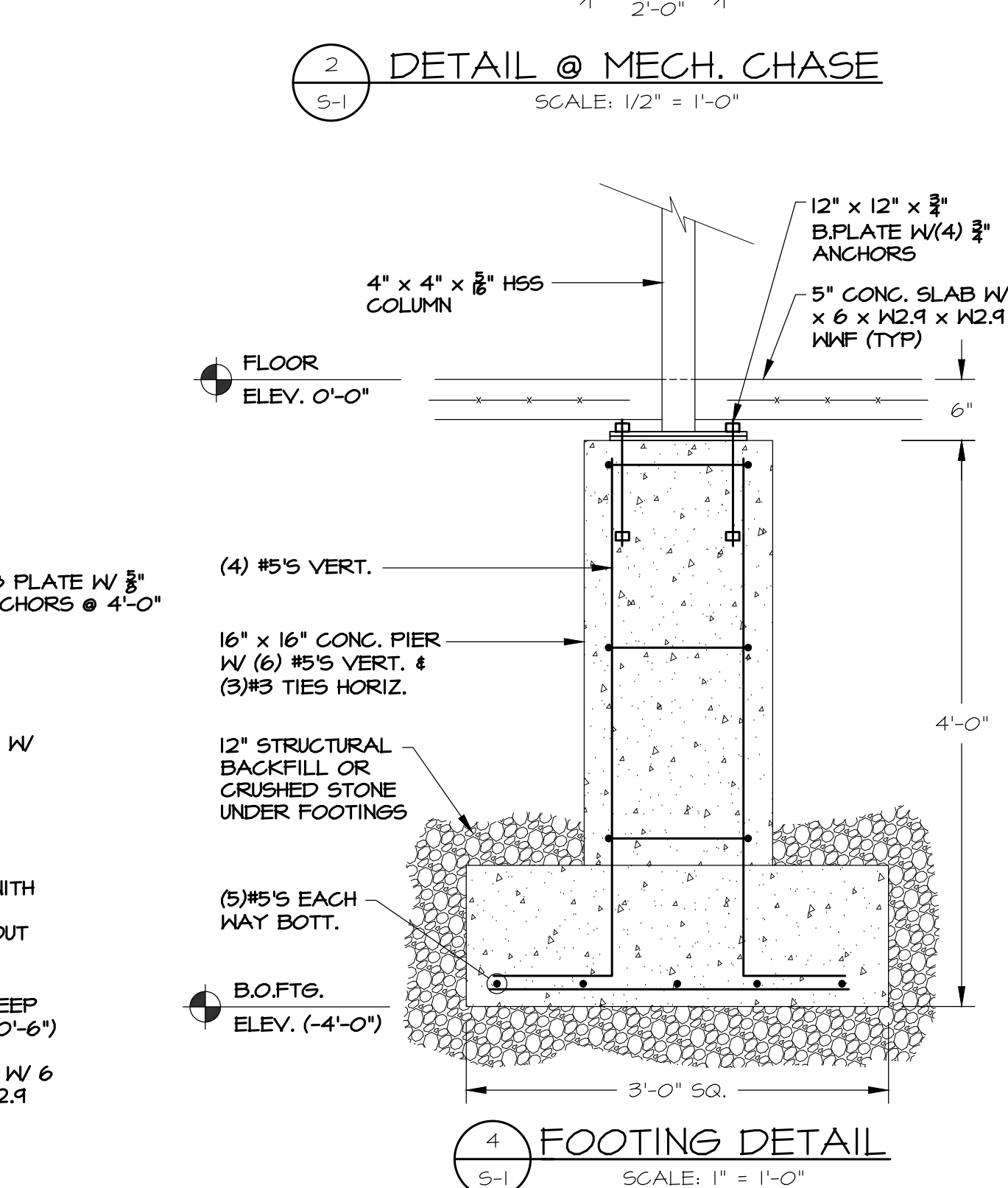
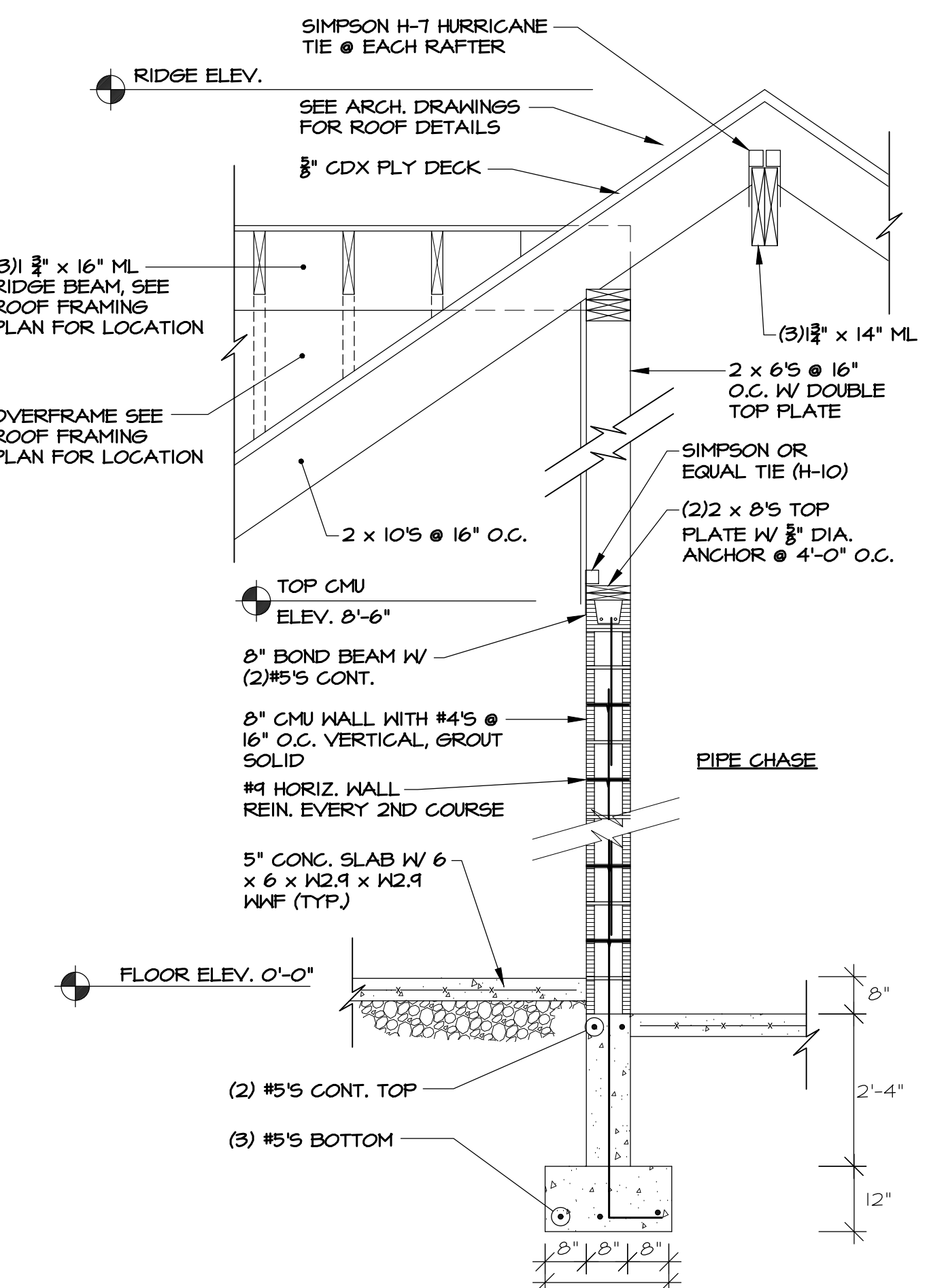
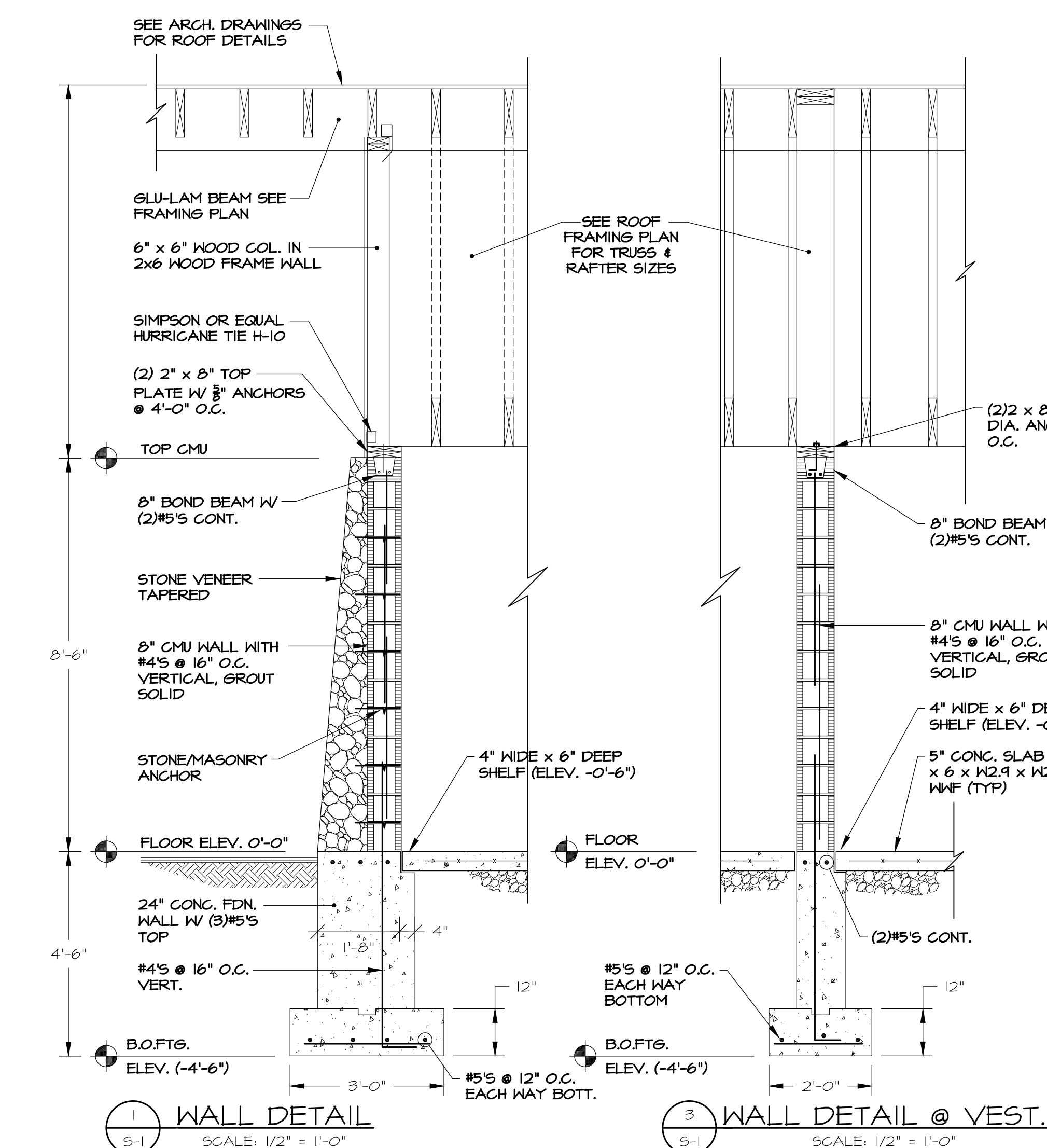
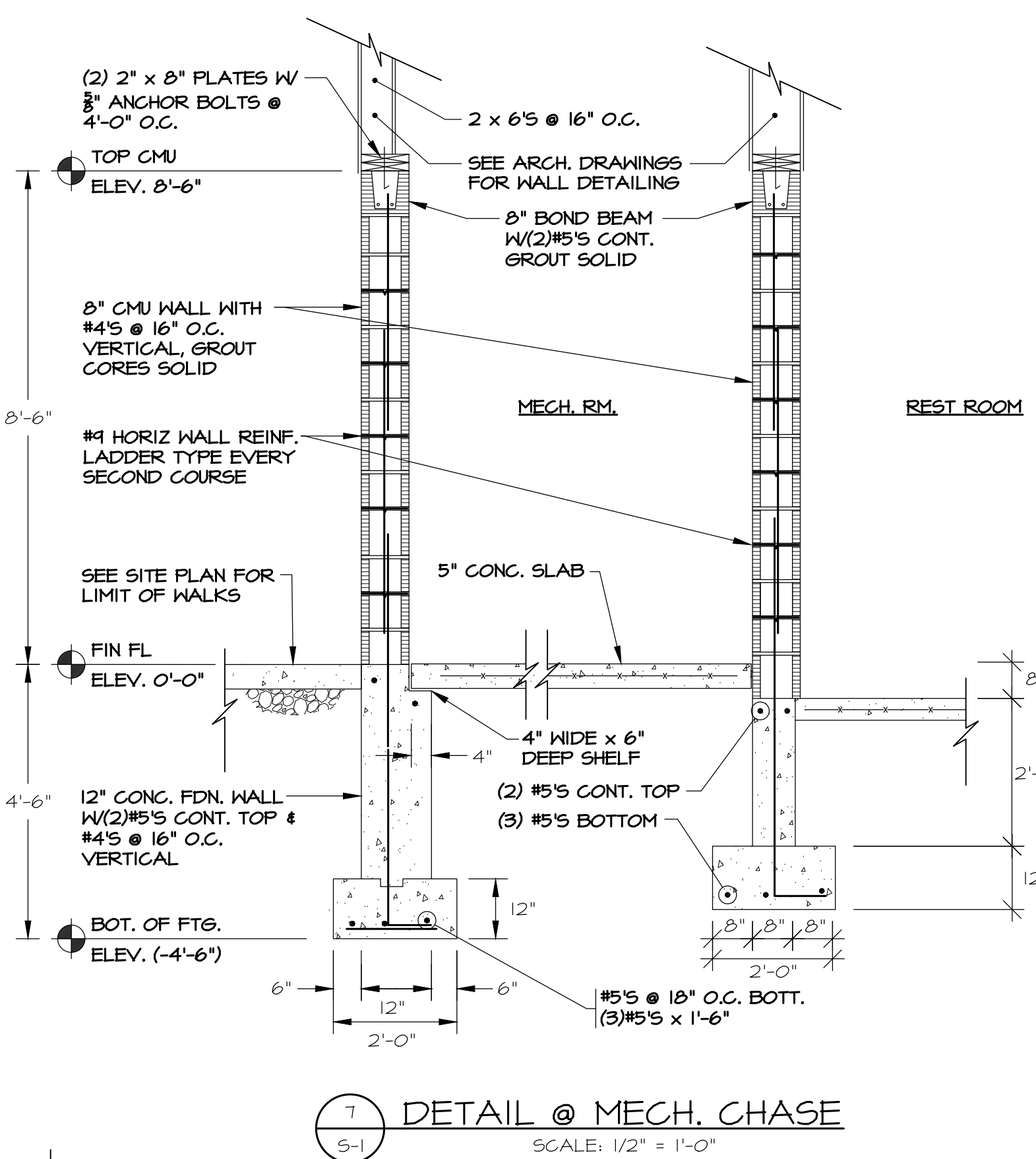
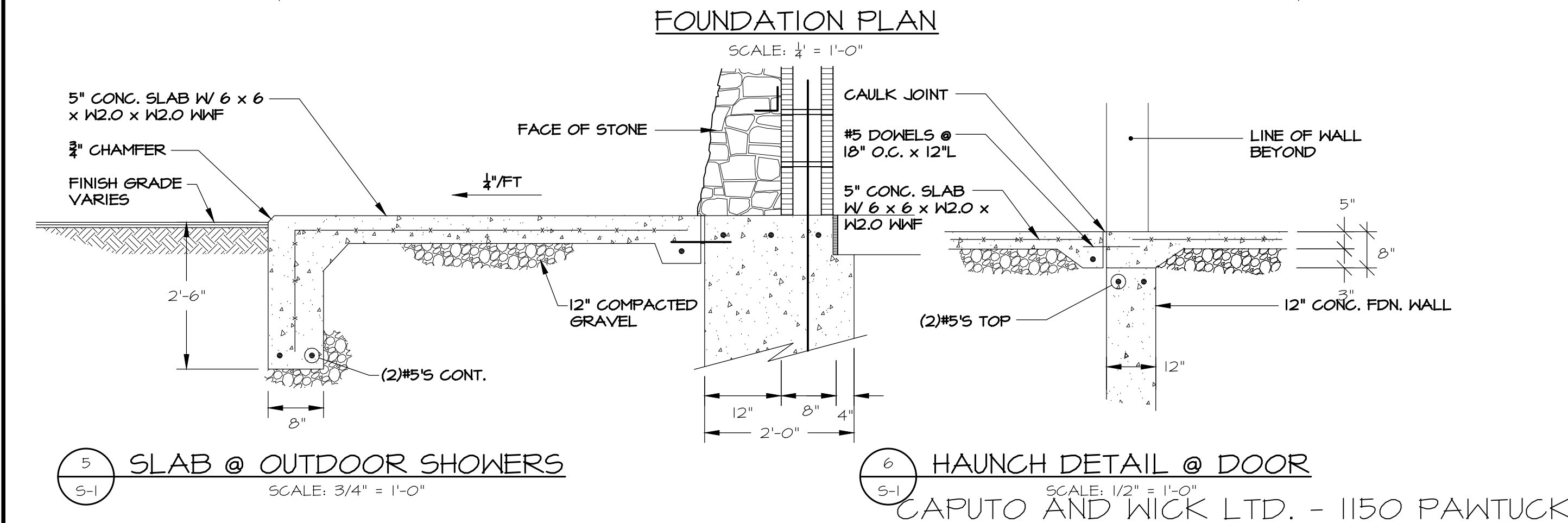
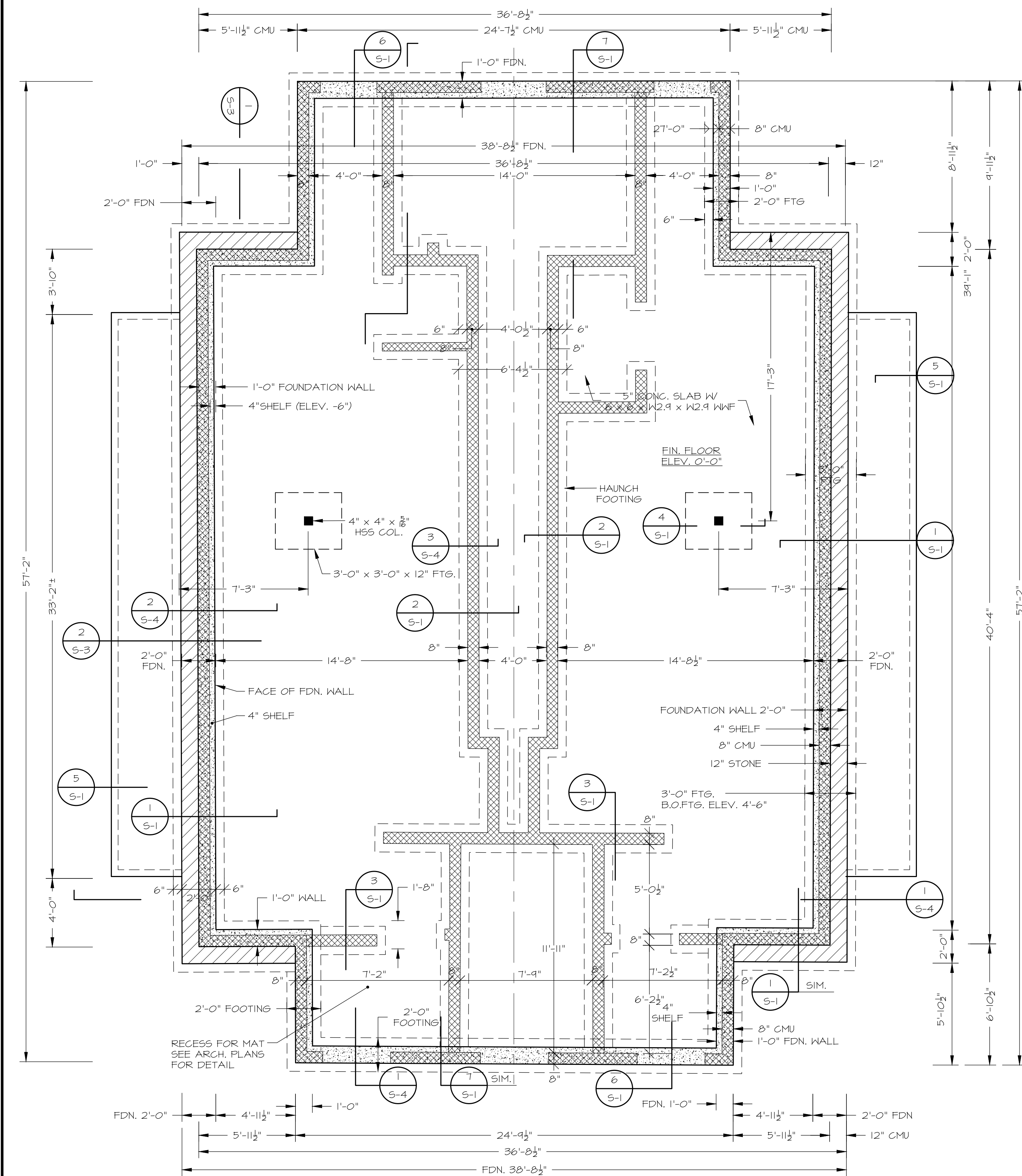
STATE OF RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
DIVISION OF PLANNING AND DEVELOPMENT

DEMOLITION AND REBUILD OF BATHHOUSES
BURLINGAME STATE PARK AND CAMPGROUND
CHARLESTOWN, RHODE ISLAND

BATHHOUSES AT MILLS CAMP, AREA A and AREA B
GENERAL NOTES AND DETAILS

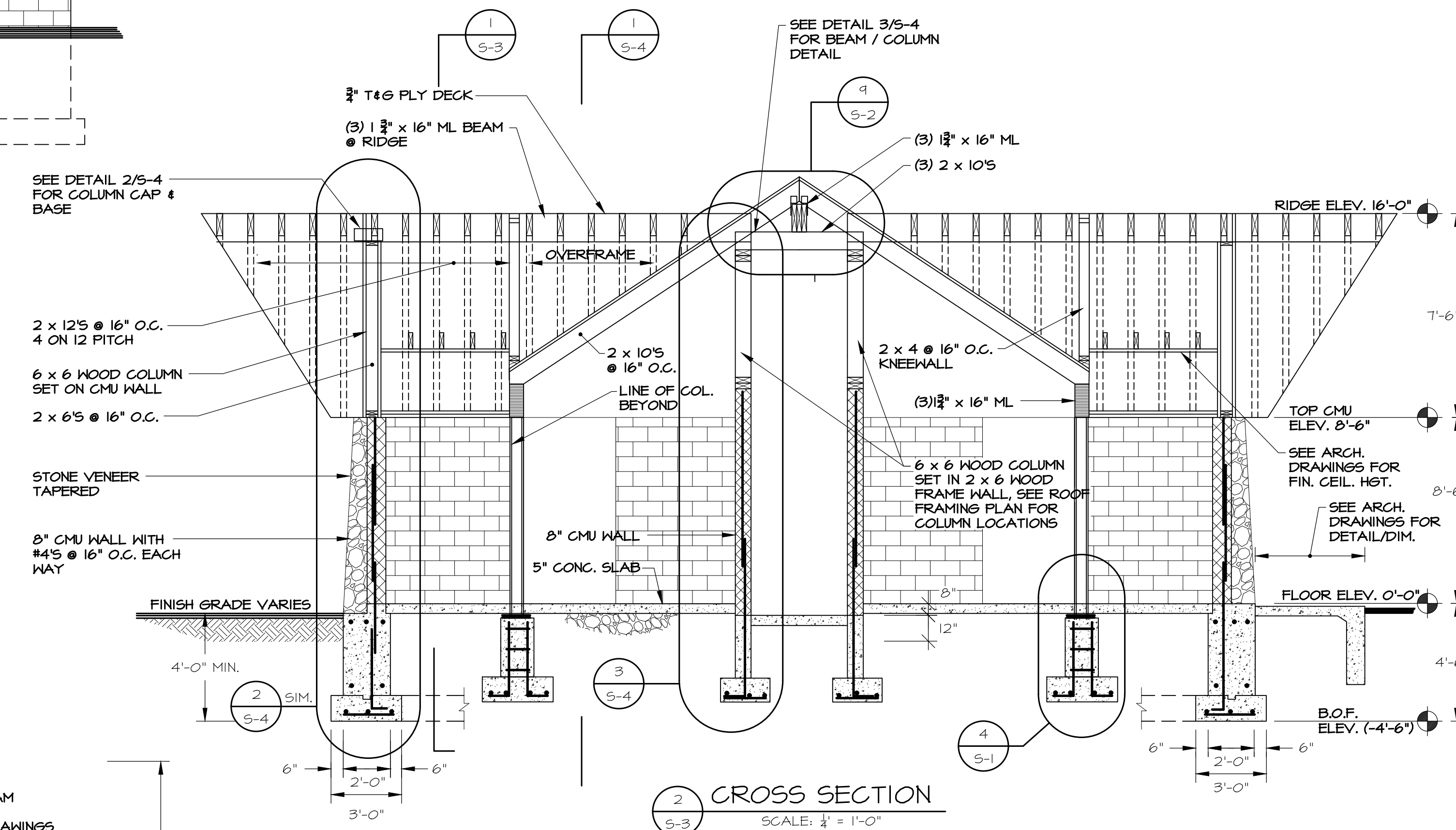
Dwg: Scale: VARIES - AS NOTED
Contract No. x Date: MARCH 6, 2023

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SEPTEMBER 2023

SEPTEMBER 2023



SEPTEMBER 2023



NOTES:

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- IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO PROVIDE FOR A SAFE AND EFFICIENT METHOD OF SHORING AND/OR BRACING THE EXISTING STRUCTURE DURING BOTH DEMOLITION AND NEW CONSTRUCTION PHASES. SUBMIT AN OUTLINE OF PROPOSED PROCEDURE TO THE ARCHITECT/ENGINEER BEFORE DEMOLITION OPERATIONS BEGIN.
- SUBMIT COMPLETE SHOP DRAWINGS AND SCHEDULES OF ALL STRUCTURAL ELEMENTS TO THE ENGINEER FOR APPROVAL PRIOR TO FABRICATION.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING DIG-SAFE PRIOR TO STARTING ANY WORK.
- REMOVE ALL TOPSOIL, EXISTING FILLS, ORGANIC MATERIALS, AND FROST DISTURBED SOILS PRIOR TO PLACING NEW FOOTINGS

CONCRETE

- ALL CONCRETE WORK SHALL CONFORM TO ACI 318 & 301 REQUIREMENTS. THIS SHALL INCLUDE PROPORTIONING OF CONCRETE MIX, CONCRETE TESTING, PLACEMENT OF CONCRETE, AND CURING PROCEDURES.
- CONCRETE SHALL HAVE THE FOLLOWING 28-DAY COMPRESSIVE STRENGTH:
 - EXTERIOR SLABS ON GRADE - 5,000 PSI
 - FOUNDATION WALLS - 5,000 PSI (L.W.)
 - ALL OTHER CONCRETE - 5,000 PSI
- CONCRETE REINFORCING SHALL BE IN ACCORDANCE WITH ASTM A615, GRADE 60. INSTALLATION SHALL BE IN ACCORDANCE WITH ACI 315 AND 318.
- WELDED WIRE FABRIC SHALL BE IN ACCORDANCE WITH ASTM A185.
- PROVIDE THE FOLLOWING MINIMUM REINFORCING COVER:
 - FOOTINGS - 3 INCHES
 - CONC. EXPOSED TO WEATHER OR EARTH - 2 INCHES
 - SLABS ON GRADE (STEEL BARS) - 2 INCHES
 - SLABS ON GRADE (WWF) - SEE TYP. DETAILS
- FOUNDATIONS HAVE BEEN ASSUMED TO BEAR UPON VIRGIN SOIL OR COMPACTED ENGINEERED FILL HAVING A MINIMUM BEARING CAPACITY OF 1.5 TONS/S.F.
- ENGINEERED FILL UNDER BUILDING SHALL BE PLACED IN 8" LAYERS AND COMPACTED TO 95% MAX. DRY DENSITY.
- ENGINEERED FILL UNDER SLABS AND FOOTINGS SHALL CONSIST OF GRANULAR SOIL FREE OF ORGANIC MATTER AND CONFORMING TO THE FOLLOWING LIMITATIONS ON GRADATION:
 - MAXIMUM SIZE OF PARTICLES 3 INCHES
 - RETAINED ON " SIEVE 30% MAXIMUM
 - PASSING NO. 100 SIEVE 45% MAXIMUM
 - PASSING NO. 200 SIEVE 8% MAXIMUM
- PROVIDE CORNER BARS AT ALL WALL CORNERS & INTERSECTIONS MATCHING HORIZONTAL REINFORCEMENT WITH 2'-6" MINIMUM LAPS.
- LAP ALL BARS 40 DIAMETERS MINIMUM.
- COORDINATE LOCATION OF FOUNDATION WALL DEPRESSIONS AND OPENINGS WITH ARCHITECTURAL DRAWINGS.
- PROVIDE TOTAL AIR ENTRAINMENT OF 4% (4) FOR ALL CONCRETE EXPOSED TO WEATHER.

- MAXIMUM WATER/CEMENT RATIO - W/C = 0.45. (USE SUPER PLASTICIZER AS REQUIRED FOR WORKABILITY.)
- ALL SAW CUT JOINTS SHALL BE MADE WITHIN 4 HOURS OF CONCRETE PLACEMENT, FILL WITH JOINT SEALANT. (200 SF MAX)
- BOTTOMS OF ALL EXTERIOR FOOTINGS SHALL BE 3'-6" MINIMUM BELOW FINISH GRADE.
- FOOTINGS SHALL BE STEPPED AT A MAXIMUM SLOPE OF 3 HORIZONTAL TO 1 VERTICAL UNLESS NOTED OTHERWISE.
- ALL FOUNDATION WALLS SHALL BE BACK FILLED AFTER 28 DAYS OF CONCRETE PLACEMENT. (THIS TIME MAY BE REDUCED IF THE WALL IS ADEQUATELY BRACED) DURING BACKFILL OPERATIONS OF ALL FOUNDATION WALLS, THE FILL ON EITHER SIDE OF THE WALL SHALL NOT EXCEED A 2'-0" DIFFERENTIAL, UNLESS THE WALL IS DESIGNED FOR RETAINING ACTION.
- ALL RETAINING WALLS SHALL BE BACK FILLED AFTER 28 DAYS OF CONCRETE PLACEMENT.
- PROVIDE MATCHING DOWELS INTO FOUNDATION WALLS AT ALL VERTICAL REINFORCEMENT.
- PROVIDE 4-#6 VERTICALS UNDER ALL BEAM BEARING LOCATIONS (TYPICAL)

STRUCTURAL LUMBER

- ALL WORK SHALL BE IN CONFORMANCE WITH THE AMERICAN FOREST & PAPER ASSOC. STANDARDS AND SPECIFICATIONS, LATEST ADDITION.
- ALL LUMBER USED IN A STRUCTURAL CAPACITY SHALL BE 19% KILN DRIED HEM-FIR NO. 1 OR EQUAL, FB. 1200 PSI.
- ANY WOOD IN DIRECT CONTACT WITH CONCRETE OF MASONRY, EXPOSED TO UNHEATED BASEMENT AND CRAWL SPACES, OR EXPOSED TO THE EXTERIOR SHALL BE PRESSURE TREATED.
- ALL FASTENERS SHALL BE IN CONFORMANCE WITH THE FASTENING SCHEDULE IN THE RHODE ISLAND STATE BUILDING CODE. FASTENERS EXPOSED TO THE WEATHER SHALL BE GALVANIZED OR STAINLESS STEEL.
- ALL BEAM TO BEAM CONNECTIONS SHALL BE GALV. FLANGE HANGERS. SUBMIT SHOP DRAWINGS FOR REVIEW.
- ALL WOOD POST CAPS AND BASE CONNECTIONS SHALL BE APPROVED GALV. (SIMPSON OR EQUAL) POST CAP AND BASE PREFABRICATED ASSEMBLIES. SUBMIT SHOP DRAWINGS FOR REVIEW.
- TJI, TJC, OR OPEN WEB TRUSS JOIST AND "PARALLUM" (PARALLEL STRAND LUMBER) FRAMING INDICATED ON DRAWINGS ARE DESIGNED AND MANUFACTURED BY "TRUS-JOIST" OR APPROVED EQUAL.
- THE FRAMING SIZES, SPACING, AND FRAMING DETAILS INDICATED ARE THE MINIMUM REQUIRED. PROVIDE DESIGN AND FRAMING DETAILS AS PER LOADS INDICATED.
- HORIZONTAL BRIDGING SHALL BE PROVIDED WITH DESIGN AND CONNECTION DETAILS. ALL BRIDGING SHALL BE INSTALLED BEFORE ANY CONSTRUCTION LOADS ARE PLACED ON THE JOISTS. THE ENDS OF ALL BRIDGING LINES TERMINATING AT WALLS OR BEAMS SHALL BE ANCHORED THERETO.
- THE ENDS OF ALL JOISTS BEARING ON BEAMS OR BEARING PLATES SHALL EXTEND 4" MINIMUM OVER THE SUPPORT.

STRUCTURAL STEEL

- ALL WORK SHALL CONFORM TO THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION SPECIFICATIONS AND ITS CODE OF STANDARD PRACTICE.
- ALL WELDING OPERATIONS SHALL BE PERFORMED BY AWS CERTIFIED WELDERS IN CONFORMANCE WITH ALL APPLICABLE REQUIREMENTS.
- ALL NEW STRUCTURAL STEEL SHALL BE GIVEN ONE COAT OF AN APPROVED SHOP PAINT, APPLIED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS, UNLESS NOTED OTHERWISE. SHOP PAINTING OF STRUCTURAL STEEL SHALL CONFORM TO SSPC-PS 101.
- AFTER ERECTION IS COMPLETE, TOUCHUP ALL SHOP PRIMED COATS DAMAGED DURING TRANSPORTATION AND ERECTION, AND PRIME ALL FIELD WELDS USING THE SAME PAINT USED FOR SHOP PRIMING.
- APPLY BITUMINOUS PAINT TO ALL COLUMNS BELOW GRADE, WHERE APPLICABLE.
- UNLESS NOTED OTHERWISE, PROVIDE A 1/2"x8"x8" BASE PLATE W/2-3/4"DIA. BOLTS (TYPICAL) UNDER ALL STEEL BEAMS.
- ALL CONNECTIONS SHALL BE SELECTED, COMPLETED, DESIGNED, AND DETAILED BY THE FABRICATOR'S REGISTERED DESIGN PROFESSIONAL (RDP) IN RESPONSIBLE CHARGE OF THE DEVELOPMENT OF FABRICATION AND ERECTION DRAWINGS. CONNECTIONS SHALL BE DESIGNED BY THE FABRICATOR IN ACCORDANCE WITH THE GOVERNING AISC SPECIFICATION. SUBMIT CALCULATIONS BEARING THE RDP'S SEAL AND SIGNATURE PRIOR TO, OR ALONG WITH, PIECE DETAILS.

STEEL DECKS

- ALL STEEL DECKING SHALL CONFORM TO THE STEEL DECK INSTITUTE (SDI) APPLICABLE REQUIREMENTS. INSTALLATION SHALL BE PER THE MANUFACTURER'S RECOMMENDATIONS IN ACCORDANCE WITH SDI SPECIFICATIONS.
- STEEL DECK SHALL TYPICALLY BE STORED OFF THE GROUND AT THE JOBSITE AND BE PROTECTED FROM THE ELEMENTS WITH A WATER-PROOF COVERING WHERE REQUIRED.
- DECK SHEETS SHALL BE PLACED IN ACCORDANCE WITH APPROVED ERECTION LAYOUT DRAWINGS (INCLUDING FASTENING SCHEDULE) SUPPLIED BY THE DECK MANUFACTURER AND IN CONFORMANCE WITH THE MANUFACTURER'S STANDARDS. UNLESS NOTED OTHERWISE, END LAPS SHALL OCCUR OVER SUPPORTS AND SHALL NOT BE LESS THAN 2 INCHES.
- METAL ROOF DECK TO BE 1-1/2" DEEP, 20 GA WIDE RIB METAL DECK OR 2 1/2" DEEP DECK BY EPIC METALS, SEE PLANS FOR LOCATIONS.
- FLOOR DECK TO BE 1 1/2" LOK. FLOOR COMPOSITE FLOOR DECK, 20 GAGE GALV. METAL DECK BY U.S.D. OR EQUAL.

MASONRY CONSTRUCTION

- ALL MASONRY UNITS SHALL CONFORM TO ASTM C-90 TYPE N-1 WITH THE STRENGTH OF UNITS AND MORTAR BEING SUCH THAT THE () VALUES INDICATED ARE SATISFIED.
- GROUT AND MORTAR SHALL CONFORM TO ASTM C476.
- ALL MASONRY WORK, INCLUDING CURING, ERECTION, AND WEATHER PROTECTION, SHALL CONFORM TO THE NCMA AND ACI-531 REQUIREMENTS AND STANDARDS.
- PROVIDE GALVANIZED HORIZONTAL REINFORCEMENT @ 16" O.C. MIN. UNLESS OTHERWISE NOTED.
- UNLESS NOTED OTHERWISE, PROVIDE A MINIMUM OF #5 @ 48" O.C. VERTICAL REINFORCEMENT IN ALL MASONRY WALLS.
- PROVIDE ADDITIONAL VERTICAL REINFORCEMENT @ JAMBS OF ALL WALL OPENINGS, WALL ENDS, STEEL BEAMS AND ANGLE BEARING LOCATIONS. MINIMUM REINFORCEMENT SHALL BE 2-#6 VERTICALS UNLESS NOTED OTHERWISE.

SHEAR WALL FRAMING

M202.3

ROOF NAILING: ROOF ATTACHMENT SHALL BE ACCOMPLISHED WITH MINIMUM 8D NAILS AS FOLLOWS:

- IN THE 4 FOOT PERIMETER EDGE ZONE ALONG THE EDGES:
 - 6" O.C. TO THE INTERMEDIATE SUPPORTS WITHIN THE 4' PERIMETER EDGE ZONE.
 - 6" O.C. ALONG THE GABLE END WALL OR RAKE.
 - 4" O.C. ALL OTHER AREA.
 - 6" O.C. EDGE.
 - 12" O.C. INTERMEDIATE.
- ALL SHEATHING EDGES WITHIN THE 4 FOOT PERIMETER EDGE ZONE SHALL BE BLOCKED WITH 2X3 MINIMUM INCLUDING THE RIDGE LINE AND SOFFIT/FACIA AREA. PROVISIONS FOR VENTILATION AIR SHALL BE MAINTAINED.
- EXCEPTION: 2X3 INTERMEDIATE BLOCKING CAN BE ELIMINATED PROVIDED ALL SHEATHING IS 5/8" NOMINAL TONGUE AND GROOVE STRUCTURAL PANELS. (BLANKET VARIANCE 14 (BV-14).

M202.04

RIDGE STRAPS: RIDGE STRAPS 1-1/4" X 20" GAUGE SHALL BE ATTACHED TO EACH PAIR OF OPPOSING RAFTERS WITH 5-8D NAILS AT EACH END INTO THE FRAMING MEMBER.

M203.1

WALL SHEATHING: WALL SHEATHING SHALL BE A MINIMUM 7/16" STRUCTURAL PANEL. NAILING SHALL BE IN ACCORDANCE WITH TABLE R602.3(i) AND THE FOLLOWING:

- AT THE TOP PLATE OR PLATES, THE SHEATHING SHALL EXTEND FROM THE TOP OF THE PLATE TO A MINIMUM OF 16" BEYOND THE STUD-TO-BOTTOM OF THE TOP PLATE CONNECTION. A MINIMUM OF 4 NAILS SHALL BE USED AT EACH STUD FASTENING, AND EDGE-NAILED TO EACH PLATE AT 6" O.C. ALTERNATE: PREFABRICATED AND PRE-ENGINEERED CONNECTION STRAPS APPROVED BY THE BUILDING OFFICIAL.
- IF THE STUDS ARE NOT CONTINUOUS TO THE FOUNDATION PLATE SUCH AS AT AN INTERMEDIATE FLOOR, THE WALL SHEATHING SHALL BE CONTINUOUS AND UNINTERRUPTED FOR A DISTANCE OF 16" BEYOND FROM TOP OF BOTTOM WALL PLATE TO 16" BEYOND BOTTOM OF BOTTOM WALL TOP PLATE BELOW WITH A MINIMUM OF 4 NAILS AT EACH STUD, FIELD-NAILED AT 6" O.C. TO FLOOR JOIST HEADER FRAMING. ALTERNATE: PREFABRICATED AND PRE-ENGINEERED CONNECTION ANCHORS OR FASTENERS APPROVED BY THE BUILDING OFFICIAL.
- AT THE BOTTOM OF THE WALL ASSEMBLY TO THE FOUNDATION SILL PLATE, THE WALL SHEATHING SHALL BE CONTINUOUS FROM POINT 26" ABOVE THE TOP OF THE BOTTOM WALL PLATE TO THE BOTTOM OF THE FOUNDATION SILL, WITH A MINIMUM OF 4 NAILS AT EACH STUD. 6" FIELD NAILED AND EDGE NAILED TO THE FOUNDATION SILL PLATE AT 6" O.C. ALTERNATE: PREFABRICATED AND PRE-ENGINEERED CONNECTION ANCHORS OR FASTENERS APPROVED BY THE BUILDING OFFICIAL.

M203.2

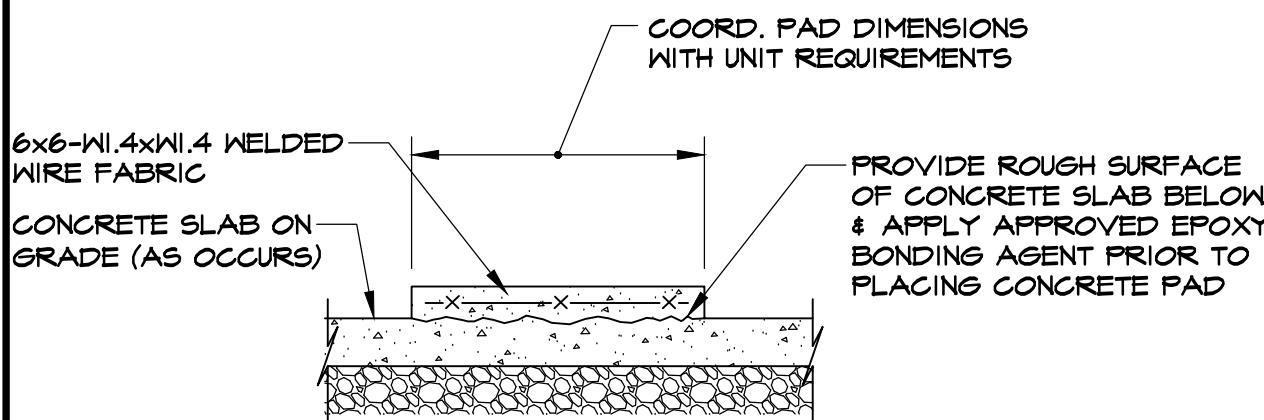
SHEAR WALLS: A 4' SEGMENT OF WALL SHEATHING SHALL BE DESIGNATED AS A SHEAR WALL AT EACH CORNER OF THE STRUCTURE AT EACH FLOOR, AND NO MORE THAN 24' APART ALONG A WALL LENGTH. THE FOLLOWING ADDITIONAL REQUIREMENTS APPLY:

- NO OPENINGS ARE PERMITTED WITHIN THIS 4' SECTION. EXCEPTION: WINDOW OPENINGS ARE ALLOWED NO CLOSER THAN 2' TO CORNER PROVIDING THE LENGTH OF THAT SHEAR PANEL IS INCREASED TO 8'.
- ALL EDGES SHALL BE BLOCKED AND NAILED AT 6" O.C. AND FIELD NAILED AT 6" O.C.
- STUDS SHALL BE DOUBLED AT EACH END OF THE SHEAR PANEL.

M203.3

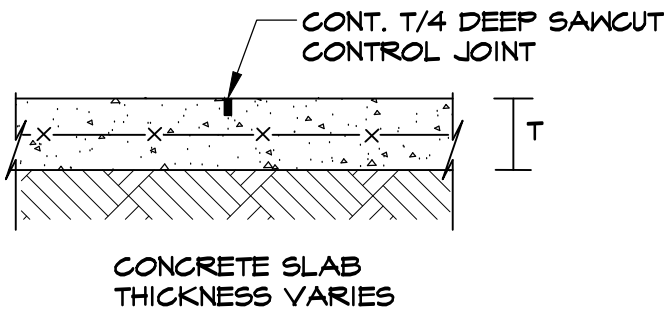
FOUNDATION ANCHOR BOLTS: ANCHOR BOLTS SHALL BE INSTALLED IN ACCORDANCE WITH SECTION R403.1.6 AND THE FOLLOWING:

- 1 & 2 STORY BUILDINGS - 1/2" STORY BUILDINGS - 1/2" @ 48" O.C. OR 5/8" @ 12" O.C.



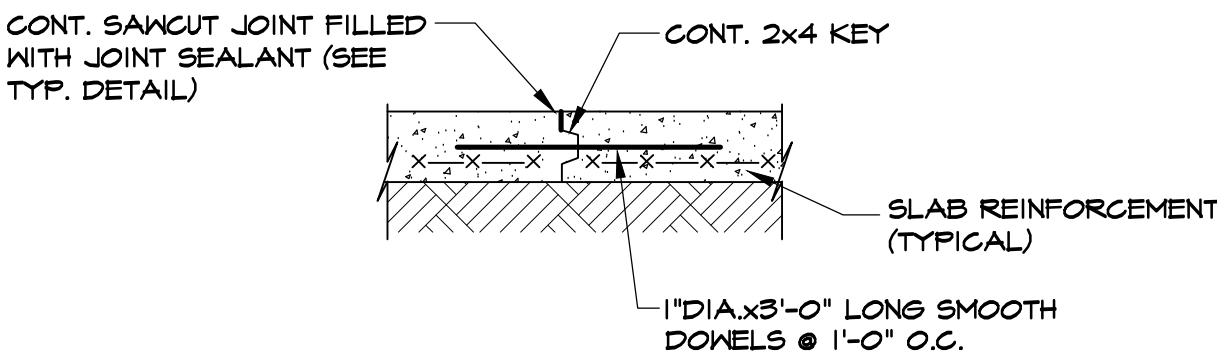
COORDINATE ALL HOUSEKEEPING PAD REQUIREMENTS, INCLUDING QUANTITIES, SIZES, LOCATIONS, EMBEDDED ITEMS, ETC. WITH MEP AND ARCHITECTURAL DRAWINGS.

TYPICAL EQUIPMENT HOUSEKEEPING PAD DETAIL
SCALE : NTS



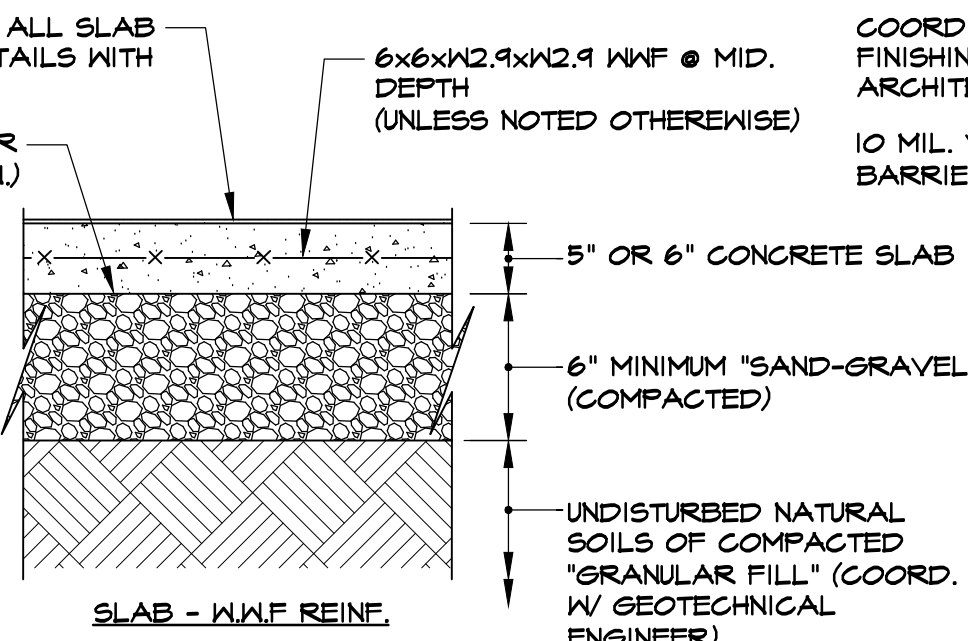
NOTE: ALL SAWCUT JOINTS SHALL BE MADE WITHIN 4 HOURS OF CONCRETE PLACEMENT. FILL WITH JOINT SEALANT.

TYPICAL SLAB CONTROL JOINT DETAIL
SCALE : NTS

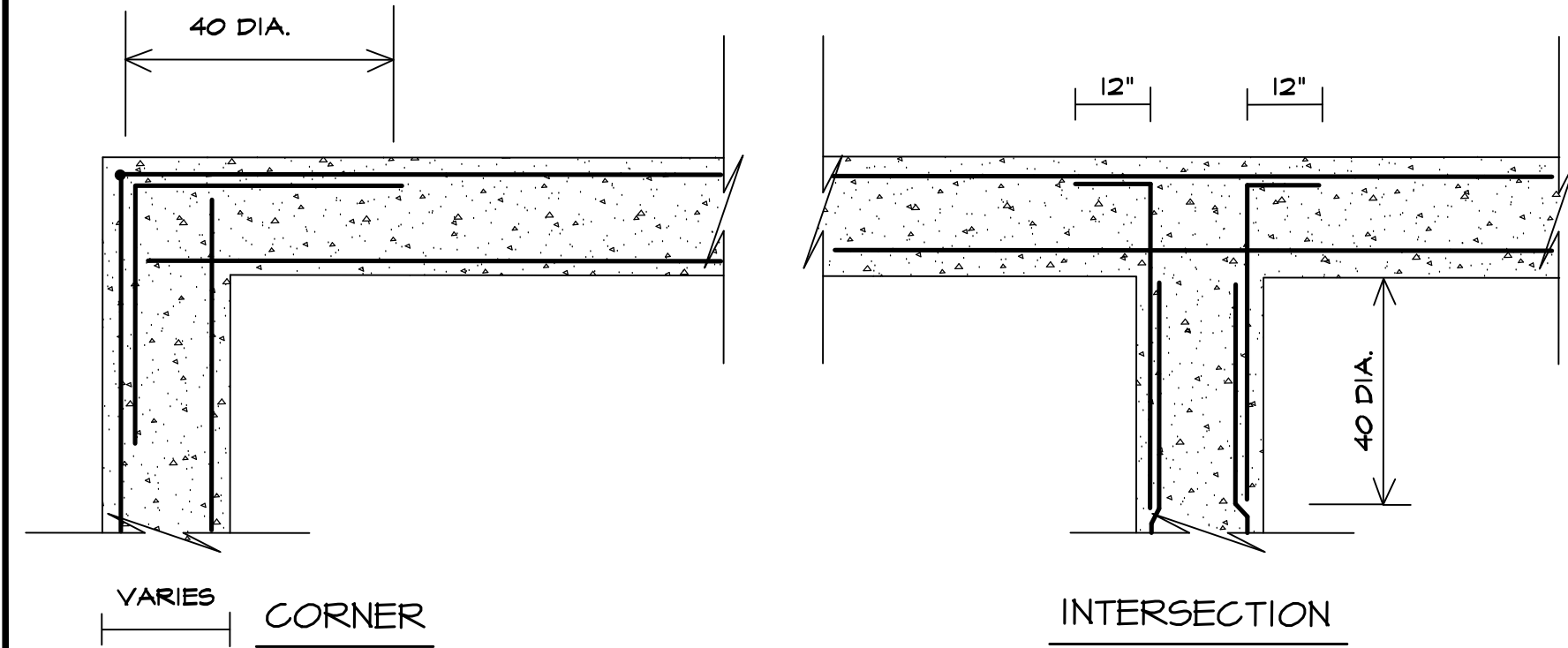
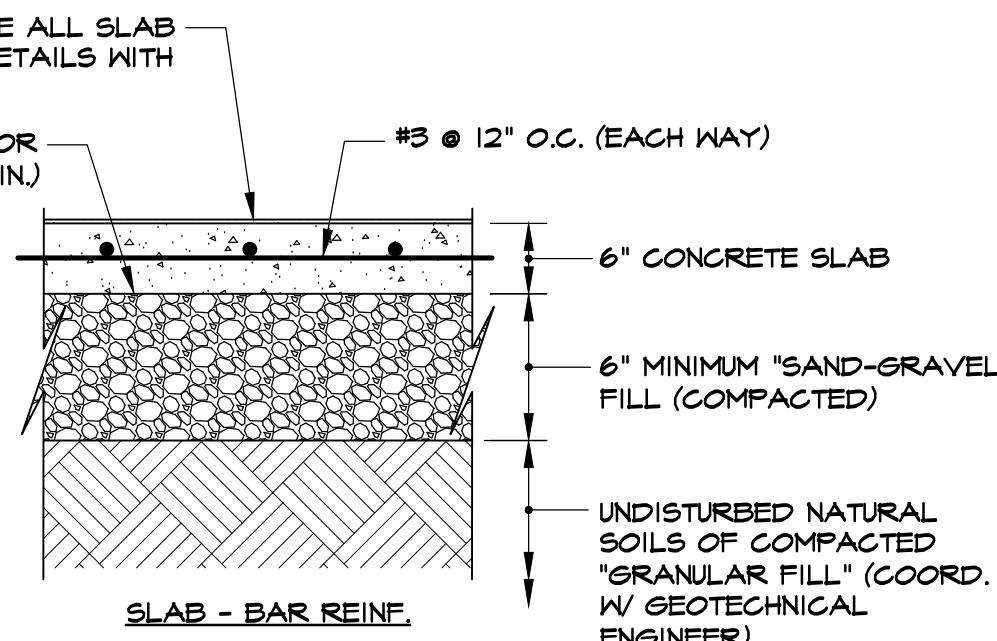


NOTE: SUBMIT CONSTRUCTION JOINT LOCATIONS FOR APPROVAL

TYPICAL SLAB ON GRADE CONSTRUCTION JOINT DETAIL
SCALE : NTS

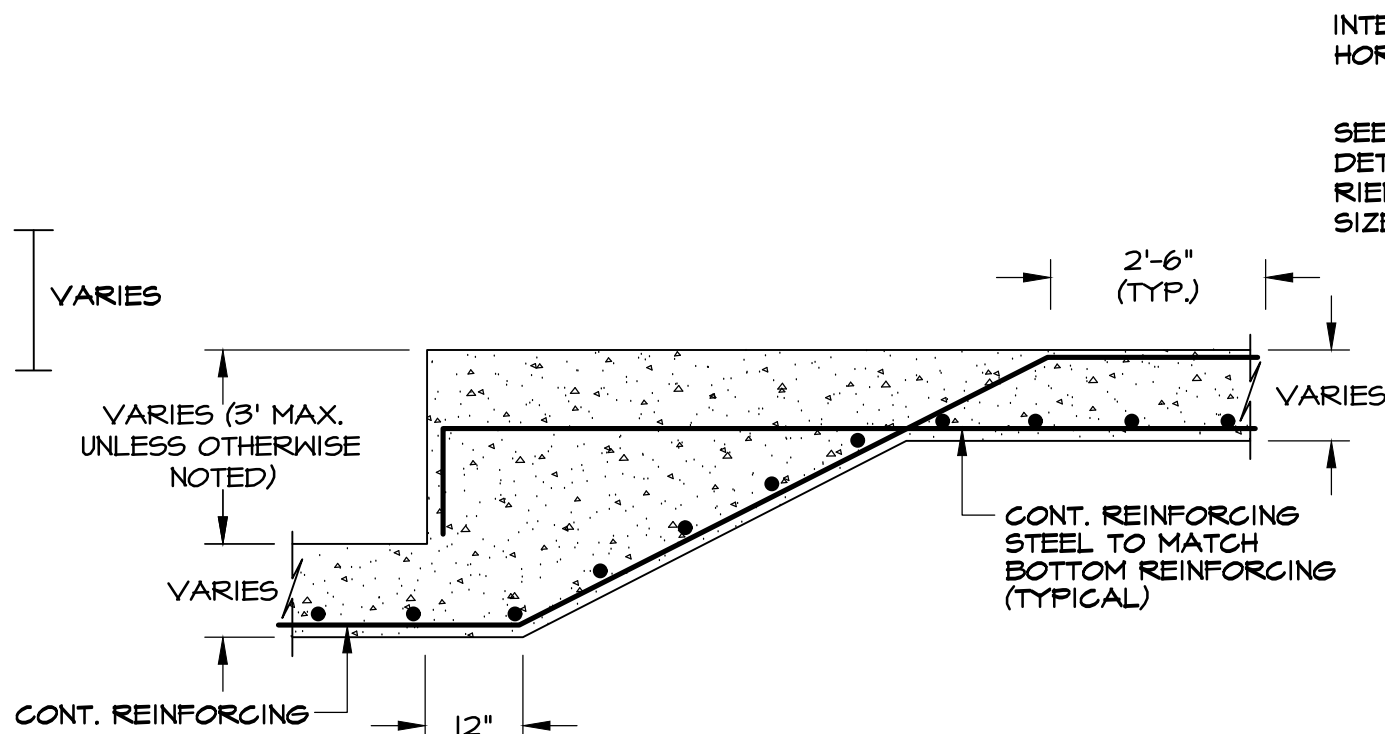


TYPICAL CONCRETE SLAB ON GRADE DETAILS
SCALE : NTS

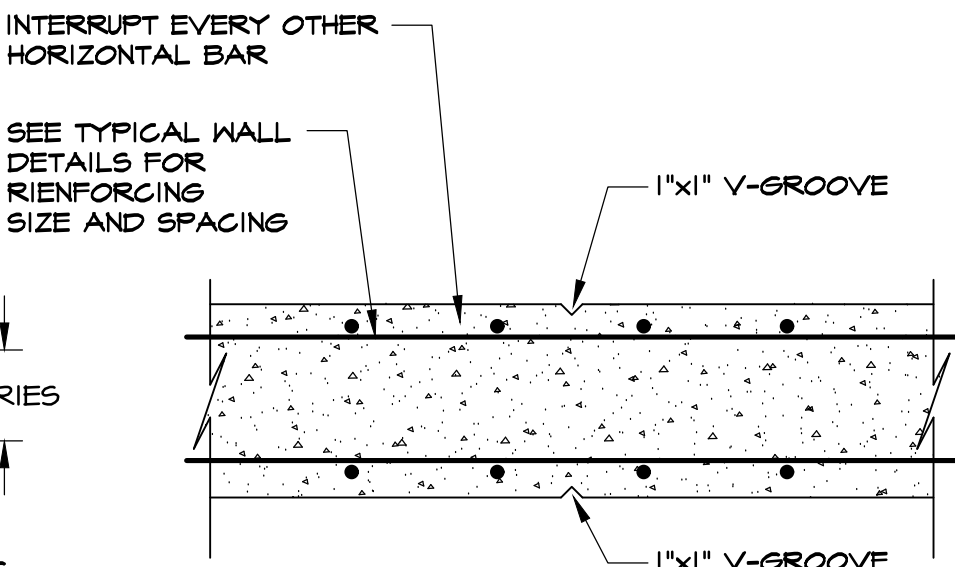


DOWELS TO BE SAME SIZE & SPACING AS HORIZ. REINF.

TYPICAL WALL DETAILS
SCALE : 1/2" = 1'-0"

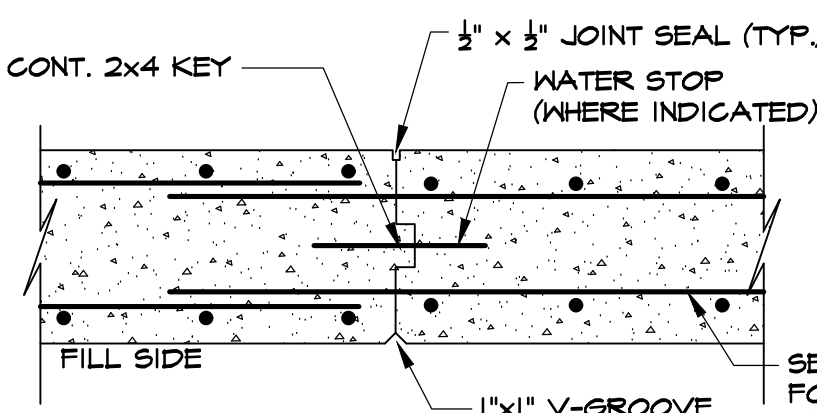


TYPICAL STEPPED FOOTING DETAIL
SCALE : NTS



NOTE: PROVIDE CONTROL JOINTS @ 20'-0" O.C. MAX @ ALL CONC. WALLS EXPOSED 24" OR GREATER ABOVE FINISH GRADE

TYPICAL CONCRETE WALL JOINT DETAILS
SCALE : NTS



NOTE: MAXIMUM PLACEMENT BETWEEN WALL CONSTR. JOINTS (FOR CONT. WALLS) SHALL BE (50) FEET, UNLESS NOTED OTHERWISE.

STATE OF RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
DIVISION OF PLANNING AND DEVELOPMENT

DEMOLITION AND REBUILD OF BATHHOUSES
BURLINGAME STATE PARK AND CAMPGROUND
CHARLESTOWN, RHODE ISLAND

BATHHOUSES AT FISH CAMP, MAIN CAMP and LEGIONTOWN
GENERAL NOTES AND DETAILS

Dwg: Scale: VARIES - AS NOTED
Contract No. x Date: MARCH 6, 2023

Sb-5
35 OF 106

CAPUTO AND WICK LTD. - 1150 PAWTUCKET AVENUE - RUMFORD R.I. 02916

SEPTEMBER 2023