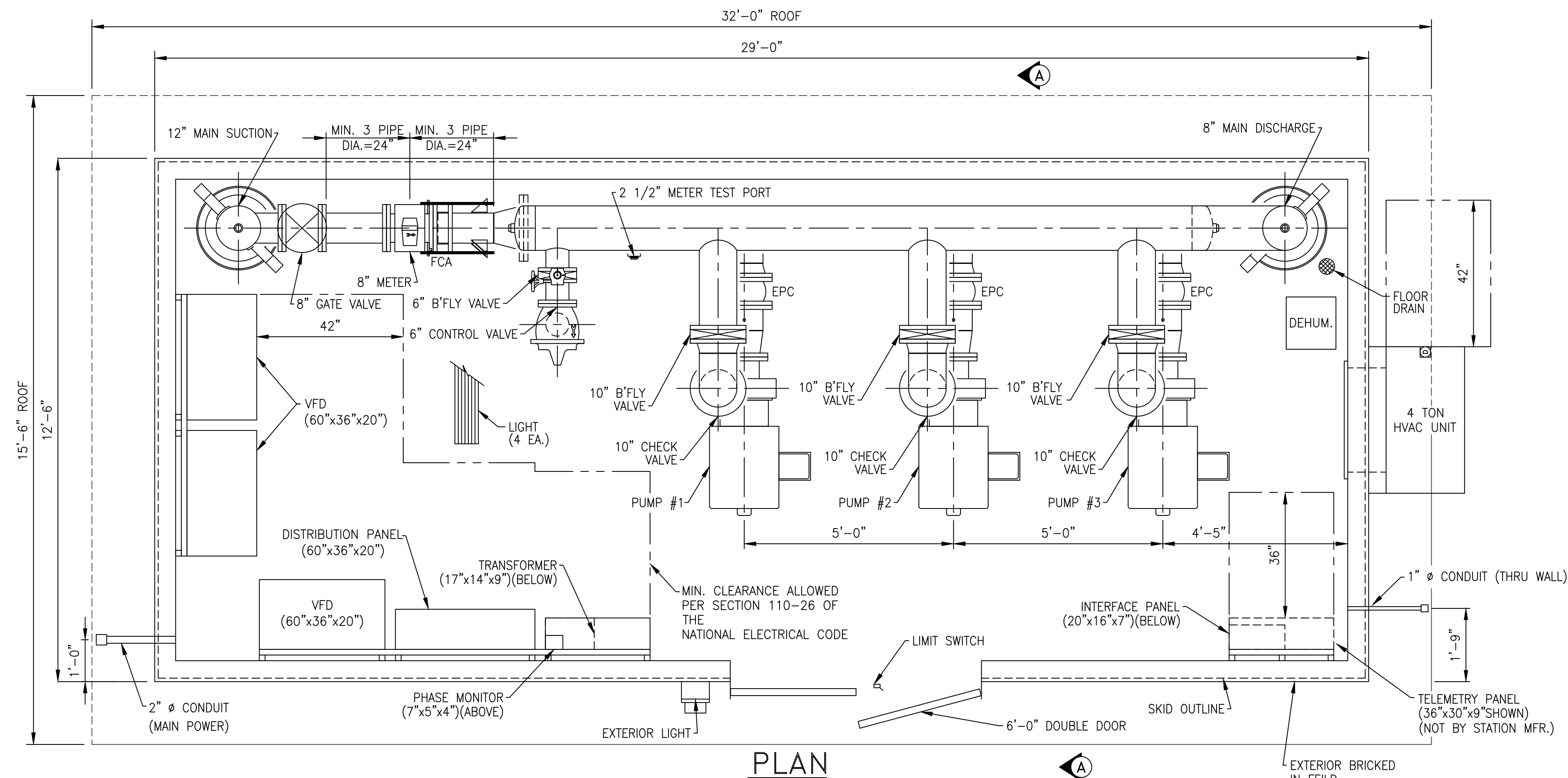
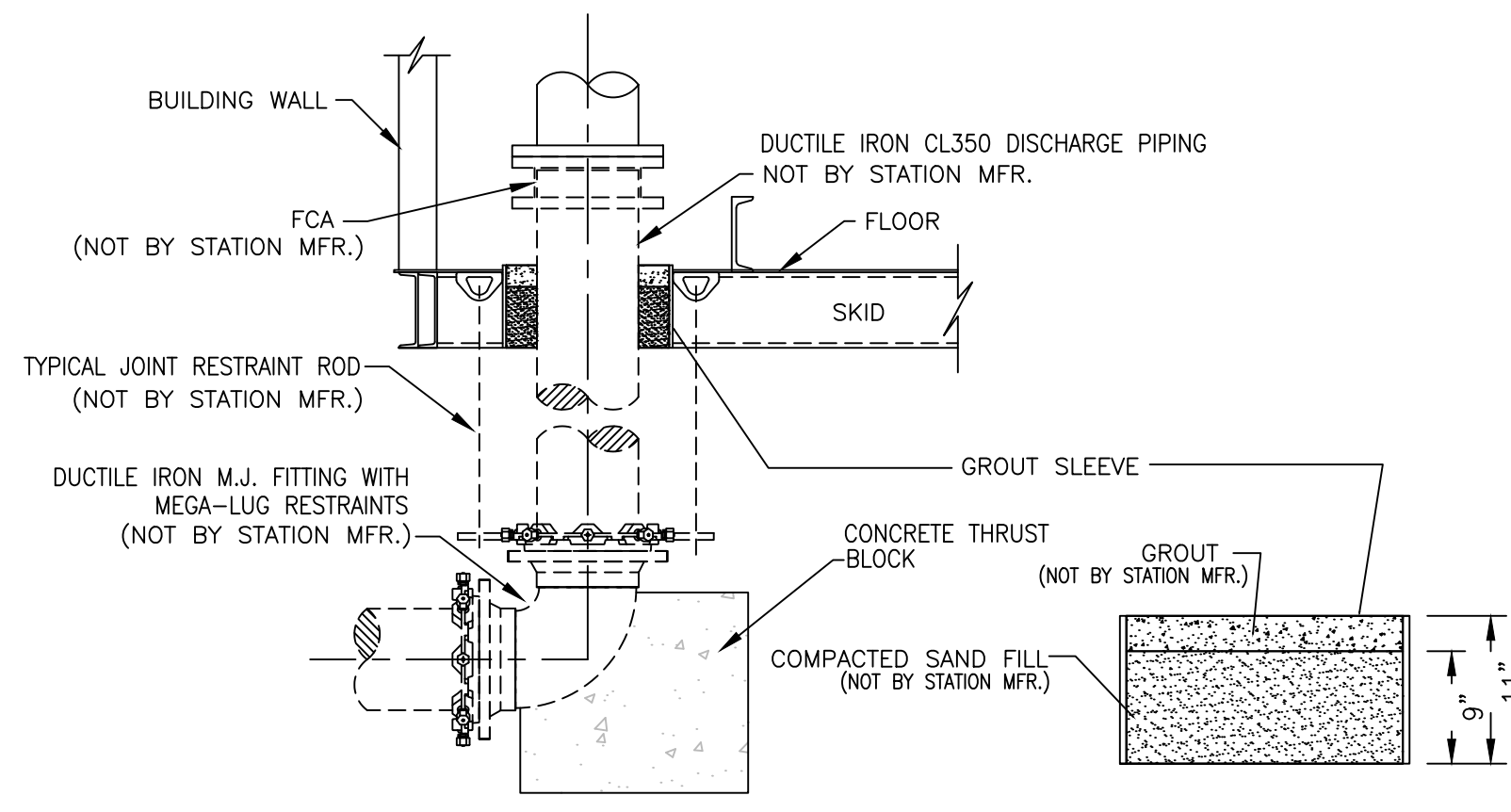


NOTE: CONNECTION BETWEEN STATION PIPING AND MAIN PIPING MUST BE RESTRAINED



NOTE: EXCEPT FOR PIPE END SUPPORTS, WHICH ARE SHOWN, VERTICAL AND ANGLE PIPE BRACES ARE NOT SHOWN FOR DRAWING CLARITY



TYPICAL PIPING CONNECTION DETAIL
NOT TO SCALE

GENERAL NOTES:

ALL STATION PIPING SHALL BE SCHEDULE 40 STEEL PIPE. MAIN SUCTION & DISCHARGE SHALL BE ANSI STANDARD B16.5 CLASS 150 FLANGE. ALL PIPING AND EQUIPMENT SHALL BE ADEQUATELY SUPPORTED AND BRACED. PLATE AND STRUCTURAL STEEL SHALL BE ASTM A-36. STRUCTURAL TUBING SHALL BE A500, GRADE B. FCA - FLANGED COUPLING ADAPTER EPC - ELASTOMER PIPE CONNECTOR SRC - SELF RESTRAINED COUPLING

* THIS DESIGN IS BASED ON THE SPARLING MODEL 656 MAGNETIC FLOW METER, REQUIRING 3 UPSTREAM AND ZERO DOWNSTREAM STRAIGHT PIPE DIAMETER LENGTHS FOR MAINTAINING STATED ACCURACY LIMITS. SPECIFICATION OR USE OF ANY OTHER MANUFACTURERS FLOW METER WILL NOT KEEP THIS DESIGN WITHIN THE ACCURACY LIMITS OF THAT FLOW METER.

* EXCEPT FOR PIPE END SUPPORTS, WHICH ARE SHOWN, VERTICAL AND ANGLE PIPE BRACES ARE NOT SHOWN FOR DRAWING CLARITY

DESIGN CRITERIA

CONTROLS: TELEMETRY (BY OTHERS)
POWER SERVICE: 480 VOLTS, 3 PHASE, 60 CYCLE

PUMP DATA

TYPE: HORIZ., CLOSE CPLD., END SUCTION
PUMP: 1, 2 & 3
CAPACITY: 1200 G.P.M. @ 304' T.D.H. (3200 R.P.M.)
MOTOR: 125 H.P., 3600 R.P.M.

CONTRACTOR NOTES:

DEHUMIDIFIER MUST BE POWERED UP AND TURNED ON IMMEDIATELY AFTER THIS STATION IS SET IN PLACE.

SHIMS MAY BE REQUIRED AROUND PERIMETER OF THE STATION TO ENSURE PROPER LEVEL. THIS IS CRITICAL FOR PROPER DOOR OPERATION.

PLEASE NOTE ORIENTATION OF THE INLET AND OUTLET PIPE AND ELECTRICAL/TELEMETRY LOCATIONS IN REFERENCE TO THE JOBSITE LAYOUT.

THE STATION IS NOT DESIGNED TO ACCEPT PIPELINE FORCES THRUST BLOCKING MUST BE PROVIDED EXTERNAL TO THE STATION.

DETAIL DRAWINGS
LEES FORD BOOSTER PUMP STATION

CUSTOMER:
WESTERN PULASKI COUNTY WATER DISTRICT
PULASKI COUNTY, KENTUCKY

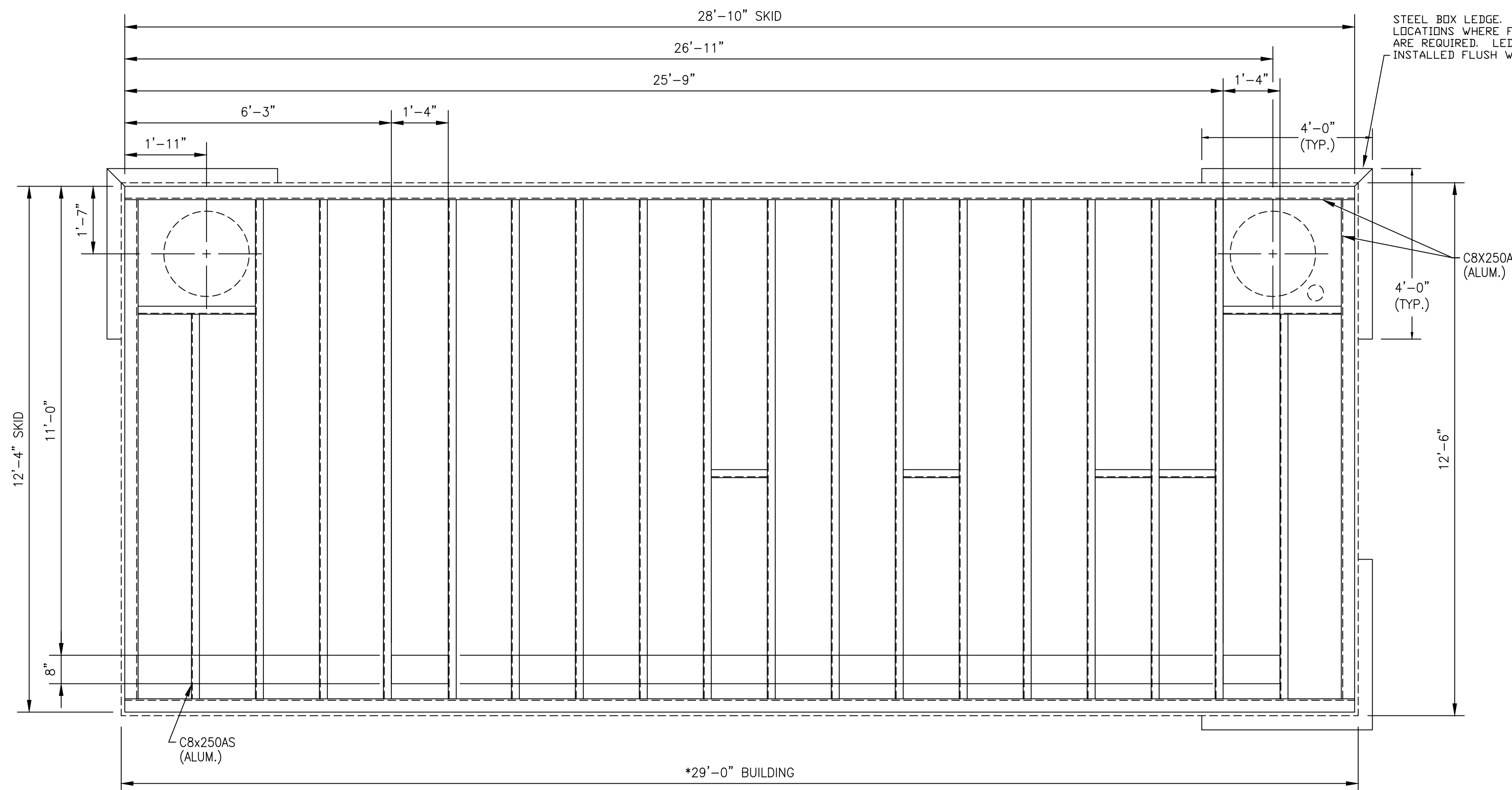
Monarch Engineering, Inc.

556 CARLTON DRIVE
LAWRENCEBURG, KY 40342

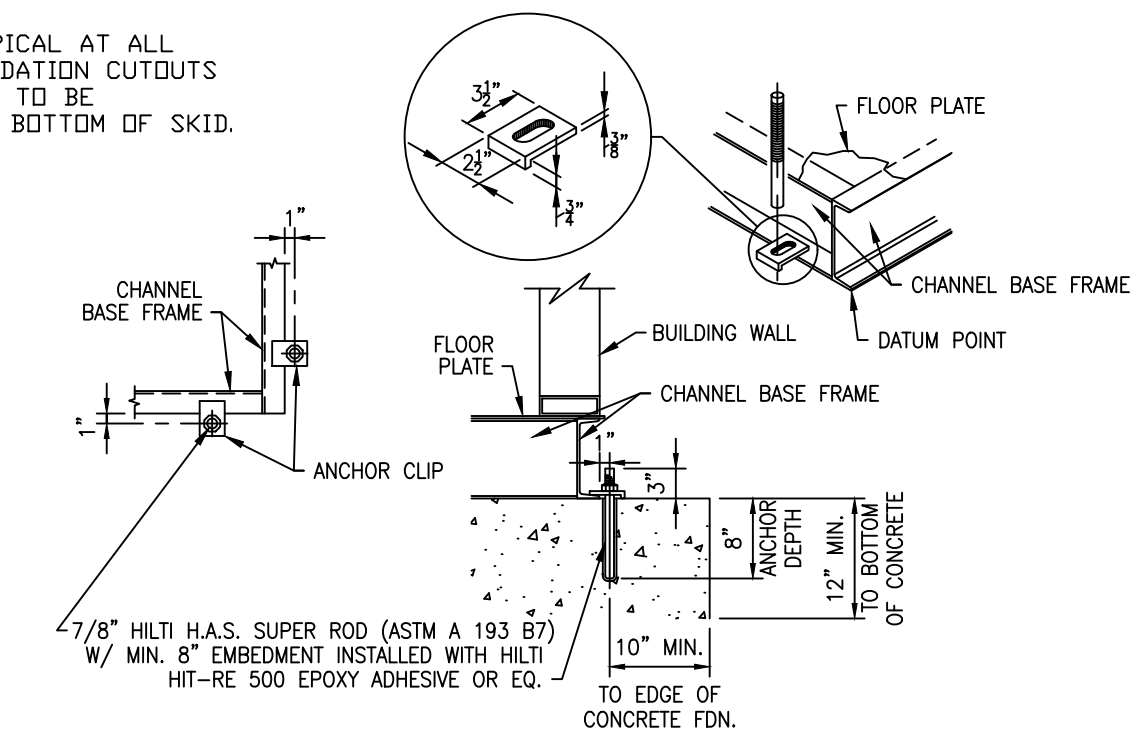
PROJECT NO. 2028
DATE: MAY 2021
DRAWN BY: JRC
CHECKED BY: DSB
CHECKED BY: DMB
SCALE: 1/2" = 1'-0"

SHEET:
BPS-1



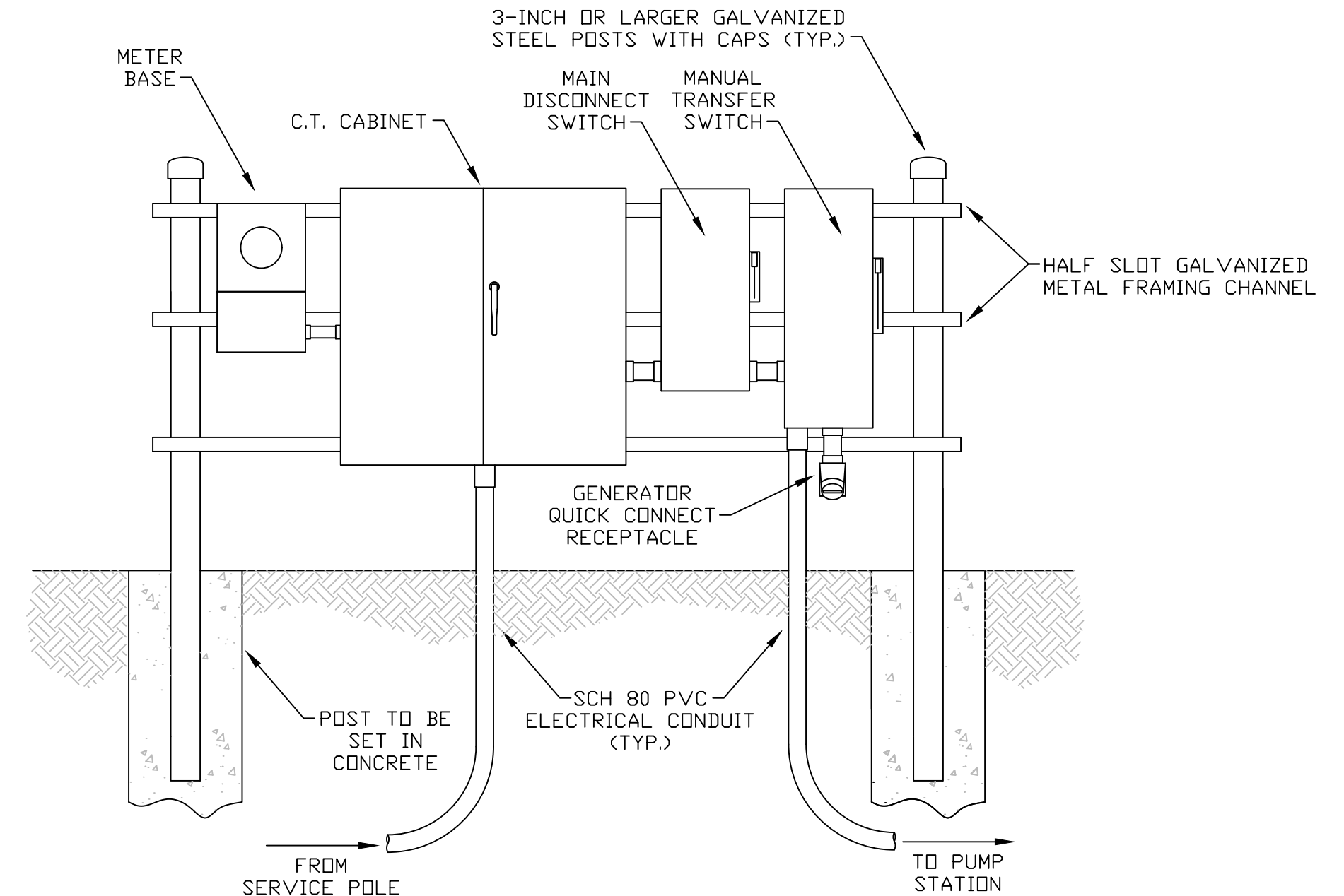


SKID PLAN



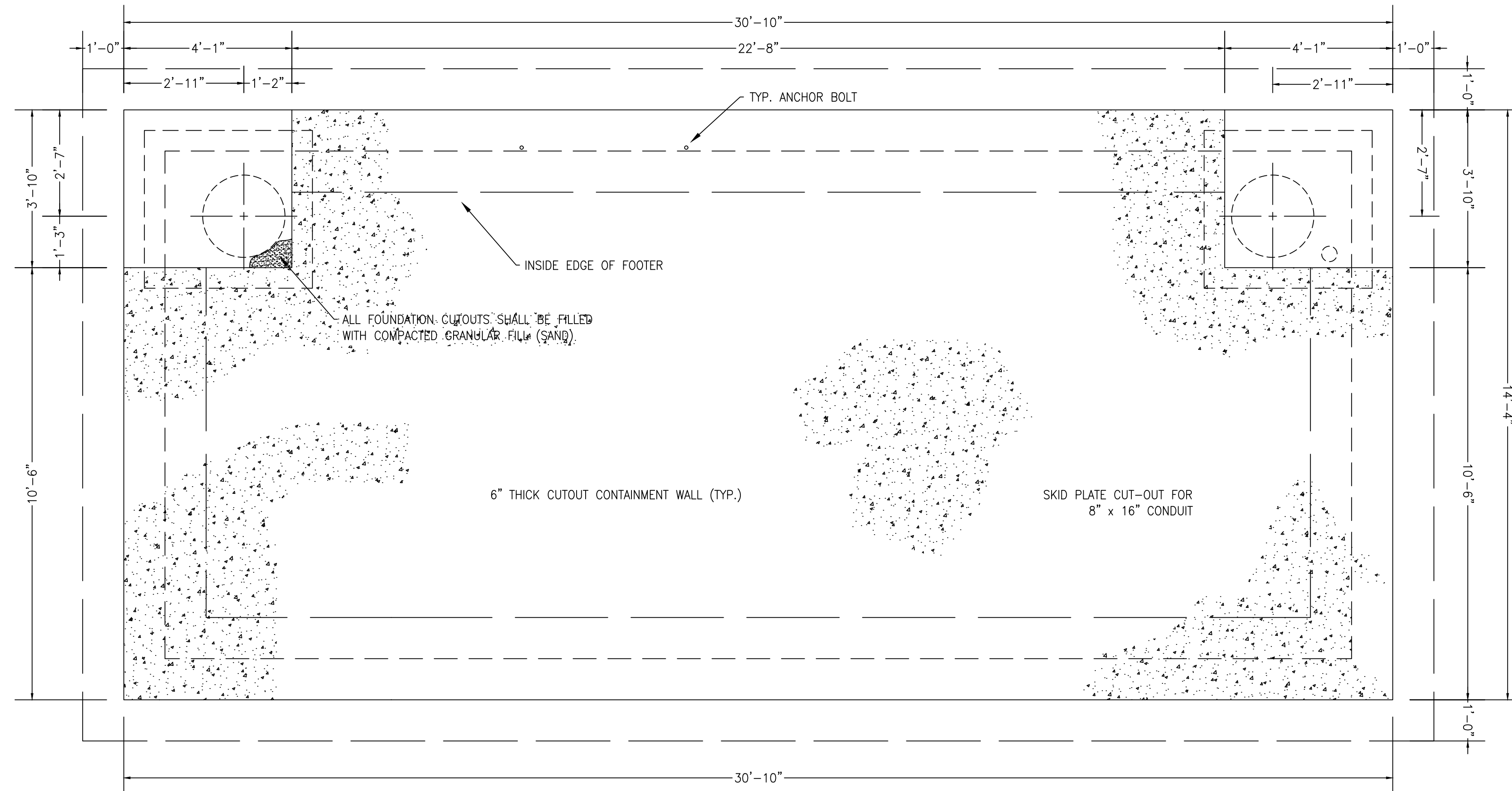
BASE FRAME ANCHOR DETAIL
CHANNEL FRAMING MEMBERS

- NOTE:
- ANCHOR CLIPS FURNISHED BY PUMP STATION MANUFACTURER.
 - ANCHOR BOLTS AND NUTS BY INSTALLER.
 - FINAL FOUNDATION AND ANCHOR BOLT DESIGN AND DIMENSIONS AS DIRECTED BY ENGINEER (MINIMUMS ARE SHOWN).
 - SHIMS MAY BE REQUIRED AROUND PERIMETER OF BASE FRAME FOR LEVELNESS AND PROPER DOOR ALIGNMENT IN FRAME.
 - QUANTITY OF ANCHOR BOLTS SPECIFIED BY ENGINEER.
 - ANCHOR BOLTS SHALL BE PLACED WITHIN 12" OF EACH CORNER WITH THE REMAINING ANCHORS BEING SPACED NO MORE THAN 6' APART ALONG ALL SIDES OF THE BUILDING PERIMETER WITH ANY WALL OF 7 FEET OR LESS HAVING TWO ANCHOR BOLTS, ALL ACCORDING TO IBC 2308.3.1, 2015 ED.



ELECTRICAL SERVICE RACK

NOT TO SCALE



FOUNDATION LAYOUT

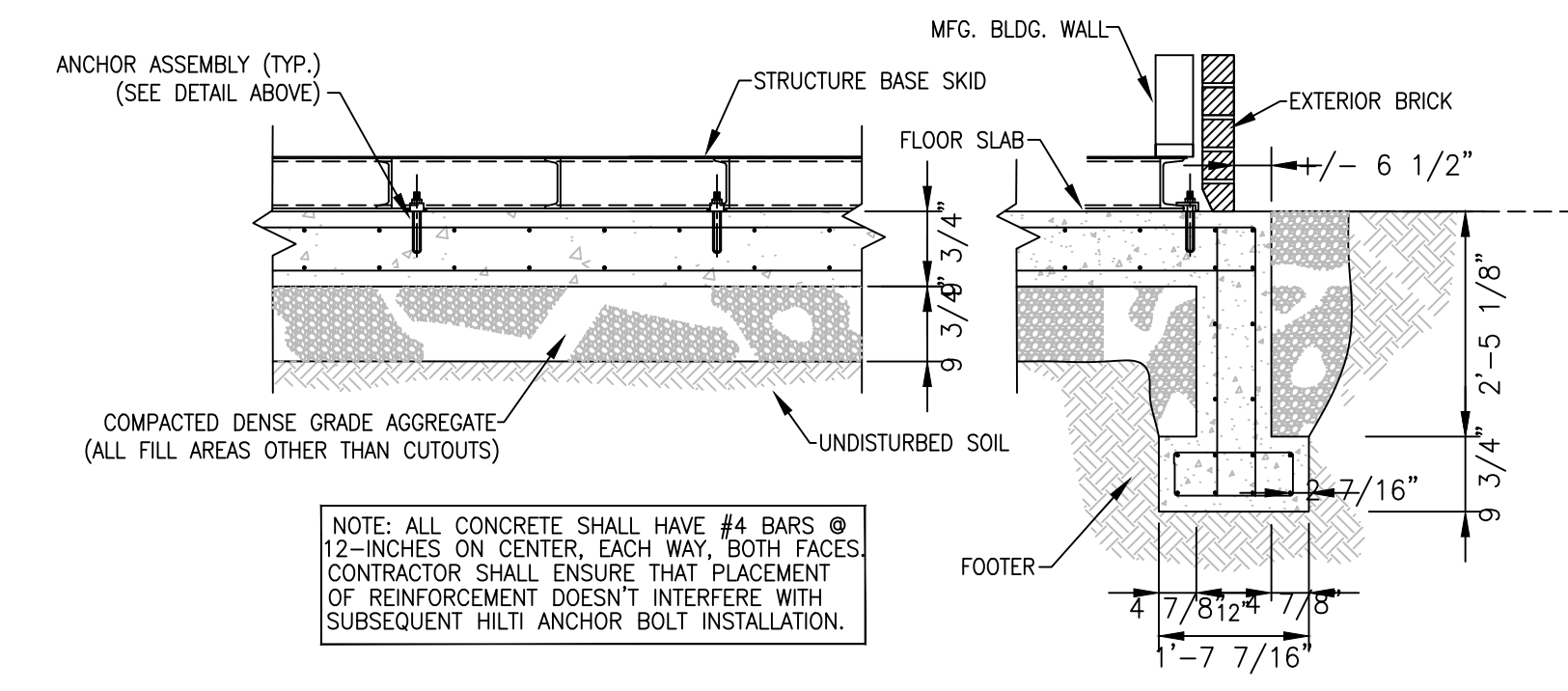
SCALE: 1/2"=1'-0"

NOTE: FOUNDATION CUTOUT MUST BE PROVIDED TO ACCOMMODATE ADEQUATE SPACE TO CONNECT DRAIN PIPING

NOTE: FOUNDATION CUTOUT MUST BE PROVIDED TO ACCOMMODATE ADEQUATE SPACE TO CONNECT MAIN PIPING

NOTE: FOUNDATION CUTOUT MUST BE PROVIDED TO ACCOMMODATE ADEQUATE SPACE TO CONNECT ELECTRICAL/ TELEMETRY CONDUIT(S)

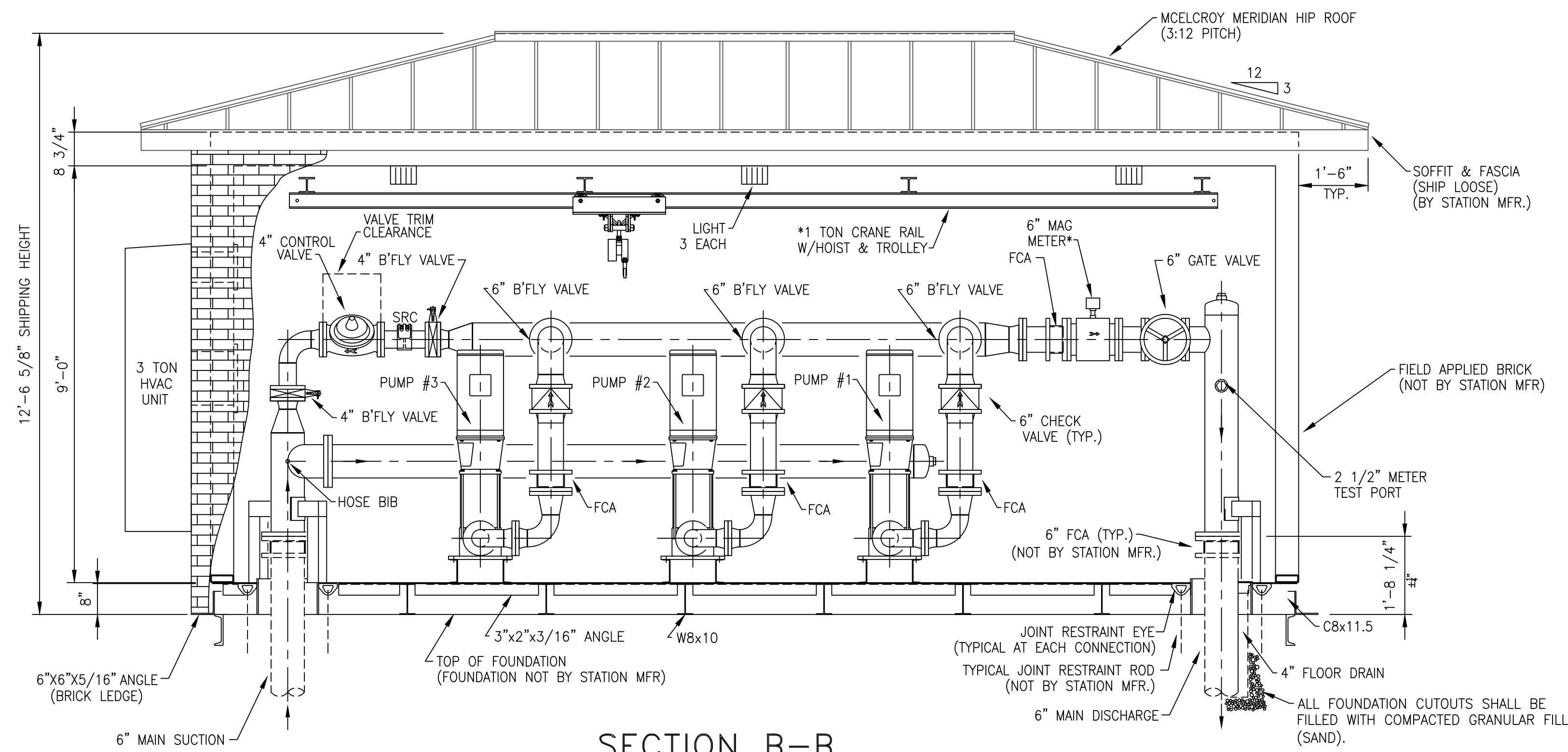
* BUILDING OVERHANGS SKID 1" AROUND ENTIRE PERIMETER



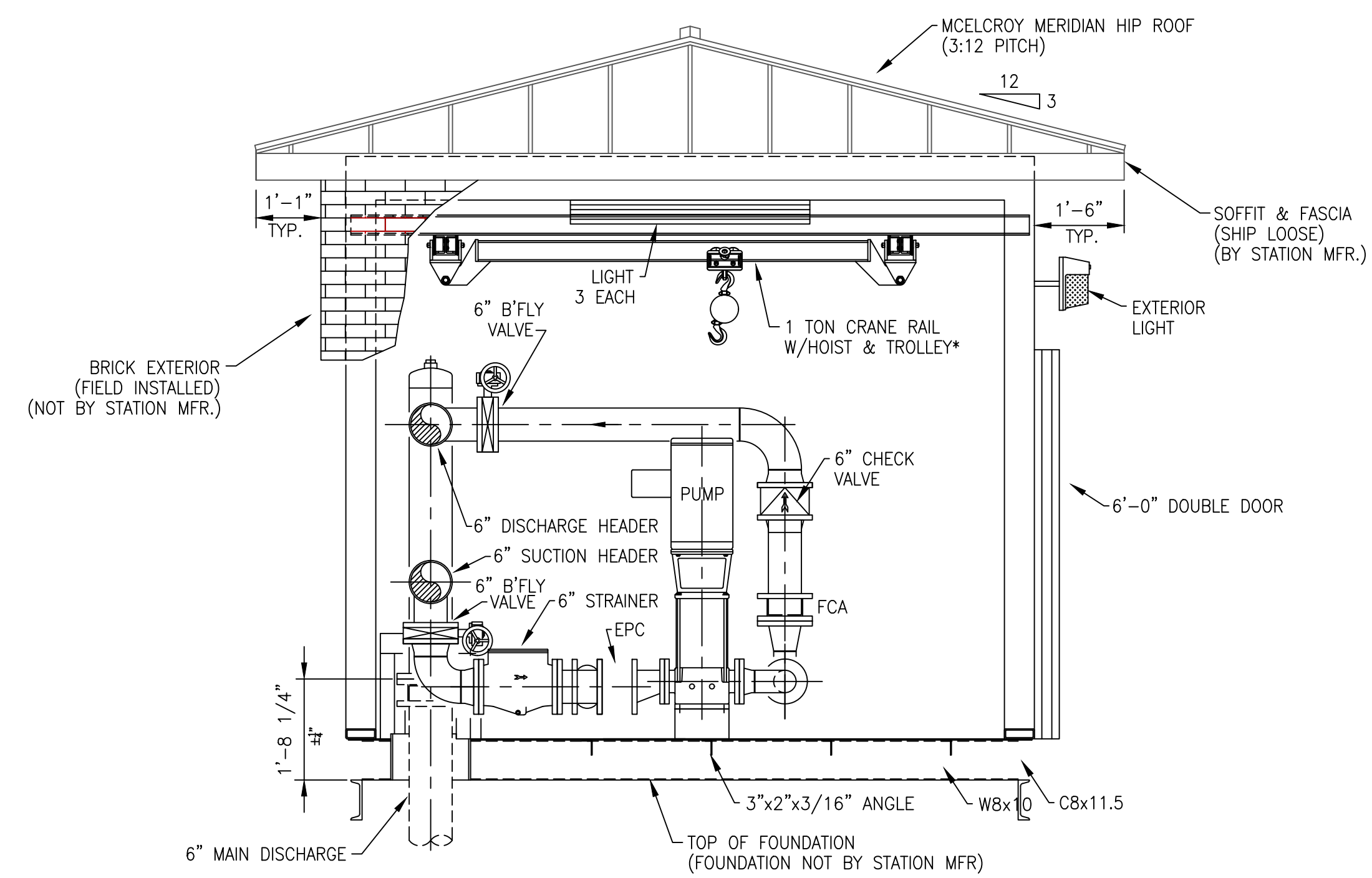
SECTION
FOUNDATION & REINFORCING DETAIL

NOT TO SCALE

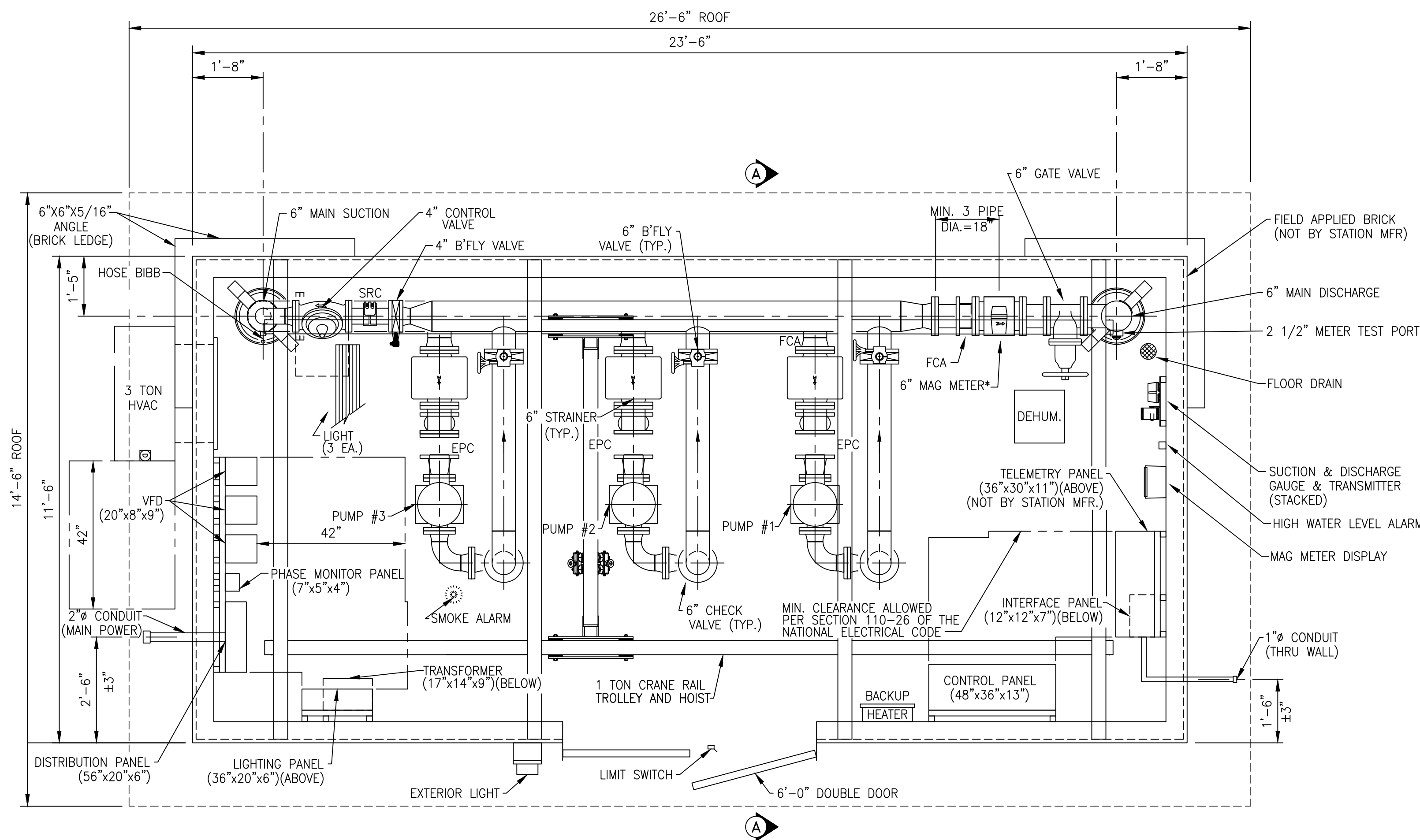
NOTE: ALL CONCRETE SHALL HAVE #4 BARS @ 12-INCHES ON CENTER, EACH WAY, BOTH FACES. CONTRACTOR SHALL ENSURE THAT PLACEMENT OF REINFORCEMENT DOESN'T INTERFERE WITH SUBSEQUENT HILTI ANCHOR BOLT INSTALLATION.



SECTION B-B



SECTION A-A



PLAN

DESIGN CRITERIA:

Controls TELEMETRY (BY OTHERS) / TIME CLOCK / LOCAL PRESSURE
 Power Service: 480 Volts, 3 Phase, 60 Cycle

PUMP DATA

Type: VERTICAL, MULTI-STAGE, CENTRIFUGAL
 Pump 1, 2, & 3
 Capacity: 259 G.P.M. AT 355 FEET T.D.H.
 Size: 4" x 4"
 Motor: 30 H.P., 3600 R.P.M.

* THIS DESIGN IS BASED ON THE SPARLING MODEL 656 MAGNETIC FLOW METER, REQUIRING 3 UPSTREAM AND ZERO DOWNSTREAM STRAIGHT PIPE DIAMETER LENGTHS FOR MAINTAINING STATED ACCURACY LIMITS. SPECIFICATION OR USE OF ANY OTHER MANUFACTURERS FLOW METER WILL NOT KEEP THIS DESIGN WITHIN THE ACCURACY LIMITS OF THAT FLOW METER.

* EXCEPT FOR PIPE END SUPPORTS, WHICH ARE SHOWN, VERTICAL AND ANGLE PIPE BRACES ARE NOT SHOWN FOR DRAWING CLARITY

* STATION MANUFACTURER SHALL ENSURE THAT CRANE RAIL HOIST ALLOWS CLEARANCE TO REMOVE PUMP MOTORS WHILE LEAVING PUMP IN PLACE

GENERAL NOTES:

ALL STATION PIPING SHALL BE STANDARD WIEGHT (.375" WALL) STEEL PIPE
 MAIN SUCTION & DISCHARGE SHALL BE ANSI STNADARD B16.5, CLASS 150 FLANGE
 ALL PIPING AND EQUIPMENT SHALL BE ADEQUATELY SUPPORTED AND BRACED
 PLATE AND STRUCTURAL STEEL SHALL BE ASTM A-36
 STRUCTURAL TUBING SHALL BE A500, GRADE B
 FCA - FLANGED COUPLING ADAPTER
 EPC - ELASTOMER PIPE CONNECTOR
 SRC - SELF RESTRAINED COUPLING

CONTRACTOR NOTES:

DEHUMIDIFIER MUST BE POWERED UP AND TURNED ON IMMEDIATELY AFTER THIS STATION IS SET IN PLACE. SHIMS MAY BE REQUIRED AROUND PERIMETER OF THE STATION TO ENSURE PROPER LEVEL. THIS IS CRITICAL FOR PROPER DOOR OPERATION.
 PLEASE NOTE ORIENTATION OF THE INLET AND OUTLET PIPE AND ELECTRICAL/TELEMETRY LOCATIONS IN REFERENCE TO THE JOBSITE LAYOUT.
 THE STATION IS NOT DESIGNED TO ACCEPT PIPELINE FORCES THRUST BLOCKING MUST BE PROVIDED EXTERNAL TO THE STATION. THRUST BLOCKING TO BE INSTALLED AS DIRECTED BY THE ENGINEER.
 CONNECTION BETWEEN STATION PIPING AND MAIN PIPING MUST BE RESTRAINED.

DESCRIPTION:

PROJECT NO. 2028

DATE: MAY 2021

DRAWN BY: JRC

CHECKED BY: DSB

CHECKED BY: DMB

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

SHEET:

BPS-3

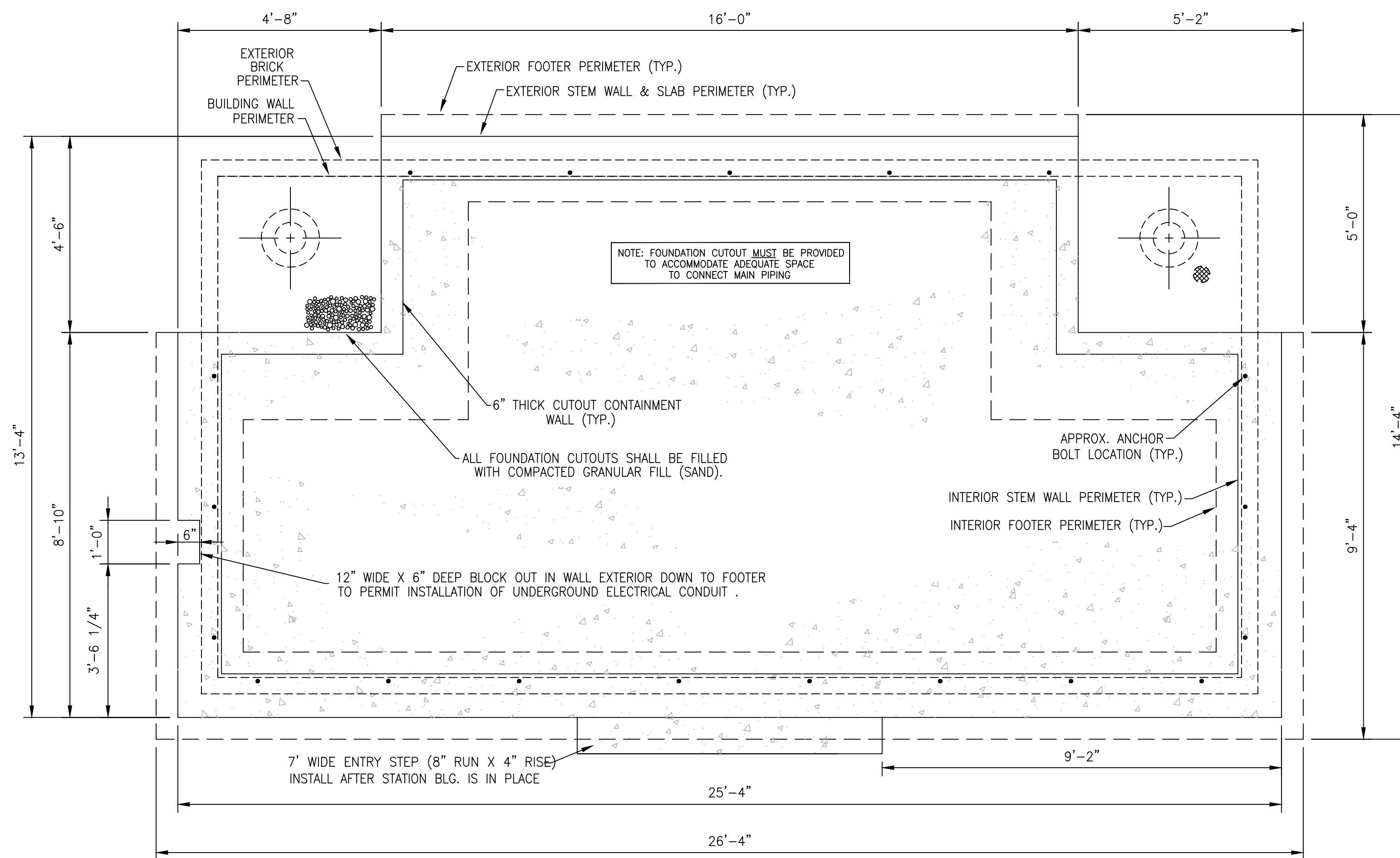


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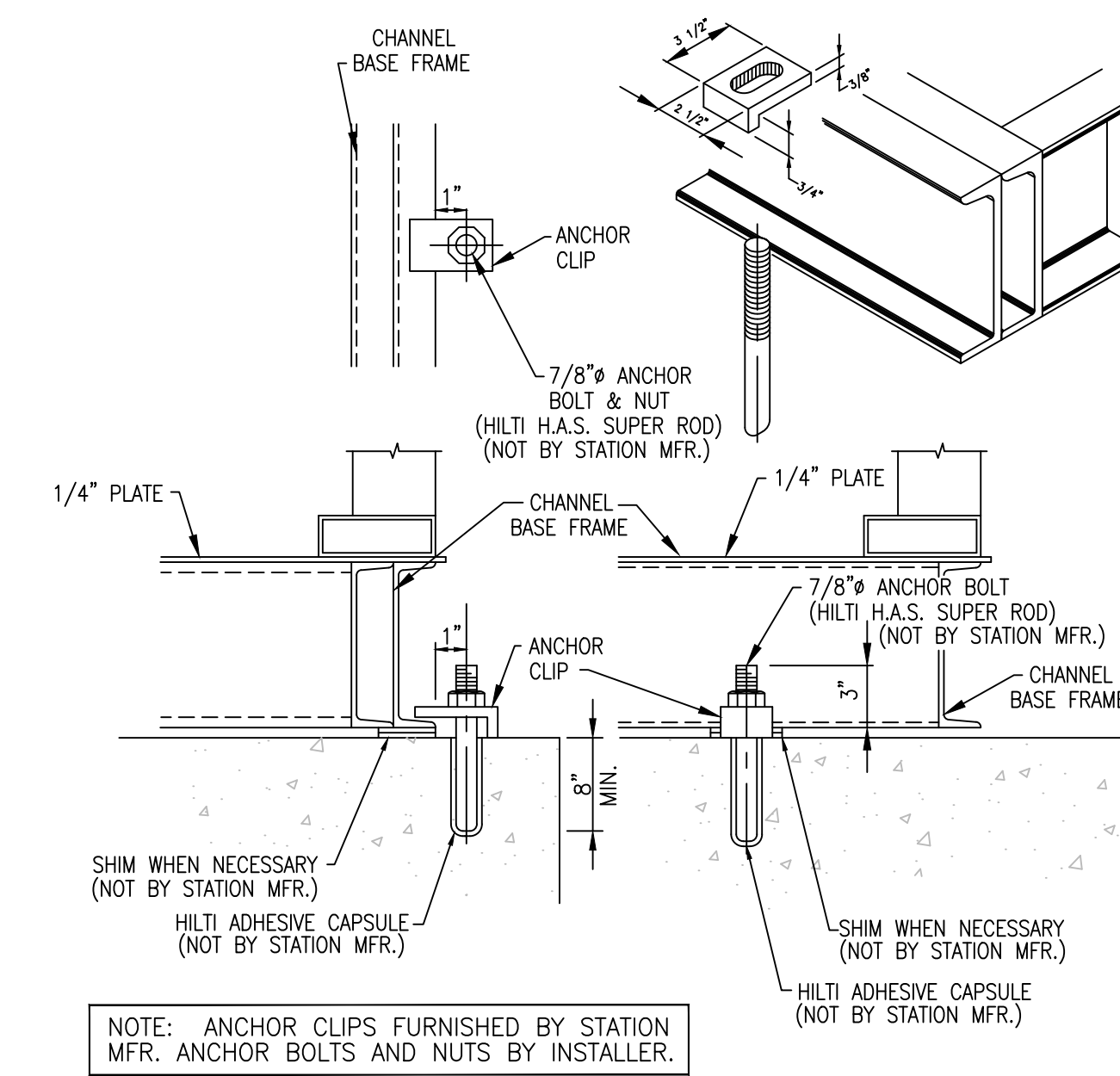
DETAIL DRAWINGS
 HICKORY NUT ROAD BOOSTER PUMP STATION NO. 2

CUSTOMER:
 WESTERN PULASKI COUNTY WATER DISTRICT
 PULASKI COUNTY, KENTUCKY



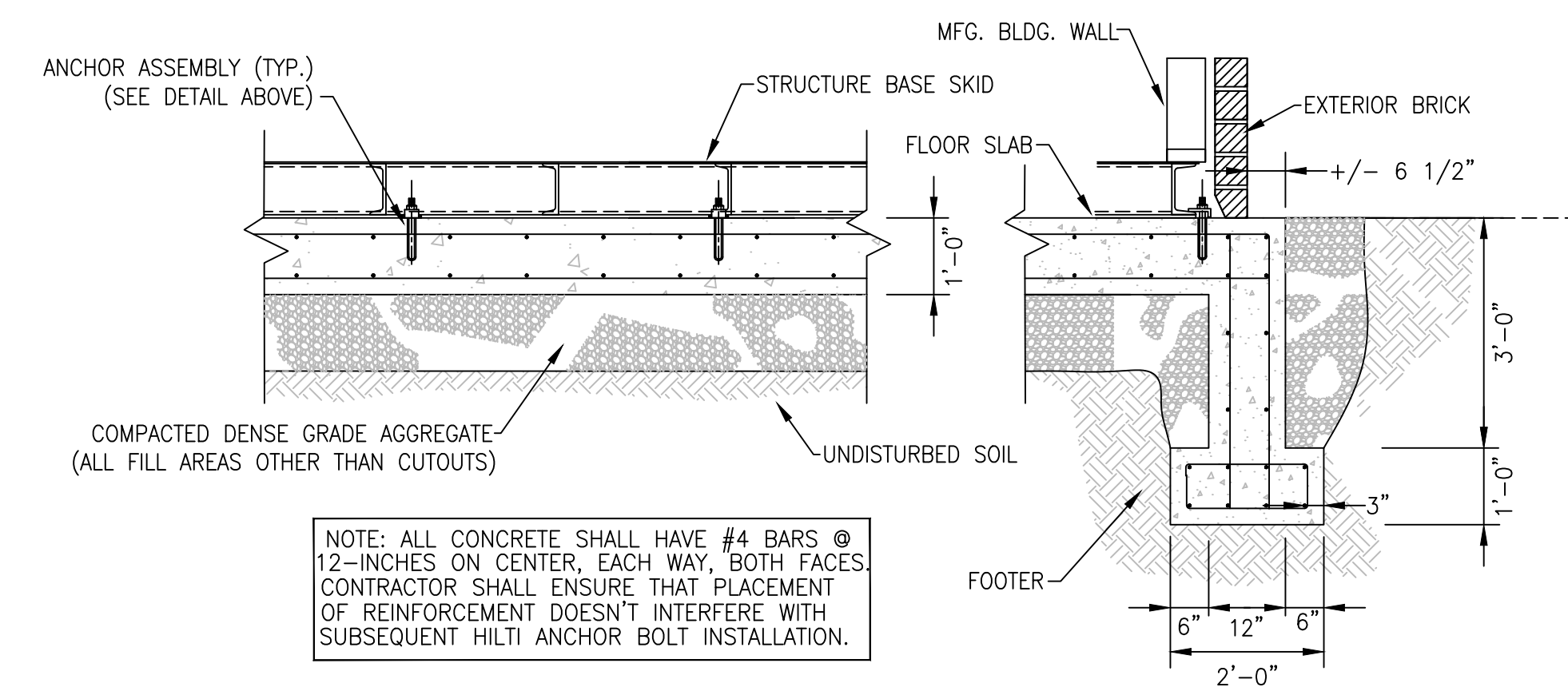
FOUNDATION LAYOUT

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



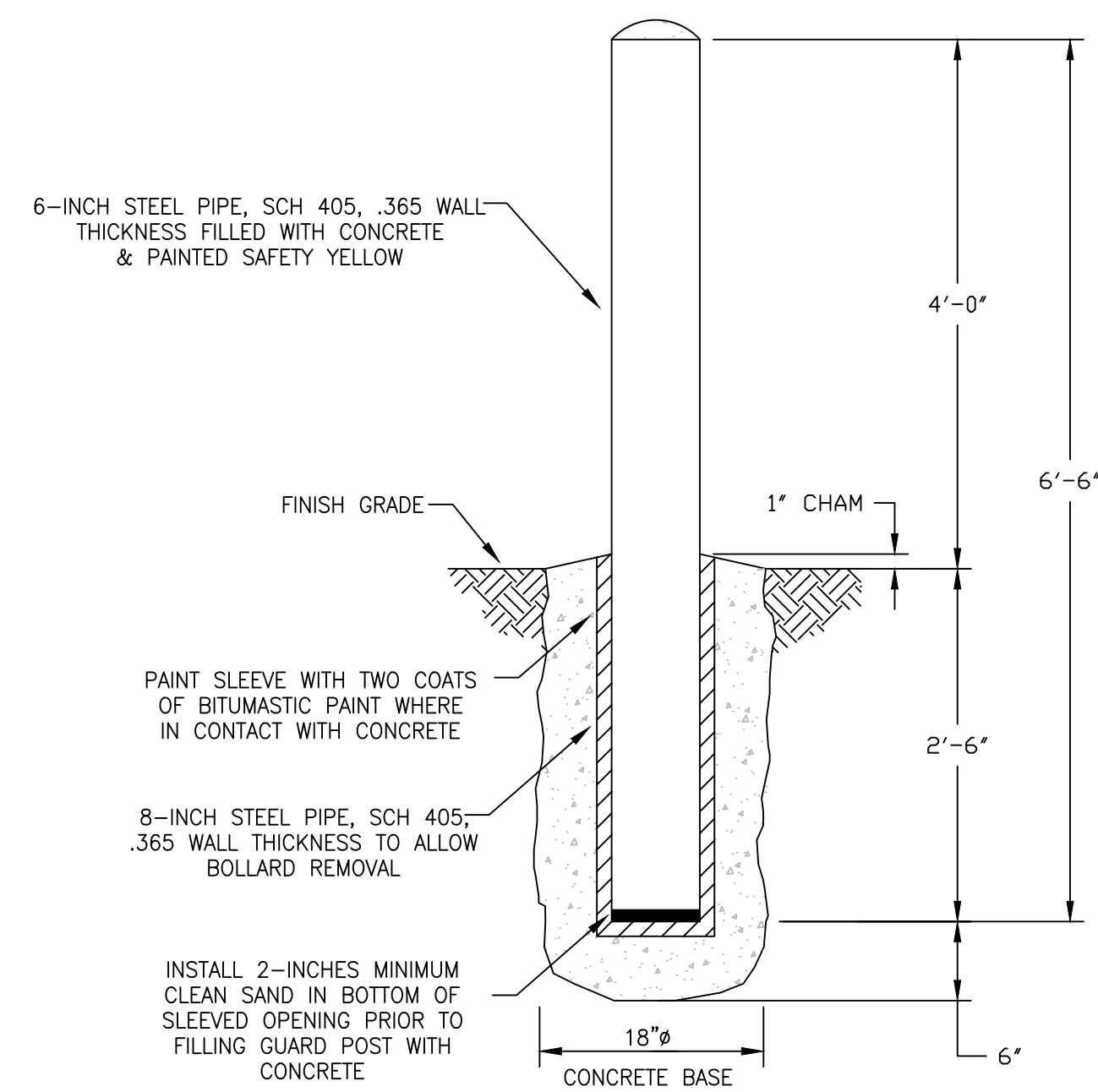
TYPICAL ANCHOR DETAIL

NOT TO SCALE



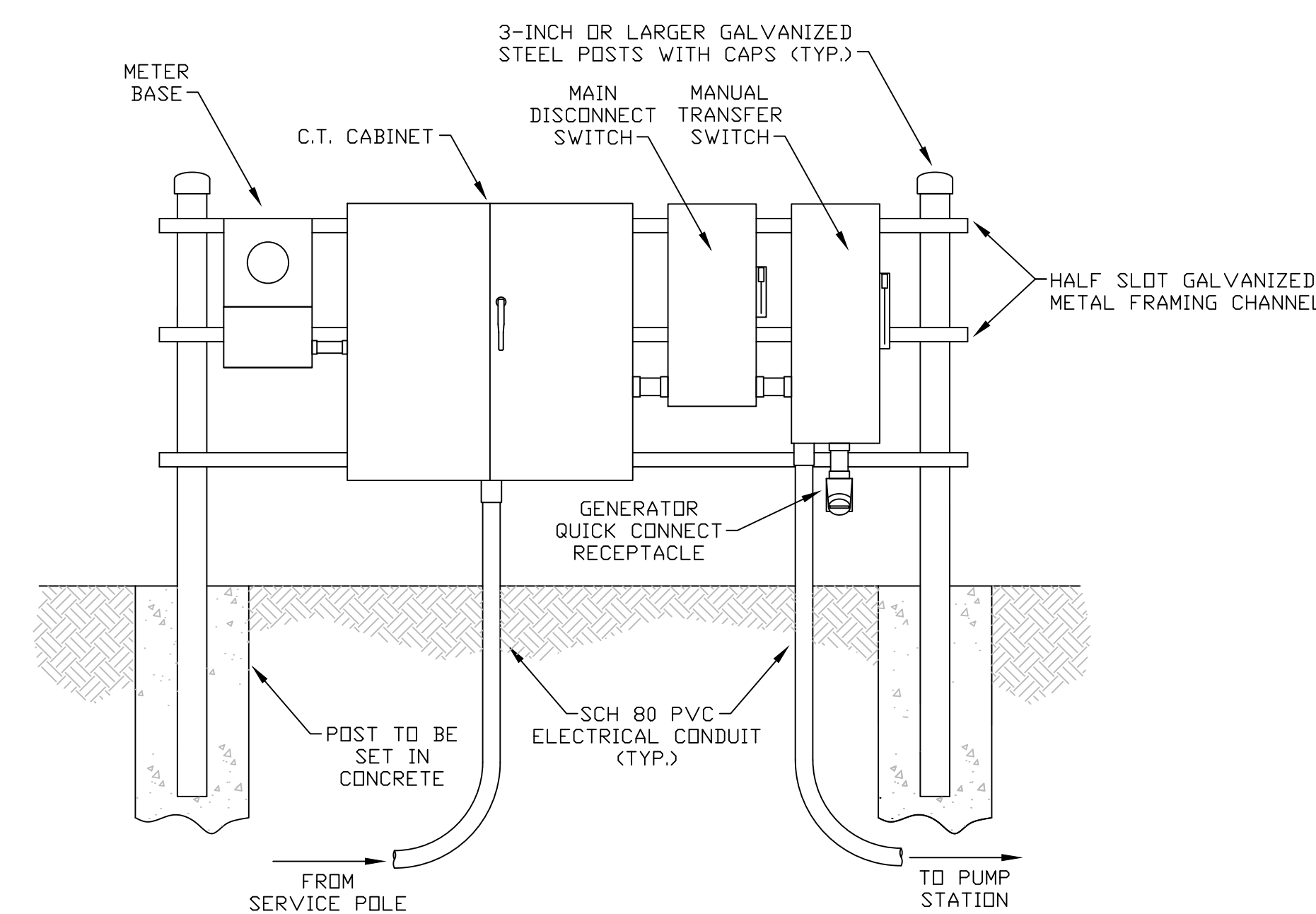
TYPICAL SECTION FOUNDATION & REINFORCING DETAIL

NOT TO SCALE



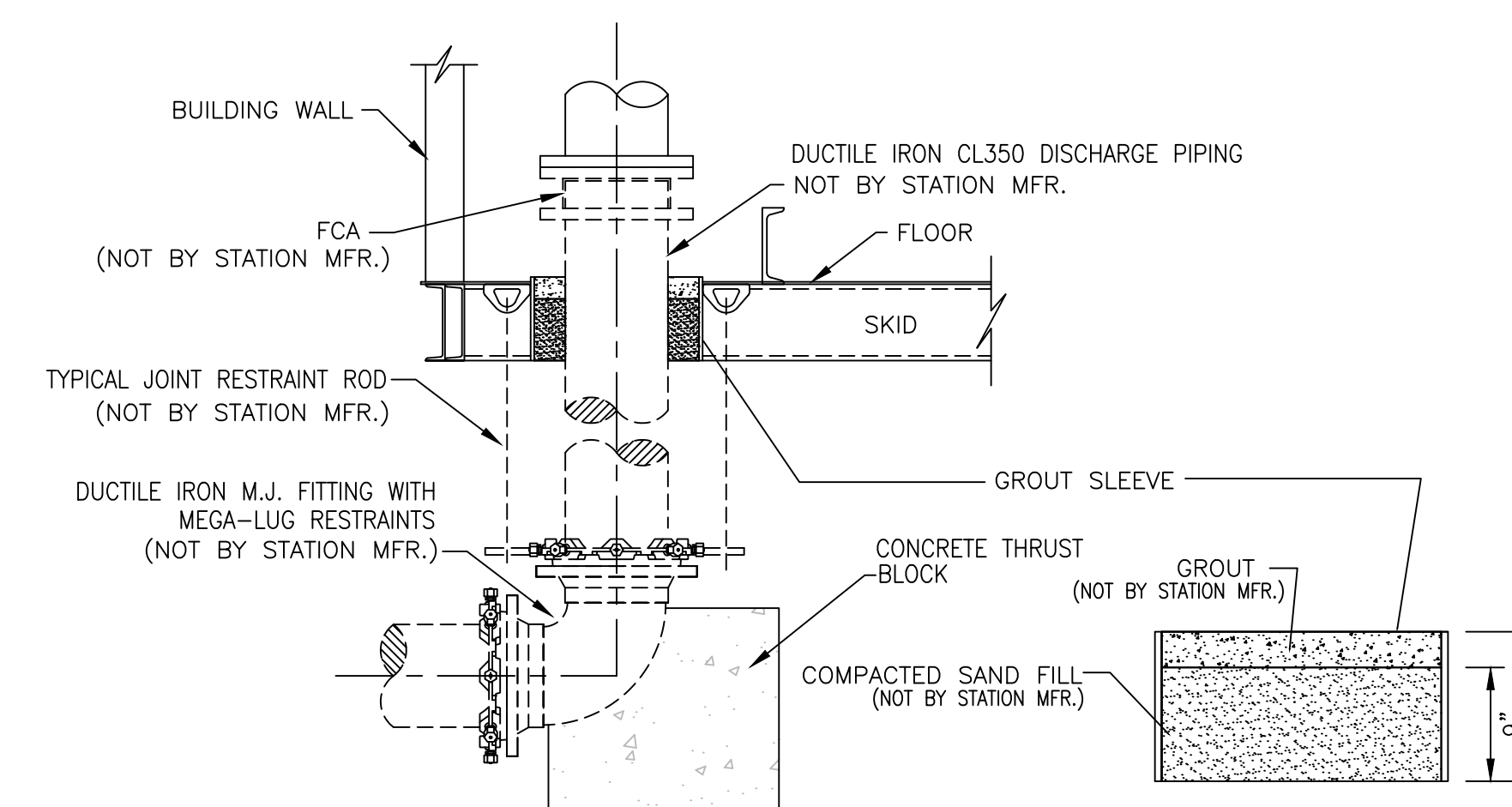
BOLLARD (GUARD POST) DETAIL

NOT TO SCALE



ELECTRICAL SERVICE RACK

NOT TO SCALE



TYPICAL PIPING CONNECTION DETAIL

NOT TO SCALE

DESCRIPTION:
FOUNDATIONS & MISCELLANEOUS DETAILS
BOOSTER PUMP STATION

CUSTOMER:
WESTERN PULASKI COUNTY WATER DISTRICT
PULASKI COUNTY, KENTUCKY

PROJECT NO. 2028
DATE: MAY 2021
DRAWN BY: JRC
CHECKED BY: DSB
CHECKED BY: DMB
SCALE: AS NOTED

SHEET:
BPS-4



Monarch Engineering, Inc.

556 CARLTON DRIVE
LAWRENCEBURG, KY 40342