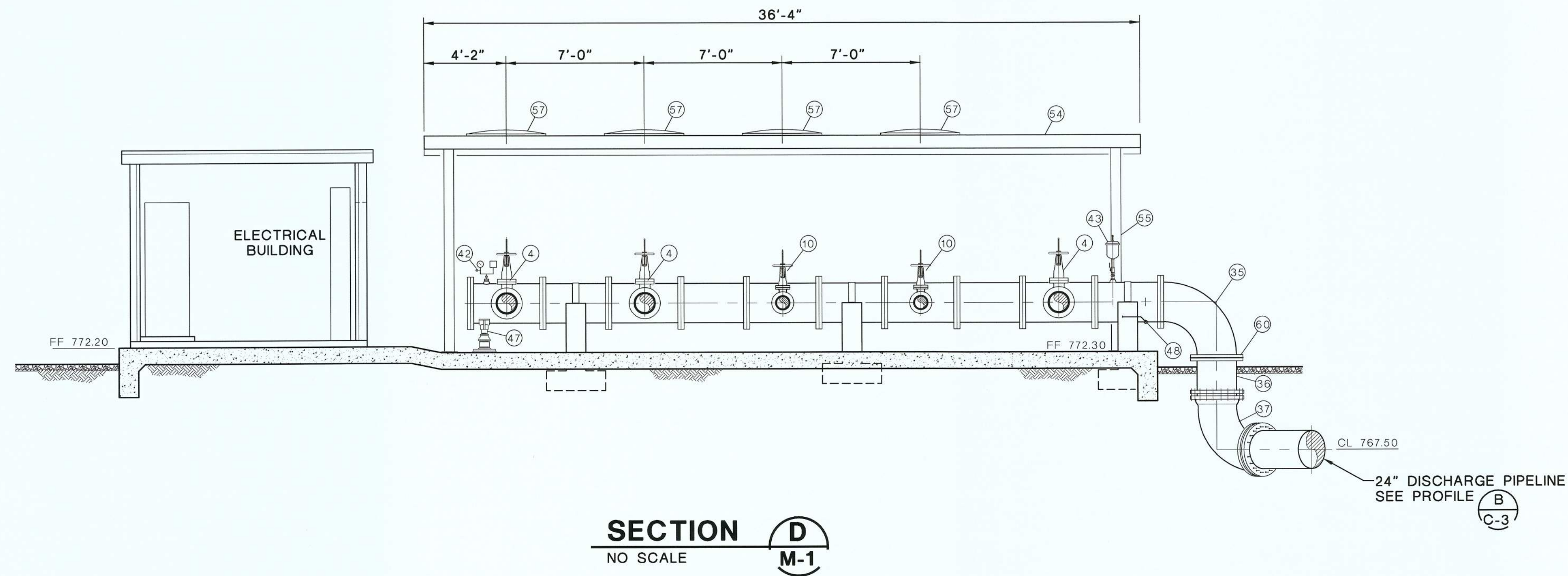
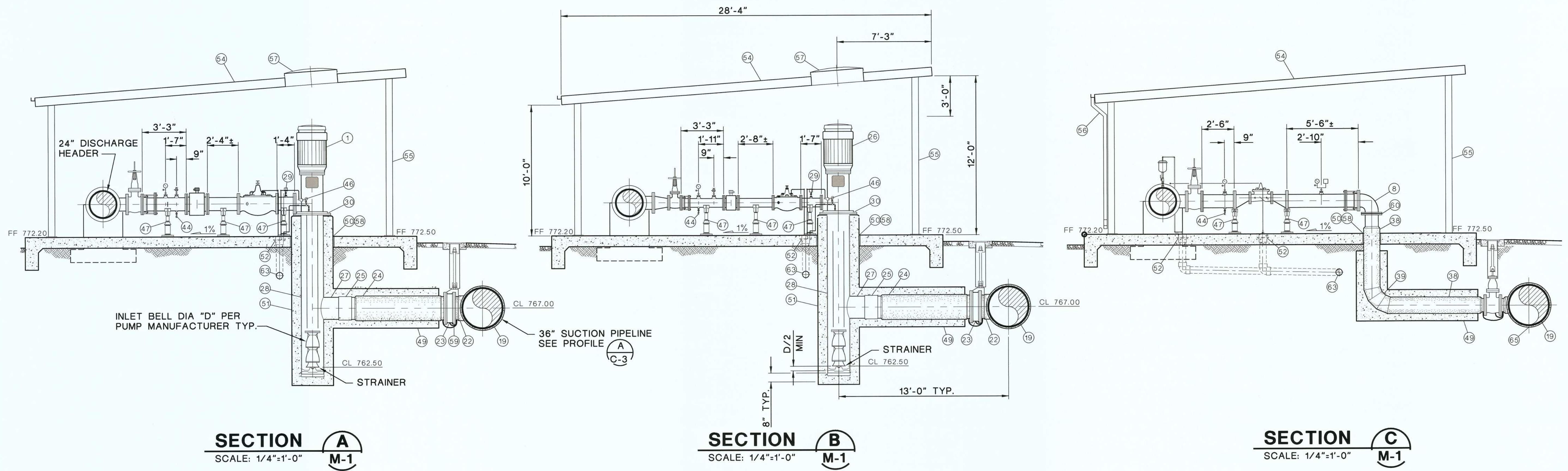
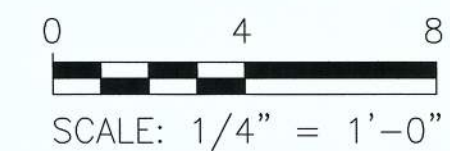


Plotted By: COR05148 Date: 28-Feb-19-06:15
 File: X:\Projects\100054178 - LHC BS1C and 5 Tank Inspection 2017\Task 2 - Booster Station 1C\Sheets\100054178 1C M02.dwg



NOTES:

- PUMP 2 HAS THE SAME SCHEDULE AS PUMP 1.
PUMP 4 HAS THE SAME SCHEDULE AS PUMP 3.
- ALL FLANGES FOR DUCTILE IRON PIPING SHALL BE ANSI B CLASS 125, AWWA C115.
- ALL FLANGES FOR STEEL PIPING SHALL BE CLASS 150 OR AWWA CLASS E.
- SEE DRAWING S-1 AND S-2 FOR CONCRETE SLAB AND FOUNDATION DETAILS. SEE DWG S-3 FOR SHADE STRUCTURE
- PROVIDE COPPER OR SST DRIP PIPES FROM A/V VALVES, CONTROL VALVES AND PUMP HEADS. TERMINATE AT THE NEAREST FLOOR DRAIN.



REVISIONS:

ADDENDUM NO. 3



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MECHANICAL SECTIONS

PROJECT:
BOOSTER STATION 1C REPLACEMENT
 LAKE HAVASU CITY, ARIZONA

DESIGNED BY: SBG/RAW
 DRAWN BY: RAW

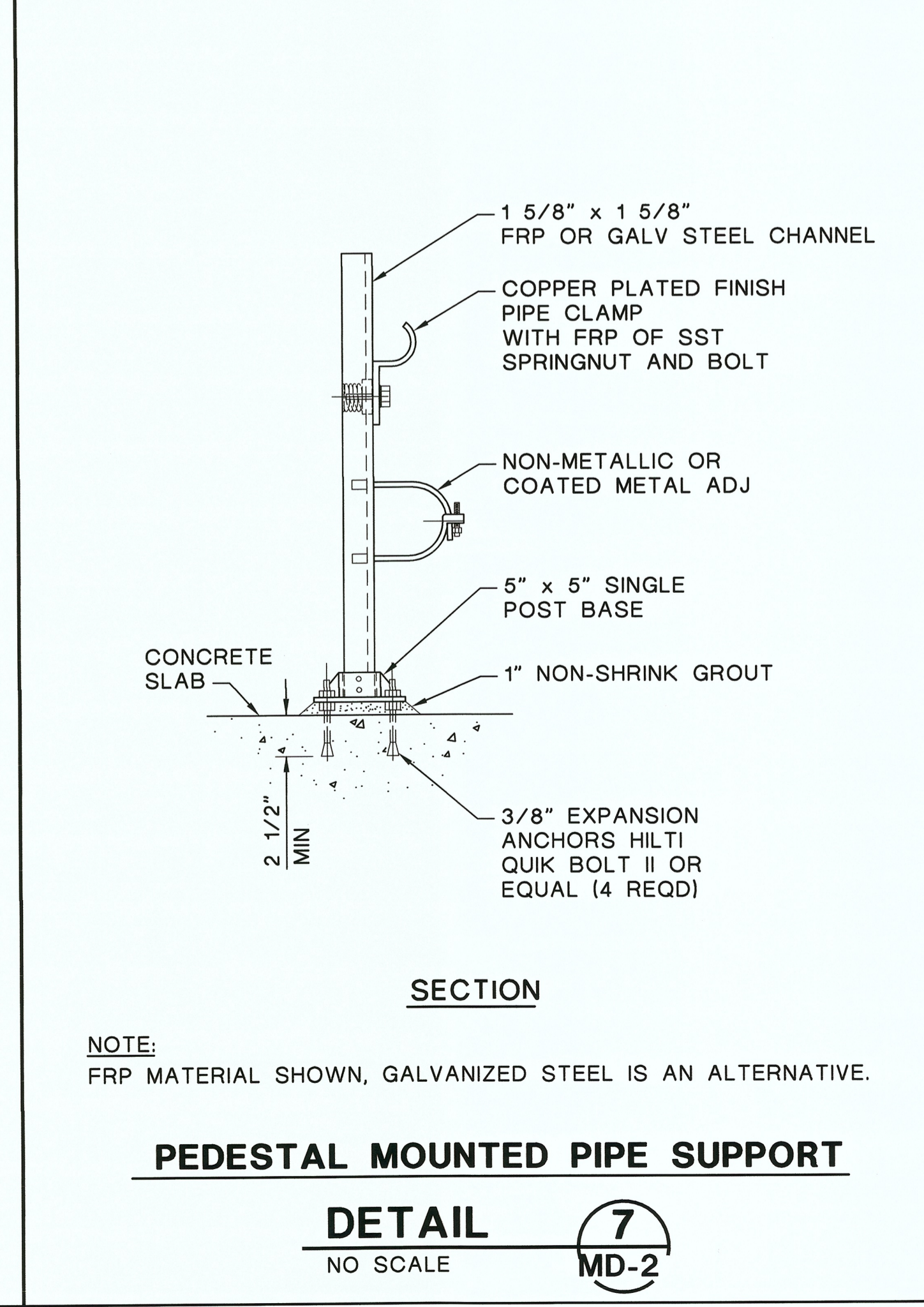
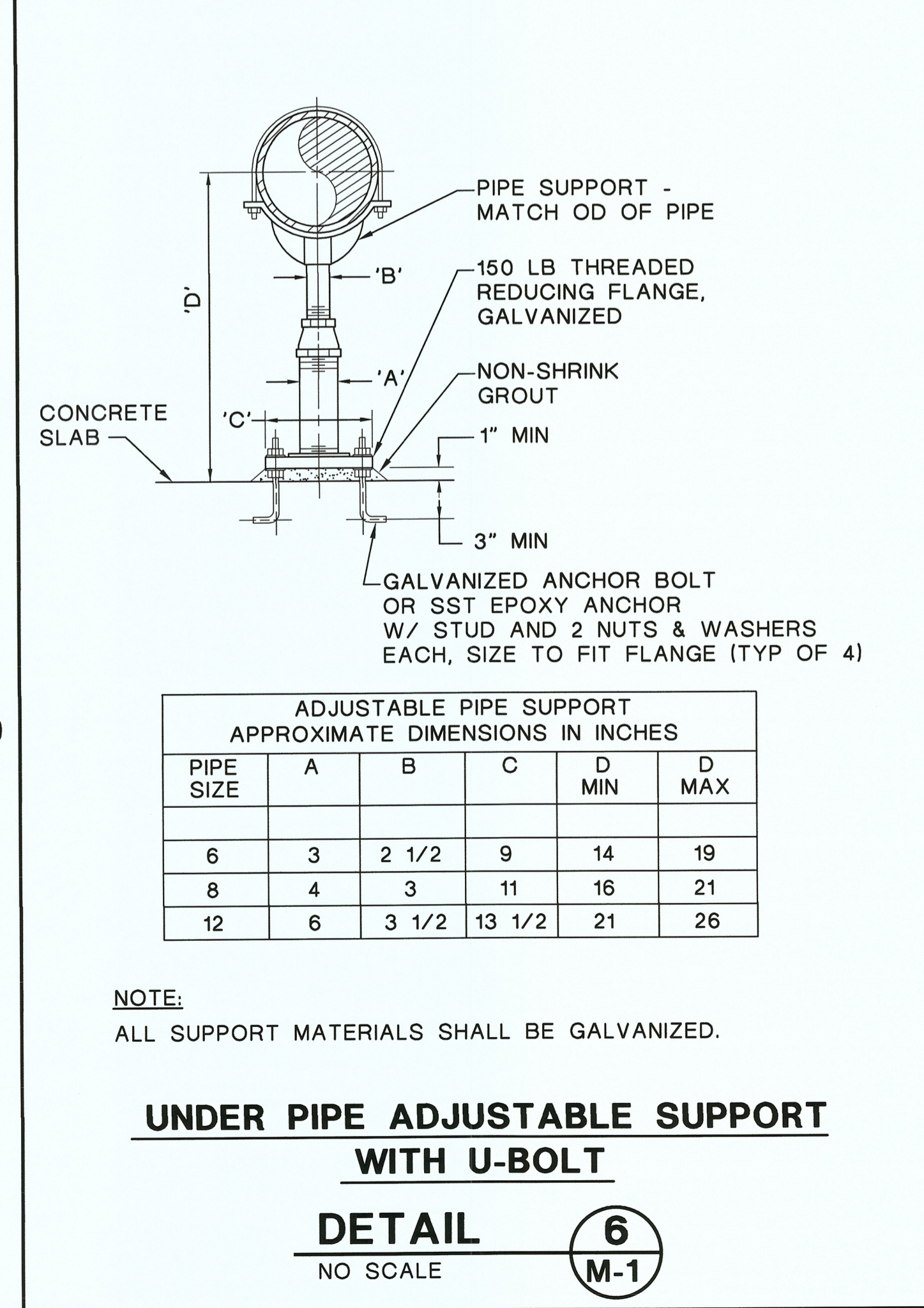
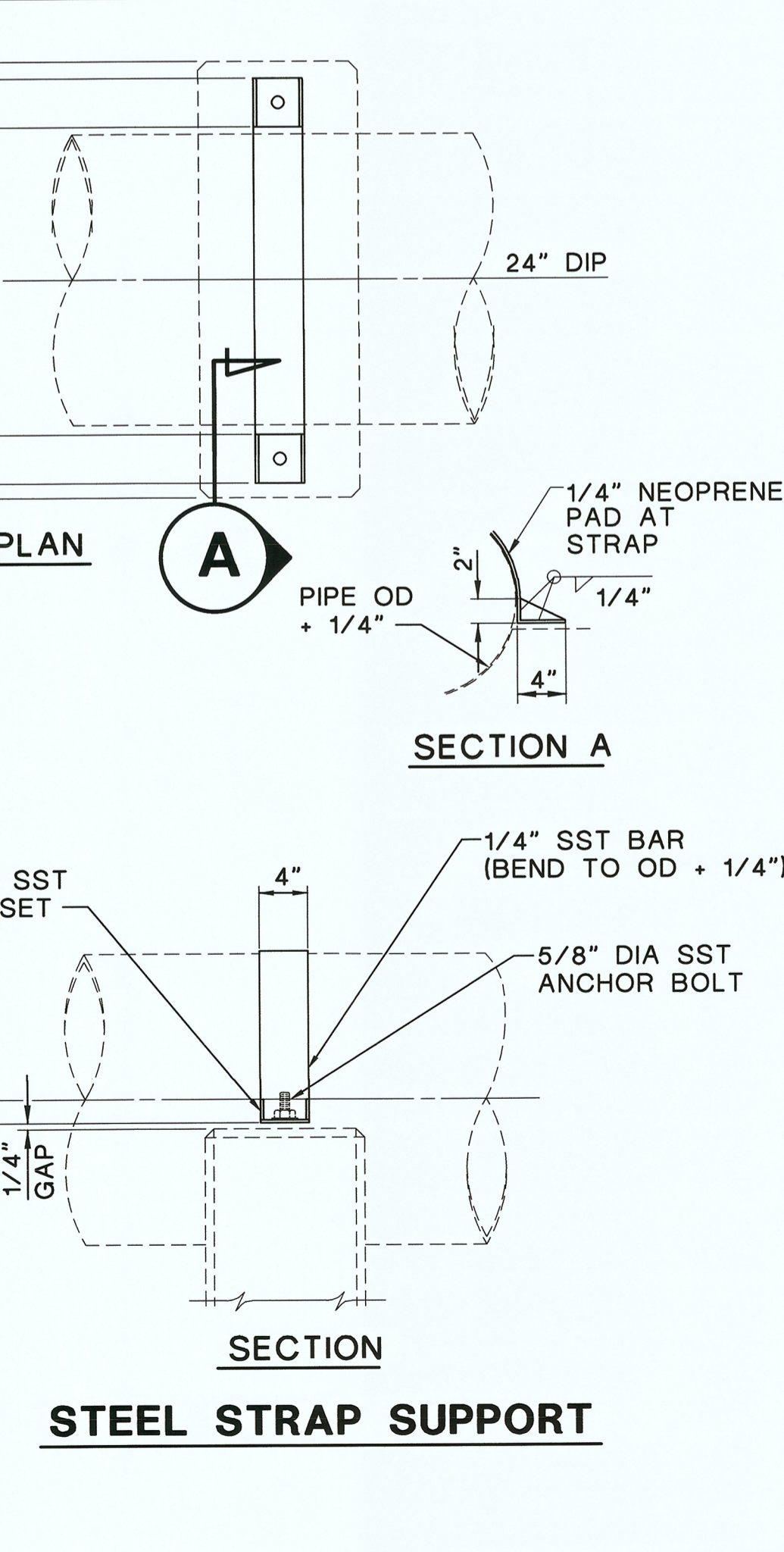
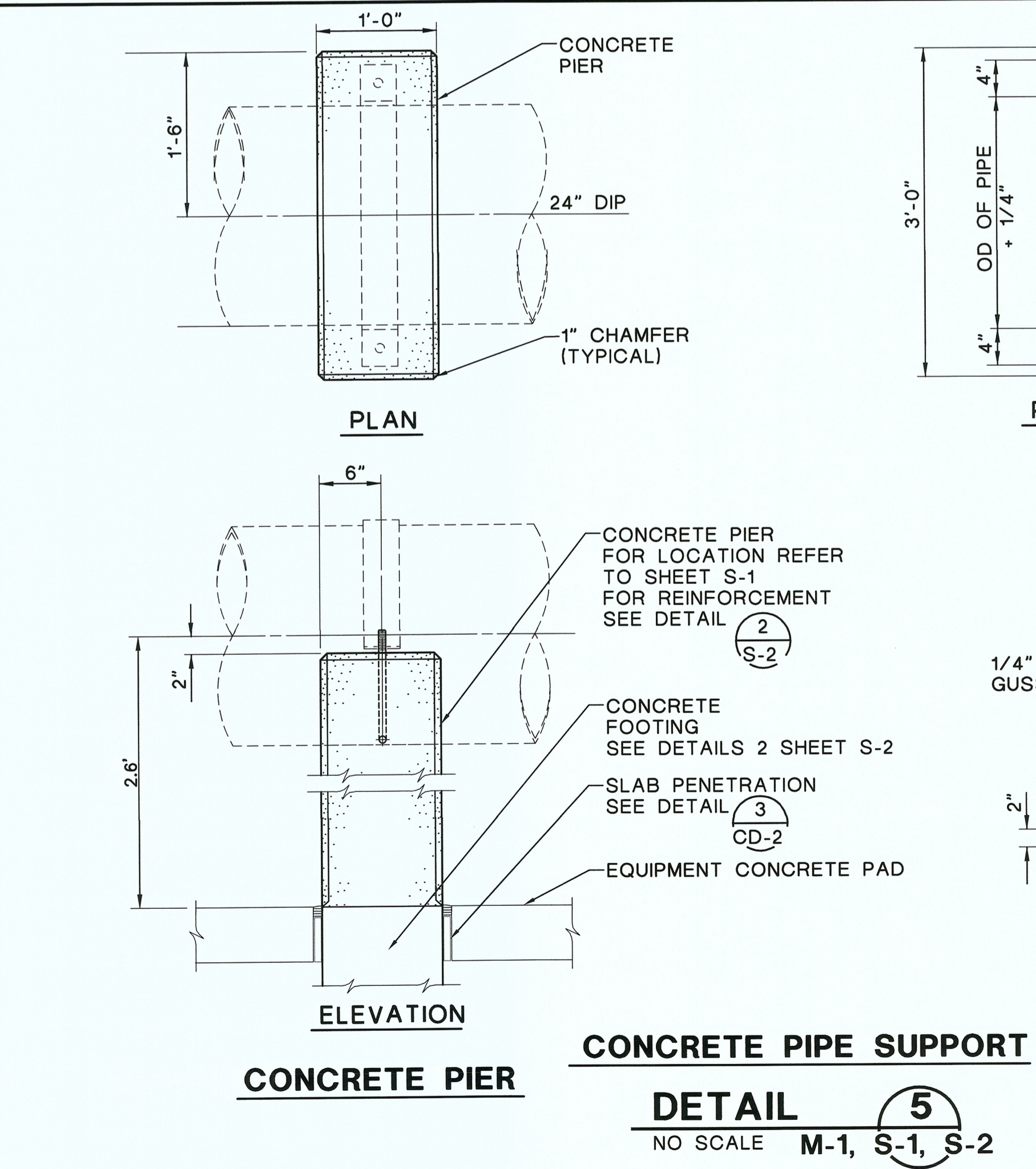
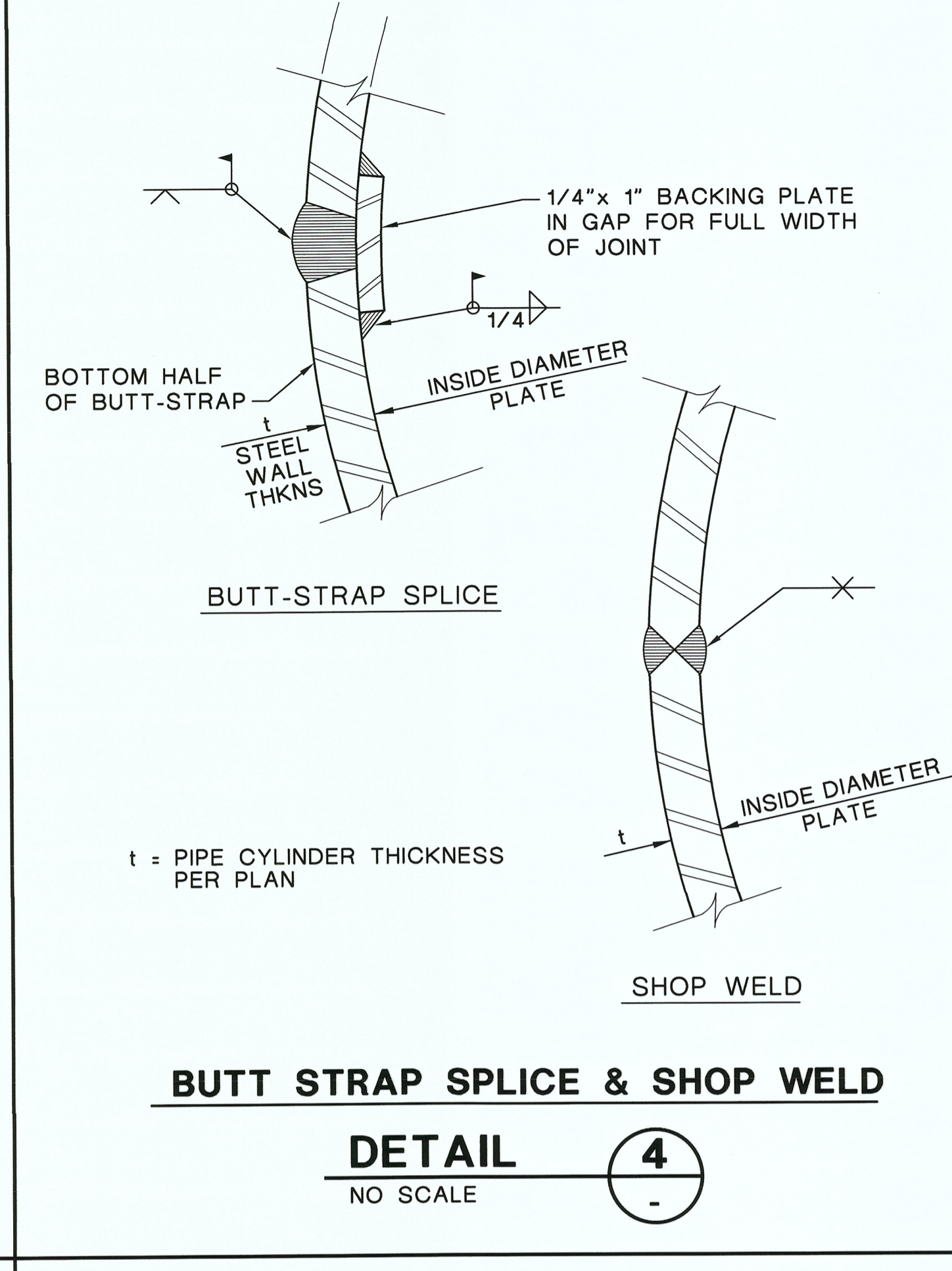
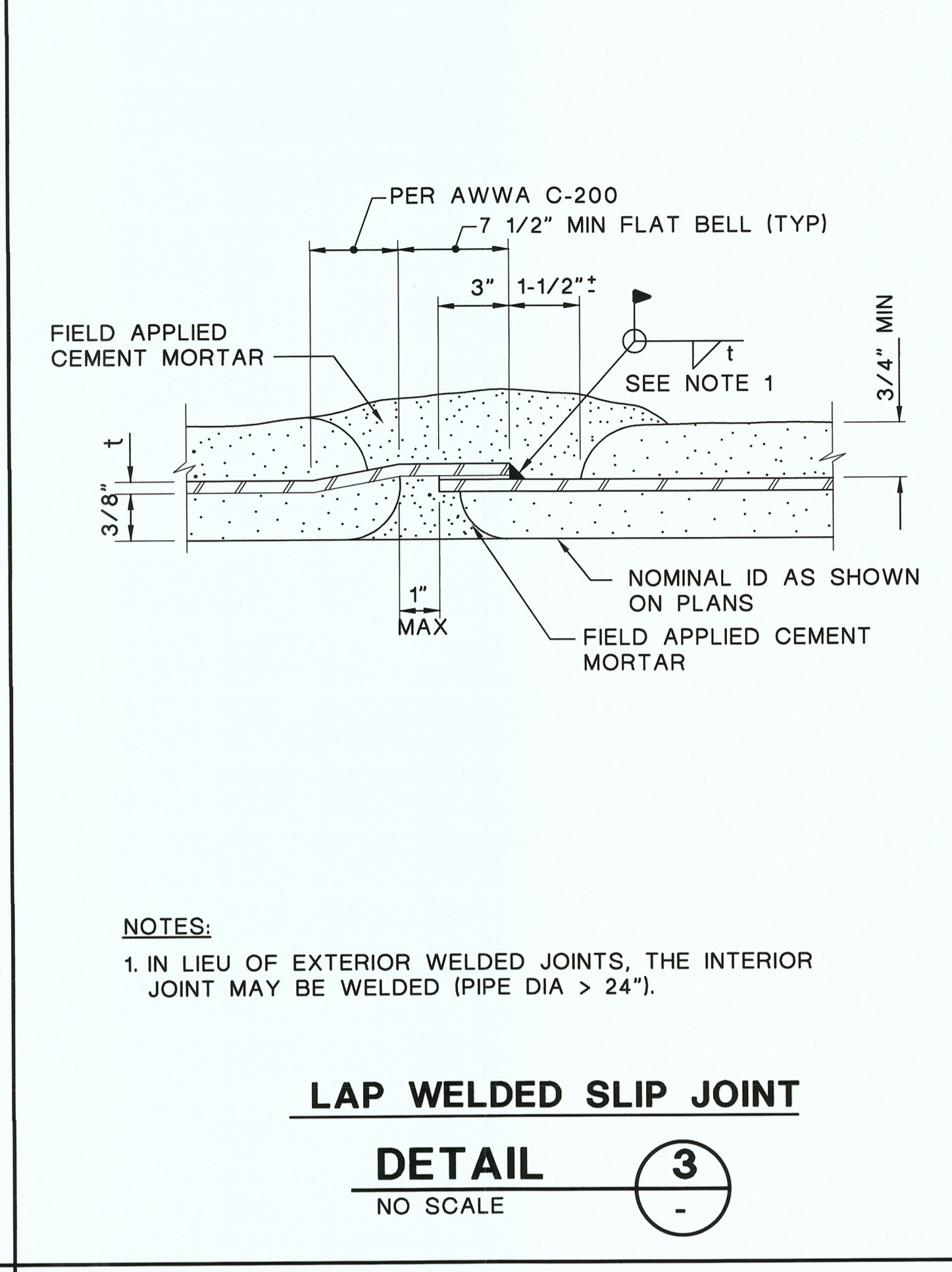
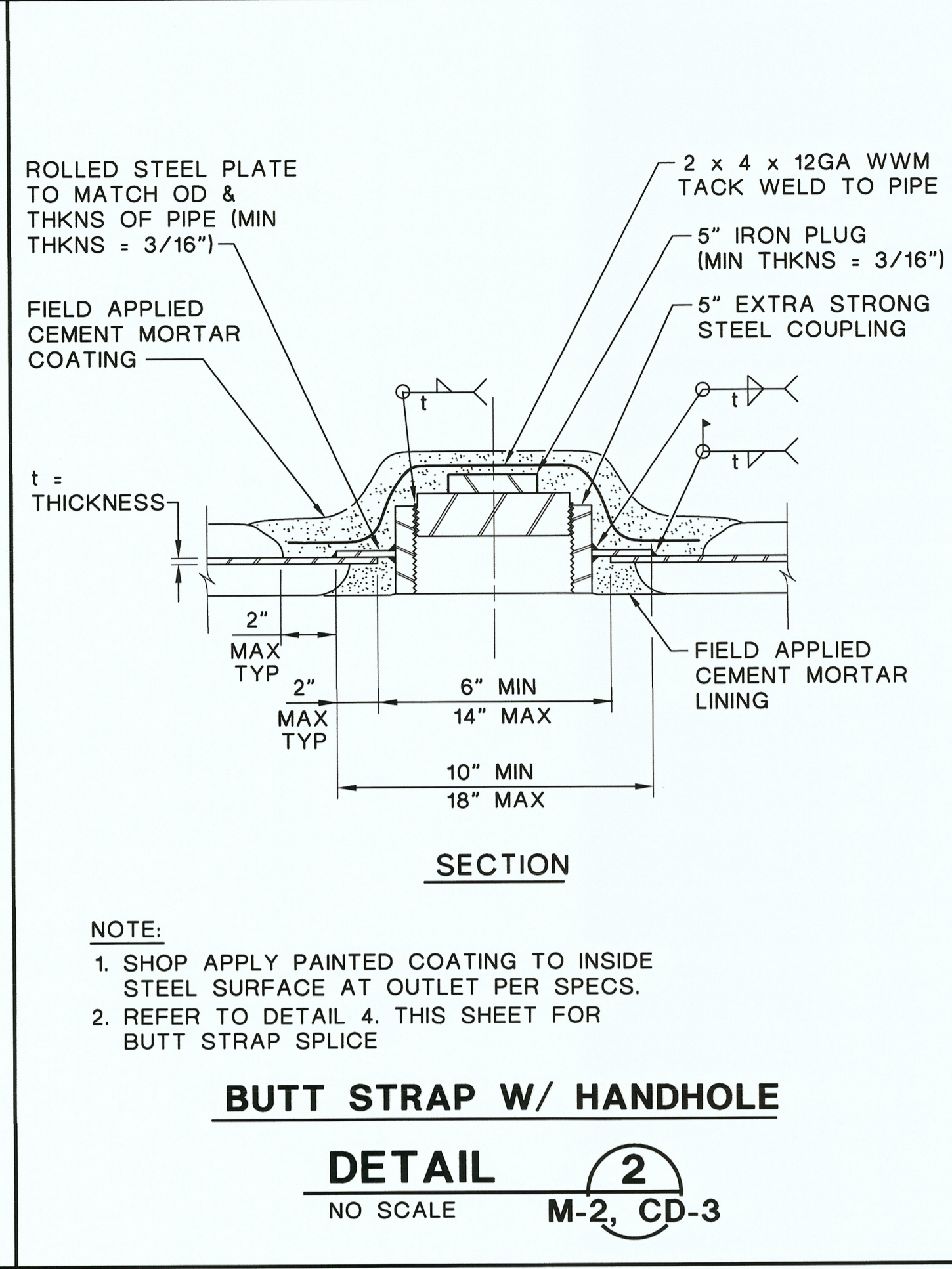
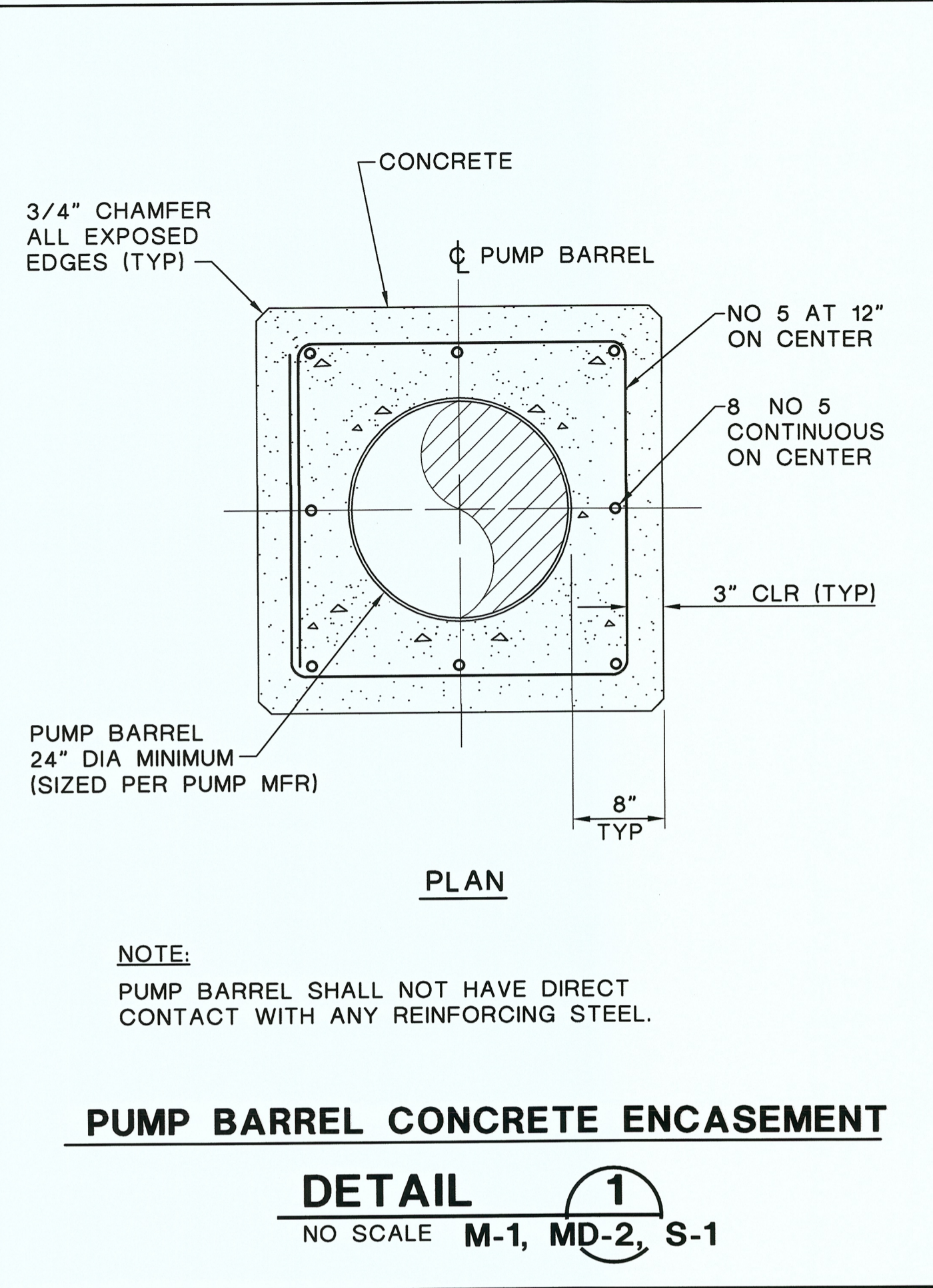


PROJECT NO.
 WT7440

DWG NO.

M-2
 16 OF 47

ORIGINAL SCALE: 1" = 1'-0"



Plotted By: GRUB4113 Date: 18-Oct-18-16:35
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MECHANICAL DETAILS - 1

PROJECT: BOOSTER STATION IC REPLACEMENT
LAKE HAVASU CITY, ARIZONA

DESIGNED BY: SBG/RAW
DRAWN BY: RAW

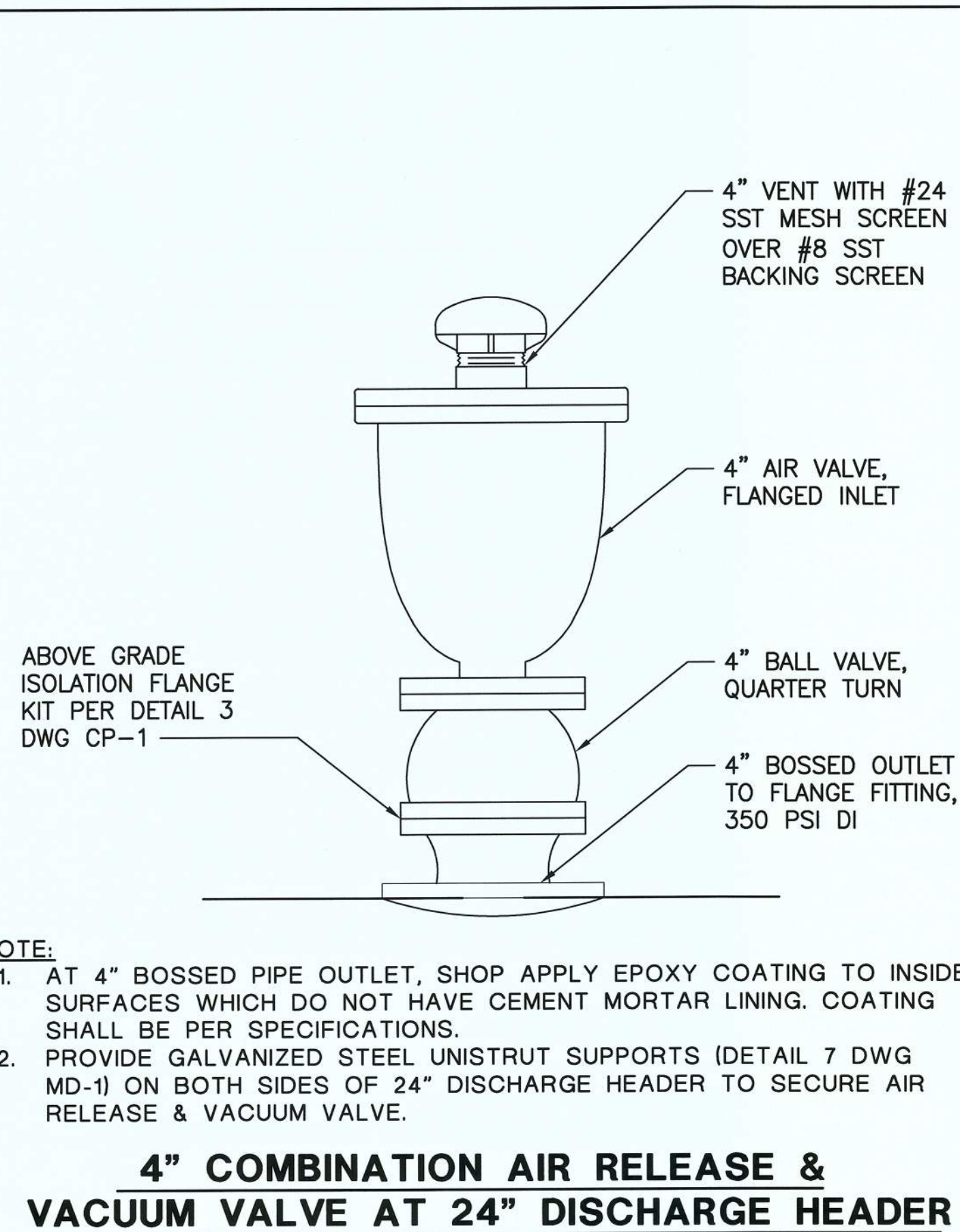
42027
JONATHAN DANIEL TULL
Professional Engineer
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EXPIRES 3-31-2020

PROJECT NO. WT7440

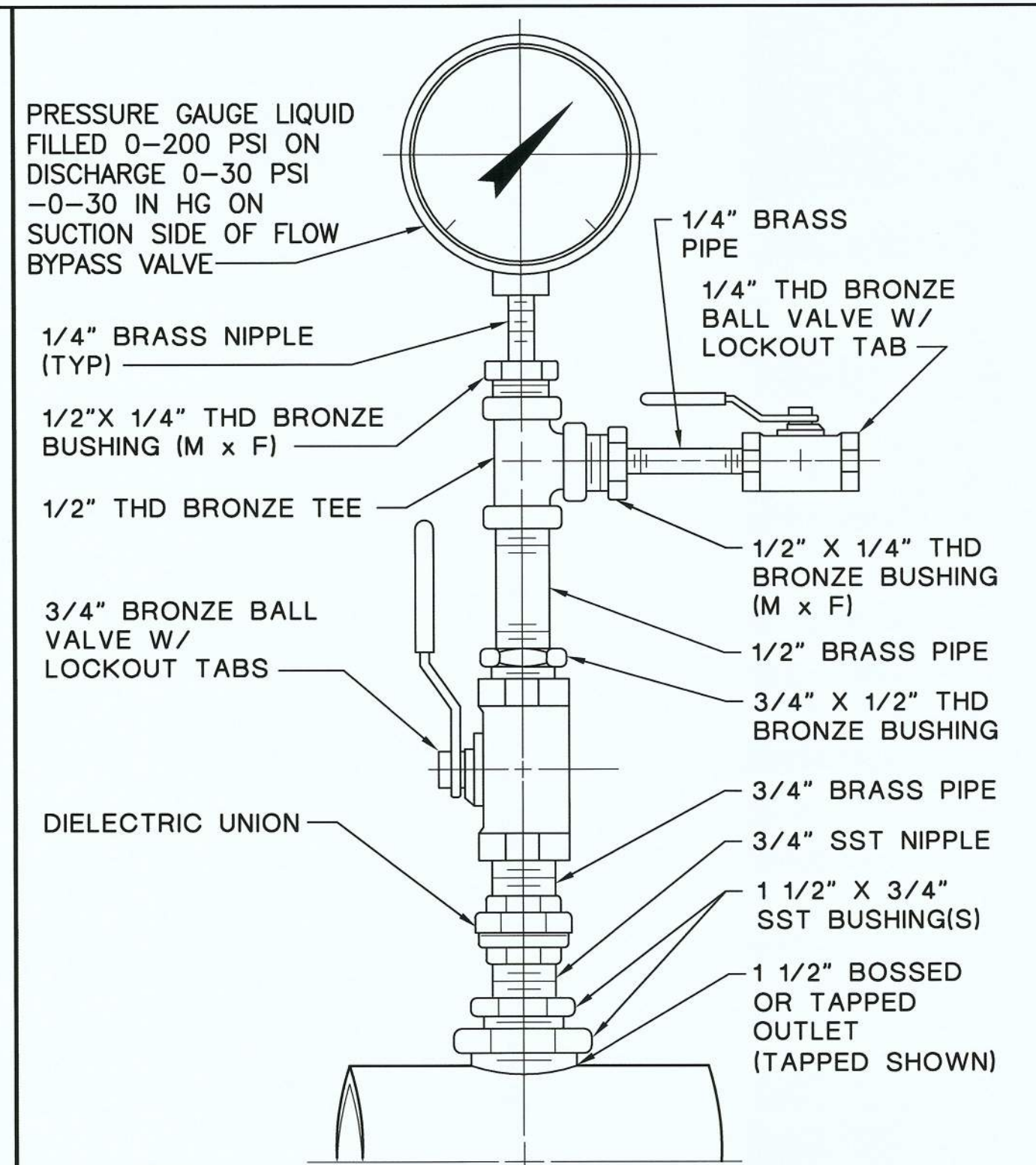
DWG NO. MD-1
17 OF 47

ORIGINAL SCALE: 1" = 16" INCHES



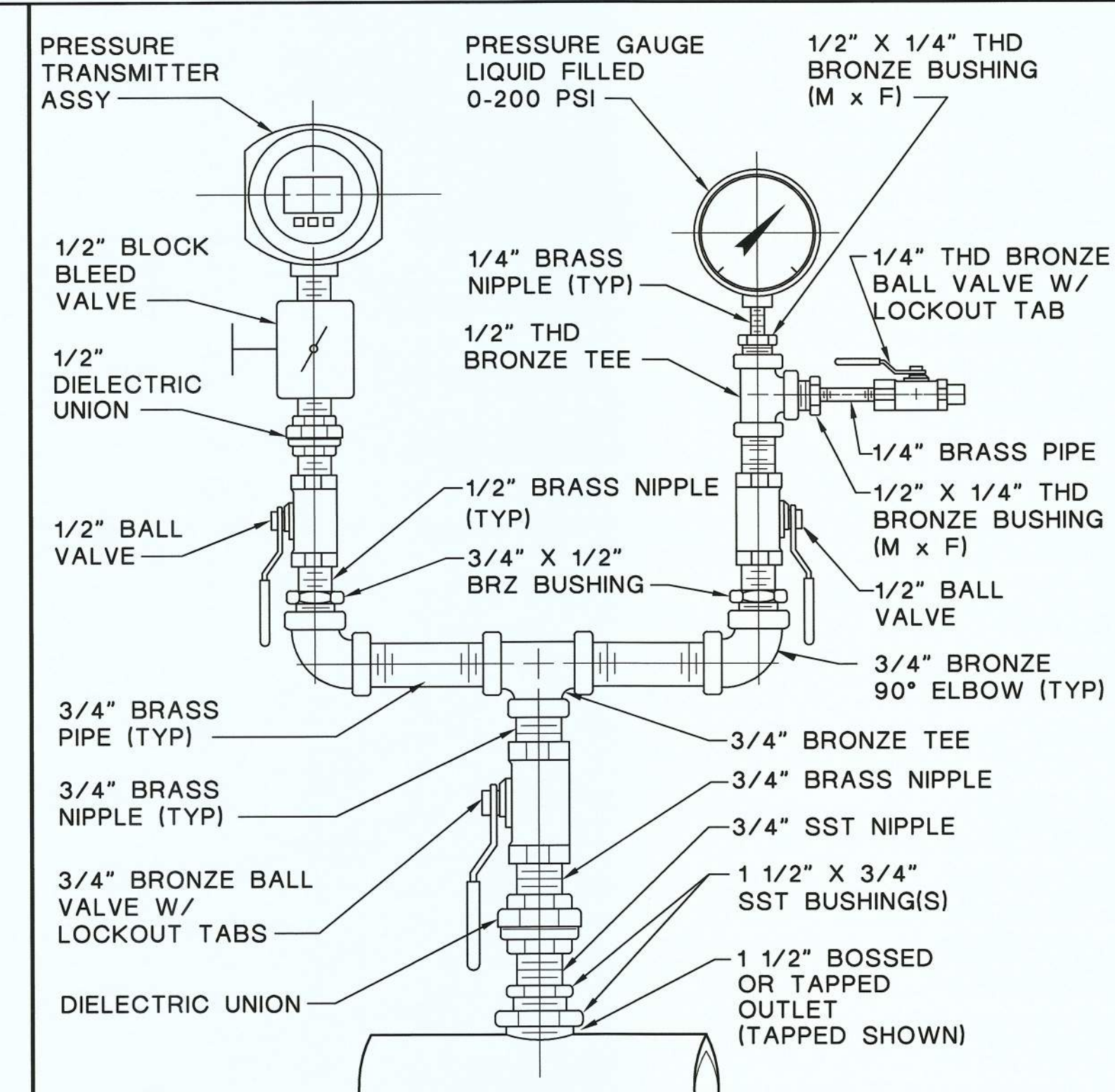
4" COMBINATION AIR RELEASE & VACUUM VALVE AT 24" DISCHARGE HEADER
DETAIL 1
 NO SCALE M-1, MD-1

NOTE:
 1. AT 4" BOSSSED PIPE OUTLET, SHOP APPLY EPOXY COATING TO INSIDE SURFACES WHICH DO NOT HAVE CEMENT MORTAR LINING. COATING SHALL BE PER SPECIFICATIONS.
 2. PROVIDE GALVANIZED STEEL UNISTRUT SUPPORTS (DETAIL 7 DWG MD-1) ON BOTH SIDES OF 24" DISCHARGE HEADER TO SECURE AIR RELEASE & VACUUM VALVE.



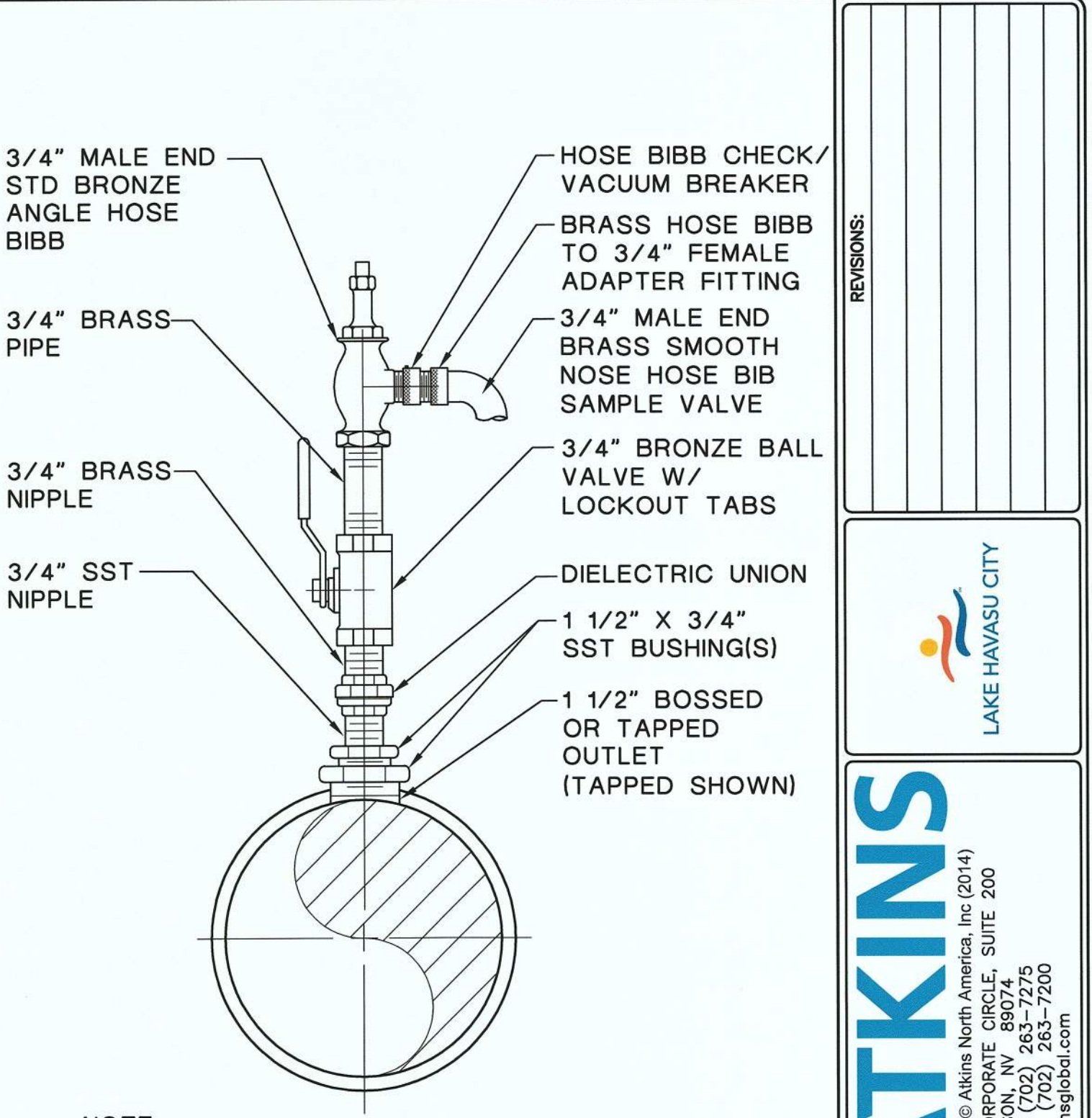
PRESSURE GAUGE
DETAIL 2
 NO SCALE M-1

NOTE:
 SHOP APPLY PAINTED COATING TO INSIDE OF STEEL SURFACE AT OUTLET PER SPECS



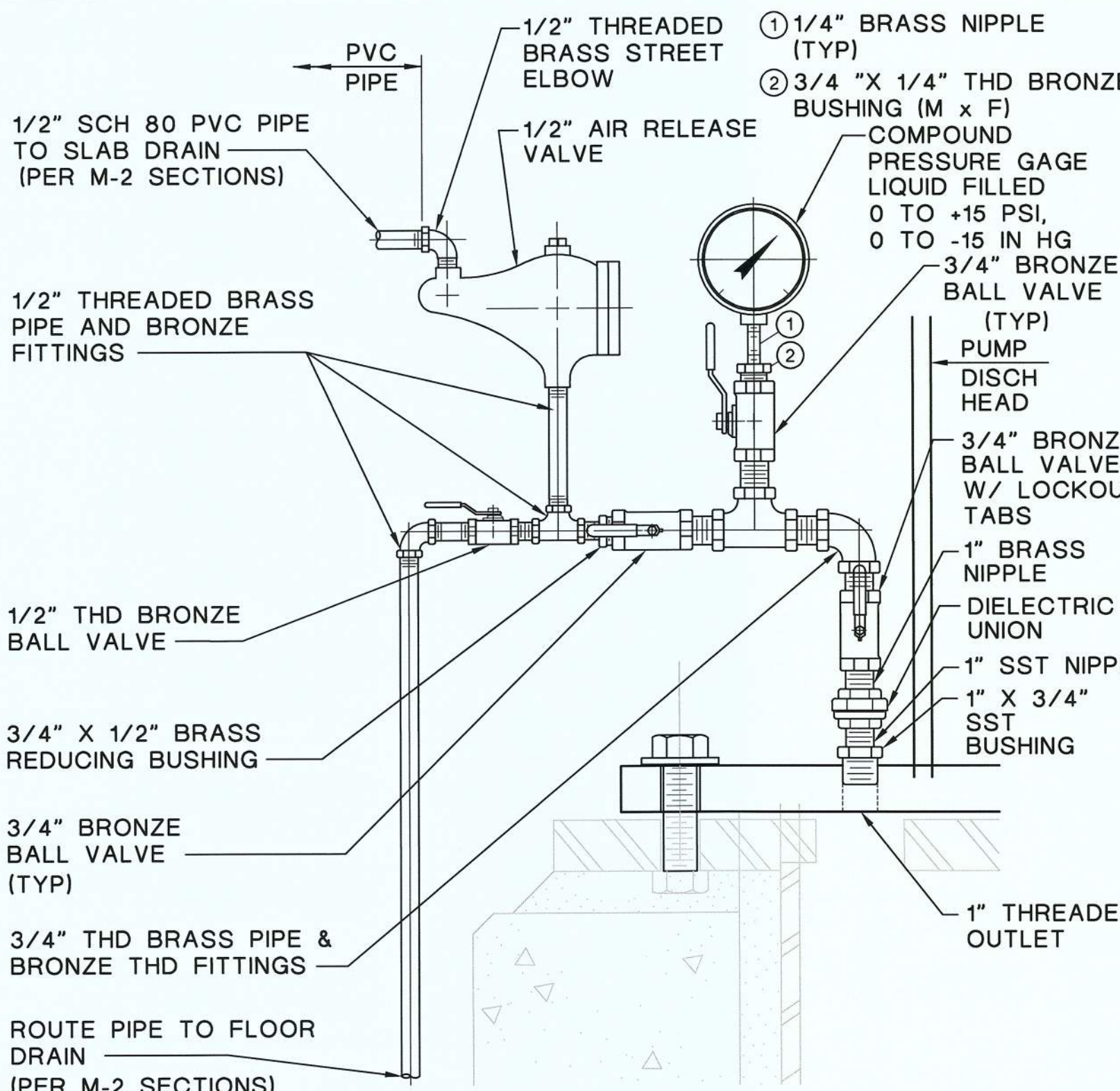
PRESSURE TRANSMITTER & GAUGE
DETAIL 3
 NO SCALE M-1

NOTE:
 SHOP APPLY PAINTED COATING TO INSIDE OF STEEL SURFACE AT OUTLET PER SPECS



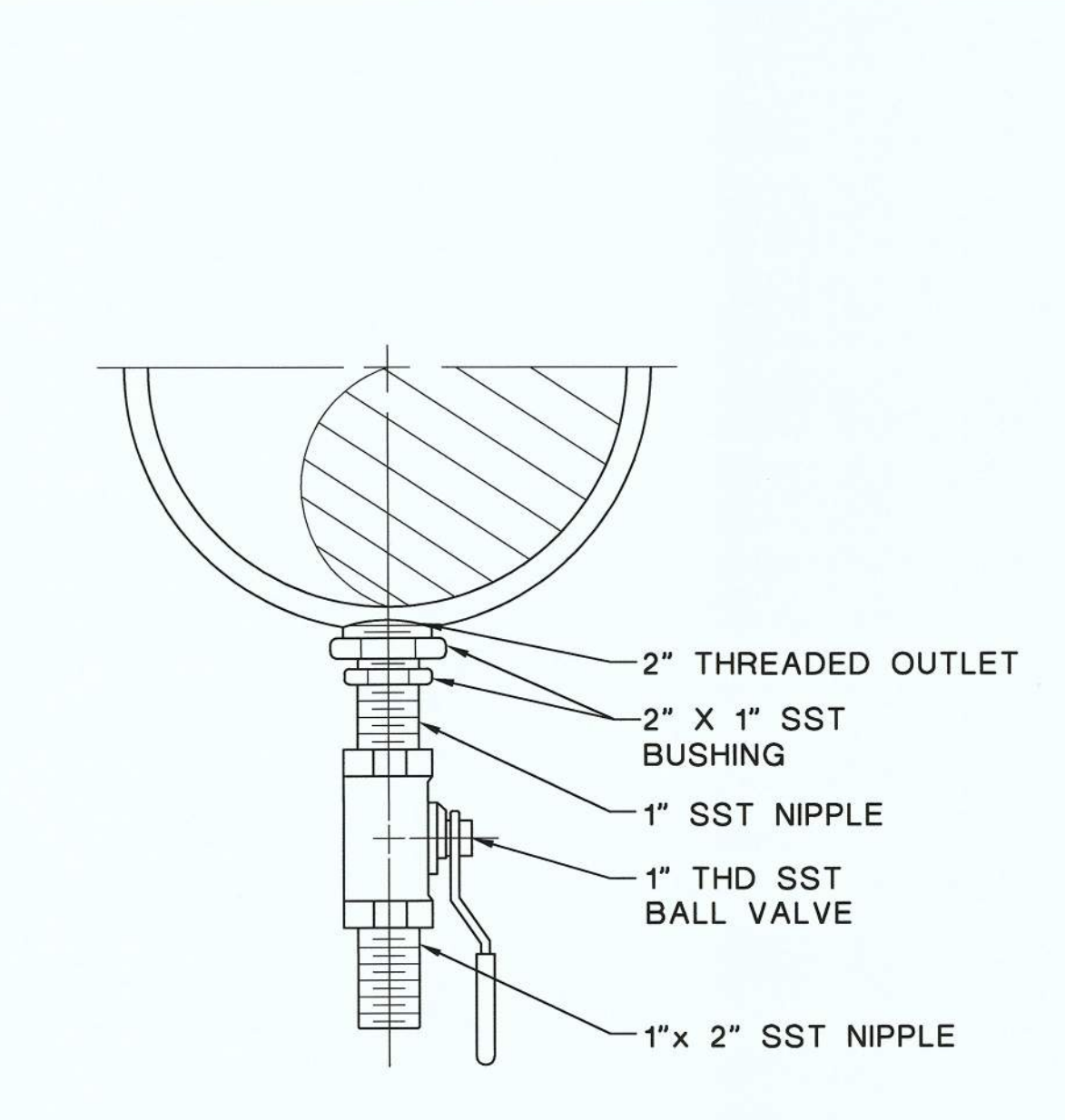
HOSE BIBB/SAMPLING OUTLET
DETAIL 4
 NO SCALE M-1

NOTE:
 SHOP APPLY PAINTED COATING TO INSIDE OF STEEL SURFACE AT OUTLET PER SPECS



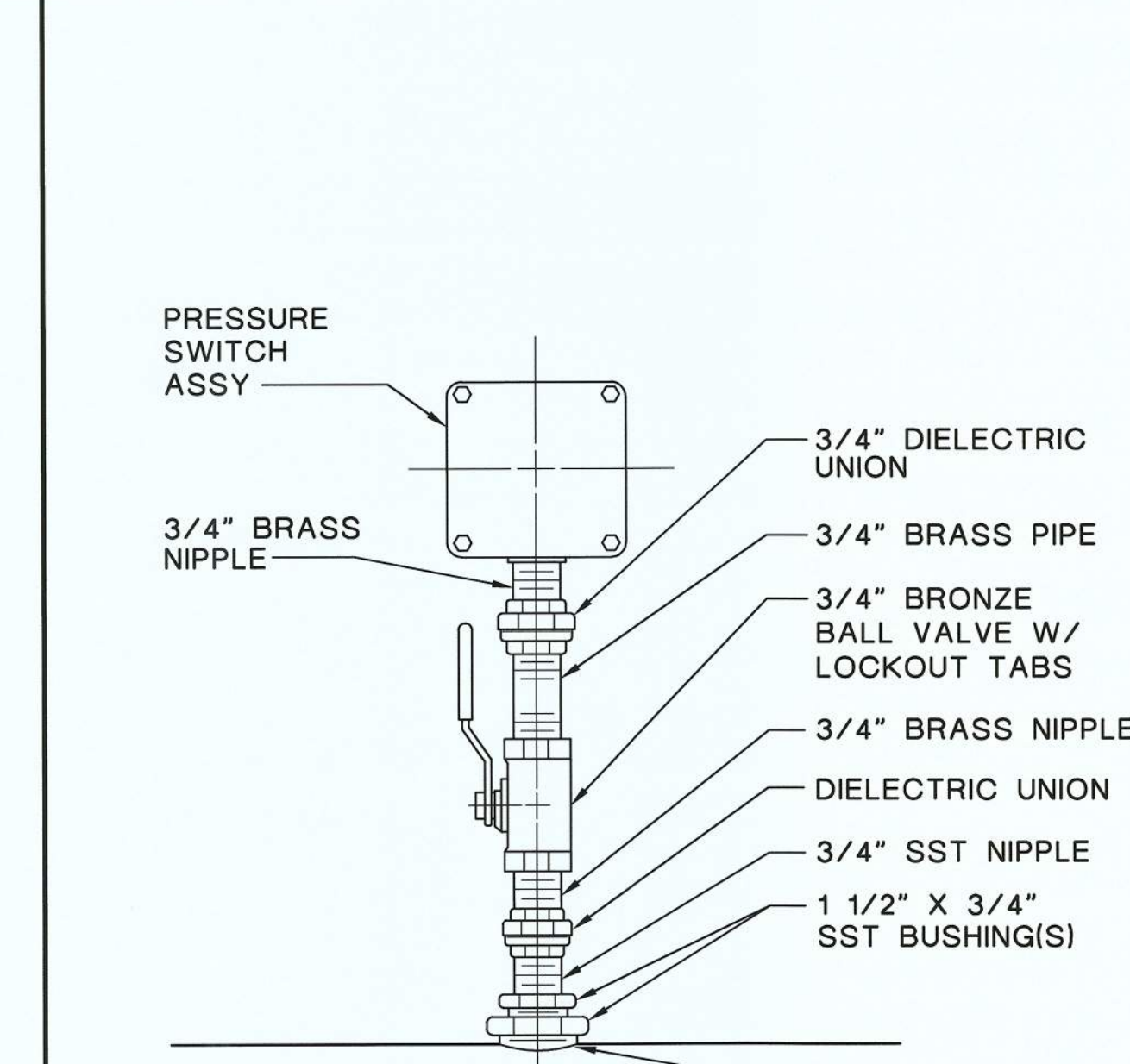
PUMP BARREL AUTOMATIC AIR RELEASE ASSY
DETAIL 5
 NO SCALE M-1

NOTE:
 ROUTE PIPE TO FLOOR DRAIN (PER M-2 SECTIONS)

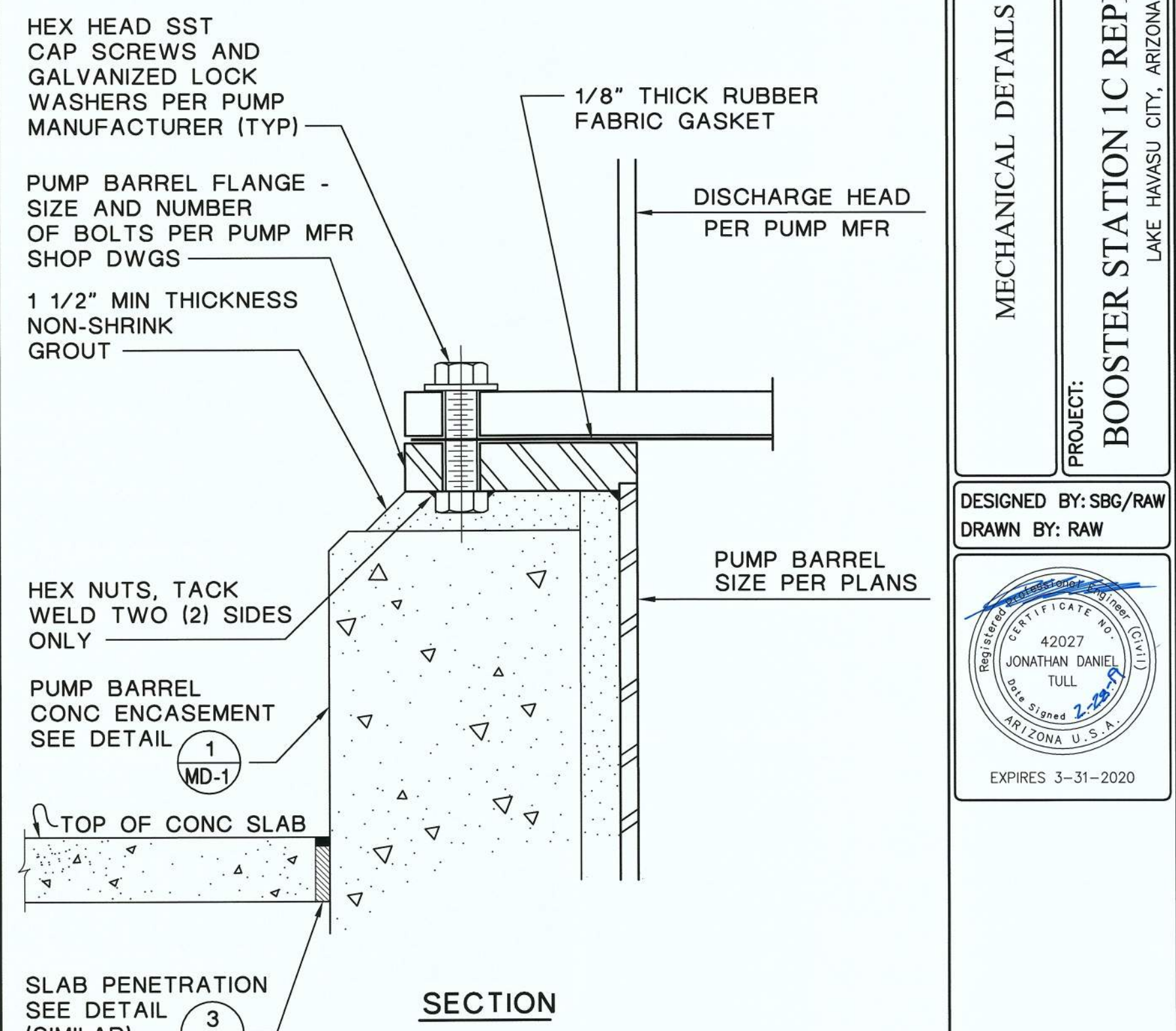


1" DRAIN
DETAIL 6
 NO SCALE M-1

NOTE:
 SHOP APPLY PAINTED COATING TO INSIDE OF STEEL SURFACE AT OUTLET PER SPECS



PRESSURE SWITCH ASSY
DETAIL 7
 NO SCALE M-1



PUMP BARREL MOUNTING
DETAIL 8
 NO SCALE M-1

Plotted By: COR05148 Date: 28-Feb-19-06:17
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MECHANICAL DETAILS - 2

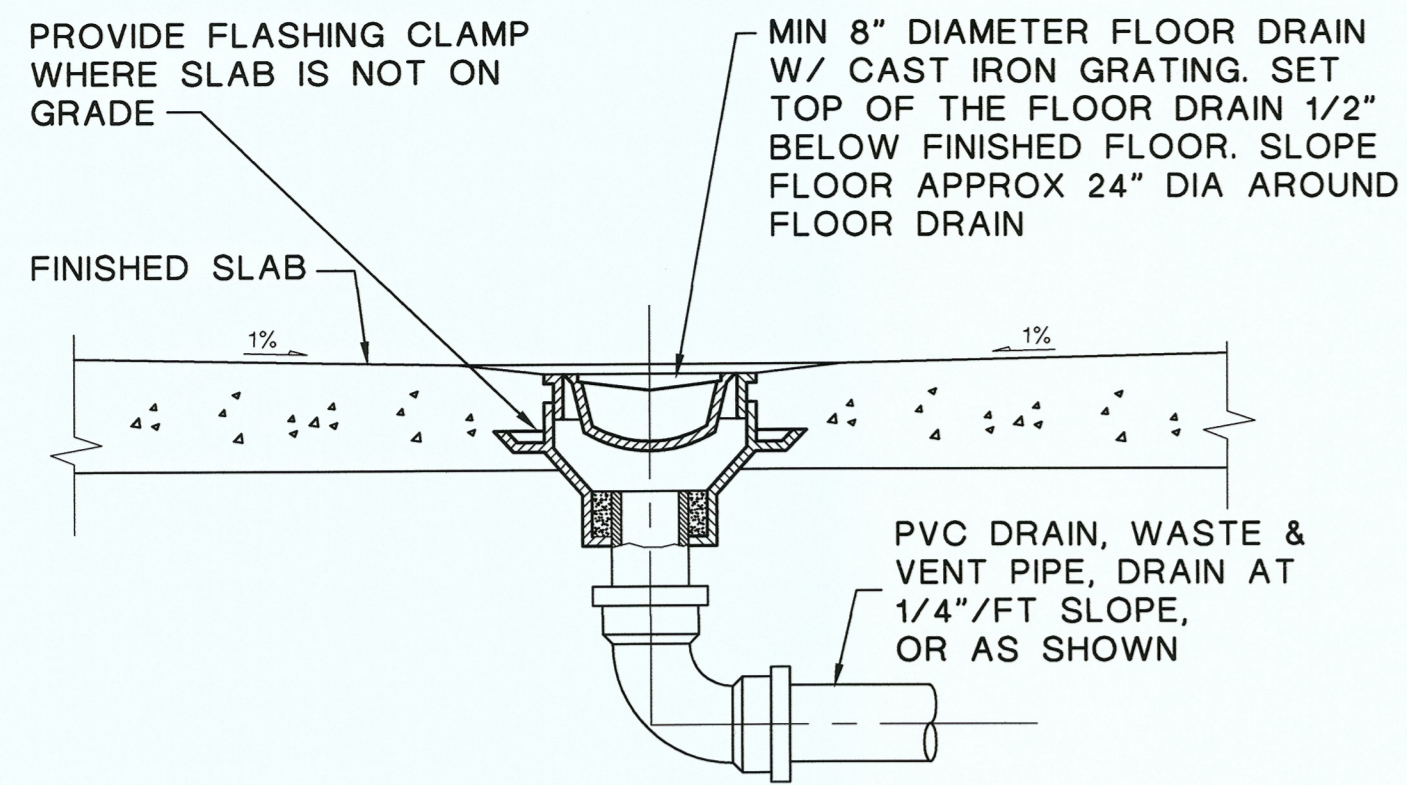
PROJECT:
BOOSTER STATION 1C REPLACEMENT
 LAKE HAVASU CITY, ARIZONA

DESIGNED BY: SBC/RAW
 DRAWN BY: RAW

PROJECT NO.
 WT7440

DWG NO.
MD-2
 18 OF 47

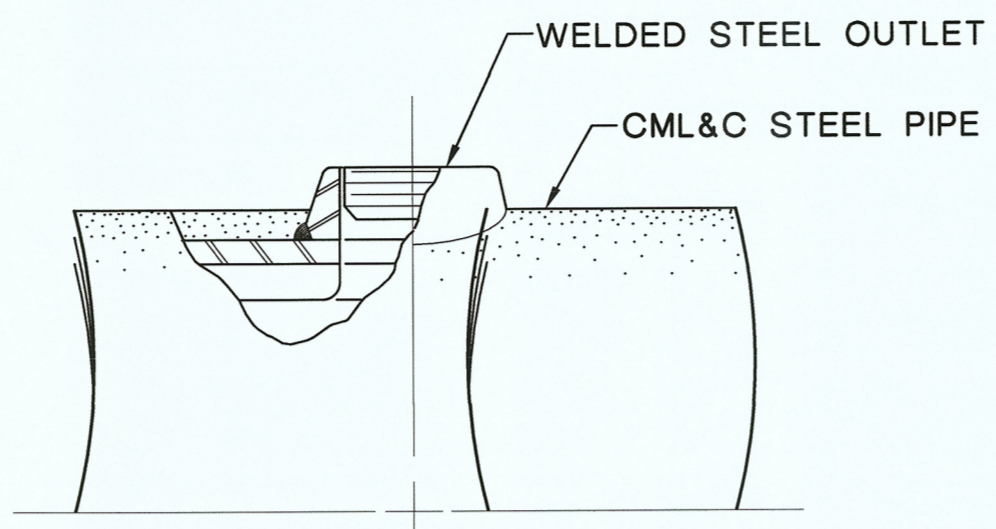
ORIGINAL SCALE: 1" = 6"



SECTION

SLAB DRAIN

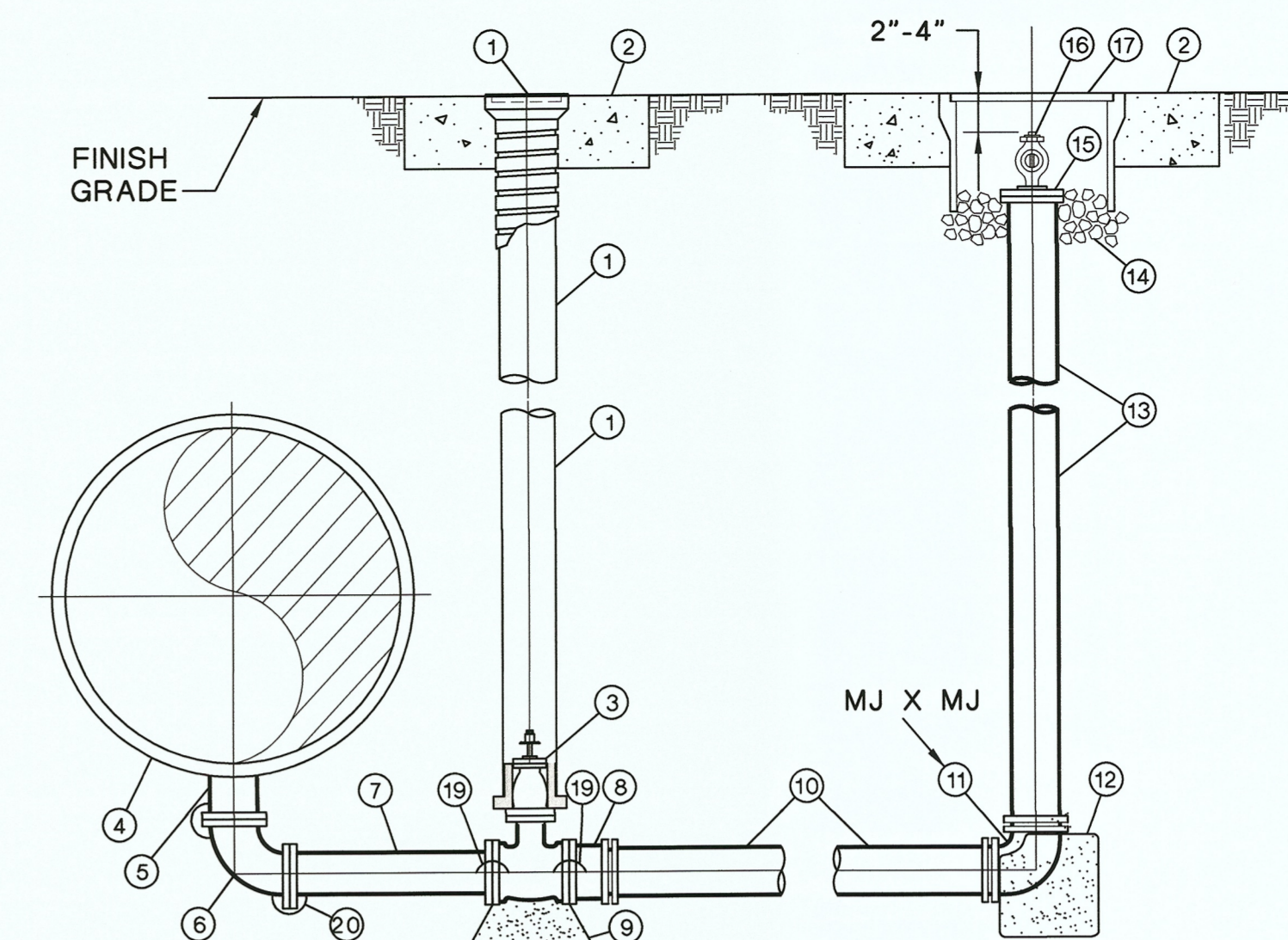
DETAIL 1
NO SCALE M-1, S-1



SECTION

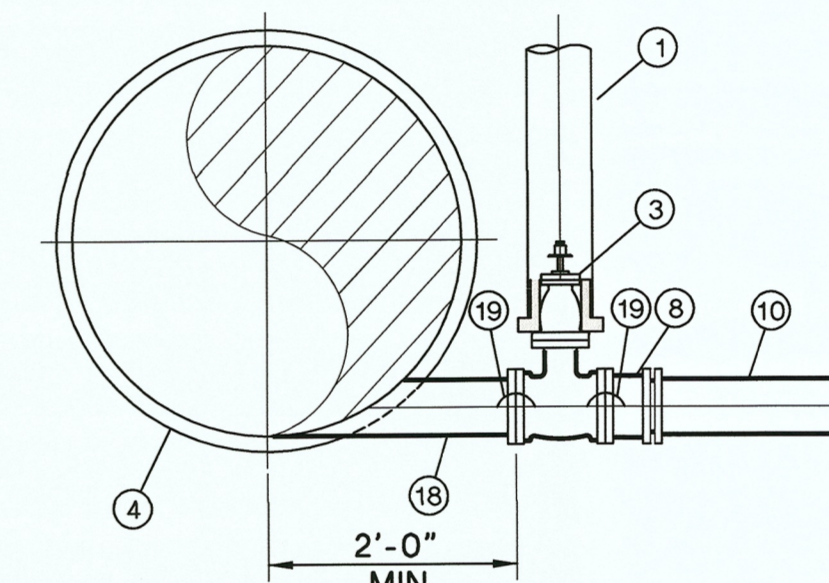
WELDED OUTLET

DETAIL 3
NO SCALE M-1



NOTE: SET TOP OF VALVE BOX FLUSH WITH FINISH GRADE.

BLOWOFF FROM DUCTILE IRON PIPE



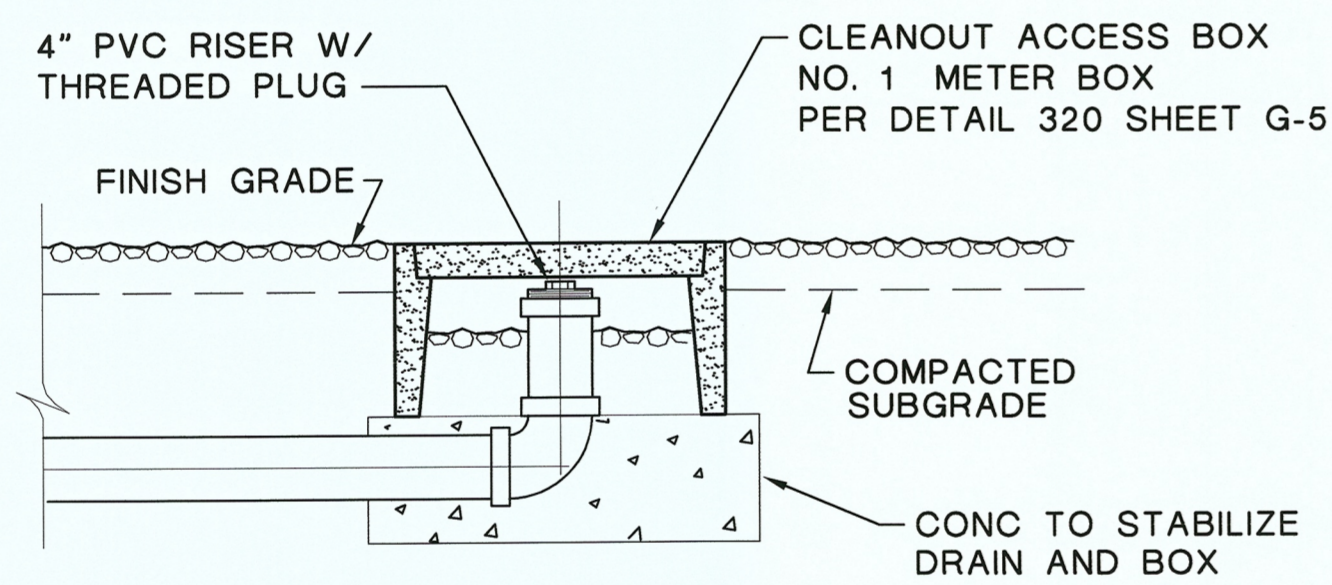
NOTE: STEEL OUTLET SHALL BE MORTAR COATED.

BLOWOFF FROM STEEL PIPE

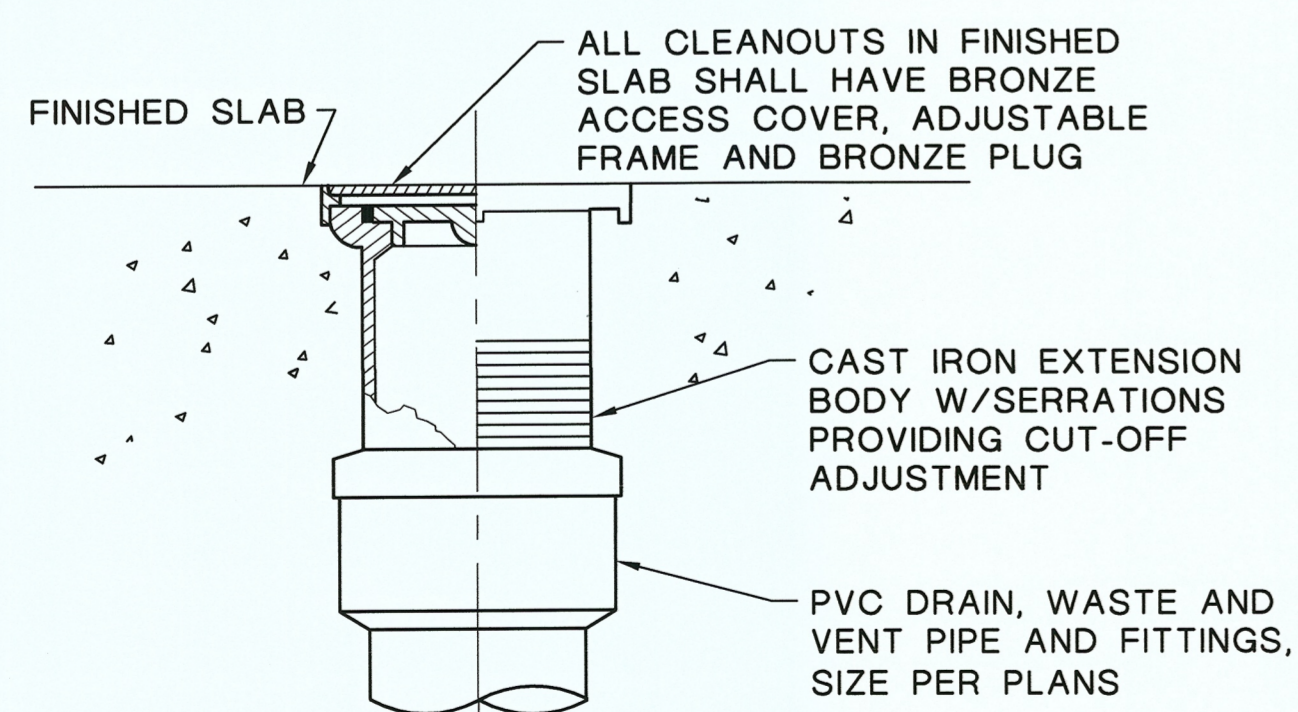
SIZE AND DESCRIPTION	
1	VALVE BOX SCREW TYPE - SEE DETAIL 5 SHEET CD-3
2	VALVE BOX CONC. MONUMENT - SEE DETAIL 5 SHEET CD-3
3	SEE DETAIL 301 SHEET G-5
4	WATER MAIN
5	MAIN SIZE X 6" FLANGED OUTLET
6	6" 90° DI BEND, FLG X FLG
7	6" X 24" LONG DI SPOOL, FLG X FLG
8	6" FLG X MJ ADAPTER (RESTRAINED)
9	VALVE BLOCKING DETAIL 301 SHEET G-5
10	6" C-900 PVC PIPE
11	6" 90° BEND, MJ X MJ (RESTRAINED)
12	CONCRETE SUPPORT BLOCK PER DETAIL 380 SHEET G-5 (4 SF)
13	6" FLG DI PIPE X REQUIRED LENGTH
14	3/8" ROCK (6" DEEP)
15	6" FLANGED COMPANION X FIPT
16	2" FIPT X MIPT BRASS LOCKABLE BALL VALVE WITH THREADED BRASS PLUG
17	METER BOX PER DETAIL 320 SHEET G-5 (19" X 30")
18	MAIN SIZE X 6" FLANGED TANGENT OUTLET
19	19" PIPE FLANGE WITH BONDING PER DETAIL 2 SHEET CP-2

6" BLOW-OFF ASSEMBLY

DETAIL 5
NO SCALE M-1, M-2, C-2



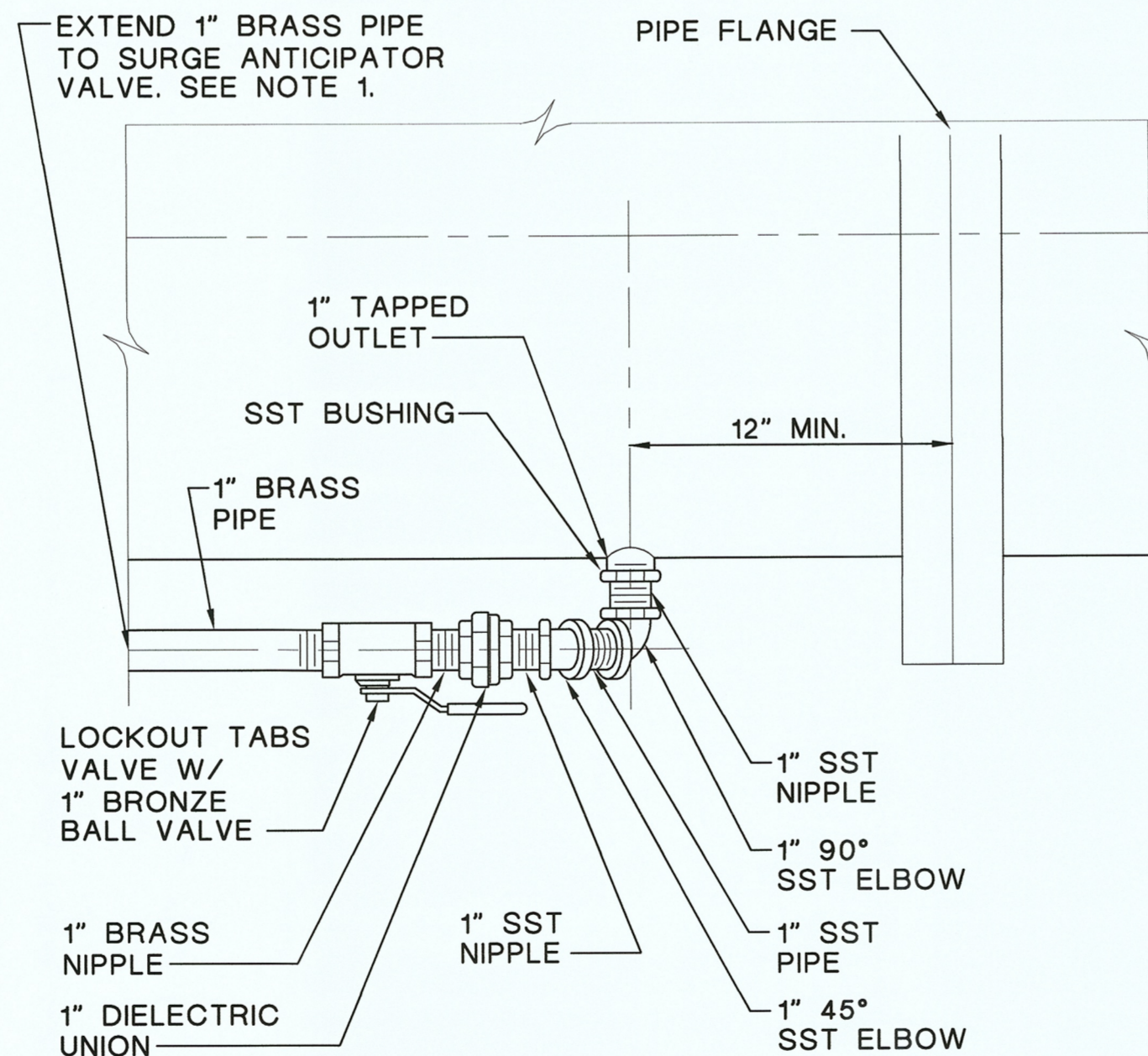
YARD CLEANOUT SECTION



SECTION

CLEANOUT IN FINISHED SLAB

DETAIL 2
NO SCALE C-1, M-1, S-1



PROFILE

SENSOR OUTLET

DETAIL 4
NO SCALE M-1

NOTE:

1. PROVIDE NECESSARY PIPE SUPPORTS AND FITTINGS TO ENSURE A CONSTANT 4% MIN. POSITIVE SLOPE FROM SENSOR OUTLET TO SURGE ANTICIPATOR VALVE, OR SLOPE IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS.
2. PROVIDE DIELECTRIC UNION AND BALL VALVE AT OPPOSITE CONNECTION OF PIPE TO SURGE ANTICIPATOR VALVE.

Plotted By: GRUB4113 Date: 18-Oct-18-16:35
File: X:\Projects\100054178 - LHC B51C and 5 Tank Inspection 2017\Task 2 - Booster Station 1\C\Sheets\100054178 1C_MD03.dwg

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MECHANICAL DETAILS - 3

PROJECT: BOOSTER STATION 1C REPLACEMENT
LAKE HAVASU CITY, ARIZONA

DESIGNED BY: SBC/RAW
DRAWN BY: RAW

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EXPIRES 3-31-2020

PROJECT NO.
WT7440

DWG NO.
MD-3
19 OF 47

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

ABBREVIATION LIST

A	AMPERE	N	NEUTRAL
A/C	AIR CONDITIONING	NA	NON-AUTOMATIC
AC	ALTERNATING CURRENT	NC	NORMALLY CLOSED
AF	ALTERNATE FRAME, CKT. BKR. RATING	NEMA	NATIONAL ELECTRICAL MANUFACTURER ASSOCIATION
AFF	ABOVE FINISHED FLOOR	NO	NORMALLY OPEN
AHU	AIR HANDLING UNIT	NO	NUMBER
AL	ALUMINUM	NOS	NUMBERS
AM	AMMETER	NP	NAMEPLATE
ANN	ANNUNCIATOR	NIC	NOT IN CONTRACT
AMP	AMPERES, AMPERAGE	NTS	NOT TO SCALE
APPD	APPROVED	O	OPEN
AS	AMMETER SWITCH	OC	ON CENTER
AT	AMPERE TRIP	OH	OVERHEAD ELECTRICAL
ATS	AUTOMATIC TRANSFER SWITCH	CC	CENTER TO CENTER
AUTO	AUTOMATIC	OL	OVERLOAD RELAY
AUX	AUXILIARY	OSC	OSCILLATION
AWG	AMERICAN WIRE GAUGE	P	POLE
BATT	BATTERY	PB	PUSH BUTTON
BKR	BREAKER	PCM	PROCESS CONTROL MODULE
BLDG	BUILDING	PCP	PROCESS CONTROL PANEL
BPS	BOOSTER PUMP STATION	PF	POWER FACTOR
CAB	CABINET	PH, Ø	PHASE
CB	CIRCUIT BREAKER	PLC	PROGRAMMABLE LOGIC CONTROLLER
CKT	CIRCUIT	PNL	PANEL
CO	CONDUIT ONLY	PANLBD	PANLBOARD
C.C.	CONDUIT	POS	POSITION
COMPT	COMPARTMENT	POM	POWER QUALITY MONITOR
COMPR	COMPRESSOR	POT	POTENTIOMETER
CP	CONTROL PANEL	PRI	PRIMARY
CPT	CONTROL POWER TRANSFORMER	PS	PRESSURE SWITCH
CR	CONTROL RELAY	PT	POTENTIAL TRANSFORMER
CT	CURRENT TRANSFORMER	PVC	POLYVINYL CHLORIDE
CU	COPPER	PVCC	PVC COATED RIGID CONDUIT
C/U	CONDENSER UNIT	PW	PART WINDING
DC	DIRECT CURRENT	PWR	POWER
DH	DATA HIGHWAY	REC	RECEPTACLE
DISC	DISCONNECT	RECPTS	RECEPTACLES
DISTR	DISTRIBUTION	REQ'D	REQUIRED
DPDT	DOUBLE POLE DOUBLE THROW	REV	REVERSE
DWG	DRAWING	RGS	RIGID GALVANIZED STEEL
E	EMPTY	RTU	REMOTE TERMINAL UNIT
EF	EXHAUST FAN	RVAT	REDUCED VOLTAGE AUTOTRANSFORMER
ELEV	ELEVATION	RVNR	REDUCED VOLTAGE NON-REVERSING
EMERG	EMERGENCY	RVSS	REDUCED VOLTAGE SOLID STATE
EMT	ELECTRICAL METALLIC TUBING	SCH	SCHEDULE
ENCL	ENCLOSURE	SEC	SECONDARY, SECONDS
EP	EXPLOSION PROOF	SECT	SECTION
EQPT	EQUIPMENT	SEL SW	SELECTOR SWITCH
ER	CONDUCTANCE RELAY	SEQ	SEQUENCE
ETM	ELAPSED TIME METER	SH	SHIELD
EHU	ELECTRIC HEATING UNIT	SHLD	SHIELDED
EXH	EXHAUST	SHT	SHEET
EXIST	EXISTING	SIG	SIGNAL
FDR	FEEDER	S1, S2	START CONTACTOR COILS
FLEX	FLEXIBLE	SP	SPARE
FLOOR	FLOOR	SPDT	SINGLE POLE DOUBLE THROW
FT	FOOT, FEET	SPECS	SPECIFICATIONS
FUT	FUTURE	SP HTR	SPACE HEATER
FVR	FULL VOLTAGE REVERSING	SP	SINGLE POLE SINGLE THROW
FVNR	FULL VOLTAGE NON-REVERSING	SS	SOLID STATE
FWD	FORWARD	SSRV	SOLID STATE REDUCE VOLTAGE
GALV	GALVANIZED	ST	SHUNT TRIP
GEN	GENERATOR	STA	STATION
GND	GROUND	STD	STANDARD
HN	HAND HOLE	STL	STEEL
HID	HIGH INTENSITY DISCHARGE	STR	STARTER
HG	MERCURY	STRV	SOLENOID OPERATED VALVE
HOA	HAND-OFF-AUTOMATIC	SW	SWITCH
HP,H.P.	HORSEPOWER	SWBD	SWITCHBOARD
HPS	HIGH PRESSURE SODIUM	SYS	SYSTEM
HTR	HEATER	SYM	SYMMETRICAL
HT TR	HEAT TRACED	TB	TERMINAL BOX
HVAC	HEATING, VENTILATING, A/C	TC	TIME CLOCK
HZ	HERTZ - CYCLES PER SECOND	TACH	TACHOMETER
IMC	INTERMEDIATE METAL CONDUIT	TEMP	TEMPERATURE
INCAND	INCANDESCENT	TERM	TERMINAL
IND	INDICATION, INDICATING	T'STAT	THERMOSTAT
I/O	INPUT/OUTPUT	TR	TIMING RELAY
INST	INSTANTANEOUS	TD	TIME DELAY
INSTR	INSTRUMENT	TS	TEMPERATURE SWITCH
INVT	INVERTER	TYP	TYPICAL
Isc	SHORT CIRCUIT CURRENT	TDON	TIME DELAY - ON
		TDOFF	TIME DELAY - OFF
JB	JUNCTION BOX	UGE	UNDERGROUND ELECTRICAL
J BOX	JUNCTION BOX	UH	UNIT HEATER
K	KILO, 1,000	UON	UNLESS OTHERWISE NOTED
KVA	KILO VOLT AMPERES	US	UNIT SUBSTATION
KW	KILOWATTS	V	VOLTAGE, VOLTS
KWH	KILOWATT HOUR	VAR	VAR METER
KCMIL	1,000 CIRCULAR MILS	VFD	VARIABLE FREQUENCY DRIVE
LC	LIGHTING CONTACTOR	VP	VAPOR PROOF
LCB	LOCAL CONTROL BOARD	VS	VOLTMETER SWITCH, VARIABLE SPEED
LCP	LOCAL CONTROL PANEL	W	WATTS, WIRE
LED	LIGHTING EMITTING DIODE	WHD	WATTHOUR DEMAND METER
LOC	LOCAL	WHM	WATTHOUR METER
LO	LOCKOUT	WP	WEATHERPROOF
LOS	LOCKOUT STOP	XD	TRANSDUCER
LS	LEVEL SWITCH	XFMR	TRANSFORMER
LT	LIGHT	XFR	TRANSFER
LTG	LIGHTING	XMTR	TRANSDUCER
LTS	LIGHTS	XPDR	TRANSPONDER
M	MOTOR CONTACTOR COIL	Y	WYE
MA	MILLIAMPS		
MAN	MANUAL		
MAG	MAGNETIC		
MAX	MAXIMUM		
MCC	MOTOR CONTROL CENTER		
MCB	MAIN CIRCUIT BREAKER		
MCP	MOTOR CIRCUIT PROTECTOR		
MD	MOTORIZED DAMPER		
MDP	MAIN DISTRIBUTION PANEL		
MH	MANHOLE		
MH	MOUNTING HEIGHT		
MIN	MINIMUM, MINUTES		
MLO	MAIN LUGS ONLY		
MOV	MOTOR OPERATED VALVE		
MR	MULTI-RATIO		
MS	MOTOR STARTER		
MMS	MANUAL MOTOR STARTER		
MTD	MOUNTED		
MTR	MOTOR		
MTS	MANUAL TRANSFER SWITCH		
MUX	MULTIPLEXING PANEL		

ELECTRICAL LEGEND

SYMBOL	DESCRIPTIONS
	A = REFERENCE TO LIGHTING FIXTURE SCHEDULE
	3 = LIGHTING PANEL CIRCUIT NUMBER
	e = SWITCH ASSOCIATED WITH FIXTURE CONTROL
	1' x 4' LED FIXTURE, SURFACE MOUNTED
	LUMINAIRE, CEILING MOUNTED (SURFACE)
	LUMINAIRE, EXTERIOR WALL MOUNTED (SURFACE)
	EMERGENCY LIGHTING
	POWERED EMERGENCY EXIT SIGN
	SMOKE DETECTOR
	SPECIAL SINGLE GANG DEVICE BOX
	DUPLEX RECEPTACLE, MT. HEIGHT SHOWN
	GFCI DUPLEX RECEPTACLE, MT. HEIGHT SHOWN
	DUPLEX RECEPTACLE, WEATHERPROOF, GROUND FAULT TYPE
	SPECIAL RECEPTACLE AS NOTED
	SINGLE POLE SWITCH
	THREE-WAY SWITCH
	LIGHTED SWITCH
	MANUAL MOTOR STARTER WITH OVERLOADS
	CONDUIT SEAL
	CONDUIT UNION
	TRANSFORMER
	PHOTOCELL
	DISTRIBUTION PANEL
	LIGHTING AND BRANCH CIRCUIT PANEL
	TERMINAL CABINET, TYPE AS SPECIFIED
	MOTOR, FRACTIONAL HORSEPOWER
	FIRE/SECURITY ALARM CONTROL PANEL
	THERMOSTAT
	JUNCTION BOX
	PULL BOX
	SHUNT TRIP
	HEAT DETECTOR
	FIRE ALARM PULL STATION
	LIGHTING CONTACTOR
	MOTION SWITCH, ADJUSTABLE "ON" TIMER
	EXISTING BRANCH CIRCUIT FEEDER OR DUCT EXPOSED
	EXISTING OVERHEAD POWER
	BRANCH CIRCUIT, FEEDER OR DUCT CONCEALED OR BELOW GRADE
	BRANCH CIRCUIT FEEDER OR DUCT
	EXISTING EQUIPMENT, CONDUIT AND WIRING TO BE REMOVED
	GROUND BUS (STRAP)
	GROUND ROD C/W GROUND ROD TAP TYPE CONNECTOR & GROUND ELECTRODE TEST BOX WITH CAST IRON COVER
	GROUND ROD C/W GROUND ROD TAP TYPE CONNECTOR
	COMPRESSION TYPE C-TAP COPPER GROUND CONNECTOR
	#4/0 AWG BARE STRANDED COPPER GROUND CONDUCTOR (PIGTAIL) STUBBING-UP FROM GROUND. CONNECT TO REBAR IN CONCRETE STRUCTURE/SLAB.
	SAFETY SWITCH OR DISCONNECT
	HAND - OFF AUTO SELECTOR SWITCH
	UNDERGROUND TELEPHONE CONDUIT

LINE LEGEND

SYMBOL	DESCRIPTIONS
	CONDUIT
	EQUIPMENT OUTLINE
	VENDOR PACKAGED EQUIPMENT
	FUSE
	KIRK KEY INTERLOCK
	CURRENT TRANSFORMER
	CIRCUIT BREAKER
	VOLTAGE TRANSFORMER
	AUTOTRANSFORMER WITH MULTIPLE TAPS SHOWN
	RELAY/CONTROL CONTACT, N.C. OR N.O. AS INDICATED
	GROUND CONNECTION
	SWITCH
	TRANSFORMER
	CONTROL DEVICE, LOCATION AND TYPE AS INDICATED ON THE PLANS OR DIAGRAM.
	FIELD INSTRUMENT, PRESSURE, TEMPERATURE, FLOW, LEVEL SWITCH OR TRANSMITTER AS INDICATED ON THE DIAGRAM OR PLANS.
	DENOTES BREAKER SHALL BE SOLID STATE TRIP
	DENOTES BREAKER SHALL BE EQUIPPED WITH GROUND FAULT MONITORING AND TRIP
	DENOTES BREAKER SHALL BE EQUIPPED WITH SHUNT TRIP - INCLUDING CONTROL POWER TRANSFORMER AND FIELD WIRING TERMINALS FOR REMOTE PUSHBUTTON.
	PROTECTIVE RELAY, TYPE AS NOTED BY EE: 50 - INSTANTANEOUS OVERCURRENT 49 - TEMPERATURE 63 - SUDDEN PRESSURE 63X - SUDDEN PRESSURE AUX RELAY 71 - LIQUID LEVEL
	MOTOR, TYPE AS REQUIRED BY THE APPLICATION, HORSEPOWER AND FULL LOAD AMPERES () AS SHOWN ON THE DIAGRAM.
	GENERATOR, KW AS SHOWN ON THE DIAGRAM.
	TRANSFER SWITCH, AMPERE RATING AS NOTED: MTS: MANUAL ATS: AUTOMATIC

GENERAL NOTES

- PRIOR TO BEGINNING EXCAVATION, VERIFY LOCATIONS OF EXISTING AND NEW UNDERGROUND UTILITIES, PIPING, ETC. PROVIDE EXCAVATION, BACKFILL, SUPPORT, SAWCUTTING, PATCHING, PAVING, ETC. AS REQUIRED. BACKFILL EXCAVATIONS TO 90 PERCENT COMPACTION AND PATCH TO MATCH EXISTING CONDITIONS.
- ALL DIRT AND DEBRIS SHALL BE REMOVED FROM ALL MANHOLES AND PULLBOXES. DISPOSE OF AS DIRECTED BY THE OWNER.
- DO NOT SCALE DRAWINGS. VERIFY DIMENSIONS IN FIELD PRIOR TO BEGINNING WORK.
- FINAL CONNECTIONS TO EQUIPMENT SHALL BE PER MANUFACTURER'S APPROVED WIRING DIAGRAMS, DETAILS AND INSTRUCTIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE MATERIALS AND EQUIPMENT COMPATIBLE WITH EQUIPMENT ACTUALLY SUPPLIED.
- CONTRACTOR SHALL VISIT JOB SITE PRIOR TO BID AND VERIFY THAT CONDITIONS ARE AS INDICATED. CONTRACTOR SHALL INCLUDE IN HIS BID COSTS, THE REQUIREMENTS TO MAKE HIS WORK MEET THE EXISTING CONDITIONS.
- THIS IS A STANDARD LEGEND SHEET. SOME SYMBOLS OR ABBREVIATIONS MAY APPEAR ON THIS SHEET AND NOT ON THE PLANS.

LIGHTING NOTES

- INSTALLATION LOCATIONS SHOWN ON THE DRAWING ARE APPROXIMATE AND THE CONTRACTOR IS EXPECTED TO EXERCISE SOUND JUDGEMENT TO INSTALL DEVICES AS CLOSELY AS POSSIBLE TO THE INDICATED POSITION ON THE DRAWINGS.
- UNLESS SHOWN OTHERWISE ON THE DRAWINGS, MOUNTING HEIGHTS OF OUTLETS SHALL BE AS FOLLOWS.

- A) CONVENIENCE OUTLETS 1' - 0"
- B) LIGHT SWITCHES 4' - 6"
- C) THERMOSTATS 5' - 6"
- D) 120 VOLTS OUTLETS FOR EMERGENCY LIGHT UNITS 8' - 2"

ELECTRICAL GENERAL NOTES

- PRIOR TO BID, VISIT JOB SITE AND BECOME FAMILIAR WITH THE EXISTING CONDITIONS. NO EXTRA COMPENSATION WILL BE ALLOWED FOR FAILURE TO COMPLY WITH THIS REQUIREMENT.
- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE (N.E.C.) AND GOVERNING MUNICIPAL, STATE AND LOCAL CODES, AND SHALL BE PERFORMED IN A THOROUGH AND WORKMAN LIKE MANNER BY COMPETENT WORKMEN.
- CONTRACTOR SHALL GUARANTEE THE ENTIRE ELECTRICAL WORK, INCLUDING PARTS AND LABOR FOR A PERIOD OF TWO (2) YEARS AFTER FINAL WRITTEN ACCEPTANCE OF OWNER.
- ALL WORK SHALL BE PERFORMED BY A LICENSED ELECTRICAL CONTRACTOR IN A FIRST CLASS MANNER AND SHALL BE COMPLETED AND FULLY OPERATIVE TO THE ACCEPTANCE OF OWNER.
- MAINTAIN A COMPLETE SET OF ELECTRICAL PRINTS FOR INDICATING ALL CHANGES. USE COLORED PENCILS TO MARK CHANGES AT THE TIME OF EXECUTION AND DELIVER THE SET TO ENGINEER UPON COMPLETION. SUBMIT AS-BUILT UPDATED DRAWINGS MONTHLY.
- ALL MATERIALS SHALL BE NEW, OF AMERICAN MANUFACTURE, AND BEAR THE UNDERWRITER'S LABORATORY AND UNION LABELS AS APPLICABLE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE DELIVERY SCHEDULES OF MATERIALS.
- LIGHTING FIXTURES SHALL BE COMPLETE WITH ALL NECESSARY WIRING LAMP HOLDERS, REFLECTORS, GLASSWARE AND MOUNTING ACCESSORIES AS REQUIRED AND POLES.
- CONTRACTOR SHALL MAKE ALL NECESSARY EXCAVATIONS, CUTTING AND DO ALL REATTACHING AS NECESSARY FOR THE PROPER EXECUTION OF THIS WORK.
- AFTER COMPLETION OF THE INSTALLATION, THE SYSTEM SHALL TEST FREE FROM SHORT CIRCUITS AND GROUNDS.
- ALL ELECTRICAL CONDUCTORS SHALL BE INSTALLED IN CONDUIT. CONDUITS SHALL COMPLY WITH N.E.C. PVC CONDUIT SHALL BE SCHEDULE 40 AND SHALL BE USED WHERE CONDUIT IS RUN IN CONCRETE SLABS, OR UNDERGROUND. ELECTRICAL METALLIC TUBING CONDUIT WITH COMPRESSION FITTINGS SHALL BE USED ON ALL INTERIOR WIRING. GRS CONDUIT SHALL BE USED ON ALL EXTERIOR WIRING.
- SHOP DRAWINGS AND MANUFACTURER'S LITERATURE: SUBMIT FOR APPROVAL, PROPERLY IDENTIFIED MANUFACTURER'S LITERATURE GIVING MATERIALS, FINISHES, ACCESSORIES AND INSTALLATION DIRECTIONS FOR ALL ELECTRICAL EQUIPMENT.
- ALL CONDUCTORS SHALL BE COPPER. NO CONDUCTOR SHALL BE SMALLER THAN No. 12 AWG. INSTALL A GROUNDING CONDUCTOR IN ALL CONDUITS SIZED PER N.E.C. INSULATION SHALL BE 600V. RATED AND SHALL BE XHHW-2.
- VERIFY SERVICE VOLTAGE BEFORE ORDERING ANY ELECTRICAL EQUIPMENT.
- SPLICES FOR No. 6 AWG OR SMALLER SHALL BE MADE WITH UL LISTED MECHANICAL PRESSURE CONNECTORS. SPLICES FOR No. 4 AWG OR LARGER SHALL BE MADE WITH MECHANICAL PRESSURE, SOLDERLESS CONNECTORS, AND SHALL BE BURNDY SERVITS OR APPROVED EQUAL.
- SAFETY SWITCHES SHALL BE HEAVY DUTY, FUSED OR NON-FUSED AND SIZES AS INDICATED.
- GROUNDING SHALL BE IN ACCORDANCE WITH ARTICLE 250 OF THE N.E.C.
- ELECTRICAL CONTRACTOR TO COORDINATE HIS WORK WITH ALL OTHER TRADES.
- ANY DISCREPANCIES ARE TO BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THE WORK.
- PRIOR TO INSTALLATION OF ROUGH ELECTRICAL WIRING, CHECK NAMEPLATE DATA ON A/C EQUIPMENT TO OBTAIN CORRECT WIRE SIZES AND OVERCURRENT PROTECTION.
- ALL CONDUIT ROUTES SHOWN ARE APPROXIMATE ONLY. CONTRACTOR SHALL FIELD VERIFY FINAL ROUTE.
- CONDUIT RUNS SHOWN ARE SCHEMATIC AND DO NOT INDICATE THE NECESSARY FITTINGS AND JUNCTION BOXES THAT ARE INCLUDED IN THE SCOPE OF THE WORK.
- CONTRACTOR SHALL PERMANENTLY IDENTIFY ALL WIRING WITH THE SOURCE AND CIRCUIT AT ALL ELECTRICAL EQUIPMENT, PULL AND JUNCTION BOXES AND ELECTRICAL TERMINATIONS PROVIDED OR ASSOCIATED WITH THIS CONSTRUCTION.
- ALL METAL RACEWAYS, INCLUDING CONDUIT, WIRE TROUGHS, WIREMOLD, ETC., SHALL BE GROUNDED. ALL CONNECTIONS IN METAL RACEWAYS SHALL BE COMPLETED IN SUCH A MANNER AS TO MAINTAIN A CONTINUOUS PATH TO GROUND THROUGHOUT THE ENTIRE LENGTH OF THE RACEWAY.

REVISIONS:	



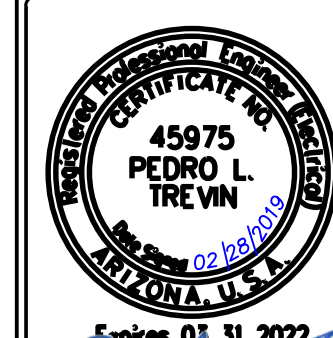
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PROJECT:
BOOSTER STATION IC REPLACEMENT

ELECTRICAL ABBREVIATIONS, SYMBOLS LEGEND, AND GENERAL NOTES

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PROJECT NO.
WT7440

DWG NO.
E-1

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