

PIPE PENETRATION THROUGH WALLS BELOW GRADE

NTS

VA



U.S. Department
of Veterans Affairs

DETAIL TITLE / PIPE PENETRATION THROUGH WALLS BELOW GRADE

SCALE: NONE

DATE ISSUED: SEPTEMBER 1, 2020

CAD DETAIL NO.:

SD220511-01.DWG

PLUMBING ABBREVIATIONS

ABS:	ACRYLONITRILE BUTADIENE STYRENE	DB:	DECIBELS
AC:	ALTERNATING CURRENT	DB(A):	DECIBELS (A WEIGHTED)
ACR:	AIR CONDITIONING AND REFRIGERATION	DDC:	DIRECT DIGITAL CONTROL
A/E:	ARCHITECT/ENGINEER	DFU:	DRAINAGE FIXTURE UNITS
AFF:	ABOVE FINISH FLOOR	DI:	DIGITAL INPUT
AFG:	ABOVE FINISH GRADE	DI:	DEIONIZED WATER
AG:	AIR GAP	DISS:	DIAMETER INDEX SAFETY SYSTEM
AI:	ANALOG INPUT	DN:	DIAMETER NOMINAL
AISI:	AMERICAN IRON AND STEEL INSTITUTE	DO:	DIGITAL OUTPUT
AO:	ANALOG OUTPUT	DOE:	DEPARTMENT OF ENERGY
ASHRAE:	AMERICAN SOCIETY OF HEATING REFRIGERATION, AIR CONDITIONING ENGINEERS	DVD:	DIGITAL VIDEO DISC
ASJ:	ALL SERVICE JACKET	DW:	DISHWASHER
ASME:	AMERICAN SOCIETY OF MECHANICAL ENGINEERS	DWG:	DRAWING
ASPE:	AMERICAN SOCIETY OF PLUMBING ENGINEERS	DWV:	DRAINAGE, WASTE AND VENT
ASR:	AUTOMATIC SPRINKLER RISER	ECC:	ENGINEERING CONTROL CENTER AKA BAS
AWG:	AMERICAN WIRE GAUGE	EL:	ELEVATION
BACNET:	BUILDING AUTOMATION AND CONTROL NETWORK	EPA:	ENVIRONMENTAL PROTECTION AGENCY
BAG:	SILVER-COPPER-ZINC BRAZING ALLOY	EPACT:	ENERGY POLICY ACT
BAS:	BUILDING AUTOMATION SYSTEM	EPDM:	ETHYLENE PROPYLENE DIENE MONOMER
BCUP:	SILVER-COPPER-PHOSPHORUS BRAZING ALLOY	EPT:	ETHYLENE PROPYLENE TERPOLYMER
BFP:	REDUCED PRESSURE BACKFLOW PREVENTER	ETO:	ETHYLENE OXIDE
BHP:	BRAKE HORSEPOWER	EX:	EXISTING
BTU:	BRITISH THERMAL UNIT	F:	FAHRENHEIT
BTU/H:	BRITISH THERMAL UNIT PER HOUR	FAR:	FEDERAL ACQUISITION REGULATIONS
BSG:	BOROSILICATE GLASS PIPE	FCO:	FLOOR CLEANOUT
C:	CELSIUS	FD:	FLOOR DRAIN
CD:	COMPACT DISK	FDC:	FIRE DEPARTMENT (HOSE) CONNECTION
CDA:	COPPER DEVELOPMENT ASSOCIATION	FNPT:	FEMALE NATIONAL PIPE THREAD
CGA:	COMPRESSED GAS ASSOCIATION	FOP:	FUEL OIL PUMP
CFM:	CUBIC FEET PER MINUTE	FOR:	FUEL OIL RETURN
CO:	CLEANOUT	FOS:	FUEL OIL SUPPLY
COR:	CONTRACTING OFFICER'S REPRESENTATIVE	FOV:	FUEL OIL VENT
CPVC:	CHLORINATED POLYVINYL CHLORIDE	FPM:	FLUOROELASTOMER POLYMER
CR:	CHLOROPRENE	FS:	FLOW SWITCH
CRS:	CORROSION RESISTANT STEEL	FSK:	FOIL-SCRIM-KRAFT FACING
CV:	CONTROL VALVE	FSS:	VA CONSTRUCTION & FACILITIES MANAGEMENT, FACILITY STANDARDS SERVICE
CXA:	COMMISSIONING AGENT	FU:	FIXTURE UNITS

VA



U.S. Department
of Veterans Affairs

DETAIL TITLE / PLUMBING ABBREVIATIONS

SCALE: NONE

DATE ISSUED: SEPTEMBER 1, 2020 CAD DETAIL NO.: SD220511-02.DWG

PLUMBING ABBREVIATIONS

GAL:	GALLON	N2:	NITROGEN
GCO:	GRADE CLEANOUTS	N2O:	NITROGEN OXIDE
GPD:	GALLONS PER DAY	NC:	NORMALLY CLOSED
GPH:	GALLONS PER HOUR	NF:	OIL FREE DRY (NITROGEN)
GPM:	GALLONS PER MINUTE	NG:	NATURAL GAS
GPR:	GAS PRESSURE REGULATOR	NIC:	NOT IN CONTRACT
GRS:	GAS REGULATOR STATION	NO:	NORMALLY OPEN
GT:	GREASE TRAP	NOM:	NOMINAL
GVTR:	GAS VENT THROUGH ROOF	NPTF:	NATIONAL PIPE THREAD FEMALE
		NPS:	NOMINAL PIPE SIZE
H&CW:	HOT AND COLD WATER	NPT:	NOMINAL PIPE THREAD
HB:	HOSE BIBB	NTS:	NOT TO SCALE
HD:	HUB DRAIN		
HDPE:	HIGH DENSITY POLYETHYLENE	O2:	OXYGEN
HEFP:	HEALTHCARE ENVIRONMENT AND FACILITIES PROGRAM (REPLACEMENT FOR OCAMES)	OC:	ON CENTER
		OCAMES:	REPLACED BY HEFP
HEX:	HEAT EXCHANGER	OD:	OUTSIDE DIAMETER
HG:	MERCURY	OR:	OPERATING ROOM
HOA:	HANDS-OFF-AUTOMATIC	OSD:	OPEN SIGHT DRAIN
HP:	HORSEPOWER	OS&Y:	OUTSIDE STEM AND YOKE
HVE:	HIGH VOLUME EVACUATION	OXY:	OXYGEN
HWCP:	HOT WATER CIRCULATING PUMP		
HYD:	HYDRANT	PA:	PASCAL
HZ:	HERTZ	PBPU:	PREFABRICATED BEDSIDE PATIENT UNITS
ID:	INSIDE DIAMETER	PD:	PRESSURE DROP OR DIFFERENCE
IE:	INVERT ELEVATION	PDI:	PLUMBING AND DRAINAGE INSTITUTE
INV:	INVERT	PG:	PRESSURE GAUGE
IPC:	INTERNATIONAL PLUMBING CODE	PH:	POWER OF HYDROGEN
IPS:	IRON PIPE SIZE	PID:	PROPORTIONAL-INTEGRAL-DIFFERENTIAL
		PLC:	PROGRAMMABLE LOGIC CONTROLLERS
KG:	KILOGRAM	PP:	POLYPROPYLENE
KPA:	KILOPASCAL	PPB:	PARTS PER BILLION
KW:	KILOWATT	PPM:	PARTS PER MILLION
KWH:	KILOWATT HOUR	PRV:	PRESSURE REDUCING VALVE
		PSI:	POUNDS PER SQUARE INCH
LAV:	LAVATORY	PSIA:	POUNDS PER SQUARE INCH ATMOSPHERE
LB:	POUND	PSIG:	POUNDS PER SQUARE INCH GAUGE
LBS/HR:	POUNDS PER HOUR	PTFE:	POLYTETRAFLUOROETHYLENE
LNG:	LIQUID NATURAL GAS	PVC:	POLYVINYL CHLORIDE
L/MIN:	LITERS PER MINUTE	PVDF:	POLYVINYLIDENE FLUORIDE
L/S:	LITERS PER SECOND	PW:	POTABLE WATER
M:	METER	RAD:	RADIANS
MA:	MEDICAL AIR	RD:	ROOF DRAIN
MAV:	MEDICAL AIR VENT	RO:	REVERSE OSMOSIS
MAX:	MAXIMUM	RPM:	REVOLUTIONS PER MINUTE
MBH:	1000 BTU PER HOUR	RTD:	RESISTANCE TEMPERATURE DETECTORS
MER:	MECHANICAL EQUIPMENT ROOM		
MFG:	MANUFACTURER	RTRP:	REINFORCED THERMOSETTING RESIN PIPE
MG:	MILLIGRAM		
MG/L:	MILLIGRAMS PER LITER		
ML:	MILLILITER		
MM:	MILLIMETER		
MIN:	MINIMUM		
MV:	MEDICAL VACUUM		

VA



U.S. Department
of Veterans Affairs

DETAIL TITLE / PLUMBING ABBREVIATIONS

SCALE: NONE

DATE ISSUED: SEPTEMBER 1, 2020 CAD DETAIL NO.: SD220511-03.DWG

PLUMBING ABBREVIATIONS

SAN:	SANITARY SEWER	W:	WASTE
SCFM:	STANDARD CUBIC FEET PER MINUTE	WAGD:	WASTE ANESTHESIA GAS DISPOSAL
SDI:	SILT DENSITY INDEX	WC:	WATER CLOSET
SDMH:	STORM DRAIN MANHOLE	WCO:	WATER CLEANOUT
SF:	SQUARE FEET	WG:	WATER GAUGE
SMACNA:	SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION	WH:	WALL HYDRANT
SPEC:	SPECIFICATION	WOG:	WATER, OIL, GAS
SPS:	STERILE PROCESSING SERVICES	WPD:	WATER PRESSURE DROP
SQFT:	SQUARE FEET	WS:	WASTE STACK
SS:	STAINLESS STEEL	WSFU:	WATER SUPPLY FIXTURE UNITS
STD:	STANDARD	YCO:	YARD CLEANOUT
SUS:	SAYBOLT UNIVERSAL SECOND	YH:	YARD HYDRANT
SW:	STORM WATER		
SWP:	STEAM WORKING PRESSURE		
TCV:	TEMPERATURE CONTROL VALVE		
TD:	TRENCH DRAIN		
TDH:	TOTAL DYNAMIC HEAD		
TEFC:	TOTALLY ENCLOSED FAN-COOLED		
TEMP:	TEMPERATURE		
TFE:	TETRAFLUOROETHYLENE		
THERM:	100,000 BTU		
THHN:	THERMOPLASTIC HIGH-HEAT RESISTANT NYLON COATED WIRE		
THWN:	THERMOPLASTIC HEAT & WATER RESISTANT NYLON COATED WIRE		
TMV:	THERMOSTATIC MIXING VALVE		
T/P:	TEMPERATURE AND PRESSURE		
TP:	TRAP PRIMER		
TSTAT:	THERMOSTAT		
TYP:	TYPICAL		
USDA:	U.S. DEPARTMENT OF AGRICULTURE		
V:	VOLT		
VA:	VETERANS ADMINISTRATION		
VA CFM:	VA CONSTRUCTION & FACILITIES MANAGEMENT		
VA CFM:	VA CFM CONSULTING SUPPORT		
CSS:	SERVICE		
VAC:	VACUUM		
VAC:	VOLTAGE IN ALTERNATING CURRENT		
VAMC:	VETERANS ADMINISTRATION MEDICAL CENTER		
VA TIL:	WWW.CFM.VA.GOV/TIL/INDEX.ASP		
VHA:	VETERANS HEALTH ADMINISTRATION		
VSD:	VARIABLE SPEED DRIVE		
VTR:	VENT THROUGH ROOF		

VA



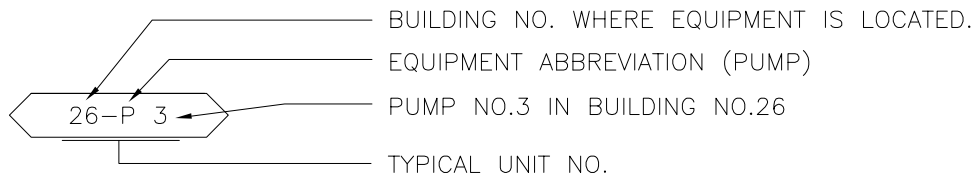
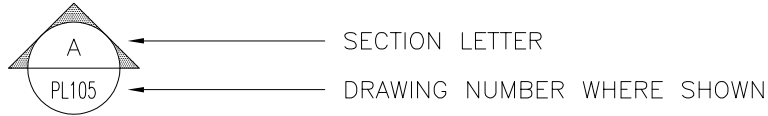
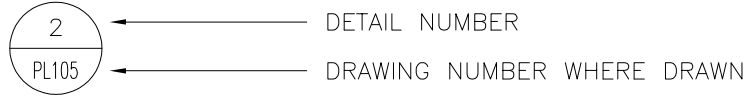
U.S. Department
of Veterans Affairs

DETAIL TITLE / PLUMBING ABBREVIATIONS

SCALE: NONE

DATE ISSUED: SEPTEMBER 1, 2020 CAD DETAIL NO.: SD220511-04.DWG

DRAWING SYMBOLS



U.S. Department
of Veterans Affairs

DETAIL TITLE / DRAWING SYMBOLS

SCALE: NONE

DATE ISSUED: SEPTEMBER 1, 2020 CAD DETAIL NO.: SD220511-05.DWG

PLUMBING PIPING SYMBOLS

— — — — —	DOMESTIC COLD WATER, COLD WATER
— — — — —	DOMESTIC HOT WATER, HOT WATER
— — — — —	DOMESTIC HOW WATER RETURN, HOT WATER RETURN
--- MA --- MA --- MA ---	MEDICAL AIR
— MV — MV — MV —	MEDICAL VACUUM
--- LA --- LA --- LA ---	LABORATORY AIR
— LV — LV — LV —	LABORATORY VACUUM
— OA — OA — OA —	ORAL EVACUATION
--- IA --- IA --- IA ---	INDUSTRIAL AIR
— D — D — D —	DRAIN
— — — — —	VENT (SANITARY)
— SS — SS — SS —	SOIL, WASTE, OR SANITARY SEWER
--- SAN --- SAN --- SAN ---	SANITARY SEWER, BELOW GRADE
— SD — SD — SD —	STORM WATER
--- SD --- SD --- SD ---	STORM WATER, BELOW GRADE
— SCW — SCW — SCW —	SOFTEN COLD WATER
— FCW — FCW — FCW —	FILTERED COLD WATER
— DWS — DWS — DWS —	DRINKING WATER SUPPLY
--- DWR --- DWR --- DWR ---	DRINKING WATER RETURN
— TWS — TWS — TWS —	TEMPERED WATER SUPPLY
--- TWR --- TWR --- TWR ---	TEMPERED WATER RETURN
— N ₂ O — N ₂ O — N ₂ O —	NITROUS OXIDE
— O — O — O —	OXYGEN
— N ₂ — N ₂ — N ₂ —	NITROGEN
— NG — NG — NG —	NATURAL GAS
--- NG --- NG --- NG ---	NATURAL GAS, BELOW GRADE
— FOD — FOD — FOD —	FUEL OIL DISCHARGE
— FOS — FOS — FOS —	FUEL OIL SUPPLY
— FOV — FOV — FOV —	FUEL OIL VENT
--- FOR --- FOR --- FOR ---	FUEL OIL RETURN

VA



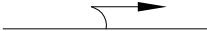


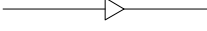
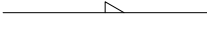
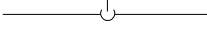


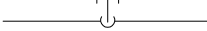
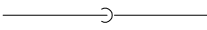
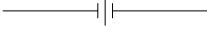



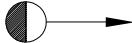



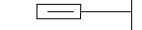
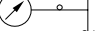

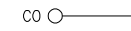
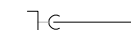
U.S. Department
of Veterans Affairs

DETAIL TITLE / PLUMBING PIPING SYMBOLS


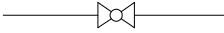

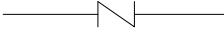


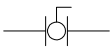
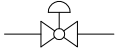
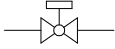
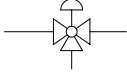
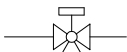

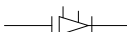




SCALE: NONE

DATE ISSUED: SEPTEMBER 1, 2020 CAD DETAIL NO.: SD220511-06.DWG

GENERAL PLUMBING SYMBOLS

	DIRECTION OF PIPE PITCH (DOWN)
	DIRECTION OF FLOW
	ANCHOR
	REDUCER OR INCREASER
	ECCENTRIC REDUCER
	TOP CONNECTION, 45° OR 90°
	BOTTOM CONNECTION, 45° OR 90°
	SIDE CONNECTION
	CAPPED OUTLET
	RISE OR DROP IN PIPE
	UNION
	PIPE UP
	PIPE DOWN
	POINT OF CONNECTION BETWEEN NEW AND EXISTING WORK
	LIMIT OF DEMOLITION
	INVERTED BUCKET TRAP SET INCLUDING PIPING ACCESSORIES
	FLOAT & THERMOSTATIC TRAP SET INCLUDING PIPING ACCESSORIES
	STRAINER
	THERMOMETER
	PRESSURE GAGE
	FLOW ELEMENT
	CLEAN OUT
	HOSE BIB

PLUMBING VALVE SYMBOLS

	GATE VALVE
	GLOBE VALVE
	GATE VALVE WITH 3/4 " HOSE ADAPTER
	CHECK VALVE
	ANGLE GLOBE VALVE
	BUTTERFLY VALVE
	BALL VALVE
	MODULATING CONTROL VALVE
	TWO POSITION CONTROL VALVE
	THREE-WAY MODULATING CONTROL VALVE
	THREE-WAY TWO POSITION CONTROL VALVE
	PRESSURE REGULATING VALVE
	AUTOMATIC FLOW CONTROL VALVE
	PRESSURE RELIEF VALVE
	MANUAL AIR VENT
	TEST PLUG (PRESSURE/TEMPERATURE)
	AUTOMATIC AIR VENT

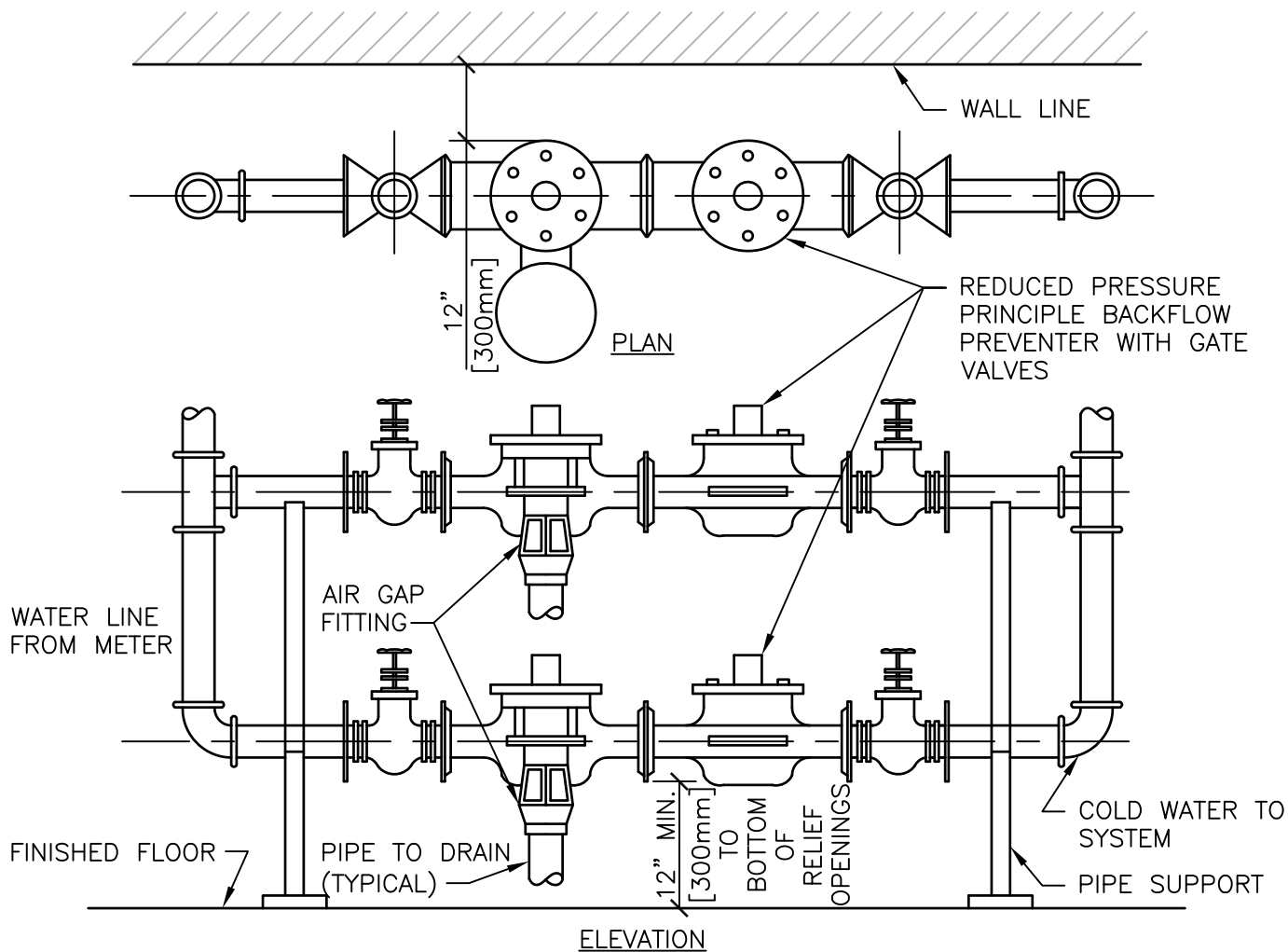


U.S. Department
of Veterans Affairs

DETAIL TITLE / PLUMBING VALVE SYMBOLS

SCALE: NONE

DATE ISSUED: SEPTEMBER 1, 2020 CAD DETAIL NO.: SD220511-08.DWG



#

BACKFLOW PREVENTER PIPING DETAIL

NTS



Department of
Veterans Affairs

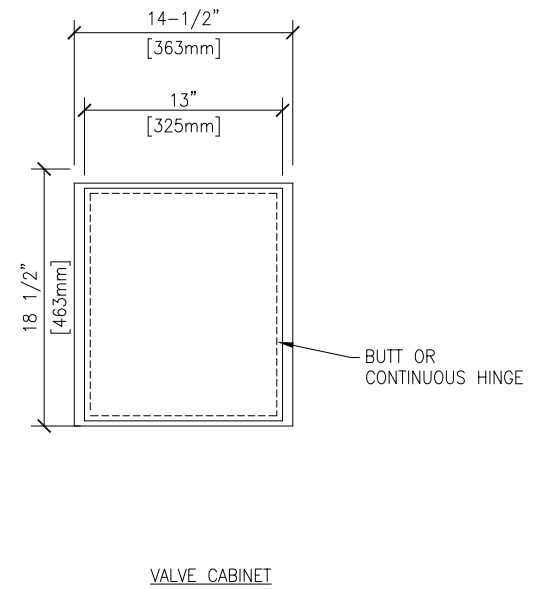
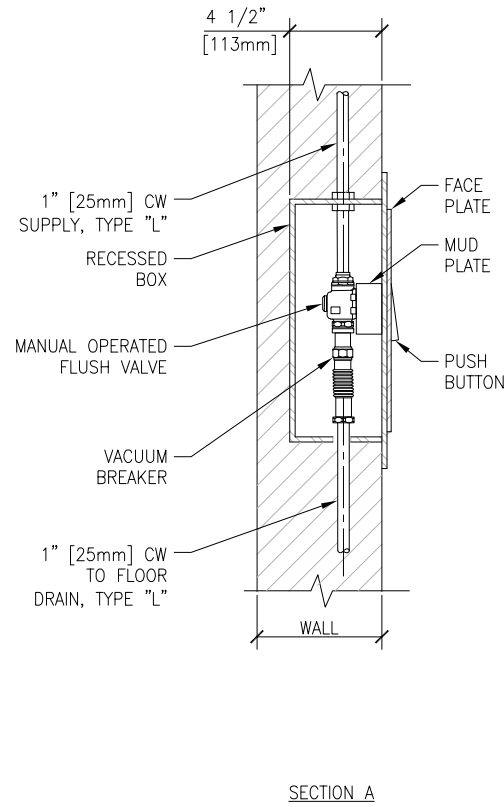
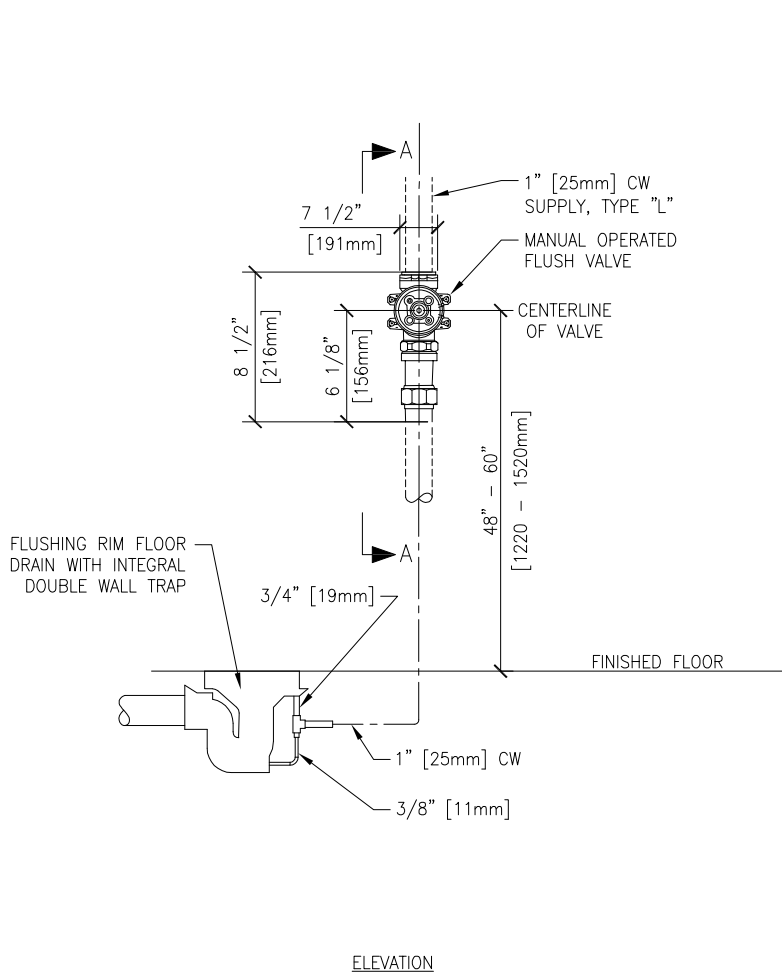
DETAIL TITLE / BACKFLOW PREVENTER PIPING DETAIL

SCALE: NONE

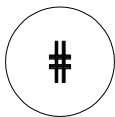
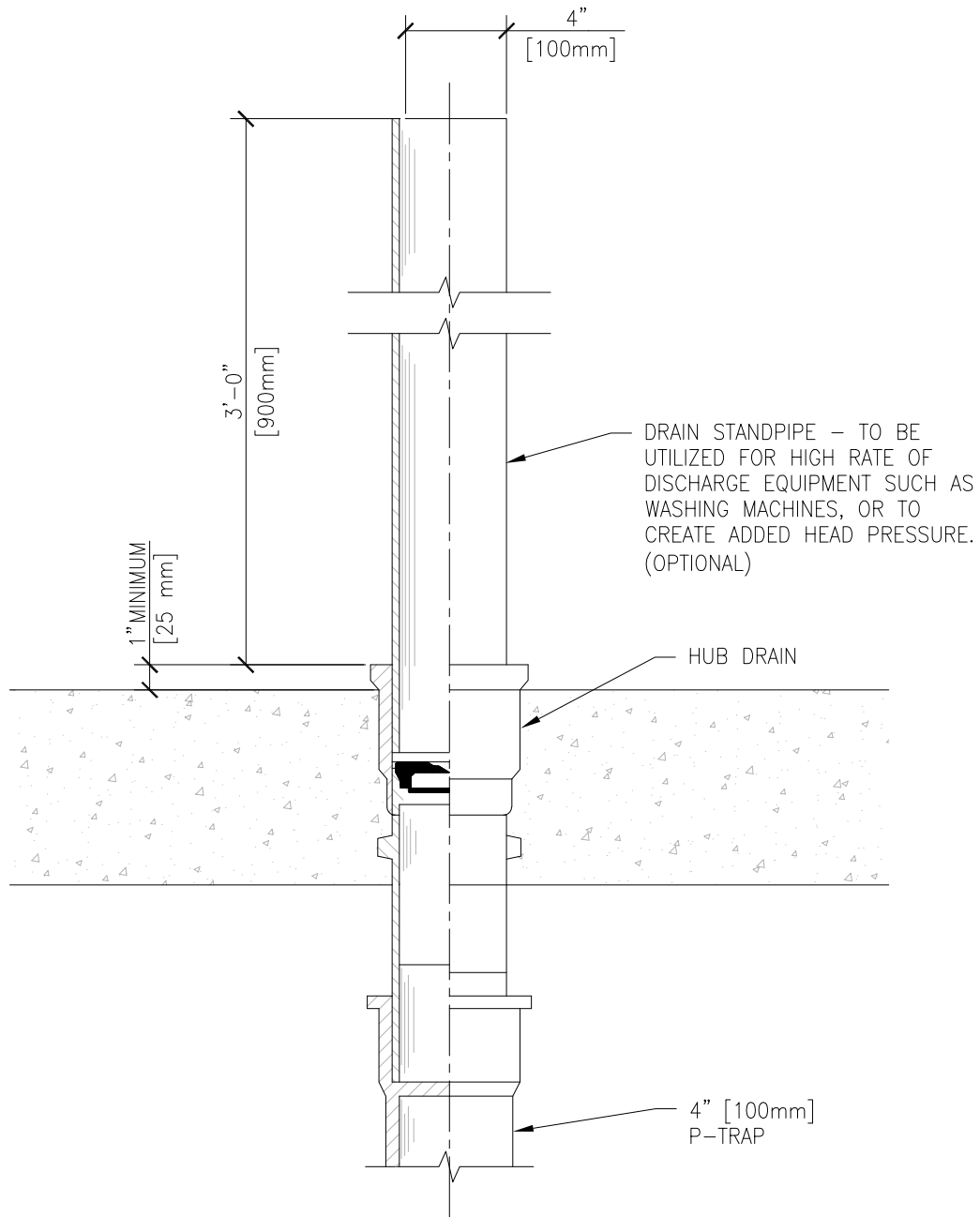
DATE ISSUED: DECEMBER 1, 2015

CAD DETAIL NO.:

SD221100-01.DWG



FLUSHING RIM FLOOR DRAIN "L" CYSTOSCOPY ROOM
NTS



TYPE "W" HUB DRAIN WITH STANDPIPE

NTS

VA

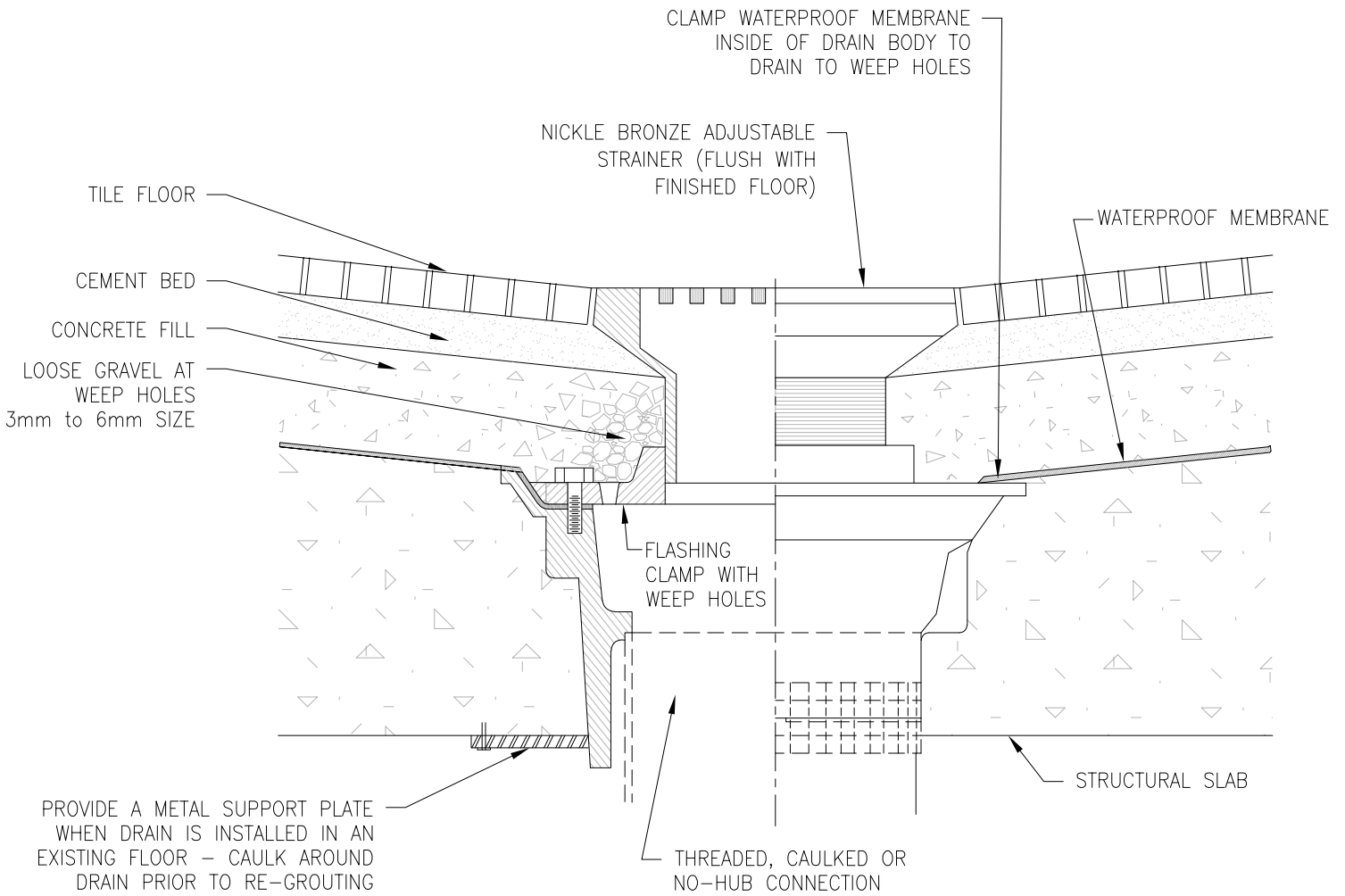


U.S. Department of Veterans Affairs

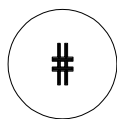
DETAIL TITLE / TYPE 'W' HUB DRAIN WITH STANDPIPE

SCALE: NONE

DATE ISSUED: SEPTEMBER 1, 2020 CAD DETAIL NO.: SD221300-02.DWG



NOTE:
SLOPE MEMBRANE LINER 2% TO DRAIN.



TYPE "C" FLOOR DRAIN DETAIL

NTS

VA

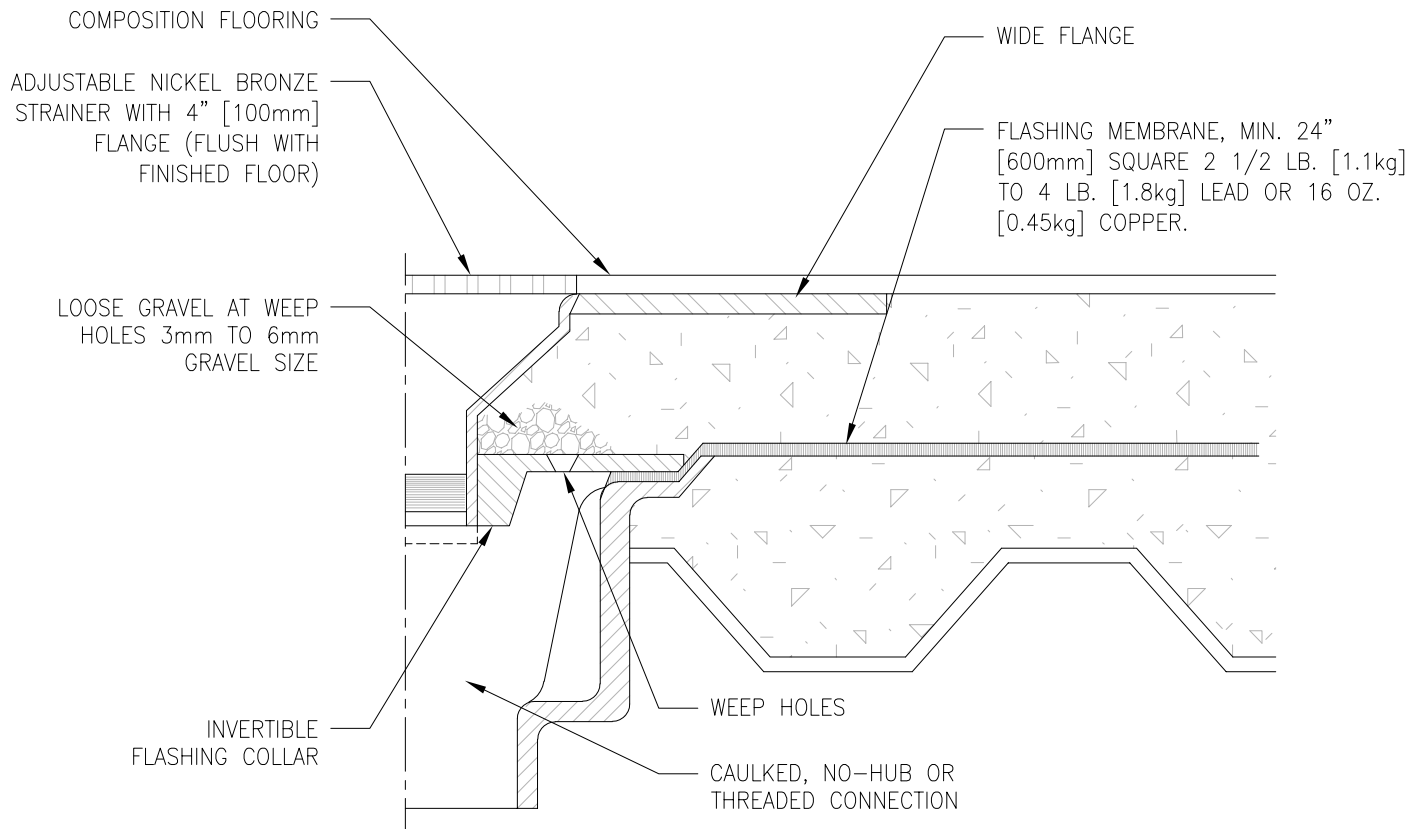


U.S. Department
of Veterans Affairs

DETAIL TITLE / TYPE "C" FLOOR DRAIN

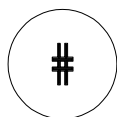
SCALE: NONE

DATE ISSUED: SEPTEMBER 1, 2020 CAD DETAIL NO.: SD221300-03.DWG



NOTES:

1. SLOPE MEMBRANE LINER 2% TO DRAIN.
2. PROVIDE FLASHING MEMBRANE WHEN DRAIN IS INSTALLED IN A NON-MEMBRANE FLOOR



TYPE "D" FLOOR DRAIN DETAIL

NTS

VA

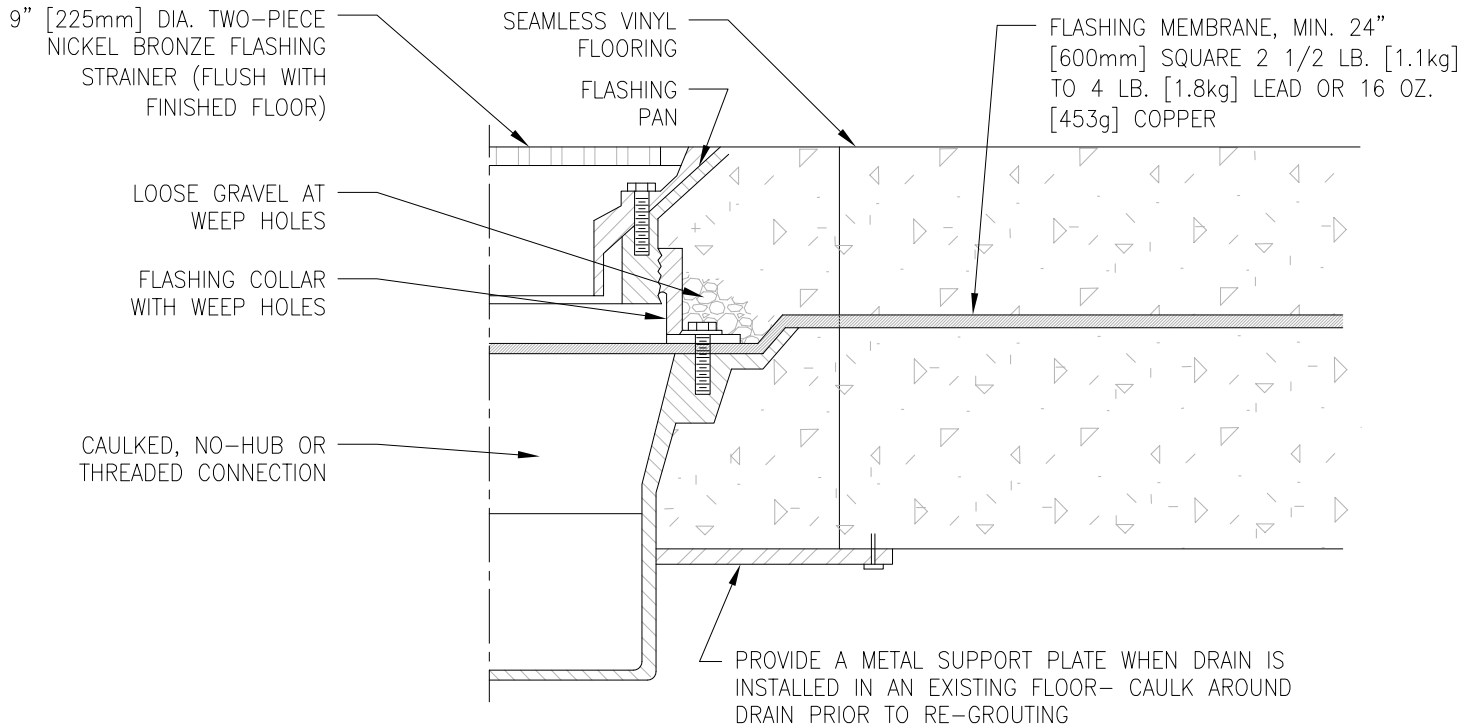


U.S. Department
of Veterans Affairs

DETAIL TITLE / TYPE "D" FLOOR DRAIN

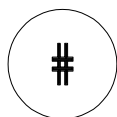
SCALE: NONE

DATE ISSUED: SEPTEMBER 1, 2020 CAD DETAIL NO.: SD221300-04.DWG



NOTES:

1. SLOPE MEMBRANE LINER 2% TO DRAIN.
2. PROVIDE FLASHING MEMBRANE WHEN DRAIN IS INSTALLED IN A NON-MEMBRANE FLOOR



TYPE "F" FLOOR DRAIN DETAIL

NTS

VA

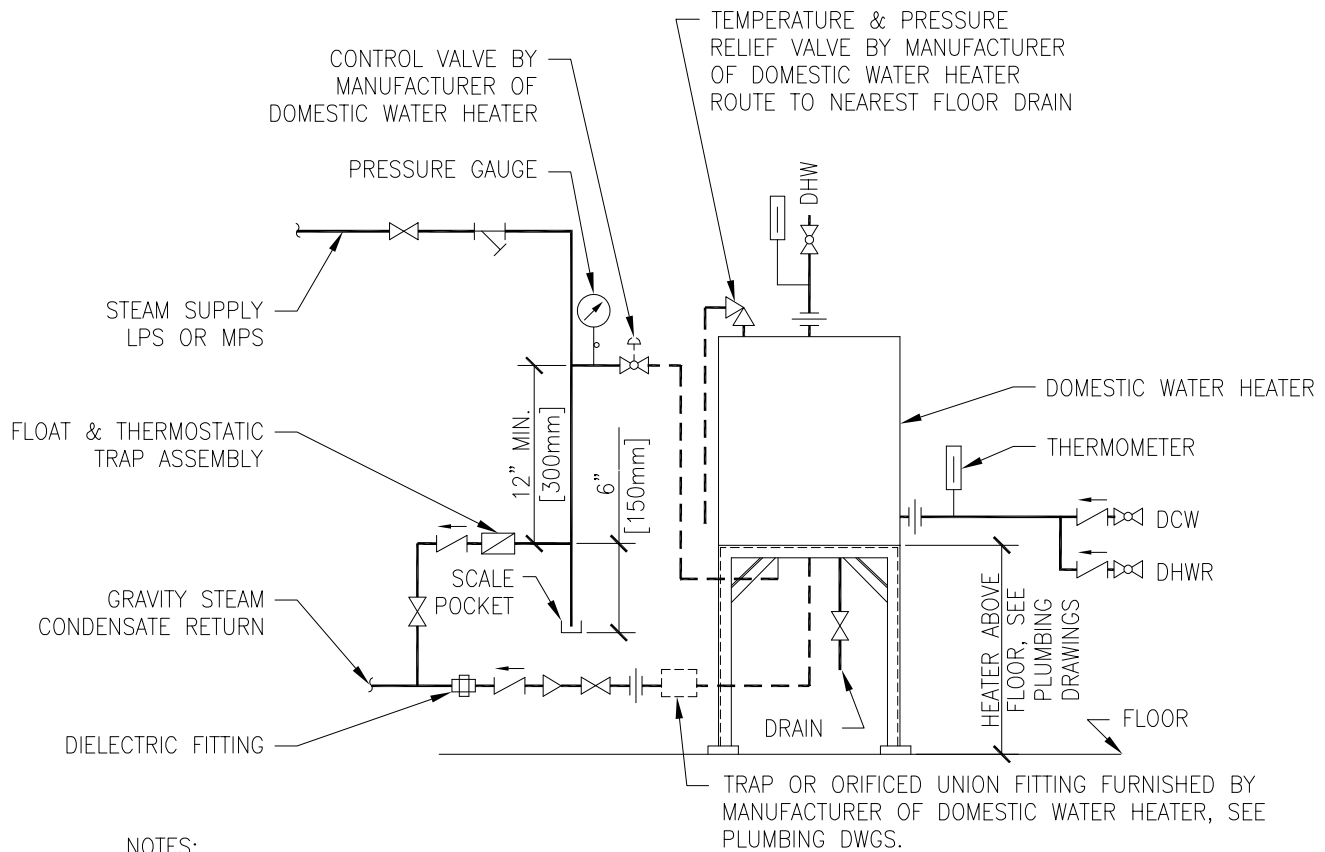


U.S. Department
of Veterans Affairs

DETAIL TITLE / TYPE "F" FLOOR DRAIN

SCALE: NONE

DATE ISSUED: SEPTEMBER 1, 2020 CAD DETAIL NO.: SD221300-05.DWG

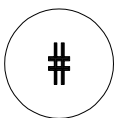


NOTES:

1. VERTICAL COIL TYPE DOMESTIC WATER HEATER IS SHOWN. IF HORIZONTAL TUBE BUNDLE TYPE IS FURNISHED, PIPING SHALL BE SIMILAR.
2. SEE PLUMBING DRAWINGS FOR PIPING CONNECTIONS.
3. PIPING TO UPPER HEATER HEAD SHOULD BE PROVIDED WITH UNION OR FLANGES, LOCATED OUTSIDE THE OUTER DIAMETER OF HEAD TO FACILITATE REMOVAL OF HEAD AND SHELL.
4. PIPING BETWEEN CONTROL VALVE AND HEATER CONNECTION SHOULD BE AS SHORT AS POSSIBLE.
5. PROVIDE INTEGRAL OR EXTERNAL HEAT TRAPS.
6. PROVIDE HOSE CONNECTION TO DRAIN.

DESIGNER'S NOTES:

ENSURE ENOUGH HEIGHT IS PROVIDED SO CONDENSATE CAN RETURN BY GRAVITY. SIZE END OF MAIN TRAP SET ON FLOOR PLANS. IF STEAM PRESSURE IS 5 PSIG [34 kPa] OR LOWER FURNISH CONTROL AIR FOR CONTROLS. WITH 30 PSIG [206 kPa] STEAM CONTROLS ARE PILOT OPERATED.



CONNECTIONS TO DOMESTIC WATER HEATER

NTS

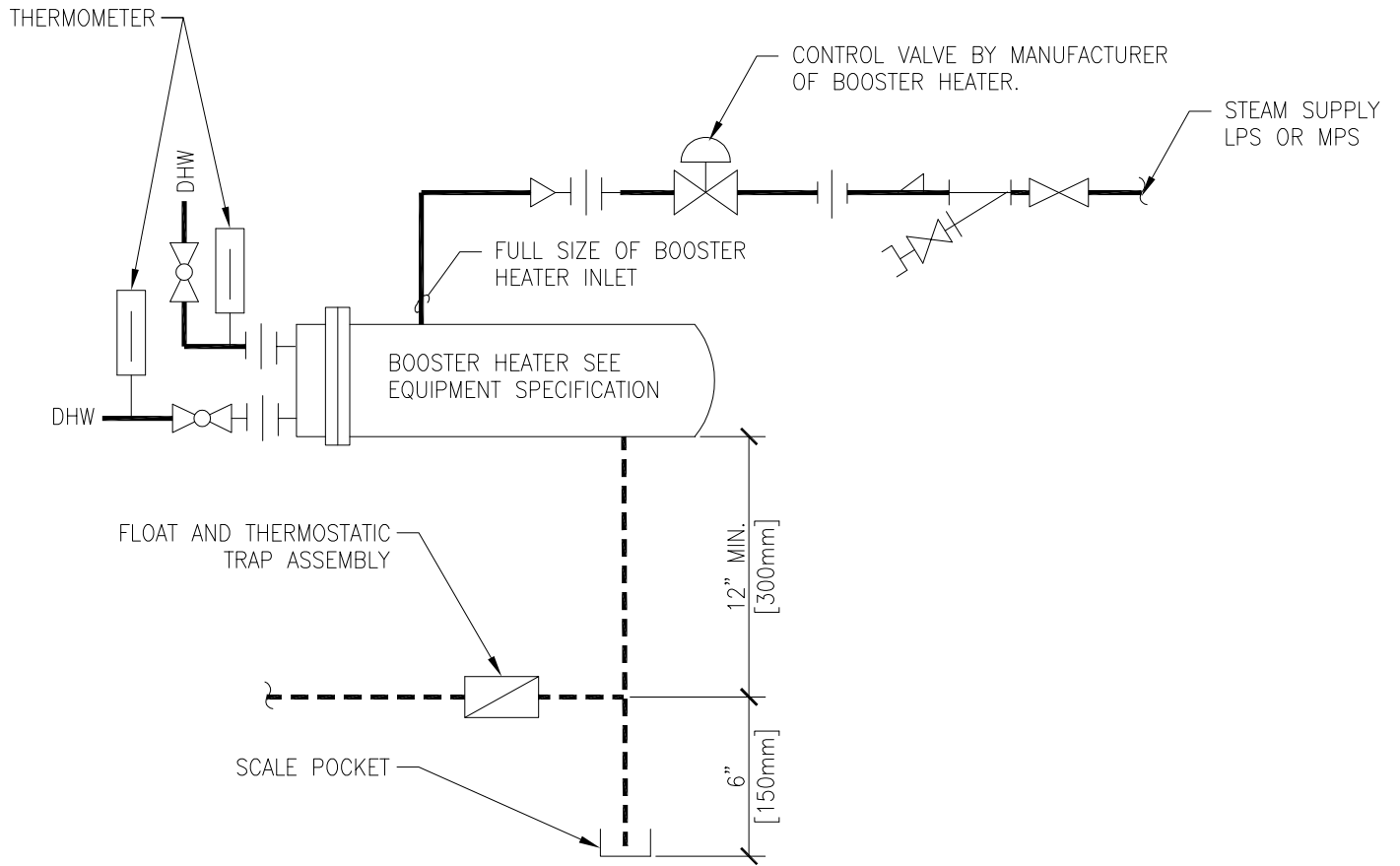


U.S. Department of Veterans Affairs

DETAIL TITLE / CONNECTIONS TO DOMESTIC WATER HEATER

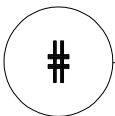
SCALE: NONE

DATE ISSUED: SEPTEMBER 1, 2020 CAD DETAIL NO.: SD223500-01.DWG



NOTES:

1. ALL STEAM BOOSTER HEATERS REQUIRED BY EQUIPMENT SPECIFICATION SHALL BE PIPED AS SHOWN ABOVE.
2. SEE EQUIPMENT SPECIFICATION AND PLUMBING DRAWINGS FOR PIPING CONNECTIONS.



CONNECTIONS TO DOMESTIC WATER BOOSTER HEATER

NTS

VA

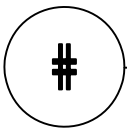
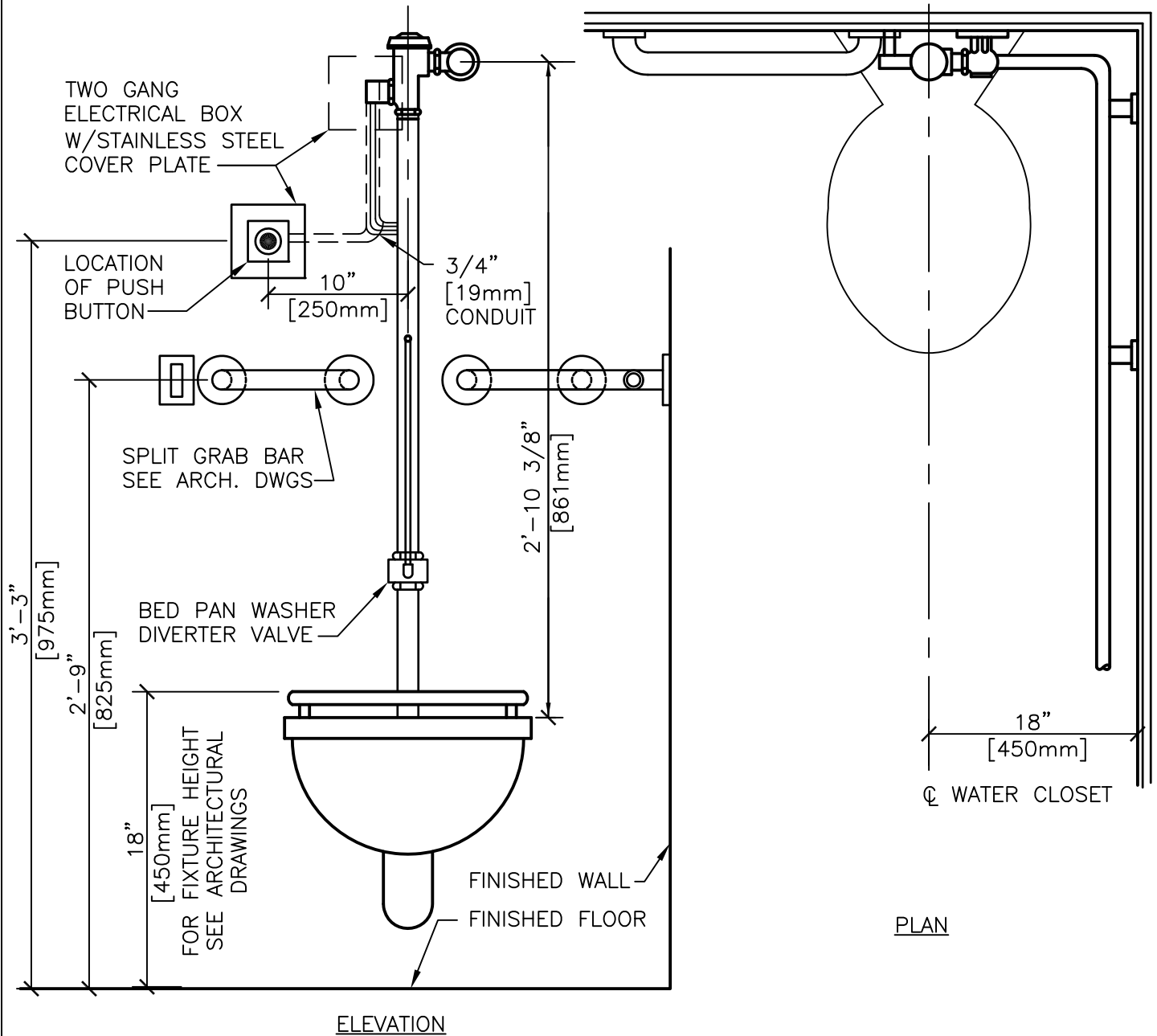


U.S. Department of Veterans Affairs

DETAIL TITLE / CONNECTIONS TO DOMESTIC WATER BOOSTER HEATER

SCALE: NONE

DATE ISSUED: SEPTEMBER 1, 2020 CAD DETAIL NO.: SD223500-02.DWG



P-103 WATER CLOSET DETAIL

NTS



Department of Veterans Affairs

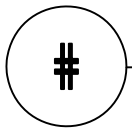
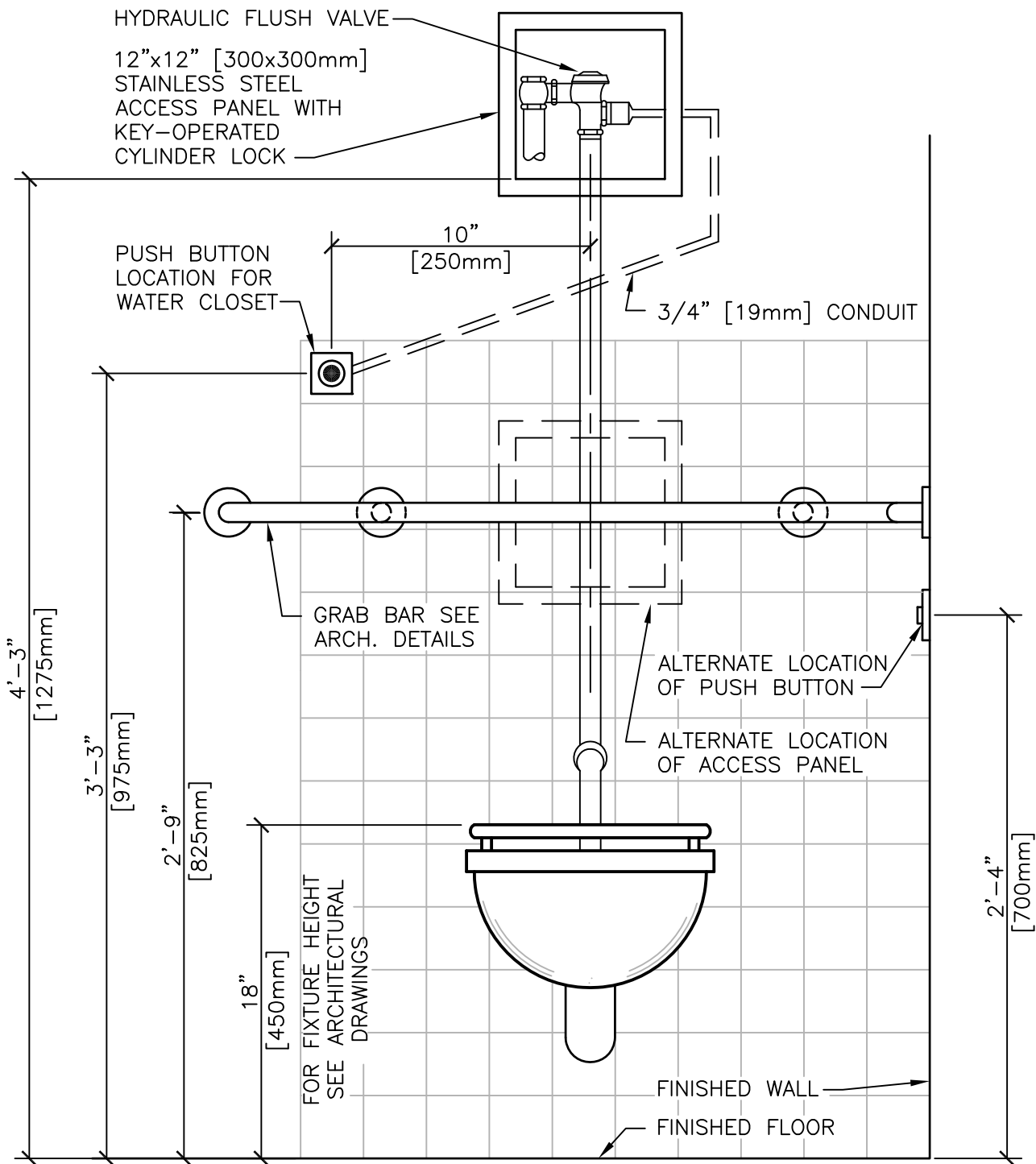
DETAIL TITLE / P-103 WATER CLOSET DETAIL

SCALE: NONE

DATE ISSUED: DECEMBER 1, 2015

CAD DETAIL NO.:

SD224000-01.DWG



P-111 WATER CLOSET

NTS



Department of
Veterans Affairs

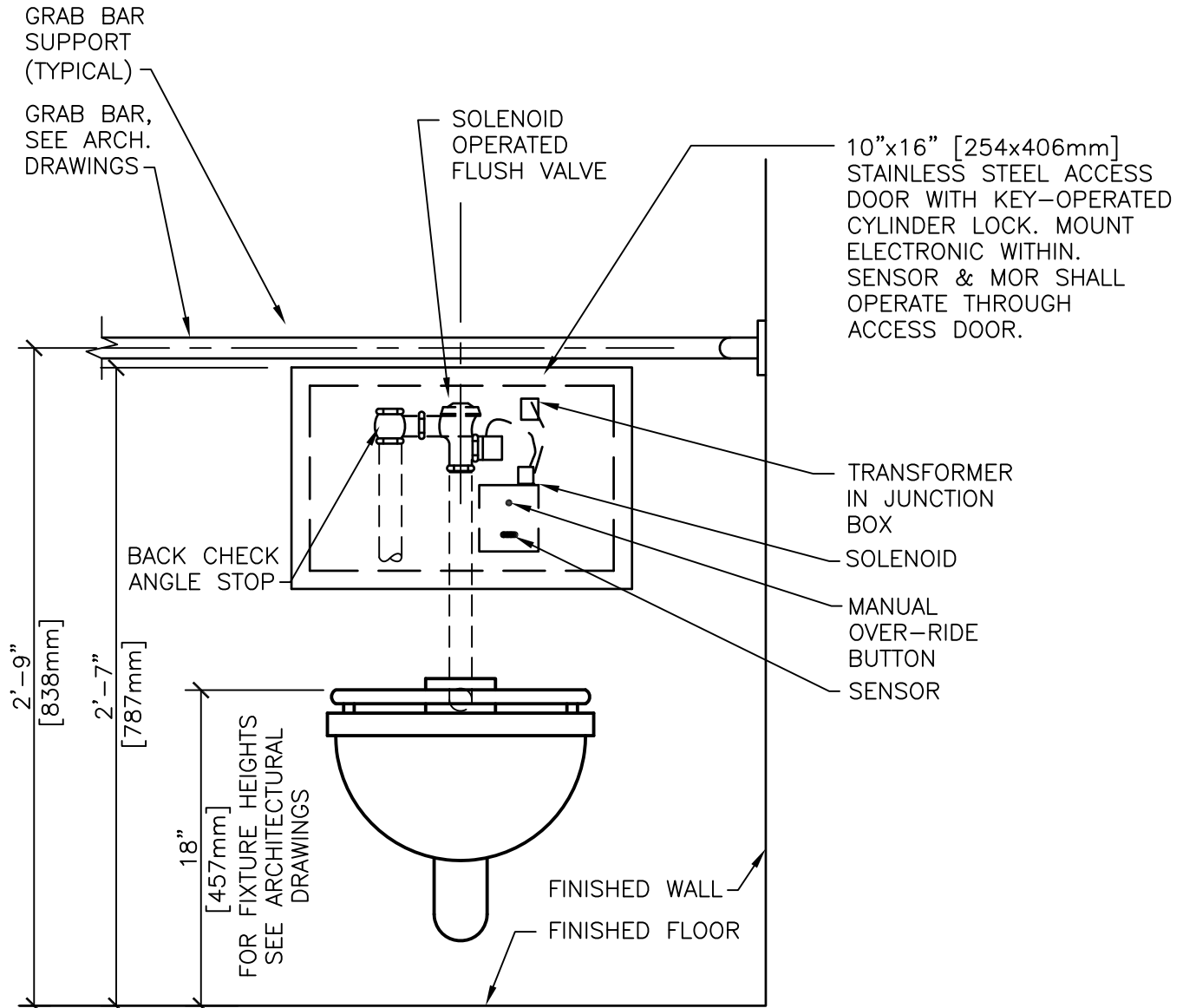
DETAIL TITLE / P-111 WATER CLOSET

SCALE: NONE

DATE ISSUED: DECEMBER 1, 2015

CAD DETAIL NO.:

SD224000-03.DWG



P-112 WATER CLOSET DETAIL - SENSOR OPERATED

NTS



Department of
Veterans Affairs

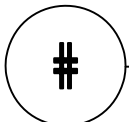
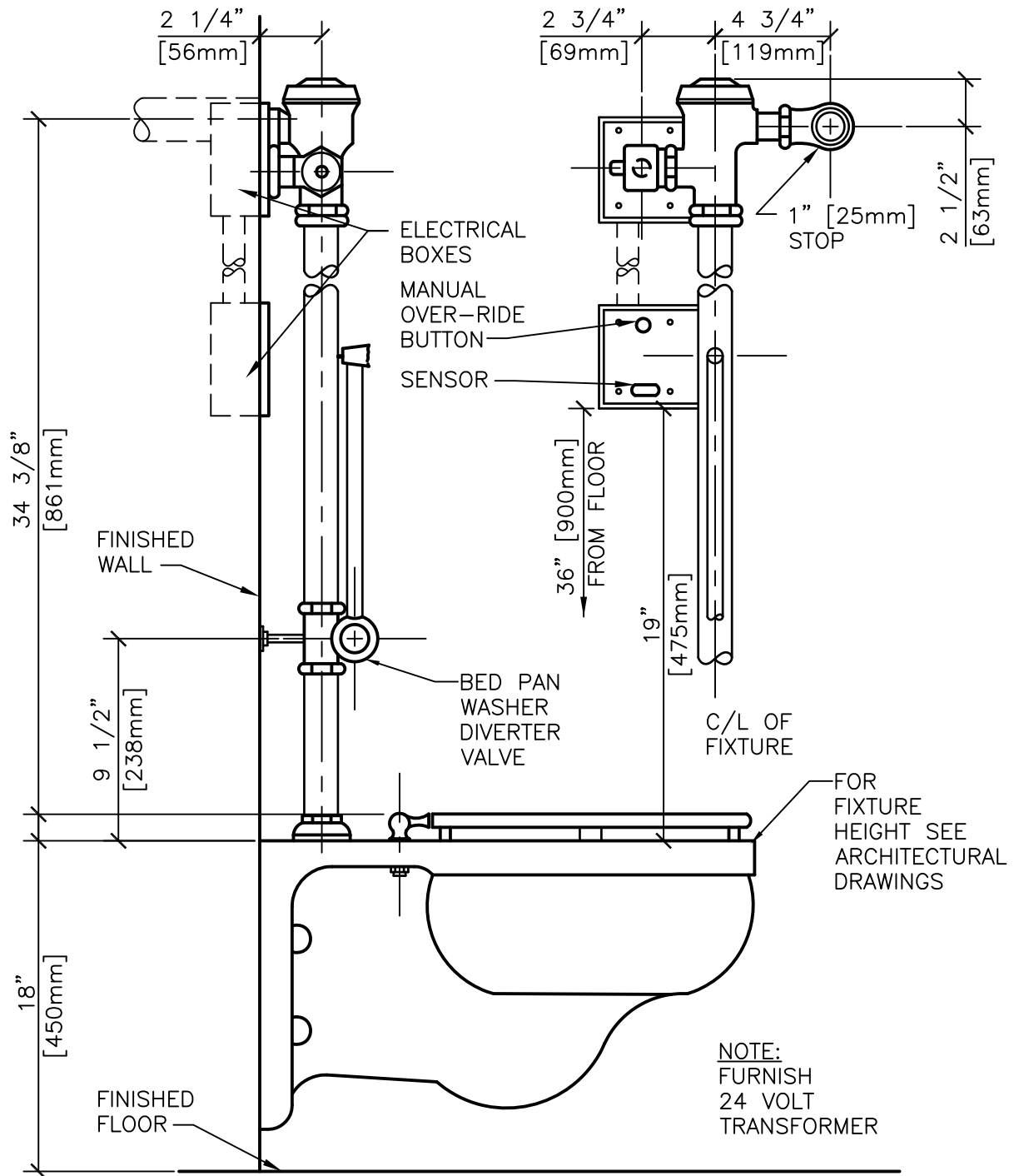
DETAIL TITLE / P-112 WATER CLOSET DETAIL - SENSOR OPERATED

SCALE: NONE

DATE ISSUED: DECEMBER 1, 2015

CAD DETAIL NO.:

SD224000-04.DWG



P-113 WATER CLOSET DETAIL - SENSOR OPERATED

NTS



Department of
Veterans Affairs

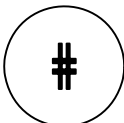
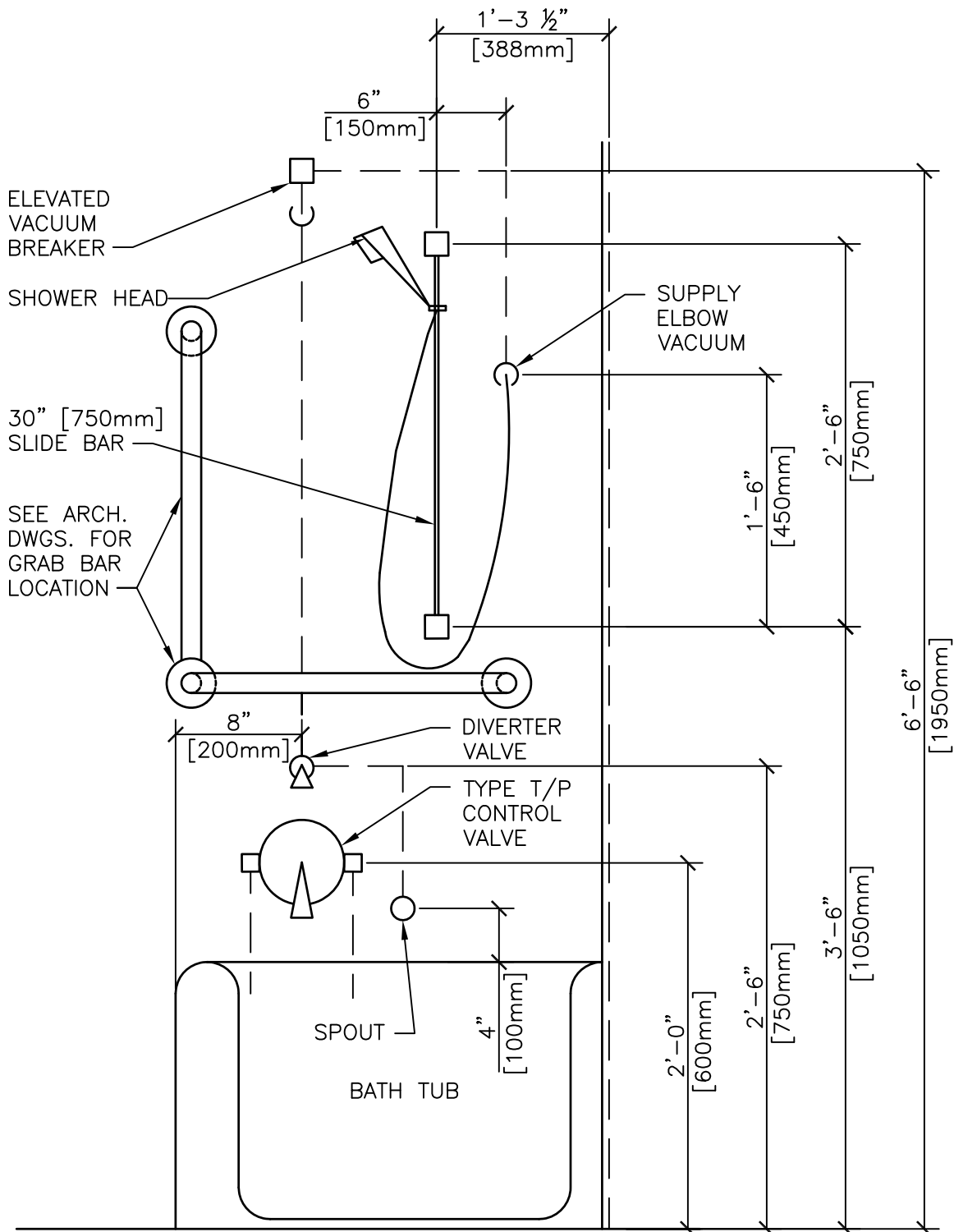
DETAIL TITLE / P-113 WATER CLOSET DETAIL - SENSOR OPERATED

SCALE: NONE

DATE ISSUED: DECEMBER 1, 2015

CAD DETAIL NO.:

SD224000-05.DWG



P-302 PATIENT BATHTUB ROUGH-IN

NTS



Department of
Veterans Affairs

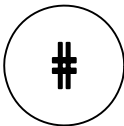
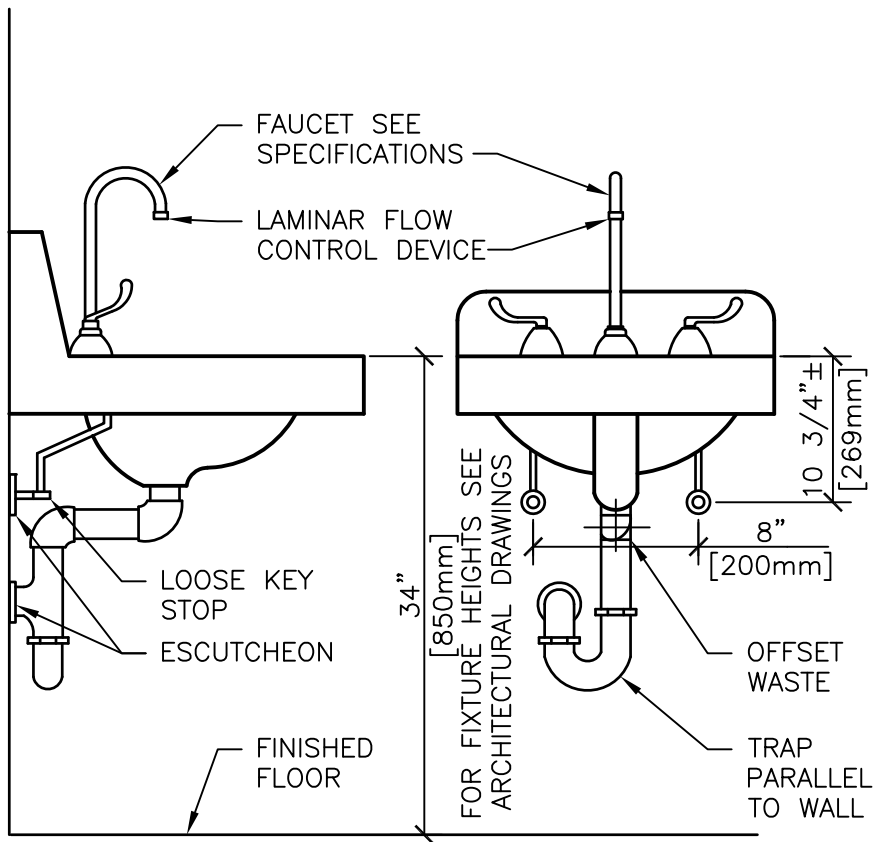
DETAIL TITLE / P-302 PATIENT BATHTUB ROUGH-IN

SCALE: NONE

DATE ISSUED: DECEMBER 1, 2015

CAD DETAIL NO.:

SD224000-06.DWG



TYPICAL WHEELCHAIR LAVATORY DETAIL

NTS

NOTE:
 PROVIDE COVER
 FOR EXPOSED
 PIPING



Department of
 Veterans Affairs

DETAIL TITLE / TYPICAL WHEELCHAIR LAVATORY DETAIL

SCALE: NONE

DATE ISSUED: DECEMBER 1, 2015

CAD DETAIL NO.:

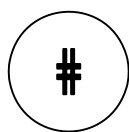
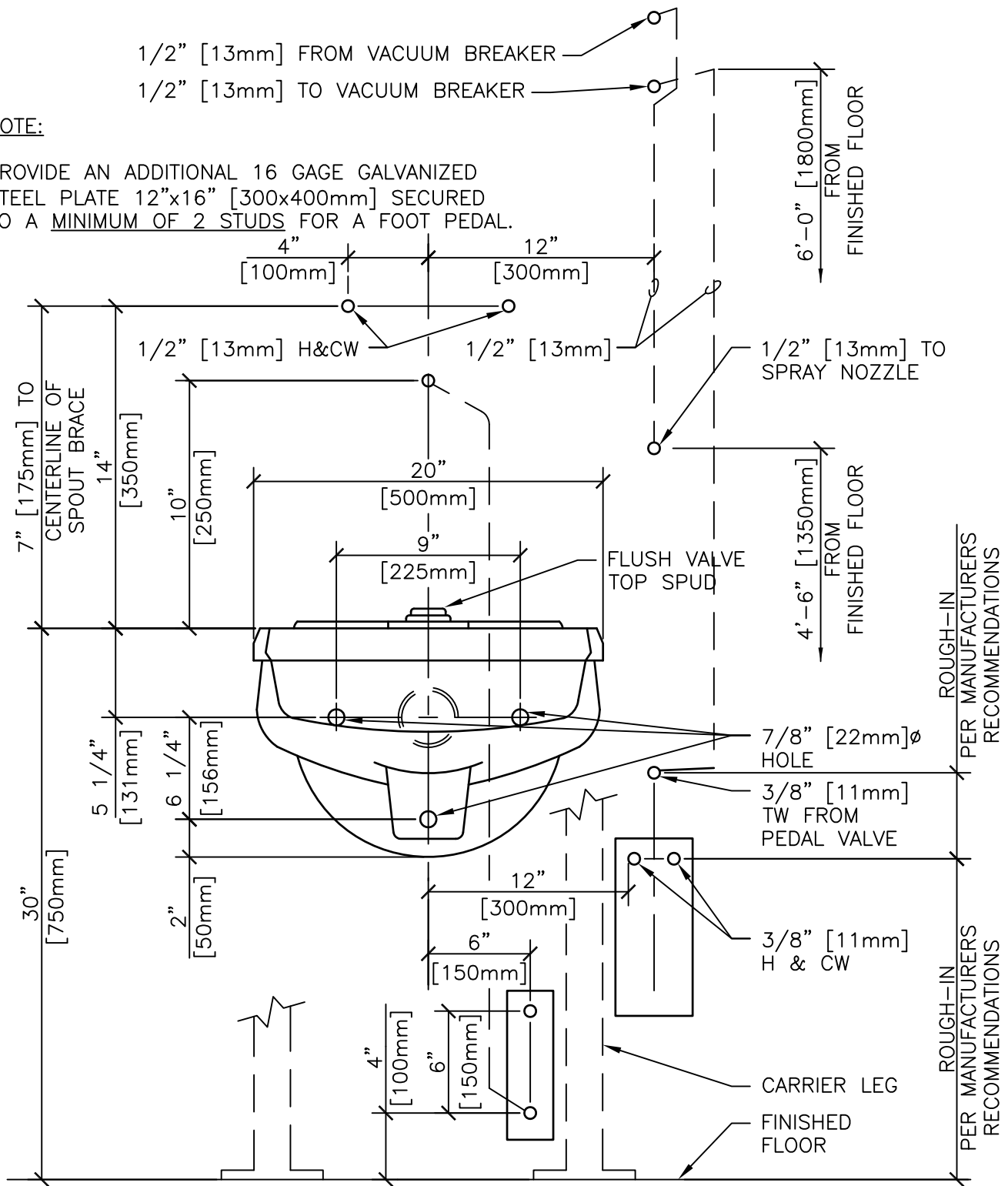
SD224000-08.DWG

1/2" [13mm] FROM VACUUM BREAKER

1/2" [13mm] TO VACUUM BREAKER

NOTE:

PROVIDE AN ADDITIONAL 16 GAGE GALVANIZED STEEL PLATE 12"x16" [300x400mm] SECURED TO A MINIMUM OF 2 STUDS FOR A FOOT PEDAL.



P-505 CLINIC SERVICE SINK ROUGH-IN DETAIL

NTS



Department of
Veterans Affairs

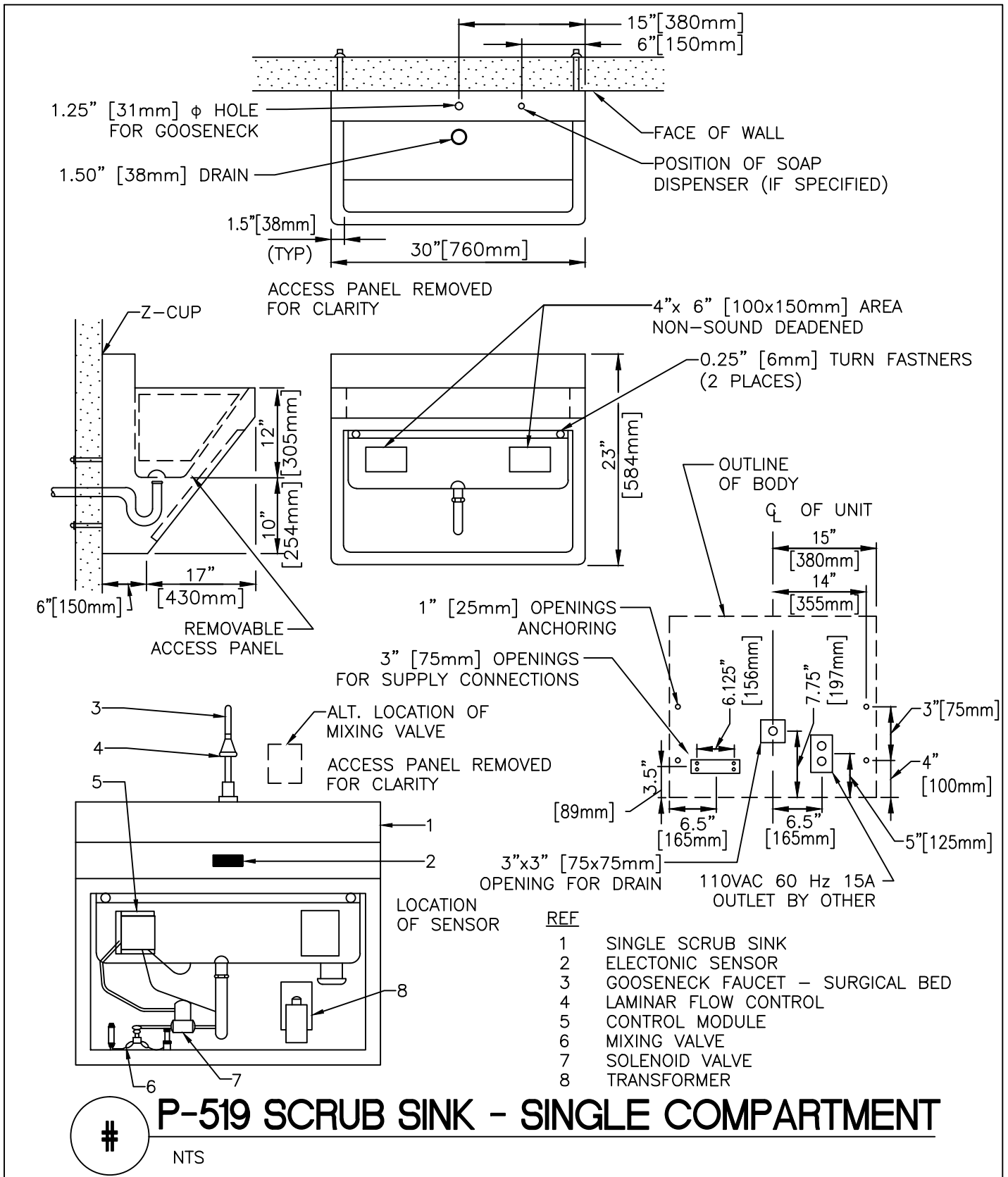
DETAIL TITLE / P-505 CLINIC SERVICE SINK ROUGH-IN DETAIL

SCALE: NONE

DATE ISSUED: DECEMBER 1, 2015

CAD DETAIL NO.:

SD224000-09.DWG



VA



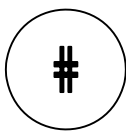
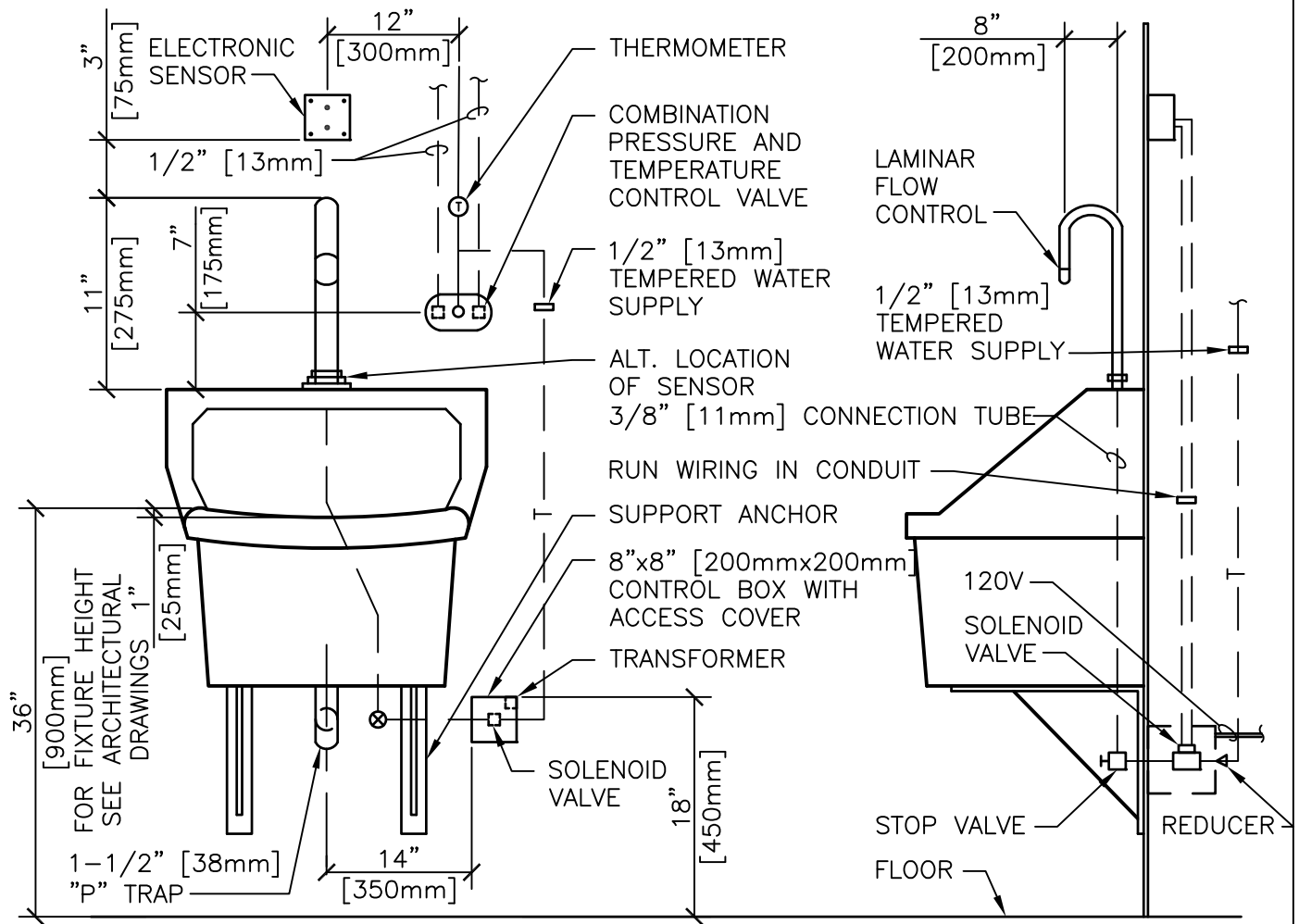
U.S. Department of Veterans Affairs

DETAIL/TITLE: P-519 SCRUB SINK - SINGLE COMPARTMENT

SCALE: NONE

DATE ISSUED: FEBRUARY 2017

CADD DETAIL NO.: SD224000-10



P-520 SURGEONS SCRUB SINK DETAIL

NTS



Department of
Veterans Affairs

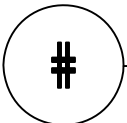
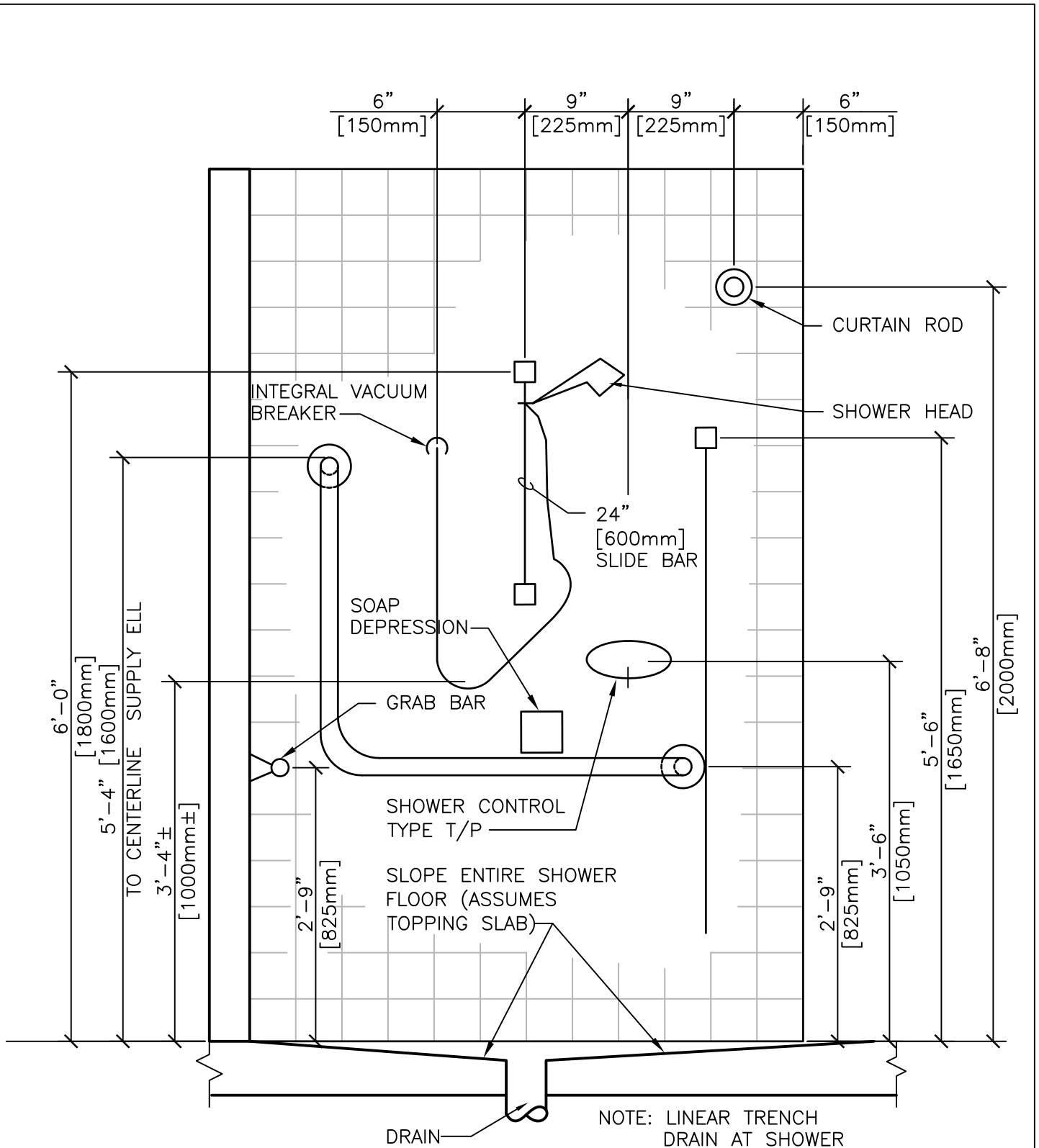
DETAIL TITLE / P-520 SURGEONS SCRUB SINK DETAIL

SCALE: NONE

DATE ISSUED: DECEMBER 1, 2015

CAD DETAIL NO.:

SD224000-11.DWG



P-701 PATIENT SHOWER

NTS



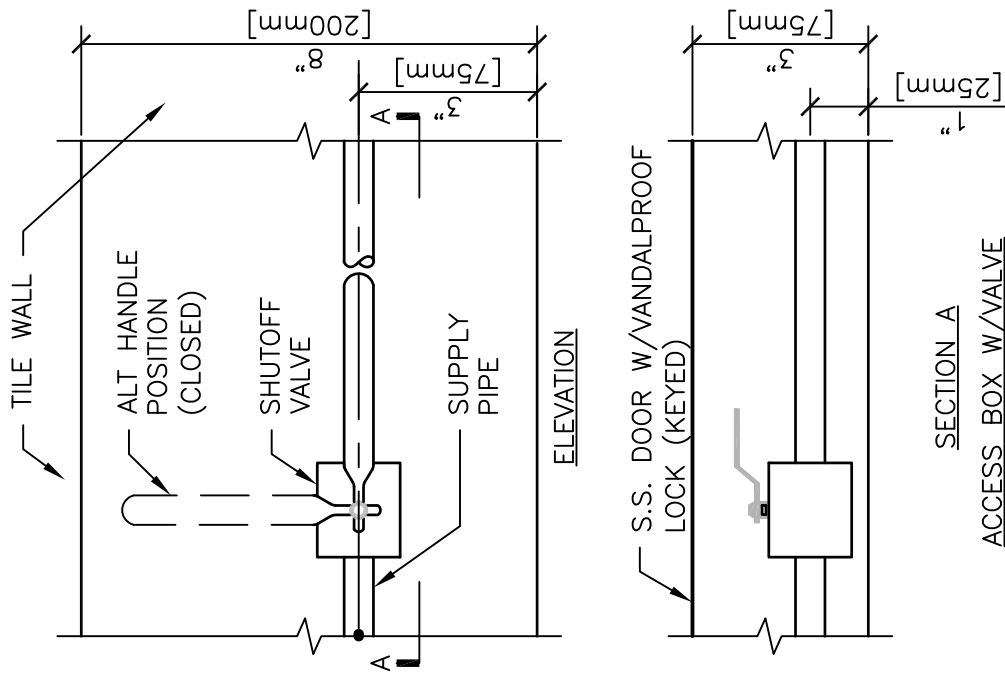
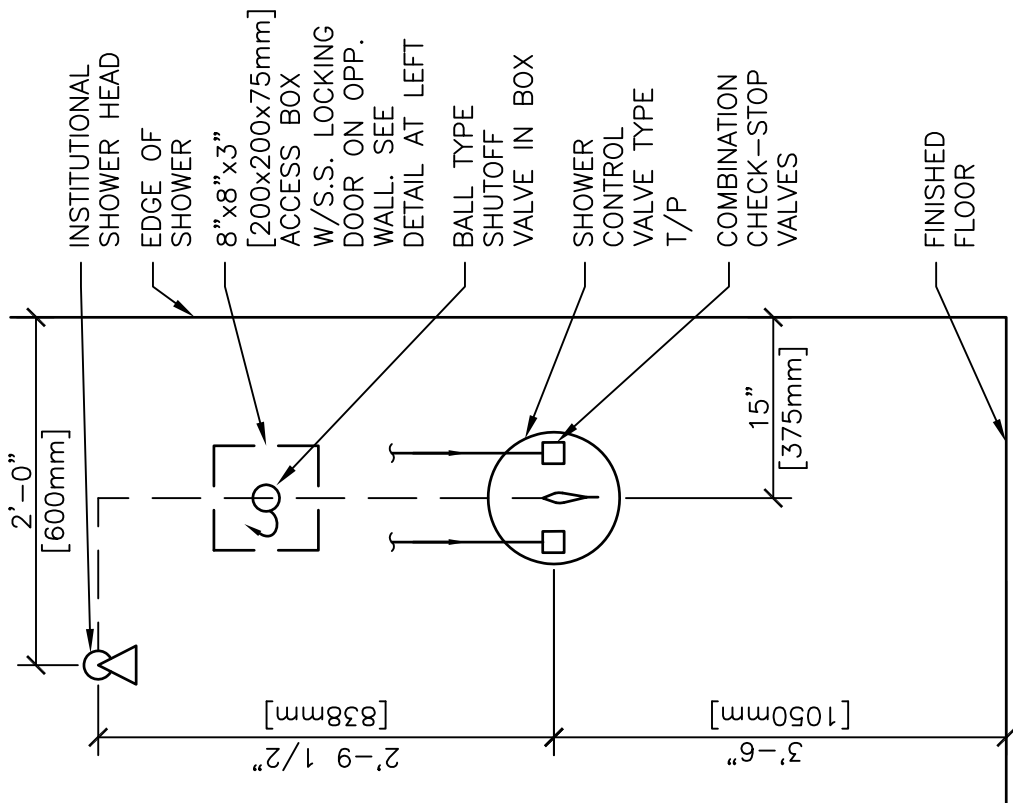
Department of
Veterans Affairs

DETAIL TITLE / P-701 PATIENT SHOWER

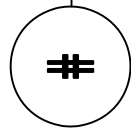
SCALE: NONE

DATE ISSUED: DECEMBER 1, 2015

CADD DETAIL NO. : SD224000-13.DWG



P-702 PATIENT SHOWER



NTS



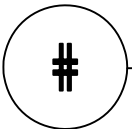
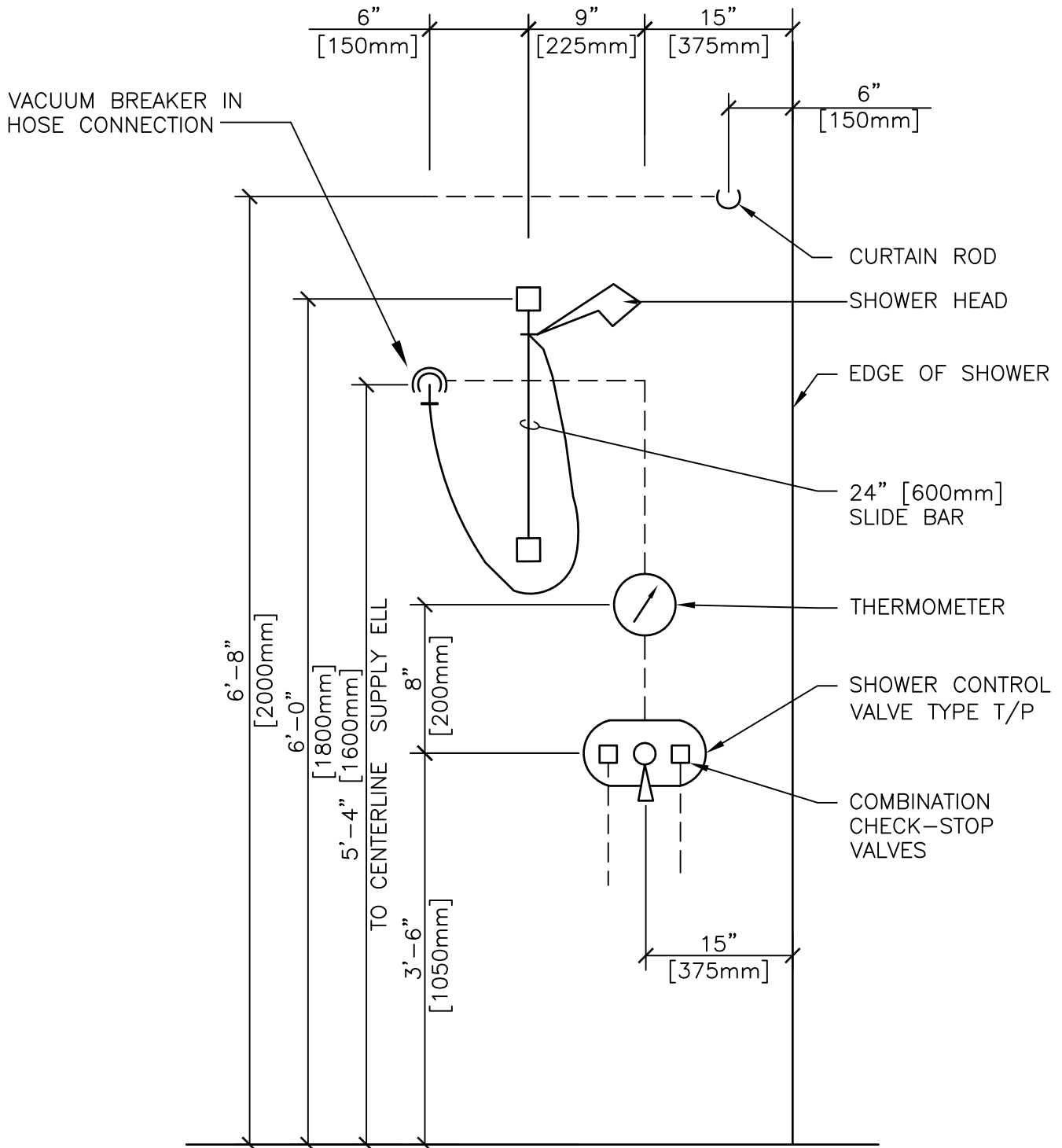
Department of Veterans Affairs

DETAIL TITLE / P-702 PATIENT SHOWER

SCALE: NONE

DATE ISSUED: DECEMBER 1, 2015

CAD DETAIL NO.: SD224000-14.DWG



P-711 SHOWER (SPINAL CORD)
(HAND HELD)

NTS



Department of
 Veterans Affairs

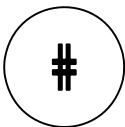
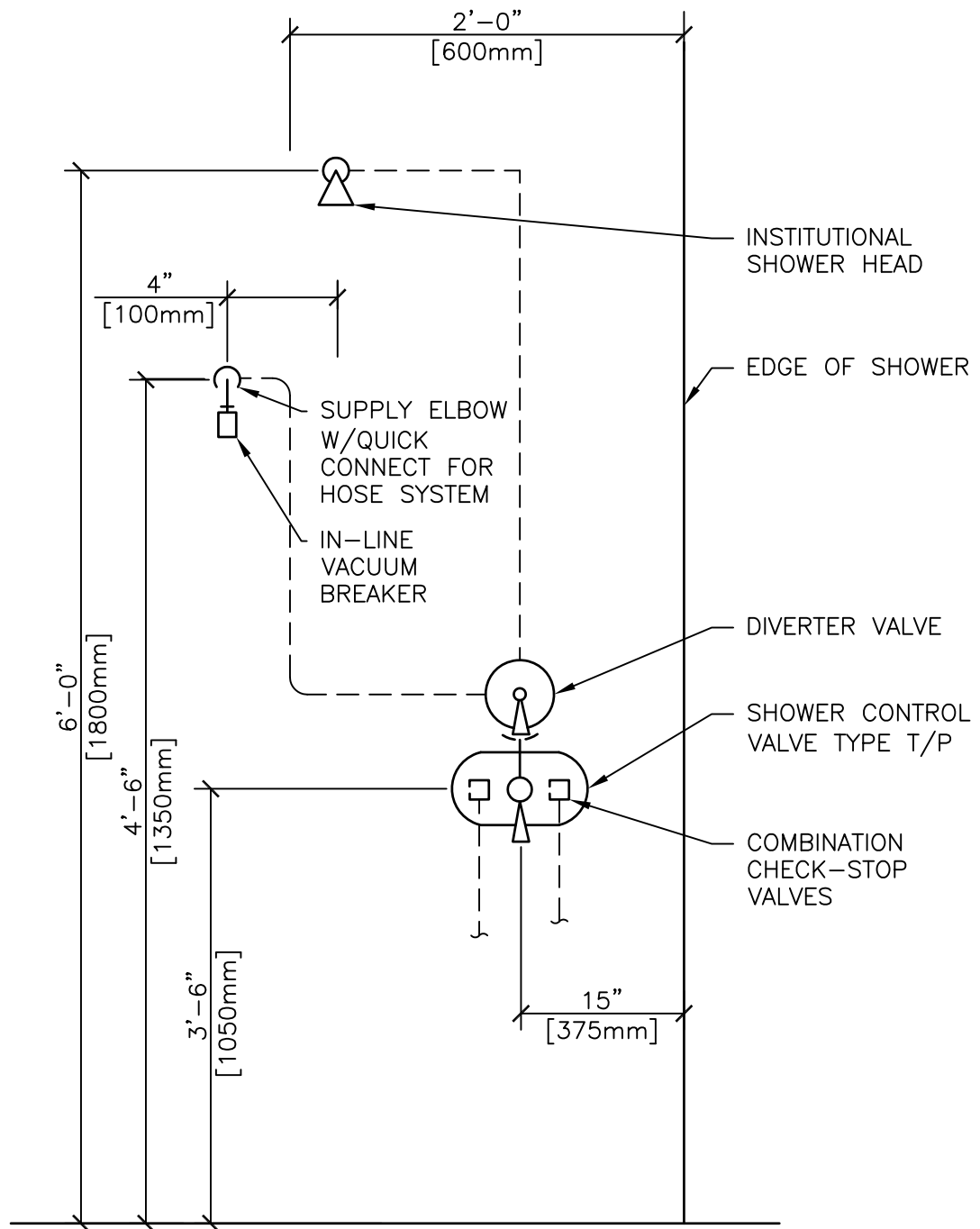
DETAIL TITLE / P-711 SHOWER (SPINAL CORD)

SCALE: NONE

DATE ISSUED: DECEMBER 1, 2015

CAD DETAIL NO.:

SD224000-15.DWG



P-703 SHOWER (SPINAL CORD)

NTS



Department of
Veterans Affairs

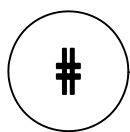
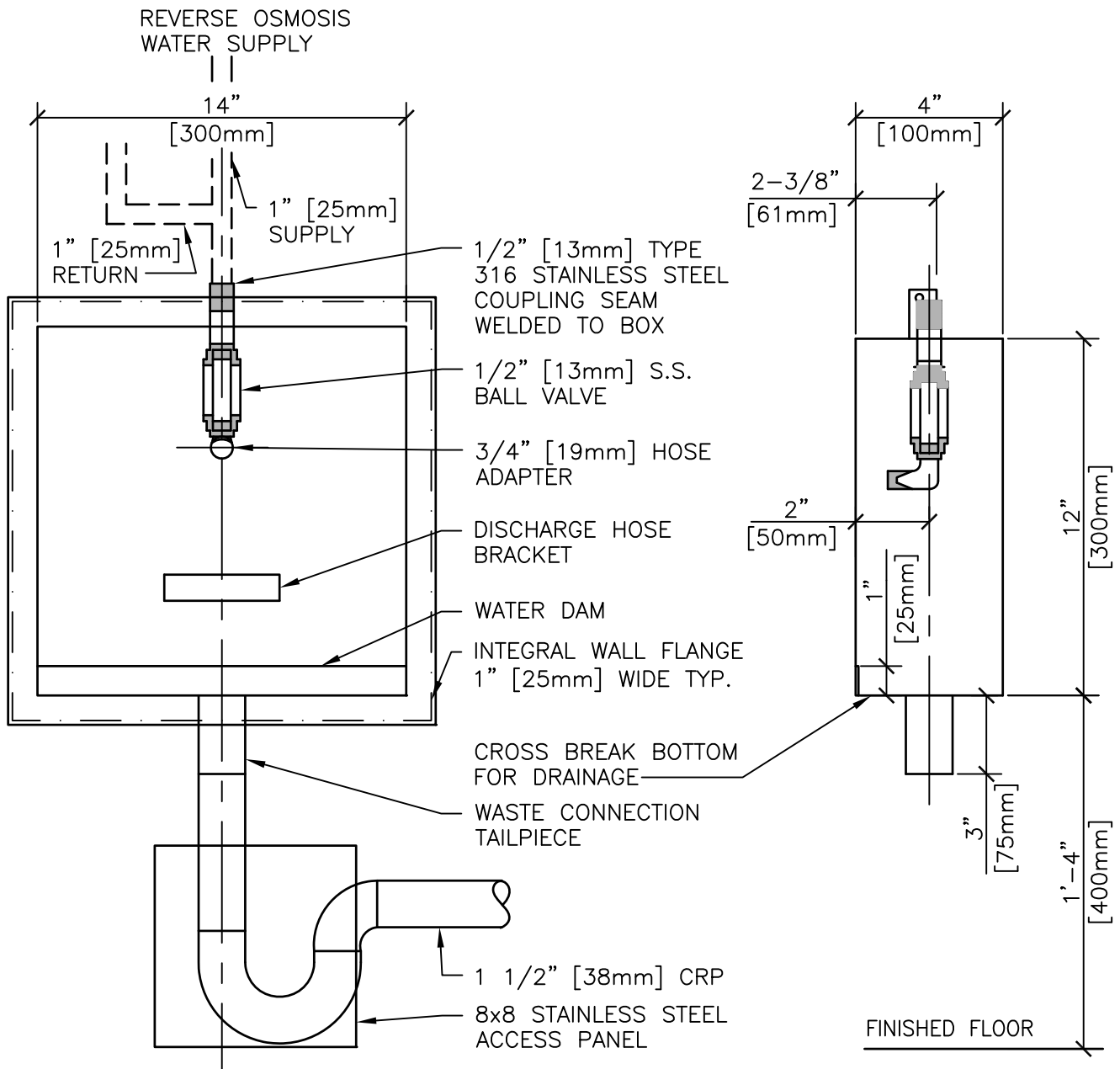
DETAIL TITLE / P-703 SHOWER (SPINAL CORD)

SCALE: NONE

DATE ISSUED: DECEMBER 1, 2015

CAD DETAIL NO.:

SD224000-16.DWG



(P-809) DIALYSIS BOX DETAIL

NTS



Department of
Veterans Affairs

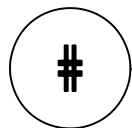
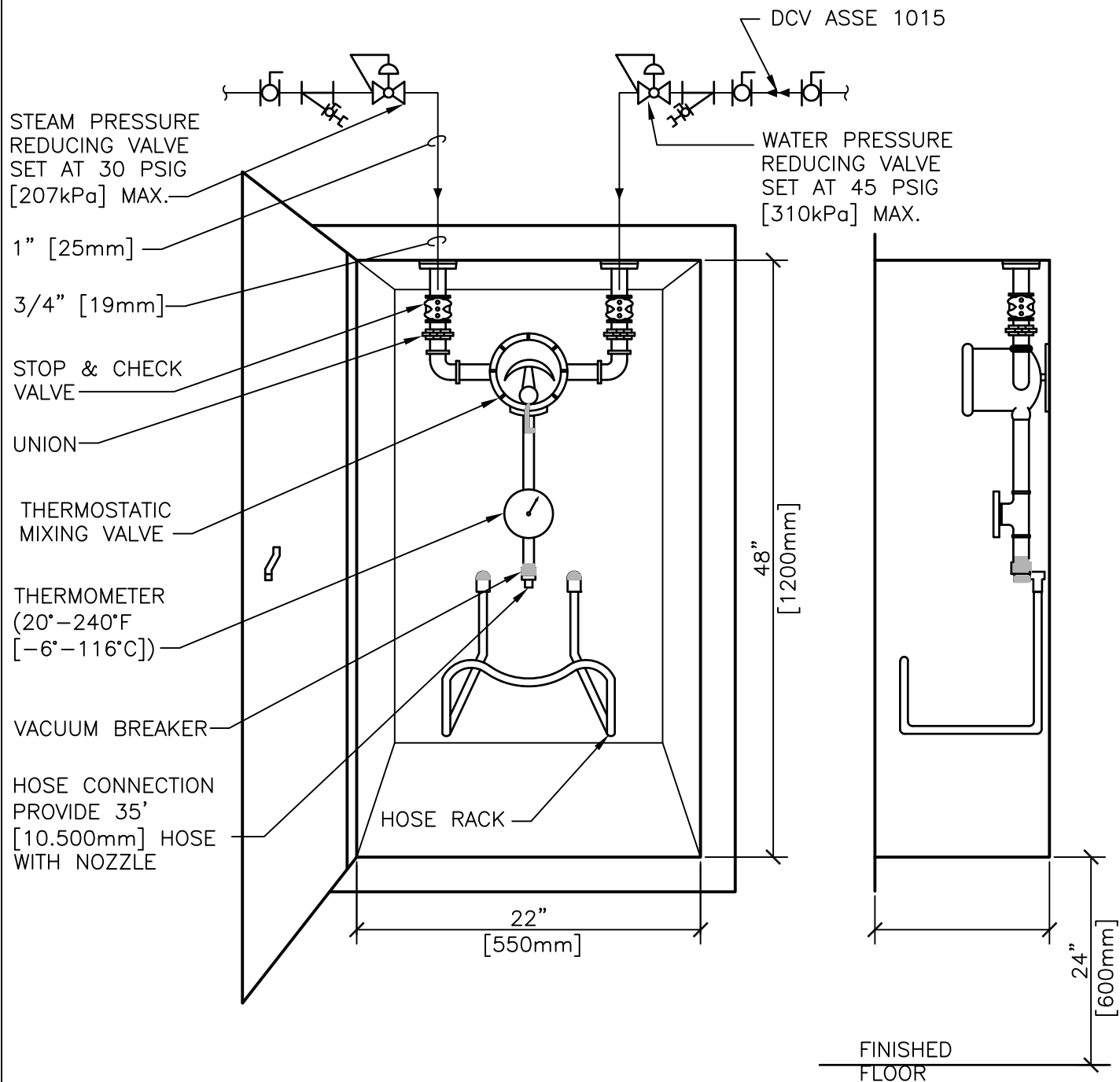
DETAIL TITLE / (P-809) DIALYSIS BOX DETAIL

SCALE: NONE

DATE ISSUED: DECEMBER 1, 2015

CAD DETAIL NO.:

SD224000-17.DWG



P-810 STEAM AND WATER MIXING VALVE DETAIL

NTS



Department of
Veterans Affairs

DETAIL TITLE / P-810 STEAM & WATER MIXING VALVE DETAIL

SCALE: NONE

DATE ISSUED: DECEMBER 1, 2015

CAD DETAIL NO.:

SD224000-18.DWG



Department of
Veterans Affairs

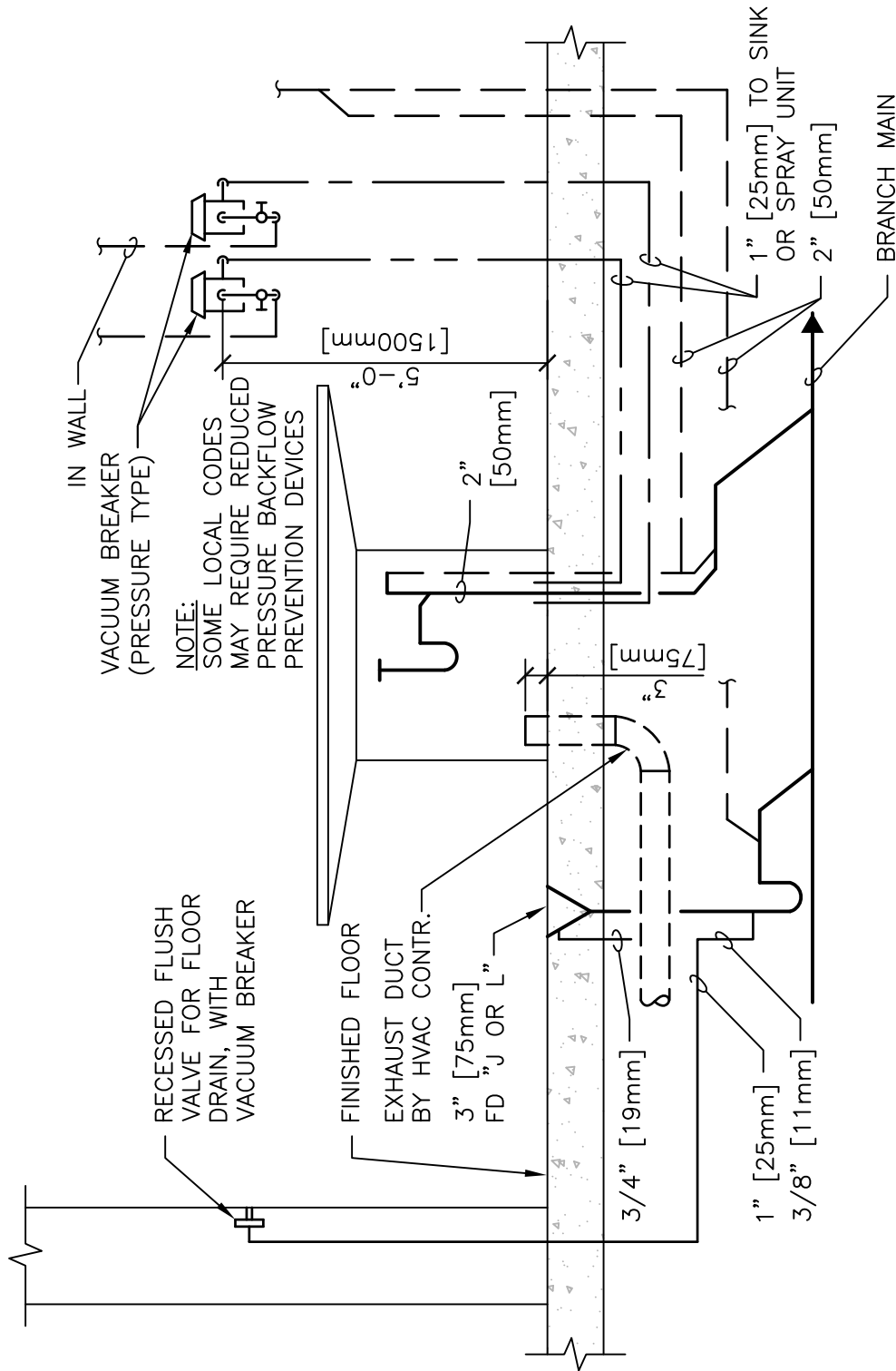
DETAIL TITLE / (ME-812) AUTOPSY TABLE PIPING DETAIL

SCALE: NONE

DATE ISSUED: DECEMBER 1, 2015

CAD DETAIL NO.:

SD224000-19.DWG

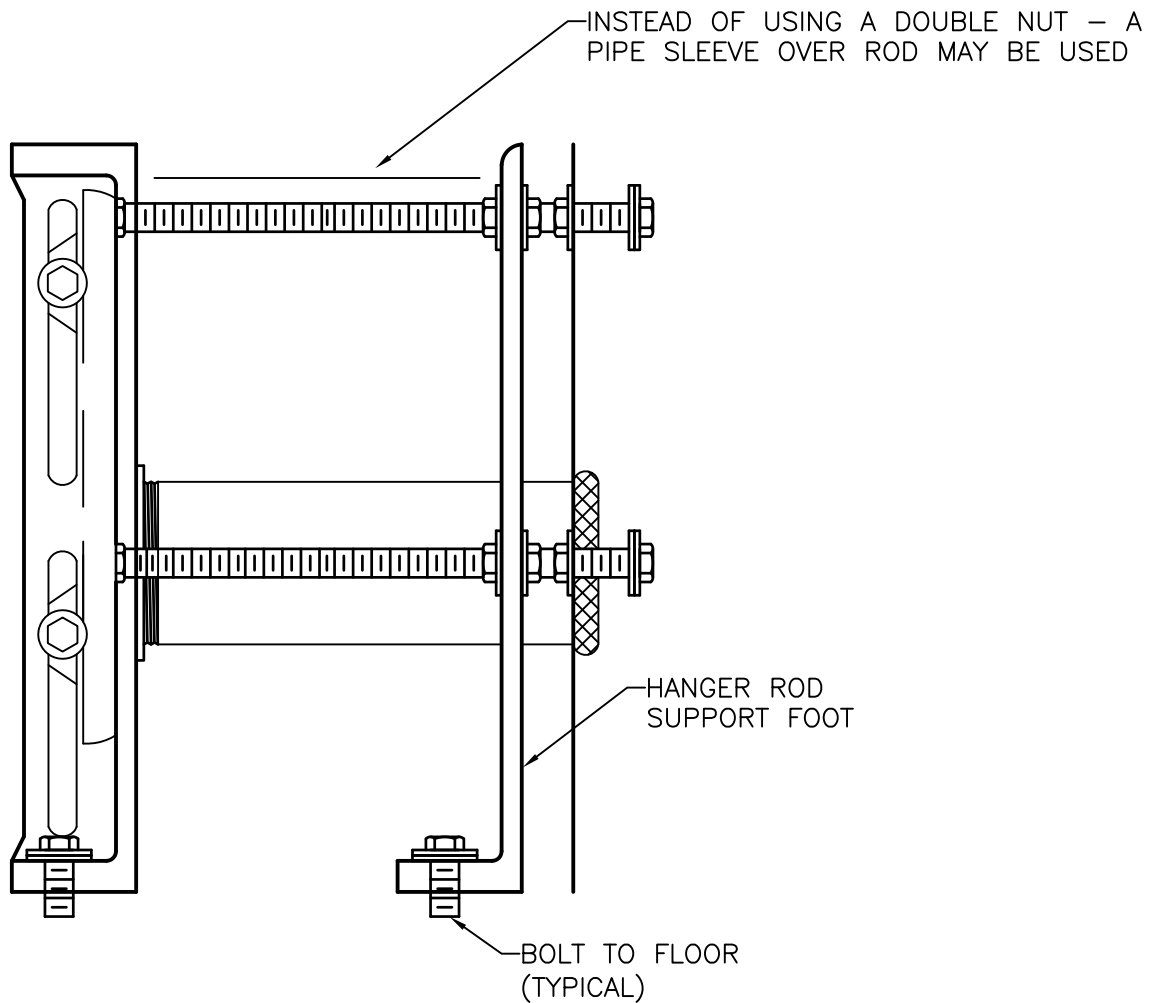


(ME-812) AUTOPSY TABLE PIPING DETAIL

#

NTS

NOTE:
DISPOSER IS AN OPTION
FOR THIS FIXTURE



INSTALLATION OF HANGER SUPPORT FOOT

#

NTS



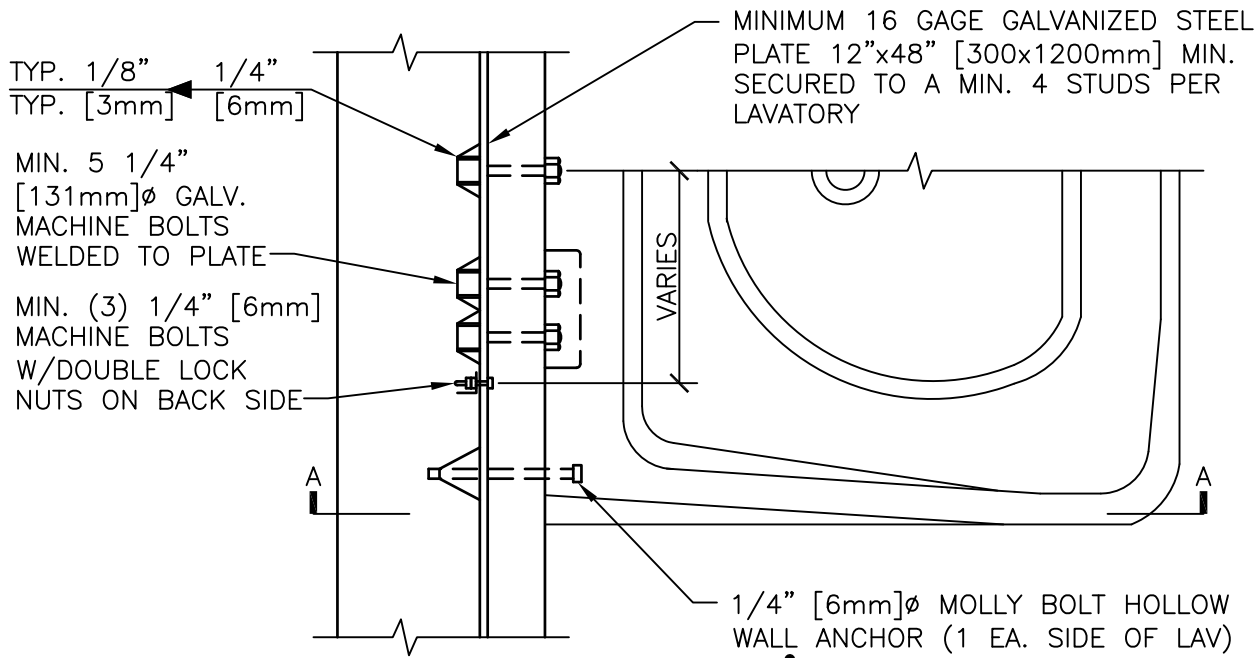
Department of
Veterans Affairs

DETAIL TITLE / INSTALLATION OF HANGER SUPPORT FOOT

SCALE: NONE

DATE ISSUED: DECEMBER 1, 2015

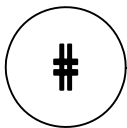
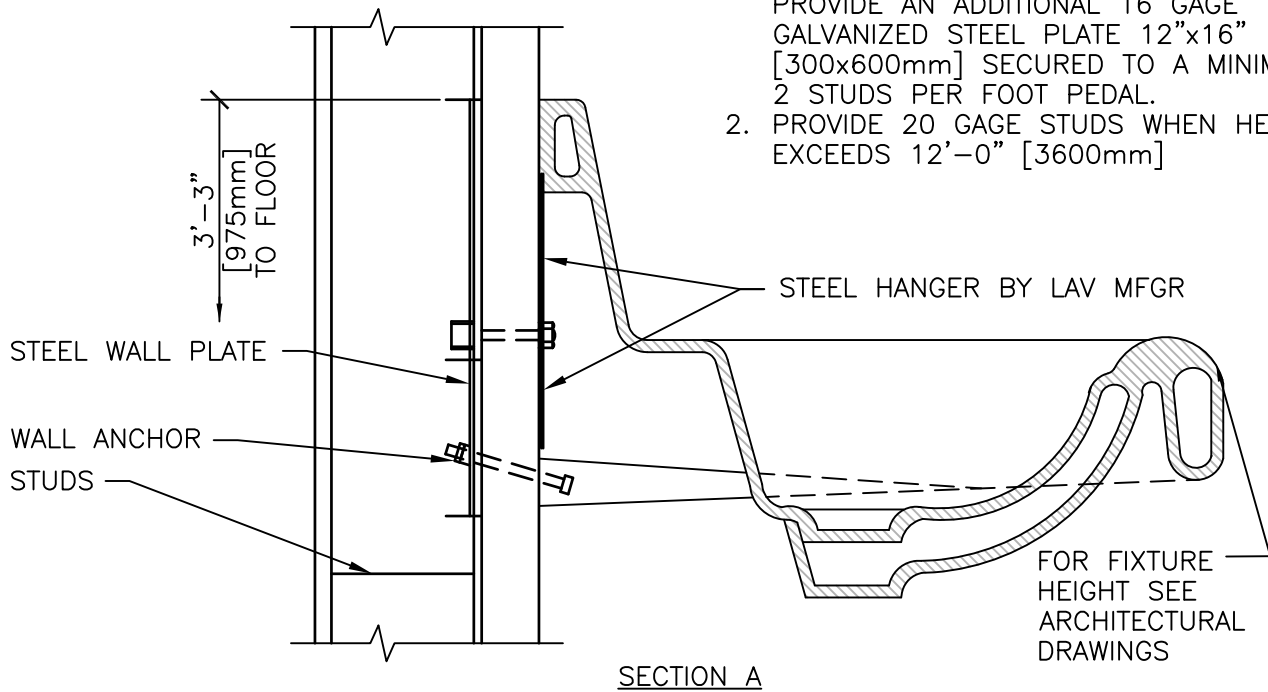
CADD DETAIL NO. : SD224000-20.DWG



PLAN

NOTE:

1. AT LAVS WITH FOOT PEDAL CONTROLS PROVIDE AN ADDITIONAL 16 GAGE GALVANIZED STEEL PLATE 12"x16" [300x600mm] SECURED TO A MINIMUM OF 2 STUDS PER FOOT PEDAL.
2. PROVIDE 20 GAGE STUDS WHEN HEIGHT EXCEEDS 12'-0" [3600mm]



LAVATORY MOUNTING DETAIL

NTS



Department of
Veterans Affairs

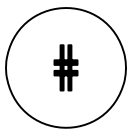
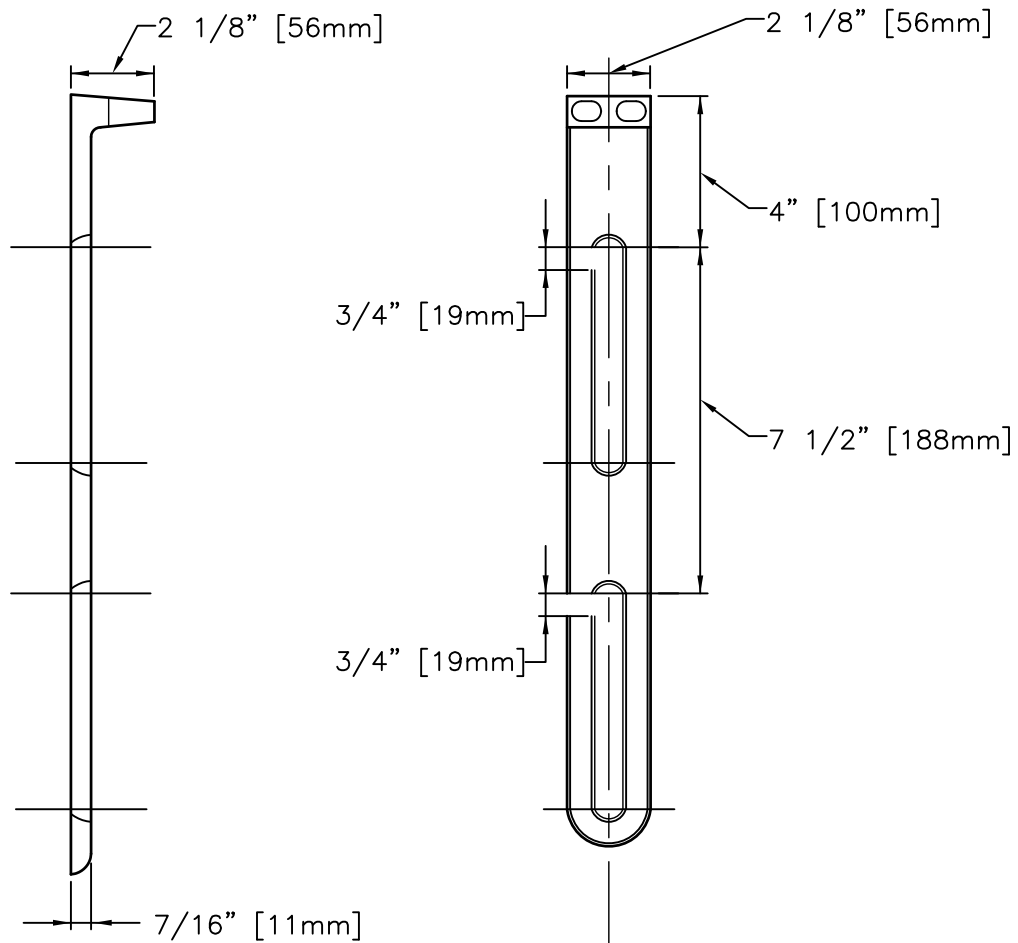
DETAIL TITLE / LAVATORY MOUNTING DETAIL

SCALE: NONE

DATE ISSUED: DECEMBER 1, 2015

CAD DETAIL NO.:

SD224000-21.DWG



HANGER ROD SUPPORT FOOT

NTS



Department of
Veterans Affairs

DETAIL TITLE / HANGER ROD SUPPORT FOOT

SCALE: NONE

DATE ISSUED: DECEMBER 1, 2015

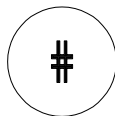
CADD DETAIL NO. : SD224000-22.DWG

DENTAL AIR (DA) ALARM PANEL SCHEDULE

LOCATION	TYPE OF PANEL	GAGES	SERVICE INDICATOR LIGHTS
BOILER PLANT CONTROL OFFICE -OR- ENGINEERING CONTROL CENTER (ECC) -OR- OTHER LOCATION WITH ENGINEERING PERSONNEL SUPERVISION -AND- DENTAL RECEPTION AREA	MASTER (SYSTEM) ALARM PANEL	NO	DENTAL AIR (DA) DEW POINT HIGH DA FILTER PRESS DROP HIGH DA HIGH TEMP SHUTDOWN DA LOW LUBRICANT DA CARBON MONOXIDE LEVEL HIGH DA LINE PRESSURE LOW DA LINE PRESSURE HIGH DESICCANT DRYER MALFUNCTION TEST BUTTON

NOTES TO DESIGNER:

1. LOCATE MASTER ALARM PANELS IN CONFORMANCE WITH INDIVIDUAL MEDICAL CENTER'S OPERATING PRACTICES FOR CRITICAL ALARM LOCATIONS.
2. INDICATE ROOM NUMBERS WHERE PANELS ARE TO BE LOCATED.



DENTAL AIR ALARM PANEL SCHEDULE

NTS

VA



U.S. Department
of Veterans Affairs

DETAIL TITLE / DENTAL AIR ALARM PANEL SCHEDULE

SCALE: NONE

DATE ISSUED: SEPTEMBER 1, 2020 CAD DETAIL NO.: SD226119_74-01.DWG

MEDICAL GAS ALARM PANEL SCHEDULE

LOCATION	TYPE OF PANEL	GAGES	SERVICE INDICATOR LIGHTS
BOILER PLANT CONTROL OFFICE -OR- ENGINEERING CONTROL CENTER (ECC) -OR- OTHER LOCATION WITH ENGINEERING PERSONNEL SUPERVISION -AND- INTENSIVE CARE NURSING -OR- FIRE STATION -OR- PHONE SWITCHBOARD -OR- SECURITY OFFICE	MASTER (SYSTEM) ALARM PANEL	NO	LIQUID OXYGEN LEVEL LOW OXYGEN RESERVE SWITCHOVER OXYGEN RESERVE IN USE OXYGEN RESERVE LOW LIQUID LEVEL OXYGEN RESERVE PRESSURE LOW OXYGEN MAIN LINE PRESSURE LOW OXYGEN MAIN LINE PRESSURE HIGH NITROUS OXIDE CHANGE OVER TO SECONDARY NITROUS OXIDE RESERVE IN USE NITROUS OXIDE MAIN LINE PRESSURE LOW NITROUS OXIDE MAIN LINE PRESSURE HIGH NITROGEN CHANGE OVER TO SECONDARY NITROGEN RESERVE IN USE NITROGEN MAIN LINE PRESSURE LOW NITROGEN MAIN LINE PRESSURE HIGH MEDICAL AIR DEWPOINT HIGH MA COMPRESSOR MALFUNCTION MEDICAL AIR MAIN LINE PRESSURE LOW MEDICAL AIR MAIN LINE PRESSURE HIGH MA SYSTEM CARBON MONOXIDE HIGH DESICCANT DRYER MALFUNCTION DESICCANT DRYER POST FILTER DIRTY DESICCANT DRYER INLET FILTER DIRTY MAIN LINE FILTER BANK DIRTY MA REFRIGERATED DRYER POST FILTER DIRTY AFTER COOLER HIGH AIR TEMPERATURE MEDICAL VACUUM LINE VACUUM LOW MEDICAL VACUUM FILTER BACK PRESSURE TEST BUTTON
SURGERY CONTROL ROOM	AREA ALARM PANEL	YES	OXYGEN LINE PRESSURE ABNORMAL NITROUS OXIDE LINE PRESSURE ABNORMAL NITROGEN LINE PRESSURE ABNORMAL MEDICAL AIR LINE PRESSURE ABNORMAL MEDICAL VACUUM LINE VACUUM LOW TEST BUTTON
RECOVERY ROOMS CRITICAL CARE AREAS EMERGENCY AREAS PATIENT AREAS	AREA (ZONE) ALARM PANEL	YES	OXYGEN LINE PRESSURE ABNORMAL NITROUS OXIDE LINE PRESSURE ABNORMAL NITROGEN LINE PRESSURE ABNORMAL MEDICAL AIR LINE PRESSURE ABNORMAL MEDICAL VACUUM LINE VACUUM LOW TEST BUTTON

DESIGNER'S NOTES:

1. LOCATE MASTER ALARM PANELS IN CONFORMANCE WITH INDIVIDUAL MEDICAL CENTER OPERATING PRACTICES FOR CRITICAL ALARM LOCATIONS.
2. INDICATE ROOM NUMBERS WHERE PANELS ARE TO BE LOCATED.
3. ADD ADDITIONAL MIXED GAS ALARMS AS REQUIRED TO THE MASTER AND AREA ALARM PANELS.



Department of
Veterans Affairs

DETAIL TITLE / MEDICAL GAS ALARM PANEL SCHEDULE

SCALE: NONE

DATE ISSUED: DECEMBER 1, 2015

CAD DETAIL NO.:


SD226200-01.DWG

MEDICAL GAS ALARM PANEL SCHEDULE, CONTINUED

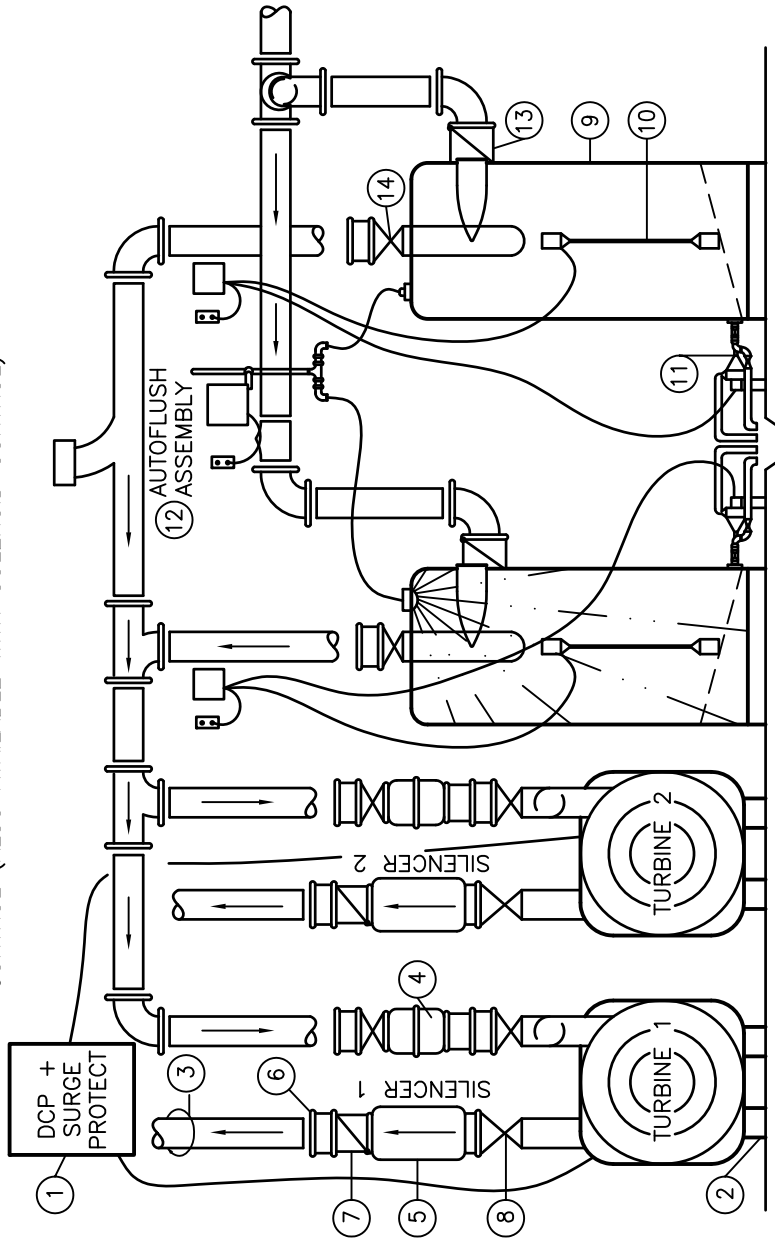
LOCATION	TYPE OF PANEL	GAGES	SERVICE INDICATOR LIGHTS
BOILER PLANT CONTROL OFFICE -OR- ENGINEERING CONTROL CENTER (ECC) -OR- OTHER LOCATION WITH ENGINEERING PERSONNEL SUPERVISION -AND- INTENSIVE CARE NURSING -OR- FIRE STATION -OR- PHONE SWITCHBOARD -OR- SECURITY OFFICE	MASTER (SYSTEM) ALARM PANEL	NO	CARBON DIOXIDE MAIN LINE PRESSURE HIGH CARBON DIOXIDE MAIN LINE PRESSURE LOW CARBON DIOXIDE CHANGEOVER TO SECONDARY SUPPLY CARBON DIOXIDE MAIN SUPPLY LESS THAN 1 DAY (LOW CONTENTS) CARBON DIOXIDE RESERVE IN USE CARBON DIOXIDE RESERVE SUPPLY LESS THAN 1 DAY (LOW CONTENTS) CARBON DIOXIDE RESERVE PRESSURE LOW (NOT FUNCTIONAL) MEDICAL AIR PRODUCTION STOP MEDICAL AIR CHANGEOVER TO SECONDARY SUPPLY OXYGEN CHANGE OVER TO SECONDARY SUP. OXYGEN MAIN SUPPLY LESS THAN 1 DAY (LOW CONTENTS) OXYGEN RESERVE SUPPLY LESS THAN 1 DAY (LOW CONTENTS) NITROUS OXIDE MAIN SUPPLY LESS THAN 1 DAY (LOW CONTENTS) NITROUS OXIDE RESERVE SUPPLY LESS THAN 1 DAY (LOW CONTENTS) NITROUS OXIDE RESERVE PRESSURE LOW (NOT FUNCTIONAL) MEDICAL-SURGICAL MAIN LINE VACUUM LOW WAGD MAIN LINE VACUUM LOW INSTRUMENT AIR CYLINDER RESERVE IN USE INSTRUMENT AIR CYLINDER RESERVE LESS THAN 1 HOUR SUPPLY NITROGEN MAIN SUPPLY LESS THAN 1 DAY (LOW CONTENTS) NITROGEN RESERVE SUPPLY LESS THAN 1 DAY (LOW CONTENTS) NITROUS OXIDE RESERVE PRESSURE LOW

DESIGNER'S NOTES:

1. LOCATE MASTER ALARM PANELS IN CONFORMANCE WITH INDIVIDUAL MEDICAL CENTER OPERATING PRACTICES FOR CRITICAL ALARM LOCATIONS.
2. INDICATE ROOM NUMBERS WHERE PANELS ARE TO BE LOCATED.
3. ADD ADDITIONAL MIXED GAS ALARMS AS REQUIRED TO THE MAIN AND AREA ALARM PANELS.

 Department of Veterans Affairs	DETAIL TITLE / MEDICAL GAS ALARM PANEL SCHEDULE, CONTINUED
SCALE: NONE	
DATE ISSUED: DECEMBER 1, 2015 CAD DETAIL NO.: SD226200-02.DWG	

GALVANIZED STEEL LIQUID SEPARATOR TANKS WITH AUTO PUMP AND ELECTRIC SURGE CONTROL (ALSO AVAILABLE WITH SOLENOID CONTROL)



PARTS LIST

ITEM NO.	PART NO.	DESCRIPTION	ITEM NO.	PART NO.	DESCRIPTION
1	DCP	DUPLEX ELEC. MOTOR CONTROL PANEL	8	ABV	THROTTLING VALVE
2	AIP	ISOLATOR PAD	9	SLG	CYCLONIC LIQUID SEPARATOR
3	TET	TURBO EXHAUSTER	10	FSA	ELECTRONIC LIQUID LEVEL SENSOR (OPT)
4	ASV	MECHANICAL ANTI-SURGE VALVE	11	SV-300	SOLENOID VALVE ELECTRONIC LIQUID LEVEL
5	AEX	AIR DISCHARGE SILENCER	12	AF-300	SOLID STATE AUTO-FLUSH ASSEMBLY
6	RPL	FLEXIBLE PLUMBING ISOLATOR	13	ACV	CHECK VALVE
7	ACV	DIRECTIONAL FLOW CHECK VALVE	14	ACV	DIRECTIONAL FLOW VALVE

PARTS LIST

NTS

ORAL EVACUATION SYSTEM PIPING DETAIL



Department of Veterans Affairs

DETAIL TITLE / ORAL EVACUATION SYSTEM PIPING DETAIL

SCALE: NONE

DATE ISSUED: DECEMBER 1, 2015

CAD DETAIL NO.: SD226219_74-01.DWG

LABORATORY GAS ALARM PANEL SCHEDULE

LOCATION	TYPE OF PANEL	GAGES	SERVICE INDICATOR LIGHTS
BOILER PLANT CONTROL OFFICE –OR– ENGINEERING CONTROL CENTER (ECC) –OR– OTHER LOCATION WITH ENGINEERING PERSONNEL SUPERVISION –AND– FIRE STATION –OR– TELEPHONE SWITCHBOARD –OR– SECURITY OFFICE	MASTER (SYSTEM)	NO	LA AIR DEW POINT HIGH LA AIR CARBON MONOXIDE HIGH LA AIR DESICCANT DRYER MALFUNCTION LA AIR DESICCANT DRYER POST FILTER DIRTY LA REFRIGERATED DRYER POST FILTER DIRTY LA AIR COMPRESSOR MALFUNCTION LA AFTERCOOLER HIGH TEMP LA DESICCANT DRYER INLET FILTER DIRTY LA MAIN LINE FILTER BANK DIRTY LA PRESSURE HIGH LA PRESSURE LOW LA VACUUM FILTER BACKPRESSURE LA VACUUM LINE VACUUM LOW (SPECIAL GAS) LINE PRESSURE LOW (SPECIAL GAS) LINE PRESSURE HIGH TEST BUTTON

NOTES TO DESIGNER:

1. LOCATE MASTER ALARM PANELS IN CONFORMANCE WITH INDIVIDUAL MEDICAL CENTER'S OPERATING PRACTICES FOR CRITICAL ALARM LOCATIONS.
2. INDICATE ROOM NUMBERS WHERE PANELS ARE TO BE LOCATED.



Department of
Veterans Affairs

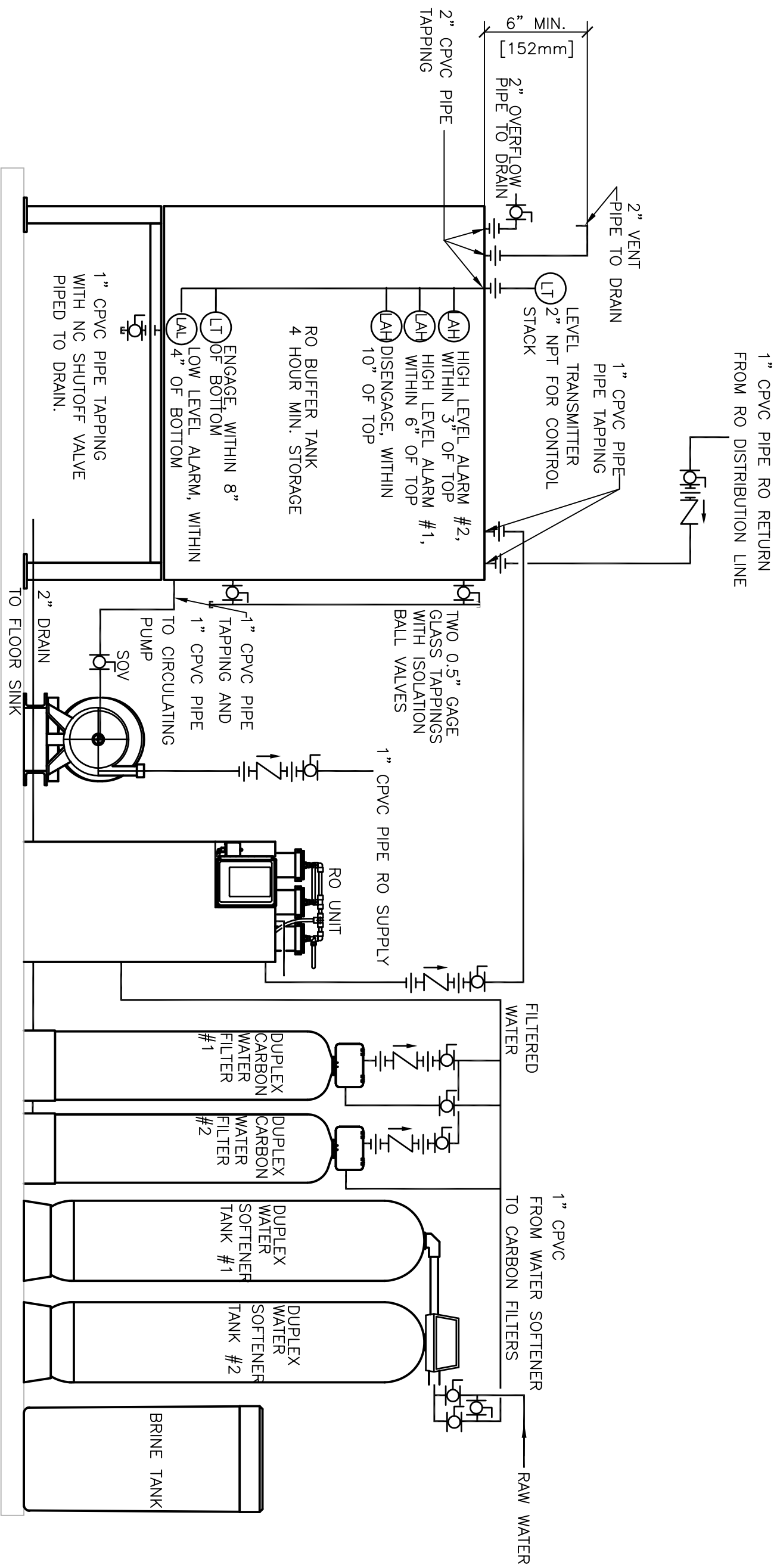
DETAIL TITLE / LABORATORY GAS ALARM PANEL SCHEDULE

SCALE: NONE

DATE ISSUED: DECEMBER 1, 2015

CAD DETAIL NO.:

SD226300-01.DWG



#

REVERSE OSMOSIS PACKAGE DETAIL

NTS