INSTALL VENT BETWEEN EQUIPMENT AND EQUIPMENT ISOLATION VALVE

1" BALL VALVE; PER SPECS

1" SCHED 80 316 STAINLESS STEEL NIPPLE, MIN. 2" LONG

PROVIDE STAINLESS STEEL PLUG AT OUTLET OF BALL VALVE

INSULATE NIPPLE AND VALVE WITH 1/2” ELASTOMERIC INSULATION

SCHED 80 THREADOLET BUTTERFLY VALVE PER SPECIFICATIONS

MIN. 10” MIN. 10”

MANUAL AIR VENT

12/9/2020
LOW POINT DRAIN

1" SCHED 80 THREADED
MIN. 2" LONG, SS, SCHED 80 NIPPLE, 1" NPT; WRAP WITH MIN 1/2" ELASTOMERIC
1" BALL VALVE, RE SPECS
PROVIDE STAINLESS STEEL PLUG AT OUTLET OF BALL VALVE

MIN. 10" CLEARANCE

FOR HEAT EXCHANGER APPLICATIONS OR IF PIPING IS LESS THAN 24" AFF.
FOR ALL OTHER APPLICATIONS IF PIPING IS MORE THAN 24" AFF.

HEAT EXCHANGER

DRAIN ANGLED AWAY FROM CENTERLINE OF HX

INSTALL DRAIN AT 45 DEGREE ANGLE FROM VERTICAL

INSTALL DRAIN AT VERTICAL AT LEAST 18" OFF FINISHED FLOOR

LOW POINT DRAIN

M18

12/9/2020  SCALE:  N.T.S.
HEAT EXCHANGER

MANUAL AIR VENT. REF AE STANDARD DETAIL M17 "MANUAL AIR VENT"

PETE'S PLUG. RE: AE STANDARD DETAIL M21 PRESSURE / TEMPERATURE TEST PORT

MANUAL BUTTERFLY VALVE RE: SPECS; INSTALL IN HORIZONTAL PIPE SEGMENT ON CHR SIDE. STAGGER THE VALVES SO NOT INSTALLED AT IDENTICAL DISTANCE FROM HX.

PETE'S PLUG. RE: AE STANDARD DETAIL M21 PRESSURE / TEMPERATURE TEST PORT

MAINTAIN 6" OF SEPARATION BETWEEN ISOLATION VALVE AND Y-STRAINER

Y-STRAINER PER SPECS

MINIMUM 2" LONG, THREADED, SCHEDULE 80, 316 STAINLESS STEEL NIPPLE. NIPPLE SAME DIAMETER AS STRAINER OUTLET.

APOLLO BALL VALVE PER SPECIFICATIONS

PROVIDE STAINLESS STEEL PLUG AT OUTLET OF BALL VALVE

MANUAL BUTTERFLY VALVE RE: SPECS INSTALL IN VERTICAL PIPE SEGMENT ON CHR SIDE

LOW POINT DRAIN HIDDEN BEHIND PIPE – REF AE STANDARD DETAIL M18 – "LOW POINT DRAIN"

REF AE STANDARD DETAIL M18 – "LOW POINT DRAIN"
PRESSURE TRANSMITTER

12/9/2020

PRESSURE TRANSMITTER

M20 N.T.S.
PRESSURE / TEMPERATURE (P/T) TEST PORT ISOMETRIC

1/2" NPT PRESSURE/TEMPERATURE TEST PORT PER SPEC
3/4" X 1/2" SS BUSHING
INSULATE NIPPLE AND VALVE WITH 1/2" ELASTOMERIC INSULATION
SCHED 80 THREADED TEXT
BUTTERFLY VALVE PER SPECIFICATIONS

MANUAL AIR VENT – RE AE
STANDARD DETAIL M17

LOW POINT DRAIN – RE AE
STANDARD DETAIL M18

12/9/2020
SCALE: M21
N.T.S.
AUSTIN ENERGY INSTRUMENT AND CONTROLS SCHEDULE

REFER TO DESIGN DRAWINGS AND SPECIFICATIONS FOR PRECISE MANUFACTURER AND MODEL NUMBERS

CHILLED WATER PIPING SCHEMATIC

08/11/14 SCALE: M22 N.T.S.
IN HORIZONTAL PIPE, INSTALL MANUAL VALVES WITH SHAFT IN HORIZONTAL POSITION, SHAFT TO EXTEND BEYOND INSULATION

NOTE: MANUAL VALVE HANDLES SHALL OPEN SUCH THAT BOTTOM OF DISC OPENS IN DIRECTION OF FLOW.
NOTES:
ALL CLEARANCE DISTANCE SHALL BE FREE AND CLEAR OF ALL OBSTRUCTIONS, PIPING, APPURTENANCES AND EQUIPMENT
HX WIDTH = HX BARE HEAT EXCHANGER + 5 INCHES INSULATION JACKET
HX HEIGHT = HX FLOOR TO UPPER BEAM
HX LENGTH = HX REAR HORIZONTAL BEAM + FRONT 2.5 INCHES INSULATION JACKET

HEAT EXCHANGER CLEARANCES
NOTE:
CONTROL VALVE REQUIRES STRAIGHT RUN OF PIPE UPSTREAM AND DOWNSTREAM. SEE FIGURE BELOW.

ELEVATION VIEW - HORIZONTAL ORIENTATION

NOTE:
ORIENTATION IS 0 DEGREES TO 45 DEGREES.
FLOW METER ACCESS CLEARANCE

NOTE:
FLOW METER REQUIRES STRAIGHT RUN OF PIPE UPSTREAM AND DOWNSTREAM. SEE FIGURE BELOW.

1. ORIENTATION IS 0 DEGREES TO 45 DEGREES.
2. INSTALL GROUNDING STRAPS. ONCE FLOW METER IS INSTALLED, GROUNDING STRIPS SHALL BE INSTALLED BEFORE WELDING IS DONE ON PIPE.

ELEVATION VIEW – HORIZONTAL ORIENTATION
NOTES:
1. ALL PANELS AND TRANSMITTERS MOUNTED ON THE WALL SHALL HAVE AT LEAST A MINIMUM OF 12" OF CLEARANCE AROUND ALL 4 SIDES OF PANEL/TRANSMITTER LOCATION.
2. THE CONTROL PANEL SHALL HAVE A MINIMUM OF 54" CLEARANCE IN FRONT OF THE CONTROL PANEL INCLUDING THE 12" CLEARANCE ON EITHER SIDE.
3. ALL OTHER PANELS AND TRANSMITTER LOCATION SHALL HAVE A MINIMUM OF 24" CLEARANCE IN FRONT OF PANEL/TRANSMITTER LOCATION INCLUDING THE CLEARANCE ON EITHER SIDE.
4. NO PANEL SHALL BE DESIGNED TO BE MOUNTED BEHIND OR IN FRONT OF HEAT EXCHANGERS OR ANY OTHER PIECE OF EQUIPMENT UNLESS EQUIPMENT IS AT LEAST 54" FROM FRONT PANEL OR TRANSMITTER LOCATION.
5. ALL PANELS SHALL BE MOUNTED ON VERTICAL UNI-STRUCT CONNECTED TO THE WALL. SEE SPECIFICATION AE SS230900
6. NO CUSTOMER PIPING OR CONDUITS SHALL RUN IN BETWEEN OR WITHIN 12" ON ALL 4 SIDES OF THE PANELS.
7. PANEL AND TRANSMITTER LAYOUT IS FOR REFERENCE OF SIZE ONLY AND DOES NOT INDICATE ACTUAL LOCATION OF PANELS OR TRANSMITTERS. ACTUAL PANEL LAYOUT WILL BE DEPENDENT ON A PER CUSTOMER BASIS.
8. DURING CONSTRUCTION CONTROL PANEL SHALL BE PROTECTED TO PREVENT DUST AND PARTICLES FROM ENTERING CONTROL AND PROTECTED FROM ANY OTHER PHYSICAL DAMAGE OCCURRING TO THE CONTROL PANEL.