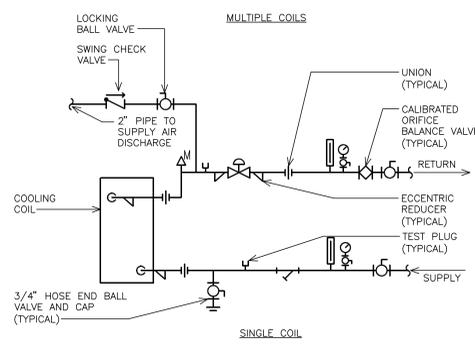
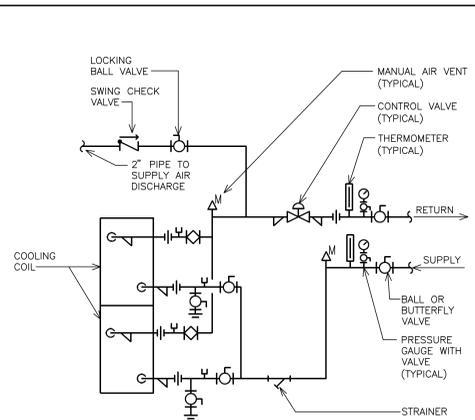
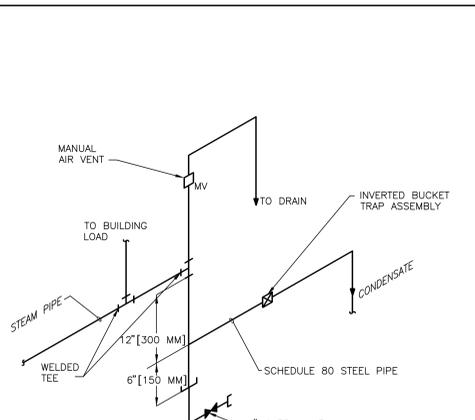


one-half inch = one foot
 one-quarter inch = one foot
 one-eighth inch = one foot
 one-sixteenth inch = one foot
 one-thirty-second inch = one foot
 one-sixty-fourth inch = one foot
 one-hundred-eighth inch = one foot
 one-hundred-sixteenth inch = one foot
 one-hundred-thirtieth inch = one foot
 one-hundred-fiftieth inch = one foot
 one-hundred-eighty inch = one foot
 one-thousand inch = one foot

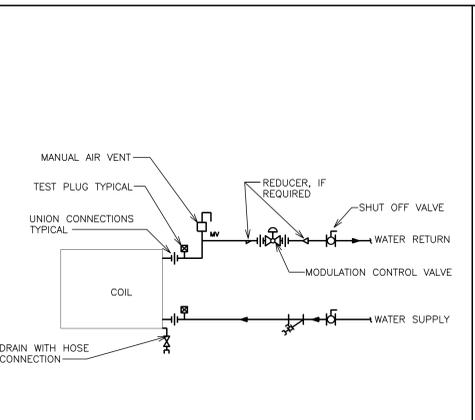


- NOTES:**
1. PIPE COILS COUNTER-FLOW TO AIR FLOW. I.E., CHILLED WATER SUPPLY CONNECTION IS ON THE DISCHARGE SIDE OF THE COIL.
 2. LOCATE UNIONS TO ALLOW FOR COIL REMOVAL.
 3. MOUNT THERMOMETERS AND GAUGES NO MORE THAN 8'-0" A.F.F.
 4. REDUCE TO CALIBRATED ORIFICE BALANCING VALVE AS REQUIRED.

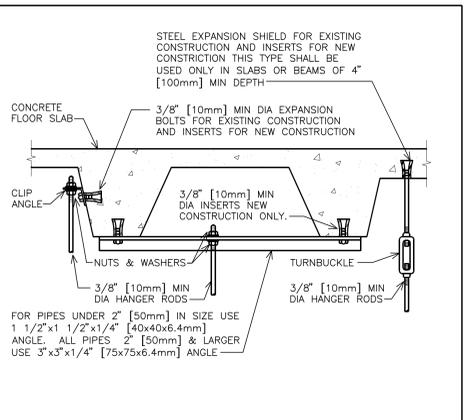
1 AIR HANDLING UNIT COOLING PIPING DETAIL (2-WAY VALVE)
 NO SCALE



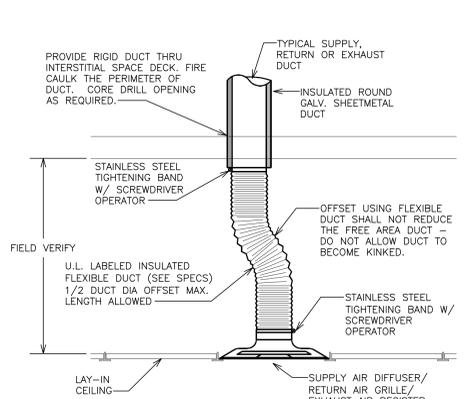
2 END OF STEAM LINE DRIP TRAP
 NO SCALE



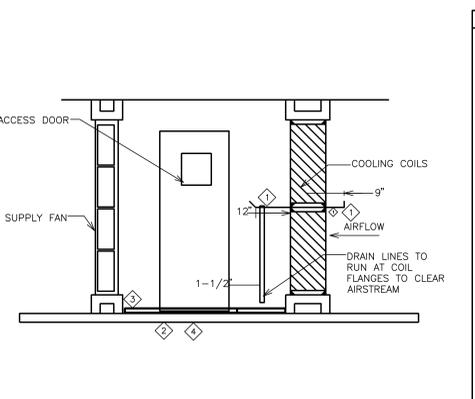
3 TERMINAL UNIT WATER-COILS PIPING CONNECTION
 NO SCALE



4 SECURING HANGER RODS IN CONCRETE
 NO SCALE



5 FLEXIBLE DUCT CONNECTION
 NO SCALE



6 COOLING COIL CONDENSATE PAN DETAIL
 NO SCALE

- KEY NOTES:**
1. PROVIDE NEW 304C STAINLESS STEEL DOUBLE SLOPED INTERMEDIATE DRAIN PAN UPSTREAM AND DOWNSTREAM OF THE NEW TOP COOLING COIL. SIZE OF NEW PAN TO EQUAL SIZE OF REMOVED PAN.
 2. REMOVE PORTIONS OF THE ACCESS SECTION FLOOR TO REMOVE EXISTING AREA DRAIN PIPING. REINSTALL NEW WELDED PIPING OF EQUAL SIZE TO EXISTING CONDENSATE PIPING TO ENSURE SYSTEM IS AIR AND WATER TIGHT.
 3. PROVIDE NEW 304C STAINLESS STEEL DOUBLE SLOPING DRAIN PAN FOR AHU FLOOR OF ACCESS SECTION NOT PROTECTED BY THE COOLING COIL CONDENSATE DRAIN PAN. CONNECT TO NEW DRAIN PIPING. INSTALL PAN DIRECTLY ON TOP OF EXISTING AHU FLOOR UNLESS ADDITIONAL BRACING BENEATH PAN IS REQUIRED TO WITHSTAND THE WEIGHT OF MAINTENANCE PERSONNEL. PROVIDE 3 INCH LIP AROUND PAN. SEAL ENTIRE PERIMETER OF PAN WATER TIGHT.
 4. PROVIDE NEW CONDENSATE TRAP PER DETAIL.

REVISIONS	ADDENDUM #3	DATE
	ADDENDUM #1	02/05/13

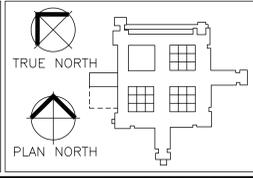
GENERAL NOTES:

GENERAL CONTRACTOR AND/OR ALL SUBCONTRACTORS SHALL FIELD VERIFY ALL DIMENSIONS SHOWN ON THESE PLANS AND SHALL BE RESPONSIBLE FOR VARIATIONS BETWEEN PLAN DIMENSIONS AND ACTUAL FIELD DIMENSIONS. WHERE VARIATIONS ARE FOUND TO OCCUR, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IN WRITING PRIOR TO PROCEEDING WITH CONSTRUCTION; NO ADJUSTMENT TO THE WORK WILL BE MADE WITHOUT THE PRIOR APPROVAL OF THE PROJECT ENGINEER.

GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR GENERAL DEMOLITION INCLUDING REMOVAL OF WALLS, PARTITIONS, DOORS & CEILING & FLOORS. ANY AND ALL CUTTING OF CONCRETE FLOORS, WALLS OR STRUCTURE SHALL BE THE GENERAL CONTRACTOR'S RESPONSIBILITY. CORE DRILLING THROUGH CONCRETE WALLS, FLOORS OR STRUCTURE FOR PIPING OR CONDUIT SHALL BE THE RESPONSIBILITY OF THE SUBCONTRACTOR BY TRADE. FIRESTOPPING OF THESE OPENINGS SHALL BE DONE BY THE RESPECTIVE SUBCONTRACTOR. REMOVAL OF DEBRIS RESULTING FROM DEMOLITION, CUTTING, AND/OR DRILLING IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. PATCHING AND REPAIR OF CONCRETE WALLS, FLOOR, OR STRUCTURE SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR; THIS WILL BE ACCOMPLISHED UPON COMPLETION OF THE INSTALLATION OF ANY AND ALL UTILITIES INSTALLED BY THE VARIOUS SUBCONTRACTORS.

DUNHAM

Dunham Associates, Inc.
 50 South Sixth Street / Suite 1100
 Minneapolis, Minnesota 55402-1540
 PHONE 612.465.7950 FAX 612.465.7951
 WEB dunhameng.com
 mechanical + electrical consulting engineering



I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Engineer under the laws of the State of Minnesota.

DARIN MAY
 Date 08/13/2012 Reg. No. 42401

Drawing Scale
 AS NOTED

Plot Scale
 12" = 1'-0"

Drawing Title
MECHANICAL DETAILS

Approved: Cynthia Doolittle, Chief, Projects Section

Approved: Steven Challeen, Director, Engineering

Project Title
VA SPD HVAC IMPROVEMENTS

Location
 V.A. MEDICAL CENTER
 ONE VETERANS DRIVE
 MINNEAPOLIS, MN 55417

Date
 08/13/2012

Checked
 CM

Drawn
 AU

Project No.
618-12-127

Building Number
70

DRAWING NO.
1260-M19

Dwg. 24 Of 28

Office of
 Facilities
 Management

Department of
 Veterans Affairs

100% CD ISSUE
 FULLY SPRINKLERED