

Wayne State University

Prentis Building Computer Lab Relocation

Basement Hydronic Heating Piping Replacement

5454 Cass Ave, Detroit, MI 48202

Issued for Bids - March 31, 2020

Project Number: 180746

WSU Project Number: 022-313456



Fishbeck, Thompson, Carr & Huber, Inc.

Engineers Scientists Architects Constructors
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DRAWING INDEX

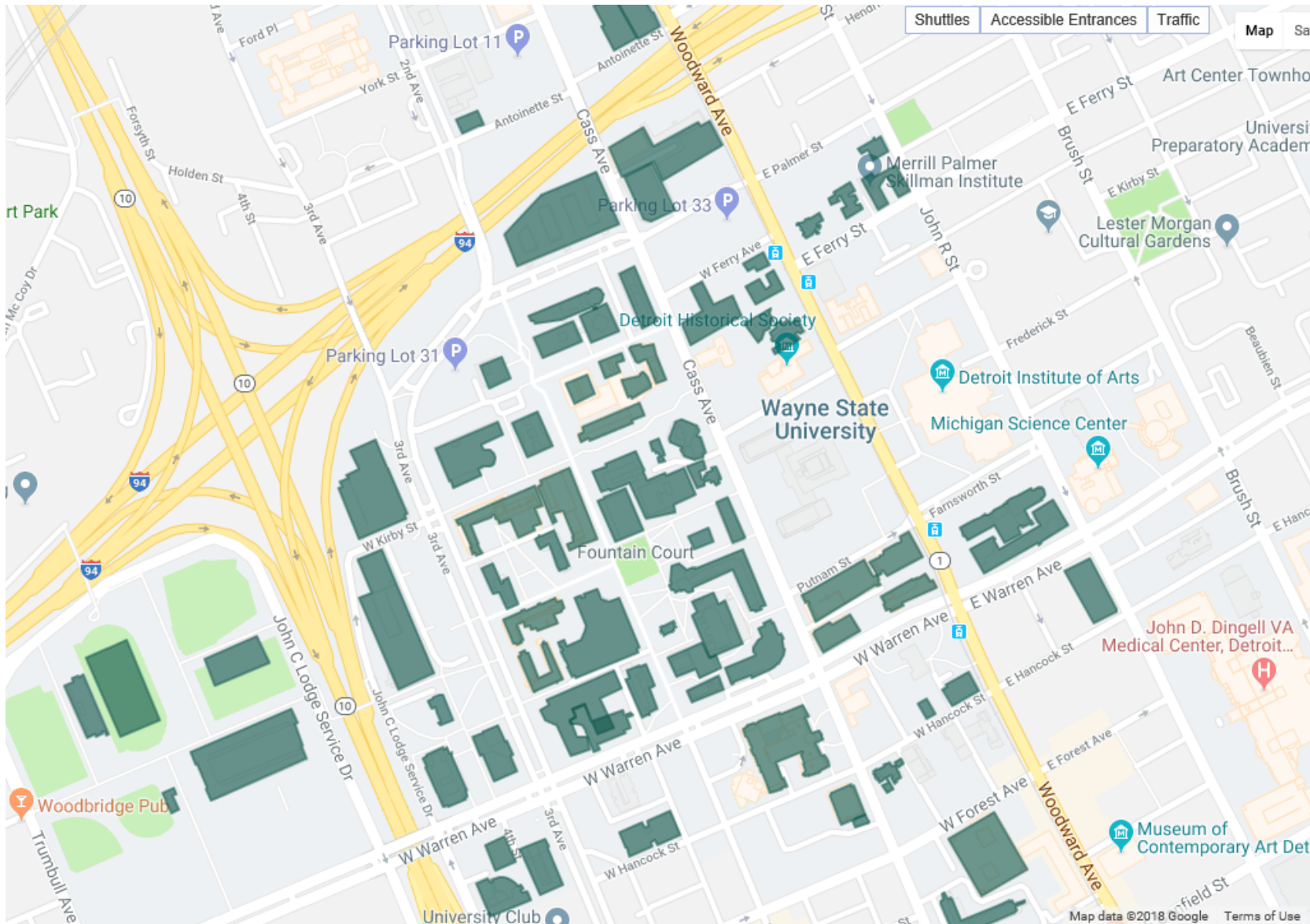
GENERAL

T100 TITLE SHEET

MECHANICAL

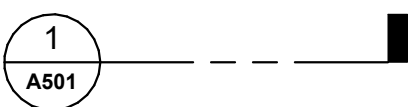
M101 BASEMENT HYDRONIC HEATING PIPING REPLACEMENT PLAN
M501 MECHANICAL DETAILS

SITE LOCATION MAP



GRAPHIC SYMBOLS

SECTION CUT LINE



ELEVATION, SECTION AND DETAIL DESIGNATION

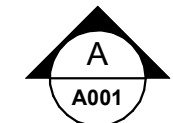


PLAN DESIGNATION

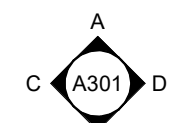
FLOOR PLAN

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

EXTERIOR ELEVATION TAG



INTERIOR ELEVATION TAG



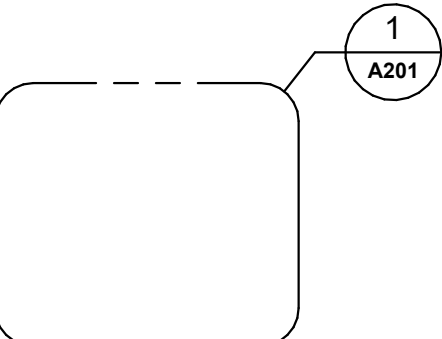
NORTH ARROW DESIGNATION



ROOM NAME AND NUMBER

VESTIBULE

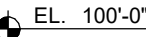
ENLARGED DETAIL FRAME



ELEVATION TARGET



ELEVATION TAG



SIGNAGE TAG

FINISH TAG

BULLETIN IDENTIFICATION

ADDENDUM IDENTIFICATION

SKETCH IDENTIFICATION

BARRIER FREE LOCATION

KEY NOTE TAG

DEMOLITION NOTE TAG

1

P-1

B1

A1

S1

1

1

1

1

SCOPE OF WORK

THE PROJECT RENOVATES THE MEYER AND ANNA PRENTIS HALL BUILDING ON WAYNE STATE UNIVERSITY'S CAMPUS LOCATED IN DETROIT, MICHIGAN. WORK INCLUDES REPLACING THE BASEMENT HEATING HOT WATER PIPING SYSTEMS.

PROJECT NOTES

- IN CASE OF A DIMENSIONAL QUESTION OR DISCREPANCY, SUBMIT A REQUEST FOR INFORMATION (RFI) TO THE CONSTRUCTION COORDINATOR.
- DIMENSIONS INDICATED ON DRAWINGS SHALL BE VERIFIED BY GENERAL CONTRACTOR PRIOR TO CONSTRUCTION.
- ACCESS AREAS OUTSIDE THE DESIGNATED WORK AREA WILL BE REQUIRED TO PERFORM THE WORK. COORDINATE ACCESS AND SCHEDULING OF ACCESS WITH OWNER.



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ftc&h

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scientists
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Hydronic Heating Piping Replacement
WSU Project: 022-313456

REVISIONS

3/31/2020 BIDS

Drawn By SF

Designer J LH

Reviewer PMO

Manager MMS

Hard copy is intended to be 24"x36" when plotted. Scale(s) indicated and graphic quality may not be accurate for any other size.

PROJECT NO.

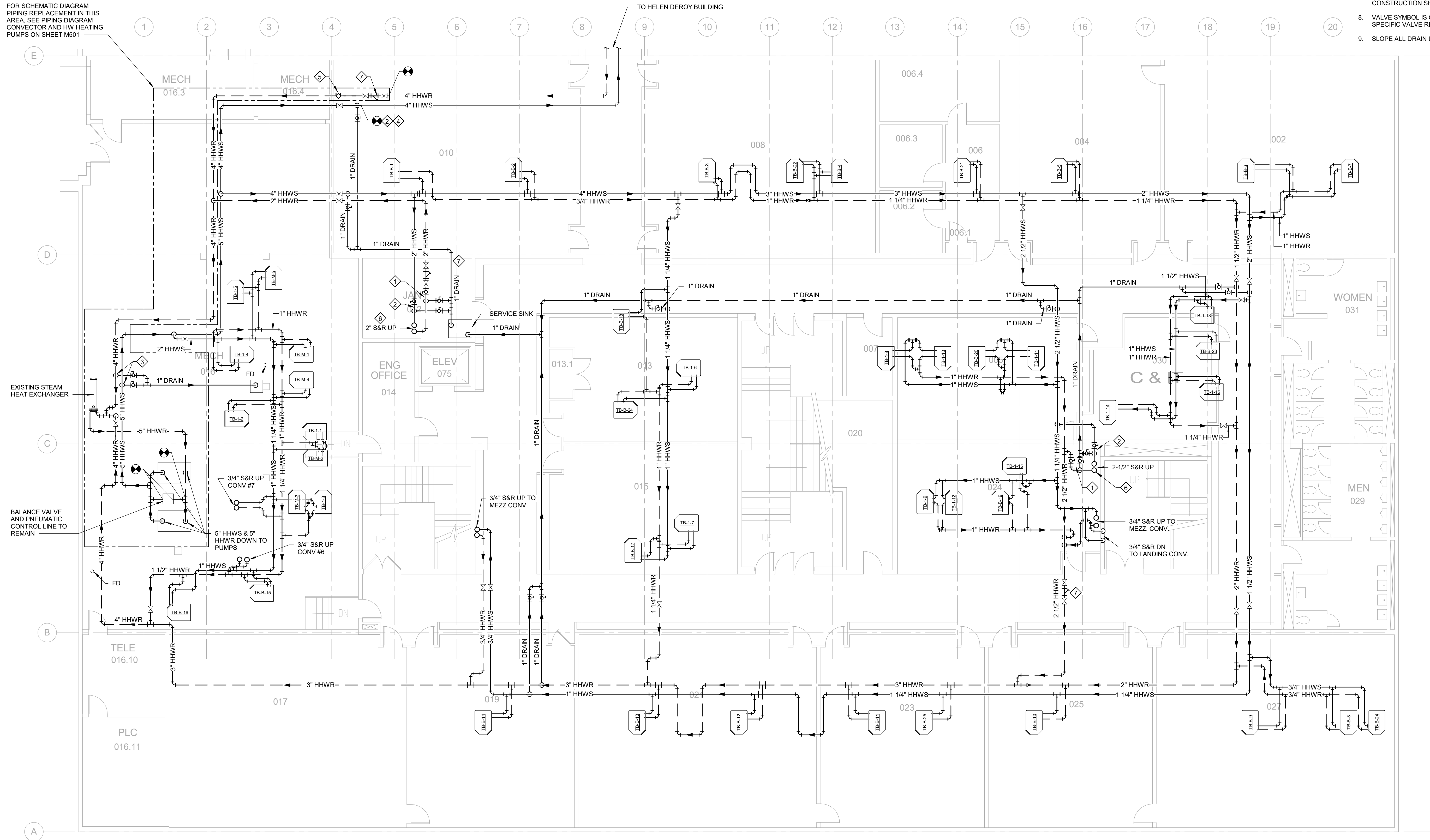
180746

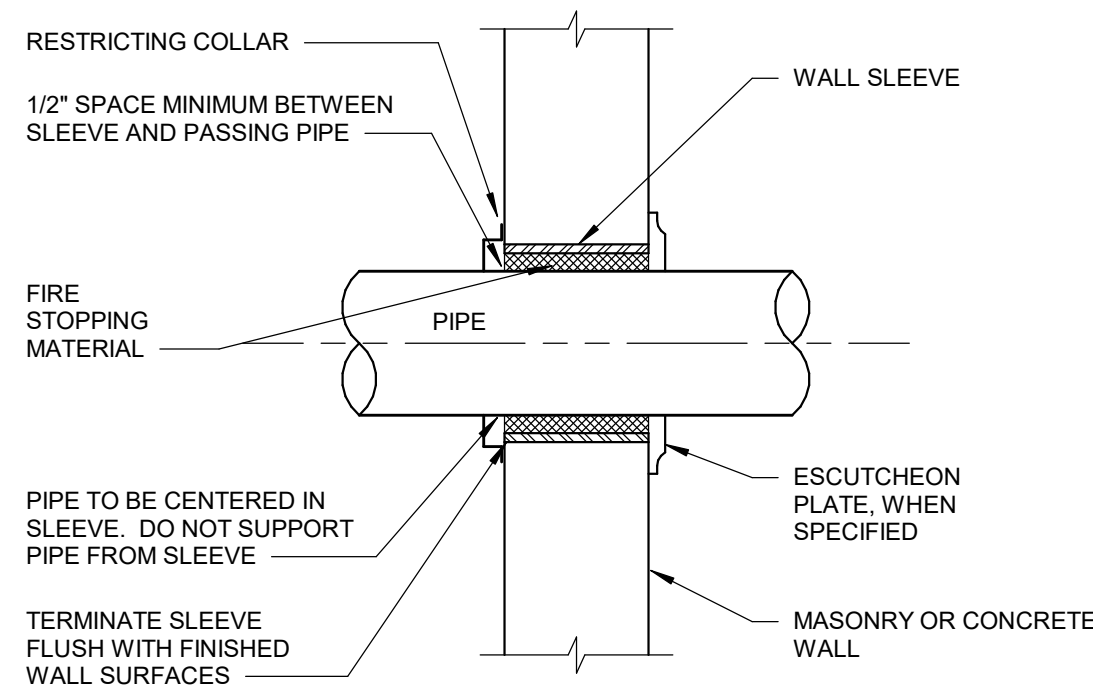
TITLE SHEET

T001

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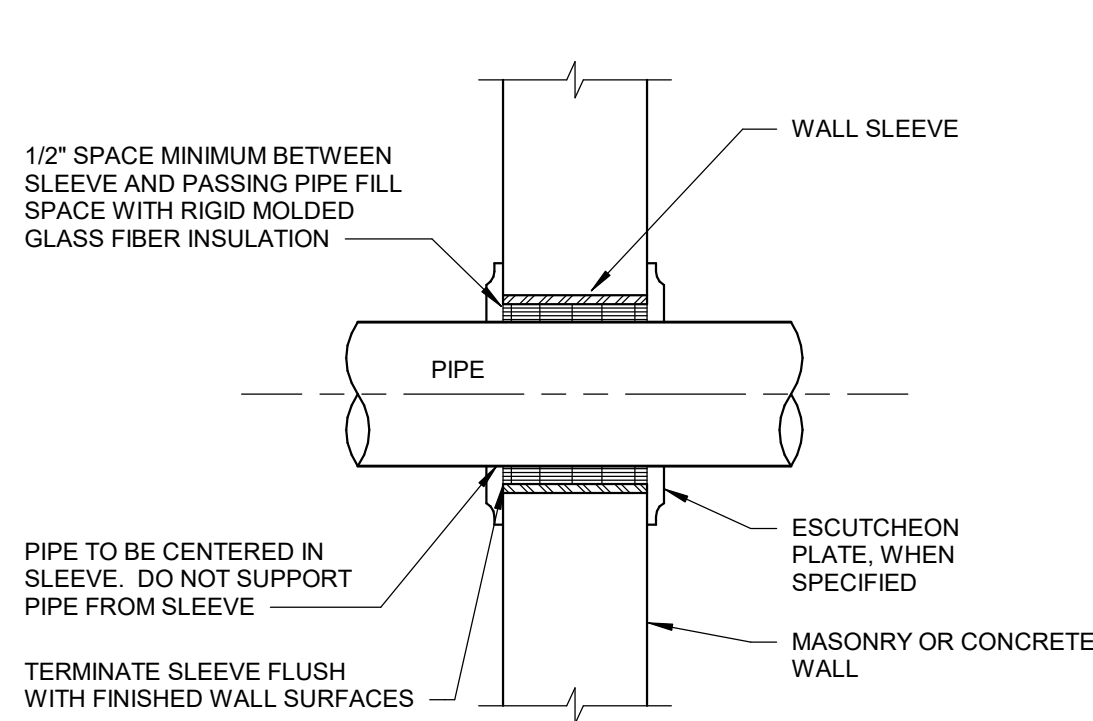
FOR SCHEMATIC DIAGRAM
PIPING REPLACEMENT IN THIS
AREA, SEE PIPING DIAGRAM
CONVECTOR AND HW HEATING
PUMPS ON SHEET M501





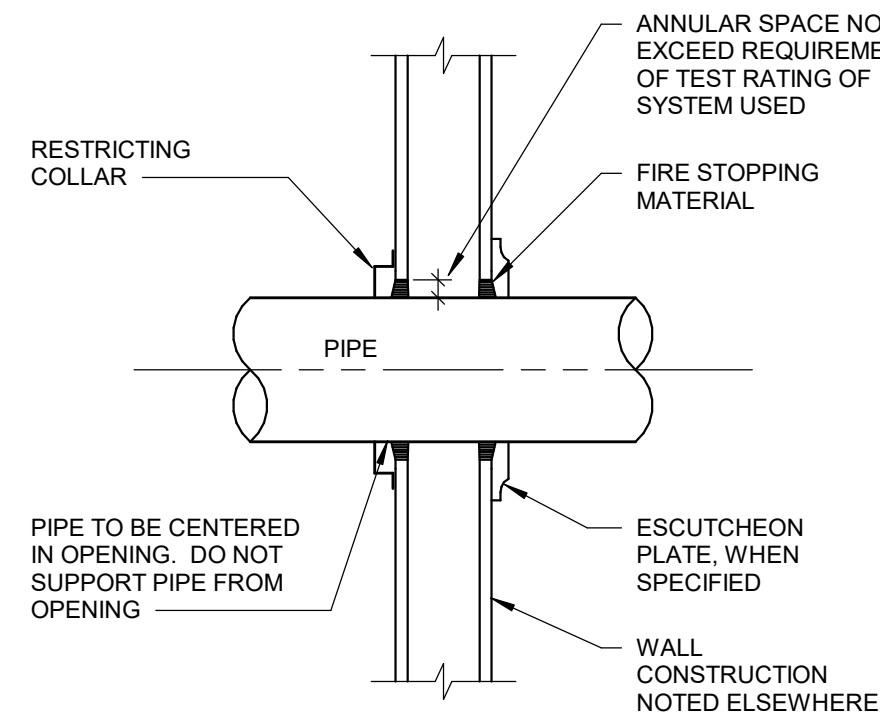
NOTE
USE TYPE 5 WALL SLEEVE FOR ALL PIPING PASSING THROUGH EXISTING FIRE RATED INTERIOR MASONRY OR CONCRETE WALLS.

1 WALL SLEEVE DETAIL - TYPE 5
NO SCALE



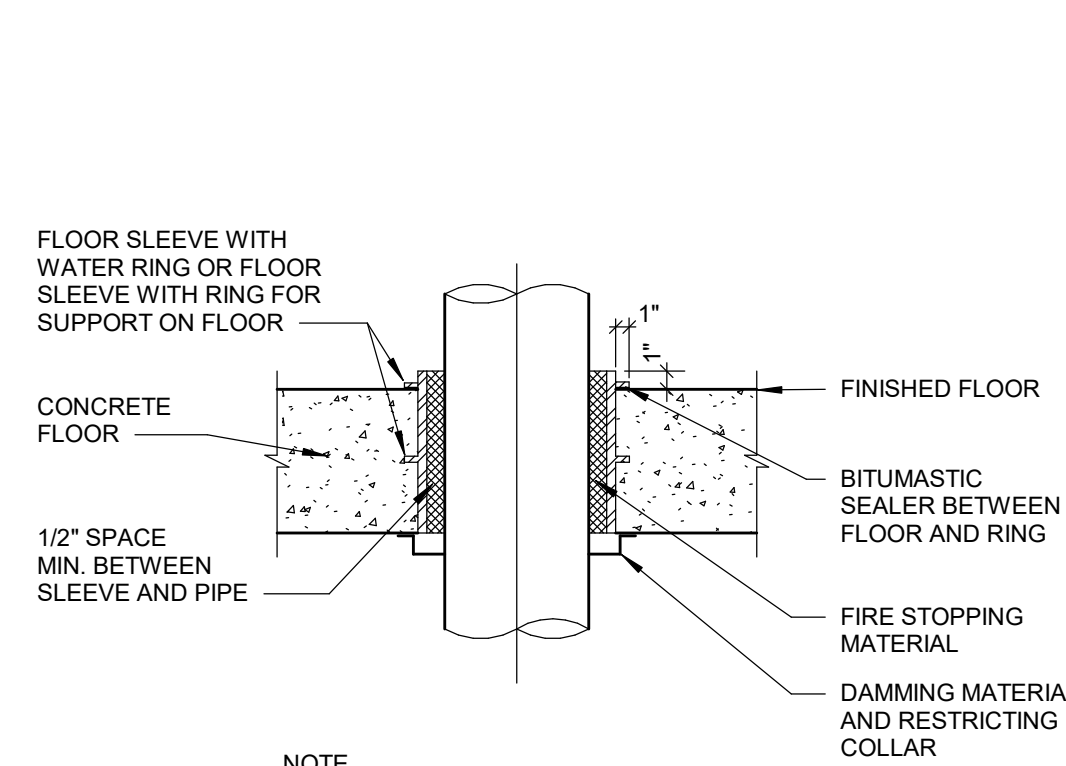
NOTE
USE TYPE 6 WALL SLEEVE FOR ALL PIPING PASSING THROUGH EXISTING INTERIOR NON-FIRE RATED MASONRY OR CONCRETE WALLS.

2 WALL SLEEVE DETAIL - TYPE 6
NO SCALE



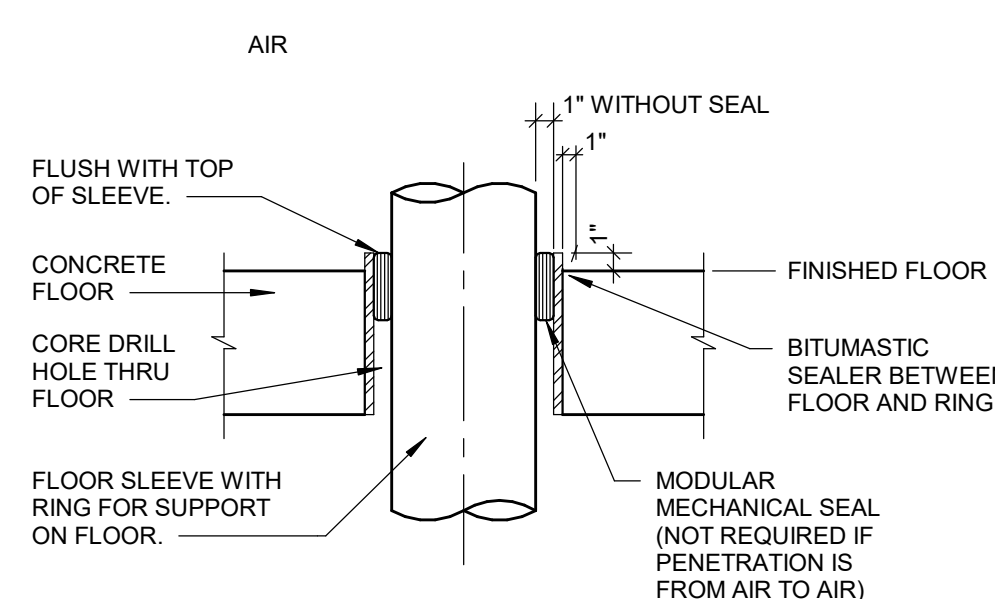
NOTE
USE TYPE 4 WALL PENETRATION FOR ALL PIPING PASSING THROUGH EXISTING FIRE RATED INTERIOR STUD WALLS.

3 WALL PENETRATION DETAIL - TYPE 4
NO SCALE



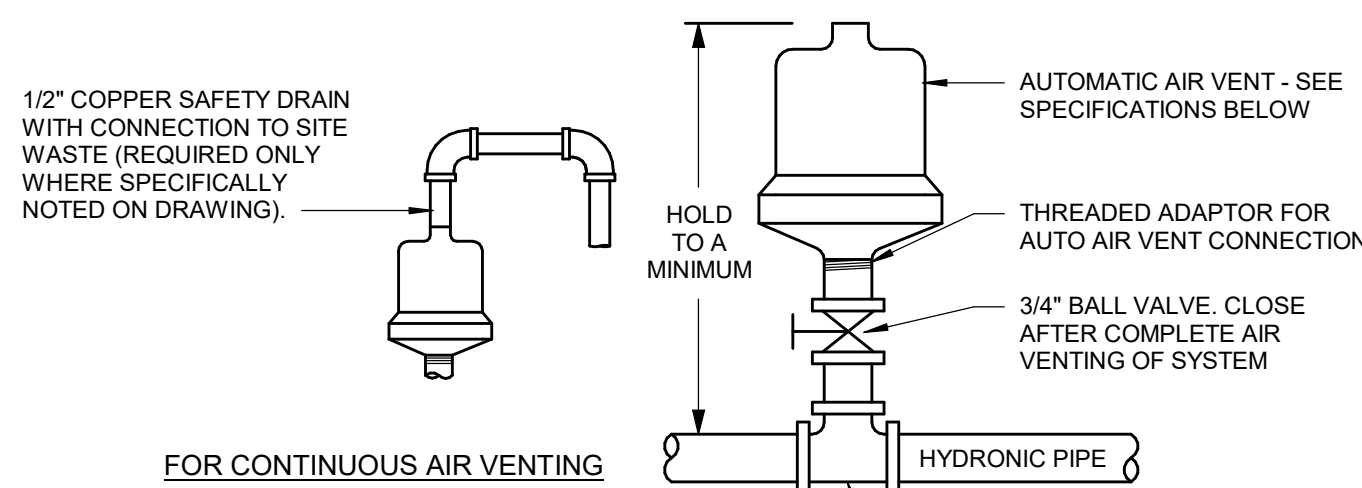
NOTE
USE TYPE 3 FLOOR SLEEVE FOR ALL PIPING PASSING THROUGH NEW OR EXISTING FIRE RATED CONCRETE FLOORS.

4 FLOOR SLEEVE DETAIL - TYPE 3
NO SCALE

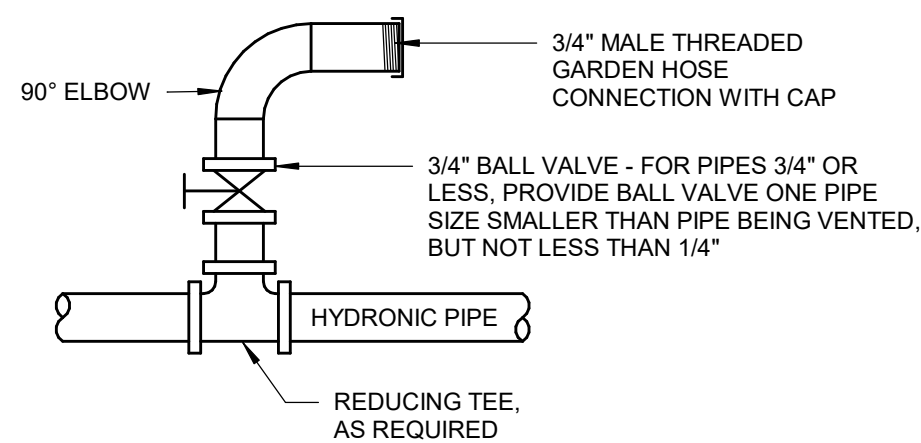


NOTE:
USE TYPE 2 FLOOR SLEEVE FOR ALL PIPING PASSING THROUGH CORED HOLE IN EXISTING NON-FIRE RATED CONCRETE FLOORS.

5 FLOOR SLEEVE DETAIL - TYPE 2
NO SCALE



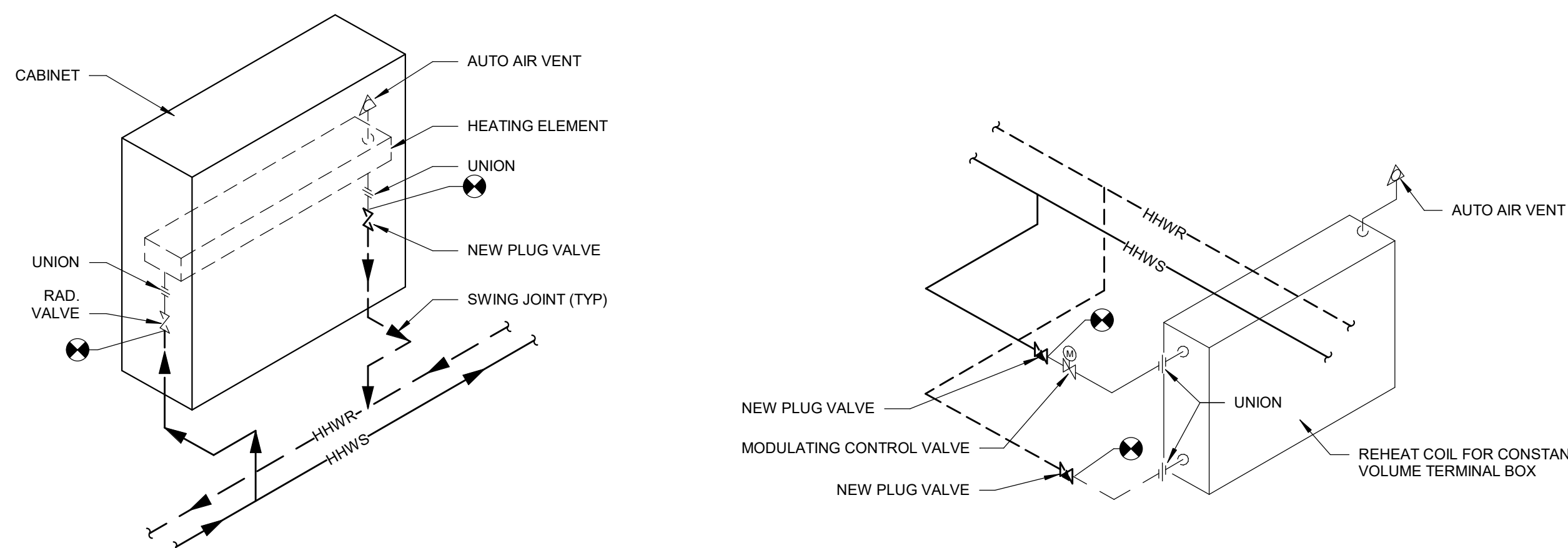
AUTOMATIC VENT



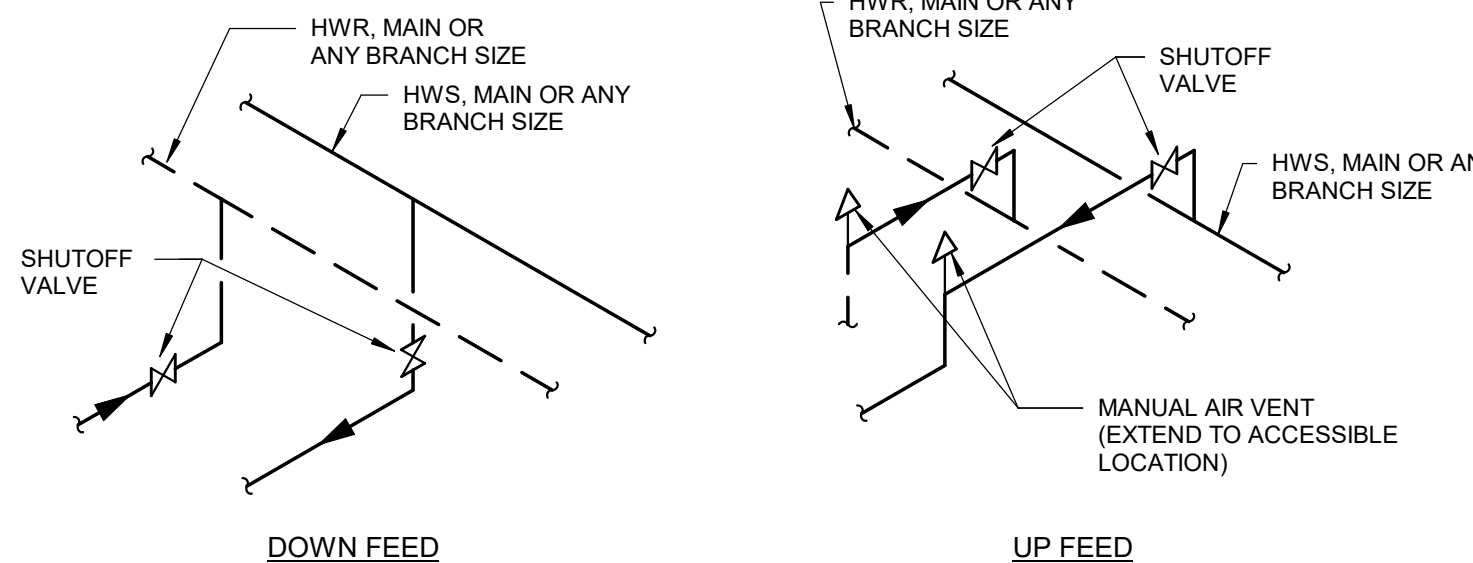
MANUAL VENT

- NOTES:
1. AUTOMATIC AIR VENTS ARE REQUIRED AT EACH HIGH POINT IN HYDRONIC PIPING LOCATED TO COMPLETELY VENT AIR FROM WATER SYSTEMS.
 2. FOR PIPE SIZES 2-1/2" AND LARGER, PROVIDE BELL & GOSSETT MODEL 78 AIR VENT, OR ARMSTRONG NO. 75, RATED FOR 150 PSI.
 3. FOR PIPE SIZES 2" AND LESS, PROVIDE BELL & GOSSETT MODEL 87 AIR VENT, OR ARMSTRONG NO. 75, RATED FOR 150 PSI.
 4. WHEN AUTOMATIC AIR VENT INSTALLATION IS NOT POSSIBLE, OR WHEN MANUAL VENTS ARE INDICATED, PROVIDE A BALL VALVE AND HOSE THREAD CONNECTION.

6 WATER SYSTEM AIR VENT DETAILS
NO SCALE

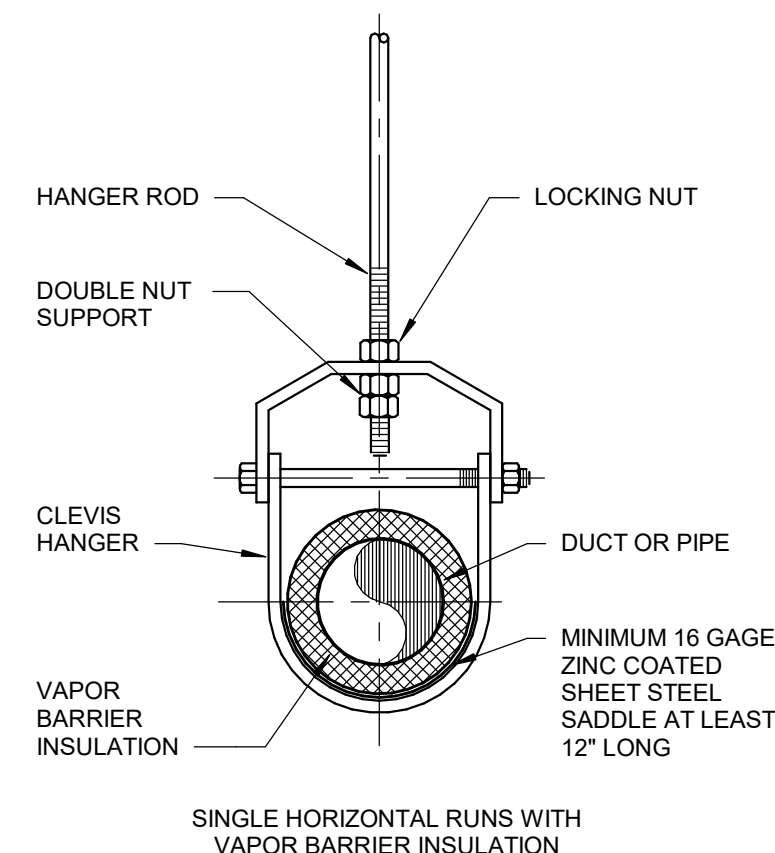


8 EXISTING RE-HEAT COIL FOR TERMINAL BOXES PIPING DETAIL
NO SCALE

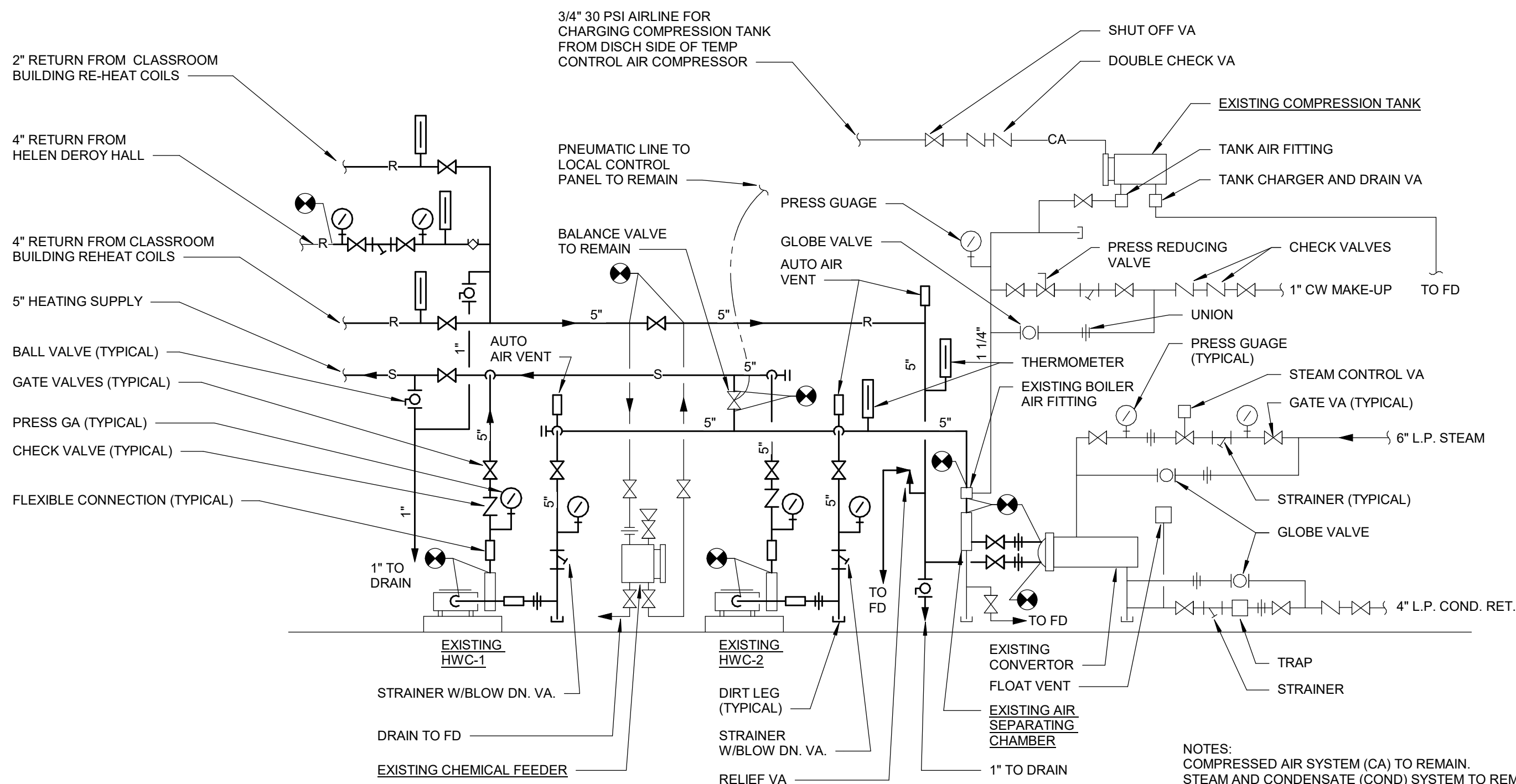


- NOTES
1. MAKE ALL TAKE OFFS WITH SWING JOINTS.
 2. DOWN FEED TO BE USED UNLESS INDICATED OTHERWISE.

9 PIPING TAKE OFF DETAILS
NO SCALE



10 TYPICAL CLEVIS HANGER
NO SCALE



NOTES:
COMPRESSED AIR SYSTEM (CA) TO REMAIN.
STEAM AND CONDENSATE (COND) SYSTEM TO REMAIN.
COLD WATER (CW) MAKEUP SYSTEM TO REMAIN.

11 PIPING DIAGRAM CONVERTOR AND H.W. HEATING PUMPS
NO SCALE



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