WARDLAW AHU-2 REPLACEMENT

STATE PROJECT NUMBER H27-6117
COLUMBIA, SC
CONSTRUCTION DOCUMENTS

DRAWING INDEX

CAMPUS PLANNING
AND CONSTRUCTION
COLUMBIA, SC 29208

SEAL:

SEAL:

CHECKED BY: BJJ
ORIG. BY:
DRAWN BY:

DRAWN BY: BJJ
DATE: 27JAN17

REV:	DESCRIPTION	DATE:

BUILDING: 080
DRAWING: 16250-T1

PROJECT TITLE: WARDLAW AHU-2 REPLACEMENT

STATE PROJECT NUMBER H27-6117

University of South Carolina

Swygert & Associates
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SHEET: T1
OF
SHEET IN SET:
OF

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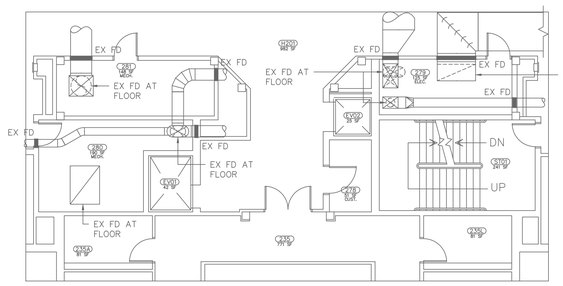
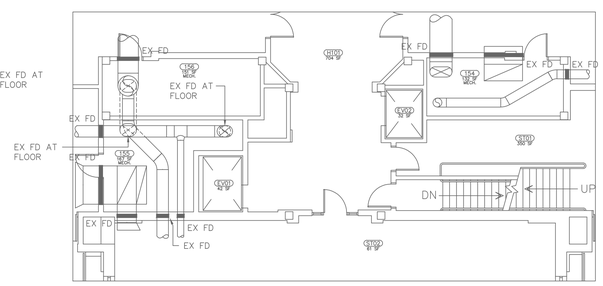
DEMOLITION NOTES

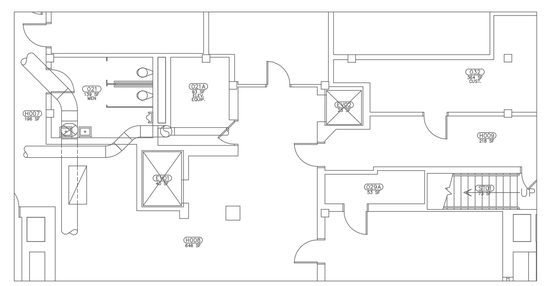
1. REMOVE AIR HANDLING UNIT. EXISTING STRUCTURAL STEEL ABOVE ROOF TO REMAIN. DOCUMENT WEIGHT OF DEMOLISHED UNIT AND REPORT FINDINGS TO ENGINEER.
2. REMOVE CHILLED WATER AND HOT WATER PIPING BACK TO ROOF PENETRATION.
3. REMOVE SUPPLY AND RETURN DUCT AS SHOWN BACK TO WALL PENETRATION.
4. SALVAGE MULTIPLE VARIABLE FREQUENCY DRIVES ON AIR HANDLER FAN MOTORS AND TURN OVER TO USC PERSONNEL.



2 M1 PARTIAL SECOND FLOOR PLAN – DEMOLITION
SCALE: 1/8" = 1'-0"



3 M1 PARTIAL FIRST FLOOR PLAN – DEMOLITION
SCALE: 1/8" = 1'-0"



4 M1 PARTIAL BASEMENT FLOOR PLAN – DEMOLITION
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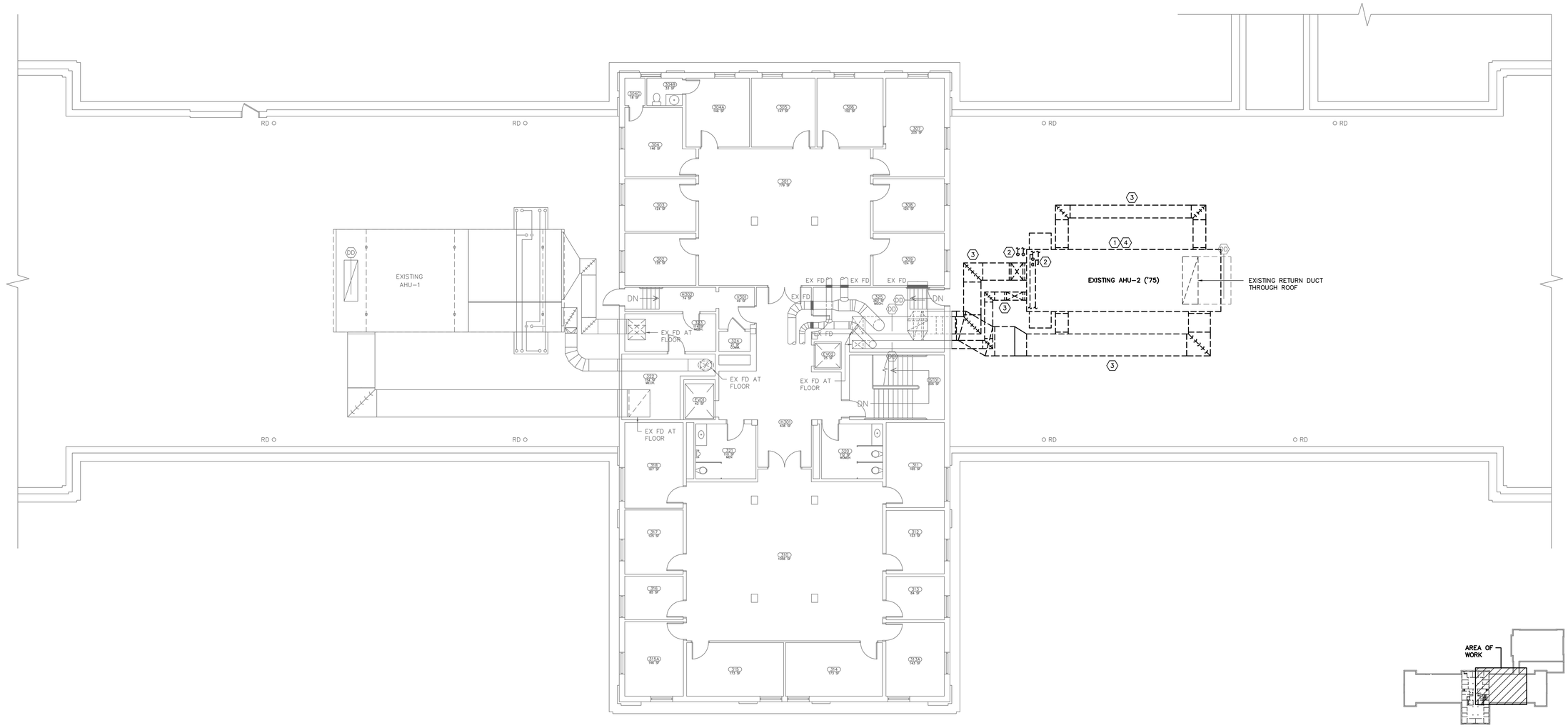

1 M1 PARTIAL THIRD FLOOR/ROOF PLAN – DEMOLITION
SCALE: 1/8" = 1'-0"

0 4' 8' 16'
SCALE: 1/8" = 1'-0"

KEY PLAN
NO SCALE

CAMPUS PLANNING AND CONSTRUCTION
COLUMBIA, SC 29208

SEAL:

SEAL:

BUILDING:	DRAWING:	DATE:	DESCRIPTION	REV.	DRAWN BY	CHECKED BY
080	16250-M1	27JAN17			BJJ	BJJ

PROJECT TITLE: WARDLAW AHU-2 REPLACEMENT

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University of South Carolina

SHEET: M1 OF 3

SHEET IN SET: OF

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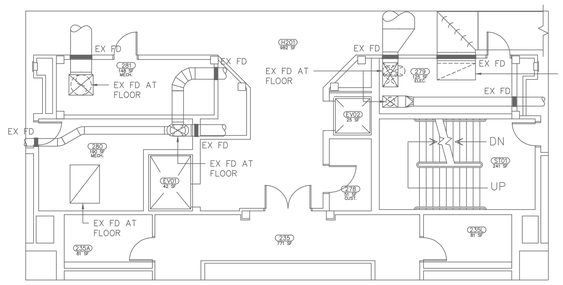
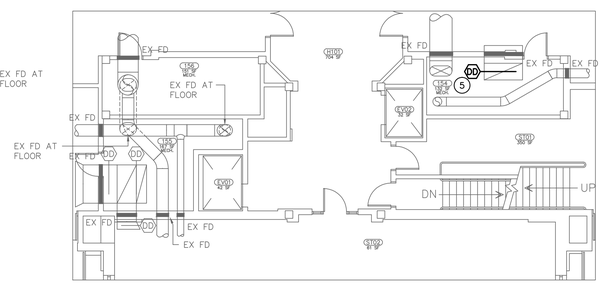
RENOVATION NOTES

1. DOUBLE WALL HIGH VELOCITY SUPPLY DUCT WITH 2" DUCT LINER PER SPECIFICATIONS. FIELD VERIFY DUCT SIZE TO MATCH EXISTING. SUPPORT DUCT ON ROOF WITH EXISTING DUCT SUPPORTS.
2. LINED RETURN DUCT WITH 2" DUCT LINER PER SPECIFICATIONS. FIELD VERIFY DUCT SIZE TO MATCH EXISTING. MODIFY/RELOCATE EXISTING DUCT SUPPORTS OR PROVIDE NEW IN ORDER TO ACCOMODATE NEW DUCT ROUTING.
3. NEW SUPPLY AIR DUCT DETECTOR IN PLACE OF EXISTING.
4. NEW RETURN AIR DUCT DETECTOR IN PLACE OF EXISTING FOR THIRD FLOOR.
5. NEW RETURN AIR DUCT DETECTOR FOR FIRST FLOOR.
6. NEW RETURN AIR DUCT DETECTOR ABOVE CEILING FOR SECOND FLOOR.
7. SUPPORT PIPING FROM STRUCTURAL SUPPORT STEEL BELOW UNIT AND HOLD AS HIGH AS POSSIBLE TO MAINTAIN MAXIMUM CLEARANCE BETWEEN PIPING AND ROOF.



2 M2 PARTIAL SECOND FLOOR PLAN – RENOVATION
SCALE: 1/8" = 1'-0"



3 M2 PARTIAL FIRST FLOOR PLAN – RENOVATION
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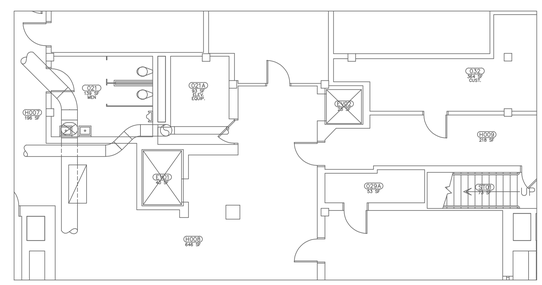
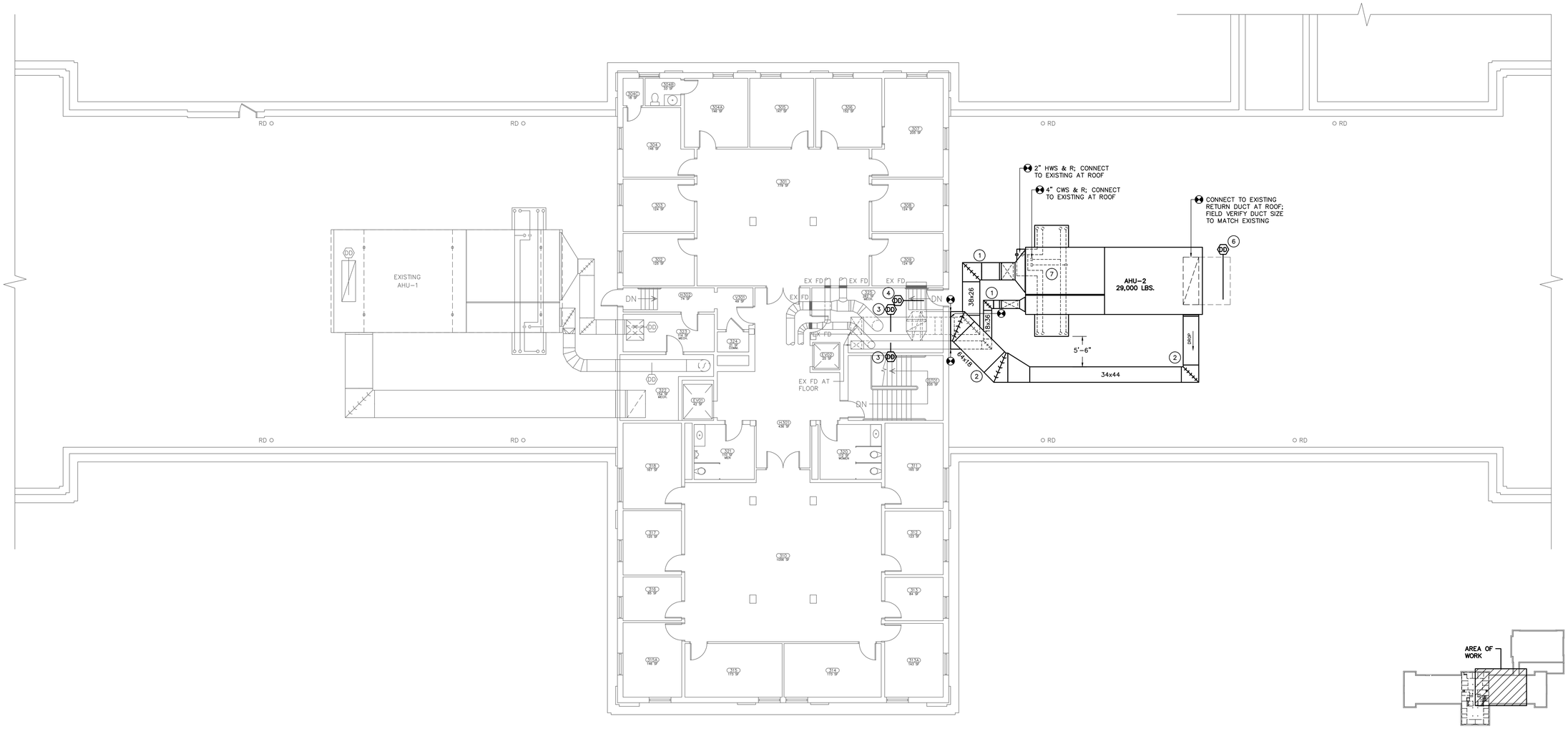


4 M2 PARTIAL BASEMENT FLOOR PLAN – RENOVATION
SCALE: 1/8" = 1'-0"



1 M2 PARTIAL THIRD FLOOR/ROOF PLAN – RENOVATION
SCALE: 1/8" = 1'-0"

0 4' 8' 16'
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KEY PLAN
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SHEET: M2 OF 3
SHEET IN SET: OF

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ISOLATION AND SEISMIC SCHEDULE

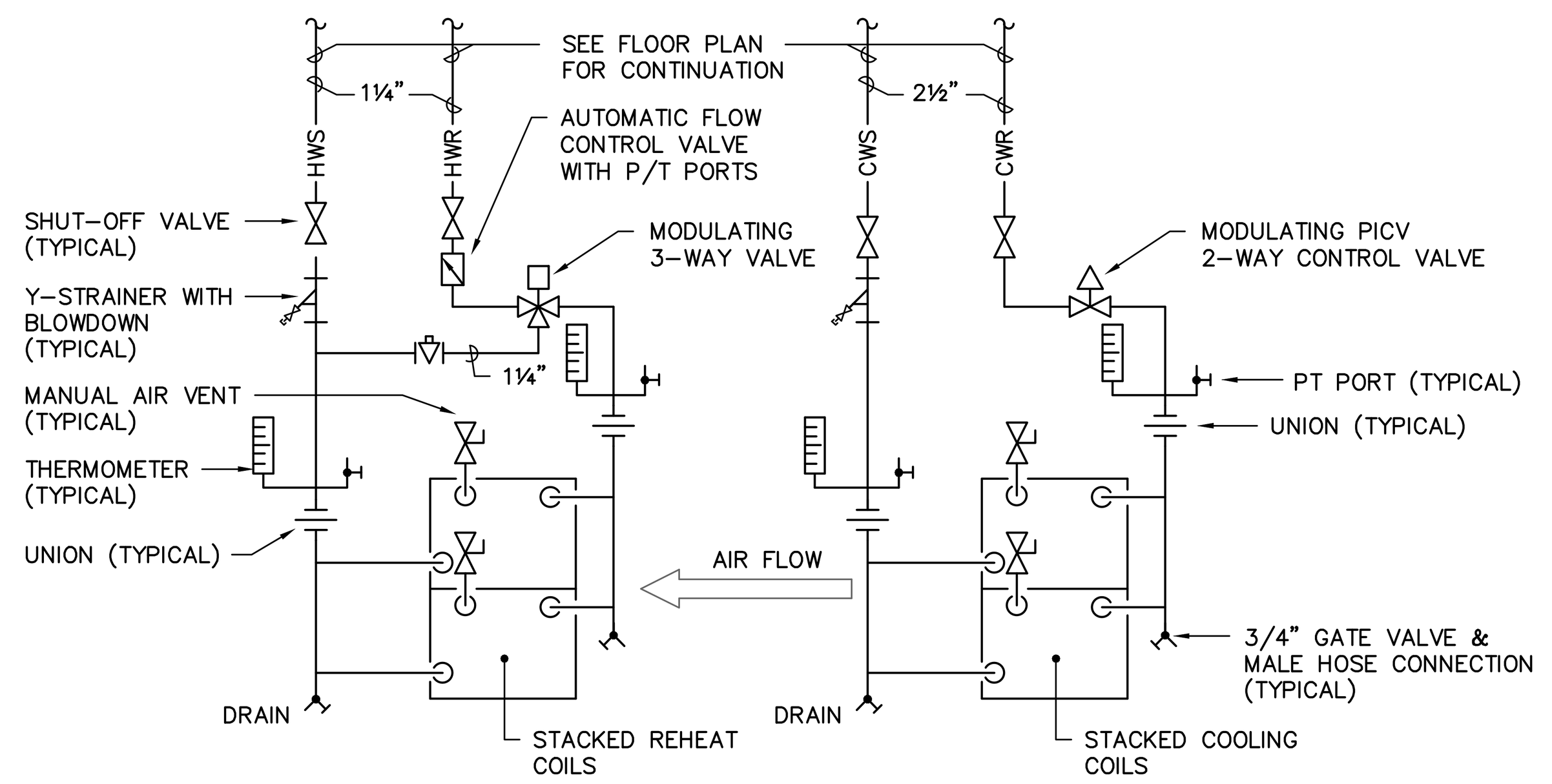
OCCUPANCY CATEGORY = III			SEISMIC DESIGN CATEGORY = D	
EQUIPMENT TAG	COMPONENT Ip	ISOLATION SPECIFICATION	SEISMIC REST. SPECIFICATION	ISOLATION DEFLECTION
AIR HANDLING UNITS (ROOF)	1.0	INTERNAL BY MANUFACTURER	NOTE 1	2"

1. ANCHOR BOLTS FOR NON-ISOLATED AND INTERNALLY ISOLATED EQUIPMENT SHALL BE SIZED BY THE SEISMIC RESTRAINT SUPPLIER.

AHU-2 SCHEDULE

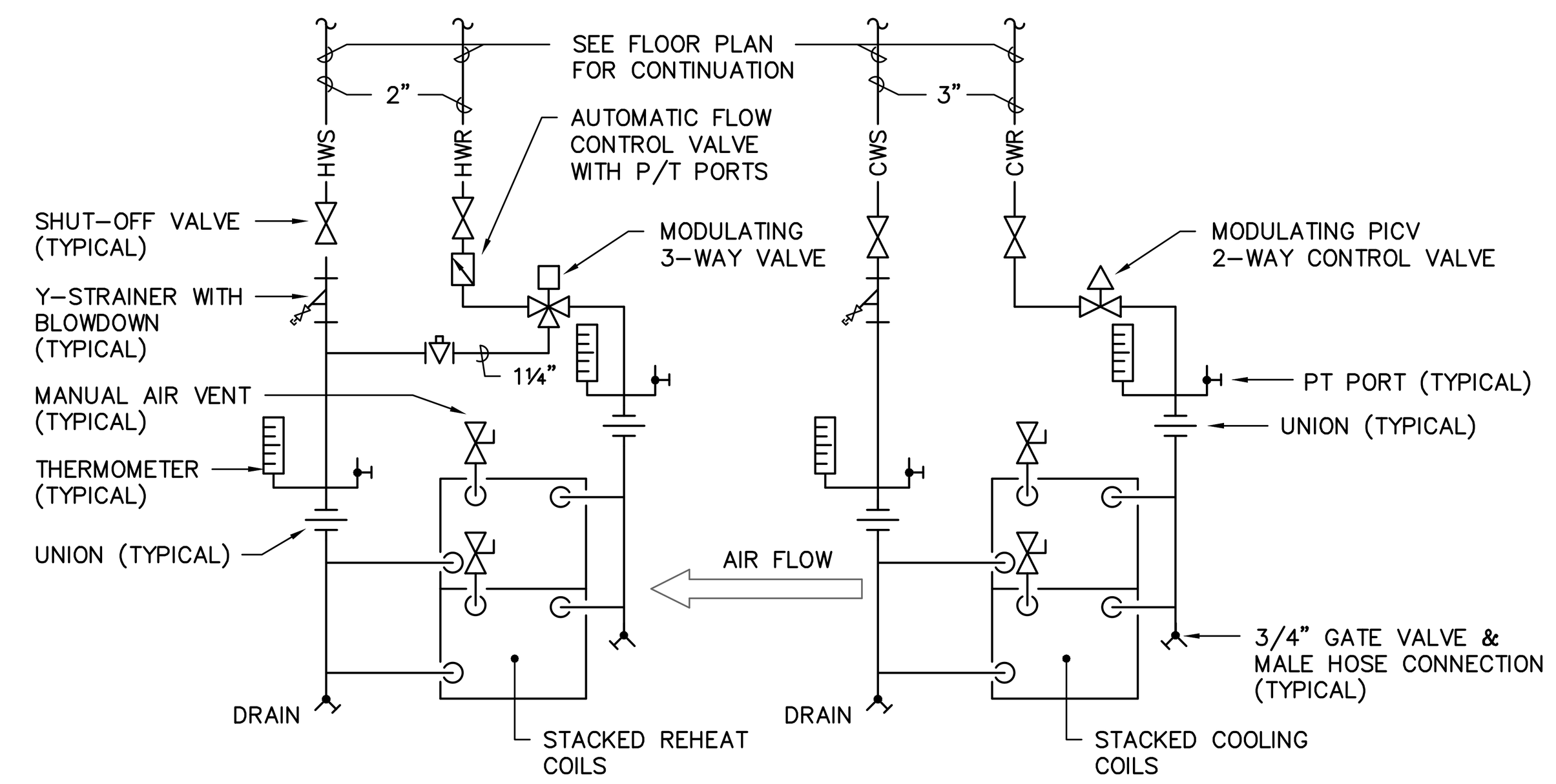
SECTION	YORK MODEL NO.	TOTAL CFM	OUTDOOR AIR-CFM	ESP IN. WG	BRAKE H.P.	MOTOR H.P.	COOLING COIL				HEATING COIL				FACE VEL. MAX-FPM	REMARKS
							EADB/WB	LADB/WB	GPM	WTR. P.D. FT. WTR.	EADB	LADB	GPM	WTR. P.D. FT. WTR.		
CAV	YC	7,000	–	3.0	7.0	7½	83.4/66.6	51.8/51.7	62.6	4.5	55	77.4	11.6	0.1	500	
VAV	YC	23,000	–	3.0	26.7	30	83.4/66.6	51.6/51.4	209.6	17.0	55	84.2	50.0	7.7	513	1–9
RA	YC	30,000	4,000	1.0	17.9	(3) 7½	–	–	–	–	–	–	–	–	–	

1. UNIT SELECTION SHALL INCLUDE 0.20" FILTER LOAD AND 6% BELT AND DRIVE LOSSES.
2. ENTERING CHILLED WATER TEMPERATURE SHALL BE 48°F AND THE WATER TEMPERATURE RISE SHALL BE 10°F.
3. ENTERING HOT WATER TEMPERATURE SHALL BE 180°F WITH 30°F DROP.
4. PROVIDE WEATHER PROOF 18 GA. G-90 GALVANIZED STEEL DOUBLE WALL CONSTRUCTION, 2" THICK POLYURETHANE FOAM INSULATION, AND WHITE ELASTOMERIC ROOF COATING.
5. PROVIDE FILTER SECTION WITH 2" MERV 8 PREFILTERS AND 12" MERV 14 FINAL FILTERS.
6. INSTALL DUCT SMOKE DETECTORS PROVIDED BY THE ELECTRICAL CONTRACTOR, WIRED TO SHUT THE UNIT DOWN UPON SENSING PRODUCTS OF COMBUSTION.
7. FANS SHALL BE INTERNALLY ISOLATED.
8. FURNISH HAND/OFF/AUTO VARIABLE FREQUENCY DRIVE FOR CAV FAN, VAV FAN, AND RETURN FANS. THE THREE RETURN FANS SHALL UTILIZE A SINGLE VFD.
9. PROVIDE WITH SMOKE DAMPER ON BOTTOM RETURN AIR INLET, SIDE RETURN AIR INLET, CAV OUTLET, AND VAV OUTLET.



AHU-2 CAV COIL PIPING DETAIL

NO SCALE



AHU-2 VAV COIL PIPING DETAIL

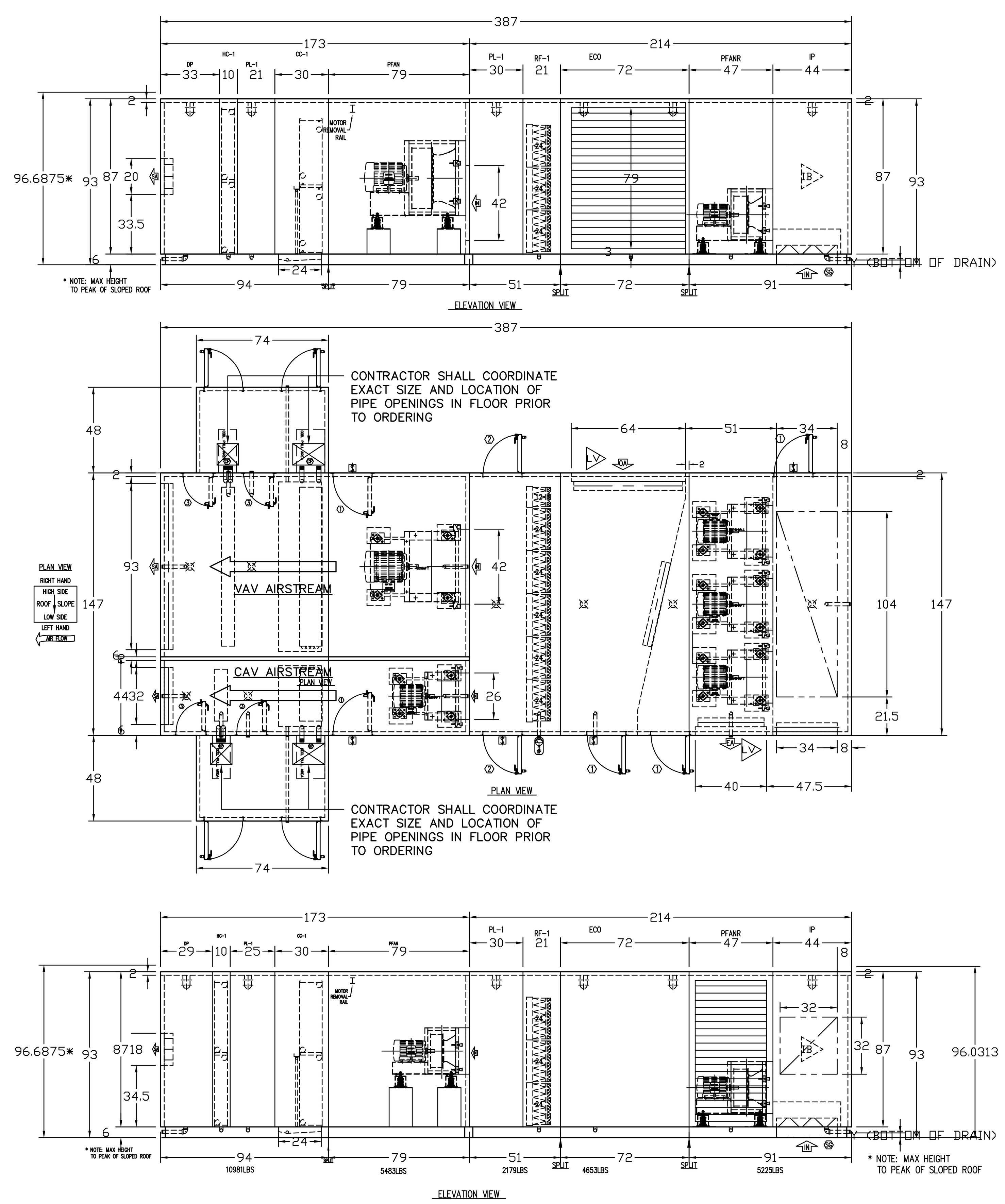
NO SCALE

LEGEND

SYMBOL	DESCRIPTION
CWS	CHILLED WATER SUPPLY LINE
CWR	CHILLED WATER RETURN LINE
HWS	HOT WATER SUPPLY LINE
HWR	HOT WATER RETURN LINE
D	DRAIN LINE
	SHUTOFF VALVE
	CHECK VALVE
	STRAINER WITH BLOWDOWN
	BUTTERFLY VALVE
	BALANCING VALVE
	UNION
	PIPE TURNS TO, AWAY
	THERMOMETER / PRESSURE GAGE
	THERMOMETER WELL CAPPED / GAGE COCK
	CONCENTRIC REDUCER
	ECCENTRIC REDUCER
T	THERMOSTAT
	RETURN, EXHAUST, FRESH AIR DUCTWORK
48x24	48"x24" RECTANGULAR DUCT
DD	DUCT SMOKE DETECTOR
	CONNECTION POINT OF NEW TO EXISTING

GENERAL NOTES

1. VISIT SITE PRIOR TO BIDDING. THIS CONTRACTOR SHALL DETERMINE DIFFICULTY OF INSTALLATION AND REFLECT THIS IN HIS BIDDING.
2. DO NOT SCALE DRAWINGS. THIS CONTRACTOR SHALL VERIFY ALL EXISTING ITEMS AND LOCATIONS IN THE FIELD.
3. ALL PIPING AND DUCTWORK LOCATIONS SHALL BE COORDINATED WITH WORK UNDER OTHER DIVISIONS OF THE SPECIFICATIONS TO AVOID INTERFERENCE.
4. THIS CONTRACTOR SHALL COORDINATE STEEL OPENINGS AND EQUIPMENT SUPPORT WITH STEEL SHOP DRAWINGS TO CONFIRM DIMENSIONS MATCH WITH EQUIPMENT SUPPLIED.
5. EXISTING PIPE, DUCTWORK, CONDUIT, ETC THAT INTERFERES WITH THE ROUTING OF NEW SYSTEMS SHALL BE RELOCATED. THIS CONTRACTOR SHALL INCLUDE THE COST OF SUCH IN HIS BID UNLESS NOTED OTHERWISE.
6. WATER SYSTEMS SHALL BE DRAINED AS REQUIRED FOR INSTALLATION OF WORK. UPON COMPLETION, SYSTEM SHALL BE FILLED WITH WATER AND VENTED OF ALL AIR.
7. ALL PIPING AND DUCTWORK INSULATION SHALL BE RUN CONTINUOUSLY THROUGH FLOORS, ROOFS AND PARTITIONS.
8. ALL MECHANICAL ITEMS EXTENDING THROUGH WALLS AND ROOF SHALL BE FLASHED AND COUNTERFLASHED. COORDINATE WITH ROOFING CONTRACTOR.
9. ALL PIPING IS SHOWN DIAGRAMMATIC. HOWEVER, THIS CONTRACTOR SHALL PROVIDE ALL REQUIRED FITTINGS, PIPING AND INSULATION FOR ALL OFFSETS AND/OR CHANGES IN ELEVATION.
10. EXTEND ALL DRAIN LINES TO NEAREST ROOF DRAIN OR AS INDICATED – SO ROUTED AS TO AVOID INTERFERENCE WITH PASSAGEWAYS AND MAINTENANCE. DRAINS FROM AIR HANDLING UNITS SHALL BE TRAPPED PER STATIC PRESSURE REQUIREMENTS.
11. ALL VALVES AND SPECIALTIES SHALL BE LINE SIZE UNLESS NOTED OTHERWISE, USING ECCENTRIC REDUCERS ON AUTOMATIC VALVES AS REQUIRED.
12. MINIMUM PIPE SIZE SHALL BE 3/4-INCH UNLESS INDICATED OTHERWISE.
13. ALL PIPING SHALL BE SUPPORTED IN ACCORDANCE WITH THE SPECIFICATIONS AND FURTHER SUPPORTS OR HANGERS SHALL BE PROVIDED TO PREVENT WEIGHT OF PIPING BEING PLACED ON EQUIPMENT.
14. PROVIDE AND INSTALL HEAT TRACE TAPE ON ALL EXTERIOR HOT AND CHILLED WATER PIPING.
15. ALL DUCTWORK SPECIFIED TO BE LINED SHALL BE INCREASED IN SIZE TO ALLOW FOR LINER.
16. DUCTWORK TO AIR HANDLING UNIT, OUTSIDE OF BUILDING, SHALL BE WRAPPED WITH ALUMINUM JACKET AND SEALED WEATHER TIGHT.
17. ALL OPEN END DUCTS SHALL HAVE 1/4-INCH MESH GALVANIZED SCREEN IN REMOVABLE FRAME.
18. PROVIDE FOR ACCESS TO ALL EQUIPMENT REQUIRING CLEANING OR ADJUSTMENT.
19. THIS CONTRACTOR SHALL PROVIDE ALL ITEMS OF MISCELLANEOUS STEEL AS REQUIRED FOR INSTALLATION OF ALL MECHANICAL ITEMS.
20. REMOVAL AND REPLACEMENT OF CEILING, AS REQUIRED FOR INSTALLATION OF NEW WORK, SHALL BE DONE BY THIS CONTRACTOR.
21. THIS CONTRACTOR SHALL DO ALL CONTROL WIRING. ELECTRICAL CONTRACTOR WILL DO ALL POWER WIRING. ALL WIRING SHALL BE IN ACCORDANCE WITH NATIONAL ELECTRIC CODE. CONTROL WIRING SHALL BE CONCEALED WITHIN WALL. DUCT DETECTORS SHALL BE FURNISHED UNDER SEPARATE FIRE ALARM CONTRACT AND INSTALLED BY DIVISION 23. POWER WIRING AND FIRE ALARM CONNECTIONS SHALL BE PROVIDED UNDER SEPARATE FIRE ALARM CONTRACT. CONTROL WIRING FOR UNIT SHUTDOWN AND SMOKE DAMPER CONTROL SHALL BE BY DIVISION 23.
22. INSTRUMENT TEST HOLES SHALL BE LOCATED IN EACH SUPPLY DUCT OR ZONE DUCT, IN EACH RETURN AIR DUCT AND EACH OUTSIDE AIR DUCT.
23. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR ANY NECESSARY DISMANTLING OF EQUIPMENT TO BE REMOVED.
24. ITEMS REMOVED UNDER THIS CONTRACT SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF PROPERLY.



UNIT CONSTRUCTION
Model: YC-IPF
Construction: Weather Proof
Base: 6" X 1.92" X 8.2#/ft structural steel channel painted w/ 3 to 5 mil DFT Champagne Enamel.
Base Insulation: 2" Polyurethane Foam
Exterior Material: 18 Ga. Champagne Pre-paint
Roof Material: 18 Ga. G-90 Galvanized w/ White Elastomeric Roof Coating

NOTES

FOR ACTUAL OVERALL CABINET WIDTH DIMENSIONS ADD:
- DOOR HANDLES: 3"
- WATER COIL CONNECTIONS: 5"
- ROOF OVERHANG: 2"
- OPENING FLANGES: 1.5"
- LIGHT SWITCHES, CONVENIENCE OUTLETS: 4"

LEGEND

- 1 0-1" DP GAGE
- 2 0-2" DP GAGE
- P P-CONE/P-RING
- WH WEATHERHOOD
- 1 SF 0-1" DP GAGE ASF
- 2 SF 0-2" DP GAGE ASF
- IB INLET BAFFLE
- LV LOUVER
- LIGHT SWITCH
- 120V OUTLET
- JUNCTION BOX
- MOTOR DISC.
- LIGHT FIXTURES
- PENDANT
- CR CORROSION RESISTANT FIXTURE
- LIGHT DISC.
- TWIN TUBE
- CP COIL PULL PANEL
- SG GALV SAFETY SCREEN
- SS SS SAFETY SCREEN
- WG GALV WALK-ON GRATING
- WS SS WALK-ON GRATING
- WA ALUM WALK-ON GRATING
- UH ELECTRIC UNIT HEATER

Unless otherwise dimensioned on unit drawing, light switches, convenience outlets, disconnects and Junction boxes are to be located at the most accessible place near the applicable section's door.

ACCESS DOOR LIST

#	Width	Height	Window / Options	FST	Mount.
1	23	72	None / Std	SS	Vert.
2	23	72	None / Std, TSTPT, GSKT	SS	Vert.

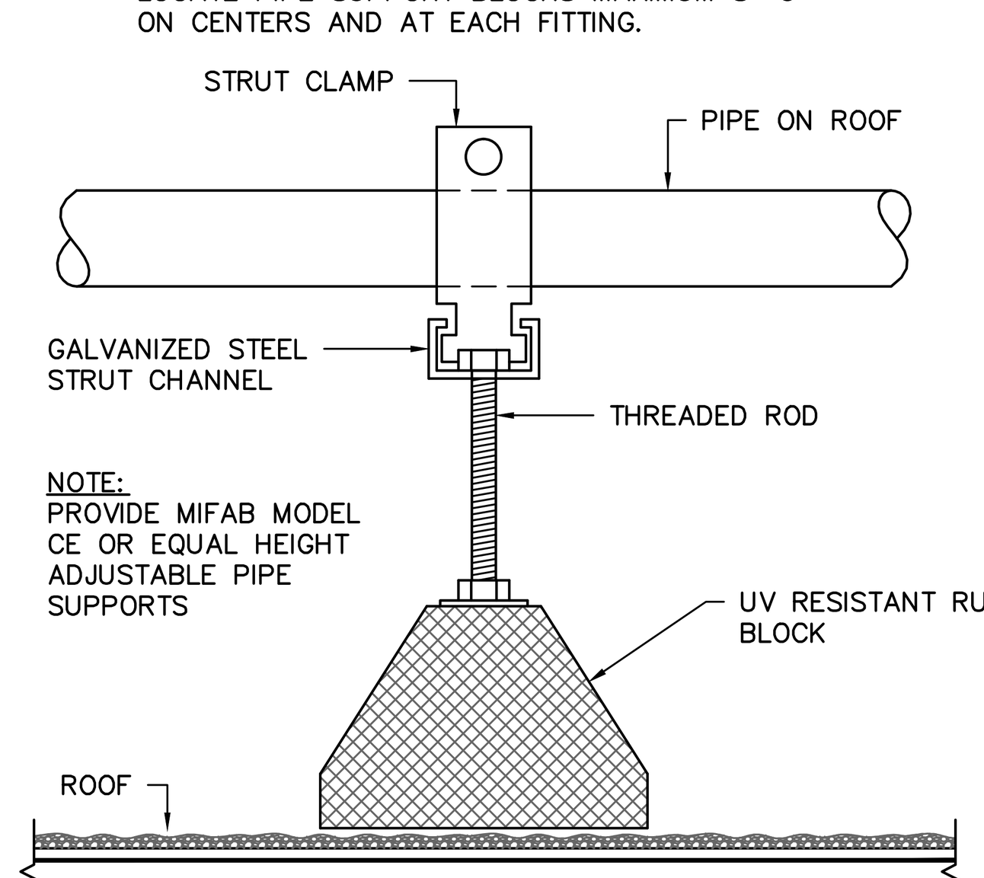
DRAIN PAN AND FLOOR DRAIN OUTLET LOCATIONS

SECT #	DIAMETER	Y
FLOOR DRAINS	1.25	2.6

AHU-2 DETAILS

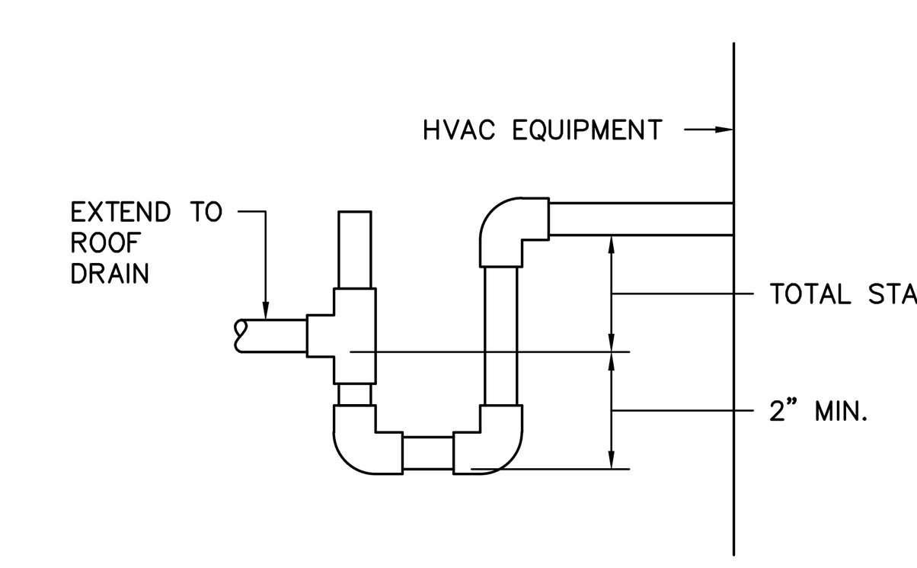
NO SCALE

NOTE:
LOCATE PIPE SUPPORT BLOCKS MAXIMUM 8'-0" ON CENTERS AND AT EACH FITTING.



ROOFTOP PIPE SUPPORT DETAIL

NO SCALE



CONDENSATE DRAIN DETAIL

NO SCALE

CAMPUS PLANNING AND CONSTRUCTION
COLUMBIA, SC 29208

SEAL:

SEAL:

DRAWING: 16250-M3 | DATE: 27JAN17 | DRAWN BY: BJJ | CHECKED BY: BJJ

DESCRIPTION | DATE | ORIG. BY | DRAWN BY

BUILDING: 080

REV.

PROJECT TITLE: WARDLAW AHU-2 REPLACEMENT

STATE PROJECT NUMBER H27-6117

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SHEET: M3 OF 3

SHEET IN SET: OF

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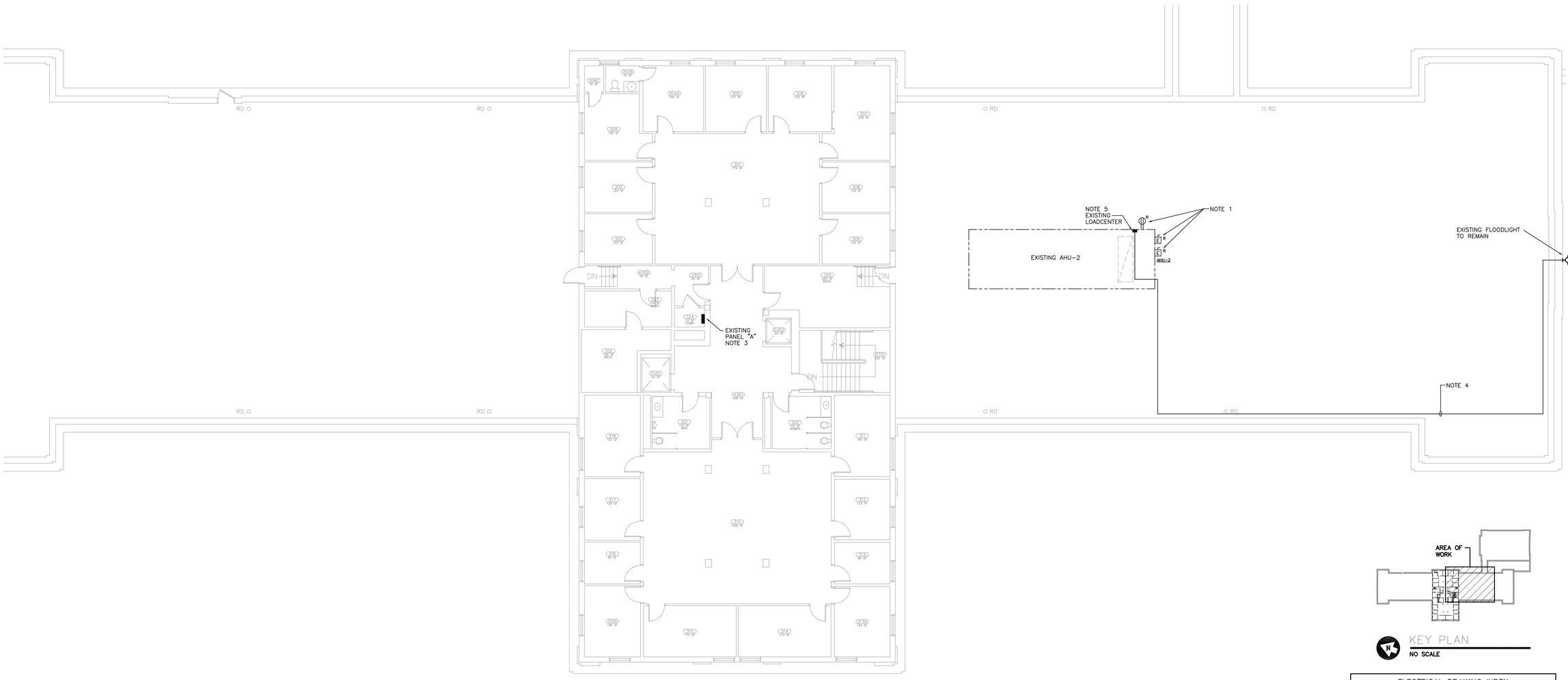
ELECTRICAL SYMBOL LEGEND

12 GFI WP	20 AMP DUPLEX RECEPTACLE, INTEGRAL IN AHU ("GFI" = GROUND FAULT INTERRUPTER; "WP" = WEATHERPROOF METALLIC "IN-USE" TYPE COVER)
	DUCT TYPE SMOKE DETECTOR. (NOTE 2)
	DUCT DETECTOR TEST STATION. (NOTE 2)
	EXISTING ELECTRICAL PANELBOARD, SURFACE MOUNTED
E R	EXISTING SAFETY DISCONNECT SWITCH TO BE REMOVED.
M	ELECTRICAL SAFETY DISCONNECT SWITCH. "M" DENOTES DISCONNECT SWITCH INTEGRAL WITH MECHANICAL EQUIPMENT.
J	JUNCTION BOX, NEMA 3R

ELECTRICAL DEMOLITION NOTES

1. CONTRACTOR SHALL DISCONNECT EXISTING ELECTRICAL CIRCUITS AT AHU-2 AND DEMOLISH BRANCH CIRCUIT BACK TO EXISTING PANEL "A" (SEE PLAN FOR LOCATION – "A" IS A DESIGNATION FOR THIS PROJECT). REMOVE EXISTING DISCONNECT SWITCHES THAT FED AHU-2. EXISTING 250 AMP BREAKER IN PANEL "A" SHALL REMAIN IN PLACE. CONTRACTOR SHALL MAINTAIN INTEGRITY OF EXISTING 120V CIRCUIT TO RECEPTACLE INSIDE EXISTING AHU-2 TO BE REUSED DURING RENOVATION.
2. THE BUILDING FIRE ALARM SYSTEM IS BEING UPGRADED UNDER A SEPARATE CONTRACT. REMOVE EXISTING DUCT SMOKE DETECTORS AND TEST STATIONS FROM EXISTING AHU-2.
3. EXISTING PANEL "A" IS A GENERAL ELECTRIC TYPE "CCB", 600 AMP, 240V, 3 PHASE, 3 WIRE.
4. LIGHTING FIXTURE WIRE/CONDUIT TO BE RE-ROUTED. SEE RENOVATION PLAN.
5. CONTRACTOR SHALL DISCONNECT EXISTING LOADCENTER. LOADCENTER SHALL BE REMOVED WITH MECHANICAL UNIT.



1 E1 PARTIAL THIRD FLOOR/ROOF PLAN – ELECTRICAL DEMOLITION
SCALE: 1/8" = 1'-0"

KEY PLAN
NO SCALE

ELECTRICAL DRAWING INDEX

1/8"=1'-0" scale 4 0 4 8 16 feet

US21510

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SEAL: SOUTH CAROLINA BELKA ENGINEERING ASSOC. INC. No. C00953 CERTIFICATE OF AUTHORIZATION

SEAL: SOUTH CAROLINA PROFESSIONAL ENGINEER No. 26181 03/04/16 CHRISTOPHER J. ARSENAULT

DRAWN BY:	JJS	CHECKED BY	CES
DATE:	04MAR16	ORIG. BY	DRAWN BY
DRAWING:	CP00357199	DESCRIPTION	
BUILDING:	080		
REV.			

PROJECT TITLE: WARDLAW AHU REPLACEMENT
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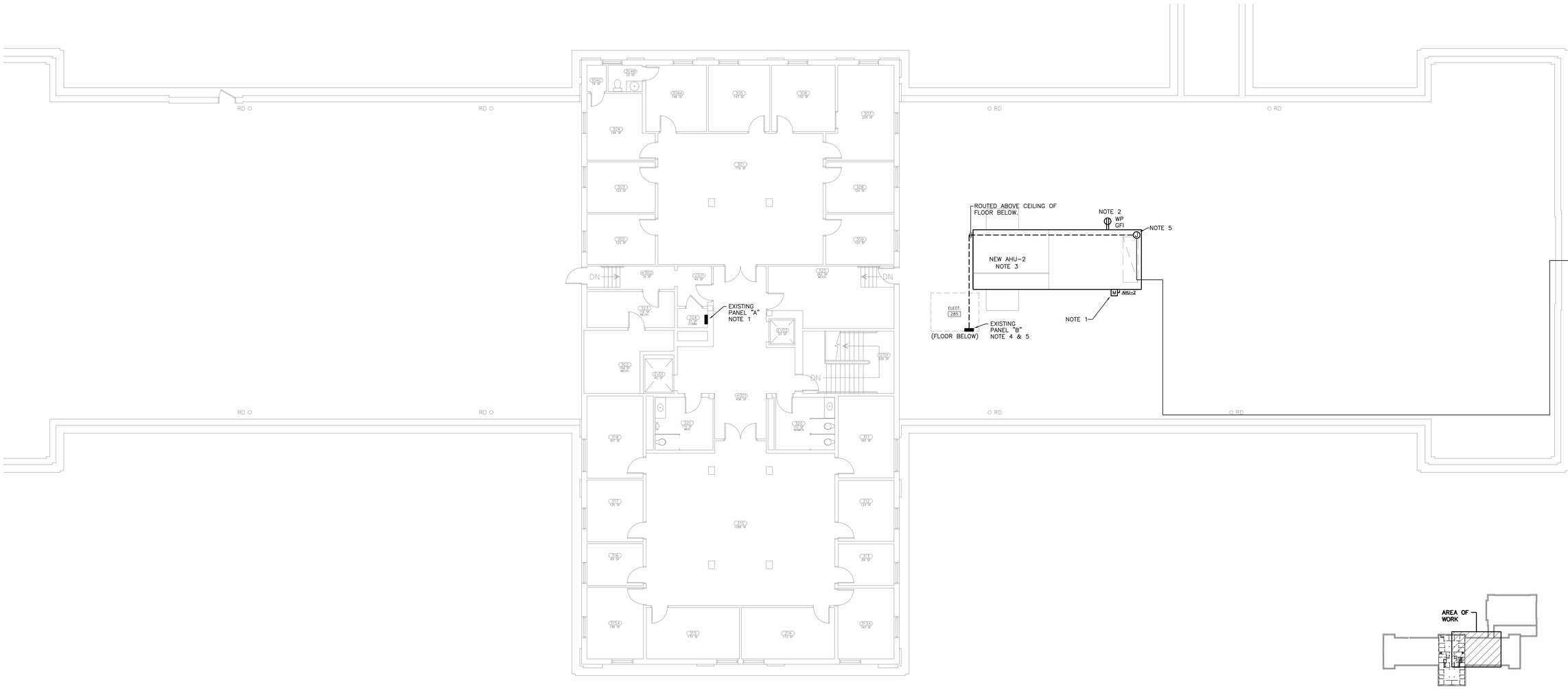
University of South Carolina

SHEET: E1
1 OF 2
SHEET IN SET: OF

ELECTRICAL RENOVATION NOTES

1. PROVIDE 3–350kcmil, 1#3 GROUND IN 3" CONDUIT FROM EXISTING 250 AMP BREAKER IN EXISTING PANEL "A" (SEE PLAN FOR LOCATION) TO NEW DISCONNECT SWITCH FOR AHU–2.
2. PROVIDE RECEPTACLE ON AHU–2 AND EXTEND EXISTING 120V RECEPTACLE CIRCUIT TO DEVICE.
3. ALL AHU–2 RELATED FIRE ALARM DEVICES SHALL BE PROVIDED UNDER SEPARATE CONTRACT.
4. EXISTING PANEL IS A GENERAL ELECTRIC TYPE "NLAB", 225 AMP, 120/208V, 3 PHASE, 4 WIRE.
5. ELECTRICAL CONTRACTOR SHALL PROVIDE A 20 AMP SINGLE POLE BREAKER IN EXISTING PANEL "B". PROVIDE NEMA 3R J–BOX AND EXTEND FLOODLIGHT CIRCUIT TO EXISTING PANEL "B" ONE FLOOR BELOW IN ELECTRICAL 285. PROVIDE 2#10, 1#10 GROUND IN 3/4" CONDUIT ROUTED THROUGH EXISTING ROOF PENETRATION FOR MECHANICAL AND ABOVE CEILING OF THE FLOOR BELOW. (PANEL WAS UNLABELED, IT IS DESIGNATED PANEL "B" FOR THIS PROJECT.)



1 / E2 PARTIAL THIRD FLOOR/ROOF PLAN – ELECTRICAL RENOVATION

SCALE: 1/8" = 1'–0"

KEY PLAN

NO SCALE

1/8"=1'–0" 4 0 4 8 16 scale feet

US21510
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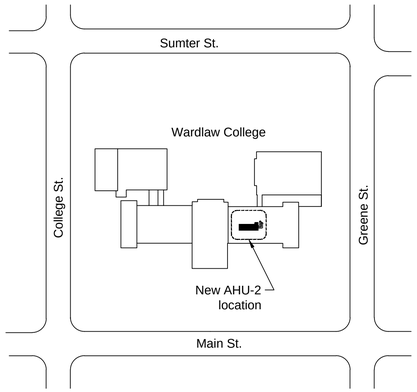
PROJECT TITLE: WARDLAW AHU REPLACEMENT
STATE PROJECT NUMBER H27–6117
University of South Carolina

SHEET: E2
2 OF 2
SHEET IN SET: OF

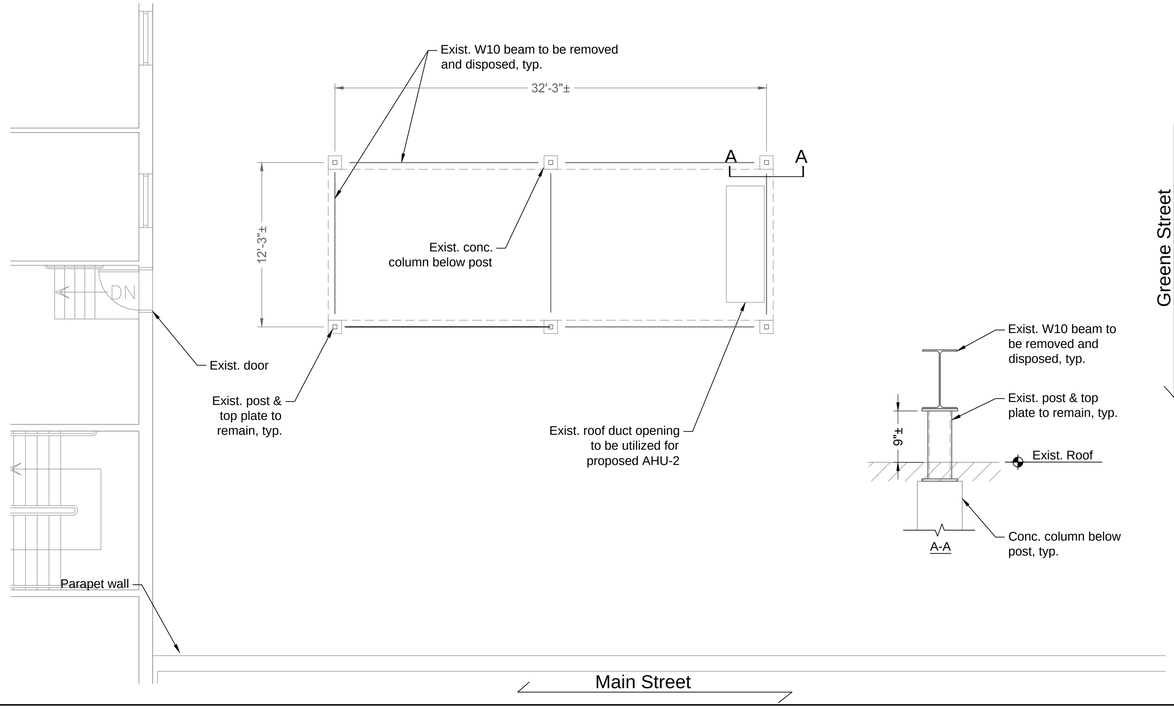
General Notes:

1. Design Specifications: International Building Code (2012 Edition).
   Design Loads:
   Dead load: Actual
   HVAC Unit Weight: 29,000 lbs.
   Wind Velocity: 115 MPH
   Exposure Catagory: B
   Site Class: Assumed D
   Mapped Spectral Response Accelerations: Ss=0.416 g, S1=0.142 g
   Site coefficients: Fa=1.467, Fv=2.232
   Seismic design category: C
   Response modification factor: ap=2.5
   Deflection amplification factor: Rp=6
   Seismic Analysis Procedure: Equivalent lateral force procedure.
2. In case of a discrepancy in dimensions or details, between Mechanical and Structural Drawings, not affecting strength, the Mechanical plans shall govern. For dimensions and details not shown, see Mechanical plans.
3. Where a detail is shown on Structural Drawings for one condition, it shall apply to all similar or like conditions, unless noted or shown otherwise on plans.
4. All items shall be tightly anchored or attached square, plumb, and true, or in other planes and shapes as shown on the drawings. Joints shall be tight, even,and free of offsets. No field altering of any members will be allowed that will cause them not to be in accordance with the drawings and specifications, without written approval of the Project Engineer.
5. The dimensions shown with a suffix "±" are approximate and shall be verified by the Contractor before fabrication.
6. If the Contractor finds a difference between these drawings & existing conditions, or finds any other conditions which prohibit execution of the work as directed in these drawings, the Contractor shall notify the Engineer immediately.
7. Any revision/modification to the original design during the shop drawing process, the Contractor shall clearly cloud line all the changes and shall receive approval from the Engineer in writing before fabrication. Any costs associated with correcting the unapproved change shall be at the Contractor's expense.
8. Use caution not to damage existing roofing materials during field welding and installation.
9. Existing structural members including steel post and cap plate shall be cleaned and repainted in a color matching the existing or approved by the owner. The paint shall consist of one coat of anti-rust primer and one coat of finish paint in a different color than the primer.



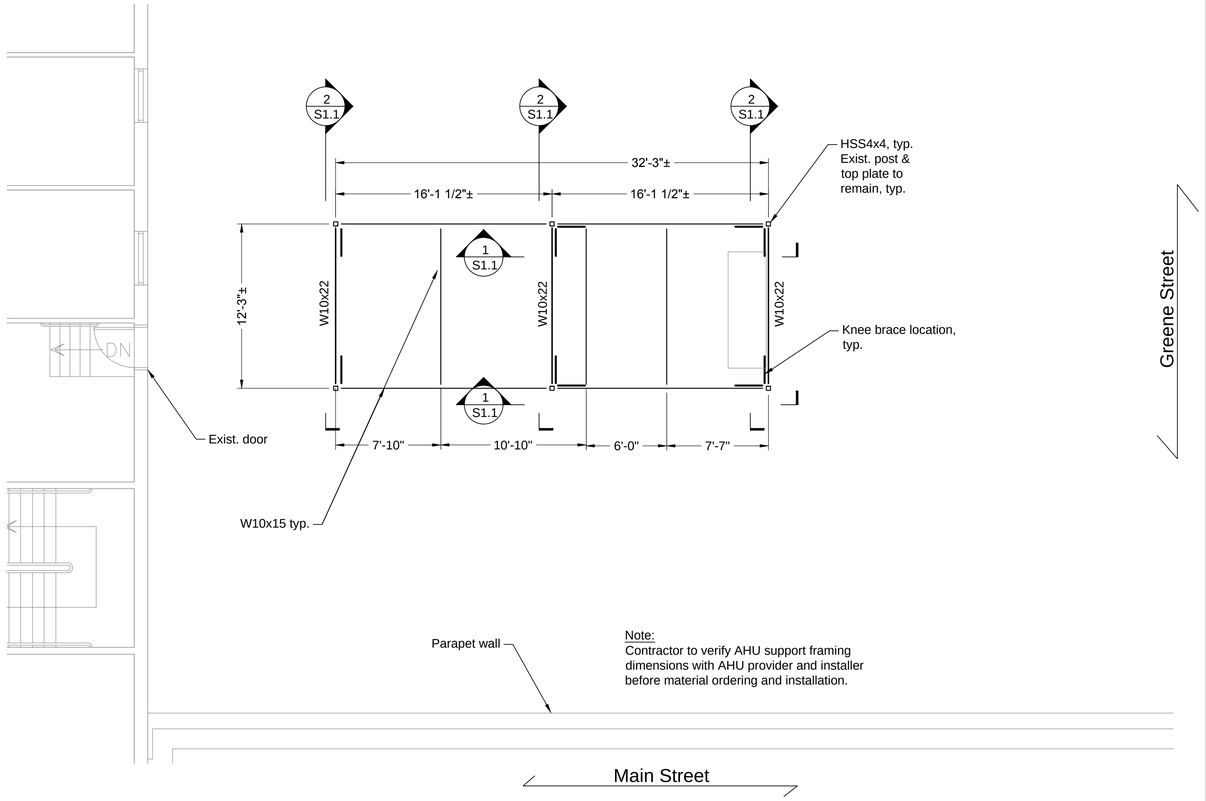
Structural and Miscellaneous Steel:

1. All structural and miscellaneous steel shall conform to the Fourteenth Edition of the AISC "Specification for the Design, Fabrication & Erection of Structural steel for Buildings" and all its supplements, and to the AISC "Code of Standard Practice for Steel Buildings and Bridges".
2. All structural steel shall conform to ASTM A-36, FY=36,000 PSI unless otherwise noted.
3. Steel W-Shapes shall conform to ASTM A992, FY=50,000 PSI.
4. All welded connections shall be done with E70XX electrodes with 3/16" min. material. U.O.N. All welding shall comply with AWS D1-1 structural welding code the latest edition.
5. All bolts shall be A325 bolts, unless otherwise noted.
6. No openings in beams shall be permitted without the written permission of the engineer.
7. The use of a gas-cutting torch in the field for cutting holes or for correcting fabrication errors will not be permitted on structural framing members except w/ the written approval of the Engineer for each specification.
14. All structural steel shall be hot-dipped galvanized according to ASTM 123 where noted. All connections, hardware shall be hot-dipped galvanized according to ASTM 153. All galvanizing damaged by welding shall be repaired by Z.R.C. cold galvanizing paint.



1 - Existing Conditions / Demolition Plan

Scale: 3/16 = 1'-0"



2 - New AHU-2 Support Framing Plan

Scale: 3/32 = 1'-0"

CHAO & ASSOCIATES, INC.
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SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION CHAO & ASSOCIATES No. C00357

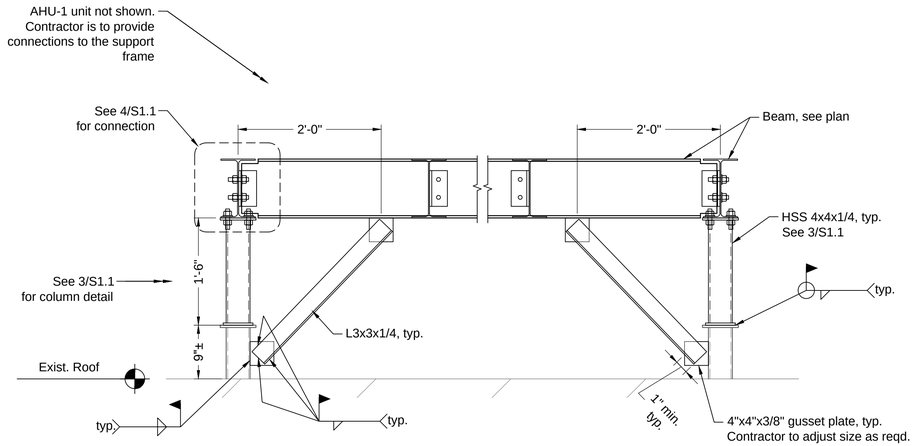
SOUTH CAROLINA PROFESSIONAL ENGINEER No. 29015 9-4-15 WEI D. CHAO

General Notes, Demolition & Framing Plans
Wardlaw Building AHU-2 Replacement
Prepared for:
The University of South Carolina
Columbia, SC

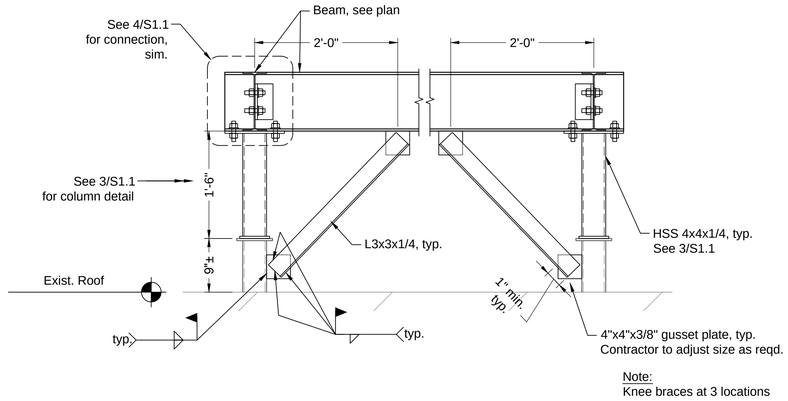
Drawn: TKS
Checked: TL
Revised:
Project No.: 392301B
File: 392301C.dwg

1.0
Sheet Number
August 24, 2015
Date

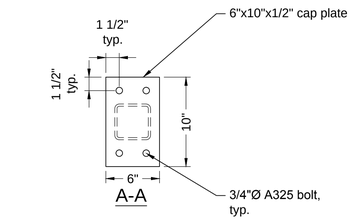
Drawing file: 392301C.dwg Plotted: Oct 22, 2015 - 5:13pm

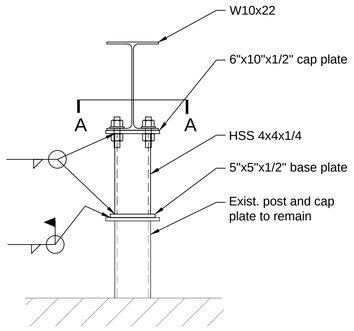


1 - Section @ Knee Braces (2 locations total) Scale: 1" = 1'-0"

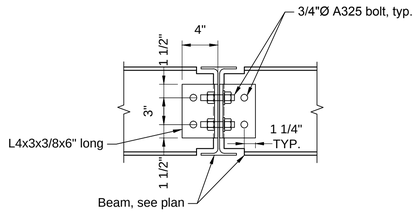


2 - Section Scale: 1" = 1'-0"

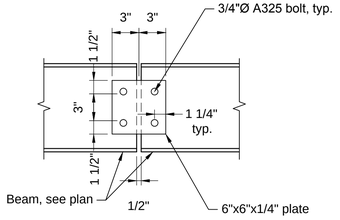




3 - Column Detail Scale: 1-1/2 = 1'-0"



4 - Beam Connection Detail Scale: 1-1/2 = 1'-0"



5 - Beam Splice Detail Scale: 1-1/2 = 1'-0"

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Sections & Details
Wardlaw Building AHU-2 Replacement
Prepared for:
The University of South Carolina
Columbia, SC

Drawn: TKS Checked: TL
Revised:
File: 392301C.dwg Project No.: 392301B

1.1
Sheet Number
August 24, 2015
Date

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