



### Addendum No. 3

**Architectural and Mechanical Energy Upgrades  
at Pine Street School – Phase 3  
McMillan Pazdan Smith Project No. 018441  
November 27, 2019**

The following clarifications, amendments, additions, deletions, revisions, and/or modifications are hereby made a part of the Contract Documents, and change the original documents only in the manner and to the extent stated below:

Item No. 1: **Project Manual – Section 23 00 01 HVAC:**

- DUCTWORK section, add item K., Ductwork with Sound Treatment:  
Where indicated on the floor plans, wrap the duct with 1 lb. per sq. ft. cadium/vinyl lagging material and acoustical covering at the area wrapped. The acoustical wrap shall be installed over 2" thick mineral wool insulation board/batts. Reduce the duct hanger spacing by ½ (double the hangers). Refer to manufacturer's recommendations for installation materials and methods. (At contractor's option, a sound lagging with integral quilted 2" fiberglass sound absorber may be used in lieu of separate lagging and insulation.)  
Lagging shall be Kinetics model KNM-100ALQ or equal by Sound Seal.
- EQUIPMENT, item C, Packaged DX Outdoor Air A/C Units with Energy Recovery (OAU):  
Remove all substitute manufacturers.
- EQUIPMENT, item G, Dampers, 1. Fire Dampers, 2nd sentence:  
Remove style "A" as an option (all dampers shall be style "B", out-of-airstream type).
- TESTING, ADJUSTING, AND BALANCING, item a.: Air Systems, add item #16:  
16. Re-balance SSOAU-3 as indicated above after new branch has been added.  
Contact engineer for plans.

Item No. 2: **Mechanical Drawings – Sheet HVAC-1 – HVAC Demolition Plan – Ground Floor:**

Delete the previously issued sheet HVAC-1 in its entirety and insert the attached drawing HVAC-1 into the contract documents.

Item No. 3: **Mechanical Drawings – Sheet HVAC-2 – HVAC Plan – Ground Floor:**

Delete the previously issued sheet HVAC-2 in its entirety and insert the attached drawing HVAC-2 into the contract documents.

Item No. 4: **Mechanical Drawings – Sheet HVAC-3 – HVAC Piping – Ground Floor:**  
Delete the previously issued sheet HVAC-3 in its entirety and insert the attached drawing HVAC-3 into the contract documents.

Item No. 5: **Mechanical Drawings – Sheet HVAC-8 – HVAC Details:**  
Delete the previously issued sheet HVAC-8 in its entirety and insert the attached drawing HVAC-8 into the contract documents.

End of Addendum No. 3

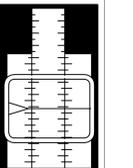
This addendum contains        2   Summary Pages  
     4   30x42 Drawing Sheets



SHEET NOTES

1) SEE GENERAL NOTES ON SHEET HVAC-1

**CROW & BULMAN  
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800 EAST MAIN STREET, SPARTANBURG, SC 29302  
PHONE: 864-585-9903, WWW.CBENGR.COM



SPARTANBURG SCHOOL DISTRICT SEVEN  
PHASE THREE ARCHITECTURAL AND  
MECHANICAL UPGRADES  
TO PINE STREET SCHOOL

500 S. Pine St., Spartanburg, SC 29302

NO.	DATE	DESCRIPTION	BY
1	11/27/19	ADDENDUM #3	WHC

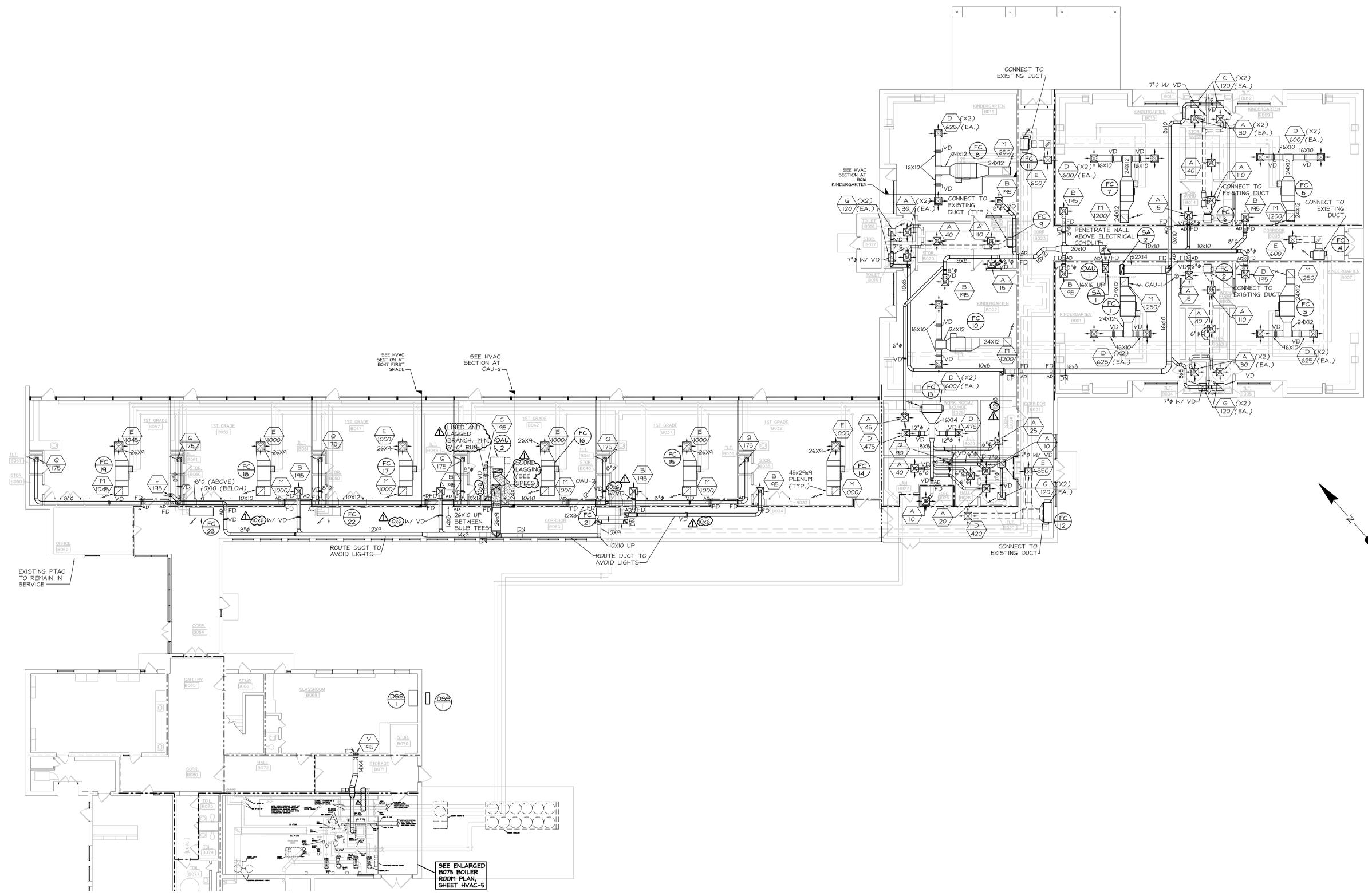
CONSTRUCTION DRAWINGS 11/04/2019

PRINCIPAL IN CHARGE: WHC  
PROJECT ENGINEER: WHC  
DRAWN BY: WHC

SHEET TITLE:  
HVAC PLAN - GROUND FLOOR

SHEET NO. 1345.5  
CBE PROJ. NO. 1345.5

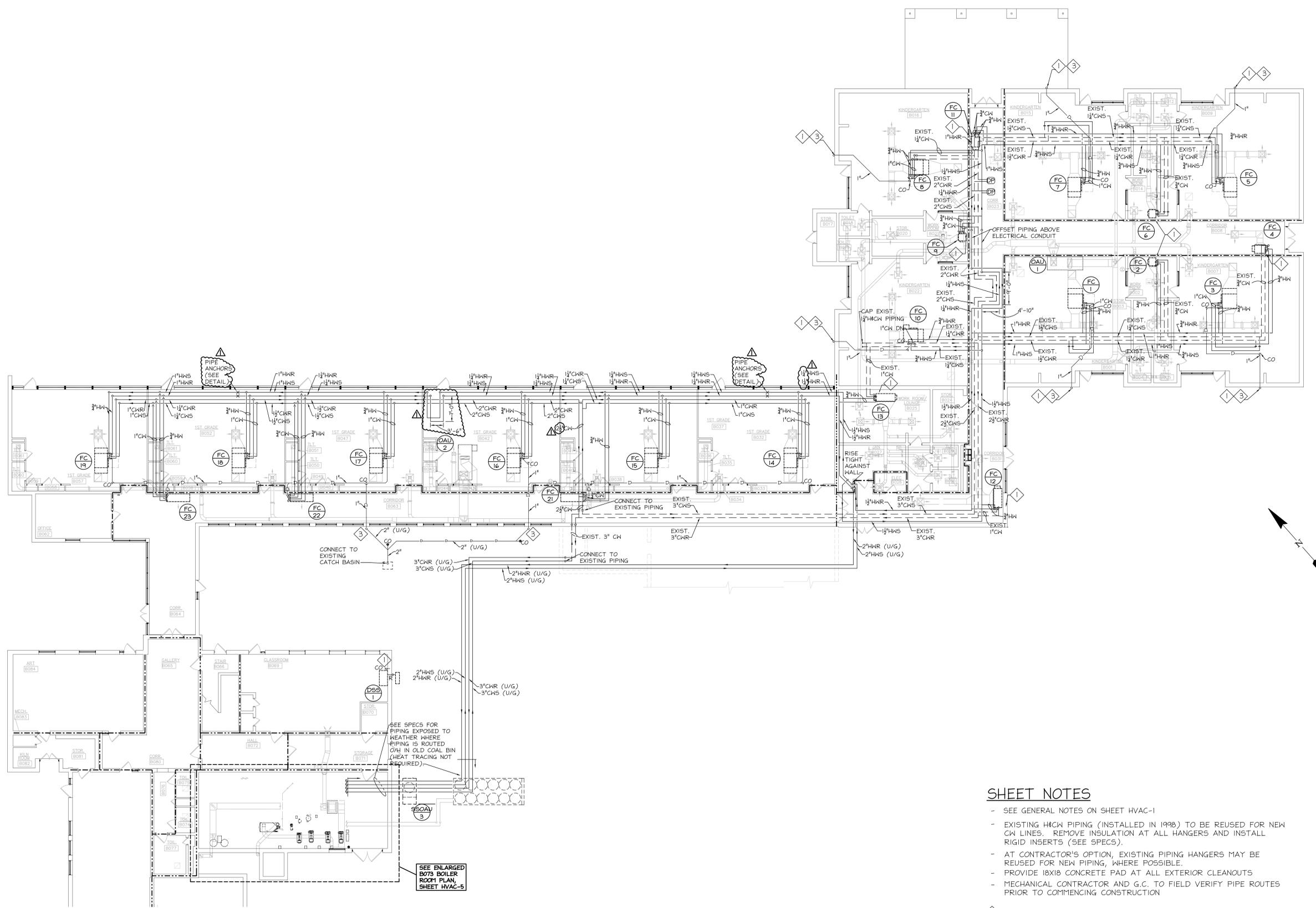
HVAC-2



GROUND FLOOR HVAC PLAN  
SCALE: 3/32" = 1'-0"

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**GROUND FLOOR HVAC PIPING PLAN**  
SCALE: 3/32" = 1'-0"

**SHEET NOTES**

- SEE GENERAL NOTES ON SHEET HVAC-1
- EXISTING H&CK PIPING (INSTALLED IN 1998) TO BE REUSED FOR NEW CW LINES. REMOVE INSULATION AT ALL HANGERS AND INSTALL RIGID INSERTS (SEE SPECS).
- AT CONTRACTOR'S OPTION, EXISTING PIPING HANGERS MAY BE REUSED FOR NEW PIPING, WHERE POSSIBLE.
- PROVIDE 18X18 CONCRETE PAD AT ALL EXTERIOR CLEANOUTS
- MECHANICAL CONTRACTOR AND G.C. TO FIELD VERIFY PIPE ROUTES PRIOR TO COMMENCING CONSTRUCTION

- ① CONNECT TO EXISTING CONDENSATE DRAIN.
- ② NOT USED
- ③ ROUTE TIGHT AGAINST EXTERIOR WALL

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**SPARTANBURG SCHOOL DISTRICT SEVEN**  
**PHASE THREE ARCHITECTURAL AND MECHANICAL UPGRADES TO PINE STREET SCHOOL**

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CONSTRUCTION DRAWINGS	11/04/2019
PRINCIPAL IN CHARGE:	WHC
PROJECT ENGINEER:	WHC
DRAWN BY:	WHC

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SHEET TITLE:  
**HVAC PIPING PLAN - GROUND FLOOR**

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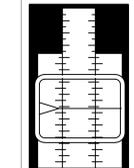
SHEET NO.	CBE PROJ. NO. 1345.5
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HVAC-3

**SHEET NOTES**

1) SEE GENERAL NOTES ON SHEET HVAC-1

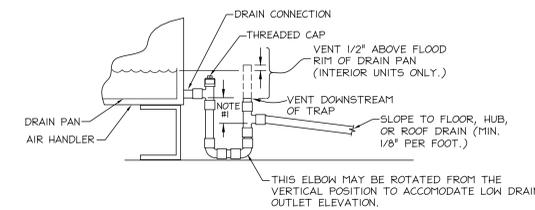
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CONSULTANT LOGO

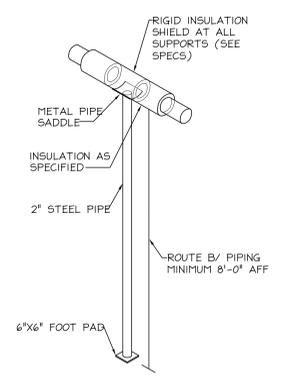
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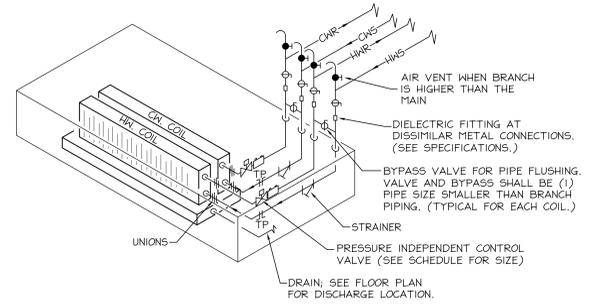


- NOTES:
- 1.) DISTANCE SHALL BE 2" OR 1/2" GREATER THAN THE FAN SUCTION PRESSURE (WHICH EVER IS GREATER).
  - 2.) DRAIN SHALL BE COPPER TUBING OF SIZE NOTED OR EQUAL TO AIR HANDLER DRAIN CONNECTION.
  - 3.) TRAP/VENT NOT REQUIRED FOR PUMPED CONDENSATE.

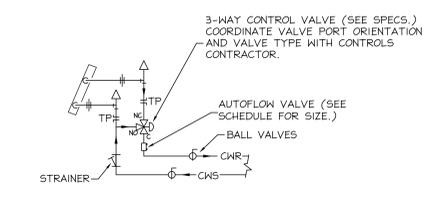
**CONDENSATE DRAIN TRAP AND VENT DETAIL**  
NO SCALE



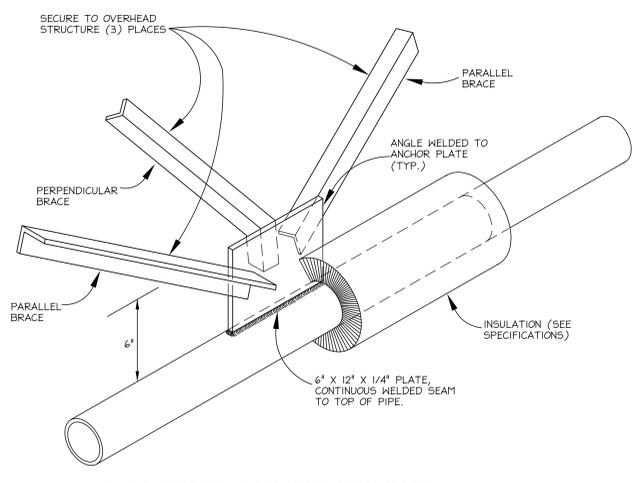
**PIPE SUPPORT COLUMN DETAIL**  
NO SCALE



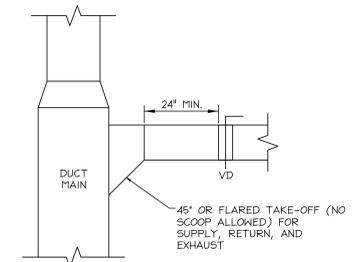
**HORIZONTAL FAN COIL UNITS & UNIT VENTILATORS (REHEAT CONFIGURATION)**  
NO SCALE



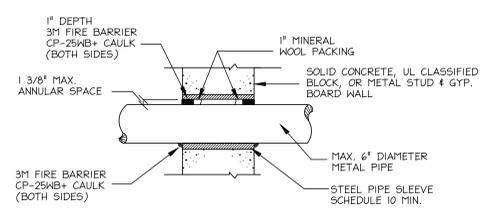
**FAN COIL 3-WAY VALVE**  
NO SCALE



**SUSPENDED PIPING ANCHOR DETAIL**  
NO SCALE

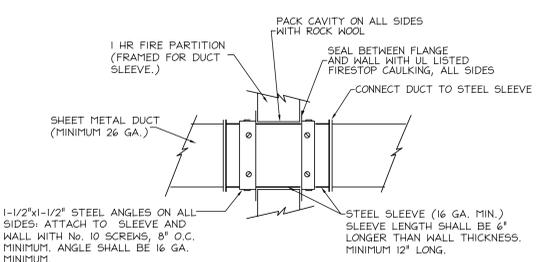


**BRANCH DUCT TAKE-OFF DETAIL**  
NO SCALE

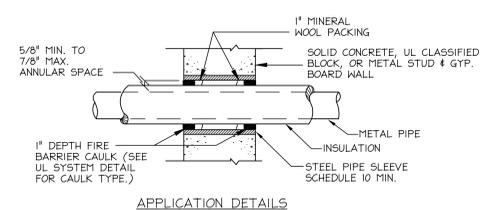


1. INSTALL THE FIRESTOP SYMMETRICALLY ON BOTH SIDES OF THE WALL ASSEMBLY.
2. MINIMUM ANNULAR SPACE REQUIREMENT IS ZERO, POINT CONTACT. MAXIMUM ANNULAR SPACE ALLOWABLE IS 1 3/8\"
3. RECESS A NOMINAL 1\"
4. FILL THE ANNULAR SPACE AROUND THE PIPE WITH A MINIMUM 1\"

**UNINSULATED PIPE (1, 2, 3, OR 4 HR)**  
(UL SYSTEM #CAJ1044)  
**DETAIL OF PIPE PENETRATION OF ALL FIRE RATED FLOORS & PARTITIONS**  
NO SCALE



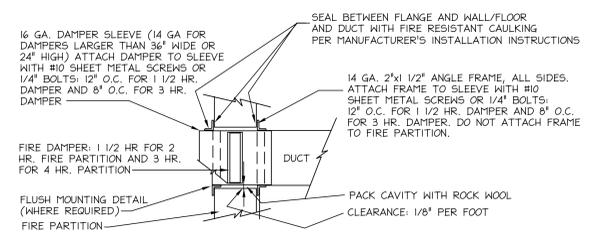
**DUCT CLOSURE DETAIL AT ALL PENETRATIONS OF ONE HOUR FIRE PARTITIONS NOT REQUIRING DAMPERS, PENETRATIONS OF SMOKE BARRIERS, OR PENETRATIONS OF SOUND WALLS.**  
NO SCALE



1. INSTALL THE FIRESTOP SYMMETRICALLY ON BOTH SIDES OF THE WALL ASSEMBLY.
2. MINIMUM ANNULAR SPACE REQUIREMENT IS 5/8\"
3. RECESS A NOMINAL 1\"
4. FILL THE ANNULAR SPACE AROUND THE PIPE WITH A MINIMUM 1\"

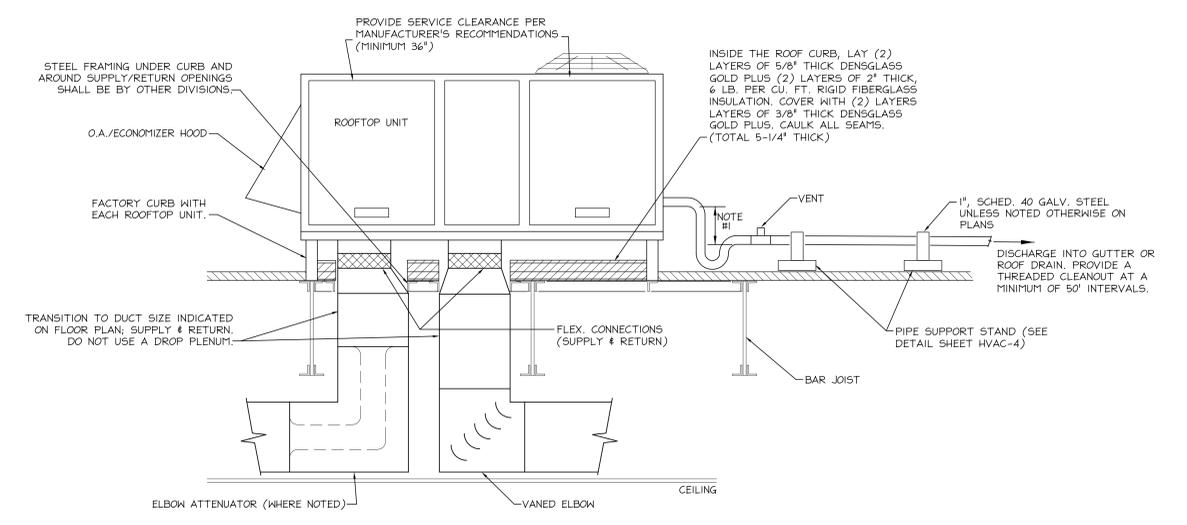
**INSULATED PIPE (1, 2, 3 OR 4 HR)**  
(UL SYSTEM #CBJ5002)  
(FOR PIPING LARGER THAN 6\"/>

**DETAIL OF PIPE PENETRATION OF ALL FIRE RATED FLOORS & PARTITIONS**  
NO SCALE



- NOTES:
- 1) FIRE DAMPER SHALL BE SIZED FOR METAL TO METAL DUCT DIMENSIONS. PARTITION OPENING SHALL BE SIZED FOR 1/8\"
  - 2) REFER TO MANUFACTURERS RECOMMENDATIONS FOR ADDITIONAL DETAIL.
  - 3) ALTERNATE INSTALLATION DETAILS SHALL BE ACCEPTABLE IF SHOWN TO BE IN COMPLIANCE WITH NFPA 90A & IFC'S LISTING.
  - 4) FOR INSULATED DUCTS: WRAP EXPOSED PORTION OF SLEEVE WITH 2\"
  - 5) ACCESS DOOR WHERE REQUIRED, SEE SPECIFICATIONS.

**FIRE DAMPER INSTALLATION DETAIL**  
APPLIES TO FIRE WALL, FIRE BARRIER, OR FIRE PARTITION.  
NO SCALE



**TYPICAL ROOFTOP UNIT DETAIL**  
NO SCALE

- NOTES:
- 1.) DISTANCE SHALL BE 2" OR 1/2" GREATER THAN THE FAN SUCTION PRESSURE (WHICH EVER IS GREATER).

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SHEET TITLE:  
**HVAC DETAILS**

SHEET NO.	CBE PROJ. NO.
	1345.5

**HVAC-8**