

## ADDENDUM NO. 01

### TO: PLANS AND SPECIFICATIONS FOR STATE OF MISSOURI

Replace Chiller & Fan Coil Units  
Oakview State School  
Monett, Missouri  
PROJECT NO.: E2331-01

Bid Opening Date: 1:30 PM, Tuesday, July 9, 2024 (Unchanged)

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**Bidders are hereby informed that the construction Plans and/or Specifications are modified as follows:**

#### **SPECIFICATION CHANGES:**

1. Section 004113 – BID FORM

**USE THE BID FORM INCLUDED WITH THIS ADDENDUM FOR SUBMITTING BID.** Do not use the BID FORM found on the MissouriBUYS website. Be sure to use the BID FORM labeled Addendum 01 in the header.

The BID FORM adds Alternate No. 2.

2. Section 012300 – Alternates

a. ADD paragraph 3.1.B. as follows:

*B. Alternate No. 2: Remove all existing piping insulation from existing heating hot water, chilled water, condensate, and refrigerant piping, and replace with new insulation per the specifications.*

3. Section 230719 – HVAC Piping Insulation

b. ADD 1.1.A.4 as follows:

4. Condensate drain piping, indoors

c. ADD 3.11.D as follows:

D. Condensate Drain Piping:

1. Flexible elastomeric:  $\frac{3}{4}$  inch thick.

#### **DRAWINGS CHANGES:**

1. Sheet M-101 – See Attached revised sheet M-101

a. ADD alternate #2 Special Notes.

b. DELETE three-way valves at DOAS units on Mechanical Piping Plan.

2. Sheet M-102A – See Attached revised sheet M-102A
  - a. ADD alternate #2 Special Notes.
3. Sheet M-500 – See Attached revised sheet M-500
  - a. Detail #1 and #2: ADD backflow preventer and pressure reducing valve note to Heating Water and Chilled Water Piping Diagrams.
  - b. Detail #3: ADD control valve note to DOAS Unit Piping Detail.
4. Sheet M-600 – See Attached revised sheet M-600
  - a. ADD backflow preventer and pressure reducing valve sections to Hydronic Specialties Schedule.

**GENERAL COMMENTS:**

1. The Pre-Bid Meeting was held June 25, 2024. The attendance sheet is included in the attachment.
2. For site access prior to bid date, contact Guy Manning at 417-766-4761.
3. **For questions regarding bidding requirements or MBE/WBE/SDVE goals contact Paul Girouard, Contract Specialist at 573-751-4797 or [Paul.Girouard@oa.mo.gov](mailto:Paul.Girouard@oa.mo.gov)**
4. **As of July 1, 2020**, all MBE, WBE, and MBE/WBE contractors, subcontractors, and suppliers must be certified by the State of Missouri, Office of Equal Opportunity. No other certifications from other Missouri certifying agencies will be accepted.
5. **MBE/WBE/SDVE participation requirements can be found in DIVISION 00. The MBE/WBE/SDVE participation goals are 10%/10%/3%, respectively. Only certified firms as of the bid opening date can be used to satisfy the MBE/WBE/SDVE participation goals for this project. If a bidder is unable to meet a participation goal, a Good Faith Effort Determination Form must be completed. Failure to complete this process will result in rejection of the bid. Any questions please contact Paul Girouard.**
6. **The Contractor shall pay not less than the prevailing hourly rate of wages for work of a similar character in the locality in which the work is performed, as determined by the Missouri Department of Labor and Industrial Relations.** Bidders are to adhere to Prevailing Wage Hourly Rate of Wages, and the Department of Labor and Industrial Relations can be contacted to determine the applicable wage rate for the work on this project.
7. **Coordination:**
  - a. The chiller disconnect switch will be replaced by the Owner during construction. Contractor shall coordinate with Owner for timing of replacement.
8. **The following questions were received:**
  - a. Will press fittings be allowed on copper piping?
    - i. Press fittings will be allowed on copper piping 2" and less.
  - b. Should the DOAS coil valves be 3-way (as shown on page M101) or 2-way (as shown on M500)? During the meeting, you indicated to follow detail 3 on M500 (2-way).
    - i. These valves should be two-way as shown on M-500.

- c. Are we supposed to use pressure independent control valves for the chilled water on the Fan coil units (Detail 5, M500) only or are pressure independent control valves required for the hot water as well?
  - i. Pressure independent control valves shall be used for control valves on heating hot water as well.
- d. The sequences on page M-501 indicate that the chiller controls (and boiler controls) are to provide the control of the chilled water (and hot water system). Should we plan for the chiller and boiler to do that control directly or should the building automation system controllers provide direct control of those systems?
  - i. Chiller and boiler factory controls are to provide control of equipment such as internal valves and staging. BAS shall monitor points from each system as specified and control system pumps.
- e. Considering that the DOAS units will have factory controls, will they be able to control the run-around reheat coils directly or will that need to be done by the building automation system?
  - i. Control of the DOAS unit run-around loop shall be by the BAS.
- f. Since the Division 26 occupancy sensors will command the exhaust damper actuators directly, do they need to be monitored (or controlled) by the building automation system?
  - i. BAS shall control and monitor position (open/closed) of exhaust system motorized dampers.
- g. Interpretation of spec. for SA and OA ductwork to be BOTH lined AND wrapped. Is this correct?
  - i. Per specification section 230713 / 3.9, these ducts are only required to be wrapped.

**ATTACHMENTS:**

- A. Pre-Bid Meeting Sign-In Sheet (2 Pages)
- B. Section 00413 – BID FORM (5 Pages)
- C. M-101 Addendum 01 Revision (1 Page)
- D. M-102A Addendum 01 Revision (1 Page)
- E. M-500 Addendum 01 Revision (1 Page)
- F. M-600 Addendum 01 Revision (1 Page)

**END ADDENDUM 01**

Name	Company & Title	Phone & Fax	E-Mail Address
David Burkett	FMDC		david.burkett@oa.mo.gov
Ryan Abbott	FMDC	(573) 298-1967	Ryan.Abbott@oa.mo.gov
Dustin Brown	JOHNSON CONTROLS, INC	417-413-8249	dustin.w.brown@jci.com
TREVOR STANBACH	VAZQUEZ	913 710 8009	trevor@VAZQUEZLL.COM JESSEK@VAZQUEZLL.COM
JAMES GALLER	ENVIROTECH	913-238-1727	JAMESG@ENVIROTECHKS.COM
Amber Tanner	MSI Constructors	417-881-0903	estimating@msiconstructors.com
DON WAGNER	OA-FMDC	816-565-5098	DON.WAGNER@OA.MO.GOV
Guy Marklund	OA FMDC	417-766-4761	Guy.Marklund@OA.MO.GOV
Bruce Dahlstrom	OA FMDC	(417) 434-6553	Bruce.Dahlstrom@oa.mo.gov
RYAN JONES	CJD ENGINEERING	(417) 877-1700	rjones@cjd-eng.com

Zach Altis

Control Service Co

417.234.0201 Zaltis@controlservice.com

## SECTION 004113 - BID FORM

### 1.0 BID

A. From:

\_\_\_\_\_  
(Bidder's Name)

herein after called the "**Bidder**".

B. To:

Director, Division of Facilities Management, Design and Construction  
Room 730, Harry S Truman State Office Building  
301 West High Street  
Jefferson City, Missouri 65101

herein after called the "**Owner**".

C. For:

Replace Chiller & Fan Coil Units  
Oakview State School Building  
Monett, Missouri

D. Project Number:

E2331-01

hereinafter called the "**Work**".

E. Documents:

The undersigned, having examined and being familiar with the local conditions affecting the work and with the complete set of contract documents, including the Drawings, the Invitation For Bid, Instructions To Bidders, Statement of Bidders Qualifications, General Conditions, Supplement to General Conditions, and the technical specifications, including: addenda number \_\_\_\_\_ through \_\_\_\_\_ hereby proposes to perform the Work for the following:

F. Bid Amount:

\_\_\_\_\_  
Dollars (\$ \_\_\_\_\_)

H. Alternates:

Alternate No. 1: Install (4) fan coil units in new mechanical closets in lieu of above ceiling, as indicated by notes and details on the drawings labeled "Alternate #1." Includes revisions to acoustical grid ceilings and construction of new closet partition walls with doors.

\_\_\_\_\_  
Dollars (\$ \_\_\_\_\_)

Alternate No. 2: Remove all existing piping insulation from existing heating hot water, chilled water, condensate, and refrigerant piping, and replace with new insulation per the specifications.

\_\_\_\_\_  
Dollars (\$ \_\_\_\_\_)

### 2.0 MBE/WBE/SDVE PERCENTAGE OF PARTICIPATION PROJECT GOALS

A. This project's specific goals are: **MBE 10%**, **WBE 10%**, and **SDVE 3%**. NOTE: Only MBE/WBE firms certified by the State of Missouri Office of Equal Opportunity, and SDVE(s) meeting the requirements of Section 34.074, RSMo, and 1 CSR 30-5.010, as of the date of bid opening can be used to satisfy the MBE/WBE/SDVE participation goals for this project.

### 3.0 BID BOND

A. Accompanying the bid is: \_\_\_ 5% Bid Bond or \_\_\_ Cashier's Check/Bank Draft for 5% of base bid that is

payable without condition to the Division of Facilities Management, Design and Construction, State of Missouri, as per Article 5 of "Instructions To Bidders".

#### **4.0 CONTRACT COMPLETION TIME AND LIQUIDATED DAMAGES**

- A. The Bidder agrees to complete the work within 200 working days from the date the Notice of Intent to Award is issued as modified by additional days added by the Owner's acceptance of alternates, if applicable. This includes ten (10) working days for document mailing and processing. The Bidder further agrees to pay to, or allow the State as liquidated damages the sum of \$700 for each working day thereafter that the entire work is not substantially complete.

#### **5.0 ATTACHMENTS TO BID**

- |                    |   |
|--------------------|---|
| A. 004336          | Proposed Subcontractors   |
| 004337             | MBE/WBE/SDVE Compliance Form                                    |
| 004338             | MBE/WBE/SDVE Joint Venture Form                                 |
| 004339             | MBE/WBE/SDVE Waiver Form  |
| 004340             | SDVE Business Form  |
| 004541             | Affidavit of Work Authorization                                 |
| 004545             | Anti-Discrimination Against Israel Act Certification form       |
| 013513.13 (3.6) B5 | DESE Drug Testing Certification <b>(DUE WITH BID SUBMITTAL)</b> |

#### **6.0 BIDDER'S CERTIFICATIONS**

By signing and submitting this bid form, the Bidder certifies as follows:

##### **A. No Undisclosed Interests or Associations, Collusion, or Solicitation of Other Bidders**

1. This bid is genuine and is not made in the interest of or on behalf of any undisclosed person, firm, or corporation, and is not submitted in conformity with any agreement or rules of any group, association or corporation.
2. The Bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham proposal.
3. The Bidder has not solicited or induced any person, firm or corporation to refrain from submitting a bid.
4. The Bidder has not sought by collusion or otherwise to obtain any advantage over any other bidder or over the Owner.

##### **B. Accuracy of Contract Documents**

The Bidder has based this bid upon an official/complete set of contract documents, either obtained from the Owner or from a secondary source known to the Bidder to have provided a complete and accurate set of contract documents. If the Bidder received the contract documents from such a secondary source, any errors or omissions in the contract documents shall be interpreted and construed in favor of the Owner and against the Bidder. This bid is based upon the conditions within Article 1.2 of the General Conditions.

##### **C. Non-Discrimination**

The Bidder will not discriminate against any employee or applicant for employment because of race, creed, color or national origin in the performance of the Work.

#### D. **Prevailing Wage**

**MISSOURI PREVAILING WAGE LAW (Sections 290.210 to 290.340, RSMo):** The Contractor shall pay not less than the specified hourly rate of wages, as set out in the wage order attached to and made part of the specifications for work under this contract, to all workers performing work under the contract, in accordance with sections 290.210 to 290.340, RSMo. The Contractor shall forfeit a penalty to the Owner of one hundred dollars per day (or portion of a day) for each worker that is paid less than the specified rates for any work done under the contract by the Contractor or by any subcontractor, in accordance with section 290.250, RSMo.

**DAVIS-BACON ACT:** If this Project is financed in whole or in part from Federal funds (as indicated in the Instructions to Bidders or other bid or contract documents for this Project), then this contract shall be subject to all applicable federal labor statutes, rules and regulations, including provisions of the Davis-Bacon Act, 40 U.S.C. §3141 et seq., and the “Federal Labor Standards Provisions,” as further set forth in Section 007333 – Supplementary General Conditions for Federally Funded/Assisted Construction Projects, which is incorporated into the contract by reference. Where the Missouri Prevailing Wage Law and the Davis-Bacon Act require payment of different wages for work performed under this contract, the Contractor and all Subcontractors shall pay the greater of the wages required under either law, on a classification by classification basis.

#### E. **Transient Employers**

The Bidder will comply with the provisions of Sections 285.230-234, RSMo, regarding transient employers.

#### F. **Federal Work Authorization Program**

The Bidder has enrolled and is participating in, and will continue to participate in, a federal work authorization program in accordance with Sections 285.525 and 285.530, RSMo for the duration of any contract awarded because of this bid.

#### G. **Illegal Immigration Reform and Immigrant Responsibility Act (IIRIRA)**

1. If awarded contract for this project, the Bidder/Contractor shall only utilize personnel authorized to work in the United States in accordance with applicable federal, state and local laws. This includes, but is not limited to, the Illegal Immigration Reform and Immigrant Responsibility Act (IIRIRA) and INA Section 274A.
2. If found to be in violation of this requirement or any applicable laws, and if the State of Missouri has reasonable cause to believe that the Contractor has knowingly employed individuals who are not eligible to work in the United States, the state shall have the right to cancel the contract immediately without penalty or recourse and suspend or debar the contractor from doing business with the state.
3. The Contractor agrees to cooperate fully with any audit or investigation from federal, state or local law enforcement agencies.

#### H. **Anti-Discrimination Against Israel Act**

1. If the awarded Contractor meets the definition of a company as defined in section 34.600, RSMo, and has ten or more employees, the Contractor shall not engage in a boycott of goods or services from the State of Israel; from companies doing business in or with Israel or authorized by, licensed by, or organized under the laws of the State of Israel; or from persons or entities doing business in the State of Israel as defined in section 34.600, RSMo.
2. If, at any time during the life of the contract, Contractor meets the definition of a company as defined in section 34.600, RSMo, and the company’s employees increases to ten or more OR the contractor’s business status changes to become a company as defined in section 34.600, RSMo, and the company has ten or more employees, then the Contractor shall submit to the Division of Facilities Management, Design and Construction a completed Box C of the exhibit titled “Anti-Discrimination Against Israel Act Certification, and shall comply with the requirements of Box C.



**7.0 CONTACT INFORMATION (mandatory for all bidders)**

Sole Proprietorship/General Partnership  LLC  Limited Partnership  Corporation  Joint Venture

Business Name: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_

Telephone: \_\_\_\_\_ Fax Number: \_\_\_\_\_

Federal ID Number: \_\_\_\_\_ or Social Security Number: \_\_\_\_\_

Missouri Business Charter Number: \_\_\_\_\_ (or provide the proper certificate from the Secretary of State)

Contact Name: \_\_\_\_\_ Contact email: \_\_\_\_\_

**8.0 SIGNATURES**

**FOR SOLE PROPRIETORSHIPS/GENERAL PARTNERSHIPS ONLY**

\_\_\_\_\_  
Sole Proprietor's Name (printed) Name each general partner: \_\_\_\_\_  
\_\_\_\_\_

Today's Date: \_\_\_\_\_  
\_\_\_\_\_

I, \_\_\_\_\_, being the sole proprietor/general partner of (name of business)  
\_\_\_\_\_ (and if the name of said business is other than my legal name, having filed a  
Registration of Fictitious Name with the Missouri Secretary of State in order to allow me to use such name in  
connection with my business, as provided by Section 417.200, RSMo, et seq.), do hereby submit this bid and agree to be  
bound unto the State of Missouri as herein provided (if a general partnership, all partners must sign below).

Signature: \_\_\_\_\_ Signature: \_\_\_\_\_

Signature: \_\_\_\_\_ Signature: \_\_\_\_\_

**FOR LIMITED LIABILITY COMPANIES ONLY**

\_\_\_\_\_ today's date \_\_\_\_\_ State(s) of organization: \_\_\_\_\_  
Manager's (or Managing Member's) Name (printed)

I, \_\_\_\_\_, being the Manager (or Managing Member) of (full legal name of limited  
liability company from Articles of Organization) \_\_\_\_\_, and being duly  
authorized to act as herein provided on behalf of said limited liability company, do hereby submit this bid on behalf of  
said limited liability company and agree that said limited liability company shall be bound unto the State of Missouri as  
herein provided.

Signature: \_\_\_\_\_

**FOR LIMITED PARTNERSHIPS/LIMITED LIABILITY PARTNERSHIPS/LIMITED LIABILITY LIMITED PARTNERSHIPS ONLY**

\_\_\_\_\_ today's date: \_\_\_\_\_ State(s) of organization: \_\_\_\_\_  
General/Managing Partner's Name (printed)

I, \_\_\_\_\_, being the General Partner/Managing Partner of (full legal name of limited partnership/limited liability partnership/limited liability limited partnership from partnership agreement or Certificate of Limited Partnership) \_\_\_\_\_, and being duly authorized to act as herein provided on behalf of said limited partnership/limited liability partnership/limited liability limited partnership, do hereby submit this bid on behalf of said limited partnership/limited liability partnership/limited liability limited partnership and agree that said limited partnership/limited liability partnership/limited liability limited partnership shall be bound unto the State of Missouri as herein provided.

Signature: \_\_\_\_\_

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**FOR CORPORATIONS ONLY**

\_\_\_\_\_  
President's Name (printed)                      Secretary's Name (printed)                      Today's date

State(s) of incorporation: \_\_\_\_\_

I, \_\_\_\_\_, being the (officer or title) \_\_\_\_\_ of (full legal name of corporation, from Articles of Incorporation) \_\_\_\_\_, and being duly authorized by the Board of Directors of said corporation to act as herein provided on behalf of said corporation, do hereby submit this bid on behalf of said corporation and agree that said corporation shall be bound unto the State of Missouri as herein provided.

Signature: \_\_\_\_\_  
President

Attested by: \_\_\_\_\_  
Corporate Secretary

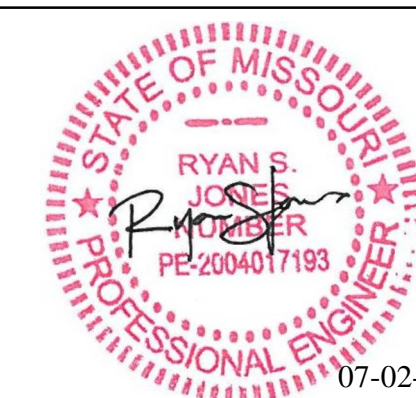
The President should sign as the bidder. If the signator is other than the corporate president, the bidder must provide satisfactory evidence that the signator has the legal authority to bind the corporation.

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**FOR ASSOCIATIONS/JOINT VENTURES**

If multiple business entities/individuals are bidding collectively as an association or joint venture, each business entity/individual bidding as part of the association or joint venture shall sign this bid in the above sections relevant to the form that such business entity or individual does business, and the bidder shall duplicate the necessary number of signature pages so that all members of the association or joint venture shall sign this bid. If a name is adopted for use by the association or joint venture, the association or joint venture shall file a Registration of Fictitious Name with the Missouri Secretary of State in order to use such name in connection with the association or joint venture, as provided by Section 417.200, RSMo, *et seq.*





RYAN S. JONES - ENGINEER  
PE-2004017193  
PROFESSIONAL SEAL

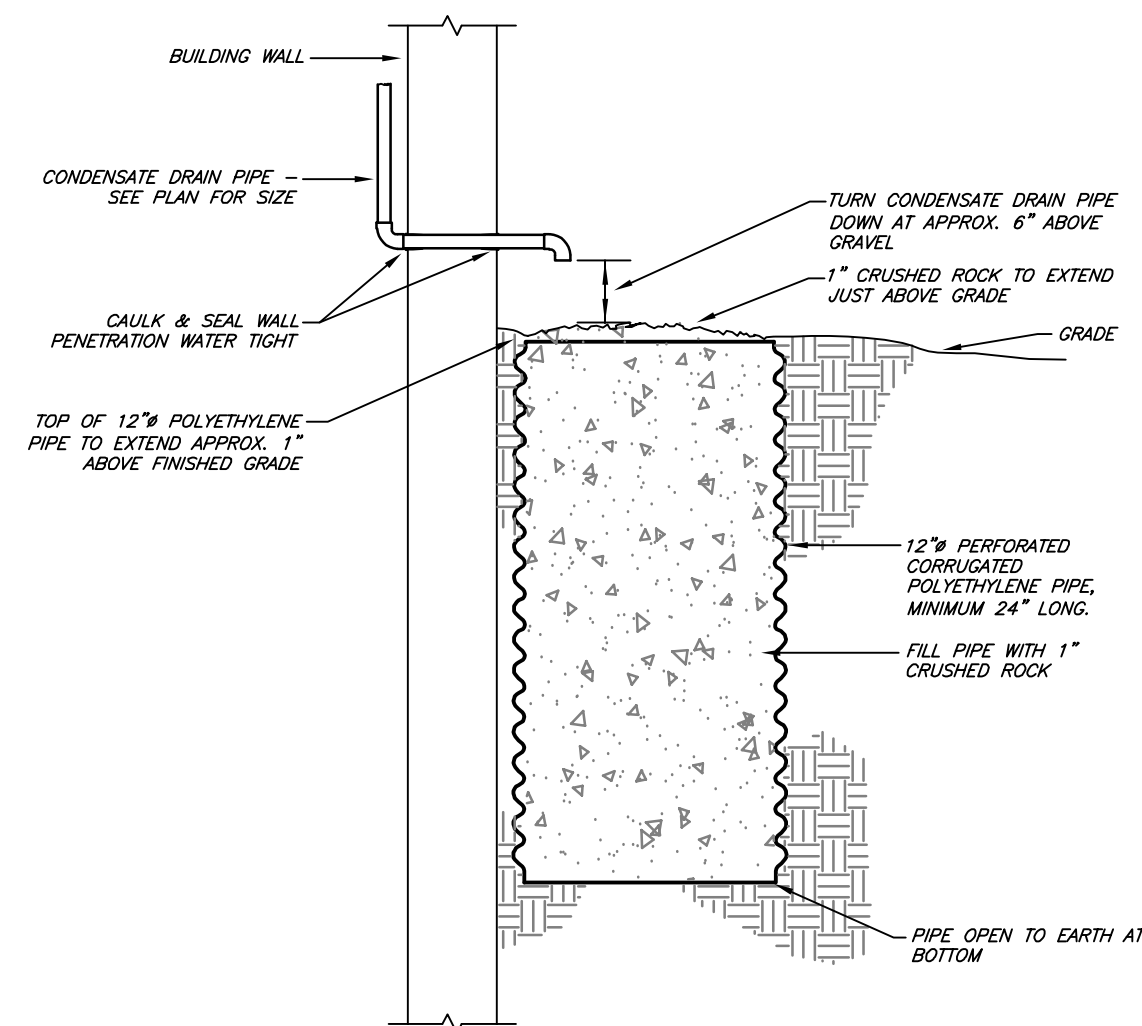
Missouri State Certificate of Authority #2005026903  
Specialty: Mechanical Engineering  
Specialty: Electrical Engineering  
Specialty: Plumbing Engineering  
Specialty: Fire Protection Engineering  
Specialty: Surveying Engineering  
Specialty: Civil Engineering  
Specialty: Chemical Engineering  
Specialty: Industrial Engineering  
Specialty: Environmental Engineering  
Specialty: Agricultural Engineering  
Specialty: Mechanical Engineering  
Specialty: Electrical Engineering  
Specialty: Plumbing Engineering  
Specialty: Fire Protection Engineering  
Specialty: Surveying Engineering  
Specialty: Civil Engineering  
Specialty: Chemical Engineering  
Specialty: Industrial Engineering  
Specialty: Environmental Engineering



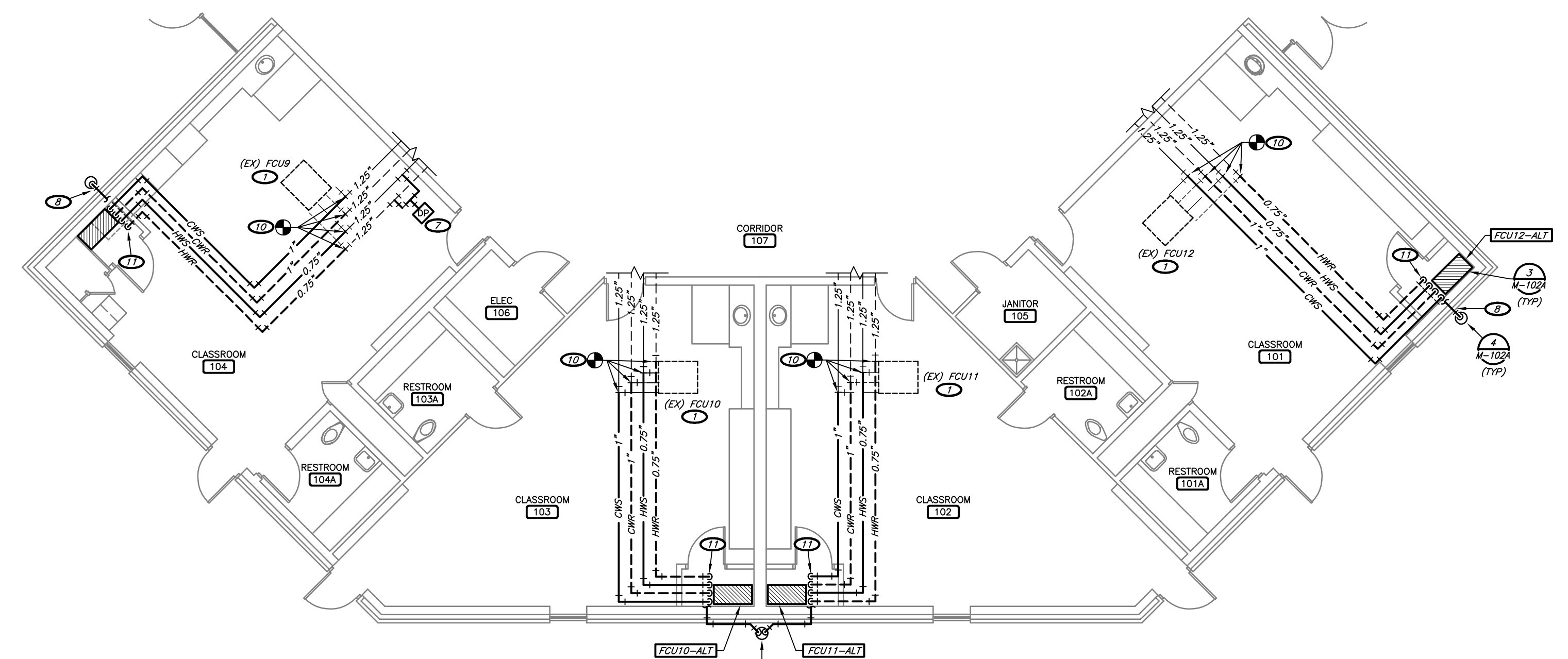
Engineering | Energy | Innovation  
2225 West Chesterfield Boulevard, Suite 200  
Springfield, MO 65807  
P: 417.877.1700 F: 417.324.7735  
www.cjd-eng.com

**KEYNOTES:**

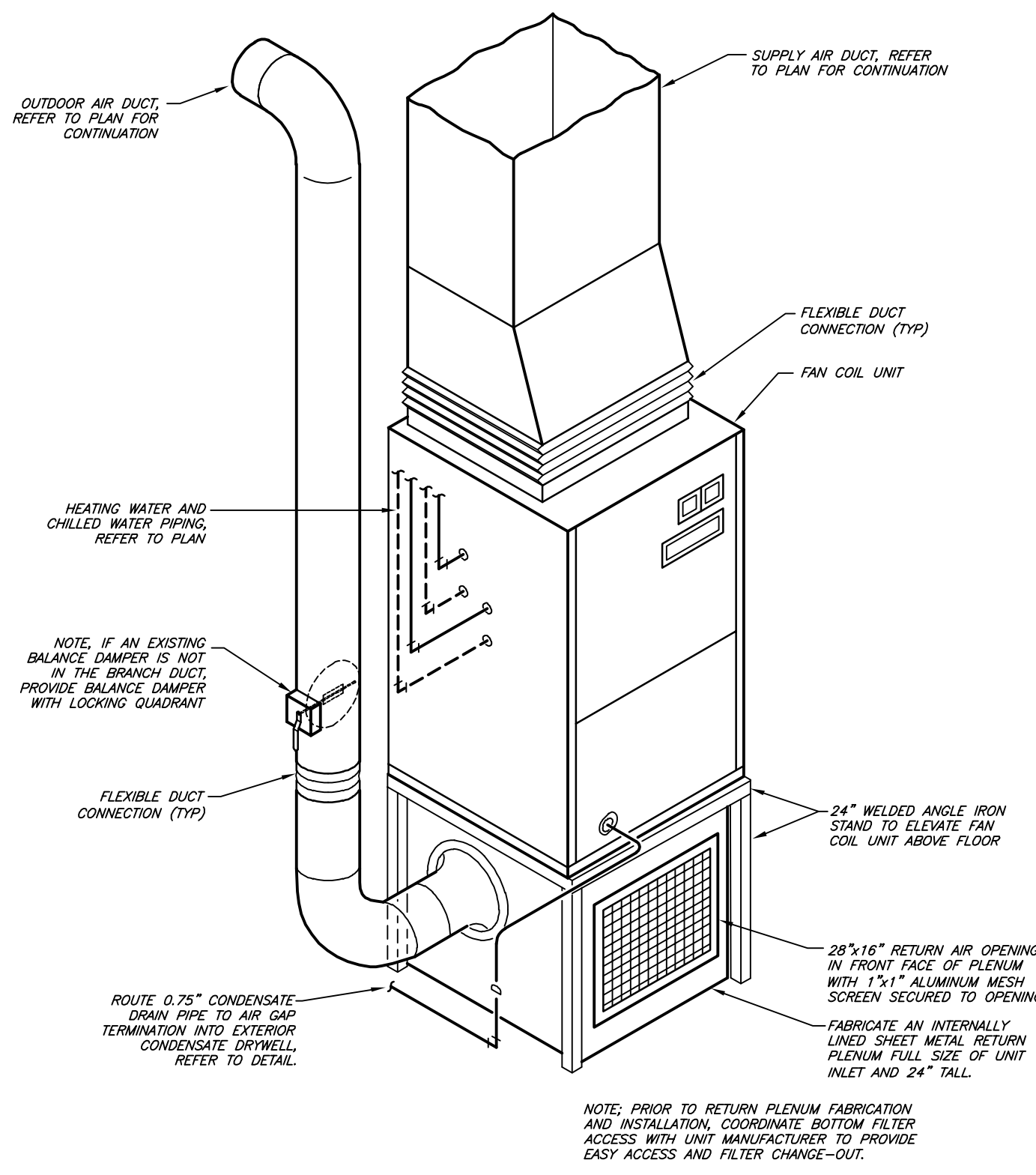
- 1 REMOVE EXISTING FAN COIL UNIT, PIPING, RETURN PLENUM AND SUPPLY DUCT TRANSITION. CAP SUPPLY DUCT.
- 2 PROVIDE RETURN AIR OPENING IN DOOR AND SECURE RETURN GRILLE IN FACE OF DOOR AT APPROXIMATELY 6" ABOVE FLOOR.
- 3 CONNECT NEW 8" OUTSIDE AIR DUCT TO EXISTING 8" DUCT, EXTEND TO NEW FAN COIL UNIT AS INDICATED.
- 4 ROUTE 8" OUTSIDE AIR DUCT DOWN AND CONNECT TO RETURN PLENUM AT FAN COIL UNIT.
- 5 18x12 SUPPLY DUCT DOWN AND TRANSITION TO FAN COIL UNIT.
- 6 CONNECT NEW 18x12 SUPPLY DUCT TO EXISTING SUPPLY DUCT, FIELD VERIFY SIZE AND LOCATION OF EXISTING DUCT.
- 7 NEW DIFFERENTIAL PRESSURE SENSOR INSTALLED UNDER BASE BID. REFER TO SHEET M-101.
- 8 0.75" CONDENSATE DRAIN FROM FAN COIL UNIT, ROUTE LOW THROUGH EXTERIOR WALL AND TERMINATE INTO CONDENSATE DRYWELL, REFER TO DETAIL. SEAL WALL PENETRATION WEATHERTIGHT.
- 9 0.75" CONDENSATE DRAIN FROM EACH FAN COIL UNIT, ROUTE LOW THROUGH EXTERIOR WALL AND TERMINATE INTO CONDENSATE DRYWELL, REFER TO DETAIL. SEAL WALL PENETRATIONS WEATHERTIGHT.
- 10 REMOVE A PORTION OF EXISTING CHILLED WATER AND HEATING WATER BRANCH PIPING AND VALVING, EXTEND TO NEW FAN COIL UNIT IN CLOSET.
- 11 1" CHILLED WATER SUPPLY AND RETURN AND 0.75" HEATING WATER SUPPLY AND RETURN DOWN TO FAN COIL UNIT.



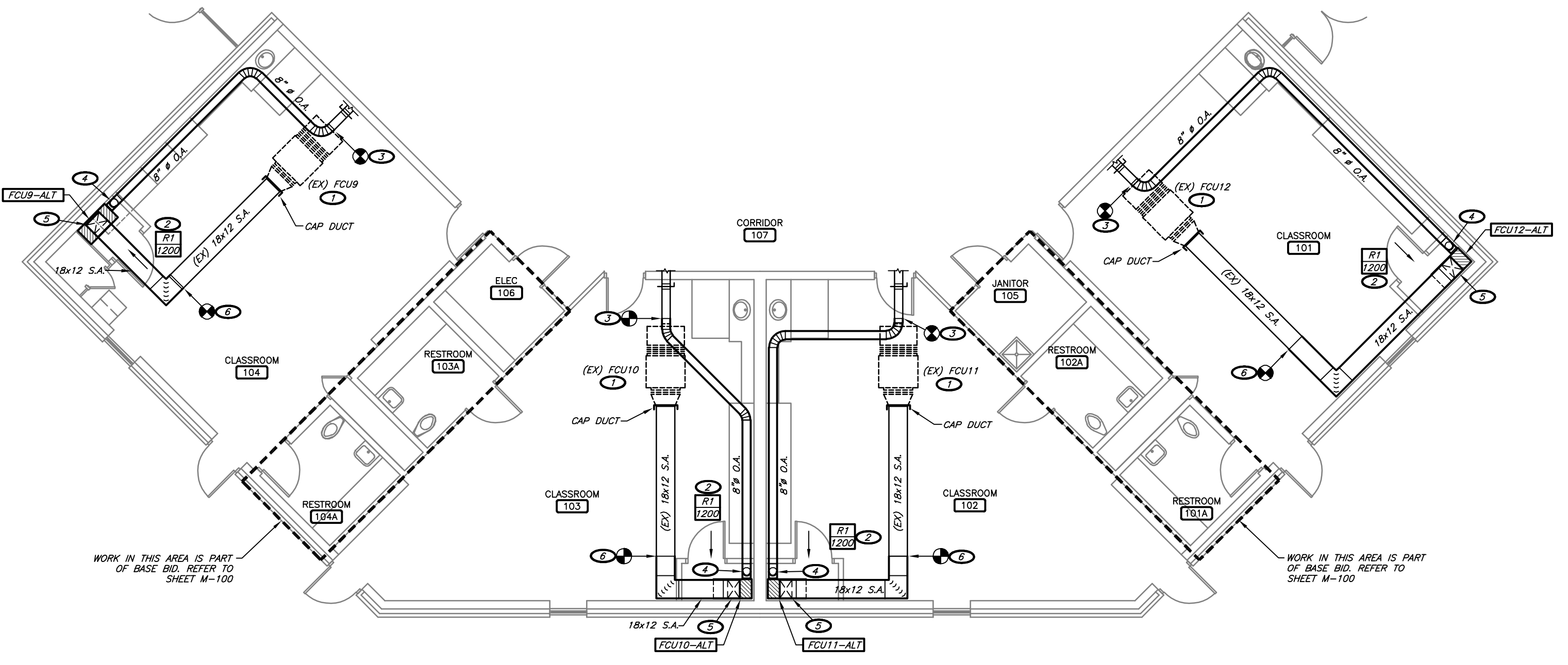
**4 CONDENSATE DRYWELL DETAIL**  
NO SCALE



**2 MECHANICAL PIPING PLAN - ALTERNATE #1**  
1/8" = 1'-0"  
NORTH



**3 VERTICAL FAN COIL UNIT DETAIL**  
NO SCALE



**1 HVAC PLAN - ALTERNATE #1**  
1/8" = 1'-0"  
NORTH

- ALTERNATE #1 SPECIAL NOTES:**
1. CONTRACTOR SHALL CONSTRUCT NEW MECHANICAL CLOSETS WITH 36" ACCESS DOOR WITH INTEGRAL RETURN AIR LOUVER WITH MIN. 2.7 SQ. FT. OF FREE AREA. REFER TO SHEET A-101A FOR CLOSET AND DOOR DETAILS.
  2. MODIFY THE EXISTING CEILING GRID AND TILES AS REQUIRED TO ACCOMMODATE THE NEW MECHANICAL CLOSET WALLS.
  3. MODIFY THE EXISTING LOWERED CEILING GRID AND TILES AT THE PREVIOUS/REMOVED FAN COIL UNIT LOCATIONS TO MATCH THE ADJACENT HIGHER CEILING.

- ALTERNATE #2 SPECIAL NOTES:**
1. ALTERNATE #2: CONTRACTOR SHALL REMOVE ALL EXISTING PIPING INSULATION FROM EXISTING HEATING HOT WATER, CHILLED WATER, CONDENSATE, AND REFRIGERANT PIPING, AND REPLACE WITH NEW INSULATION PER THE SPECIFICATIONS.
  2. ALL NEW PIPING INSTALLED UNDER BASE BID SHALL BE INSULATED AS PART OF BASE BID.
  3. ALL NEW PIPING INSTALLED UNDER ALTERNATE #1 BID SHALL BE INSULATED AS PART OF ALTERNATE #1 BID.

OFFICE OF ADMINISTRATION  
DIVISION OF FACILITIES  
MANAGEMENT,  
DESIGN AND CONSTRUCTION

OAKVIEW STATE SCHOOL

REPLACE CHILLER &  
FAN COIL UNITS

PROJECT # E2331-01  
SITE # 2038  
FACILITY # 5012038004

REVISION: ADDENDUM #1  
DATE: 07/02/2024  
REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_  
REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_  
ISSUE DATE: 04/12/2024

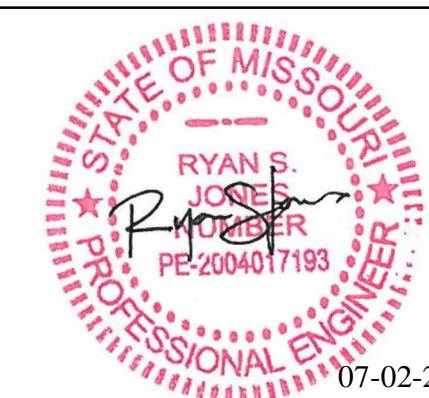
CAD DWG FILE: M-102A.DWG  
DRAWN BY: TKB  
CHECKED BY: RSJ  
DESIGNED BY: TKB

SHEET TITLE:  
**MECHANICAL  
PLANS -  
ALTERNATE #1**

SHEET NUMBER:

**M-102A**

8 OF 11 SHEETS  
APRIL 12, 2024



RYAN S. JONES - ENGINEER  
PE-2004017193  
PROFESSIONAL SEAL

Missouri State Certificate of Authority #2005026903  
Specialty: Design Engineer by CJD Engineering LLC are instruments of service for use solely with respect to this project. CJD Engineering LLC retains ownership and all control over, including the right to reassign, rights including copyright. This drawing shall not be relied on for or used for any other work without prior written consent by and separate agreement with CJD Engineering LLC. Wherever changes, additions or deletions are made to this drawing, they shall be made in accordance with the provisions of the Missouri Professional Engineer Act without prior written approval from CJD Engineering LLC. Use of this drawing by any other person is prohibited. The user assumes full responsibility for any damage, liability or costs resulting directly or indirectly from such changes to the fullest extent of the law.

**CJD**  
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OFFICE OF ADMINISTRATION  
DIVISION OF FACILITIES  
MANAGEMENT,  
DESIGN AND CONSTRUCTION

OAKVIEW STATE SCHOOL

REPLACE CHILLER &  
FAN COIL UNITS

PROJECT # E2331-01  
SITE # 2038  
FACILITY # 5012038004

REVISION: ADDENDUM #1  
DATE: 07/02/2024  
REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_  
REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_  
ISSUE DATE: 04/12/2024

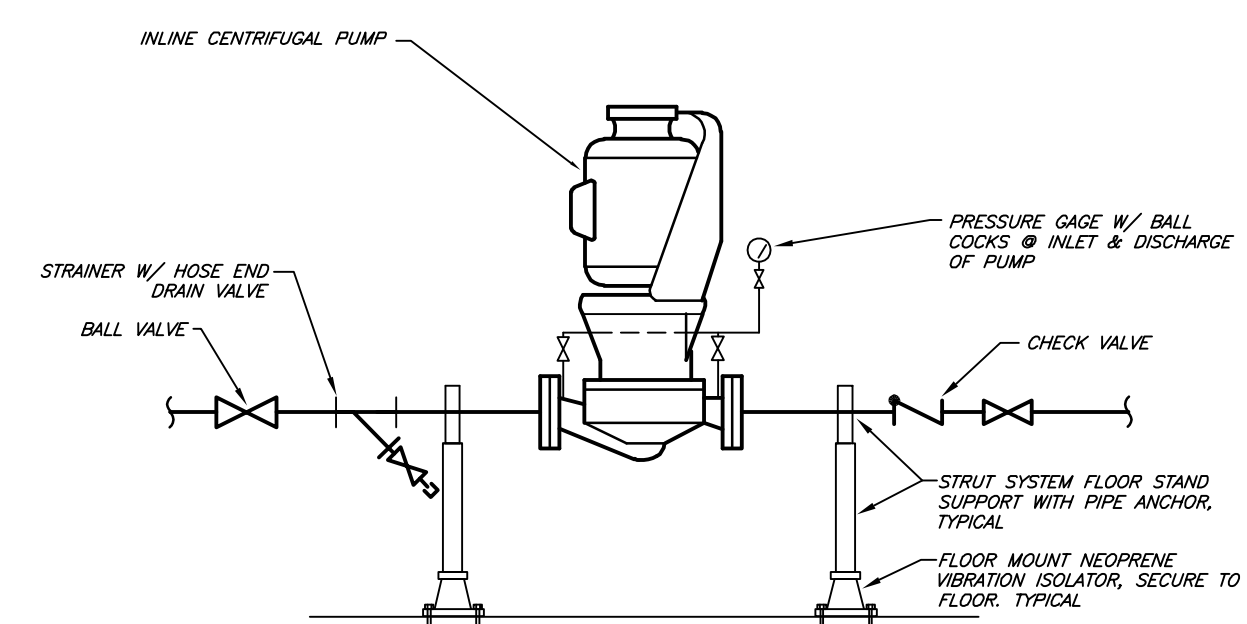
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DRAWN BY: TKB  
CHECKED BY: RSJ  
DESIGNED BY: TKB

SHEET TITLE:  
**MECHANICAL  
DETAILS**

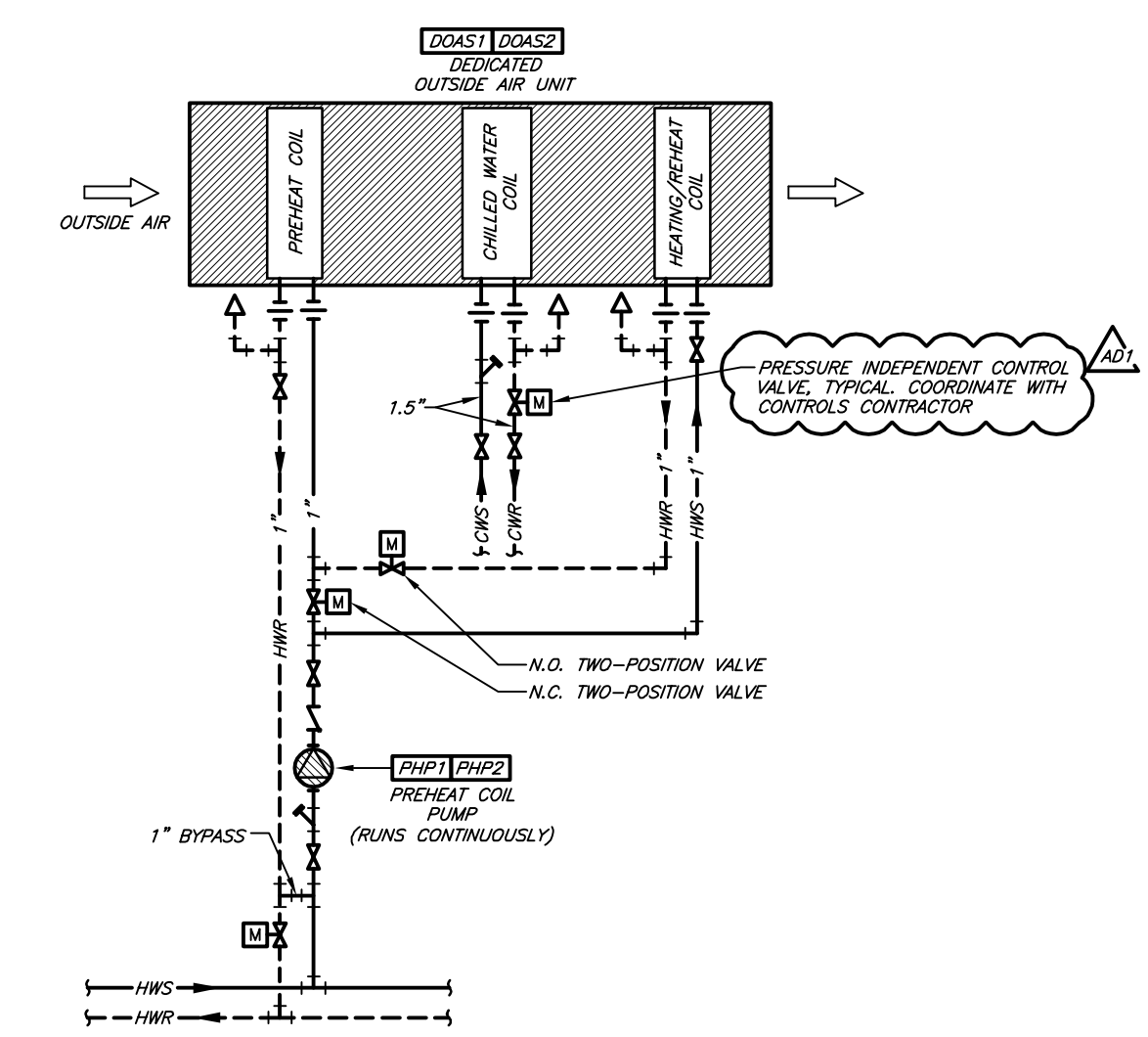
SHEET NUMBER:

**M-500**

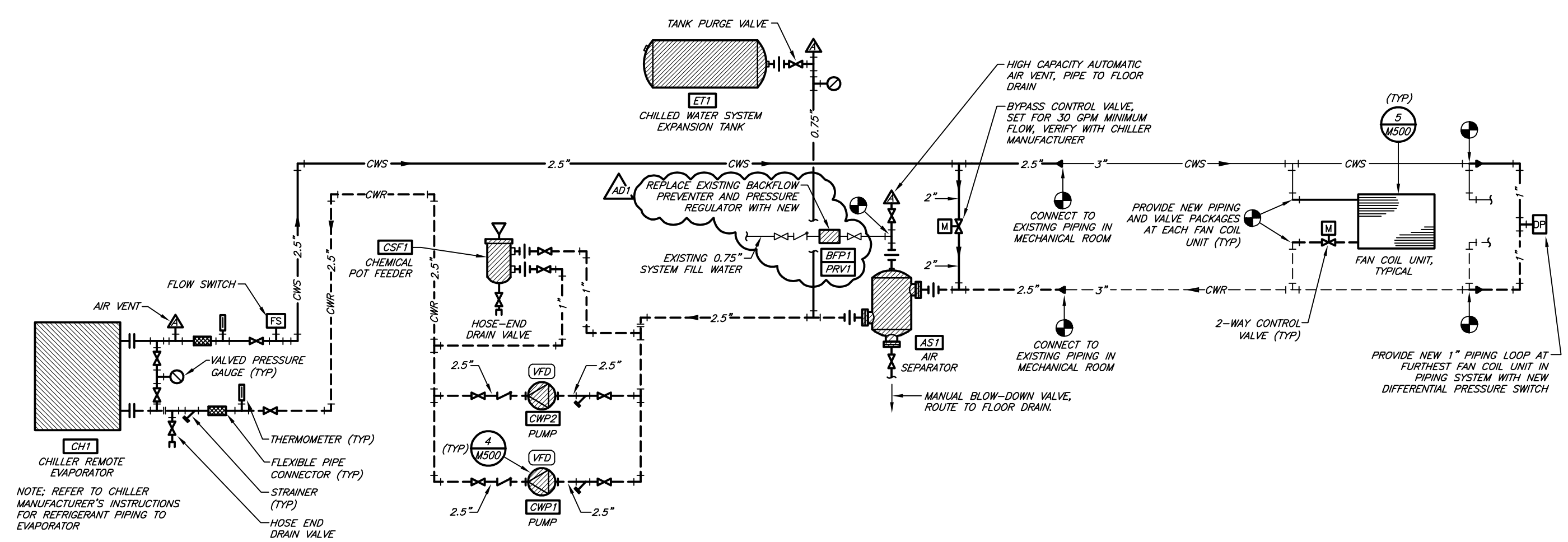
9 OF 11 SHEETS  
APRIL 12, 2024



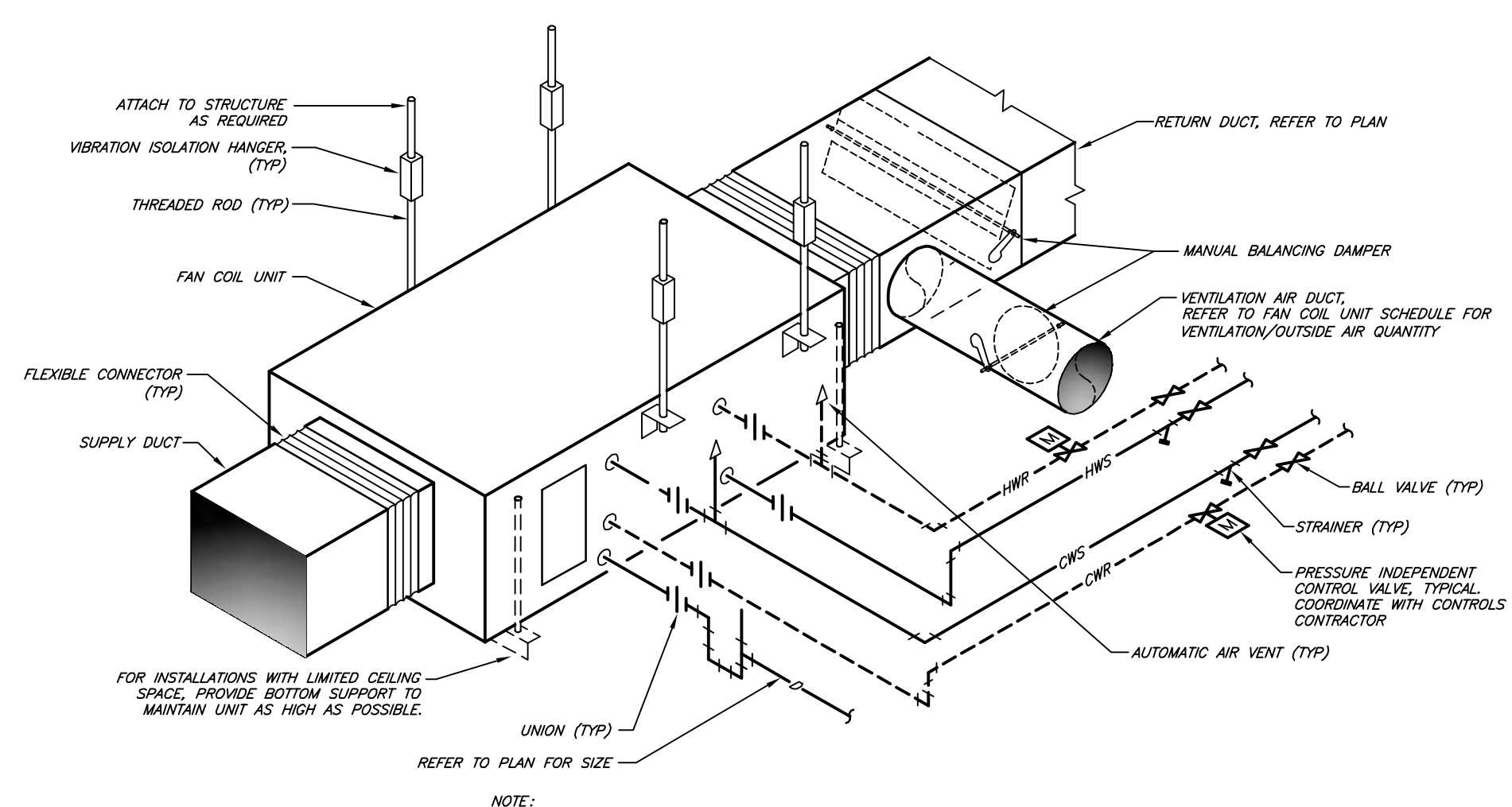
4 IN-LINE PUMP DETAIL  
NO SCALE



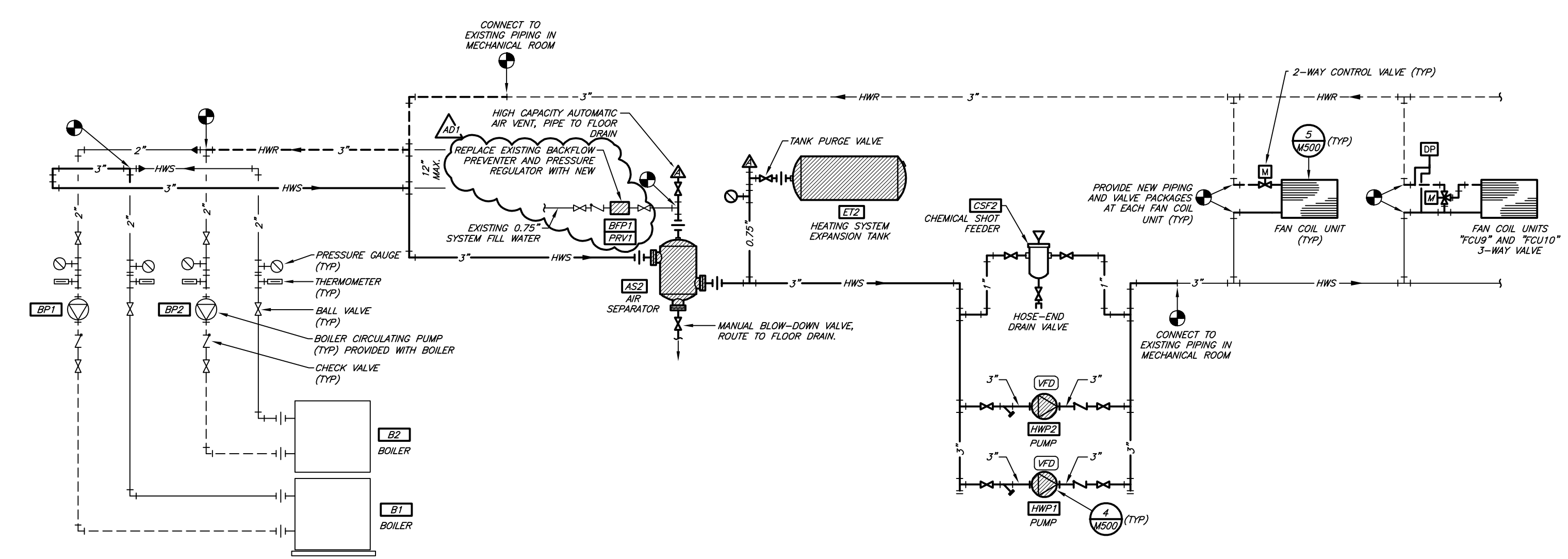
3 DOAS UNIT PIPING DETAIL  
NO SCALE



2 CHILLED WATER PIPING DIAGRAM  
NO SCALE



5 4-PIPE FAN COIL UNIT DETAIL  
NO SCALE



1 HEATING WATER PIPING DIAGRAM  
NO SCALE

SPECIAL NOTE:  
BOILERS "B1" AND "B2", BOILER CIRCULATING PUMPS "BP1" AND "BP2" AND HEATING WATER PIPING TO THE SECONDARY LOOP HAVE PREVIOUSLY BEEN REPLACED IN JOB WORK ORDER CONTRACT (J.O.C.) IN NOVEMBER 2023. COORDINATE WITH OWNER AND VERIFY EXACT FIELD CONDITIONS.

