

DOCUMENT 00 90 00

ADDENDUM

ADDENDUM NO. [1] Date: October 31, 2019

**RE: WESTERN TECHNICAL COLLEGE
KUMM CENTER COOLING UPGRADES
400 SIX STREET NORTH
LA CROSSE, WISCONSIN 54601
HSR PROJECT NO. 19035**

FROM: HSR Associates, Inc
100 Milwaukee Street
La Crosse, WI 54603
(608) 784-1830

To: Prospective Bidders

This addendum forms a part of the Contract Documents and modifies the original Bidding Documents dated October, 2019. Acknowledge receipt of this Addendum in the space provided on the bid form. Failure to do so may subject the Bidder to disqualification.

This Addendum consists of [2] page, [2] specification sections, and [3] 30 x 42 drawings.

CHANGES TO BIDDING REQUIREMENTS AND CONDITIONS OF THE CONTRACT:

1. Section 00 41 00 BID FORM

- a. Revised Bid Form attached hereto adding alternate bid #1.

2. Section 01 23 00 ALTERNATES

- a. Section attached hereto as part of Contract Documents.

Alternate No. 1: Chiller Condenser Heat Exchanger and Accessories

The following work shall be priced under Alternate No. 1: State the amount to be added to the base bid for chiller condenser water heat exchanger (HX-1) and all associated pumps, air control, and buffer tank as noted in schematic 1M400. Chiller condenser bypass valve shall be omitted under this alternate as noted on 1M400.

CHANGES TO SPECIFICATIONS:

1. Section 23 07 19 Pipe Insulation

- a. Condenser supply and return piping shall be insulated with 1" closed cell insulation per specification.

2. Section 23 09 93 Controls (Provided by Owner)

- a. 2.02, I: Differential pressure sensors shall be Setra Series 230 with a range that is midscale of desired pressure setpoint for application.
- b. 3.03, L, 2: Chilled water pumps (CWP-1 & CWP-2) shall be monitored by frequency feedback in lieu of current sensor.
- c. 3.03, L, 5, a, (1), (c): Minimum Chilled Water Flow Control: Bypass valve shall be controlled by flow meter to maintain minimum flow through chiller.

- d. 3.03, L, 5, a, (3): Existing Well Water Pump shall control to existing pressure sensor located by well/city water connection. 2-way modulating valve shall be added to inlet of well-side heat exchanger. Valve shall modulate to maintain 60 deg F entering chiller. Programming shall also be capable of pre-positioning valve based on condenser valve status of chiller modules. If chiller is off, valve shall be closed. Valve shall be spring return normally open with position feedback to BAS.
 - e. Existing West Stair AHU shall be provided with new chilled water 3-way control valve.
3. Section 23 21 11 Valves and Cocks
 - a. Add the following for check valves on discharge of pumps.
 - b. Check valves, 3" and larger, Crane Model Duo-Chek II, Wafer, Non-Slam, cast iron body, 316 stainless steel plates and springs with Buna-N insert seat, 200# WOG
 4. Section 23 21 16 Water Specialties
 - a. All manual air vents noted on plans/details and required at high points of system for air removal shall be 1/4" ball valves with hose connection and pressure rated cap in lieu of manual key type vents. Valve and cap shall elbow down for easy access.

CHANGES TO DRAWINGS

5. Sheet M100 DEMO & REMODEL PLAN 30 x 42 attached hereto
 - a. Revisions clouded on Drawing
 - b. Added access panel to existing (E)AHU-1 along with keynote #4.
6. Sheet M400 HVAC SCHEMATICS 30 x 42 attached hereto
 - a. Revisions clouded on Drawing.
 - b. Revised existing well pump control. Added 2-way modulating control valve to well-side of heat exchanger.
 - c. Added dashed lines indicating Alternate #1 work along with condenser bypass valve noted to be under base bid.
 - d. Existing West Stair AHU shall be provided with new chilled water 3-way control valve.
7. Sheet M501 HVAC DETAILS 30 x 42 attached hereto
 - a. Revisions clouded on Drawing.
 - b. Detail 1M501 INLINE PUMP DETAIL: Removed balancing station on discharge piping.
 - c. Detail 2M501 PLATE & FRAME HX PIPING DETAIL: Added 3/4" drain valves/caps on each drop to heat exchanger to promote flushing. Revised air vents to be 1/4" ball valves in lieu of manual key type vents.
 - d. Detail 3M501 STACKED CHILLED WATER COIL DETAIL 2-WAY: Revised 2-way control valve to be pressure depending valve in lieu of pressure independent.
 - e. Detail 4M501 INLINE PUMP DETAIL – FLOOR MOUNTED: Removed triple duty valve on discharge of pump and added check valve as noted above under Section 23 21 11.

PRIOR APPROVALS

1. Section 23 21 16 Water Specialties
 - a. WATER FILTERS
 - i. Parker Filtration and Great River Filter are only approved manufacturers, all others shall be removed. This conforms to campus standard.

END OF DOCUMENT 00 90 00

DOCUMENT 00 41 00

BID FORM (Revised)

BIDDER: _____

BID FOR SINGLE PRIME CONTRACT

PROJECT: **WESTERN TECHNICAL COLLEGE
KUMM CENTER COOLING UPGRADES
400 SIX STREET NORTH
LA CROSSE, WISCONSIN 54601
HSR PROJECT NO. 19035**

TO: **WESTERN TECHNICAL COLLEGE
505 9th STREET NORTH
LA CROSSE, WISCONSIN 54601
ATT: JAY McHENRY – DIRECTOR OF FACILITIES**

BASE BID

The undersigned, having examined the site where the Work is to be executed and become familiar with local conditions affecting the cost of the Work and carefully examined the Project Manual, the Project Drawings, all other Bidding Documents and Addenda thereto prepared by the AE, HSR Associates, Inc., hereby agrees to provide all labor, materials, equipment and services necessary for the complete and satisfactory execution of the ENTIRE WORK, in the time frame stipulated in these contract documents, for the Base Bid stipulated sum of:

_____ Dollars (\$ _____ .00)

ALTERNATE BIDS

The undersigned further agrees to perform the alternative portions of the Work as described in the Project Manual, Section 01 23 00 Alternates, for the following additions to the Base Bid sum stipulated above:

Alternate No. 1: Chiller Condenser Heat Exchanger and Accessories

Add _____ Dollars (\$ _____ .00)

BIDDER'S CHOICE SUBSTITUTIONS

The following Bidder's Choice Substitution is proposed for your consideration subject to the requirements set forth in Document 00 22 13 Supplementary Instructions to Bidders, Subparagraph 3.3.4:

Substitution No. S1:

For substituting _____

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Type, Brand, Catalog No. _____

Manufacturer _____

Deduct from BASE BID _____ Dollars (\$ _____ .00)

In submitting this Bid, the undersigned agrees to:

1. Hold this Bid open for **30** days.
2. Accept the provisions of Instructions to Bidders regarding disposition of Bid Security.
3. Enter into and execute an Agreement, if awarded on the basis of this Bid, and to furnish Performance and Labor and Material Payment Bonds according to the Supplementary Conditions.
4. Accomplish work according to the Contract Documents.
5. Complete the work by the time stated in Section 01 10 00 Summary of the Work.

Receipt of the following Addenda and inclusion of their provisions in this Bid is hereby acknowledged:

Addendum No. _____ Dated _____

Addendum No. _____ Dated _____

Addendum No. _____ Dated _____

Addendum No. _____ Dated _____

Attached hereto are the required:

- a. Bid Security
- b. Section 00 45 13 Certificate of Organization and Authority
- c. Section 00 45 17 Non-Collusive Affidavit: An affidavit in proof that the undersigned has not entered into any collusion with any person in respect to this Bid or any other bid or the submitting of bids for the contract for which this bid is submitted.
- d. Section 00 45 19 Certification of Non-segregated Facilities

FIRM NAME: _____

(Affix seal if Corporation) By: _____

Title: _____

By: _____

Title: _____

Date: _____

Official Address: _____

Telephone: _____

END OF DOCUMENT 00 41 00

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SECTION 01 23 00

ALTERNATES

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Description of Alternates.

1.02 RELATED REQUIREMENTS

- A. Document 00 21 13 - Instructions to Bidders: Instructions for preparation of pricing for Alternates.

1.03 DESCRIPTION

- A. Conditions of the Contract and pertinent portions of Sections in Division One of this Project Manual, apply to the Work of this Section as fully as though repeated herein.
- B. This Section describes the alternates to the project. Refer to the Product/Execution Articles of the Contract Documents for information pertaining to the work of each alternate.
- C. Each proposal under an alternate shall include all incidental work and all adjustments necessary to accommodate the changes. All work shall meet the requirements of the Contract Documents.
- D. Each alternate proposal shall be submitted as an individual cost for the particular alternate and shall be proposed under the premise that no other alternates have been accepted. Should the work of an alternate called for by the Bid Form not affect the cost of the work, "No Change" shall be stated.
- E. Owner may, at his option, vary the scope of the work by authorizing alternates which will add to the work, deduct from the work or substitute materials, equipment or methods.
- F. Immediately following Award of Contract, awarded Contractor shall prepare and distribute to each party involved, notification of the status of each alternate. Indicate whether alternates have been accepted, rejected, or deferred for consideration at a later date. Include a complete description of negotiated modifications to alternates, if any.

1.04 ACCEPTANCE OF ALTERNATES

- A. Alternates quoted on Bid Forms will be reviewed and accepted or rejected at Owner's option. Accepted Alternates will be identified in the Owner-Contractor Agreement.

1.05 SCHEDULE OF ALTERNATES

- A. Alternate No. 1: Chiller Condenser Heat Exchanger and Accessories
 - 1. The following work shall be priced under Alternate No. 1: State the amount to be added to the base bid for chiller condenser water heat exchanger (HX-1) and all associated pumps, air control, and buffer tank as noted in schematic 1M400. Chiller condenser bypass valve shall be omitted under this alternate as noted on 1M400.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

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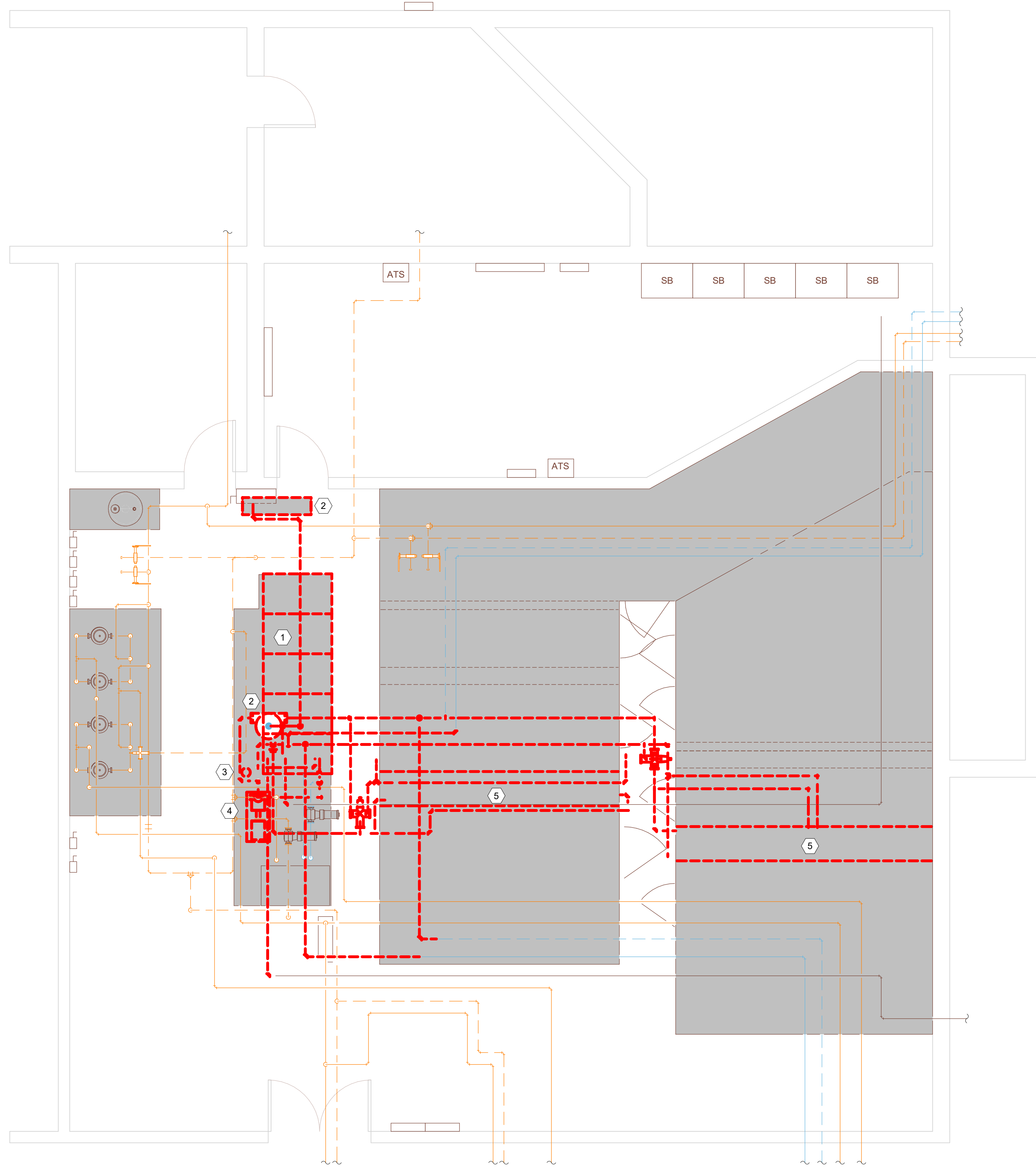
KEYNOTES - DEMO	
Keynote Number	Keynote Description
	ALL REMOVED ITEMS THAT THE OWNER WANTS SHALL BE REMOVED AND TURNED OVER TO THE OWNER AT DESIGNATED STORAGE SPACE ON SITE. ALL REMAINING ITEMS REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR.
1	REMOVE EXISTING CHILLER MODULES.
2	REMOVE EXISTING AIR SEPARATOR & ASSOCIATED EXPANSION TANK/PIPING. CAP COLD WATER MAKE-UP PIPING.
3	REMOVE EXISTING FILTER/CHEMICAL FEEDER & ASSOCIATED PIPING.
4	REMOVE EXISTING CHILLED WATER PUMP & ASSOCIATED PIPING/ACCESSORIES.
5	REMOVE EXISTING CHILLED WATER COILS & ASSOCIATED SUPPORT STRUCTURE, PIPING, & PIPING ACCESSORIES.

KEYNOTES - REMODEL	
Keynote Number	Keynote Description
1	EXTEND EXISTING 3" EVAPORATOR PIPES FROM EXISTING DRHC-1 TO NEW TIE IN LOCATION IN CWR. SEE M400.
2	EXISTING CHILLED WATER RISER TO WEST & EAST STAIR AHUS. PROVIDE TEMPORARY BYPASS AT AHUS & FLUSH EXISTING PIPING SYSTEM. COORDINATE WITH CHEMICAL TREATMENT PROVIDER ON RECOMMENDED FLUSHING PRODUCTS. DO NOT FLUSH THROUGH EXISTING AHU COOLING COILS. INSULATE DISTURBED PIPING PER SPECIFICATION.
3	NEW CONNECTION TO EXISTING. FLUSH EXISTING PIPING AS NOTED ABOVE.
4	PROVIDE NEW 24"x60" ACCESS PANEL IN EXISTING AHU FOR COIL REPLACEMENT. PANEL SHALL BE SECURED WITH REMOVABLE FASTENERS FOR FUTURE USE. INSULATE PANEL WITH 2" ARMAFLEX & LABEL ACCORDINGLY.

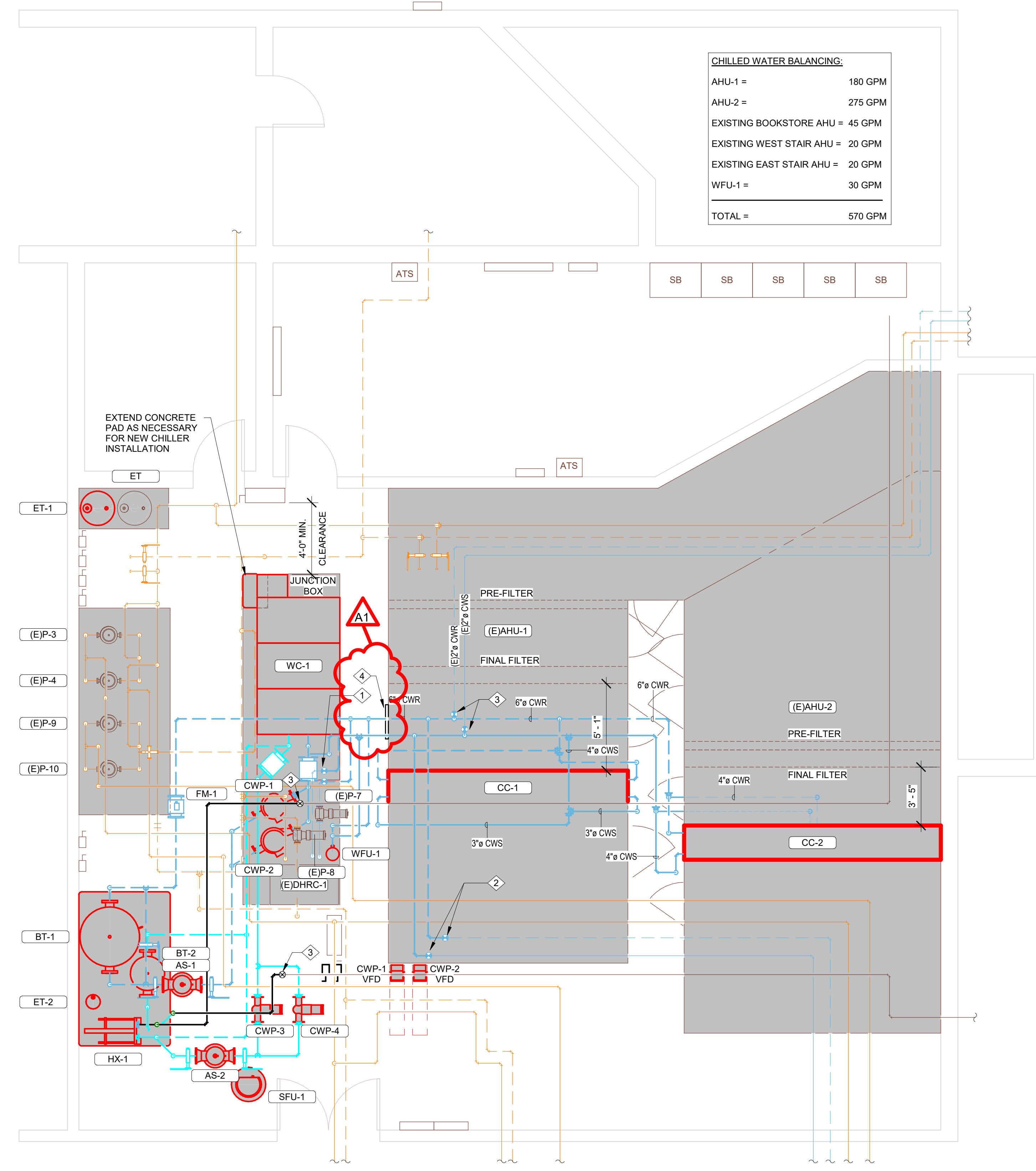
REFRIGERANT EVACUATION SYSTEM NOTE:
 MECHANICAL ROOM AREA 1,960 FT² x 12 FT = 23,520 FT³ / 1,000 FT³ = 23.52
 18 LBS./CIRCUIT OF R-410A REFRIGERANT IN CHILLER / 23.52 = 0.77 LBS. / 1,000 FT³
 AMOUNT OF R-410A REFRIGERANT ALLOWED = 25 LBS. / 1,000 FT³
 *NO EVACUATION SYSTEM REQUIRED

CHILLED WATER BALANCING:

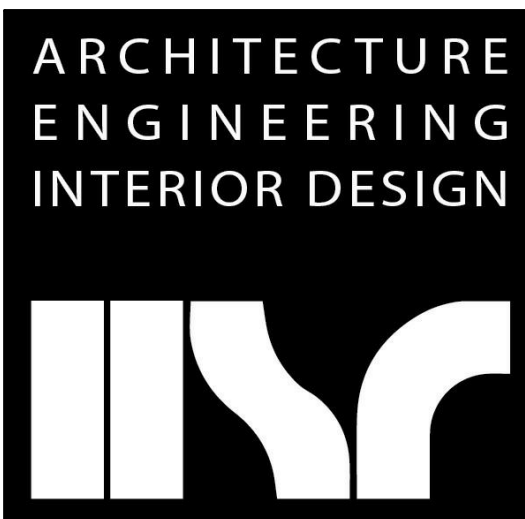
AHU-1 =	180 GPM
AHU-2 =	275 GPM
EXISTING BOOKSTORE AHU =	45 GPM
EXISTING WEST STAIR AHU =	20 GPM
EXISTING EAST STAIR AHU =	20 GPM
WFU-1 =	30 GPM
TOTAL =	570 GPM



1 MECHANICAL DEMO PLAN
 1/4" = 1'-0"



2 MECHANICAL REMODEL PLAN
 1/4" = 1'-0"



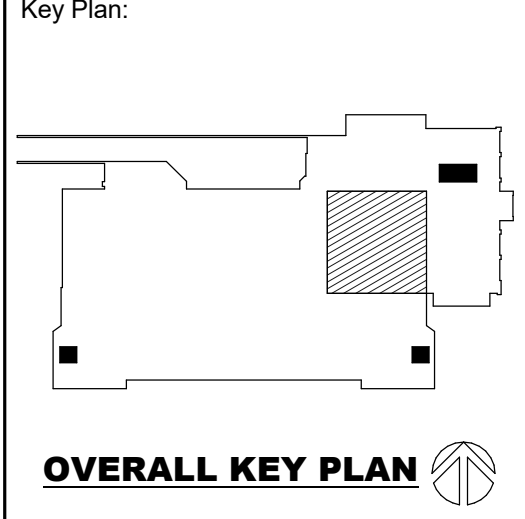
HSR ASSOCIATES INC.
 100 MILWAUKEE STREET
 LA CROSSE, WISCONSIN
 PHONE: 608.784.1830
 FAX: 608.782.5844
 www.hsrassociates.com

Consultant:

**WESTERN TECHNICAL COLLEGE
 KUMM CENTER COOLING UPGRADES
 DEMO & REMODEL PLAN**

Project Title:
 Project Location: 400 6TH STREET NORTH
 LA CROSSE, WI 54601
 Sheet Title:

HSR Project Number: **19035**
 Project Date: **OCTOBER 2019**
 Drawn By: **JB**



Revisions:

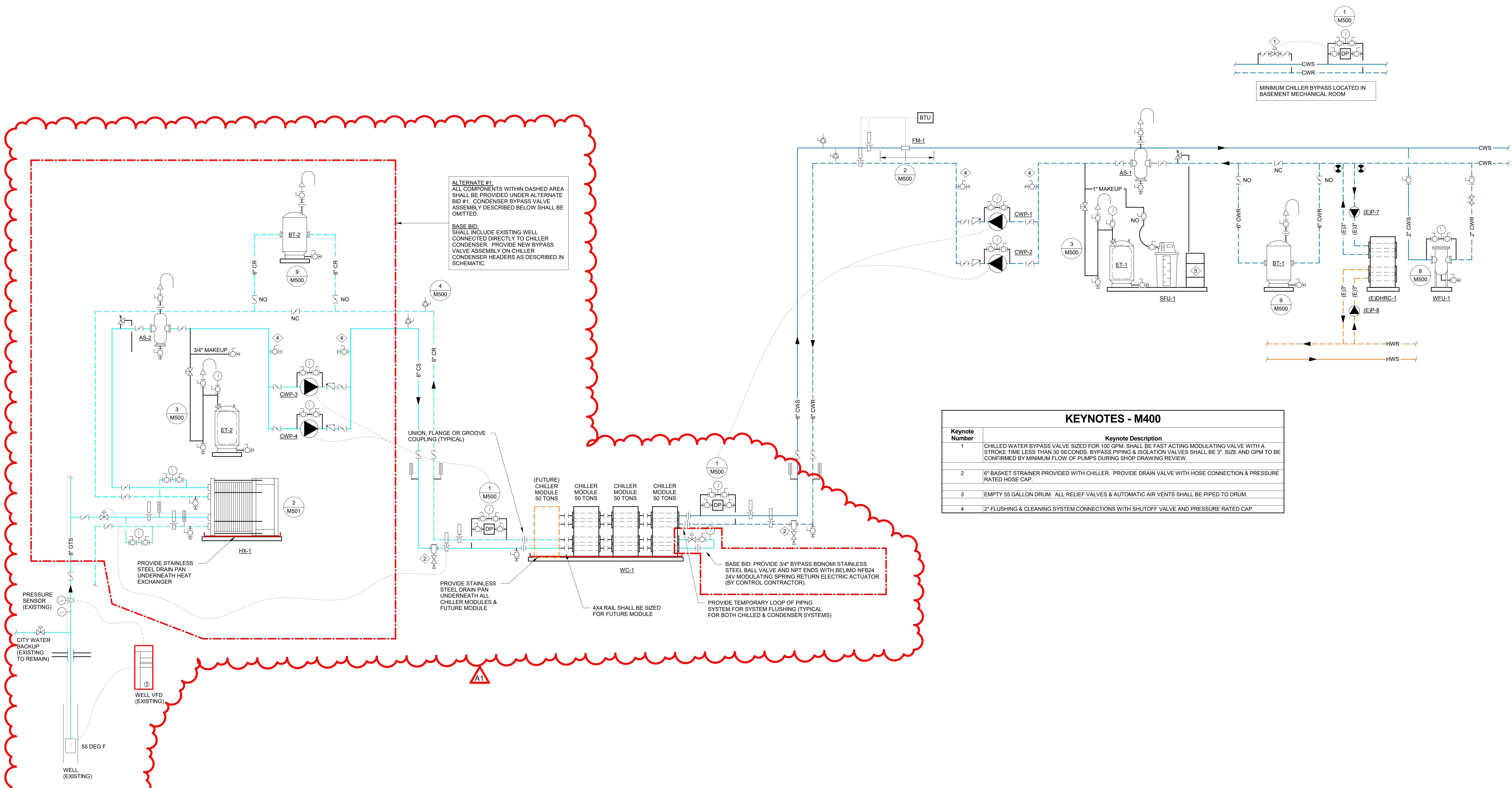
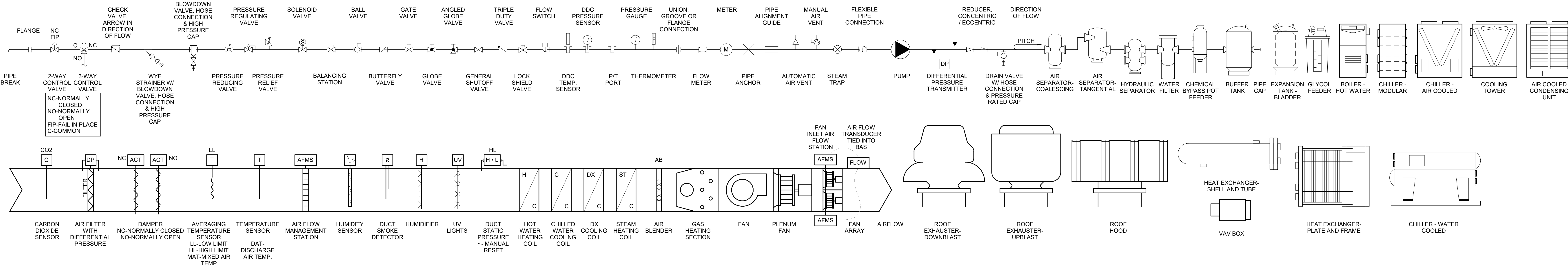
No.	Description	Date
A1	Addendum #1	10-31-19

Graphic Scale:
 0' 1' 2' 4' 6'

Last Update:
10/31/2019 1:20:42 PM

M100

HVAC SCHEMATIC/CONTROL SYMBOLS



ALTERNATE #1:
ALL COMPONENTS WITHIN DASHED AREA SHALL BE PROVIDED UNDER ALTERNATE BID #1. CONDENSER BYPASS VALVE ASSEMBLY DESCRIBED BELOW SHALL BE OMITTED.

BASE BID:
SHALL INCLUDE EXISTING WELL CONNECTED DIRECTLY TO CHILLER CONDENSER. PROVIDE NEW BYPASS VALVE ASSEMBLY ON CHILLER CONDENSER HEADERS AS DESCRIBED IN SCHEMATIC.

KEYNOTES - M400

Keynote Number	Keynote Description
1	CHILLED WATER BYPASS VALVE SIZED FOR 100 GPM. SHALL BE FAST ACTING MODULATING VALVE WITH A STROKE TIME LESS THAN 30 SECONDS. BYPASS PIPING & ISOLATION VALVES SHALL BE 3" SIZE AND GPM TO BE CONFIRMED BY MINIMUM FLOW OF PUMPS DURING SHOP DRAWING REVIEW.
2	6" BASKET STRAINER PROVIDED WITH CHILLER. PROVIDE DRAIN VALVE WITH HOSE CONNECTION & PRESSURE RATED HOSE CAP.
3	EMPTY 55 GALLON DRUM. ALL RELIEF VALVES & AUTOMATIC AIR VENTS SHALL BE PIPED TO DRUM.
4	2" FLUSHING & CLEANING SYSTEM CONNECTIONS WITH SHUTOFF VALVE AND PRESSURE RATED CAP.

1 GEOTHERMAL/CHILLED/HEATING PIPING SCHEMATIC
N.T.S.



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100 MILWAUKEE STREET
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Consultant:

Project Title: **WESTERN TECHNICAL COLLEGE
KUMM CENTER COOLING UPGRADES**
Project Location: 400 6TH STREET NORTH
LA CROSSE, WI 54601
Sheet Title: **HVAC SCHEMATICS**

Project Number: **19035**
Project Date: **OCTOBER 2019**
Drawn By: **JB**

Key Plan:

Revisions:

No.	Description	Date
A1	Addendum #1	10-31-19

Graphic Scale: **VARIES**
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M400



Consultant:

Project Title: **WESTERN TECHNICAL COLLEGE
KUMM CENTER COOLING UPGRADES**
Project Location: 400 6TH STREET NORTH
LA CROSSE, WI 54601
Sheet Title: **HVAC DETAILS**

HSR Project Number: **19035**

Project Date: **OCTOBER 2019**

Drawn By: **JB**

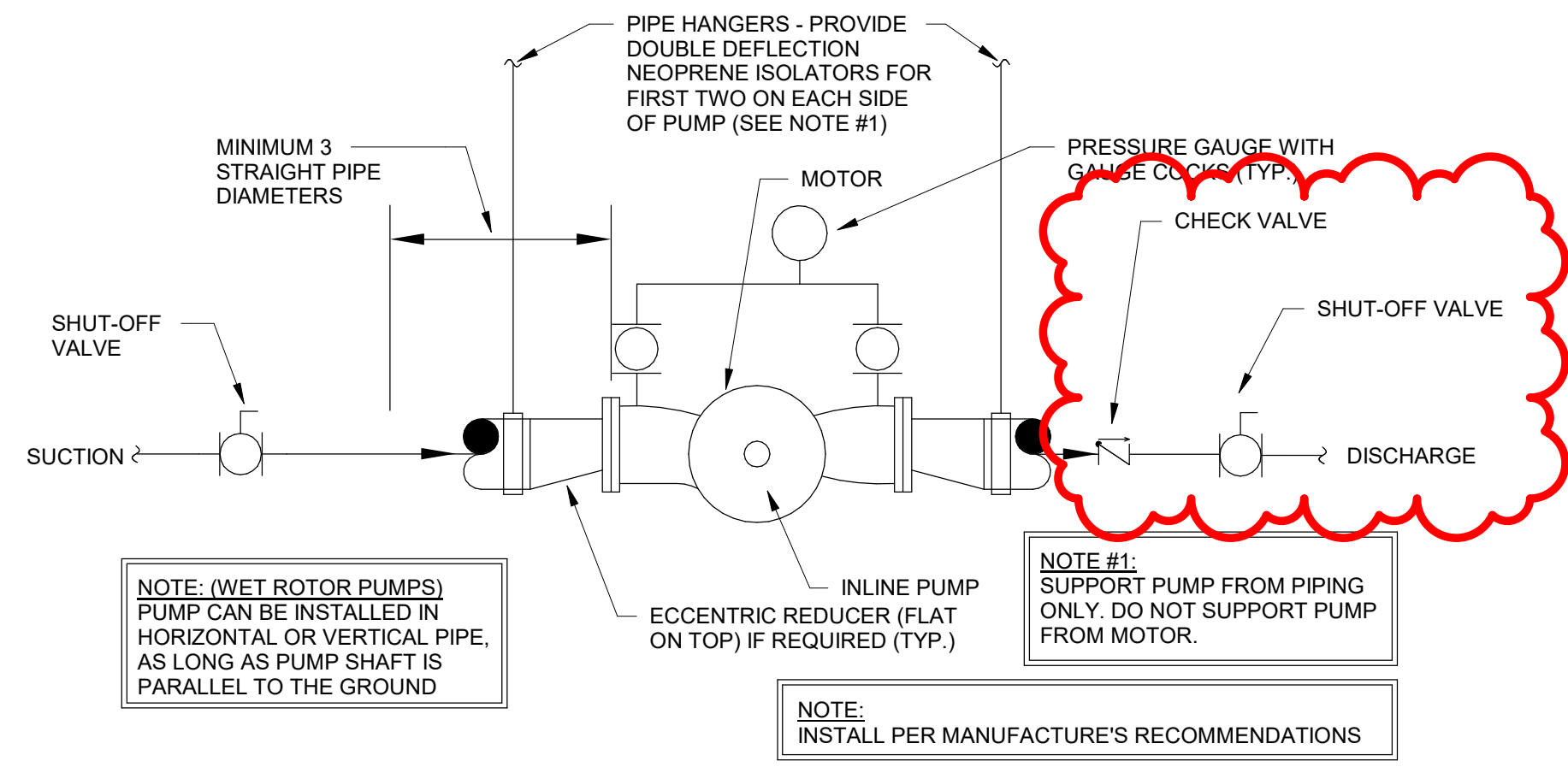
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No.	Description	Date
A1	Addendum #1	10-31-19

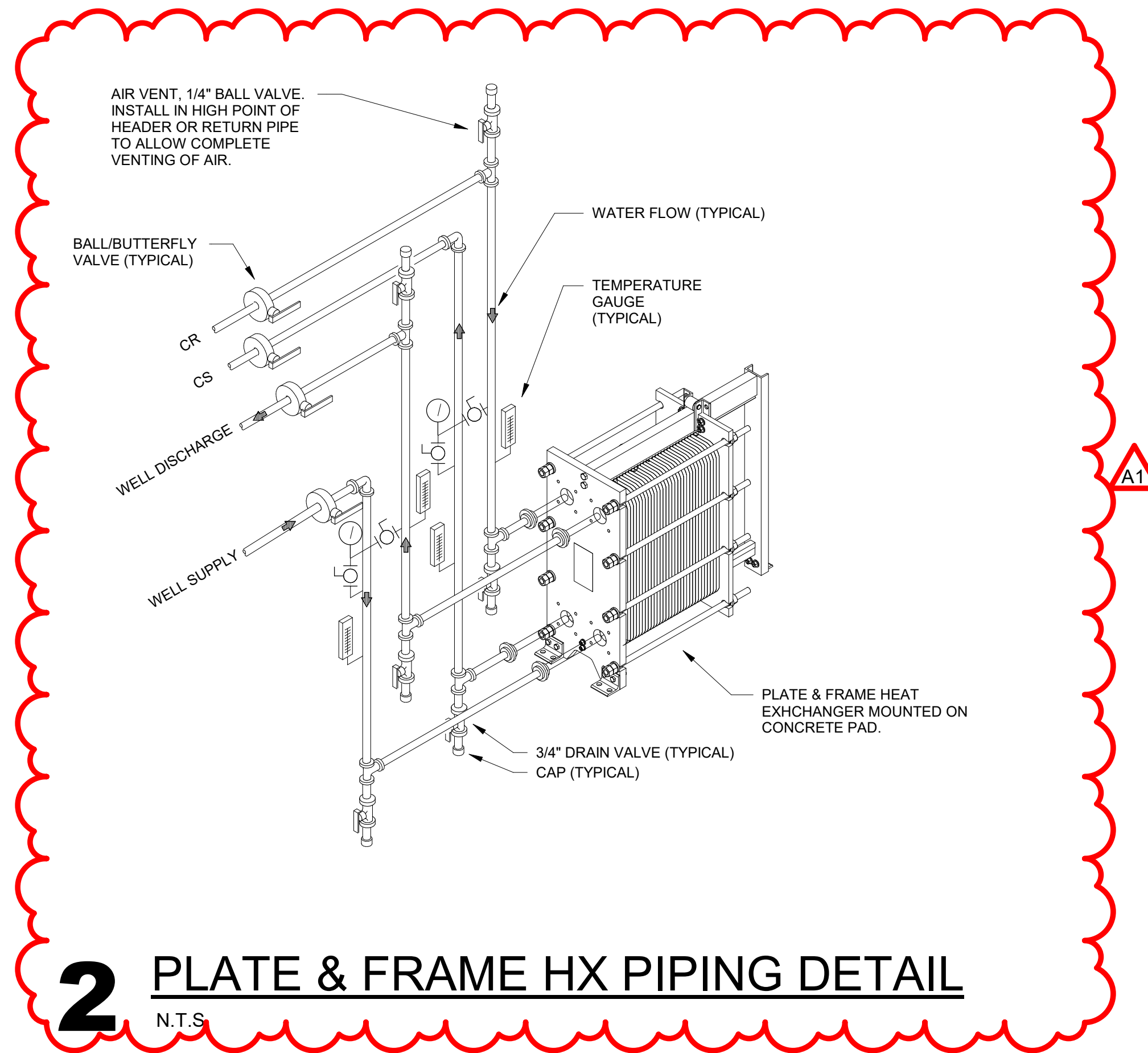
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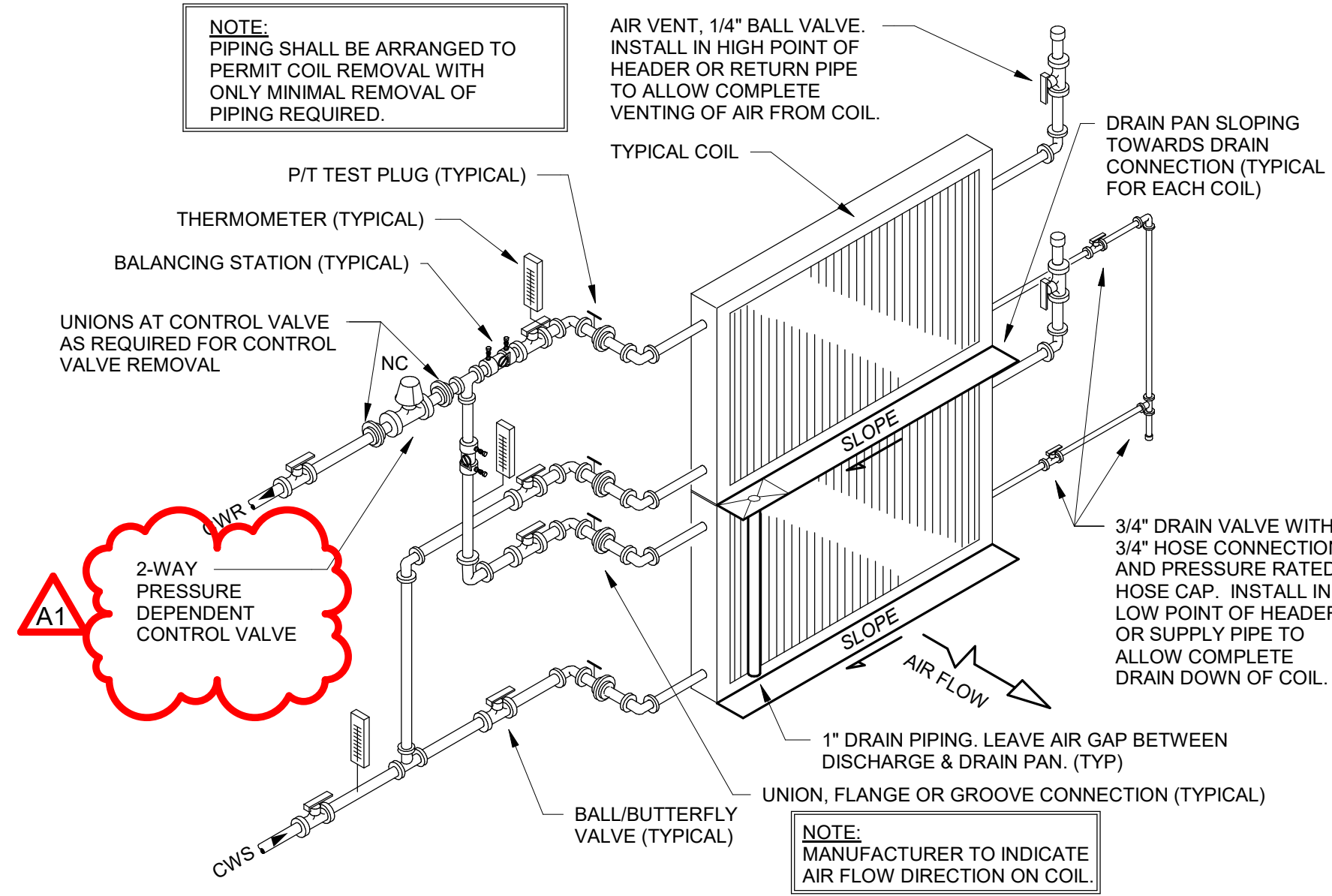
M501



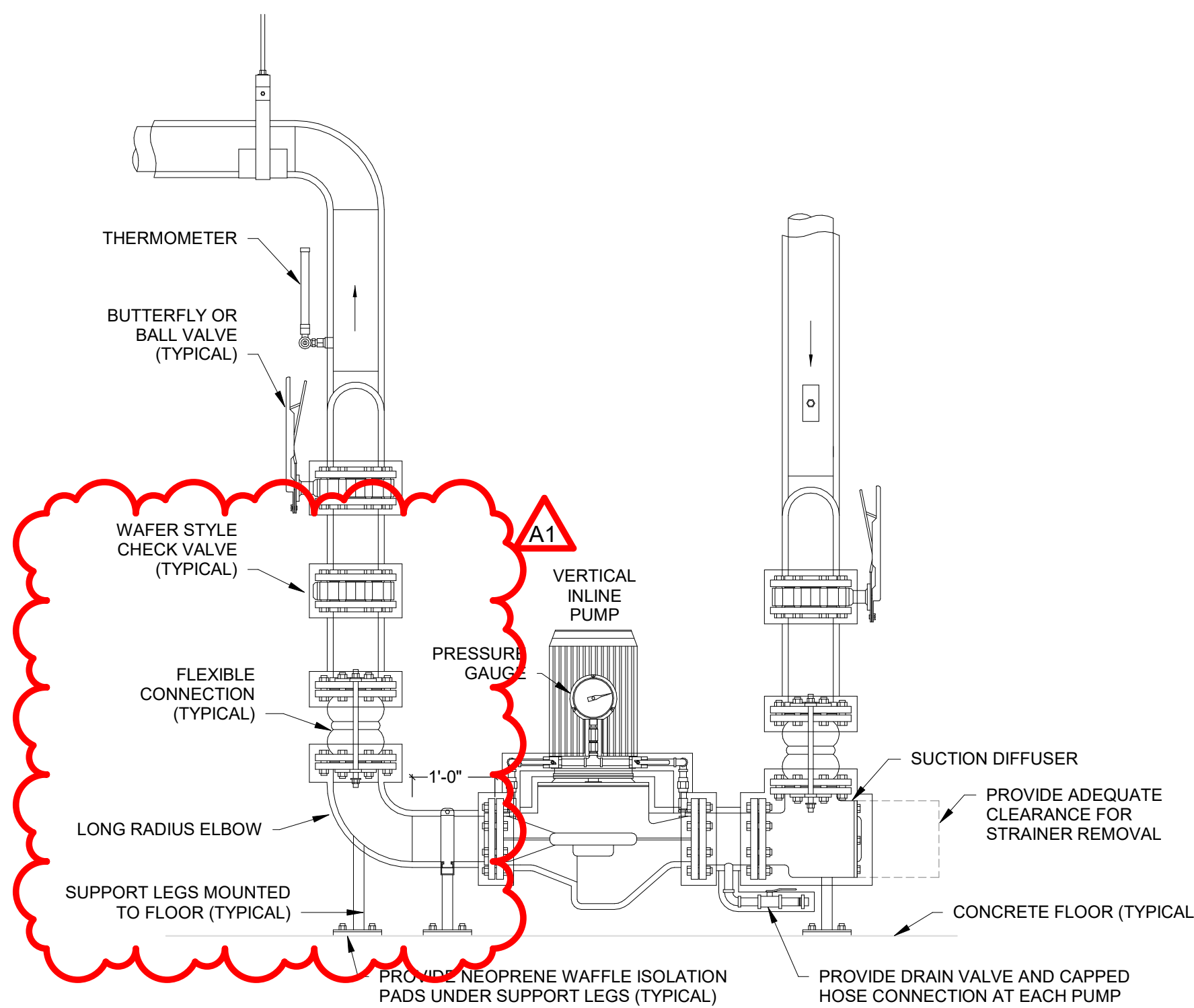
1 INLINE PUMP DETAIL
N.T.S.



2 PLATE & FRAME HX PIPING DETAIL
N.T.S.



3 STACKED CHILLED WATER COIL DETAIL 2-WAY
N.T.S.



4 INLINE PUMP DETAIL - FLOOR MOUNTED
N.T.S.