ADDENDUM NO. 1

June 14, 2024

IPS Broad Ripple MS 717; Middle School Renovations
1115 Broad Ripple Ave.
Indianapolis, IN 46220

TO: ALL BIDDERS OF RECORD

This Addendum forms a part of and modifies the Bidding Requirements, Contract Forms, Contract Conditions, the Specifications and the Drawings dated May 24, 2024, by Lancer Associates Architecture. Acknowledge receipt of the Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to disqualification.

This Addendum consists of Pages ADD 1-1 through ADD 1-2, Section 00 10 00a - Electronic Bid Submission Instructions, Site Logistics Plan and attached Lancer Associates Architecture Addendum No. 1 dated June 13, 2024, consisting of two (2) pages, and Addendum No. 1 Drawings: MH1A - Mechanical HVAC First Floor Plan - Unit A, MH1C - Mechanical HVAC First Floor Plan - Unit C, MH1D - Mechanical HVAC First Floor Plan - Unit D, MH2B - Mechanical HVAC Second Floor Plan - Unit B, MH2F - Mechanical HVAC Second Floor Plan - Unit F, MH3A - Mechanical HVAC Third Floor Plan - Unit A, MH3B - Mechanical HVAC Third Floor Plan - Unit B, MH3C - Mechanical HVAC Third Floor Plan - Unit C, MH4A - Mechanical HVAC Penthouse Plan - Unit A, MH4B - Mechanical HVAC Penthouse Plan - Unit B, M402 - Enlarged Mechanical Room Plan, M501 - Mechanical Details, M607 - Mechanical Schedules, M701 - Temperature Controls Schematics, M703 - Temperature Controls Schematics, E101A - First Floor Electrical Plan - Unit A , E101C - First Floor Electrical Plan - Unit C, E101F - First Floor Electrical Plan - Unit F, E102C - Second Floor Electrical Plan - Unit C, E104A - Penthouse Electrical Plan - Unit A, ED1A - Demolition First Floor Electrical Plan - Unit A, Ed1B - Demolition First Floor Electrical Plan - Unit B, Ed1C - Demolition First Floor Electrical Plan - Unit C, Ed1D - Demolition First Floor Electrical Plan - Unit D, Ed1E - Demolition First Floor Electrical Plan - Unit E, Ed1F - Demolition First Floor Electrical Plan - Unit F, ED2C - Demolition Second Floor Electrical Plan - Unit C, Ed3B - Demolition Third Floor Electrical Plan - Unit B, Ed3C - Demolition Third Floor Electrical Plan - Unit C, E403 - Enlarged Boiler Room Plan - Unit D, E601 - Riser Diagram Unit A And B – Demolition, E602 - Riser Diagram Unit C, E And F – Demolition, E603 - Riser Diagram Unit D – Demolition, E604 - Riser Diagram Unit A And B - New Work, E605 - Riser Diagram Unit C, E And F - New Work, E607 – Schedules, E616 - Panelboard Schedules - Unit D.

A. <u>SPECIFICATION SECTION 00 00 10 – TITLE PAGE</u>

1. Change the Bid Date to July 11, 2024. The time remains the same.

B. SPECIFICATION SECTION 00 02 00b INDIANA NOTICE TO BIDDERS

1. Change the Bid Date to July 11, 2024. The time remains the same.

C. SPECIFICATION SECTION 00 10 00 – INSTRUCTIONS TO BIDDERS

Add the following:

1. Electronic Bid Submission Instructions attached herein.
2. The Microsoft Teams Link for the Bid Opening will be provided in future Addendum.

D. SPECIFICATION SECTION 01 32 00 – SCHEDULES AND REPORTS

Add the following:

1. Site Logistics Plan attached herein.

EASTERN Engineering 50 YEARS 1972★2022 | eBid ELECTRONIC BID SUBMISSION

Electronic Bid Submission

Submit and review bids electronically through the plan room and not in person. We are here to help businesses go from paper to uploading bids electronically. Step by step we will help transition your teams today.

Easy, Confidential and Complete

Suppliers can submit bids with **no paper, no delivery and no mailing.**

Easily upload all documents from your office for both job owners and suppliers.

Complete communiation through the plan room.

The bids can't be viewed by anyone, even authorized people, until the bid day/time is past. **Secure and fair for all bidders.**

Contractors may return at any time prior to the posted bid date and time, to make changes or updates

Only after close time and only those with authorization can download, open and review the submitted bids.

When bid time ends, simply arrange a meeting to review all the bids.

Every one is working together within the online plan room.

To add this feature to your next project contact Tamara Tincher
Tamara.Tincher@easternengineering.com or (317) 827-6083.

How to submit a bid electronically through the online plan room

1) Bidders need to register and sign-in to the plan room, in order to submit a bid.

2) Click on the project listing then click 'Submit Bid' button.

3) Save your completed bid form and required forms as PDFs.

   All bid documents can be in one pdf or separate pdf documents can be uploaded.

4) Click 'Submit Bid' next to the job name on the information tab.

5) Attach bid form and required bid documents per the project specifications.

   Click 'Submit Bid' at bottom of screen.

6) You will receive a confirmation screen, stating that, "Your Bid Submission has been saved successfully."

   You will receive a confirmation email confirmation, indicating your submission was received.

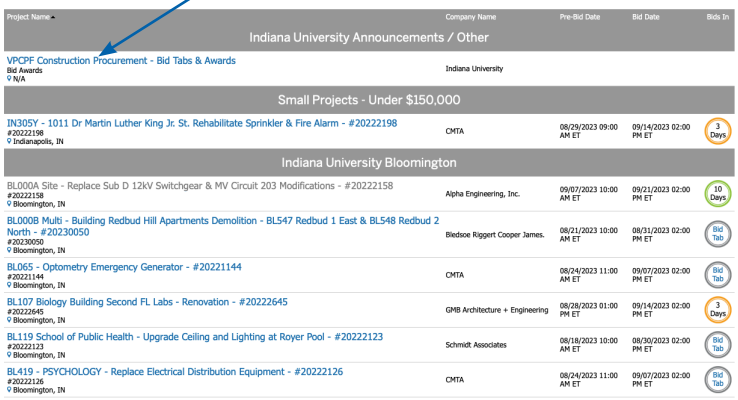
Completely Secure

- The bids can't be viewed by anyone, even authorized people, until the bid day/time is past. Keeping the process secure and fair for all bidders.
- Only after close time and only those with authorization can download, open and review the submitted bids
- Every one is working together within the online plan room and completely secure.

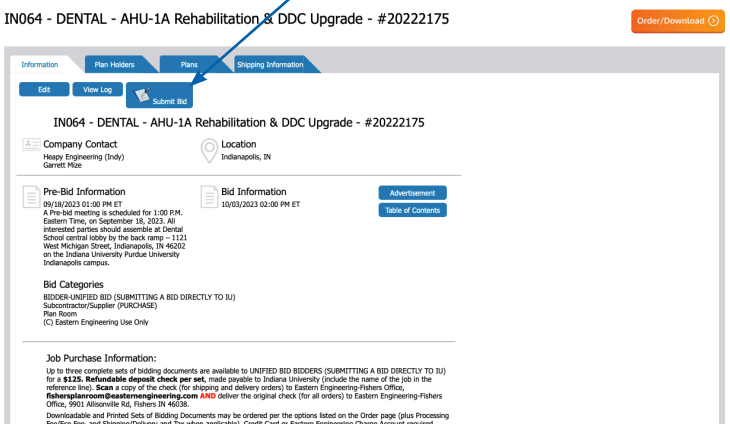
Support is Available

If you have any questions contact Tamara at Tamara.Tincher@easternengineering.com or (317) 827-6083.

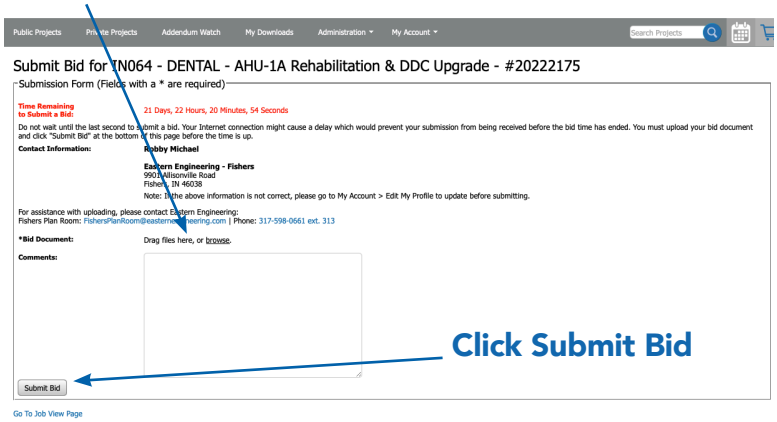
Project listing



Click on Submit Bid 



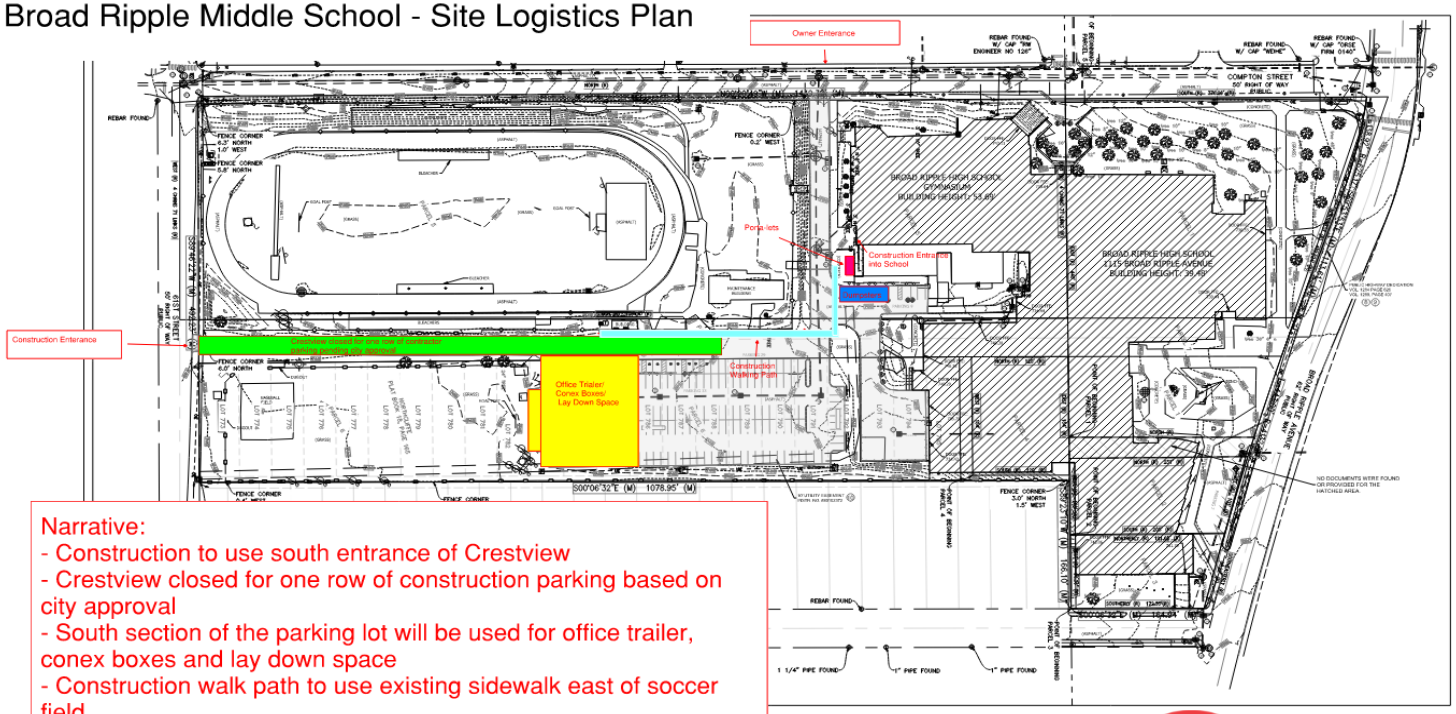
Drag file here or click browse to select your pdfs



Click Submit Bid

Site Logistics Plan

Broad Ripple Middle School - Site Logistics Plan



Narrative:
- Construction to use south entrance of Crestview
- Crestview closed for one row of construction parking based on city approval
- South section of the parking lot will be used for office trailer, conex boxes and lay down space
- Construction walk path to use existing sidewalk east of soccer field
- Construction will enter school using south entrance to the gym
- Demo dumpsters to be located in parking spaces east of the gym
- Porta-lets to be located in between construction entrance and demo dumpsters
- Owner entrance to utilize west parking lot entrance from Compton Street

HARMON CONSTRUCTION, INC.

The SKILLMAN Corporation
Construction Management
AN EMPLOYEE-OWNED COMPANY

LANCER ASSOCIATES ARCHITECTURE
145 N. East St.
INDIANAPOLIS, IN 46204

JQOL QUALITY OF LIFE

INDIANAPOLIS PUBLIC SCHOOLS
BROAD RIPPLE MIDDLE SCHOOL
1115 BROAD RIPPLE AVE
INDIANAPOLIS, IN 46220

REVISIONS

PROJECT: 2023.138
DATE: XX/XX/XXX
DRAWN BY:

EXISTING CONDITIONS

CD-100

ADDENDUM NO. 1

PROJECT: **Indianapolis Public Schools**
Broad Ripple MS 717 Renovation

PROJECT #: **23126**
DATE: **June 13, 2024**

THIS ADDENDUM FORMS A PART OF THE CONTRACT DOCUMENTS AND IS ISSUED IN ACCORDANCE WITH THE INSTRUCTIONS TO BIDDERS. ACKNOWLEDGE RECEIPT OF THIS ADDENDUM BY SIGNING THE ADDDENDUM ACKNOWLEDGMENT SECTION OF THE BID FORM.

Bidder Questions:

1. **Question:** We are unable to locate any loading dock equipment needed on the equipment schedule. Please clarify.

   Response: There is no loading dock equipment required in the project scope.

2. **Question:** is the Fire Curtain to be replaced: it is mentioned in the drawing notes, but it is not mentioned in Section 11 6143.

   Response: Yes, the fire curtain for the stage is to be replaced in this project scope.

3. **Question:** Has the existing Fire Curtain material been tested for content?

   Response: Yes, the fire curtain has recently been tested and no hazardous materials were found.

4. **Question:** Has the rigging system and fire curtain system been inspected for proper operation?

   Response: The rigging system has not been inspected; however, it is operational. The fire curtain system has not been inspected for proper operation.

145 N. East Street, Indianapolis, IN 46204

5. **Question:** Regarding drawing sheet CD-102 and CS-102; The area along Broad Ripple Ave. (north side of the building) changes shape and area on these two sheets. Please advise.

   Response: The drawing viewport on sheet CD-102 has accidently been shifted such that the entirety of the Work scope along Broad Ripple Ave. is not visible. The shape and area of this Work scope is as shown on sheet CS-102. Reference the revised sheet CD-102, attached.

6. **Question:** The spec does not call out for any MC cable to be used. Please clarify if they would allow us to use it for all the new lighting that would have dimming cable in it for those particular areas.

   Response: The IPS standards require conduit and wire. MC is allowed as a whip from j-box to light fixture.

7. **Question:** If we are not allowed to use MC cable, can we run the dimming cable in open ceiling for those particular areas? Please clarify.

   Response: This will have to be reviewed and approved by the owner. We will have the answer in addendum 2.

MEP Engineering Revisions

Reference the attached Addendum No. 1 from Creative Engineering Solutions, dated 06/13/2024. Attachments include revised mechanical and electrical drawings.

Attachments:

Sheet CD-102 Demo Plan Rev. 1, 06/13/24, Addendum 01

Creative Engineering Solutions – Addendum No. 1, dated 06/13/2024, (39 pages)

End of Addendum No. 1

creative engineering solutions
mechanical • electrical • plumbing

PROJECT NAME: IPS BROAD RIPPLE MS 717
OWNER NAME: INDIANAPOLIS PUBLIC SCHOOL CORPORATION
CES PROJECT NO. 2023-019.BMS **ARCHITECT PROJECT NO. 23126**
ADDENDUM NO. 1
DATED: 6/13/2024

This Addendum consists of 2 Addendum pages and 37 attachment pages totaling 39 pages. This Addendum shall supplement, amend, and become part of the Bid Documents. All Bids shall be based on these modifications. Bidders shall acknowledge the receipt of this addendum on their Bid Form.

PART 1 - CHANGES TO THE PROJECT MANUAL

Modifications described herein shall be incorporated in the Project Manual. All other Work shall remain unchanged.

DIVISION 21 - FIRE SUPPRESSION DIVISION

None

DIVISION 22 – PLUMBING

None

DIVISION 23 - HEATING, VENTILATING, AND AIR-CONDITIONING(HVAC)

Section 233416 “CENTRIFUGAL HVAC FANS”
ADD Text within Paragraph 2.2, A as follows:
“5. Pennbarry”
ADD Text within Paragraph 2.3, A as follows:
“5. Pennbarry”

DIVISION 26 – ELECTRICAL

None

DIVISION 27 – COMMUNICATIONS

None

DIVISION 28 - ELECTRONIC SAFETY AND SECURITY

None

PART 2 - CHANGES TO THE DRAWINGS

Modifications described herein shall be incorporated in the Drawings. All other Work shall remain unchanged.

2.1 DRAWING SHEETS: ADDITIONS, DELETIONS AND REPLACEMENTS

Drawing No.	INDICATE ACTION: REPLACE (r), add (a), delete (d)

M-SERIES DRAWINGS

MH1A – MECHANICAL HVAC FIRST FLOOR PLAN – UNIT A	DELETE AND REPLACE
MH1C – MECHANICAL HVAC FIRST FLOOR PLAN – UNIT C	DELETE AND REPLACE
MH1D – MECHANICAL HVAC FIRST FLOOR PLAN – UNIT D	DELETE AND REPLACE
MH2B – MECHANICAL HVAC SECOND FLOOR PLAN – UNIT B	DELETE AND REPLACE
MH2F – MECHANICAL HVAC SECOND FLOOR PLAN – UNIT F	DELETE AND REPLACE
MH3A – MECHANICAL HVAC THIRD FLOOR PLAN – UNIT A	DELETE AND REPLACE
MH3B – MECHANICAL HVAC THIRD FLOOR PLAN – UNIT B	DELETE AND REPLACE
MH3C – MECHANICAL HVAC THIRD FLOOR PLAN – UNIT C	DELETE AND REPLACE
MH4A – MECHANICAL HVAC PENTHOUSE PLAN – UNIT A	DELETE AND REPLACE
MH4B – MECHANICAL HVAC PENTHOUSE PLAN – UNIT B	ADD
M402 – ENLARGED MECHANICAL ROOM PLAN	DELETE AND REPLACE
M501 – MECHANICAL DETAILS	DELETE AND REPLACE
M607 – MECHANICAL SCHEDULES	DELETE AND REPLACE
M701 – TEMPERATURE CONTROLS SCHEMATICS	DELETE AND REPLACE
M703 – TEMPERATURE CONTROLS SCHEMATICS	DELETE AND REPLACE

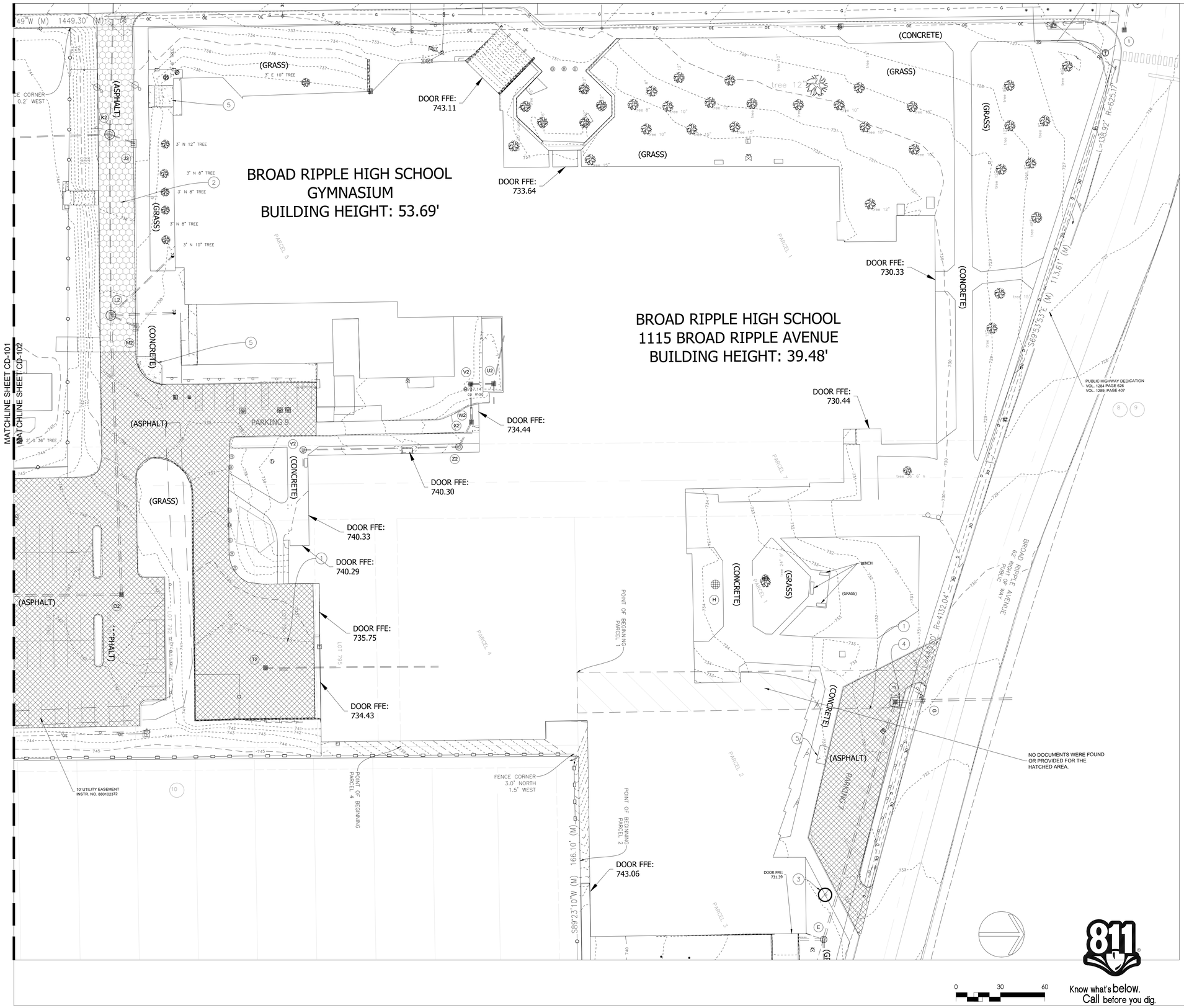
P-SERIES DRAWINGS

None

E-SERIES DRAWINGS

E101A - FIRST FLOOR ELECTRICAL PLAN - UNIT A	DELETE AND REPLACE
E101C - FIRST FLOOR ELECTRICAL PLAN - UNIT C	DELETE AND REPLACE
E101F - FIRST FLOOR ELECTRICAL PLAN - UNIT F	DELETE AND REPLACE
E102C - SECOND FLOOR ELECTRICAL PLAN – UNIT C	DELETE AND REPLACE
E104A - PENTHOUSE ELECTRICAL PLAN - UNIT A	DELETE AND REPLACE
ED1A - DEMOLITION FIRST FLOOR ELECTRICAL PLAN - UNIT A	DELETE AND REPLACE
ED1B - DEMOLITION FIRST FLOOR ELECTRICAL PLAN - UNIT B	DELETE AND REPLACE
ED1C - DEMOLITION FIRST FLOOR ELECTRICAL PLAN - UNIT C	DELETE AND REPLACE
ED1D - DEMOLITION FIRST FLOOR ELECTRICAL PLAN - UNIT D	DELETE AND REPLACE
ED1E - DEMOLITION FIRST FLOOR ELECTRICAL PLAN - UNIT E	DELETE AND REPLACE
ED1F - DEMOLITION FIRST FLOOR ELECTRICAL PLAN - UNIT F	DELETE AND REPLACE
ED2C - DEMOLITION SECOND FLOOR ELECTRICAL PLAN - UNIT	DELETE AND REPLACE
ED3B - DEMOLITION THIRD FLOOR ELECTRICAL PLAN - UNIT B	DELETE AND REPLACE
ED3C - DEMOLITION THIRD FLOOR ELECTRICAL PLAN - UNIT C	DELETE AND REPLACE
E403 - ENLARGED BOILER ROOM PLAN - UNIT D	DELETE AND REPLACE
E601 - RISER DIAGRAM UNIT A AND B - DEMOLITION	DELETE AND REPLACE
E602 - RISER DIAGRAM UNIT C, E AND F - DEMOLITION	DELETE AND REPLACE
E603 - RISER DIAGRAM UNIT D - DEMOLITION	DELETE AND REPLACE
E604 - RISER DIAGRAM UNIT A AND B - NEW WORK	DELETE AND REPLACE
E605 - RISER DIAGRAM UNIT C, E AND F - NEW WORK	DELETE AND REPLACE
E607 – SCHEDULES	DELETE AND REPLACE
E616 - PANELBOARD SCHEDULES - UNIT D	DELETE AND REPLACE

END OF ADDENDUM NO 1

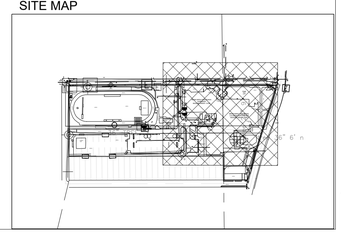


DEMOLITION PLAN KEYNOTES

1. MILL 1.5" EXISTING PAVEMENT
2. FULL DEPTH PAVEMENT REMOVAL
3. SIGN RELOCATION
4. REPLACE APRON
5. REMOVE CONCRETE

Know what's below. Call before you dig.

SITE MAP



LANCER ASSOCIATES ARCHITECTURE
145 N. East St.
INDIANAPOLIS, IN 462024

JQOL QUALITY OF LIFE

ROBERT SANTOS
REGISTERED
No. 12300688
STATE OF INDIANA
PROFESSIONAL ENGINEER

REVISIONS:

#	Date	Desc.
1	06/13/2024	Addendum #1

100% CONSTRUCTION DOCUMENTS

PROJECT: 2023.138
DATE: 05.24.2024
DRAWN BY: AKD

DEMO PLAN

CD-102

PLOT DATE/TIME: 9/23/2006 11:14:09 AM

GENERAL LIGHTING NOTES

A REFER TO ELECTRICAL SYMBOLS AND ABBREVIATIONS SHEET E001 FOR ADDITIONAL INFORMATION.

B ALL LIGHT FIXTURES AND SWITCHES WILL BE CONNECTED TO THE EXISTING CIRCUIT SERVING ROOM OR AREA. REUSE EXISTING BACK BOX FOR FIXTURES AND SWITCHES. PROVIDE BLANK COVER PLATES WHERE MULTIPLE GANG BOXES ARE REDUCED TO ONE DEVICE.

C ALL RESTROOM EXHAUST FANS SHALL BE CONTROLLED BY OCCUPANY SENSORS.

◯ LIGHTING PLAN NOTES

1 CONNECT BRANCH CIRCUITS THAT WERE MAINTAINED DURING DEMOLITION. REWORK WIRE AND CONDUIT AS REQUIRED. TRACE ALL CIRCUITS AND UPDATE PANELBOARD SCHEDULE. LABEL RECEPTACLES WITH CIRCUIT TAGS. REWORK CMU FOR FLUSH MOUNTED PANELBOARDS AS REQUIRED.

2 CONNECT ALL TUNNEL LIGHTING TO SPARE BREAKER IN PANELBOARD 'SGR'. ALL LIGHTING SHALL BE CONTROLLED TOGETHER.

3 CONNECT EMERGENCY LIGHTING UNIT TO STAIRWELL FIXTURE CIRCUIT. USE SINGLE CHANNEL RACEWAY ON BLOCK WALL FROM CEILING DOWN TO EMERGENCY FIXTURE OR FROM ADJACENT FIXTURE.

4 ALL FEEDERS THAT ARE FUSED LESS THAN 100A WILL BE FED FROM PANELBOARD 'PH1A'. EXTEND WIRE AND CONDUIT AS REQUIRED. SEE PANELBOARD SCHEDULE FOR ADDITIONAL INFORMATION.

5 PROVIDE SURFACE RACEWAY TO NEW FIXTURE. CONNECT TO CIRCUIT SERVING ROOM/AREA AHEAD OF ANY SWITCHING.

6 MOUNT FIXTURE SO THAT IT COVERS THE TWO HOLES LEFT BY DEMOLISHED FIXTURES.

7 REWORK GYP. CEILING FOR NEW FIXTURE DIMENSIONS.

8 PROVIDE SHEET METAL TO FILL IN GAPS THAT OCCUR WHERE THE NEW FIXTURE DOESN'T MATCH THE DEMOLISHED FIXTURE DIMENSIONS. PAINT SHEET METAL TO MATCH CEILING. REWORK GYP CEILING AS REQUIRED.

9 120V CONNECTION FOR DOOR POWER. CONNECT TO SPARE 1P-20A BREAKER IN PANELBOARD '1P' LOCATED IN UNIT B. COORDINATE EXACT REQUIREMENTS WITH TECHNOLOGY CONTRACTOR.

10 PATCH DRYWALL WHERE DOWN LIGHTS WHERE REMOVED DURING DEMOLITION.

11 MOUNT OCCUPANCY SENSOR AT SAME ELEVATION AS THE JOISTS.

12 MOUNT OCCUPANCY SENSOR AT SAME ELEVATION AS THE BOTTOM OF DUCT WORK.

13 EXISTING AES UTILITY TRANSFORMER FEEDING SWITCHBOARD 'A'.

14 CONNECT GROUND TRIANGLE TO GROUNDING BUS BAR SERVING SWITCHBOARD 'A'. SEE MULTIPLE SERVICE ENTRANCE GROUNDING AND BONDING SCHEMATIC.

15 CONNECT GROUND TRIANGLE TO GROUNDING BUS BAR SERVING SWITCHBOARD 'M'. SEE MULTIPLE SERVICE ENTRANCE GROUNDING AND BONDING SCHEMATIC.

16 PROVIDE NEW HOUSE KEEPING PAD FOR NEW EQUIPMENT.

17 PROVIDE UNISTRUT SUPPORT FOR EQUIPMENT MOUNTING.

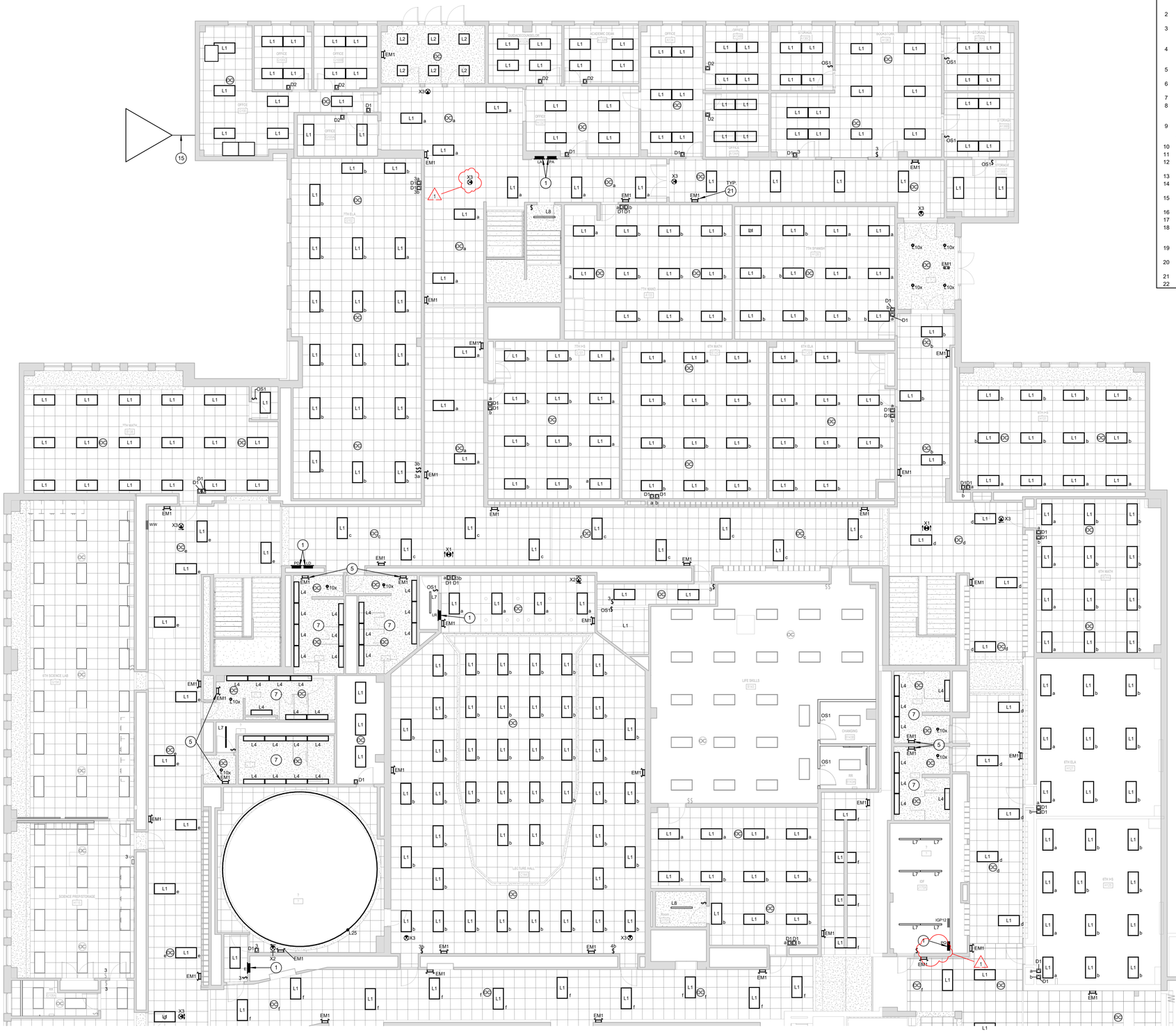
18 CONNECT FEEDERS THAT WERE MAINTAINED DURING DEMOLITION TO NEW SWITCHBOARD INDICATED. EXTEND WIRE AND CONDUIT AS REQUIRED. SEE RISER DIAGRAM FOR ADDITIONAL INFORMATION.

19 RECONNECT NEW EQUIPMENT TO CIRCUIT THAT WAS MAINTAINED DURING DEMOLITION.

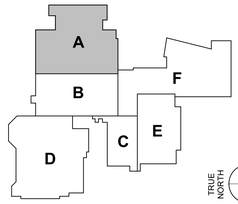
20 LIGHT FIXTURES WITHIN THIS AREA ARE CONTROLLED BY FIRST FLOOR OCCUPANCY SENSORS.

21 ALL EMERGENCY UNITS SHALL BE NUMBERED PER IPS STANDARDS.

22 EXTEND NEAREST LIGHTING CIRCUIT TO FIXTURE INDICATED.



1 FIRST FLOOR LIGHTING PLAN - UNIT A
1/8" = 1'-0"



LANCER ASSOCIATES ARCHITECTURE
145 N. East St.
INDIANAPOLIS, IN 462024

creative engineering solutions
mechanical • electrical • plumbing
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Indianapolis, Indiana 46204 317-916-9192
www.creativeeng.net

IPS BROAD RIPPLE MS 717
MIDDLE SCHOOL RENOVATION
1115 BROAD RIPPLE AVE.
INDIANAPOLIS, IN 46220

DAVID L. JONES II
REGISTERED
NO. PE12100175
STATE OF INDIANA
PROFESSIONAL ENGINEER

REVISIONS:

#	Date	Desc.
1	06.14.2024	ADDENDUM #1

100% CONSTRUCTION DOCUMENT

PROJECT: #23126
DATE: 05/24/2024
DRAWN BY: DLJ/MGM

FIRST FLOOR ELECTRICAL PLAN - UNIT A

E101A

PLOT DATE/TIME:6/13/2024 8:23:15 AM

GENERAL LIGHTING NOTES

A REFER TO ELECTRICAL SYMBOLS AND ABBREVIATIONS SHEET E001 FOR ADDITIONAL INFORMATION.

B ALL LIGHT FIXTURES AND SWITCHES WILL BE CONNECTED TO THE EXISTING CIRCUIT SERVING ROOM OR AREA. REUSE EXISTING BACK BOX FOR FIXTURES AND SWITCHES. PROVIDE BLANK COVER PLATES WHERE MULTIPLE GANG BOXES ARE REDUCED TO ONE DEVICE.

C ALL RESTROOM EXHAUST FANS SHALL BE CONTROLLED BY OCCUPANY SENSORS.

LIGHTING PLAN NOTES

1 CONNECT BRANCH CIRCUITS THAT WERE MAINTAINED DURING DEMOLITION. REWORK WIRE AND CONDUIT AS REQUIRED. TRACE ALL CIRCUITS AND UPDATE PANELBOARD SCHEDULE. LABEL RECEPTACLES WITH CIRCUIT TAGS. REWORK CMU FOR FLUSH MOUNTED PANELBOARDS AS REQUIRED.

2 CONNECT ALL TUNNEL LIGHTING TO SPARE BREAKER IN PANELBOARD 'SGR'. ALL LIGHTING SHALL BE CONTROLLED TOGETHER.

3 CONNECT EMERGENCY LIGHTING UNIT TO STAIRWELL FIXTURE CIRCUIT. USE SINGLE CHANNEL RACEWAY ON BLOCK WALL FROM CEILING DOWN TO EMERGENCY FIXTURE OR FROM ADJACENT FIXTURE.

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9 120V CONNECTION FOR DOOR POWER. CONNECT TO SPARE 1P-20A BREAKER IN PANELBOARD 'IP' LOCATED IN UNIT B. COORDINATE EXACT REQUIREMENTS WITH TECHNOLOGY CONTRACTOR.

10 PATCH DRYWALL WHERE DOWN LIGHTS WHERE REMOVED DURING DEMOLITION.

11 MOUNT OCCUPANCY SENSOR AT SAME ELEVATION AS THE JOISTS.

12 MOUNT OCCUPANCY SENSOR AT SAME ELEVATION AS THE BOTTOM OF DUCT WORK.

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15 CONNECT GROUND TRIANGLE TO GROUNDING BUS BAR SERVING SWITCHBOARD 'M'. SEE MULTIPLE SERVICE ENTRANCE GROUNDING AND BONDING SCHEMATIC.

16 PROVIDE NEW HOUSE KEEPING PAD FOR NEW EQUIPMENT.

17 PROVIDE UNISTRUT SUPPORT FOR EQUIPMENT MOUNTING.

18 CONNECT FEEDERS THAT WERE MAINTAINED DURING DEMOLITION TO NEW SWITCHBOARD INDICATED. EXTEND WIRE AND CONDUIT AS REQUIRED. SEE RISER DIAGRAM FOR ADDITIONAL INFORMATION.

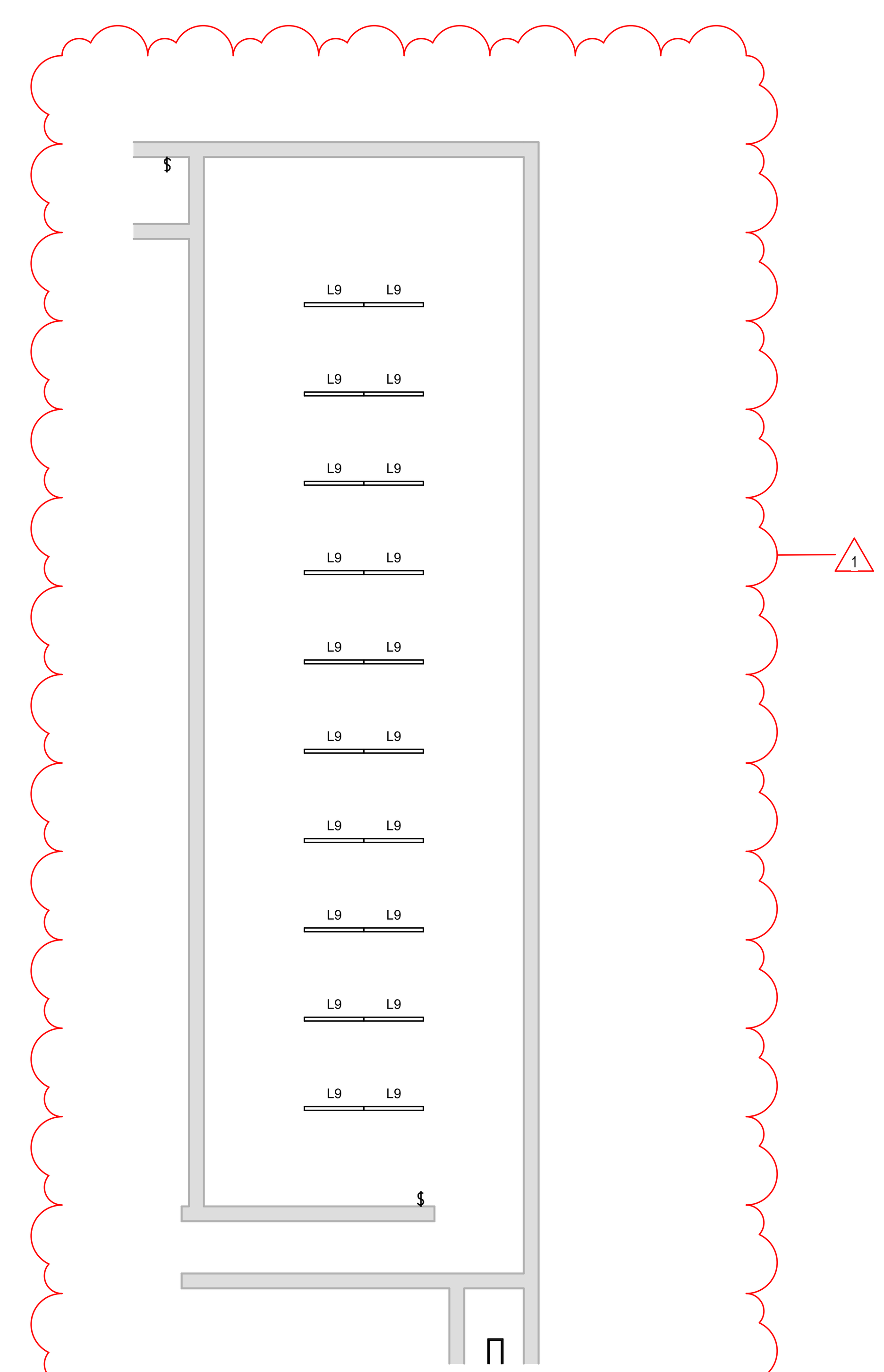
19 RECONNECT NEW EQUIPMENT TO CIRCUIT THAT WAS MAINTAINED DURING DEMOLITION.

20 LIGHT FIXTURES WITHIN THIS AREA ARE CONTROLLED BY FIRST FLOOR OCCUPANCY SENSORS.

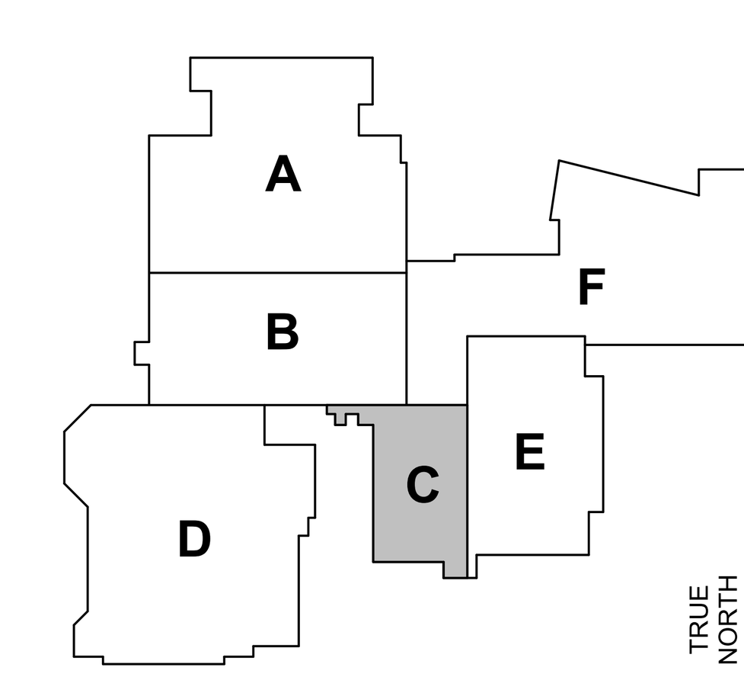
21 ALL EMERGENCY UNITS SHALL BE NUMBERED PER IPS STANDARDS.

22 EXTEND NEAREST LIGHTING CIRCUIT TO FIXTURE INDICATED.

2 **FIRST FLOOR ELECTRICAL PLAN - UNIT C**
1/8" = 1'-0"



1 **BASEMENT LIGHTING PLAN - UNIT C**
1/8" = 1'-0"



LANCER ASSOCIATES ARCHITECTURE
145 N. East St.
INDIANAPOLIS, IN 46204

creative engineering solutions

IPS BROAD RIPPLE MS 717
MIDDLE SCHOOL RENOVATION
1115 BROAD RIPPLE AVE.
INDIANAPOLIS, IN 46220

DAVID L. JONES III
REGISTERED
NO. PE12100175
STATE OF INDIANA
PROFESSIONAL ENGINEER

REVISIONS:

#	Date	Desc.
1	06.14.2024	ADDENDUM #1

100% CONSTRUCTION DOCUMENT

PROJECT: #23126
DATE: 05/24/2024
DRAWN BY: DLJ/MGM

FIRST FLOOR ELECTRICAL PLAN - UNIT C

E101C

LIGHTING PLAN NOTES

1. CONNECT BRANCH CIRCUITS THAT WERE MAINTAINED DURING DEMOLITION. REWORK WIRE AND CONDUIT AS REQUIRED. TRACE ALL CIRCUITS AND UPDATE PANELBOARD SCHEDULE. LABEL RECEPTACLES WITH CIRCUIT TAGS. REWORK CMU FOR FLUSH MOUNTED PANELBOARDS AS REQUIRED.
2. CONNECT ALL TUNNEL LIGHTING TO SPARE BREAKER IN PANELBOARD 'SGR'. ALL LIGHTING SHALL BE CONTROLLED TOGETHER.
3. CONNECT EMERGENCY LIGHTING UNIT TO STAIRWELL FIXTURE CIRCUIT. USE SINGLE CHANNEL RACEWAY ON BLOCK WALL FROM CEILING DOWN TO EMERGENCY FIXTURE OR FROM ADJACENT FIXTURE.
4. ALL FEEDERS THAT ARE FUSED LESS THAN 100A WILL BE FED FROM PANELBOARD 'PH1A'. EXTEND WIRE AND CONDUIT AS REQUIRED. SEE PANELBOARD SCHEDULE FOR ADDITIONAL INFORMATION.
5. PROVIDE SURFACE RACEWAY TO NEW FIXTURE. CONNECT TO CIRCUIT SERVING ROOM/AREA AHEAD OF ANY SWITCHING.
6. MOUNT FIXTURE SO THAT IT COVERS THE TWO HOLES LEFT BY DEMOLISHED FIXTURES.
7. REWORK GYP. CEILING FOR NEW FIXTURE DIMENSIONS.
8. PROVIDE SHEET METAL TO FILL IN GAPS THAT OCCUR WHERE THE NEW FIXTURE DOESN'T MATCH THE DEMOLISHED FIXTURE DIMENSIONS. PAINT SHEET METAL TO MATCH CEILING. REWORK GYP CEILING AS REQUIRED.
9. 120V CONNECTION FOR DOOR POWER. CONNECT TO SPARE 1P-20A BREAKER IN PANELBOARD 'IP' LOCATED IN UNIT B. COORDINATE EXACT REQUIREMENTS WITH TECHNOLOGY CONTRACTOR.
10. PATCH DRYWALL WHERE DOWN LIGHTS WHERE REMOVED DURING DEMOLITION.
11. MOUNT OCCUPANCY SENSOR AT SAME ELEVATION AS THE JOISTS.
12. MOUNT OCCUPANCY SENSOR AT SAME ELEVATION AS THE BOTTOM OF DUCT WORK.
13. EXISTING AES UTILITY TRANSFORMER FEEDING SWITCHBOARD 'A'.
14. CONNECT GROUND TRIANGLE TO GROUNDING BUS BAR SERVING SWITCHBOARD 'A'. SEE MULTIPLE SERVICE ENTRANCE GROUNDING AND BONDING SCHEMATIC.
15. CONNECT GROUND TRIANGLE TO GROUNDING BUS BAR SERVING SWITCHBOARD 'M'. SEE MULTIPLE SERVICE ENTRANCE GROUNDING AND BONDING SCHEMATIC.
16. PROVIDE NEW HOUSE KEEPING PAD FOR NEW EQUIPMENT.
17. PROVIDE UNISTRUT SUPPORT FOR EQUIPMENT MOUNTING.
18. CONNECT FEEDERS THAT WERE MAINTAINED DURING DEMOLITION TO NEW SWITCHBOARD INDICATED. EXTEND WIRE AND CONDUIT AS REQUIRED. SEE RISER DIAGRAM FOR ADDITIONAL INFORMATION.
19. RECONNECT NEW EQUIPMENT TO CIRCUIT THAT WAS MAINTAINED DURING DEMOLITION.
20. LIGHT FIXTURES WITHIN THIS AREA ARE CONTROLLED BY FIRST FLOOR OCCUPANCY SENSORS.
21. ALL EMERGENCY UNITS SHALL BE NUMBERED PER IPS STANDARDS.
22. EXTEND NEAREST LIGHTING CIRCUIT TO FIXTURE INDICATED.

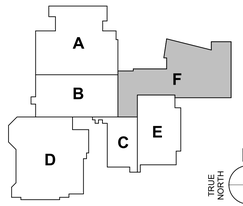
GENERAL LIGHTING NOTES

A. REFER TO ELECTRICAL SYMBOLS AND ABBREVIATIONS SHEET E001 FOR ADDITIONAL INFORMATION.

B. ALL LIGHT FIXTURES AND SWITCHES WILL BE CONNECTED TO THE EXISTING CIRCUIT SERVING ROOM OR AREA. REUSE EXISTING BACK BOX FOR FIXTURES AND SWITCHES. PROVIDE BLANK COVER PLATES WHERE MULTIPLE GANG BOXES ARE REDUCED TO ONE DEVICE.

C. ALL RESTROOM EXHAUST FANS SHALL BE CONTROLLED BY OCCUPANY SENSORS.

1 **FIRST FLOOR ELECTRICAL PLAN - UNIT F**
1/8" = 1'-0"



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PROJECT: #23126
DATE: 05/24/2024
DRAWN BY: DLJ/MGM

FIRST FLOOR ELECTRICAL PLAN - UNIT F

E101F

PLOT DATE/TIME 6/3/2024 8:25:57 AM

GENERAL LIGHTING NOTES

A REFER TO ELECTRICAL SYMBOLS AND ABBREVIATIONS SHEET E001 FOR ADDITIONAL INFORMATION.

B ALL LIGHT FIXTURES AND SWITCHES WILL BE CONNECTED TO THE EXISTING CIRCUIT SERVING ROOM OR AREA. REUSE EXISTING BACK BOX FOR FIXTURES AND SWITCHES. PROVIDE BLANK COVER PLATES WHERE MULTIPLE GANG BOXES ARE REDUCED TO ONE DEVICE.

C ALL RESTROOM EXHAUST FANS SHALL BE CONTROLLED BY OCCUPANY SENSORS.

◯ LIGHTING PLAN NOTES

1 CONNECT BRANCH CIRCUITS THAT WERE MAINTAINED DURING DEMOLITION. REWORK WIRE AND CONDUIT AS REQUIRED. TRACE ALL CIRCUITS AND UPDATE PANELBOARD SCHEDULE. LABEL RECEPTACLES WITH CIRCUIT TAGS. REWORK CMU FOR FLUSH MOUNTED PANELBOARDS AS REQUIRED.

2 CONNECT ALL TUNNEL LIGHTING TO SPARE BREAKER IN PANELBOARD 'SGR'. ALL LIGHTING SHALL BE CONTROLLED TOGETHER.

3 CONNECT EMERGENCY LIGHTING UNIT TO STAIRWELL FIXTURE CIRCUIT. USE SINGLE CHANNEL RACEWAY ON BLOCK WALL FROM CEILING DOWN TO EMERGENCY FIXTURE OR FROM ADJACENT FIXTURE.

4 ALL FEEDERS THAT ARE FUSED LESS THAN 100A WILL BE FED FROM PANELBOARD 'PH1A'. EXTEND WIRE AND CONDUIT AS REQUIRED. SEE PANELBOARD SCHEDULE FOR ADDITIONAL INFORMATION.

5 PROVIDE SURFACE RACEWAY TO NEW FIXTURE. CONNECT TO CIRCUIT SERVING ROOM/AREA AHEAD OF ANY SWITCHING.

6 MOUNT FIXTURE SO THAT IT COVERS THE TWO HOLES LEFT BY DEMOLISHED FIXTURES.

7 REWORK GYP. CEILING FOR NEW FIXTURE DIMENSIONS.

8 PROVIDE SHEET METAL TO FILL IN GAPS THAT OCCUR WHERE THE NEW FIXTURE DOESN'T MATCH THE DEMOLISHED FIXTURE DIMENSIONS. PAINT SHEET METAL TO MATCH CEILING. REWORK GYP CEILING AS REQUIRED.

9 120V CONNECTION FOR DOOR POWER. CONNECT TO SPARE 1P-20A BREAKER IN PANELBOARD 'IP' LOCATED IN UNIT B. COORDINATE EXACT REQUIREMENTS WITH TECHNOLOGY CONTRACTOR.

10 PATCH DRYWALL WHERE DOWN LIGHTS WHERE REMOVED DURING DEMOLITION.

11 MOUNT OCCUPANCY SENSOR AT SAME ELEVATION AS THE JOISTS.

12 MOUNT OCCUPANCY SENSOR AT SAME ELEVATION AS THE BOTTOM OF DUCT WORK.

13 EXISTING AES UTILITY TRANSFORMER FEEDING SWITCHBOARD 'A'.

14 CONNECT GROUND TRIANGLE TO GROUNDING BUS BAR SERVING SWITCHBOARD 'A'. SEE MULTIPLE SERVICE ENTRANCE GROUNDING AND BONDING SCHEMATIC.

15 CONNECT GROUND TRIANGLE TO GROUNDING BUS BAR SERVING SWITCHBOARD 'M'. SEE MULTIPLE SERVICE ENTRANCE GROUNDING AND BONDING SCHEMATIC.

16 PROVIDE NEW HOUSE KEEPING PAD FOR NEW EQUIPMENT.

17 PROVIDE UNISTRUT SUPPORT FOR EQUIPMENT MOUNTING.

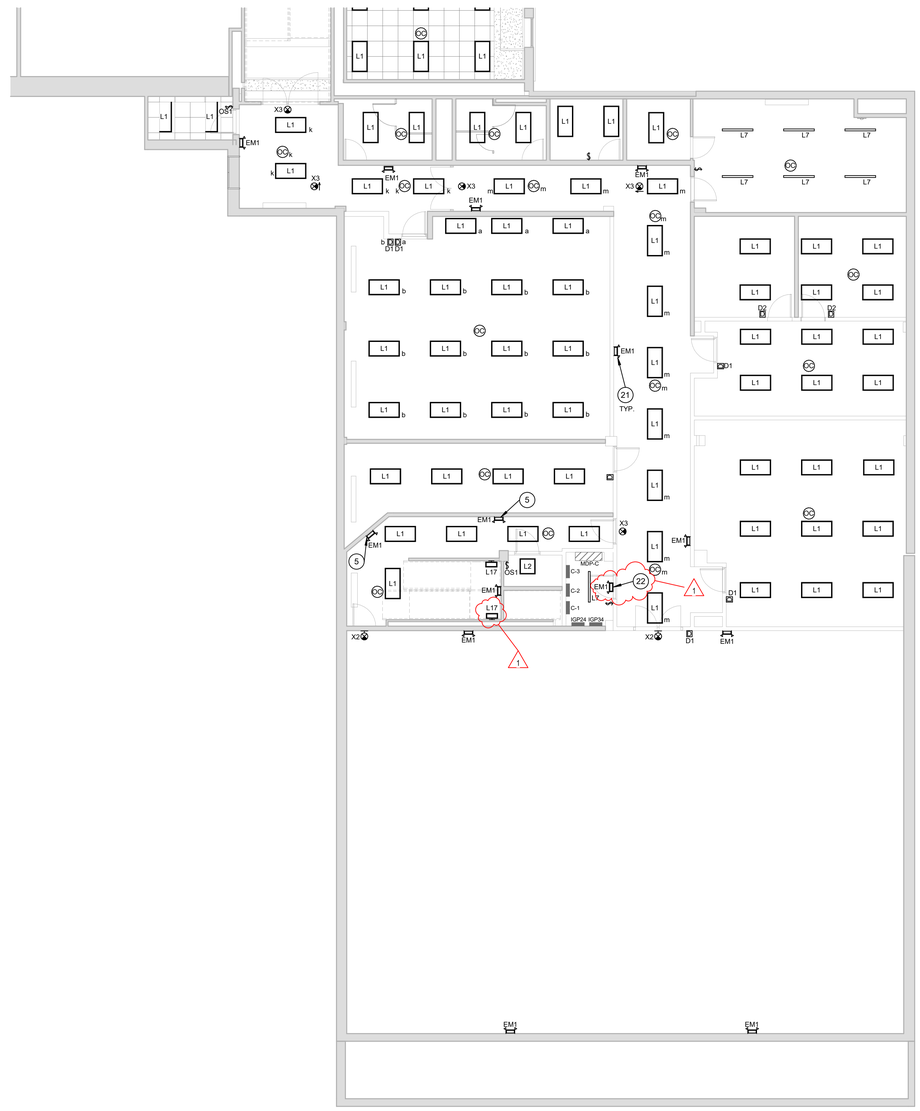
18 CONNECT FEEDERS THAT WERE MAINTAINED DURING DEMOLITION TO NEW SWITCHBOARD INDICATED. EXTEND WIRE AND CONDUIT AS REQUIRED. SEE RISER DIAGRAM FOR ADDITIONAL INFORMATION.

19 RECONNECT NEW EQUIPMENT TO CIRCUIT THAT WAS MAINTAINED DURING DEMOLITION.

20 LIGHT FIXTURES WITHIN THIS AREA ARE CONTROLLED BY FIRST FLOOR OCCUPANCY SENSORS.

21 ALL EMERGENCY UNITS SHALL BE NUMBERED PER IPS STANDARDS.

22 EXTEND NEAREST LIGHTING CIRCUIT TO FIXTURE INDICATED.



1 **SECOND FLOOR ELECTRICAL PLAN - UNIT C**
1/8" = 1'-0"

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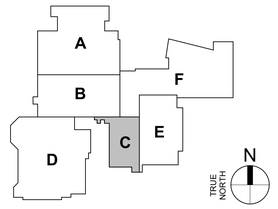
PROJECT:	#23126
DATE:	05/24/2024
DRAWN BY:	DLJ/MGM

SECOND FLOOR ELECTRICAL PLAN - UNIT C



E102C

PLOT DATE/TIME:6/13/2024, 9:27:13 AM

GENERAL LIGHTING NOTES

A REFER TO ELECTRICAL SYMBOLS AND ABBREVIATIONS SHEET E001 FOR ADDITIONAL INFORMATION.

B ALL LIGHT FIXTURES AND SWITCHES WILL BE CONNECTED TO THE EXISTING CIRCUIT SERVING ROOM OR AREA. REUSE EXISTING BACK BOX FOR FIXTURES AND SWITCHES. PROVIDE BLANK COVER PLATES WHERE MULTIPLE GANG BOXES ARE REDUCED TO ONE DEVICE.

C ALL RESTROOM EXHAUST FANS SHALL BE CONTROLLED BY OCCUPANY SENSORS.

◯ LIGHTING PLAN NOTES

1 CONNECT BRANCH CIRCUITS THAT WERE MAINTAINED DURING DEMOLITION. REWORK WIRE AND CONDUIT AS REQUIRED. TRACE ALL CIRCUITS AND UPDATE PANELBOARD SCHEDULE. LABEL RECEPTACLES WITH CIRCUIT TAGS. REWORK CMU FOR FLUSH MOUNTED PANELBOARDS AS REQUIRED.

2 CONNECT ALL TUNNEL LIGHTING TO SPARE BREAKER IN PANELBOARD 'SGR'. ALL LIGHTING SHALL BE CONTROLLED TOGETHER.

3 CONNECT EMERGENCY LIGHTING UNIT TO STAIRWELL FIXTURE CIRCUIT. USE SINGLE CHANNEL RACEWAY ON BLOCK WALL FROM CEILING DOWN TO EMERGENCY FIXTURE OR FROM ADJACENT FIXTURE.

4 ALL FEEDERS THAT ARE FUSED LESS THAN 100A WILL BE FED FROM PANELBOARD 'PH1A'. EXTEND WIRE AND CONDUIT AS REQUIRED. SEE PANELBOARD SCHEDULE FOR ADDITIONAL INFORMATION.

5 PROVIDE SURFACE RACEWAY TO NEW FIXTURE. CONNECT TO CIRCUIT SERVING ROOM/AREA AHEAD OF ANY SWITCHING.

6 MOUNT FIXTURE SO THAT IT COVERS THE TWO HOLES LEFT BY DEMOLISHED FIXTURES.

7 REWORK GYP. CEILING FOR NEW FIXTURE DIMENSIONS.

8 PROVIDE SHEET METAL TO FILL IN GAPS THAT OCCUR WHERE THE NEW FIXTURE DOESN'T MATCH THE DEMOLISHED FIXTURE DIMENSIONS. PAINT SHEET METAL TO MATCH CEILING. REWORK GYP CEILING AS REQUIRED.

9 120V CONNECTION FOR DOOR POWER. CONNECT TO SPARE 1P-20A BREAKER IN PANELBOARD 'IP' LOCATED IN UNIT B. COORDINATE EXACT REQUIREMENTS WITH TECHNOLOGY CONTRACTOR.

10 PATCH DRYWALL WHERE DOWN LIGHTS WHERE REMOVED DURING DEMOLITION.

11 MOUNT OCCUPANCY SENSOR AT SAME ELEVATION AS THE JOISTS.

12 MOUNT OCCUPANCY SENSOR AT SAME ELEVATION AS THE BOTTOM OF DUCT WORK.

13 EXISTING AES UTILITY TRANSFORMER FEEDING SWITCHBOARD 'A'.

14 CONNECT GROUND TRIANGLE TO GROUNDING BUS BAR SERVING SWITCHBOARD 'A'. SEE MULTIPLE SERVICE ENTRANCE GROUNDING AND BONDING SCHEMATIC.

15 CONNECT GROUND TRIANGLE TO GROUNDING BUS BAR SERVING SWITCHBOARD 'M'. SEE MULTIPLE SERVICE ENTRANCE GROUNDING AND BONDING SCHEMATIC.

16 PROVIDE NEW HOUSE KEEPING PAD FOR NEW EQUIPMENT.

17 PROVIDE UNISTRUT SUPPORT FOR EQUIPMENT MOUNTING.

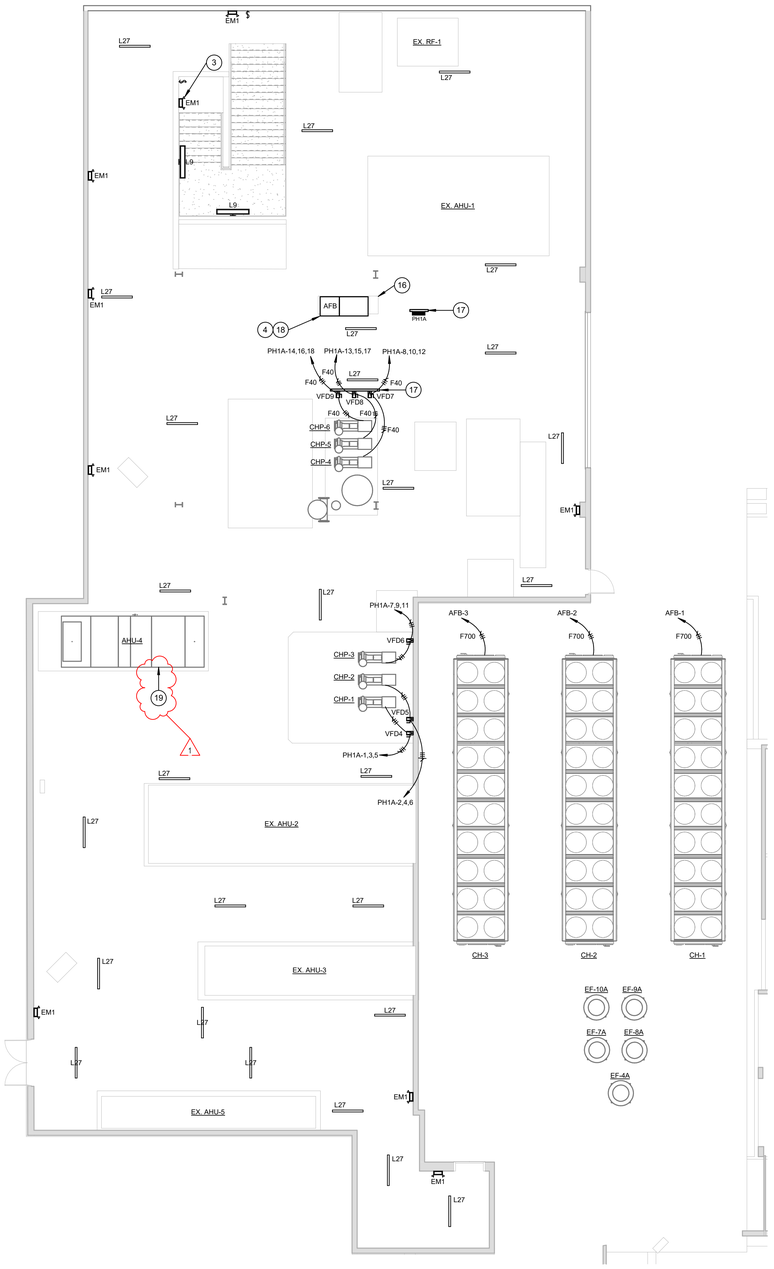
18 CONNECT FEEDERS THAT WERE MAINTAINED DURING DEMOLITION TO NEW SWITCHBOARD INDICATED. EXTEND WIRE AND CONDUIT AS REQUIRED. SEE RISER DIAGRAM FOR ADDITIONAL INFORMATION.

19 RECONNECT NEW EQUIPMENT TO CIRCUIT THAT WAS MAINTAINED DURING DEMOLITION.

20 LIGHT FIXTURES WITHIN THIS AREA ARE CONTROLLED BY FIRST FLOOR OCCUPANCY SENSORS.

21 ALL EMERGENCY UNITS SHALL BE NUMBERED PER IPS STANDARDS.

22 EXTEND NEAREST LIGHTING CIRCUIT TO FIXTURE INDICATED.



1 **PENTHOUSE ELECTRICAL PLAN - UNIT A**
1/8" = 1'-0"

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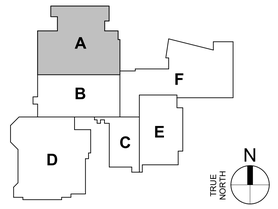
PROJECT: #23126
DATE: 05/24/2024
DRAWN BY: DLJ/MGM

PENTHOUSE ELECTRICAL PLAN - UNIT A



E104A

PLOT DATE/TIME:6/13/2024 8:29:00 AM

GENERAL ENLARGED DEMOLITION NOTES

A REFER TO ELECTRICAL SYMBOLS AND ABBREVIATIONS SHEET E001 FOR ADDITIONAL INFORMATION.

B MAINTAIN BACK BOXES FOR ALL FIXTURES AND SWITCHES TO BE DEMOLISHED UNLESS NOTED OTHERWISE.

◇ ENLARGED DEMOLITION PLAN NOTES

1 REMOVE PANELBOARD INDICATED. MAINTAIN EXISTING BRANCH CIRCUITS FOR RECONNECTION TO NEW PANELBOARD AT SAME LOCATION. SEE DEMOLITION RISER DIAGRAM FOR ADDITIONAL INFORMATION.

2 REMOVE SWITCHBOARD/DISTRIBUTION BOARD INDICATED. MAINTAIN FEEDERS THAT ARE EXISTING TO REMAIN FOR RECONNECTION TO NEW SWITCHBOARD. SEE DEMOLITION RISER DIAGRAM FOR ADDITIONAL INFORMATION.

3 DISCONNECT AND REMOVE WIRE, CONDUIT AND ASSOCIATED ELECTRICAL EQUIPMENT BACK TO SOURCE FOR EQUIPMENT INDICATED.

GENERAL ENLARGED LIGHTING NOTES

A REFER TO ELECTRICAL SYMBOLS AND ABBREVIATIONS SHEET E001 FOR ADDITIONAL INFORMATION.

B MAINTAIN BACK BOXES FOR ALL FIXTURES AND SWITCHES TO BE DEMOLISHED UNLESS NOTED OTHERWISE.

○ ENLARGED LIGHTING PLAN NOTES

1 SWITCH FOR TUNNEL LIGHTS.

GENERAL ENLARGED ELECTRICAL NOTES

A REFER TO ELECTRICAL SYMBOLS AND ABBREVIATIONS SHEET E001 FOR ADDITIONAL INFORMATION.

B ALL LIGHT FIXTURES AND SWITCHES WILL BE CONNECTED TO THE EXISTING CIRCUIT SERVING ROOM OR AREA. REUSE EXISTING BACK BOX FOR FIXTURES AND SWITCHES. PROVIDE BLANK COVER PLATES WHERE MULTIPLE GANG BOXES ARE REDUCED TO ONE DEVICE.

○ ENLARGED ELECTRICAL PLAN NOTES

1 CONNECT BRANCH CIRCUITS THAT WERE MAINTAINED DURING DEMOLITION. REWORK WIRE AND CONDUIT AS REQUIRED. TRACE ALL CIRCUITS AND UPDATE PANELBOARD SCHEDULE. LABEL RECEPTACLES WITH CIRCUIT TAGS.

2 CONNECT FEEDERS THAT WHERE MAINTAINED DURING DEMOLITION TO NEW SWITCHBOARD/DISTRIBUTION BOARD INDICATED. EXTEND WIRE AND CONDUIT AS REQUIRED. SEE RISER DIAGRAM FOR ADDITIONAL INFORMATION.

2 CONNECT FEEDERS THAT WHERE MAINTAINED DURING DEMOLITION TO NEW SWITCHBOARD/DISTRIBUTION BOARD INDICATED. EXTEND WIRE AND CONDUIT AS REQUIRED. UPDATE PANEL SCHEDULES. SEE RISER DIAGRAM FOR ADDITIONAL INFORMATION.

3 MAIN ELECTRICAL GROUNDING SYSTEM BUS BAR. CONNECT TO SWITCHBOARD GROUND BUS. SEE MULTIPLE SERVICE ENTRANCE GROUNDING AND BONDING SCHEMATIC.

4 PROVIDE VERIS HAWKEYE ELECTRIC METER. CONNECT TO BUILDING AUTOMATION SYSTEM. METER TO PROVIDE KW/KWH, VOLTAGE AND CURRENT FOR ALL THREE LEGS, AND POWER FACTOR. METER SHALL BE CAPABLE OF COMMUNICATING TO A MASTER CONTROLLER, MULTI-FUNCTION DIGITAL METER, MICROPROCESSOR BASED AND SUITABLE FOR ELECTRICAL SYSTEM INDICATED.

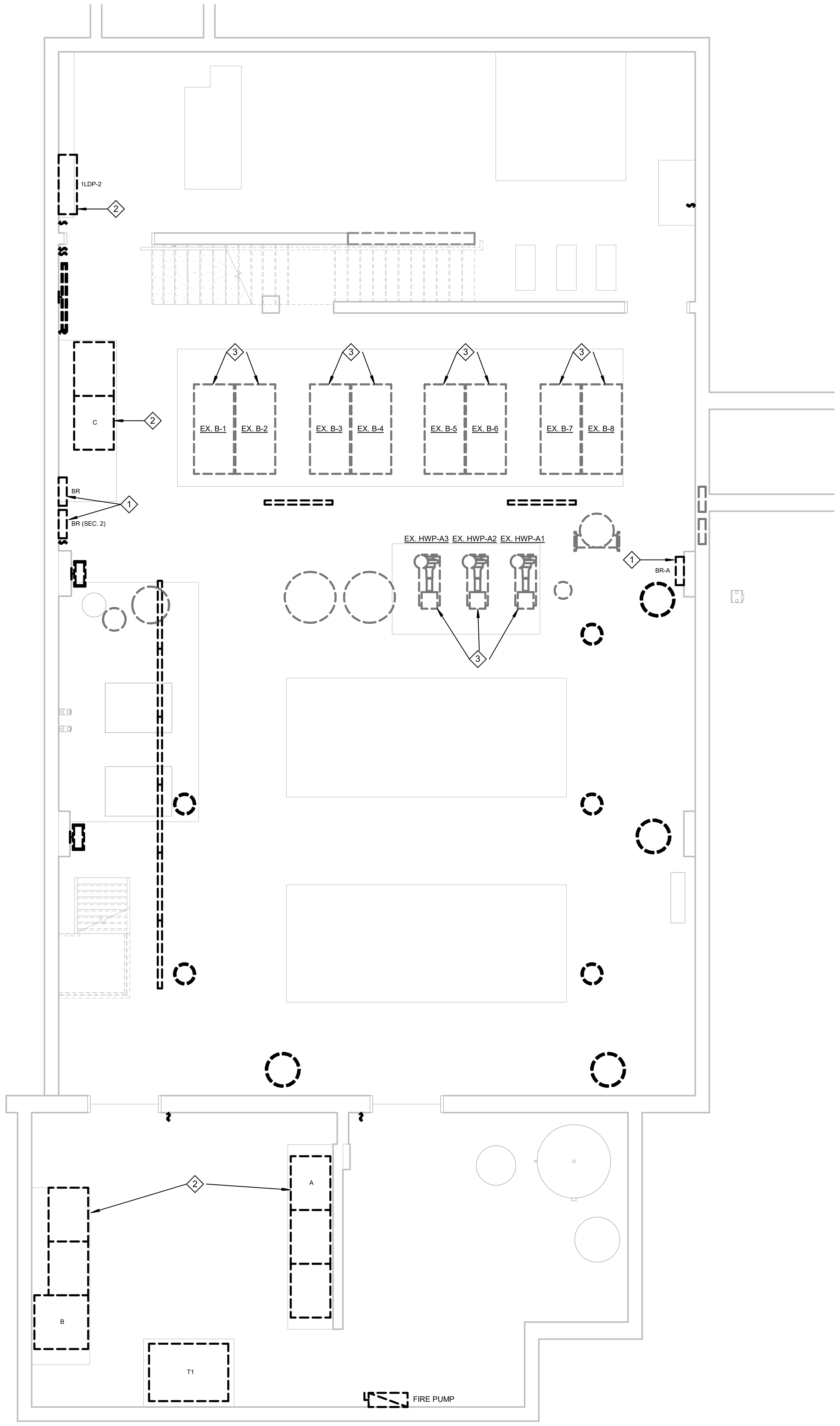
5 PROVIDE NEW HOUSE KEEPING PAD FOR NEW EQUIPMENT.

6 CONNECT EXISTING GROUNDING CONDUCTORS COILED AT CEILING TO GROUND BUS BAR.

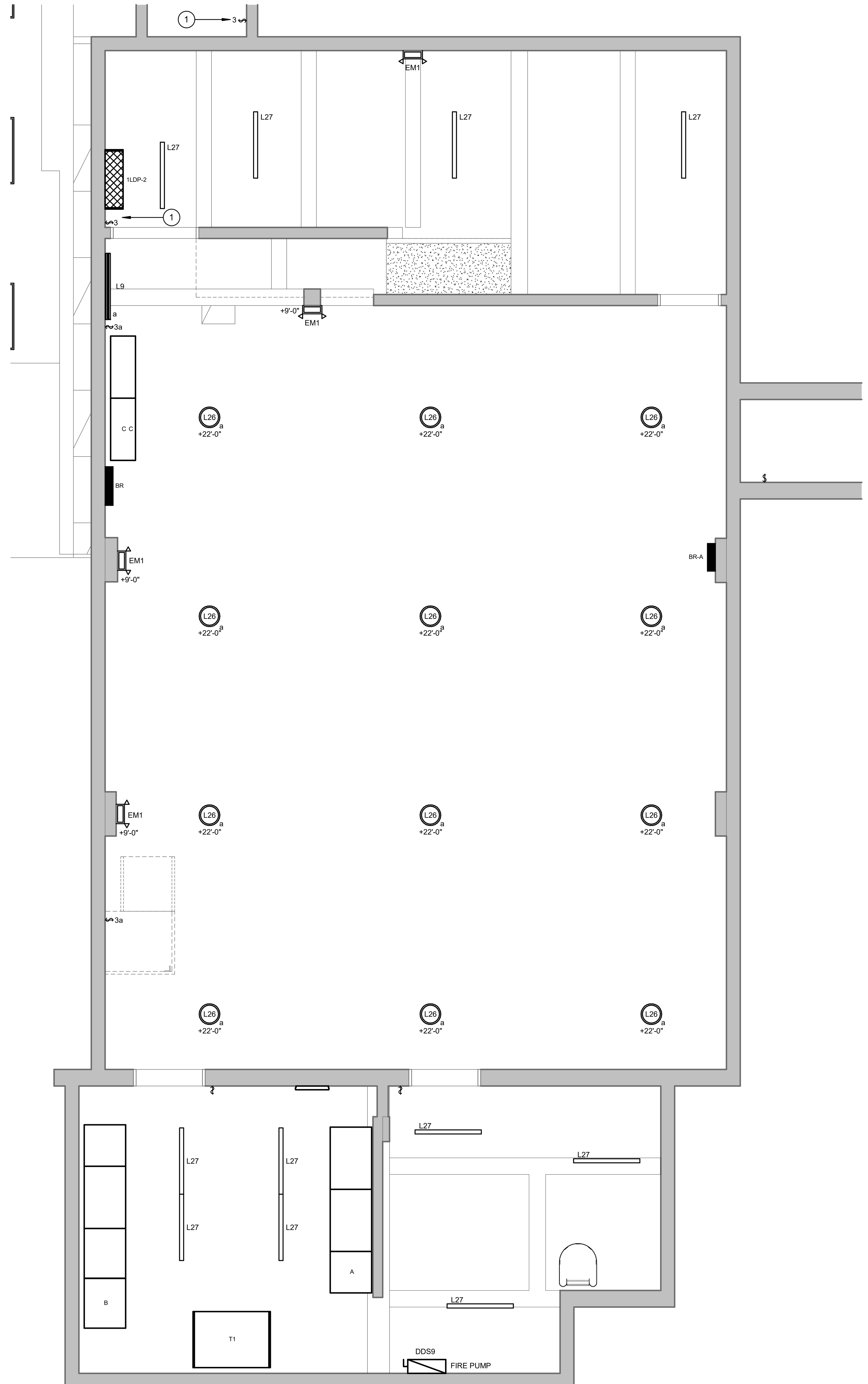
7 PROVIDE UNISTRUT SUPPORT FOR VFD MOUNTING.

8 PROVIDE SIGN INDICATING THAT THERE IS A SECOND SERVICE IN THIS BUILDING AND ITS LOCATION.

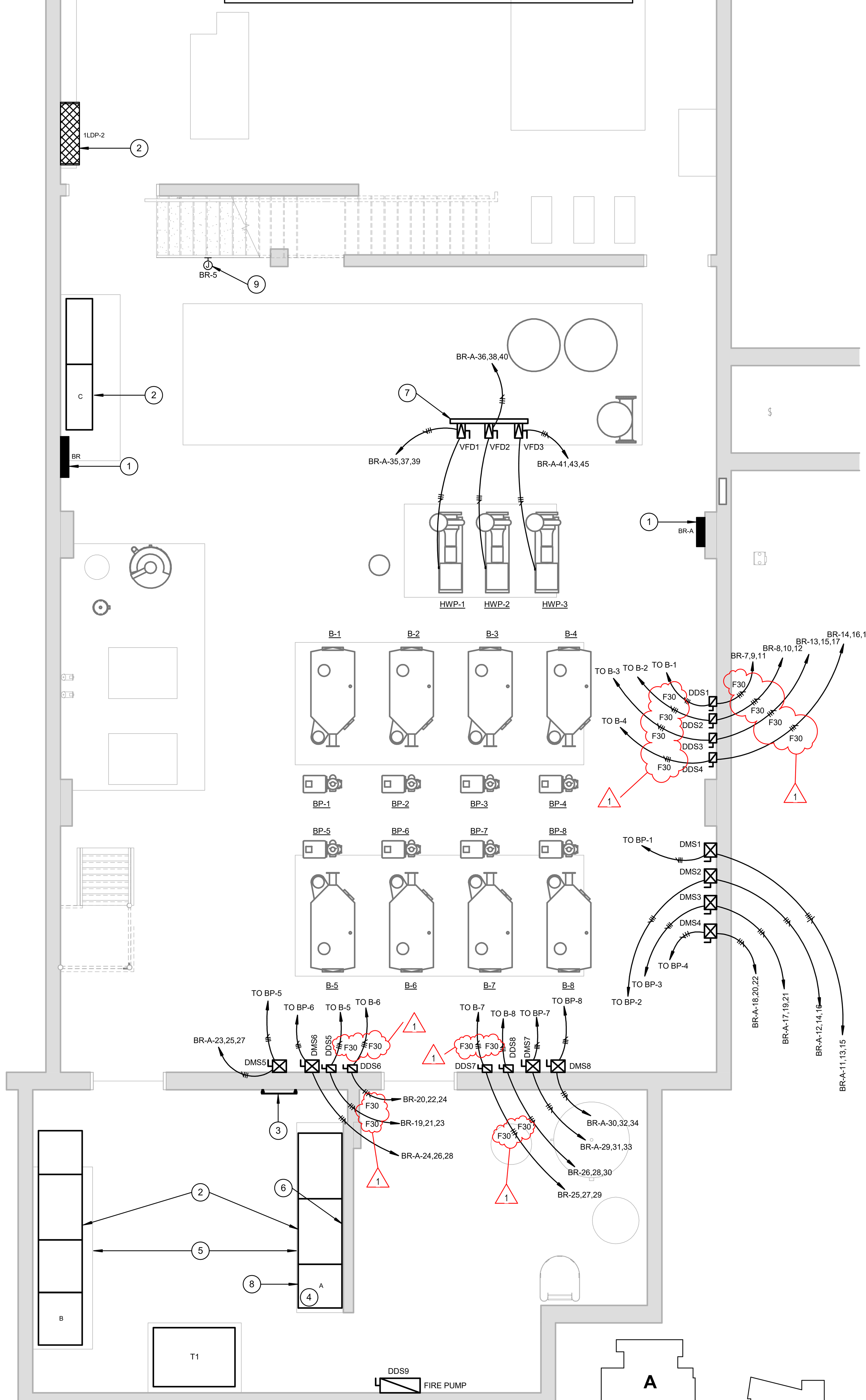
9 120V CONNECTION FOR AUTOMATIC BOILER SHUT OFF CONTROL PANEL.



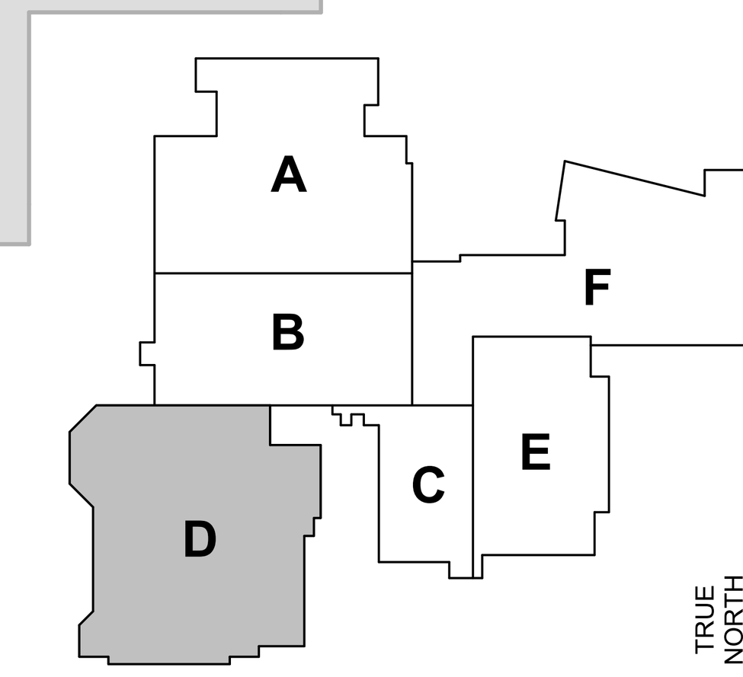
3 ENLARGED BOILER ROOM DEMOLITION PLAN - UNIT D
1/4" = 1'-0"



2 ENLARGED BOILER ROOM LIGHTING PLAN - UNIT D
1/4" = 1'-0"



1 ENLARGED BOILER ROOM POWER PLAN - UNIT D
1/4" = 1'-0"



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PROJECT: #23126
DATE: 05/24/2024
DRAWN BY: Author

ENLARGED BOILER ROOM PLAN - UNIT D

E403

GENERAL RISER DIAGRAM NOTES

A REFER TO ELECTRICAL SYMBOLS AND ABBREVIATIONS SHEET E001 FOR ADDITIONAL INFORMATION.

◇ DEMOLITION RISER DIAGRAM NOTES

1 DISCONNECT AND REMOVE FEEDER FROM PANELBOARD TO BE REMOVED. EXISTING FEEDER TO REMAIN FOR EXTENSION TO NEW REPLACEMENT PANELBOARD.

1 **RISER DIAGRAM UNIT A AND B - DEMOLITION**
NOT TO SCALE

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PROJECT: #23126
DATE: 05/24/2024
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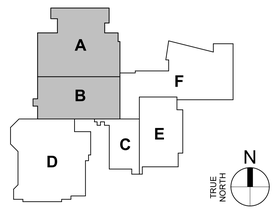
RISER DIAGRAM UNIT A AND B - DEMOLITION

E601



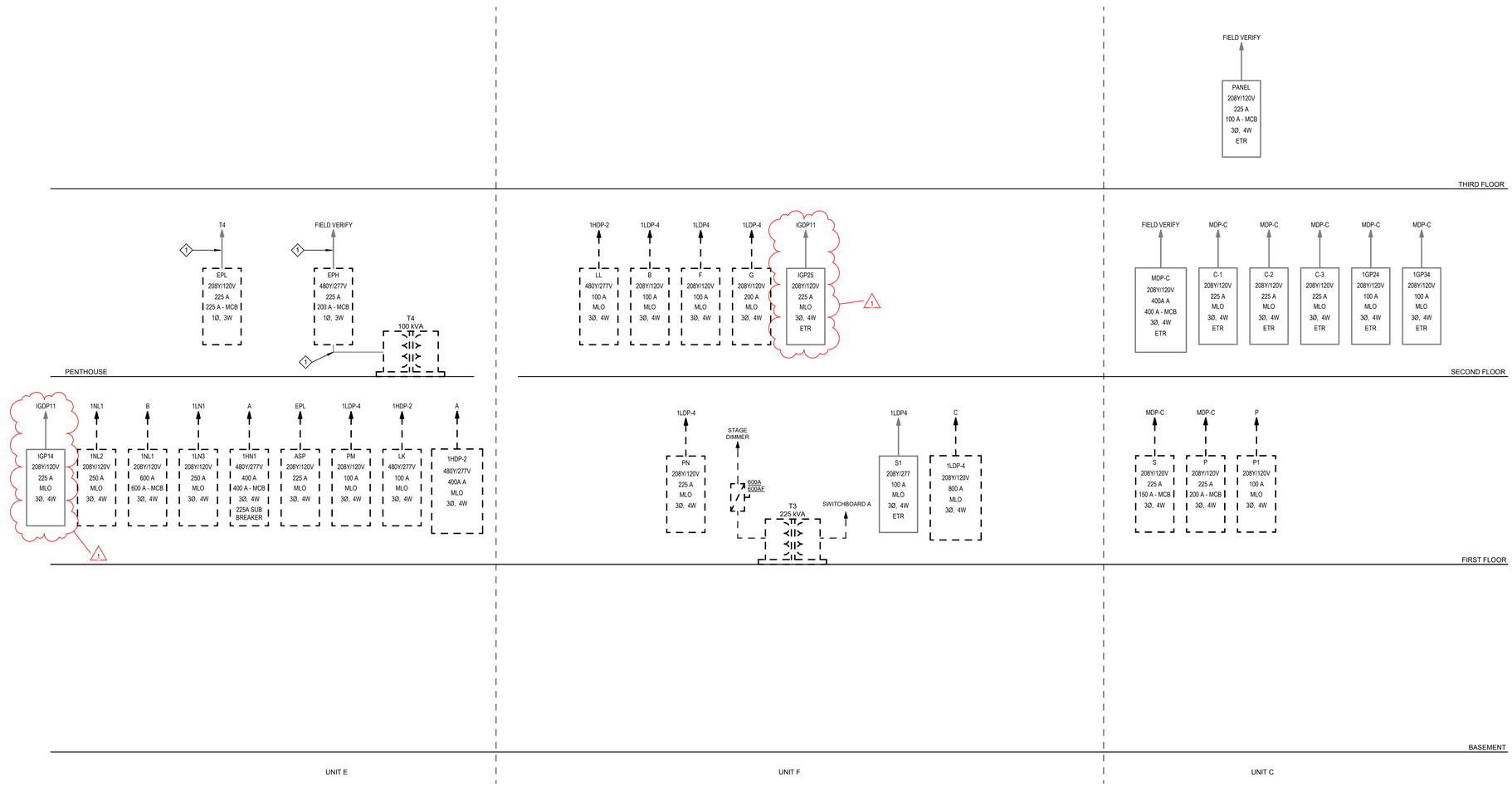
PLOT DATE/TIME: 6/13/2024 8:32:22 AM

GENERAL RISER DIAGRAM NOTES

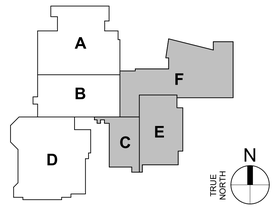
A REFER TO ELECTRICAL SYMBOLS AND ABBREVIATIONS SHEET E001 FOR ADDITIONAL INFORMATION.

◇ DEMOLITION RISER DIAGRAM NOTES

1 DISCONNECT AND REMOVE FEEDER FROM PANELBOARD TO BE REMOVED. EXISTING FEEDER TO REMAIN FOR EXTENSION TO NEW REPLACEMENT PANELBOARD.



1 RISER DIAGRAM UNIT C, E AND F - DEMOLITION
1/8" = 1'-0"



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2	02/14/2024	Addendum #1

100% CONSTRUCTION DOCUMENT

PROJECT: #23126
DATE: 05/24/2024
DRAWN BY: Author

RISER DIAGRAM UNIT C, E AND F - DEMOLITION

E602

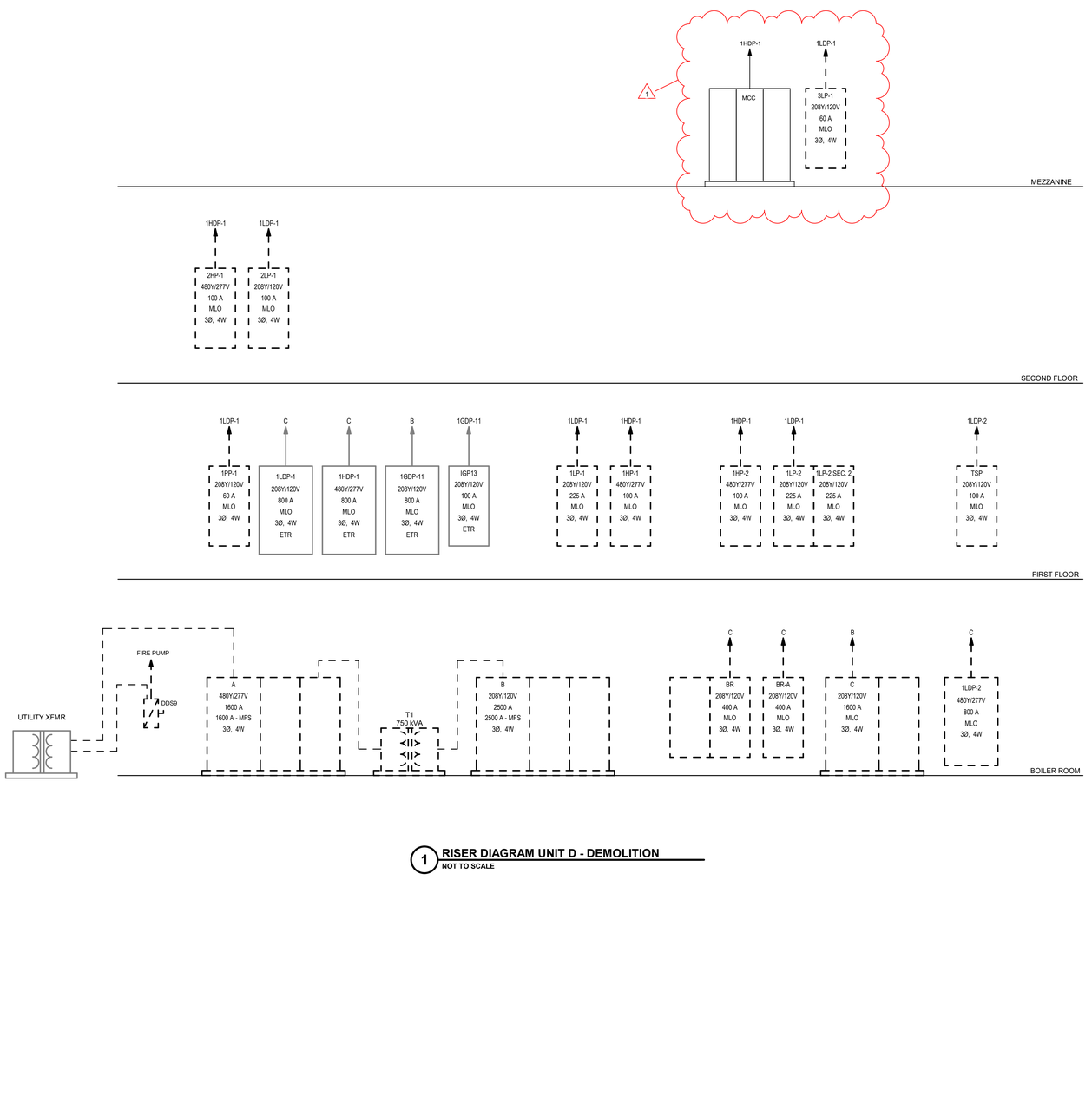
PLOT DATE/TIME:5/1/2024 8:34:03 AM

GENERAL RISER DIAGRAM NOTES

A REFER TO ELECTRICAL SYMBOLS AND ABBREVIATIONS SHEET E001 FOR ADDITIONAL INFORMATION.

◇ DEMOLITION RISER DIAGRAM NOTES

1 DISCONNECT AND REMOVE FEEDER FROM PANELBOARD TO BE REMOVED. EXISTING FEEDER TO REMAIN FOR EXTENSION TO NEW REPLACEMENT PANELBOARD.



1 RISER DIAGRAM UNIT D - DEMOLITION
NOT TO SCALE

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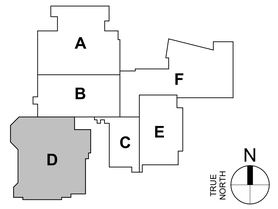
DRAWN BY: Author

RISER DIAGRAM UNIT D - DEMOLITION



E603

PLOT DATE/TIME:6/13/2024 8:30:03 AM

GENERAL RISER DIAGRAM NOTES

A REFER TO ELECTRICAL SYMBOLS AND ABBREVIATIONS SHEET E001 FOR ADDITIONAL INFORMATION.

RISER DIAGRAM NOTES

1 EXTEND FEEDER THAT WAS MAINTAINED DURING DEMOLITION TO NEW PANELBOARD.

2 BOND NEUTRAL AND GROUND BAR AT DISCONNECT. PROVIDE A #6 GROUNDING CONDUCTOR TO GROUND BUS. SEE MULTIPLE SERVICE ENTRANCE GROUNDING AND BONDING SCHEMATIC FOR ADDITIONAL INFORMATION.

1 **RISER DIAGRAM UNIT A AND B - NEW WORK**
NOT TO SCALE

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DAVID L. JONES II REGISTERED NO. PE12100175 STATE OF INDIANA PROFESSIONAL ENGINEER

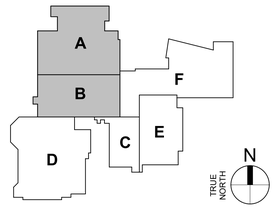
REVISIONS:

#	Date	Desc.
1	06.14.2024	ADDENDUM #1

100% CONSTRUCTION DOCUMENT

PROJECT: #23126
DATE: 05/24/2024
DRAWN BY: DLJ/MGM

RISER DIAGRAM UNIT A AND B - NEW WORK



E604

PLOT DATE/TIME:5/10/2024 9:36:20 AM

GENERAL RISER DIAGRAM NOTES

A REFER TO ELECTRICAL SYMBOLS AND ABBREVIATIONS SHEET E001 FOR ADDITIONAL INFORMATION.

◯ RISER DIAGRAM NOTES

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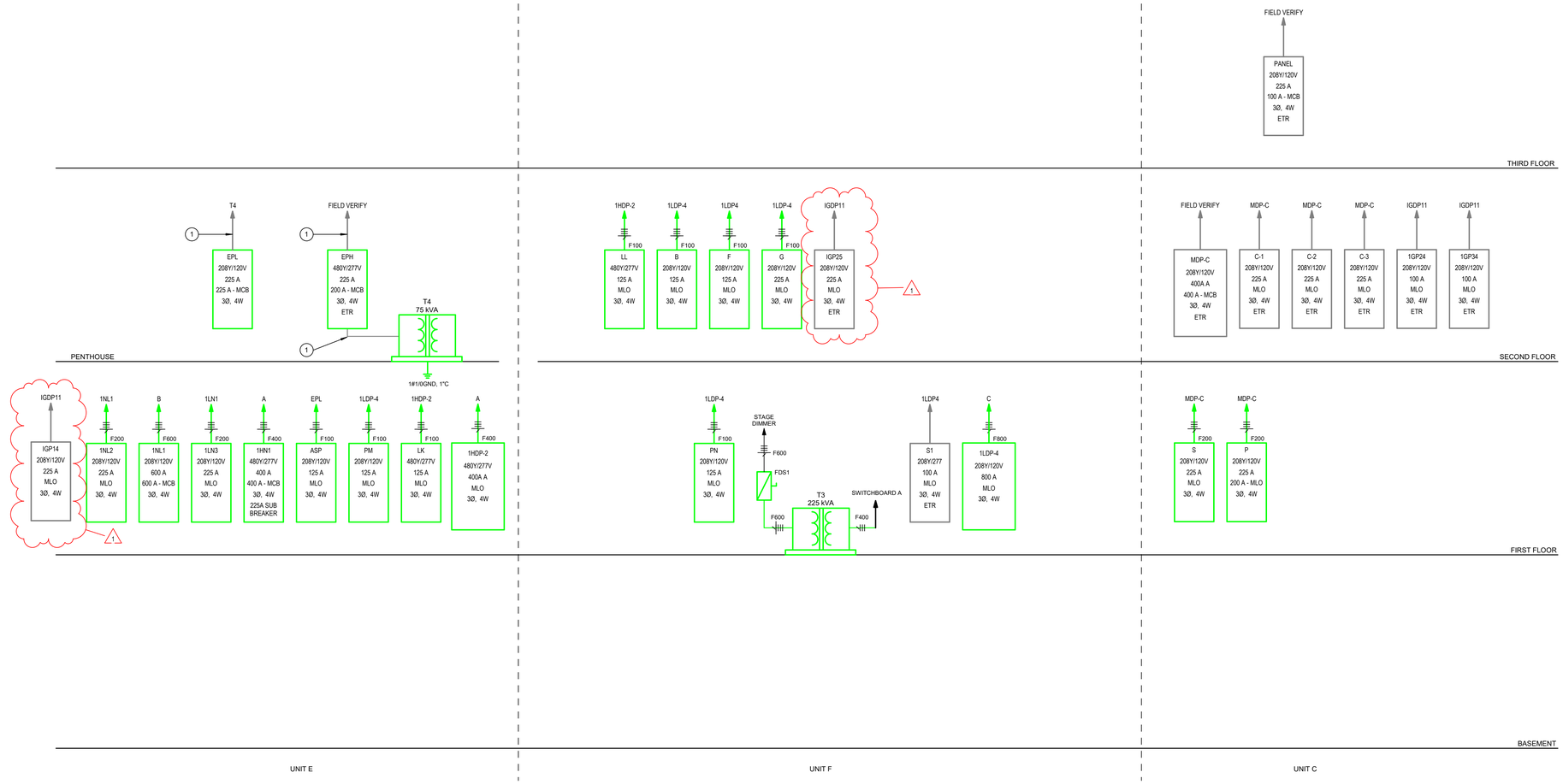
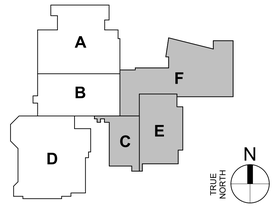


1 RISER DIAGRAM UNIT C, E AND F - NEW WORK
NOT TO SCALE



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REVISIONS:

#	Date	Desc.
1	06.14.2024	ADDENDUM #1
2	07.14.2024	Addendum #1

100% CONSTRUCTION DOCUMENT

PROJECT: #23126
DATE: 05/24/2024
DRAWN BY: DLJ/MGM

RISER DIAGRAM UNIT C, E AND F - NEW WORK

E605

PLOT DATE/TIME:5/3/2024 8:27:17 AM

LIGHT FIXTURE SCHEDULE

LABEL	DESCRIPTION	VOLTAGE	SOURCE TYPE	SOURCE LUMENS	WATTS	CCT	MOUNTING	LENS/REFLECTOR	CERTIFICATIONS	ACCEPTABLE MANUFACTURERS	LABEL
EM1	LED EMERGENCY LIGHT. 25' ON CENTER COVERAGE. ADJUSTABLE OPTICS. SELF DIAGNOSTIC. WHITE FINISH. SEALED NICKEL CADMIUM BATTERY.	120/277 V	LED	N/A	10 W	N/A	SURFACE/WALL	N/A	N/A	DUAL-LITE EZ-2I Spectron	EM1
L1	2X4 LED FLAT PANEL. 0-10V DIMMING.	120/277 V	LED	5,000 LM	40 W	4000 K	RECESSED IN GRID	WHITE FROST ACRYLIC	DLC	LITHONIA CPX	L1
L2	2X4 LED FLAT PANEL. 0-10V DIMMING. PROVIDE SURFACE MOUNT KIT.	120/277 V	LED	3,500 LM	20 W	4000 K	SURFACE/CEILING	WHITE FROST ACRYLIC	DLC	LITHONIA CPX	L2
L3	2X2 LED FLAT PANEL. 0-10V DIMMING.	120/277 V	LED	4,600 LM	40 W	4000 K	RECESSED IN GRID	WHITE FROST ACRYLIC	DLC	LITHONIA CPX	L3
L4	1X4 LED VANDAL RESISTANT TROFER. 0-10V DIMMING.	120/277 V	LED	3,000 LM	28 W	4000 K	RECESSED IN GYP	POLYCARBONATE LENS	DLC	LITHONIA VRTL	L4
L5	1X4 LED FLAT PANEL. 0-10V DIMMING. PROVIDE SURFACE MOUNT KIT.	120/277 V	LED	3,000 LM	25 W	4000 K	SURFACE/CEILING	POLYCARBONATE LENS	DLC	LITHONIA CPX	L5
L6	1X4 LED WET LOCATION TROFFER.	120/277 V	LED	3,000 LM	25 W	4000 K	RECESSED IN GYP	POLYCARBONATE LENS	DLC	LITHONIA WRTL	L6
L7	4' LENSED LED STRIP LIGHT. 0-10V DIMMING.	120/277 V	LED	4,000 LM	38 W	4000 K	CHAIN MOUNTED TO STRUCTURE	SEMI-FROSTED LENS	DLC	LITHONIA CSS	L7
L8	4' LENSED LED STRIP LIGHT. 0-10V DIMMING.	120/277 V	LED	4,000 LM	38 W	4000 K	SURFACE/CEILING/WALL	SEMI-FROSTED LENS	DLC	LITHONIA CSS	L8
L9	4' LENSED LED STRIP LIGHT. 0-10V DIMMING, WHITE FINISH.	120/277 V	LED	5,400 LM	45 W	4000 K	SURFACE/CEILING/WALL	SEMI-FROSTED LENS	DLC	LITHONIA CSS	L9
L10	4' LENSED LED STRIP LIGHT. 0-10V DIMMING, WHITE FINISH.	120/277 V	LED	2,600 LM	25 W	4000 K	SURFACE MOUNTED	SEMI-FROSTED LENS	DLC	LITHONIA CPX	L10
L10x	4" ROUND LED DOWNLIGHT. SELF-FLANGED TRIM. MEDIUM DISTRIBUTION (50°). 0-10V DIMMING.	120/277 V	LED	1,000 LM	11 W	4000 K	RECESSED IN DRYWALL	SEMI-SPECULAR CLEAR	ES	PORTFOLIO LD4B PRESCOLITE LTR-4RD GOTHAM EVO	L10x
L11	2X4 LED VANDAL RESISTANT TROFER. 0-10V DIMMING.	120/277 V	LED	3,000 LM	24 W	4000 K	RECESSED IN GYP	WHITE FROST ACRYLIC	DLC	LITHONIA 2VRTL	L11
L12x	6" ROUND LED DOWNLIGHT. SELF-FLANGED TRIM. 0-10V DIMMING.	120/277 V	LED	1,000 LM	12 W	4000 K	RECESSED IN XXXX	DIFFUSE IMPACT RESISTANT POLYCARBONATE LENS	N/A	PORTFOLIO LD6B PRESCOLITE LTR-6RD LITHONIA LDN6	L12x
L13	4' LENSED LED STRIP LIGHT. 0-10V DIMMING.	120/277 V	LED	1,500 LM	15 W	4000 K	PENDANT	FLUSH SATIN LENS	DLC	FOCAL POINT FSM4LS FINELITE HP4 PINNACLE EDGE	L13
L14	16" DIAMETER LED HIGHBAY. WHITE POLYESTER POWDER COAT FINISH. ROUND, DECORATIVE SHIELD. WIDE DISTRIBUTION. 0-10V DIMMING.	120/277 V	LED	12,000 LM	106 W	4000 K	AIRCRAFT CABLE	WHITE FROST ACRYLIC	DLC	LITHONIA CPRB	L14
L15	4" X 4' WALL MOUNTED, LINEAR, DIRECT LED FIXTURE. FLUSH LENS. WHITE FINISH. 0-10V DIMMING. U.L. LISTED WET LOCATION.	120/277 V	LED	3,000 LM	34 W	4000 K	SURFACE/WALL	TEMPERED CLEAR GLASS	N/A	LUMENWERX VIAWETW OCL UA1 SELUX L125	L15
L16	VANDAL RESISTANT STAIRWELL LED WITH INTEGRAL OCCUPANCY SENSOR.	120/277 V	LED	3,779 LM	50 W	4000 K	SURFACE/CEILING	OPAL POLYCARBONATE	DLC	LUMINAIRE ENDEAVOR ESF18	L16
L17	VANDAL RESISTANT STAIRWELL LED WITH INTEGRAL OCCUPANCY SENSOR.	120/277 V	LED	3,779 LM	50 W	4000 K	SURFACE/WALL	OPAL POLYCARBONATE	DLC	LUMINAIRE ENDEAVOR ESF18	L17
L19	4' LENSED LED STRIP LIGHT. 0-10V DIMMING WITH WIRE GUARD.	120/277 V	LED	4,000 LM	38 W	4000 K	CHAIN MOUNTED TO STRUCTURE	SEMI-FROSTED LENS	DLC	LITHONIA CSS	L19
L20	LOW PROFILE LED WRAPAROUND. 0-10V DIMMING.	120/277 V	LED	5,000 LM	25 W	4000 K	SURFACE/CEILING	POLYCARBONATE LENS	DLC	LITHONIA FML4W	L20
L21	1X4 LED FLAT PANEL. 0-10V DIMMING.	120/277 V	LED	4,500 LM	40 W	4000 K	RECESSED IN GRID	WHITE FROST ACRYLIC	DLC	LITHONIA CPX	L21
L22	2X2 LED FLAT PANEL. 0-10V DIMMING.	120/277 V	LED	3,500 LM	30 W	4000 K	RECESSED IN GRID	WHITE FROST ACRYLIC	DLC	LITHONIA CPX	L22
L23	LED MIRROR/VANITY FIXTURE WITH LAMPS (E26 BASE/A19 SIZE) AT 6" O.C, FINISH SELECTED BY A/E, FIELD VERIFY EXACT LENGTH, PROVIDE SQUARE WIRE GUARD, UL WET LABEL.	120/277 V	LED	N/A	0 W	2700 K	SURFACE/WALL	HEAT RESISTANT GLASS WITH DIE-CAST ALUMINUM GUARD	N/A	CELESTIAL AQUARIUS R	L23
L24	VAPOR TIGHT LED STRIP LIGHT	120/277 V	LED	3,000 LM	25 W	4000 K	SURFACE/CEILING/WALL	POLYCARBONATE LENS	DLC	LITHONIA CSVT	L24
L25	LED TAPE LIGHT FOR COVE LIGHTING. PROVIDE RIGID MOUNTING CHANNEL.	120/277 V	LED	240 LM/FT	11 W	4000 K	SURFACE	SEMI-FROSTED LENS	N/A	LINEAR LED 'XOO' CONTECH TLT BRUCK SABER	L25
L26	16" DIAMETER LED HIGHBAY. WHITE POLYESTER POWDER COAT FINISH. ROUND, DECORATIVE SHIELD. WIDE DISTRIBUTION. 0-10V DIMMING.	120/277 V	LED	21,000 LM	148 W	4000 K	PENDANT/STEM	POLYCARBONATE LENS	DLC	LITHONIA CPRB	L26
L27	4' LENSED LED STRIP LIGHT. 0-10V DIMMING, WHITE FINISH.	120/277 V	LED	5,400 LM	45 W	4000 K	CHAIN MOUNTED TO STRUCTURE	SEMI-FROSTED LENS	N/A	LITHONIA CSS	L27
X1	LED EXIT LIGHT, WHITE POLYCARBONATE HOUSING, DUAL FACE, RED LETTERS, SELF POWERED NICKEL-CADMIUM BATTERY, SELF DIAGNOSTIC/SELF-TESTING MODULE.	120/277 V	LED	N/A	5 W	N/A	UNIVERSAL	N/A	N/A	DUAL-LITE LXURWEI	X1
X2	LED EXIT LIGHT, WHITE POLYCARBONATE HOUSING, SINGLE FACE, RED LETTERS, SELF POWERED NICKEL-CADMIUM BATTERY, SELF DIAGNOSTIC/SELF-TESTING MODULE.	120/277 V	LED	N/A	5 W	N/A	UNIVERSAL	N/A	N/A	DUAL-LITE LXURWEI	X2
X3	LED EXIT LIGHT, WHITE POLYCARBONATE HOUSING, SINGLE FACE, RED LETTERS, SELF POWERED NICKEL-CADMIUM BATTERY, SELF DIAGNOSTIC/SELF-TESTING MODULE.	120/277 V	LED	N/A	5 W	N/A	UNIVERSAL	N/A	N/A	DUAL-LITE LXURWEI	X3
X4	LED EXIT LIGHT, WHITE POLYCARBONATE HOUSING, SINGLE FACE, RED LETTERS, SELF POWERED NICKEL-CADMIUM BATTERY, SELF DIAGNOSTIC/SELF-TESTING MODULE. WITH WIRE GUARD.	120/277 V	LED	N/A	5 W	N/A	UNIVERSAL	VANDAL-RESISTANT POLYCARBONATE SHIELD WITH TAMPERPROOF SCREWS	N/A	DUAL-LITE LXURWEI	X4
X5	LED EXIT LIGHT, BLACKPOLYCARBONATE HOUSING, SINGLE FACE, RED LETTERS, SELF POWERED NICKEL-CADMIUM BATTERY, SELF DIAGNOSTIC/SELF-TESTING MODULE.	120/277 V	LED	N/A	5 W	N/A	UNIVERSAL	N/A	N/A	DUAL-LITE LXURWEI	X5
X6	LED COMBO EXIT/EMERGENCY LIGHT, BLACK POLYCARBONATE HOUSING, SINGLE FACE, RED LETTERS, SELF POWERED NICKEL-CADMIUM BATTERY, SELF DIAGNOSTIC/SELF-TESTING MODULE.	120/277 V	LED	N/A	5 W	N/A	UNIVERSAL	N/A	N/A	DUAL-LITE HCX	X6

ENCLOSED SWITCHES & CIRCUIT BREAKERS SCHEDULE

LABEL	EQUIPMENT SERVED	EQUIPMENT RATINGS VOLTAGE	POLES	AMPERAGE	FUSED	FUSE SIZE	NEMA ENCL	ACCESSORIES AUX. CONTACTS	SOLID NEUTRAL	REMARKS
DDS1	B-1	240 V	3	30 A	Yes	20A	1	(1) N.O. / N.C.	No	
DDS2	B-2	240 V	3	30 A	Yes	20A	1	(1) N.O. / N.C.	No	
DDS3	B-3	240 V	3	30 A	Yes	20A	1	(1) N.O. / N.C.	No	
DDS4	B-4	240 V	3	30 A	Yes	20A	1	(1) N.O. / N.C.	No	
DDS5	B-5	240 V	3	30 A	Yes	20A	1	(1) N.O. / N.C.	No	
DDS6	B-6	240 V	3	30 A	Yes	20A	1	(1) N.O. / N.C.	No	
DDS7	B-7	240 V	3	30 A	Yes	20A	1	(1) N.O. / N.C.	No	
DDS8	B-8	240 V	3	30 A	Yes	20A	1	(1) N.O. / N.C.	No	
DDS9	FIRE PUMP	600 V	3	400 A	Yes	250A	1	(1) N.O. / N.C.	No	SE RATED
FDS1	DIMMER	240 V	3	600 A	Yes	600A	1	(1) N.O. / N.C.	No	

1

ENCLOSED & VARIABLE-FREQUENCY MOTOR CONTROLLERS SCHEDULE

LABEL	EQUIPMENT SERVED	EQUIPMENT RATINGS VOLTAGE	PHASE	HP	FLA	NEMA ENCL	STARTER TYPE	STARTER NEMA SIZE	DISCONNECT SWITCH TYPE	DISCONNECT SWITCH FUSE SIZE	REMOTE CAPACITOR	REMARKS
DMS1	BP-1	208 V	3	2	7.8 A	1	FVNR	1	FUSIBLE	10	-	PROVIDE SINGLE PHASE PROTECTION. THE SINGLE PHASE PROTECTION SHALL BE PART OF THE OVERLOAD BLOCK. OVERLOADS SHALL BE ADJUSTABLE.
DMS2	BP-2	208 V	3	2	7.8 A	1	FVNR	1	FUSIBLE	10	-	PROVIDE SINGLE PHASE PROTECTION. THE SINGLE PHASE PROTECTION SHALL BE PART OF THE OVERLOAD BLOCK. OVERLOADS SHALL BE ADJUSTABLE.
DMS3	BP-3	208 V	3	2	7.8 A	1	FVNR	1	FUSIBLE	10	-	PROVIDE SINGLE PHASE PROTECTION. THE SINGLE PHASE PROTECTION SHALL BE PART OF THE OVERLOAD BLOCK. OVERLOADS SHALL BE ADJUSTABLE.
DMS4	BP-4	208 V	3	2	7.8 A	1	FVNR	1	FUSIBLE	10	-	PROVIDE SINGLE PHASE PROTECTION. THE SINGLE PHASE PROTECTION SHALL BE PART OF THE OVERLOAD BLOCK. OVERLOADS SHALL BE ADJUSTABLE.
DMS5	BP-5	208 V	3	2	7.8 A	1	FVNR	1	FUSIBLE	10	-	PROVIDE SINGLE PHASE PROTECTION. THE SINGLE PHASE PROTECTION SHALL BE PART OF THE OVERLOAD BLOCK. OVERLOADS SHALL BE ADJUSTABLE.
DMS6	BP-2	208 V	3	2	7.8 A	1	FVNR	1	FUSIBLE	10	-	PROVIDE SINGLE PHASE PROTECTION. THE SINGLE PHASE PROTECTION SHALL BE PART OF THE OVERLOAD BLOCK. OVERLOADS SHALL BE ADJUSTABLE.
DMS7	BP-7	208 V	3	2	7.8 A	1	FVNR	1	FUSIBLE	10	-	PROVIDE SINGLE PHASE PROTECTION. THE SINGLE PHASE PROTECTION SHALL BE PART OF THE OVERLOAD BLOCK. OVERLOADS SHALL BE ADJUSTABLE.
DMS8	BP-8	208 V	3	2	7.8 A	1	FVNR	1	FUSIBLE	10	-	PROVIDE SINGLE PHASE PROTECTION. THE SINGLE PHASE PROTECTION SHALL BE PART OF THE OVERLOAD BLOCK. OVERLOADS SHALL BE ADJUSTABLE.
VFD1	HWP-1	208 V	3	5	17.5 A	-	VFD	-	-	-	-	TCC FURNISHED, E.C. INSTALLED.
VFD2	HWP-2	208 V	3	5	17.5 A	-	VFD	-	-	-	-	TCC FURNISHED, E.C. INSTALLED.
VFD3	HWP-3	208 V	3	5	17.5 A	-	VFD	-	-	-	-	TCC FURNISHED, E.C. INSTALLED.
VFD4	CHP-1	480 V	3	7.5	11.0 A	-	VFD	-	-	-	-	TCC FURNISHED, E.C. INSTALLED.
VFD5	CHP-2	480 V	3	7.5	11.0 A	-	VFD	-	-	-	-	TCC FURNISHED, E.C. INSTALLED.
VFD6	CHP-3	480 V	3	7.5	11.0 A	-	VFD	-	-	-	-	TCC FURNISHED, E.C. INSTALLED.
VFD7	CHP-4	480 V	3	15	21.0 A	-	VFD	-	-	-	-	TCC FURNISHED, E.C. INSTALLED.
VFD8	CHP-5	480 V	3	15	21.0 A	-	VFD	-	-	-	-	TCC FURNISHED, E.C. INSTALLED.
VFD9	CHP-6	480 V	3	15	21.0 A	-	VFD	-	-	-	-	TCC FURNISHED, E.C. INSTALLED.

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REVISIONS:

#	Date	Desc.
1	06.14.2024	ADDENDUM #1

100% CONSTRUCTION DOCUMENT

PROJECT: #23126
DATE: 05/24/2024
DRAWN BY: Author

SCHEDULES

E607

PLOT DATE/TIME:6/13/2024 8:36:15 AM

BRANCH PANELBOARD SCHEDULE

DESIGNATION: 1LP-2 | **VOLTS:** 208Y/120 V | **MAINS RATING:** 225 A
LOCATION: 1ST FLR UNIT D | **PHASES:** 3 | **MAINS TYPE:** MLO
MOUNTING: FLUSH | **WIRES:** 4
SUPPLY FROM: 1LDP-1 | **AIC RATING:** 22K

O	CKT NO.	DESCRIPTION	CIRCUIT TYPE	TRIP	P	A		B		C		P	TRIP	CIRCUIT TYPE	DESCRIPTION	CKT NO.	O
	1															2	
	3								0.00			1	20 A		SPARE	4	--
--	5	SPARE		20 A	1					0.00	0.00	1	20 A		SPARE	6	--
--	7	SPARE		20 A	1	0.00	0.00					1	20 A		SPARE	8	--
--	9	SPARE		20 A	1			0.00	0.00			1	20 A		SPARE	10	--
--	11	SPARE		20 A	1					0.00	0.00	1	20 A		SPARE	12	--
--	13	SPARE		20 A	1	0.00	0.00					1	20 A		SPARE	14	--
--	15	SPARE		20 A	1			0.00	0.00			1	20 A		SPARE	16	--
--	17	SPARE		20 A	1					0.00	0.00	1	20 A		SPARE	18	--
--	19	SPARE		20 A	1	0.00	0.00					1	20 A		SPARE	20	--
--	21	SPARE		20 A	1			0.00	0.00			1	20 A		SPARE	22	--
--	23	SPARE		20 A	1					0.00	0.00	1	20 A		SPARE	24	--
--	25	SPARE		20 A	1	0.00	0.00					1	20 A		SPARE	26	--
--	27	SPARE		20 A	1			0.00	0.00			1	20 A		SPARE	28	--
--	29	SPARE		20 A	1					0.00	0.00	1	20 A		SPARE	30	--

	A	B	C
TOTAL LOAD:	0.00 kVA	0.00 kVA	0.00 kVA
TOTAL AMPS:	0 A	0 A	0 A

TOTAL CONNECTED LOAD:	0.00 kVA	0.00 kVA	TOTAL DEMAND LOAD:
TOTAL CONNECTED AMPS:	0 A	0 A	TOTAL DEMAND AMPS:

PANELBOARD & CIRCUIT BREAKER OPTIONS ("O" COLUMN / MCB OPTIONS ABBREVIATIONS)		LOAD CLASSIFICATION	CONNECTED LOAD (VA)	DEMAND FACTOR	ESTIMATE DEMAND (VA)
C	CONTACTOR CONTROLLED				
G	GFCI PROTECTED				
P	HANDLE LOCKING DEVICE				
S	SHUNT TRIP				
X	80% RATED MAIN CIRCUIT BREAKER WITH LSI				
Y	100% RATED MAIN CIRCUIT BREAKER WITH LSI				
Z	100% RATED MAIN CIRCUIT BREAKER WITH LSIG				
	FEED THROUGH LUGS (FTL)				
	SUB FEED LUGS (SFL)				

NOTES:

BRANCH PANELBOARD SCHEDULE

DESIGNATION: 1LP-2 SEC. 2 | **VOLTS:** 208Y/120 V | **MAINS RATING:** 225 A
LOCATION: 1ST FLR UNIT D | **PHASES:** 3 | **MAINS TYPE:** MLO
MOUNTING: FLUSH | **WIRES:** 4
SUPPLY FROM: 1LP-2 SEC 1 | **AIC RATING:** 22K

O	CKT NO.	DESCRIPTION	CIRCUIT TYPE	TRIP	P	A		B		C		P	TRIP	CIRCUIT TYPE	DESCRIPTION	CKT NO.	O
--	1	SPARE		20 A	1	0.00	0.00					1	20 A		SPARE	2	--
--	3	SPARE		20 A	1			0.00	0.00			1	20 A		SPARE	4	--
--	5	SPARE		20 A	1					0.00	0.00	1	20 A		SPARE	6	--
--	7	SPARE		20 A	1	0.00	0.00					1	20 A		SPARE	8	--
--	9	SPARE		20 A	1			0.00	0.00			1	20 A		SPARE	10	--
--	11	SPARE		20 A	1					0.00	0.00	1	20 A		SPARE	12	--
--	13	SPARE		20 A	1	0.00	0.00					1	20 A		SPARE	14	--
--	15	SPARE		20 A	1			0.00	0.00			1	20 A		SPARE	16	--
--	17	SPARE		20 A	1					0.00	0.00	1	20 A		SPARE	18	--
--	19	SPARE		20 A	1	0.00	0.00					3	20 A		SPARE	20	--
--	21	SPARE		20 A	1			0.00	0.00			--	--	--	--	22	--
--	23	SPARE		20 A	1					0.00	0.00	--	--	--	--	24	--
--	25	SPARE		60 A	3	0.00	0.00					2	40 A		SPARE	26	--
--	27	--	--	--	--			0.00	0.00			--	--	--	--	28	--
--	29	--	--	--	--					0.00	0.00	1	20 A		SPARE	30	--

	A	B	C
TOTAL LOAD:	0.00 kVA	0.00 kVA	0.00 kVA
TOTAL AMPS:	0 A	0 A	0 A

TOTAL CONNECTED LOAD:	0.00 kVA	0.00 kVA	TOTAL DEMAND LOAD:
TOTAL CONNECTED AMPS:	0 A	0 A	TOTAL DEMAND AMPS:

PANELBOARD & CIRCUIT BREAKER OPTIONS ("O" COLUMN / MCB OPTIONS ABBREVIATIONS)		LOAD CLASSIFICATION	CONNECTED LOAD (VA)	DEMAND FACTOR	ESTIMATE DEMAND (VA)
C	CONTACTOR CONTROLLED				
G	GFCI PROTECTED				
P	HANDLE LOCKING DEVICE				
S	SHUNT TRIP				
X	80% RATED MAIN CIRCUIT BREAKER WITH LSI				
Y	100% RATED MAIN CIRCUIT BREAKER WITH LSI				
Z	100% RATED MAIN CIRCUIT BREAKER WITH LSIG				
	FEED THROUGH LUGS (FTL)				
	SUB FEED LUGS (SFL)				

NOTES:

BRANCH PANELBOARD SCHEDULE

DESIGNATION: TSP | **VOLTS:** 208Y/120 V | **MAINS RATING:** 125 A
LOCATION: BOILER HOUSE | **PHASES:** 3 | **MAINS TYPE:** MLO
MOUNTING: SURFACE | **WIRES:** 4
SUPPLY FROM: 1LDP-2 | **AIC RATING:** 22K

O	CKT NO.	DESCRIPTION	CIRCUIT TYPE	TRIP	P	A		B		C		P	TRIP	CIRCUIT TYPE	DESCRIPTION	CKT NO.	O
--	1	SPARE		20 A	1	0.00	0.00					1	20 A		SPARE	2	--
--	3	SPARE		20 A	1			0.00	0.00			1	20 A		SPARE	4	--
--	5	SPARE		20 A	1					0.00	0.00	1	20 A		SPARE	6	--
--	7	SPARE		20 A	1	0.00	0.00					1	20 A		SPARE	8	--
--	9	SPARE		20 A	1			0.00	0.00			1	20 A		SPARE	10	--
--	11	SPARE		20 A	1					0.00	0.00	1	20 A		SPARE	12	--
--	13	SPARE		20 A	1	0.00	0.00					1	20 A		SPARE	14	--
--	15	SPARE		20 A	1			0.00	0.00			1	20 A		SPARE	16	--
--	17	SPARE		20 A	1					0.00	0.00	1	20 A		SPARE	18	--
--	19	SPARE		20 A	1	0.00	0.00					1	20 A		SPARE	20	--
--	21	SPARE		20 A	1			0.00	0.00			1	20 A		SPARE	22	--
--	23	SPARE		20 A	1					0.00	0.00	1	20 A		SPARE	24	--
--	25	SPARE		20 A	1	0.00	0.00					1	20 A		SPARE	26	--
--	27	SPARE		20 A	2			0.00	0.00			1	20 A		SPARE	28	--
--	29	--	--	--	--					0.00	0.00	1	20 A		SPARE	30	--

	A	B	C
TOTAL LOAD:	0.00 kVA	0.00 kVA	0.00 kVA
TOTAL AMPS:	0 A	0 A	0 A

TOTAL CONNECTED LOAD:	0.00 kVA	0.00 kVA	TOTAL DEMAND LOAD:
TOTAL CONNECTED AMPS:	0 A	0 A	TOTAL DEMAND AMPS:

PANELBOARD & CIRCUIT BREAKER OPTIONS ("O" COLUMN / MCB OPTIONS ABBREVIATIONS)		LOAD CLASSIFICATION	CONNECTED LOAD (VA)	DEMAND FACTOR	ESTIMATE DEMAND (VA)
C	CONTACTOR CONTROLLED				
G	GFCI PROTECTED				
P	HANDLE LOCKING DEVICE				
S	SHUNT TRIP				
X	80% RATED MAIN CIRCUIT BREAKER WITH LSI				
Y	100% RATED MAIN CIRCUIT BREAKER WITH LSI				
Z	100% RATED MAIN CIRCUIT BREAKER WITH LSIG				
	FEED THROUGH LUGS (FTL)				
	SUB FEED LUGS (SFL)				

NOTES:

BRANCH PANELBOARD SCHEDULE

DESIGNATION: 1PP-1 | **VOLTS:** 208Y/120 V | **MAINS RATING:** 125 A
LOCATION: 1ST FLR UNIT D | **PHASES:** 3 | **MAINS TYPE:** MLO
MOUNTING: SURFACE | **WIRES:** 4
SUPPLY FROM: 1LDP-1 | **AIC RATING:** 22K

O	CKT NO.	DESCRIPTION	CIRCUIT TYPE	TRIP	P	A		B		C		P	TRIP	CIRCUIT TYPE	DESCRIPTION	CKT NO.	O
--	1	SPARE		20 A	1	0.00	0.00					1	20 A		SPARE	2	--
--	3	SPARE		20 A	1			0.00	0.00			1	20 A		SPARE	4	--
--	5	SPARE		20 A	1					0.00	0.00	1	20 A		SPARE	6	--
--	7	SPARE		20 A	1	0.00	0.00					1	20 A		SPARE	8	--
--	9	SPARE		20 A	1			0.00	0.00			1	20 A		SPARE	10	--
--	11	SPARE		20 A	1					0.00	0.00	1	20 A		SPARE	12	--
--	13	SPARE		20 A	1	0.00	0.00					1	20 A		SPARE	14	--
--	15	SPARE		20 A	1			0.00	0.00			1	20 A		SPARE	16	--
--	17	SPARE		20 A	3					0.00	0.00	1	20 A		SPARE	18	--
--	19	--	--	--	--	0.00	0.00					1	20 A		SPARE	20	--
--	21	--	--	--	--			0.00	0.00			2	30 A		SPARE	22	--
--	23	SPARE		20 A	1					0.00	0.00	--	--	--	--	24	--

	A	B	C
TOTAL LOAD:	0.00 kVA	0.00 kVA	0.00 kVA
TOTAL AMPS:	0 A	0 A	0 A

TOTAL CONNECTED LOAD:	0.00 kVA	0.00 kVA	TOTAL DEMAND LOAD:
TOTAL CONNECTED AMPS:	0 A	0 A	TOTAL DEMAND AMPS:

PANELBOARD & CIRCUIT BREAKER OPTIONS ("O" COLUMN / MCB OPTIONS ABBREVIATIONS)		LOAD CLASSIFICATION	CONNECTED LOAD (VA)	DEMAND FACTOR	ESTIMATE DEMAND (VA)
C	CONTACTOR CONTROLLED				
G	GFCI PROTECTED				
P	HANDLE LOCKING DEVICE				
S	SHUNT TRIP				
X	80% RATED MAIN CIRCUIT BREAKER WITH LSI				
Y	100% RATED MAIN CIRCUIT BREAKER WITH LSI				
Z	100% RATED MAIN CIRCUIT BREAKER WITH LSIG				
	FEED THROUGH LUGS (FTL)				
	SUB FEED LUGS (SFL)				

NOTES:

POWER DISTRIBUTION PANELBOARD SCHEDULE

DESIGNATION: 1LDP-1 | **VOLTS:** 208Y/120 V | **MAINS RATING:** 800 A
LOCATION: 1ST FLR UNIT D | **PHASES:** 3 | **MAINS TYPE:** MLO
MOUNTING: SURFACE | **WIRES:** 4
SUPPLY FROM: C | **AIC RATING:** 22K

O	CKT NO.	DESCRIPTION	CIRCUIT TYPE	TRIP	P	A		B		C		P	TRIP	CIRCUIT TYPE	DESCRIPTION	CKT NO.	O
	1	1PP-1		60 A	3	0.00	0.00					3	60 A		3LP-1	2	
--	3	--	--	--	--			0.00	0.00			--	--	--	--	4	--
--	5	--	--	--	--					0.00	0.00	--	--	--	--	6	--
	7	2LP-1		100 A	3	0.00	0.00					3	100 A		SPARE	8	--
--	9	--	--	--	--			0.00	0.00			--	--	--	--	10	--
--	11	--	--	--	--					0.00	0.00	--	--	--	--	12	--
--	13	SPARE		100 A	3	0.00	0.00					3	125 A		SPARE	14	--
--	15	--	--	--	--			0.00	0.00			--	--	--	--	16	--
--	17	--	--	--	--					0.00	0.00	--	--	--	--	18	--
	19	PK		200 A	3	0.00	0.00					3	200 A		SPARE	20	--
--	21	--	--	--	--			0.00	0.00			--	--	--	--	22	--
--	23	--	--	--	--					0.00	0.00	--	--	--	--	24	--
	25	PQ		200 A	3	0.00	0.00					3	200 A		SPARE	26	--
--	27	--	--	--	--			0.00	0.00			--	--	--	--	28	--
--	29	--	--	--	--					0.00	0.00	--	--	--	--	30	--
	31	PT		200 A	3	0.00	0.00					3	200 A		SPARE	32	--
--	33	--	--	--	--			0.00	0.00			--	--	--	--	34	--
--	35	--	--	--	--					0.00	0.00	--	--	--	--	36	--
	37															38	
	39															40	
	41															42	

	A	B	C
TOTAL LOAD:	0.00 kVA	0.00 kVA	0.00 kVA
TOTAL AMPS:	0 A	0 A	0 A

TOTAL CONNECTED LOAD:	0.00 kVA	0.00 kVA	TOTAL DEMAND LOAD:
TOTAL CONNECTED AMPS:	0 A	0 A	TOTAL DEMAND AMPS:

PANELBOARD & CIRCUIT BREAKER OPTIONS ("O" COLUMN / MCB OPTIONS ABBREVIATIONS)		LOAD CLASSIFICATION	CONNECTED LOAD (VA)	DEMAND FACTOR	ESTIMATE DEMAND (VA)
C	CONTACTOR CONTROLLED				
G	GFCI PROTECTED				
P	HANDLE LOCKING DEVICE				
S	SHUNT TRIP				
X	80% RATED MAIN CIRCUIT BREAKER WITH LSI				
Y	100% RATED MAIN CIRCUIT BREAKER WITH LSI				
Z	100% RATED MAIN CIRCUIT BREAKER WITH LSIG				
	FEED THROUGH LUGS (FTL)				
	SUB FEED LUGS (SFL)				

NOTES:

BRANCH PANELBOARD SCHEDULE

DESIGNATION: 1LP-1 | **VOLTS:** 208Y/120 V | **MAINS RATING:** 225 A
LOCATION: 1ST FLR UNIT D | **PHASES:** 3 | **MAINS TYPE:** MLO
MOUNTING: FLUSH | **WIRES:** 4
SUPPLY FROM: 1LDP-1 | **AIC RATING:** 22K

O	CKT NO.	DESCRIPTION	CIRCUIT TYPE	TRIP	P	A		B		C		P	TRIP	CIRCUIT TYPE	DESCRIPTION	CKT NO.	O
--	1	SPARE		20 A	1	0.00	0.00					1	20 A		SPARE	2	--
--	3	SPARE		20 A	1			0.00	0.00			1	20 A		SPARE	4	--
--	5	SPARE		20 A	1					0.00	0.00	1	20 A		SPARE	6	--
--	7	SPARE		20 A	1	0.00	0.00					1	20 A		SPARE	8	--
--	9	SPARE		20 A	1			0.00	0.00			1	20 A		SPARE	10	--
--	11	SPARE		20 A	1					0.00	0.00	1	20 A		SPARE	12	--
--	13	SPARE		20 A	1	0.00	0.00					1	20 A		SPARE	14	--
--	15	SPARE		20 A	1			0.00	0.00			1	20 A		SPARE	16	--
--	17	SPARE		20 A	1					0.00	0.00	1	20 A		SPARE	18	--
--	19	SPARE		20 A	1	0.00	0.00					1	20 A		SPARE	20	--
--	21	SPARE		20 A	1			0.00	0.00			1	20 A		SPARE	22	--
--	23	SPARE		20 A	1					0.00	0.00	1	20 A		SPARE	24	--
--	25	SPARE		20 A	1	0.00	0.00					1	20 A		SPARE	26	--
--	27	SPARE		20 A	1			0.00	0.00			1	20 A		SPARE	28	--
--	29	SPARE		20 A	1					0.00	0.00	1	20 A		SPARE	30	--
--	31	SPARE		20 A	1	0.00	0.00					1	20 A		SPARE	32	--
--	33	SPARE		20 A	1			0.00	0.00			1	20 A		SPARE	34	--
--	35	SPARE		10 A	2					0.00	0.00	1	20 A		SPARE	36	--
--	37	--	--	--	--	0.00	0.00					1	20 A		SPARE	38	--
--	39	SPARE		20 A	1			0.00	0.00			1	20 A		SPARE	40	--
--	41	SPARE		20 A	1					0.00	0.00	1	20 A		SPARE	42	--

	A	B	C
TOTAL LOAD:	0.00 kVA	0.00 kVA	0.00 kVA
TOTAL AMPS:	0 A	0 A	0 A

TOTAL CONNECTED LOAD:	0.00 kVA	0.00 kVA	TOTAL DEMAND LOAD:
TOTAL CONNECTED AMPS:	0 A	0 A	TOTAL DEMAND AMPS:

PANELBOARD & CIRCUIT BREAKER OPTIONS ("O" COLUMN / MCB OPTIONS ABBREVIATIONS)		LOAD CLASSIFICATION	CONNECTED LOAD (VA)	DEMAND FACTOR	ESTIMATE DEMAND (VA)
C	CONTACTOR CONTROLLED				
G	GFCI PROTECTED				
P	HANDLE LOCKING DEVICE				
S	SHUNT TRIP				
X	80% RATED MAIN CIRCUIT BREAKER WITH LSI				
Y	100% RATED MAIN CIRCUIT BREAKER WITH LSI				
Z	100% RATED MAIN CIRCUIT BREAKER WITH LSIG				
	FEED THROUGH LUGS (FTL)				
	SUB FEED LUGS (SFL)				

NOTES:

BRANCH PANELBOARD SCHEDULE

DESIGNATION: BR | **VOLTS:** 208Y/120 V | **MAINS RATING:** 225 A
LOCATION: BOILER HOUSE | **PHASES:** 3 | **MAINS TYPE:** MLO
MOUNTING: SURFACE | **WIRES:** 4
SUPPLY FROM: C | **AIC RATING:** 22K

O	CKT NO.	DESCRIPTION	CIRCUIT TYPE	TRIP	P	A		B		C		P	TRIP	CIRCUIT TYPE	DESCRIPTION	CKT NO.	O
--	1	SPARE		20 A	1	0.00	0.00					1	20 A		SPARE	2	--
--	3	SPARE		20 A	1			0.00	0.00			1	20 A		SPARE	4	--
	5	BOILER AUTO SHUTOFF	CNT PNL	20 A	1					0.00	0.00	1	20 A		SPARE	6	--
	7	B-1	EQUIP.	25 A	3	0.12	0.12					3	25 A	EQUIP.	B-2	8	
--	9	--	--	--	--			0.12	0.12			--	--	--	--	10	--
--	11	--	--	--	--					0.12	0.12	--	--	--	--	12	--
	13	B-3	EQUIP.	25 A	3	0.12	0.12					3	25 A	EQUIP.	B-4	14	
--	15	--	--	--	--			0.12	0.12			--	--	--	--	16	--
--	17	--	--	--	--					0.12	0.12	--	--	--	--	18	--
	19	B-5	EQUIP.	25 A	3	0.12	0.12					3	25 A	EQUIP.	B-6	20	
--	21	--	--	--	--			0.12	0.12			--	--	--	--	22	--
--	23	--	--	--	--					0.12	0.12	--	--	--	--	24	--
	25	B-7	EQUIP.	25 A	3	0.12	0.12					3	25 A	EQUIP.	B-8	26	
--	27	--	--	--	--			0.12	0.12			--	--	--	--	28	--
--	29	--	--	--	--					0.12	0.12	--	--	--	--	30	--
--	31	SPARE		20 A	1	0.00	0.00					2	25 A		SPARE	32	--
--	33	SPARE		20 A	1			0.00	0.00			--	--	--	--	34	--
--	35	SPARE		20 A	1					0.00	0.00	3	20 A		SPARE	36	--
--	37	SPARE		20 A	1	0.00	0.00					--	--	--	--	38	--
--	39	SPARE		20 A	1			0.00	0.00			--	--	--	--	40	--
--	41	SPARE		20 A	1					0.00	0.00	1	20 A		SPARE	42	--
--	43	SPARE		20 A	1	0.00	0.00					1	20 A		SPARE	44	--
--	45	SPARE		20 A	1			0.00	0.00			1	20 A		SPARE	46	--
--	47	SPARE		20 A	1					0.00	0.00	1	20 A		SPARE	48	--
--	49	SPARE		20 A	1	0.00	0.00					1	20 A		SPARE	50	--
--	51	SPARE		20 A	1			0.00	0.00			1	20 A		SPARE	52	--
--	53	SPARE		20 A	1					0.00	0.00	1	20 A		SPARE	54	--
--	55	SPARE		20 A	1	0.00	0.00					1	20 A		SPARE	56	--
--	57	SPARE		20 A	1			0.00	0.00			1	20 A		SPARE	58	--
--	59	SPARE		20 A	1					0.00	0.00	1	20 A		SPARE	60	--
--	61	SPARE		20 A	1	0.00	0.00					1	20 A		SPARE	62	--
--	63	SPARE		20 A	1			0.00	0.00			1	20 A		SPARE	64	--
--	65	SPARE		20 A	1					0.00	0.00	1	20 A		SPARE	66	--
--	67	PANEL TSP	PANEL	70 A	3	0.00	0.00					1	20 A		SPARE	68	--
--	69	--	--	--	--			0.00	0.00			1	20 A		SPARE	70	--
--	71	--	--	--	--					0.00	0.00	1	20 A		SPARE	72	--

1

1

	A	B	C
TOTAL LOAD:	0.96 kVA	0.96 kVA	0.96 kVA
TOTAL AMPS:	8 A	8 A	8 A

TOTAL CONNECTED LOAD:	2.88 kVA	2.88 kVA	TOTAL DEMAND LOAD:
TOTAL CONNECTED AMPS:	8 A	8 A	TOTAL DEMAND AMPS:

PANELBOARD & CIRCUIT BREAKER OPTIONS ("O" COLUMN / MCB OPTIONS ABBREVIATIONS)		LOAD CLASSIFICATION	CONNECTED LOAD (VA)	DEMAND FACTOR	ESTIMATE DEMAND (VA)
		Mechanical - Motor	2882 VA	100.00%	2882 VA
C	CONTACTOR CONTROLLED	Power - Continuous	0 VA	0.00%	0 VA
G	GFCI PROTECTED				
P	HANDLE LOCKING DEVICE				
S	SHUNT TRIP				
X	80% RATED MAIN CIRCUIT BREAKER WITH LSI				
Y	100% RATED MAIN CIRCUIT BREAKER WITH LSI				
Z	100% RATED MAIN CIRCUIT BREAKER WITH LSIG				
	FEED THROUGH LUGS (FTL)				
	SUB FEED LUGS (SFL)				

NOTES:

BRANCH PANELBOARD SCHEDULE

DESIGNATION: BR-A | **VOLTS:** 208Y/120 V | **MAINS RATING:** 225 A
LOCATION: BOILER HOUSE | **PHASES:** 3 | **MAINS TYPE:** MLO
MOUNTING: SURFACE | **WIRES:** 4
SUPPLY FROM: C | **AIC RATING:** 22K

O	CKT NO.	DESCRIPTION	CIRCUIT TYPE	TRIP	P	A		B		C		P	TRIP	CIRCUIT TYPE	DESCRIPTION	CKT NO.	O
--	1	SPARE		20 A	1	0.00	0.00					1	20 A		SPARE	2	--
--	3	SPARE		20 A	1			0.00	0.00			1	20 A		SPARE	4	--
--	5	SPARE		20 A	1					0.00	0.00	1	20 A		SPARE	6	--
--	7	SPARE		20 A	1	0.00	0.00					1	20 A		SPARE	8	--
--	9	SPARE		20 A	1			0.00	0.00			1	20 A		SPARE	10	--
	11	BP-1	EQUIP.	20 A	3					0.94	0.94	3	20 A	EQUIP.	BP-2	12	
--	13	--	--	--	--	0.94	0.94					--	--	--	--	14	--
--	15	--	--	--	--			0.94	0.94			--	--	--	--	16	--
	17	BP-3	EQUIP.	20 A	3					0.94	0.94	3	20 A	EQUIP.	BP-4	18	
--	19	--	--	--	--	0.94	0.94					--	--	--	--	20	--
--	21	--	--	--	--			0.94	0.94			--	--	--	--	22	--
	23	BP-5	EQUIP.	20 A	3					0.94	0.94	3	20 A	EQUIP.	BP-6	24	
--	25	--	--	--	--	0.94	0.94					--	--	--	--	26	--
--	27	--	--	--	--			0.94	0.94			--	--	--	--	28	--
	29	BP-7	EQUIP.	20 A	3					0.94	0.94	3	20 A	EQUIP.	BP-8	30	
--	31	--	--	--	--	0.94	0.94					--	--	--	--	32	--
--	33	--	--	--	--			0.94	0.94			--	--	--	--	34	--
	35	HWP-1	EQUIP.	30 A	3					2.10	2.10	3	30 A	EQUIP.	HWP-2	36	
--	37	--	--	--	--	2.10	2.10					--	--	--	--	38	--
--	39	--	--	--	--			2.10	2.10			--	--	--	--	40	--
	41	HWP-3	EQUIP.	20 A	3					2.10	0.00	1	20 A		SPARE	42	--
--	43	--	--	--	--	2.10	0.00					1	20 A		SPARE	44	--
--	45	--	--	--	--			2.10	0.00			1	20 A		SPARE	46	--
--	47	SPARE		20 A	1					0.00	0.00	1	20 A		SPARE	48	--
--	49	SPARE		20 A	1	0.00	0.00					1	20 A		SPARE	50	--
--	51	SPARE		20 A	1			0.00	0.00			1	20 A		SPARE	52	--
--	53	SPARE		20 A	1					0.00	0.00	1	20 A		SPARE	54	--

	A	B	C
TOTAL LOAD:	13.79 kVA	13.79 kVA	13.79 kVA
TOTAL AMPS:	115 A	115 A	115 A

TOTAL CONNECTED LOAD:	41.38 kVA	41.38 kVA	TOTAL DEMAND LOAD:
TOTAL CONNECTED AMPS:	115 A	115 A	TOTAL DEMAND AMPS:

PANELBOARD & CIRCUIT BREAKER OPTIONS ("O" COLUMN / MCB OPTIONS ABBREVIATIONS)		LOAD CLASSIFICATION	CONNECTED LOAD (VA)	DEMAND FACTOR	ESTIMATE DEMAND (VA)
		Mechanical - Motor	41380 VA	100.00%	41380 VA
C	CONTACTOR CONTROLLED	Power - Continuous	0 VA	0.00%	0 VA
G	GFCI PROTECTED				
P	HANDLE LOCKING DEVICE				
S	SHUNT TRIP				
X	80% RATED MAIN CIRCUIT BREAKER WITH LSI				
Y	100% RATED MAIN CIRCUIT BREAKER WITH LSI				
Z	100% RATED MAIN CIRCUIT BREAKER WITH LSIG				
	FEED THROUGH LUGS (FTL)				
	SUB FEED LUGS (SFL)				

NOTES:

LANCER ASSOCIATES ARCHITECTURE

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DAVID L. JONES III
NO. PE12100175
STATE OF INDIANA

David L. Jones III

REVISIONS:

#	Date	Desc.
1	06.14.2024	ADDENDUM #1

100% CONSTRUCTION DOCUMENT

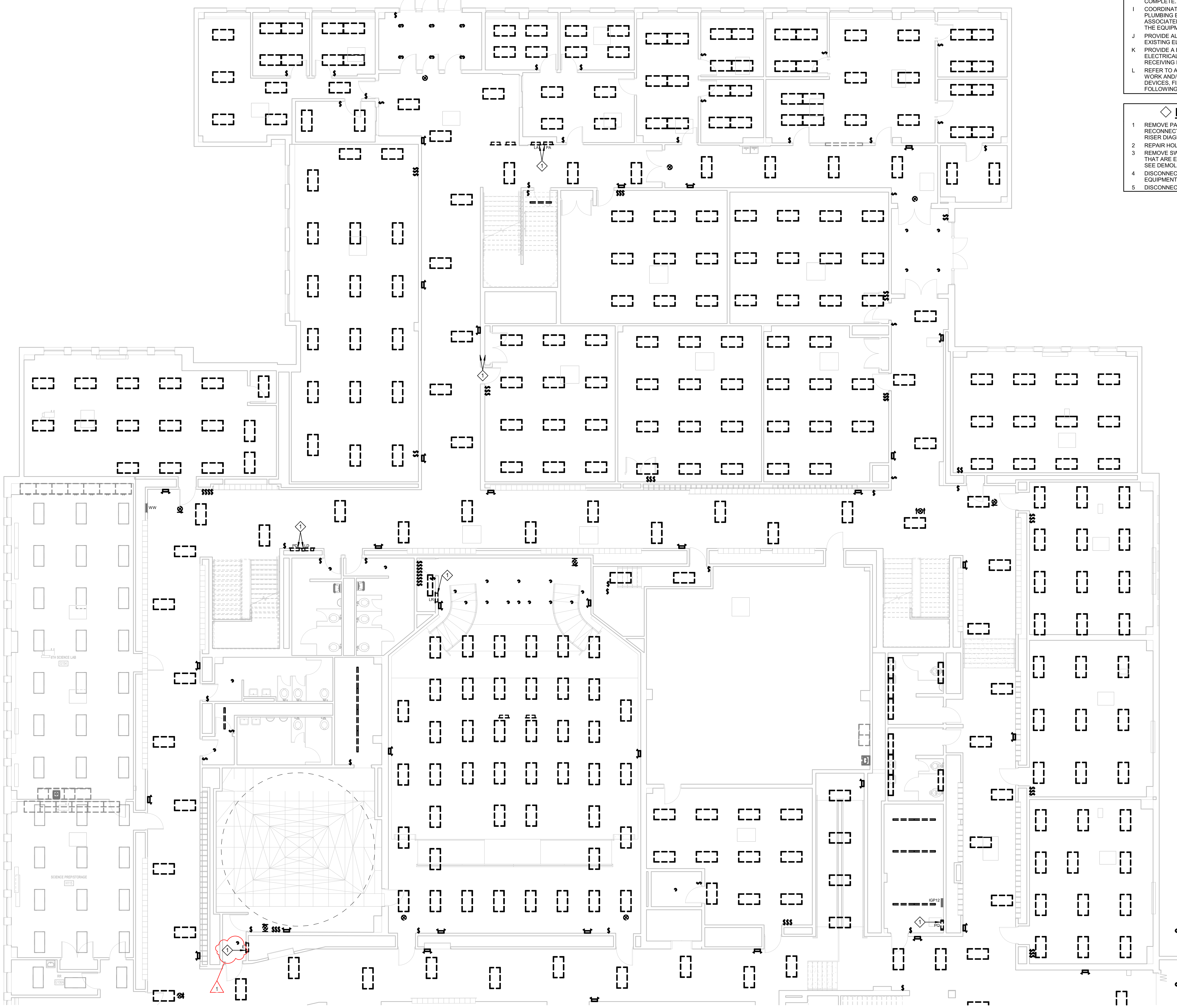
PROJECT: #23126
DATE: 05/24/2024
DRAWN BY: DLJ/MGM

PANELBOARD SCHEDULES - UNIT D

E616

PLOT DATE/TIME:6/13/2024 8:38:54 AM

MAINTAIN ALL LIGHTING CIRCUITS FOR RECONNECTION TO NEW LIGHT FIXTURES. MAINTAIN BACK BOXES FOR SWITCHES AND WALL MOUNTED FIXTURES FOR REUSE. THIS NOTE IS TYPICAL FOR ALL DEMOLITION SHEETS.



1 **DEMOLITION FIRST FLOOR ELECTRICAL PLAN - UNIT A**
1/8" = 1'-0"

GENERAL DEMOLITION NOTES

- A REFER TO ELECTRICAL SYMBOLS AND ABBREVIATIONS SHEET E001 FOR ADDITIONAL INFORMATION.
- B MAINTAIN BACK BOXES FOR ALL FIXTURES AND SWITCHES TO BE DEMOLISHED UNLESS NOTED OTHERWISE.
- C THIS DRAWING REPRESENTS INFORMATION OBTAINED FROM ORIGINAL CONTRACT DRAWINGS AND FIELD SURVEY. VERIFY BY ON-SITE OBSERVATION THE EXTENT OF WORK PRIOR TO SUBMISSION OF BID.
- D CONTRACT DOCUMENTS CONSIST OF BOTH PROJECT MANUAL AND DRAWINGS AND ARE MEANT TO BE COMPLEMENTARY. ANYTHING APPEARING ON EITHER MUST BE EXECUTED THE SAME AS IF SHOWN ON BOTH.
- E THOROUGHLY EXAMINE THE WORK OF OTHER CONTRACTORS AND PROPERLY INSTALL ALL WORK REQUIRED FOR THE PROJECT.
- F THE OWNER HOLDS RIGHT OF FIRST REFUSAL FOR ALL DEMOLISHED ELECTRICAL EQUIPMENT.
- G ALL ELECTRICAL ITEMS SHOWN WITH LIGHT LINEWORK ARE EXISTING TO REMAIN.
- H REMOVE ALL ELECTRICAL ITEMS SHOWN WITH BOLD/DASHED LINEWORK COMPLETE.
- I COORDINATE AND DISCONNECT ALL ARCHITECTURAL, MECHANICAL, AND PLUMBING EQUIPMENT AS NOTED FOR REMOVAL BY OTHERS. REMOVE ALL ASSOCIATED ELECTRICAL EQUIPMENT, RACEWAYS, CONDUCTORS, ETC. SERVING THE EQUIPMENT.
- J PROVIDE ALL CUTTING AND PATCHING AS REQUIRED FOR THE REMOVAL OF EXISTING ELECTRICAL EQUIPMENT. REFER TO SPECIFICATIONS.
- K PROVIDE A BLANK COVERPLATE FOR ALL EXISTING WALL OPENINGS WHERE ELECTRICAL EQUIPMENT HAS BEEN REMOVED AND NOT REPLACED. IN AREAS RECEIVING NEW WALL TREATMENTS, PATCH THE EXISTING OPENING.
- L REFER TO A, M, AND P-SERIES DRAWINGS FOR AREAS WITH ABOVE CEILING WORK AND/OR CEILING REMOVAL. TEMPORARILY SUPPORT ALL ELECTRICAL DEVICES, FIXTURES, ETC. AS REQUIRED. RE-INSTALL ELECTRICAL ITEMS FOLLOWING THE COMPLETION OF WORK IN THE NEW OR EXISTING CEILINGS.

◇ DEMOLITION PLAN NOTES

1. REMOVE PANELBOARD INDICATED. MAINTAIN EXISTING BRANCH CIRCUITS FOR RECONNECTION TO NEW PANELBOARD AT SAME LOCATION. SEE DEMOLITION RISER DIAGRAM FOR ADDITIONAL INFORMATION.
2. REPAIR HOLES IN DRYWALL WHERE FIXTURE WAS SECURED TO CEILING.
3. REMOVE SWITCHBOARD/DISTRIBUTION BOARD INDICATED. MAINTAIN FEEDERS THAT ARE EXISTING TO REMAIN FOR RECONNECTION TO NEW SWITCHBOARD. SEE DEMOLITION RISER DIAGRAM FOR ADDITIONAL INFORMATION.
4. DISCONNECT AND REMOVE WIRE, CONDUIT AND ASSOCIATED ELECTRICAL EQUIPMENT BACK TO SOURCE FOR EQUIPMENT INDICATED.
5. DISCONNECT AND MAINTAIN CIRCUIT FOR RECONNECTION TO NEW EQUIPMENT.

LANCER ASSOCIATES ARCHITECTURE
145 N. East St.
INDIANAPOLIS, IN 462024

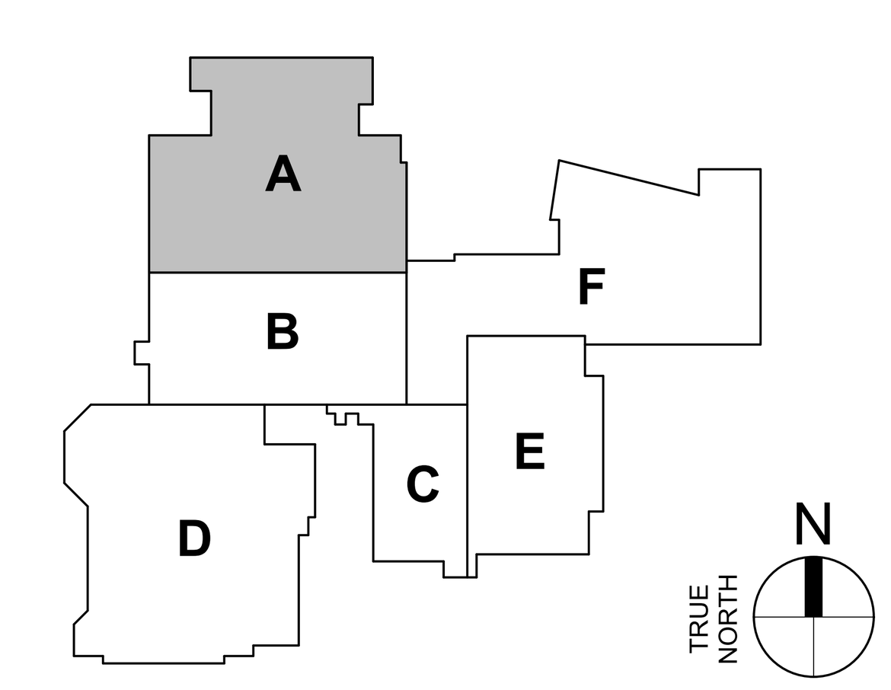
IPS BROAD RIPPLE MS 717
MIDDLE SCHOOL RENOVATION
1115 BROAD RIPPLE AVE.
INDIANAPOLIS, IN 46220

REVISIONS:

#	Date	Desc.
1.	06.14.2024	ADDENDUM #1

100% CONSTRUCTION DOCUMENT

PROJECT: #23126
DATE: 05/24/2024
DRAWN BY: DLJ/MGM



DEMOLITION FIRST FLOOR ELECTRICAL PLAN - UNIT A

ED1A

◇ DEMOLITION PLAN NOTES

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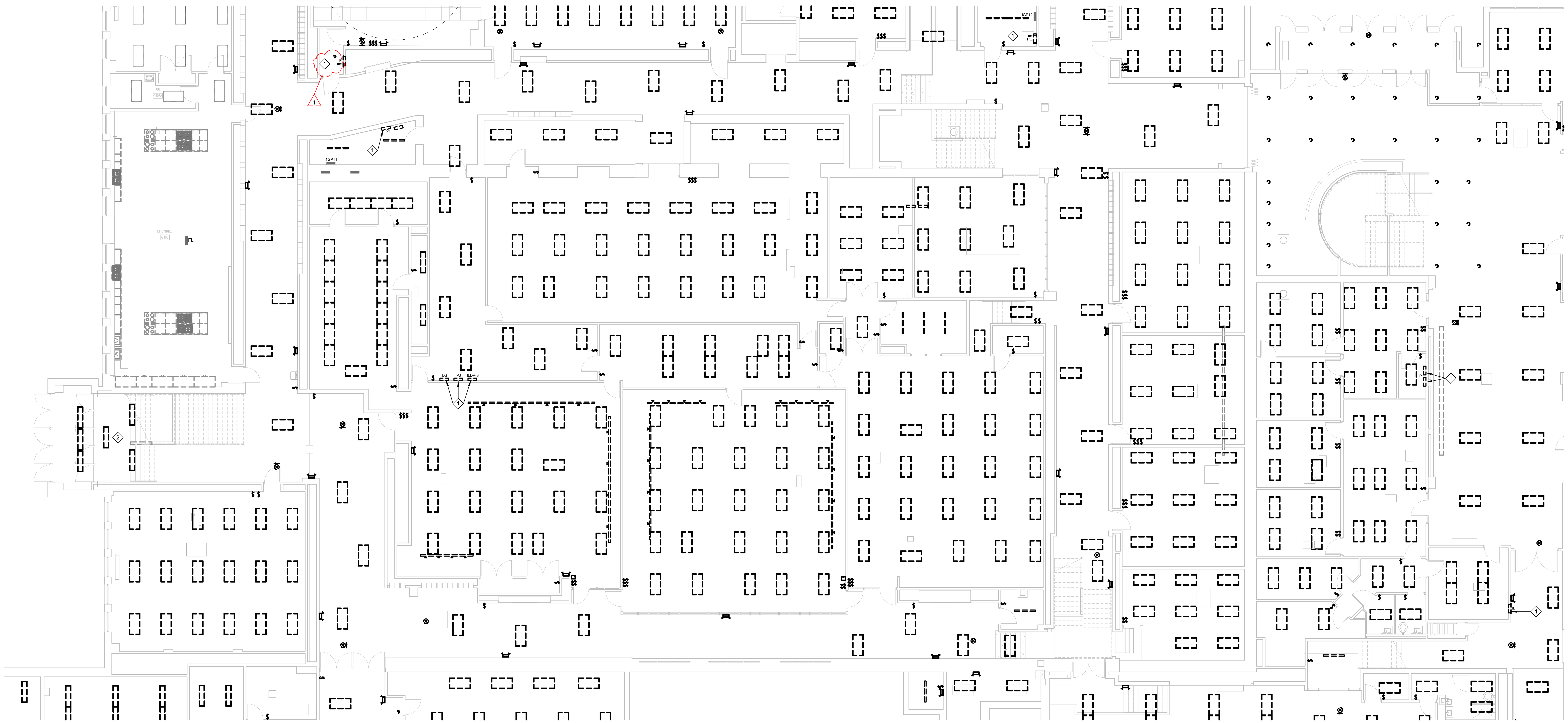
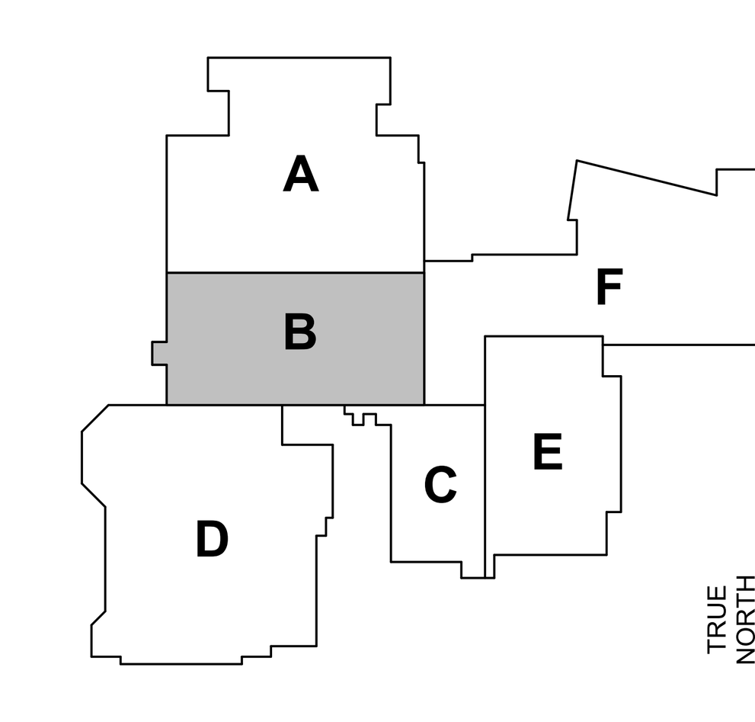


1 DEMOLITION FIRST FLOOR ELECTRICAL PLAN - UNIT B
1/8" = 1'-0"



TRUE NORTH N

IPS BROAD RIPPLE MS 717
MIDDLE SCHOOL RENOVATION
1115 BROAD RIPPLE AVE.
INDIANAPOLIS, IN 46220

DAVID L. JONES III REGISTERED NO. PE12100175 STATE OF INDIANA PROFESSIONAL ENGINEER

REVISIONS:

#	Date	Desc.
1	06.14.2024	ADDENDUM #1

100% CONSTRUCTION DOCUMENT

PROJECT:	#23126
DATE:	05/24/2024
DRAWN BY:	DLJ/MGM

DEMOLITION FIRST FLOOR ELECTRICAL PLAN - UNIT B

ED1B

GENERAL DEMOLITION NOTES

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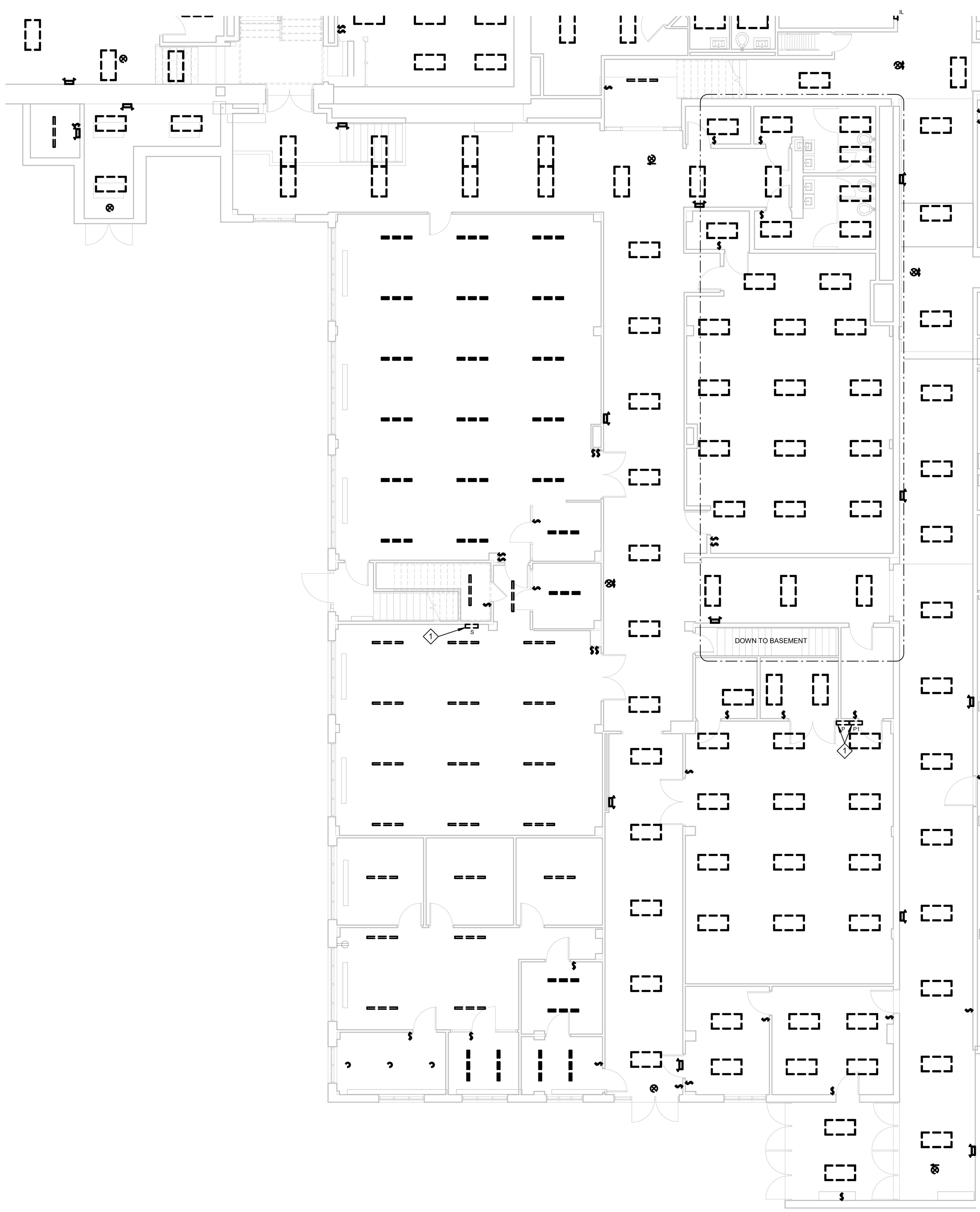
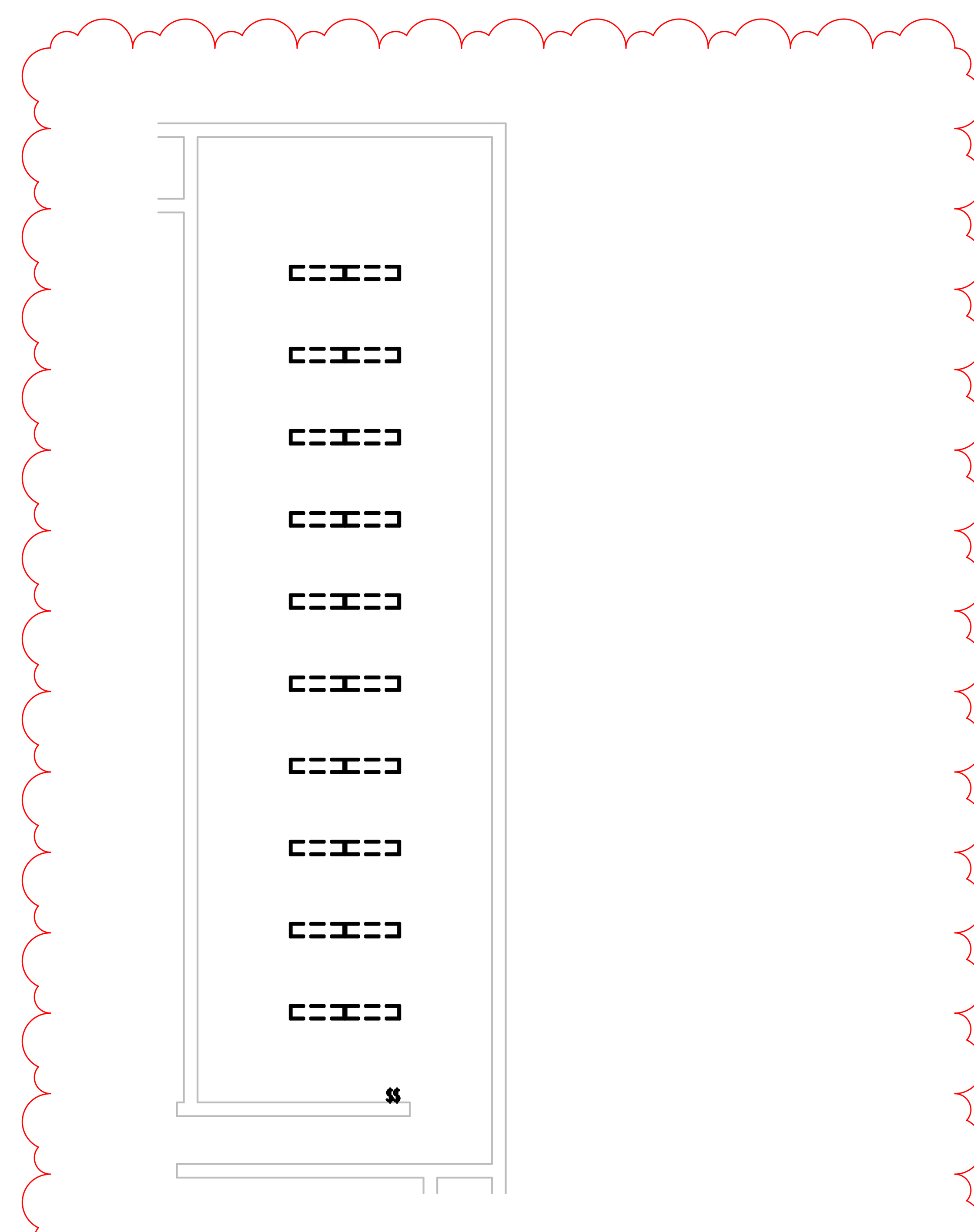
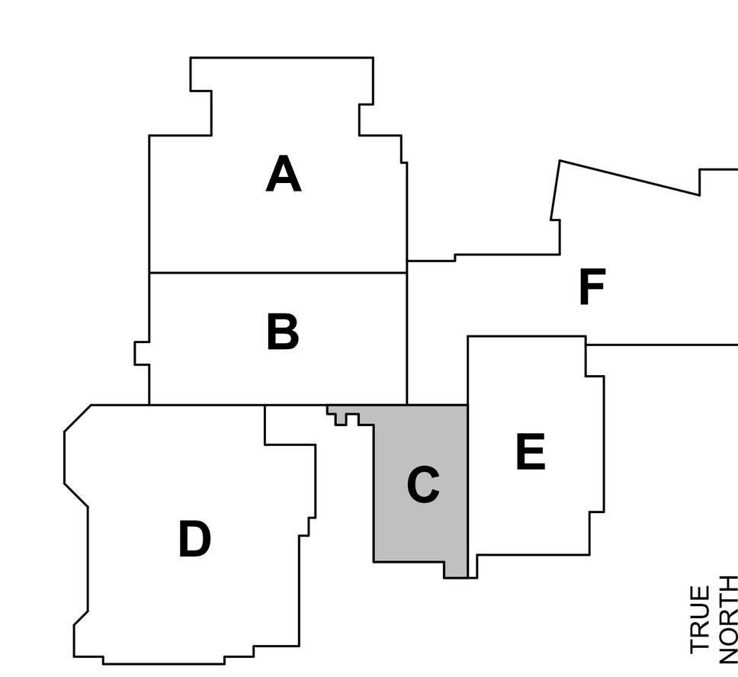
5 DISCONNECT AND MAINTAIN CIRCUIT FOR RECONNECTION TO NEW EQUIPMENT.



2 DEMOLITION FIRST FLOOR ELECTRICAL PLAN - UNIT C
1/8" = 1'-0"



1 DEMOLITION BASEMENT ELECTRICAL PLAN - UNIT C
1/8" = 1'-0"



TRUE NORTH
N

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145 N. East St.
INDIANAPOLIS, IN 462024

IPS BROAD RIPPLE MS 717
MIDDLE SCHOOL RENOVATION
1115 BROAD RIPPLE AVE.
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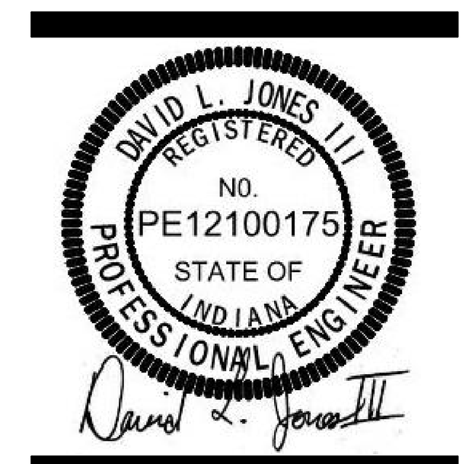

REVISIONS:

#	Date	Desc.
1	06.14.2024	ADDENDUM #1

100% CONSTRUCTION DOCUMENT

PROJECT:	#23126
DATE:	05/24/2024
DRAWN BY:	DLJ/MGM

DEMOLITION FIRST FLOOR ELECTRICAL PLAN - UNIT C

ED1C

GENERAL DEMOLITION NOTES

A. REFER TO ELECTRICAL SYMBOLS AND ABBREVIATIONS SHEET E001 FOR ADDITIONAL INFORMATION.
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1 **DEMOLITION FIRST FLOOR ELECTRICAL PLAN - UNIT D**
1/8" = 1'-0"

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INDIANAPOLIS, IN 46220

DAVID L. JONES III
REGISTERED
NO
PE12100175
STATE OF
INDIANA
PROFESSIONAL ENGINEER

REVISIONS:

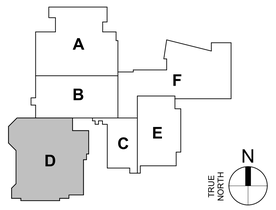
#	Date	Desc.
1	06.14.2024	/ADDENDUM #1

100% CONSTRUCTION DOCUMENT

PROJECT: #23126
DATE: 05/24/2024
DRAWN BY: DLJ/MGM

DEMOLITION FIRST FLOOR ELECTRICAL PLAN - UNIT D

ED1D



PLOT DATE/TIME: 6/13/2024 8:19:25 AM

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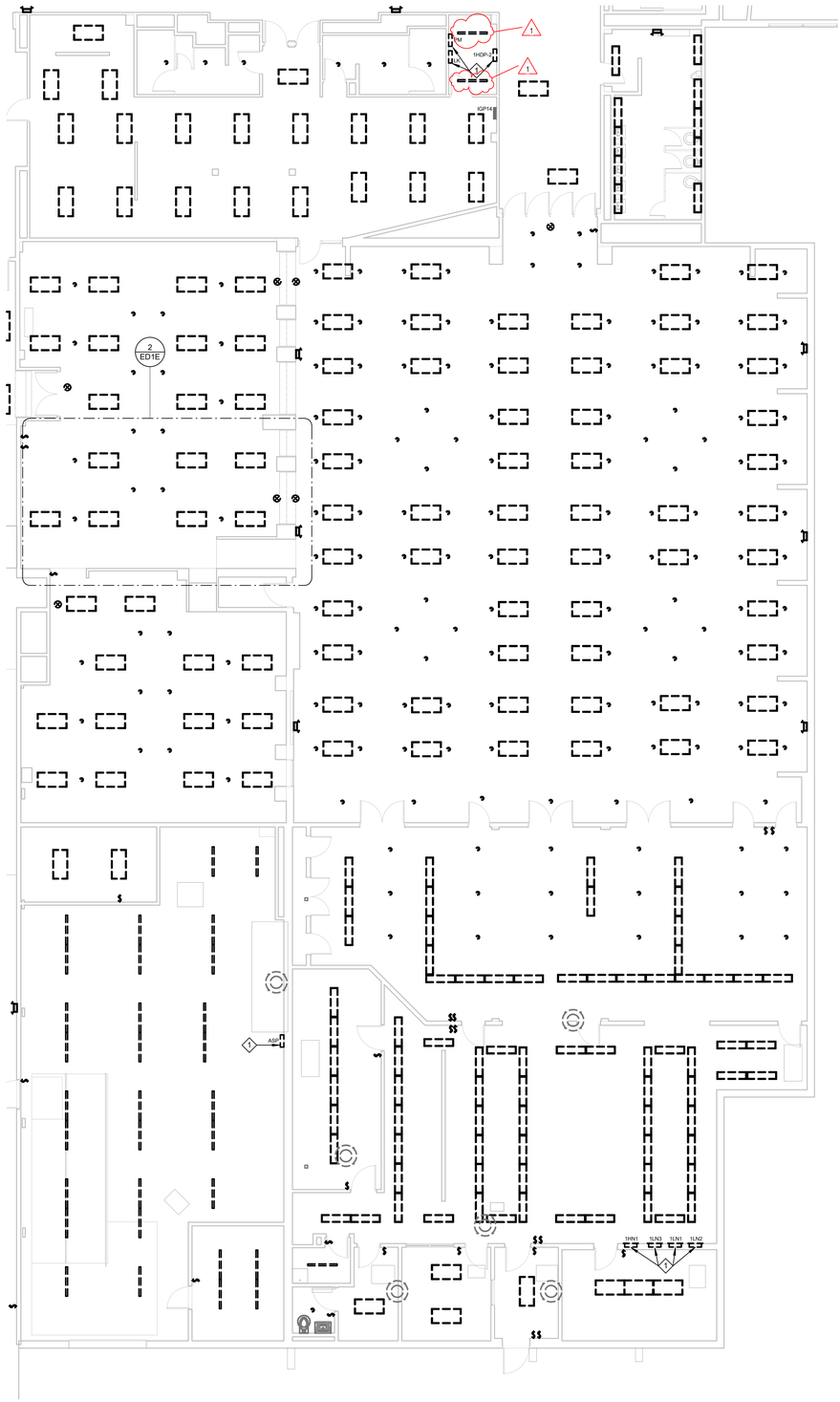
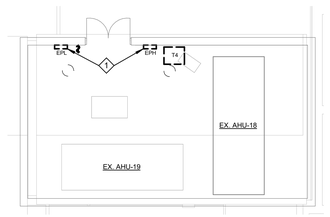
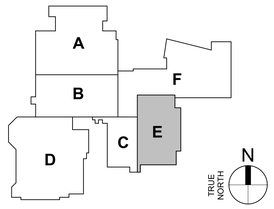


1 DEMOLITION FIRST FLOOR ELECTRICAL PLAN - UNIT E
1/8" = 1'-0"



2 DEMOLITION PENTHOUSE - UNIT E
1/8" = 1'-0"



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DAVID L. JONES II REGISTERED NO. PE12100175 STATE OF INDIANA PROFESSIONAL ENGINEER

REVISIONS:

#	Date	Desc.
1	06.14.2024	ADDENDUM #1

100% CONSTRUCTION DOCUMENT

PROJECT: #23126
DATE: 05/24/2024
DRAWN BY: DLJ/MGM

DEMOLITION FIRST FLOOR AND PENTHOUSE ELECTRICAL PLAN - UNIT E

ED1E

PLOT DATE/TIME:5/1/2024 8:17:31 AM

◇ DEMOLITION PLAN NOTES

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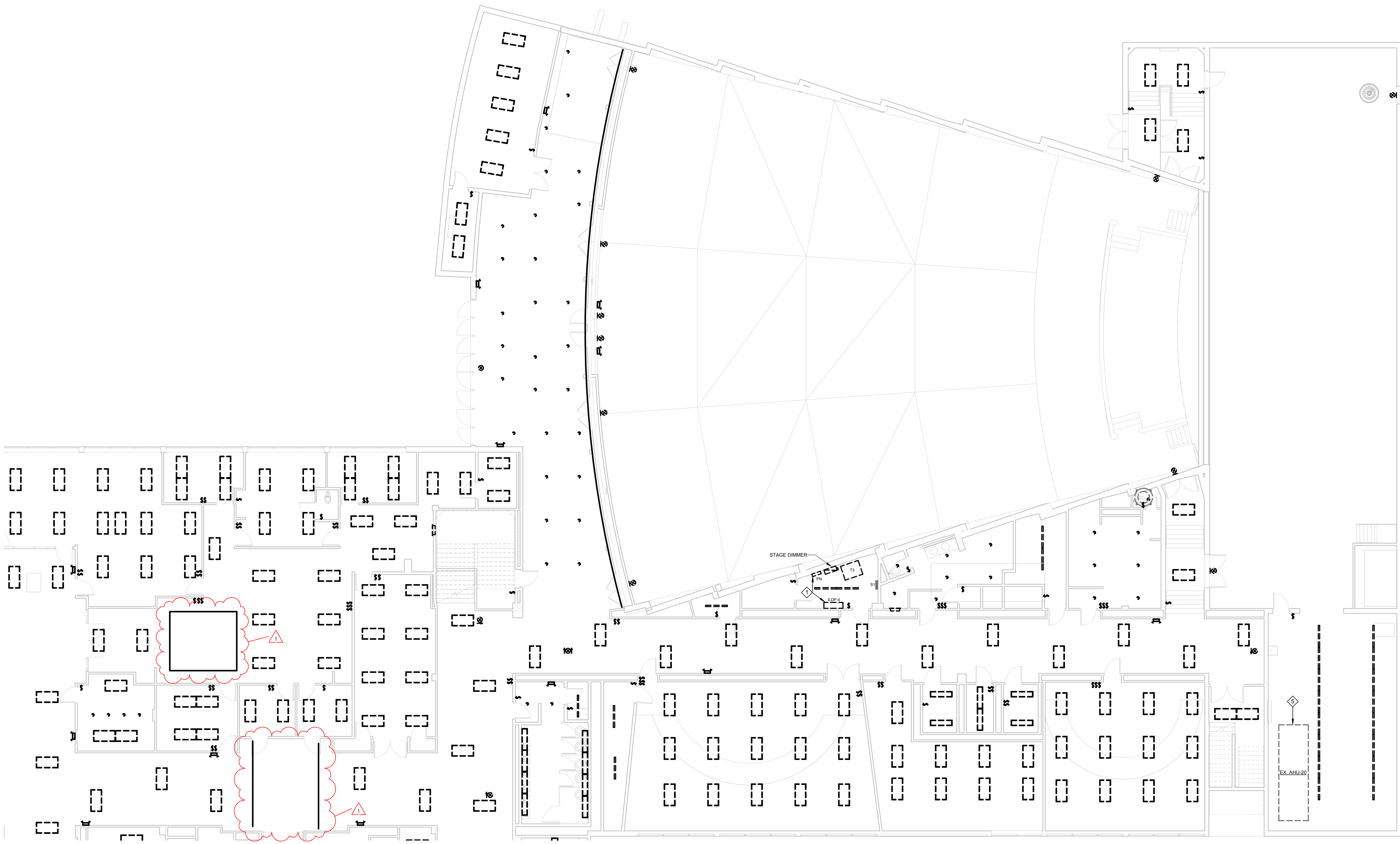
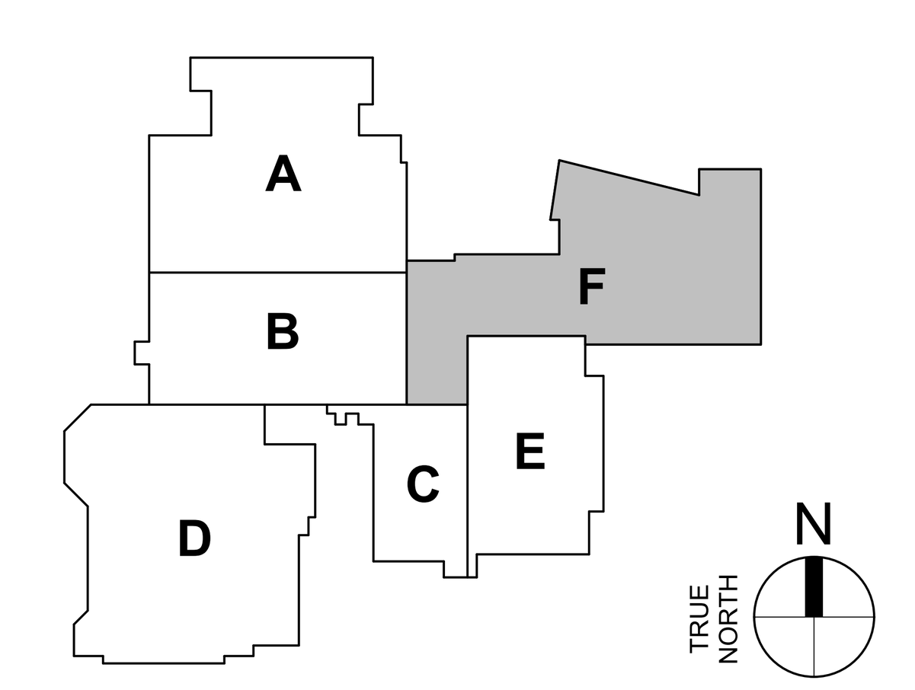


1 DEMOLITION FIRST FLOOR ELECTRICAL PLAN - UNIT F
1/8" = 1'-0"



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DAVID L. JONES III REGISTERED NO. PE12100175 STATE OF INDIANA PROFESSIONAL ENGINEER

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100% CONSTRUCTION DOCUMENT

PROJECT: #23126
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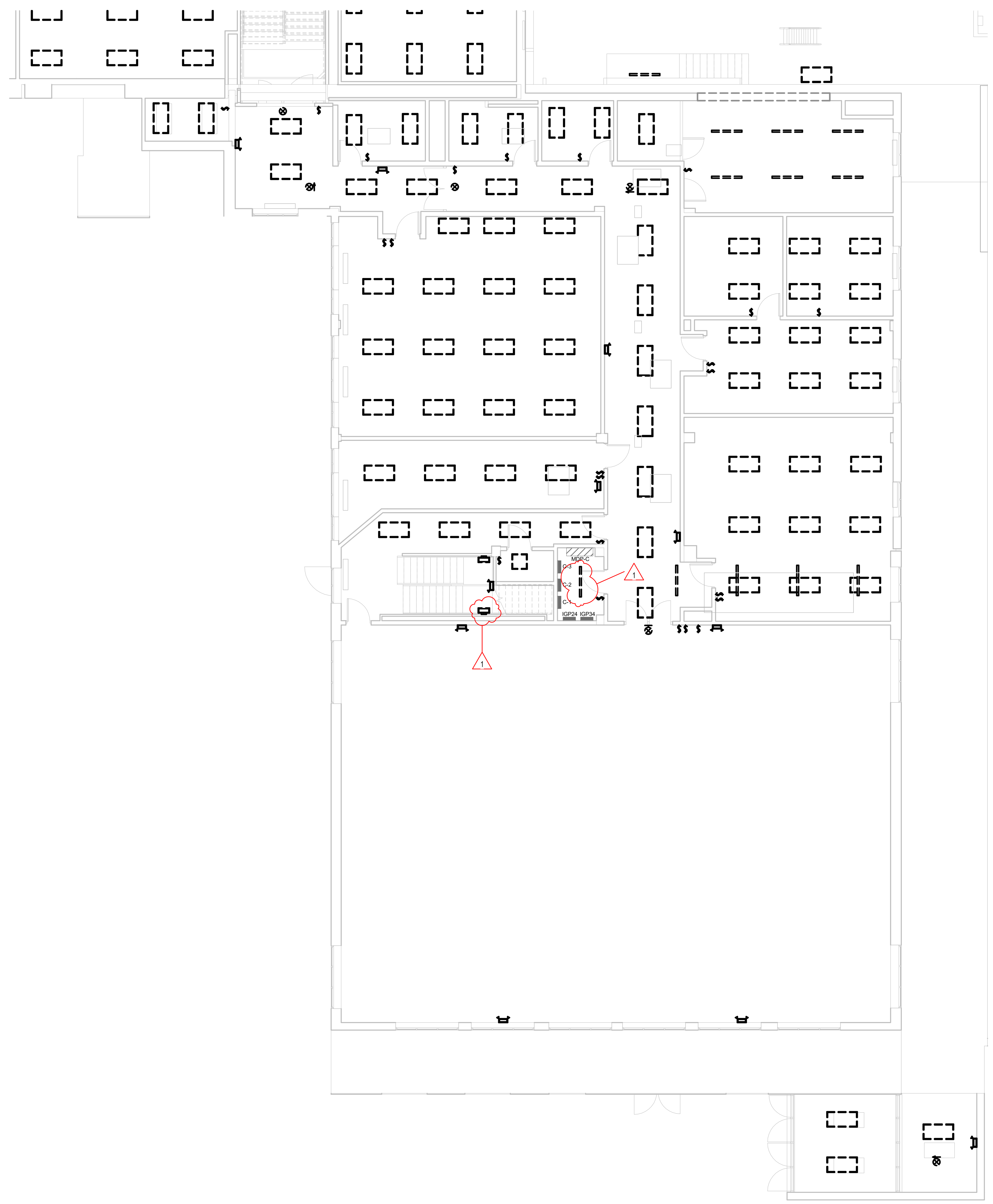
DRAWN BY: DLJ/MGM

DEMOLITION FIRST FLOOR ELECTRICAL PLAN - UNIT F

ED1F



1 DEMOLITION SECOND FLOOR ELECTRICAL PLAN - UNIT C

1/8" = 1'-0"

GENERAL DEMOLITION NOTES

A REFER TO ELECTRICAL SYMBOLS AND ABBREVIATIONS SHEET E001 FOR ADDITIONAL INFORMATION.

B MAINTAIN BACK BOXES FOR ALL FIXTURES AND SWITCHES TO BE DEMOLISHED UNLESS NOTED OTHERWISE.

C THIS DRAWING REPRESENTS INFORMATION OBTAINED FROM ORIGINAL CONTRACT DRAWINGS AND FIELD SURVEY. VERIFY BY ON-SITE OBSERVATION THE EXTENT OF WORK PRIOR TO SUBMISSION OF BID.

D CONTRACT DOCUMENTS CONSIST OF BOTH PROJECT MANUAL AND DRAWINGS AND ARE MEANT TO BE COMPLEMENTARY. ANYTHING APPEARING ON EITHER MUST BE EXECUTED THE SAME AS IF SHOWN ON BOTH.

E THOROUGHLY EXAMINE THE WORK OF OTHER CONTRACTORS AND PROPERLY INSTALL ALL WORK REQUIRED FOR THE PROJECT.

F THE OWNER HOLDS RIGHT OF FIRST REFUSAL FOR ALL DEMOLISHED ELECTRICAL EQUIPMENT.

G ALL ELECTRICAL ITEMS SHOWN WITH LIGHT LINEWORK ARE EXISTING TO REMAIN.

H REMOVE ALL ELECTRICAL ITEMS SHOWN WITH BOLD/DASHED LINEWORK COMPLETE.

I COORDINATE AND DISCONNECT ALL ARCHITECTURAL, MECHANICAL, AND PLUMBING EQUIPMENT AS NOTED FOR REMOVAL BY OTHERS. REMOVE ALL ASSOCIATED ELECTRICAL EQUIPMENT, RACEWAYS, CONDUCTORS, ETC. SERVING THE EQUIPMENT.

J PROVIDE ALL CUTTING AND PATCHING AS REQUIRED FOR THE REMOVAL OF EXISTING ELECTRICAL EQUIPMENT. REFER TO SPECIFICATIONS.

K PROVIDE A BLANK COVERPLATE FOR ALL EXISTING WALL OPENINGS WHERE ELECTRICAL EQUIPMENT HAS BEEN REMOVED AND NOT REPLACED. IN AREAS RECEIVING NEW WALL TREATMENTS, PATCH THE EXISTING OPENING.

L REFER TO A, M, AND P-SERIES DRAWINGS FOR AREAS WITH ABOVE CEILING WORK AND/OR CEILING REMOVAL. TEMPORARILY SUPPORT ALL ELECTRICAL DEVICES, FIXTURES, ETC. AS REQUIRED. RE-INSTALL ELECTRICAL ITEMS FOLLOWING THE COMPLETION OF WORK IN THE NEW OR EXISTING CEILINGS.

◇ DEMOLITION PLAN NOTES

1 REMOVE PANELBOARD INDICATED. MAINTAIN EXISTING BRANCH CIRCUITS FOR RECONNECTION TO NEW PANELBOARD AT SAME LOCATION. SEE DEMOLITION RISER DIAGRAM FOR ADDITIONAL INFORMATION.

2 REPAIR HOLES IN DRYWALL WHERE FIXTURE WAS SECURED TO CEILING.

3 REMOVE SWITCHBOARD/DISTRIBUTION BOARD INDICATED. MAINTAIN FEEDERS THAT ARE EXISTING TO REMAIN FOR RECONNECTION TO NEW SWITCHBOARD. SEE DEMOLITION RISER DIAGRAM FOR ADDITIONAL INFORMATION.

4 DISCONNECT AND REMOVE WIRE, CONDUIT AND ASSOCIATED ELECTRICAL EQUIPMENT BACK TO SOURCE FOR EQUIPMENT INDICATED.

5 DISCONNECT AND MAINTAIN CIRCUIT FOR RECONNECTION TO NEW EQUIPMENT.

LANCER ASSOCIATES ARCHITECTURE
145 N. East St.
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IPS BROAD RIPPLE MS 717
MIDDLE SCHOOL RENOVATION
1115 BROAD RIPPLE AVE.
INDIANAPOLIS, IN 46220

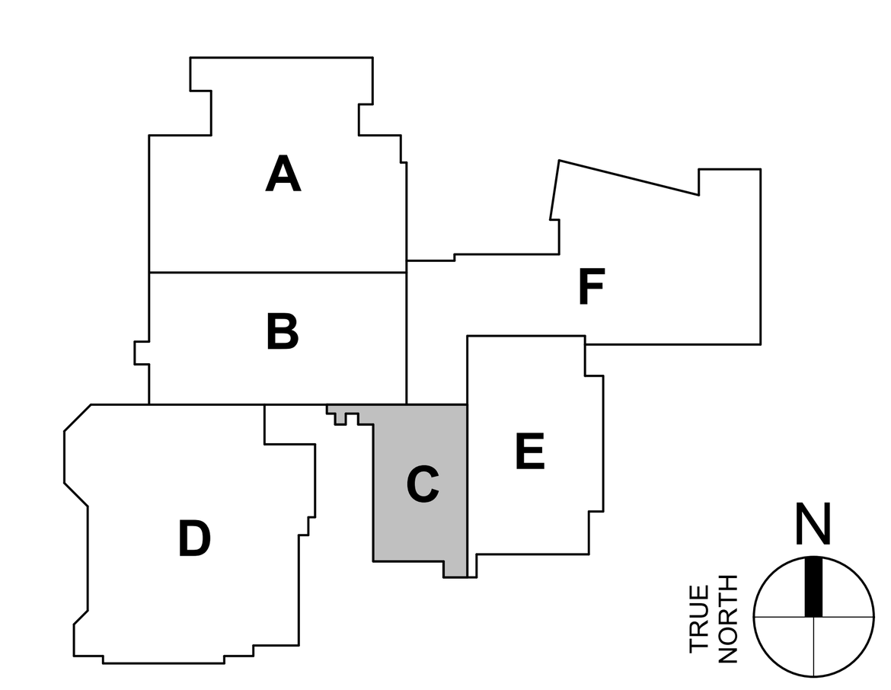
DAVID L. JONES III REGISTERED No. PE12100175 STATE OF INDIANA PROFESSIONAL ENGINEER

REVISIONS:

#	Date	Desc.
1	06.14.2024	ADDENDUM #1

100% CONSTRUCTION DOCUMENT

PROJECT:	#23126
DATE:	05/24/2024
DRAWN BY:	DLJ/MGM



DEMOLITION SECOND FLOOR ELECTRICAL PLAN - UNIT C

ED2C

◇ DEMOLITION PLAN NOTES

1. REMOVE PANELBOARD INDICATED. MAINTAIN EXISTING BRANCH CIRCUITS FOR RECONNECTION TO NEW PANELBOARD AT SAME LOCATION. SEE DEMOLITION RISER DIAGRAM FOR ADDITIONAL INFORMATION.
2. REPAIR HOLES IN DRYWALL WHERE FIXTURE WAS SECURED TO CEILING.
3. REMOVE SWITCHBOARD/DISTRIBUTION BOARD INDICATED. MAINTAIN FEEDERS THAT ARE EXISTING TO REMAIN FOR RECONNECTION TO NEW SWITCHBOARD. SEE DEMOLITION RISER DIAGRAM FOR ADDITIONAL INFORMATION.
4. DISCONNECT AND REMOVE WIRE, CONDUIT AND ASSOCIATED ELECTRICAL EQUIPMENT BACK TO SOURCE FOR EQUIPMENT INDICATED.
5. DISCONNECT AND MAINTAIN CIRCUIT FOR RECONNECTION TO NEW EQUIPMENT.

GENERAL DEMOLITION NOTES

A. REFER TO ELECTRICAL SYMBOLS AND ABBREVIATIONS SHEET E001 FOR ADDITIONAL INFORMATION.
B. MAINTAIN BACK BOXES FOR ALL FIXTURES AND SWITCHES TO BE DEMOLISHED UNLESS NOTED OTHERWISE.
C. THIS DRAWING REPRESENTS INFORMATION OBTAINED FROM ORIGINAL CONTRACT DRAWINGS AND FIELD SURVEY. VERIFY BY ON-SITE OBSERVATION THE EXTENT OF WORK PRIOR TO SUBMISSION OF BID.
D. CONTRACT DOCUMENTS CONSIST OF BOTH PROJECT MANUAL AND DRAWINGS AND ARE MEANT TO BE COMPLEMENTARY. ANYTHING APPEARING ON EITHER MUST BE EXECUTED THE SAME AS IF SHOWN ON BOTH.
E. THOROUGHLY EXAMINE THE WORK OF OTHER CONTRACTORS AND PROPERLY INSTALL ALL WORK REQUIRED FOR THE PROJECT.
F. THE OWNER HOLDS RIGHT OF FIRST REFUSAL FOR ALL DEMOLISHED ELECTRICAL EQUIPMENT.
G. ALL ELECTRICAL ITEMS SHOWN WITH LIGHT LINEWORK ARE EXISTING TO REMAIN.
H. REMOVE ALL ELECTRICAL ITEMS SHOWN WITH BOLD/DASHED LINEWORK COMPLETE.
I. COORDINATE AND DISCONNECT ALL ARCHITECTURAL, MECHANICAL, AND PLUMBING EQUIPMENT AS NOTED FOR REMOVAL BY OTHERS. REMOVE ALL ASSOCIATED ELECTRICAL EQUIPMENT, RACEWAYS, CONDUCTORS, ETC. SERVING THE EQUIPMENT.
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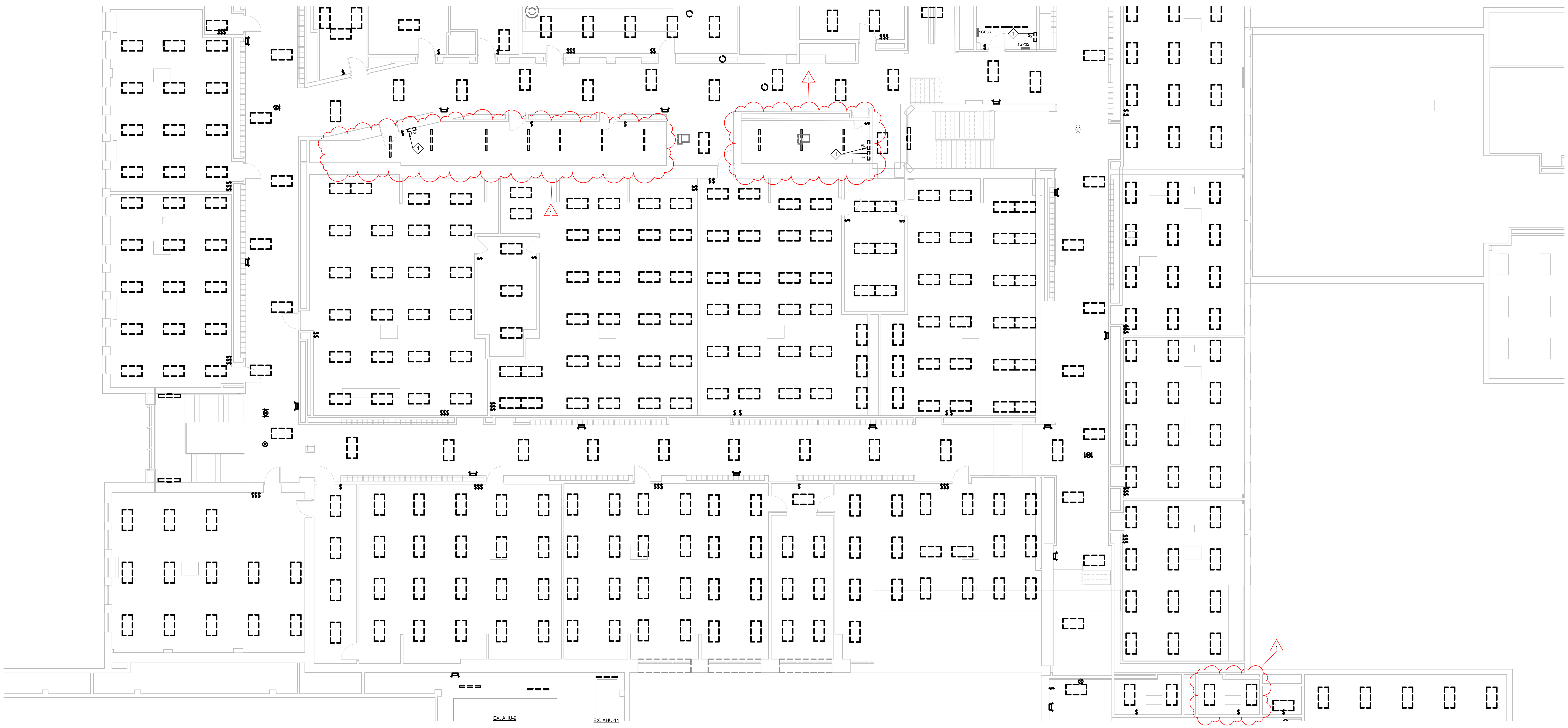
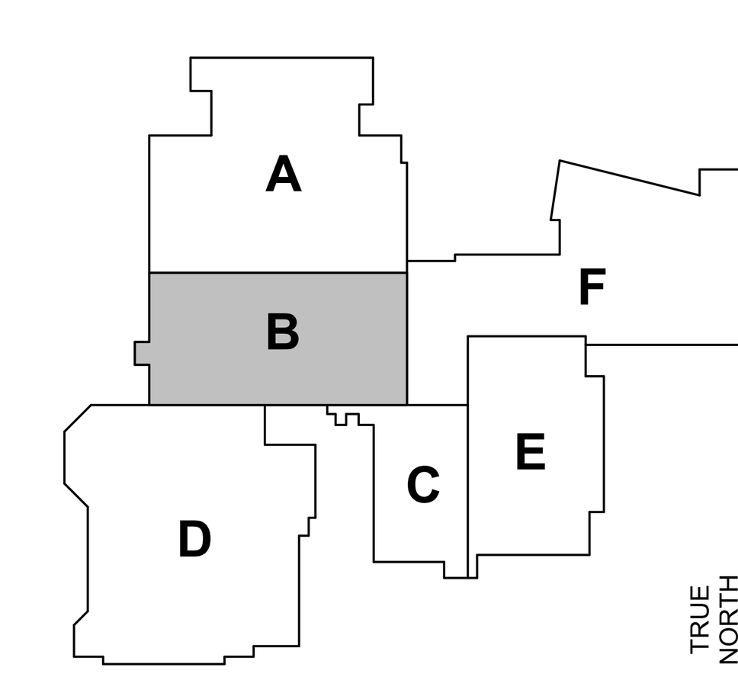


1 DEMOLITION THIRD FLOOR ELECTRICAL PLAN - UNIT B
1/8" = 1'-0"



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DEMOLITION THIRD FLOOR ELECTRICAL PLAN - UNIT B

ED3B

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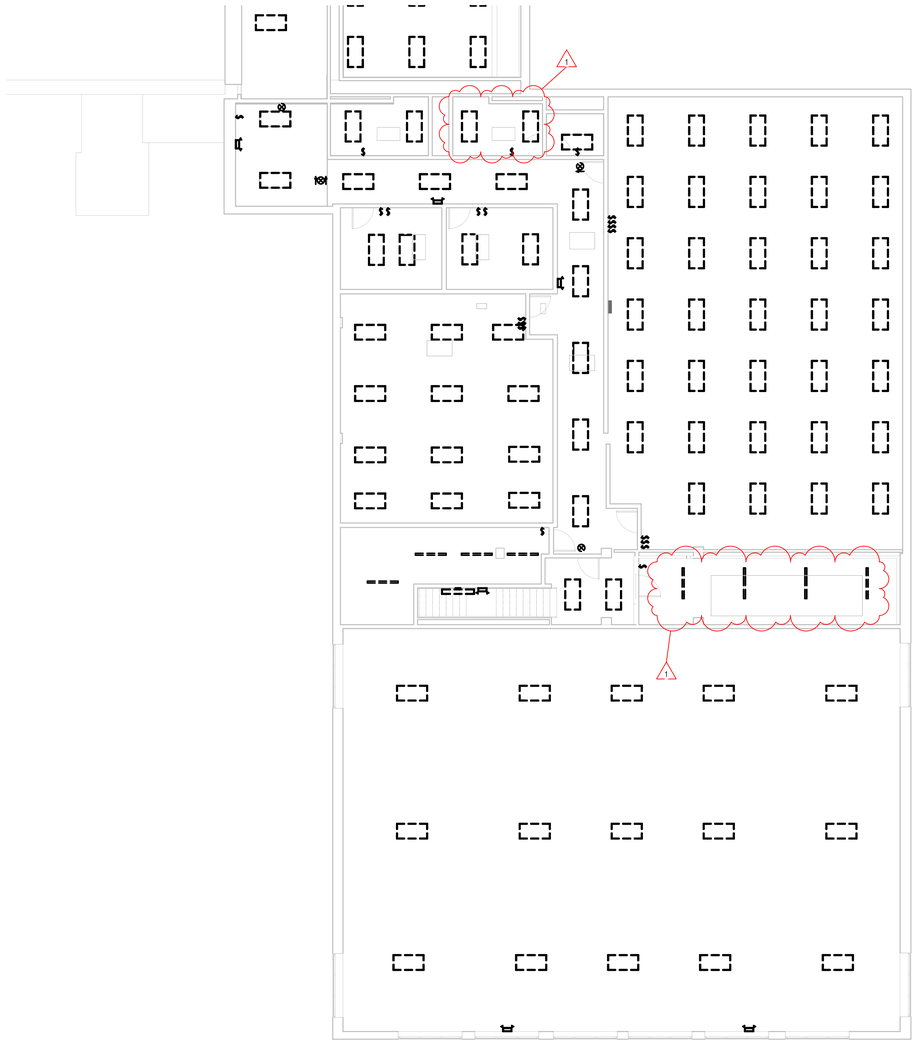

1 **DEMOLITION THIRD FLOOR ELECTRICAL PLAN - UNIT C**
1/8" = 1'-0"

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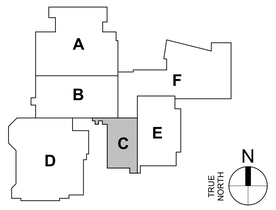
DEMOLITION THIRD FLOOR ELECTRICAL PLAN - UNIT C

ED3C



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GENERAL HVAC NOTES

A. DARK LINES INDICATE NEW WORK.

B. LIGHT SOLID LINES INDICATE EXISTING MECHANICAL EQUIPMENT, DUCTWORK, PIPING, AND/OR MECHANICAL ACCESSORIES TO REMAIN AS-IS. CONTRACTOR TO FIELD VERIFY ACTUAL EXISTING CONDITIONS PRIOR TO BIDDING.

C. REPLACE ALL DDC CONTROLS WITH NEW BACNET DDC CONTROLS THROUGHOUT BUILDING

D. PROVIDE TESTING AND BALANCING SERVICES TO BALANCE SYSTEM TO FINAL AIRFLOW AND HYDRONIC FLOWS INDICATED ON SCHEDULES

ENLARGED HVAC PLAN NOTES

1 INSTALL AHU ON EXISTING STRUCTURE. RECONNECT SUPPLY AIR AND RETURN AIR/OUTDOOR AIR DUCT. INSULATE DUCT PER PROJECT SPECIFICATIONS.

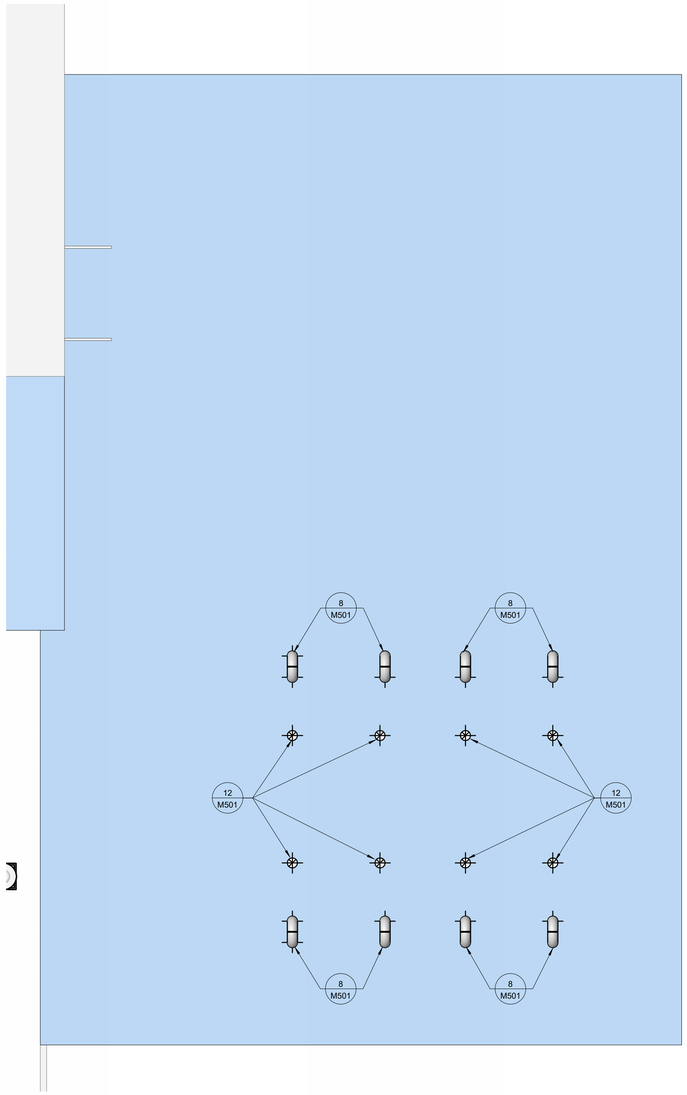
2 INSTALL AHU ON EXISTING CONCRETE HOUSEKEEPING PAD. RECONNECT SUPPLY AIR AND RETURN AIR/OUTDOOR AIR DUCT. INSULATE DUCT PER PROJECT SPECIFICATIONS.

3 RECONNECT CWS/R AND HWS/R PIPING TO NEW AHU. PROVIDE PIPING SPECIALTIES AND CONTROL VALVE PER DETAILS AND PROJECT SPECIFICATIONS. INSULATE PIPING PER PROJECT SPECIFICATIONS.

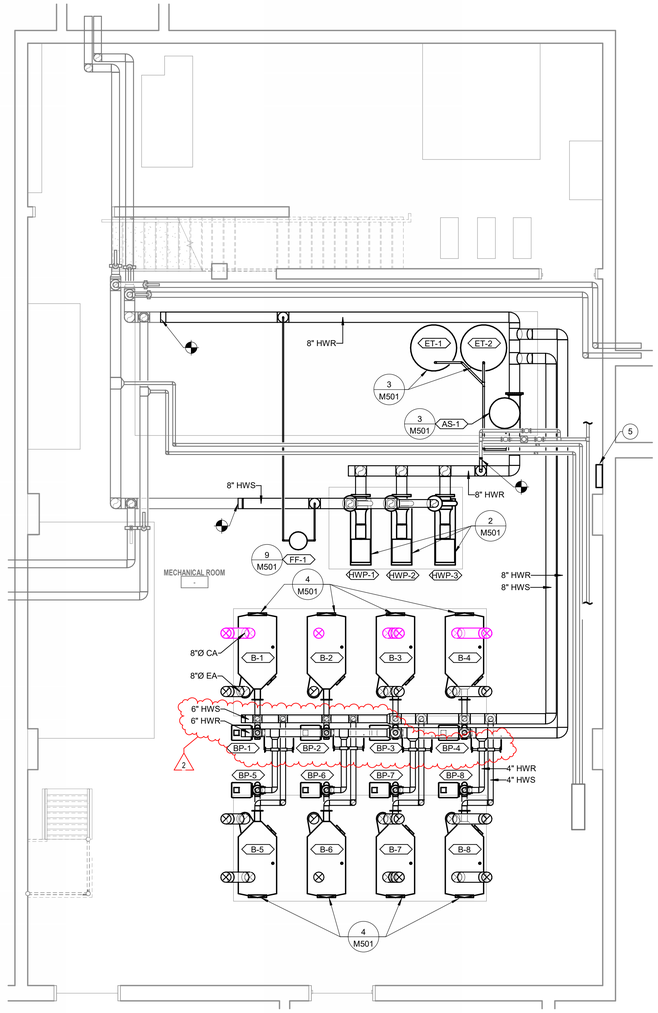
4 REMOVE AND REPLACE ALL EXISTING CONTROLS COMPONENTS ON HVAC EQUIPMENT. PROVIDE SEQUENCE OF OPERATIONS PER M700 SERIES DRAWINGS.

5 REPLACE ALL CONTROLS COMPONENTS AND COMMUNICATION CABLING TO NEW DDC CONTROLS.

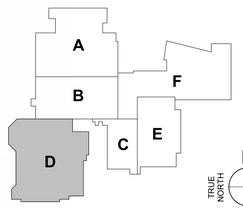
6 PROVIDE NEW CONTROLS COMPONENTS PER CONTROLS DIAGRAMS AND SEQUENCES OF OPERATIONS. PROVIDE SEQUENCES OF OPERATION PER M700 SERIES DRAWINGS.



2 BOILER ROOM ROOF PLAN
1/4" = 1'-0"



1 HVAC PLAN BOILER ROOM
1/4" = 1'-0"



TRUE NORTH

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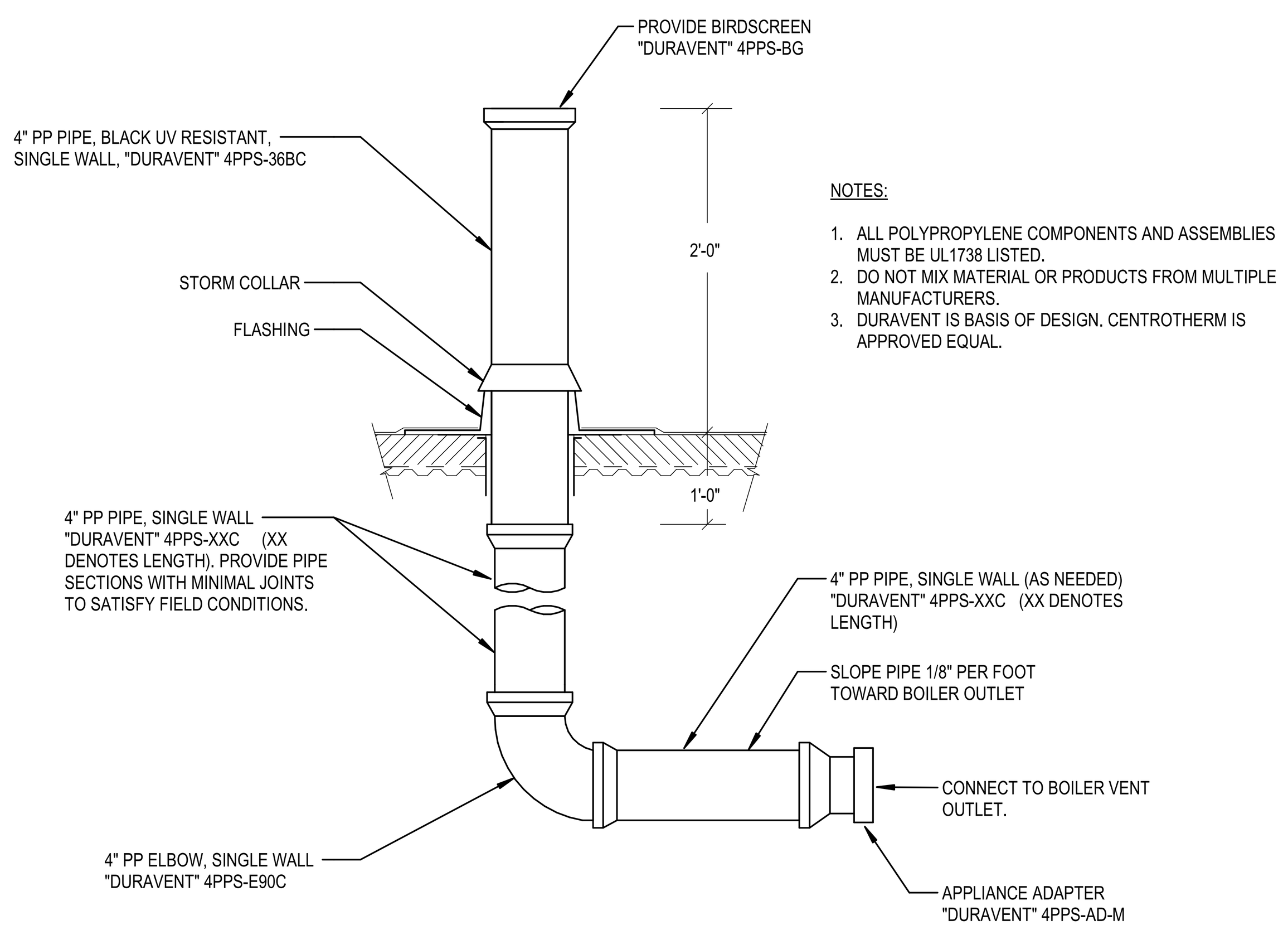
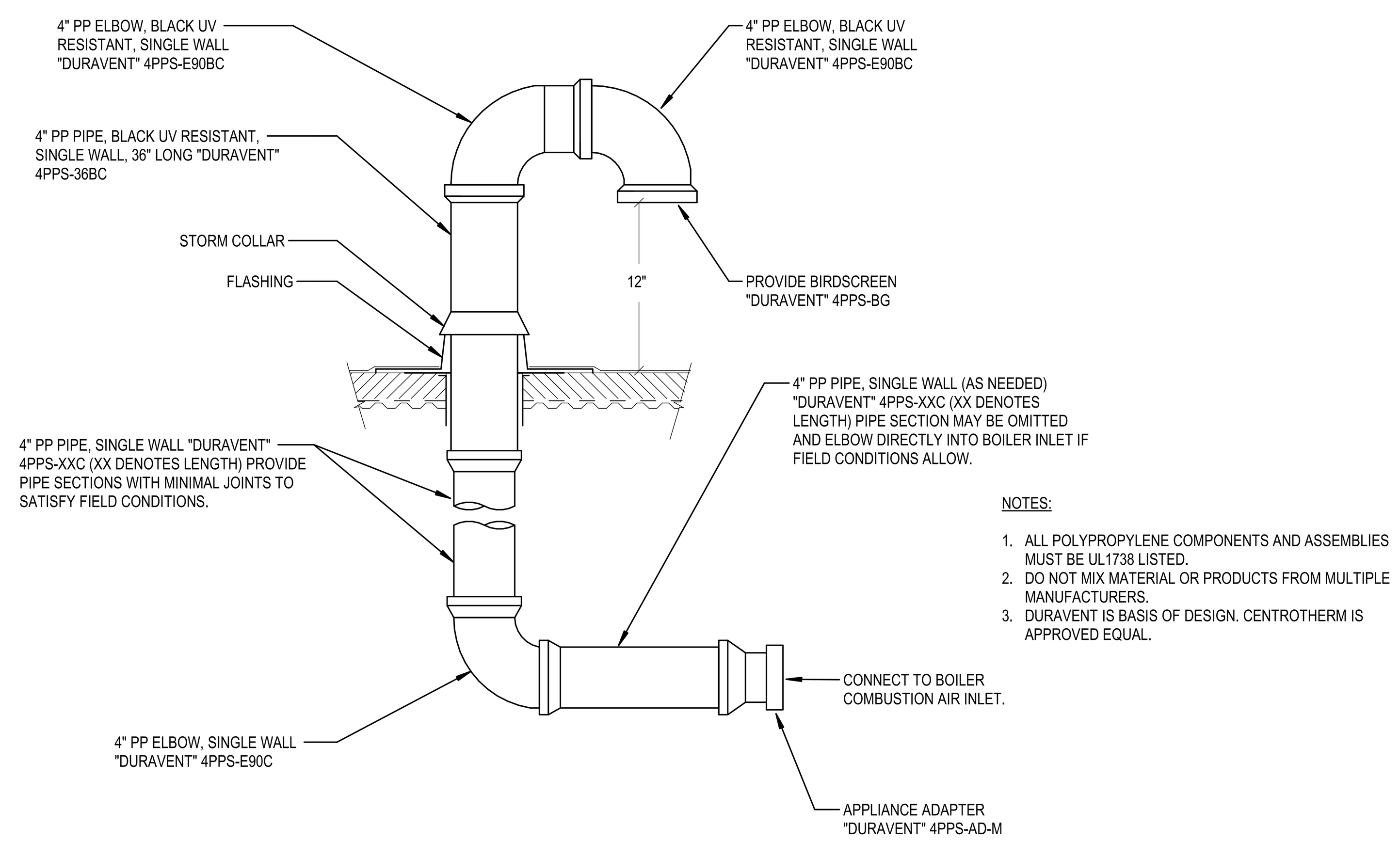
ENLARGED MECHANICAL ROOM PLAN

M402

PLOT DATE/TIME: 6/13/2024 1:48:05 PM



12 CONDENSING BOILER VENT DETAIL - POLYPROPYLENE
NOT TO SCALE



8 CONDENSING BOILER VENT DETAIL - POLYPROPYLENE
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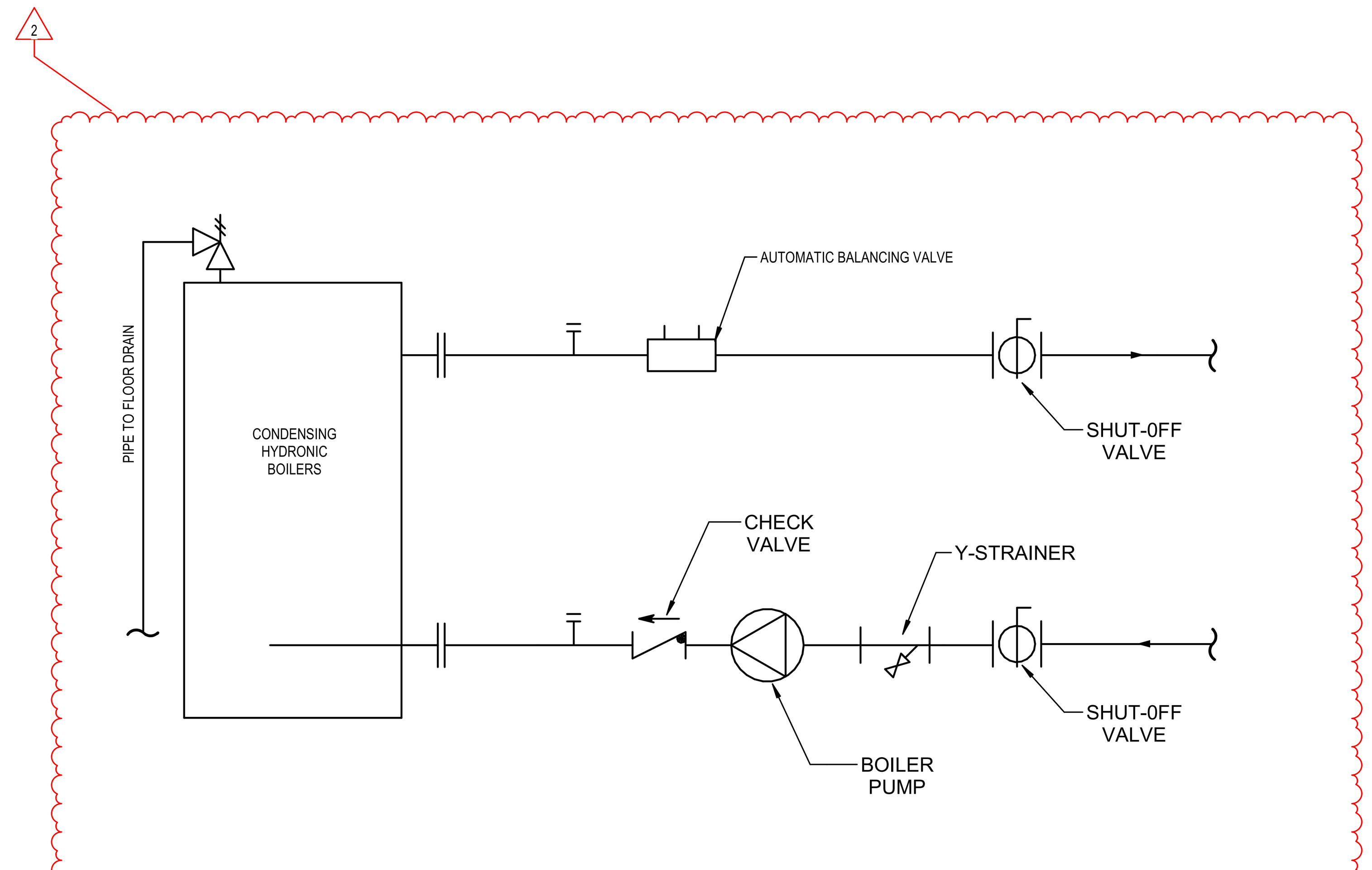
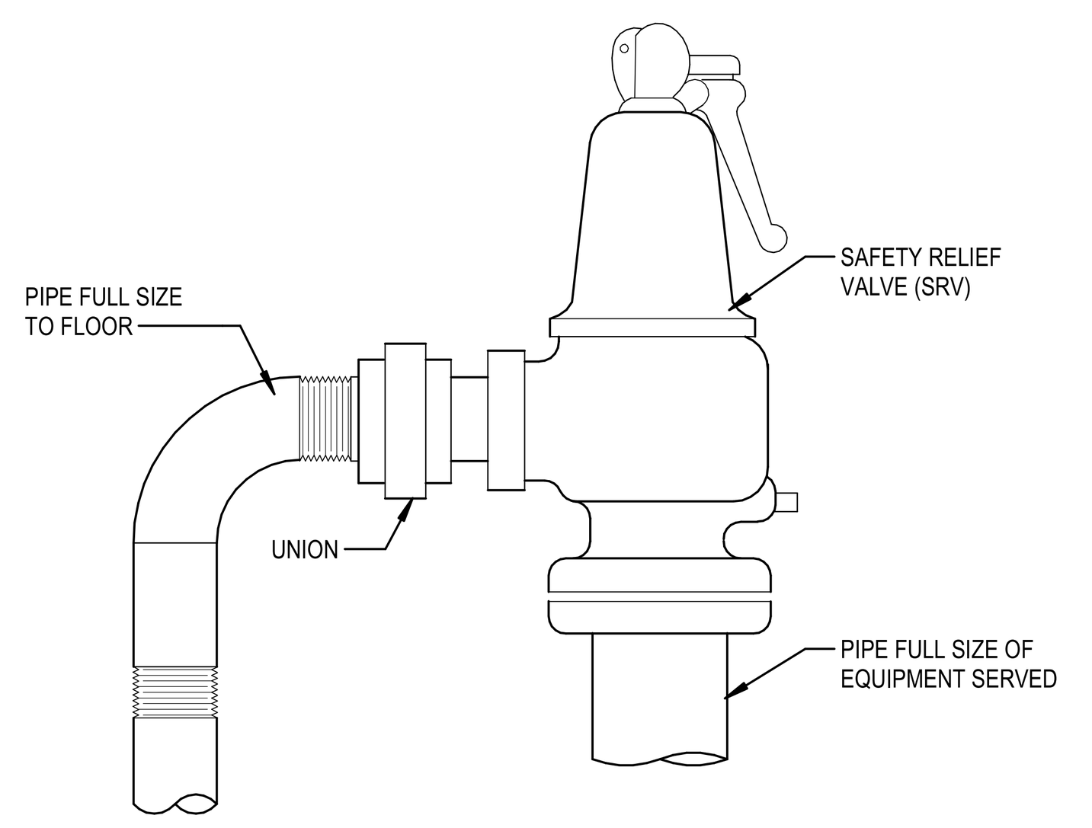
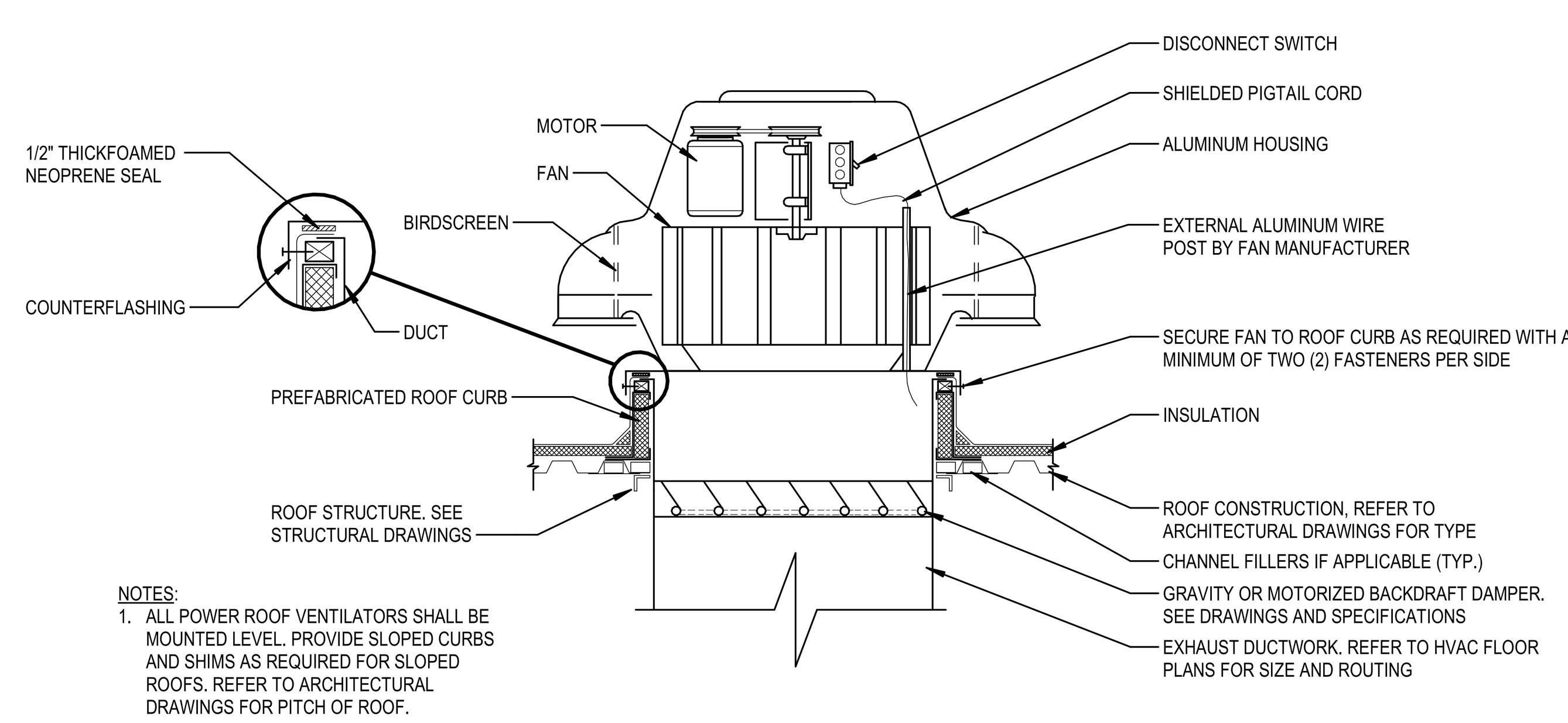


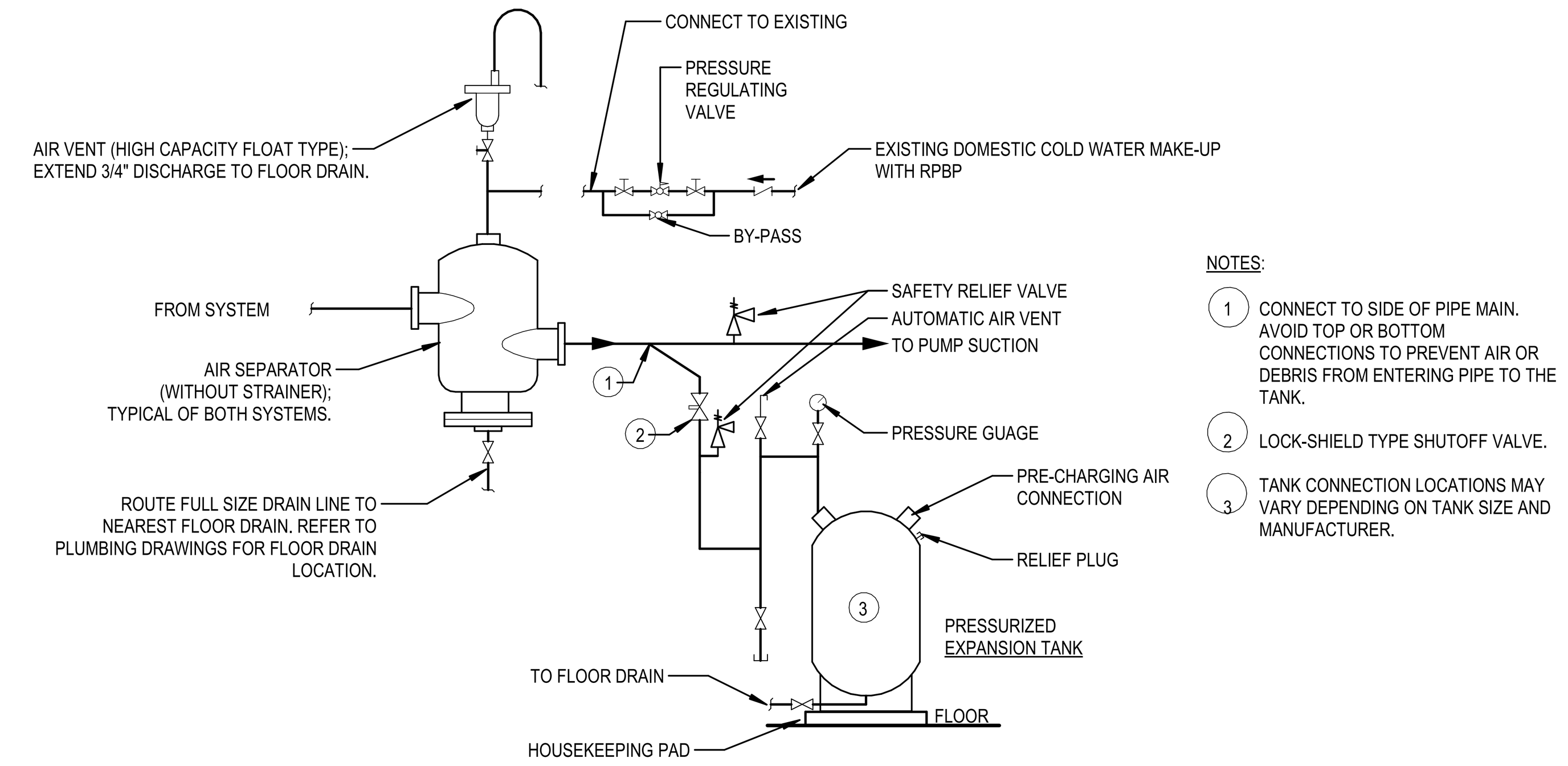
4 CONDENSING BOILER PIPING DETAIL
NOT TO SCALE



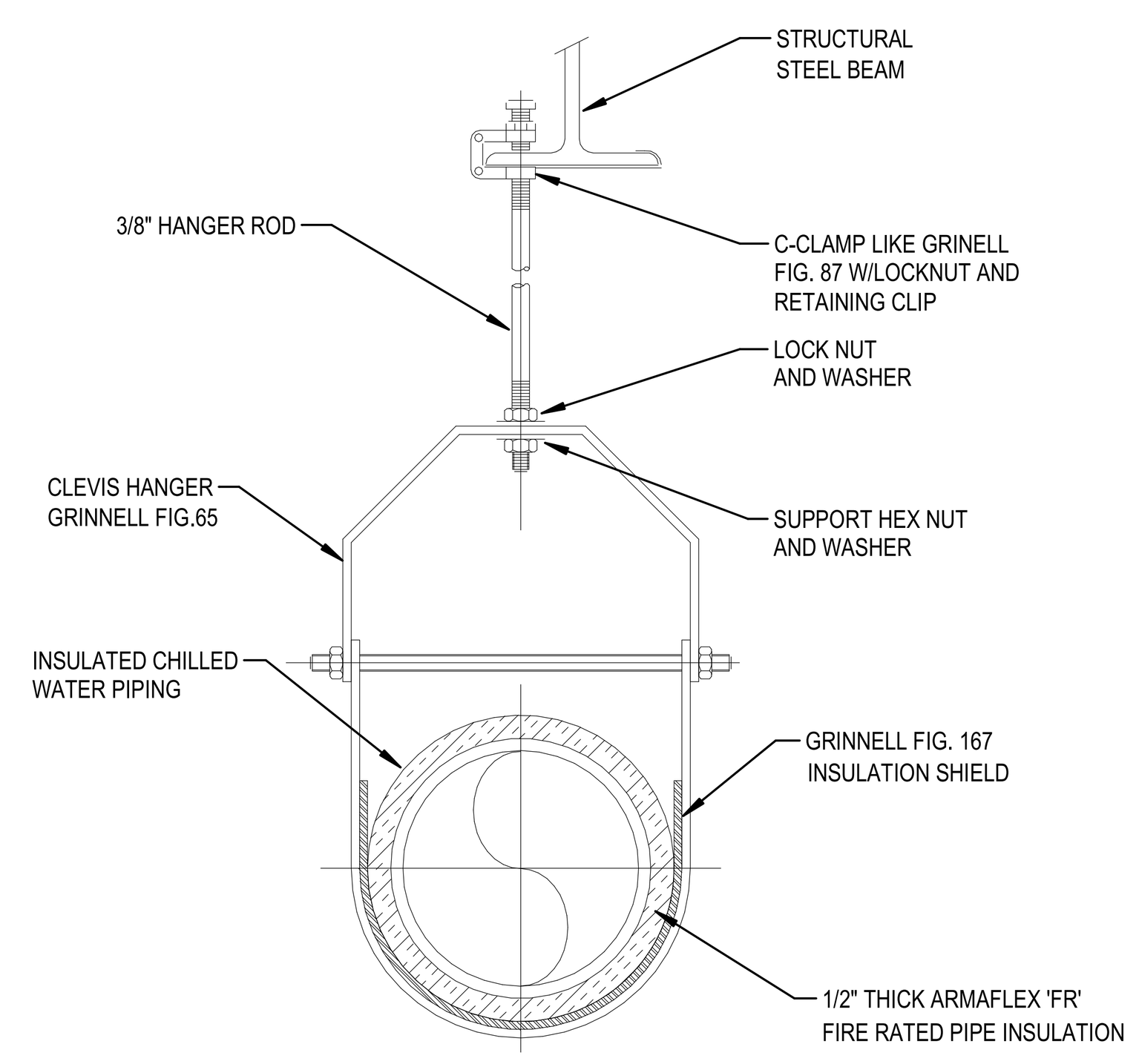
11 SAFETY RELIEF VALVE DETAIL (WATER)
NOT TO SCALE



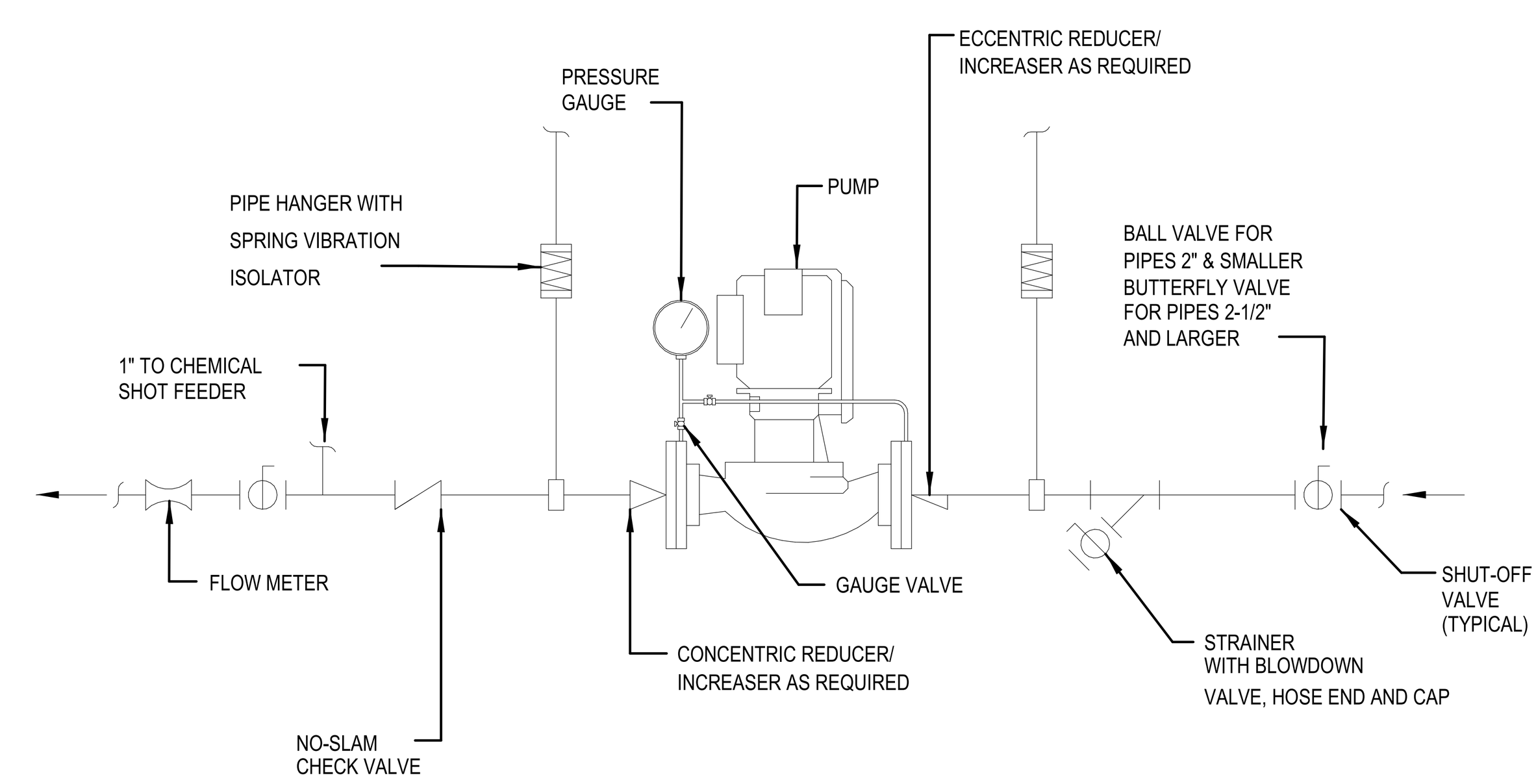
7 POWER ROOF VENTILATOR INSTALLATION DETAIL
NOT TO SCALE



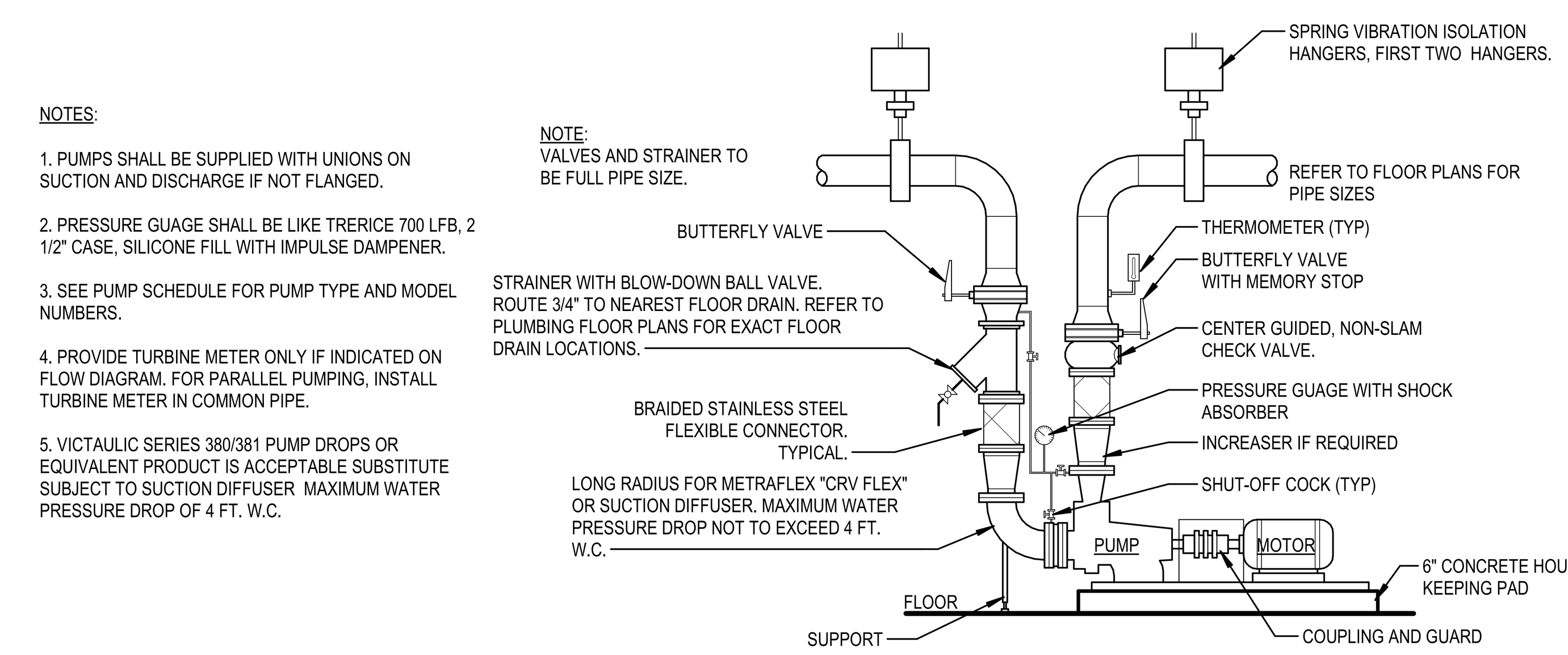
3 AIR SEPARATOR AND EXPANSION TANK PIPING DETAIL
NOT TO SCALE



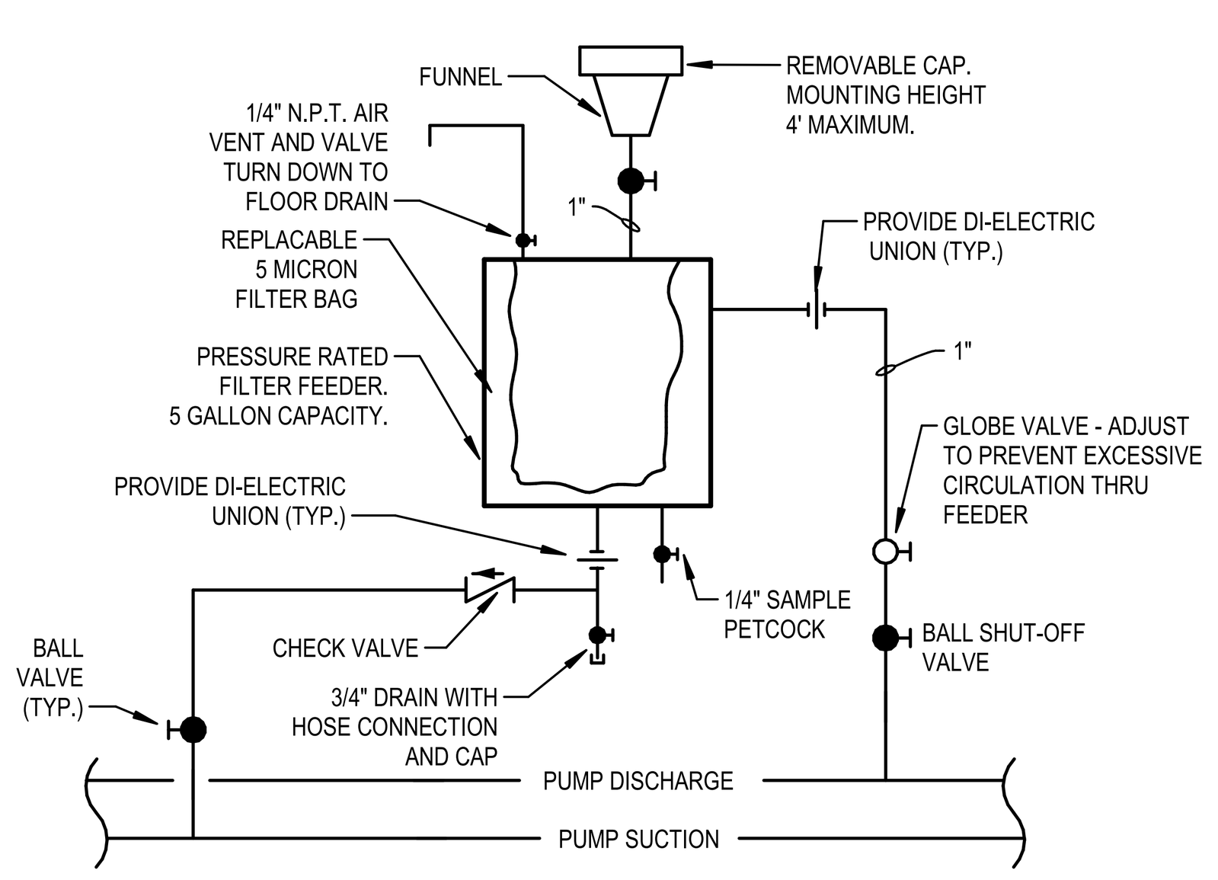
10 CLEVIS PIPE HANGER
NOT TO SCALE



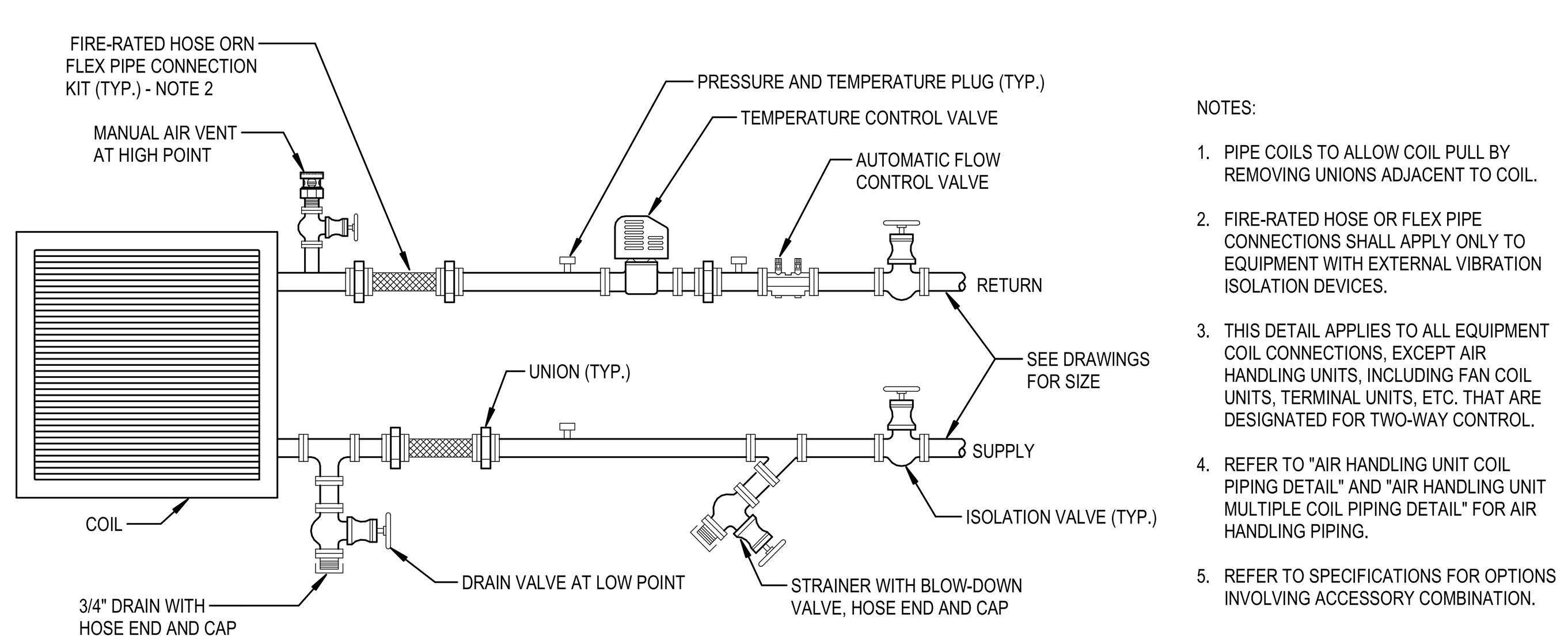
6 INLINE PUMP PIPING DETAIL
NOT TO SCALE



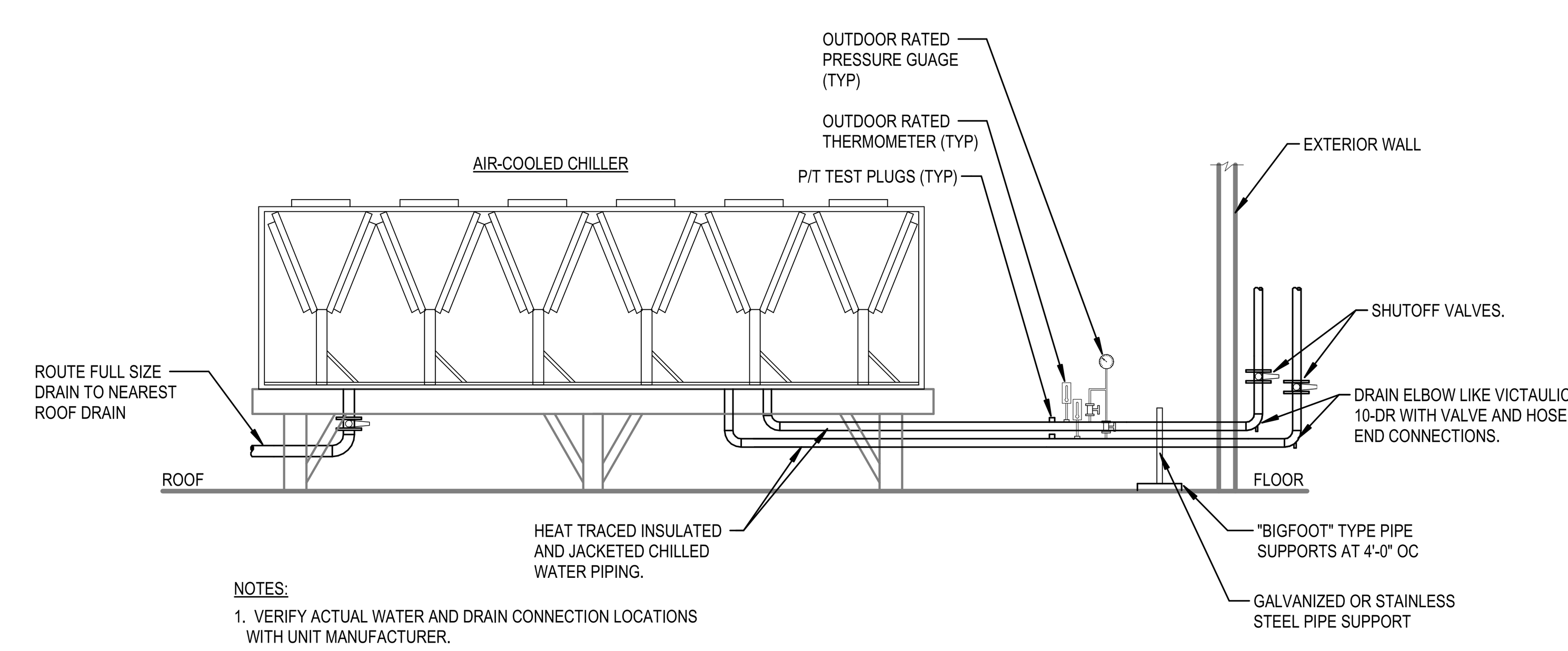
2 BASE MOUNTED END SUCTION PUMP PIPING DETAIL
NOT TO SCALE



9 CHEMICAL SHOT FILTER FEEDER PIPING DETAIL
NOT TO SCALE



5 TWO WAY COIL PIPING DETAIL
NOT TO SCALE



1 AIR-COOLED CHILLER INSTALLATION AND ABOVE GRADE PIPING DETAIL
NOT TO SCALE

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MECHANICAL DETAILS

M501

AIR COOLED CHILLER SCHEDULE - 23 64 23

MARK (IDENTITY DATA)	MANUFACTURER	MODEL	L (UNIT DIMENSIONS)	W	H	WEIGHT (LBS)	NOMINAL (TONS) (CAPACITY)	EFFECTIVE (TONS)	EER (PERFORMANCE DATA)	IPLV	FLOW (GPM) (EVAPORATOR DATA)	MIN. FLOW (GPM)	EWT (°F)	LWT (°F)	AMBIENT (°F)	WPD (FT-WG)	FOULING FACTOR	FLUID TYPE	TYPE (COMPRESSOR DATA)	QTY	# OF CIRCUITS	VFD	TYPE (REFRIGERANT DATA)	CHARGE (LB)	QTY (CONDENSER FAN DATA)	FAN RLA EACH	POWER (DBA) (SOUND DATA)	PRESSURE (DBA)	VOLTS (V) (ELECTRICAL DATA)	PH	FREQ (HZ)	UNIT POWER (KW)	MCA (A)	MOCP (A)	NOTES
CH-1	TRANE	RTAF310	458"	87"	94"	18,503	310	-	10.6	16.5	495	323	60.0	45.0	95	6.8	0.0001	WATER	SCREW			NO	R-513A			2.50	104	76	460	3	60	351.0	599	700	1-6
CH-2	TRANE	RTAF310	458"	87"	94"	18,503	310	-	10.6	16.5	495	323	60.0	45.0	95	6.8	0.0001	WATER	SCREW			NO	R-513A			2.50	104	76	460	3	60	351.0	599	700	1-6
CH-3	TRANE	RTAF310	458"	87"	94"	18,503	310	-	10.6	16.5	495	323	60.0	45.0	95	6.8	0.0001	WATER	SCREW			NO	R-513A			2.50	104	76	460	3	60	351.0	599	700	1-6

AIR COOLED CHILLER SCHEDULE NOTES:

1. MANUFACTURER PROVIDED OVERCURRENT PROTECTED DISCONNECT.
2. SINGLE POINT POWER.
3. HIGH-FAULT 65 KA SCCR.
4. STARTER TYPE: ACROSS-THE-LINE. PROVIDE 120V/1PH HEATER FOR FREEZE PROTECTION OF BUNDLE.
5. HAIL GUARDS.
6. PIPE COVER PANELS / END PANELS.

AHU SCHEDULE

MARK (IDENTITY DATA)	MANUFACTURER	MODEL	LOCATION	AREA SERVED	L (DIMENSIONS)	W	H	WEIGHT (LBS)	AIRFLOW (CFM) (SUPPLY FAN DATA)	ESP/TSP (IN-WG)	RPM	QTY (MOTOR)	HP	BHP	1 (SUPPLY FAN SOUND POWER (OUTLET) – OCTAVE BAND)	2	3	4	5	6	7	8	VOLT/PH/HZ (SUPPLY FAN ELECTRICAL DATA)	FLA (A)	MCA (A)	MOCP (A)
AHU-4	TRANE	CSAA025	UNIT B	UNIT A & B	223.4"	80"	65"	5,170	12,000	1.5/4.8	1,819	1	15.0	13.6	96	87	97	91	89	91	86	73	460/3/60	18.1	-	-
AHU-8	TRANE	CSAA014	UNIT D	UNIT D	173.3"	72"	45"	3,029	6,500	1.25/4.25	2,183	1	10.0	6.9	96	87	97	91	89	91	86	73	460/3/61	12.5	-	-
AHU-9	-	-	UNIT D	GYM	-	-	-	-																		
AHU-20	TRANE	CSAA012	UNIT F	UNIT F	209.9"	66.5"	45"	3,293	5,670	2/5.44	1,970	1	7.5	7.4	96	87	97	91	89	91	86	73	460/3/62	9.8	-	-

AIR HANDLING UNIT SCHEDULE NOTES

1. REPLACE SUPPLY FAN FOR AHU-9.

AHU SCHEDULE (CONTINUED)

MARK	AIRFLOW (CFM) (HEATING COIL DATA)	CAPACITY (MBH)	FLOW (GPM)	EAT (°F) DB	LAT (°F) DB	WPD (FT-WG)	FACE VEL. (FPM)	APD (IN-WG)	ROWS	FPI	FLUID TYPE	TOTAL CAP. (MBH) (COOLING COIL DATA)	SENSIBLE CAP. (MBH)	FLOW (GPM)	EAT (°F) DB/WB	LAT (°F) DB/WB	EWT/LWT (°F)	WPD (FT-WG)	FACE VEL. (FPM)	APD (IN-WG)	ROWS	FPI	FLUID TYPE	NOTES
AHU-4	12,000	1,020	52	-10	68.4	0.67	693	0.78	4	10.0	WATER	876	493	123	92/76	55/54.9	45/59.2	10.60	481	0.93	8	-	WATER	-
AHU-8	6,500	499	25	0.0	70	0.79	695	0.40	4	10.0	WATER	255	170	35	92/76	55/54.9	45/59.6	1.40	476	0.39	4	-	WATER	-
AHU-9		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
AHU-20	5,670	502	24.5	-10.0	71	0.34	0.34	0.84	4	12.0	WATER	414	233	58	92/76	55/54.9	45/59.2	10.50	461	0.89	8	-	WATER	-

IPS #34 BOILER SCHEDULE - 23 52 16

MARK (IDENTITY DATA)	MANUFACTURER	MODEL	TYPE	WEIGHT (LBS)	INPUT (BTUH) (HEATING DATA)	OUTPUT (BTUH)	EFF (%)	MINIMUM (PSI) (GAS PRESSURE DATA)	MAXIMUM (PSI)	FLOW (GPM) (WATER DATA)	WPD (FT-WG)	EWT (°F)	LWT (°F)	FLUID TYPE	VOLTS (V) (ELECTRICAL DATA)	PHASE	FREQ (HZ)	FLA (A)	MOCP (A)	NOTES
B-1	LOCHINVAR	FB-2001	CONDENSING	2,570	1,999	1,923	96.4	8	14	192	14.5	120	140	WATER	208	3	60	13	25	1-7
B-2	LOCHINVAR	FB-2001	CONDENSING	2,570	1,999	1,923	96.4	8	14	192	14.5	120	140	WATER	208	3	60	13	25	1-7
B-3	LOCHINVAR	FB-2001	CONDENSING	2,570	1,999	1,923	96.4	8	14	192	14.5	120	140	WATER	208	3	60	13	25	1-7
B-4	LOCHINVAR	FB-2001	CONDENSING	2,570	1,999	1,923	96.4	8	14	192	14.5	120	140	WATER	208	3	60	13	25	1-7
B-5	LOCHINVAR	FB-2001	CONDENSING	2,570	1,999	1,923	96.4	8	14	192	14.5	120	140	WATER	208	3	60	13	25	1-7
B-6	LOCHINVAR	FB-2001	CONDENSING	2,570	1,999	1,923	96.4	8	14	192	14.5	120	140	WATER	208	3	60	13	25	1-7
B-7	LOCHINVAR	FB-2001	CONDENSING	2,570	1,999	1,923	96.4	8	14	192	14.5	120	140	WATER	208	3	60	13	25	1-7
B-8	LOCHINVAR	FB-2001	CONDENSING	2,570	1,999	1,923	96.4	8	14	192	14.5	120	140	WATER	208	3	60	13	25	1-7

BOILER SCHEDULE NOTES

1. SEE BOILER PIPING INSTALLATION DETAIL 4/M501.
2. MANUFATURER SHALL PROVIDE A FACTORY OR FIELD INSTALLED RELAY FOR PRIMARY PUMP CONTROL FOR EACH BOILER.
3. MANUFACTURER SHALL PROVIDE A BACNET COMMUNICATING MASTER BOILER CONTROLLER FOR CONTROL OF ALL BOILER IN EACH LOCATION.
4. MANUFACTURER SHALL PROVIDE A BOILER SUPPLY HEADER TEMPERATURE SENSOR FOR FIELD MOUNTING.
5. MANUFACTURER TO PROVIDE GAS PRESSURE REGULATOR(S) SIZED FOR BOILER.

PUMP SCHEDULE - 23 21 23

MARK (IDENTITY DATA)	MANUFACTURER	MODEL	IMPELLER SIZE (IN)	SYSTEM SERVED	WEIGHT (LBS)	TYPE	FLUID TYPE (FLUID DATA)	FLOW (GPM)	HEAD (FT-WG)	TEMP (°F)	EFF (%)	HP (MOTOR DATA)	BHP	SPEED (RPM)	VOLTS (V) (ELECTRICAL DATA)	PH	FREQ (HZ)	NOTES
HWP-1	GRUNDFOS	NBS 015-095-4P	8.82	HW SECONDARY	419	BASE MOUNTED END SUCTION	WATER	960	125.0	44	71.2	5.0	4.9	1,750	208	3	60	1-3
HWP-2	GRUNDFOS	NBS 015-095-4P	8.82	HW SECONDARY	419	BASE MOUNTED END SUCTION	WATER	960	125.0	44	71.2	5.0	4.9	1,750	208	3	60	1-3
HWP-3	GRUNDFOS	NBS 015-095-4P	8.82	HW SECONDARY	419	BASE MOUNTED END SUCTION	WATER	960	125.0	44	71.2	5.0	4.9	1,750	208	3	60	1-3
BP-1	GRUNDFOS	400707 VL	5.60	B-1 PRIMARY	60	CLOSE COUPLED INLINE	WATER	195	25.0	14	76.0	2.0	1.7	1,760	208	3	60	3-4
BP-2	GRUNDFOS	400707 VL	5.60	B-2 PRIMARY	60	CLOSE COUPLED INLINE	WATER	195	25.0	14	76.0	2.0	1.7	1,760	208	3	60	3-4
BP-3	GRUNDFOS	400707 VL	5.60	B-3 PRIMARY	60	CLOSE COUPLED INLINE	WATER	195	25.0	14	76.0	2.0	1.7	1,760	208	3	60	3-4
BP-4	GRUNDFOS	400707 VL	5.60	B-3 PRIMARY	60	CLOSE COUPLED INLINE	WATER	195	25.0	14	76.0	2.0	1.7	1,760	208	3	60	3-4
BP-5	GRUNDFOS	400707 VL	5.60	B-3 PRIMARY	60	CLOSE COUPLED INLINE	WATER	195	25.0	14	76.0	2.0	1.7	1,760	208	3	60	3-4
BP-6	GRUNDFOS	400707 VL	5.60	B-3 PRIMARY	60	CLOSE COUPLED INLINE	WATER	195	25.0	14	76.0	2.0	1.7	1,760	208	3	60	3-4
BP-7	GRUNDFOS	400707 VL	5.60	B-3 PRIMARY	60	CLOSE COUPLED INLINE	WATER	195	25.0	14	76.0	2.0	1.7	1,760	208	3	60	3-4
BP-8	GRUNDFOS	400707 VL	5.60	B-3 PRIMARY	60	CLOSE COUPLED INLINE	WATER	195	25.0	14	76.0	2.0	1.7	1,760	208	3	60	3-4
CHP-1	GRUNDFOS	NBS 040-070-4P	6.85	CHW PRIMARY	496	BASE MOUNTED END SUCTION	WATER	495	35.0	44	84.2	7.5	6.2	1,750	460	3	60	1-3
CHP-2	GRUNDFOS	NBS 040-070-4P	6.85	CHW PRIMARY	496	BASE MOUNTED END SUCTION	WATER	495	35.0	44	84.2	7.5	6.2	1,750	460	3	60	1-3
CHP-3	GRUNDFOS	NBS 040-070-4P	6.85	CHW PRIMARY	496	BASE MOUNTED END SUCTION	WATER	495	35.0	44	84.2	7.5	6.2	1,750	460	3	60	1-3
CHP-4	GRUNDFOS	NBS 030-110-4P	9.61	CHW SECONDARY	746	BASE MOUNTED END SUCTION	WATER	870	125.0	44	71.5	15.0	14.5	1,765	460	3	60	1-3
CHP-5	GRUNDFOS	NBS 030-110-4P	9.61	CHW SECONDARY	746	BASE MOUNTED END SUCTION	WATER	870	125.0	44	71.5	15.0	14.5	1,765	460	3	60	1-3
CHP-6	GRUNDFOS	NBS 030-110-4P	9.61	CHW SECONDARY	746	BASE MOUNTED END SUCTION	WATER	870	125.0	44	71.5	15.0	14.5	1,765	460	3	60	1-3

PUMP SCHEDULE NOTES:

1. TCC TO PROVIDE VFD.
2. PROVIDE WITH STRAINER.
3. PROVIDE WITH FULL SIZE IMPELLER.
4. HOA STARTER BY EC. BOILER CONTROLLER SHALL CONTROL PUMP START.

EXPANSION TANK SCHEDULE - 23 21 16

MARK (IDENTITY DATA)	MANUFACTURER	MODEL	SYSTEM SERVED	WEIGHT (LBS)	ACCEPTANCE VOLUME (GAL)	MIN (°F) (OPERATING TEMPERATURE)	MAX (°F)	PRECHARGE PRESSURE (PSI)	VALVE (PSI) (MAXIMUM OPERATING PRESSURE)	TANK (PSI)	NOTES
ET-1	BELL AND GOSSETT	B165	HHW	240	22.5	40	140	12	75	125	1-4
ET-2	BELL AND GOSSETT	B165	HHW	240	22.5	40	140	12	75	125	1-4
ET-3	BELL AND GOSSETT	B165	CHW	240	22.5	40	140	12	75	125	1-4

EXPANSION TANK SCHEDULE NOTES

1. ASME RATED.
2. PROVIDE WITH FLOOR MOUNTS.
3. BLADDER TANK.
4. MANUFACTURER TO PROVIDE AMSE PRESSURE RELIEF VALVE.

AIR SEPARATOR SCHEDULE

MARK (IDENTITY DATA)	MANUFACTURER	MODEL	WEIGHT (LBS)	SYSTEM SERVED	CONNECTION SIZE (IN)	FLOW (GPM)	WPD (FT-WG)	FLUID TYPE	MAX OPERATING TEMP (°F)	STRAINER REQ'D	NOTES
AS-1	BELL AND GOSSETT	R-6F	580	HHW	6	335	0.6	WATER	350	NO	1-4
AS-2	BELL AND GOSSETT	R-6F	580	CHW	6	335	0.6	WATER	350	NO	1-4

AIR SEPARATOR SCHEDULE NOTES

1. COALESCING AIR AND DIRT SEPARATOR WITH 304 STAINLESS STEEL COALESCENCE PALL RINGS.
2. AUTOMATIC AIR VENT.
3. DESIGNED AND CONSTRUCTED PER ASME CODE SECTION VIII DIV. 1.
4. AIR SEPARATORS TO BE CLEANABLE.

MISCELLANEOUS EQUIPMENT SCHEDULE

MARK	DESCRIPTION
FF-1 FF-2	BY-PASS FILTER FEEDER, 300 PSI MAX PRESURE TANK @ 200°F MAX, EASY OPEN/CLOSE CAST IRON CAP, EXTENDED NECK WITH TOP INLET. PROVIDE NEPTUNE MODEL DBF-5HP PROVIDE WITH 5 MICRON FILTER BAG. SEE DETAIL 8/M501.

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#	Date	Desc.
1	06/13/2024	ADDENDUM #1

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PROJECT: #23126
DATE: 05/24/2024
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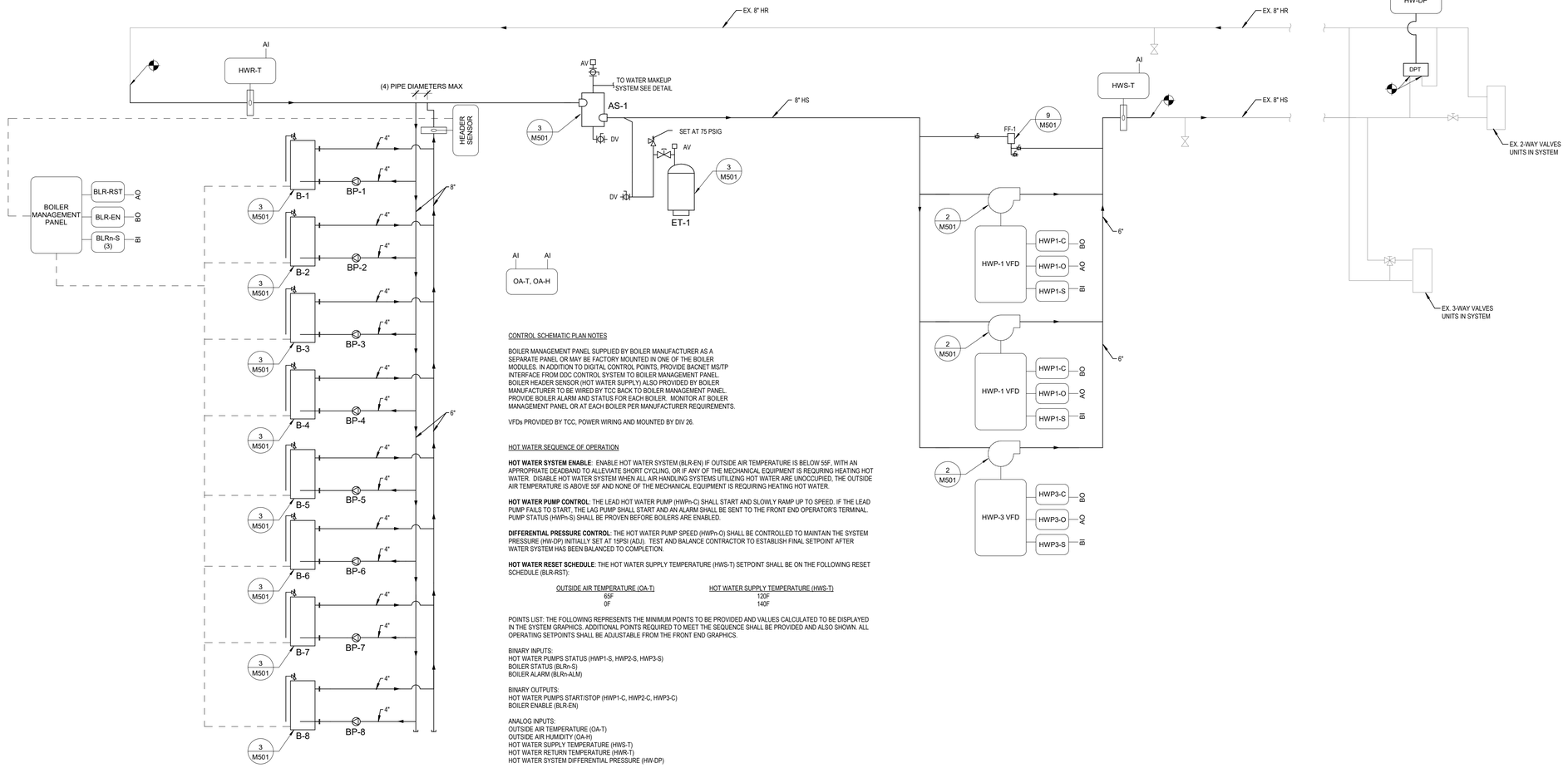
MECHANICAL SCHEDULES

M607

PLOT DATE/TIME 6/13/2024 3:20:39 PM



CONTROL SCHEMATIC PLAN NOTES

BOILER MANAGEMENT PANEL SUPPLIED BY BOILER MANUFACTURER AS A SEPARATE PANEL OR MAY BE FACTORY MOUNTED IN ONE OF THE BOILER MODULES. IN ADDITION TO DIGITAL CONTROL POINTS, PROVIDE BACNET MS/TP INTERFACE FROM DDC CONTROL SYSTEM TO BOILER MANAGEMENT PANEL. BOILER HEADER SENSOR (HOT WATER SUPPLY) ALSO PROVIDED BY BOILER MANUFACTURER TO BE WIRED BY TCC BACK TO BOILER MANAGEMENT PANEL. PROVIDE BOILER ALARM AND STATUS FOR EACH BOILER. MONITOR AT BOILER MANAGEMENT PANEL OR AT EACH BOILER PER MANUFACTURER REQUIREMENTS.

VFDs PROVIDED BY TCC, POWER WIRING AND MOUNTED BY DIV 26.

HOT WATER SEQUENCE OF OPERATION

HOT WATER SYSTEM ENABLE: ENABLE HOT WATER SYSTEM (BLR-EN) IF OUTSIDE AIR TEMPERATURE IS BELOW 55F, WITH AN APPROPRIATE DEADBAND TO ALLEVIATE SHORT CYCLING. OR IF ANY OF THE MECHANICAL EQUIPMENT IS REQUIRING HEATING HOT WATER. DISABLE HOT WATER SYSTEM WHEN ALL AIR HANDLING SYSTEMS UTILIZING HOT WATER ARE UNOCCUPIED, THE OUTSIDE AIR TEMPERATURE IS ABOVE 55F AND NONE OF THE MECHANICAL EQUIPMENT IS REQUIRING HEATING HOT WATER.

HOT WATER PUMP CONTROL: THE LEAD HOT WATER PUMP (HWPn-C) SHALL START AND SLOWLY RAMP UP TO SPEED. IF THE LEAD PUMP FAILS TO START, THE LAG PUMP SHALL START AND AN ALARM SHALL BE SENT TO THE FRONT END OPERATOR'S TERMINAL. PUMP STATUS (HWPn-S) SHALL BE PROVEN BEFORE BOILERS ARE ENABLED.

DIFFERENTIAL PRESSURE CONTROL: THE HOT WATER PUMP SPEED (HWPn-O) SHALL BE CONTROLLED TO MAINTAIN THE SYSTEM PRESSURE (HW-DP) INITIALLY SET AT 15PSI (ADJ). TEST AND BALANCE CONTRACTOR TO ESTABLISH FINAL SETPOINT AFTER WATER SYSTEM HAS BEEN BALANCED TO COMPLETION.

HOT WATER RESET SCHEDULE: THE HOT WATER SUPPLY TEMPERATURE (HWS-T) SETPOINT SHALL BE ON THE FOLLOWING RESET SCHEDULE (BLR-RST):

OUTSIDE AIR TEMPERATURE (OA-T)	HOT WATER SUPPLY TEMPERATURE (HWS-T)
65F	120F
0F	140F

POINTS LIST: THE FOLLOWING REPRESENTS THE MINIMUM POINTS TO BE PROVIDED AND VALUES CALCULATED TO BE DISPLAYED IN THE SYSTEM GRAPHICS. ADDITIONAL POINTS REQUIRED TO MEET THE SEQUENCE SHALL BE PROVIDED AND ALSO SHOWN. ALL OPERATING SETPOINTS SHALL BE ADJUSTABLE FROM THE FRONT END GRAPHICS.

BINARY INPUTS:
HOT WATER PUMPS STATUS (HWP1-S, HWP2-S, HWP3-S)
BOILER STATUS (BLRn-S)
BOILER ALARM (BLRn-ALM)

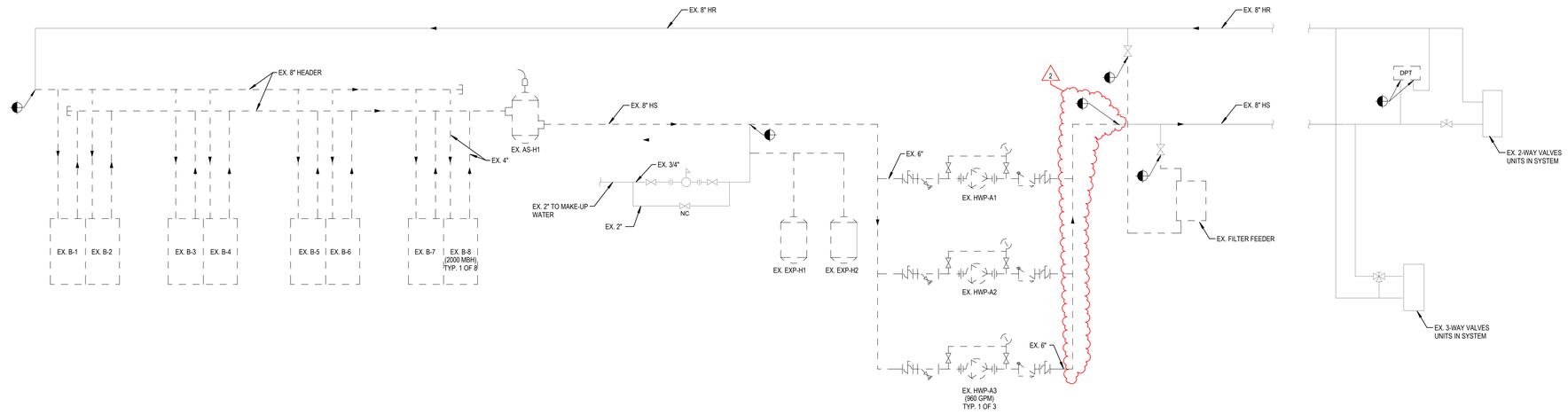
BINARY OUTPUTS:
HOT WATER PUMPS START/STOP (HWP1-C, HWP2-C, HWP3-C)
BOILER ENABLE (BLR-EN)

ANALOG INPUTS:
OUTSIDE AIR TEMPERATURE (OA-T)
OUTSIDE AIR HUMIDITY (OA-H)
HOT WATER SUPPLY TEMPERATURE (HWS-T)
HOT WATER RETURN TEMPERATURE (HWR-T)
HOT WATER SYSTEM DIFFERENTIAL PRESSURE (HW-DP)

ANALOG OUTPUTS:
HOT WATER RESET SIGNAL (BLR-RST)
HOT WATER PUMPS SPEED CONTROL (HWP1-O, HWP2-O, HWP3-O)

CALCULATIONS:
HOT WATER SYSTEM BTUS (INSTANTANEOUS, KBTU)
HOT WATER SYSTEM BTUS (MONTHLY, MMBTU)

2 HEATING WATER SYSTEM
NOT TO SCALE



1 EXISTING HEATING WATER SCHEMATIC
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PROJECT: #23126
DATE: 05/24/2024
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TEMPERATURE CONTROLS SCHEMATICS

M701

PLOT DATE/TIME: 6/13/2024 1:17:27 PM

CHILLED WATER SEQUENCE OF OPERATION

SYSTEM ENABLE: THE CHILLED WATER SYSTEM SHALL BE ENABLED IF ANY SYSTEM IS REQUIRING CHILLED WATER IS IN THE OCCUPIED MODE AND THE OUTSIDE AIR TEMPERATURE IS ABOVE 55F (ADJ).

SECONDARY CHILLED WATER PUMP CONTROL: THE LEAD SECONDARY CHILLED WATER PUMP (CWPn-C) SHALL START AND SLOWLY RAMP UP TO SPEED. IF THE LEAD PUMP FAILS TO START, THE LAG PUMP SHALL START AND AN ALARM SHALL BE SENT TO THE FRONT END OPERATOR'S TERMINAL. SECONDARY PUMP STATUS (CWPn-S) SHALL BE PROVEN BEFORE THE PRIMARY CHILLED WATER PUMP(S) ARE ENABLED. LEAD/LAG DESIGNATION OF PUMPS SHALL CYCLE ON A MONTHLY BASIS.

DIFFERENTIAL PRESSURE CONTROL: THE SECONDARY CHILLED WATER PUMP SPEED (CWSn-O) SHALL BE CONTROLLED TO MAINTAIN THE SYSTEM PRESSURE (CWS-DP) INITIALLY SET AT 15PSI (ADJ). TEST AND BALANCE CONTRACTOR TO ESTABLISH FINAL SETPOINT AFTER WATER SYSTEM HAS BEEN BALANCED TO COMPLETION.

IF THE LEAD PUMP IS UNABLE TO MAINTAIN THE SYSTEM DIFFERENTIAL PRESSURE AFTER A 15 MINUTE (ADJ) PERIOD, THE LAG SECONDARY PUMP SHALL BE ENABLED. THE SPEED OF THE LEAD PUMP SHALL SLOWLY RAMP BACK TO THE SPEED OF THE LAG PUMP AND BOTH PUMPS SHALL RUN TOGETHER AT THE SAME SPEED TO MAINTAIN THE SYSTEM DIFFERENTIAL PRESSURE.

IF BOTH PUMPS ARE RUNNING AND THE SPEED DROPS TO 40% (ADJ) DUE TO A DECREASE IN SYSTEM DEMAND, THE LAG PUMP SHALL BE DISABLED AND THE LEAD PUMP SHALL RAMP UP ACCORDINGLY. A DEADBAND SHALL BE PUT IN PLACE TO ALLEVIATE SHORT CYCLING OF THE LAG PUMP.

PRIMARY CHILLED WATER PUMP CONTROL: ONCE A SECONDARY CHILLED WATER PUMP HAS STARTED, THE LEAD CHILLER ISOLATION VALVE (CHn-ISO) SHALL OPEN. ONCE THE ISOLATION VALVE HAS BEEN PROVEN OPEN (VLVn-ES), THE LEAD PRIMARY CHILLED WATER PUMP (CWPn-C) SHALL START. IF THE LEAD PRIMARY PUMP FAILS TO START, THE LAG PRIMARY PUMP SHALL START AND AN ALARM SHALL BE SENT TO THE FRONT END OPERATOR'S TERMINAL. THE FINAL PRIMARY CHILLED WATER SPEED (CWPn-O) SHALL BE DETERMINED BY THE TEST AND BALANCE CONTRACTOR. PRIMARY PUMP STATUS (CWPn-S) SHALL BE PROVEN BEFORE THE ASSOCIATED CHILLERS ARE ENABLED (CHn-C). LEAD/LAG PRIMARY PUMPS SHALL CYCLE ON A MONTHLY BASIS.

CHILLER CONTROL: ONCE A PRIMARY CHILLED WATER CHILLED WATER PUMP HAS STARTED, THE LEAD CHILLER SHALL BE ENABLED TO START AND RUN UNDER ITS OWN CONTROLS. THE CHILLER SHALL SLOWLY RAMP ITS CAPACITY UP OVER A 15 MINUTES PERIOD IN ORDER TO MINIMIZE ELECTRICAL DEMAND UPON STARTUP. IF THE LEAD CHILLER FAILS TO START, THE LAG ISOLATION VALVE SHALL OPEN AND THE LAG CHILLER SHALL START. AN ALARM SHALL BE SENT TO THE FRONT END OPERATOR'S TERMINAL INDICATING FAILURE OF THE LEAD CHILLER. ON CHILLER SHUTDOWN, THE CHILLER SHALL BE STOPPED AND THE ASSOCATED PRIMARY CHILLED WATER PUMP SHALL CONTINUE TO RUN FOR 15 MINUTES (ADJ).

IF AFTER 30 MINUTES (ADJ), THE LEAD CHILLER IS UNABLE TO MAINTAIN A 44F (ADJ) CHILLED WATER SUPPLY TEMPERATURE, THE LAG CHILLER ISOLATION VALVE SHALL OPEN AND THE LAG PRIMARY CHILLED WATER PUMP BE ENABLED AFTER THE VALVE HAS BEEN PROVEN TO BE OPEN. ONCE THE LAG PRIMARY CHILLED WATER PUMP HAS STARTED, THE LAG CHILLER SHALL BE ENABLED AND RUN UNDER ITS OWN CONTROLS.

IF THE TOTAL LOAD OF BOTH CHILLERS IS LESS THAN 80% (ADJ) OF THE TOTAL LOAD OF ONE CHILLER FOR 30 MINUTES (ADJ), THE LAG CHILLER SHALL BE DISABLED AND THE LAG PRIMARY CHILLED WATER PUMP SHALL CONTINUE TO RUN FOR 15 MINUTES (ADJ). AFTER 15 MINUTES, THE LAG PRIMARY CHILLED WATER PUMP SHALL BE DISABLED. ONCE THE LAG PRIMARY PUMP HAS STOPPED, THE LAG CHILLER ISOLATION VALVE SHALL CLOSE.

POINTS LIST: THE FOLLOWING REPRESENTS THE MINIMUM POINTS TO BE PROVIDED AND CALCULATIONS TO BE DISPLAYED IN THE SYSTEM GRAPHICS. ALL POINTS LISTED BELOW SHALL BE AVAILABLE TO TREND AS NEEDED. ADDITIONAL POINTS REQUIRED TO MEET THE SEQUENCE SHALL BE PROVIDED AND ALSO SHOWN.

BINARY INPUTS
- PRIMARY CHILLED WATER PUMPS STATUS (CWP1-S, CWP2-S, CWP3-S)
- SECONDARY CHILLED WATER PUMP STATUS (CWP4-S, CWP5-S, CWP6-S)
- CHILLER STATUS (CH1-S, CH2-S, CH3-S)
- CHILLER ALARM (CH1-ALM, CH2-ALM, CH3-ALM)
- CHILLER ISOLATION VALVE END SWITCH (VLV1-ES, VLV2-ES, VLV3-ES)

BINARY OUTPUTS
- PRIMARY CHILLED WATER PUMPS ENABLE (CWP1-C, CWP2-C, CWP3-C)
- SECONDARY CHILLED WATER PUMPS ENABLE (CWP4-C, CWP5-C, CWP6-C)
- CHILLER ENABLE (CH1-C, CH2-C, CH3-C)
- CHILLER ISOLATION VALVES (CH1-ISO, CH2-ISO, CH3-ISO)

ANALOG INPUTS
- OUTSIDE AIR TEMPERATURE (OA-T, MAY BE BROADCAST)
- OUTSIDE AIR HUMIDITY (OA-H, MAY BE BROADCAST)
- PRIMARY CHILLED WATER SUPPLY TEMPERATURE (PCWS-T)
- PRIMARY CHILLED WATER RETURN TEMPERATURE (PCWR1-T, PCWR2-T, PCWR3-T)
- SECONDARY CHILLED WATER SUPPLY TEMPERATURE (SCWS-T)
- SECONDARY CHILLED WATER RETURN TEMPERATURE (SCWR-T)
- CHILLED WATER FLOW (CWS-F)
- CHILLED WATER SYSTEM DIFFERENTIAL PRESSURE (CWS-DPA, CWS-DPB)

ANALOG OUTPUTS
- PRIMARY CHILLED WATER PUMP SPEED CONTROL (CWP1-O, CWP2-O, CWP3-O)
- SECONDARY CHILLED WATER PUMP SPEED CONTROL (CWP4-O, CWP5-O, CWP6-O)

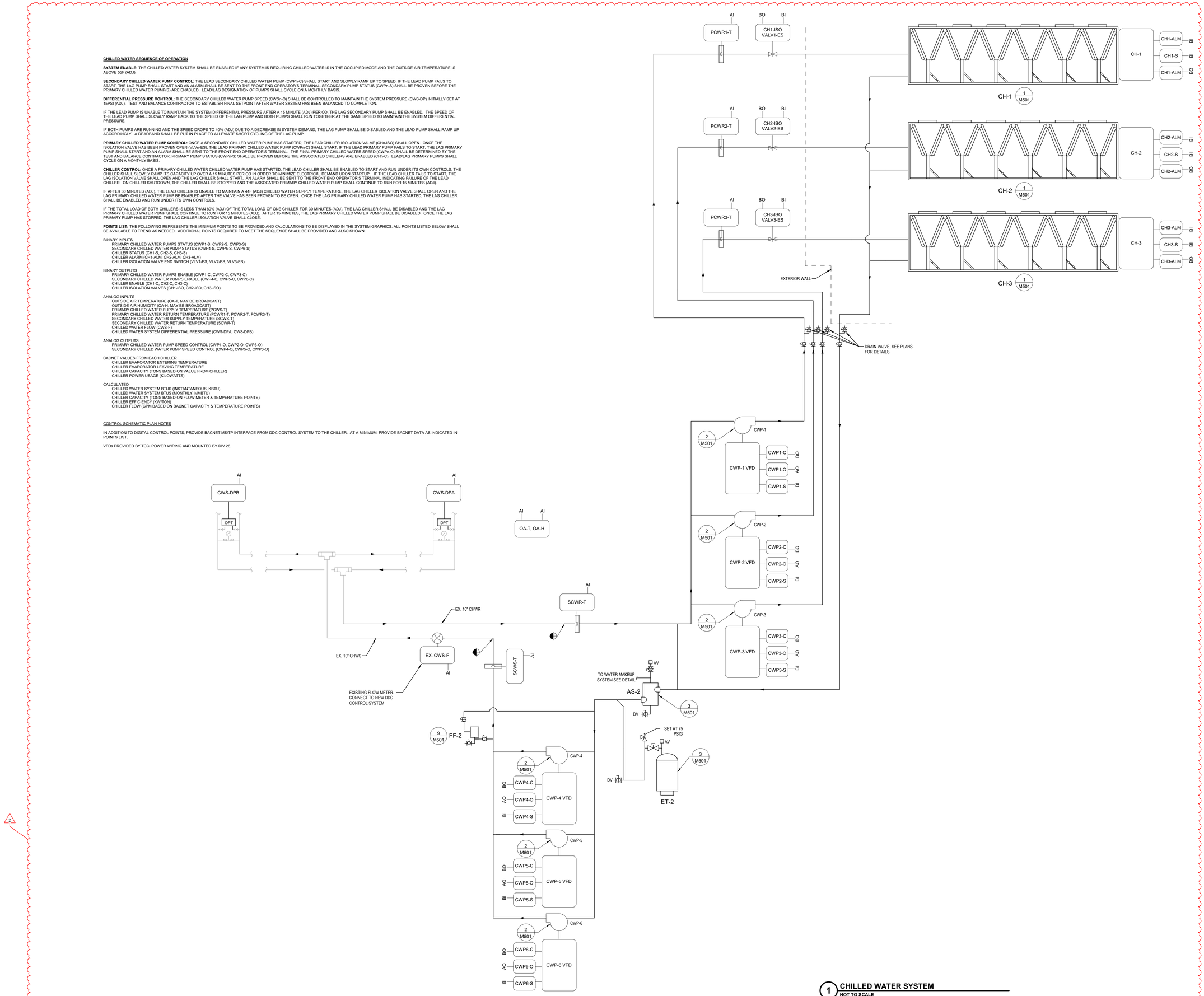
BACNET VALUES FROM EACH CHILLER
- CHILLER EVAPORATOR ENTERING TEMPERATURE
- CHILLER EVAPORATOR LEAVING TEMPERATURE
- CHILLER CAPACITY (TONS BASED ON VALUE FROM CHILLER)
- CHILLER POWER USAGE (KILOWATTS)

CALCULATED
- CHILLED WATER SYSTEM BTUS (INSTANTANEOUS, KBTU)
- CHILLED WATER SYSTEM BTUS (MONTHLY, MMBTU)
- CHILLER CAPACITY (TONS BASED ON FLOW METER & TEMPERATURE POINTS)
- CHILLER EFFICIENCY (KW/TON).
- CHILLER FLOW (GPM BASED ON BACNET CAPACITY & TEMPERATURE POINTS)

CONTROL SCHEMATIC PLAN NOTES

IN ADDITION TO DIGITAL CONTROL POINTS, PROVIDE BACNET MS/TP INTERFACE FROM DDC CONTROL SYSTEM TO THE CHILLER. AT A MINIMUM, PROVIDE BACNET DATA AS INDICATED IN POINTS LIST.

VFDs PROVIDED BY TCC, POWER WIRING AND MOUNTED BY DIV 26.



1 CHILLED WATER SYSTEM
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PROJECT: #23126
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TEMPERATURE CONTROLS SCHEMATICS

M703

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GENERAL HVAC NOTES

A. DARK LINES INDICATE NEW WORK.

B. LIGHT SOLID LINES INDICATE EXISTING MECHANICAL EQUIPMENT, DUCTWORK, PIPING, AND/OR MECHANICAL ACCESSORIES TO REMAIN AS-IS. CONTRACTOR TO FIELD VERIFY ACTUAL EXISTING CONDITIONS PRIOR TO BIDDING.

C. REPLACE ALL DDC CONTROLS WITH NEW BACNET DDC CONTROLS THROUGHOUT BUILDING

D. PROVIDE TESTING AND BALANCING SERVICES TO BALANCE SYSTEM TO FINAL AIRFLOW AND HYDRONIC FLOWS INDICATED ON SCHEDULES

MECHANICAL HVAC PLAN NOTES

1 REMOVE EXISTING SPACE TEMPERATURE SENSOR. PROVIDE SPACE TEMPERATURE SENSOR AND CONTROL CABLING TO NEW DDC CONTROLLER FOR EQUIPMENT BEING CONTROLLED.

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3 REMOVE FAN POWERED VAV TERMINAL UNIT DDC CONTROLLER, DAMPER ACTUATOR, AND TEMPERATURE CONTROL VALVE AND ACTUATOR. PROVIDE NEW DDC CONTROLLER, DAMPER ACTUATOR, AND TEMPERATURE CONTROL VALVE AND ACTUATOR, AND CONTROLS COMMUNICATIONS.

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8 REMOVE TEMPERATURE CONTROL VALVE AND ACTUATOR CONTROLLING FIN-TUBE RADIATION. PROVIDE NEW TEMPERATURE CONTROL VALVE AND ACTUATOR, AND CONTROL CABLING TO NEW DDC CONTROLLER.

9 REMOVE AND REPLACE ALL EXISTING CONTROLS COMPONENTS ON AIR HANDLING UNIT EQUIPMENT. PROVIDE CONTROLS COMPONENTS AND SEQUENCE OF OPERATIONS PER M700 SERIES DRAWINGS.

10 REPLACE ALL EXISTING CONTROLS COMPONENTS AND COMMUNICATION CABLING WITH NEW DDC CONTROL SYSTEM.

11 PROVIDE HEAT TRACING ON ALL EXTERIOR PIPING ON ROOF.

12 PROVIDE NON-FREEZE WALL HYDRANT NFWH-1 EQUAL TO ZURN Z1320-C. INSTALL OUTLET OF HYDRANT 2'-0" ABOVE ROOF.

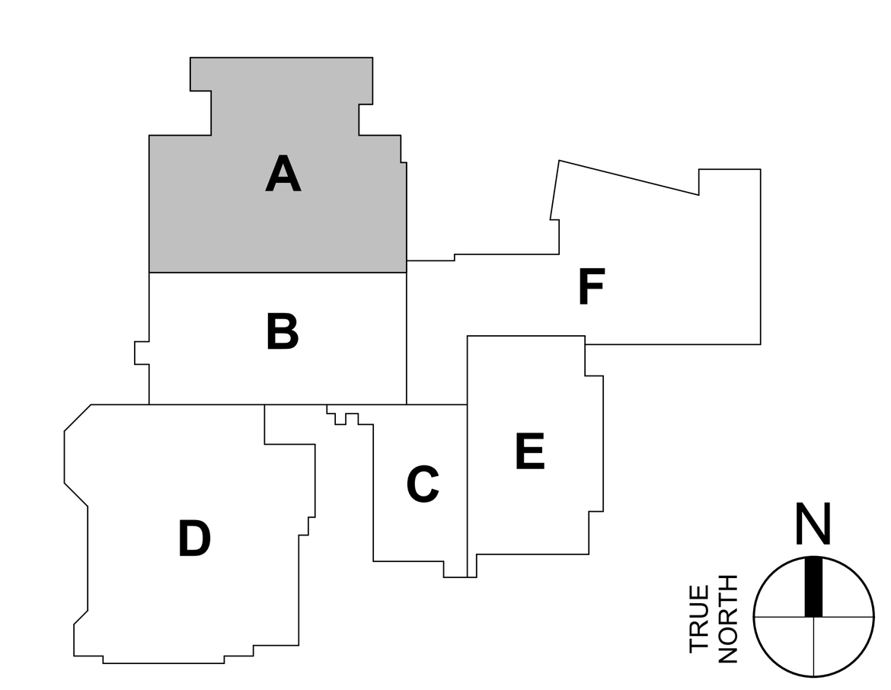
13 SUPPORT PIPING FROM CHILLER SUPPORT STRUCTURE. COORDINATE WITH STRUCTURAL ELEMENTS. REFER TO STRUCTURAL DRAWINGS.

14 INSTALL EXHAUST FAN ON EXISTING ROOF CURB. REPAIR CURBS AS NECESSARY AND PROVIDE CURB ADAPTERS AS REQUIRED FOR INSTALLATION OF NEW FANS. BALANCE AIRFLOW OF FAN AND EXHAUST INLETS TO VALUES DETERMINED PRIOR TO DEMOLITION.

15 INSTALL CHILLERS ON STEEL SUPPORT STRUCTURE. REFER TO STRUCTURAL DRAWINGS.

16 PROVIDE NEW CONTROLS COMPONENTS PER CONTROLS DIAGRAMS AND SEQUENCES OF OPERATIONS. PROVIDE SEQUENCES OF OPERATION PER M700 SERIES DRAWINGS.

1 **MECHANICAL HVAC FIRST FLOOR PLAN - UNIT A**
1/8" = 1'-0"



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PROJECT: #23126
DATE: 05/24/2024
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MECHANICAL HVAC FIRST FLOOR PLAN - UNIT A

MH1A

GENERAL HVAC NOTES

A. DARK LINES INDICATE NEW WORK.

B. LIGHT SOLID LINES INDICATE EXISTING MECHANICAL EQUIPMENT, DUCTWORK, PIPING, AND/OR MECHANICAL ACCESSORIES TO REMAIN AS-IS. CONTRACTOR TO FIELD VERIFY ACTUAL EXISTING CONDITIONS PRIOR TO BIDDING.

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3. REMOVE FAN POWERED VAV TERMINAL UNIT DDC CONTROLLER, DAMPER ACTUATOR, AND TEMPERATURE CONTROL VALVE AND ACTUATOR. PROVIDE NEW DDC CONTROLLER, DAMPER ACTUATOR, AND TEMPERATURE CONTROL VALVE AND ACTUATOR, AND CONTROLS COMMUNICATIONS.
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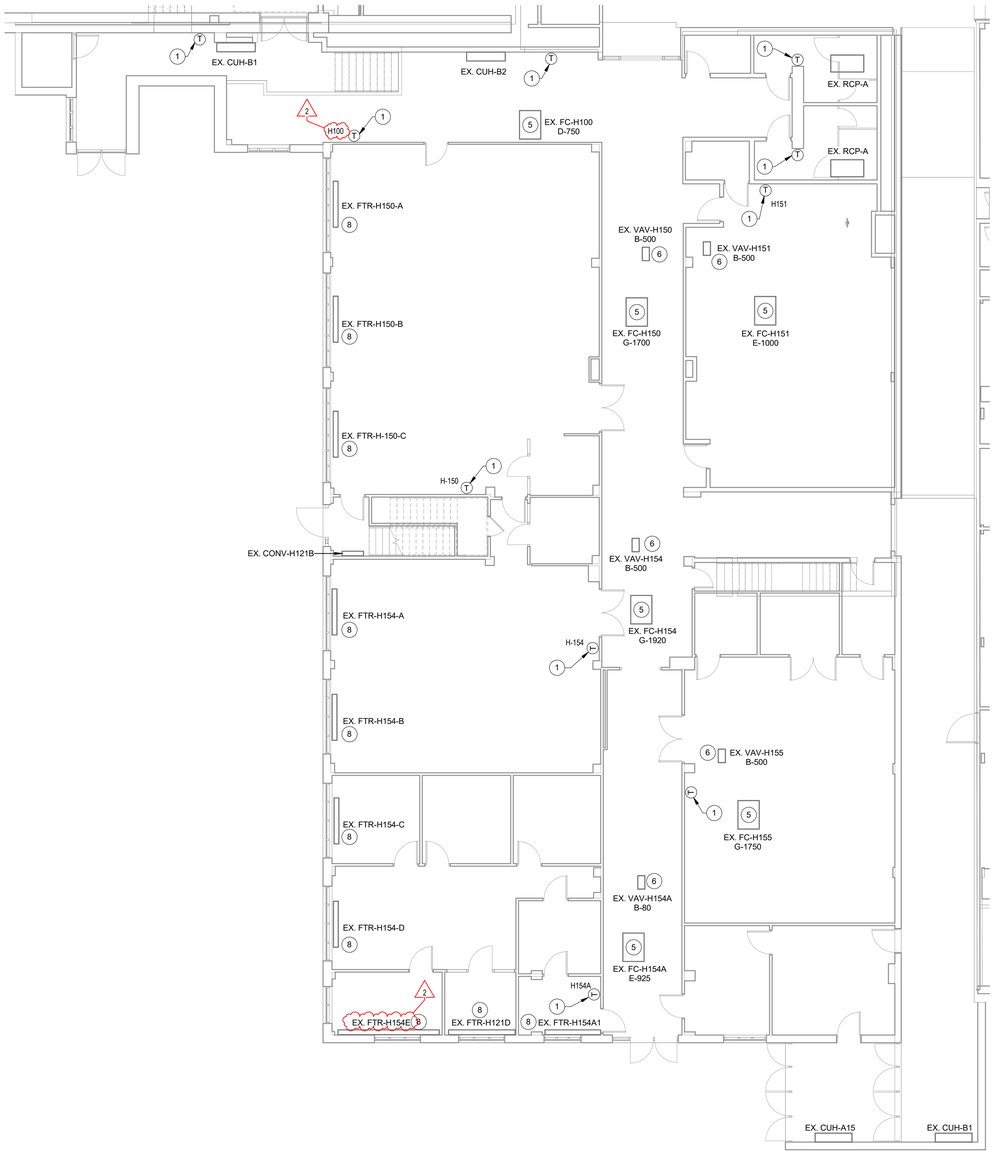
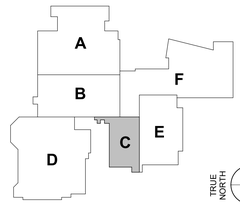


1 **MECHANICAL HVAC FIRST FLOOR PLAN - UNIT C**
1/8" = 1'-0"



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GABRIEL S. CIRGLER
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STATE OF
INDIANA
PROFESSIONAL ENGINEER

REVISIONS:

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MECHANICAL HVAC FIRST FLOOR PLAN - UNIT C

MH1C

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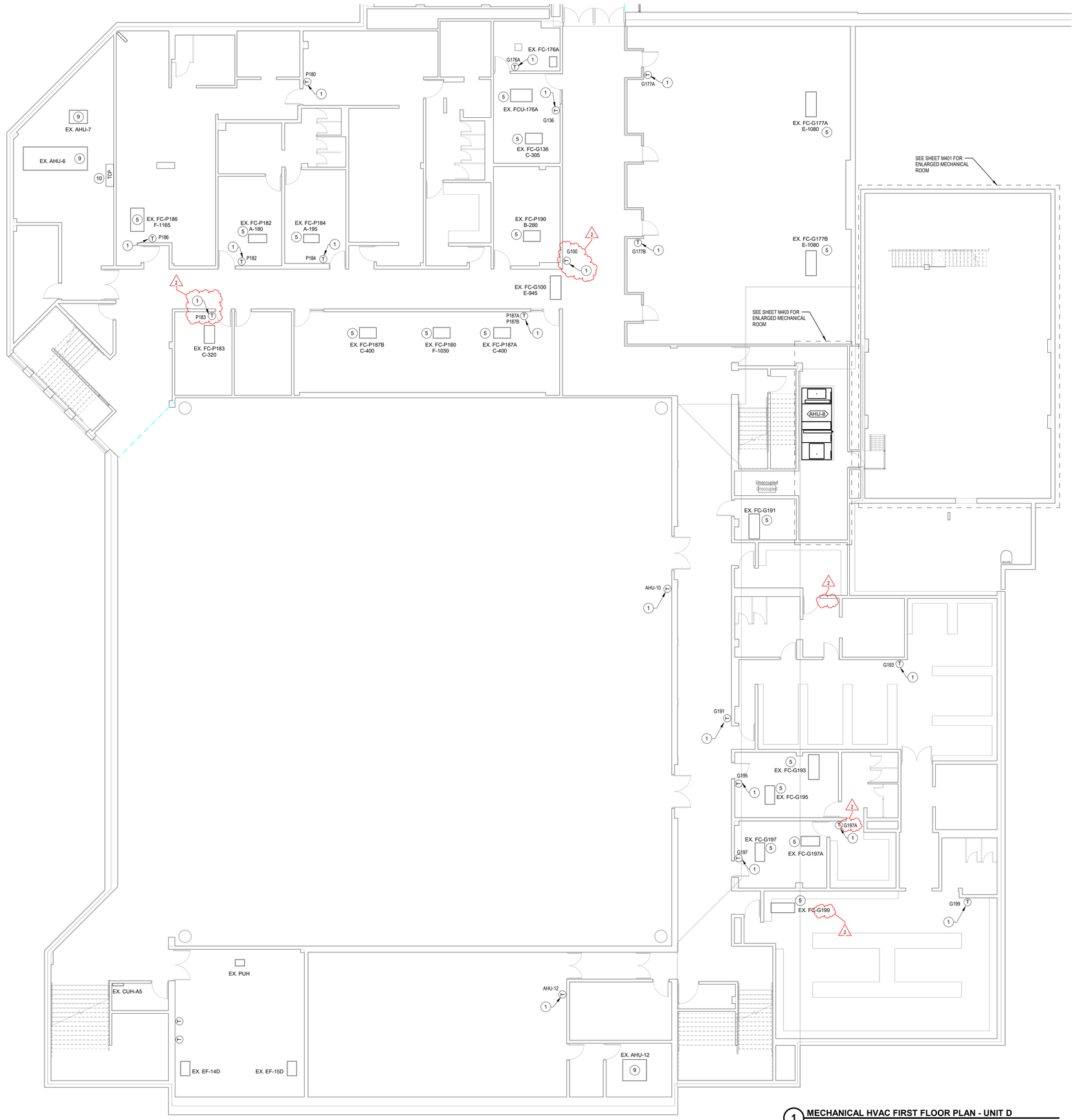

1 **MECHANICAL HVAC FIRST FLOOR PLAN - UNIT D**
1/8" = 1'-0"

GENERAL HVAC NOTES

A. DARK LINES INDICATE NEW WORK.

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GABRIEL S. CURRIER REGISTERED NO. PE10808972 STATE OF INDIANA PROFESSIONAL ENGINEER

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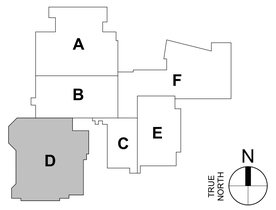
MECHANICAL HVAC FIRST FLOOR PLAN - UNIT D

MH1D



PLOT DATE/TIME:5/13/2024 1:10:53 AM

LANCER ASSOCIATES ARCHITECTURE
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GENERAL HVAC NOTES

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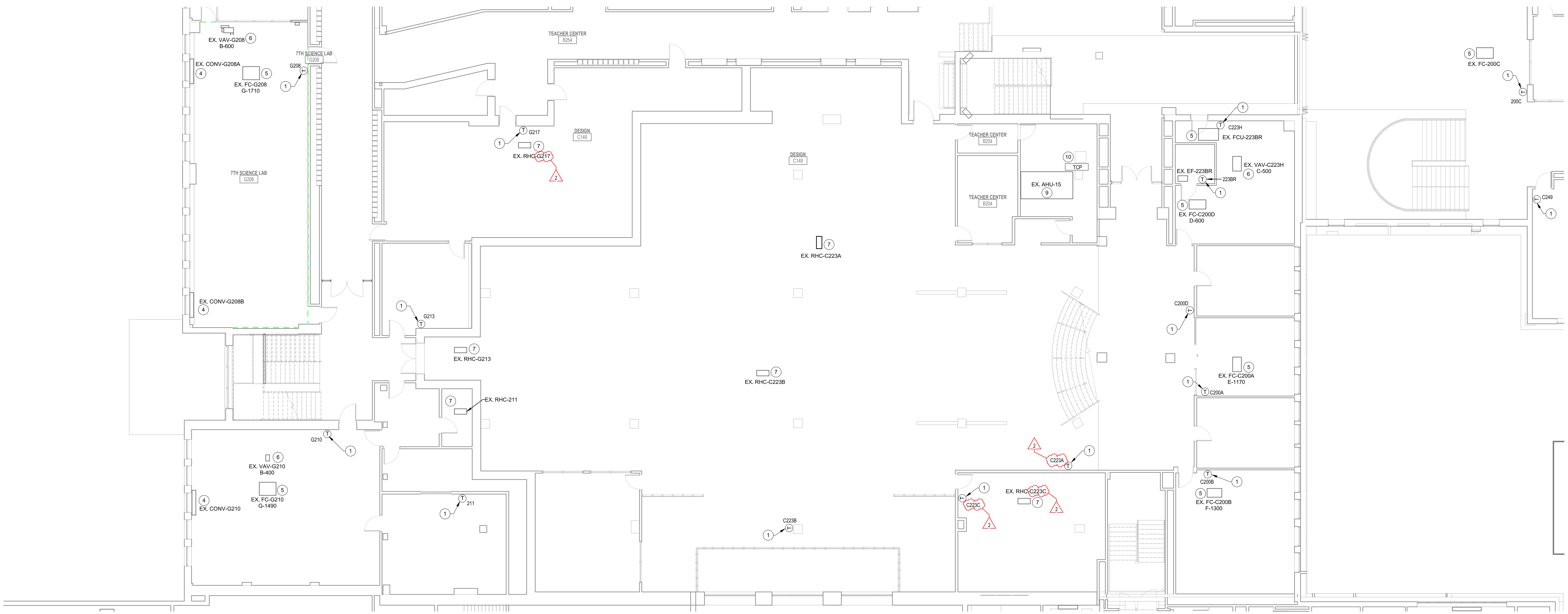
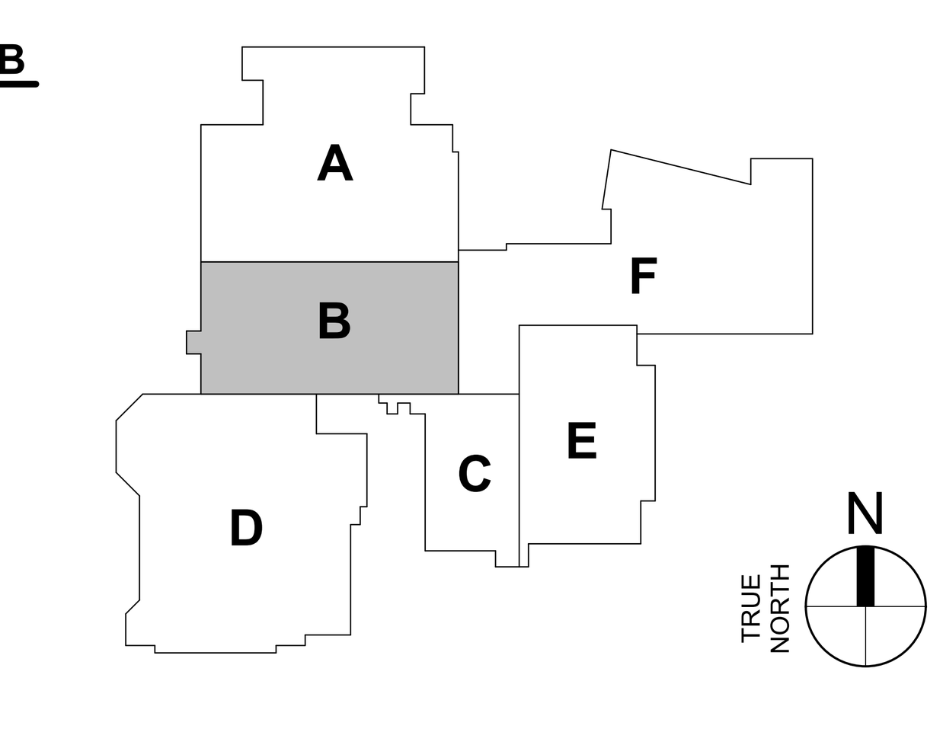


1 MECHANICAL HVAC SECOND FLOOR PLAN - UNIT B
1/8" = 1'-0"



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PROFESSIONAL ENGINEER

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MECHANICAL HVAC SECOND FLOOR PLAN - UNIT B

MH2B

PLOT DATE/TIME:6/13/2024 10:53:51 AM

MECHANICAL HVAC PLAN NOTES

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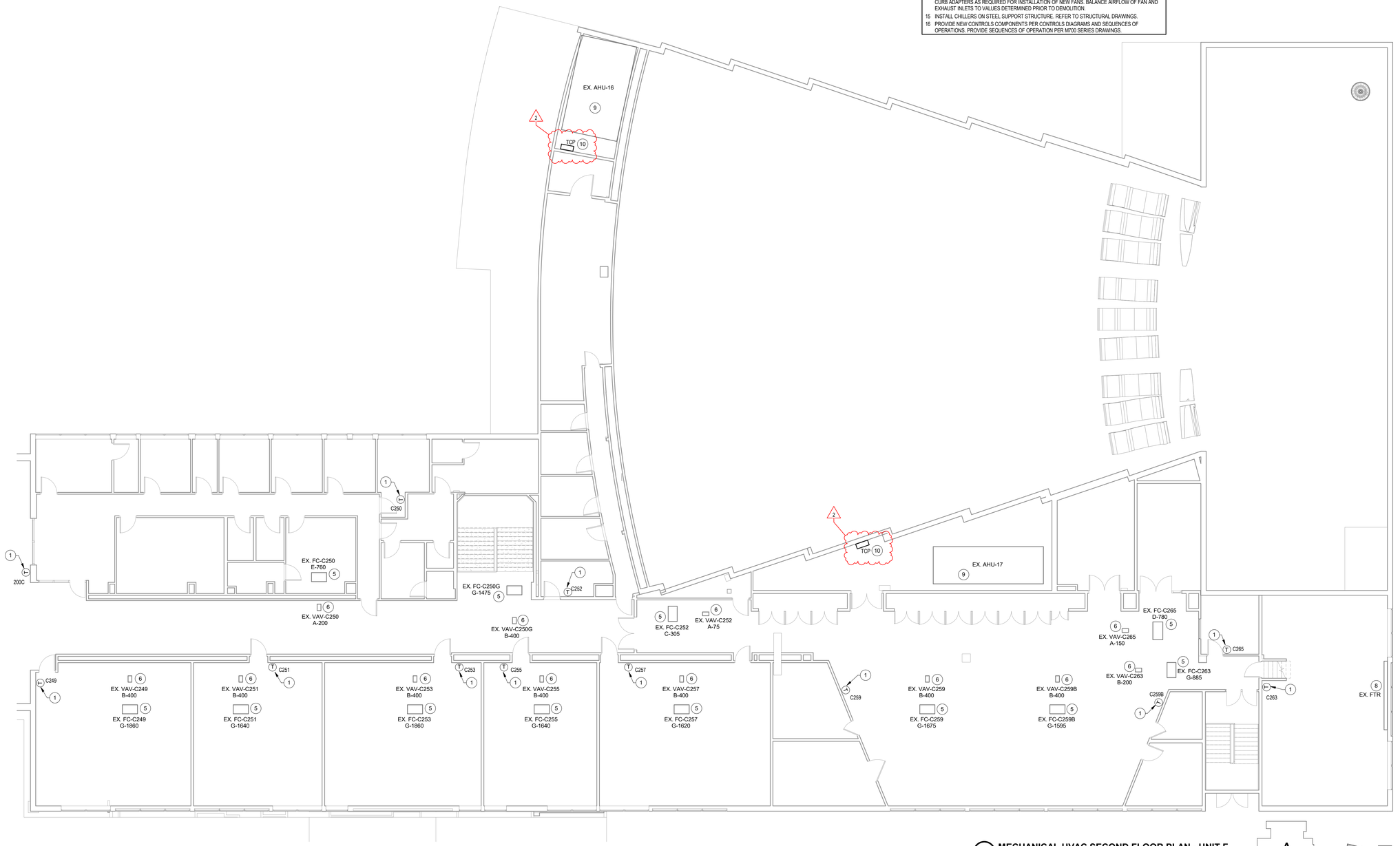
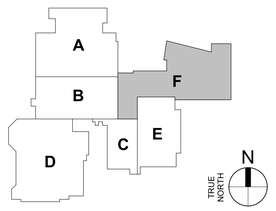


1 **MECHANICAL HVAC SECOND FLOOR PLAN - UNIT F**
1/8" = 1'-0"



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PROFESSIONAL ENGINEER

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MECHANICAL HVAC SECOND FLOOR PLAN - UNIT F

MH2F

PLOT DATE/TIME: 6/13/2024 10:53:52 AM

GENERAL HVAC NOTES

A. DARK LINES INDICATE NEW WORK.

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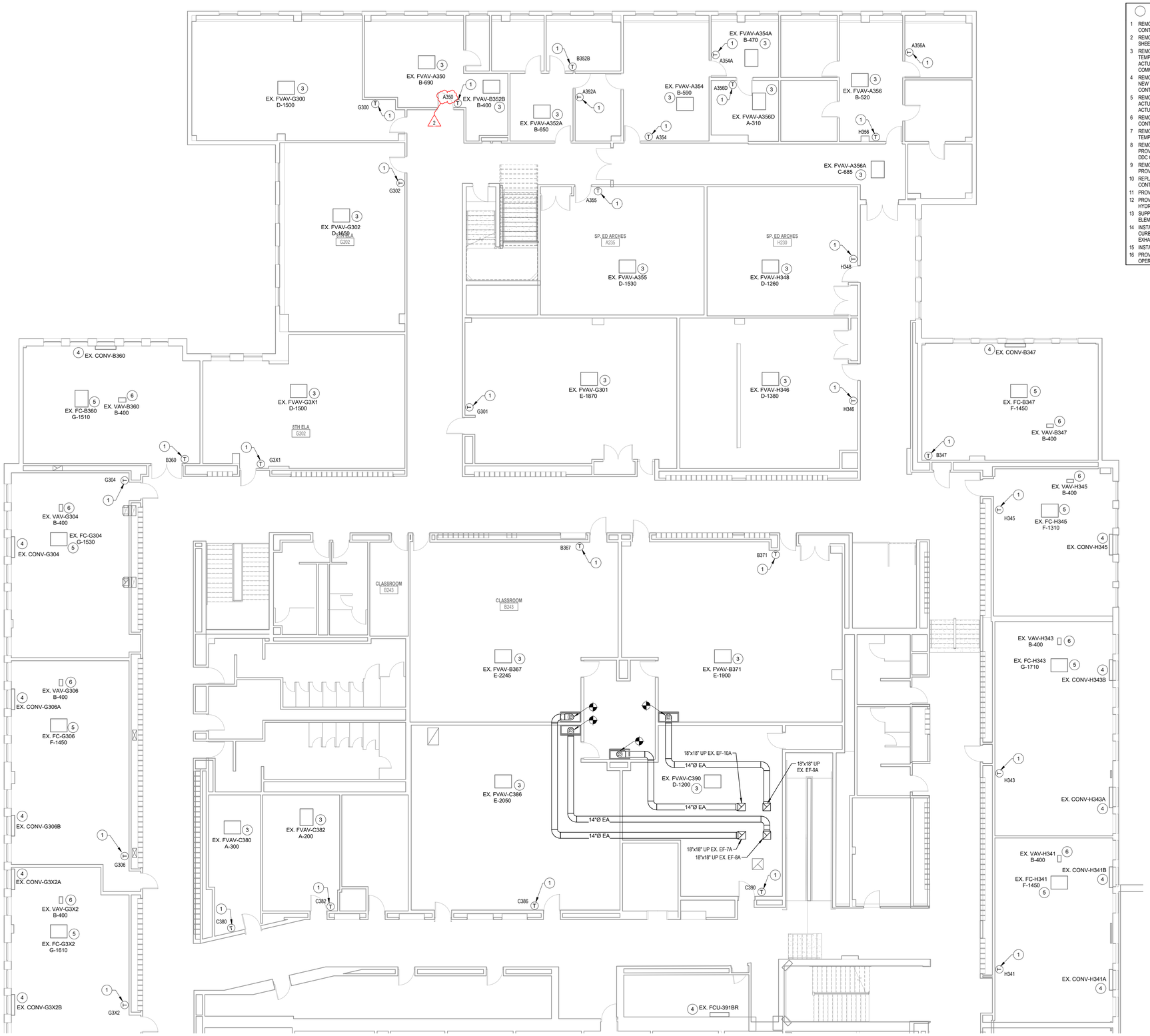
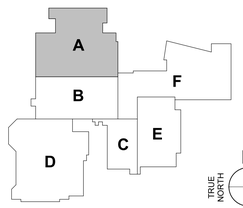


1 MECHANICAL HVAC THIRD FLOOR PLAN - UNIT A
1/8" = 1'-0"



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#	Date	Desc.
1	06/13/2024	ADDENDUM #1

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PROJECT: #23126
DATE: 05/24/2024
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MECHANICAL HVAC THIRD FLOOR PLAN - UNIT A

MH3A

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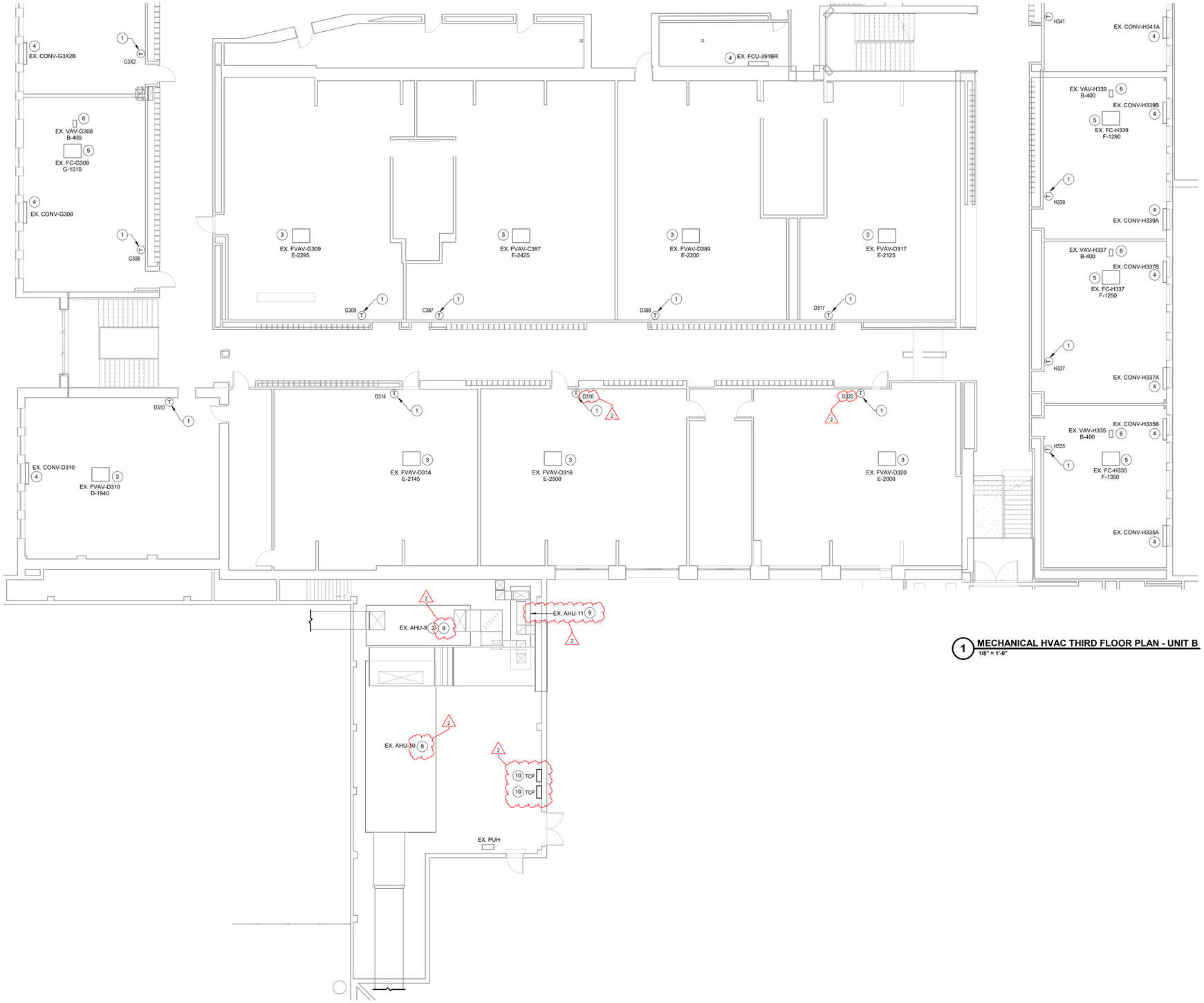

1 MECHANICAL HVAC THIRD FLOOR PLAN - UNIT B
1/8" = 1'-0"

GENERAL HVAC NOTES

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B. LIGHT SOLID LINES INDICATE EXISTING MECHANICAL EQUIPMENT, DUCTWORK, PIPING, AND/OR MECHANICAL ACCESSORIES TO REMAIN AS-IS. CONTRACTOR TO FIELD VERIFY ACTUAL EXISTING CONDITIONS PRIOR TO BIDDING.

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PROJECT: #23126
DATE: 05/24/2024
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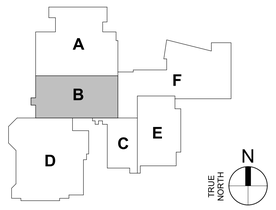
MECHANICAL HVAC THIRD FLOOR PLAN - UNIT B

MH3B



PLOT DATE/TIME:6/13/2024 1:10:53:36 AM

GENERAL HVAC NOTES

A. DARK LINES INDICATE NEW WORK.

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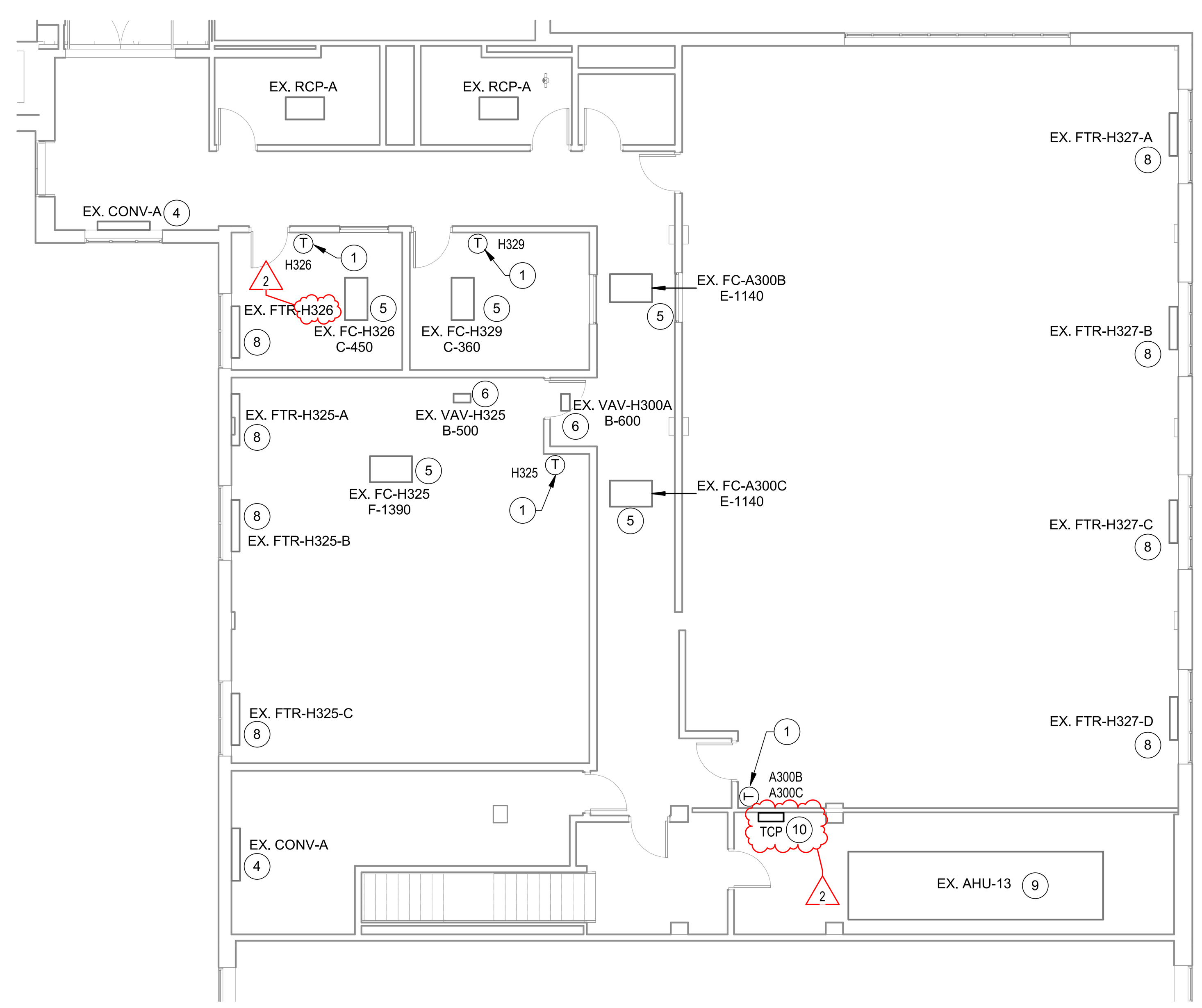
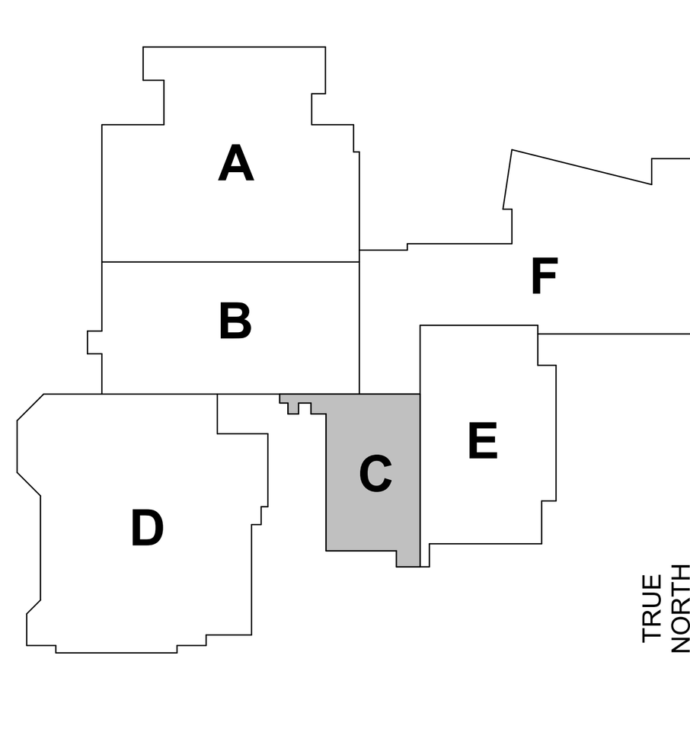


1 **MECHANICAL HVAC THIRD FLOOR PLAN - UNIT C**
1/8" = 1'-0"



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PROJECT:	#23126
DATE:	05/24/2024
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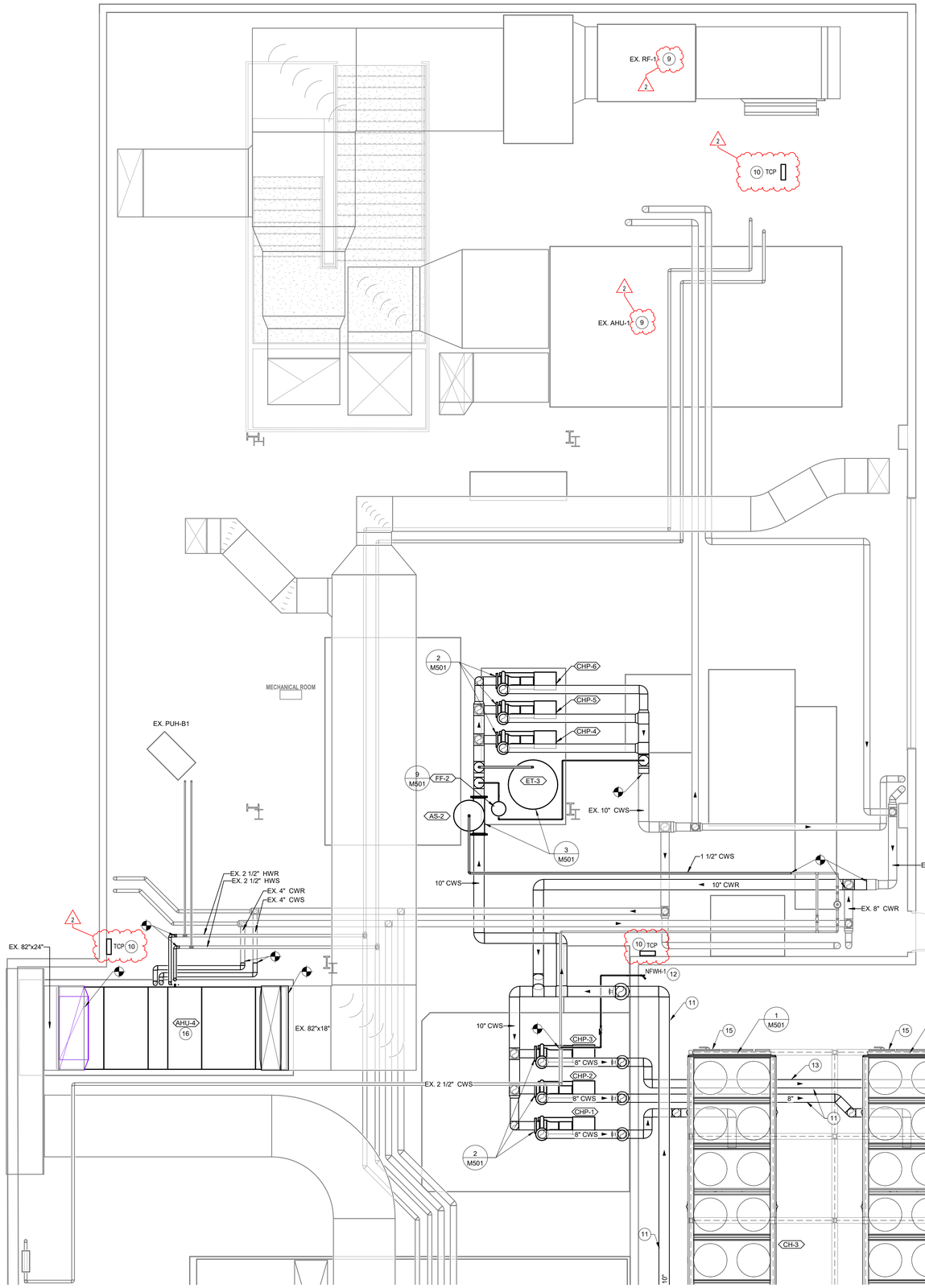
MECHANICAL HVAC THIRD FLOOR PLAN - UNIT C

MH3C



1 MECHANICAL HVAC PENTHOUSE FLOOR PLAN - UNIT A
1/4" = 1'-0"

GENERAL HVAC NOTES

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PROFESSIONAL ENGINEER

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PROJECT: #23126
DATE: 05/24/2024
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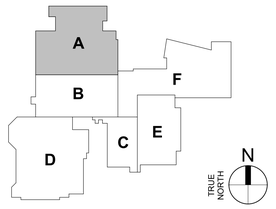
MECHANICAL HVAC PENTHOUSE FLOOR PLAN - UNIT A

MH4A



PLOT DATE/TIME:5/13/2024 1:10:53:39 AM

GENERAL HVAC NOTES

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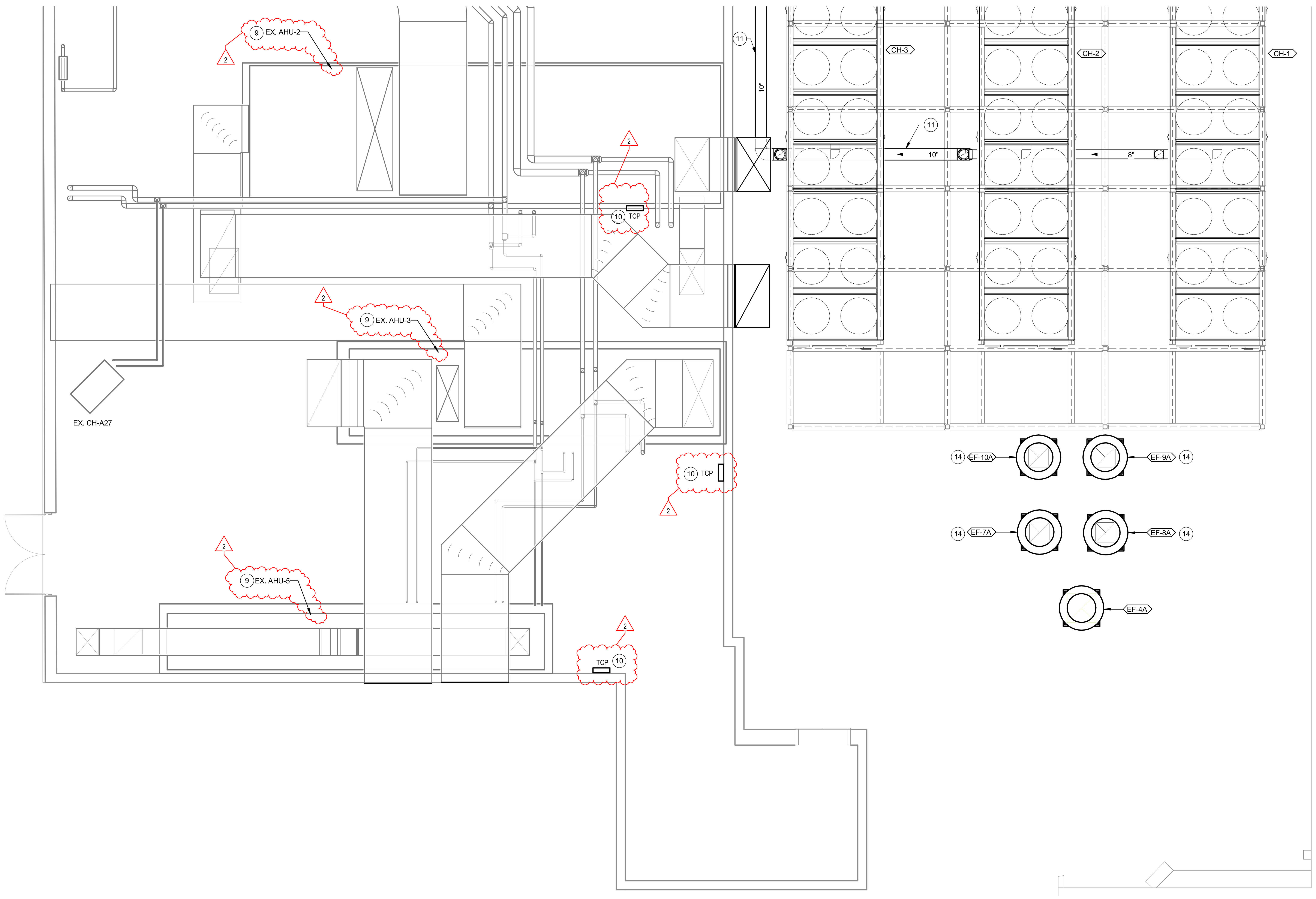
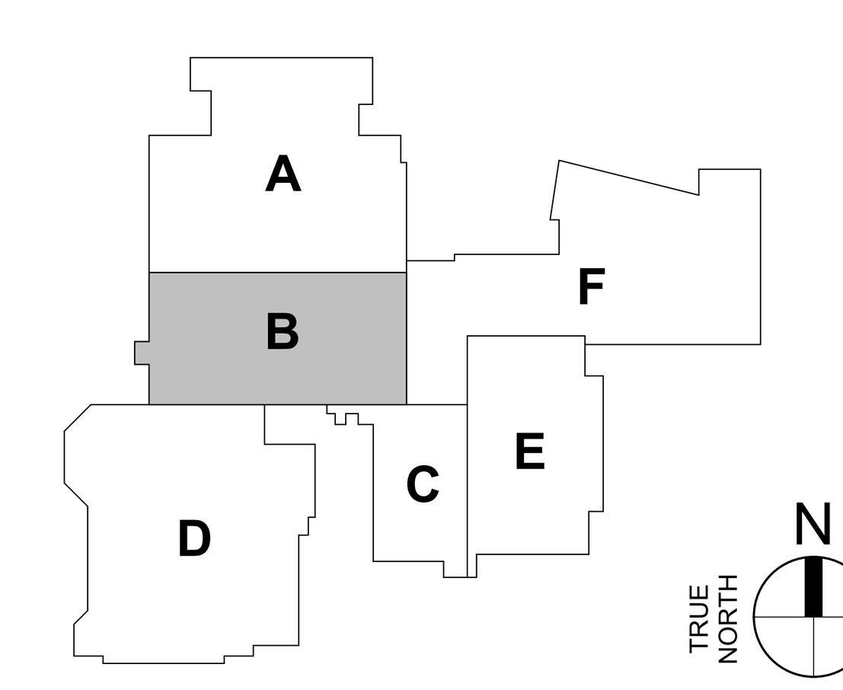


1 **MECHANICAL HVAC PENTHOUSE FLOOR PLAN - UNIT A Copy 1**
1/4" = 1'-0"



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MECHANICAL HVAC PENTHOUSE FLOOR PLAN - UNIT B

MH4B