

ADDENDUM NO. 3

May 10, 2022

BIDDING AND CONTRACT DOCUMENTS

FOR

**SPIETH HALL ROOF REPLACEMENT AND
MECHANICAL UPGRADE**

PROJECT NO. 950599

CONTRACT NO. 950599-LF-2022-84



The following changes, additions, or deletions shall be made to the following documents as indicated for this Project; and all other terms and conditions shall remain the same.

1. **LIST OF DRAWINGS**

Replace List of Drawings with one included in this Addendum.

2. **DRAWINGS**

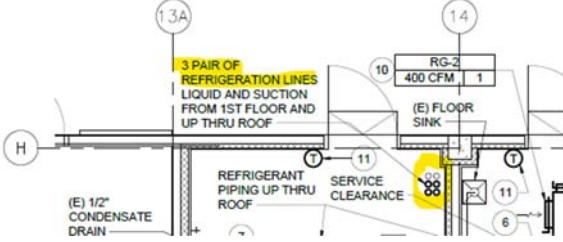
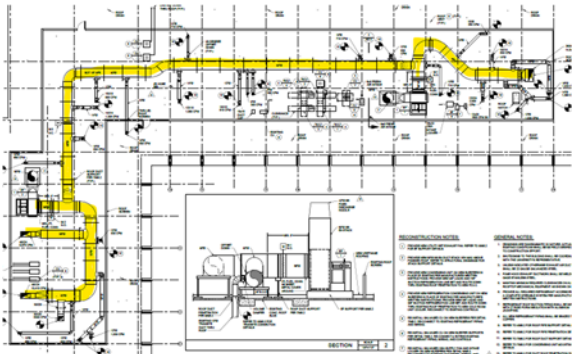
Add SK-1, PHASING PLAN

Add SK-2, PIPING SUPPORT DETAIL

Add SK-3, ROOF EXHAUST DUCT MATERIAL TYPES

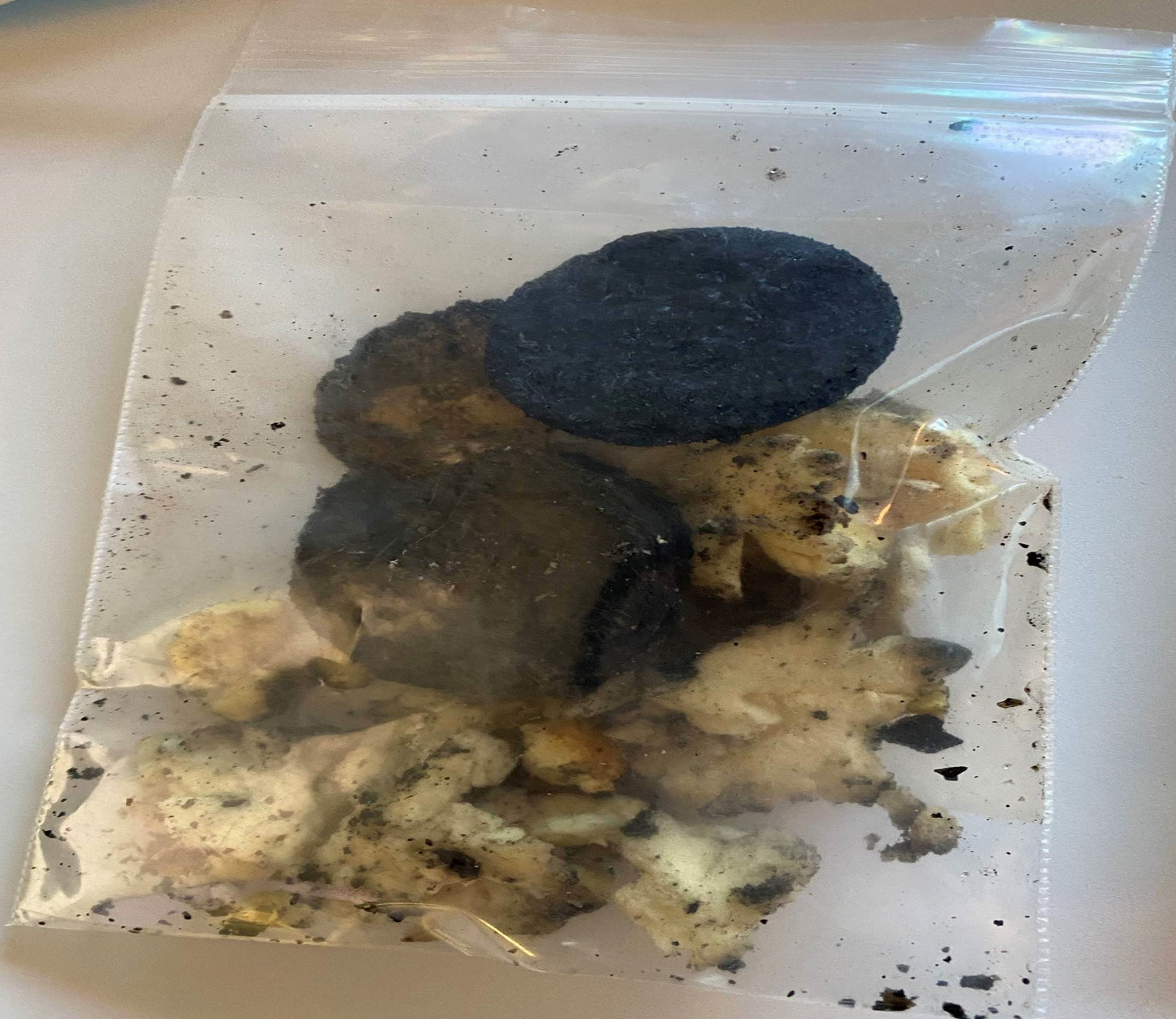
3. **Request for Clarification**

RFI No.	QUESTIONS / ANSWERS
3-1	<p>Question: With current delays and issues with supply chain can the project duration change based on the actual lead time after the purchase of the equipment?</p> <p>Answer: The Contract duration is 9 months to allow for long lead times. However, if the lead time for some equipment requires a contract time extension, the University will consider issuing a \$0 cost change order extending the time. That is, with no additional cost to the University.</p>
3-2	<p>Question: How many phases does this project have? Please provide the phasing of this project?</p> <p>Answer: Refer to attached phasing sketch SK-1 for requirements.</p>
3-3	<p>Question: During the phasing of this project, will you have any temporary exhaust or cooling requirements? If yes, please provide exact sizes and procedures?</p> <p>Answer: No temporary exhaust or cooling required. Work shall be done during the shutdown period with no impact to supply.</p>
3-4	<p>Question: During the job walk we noticed a copper line that runs in the middle of the roof, which is marked as "Lab Vacuum" .This line is not shown on drawings, but will you have any requirement regarding this line?</p> <p>Answer: Protect the existing vacuum piping from damage during construction. Contractor shall be responsible for any damages during construction.</p>

<p>3-5</p>	<p>Question: Per Drawings M1.1 and M1.2, Grids 14xH 3 pair of refrigeration lines going from first floor to the roof. See attached snip. During the job walk they did not look like they are visible, but are they inside a shaft? If they are inside a shaft, access will be required, so would provide a detail on <u>how will they be supported?</u></p>  <p>Answer: Existing refrigerant pipe riser is located within wall shaft. Contractor shall cut opening and patch and paint wall to match existing. Support vertical refrigerant piping at floor level per attached sketch SK-2.</p>
<p>3-6</p>	<p>Question: Per drawing M2.3, General Notes, #4: Fume hood exhaust ductwork shall be welded 24 gage stainless steel. Spec section 23311-3, 2.2, C shows that minimum 18 gauge 24 gauge is very difficult to weld and it will look really bad, we recommend minimum 18 gauge SS.</p> <p>Answer: Provide minimum 18-gauge welded SS ductwork per SMACNA.</p>
<p>3-7</p>	<p>Question: Spec Section 23311-3, 2.2, C shows that we are to use for exposed duct 316L with 4 finish is a brush finish which is extremely expensive and requires much more labor and it would be a waste to have it on the roof. Since this duct is on the roof and exposed to weather, can we use 304 SS or 316 SS ductwork with 2b finish?</p> <p>Answer: Provide 316L SS with 2B finish. 304 SS is not acceptable.</p>
<p>3-8</p>	<p>Question: Please clarify if Ductwork connected to room 2245 Sterilizer Hood needs to be welded SS ductwork?</p> <p>Answer: Exhaust branch ductwork serving Room 2245 Sterilizer Hood shall be welded stainless steel per plan.</p>
<p>3-9</p>	<p>Question: Per M5.1, and M2.3, most of the branches are welded stainless steel ductwork However; main ducts on the roof are 48", 40", 52", 46x60 between grids 17 & 17A and 48x24 between grids 7 & 9. See attached highlighted ductwork. Will the main ducts above need to be welded SS or just galvanized?</p>  <p>Answer: All galvanized ducts shall be minimum 18 gauge and constructed of -10 in. w.g. per SMACNA and Specification Section 23 3113. Refer to attached sketch SK-3 for duct material types.</p>

<p>3-10</p>	<p>Question: Drawing does not show any <u>guy wires</u> for the stack. Will there be any guy wires requirements, if yes, please provide a detail to how it will be attached to the <u>roof</u> and to the <u>duct</u>.</p> <p>Answer: Guy wires are not allowed for welded SS stack support per detail 8/M5.2 Note #2 and 1/S5.1</p>
<p>3-11</p>	<p>Question: Spec section 230900 has very detailed DDC controls specifications. Please provide the existing type of controls at this building?</p> <p>Answer: No existing DDC controls for the exhaust fan systems. Contractor shall provide new standalone DDC controls for exhaust system capable for future BACnet connection.</p>
<p>3-12</p>	<p>Question: Will UCR be having a 3rd party commissioning agent? or all commissioning will be done by the control contractor?</p> <p>Answer: UCR will hire 3rd party commissioning agent under direct contract with the University.</p>
<p>3-13</p>	<p>Question: Please provide pictures of existing roof assembly and what it consists of.</p> <p>Answer: Existing as-built drawings for the north portion of the building are not available, however the roof system appears to be a ballast gravel composition roof over rigid foam insulation with a cover/protection board. Refer to the asbestos reports for locations of hazardous materials and photos of roof core samples provided with this response.</p>
<p>3-14</p>	<p>Question: Please provide staging area(s) for dumpsters for roof demo.</p> <p>Answer: Dumpsters to be placed at the Construction Laydown Area. Refer to Division 01 5200 Construction Facilities.</p>
<p>3-15</p>	<p>Question: We received an extensive asbestos report that has testing very much everywhere in the building. Please confirm that we are responsible for asbestos removal only at related locations that are related to our work which are on the roof and the 4 cooling rooms?</p> <p>Answer: Confirmed. The contractor is responsible for asbestos removal for areas of work indicated in the drawings.</p>
<p>3-16</p>	<p>Question: Since we are to demo multiple exhaust fans that services Fume Hoods, will there be any hazardous material in these old exhaust fans? Who will scrub the old exhaust fans if any hazardous material exists?</p> <p>Answer: Contractor shall coordinate with UCR EHS to conduct a specific hazard assessment prior to construction activity to determine if there could be contamination or concern. If any contamination is present, a plan specific to that concern will be formulated. Prior to work on all fume hoods at UCR, researchers are required to clean the interior of their lab hoods with soap and water and then the hoods are tagged to show they are ready for contractor work. Most contamination would have resided in the hood itself. During construction, any identified contamination cleanup or special work requirements beyond typical worker PPE should be brought to the attention of the University's Representative for consultation with EHS.</p>
<p>3-17</p>	<p>Question: Manufacturer confirmed that direct drive is not available for this size EF USF-54 30hp.</p> <p>Answer: The new EFs shall be belt drive due to space limitation. The EF model scheduled per plan is correct.</p>

END OF ADDENDUM





LIST OF DRAWINGS

SHEET NO.	TITLE	DATE
G0.1	TITLE SHEET	02/02/22
A0.1	(E) ROOF PLAN, SELECTIVE DEMOLITION	02/02/22
A0.2	(E) EXISTING PARTIAL BASEMENT FLOOR PLAN	02/02/22
A0.3	(E) EXISTING PARTIAL 1 ST FLOOR PLAN	02/02/22
A0.4	(E) EXISTING PARTIAL 2 ND FLOOR PLAN	02/02/22
A0.5	(N) ROOF PLAN	02/02/22
A0.6	DETAILS, NOTES AND SYMBOLS	02/02/22
S0.1	GENERAL NOTES	02/02/22
S2.1	ROOF FRAMING PLAN	02/02/22
S5.1	STRUCTURAL DETAILS	02/02/22
<u>SK-1</u>	<u>PHASING PLAN</u>	<u>05/10/2022</u> <u>Addendum 3</u>
<u>SK-2</u>	<u>PIPING SUPPORT DETAIL</u>	<u>05/10/2022</u> <u>Addendum 3</u>
<u>SK-3</u>	<u>ROOF EXHAUST DUCT MATERIAL TYPES</u>	<u>05/10/2022</u> <u>Addendum 3</u>
M0.1	SYMBOLS, DESIGNATION & ABBREVIATION	02/02/22
M0.2	MECHANICAL SCHEDULES	02/02/22
M1.1	FIRST FLOOR MECHANICAL PLAN	02/02/22
M1.2	SECOND FLOOR MECHANICAL PLAN	02/02/22
M1.3	ROOF MECHANICAL DEMOLITION PLAN	02/02/22
M2.3	ROOF MECHANICAL RECONSTRUCTION PLAN	02/02/22
M5.1	EXHAUST AIRFLOW DIAGRAM	02/02/22
M5.2	MECHANICAL DETAILS	02/02/22
M5.3	MECHANICAL DETAILS	02/02/22
M5.4	MECHANICAL DETAILS	02/02/22
E0.1	SYMBOLS, DESIGNATIONS AND ABBREVIATIONS	02/02/22 <u>04/18/22</u> <u>Addendum 2</u>
E1.0	BASEMENT POWER DEMOLITION PLAN	02/02/22 <u>04/18/22</u> <u>Addendum 2</u>
E1.1	FIRST FLOOR POWER PLAN	02/02/22
E1.2	SECOND FLOOR POWER PLAN	02/02/22
E1.3	ROOF POWER DEMOLITION PLAN	02/02/22 <u>04/18/22</u> <u>Addendum 2</u>
E2.1	BASEMENT POWER RECONSTRUCTION PLAN	02/02/22 <u>04/18/22</u> <u>Addendum 2</u>
E2.4	ROOF POWER RECONSTRUCTION PLAN	02/02/22
E5.1	ELECTRICAL DETAILS	02/02/22
E6.1	SINGLE LINE DIAGRAM (DEMOLITION)	02/02/22 <u>04/18/22</u> <u>Addendum 2</u>
E6.2	SINGLE LINE DIAGRAM (RECONSTRUCTION)	02/02/22 <u>04/18/22</u> <u>Addendum 2</u>

END OF LIST OF DRAWINGS

May 9th, 2022

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University of California, Riverside
Planning, Design & Construction
Office: 951-827-4821

Subject: UCR Spieth Hall Roof Replacement & Mechanical Upgrades - Addendum #3

SUMMARY OF REVISIONS

MECHANICAL

SK-1:

1. Phasing plan to allow maximum 12-hour shutdowns.

SK-2:


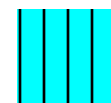




1. Piping wall support detail for new refrigerant piping in existing shaft riser.

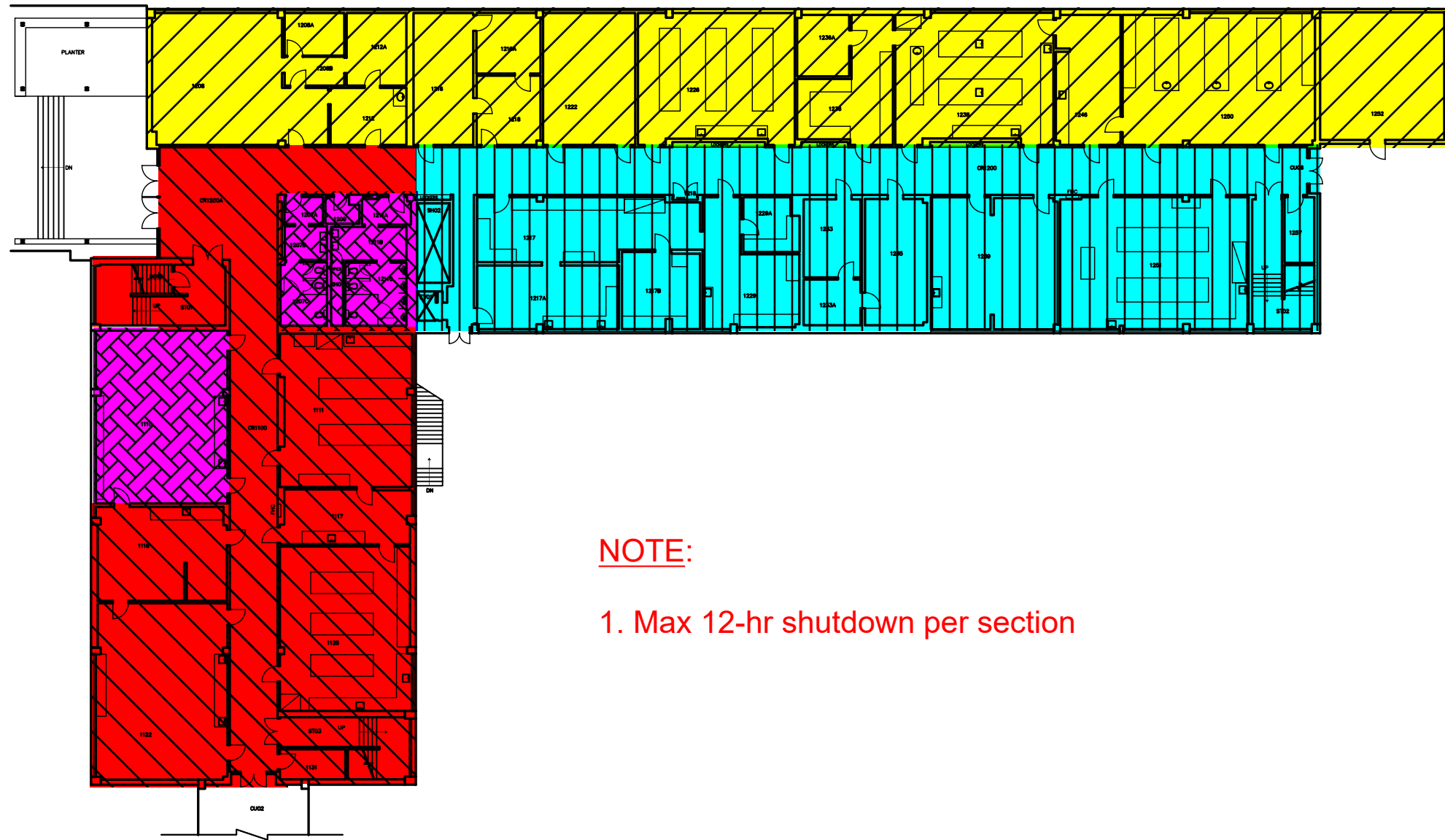
SK-3:

1. Roof exhaust duct construction material clarifications.



LEGEND

-  Section #1
-  Section #2
-  Section #3
-  Section #4
-  Section #5
-  Section #6



NOTE:

- 1. Max 12-hr shutdown per section

1ST FLOOR



Reviewed for Code Compliance
05/10/22



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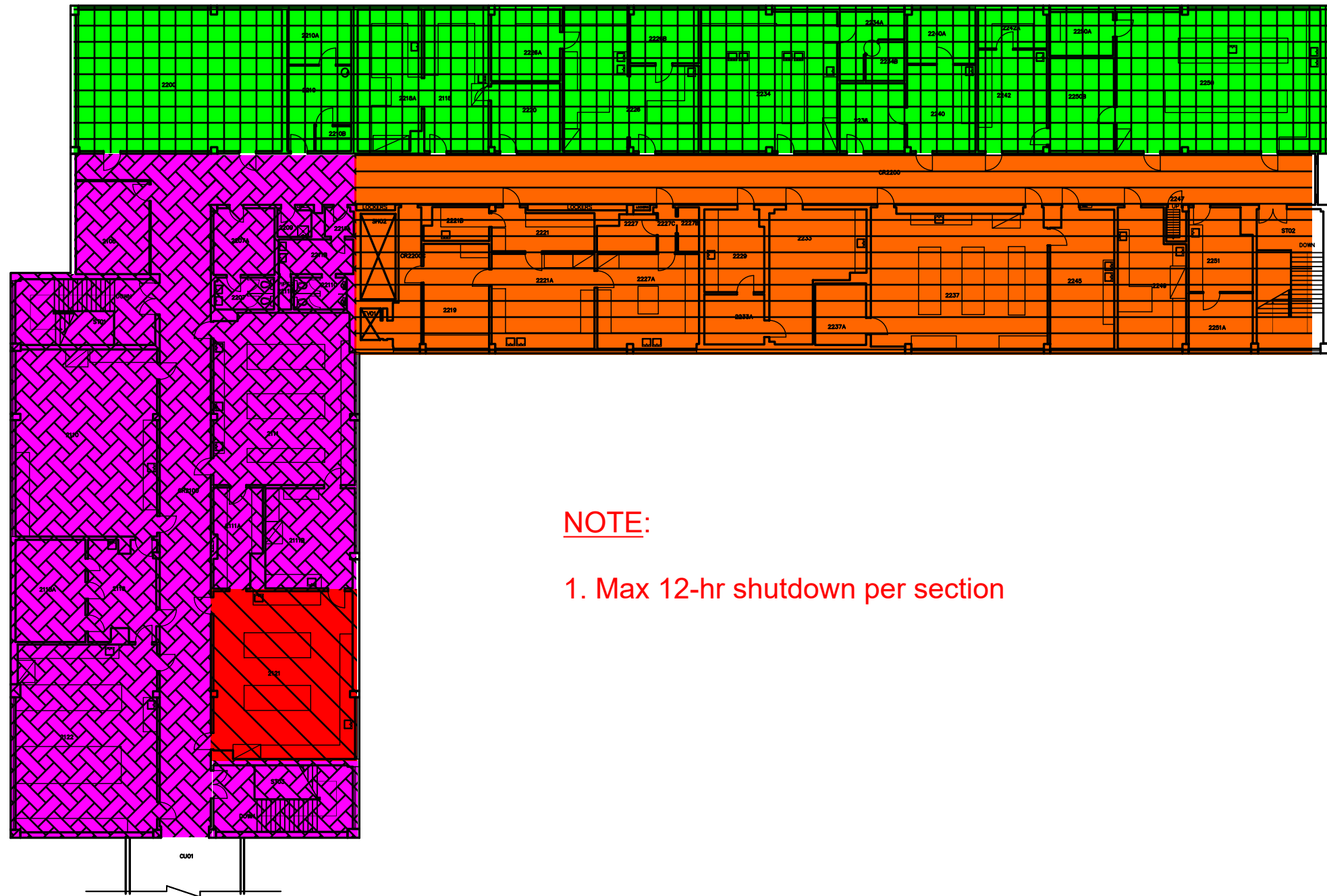
SPIETH HALL ROOF REPLACEMENT &
MECHANICAL UPGRADE

PHASING PLAN
ADDENDUM #3

FILE	120-07-05
DATE	05-09-22
DRAWING NUMBER	SK-1

LEGEND

-  Section #1
-  Section #2
-  Section #3
-  Section #4
-  Section #5
-  Section #6



NOTE:

- 1. Max 12-hr shutdown per section

2ND FLOOR



Reviewed for Code Compliance
05/10/22



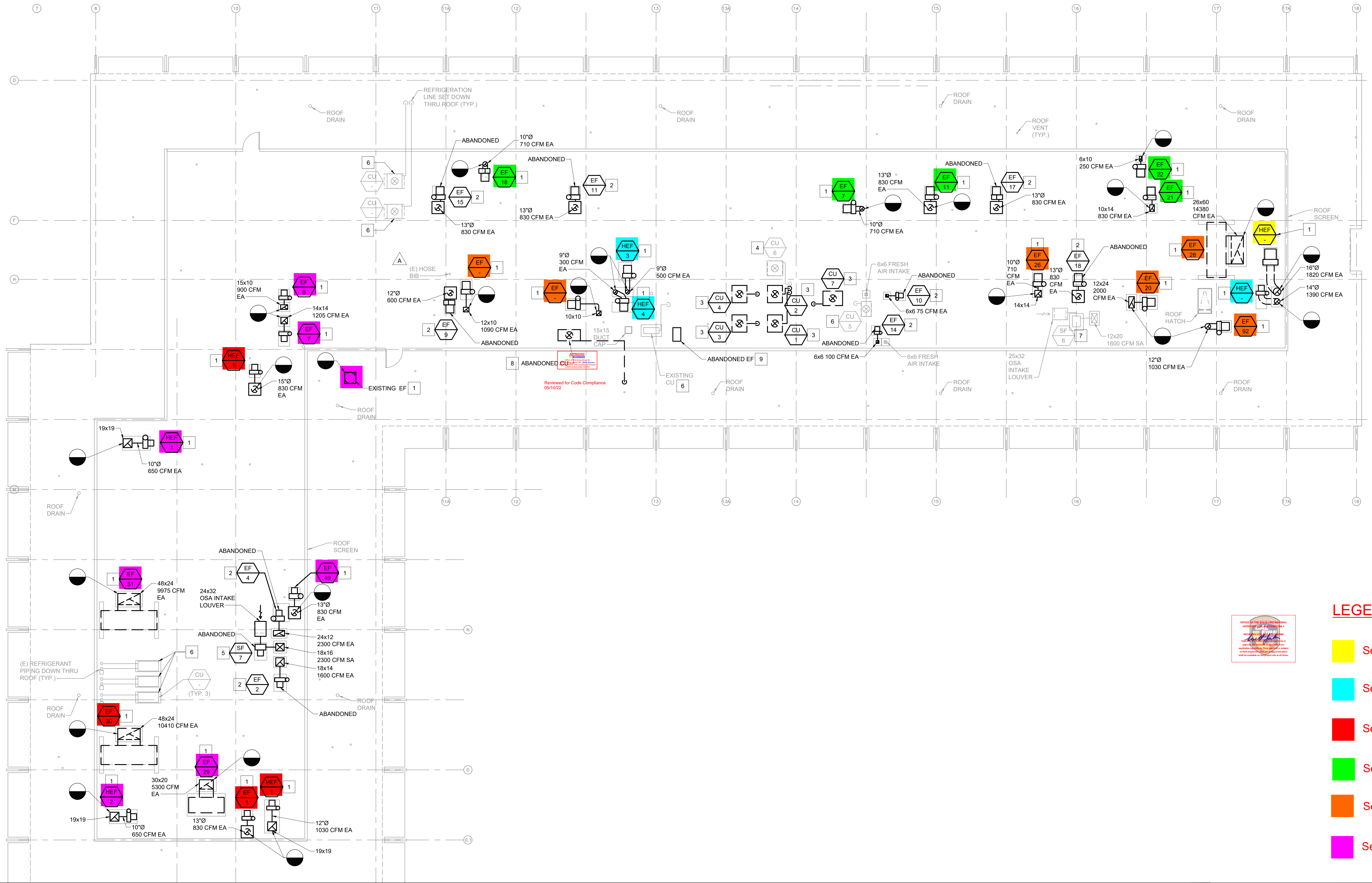
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- LEGEND**
- Section #1
 - Section #2
 - Section #3
 - Section #4
 - Section #5
 - Section #6

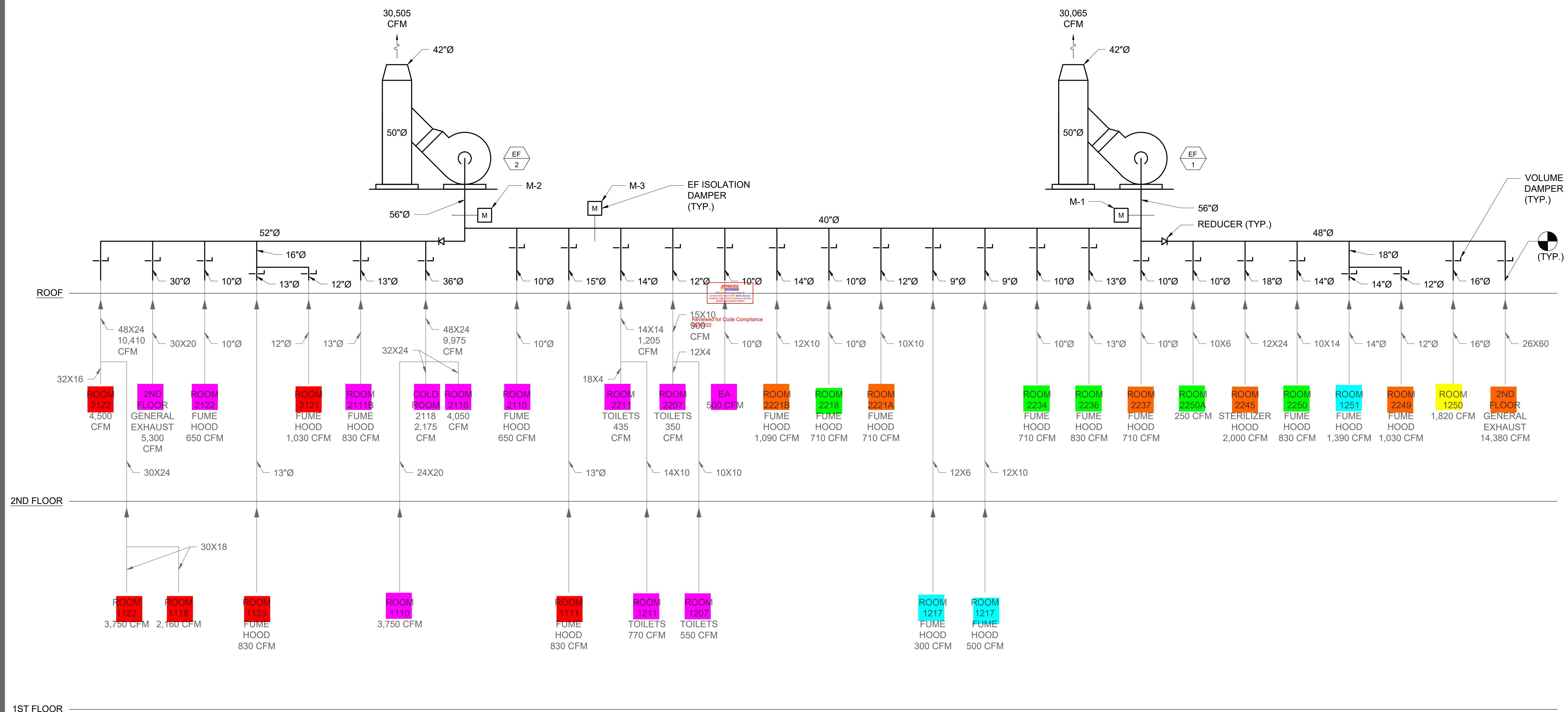


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- LEGEND**
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 - Section #2
 - Section #3
 - Section #4
 - Section #5
 - Section #6



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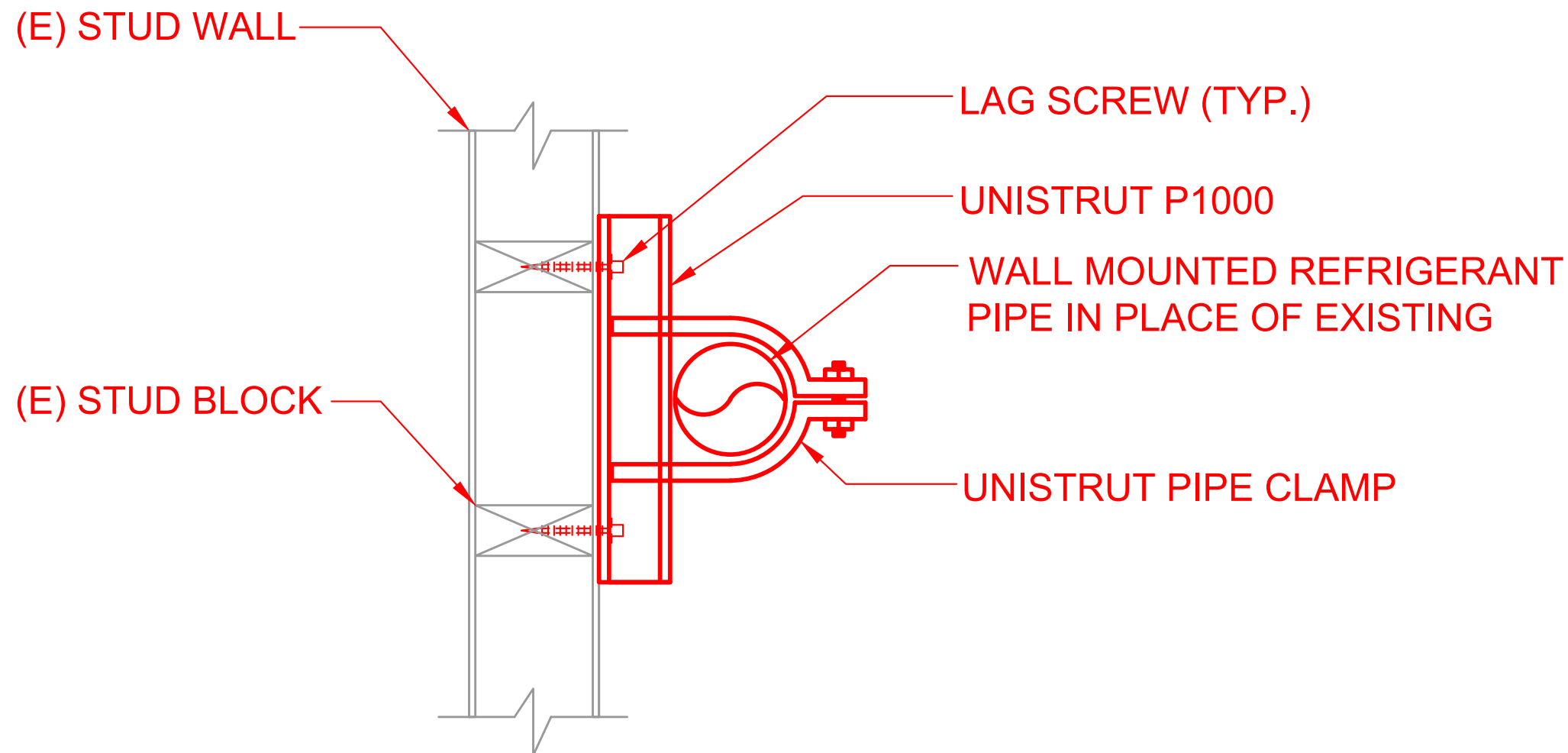
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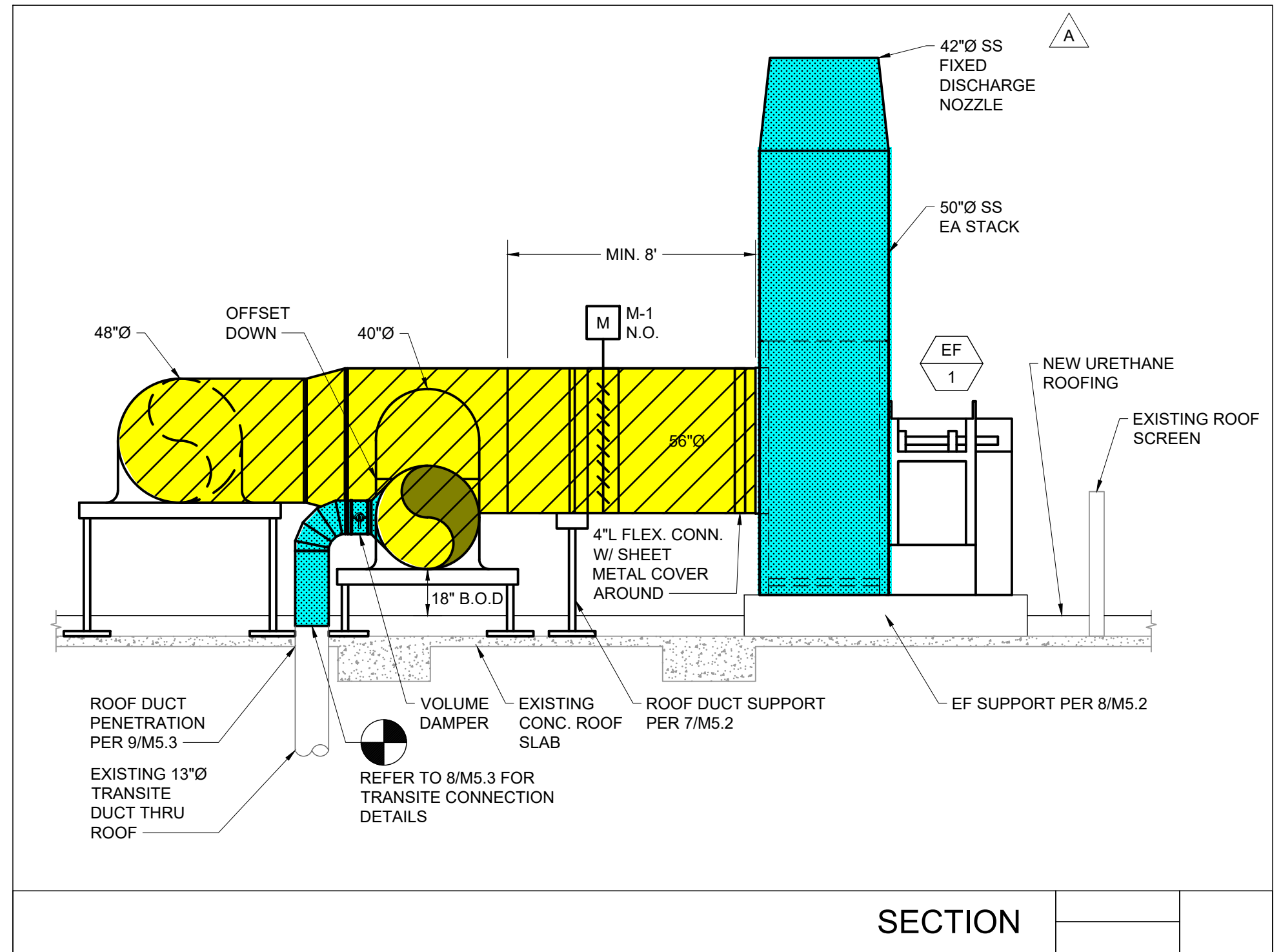
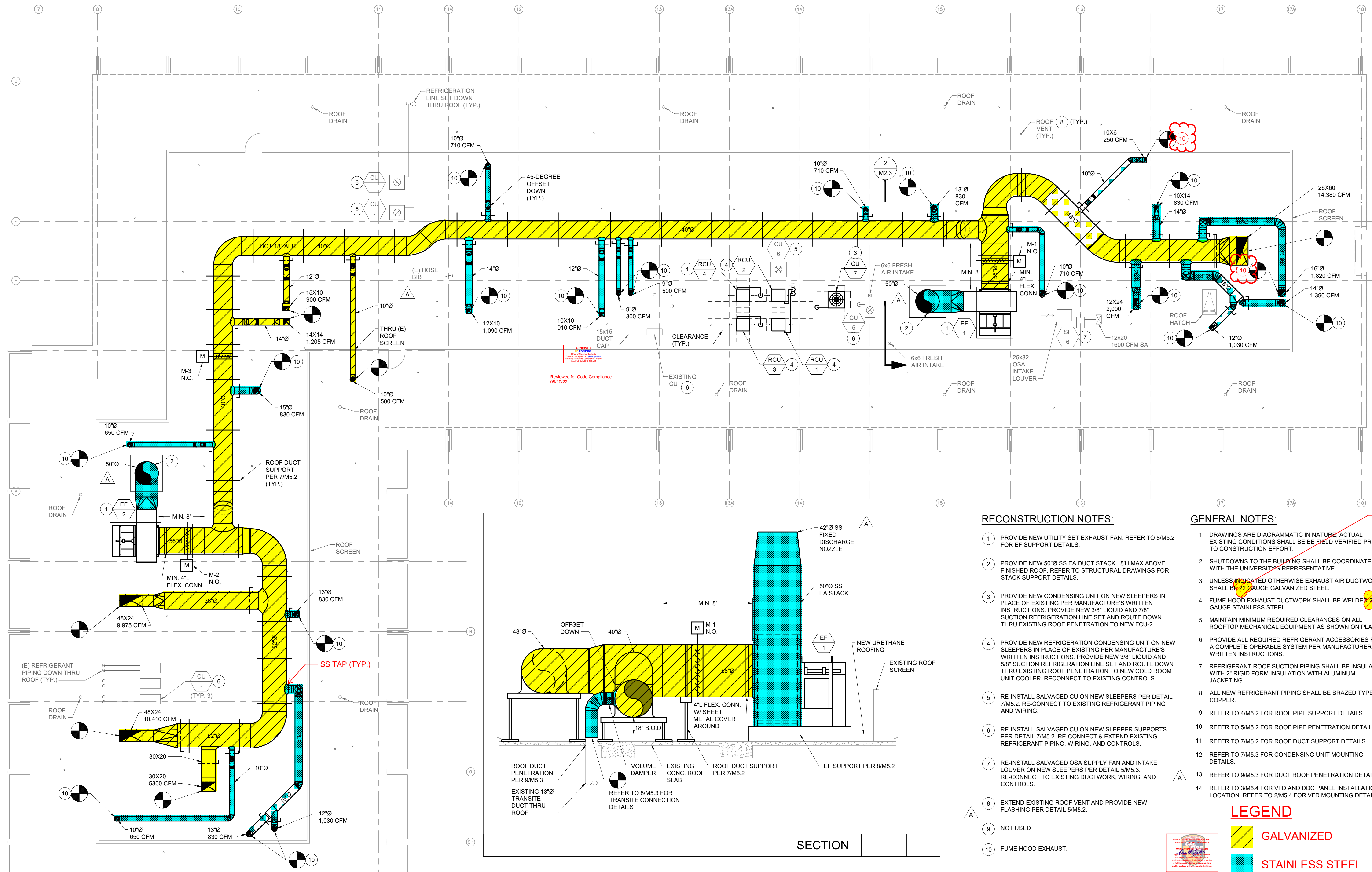
PIPING SUPPORT DETAIL (N.T.S.)

ADDENDUM #3

FILE
120-07-05

DATE
05-09-22

DRAWING NUMBER
SK-2



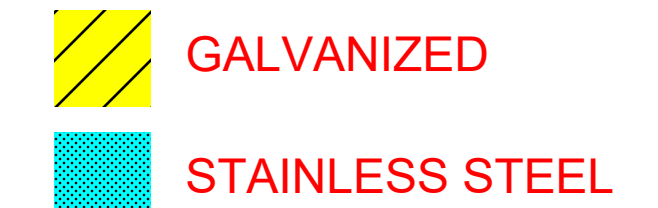
RECONSTRUCTION NOTES:

- 1 PROVIDE NEW UTILITY SET EXHAUST FAN. REFER TO 8/M5.2 FOR EF SUPPORT DETAILS.
- 2 PROVIDE NEW 50"Ø SS EA DUCT STACK 18" MAX ABOVE FINISHED ROOF. REFER TO STRUCTURAL DRAWINGS FOR STACK SUPPORT DETAILS.
- 3 PROVIDE NEW CONDENSING UNIT ON NEW SLEEPERS IN PLACE OF EXISTING PER MANUFACTURER'S WRITTEN INSTRUCTIONS. PROVIDE NEW 3/8" LIQUID AND 7/8" SUCTION REFRIGERATION LINE SET AND ROUTE DOWN THRU EXISTING ROOF PENETRATION TO NEW FCU-2.
- 4 PROVIDE NEW REFRIGERATION CONDENSING UNIT ON NEW SLEEPERS IN PLACE OF EXISTING PER MANUFACTURER'S WRITTEN INSTRUCTIONS. PROVIDE NEW 3/8" LIQUID AND 5/8" SUCTION REFRIGERATION LINE SET AND ROUTE DOWN THRU EXISTING ROOF PENETRATION TO NEW COLD ROOM UNIT COOLER. RECONNECT TO EXISTING CONTROLS.
- 5 RE-INSTALL SALVAGED CU ON NEW SLEEPERS PER DETAIL 7/M5.2. RE-CONNECT TO EXISTING REFRIGERANT PIPING AND WIRING.
- 6 RE-INSTALL SALVAGED CU ON NEW SLEEPER SUPPORTS PER DETAIL 7/M5.2. RE-CONNECT & EXTEND EXISTING REFRIGERANT PIPING, WIRING, AND CONTROLS.
- 7 RE-INSTALL SALVAGED OSA SUPPLY FAN AND INTAKE LOUVER ON NEW SLEEPERS PER DETAIL 5/M5.3. RE-CONNECT TO EXISTING DUCTWORK, WIRING, AND CONTROLS.
- 8 EXTEND EXISTING ROOF VENT AND PROVIDE NEW FLASHING PER DETAIL 5/M5.2.
- 9 NOT USED
- 10 FUME HOOD EXHAUST.

GENERAL NOTES:

- 1 DRAWINGS ARE DIAGRAMMATIC IN NATURE. ACTUAL EXISTING CONDITIONS SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION EFFORT.
- 2 SHUTDOWNS TO THE BUILDING SHALL BE COORDINATED WITH THE UNIVERSITY'S REPRESENTATIVE.
- 3 UNLESS INDICATED OTHERWISE EXHAUST AIR DUCTWORK SHALL BE 22 GAUGE GALVANIZED STEEL.
- 4 FUME HOOD EXHAUST DUCTWORK SHALL BE WELDED 24 GAUGE STAINLESS STEEL.
- 5 MAINTAIN MINIMUM REQUIRED CLEARANCES ON ALL ROOFTOP MECHANICAL EQUIPMENT AS SHOWN ON PLAN.
- 6 PROVIDE ALL REQUIRED REFRIGERANT ACCESSORIES FOR A COMPLETE OPERABLE SYSTEM PER MANUFACTURER'S WRITTEN INSTRUCTIONS.
- 7 REFRIGERANT ROOF SUCTION PIPING SHALL BE INSULATED WITH 2" RIGID FORM INSULATION WITH ALUMINUM JACKETING.
- 8 ALL NEW REFRIGERANT PIPING SHALL BE BRAZED TYPE "L" COPPER.
- 9 REFER TO 4/M5.2 FOR ROOF PIPE SUPPORT DETAILS.
- 10 REFER TO 5/M5.2 FOR ROOF PIPE PENETRATION DETAILS.
- 11 REFER TO 7/M5.2 FOR ROOF DUCT SUPPORT DETAILS.
- 12 REFER TO 7/M5.3 FOR CONDENSING UNIT MOUNTING DETAILS.
- 13 REFER TO 9/M5.3 FOR DUCT ROOF PENETRATION DETAILS.
- 14 REFER TO 3/M5.4 FOR VFD AND DDC PANEL INSTALLATION LOCATION. REFER TO 2/M5.4 FOR VFD MOUNTING DETAILS.

LEGEND



18 GAUGE GALVANIZED STEEL

18 GAUGE STAINLESS STEEL



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ROOF EXHAUST DUCT MATERIAL TYPES
 ADDENDUM #3

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