

RICHMOND COMMUNITY SCHOOL
Richmond High School: Mechanical Modernization Project
LWC Commission No. 20104.02

ADDENDUM #02
September 24, 2021

LWC, Inc.
712 EAST MAIN ST
RICHMOND, IN 47374

To Prospective Bidders:

This addendum is a modification of the Contract Documents for the above referenced project and is hereby incorporated into and becomes a part of said Contract Documents. Acknowledge receipt of this Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to disqualification. It is to be considered in the Proposals and covers additions to or changes in the Contract Documents as indicated below.

This addendum consists of (8) pages.

Attachments:

- Prebid Sign In Sheet
- Drawings: S100, S500, D203, A203, M203, M204, M303
- Specifications: Section 000400 – Form of Proposal, Section 012200 – Unit Prices, Section 012300 - Alternates.

GENERAL NOTES

- **Bid Date and time is October 8, 2021, at 3:00 pm** at the School Administration Building, 300 Hub Etchison Parkway.
- The last Addendum will be issued Tuesday, October 5, 2021.
- The last day for Bidder Questions is Friday, October 1, 2021. Any questions after that date will not be answered.

PREBID MEETING AGENDA

The following is the pre-bid meeting Agenda.

Richmond Community School
Richmond High School – Mechanical Modernization
September 22, 2021, at 2:00 PM

- 1) Introductions / Registration sheet
- 2) Project Description
 - The Work of Project is defined by the Contract Documents and consists of the following:
 - Removal of the existing steam boilers and replacement with hydronic boilers.
 - Removal of two existing chillers and replacement with three new chillers and cooling towers.

- Replacement of steam piping in the tunnels from central plant throughout the building to where steam to hydronic heat exchangers are located.
- Replacement of all systems associated with the natatorium.
- Replacement of steam components in room east of the Library.
- There is an alternate to replace equipment and VAV boxes through the area of the Library.
- There is an alternate to replace finishes in the classrooms adjacent to the Library, including painting, flooring, new ceiling pads, replacement of chalkboards with markerboards, and new roller shades.
- Replacement of fencing and minor civil work around the location of the cooling towers.
- There is an alternate for additional demolition and grading south of the central plant where a chiller is being removed.
- A portion of roof over the natatorium will be replaced where new rooftop equipment is being mounted.
- There is miscellaneous exterior trim work around the perimeter of the natatorium.

4) Bids were originally due Friday, September 24, 2021, by 3:00 PM. Per Addendum 01, the new Bid Date and time will be October 8, 2021, at 3:00 pm at the School Administration Building, 300 Hub Etchison Parkway.

a. Submit sealed bids to:

Attention of Karen Scalf
 Chief Financial Officer
 Richmond Community Schools
 Richmond High School Fire Alarm Upgrades
 300 Hub Etchison Parkway
 Richmond, Indiana 47374.

b. Bids may **NOT** be submitted electronically.

5) Addendums Issued to date = 1

a. Addendum 01 was issued September 16, 2021.

b. At least one additional addendum to be issued, which will include:

- i. Notes from today
- ii. Clarifications as needed
- iii. Asbestos report for materials in the area of this Project.
- iv. Revised structural details in the Natatorium at the entrance to the Girl's Shower and Office T176A.
- v. Revised mechanical drawings clarifying controls locations.
- vi. Clarification of temporary mechanical equipment requirements and pricing.
- vii. Revised Alternates.

c. Last day for Addenda was previously Tuesday, September 21, 2021. Per Addendum 01, the Last Addendum will be issued Tuesday, October 5, 2021.

- i. Prior to Addendum 01, all questions were to be submitted by Monday, September 20, 2021. Per Addendum 01, all questions must be submitted by Friday, October 1, 2021. Any questions submitted after that date and time will not be answered.
- 6) Documents available from the following locations. Contractors may arrange for printed “hard copies” with the printer of their choice, at Contractor’s expense:
 - a. LWC’s FTP. For access, contact Sherry Jeffers by email at sjeffers@lwcinspires.com
- 7) Single Prime General Contract
- 8) Prevailing wage rates ***do not*** apply
- 9) Owner is tax exempt.
- 10) Bidding and questions:
 - a. All questions must be submitted in writing to LWC, Inc. via email. No verbal answers will be given. Submit question to Kevin McCurdy: kmccurdy@lwcinspires.com
 - b. Additional site visits must be scheduled in advance with the Owner. No exceptions will be made. For access, contact Glen Slifer at 765.969.2484 and/or John Hamilton at 765.969.1357
- 11) General Project schedule:
 - First Advertisement: August 27, 2021
 - Second Advertisement: September 03, 2021
 - Pre-bid Meeting: September 07, 2021, at 3:00 pm.
 - Last Day for Bidder Questions: September 17, 2021
 - Date of Last Addendum: September 21, 2021
 - Bids Due: September 24, 2021, at 3:00 pm.
 - Anticipated Contract Award: October 06, 2021
 - Issue Notice to Proceed: October 07, 2021
 - Construction Start: November 01, 2021* (Refer to Phasing Plans)
 - i. Phase 1: Chiller Work (Start November 01, 2021)
 - ii. Phase 2: Boiler Work ** (Start approx. April, 2022 – Coordinate w/ end of heating)
 - iii. Phase 3: Natatorium & Library Work** (Start contingent on Phase 2)
 - Substantial Completion Date **for all work inside the building:** July 22, 2022** (Completion Date for overall project may be longer for work associated with work not inside the building. This will be negotiated with the lowest and most responsive Bidder prior to final Contract as part of an overall review of the Project Schedule between the Owner, Bidder, and Architect).

- **Punchlist Completed for all work inside the building:** August 05, 2022
(Punchlist for overall project may be longer for work associated with work not inside the building. This will be negotiated with the lowest and most responsive Bidder prior to final Contract as part of an overall review of the Project Schedule between the Owner, Bidder, and Architect).

* Note: Work in Central Plant (a.k.a. Boilerhouse) may be performed during school hours. All work inside the building during the regular school year, including work in the tunnels and basement, must be performed off hours when students are not in the building (from after 4:00 pm to 7:00 am). Work during summer school (June 06, 2022 – August 05, 2022) may be performed inside the building, including work in the tunnels and basements, at any time.

**Note: It is anticipated that after hours work will be required to meet the project schedule. The Contractor shall be responsible for any after hours or premium costs required to meet the Date of Substantial Completion.

12) Allowances:

- a. There are currently no Allowances to include in the Base Bid as part of this Project.

13) Unit Prices

- a. There are currently no unit prices.

14) Alternates

- a. Alternate No. 01 – Additional Scope at Existing South Chiller Location.
 - i. Base Bid Work shall include complete removal of the chiller south of Central Plant, including all associated electrical and piping. Existing concrete pad, foundations, wood fence, installation of topsoil to match surrounding grades, and restoration of lawn shall be by Owner under separate Contract.
 - ii. Alternate Bid Work shall include complete removal of the chiller south of Central Plant, including all associated electrical, piping, concrete pad, foundations, wood fence, installation of topsoil to match surrounding grades, and restoration of lawn.
- b. Alternate No. 02 – Additional Classroom Finishes.
 - i. Base Bid Work shall include repair, full prime paint, and two-coat finish paint all walls, ceilings, and other surfaces, in all locations as required for removal and installation of new plumbing, mechanical, and electrical items only in Classroom L113, Classroom L111, Classroom L110, Classroom L109, Classroom L106, Computer Lab L104, Office R121, Classroom R123, Office R123A, Storage R124, Room R128, Room R128A and Room R129. All walls where repairs and painting are required due to removal of

- plumbing, mechanical, and/or electrical items shall have all damaged areas repaired, whether the result of this project or not, and shall be fully primed and two-coat finish painted corner to corner and floor to ceiling.
- ii. Alternate Bid Work shall include repair, full prime paint, and two-coat finish paint all walls, replacement of all suspended acoustical ceiling tile, replacement of all carpet and vinyl base, installation of new markerboards and tackboards as indicated, and installation of new roller shades in Classroom L113, Classroom L111, Classroom L110, Classroom L109, Classroom L106, Computer Lab L104, Office R121, Classroom R123, Office R123A, Storage R124, Room R128, Room R128A and Room R129.
- c. Alternate No. 03 – Additional Mechanical Scope at Unit C.
 - i. Base Bid Work shall limit work in Unit C to those rooms with existing steam heat, including Office R121, Classroom R123, Office R123A, Storage R124, Room R128, Room R128A and Room R129. All associated work, including additional plumbing, mechanical, electrical, and finish scope required to convert these spaces from steam to a hydronic system, shall be included.
 - ii. Alternate Bid Work shall add all plumbing, mechanical, and electrical work as indicated in Unit C, in addition to the work included with the Base Bid scope.
 - d. Alternate No. 04 – Add New Equipment in Fan Room L103 at Unit C.
 - i. Base Bid Work shall maintain all existing equipment in Fan Room L103. No additional equipment shall be provided, including the AHU-1C, new rooftop unit ERV-1 and all new ductwork associated with new equipment connections to existing ductwork. The structural and roof work required to provide a new roof opening for ERV-1 shall not be included in the Base Bid. All new work in the area of Unit C shall be fed from the existing units.
 - ii. Alternate Bid Work shall include all plumbing, mechanical, and electrical work as indicated in Fan Room L103, including the AHU-1C, new rooftop unit ERV-1 and all new ductwork associated with new equipment connections to existing ductwork. The structural and roof work required to provide a new roof opening for ERV-1 shall be included in the Alternate Bid.
 - e. Alternate No. 05 – Extend ceiling and lighting replacement in hall around pool.
 - i. Base Bid Work shall leave existing ceiling and lights in Corridor T270 and Corridor T271 as-is.
 - ii. Alternate Bid Work shall remove plaster ceiling and replace with new acoustical ceiling and LED fixtures in Corridor T270 and Corridor T271 to match Corridor T165.
 - f. Alternate No. 06 – Alternate Controls Contractor.
 - i. This Alternate is being deleted as part of Addendum 02.
 - g. Alternate No. 07 – Delay Natatorium Work Until 2023.

- i. This Alternate is being deleted as part of Addendum 02.
- h. Alternate No. 08 – Delay Library Work Until 2023.
 - i. Base Bid – All Work accepted as part of the Contract at Library and surrounding areas, including architectural, roofing, plumbing, mechanical, electrical, and miscellaneous associated work, shall be completed per Specification Section 000500 – Preliminary Schedule, and Drawings G001 and G002, Phasing Plans, with Substantial Completion of all work by July 22, 2022. This includes Base Bid Work and all Accepted Alternates in that area.
 - ii. Alternate Bid - All Work at Library and surrounding areas, including architectural, roofing, plumbing, mechanical, electrical, and miscellaneous associated work, shall be Substantially Complete by July 22, 2023. This includes Base Bid Work and all Accepted Alternates in that area. This excludes changing the timing for the removal of existing steam piping and replacement with hot water hydronic piping in the tunnels in this area. Hydronic to steam heat exchangers shall be installed as needed to allow the main steam piping to be replaced per the Base Bid Schedule.

15) Special attention to the following:

- a. Owner will occupy site and existing building during entire construction period.
This includes portions of the building during the summer for summer school and other community activities in and around the building. Cooperate with Owner during construction operations to minimize conflicts and facilitate Owner usage. Perform the Work so as not to interfere with Owner's day-to-day operations. Maintain existing exits unless otherwise indicated. Refer to Phasing Plans. Note: Phasing plans are schematic. The General Contractor will be responsible for finalizing Phasing Plans based on their means and methods and detailed sequence of activities.
- b. Notify Owner not less than 72 hours in advance of the following activities:
 - i. Any noise-generating activities anticipated during times when the building will be occupied.
 - ii. Any activity that will affect full functionality of the fire alarm system in any area of the building.
 - iii. Disruption of any building utilities.
 - iv. Closure of any means of egress pathway or exit from the building.
 - v. Any rigging or other activities that might involve the use of crane and/or other overhead activities with significant loads.
- c. Work during normal school year **inside the building** will be required to be between 4:00 pm and 7:00 am. Work at Central Plant can be performed at any

time as long as all other requirements for noise, safety, and Owner notification of activities identified throughout the Specifications are followed.

- d. The location of Site Trailer, dumpster, Contractor parking and building access will change from summer hours to regular school hours.
- e. Temporary conditioning requirements were added to the Project as part of Addendum 01. The intent is alleviate concerns about equipment delivery and potential impact to schedule. The cost for this will still need to be tracked as noted.
- f. Submittals for major equipment shall be required within 10 days of Letter of Intent to Award issued following the Boards determination of the lowest and most responsive Bidder.

16) Temporary facilities as specified.

17) Contractor shall ensure site security.

18) Coordinate all site activities with Owner to ensure Owner access.

19) Personal Protective Equipment requirements by Contractor.

- a. Follow State mandated COVID-19 protocols as well as RCS requirements. Currently, masks are required in the building, but not outside.

20) Weekly progress meetings as stipulated in the project manual.

- a. Pre-Construction, Scheduling and Pre-install meetings as required.
- b. Contractor may utilize portion of site for meetings.

21) General questions?

22) Tour

PREBID QUESTIONS AND ANSWERS:

Question: Do masks apply to central plant?

Answer: Masks are not required in central plant or outside the building. Your own company policies and requirements for COVID apply in those spaces. The mask mandate only applies to spaces inside and directly connected to the educational areas of the high school.

Question: Will a new Bid Form be issued?

Answer: Yes, a new Bid Form will be issued with Addendum #02.

Question: What is the budget for the project?

Answer: The project estimate is \$7.9 million. (It was stated in the meeting that the budget was \$8 million, which was inaccurate).

Question: What is the schedule for the pool?

Answer: The pool could be made available for full Contractor access during normal school hours starting the third week of March. This would need to be coordinated with the Owner between the issuance of the Notice of Intent and Contract as part of the overall schedule so they can prepare an alternative location for swimming after the third week of March.

DRAWINGS

ITEM NO.1 Drawing S100

- A. Add Section callouts at southwest corner of second floor Area G. See attached drawing.

ITEM NO.2 Drawing S500

- A. Add Sections 6-8 as shown on attached drawing.

ITEM NO.3 Drawing D203

- A. Clarification notes to Office "T173A & T176A" on drawing.

ITEM NO.4 Drawing A203

- A. Clarification notes to Office "T173A & T176A" on drawing.

ITEM NO.5 Drawing M203

- A. Added BAS panel adjacent to HVLAS fan BACnet controller.

ITEM NO.6 Drawing M204

- A. Moved VFD controller near structure to maintain 25ft requirement.

ITEM NO.7 Drawing M303

- A. BAS panel added in each mechanical room.

SPECIFICATIONS

ITEM NO. 1 000400 – Bid Proposal Form

- A. Add Unit Prices No.1 and No. 2.
- B. Review Alternates No. 6 and 7.

ITEM NO. 2 012200 – Unit Prices

- A. Add new specification section.

ITEM NO. 3 012300 – Alternates

- A. Revise Alternate No. 06.
- B. Revise Alternate No. 07.

END OF ADDENDUM #02



Pre-Bid Meeting Sign-in Sheet
Date and Local Time:

September 22, 2021, 2:00 PM

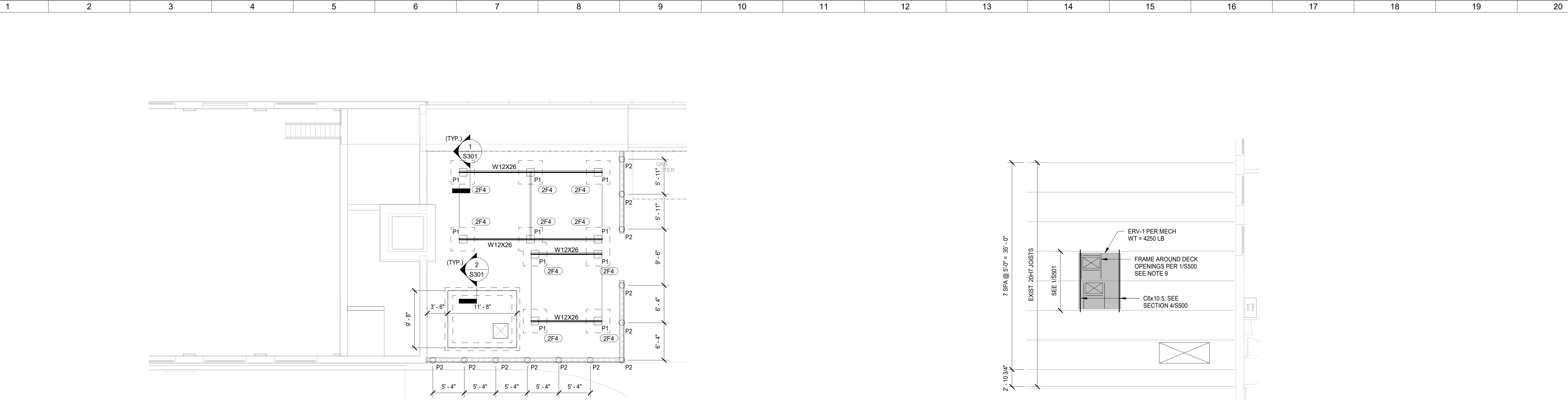
PRINT NAME & TITLE	COMPANY	ADDRESS	TELEPHONE NOS.	E-MAIL ADDRESS
1 Kevin R. McCurdy, AIA	LWC, Inc.	712 East Main	ofc. 765-966-3546 fax cell 765-277-9738	kmccurdy@lwcinspires.com
2 David Holt PHR			ofc. 513-604-1492 fax cell 765-277-9738 dholt@peckannafoodsbygg.com	
3 John McGlynn	Sundquist Co.		ofc. J.McGlynn@SundquistCompany.com fax cell 317-459-3557	
4 Ken Harris	Thor Construction		ofc. Ken@thor-construction.net fax cell 317-702-5094	
5 Ron Mize	Thor Const		ofc. 765-914-1889 fax cell	
6 Greg Leoni	WCF		ofc. 765-977-1218 fax cell Greg@WCIRichmond.com	
Brian Ballinger	WCF		ofc. 765 969 5957 fax cell b.culvayahco.com	
7 Brad Cully	Cully Mechanical		ofc. 765 969 5957 fax cell b.culvayahco.com	
8 Neville Hughart	Eagle Mechanical		ofc. nhughart@eaglemechanicalinc.net fax cell 937-603-1986	
9 Brian Clouse	JCI		ofc. brian.T.Clouse@JCI.com fax cell 317-416-0607	
10 Marvin Doyle	JCI		ofc. 513 fax cell 513-620-1848	
11 Kyle French	North Mechanical		ofc. 317-610-2622 fax cell 317-657-8802	
12 Glen Slifer	RCS		ofc. 765-969-2484 fax cell	
13 NIC ELLIOTT	EAGLE MECHANICAL		ofc. 812-691-6415 fax cell	
14 STEVE SHUTE	SGCI		ofc. 962-1378 fax cell	
15 Jeremiah Waltz	SGCI		ofc. 962-1378	



Pre-Bid Meeting Sign-in Sheet
Date and Local Time:

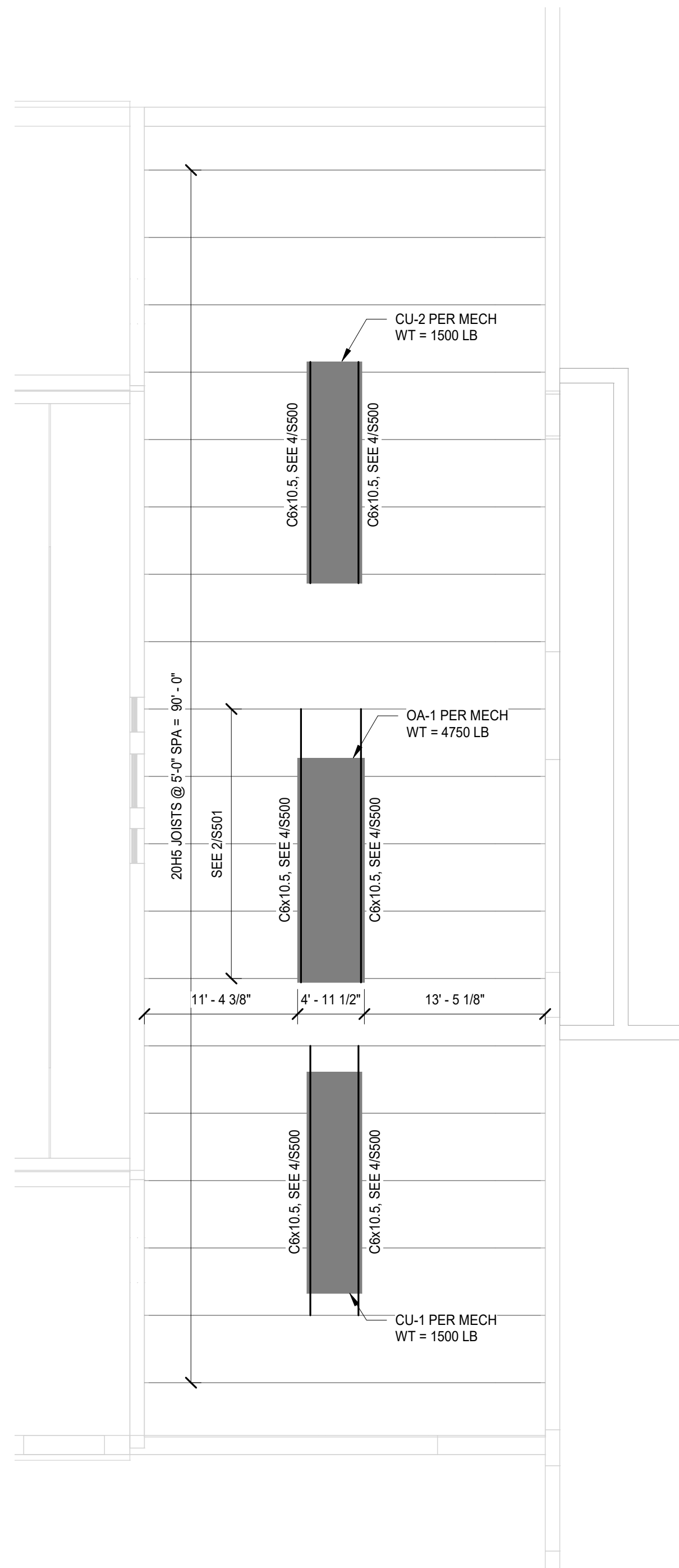
September 22, 2021, 2:00 PM

	PRINT NAME & TITLE	COMPANY	ADDRESS	TELEPHONE NOS.	E-MAIL ADDRESS
				fax	<i>jvultz@smarell.com</i>
				cell	
16	<i>John Hamilton</i>	<i>RCS</i>		ofc.	
				fax	
				cell	
17	<i>Mike Meyer</i>	<i>TJ Williams Electric</i>		ofc.	<i>miken@tjwelectric.com</i>
				fax	
				cell	
18	<i>Aaron Ryan</i>	<i>Ryan's Flooring</i>		ofc.	<i>Commercial@ryansflooring.com</i>
				fax	
				cell	
19				ofc.	
				fax	
				cell	
20				ofc.	
				fax	
				cell	
21				ofc.	
				fax	
				cell	
22				ofc.	
				fax	
				cell	

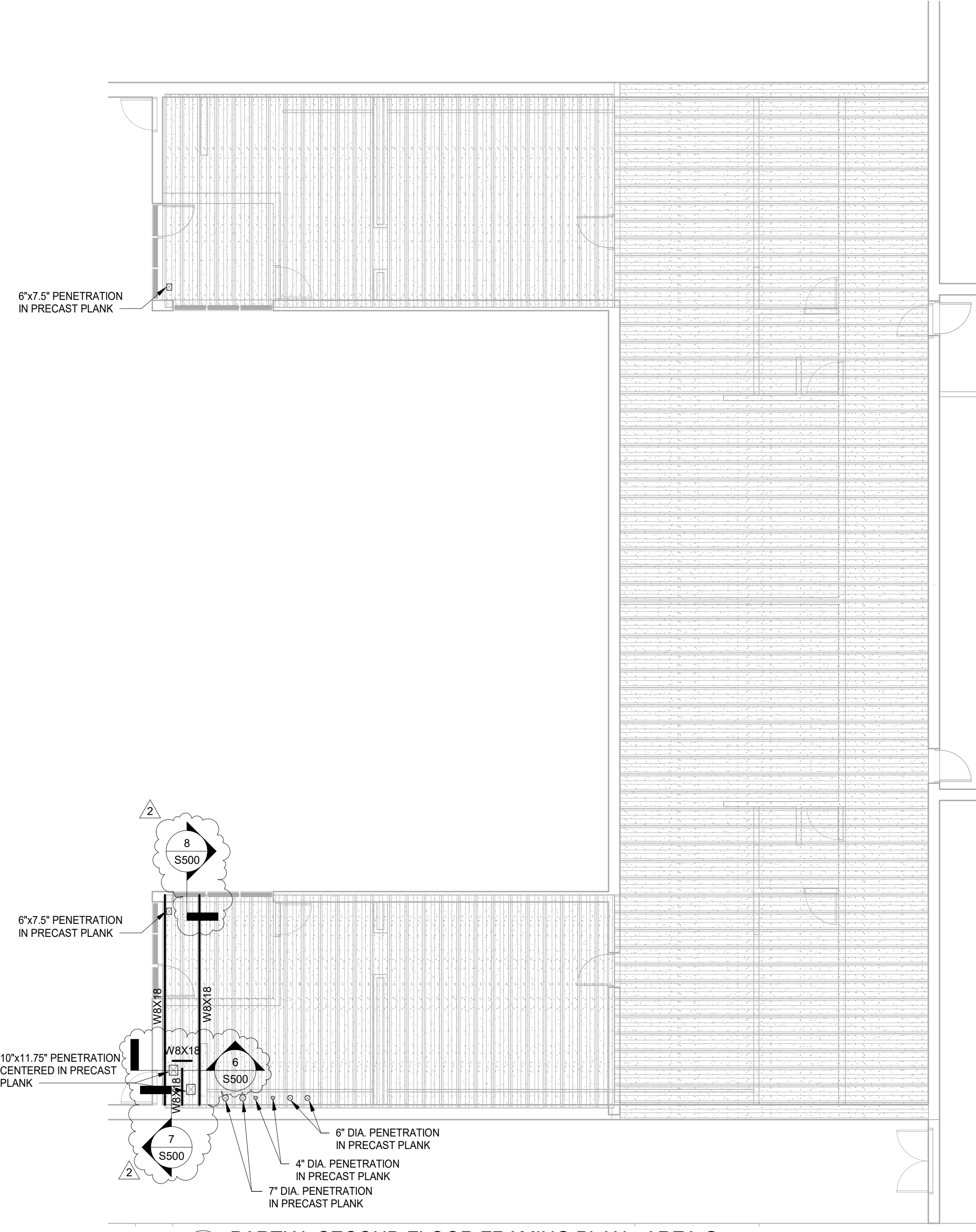


1 CENTRAL PLANT FOUNDATION PLAN
S100 1/8" = 1'-0"

2 PARTIAL ROOF FRAMING PLAN - AREA C
S100 1/8" = 1'-0"



3 PARTIAL ROOF FRAMING PLAN - AREA G
S100 1/8" = 1'-0"



4 PARTIAL SECOND FLOOR FRAMING PLAN - AREA G
S100 1/8" = 1'-0"

- SHEET NOTES:**
- ELEVATION (100'-0") DENOTES THE FIRST FLOOR OF THE EXISTING BUILDING.
 - REFER TO DRAWING S001 FOR GENERAL NOTES.
 - REFER TO DRAWINGS S300 AND S500 FOR TYPICAL DETAILS.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING ALL EXISTING CONDITIONS, DIMENSIONS AND ELEVATIONS PRIOR TO CONSTRUCTION. NOTIFY EOR IMMEDIATELY OF ANY DISCREPANCIES SO THAT MODIFICATIONS CAN BE MADE IF NECESSARY.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING AND VERIFYING WITH ARCHITECTURAL AND MEP DRAWINGS PRIOR TO CONSTRUCTION. NOTIFY EOR, ARCHITECT AND/OR MEP ENGINEERS OF ANY DISCREPANCIES SO THAT MODIFICATIONS CAN BE MADE.
 - "FX" DESIGNATES A SPREAD FOOTING. REFER TO SCHEDULE ON DRAWING S300 FOR SCHEDULE. THE TOP OF ALL FOOTINGS SHALL BE 3'-0" BELOW GRADE UNLESS NOTED OTHERWISE.
 - "PX" DESIGNATES A REINFORCED CONCRETE PIER. REFER TO DRAWING S301 FOR ADDITIONAL INFORMATION.
 - STEEL COOLING TOWER SUPPORT BEAMS SHALL BE HOT DIP GALVANIZED. TOP OF STEEL SHALL BE 3'-0" ABOVE GRADE, TYPICAL.
 - COORDINATE WITH MECHANICAL CONTRACTOR FOR ROOF OPENING SIZE(S) AND LOCATION(S).
 - THE CONTRACTOR SHALL COORDINATE SIZES, LOCATIONS AND WEIGHTS OF ALL ROOFTOP EQUIPMENT WITH MECHANICAL CONTRACTOR PRIOR TO CONSTRUCTION. NOTIFY EOR IMMEDIATELY OF ANY DISCREPANCIES SO THAT MODIFICATIONS CAN BE MADE.
 - REFER TO DRAWING S501 FOR JOIST REINFORCING DETAILS. EXISTING JOIST CONFIGURATION AND SHAPES ARE ASSUMED - GC TO FIELD VERIFY PRIOR TO STEEL FABRICATION.
 - PENETRATIONS IN PRECAST PLANKS THAT ARE 7" OR SMALLER SHALL BE CENTERED OVER CORES IN PLANK. GC SHALL FIELD VERIFY AND COORDINATE FINAL LOCATIONS. ALL OPENING LOCATIONS TO BE SUBMITTED TO EOR FOR REVIEW PRIOR TO CONSTRUCTION.

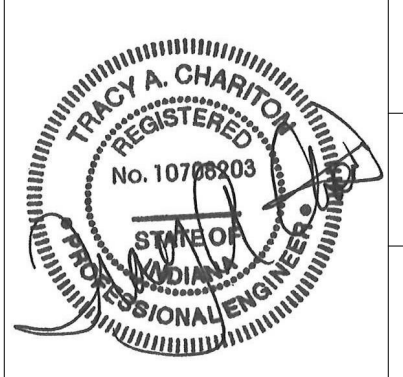
1	Bid Documents	08.27.2021
2	ADDENDUM 02	09.21.2021
No.	Revisions / Submissions	Date

JPS CONSULTING ENGINEERS, LLC
 9365 Counselors Row, Suite 116
 Indianapolis, IN 46240
 ph 317.617.4270
 www.jpsconsultingengineers.com

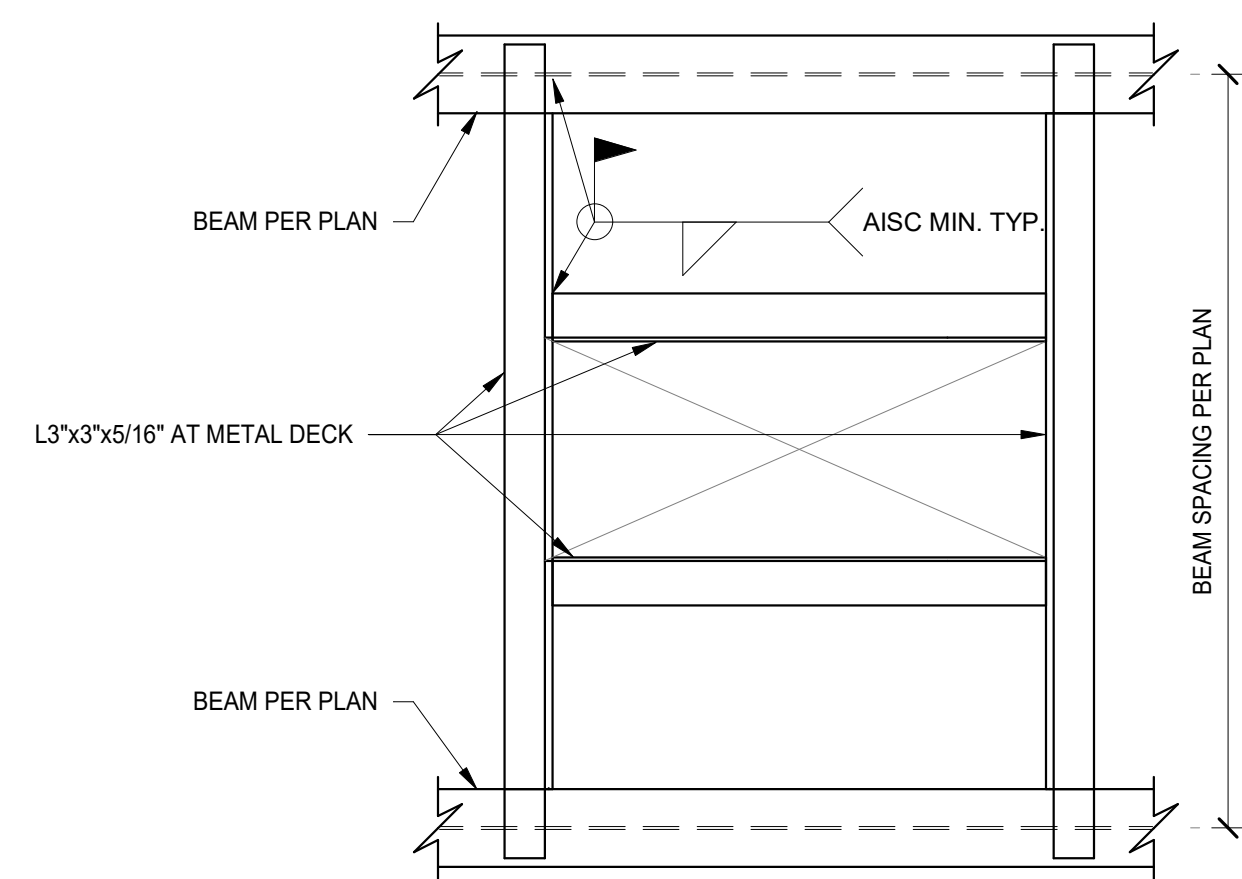
RICHMOND COMMUNITY SCHOOLS
RICHMOND HIGH SCHOOL
 380 Hub Etchison Pkwy,
 Richmond, IN 47374

MECHANICAL MODERNIZATION PROJECT

STRUCTURAL PLANS	
Comm. No.	Date
20104.02	08.27.2021
Drawn	Drawing No.
VM	S100
Checked	TAC

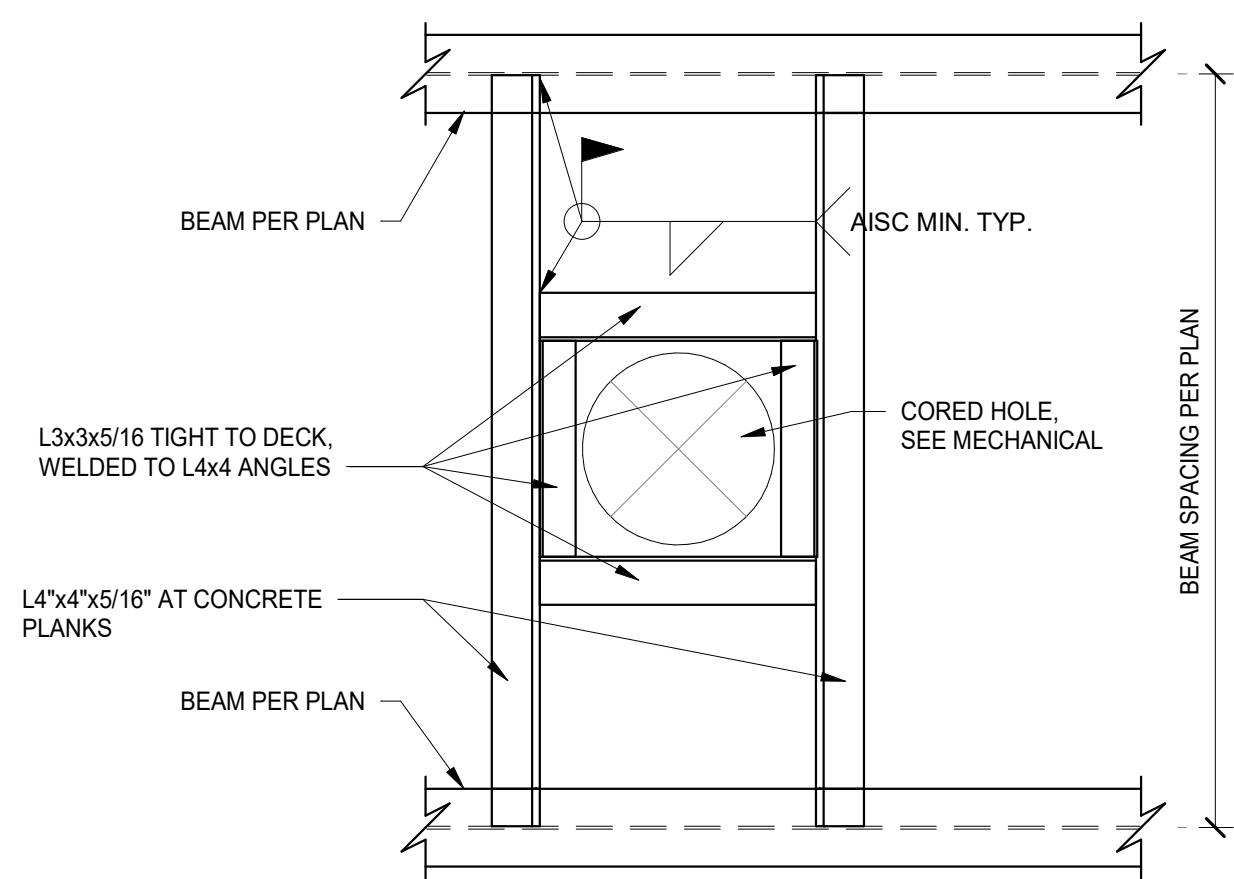


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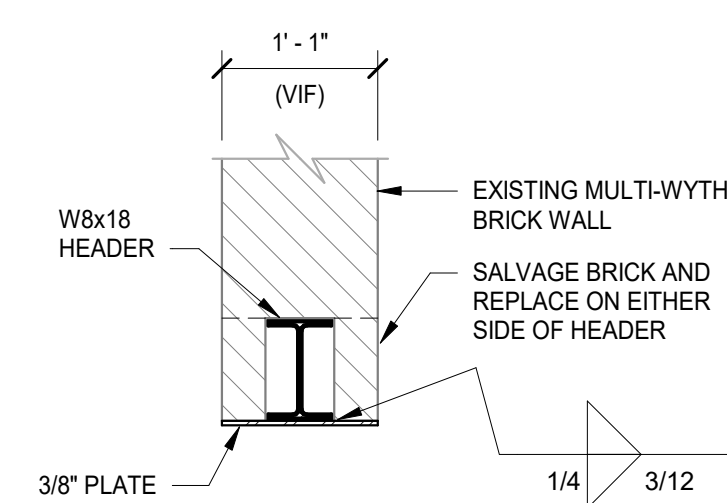
- NOTES:**
1. PROVIDE STEEL FRAME AROUND ALL OPENINGS WITH ANY DIMENSION 12" OR LARGER.
 2. VERIFY SIZE AND LOCATION OF OPENINGS WITH THE VARIOUS TRADES. PROVIDE STEEL FRAME AROUND THE GROUP OF ANY TWO OR MORE PIPE PENETRATIONS WITH LESS THAN 12" CLEAR BETWEEN THE PENETRATIONS. VERIFY SIZE AND LOCATION OF THE PENETRATIONS WITH THE VARIOUS TRADES.
 3. SUBMIT FRAME LAYOUTS AS COORDINATED WITH OTHER TRADES FOR SIZES AND LOCATIONS FOR A/E APPROVAL.
 4. PROVIDE STEEL FRAME AROUND ALL ROOF DRAINS REQUIRING METAL SUMP PAN. FOR NUMBER AND LOCATIONS OF ROOF DRAINS, SEE PLUMBING & ARCHL DWGS.

1 TYPICAL FRAMED OPENING DETAIL
S500 3/4" = 1'-0"

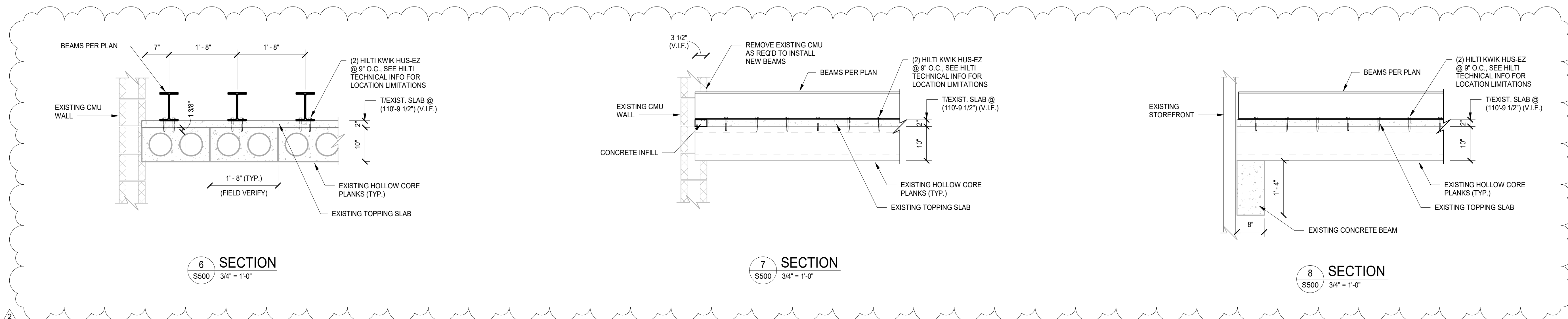


- NOTES:**
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 3. SUBMIT FRAME LAYOUTS AS COORDINATED WITH OTHER TRADES FOR SIZES AND LOCATIONS FOR A/E APPROVAL.
 4. PROVIDE STEEL FRAME AROUND ALL ROOF DRAINS REQUIRING METAL SUMP PAN. FOR NUMBER AND LOCATIONS OF ROOF DRAINS, SEE PLUMBING & ARCHL DWGS.

2 TYPICAL FRAMED OPENING DETAIL AT BOILER HOUSE
S500 3/4" = 1'-0"



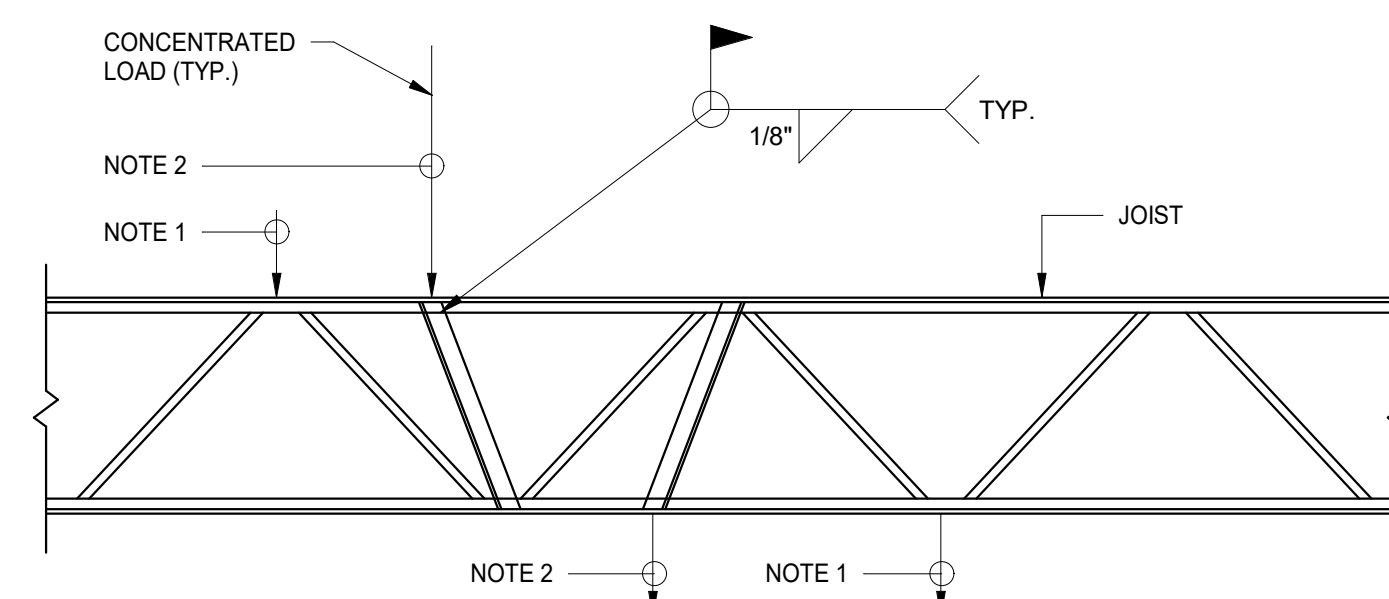
5 TYPICAL HEADER AT UTILITY PLANT WALL
S500 3/4" = 1'-0"



6 SECTION
S500 3/4" = 1'-0"

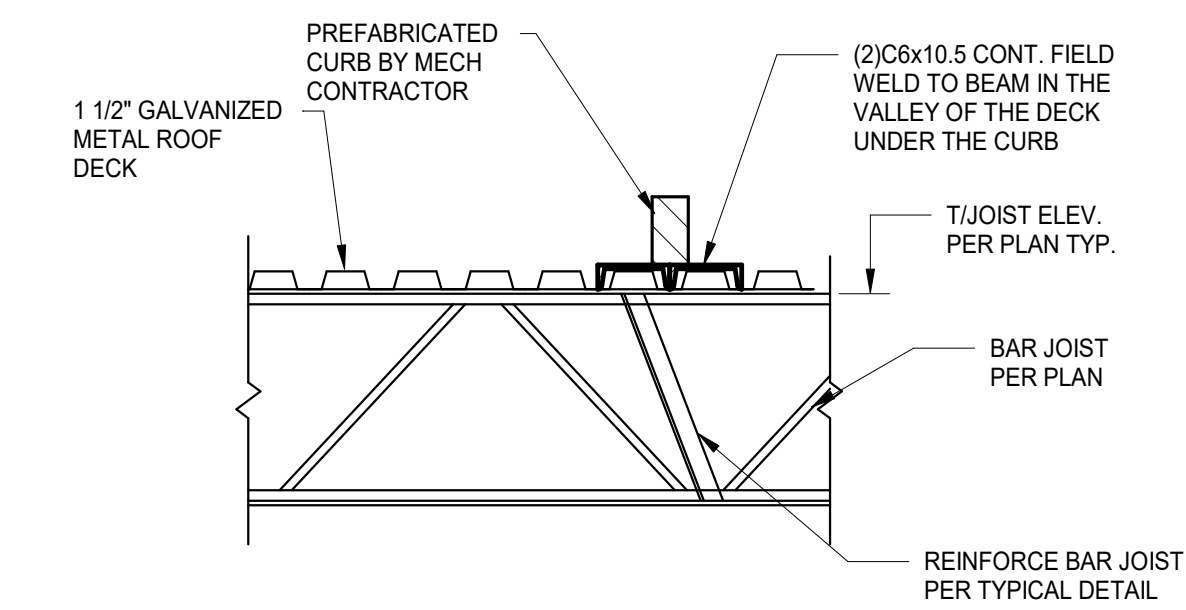
7 SECTION
S500 3/4" = 1'-0"

8 SECTION
S500 3/4" = 1'-0"



- NOTES:**
1. FOR CONCENTRATED LOADS LOCATED AT JOIST PANEL POINT LOCATION, NO ADDITIONAL ANGLE REQUIRED.
 2. WHERE STEEL FRAMES INTO OR SETS ON JOISTS NOT LOCATED AT PANEL POINTS, PROVIDE (2) L1x1x1/8 TO PANEL POINT AS SHOWN.

3 TYPICAL BAR JOIST REINFORCING FOR CONCENTRATED LOADS
S500 3/4" = 1'-0"



4 TYPICAL FABRICATED CURB ON ROOF BAR JOIST SUPPORT
S500 3/4" = 1'-0"

1	Bid Documents	08.27.2021
2	ADDENDUM 02	09.21.2021
No.	Revisions / Submissions	Date

JPS CONSULTING ENGINEERS, LLC
 9365 Counselors Row, Suite 116
 Indianapolis, IN 46240
 ph 317.617.4270
 www.jpsconsultingengineers.com

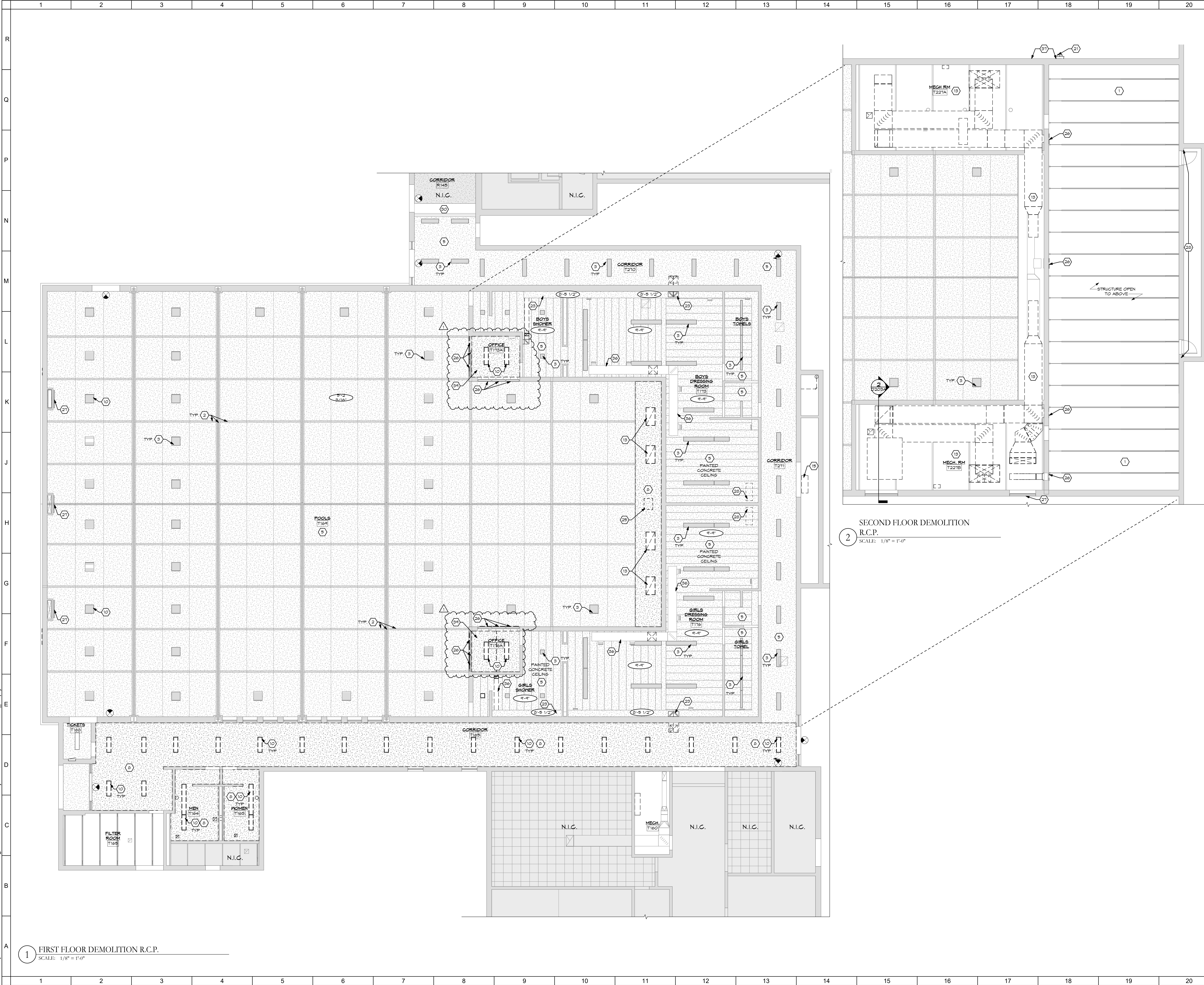
RICHMOND COMMUNITY SCHOOLS
RICHMOND HIGH SCHOOL
 380 Hub Etchison Pkwy,
 Richmond, IN 47374

MECHANICAL MODERNIZATION PROJECT

TYPICAL STEEL DETAILS

Comm. No.	Date
20104.02	08.27.2021
Drawn	Drawing No.
VM	S500
Checked	TAC

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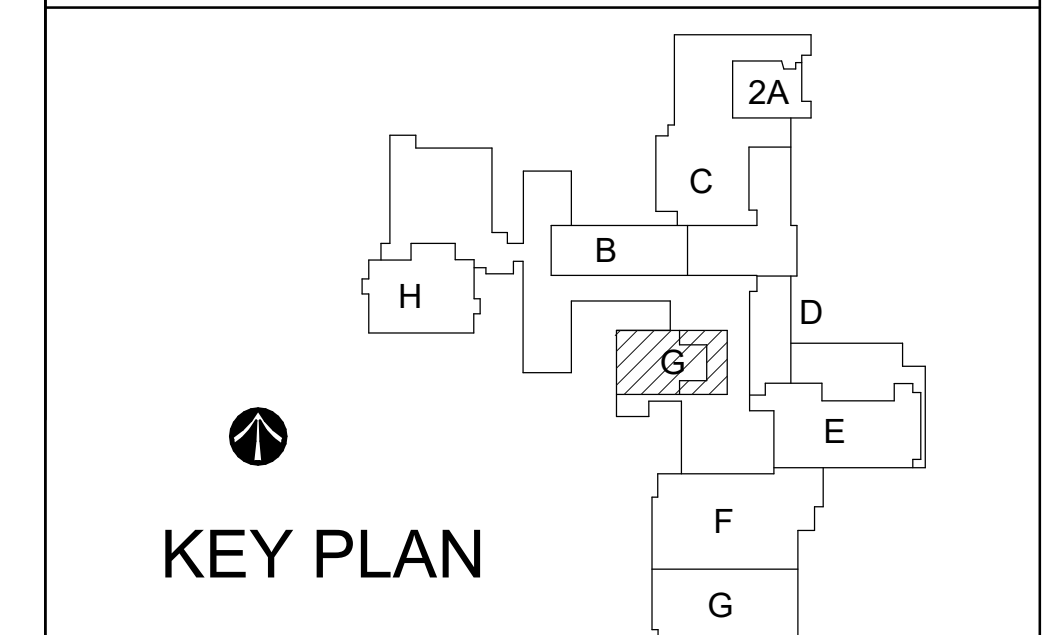
SHEET NOTES:

1. EXISTING TO REMAIN.
2. EXISTING LAMINATE WOOD BEAM & FURLIN TO REMAIN.
3. EXISTING LIGHTING TO REMAIN - SEE ELECTRICAL.
4. EXISTING GELING GRID TO REMAIN. REPAIR SUSPENDED ACOUSTICAL GELING GRID IN MAIN ROOM AS REQUIRED FOR SEAMLESS PATCH WITH NEW SUSPENDED ACOUSTICAL GELING TILES TO MATCH MAIN ROOM. - ALT #2 & #3 EXISTING GELING TILE TO REMAIN.
5. REPLACE EXISTING CHALKBOARD OR EXISTING MARKERBOARD WITH NEW MARKERBOARD OF SAME DIMENSIONS. - SEE ALT #2
6. REMOVE ROOM ENTIRELY, INCLUDING ALL ELECTRICAL ITEMS ASSOC. WITH WALLS & GELING.
7. REMOVE ENTIRE GELING & REPLACE WITH NEW SUSPENDED ACOUSTICAL GELING SYSTEM.
8. REMOVE & REPLACE ALL FLOORING & BASE TRIM IN THIS ROOM. SEE FINISH SCHEDULE - SEE ALT #2
9. REMOVE & REPLACE LIGHT FIXTURE. - SEE ELECTRICAL.
10. GELING MOUNTED PROJECTORS & RELATED EQUIP. TO REMAIN. INSTALL NEW SUSPENDED ANGLE, UNSUT ACOUSTICAL GELING TILE AROUND ALL COMPONENTS.
11. REMOVE & REPLACE EXISTING WINDOW SHADES WITH NEW WINDOW SHADES.
12. REMOVE MECHANICAL EQUIPMENT COMPLETELY. - SEE MECHANICAL.
13. PREPARE ALL WALL SURFACES TO RECEIVE PAINT, INCLUDING REMOVAL AND / OR BANDING OF ADHESIVE PER PAINT MANUFACTURER'S RECOMMENDATIONS PRIME & TWO-COAT FINISH PAINT WALL. FINISH PAINT PER FINISH SCHEDULE. - SEE ALT #2
14. REMOVE & REPLACE EXISTING MECHANICAL HEATING UNIT. SEE MECHANICAL.
15. PATCH FINISH FLOOR WITH PRODUCT FROM OWNER ATTIC STOCK IN WHOLE PIECES TOOTHED INTO EXISTING FLOORING.
16. CLEAN MASONRY AS REQUIRED. PATCH & REPAIR WALLS & FLOORS AS REQUIRED FROM REMOVAL OF MECHANICAL UNIT. FINISH TO MATCH EXISTING ADJACENT.
17. PATCH, REPAIR, & PAINT BULKHEAD TO MATCH EXISTING ADJACENT.
18. PATCH & REPAIR WALL WHERE THERMOSTAT HAS REMOVED. MATCH EXISTING ADJACENT PAINT COLOR, TEXTURE, & FINISH. - WALL TO WALL.
19. REMOVE & REPLACE THERMOSTAT. - SEE MECHANICAL.
20. CEILING FAN TO BE PORTIONED IN BAY TYP. - SEE MECHANICAL.
21. DEMOLISH & REMOVE EXHAUST FAN COMPLETELY. - SEE MECHANICAL.
22. REMOVE & REPLACE PORTION OF GELING FOR REMOVAL OF EXISTING EQUIPMENT AND / OR INSTALLATION OF NEW EQUIPMENT. - SEE PLUMBING, MECHANICAL, & ELECTRICAL DWGS.
23. REMOVE & REPLACE SECTION OF DUCT WORK. - SEE MECHANICAL.
24. MECHANICAL EQUIPMENT - SEE MECHANICAL.
25. ACCESS PANEL - 2'-0" x 2'-6"
26. REPLACE LOUVERED GRILLS TO MATCH EXISTING GRILLS IN SIZE, SHAPE, & COLOR. - SEE MECH.
27. EXISTING LOUVERED GRILL TO BE CLEANED, DAMAGED GRILL TO BE REPLACED (1) FOR (1) - SEE MECH.
28. PATCH, REPAIR, & PAINT GELING / WALL AREA WHERE GELING / WALL MOUNTED MECH UNIT HAS REMOVED. PAINT TO MATCH EXISTING ADJACENT.
29. EXISTING FENCING TO REMAIN.
30. EXISTING BULKHEAD WITH ROLL-UP FIRE DOOR.
31. NEW LIGHTING FIXTURES - SEE ELECTRICAL.
32. EXISTING FLOORING SHALL BE PROTECTED AT ALL TIMES.
33. PATCH, REPAIR, & PAINT GELING AS REQUIRED.
34. NEW ACOUSTICAL DROP GELING - SEE FINISH SCHEDULE.
35. RETURN VENTS - SEE MECH.
36. EXPOSED DUCT WORK TO REMAIN - SEE MECH.
37. PATCH & REPAIR MASONRY WALL, TOOTHIN BRICK MASONRY TO MATCH EXISTING ADJACENT IN COLOR, TEXTURE & HEIGHT.
38. NEW 12' x 12' ACCESS DOOR.
39. REMOVE & REPLACE PLASTER GELING AS REQUIRED FOR NEW MECHANICAL VENT. - SEE MECH. MATCH EXISTING IN COLOR, TEXTURE, & HEIGHT.

GENERAL NOTES:

- A. SEE MECHANICAL, ELECTRICAL & PLUMBING DRAWINGS FOR ASSOCIATED WORK.
- B. ALL PROJECTORS ARE TO REMAIN UNLESS OTHERWISE NOTED.
- C. ALL GELING-MOUNTED SPEAKERS ARE TO REMAIN UNLESS OTHERWISE NOTED.
- D. ALL EDUCATION EQUIPMENT, BOOKSHELVES, ELECTRONICS & FURNITURE SHALL BE PROTECTED FROM DUST & DEBRIS AT ALL TIMES.
- E. ALL VINYL BASE SHALL BE REMOVED & REPLACED WITH NEW VINYL WALL BASE IN ALL ROOMS RECEIVING NEW FLOORING. SEE FINISH SCHEDULE FOR COLOR.
- F. REMOVE & REPLACE ALL SUSPENDED ACOUSTICAL GELING TILES. EXISTING SUSPENDED ACOUSTICAL GELING GRID SYSTEM TO REMAIN EXCEPT WHERE NOTED OTHERWISE. PROTECT THROUGHOUT PROJECT. ALL EXISTING GELING MOUNTED EQUIPMENT SHALL REMAIN UNLESS NOTED OTHERWISE. REMOVE & REINSTALL GELING-MOUNTED EQUIPMENT TO ALL CORNER ANGLE. UNSUT SUSPENDED ACOUSTICAL GELING TILES TO BE REINSTALLED. - SEE ALT #2
- G. ALL WINDOWS IN CLASSROOMS ARE TO RECEIVE NEW WINDOW SHADES. REFER TO FLOOR PLAN TAGS & SPECIALTY EQUIPMENT SCHEDULE. - SEE ALT #2
- H. ALL WALLS SHALL HAVE DAMAGE SPOTS REPAIRED & PRIMED. PRIME ENTIRE SURFACE OF WALL WITH OIL-BASED PRIMER & TWO-COAT FINISH PAINT WITH EXTERIOR ACRYLIC LATEX PAINT. ALL FINISH PAINT TO MATCH HAD 12B BONE WHITE. APPLIED TO ALL WALLS WHERE PLUMBING, MECHANICAL, & ELECTRICAL EQUIPMENT ARE BEING REMOVED OR MODIFIED AS PART OF THE BASE BID. SEE ALT #2 FOR ADDITIONAL SCOPE.
- I. ALL ROOMS WITH NO SHEET NOTE #52 OR NOT IN CONTRACT (I.G. SHALL TO RECEIVE NEW CARPET TILE FLOORING AFTER REMOVAL OF EXISTING FLOORING & FLOOR PREP PER FLOORING MANUFACTURER'S WRITTEN INSTRUCTIONS. FLOORING SHALL BE SHAW/PHILADELPHIA COMMERCIAL SPINLE 3444G. 48" x 48" x 1/4" CARPET TILES. SEE ALT #2 FOR EXTENTS APPROXIMATE LOCATIONS WHERE GELING MUST BE MODIFIED FOR PLUMBING, MECHANICAL, & ELECTRICAL WORK ARE GENERALLY INDICATED. ADDITIONAL AREAS OF MODIFICATION NOT INDICATED MAY BE NECESSARY. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL AREA OF GELING MODIFICATIONS NECESSARY FOR A COMPLETE PROJECT, WHETHER SHOWN OR NOT.

KEY PLAN:



No.	Revisions / Submissions	Date
1	Bid Documents	08.27.2021
	Addendum #2	09.24.2021

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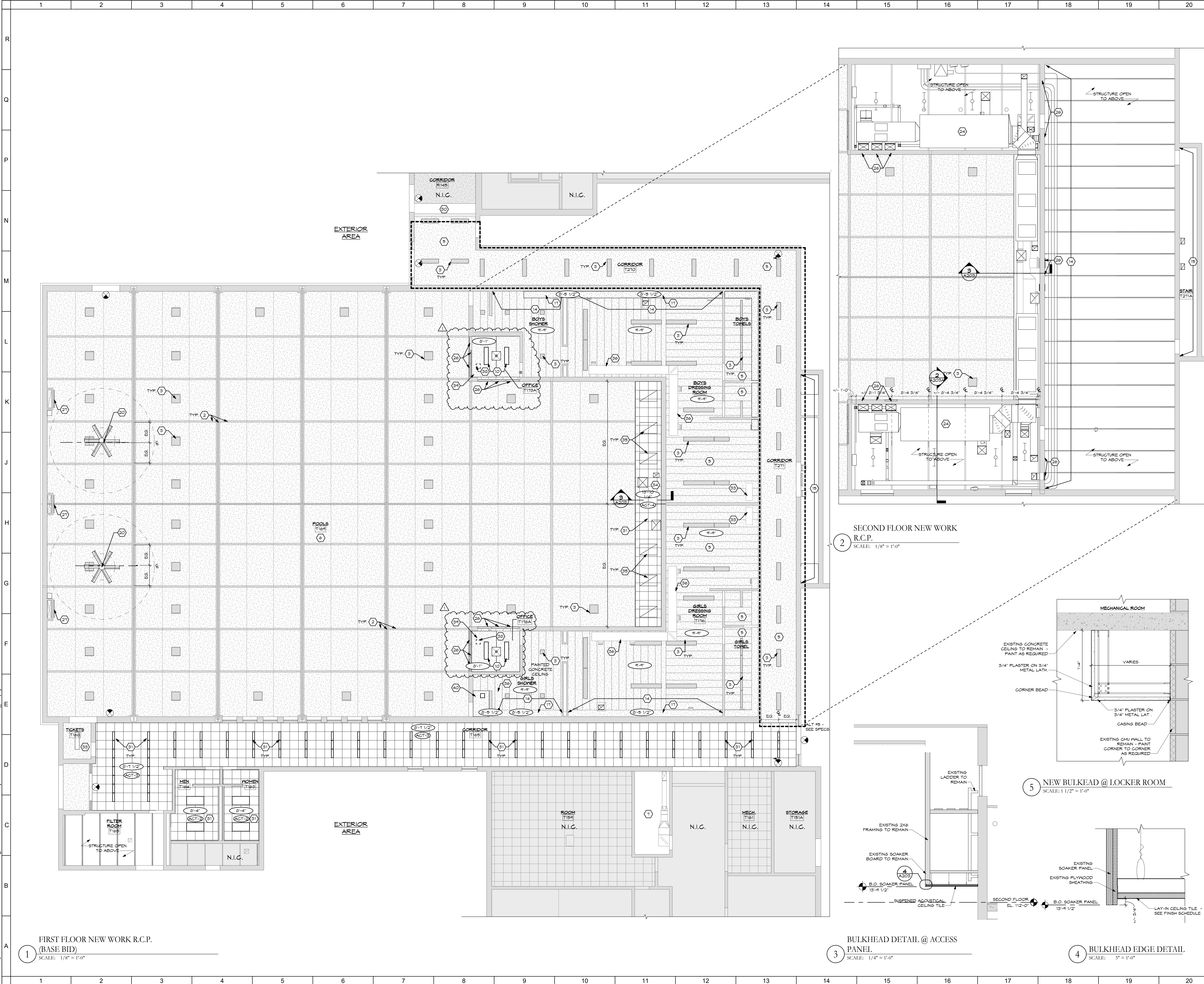
NATATORIUM - FIRST & SECOND FLOOR REFLECTED CEILING DEMOLITION PLANS

Comm. No.	Date
20104.02	06.18.2021
Drawn	Drawing No.
TOD	D203
Checked	KRM

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1 FIRST FLOOR DEMOLITION R.C.P.
SCALE: 1/8" = 1'-0"

2 SECOND FLOOR DEMOLITION R.C.P.
SCALE: 1/8" = 1'-0"



1 FIRST FLOOR NEW WORK R.C.P. (BASE BID)
SCALE: 1/8" = 1'-0"

2 SECOND FLOOR NEW WORK R.C.P.
SCALE: 1/8" = 1'-0"

3 BULKHEAD DETAIL @ ACCESS PANEL
SCALE: 1/4" = 1'-0"

5 NEW BULKHEAD @ LOCKER ROOM
SCALE: 1/2" = 1'-0"

4 BULKHEAD EDGE DETAIL
SCALE: 3" = 1'-0"

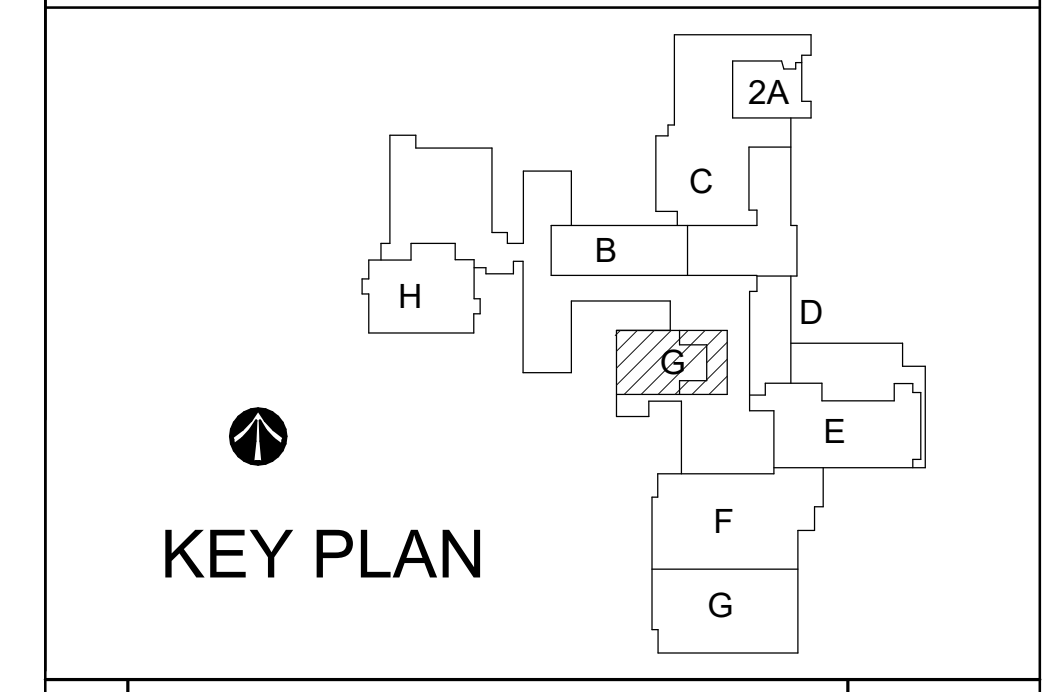
SHEET NOTES:

- EXISTING TO REMAIN.
- EXISTING LAMINATE WOOD BEAM & FURLIN TO REMAIN.
- EXISTING LIGHTING TO REMAIN - SEE ELECTRICAL.
- EXISTING GELING GRID TO REMAIN. REPAIR SUSPENDED ACOUSTICAL GELING GRID IN MAIN ROOM AS REQUIRED FOR SEAMLESS PATCH WITH NEW SUSPENDED ACOUSTICAL GELING TILES TO MATCH MAIN ROOM - ALT #2 IS EXISTING GELING TILE TO REMAIN.
- REPLACE EXISTING CHALKBOARD OR EXISTING MARKERBOARD WITH NEW MARKERBOARD OF SAME DIMENSIONS - SEE ALT #2.
- REMOVE ROOM ENTIRELY, INCLUDING ALL ELECTRICAL ITEMS ASSOC. WITH WALLS & GELING.
- REMOVE ENTIRE GELING & REPLACE WITH NEW SUSPENDED ACOUSTICAL GELING SYSTEM.
- REMOVE & REPLACE ALL FLOORING & BASE TRIM IN THIS ROOM. SEE FINISH SCHEDULE - SEE ALT #2.
- REMOVE & REPLACE LIGHT FIXTURE - SEE ELECTRICAL.
- CEILING MOUNTED PROJECTORS & RELATED EQUIP. TO REMAIN. INSTALL NEW SUSPENDED PANEL, UNSUIT ACOUSTICAL GELING TILE AROUND ALL COMPONENTS.
- REMOVE & REPLACE EXISTING WINDOW SHADES WITH NEW WINDOW SHADES.
- REMOVE MECHANICAL EQUIPMENT COMPLETELY - SEE MECHANICAL.
- PREPARE ALL WALL SURFACES TO RECEIVE PAINT, INCLUDING REMOVAL AND / OR BANDING OF ADHESIVE PER PAINT MANUFACTURER'S RECOMMENDATIONS PRIME & TWO-COAT FINISH PAINT WALL. FINISH PAINT PER FINISH SCHEDULE - SEE ALT #2.
- REMOVE & REPLACE EXISTING MECHANICAL HEATING UNIT. SEE MECHANICAL.
- REMOVE & REPLACE WALLS & FLOORS AS REQUIRED. PAINT WALL TO WALL. PATCH FINISH FLOOR WITH PRODUCT FROM OWNER ATTIC STOCK IN WHOLE PIECES TOOTHED INTO EXISTING FLOORING.
- CLEAN MASONRY AS REQUIRED. PATCH & REPAIR WALLS & FLOORS AS REQUIRED FROM REMOVAL OF MECHANICAL UNIT. FINISH TO MATCH EXISTING ADJACENT.
- PATCH, REPAIR, & PAINT BULKHEAD TO MATCH EXISTING ADJACENT.
- PATCH & REPAIR WALL WHERE THERMOSTAT HAS BEEN REMOVED. MATCH EXISTING ADJACENT PAINT COLOR, TEXTURE, & FINISH - WALL TO WALL.
- REMOVE & REPLACE THERMOSTAT - SEE MECHANICAL.
- CEILING FAN TO BE PORTIONED IN BAY TYP - SEE MECHANICAL.
- DEMOLISH & REMOVE EXHAUST FAN COMPLETELY - SEE MECHANICAL.
- REMOVE & REPLACE PORTION OF GELING FOR REMOVAL OF EXISTING EQUIPMENT AND / OR INSTALLATION OF NEW EQUIPMENT - SEE PLUMBING, MECHANICAL, & ELECTRICAL DWGS.
- REMOVE & REPLACE SECTION OF DUCT WORK - SEE MECHANICAL.
- MECHANICAL EQUIPMENT - SEE MECHANICAL.
- ACCESS PANEL - 2'-0" x 2'-4"
- REPLACE LOUVERED GRILLS TO MATCH EXISTING GRILLS IN SIZE, SHAPE, & COLOR - SEE MECH.
- EXISTING LOUVERED GRILL TO BE CLEANED. DAMAGED GRILL TO BE REPLACED (1) FOR (1) - SEE MECH.
- PATCH, REPAIR, & PAINT GELING / WALL AREA WHERE GELING / WALL MOUNTED MECH UNIT HAS BEEN REMOVED. PAINT TO MATCH EXISTING ADJACENT.
- EXISTING FENCING TO REMAIN.
- EXISTING BULKHEAD WITH ROLL-UP FIRE DOOR.
- NEW LIGHTING FIXTURES - SEE ELECTRICAL.
- EXISTING FLOORING SHALL BE PROTECTED AT ALL TIMES.
- PATCH, REPAIR, & PAINT GELING AS REQUIRED.
- NEW ACOUSTICAL DROP GELING - SEE FINISH SCHEDULE.
- RETURN VENTS - SEE MECH.
- EXPOSED DUCT WORK TO REMAIN - SEE MECH.
- PATCH & REPAIR MASONRY WALL, TOOTHIN BRICK MASONRY TO MATCH EXISTING ADJACENT IN COLOR, TEXTURE, & HEIGHT.
- NEW 1/2" ACCESS DOOR.
- REMOVE & REPLACE PLASTER GELING AS REQUIRED FOR NEW MECHANICAL VENT - SEE MECH. MATCH EXISTING IN COLOR, TEXTURE, & HEIGHT.

GENERAL NOTES:

- SEE MECHANICAL, ELECTRICAL & PLUMBING DRAWINGS FOR ASSOCIATED WORK.
- ALL PROJECTORS ARE TO REMAIN UNLESS OTHERWISE NOTED.
- ALL CEILING-MOUNTED SPEAKERS ARE TO REMAIN UNLESS OTHERWISE NOTED.
- ALL EDUCATION EQUIPMENT, BOOKSHELVES, ELECTRONICS & FURNITURE SHALL BE PROTECTED FROM DUST & DEBRIS AT ALL TIMES.
- ALL VINYL BASE SHALL BE REMOVED & REPLACED WITH NEW VINYL WALL BASE IN ALL ROOMS RECEIVING NEW FLOORING. SEE FINISH SCHEDULE FOR COLOR.
- REMOVE & REPLACE ALL SUSPENDED ACOUSTICAL GELING TILES. EXISTING SUSPENDED ACOUSTICAL GELING GRID SYSTEM TO REMAIN EXCEPT WHERE NOTED OTHERWISE. PROTECT THROUGHOUT PROJECT ALL EXISTING CEILING MOUNTED EQUIPMENT SHALL REMAIN UNLESS NOTED OTHERWISE. REMOVE & REINSTALL CEILING-MOUNTED EQUIPMENT TO ALL CORNER PANELS. UNITS SUSPENDED ACOUSTICAL GELING TILES TO BE REINSTALLED - SEE ALT #2.
- ALL WINDOWS IN CLASSROOMS ARE TO RECEIVE NEW WINDOW SHADES. REFER TO FLOOR PLAN TAGS & SPECIALTY EQUIPMENT SCHEDULE - SEE ALT #2.
- ALL WALLS SHALL HAVE DAMAGE SPOTS REPAIRED & PRIMED. PRIME ENTIRE SURFACE OF WALL WITH OIL-BASED PRIMER & TWO-COAT FINISH PAINT WITH EXTERIOR ACRYLIC LATEX PAINT. ALL FINISH PAINT TO MATCH H&B 120 BONE WHITE. APPLIES TO ALL WALLS WHERE PLUMBING, MECHANICAL, & ELECTRICAL EQUIPMENT ARE BEING REMOVED OR MODIFIED AS PART OF THE BASE BID. SEE ALT #2 FOR ADDITIONAL SPECIFICATIONS. SCORE.
- ALL ROOMS WITH NO SHEET NOTE #52 OR NOT IN CONTRACT N.I.C. SHALL TO RECEIVE NEW CARPET TILE FLOORING AFTER REMOVAL OF EXISTING FLOORING & FLOOR PREP PER FLOORING MANUFACTURER'S WRITTEN INSTRUCTIONS. FLOORING SHALL BE SHAWPHILADELPHIA COMMERCIAL SPIZZE #4440. 40200 FINISH #4440. 4" TILES. SEE ALT #2 FOR EXTENTS APPROXIMATE LOCATIONS WHERE GELING MUST BE MODIFIED FOR PLUMBING, MECHANICAL, & ELECTRICAL. 4" TILES ARE GENERALLY INDICATED. ADDITIONAL AREAS OF MODIFICATION NOT INDICATED MAY BE MODIFIED. CONTRACTOR SHALL BE RESPONSIBLE FOR AREA OF GELING MODIFICATIONS NECESSARY FOR A COMPLETE PROJECT, WHETHER SHOWN OR NOT.

KEY PLAN:



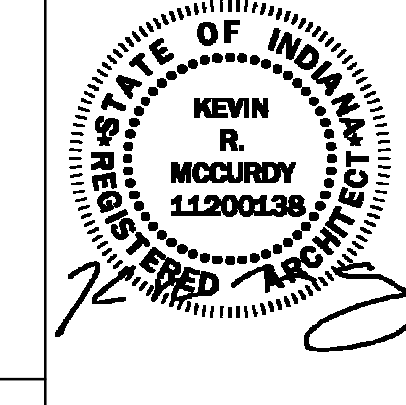
No.	Revisions / Submissions	Date
1	Bid Documents	08.27.2021
2	Addendum #2	09.24.2021

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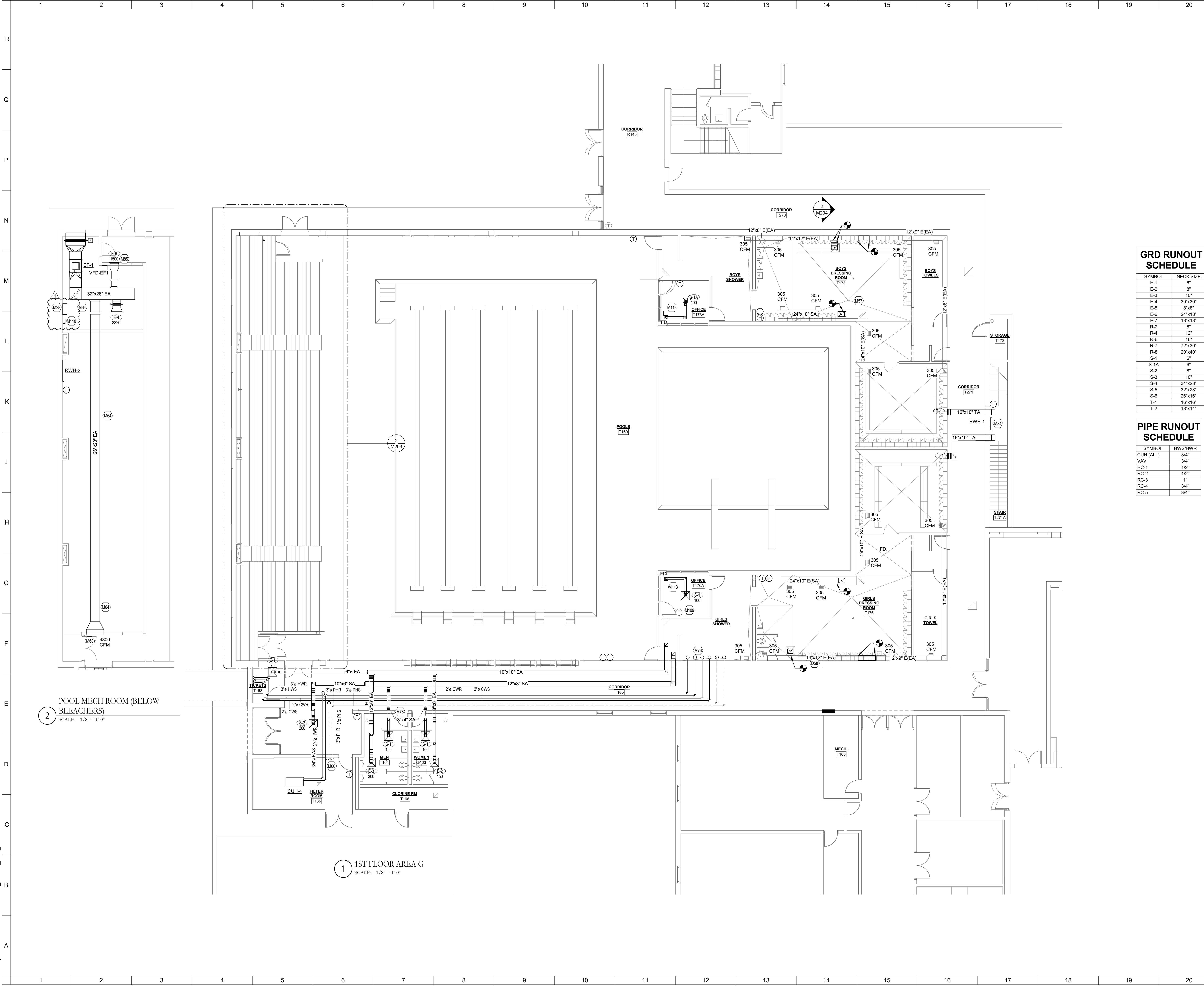
NATATORIUM - FIRST & SECOND FLOOR NEW REFLECTED CEILING PLANS

Comm. No.	Date
20104.02	06.18.2021
Drawn	Drawing No.
TOD	A203
Checked	KRM



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2 POOL MECH ROOM (BELOW BLEACHERS)
SCALE: 1/8" = 1'-0"

1 1ST FLOOR AREA G
SCALE: 1/8" = 1'-0"

- SHEET NOTES:**
- D58 SEE TUNNEL SECTIONS ON THIS SHEET FOR MORE DETAIL OF PIPE LAYOUT.
 - M28 BAS PANEL.
 - M57 18"x14" SA DUCT UP TO MECHANICAL ROOM ABOVE. SEE SHEET M204 FOR CONTINUATION.
 - M64 ALL EA DUCTWORK FOR POOL EXHAUST SHALL BE ALUMINUM CONSTRUCTION. REFER TO SPECIFICATION SECTION 231200 FOR MORE DETAIL.
 - M66 PHS/R SHALL TIE TO POOL SUPPLY PIPE UPSTREAM OF BOILER CONNECTION.
 - M68 REBALANCE EXISTING 48"x24" GRILLED TO CFM INDICATED.
 - M76 HYDRONIC PIPING UP TO 2ND FLOOR MECHANICAL ROOMS. SEE SHEET M204 FOR CONTINUATION.
 - M78 ROUTE PIPING ALONG CEILING THROUGH CORRIDOR. DUCT AND PIPE CROSSING SHALL OFFSET UP BETWEEN STRUCTURAL JOISTS.
 - M84 RADIANT HEATER TO BE WALL MOUNTED ABOVE DOOR.
 - M85 GRILLE SIZE TO MATCH EXISTING.
 - M109 HLVS FAN REMOTE CONTROLLER.
 - M110 HLVS FAN BAGNET CONTROLLER. UTILIZE EXISTING SAFRA DUCT CHASE FOR CABLE PATHWAYS.
 - M113 PROVIDE 12"x12" ACCESS DOOR FOR FIRE DAMPER ACCESS. REFER TO ARCHITECTURAL DRAWINGS FOR MORE DETAIL.

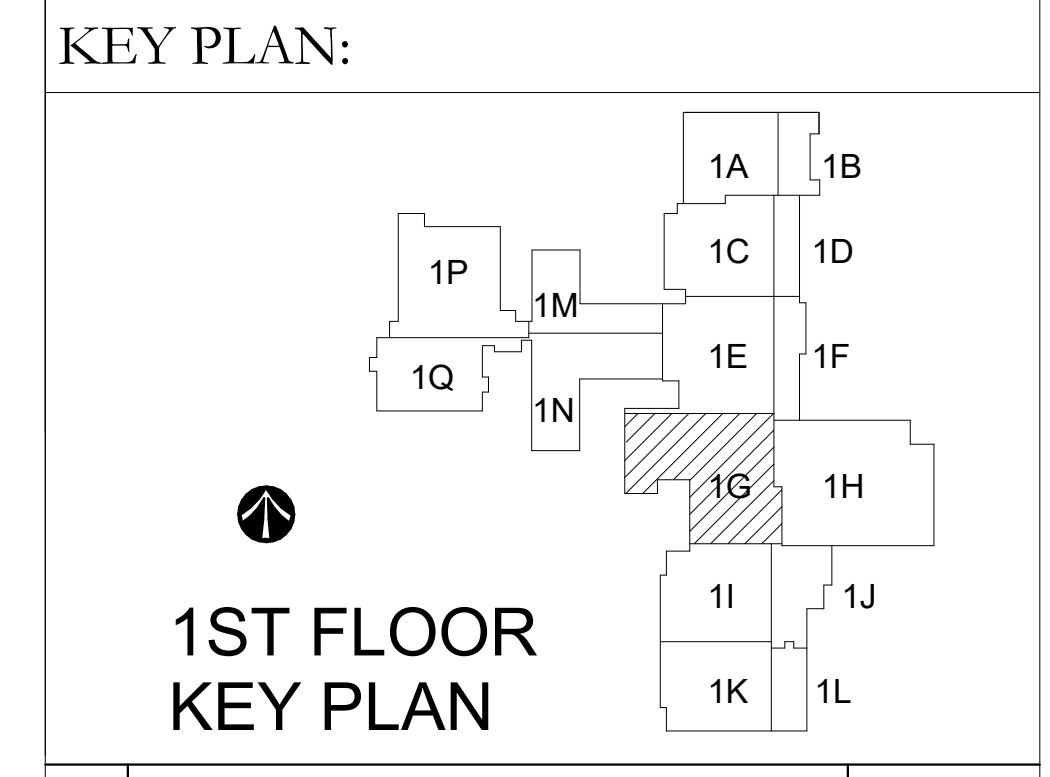
GRD RUNOUT SCHEDULE

SYMBOL	NECK SIZE
E-1	6"
E-2	8"
E-3	10"
E-4	30"x30"
E-5	8"x8"
E-6	24"x18"
E-7	18"x18"
R-2	8"
R-4	12"
R-6	16"
R-7	72"x30"
R-8	20"x40"
S-1	6"
S-1A	6"
S-2	8"
S-3	10"
S-4	34"x28"
S-5	32"x28"
S-6	25"x16"
T-1	16"x16"
T-2	18"x14"

PIPE RUNOUT SCHEDULE

SYMBOL	HWS/HWR
CUH (ALL)	3/4"
VAV	3/4"
RC-1	1/2"
RC-2	1/2"
RC-3	1"
RC-4	3/4"
RC-5	3/4"

- GENERAL NOTES:**
- A. FIELD VERIFY DUCT/PIPE LAYOUTS WITH EXISTING CONDITIONS PRIOR TO ORDERING ANY EQUIPMENT OR MATERIALS.
 - B. COORDINATE NEW WORK WITH ALL EXISTING AND NEW WORK OF OTHER TRADES.



No.	Revisions / Submissions	Date
1	Addendum 2	9.21.2021

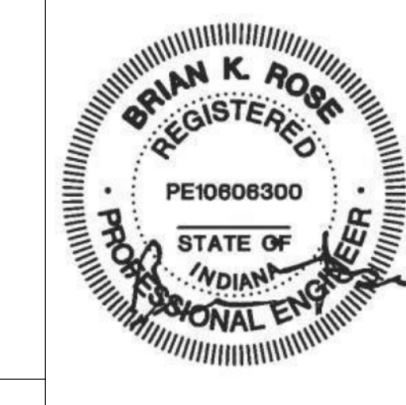
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FIRST FLOOR AREA G MECHANICAL PLAN

Comm. No.	Date
20104.02	9.10.2021
Drawn	JLK
Checked	NPR
Drawing No.	M203

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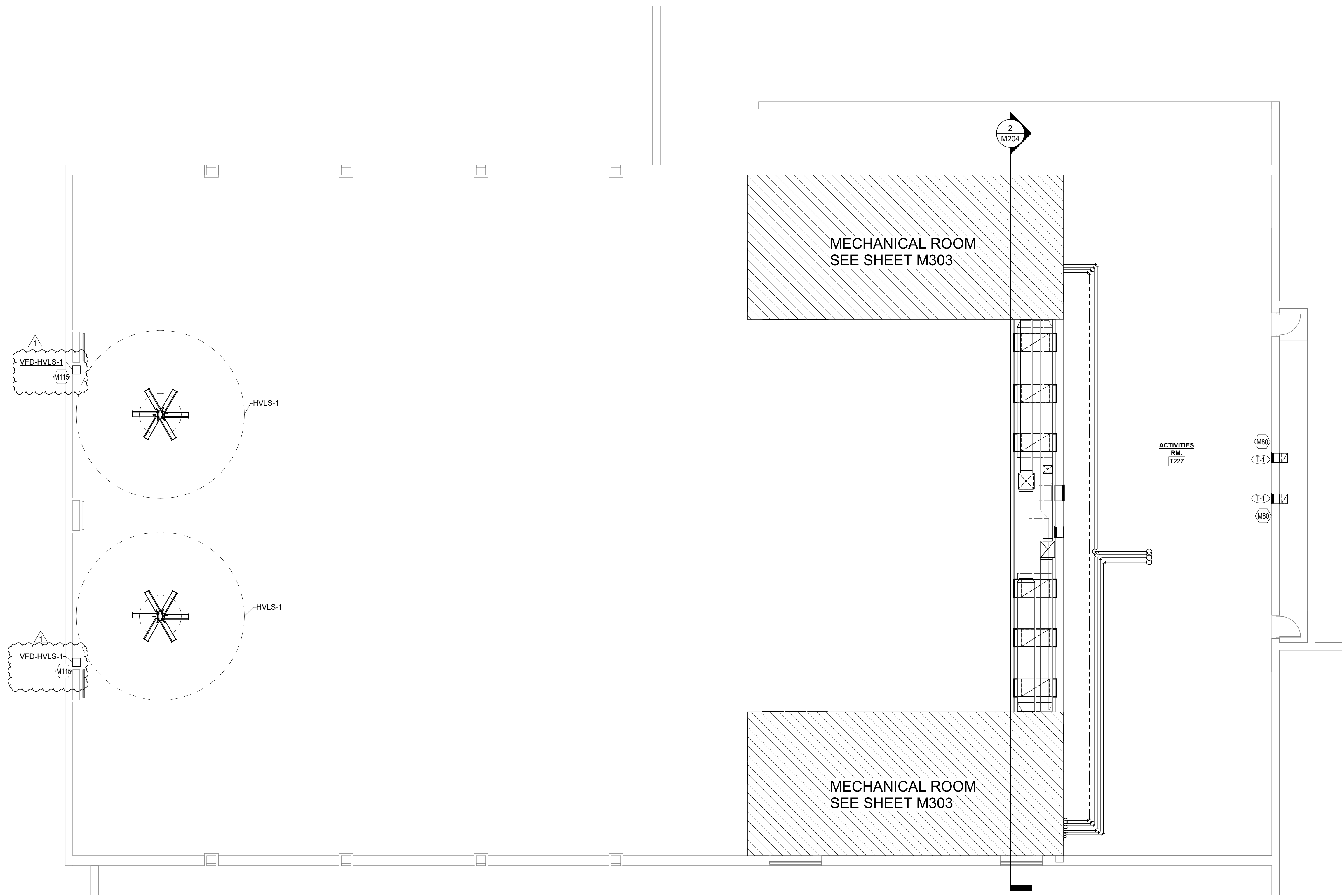


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SHEET NOTES:

- M80 COORDINATE TRANSFER GRILLE LOCATION WITH EXISTING WALL FIXTURES.
- M115 HVLS FAN VFD CONTROLLER SHALL BE WITHIN 25FT OF HVLS FAN AND MOUNTED NEAR STRUCTURE.



GRD RUNOUT SCHEDULE

SYMBOL	NECK SIZE
E-1	8"
E-2	8"
E-3	10"
E-4	30"x30"
E-5	5"x8"
E-6	24"x18"
E-7	18"x18"
R-2	8"
R-4	12"
R-6	16"
R-7	72"x30"
R-8	20"x40"
S-1	6"
S-1A	6"
S-2	8"
S-3	10"
S-4	34"x28"
S-5	32"x28"
S-6	26"x16"
T-1	16"x16"
T-2	18"x14"

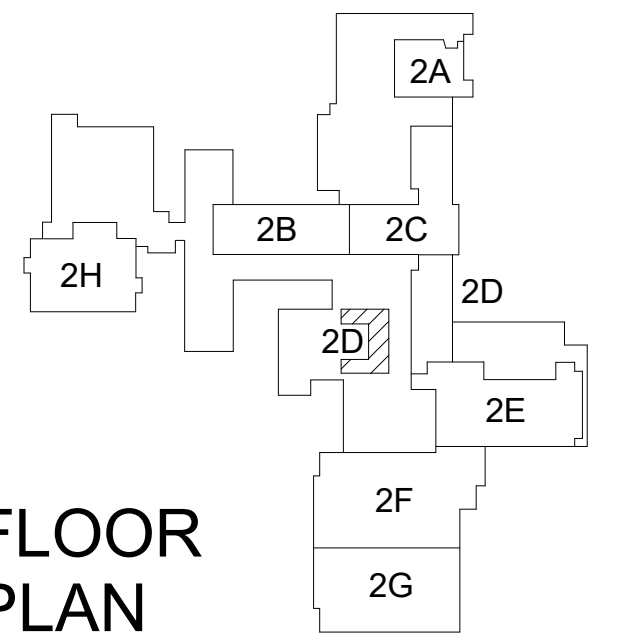
PIPE RUNOUT SCHEDULE

SYMBOL	HWSR/HWR
CUH (ALL)	3/4"
VAV	3/4"
RC-1	1/2"
RC-2	1/2"
RC-3	1"
RC-4	3/4"
RC-5	3/4"

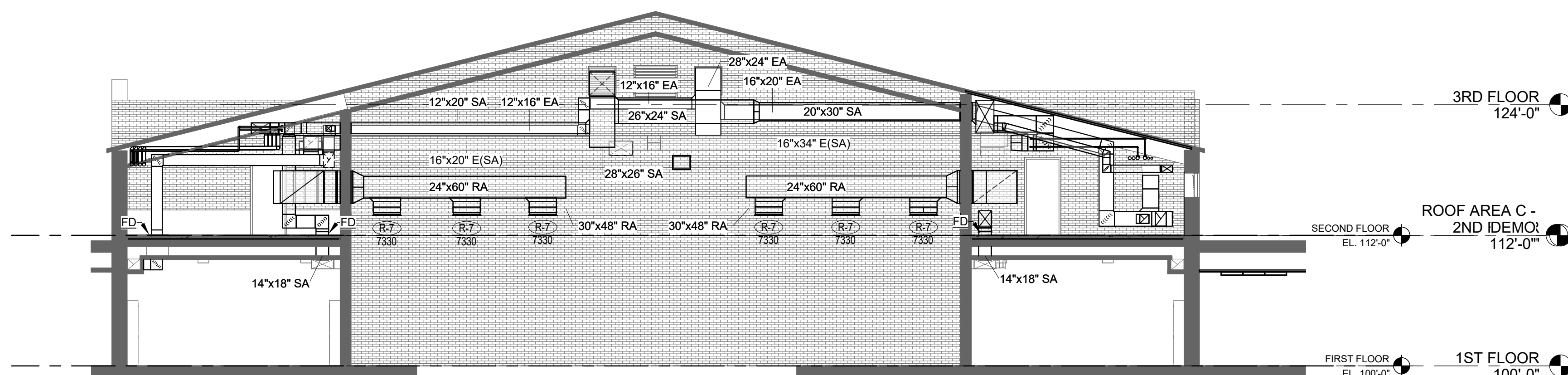
GENERAL NOTES:

- A. FIELD VERIFY DUCT/PIPE LAYOUTS WITH EXISTING CONDITIONS PRIOR TO ORDERING ANY EQUIPMENT OR MATERIALS.
- B. COORDINATE NEW WORK WITH ALL EXISTING AND NEW WORK OF OTHER TRADES.

KEY PLAN:



1 2ND FLOOR AREA G SCALE: 1/8" = 1'-0"



2 POOL BULKHEAD SECTION SCALE: 1/8" = 1'-0"

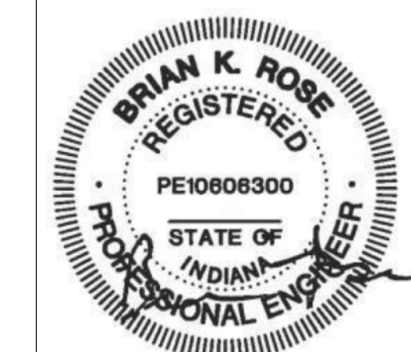
No.	Revisions / Submissions	Date
1	Addendum 2	9.21.2021

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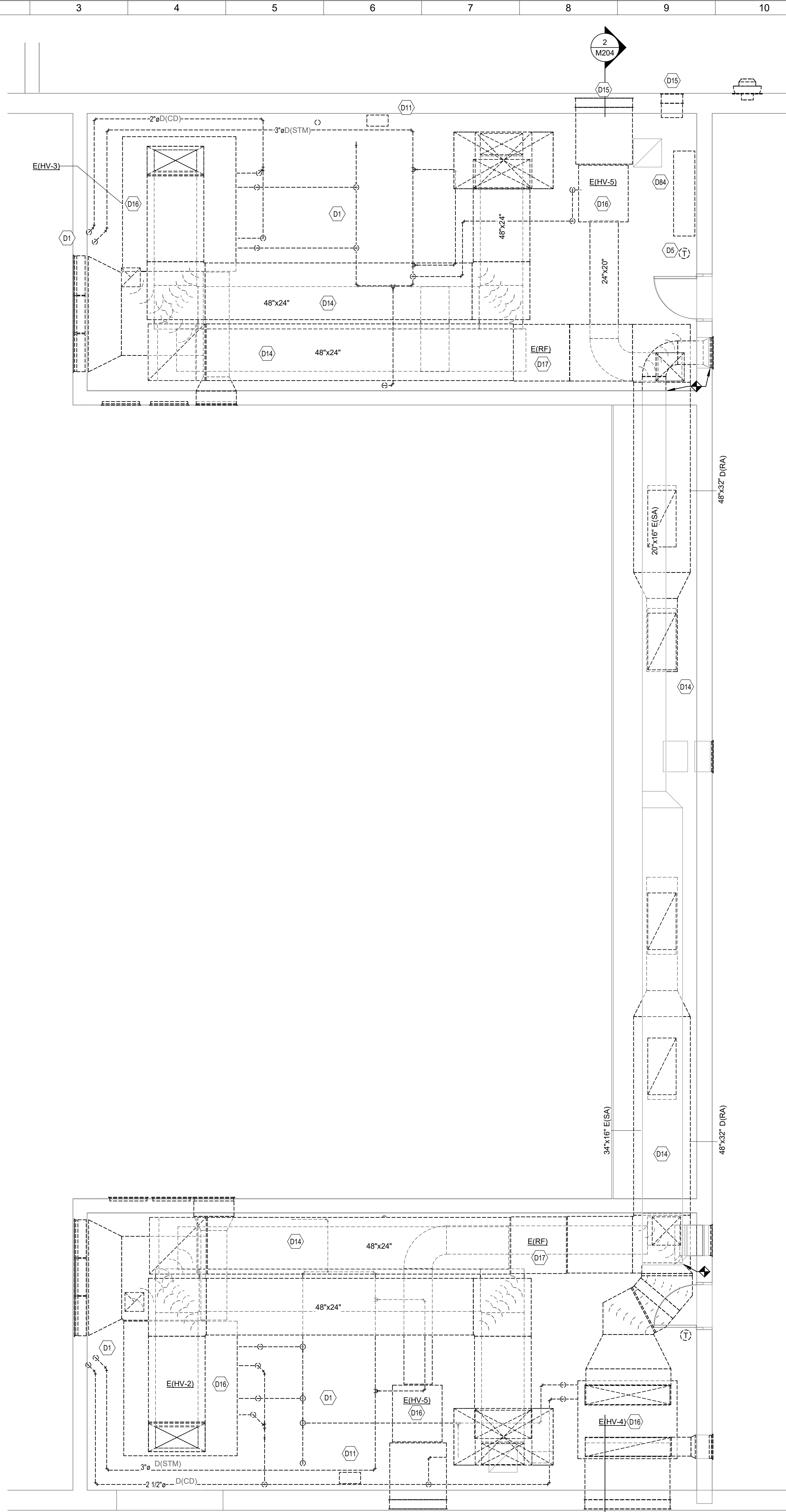
SECOND FLOOR AREA G MECHANICAL PLAN

Comm. No.	Date
20104.02	9.10.2021
Drawn	Drawing No.
JLK	M204
Checked	
NPR	

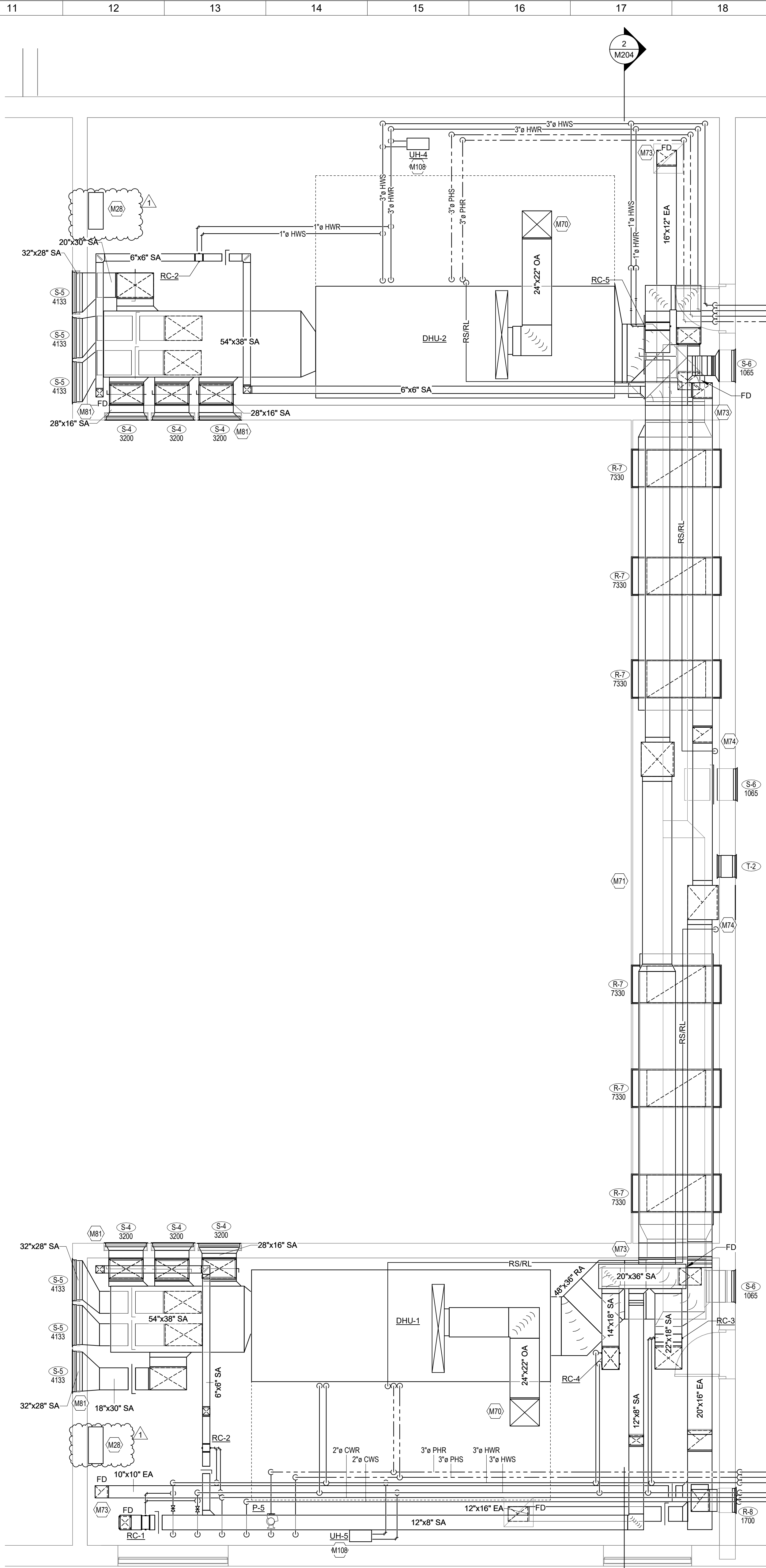


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1 ENLARGED MECHANICAL ROOM
- AREA G DEMO
SCALE: 1/4" = 1'-0"



2 ENLARGED MECHANICAL ROOM
- AREA G
SCALE: 1/4" = 1'-0"

GRD RUNOUT SCHEDULE

SYMBOL	NECK SIZE
E-1	6"
E-2	8"
E-3	10"
E-4	30"x30"
E-5	8"x8"
E-6	24"x18"
E-7	18"x18"
R-2	8"
R-4	12"
R-6	16"
R-7	72"x30"
R-8	20"x40"
S-1	6"
S-1A	6"
S-2	8"
S-3	10"
S-4	34"x28"
S-5	32"x28"
S-6	26"x16"
T-1	16"x16"
T-2	18"x14"

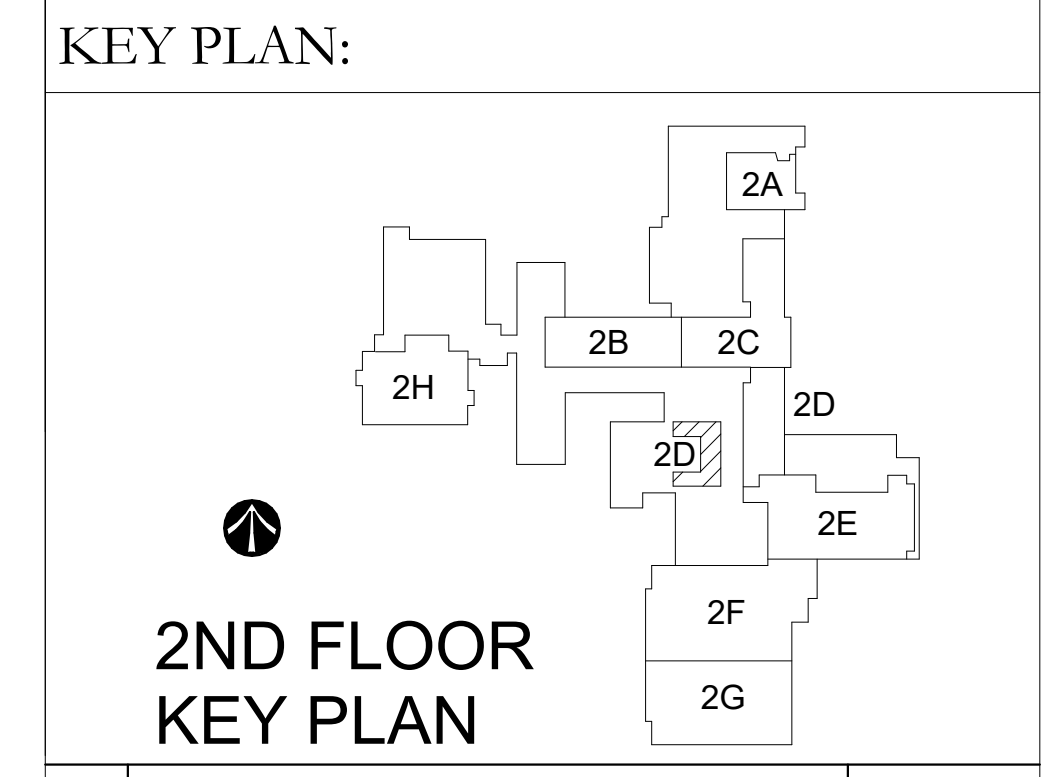
PIPE RUNOUT SCHEDULE

SYMBOL	HWS/HWR
CUH (ALL)	3/4"
VAV	3/4"
RC-1	1/2"
RC-2	1/2"
RC-3	1"
RC-4	3/4"
RC-5	3/4"

- SHEET NOTES:**
- D1 EXISTING STEAM AND LOW PRESSURE CONDENSATE PIPING, AND ALL ASSOCIATED VALVES, HANGERS, AND SUPPORTS TO BE COMPLETELY REMOVED. PATH TO BE REUSED FOR NEW HWS/HWR PIPING.
 - D5 REMOVE EXISTING THERMOSTAT/TEMPERATURE SENSOR AND ALL PNEUMATIC TUBING OR ELECTRICAL WIRING. IF SURFACE MOUNTED, EXISTING WIREMOLD MAY BE USED IF THERMOSTAT IS GOING BACK IN SAME LOCATION. PATCH AND PAINT WALL/CEILING IF WIREMOLD IS REMOVED. IF RECESSED, PROVIDE STAINLESS STEEL COVER PLATE AT EXISTING OPENING IF BACK BOX IS NOT REUSED.
 - D11 EXISTING UNIT HEATER TO BE REMOVED COMPLETELY, INCLUDING ALL PIPING, CONTROLS, AND ELECTRICAL CONNECTIONS. CONDENSATE RUN BELOW SLAB TO TUNNEL SHALL BE ABANDONED AND CAPPED BELOW FLOOR LINE. REFER TO ARCHITECTURAL PLANS FOR FINISH DETAILS.
 - D14 EXISTING SUPPLY/RETURN OUTSIDE AIR DUCTWORK INDICATED TO BE REMOVED COMPLETELY. REMOVE ALL ASSOCIATED HANGERS/SUPPORTS/ACCESSORIES.
 - D15 EXISTING LOUVER TO REMAIN AND BE BLANKED OFF WITH 2" INSULATED ALUMINUM. SEAL AIR AND WATER TIGHT.
 - D16 EXISTING HEATING/VENTILATION UNIT TO BE REMOVED COMPLETELY, INCLUDING ALL PIPING, DUCTWORK, ELECTRICAL AND CONTROLS CONNECTIONS. REFER TO ELECTRICAL DRAWINGS FOR INFORMATION ON DEMOLITION AND RECONNECTION OF ELECTRICAL.
 - D17 EXISTING RETURN FAN TO BE REMOVED COMPLETELY, INCLUDING ALL DUCTWORK, ELECTRICAL AND CONTROLS CONNECTIONS.
 - D84 PNEUMATIC CONTROL PANEL TO BE REMOVED COMPLETELY. SEE GENERAL DEMOLITION NOTES FOR MORE INFORMATION.
 - M28 BAS PANEL.
 - M70 26"x20" OA DUCT UP TO EXISTING ROOF INTAKE. TRANSITION AS NEEDED.
 - M71 REFER TO POOL BULKHEAD SECTION ON THIS SHEET FOR DUCT SIZES AND MORE DETAIL.
 - M73 FIRE DAMPERS TO BE PLACED AT ALL NEW FLOOR AND WALL PENETRATIONS.
 - M74 RS/RL OUT THROUGH EXISTING OPENING TO CONDENSING UNITS ON ROOF. SEE SHEET M206 FOR CONTINUATION.
 - M81 COLOR BY ARCHITECT.
 - M108 REFER TO DETAIL ON SHEET M403 FOR CONNECTION DETAILS.

- GENERAL NOTES:**
- A. FIELD VERIFY DUCT/PIPE LAYOUTS WITH EXISTING CONDITIONS PRIOR TO ORDERING ANY EQUIPMENT OR MATERIALS.
 - B. COORDINATE NEW WORK WITH ALL EXISTING AND NEW WORK OF OTHER TRADES.

- DEMOLITION NOTES:**
- A. DEMO PNEUMATIC CONTROLS BACK TO MAINS AND CAP FOR ALL COMPONENTS DEMOLISHED IN THIS AREA.
 - B. LOCATE AND CAP AT MAINS PRIOR TO DEMO TO KEEP THE SYSTEM SERVING THE BUILDING OPERATIONAL.
 - C. DEMOLISHED HYDRONIC RUNOUTS TO BE CAPPED AS CLOSE TO MAINS AS POSSIBLE.
 - D. ABANDON PIPING IN PLACE WHERE INACCESSIBLE WITHIN BLOCK WALLS AND ABOVE HARD CEILINGS.
 - E. DEMOLISH PIPING NOTED BELOW SLAB TO FLOOR LINE AND CAP. PATCH AND REFINISH FLOOR TO MATCH ADJACENT.



1	Addendum 2	Revisions / Submissions	9.21.2021
No.			Date

LWC
INCORPORATED
434 East First Street Dayton, OH 45402 937.223.6500
712 East Main Street Richmond, IN 47374 765.966.3546

WE RICHMOND Richmond Community Schools
RICHMOND HIGH SCHOOL
380 Hub Etchison Pkwy,
Richmond, IN 47374
MECHANICAL MODERNIZATION PROJECT

ENLARGED MECHANICAL ROOMS

Comm. No.	Date	
20104.02	9.10.2021	
Drawn	JLK	Drawing No.
Checked	NPR	M303

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FORM OF PROPOSAL

For: **RICHMOND COMMUNITY SCHOOLS**
RICHMOND HIGH SCHOOL MECHANICAL MODERNIZATION

LWC Incorporated
712 East Main Street
Richmond, IN 47374
Tel: 765-966-3546
Fax: 765-962-9195

SUBMITTED BY:

Name: _____
Address: _____

Telephone: _____
Fax: _____
Email: _____

TO: Richmond Community Schools
300 Hub Etchison Parkway
Richmond, IN 47374

Checklist:

State Form 96 **(Revised 2013)**
Bid Bond

Financial Statement
Indiana Public Law Certificate

Bonding Co.: _____

Addenda Received: _____

The undersigned, having carefully examined all contract documents, including Instructions to Bidders, General Conditions, Modifications to General Conditions, Special Conditions, Drawings, and Specifications and Addenda entitled:

Richmond Community Schools
Richmond High School Mechanical Modernization

Dated August 28, 2021, prepared by LWC Incorporated (Architects), Richmond, Indiana, and having examined the site, hereby proposed to furnish all materials, all services, all labor, and all equipment to complete all work as described in the contract documents for the following:

BASE BID:

TOTAL BASE BID – SINGLE PRIME CONTRACT:

\$ _____

SUM IN WORDS: _____

ALLOWANCES

The following allowances are included in the Base Bid:

NONE.

UNIT PRICES

Unit Price No. 1 – Monthly Rental of Temporary Boiler
_____ Dollars Per Month

(\$ _____) Per Month

Unit Price No. 2 – Monthly Rental of Temporary Chiller
_____ Dollars Per Month

(\$ _____) Per Month

ALTERNATES:

ALTERNATE NO. 1 – Additional Scope at Existing South Chiller Location:

ALL LABOR AND MATERIALS, for the sum of **ADD \$** _____

Sum in words: _____

ALTERNATE NO. 2 – Additional Classroom Finishes:

ALL LABOR AND MATERIALS, for the sum of **ADD \$** _____

Sum in words: _____

ALTERNATE NO. 3 – Additional Mechanical Scope at Unit C:

ALL LABOR AND MATERIALS, for the sum of **ADD \$** _____

Sum in words: _____

ALTERNATE NO. 4 – New Equipment in Fan Room L103 at Unit C:

ALL LABOR AND MATERIALS, for the sum of **ADD \$** _____

Sum in words: _____

ALTERNATE NO. 5 – Extend Ceiling and lighting replacement in hall around pool:

ALL LABOR AND MATERIALS, for the sum of **ADD \$** _____

Sum in words: _____

ALTERNATE NO. 6 – Temporary Steam Boilers:

ALL LABOR AND MATERIALS, for the sum of **ADD \$** _____

Sum in words: _____

ALTERNATE NO. 7 – Temporary Chiller:

ALL LABOR AND MATERIALS, for the sum of **ADD \$** _____

Sum in words: _____

ALTERNATE NO. 8 – Delay Library Work Until 2023:

ALL LABOR AND MATERIALS, for the sum of **ADD \$** _____

Sum in words: _____

RICHMOND COMMUNITY SCHOOLS
RICHMOND HIGH SCHOOL
MECHANICAL MODERNIZATION PROJECT
LWC COMMISSION NO. 20104.02

SIGNATURE SHEET:

A CORPORATION: _____

STATE IN WHICH INCORPORATED: _____

A PARTNERSHIP: _____

AN INDIVIDUAL: _____

BY: _____
Signature Title

BY: _____
Signature Title

BUSINESS ADDRESS:

DATE: _____

NOTE: A CORPORATION must present a certified copy of a resolution by its Board of Directors authorizing the signing of this proposal by any person other than the President of the Corporation. AN INDIVIDUAL must be the Owner and state the name of his business, as well as his full legal name.

RICHMOND COMMUNITY SCHOOLS
RICHMOND HIGH SCHOOL
MECHANICAL MODERNIZATION PROJECT
LWC COMMISSION NO. 20104.02

VOLUNTARY ALTERNATES:

Contractors may voluntarily propose additional Alternates for the Owner's consideration.

Bidders desiring to submit voluntary Alternates shall list each below, together with the amount to be added to, or deducted from, the amount of their base bid. A brief description of each Alternate shall be included.

Voluntary Alternate #	Proposed Alternate	Add	Deduct

SUBSTITUTION SHEET:

All bids shall be based upon the "Standards" specified. (See standard substitution provision of specifications.)

Bidders desiring to make substitutions for "Standards" specified, shall list each proposed substitution below, together with the amount to be added to, or deducted from, the amount of their base bid.

Brand or Make Specified	Proposed Substitution	Add	Deduct

SUBCONTRACTOR LIST

This list shall be provided with the Form of Proposal. Additional sheets may be added in the same format.

<u>NAME/ADDRESS/PHONE</u>	<u>WORK TO BE PROVIDED</u>
_____	_____
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_____	_____

END OF FORM OF PROPOSAL

SECTION 012200 - UNIT PRICES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for unit prices.
- B. Related Sections include the following:
 - 1. Division 01 Section "Contract Modification Procedures" for procedures for submitting and handling Change Orders.

1.3 DEFINITIONS

- A. Unit price is an amount proposed by bidders, stated on the Bid Form, as a price per unit of measurement for materials or services added to or deducted from the Contract Sum by appropriate modification, if estimated quantities of Work required by the Contract Documents are increased or decreased.

1.4 PROCEDURES

- A. Unit prices include all necessary material, plus cost for delivery, installation, insurance, applicable taxes, overhead, and profit.
- B. Measurement and Payment: Refer to individual Specification Sections for work that requires establishment of unit prices. Methods of measurement and payment for unit prices are specified in those Sections.
- C. Owner reserves the right to reject Contractor's measurement of work-in-place that involves use of established unit prices and to have this work measured, at Owner's expense, by an independent surveyor acceptable to Contractor.
- D. List of Unit Prices: A list of unit prices is included in Part 3. Specification Sections referenced in the schedule contain requirements for materials described under each unit price.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 LIST OF UNIT PRICES

A. Unit Price No. 1 – Monthly Rental of Temporary Boiler:

1. Description: Provide a price per month for rental fees of temporary boiler. Cost shall include all markups.

B. Unit Price No. 2 – Monthly Rental of Temporary Chiller:

1. Description: Provide a price per month for rental fees of temporary chiller. Cost shall include all markups.

END OF SECTION 012200

SECTION 012300 - ALTERNATES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes administrative and procedural requirements for alternates.

1.3 DEFINITIONS

- A. Alternate: An amount proposed by bidders and stated on the Bid Form for certain work defined in the bidding requirements that may be added to or deducted from the base bid amount if Owner decides to accept a corresponding change either in the amount of construction to be completed or in the products, materials, equipment, systems, or installation methods described in the Contract Documents.
 - 1. Alternates described in this Section are part of the Work only if enumerated in the Agreement.
 - 2. The cost or credit for each alternate is the net addition to or deduction from the Contract Sum to incorporate alternate into the Work. No other adjustments are made to the Contract Sum.

1.4 PROCEDURES

- A. Coordination: Revise or adjust affected adjacent work as necessary to completely integrate work of the alternate into Project.
 - 1. Include as part of each alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not indicated as part of alternate.
- B. Notification: Immediately following award of the Contract, notify each party involved, in writing, of the status of each alternate. Indicate if alternates have been accepted, rejected, or deferred for later consideration. Include a complete description of negotiated revisions to alternates.
- C. Execute accepted alternates under the same conditions as other work of the Contract.

- D. Schedule: A schedule of alternates is included at the end of this Section. Specification Sections referenced in schedule contain requirements for materials necessary to achieve the work described under each alternate.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 SCHEDULE OF ALTERNATES

1. Alternate No. 01 – Additional Scope at Existing South Chiller Location.
 - a. Base Bid Work shall include complete removal of the chiller south of Central Plant, including all associated electrical and piping. Existing concrete pad, foundations, wood fence, installation of topsoil to match surrounding grades, and restoration of lawn shall be by Owner under separate Contract.
 - b. Alternate Bid Work shall include complete removal of the chiller south of Central Plant, including all associated electrical, piping, concrete pad, foundations, wood fence, installation of topsoil to match surrounding grades, and restoration of lawn.
2. Alternate No. 02 – Additional Classroom Finishes.
 - a. Base Bid Work shall include repair, full prime paint, and two-coat finish paint all walls, ceilings, and other surfaces, in all locations as required for removal and installation of new plumbing, mechanical, and electrical items only in Classroom L113, Classroom L111, Classroom L110, Classroom L109, Classroom L106, Computer Lab L104, Office R121, Classroom R123, Office R123A, Storage R124, Room R128, Room R128A and Room R129. All walls where repairs and painting are required due to removal of plumbing, mechanical, and/or electrical items shall have all damaged areas repaired, whether the result of this project or not, and shall be fully primed and two-coat finish painted corner to corner and floor to ceiling.
 - b. Alternate Bid Work shall include repair, full prime paint, and two-coat finish paint all walls, replacement of all suspended acoustical ceiling tile, replacement of all carpet and vinyl base, installation of new markerboards and tackboards as indicated, and installation of new roller shades in Classroom L113, Classroom L111, Classroom L110, Classroom L109, Classroom L106, Computer Lab L104, Office R121, Classroom R123, Office R123A, Storage R124, Room R128, Room R128A and Room R129.
3. Alternate No. 03 – Additional Mechanical Scope at Unit C.
 - a. Base Bid Work shall limit work in Unit C to those rooms with existing steam heat, including Office R121, Classroom R123, Office R123A, Storage R124, Room R128, Room R128A and Room R129. All associated work, including additional plumbing, mechanical, electrical, and finish scope required to convert these spaces from steam to a hydronic system, shall be included.
 - b. Alternate Bid Work shall add all plumbing, mechanical, and electrical work as indicated in Unit C, in addition to the work included with the Base Bid scope.

4. Alternate No. 04 – Add New Equipment in Fan Room L103 at Unit C.
 - a. Base Bid Work shall maintain all existing equipment in Fan Room L103. No additional equipment shall be provided, including the AHU-1C, new rooftop unit ERV-1 and all new ductwork associated with new equipment connections to existing ductwork. The structural and roof work required to provide a new roof opening for ERV-1 shall not be included in the Base Bid. All new work in the area of Unit C shall be fed from the existing units.
 - b. Alternate Bid Work shall include all plumbing, mechanical, and electrical work as indicated in Fan Room L103, including the AHU-1C, new rooftop unit ERV-1 and all new ductwork associated with new equipment connections to existing ductwork. The structural and roof work required to provide a new roof opening for ERV-1 shall be included in the Alternate Bid.

5. Alternate No. 05 – Extend ceiling and lighting replacement in hall around pool.
 - a. Base Bid Work shall leave existing ceiling and lights in Corridor T270 and Corridor T271 as-is.
 - b. Alternate Bid Work shall remove plaster ceiling and replace with new acoustical ceiling and LED fixtures in Corridor T270 and Corridor T271 to match Corridor T165.

6. Alternate No. 06 – Temporary Steam Boilers.
 - a. Base Bid Work shall not include any provisions for installation, connections, or removal of a temporary steam boiler.
 - b. Alternate Bid Work shall include all requirements for installation, connections, and removal of a temporary steam boiler located in the fenced automotive yard north of Central Plant. The cost shall include all equipment, piping, controls, connections, and specialty equipment required to install, operate, and remove the temporary steam to water heating systems. Refer to drawings on Sheet M105.1 for additional information. Contractor shall provide detailed phasing plan with Bid to determine need for the acceptance of Alternate with proposal.

7. Alternate No. 07 – Temporary Chiller.
 - a. Base Bid Work shall not include any provisions for installation, connections, or removal of temporary chiller.
 - b. Alternate Bid Work shall include all requirements for installation, connections, and removal of temporary chiller to the existing system. The cost shall include all equipment, piping, controls, connections, and specialty equipment required to install, operate, and remove the temporary chilled water system. Refer to drawings on Sheet M105.1 for additional information. Contractor shall provide detailed phasing plan with Bid to determine need for acceptance of Alternate with proposal.

8. Alternate No. 08 – Delay Library Work Until 2023.
 - a. Base Bid – All Work accepted as part of the Contract at Library and surrounding areas, including architectural, roofing, plumbing, mechanical, electrical, and miscellaneous associated work, shall be completed per Specification Section 000500 – Preliminary Schedule, and Drawings G001 and G002, Phasing Plans, with Substantial Completion of all work by July 22, 2022. This includes Base Bid Work and all Accepted Alternates in that area.

- b. Alternate Bid - All Work at Library and surrounding areas, including architectural, roofing, plumbing, mechanical, electrical, and miscellaneous associated work, shall be Substantially Complete by July 22, 2023. This includes Base Bid Work and all Accepted Alternates in that area. This excludes changing the timing for the removal of existing steam piping and replacement with hot water hydronic piping in the tunnels in this area. Hydronic to steam heat exchangers shall be installed as needed to allow the main steam piping to be replaced per the Base Bid Schedule.

END OF SECTION 012300