

ADDENDUM NUMBER ONE

Bids Received until
2:00 P.M. CDT November 17, 2011
Hoover City Schools Board of Education
2810 Metropolitan Way
Hoover, Alabama 35243

Harold L. Foshee Architects
345 Highgate Hill
Indian Springs,
Alabama 35124

This addendum hereby becomes part of and modifies the Contract Documents dated October 14, 2011. It supersedes all contrary and/or conflicting information contained in said Contract Documents, including Contract Drawings and Project Manual. Amend the Contract Documents in the following particulars:

PROJECT MANUAL:

M1.1 Advertisement for Bids:

- A. Change time for receipt of bids as shown above.

M1.2 Section 12305 Pre-Manufactured Casework:

- A. Refer to 4.6 Products: D and change the following:

1. Provide a wiring harness kit for each computer station with a power feed for each row of stations. The system shall be 4 wire with two 125 volt, 20 amp power circuits incorporated into the system with one safety ground isolated from one another and one neutral conductors. The safety ground and neutral conductor is for use with general purpose equipment. The system shall be designed to accommodate a maximum of 13 Duplex Receptacles per circuit. The system shall be completely modular and easily reconfigured to allow all individual tables to be connected and reconfigured per Owners needs. Seven (7) 20 amp infeed cords are to be provided per room, to allow all new configurations to be plugged into standard 20 amp wall duplex outlets.

M1.3 Section 15745 Water Source Heat Pumps:

- A. Refer to 2.1 Manufacturers and delete Addison and Mammoth as acceptable manufacturers.

M1.4 Interior Finish Schedule:

- A. In Classrooms G303, G304, G305, G306, G307, G312, G313, G314, G315, G316, G317 and G319 change ceiling height to 9'-1".

DRAWINGS:

D1.1 Sheet No. A6.1:

A. Revise drawings as shown. See Attachments SD-1 and SD-2.

D1.2 Sheet No. A6.2:

A. Revise drawings as shown. See Attachment SD-3.

D1.3 Sheet No. A2.1, A2.2, A2.3, A3.1, A5.1:

A. Added double walls at Column AD and between Columns 1' & 2. See Attachment SD-4 & SD-7.

B. Change CB2 (abutting CB1) to CB4 - Classroom G105 only.

D1.4 Sheet No. A3.1, A7.1, A7.2:

A. Change ceiling heights in corridor G300A and G300B as shown.. See Attachment SD-5 and SD-6.

D1.5 Sheet No. A1.6, A1.7, A1.8:

A. Refer to Building Code (IBC) Classifications: New Construction Addition - Building One and change Required Fire Resistance Rating for columns supporting roof only to 1 hour.

D1.6 Sheet No. A4.1:

A. Refer to Aluminum Window Schedule: All windows shall have blinds except Type H.

D1.7 Sheet No. P1.3:

A. Refer to added trap primer and piping at Mechanical Room G201B.

D1.8 Sheet No. M0.1:

A. Revise drawing with Test and Balance note added. See revised drawing.

D1.9 Sheet No. M2.1:

A. Revise drawing with various ductwork modifications in Classroom Building One Addition First Floor. Refer to new duct mounted fire dampers removed from walls of mechanical room housing Ex. AC-1041 and new fire dampers added in corridor walls. Corridor grilles in renovation portion of existing building changed and require ceiling radiation dampers. See revised drawing.

D1.10 Sheet No. M2.2:

A. Revise drawing with various ductwork modifications in Classroom Building One Additions Second Floor. Refer to corridor grilles in renovation portion of existing changed and require ceiling radiation dampers. See revised drawing.

D1.11 Sheet No. M2.3:

A. Revise drawing with various ductwork modifications in Classroom Building One Additions Third Floor. See revised drawing.

D1.12 Sheet No. M2.4:

A. Revise drawing with various ductwork modifications in Classroom Building One Additions Attic. Refer to note added requiring combination fire/smoke dampers in ERU ductwork penetrating gyp. At bottom

of roof trusses and routing in the chase below. See revised drawing.

D1.13 Sheet No. M3.3:

A. Refer to AC3-8 & 3-9 thermostats renamed to match equipment nomenclature. See revised drawing.

D1.14 Sheet No. M3.4:

A. Refer to control panel locations and note regarding contractor's careful coordination for getting ERUS into the building and installed. See revised drawing.

D1.15 Sheet No. M4.1:

A. Refer to modifications to Control Plant including locating control panels and control valves and removal of flow meter. See revised drawing.

D1.16 Sheet No. M4.2:

A. Refer to modifications to Control Plant including locating control panels and control valves and removal of flow meter. See revised drawing.

D1.17 Sheet No. M4.4:

A. Refer to modifications to control panel locations for Multipurpose Building in second level mechanical/storage areas. See revised drawing.

D1.18 Sheet No. M5.2:

A. Refer to detail added for ERU with water-source heat pump. See revised drawing.

D1.19 Sheet No. M6.4:

A. Refer to modifications made to the central condenser water and loop water plant control diagrams and sequences. See revised drawing.

D1.20 Sheet No. M6.5:

A. Refer to control diagram added for HVAC control panels. See revised drawing.

D1.21 Sheet No. E0.1:

A. Revise Electrical Site Plan as shown on attachment SD-E7.

D1.22 Sheet No. E0.2:

A. Revise Central Plant Electrical Plans as shown on attachment SD-E7.

D1.23 Sheet No. E1.1:

A. Change electrical notes as shown. See attachment SD-E1.

D1.24 Sheet No. E1.5:

A. Add note as shown on attachment SD-E2 and SD-E3.

D1.25 Sheet No. E3.1:

A. Revise First Floor Power & Auxiliary Plan as shown on attachment SD-E4.

D1.26 Sheet No. E3.2:

A. Revise Second Floor Power & Auxiliary Plan as shown on attachment SD-E5.

D1.27 Sheet No. E3.3:

A. Revise as shown on attachment SD-E6.

D1.28 Sheet No. E3.4:

A. Revise as shown on attachment SD-E13.

D1.29 Sheet No. E3.7:

A. Revise as shown on attachment SD-E8.

D1.30 Sheet No. E4.2:

A. Revise as shown on attachment SD-E12.

D1.31 Sheet No. E4.4:

A. Revise as shown on attachment SD-E11.

D1.32 Sheet No. E4.7:

A. Revise as shown on attachment SD-E9.

D1.33 Sheet No. E6.2:

A. Revise Panelboard Schedules as shown on attachment SD-E14 and SD-E15.

D1.34 Sheet No. E6.3:

A. Revise Panelboard Schedule as shown on attachment SD-E16.

GENERAL INFORMATION / CLARIFICATION:

G1.1 Subject to the General Conditions Modifications Part A and provision of equal products in strict compliance with all requirements of individual specification sections the following manufacturers are approved:

<u>Section</u>	<u>Manufacturer</u>
08512 Aluminum Windows	Peerless Products, Inc.
09245 Gypsum Drywall Systems	CertainTeed Gypsum, Inc.
07622 Preformed Metal Building Components	ACI Metal Roofing Systems.
09520 Acoustical Wall Panels	Conwed Designscape
10116 Communication Boards	American Visual Display Products, LLC
12484 Entrance Floor Mats	Kadee Industries
15180 Hydronic Specialities: Heat Pump Hose Kits	Griswold Controls
15185 Hydronic Pumps Vertical In-Line Pumps Flexible-Coupled, Double Suction Pumps	Armstrong Pumps

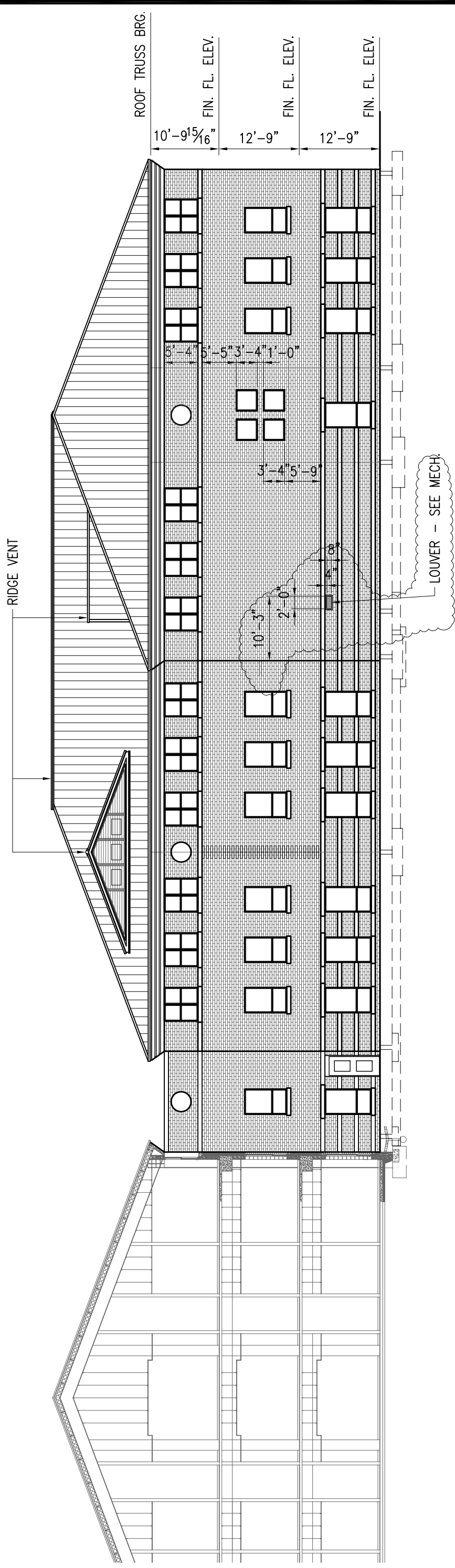
G1.2 Exposed steel columns which are fire protected with sprayed fire proofing shall have a medium density (22 pcf) fireproofing. Topcoats and/or sealers for sprayed fireproofing are not required.

END OF ADDENDUM NUMBER ONE



Harold L. Foshee Architects
By: Harold L. Foshee, Jr.

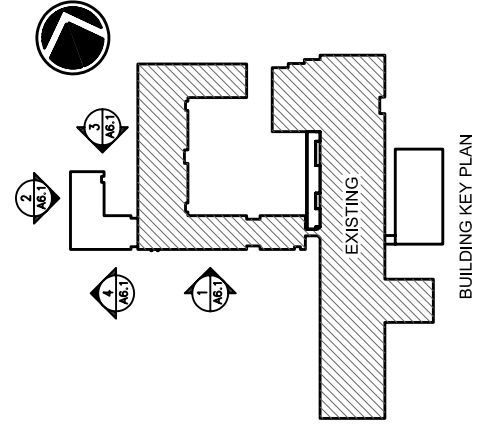
**ADDITIONS TO
HOOVER HIGH SCHOOL
HOOVER, ALABAMA**



3
A6.1

NORTH ELEVATION - BUILDING ONE ADDITION

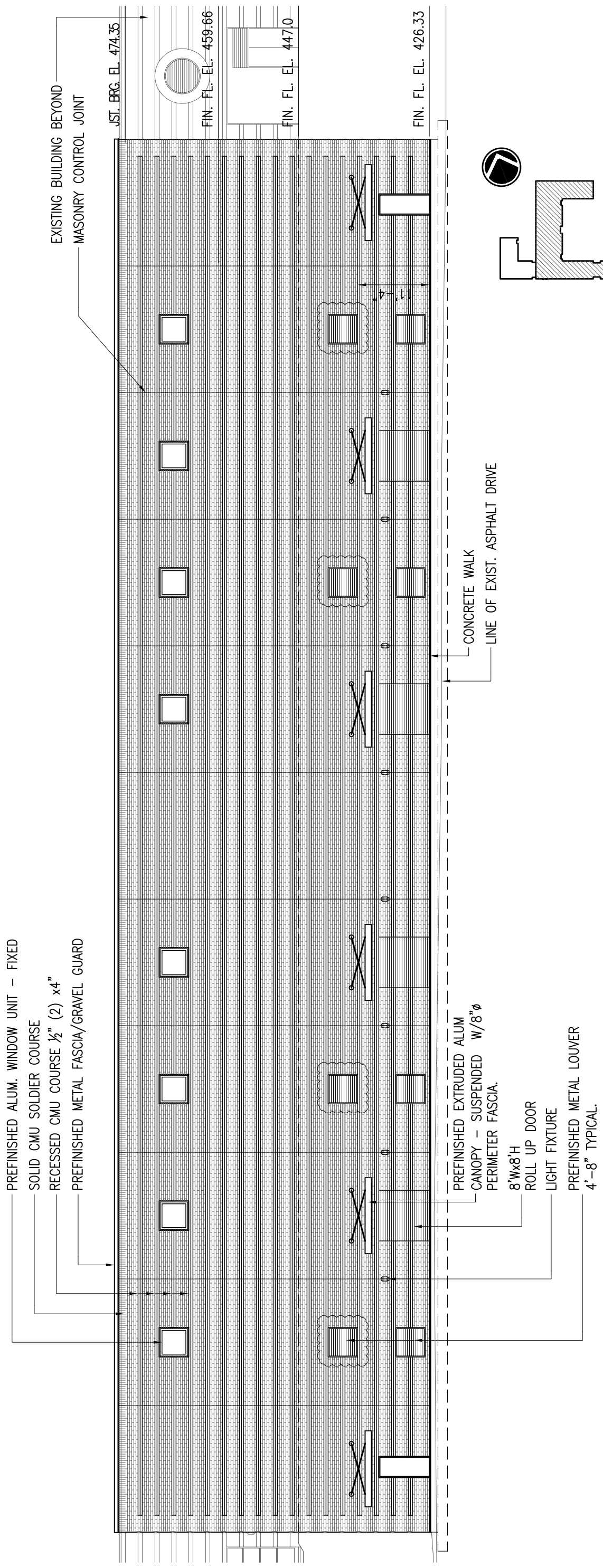
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DATE:	11-08-11

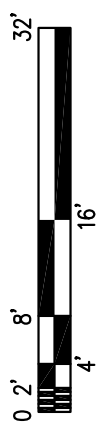
Revise Drawing Sheet No. A6.1

**ADDITIONS TO
HOOVER HIGH SCHOOL
HOOVER, ALABAMA**

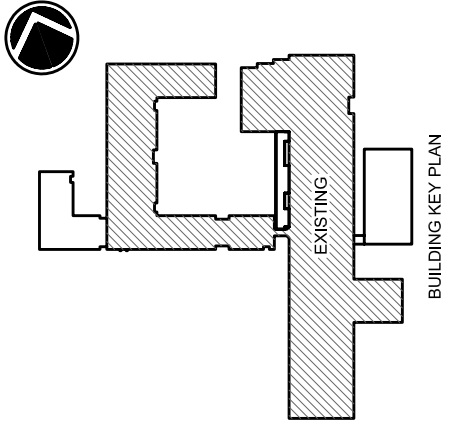


EAST ELEVATION - MULTI-PURPOSE BUILDING

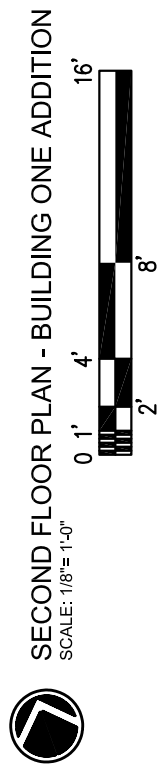
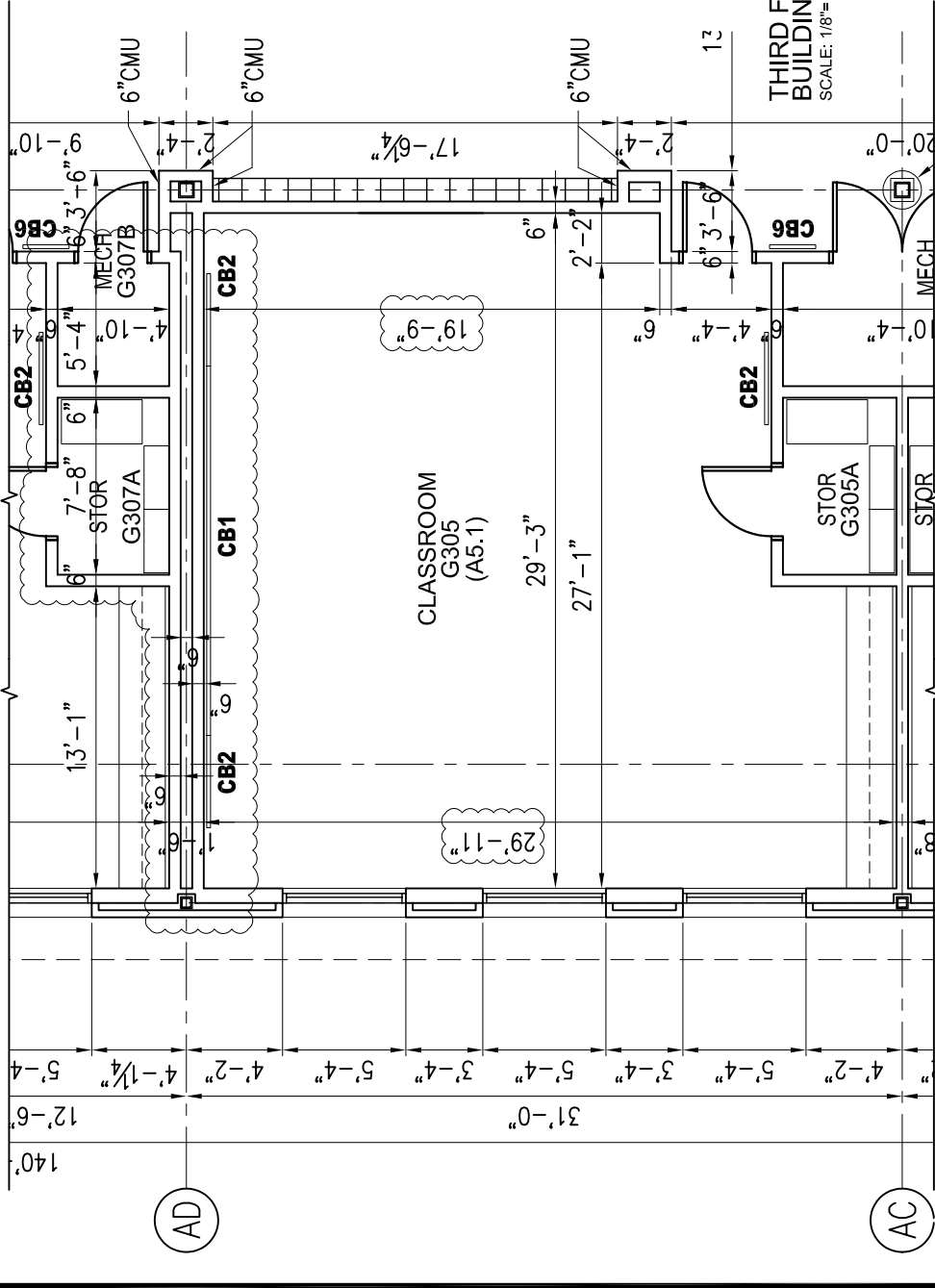
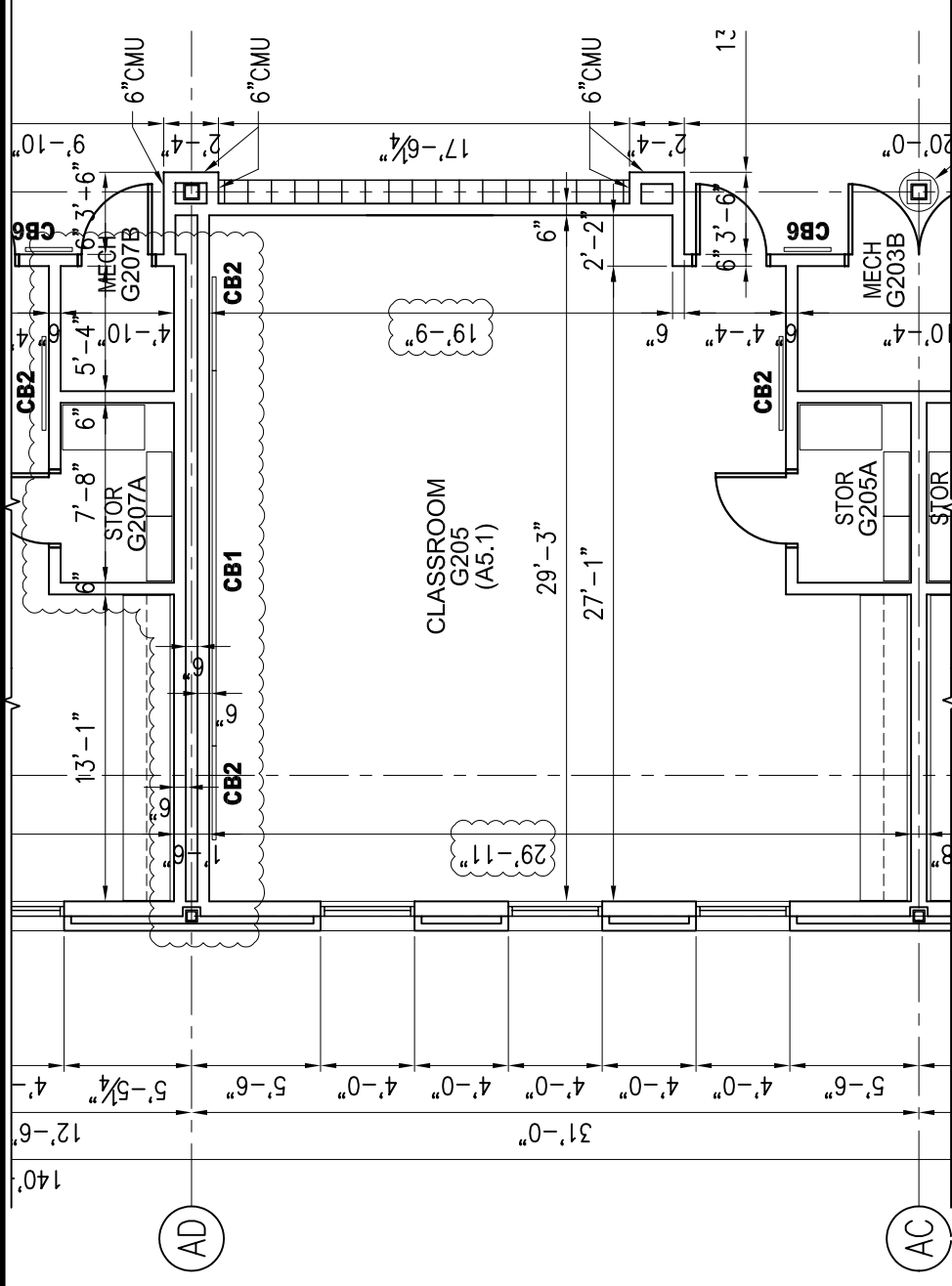
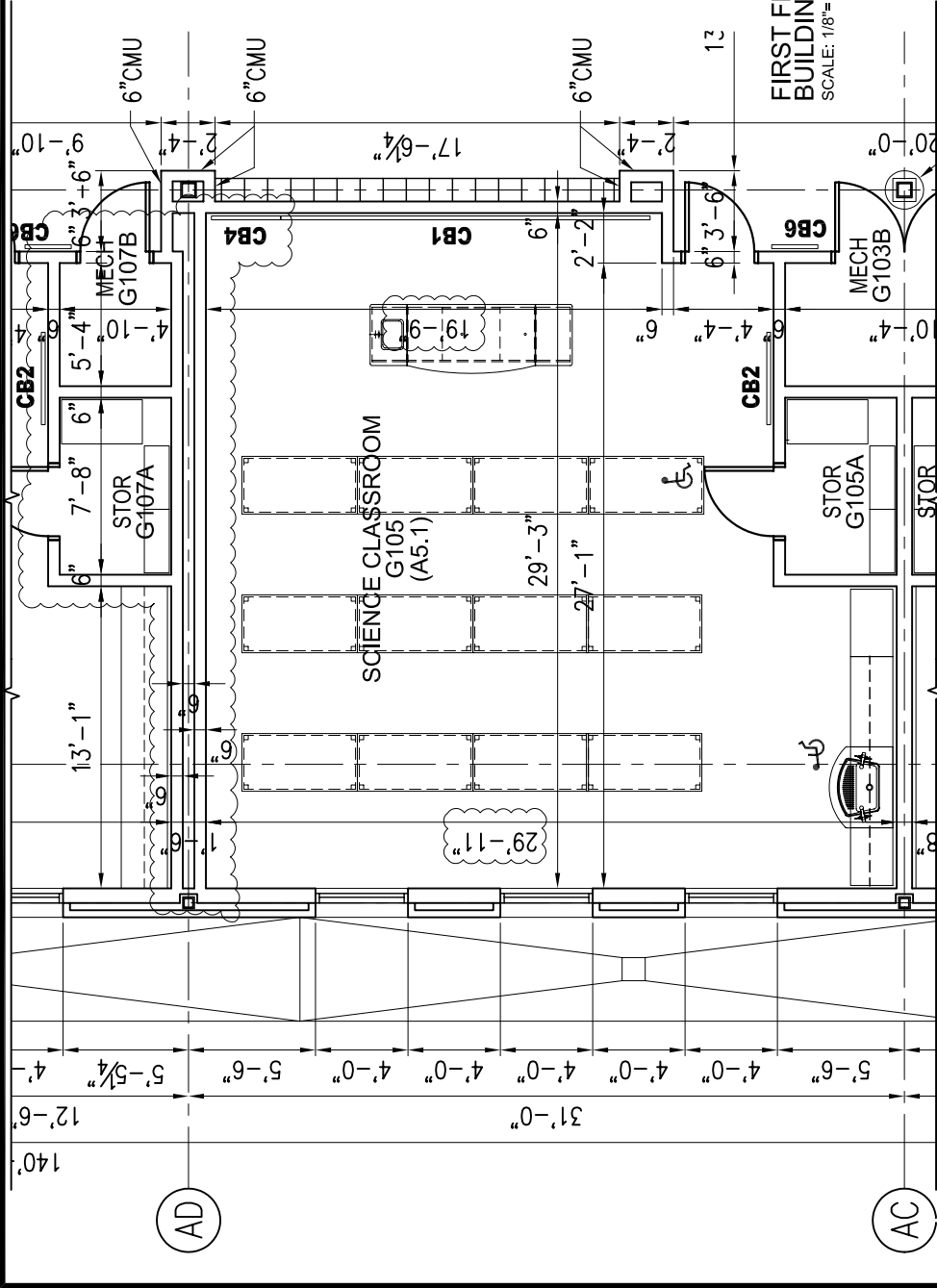
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DATE:	11-08-11



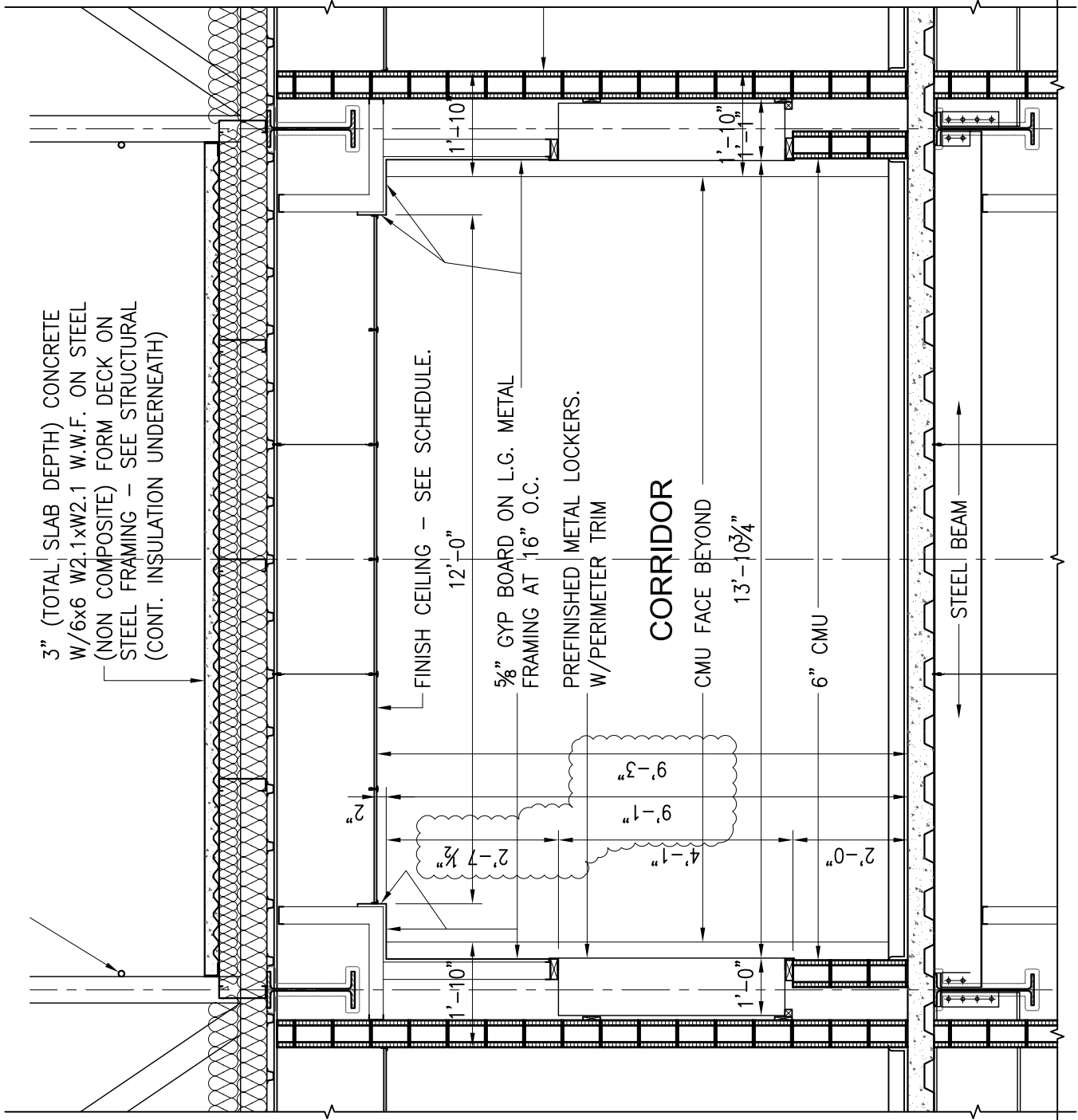
Revise Drawing Sheet No. A6.2



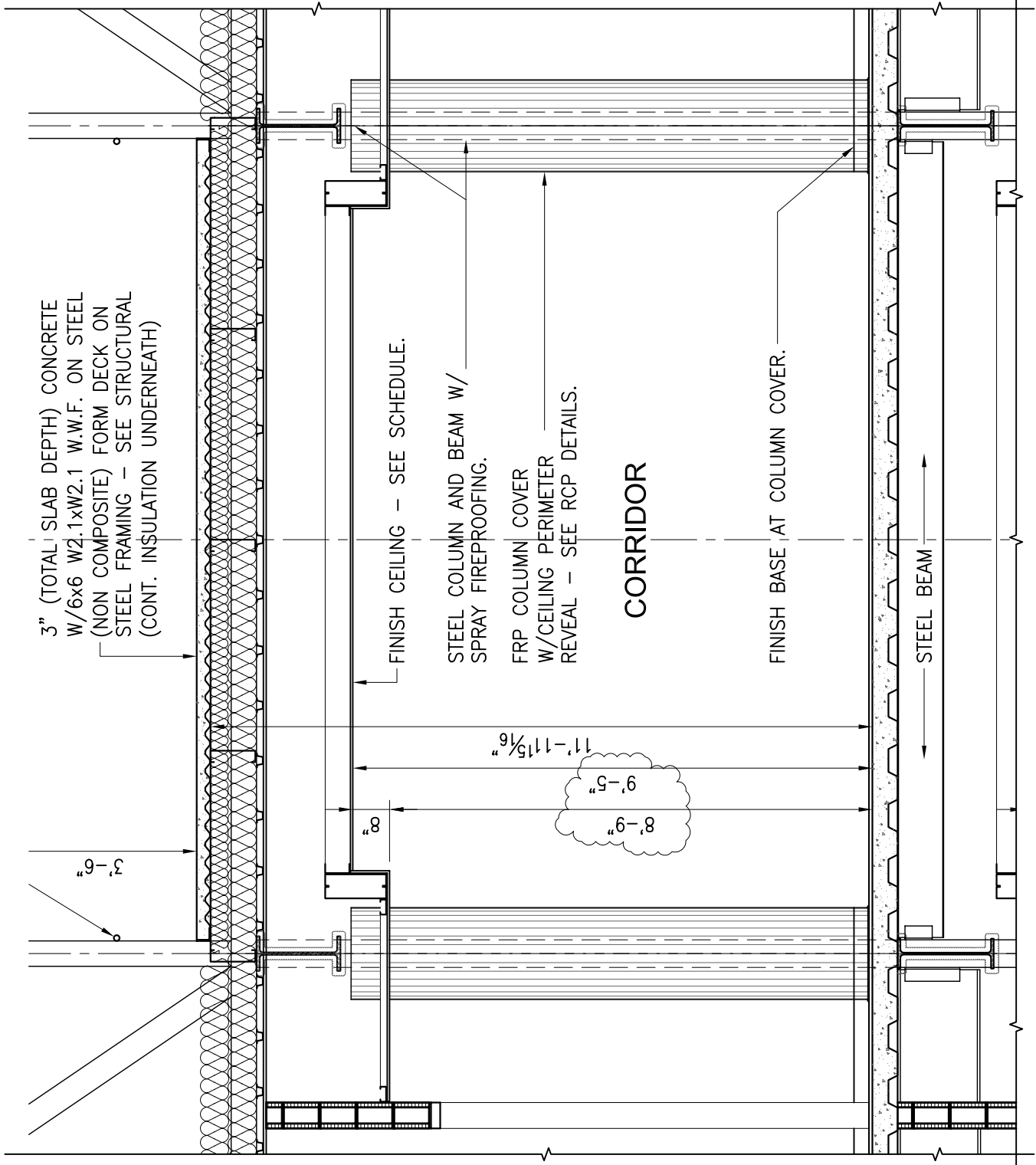
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File Name	SD-4
DATE:	11-08-11

**ADDITIONS TO
HOOVER HIGH SCHOOL
HOOVER, ALABAMA**

Revise Drawing Sheet No. A2.1, A2.2, A2.3



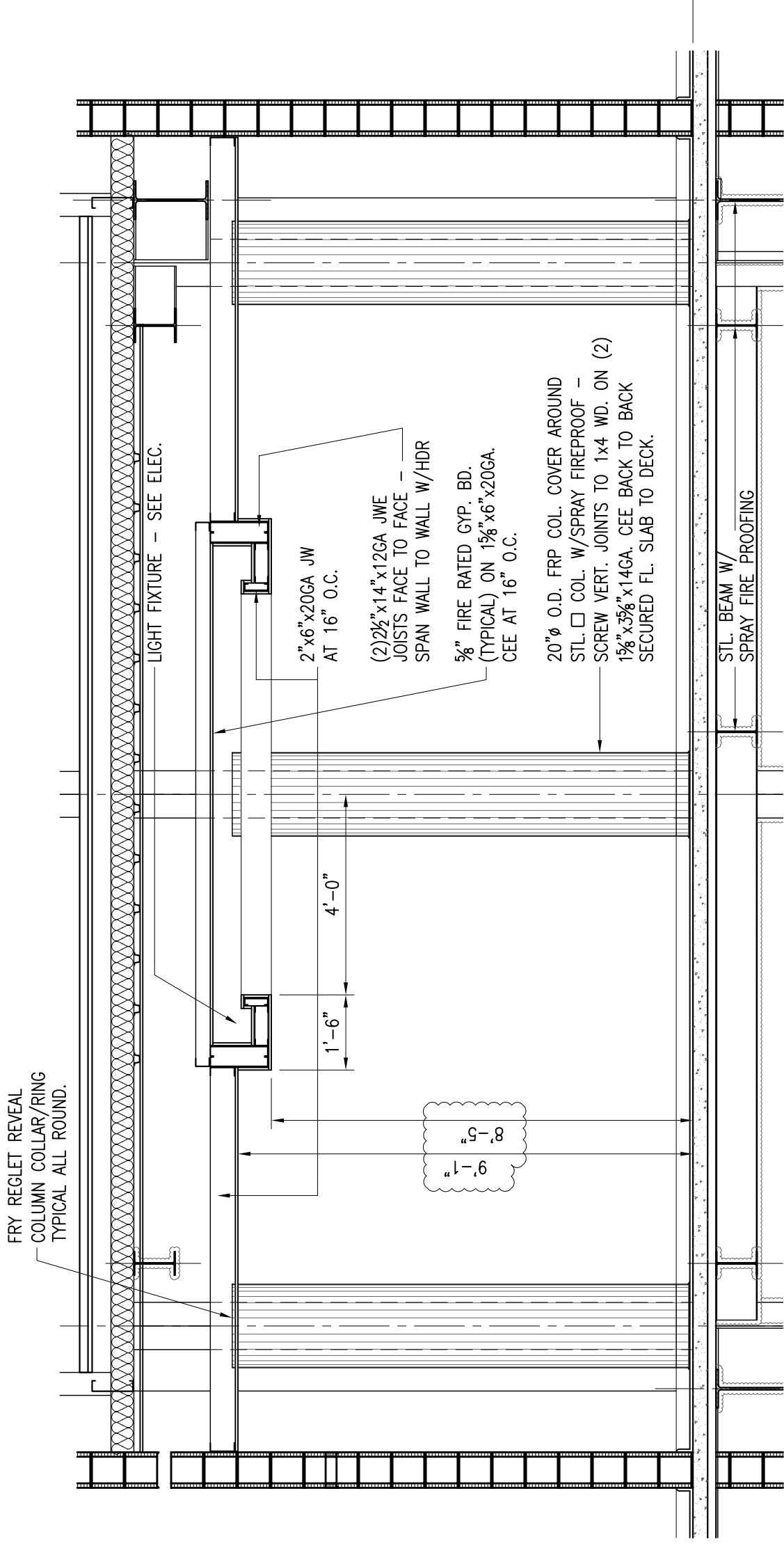
A
A7.1
SECTION A-A - BUILDING ONE ADDITION
SCALE: 3/8" = 1'-0"
0.3" 1' 4'
6" 2'



A
A7.2
SECTION A-A - BUILDING ONE ADDITION
SCALE: 3/8" = 1'-0"
0.3" 1' 4'
6" 2'

Job Number	11450
File Name	SD-5
DATE:	11-08-11

ADDITIONS TO
HOOVER HIGH SCHOOL
HOOVER, ALABAMA
Revise Drawing Sheet No. A7.1, A7.2



SECTION A-A - AT CORRIDOR INTERSECTION

SCALE: 3/8" = 1'-0"



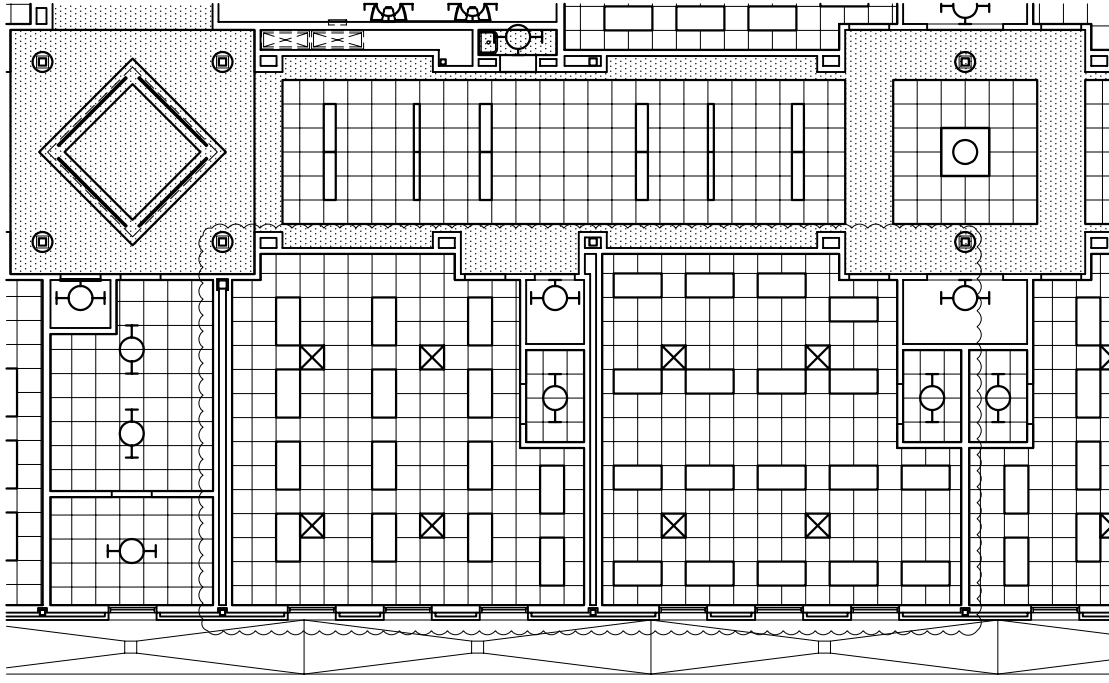
A
A3.1

Job Number	11450
File Name	SD-6
DATE:	11-08-11

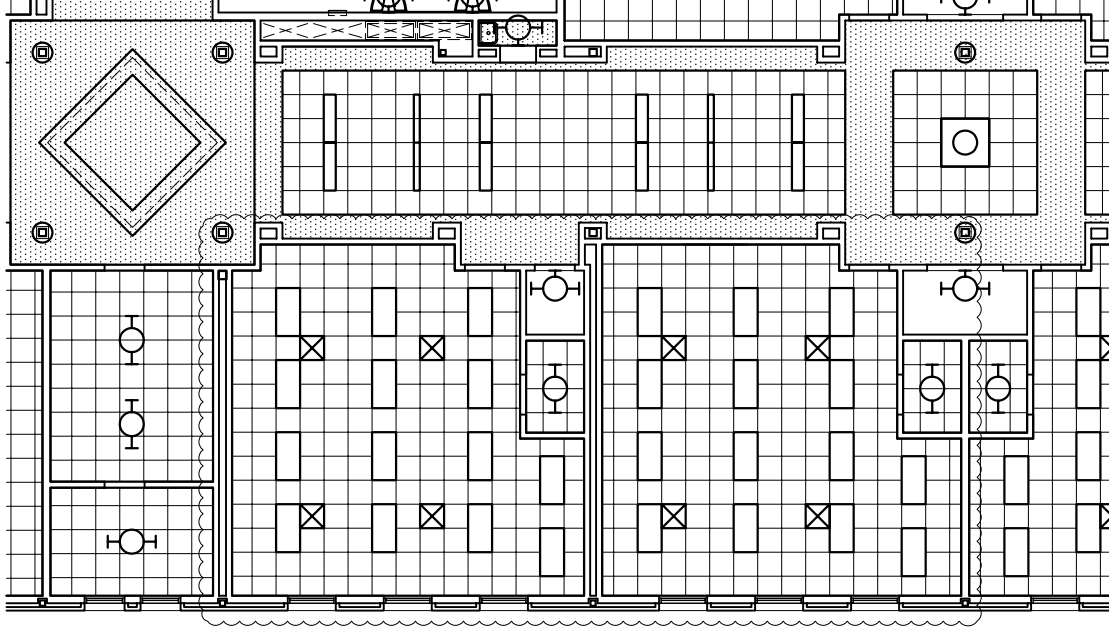
**ADDITIONS TO
HOOVER HIGH SCHOOL
HOOVER, ALABAMA**

Revise Drawing Sheet No. A3.1

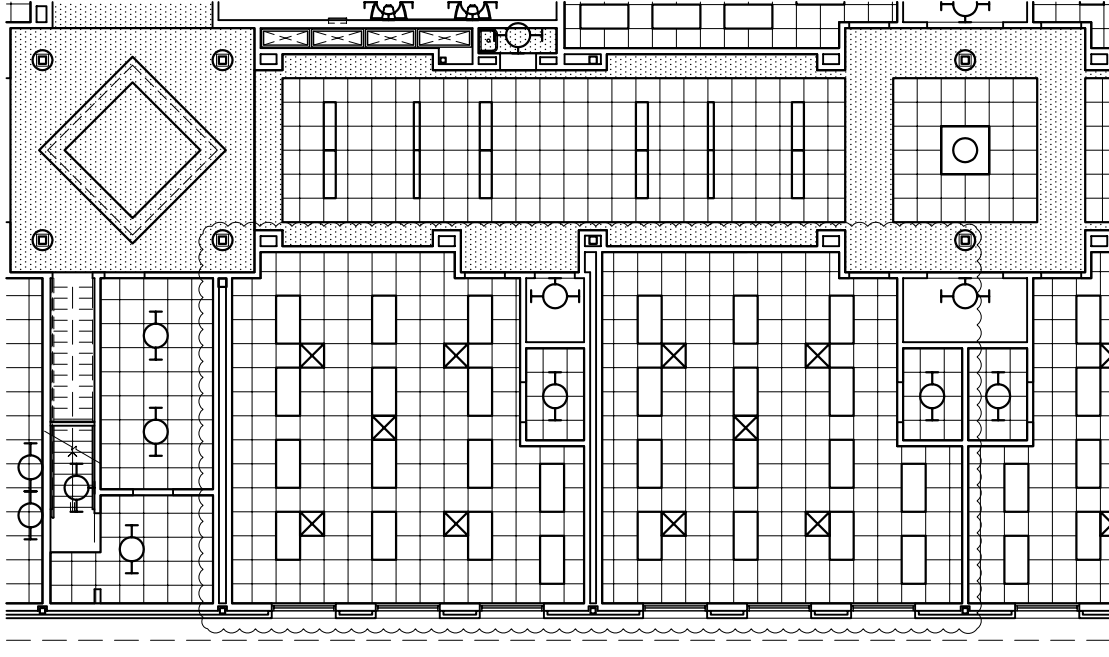
ADDITIONS TO
 HOOVER HIGH SCHOOL
 HOOVER, ALABAMA



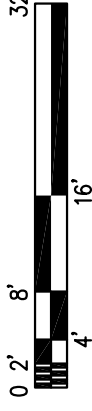
**BUILDING ONE ADDITION -
 1ST FL. REF. CEILING PLAN**
 SCALE: 1/16" = 1'-0" 0' 2' 8' 32'



**BUILDING ONE ADDITION -
 2ND FL. REF. CEILING PLAN**
 SCALE: 1/16" = 1'-0" 0' 2' 8' 32'



**BUILDING ONE ADDITION -
 3RD FL. REF. CEILING PLAN**
 SCALE: 1/16" = 1'-0" 0' 2' 8' 32'



Job Number	11450
File Name	SD-7
DATE:	11-08-11

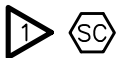
ELECTRICAL NOTES

7. THIS CONTRACTOR SHALL COORDINATE ALL PENETRATIONS THROUGH UPPER LEVEL FLOOR SLABS WITH STRUCTURAL. CONTRACTOR SHALL PROPERLY FIRE STOP AROUND ALL FLOOR TO FLOOR PENETRATIONS.
8. ALL ELECTRICAL PANELBOARDS AND SWITCHBOARDS SHALL BE PROVIDED WITH FULL A.I.C. RATINGS AS SPECIFIED IN THE PANELBOARD SCHEDULES SHOWN ON THE DRAWINGS. SERIES RATING OF POWER DISTRIBUTION EQUIPMENT IS NOT ALLOWED. ALL PANELBOARDS AND SWITCHBOARDS MAY BE PROVIDED WITH TIN PLATED ALUMINUM BUSSING.
9. CONTRACTOR SHALL SUBMIT 1/4" = 1'-0" DRAWINGS SHOWING PROPOSED LAYOUTS OF ALL ELECTRICAL DISTRIBUTION EQUIPMENT IN ELECTRICAL ROOMS WITH SHOP DRAWINGS.
10. PANEL DIMENSIONS SHALL NOT EXCEED THE SIZES SHOWN ON PLANS WITHOUT SPECIFIC PERMISSION FROM THE ENGINEER.
11. THIS CONTRACTOR SHALL RE-USE EXISTING SPARE BREAKERS AND PROVIDE NEW BREAKERS WITHIN EXISTING PANELS PP-EM, RP-K1, LP-F1, RP-EM-A1 AND LP-EM-F1 AS NECESSARY TO ACCOMMODATE NEW BRANCH CIRCUITS SHOWN ON DRAWINGS. CIRCUIT NUMBERS AS SHOWN ON DRAWINGS ARE FOR REFERENCE PURPOSES ONLY. PANEL DIRECTORY CARDS SHALL BE RE-TYPED TO INDICATE ALL CONNECTED CIRCUITS. NEW CIRCUIT BREAKERS ADDED TO THESE EXISTING PANELS SHALL HAVE AN AIC RATING EQUIVALENT TO THE AIC RATING AS DETERMINED FROM THE SHORT CIRCUIT STUDY.
12. PROVIDE NEW ENGRAVED NAMEPLATES FOR ALL BRANCH CIRCUIT BREAKERS ADDED TO EXISTING MAIN SWITCHBOARD MSBB. NEW CIRCUIT BREAKERS SHALL BE RATED 100KAIC MINIMUM.
13. PROVIDE NEW ENGRAVED NAMEPLATES FOR ALL FUSIBLE SWITCHES ADDED TO EXISTING MOTOR CONTROL CENTER MCC-H. NEW SWITCHES SHALL BE RATED 100KAIC MINIMUM.
14. ALL LOW VOLTAGE CABLING NOT INSTALLED IN CONDUIT SHALL BE PLENUM RATED CABLING. LOW VOLTAGE CABLING WHERE SPECIFIED ON THE DRAWINGS AND WITHIN THE SPECIFICATIONS BY WAY OF NON-PLENUM CATALOG NUMBERS SHALL BE CONVERTED TO ITS PLENUM RATED EQUIVALENT WHEN NOT INSTALLED IN CONDUIT.

BESIDE PROJECTOR POWER OUTLET - EXACT LOCATION AS DIRECTED BY ARCHITECT.



PROJECTION SYSTEM - SOUND AMPLIFIER - LIGHTSPEED 820iR RECEIVER/ AMPLIFIER PROVIDED WITH CEILING MICROPHONE SENSOR AND REDMIKE & CRADLE CHARGER - SEE CLASSROOM A/V SYSTEM RISER DIAGRAM AND OUTLET DETAILS ON SHEET E1.4.



PROJECTION SYSTEM - CEILING SPEAKER ASSEMBLY - LIGHTSPEED MCQ MULTIMEDIA CEILING SPEAKER - SEE CLASSROOM A/V SYSTEM RISER DIAGRAM AND OUTLET DETAILS ON SHEET E1.4.



PROJECTION SYSTEM - WIRELESS MIC. SENSOR - LIGHTSPEED CEILING MOUNTED SENSOR PROVIDED WITH SOUND AMPLIFIER - SEE CLASSROOM A/V SYSTEM RISER DIAGRAM AND OUTLET DETAILS ON SHEET E1.4.

JRA
JACKSON, RENFRO & ASSOC., INC.
ELECTRICAL ENGINEERING & DESIGN
 141 VILLAGE STREET, SUITE 1
 BIRMINGHAM, ALABAMA 35242
 PHONE: (205) 995-1078
 FAX: (205) 995-1399

PROJECT:

ADDITIONS TO HOOVER HIGH SCHOOL

SHEET TITLE:

LEGEND, NOTES & SCHEDULES

REF. SHEET: E1.1

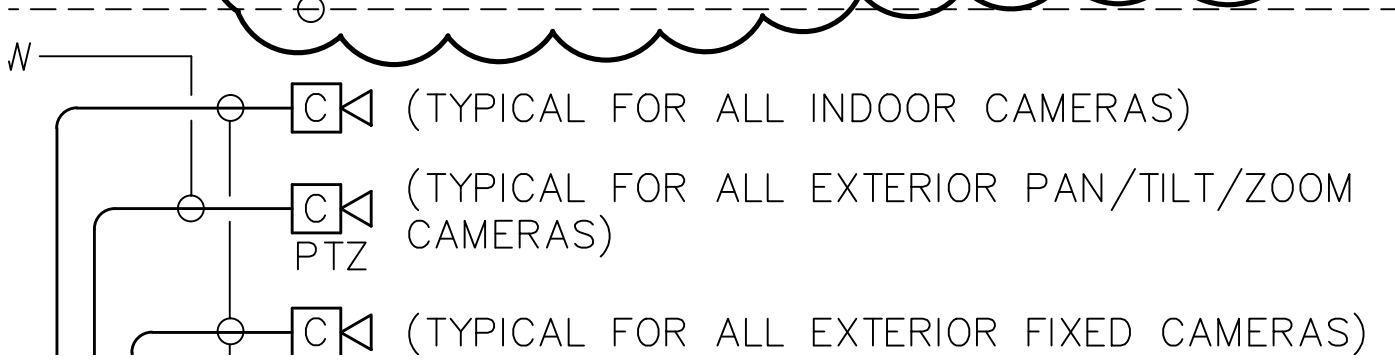
JRA JOB NO.: 211093

DATE: 11/08/11

DRAWING NO.: SD-E1

1

ITEMS SHOWN ARE TYPICAL FOR DVR-1M AND DVR-2M (EXISTING SECURITY ROOM), DVR-MP (NEW MULTI-PURPOSE BUILDING COMM. ROOM) AND ANY OTHER DVR'S REQUIRED BY EQUIPMENT SUPPLIER



PROJECT:

ADDITIONS TO HOOVER HIGH SCHOOL

SHEET TITLE:

ELECTRICAL DETAILS

REF. SHEET: E1.5

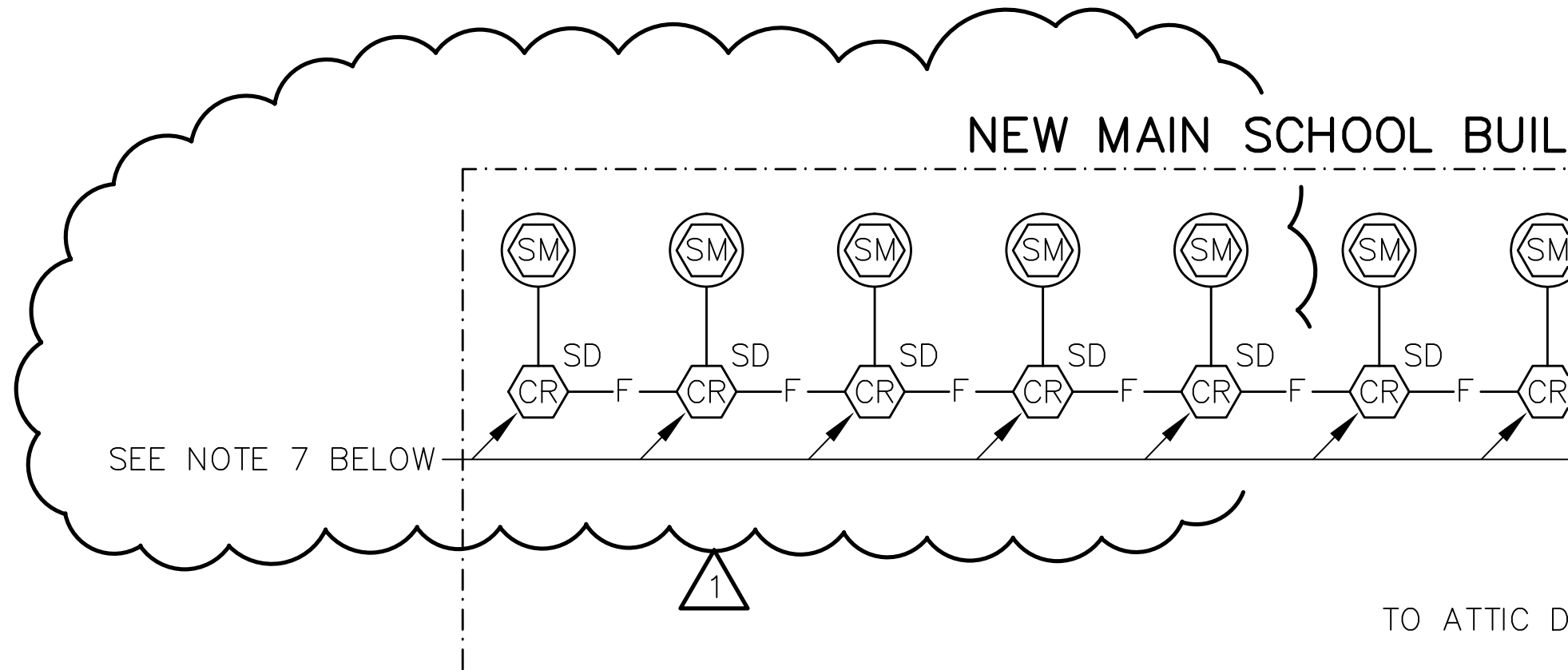
JRA JOB NO.: 211093

DATE: 11/08/11

DRAWING NO.: SD-E2

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JACKSON, RENFRO & ASSOC., INC.
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1

2. CONTRACTOR SHALL CONNECT CCTV CAMERAS TO CCTV FRONT-END EQUIPMENT WITHIN NEAREST COMM. ROOM. ALL DVR'S SHALL BE CONNECTED TO ONE ANOTHER THROUGH THE FACILITY DATA ETHERNET SYSTEM.
3. CATEGORY 6 PATCH CABLE TO LOCAL DATA OUTLET(S) AS SHOWN ON PLANS. COORDINATE ALL WORK REQUIRED WITH OWNER PRIOR TO START OF WORK.
4. PROVIDE QUANTITY OF DIGITAL VIDEO RECORDER/MULTIPLEXERS AND CAMERA POWER SUPPLIES AT THE EXISTING SECURITY ROOM WITHIN THE EXISTING ADMINISTRATIVE OFFICE AREA OF THE MAIN SCHOOL BUILDING AND NEW MULTI-PURPOSE BUILDING COMM. ROOM AS NECESSARY TO ACCOMMODATE CCTV CAMERAS SHOWN ON PLANS. DIGITAL VIDEO RECORDER/MULTIPLEXERS AND CAMERA POWER SUPPLIES SHALL BE LOCATED WITHIN COMM. ROOMS ON CONTRACTOR PROVIDED WALL MOUNTED SHELVES. 'DVR' UNITS SHOWN ON PLANS REPRESENT DVR LOCATIONS ONLY (NOT QUANTITY OF DVR'S).

PROJECT:

ADDITIONS TO HOOVER HIGH SCHOOL

SHEET TITLE:

ELECTRICAL DETAILS

REF. SHEET: E1.5 JRA JOB NO.: 211093

DATE: 11/08/11

DRAWING NO.: SD-E3

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JACKSON, RENFRO & ASSOC., INC.

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 PHONE: (205) 955-1078
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TELEPHONE EQUIPMENT BACKBOARD TB-2M
 8'-0"H X 3/4" THICK PLYWOOD LENGTH OF
 EACH WALL - PRIME AND FINISH PAINT WITH
 TWO (2) COATS FIRE RETARDANT GREY
 ENAMEL

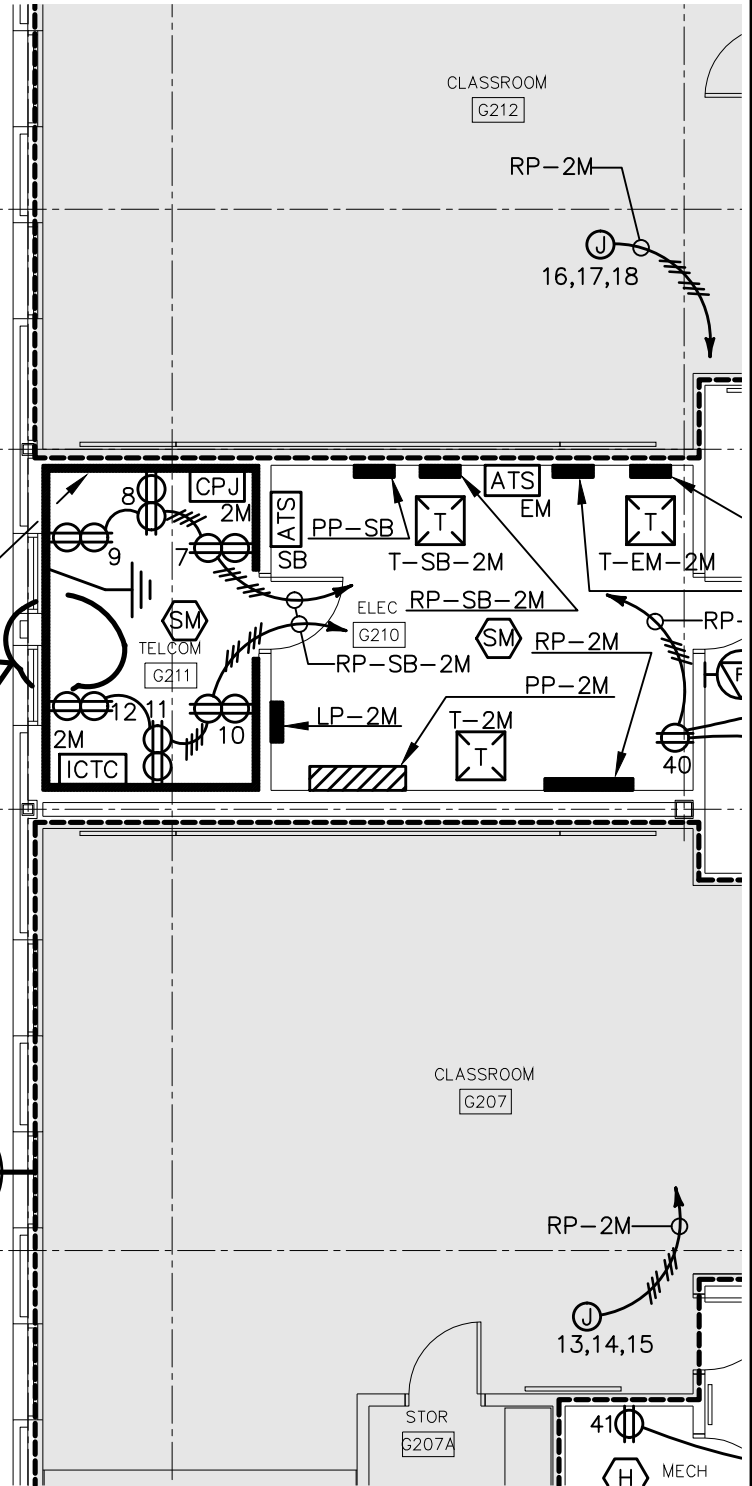
AF.3

AF

AE

A
 E3.8

AD.4

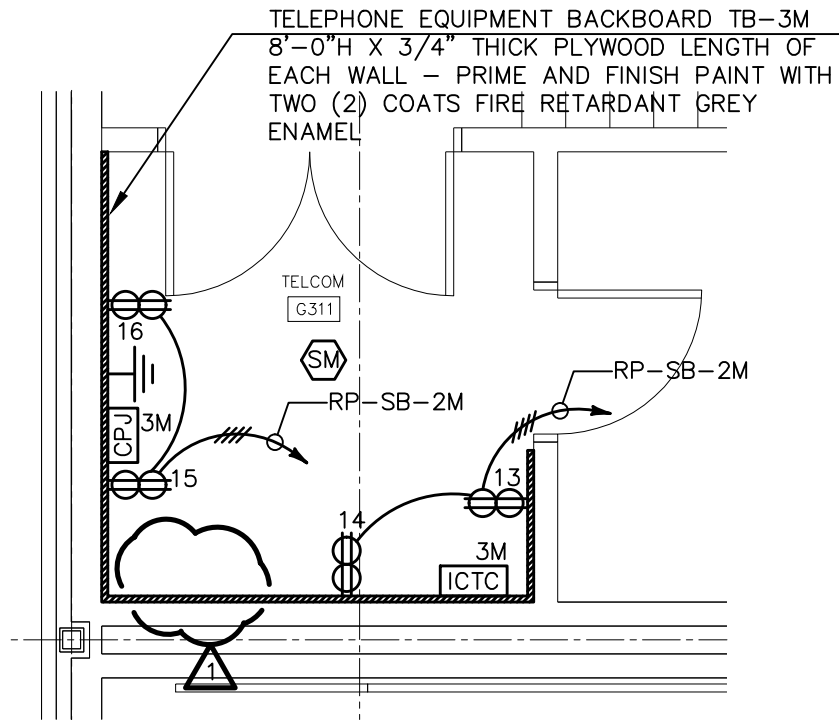


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PROJECT:
 ADDITIONS TO HOOVER HIGH SCHOOL

SHEET TITLE:
 SECOND FLOOR POWER & AUXILIARY PLAN

REF. SHEET: E3.2 JRA JOB NO.: 211093 DATE: 11/08/11 DRAWING NO.: SD-E5



B
E3.3

TELECOM G311
LARGE SCALE POWER & AUXILIARY
 SCALE : 1/4" = 1'-0"

PROJECT:

ADDITIONS TO HOOVER HIGH SCHOOL

SHEET TITLE:

THIRD FLOOR POWER & AUXILIARY PLAN

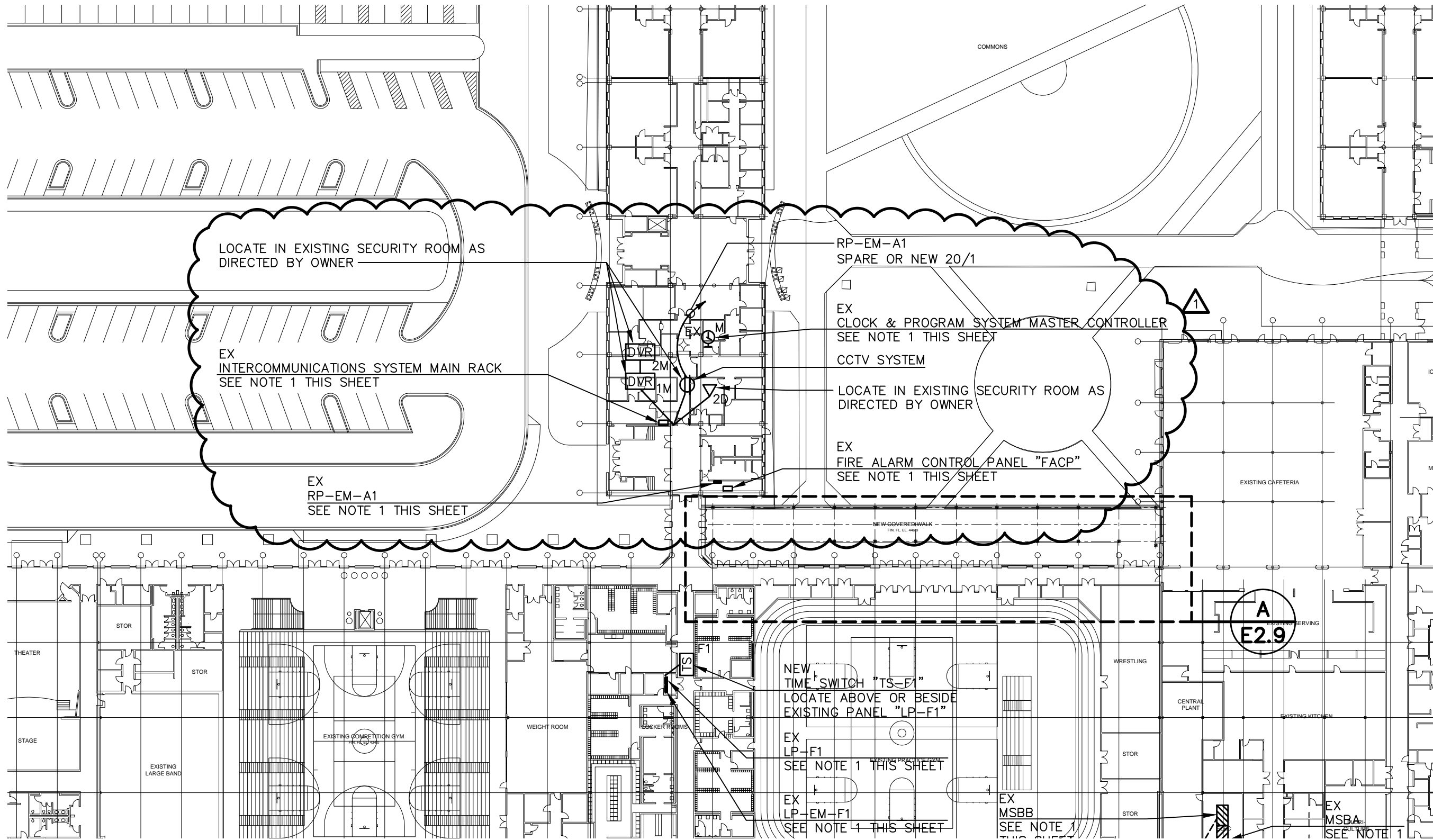
REF. SHEET: E3.3 JRA JOB NO.: 211093

DATE: 11/08/11

DRAWING NO.: SD-E6

JRA
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PROJECT:

ADDITIONS TO HOOVER HIGH SCHOOL

SHEET TITLE:

ELECTRICAL SITE PLAN

REF. SHEET: E0.1

JRA JOB NO.: 211093

DATE: 11/08/11

DRAWING NO.: SD-E7

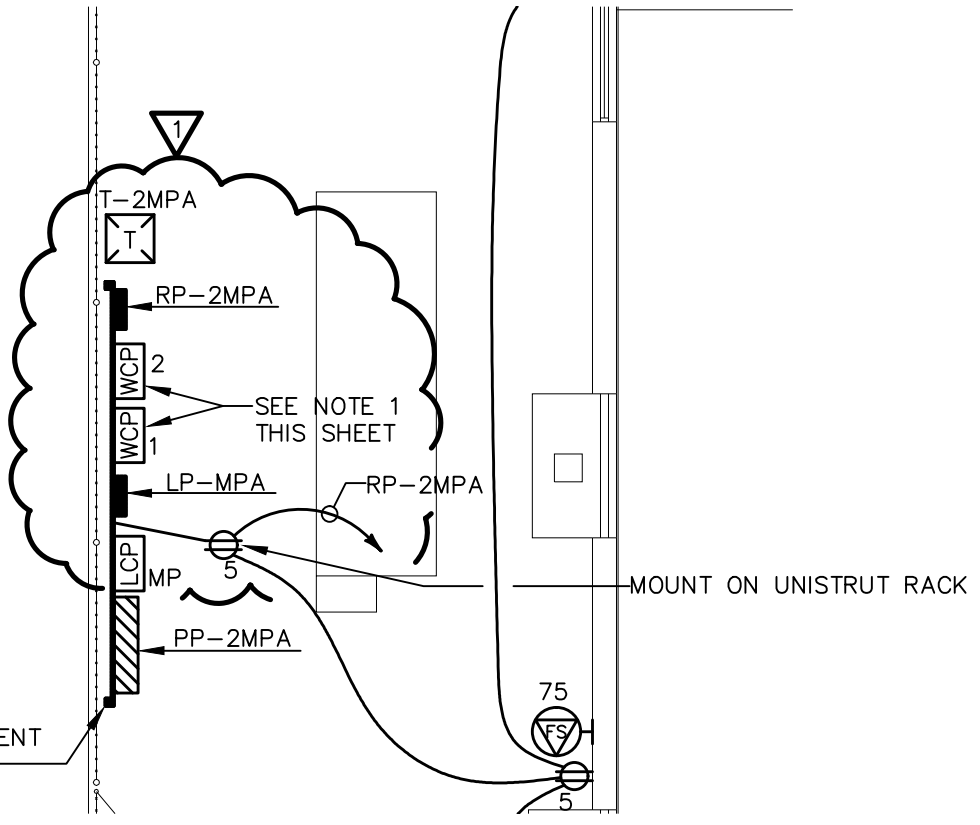
JRA
JACKSON, RENFRO & ASSOC., INC.
 ELECTRICAL ENGINEERING & CONSULTING
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 BIRMINGHAM, ALABAMA 35242
 PHONE: (205) 955-1078
 FAX: (205) 955-1999

A
E2.9

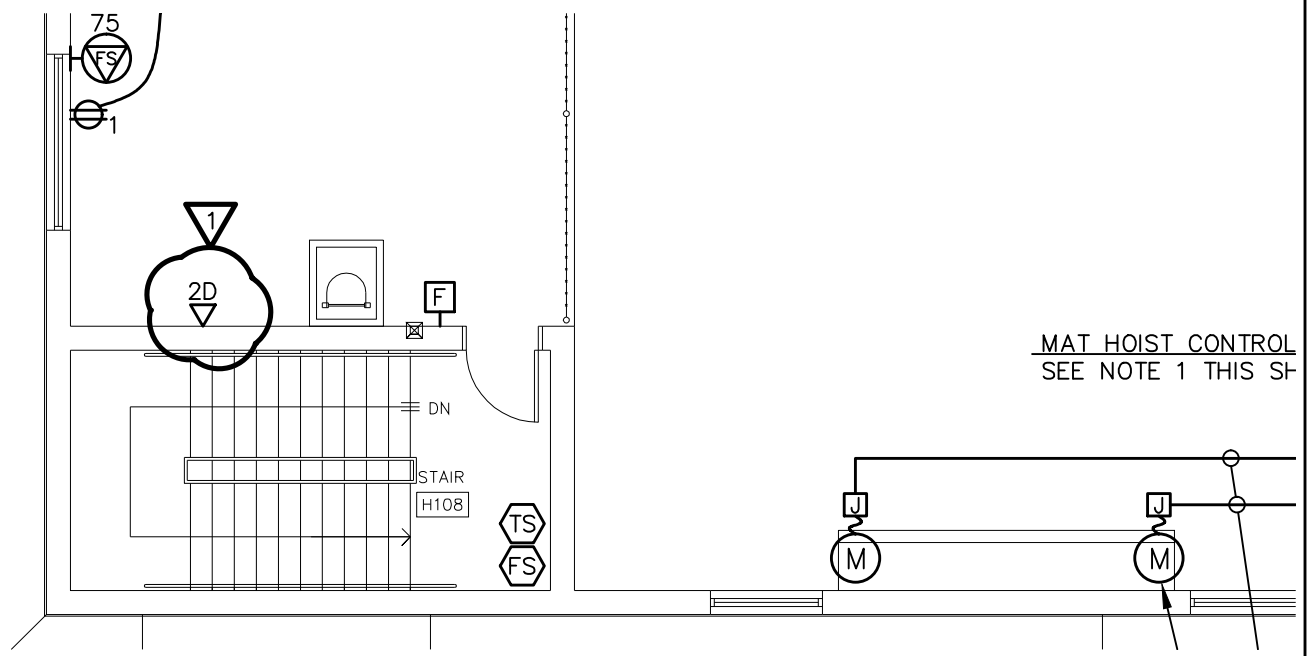
NEW TIME SWITCH "TS-F1"
 LOCATE ABOVE OR BESIDE
 EXISTING PANEL "LP-F1"
 EX LP-F1
 SEE NOTE 1 THIS SHEET
 EX LP-EM-F1
 SEE NOTE 1 THIS SHEET

EX MSBB
 SEE NOTE 1 THIS SHEET

EX MSBA
 SEE NOTE 1 THIS SHEET



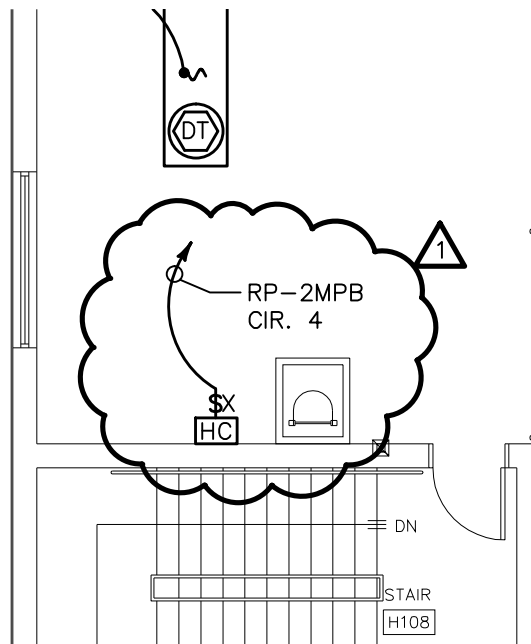
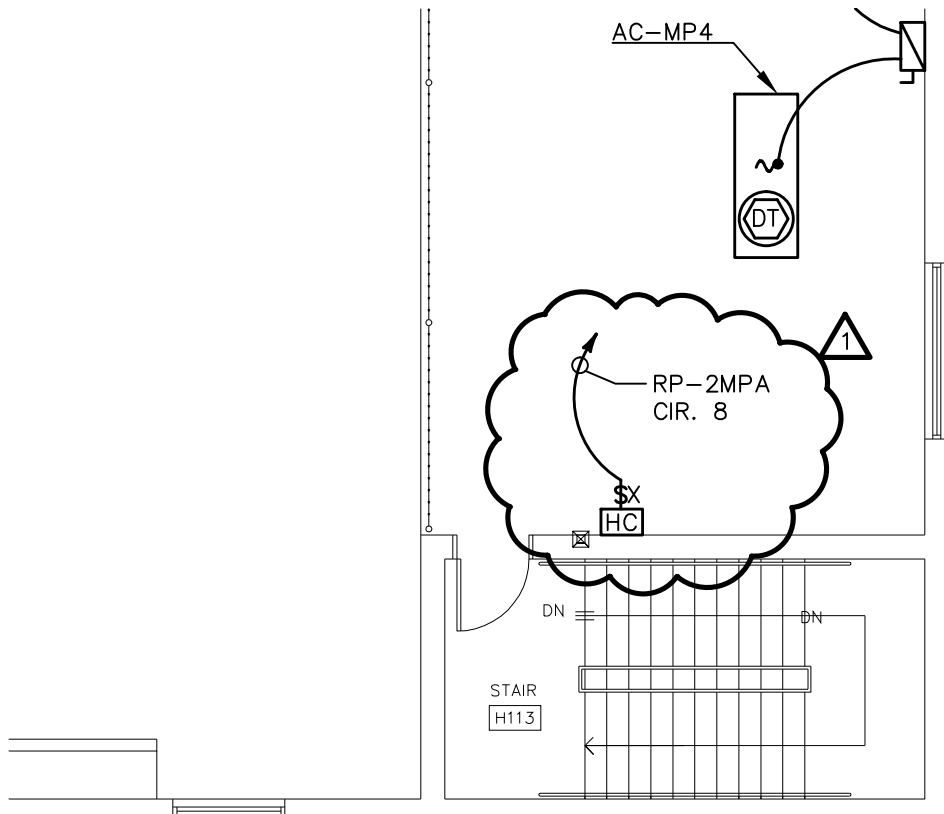
SEE SHEET E1.2 FOR EQUIPMENT UNISTRUT MOUNTING DETAIL



MAT HOIST CONTROL
SEE NOTE 1 THIS SF

JRA
JACKSON, RENFRO & ASSOC., INC.
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 FAX: (205) 995-1399

PROJECT: ADDITIONS TO HOOVER HIGH SCHOOL			
SHEET TITLE: MULTI-PURPOSE SECOND FLOOR POWER & AUXILIARY PLAN			
REF. SHEET: E3.7	JRA JOB NO.: 211093	DATE: 11/08/11	DRAWING NO.: SD-E8

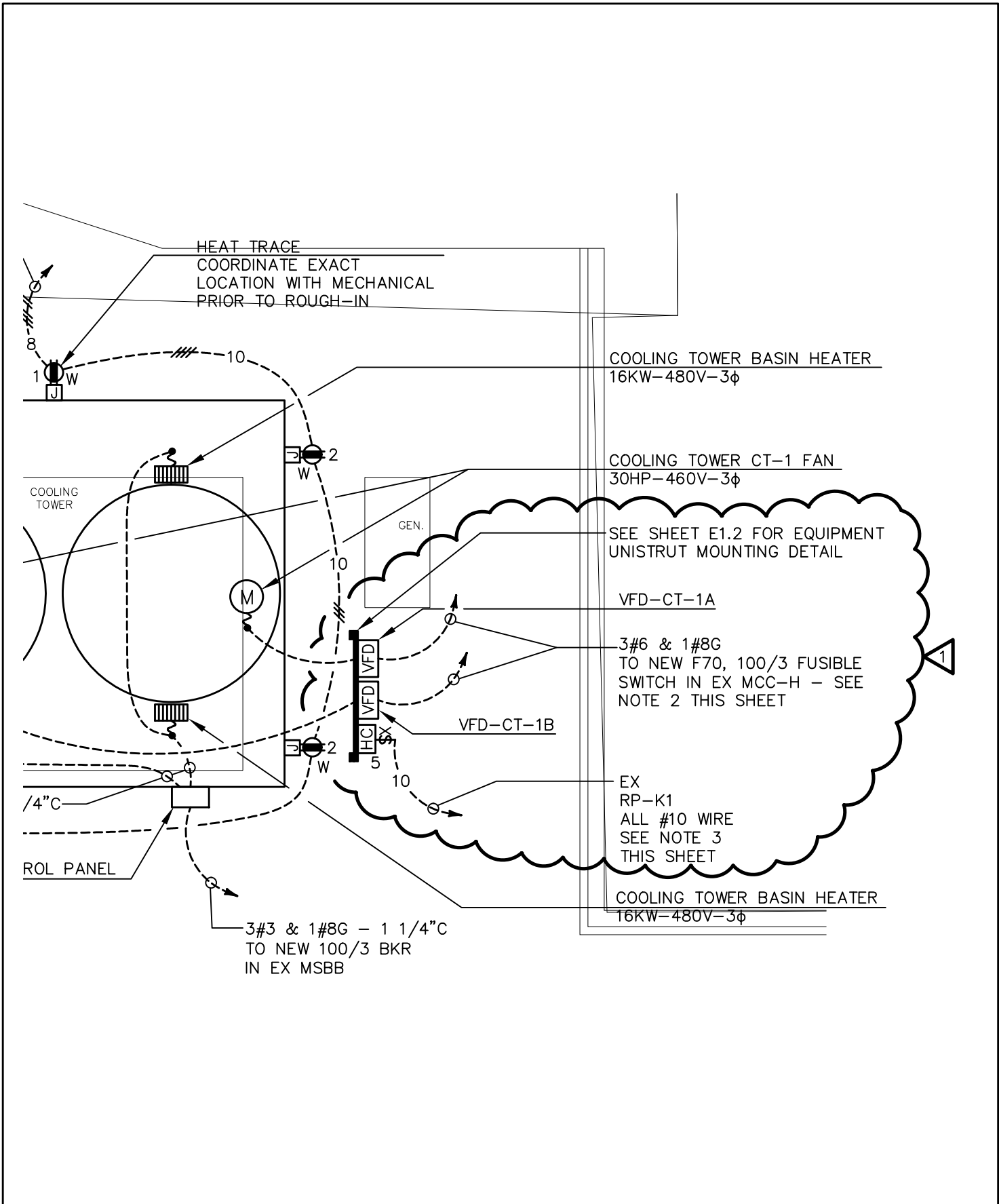


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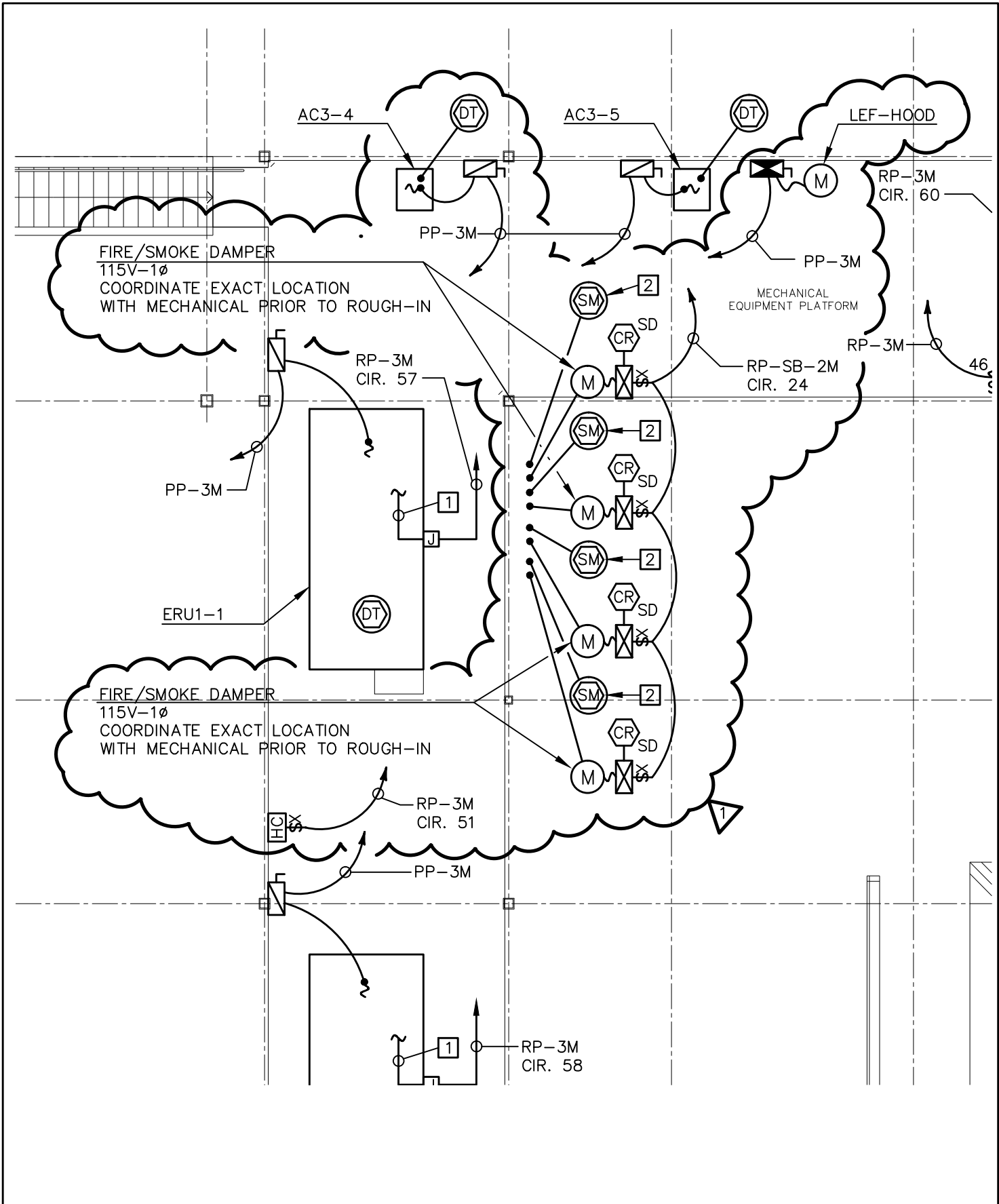
PROJECT:
 ADDITIONS TO HOOVER HIGH SCHOOL

SHEET TITLE:
 MULTI-PURPOSE SECOND FLOOR MECHANICAL POWER PLAN

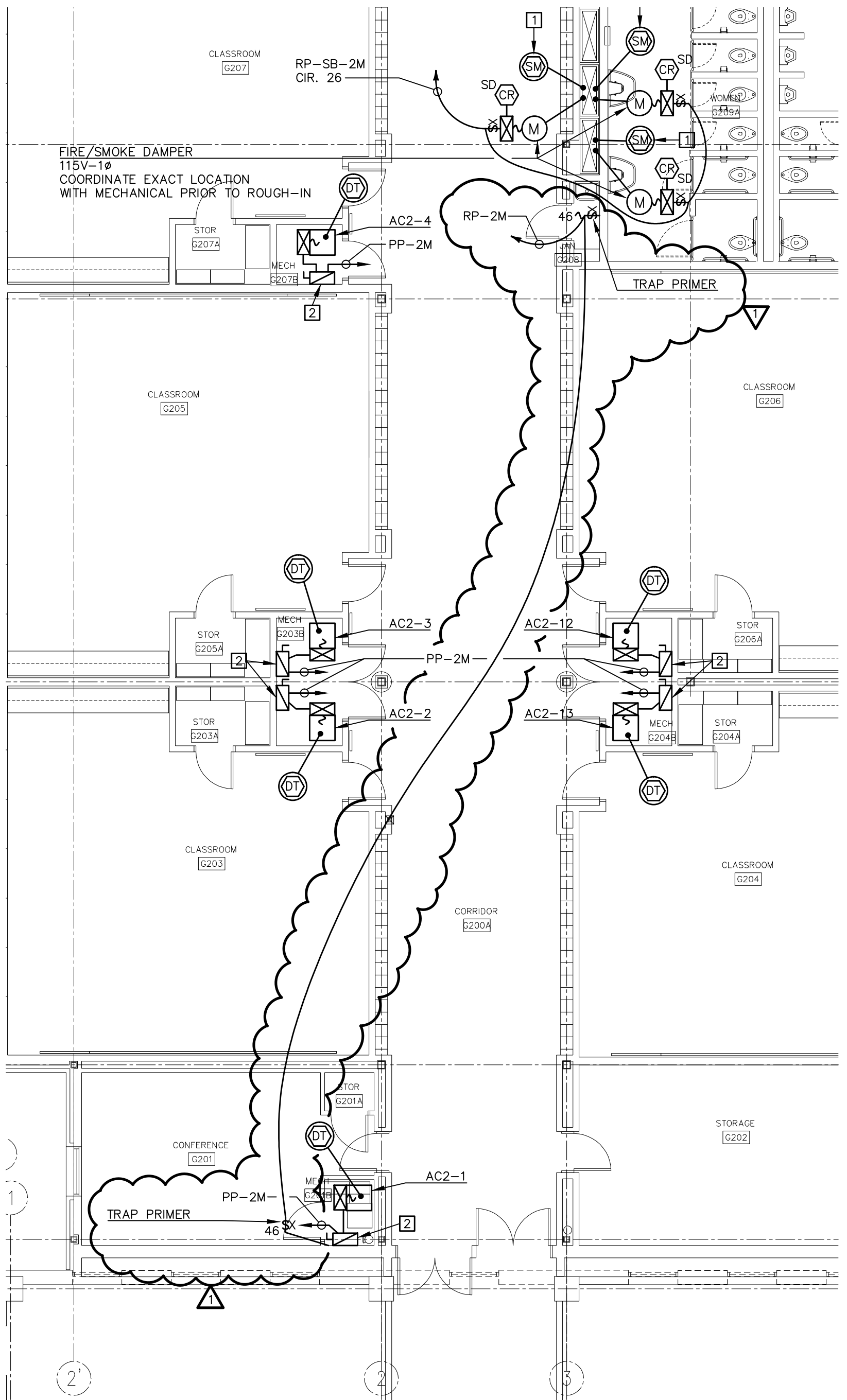
REF. SHEET: E4.7 JRA JOB NO.: 211093 DATE: 11/08/11 DRAWING NO.: SD-E9



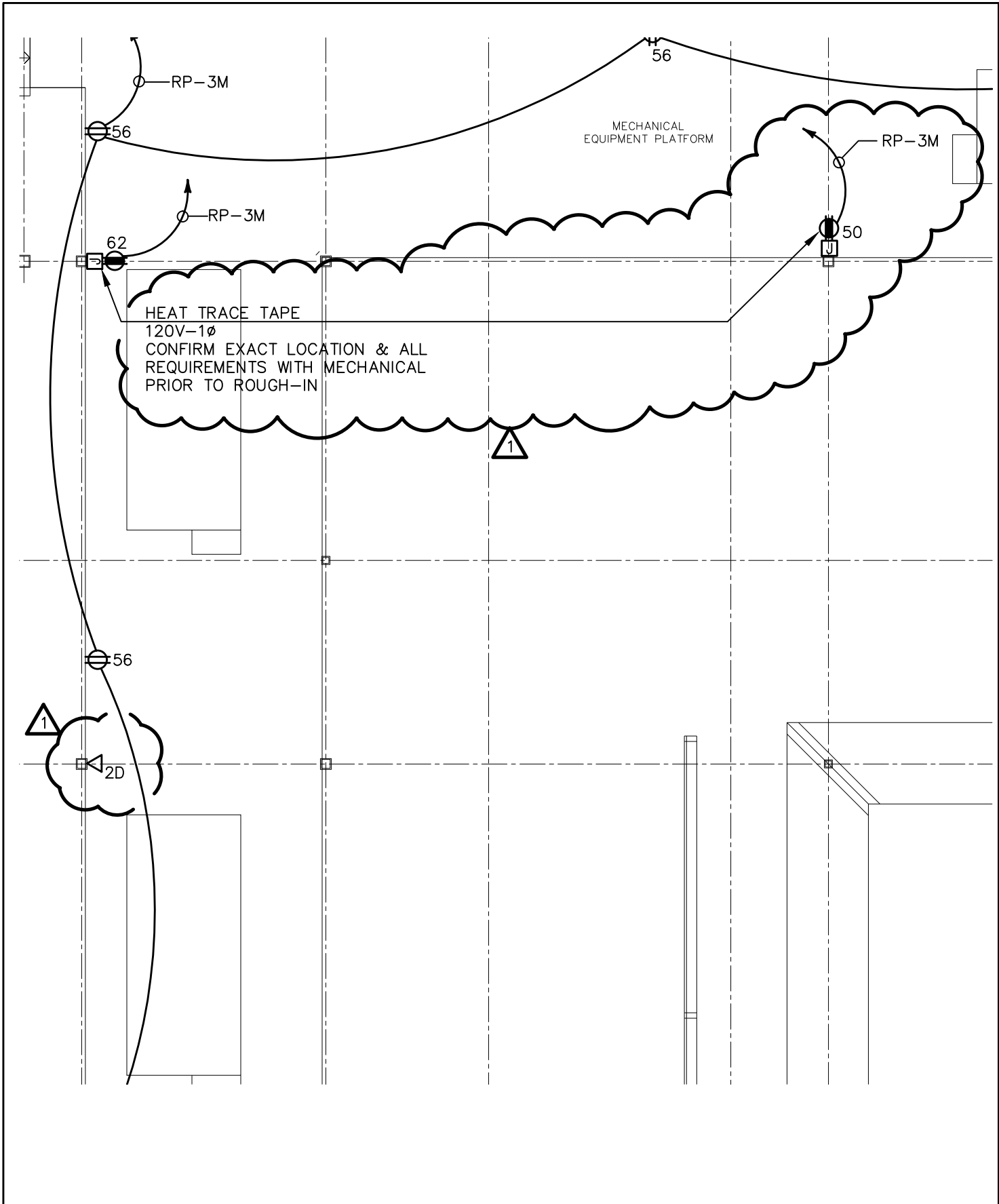
<p>JRA JACKSON, RENFRO & ASSOC., INC. <small>ELECTRICAL ENGINEERING & DESIGN</small> 141 VILLAGE STREET, SUITE 1 BIRMINGHAM, ALABAMA 35242 PHONE: (205) 995-1078 FAX: (205) 995-1399</p>	PROJECT:		
	ADDITIONS TO HOOVER HIGH SCHOOL		
	SHEET TITLE:		
	CENTRAL PLANT ELECTRICAL PLANS		
REF. SHEET: E0.2	JRA JOB NO.: 211093	DATE: 11/08/11	DRAWING NO.: SD-E10



<p>JRA JACKSON, RENFRO & ASSOC., INC. <small>ELECTRICAL ENGINEERING & DESIGN</small> 141 VILLAGE STREET, SUITE 1 BIRMINGHAM, ALABAMA 35242 PHONE: (205) 995-1078 FAX: (205) 995-1399</p>	PROJECT:		
	ADDITIONS TO HOOVER HIGH SCHOOL		
	SHEET TITLE:		
	ROOF MECHANICAL POWER PLAN		
REF. SHEET: E4.4	JRA JOB NO.: 211093	DATE: 11/08/11	DRAWING NO.: SD-E11



<p>JRA JACKSON, RENFRO & ASSOC., INC. <small>ELECTRICAL ENGINEERING & DESIGN</small> 141 VILLAGE STREET, SUITE 1 BIRMINGHAM, ALABAMA 35242 PHONE: (205) 995-1078 FAX: (205) 995-1399</p>	PROJECT: ADDITIONS TO HOOVER HIGH SCHOOL			
	SHEET TITLE: SECOND FLOOR MECHANICAL POWER PLAN			
	REF. SHEET: E4.2	JRA JOB NO.: 211093	DATE: 11/08/11	DRAWING NO.: SD-E12



JRA
JACKSON, RENFRO & ASSOC., INC.
 ELECTRICAL ENGINEERING & DESIGN
 141 VILLAGE STREET, SUITE 1
 BIRMINGHAM, ALABAMA 35242
 PHONE: (205) 995-1078
 FAX: (205) 995-1399

PROJECT:
 ADDITIONS TO HOOVER HIGH SCHOOL

SHEET TITLE:
 ATTIC POWER & AUXILIARY PLAN

REF. SHEET: E3.4	JRA JOB NO.: 211093	DATE: 11/08/11	DRAWING NO.: SD-E13
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PANELBOARD SCHEDULE - PP-3M											
PANEL TYPE: SQUARE 'D' I-LINE SERIES						AIC RATING: 30KAIC (MINIMUM)					
VOLTAGE: 277/480V-3P-4W						MOUNTING: SURFACE					
AMPS & TYPE: 600 AMP - MLO						LOCATION: ELEC G310					
FED FROM: PP-1M						FEEDER: SEE PANELBOARD SCHEDULE - PP-1M					
CIR. NO.	DESCRIPTION	VOLTS	P	HP	KW OR KVA	AMPS	BKR SIZE	LOCAL SAFETY SW. RATING	WIRE AND COND. SIZE	REMARKS	
1	LP-3M	277/480	3		34.0		100/3	-	4#3 & 1#8G - 1 1/2"C		
2	DP-3M (112.5 KVA X-FORMER)	480	3		63.0		175/3	-	3#2/0 & 1#6G - 2"C		
3	ERU1-1	460	3			55.0	70/3	100/3 - F70	3#4 & 1#8G - 1 1/4"C		
4	ERU2-1	460	3			55.0	70/3	100/3 - F70	3#4 & 1#8G - 1 1/4"C		
5	ERU3-1	460	3			55.0	70/3	100/3 - F70	3#4 & 1#8G - 1 1/4"C		
6	AC3-4	460	3			9.1	15/3	30/3 - F15	3#12 & 1#12G - 3/4"C		
7	AC3-5	460	3			10.2	15/3	30/3 - F15	3#12 & 1#12G - 3/4"C		
8	AC3-1	460	3			9.1	15/3	30/3 - F15	3#12 & 1#12G - 3/4"C		
9	AC3-2	460	3			6.5	15/3	30/3 - F15	3#12 & 1#12G - 3/4"C		
10	AC3-3	460	3			6.5	15/3	30/3 - F15	3#12 & 1#12G - 3/4"C		
11	AC3-6	460	3			6.5	15/3	30/3 - F15	3#12 & 1#12G - 3/4"C		
12	AC3-7	460	3			6.5	15/3	30/3 - F15	3#12 & 1#12G - 3/4"C		
13	AC3-8	460	3			9.1	15/3	30/3 - F15	3#12 & 1#12G - 3/4"C		
14	AC3-9	460	3			6.5	15/3	30/3 - F15	3#12 & 1#12G - 3/4"C		
15	AC3-10	460	3			9.1	15/3	30/3 - F15	3#12 & 1#12G - 3/4"C		
16	AC3-11	460	3			6.5	15/3	30/3 - F15	3#12 & 1#12G - 3/4"C		
17	AC3-12	460	3			9.1	15/3	30/3 - F15	3#12 & 1#12G - 3/4"C		
18	EWH3-1	277	1		5.0		25/1	-	2#10 & 1#10G - 3/4"C		
19	EWH3-2	277	1		5.0		25/1	-	2#10 & 1#10G - 3/4"C		
20	LEF-HOOD	460	3	1			15/3	-	3#12 & 1#12G - 3/4"C		
21	SPACE		3				-/3	-			
22	SPACE		3				-/3	-			
23	SPACE		3				-/3	-			
24	SPACE		3				-/3	-			
TOTAL CONNECTED LOAD:						339.2 KVA	NOTES:				
						424.0 AMPS					
TOTAL DEMAND LOAD:						309.7 KVA					
						387.1 AMPS					

PANELBOARD SCHEDULE - RP-SB-2M									
PANEL TYPE: SQUARE 'D' TYPE NQOD						AIC RATING: 10KAIC (MINIMUM)			
VOLTAGE: 120/208V-3P-4W						MOUNTING: SURFACE			
AMPS & TYPE: 100/3 MAIN BKR						LOCATION: ELEC G210			
FED FROM: PP-SB						FEEDER: 4#3 & 1#8G - 1 1/2"C			
CKT. NO.	BKR	DESCRIPTION	WATTS	PHASE	WATTS	DESCRIPTION	BKR	CKT. NO.	
1	20/1	TELECOMMUNICATIONS BACKBOARD G111	1,000	A	300	VF1-1	20/1	22	
2	20/1	TELECOMMUNICATIONS BACKBOARD G111	1,000	B	300	ACCESS CONTROL SYSTEM	20/1	23	
3	20/1	TELECOMMUNICATIONS BACKBOARD G111	1,000	C	300	FIRE/SMOKE DAMPERS	20/1	24	
4	20/1	TELECOMMUNICATIONS BACKBOARD G111	1,000	A		SPARE	20/1	25	
5	20/1	TELECOMMUNICATIONS BACKBOARD G111	1,000	B	300	FIRE/SMOKE DAMPERS	20/1	26	
6	20/1	TELECOMMUNICATIONS BACKBOARD G111	1,000	C		SPARE	20/1	27	
7	20/1	TELECOMMUNICATIONS BACKBOARD G211	1,000	A		SPARE	20/1	28	
8	20/1	TELECOMMUNICATIONS BACKBOARD G211	1,000	B		SPARE	20/1	29	
9	20/1	TELECOMMUNICATIONS BACKBOARD G211	1,000	C		SPARE	20/1	30	
10	20/1	TELECOMMUNICATIONS BACKBOARD G211	1,000	A		-	20/1	31	
11	20/1	TELECOMMUNICATIONS BACKBOARD G211	1,000	B		-	20/1	32	
12	20/1	TELECOMMUNICATIONS BACKBOARD G211	1,000	C		-	20/1	33	
13	20/1	TELECOMMUNICATIONS BACKBOARD G311	1,000	A		-	20/1	34	
14	20/1	TELECOMMUNICATIONS BACKBOARD G311	1,000	B		-	20/1	35	
15	20/1	TELECOMMUNICATIONS BACKBOARD G311	1,000	C		-	20/1	36	
16	20/1	TELECOMMUNICATIONS BACKBOARD G311	1,000	A		-	20/1	37	
17	20/1	FIRE/SMOKE DAMPERS	300	B		-	20/1	38	
18	20/1	TELECOMMUNICATIONS BACKBOARD B220	1,000	C		-	20/1	39	
19	20/1	TELECOMMUNICATIONS BACKBOARD B220	1,000	A		-	20/1	40	
20	20/1	TELEVISION DISTRIBUTION SYSTEM RACK	1,000	B		-	20/1	41	
21	20/1	TELEVISION DISTRIBUTION SYSTEM RACK	1,000	C		-	20/1	42	
NOTES: 1. PROVIDE INTEGRAL 160KA (PER PHASE) SURGE SUPPRESSION DEVICE.				PH. A:	PH. B:	PH. C:	TOTAL CONNECTED LOAD:		
				7,300	6,900	7,300	59.7 AMPS		
							TOTAL DEMAND LOAD:		
							21.5 KVA 59.7 AMPS		

JRA
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 141 VILLAGE STREET, SUITE 1
 BIRMINGHAM, ALABAMA 35242
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 FAX: (205) 995-1399

PROJECT:
ADDITIONS TO HOOVER HIGH SCHOOL

SHEET TITLE:
PANEL SCHEDULES

REF. SHEET: E6.2 | JRA JOB NO.: 211093 | DATE: 11/08/11 | DRAWING NO.: SD-E14

PANELBOARD SCHEDULE - RP-3M (SECT. 1)

PANEL TYPE: SQUARE 'D' TYPE NQOD				AIC RATING: 10KAIC (MINIMUM)				
VOLTAGE 120/208V-3P-4W				MOUNTING: SURFACE				
AMPS & TYPE: 225 AMP - MLO				LOCATION: ELEC G310				
FED FROM: DP-3M				FEEDER: SEE PANELBOARD SCHEDULE - DP-3M				
CKT. NO.	BKR	DESCRIPTION	WATTS	PHASE	WATTS	DESCRIPTION	BKR	CKT NO.
1	20/1	CLASSROOM G303 RECEPTACLES	1,000	A	1,200	BIO CLASSROOM G317 RECEP'S	20/1	22
2	20/1	CLASSROOM G303 RECEPTACLES	1,000	B	1,200	BIO CLASSROOM G317 RECEP'S	20/1	23
3	20/1	CLASSROOM G303 RECEPTACLES	1,200	C	1,200	BIO CLASSROOM G317 RECEP'S	20/1	24
4	20/1	CLASSROOM G304 RECEPTACLES	1,000	A	1,200	BIO CLASSROOM G319 RECEP'S	20/1	25
5	20/1	CLASSROOM G304 RECEPTACLES	1,000	B	1,200	BIO CLASSROOM G319 RECEP'S	20/1	26
6	20/1	CLASSROOM G304 RECEPTACLES	1,200	C	1,200	BIO CLASSROOM G319 RECEP'S	20/1	27
7	20/1	CLASSROOM G305 RECEPTACLES	1,000	A	1,000	DRINKING FOUNTAIN	20/1 ⁽¹⁾	28
8	20/1	CLASSROOM G305 RECEPTACLES	1,000	B	1,000	DRINKING FOUNTAIN	20/1 ⁽¹⁾	29
9	20/1	CLASSROOM G305 RECEPTACLES	1,200	C	1,000	DRINKING FOUNTAIN	20/1 ⁽¹⁾	30
10	20/1	CLASSROOM G307 RECEPTACLES	1,000	A	1,200	RECEPTACLES	20/1	31
11	20/1	CLASSROOM G307 RECEPTACLES	1,000	B	1,000	RECEPTACLES	20/1	32
12	20/1	CLASSROOM G307 RECEPTACLES	1,200	C	1,000	RECEPTACLES	20/1	33
13	20/1	BIOLOGY CLASSROOM G314 RECEPTACLES	1,200	A	1,000	REFRIGERATOR	20/1	34
14	20/1	BIOLOGY CLASSROOM G314 RECEPTACLES	1,200	B	1,000	RECEPTACLES	20/1	35
15	20/1	BIOLOGY CLASSROOM G314 RECEPTACLES	1,200	C	800	BIO CLASSROOM G306 RECEP'S	20/1	36
16	20/1	BIOLOGY CLASSROOM G315 RECEPTACLES	1,200	A	800	BIO CLASSROOM G306 RECEP'S	20/1	37
17	20/1	BIOLOGY CLASSROOM G315 RECEPTACLES	1,200	B	800	BIO CLASSROOM G306 RECEP'S	20/1	38
18	20/1	BIOLOGY CLASSROOM G315 RECEPTACLES	1,200	C	800	BIO CLASSROOM G306 RECEP'S	20/1	39
19	20/1	BIOLOGY CLASSROOM G316 RECEPTACLES	1,200	A	800	BIO CLASSROOM G306 RECEP'S	20/1	40
20	20/1	BIOLOGY CLASSROOM G316 RECEPTACLES	1,200	B	800	BIO CLASSROOM G306 RECEP'S	20/1	41
21	20/1	BIOLOGY CLASSROOM G316 RECEPTACLES	1,200	C	800	BIO CLASSROOM G306 RECEP'S	20/1	42

RP-3M (SECT. 2)

43	20/1	BIO CLASSROOM G306 RECEP'S	1,200	A	1,500	HAND DRYER	20/1	64
44	20/1	BIO CLASSROOM G306 RECEP'S	1,000	B	1,500	HEAT TRACE	20/1	65
45	20/1	BIO CLASSROOM G306 RECEP'S	1,200	C	1,000	HAND WASH	20/1	66
46	20/1	TRAP PRIMER	300	A		SPARE	20/1	67
47	20/1	TRAP PRIMER	300	B		SPARE	20/1	68
48	20/1	TRAP PRIMER	300	C		SPARE	20/1	69
49	20/1	TRAP PRIMER	300	A		SPARE	20/1	70
50	20/1	HEAT TRACE TAPE	200	B		SPARE	20/1	71
51	20/1	HVAC CONTROL PANEL	500	C		SPARE	20/1	72
52	20/1	TRAP PRIMER	300	A		-	20/1	73
53	20/1	TRAP PRIMER	300	B		-	20/1	74
54	20/1	TRAP PRIMER	300	C		-	20/1	75
55	20/1	TRAP PRIMER	300	A		-	20/1	76
56	20/1	ATTIC RECEPTACLES	1,200	B		-	20/1	77
57	20/1	ERU1-1 LIGHTS	200	C		-	20/1	78
58	20/1	ERU2-1 LIGHTS	200	A		-	20/1	79
59	20/1	ERU3-1 LIGHTS	200	B		-	20/1	80
60	20/1	HVAC CONTROL PANEL	500	C		-	20/1	81
61	20/1	HVAC CONTROL PANEL	500	A		-	20/1	82
62	20/1	HEAT TRACE TAPE	1,500	B		-	20/1	83
63	20/1	HAND DRYER	1,500	C		-	20/1	84

NOTES:

- INDICATED BREAKER(S) SHALL BE GFI-TYPE (5mA TRIP).
- PROVIDE INTEGRAL 120KA (PER PHASE) SURGE SUPPRESSION DEVICE.

PH. A:	PH. B:	PH. C:	TOTAL CONNECTED LOAD:	60.9 KVA
19,400	20,800	20,700		169.2 AMPS
			TOTAL DEMAND LOAD:	43.3 KVA
				120.3 AMPS



<p align="center">JRA JACKSON, RENFRO & ASSOC., INC. <small>ELECTRICAL ENGINEERING & DESIGN</small> 141 VILLAGE STREET, SUITE 1 BIRMINGHAM, ALABAMA 35242 PHONE: (205) 995-1078 FAX: (205) 995-1399</p>	PROJECT: ADDITIONS TO HOOVER HIGH SCHOOL			
	SHEET TITLE: PANEL SCHEDULES			
REF. SHEET: E6.2	JRA JOB NO.: 211093	DATE: 11/08/11	DRAWING NO.: SD-E15	

PANELBOARD SCHEDULE - RP-2MPA

PANEL TYPE: SQUARE 'D' TYPE NQOD				AIC RATING: 10KAIC (MINIMUM)							
VOLTAGE: 120/208V-3P-4W				MOUNTING: SURFACE							
AMPS & TYPE: 100/3 MAIN BKR				LOCATION: MECH/STORAGE H201							
FED FROM: PP-2MPA				FEEDER: 4#3 & 1#8G - 1 1/2"C							
CKT. NO.	BKR	DESCRIPTION	WATTS	PHASE	WATTS	DESCRIPTION	BKR	CKT NO.			
1	20/1	WINCH CONTROL PANEL NO. 1	1,600	A		SPARE	20/1	22			
2	20/1	WINCH CONTROL PANEL NO. 1	1,600	B		SPARE	20/1	23			
3	20/1	WINCH CONTROL PANEL NO. 2	1,600	C		SPARE	20/1	24			
4	20/1	WINCH CONTROL PANEL NO. 2	1,600	A		SPARE	20/1	25			
5	20/1	RECEPTACLES	600	B		-	20/1	26			
6	20/1	FLOOR POCKET	200	C		-	20/1	27			
7	20/1	FLOOR POCKET	200	A		-	20/1	28			
8	20/1	HVAC CONTROL PANEL	500	B		-	20/1	29			
9	20/1	SPARE		C		-	20/1	30			
10	20/1 ⁽¹⁾	DRINKING FOUNTAIN	1,000	A		-	20/1	31			
11	20/1	RECEPTACLES	1,000	B		-	20/1	32			
12	20/1	RECEPTACLES	1,000	C		-	20/1	33			
13	20/1	RECEPTACLES	1,200	A		-	20/1	34			
14	20/1	RECEPTACLES	400	B		-	20/1	35			
15	20/1	TRAP PRIMER	200	C		-	20/1	36			
16	20/1	TRAP PRIMER	200	A		-	20/1	37			
17	20/1	ERU-MP2 LIGHTS	200	B		-	20/1	38			
18	20/1	ERU-MP4 LIGHTS	200	C		-	20/1	39			
19	20/1	HVAC CONTROL PANEL	500	A		-	20/1	40			
20	20/1	SPARE		B		-	20/1	41			
21	20/1	SPARE		C		-	20/1	42			
NOTES: 1. INDICATED BREAKER(S) SHALL BE GFI-TYPE (5mA TRIP). 2. PROVIDE INTEGRAL 160KA (PER PHASE) SURGE SUPPRESSION DEVICE.				PH. A:	PH. B:	PH. C:	TOTAL CONNECTED LOAD:				
				6,300	4,300	3,200			13.8 KVA		
										TOTAL DEMAND LOAD:	
										13.8 KVA	38.3 AMPS




PANELBOARD SCHEDULE - RP-2MPB											
PANEL TYPE: SQUARE 'D' TYPE NQOD				AIC RATING: 10KAIC (MINIMUM)							
VOLTAGE: 120/208V-3P-4W				MOUNTING: SURFACE							
AMPS & TYPE: 60/3 MAIN BKR				LOCATION: MECH/STORAGE H201							
FED FROM: PP-2MPB				FEEDER: 4#6 & 1#8G - 1 1/4"C							
CKT. NO.	BKR	DESCRIPTION	WATTS	PHASE	WATTS	DESCRIPTION	BKR	CKT NO.			
1	20/1	RECEPTACLES	800	A		SPARE	20/1	16			
2	20/1	FLOOR POCKET	800	B		SPARE	20/1	17			
3	20/1	FLOOR POCKET	800	C		SPARE	20/1	18			
4	20/1	HVAC CONTROL PANEL	500	A		-	20/1	19			
5	20/1	SPARE		B		-	20/1	20			
6	20/1	RECEPTACLES	1,000	C		-	20/1	21			
7	20/1 ⁽¹⁾	DRINKING FOUNTAIN	1,000	A		-	20/1	22			
8	20/1	RECEPTACLES	1,000	B		-	20/1	23			
9	20/1	RECEPTACLES	1,000	C		-	20/1	24			
10	20/1	RECEPTACLES	1,000	A		-	20/1	25			
11	20/1	TRAP PRIMER	200	B		-	20/1	26			
12	20/1	TRAP PRIMER	200	C		-	20/1	27			
13	20/1	ERU-MP1 LIGHTS	200	A		-	20/1	28			
14	20/1	ERU-MP3 LIGHTS	200	B		-	20/1	29			
15	20/1	HVAC CONTROL PANEL	500	C		-	20/1	30			
NOTES: 1. INDICATED BREAKER(S) SHALL BE GFI-TYPE (5mA TRIP). 2. PROVIDE INTEGRAL 160KA (PER PHASE) SURGE SUPPRESSION DEVICE.			PH. A:	PH. B:	PH. C:	TOTAL CONNECTED LOAD:		9.2 KVA			
			3,500	2,200	3,500			25.6 AMPS			
									TOTAL DEMAND LOAD:		9.2 KVA
											25.6 AMPS

TRANSFORMER SCHEDULE								
MARK	SIZE (KVA)	DESCRIPTION	PRIMARY VOLTAGE & PHASE	SECONDARY VOLTAGE & PHASE	PANEL FED	MOUNTING	GROUND SIZE	REMARKS
T-EM-BMP	15	DRY-TYPE	480V-3P-3W	120/208V-3P-4W	RP-EM-BMP	SEE NOTE 4	#8	
T-BMP	15	DRY-TYPE	480V-3P-3W	120/208V-3P-4W	RP-BMP	SEE NOTE 4	#8	
T-2MPA	30	DRY-TYPE	480V-3P-3W	120/208V-3P-4W	RP-2MPA	SEE NOTE 3	#8	
T-2MPB	15	DRY-TYPE	480V-3P-3W	120/208V-3P-4W	RP-2MPB	SEE NOTE 3	#8	

TRANSFORMER SCHEDULE NOTES:

1. EXACT TRANSFORMER LOCATIONS SHALL BE FIELD COORDINATED TO PROVIDE CODE-REQUIRED CLEARANCES AND WORKING SPACES AROUND TRANSFORMERS AND ADJACENT EQUIPMENT (SUCH AS PANELBOARDS).
2. ALL TRANSFORMERS SHALL BE MOUNTED ON VIBRATION ISOLATORS PER SPECIFICATION REQUIREMENTS.
3. FLOOR MOUNT ON 4-INCH THICK CONCRETE HOUSEKEEPING PAD.
4. TRAPEZE MOUNT FROM STRUCTURE ABOVE.

 <p>JRA JACKSON, RENFRO & ASSOC., INC. <small>ELECTRICAL ENGINEERING & DESIGN</small> 141 VILLAGE STREET, SUITE 1 BIRMINGHAM, ALABAMA 35242 PHONE: (205) 995-1078 FAX: (205) 995-1399</p>	PROJECT: ADDITIONS TO HOOVER HIGH SCHOOL			
	SHEET TITLE: PANEL SCHEDULES			
	REF. SHEET: E6.4	JRA JOB NO.: 211093	DATE: 11/08/11	DRAWING NO.: SD-E17