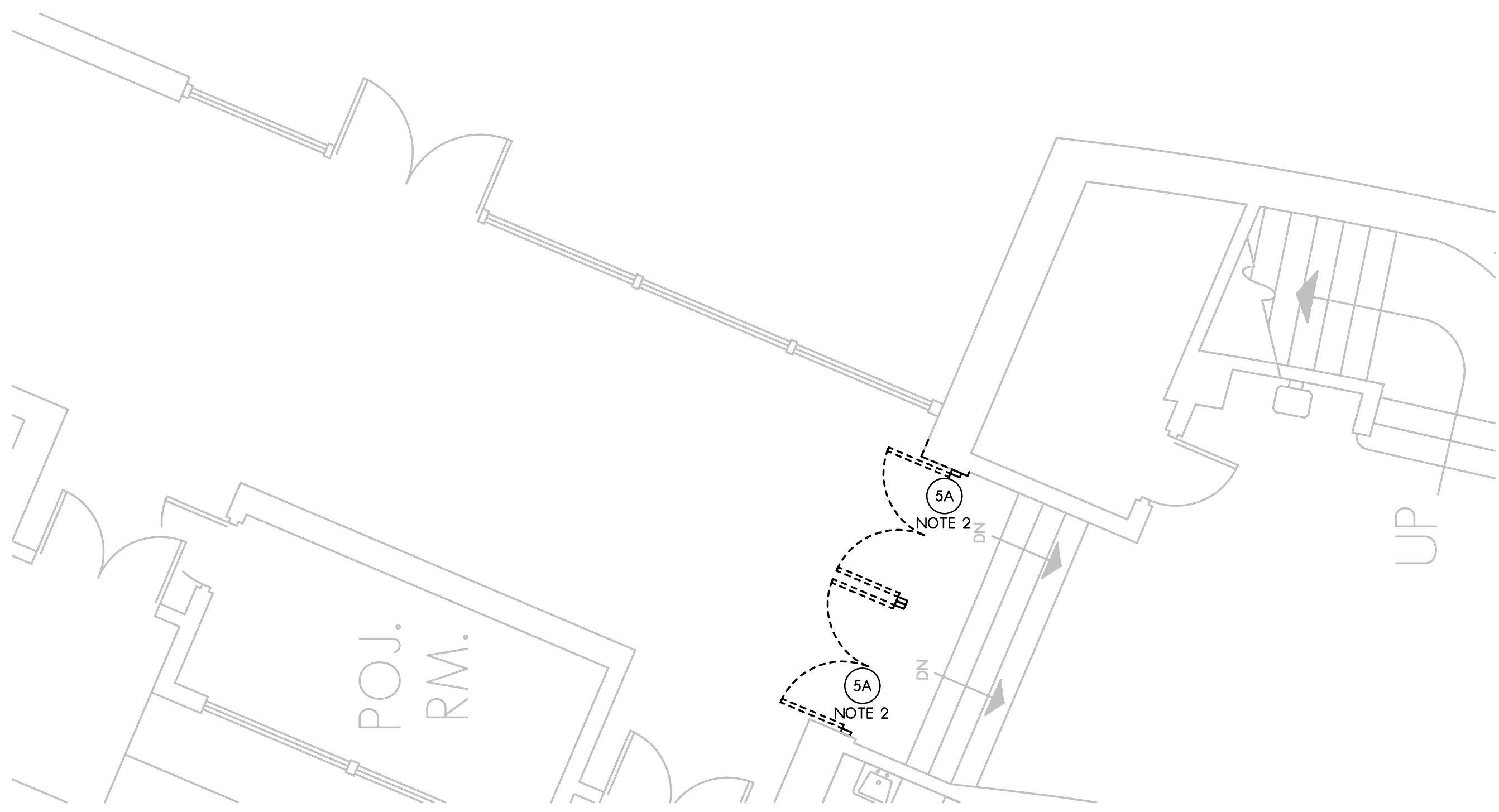


ROCKFORD
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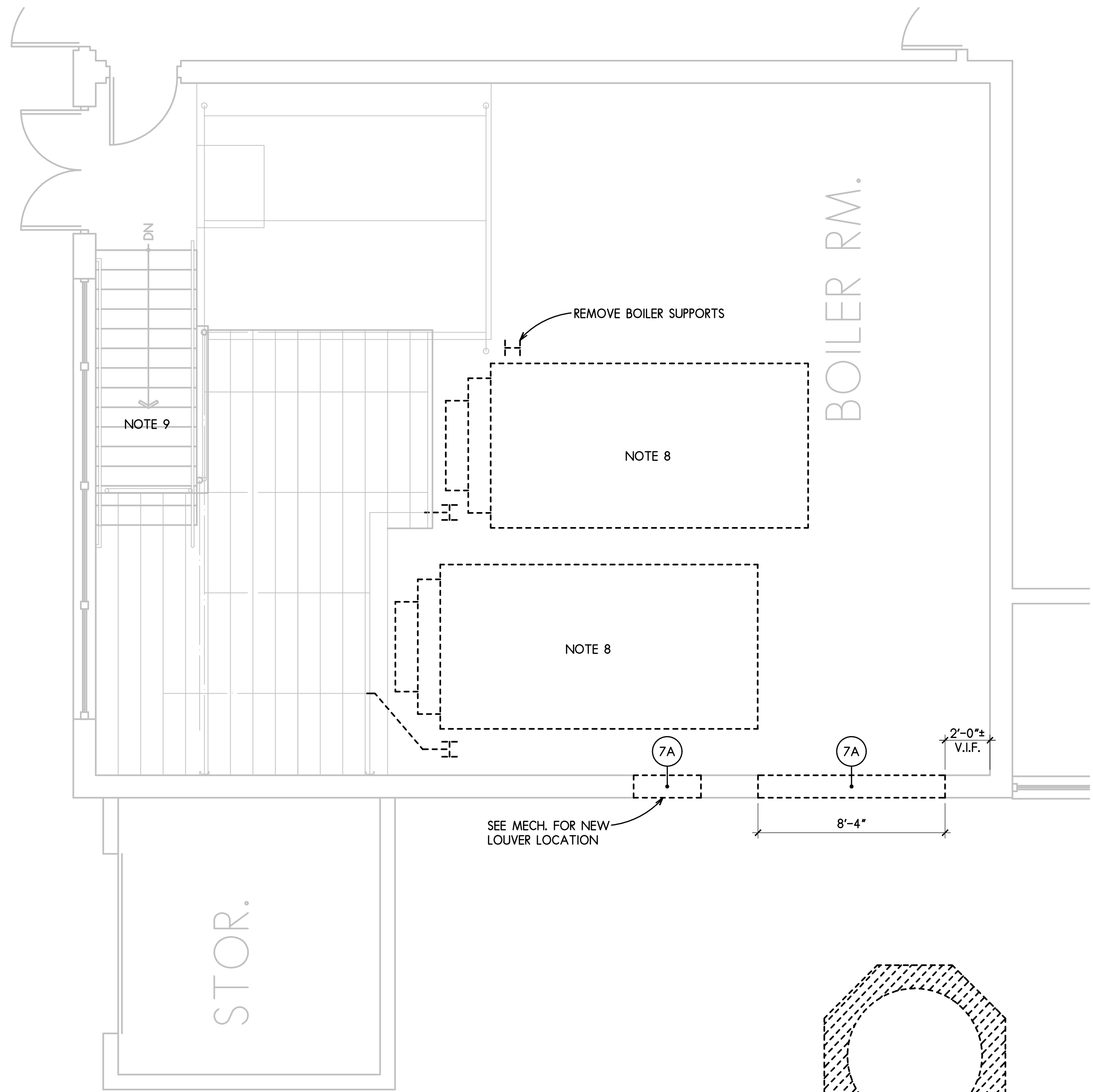


FLINN MIDDLE SCHOOL	
HVAC, LIGHTING AND ADA RENOVATIONS – ROCKFORD IL	
ROCKFORD PUBLIC SCHOOLS 205	
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ISSUED FOR:	DATE
RE-BIDDING	01-22-16
DRAWN	APPROVED
—	—
DATE: 11-13-2015 PROJECT NUMBER: 25109 SHEET NUMBER CS	

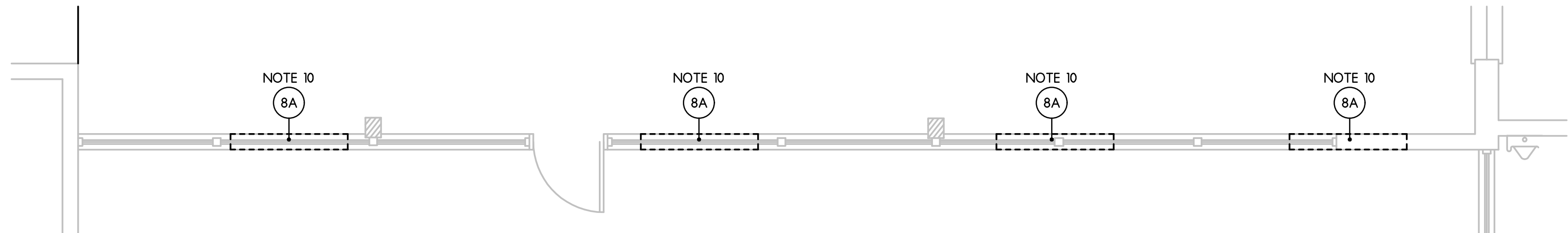


1 LIFT MAIN LEVEL DEMOLITION PLAN
SCALE: 1/4" = 1'-0"

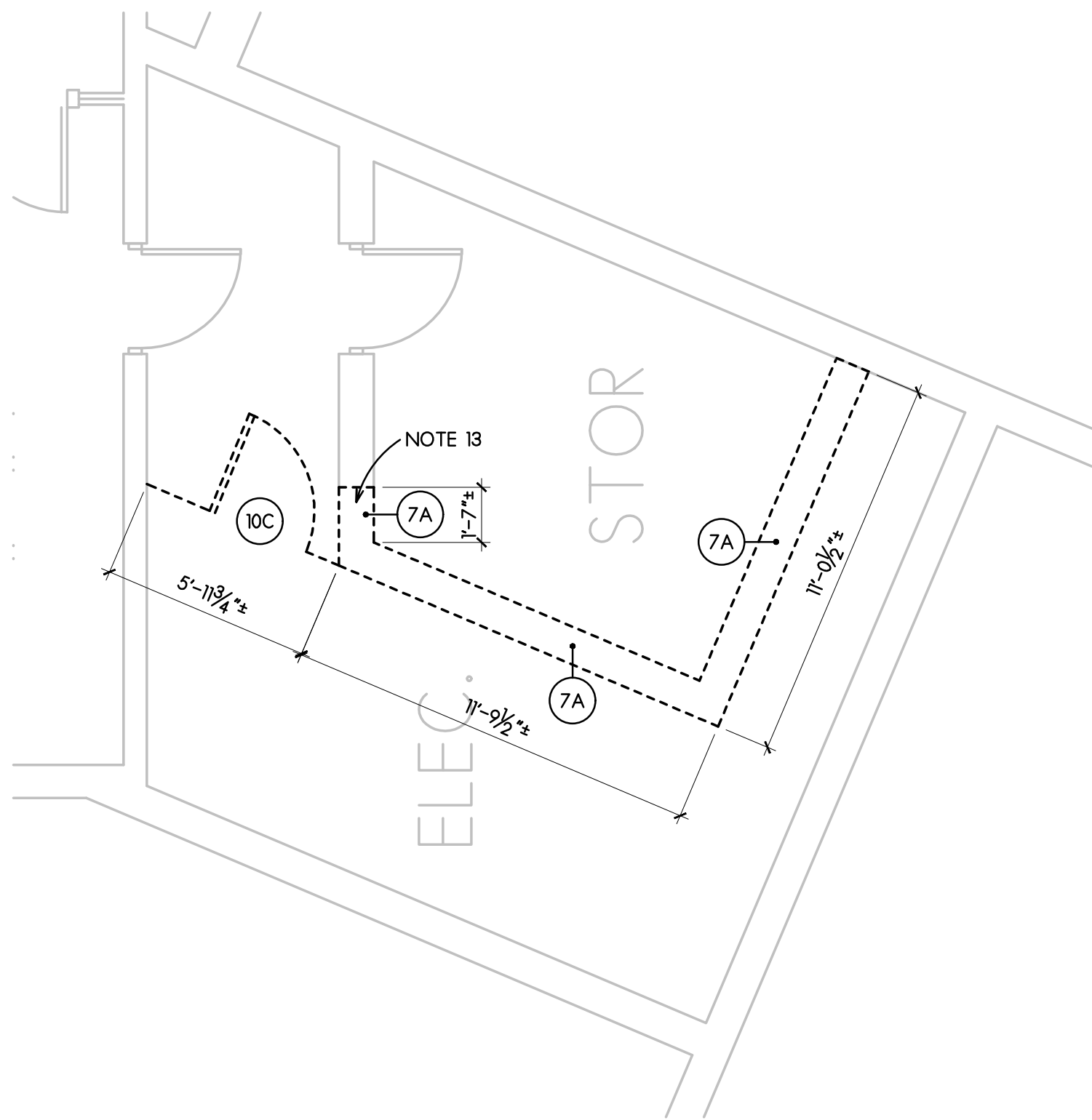
DEMOLITION KEYNOTES	
ITEM:	
1 FOUNDATION WALL	7 WALL CONSTRUCTION
2 RAMP CONSTRUCTION	8 MECHANICAL LOUVER (FOR COORDINATION SEE MDLS)
3 FLOOR CONSTRUCTION	9 PIPE HANDRAIL / GUARDRAIL
4 ALUMINUM STOREROOM	10 WIRE GATE ASSEMBLY
5 H.W. DOOR AND FRAME	
6 METAL GRATE / CHECKERD PLATE PLATFORM CONSTRUCTION	
ACTION:	
A REMOVE AND DISCARD	
B REMOVE AND TURN OVER TO OWNER	
C REMOVE AND RESTORE FOR REUSE	
GENERAL NOTES: FOR DEMOLITION	
1. ITEMS REMOVED AND TURNED OVER TO OWNER SHALL BE TRANSPORTED TO A ROOM OR AREA ONSITE DESIGNATED BY THE OWNER/PROJECT ARCHITECT.	
2. WHERE ITEMS ARE REMOVED, THE SUBSTRATE SHALL BE REPAIRED, PATCHED, CLEANED, ETC. TO A CONDITION SUITABLE TO RECEIVE NEW WORK AND/OR FINISHES.	
3. ITEMS TO BE DISPOSED, SHALL BE REMOVED FROM THE SITE ON A TIMELY BASIS.	
4. NOT USED	
5. REROUTE EXISTING PIPING, DUCTS AND OTHER OBSTRUCTIONS IN EXISTING MECHANICAL TUNNEL TO PREP FOR RAMP FORMWORK.	
6. NOT USED	
7. VERIFY EXACT LIMITS OF STAIR DEMOLITION WITH OWNER PRIOR TO REMOVING ANY LANDINGS.	
8. SEE MECHANICAL PLANS FOR LIMITS OF BOILER DEMOLITION.	
9. ACCESS FROM EXTERIOR GRADE LEVEL TO BOILER ROOM FLOOR LEVEL TO BE MAINTAINED WITH EXISTING C.I.P. CONC. STAIR.	
10. LOUVERS AT SOUTH WALL TO BE REMOVED PER SHEET MDLS - HVAC CONTR. WILL REPLACE WITH NEW LOUVERS PER SHEET MLS - G.C. IS RESPONSIBLE FOR PROVIDING NEW LINTELS OR RETRO-FITTING EXISTING LINTELS TO ACCOMMODATE NEW LOUVERS - ONCE NEW LOUVERS ARE INSTALLED, G.C. IS RESPONSIBLE FOR PATCHING AND/OR REPAIRING SURFACES ADJACENT TO NEW LOUVERS BOTH INTERIOR AND EXTERIOR INCLUDING BUT NOT LIMITED TO MASONRY-WORK AND GWB / PLASTER SURFACES.	
11. ALL EXISTING CONDUIT AND PIPING THIS AREA TO REMAIN AFTER BOILER DEMOLITION, IS TO BE RELOCATED UNDER DECK TO REMAIN FOR SUPPORT - VERIFY ALL PIPING TO REMAIN AND ESTABLISH A NEW LOCATION PRIOR TO DEMOLITION - BRING ALL COORDINATION ISSUES TO THE ATTENTION OF THE OWNER PRIOR TO DEMOLITION - ALL PIPING TO REMAIN IS TO BE TEMPORARILY SUPPORTED DURING DEMOLITION AND RECONSTRUCTION.	
12. NOT USED	
13. REMOVE PORTION OF 12" CMU WALL TO ACCOMMODATE DIMENSIONS SHOWN ON SHEET A11 - VERIFY EXACT LIMITS PRIOR TO DEMOLITION.	



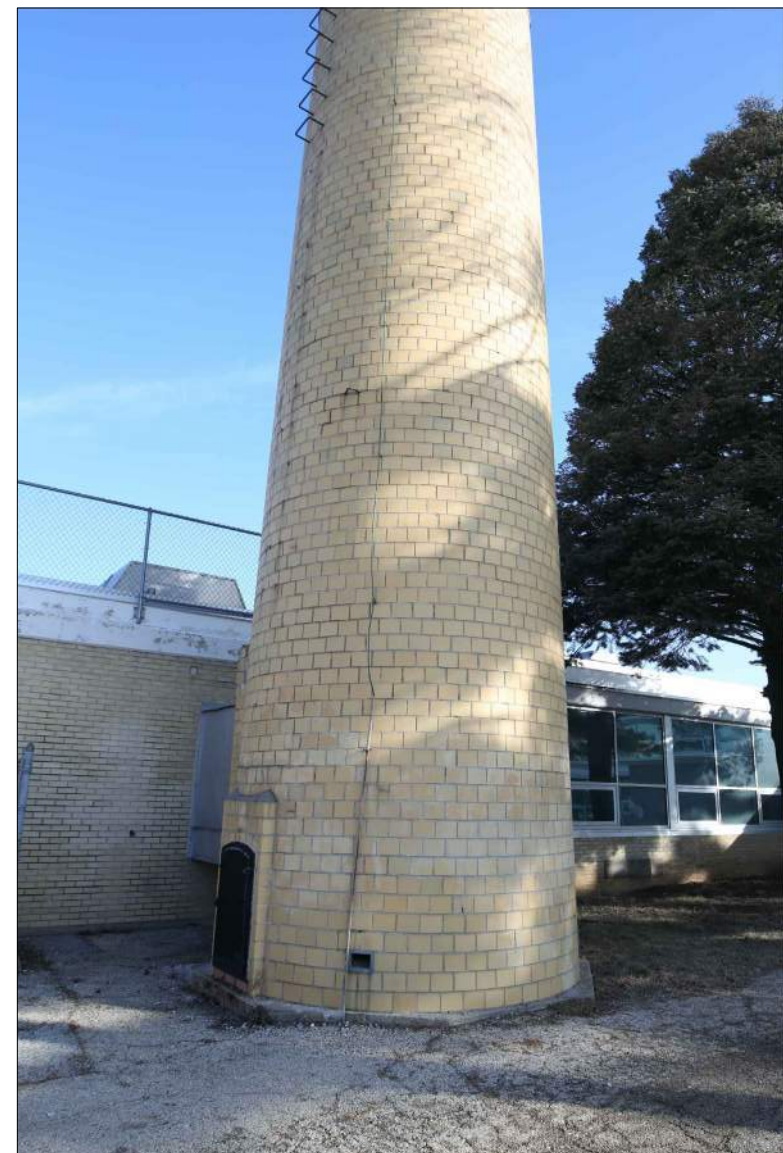
4 BOILER ROOM MAIN LEVEL DEMOLITION PLAN
SCALE: 1/4" = 1'-0"



5 CAFETERIA MAIN LEVEL DEMOLITION PLAN
SCALE: 1/4" = 1'-0"



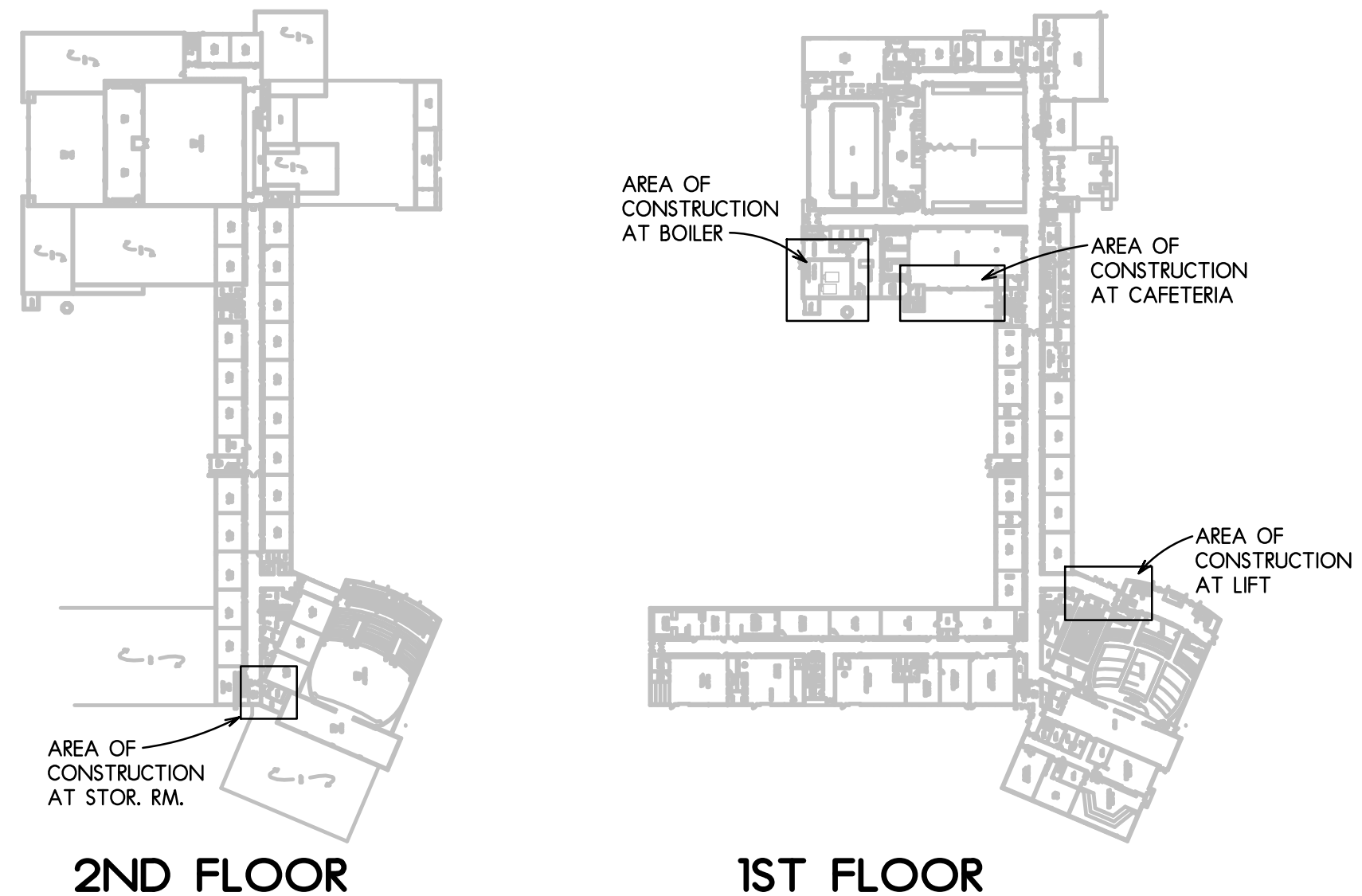
3 STORAGE ROOM SECOND LEVEL DEMOLITION PLAN
SCALE: 1/4" = 1'-0"



1



2

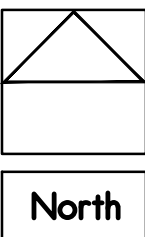


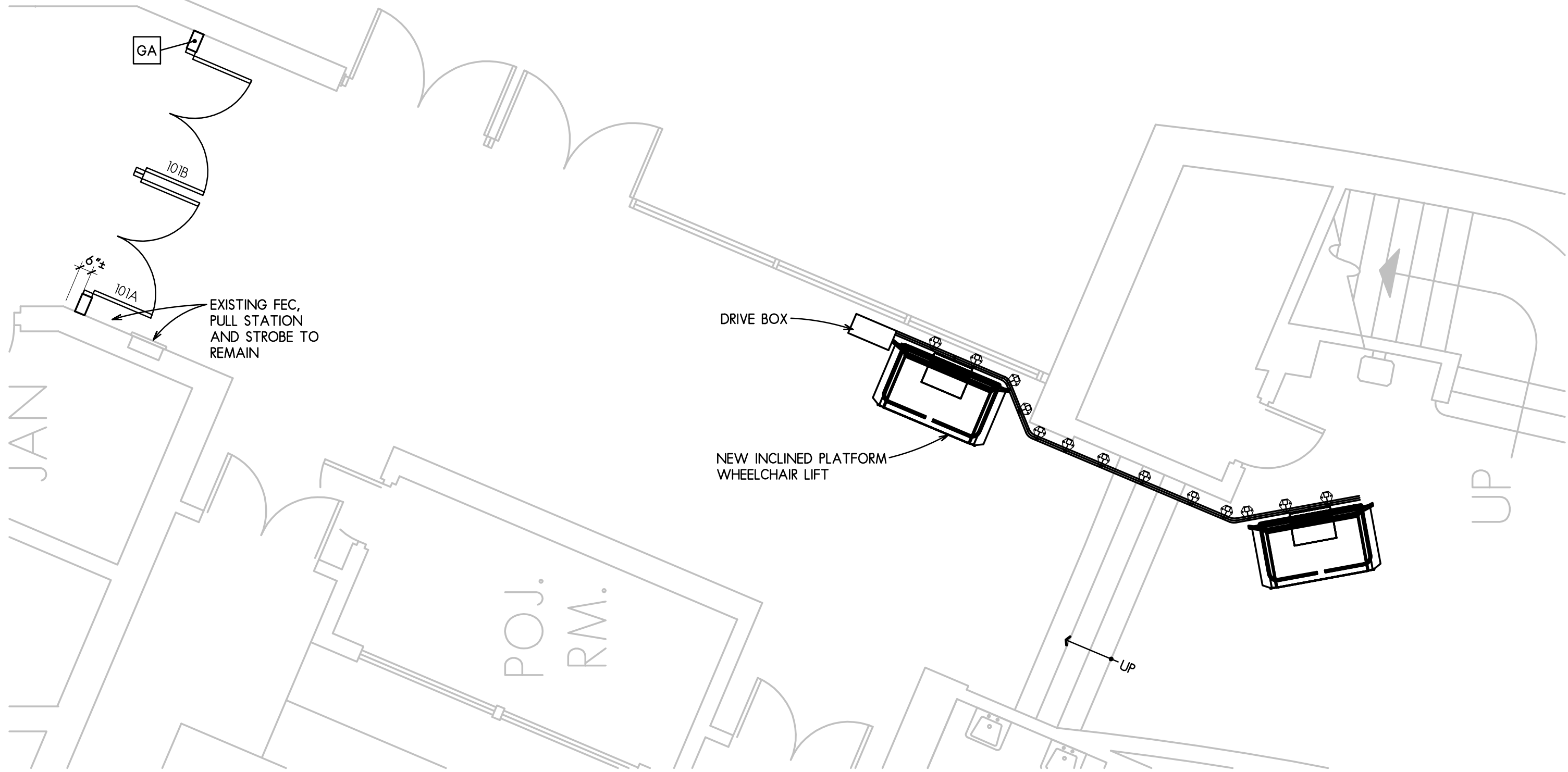
2ND FLOOR

1ST FLOOR

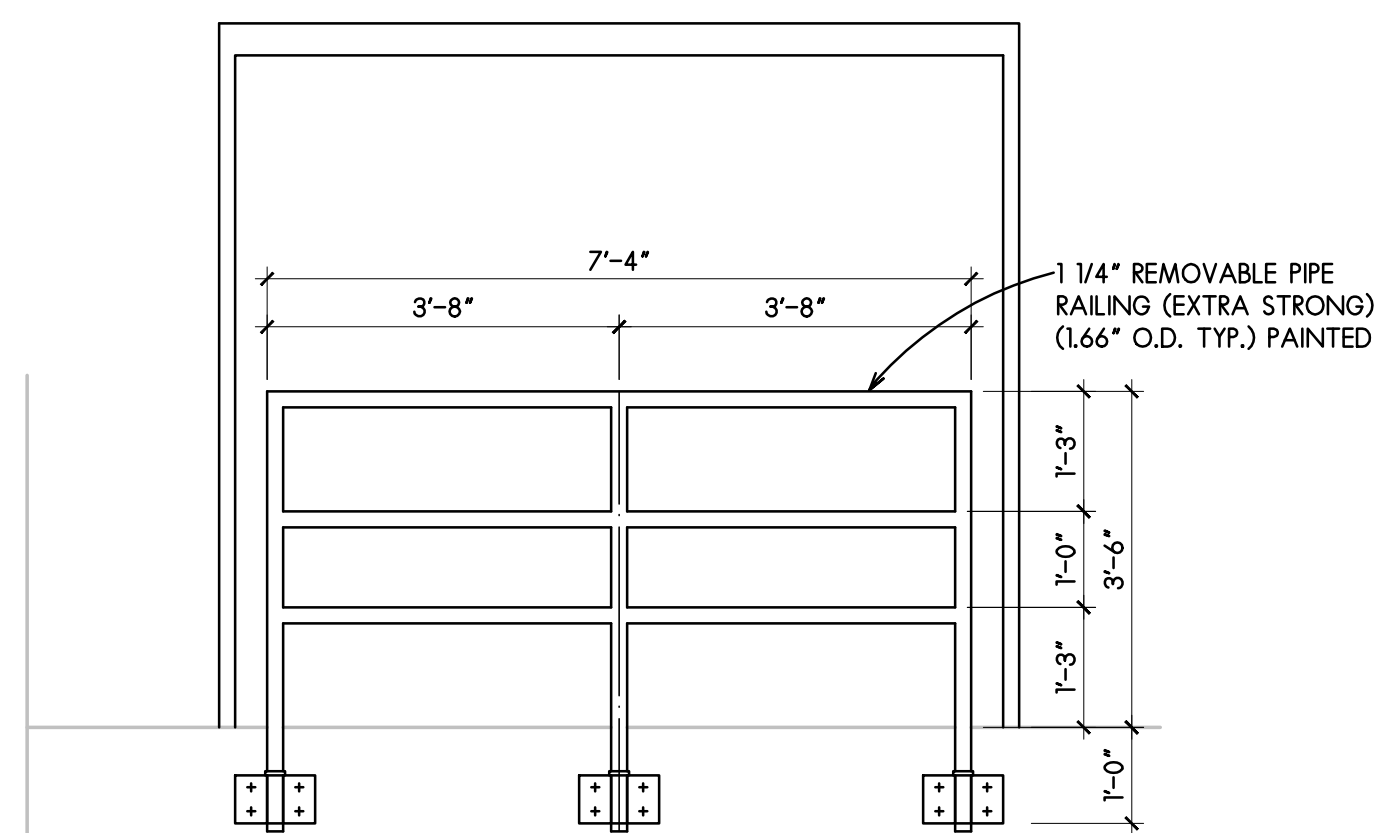
KEY PLAN

PARTIAL DEMOLITION PLANS
SCALE: AS NOTED

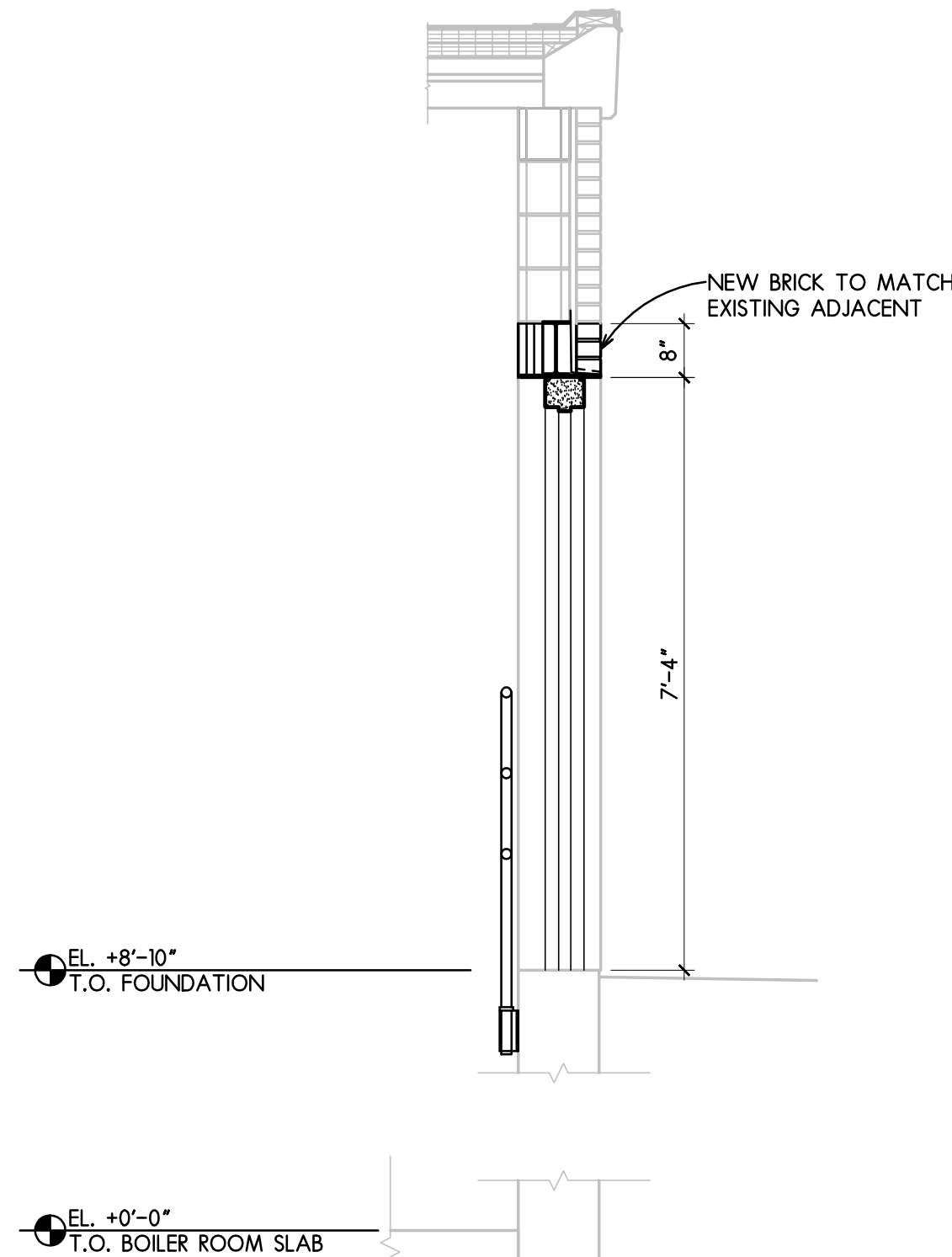




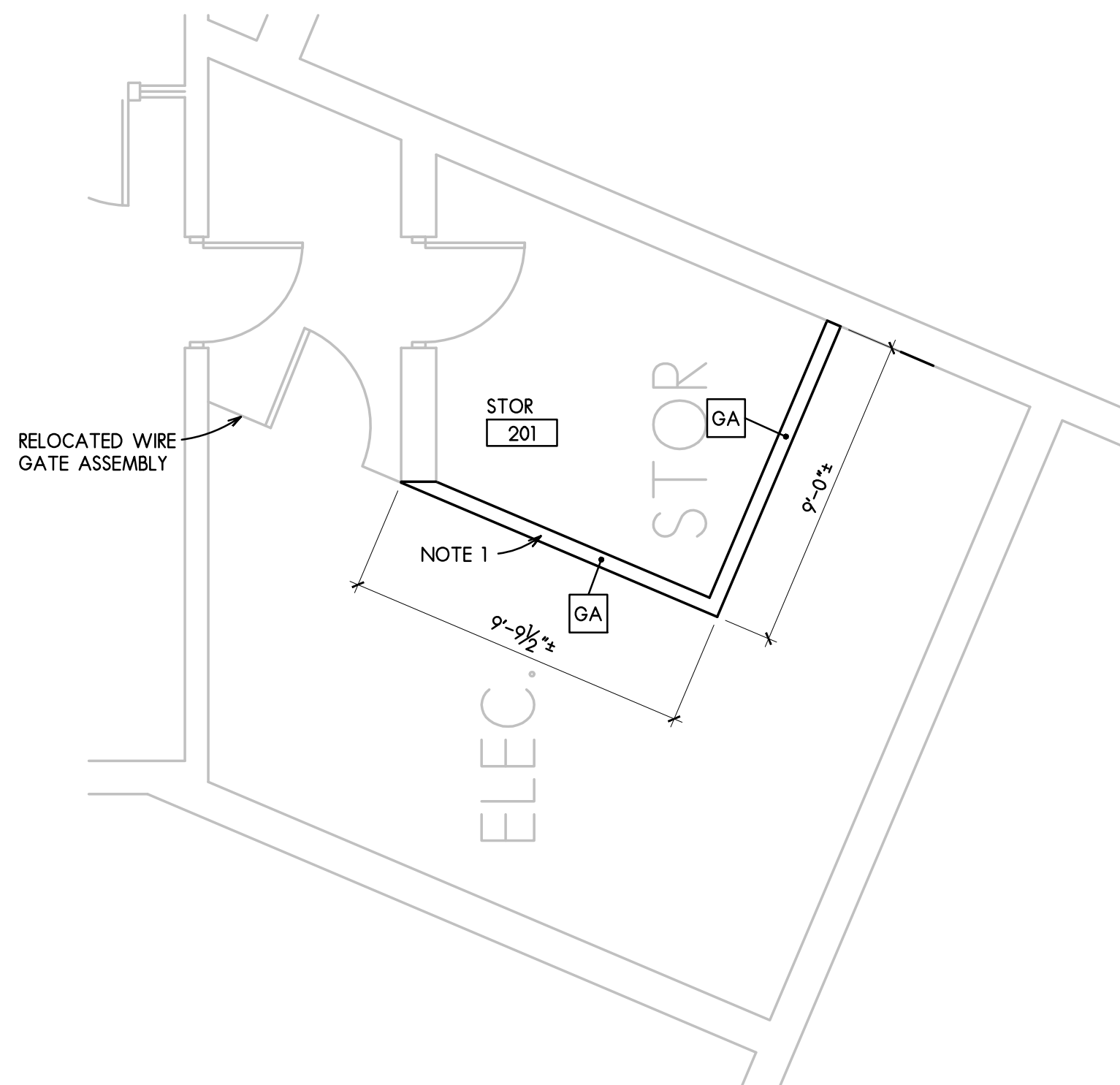
1 LIFT
MAIN LEVEL REVISED PLAN
SCALE: 1/4" = 1'-0"



5 BOILER ROOM ELEVATION
SCALE: 1/2" = 1'-0"



2 BOILER ROOM WALL SECTION
SCALE: 1/2" = 1'-0"



3 STORAGE
SECOND LEVEL REVISED PLAN
SCALE: 1/4" = 1'-0"

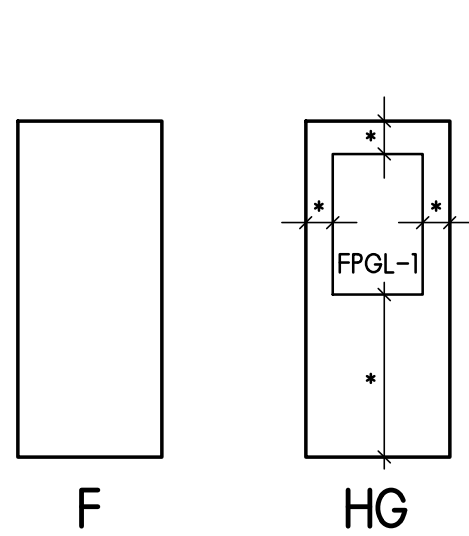
OPENING SCHEDULE

DOOR						FRAME					FIRE RTG		NOTES		HARDWARE				
OPNG NO	TYPE	MATL	FINISH SIDE 1	FINISH SIDE 2	PR	SIZE	TYPE	MATL	FINISH SIDE 1	FINISH SIDE 2	DETAILS	DR. & FR.	REFERENCE NOTES		HANG DEVICE	SECURE DEVICE	EXIT DEVICE	CLOSE DEVICE	MISC
MAIN LEVEL																			
101A	HG	WD	-	-	PR	3'-0"x7'-0"x2"	1	HM	-	-	J1 HI	1 HR	-		HG	-	ECVREN	CL	F, KP, SS
101B	HG	WD	-	-	PR	3'-0"x7'-0"x2"	1	HM	-	-	J1 HI	1 HR	-		HG	-	ECVREN	CL	F, KP, SS
103A	F	HM	-	-	PR	4'-0"x8'-0"x1 3/4"	2	HM	-	-	-	-	-		HH	FB, DB	-	-	THR

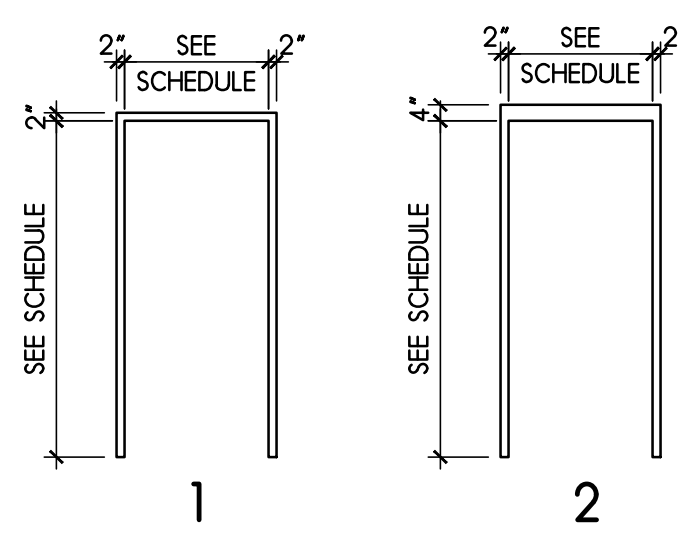
ROOM FINISH SCHEDULE

ROOM NO.	NAME	FLOOR MATL	BASE	WALL FINISH N	S	E	W	CEILINGS MATL	FIN	HT	NOTES
MAIN LEVEL											
201	STORAGE	-	RESL	P	P	P	P	EX	P	-	-

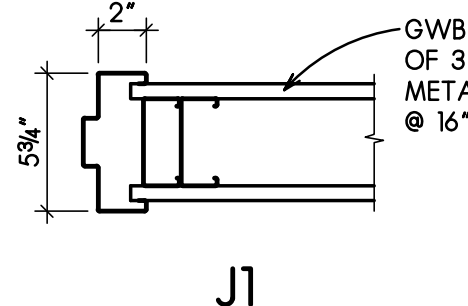
RESILIENT BASE HEIGHT TO MATCH EXISTING ADJACENT
PAINT COLOR TO MATCH EXISTING ADJACENT



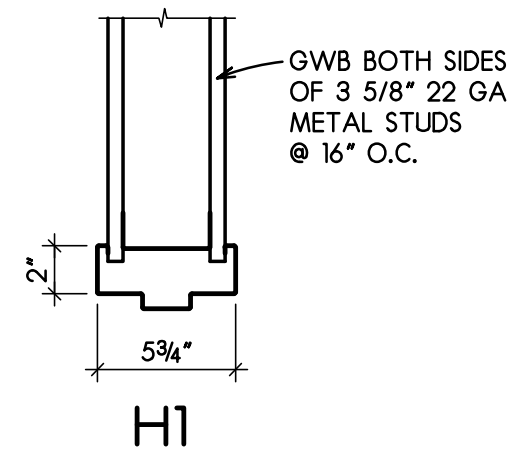
DOOR TYPES
SCALE: 1/4" = 1'-0"
* - MATCH PROFILE OF EXISTING HALF GLASS WOOD DOORS ON SITE



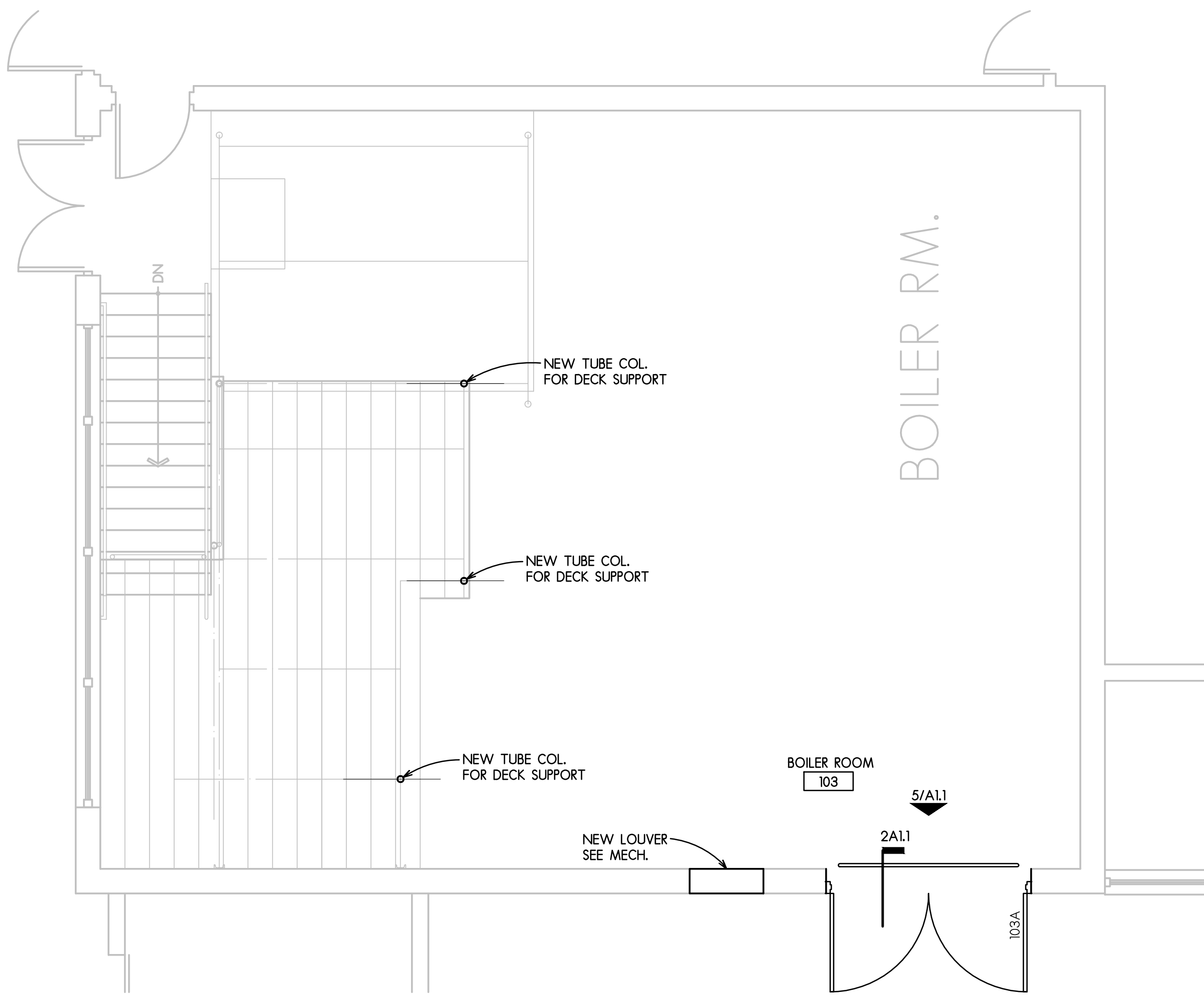
FRAME TYPES
SCALE: 1/4" = 1'-0"



JAMB DETAILS
SCALE: 1 1/2" = 1'-0"



HEAD DETAILS
SCALE: 1 1/2" = 1'-0"



4 BOILER ROOM
MAIN LEVEL REVISED PLAN
SCALE: 1/4" = 1'-0"

ARCHITECTURAL SYMBOLS :

2A3.2	BUILDING SECTIONS	ART ROOM	ROOM NAME & NUMBER
2A3.2	WALL SECTIONS	124	
2A3.2		ELEVATION TARGET	
2A3.2		WALL TYPE NUMBERS	
201.1	DOOR/ OPENING NUMBERS		
3A4.1	PLAN DETAILS		
INTERIOR ELEVATIONS			
5.1	COLUMN CENTER LINES		

WALL TYPES :

GA 5/8" TYPE "X" GWB BOTH SIDES OF 3 5/8" 22 GA. METAL STUDS @ 16" O.C. FULL HEIGHT INTO FLUTES OF CLIP. CONCRETE DECK ABOVE - U.L. DESIG. U419 1 HOUR RATED

GENERAL NOTES :

1. MAINTAIN MINIMUM 3'-0" CLEARANCE FROM FACE OF SWITCHGEAR TO FACE OF NEW GWB PARTITION.

SCHEDULE KEYNOTES

CD	COILING DOOR	MATL	MATERIAL
EX	EXISTING	MIN	MINIMUM
FR	FRAME	MTL	METAL
GL	GLASS	OH	OVERHEAD DOOR
H	HEAD	P	PAINT
HDWR	HARDWARE	FR	PAIR
HG	HALF GLASS	RTG	RATING
HM	HOLLOW METAL	RESL	RESILIENT
HR	HOUR	TER	TERRAZZO
J	JAMB	VCT	VINYL COMPOSITION TILE
M	MINUTES	WD	WOOD

HARDWARE GENERAL NOTES

- ALL DOORS SHALL BE HUNG ON FULL MORTISE BUTT HINGES UNLESS NOTED OTHERWISE.
- ALL DOORS SHALL HAVE SILENCERS, EXCEPT DOORS WHICH HAVE WEATHERSTRIPPING OR SOUND SEALS.

HARDWARE LEGEND

HANGING DEVICES:

HE	HINGE - ELECTRIFIED
HG	HINGE - GEAR (CONTINUOUS) TYPE
HH	HINGE - HEAVY WEIGHT BALL BRG.
HS	HINGE - REGULAR NON-BALL BRG.
HS	HINGE - SPRING TYPE
PR	PIVOT

SECURING DEVICES:

AFB	AUTOMATIC FLUSH BOLTS WITH COORDINATOR & DUST PROOF STRIKE
CL	LOCKSET, CLASSROOM FUNCTION
DB	DEAD BOLT
DUN	NARROW STILE DEADLOCK
DT	DUMMY TRIM
EM	LOCKSET, ELECTROMECHANICAL
EN	LOCKSET, ENTRANCE FUNCTION
ES	ELECTRIC STRIKE
FB	FLUSH BOLTS WITH DUST PROOF STRIKE
MAG	LOCK, ELECTROMAGNETIC
OF	LOCKSET, OFFICE FUNCTION
PR	LOCKSET, PRIVACY FUNCTION
PA	LATCHSET, PASSAGE FUNCTION
ST	LOCKSET, STOREROOM FUNCTION

EXIT DEVICES:

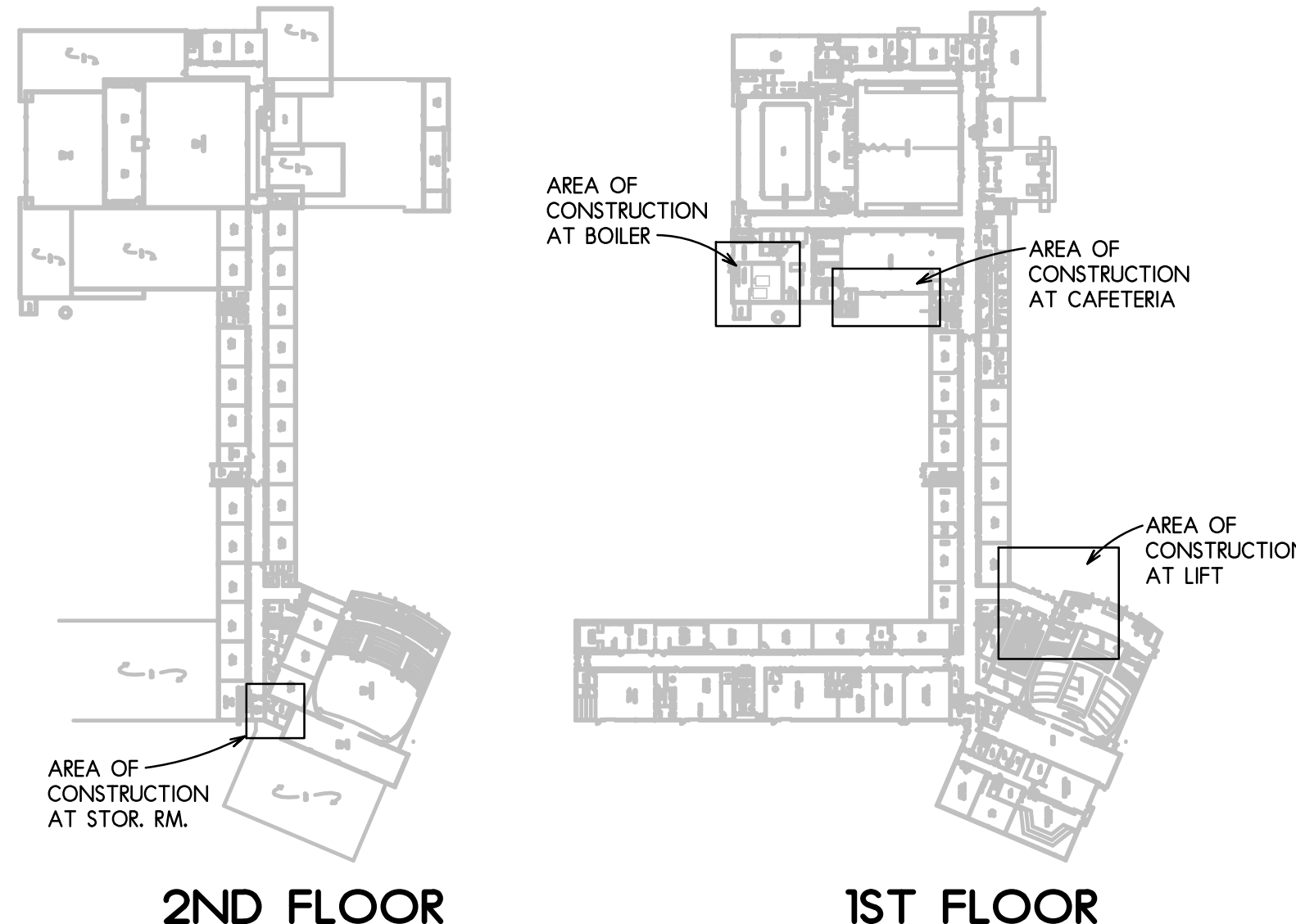
ECVREN	CONCEALED VERTICAL ROD, ENTRANCE FUNCTION LESS BOTTOM ROD
ECVREO	CONCEALED VERTICAL ROD, EXIT ONLY FUNCTION (ETC. FOR OTHER FUNCTIONS)
ECVRP	CONCEALED VERTICAL ROD, PASSAGE FUNCTION
ERE	RIM, ENTRANCE FUNCTION
EREO	RIM, EXIT ONLY FUNCTION (ETC. FOR OTHER FUNCTIONS)
EVRP	EXPOSED VERTICAL ROD, PASSAGE FUNCTION

CLOSING DEVICES:

ACL	AUTOMATIC RELEASED
CCL	OVERHEAD CONCEALED
CL	OVERHEAD EXPOSED
FCL	FLOOR, RECESSED

MISCELLANEOUS HARDWARE ITEMS:

AP	ARMOR PLATES
BF	BI-FOLD DOOR HARDWARE SET
CATCH	OVERHEAD MAGNETIC CATCHES
DC	DRIP CAP
DV	DOOR VIEWER
EG	EDGE GUARDS
F	FLOOR STOP
FI	FLOOR HOLDER
KP	KICK PLATES
MAG	MAGNETIC DOOR HOLDER
O	OVERHEAD SURFACE-MOUNTED SLIDE STOP
PB	PULL BAR
PSB	PUSH BAR
PSP	PUSH PLATE
SL	SLIDING DOOR HARDWARE SET
SND	SOUND SEALS, INCL. AUTOMATIC DOOR BOTTOM
SS	SMOKE SEALS
THR	THRESHOLD
W	WALL-MOUNTED BUMPER-STOP
WTHR	WEATHERSTRIPPING, INCLUDING BOTTOM SWEEP



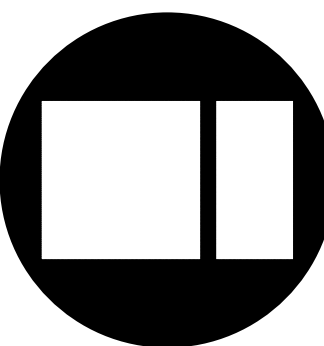
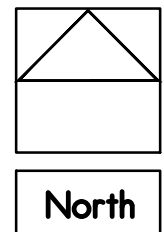
2ND FLOOR

1ST FLOOR

KEY PLAN

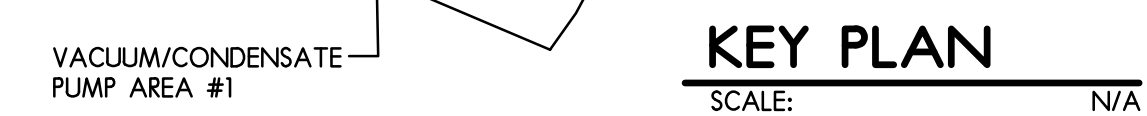
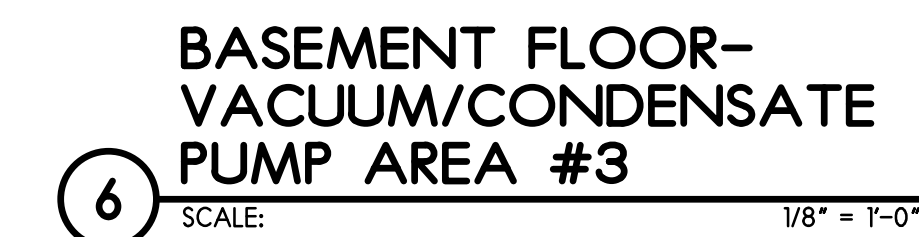
PARTIAL MAIN LEVEL REVISED PLANS

SCALE: 1/4" = 1'-0"

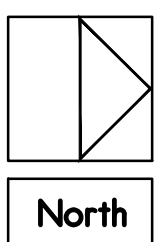


1. ALL EXISTING PLUMBING & HVAC PIPING SUPPORTED AND/OR ATTACHED TO EXISTING PLANT SHALL BE RELOCATED/RE-SUPPORTED/RE-PIPED AS REQUIRED TO FACILITATE THE REMOVAL OF EXISTING BOILERS AND INSTALLATION OF NEW BOILERS.
2. EXISTING STEAM BOILER SYSTEM IN MECHANICAL ROOM SHALL BE REMOVED IN ITS ENTIRETY. THIS SHALL INCLUDE BUT NOT LIMITED TO BOILERS, BOILERS SUPPORTS, BURNERS, STEAM SUPPLY, CONDENSATE WATER PIPING, STEAM TRAP & PUMPS, GAS PIPING, CONTROL PANELS, CONTROL VALVES, ETC....
3. EXISTING PLASTER CEILING IN BOILER ROOM SHALL BE REMOVED IN ITS ENTIRETY. EXISTING PIPING, CONDUITS, HANGERS AND SUPPORTS SHALL BE RELOCATED AND NEW HANGERS SHALL BE PROVIDED AND INSTALLED.
4. EXISTING VACUUM/CONDENSATE PUMPS LOCATED THROUGHOUT THE BUILDING SHALL BE REMOVED AND REPLACED WITH NEW EQUIPMENT OF EQUAL SIZE AND CAPACITY.

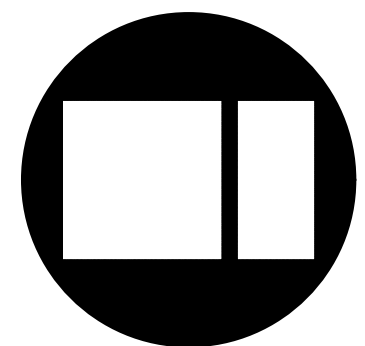
- ① REMOVE EXISTING STEAM BOILER, MASONRY, REFRACTORY, STRUCTURAL SUPPORT, NATURAL GAS POWER BURNER, BURNER CONTROL PANEL, CONTROLS, TRIM, RELIEF VALVES, ASSOCIATED PIPING, VALVES, INSULATION, ETC. AS REQUIRED FOR THE INSTALLATION OF NEW BOILERS AS SHOWN ON NEW WORK PLANS
- ② REMOVE EXISTING BOILER FEED SYSTEM, TANK, PUMPS, SUPPORTS, CONTROLS, ASSOCIATED PIPING, VALVES, CONTROLS, INSULATION, ETC.
- ③ REMOVE EXISTING VACUUM CONDENSATE PUMP AND ASSOCIATED PIPING, VALVES, CONTROLS, CONCRETE PAD, ETC...
- ④ REMOVE EXISTING BLOW DOWN SEPARATOR AND ALL ASSOCIATED PIPING.
- ⑤ REMOVE EXISTING BREECING, SHUTTER, INSULATION, ETC... CAP AND SEAL OPENING WITH SHEET METAL AIR TIGHT.
- ⑥ REMOVE EXISTING STEAM/CONDENSATE/PUMPED RETURN/MAKE-UP/DRAIN PIPING, VALVES, SUPPORTS, INSULATION, ETC...
- ⑦ REMOVE EXISTING CHEMICAL FEEDER SYSTEM.
- ⑧ EXISTING WATER SOFTENER TO REMAIN.
- ⑨ EXISTING ELECTRICAL PANEL WITH TEMPERATURE CONTROL RELAYS. REMOVE ALL CONTROL RELAYS ASSOCIATED WITH HVAC EQUIPMENT. BE SURE TO CONSIDER THIS PROJECT. FIELD VERIFY ALL EXISTING CONDITIONS AND COORDINATE ALL REMOVAL WORK WITH ELECTRICAL AND THERM. CONTROL CONTRACTORS.
- ⑩ EXISTING CONTROL PANEL & EQUIPMENT, AIR COMPRESSOR, CONCRETE PAD, AIR DRYER, AND ALL ASSOCIATED PNEUMATIC PIPING, VALVES & CONTROLS PART OF EXISTING ACTIVE SYSTEM, IN THE BUILDING SHALL REMAIN.
- ⑪ EXISTING EMERGENCY GENERATOR.
- ⑫ REMOVE EXISTING STEAM SUPPLY BACK TO THIS POINT (APPROXIMATELY). PREPARE TO CONNECT WITH NEW STEAM SUPPLY AS SHOWN ON NEW WORK PLAN.
- ⑬ CAP EXISTING WALL OPENING.
- ⑭ REMOVE EXISTING BOILER CONDENSATE RETURN AS SHOWN.
- ⑮ REMOVE EXISTING CONCRETE PAD AT STORAGE PATCH FLOOR TO MATCH EXISTING.
- ⑯ EXISTING DOMESTIC WATER HEATER, STORAGE TANK AND ASSOCIATED PIPING AND PUMPS SHALL REMAIN.
- ⑰ REMOVE EXISTING PUMPED CONDENSATE AS SHOWN BACK TO THIS POINT (APPROX.) TO ALLOW FOR INSTALLATION OF NEW PUMP AS SHOWN ON SHEET M1.
- ⑱ REMOVE EXISTING COMBUSTION AIR INTAKE DAMPER & DAMPER OPERATOR WITH ALL ASSOCIATED PNEUMATIC TUBING. REMOVE EXISTING INTAKE HOLE ON ROOF. CAP EXISTING OPENING WITH CONCRETE PATCH TO MATCH ADJACENT ROOF MATERIAL.
- ⑲ RE-ROUTE EXISTING PNEUMATIC TUBING ON WALL AS REQUIRED TO ALLOW FOR NEW DOOR OPENINGS. FIELD VERIFY ALL EXISTING CONDITIONS.
- ⑳ RE-ROUTE EXISTING GAS PIPING AS REQUIRED TO ALLOW FOR NEW DOOR OPENINGS. GAS PIPING SHALL BE RE-ROUTED TO PROVIDE CLEAR PATH IN FRONT OF THE NEW DOORS. FIELD VERIFY ALL EXISTING CONDITIONS.
- ㉑ REMOVE EXISTING STEEL COLUMNS AS PART OF THE EXISTING BOILER SUPPORTS (CONCRETE) WITH CONCRETE BASE. SEE DEMOLITION NOTE #1 ABOVE.

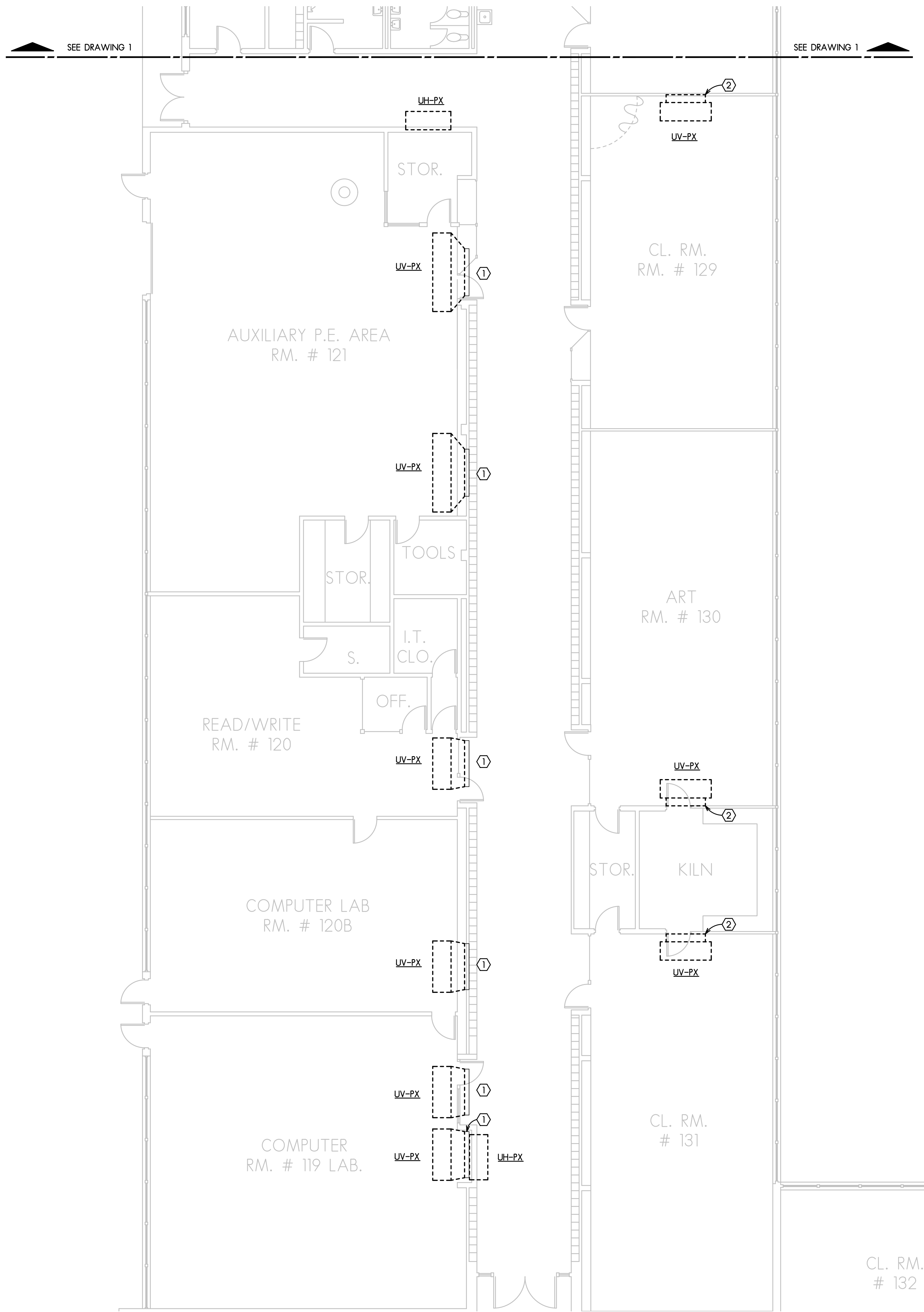


SCALE: AS NOTED

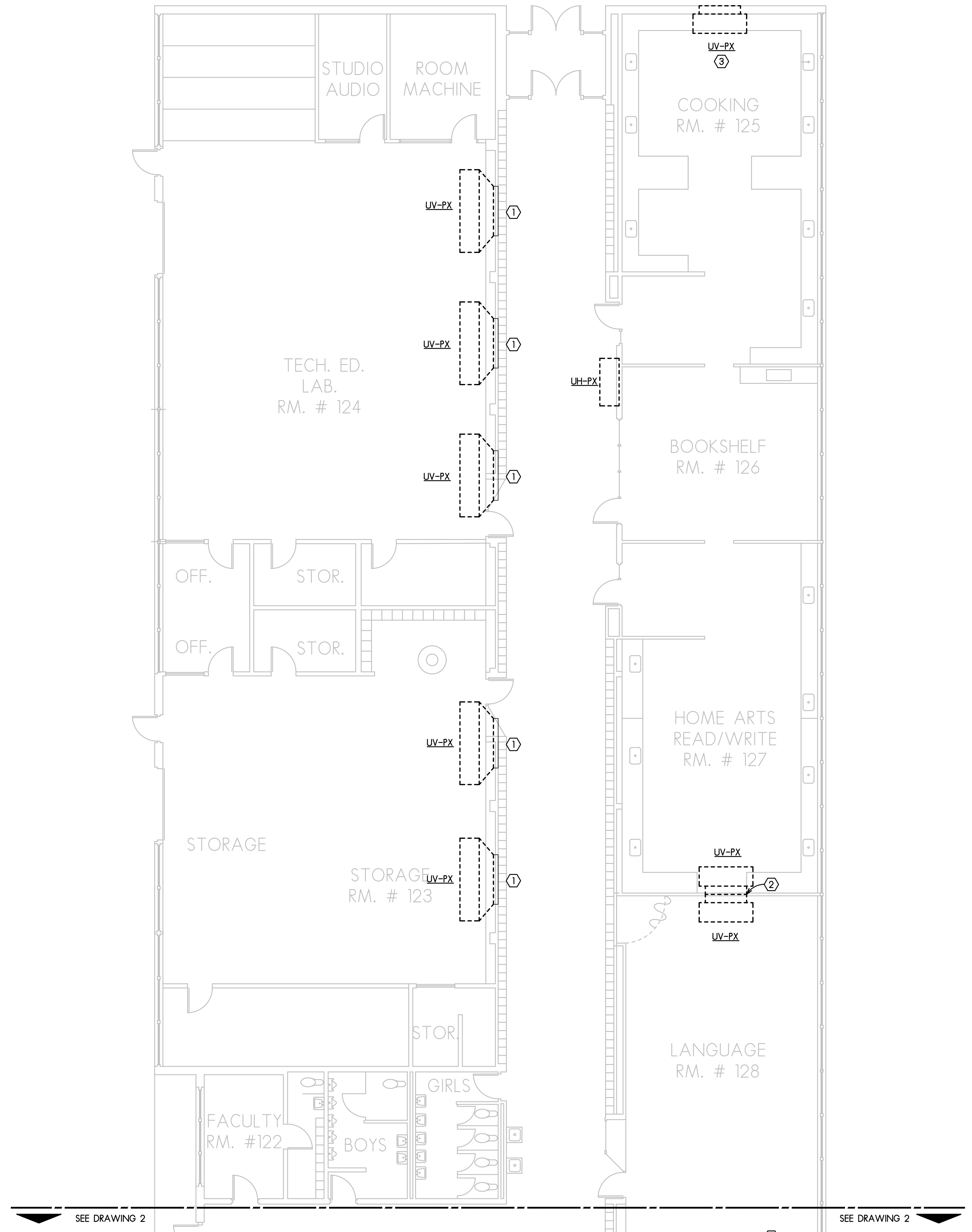


DATE: 11-13-2015	ISSUED FOR: DATE
PROJECT NUMBER	RE-BIDDING 01-29-18
25109	
SHEET NUMBER	
MD1.1	
	DRAWN APPROVED
	PM RAS





2 HVAC PARTIAL FIRST FLOOR PLAN
SCALE: 1/8" = 1'-0"



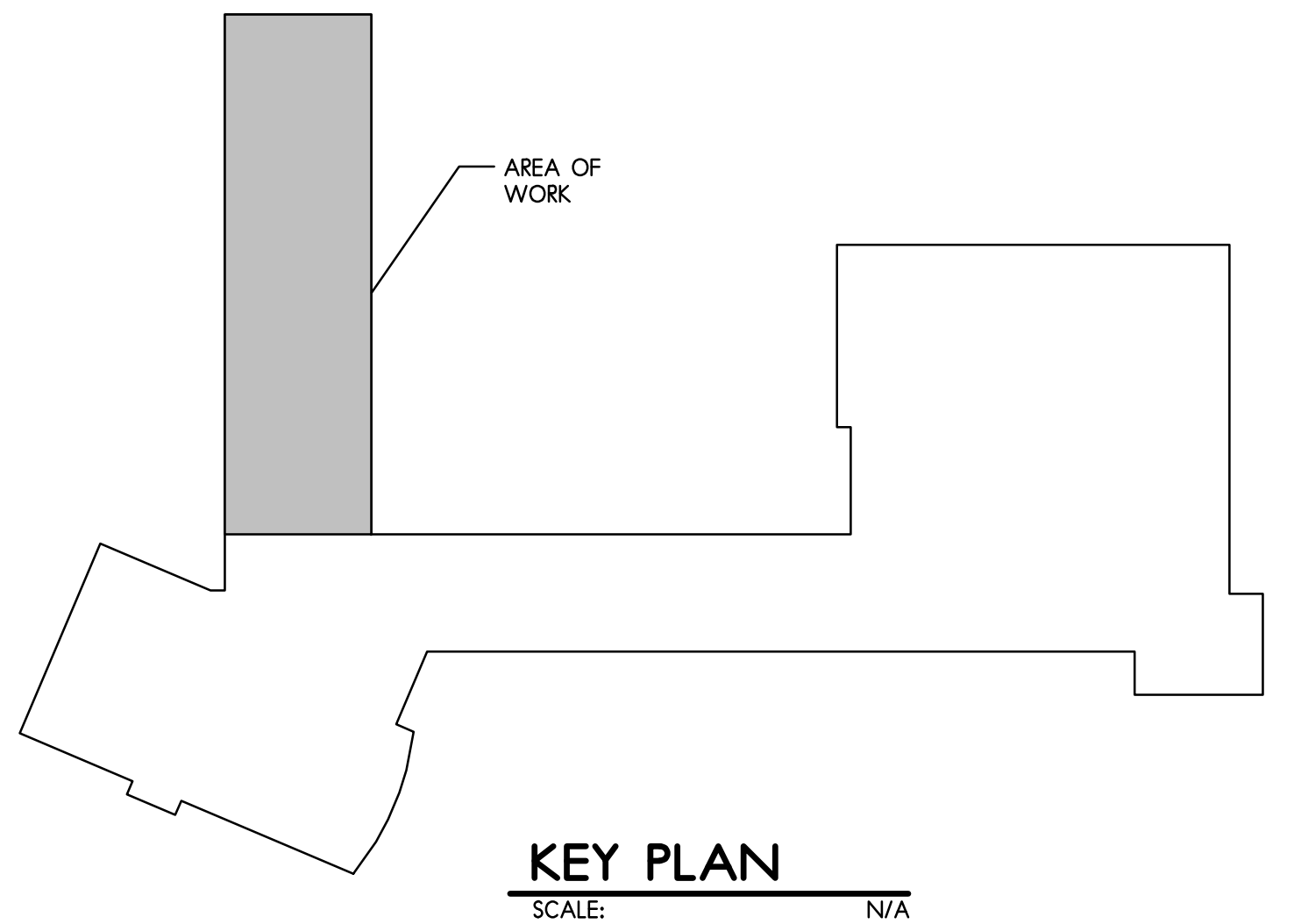
1 HVAC PARTIAL FIRST FLOOR PLAN
SCALE: 1/8" = 1'-0"

GENERAL NOTES

1. FIELD VERIFY FINAL SIZES OF ALL UNITS PRIOR TO ORDERING REPLACEMENTS.

HVAC DEMOLITION KEYED NOTES

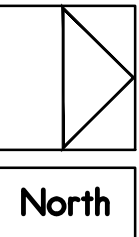
1. REMOVE EXISTING SUSPENDED UNIT VENTILATOR AS SHOWN. EXISTING, RECENTLY REPLACED, INTAKE LOUVER AND SCREEN IN CLEARSTORY SHALL REMAIN. REMOVE EXISTING OA DUCT AND PREPARE TO INSTALL NEW UNIT AS SHOWN ON NEW WORK PLAN.
2. REMOVE EXISTING SUSPENDED UNIT VENTILATOR AS SHOWN. REMOVE EXISTING ROOF HOOD, CURB TO REMAIN. PREPARE FOR NEW HOOD AND CURB ADAPTER. REMOVE EXISTING OUTSIDE AIR DUCT AND PREPARE TO INSTALL NEW UNIT AS SHOWN ON NEW WORK PLAN.
3. REMOVE EXISTING SUSPENDED UNIT VENTILATOR AS SHOWN. REMOVE EXISTING WALL LOUVER AND ASSOCIATED INTAKE OA DUCT. PREPARE TO INSTALL NEW UNIT AS SHOWN ON NEW WORK PLAN.



KEY PLAN
SCALE: N/A

MECHANICAL DEMOLITION PLANS

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





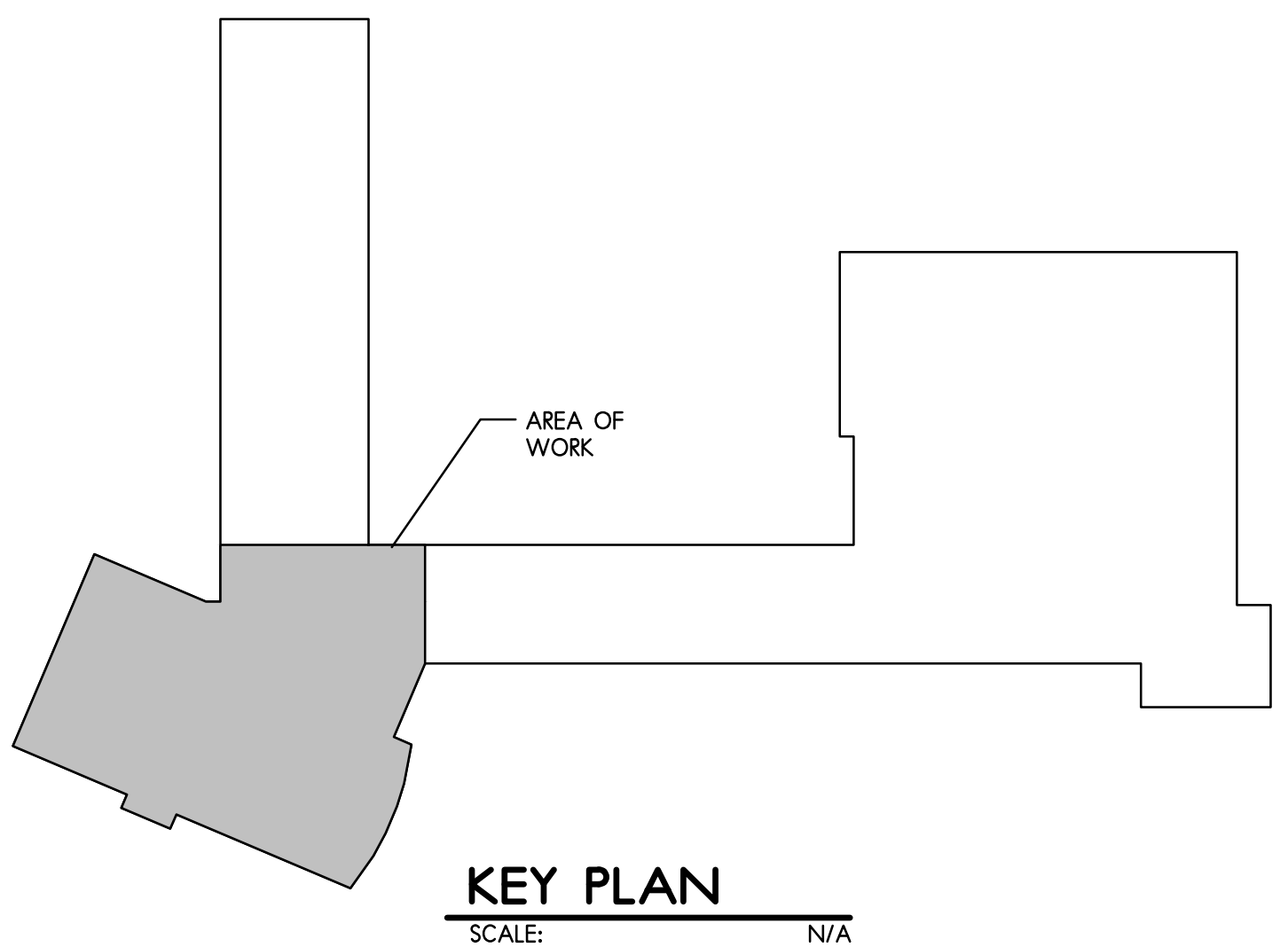
1 HVAC PARTIAL FIRST FLOOR PLAN
SCALE: 1/8" = 1'-0"

GENERAL NOTES

1. FIELD VERIFY FINAL SIZES OF ALL UNITS PRIOR TO ORDERING REPLACEMENTS.

HVAC DEMOLITION KEYED NOTES

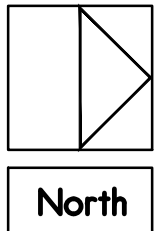
① REMOVE EXISTING FLOOR UNIT VENTILATOR AS SHOWN. REMOVE EXISTING WALL LOUVER AND ASSOCIATED INTAKE OR DUCT. PREPARE TO INSTALL NEW UNIT AS SHOWN ON NEW WORK PLAN.

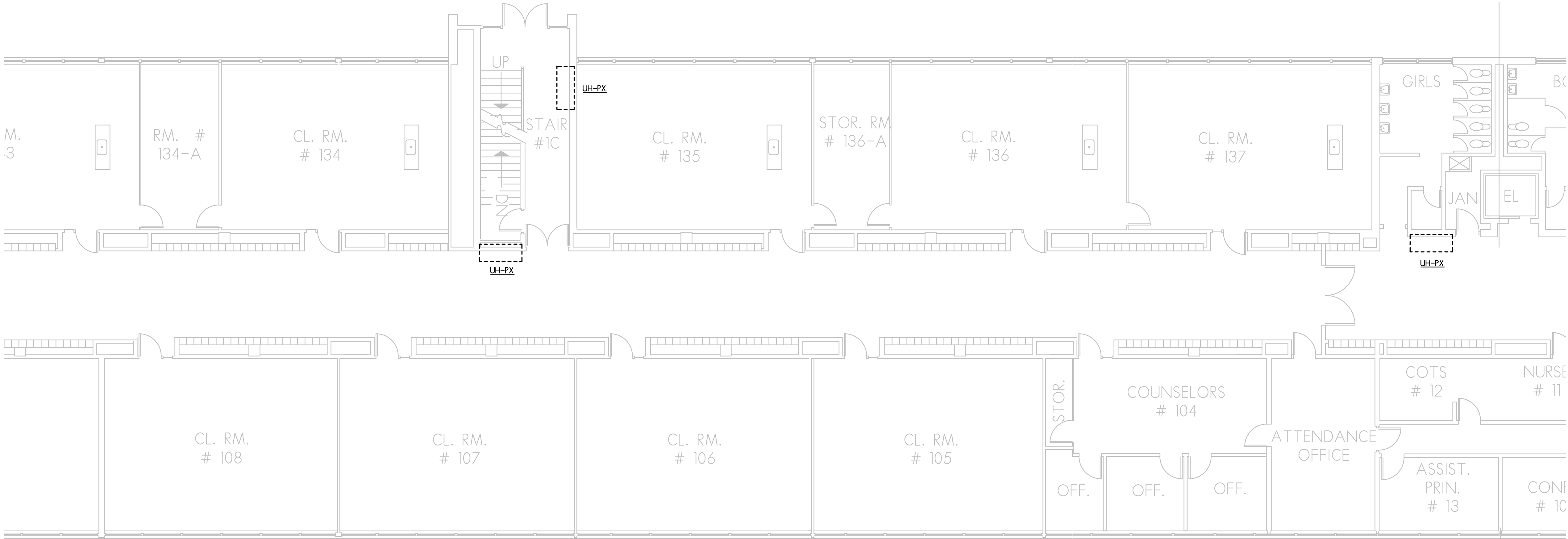


KEY PLAN
SCALE: N/A

MECHANICAL DEMOLITION PLANS

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

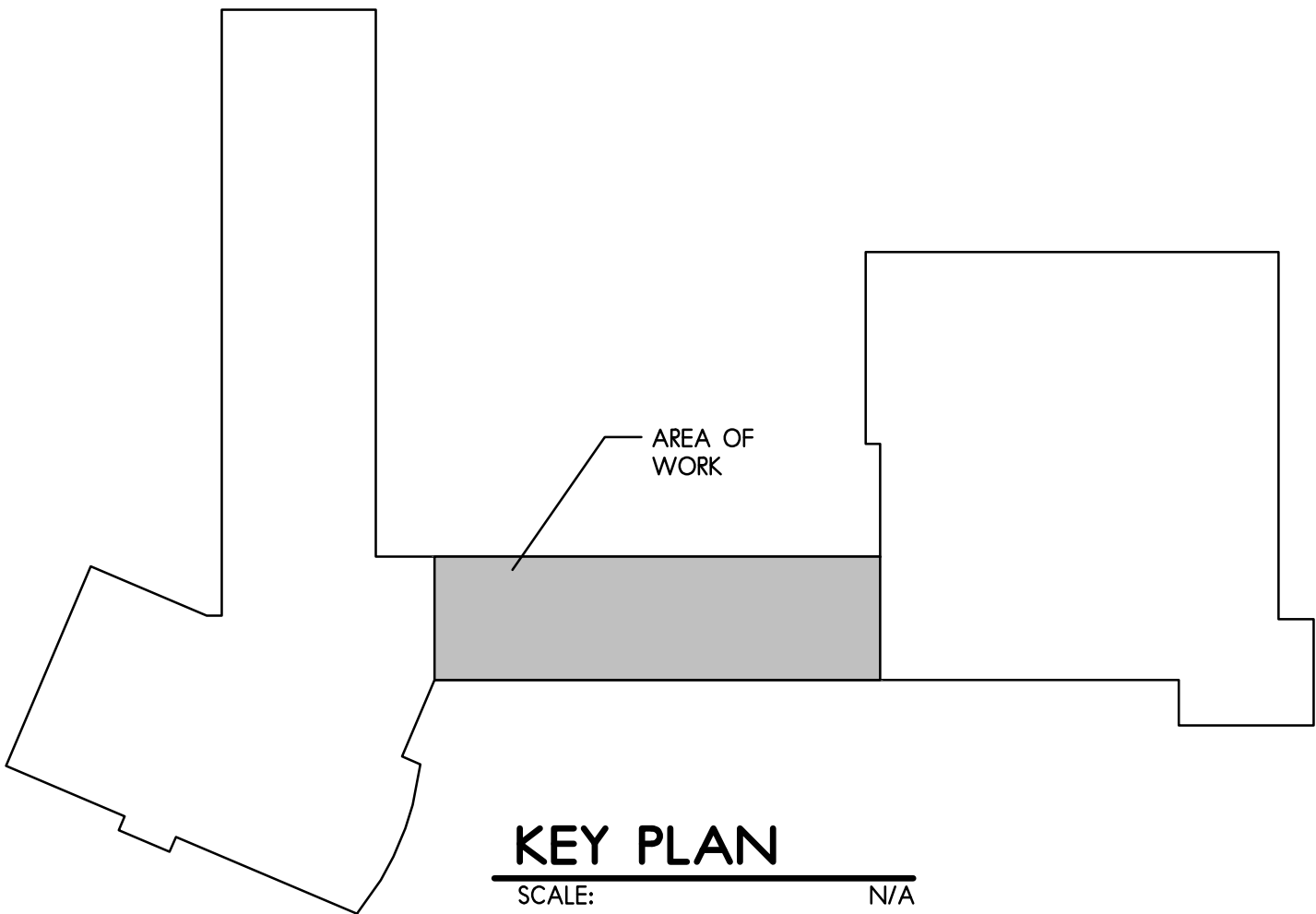




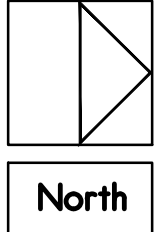
1 HVAC PARTIAL FIRST FLOOR PLAN
SCALE: 1/8" = 1'-0"

GENERAL NOTES

1. FIELD VERIFY FINAL SIZES OF ALL UNITS PRIOR TO ORDERING REPLACEMENTS.



MECHANICAL DEMOLITION PLANS
SCALE: 1/8" = 1'-0"

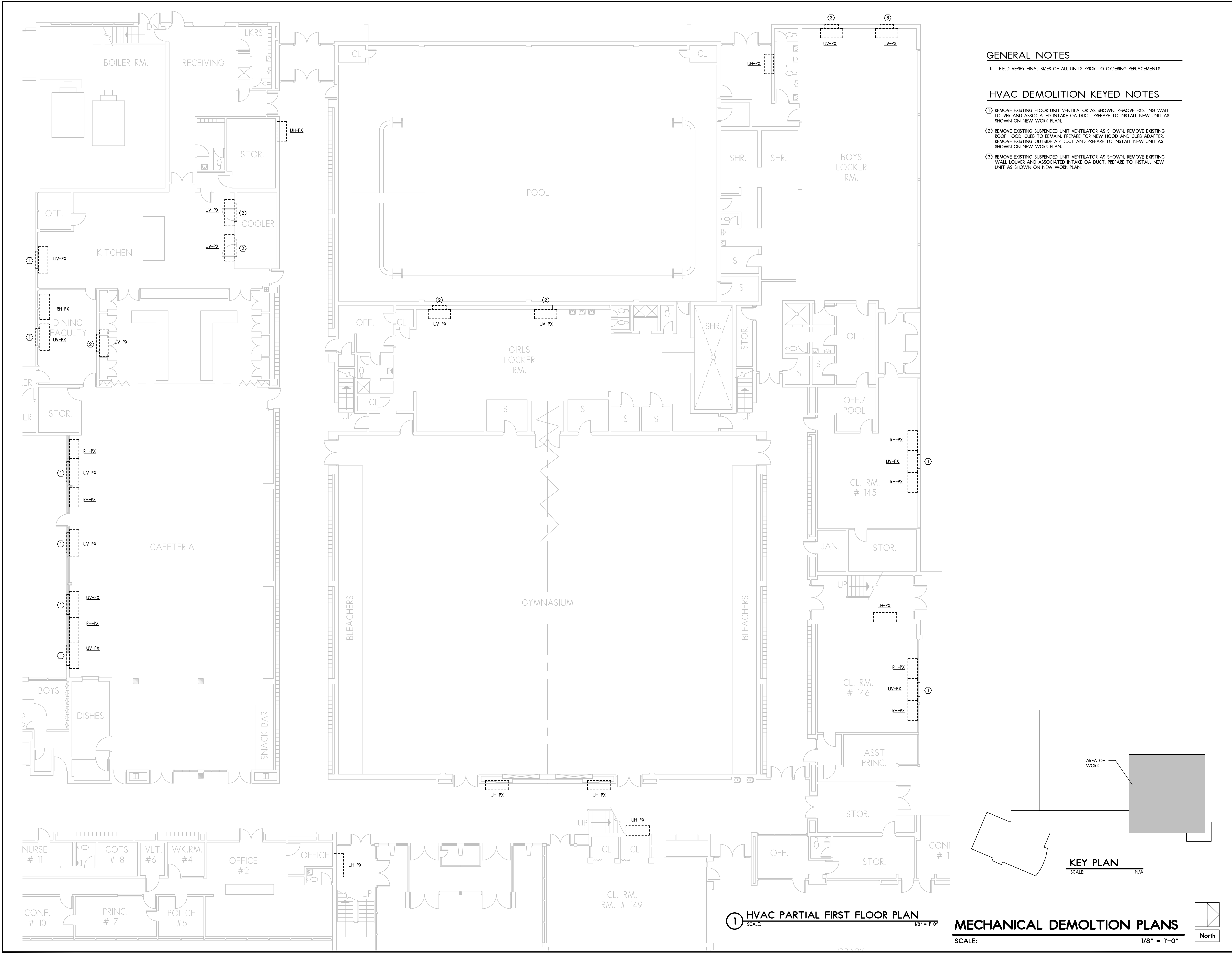


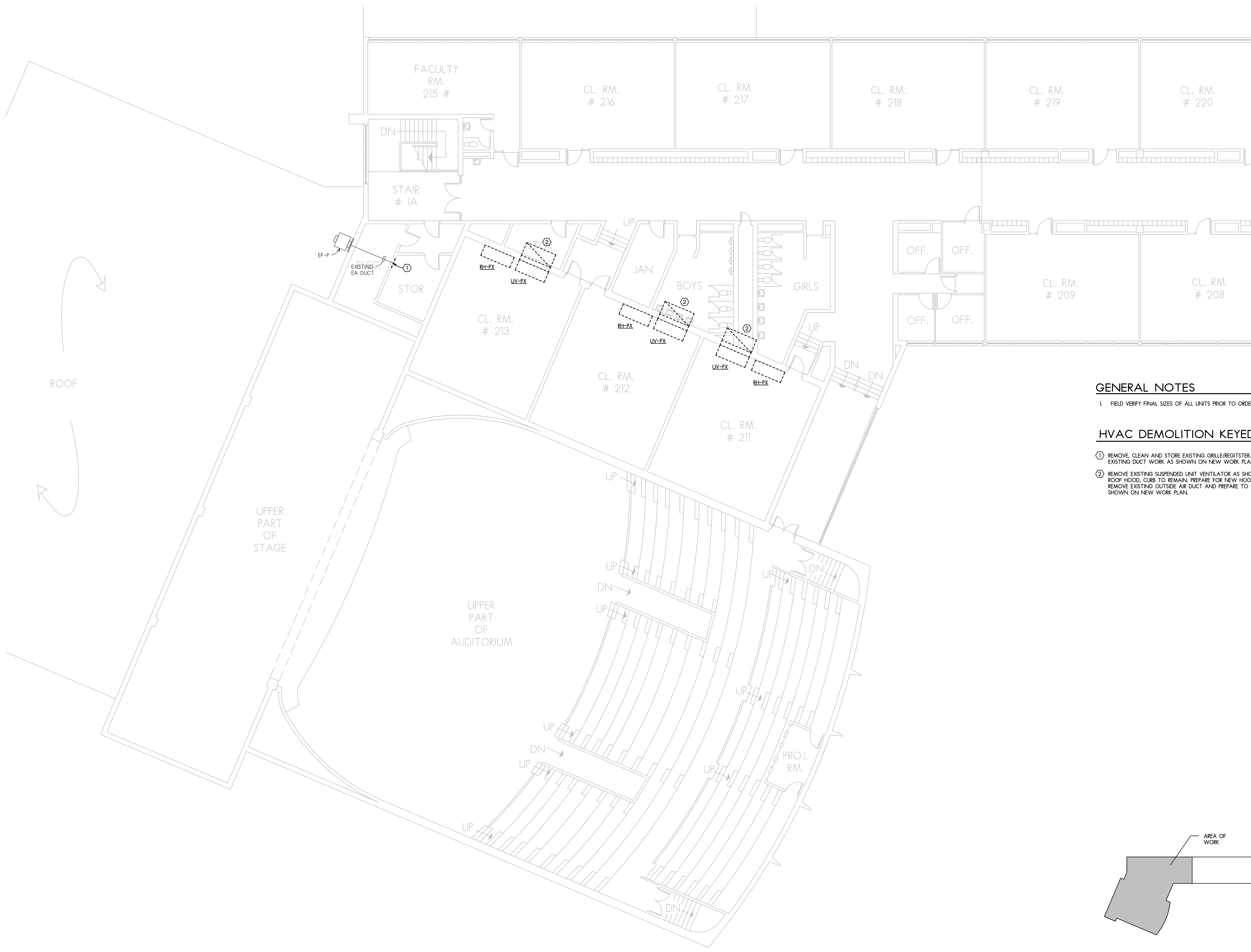
ISSUED FOR:	DATE
RE-BIDDING	01-27-18
DRAWN	APPROVED
PM	RAS

DATE:	11-13-2015
PROJECT NUMBER	25109
SHEET NUMBER	MD1.4

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HVAC, LIGHTING AND ADA RENOVATIONS – ROCKFORD IL
ROCKFORD PUBLIC SCHOOLS 205**



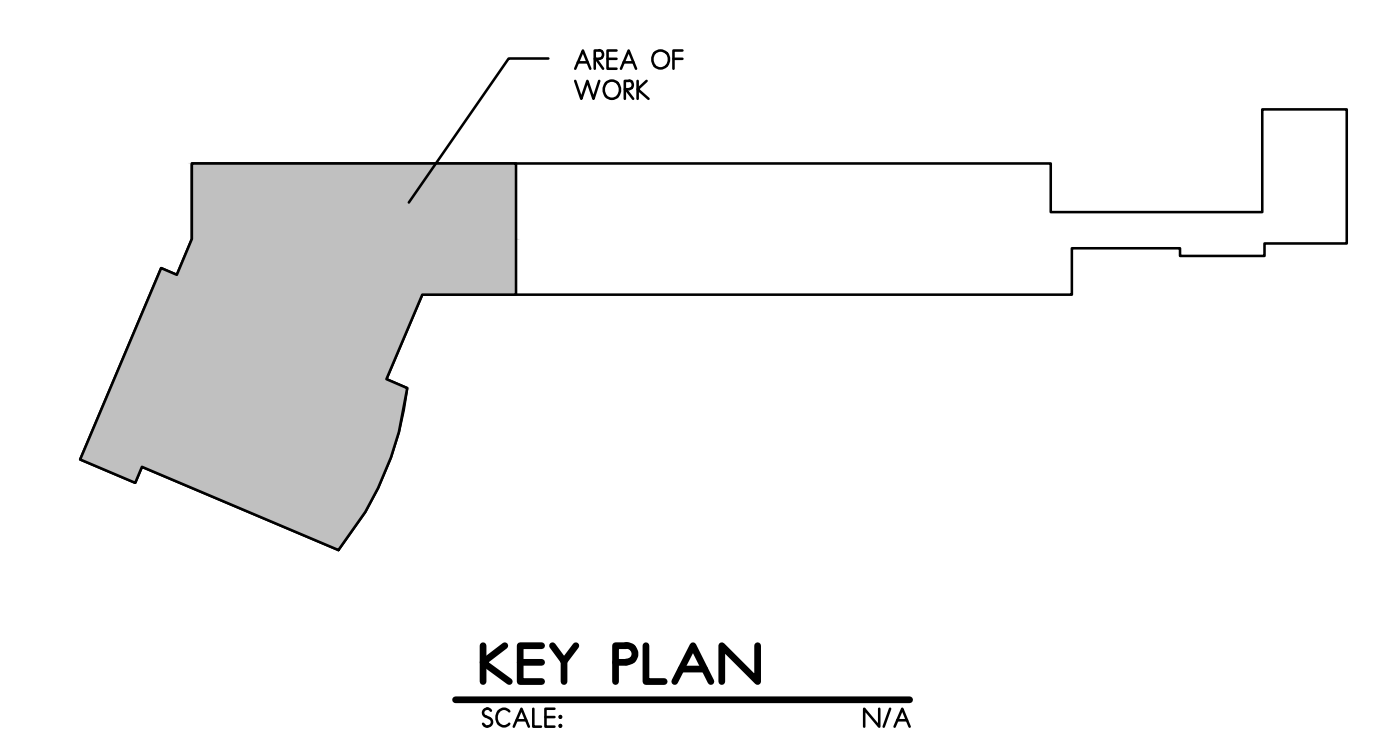


GENERAL NOTES

1. FIELD VERIFY FINAL SIZES OF ALL UNITS PRIOR TO ORDERING REPLACEMENTS.

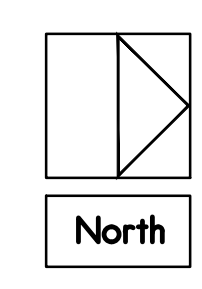
HVAC DEMOLITION KEYED NOTES

- ① REMOVE, CLEAN AND STORE EXISTING GRILLE/REGISTERS. PREPARE TO EXTEND EXISTING DUCT WORK AS SHOWN ON NEW WORK PLAN.
- ② REMOVE EXISTING SUSPENDED UNIT VENTILATOR AS SHOWN. REMOVE EXISTING ROOF HOOD, CURB TO REMAIN. PREPARE FOR NEW HOOD AND CURB ADAPTER. REMOVE EXISTING OUTSIDE AIR DUCT AND PREPARE TO INSTALL NEW UNIT AS SHOWN ON NEW WORK PLAN.



1 HVAC PARTIAL SECOND FLOOR PLAN
SCALE: 1/8" = 1'-0"

MECHANICAL DEMOLITION PLANS
SCALE: 1/8" = 1'-0"



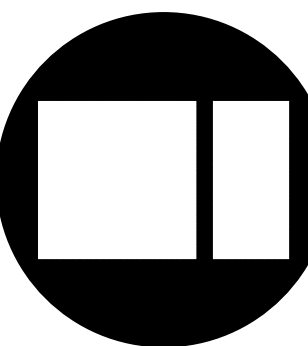


1. FIELD VERIFY FINAL SIZES OF ALL UNITS PRIOR TO ORDERING REPLACEMENTS

① REMOVE EXISTING FLOOR UNIT VENTILATOR AS SHOWN. REMOVE EXISTING WALL LOUVER AND ASSOCIATED INTAKE OA DUCT. PREPARE TO INSTALL NEW UNIT AS SHOWN ON NEW WORK PLAN.



SCALE:

$$1/8'' = 1'-0''$$


GENERAL INSULATION NOTES

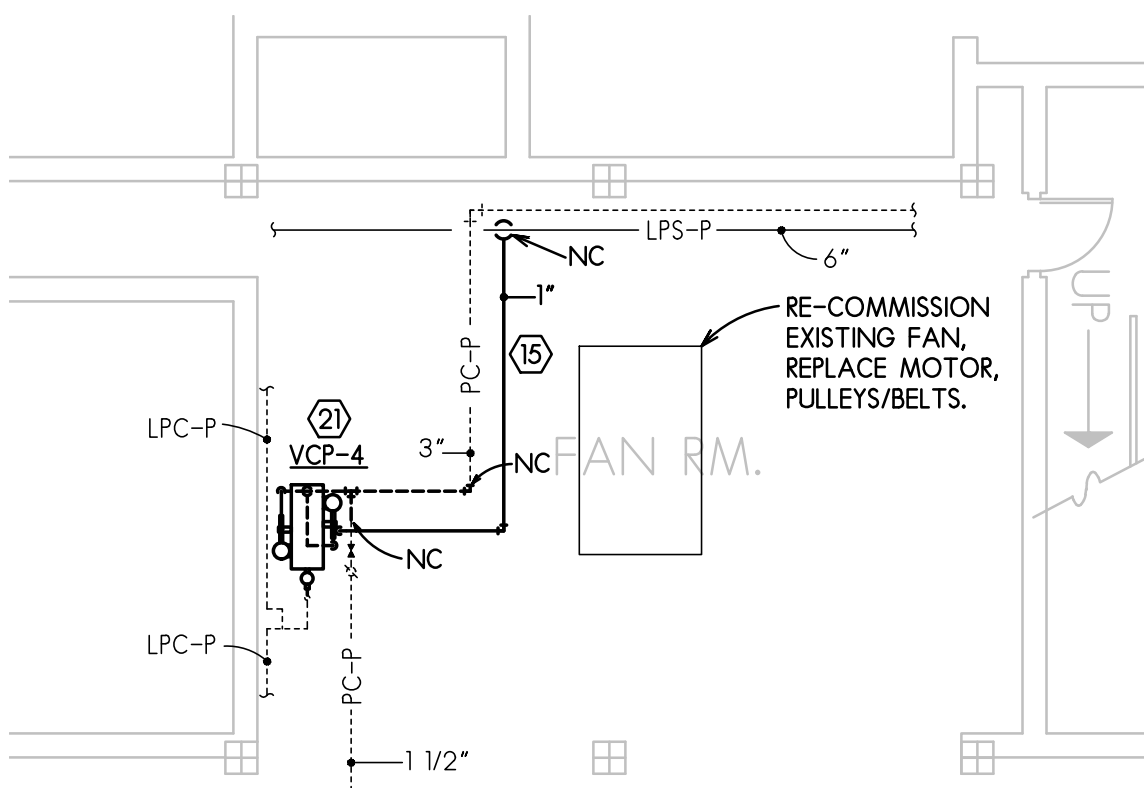
IN ADDITION TO INSULATION REQUIREMENT FOR ALL NEW PIPING AND EQUIPMENT, REMOVE ALL EXISTING INSULATION FROM ALL EXISTING PLUMBING & HVAC PIPING AND EQUIPMENT IN BOILER ROOM AFTER THE COMPLETION OF ASBESTOS ABATEMENT DONE BY THE DISTRICT. REPLACE INSULATION ON ALL EXISTING DOMESTIC COLD WATER, HOT WATER, HOT WATER RE-CIRCULATION PIPING, HVAC STEAM AND HEATING WATER PIPING, STORAGE TANKS, ETC... REFER TO SPECIFICATION FOR INSULATION MATERIAL AND THICKNESS. FIELD VERIFY ALL EXISTING EQUIPMENT & PIPING QUANTITIES.

NATURAL GAS PIPING NOTE

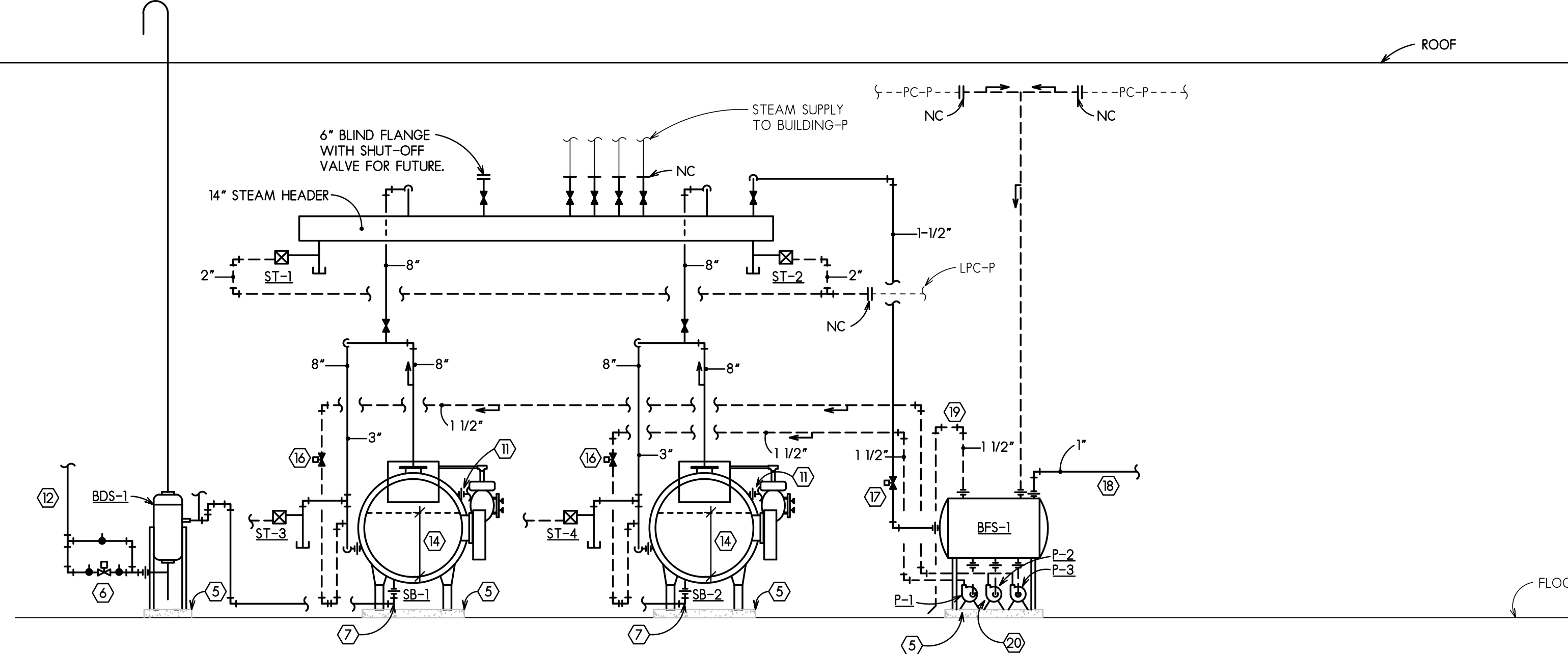
CONTRACTOR SHALL DISCONNECT EXISTING GAS SERVICE TO EXISTING STEAM BOILERS TO BE REMOVED. MODIFY & EXTEND PIPING FROM CURRENT LOCATION TO CONNECT WITH NEW BOILERS GAS CONNECTION. PROVIDE DIRT LEG, SHUTOFF VALVES, VENT PIPING AS REQUIRED. FIELD VERIFY ALL EXISTING CONDITIONS.

KEYED NOTES

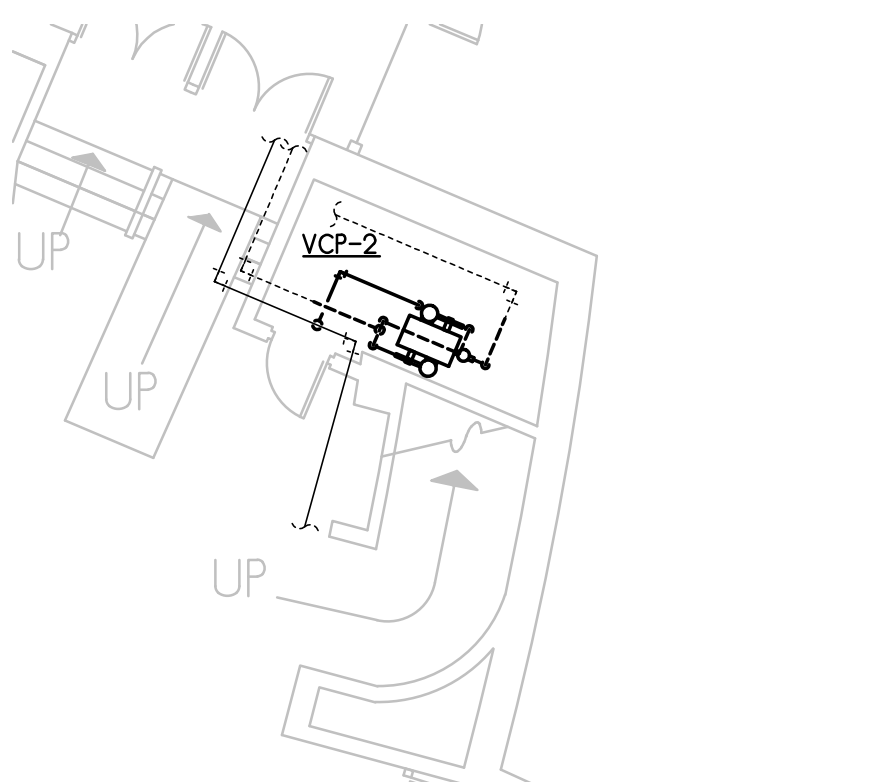
- OUTLINE OF SERVICE CLEARANCE, TUBE PULL OUT, AND DOOR SWING SHOWN FOR REFERENCE. COORDINATE EXACT BOILER LOCATION TO ALLOW FOR PROPER SERVICE CLEARANCE PER MFR RECOMMENDATION.
- OUT NEW OPENING IN EXISTING WALL TO INSTALL NEW LOUVER & MOD AS SHOWN. PROVIDE STRUCTURAL LINTEL AS REQUIRED. LOUVER SHALL BE RUSKIN ELF-375DX OR APPROVED EQUAL. INTERLOCK MOD OPERATION WITH PRE-1
- 6" BLIND FLANGE AND SHUT OFF GATE VALVE FOR FUTURE CONNECTION.
- 14" STEAM SUPPLY HEADER.
- 4" THICK CONCRETE HOUSE KEEPING PAD.
- TEMPERATURE REGULATOR AND SOLENOID VALVES.
- TERMINATE SLOW & QUICK OPEN BOTTOM BLOW DOWN PIPING AT BLOW DOWN SEPARATOR.
- 48"x48" COMBUSTION AIR DUCT DROP TO 24" ABOVE BOILER.
- 12" BOILER FLUE STACK THROUGH ROOF.
- INTERLOCK MOTOR OPERATED DAMPER WITH BOILER OPERATION.
- TERMINATE AUTOMATIC SURFACE BLOW DOWN SYSTEM (PROVIDED BY BOILER MFR.) AT BLOW DOWN SEPARATOR.
- EXTEND AND CONNECT TO NEAREST COLD WATER WITH RPZ.
- BOILER EMERGENCY SHUT OFF SWITCH LOCATED AND WIRED BY EXIT DOOR PER AHJ REQUIREMENT.
- BOILER WATER LEVEL (VERIFY WITH BOILER MFR)
- 1" EQUALIZING LINE FROM BOILER MAIN SUPPLY HEADER TO VCP WITH CHECK VALVE. REFER TO MFR. SPECIFIC INSTALLATION INSTRUCTIONS AND PIPING DIAGRAM.
- BOILER FEED WATER CONTROL VALVE PROVIDED BY THE FEED WATER SYSTEM SUPPLIER AND INTEGRATED WITH FEED WATER SYSTEM CONTROL PANEL. FIELD LOCATE EXACT LOCATION.
- 1 1/2" STEAM SUPPLY TO SPARGE TUBE HEATER.
- 1" SOFT MAKE UP WATER WITH AIR GAP. EXTEND AND CONNECT TO HVAC SOFT MAKE UP WATER. PROVIDE RPZ AS REQUIRED. FIELD VERIFY EXACT CONDITIONS.
- STEAM FLASH RELIEF PIPE UP 10' ABOVE FEED TANK AND DISCHARGE AS SHOWN.
- PIPE MIDDLE FEED PUMP AS A BACK-UP TO ANY OF THE OTHER TWO PUMPS. PROVIDE & INSTALL ALL REQUIRED VALVES, FITTINGS & CONTROL.
- INSTALL OWNER PROVIDED UNIT AS SHOWN. REFER TO EQUIPMENT SCHEDULE ON M3.1 FOR UNIT INFO.
- COORDINATE EXACT LOUVER OPENING IN FIELD WITH EXISTING GAS SERVICE AND NEW DOOR OPENING. PROVIDE ALL REQUIRED LABOR & MATERIAL TO RE-ROUTE ALL PIPING, CONDUITS, ETC... ON WALL.



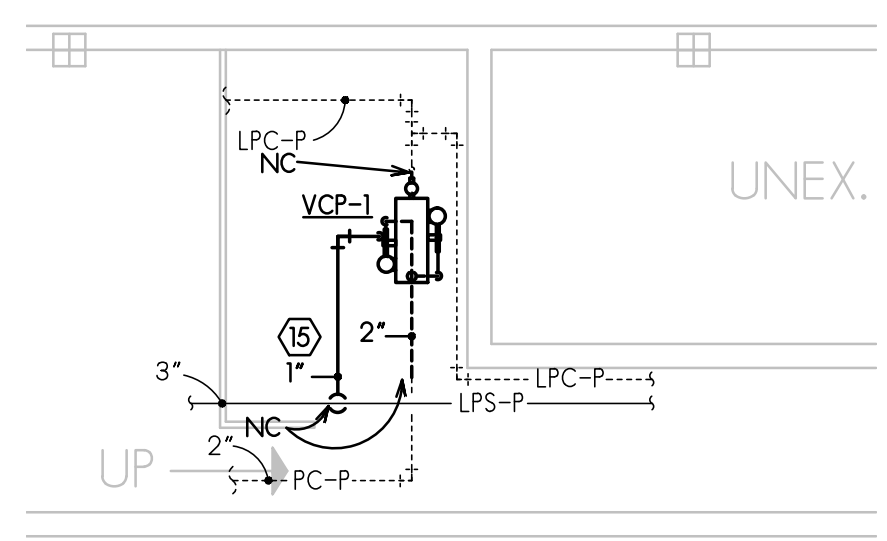
3 BASEMENT - FAN ROOM NEW WORK PLAN
SCALE: 1/8" = 1'-0"



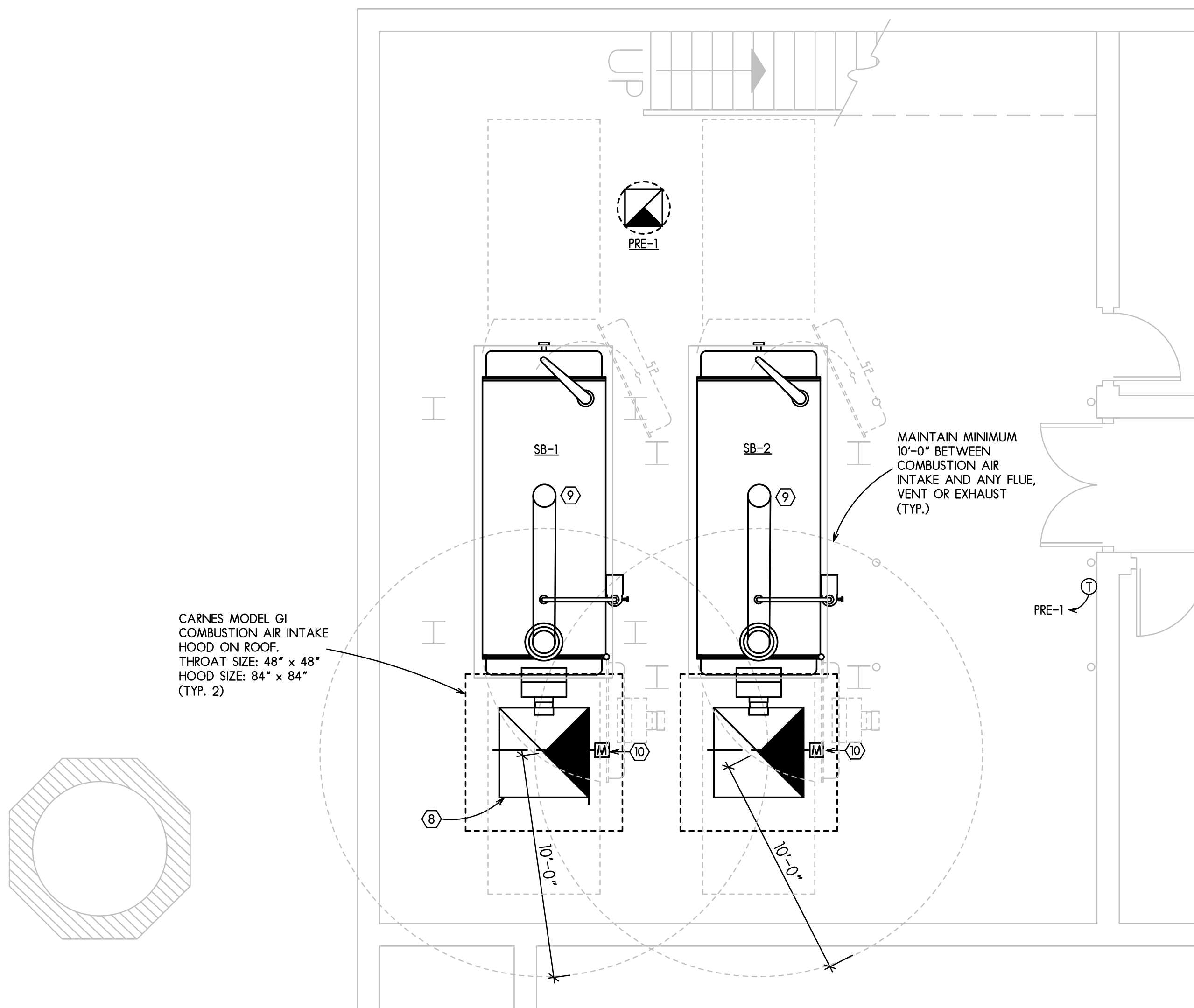
2 BOILER ROOM PIPING DIAGRAM
SCALE: N/A



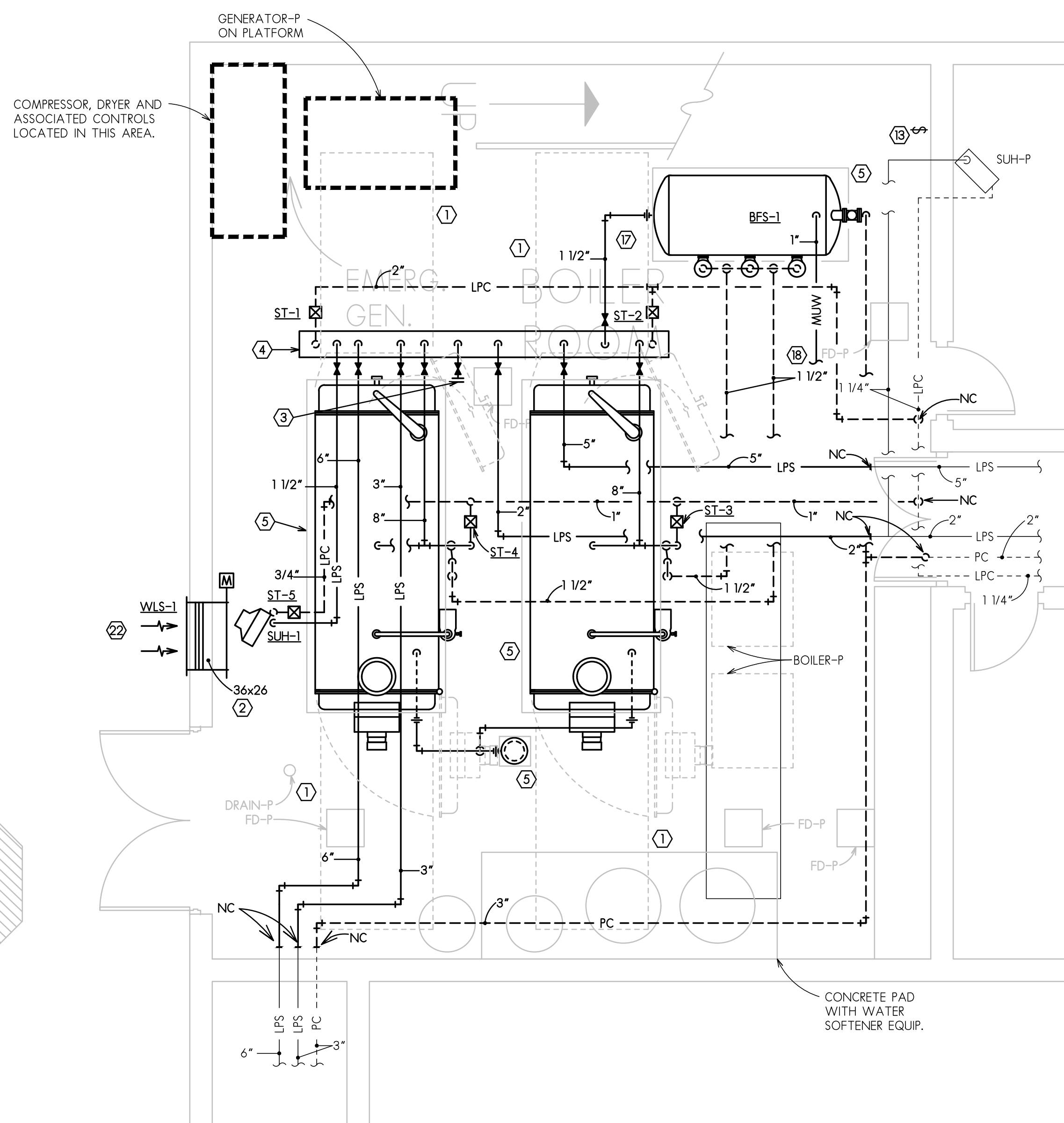
5 FIRST FLOOR - VACUUM/CONDENSATE PUMP AREA #2
SCALE: 1/8" = 1'-0"



6 BASEMENT - VACUUM/CONDENSATE PUMP AREA #3
SCALE: 1/8" = 1'-0"



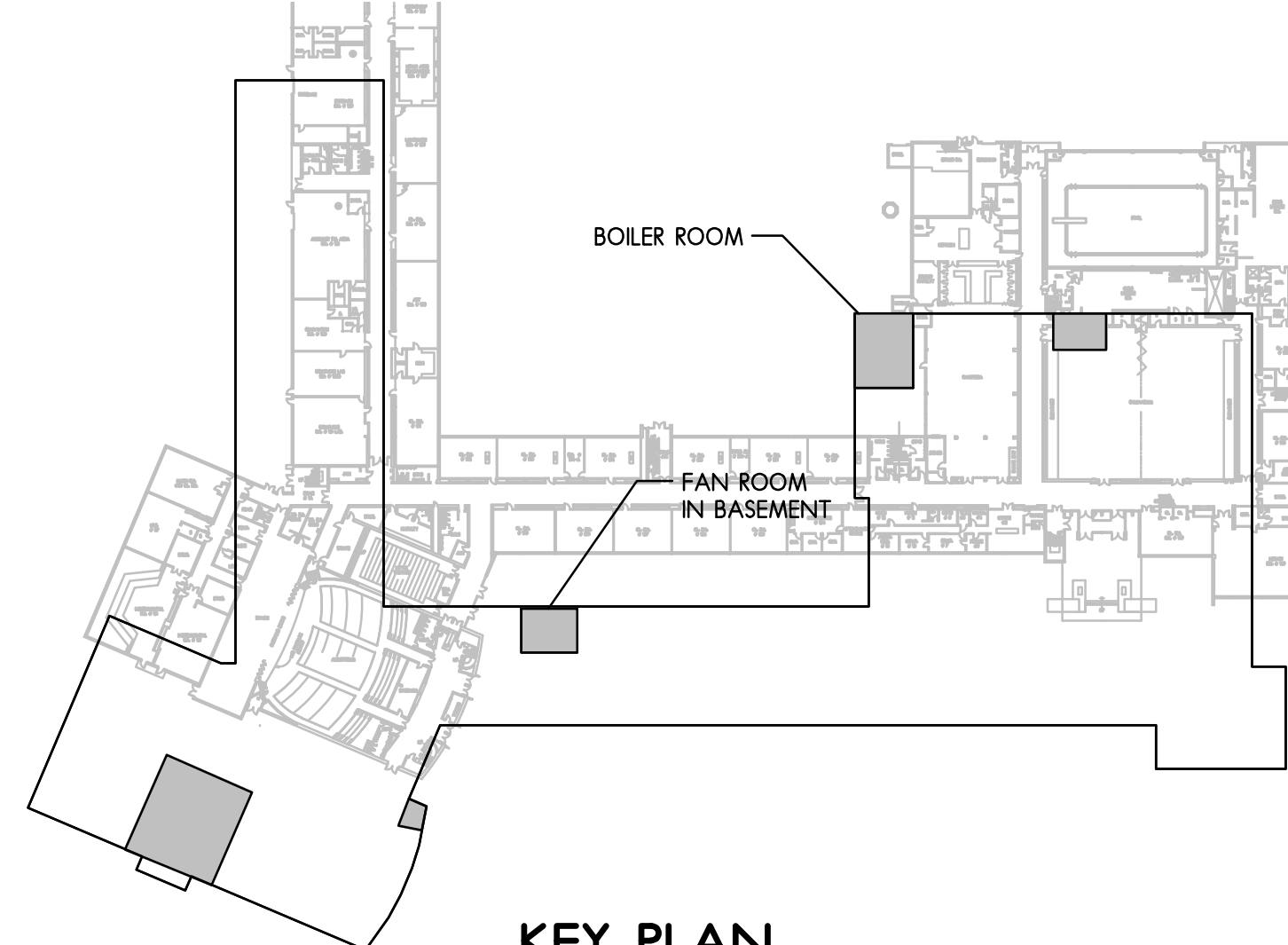
7 BOILER ROOM HVAC NEW WORK
SCALE: 1/4" = 1'-0"



1 BOILER ROOM PIPING NEW WORK
SCALE: 1/4" = 1'-0"



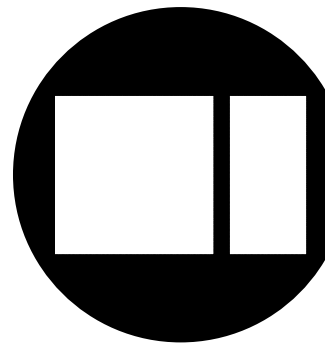
4 FIRST FLOOR - VACUUM/CONDENSATE PUMP AREA #1
SCALE: 1/8" = 1'-0"

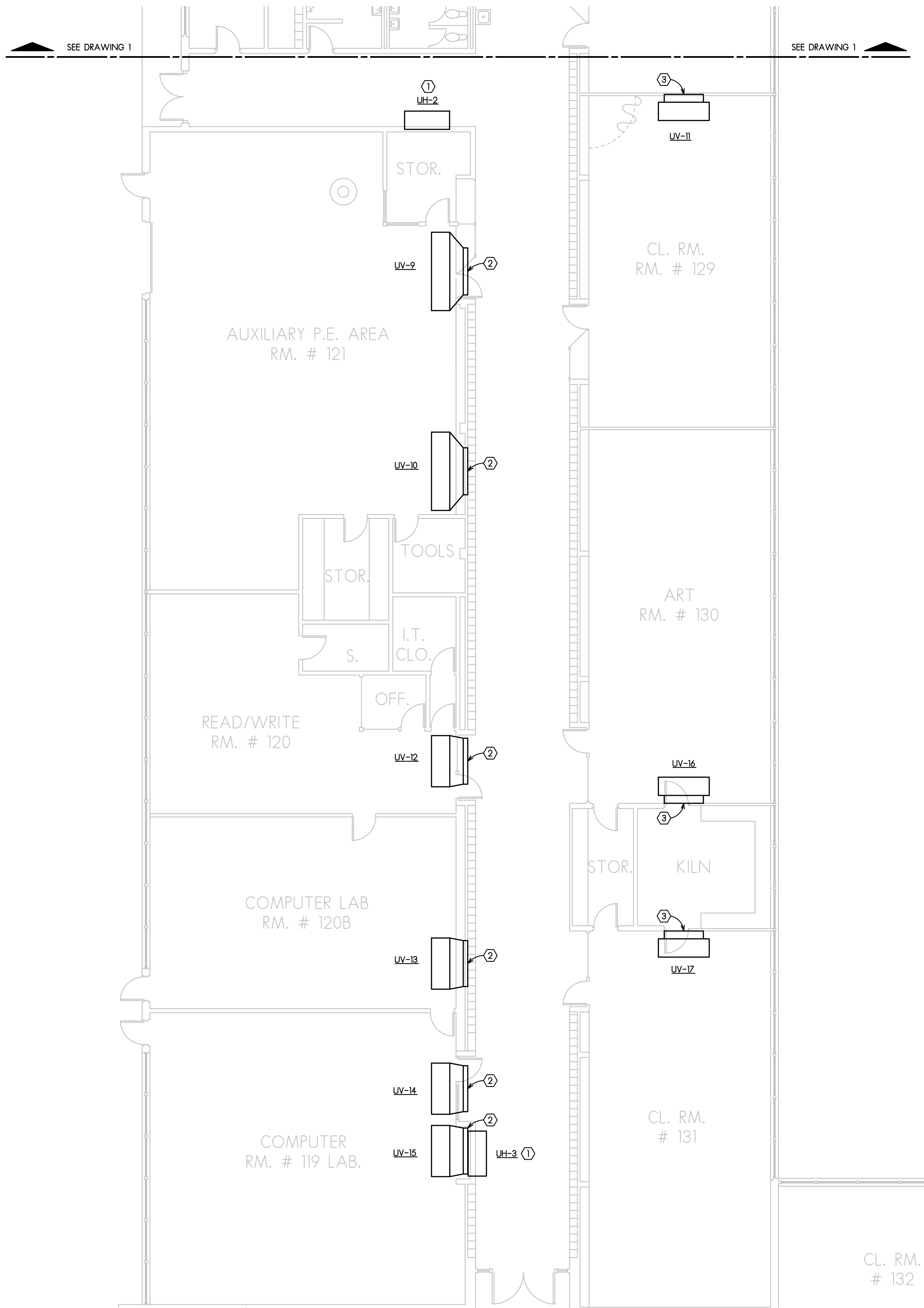


KEY PLAN
SCALE: N/A

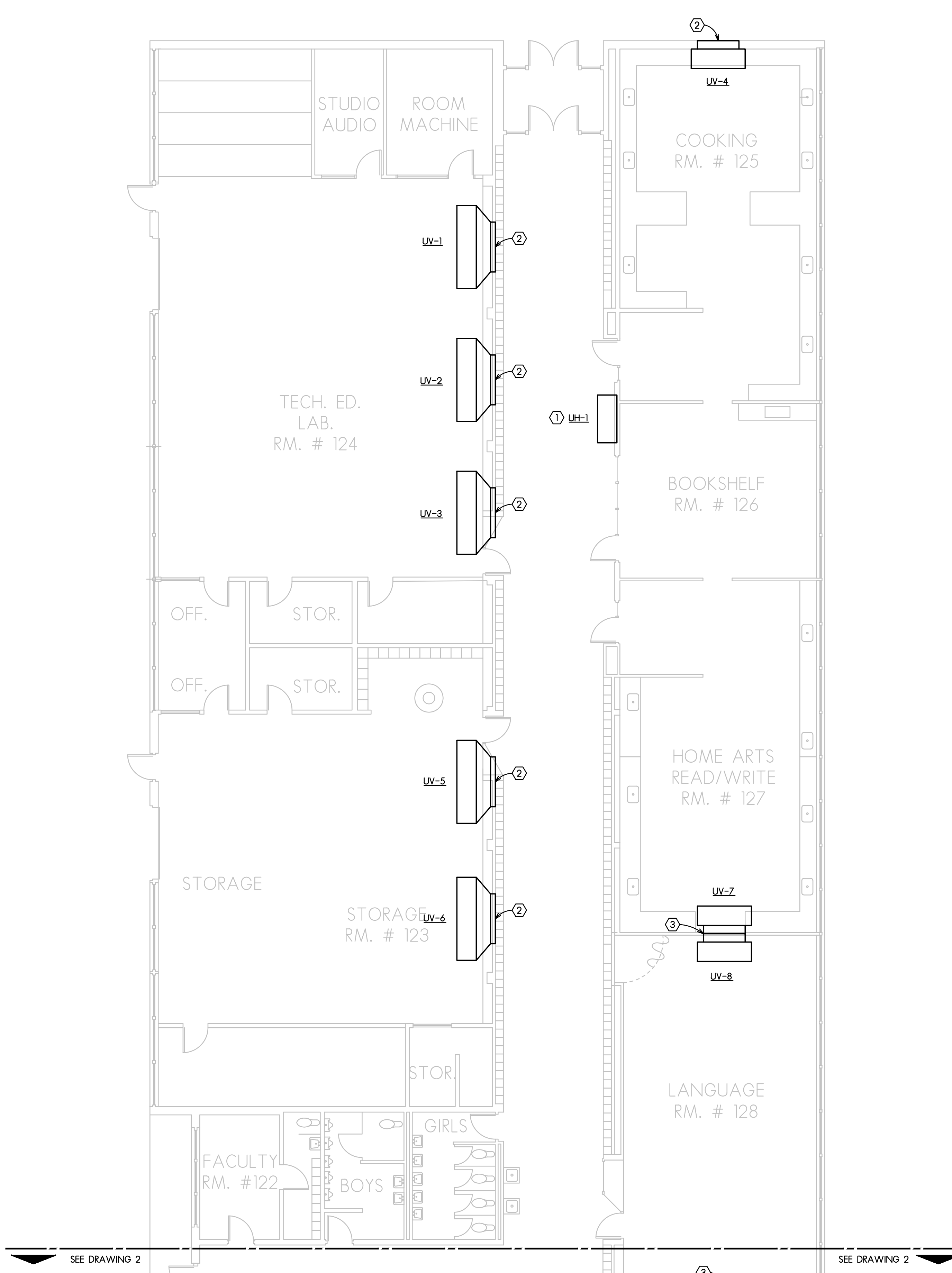
MECHANICAL NEW WORK PLANS

SCALE: 1/4" = 1'-0"





2 HVAC PARTIAL FIRST FLOOR PLAN
SCALE: 1/8" = 1'-0"



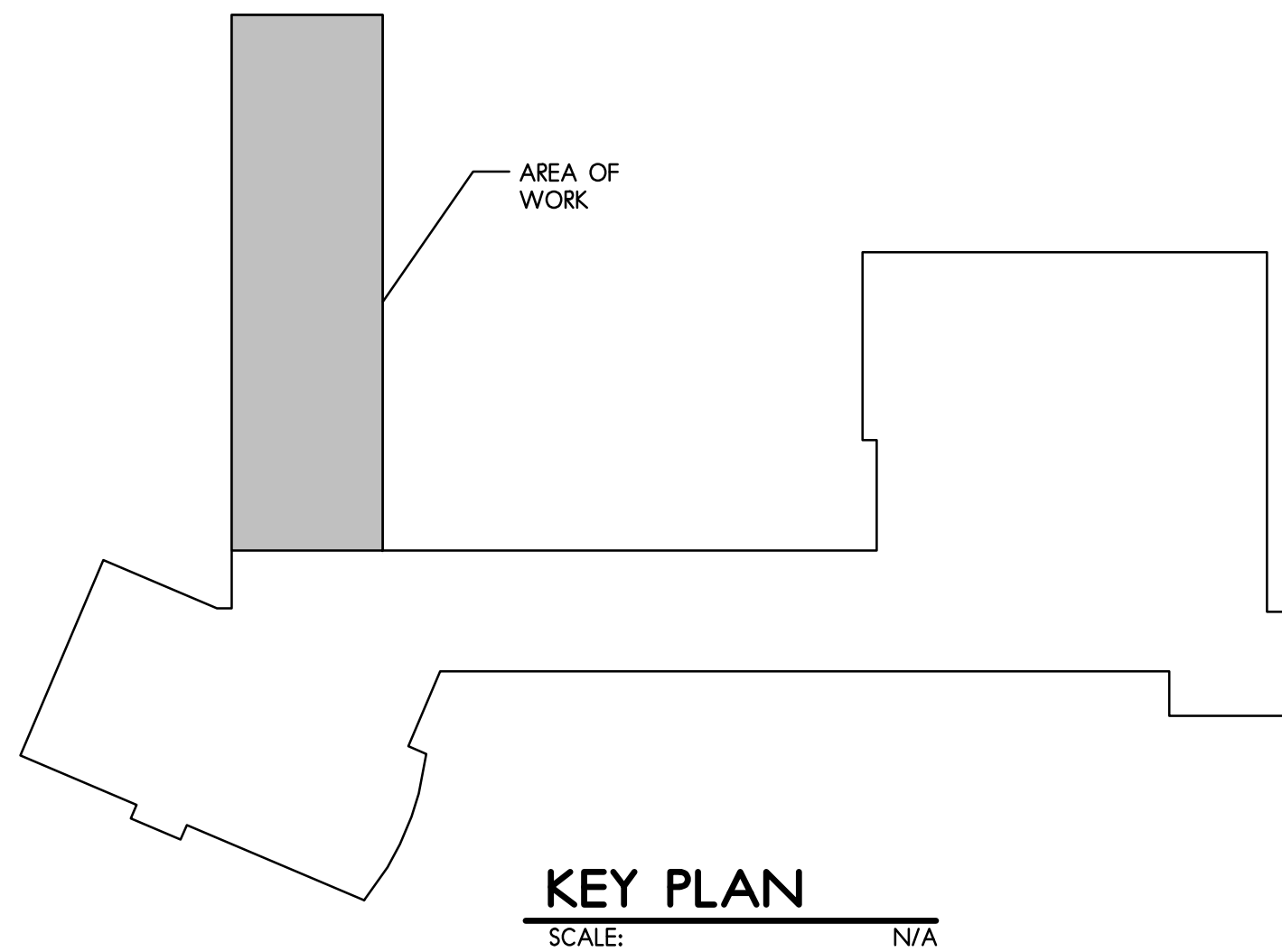
1 HVAC PARTIAL FIRST FLOOR PLAN
SCALE: 1/8" = 1'-0"

GENERAL NOTES

1. FIELD VERIFY FINAL SIZES OF ALL UNITS PRIOR TO ORDERING REPLACEMENTS.

HVAC KEYED NOTES

- 1 MODIFY EXISTING WALL OPENING AS REQUIRED TO INSTALL NEW UNIT HEATER. PROVIDE TRIM AND PAINT AS REQUIRED TO MATCH EXISTING ADJACENT SURFACE.
- 2 CONNECT NEW OUTSIDE AIR DUCT FROM UNIT TO EXISTING LOUVER.
- 3 REPLACE EXISTING ROOF HOOD WITH NEW TO MATCH EXISTING SIZE AND TYPE. PROVIDE CURB ADAPTER AS NEEDED. INSTALL NEW 24x12 OA DUCT, OR EQUIVALENT AREA, FROM NEW HOOD TO OA INTAKE OPENING AT NEW UNIT. PROVIDE TRANSITION FITTINGS AS REQUIRED.



KEY PLAN
SCALE: N/A

MECHANICAL NEW WORK PLANS

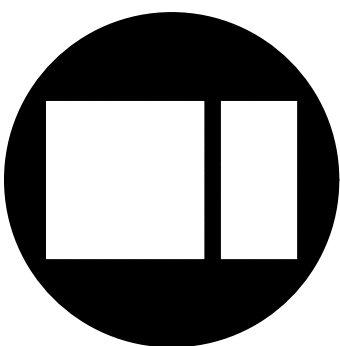
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DATE: 11-13-2015	PROJECT NUMBER	SHEET NUMBER
25109	M1.2	

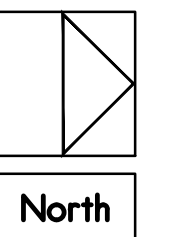
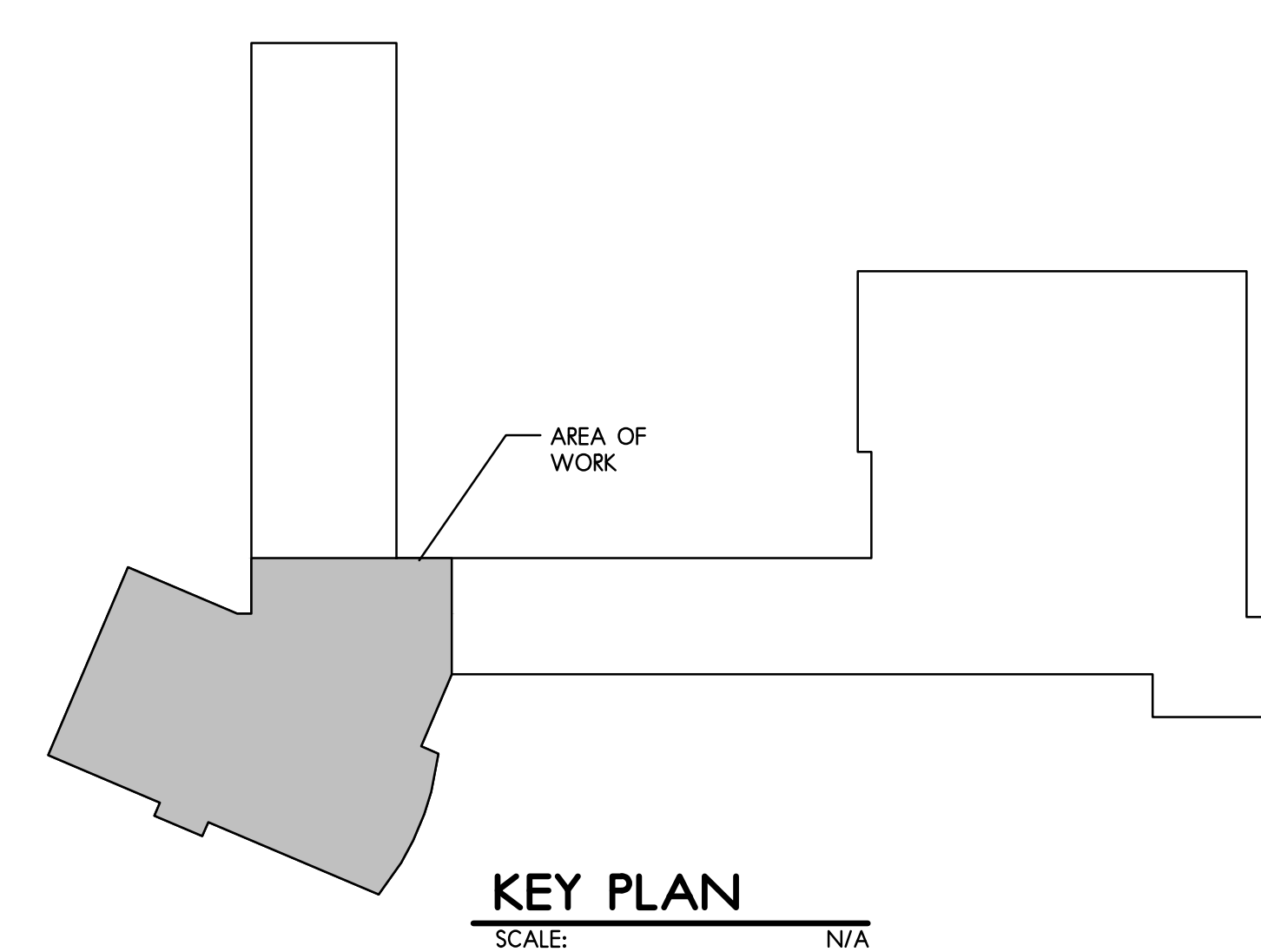
ISSUED FOR: DE-BIDDING	DATE: 01-27-18
DRAWN: PM	APPROVED: RAS

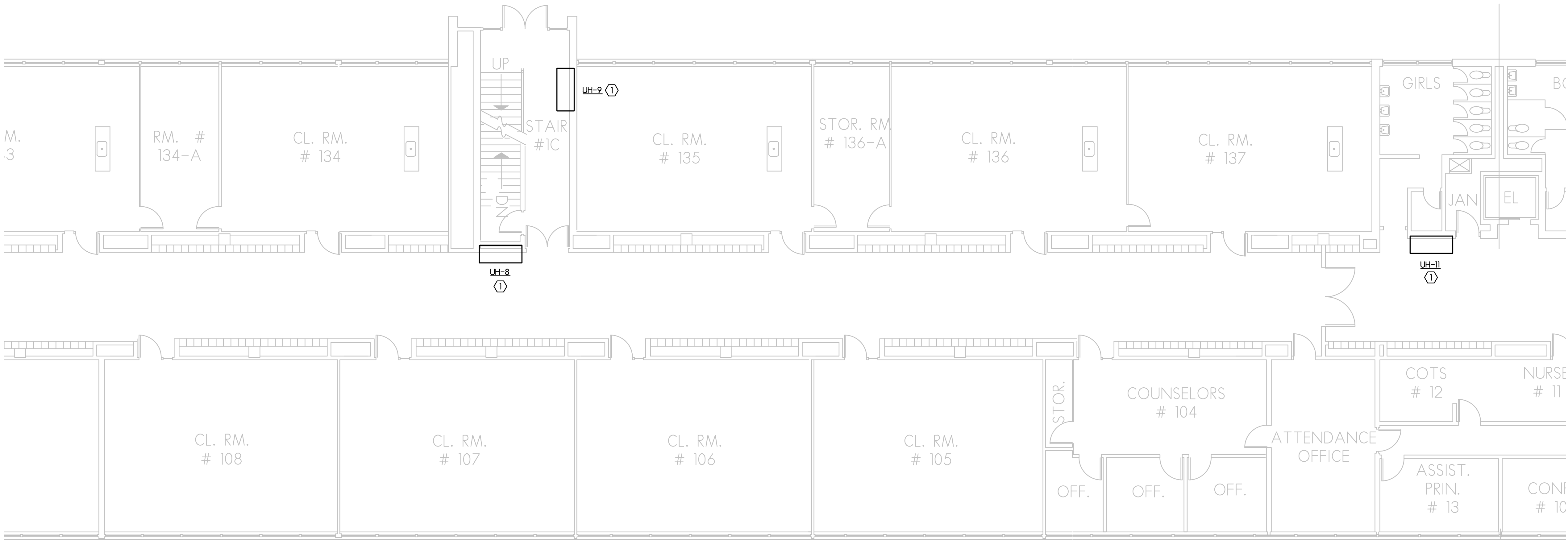
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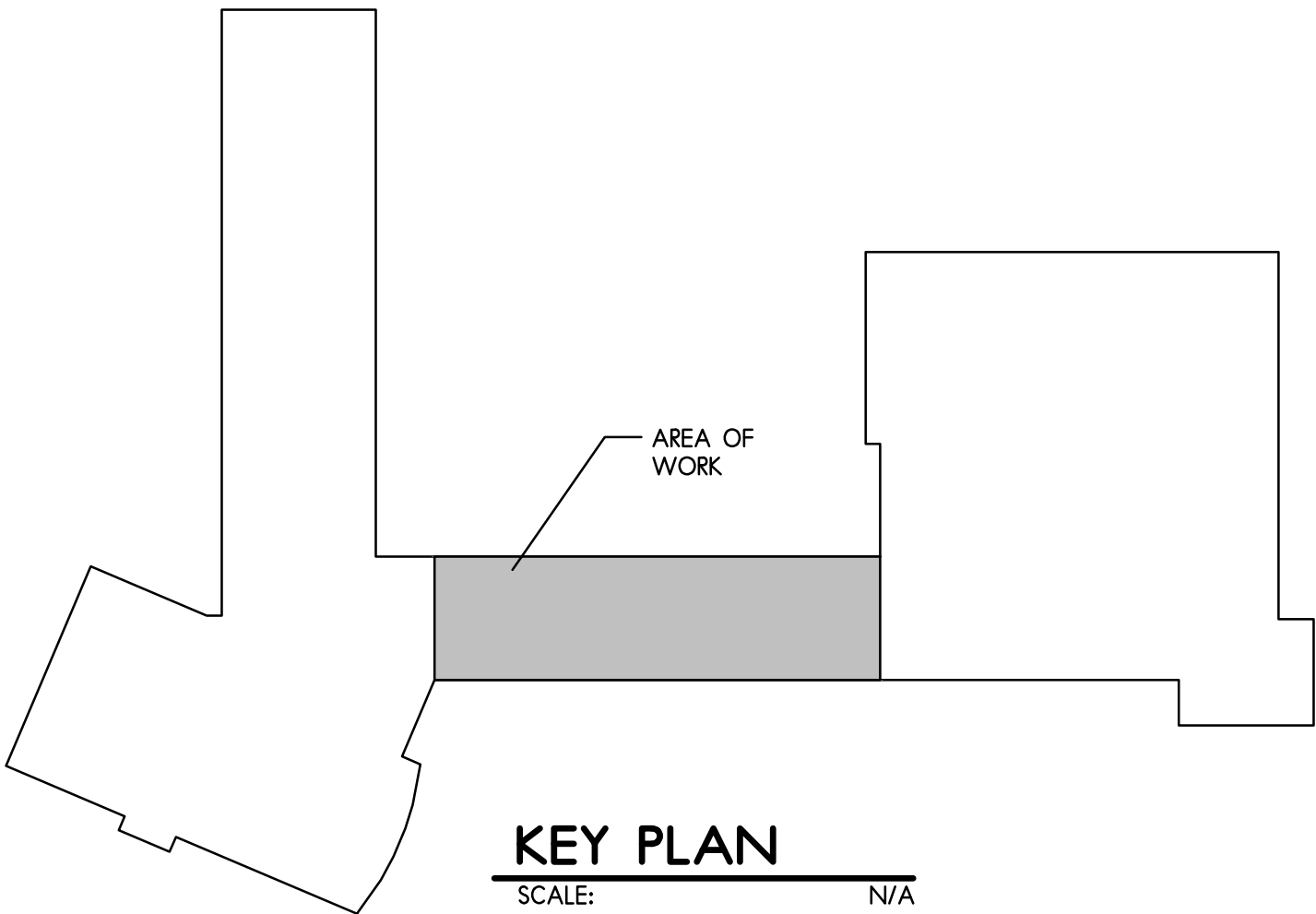
① HVAC PARTIAL FIRST FLOOR PLAN
SCALE: 1/8" = 1'-0"

GENERAL NOTES

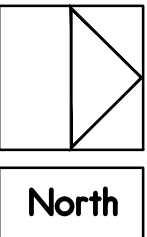
1. FIELD VERIFY FINAL SIZES OF ALL UNITS PRIOR TO ORDERING REPLACEMENTS.

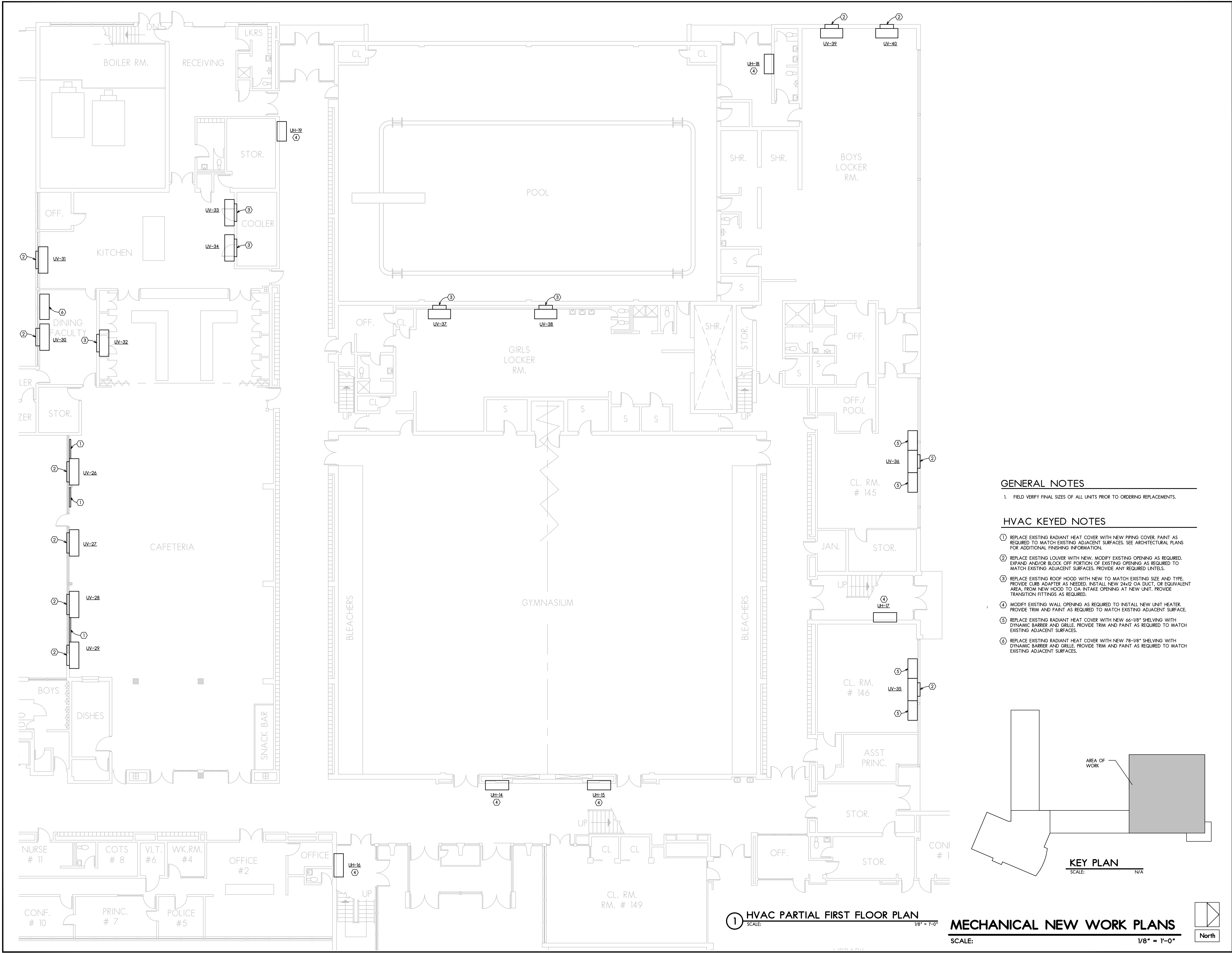
HVAC KEYED NOTES

- ① MODIFY EXISTING WALL OPENING AS REQUIRED TO INSTALL NEW UNIT HEATER.
PROVIDE TRIM AND PAINT AS REQUIRED TO MATCH EXISTING ADJACENT SURFACE.



MECHANICAL NEW WORK PLANS
SCALE: 1/8" = 1'-0"





GENERAL NOTES

1. FIELD VERIFY FINAL SIZES OF ALL UNITS PRIOR TO ORDERING REPLACEMENTS.

HVAC KEYED NOTES

- ① REPLACE EXISTING RADIANT HEAT COVER WITH NEW PIPING COVER. PAINT AS REQUIRED TO MATCH EXISTING ADJACENT SURFACES. SEE ARCHITECTURAL PLANS FOR ADDITIONAL FINISHING INFORMATION.
- ② REPLACE EXISTING LOUVER WITH NEW. MODIFY EXISTING OPENING AS REQUIRED. EXPAND AND/OR BLOCK OFF PORTION OF EXISTING OPENING AS REQUIRED TO MATCH EXISTING ADJACENT SURFACES. PROVIDE ANY REQUIRED LINTELS.
- ③ REPLACE EXISTING ROOF HOOD WITH NEW TO MATCH EXISTING SIZE AND TYPE. PROVIDE CURB ADAPTER AS NEEDED. INSTALL NEW 24x12 OA DUCT, OR EQUIVALENT AREA, FROM NEW HOOD TO OA INTAKE OPENING AT NEW UNIT. PROVIDE TRANSITION FITTINGS AS REQUIRED.
- ④ MODIFY EXISTING WALL OPENING AS REQUIRED TO INSTALL NEW UNIT HEATER. PROVIDE TRIM AND PAINT AS REQUIRED TO MATCH EXISTING ADJACENT SURFACE.
- ⑤ REPLACE EXISTING RADIANT HEAT COVER WITH NEW 66-1/8" SHELVEING WITH DYNAMIC BARRIER AND GRILLE. PROVIDE TRIM AND PAINT AS REQUIRED TO MATCH EXISTING ADJACENT SURFACES.
- ⑥ REPLACE EXISTING RADIANT HEAT COVER WITH NEW 78-1/8" SHELVEING WITH DYNAMIC BARRIER AND GRILLE. PROVIDE TRIM AND PAINT AS REQUIRED TO MATCH EXISTING ADJACENT SURFACES.

AREA OF WORK

KEY PLAN

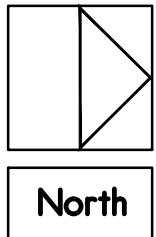
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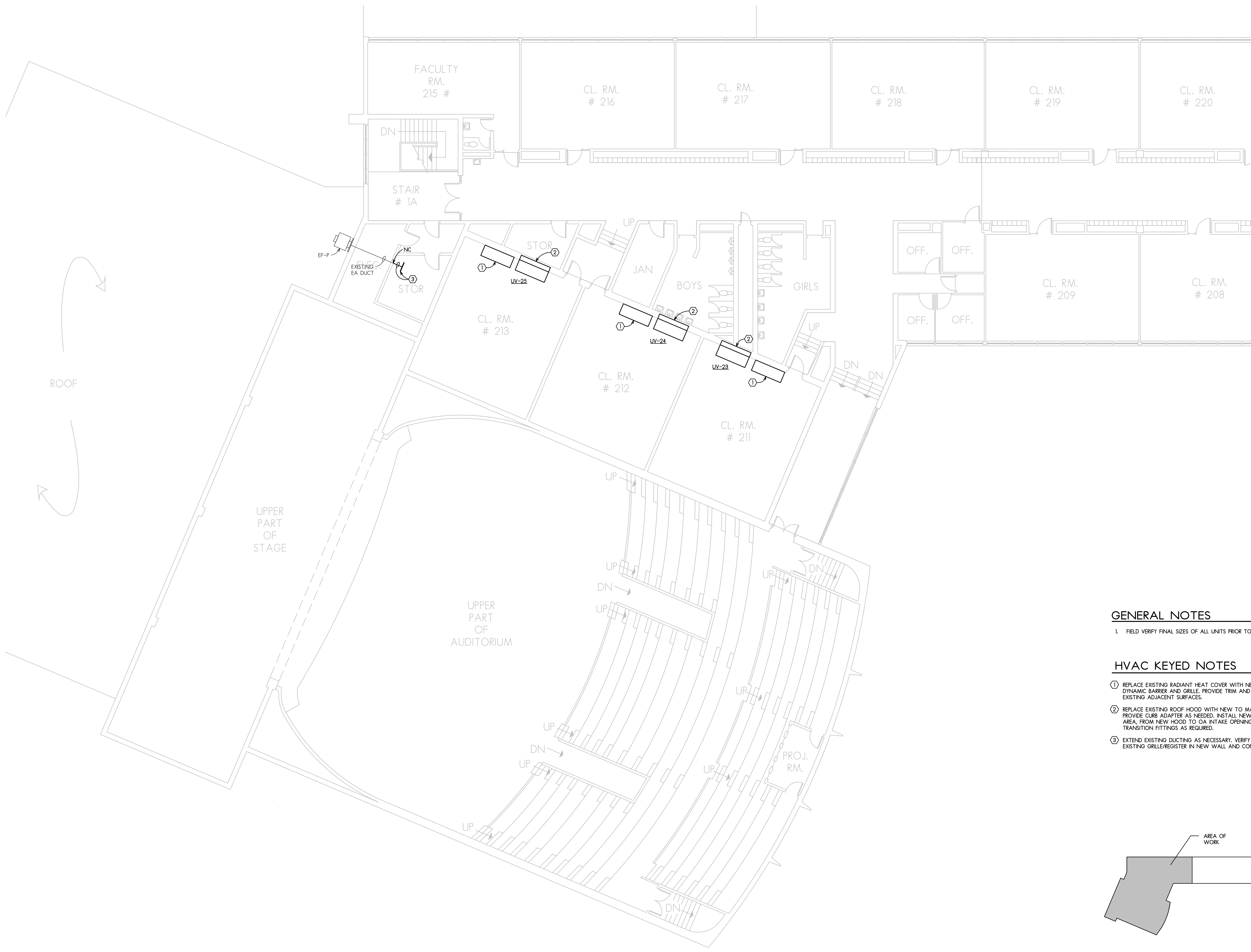
① HVAC PARTIAL FIRST FLOOR PLAN

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

MECHANICAL NEW WORK PLANS

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





GENERAL NOTES

- 1. FIELD VERIFY FINAL SIZES OF ALL UNITS PRIOR TO ORDERING REPLACEMENTS.

HVAC KEYED NOTES

- ① REPLACE EXISTING RADIANT HEAT COVER WITH NEW 78-118" SHELIVING WITH DYNAMIC BARRIER AND GRILLE. PROVIDE TRIM AND PAINT AS REQUIRED TO MATCH EXISTING ADJACENT SURFACES.
- ② REPLACE EXISTING ROOF HOOD WITH NEW TO MATCH EXISTING SIZE AND TYPE. PROVIDE CURB ADAPTER AS NEEDED. INSTALL NEW 24x12 OA DUCT, OR EQUIVALENT AREA, FROM NEW HOOD TO OA INTAKE OPENING AT NEW UNIT. PROVIDE TRANSITION FITTINGS AS REQUIRED.
- ③ EXTEND EXISTING DUCTING AS NECESSARY. VERIFY DUCT SIZE IN FIELD. REINSTALL EXISTING GRILLE/REGISTER IN NEW WALL AND CONNECT TO EXTENDED DUCTWORK.

AREA OF WORK

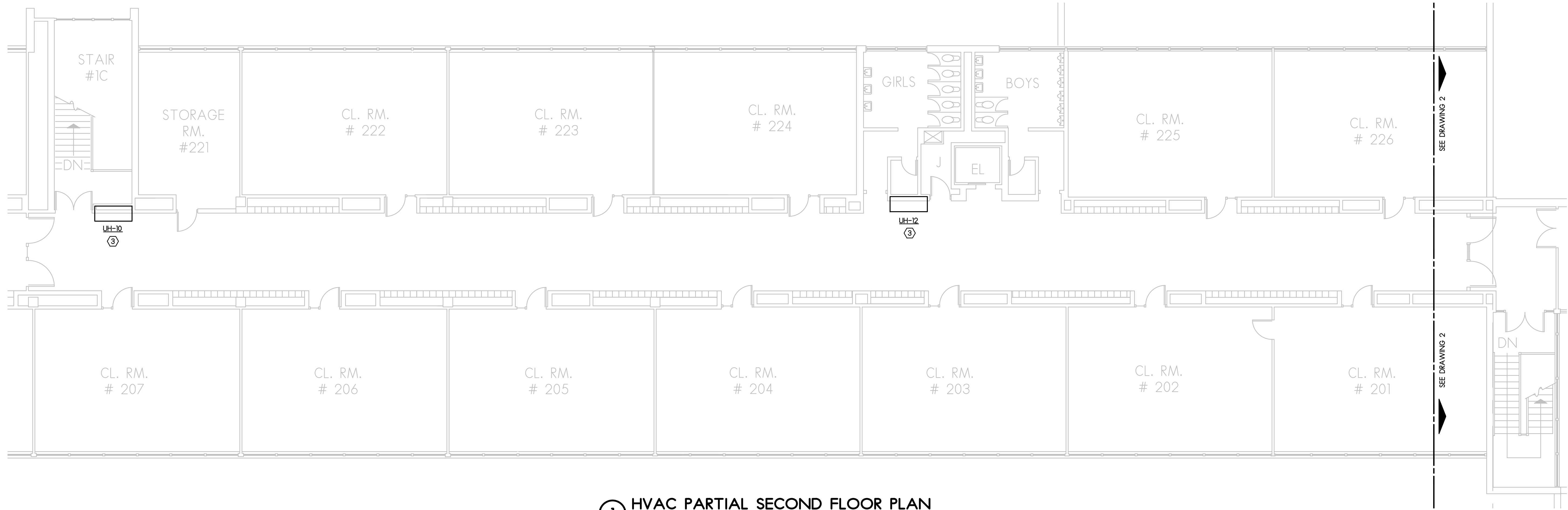
KEY PLAN
SCALE: N/A

DATE: 11-13-2015
PROJECT NUMBER: 25109
SHEET NUMBER: M1.6

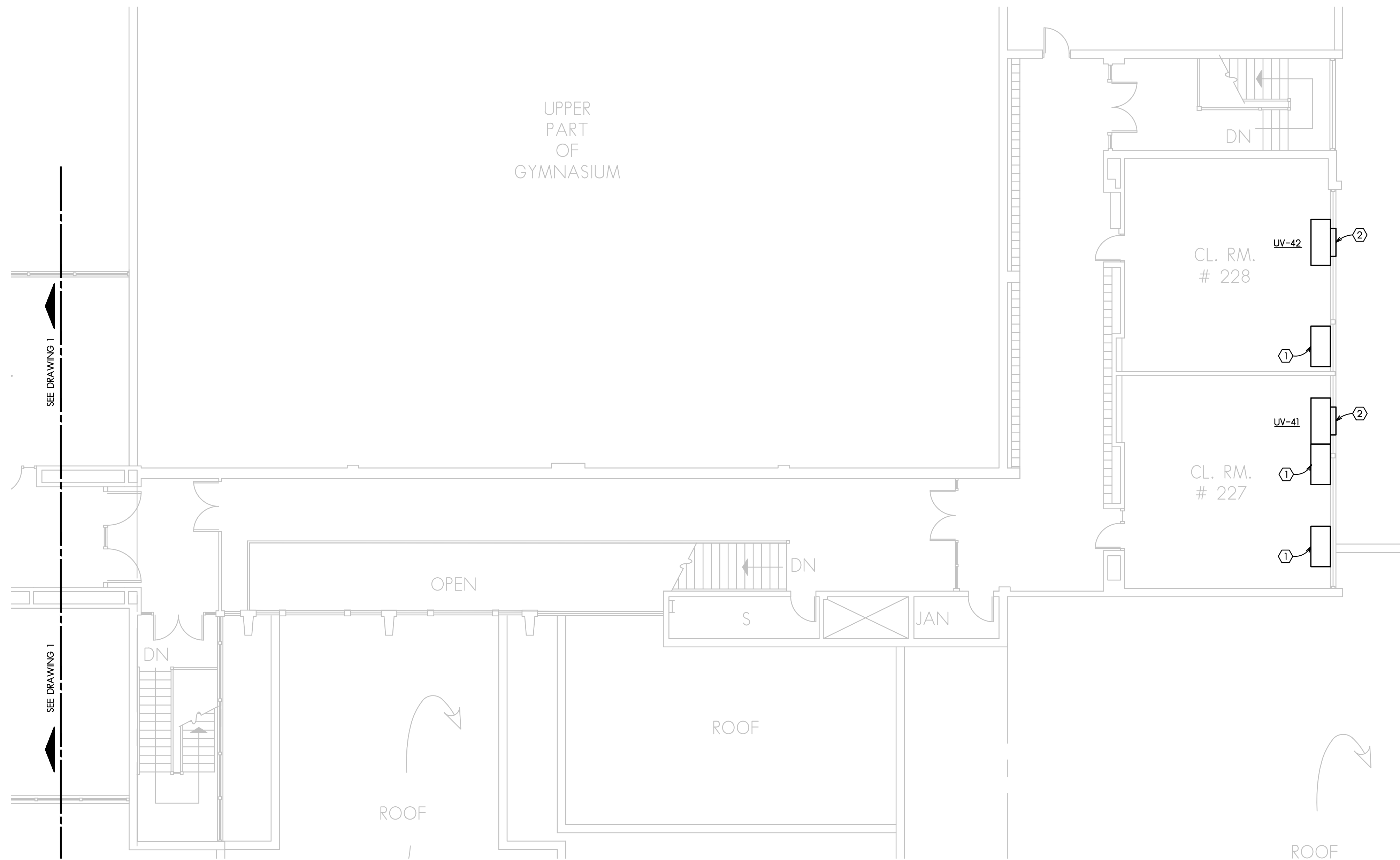
ISSUED FOR: BIDDING
DATE: 01-27-18
DRAWN: PM
APPROVED: RAS

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1 HVAC PARTIAL SECOND FLOOR PLAN
SCALE: 1/8" = 1'-0"



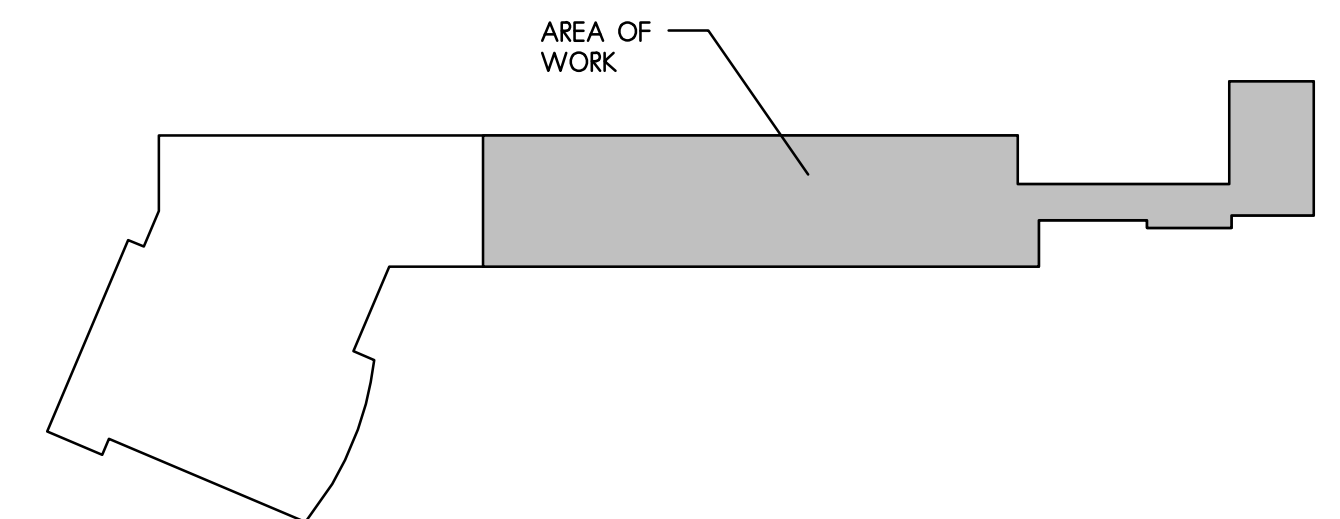
2 HVAC PARTIAL SECOND FLOOR PLAN
SCALE: 1/8" = 1'-0"

GENERAL NOTES

1. FIELD VERIFY FINAL SIZES OF ALL UNITS PRIOR TO ORDERING REPLACEMENTS.

HVAC KEYED NOTES

1. REPLACE EXISTING RADIANT HEAT COVER WITH NEW 66-1/8" SHELVING WITH DYNAMIC BARRIER AND GRILLE. PROVIDE TRIM AND PAINT AS REQUIRED TO MATCH EXISTING ADJACENT SURFACES.
2. REPLACE EXISTING LOUVER WITH NEW. MODIFY EXISTING OPENING AS REQUIRED. EXPAND AND/OR BLOCK OFF PORTION OF EXISTING OPENING AS REQUIRED TO MATCH EXISTING ADJACENT SURFACES. PROVIDE ANY REQUIRED LINTELS.
3. MODIFY EXISTING WALL OPENING AS REQUIRED TO INSTALL NEW UNIT HEATER. PROVIDE TRIM AND PAINT AS REQUIRED TO MATCH EXISTING ADJACENT SURFACE.

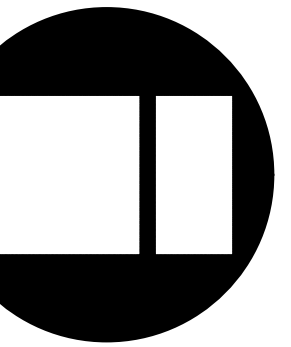
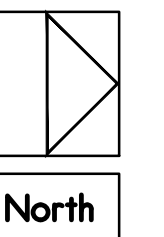


KEY PLAN

SCALE: N/A

MECHANICAL NEW WORK PLANS

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



HVAC PIPING LEGEND

—— LPS ———	LOW PRESSURE STEAM
----- LPC -----	LOW PRESSURE CONDENSATE
----- PC -----	PUMP CONDENSATE

PIPING SYMBOLS

	DIRT POCKET
	SPOOL PIECE
	Y-TYPE STRAINER
	Y-TYPE STRAINER WITH BALL DRAIN VALVE
	Y-TYPE STRAINER WITH CAPPED DRAIN VALVE
	EXPANSION JOINT
	FLEXIBLE CONNECTION
	PIPE ANCHOR
	PIPE GUIDE
	UNION
	BLIND FLANGE
	CAPPED END
	HOSE END DRAIN (TO BE CAPPED)
	THERMOMETER OR TEMPERATURE GAUGE
	PRESSURE AND TEMPERATURE TEST PLUG
	PRESSURE GAUGE ASSEMBLY WITH NEEDLE VALVE
	MANUAL AIR VENT VALVE
	AUTO AIR VENT VALVE
	(PIPE DISCHARGE TO DRAIN)
	DIRECTION OF FLOW
	PITCH DOWN IN DIRECTION OF ARROW
	TEE CONNECTION, SIDE
	TEE CONNECTION, BOTTOM
	TEE CONNECTION, TOP
	OFFSET
	ELBOW TURNED UP OR TEE UP & DOWN
	ELBOW TURNED DOWN
	VALVE IN VERTICAL RISER
	CONCENTRIC REDUCER
	ECCENTRIC REDUCER
	PUMP (IN SCHEMATIC)

VALVE SYMBOLS

	ANGLE VALVE
	BALL VALVE
	BUTTERFLY VALVE
	CIRCUIT SETTER
	GATE VALVE
	GLOBE VALVE
	HOSE END BALL DRAIN VALVE
	HOSE END GATE DRAIN VALVE
	NEEDLE VALVE
	PLUG VALVE OR COCK
	PRESSURE REDUCING VALVE
	PRESSURE REDUCING STATION
	RELIEF VALVE
	SOLENOID VALVE
	SILENT CHECK VALVE
	SWING CHECK VALVE
	THREE WAY CONTROL VALVE
	TWO WAY CONTROL VALVE
	VERTICAL LIFT CHECK VALVE

DUCT AND EQUIPMENT SYMBOLS

	ROUND DUCT ELBOW TURNED DOWN
	RECTANGULAR ELBOW TURNED DOWN, SUPPLY OR OUTSIDE AIR DUCT
	RECTANGULAR ELBOW TURNED DOWN, EXHAUST OR RETURN AIR DUCT
	WALL LOUVER & SCREEN (BOTTOM OF DUCT TO DRAIN TOWARD LOUVER)
	BACKDRAFT DAMPER
	PROVIDE CEILING AND DUCT ACCESS
	RECTANGULAR METAL DUCT:
	1) FIRST DIMENSION IS SIDE SHOWN
	2) ALL DUCTWORK SIZES SHOWN ARE NET FREE INSIDE DIMENSIONS
	3) GALVANIZED SHEET METAL UNLESS NOTED
	ROUND DUCT (SEE NOTES ABOVE)
	ROUND DUCT ELBOW TURNED UP
	RECTANGULAR ELBOW TURNED UP, SUPPLY OR OUTSIDE AIR DUCT
	RECTANGULAR ELBOW TURNED UP, EXHAUST OR RETURN AIR DUCT
	MOTOR OPERATED DAMPER
	PROVIDE CEILING & DUCT ACCESS

CONTROL SYMBOLS

ARROWS INDICATE THE UNIT BEING CONTROLLED	
	DUCT SMOKE DETECTOR, (SEE ELECTRICAL DWG)
	THERMOSTAT
	SENSOR
	HUMIDISTAT
	ELECTRIC ACTUATOR (MOTOR)
	SMOKE DAMPER ACTUATOR
	CO MONITOR
	FREON MONITOR
	SWITCH ON WALL
	OPOSED BLADE DAMPER
	PARALLEL BLADE DAMPER
	INLINE CENTRIFUGAL FAN WITH MOTOR ON SIDE AND ADJUSTABLE FLEXIBLE CONNECTIONS (AFC)
	CENTRIFUGAL FAN

DEMOLITION GENERAL NOTES

1. VERIFY EXACT SIZE AND LOCATION OF THE EXISTING UTILITIES BEFORE START OF DEMOLITION.
2. RELOCATE, REMOVE AND ADJUST ALL MECHANICAL AND ASSOCIATED ELECTRICAL ITEMS AS REQUIRED TO COORDINATE WITH NEW WORK.
3. ALL MECHANICAL ITEMS SHOWN ON DEMOLITION PLANS ARE EXISTING AND ARE SHOWN IN SCHEMATIC FORM ONLY.
4. IN AREAS WHERE EXISTING CONSTRUCTION IS REMOVED AND NO ADDITIONAL CONSTRUCTION IS INDICATED, PATCH ADJACENT CONSTRUCTION TO MATCH EXISTING.
5. REFER TO ARCHITECTURAL PLANS FOR COORDINATION OF ALL EQUIPMENT.
6. CONNECTIONS TO, AND SHUTDOWNS OF, THE EXISTING SYSTEMS SHALL BE COORDINATED WITH OWNER AS TO CREATE MINIMAL INTERFERENCE WITH OWNER'S OPERATION AND RESULTING DOWNTIME OF EXISTING SERVICES. CONTRACTORS SHALL SUBMIT TO OWNER FOR REVIEW AND APPROVAL OF THE PROPOSED PHASING PLAN FOR CONNECTING NEW TO EXISTING SERVICES.
7. CONTRACTOR SHALL COMPLY WITH GENERAL CONDITIONS AND PROTECTION PROVISIONS SPECIFIED.
8. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS BEFORE BEGINNING WORK. CONTRACTOR SHALL PROTECT EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION. ANY EXISTING UTILITIES AND SERVICES DAMAGED SHALL BE REPAIRED AT NO EXPENSE TO OWNER. THE CONTRACTOR SHALL TEMPORARILY MOVE OR TAKE EQUIPMENT OUT OF SERVICE AS NECESSARY TO COMPLETE WORK. SUCH SERVICES SHALL BE REPAIRED IN ACCORDANCE WITH THE SPECIFICATIONS.

DEMOLITION DEFINITIONS:

CERTAIN ABBREVIATIONS OF SYMBOLS, WHEN APPLIED TO PRESENT (OR EXISTING) LINE, DEVICE OR EQUIPMENT, SHALL HAVE FOLLOWING MEANINGS:

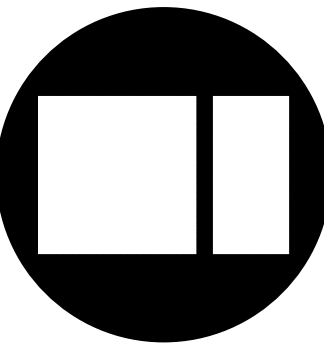
NC	NEW CONNECTION TO PRESENT PIPING, DEVICE, MANHOLE, SEWER, DUCT, WIRING, EQUIPMENT, ETC. INSTALL, TEST, COVER, PAINT, ETC. SAME AS NEW WORK. IF IN SEWER MANHOLE, PROVIDE FLOW CHANNEL IN BOTTOM.
VL	VERIFY EXACT LOCATION IN FIELD. THIS NOTE APPLIES TO ALL PRESENT OR EXISTING UTILITIES AND CONSTRUCTION WHETHER CALLED FOR OR NOT.
P	TO REMAIN UNCHANGED. IF CHANGE CANNOT BE AVOIDED, CHANGE "P" TO "PXR", AT NO INCREASE IN CONTRACT PRICE. VERIFY LOCATION.
PX	TO BE COMPLETELY REMOVED, INCLUDING UNNEEDED CONNECTIONS, PIPING, DUCTS, WIRING, BASES, ETC. OF EVERY KIND. OTHER DISTURBED WORK OF EVERY KIND RESTORED, PATCHED, TESTED, COVERED, PAINTED, ETC. TO EQUAL ORIGINAL CONDITION. REMOVED MATERIALS MUST NOT BE REUSED UNLESS OTHERWISE SPECIFIED OR DIRECTED BY ARCHITECT.

HVAC ABBREVIATIONS

ACCU	AIR COOLED CONDENSING UNIT	GF	GAS FURNACE	PS	PRESSURE SWITCH
AFC	ADJUSTABLE FLEXIBLE CONNECTION	GPM	GALLONS PER MINUTE	PSD	PUMP SUCTION DIFFUSER
AFB	ABOVE FINISHED FLOOR	HP	HORSE POWER	PSI	POUNDS PER SQUARE INCH
APD	AIR PRESSURE DROP	HVAC	HEATING, VENTILATION AND AIR CONDITIONING	PSIG	POUNDS PER SQUARE INCH (GAUGE)
BDD	BACKDRAFT DAMPER	HX	HEAT EXCHANGER	R	RISE
BOD	BOTTOM OF DUCT	HZ	HERTZ	RECIRC	RECIRCULATION
BTU	BRITISH THERMAL UNIT	ID	INSIDE DIAMETER	REQD	REQUIRED
BTUH	BTU PER HOUR	IF	INLINE FAN	RL	RELATIVE HUMIDITY
CA	COMBUSTION AIR	IN	INCH	RPM	REVOLUTIONS PER MINUTE
CAD	COMBUSTION AIR DAMPER	IP	INLINE PLUMP	RS	REFRIGERANT SUCTION LINE
CEB	CONCRETE EQUIPMENT BASE	KW	KILOWATT	SP	STATIC PRESSURE
CFM	CUBIC FEET PER MINUTE	LAT	LEAVING AIR TEMPERATURE	SPEC	SPECIFICATION
CUV	CLASSROOM UNIT VENTILATOR	LB	POUND	SS	STAINLESS STEEL
CV	FLOW COEFFICIENT	LGTH	LENGTH	TC	TEMPERATURE CONTROL
Δ(Delta)	DIFFERENTIAL, DIFFERENCE	LPB	LOW PRESSURE BOILER	TCC	TC CONTRACTOR
D	DROP	LPR	LOW PRESSURE RETURN	TEMP	TEMPERATURE
DB	DRY BULB	LPS	LOW PRESSURE SUPPLY	TEA	TO FLOOR ABOVE
DIA	DIAMETER	MAU	MAKE-UP AIR UNIT	TFB	TO FLOOR BELOW
DPR	DAMPER	MAY	MAKE-UP AIR VENT	T-STAT	THERMOSTAT
DX	DIRECT EXPANSION	MAX	MAXIMUM	TSP	TOTAL STATIC PRESSURE
EA	EXHAUST AIR DUCT	MBH	1000 BTU/HOUR	TYP	TYPICAL
EAG	EXHAUST AIR GRILLE	MCC	MOTOR CONTROL CENTER	VEL	VELOCITY
EAR	EXHAUST AIR REGISTER	MECH	MECHANICAL	VOL	VOLUME
EAT	ENTERING AIR TEMPERATURE	MFR	MANUFACTURER	W/	WITH
EC	ELECTRICAL CONTRACTOR	MIN	MINIMUM	W/O	WITHOUT
ESP	EXTERNAL STATIC PRESSURE	MOD	MOTOR OPERATED DAMPER	WB	WET BULB
EWI	ENTERING WATER TEMPERATURE	MTD	MOUNTED	WC	WATER COLUMN
EF	EXHAUST FAN	MTG	MOUNTING	WG	WATER GAUGE
ELEC	ELECTRIC OR ELECTRONIC	NEG	NEGATIVE	WLS	WALL LOUVER AND SCREEN
EQUIP	EQUIPMENT	NEMA	NATIONAL ELEC. MFR. ASSOC.	WPD	WATER PRESSURE DROP
ET	EXPANSION TANK	NC	NEW CONNECTION	WTD	WATER TEMPERATURE DROP
F	FAHRENHEIT	N.C.	NORMALLY CLOSED		
F & BP	FACE AND BYPASS	NK	NECK		
F & TT	FLOAT AND THERMOSTAT TRAP	N.O.	NORMALLY OPEN		
FBO	FURNISHED BY OTHERS	OA	OUTSIDE AIR		
FC	FORWARD CURVE	OAD	OUTSIDE AIR DAMPER		
FFA	FROM FLOOR ABOVE	OAI	OUTSIDE AIR INTAKE		
FB	FROM FLOOR BELOW	PC	PLUMBING CONTRACTOR		
FLA	FULL LOAD AMPS	PD	PRESSURE DROP		
FPW	FEET PER MINUTE	PH	PHASE		
FT	FOOT	PRE	POWER ROOF EXHAUSTER (AIR)		
FTC	FINNED TUBE CONVECTOR	PRESS	PRESSURE		
FTG	FITTING	PRI	POWER ROOF INTAKE (AIR)		
GC	GENERAL CONTRACTOR	PRV	PRESSURE REDUCING VALVE		
GAL	GALLON				

GENERAL NOTES

1. DRAWINGS ARE GENERALLY DIAGRAMMATIC. EACH CONTRACTOR SHALL MAKE REQUIRED CHANGES FROM THE GENERAL ROUTING SHOWN ON THESE DRAWINGS SUCH AS OFF SETS, BENDS OR CHANGES IN ELEVATION DUE TO COORDINATION WITH THE WORK OF OTHER TRADES AND THE BUILDING CONSTRUCTION. ALL CHANGES SHALL BE MADE WITHOUT ADDITIONAL COST TO THE OWNER. FOR PRESENT CONSTRUCTION, VERIFY ALL EXISTING CONDITIONS PRIOR TO BIDDING TO AVOID CONFLICT. IT IS INTENDED THAT ALL EQUIPMENT, MATERIAL, DEVICES, ETC. SHALL BE LOCATED SYMMETRICALLY WITH THE ARCHITECTURAL ELEMENTS, NOTWITHSTANDING THE FACT THAT LOCATIONS INDICATED BY THESE DRAWINGS MAY BE DISTORTED FOR CLARNESS OF PRESENTATION.
- EACH CONTRACTOR SHALL CHECK DRAWINGS OF THE OTHER TRADES TO VERIFY SPACES IN WHICH THEIR WORK WILL BE INSTALLED IS CLEAR OF OBSTRUCTIONS. MAINTAIN MAXIMUM HEADROOM AND IF SPACE CONDITIONS APPEAR INADEQUATE, NOTIFY ARCHITECT BEFORE PROCEEDING WITH THE INSTALLATION.
- FURNISH ALL TRADES ADVANCE INFORMATION ON LOCATIONS AND SIZES OF PIPING, DUCTWORK, EQUIPMENT, FRAMES, BOXES, SLEEVES AND OPENINGS NEEDED FOR WORK, AND ALSO FURNISH INFORMATION AND SHOP DRAWINGS TO PERMIT TRADES AFFECTED TO INSTALL THEIR WORK PROPERLY AND WITHOUT DELAY.
- WHERE THERE IS EVIDENCE THAT WORK OF ONE TRADE WILL INTERFERE WITH WORK OF OTHER TRADES, ALL TRADES SHALL ASSIST IN WORKING OUT SPACE CONDITIONS TO MAKE SATISFACTORY ADJUSTMENTS.
- HVAC CONTRACTOR TO REVIEW, PRIOR TO BIDDING, ALL DRAWINGS TO COORDINATE VARIOUS WORK AS CALLED FOR. CONTRACTOR SHALL CAREFULLY CHECK ALL DRAWINGS FOR ALL TRADES AND ANY LACK OF COORDINATION BETWEEN HIS WORK AND DRAWINGS FOR JOB CONDITIONS SHALL BE IMMEDIATELY REPORTED TO ARCHITECT.
- CONTRACTOR SHALL COORDINATE ALL CEILING DIFFUSERS AND GRILLES WITH SUSPENDED CEILING AND LIGHT PATTERNS. OPENINGS SHALL BE IN CENTER OF TILES.
- ALL SHEETMETAL DUCTWORK SHALL BE CONSTRUCTED TO THE LATEST SMACNA STANDARDS.
- SHEETMETAL DUCT SIZES MAY BE ALTERED TO FIT JOB CONDITIONS, BUT NET FREE AREAS MUST BE MAINTAINED. INCREASE SHEETMETAL DUCT SIZE TO ALLOW FOR DUCT LINING WHERE USED. WRAP ALL DUCTWORK EXCEPT AS NOTED.
- ALL DUCTWORK TO BE HELD TIGHT TO STRUCTURAL ROOF JOISTS, BEAMS, ETC., AS CLEARANCE IS MINIMAL. COORDINATE WITH OTHER CONTRACTORS TO AVOID CONFLICT.
- OUTDOOR INTAKE SHEETMETAL DUCTWORK SHALL BE WATERTIGHT WITH SOLDERED SEAMS. FITCH DUCTWORK TO WALL LOUVER AND SCREEN TO DRAIN ALL MOISTURE TO BUILDING EXTERIOR. INTAKES TO BE WRAPPED WITH 2" INSULATION.
- CONTRACTOR SHALL INCLUDE IN HIS WORK THE RELOCATION OF ALL CROSS BRACING, AS REQUIRED TO FIT DUCTS BETWEEN JOISTS. THIS WORK SHALL BE COORDINATED WITH THE GENERAL CONTRACTOR WITH ARCHITECTURAL APPROVAL.
- CONTRACTOR SHALL PROVIDE ALL DUCT DROPS AND OFFSETS TO AVOID INTERFERENCES WITH JOISTS, OTHER DUCTS, LIGHTS, PIPES, ETC.
- ALL THERMOSTATS LOCATED TO MATCH ADJACENT LIGHT SWITCHES AND WITH PLASTIC OR CAST GUARDS AS SPECIFIED. ALL THERMOSTATS LOCATED ON EXTERIOR WALLS OR COLUMNS MUST BE MOUNTED ON THERMAL INSULATING BLOCKS.
- REFRIGERANT PIPING TO BE SIZED AND PIPED AS RECOMMENDED BY THE MANUFACTURER. FURNISH DRAWINGS IN THE FORM OF SHOP DRAWINGS SHOWING ALL PIPING SIZES, CONNECTIONS, RISERS, TRAPS, REFRIGERANT DEVICES AND ACCESSORIES, ETC. FOR THE COMPLETE INSTALLATION OF EACH RESPECTIVE SYSTEM. CONNECTIONS TO CONDENSING UNITS SHALL BE MADE WITH REFRIGERANT TYPE VIBRATIONS ELIMINATORS. CONNECTIONS TO AIR HANDLING UNITS SHALL BE MADE WITH SWING TYPE OFFSETS TO ABSORB ANY VIBRATION THAT MAY BE EVIDENT.
- PROVIDE TWO COATS OF UV PROTECTION PAINT OVER ELASTOMERIC INSULATION WITH JACKETING ON ALL EXPOSED EXTERIOR REFRIGERATION PIPING. (REFER TO SPECIFICATIONS)
- PROVED MOTORIZED OUTDOOR AIR DAMPERS FOR EACH FORCED AIR FURNACE UNIT/AIR HANDLING UNIT. AS OAD CLOSES, RAD OPENS, ETC.
- HEATING, VENTILATING, AIR CONDITIONING AND ELECTRICAL DESIGNS ARE BASED ON THE REQUIREMENTS FOR THE SPECIFIED EQUIPMENT MANUFACTURER. CONDUITS, DISCONNECTS, BREAKERS, FUSES AND WIRE SIZES ARE SELECTED ON THE BASIS OF SPECIFIED EQUIPMENT MANUFACTURER. INCREASED CURRENT REQUIREMENTS NECESSITATING LARGER WIRE, BREAKERS, FUSES, SWITCHES, ETC. TO ACCOMMODATE ANY ALTERNATE OR SUBSTITUTE MANUFACTURER'S EQUIPMENT OTHER THAN AS SHOWN ON DRAWINGS OR SCHEDULES SHALL BE PROVIDED WITHOUT INCREASE IN CONTRACT PRICE BY THE CONTRACTOR FURNISHING EQUIPMENT.
- INSTALL 1" OF NON-SHRINK GROUT AROUND DUCTWORK AND PIPING ON EACH WALL FACE TO SEAL OPENINGS AND ELIMINATE SOUND TRANSFER WITH AIR-TIGHT CONNECTIONS.
- INSTALL DRAFT DIVERTERS FOR HEATERS AS RECOMMENDED BY UNIT MANUFACTURER.
- CONTRACTOR TO COORDINATE ALL UNIT IDENTIFICATION AND NUMBERING WITH OWNER AND TCC PRIOR TO ORDERING UNITS.



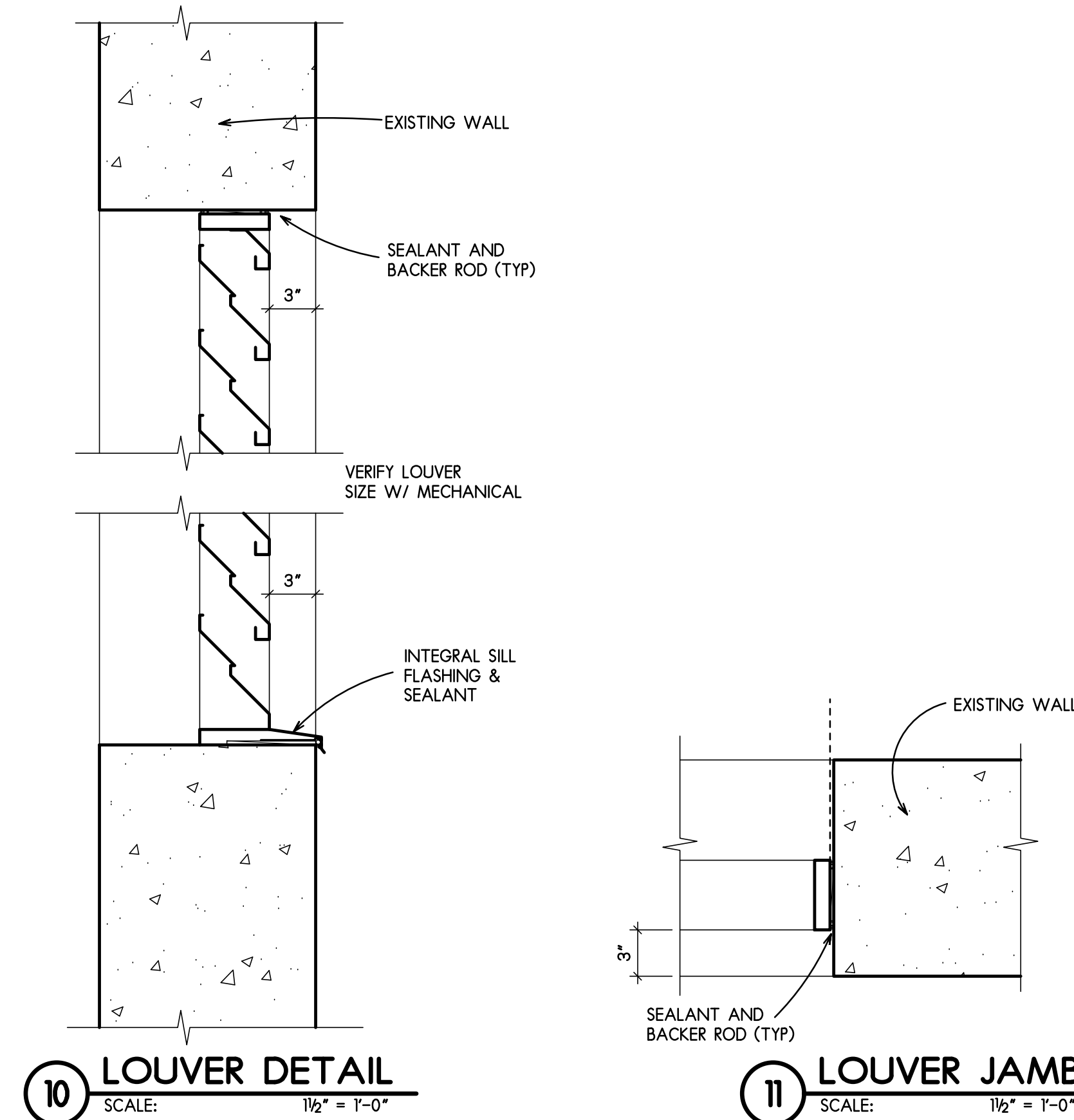
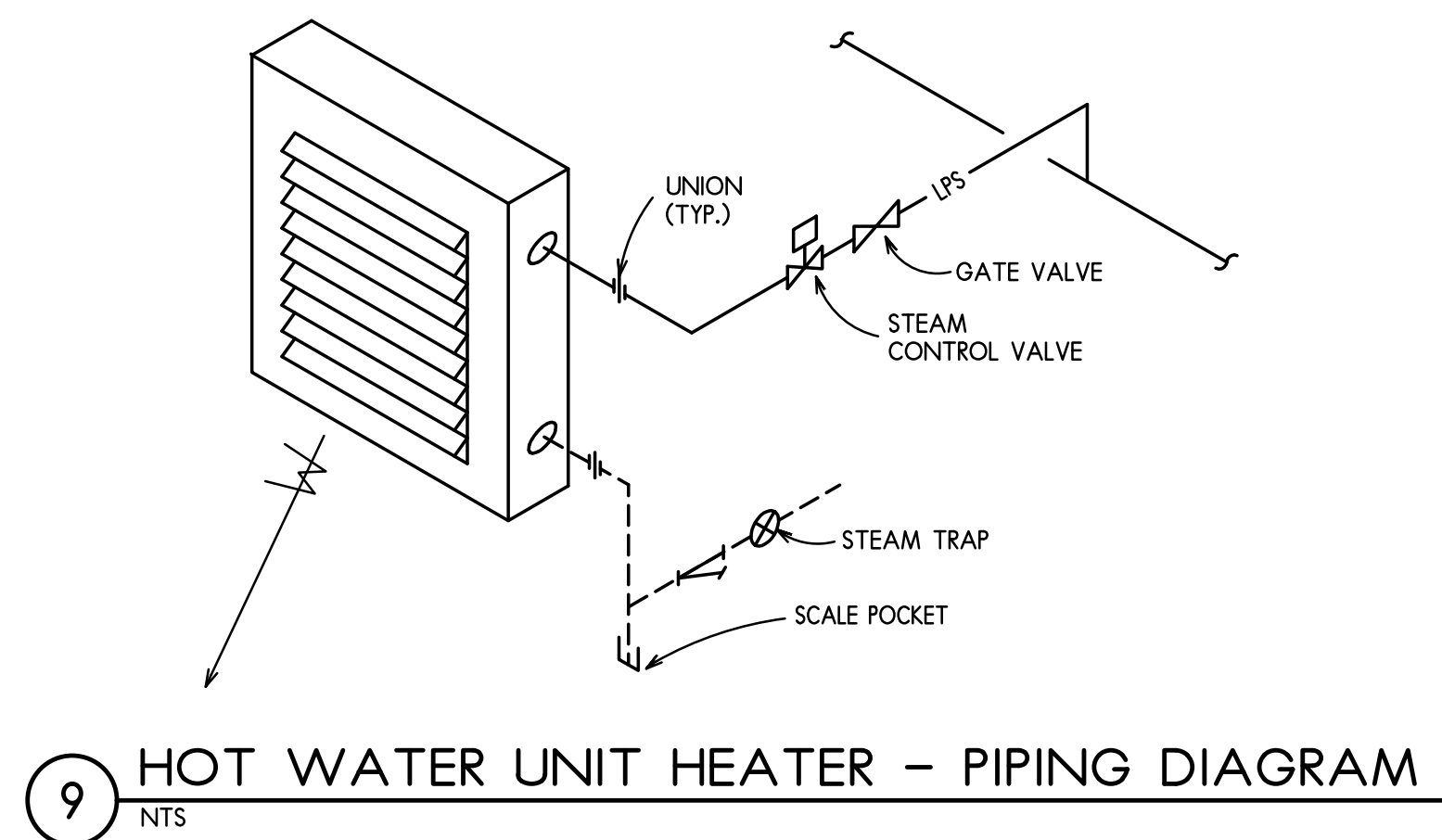
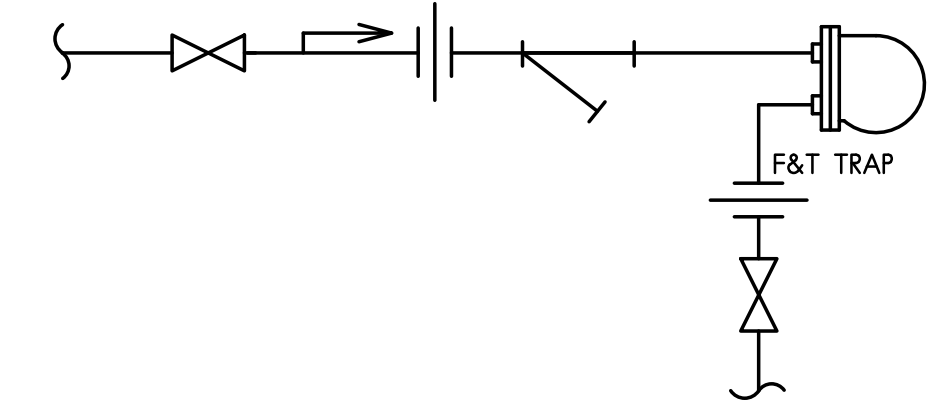
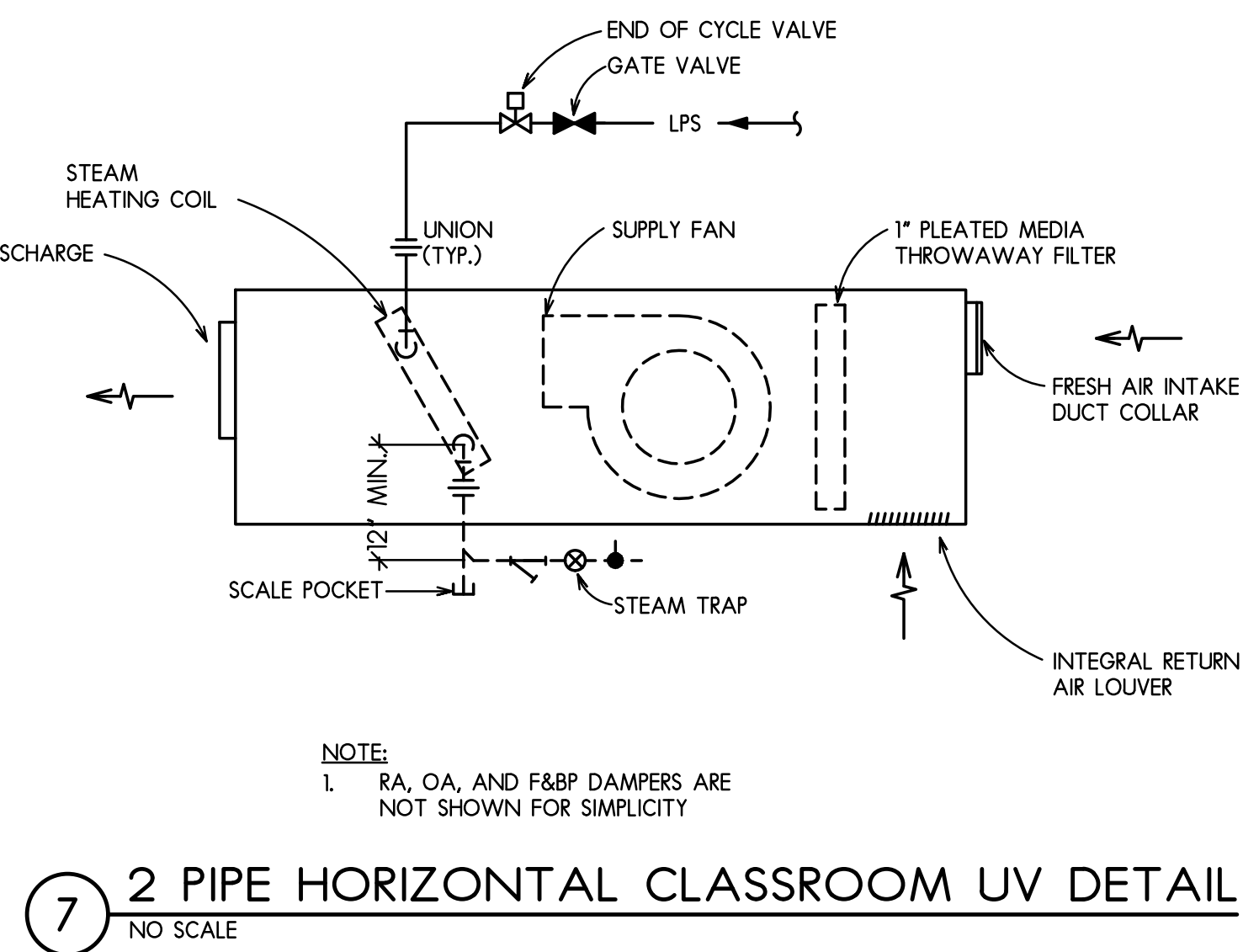
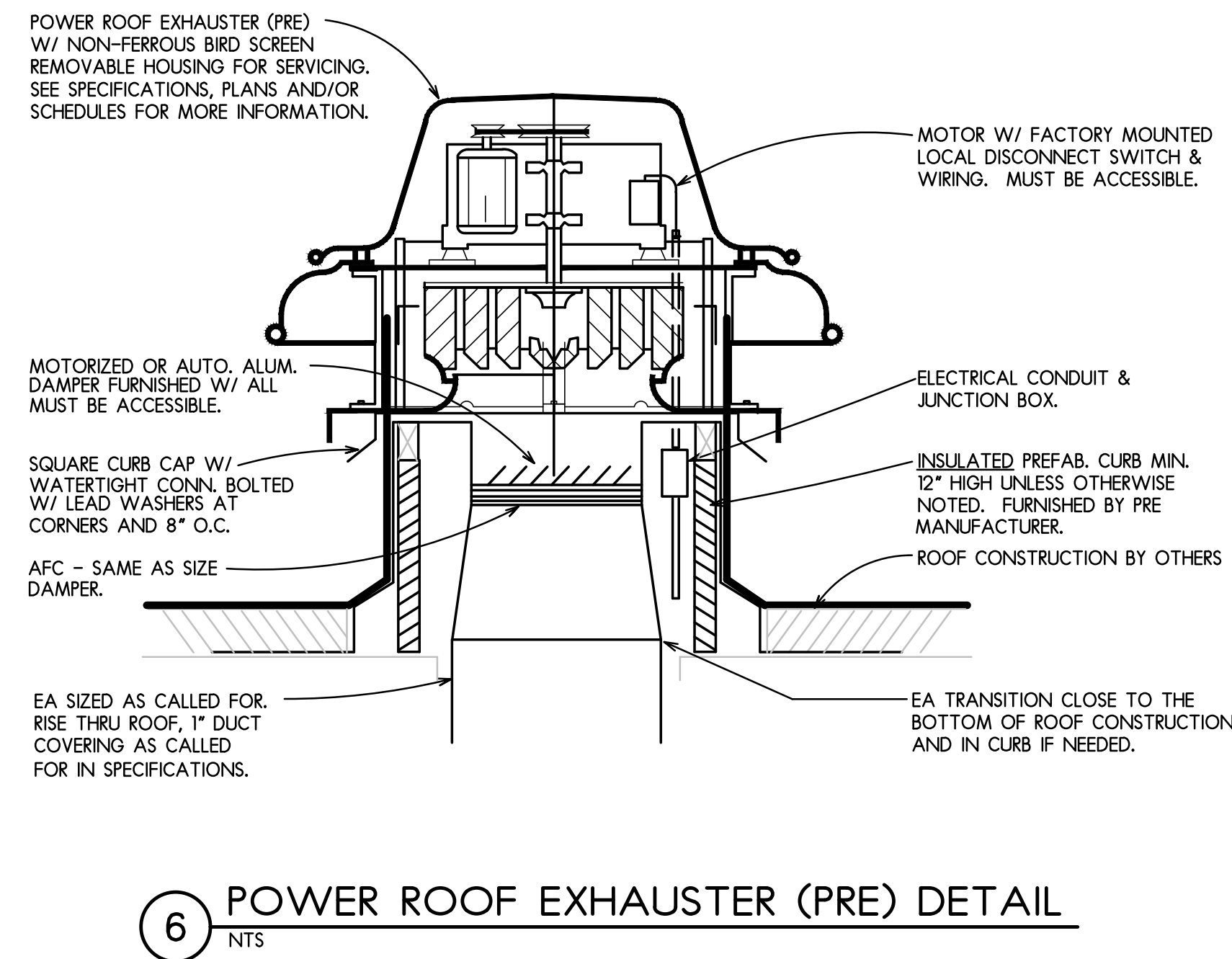
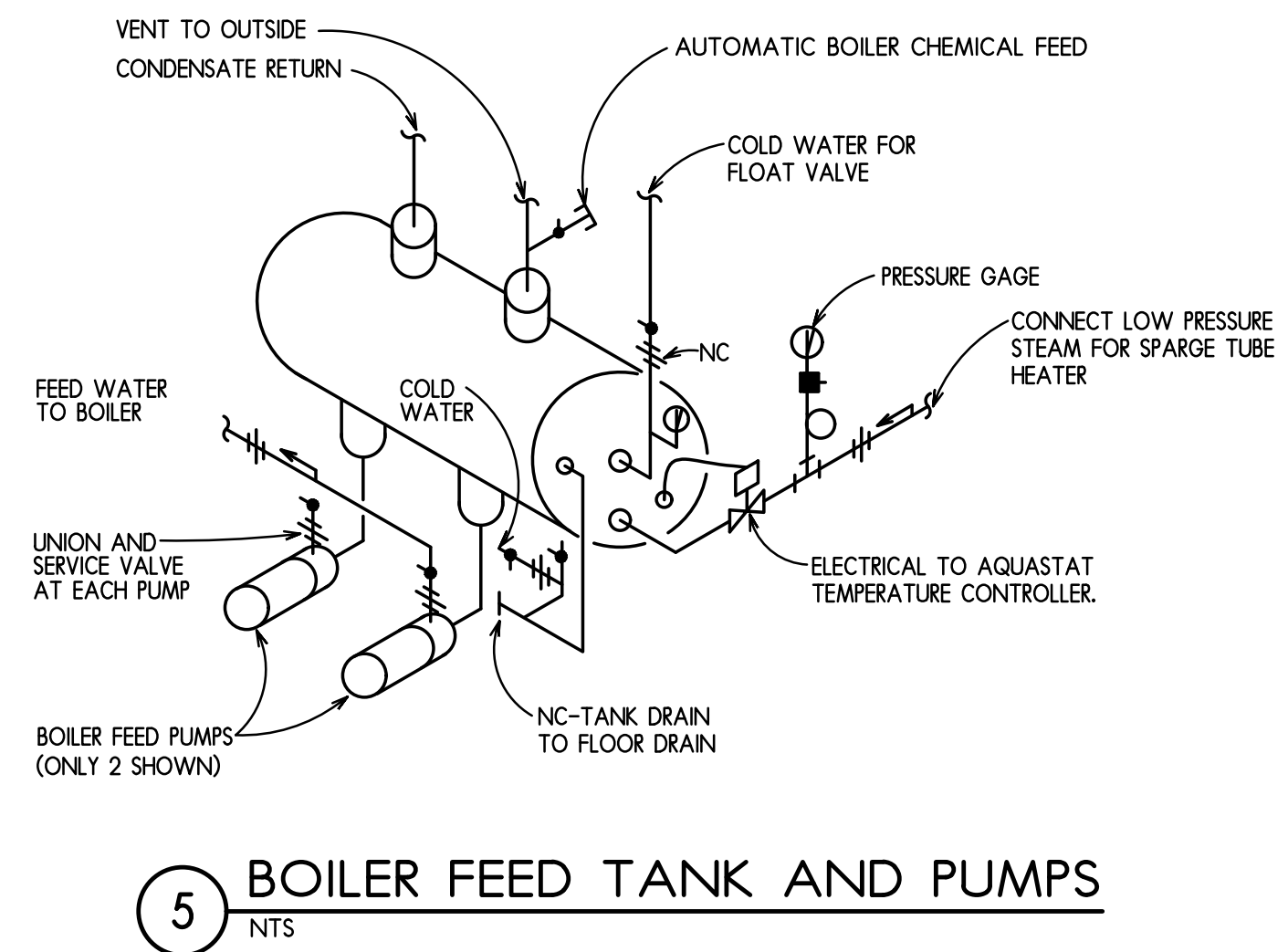
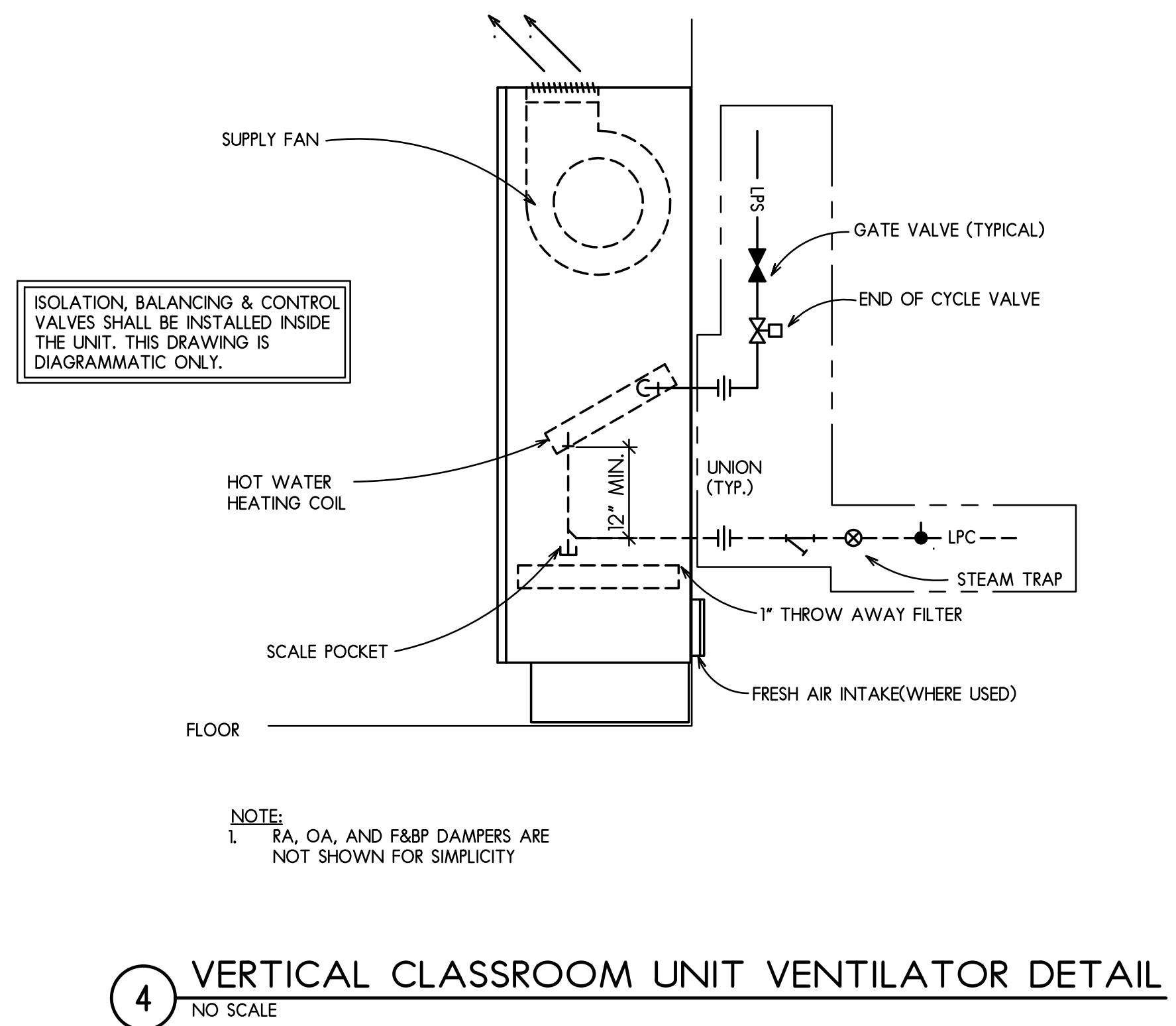
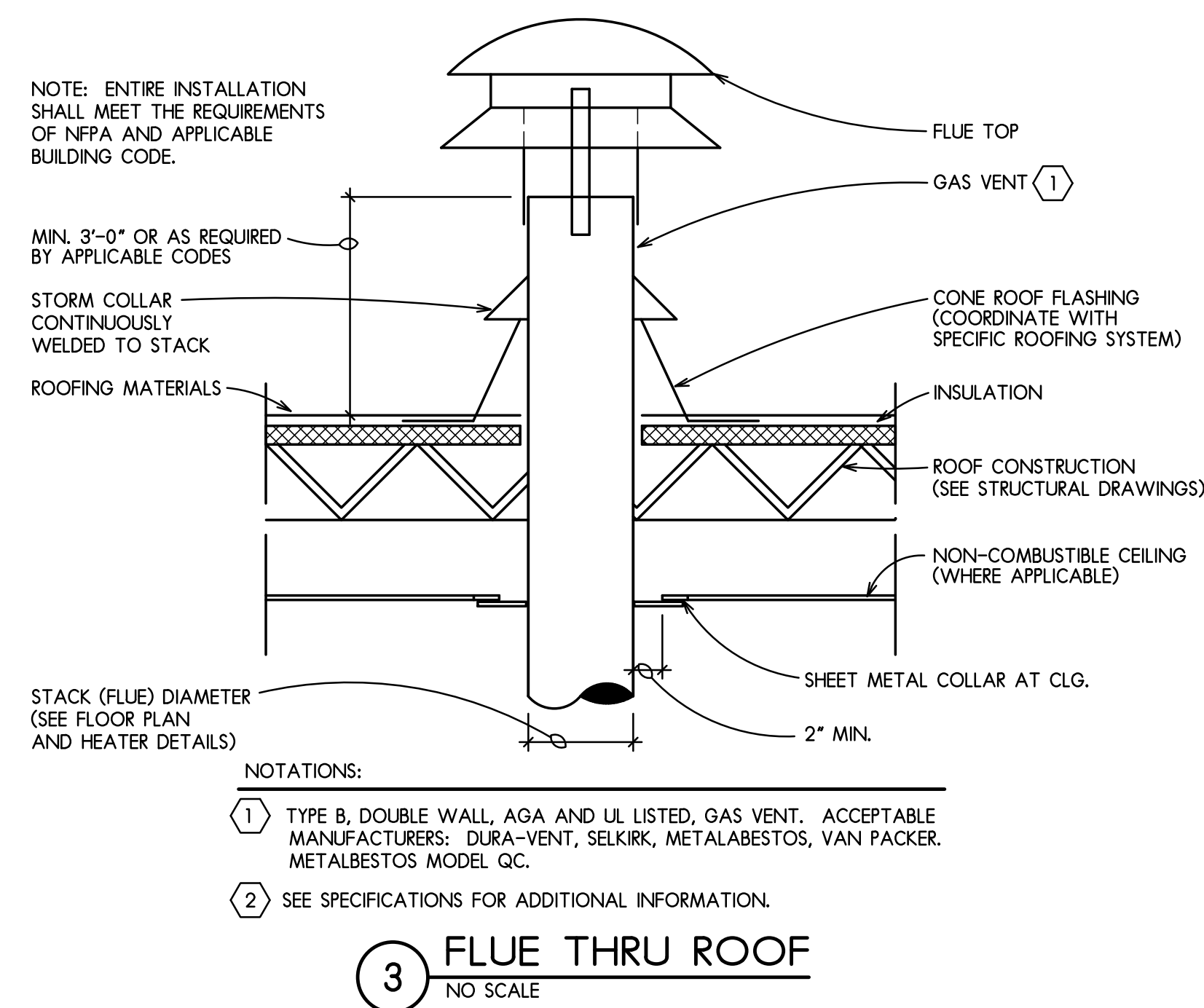
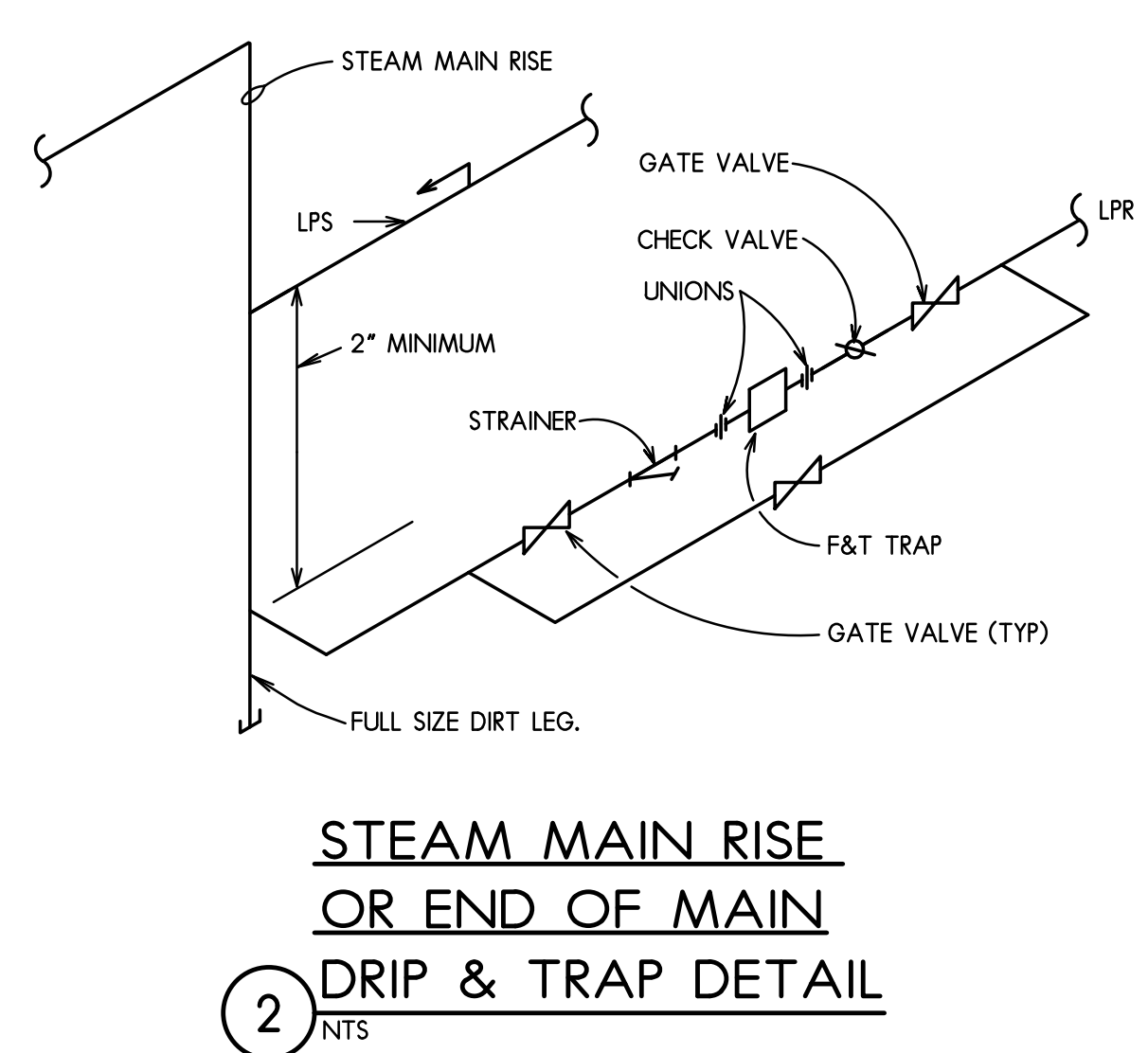
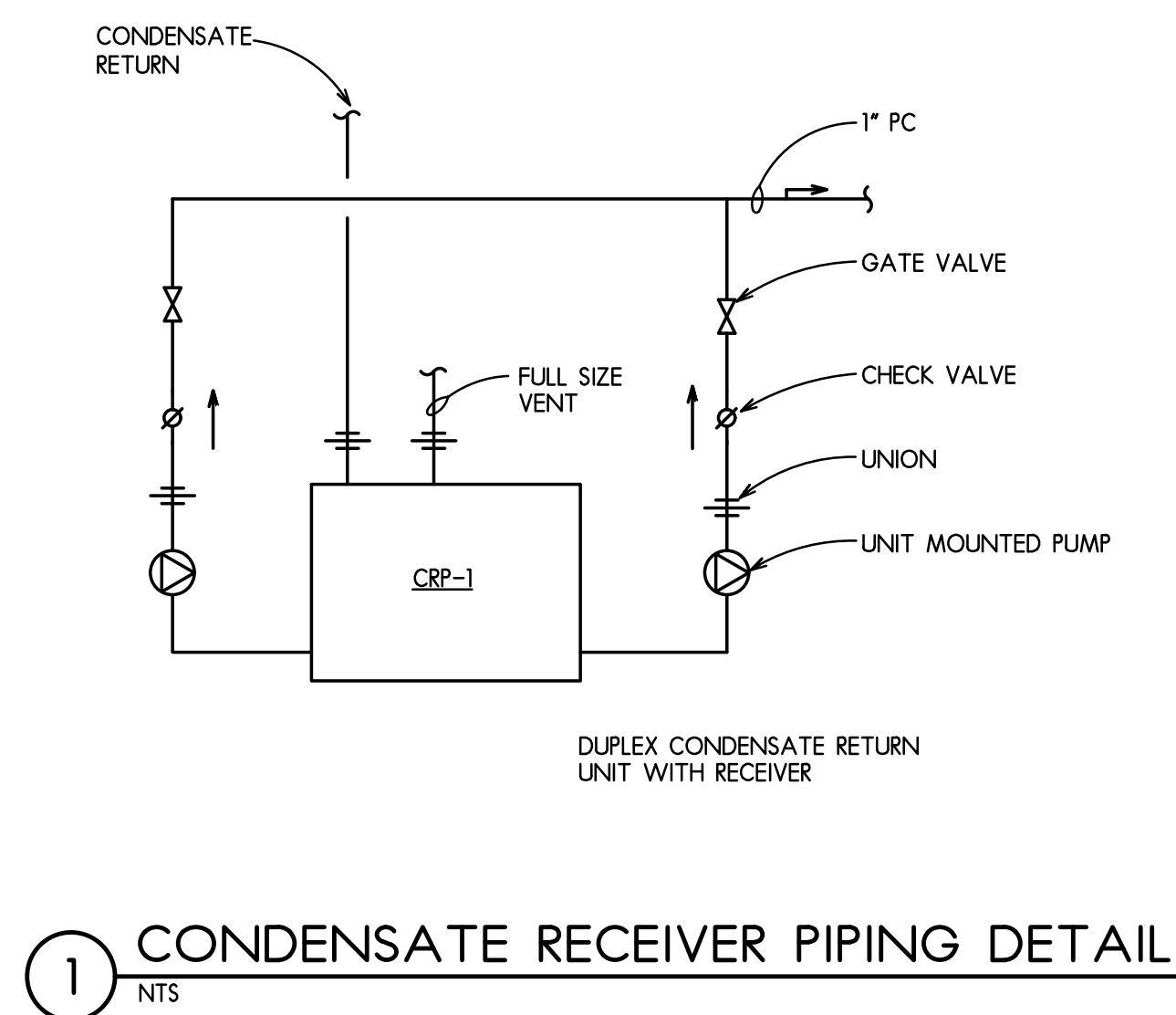
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ISSUED FOR:	DATE
RE-BIDDING	01-27-15
DRAWN	APPROVED
PM	RAS

DATE: 11-13-2015	PROJECT NUMBER
	25109
SHEET NUMBER	M2.1

MECHANICAL, SYMBOLS, NOTES & ABBREVIATIONS

SCALE: N/A



SUSPENDED UNIT HEATER (SUH) SCHEDULE

PLAN NO.	SUH-1
SERVICE	BOILER ROOM
MANUFACTURER	TRANE
MODEL	UHSB-108
MBH	108
LBS/HR (STEAM)	110
PRESSURE (PSIG)	5.0
EAT (°F)	60
CFM	1800
HP	1/12
VOLTS/ PH	115/1/60
NOTES	-

NOTES:
1. PROVIDE WITH REMOTE THERMOSTAT & SUMMER/WINTER SWITCH.

STEAM TRAP SCHEDULE

PLAN NO.	ST-1 & 2	ST-3	ST-4	ST-5	
SERVICE	S. HEADER	SB-1	SB-2	SUH-1	
MANUFACTURER	SPIRAX SARCO	SPIRAX SARCO	SPIRAX SARCO	SPIRAX SARCO	
MODEL	FT-15	FT-15	FT-15	FT-15	
TYPE	F&T	F&T	F&T	F&T	
CONNECTION SIZE	1-1/2"	1"	1"	3/4"	
MAX PRESSURE PSI	15	15	15	15	
CAPACITY (LBS/HR)	910	250	250	175	
NOTES	-	-	-	-	

NOTES: SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
1. CAPACITY IS MEASURED IN # / HOUR AT 1/2 PSI PRESSURE DIFFERENTIAL.

POWER ROOF EXHAUSTER (PRE) SCHEDULE

PLAN NO.	PRE-1
SERVICE	BOILER ROOM SUMMER VENTILATION
MANUFACTURER	COOK
MODEL	135C38
CFM	1,275
ESP (IN WC)	0.5
HP/BHP	0.25/0.21
MAX SONES	8.4
VOLTS/PH	120/1
WEIGHT (LBS)	120
NOTES	1, 2, 3, 4

NOTES: SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
1. PROVIDE MANUFACTURER'S INSULATED PREFAB ROOF CURB. MIN. 14" HIGH
2. CONTROL WITH T-STAT.
3. PROVIDE FACTORY WIRED DISCONNECT SWITCH.
4. PROVIDE BACKDRAFT DAMPER.

BOILER FEED WATER SYSTEM (BFS) SCHEDULE

GENERAL	PLAN NO.	BFS-1
	LOCATION	BOILER RM
	SERVICE	BUILDING
	MANUFACTURER	B&G
RECEIVER	MODEL	0.95-CMHD-2.0-C35
	TYPE	TRIPLEX
	CAPACITY (EDR)	28,000
	MATERIAL	STEEL
PUMP	VOL (GAL)	492
	INLET SIZE (IN)	4
	QUANTITY	3
	MOUNTING	VER
VACUUM	GPM	15
	DISCH. PRESS. (PSI)	20
	HP/BHP	1/3
	VOLTS/PHASE	208/3
NOTES	RPM	3,500
		1, 2, 3, 4, 5

NOTES: SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
1. PROVIDE WITH 3 VALVE BY-PASS AROUND MAKEUP VALVE.
2. PROVIDE WITH AIR GAP FITTING ON MAKEUP ASSEMBLY.
3. PROVIDE WITH LOW WATER CUTOFF, GAUGE GLASS, DIAL THERMOMETER & DISCHARGE PRESSURE GAUGE.
4. PROVIDE INLET BASKET STRAINER AND BUTTERFLY SUCTION VALVE.
5. PROVIDE WITH CONTROL PANEL-SEE SPECS FOR REQUIREMENT.

CONDENSATE VACUUM PUMP (VCP) SCHEDULE

GENERAL	PLAN NO.	VCP-1	VCP-2,3	VCP-4
	LOCATION	BOILER RM	BOILER RM	BOILER RM
	SERVICE	BUILDING	BUILDING	BUILDING
	MANUFACTURER	B&G	B&G	VENT-RITE
RECEIVER	MODEL	10VLR1-30-35	SVLR1-30-35	VRD-252520-E3
	TYPE	DUPLEX	DUPLEX	DUPLEX
	CAPACITY (EDR)	30,000	10,000	65,000
	MATERIAL	CAST IRON	CAST IRON	CAST IRON
PUMP	VOL (GAL)	37	23	43
	INLET SIZE (IN)	2	2	2 1/2
	QUANTITY	2	2	2
	MOUNTING	VER	VER	VER
VACUUM	GPM	15	7.5	30
	DISCH. PRESS. (PSI)	30	30	30
	HP/BHP	1.5	1.0	2.0
	VOLTS/PHASE	208/3	208/3	208/3
NOTES	RPM	3500	3500	3500
	CFM	4	2.5	6.8
	Hg (IN)	5.5	5.5	5.5
		1, 2, 3	1, 2, 3	4

NOTES: SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
1. PROVIDE WITH WATER LEVEL GAUGE & COMPOUND GAUGE.
2. PROVIDE WITH INLET STRAINER, SOLENOID VALVE, DISCHARGE VALVE, VACUUM, SWITCH, AND ANGLE THERMOMETER.
3. PROVIDE WITH CONTROL PANEL-SEE SPECS FOR REQUIREMET.
4. UNIT IS PROVIDED BY OWNER AND INSTALLED BY CONTRACTOR.

STEAM BOILER (SB) SCHEDULE

PLAN NO.	SB-1	SB-2	
LOCATION	BOILER PLANT	BOILER PLANT	
MANUFACTURER	CLEAVER BROOKS	CLEAVER BROOKS	
MODEL	CBLE-150	CBLE-150	
TYPE	FIRE TUBE	FIRE TUBE	
OPERATING PRESSURE (PSI)	10	10	
FIRING OUTPUT (MBH)	5,021	5,021	
STEAM CAP. (LBS/HR)	5,175	5,175	
BOILER HP	150	150	
FUEL	N. GAS	N. GAS	
FIRING STAGES	FULL MOD.	FULL MOD.	
ELECTRICAL	208/3/60	208/3/60	
HP	10	10	
NOTES	1, 2, 3	1, 2, 3	

NOTES: SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
1. PROVIDE STANDARD TRIM AS SPECIFIED.
2. PROVIDE FORCED DRAFT BURNER AND 5 PSI GAS TRAIN.
3. MOUNT ON 4" CEB.

BLOWDOWN SEPARATOR (BDS) SCHEDULE

PLAN NO.	BDS-1	
LOCATION	BOILER ROOM	
SERVICE	SB-1, SB-2	
TANK DATA	MANUFACTURER	CB
	MODEL	A20B
	DIAMETER (IN)	14
	HEIGHT (IN)	22
	INLET SIZE (IN)	1
	VENT SIZE (IN)	2 1/2
AFTER COOLER	DRAIN SIZE (IN)	2
	OPERATING WEIGHT (LBS)	-
	MODEL	16DS
	TYPE	AUTO
	DRAIN SIZE	2
	WATER INLET (IN)	1/2
NOTES	1	

NOTES: SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
1. PROVIDE WITH FLOOR STAND, TEMP. REGULATOR VALVE & SOLENOID VALVE.

UNIT HEATER (UH) SCHEDULE

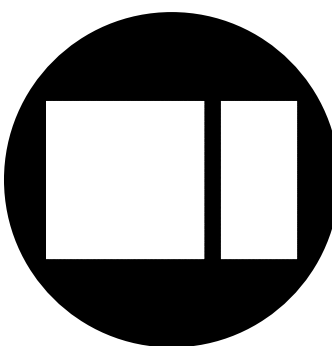
PLAN NO.	UH-1 THRU UH-3	UH-4	UH-5	UH-6 THRU UH-7	UH-8	UH-9	UH-10	UH-11	UH-12	UH-13	UH-14 THRU UH-16	UH-17	UH-18	UH-19
SERVICE	HALLWAY	HALLWAY	HALLWAY	HALLWAY	HALLWAY	HALLWAY	HALLWAY	HALLWAY	HALLWAY	NOT USED	HALLWAY	HALLWAY	HALLWAY	HALLWAY
MANUFACTURER	TRANE	TRANE	TRANE	TRANE	TRANE	TRANE	TRANE	TRANE	TRANE		TRANE	TRANE	TRANE	TRANE
MODEL	FFHB12	FFHB12	FFHB08	FFHB12	FFHB08	FFHB12	FFHB08	FFHB12	FFHB08		FFHB12	FFHB08	FFHB06	FFHB12
CFM	777	777	777	550	777	550	550	550	550		777	550	428	777
STEAM	ARRANGEMENT	VERTICAL RECESSED	VERTICAL RECESSED	VERTICAL RECESSED	VERTICAL RECESSED	VERTICAL RECESSED	VERTICAL RECESSED	VERTICAL RECESSED	VERTICAL RECESSED		VERTICAL RECESSED	VERTICAL RECESSED	VERTICAL RECESSED	VERTICAL RECESSED
	EAT/LAT (°F)	60.0/135.5	60.0/135.5	60.0/132.9	60.0/135.5	60.0/132.9	60.0/135.5	60.0/132.9	60.0/132.9		60.0/135.5	60.0/132.9	60.0/133.1	60.0/135.5
	MBH	63.7	63.7	43.5	63.7	43.5	63.7	43.5	43.5		63.7	43.5	33.9	63.7
	PRESSURE	5.0 PSIG	5.0 PSIG	5.0 PSIG	5.0 PSIG	5.0 PSIG	5.0 PSIG	5.0 PSIG	5.0 PSIG		5.0 PSIG	5.0 PSIG	5.0 PSIG	5.0 PSIG
MOTOR	CONDENSATE	66.2 LB./HR.	66.2 LB./HR.	45.2 LB./HR.	66.2 LB./HR.	45.2 LB./HR.	66.2 LB./HR.	45.2	45.2 LB./HR.		66.2 LB./HR.	45.2 LB./HR.	35.3 LB./HR.	66.2 LB./HR.
	VOLTS/PH	120/1	120/1	120/1	120/1	120/1	120/1	120/1	120/1		120/1	120/1	120/1	120/1
	WATTS	160	160.0	122.0	160.0	122.0	160.0	122.0	122.0		160.0	122.0	79.0	160.0
	SPEED	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH		HIGH	HIGH	HIGH	HIGH
NOTES	AMPS	6.1	6.1	3.9	6.1	3.9	6.1	3.9	3.9		6.1	3.9	3.9	6.1
		-	-	-	-	-	-	-	-		-	-	-	-

NOTES: SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
1. PROVIDE WITH 40 CFM O.A.
2. FACE & BYPASS CONTROL.
3. 3 ROW COIL FOR BOTH HEATING & COOLING FOR A 2 PIPE SYSTEM.
4. F.A.I. DUCT THROUGH THE WALL - 24" x 3" W/ INTAKE LOUVER.

CLASSROOM UNIT VENTILATOR (UV) SCHEDULE

PLAN NO.	UV-1 THRU UV-3,	UV-4	UV-5 & UV-6	UV-7 & UV-8	UV-9 & UV-10	UV-11 THRU UV-13	UV-14 & UV-15	UV-16 & UV-17	UV-18	UV-19	UV-20 THRU UV-22	UV-23 THRU UV-25	UV-26 THRU UV-31	UV-32 THRU UV-34	UV-35 & UV-36	UV-37 THRU UV-40	UV-41 & UV-42
SERVICE	CLASSROOMS	CLASSROOMS	CLASSROOMS	CLASSROOMS	CLASSROOMS	CLASSROOMS	CLASSROOMS	CLASSROOMS	CLASSROOMS	CLASSROOMS	CLASSROOMS	CLASSROOMS	CAFETERIA	KITCHEN	CLASSROOMS	LOCKERS	CLASSROOMS
MANUFACTURER	TRANE	TRANE	TRANE	TRANE	TRANE	TRANE	TRANE	TRANE	TRANE	TRANE	TRANE	TRANE	TRANE	TRANE	TRANE	TRANE	TRANE
MODEL	HUVC1501	HUVC1501	HUVC1501	HUVC1501	HUVC1501	HUVC1501	HUVC1501	HUVC1501	HUVC1501	HUVC1501	HUVC1501	HUVC1501	HUVC1500	HUVC1501	HUVC1501	HUVC1501	HUVC1500
CFM	1409	1409	1409	1409	1409	1409	1409	1409	1500	1250	1500	1250	1500	1409	1250	1409	1500
MIN. OA (CFM)	220	400	300	400	300	400	220	400	400	350	400	350	780	780	350	1409	350
HEATING	EAT (°F)	57.5	47.3	53.0	47.3	53.0	47.3	57.5	47.3	48.7	47.6	48.7	30.0	30.0	47.6	-10.0	51.3
	LAT (°F)	109.0	109.0	109.0	123.3	129.0	123.3	125.0	112.0	114.0	112.0	114.0	107.3	109.4	114.0	85.6	112.0
	PRESSURE	5.0 PSIG	5.0 PSIG	5.0 PSIG	5.0 PSIG	5.0 PSIG	5.0 PSIG	5.0 PSIG	5.0 PSIG	5.0 PSIG	5.0 PSIG	5.0 PSIG	5.0 PSIG	5.0 PSIG	5.0 PSIG	5.0 PSIG	5.0 PSIG
	COND.	120.4 LB./HR.	120.4 LB./HR.	103.9 LB./HR.	120.4 LB./HR.	103.9 LB./HR.	120.4 LB./HR.	120.4 LB./HR.	120 LB./HR.	102 LB./HR.	120 LB./HR.	102 LB./HR.	127 LB./HR.	120.4 LB./HR.	144.8 LB./HR.	102 LB./HR.	102 LB./HR.
MOTOR	MBH	115.7	115.7	115.7	115.7	99.9	115.7	99.9	117.4	97.5	117.4	97.5	117.4	115.7	97.5	139.2	117.4
	HP	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.25	0.25	0.25	0.25	0.25	1.0	1.0	0.25	0.25
	VOLTAGE/PH	120/1	120/1	120/1	120/1	120/1	120/1	120/1	120/1	120/1	120/1	120/1	120/1	120/1	120/1	120/1	120/1
	RPM	1050	1050	1050	1050	1050	1050	1050	1116	1116	1116	1116	1116	1050	1050	1116	1116
NOTES	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

NOTES: SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
1. PROVIDE WITH DISCHARGE GRILLE, OUTDOOR INTAKE GRILLE WITH HORIZONTAL LOUVERS. FRONT RETURN AIR, FACE & BYPASS DAMPERS FOR ASHRE TYPE 2 CONTROL, STEAM COIL FOR TWO PIPE SYSTEM. BAKED ENAMEL FINISH.

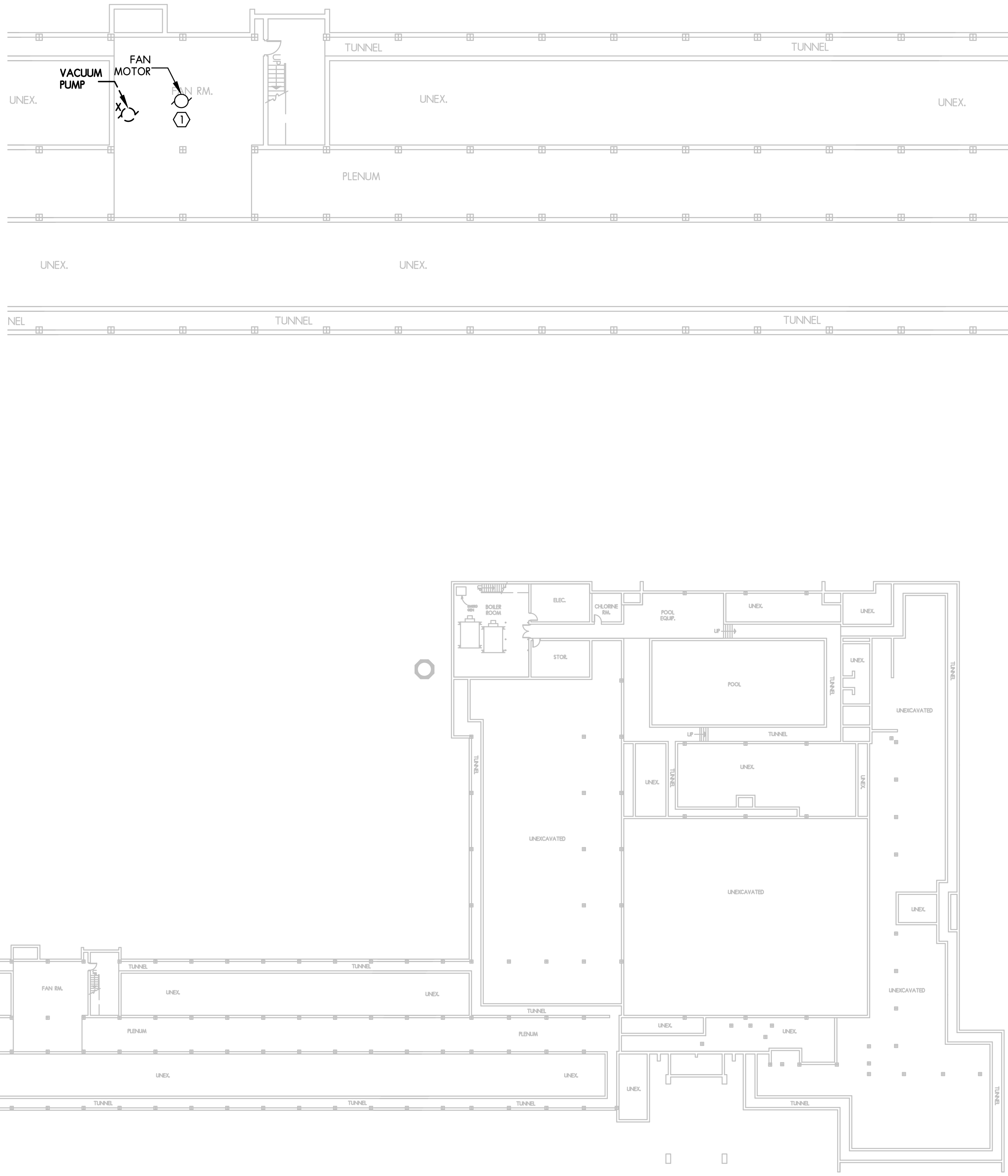


MECHANICAL SCHEDULES

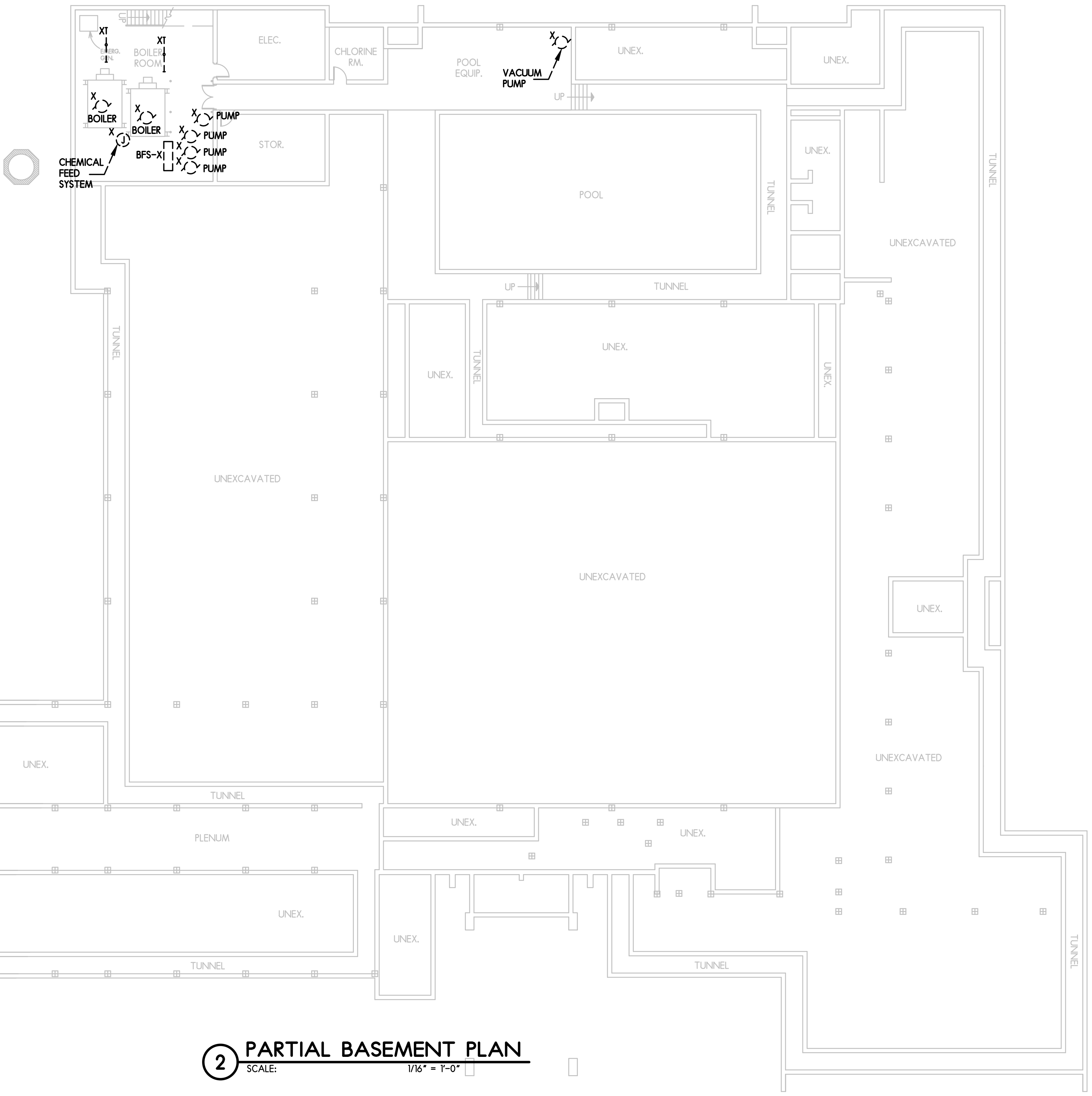
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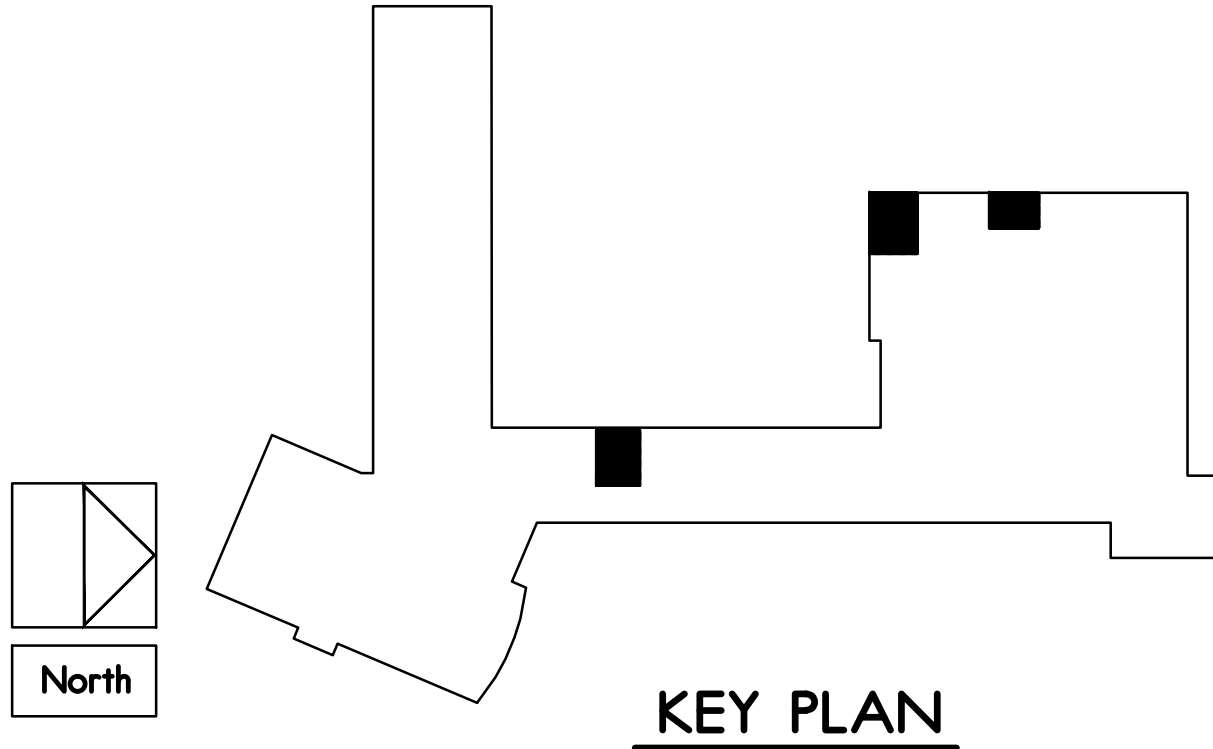
1 OVERALL BASEMENT PLAN
SCALE: 1/32" = 1'-0"



2 PARTIAL BASEMENT PLAN
SCALE: 1/16" = 1'-0"



KEYED NOTES:
① DISCONNECT EXISTING FAN FOR REFURBISHMENT.

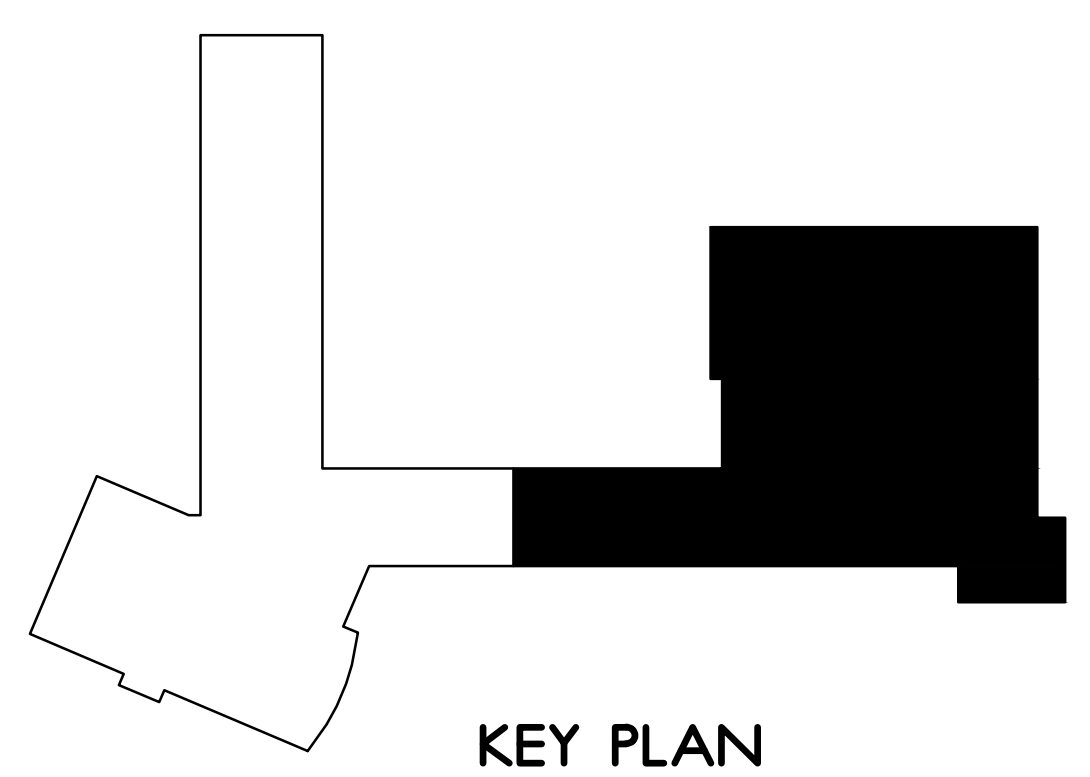
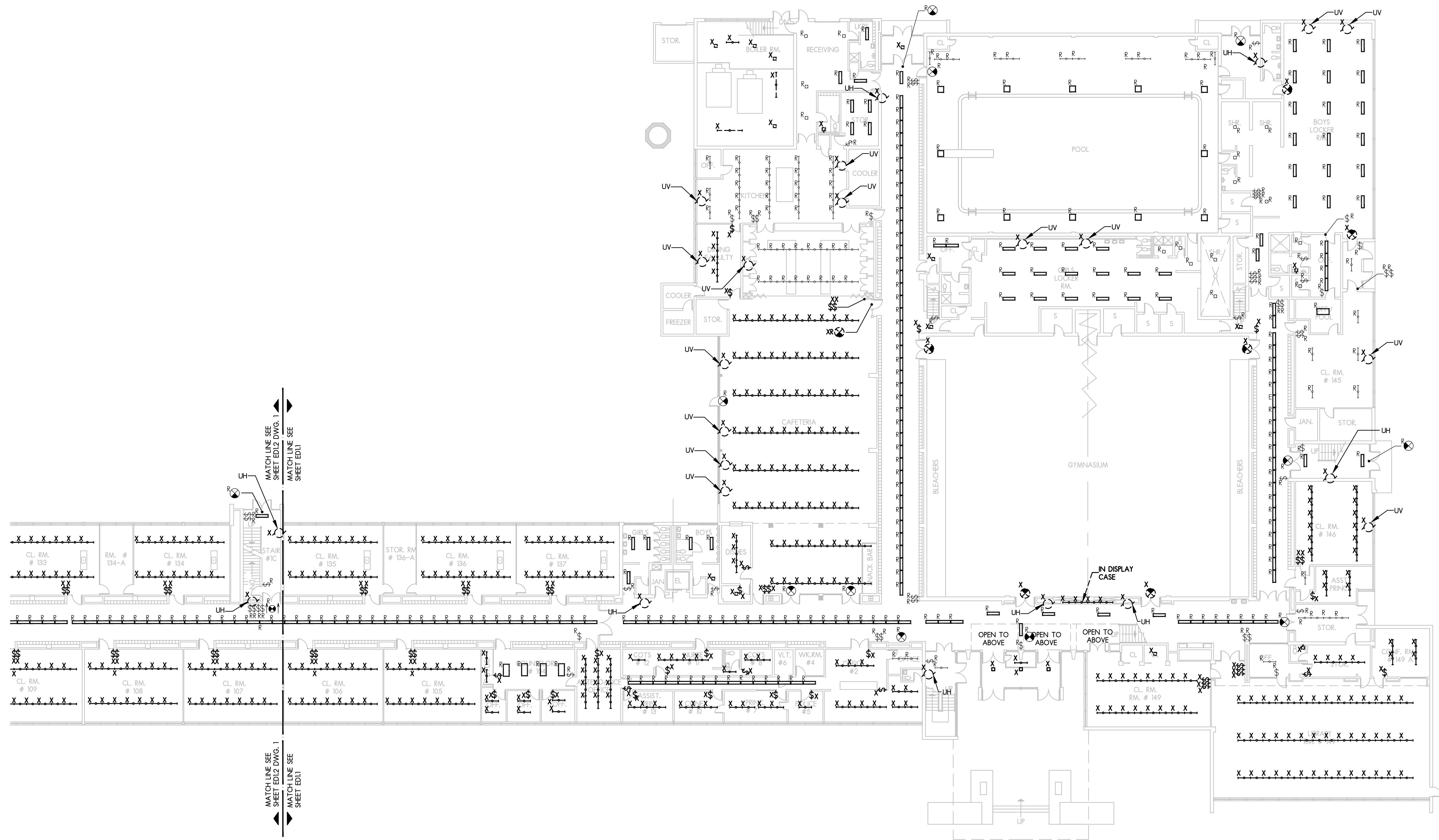


**BASEMENT LEVEL
LIGHTING & POWER DEMOLITION PLAN**

DATE: 11-13-2015	ISSUED FOR: 01-27-15
PROJECT NUMBER: 25109	RE-BUILDING
SHEET NUMBER: ED1.0	DRAWN APPROVED

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**FIRST FLOOR LIGHTING AND
POWER DEMOLITION PLAN**

SCALE: 1/16" = 1'-0"

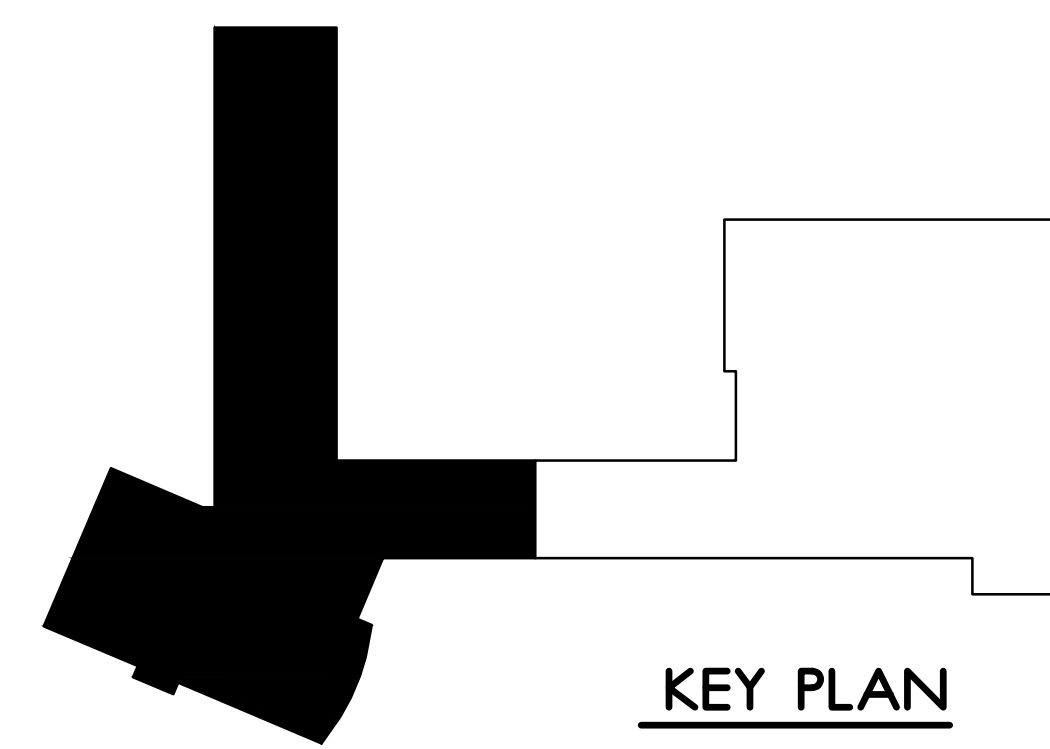
North

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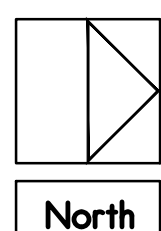
ISSUED FOR:	DATE
RE-BIDDING	01-27-18
DRAWN	APPROVED

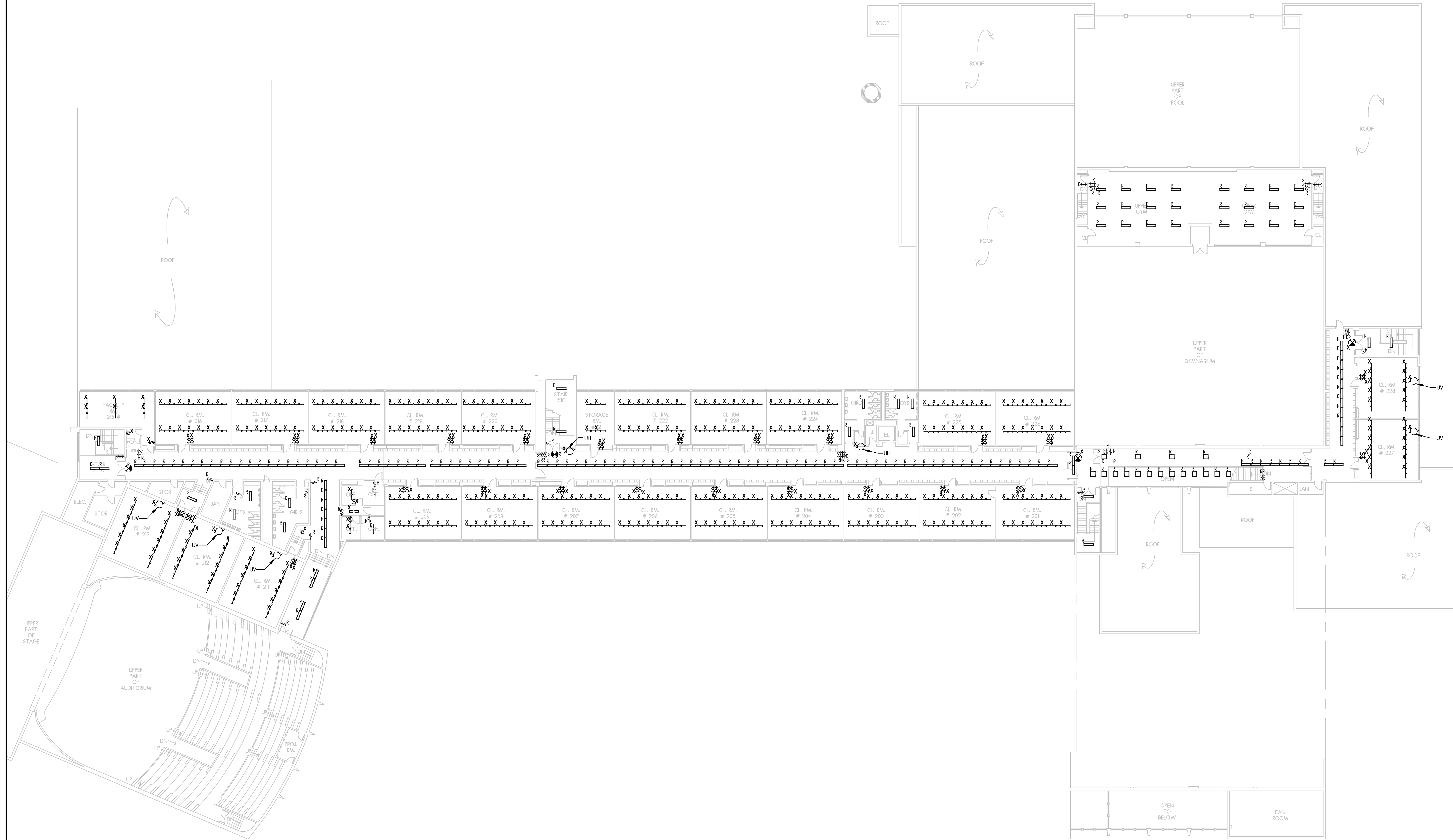
DATE: 11-13-2015	PROJECT NUMBER
25109	SHEET NUMBER
ED1.1	



FIRST FLOOR LIGHTING AND POWER DEMOLITION PLAN

1/16" = 1'-0"



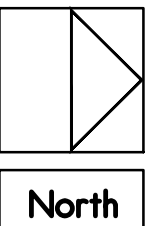


GENERAL NOTES:

1. ALL DEMOLITION PERTAINING TO THE LIGHTING FIXTURES, LIGHTING SWITCHES ON THE SECOND FLOOR IS TO BE PERFORMED BY OWNER.

SECOND FLOOR LIGHTING AND POWER DEMOLITION PLAN

SCALE: 1/16" = 1'-0"

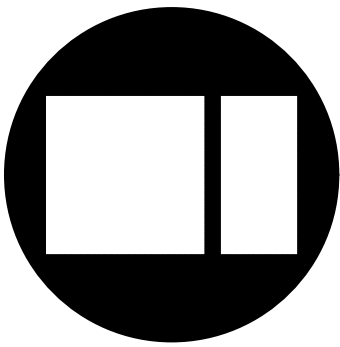


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DATE: 11-13-2015	PROJECT NUMBER
	25109
SHEET NUMBER	ED1.3

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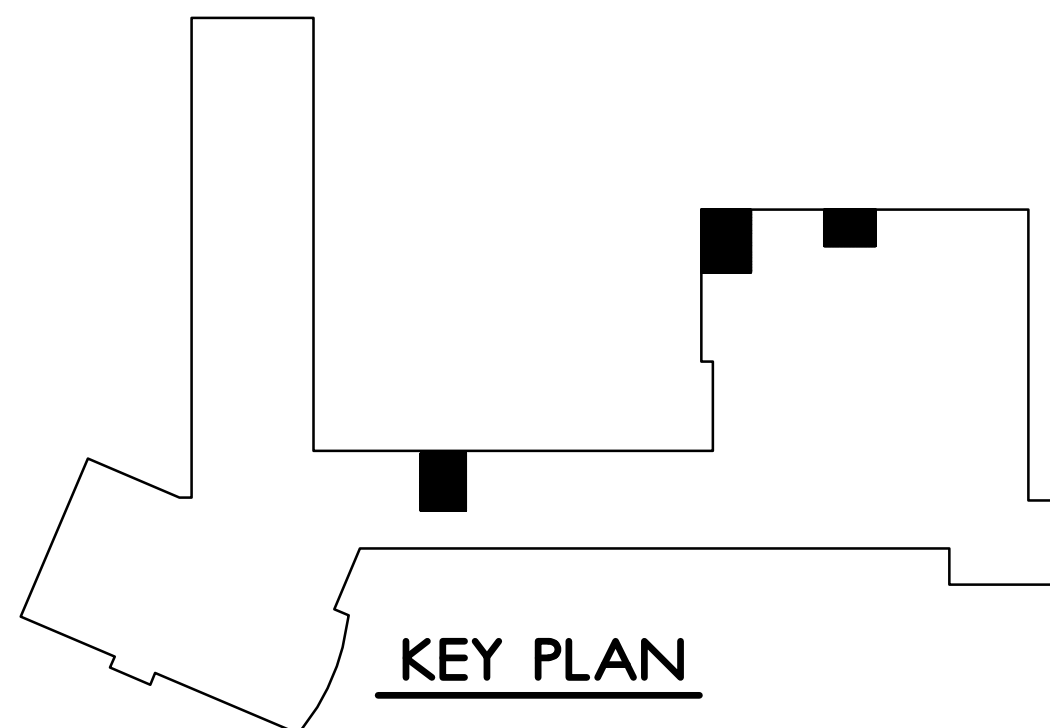
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North

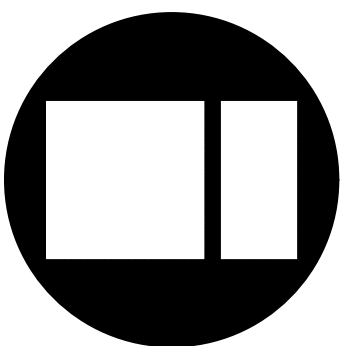


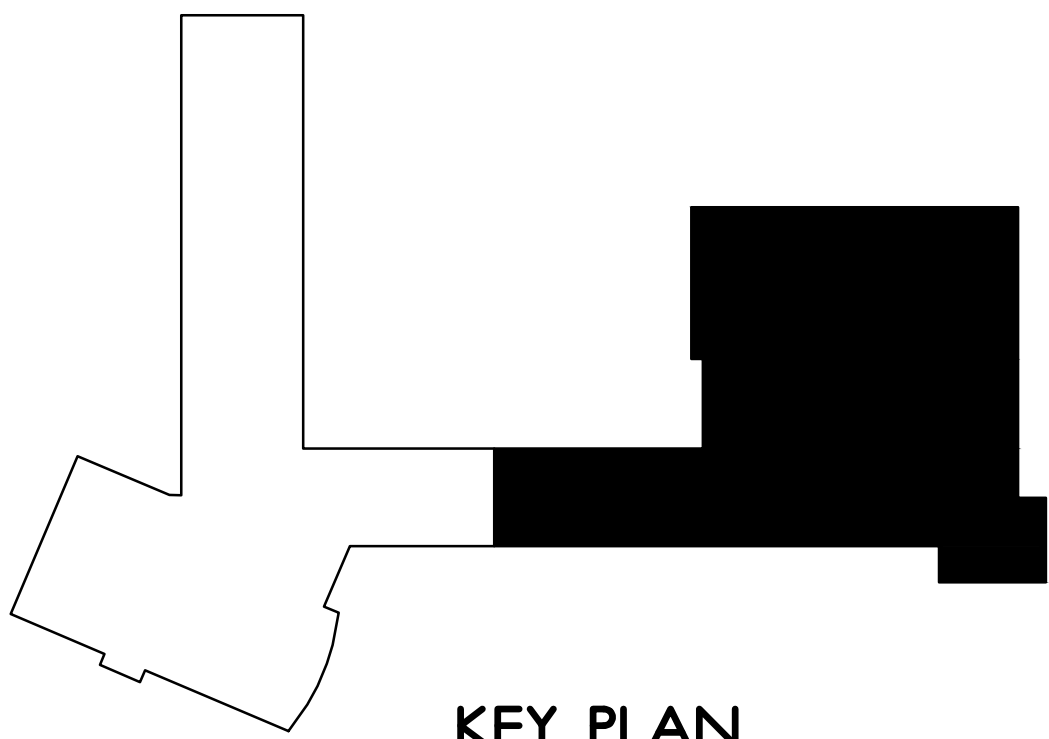
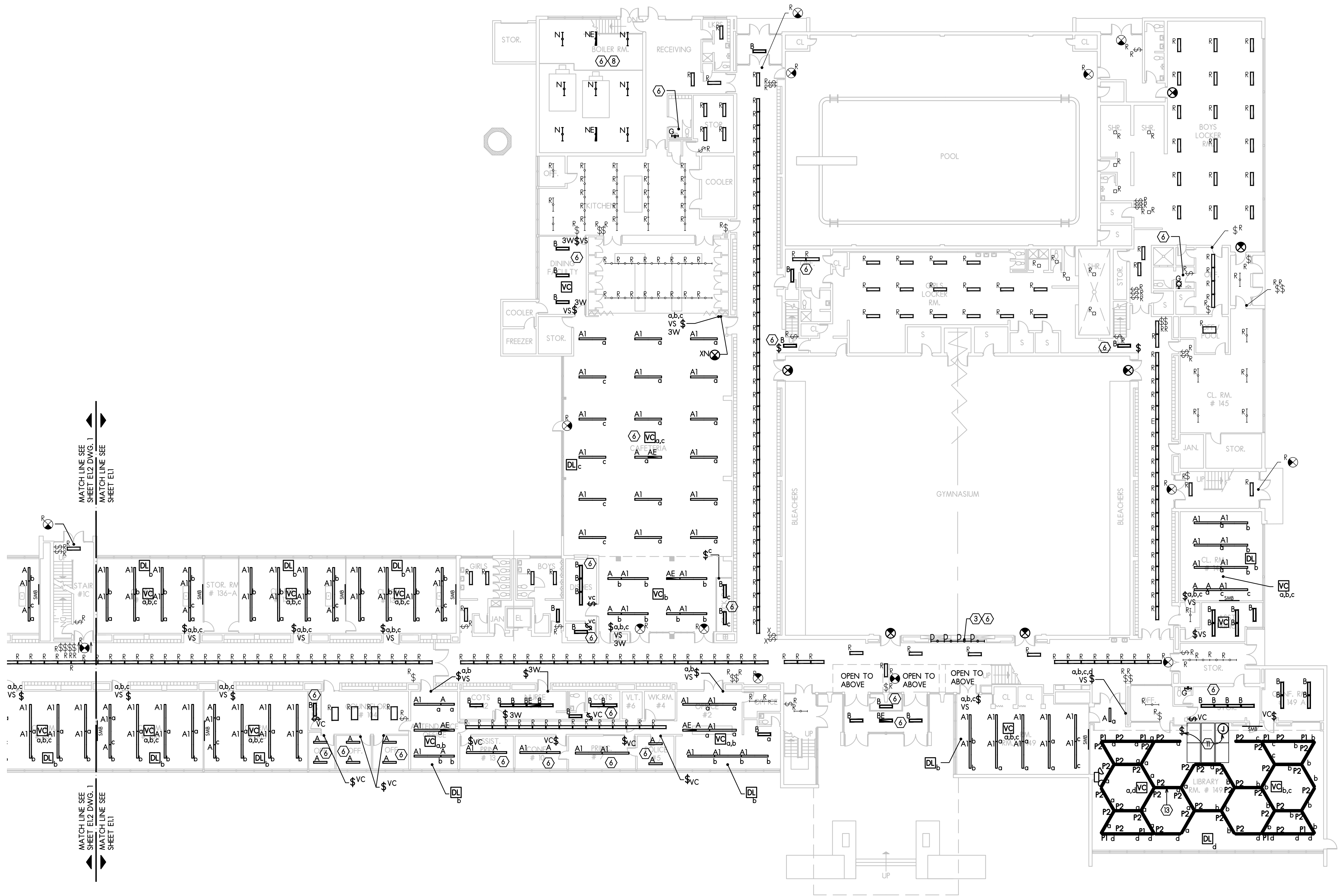
SCALE: $1/16" = 1'-0"$

- ⑦ 47.25"x71" CEILING MOUNTED ACOUSTIC SUSPENDED PANEL WITH LOW VOLTAGE EMBEDDED LINEAR LED STRIP(4000K, 507LM/FOOT). PANEL BY ALCON PRODUCTS. WWW.ALCONPRODUCTS.COM
LIGHTING WILL REQUIRE A NEXTEK POWER HUB PHD6 AND NEXTEK SKY-DUET: 2 BUTTON SWITCH. CONTACT KEVIN SHERIDAN @ Cell: (773) 550-9697 E-mail: kevin@sheridancontract.com
FOR ORDERING INFORMATION, COLOR AND MATERIAL OF FABRIC PANEL TO BE DETERMINED BY OWNER.
- ⑧ RELOCATE EXISTING APPROXIMATELY 12"x12" JUNCTION BOX AS REQUIRED TO FACILITATE INSTALLATION OF NEW DOOR OPENING.

THE FOLLOWING NOTES APPLY TO ALL SHEETS
UNLESS NOTED OTHERWISE

- UNLESS OTHERWISE NOTED REUSE EXISTING CIRCUIT TO FEED NEW LIGHTING FIXTURES. REUSE EXISTING SWITCHING WHERE NEW SWITCHES ARE NOT SHOWN.
- B. ITEMS IDENTIFIED BY THE LETTER "X" ARE EXISTING AND SHALL REMAIN AS IS.
- C. WHERE NO NEW SWITCH IS SHOWN FOR REPLACEMENT FIXTURE, CONNECT IT TO EXISTING SWITCH.
- D. LOCATE DAYLIGHT SENSOR AS UNIFORMLY/CENTRALLY AS POSSIBLE IN ROOM.
- E. LOCATE ROOM VACANCY SENSOR IN AS CENTER OF ROOM AS POSSIBLE OR AS UNIFORMLY AS POSSIBLE IN ROOM FOR OPTIMUM COVERAGE.
- F. EXIT SIGNS AND EMERGENCY LIGHTS SHALL ALWAYS BE ON. FEED FROM AN EXISTING CLOSEST EMERGENCY CIRCUIT. EMERGENCY FIXTURE SHOWN ON NEW WORK PLAN ARE FOR CONCEPT AND GENERAL CODE COMPLIANCE. IF THERE IS AN EXISTING EMERGENCY FIXTURE IN VICINITY OF NEWLY SHOWN EMERGENCY FIXTURES, THE EXISTING EMERGENCY FIXTURE CAN BE ACCEPTABLE RATHER THAN ADDING AN EMERGENCY FIXTURE, PROVIDED IT COMPLIES WITH THE CODE. OTHERWISE PROVIDE NEW EMERGENCY FIXTURE AS INDICATED.
- G. COORDINATE EXACT LOCATIONS OF NEW OUTLETS AT JOB SITE.
- H. IN GENERAL, MOUNT THE NEW FIXTURES AT APPROXIMATE SAME ELEVATION AS EXISTING FIXTURE IN A GIVEN ROOM. COORDINATE EXACT MOUNTING HEIGHT IN EACH ROOM WITH ARCHITECT/ENGINEER & OWNER.
- I. WHERE PANELS AND SWITCHBOARD ARE PLANNED TO BE REPLACED, THE RELOCATION OF EXISTING SPACE, (NOT, CONSULT ARCHITECT/ENGINEER, ALSO AS MUCH AS POSSIBLE, PROVIDE MAXIMUM AVAILABLE BUSSED SPACE, SO THAT ALL CONDUIT CABLES CAN BE ADDED IN THE FUTURE. PROVIDE EQUIPMENT SUBMITTAL BASED UPON MAXIMUM UTILIZATION OF EXISTING AVAILABLE SPACE.
- J. WHERE LOAD IS ADDED/DELETED, UPDATE PANEL DIRECTORY ACCORDINGLY. PROVIDE NEW DIRECTORY WHERE NEW PANEL IS PROVIDED.
- K. WHERE REPLACEMENT OF LIGHTING FIXTURES, REPLACEMENT OF PANELS, SWITCHBOARD, ADDITION OF RECEPTACLES AND OUTLETS, AND/OR RELOCATION OF EXISTING CONDITION OF ADJACENT OR ADJOINING MATERIALS SUCH AS BUT NOT LIMITED TO: WALLS, CEILING, MILLWORK, ELECTRICAL AND PLUMBING CLUSTERS IN WAUS, CEILING, MILLWORK, CABINETRY AND FLOORS FOR CABLENETY RENOVATION SHALL BE PERFORMED BY DIVISION 26. PROVIDE CONTRACTOR AND COORDINATED WITH GENERAL CONTRACTOR. GENERAL CONTRACTOR SHALL PROVIDE ALL NECESSARY AND REQUIRED PATCHING, FINISHING AND PAINTING AND/OR REPLACEMENT OF MATERIALS ETC.
- L. PROVIDE COMPLETE LIGHTING CONTROL SYSTEM FOR ALL AREAS/ROOMS AS INDICATED ELSEWHERE IN THIS DOCUMENT.
- M. IN SOME ROOMS, LIGHTING FIXTURES HAVING DIFFERENT LENGTHS (SUCH AS 4' LONG AND 8' LONG) SHALL BE PROVIDED TO PROVIDE SUFFICIENT THEM EVERY 4' OR IN SUCH A WAY THAT THEY LOOK SYMMETRICAL AND UNIFORM. COORDINATE EXACT CONFIGURATION WITH ARCHITECT DURING CONSTRUCTION PERIOD.
- N. REUSE EXISTING ROUGH-IN TO FEED NEW LIGHTING FIXTURES. PROVIDE NEW ROUGH-IN FOR NEW LIGHTING FIXTURES. EXISTING ROUGH-IN TO NEW LIGHTING FIXTURES AS REQUIRED. REFER TO DETAIL 1 ON SHEET E3.0 FOR FURTHER INFORMATION.
- O. DISCONNECT EXISTING UNIT VENTILATORS (UV), UNIT HEATERS (UH) AND EXHAUST FANS AS SHOWN ON PLANS. REFEED THEM FROM INDICATED CIRCUIT AND PANEL. IN MOST CASES THEY SHALL BE REFEED FROM SAME REPLACED NEW PANEL OR A NEW REPLACEMENT PANEL LOCATED IN VICINITY OF EXISTING PANEL. IN MOST CASES, EXISTING CONDUITS CAN BE REUSED. PROVIDE NEW CONDUITS FOR NEW EQUIPMENT. PROVIDE ALL NEW WIRING. THIS INFORMATION IS PROVIDED AS A COURTESY TO CONTRACTOR. IT IS POSSIBLE THAT, IN SOME SITUATIONS, EXISTING CONDUITS MAY NOT BE REUSED. VERIFY AT THE JOB SITE WHETHER EXISTING CONDUIT CAN BE REUSED OR NEW CONDUITS NEED TO BE PROVIDED.
- P. FOR SIMPLICITY, ALL PANELS (WHETHER REMOVED OR ADDITION OF THEM) ARE SHOWN ONLY ON NEW WORK PLANS. REFER TO SHEETS E1.0, E2.1, E2.2 & E2.3.
- Q. SERIES RATINGS OF PANELS IS REQUIRED FOR THEIR SHORT CIRCUIT RATINGS.





FIRST FLOOR LIGHTING NEW WORK PLAN
SCALE: 1/16" = 1'-0"

GENERAL NOTES:

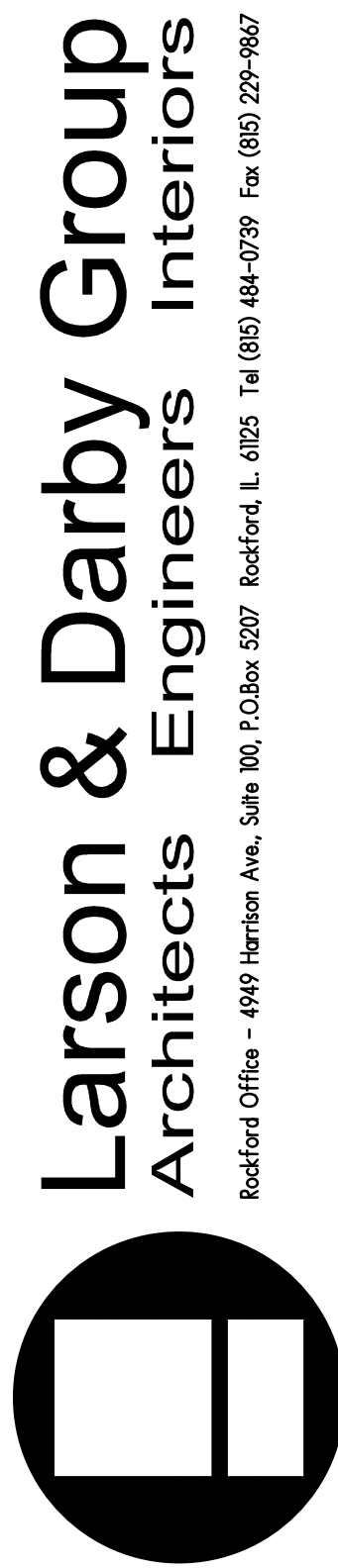
1. REFER TO SHEET E10 FOR ALL GENERAL NOTES AND KEYED NOTES.

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DATE: 11-13-2015	PROJECT NUMBER	SHEET NUMBER
	25109	E11

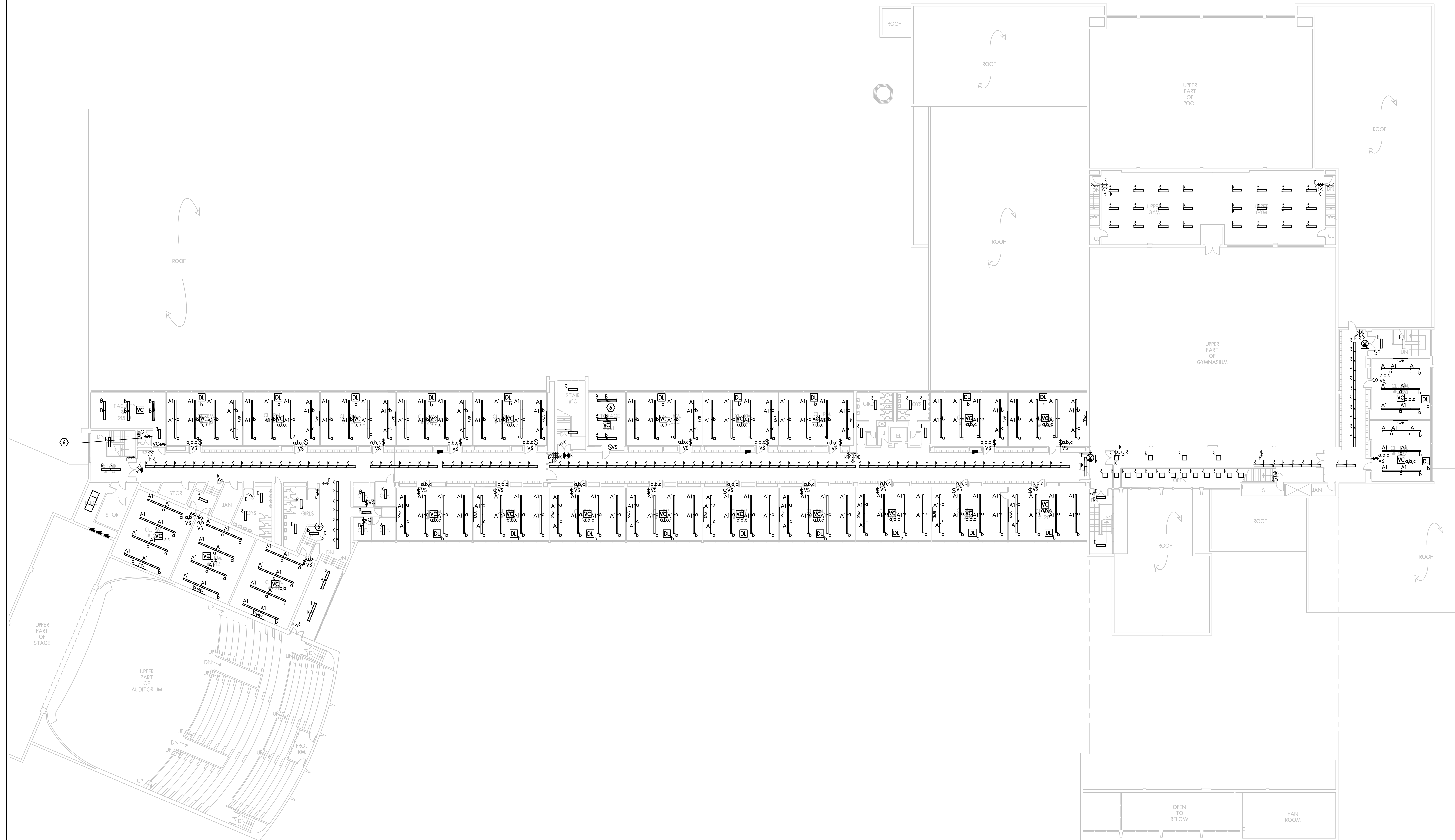


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EP	DJ

DATE: 11-13-2015
PROJECT NUMBER
25109
SHEET NUMBER
E1.2



SECOND FLOOR LIGHTING NEW WORK PLAN

SCALE: $1/16" = 1'-0"$

- GENERAL NOTES:

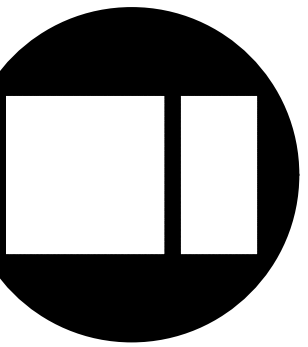
1. REFER TO SHEET E1.0 FOR ALL GENERAL NOTES AND KEYED NOTES.
2. REPLACEMENT OF LIGHTING FIXTURES, LIGHTING SWITCHES, AND LIGHTING CONTROLS ON THE SECOND FLOOR IS TO BE PERFORMED BY OWNER.

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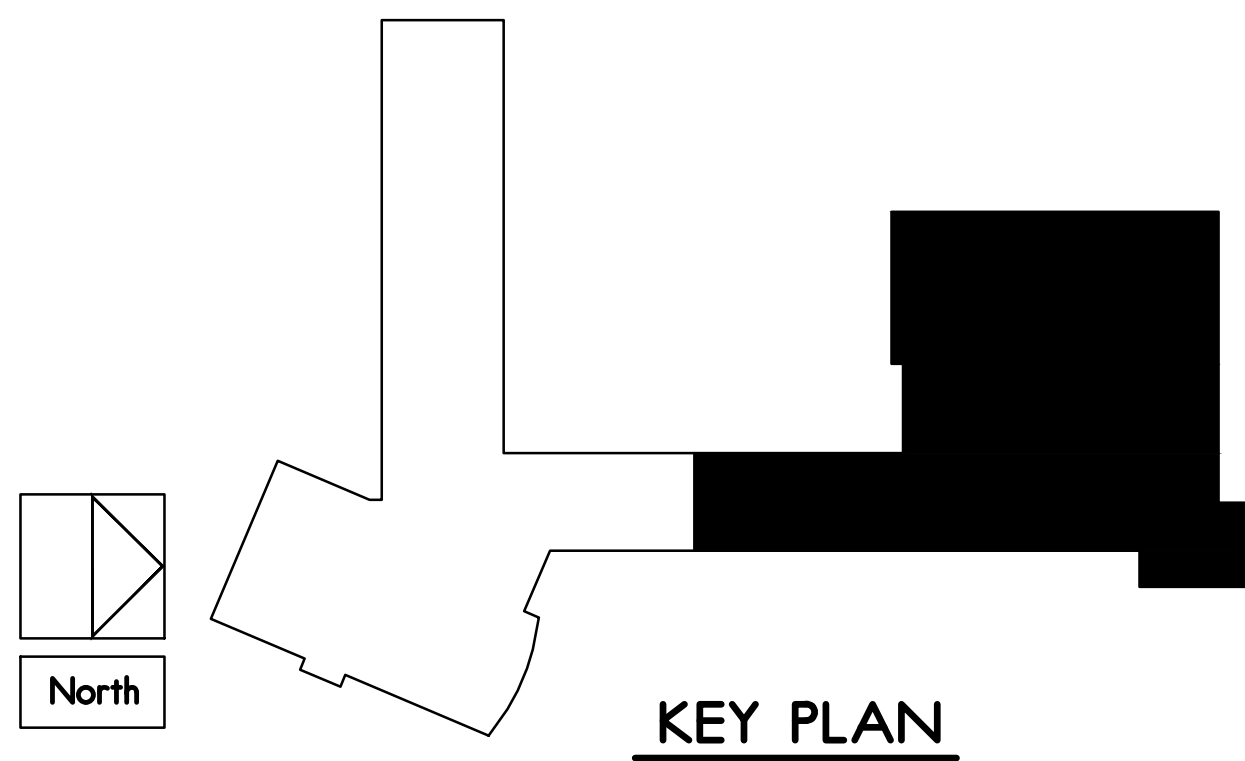
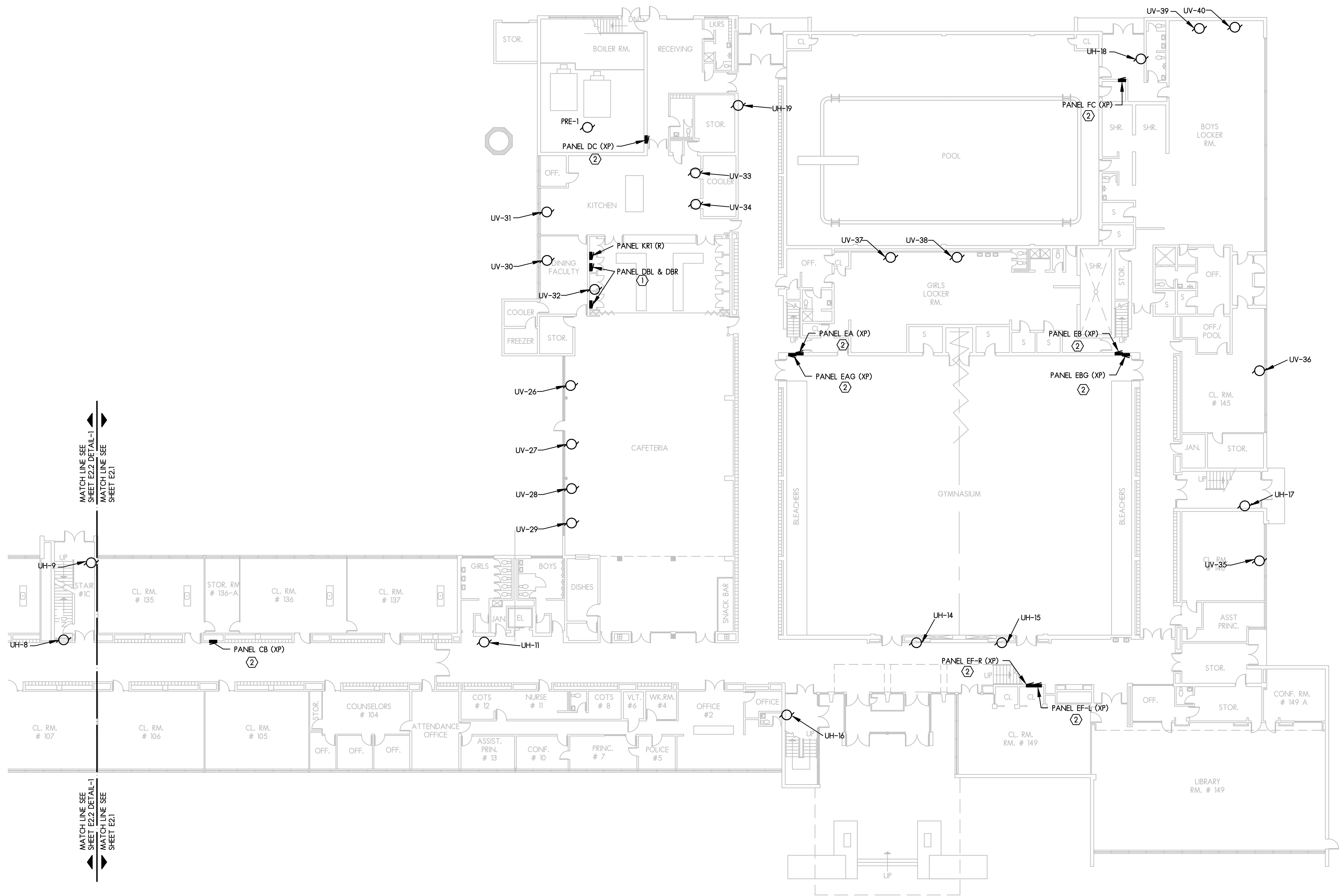
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DATE: 11-13-2015	ISSUED FOR: DATE
PROJECT NUMBER	RE-BIDDING 01-29-18
25109	
SHEET NUMBER	
EI.3	
	DRAWN APPROVED
	EP DJ



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KEYED NOTES:

- ① REPLACE EXISTING PANEL DB WITH PANELS DBL & DBR. REFER TO DETAILS-1 SHEET E3.3. THIS WORK SHALL BE DONE UNDER BASE BID.
- ② THIS PANEL SHALL BE REPLACED UNDER ALTERNATE E2. REFER TO SHEET E3.1A.

FIRST FLOOR POWER NEW WORK PLAN

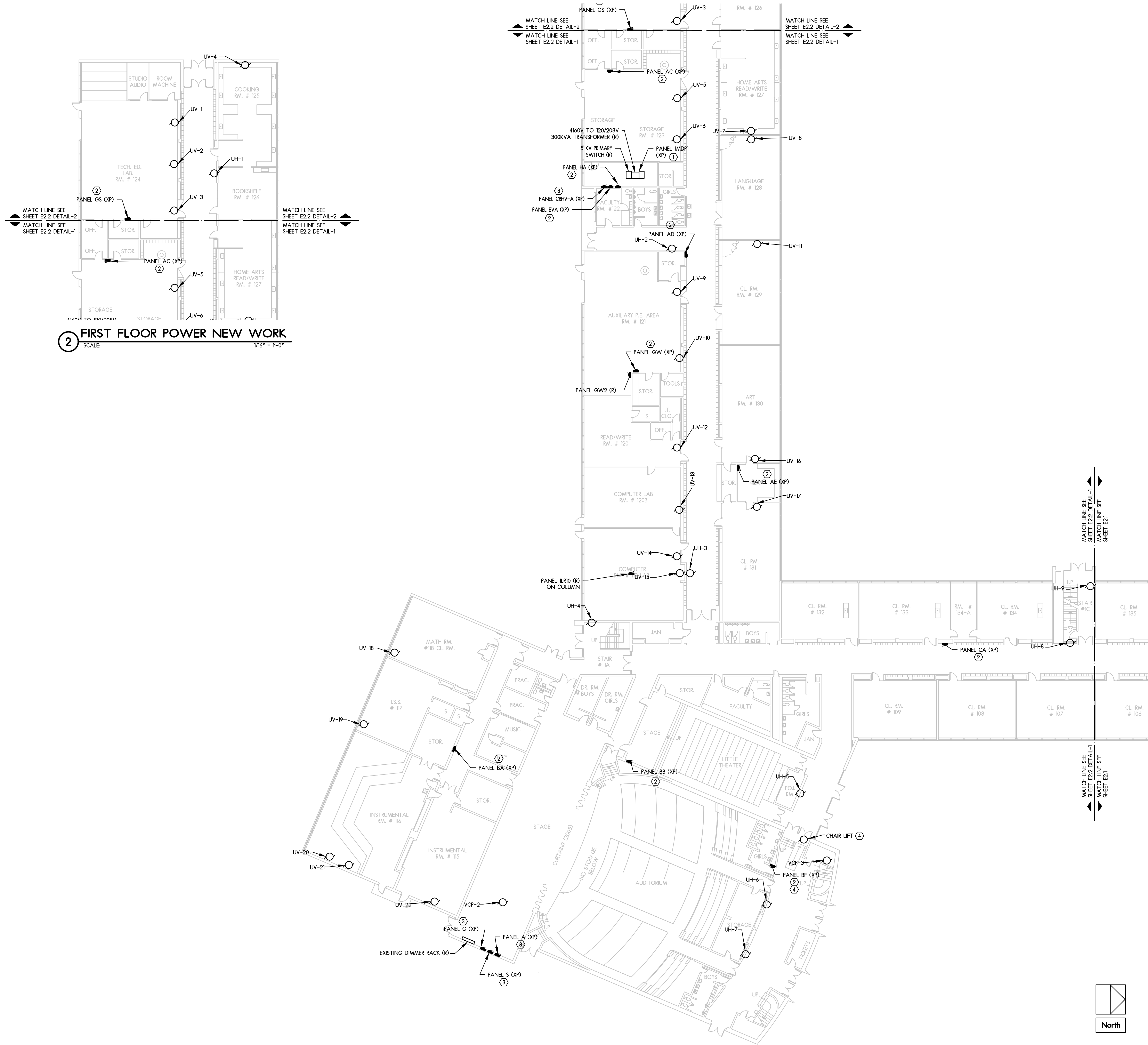
SCALE: 1/16" = 1'-0"

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1A	D2

DATE: 11-13-2015	PROJECT NUMBER	SHEET NUMBER
	25109	E2.1



- KEYED NOTES:**
- THIS MAIN BOARD SHALL BE REPLACED UNDER ALTERNATE E1. REFER TO SHEET E3.1A.
 - THIS PANEL SHALL BE REPLACED UNDER ALTERNATE E2. REFER TO SHEET E3.1A.
 - REPLACE THIS PANEL WITH NEW ONE UNDER BASE BID. REFER TO SHEET E3.3.
 - PROVIDE 1-20-2P CIRCUIT BREAKER IN PANEL "BF" AND FEED CHAIR LIFT.

2 FIRST FLOOR POWER NEW WORK
SCALE: 1/16" = 1'-0"

1 FIRST FLOOR POWER NEW WORK
SCALE: 1/16" = 1'-0"

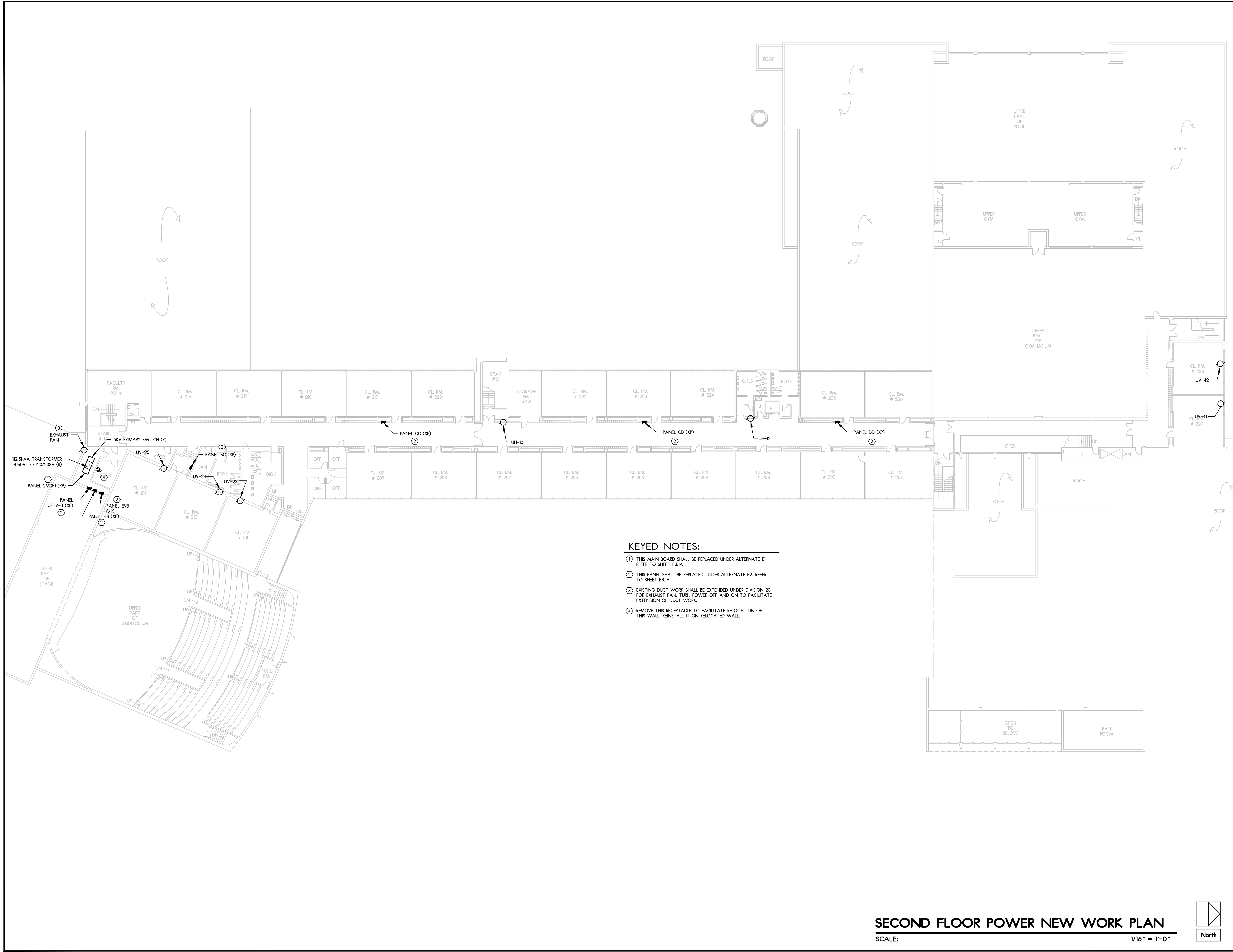
FIRST FLOOR POWER NEW WORK PLAN
SCALE: 1/16" = 1'-0"

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DATE: 11-13-2015	PROJECT NUMBER
25109	SHEET NUMBER
E2.2	

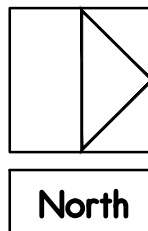


KEYED NOTES:

- ① THIS MAIN BOARD SHALL BE REPLACED UNDER ALTERNATE E1. REFER TO SHEET E3.1A.
- ② THIS PANEL SHALL BE REPLACED UNDER ALTERNATE E2. REFER TO SHEET E3.1A.
- ③ EXISTING DUCT WORK SHALL BE EXTENDED UNDER DIVISION 23 FOR EXHAUST FAN. TURN POWER OFF AND ON TO FACILITATE EXTENSION OF DUCT WORK.
- ④ REMOVE THIS RECEPTACLE TO FACILITATE RELOCATION OF THIS WALL. REINSTALL IT ON RELOCATED WALL.

SECOND FLOOR POWER NEW WORK PLAN

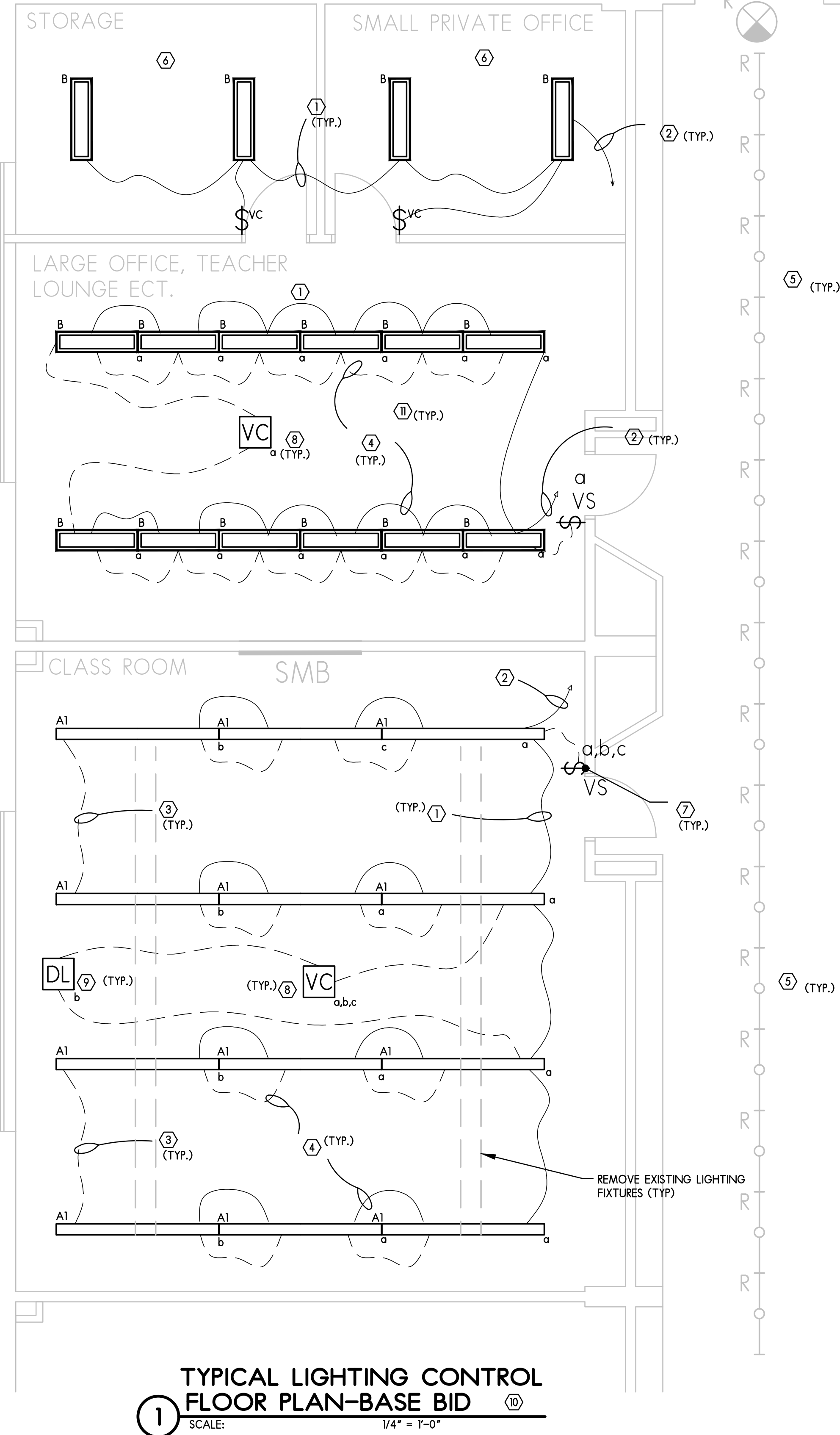
SCALE: 1/16" = 1'-0"



DATE: 11-13-2015	ISSUED FOR: 11-13-2015
PROJECT NUMBER 25109	RE-BIDDING
SHEET NUMBER E2.3	DATE 01-27-16
	DRAWN BY TA
	APPROVED BY DJ

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LIGHT FIXTURE SCHEDULE L1									
TAG	DESCRIPTION	MOUNTING	VOLTAGE	NUMBER OF LAMPS	INPUT WATTS	LAMP TYPE	MANUFACTURER	CATALOG NUMBER	NOTES
A	4' SUSPENDED LINEAR LED, WHITE	SUSPENDED	120V	-	44	LED	PEERLESS LIGHTING	BRW9L HI 30/70 SSH XXFT R4 120 XXXX LP850 C210	L2 L4
A1	8' SUSPENDED LINEAR LED, WHITE	SUSPENDED	120V	-	88	LED	PEERLESS LIGHTING	BRW9L HI 30/70 SSH XXFT R8 120 XXXX LP850 C210	L2 L4
B	4' WRAP AROUND LED, WHITE	SURFACE	120V	-	34.9	LED	LITHONIA LIGHTING	STL4-40L-MVOLT- EZ1-LP850	L2
C	2'X4' LED TROFFER	FLUSH GRID	120V	-	32	LED	LITHONIA LIGHTING	2ALL4 40L MVOLT EZ1 LP850	L2
D	4' LED STRIP LIGHT, DIFFUSER WHITE	SURFACE	120V	-	32	LED	LITHONIA LIGHTING	ZLIN L48 3000LM FST MVOLT 40K 80CRI WH	L2, L3
E	8' LED STRIP LIGHT	SUSPENDED	120V	-	134	LED	KENALL LIGHTING	MLHA12-96-R-MW-PP-1-67L40K-DCC-1-DV-CDF-NAT-PM	NOT USED
F	1'X4' LED RECESSED LED LIGHT	FLUSH FLANGE	120V	-	40.68	LED	LITHONIA LIGHTING	VTL4 40L ADP EZ1 LP840 DGA14	NOT USED
G	2' WALL MOUNT LED VANITY LIGHT	SURFACE	120V	-	18	LED	LITHONIA LIGHTING	WL2-18L-MVOLT-EZ1-LP840	
H	12" LONG LED STRIP LIGHT	SURFACE	120V	-	7	LED	TRAXON TECHNOLOGIES	AC DIM 4000K 135X135 WITH CABLE UL3M 20X1 TX	NOT USED
J	24" LED RECESSED LIGHT	FLUSH	120V		12	LED	MARK ARCHITECTURAL LIGHTING	S6LF-2FT-XX-N40-AD-120-HT	NOT USED
K	4' WALL MOUNT LED LIGHT	SURFACE	120V		28	LED	LITHONIA LIGHTING	WL4-30L-MVOLT-EZ1-LP840	NOT USED
L	2'X2" LED TROFFER	FLUSH GRID	120V		35	LED	LITHONIA LIGHTING	2ALL2 40L MVOLT EZ1 LP840	NOT USED
M	48" LED RECESSED LIGHT	FLUSH	120V		24	LED	MARK ARCHITECTURAL LIGHTING	S6LF-4FT-XX-N40-AD-120-HT	NOT USED
N	1 x 4, LINEAR LED STRIP LIGHT, ROD MOUNTED	SUSPENDED	120V	-	33	LED	LITHONIA	ZLIN L48 3000LM FST 120 50K 80CRI WH	
P1	4', LINEAR LED PENDENT LIGHT	SUSPENDED	120V		16.1	LED	AXIS LIGHTING	STFD-D4-SO-400-80-40-C-UNV-MD	L5 L6
P2	8', LINEAR LED PENDENT LIGHT	SUSPENDED	120V		32.2	LED	AXIS LIGHTING	STFD-D8-SO-400-80-40-C-UNV-MD	L5 L6
	THERMOPLASTIC, LED EXIT	UNIVERSAL	UNIVERSAL	-		LED	LITHONIA	LQM SERIES	
	COMBINATION EMERGENCY LIGHT UNIT AND EXIT SIGN, NICAD BATTERY BACKUP, POLYCARBONATE HOUSING,	UNIVERSAL	UNIVERSAL	-		LED & MR24	LITHONIA	LHQM SERIES	
	EMERGENCY LED LIGHT UNIT, NICAD BATTERY BACKUP, POLYCARBONATE HOUSING, WALL MOUNTED.	WALL	UNIVERSAL	-	-		LITHONIA	ELM2-LED	

- GENERAL NOTES:
- L1. SUFFIX "E" AFTER THE LIGHT FIXTURE TYPE DENOTES THE FIXTURE IS EMERGENCY TYPE. FOR EXAMPLE, FIXTURE TYPE "AE" ON FLOOR PLAN INDICATES THAT IT IS AN EMERGENCY FIXTURE SAME AS TYPE "A", THIS FIXTURE SHALL ALWAYS BE ON.
- L2. REFER TO GENERAL LIGHTING CONTROL NOTES ON THIS SHEET AND "TYPICAL LIGHTING CONTROL FLOOR PLAN BASE BID" DETAIL ON THIS SHEET. UNLESS NOTED OTHERWISE PROVIDE LIGHT MODULES INSIDE EACH LIGHTING FIXTURES AS INDICATED IN ABOVE MENTIONED NOTES AND IN ABOVE MENTIONED DETAIL. WHERE LIGHTING FIXTURES HAVING LIGHT MODULES ARE PROVIDED AND FIXTURES ARE MOUNTED IN ONE CONTINUOUS ROW PROVIDE CATSE CONTROL WIRING AND POWER WIRING INSIDE FIXTURES RATHER THAN EXTERNAL EXPOSED WIRING.
- L3. PROVIDE FIXTURE IN ENTIRE LENGTH OF COVE. CONTRACTOR CAN USE 8' LONG FIXTURES IN LIEU OF 4' LONG FIXTURES. DEPENDING UPON LENGTH OF COVE. VERIFY EXACT LENGTH OF COVE AT JOBSITE.
- L4. PROVIDE ADDITIONAL CONNECTORS, CLIPS AS REQUIRED TO MEET THE REQUIREMENTS INDICATED IN GENERAL NOTE "N" ON SHEET E10.
- L5. THIS FIXTURE WILL REQUIRE CONNECTION HUBS - AY, AH, AI. VERIFY THE QUANTITY AND HUB TYPE WITH THE FIXTURE LAYOUT.
- L6. CUSTOM COLOR TO BE DETERMINED BY OWNER.

GENERAL LIGHTING CONTROL SYSTEM NOTES

- N1. AS INDICATED IN THIS DOCUMENT, PROVIDE COMPLETE LIGHTING CONTROL SYSTEM BASED UPON LIGHT SYSTEM MANUFACTURED BY ACUTY BRANDS, INC. AS BASIS OF DESIGN, UNLESS OTHERWISE NOTED, PROVIDE LIGHT MODULE INSIDE EACH LIGHTING FIXTURE. FOR CERTAIN FIXTURES (SUCH AS TYPE "D" AND TYPE "H") INSTALL ONE LIGHT MODULE NEXT TO GROUP OF FIXTURES FOR GIVEN ZONE. ADDITIONALLY, WHERE THESE FIXTURES ARE INSTALLED, PROVIDE LIGHT COMPATIBLE SWITCHES, VACANCY SENSORS, DAYLIGHTS SENSOR ETC. AS SHOWN ON FLOOR PLAN, PROVIDE CAT 5e WIRING TO INTERCONNECT THESE DEVICES. REFER TO "TYPICAL LIGHTING CONTROL FLOOR PLAN" DETAIL ON THIS SHEET FOR TYPICAL WIRING DIAGRAM.
- N2. UNLESS SPECIFICALLY NOTED VIA KEY NOTE - 1 ON SHEETS E11, E12, AND E13, PROVIDE COMPLETELY OPERATIONAL SYSTEM AS INDICATED ABOVE ON A ROOM BY ROOM BASIS, MEANING EACH ROOM WILL BE INSTALLED AND WIRED AS A STANDALONE SYSTEM.
- N3. LIGHTING FIXTURES FOR STORAGE ROOMS, SMALL OFFICES, CLOSETS ETC INDICATED VIA SPECIFIC NOTE SHALL BE STANDARD LED FIXTURES AND SHALL NOT HAVE ANY LIGHT FEATURE AND SHALL NOT HAVE ANY PROVISION FOR LIGHT SYSTEM. REFER TO KEY NOTE-6 ON THIS SHEET.

- KEYED NOTES:
1. TYPICAL 120V POWER WIRING SHOWN VIA SOLID LINE.
2. TYPICAL 120V POWER SOURCE TO ROOM LIGHTING FIXTURES. FED FROM EXISTING ROUGH-INS.
3. TYPICAL CAT5E CABLE SHOWN VIA DASHED LINE.
4. PROVIDE WIRING INSIDE LIGHTING FIXTURES WHEN FIXTURES ARE MOUNTED IN ROW.
5. WHERE EXISTING FIXTURES ARE REMAINING, EXISTING WIRING SHALL REMAIN AS IS, WHERE LIGHTING FIXTURES ARE REPLACED IN CORRIDOR PROVIDE LIGHT CONTROL FOR CORRIDOR LIGHTING.
6. LIGHT FIXTURE CONTROL SYSTEM IS NOT REQUIRED IN SMALL OFFICES, CLOSETS, STORAGE ROOM ETC. AS INDICATED VIA KEYED NOTE 1 ON SHEETS E10A, E11, E12, E13.
7. IN CLASSROOMS 8 BUTTON SWITCH SHALL BE ACUTY BRANDS MODEL NO. #P0DM 4S DX. IN GENERAL CLASSROOMS SHALL HAVE THREE LIGHTING CONTROLS, ONE FOR 8' LONG FIXTURES NEAR SMARTBOARD, 2ND FOR FIXTURES AT EXTERIOR WINDOW AND TIED WITH DAYLIGHT SENSOR AND 3RD FOR REMAINING FIXTURES. REFER TO FLOOR PLANS FOR ANY VARIATIONS OF THIS. ALL LIGHTS AND CONTROLS SHALL BE DIMMABLE.
8. DUAL TECHNOLOGY VACANCY SENSOR, ACUTY BRANDS, MODEL #CM PDT 10 OR APPROVED EQUAL. THE EXACT MODEL NUMBER SHALL DEPEND UPON THE SIZE OF THE ROOM AND LOCATION FOR BEST COVERAGE.
9. DAY LIGHT SENSOR, ACUTY BRAND MODEL #CMADCX OR APPROVED EQUAL.
10. THIS DETAIL PROVIDES CONCEPTUAL WIRING DIAGRAM BASED UPON LIGHT SYSTEM MANUFACTURED BY ACUTY BRAND, CONTACT FOR ACUTY BRANDS LIGHT SYSTEM PRODUCTS: DAN BROWN 630-750-7002. UNDER BASE BID, PROVIDE STAND ALONE LIGHT CONTROL SYSTEM FOR ROOMS WHERE LIGHT MODULES ARE PROVIDED. THIS DETAIL IS TYPICAL AND CONCEPTUAL IN NATURE. REFER TO INDIVIDUAL ROOM LAYOUT FOR QUANTITY OF FIXTURES AND DEVICES. IF THERE IS ANY EMERGENCY FIXTURE INSIDE A ROOM/AREA DO NOT CONNECT TO THIS SYSTEM. EMERGENCY LIGHTING FIXTURES SHALL ALWAYS BE ON.
11. IN GENERAL LARGE OFFICES, CAFETERIA ETC. SHALL HAVE ONE VACANCY TYPE ON/OFF CONTROL. REFER TO FLOOR PLAN FOR ANY VARIATIONS TO THIS. ALL LIGHTS AND CONTROLS IN THIS AREAR /ROOM SHALL BE DIMMABLE.

MOTOR AND EQUIPMENT SCHEDULE															
EQUIP. TAG	DESIGNATED TAG	LOAD				WIRE(AWG) & CONDUIT SIZE	SOURCE OF POWER		PROTECT (AMPERES)	STARTER		DISCONNECT (AMP.)		NOTES	
		VOLTS	PHASE	H.P.	AMP		PANEL	CCT. NO.		SIZE	TYPE	SIZE	TYPE		
PRE-1	POWER ROOF EXHAUSTER	120	1	1/4		2#12, 1#12G - 1/2" C	BMEQ	19		20A-1P		WE			
UH-1 THRU UH-3	UNIT HEATER	120	1	160 WATT		2#12, 1#12G - 1/2" C	HA			15A-1P			20A-1P		
UH-4	UNIT HEATER	120	1	160 WATT		2#12, 1#12G - 1/2" C	HB			15A-1P			20A-1P		
UH-5	UNIT HEATER	120	1	122 WATT		2#12, 1#12G - 1/2" C	HB			15A-1P			20A-1P		
UH-6 & UH-7	UNIT HEATER	120	1	160 WATT		2#12, 1#12G - 1/2" C	HB			15A-1P			20A-1P		
UH-8	UNIT HEATER	120	1	122 WATT		2#12, 1#12G - 1/2" C	HC			15A-1P			20A-1P		
UH-9	UNIT HEATER	120	1	160 WATT		2#12, 1#12G - 1/2" C	HC			15A-1P			20A-1P		
UH-10	UNIT HEATER	120	1	122 WATT		2#12, 1#12G - 1/2" C	HC			15A-1P			20A-1P		
UH-11	UNIT HEATER	120	1	122 WATT		2#12, 1#12G - 1/2" C	HC			15A-1P			20A-1P		
UH-12	UNIT HEATER	120	1	122 WATT		2#12, 1#12G - 1/2" C	HC			15A-1P			20A-1P		
UH-13	UNIT HEATER	NOT USED													
UH-14 THRU UH-15	UNIT HEATER	120	1	160 WATT		2#12, 1#12G - 1/2" C	HC			15A-1P			20A-1P		
UH-17	UNIT HEATER	120	1	122 WATT		2#12, 1#12G - 1/2" C	BMEQ			20A-1P			20A-1P		
UH-18	UNIT HEATER	120	1	79 WATT		2#12, 1#12G - 1/2" C	BMEQ			20A-1P			20A-1P		
UH-19 & UH-16	UNIT HEATER	120	1	160 WATT		2#12, 1#12G - 1/2" C	BMEQ			20A-1P			20A-1P		
UV-1 THRU UV-3	UNIT VENTILATOR	120	1	1		2#10, 1#10G - 1/2" C	CRHV-A-N			30A-1P			30A-1P		
UV-4	UNIT VENTILATOR	120	1	1		2#10, 1#10G - 1/2" C	CRHV-A-N			30A-1P			30A-1P		
UV-5 & UV-6	UNIT VENTILATOR	120	1	1		2#10, 1#10G - 1/2" C	CRHV-A-N			30A-1P			30A-1P		
UV-7 & UV-8	UNIT VENTILATOR	120	1	1		2#10, 1#10G - 1/2" C	CRHV-A-N			30A-1P			30A-1P		
UV-9 & UV-10	UNIT VENTILATOR	120	1	1		2#10, 1#10G - 1/2" C	CRHV-A-N			30A-1P			30A-1P		
UV-11 THRU UV-13	UNIT VENTILATOR	120	1	1		2#10, 1#10G - 1/2" C	CRHV-A-N			30A-1P			30A-1P		
UV-14 & UV-15	UNIT VENTILATOR	120	1	1		2#10, 1#10G - 1/2" C	CRHV-A-N			30A-1P			30A-1P		
UV-16 & UV-17	UNIT VENTILATOR	120	1	1		2#10, 1#10G - 1/2" C	CRHV-A-N			30A-1P			30A-1P		
UV-18	UNIT VENTILATOR	120	1	1/4		2#12, 1#12G - 1/2" C	CRHV-B			15A-1P			20A-1P		
UV-19	UNIT VENTILATOR	120	1	1/4		2#12, 1#12G - 1/2" C	CRHV-B			15A-1P			20A-1P		
UV-20 & UV-21	UNIT VENTILATOR	120	1	1/4		2#12, 1#12G - 1/2" C	CRHV-B			15A-1P			20A-1P		
UV-22	UNIT VENTILATOR	120	1	1/4		2#12, 1#12G - 1/2" C	CRHV-B			15A-1P			20A-1P		
UV-23 THRU UV-25	UNIT VENTILATOR	120	1	1/4		2#12, 1#12G - 1/2" C	CRHV-B			15A-1P			20A-1P		
UV-26 THRU UV-31	UNIT VENTILATOR	120	1	1/4		2#12, 1#12G - 1/2" C	BMEQ			20A-1P			20A-1P		
UV-32 THRU UV-34	UNIT VENTILATOR	120	1	1		2#10, 1#10G - 1/2" C	BMEQ			30A-1P			30A-1P		
UV-35 & UV-36	UNIT VENTILATOR	120	1	1		2#10, 1#10G - 1/2" C	BMEQ			30A-1P			30A-1P		
UV-37 THRU UV-40	UNIT VENTILATOR	120	1	1/4		2#12, 1#12G - 1/2" C	BMEQ			20A-1P			20A-1P		
UV-41 & UV-42	UNIT VENTILATOR	120	1	1/4		2#12, 1#12G - 1/2" C	BMEQ			20A-1P			20A-1P		
BFS-1(A)	BOILER FEED SYSTEM	208	3	1/3		3#12, 1#12G - 1/2" C	BMEQ			20A-3P	WE		20A-3P	TOGGLE	
BFS-1(B)		208	3	1/3		3#12, 1#12G - 1/2" C	BMEQ			20A-3P	WE		20A-3P	TOGGLE	
BFS-1(C)		208	3	1/3		3#12, 1#12G - 1/2" C	BMEQ			20A-3P	WE		20A-3P	TOGGLE	
VCP-1	CONDENATE VACUUM PUMP	208	3	2 @ 1.5		3#10, 1#10G - 1/2" C	CF			25A-3P	WE		30A-3P	TOGGLE	
VCP-2	CONDENATE VACUUM PUMP	208	3	2 @ 1		3#10, 1#10G - 3/4" C	S			25A-3P	WE		30A-3P	TOGGLE	
VCP-3	CONDENATE VACUUM PUMP	208	3	2 @ 1.5		3#10, 1#10G - 3/4" C	BF			25A-3P	WE		30A-3P	TOGGLE	
VCP-4	CONDENATE VACUUM PUMP	208	3	2 @ 2		3#10, 1#10G - 3/4" C	BMEQ			25A-3P	WE		30A-3P	TOGGLE	
SB-1	STEAM BOILER	208	3	10		3#6, 1#10G - 3/4" C	BMEQ			50A-3P	WE		60A-3P	TOGGLE	
SB-2	STEAM BOILER	208	3	10		3#6, 1#10G - 3/4" C	BMEQ			50A-3P	WE		60A-3P	TOGGLE	
SUH-1	SUSPENDED UNIT HEATER	120	1	1/12		2 #12, 1#12G-1/2" C	BMEQ	19		20-1P			20-1P	TOGGLE	

Ⓢ EXITING PANEL 1MDP1					
VOLTAGE : 120/208V		MAIN TYPE: 1200A MCB		OCP TYPE: CIRCUIT BREAKERS	
PHASE: 3PH/4W		BUS AMP: 1200 AMP		FAULT DUTY:	
CCT. NO.	LOAD DESCRIPTION	DEVICE RATING (AMP)		NOTES	
		FRAME	TRIP		
600A CIRCUIT BREAKER KIRK KEY					
1	AC	400-3P	300-3P		
2	AE	200-3P	125-3P		
3	CRHV-A-N	200-3P	150-3P	Ⓢ	
4	AD	100-3P	70-3P		
5	HA	100-3P	40-3P		
6	SPARE	100-3P	40-3P	Ⓢ	
7	EVA	100-3P	100-3P		
8	NO LABLE	100-3P	30-3P		
9	NO LABLE	100-3P	30-3P		
600A CIRCUIT BREAKER KIRK KEY					
10	GW	200-3P	175-3P		
11	BM	200-3P	175-3P		
12	GS	200-3P	175-3P		
13	SPACE	200-3P			

②⑦ EXISTING PANEL 2MDP1					
VOLTAGE : 120/208 V		MAIN TYPE: 500 MCB		OCP TYPE: CIRCUIT BREAKER	
PHASE: 3PH,4W		BUS AMP: 500 AMP		FAULT DUTY:	
CCT. NO.	LOAD DESCRIPTION	DEVICE RATING (AMP)		NOTES	
		FRAME	TRIP		
500A KIRK KEY MAIN CIRCUIT BREAKER					
1	A-S-G PANEL & STAGE	400-3P	250-3P	②⑦	
2					
3	BB	100-3P	70A-3P		
4	BA MUSIC DEPT	100-3P	70-3P		
5	BF	100-3P	70-3P		
6	AUD HEAT	100-3P	50-3P		
7	BC	100-3P	50-3P		
8	AUD-EX	100-3P	40-3P		
9	CRHV-B	100-3P	40-3P		
10	EVb	100-3P	40-3P		
11	HB	100-3P	40-3P		
12	SPARE	100-3P	30-3P		
13	SPARE (ON)	100-3P	30-3P		
14	SPACE	100-3P			
15	SPACE	400-3P			
16					
17	SPACE	100-3P			
18	SPACE	100-3P			

PANEL SCHEDULE ③④⑤⑥									
PANEL NAME	MOUNTING	VOLTAGE	PHASE & WIRE	CIRCUIT BREAKERS	SPACES	AIC	MLO (AMP)	MCB (AMP)	REMARKS
FIRST FLOOR									
CRHV-A-E	FLUSH	120/208	3/4	14-15A-1P			40		②
CRHV-A-N	FLUSH	120/208	3/4	②		43000	150		②③②⑤
S-E	SURFACE	120/208	3/4	2-70A-3P, 1-100A-3P	3		225		②
S-N	SURFACE	120/208	3/4	②②		14000	400		②②
DB-E	FLUSH	120/208	3/4	35-XX-1P, 4-XX-3P	1		200		②①⑧
DBL-N & DBR-N	FLUSH	120/208	3/4	②③		25200	②③		
A-E	SURFACE	120/208	3/4	14-20A-1P			70		②
A-N	SURFACE	120/208	3/4	⑧⑦		14000	100		②②
G-E	SURFACE	120/208	3/4	26-20A-1P		8	100		②
G-N	SURFACE	120/208	3/4	30-20A-1P, 1-25A-3P	9	14000	100		②②

② EXITING PANEL 1MDP1					
VOLTAGE : 120/208 V		MAIN TYPE: 1200A MCB		OCP TYPE: CIRCUIT BREAKER	
PHASE: 3PH,4W		BUS AMP: 1200A		FAULT DUTY:	
CCT. NO.	LOAD DESCRIPTION	DEVICE RATING (AMP)		NOTES	
		FRAME	TRIP		
600A CIRCUIT BREAKER KIRK KEY					
1	BR	200-3P	200-3P		
2	EF	200-3P	175-3P		
3	EA & EGA	200-3P	125-3P		
4	BMEQ	200-3P	200-3P	⑧	
5	DC	100-3P	100-3P		
6	ESP	100-3P	100-3P		
7	DA	100-3P	100-3P		
8	EM	200-3P	200-3P		
9	RECIRC. PUM	100-3P	30-3P		
10	BOILER PAN	100-3P	100-3P		
11	EC	100-3P	70-3P		
12	POOL PUMPS	100-3P	50-3P		
13	DD	100-3P	100-3P		
14	EB & EGB	100-3P	100-3P		
15	BHV	200-3P	175-3P		
16	DBV	200-3P	125-3P	⑭	
600A CIRCUIT BREAKER KIRK KEY					

PANEL SCHEDULE ③④⑤⑥⑦⑧									
PANEL NAME	MOUNTING	VOLTAGE	PHASE & WIRE	CIRCUIT BREAKERS	SPACES	AIC	MLO (AMP)	MCB (AMP)	REMARKS
FIRST FLOOR									
DC-E	FLUSH	120/208	3/4	28-20A-1P, 4-15A-3P	2		200		②
DC-N	FLUSH	120/208	3/4	⑧		20000	200		
EA-E	FLUSH	120/208	3/4	20-20A-1P	1		100		②
EA-N	FLUSH	120/208	3/4	⑧		8500	100		
EAG-E	FLUSH	120/208	3/4	14-20A-1P	4		100		②
EAG-N	FLUSH	120/208	3/4	⑧		8500	100		
EBG-E	FLUSH	120/208	3/4	14-20A-1P	4		100		②
EBG-N	FLUSH	120/208	3/4	⑧		5000	100		
EB-E	FLUSH	120/208	3/4	14-20A-1P	4		100		②
EB-N	FLUSH	120/208	3/4	⑧		5000	100		
FC-E	FLUSH	120/208	3/4	12-20A-1P, 1-40A-3P 1-30A-1P	4		100		②
FC-N	FLUSH	120/208	3/4	⑧		6000	100		
EF-L-E	FLUSH	120/208	3/4	20-20A-1P	4		200		②
EF-L-N	FLUSH	120/208	3/4	⑧		7200	200		
EF-R-E	FLUSH	120/208	3/4	24-20A-1P			100		②
EF-R-N	FLUSH	120/208	3/4	⑧		7200	100		
CB-E	FLUSH	120/208	3/4	26-20A-1P	4		100		②
CB-N	FLUSH	120/208	3/4	⑧		16000	100		
1LR10	SURFACE	120/208	3/4	9-20A-1P, 2-20A-2P 1-30A-3P	14		—		①
AE-E	FLUSH	120/208	3/4	37--20A-1P, 2-30A-1P	5		200		②
AE-N	FLUSH	120/208	3/4	⑧		8600	200		
GW-E	SURFACE	120/208	3/4	21-20A=1P, 1-15A-3P 1-100A-3P	7		200		②
GW-N	SURFACE	120/208	3/4	⑧		16000	200		
GW2	SURFACE	120/208	3/4	5-20A-2P	14		70		①
AD-E	FLUSH	120/208	3/4	22-20A-1P			100		②
AD-N	FLUSH	120/208	3/4	⑧		10300	100		
HA-E	FLUSH	120/208	3/4	6-15A-1P			40		②
HA-N	FLUSH	120/208	3/4	⑧②⑧		19000	40		②③
EVA-E	FLUSH	120/208	3/4	6-15A-1P			50		②
EVA-N	FLUSH	120/208	3/4	⑧②⑧		19000	100		③⑩
AC-E	SURFACE	120/208	3/4	31-20A-1P, 1-20A-2P 1-30A-3P, 1-100A-3P	1		200		②
AC-N	FLUSH	120/208	3/4	⑧		30000	200		
GS-E	SURFACE	120/208	3/4	28-20A-1P, 4-20A-2P 1-15A-3P, 1-100A-3P	6		200		②
GS-N	FLUSH	120/208	3/4	⑧		22000	200		
BB-E	FLUSH	120/208	3/4	26-20A-1P			100		②④②
BB-N	FLUSH	120/208	3/4	⑧		12000	100		②④
BA-E	FLUSH	120/208	3/4	29-20A-1P, 1-15A-3P	4		100		②
BA-N	FLUSH	120/208	3/4	⑧		6000	100		
BF-E	FLUSH	120/208	3/4	22-20A-1P, 1-15A-3P	5		100		②
BF-N	FLUSH	120/208	3/4	24-20A-1P, 1-15A-3P 1-25A-3P	2	4300	100		
CA-E	FLUSH	120/208	3/4	26-20A-1P			100		②
CA-N	FLUSH	120/208	3/4	⑧		14000	100		
KR1	SURFACE	120/208	3/4	3-20A-1P, 2-20A-3P 1-20A-2P,	13				①

PANEL SCHEDULE ③④⑤⑥⑦⑧									
PANEL NAME	MOUNTING	VOLTAGE	PHASE & WIRE	CIRCUIT BREAKERS	SPACES	AIC	MLO (AMP)	MCB (AMP)	REMARKS
BASMENT FLOOR									
LE1	SURFACE	120/208	3/4	3-30A-3P, 1-20A-3P 1-60A-3P, 1-40A-3P 12-20A-1P	2		200		①
BHVL-E	SURFACE	120/208	3/4	6-15A-3P, 2-30A-3P 2-50A-3P	3		225		②
BHVL-N	SURFACE	120/208	3/4	⑧②⑧		56000	225		
BHVR-E	SURFACE	120/208	3/4	36-20A-1P			200		②
BHVR-N	SURFACE	120/208	3/4	⑧②⑧		56000	225		
BR-E	SURFACE	120/208	3/4	26-20A-1P, 1-15A-3P 1-30A-3P, 1-70A-3P 1-50A-3P			125		②
BR-N	SURFACE	120/208	3/4	⑧		48000	125		
CF-E	SURFACE	120/208	3/4	12-20A-1P, 1-100A-3P 1-70A-3P, 1-125A-3P	7		175		②
CF-N	SURFACE	120/208	3/4	12-20A-1P, 1-100A-3P 1-25A-3P, 1-125A-3P	15	22000	175		
HC-E	SURFACE	120/208	3/4	6-15A-1P			50		②
HC-N	SURFACE	120/208	3/4	⑧②⑧		15000	40		②③
LLR1	SURFACE	120/208	3/4	15-XX-1P	15				①

PANEL SCHEDULE ③④⑤⑥⑦⑧									
PANEL NAME	MOUNTING	VOLTAGE	PHASE & WIRE	CIRCUIT BREAKERS	SPACES	AIC	MLO (AMP)	MCB (AMP)	REMARKS
SECOND FLOOR									
CC-E	FLUSH	120/208	3/4	36-20A-1P			200		②
CC-N	FLUSH	120/208	3/4	⑧		19000	200		
CD-E	FLUSH	120/208	3/4	24-20A-1P			100		②
CD-N	FLUSH	120/208	3/4	⑧		11000	100		
DD-E	FLUSH	120/208	3/4	22-20A-1P	2		100		②
DD-N	FLUSH	120/208	3/4	⑧		5000	100		
EVB-E	FLUSH	120/208	3/4	3-15A-3P, 4-15A-1P 1-20A-1P	4		50		②
EVB-N	FLUSH	120/208	3/4	⑧②⑧		17000	40		③⑩
HB-E	FLUSH	120/208	3/4	6-15A-1P			50		②
HB-N	FLUSH	120/208	3/4	⑧②⑧		17000	40		②③
CRHV-B-E	FLUSH	120/208	3/4	8-15A-1P			50		②
CRHV-B-N	FLUSH	120/208	3/4	⑧②⑧		17000	40		②③
BC-E	FLUSH	120/208	3/4	16-XX-P			100		②
BC-N	FLUSH	120/208	3/4	⑧		6000	100		

②④ PANEL 1MDP1				
VOLTAGE : 120/208V		MAIN TYPE: 1200A MCB		OCP TYPE: CIRCUIT BREAKERS
PHASE: 3PH/4W		BUS AMP: 1200 AMP		FAULT DUTY: 83,357 AMP
CCT. NO.	LOAD DESCRIPTION	DEVICE RATING (AMP)		NOTES
		FRAME	TRIP	
1	AC	400-3P	300-3P	
2	AE	200-3P	125-3P	
3	AD	100-3P	70-3P	
4	HA	100-3P	40-3P	
5	CRHV-A	200-3P	150-3P	
6	EVA	100-3P	100-3P	
7	⑦	100-3P	30-3P	
8	⑦	100-3P	30-3P	
9	BM	200-3P	175-3P	
10	GW	200-3P	175-3P	
11	GS	200-3P	175-3P	
12	SPACE	⑬		
13	SPACE	⑬		
14	SPACE	⑬		

②④ PANEL LMDP1				
VOLTAGE : 120/208V		MAIN TYPE: 1200A MCB		OCP TYPE: CIRCUIT BREAKER
PHASE: 3PH,4W		BUS AMP: 1200A		FAULT DUTY: 83,357 AMP
CCT. NO.	LOAD DESCRIPTION	DEVICE RATING (AMP)		NOTES
		FRAME	TRIP	
1	BR	200-3P	200-3P	
2	EF	200-3P	175-3P	
3	EA & EGA	200-3P	125-3P	
4	DC	100-3P	100-3P	
5	ESP	100-3P	100-3P	
6	DA	100-3P	100-3P	
7	EM	200-3P	200-3P	
8	RECIRC. PUM	100-3P	30-3P	
9	BOILER PAN	100-3P	100-3P	
10	EC	100-3P	70-3P	
11	POOL PUMPS	100-3P	50-3P	
12	DD	100-3P	100-3P	
13	EB & EGB	100-3P	100-3P	
14	BHV	225-3P	225-3P	②⑩②⑨
15	DBL & DBR	225-P	225-3P	⑭⑩⑧
16	BMEQ	200-3P	200-3P	⑧
17	SPACE	⑬		
18	SPACE	⑬		
19	SPACE	⑬		
20	SPACE	⑬		

②④ PANEL 2MDP1				
VOLTAGE : 120/208 V		MAIN TYPE: 500 MCB		OCP TYPE: CIRCUIT BREAKER
PHASE: 3PH,4W		BUS AMP: 500 AMP		FAULT DUTY: 31,259 AMP
CCT. NO.	LOAD DESCRIPTION	DEVICE RATING (AMP)		NOTES
		FRAME	TRIP	
1	A-S-G PANEL & STAGE	400-3P	400-3P	
2				
3	BB	100-3P	70A-3P	
4	BA MUSIC DEPT	100-3P	70-3P	
5	BF	100-3P	70-3P	
6	AUD HEAT	100-3P	50-3P	
7	BC	100-3P	50-3P	
8	SPARE	100-3P	40-3P	
9	CRHV-B-N	100-3P	40-3P	
10	EVB-N	100-3P	40-3P	
11	HB-N	100-3P	40-3P	
12	SPARE (ON) ⑦	100-3P	30-3P	
13	SPACE	⑰		
14	SPACE	⑰		
15	SPACE	⑰		
16	SPACE	⑰		
17	SPACE	⑰		
18	SPACE	⑰		

②④ PANEL LMDP2				
VOLTAGE : 120/208 V		MAIN TYPE: 600A MCB		OCP TYPE: CIRCUIT BREAKER
PHASE: 3PH,4W		BUS AMP: 600A		FAULT DUTY: 43,237 AMP
CCT. NO.	LOAD DESCRIPTION	DEVICE RATING (AMP)		NOTES
		FRAME	TRIP	
1	CF	200-3P	175-3P	
2	⑦	100-3P	70-3P	
3	⑦	100-3P	70-3P	
4	CD	100-3P	70-3P	
5	⑦	100-3P	70-3P	
6	HC	100-3P	40-3P	
7	⑦	30-3P	30-3P	
8	⑦	30-3P	30-3P	
9	A.C. IN OFFICE	200-3P	⑨	
10	SPACE	⑬		
11	SPACE	⑬		
12	SPACE	⑬		
13	SPACE	⑬		
14	SPACE	⑬		
15	SPACE	⑬		
16	SPACE	⑬		

KEYED NOTES:

- ① EXISTING PANEL SHALL REMAIN.

② REPLACE THIS PANEL WITH NEW. SOME OF THE PANELS DO NOT HAVE ANY INFORMATION ABOUT RATING OR AMPACITY OF PANELS. PROVIDE NEW PANELS OF THE SAME RATING AND SAME AMPACITY

③ MOST OF THE EXISTING PANELS DO NOT HAVE NAME TAGS. PROVIDE LABELS ON PANELS READING NAME TAG INDICATED IN THIS DOCUMENT. THE EXISTING INDICATED CIRCUIT BREAKERS ARE BASED UPON THE SURVEY AT THE TIME OF DESIGN. VERIFY ALL EXISTING CIRCUIT BREAKERS AND PROVIDE NEW CIRCUIT BREAKERS TO MATCH EXISTING, UNLESS DIFFERENT RATED CIRCUIT BREAKERS ARE NOTED TO BE PROVIDED.

④ TRACE ALL WIRING FOR PANEL BACK TO SERVICE. PROVIDE SCHEMATIC DIAGRAM FOR ALL PANELS INDICATING FEEDER INFORMATION (CONDUIT AND WIRE QUANTITY AND WIRE SIZES) AND RATING OF OVERCURRENT PROTECTION IN DISTRIBUTION PANEL OR IN SWITCHBOARD. PROVIDE A COMPLETE FORMAL SCHEMATIC DIAGRAM IN ACCORDANCE WITH INDUSTRY STANDARDS. THE FORMAT OF WIRING DIAGRAM SHALL BE ACCEPTABLE TO ENGINEER AND OWNER.

⑤ AT THE END OF PANEL NAME "E1" INDICATES EXISTING AND "N" INDICATES NEW. FOR EXAMPLE: BLR2(E) INDICATES CHARACTERISTICS OF EXISTING PANEL BLR2 AND BLR2(N) INDICATES THE CHARACTERISTICS OF NEW PANEL EVA. PROVIDE NAME TAG ON NEW PANELS WITHOUT "N)". FOR EXAMPLE: NEW PANEL EVA(N) SHALL HAVE LABEL EVA.
- ⑥ ALL NEW PANELS SHALL HAVE GROUND BAR IN ADDITION TO PHASE & NEUTRAL BARS. SOME OF THE EXISTING PANELS MAY HAVE DOUBLE LUGS TO FEED ANOTHER PANEL. PROVIDE DOUBLE LUGS FOR NEW REPLACEMENT PANEL AS REQUIRED TO FEED SUB-FEED ANOTHER PANEL. VERIFY NEED FOR DOUBLE LUGS AT JOBSITE.

⑦ TRACE THE LOAD FED FROM THIS CIRCUIT BREAKER AND PROVIDE NEW LABEL INDICATING LOAD SERVED.

⑧ PROVIDE SAME NUMBER OF CIRCUIT BREAKERS AND BUSSED SPACES AS EXISTING PANEL.

⑨ PRESENTLY ONE 200A-3P CIRCUIT BREAKER IS LOCATED BEHIND AND EXTERNAL TO LMDP2. UNDER NEW CONFIGURATION PROVIDE THIS CIRCUIT BREAKER INSIDE LMDP2. CONFIRM TRIP RATING OF THIS CIRCUIT BREAKER AND PROVIDE NEW CIRCUIT BREAKER WITH SAME TRIP RATING.

⑩ NOT USED.

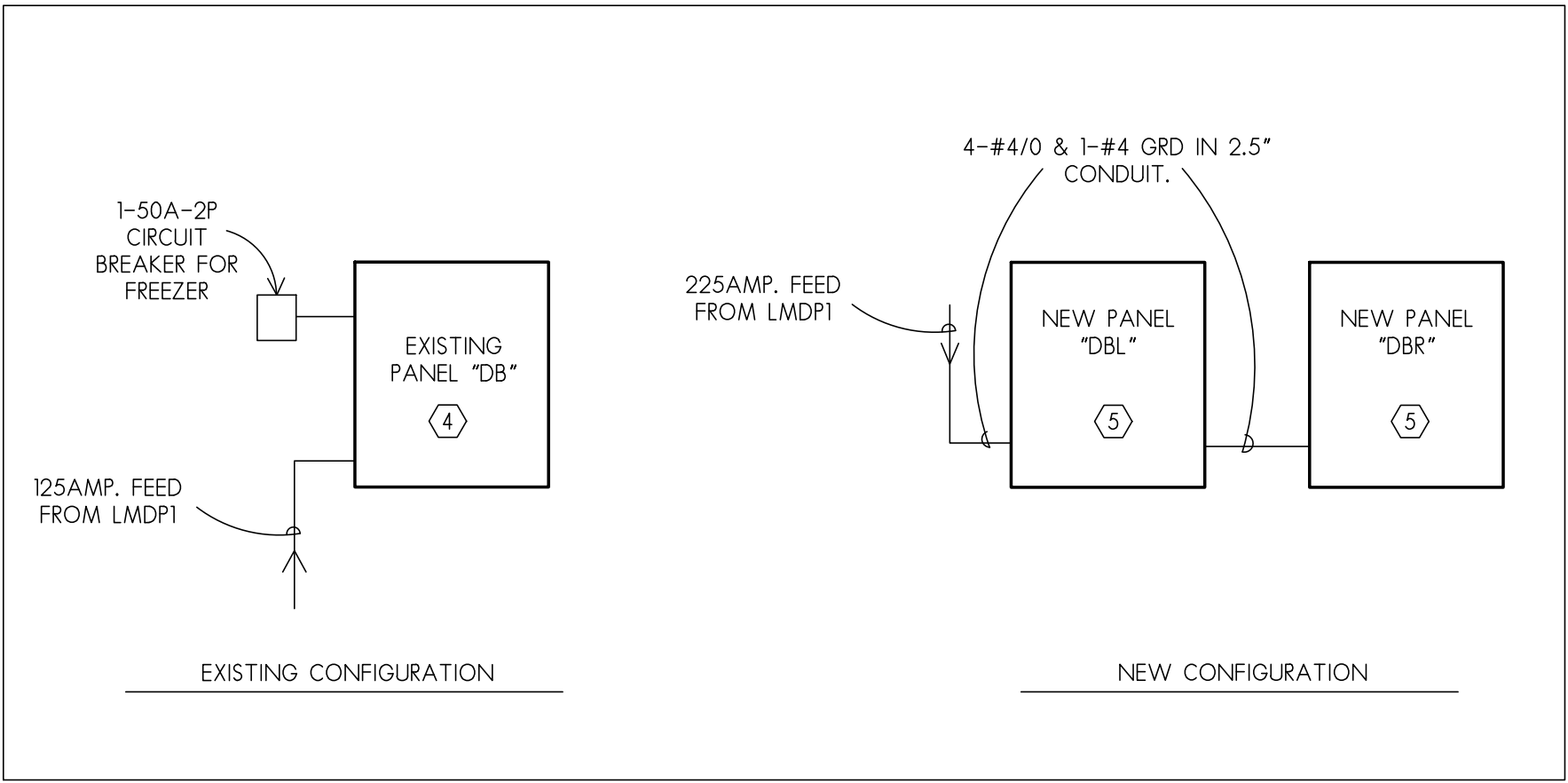
⑪ NOT USED.

⑫ NOT USED.

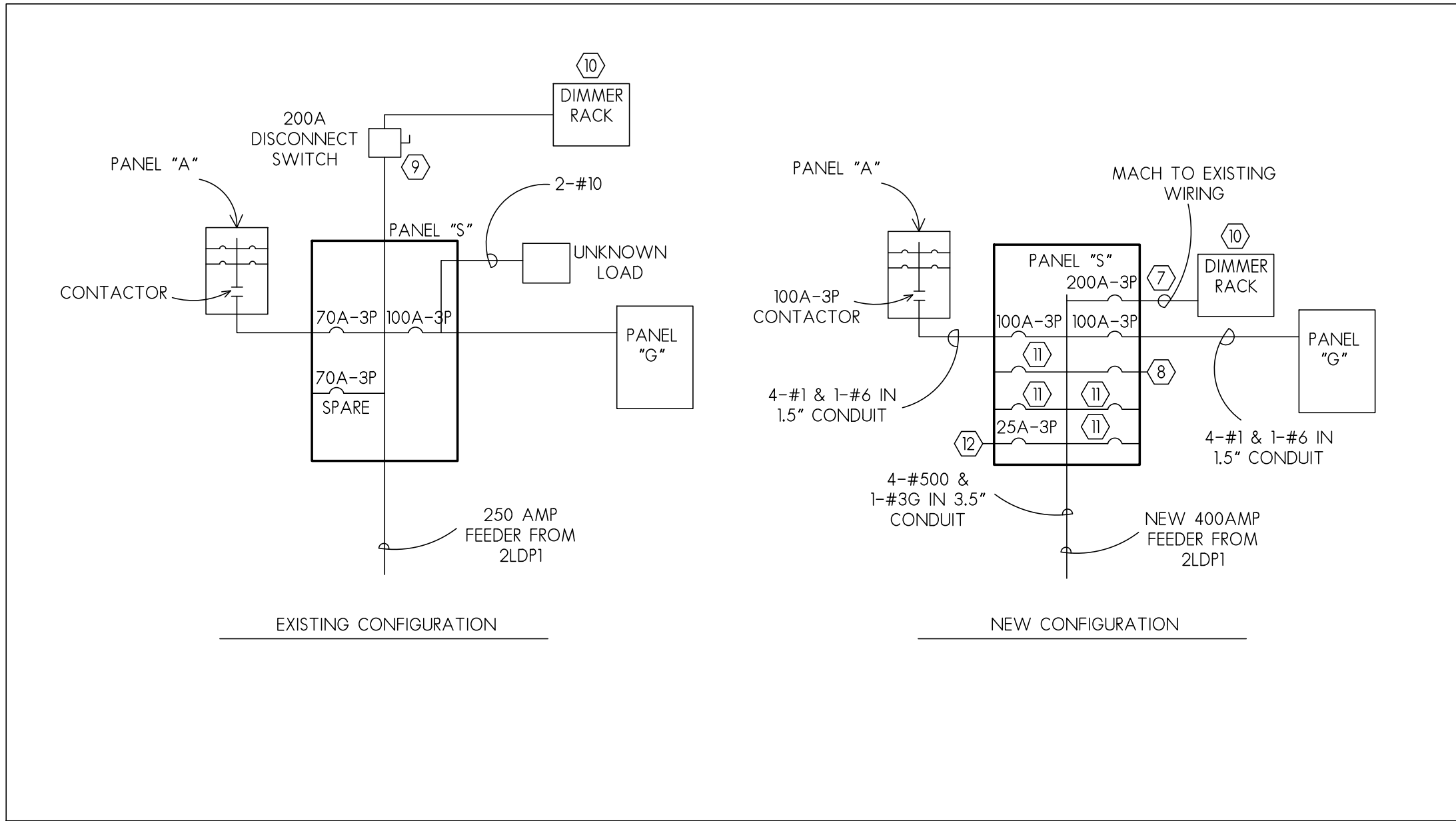
⑬ REFER TO NOTE-1 ON SHEET E2.1 AND DETAIL-

Panel CRHV-A-N			PLUS GROUND BUS			Project Number: 25109		
Voltage: 120/208V, 3PH, 4W						FLUSH		
Mains: 150A M.L.O.						Mounting: 38900A		
C K T	BRKR (A/P)	DESCRIPTION	PH. A LOAD (VA)	PH. B LOAD (VA)	PH. C LOAD (VA)	DESCRIPTION	BRKR (A/P)	C K T
130	1	UV-1	1840			UV-2	30	1
325	1	UV-3		1840		UV-4	30	1
530	1	UH-5			1840	UV-6	30	1
730	1	UV-7	1840			UV-8	30	1
930	1	UV-9	1840			UV-10	30	1
1130	1	UV-11		1840		UV-14	30	1
1330	1	UV-13	1840			UV-16	30	1
1530	1	UV-15		1840		UV-17	30	1
1730	1	UHV-12			1840	SPARE	20	1
19		SPACE				SPACE		
21		SPACE				SPACE		
23		SPACE				SPACE		
25		SPACE				SPACE		
27		SPACE				SPACE		
29		SPACE				SPACE		
Connected Load Phase A:			11.04 KVA					
Connected Load Phase B:			11.04 KVA	Maximum connected Amps			86.82	
Connected Load Phase C:			9.20 KVA					

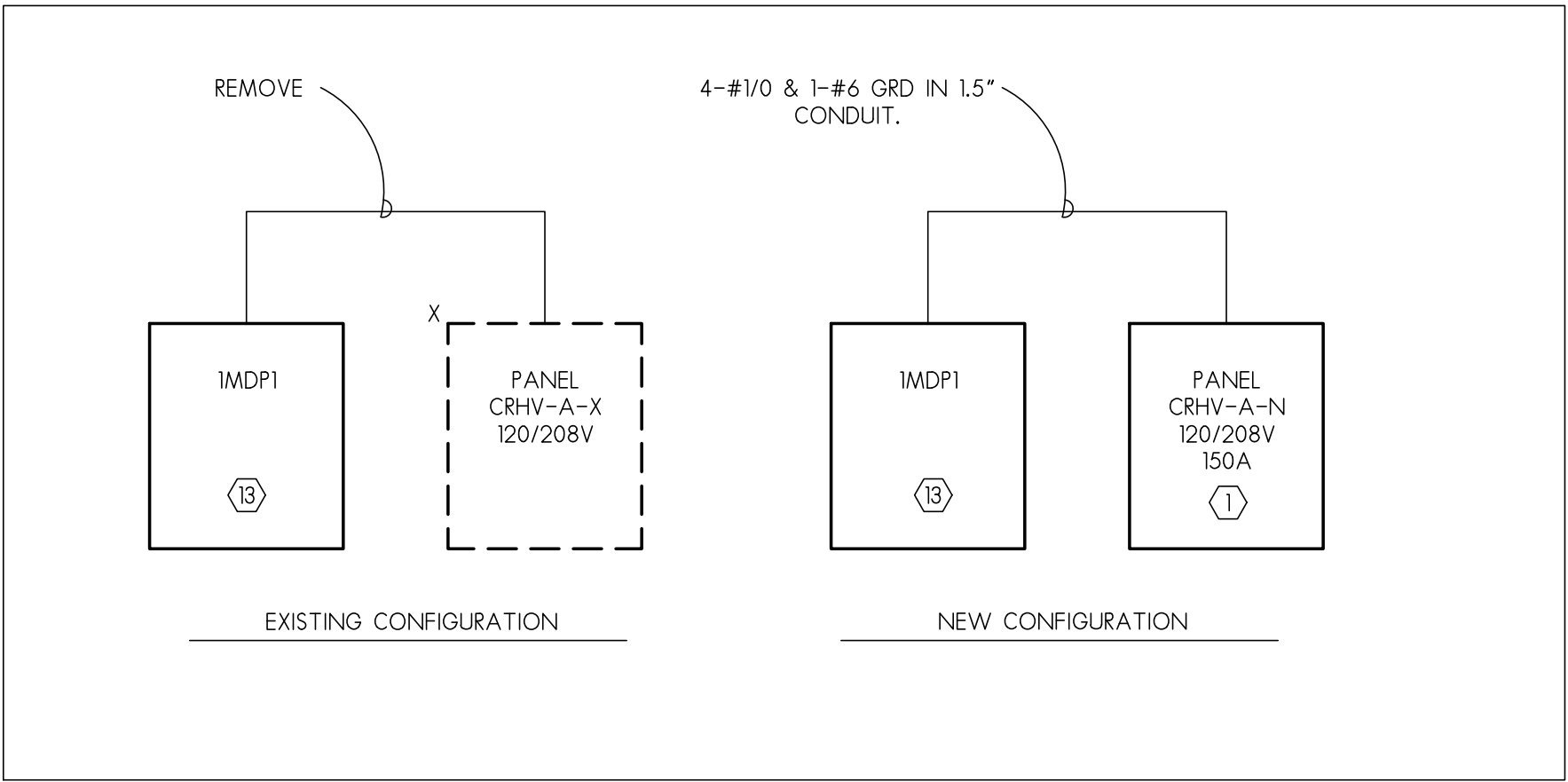
Panel BMEQ						Project Number: 25109		
Voltage: 120/208V, 3PH, 4W						Mounting: SURFACE		
Mains: 200A M.L.O.						Min. AIC: 37332 A		
C K T	BRKR (A/P)	DESCRIPTION	PH. A LOAD (VA)	PH. B LOAD (VA)	PH. C LOAD (VA)	DESCRIPTION	BRKR (A/P)	C K T
1	20	BFS-1(A)	250			BFS-1(B)	20	1
3			250	250				3
5				250	250			5
7	20	BFS-1(C)	250			VCP-4	25	3
9			1800	250				9
11				1800	250			11
13	50	SB-1	3720			SB-2	50	3
15			3720	3720				15
17				3720	3720			17
19	20	PRE-1, SUH-1	600			UV-26 , UV-27	20	1
21	20	UH-17 & UH-18	960			UV-28 , UV-29	20	1
23	20		1440	480		UV-30 , UV-31	20	1
25	20	UH-19		480		UV-32	30	1
27	20	UH-16		1920		UV-33	30	1
29	20	UV-39 , UV-40	1440			UV-34	30	1
31	20	UV-37 , UV-38	1440	1920		UV-35	30	1
33	1	UV-41 , UV-42	1440	1920		UV-36	30	1
35		SPACE		1920		SPACE		
37		SPACE				SPACE		
39		SPACE				SPACE		
41		SPACE				SPACE		
Connected Load Phase A:			19.71 KVA	Maximum connected Amps			136.82	
Connected Load Phase B:			17.19 KVA					
Connected Load Phase C:			12.39 KVA					



1 KITCHEN PANEL



2 PANEL A,S,G WIRING DIAGRAM



3 PANEL CRHV-A WIRING DIAGRAM

KEYED NOTES:

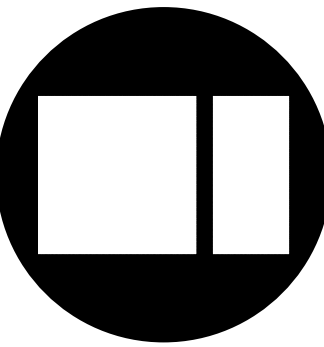
- 1 REFER TO PANEL SCHEDULE FOR THIS PANEL.
- 2 NOT USED
- 3 THIS DETAIL INDICATES REPLACEMENT OF EXISTING KITCHEN PANEL "DB" WITH PANELS "DBL" & "DBR".
- 4 EXISTING "DB" PANEL IS 120/208V, 3PH, 4W, 200A M.L.O., WITH 35-XXA-1P, 4-XXA-3P CIRCUIT BREAKERS, AND ONE SPACE. IT ALSO FEEDS EXTERNAL 1-50A-2P CIRCUIT BREAKER. REPLACE THIS PANEL WITH PANELS "DBL" & "DBR". THIS PANEL IS FED FROM 125AMP CIRCUIT BREAKER FROM LMDP1. REMOVE 125AMP FEED TO LMDP1.
- 5 PROVIDE PANELS "DBL" AND "DBR" IN LIEU OF PANEL "DB". EACH OF PANELS "DBL" AND "DBR" SHALL BE 120/208V, 3PH, 4W, 225AMP M.L.O., 42 POLE, FLUSH MOUNTED. PROVIDE APPROXIMATELY 16-XXA-1P AND 2-XXA-3P CIRCUIT BREAKERS IN EACH OF THESE PANELS TO SERVE LOAD OF PANEL "DB". ADDITIONALLY PROVIDE 1-50A-2P CIRCUIT BREAKER IN PANEL "DBL" TO SERVE WALK-IN FREEZER, AND PROVIDE 10-20A-1P SPARE CIRCUIT BREAKERS IN EACH OF THESE PANELS. REMAINING POLES SHALL BE SPACES. PANEL "DBL" SHALL HAVE DOUBLE LUGS TO FEED PANEL "DBR". TRANSFER ALL LOAD FROM PANEL "DB" AND EXTERNAL 1-50A-2P CIRCUIT BREAKER TO THESE TWO PANELS. REMOVE 1-50A-2P EXTERNAL CIRCUIT BREAKER. PROVIDE 4-1" SPARE CONDUITS FROM EACH OF "DBL" AND "DBR" AND TERMINATE ABOVE ACCESSIBLE CEILING SPACE FOR ANY FUTURE WIRING.
- 6 THIS DIAGRAM PROVIDES REPLACEMENT OF EXISTING PANEL "S" WITH NEW PANEL "S". REFER TO PANEL SCHEDULE SHEET E3.1 FOR ADDITIONAL INFORMATION.
- 7 VERIFY RATING OF FUSES LOCATED IN DISCONNECT SWITCH SERVING DIMMER RACK. MATCH THE RATING OF THIS BREAKER TO RATING OF FUSES TO PROTECT THE WIRING. THE 200AMP RATING SHOWN IS FOR GENERAL INFORMATION ONLY.
- 8 PROVIDE 2-30A-1P OR 1-30A-2P CIRCUIT BREAKER TO SERVE UNKNOWN LOAD. VERIFY EXACT BREAKER REQUIREMENT AT JOB SITE.
- 9 REMOVE DISCONNECT SWITCH AND ASSOCIATED CONDUIT AND WIRING UNDER NEW CONFIGURATION.
- 10 DIMMER RACK SHALL REMAIN.
- 11 100A-3P SPACE.
- 12 PROVIDE 25A-3P FOR VACUUM PUMP (VCP-2).
- 13 CURRENTLY MAIN DISTRIBUTION BOARD (MDP1) FEED PANEL (CRHV-A). DISCONNECT EXISTING 40A-3P CIRCUIT BREAKER THAT FEED THIS PANEL AND REMOVE ALL WIRING AND CONDUITS. PROVIDE NEW 150A-3P CIRCUIT BREAKER IN EXISTING SPACE AT MDP1 TO FEED NEW PANEL CRHV-A-N.
- 14 THIS DIAGRAM PROVIDES REPLACEMENT OF EXISTING PANEL "CRHV-A" WITH NEW PANEL "CRHV-A-N". REFER TO PANEL SCHEDULE SHEET E3.1 FOR ADDITIONAL INFORMATION.

ELECTRICAL
SCHEDULES & SCHEMATIC DIAGRAM

SCALE: NONE

ISSUED FOR:	DATE
RE-BIDDING	01-27-18
DRAWN	APPROVED
TA	DJ

DATE: 11-13-2015	PROJECT NUMBER	SHEET NUMBER
	25109	E3.3



GENERAL ELECTRICAL NOTES

- REFER TO ARCHITECTURAL PLANS AND SPECIFICATIONS FOR ADDITIONAL GENERAL NOTES WHICH WILL APPLY HERE.
- DO NOT SCALE DRAWINGS.
- NOTES ON DRAWINGS SHALL APPLY TO ALL SIMILAR CONDITIONS WHETHER THEY ARE REPEATED OR NOT.
- THE CONTRACTOR MUST VISIT THE SITE TO FAMILIARIZE HIMSELF WITH THE EXISTING SITE AND BUILDING CONDITIONS WHICH WILL BE AFFECTED DURING CONSTRUCTION PRIOR TO SUBMITTING HIS BID PROPOSAL. CONTRACTOR IS CAUTIONED THAT THE PROJECT IS A REMODELING JOB AND IT IS ASSUMED THAT HE HAS INCLUDED FUNDS IN HIS BID TO COVER UNFORESEEN ITEMS WHICH MUST BE MOVED, RELOCATED OR ADJUSTED TO FIT HIS WORK. NO EXTRA COMPENSATION WILL BE ALLOWED FOR ANY EXTRA WORK CAUSED BY FAILURE TO VISIT, EXAMINE OR VERIFY.
- ALL EXISTING EQUIPMENT IS TO REMAIN OPERATIONAL DURING CONSTRUCTION PERIOD. ALL TEMPORARY WIRING OR REROUTING OF CIRCUITRY TO ACHIEVE THIS IS BY THE ELECTRICAL CONTRACTOR. SHUTDOWN OF EXISTING SERVICES SHALL ONLY BE PERMITTED UPON WRITTEN APPROVAL FROM THE OWNER AND THEN ONLY FOR THAT DATE AND DURATION AGREED UPON. INCLUDE ALL PREMIUM TIME CHARGES IN THE BASE BID.
- EXISTING CONDUIT IN SAME PLACE MAY BE REUSED WHERE POSSIBLE, PULL NEW WIRE AS REQUIRED. ALL UNUSED CONDUIT, WIRE, JUNCTION BOXES, ETC. WILL BE REMOVED. RELOCATED EXISTING CONDUIT SHALL NOT BE ALLOWED.
- BOXES LOCATED ON OPPOSITE SIDES OF NON-FIRE RATED WALLS SHALL BE OFFSET A MINIMUM OF 6" HORIZONTALLY. BOXES ON OPPOSITE SIDES OF FIRE RATED WALL SHALL BE OFFSET A MINIMUM OF 24" HORIZONTALLY. THRU THE WALL. BOXES SHALL NOT BE ALLOWED WITHOUT PRIOR WRITTEN APPROVAL OF THE ARCHITECT/ENGINEER.
- ELECTRICAL CONTRACTOR SHALL VERIFY TOTAL CONNECTED LOAD/HP WITH ALL OTHER TRADES PRIOR TO WIRING OF ALL OTHER TRADES' EQUIPMENT. MAKE ANY CHANGES TO OVERCURRENT DEVICES AND FEEDER SIZE PER ELECTRICAL CODE AS REQUIRED.
- ELECTRICAL CONTRACTOR SHALL VERIFY ALL FURNITURE, MODULAR FURNITURE AND EQUIPMENT LOCATIONS WITH ARCHITECTURAL PLANS, ELEVATIONS AND REVIEWED SHOP DRAWINGS. PRIOR TO MAKING THE ACTUAL ELECTRICAL INSTALLATION, THIS CONTRACTOR SHALL ADJUST RECEPTACLES, OUTLETS OR CONNECTION LOCATIONS TO ACCOMMODATE FURNITURE AND/OR EQUIPMENT.
- ALL EXPOSED CABLES IN PLENUM CEILING SHALL BE APPROVED FOR PLENUM APPLICATION.
- PROVIDE SLEEVES/CONDUITS FOR LOW VOLTAGE CABLES WHEN THEY TRAVERSE ABOVE NON ACCESSIBLE CEILING SPACE. ALSO, PROVIDE SLEEVES THROUGH MASONRY WALLS FOR LOW VOLTAGE CABLES. VERIFY SLEEVE/CONDUIT SIZE REQUIREMENTS AND LOCATION WITH THE CONTRACTOR INSTALLING LOW VOLTAGE SYSTEM.
- THE LOW VOLTAGE SYSTEMS SUCH AS TELEPHONE AND DATA SHALL BE FURNISHED AND INSTALLED BY OWNER. ALL EQUIPMENT, DEVICES, JACKS, CABLES, ETC. SHALL BE PROVIDED BY OWNER. THIS CONTRACTOR SHALL PROVIDE ALL BACKBOXES, RACEWAY SYSTEM AND POWER FOR THESE SYSTEMS. THE SPECIAL BACKBOXES FOR THESE SYSTEMS SHALL BE FURNISHED BY OWNER AND INSTALLED BY THIS CONTRACTOR. PROVIDE MINIMUM OF 3/4" CONDUIT FOR EACH OUTLET FOR THESE SYSTEMS AND TERMINATE INTO NEAREST ACCESSIBLE CEILING SPACE. COORDINATE ALL REQUIREMENTS WITH SYSTEM MANUFACTURER.
- UNLESS NOTED OTHERWISE, THE CONDUITS AND BACK BOXES SHALL BE CONCEALED WITHIN ALL DRY WALLS AND NEW MASONRY WALLS. SURFACE METAL RACEWAY SHALL BE USED FOR DEVICES ON EXISTING MASONRY WALLS. AS MUCH AS PRACTICAL, WHEREVER FEASIBLE, INSTALL CONDUITS BEHIND A WALL IN AN UNFINISHED ROOM AND PENETRATE INTO AN ELECTRICAL DEVICE TO BE INSTALLED IN FINISHED AREA. IF THIS IS NOT FEASIBLE, PROVIDE SURFACE METAL RACEWAY IN THE ROOM WHERE ELECTRICAL DEVICE NEEDS TO BE INSTALLED. THE SURFACE METAL RACEWAY SHALL BE ROUTED IN THE CORNER AND/OR ADJACENT TO WINDOW, DOOR FRAMEWORK ETC., SO IT IS AS INCONSPICUOUS AS POSSIBLE. FOR SAKE OF EMPLOYMENT ONLY THE TERM "CONDUIT" IS USED IN MOST CASES IN THIS DOCUMENT. HOWEVER, BASED UPON ABOVE, THE SURFACE METAL RACEWAY AND CONDUIT SHALL BE USED, AS APPLICABLE. WHERE SURFACE METAL RACEWAY IS USED ONE TWO CHANNEL RACEWAY WITH DIVIDER CAN BE USED (FOR POWER & LOW VOLTAGE) WHERE APPLICABLE.
- SOME DEVICES SHALL BE FLUSH MOUNTED (IN DRY WALLS AND EXISTING MASONRY WALLS CONSTRUCTION) AND SOME SHALL BE SURFACE MOUNTED (ON EXISTING MASONRY WALLS). VERIFY REQUIREMENT BEFORE ORDERING ANY MATERIAL.
- WHERE POWER AND LOW VOLTAGE OUTLETS (SUCH AS DATA OUTLETS) ARE SHOWN TOGETHER ON DRAWINGS, PROVIDE THEM ADJACENT TO EACH OTHER.
- PROVIDE CONCRETE PAD FOR ALL FLOOR MOUNTED ELECTRICAL EQUIPMENT, (SUCH AS SWITCHBOARDS, PANELS, TRANSFORMER, ETC.)
- THE EXISTING EQUIPMENT IS SHOWN BASED UPON THE INFORMATION OBTAINED THROUGH BRIEF SURVEY OF THE FACILITY. CONTRACTOR IS TO SURVEY THE EXISTING FACILITY IN ORDER TO DETERMINE THE FULL EXTENT OF WORK AND BE COMPLETELY FAMILIAR WITH ALL THE EXISTING CONDITIONS INCLUDING PLUMBING, HVAC, ELECTRICAL, ETC. THE ARCHITECT/ENGINEER AND OWNER ASSUME NO RESPONSIBILITY IN RESPECT TO THE ACCURACY OF SUCH INFORMATION SHOWN ON THE DRAWINGS. CONTRACTOR SHALL MAKE ADEQUATE ALLOWANCE IN HIS BID FOR SOME DEVIATIONS TO SUCH INFORMATION.
- WHERE EXISTING CONDITIONS PREVENT PROPER INSTALLATION OF PROPOSED WORK, REROUT, EXTEND OR ALTER EXISTING WORK SO AS TO ACCOMMODATE PROPOSED WORK REQUIREMENTS.
- CIRCUIT NUMBERS SHOWN FOR EXISTING PANELS ARE FOR REFERENCE ONLY. USE NEXT AVAILABLE CIRCUITS AND PROVIDE APPROPRIATE SIZE BREAKERS.
- REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS OF ELECTRICAL EQUIPMENT & DEVICES. THE ELECTRICAL DRAWINGS ARE FOR CONCEPT ONLY.
- EACH LIGHTING FIXTURE ON DIMMER CIRCUIT SHALL HAVE SEPARATE NEUTRAL CONDUCTOR. COMMON NEUTRAL IS NOT ALLOWED.
- IN GENERAL, DASHED LINES INDICATE EXISTING ITEMS TO BE REMOVED, LIGHT SOLID LINES INDICATE ITEMS TO REMAIN AND DARK SOLID LINES INDICATE NEW ITEMS.
- WHERE EXISTING WIRING DEVICE (SUCH AS RECEPTACLE, SWITCH, ETC.) IS INDICATED TO REMAIN, REUSE EXISTING JUNCTION BOX, RACEWAY, BUT PROVIDE NEW DEVICE AND ASSOCIATED COVERPLATE. RECONNECT THIS DEVICE TO NEW CIRCUIT AS INDICATED.
- THE SYSTEMS PROVIDED BY THIS CONTRACTOR SHALL BE COMPLETELY OPERATIONAL REGARDLESS OF OMISSION OF MINOR ITEMS, SUCH AS CIRCUIT NUMBER FOR RELAY, A CIRCUIT NUMBER NEXT TO A LIGHTING FIXTURE, ETC.
- ALL OUTDOOR DEVICES SUCH AS RECEPTACLES, DISCONNECTS, LIGHTING FIXTURES, JUNCTION BOXES, ETC. SHALL BE OUTDOOR TYPE.
- THE EXIT SIGNS ARE PROVIDED FOR BIDDING PURPOSE. FINAL LOCATION SHALL BE AS DETERMINED BY LOCAL FIRE MARSHALL. IF REQUIRED BY FIRE MARSHALL, PROVIDE ADDITIONAL EXIT SIGNS WITHOUT ADDITIONAL COST TO OWNER.
- WHERE A NEW WALL IS TO BE BUILT PERPENDICULAR TO EXISTING WALL AND IF THERE IS AN EXISTING RECEPTACLE ON THE EXISTING WALL, RELOCATE THIS RECEPTACLE AS REQUIRED.
- IN CERTAIN CASES LARGER SIZE CABLES ARE SPECIFIED IN ORDER TO COMPENSATE FOR VOLTAGE DROP. PROVIDE OVERSIZE AND/OR MULTIPLE LUGS AT THE LINE AND LOAD SIDE OF EQUIPMENT TO INCORPORATE LARGER AND ADDITIONAL CABLES. IF REQUIRED, PROVIDE SPLICE BOXES AT EITHER END OF CABLE TO INTERCEPT CHANGE IN THE CABLES.
- PROVIDE TYPED PANEL DIRECTORY INDICATING LOAD SERVED.
- UNO, ALL OVERCURRENT PROTECTION DEVICES 800 AMP AND LARGER SHALL BE 100% RATED.
- AS REQUIRED EXTEND EXISTING RECEPTACLES WHERE EXISTING WALLS ARE FURRED OUT. REFER TO ARCHITECTURAL DRAWINGS FOR EXTENT OF THIS WORK.
- DUE TO THE SMALL SCALE AND INTERFERENCE OF EXISTING EQUIPMENT, EACH AND EVERY ITEM IS NOT SHOWN. SHOWN INFORMATION IS INTENDED AS A GUIDE. CONTRACTOR SHALL VERIFY INFORMATION AND CONDITIONS IN THE FIELD.
- RECONFIGURE LIGHTING FIXTURES AND OUTLETS IN MECHANICAL ROOMS TO BE COMPATIBLE WITH EQUIPMENT LAYOUT AS REQUIRED.
- COORDINATE THE FINAL LOCATION OF RECEPTACLES IN TELECOMMUNICATION CLOSETS WITH TELECOMMUNICATION EQUIPMENT VENDOR.
- ALL RECEPTACLES LOCATED WITHIN 6" OF SOURCE OF WATER (SUCH AS SINK) AND ALL OUTDOOR RECEPTACLES SHALL BE GFI TYPE, WHETHER SPECIFICALLY INDICATED OR NOT.
- WHERE THE OUTLETS ARE SHOWN ON FURNITURE/DESK THEY SHALL BE PROVIDED EITHER UNDER THE DESK OR AS A PART OF MILLWORK AS INDICATED ON ARCHITECTURAL DRAWINGS. PROVIDE CONDUITS AND WIRING UNDER OR WITHIN THE FURNITURE/DESK. THE QUANTITY AND LOCATION OF INDICATED OUTLETS IS APPROXIMATE. COORDINATE EXACT REQUIREMENTS WITH ARCHITECT AND MILLWORK VENDOR. IF FURNITURE/DESK IS NEXT TO WALL, THE ROUGH-IN SHALL BE PROVIDED FROM WALLS. IF FURNITURE/DESK IS FREE STANDING, THE ROUGH-IN SHALL BE PROVIDED FROM FLOOR. THE POWER POLE IS NOT ALLOWED UNLESS SPECIFICALLY INDICATED.
- IN ORDER TO FACILITATE THE REPLACEMENT OF EXISTING OR INSTALLATION OF NEW DUCTWORK AND/OR PIPING, REMOVE EXISTING LIGHTING FIXTURE AND/OR SMOKE /HEAT DETECTORS AS REQUIRED. THIS WORK IS NOT SHOWN ON DRAWINGS. ONCE THE INSTALLATION OF DUCTWORK, PIPING ETC IS COMPLETED, REINSTALL ELECTRICAL EQUIPMENT/DEVICES. PROVIDE ADEQUATE ALLOWANCE IN THE BID FOR THIS WORK.
- PROVIDE EXPANSION FITTINGS FOR ALL ELECTRICAL RACEWAYS AT EVERY EXPANSION JOINT. REFER TO ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR LOCATION OF EXPANSION JOINTS.
- COORDINATE THE INSTALLATION OF ELECTRICAL EQUIPMENT SUCH AS PANELS, SWITCHBOARD, MOTOR CIRCUIT CENTER, TRANSFORMER ETC. WITH OTHER TRADES SUCH THAT NO DUCTWORK, PIPING ETC. IS LOCATED ABOVE THEM.
- UNLESS NOTED OTHERWISE, PROVIDE WIREGUARDS FOR ALL SURFACE MOUNTED DEVICES (SUCH AS FIRE ALARM PULL STATIONS, HORN/SPEAKERS, CLOCKS, SPEAKERS, BATTERY PACKS, EXIT SIGNS, LIGHTING FIXTURES ETC.) LOCATED IN GYMNASIUM.
- ELECTRICAL CONTRACTOR SHALL VERIFY SIZE OF ALL EXISTING OPENINGS, DOORS, ETC., FOR REMOVING EQUIPMENT AND MATERIAL OUT OF BUILDING. ELECTRICAL CONTRACTOR SHALL PROVIDE ANY NEW OR ENLARGED OPENINGS IN EXISTING BUILDING CONSTRUCTION REQUIRED TO FACILITATE EXITING OF HIS EQUIPMENT/MATERIAL AND RESTORE SUCH OPENINGS TO THEIR ORIGINAL STATE AFTER COMPLETION.
- VERIFY QUANTITY AND SIZE OF LUGS PROVIDED IN OTHER TRADES' EQUIPMENT (FOR EXAMPLE, CHILLER, ELEVATOR, FIRE PUMP ETC.) BEFORE STARTING ANY WORK ASSOCIATED WITH SUCH EQUIPMENT. IF THEIR LUGS CANNOT ACCOMMODATE THE CABLES INDICATED IN ELECTRICAL DOCUMENT, PROVIDE LUG FITTINGS TO ACCOMMODATE CHANGE IN THE CABLES. PROVIDE SUCH FITTINGS IN A JUNCTION BOX AS CLOSE AS POSSIBLE TO THEIR EQUIPMENT. IF ALLOWED BY THE EQUIPMENT MANUFACTURER, SUCH FITTINGS MAY BE INSTALLED IN THEIR EQUIPMENT RATHER THAN IN A SEPARATE JUNCTION BOX.
- MAIN SERVICE ENTRANCE EQUIPMENT SHALL HAVE LABEL FOR SERVICE ENTRANCE TYPE, AND SHALL BE GROUNDED PER ELECTRICAL CODE.
- ALL SWITCHES IN COMMON AREAS SUCH AS HALLWAYS, CORRIDORS, VESTIBULES, STAIRS, PUBLIC WASHROOMS ETC. SHALL BE KEYED TYPE WHETHER SPECIFICALLY INDICATED OR NOT.
- PROVIDE SEPARATE DEDICATED GROUNDING CONDUCTOR IN EACH FEEDER AND BRANCH CIRCUIT WIRING CIRCUIT.
- THE ELECTRICAL DRAWINGS SHOW DIRECT PRINCIPLE WORK WHICH MUST BE ACCOMPLISHED UNDER THIS CONTRACT. INDIRECT AND INCIDENTAL WORK WILL ALSO BE NECESSARY DUE TO CHANGES AFFECTING EXISTING ARCHITECTURAL, MECHANICAL, PLUMBING OR OTHER SYSTEMS. SUCH INCIDENTAL WORK IS ALSO PART OF THIS CONTRACT. INSPECT THOSE AREA, AND ASCERTAIN WORK NEEDED AND DO THAT WORK IN ACCORDANCE WITH THE CONTRACT REQUIREMENTS, AT NO ADDITIONAL COST.
- PROVIDE REMOTE TEST AND INDICATING STATION IN A READILY ACCESSIBLE AND VISIBLE SPACE FOR EACH DUCT SMOKE DETECTOR. VERIFY ITS EXACT LOCATION WITH OWNER.
- WHERE "NM" IS INDICATED NEXT TO A DEVICE, CONTRACTOR SHALL VERIFY ITS REQUIREMENT IN FIELD. THIS INCLUDES VERIFICATION OF DEVICE TYPE, LOCATION, WIRING CONDUIT AND CIRCUIT BREAKER ETC. PROVIDE APPROPRIATE DEVICE, WIRING, CONDUIT, CIRCUIT BREAKER ETC. AS REQUIRED.
- PROVIDE RED PLASTIC SIGN AT MAIN WATER SERVICE METER INDICATING "MAIN GROUND LOCATION."
- PROVIDE ARC-FLASH LABELS ON NEW EQUIPMENT IN ACCORDANCE WITH NEC.
- WHERE EQUIPMENT DEVICES ARE INDICATED TO BE REMOVED, REMOVE ACCESSIBLE, UNUSABLE CONDUITS & WIRING. IF CONDUITS ARE NOT ACCESSIBLE THEY MAY BE ABANDONED, MAINTAIN CONTINUITY TO THE LOAD WHICH IS TO REMAIN.
- PROVIDE PULL STRINGS IN ALL CONDUITS FOR LOW VOLTAGE CABLES FOR TELE/DATA SOUND SYSTEM, SECURITY SYSTEM ETC.
- WHERE EXISTING HVAC EQUIPMENT IS SHOWN TO BE REMOVED, REMOVE ITS ASSOCIATED STARTER, DISCONNECT SWITCH, CONDUIT WIRING ETC. FIELD VERIFY LOCATION OF STARTER, DISCONNECT, ETC.
- ONLY OCCUPANCY/VACANCY SENSORS & REQUIRED SWITCHES ARE INDICATED. PROVIDE POWER PACKS (CONTROL RELAYS) AS REQUIRED. LOCATE SENSORS TO PROVIDE OPTIMUM COVERAGE OF THE DEVICE.
- PROVIDE GROUND BUS BAR IN EACH PANEL WHETHER SPECIFICALLY INDICATED OR NOT.
- ARMORED (BX) CABLES ARE NOT ALLOWED.
- SERIES RATING OF PANELS IS ACCEPTABLE FOR THEIR SHORT CIRCUIT RATING.
- LUGS FOR CIRCUIT BREAKERS AND SWITCHES SHALL BE RATED FOR TERMINATION OF 60 DEGREE C AND 75 DEGREE C RATED CONDUCTORS. THIS SHALL ALLOW USE OF CONDUCTORS BASED UPON AMPACITIES OF ONLY 75 DEGREE C.

GENERAL ELECTRICAL SYMBOLS

- ① JUNCTION BOX- EXPOSED OR IN CEILING
- ①+ JUNCTION BOX - WALL MOUNTED

LIGHTING SYMBOLS

- FLUORESCENT LIGHTING FIXTURE. SIZE AND TYPE AS INDICATED ON SCHEDULE.
- FLUORESCENT STRIP LIGHTING FIXTURE. SIZE AND TYPE AS INDICATED ON SCHEDULE.
- INCANDESCENT, FLUORESCENT OR HID LIGHTING FIXTURE. SIZE AND TYPE AS INDICATED ON SCHEDULE.
- WALL MOUNTED FLUORESCENT LIGHTING FIXTURE. SIZE AND TYPE AS INDICATED ON SCHEDULE.
- WALL MOUNTED INCANDESCENT, HID, OR FLUORESCENT LIGHTING FIXTURE. SIZE AND TYPE AS INDICATED ON SCHEDULE.
- INCANDESCENT, FLUORESCENT OR HID WALL WASH LIGHTING FIXTURE- SIZE AND TYPE AS INDICATED ON SCHEDULE.
- FLUORESCENT LIGHTING FIXTURE WIRED TO LIFE SAFETY CIRCUIT.
- FLUORESCENT LIGHTING FIXTURE WIRED TO CRITICAL CIRCUIT.
- BATTERY PACK, EMERGENCY LIGHTING UNIT
- REMOTE HEAD CONNECTED TO BATTERY PACK.
- *X* INDICATES FIXTURE. SHADED QUADRANTS INDICATES DIRECTION OF LIGHTED FACES. ARROWS INDICATE DIRECTION OF ARROWS.
- LIGHT SWITCH, SINGLE POLE UNLESS NOTED OTHERWISE:
- | | | | |
|------|-----------------------|------|----------------|
| *S* | SWITCH-LEG | *WP* | WEATHERPROOF |
| *D* | DIMMER SWITCH | *2P* | TWO POLE |
| | | *3P* | THREE POLE |
| *K* | KEY OPERATED | *3W* | THREE-WAY |
| *P* | PILOT LIGHT | *4W* | FOUR-WAY |
| *XX* | CIRCUIT NUMBER | | |
| *VC* | VACANCY SENSOR SWITCH | *VS* | VACANCY SWITCH |
- DAYLIGHT SENSOR
- OCCUPANCY SENSOR
- VACANCY SENSOR
- TIME CLOCK
- PHOTOCELL

POWER SYMBOLS

- WALL FLOOR BOX POKE THROUGH ABOVE COUNTER
- QUADPLEX RECEPTACLE
- DUPLEX RECEPTACLE
- JUNCTION BOX WITH FLEXIBLE CONDUIT TO FINAL EQUIPMENT OR FURNITURE SYSTEM POWER CONNECTION
- ADJACENT LETTERS IN THE SYMBOLS ABOVE INDICATE THE FOLLOWING:
- *GF* RECEPTACLE HAS GROUND FAULT CIRCUIT INTERRUPTER
- *WP* RECEPTACLE HAS WATERPROOF COVER
- *XX* RECEPTACLE CIRCUIT NUMBER
- SPECIAL PURPOSE OUTLET - SEE SCHEDULE
- *XX* INDICATES OUTLET TAG
- PUSH-BUTTON STATION
- PUSH PLATE STATION
- MANUAL MOTOR CONTROL
- *K* KEY OPERATED
- *P* PILOT LIGHT
- *T* THERMAL OVERLOAD PROTECTION
- MOTOR - SEE SCHEDULE, "XX" INDICATES TAG
- FUSED DISCONNECT SWITCH, "AS" INDICATES AMPERE RATING OF SWITCH AND "AF" INDICATES AMPERE RATINGS OF FUSE
- NON-FUSED DISCONNECT SWITCH, CIRCUIT BREAKER IN ENCLOSURE.
- SURFACE MOUNTED DISTRIBUTION PANELBOARD
- SURFACE MOUNTED NORMAL BRANCH CIRCUIT PANELBOARD
- RECESSED MOUNTED NORMAL BRANCH CIRCUIT PANELBOARD
- TRANSFORMER
- LIGHT RELAY/POWER PACK
- GROUNDING ELECTRODE CONDUCTOR
- POWER METER

ELECTRICAL ABBREVIATIONS

- | | | | |
|------|--------------------------------|-----|------------------------------------|
| AC | ABOVE COUNTER | NC | NORMALLY CLOSED |
| AFF | ABOVE FINISHED FLOOR | NEC | NATIONAL ELECTRICAL CODE |
| ATS | AUTOMATIC TRANSFER SWITCH | NL | NIGHT LIGHT |
| BFS | BOILER FEED SYSTEM | NO | NORMALLY OPEN |
| C | CONDUIT | PH | PHASE (#) |
| EC | ELECTRICAL CONTRACTOR | PNL | PANEL |
| EF | EXHAUST FAN | R | REMAIN |
| EM | EMERGENCY | SW | SWITCH |
| EDH | ELECTRIC DUCT HEATER | TTC | TELEPHONE TERMINAL CABINET |
| ESLH | ELECTRIC SUSPENDED UNIT HEATER | UNO | UNLESS NOTED OTHERWISE |
| ETR | EXISTING TO REMAIN | U | UNIT VENTILATOR |
| EWC | ELECTRIC WATER COOLER | V | VOLTS |
| EWI | ELECTRIC WATER HEATER | VCP | VACUUM PUMP SYSTEM |
| EX | EXISTING | VIF | VERIFY IN FIELD |
| FBO | FURNISHED BY OTHERS | W | WIRE |
| FLA | FULL LOAD AMPS | WE | WITH EQUIPMENT |
| GF | GROUND FAULT INTERRUPTER | WP | WEATHER PROOF |
| GRD | GROUND | X | EXISTING TO BE REMOVED |
| HP | HORSEPOWER | XR | EXISTING TO BE RELOCATED |
| JB | JUNCTION BOX | XN | EXISTING RELOCATED IN NEW LOCATION |
| KW | KILOWATTS | | |
| KVA | KILO VOLT AMPERES | | |
| LTO | LIGHTING | | |
| MAX | MAXIMUM | | |
| MC | MECHANICAL CONTRACTOR | | |
| MFG | MANUFACTURER | | |
| MIN | MINIMUM | | |
| MTD | MOUNTED | | |
| MV | MERCURY VAPOR | | |

ELECTRICAL- SCHEDULES, SYMBOLS, NOTES & ABBREVIATIONS

SCALE: NONE