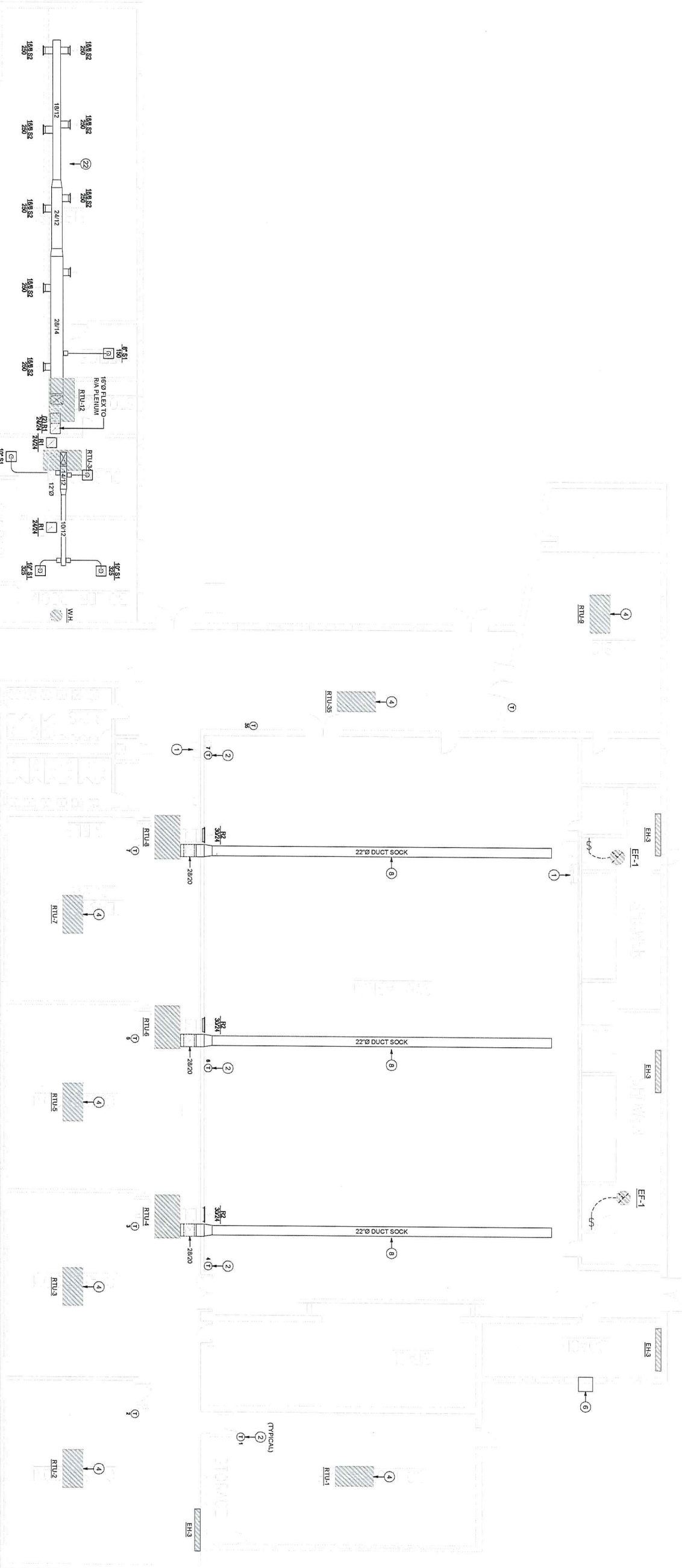
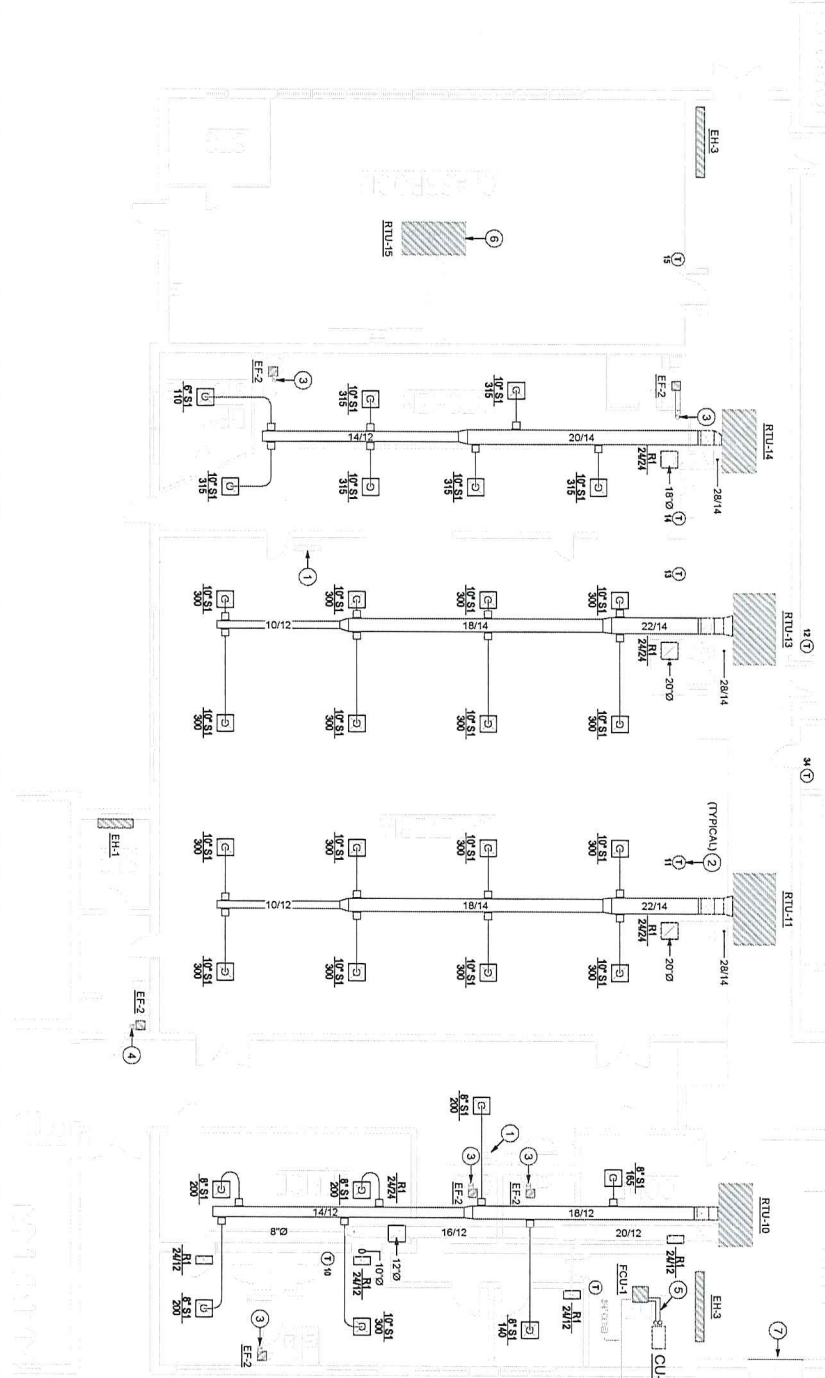
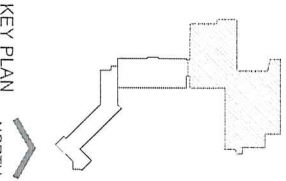




- KEYNOTES:**
1. PROVIDE INSULATION TO ALL DUCTS, EXCEPT WHERE NOTED OTHERWISE.
 2. PROVIDE INSULATION TO ALL DUCTS, EXCEPT WHERE NOTED OTHERWISE.
 3. PROVIDE INSULATION TO ALL DUCTS, EXCEPT WHERE NOTED OTHERWISE.
 4. PROVIDE INSULATION TO ALL DUCTS, EXCEPT WHERE NOTED OTHERWISE.
 5. PROVIDE INSULATION TO ALL DUCTS, EXCEPT WHERE NOTED OTHERWISE.
 6. PROVIDE INSULATION TO ALL DUCTS, EXCEPT WHERE NOTED OTHERWISE.
 7. PROVIDE INSULATION TO ALL DUCTS, EXCEPT WHERE NOTED OTHERWISE.
 8. PROVIDE INSULATION TO ALL DUCTS, EXCEPT WHERE NOTED OTHERWISE.



1 PARTIAL MECHANICAL PLAN
SCALE: 1/8" = 1'-0"
NORTH



NOTES:

1. CORRELATE LOCATION OF AIR DEVICES WITH CEILING COOL, LIGHT LOCATIONS, STRUCTURAL MEMBERS AND ARCH. FEATURES.
2. FLOW PATTERN OF AIR DEVICES MUST BE VIEWED WITH ARCHITECT'S INTENT AND FLOW SCHEDULE.
3. PROVIDE FEEDBACK FOR DUCT CONNECTION OR SOURCE TO FLOW INLET, AS REQUIRED.
4. PAINT DUCT INSIDE OF DUCT BLACK BEHIND AIR DEVICE.
5. PROVIDE OPENED BLADE DUCTS.
6. PROVIDE WITHOUT SCREEN INLETS.
7. PROVIDE FLOW CASSET AT FLOW.



1. REFER TO PROJECT MANUAL SPECIFICATIONS FOR ADDITIONAL FEATURES AND FINISHES.
2. HORIZONTAL DISCHARGE UNIT.
3. EXISTING RIG TO REMAIN.
4. R410A REFRIGERANT.
5. INSTALL NEW RIG ON EXISTING CURB. PROVIDE CURB ADAPTER/EXTENSION MATCHING NEW RIG TO EXISTING CURB.

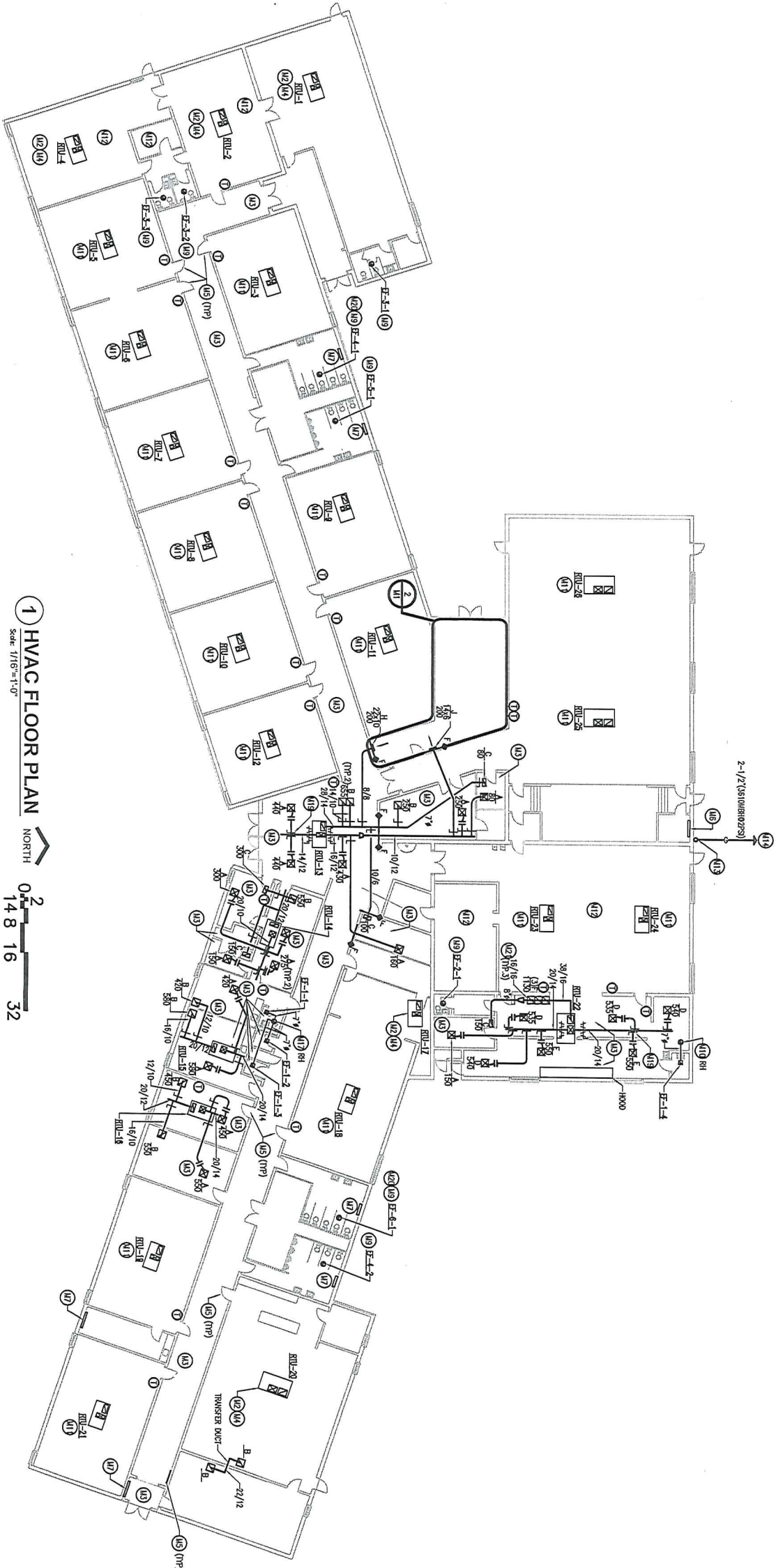


EXHAUST FAN SCHEDULE

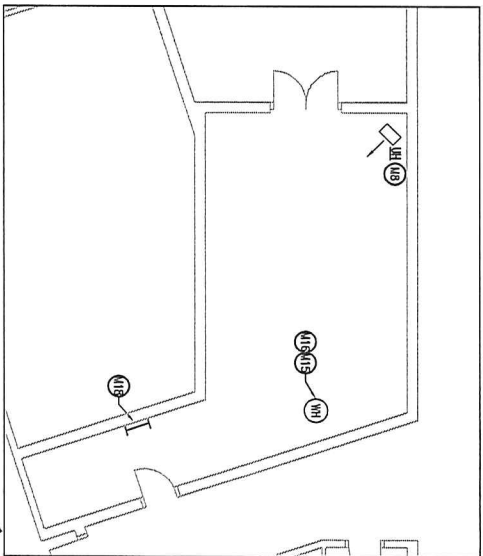
- NOTES:
1. TIMER CONTROLLED.
2. SWITCH WITH LIGHTS.
3. SPEED CONTROL SWITCH AT UNIT.
4. SPEED CONTROL WALL SWITCH.
5. BELT DRIVE.
6. DIRECT DRIVE.
7. VIBRATION ISOLATION MOUNTING.
8. WALL SWITCH.
9. SWITCH WITH BREAKER AT PANELBOARD.

MECHANICAL SYMBOL LEGEND

[illegible]MO



1 HVAC FLOOR PLAN



NOTE:
REFER TO SHEET ED FOR SERVICE ENTRANCE - ENGINEERED DRAWING REQUIREMENTS AND LIGHTING - ENGINEERED DRAWING REQUIREMENTS.

RUN OUT SCHEDULE	
CPM	DUCT SIZE
50 - 75	5"
75 - 115	6"
115 - 160	7"
161 - 220	8"
221 - 300	9"
301 - 400	10"
401 - 700	12"

GENERAL NOTES:

[illegible]

MECHANICAL KEYNOTES: (IX)

- [illegible]

SEAL

TULSA PUBLIC SCHOOLS
GRIMES ELEMENTARY SCHOOL
HVAC REMODEL

SEAL

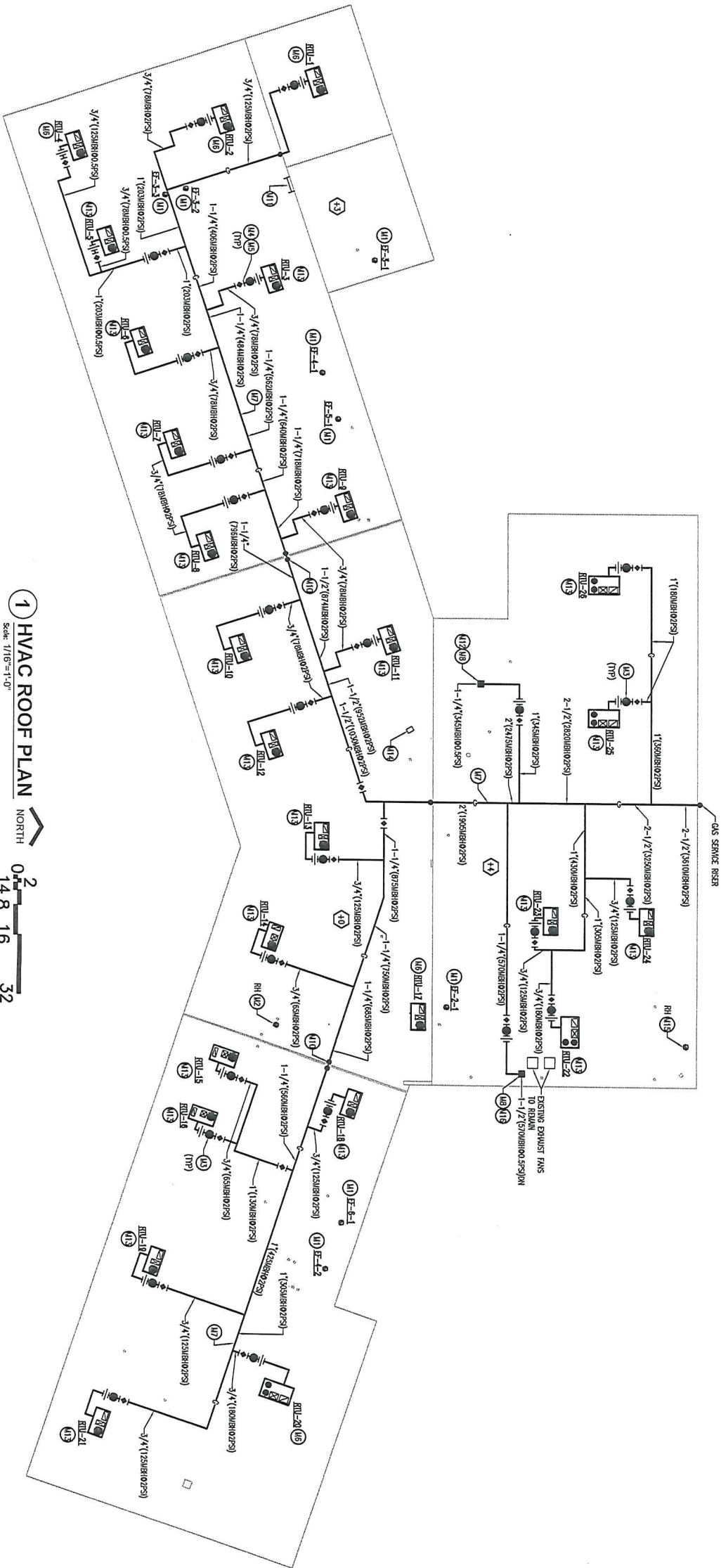
PROJECT TITLE
GRIMES
ELEMENTARY
SCHOOL HVAC
REMODEL

REVISION
RECORD DRAWINGS
09.24.2009

SHEET TITLE
HVAC
FLOOR
PLAN

SHEET NO.

M1



1 HVAC ROOF PLAN NORTH
Scale: 1/16"=1'-0"
0' 2' 4' 8' 16' 32'

MECHANICAL REMARKS: (M)

M1. PROVIDE NEW EXHAUST FAN. EXTEND EXISTING CURB TO MINIMUM OF 14" ABOVE ROOF AND MOISTY AS REQUIRED TO BE COMPATIBLE WITH FAN AND ROOF SYSTEM. COORDINATE EXHAUST FAN LOCATION WITH RDU LOCATIONS TO MAINTAIN MINIMUM 10'-0" CLEARANCE TO ANY OUTSIDE AIR INTAKE.

M2. PROVIDE SPAN ALUMINUM ROOF HOOK STEEL FOR CONNECTED EXHAUST FANS. EXTEND EXISTING CURB TO MAXIMUM OF 14" ABOVE ROOF AND MOISTY AS REQUIRED TO BE COMPATIBLE WITH ROOF HOOK AND ROOF SYSTEM. COORDINATE ROOF HOOK LOCATION WITH RDU LOCATIONS TO MAINTAIN MINIMUM 10'-0" CLEARANCE TO ANY OUTSIDE AIR INTAKE.

M3. PROVIDE GAS SHUT-OFF VALVE. UNION AND GAS PRESSURE REGULATOR AT LOCATIONS AS SHOWN. SET GAS PRESSURE REGULATOR FAN CONNECTED LOAD. REGULATOR SHALL REGULATE GAS PRESSURE FROM 2PSI TO 10PSI. (TYPICAL THROUGHOUT)

M4. PROVIDE GAS SHUT-OFF VALVE FOR EXHAUST SHUT-OFF. (TYPICAL)

M5. PROVIDE GAS SHUT-OFF VALVE AND UNION AHEAD OF EQUIPMENT CONNECTION. (TYPICAL THROUGHOUT)

M6. INSTALL CURB ADAPTER TO ACCOMMODATE TURNING OF NEW RDU ON EXISTING CURB. RDU CURB HEIGHT TO BE A MINIMUM OF 14" ABOVE FINISHED ROOF. CONNECT NEW RDU'S SUPPLY AND RETURN DUCTWORK INTO EXISTING DUCTWORK. COORDINATE EXACT LOCATION OF EXISTING CURB AND RETURNING DUCTWORK.

M7. ROUTE NEW GAS LINE ACROSS ROOF TO SERVE ALL EXISTING GAS FIRED EQUIPMENT, NEW RDU'S, NEW UNIT HEATER, NEW WATER HEATER, AND EXISTING GAS FIRED KITCHEN EQUIPMENT.

M8. PENETRATION TO COMPLY WITH REQUIREMENTS OF ROOF WARRANTY.

M9. NOTE NOT USED.

M10. PROVIDE EXPANSION LOOP IN GAS PIPING AT BUILDING EXPANSION JOINT.

M11. PROVIDE NEW LUGGER TO DEMAND ROOF. SECURE LUGGER TO WALL WORK BY ROOFING CONTRACTOR.

M12. ROUTE GAS PIPE DOWN TO NEW UNIT HEATER AND NEW WATER HEATER LOCATED IN BOILER ROOM. PROVIDE A ROOF CURB AND SHEET METAL HOOD WITH WEATHER SHIELD FROM PENETRATION THROUGH ROOF. CONNECT GAS TO WATER HEATER AND UNIT HEATER FOR MANUFACTURER'S INSTALLATION REQUIREMENTS.

M13. NEW RDU WITH NEW CURB AND SUPPORT STEEL.

M14. NEW ROOF HATCH BY ROOFING CONTRACTOR.

M15. PROVIDE SPAN ALUMINUM ROOF HOOK STEEL FOR CONNECTED EXHAUST FANS. PROVIDE WITH ROOF CURB COMPATIBLE WITH RDU. MAINTAIN MINIMUM 10'-0" CLEARANCE TO ANY OUTSIDE AIR INTAKE.

M16. ROUTE GAS PIPE DOWN THROUGH ROOF TO SERVE EXISTING GAS FIRED KITCHEN EQUIPMENT. ADJUSTMENT AND CAP EXISTING GAS PIPING CONNECTIONS. PROVIDE REPLACEMENT FOR CONNECTION TO NEW GAS PIPING. PROVIDE A ROOF CURB AND SHEET METAL HOOD WITH WEATHER SHIELD FROM PENETRATION THROUGH ROOF.

GENERAL NOTES:

A. CONFORM WITH TULSA PUBLIC SCHOOLS ENERGY AUDIT CONSTRUCTION AT (918) 746-6880 FOR UNIT INSTALLATION AND SPECIFICATIONS.

B. NEW GAS PIPE TO BE SET ON 4x4 TREATED WOOD BLOCKS ON BUILT-UP ROOFING. MAXIMUM 10'-0" SPACING ON 3" AND LARGER PIPE. 6'-0" MAXIMUM SPACING ON 2'-1/2" AND SMALLER. PROVIDE 3/4" THICK ROOF WALK PLY MATERIAL AT EACH PIPE SUPPORT. ALL PIPE SUPPORTS FOR 3" AND LARGER TO HAVE 1/4" THICK PAINTED STEEL PLATE THE SAME SIZE AS WALK PLY. PAINT ALL PIPE WITH ZINC CORROSION.

C. ROOF COMPOSITE PIPING FROM RDU'S TO NEAREST GUTTER. EXPOSED PIPE SHALL BE GALVANIZED STEEL. PROVIDE GALVANIZED STEEL WOOD BLOCKS AND CONTINGENT STRIPS. SET WOOD BLOCKS AND ROOF TIEED LUG EXPENDING 3" IN ALL DIRECTIONS. REFER TO HVAC GENERAL NOTES AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

D. ALL CONDENSATES SHALL BE SUPPORTED WITH 4x4 TREATED WOOD BLOCKS AND GALVANIZED CONTINGENT STRIPS. SET BLOCKS ON TOP OF TIEED LUG EXPENDING 3" IN ALL DIRECTIONS. PROVIDE GALVANIZED STEEL WOOD BLOCKS AND CONTINGENT STRIPS. PROVIDE GALVANIZED STEEL WOOD BLOCKS AND ROOF TIEED LUG EXPENDING 3" IN ALL DIRECTIONS. REFER TO HVAC GENERAL NOTES AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

E. RDU GAS PIPING AND CONDENSATES FOR RDU'S TOGETHER ON SAME WOOD BLOCKING.

TULSA PUBLIC SCHOOLS
GRIMES ELEMENTARY SCHOOL
HVAC REMODEL

SEAL

PROJECT TITLE
GRIMES
ELEMENTARY
SCHOOL HVAC
REMODEL

REVISION
RECORD DRAWINGS
09.24.2009

SHEET TITLE
HVAC ROOF
PLAN

DATE: 09.23.2009
SHEET NO.

M2

CONDENSER UNIT SCHEDULE												
MARK	AREA SERVED	MANUFACTURER	MODEL NO.	NOMINAL COOLING CAP. (MBH)	SEER	ELECTRICAL		COIL		ACCESSORIES		
						VOLTAGE	M.C.A.	F.P.S. (S.T.)	ROWS		F.P.L.	
CU-1	THRU	CLASSROOMS	CARRIER	366RC048	47.0	12.0	208/1/60	20.2	18.7	2	20	A THRU E
CU-33		CORRIDOR	CARRIER	366RC030	30.0	12.0	208/1/60	18.6	18.7	1	25	A THRU E
CU-34		COMPUTER ROOM	MITSUBISHI	PULIZEX	12.3	10.4	208/1/60	11.0	-	-	-	A THRU F

NOTE: A. SET UNIT LEVEL IN ALL DIRECTIONS.
B. PROVIDE CONCRETE PAD EXTENDING 4" ON ALL SIDES OF UNIT.
C. PROVIDE 1/2" SLOPE FOR DRAINAGE.
D. APPROVAL, REQUIREMENTS AND FEATURES

ACCESSORIES:
A. TIME DELAY RELAY
B. UNIT SHIPMENT PEET
C. CHRONOLOG HEATER
D. FILTER DRIVEN
E. LOW PRESSURE SWITCH
F. WIND BATTLE

F	GRILLE, REGISTER AND DIFFUSER SCHEDULE										
	MARK	SERVICE	STYLE	MANUFACTURER	MODEL	MATERIAL	MOUNTING		NECK SIZE	FINISH	REMARKS
							FACE				
A	CEILING SUPPLY	STEPPED FACE	TTUS	TMS	STEEL	FULL FACE LAV-IN 24"x24"	PER RINOUT SCHEDULE		#26 WHITE	AB,C,D,E,F	
B	CEILING SUPPLY	STEPPED FACE	TTUS	TMS	STEEL	PANEL LAV-IN 12"x12"	PER RINOUT SCHEDULE		#26 WHITE	AB,C,D,E,F	
C	SIDEWALL RETURN	VEE LAMBER SIGHTPROOF	TTUS	T-700L	STEEL	CHANNEL FRAME 30"x24"	PER PLANS		#26 WHITE	ABC	
D	CEILING SUPPLY	STEPPED FACE	TTUS	TMS	STEEL	FLANGE 12"x12"	PER RINOUT SCHEDULE		#26 WHITE	AB,C,D,E,G	
E	CEILING RETURN	1/2" SPACING SS DEFLECTION	TTUS	355RL	STEEL	LAV-IN 24"x6"	0-300 CMH		#26 WHITE	AB,C,D,E,F	
F	CEILING RETURN	1/2" SPACING SS DEFLECTION	TTUS	355RL	STEEL	LAV-IN 24"x24"	551-120 CMH		#26 WHITE	AB,C,D,E,F	
G	CEILING	1/2" SPACING TTUS	355RL	STEEL	LAV-IN 24"x12"	22"x10" COIL			#26 WHITE	AB,C,D,E,F	

F GRILLE, REGISTER AND DIFFUSER SCHEDULE										
MARK	SERVICE	STYLE	MANUFACTURER	MODEL	MATERIAL	MOUNTING		NECK SIZE	FINISH	REMARKS
						FACE				
A	CEILING SUPPLY	STEPPED FACE	TTUS	TMS	STEEL	FULL FACE LW-IN 24"x24"		PER RINOUT SCHEDULE	#26 WHITE	AB,C,D,E,F
B	CEILING SUPPLY	STEPPED FACE	TTUS	TMS	STEEL	PANEL LW-IN 12"x12"		PER RINOUT SCHEDULE	#26 WHITE	AB,C,D,E,F
C	SIDEWALL RETURN	VEE LOUVER SIGHTPROOF	TTUS	T-700L	STEEL	CHANNEL 30"x24"		PER PLANS	#26 WHITE	A,B,C
D	CEILING SUPPLY	STEPPED FACE	TTUS	TMS	STEEL	12"x12"		PER RINOUT SCHEDULE	#26 WHITE	AB,C,D,E,G
E	CEILING RETURN	1/2" SPACING 35° DEFLECTION	TTUS	35SRL	STEEL	LW-IN 24"x6"	22"x6" 0-300 CFM		#26 WHITE	AB,C,D,E,F
F	CEILING RETURN	1/2" SPACING 35° DEFLECTION	TTUS	35SRL	STEEL	LW-IN 24"x24"	22"x22" 551-1200 CFM		#26 WHITE	AB,C,D,E,F
G	CEILING RETURN	1/2" SPACING 35° DEFLECTION	TTUS	35SRL	STEEL	LW-IN 24"x12"	22"x10" 301-550 CFM		#26 WHITE	AB,C,D,E,F
H	SIDEWALL SUPPLY	DOUBLE DEFLECTION VERTICAL	TTUS	30ORS	STEEL	SURFACE FLANGE		PER PLANS	#26 WHITE	AB,C,D,E,G
J	SIDEWALL RETURN	HEAVY DUTY 0° DEFLECTION	TTUS	30RS	STEEL	SURFACE FLANGE		PER PLANS	#26 WHITE	AB,C,D,E,G
K	CEILING SUPPLY	STEPPED FACE	TTUS	TMS-A	ALUMINUM	LW-IN 24"x24"		PER RINOUT SCHEDULE	#26 WHITE	AB,C,D,E
L	CEILING SUPPLY	1/2"x1/2"x1/2" REGULATE	TTUS	50F	ALUMINUM	LW-IN 24"x24"	22"x22"		#26 WHITE	A,B,C,D

Symbo	Description
	SUPPLY DIFFUSER
	RETURN GRILLE
	EXHAUST GRILLE OR FAN
	SPECIAL AIR DEVICE
	ROUNDOUT BALANCE DAMPER
	MANUAL DAMPER
	OPPOSED BLADE DAMPER, MOTORIZED
	FLEX DUCT ROUNDOUT
	FIRE DAMPER
	SMOKE DAMPER
	COMBINATION FIRE/ SMOKE DAMPER
	DUCT TRANSITION (ONE LINE)
	CONNECT TO EXISTING
	THERMOSTAT

MECHANICAL SYMBOL LEGEND

No.	REVISIONS/SUBMISSIONS

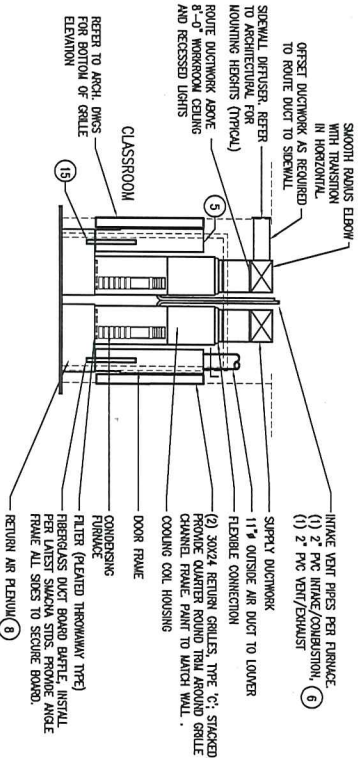
 Coleman · Johnston · Clyma, ARCHITECTS 410 South Main Street Suite 200 Tulsa, Oklahoma 74119 Phone (918) 481-1111 Fax (918) 481-1112 www.cjca.com		
ALLIED ENGINEERING GROUP 2211 E. SKELLY DR., SUITE 100 TULSA, OKLAHOMA 74105 (918) 712-7409 / FAX (918) 712-7408		

Drawing Title	MARK TWAIN ELEMENTARY SCHOOL Tulsa, Oklahoma		
Sheet	Drawing	MS	Project No.
	Checked	AET	CAD File No.

MECHANICAL SCHEDULES

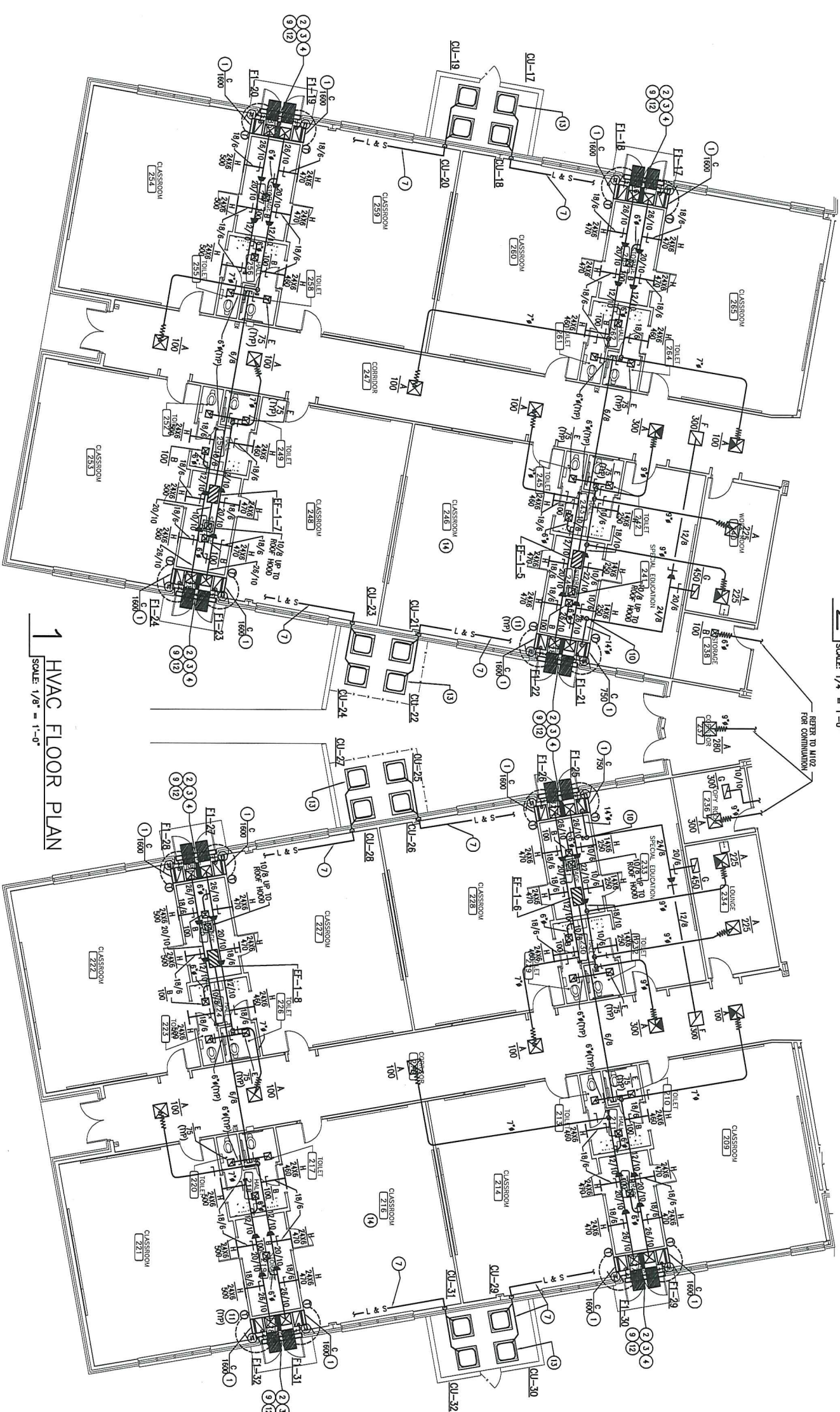
D	C	B	A
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RUN OUT SCHEDULE	
CFM	DUCT SIZE
50 - 75	5 1/4"
75 - 115	6 3/4"
115 - 160	7 1/4"
161 - 220	8 3/4"
221 - 290	9 3/4"
291 - 400	10 3/4"
401 - 700	12 3/4"



2 TYPICAL FURNACE CLOSET ELEVATION

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

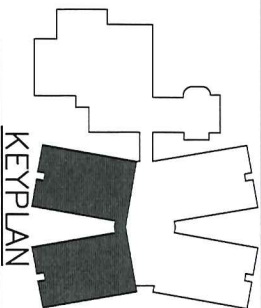


1 HVAC FLOOR PLAN

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

MECHANICAL HVAC KEYNOTES:

1. LOCATE (2)-30"24" RETURN AIR GRILLES STAGGED IN VERTICAL POSITION, PROVIDE TRIM AROUND TO HOLD CHANNEL FRAME IN PLACE (TYPICAL AT ALL CLASSROOM FURNACES).
2. PROVIDE 72"x48" WEATHERPROOF LOWER AND FRAME COAT FINISH LOCATE LOWER BEHIND LOWER FURNACE, PROVIDE 1/4" X 1/4" RETURN GRILLS TYPE "C" STAGGED, 11" X 11" OUTSIDE AIR DUCT TO LOWER FLEXIBLE CONNECTION
3. PROVIDE 11" X 11" OUTSIDE AIR DUCT TO LOWER FLEXIBLE CONNECTION, PROVIDE 1/4" X 1/4" RETURN GRILLS TYPE "C" STAGGED, 11" X 11" OUTSIDE AIR DUCT TO LOWER FLEXIBLE CONNECTION
4. PROVIDE 1/4" X 1/4" RETURN GRILLS TYPE "C" STAGGED, 11" X 11" OUTSIDE AIR DUCT TO LOWER FLEXIBLE CONNECTION
5. 14"x20" RETURN AIR DUCT DOWN TO FURNACE
6. CONNECT INtake AND VENT PIPING TO 2" PVC CONCENTRIC TERMINATION KIT, ROUTE UP THROUGH ROOF AND TERMINATE PER MFR'S INSTRUCTIONS, MAINTAIN 10'-0" CLEAR FROM OUTSIDE AIR INTAKE
7. ROUTE LIQUID AND SUCION LINES TO EXTERIOR WALL AND SECURE TO WALL WITH UNINSULATED SUPPORT PIPING, PROVIDE 1/4" X 1/4" RETURN GRILLS TYPE "C" STAGGED, 11" X 11" OUTSIDE AIR DUCT TO LOWER FLEXIBLE CONNECTION
8. SET UNIT ON 18" HIGH RETURN AIR SUPPORT FRAME CONSTRUCTED FROM ANGLE IRON WITH SHEET METAL FRONT, SIZES AND BOTTOM RETURN AIR RETURN STRAND TO BE EXPOSED TO BE BENT 90° WITH PLASTIC COVERING AIR EXPOSED EDGE AND STAYS, SET UNIT ON VIBRATION ISOLATION PAD BETWEEN UNIT CABINET AND SUPPORT FRAME (TYPICAL ALL UNITS)
9. PROVIDE CONDENSING DRAIN WITH A 1/2" X 1/2" AT EXTERIOR WALL AND ROUTE DRAIN PIPING TO EXTERIOR WALL AND DISCHARGE INTO FLOOR DRAIN PARALLEL TO PRIMARY DRAIN, IDENTIFY SECONDARY DRAIN LINE WITH LABEL AND ALTERNATE PINK COLOR AT TERMINATION
10. OFFSET DUCTWORK AS REQUIRED TO ROUTE UNDER ROAD GRADERS
11. LOCATE THERMOSTAT IN COMPLIANCE WITH ADA WORKING AND ACCESS REQUIREMENTS, PROVIDE LOCKING COVER
12. PROVIDE DRAIN PIPING FOR FLE CONDENSATE WITH TRAP, EXTEND DRAIN PIPING TO FLOOR DRAIN
13. SET CONDENSING UNITS ON CONCRETE PAD AND LEVEL UNIT IN ALL DIRECTIONS (TYPICAL)
14. PROVIDE 5'-0" OF ADDITIONAL DUCT LATER MAXIMUMLY CONSTRUCTION OF 5/4" CONNECTION TO TOLERANCE FINISH SECTION(TYPICAL ALL FURNACES)
15. CENTER BRUTE IN DUCT AND EXTEND 6" INTO RA PLenum AND TO TOP OF LOWER GRILLE



REVISIONS/SUBMISSIONS

No.	Date

COLEMAN · JOHNSON · CLYMER, Inc.
ARCHITECTS
610 South Main Street
Suite 200
Tulsa, Oklahoma 74119
Tel: (918) 582-7122
Fax: (918) 582-7122
www.cjcarchitects.com

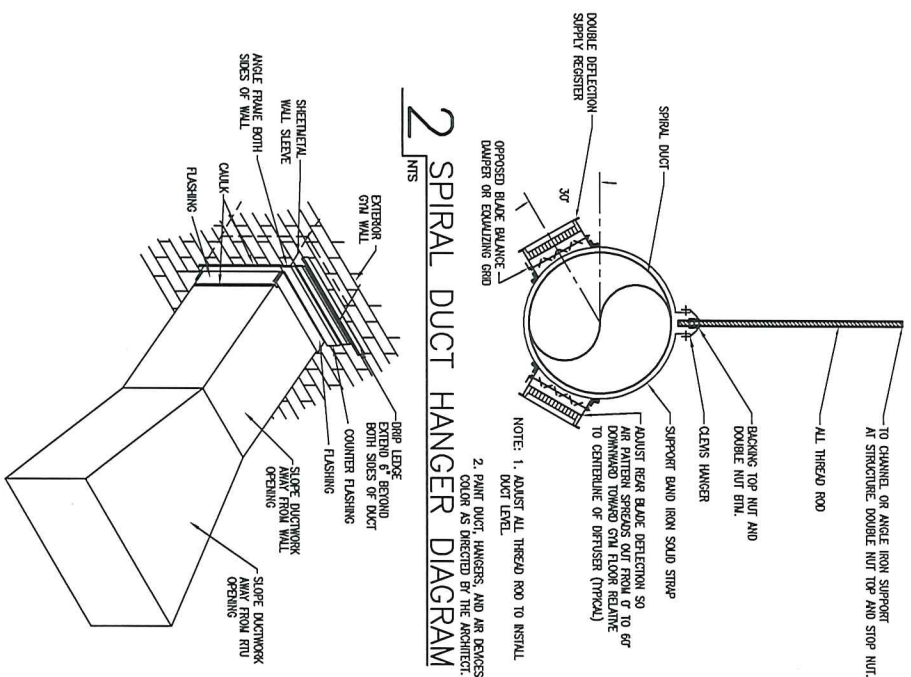
ALLIED ENGINEERING GROUP, LLC
2225 E. KICKAPOO DR., SUITE B
TULSA, OKLAHOMA 74119
(918) 712-7408 / FAX (918) 712-7182

**MARK TWAIN
ELEMENTARY SCHOOL**
Tulsa, Oklahoma

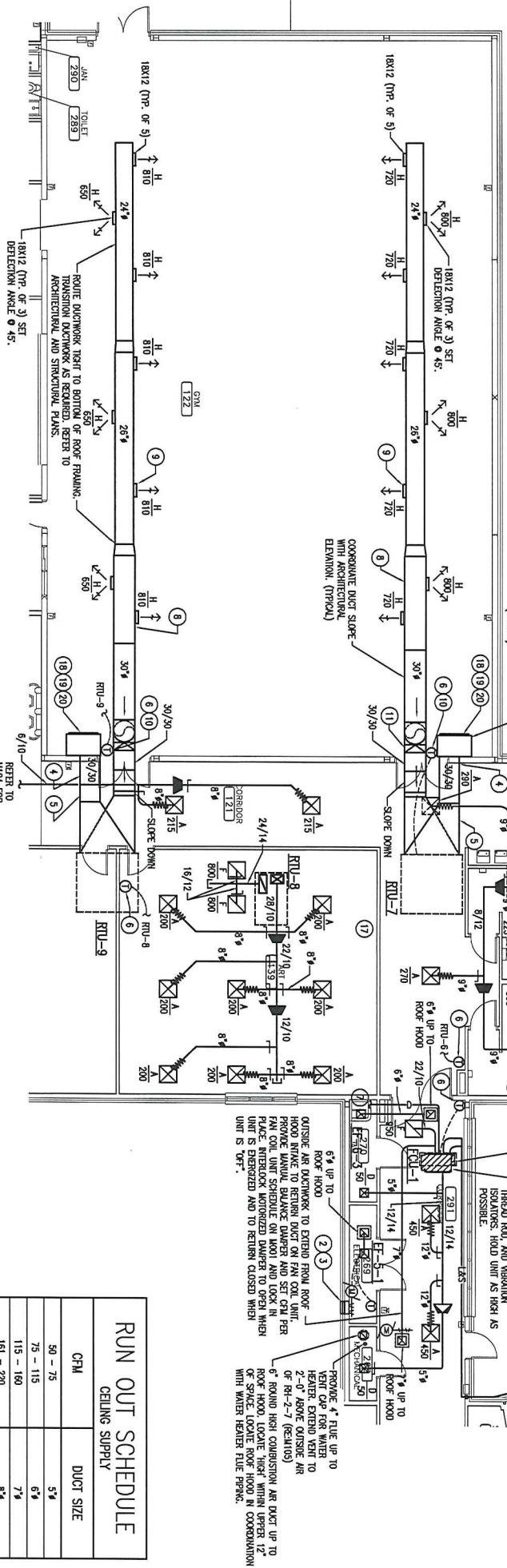
Drawing Title

MECHANICAL HVAC PLAN

Drawn	MS	Project No.	9832
Checked	AET	CAD File No.	
Reviewed	GDG	Drawing No.	M101
Date	9/12/2000	Scale	1/8"=1'-0"
			3 of 7



3 DUCTWORK WALL PENETRATION



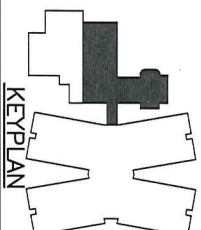
1 HVAC FLOOR PLAN

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

RUN OUT SCHEDULE	
CEILING SUPPLY	
CFM	DUCT SIZE
50 - 75	5"
75 - 115	6"
115 - 160	7"
161 - 220	8"
221 - 280	9"
281 - 480	10"
481 - 700	12"

MECHANICAL HVAC KEYNOTES:

1. ROUTE LIQUID AND SUCION LINES FROM FOU-1 TO OJ-33 IN OUTSIDE FENCE AREA. REFER SHEET M102.
2. COORDINATE LOCATION OF LOUVER WITH ELECTRICAL EQUIPMENT AND LOCATE ACCORDINGLY.
3. PROVIDE 18"x12" VENTILATION LOUVER WITH RAINWATER BLADES. BRASS/STEEL BEHIND LOWER FACE. ALUMINUM CONSTRUCTION AND PAINT COAT FINISH. LOCATE LOUVER IN WALL. PROVIDE MOTORIZED DAMPER. INTERLOCK DAMPER WITH EF-5-1 OPERATION. DAMPER TO BE OPEN WHEN FAN IS ON. TOP OF LOUVER TO BE 8'-0" AFF.
4. ROUTE SUPPLY AIR RETURN DUCTWORK EXPRESSED ON ROOF. ROUTE DUCTWORK THROUGH GYM WALL. COORDINATE WALL PENETRATION WITH ARCHITECT AND WALL PENETRATION DETAIL. SIZE OF PENETRATION TO BE COORDINATED IN FIELD. TOP OF DUCT ELEVATION ±20'-9" AFF. TOP OF SUPPLY AND RETURN TO PENETRATE WALL AT SAME ELEVATION. INSULATE EXTERIOR DUCTWORK PER SPECIFICATIONS SECTION 15061. CROSSBREAK AND SLOPE TOP OF EXTERIOR DUCTWORK TO PROVIDE DRAIN. SUPPORT EXTERIOR DUCTWORK ON ANGLE IRON FRAME STANDS SET ON EXTERIOR RAILS.
5. TRANSMISSION SUPPLY AND RETURN DUCTWORK TO SIZES SHOWN.
6. LOCATE THERMOSTAT IN COMPLIANCE WITH ADA MOUNTING AND ACCESS REQUIREMENTS. PROVIDE LOOKING COVER.
7. PROVIDE 1" CONDENSATE DRAIN PIPING FROM FOU-1 TO FLOOR DRAIN REVEALED WITH 1" AIR CAP. SECONDARY DRAIN TO DISCHARGE INTO DRAIN PAN.
8. INSTALL SUPPLY AIR DUCT AS HIGH AS POSSIBLE. SUPPORT DUCT FROM BUILDING STEEL USING SINGLE ALL THREADED ROD. CLEVIS HANGER AND SOLID BAND IRON STRAP. REFER TO INSTALLATION DRAWING THIS SHEET.
9. INSTALL SUPPLY AIR RESISTERS AT 30 DEGREES DOWN FROM HORIZONTAL. OFF SIZE OF SUPPLY AIR DUCT AND HORIZONTAL WELDS TO ACHIEVE AIR FLOW INTO COVER SPACE. REFER TO DUCT HANGER DRAWING THIS SHEET (TYPICAL).
10. INSTALL THERMOSTAT BEHIND HEAVY DUTY STEEL, VENTILATED, LOOKING COVER. LOCATE THERMOSTAT AT 60 INCHES AFF.
11. SQUARE TO ROUND TRANSITION. (TYPICAL)
12. PROVIDE SHEET METAL DRAIN PAN UNDER FOL. FLOAT SWITCH MOUNTED IN DRAIN PAN TO BE INTERLOCKED TO SHUT FAN COIL UNIT OFF.
13. ROUTE DUCTWORK AS HIGH AS POSSIBLE IN BETWEEN JOISTS.
14. TOP BOTTOM OF MAIN AND ROUTE BRANCH BELOW JOISTS.
15. ROUTE DUCTWORK UP AS REQUIRED TO ROUTE ABOVE SUPPLY DUCT.
16. FILL CUBS WITH ALTERNATING LAYERS OF SOUND ATTENUATING MATERIALS CONSISTING OF 2-LAYERS OF 6" BATT INSULATION, AND 1-LAYER OF 5/8" OPSAM BOARD. REPEAT 3 TIMES AND FILL REMAINDER OF CUBS WITH 6" BATT INSULATION.
17. PROVIDE 5'-0" OF ACoustical DUCT LINER IMMEDIATELY DOWNSTREAM OF S/A & R/A CONNECTION TO R/O SPLITF AND RETURN AIR CONNECTION. (TYPICAL. FILL R/O S).
18. 48"x48"x20" RETURN AIR PLenum BOX. PROVIDE A 24"x24" ACCESS DOOR ON BOTTOM OF PLenum BOX. COORDINATE WITH ARCHITECT AND PROVIDE DETAIL. (TYPICAL. FILL R/O S).
19. PROVIDE A 42"x42" LOUVER WITH BRASS/STEEL BEHIND LOWER FACE. ALUMINUM CONSTRUCTION AND PAINT COAT FINISH. LOCATE LOUVER IN WALL. PROVIDE MOTORIZED DAMPER. INTERLOCK DAMPER WITH EF-5-1 OPERATION. DAMPER TO BE OPEN WHEN FAN IS ON. TOP OF LOUVER TO BE 8'-0" AFF.
20. PROVIDE A SLOPED 45 DEGREE PLenum TOP COVER. EXPOSED SIZES OF COVER TO TOP OF PLenum BOX. PROVIDE 1/2" INSULATION. PROVIDE DETAIL. (TYPICAL. FILL R/O S).



REVISIONS/SUBMISSIONS

No.	REVISIONS/SUBMISSIONS	Date



Coleman Johnston Clyma, Inc.
ARCHITECTS



ALLIED ENGINEERING GROUP, LLC
2211 E. SHELLEY DR., SUITE B,
TULSA, OKLAHOMA 74119
(918) 712-7408 / FAX (918) 712-7182

MARK TWAIN ELEMENTARY SCHOOL

Tulsa, Oklahoma

MECHANICAL HVAC PLAN

Drawing Title	
Drawn	MS Project No. 98332
Checked	ACT CAD File No.
Reviewed	GDG Drawing No.
Date	9/12/2000
Scale	1/8"=1'-0" 5 of 7



1. GAS PIPING AND CONDENSATE PIPING SUPPORTS. REFER TO GAS PIPING GENERAL NOTES FOR DESCRIPTION (TYPICAL).
2. ROUTE CONDENSATE DRAIN PIPING TO GUTTERS, ELBOW DOWN, TERMINATE PIPING WITH 2" AIR CAP. ANCHOR END OF PIPING AT POINT OF TERMINATION.
3. SET CONDENSING UNIT ON 4"x4" EXTENDED TREAD RUNNERS. PROVIDE TREAD MATS OVER REDWOOD RUNNERS. REMOVE TREAD MATS 6" ON ALL SIDES, SET UNIT LEVEL IN ALL DIRECTIONS.
4. ROUTE CONDENSATE DRAIN PIPING TO SCUPPERS, ELBOW DOWN, TERMINATE PIPING WITH 2" AIR CAP. REFER TO ARCH. PLANS FOR FINAL SCUPPER LOCATIONS AND MODIFY CONDENSATE RACHS AS REQUIRED.
5. ROUTE REFRIGERANT PIPING DOWN THROUGH ROOF TO FCU-2 USING MOST DIRECT PATH WITH LEAST NUMBER OF ELBOWS.
6. ROOF HOOD TO BE EQUAL TO GREENECK. GAS-10 SPUN ALUMINUM HOOD TO BE EQUAL TO GREENECK. GAS-8 SPUN ALUMINUM HOOD TO BE ARCHITECTURAL FOR FLASHING REQUIREMENTS.
7. ROOF HOOD TO BE EQUAL TO GREENECK. GAS-8 SPUN ALUMINUM ROOF HOOD TO SET. ROOF HOOD ON 14" HIGH FACTORY CURBS. REFER TO ARCHITECTURAL FOR FLASHING REQUIREMENTS.
8. COMBINATION COMBUSTION AIR/VENT TERMINATION. MAINTAIN 10"-0" CLEAR ROOF TOP OUTSIDE AIR INTAKE.
9. EXISTING ROOF TOP UPNS TO BE REMOVED AND RETURNED TO OWNER. EXISTING GAS PIPING SHALL BE REMOVED AND REPLACED WITH NEW GAS VALVES, UNIONS AND PIPING. REMOVE EXISTING GAS PIPING. PROVIDE NEW UNITS IN SAME LOCATION AS SHOWN.
10. PROVIDE PIPE MANIFOLD, VALVE AND UNION AT EACH BRANCH LINE PRIOR TO ENTERING THE BUILDING.
11. PROVIDE SHUT-OFF VALVE AND UNION AHEAD OF PRESSURE REGULATOR.
12. SECURE RISER TO WALL AND SHEET PIPING TO MATCH WALL FINISH.
13. PROVIDE ROOF CURB AND SHEET METAL HOOD WITH WEATHER SHIELD FOR PIPE ENTRY THRU ROOF.
14. PROVIDE PRESSURE REGULATOR, SHUT-OFF VALVE, AND UNION AT 1/4" SCH. ROOF TOP UNIT.



CJC
Coleman · Johnston · Clyma, Inc.
ARCHITECTS
610 South Main Street
Suite 200
Tulsa, Oklahoma 74119
Ba (918) 592-7171
Fax (918) 592-7176
cjc@hccnet.net

ALB
2211 E. SKELLY DR.,
TULSA, OKLAHOMA 74
(918) 712-7409 / FAX

Tulsa, Oklahoma

18

Date
 9/12/2000
 Scale
 $1/16" = 1' - 0"$

ROOF TOP UNIT SCHEDULE

[illegible]

NOTES:
1. COOLING CAPACITIES ARE BASED ON UNIT ON/10% SUPPLY AIR AND 80°F, 60%/37°F, DRYG, WITH 105°F AIR ENTERING CONDENSER. EER IS BASED ON A9
CONDITIONS.
2. REFER TO PROJECT MANUAL SPECIFICATIONS FOR ADDITIONAL FEATURES AND REQUIREMENTS.

EXHAUST FAN SCHEDULE

MARK	MANUFACTURER	MODEL NO.	C/W		T.E.P.		M.M.		S.M.S.		H.P.		ELECTRICAL		TYPE	NOTES	ACCOMMODATIONS
			NO.	WT.	IN.	TH.	IN.	TH.	IN.	TH.	IN.	TH.	IN.	TH.			
BR-12	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-13	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-14	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-15	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-16	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-17	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-18	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-19	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-20	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-21	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-22	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-23	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-24	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-25	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-26	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-27	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-28	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-29	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-30	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-31	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-32	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-33	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-34	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-35	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-36	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-37	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-38	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-39	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-40	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-41	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-42	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-43	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-44	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-45	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
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BR-47	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-48	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-49	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-50	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-51	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-52	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-53	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-54	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-55	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-56	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-57	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-58	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-59	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-60	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-61	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-62	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-63	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
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BR-66	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-67	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-68	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-69	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-70	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
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BR-73	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-74	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
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BR-77	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-78	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-79	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-80	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-81	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-82	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-83	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-84	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-85	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-86	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-87	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-88	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-89	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-90	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-91	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-92	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-93	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-94	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-95	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-96	BRUNNEN	1000	50	0.35	1050	20	100	100	100	100	100	100	100	100	100		
BR-97	BRUNNEN																

[illegible]

MECHANICAL SYMBOL LEGEND

☒	SHIPPY DUTYBOX, 4-WAY THROW	☒	MANUAL DUMPER
☒	SHIPPY DUTYBOX, 3-WAY THROW	☒	OPPOSED BLADE DUMPER, UNWEIGHED
☒	SHIPPY DUTYBOX, 2-WAY THROW	☒	TERMOSTAT
☒	RETURN ORGLE	☒	SEASON
☒	DUMPSH DRALE OR FAN	☒	DOOR UNDERCUT
☒	CIRCULAR SHIPPY DUTYBOX	☒	FLEX DUCT RADIATOR
☒		☒	SHIPPY DUTYBOX (4-WAY THROW)

NONI SCHEDULE

CM	DOCI SIZE
50 - 75	5 ϕ
75 - 115	6 ϕ
115 - 160	7 ϕ
161 - 220	8 ϕ
221 - 290	9 ϕ
291 - 490	10 ϕ
491 - 700	12 ϕ

FURNACE AND CONDENSING UNIT SCHEDULE

FURNACE									
MARK	F-553A3 F-1611213			F-1234 F-5610208			F-202B		
MANUFACTURER	LUNOX			LUNOX			LUNOX		
MODEL NO.	651W-48-200			651W-40C-200			651W-40C-110		
HEATING CAPACITY	66			88			110		
INPUT (kW)	61			81			103		
OUTPUT (kW)	1200			1600			2000		
CFM	175			350			350		
OUTSIDE AIR (CFM)	0.6			0.6			0.6		
TOTAL E.S.P. (MG)	1/2			1			1		
FAN (HP)	1			1			1		
ELECTRICAL DATA	120/160			120/160			120/160		
VOLTAGE	12			12			12		
WIRE	10/4			10/4			10/4		
WEIGHT (LB)	151			180			185		
EXHAUSTOR OUT									
EXHAUSTOR INLET									

EVAPORATOR COIL

H.V.A.C. GENERAL NOTES:

[illegible]

H.V.A.C. GENERAL NOTES:

[illegible]

MAKE-UP AIR UNIT SCHEDULE

	SUPPLY FAN	(AIR FLOW)	HEATING	FILTER	MAX.	ACCESSORIES
	CAN	STATIC PR	CAPACITY	DATA	OBERING WEIGHT (LBS.)	
MARK	MANUFACTURER	TOTAL TOTAL	RPM	WATT INPUT	DURATION SIZE	
	MODEL NO.	O/A	HP	PULSE PHASE	SIZE (IN)	
	GEOMETRY	2500	12X	3M	200	
mu-1	B-112	2500	0.3X	1.5	3	
					200	
					160	
					3/4"	
					MM	
					PRE	
					2	
					30	
					0.08	
					NOTHING	
					950	
					1.2	A&C.D

1. ALL DIMENSIONS ARE IN "I".
2. ALL DIMENSIONS ARE LISTED AS MINIMUM AIR QUANTITY.
3. ACCESSORIES ARE NOT INCLUDED WITH THE ABOVE DATA.
4. ALL DIMENSIONS ARE LISTED AS MINIMUM AIR QUANTITY.
5. ALL DIMENSIONS ARE LISTED AS MINIMUM AIR QUANTITY.

NOTES:
1. ALL TEMPERATURES ARE IN °F.
2. OUTSIDE AIR LISTED IS MINIMUM AIR QUANTITY

ACCESSORIES:
A. WEATHERHOOD WITH BIODIFFERENTIAL PLEATED FILTERS.
B. PLEATED FILTERS.

GRILLE, REGISTER AND DIFFUSER SCHEDULE

MARK	SERVICE	MANUFACTURER	STYLE	MODEL NO.	MATERIAL	MOVING	FACE	REAR SIZE	FINISH	NOTES
A	SHIPPY	TUNIS	SQUARE CROWN	TUN-AM	ALUMINUM	W-L-N	24/24	FE8 PLANS	WHITE	1,35
B	SHIPPY	TUNIS	EGGSHAPED	50F	ALUMINUM	W-L-N	24/24	FE8 PLANS	WHITE	12,45/5
C	RETRON	TUNIS	1/2" SQUARE-36" DENT	35F	ALUMINUM	W-L-N	24/24	FE8 PLANS	WHITE	12,45/5
D	SHIPPY	TUNIS	SQUARE CROWN	N65	STEEL	W-L-N	24/24	FE8 PLANS	WHITE	1,25
E	RETRON	TUNIS	1/2" SQUARE-36" DENT	3550A	STEEL	W-L-N	24/24	FE8 PLANS	WHITE	12,45/5
F	RETRON	TUNIS	1/2" SQUARE-36" DENT	3550A	STEEL	W-L-N	12/24	FE8 PLANS	WHITE	12,45/5
G	SHIPPY	TUNIS	SQUARE CROWN	3550A	ALUMINUM	50/60/26	24/24	FE8 PLANS	WHITE	1,25
H	SHIPPY	TUNIS	1/2" SQUARE-36" DENT	3550A	STEEL	50/60/26	61/10	FE8 PLANS	WHITE	12,45/5
I	RETRON	TUNIS	1/2" SQUARE-36" DENT	3550A	STEEL	50/60/26	35/42	FE8 PLANS	WHITE	12,45/5
J	RETRON	TUNIS	1/2" SQUARE-36" DENT	3550A	STEEL	50/60/26	24/24	FE8 PLANS	WHITE	12,45/5

1. COORDINATE LOCATION OF AIR DEVICES WITH CEILING GRID, LIGHT LOCATIONS, STRUCTURAL MEMBERS AND ARCH FEATURES.

HEAT PUMP UNIT SCHEDULE

HEAT PUMP UNIT SCHEDULE												
MARK (HONDU UNIT)	AREA SERVED	MANUFACTURER	MODEL NO.	NOMINAL COOLING CAPACITY (Btu/h)	NOMINAL HEATING CAPACITY (Btu/h)	SEER (EER)	ELECTRICAL DATA		WEIGHT (LBS)	NOTES	ACCESSORIES	
							VOLUME	M.C.A./I.O.C.P.				
HP-1 (FD-1A,1B,1C,1D)	CORROCOR 12A130	MTS-BESI	WZ-8848MA	112.0 - 70.2	10.0 - 70.2	15	200V/60	32	50	280	12.3A	A&C
HP-2 (FD-2)	UE 254	MTS-BESI	PD-A450MA	34.0	37.0	14	200V/60	25	40	190	12.3A	A&C

NOTES:

1. COOLING CAPACITIES ARE BASED ON UNIT CEN SPRAY AIR, 95°F DB/67°F WB, WITH 95°F AIR ENTERING CONDENSER. EER IS BASED ON A/C COOLING.
2. RETURN TO EXHAUST MODE. SPEEDS/TONS FOR A/C HEATING, COOLING, AND EXHAUST MODES.
3. HEATING CAPACITIES ARE BASED ON 17°F DB, 10°F WB AIR, 95°F DB, 10°F WB AIR, 95°F DB, 10°F WB AIR, 95°F DB, 10°F WB AIR, 95°F DB, 10°F WB AIR.
4. INDOOR COOLING WITH ROOM FLOW, INDOOR UNIT FORCED BY OUTDOOR FLOW FAN UNIT.

FAN COIL UNIT SCHEDULE

MARK MODEL NO.	AREA SERVED	MANUFACTURER	MODEL NO.	CPU	O.A. CPU	E.S.P. IM.G.	ELECTRICAL					W.T. (LBS.)	NOTES	ACCESSORIES	
							COOLING (HR)	HEATING (HR)	FLA	VOLTAOE	W.A.O.C.P.				
TD-4 (TD-2)	OSBORNE 1251.30	WISBROS	PA-183A	600	0	0.60	18.0	19.0	0.51	200V/1/60	1	CU	60	12.54	AB,DE
TD-2	WIT 264	WISBROS	PA-183A	600	0	0.60	36.0	37.0	0.57	200V/1/60	1	CU	60	12.54	AB,CD

ACCESSORIES:
A. FILTERS.
B. HERMATIC DEVIATION VALVE (TV).
C. INTERLOCK OPERATION WITH OUTDOOR HEAT PUMP/CONDENSING UNIT.
D. HARD WIRE, WALL-MOUNTED, REMOTE CONTROLLER.
E. POWER BRANCH BOX PVC-ABS/PE.

U



320 South Boston, Suite 1600, Tulsa, Oklahoma 74103
Tel 918.587.6158, Fax 918.587.0357, www.gh2.com
A SPECIALTY PRACTICE OF GH2 ARCHITECTS, LLC

GH2 | ARCHITECTS



1401 SOUTH DOWNEY STREET SUITE A TULSA, OK 74119
(918) 264-0224/FAX (918) 264-3104 info@hwy7.com
CA 3079 DE: 06/20/2012

DRAWN BY	DMS,DSP,GMB
CHECKED BY	DLW,DRR
ENGINEER	GAYLE GWINUP
LICENSE #	15478
ENGINEER	THOMAS MCKENNA
LICENSE #	20222

Porter Early Childhood Center

Tulsa, Oklahoma

Mechanical General
Notes and Schedules

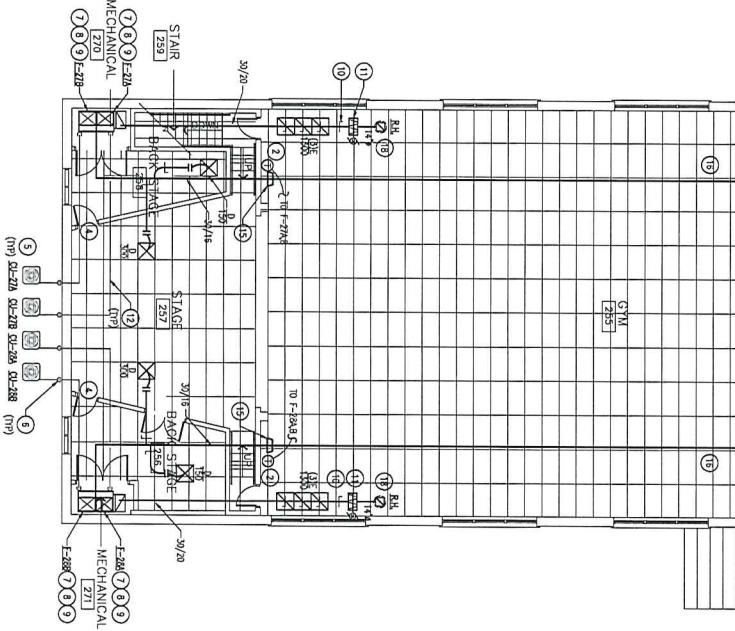
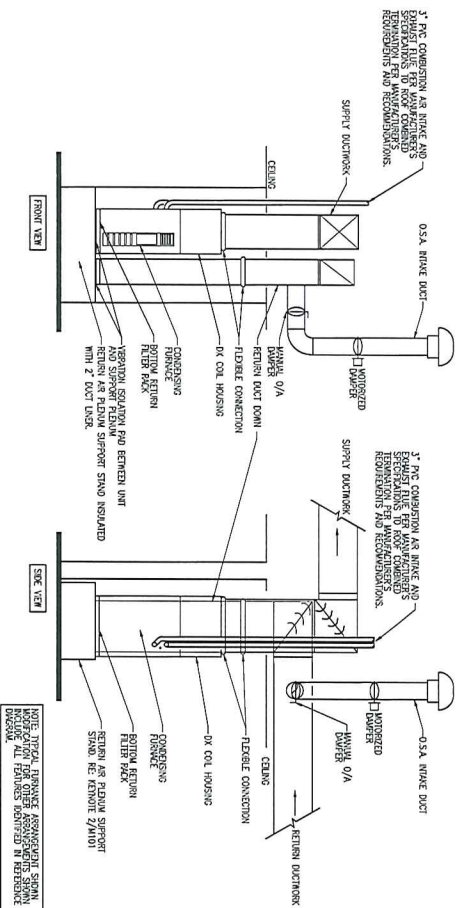
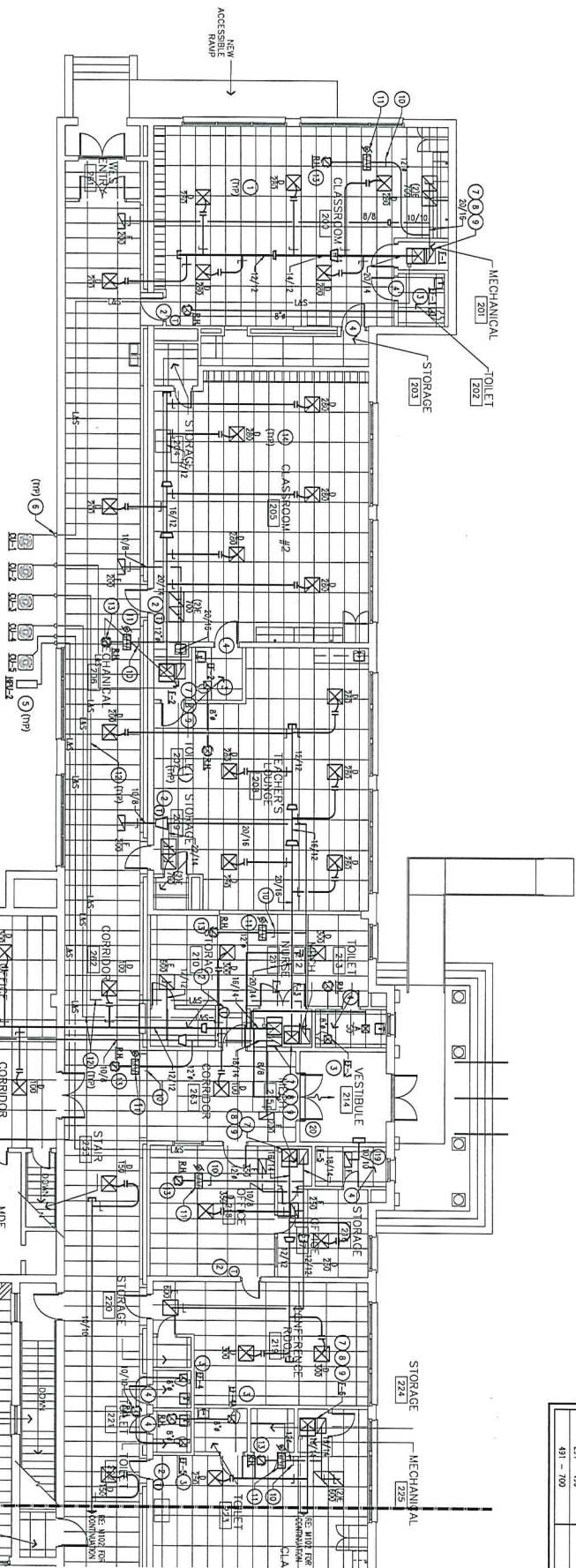
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ISSUED / REVISIONS
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M001

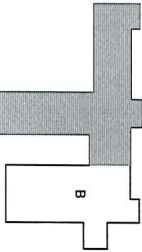
RUN OUT SCHEDULE		
CEN	DUCT SIZE	
50 - 75	5"ø	
75 - 115	6"ø	
115 - 160	7"ø	
161 - 220	8"ø	
221 - 290	9"ø	
291 - 400	10"ø	
401 - 600	12"ø	



FIRST FLOOR HVAC PLAN-AREA 'A'
SCALE: 1/8" = 1'-0"
NORTH 0 2 4 8 16 FEET

REMARKS:

1. COORDINATE FURN. LOCATION OF ALL SUPPLY, RETURN AND EXHAUST GRILLS WITH UNITS, SPRINKLER HEADS AND ARCHITECTURAL DETAILING CEILING PANEL.
2. PROVIDE CONTINGENT LOCATED CEILING AND PERMANENT MOUNT THROUGHT UNITS/MAKING TO BE LOCATED IN THE CEILING. PROVIDE CONTINGENT LOCATED CEILING AND PERMANENT MOUNT THROUGHT UNITS/MAKING TO BE LOCATED IN THE CEILING. PROVIDE CONTINGENT LOCATED CEILING AND PERMANENT MOUNT THROUGHT UNITS/MAKING TO BE LOCATED IN THE CEILING.
3. SET CONDENSING UNIT ON MAINWALL 4" THICK REINFORCED CONCRETE PAD EXTENDING 6" FROM UNIT IN ALL DIRECTIONS. LOCATE UNIT IN CONFORMANCE WITH ACTUAL SITE CONDITIONS. PROVIDE CONTINGENT LOCATED CEILING AND PERMANENT MOUNT THROUGHT UNITS/MAKING TO BE LOCATED IN THE CEILING. PROVIDE CONTINGENT LOCATED CEILING AND PERMANENT MOUNT THROUGHT UNITS/MAKING TO BE LOCATED IN THE CEILING.
4. RELOCATE DOOR 1".
5. PROVIDE CEILING MOUNTED EXHAUST FAN WITH METALLIC BROADCAST DUCTWORK. ROUTE EXHAUST DUCT UP TO ROOF FLOOR ON CEILING. RE-EXHAUST FAN SCHEDULE SHEET M001. LOCATE EXHAUST ON ROOF TO BE NO CLOSER THAN 10' TO EDGE OF ROOF AND 10' FROM ADJACENT ROOF EDGES. PROVIDE CONTINGENT LOCATED CEILING AND PERMANENT MOUNT THROUGHT UNITS/MAKING TO BE LOCATED IN THE CEILING. PROVIDE CONTINGENT LOCATED CEILING AND PERMANENT MOUNT THROUGHT UNITS/MAKING TO BE LOCATED IN THE CEILING.
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Porter Early Childhood Center
Tulsa, Oklahoma
HAVC Plan - Area "A"

20100047

ISSUED/REVISIONS

08/14/11 Construction Documents

M101

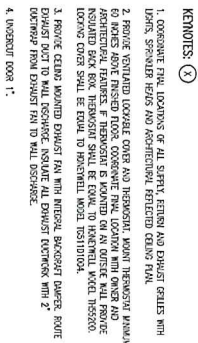
DRAWN BY: DMS DSP GMB
CHECKED BY: DLA/DJR
ENGINEER: GALE GUNUP
LICENSE #: 15478
ENGINEER: THOMAS MCKENNA
LICENSE #: 20222

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GH2 | ARCHITECTS
320 South Boston, Suite 1000, Tulsa, Oklahoma 74103
Tel 918.587.9150, Fax 918.587.2527, www.gh2.com
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B TWINNED
SCALE: NTS



- [illegible]

RUN OUT SCHEDULE	
CFI	DUCT SIZE
50 - 75	5"ø
75 - 115	6"ø
115 - 160	7"ø
161 - 220	8"ø
221 - 260	9"ø
291 - 430	10"ø
491 - 700	12"ø

A LOWER LEVEL HVAC PLAN-AREA 'C'
SCALE: 1/8" = 1'-0"
NORTH
0 2 4 8 16 FEET

Porter Early Childhood Center
Tulsa, Oklahoma

HVAC Plan - Area "C"

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ISSUED / REVISIONS
01/14/11 Construction Document

M103

DRAWN BY DMS,DSP,GMB
CHECKED BY DLV,DRR
ENGINEER GAYLE GWINUP
LICENSE # 15478
ENGINEER THOMAS MCKENNA
LICENSE # 20222

AEL
AEL ENGINEERING GROUP, LLC
MEMBER - FEDERAL TRADE COMMISSION
1461 SOUTH DOWNEY STREET SUITE 4, TALLAH, OK 74119
(319) 364-5254/FAX (319) 364-3105 info@aeleng.com
ON 8/17 12P 06/25/2012

320 South Boston, Suite 1600, Tulsa, Oklahoma 74103
Tel 918.587.6158, Fax 918.587.0357, www.gh2.com
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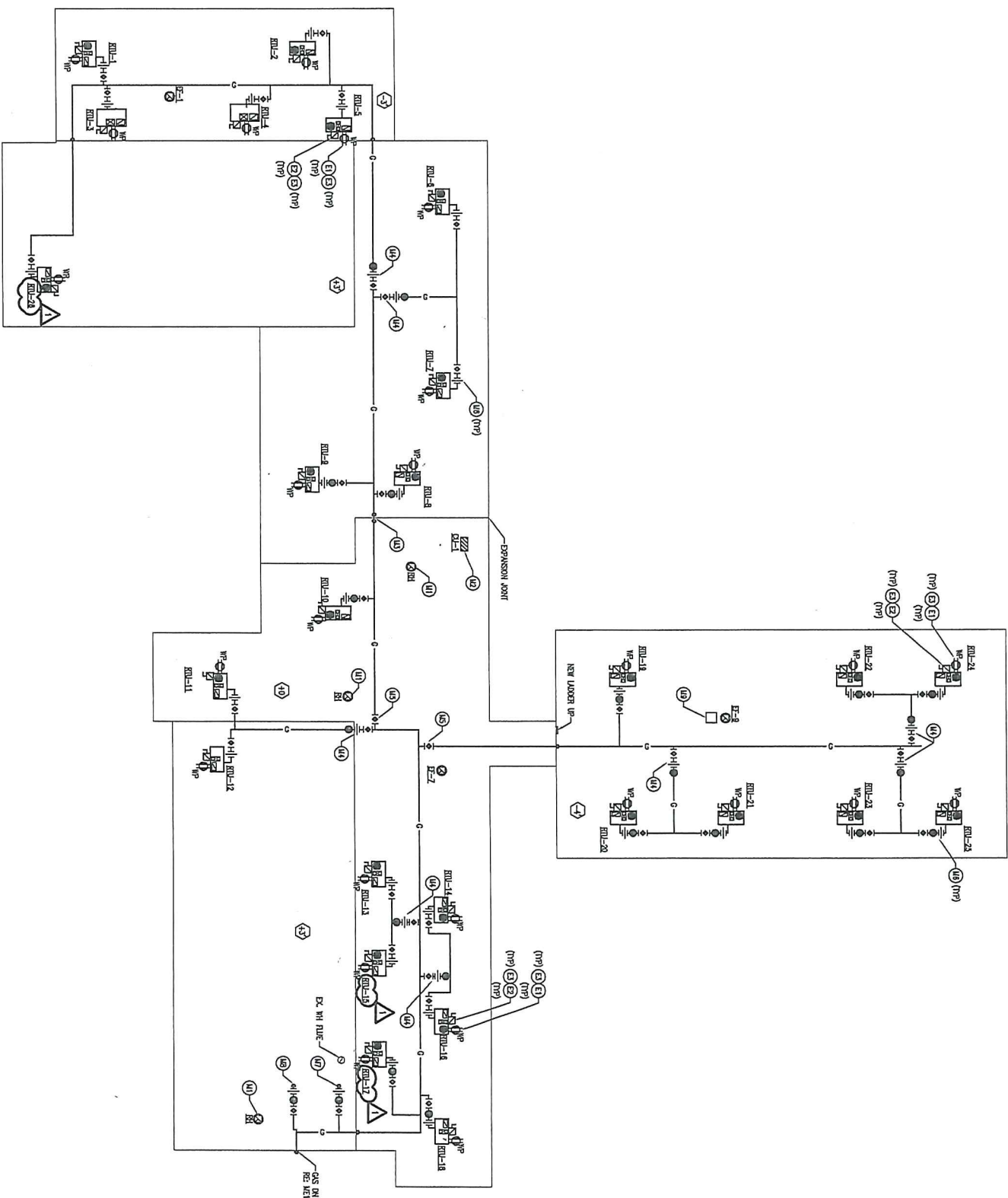
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1 BTW - ANNEX ROOF PLAN
Scale 1/16"=1'-0"

0 2 14 8 16 32

NORTH



- [illegible]

GENERAL NOTES

- [illegible]

Tulsa Legacy Charter School

You are currently running an experimental version of Earth.

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