EXHAUST FAN SCHEDULE

TAG	BASIS OF DESIGN		FLOW RATE (CFM)	E.S.P.	FAN SPEED (RPM)	DRIVE TYPE	SONES	ELECTRICAL DATA			NOTES
	MANUFACTURER	MODEL OR SERIES						HP	FLA	VOLT/PH.HZ	
EF-1	GREENHECK	CUE-120-VG	1,000	0.50	1,161	DIRECT	8.3	1/4	3.8	115/1/60	①②③④⑤

① FAN SHALL BE CONTROLLED TO RUN CONTINUOUSLY DURING OCCUPIED HOURS.

② PROVIDE FAN WITH ECM MOTOR / ECM CONTROL BOARD FOR BMS INTEGRATION

③ PROVIDE WITH GREENHECK PART FOR BMS INTEGRATION. VERIFY IN FIELD.

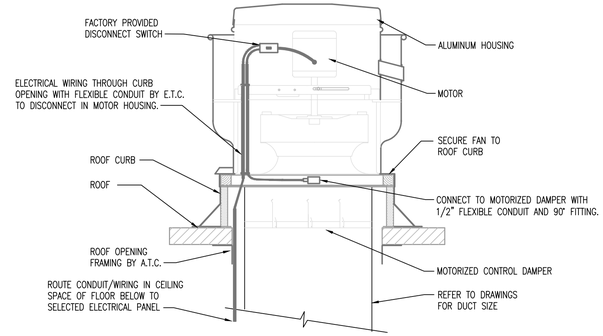
④ ECM SPEED CONTROL SHALL BE FROM A 0-10 VDC INPUT.

⑤ INCLUDE FACTORY PROVIDED DISCONNECT SWITCH.

⑥ PROVIDE WITH MOTORIZED CONTROL DAMPER BY TAMCO, SERIES 9000 OR APPROVED EQUAL. SEE DETAIL ON THIS SHEET.

DIFFUSERS, REGISTERS, GRILLES SCHEDULE

TAG	BASIS OF DESIGN		SERVICE	SIZE	TYPE	BORDER TYPE	CONSTRUCTION MATERIAL	NOTES
	MANUFACTURER	MODEL OR SERIES						
EG-1	PRICE	80	EXHAUST	24x24	GRILLE	LAY-IN	ALUMINUM	



1 / M1 CENTRIFUGAL EXHAUST FAN DETAIL

SCALE: NOT TO SCALE

#HVAC DEMOLITION PLAN NOTES:

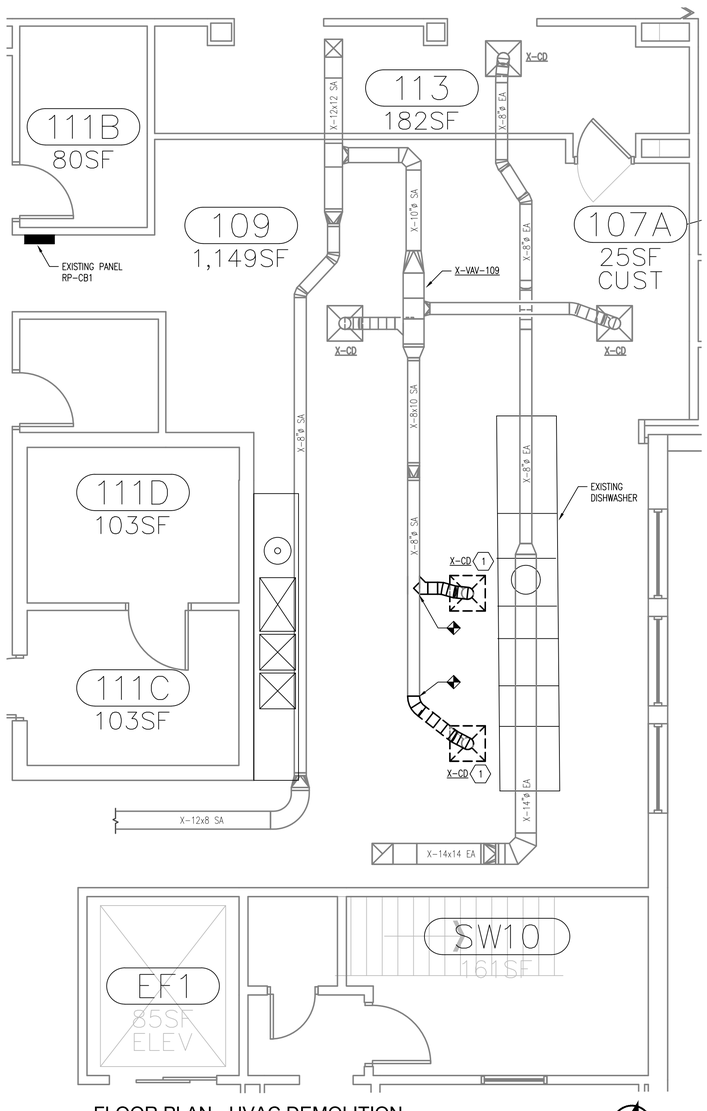
1. REMOVE EXISTING SUPPLY DIFFUSER AND SAVE FOR RELOCATION. PREP DUCTWORK FOR CONNECTION TO NEW. PATCH AND CAP ALL UNUSED OPENINGS. RECORD EXISTING AIRFLOWS FOR RE-BALANCING IN NEW WORK.

HVAC PLAN NOTES:

1. RELOCATE EXISTING SUPPLY DIFFUSER TO NEAREST CEILING TILE IN AREA SHOWN. RE-BALANCE TO EXISTING AIRFLOWS. PROVIDE BALANCE DAMPERS AS NEEDED.
2. INSTALL NEW EXHAUST GRILLE IN NEAREST AVAILABLE CEILING TILE TO DISHWASHER OPENINGS BELOW. BALANCE TO AIRFLOWS SHOWN.
3. INSTALL NEW EF-1 ON ROOF ABOVE KITCHEN SPACE. VERIFY EXACT LOCATION IN FIELD PRIOR TO WORK. MAINTAIN ALL CODE REQUIRED CLEARANCES, SUCH AS ROOF EDGE AND AIR INTAKES. ALL ROOFING WORK SHALL COMPLY WITH MSU STANDARDS AND EXISTING ROOF WARRANTY.
4. EXHAUST FAN CONTROLS INTENT INVOLVES INTERLOCKING WITH BMS TO RUN DURING NORMAL KITCHEN OPERATING HOURS. MOTORIZED DAMPER SHALL CLOSE WHEN FAN IS OFF. CONTRACTOR IS RESPONSIBLE FOR VERIFYING AND PROVIDING ALL CONTROLS EQUIPMENT TO PROVIDE A FULLY FUNCTIONING SYSTEM. THE PREFERRED CONTROLS PANEL IS "PANEL 1". VERIFY IF SPACE IS AVAILABLE. ADDITION OF CONTROL MODULE SHALL BE A PART OF THIS PROJECT IF REQUIRED.

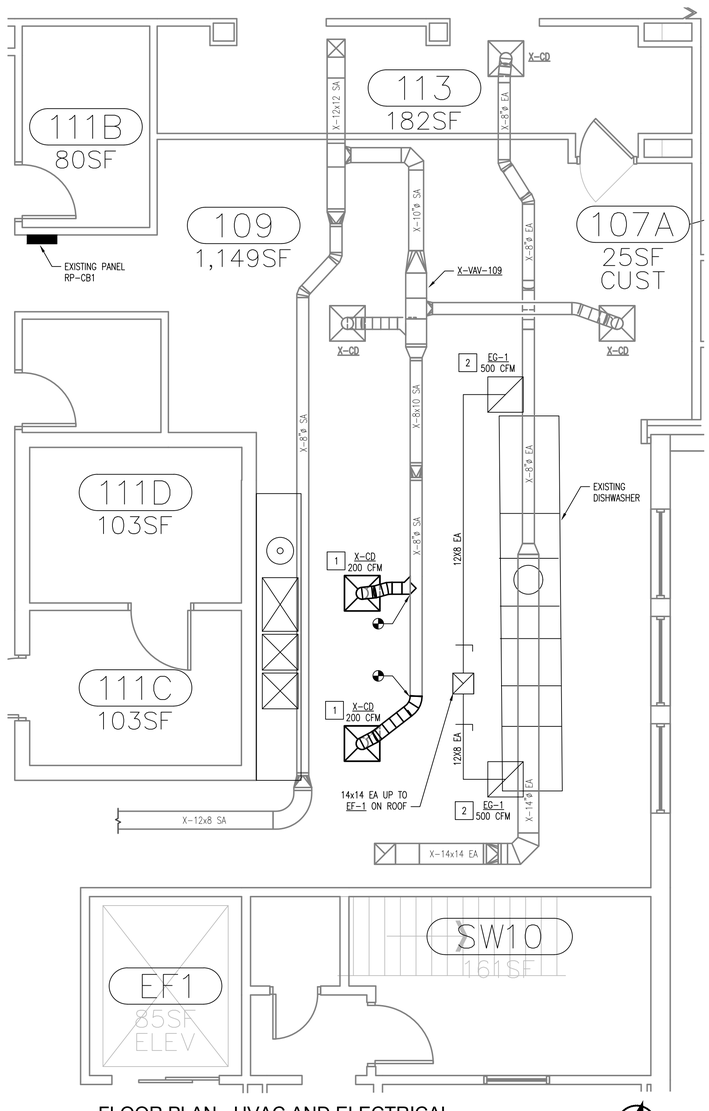
ELECTRICAL GENERAL NOTES:

1. TRANSITION FROM EMT TO LIQUIDTIGHT FLEXIBLE METALLIC CONDUIT ABOVE CEILING BEFORE ENTERING ROOF CURB. ROUTE LIQUIDTIGHT FLEXIBLE METALLIC CONDUIT UP THRU ROOF CURB TO INTEGRAL DISCONNECT SWITCH. PROVIDE SEPARATE CONDUIT FOR ANY REQUIRED CONTROL WIRING – FIELD VERIFY.
2. CONNECT EXHAUST FAN TO SPARE 20A, 1-POLE BREAKER IN EXISTING PANELBOARD RP-CB1 LOCATED IN THE KITCHEN AREA.
3. CONNECT MOTORIZED DAMPER TO SAME CIRCUIT AS EXHAUST FAN.



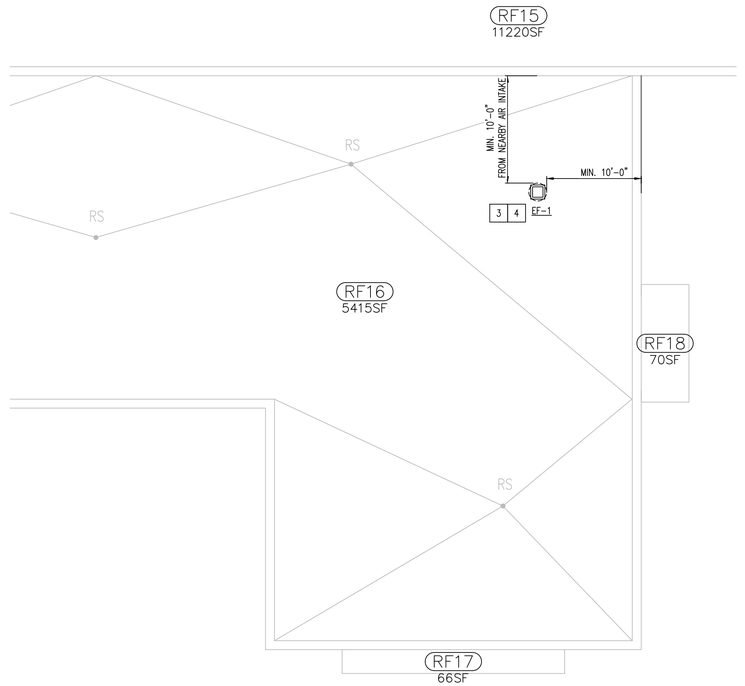
FLOOR PLAN - HVAC DEMOLITION

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



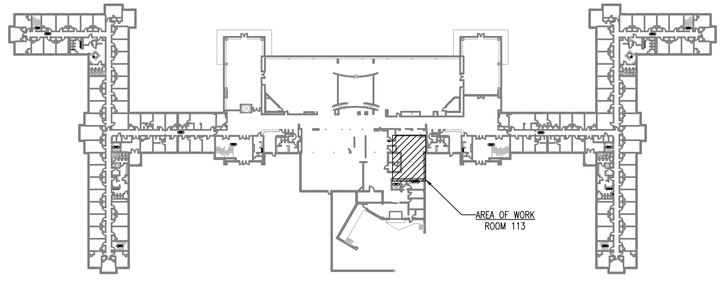
FLOOR PLAN - HVAC AND ELECTRICAL

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



ROOF PLAN - HVAC AND ELECTRICAL

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



BUILDING KEY PLAN

SCALE: NOT TO SCALE

MICHIGAN STATE UNIVERSITY
Infrastructure Planning and Facilities

SHAW HALL
HAVC UPGRADES IN DISHWASHER ROOM

MSU PROJ. NO.
CP25012

PR. MGR.	KAUK
ARCH.	KASDORF
MECH.	WINKLER
ELEC.	HALSEY
CIVIL	-
L.A.	-
INT. DES.	-
CONST. REP.	-
APPR.	DURKIN
DATE	4/2/2025
SCALE	AS NOTED
ISSUED	
RELEASED FOR BID	

MECH AND ELEC FLOOR PLAN

ME1

1 OF 1