

## CELLAR FLOOR MECHANICAL PLAN

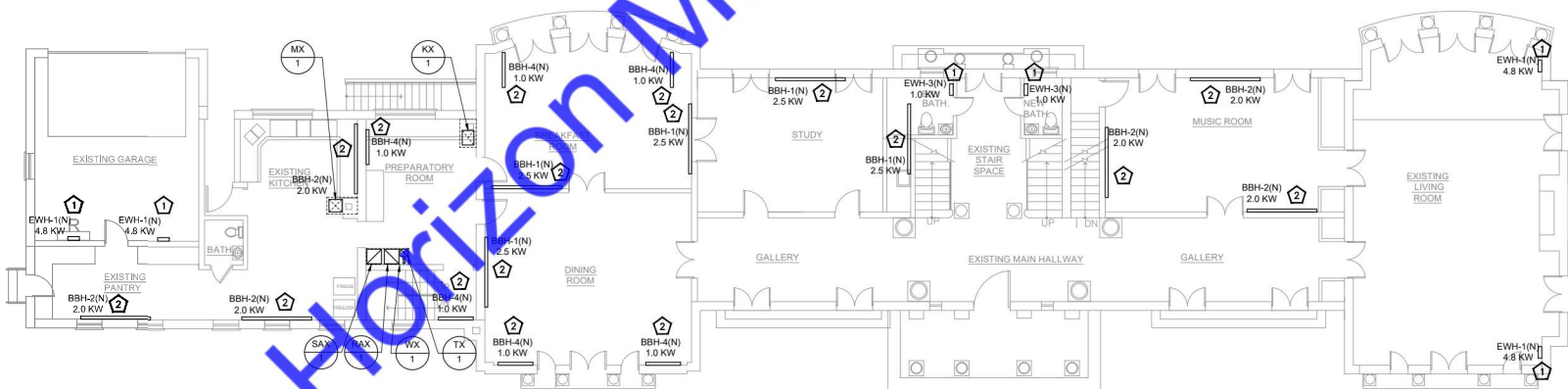
SCALE: 1/8"=1'-0"

### GENERAL NOTES:

- CONTRACTOR SHALL BALANCE EACH AIR DIFFUSER WITH THE CFM SHOWN PLAN.
- DUCTWORK SHOWN ON PLAN ARE SCHEMATIC ONLY. CONTRACTOR SHALL COORDINATE WITH OTHER TRADES FOR DUCTWORK ROUTING, OFFSET AND RUN PIPING, DUCTWORK INSIDE THE STRUCTURE IF REQUIRED, PROVIDE ANY EXTRA DUCTWORK, FITTINGS, INSULATIONS AND OTHER ACCESSORIES IN ORDER TO COMPLETE THE INSTALLATION.
- EQUIPMENT SIZES, DIMENSIONS AND REQUIRED CONNECTIONS SHALL BE VERIFIED WITH THE ACTUAL EQUIPMENT SELECTED VENDOR DRAWINGS BEFORE FABRICATION OF DUCTWORK, PIPING ETC.
- DUCT SIZES SHOWN ON PLANS ARE CLEAR INSIDE AIR STREAM DIMENSIONS.
- CONTRACTOR SHALL COORDINATE ALL ELECTRICAL REQUIREMENTS FOR ALL HVAC BASED ON ACTUAL EQUIPMENT SELECTED PRIOR TO INSTALLATION.
- CONTRACTOR SHALL COORDINATE EQUIPMENT WEIGHTS AND SUPPORTS BASED ON ACTUAL EQUIPMENT SELECTED.
- ALL EXPOSED DUCTWORK SHALL BE AS SHOWN DOUBLE WALL, INSULATED METAL, PRIMED FOR PAINTING. ALL CONCEALED DUCTWORK SHALL BE INSULATED METAL RECTANGULAR AND CIRCULAR DUCT SHALL BE INSULATED INTERNALLY UNLESS OTHERWISE ALLOWED IN WRITING BY THE ENGINEER OF RECORD. COORDINATE FINAL FINISH WITH ARCHITECT.
- COORDINATE WITH ALL TRADES FOR MATERIALS IN RATED AND PLENUM SPACES.
- ALL EXHAUST FANS SCHEDULED TO BE AUTOMATICALLY CONTROLLED BY MECHANICAL AIR HANDLERS SHALL BE CONNECTED BY MEANS OF AN AUXILIARY RELAY, PROVIDE AUXILIARY RELAY AS NEEDED.
- ALL SOURCE OF MECHANICAL INTAKE SHALL MAINTAIN 10 LINEAR FEET SEPARATION BETWEEN ANY SOURCE OF EXHAUST. CONTRACTOR IS RESPONSIBLE TO ADJUST DUCT LENGTH AS NEEDED.
- MD TO INTERLOCK WITH RESPECTIVE INDOOR UNITS.
- COORDINATE FINAL LOCATION OF EQUIPMENT WITH STRUCTURAL DRAWINGS.
- CONTRACTOR SHALL DEMOLISH ALL EXISTING HVAC SYSTEMS INCLUDING FURNACE, DUCTWORK AND ALL ASSOCIATED ACCESSORIES.
- BEFORE STARTING DEMOLITION, PROVIDE NECESSARY PROTECTIVE DEVICES WHERE REQUIRED AND IN STRICT ACCORDANCE WITH OSHA AND ICRA REGULATIONS.
- TAKE NECESSARY PRECAUTIONS TO PREVENT DUST AND DIRT MIGRATING TO OCCUPIED AREAS OF THE BUILDING. THIS INCLUDES BLANKING OFF ANY RETURN AIR GRILLES/ DUCTS IN THE WORK AREA. PROVIDE TEMPORARY EXHAUST FANS, DUCTED DIRECTLY TO OUTDOORS, TO MAINTAIN NEGATIVE PRESSURE WITHIN THE WORK AREA.
- KEEP ALL ADJOINING AREAS ADJACENT TO THE WORK AREAS CLEAN AND FREE OF DEBRIS.
- ALL DEMOLISHED MATERIALS SHALL BE REMOVED AND DISPOSED OF OFF SITE.
- REPAIR/ REPLACE EXISTING EQUIPMENT/ MATERIALS NOT SCHEDULED OR NOTED TO BE DEMOLISHED BUT BECOME DAMAGED DURING THE PROGRESS OF THE WORK. MAKE ANY AND ALL SUCH REPAIRS, REPLACEMENTS, MODIFICATIONS TO RESTORE THE DAMAGED ITEMS TO THEIR ORIGINAL CONDITIONS AT THE TIME OF DAMAGE, TO THE SATISFACTION OF AND AT THE ADDITIONAL COST TO THE OWNER.
- PROVIDE WEATHER PROOF COATING FOR ALL EXTERIOR PIPING INSULATION.
- MECHANICAL CONTRACTOR TO COORDINATE ALL DUCT WORK, CROSSINGS, OVERLAPPING AND PENETRATIONS WITH SITE CONDITIONS AND AS PER EXISTING FLOOR LAYOUT AND SKYLIGHT IN FIELD. MODIFY DUCT WORK WHEREVER REQUIRED.
- PROVIDE FIRE OR FIRE-SMOKE DAMPER WHEREVER DUCTS ARE CROSSING FIRE/SMOKE RATED WALLS/BARRIERS/SLABS. COORDINATE WITH ARCHITECTURAL DRAWING FOR FIRE RATING OF THE WALLS.

### SECOND FLOOR MECHANICAL PLAN KEY NOTES:

- 20"x20" SUPPLY AND RETURN DUCTWORK SERVING AHU-1 (N) AND AHU-2 (N), BOTH LOCATED AT THE ATTIC LEVEL. ALL DUCTWORK SHALL BE ROUTED AS HIGH AS POSSIBLE.
- SUPPLY/RETURN DUCTWORK ROUTED TO AND CONNECTED TO THE FLOOR GRILLES SERVING THE FIRST FLOOR.
- WALL HEATER. INSTALL AS PER MANUFACTURERS INSTRUCTIONS. ALL UNITS SHALL BE PROVIDED WITH THERMOSTATS.

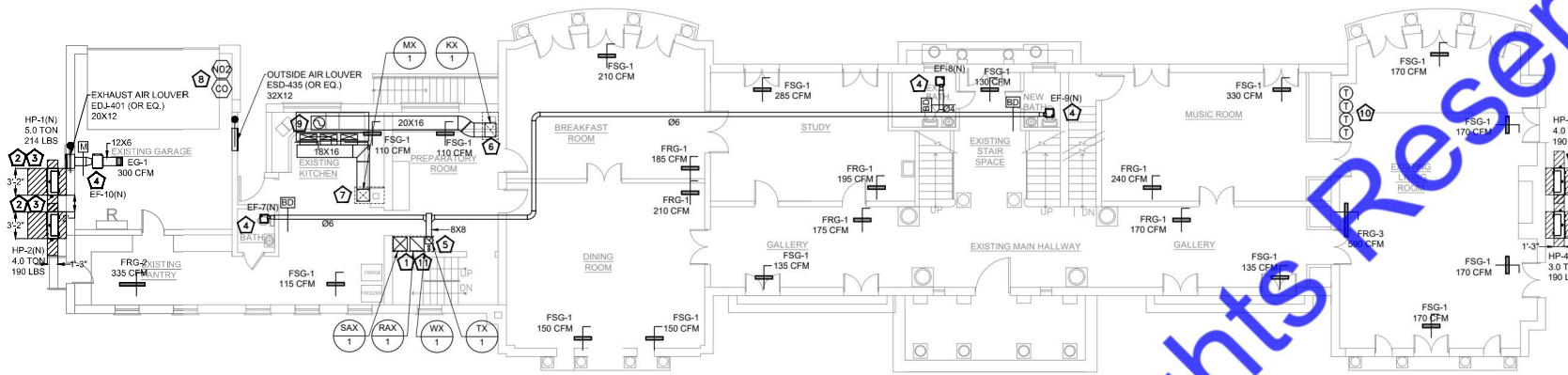


## FIRST FLOOR MECHANICAL PLAN - 1

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

### FIRST FLOOR MECHANICAL PLAN KEY NOTES:

- WALL HEATER. INSTALL AS PER MANUFACTURERS INSTRUCTIONS. ALL UNITS SHALL BE PROVIDED WITH THERMOSTATS.
- BASEBOARD HEATER. INSTALL AS PER MANUFACTURERS INSTRUCTIONS. ALL UNITS SHALL BE PROVIDED WITH THERMOSTATS.



## FIRST FLOOR MECHANICAL PLAN - 2

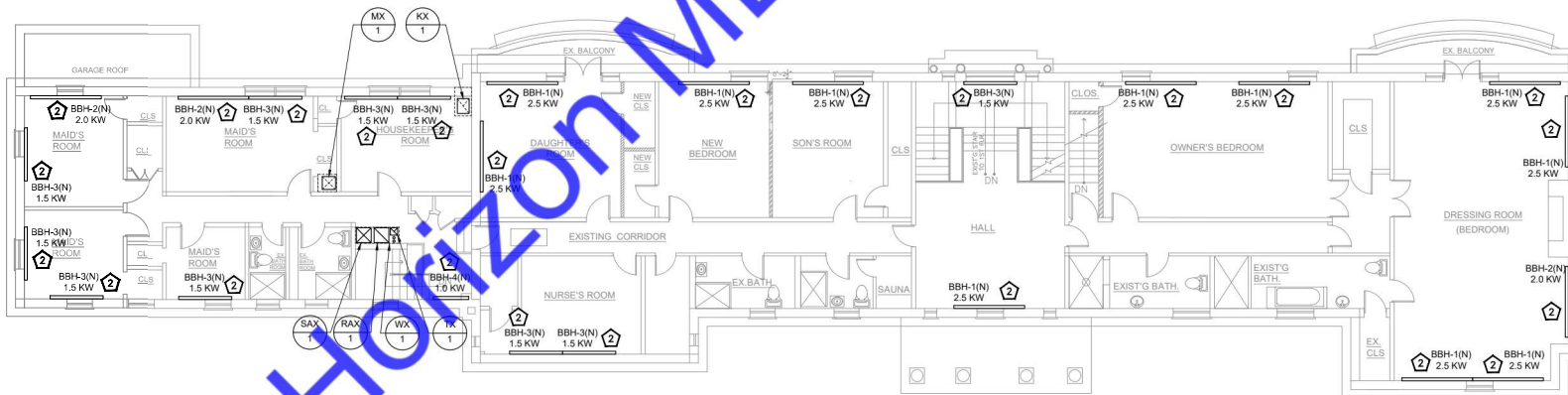
SCALE: 1/8"=1'-0"

### GENERAL NOTES:

- CONTRACTOR SHALL BALANCE EACH AIR DIFFUSER WITH THE CFM SHOWN PLAN.
- DUCTWORK SHOWN ON PLAN ARE SCHEMATIC ONLY. CONTRACTOR SHALL COORDINATE WITH OTHER TRADES FOR DUCTWORK ROUTING, OFFSET AND RUN PIPING, DUCTWORK INSIDE THE STRUCTURE IF REQUIRED. PROVIDE ANY EXTRA DUCTWORK, FITTINGS, INSULATIONS AND OTHER ACCESSORIES IN ORDER TO COMPLETE THE INSTALLATION.
- EQUIPMENT SIZES, DIMENSIONS AND REQUIRED CONNECTIONS SHALL BE VERIFIED WITH THE ACTUAL EQUIPMENT SELECTED VENDOR DRAWINGS BEFORE FABRICATION OF DUCTWORK, PIPING ETC.
- DUCT SIZES SHOWN ON PLANS ARE CLEAR INSIDE AIR STREAM DIMENSIONS.
- CONTRACTOR SHALL COORDINATE ALL ELECTRICAL REQUIREMENTS FOR ALL HVAC BASED ON ACTUAL EQUIPMENT SELECTED PRIOR TO INSTALLATION.
- CONTRACTOR SHALL COORDINATE EQUIPMENT WEIGHTS AND SUPPORTS BASED ON ACTUAL EQUIPMENT SELECTED.
- ALL EXPOSED DUCTWORK SHALL BE AS SHOWN DOUBLE WALL, INSULATED METAL, PRIMED FOR PAINTING. ALL CONCEALED DUCTWORK SHALL BE INSULATED METAL RECTANGULAR AND CIRCULAR DUCT SHALL BE INSULATED INTERNALLY UNLESS OTHERWISE ALLOWED IN WRITING BY THE ENGINEER OF RECORD. COORDINATE FINAL FINISH WITH ARCHITECT.
- COORDINATE WITH ALL TRADES FOR MATERIALS IN RATED AND PLENUM SPACES.
- ALL EXHAUST FANS SCHEDULED TO BE AUTOMATICALLY CONTROLLED BY MECHANICAL AIR HANDLERS SHALL BE CONNECTED BY MEANS OF AN AUXILIARY RELAY. PROVIDE AUXILIARY RELAY AS NEEDED.
- ALL SOURCE OF MECHANICAL INTAKE SHALL MAINTAIN 10 LINEAR FEET SEPARATION BETWEEN ANY SOURCE OF EXHAUST. CONTRACTOR IS RESPONSIBLE TO ADJUST DUCT LENGTH AS NEEDED.
- MD TO INTERLOCK WITH RESPECTIVE INDOOR UNITS.
- COORDINATE FINAL LOCATION OF EQUIPMENT WITH STRUCTURAL DRAWINGS.
- CONTRACTOR SHALL DEMOLISH ALL EXISTING HVAC SYSTEMS INCLUDING FURNACE, DUCTWORK AND ALL ASSOCIATED ACCESSORIES.
- BEFORE STARTING DEMOLITION, PROVIDE NECESSARY PROTECTIVE DEVICES WHERE REQUIRED AND IN STRICT ACCORDANCE WITH OSHA AND ICRA REGULATIONS.
- TAKE NECESSARY PRECAUTIONS TO PREVENT DUST AND DIRT MIGRATING TO OCCUPIED AREAS OF THE BUILDING. THIS INCLUDES BLANKING OFF ANY RETURN AIR GRILLES/ DUCTS IN THE WORK AREA. PROVIDE TEMPORARY EXHAUST FANS, DUCTED DIRECTLY TO OUTDOORS, TO MAINTAIN NEGATIVE PRESSURE WITHIN THE WORK AREA.
- KEEP ALL ADJOINING AREAS ADJACENT TO THE WORK AREAS CLEAN AND FREE OF DEBRIS.
- ALL DEMOLISHED MATERIALS SHALL BE REMOVED AND DISPOSED OF OFF-SITE.
- REPAIR/ REPLACE EXISTING EQUIPMENT/ MATERIALS NOT SCHEDULED OR NOTED TO BE DEMOLISHED BUT BECOME DAMAGED DURING THE PROGRESS OF THE WORK. MAKE ANY AND ALL SUCH REPAIRS, REPLACEMENTS, MODIFICATIONS TO RESTORE THE DAMAGED ITEMS TO THEIR ORIGINAL CONDITIONS AT THE TIME OF DAMAGE, TO THE SATISFACTION OF AND AT THE ADDITIONAL COST TO THE OWNER.
- PROVIDE WEATHER PROOF COATING FOR ALL EXTERIOR PIPING INSULATION.
- MECHANICAL CONTRACTOR TO COORDINATE ALL DUCT WORK, CROSSINGS, OVERLAPPING AND PENETRATIONS WITH SITE CONDITIONS AND AS PER EXISTING JUST LAYOUT AND SKYLIGHT IN FIELD. MODIFY DUCT WORK WHEREVER REQUIRED.
- PROVIDE FIRE OR FIRE-SMOKE DAMPER WHEREVER DUCTS ARE CROSSING FIRE/SMOKE RATED WALLS/BARRIERS/SLABS. COORDINATE WITH ARCHITECTURAL DRAWING FOR FIRE RATING OF THE WALLS.

### FIRST FLOOR MECHANICAL PLAN KEY NOTES:

- 20"x20" SUPPLY AND RETURN DUCTWORK SERVING AHU-1 (N) AND AHU-2 (N), BOTH LOCATED AT THE ATTIC LEVEL. ALL DUCTWORK SHALL BE ROUTED AS HIGH AS POSSIBLE.
- CONTRACTOR TO CONFIRM THE FINAL LOCATION OF THE UNIT WITH ARCHITECT/ OWNER.
- INSTALL REFRIGERANT PIPING BETWEEN INDOOR AND OUTDOOR UNITS AS PER THE MANUFACTURER'S RECOMMENDATIONS. PROVIDE INSULATION TO REFRIGERANT PIPING AS PER 2022 NYECC. COORDINATE REFRIGERANT PIPE ROUTING WITH ARCHITECT/OWNER.
- CEILING/ INLINE EXHAUST FAN, FAN SHALL BE SUSPENDED FROM STRUCTURE ABOVE. VERIFY EXACT LOCATION OF STRUCTURAL MEMBERS PRIOR TO INSTALLATION. INTERCONNECT WITH MECHANICAL SCHEDULE FOR MORE DETAILS.
- 10"x10" EXHAUST DUCTWORK UP TO THE ROOF. ALL DUCTWORK SHALL BE ROUTED AS HIGH AS POSSIBLE.
- 20"x16" KITCHEN EXHAUST GREASE DUCTWORK UP TO THE ROOF. ALL DUCTWORK SHALL BE ROUTED AS HIGH AS POSSIBLE.
- 18"x16" MAKEUP AIR DUCTWORK UP TO THE ROOF. ALL DUCTWORK SHALL BE ROUTED AS HIGH AS POSSIBLE.
- INTERCONNECT EF-10(N), COINQ, SENSOR WITH CONTROLLER IN SPACE.
- INSTALL TYPE 1 GREASE EXHAUST HOOD WITH FIRE SUPPRESSION SYSTEM. CONTACT HOOD MANUFACTURERS FOR THE EXHAUST SPECIFICATIONS OF THE HOOD SYSTEM. SUPPORT HOOD PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. PROVIDE TRAPEZE HANGERS FOR ALL THREAD SUPPORT UNDER DUCTWORK AS REQUIRED. TRANSITION FROM HOOD CONNECTION TO WELDED KITCHEN EXHAUST DUCT SIZES SHOWN.
- LOCATION OF DIGITAL THERMOSTAT CONTROL FOR AHU-1(N) INSTALL AND WIRE NEW 7-DAY PROGRAMMABLE THERMOSTAT. COORDINATE EXACT LOCATION AS PER SITE CONDITIONS PRIOR TO ROUGH-IN. PROVIDE LOCKABLE COVER. LOCATION CAN BE MOVED AT CONTRACTOR DISCRETION.
- 03" COMBUSTION AIR INTAKE AND FLUE VENT FOR THE WATER HEATER. TERMINATE WITH CONCENTRIC VENT PIPE. CONTRACTOR TO INSTALL AS PER MANUFACTURERS INSTRUCTIONS.



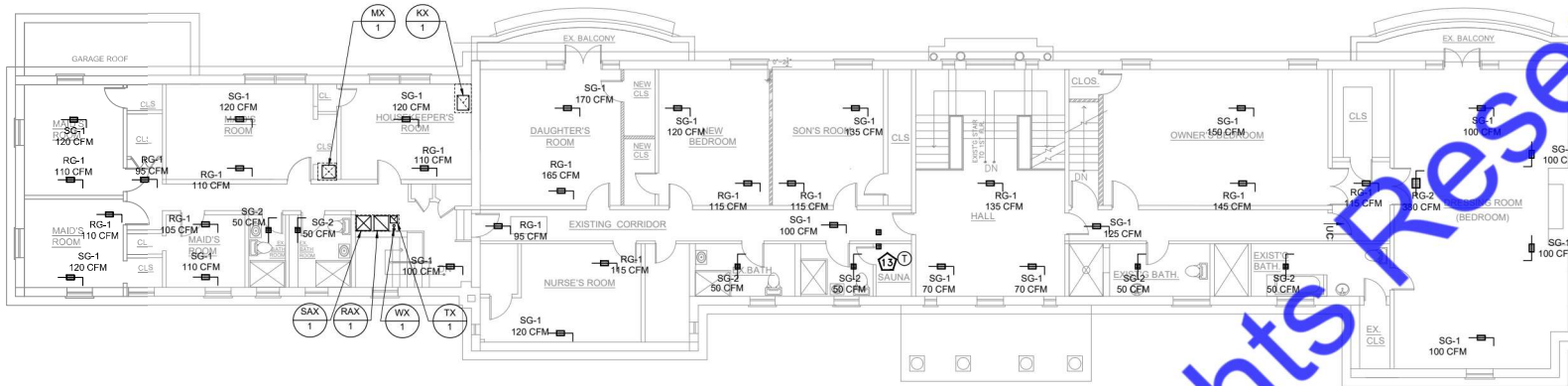
## SECOND FLOOR MECHANICAL PLAN - 1

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

### SECOND FLOOR MECHANICAL PLAN KEY NOTES:

- 20"x20" SUPPLY AND RETURN DUCTWORK SERVING AHU-1 (N) AND AHU-2 (N), BOTH LOCATED AT THE ATTIC LEVEL. ALL DUCTWORK SHALL BE ROUTED AS HIGH AS POSSIBLE.
- SUPPLY/RETURN DUCTWORK ROUTED TO AND CONNECTED TO THE FLOOR GRILLES SERVING THE FIRST FLOOR.
- WALL HEATER. INSTALL AS PER MANUFACTURERS INSTRUCTIONS. ALL UNITS SHALL BE PROVIDED WITH THERMOSTATS.



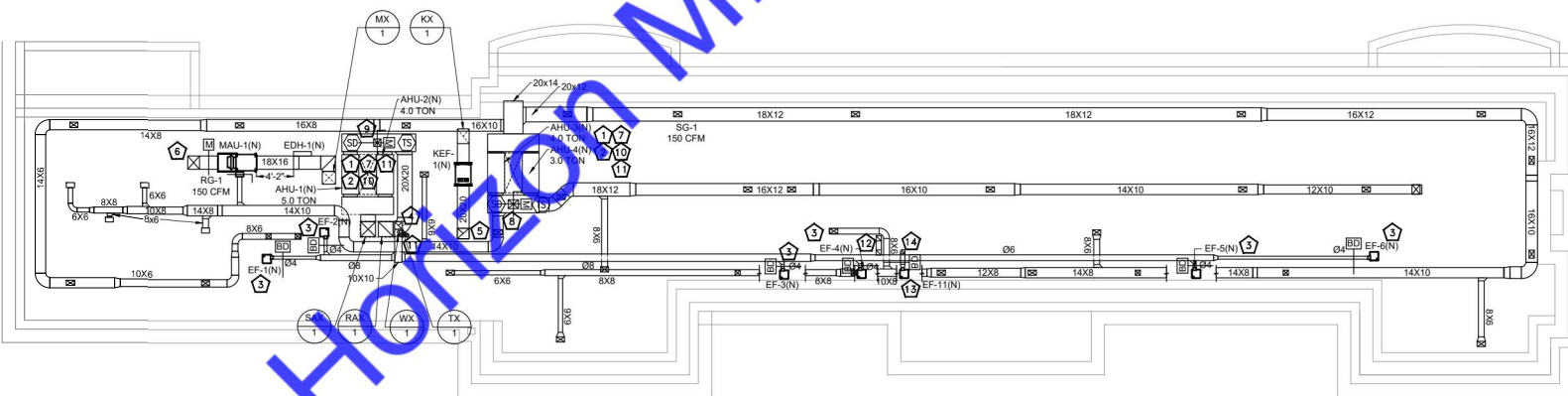


## SECOND FLOOR MECHANICAL PLAN - 2

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### GENERAL NOTES:

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- COORDINATE WITH ALL TRADES FOR MATERIALS IN RATED AND PLENUM SPACES.
- ALL EXHAUST FANS SCHEDULED TO BE AUTOMATICALLY CONTROLLED BY MECHANICAL AIR HANDLERS SHALL BE CONNECTED BY MEANS OF AN AUXILIARY RELAY. PROVIDE AUXILIARY RELAY AS NEEDED.
- ALL SOURCE OF MECHANICAL INTAKE SHALL MAINTAIN 10 LINEAR FEET SEPARATION BETWEEN ANY SOURCE OF EXHAUST. CONTRACTOR IS RESPONSIBLE TO ADJUST DUCT LENGTH AS NEEDED.
- MD TO INTERLOCK WITH RESPECTIVE INDOOR UNITS.
- COORDINATE FINAL LOCATION OF EQUIPMENT WITH STRUCTURAL DRAWINGS.
- CONTRACTOR SHALL DEMOLISH ALL EXISTING HVAC SYSTEMS INCLUDING FURNACE, DUCTWORK AND ALL ASSOCIATED ACCESSORIES.
- BEFORE STARTING DEMOLITION, PROVIDE NECESSARY PROTECTIVE DEVICES WHERE REQUIRED AND IN STRICT ACCORDANCE WITH OSHA AND ICRA REGULATIONS.
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- KEEP ALL ADJOINING AREAS ADJACENT TO THE WORK AREAS CLEAN AND FREE OF DEBRIS.
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- PROVIDE WEATHER PROOF COATING FOR ALL EXTERIOR PIPING INSULATION.
- MECHANICAL CONTRACTOR TO COORDINATE ALL DUCT WORK, CROSSINGS, OVERLAPPING AND PENETRATIONS WITH SITE CONDITIONS AND AS PER EXISTING JUST LAYOUT AND SKYLIGHT IN FIELD. MODIFY DUCT WORK WHEREVER REQUIRED.
- PROVIDE FIRE OR FIRE-SMOKE DAMPER WHEREVER DUCTS ARE CROSSING FIRE-SMOKE RATED WALLS/BARRIERS/SLABS. COORDINATE WITH ARCHITECTURAL DRAWING FOR FIRE RATING OF THE WALLS.



## ATTIC MECHANICAL PLAN

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

### ATTIC MECHANICAL PLAN KEY NOTES:

- CONTRACTOR TO CONFIRM THE FINAL LOCATION OF THE UNIT WITH ARCHITECT/ OWNER.
- INSTALL REFRIGERANT PIPING BETWEEN INDOOR AND OUTDOOR UNITS AS PER THE MANUFACTURER'S RECOMMENDATIONS. PROVIDE INSULATION TO REFRIGERANT PIPING AS PER 2022 NYECC. COORDINATE REFRIGERANT PIPE ROUTING WITH ARCHITECT/ OWNER.
- CEILING/ INLINE EXHAUST FAN. FAN SHALL BE SUSPENDED FROM STRUCTURE ABOVE. VERIFY EXACT LOCATION OF STRUCTURAL MEMBERS PRIOR TO INSTALLATION. INTERCONNECT WITH MECHANICAL SCHEDULE FOR MORE DETAILS.
- 10"x10" EXHAUST DUCTWORK UP TO THE ROOF. ALL DUCTWORK SHALL BE ROUTED AS HIGH AS POSSIBLE.
- 20"x16" KITCHEN EXHAUST GREASE DUCTWORK UP TO THE ROOF. ALL DUCTWORK SHALL BE ROUTED AS HIGH AS POSSIBLE.
- 18"x16" MAKEUP AIR DUCTWORK UP TO THE ROOF. ALL DUCTWORK SHALL BE ROUTED AS HIGH AS POSSIBLE.
- PROVIDE SECONDARY DRIP PAN UNDER AC UNIT WITH WATER LEAKAGE SENSOR AND ALARM TO SHUT THE UNIT. ROUTE CONDENSATE DRAIN LINE FROM AC TO THE NEAREST APPROVED PLACE OF DISPOSAL. PROVIDE HORIZONTAL SLOPE IN THE DIRECTION OF DISCHARGE OF NOT LESS THAN 1/8" IN 12 UNITS VERTICAL IN 12 UNITS HORIZONTAL. PROVIDE DRAIN PUMP IF REQUIRED.
- 10"x10" OUTSIDE AIR DUCTWORK UP TO THE ROOF. ALL DUCTWORK SHALL BE ROUTED AS HIGH AS POSSIBLE.
- 12"x10" OUTSIDE AIR DUCTWORK UP TO THE ROOF. ALL DUCTWORK SHALL BE ROUTED AS HIGH AS POSSIBLE.
- EXTEND THE DUCTWORK AS SHOWN. ACOUSTICALLY LINE THE FIRST 10'-0" OF BOTH SUPPLY AND RETURN MAIN DUCTS.
- PROVIDE REMOTE TEMPERATURE SENSOR MOUNTED IN RETURN DUCT AND WIRE BACK TO THERMOSTAT OF RESPECTIVE UNIT. INSTALL PER MANUFACTURER'S INSTRUCTIONS.
- TRANSFER DUCTS FOR SAUNA ROOM TO BE ACOUSTICALLY LINED.
- SAUNA ROOM EXHAUST FAN OPERATION TO BE INTERLOCKED WITH THERMOSTAT AS SHOWN ON THE PLAN. COORDINATE EXACT LOCATION OF THE THERMOSTAT AND OPERATION TEMPERATURE WITH THE OWNER AND MANUFACTURERS.
- 06" EXHAUST DUCT UP TO THE ROOF.

HEAT PUMP UNIT SCHEDULE (OUTDOOR)															MAKE: LG (OR EQUIVALENT)	
TAG	LOCATION	STATUS	INDOOR UNIT SERVED	TON	TOTAL COOLING CAP. (MBH) @95°F	SENSIBLE COOLING CAP. (MBH) @95°F	HEATING CAP. (MBH) @17°F	DIMENSIONS (HxWxD) (IN.)	WEIGHT (LBS)	PIPE DIA. LIQ. GAS	ELECTRICAL DATA			SEER	HSPF2	MODEL NO.
HP-1(N)	SEE PLAN	NEW	AHU-1(N)	5.0	52.2	41.0	34.5	55X38X13	214	3/8" 3/4"	208/1/60	32.0	40.0	17.5	9.4	KUSXB601A (OR EQUIVALENT)
HP-2(N)	SEE PLAN	NEW	AHU-2(N)	4.0	45.5	35.0	31.0	55X38X13	190	3/8" 5/8"	208/1/60	32.0	40.0	18.0	9.4	KUSXB481A (OR EQUIVALENT)
HP-3(N)	SEE PLAN	NEW	AHU-3(N)	4.0	45.5	35.0	31.0	55X38X13	190	3/8" 5/8"	208/1/60	32.0	40.0	18.0	9.4	KUSXB481A (OR EQUIVALENT)
HP-3(N)	SEE PLAN	NEW	AHU-4(N)	3.0	30.0	26.5	26.6	39X35X35	190	3/8" 5/8"	208/1/60	32.0	35.0	17.5	9.5	KUSXB361A (OR EQUIVALENT)
NOTES :-																
1. UNIT SHALL HAVE TEN YEAR EXTENDED WARRANTY FOR COMPRESSORS/PARTS.																
2. PROVIDE COMPRESSOR CYCLE PROTECTOR.																
3. CONTRACTOR SHALL PROVIDE A LONG LINE SET FOR REFRIGERANT PIPING IN THE EVENT THAT TOTAL REFRIGERANT LENGTH EXCEED THE MANUFACTURER'S STANDARD RECOMMENDED LENGTH.																
4. OUTDOOR HEATPUMPUNITS TO BE LOCATED WITH PROPER CLEARANCES AND MUST PREVENT RE-CIRCULATION OF AIR. COORDINATE WITH MANUFACTURER AND ARCHITECT.																
5. HEAT PUMP UNIT SHALL NOT PRODUCE NOISE LEVELS IN EXCESS OF 42 DECIBELS FOR A SINGLE AIR CIRCULATING DEVICE AND 45 DECIBELS FOR THE CUMULATIVE NOISE LEVEL OF MULTIPLE AIR CIRCULATING DEVICES AS MEASURED 3 FEET FROM THE NOISE SOURCE AT AN OPEN DOOR OR WINDOW OF A NEARBY RESIDENCE.																

AIR HANDLING UNIT SCHEDULE (INDOOR UNITS)													MAKE: LG (OR EQUIVALENT)		
UNIT TAG	LOCATION	AREA SERVED	TYPE	CAPACITY (TON)	SUPPLY CFM	OUTSIDE AIR CFM	ESP (IN. WG)	DIMENTIONS (WXDXH) (IN.)	ELECTRICAL DATA			PIPE CONNECTION SIZE		MODEL NO.	
									PH/VOLT/HZ	MCA	MOP	LIG.	SUCTION		DRAIN
AHU-1(N)	SEE PLAN	SEE PLAN	HEAT PUMP	5.0	1750	375	0.5	22X55X25	POWERED FROM HP-1(N)			3/8"	3/4"	3/4"	KNSLB601A (OR EQUIVALENT)
AHU-2(N)	SEE PLAN	SEE PLAN	HEAT PUMP	4.0	1400	375	0.5	22X55X25	POWERED FROM HP-2(N)			3/8"	5/8"	3/4"	KNSLB481A (OR EQUIVALENT)
AHU-3(N)	SEE PLAN	SEE PLAN	HEAT PUMP	4.0	1400	215	0.5	22X55X25	POWERED FROM HP-3(N)			3/8"	5/8"	3/4"	KNSLB481A (OR EQUIVALENT)
AHU-4(N)	SEE PLAN	SEE PLAN	HEAT PUMP	3.0	1050	215	0.5	22X55X25	POWERED FROM HP-4(N)			3/8"	5/8"	3/4"	KNSLB361A (OR EQUIVALENT)
NOTES:-															
1) PROVIDE UNIT MOUNTED DISCONNECT SWITCH.															
2) PROVIDE SINGLE POINT CONNECTION.															
3) AHU SHALL BE PROVIDED WITH AN DRAIN PAN WITH A WATER LEVEL SENSOR IN ORDER SHUT OFF THE AC IN CASE OF BLOCKAGE OF THE CONDENSATE PIPE.															
4) PROVIDE FACTORY FITTED CONDENSATE PUMP IF REQUIRED. ROUTE CONDENSATE DRAIN FROM AHU TO APPROVED PLACE OF CONDENSATE TERMINATION. COORDINATE WITH PLUMBING CONTRACTOR.															
5) ALL REFRIGERANT PIPING TO BE SIZED PER MANUFACTURERS RECOMMENDATIONS.															
6) PROVIDE FILTER ON ALL RETURNS TO UNIT.															
7) INDOOR UNIT ACCESS PANEL FIELD-PROVIDED.															
8) CONTRACTOR SHALL PROVIDE A LONG LINE SET FOR REFRIGERANT PIPING IN THE EVENT THAT TOTAL REFRIGERANT LENGTH EXCEEDS THE MANUFACTURER'S STANDARD RECOMMENDED LENGTH.															
9) REFRIGERANT R-32 SHALL BE PROVIDED.															

ELECTRIC WALL HEATER SCHEDULE									MAKE: BERKO (OR EQUIVALENT)
UNIT TAG	SERVING	TYPE	KW	BTU/HR	ELECTRIC DATA (V/PH/HZ)	AMPS (A)	QTY (NOS)	DIMENSIONS (WxHxD)	MODEL NO.
EWH-1(N)	SEE PLAN	FAN-FORCED WALL HEATER	4.8	16378	240/1/60	20	4	15"X20"X4"	VFK484F
EWH-2(N)	SEE PLAN	FAN-FORCED WALL HEATER	2.4	8189	240/1/60	10	2	15"X20"X4"	GFR2404T2F
EWH-3(N)	SEE PLAN	FAN-FORCED WALL HEATER	1.0	3412	120/1/60	8.3	2	15"X20"X4"	SED1012C
NOTES:-									
1. PROVIDE DISCONNECTION SWITCH.									
2. "HEATER ON" PILOT LIGHT.									
3. THREE-POSITION SELECTOR SWITCH ( HEATER-STANDBY-FAN).									
4. BUILT-IN THERMOSTAT FOR WALL HEATER.									
5. UNIT HEATER SHALL BE INSTALLED IN ACCORDANCE WITH THE LISTING AND MANUFACTURER'S INSTALLATION INSTRUCTIONS.									
6. PROVIDE RECESS/SURFACE MOUNTING FRAME. CONFIRM THE FINAL REQUIREMENT WITH THE ARCHITECT/OWNER.									

BASEBOARD HEATER SCHEDULE								MAKE: BERKO (OR EQUIVALENT)
UNIT TAG	SERVING	KW	BTU/HR	ELECTRIC DATA (V/PH/HZ)	AMPS (A)	QTY (NOS)	LENGTH (IN)	MODEL NO.
BBH-1(N)	SEE PLAN	2.5	8530	240/1/60	10.5	16	96	25408NW
BBH-2(N)	SEE PLAN	2.0	6824	240/1/60	8.4	9	96	2548NW
BBH-3(N)	SEE PLAN	1.5	5118	240/1/60	6.3	10	72	2546NW
BBH-4(N)	SEE PLAN	1.0	3412	240/1/60	4.2	7	48	2544NW
NOTES:-								
1. PROVIDE DISCONNECTION SWITCH.								
2. BUILT-IN THERMOSTAT FOR WALL HEATER .								
3. UNIT HEATER SHALL BE INSTALLED IN ACCORDANCE WITH THE LISTING AND MANUFACTURER'S INSTALLATION INSTRUCTIONS.								
4. MAINTAIN MANUFACTURER-REQUIRED CLEARANCES FROM FINISHED FLOORS, WALLS, FURNITURE & , AND DRAPERIES.								
5. PROVIDE ALL NECESSARY ACCESSORIES AS PER MANUFACTURER INSTRUCTIONS.								

ELECTRIC DUCT HEATER SCHEDULE							MAKE: GREENHECK (OR EQUIVALENT)
UNIT ID	MODEL	HEATER TYPE	LOCATION	DUCT HEATER DIMENSIONS (IN)		ELECTRICAL DATA W V PH HZ AMP	
EDH-1(N)	IDHE	FLANGE	SEE PLAN	18	16	30.0 208 3	100
NOTES:-							
1. INSTALL ELECTRIC DUCT HEATER AS PER MANUFACTURER'S RECOMMENADATION.							
2. PROVIDE DUCT T-STAT AND WIRE TO DUCT HEATER.							
3. PROVIDE DISCONNECT SWITCH, VAPOR BARRIER, DUST TIGHT BOX AND FAN INTERLOCK SWITCH.							
4. PROVIDE DUCT HEATER WITH SCR CONTROL AND THERMOSTAT.							
5. DUCT HEATER SHALL BE UL 1996 LISTED.							

MECHANICAL FAN SCHEDULE											MAKE: GREENHECK (OR EQUIVALENT)	
TAG	AREA SERVED	QTY	FLOW RATE CFM	STATIC PRESSURE EXTERNAL IN W.G.	SPEED RPM	INPUT WATT	ELECTRIC DATA EFFICACY (CFM/WATT)	V/PH/HZ	FLA	MAXIMUM SOUND SONES	MODEL	REMARK
EF-1(N) TO EF-6(N)	RESTROOMS	6	100	0.5	773	16.0	6.3	115/1/60	0.29	3.0	SP-LP0511-1	1,2,3,4
EF-7(N) TO EF-9(N)	RESTROOMS	3	50	0.5	773	16.0	3.1	115/1/60	0.15	3.0	SP-LP0511-1	1,2,3,4
EF-10(N)	PARKING	1	300	0.5	1070	179.0	1.7	115/1/60	3.3	3.0	CSP-AS10	1,2,3,5
EF-11(N)	SAUNA	1	70	0.5	773	16.0	4.4	115/1/60	0.29	3.0	SP-LP0511-1	1,2,3,8
KEF-1(N)	PANTRY/ KITCHEN	1	2325	1.5	1607	840.0	2.8	208/1/60		10.2	QE1-15	1 TO 6
MAU-1(N)		1	2000	1.0	1426	560.0	3.6	208/1/60	3.6	13.3	SQ-15-M2-VG	1,2,3,7
NOTES FOR EF-1(N) TO EF-11(N) & MAU-1(N):												
1. PROVIDE FACTORY MOUNTED AND INSTALLED DISCONNECT												
2. PROVIDE THERMAL OVERLOAD PROTECTION, BACKDRAFT DAMPER, AMCA SEAL AND UL CERTIFIED, SPEED CONTROLLER												
3. INSTALL AS PER MANUFACTURERS INSTRUCTIONS.												
4. PROVIDE MANUAL CONTROL.												
5. INTERCONNECT WITH CO <sub>2</sub> /NO <sub>2</sub> SENSOR WITH CONTROLLER IN SPACE.												
6. PROVIDE MAU WITH MERV 8 FILTER & MOTORIZED DAMPER.												
7. INTERCONNECT WITH KEF-1(N).												
8. SAUNA ROOM EXHAUST FAN OPERATION TO BE INTERLOCKED WITH THERMOSTAT AS SHOWN ON THE PLAN. COORDINATE OPERATION TEMPERATURE WITH THE OWNER AND MANUFACTURERS.												
NOTES FOR EF-1(N) TO EF-10(N) & MAU-1(N):												
1. PROVIDE INLINE EXHAUST FAN QE1-15 BY GREENHECK OR APPROVED EQUIVALENT, LISTED FOR GREASE EXHAUST.												
2. INSTALL FAN IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS AND APPLICABLE CODES.												
3. PROVIDE FULLY WELDED, GREASE-TIGHT DUCTWORK WITH REQUIRED ACCESS FOR CLEANING.												
4. FAN SHALL BE ACCESSIBLE FOR SERVICE AND MAINTENANCE WITH REQUIRED CLEARANCES.												
5. PROVIDE REQUIRED ELECTRICAL DISCONNECTS, CONTROLS, AND INTERLOCKS (WITH HOODS).												
6. COORDINATE GREASE DRAINAGE AND MANAGEMENT PROVISIONS AS REQUIRED.												

VENTILATION CALCULATION											
ROOM TAG	AREA	OCCUPANCY AS PER 2022 NYC MC/1000SQ.FT.	OCCUPANCY AS PER 2022 NYC MC	FINAL OCCUPANCY	CFM/PERSON	CFM/SQ.FT	SUPPLY CFM	PROVIDED CFM	EXHAUST CFM /SQ.FT. / FIXTURE	EXHAUST CFM	SELECTED EXHAUST CFM
MAID'S RM 1	155	10	2	2	5	0.06	20	20	0	0	0
MAID'S RM 2	125	10	2	2	5	0.06	18	20	0	0	0
HOUSEKEEPER'S RM	200	10	2	2	5	0.06	22	25	0	0	0
MAID'S RM 3	165	10	2	2	5	0.06	20	20	0	0	0
MAID'S RM 4	85	10	1	2	5	0.06	16	20	0	0	0
DAUGHTER'S RM	275	10	3	2	5	0.06	27	30	0	0	0
NEW BEDRM	220	10	3	2	5	0.06	24	25	0	0	0
SON'S RM	210	10	3	2	5	0.06	25	25	0	0	0
NURSE'S RM	210	10	3	2	5	0.06	23	25	0	0	0
OWNER'S BEDRM	270	10	3	2	5	0.06	27	30	0	0	0
DRESSING RM	655	10	7	2	5	0.06	50	50	0	0	0
HALL 2	0	0	0	0	0	0.06	15	15	0	0	0
CLOSET 1	20	0	0	0	0	0.12	3	5	0	0	0
EX. BATH RM 1	30	0	0	0	0	0.00	0	0	70	70	70
EX. BATH RM 2	30	0	0	0	0	0.00	0	0	70	70	70
CLOSET 2	55	0	0	0	0	0.12	7	10	0	0	0
HALL 3	170	0	0	0	0	0.06	11	15	0	0	0
EX. BATH RM 3	65	0	0	0	0	0.00	0	0	70	70	70
EX. BATH RM 4	75	0	0	0	0	0.00	0	0	70	70	70
HALL 4	430	0	0	0	0	0.06	26	30	0	0	0
HALL 5	230	0	0	0	0	0.06	14	15	0	0	0
EX. BATH RM 5	95	0	0	0	0	0.00	0	0	70	70	70
EX. BATH RM 6	145	0	0	0	0	0.00	0	0	70	70	70
CLOSET 3	75	0	0	0	0	0.12	9	10	0	0	0
CLOSET 4	40	0	0	0	0	0.12	5	5	0	0	0
EXISTING PANTRY/ KITCHEN	845	0	0	0	0	0.00	0	0	0.7	591.5	595
BREAKFAST RM	380	0	0	0	0	0.06	23	25	0	0	0
DINING RM	465	0	0	6	15	0.00	90	90	0	0	0
STUDY	375	0	0	6	15	0.00	90	90	0	0	0
EX. MAIN HALLWAY	840	0	0	0	0	0.06	51	55	0	0	0
NEW LAUNDRY RM	215	0	0	0	0	0.12	26	30	0	0	0
OPEN SPACE AREA	30	0	0	0	0	0.12	4	5	0	0	0
STORAGE	210	0	0	0	0	0.12	26	30	0	0	0
STORAGE	465	0	0	0	0	0.12	56	60	0	0	0
STORAGE	185	0	0	0	0	0.12	23	25	0	0	0
NEW ACCESSORY & CELLAR SPACE SAREA	660	0	0	0	0	0.12	80	80	0	0	0
STORAGE	31	0	0	0	0	0.12	4	5	0	0	0
STORAGE	22	0	0	0	0	0.12	3	5	0	0	0
STORAGE	365	0	0	0	0	0.12	44	45	0	0	0
MUSIC RM	420	0	0	15	15	0.00	90	90	0	0	0
EX. LIVING RM	825	0	0	6	15	0.00	90	90	0	0	0
HALL 5	90	0	0	0	0	0.06	6	10	0	0	0
EX. BATH RM 7	30	0	0	0	0	0.00	0	0	70	70	70
EX. BATH RM 8	30	0	0	0	0	0.00	0	0	70	70	70
	10793			46			1068	1080			1085