

VENTILATION CONSTRUCTION NOTES:

1. CONTRACTOR IS ADVISED THAT ALL LOCATIONS ARE APPROXIMATE. CONTRACTOR SHALL VERIFY THE EXISTING CONDITIONS AT PROJECT SITE BEFORE SUBMITTING COST PROPOSAL.
2. ALL WORK SHALL BE IN ACCORDANCE WITH FEDERAL, STATE, AND CITY CODES, ORDINANCES, AND STANDARDS.
3. CONTRACTOR SHALL PAY ALL PERMIT FEES, PLAN REVIEW FEES, LICENSE FEES, INSPECTIONS AND TAXES APPLICABLE AND INCLUDED BID.
4. CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIAL, EQUIPMENT AND TOOLS FOR COMPLETE INSTALLATION OF ALL WORK SHOWN ON PLANS AND/OR DESCRIBED HEREIN, INCLUDING ALL DEVICES, CONTROLS AND APPURTENANCES REQUIRED TO SET NEW SYSTEMS INTO OPERATION.
5. AN ATTEMPT HAS BEEN MADE TO SHOW ALL PIPING, FIXTURES, DUCTWORK, AND OUTLETS. THIS CONTRACTOR SHALL VISIT THE SITE TO VERIFY COMPONENTS, LOCATIONS AND SIZES SHOWN OR NOT SHOWN. ALL COMPONENTS NEED TO BE REMOVED IN THE DEMOLITION AREA UNLESS NOTED ON THE DRAWINGS.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR THEIR OWN DEMOLITION, REMOVAL, CAPPING, STORING, ABANDONING, DISCONNECTING, RELOCATING, AND RECONNECTION OF EXISTING EQUIPMENT AND MATERIAL.
 - A. REMOVE ANY PIPES PROTRUDING ABOVE FINISHED FLOOR OR THROUGH WALL AND CAP AND FINISH OVER WITH MATERIAL TO MATCH EXISTING.
 - B. REMOVE ALL FIXTURES, CARRIERS, SUPPLY & WASTE & VENT PIPING, STEAM, HEATING HOT WATER, HVAC SUPPLY, RETURN & EXHAUST AS NOTED. CAP AT NEAREST ACTIVE MAIN. SUPPLY & RETURN MAINS TO BE VALVED & CAPPED. VALVES AND CAP ALL CONTROL AIR LINES AT MAIN.
 - C. IN REMODELED/ALTERED AREAS ANY PIPING OR DUCTWORK PASSING THROUGH THE REMODELED AREAS TO SERVE (OR BEING SERVED FROM EXISTING ADJACENT, REMOTE, OR SURROUNDING AREA THAT ARE TO REMAIN) SHALL BE RETAINED AND KEPT OPERATIONAL AND SHALL BE REROUTED IN ALL CASES WHERE THEY INTERFERE WITH ANY NEW WORK OR USAGE TO BE ACCOMPLISHED IN THE REMODELED AREA.
 - D. PENETRATIONS THROUGH EXISTING WALLS AND FLOORS FORMERLY OCCUPIED BY REMOVED PIPING SHALL BE PATCHED TO MATCH EXISTING CONSTRUCTION.
 - E. ALL CUTTING, PATCHING, REPAIRING, REPLACEMENT AND REFINISHING SHALL MATCH EXISTING CONSTRUCTION AS NEARLY AS POSSIBLE.
7. CONTRACTOR SHALL VERIFY ALL MOUNTING, ALL ARRANGEMENTS, HEIGHTS AND LOCATIONS PRIOR TO ROUGH-IN. ANY MENTION OF SPECIFIC MOUNTING ARRANGEMENT, HEIGHT OR LOCATION SHALL NOT RELIEVE CONTRACTOR OF RESPONSIBILITY TO VERIFY SPECIFIC REQUIREMENT FURNISHED OR OTHER TRADES WORKING IN THE SAME AREA. NO ADDITIONS TO CONTRACT SUM WILL BE PERMITTED FOR ITEMS INSTALLED IN WRONG LOCATIONS, IN CONFLICT WITH OTHER WORK, ETC.
8. THESE DRAWINGS ARE NECESSARILY DIAGRAMMATIC IN NATURE. NOT ALL FITTINGS, OFFSETS, VENTS, OR DRAINS ARE SHOWN. CONTRACTOR SHALL VISIT SITE PRIOR TO BIDDING AND INCLUDE ALL FITTINGS, OFFSETS, VENTS, AND DRAINS AS REQUIRED TO PROVIDE A COMPLETE AND FUNCTIONING SYSTEM.
9. SHOULD CONDITIONS NECESSITATE ANY REARRANGEMENTS, OR IF DUCTWORK AND/OR PIPING CAN BE RUN TO BETTER ADVANTAGE, PREPARE AND SUBMIT SHOP DRAWINGS SHOWING CHANGES BEFORE PROCEEDING WITH WORK. IF SUCH CHANGES ARE APPROVED BY ARCHITECT/ENGINEER, THEY SHALL BECOME A PART OF CONTRACT AFTER THEIR APPROVAL.
11. UPON COMPLETION OF WORK, CONTRACTOR SHALL REVIEW AND CHECK ENTIRE PORTION OF WORK, CLEAN EQUIPMENT AND DEVICES, REMOVE SURPLUS MATERIALS AND RUBBISH FROM OWNER'S PROPERTY, LEAVING WORK IN NEAT AND CLEAN ORDER; AND IN COMPLETE WORKING CONDITION. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL OF ANY CARTON, DEBRIS, ETC. FOR EQUIPMENT INSTALLED BY CONTRACTOR INCLUDING EQUIPMENT FURNISHED BY OWNER OR EQUIPMENT FURNISHED BY OTHERS.
12. CONTRACTOR IS RESPONSIBLE FOR SCHEDULING DELIVERY, RECEIVING, UNLOADING, UNPACKING, STORING, SETTING IN PLACE, AND PROTECTING FROM DAMAGE, VANDALISM, THEFT OR WEATHER DURING CONSTRUCTION FOR ALL NEW EQUIPMENT FURNISHED BY CONTRACTOR.
13. DO ALL CUTTING AND PATCHING OF BUILDING MATERIALS AS REQUIRED FOR INSTALLATION OF A COMPLETE AND WORKABLE SYSTEM. PATCHING SHALL MATCH EXISTING FINISHES AND CONSTRUCTION TO THE GREATEST POSSIBLE EXTENT.
14. IN AREAS WITH UNFINISHED CEILINGS, PIPING SHALL BE RUN ALONG THE UNDERSIDE OF SUPPORT JOIST OR STRUCTURAL MEMBERS. PIPING SHOULD BE GENERALLY HIDDEN AS MUCH AS POSSIBLE. THEREFORE, IT SHOULD BE LOCATED ABOVE STRUCTURAL MEMBERS OR ALONG TOP SIDE OF STRUCTURAL FLANGES.
16. ENSURE MECHANICAL EQUIPMENT IS INSTALLED TO PROVIDE SUFFICIENT CLEARANCE FOR COIL PULL AND MINIMUM 3' MAINTENANCE ACCESS TO EQUIPMENT DOORS.
17. ENGINEER RESERVES RIGHT TO CHANGE LOCATION OF ALL EQUIPMENT, DUCTWORK, PIPING AND CONDUIT FIVE FEET IN ANY DIRECTION WITHOUT THESE CHANGES BEING MADE SUBJECT OF AN EXTRA CHARGE PROVIDED SUCH CHANGES ARE MADE BEFORE FINAL INSTALLATION.
18. ALL DUCTWORK SHALL CONFORM TO SMACNA STANDARDS AND LOCAL CODES. DUCT DROPS TO CEILING MAY BE FLEXIBLE DUCT AS INDICATED ON DRAWINGS. FLEXIBLE DUCTS SHALL BE FULLY EXTENDED AND OPEN .
19. DUCT CONNECTIONS TO EQUIPMENT AND VALVES SHALL BE FLANGE CONNECTIONS WITH CHEMICALLY RESISTANT GASKET OR WITH BANDED CONNECTION AND CHEMICALLY RESISTANT GASKET AS REQUIRED BY MANUFACTURE FOR EACH ITEM.
20. PROVIDE MANUAL VOLUME AIR DAMPERS TO EACH SUPPLY, RETURN, AND EXHAUST DEVICES BRANCH TAKE-OFF.
21. AIR FILTERS SHALL BE INSTALLED ON ALL RETURN AIR EQUIPMENT INLETS. PROVIDE AN EXTRA FILTER AND INSTALL AT END OF CONSTRUCTION.
22. PROVIDE CONDENSATE DRAINS FOR ALL AIR CONDITIONING UNITS AND DRAIN TO BASEMENT FLOOR DRAIN AS INDICATED ON DRAWINGS.
23. THERMOSTAT MUST BE PROGRAMMABLE TO BE ABLE TO SET TEMPERATURE BACK WHEN SPACE IS UNOCCUPIED.
24. HANGERS SHALL BE PROVIDED IN ACCORDANCE WITH SMACNA STANDARDS.
25. CONTRACTOR SHALL BE RESPONSIBLE FOR BALANCING HVAC SYSTEM, ADJUST DAMPERS AND FANS TO OBTAIN AIR FLOWS WITHIN 10% OF AIR FLOWS INDICATED ON DRAWINGS.

VENTILATING CONSTRUCTION NOTES

1. ALL SUPPLY AIR DIFFUSERS, RETURN AND EXHAUST GRILLES SHALL HAVE CONTROL DAMPERS IN THE DUCT RUNOUT. DIFFUSERS & GRILLES SHALL HAVE AN OPPOSED BLADE DAMPER LOCATED IN THE FACE OF THE DIFFUSER OR GRILLE.
2. REGARDLESS OF FLEX DUCT LENGTH SHOWN ON DRAWINGS, MAXIMUM LENGTH OF 48" AS SPECIFIED IN SPECIFICATION SECTION 23 31 00 SHALL NOT BE EXCEEDED. FLEX DUCT INSTALLATION SHALL BE AT TERMINAL ENDS ONLY.

FLEX DUCT SCHEDULE	
CFM	SIZE
≤ 110	6"Ø
111 - 250	8"Ø
251 - 350	10"Ø
351 - 500	12"Ø
≥ 501	14"Ø

LOW PRESSURE DUCT SCHEDULE	
MAX. CFM	DUCT SIZE
500	10/10
1000	14/12
1500	20/12
2000	24/12
2500	30/12
3000	36/12

VENTILATING SYMBOL LIST

SYMBOL	DESCRIPTION
	SUPPLY OR OUTDOOR AIR DUCT
	SUPPLY OR OUTDOOR DUCT (HIDDEN BEHIND ANOTHER DUCT)
	RETURN AIR DUCT
	RETURN AIR DUCT (HIDDEN BEHIND ANOTHER DUCT)
	EXHAUST OR RELIEF AIR DUCT
	EXHAUST OR RELIEF AIR DUCT (HIDDEN BEHIND ANOTHER DUCT)
	SUPPLY FIRST NUMBER IS SIDE SHOWN SECOND NUMBER IS SIDE NOT SHOWN
	RETURN SAME NOTATION FOR OA AND EA
	TURNING VANES
	MANUAL VOLUME DAMPER
	MOTORIZED DAMPER
	FIRE DAMPER / SMOKE DAMPER
	FLEXIBLE DUCT
SA	SUPPLY AIR
RA	RETURN AIR
OA	OUTDOOR AIR
EA	EXHAUST AIR
	THERMOSTAT
	CARBON DIOXIDE SENSOR
	EXISTING TO BE REMOVED
	EQUIPMENT
	DEMOLITION BEGINNING/END POINT
	NEW CONNECTION TO EXISTING BEGINNING/END POINT
UP	DUCTWORK UP
DN	DUCTWORK DOWN

Architect:



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Project :

**Ashton House
Community Center**

820 West Park Road
Iowa City, Iowa 52246

Project number: 13.04

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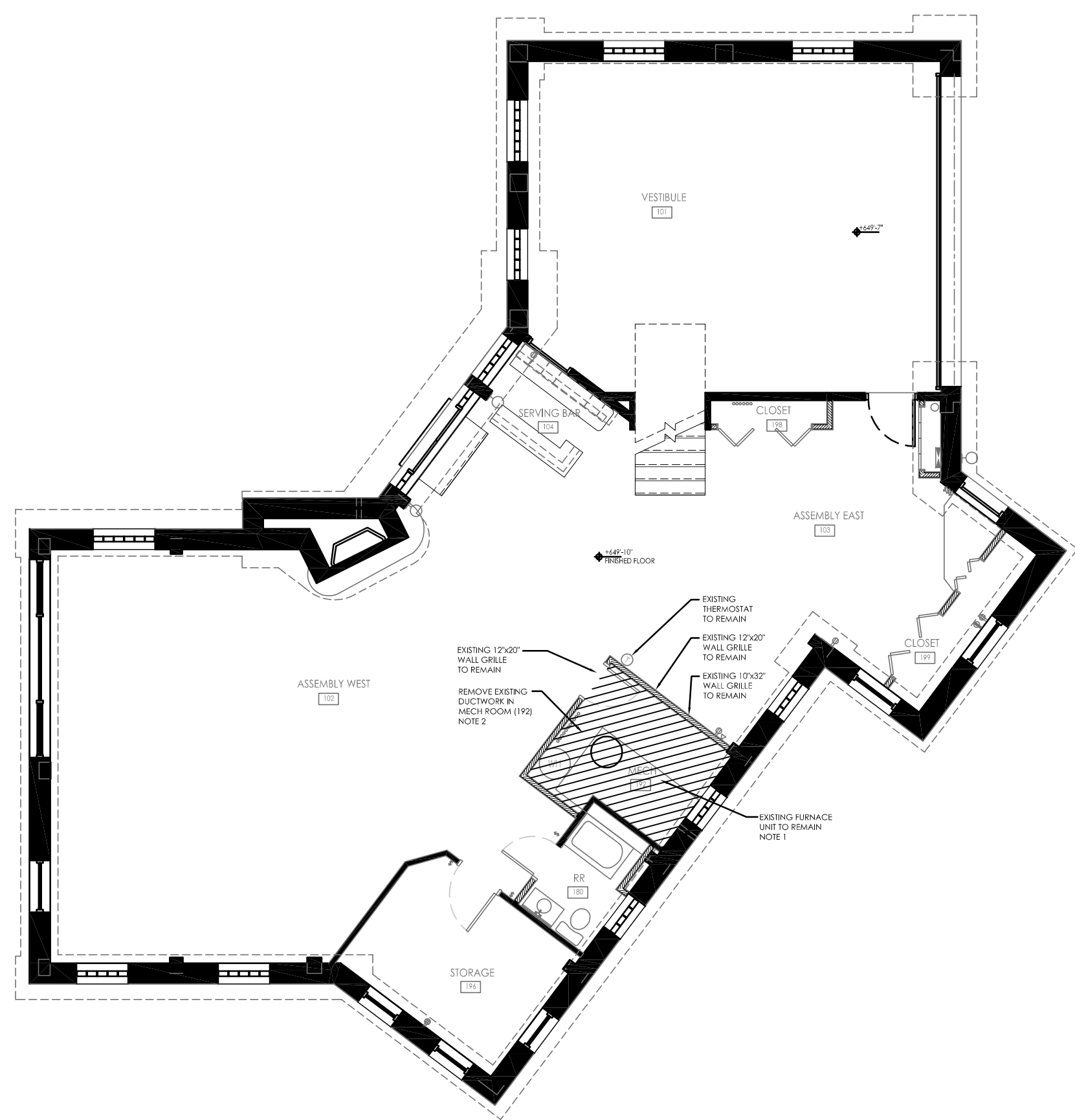
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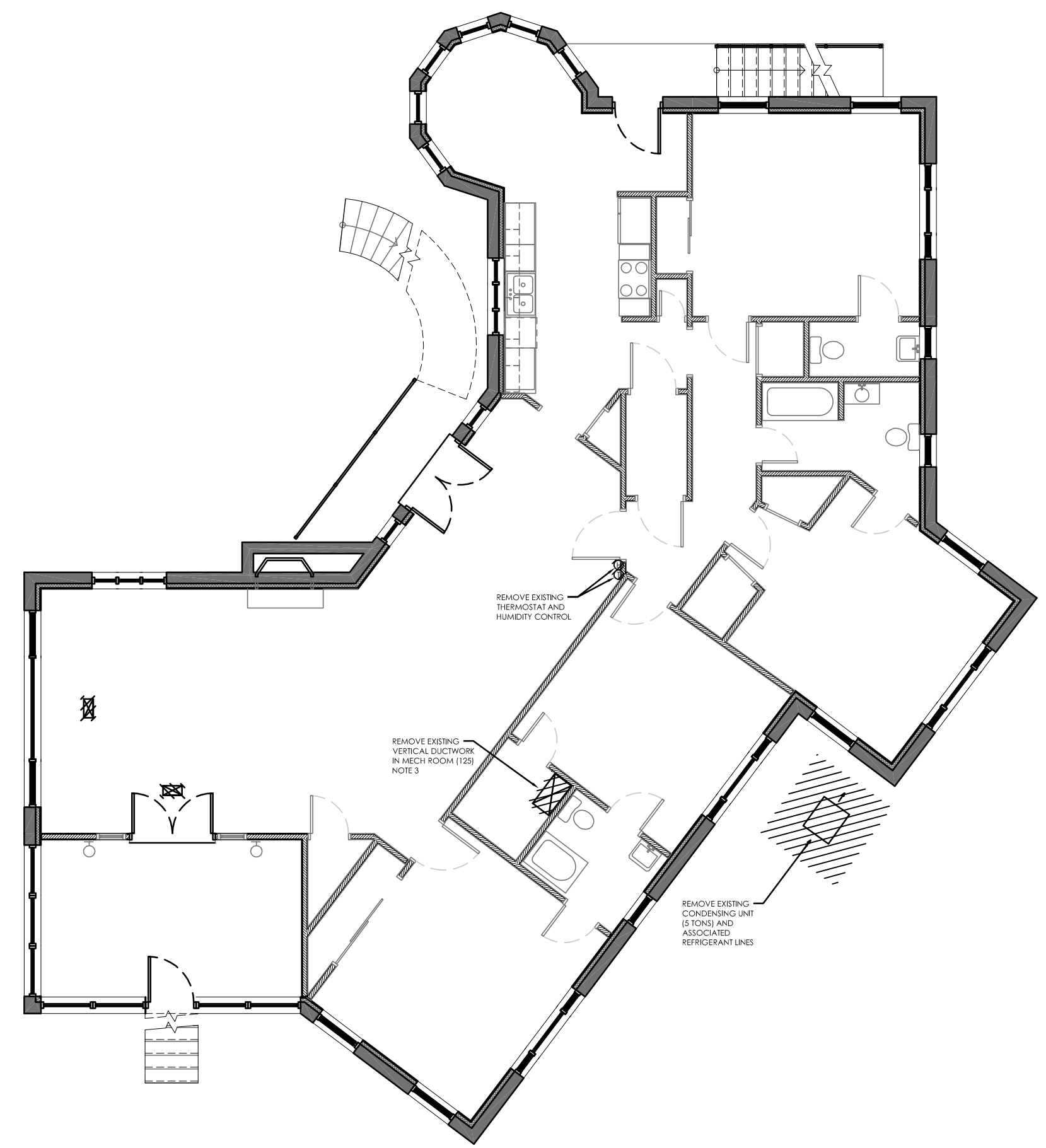
**MECHANICAL
NOTES & LEGEND**

Sheet Number:

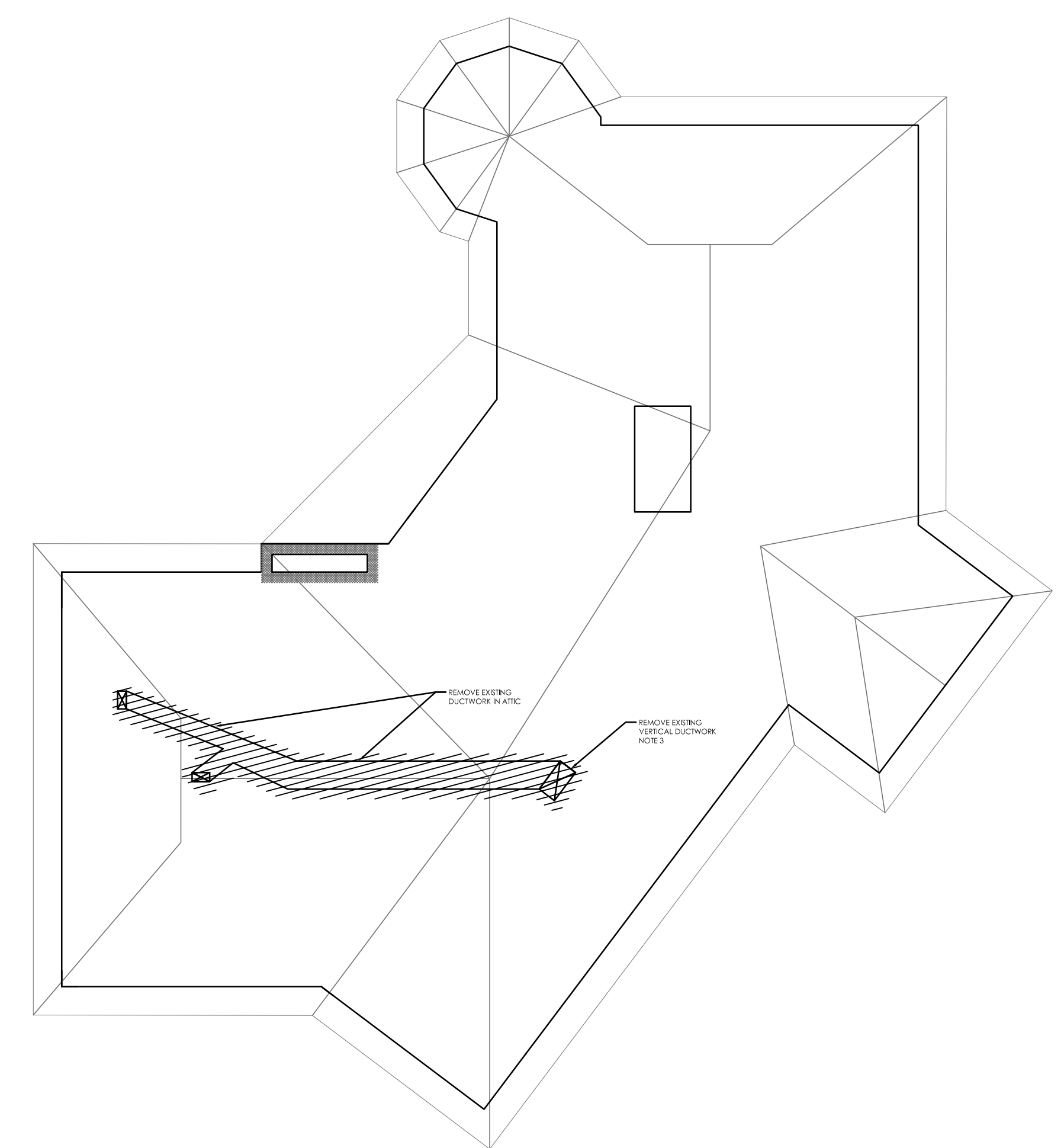
M00



A
M01 **BASEMENT - DEMOLITION PLAN**
SCALE 1/8" = 1' - 0"
0' 5' 10' 20' 30'



B
M01 **UPPER LEVEL - DEMOLITION PLAN**
SCALE 1/8" = 1' - 0"
0' 5' 10' 20' 30'



C
M01 **ATTIC - DEMOLITION PLAN**
SCALE 1/8" = 1' - 0"
0' 5' 10' 20' 30'

- NOTES:**
1. DISABLE EXISTING FURNACE UNIT.
 2. REMOVE EXISTING DUCTWORK AS NECESSARY TO INSTALL NEW DUCTWORK AND PIPING.
 3. COMBINE EXISTING RETURN AIR AND SUPPLY AIR DUCTWORK (IN THE EXISTING SOFFIT) FOR REUSE AS RETURN AIR FOR NEW AHUS. CAP END OF OPEN RETURN AIR DUCTWORK TO BASEMENT AS NECESSARY.

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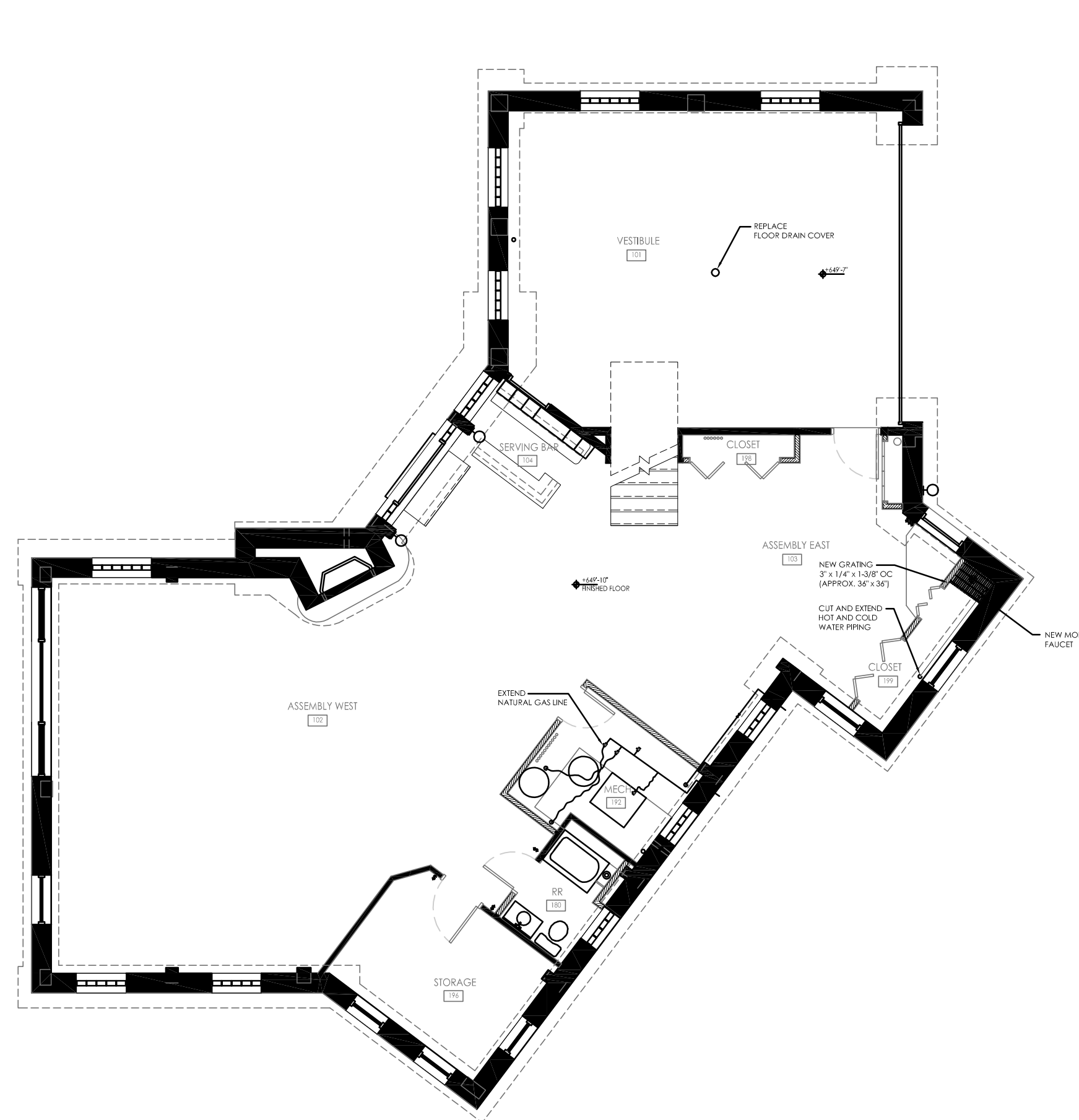
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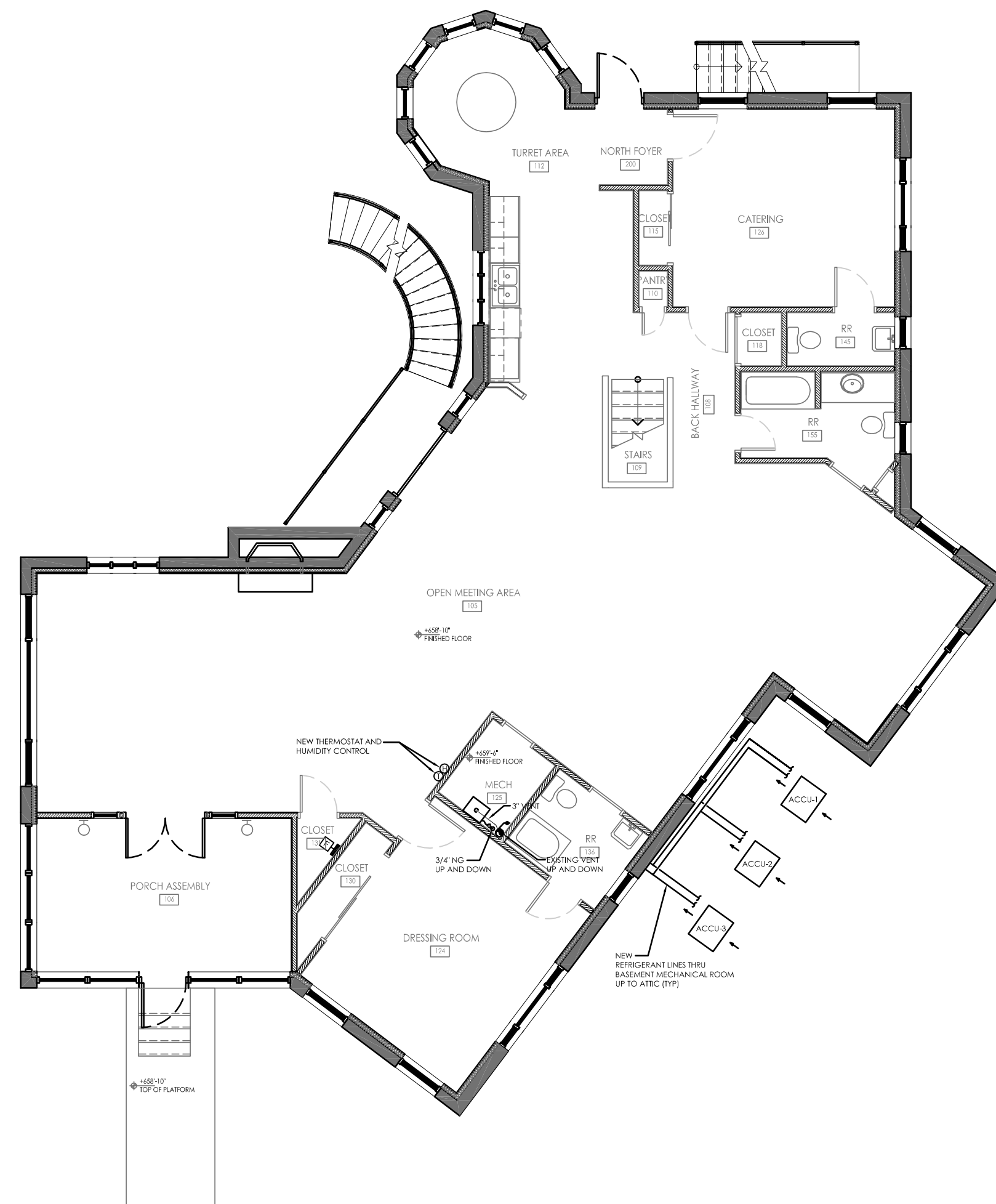
MECHANICAL DEMOLITION PLANS

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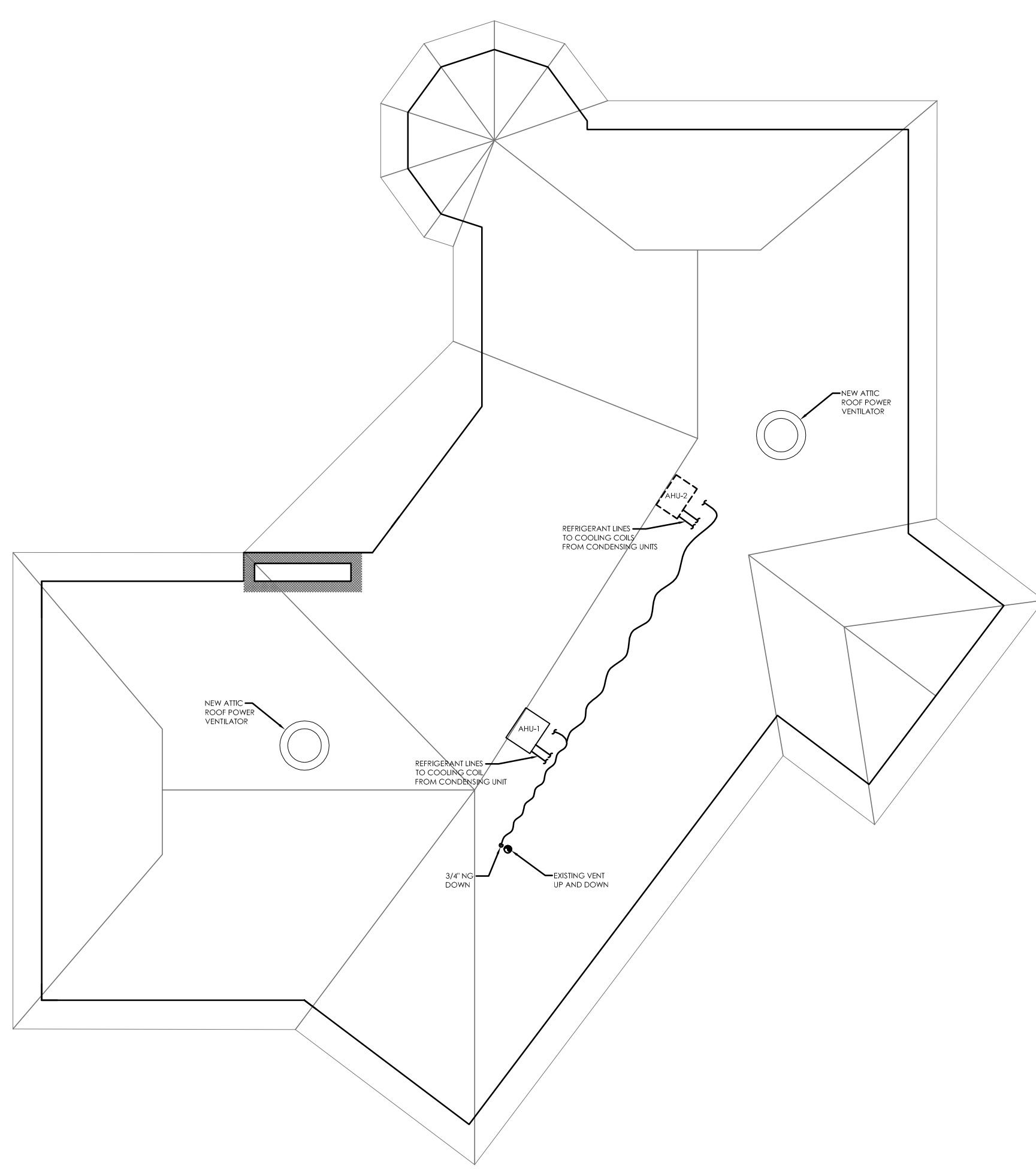
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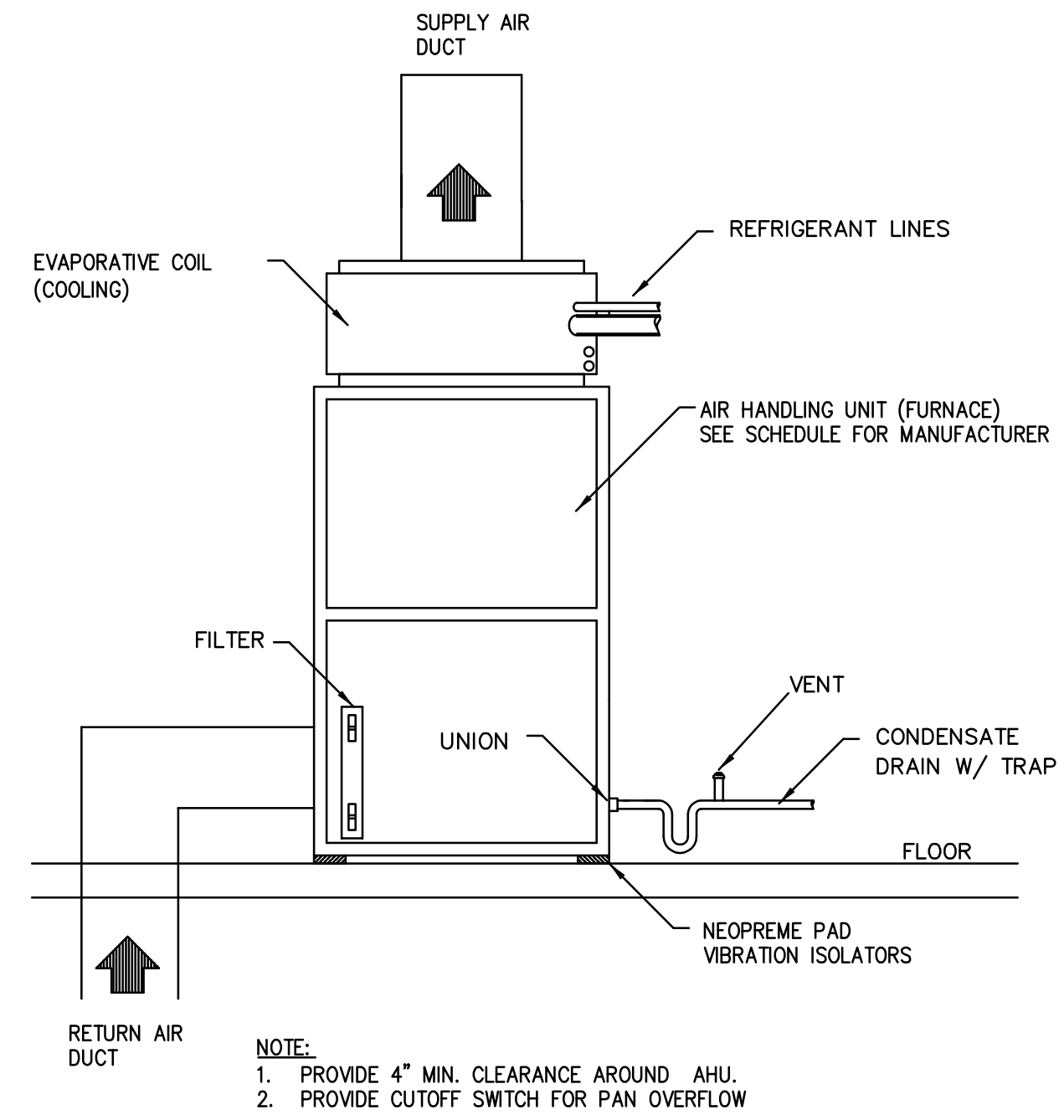
A **M02** **BASEMENT - MECHANICAL PLAN**
 SCALE 1/8" = 1'-0"
 0' 5' 10' 20' 30'



B **M02** **UPPER LEVEL - MECHANICAL PLAN**
 SCALE 1/8" = 1'-0"
 0' 5' 10' 20' 30'

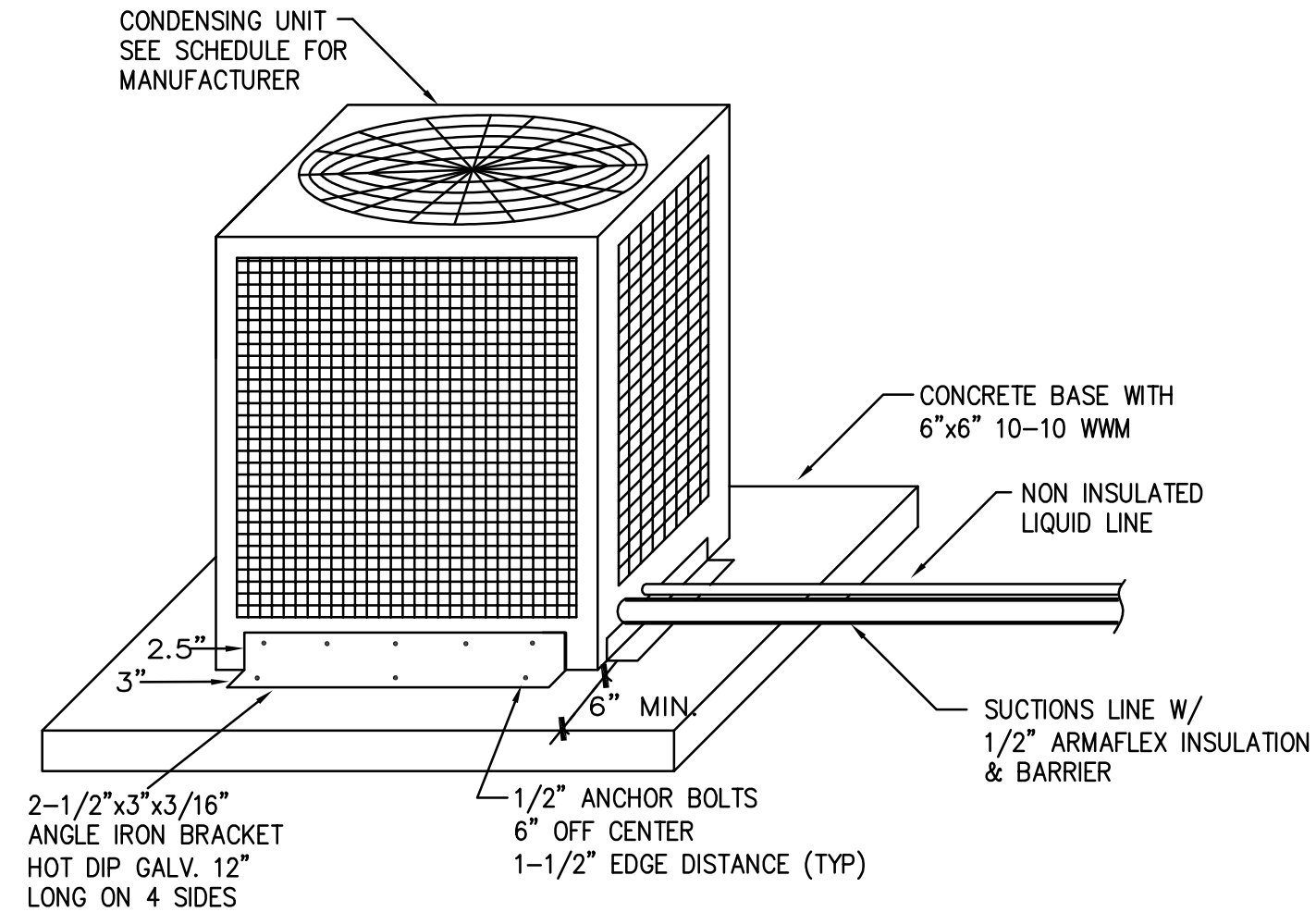


C **M02** **ATTIC - MECHANICAL PLAN**
 SCALE 1/8" = 1'-0"
 0' 5' 10' 20' 30'



D **M02** **AHU INSTALLATION DETAIL**
 NO SCALE

NOTE:
 1. PROVIDE 4" MIN. CLEARANCE AROUND AHU.
 2. PROVIDE CUTOFF SWITCH FOR PAN OVERFLOW.



E **M02** **ACCU INSTALLATION DETAIL**
 NO SCALE

NOTES:
 1. SCREWS, AND ANCHORS TYPICAL FOR ALL FOR SIDES OF CONDENSING UNIT.
 2. HILTI #12-24 SELFDRILLING SCREWS. #5 POINT 5/8" FROM EDGE OF STEEL. MIN. 3" OFF CENTER.

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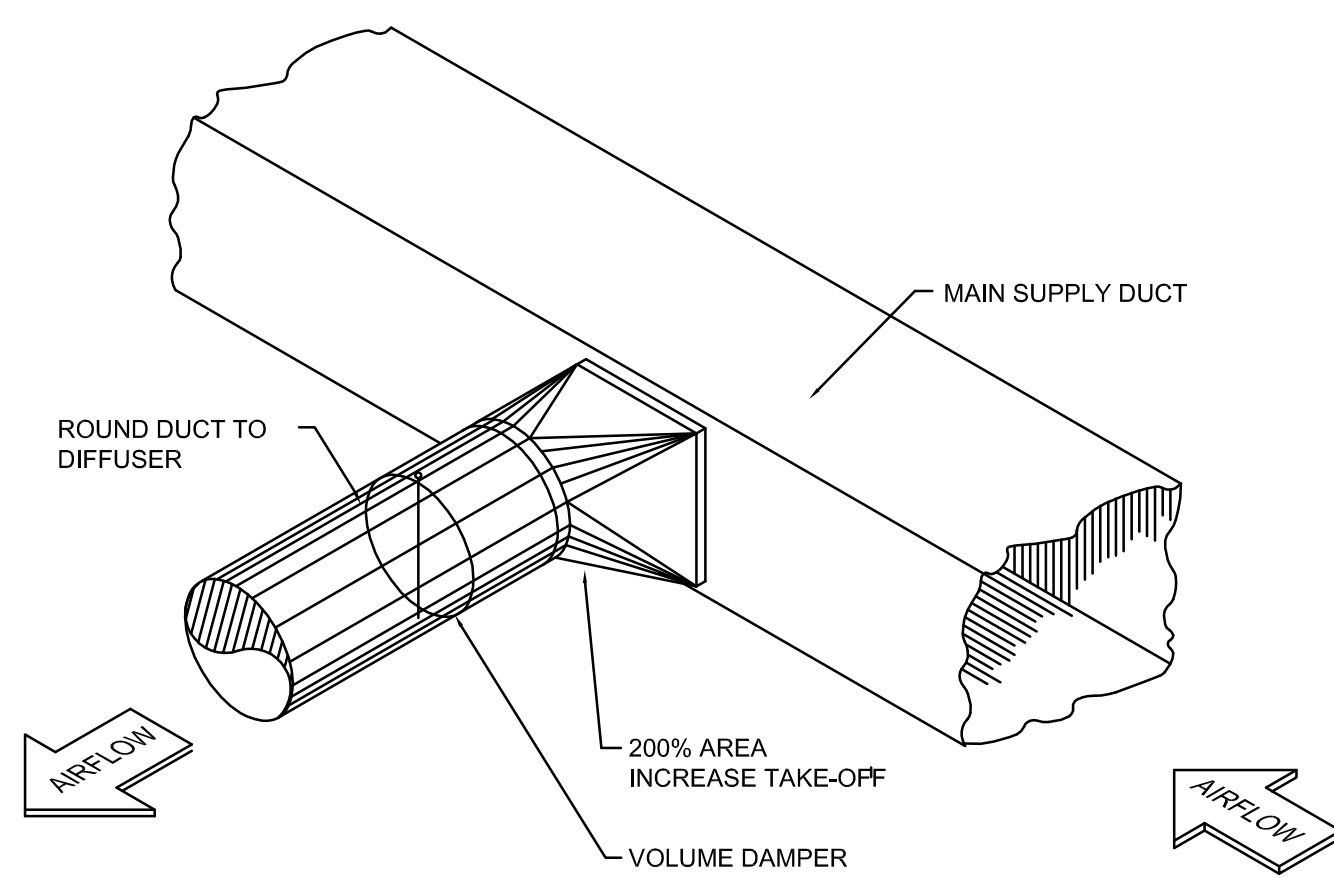
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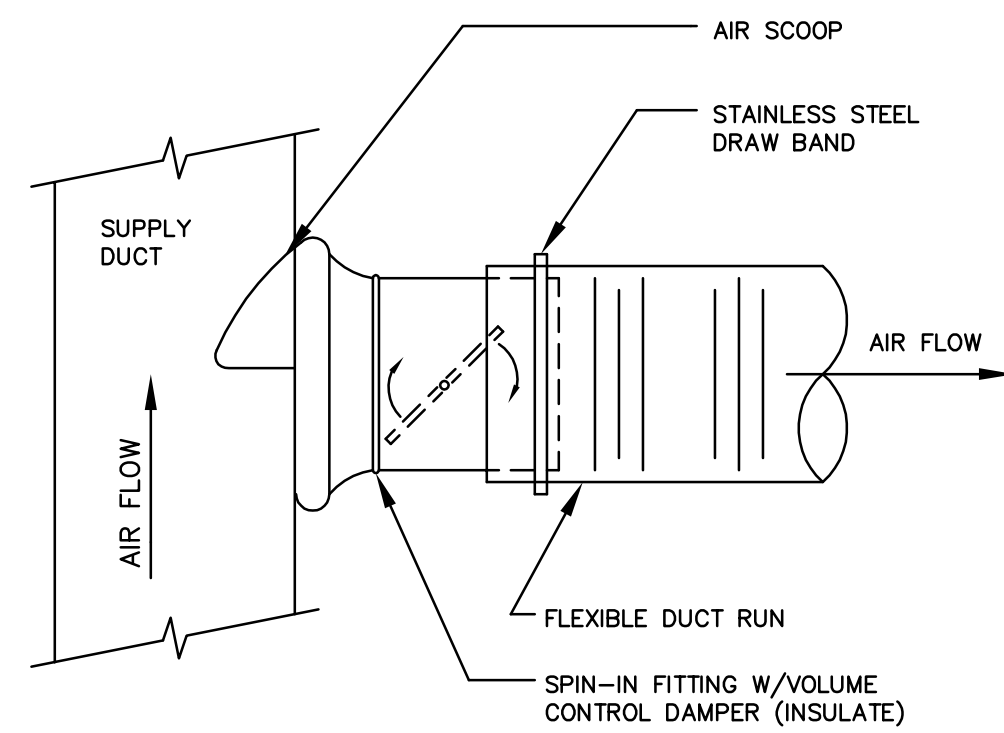
Sheet Title:
MECHANICAL PLANS

Sheet Number:
M02



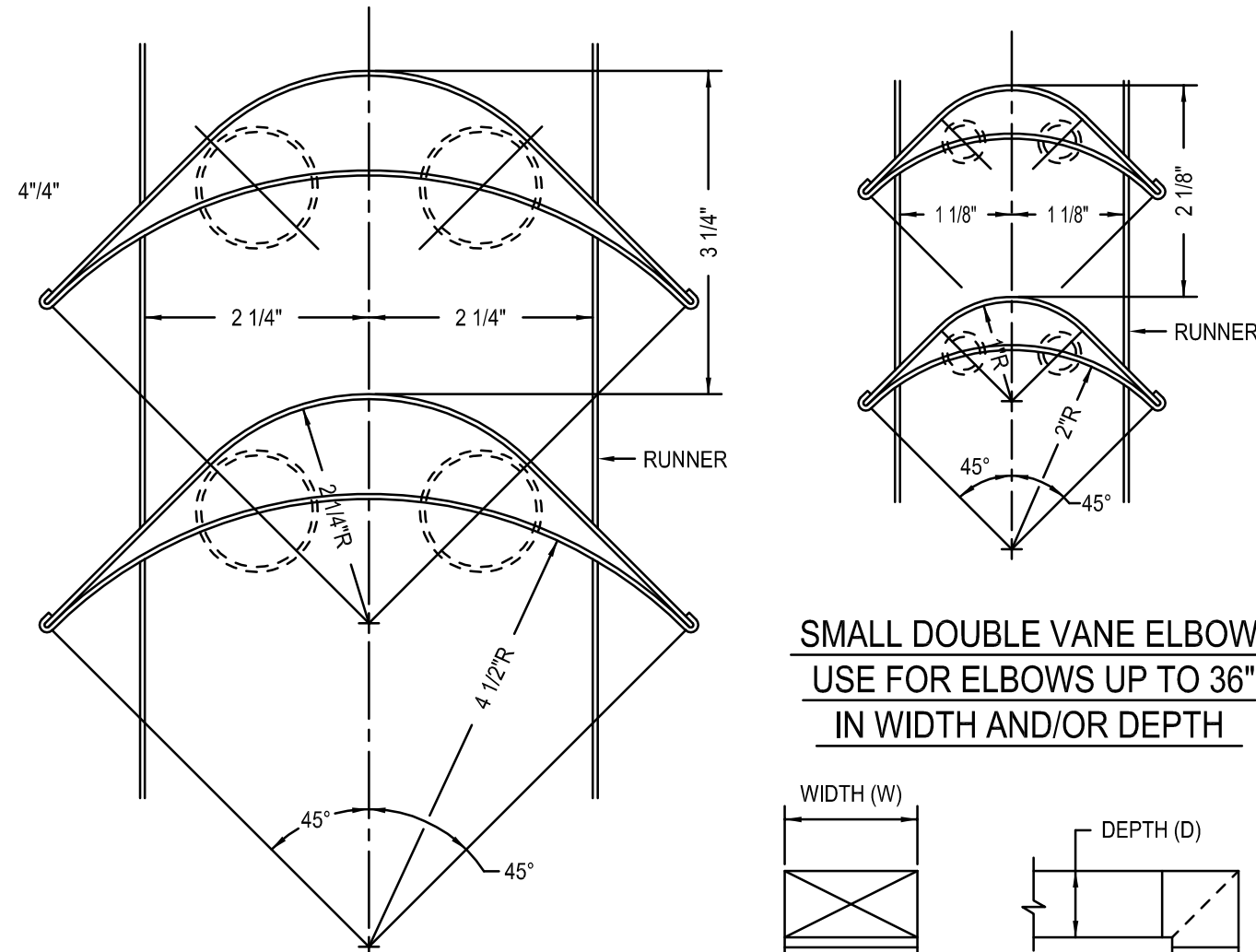
A BRANCH DUCT DETAIL

M04 NO SCALE



B FLEXIBLE DUCT CONNECTION DETAIL

M04 NO SCALE

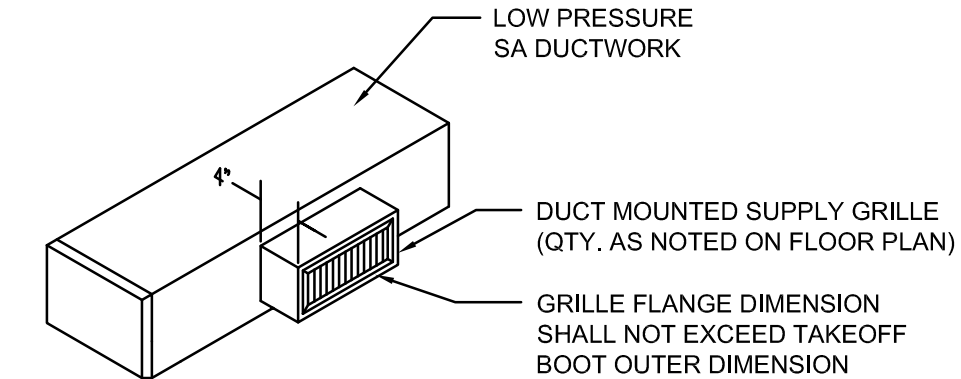


C SQUARE OR RECTANGULAR ELBOW DETAIL

C SQUARE OR RECTANGULAR ELBOW DETAIL

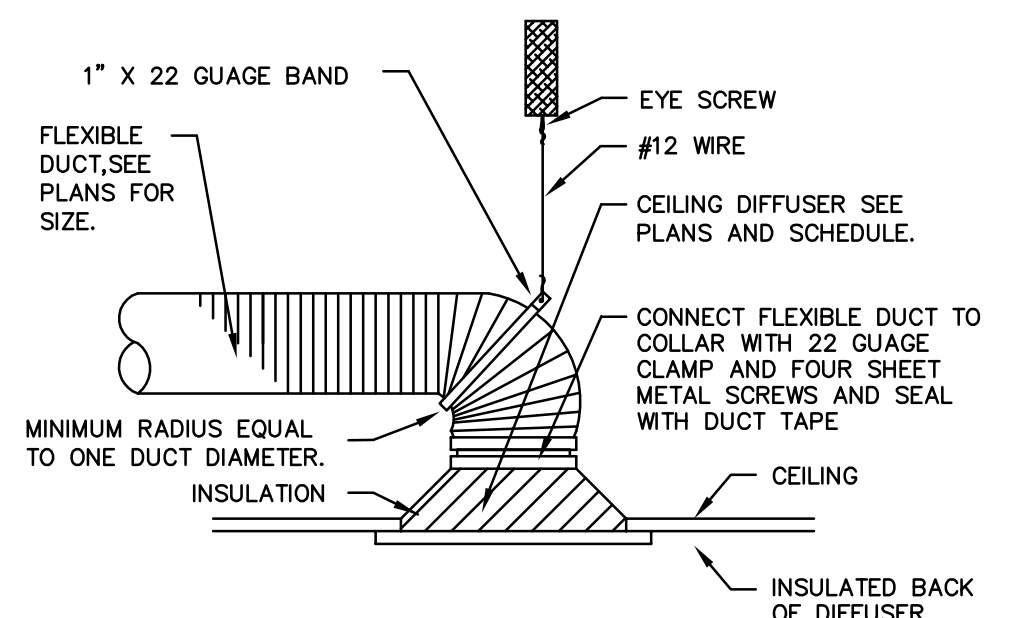
M04 NO SCALE

- NOTES:
1. ALL SQUARE OR RECTANGULAR ELBOWS HAVE ONE OF THE TWO TYPES OF TURNING VANES SHOWN ABOVE. SINGLE VANE ELBOWS WILL NOT BE PERMITTED.
 2. VANES SHALL BE FACTORY CONSTRUCTED, SUPPORTED AND FASTENED AS RECOMMENDED BY SMACNA.
 3. SQUARE ELBOWS ARE TO BE USED ONLY WHERE ABSOLUTELY NECESSARY. RADIUS ELBOWS CONTRACTOR TO PROVIDE ACCESS DOORS UPSTREAM AND DOWNSTREAM FOR CLEANING AND INSPECTION OF SQUARE ELBOWS.



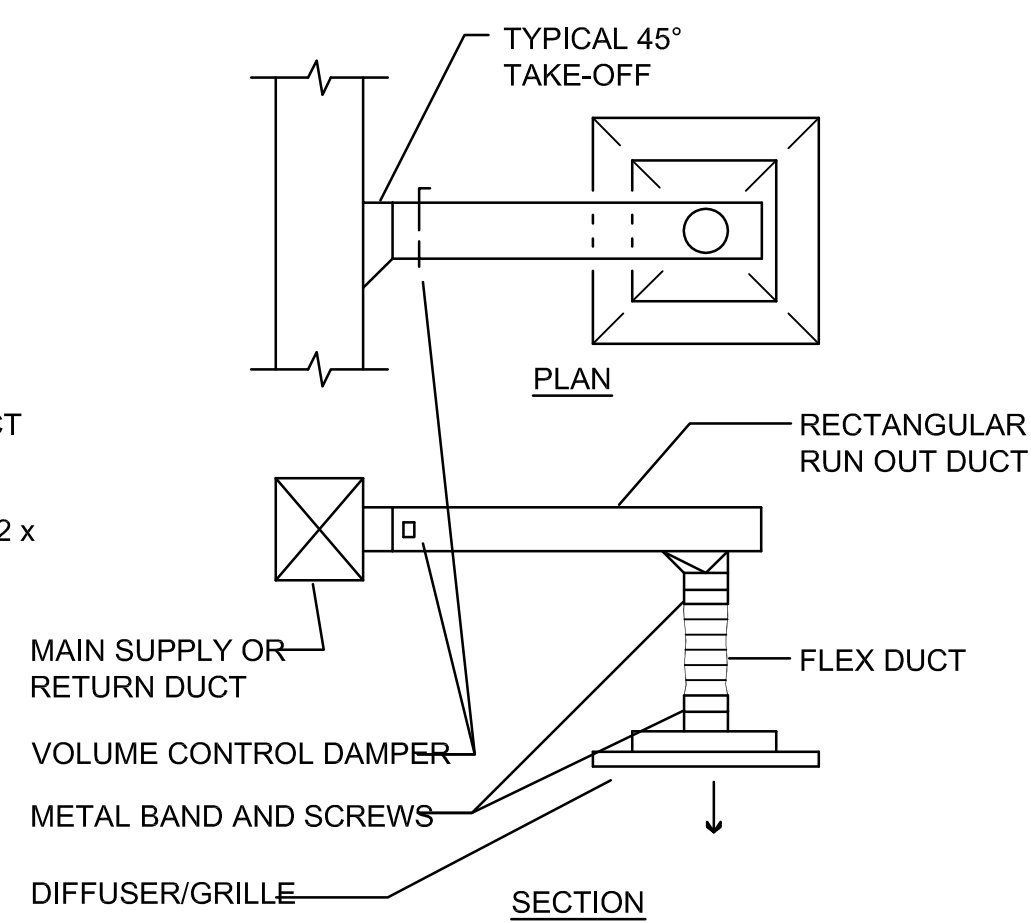
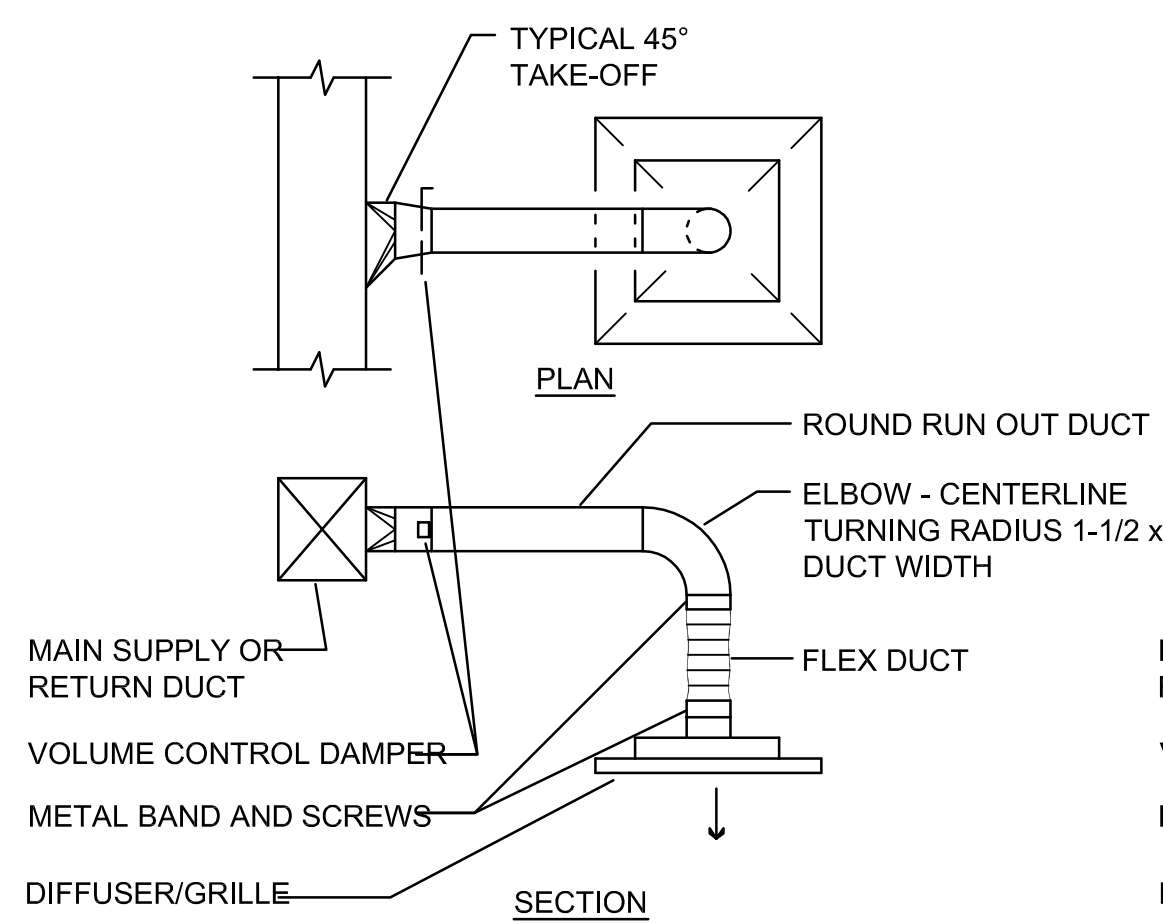
D DUCT MOUNTED SUPPLY GRILLE DETAIL

M04 NO SCALE



E DIFFUSER SUPPORT DETAIL

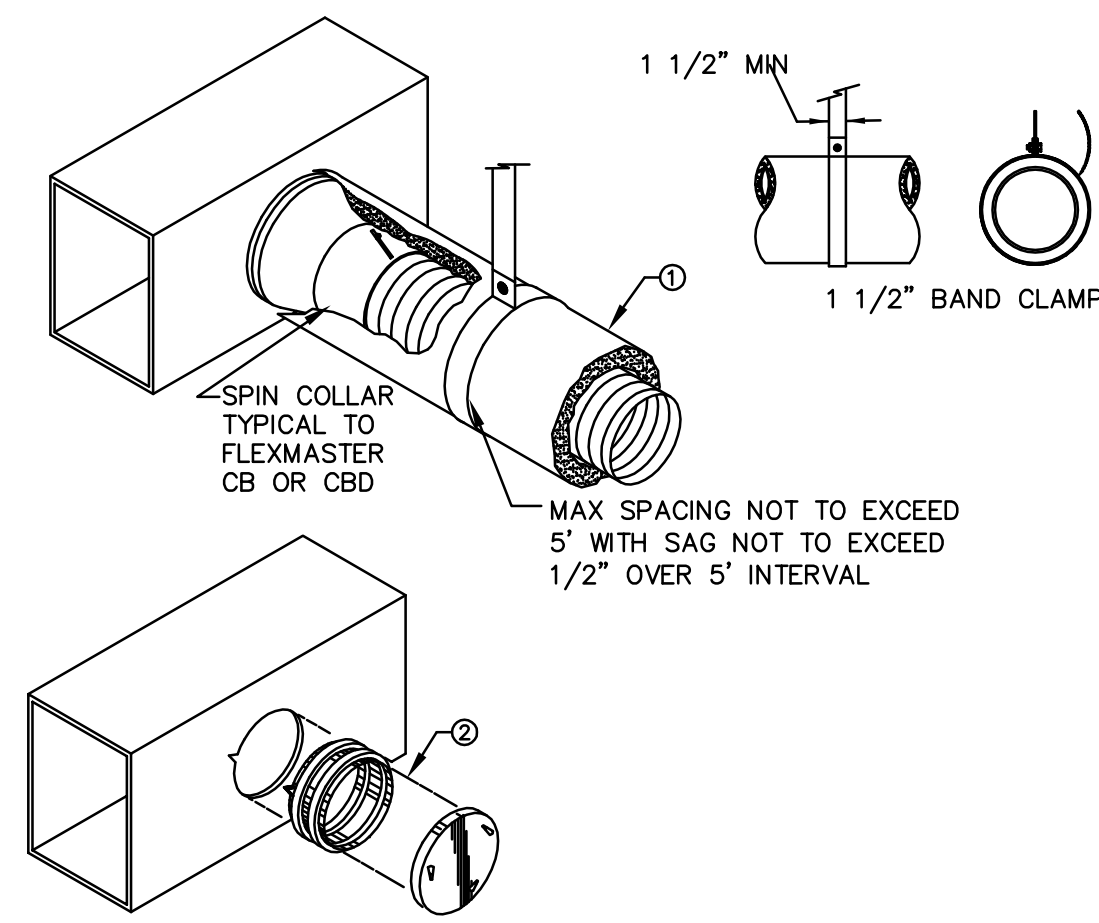
M04 NO SCALE



F SUPPLY AND RETURN DUCT TAKE-OFF DETAIL

M04 NO SCALE

- NOTES:
1. CONTRACTOR HAS THE OPTION TO USE EITHER METHOD SHOWN.
 2. FLEXIBLE DUCT SHALL BE ONLY USED FOR ALIGNMENT AND NOT FOR OFFSET OR CHANGE IN DIRECTION.
 3. CONTRACTOR SHALL PROVIDE TRANSITION FROM NECK SIZE INDICATED TO DUCT SIZE INDICATED AS REQUIRED.

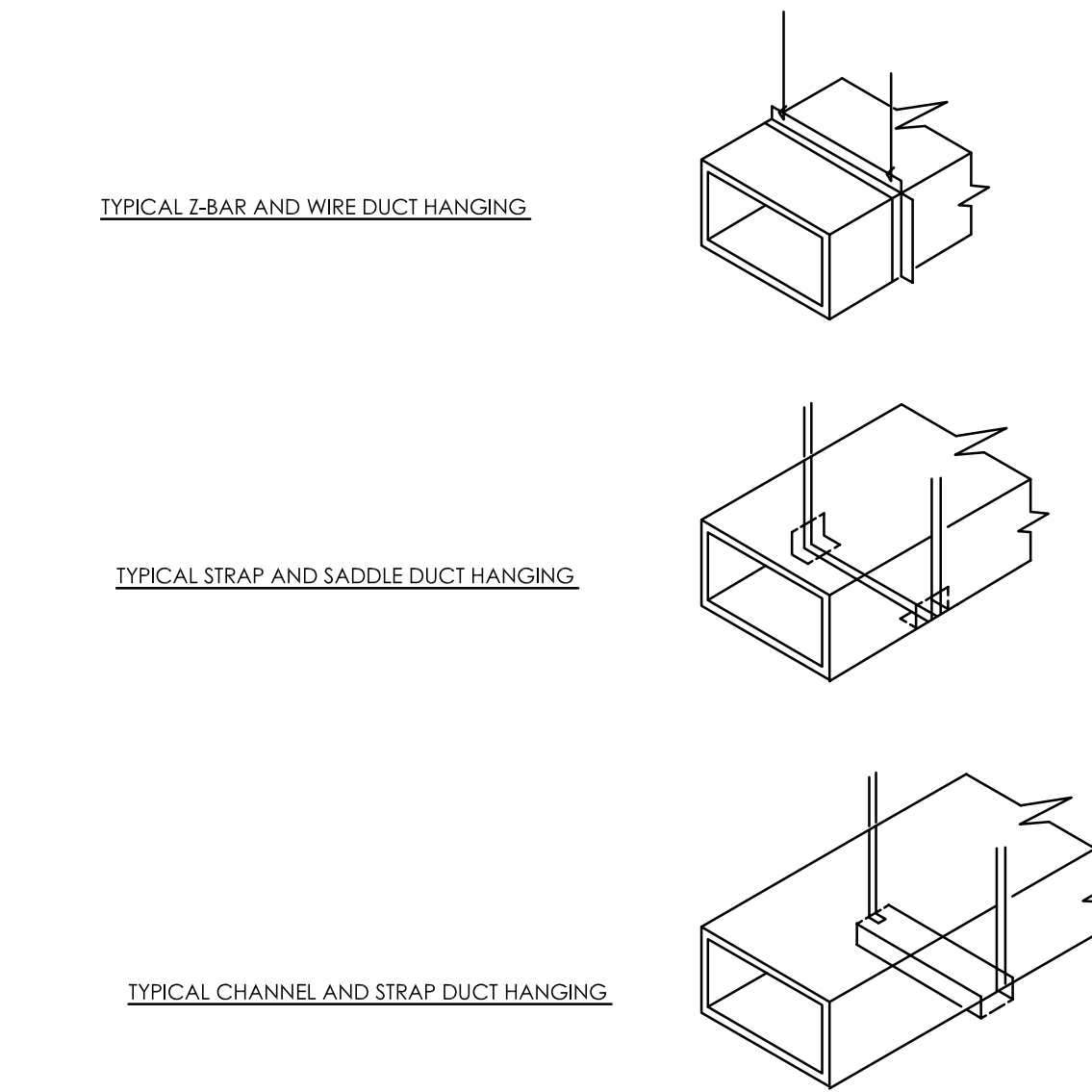


G DUCT SUPPORT FOR FLEXIBLE DUCTS DETAILS

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GAUGE	THK.	1" STRAP CAPABILITY	MAXIMUM LOAD
24	.028	840	165
22	.034	1070	216
20	.040	1298	259

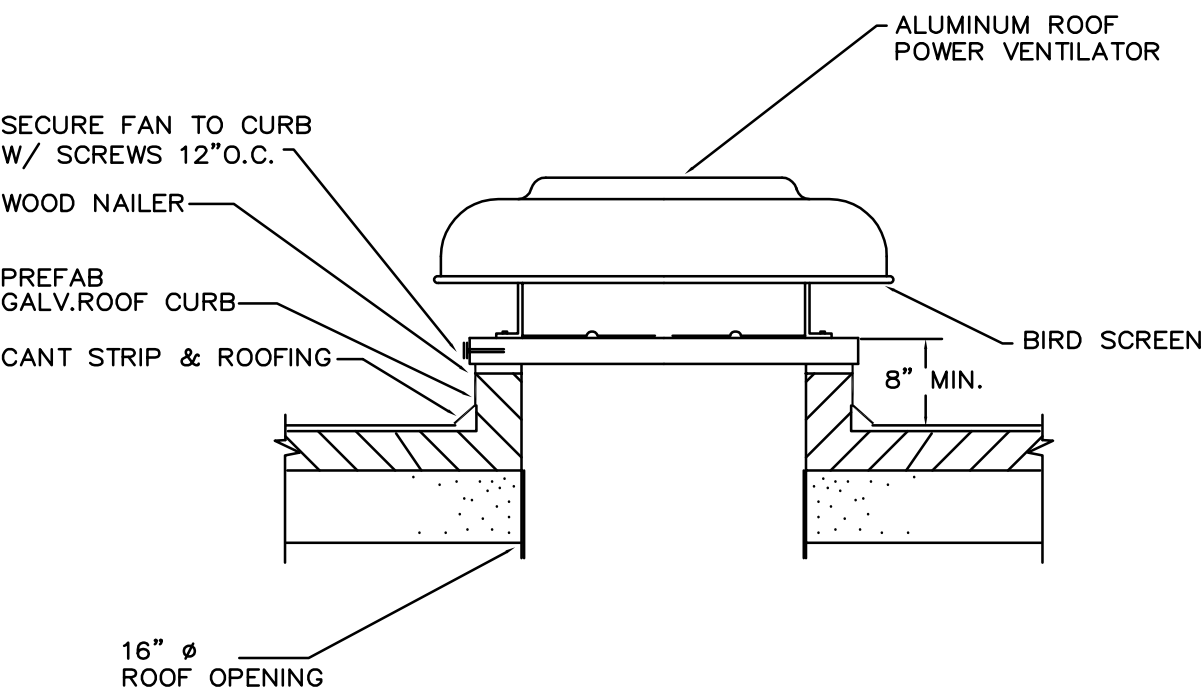
* ELASTIC LIMIT ASSUMED 30ksi; RECOMMEND MAX LOAD (20% OF YIELD STRENGTH).



H METHODS OF HANGING DUCTS DETAILS

M04 NO SCALE

- NOTES:
1. HANG DUCTS ACCORDING TO SMACNA STANDARDS.
 2. ALL STRAPS SHALL BE MINIMUM 1-1/2", 26 GA. GALVANIZED STEEL WITH 6 FT MAX. SPACING.



I ATTIC ROOF VENTILATOR DETAIL

M04 NO SCALE

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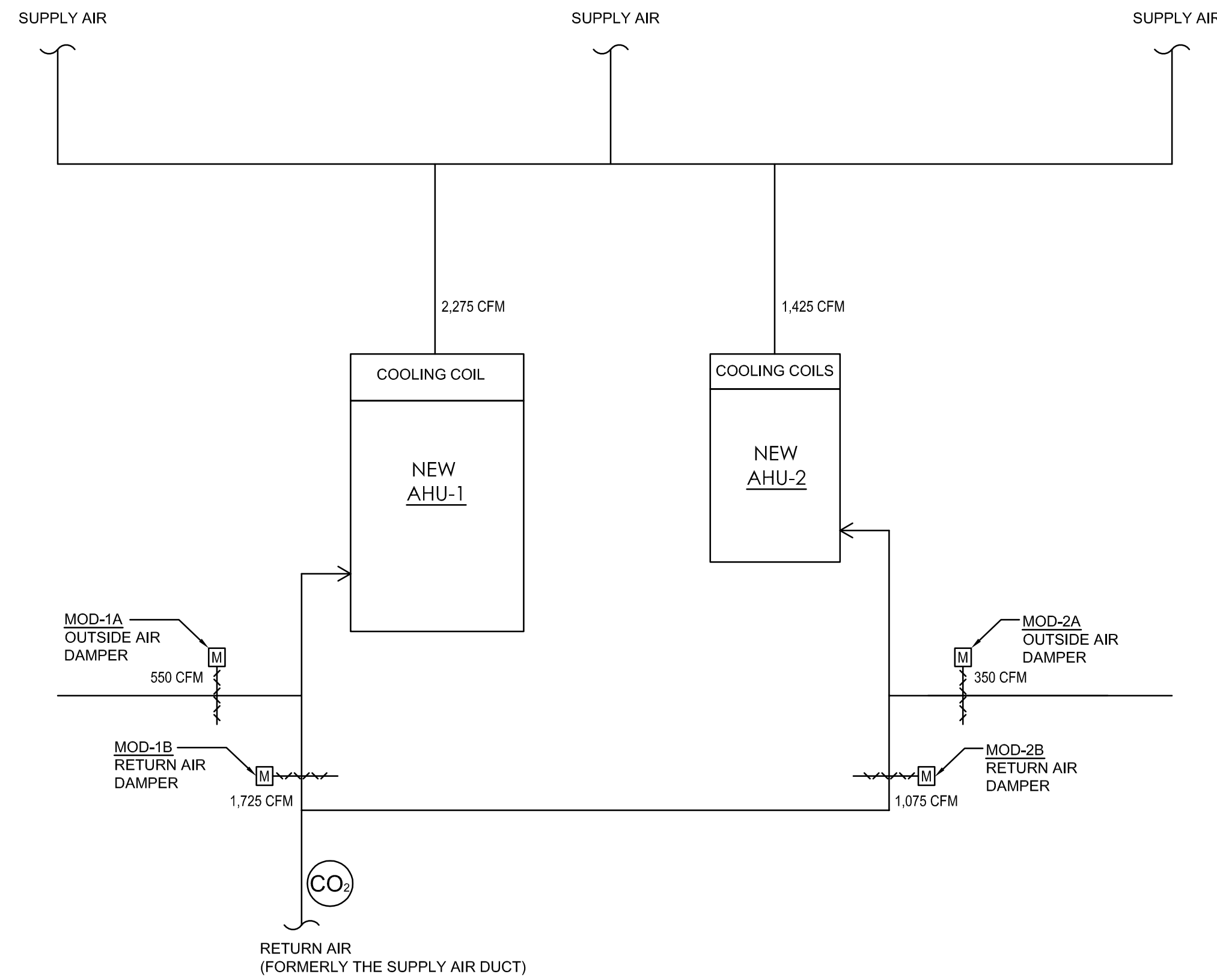
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MECHANICAL DETAILS

Sheet Number:

M04



A
M04
NO SCALE

AIR HANDLING UNIT SCHEDULE			
TAG		AHU-1	AHU-2
TYPE		GAS FURNACE ¹	GAS FURNACE
LOCATION		ATTIC	ATTIC
MANUFACTURER (BASIS OF DESIGN)		CARRIER	CARRIER
MODEL (BASIS OF DESIGN)		59SC2B120S24-22	59SC2B100S21-22
ARRANGEMENT		VERTICAL ²	VERTICAL ²
SUPPLY FAN	FAN	QUANTITY	1
		BLOWER WHEEL - DIA X WIDTH	11 X 11
		AIRFLOW (CFM)	2,275
		OUTDOOR AIRFLOW (CFM)	550
		FAN SPEED (RPM)	500/1,150
		E.S.P. (IN WG) - HEATING	0.2
		E.S.P. (IN WG) - COOLING	0.5
	MOTOR	QUANTITY	1
		HORSEPOWER (HP)	14.1
		VOLTS / PHASE / HERTZ	115 / 1 / 60
		FULL LOAD AMPS	14.9
		MAX. CIRCUIT BREAKER/FUSE	20
COOLING DATA ¹	COIL	REFRIGERANT	R-134a
HEATING DATA	FURNACE	TYPE	CONDENSING
		FUEL	NATURAL GAS
		BURNERS	5
		IGNITION	SILICON NITRIDE
FILTER	FILTER		KGAWF**06UFR
MAX. UNIT DIMENSIONS		LENGTH (IN)	2'-5 1/2"
		WIDTH (IN)	2'-0 1/2"
		HEIGHT (IN)	1'-9"
		WEIGHT (LBS)	2'-11"
ACCESSORIES		OCCUPANCY SENSORS	
		DEMAND CONTROL VENTILATION (CO2 SENSOR)	
		PROGRAMMABLE THERMOSTAT	
		HUMIDIFIER	
		ENERGY RECOVERY VENTILATOR (ERV)	
REMARKS			
		1. COILING COILS MOUNTED EXTERNAL TO GAS FURNACE. SEE EVAPORATIVE COOLING COIL SCHEDULE.	
		2. HORIZONTAL GAS FURNACE ARRANGEMENT IS PREFERRED.	

COMBINATION STARTERS & DISCONNECTS SHALL BE PROVIDED BY EQUIPMENT SUPPLIER.

AIR COOLED CONDENSING UNIT SCHEDULE															
MARK	DESCRIPTION	NOTES	TOTAL COOLING TONS	CONDENSER MOTOR			COMPRESSOR MOTOR				REFRIG	MCA	DESIGN BASIS	REMARKS	
				NO.	FLA	VOLTS	NO.	VOLTS	PHASE	RLA					
ACCU-1	AIR COOLED CONDENSING UNIT	1	5	1	1.2	208/230	1	1	208/230	1	26.4	R-134a	50	CARRIER	
ACCU-2	AIR COOLED CONDENSING UNIT	1	4	1	1.4	208/230	1	1	208/230	1	19.9	R-134a	40	CARRIER	
ACCU-3	AIR COOLED CONDENSING UNIT	1	4	1	1.4	208/230	1	1	208/230	1	19.9	R-134a	40	CARRIER	

NOTES:
1. SIZE REFRIGERANT LINES PER MANUFACTURER'S RECOMMENDATION.

(SPLIT) EVAPORATIVE COOLING COIL SCHEDULE											
MARK	DESCRIPTION	LOCATION	NOTES	TOTAL CAPACITY TONS	SENSIBLE CAPACITY TONS	AIR QTY CFM	FACE VEL FPM	EAT °F	LAT °F	DESIGN BASIS	REMARKS
CC-2A	COOLING COIL	AHU-2	1, 2	4	X	2,280	497	95/78	64	CARRIER	
CC-2B	COOLING COIL	AHU-2	1, 2	4	X	2,280	497	95/78	64	CARRIER	

NOTES:
1. SIZE REFRIGERANT LINES PER MANUFACTURER'S RECOMMENDATION.
2. INTERTWINED COOLING COILS.

DAMPER SCHEDULE										
MARK	FUNCTION	TYPE	MAX VELOCITY (FPM)	C.F.M.	MAX S.P. (IN W.C.)	FREE AREA (SQ FT)	HEIGHT (IN)	WIDTH (IN)	DEPTH (IN)	REMARKS
MOD-1B	AHU-1 RETURN AIR	OPPOSED BLADE	*	1,425	0.05	*	*	*	*	
MOD-2A	AHU-2 OUTSIDE AIR	OPPOSED BLADE	*	350	0.05	*	*	*	*	
MOD-2B	AHU-2 RETURN AIR	OPPOSED BLADE	*	1,075	0.05	*	*	*	*	

* DENOTES VALUES TO BE DETERMINED BY CONTRACTOR.

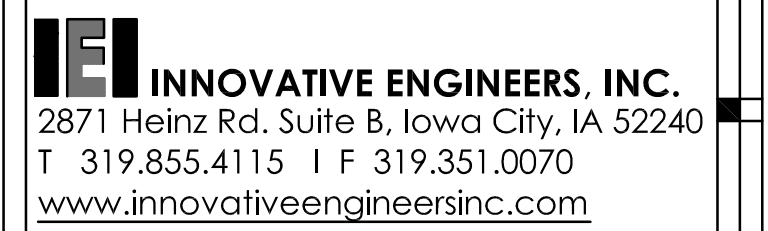
GRILLE AND DIFFUSER SCHEDULE										
MARK	DESCRIPTION	FACE SIZE	NECK SIZE	AIR PATTERN	C.F.M.	S.P. (WATER)	THROW (FEET)	NOISE LEVEL (NC)	REMARKS	
1	DUCT MOUNTED GRILLE	12"x8"	12"x8"	2-WAY	50	0.03	-	<25		
2	WALL MOUNTED GRILLE (EXISTING)	20"x12"	10"Ø	2-WAY	400	0.03	-	<25	EXISTING	
3	WALL MOUNTED GRILLE (EXISTING)	20"x12"	14"Ø	2-WAY	750	0.03	-	<25	EXISTING	
4	TITUS OMNI	12"x12"	4"Ø	4-WAY	50	0.08	2-2-5	12	WHITE FINISH	
5	TITUS OMNI	12"x12"	4"Ø	4-WAY	75	0.13	2-3-6	21	WHITE FINISH	
6	TITUS OMNI	12"x12"	6"Ø	4-WAY	175	0.25	5-7-14	24	WHITE FINISH	
7	TITUS OMNI	24"x24"	6"Ø	4-WAY	200	0.10	3-4-8	21	WHITE FINISH	
8	TITUS OMNI	24"x24"	8"Ø	4-WAY	250	0.06	3-5-10	12	WHITE FINISH	
9	TITUS OMNI	24"x24"	8"Ø	4-WAY	300	0.09	4-6-12	21	WHITE FINISH	
10	TITUS OMNI	24"x24"	10"Ø	4-WAY	400	0.08	5-7-13	15	WHITE FINISH	

ATTIC ROOF POWER VENTILATOR SCHEDULE										
QTY	FUNCTION	TYPE	C.F.M. (EACH)	VOLTS PHASE	HP	FLA	OPENING (IN)	BLADE DIA (IN)	MANUFACTURER MODEL	REMARKS
2	ATTIC	POWER VENTILATOR	850	115 / 1	1/15	1.1	16" Ø	14" Ø	JETFAN 707	INCLUDE SNAP ACTION THERMOSTAT INCLUDE FIRESTAT

Architect:



Consultant:



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Project :

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Community Center

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Iowa City, Iowa 52246

Project number: 13.04

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Date	Description
2013.04.17	OUT FOR BID

Sheet Title:

**MECHANICAL
SINGLE LINE DIAGRAM
SCHEDULES**

Sheet Number:

M05

PLUMBING CONSTRUCTION NOTES:

1. CONTRACTOR IS ADVISED THAT ALL LOCATIONS ARE APPROXIMATE. CONTRACTOR SHALL VERIFY THE EXISTING CONDITIONS AT PROJECT SITE BEFORE SUBMITTING COST PROPOSAL.
2. PLUMBING WORK INCLUDES, BUT IS NOT LIMITED TO:
 - A. DOMESTIC WATER: REMOVE WASHER VALVE BOXES AND ASSOCIATED PIPING AS INDICATED ON DRAWINGS.
 - B. DOMESTIC WATER: INSTALL NEW WALL-MOUNTED UTILITY FAUCET, GRATING, AND ASSOCIATED PIPING AS INDICATED ON DRAWINGS.
 - C. DOMESTIC WATER: INSTALL NEW BACKFLOW PREVENTER.
 - D. DOMESTIC HOT WATER: REMOVE EXISTING WATER HEATER AND ASSOCIATED PIPING AS INDICATED ON DRAWINGS.
 - E. DOMESTIC HOT WATER: INSTALL NEW TANKLESS WATER HEATER AND ASSOCIATED PIPING AS INDICATED ON DRAWINGS.
 - F. NATURAL GAS: REMOVE EXISTING UNIT HEATER IN GARAGE AND ASSOCIATED NATURAL GAS PIPING INDICATED ON DRAWINGS.
 - G. NATURAL GAS: INSTALL FLEXIBLE PIPING TO NEW TANKLESS WATER HEATER AS INDICATED ON DRAWINGS.
 - H. VENTS AND DRAINS: REMOVE EXISTING DRAIN AND VENT IN HARL COMMONS AND INSTALL NEW DRAIN AND VENT PIPING
3. ALL WORK SHALL BE IN ACCORDANCE WITH FEDERAL, STATE, AND CITY CODES, ORDINANCES, AND STANDARDS.
4. CONTRACTOR SHALL PAY ALL PERMIT FEES, PLAN REVIEW FEES, LICENSE FEES, INSPECTIONS AND TAXES APPLICABLE AND INCLUDED BID.
5. CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIAL, EQUIPMENT AND TOOLS FOR COMPLETE INSTALLATION OF ALL WORK SHOWN ON PLANS AND/OR DESCRIBED HEREIN, INCLUDING ALL FIXTURES, DEVICES, CONTROLS AND APPURTENANCES REQUIRED TO SET NEW SYSTEMS INTO OPERATION.
6. AN ATTEMPT HAS BEEN MADE TO SHOW PIPING, FIXTURES, DUCTWORK, AND OUTLETS. THIS CONTRACTOR SHALL VISIT THE SITE TO VERIFY COMPONENTS, LOCATIONS AND SIZES SHOWN OR NOT SHOWN. ALL COMPONENTS NEED TO BE REMOVED IN THE DEMOLITION AREA UNLESS NOTED ON THE DRAWINGS.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR THEIR OWN DEMOLITION, REMOVAL, CAPPING, STORING, ABANDONING, DISCONNECTING, RELOCATING, AND RECONNECTION OF EXISTING EQUIPMENT AND MATERIAL.
 - A. REMOVE ANY PIPES PROTRUDING ABOVE FINISHED FLOOR OR THROUGH WALL AND CAP AND FINISH OVER WITH MATERIAL TO MATCH EXISTING.
 - B. REMOVE ALL FIXTURES, CARRIERS, SUPPLY & WASTE & VENT PIPING, STEAM, HEATING HOT WATER, HVAC SUPPLY, RETURN & EXHAUST AS NOTED. CAP AT NEAREST ACTIVE MAIN. SUPPLY & RETURN MAINS TO BE VALVED & CAPPED. VALVES AND CAP ALL CONTROL AIR LINES AT MAIN.
 - C. IN REMODELED/ALTERED AREAS ANY PIPING OR DUCTWORK PASSING THROUGH THE REMODELED AREAS TO SERVE (OR BEING SERVED FROM EXISTING ADJACENT, REMOTE, OR SURROUNDING AREA THAT ARE TO REMAIN) SHALL BE RETAINED AND KEPT OPERATIONAL AND SHALL BE REROUTED IN ALL CASES WHERE THEY INTERFERE WITH ANY NEW WORK OR USAGE TO BE ACCOMPLISHED IN THE REMODELED AREA.
 - D. PENETRATIONS THROUGH EXISTING WALLS AND FLOORS FORMERLY OCCUPIED BY REMOVED PIPING SHALL BE PATCHED TO MATCH EXISTING CONSTRUCTION.
 - E. ALL CUTTING, PATCHING, REPAIRING, REPLACEMENT AND REFINISHING SHALL MATCH EXISTING CONSTRUCTION AS NEARLY AS POSSIBLE.
8. CONTRACTOR SHALL VERIFY ALL MOUNTING, ALL ARRANGEMENTS, HEIGHTS AND LOCATIONS PRIOR TO ROUGH-IN. ANY MENTION OF SPECIFIC MOUNTING ARRANGEMENT, HEIGHT OR LOCATION SHALL NOT RELIEVE CONTRACTOR OF RESPONSIBILITY TO VERIFY SPECIFIC REQUIREMENT FURNISHED OR OTHER TRADES WORKING IN THE SAME AREA. NO ADDITIONS TO CONTRACT SUM WILL BE PERMITTED FOR ITEMS INSTALLED IN WRONG LOCATIONS, IN CONFLICT WITH OTHER WORK, ETC.
9. THESE DRAWINGS ARE NECESSARILY DIAGRAMMATIC IN NATURE. NOT ALL FITTINGS, OFFSETS, VENTS, OR DRAINS ARE SHOWN. CONTRACTOR SHALL VISIT SITE PRIOR TO BIDDING AND INCLUDE ALL FITTINGS, OFFSETS, VENTS, AND DRAINS AS REQUIRED TO PROVIDE COMPLETE AND FUNCTIONING SYSTEM.
10. SHOULD CONDITIONS NECESSITATE ANY REARRANGEMENTS, OR IF PIPING CAN BE RUN TO BETTER ADVANTAGE, PREPARE AND SUBMIT SHOP DRAWINGS SHOWING CHANGES BEFORE PROCEEDING WITH WORK. IF SUCH CHANGES ARE APPROVED BY ARCHITECT/ENGINEER, THEY SHALL BECOME A PART OF CONTRACT AFTER THEIR APPROVAL.
11. UPON COMPLETION OF WORK, CONTRACTOR SHALL REVIEW AND CHECK ENTIRE PORTION OF WORK, CLEAN EQUIPMENT AND DEVICES, REMOVE SURPLUS MATERIALS AND RUBBISH FROM OWNER'S PROPERTY, LEAVING WORK IN NEAT AND CLEAN ORDER; AND IN COMPLETE WORKING CONDITION. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL OF ANY CARTON, DEBRIS, ETC. FOR EQUIPMENT INSTALLED BY CONTRACTOR INCLUDING EQUIPMENT FURNISHED BY OWNER OR EQUIPMENT FURNISHED BY OTHERS.
12. PATCHING SHALL MATCH EXISTING FINISHES AND CONSTRUCTION TO THE GREATEST POSSIBLE EXTENT.
13. IN AREAS WITH UNFINISHED CEILINGS, PIPING SHALL BE RUN ALONG THE UNDERSIDE OF SUPPORT JOIST OR STRUCTURAL MEMBERS. PIPING SHOULD BE GENERALLY HIDDEN AS MUCH AS POSSIBLE. THEREFORE, IT SHOULD BE LOCATED ABOVE STRUCTURAL MEMBERS OR ALONG TOP SIDE OF STRUCTURAL FLANGES.
14. ENGINEER RESERVES RIGHT TO CHANGE LOCATION OF ALL EQUIPMENT, DUCTWORK, PIPING AND CONDUIT FIVE FEET IN ANY DIRECTION WITHOUT THESE CHANGES BEING MADE SUBJECT OF AN EXTRA CHARGE PROVIDED SUCH CHANGES ARE MADE BEFORE FINAL INSTALLATION.

PLUMBING SYMBOL LIST

SYMBOL	DESCRIPTION
	NEW CONNECTION TO EXISTING BEGINNING/END POINT
	ELBOW TURNED UP
	ELBOW TURNED DOWN
	TEE - TOP OUTLET
	TEE - BOTTOM OUTLET
	VACUUM OUTLET
	COMPRESSED AIR OUTLET
	BALANCING VALVE
	GATE VALVE
	BALL VALVE
	CHECK VALVE
	BACKFLOW PREVENTER
	HOSE BIBB
	FLOOR DRAIN, DESIGNATION NUMBER & SIZE
	ROOF DRAIN, DESIGNATION NUMBER & SIZE
	CLEANOUT - FLOOR OR YARD
	CLEANOUT - PLUG TYPE
	CLEANOUT - WALL
	OPEN SITE DRAIN
	FIXTURE DESIGNATION & NUMBER
	FLOW

PLUMBING DESIGNATIONS

DESIG.	DESCRIPTION	PIPE MATERIAL
COND	CONDENSATE	PVC
CW	DOMESTIC COLD WATER	COPPER, PEX
NG	NATURAL GAS	FLEX. SS CORRUGATED TUBING
HW	DOMESTIC HOT WATER	COPPER, PEX
HWR	DOMESTIC HOT WATER RECIRCULATION	COPPER, PEX
VENT	VENT	PVC

Architect:



Consultant:

IE INNOVATIVE ENGINEERS, INC.
 2871 Heinz Rd. Suite B, Iowa City, IA 52240
 T 319.855.4115 | F 319.351.0070
 www.innovativeengineersinc.com

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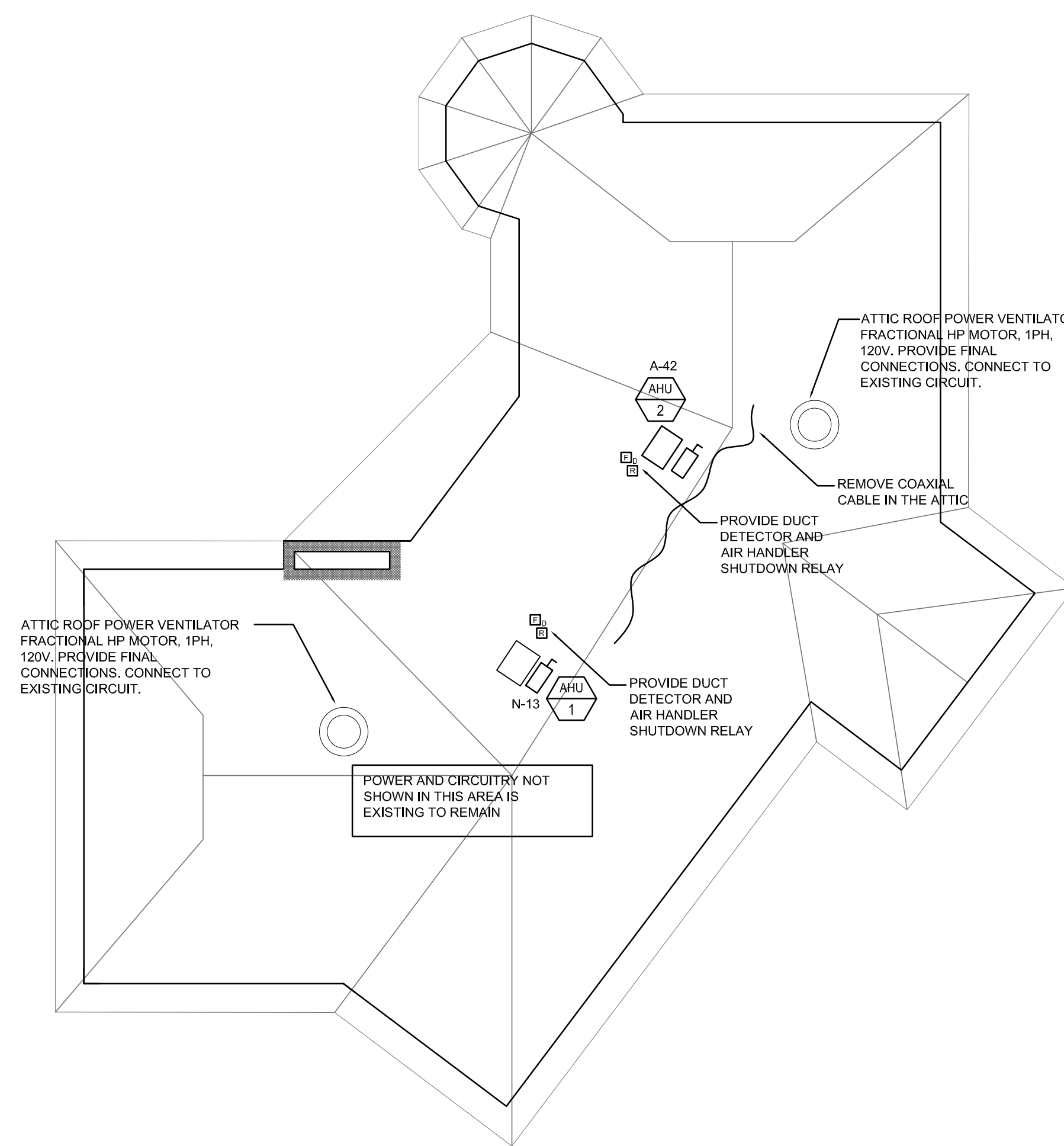
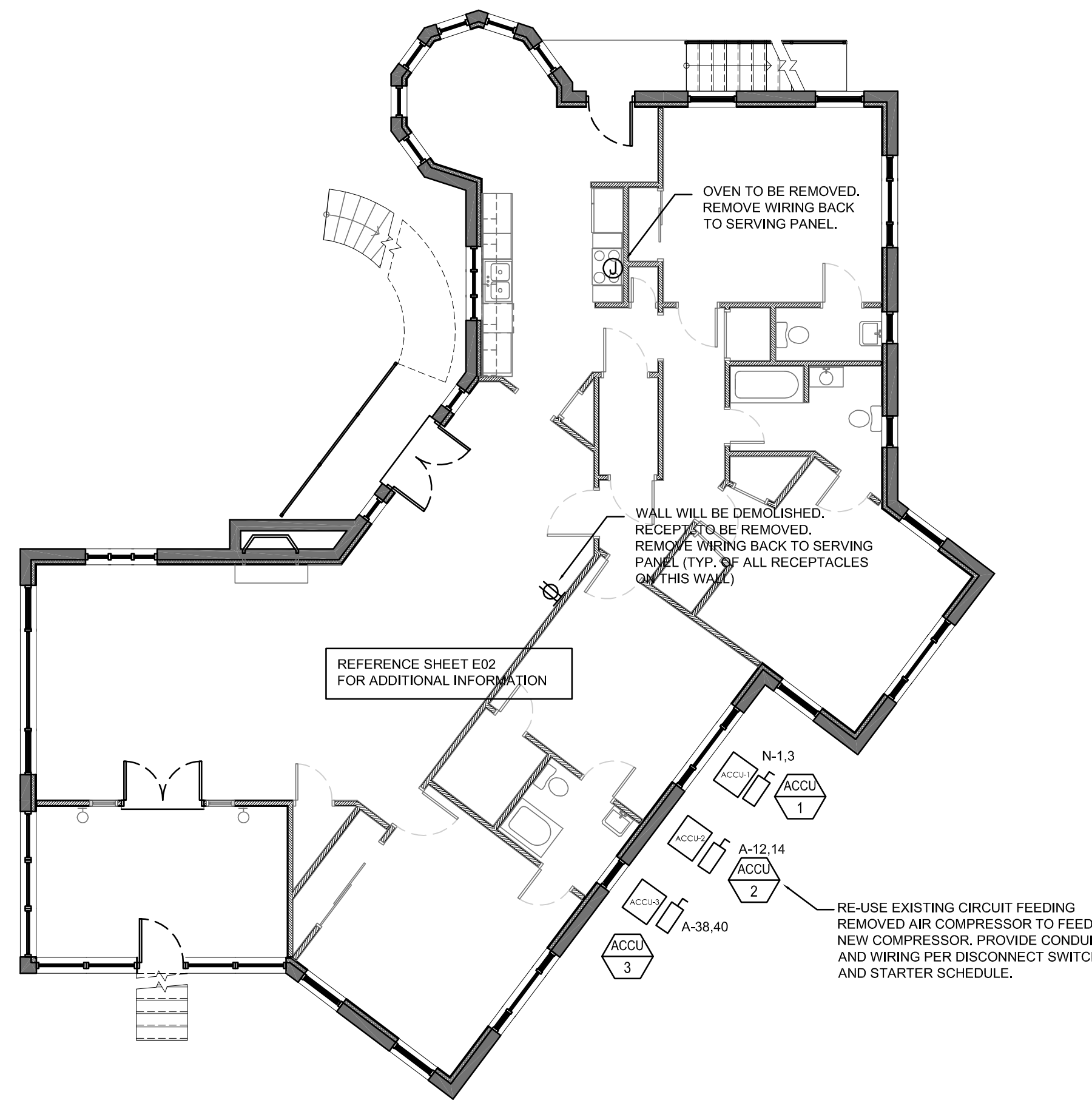
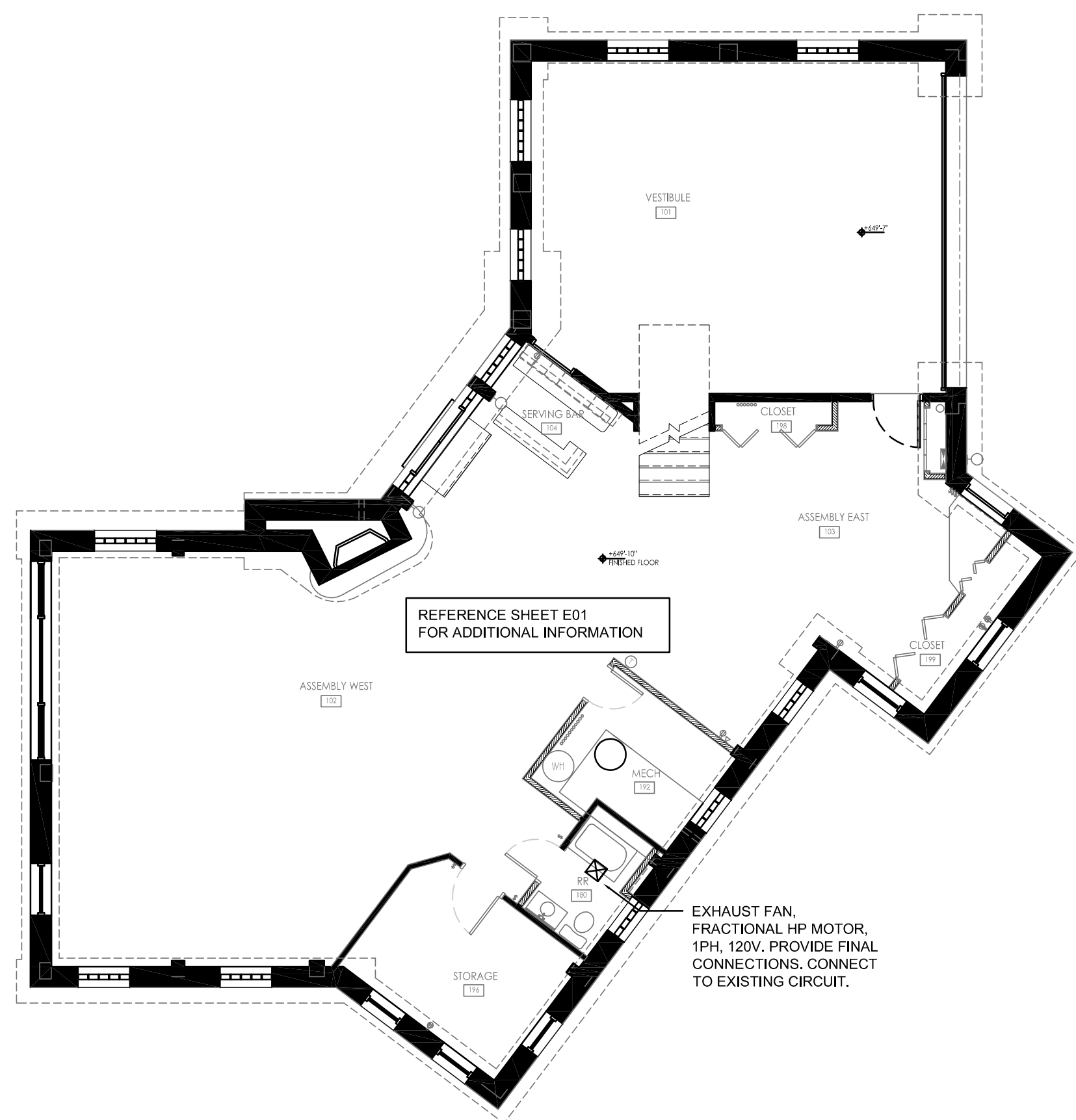
**PLUMBING
NOTES & LEGEND**

Sheet Number:

P00

FIXTURE CONNECTION SCHEDULE

ITEM #	DESCRIPTION	WASTE	TRAP	VENT	CW	HW	TW	FURNISHED BY	INSTALLED BY	FINAL CONNECTION	REMARKS
MBU-1	WALL-MOUNT UTILITY FAUCET	FLOOR DRAIN	-	-	1/2"	1/2"		PLUMBING CONTRACTOR	PLUMBING CONTRACTOR	PLUMBING CONTRACTOR	MOUNTING HEIGHT = 2'-8"



A
E00 ELECTRICAL - BASEMENT PLAN
SCALE 1/8" = 1' - 0"
0' 5' 10' 20' 30'

B
E00 ELECTRICAL - UPPER LEVEL PLAN
SCALE 1/8" = 1' - 0"
0' 5' 10' 20' 30'

C
E00 ELECTRICAL - ATTIC PLAN
SCALE 1/8" = 1' - 0"
0' 5' 10' 20' 30'

GENERAL ELECTRICAL DEMOLITION NOTES:

1. E.C. SHALL VERIFY THE EXISTING CONDITIONS AT THE PROJECT SITE BEFORE SUBMITTING COST PROPOSAL.
2. THE E.C. SHALL VISIT THE SITE TO VERIFY DEVICES AND EQUIPMENT NOT SHOWN.
3. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR HIS OWN DEMOLITION REMOVAL, CAPPING, ABANDONING, DISCONNECTING OF EXISTING ELECTRICAL EQUIPMENT AND MATERIAL. ALL CUTTING, PATCHING, REPAIRING, REPLACEMENT AND REFINISHING, SHALL MATCH THE EXISTING CONSTRUCTION AS NEARLY AS POSSIBLE.
4. THE OWNER SHALL HAVE THE FIRST CHOICE TO ACCEPT EXISTING DEVICES AND EQUIPMENT BEING REMOVED AND NOT REUSED.

GENERAL POWER NOTES:

1. ALL BRANCH CIRCUITS SHALL HAVE GROUND CONDUCTORS.
2. PROVIDE SEPARATE NEUTRAL FOR EACH BRANCH CIRCUIT PHASE CONDUCTOR.
3. MAXIMUM OF THREE (3) CURRENT CARRYING CONDUCTORS TO A CONDUIT.
4. HOMERUN CIRCUITS SHALL CONTAIN NO MORE THAN THREE (3) HOT CONDUCTORS PER CONDUIT.

GENERAL LIGHTING NOTES:

1. TYPICAL LIGHTING HOMERUN CIRCUITS SHALL BE #12 PHASE WIRE, #12 NEUTRAL WIRE, #12 GND, 3/4"Ø. FOR 120V, 20A HOMERUN CIRCUITS THAT EXCEED 100 FOOT FEEDER LENGTH, OVERSIZE CONDUCTOR TO #10 DUE TO VOLTAGE DROP.
2. 120V LIGHTING HOMERUN CIRCUITS SHALL CONTAIN NO MORE THAN (3) HOT OR SWITCHED CONDUCTORS PER CONDUIT.
3. EXIT SIGNS THAT ARE NOT WALL MOUNTED SHALL BE PENDENT MOUNTED, CONTRACTOR SHALL SUPPLY WALL MOUNT, CEILING MOUNT, OR PENDANT MOUNT ACCESSORIES AS REQUIRED.
4. EXIT LIGHTS AND EMERGENCY LIGHTS TO BE FED FROM UNSWITCHED LIGHTING CIRCUIT.
5. COORDINATE EXACT LOCATION OF LIGHT SWITCHES WITH OWNER REPRESENTATIVE.

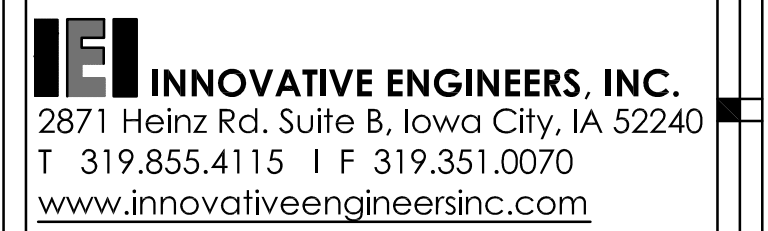
GENERAL FIRE ALARM NOTES:

1. ALL FIRE ALARM CABLE ASSEMBLIES, INCLUDING THOSE INSTALLED IN RACEWAY, SHALL BE PLENUM RATED.
2. ALL FIRE ALARM WIRING SHALL BE INSTALLED IN RACEWAY.
3. THE FIRE ALARM RACEWAY SYSTEM SHALL BE AN ENTIRELY NEW RACEWAY SYSTEM. EXISTING RACEWAY SHALL NOT BE RE-USED FOR THE NEW SYSTEM.

Architect:



Consultant:



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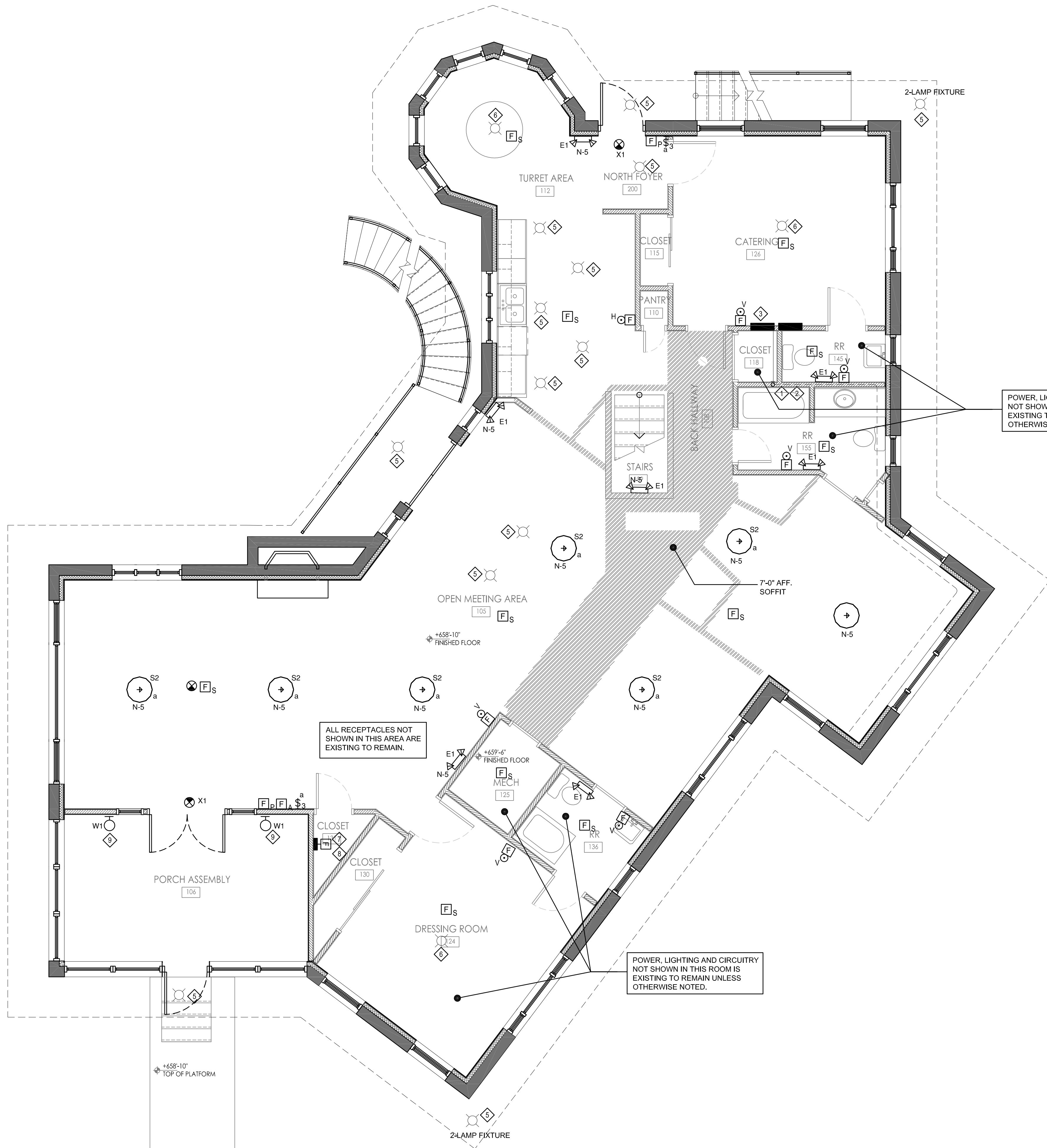
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2013.04.17	OUT FOR BID

Sheet Title:

**ELECTRICAL
PLANS & GENERAL
NOTES**

Sheet Number:

E00



- KEYED ELECTRICAL SYSTEMS NOTES:**
- 1 REFERENCE LOWER LEVEL FLOOR PLAN FOR CONDUIT CONTINUATION.
 - 2 REFERENCE ONE-LINE DIAGRAM FOR ADDITIONAL INFORMATION.
 - 3 RELOCATED PANEL-A, 120/240V, 1PH, 3W, 200A. EXTEND ALL EXISTING CIRCUITRY FROM SPLICE BOX ON FLOOR BELOW TO NEW PANEL LOCATION. RELOCATED PANEL SHALL BE FLUSH WITH WALL.
 - 4 NEW PANEL-N, 120/240V, 1PH, 3W, 60A.
 - 5 EXISTING LIGHT FIXTURE TO REMAIN. RETROFIT WITH PHILIPS LAMP 13PAR30L/END/F36-3000-DIM.
 - 6 CONTRACTOR TO INSTALL FIXTURE FURNISHED BY OWNER. CONNECT TO EXISTING J-BOX AND CIRCUITRY.
 - 7 ADDRESSABLE FIRE ALARM PANEL SIMPLEX 4010. PANEL SHALL BE EQUIPPED WITH DACT FOR COMMUNICATION.
 - 8 PROVIDE (2) PHONE LINES FOR FIRE ALARM PANEL.
 - 9 REPLACE EXISTING FIXTURE WITH NEW FIXTURE TYPE W1. CONNECT TO EXISTING LIGHTING CIRCUIT.

Architect:

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Sheet Title:

**ELECTRICAL
 UPPER LEVEL**

Sheet Number:

E02

A
E02 ELECTRICAL - UPPER LEVEL PLAN

SCALE 1/4"=1'-0"

LIGHTING FIXTURES	
SYMBOL	DESCRIPTION
F1	FIXTURE TYPE
23-1	CIRCUIT-RELAY
a	CONTROL DEVICE
	SURFACE/SUSPENDED MOUNTED FLUORESCENT STRIP OR LINEAR, NORMAL POWER
	SURFACE MOUNTED OR PENDANT FIXTURE, NORMAL POWER
	EXIT SIGN - FACES AND ARROWS AS SHOWN
	TRACK LIGHTING - HEADS AS SHOWN

RECEPTACLES	
SYMBOL	DESCRIPTION
	DUPLEX RECEPTACLE
	QUADRUPEX RECEPTACLE
	GROUND FAULT CIRCUIT INTERRUPTER
	WEATHER PROOF
	SIMPLEX SPECIAL RECEPTACLE

TELECOMMUNICATIONS SYSTEMS	
SYMBOL	DESCRIPTION
	DATA/TELEPHONE OUTLET ROUGH-IN, WALL MOUNTED
	TV OUTLET

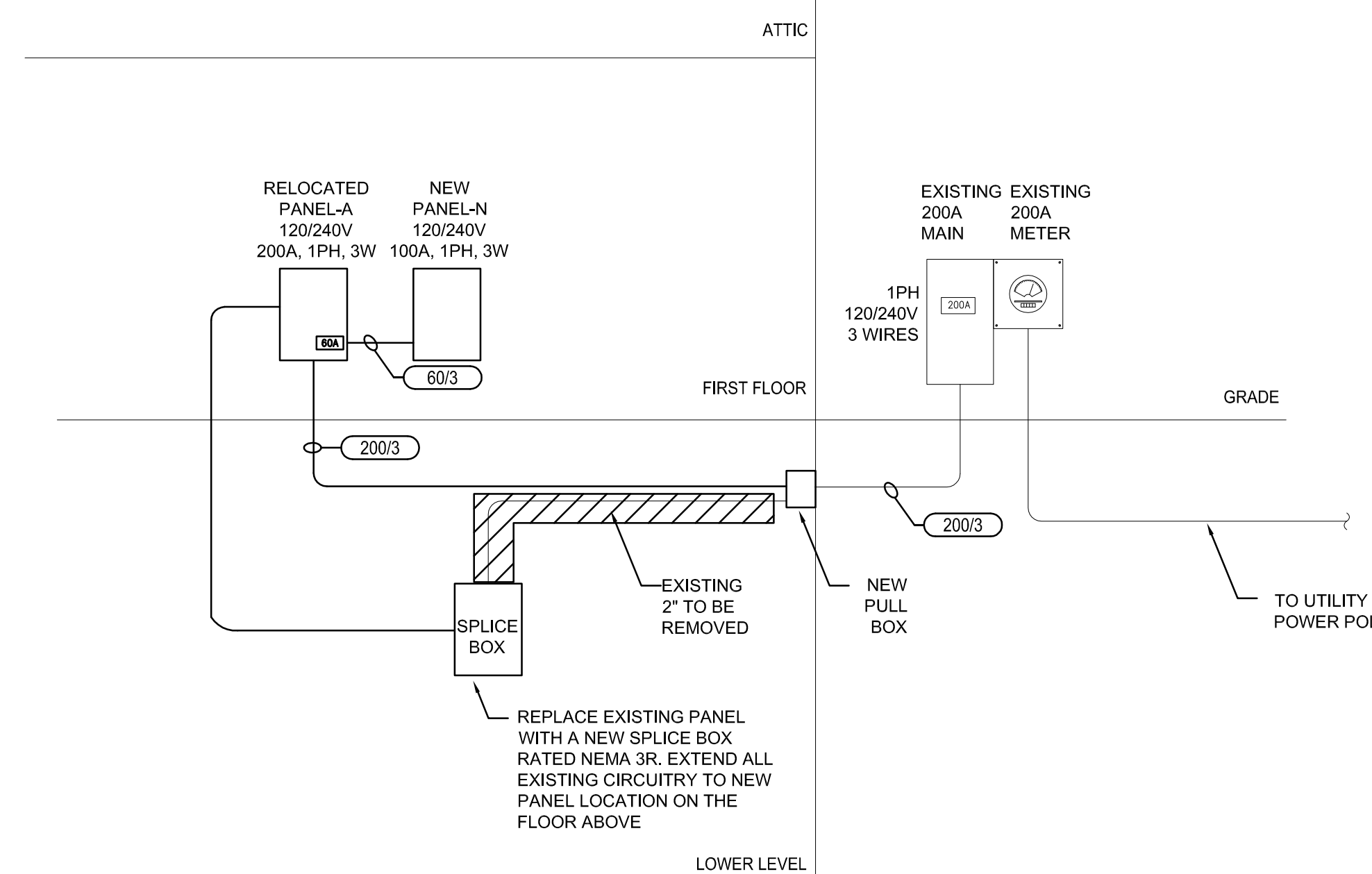
POWER SYSTEMS	
SYMBOL	DESCRIPTION
	DISTRIBUTION PANEL WITH DESIGNATION
	BRANCH PANEL WITH DESIGNATION
	MECHANICAL EQUIPMENT CONNECTION WITH DESIGNATION
	MOTOR WITH DESIGNATION
	DISCONNECT SWITCH
	JUNCTION BOX

LIGHTING CONTROLS	
SYMBOL	DESCRIPTION
	SINGLE POLE (LOWER CASE LETTER INDICATES SWITCH LEG)
	THREE WAY
	FOUR WAY
	SINGLE POLE TIMER SWITCH
	INFRARED SENSOR
	ULTRASONIC SENSOR
	DUAL TECHNOLOGY SENSOR
	DENOTES WALL MOUNTING

FIRE ALARM SYMBOLS	
SYMBOL	DESCRIPTION
	FIRE ALARM CONTROL PANEL
	AUTOMATIC SENSOR - HEAT DETECTOR
	MANUAL PULL STATION
	AUTOMATIC SENSOR - SMOKE DETECTOR
	VISUAL ALARM
	AUDIBLE/VISUAL ALARM - HORN STROBE
	ANNUNCIATOR PANEL



FEEDER SCHEDULE				
MARK	PHASE CONDUCTORS	NEUTRAL CONDUCTORS	GROUND CONDUCTORS	SETS & SIZE CONDUIT
200-3	2 #3/0	1 #3/0	1 #6	(1) 2"
60-3	2 #6	1 #6	1 #10	(1) 1"

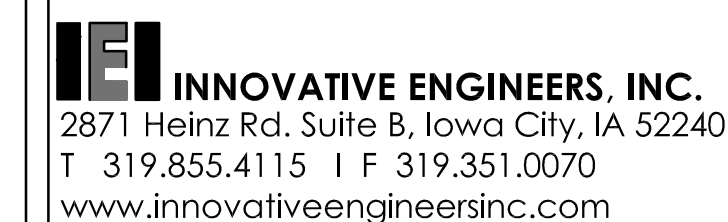


A **ELECTRICAL - ONE LINE DIAGRAM**
E03 SCALE = NTS

Architect:



Consultant:



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**ELECTRICAL
SYMBOLS & ONE-LINE**

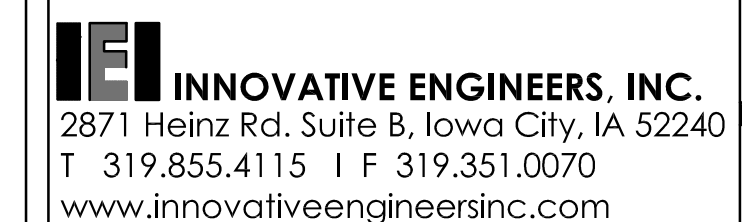
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E03

Architect:



Consultant:



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**ELECTRICAL
DETAILS & SCHEDULES**

Sheet Number:

E04

SPECIFICATION: SQUARE-D OR EQUAL										MAINS LUGS ONLY				
MAIN BUS RATING: 200 AMPS										LOCATION: 1ST FLR				
VOLTAGE: 120/240V, 1PH, 3WIRE										MOUNTING: FLUSH MOUNT				
										AIC - EXISTING				
AMPS	POLES	TOTAL VA	WIRE SIZE	GRD SIZE	DESCRIPTION	CIRC No.	CIRC No.	DESCRIPTION	GRD SIZE	WIRE SIZE	TOTAL VA	POLES	AMPS	
20	1	300	12	12	Existing load	1	2	Existing load	12	12	360	1	20	
20	1	500	12	12	Existing load	3	4	Existing load	12	12	300	1	20	
20	1	360	12	12	Existing load	5	6	Existing load	12	12	500	1	20	
15	1	360	12	12	Existing load	7	8	Existing load	12	12	400	1	20	
15	1	540	12	12	Existing load	9	10	Existing load	12	12	660	1	20	
15	1	720	12	12	Existing load	11	12	ACCU-2 (NEW)	10	8	3100	2	40	
15	1	900	12	12	Existing load	13	14	ACCU-2 (NEW)	10	8	3100	2	40	
15	1	600	12	12	Existing load	15	16	Existing load			200			
15	1	400	12	12	Existing load	17	18	Existing load	12	12	540	1	20	
15	1	400	12	12	Existing load	19	20	Existing load	12	12	720	1	20	
15	1	300	12	12	Existing load	21	22	Existing load	12	12	900	1	20	
15	1	200	12	12	Existing load	23	24	AHU-1 (NEW)	12	12	1200	1	20	
15	1	200	12	10	Existing load	25	26	Existing load	12	12	1200	1	20	
50	2	3600	8	10	Septic Pump (Existing)	27	28	Existing load	12	12	100	1	20	
50	2	3600	8	10	Septic Pump (Existing)	29	30	Existing load	12	12	100	1	20	
20	1	180	12	12	Existing load	31	32	Existing load	12	12	300	1	20	
20	1	180	12	12	Existing load	33	34	NEW SUB PANEL-N	6	6	5470	2	20	
20	1	180	12	12	Existing load	35	36	NEW SUB PANEL-N	6	6	5470	2	20	
20	1	180	12	12	Existing load	37	38	ACCU-3 (NEW)	10	8	3100	2	40	
20	1	180	12	12	Existing load	39	40	ACCU-3 (NEW)	10	8	3100	2	40	
20	1				Existing load	41	42	Space			0			
SUBTOTAL		13880	VA						SUBTOTAL		30820	VA		

* NON SIMULTANEOUS LOAD
VERIFY ALL EQUIPMENT LOAD AND BREAKER AND WIRE SIZES PRIOR TO INSTALLATIONS

TOTAL LOAD = 44,700

PANEL -A (RELOCATED)
DEMAND LOAD CALCULATIONS

TOTAL GENERAL CALCULATED LOAD	9600 VA		
RECEP. 1st 10,000 VA @ 100%	9,600 @ 100%	9,600 VA	
REST @ 40%	0 @ 40%	0 VA	
AIR CONDITIONERS @ 100%	34,140 @ 100%	34,140 VA	
		TOTAL LOAD 43,740 VA	
CURRENT PER PHASE	=	TOTAL LOAD (VA) / (240V)	
	=	182	AMPS

SPECIFICATION: SQUARE-D NODD OR EQUAL										MAINS LUGS ONLY				
MAIN BUS RATING: 100 AMPS										LOCATION: 1ST FLR				
VOLTAGE: 120/240V, 1PH, 3WIRE										MOUNTING: FLUSH MOUNT				
										AIC - 10,000 AMPS				
AMPS	POLES	TOTAL VA	WIRE SIZE	GRD SIZE	DESCRIPTION	CIRC No.	CIRC No.	DESCRIPTION	GRD SIZE	WIRE SIZE	TOTAL VA	POLES	AMPS	
50	2	4080	8	10	ACCU-1	1	2							
50	2	4080	8	10	ACCU-1	3	4							
20	1	1000	12	12	1ST FLR NEW LIGHTS	5	6							
20	1	180	12	12	FIRE ALARM CKT.	7	8							
20	2	800	10	10	SITE LIGHTING	9	10							
20	2	800	10	10	SITE LIGHTING	11	12							
20	1	1200	12	12	AHU-1	13	14							
						15	16							
						17	18							
						19	20							
SUBTOTAL		12140	VA						SUBTOTAL		0	VA		

* NON SIMULTANEOUS LOAD
VERIFY ALL EQUIPMENT LOAD AND BREAKER AND WIRE SIZES PRIOR TO INSTALLATIONS

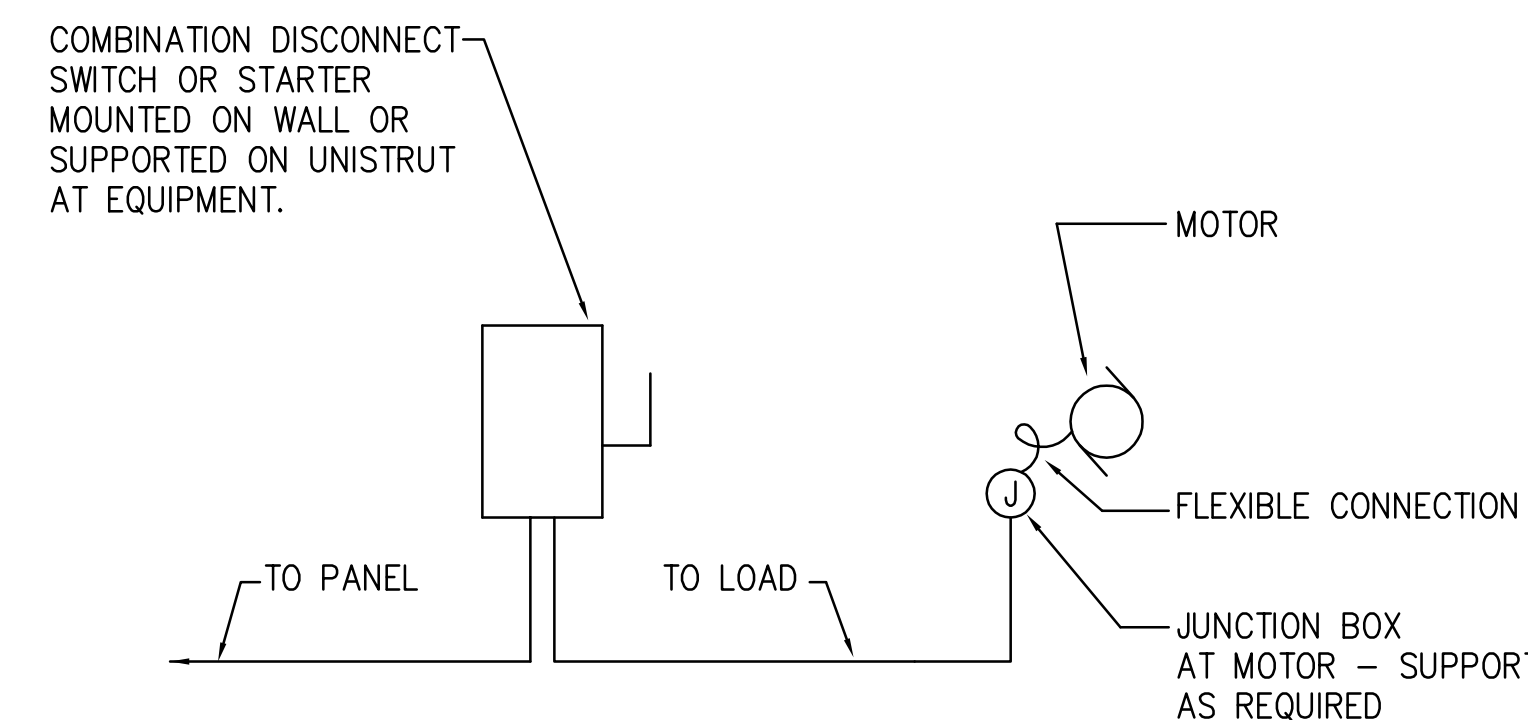
TOTAL LOAD = 12,140

SUB PANEL-N
DEMAND LOAD CALCULATIONS

TOTAL GENERAL CALCULATED LOAD	180 VA		
RECEP. 1st 10,000 VA @ 100%	180 @ 100%	180 VA	
REST @ 40%	0 @ 40%	0 VA	
AIR CONDITIONERS @ 100%	9,360 @ 100%	9,360 VA	
		TOTAL LOAD 9,540 VA	
CURRENT PER PHASE	=	TOTAL LOAD (VA) / (240V)	
	=	40	AMPS

LIGHTING FIXTURE SCHEDULE										
MARK	FIXTURE		VOLT.	LAMP		MOUNTING		MANUFACTURER		REMARKS
	TYPE	DIFFUSER		# & WATTS	TYPE	HT.	NAME	SERIES NO.		
S1	SURFACE CEILING MOUNT	MATTE WHITE ACRYLIC	120	4-F26W	CFL 41K		REFER TO PLANS	AVALON	AV1 23" SIZE	ARCHITECT TO SELECT FINISH BASEMENT FLR FIXTURES
S2	SURFACE CEILING MOUNT	MATTE WHITE ACRYLIC	120	4-F26W	CFL 41K	SUSPEND 24" STEM	REFER TO PLANS	AVALON	AV1 23" SIZE	ARCHITECT TO SELECT FINISH 1ST FLR FIXTURES
X1	SINGLE FACE EDGE LIT EXIT SIGN	N/A	120	N/A	LED	SURFACE	CEILG.	MCPHILBEN	ER44RLDU	RED PANEL COLOR, SINGLE FACE ALUMNUM FINISH
E1	EMERGENCY LIGHT	N/A	120	2-5W	MR11	SURFACE	WALL	MCPHILBEN	CAX6	
W1	WALL SCONCE	MATTE WHITE ACRYLIC	120	2-13W QD	CFL	SURFACE	WALL	HORIZON	HR1	ARCHITECT TO SELECT FINISH
T1	TRACK HEAD	N/A	120	12"	MR16 LED	TRACK	N/A	LBL	HB295	VERIFY LOW VOLTAGE HEAD SELECTION WITH ARCHITECT ARCHITECT TO SELECT FINISH LENGTH AS SHOWN ON DWGS. PROVIDE ALL ACCESSORIES NECESSARY FOR A COMPLETE SYSTEM
TRACK	TRACK MONORAIL	N/A	120	N/A	N/A	SUSPEND	N/A	LIGHTOLIER		

ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR TRIM TYPES. COORDINATE WITH REFLECTED CEILING PLANS



A
E04
EQUIPMENT WIRING - TYPICAL
SCALE = NTS