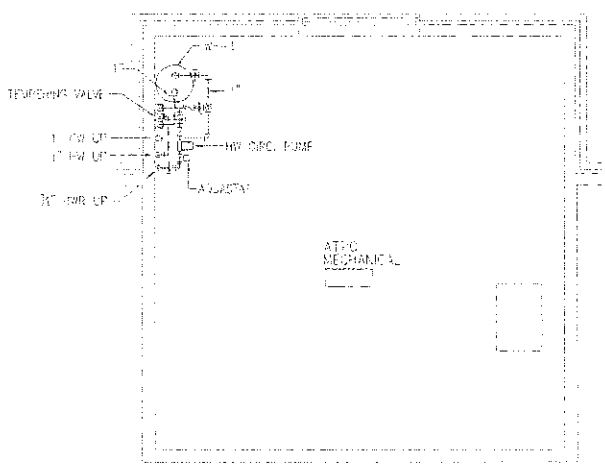
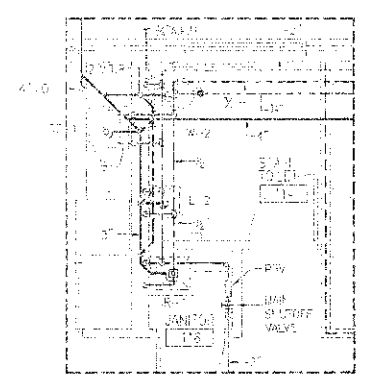


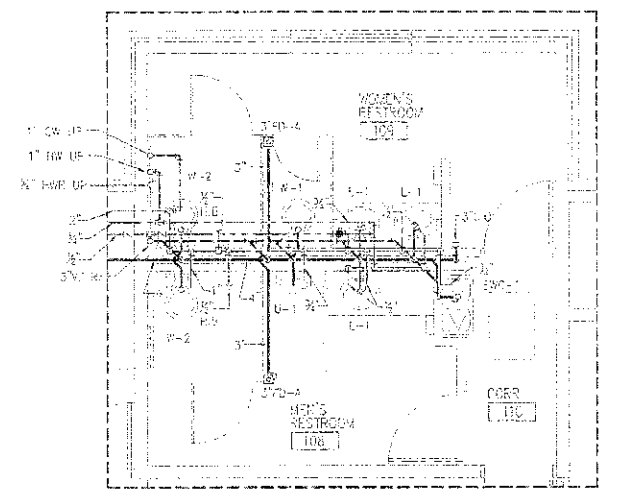
PLUMBING FLOOR PLAN
SCALE: 1/8" = 1' - 0"



PART PLAN OF ATTIC MECHANICAL
SCALE: 1/4" = 1' - 0"

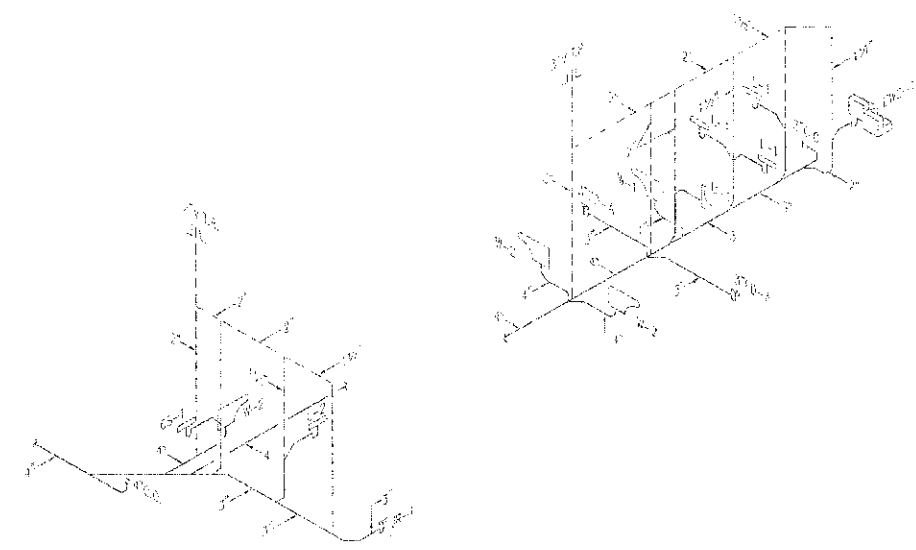


PART PLAN OF STAFF TOILET
SCALE: 1/4" = 1' - 0"

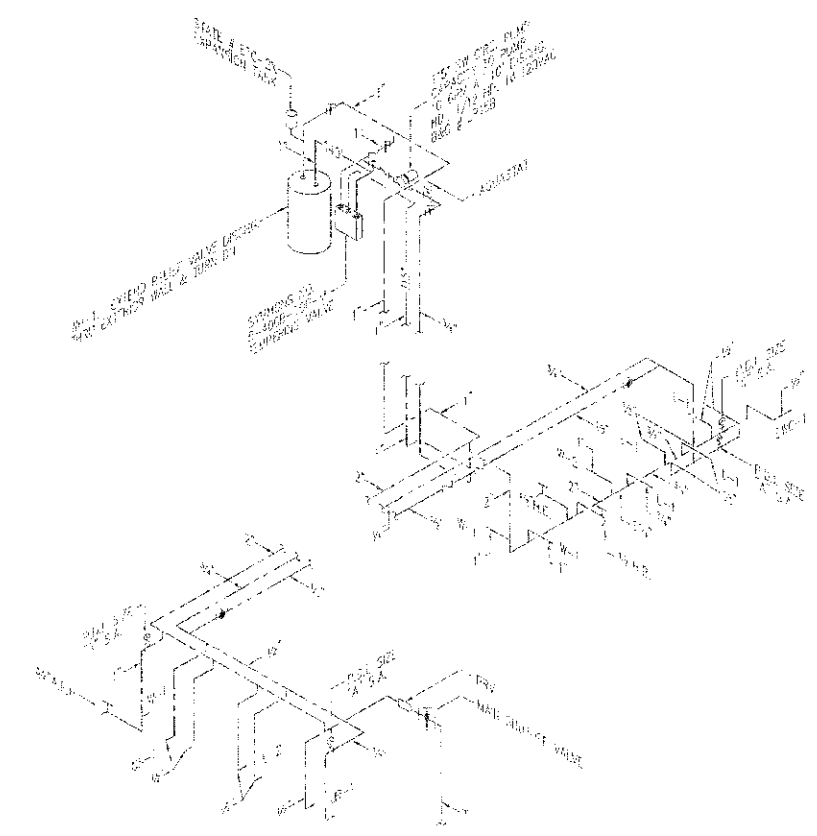


PART PLAN OF MEN'S & WOMEN'S TOILETS
SCALE: 1/4" = 1' - 0"

PLUMBING SYMBOLS LIST	
	COLD WATER PIPE
	1/2" HOT WATER PIPE
	1/2" HOT WATER PIPE
	HOT WATER RETURN PIPE
	VENT PIPE
	WASTE PIPE
	ELBOW UP
	ELBOW DOWN
	CLEAN OUT (C.O.)
	ANTI-SIPHON DEVICE (A.S.D.)
	HOSE BIB (H.B.)
	ELECTRIC WATER COLUMN (EWC-1)
	LAVATORY (L-1)
	WATER CLOSET (W-C)
	URINAL (U-1)
	COUNTER SINK (CS-1)
	JANITOR'S RECEPTACLE (J.R.)
	FLOOR DRAIN (F-D)
	GATE VALVE
	BALANCING COCK
	SHOCK ABSORBER (A.S.D.) (S.A.)
	CHECK VALVE



WASTE & VENT RISER DIAGRAM
NO SCALE



DOMESTIC WATER RISER DIAGRAM
NO SCALE

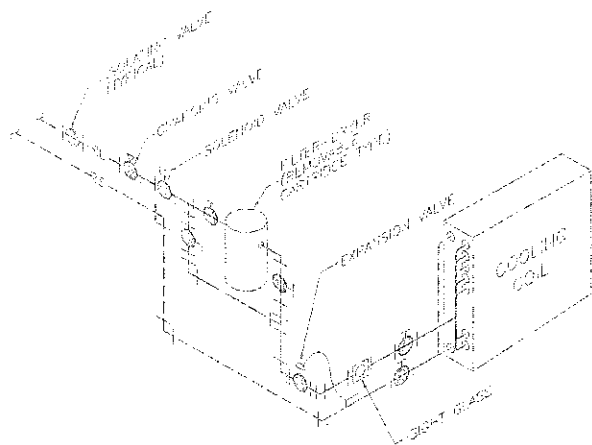


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TOBACCOVILLE VILLAGE HALL
NEW VILLAGE HALL
Tobaccoville, NC

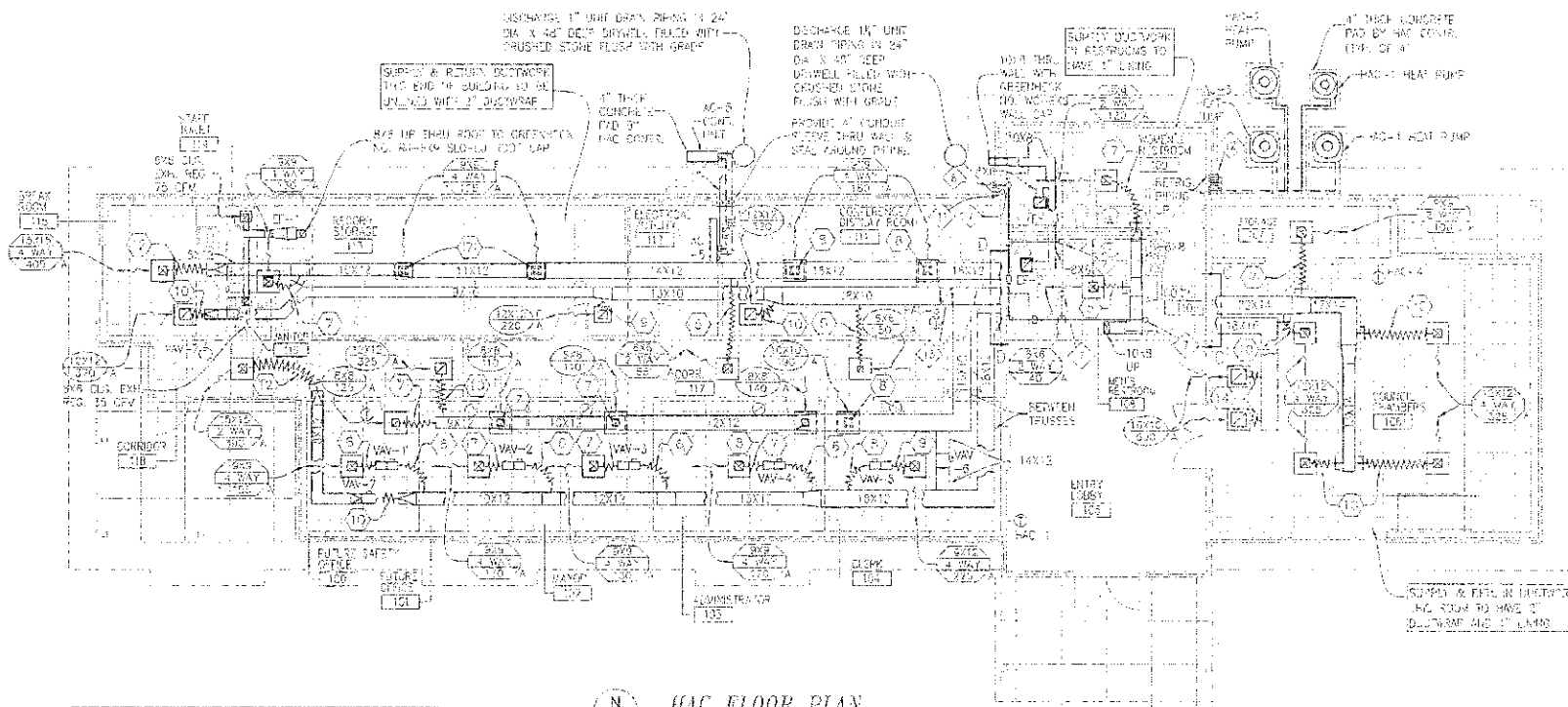
Architect: **ideline architecture, p.c.**
159 Beaufort Court, Suite 100
Fayetteville, NC 27106
Phone: 336-727-4400
Fax: 336-727-4403

DATE: 10/02/07
DRAWN: CS
CHECKED: CS



REFRIGERANT PIPING DIAGRAM
NO SCALE

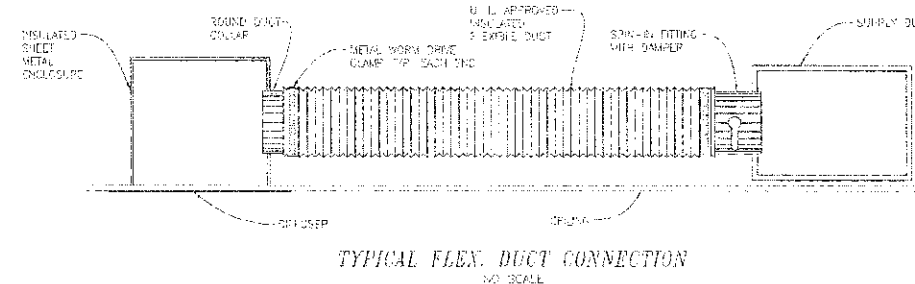
FAN SCHEDULE						
FAN NO.	AREA SERVED	FAN TYPE	CFM	S.F.	ELECTRICAL CHARACTERISTICS	REF. & SHEET NUMBER
EF-1	STAFF TOILET RM & JAN. RM	INDUSTRY CABINET FAN	170	1/8"	115/230VAC	GREENHECK NO. SP-A110
EF-2	MEN'S RESTROOM 106	CABINET FAN	52	1/8"	115/230VAC	GREENHECK NO. SP-A150
EF-3	WOMEN'S RESTROOM 108	CABINET FAN	52	1/8"	115/230VAC	GREENHECK NO. SP-A150



HAC FLOOR PLAN
SCALE: 1/8" = 1' - 0"

HEATING & AIR CONDITIONING SYMBOLS LIST

	SUPPLY DUCT
	RETURN DUCT
	FLEXIBLE DUCT
	CEILING DIFFUSER
	CEILING RETURN PANEL
	CEILING EXHAUST REGISTER
	WALL SUPPLY GRILL
	WALL RETURN GRILL
	SANITARY
	DRAIN PIPE
	REFRIGERANT SUCTION PIPE
	REFRIGERANT LIQUID PIPE
	ELBOW UP
	ELBOW DOWN
	THERMOSTAT



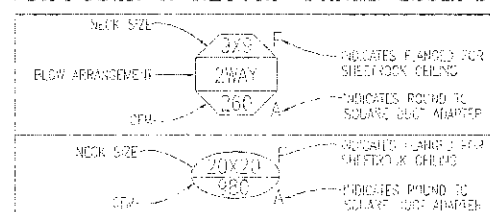
TYPICAL FLEX. DUCT CONNECTION
NO SCALE

- HAC INSTALLATION NOTES:
- CONNECT BY 1/2" HAC-1 PLENUM WITH ELECTRIC MOTOR OPERATED DAMPER
 - CONNECT 10X10 TO HAC-3 PLENUM WITH ELECTRIC MOTOR OPERATED DAMPER
 - CONNECT 10X6 TO HAC-2 PLENUM WITH ELECTRIC MOTOR OPERATED DAMPER
 - SUSPEND HAC-1 FROM STRUCTURE WITH THREADED RODS & CHIMNEY ISOLATORS
 - HAC UNIT MOUNTED ON ANGLES FROM CEILING
 - PROVIDE 1/2" DEEP SECONDARY DRAIN HAS UNDER UNIT WITH 1/2" DRAIN TO DISCHARGE AS SHOWN
 - 1/2" PAN DRAIN PIPING UP
 - DISCHARGE 1/2" PAN DRAIN PIPING THRU EXTERIOR WALL AND TURN DOWN
 - 1/2" PAN DRAIN PIPING DOWN
 - 1/2" UNIT DRAIN DOWN
 - 1/2" UNIT DRAIN UP
 - TURN PIPING THIS WALL 4" 1" PVC SLEEVES PER I.D.C. APPLICABLE PERMS
 - SLOPE 10X10 UP OVER 1/4"12

VAV BOX SCHEDULE

VAV NO.	AREA SERVED	CFM	FRAME (HxV) (FAC) SIZE
1	FUTURE SAFETY OFFICE 102	155	6
2	FUTURE OFFICE 101	30	4
3	WAV-1 102	130	6
4	ADMINISTRATOR 101	70	4
5	CLERK 104	215	8
6	HAC-2 UNIT BYPASS	280	12X12
7	BOBBING 106	350	10

DIFFUSER & RETURN PANEL LEGEND



FLEXIBLE DUCT LEGEND



MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT METHOD OF COMPLIANCE

Prescriptive X Energy Code Budget

Thermal Zone 9

Exterior design conditions:
winter dry bulb 16
summer dry bulb 84

Interior design conditions:
winter dry bulb 74
summer dry bulb 75
relative humidity 25 PERCENT

Building heating load 124,188 BTUH

Building cooling load 175,512 BTUH

Mechanical Conditioning Systems:

1. Type:
 - heating and cooling: X
 - cooling: X
 - load based on the mechanical system of this building: X
 - load based on the mechanical system of this building: X
 - load based on the mechanical system of this building: X

2. Control:
 - control: X
 - control: X
 - control: X

3. Equipment:
 - equipment: X
 - equipment: X
 - equipment: X

4. Design:
 - design: X
 - design: X
 - design: X

5. Compliance:
 - compliance: X
 - compliance: X
 - compliance: X

6. Statement:
 - statement: X
 - statement: X
 - statement: X

7. Signature:
 - signature: X
 - signature: X
 - signature: X

8. Date:
 - date: X
 - date: X
 - date: X

9. Drawn:
 - drawn: X
 - drawn: X
 - drawn: X

10. Scale:
 - scale: X
 - scale: X
 - scale: X

11. Notes:
 - notes: X
 - notes: X
 - notes: X

12. Comments:
 - comments: X
 - comments: X
 - comments: X

13. Revision:
 - revision: X
 - revision: X
 - revision: X

14. Approval:
 - approval: X
 - approval: X
 - approval: X

15. Seal:
 - seal: X
 - seal: X
 - seal: X

16. Title:
 - title: X
 - title: X
 - title: X

17. Project:
 - project: X
 - project: X
 - project: X

18. Location:
 - location: X
 - location: X
 - location: X

19. Client:
 - client: X
 - client: X
 - client: X

20. Contact:
 - contact: X
 - contact: X
 - contact: X

TOBACCOVILLE VILLAGE HALL
NEW VILLAGE HALL
Tobaccoville, NC

WILLIAM G. ROBINSON, JR.
CONSULTING ENGINEER

SEAL

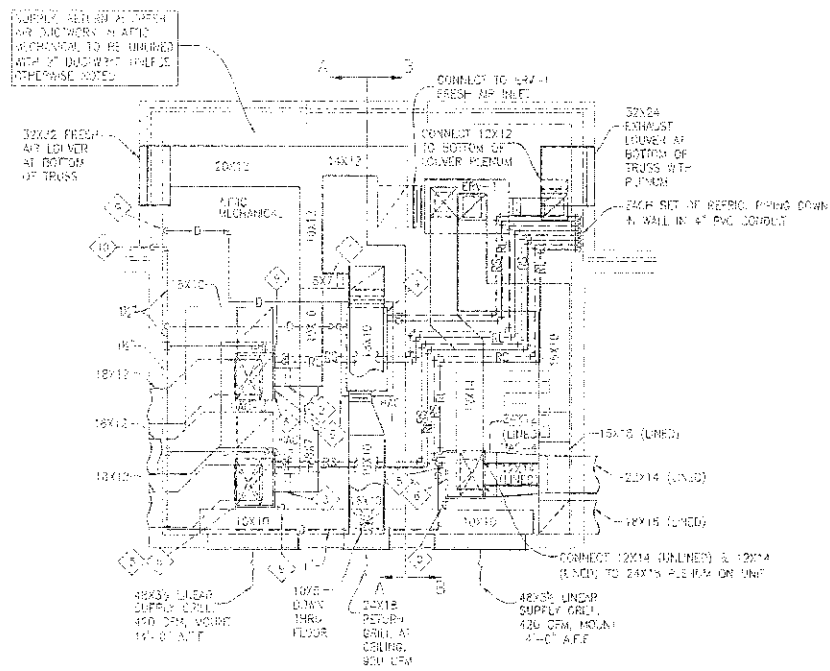
WILLIAM G. ROBINSON, JR.
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(704) 765-8766

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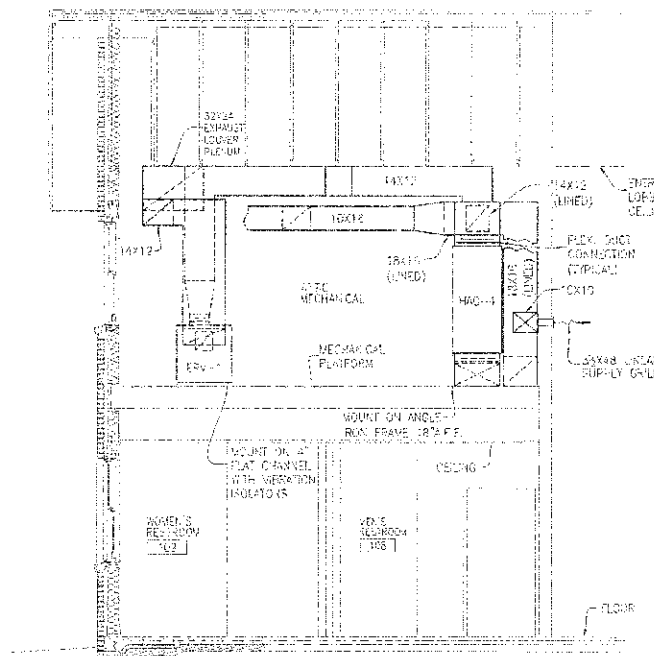
REV. 1
REV. 2
REV. 3
REV. 4
REV. 5
REV. 6
REV. 7
REV. 8
REV. 9
REV. 10
REV. 11
REV. 12
REV. 13
REV. 14
REV. 15
REV. 16
REV. 17
REV. 18
REV. 19
REV. 20

DATE: April 22, 2007
DRAWN: RB
SCALE: 1/8" = 1' - 0"

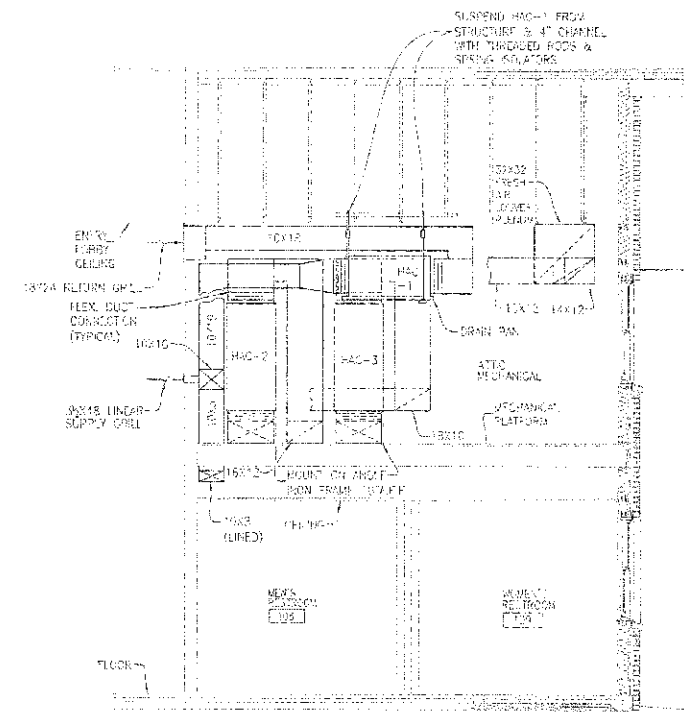
HAC-1



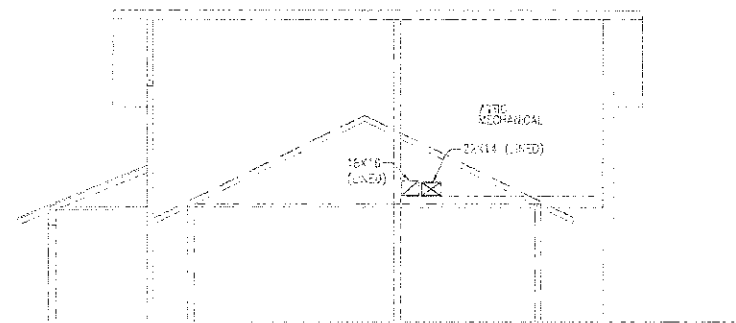
PART PLAN OF ATTIC MECHANICAL SPACE
SCALE: 1/4" = 1' - 0"



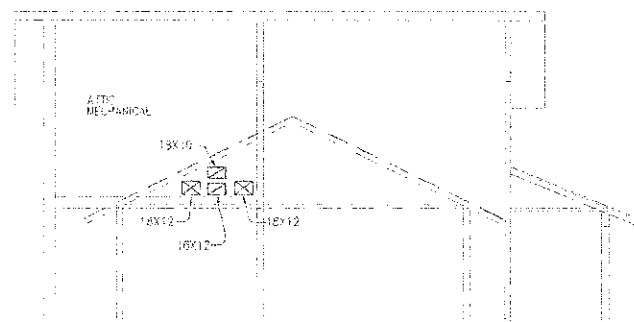
HAC SECTION B-B
SCALE: 1/4" = 1' - 0"



HAC SECTION A-A
SCALE: 1/4" = 1' - 0"



HAC SECTION C-C
SCALE: 1/8" = 1' - 0"



HAC SECTION D-D
SCALE: 1/8" = 1' - 0"

ENERGY RECOVERY VENTILATOR SCHEDULE																						
UNIT NO.	UNITS SERVED	COLLECTOR	SEASON	SUPPLY				EXHAUST				EFFICIENCY				MANUFACTURER & MODEL NO.						
				TEMP	DELT	TA	WB	TEMP	DELT	TA	WB	ENT	ESP	HRP	ESP		HRP					
ERV-1	HAC-1	900	WINTER	55.0	22.0	40.0	57.0	75.0	62.0	30.0	75.0	62.0	30.0	75.0	62.0	30.0	3/4"	3/4"	3/4"	3/4"	2420SWAC	SEMCOE NO. EV-1000
			WINTER	18.0	15.0	55.0	24.0	75.0	62.0	30.0	75.0	62.0	30.0	75.0	62.0	30.0	3/4"	3/4"	3/4"	3/4"		

* VERIFY ICF REQUIREMENTS WITH UNIT MFG

HEATING & AIR CONDITIONING UNIT SCHEDULE															
UNIT NO.	AREA SERVED	TYPE SYSTEM	HSA TONS	CFM	CR	SEER	SEER NET	FAN ELEC. CAPACITY	HE COOLING CAPACITY	HE HEATING CAPACITY	AVG HFC BTU	HEAT. ELEC. CAPACITY	LT	SPRINT AF	MANUFACTURER & MODEL NO.
HAC-1	ENTRY ENTRY RES. MEN'S RESTROOM	SPUT SYSTEM HEAT PUMP	2 1/2	1450	0.5	1/2	1420SWAC	27,000	25,000	11.5A	3600WAC	130	240	48"	FRAME NO. 270630401 HEAT PUMP WITH NO. 270630401 AIR HANDLER
HAC-2	GL. OFF. 101, 102, 103, 104 & 105	SPUT SYSTEM HEAT PUMP	3	1200	0.6	1/2	1420SWAC	33,000	32,000	11.5B	3600WAC	130	240	48"	FRAME NO. 270630401 HEAT PUMP WITH NO. 270630401 AIR HANDLER
HAC-3	GL. OFF. 101, 102, 103, 104 & 105	SPUT SYSTEM HEAT PUMP	3	1200	0.6	1/2	1420SWAC	33,000	32,000	11.5B	3600WAC	130	240	48"	FRAME NO. 270630401 HEAT PUMP WITH NO. 270630401 AIR HANDLER
HAC-4	GL. OFF. 101, 102, 103, 104 & 105	SPUT SYSTEM HEAT PUMP	3	1200	0.6	1/2	1420SWAC	33,000	32,000	11.5B	3600WAC	130	240	48"	FRAME NO. 270630401 HEAT PUMP WITH NO. 270630401 AIR HANDLER
HAC-5	ELECTRICAL / 101, 102, 103, 104 & 105	6. TON SPUT SYSTEM AC	6	1400	0.5	1/2	1420SWAC	12,000	---	---	---	---	---	---	4.5 TON SPUT SYSTEM & 101, 102, 103, 104 & 105

-HEATING/COOLING UNIT TO BE PROVIDED WITH SOLID VALVE, EXPANSION VALVE, CAPSULE VALVES, SHUT VALVES, & FILTER-DRIER WITH CAPSULE VALVES
 -HAC CONTRACTOR TO FURNISH JUNCTION SWITCH FOR HIS EQUIPMENT FOR ELECTRICAL SPECIFICATIONS
 -ALL SUPPLY, RETURN, AND FRESH AIR DUCTWORK DIMENSIONS SHOWN UNLESS OTHERWISE NOTED
 -NO-S TO HAVE LOW AMBIENT COILS

- HAC INSTALLATION NOTES:
- CONNECT GAS TO HAC-1 P-FLAN WITH SELECTING MOTOR OPERATED DAMPER
 - CONNECT GAS TO HAC-2 P-FLAN WITH SELECTING MOTOR OPERATED DAMPER
 - CONNECT GAS TO HAC-3 P-FLAN WITH SELECTING MOTOR OPERATED DAMPER
 - SHIELD HAC-1 EXHAUST THROUGH WITH TRAP/FLUE ROSS & SPRING ISOLATOR
 - HAC UNIT MOUNTED ON ANGLE IRON FRAME
 - PROVIDE 1/2" DIA. SECONDARY DRAIN FOR EACH UNIT WITH 1/2" DRAIN TO WASTEWATER AS SHOWN
 - 1" AIR DRAIN FROM UP
 - OPERATED BY PAN DAMP RING THRU EXTERIOR WALL AND TURN DOWN
 - 1" AIR DRAIN FROM DOWN
 - 1" AIR DRAIN UP
 - TURN DOWN WITH 1/2" DIA. AIR DRAIN SLEEVES SEALED AROUND PIPING
 - SHIELD EXHAUST UP OVER 18X12

Ex. 316-722-402

316-722-4117

REVISIONS

TOBACCOVILLE VILLAGE HALL
NEW VILLAGE HALL
Tobaccoville, NC

DATE: April 05, 2007
DRAWN: [Signature]

SHEET: HAC-2



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