HVAC NOTES:

1. THE ENGINEER CERTIFIES THAT TO THE BEST OF HIS KNOWLEDGE, ALL WORK DEPICTED IS IN ACCORDANCE WITH THE FLORIDA BUILDING CODE. INSTALLATION SHALL BE IN ACCORDANCE WITH STANDARDS AS SETFORTH THEREIN.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL EQUIPMENT DESIGN REQUIREMENTS (I.E. VOLTAGE, WATER, DRAINS,GAS CONNECTIONS, ETC.) WHEN REQUIRED FOR THE CORRECT/APPROVED OPERATION. THE EQUIPMENT SHALL BE FURNISHED WITH ALL NECESSARY ACCESSORIES WHETHER CONSIDERED OPTIONAL OR STANDARD BY THE MANUFACTURER. EQUIPMENT SHALL NOT BE ORDERED BASE ON MANUFACTURERS' MODEL NUMBERS.
3. ALL EQUIPMENT AND MATERIALS SHALL BE NEW, FREE FROM DEFECTS AND WITH MANUFACTURER'S WARRANTY.
4. AIR CONDITIONING DUCTWORK CONCEALED ABOVE CEILINGS SHALL BE OF 1-1/2" THICK CLASS 1, U.L. 181 LISTED FIBERGLASS DUCT BOARD.
5. FLEXIBLE DUCTWORK MAY BE USED FOR BRANCHES TO DIFFUSERS AS INDICATED ON DRAWINGS. FLEXIBLE DUCTS SHALL BE U.L.181 LISTED, WITH SPIRAL STEEL INTERNAL REINFORCING,1-1/2" FIBERGLASS INSULATION AND POLYETHYLENE JACKET.FABRICATED IN ACCORDANCE WITH S.M.A.C.N.A. STANDARDS.
6. PROVIDE SPIN COLLARS WITH VOLUME DAMPERS AT ALL FLEXIBLE DUCT TAPS TO RIGID DUCTS. DAMPERS TO HAVE LOCKING QUADRANTS WITH HAND LEVERS.
7. PROVIDE DOUBLE THICKNESS TURNING VANES AT ELBOWS AND EXTRACTOR DAMPERS AT ALL DUCT BRANCHES AND TAKE-OFFS.
8. ALL OUTSIDE AIR AND EXHAUST DUCTWORK SHALL BE OF GALVANIZED SHEET METAL FABRICATED IN ACCORDANCE WITH S.M.A.C.N.A. STANDARD FOR LOW VELOCITY DUCT MANUAL.
9. ROOF EQUIPMENT SHALL BE INSTALLED WITH PREFABRICATED ROOF CURBS AND ANCHORED TO WITHSTAND HURRICANE WIND FORCES.
10. PROVIDE CONCRETE PADS FOR CONDENSING UNITS 8" THICK MIN. ELEVATION TO MEET FLOOD CRITERIA. ANCHOR UNITS TO WITHSTAND FBC HURRICANE CRITERIA.
11. ALL HVAC SYSTEMS SHALL BE BALANCED TO DELIVER AIR QUANTITIES INDICATED ON DRAWINGS. ACCEPTABLE TOLERANCE OF PLUS OR MINUS 10%.
12. CONDENSATE DRAIN PIPING SHALL BE SCHEDULE 40 PVC DRAINAGE PIPE OF 1-1/4" (2" BELOW GROUND). INSULATE WITH APPROVED RETARDANT FOAM INSULATION APPROVED FOR PLENUM USE. AT CONTRACTOR'S OPTION USE DWV COPPER PIPE WITH INSULATION.

HVAC DESIGN REQUIRES:	YES	NO
DUCT SMOKE DETECTOR		✓
FIRE DAMPER(S)		✓
SMOKE DAMPER(S)		✓
FIRE RATED ENCLOSURE		✓
FIRE RATED ROOF/FLOOR CEILING ASSEMBLY		✓
FIRE STOPPING		✓
SMOKE CONTROL		✓

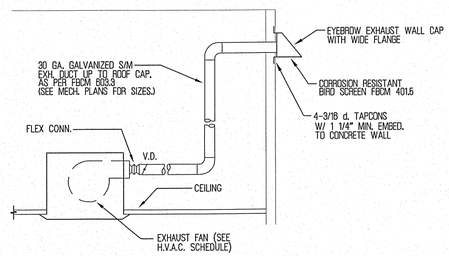
AIR DISTRIBUTION SCHEDULE			
SYMBOL	"CD"	"RG"	
DESCRIPTION	CLG DIFFUSER	GRILLE	
APPLICATION	SUPPLY	RETURN	
DESIGN MFG.	TITUS	TITUS	
MODEL NO.	TDC	350 FL	
ACCESORIES	O.B.D.	---	
NOTES	----	---	

HVAC LEGEND

SYMBOL	DESCRIPTION
? X ?	DUCT (SIZE IS CLEAR INSIDE DIMENSION)
	SQUARE ELBOW WITH TURNING VANES
AIRFLOW V.D.	AIR EXTRACTOR W/ VOLUME DAMPER (V.D.)
	DUCT TRANSITION
	RETURN AIR GRILLE
	CEILING DIFFUSER
	FLEXIBLE DUCT WORK
T	PROGRAMMABLE THERMOSTAT
	WALL CAP
	EXHAUST FAN

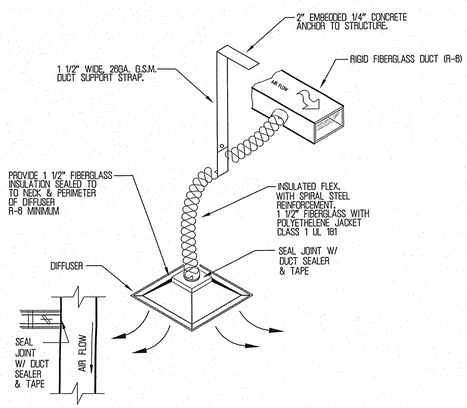
VENTILATION FAN SCHEDULE			
MARK NO.	EF-1		
FAN TYPE	CENTRIFUGAL		
DRIVE TYPE	DIRECT		
AIR FLOW (CFM)	60		
STATIC PRESSURE(IN.W.G.)	0.250		
FAN SPEED (RPM)	1600		
MOTOR H.P.	40 W		
ELECTRIC SERVICE	120/1/60		
DESIGN MFG.	GREENHECK		
MODEL NO.	SP-B		
ACCESSORIES	1		

1 PROVIDE BACKDRAFT DAMPER, SPEED CONTROL SWITCH.



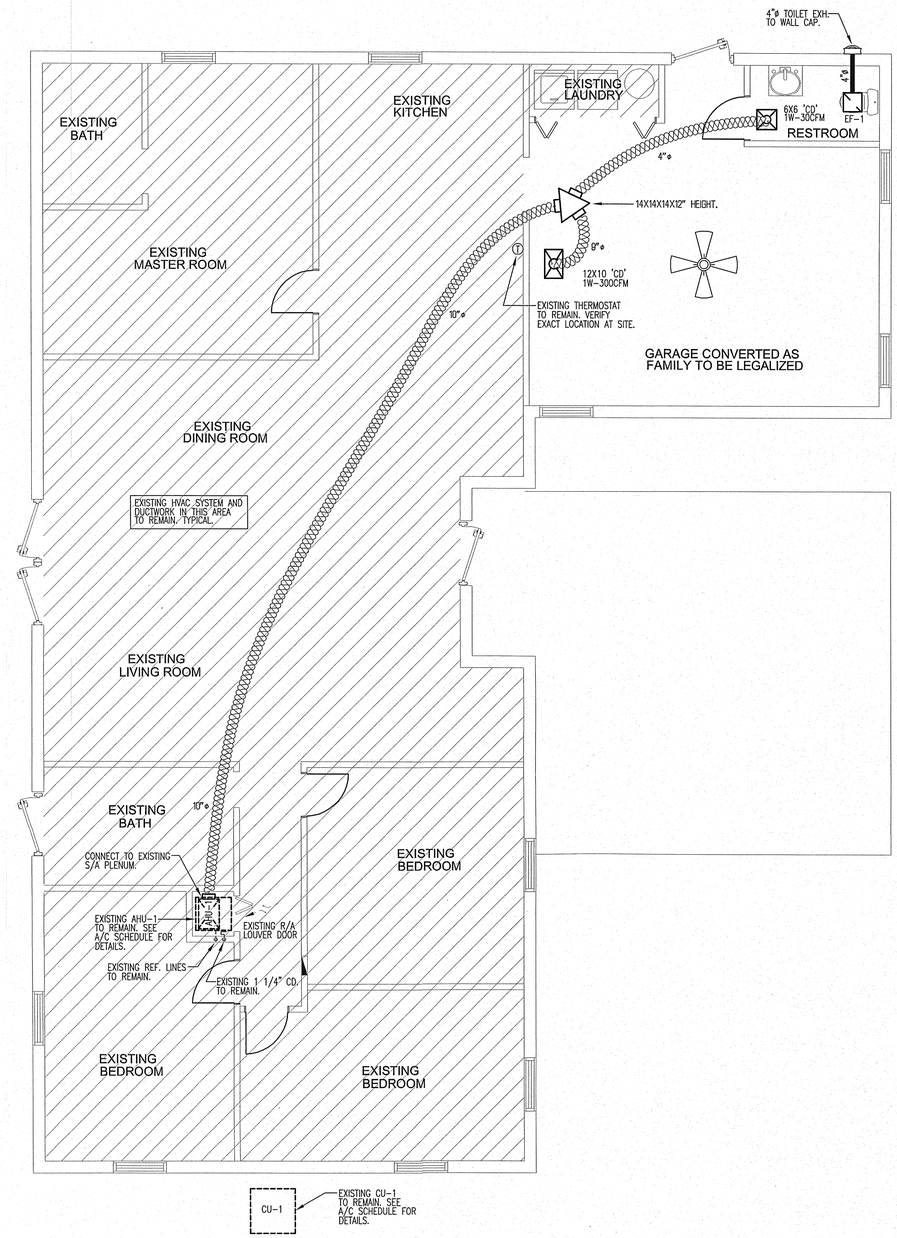
BATH EXHAUST FAN DETAIL

SCALE: N.T.S. (THRU WALL)



FLEXIBLE DUCT CONNECTION DETAIL

N.T.S.



MECHANICAL FLOOR PLAN

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

NORTH

EXISTING SPLIT AC SYSTEM SCHEDULE																					
DESIGNATION	MANUF.	TON	REFRIG.	CFM	SEER	TOTAL CAP.	SEN. CAP.	COND. MOD#	AHU. MOD#	COMP. RLA	FAN MOTOR FLA	AMPACITY	FUSE OR HACR	COND. DIMENSION H X L X W	SUCTION LINES	LIQUID LINES	COND. WT/LBS	AHU FAN HP	AHU DIMENSION H X W X D	AHU WT/LBS	ELECTRIC HEAT(KW)	ELECTRIC SERVICE
AC-1 (EXISTING)	GOODMAN	6.0	R-22	2000	13.0	67.0	40.0	GSC130601BC	ARUF48B01B4B	26.3	1.2	33	40	34X30X30	1 1/8"	3/8"	242	3/4	64X22X24	192	10	240-1-60

CT ENGINEERING

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MIAMI, FLORIDA . 33196
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PROJECT: GARAGE CONVERTION TO FAMILY

MARLENE CAMPBELL

16000 SW 100TH CT MIAMI, FL 33157

DATE: NOV 07-2011

REVISIONS:

SCALE:	AS SHOWN
DRAWN BY:	C.T.
CHECKED BY:	C.T.

11/7/11

CARLOS TILLAN
PROFESSIONAL . ENGINEER
PE. #68869

SHEET TITLE:

MECHANICAL FLOOR PLAN NOTES AND DETAILS

PAGE: #

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John Ariton 11/14/2011 9:25:54 AM A MECH Approved