



Permit Holder
The Permit Allows
11/11/2017
June 28, 2017
Amec Foster Wheeler Architects Limited
To prepare Professional Engineering
Drawings for the project
Permit No. as Issued by Reg.
132/Elevators
Which is valid for the year 2017.



APPROX. NORTH

NOTES:
1. CONTRACTOR TO VERIFY ALL SITE CONDITIONS, LOCATIONS AND DIMENSIONS PRIOR TO COMMENCING WORK. TRACE WORK COORDINATE SYSTEM SHOT OWNER & SERVICE INTERFERENCES WITH CONTRACT.
2. PROVIDE ALL MATERIALS & LABOUR REQUIRED FOR INSTALLATION OF ALL EQUIPMENT APPLICABLE CODES, REGULATIONS & DRAWINGS THAT FORM PART OF THIS CONTRACT.
3. DO NOT SCALE FROM DRAWINGS.
4. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE.
5. INSTALLATION OF VRF HEATING/COOLING SYSTEM SHALL BE IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. THIS MAY REQUIRE THE USE OF PROXY SIZE SLOPE, ROUTING, AND CONFIGURATION OF REFERENT PIPING SYSTEM SHALL BE AS REQUIRED TO COMPLY WITH MANUFACTURER'S RECOMMENDATIONS.

revision	description	date	by	checked
A	ISSUED FOR 95% REVIEW	17/06/2017	AW/25	AW/25
B	ISSUED FOR CLIENT REVIEW	28/06/2017	AW/25	AW/25
C	ISSUED FOR TENDER	28/06/2017	AW/25	AW/25

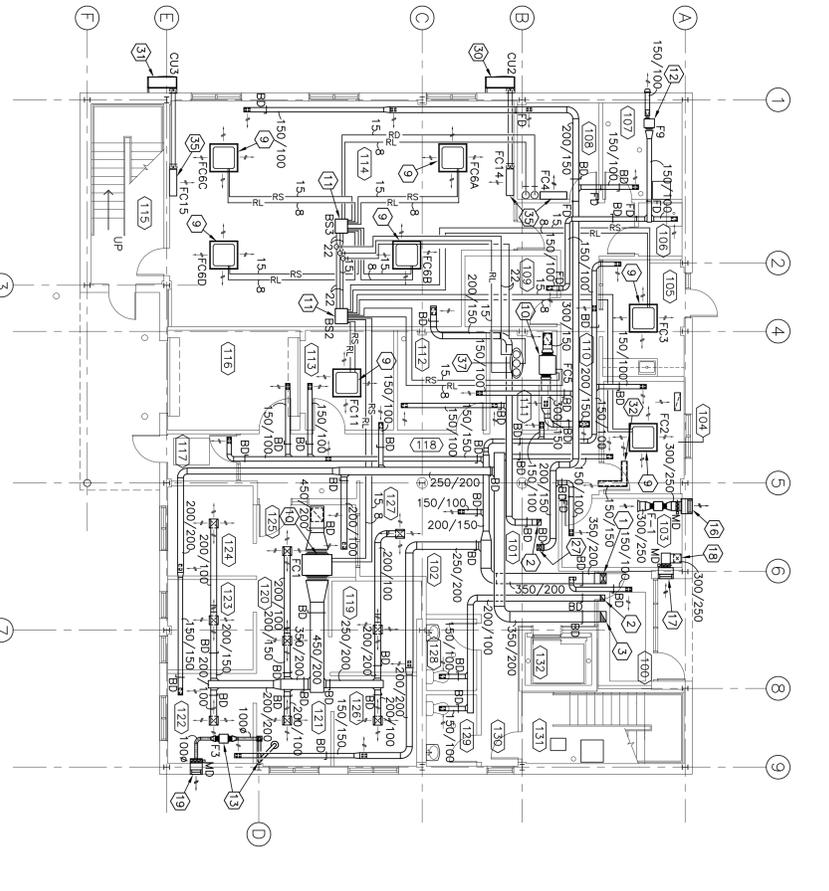
MCTS CENTRE AND
C&P BUILDING
PLACENTIA
HVAC PLANS

designed: J.-J.
date: JUNE 28, 2017
drawn: JTB
date: JUNE 28, 2017
approved: JTB
date: JUNE 28, 2017
Tender Project Manager
R.081781.004
no. de projet
M3

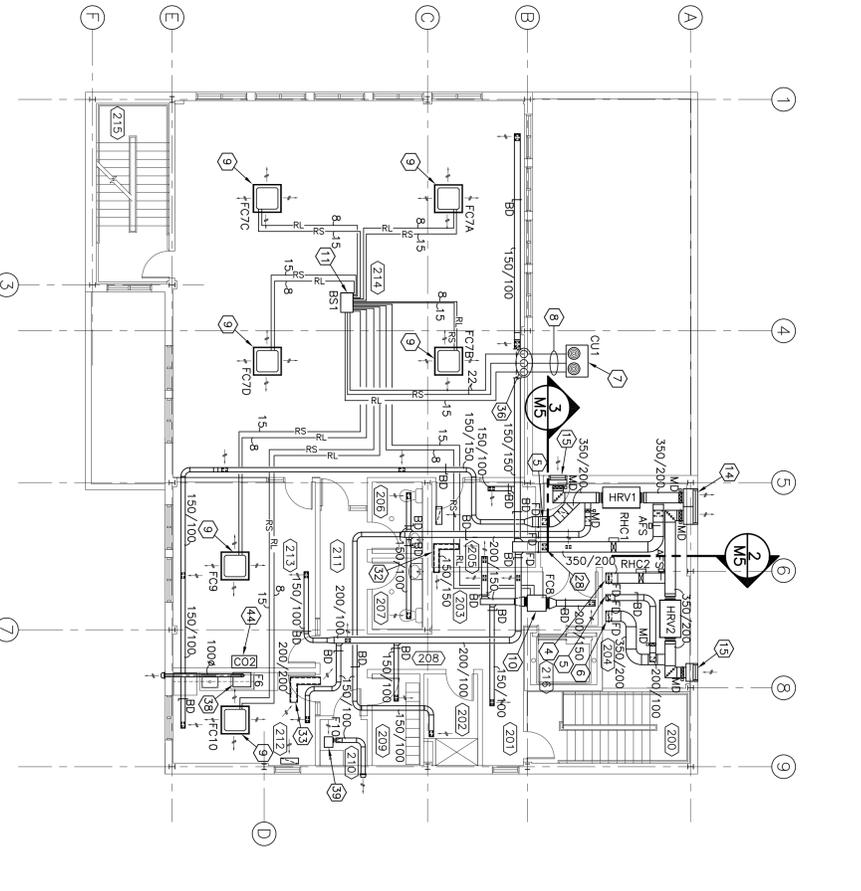
ROOM NUMBER/NAME	TYPE(S)*	SIZE**	# RECD AIRFLOW(S) (L/S)	TYPE*	SIZE**	#RECD AIRFLOW (L/S)
100 VESTIBULE	SA1	200x100	5	RA1	200x100	5
101 LOBBY	SA1	200x100	5	RA1	200x100	5
102 RECEPTION	SA1	200x100	10	RA1	600x200	10
103 ELECTRICAL	SA1	200x100	5	RA1	N/A (TRANSFER)	5
104 MECHANICAL	SA1	200x100	10	RA1	200x100	10
105 MCT'S OFF	SA1	200x100	10	RA1	200x100	10
106 JANITOR	SA1	200x100	5	RA1	200x100	5
107 WATER ENTRY	SA1	200x100	1	RA1	200x100	1
108 JAN ROOM	SA1	200x100	5	RA1	200x100	5
109 RESTROOM	SA1	200x100	1	RA1	200x100	1
110 CORRIDOR	SA1	200x100	1	RA1	200x100	1
111 SHARED EQUIPMENT (CO-PEP)	SA1	350x200	100	RA1	200x100	100
112 MCT'S STORAGE	SA1	200x100	1	RA1	350x250	1
113 WORKSHOP - DIRTY	SA1	200x100	50	RA1	200x100	50
114 WORKSHOP - CLEAN	SA1	200x100	20	RA1	200x100	20
115 E&I ELECTRONICS EQUIPMENT ROOM	SA1	200x100	30	RA1	200x100	30
116 MCT'S UP SPACE	SA1	200x100	2	RA1	200x100	2
117 CORRIDOR	SA1	200x100	1	RA1	200x100	1
118 CORRIDOR	SA1	200x100	1	RA1	200x100	1
119 PERSONAL STORAGE AREA	SA1/SA2	200x100/100	1/1	RA1	200x100	1
120 E&I CLEAN WORKSHOP	SA2	100x	45	RA1	200x100	45
121 FACE SOLDERING STATION	SA2	100x	60	RA1	200x100	60
122 WORKSTATION #1	SA2	100x	45	RA1	200x100	45
123 WORKSTATION #2	SA2	100x	45	RA1	200x100	45
124 WORKSTATION #3	SA2	100x	45	RA1	200x100	45
125 INNAV TECH/AUTOLOAD	SA1/SA2	200x100/100	1/1	RA1/RA1	200x100/450x400	1/1
126 WORKSTATION #4	SA1/SA2	200x100/100	1/1	RA1	60/360	1
127 WORKSTATION #5	SA1/SA2	200x100/100	1/1	RA1	60/360	1
128 WASHROOM	SA1	200x100	1	RA1	200x100	1
129 CORRIDOR	SA1	200x100	1	RA1	200x100	1
130 CORRIDOR	SA1	200x100	1	RA1	200x100	1
131 ELEVATOR	SA1	200x100	1	RA1	200x100	1
132 ELEVATOR	SA1	200x100	1	RA1	200x100	1

ROOM NUMBER/NAME	TYPE(S)*	SIZE**	# RECD AIRFLOW(S) (L/S)	TYPE*	SIZE**	#RECD AIRFLOW (L/S)
201 CORRIDOR	SA1	200x100	5	RA1	200x100	5
202 SHOWER ROOM	SA1	200x100	1	RA1	200x100	1
203 LOBBY	SA1	200x100	5	RA1	200x100	5
204 MECHANICAL	SA1	200x100	10	RA1	600x200	10
205 MCT'S DESK	SA1	200x100	15	RA1	N/A (TRANSFER)	15
206 FEMALE WASHROOM	SA1	200x100	1	RA1	200x100	1
207 MALE WASHROOM	SA1	200x100	1	RA1	200x100	1
208 MCT'S COOKER ROOM	SA1	200x100	10	RA1	200x100	10
209 JANITOR	SA1	200x100	1	RA1	200x100	1
210 CORRIDOR	SA1	200x100	1	RA1	200x100	1
211 CORRIDOR	SA1	200x100	1	RA1	200x100	1
212 MCT'S KITCHEN	SA1	200x100	5	RA1	600x200/200x100	1/1
213 MCT'S STORAGE	SA1	200x100	1	RA1	200x100	1
214 MCT'S OPERATIONS ROOM	SA1	200x100	2	RA1	200x100	2
215 STAIR #1	SA1	200x100	1	RA1	200x100	1
216 ELEVATOR	SA1	200x100	1	RA1	200x100	1

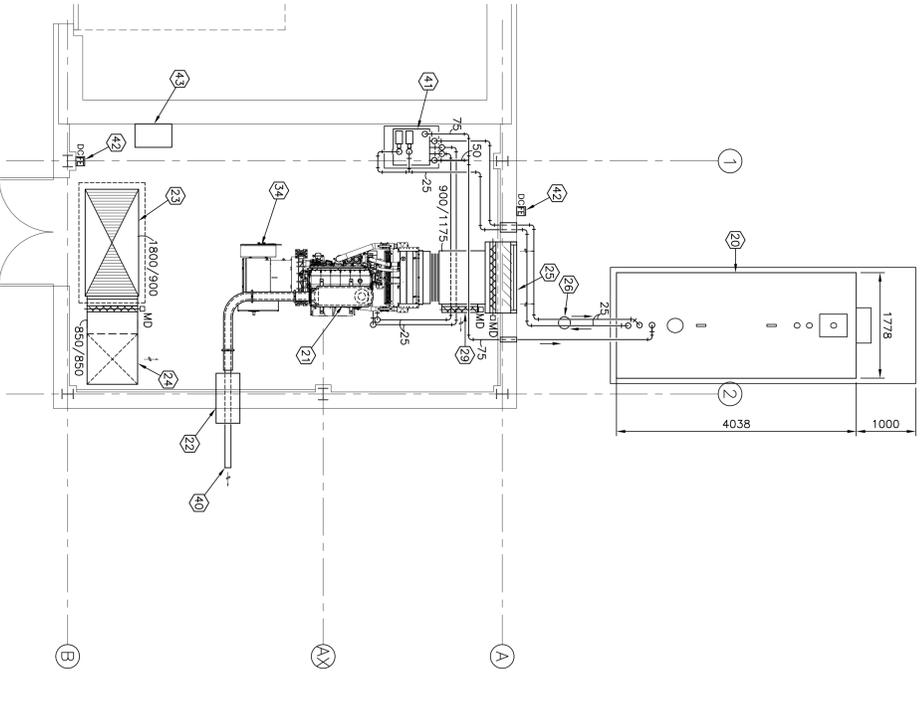
- DRAWING NOTES:
- 350/200 SUPPLY AIR DUCT UP TO MECHANICAL ROOM SHEET FOR FIRE DAMPER AT FLOOR PENETRATION. SEE DETAIL 7 DRAWING M3.
 - 200/100 EXHAUST AIR DUCT UP TO MECHANICAL ROOM ABOVE. PROVIDE FIRE DAMPER AT FLOOR PENETRATION. SEE DETAIL 7 DRAWING M3.
 - 350/200 RETURN AIR DUCT UP TO MECHANICAL ROOM ABOVE. PROVIDE FIRE DAMPER AT FLOOR PENETRATION. SEE DETAIL 7 DRAWING M3.
 - 350/200 SUPPLY AIR DUCT DOWN TO LEVEL 1 CEILING SPACE. FOR CONTINUATION SEE PLAN 1 THIS SHEET.
 - 200/100 EXHAUST AIR DUCT DOWN TO LEVEL 1 CEILING SPACE. FOR CONTINUATION SEE PLAN 1 THIS SHEET.
 - 350/200 RETURN AIR DUCT DOWN TO LEVEL 1 CEILING SPACE. FOR CONTINUATION SEE PLAN 1 THIS SHEET.
 - ROOF MOUNTED CONDENSER (CU1) SEE SCHEDULE DRAWING FOR DETAILS.
 - REFRIGERANT LIQUID AND SUCTION LINES RUN THROUGH EXTERIOR WALL. SEE SCHEDULE DRAWING FOR DETAILS.
 - CEILING MOUNTED CASSETTE TYPE A/C UNIT. (TYPICAL OF 131) SEE SCHEDULE DRAWING FOR DETAILS. SEE GENERAL NOTES, THIS SHEET.
 - DUCTED FAN COIL UNIT MOUNTED IN CEILING SPACE. (TYPICAL OF 131) SEE SCHEDULE DRAWING FOR DETAILS. SEE GENERAL NOTES, THIS SHEET.
 - BRANCH SELECTOR BOX MOUNTED IN CEILING SPACE (TYPICAL OF 3) SEE GENERAL NOTES, THIS SHEET. REGARDING VRF SYSTEM.
 - JANITOR ROOM 106 AND RECEIVING ROOM 109 EXHAUST FAN 93. SEE SCHEDULE SHEET AND SPECIFICATIONS FOR DESCRIPTION.
 - JANITOR ROOM 106 AND RECEIVING ROOM 109 EXHAUST FAN 93. SEE SCHEDULE SHEET AND SPECIFICATIONS FOR DESCRIPTION.
 - PIPE EXHAUST FAN 93 AND BENCH MOUNTED EXHAUST FAN 93. SEE SCHEDULE SHEET AND SPECIFICATIONS FOR DESCRIPTION.
 - FX-BRACKET KIT D/100-1190 AND FX-METAL HOOD-ESD/EX-0/100 OR APPROVED EQUAL.
 - 1200/600 EXHAUST AIR INTAKE LOUVER. SEE DRAWING M7 FOR DETAIL.
 - 600/600 FRESH AIR INTAKE LOUVER. SEE DRAWING M7 FOR DETAIL.
 - 500/500 FRESH AIR INTAKE LOUVER. SEE DRAWING M7 FOR DETAIL.
 - 300/250 FRESH AIR INTAKE LOUVER. SEE DRAWING M7 FOR DETAIL.
 - 400/400 EXHAUST AIR LOUVER SERVING FAN F3.
 - 10000 LITRE FUEL OIL STORAGE TANK. SEE SPECIFICATION SECTION 33 56 13 AND DRAWINGS M10 AND M12 FOR DETAILS.
 - DIESEL GENERATOR ENGINE EXHAUST MUFFLER. SEE DETAIL 12 ON DRAWING M6.
 - DIESEL GENERATOR ENGINE EXHAUST PIPE THROUGH EXTERIOR WALL. SEE DETAIL 2 ON DRAWING M6.
 - 1800/900 FRESH AIR INTAKE PLENUM UP THROUGH EXTERIOR WALL. SEE DETAIL 2 ON DRAWING M6.
 - PRE-FABRICATED GRANITE VENTILATOR EQUAL TO APPROVED EQUAL) C/W INSECT SCREEN. PLENUM TO BE THERMALLY INSULATED C/W CONDENSATE DRAIN.
 - 850/850 OPEN ENDED FRESH AIR INTAKE DUCT DOWN TO TERMINATE 450mm A.F.F.
 - 1200/1500 EXHAUST AIR LOUVER SERVING DIESEL GENERATOR RADATOR FAN.
 - ABOVE GRADE FUEL OIL SUPPLY LINE. SEE DETAIL DRAWING FOR DETAILS OF FUEL SYSTEM.
 - 200/150 SUPPLY DUCT UP TO MECHANICAL ROOM ABOVE. FOR CONTINUATION SEE PLAN 2 THIS SHEET. PROVIDE FIRE DAMPER AT FLOOR PENETRATION.
 - 200/150 SUPPLY DUCT DOWN TO LEVEL 1 CEILING SPACE. FOR CONTINUATION SEE PLAN 1 THIS SHEET.
 - 600/600 BY-PASS DAMPER.
 - WALL MOUNTED CONDENSER C/U SERVING FC14 SUSPENDED ON EXTERIOR WALL. SEE DETAIL 4 ON DRAWING M5 AND SCHEDULE DRAWING FOR DETAILS.
 - WALL MOUNTED CONDENSER C/U SERVING FC15 SUSPENDED ON EXTERIOR WALL. SEE DETAIL 4 ON DRAWING M5 AND SCHEDULE DRAWING FOR DETAILS.
 - 150/150 ACOUSTICALLY LINED CROSS-TALK ATTENUATOR. SEE DETAIL 12/M7.
 - 200/200 ACOUSTICALLY LINED CROSS-TALK ATTENUATOR. SEE DETAIL 12 ON DRAWING M7.
 - GENSET CONTROL PANEL. PANEL WILL ROOM VENTILATION AND GENERATOR AND M12 FOR DETAILS.
 - WALL MOUNTED A/C UNIT. SEE SCHEDULE DRAWING FOR DETAILS.
 - REFRIGERANT LIQUID AND SUCTION LINES DOWN TO LEVEL 1 CEILING SPACE. FOR CONTINUATION SEE PLAN 1 THIS SHEET.
 - REFRIGERANT LIQUID AND SUCTION LINES UP TO LEVEL 2. FOR CONTINUATION SEE PLAN 2 THIS SHEET.
 - RANGE HOOD. SEE SCHEDULE SHEET AND SPECIFICATIONS FOR DESCRIPTION.
 - JANITOR ROOM 210 EXHAUST FAN 110. SEE SCHEDULE SHEET AND SPECIFICATIONS FOR DESCRIPTION.
 - OPEN END OF GENSET EXHAUST PIPE TO BE CUT ON 45 ANGLE.
 - DAY TANK PUMP ASSEMBLY. SEE SPECIFICATIONS AND DETAIL 5 DRAWING M10.
 - 4.5kg MULTIPURPOSE DRY CHEMICAL FIRE EXTINGUISHER MOUNTED ON WALL BRACKET.
 - EMERGENCY SPILL RESPONSE KIT. SEE SPECIFICATIONS SECTION 33 56 13 FOR DETAILS.



HVAC PLAN - LEVEL 1
SCALE : 1:100



HVAC PLAN - LEVEL 2
SCALE : 1:100



MECHANICAL PLAN - GENERATOR ROOM (ITS STORAGE BUILDING)
SCALE : 1:50

SYMBOL	DESCRIPTION
[Symbol]	DRAWING LEGEND - HVAC
[Symbol]	REFRIGERANT SUCTION PIPING
[Symbol]	REFRIGERANT LIQUID PIPING
[Symbol]	PIPE ELBOW DOWN
[Symbol]	PIPE ELBOW UP
[Symbol]	RIGID RECTANGULAR DUCTING
[Symbol]	RIGID ROUND DUCTING
[Symbol]	ACOUSTIC LINED DUCTING (INSIDE DIM. INDICATED).
[Symbol]	90° MITRED ELBOW W/ TURNING VANES
[Symbol]	SUPPLY AIR GRILLE
[Symbol]	RETURN OR EXHAUST AIR GRILLE
[Symbol]	SUPPLY AIR DUCT UP
[Symbol]	RETURN OR EXHAUST AIR DUCT UP
[Symbol]	SUPPLY AIR DUCT DOWN
[Symbol]	RETURN OR EXHAUST AIR DUCT DOWN
[Symbol]	TYPE (SEE SCHEDULE)
[Symbol]	NECK SIZE
[Symbol]	DESIGN AIRFLOW
[Symbol]	FLEXIBLE CONNECTION BETWEEN HVAC EQUIPMENT AND RIGID DUCT WORK
[Symbol]	MOTORIZED DAMPER
[Symbol]	FRESH AIR INTAKE OR EXHAUST AIR DUCT. ARROW INDICATES DIRECTION OF AIR
[Symbol]	MANUAL BALANCING DAMPER
[Symbol]	FIRE DAMPER C/W ACCESS DOOR
[Symbol]	CEILING OR WALL MOUNTED EVAPORATOR
[Symbol]	DUCTED FAN COIL UNIT
[Symbol]	REFRIGERANT CIRCUIT SELECTOR BOX
[Symbol]	DUCT MOUNTED REHEAT COIL
[Symbol]	HEAT RECOVERY VENTILATOR
[Symbol]	AIRFLOW SENSOR
[Symbol]	CARBON DIOXIDE SENSOR
[Symbol]	A - PLAN, SECTION, ELEVATION, OR DETAIL NUMBER WHERE THE ABOVE IS DRAWN