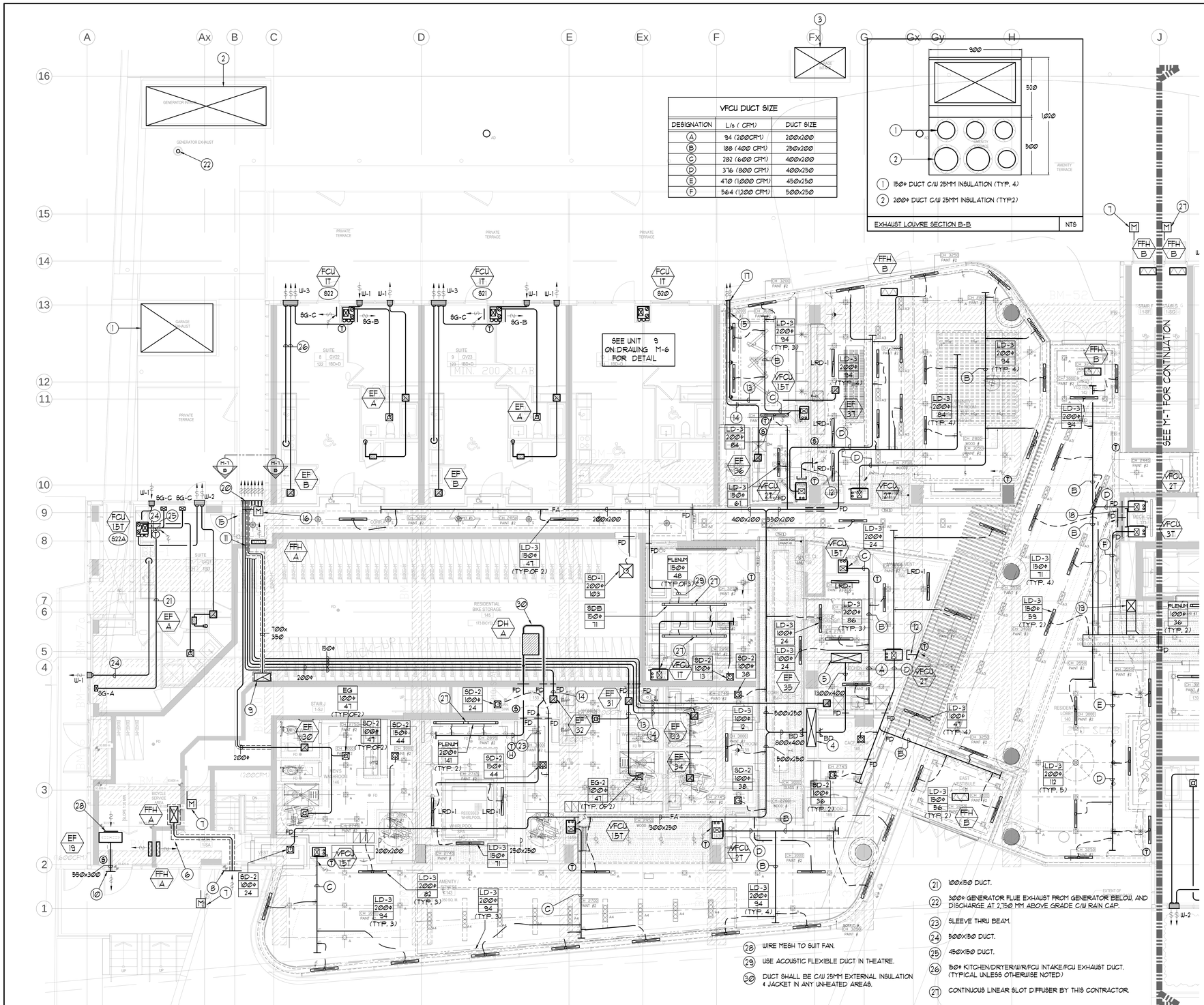


VFCU DUCT SIZE		
DESIGNATION	L/s (CFM)	DUCT SIZE
A	94 (200CFM)	200x200
B	188 (400 CFM)	250x200
C	282 (600 CFM)	400x200
D	376 (800 CFM)	400x250
E	470 (1,000 CFM)	450x250
F	564 (1,200 CFM)	500x250

1. 150ø DUCT C/W 25MM INSULATION (TYP. 4)
2. 200ø DUCT C/W 25MM INSULATION (TYP.2)

REFER TO DWG M-9 FOR ACOUSTIC NOTES

GENERAL NOTES:

1) CONTRACTOR SHALL CO-ORDINATE ARCHITECTURAL, STRUCTURAL, LIGHTING, HVAC, SPRINKLER DRAWINGS TO AVOID AREAS OF CONFLICT AND TO MAINTAIN CEILING HEIGHTS.

2) CONTRACTOR SHALL REPORT ALL DISCREPANCIES AND AREA OF CONFLICTS TO THE ENGINEER PRIOR TO WORK BEGINS.

3) PROVIDE EXPANSION CHAMBERS FOR ALL KITCHEN SINKS.

4) SEE INSTALLATION DETAILS DRAWING FOR WASHER DOM. H+C WATER, SANITARY CONNECTION DETAILS.

5) SUPPLY AND INSTALL COMPLETE DOMESTIC HOT AND COLD WATER LINES, SANITARY AND VENT LINES TO EACH FIXTURE /EQUIPMENT INCLUDING WATER CLOSETS, LAVATORIES, BATHS, SHOWERS, KITCHEN SINK, WASHING MACHINES, DISHWASHERS, AND FLOOR DRAINS, KITCHEN SINK, LAVATORIES, WATER CLOSETS AND WASHING MACHINE TO BE C/W LOCALIZED SHUT-OFF VALVES.

6) ALL VENT PIPE INSTALLATION TO COMPLY WITH PLUMBING CODES.

7) FOR D.H.+C. W. RISER SIZES, REFER TO RISER DIAGRAM

8) FIRE DAMPERS ARE REQUIRED TO BE LISTED AND ARE TO HAVE FIRE PROTECTION RATING OF THE PENETRATED FIRE SEPARATION.

9) THE PIPING PENETRATING THE VARIOUS FIRE SEPARATION IS REQUIRED TO BE FIRESTOPPED WITH A LISTED FIRESTOPPING MATERIAL IN ACCORDANCE WITH OBC ARTICLE 3.1.9.1

10) THE FIRE HOSE CABINET THAT ARE RECESSED INTO THE EXIT STAIR SHAFTS ARE REQUIRED TO BE SEPARATED FROM THE EXIT STAIR BY A 2 HR. FIRE SEPARATION.

11) NO FLEXIBLE DUCT SHALL BE USED FOR ANY IN-SUITE DUCTWORK.

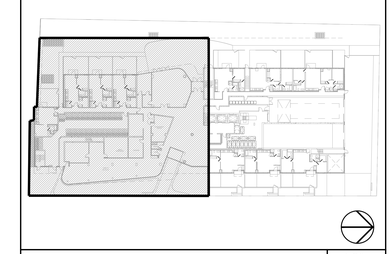
12) PROVIDE 25MM EXTERNAL INSULATION TO ENTIRE FRESH AIR DUCT FROM EXTERIOR WALL TO ERV FAN COIL UNIT.

13) DRYER EXHAUST DUCT SHALL BE SMOOTH AND CORROSION-RESISTANT MATERIAL (FLEXIBLE CONNECTION IS NOT ACCEPTABLE.)

CLEAR FLOOR TO UNDERSLAB = 4050mm
CLEAR PRODUCT= 3000mm
COMPLETE DROP CEILING =1000mm FOR DUCT/PIPES
ROOF DRAINS & TERRACE DRAINS FROM 2/F

NOTES:

1. 3,100x2,000 (6.2 M², 68 FT²) EXHAUST AIR SHAFT FOR P-1 & P-2 LEVEL C/W GRATE BY OTHERS.
2. 3,200x1,700 (8.84 M², 95 FT²) AIR SHAFT FOR GENERATOR INTAKE & EXHAUST C/W GRATE BY OTHERS.
3. 2,250x1,300 (2.93 M², 31.5 FT²) FRESH AIR INTAKE SHAFT FOR P-2 LEVEL C/W GRATE BY OTHERS.
4. 1,650x400 F/A DUCT FROM BELOW C/W FIRE DAMPER AT SLAB.
5. 1,300x400 F/A DUCT UP TO SOUTH SHAFT A C/W FIRE DAMPER AT SLAB.
6. 700x350 STAIR PRESSURIZATION DUCT DOWN c/w 2HR FIRE RATED ENCLOSURE. ENCLOSURE BY OTHERS.
7. MOTORIZED DOOR TO BE CONNECTED TO FIRE ALARM SYSTEM BY DIV.16.
8. 1000x750 WEATHERPROOF INTAKE LOUVRE c/w BIRDSCREEN.
9. 700x350 STAIR RELIEF DUCT FROM BELOW c/w 2HR FIRE RATED ENCLOSURE. ENCLOSURE BY OTHERS.
10. 600x600 WEATHERPROOF EXHAUST LOUVRE C/W BIRDSCREEN.
11. 2HR FIRE RATED ENCLOSURE BY OTHERS.
12. 400x300 RETURN AIR DUCT ABOVE CEILING C/W ACOUSTIC INSULATION AND WIRE MESH AT OPEN ENDS.
13. 200ø EXHAUST AIR DUCT. (PROVIDE INSULATION 1.6m AWAY FROM EXTERIOR WALL.)
14. 150ø EXHAUST AIR DUCT.
15. 25MM EXTERNAL INSULATION 1.6M FROM EXTERIOR WALL. (PROVIDE INSULATION 1.6m AWAY FROM EXTERIOR WALL.)
16. MOTORIZED DAMPER BY DIV.15 TO BE CONNECTED TO FIRE ALARM SYSTEM BY DIV.16.
17. 400x200 WEATHERPROOF EXHAUST LOUVRE C/W BIRDSCREEN.
18. 800x300 RETURN AIR DUCT ABOVE CEILING C/W ACOUSTIC INSULATION AND WIRE MESH AT OPEN ENDS.
19. 500x400 F/A DUCT UP TO SOUTH SHAFT B C/W FIRE DAMPER AT SLAB.
20. 900x1,000 WEATHERPROOF EXHAUST LOUVRE c/w BIRDSCREEN.
21. 100x150 DUCT.
22. 300ø GENERATOR FLUE EXHAUST FROM GENERATOR BELOW, AND DISCHARGE AT 2,750 MM ABOVE GRADE C/W RAIN CAP.
23. SLEEVE THRU BEAM.
24. 500x150 DUCT.
25. 450x150 DUCT.
26. 150ø KITCHEN/DRYER/W/R/FCU INTAKE/FCU EXHAUST DUCT. (TYPICAL UNLESS OTHERWISE NOTED)
27. CONTINUOUS LINEAR SLOT DIFFUSER BY THIS CONTRACTOR.
28. WIRE MESH TO SUIT FAN.
29. USE ACOUSTIC FLEXIBLE DUCT IN THEATRE.
30. DUCT SHALL BE C/W 25MM EXTERNAL INSULATION & JACKET IN ANY UNHEATED AREAS.



KEY PLAN — N.T.S.

LEGEND MECHANICAL

SYMBOL	DESCRIPTION
	SUPPLY AIR DIFFUSER
	SUPPLY AIR TROFFER
	LINEAR SUPPLY DIFFUSER
T	THERMOSTAT
S	FAN SWITCH
	RETURN AIR GRILLE
	EXHAUST AIR GRILLE
	SUPPLY DUCT UP
	SUPPLY DUCT DOWN
	RETURN DUCT UP
	RETURN DUCT DOWN
	EXHAUST DUCT UP
	EXHAUST DUCT DOWN
FD	FIRE DAMPER
BD	BALANCING DAMPER
	MOTORIZED DAMPER
MFD	MOTORIZED FIRE DAMPER
BDD	BACKDRAFT DAMPER
OBD	OPPOSED BLADE VOLUME CONTROL DAMPER C/W LOCKING QUADRANT
	TURNING VANES
	FLEXIBLE CONNECTION
	ACOUSTIC INSULATION
A / V	-TYPE OF EQUIPMENT -EQUIPMENT IDENTIFICATION
200x100 / 200Ø	-TYPE OF DIFFUSER OR GRILLE -GRILLE SIZE OR DIFFUSER NECK SIZE -ARRANGEMENT OR L/V
30A, 3P	STARTER (3 PHASE , 1 PHASE)
S	IN-SUITE ERV FASTER SWITCH
S	FAN SWITCH / IN-SUITE ERV OVERRIDE BUTTON
CO	CO SENSOR
G	GAS LINE
G	GAS METER
G	GAS COCK
	PRESSURE REDUCING VALVE
	SANITARY ABOVE GRADE
	SANITARY BELOW GRADE
	STORM ABOVE GRADE
	STORM BELOW GRADE
	DOMESTIC COLD WATER
	DOMESTIC HOT WATER
	DOMESTIC HOT WATER RECIRCULATION
	SANITARY VENT
	WATER METER
FD	FLOOR DRAIN
FFD	FUNNEL FLOOR DRAIN
HD	HUB DRAIN
RD	ROOF DRAIN
BLD	BLAIS DRAIN
AD	AREA DRAIN
BLAD	BI-LEVEL AREA DRAIN
CB	CATCH BASIN
	SANITARY TRAP
	ELBOW UP
	ELBOW DOWN
CO	WALL CLEANOUT
CO	FLOOR CLEANOUT
HB	HOSE BIBBS
NFHB	NON-FREEZE HOSE BIBBS
	GLOBE VALVE
	GATE VALVE
	BALL VALVE
	BUTTERFLY VALVE
	PRESSURE REDUCING VALVE
	CHECK VALVE
	CAP
	COMPRESSED AIR OUTLET
NV	BACKFLOW PREVENTER
	CIRCUIT BALANCING VALVE
	MULTIPLE PIPES / - DENOTES NO. OF PIPES
T	TEMPERATURE SENSOR
T	THERMOMETER
	2-WAY MODULATING VALVE
	3-WAY MODULATING VALVE
	1/2"x4"(12) THERMOWELL C/W 1/2" BUSHINGS & 1/2" PLUG
200Ø	FLOOR ELEVATION ABOVE LEVEL
200Ø	FLOOR ELEVATION THIS LEVEL
200Ø	HEADROOM (FLOOR TO U/S HEIGHT)

DATE	NO.	DESCRIPTION	BY
JAN.04/15	7	ISSUED FOR SITE INSTRUCTION #7-5	E.P.
JAN.15/15	6	ISSUED FOR SITE INSTRUCTION #7-4	E.P.
JAN.07/15	5	ISSUED FOR CITY COMMENTS	E.P.
JAN.07/15	4	ISSUED FOR SITE INSTRUCTION #7-1	E.P.
JAN.23/14	3	ISSUED FOR TENDER	E.P.
JAN.14/14	2	RE-ISSUED FOR PERMIT	E.P.
JAN.06/14	1	ISSUED FOR PERMIT	E.P.

MARK VOID ALL PRINTS DATED PREVIOUS TO FINAL DATE ABOVE

REVISIONS

CONTRACTOR MUST CHECK AND VERIFY ALL DIMENSIONS AND CONDITIONS ON THE JOB AND REPORT DISCREPANCIES TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK. THIS DRAWING IS THE PROPERTY OF THE ENGINEERS AND MUST BE RETURNED UPON COMPLETION OF THE WORK.

DRAWINGS ARE NOT TO BE SCALED

NOVA TREND ENGINEERING GROUP LTD.
115 West Beaver Creek Road, Unit 31
Richmond Hill, Ontario L4B 3N1
Tel: 905 882-5445
Fax: 905 882-5447

DRAWING TITLE:
G/F SOUTH
HVAC DUCTWORK LAYOUT

PROJECT TITLE:
SQ ALEXANDRA PARK
BLOCK 11
38 CAMERON STREET
TORONTO ONTARIO

DRAWN BY:	CHECKED BY:	SCALE:
G.S.	E.P.	1:50
DATE: FEB. 13	PROJECT NUMBER: 1313	DRAWING NUMBER: M-6 OF 43