

UNIT	NAME	AREA (SQ. FT.)	* OF UR	* OF POWDER	SIZE (T)	FIXTURE UNITS	BR	SQ. FT./T
401	1A-MR3	525	1	0	1	10	1	525
402	1D-M1	640	1	0	15	10	1	427
403	1L	615	1	0	15	10	1	410
404	1LB	615	1	0	15	10	1	410
405	2MR3	715	2	0	15	16	2	511
406	1B1	490	1	0	1	10	1	490
407	1BR	490	1	0	1	10	1	490
408	2M3	715	2	0	15	16	2	511
409	1E2	480	1	0	1	10	1	480
410	1C-D-B4	590	2	0	1	16	1	590
411	1C-D1	590	2	0	1	16	1	590
412	1C-D1	590	2	0	1	16	1	590
413	1C-D2	590	2	0	1	16	1	590
428	2F-M2	705	2	0	15	16	1	410
429	1B-D4	580	1	0	1	10	1	580

GRILLE SIZING TABLE			
DESIGNATION	SIZE	L/S	UNITS SERVED
SG-A	300x100	47-10	
SG-B	300x150	71-93	
SG-C	400x150	94-140	
SG-D	450x150	141-188	
EG-A	150x150	35	
W-1	225x200	210mm(L)	
W-2	425x200	INSULATED	
W-3	625x200	WALL BOX	

DUCT SIZING TABLE			
DESIGNATION	L/S	DUCT SIZE	DUCT SIZE
A	47	100x150	
B	71	150x150	
C	94	200x150	
D	118	200x150	
E	141	250x150	
F	165	300x150	

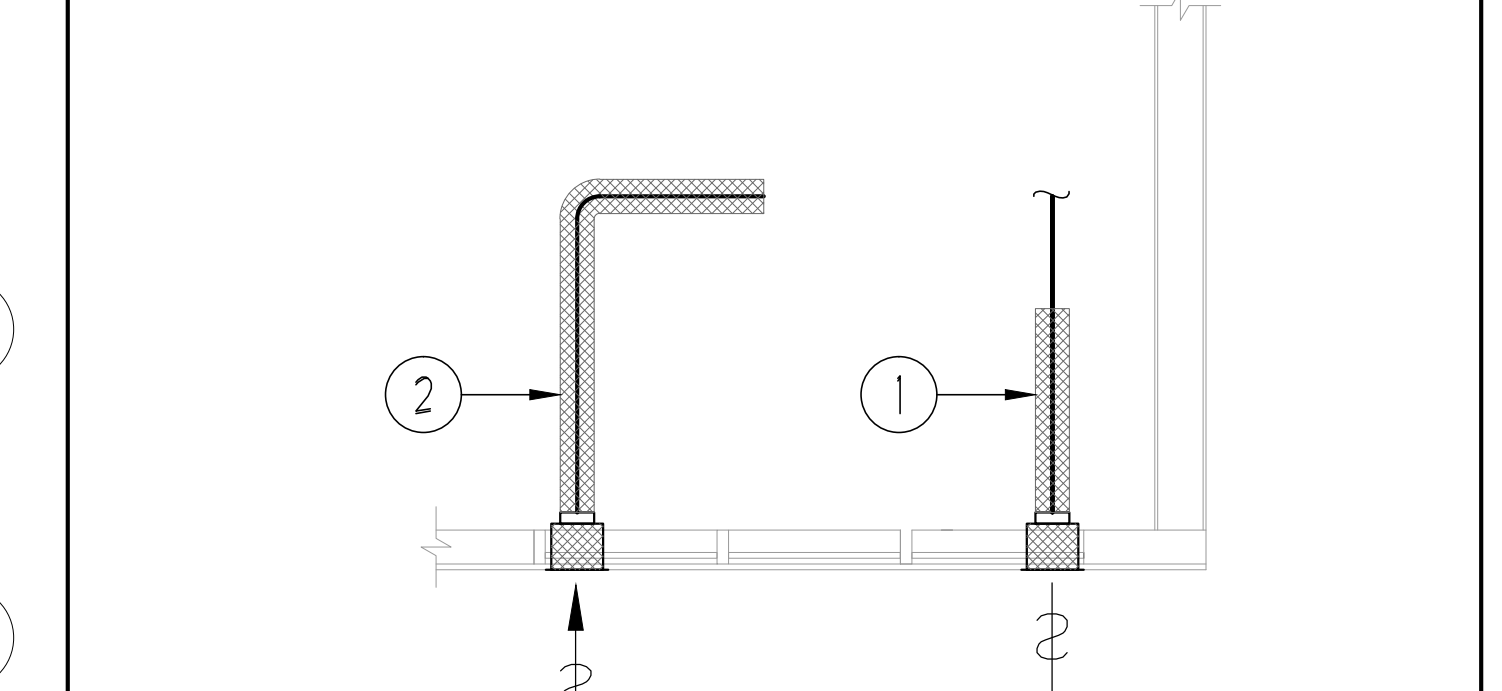
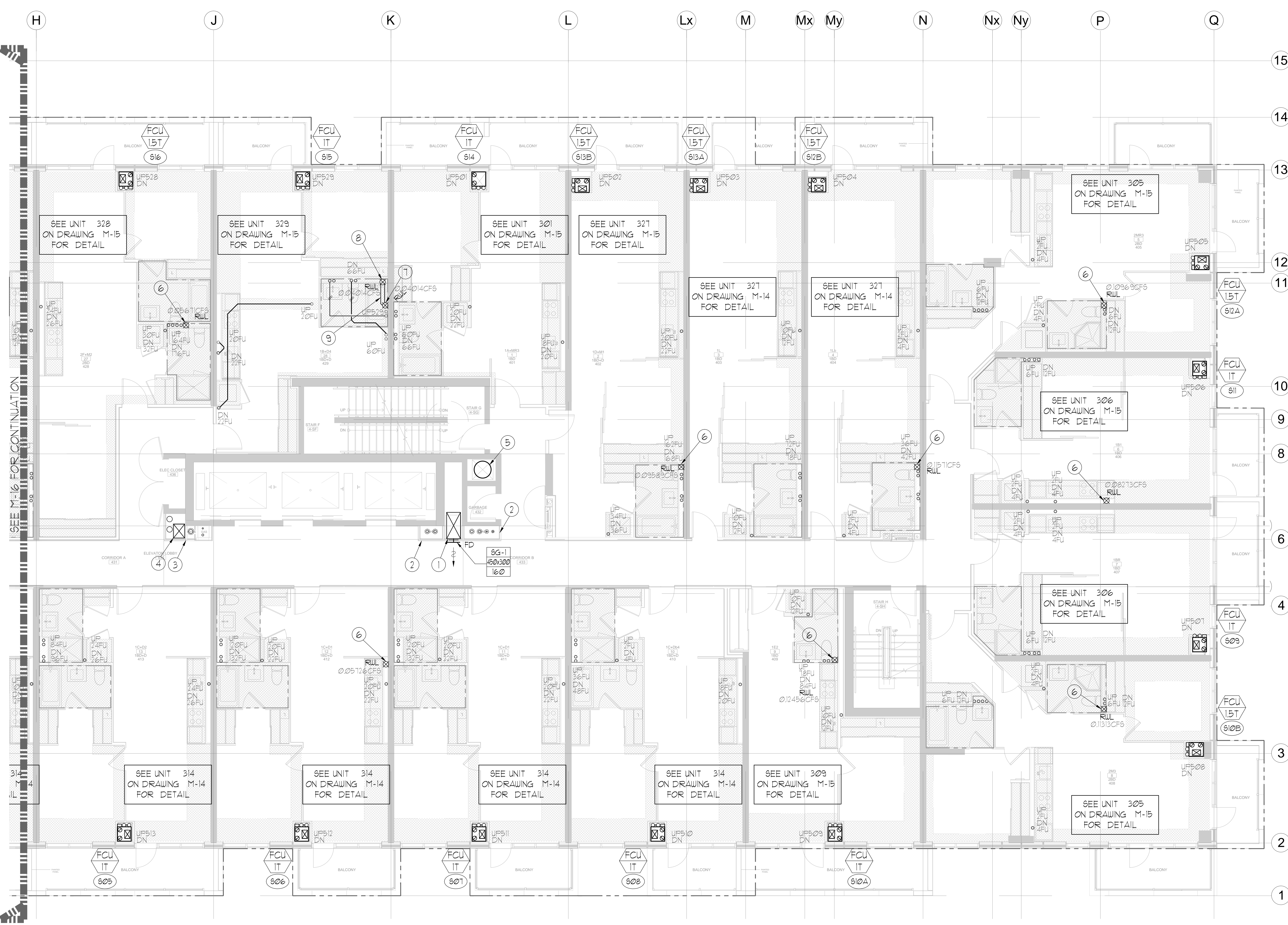
VERTICAL FAN COIL SIZE		
DESIGNATION	MODEL	W X D
FCU-1T	450	502x660
FCU-15T	600	502x660
FCU-2T	800	502x660
FCU-25T	1000	553x660
FCU-3T	1200	553x660

NOTE: A MIN. OF 125mm IS REQUIRED ON THE SIDE OF PIPE RISER.

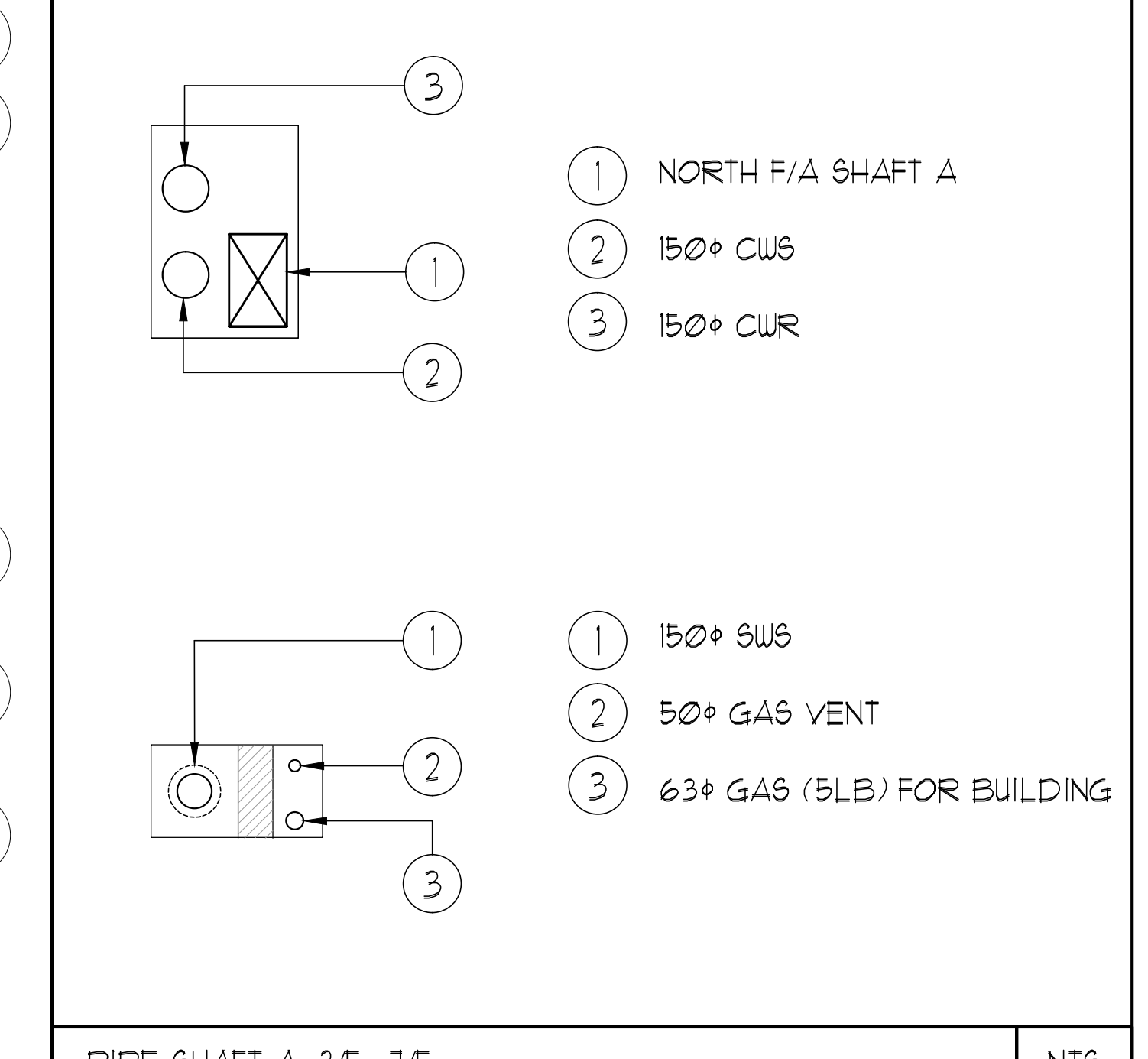
- GENERAL NOTES:
- CONTRACTOR SHALL CO-ORDINATE ARCHITECTURAL, STRUCTURAL, LIGHTING, HVAC, SPRINKLER DRAWINGS TO AVOID AREAS OF CONFLICT AND TO MAINTAIN CEILING HEIGHTS.
 - CONTRACTOR SHALL REPORT ALL DISCREPANCIES AND AREA OF CONFLICTS TO THE ENGINEER PRIOR TO WORK BEGINS.
 - PROVIDE EXPANSION CHAMBERS FOR ALL KITCHEN SINKS.
 - SEE INSTALLATION DETAILS DRAWING FOR WASHER, D.O.M, H.C WATER, SANITARY CONNECTION DETAILS.
 - 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.
 - ALL VENT PIPE INSTALLATION TO COMPLY WITH PLUMBING CODES.
 - FOR D.H.C. W. RISER SIZES, REFER TO RISER DIAGRAM
 - FIRE DAMPERS ARE REQUIRED TO BE LISTED AND ARE TO HAVE FIRE PROTECTION RATING OF THE PENETRATED FIRE SEPARATION.
 - THE PIPING PENETRATING THE VARIOUS FIRE SEPARATION IS REQUIRED TO BE FIRESTOPPED WITH A LISTED FIRESTOPPING MATERIAL IN ACCORDANCE WITH OBC ARTICLE 3.13.1
 - 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.
 - NO FLEXIBLE DUCT SHALL BE USED FOR ANY IN-SUITE DUCTWORK.
 - PROVIDE 25MM EXTERNAL INSULATION TO ENTIRE FRESH AIR DUCT FROM EXTERIOR WALL TO ERV FAN COIL UNIT.
 - DRYER EXHAUST DUCT SHALL BE SMOOTH AND CORROSION-RESISTANT MATERIAL (FLEXIBLE CONNECTION IS NOT ACCEPTABLE).

LEGEND MECHANICAL

SYMBOL	DESCRIPTION
[Symbol]	SUPPLY AIR DISBURSER
[Symbol]	SUPPLY AIR TRIGGER
[Symbol]	LINEAR SUPPLY DIFFUSER
[Symbol]	THERMOSTAT
[Symbol]	FAN MOTOR
[Symbol]	RETURN AIR GRILLE
[Symbol]	EXHAUST AIR GRILLE
[Symbol]	SUPPLY DUCT UP
[Symbol]	SUPPLY DUCT DOWN
[Symbol]	RETURN DUCT UP
[Symbol]	RETURN DUCT DOWN
[Symbol]	EXHAUST DUCT UP
[Symbol]	EXHAUST DUCT DOWN
[Symbol]	FINE DAMPER
[Symbol]	BALANCING DAMPER
[Symbol]	MOTORIZED DAMPER
[Symbol]	MOTORIZED FIRE DAMPER
[Symbol]	BACKDRIFT DAMPER
[Symbol]	OPPOSED BLADE VALVE CONTROL DAMPER
[Symbol]	COIL STOPPING DAMPER
[Symbol]	TUNING VANES
[Symbol]	FLEXIBLE CONNECTION
[Symbol]	ACOUSTIC INSULATION
[Symbol]	TYPE OF EQUIPMENT
[Symbol]	FIXTURE CONNECTION
[Symbol]	TYPE OF GRILLE OR GRILLE
[Symbol]	SMALL SIZE OR OTHER SIZES
[Symbol]	ANGLE (10° OR 45°)
[Symbol]	STARTER (3 PHASE / PHASE 1)
[Symbol]	FAN SWITCH / IN-SUITE ERV OVERRIDE BUTTON
[Symbol]	CO SENSOR
[Symbol]	GAS LINE
[Symbol]	GAS METER
[Symbol]	GAS SOON
[Symbol]	PRESSURE REDUCING VALVE
[Symbol]	SANITARY ABOVE GRADE
[Symbol]	SANITARY BELOW GRADE
[Symbol]	STORM ABOVE GRADE
[Symbol]	STORM BELOW GRADE
[Symbol]	DOMESTIC COLD WATER
[Symbol]	DOMESTIC HOT WATER
[Symbol]	SANITARY VENT
[Symbol]	WATER METER
[Symbol]	FLOOR DRAIN
[Symbol]	TUNNEL FLOOR DRAIN
[Symbol]	ALB DRAIN
[Symbol]	ROOF DRAIN
[Symbol]	ALB DRAIN
[Symbol]	AREA DRAIN
[Symbol]	B1-LEVEL AREA DRAIN
[Symbol]	CATCH BASIN
[Symbol]	SANITARY TRAP
[Symbol]	ELBOW UP
[Symbol]	ELBOW DOWN
[Symbol]	WALL CLEANOUT
[Symbol]	FLOOR CLEANOUT
[Symbol]	HOSE BIBB
[Symbol]	NON-FREEZE HOSE BIBB
[Symbol]	GLOBE VALVE
[Symbol]	GATE VALVE
[Symbol]	BALL VALVE
[Symbol]	BUTTERFLY VALVE
[Symbol]	PRESSURE REDUCING VALVE
[Symbol]	CAP
[Symbol]	COMPRESSED AIR OUTLET
[Symbol]	BACKFLOW PREVENTER
[Symbol]	CIRCUIT BALANCING VALVE
[Symbol]	MULTIPLE PIPES
[Symbol]	DENOTES NO. OF PIPES
[Symbol]	TEMPERATURE SENSOR
[Symbol]	THERMISTOR
[Symbol]	1-WAY MODULATING VALVE
[Symbol]	3-WAY MODULATING VALVE
[Symbol]	COU 10' BUILDING 4 10' PLUS
[Symbol]	FLOOR ELEVATION ABOVE LEVEL
[Symbol]	HEADROOM FLOOR TO CEILING



- EXHAUST DUCTWORK TO BE C/W 25mm THICK THERMAL INSULATION 6FT. FROM EXTERIOR WALL. (TYPICAL)
- F/A INTAKE DUCTWORK TO BE C/W 25mm THICK THERMAL INSULATION FOR ENTIRE LENGTH FROM EXTERIOR WALL TO ERV FCU. (TYPICAL)



- 1 NORTH F/A SHAFT A
- 2 150+ CU/S
- 3 150+ CUR
- 1 150+ SH/S
- 2 50+ GAS VENT
- 3 63+ GAS (5LB) FOR BUILDING

- ACOUSTIC NOTES:
- ALL SYSTEM/DOMESTIC PIPE LOOPS OR OFFSETS WHICH ARE 50MM DIA. AND LARGER SHALL BE ISOLATED USING NEOPRENE-IN-SHEAR HANGERS AND ADDITIONAL 25 MM THICK RIBBED OR WAFFLED NEOPRENE PADS IN THE SADDLES OF CLEVIS HANGERS.
 - ALL PIPES SMALLER THAN 50MM DIA. SHALL BE ISOLATED WITH 5MM THICK RIBBED OR WAFFLED RUBBER PADS IN HANGER SADDLES.
- CLEAR FLOOR TO UNDERSLAB = 2500mm
 CLEAR PRODUCT = 2500mm
 UNITS 419/421: DRAINS FROM TERRACE ON 5/F

- NOTES:
- NORTH F/A SHAFT B FROM G/F TO 14/F. DUCT SERVING CORRIDOR FROM G/F TO 14/F. SEE PRESSURIZATION / VENTILATION RISER DIAGRAM FOR DETAILS.
 - PIPE SHAFT - REFER TO PIPE RISER DETAIL ON THIS DRAWING FOR DETAILS.
 - 150+ KITCHEN / DRYER / W/R / FCU INTAKE / FCU EXHAUST DUCT. (TYPICAL UNLESS OTHERWISE NOTED)
 - NORTH F/A SHAFT A FROM G/F TO 14/F. DUCT SERVING CORRIDOR FROM 9/F TO 14/F. SEE PRESSURIZATION / VENTILATION RISER DIAGRAM FOR DETAILS.
 - 600+ GARBAGE CHUTE.
 - 100+ RUL FROM ABOVE AND DOWN.
 - 100+ RUL FROM ABOVE.
 - 100+ RUL DOWN.
 - 100+ STM 51%.

REVISIONS

NO.	DESCRIPTION	DATE

CONTRACTOR MUST CHECK AND VERIFY ALL DIMENSIONS AND CONDITIONS ON THE JOB BEFORE COMMENCING WORK TO THE MAXIMUM EXTENT POSSIBLE PRIOR TO THE START OF WORK. THIS DRAWING IS THE PROPERTY OF THE ENGINEER AND NOT BE REPRODUCED FROM COPIES OF THE WORK.

DRAWINGS ARE NOT TO BE SCALED

NOVA ENGINEERING

01/10/14

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DRAWING TITLE: 4/F NORTH MECHANICAL LAYOUT

PROJECT TITLE: 50 ALEXANDRA PARK BLOCK II 38 CAMERON STREET TORONTO ONTARIO

DESIGNED BY: G.S. CHECKED BY: E.P. SCALE: 1:50

DATE: FEB, 13 PROJECT NUMBER: 1313 DRAWING NUMBER: M-11 OF 43