

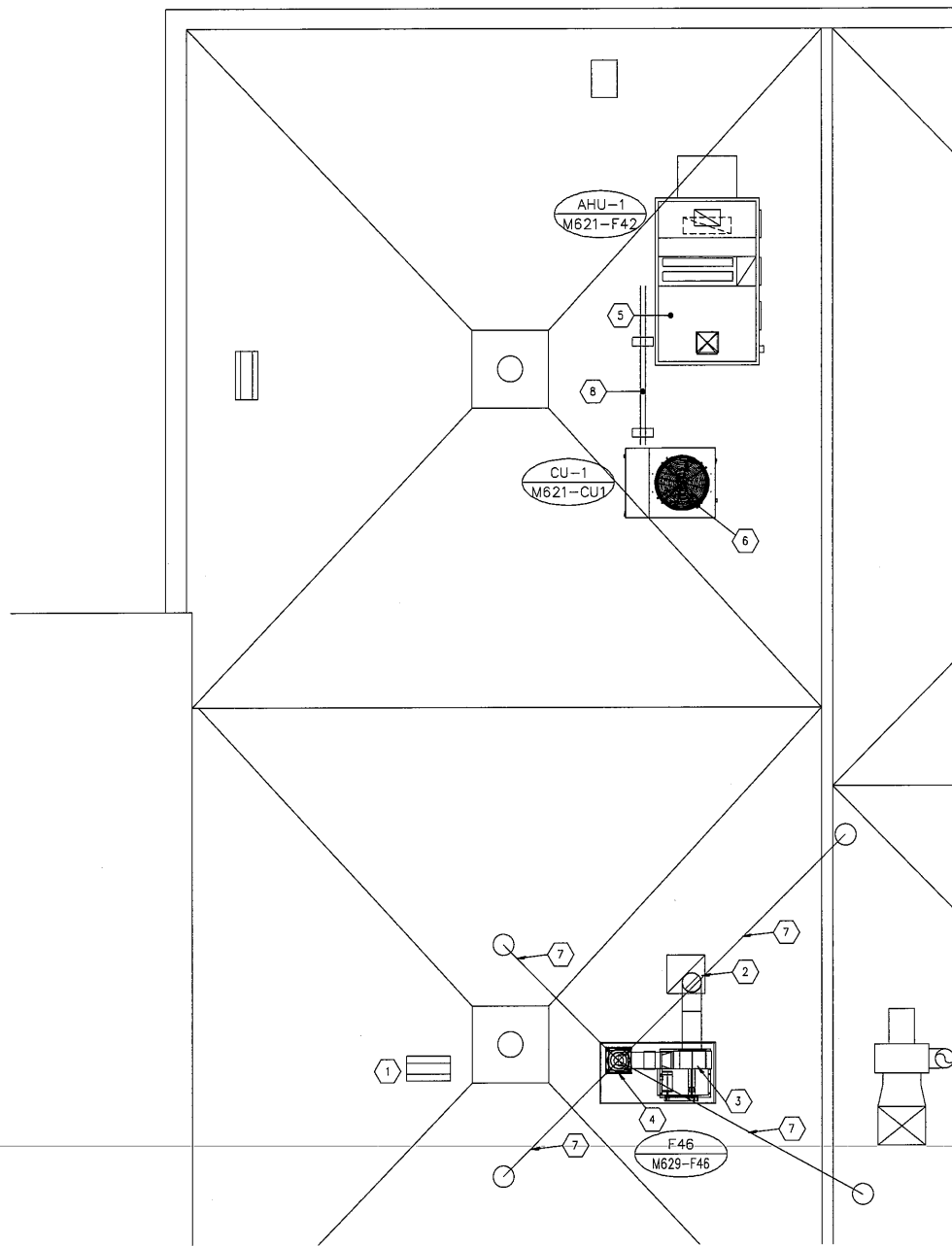
1 NEW VENTILATION - PLAN  
SCALE 1:50

KEY NOTES

- 1 EXISTING 1000x550 R/A DUCT TO EXISTING ROOF TOP UNIT; DUCT TO REMAIN IN SERVICE TO MAX. EXTENT POSSIBLE; PROVIDE NEW DUCTWORK TO SUIT TIE-IN TO NEW AIR HANDLING UNIT; NEW AIR HANDLING RETURN AIR OPENING, 406x254, CHECK SHOP DRAWINGS BEFORE TRANSITION FABRICATION
- 2 NEW AIR SUPPLY DUCTWORK, FROM NEW AIR HANDLING UNIT THRU OUT CEILING SPACE, AS SHOWN; DUCT INSULATED; PROVIDE BASE ELBOW DRIP PAN, SOLDERED WATERTIGHT
- 3 EXISTING R/A & EXHAUST DUCTWORK IN LOCKER ROOM AREA, TO REMAIN IN SERVICE, NOT SHOWN ENTIRELY, N/C
- 4 NEW REHEAT COIL, APPROX. DIMS 1000mm WIDE x 525mm HIGH, AT APPROX. SAME LOCATION; RE-CONNECT PIPING TO NEW REHEAT COIL, C/W NEW 3-WAY TEMPERATURE CONTROL VALVE. PROVIDE NEW DUCT TRANSITIONS TO SUIT
- 5 RE-CONNECT EXISTING DUCT BRANCHES TO NEW DUCTWORK
- 6 EXISTING DUCTWORK, AIR TERMINALS, BALANCING DAMPERS TO REMAIN IN SERVICE, WHERE NOTED, TYP.
- 7 1 HOUR FIRE RATED WALL; PROVIDE FIRE DAMPER TO MATCH WALL RATING.
- 8 EXISTING REHEAT COIL TO REMAIN IN SERVICE; INSTALL NEW 3-WAY TEMPERATURE CONTROL VALVE
- 9 NEW LAB FUME HOOD.
- 10 NEW FUME HOOD S. STEEL EXHAUST DUCT, THRU CEILING SPACE TO EXISTING OPENING TO BE RE-USED. PROVIDE BALANCING DAMPER (TBD)
- 11 EXISTING ROOF OPENING & ROOF CURB TO BE RE-USED FOR NEW FUME HOOD DUCT.
- 12 NEW HIGH VOLUME AIR SUPPLY DIFFUSERS; CO-ORDINATE LOCATION WITH CEILING TILES AND LIGHTING LAYOUT.
- 13 NEW EXHAUST/RELIEF FAN, F-47 (M620-F47), LOCATED IN CEILING SPACE; SUPPORT FAN FROM ROOF JOIST; INLET DUCT TO SUIT SIZE AS SHOWN; PROVIDE BALANCING DAMPER AND INLET SCREEN
- 14 NEW VAV BOX, VAV-1, 2 POSITIONS, 50% & 100%, C/W DISCHARGE SILENCER BOX; SUPPORT AIR VALVE FROM ROOF JOISTS
- 15 NEW RETURN AIR GRILLES, RG-1, FINAL LOCATION TO BE CO-ORDINATED WITH CEILING LAYOUT
- 16 NEW 600x600 RETURN GRILLE, RG-1; CONNECTED TO EXISTING DUCTS.

DIFFUSER/GRILLE SCHEDULE

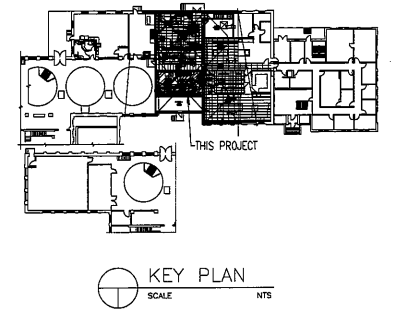
TAG	MANUFACTURER	MODEL	COMMENTS
SD-1	E.H. PRICE	350/600x600/SCDA/3/3C/B12	
RG-1	E.H. PRICE	300x300/80/3/3C/B12	



2 ROOF NEW HVAC EQUIPMENT - PLAN  
SCALE 1:50

KEY NOTES

- 1 EXISTING ROOF CURB AND RELIEF HOOD, TO BE RE-USED FOR NEW EXHAUST/RELIEF FAN, F-47 (M621-F47); PROVIDE DUCT TRANSITION TO EXISTING TO SUIT
- 2 EXISTING ROOF CURBED OPENING TO BE RE-USED FOR NEW FUME HOOD EXHAUST DUCT; PROVIDE NEW CURB CAP AND DUCT FLASHING TO SUIT
- 3 NEW FUME HOOD EXHAUST FAN, F-46 (M629-F46); INSTALLED ON NEW ROOF CURB, COVERED WITH FLASHING; SEE ARCHITECTURAL DETAILS FOR ROOF CURB
- 4 FUME HOOD EXHAUST STACK, MIN. 3000mm HEIGHT, C/W EXIT VELOCITY CONE; STACK CONSTRUCTED WITH PS SS CHIMNEY PIPE & FITTINGS; SEE MECHANICAL DETAIL
- 5 NEW AIR HANDLING UNIT, AHU-1 (M621-F42) AT SAME LOCATION AS THE REMOVED UNIT; LOCATE UNIT IN SUCH MANNER THAT NEW SUPPLY AND RETURN OPENINGS ARE APPROX. AT SAME LOCATIONS AS PREVIOUS UNIT OPENINGS; REWORK ROOF OPENING AS REQUIRED TO SUIT; ROOF CURB, 450mm HIGH TO SUIT NEW UNIT; ROOF CURB DETAIL BY ARCHITECTURAL
- 6 NEW CONDENSING UNIT, CU-1 (M621-CU1); PROVIDE NEW ROOF RECYCLED RUBBER PAD; SEE ARCHITECTURAL FOR DETAILS. FINAL LOCATION TO BE CO-ORDINATED WITH STRUCTURAL
- 7 PROVIDE NEW GUY WIRES, TYP.x4, ANCHORED TO EXISTING ROOF ANCHORS.
- 8 FIELD RUN REFRIGERATION LINES BETWEEN CU-1 & AHU-1 DX COIL; SUPPORT LINE ON ROOF SLEEPERS



GENERAL NOTES

1. PERFORM ALL WORK IN ACCORDANCE WITH ALL APPLICABLE CODES, STANDARDS AND CITY INSPECTIONS REQUIREMENTS.
2. COORDINATE WORKS WITH OTHER SUB-TRADES. REFER TO SPECIFIC DETAILS FOR CUTTING AND SEALING PENETRATIONS THROUGH OPENINGS & FIRE SEPARATIONS.
3. REFER TO TECHNICAL SPECIFICATIONS FOR EQUIPMENT AND MATERIAL SPECIFICATIONS AND INSTALLATION AND CONSTRUCTION REQUIREMENTS.
4. INSULATE PLUMBING PIPES AND DUCTWORK WHERE INDICATED AND AS SPECIFIED.
5. SUPPORT ALL PLUMBING LINES AND DUCTWORK TO MEET CODE REQUIREMENTS & ESTABLISHED INDUSTRY TRADE PRACTICES, (SMACNA, ASHRAE).
6. INVESTIGATE SITE PRIOR TO CONSTRUCTION TO CONFIRM ALL DIMENSIONS AND INSTALLATION REQ'S.
7. PERFORM ALL CUTTING & PATCHING NECESSARY FOR ANY REQUIRED OPENINGS THRU WALLS, ROOF AND FLOOR.
8. PROVIDE TAB TO ENSURE AIR DISTRIBUTION TO VOLUMES INDICATED.
9. NOT ALL EQUIPMENT/PIPING, ETC. IS SHOWN.
10. PROVIDE FIRE STOPS AT ALL FIRE RATED WALLS/FLOOR OPENINGS TO MATCH EXISTING RATING
11. ALL NEW SUPPLY AND EXHAUST DUCT INSULATED, SEE SPECIFICATIONS FOR DETAILS.
12. PRIOR TO TESTING AND BALANCING NEW SYSTEM, CONSISTING OF EXISTING AND NEW DUCTWORK, VISUALLY INSPECT AND CLEAN EXISTING DUCTWORK REMAINING IN SERVICE.

NOTE

THE CITY OF WINNIPEG PERSONNEL REQUIRES THE USE OF EXISTING SHOWER ROOM (110B) AND EXISTING CLEAN LOCKER ROOM (110D) AT THE BEGINNING AND END OF EACH WORK DAY FOR CITY PERSONNEL TO SHOWER AND CHANGE. WORK IN ROOMS 110B, 110C, 110D IS RESTRICTED TO BETWEEN 8:00 AND 15:30 HOURS TO ACCOMMODATE CITY USE OF THE FACILITY. CLEANUP WASTE AND DEBRIS AT THE END OF EACH WORK DAY AND LEAVE THE ROOMS CLEAN AND IN WORKING ORDER. ALTERNATING WORK IN ROOMS 110B, 110C, 110D CAN BE PERFORMED IN THE EVENING OR WEEKEND.

**ALLIANCE**  
Engineering Services Inc.

 Certificate of Authorization Alliance Engineering Services Inc. No.2906 Date: _____	B.M. ELEV.	FIELD BOOK #:	 LM Architectural Group 500-136 Market Ave Winnipeg, Manitoba, Canada R3B 0P4 t: (204) 942.0681 f: (204) 943.8676 www.lm-architects.com	SEAL  A.F.G. GOSSEN PROFESSIONAL ENGINEER	<b>THE CITY OF WINNIPEG</b> WATER AND WASTE DEPARTMENT <b>NORTH END WATER POLLUTION CONTROL CENTRE</b> - LAB RENOVATIONS - SHEET 1 OF 1 CITY DRAWING NUMBER 1-0101M-H0004-001-01
	POSTED TO LBIS				
	3 ISSUED FOR FINAL REVIEW 2011-08-30 AG			CONSULTANT DRAWING NO. M2.2	<b>NEW VENTILATION - PLANS</b>
	2 ISSUED FOR REVIEW 2011-06-30 AG				
	1 ISSUED FOR REVIEW 2011-05-20 AG				
	A ISSUED FOR PROJECT COORDINATION 2011-05-06 AG				
	NO. REVISIONS	DATE	BY		