



CRAWL SPACE FLOOR PLAN - MECHANICAL
SCALE: 1:100

- 1 CRAWL SPACE EXHAUST FANS EF-1 & EF-2 SHALL BE HUNG FROM UIS OF FLOOR AS PER HVAC SCHEDULE. ROUTE 8" SCH.40 PIPE 2200 FROM BASEMENT FLOOR OUT TO EXTERIOR WALL. PIPE SHALL BE AS CLOSE AS POSSIBLE TO WALL SURFACES. GOOSE NECK UP TO GRADE. MINIMUM 600 CLEARANCE FROM GOOSE NECK OPENING TO GRADE. SUPPLY & INSTALL INCLUDING ELECTRICAL HOOK-UP BY DIVISION 26 TO COMPLETE A VIBRATION FREE SYSTEM.
- 2 BASEMENT FLOOR GRILLE WITH FIRE DAMPER SUPPLYS VENTILATION INTO CRAWLSPACE. SEE PROJECT SPECIFICATIONS FOR SEQUENCE OF OPERATION.
- 3 MOTORIZED CONTROL DAMPERS FOR CRAWLSPACE VENTILATION. SEE PROJECT SPECIFICATIONS FOR SEQUENCE OF OPERATION.

GRILLE SCHEDULE			
TYPE	DESCRIPTION	MANUFACTURER	REMARKS
A	1000 HEAVY DUTY ALUMINUM LINEAR BAR FLOOR GRILLE. BRUSH ALUMINUM	E.H. PRICE TYPE LBP425C66	GA
B	ALUMINUM WALL GRILLE. SINGLE DEFLECTION, 19 BLADE SPACING, ALUMINUM FINISH	E.H. PRICE TYPE 610F/L/A/B15	
C	ALUMINUM CURVED VANE DIFFUSER, TWO WAY PATTERN, ALUMINUM FINISH	E.H. PRICE TYPE CVD/F/2S/B15	GA
D	ALUMINUM WALL RETURN GRILLE, FIXED LOUVERS, 45 DEGREE DEFLECTION, 19 BLADE SPACING, ALUMINUM FINISH	E.H. PRICE TYPE 630F/L/A/B15	
E	ALUMINUM EGG CRATE FACE RETURN GRILLE, 13X13X13 ALUMINUM GRID CORE, ALUMINUM FINISH	E.H. PRICE TYPE 80F/A/B15	GB
F	ALUMINUM ROUND GRILLE	E.H. PRICE TYPE LG LATTICE 100AL/CS/B15	GA
G	ALUMINUM SQUARE PLAQUE DIFFUSER, ALUMINUM FINISH	E.H. PRICE TYPE ASPD/B15	
H	ALUMINUM CURVED VANE DIFFUSER, TWO WAY PATTERN, ALUMINUM FINISH	E.H. PRICE TYPE CVD/F/2S/B15	GC
J	ALUMINUM CURVED VANE DIFFUSER, TWO WAY PATTERN, ALUMINUM FINISH	E.H. PRICE TYPE CVD/F/2S/B15	
K	ALUMINUM LINEAR BAR GRILLE (FOR SILL), BRUSH ALUMINUM	E.H. PRICE TYPE LBP15A/66	GA
FD	FIRE DAMPER TYPE A FOR BOTH RECTANGULAR SUPPLY AND RETURN AIR; NCA FD TYPE C FOR ROUND DUCTS. ALL FIRE DAMPERS CW 100 DEGREES CELSIUS LINK 1 1/2 HOUR RATED.	NCA SLIMLINE MODEL SL	GD

GRILLE REMARKS	
GA	C/W COMBINATION FIRE / BALANCING DAMPER
GB	C/W 1 HOUR RATED FIRE STOP FLAP
GC	C/W OPPOSED BLADE DAMPER
GD	PROVIDE GREENHECK # CAD-10 OR # HAD-10 ACCESS DOOR, 200X200 OR EQUIVALENT FOR ALL FIRE DAMPER INSTALLATION.

HVAC SCHEDULE		
MARK	DESCRIPTION	REMARKS
AHU-1 AHU-2	LENNOX # G61 MPV-60D-135 NATURAL GAS UP-FLOW HIGH EFFICIENCY (90% MIN. AFUE) DIRECT VENT, TWO STAGE HEAT, VARIABLE SPEED BLOWER FURNACE, CAPACITY 38.7 KW (132,000 BTU/HR) INPUT, 35.7 KW (122,000 BTU/HR) OUTPUT, NOMINAL FAN CAPACITY: 775 L/S @ 199 Pa (1640 CFM @ 0.8" SP), 746W (1HP), 120V MOTOR. C/W AIR FILTERS (10-PACK) AND RACK KIT FOR SIDE RETURN, AND OPTIONAL RETURN AIR BASE (RAB), DIRECT VENT WALL TERMINATION KIT "WTK" FOR MULTIPLE UNITS. 3 REQUIRED (AHU-1, AHU-2 & P-13).	
AC-1 AC-2	LENNOX ELITE SERIES MODEL NO. XC13-060-23-2, 5 TON CONDENSER, 230V, 10, MIN CIRCUIT AMPACITY 34.6A C/W TXV, LOW AMBIENT KIT, MODEL NO. 34MTZ, FREEZE STAT AND COMPRESSOR CRANKCASE HEATER. INDOOR COIL: LENNOX MODEL NO. CX34-60D-6F UP FLOW-CASED, 5-TON. COIL: NOMINAL AIR FLOW 775 L/S @ 35Pa (1640 CFM @ .18SP) COOLING SYSTEM TO BE PRE-CHARGED WITH R-410A REFRIGERANT.	
AHU-3 AHU-4	LENNOX # G61 MPV-60D-135 NATURAL GAS UP-FLOW HIGH EFFICIENCY (90% MIN. AFUE) DIRECT VENT, TWO STAGE HEAT, VARIABLE SPEED BLOWER FURNACE, CAPACITY 38.7 KW (132,000 BTU/HR) INPUT, 35.7 KW (122,000 BTU/HR) OUTPUT, NOMINAL FAN CAPACITY: 887 L/S @ 199 Pa (1900 CFM @ 0.8" SP), 746W (1HP), 120V MOTOR. C/W AIR FILTERS (10-PACK) AND RACK KIT FOR SIDE RETURN AND OPTIONAL RETURN AIR BASE (RAB). (NOTE: THESE UNITS ARE INTENDED FOR HEATING AND VENTILATION BUT NOT FOR COOLING).	
AHU-5	LENNOX # G61 MPV-36C-280 NATURAL GAS UP-FLOW HIGH EFFICIENCY (90% MIN. AFUE) DIRECT VENT, TWO STAGE HEAT, VARIABLE SPEED BLOWER FURNACE, CAPACITY 25.8 KW (88,000 BTU/HR) INPUT, 23.1 KW (79,000 BTU/HR) OUTPUT, NOMINAL FAN CAPACITY: 498 L/S @ 199 Pa (1050 CFM @ 0.8" SP), 373W (1/2 HP), 120V MOTOR. C/W AIR FILTERS (10-PACK) AND RACK KIT FOR SIDE RETURN. (NOTE: THESE UNITS ARE INTENDED FOR HEATING AND VENTILATION BUT NOT FOR COOLING).	
HRV-1	LIFEBREATH MODEL 500DCS HEAT RECOVERY VENTILATOR. TWO PSC, 5-SPEED DOUBLE-SHAFTED MOTORS, 120V, 3.15A, EACH AT HIGH SPEED BLOWER. CENTRIFUGAL TYPE RATED AT 250 L/S (530 CFM), DUCT CONNECTION: FOUR-350mm x 200mm (14"x8"), COMPLETE WITH WASHABLE FILTERS IN EXHAUST & SUPPLY AIR STREAM. UNIT TO BE SET ON SUPPORT BRACKETS HUNG BY THREADED ROD TYPE APPARATUS.	
H1	LIFEBREATH MODEL 98-250 VENTILATION DEHUMIDISTAT C/W KNOCKOUT FOR CONTROL PAD MOUNTED REMOTELY TO GIVE FULL HRV FUNCTIONALITY & CONTROL FROM REMOTE LOCATION. SUPPLY & INSTALL DEHUMIDISTAT & CONTROL PAD.	
HRV-2	LIFEBREATH MODEL 200MAX. HEAT RECOVERY VENTILATOR. EACH AIR STREAM TO HAVE ONE CENTRIFUGAL BLOWER DRIVEN BY A COMMON PSC MOTOR. 5-SPEED FAN OPERATION, 120V, 1.4A AT HIGH SPEED. AIR VOLUME: 94 L/S (200CFM), COMPLETE WITH WASHABLE AIR FILTERS IN EXHAUST & SUPPLY AIR STREAM.	
H-2	LIFEBREATH MODEL 98-250 VENTILATION DEHUMIDISTAT C/W KNOCKOUT FOR CONTROL PAD MOUNTED REMOTELY TO GIVE FULL HRV FUNCTIONALITY & CONTROL FROM REMOTE LOCATION. SUPPLY & INSTALL DEHUMIDISTAT & CONTROL PAD.	
CF1 CF2	PLEASANTVAIRE ACP36 DOWNDRAFT CEILING FAN, 900MM (36") LONG BLADES, 700 RPM, 1700 L/S (7100 CFM) C/W SAFETY CHAIN.	
EF-1	GREENHECK MODEL SQ-65-D DIRECT DRIVE CENTRIFUGAL INLINE FAN, VOLUME: 72 L/S @ 50 Pa (153 CFM @ 0.2" SP) 1550 RPM, 130 MOTOR HP, 115W/60HZ/1PH. ACCESSORIES TO INCLUDE NEMA-1 TOGGLE SWITCH (MOUNTED & WIRED), SPRING HANGING ISOLATORS & BRACKETS, CSA LABELLED MOTOR, UL618-705 "POWER VENTILATORS", MOTOR WITH THERMAL OVERLOADS. FAN TO BE HUNG FROM UNDERSIDE OF APPARATUS ROOM FLOOR WITH SPRING HANGING ISOLATORS AND BRACKETS. FAN TO BE CONNECTED TO 8" SCH. 40 PIPE WITH INSULATED FLEXIBLE DUCT.	
EF-2	GREENHECK MODEL SQ-80-D DIRECT DRIVE CENTRIFUGAL INLINE FAN, VOLUME: 58 L/S @ 50 Pa (123 CFM @ 0.2" SP) 1550 RPM, 140 MOTOR HP, 115W/60HZ/1PH. ACCESSORIES TO INCLUDE NEMA-1 TOGGLE SWITCH (MOUNTED & WIRED), SPRING HANGING ISOLATORS & BRACKETS, CSA LABELLED MOTOR, UL618-705 "POWER VENTILATORS", MOTOR WITH THERMAL OVERLOADS. FAN TO BE HUNG FROM UNDERSIDE OF BASEMENT FLOOR WITH SPRING HANGING ISOLATORS AND BRACKETS. FAN TO BE CONNECTED TO 8" SCH. 40 PIPE WITH INSULATED FLEXIBLE DUCT.	
EF-3	GREENHECK MODEL SE1-4-426-D-1 SIDEWALL DIRECT DRIVE EXHAUST FAN, VOLUME: 110 L/S @ 25 Pa (232 CFM @ 0.1"SP) MOTOR: 1140 HP, 115V, 1550 RPM. OPTIONS TO INCLUDE: 1. GREENHECK MODEL WD-320 VERTICAL MOUNT EXHAUST DAMPER 2. GREENHECK 45" ALUMINUM WEATHERHOOD C/W 13mm WELDED WIRE BIRDSCREEN & PREPUNCHED MOUNTING HOLES. 3. GREENHECK WALL HOUSING, 338x338x483, GALVANIZED STEEL CONSTRUCTION.	
CD-1	GREENHECK MODEL VCDR-50. ROUND VOLUME CONTROL DAMPER, 2000, 130 STEEL AXLE W/ 3/4SS AXLE BEARINGS. BLADE TO BE 20 GA STAINLESS STEEL. DAMPER TO BE OPERATED BY AN ELECTRIC ACTUATOR.	
CD-2	TAMCO SERIES 1000. RECTANGULAR VOLUME CONTROL DAMPER, 250 x 170 (10"x6.75"), DAMPER TO BE OPERATED BY AN ELECTRIC ACTUATOR, 130 DAMPER SHAFT.	
A-1	BELIMO MODEL LF-120-S ELECTRIC DAMPER ACTUATOR, ON-OFF, 120V, FAIL-SAFE CONTROL OF DAMPER. SET FOR NORMALLY-CLOSED OPERATION. THE ACTUATOR TO BE MOUNTED DIRECTLY TO 130 DAMPER SHAFT BY MEANS OF ITS UNIVERSAL CLAMP.	
FD-1	FIRE DAMPER FOR CONTROL DAMPER, CD-1, 100° CELSIUS FUSIBLE LINK, 1-1/2 HOURS RATED.	
T	LENNOX "SIGNATURE SERIES" TWO-STAGE HEAT/COOL THERMOSTAT, MODEL 9815L.	

NOTES :
SEE DRAWING M1.

ORIGINAL STAMPED BY: DOUG PALEY, P.ENG
DATE: 2006.07.14

NO.	REVISION/DESCRIPTION	BY	DATE
SEALS			

DRAWN BY	RCP/DTA	CHECKED BY	APPROVED
DATE	2006.07.14	USER APPROVAL	

CITY OF WINNIPEG
PLANNING, PROPERTY &
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CIVIC ACCOMMODATIONS DIVISION
300 - 65 GARRY ST. R3C 4K4

PROJECT
WEST TRANSCONA
FIRE PARAMEDIC STATION 21

1446 REGENT AVE. WEST
SHEET TITLE

CRAWL SPACE FLOOR PLAN
MECHANICAL
SCHEDULE

METRIC
WHOLE NUMBERS ARE IN MILLIMETRES,
DECIMALIZED NUMBERS ARE IN METRES

SCALE	PROJECT NO.	SHEET NO.
AS SHOWN	2004-058-01	M5