

1 VENTILATION LAYOUT – BASEMENT
SCALE: 1:70

KEY NOTES:

1. EXHAUST AIR DUCTWORK FROM ELECTRICAL ROOM AND SUPPLY AND EXHAUST AIR DUCTWORK FROM HRV SHALL BE THERMALLY INSULATED. REFER TO SPECIFICATION FOR DUCTWORK INSULATION REQUIREMENTS.
2. EF-5 SHALL BE INTERLOCKED WITH REVERSE ACTING THERMOSTAT.
3. ALL CONTROL WIRING SHALL BE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR.
4. WHEREVER DUCTWORK PENETRATES A FIRE SEPARATION, CONTRACTOR SHALL INSTALL FIRE DAMPERS IN ACCORDANCE WITH NFPA 80, ARTICLE 3.1.8.7 OF THE 2010 NBC, AND ALL OTHER APPLICABLE CODES AND STANDARDS.
5. ALL DUCTWORK LOCATED IN THE CEILING SPACE OF THE BASEMENT SHALL BE INSTALLED IN THE JOIST SPACE.

LEGEND	
	RECTANGULAR DUCTWORK
	ROUND SPIRAL DUCTWORK
	FLEXIBLE DUCTWORK
	ROUND CEILING DIFFUSER
	EXHAUST FAN
	BALANCING DAMPER
	CONTROL WIRING
	THERMOSTAT/TEMPERATURE SENSOR
	EQUIPMENT TAG AIRFLOW (L/S)
	FIRE DAMPER
	REVERSE-ACTING T'STAT

GENERAL NOTES: HVAC

ALL DUCTWORK FOR SUPPLY AND RETURN DUCT COLLARS SHALL BE CONSTRUCTED IN ACCORDANCE WITH ASHRAE AND SMACNA RECOMMENDATIONS AND SHALL BE GALVANIZED STEEL. C/W DAMPERS AND LOCKING QUADRANT.

SUPPLY AND LOCATE ALL SUPPORTS, SLEEVES, ROOF CURBS ETC., REQUIRED FOR THIS WORK.

ALL DUCTS SHALL BE HUNG WITH ADEQUATE HANGERS SUPPORTED INDEPENDENTLY. ALL ANGLES AND RODS SHALL BE GALVANIZED. ALL AUXILIARY STEEL NEEDED TO HANG DUCTS OR FANS FROM JOISTS, TRUSSES OR STEEL BEAMS SHALL BE PROVIDED BY THIS CONTRACTOR.

- A. DUCTS AND EQUIPMENT SHALL BE HUNG FROM THE TOP OR BOTTOM CHORDS OF JOIST AT PANEL POINTS OR FLANGES OF STEEL BEAMS.
- B. ALL SQUARE ELBOWS TO HAVE DOUBLE THICKNESS AIRFOIL TURNING VANES.
- C. DUCTS CANNOT IN ANY LOCATION BE SUPPORTED FROM FURRING, CEILING CONSTRUCTION, PIPING, ELECTRICAL CONDUIT OR ROOF DECK.
- D. PROVIDE CANVAS FLEXIBLE CONNECTIONS AT ALL AC UNITS SUPPLY AND RETURN DUCTS AND ALL EXHAUST FANS.

THIS CONTRACTOR SHALL PROVIDE ALL LABOUR, MATERIALS & TOOLS REQUIRED FOR COMMISSIONING, CALIBRATION, ADJUSTMENT, AND SETTING OF ALL CONTROL DEVICES FOR PROPER OPERATION OF SYSTEMS. PROVE ALL MODES OF OPERATION PRIOR TO FINAL INSPECTION TO THE SATISFACTION OF THE ENGINEER.

THIS CONTRACTOR SHALL ENSURE THAT ALL REQUIRED CLEARANCES AS RECOMMENDED BY THE MANUFACTURER ARE PROVIDED TO ALLOW FOR PROPER OPERATION AND SERVICING OF MECHANICAL EQUIPMENT.

THIS CONTRACTOR SHALL NOTIFY THE OWNER WHEN THE ROOF OR WALL OPENING LOCATIONS HAVE BEEN DETERMINED AND PRIOR TO CUTTING. THE OWNER OR HIS REPRESENTATIVE SHALL SUPERVISE CUTTING OF ALL OPENINGS.

THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL LOCATIONS FOR EQUIPMENT, DUCTWORK AND CONTROL DEVICES. THIS CONTRACTOR SHALL VERIFY ALL EQUIPMENT LOCATIONS ON SITE PRIOR TO INSTALLATION AND SHALL COORDINATE THE LOCATIONS SO AS NOT TO CAUSE INTERFERENCE WITH THE WORK OF OTHER TRADES.

THIS CONTRACTOR SHALL PROVIDE ALL LABOUR, MATERIAL, TOOLS, EQUIPMENT, ETC. REQUIRED FOR THE INSTALLATION/MODIFICATION OF THE HVAC SYSTEMS AS SHOWN TO PROVIDE A COMPLETE AND OPERATING SYSTEM.

VISIT THE JOB SITE AND EXAMINE ALL DRAWINGS AND CONDITIONS WHICH COULD AFFECT THE WORK. NO EXTRA COST WILL BE ALLOWED DUE TO FAILURE TO TAKE SITE CONDITIONS INTO CONSIDERATION. BE FAMILIAR WITH ALL RELATED WORK TO AVOID CONFLICTS WITH OTHER TRADES.

THE COMPLETE INSTALLATION/MODIFICATION OF THE HVAC SYSTEMS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF ALL APPLICABLE CODES AND STANDARDS.

OBTAIN PERMITS AND PAY ALL FEES FOR WORK AND ALL REQUIRED INSPECTIONS.

ALL MATERIALS SHALL CONFORM TO CSA, NFPA AND CEC REQUIREMENTS AND BEAR A CSA LABEL.

BEFORE FINAL PAYMENT IS MADE, GUARANTEE ALL MATERIALS AND WORKMANSHIP SUPPLIED IN THE PERFORMANCE OF THIS CONTRACT FOR A PERIOD OF ONE YEAR FROM DATE OF FINAL ACCEPTANCE AND BE RESPONSIBLE WHEN CALLED UPON TO MAKE GOOD WITHOUT FURTHER COST TO THE OWNER, SUCH DEFECTS AS MAY APPEAR WITHIN THIS PERIOD.

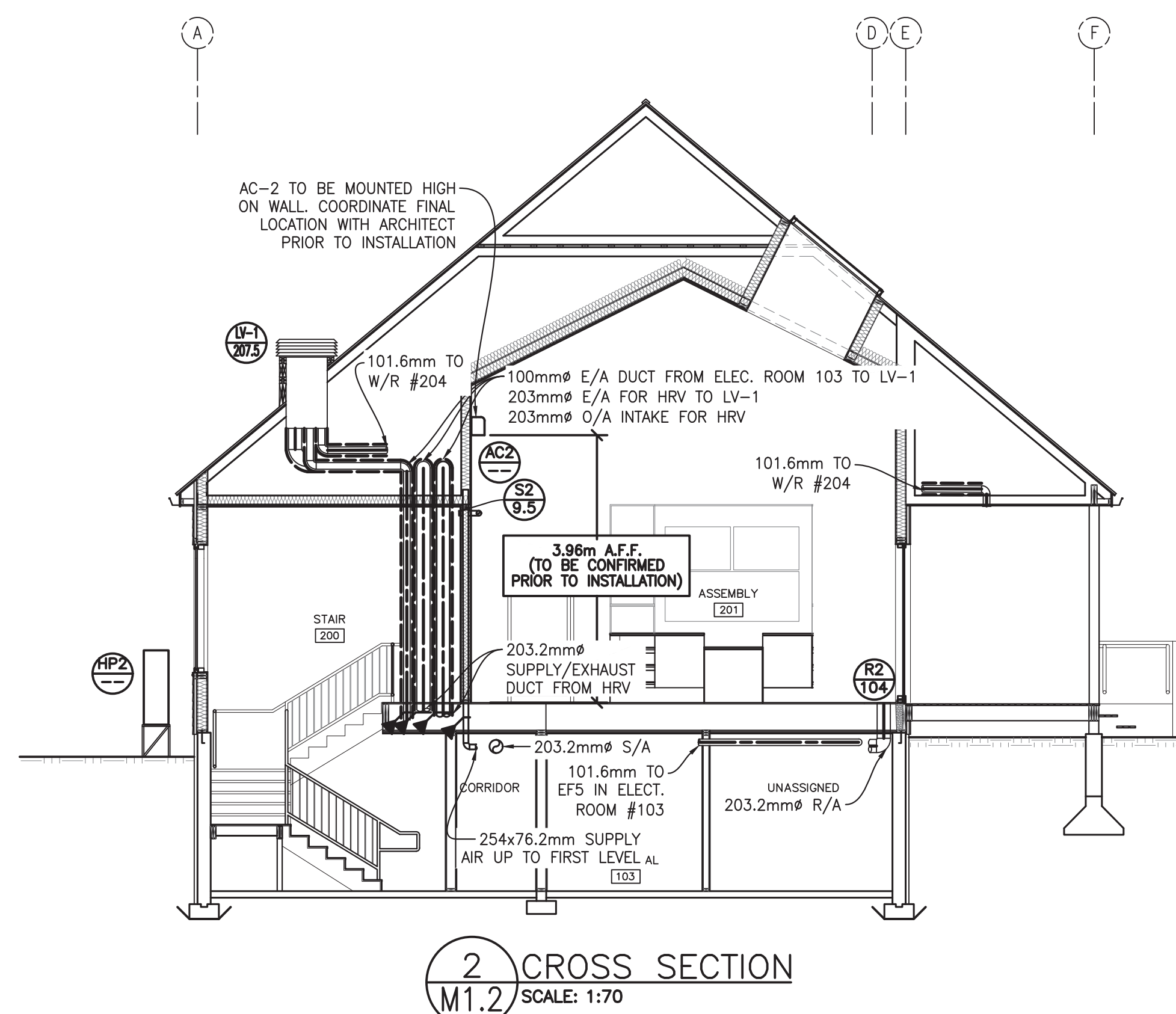
KEEP ACCURATE RECORD "AS-BUILT" DRAWINGS AND SUBMIT THESE BEFORE FINAL CERTIFICATE OF COMPLETION.

BE RESPONSIBLE FOR CARE OF THE BUILDING, COORDINATE ALL CORE DRILLING WITH OWNER'S SITE REPRESENTATIVE AND EFFECTIVE TENANTS. DO ALL CUTTING, PATCHING AND PAINTING REQUIRED FOR THE WORK OF THIS TRADE. CLEAN UP ALL DEBRIS DAILY AND REMOVE FROM THE SITE ON OR BEFORE COMPLETION OF THE CONTRACT. COORDINATE WITH ALL OTHER TRADES.

ON COMPLETION OF PROJECT, SUBMIT THREE (3) HARD COVER "OPERATING AND MAINTENANCE MANUALS" FOR APPROVAL. THE MANUALS SHALL CONTAIN AN INDEX PAGE AND TABBED DIVIDER PAGES, A LIST OF THE SUPPLIER'S NAMES, ADDRESSES AND TELEPHONE NUMBERS, OPERATING AND MAINTENANCE INSTRUCTIONS FOR ALL EQUIPMENT, COPIES OF TEST CERTIFICATES, ETC., AND INCLUDING A COMPLETE SET OF "APPROVED SHOP DRAWINGS".

FURNISH GUARANTEES FOR ALL EQUIPMENT SUPPLIED UNDER THIS CONTRACT.

ALL FLEXIBLE DUCTWORK SHALL BE INSULATED (EQUAL TO "BOFLEX") INSULATED MULTI-PLY ALUMINUM LAMINATE PMA-TYPE, MAXIMUM LENGTH 6'-0"



2 CROSS SECTION
SCALE: 1:70

THIS DRAWING IS PROVIDED TO REFLECT THE GENERAL EXTENT OF WORK AND AS SUCH DOES NOT NECESSARILY INDICATE THE ENTIRE SCOPE OF WORK. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH RELATED ARCHITECTURAL, STRUCTURAL, ELECTRICAL AND/OR MECHANICAL DRAWINGS/DETAILS, SPECIFICATIONS, TENDER AND/OR OTHER CONTRACT DOCUMENTS, AS APPLICABLE.

THIS DRAWING AND ITS RELATED DESIGNS, CALCULATIONS AND SPECIFICATIONS ARE INSTRUMENTS OF PROFESSIONAL SERVICE FOR THE EXECUTION OF THE WORK ON THIS PROJECT ONLY. THIS DRAWING SHALL NOT BE USED FOR ANY OTHER PROJECT WITHOUT THE EXPRESS WRITTEN CONSENT OF THE ENGINEER. THE ENGINEER ACCEPTS NO RESPONSIBILITY FOR LOSSES, DAMAGES OR COSTS ARISING OUT OF ANY USE OR REUSE OF THIS DRAWING NOT SPECIFICALLY AUTHORIZED BY THE ENGINEER IN WRITING.

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EXCEPT AS MAY BE CERTIFIED OTHERWISE IN WRITING BY THE ENGINEER, ONLY THE REPRODUCIBLE HARD COPY BEARING THE ENGINEER'S SEAL AND ORIGINAL SIGNATURE SHALL CONSTITUTE THE ORIGINAL OF THIS DRAWING.

THIS DRAWING IS NOT TO BE SCALED. OBTAIN ACCURATE DIMENSIONS FROM ARCHITECTURAL DRAWINGS OR SITE MEASUREMENTS.



4	ISSUED FOR TENDER	05/08/2017
3	99% DESIGN REVIEW	04/10/2017
2	99% DESIGN REVIEW	01/18/2017
1	DESIGN DEVELOPMENT – 50%	11/01/2016
0	ISSUED FOR REVIEW	09/09/2016
revisions		date
project		projet

**WEST GATE ENTRANCE
VISITOR RECEPTION CENTER
WOLFE LAKE
FUNDY, NB
ALBERT COUNTY**

drawing dessin
VENTILATION PLANS

designed	RSG	conçu
date	JAN. 11/17	
drawn	KDL	dessiné
date	JAN. 11/17	
approved	DGF	approuvé
date	JAN. 11/17	
Tender		Soumission
PWGSC Project Manager	Administrateur de projets TPSGC	
project number		no. du projet
	R.075853.001	
drawing no.		no. du dessin
	M1.2	