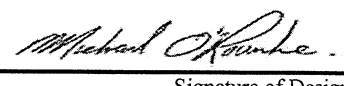


Schedule 1: Designer Information

Use one form for each individual who reviews and takes responsibility for design activities with respect to the project.

A. Project Information				
Building number, street name			Unit no.	Lot/con.
Municipality INNISFIL	Postal code	Plan number/ other description		
B. Individual who reviews and takes responsibility for design activities				
Name MICHAEL O'ROURKE		Firm HVAC DESIGNS LTD.		
Street address 375 FINLEY AVE		Unit no. 202	Lot/con. N/A	
Municipality AJAX	Postal code L1S 2E2	Province ONTARIO	E-mail info@hvacdesigns.ca	
Telephone number (905) 619-2300	Fax number (905) 619-2375	Cell number ()		
C. Design activities undertaken by individual identified in Section B. [Building Code Table 3.5.2.1 OF Division C]				
<input type="checkbox"/> House <input type="checkbox"/> Small Buildings <input type="checkbox"/> Large Buildings <input type="checkbox"/> Complex Buildings <input checked="" type="checkbox"/> HVAC – House <input type="checkbox"/> Building Services <input type="checkbox"/> Detection, Lighting and Power <input type="checkbox"/> Fire Protection <input type="checkbox"/> Building Structural <input type="checkbox"/> Plumbing – House <input type="checkbox"/> Plumbing – All Buildings <input type="checkbox"/> On-site Sewage Systems				
Description of designer's work HEAT LOSS / GAIN CALCULATIONS DUCT SIZING RESIDENTIAL MECHANICAL VENTILATION DESIGN SUMMARY RESIDENTIAL SYSTEM DESIGN per CSA-F280-12		Model: TH-7E Project: ALCONA		
D. Declaration of Designer				
I, <u>MICHAEL O'ROURKE</u> (print name)		declare that (choose one as appropriate):		
<input type="checkbox"/> I review and take responsibility for the design work on behalf of a firm registered under subsection 3.2.4. of Division C, of the Building Code. I am qualified, and the firm is registered, in the appropriate classes/categories. Individual BCIN: _____ Firm BCIN: _____				
<input checked="" type="checkbox"/> I review and take responsibility for the design and am qualified in the appropriate category as an "other designer" under subsection 3.2.5. of Division C, of the Building Code. Individual BCIN: <u>19669</u> Basis for exemption from registration and qualification: <u>O.B.C SENTENCE 3.2.4.1 (4)</u>				
<input type="checkbox"/> The design work is exempt from the registration and qualification requirements of the Building Code. Basis for exemption from registration and qualification: _____				
I certify that:				
1. The information contained in this schedule is true to the best of my knowledge. 2. I have submitted this application with the knowledge and consent of the firm.				
June 14, 2018 Date		 Signature of Designer		

NOTE:

- For the purposes of this form, "individual" means the "person" referred to in Clause 3.2.4.7(1) d). of Division C, Article 3.2.5.1. of Division C, and all other persons who are exempt from qualification under Subsections 3.2.4. and 3.2.5. of Division C.
- Schedule 1 is not required to be completed by a holder of a license, temporary license, or a certificate of authorization, issued by the Ontario Association of Architects. Schedule 1 is also not required to be completed by a holder of a license to practise, a limited license to practise, or a certificate of authorization, issued by the Association of Professional Engineers of Ontario.

SHEET NAME: ALCONA										DATE: Jun-18		WINTER NATURAL AIR CHANGE RATE		HEAT LOSS AT °F		CSA-F280-12		
BUILDER: BAYVIEW WELLINGTON										LO# 78875		SUMMER NATURAL AIR CHANGE RATE		HEAT GAIN AT °F		SB-12 PACKAGE A1		
TYPE: TH-7E										GFA: 1918								
ROOM USE	EXP. WALL	CLG. HT.	FACTORS	MBR	EINS	WIC	BED-2	BED-3	BED-4	BATH								
GRS.WALL AREA	LOSS	GAIN	LOSS	GAIN	LOSS	GAIN	LOSS	GAIN	LOSS	GAIN								
NORTH	23.3	15.0	0	0	0	0	0	0	0	0								
EAST	23.3	40.5	0	0	0	0	33	769	41	955	1662							
SOUTH	23.3	23.9	0	0	0	0	0	0	13	303	311							
WEST	23.3	40.5	28	552	1135	13	303	527	0	0	0							
SKYL.T.	40.8	99.8	0	0	0	0	0	0	0	0	0							
DOORS	27.6	3.1	0	0	0	0	0	0	0	0	0							
NET EXPOSED WALL	4.9	0.5	233	1138	126	50	244	27	0	0	0							
NET EXPOSED BSMT WALL ABOVE GR	3.9	0.4	0	0	0	0	66	322	36	288	1407	156						
EXPOSED CLG	1.4	0.5	210	295	111	98	138	52	88	124	46	154	216	81	225	316	119	
NO ATTIC EXPOSED CLG	3.0	1.1	0	0	0	0	0	0	0	0	0	0	28	84	32	0	0	
EXPOSED FLOOR	2.8	0.3	0	0	0	0	0	0	0	0	0	154	430	48	0	0	0	
BASEMENT/CRAWL HEAT LOSS																		
SLAB ON GRADE HEAT LOSS																		
SUBTOTAL HT LOSS				2086			1372		1738		3065		2279		918		73	
SUB TOTAL HT GAIN				0.20	0.28		606		0.20	0.28	0.20	0.28	0.20	0.28	0.20	0.28	0.28	
LEVEL FACTOR / MULTPLIER				577			480		403		89		3		41		8	
AIR CHANGE HEAT LOSS				52			57		35		3		3		3		3	
AIR CHANGE HEAT GAIN				0			230		186		41		8		41		8	
DUCT LOSS				0			222		0		0		0		0		0	
DUCT GAIN				480			1		240		1		169		240		0	
HEAT GAIN PEOPLE	240			501			501		501		501		501		501		0	
HEAT GAIN APPLIANCES/LIGHTS				2662			2440		2045		454		2423		454		108	
TOTAL HT LOSS BTU/H				3127			3290		4039		108		2423		454		108	
TOTAL HT GAIN x 1.3 BTU/H																		

ROOM USE	EXP. WALL	CLG. HT.	FACTORS	GRS.WALL AREA	LOSS	GAIN	KT/TFM	WIR	FOY	MUD	LOD	BAS
EXP. WALL	CLG. HT.	FACTORS	GRS.WALL AREA	LOSS	GAIN	KT/TFM	WIR	FOY	MUD	LOD	BAS	
NORTH	23.3	15.0	0	0	0	0	0	0	0	0	0	0
EAST	23.3	40.5	0	0	0	0	0	0	0	0	0	0
SOUTH	23.3	23.9	28	652	659	0	0	0	0	0	0	0
WEST	23.3	40.5	80	1864	3244	0	0	0	0	0	0	0
SKYL.T.	40.8	99.8	0	0	0	0	0	0	0	0	0	0
DOORS	27.6	3.1	0	0	0	0	0	0	0	0	0	0
NET EXPOSED WALL	4.9	0.5	372	1817	201	246	1202	133	168	772	85	240
NET EXPOSED BSMT WALL ABOVE GR	3.9	0.4	0	0	0	0	0	0	0	0	0	0
EXPOSED CLG	1.4	0.5	0	0	0	0	0	0	0	0	0	0
EXPOSED FLOOR	3.0	1.1	0	0	0	0	0	0	0	0	0	0
BASEMENT/CRAWL HEAT LOSS												
SLAB ON GRADE HEAT LOSS												
SUBTOTAL HT LOSS				4333		4113		706		1725		4839
SUB TOTAL HT GAIN				0.30	0.42		0.30	0.42	0.30	0.42		0.50
LEVEL FACTOR / MULTPLIER				1808		157	735	669	720	191		1.11
AIR CHANGE HEAT LOSS				0		0	0	0	0	0		6552
AIR CHANGE HEAT GAIN				0		0	0	0	0	0		0
DUCT LOSS				0		0	0	0	0	0		0
DUCT GAIN				0		0	0	0	0	0		0
HEAT GAIN PEOPLE	240			501		501	2495	0	2273	501		0
HEAT GAIN APPLIANCES/LIGHTS				6141		6141	2495	0	2273	501		0
TOTAL HT LOSS BTU/H				6203		6141	2495	0	2273	501		0
TOTAL HT GAIN x 1.3 BTU/H							2495	0	2273	501		0

SITE NAME: ALCONA
BUILDER: BAYVIEW WELLINGTON

TYPE: TH-7E DATE: Jun-18 GFA: 1918 LO# 78875

HEATING CFM 800 COOLING CFM 800
TOTAL HEAT LOSS 38,375 TOTAL HEAT GAIN 24,938
AIR FLOW RATE CFM 20.85 AIR FLOW RATE CFM 32.08

LENNOX
EL196UH045XE24B
FAN SPEED 45

AFUE = 96 %
INPUT (BTU/H) = 44,000
OUTPUT (BTU/H) = 42,000

RUN COUNT	4th	3rd	2nd	1st	Bas
S/A	0	0	9	6	3
R/A	0	0	4	1	1

All S/A diffusers 4"x10" unless noted otherwise on layout.
All S/A runs 5'Ø unless noted otherwise on layout.

furnace pressure 0.6
a/c coil pressure 0.05
available pressure 0.2
for s/a & r/a 0.35
plenum pressure s/a 0.18
max s/a diff press. loss 0.02
min adjusted pressure s/a 0.16

r/a pressure 0.17
r/a grille press. loss 0.02
adjusted pressure r/a 0.15

DESIGN CFM = 800
CFM @ 6" E.S.P.

TEMPERATURE RISE 49 °F

Town of Innisfil Certified Model
10/24/2018 9:02:54 AM kbayley

ROOM NAME	1	2	3	4	5	6	7	8	10
MBR	1.33	0.87	0.16	2.44	1.96	2.04	0.45	1.96	1.33
RM LOSS MBH	28	18	3	51	41	43	9	41	28
CFM PER RUN HEAT	1.56	0.82	0.06	3.29	2.02	2.42	0.11	2.02	1.56
RM GAIN MBH	50	26	2	106	65	78	3	65	50
CFM PER RUN COOLING	0.17	0.17	0.17	0.16	0.17	0.17	0.17	0.17	0.17
ADJUSTED PRESSURE	66	55	39	43	48	43	28	52	59
EQUIVALENT LENGTH	195	120	140	170	130	125	170	145	175
TOTAL EFFECTIVE LENGTH	261	179	213	178	168	198	197	134	234
ADJUSTED PRESSURE	0.07	0.1	0.1	0.08	0.1	0.1	0.09	0.09	0.07
ROUND DUCT SIZE	5	4	4	6	5	6	4	5	5
HEATING VELOCITY (ft/min)	206	207	34	260	301	219	103	301	206
COOLING VELOCITY (ft/min)	367	298	23	540	477	398	34	477	367
OUTLET GRILL SIZE	3X10	3X10	3X10	4X10	3X10	4X10	3X10	3X10	3X10
TRUNK	A	B	B	C	C	B	C	C	A

ROOM NAME	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
KT/FM	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05
KT/FM	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43
KT/FM	2.07	2.07	2.07	2.07	2.07	2.07	2.07	2.07	2.07	2.07	2.07	2.07	2.07	2.07	2.07
KT/FM	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66
KT/FM	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
KT/FM	24	20	20	20	20	20	20	20	20	20	20	20	20	20	20
KT/FM	110	160	160	160	160	160	160	160	160	160	160	160	160	160	160
KT/FM	134	180	180	180	180	180	180	180	180	180	180	180	180	180	180
KT/FM	0.13	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
KT/FM	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
KT/FM	316	316	316	316	316	316	316	316	316	316	316	316	316	316	316
KT/FM	485	485	485	485	485	485	485	485	485	485	485	485	485	485	485
KT/FM	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10
KT/FM	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A

TRUNK	CFM	RECT	DUCT	ROUND	STATIC PRESS.	VELOCITY (ft/min)	TRUNK	CFM	RECT	DUCT	ROUND	STATIC PRESS.	VELOCITY (ft/min)	TRUNK	CFM	RECT	DUCT	ROUND	STATIC PRESS.	VELOCITY (ft/min)
TRUNK A	272	0.07	10	14	0.15	8	TRUNK G	0	0.00	0	0	0.00	0	TRUNK U	0	0.06	0	0	0.06	0
TRUNK B	474	0.07	11	14	0.15	8	TRUNK H	0	0.00	0	0	0.00	0	TRUNK V	0	0.06	0	0	0.06	0
TRUNK C	328	0.08	9.2	10	0.15	8	TRUNK I	0	0.00	0	0	0.00	0	TRUNK W	0	0.06	0	0	0.06	0
TRUNK D	0	0.00	0	0	0.00	0	TRUNK J	0	0.00	0	0	0.00	0	TRUNK X	800	0.06	13.9	22	0.06	655
TRUNK E	0	0.00	0	0	0.00	0	TRUNK K	0	0.00	0	0	0.00	0	TRUNK Y	0	0.06	0	0	0.06	0
TRUNK F	0	0.00	0	0	0.00	0	TRUNK L	0	0.00	0	0	0.00	0	TRUNK Z	0	0.06	0	0	0.06	0
TRUNK	0	0.00	0	0	0.00	0	TRUNK M	0	0.00	0	0	0.00	0	DROP	800	0.06	13.9	24	0.06	480

TYPE: TH-7E
SITE NAME: ALCONA

LO # 78875

RESIDENTIAL MECHANICAL VENTILATION DESIGN SUMMARY

COMBUSTION APPLIANCES		9.32.3.1(1)
a) <input checked="" type="checkbox"/>	Direct vent (sealed combustion) only	
b) <input type="checkbox"/>	Positive venting induced draft (except fireplaces)	
c) <input type="checkbox"/>	Natural draft, B-vent or induced draft gas fireplace	
d) <input type="checkbox"/>	Solid Fuel (including fireplaces)	
e) <input type="checkbox"/>	No Combustion Appliances	

HEATING SYSTEM	
<input checked="" type="checkbox"/>	Forced Air
<input type="checkbox"/>	Non Forced Air
<input type="checkbox"/>	Electric Space Heat

HOUSE TYPE		9.32.1(2)
<input checked="" type="checkbox"/>	I Type a) or b) appliance only, no solid fuel	
<input type="checkbox"/>	II Type I except with solid fuel (including fireplaces)	
<input type="checkbox"/>	III Any Type c) appliance	
<input type="checkbox"/>	IV Type I, or II with electric space heat	
<input type="checkbox"/>	Other: Type I, II or IV no forced air	

SYSTEM DESIGN OPTIONS		O.N.H.W.P.
<input type="checkbox"/>	1 Exhaust only/Forced Air System	
<input type="checkbox"/>	2 HRV with Ducting/Forced Air System	
<input checked="" type="checkbox"/>	3 HRV Simplified/connected to forced air system	
<input type="checkbox"/>	4 HRV with Ducting/non forced air system	
<input type="checkbox"/>	Part 6 Design	

TOTAL VENTILATION CAPACITY		9.32.3.3(1)
Basement + Master Bedroom	2 @ 21.2 cfm	42.4 cfm
Other Bedrooms	3 @ 10.6 cfm	31.8 cfm
Kitchen & Bathrooms	4 @ 10.6 cfm	42.4 cfm
Other Rooms	3 @ 10.6 cfm	31.8 cfm
Table 9.32.3.A.	TOTAL	148.4 cfm

PRINCIPAL VENTILATION CAPACITY REQUIRED		9.32.3.4.(1)
1 Bedroom	31.8	cfm
2 Bedroom	47.7	cfm
3 Bedroom	63.6	cfm
4 Bedroom	79.5	cfm
5 Bedroom	95.4	cfm
TOTAL	79.5	cfm

SUPPLEMENTAL VENTILATION CAPACITY		9.32.3.5.
Total Ventilation Capacity	148.4	cfm
Less Principal Ventil. Capacity	79.5	cfm
Required Supplemental Capacity	68.9	cfm

PRINCIPAL EXHAUST FAN CAPACITY	
Model: VANEE 65H	Location: BSMT
79.5 cfm	3.0 sones
<input checked="" type="checkbox"/>	HVI Approved

PRINCIPAL EXHAUST HEAT LOSS CALCULATION			
CFM	ΔT °F	FACTOR	% LOSS
79.5 CFM	X 83 F	X 1.08	X 0.25

SUPPLEMENTAL FANS		NUTONE	
Location	Model	cfm	HVI
ENS	QTXEN050C	50	✓
BATH	QTXEN050C	50	✓
W/R	QTXEN050C	50	✓

HEAT RECOVERY VENTILATOR		9.32.3.11.
Model: VANEE 65H		
155 cfm high	64 cfm low	
75 % Sensible Efficiency	<input checked="" type="checkbox"/>	HVI Approved
@ 32 deg F (0 deg C)		

LOCATION OF INSTALLATION	
Lot:	Concession
Township	Plan:
Address	
Roll #	Building Permit #

BUILDER: BAYVIEW WELLINGTON	
Name:	
Address:	
City:	
Telephone #:	Fax #:

INSTALLING CONTRACTOR	
Name:	
Address:	
City:	
Telephone #:	Fax #:

DESIGNER CERTIFICATION	
I hereby certify that this ventilation system has been designed in accordance with the Ontario Building Code.	
Name:	HVAC Designs Ltd.
Signature:	<i>Michael O'Rourke</i>
HRAI #	001820
Date:	June-18

HEAT LOSS AND GAIN SUMMARY SHEET

MODEL: TH-7E

SFQT: 1918

LO# 78875

BUILDER: BAYVIEW WELLINGTON

SITE: ALCONA

DESIGN ASSUMPTIONS

HEATING	°F	COOLING	°F
OUTDOOR DESIGN TEMP.	-11	OUTDOOR DESIGN TEMP.	84
INDOOR DESIGN TEMP.	72	INDOOR DESIGN TEMP. (MAX 75°F)	75

BUILDING DATA

ATTACHMENT:	ATTACHED	# OF STORIES (+BASEMENT):	3
FRONT FACES:	EAST	ASSUMED (Y/N):	Y
AIR CHANGES PER HOUR:	3.57	ASSUMED (Y/N):	Y
AIR TIGHTNESS CATEGORY:	AVERAGE	ASSUMED (Y/N):	Y
WIND EXPOSURE:	SHELTERED	ASSUMED (Y/N):	Y
HOUSE VOLUME (ft³):	25702.0	ASSUMED (Y/N):	Y
INTERNAL SHADING:	BLINDS/CURTAINS	ASSUMED OCCUPANTS:	5
INTERIOR LIGHTING LOAD (Btu/h/ft²):	1.27	DC BRUSHLESS MOTOR (Y/N):	Y
FOUNDATION CONFIGURATION	BCIN_1	DEPTH BELOW GRADE:	6.5 ft
LENGTH: 50.0 ft	WIDTH: 22.0 ft	EXPOSED PERIMETER:	118.0 ft

2012 OBC - COMPLIANCE PACKAGE

Component	Compliance Package A1	
	Nominal	Min. Eff.
Ceiling with Attic Space Minimum RSI (R)-Value	60	59.22
Ceiling Without Attic Space Minimum RSI (R)-Value	31	27.65
Exposed Floor Minimum RSI (R)-Value	31	29.80
Walls Above Grade Minimum RSI (R)-Value	22	17.03
Basement Walls Minimum RSI (R)-Value	20 ci	21.12
Below Grade Slab Entire surface > 600 mm below grade Minimum RSI (R)-Value	-	-
Edge of Below Grade Slab ≤ 600 mm Below Grade Minimum RSI (R)-Value	10	10
Heated Slab or Slab ≤ 600 mm below grade Minimum RSI (R)-Value	10	11.13
Windows and Sliding Glass Doors Maximum U-Value	0.28	-
Skylights Maximum U-Value	0.49	-
Space Heating Equipment Minimum AFUE	0.96	-
HRV Minimum Efficiency	75%	-
Domestic Hot Water Heater Minimum EF	0.8	-

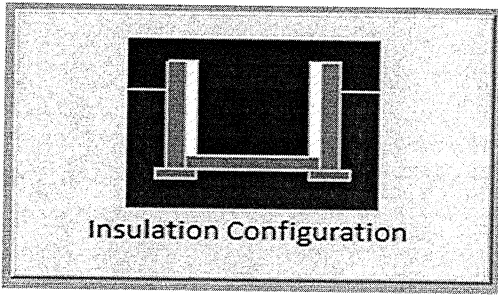
INDIVIDUAL BCIN: 19669

MICHAEL O'ROURKE



Residential Foundation Thermal Load Calculator

Supplemental tool for CAN/CSA-F280

Weather Station Description		
Province:	Ontario	
Region:	Barrie	
Site Description		
Soil Conductivity:	Normal conductivity: dry sand, loam, clay	
Water Table:	Normal (7-10 m, 23-33 ft)	
Foundation Dimensions		
Floor Length (m):	15.2	 <p>Insulation Configuration</p>
Floor Width (m):	6.7	
Exposed Perimeter (m):	36.0	
Wall Height (m):	2.7	
Depth Below Grade (m):	1.98	
Window Area (m ²):	2.1	
Door Area (m ²):	1.9	
Radiant Slab		
Heated Fraction of the Slab:	0	
Fluid Temperature (°C):	33	
Design Months		
Heating Month	1	
Foundation Loads		
Heating Load (Watts):	1102	

TYPE: TH-7E

LO# 78875

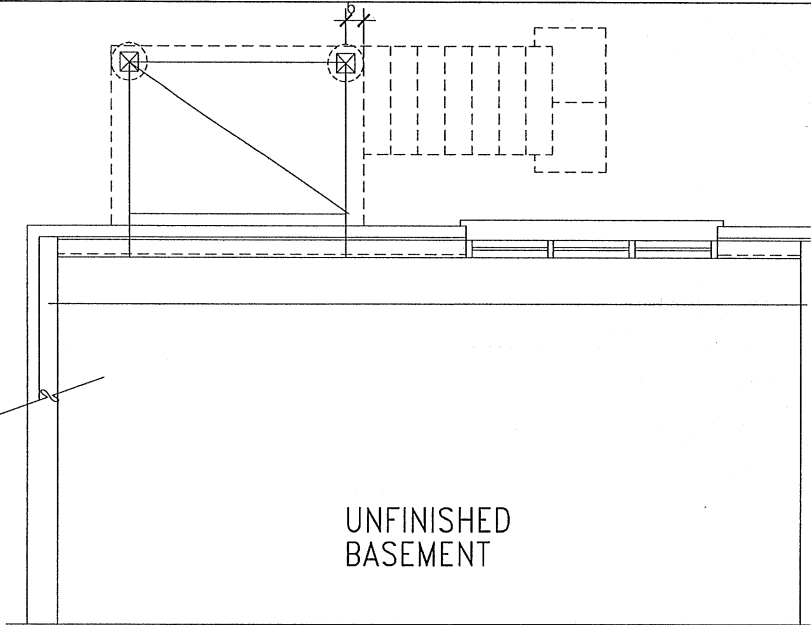
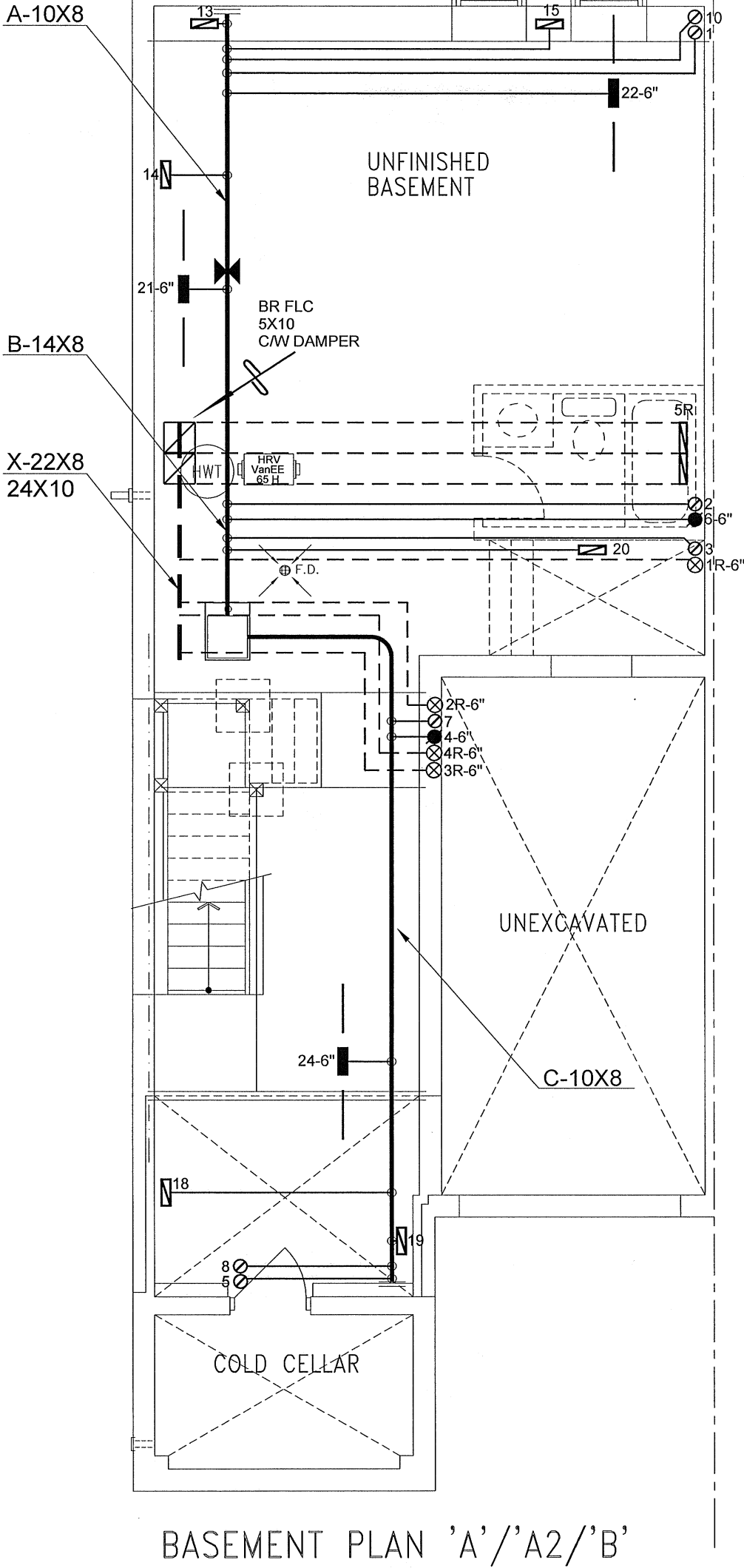
Air Infiltration Residential Load Calculator

Supplemental tool for CAN/CSA-F280

Weather Station Description				
Province:	Ontario			
Region:	Barrie			
Weather Station Location:	Open flat terrain, grass			
Anemometer height (m):	10			
Local Shielding				
Building Site:	Suburban, forest			
Walls:	Heavy			
Flue:	Heavy			
Highest Ceiling Height (m):	6.55			
Building Configuration				
Type:	Semi			
Number of Stories:	Two			
Foundation:	Full			
House Volume (m ³):	727.8			
Air Leakage/Ventilation				
Air Tightness Type:	Present (1961-) (3.57 ACH)			
Custom BDT Data:	ELA @ 10 Pa.	970.2 cm ²		
	3.57	ACH @ 50 Pa		
Mechanical Ventilation (L/s):	Total Supply	Total Exhaust		
	37.5	37.5		
Flue Size				
Flue #:	#1	#2	#3	#4
Diameter (mm):	0	0	0	0
Natural Infiltration Rates				
Heating Air Leakage Rate (ACH/H):	0.342			
Cooling Air Leakage Rate (ACH/H):	0.076			

TYPE: TH-7E

LO# 78875



PARTIAL BASEMENT FLOOR
PLAN WOD 9R COND.
'A'/'A2'/'B'

I MICHAEL O'ROURKE HAVE REVIEW
AND TAKE RESPONSIBILITY FOR THE
DESIGN WORK AND AM QUALIFIED
UNDER DIVISION C.32.5 OF THE
BUILDING CODE.

Michael O'Rourke
Michael O'Rourke, BCIN# 19669
HVAC DESIGNS LTD.

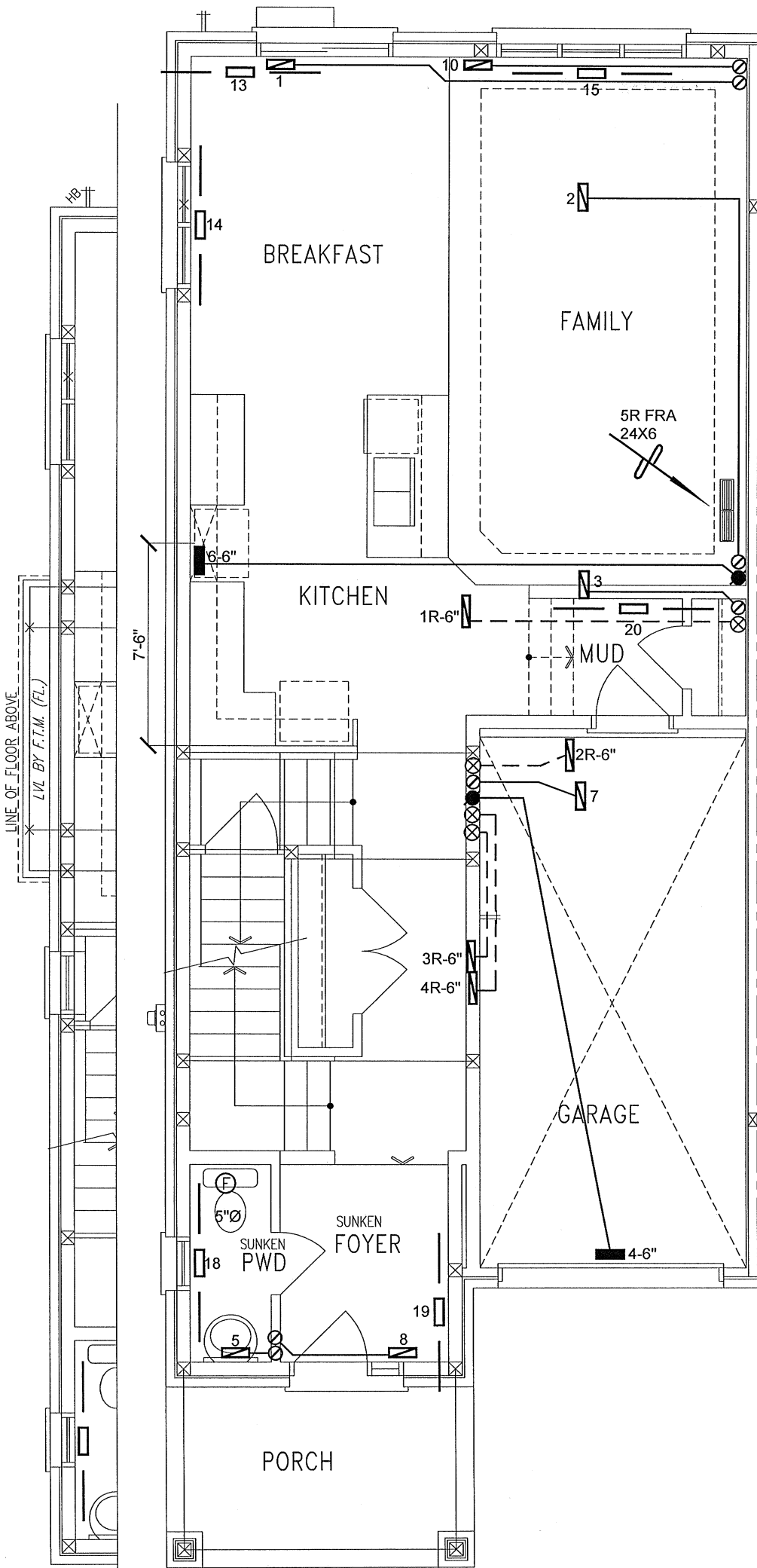
CSA-F280-12

PACKAGE A1

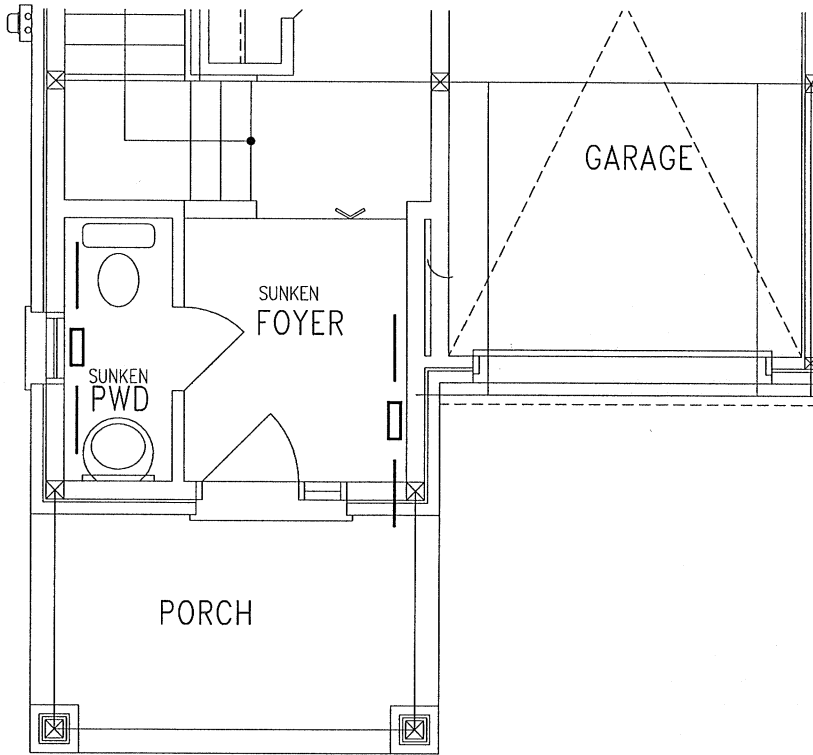
HVAC LEGEND							3.		
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	2.	
	SUPPLY AIR GRILLE		6" SUPPLY AIR BOOT ABOVE		14"x8" RETURN AIR GRILLE		RETURN AIR STACK ABOVE	1.	
	SUPPLY AIR GRILLE 6" BOOT		SUPPLY AIR STACK FROM 2nd FLOOR		30"x8" RETURN AIR GRILLE		RETURN AIR STACK 2nd FLOOR	No.	Description
	SUPPLY AIR BOOT ABOVE		6" SUPPLY AIR STACK 2nd FLOOR		FRA- FLOOR RETURN AIR GRILLE		REDUCER	Date	
							REVISIONS		

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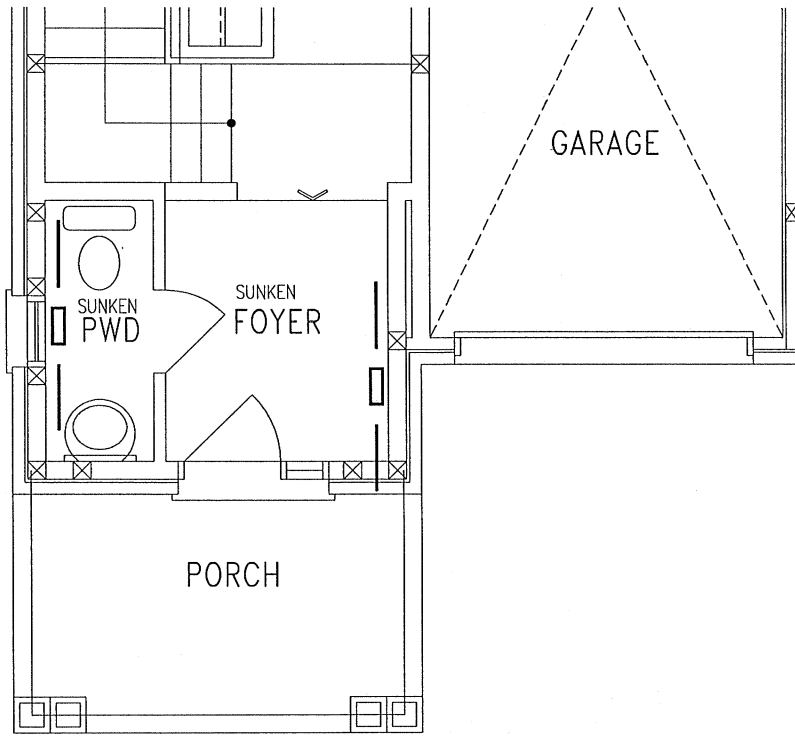
Client	<div><div>HVACDESIGNS LTD.</div><div>375 Finley Ave. Suite 202 - Ajax, Ontario L1S 2E2 Tel. 905.619.2300 - 905.420.5300 Fax 905.619.2375 Email: info@hvacdesigns.ca Web: www.hvacdesigns.ca Specializing in Residential Mechanical Design Services</div></div> <div>Installation to comply with the latest Ontario Building Code. All supply branch outlets shall be equipped with a manual balancing damper. Ductwork which passes through the garage or unheated spaces shall be adequately insulated and be gas-proofed.</div>	HEAT LOSS 40161 BTU/H UNIT DATA		# OF RUNS S/A R/A FANS			Sheet Title	
BAYVIEW WELLINGTON		MAKE LENNOX		3RD FLOOR			BASEMENT HEATING LAYOUT	
Project Name ALCONA INNISFIL, ONTARIO		MODEL EL196UH045XE24B		2ND FLOOR	9	4	2	
		INPUT 44 MBTU/H		1ST FLOOR	6	1	2	
		OUTPUT 42 MBTU/H		BASEMENT	3	1	0	Date JUNE/2018
	COOLING 2.0 TONS		ALL S/A DIFFUSERS 4 "x10" UNLESS NOTED OTHERWISE ON LAYOUT. ALL S/A RUNS 5"Ø UNLESS NOTED OTHERWISE ON LAYOUT. UNDERCUT DOORS 1" min. FOR R/A				Scale 3/16" = 1'-0"	
TH-7E	1918 sqft		FAN SPEED 800 cfm @ 0.6" w.c.					BCIN# 19669
								LO# 78875



GROUND FLOOR PLAN 'A'



GROUND FLOOR PLAN 'A2'



PARTIAL GROUND FLOOR PLAN 'B'

GROUND FLOOR PLAN 'A2'
W/ SIDE AND REAR UPGRADE

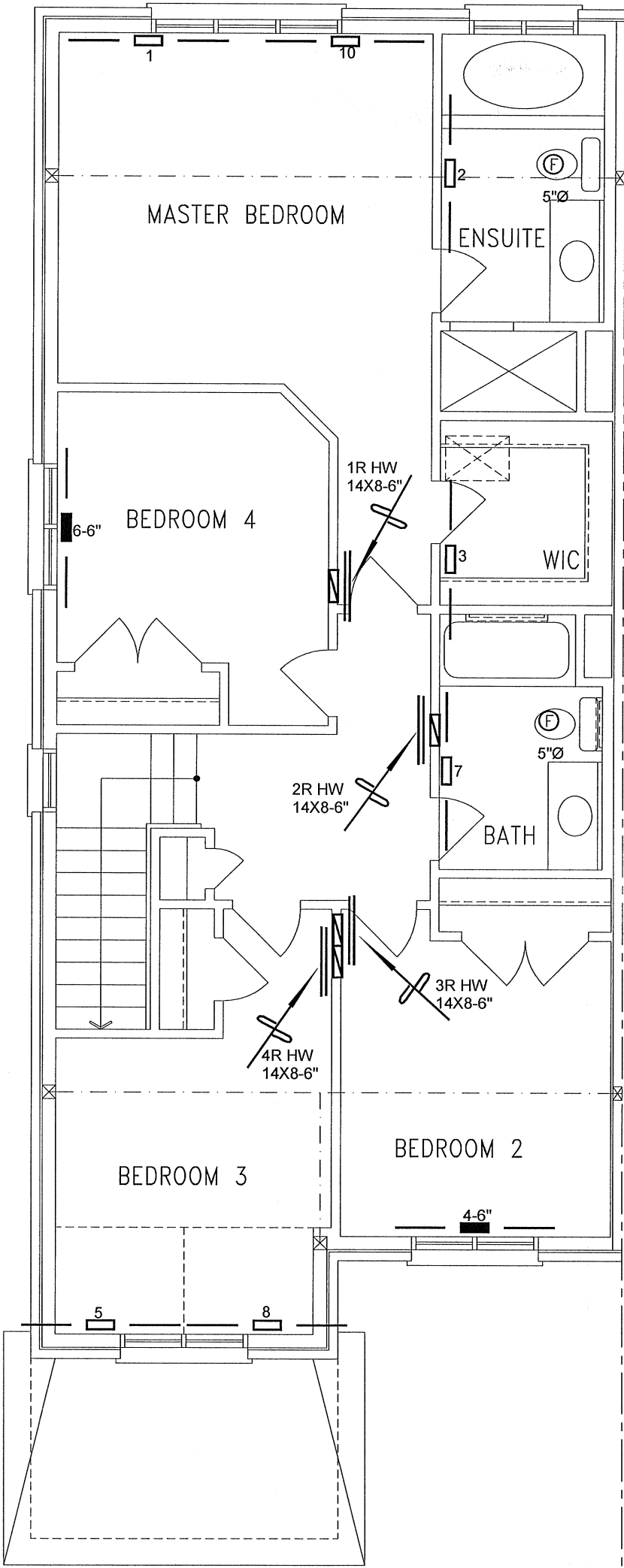
I MICHAEL O'ROURKE HAVE REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK AND AM QUALIFIED UNDER DIVISION C.3.2.5 OF THE BUILDING CODE.
Michael O'Rourke
Michael O'Rourke, BCIN# 19669
HVAC DESIGNS LTD.

CSA-F280-12
PACKAGE A1

HVAC LEGEND								3.		
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	2.		
	SUPPLY AIR GRILLE		6" SUPPLY AIR BOOT ABOVE		14"x8" RETURN AIR GRILLE		RETURN AIR STACK ABOVE	1.		
	SUPPLY AIR GRILLE 6" BOOT		SUPPLY AIR STACK FROM 2nd FLOOR		30"x8" RETURN AIR GRILLE		RETURN AIR STACK 2nd FLOOR	No.	Description	Date
	SUPPLY AIR BOOT ABOVE		6" SUPPLY AIR STACK 2nd FLOOR		FRA- FLOOR RETURN AIR GRILLE		REDUCER	REVISIONS		

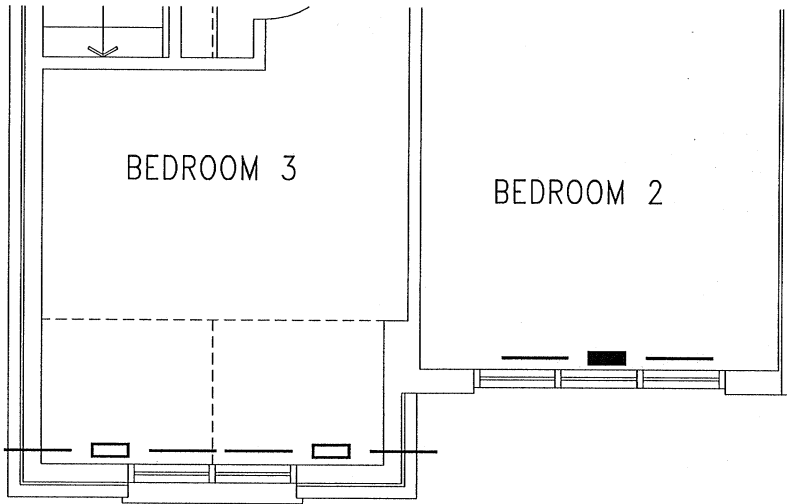
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BAYVIEW WELLINGTON			FIRST FLOOR HEATING LAYOUT	
Project Name			Date	
ALCONA INNISFIL, ONTARIO			JUNE/2018	
		Scale		
		3/16" = 1'-0"		
		BCIN# 19669		
TH-7E		LO#		
1918 sqft		78875		

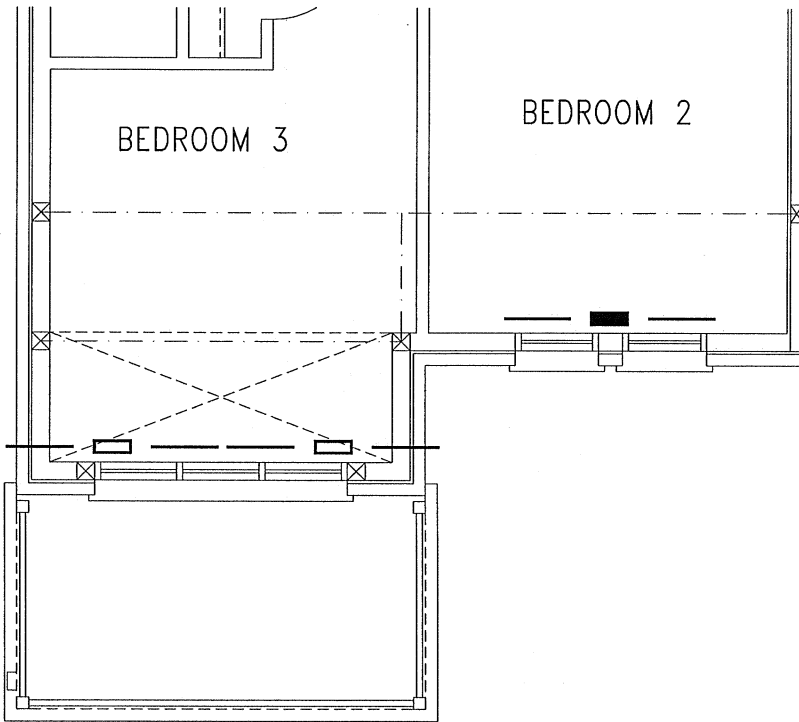


SECOND FLOOR PLAN 'A'

SECOND FLOOR PLAN 'A2'
W/ SIDE AND REAR UPGRADE



PARTIAL SECOND FLOOR PLAN 'A2'



PARTIAL SECOND FLOOR PLAN 'B'

I MICHAEL O'ROURKE HAVE REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK AND AM QUALIFIED UNDER DIVISION C.32.3 OF THE BUILDING CODE.

Michael O'Rourke
Michael O'Rourke, BCIN# 19669
HVAC DESIGNS LTD.

CSA-F280-12
PACKAGE A1

HVAC LEGEND								3.		
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	2.		
	SUPPLY AIR GRILLE		6" SUPPLY AIR BOOT ABOVE		14"x8" RETURN AIR GRILLE		RETURN AIR STACK ABOVE	1.		
	SUPPLY AIR GRILLE 6" BOOT		SUPPLY AIR STACK FROM 2nd FLOOR		30"x8" RETURN AIR GRILLE		RETURN AIR STACK 2nd FLOOR	No.	Description	Date
	SUPPLY AIR BOOT ABOVE		6" SUPPLY AIR STACK 2nd FLOOR		FRA- FLOOR RETURN AIR GRILLE		REDUCER	REVISIONS		

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BAYVIEW WELLINGTON			SECOND FLOOR HEATING LAYOUT	
Project Name			Date	JUNE/2018
ALCONA INNISFIL, ONTARIO			Scale	3/16" = 1'-0"
			BCIN# 19669	
TH-7E	1918 sqft	LO#	78875	