

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]			
☐ House ☐ Small Buildings ☐ Large Buildings ☐ Complex Buildings ☒ HVAC – House ☐ Building Services ☐ Detection, Lighting and Power ☐ Fire Protection ☐ Building Structural ☐ Plumbing – House ☐ Plumbing – All Buildings ☐ 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: 32-2-10 ALT 1ST Project: ALCONA	
D. Declaration of Designer			
I <u>MICHAEL O'ROURKE</u> (print name)		declare that (choose one as appropriate):	
☐ 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: _____			
☒ 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>			
☐ 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 21, 2017 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.

Application for a Permit Construct or Demolish – Effective January 1, 2015

SITE NAME: ALCONA	ALT 1ST	GFA: 2135	DATE: Jun-17	WINTER NATURAL AIR CHANGE RATE 0.332	HEAT LOSS AT °F. 83	CSA-F280-12
BUILDER: BAYVIEW WELLINGTON	TYPE: 32-2-10		LO# 74576	SUMMER NATURAL AIR CHANGE RATE 0.087	HEAT GAIN AT °F. 12	SB-12 PACKAGE A1
ROOM USE	ENS	WIC	BED-2	BED-3	BED-4	BATH
EXP. WALL	22	6	24	35	17	8
CLG. HT.	9	9	10	10	9	9
FACTORS	198	54	228	333	153	72
GRS.WALL AREA	LOSS GAIN	LOSS GAIN	LOSS GAIN	LOSS GAIN	LOSS GAIN	LOSS GAIN
GLAZING	0	0	0	0	0	0
NORTH	0	0	0	0	0	0
EAST	0	0	0	0	0	0
SOUTH	0	0	0	0	0	0
WEST	0	0	0	0	0	0
SKYL.T.	13	303	538	0	28	652
DOORS	0	0	0	0	0	173
NET EXPOSED WALL	4.9	0.7	242	1182	173	47
NET EXPOSED BSMT WALL ABOVE GR	3.9	0.6	0	0	0	0
EXPOSED CLG	1.4	0.6	224	315	129	74
NO ATTIC EXPOSED CLG	3.0	1.2	0	0	0	0
EXPOSED FLOOR	2.8	0.4	0	0	0	0
BASEMENT/CRAWL HEAT LOSS	0	0	0	0	0	0
SLAB ON GRADE HEAT LOSS	0	0	0	0	0	0
SUB TOTAL HT LOSS	2149	1461	2324	2526	1526	660
LEVEL FACTOR / MULTIPLIER	0.20	0.25	0.20	0.25	0.20	0.25
AIR CHANGE HEAT LOSS	531	99	575	625	377	163
AIR CHANGE HEAT GAIN	103	7	104	120	63	21
DUCT LOSS	0	0	290	0	0	0
HEAT GAIN PEOPLE	2	480	1	240	1	0
HEAT GAIN APPLIANCES/LIGHTS	518	0	518	518	518	0
TOTAL HT LOSS BTU/H	2681	497	3188	3151	1903	824
TOTAL HT GAIN x 1.3 BTU/H	3331	131	3339	3352	2224	409

ROOM USE	WIR	LAUN	WIC-2	KIT	WOD	BAS
EXP. WALL	4	7	12	60	36	150
CLG. HT.	10	9	10	10	9	9
FACTORS	40	63	120	600	324	1116
GRS.WALL AREA	LOSS GAIN	LOSS GAIN	LOSS GAIN	LOSS GAIN	LOSS GAIN	LOSS GAIN
GLAZING	0	0	0	0	0	0
NORTH	0	0	0	0	0	0
EAST	0	0	0	0	0	0
SOUTH	0	0	0	0	0	0
WEST	0	0	0	0	0	0
SKYL.T.	88	2050	3642	0	0	0
DOORS	0	0	0	0	0	0
NET EXPOSED WALL	4.9	0.7	362	1789	0	0
NET EXPOSED BSMT WALL ABOVE GR	3.9	0.6	0	0	0	0
EXPOSED CLG	1.4	0.6	0	0	0	0
NO ATTIC EXPOSED CLG	3.0	1.2	0	0	0	0
EXPOSED FLOOR	2.8	0.4	0	0	0	0
BASEMENT/CRAWL HEAT LOSS	0	0	0	0	0	0
SLAB ON GRADE HEAT LOSS	0	0	0	0	0	0
SUB TOTAL HT LOSS	2887	1446	4009	4551	0	5186
LEVEL FACTOR / MULTIPLIER	0.30	0.37	0.30	0.37	0.30	0.37
AIR CHANGE HEAT LOSS	1066	1066	1680	1680	475	6800
AIR CHANGE HEAT GAIN	102	102	282	282	0	0
DUCT LOSS	0	0	0	0	0	0
HEAT GAIN PEOPLE	0	0	0	0	0	0
HEAT GAIN APPLIANCES/LIGHTS	518	518	518	518	0	0
TOTAL HT LOSS BTU/H	3952	6232	6251	6232	1296	13951
TOTAL HT GAIN x 1.3 BTU/H	2686	2686	2686	2686	618	1149

SITE NAME: AL CONA

SITE NAME: ALCOVA
BUILDING: BAYVIEW WEI LINGTON

ALT 1ST

DATE: Jun-17

GFA:	2135	IO#	74576
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HEATING CFM	995	COOLING CFM	995
TOTAL HEAT LOSS	45,951	TOTAL HEAT GAIN	27,932
AIR FLOW RATE CFM	21.65	AIR FLOW RATE CFM	35.62

0.05 furnace pressure	0.05 a/c coil pressure	0.2 available pressure	0.35 for s/a & r/a
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^LENNOX 70
EL296UH070XE36B
FAN SPEED

AFUE = 96 %
 INPUT (BTU/H) = 66,000
 OUTPUT (BTU/H) = **64,000**
 DESIGN CFM = 995
 CFM @ 6" E.S.P.

	IRON COUNT	401	510	ZINC	1st	DAS
S/A		0	0	11	9	4
R/A		0	0	4	2	1

All S/A diffusers 4"x10" unless noted otherwise on layout.

All S/A runs 5'x6" unless noted otherwise on layout.

	1	2	3	4
	N/A	0	0	4
	All S/A diffusers 4"x10" unless noted otherwise on layout.			
	All S/A runs 5"Ø unless noted otherwise on layout.			

max s/a diff. press. loss	0.02	r/a diff. press. loss	0.02
min adjusted pressure s/a	0.16	adjusted pressure r/a	0.15

TEMPERATURE RISE 60 °F

Run #																										
Run Name																										
Room Loss MBH																										
CFM PER RUN HEAT																										
RUM GAIN MBH																										
CFM PER RUN COOLING																										
ADJUSTED PRESSURE																										
ACTUAL DUCT LGH.																										
EQUIVALENT LENGTH																										
TOTAL EFFECTIVE LENGTH																										
ADJUSTED PRESSURE																										
ROUND DUCT SIZE																										
HEATING VELOCITY (ft/min)																										
COOLING VELOCITY (ft/min)																										
OUTLET GRILL SIZE																										
TRUNK																										
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
ENS	WIC	BED-2	BED-3	BED-4	BATH	BED-2	BED-3	MBR	WIC-2	GRT	GRT	GRT	KIT	KIT	KIT	LAUN	W/R	FOY	MUD	BAS	BAS	BAS	BAS			
1.34	1.72	0.50	1.59	1.58	1.90	0.82	1.59	1.58	1.34	1.11	1.98	1.98	2.08	2.08	2.08	0.83	0.27	2.66	1.69	3.81	3.81	3.81	3.81			
37	11	35	34	41	18	35	34	29	24	43	43	43	45	45	45	18	6	58	37	83	83	83	83			
1.67	1.03	0.13	1.67	1.68	2.22	0.41	1.67	1.68	0.80	1.34	1.34	1.34	2.08	2.08	2.08	0.94	0.04	0.71	0.93	0.44	0.44	0.44	0.44			
59	37	5	59	60	79	15	59	60	59	28	48	48	74	74	74	33	1	25	33	16	16	16	16			
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	0.17	0.17	0.17	0.17	0.17	0.16	0.16	0.16	0.16			
67	58	36	37	54	41	58	42	63	75	41	24	33	33	37	43	30	26	31	19	37	28	25	34			
150	130	120	190	120	140	160	180	140	150	120	130	140	180	140	120	170	110	90	140	90	110	150	120			
217	188	156	227	174	181	218	222	203	225	161	154	173	213	177	163	200	136	121	159	127	138	175	154			
0.08	0.09	0.11	0.08	0.1	0.1	0.08	0.08	0.08	0.08	0.11	0.11	0.1	0.08	0.1	0.11	0.09	0.13	0.14	0.11	0.13	0.12	0.09	0.11			
4	4	4	5	5	4	4	5	5	5	4	4	4	5	5	5	4	4	4	4	5	5	5	5			
213	424	126	257	250	301	207	257	250	213	275	493	493	330	330	330	207	69	665	424	609	609	609	609			
433	424	57	433	441	580	172	433	441	433	321	551	551	543	543	543	379	11	287	379	117	117	117	117			
3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10			
A	C	C	D	C	C	D	C	D	A	D	C	D	A	A	A	C	C	D	C	A	A	D	D			

RUN #
ROOM NAME
RM LOSS MBH.
CFM PER RUN HEAT
RM GAIN MBH.
CFM PER RUN COOLING
ADJUSTED PRESSURE
ACTUAL DUCT LGH.
EQUIVALENT LENGTH
TOTAL EFFECTIVE LENGTH
ADJUSTED PRESSURE
ROUND DUCT SIZE
HEATING VELOCITY (ft/min)
COOLING VELOCITY (ft/min)
OUTLET GRILL SIZE
TRUNK

[illegible][illegible]

TYPE: 32-2-10
SITE NAME: ALCONA

LO # 74576
ALT 1ST

RESIDENTIAL MECHANICAL VENTILATION DESIGN SUMMARY

COMBUSTION APPLIANCES		9.32.3.1(1)
a)	☒ Direct vent (sealed combustion) only	
b)	☐ Positive venting induced draft (except fireplaces)	
c)	☐ Natural draft, B-vent or induced draft gas fireplace	
d)	☐ Solid Fuel (including fireplaces)	
e)	☐ No Combustion Appliances	

HEATING SYSTEM	
☒ Forced Air	☐ Non Forced Air
☐ Electric Space Heat	

HOUSE TYPE		9.32.1(2)
☒ I	Type a) or b) appliance only, no solid fuel	
☐ II	Type I except with solid fuel (including fireplaces)	
☐ III	Any Type c) appliance	
☐ IV	Type I, or II with electric space heat	
☐	Other: Type I, II or IV no forced air	

SYSTEM DESIGN OPTIONS		O.N.H.W.P.
☐ 1	Exhaust only/Forced Air System	
☐ 2	HRV with Ducting/Forced Air System	
☒ 3	HRV Simplified/connected to forced air system	
☐ 4	HRV with Ducting/non forced air system	
☐	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	5 @ 10.6 cfm	53.0 cfm
Table 9.32.3.A. TOTAL		169.6 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	169.6	cfm
Less Principal Ventil. Capacity	139	cfm
Required Supplemental Capacity	30.6	cfm

PRINCIPAL EXHAUST FAN CAPACITY	
Model:	VANEE 60H-V+
Location:	BSMT
139.0 cfm	3.0 sones
☒ HVI Approved	

PRINCIPAL EXHAUST HEAT LOSS CALCULATION	
CFM	ΔT °F
139.0 CFM	83 F
X	X
FACTOR	% LOSS
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 60H-V+	
139 cfm high	50 cfm low	
75 % Sensible Efficiency	☒ 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:	
HRAI #	001820
Date:	June-17

HEAT LOSS AND GAIN SUMMARY SHEET

MODEL: 32-2-10	ALT 1ST	BUILDER: BAYVIEW WELLINGTON
SFQT: 2135	LO# 74576	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)	72

BUILDING DATA

ATTACHMENT:	DETACHED	# 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):	28935.0	ASSUMED (Y/N):	Y
INTERNAL SHADING:	BLINDS/CURTAINS	ASSUMED OCCUPANTS:	5
INTERIOR LIGHTING LOAD (Btu/h/ft²):	1.50	DC BRUSHLESS MOTOR (Y/N):	Y
FOUNDATION CONFIGURATION	BCIN_1	DEPTH BELOW GRADE:	6.0 ft
LENGTH: 48.0 ft	WIDTH: 27.0 ft	EXPOSED PERIMETER:	150.0 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	29.8
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	-

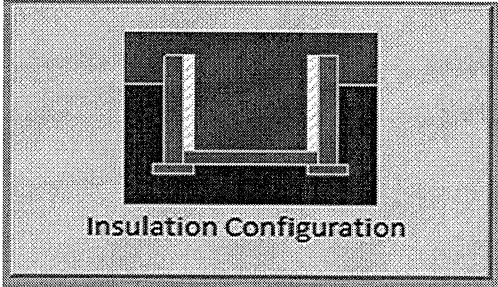
INDIVIDUAL BCIN: 19669

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):	14.6	 Insulation Configuration
Floor Width (m):	8.2	
Exposed Perimeter (m):	0.0	
Wall Height (m):	2.7	
Depth Below Grade (m):	1.83	
Window Area (m ²):	2.7	
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):		1519

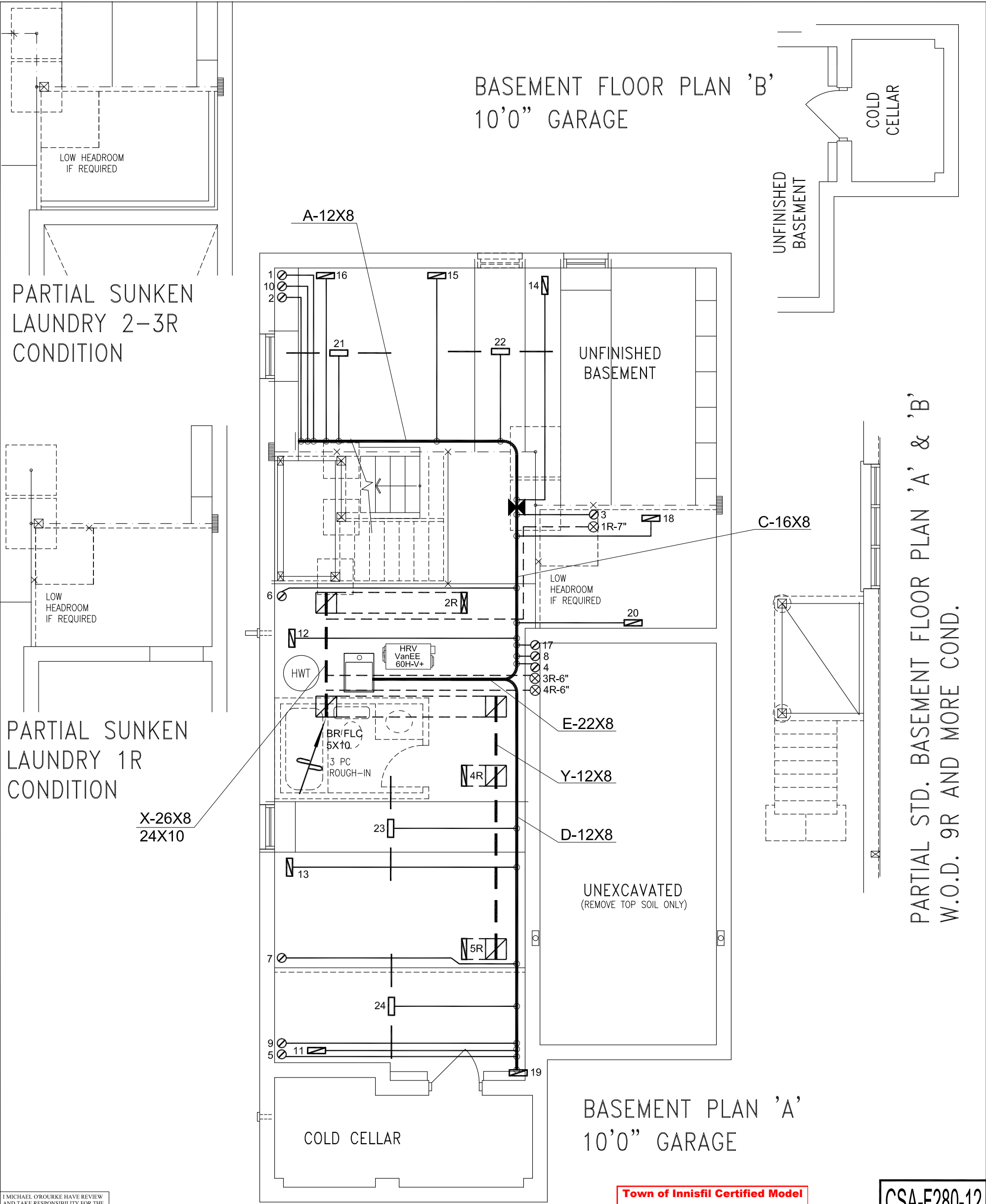
TYPE: 32-2-10
LO# 74576

ALT 1ST

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):	6.71			
Building Configuration				
Type:	Detached			
Number of Stories:	Two			
Foundation:	Full			
House Volume (m ³):	819.3			
Air Leakage/Ventilation				
Air Tightness Type:	Present (1961-) (3.57 ACH)			
Custom BDT Data:	ELA @ 10 Pa.	1092.2 cm ²		
	3.57	ACH @ 50 Pa		
Mechanical Ventilation (L/s):	Total Supply	Total Exhaust		
	65.6	65.6		
Flue Size				
Flue #:	#1	#2	#3	#4
Diameter (mm):	0	0	0	0
Natural Infiltration Rates				
Heating Air Leakage Rate (ACH/H):	0.332			
Cooling Air Leakage Rate (ACH/H):	0.087			



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.

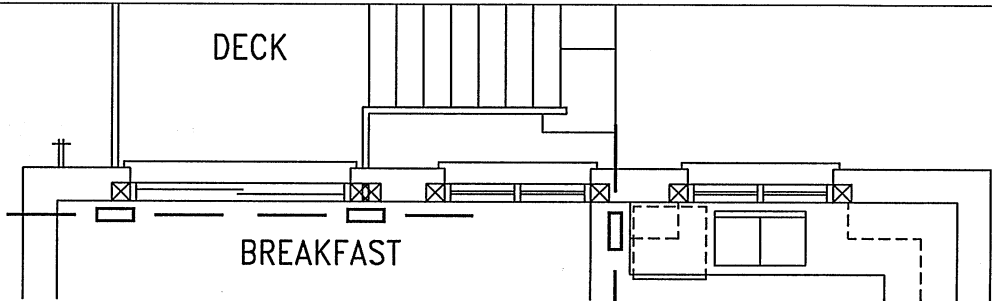
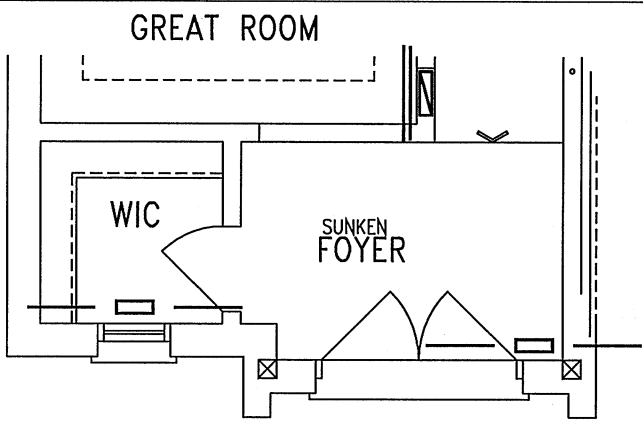
Michael O'Rourke
Michael O'Rourke, BCIN# 19669
HVAC DESIGNS LTD.

CSA-F280-12
PACKAGE A1

HVAC LEGEND								3.		
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	2.		
	FLOOR SUPPLY AIR GRILLE		6" SUPPLY AIR BOOT ABOVE		14"x8" RETURN AIR GRILLE		RETURN AIR STACK ABOVE	1.		
	FLOOR 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		

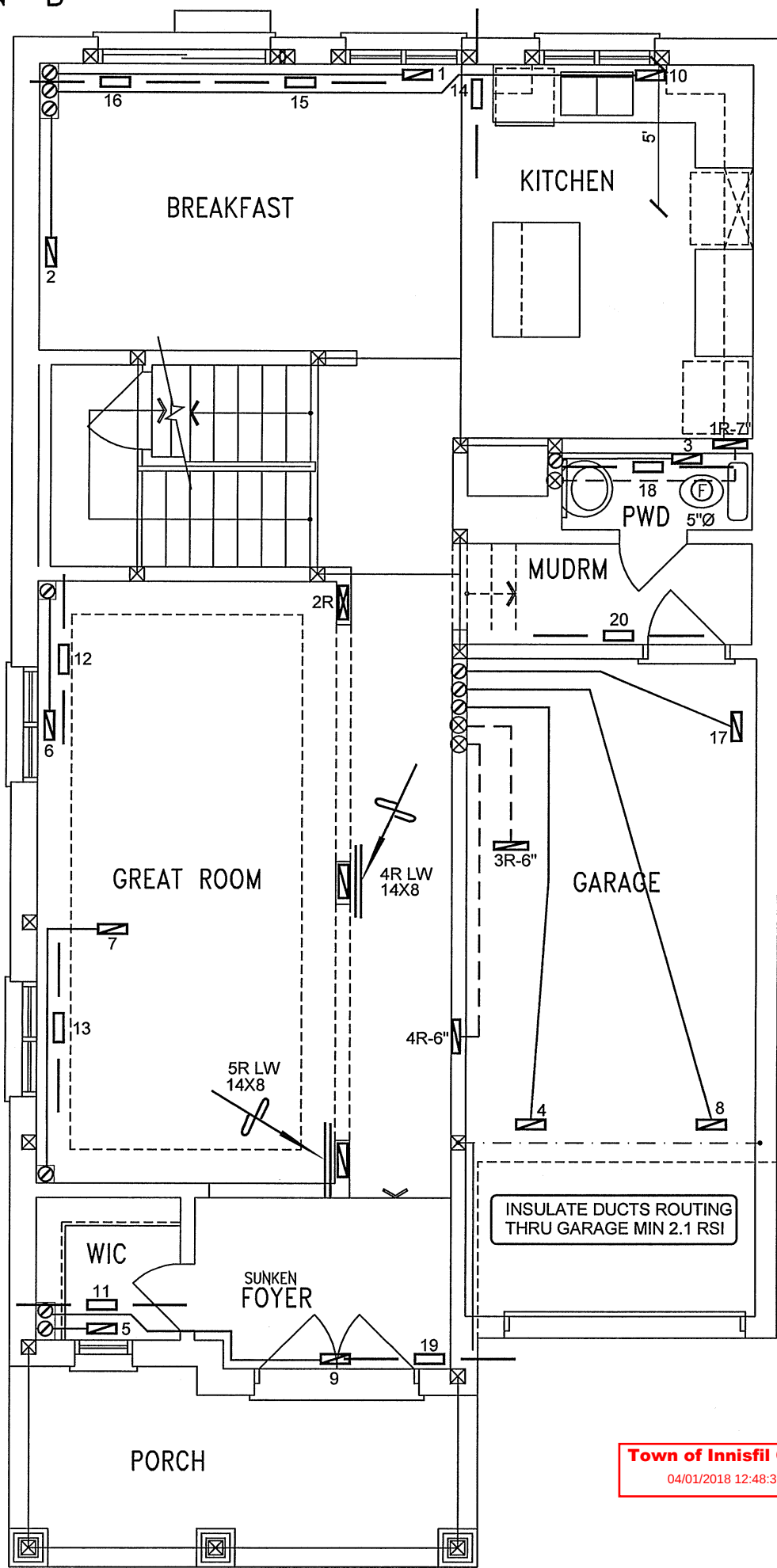
ALL DRAWINGS, CALCULATIONS AND SPECIFICATIONS ARE THE PROPERTY OF HVAC DESIGNS LTD.© AND MAY NOT BE REPRODUCED, MODIFIED OR ALTERED WITHOUT EXPRESSED WRITTEN CONSENT. THE DRAWINGS ARE DATED AND USE OF THESE DRAWINGS AFTER ONE YEAR FROM THE DATED NOTED IS NOT AUTHORIZED. CONTRACTOR SHALL CHECK ALL CONDITIONS BEFORE PROCEEDING WITH WORK. LATEST MUNICIPAL APPROVED DRAWINGS ONLY TO BE USED DURING INSTALLATION OF HEATING SYSTEM. HVAC DESIGNS LTD. IS NOT LIABLE FOR ANY CLAIMS ARISING FROM UNAUTHORIZED USE OF THE DRAWINGS OR FROM ANY CHANGES TO ACCEPTED STANDARDS AND/OR THE ONTARIO BUILDING CODE.

Client		 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	HEAT LOSS 49073 BTU/H UNIT DATA		# OF RUNS S/A R/A FANS			Sheet Title		
BAYVIEW WELLINGTON			MAKE LENNOX					BASEMENT HEATING LAYOUT		
Project Name ALCONA INNISFIL, ONTARIO			MODEL EL296UH070XE36B	2ND FLOOR	11	4	3			
			INPUT 66 MBTU/H	1ST FLOOR	9	2	2	Date	JUNE/2017	
			OUTPUT 64 MBTU/H	BASEMENT	4	1	0	Scale	3/16" = 1'-0"	
		COOLING 2.5 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						BCIN# 19669	
ALT. 1ST 32-2-10		FAN SPEED 995 cfm @ 0.5" w.c.							LO#	74576
2135 sqft		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.								



PARTIAL ALT. GROUND FLOOR PLAN 'A' & 'B'
W.O.D. 9R AND MORE COND.

GROUND FLOOR PLAN 'B'
10'0" GARAGE



Town of Innisfil Certified Model
04/01/2018 12:48:30 PM kgervais

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.

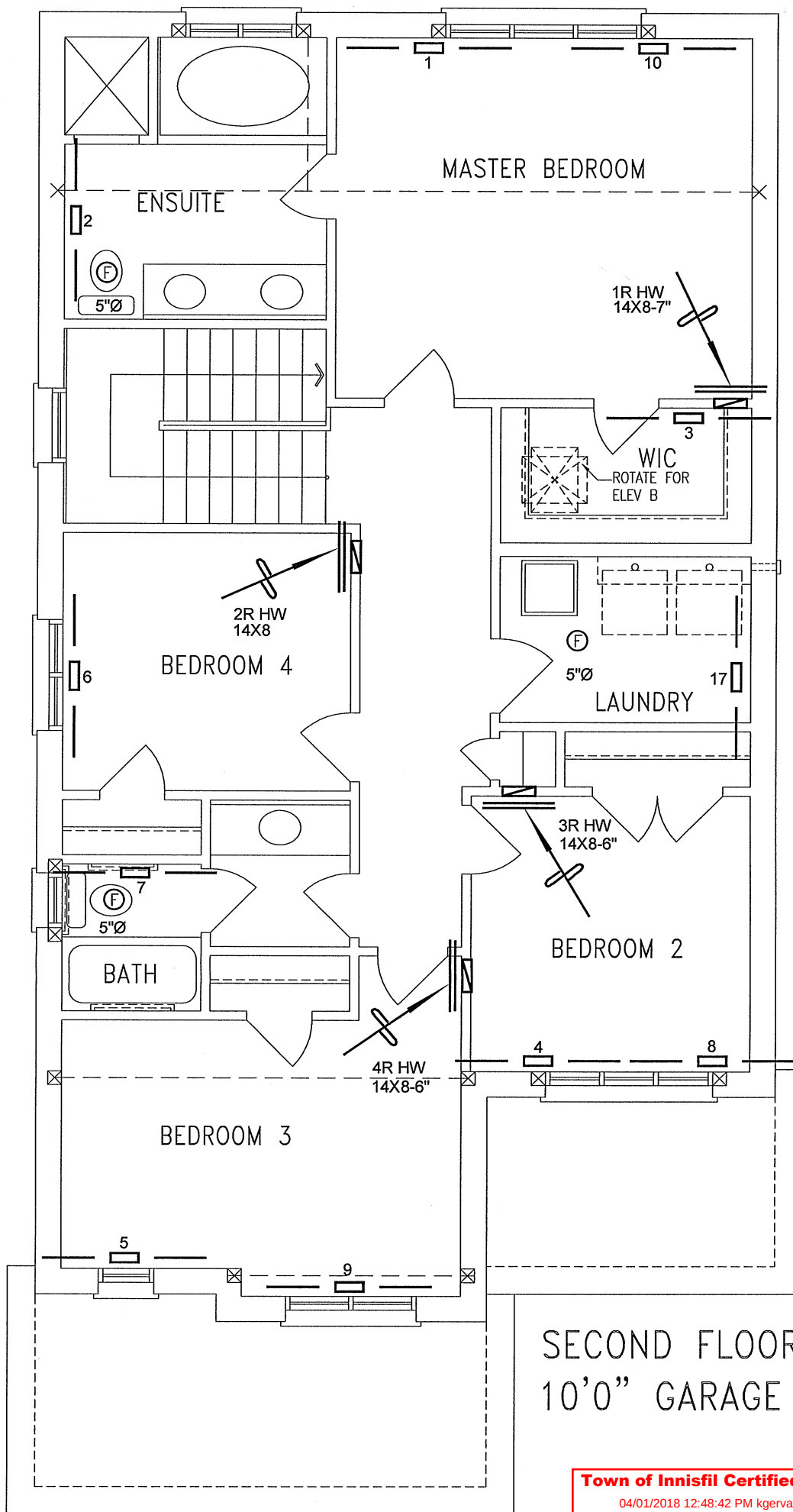
ALT. GROUND FLOOR PLAN 'A' 10'0" GARAGE

CSA-F280-12
PACKAGE A1

HVAC LEGEND								3.		
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	2.		
	FLOOR SUPPLY AIR GRILLE		6" SUPPLY AIR BOOT ABOVE		14"x8" RETURN AIR GRILLE		RETURN AIR STACK ABOVE	1.		
	FLOOR 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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Client BAYVIEW WELLINGTON		 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 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.	Sheet Title FIRST FLOOR HEATING LAYOUT	
Project Name ALCONA INNISFIL, ONTARIO			Date JUNE/2017	
ALT. 1ST 32-2-10			Scale 3/16" = 1'-0"	
2135 sqft			BCIN# 19669	
			LO# 74576	



Town of Innisfil Certified Model
04/01/2018 12:48:42 PM kgervais

CSA-F280-12
PACKAGE A1

I MICHAEL O'ROURKE HAVE REVIEW
AND TAKE RESPONSIBILITY FOR THE
DESIGN WORK AND AM QUALIFIED
UNDER DIVISION C, 3.2.5 OF THE
BUILDING CODE.



Michael O'Rourke, BCIN# 19669
HVAC DESIGNS LTD

HVAC LEGEND								3.		
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	2.		
	FLOOR SUPPLY AIR GRILLE		6" SUPPLY AIR BOOT ABOVE		14"x8" RETURN AIR GRILLE		RETURN AIR STACK ABOVE	1.		
	FLOOR 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/2017
ALCONA INNISFIL, ONTARIO		Scale	3/16" = 1'-0"
		BCIN# 19669	
ALT. 1ST 32-2-10	2135 sqft	LO#	74576