

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 OAKVILLE	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: GEORGIAN 4 Project: TIBURTINO		
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: 19669 Basis for exemption from registration and qualification: O.B.C SENTENCE 3.2.4.1 (4)				
☐ 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.				
January 15, 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.

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

SITE NAME: TIBURTINO			DATE: Jan-18			TYPE: GEORGIAN 4			WINTER NATURAL AIR CHANGE RATE 0.369			HEAT LOSS AT °F. 72			CSA-F280-12		
BUILDER: GREENPARK HOMES			LO# 77356			GFA: 4198			SUMMER NATURAL AIR CHANGE RATE 0.117			HEAT GAIN AT °F. 14			SB-12 PACKAGE A.1		
ROOM USE	EXP. WALL CLG. HT.	FACTORS	MBR	ENS	WIC	BED-2	BED-3	BED-4	BATH	WIC-4	LAUN	ENS-2	BED-5	ENS-5			
GRS WALL AREA GLAZING			396	270	60	300	260	330	0	110	400	90	203	70			
NORTH	20.3	16.3	0	0	0	0	0	10	0	0	10	0	16	0			
EAST	20.3	41.9	40	811	1676	40	811	1676	0	0	8	162	324	0			
WEST	20.3	25.2	0	0	0	0	0	0	0	0	0	0	0	0			
SKYL.T.	35.5	102.1	2	71	204	2	71	204	0	0	0	0	0	0			
DOORS	24.1	4.7	0	0	0	0	0	0	0	0	0	0	0	0			
NET EXPOSED WALL	4.3	0.8	356	1513	293	246	1046	202	60	255	49	82	349	67			
NET EXPOSED BSMT WALL ABOVE GR	3.4	0.7	0	0	0	0	0	0	0	0	0	0	0	0			
EXPOSED CLG	1.2	0.6	268	328	163	176	215	107	114	139	69	83	298	58			
NO ATTIC EXPOSED CLG	2.6	1.3	0	0	0	0	0	0	0	0	0	0	0	0			
BASEMENT/CRAWL HEAT LOSS			0	0	0	0	0	0	0	0	0	0	0	0			
SLAB ON GRADE HEAT LOSS			0	0	0	0	0	0	0	0	0	0	0	0			
SUB TOTAL HT LOSS			2723	1748	1315	2260	2208	2605	176	898	2312	588	1669	429			
SUB TOTAL HT GAIN			0.20	0.40	0.20	0.40	0.20	0.40	0.20	0.40	0.20	0.40	0.50	0.50			
LEVEL FACTOR / MULTIPLIER			1093	701	158	907	886	1045	71	360	928	236	2319	634			
AIR CHANGE HEAT LOSS			0	0	0	0	0	0	0	0	0	0	0	0			
DUCT LOSS			0	0	0	0	0	0	0	0	0	0	0	0			
HEAT GAIN PEOPLE	240		2	480	0	1	240	1	0	0	0	0	1	240			
HEAT GAIN APPLIANCES			745	0	0	745	0	0	0	0	745	0	745	0			
TOTAL HT LOSS BTU/H			3816	2449	553	3167	3095	3650	247	1258	3239	824	3888	1064			
TOTAL HT GAIN x 1.3 BTU/H																	

ROOM USE			FOY			MUD			B-BATH			BAS					
EXP. WALL CLG. HT.			10			17			6			169					
FACTORS			11			11			10			10					
GRS WALL AREA GLAZING			110	187	42	187	42	187	42	187	42	187	42	187			
NORTH	20.3	16.3	0	0	0	0	0	0	0	0	0	0	0	0			
EAST	20.3	41.9	0	0	0	0	0	0	0	0	0	0	0	0			
WEST	20.3	25.2	0	0	0	0	0	0	0	0	0	0	0	0			
SKYL.T.	35.5	102.1	0	0	0	0	0	0	0	0	0	0	0	0			
DOORS	24.1	4.7	0	0	0	0	0	0	0	0	0	0	0	0			
NET EXPOSED WALL	4.3	0.8	48	1165	223	40	962	186	0	0	0	0	0	0			
NET EXPOSED BSMT WALL ABOVE GR	3.4	0.7	0	0	0	0	0	0	0	0	0	0	0	0			
EXPOSED CLG	1.2	0.6	62	264	51	147	625	121	0	0	0	0	0	0			
NO ATTIC EXPOSED CLG	2.6	1.3	0	0	0	0	0	0	0	0	0	0	0	0			
BASEMENT/CRAWL HEAT LOSS			0	0	0	0	0	0	0	0	0	0	0	0			
SLAB ON GRADE HEAT LOSS			0	0	0	0	0	0	0	0	0	0	0	0			
SUB TOTAL HT LOSS			1418	1587	307	1587	307	1587	307	1587	307	1587	307	1587			
SUB TOTAL HT GAIN			0.30	0.51	0.30	0.51	0.30	0.51	0.50	0.50	0.50	0.50	0.50	0.50			
LEVEL FACTOR / MULTIPLIER			719	805	381	805	381	805	381	805	381	805	381	805			
AIR CHANGE HEAT LOSS			0	0	0	0	0	0	0	0	0	0	0	0			
DUCT LOSS			0	0	0	0	0	0	0	0	0	0	0	0			
HEAT GAIN PEOPLE	240		0	0	0	0	0	0	0	0	0	0	0	0			
HEAT GAIN APPLIANCES			0	0	0	0	0	0	0	0	0	0	0	0			
TOTAL HT LOSS BTU/H			2137	2392	385	2392	385	2392	385	2392	385	2392	385	2392			
TOTAL HT GAIN x 1.3 BTU/H																	

TOTAL HEAT GAIN BTU/H:

TONS: 5.00

LOSS DUE TO VENTILATION LOAD BTU/H: 3030

STRUCTURAL HEAT LOSS: 77525

TOTAL COMBINED HEAT LOSS BTU/H: 80555

SITE NAME: TIBURTINO
BUILDER: GREENPARK HOMES

TYPE: GEORGIAN 4

DATE: Jan-18

GFA: 4198 LO# 77396

HEATING CFM	1818	COOLING CFM	1818
TOTAL HEAT LOSS	77,525	TOTAL HEAT GAIN	59,397
AIR FLOW RATE CFM	23.45	AIR FLOW RATE CFM	30.61

furnace pressure	0.05
a/c coil pressure	0.2
available pressure	

~GOODMAN 100
GMVC961005CNA
FAN SPEED

AFUE = 96 %
INPUT (BTU/H) = 100,000
OUTPUT (BTU/H) = 96,000

RUN COUNT	4th	3rd	2nd
S/A	0	0	15
R/A	0	0	4

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

	for s/a & m/a	0.30
plenum pressure s/a	0.18	
max s/a dif 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

$$\text{DESIGN CFM} = \frac{1818}{\text{CFM @ .6" E.S.P.}}$$

All S/A dimensions 4 x 10 unless noted otherwise on layout.

[illegible]

RUN #	25	26	27	28	29	30	31	32	33	34	35	36	37
ROOM NAME	BAS	BAS	BAS	BED-5	ENS-5	B-BATH	ENS	BED-2	BED-3	BED-4	LIV	DIN	STUDY
RM LOSS MBH	3.02	3.02	3.02	3.89	1.06	0.64	1.22	1.58	1.55	1.83	1.95	2.35	2.09
CFM PER RUN HEAT	71	71	71	91	25	15	29	37	36	43	46	55	49
RM GAIN MBH	0.36	0.36	0.36	1.73	0.03	0.02	0.92	2.20	2.22	2.35	2.81	3.24	2.83
CFM PER RUN COOLING	11	11	11	53	1	1	28	67	68	72	86	99	87
ADJUSTED PRESSURE	0.17	0.17	0.17	0.16	0.17	0.17	0.17	0.17	0.17	0.17	0.16	0.16	0.16
ACTUAL DUCT LGH.	51	42	10	65	44	19	56	66	39	48	19	58	32
EQUIVALENT LENGTH	130	140	160	170	150	150	180	235	210	160	190	150	150
TOTAL EFFECTIVE LENGTH	181	182	170	235	194	169	236	301	249	208	209	182	182
ADJUSTED PRESSURE	0.1	0.09	0.1	0.07	0.09	0.1	0.07	0.06	0.07	0.08	0.08	0.08	0.09
ROUND DUCT SIZE	5	5	5	6	4	4	4	5	5	5	6	6	5
HEATING VELOCITY (ft/min)	521	521	521	464	287	172	333	272	264	316	235	280	360
COOLING VELOCITY (ft/min)	81	81	81	270	11	11	321	492	499	529	438	505	639
OUTLET GRILL SIZE	3X10	3X10	3X10	4X10	3X10	3X10	3X10	3X10	3X10	3X10	4X10	4X10	3X10
TRUNK	G	G	G	C	C	G	A	A	E	F	C	C	G

SUPPLY AIR TRUNK SIZE										RETURN AIR TRUNK SIZE									
TRUNK					STAT					TRUNK					STAT				
CFM	DUCT	ROUND	RECT	VELOCITY (f/min)	CFM	DUCT	ROUND	RECT	VELOCITY (f/min)	CFM	DUCT	ROUND	RECT	VELOCITY (f/min)	CFM	DUCT	ROUND	RECT	VELOCITY (f/min)
TRUNK A	254	0.06	9	10	8	457	TRUNK G	468	0.08	10.6	14	8	602	TRUNK O	0	0.05	0	0	8
TRUNK B	318	0.07	9.4	10	8	572	TRUNK H	738	0.07	12.9	20	8	664	TRUNK P	0	0.05	0	0	8
TRUNK C	510	0.06	11.7	16	8	574	TRUNK I	0	0.00	0	0	8	0	TRUNK Q	0	0.05	0	0	8
TRUNK D	828	0.06	14	22	8	677	TRUNK J	0	0.00	0	0	8	0	TRUNK R	0	0.05	0	0	8
TRUNK E	1082	0.06	15.5	28	8	696	TRUNK K	0	0.00	0	0	8	0	TRUNK S	0	0.05	0	0	8
TRUNK F	1270	0.07	18	30	8	498	TRUNK L	0	0.00	0	0	8	0	TRUNK T	0	0.05	0	0	8

[illegible]

TYPE: GEORGIAN 4
SITE NAME: TIBURTINO

LO # 77396

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	4 @ 10.6 cfm	42.4 cfm
Kitchen & Bathrooms	7 @ 10.6 cfm	74.2 cfm
Other Rooms	10 @ 10.6 cfm	106.0 cfm
Table 9.32.3.A.	TOTAL	265.0 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		95.4 cfm

SUPPLEMENTAL VENTILATION CAPACITY		9.32.3.5.
Total Ventilation Capacity	265	cfm
Less Principal Ventil. Capacity	155	cfm
Required Supplemental Capacity	110.0	cfm

PRINCIPAL EXHAUST FAN CAPACITY	
Model: VANEE 65H	Location: BSMT
155.0 cfm	3.0 sones
☒ HVI Approved	

PRINCIPAL EXHAUST HEAT LOSS CALCULATION			
CFM	ΔT °F	FACTOR	% LOSS
155.0 CFM	72 F	1.08	0.25

SUPPLEMENTAL FANS		NUTONE	
Location	Model	cfm	HVI Sones
ENS	QTXEN050C	50	✓ 0.3
BATH	QTXEN050C	50	✓ 0.3
ENS-2	QTXEN050C	50	✓ 0.3

HEAT RECOVERY VENTILATOR		9.32.3.11.
Model: VANEE 65H		
155 cfm high	64 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: GREENPARK HOMES	
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:	January-18

HEAT LOSS AND GAIN SUMMARY SHEET**MODEL:** GEORGIAN 4**BUILDER:** GREENPARK HOMES**SFQT:** 4198**LO#** 77396**SITE:** TIBURTINO**DESIGN ASSUMPTIONS**

HEATING	°F	COOLING	°F
OUTDOOR DESIGN TEMP.	0	OUTDOOR DESIGN TEMP.	86
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 (ft ³):	66818.0	ASSUMED (Y/N):	Y
INTERNAL SHADING:	BLINDS/CURTAINS	ASSUMED OCCUPANTS:	6
INTERIOR LIGHTING LOAD (Btu/h/ft ²):	1.50	DC BRUSHLESS MOTOR (Y/N):	Y
FOUNDATION CONFIGURATION	BCIN_1	DEPTH BELOW GRADE:	7.0 ft
LENGTH: 52.0 ft	WIDTH: 55.0 ft	EXPOSED PERIMETER:	214.0 ft

2012 OBC - COMPLIANCE PACKAGE		Compliance Package A1	
Component		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	-

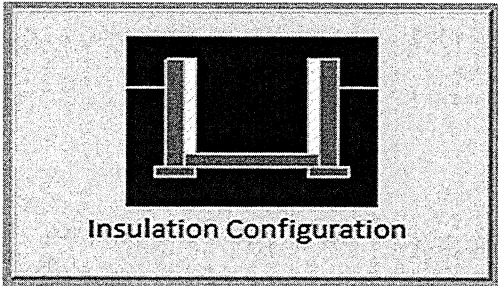
INDIVIDUAL BCIN: 19669

MICHAEL O'ROURKE



Residential Foundation Thermal Load Calculator

Supplemental tool for CAN/CSA-F280

Weather Station Description		
Province:	Ontario	
Region:	Oakville	
Site Description		
Soil Conductivity:	Normal conductivity: dry sand, loam, clay	
Water Table:	Normal (7-10 m, 23-33 ft)	
Foundation Dimensions		
Floor Length (m):	15.8	 Insulation Configuration
Floor Width (m):	16.8	
Exposed Perimeter (m):	0.0	
Wall Height (m):	3.0	
Depth Below Grade (m):	2.13	
Window Area (m ²):	5.2	
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):		2046

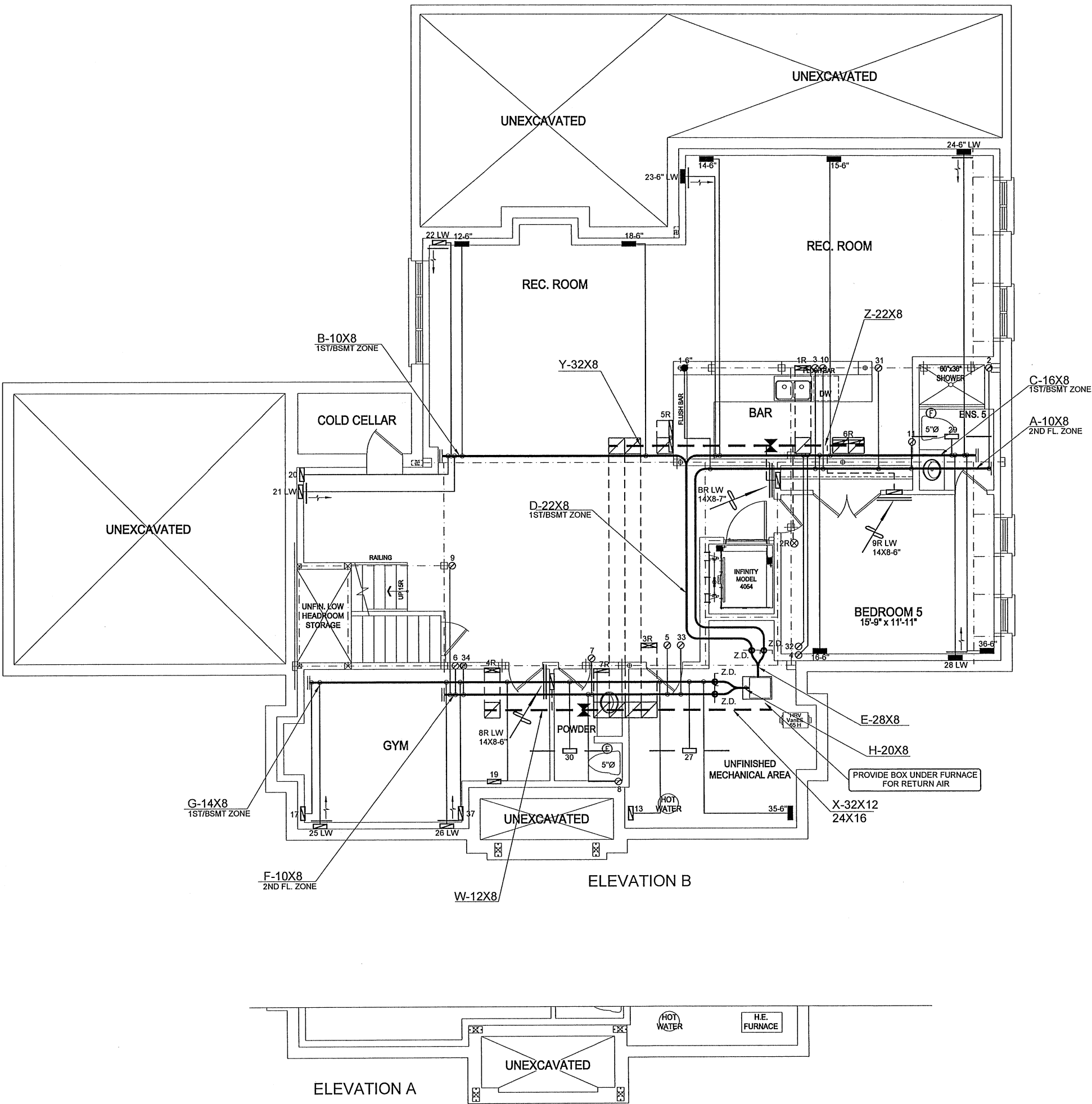
TYPE: GEORGIAN 4
LO# 77396

Air Infiltration Residential Load Calculator

Supplemental tool for CAN/CSA-F280

Weather Station Description				
Province:	Ontario			
Region:	Oakville			
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):	7.32			
Building Configuration				
Type:	Detached			
Number of Stories:	Two			
Foundation:	Full			
House Volume (m ³):	1892.1			
Air Leakage/Ventilation				
Air Tightness Type:	Present (1961-) (3.57 ACH)			
Custom BDT Data:	ELA @ 10 Pa.	2522.2 cm ²		
	3.57	ACH @ 50 Pa		
Mechanical Ventilation (L/s):	Total Supply	Total Exhaust		
	73.2	73.2		
Flue Size				
Flue #:	#1	#2	#3	#4
Diameter (mm):	0	0	0	0
Natural Infiltration Rates				
Heating Air Leakage Rate (ACH/H):	0.369			
Cooling Air Leakage Rate (ACH/H):	0.117			

TYPE: GEORGIAN 4
LO# 77396



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.

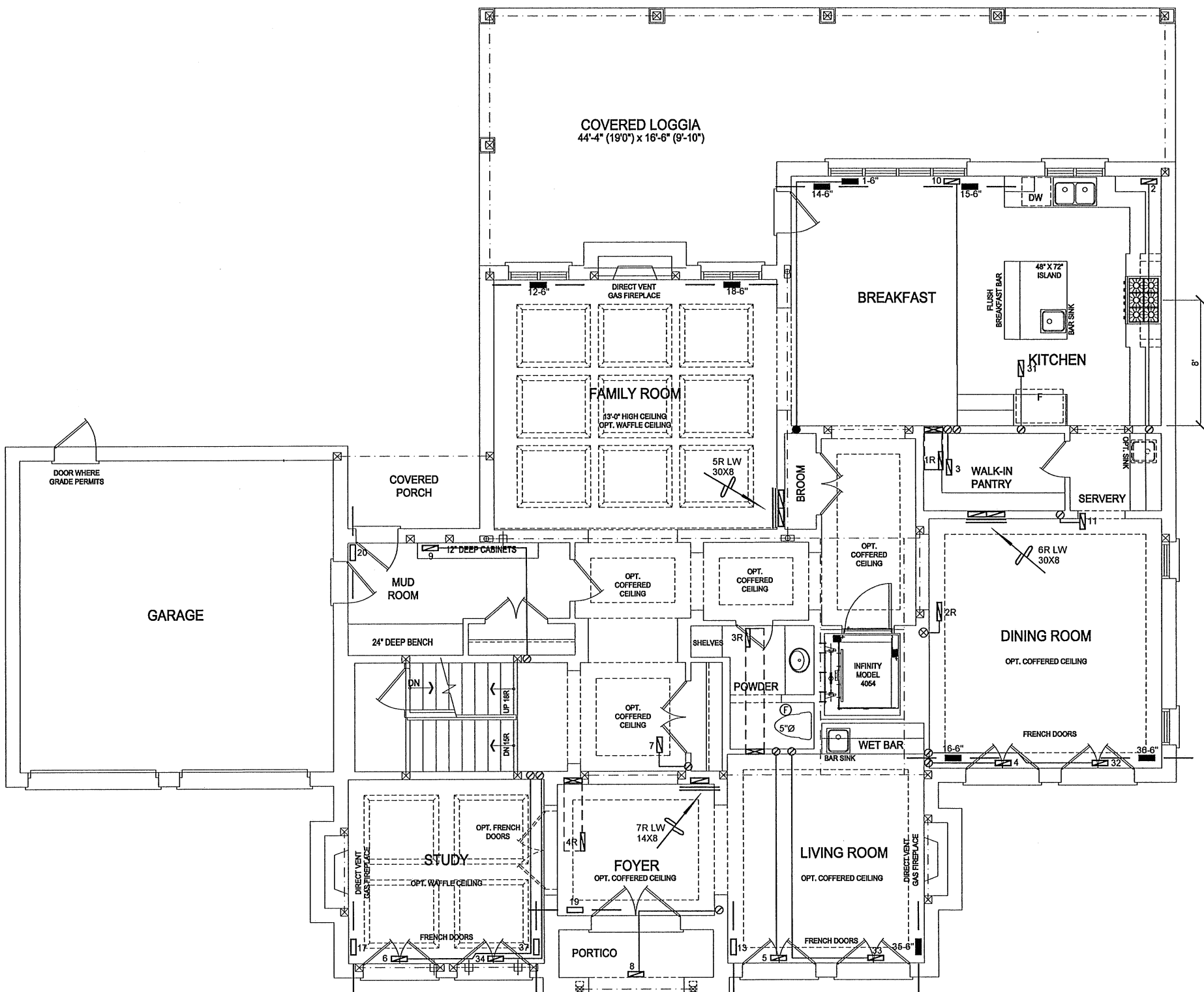
Michael O'Rourke
Michael O'Rourke, BCIN# 19669
HVAC DESIGNS LTD.

CSA-F280-12
PACKAGE A1

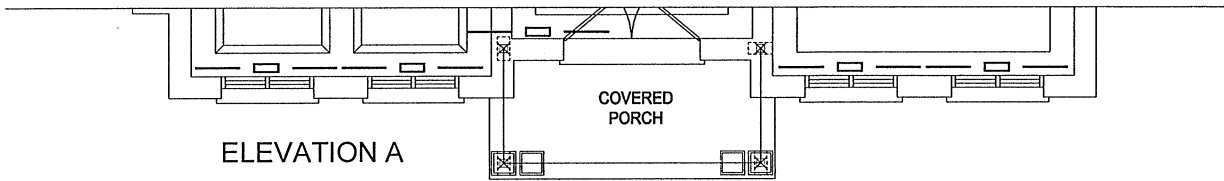
HVAC LEGEND							3.	
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	2.
	SUPPLY AIR GRILLE		6" SUPPLY AIR BOOT ABOVE		14"x8" RETURN AIR GRILLE		RETURN AIR STACK ABOVE	1.
	SUPPLY AIR GRILLE 6" BOOT		SUPPLY AIR STACK FROM 2nd FLOOR		30"x8" RETURN AIR GRILLE		RETURN AIR STACK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

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Client GREENPARK HOMES	 375 Finley Ave. Suite 202 - Ajax, Ontario L1S 2E2 Tel. 905.619.2300 - 905.420.5300 Fax 905.619.2375 Email: info@hvacadesigns.ca Web: www.hvacadesigns.ca Specializing in Residential Mechanical Design Services	HEAT LOSS 80555 BTU/H UNIT DATA MAKE GOODMAN MODEL GMVC961005CNA INPUT 100 MBTU/H OUTPUT 96 MBTU/H COOLING 5.0 TONS FAN SPEED 1818 cfm @ 0.6" w.c.	# OF RUNS S/A R/A FANS 3RD FLOOR 2ND FLOOR 15 4 4 1ST FLOOR 12 3 2 BASEMENT 10 3 2	Sheet Title BASEMENT HEATING LAYOUT	
				Date	JAN/2018
Project Name TIBURTINO BUILDING CORP OAKVILLE, ONTARIO	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.		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"
				BCIN# 19669	
GEORGIAN 4	4198 sqft			LO#	77396



ELEVATION B



ELEVATION A

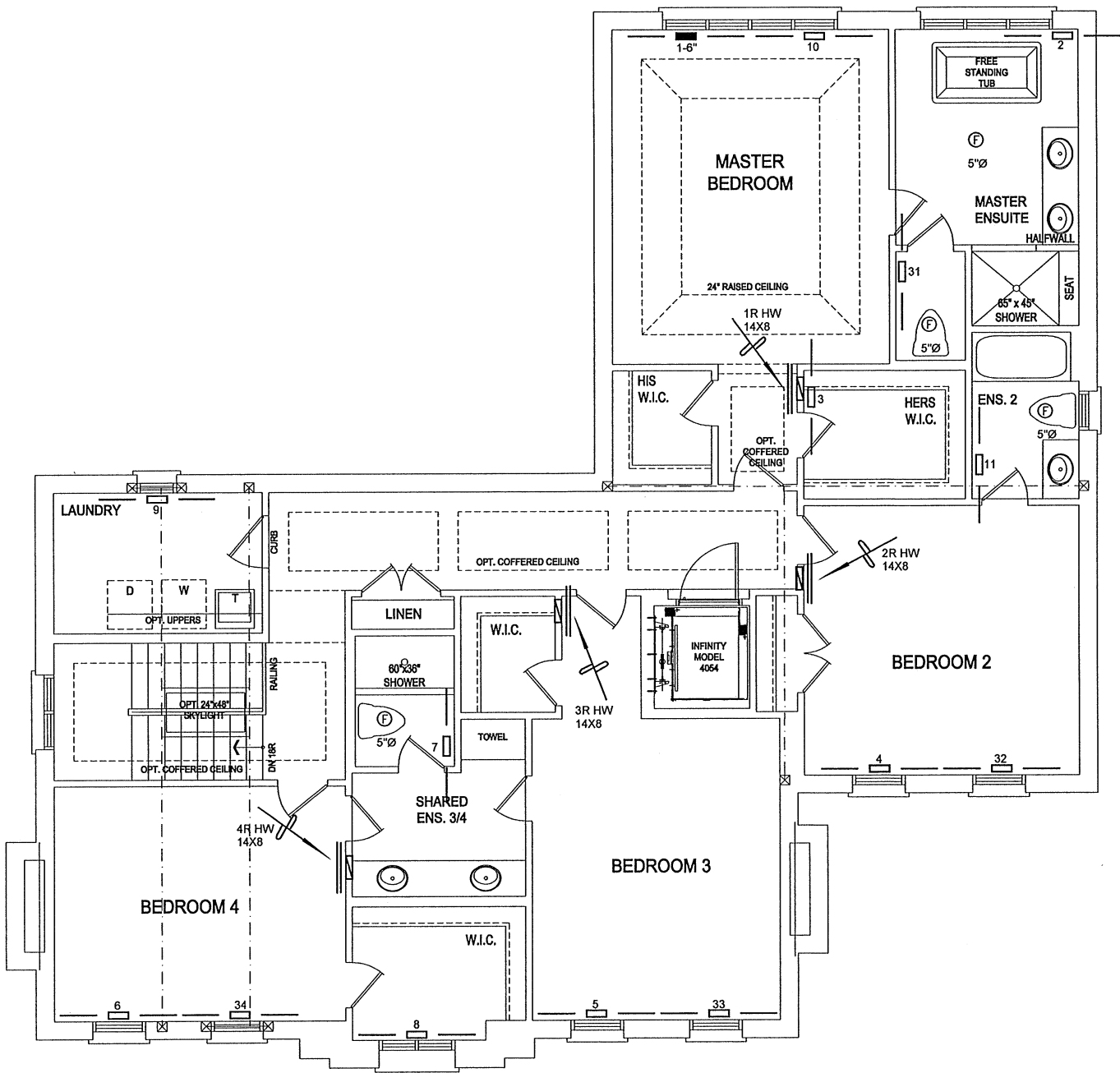
I MICHAEL O'ROURKE HAVE REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK AND AM QUALIFIED UNDER DIVISION C, 3.2.5 OF THE BUILDING CODE.
Michael O'Rourke
Michael O'Rourke, BCIN# 19669
HVAC DESIGNS LTD.

CSA-F280-12
PACKAGE A1

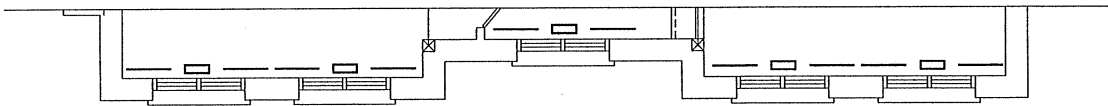
HVAC LEGEND								3.		
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	2.		
	SUPPLY AIR GRILLE		6" SUPPLY AIR BOOT ABOVE		14"x8" RETURN AIR GRILLE		RETURN AIR STACK ABOVE	1.		
	SUPPLY AIR GRILLE 6" BOOT		SUPPLY AIR STACK FROM 2nd FLOOR		30"x8" RETURN AIR GRILLE		RETURN AIR 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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Client GREENPARK HOMES		 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 TIBURTINO BUILDING CORP OAKVILLE, ONTARIO			Date JAN/2018	
GEORGIAN 4 4198 sqft			Scale 3/16" = 1'-0"	
			BCIN# 19669	
			LO# 77396	



ELEVATION B



ELEVATION A

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.
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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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Client GREENPARK HOMES		 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	Sheet Title SECOND FLOOR HEATING LAYOUT	
Project Name TIBURTINO BUILDING CORP OAKVILLE, ONTARIO			Date JAN/2018	
GEORGIAN 4 4198 sqft			Scale 3/16" = 1'-0"	
			BCIN# 19669	
			LO#	77396
		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.		