

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.
Municipality OAKVILLE			Postal code
Plan number/ other description			Lot/con.
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@hvacdsgns.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 1 Project: TIBURTINO BUILDING CORP	
D. Declaration of Designer			
I, <u>MICHAEL O'ROURKE</u> declare that (choose one as appropriate): (print name)			
☐ 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.			
January 16, 2018		 Signature of Designer	
Date			

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.

SITE NAME: TIBURTINO BUILDING CORP BUILDER: GREENPARK HOMES										DATE: Jan-18 LO# 77393		WINTER NATURAL AIR CHANGE RATE SUMMER NATURAL AIR CHANGE RATE		HEAT LOSS AT °F. HEAT GAIN AT °F.		CSA-F280-12 SB-12 PACKAGE A1	
TYPE: GEORGIAN 1										GFA: 3522		HALL		ENS-4		ENS-5	
ROOM USE EXP. WALL CLG. HT.	MBR	ENS	WIC	BED-2	BED-3	BED-4	BATH	HALL	ENS-4	ENS-5	BED-5	BATH		ENS-4		ENS-5	
GRS.WALL AREA GLAZING	320	90	243	90	126	243	279	250	117	60	174	279		117		60	
NORTH	0	16	0	20	0	0	0	0	0	0	0	0		0		0	
EAST	0	0	0	0	0	0	0	0	0	0	0	0		0		0	
SOUTH	0	0	0	0	0	0	0	0	0	0	0	0		0		0	
WEST	0	0	0	0	0	0	0	0	0	0	0	0		0		0	
SKYL.T.	47	953	405	494	1075	487	982	413	592	24	487	10		24		0	
DOORS	35.5	101.2	0	0	0	0	0	0	0	0	0	20		20		0	
NET EXPOSED WALL	4.3	0.7	273	1161	192	74	315	52	223	948	157	206		189		206	
NET EXPOSED BSMT WALL ABOVE GR	3.4	0.6	0	0	0	0	0	0	0	0	0	0		0		0	
EXPOSED CLG	1.2	0.6	255	312	146	160	196	92	152	186	87	0		0		0	
NO ATTIC EXPOSED CLG	2.6	1.2	0	0	0	0	0	0	0	0	0	0		0		0	
EXPOSED FLOOR	2.4	0.4	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		0		0	
SLAB ON GRADE HEAT LOSS	0	0	0	0	0	0	0	0	0	0	0	0		0		0	
SUBTOTAL HT LOSS	2426	835	1539	738	1617	2025	2000	1999	1205	423	1450	1672		809		17	
SUB TOTAL HT GAIN	2281	0.20	0.31	0.20	0.31	0.20	0.31	0.20	0.31	0.20	0.31	0.20		0.20		0.50	
LEVEL FACTOR / MUL TIPLIER	740	255	470	314	494	516	511	510	358	522	1789	510		358		522	
AIR CHANGE HEAT LOSS	171	0	0	0	99	137	261	0	0	0	0	125		61		1	
DUCT LOSS	0	0	0	0	211	0	115	0	0	0	0	0		0		0	
DUCT GAIN	0	0	0	0	240	1	240	0	0	0	0	0		0		0	
HEAT GAIN PEOPLE	240	2	0	1	514	1	514	0	0	0	0	0		0		0	
HEAT GAIN APPLIANCES	514	1089	2009	1479	2321	2643	2872	2609	1572	945	3238	2872		1572		945	
TOTAL HT LOSS BTU/H	3165	4480	1031	1838	3111	3522	3522	3522	1642	1131	4231	3005		1131		24	
TOTAL HT GAIN x 1.3 BTU/H																	

TOTAL HEAT GAIN BTU/H: 42673										TONS: 3.56		LOSS DUE TO VENTILATION LOAD BTU/H: 3030		STRUCTURAL HEAT LOSS: 65459		TOTAL COMBINED HEAT LOSS BTU/H: 68489	
ROOM USE EXP. WALL CLG. HT.	DIN	LIV	KTIFM	STDY	LAUN	PWD	FOY	MUD	BAS	GFA: 3522		HALL		ENS-4		ENS-5	
GRS.WALL AREA GLAZING	168	300	924	176	99	36	312	284	822	2173		284		117		60	
NORTH	36	0	0	0	0	0	0	0	0	0		0		0		0	
EAST	0	0	0	0	0	0	0	0	0	0		0		0		0	
SOUTH	0	0	0	0	0	0	0	0	0	0		0		0		0	
WEST	0	0	0	0	0	0	0	0	0	0		0		0		0	
SKYL.T.	35.5	101.2	0	0	0	0	0	0	0	0		0		0		0	
DOORS	24.1	4.0	8	192	32	0	0	0	0	0		0		0		0	
NET EXPOSED WALL	4.3	0.7	762	3240	537	148	629	104	87	370	61	50		1203		199	
NET EXPOSED BSMT WALL ABOVE GR	3.4	0.6	0	0	0	0	0	0	0	0	0	0		0		0	
EXPOSED CLG	1.2	0.6	0	0	0	0	0	0	0	0	0	0		0		0	
NO ATTIC EXPOSED CLG	2.6	1.2	0	0	0	0	0	0	0	0	0	0		0		0	
EXPOSED FLOOR	2.4	0.4	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		0		0	
SLAB ON GRADE HEAT LOSS	0	0	0	0	0	0	0	0	0	0	0	0		0		0	
SUBTOTAL HT LOSS	1291	2173	7366	1197	778	254	2317	1914	7432	1291		2317		384		317	
SUB TOTAL HT GAIN	0.30	0.44	0.30	0.44	0.20	0.31	0.30	0.44	0.50	1.23	0.50	0.30		0.44		0.30	
LEVEL FACTOR / MUL TIPLIER	562	946	3206	521	238	313	1008	833	8169	562		1008		1008		8169	
AIR CHANGE HEAT LOSS	49	0	0	0	0	0	0	0	0	0		29		0		0	
DUCT LOSS	0	0	0	0	0	0	0	0	0	0		0		0		0	
DUCT GAIN	0	0	0	0	0	0	0	0	0	0		0		0		0	
HEAT GAIN PEOPLE	240	2	0	1	514	1	514	0	0	0		0		0		0	
HEAT GAIN APPLIANCES	514	1089	2009	1479	2321	2643	2872	2609	1572	514		2748		514		514	
TOTAL HT LOSS BTU/H	1853	3118	10571	1718	1016	567	3325	2748	16601	1853		3325		16601		16601	
TOTAL HT GAIN x 1.3 BTU/H																	

SITE NAME: TIBURTINO BUILDING CORP
BUILDER: GREENPARK HOMES

GFA: 3522 LO# 77393

DATE: Jan-18

TYPE: GEORGIAN 1

HEATING CFM	1316	COOLING CFM	1316
TOTAL HEAT LOSS	65,459	TOTAL HEAT GAIN	42,171
AIR FLOW RATE CFM	20.1	AIR FLOW RATE CFM	31.21

GMVC960804CNA 80
FAN SPEED LOW 1316
MEDIUM 1389
HIGH 1396

4th	3rd	2nd	1st	Bas
0	0	14	8	8
0	0	4	3	2

~*GOODMAN
AFUE = 96 %
INPUT (BTU/H) = 80,000
OUTPUT (BTU/H) = 76,800
DESIGN CFM = 1316
CFM @ 8" E.S.P.
TEMPERATURE RISE 54 °F

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

ROOM NAME	1	2	3	4	5	6	7	8	9	10	11	12	14	15	17	18	19	20	21	22	23	24
ROOM NAME	MBR	ENS	WIC	BED-2	BED-3	BED-4	BATH	BED-3	BED-4	MBR	ENS-4	DIN	KT/FM	KT/FM	LAUN	HALL	FOY	BATH	MUD	STDY	LIV	BAS
RM LOSS MBH	32	22	40	30	27	29	29	23	27	32	32	37	71	71	20	52	67	29	55	35	63	332
CFM PER RUN HEAT	2.24	0.55	1.03	1.84	1.56	1.77	0.82	1.56	1.77	2.24	1.13	1.59	2.70	2.70	1.56	3.01	0.54	0.82	1.11	1.78	3.49	0.47
RM GAIN MBH	70	17	32	57	49	55	26	49	55	70	35	50	84	84	49	94	17	28	35	56	109	15
CFM PER RUN COOLING	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	0.17	0.16	0.17	0.17	0.17	0.17	0.15	0.17
ADJUSTED PRESSURE	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	0.17	0.16	0.17	0.17	0.17	0.17	0.15	0.17
EQUVALENT LENGTH	55	57	61	35	44	38	46	45	32	65	37	26	52	43	32	18	26	40	30	15	22	22
ACTUAL DUCT LGH	140	120	150	170	130	120	160	150	180	130	110	160	120	130	190	240	170	140	140	100	120	150
EQUVALENT LENGTH	195	177	211	205	174	158	206	195	212	195	147	186	172	173	222	258	196	180	170	115	142	172
TOTAL EFFECTIVE LENGTH	0.09	0.1	0.08	0.08	0.1	0.11	0.08	0.09	0.08	0.09	0.12	0.09	0.09	0.09	0.08	0.06	0.09	0.1	0.1	0.15	0.11	0.1
ADJUSTED PRESSURE	5	4	4	5	4	4	4	4	5	5	4	4	5	5	5	6	5	4	4	4	6	5
ROUND DUCT SIZE	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	6	5	4	4	4	6	5
HEATING VELOCITY (ft/min)	235	252	459	220	264	333	264	198	235	367	424	521	617	617	147	265	492	333	631	402	321	492
COOLING VELOCITY (ft/min)	514	195	367	419	562	631	298	562	404	514	402	574	617	617	360	479	125	298	402	642	556	110
OUTLET GRILL SIZE	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	4X10	3X10	3X10	3X10	3X10	4X10	3X10
TRUNK	D	D	D	E	E	H	E	E	H	D	H	A	A	A	E	E	C	E	C	G	G	C

ROOM NAME	25	26	27	28	29	30	31	32
ROOM NAME	KT/FM	BAS	BAS	PWD	ENS-5	BED-5	ENS-5	BED-5
RM LOSS MBH	71	67	67	67	11	19	65	3.24
CFM PER RUN HEAT	2.70	0.47	0.47	0.47	0.01	0.02	1.29	0.02
RM GAIN MBH	84	15	15	15	0	1	40	0
CFM PER RUN COOLING	0.16	0.17	0.17	0.17	0.17	0.17	0.17	0.17
ADJUSTED PRESSURE	45	62	61	47	36	13	12	36
ACTUAL DUCT LGH	90	120	110	120	130	110	110	180
EQUVALENT LENGTH	135	182	171	167	166	123	122	216
ADJUSTED PRESSURE	0.12	0.09	0.1	0.1	0.1	0.14	0.14	0.08
ROUND DUCT SIZE	5	5	5	5	4	4	4	5
HEATING VELOCITY (ft/min)	521	492	492	492	126	218	477	294
COOLING VELOCITY (ft/min)	617	110	110	110	110	110	110	110
OUTLET GRILL SIZE	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10
TRUNK	A	A	A	A	C	C	G	G

SUPPLY AIR TRUNK SIZE										RETURN AIR TRUNK SIZE									
TRUNK	STATIC	ROUND	RECT	VELOCITY	TRUNK	STATIC	ROUND	RECT	VELOCITY	TRUNK	STATIC	ROUND	RECT	VELOCITY					
CFM	PRESS.	DUCT	DUCT	(ft/min)	CFM	PRESS.	DUCT	DUCT	(ft/min)	CFM	PRESS.	DUCT	DUCT	(ft/min)					
TRUNK A	0.09	10.1	12	8	TRUNK G	0.08	7.4	6	8	TRUNK O	0.06	0	0	8					
TRUNK B	0.00	0	0	8	TRUNK H	0.08	5.6	4	8	TRUNK P	0	0	0	8					
TRUNK C	0.09	12	16	8	TRUNK I	0.08	8.6	12	8	TRUNK Q	0	0	0	8					
TRUNK D	0.08	6.5	6	8	TRUNK J	0.00	0	0	8	TRUNK R	0	0	0	8					
TRUNK E	0.06	10	12	8	TRUNK K	0	0	0	8	TRUNK S	0	0	0	8					
TRUNK F	0.06	15.3	28	8	TRUNK L	0	0	0	8	TRUNK T	0	0	0	8					
										TRUNK U	0	0	0	8					
										TRUNK V	0	0	0	8					
										TRUNK W	0	0	0	8					
										TRUNK X	1111	15.7	30	8					
										TRUNK Y	415	10.8	14	8					
										TRUNK Z	655	12.9	20	8					
										DROP	1316	16.7	24	12					

TYPE: GEORGIAN 1
SITE NAME: TIBURTINO BUILDING CORP

LO # 77393

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	<u>2</u> @ 21.2 cfm	<u>42.4</u> cfm
Other Bedrooms	<u>4</u> @ 10.6 cfm	<u>42.4</u> cfm
Kitchen & Bathrooms	<u>7</u> @ 10.6 cfm	<u>74.2</u> cfm
Other Rooms	<u>8</u> @ 10.6 cfm	<u>84.8</u> cfm
Table 9.32.3.A.	TOTAL	<u>243.8</u> 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	<u>243.8</u>	cfm
Less Principal Ventil. Capacity	<u>155</u>	cfm
Required Supplemental Capacity	<u>88.8</u>	cfm

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

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

SUPPLEMENTAL FANS		NUTONE		
Location	Model	cfm	HVI	Sones
ENS	QTXEN050C	50	☒	0.3
BATH	QTXEN050C	50	☒	0.3
ENS-4	QTXEN050C	50	☒	0.3
PWD	QTXEN050C	50	☒	0.3

HEAT RECOVERY VENTILATOR		9.32.3.11.
Model: VANEE 65H		
<u>155</u> cfm high	<u>64</u> cfm low	
<u>75</u> % 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 1

BUILDER: GREENPARK HOMES

SFQT: 3522

LO# 77393

SITE: TIBURTINO BUILDING CORP

DESIGN ASSUMPTIONS

HEATING	°F	COOLING	°F
OUTDOOR DESIGN TEMP.	0	OUTDOOR DESIGN TEMP.	86
INDOOR DESIGN TEMP.	72	INDOOR DESIGN TEMP. (MAX 75°F)	74

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):	50816.0	ASSUMED (Y/N):	Y
INTERNAL SHADING:	BLINDS/CURTAINS	ASSUMED OCCUPANTS:	6
INTERIOR LIGHTING LOAD (Btu/h/ft²):	1.27	DC BRUSHLESS MOTOR (Y/N):	Y
FOUNDATION CONFIGURATION	BCIN_1	DEPTH BELOW GRADE:	6.0 ft
LENGTH: 52.0 ft	WIDTH: 39.0 ft	EXPOSED PERIMETER:	182.0 ft

2012 OBC - COMPLIANCE PACKAGE

Component

Compliance Package

A1

Nominal	Min. Eff.
60	59.22
31	27.65
31	29.80
22	17.03
20 ci	21.12
-	-
10	10
10	11.13
0.28	-
0.49	-
0.96	-
75%	-
0.8	-

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

-

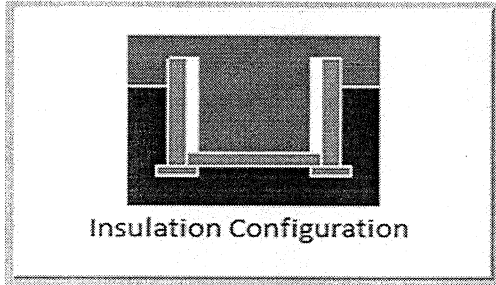
INDIVIDUAL BCIN: 19669

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):	11.9	
Exposed Perimeter (m):	0.0	
Wall Height (m):	2.7	
Depth Below Grade (m):	1.83	
Window Area (m ²):	6.3	
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):	1707	

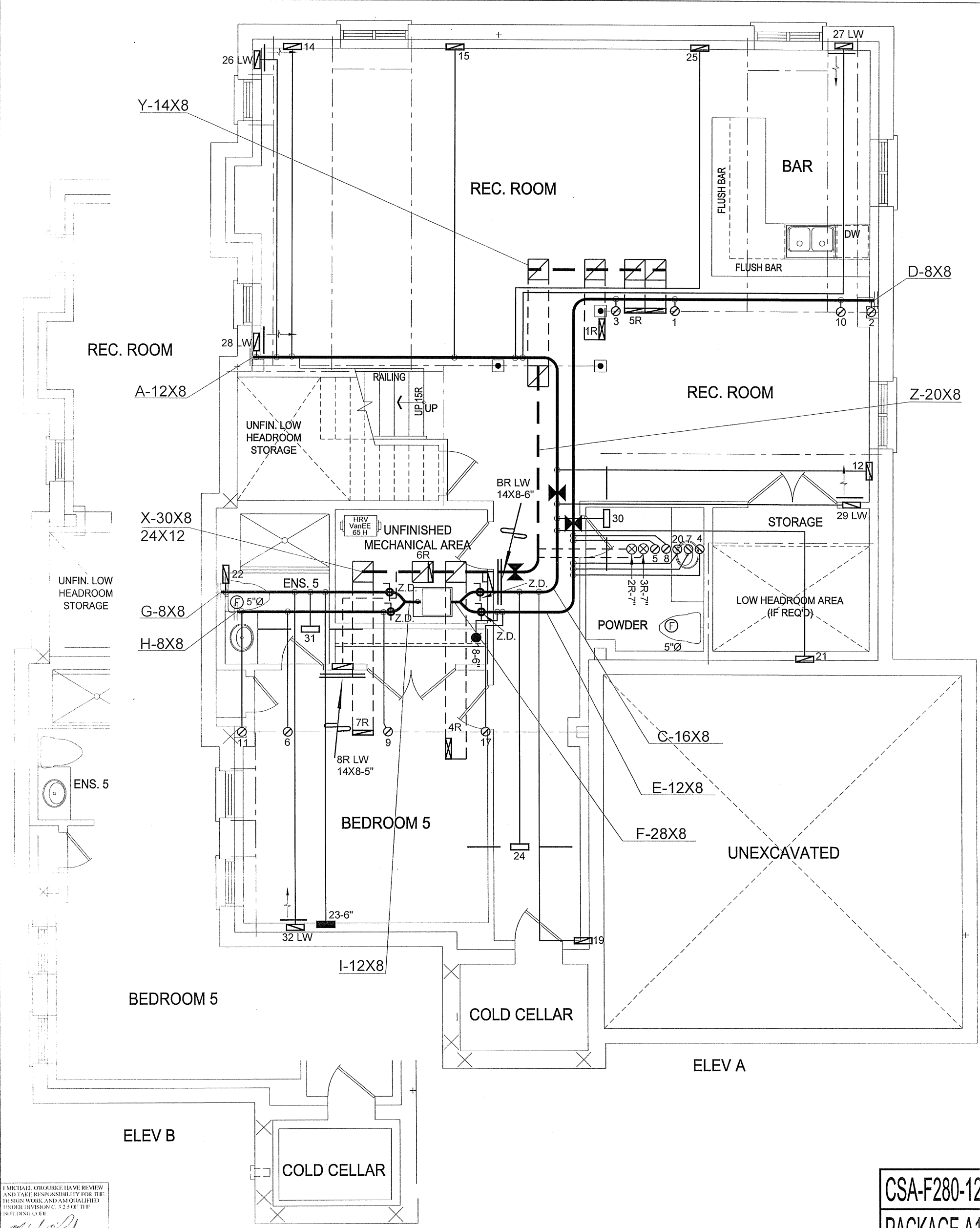
TYPE: GEORGIAN 1
LO# 77393

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):	7.01			
Building Configuration				
Type:	Detached			
Number of Stories:	Two			
Foundation:	Full			
House Volume (m ³):	1438.9			
Air Leakage/Ventilation				
Air Tightness Type:	Present (1961-) (3.57 ACH)			
Custom BDT Data:	ELA @ 10 Pa.	1918.2 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):	0.358			
Cooling Air Leakage Rate (ACH/H):	0.106			

TYPE: GEORGIAN 1
LO# 77393



I MICHAEL OROURKE HAVE REVIEWED 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.

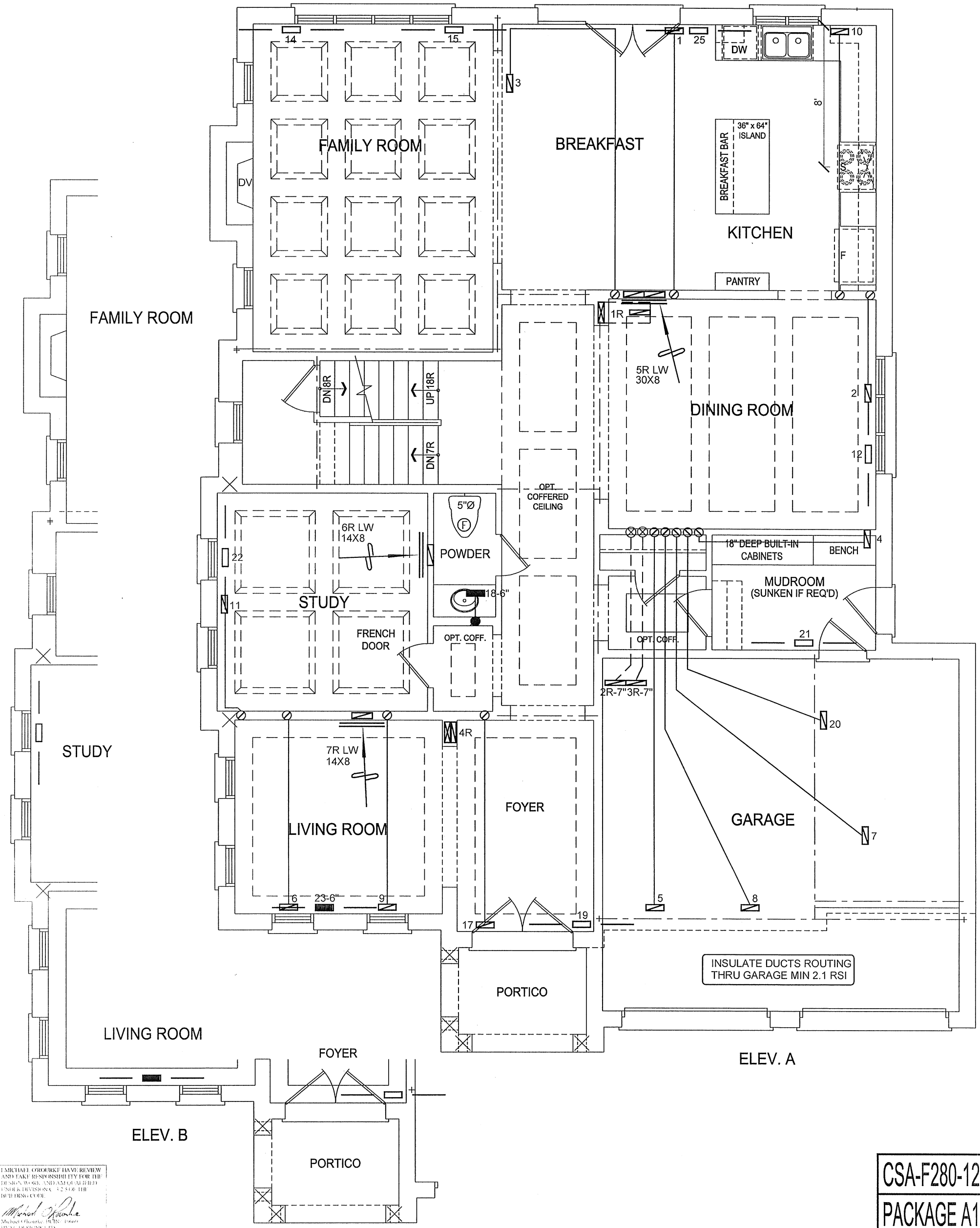
Z.D. = ZONE DAMPER

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 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	HEAT LOSS 68489 BTU/H UNIT DATA		# OF RUNS S/A R/A FANS			Sheet Title BASEMENT HEATING LAYOUT	
Project Name TIBURTINO BUILDING CORP OAKVILLE, ONTARIO			MAKE GOODMAN		3RD FLOOR				
			MODEL GMVC960804CNA		2ND FLOOR				
			INPUT 80 MBTU/H		1ST FLOOR				
			OUTPUT 76.8 MBTU/H		BASEMENT				
GEORGIAN 1 3522 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.		COOLING 3.5 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			Date JAN/2018
				FAN SPEED 1316 cfm @ 0.6" w.c.					Scale 3/16" = 1'-0"
									BCIN# 19669
									LO# 77393



I, MICHAEL CHOURKE, HAVE REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK AND AM QUALIFIED UNDER DIVISION 1.2.2 OF THE BUILDING CODE.

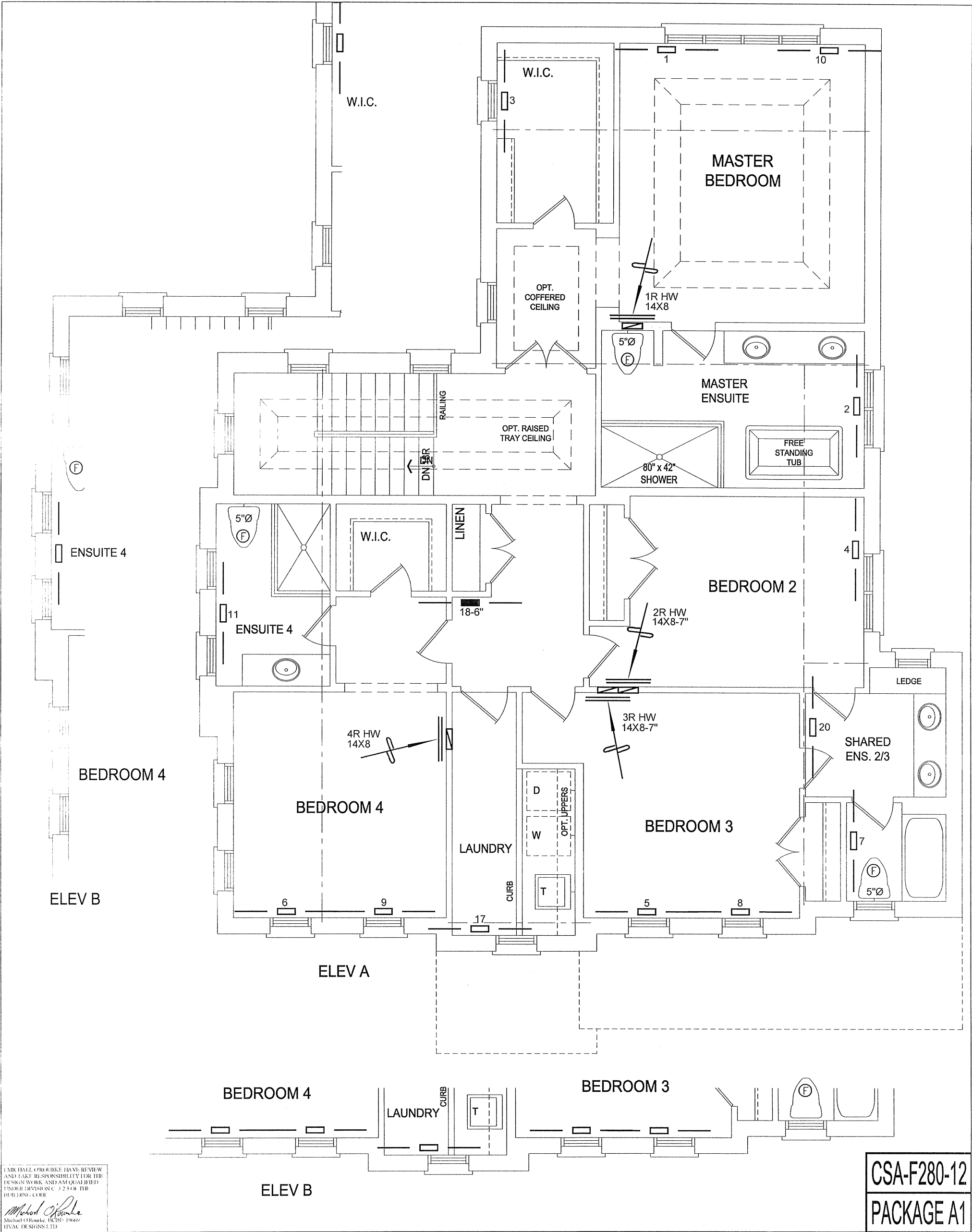
Michael Chourke
Michael Chourke (P.Eng.) 19669
HVAC DESIGNS LTD.

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		

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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 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	
GREENPARK HOMES			FIRST FLOOR HEATING LAYOUT	
Project Name TIBURTINO BUILDING CORP OAKVILLE, ONTARIO			Date	JAN/2018
			Scale	3/16" = 1'-0"
		BCIN# 19669		
GEORGIAN 1 3522 sqft		LO#	77393	



I AMIC HALL OROURKE HAVE REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK AND AM QUALIFIED UNDER DIVISION C 4.2.5 OF THE BUILDING CODE

Michael O'Rourke
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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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	Sheet Title	
GREENPARK HOMES			SECOND FLOOR HEATING LAYOUT	
Project Name			Date	JAN/2018
TIBURTINO BUILDING CORP OAKVILLE, ONTARIO			Scale	3/16" = 1'-0"
		BCIN# 19669		
GEORGIAN 1		3522 sqft	LO#	77393
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.				