

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 VAUGHAN (WOODBIDGE)	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: 4006 - THE LILAC ELEV A & B - WOB Project: PINE VALLEY PH 2		
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.					
April 11, 2022 _____ 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

ROOM USE	EXP. WALL CLG. HT.	FACTORS		DIN	KT/GR	LIB	LAUN	FOY	MUD	WOB	BAS
		GRS.WALL AREA	LOSS GAIN								
GLAZING				242							
NORTH		21.3	15.7	0	0	0	0	0	0	430	1043
EAST		21.3	40.6	0	0	0	0	0	0	0	3
SOUTH		21.3	24.4	45	958	1098	0	0	0	0	0
WEST		21.3	40.6	0	0	0	0	0	0	0	0
SKYLT.		37.2	101.5	0	0	0	0	0	0	58	1234
DOORS		20.1	3.4	0	0	0	4	149	406	2358	0
NET EXPOSED WALL		4.5	0.8	197	879	148	0	0	0	0	0
NET EXPOSED BSMT WALL ABOVE GR		3.6	0.6	0	0	0	0	0	0	20	401
EXPOSED CLG		1.3	0.6	0	0	0	0	0	0	352	1571
NO ATTIC EXPOSED CLG		2.7	1.3	0	0	0	171	219	100	0	0
EXPOSED FLOOR		2.6	0.4	0	0	0	0	0	0	0	0
BASEMENT/CRAWL HEAT LOSS		0	0	0	0	0	0	0	0	0	0
SLAB ON GRADE HEAT LOSS		0	0	0	0	0	91	232	39	0	0
SUBTOTAL HT LOSS		1837		0	0	0	0	0	0	552	2510
SUB TOTAL HT GAIN					5989	2941	600	546		3758	4584
LEVEL FACTOR /MULTIPLIER		0.30	0.48		0.30	0.48	0.30	0.48	0.30	0.48	0.50
AIR CHANGE HEAT LOSS		890			3168	1923	291	778	1079		13532
AIR CHANGE HEAT GAIN				81	391	192	36	18	24		201
DUCT LOSS		0			0	0	89	0	0		0
DUCT GAIN		0			0	0	110	0	0		0
HEAT GAIN PEOPLE	240	0			0	0	0	0	0		0
HEAT GAIN APPLANCES/LIGHTS				521	521	521	521	0	521	0	521
TOTAL HT LOSS BTU/H		2727			9676	5892	981	2383	3305	3758	18116
TOTAL HT GAIN x 1.3 BTU/H		2403			8972	4751	1577	374	1197	3497	1440

TOTAL HEAT GAIN BTU/H:	48960	TONS: 4.08	LOSS DUE TO VENTILATION LOAD BTU/H: 1631	STRUCTURAL HEAT LOSS: 69772	TOTAL COMBINED HEAT LOSS BTU/H: 71403
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Michael O'Rourke
INDIVIDUAL BCIN: 19669
REVIEW AND TAKE RESPONSIBILITY FOR THE DESIGN WORK AND AM QUALIFIED IN THE APPROPRIATE CATEGORY AS AN "OTHER DESIGNER" UNDER DIVISION C, 3.2.5 OF THE BUILDING CODE.

INDIVIDUAL BCIN: 19669

MICHAEL O'ROURKE

Michael O'Rourke.

SITE NAME: PINE VALLEY PH 2
BUILDER: GOLD PARK HOMESELEV A & B - WOB
TYPE: 4006 - THE LILAC

DATE: Apr-22

GFA: 3373

LO# 96123

HEATING CFM 1575
TOTAL HEAT LOSS 69,772
AIR FLOW RATE CFM 22.57COOLING CFM 1575
TOTAL HEAT GAIN 48,685
AIR FLOW RATE CFM 32.35AFUE = 96 %
INPUT (BTU/H) = 88,000
OUTPUT (BTU/H) = 85,600
\$*LENNOX
ML196UH090XE48C 90
FAN SPEED
LOW
MEDIUM 1080
HIGH 1190
DESIGN CFM = 1575
CFM @ .6" E.S.P.

RUN COUNT	4th	3rd	2nd	1st	Bas
S/A	0	0	14	10	6
R/A	0	0	5	3	1

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

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

RUN #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
ROOM NAME	MBR	ENS	WIC	BED-2	BED-3	BED-4	BATH	BED-2	BED-3	MBR	ENS-2	DIN	KT/GR	KT/GR	KT/GR	KT/GR	LAUN	KT/GR	FOY	ENS	BED-4	MUD	LIB	LIB
RM LOSS MBH	1.77	1.88	0.80	2.92	1.94	1.41	1.04	2.92	1.94	1.77	1.13	2.73	2.42	2.42	2.42	2.42	0.98	2.42	1.68	1.68	1.41	3.31	2.95	2.95
CFM PER RUN HEAT	40	38	18	66	44	32	23	66	44	40	26	62	55	55	55	55	22	55	54	38	32	75	66	66
RM GAIN MBH	2.07	1.57	0.22	2.92	2.45	1.85	1.26	2.92	2.45	2.07	0.40	2.40	2.24	2.24	2.24	2.24	1.58	2.24	1.57	1.57	1.85	1.20	2.38	2.38
CFM PER RUN COOLING	67	51	7	94	79	60	41	94	79	67	13	78	73	73	73	73	51	73	12	51	60	39	77	77
ADJUSTED PRESSURE	0.17	0.17	0.17	0.16	0.17	0.17	0.17	0.16	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
ACTUAL DUCT LGH.	36	47	21	75	77	38	62	81	76	44	74	31	26	33	31	31	62	38	37	38	49	47	54	58
EQUIVALENT LENGTH	120	160	190	130	170	180	140	160	140	140	170	150	110	90	90	90	150	110	150	190	180	120	120	120
TOTAL EFFECTIVE LENGTH	156	207	211	205	247	218	202	241	216	184	244	181	136	123	121	121	212	148	187	228	239	174	178	178
ADJUSTED PRESSURE	0.11	0.08	0.08	0.08	0.07	0.08	0.09	0.07	0.08	0.09	0.07	0.1	0.13	0.14	0.14	0.14	0.08	0.12	0.09	0.08	0.07	0.08	0.1	0.1
ROUND DUCT SIZE	5	5	4	6	6	5	4	6	6	5	4	5	5	5	5	5	5	5	5	5	5	6	5	5
HEATING VELOCITY (ft/min)	294	279	207	337	224	235	264	337	224	294	298	455	404	404	404	404	162	404	396	279	235	382	485	485
COOLING VELOCITY (ft/min)	492	374	80	479	403	441	470	479	403	492	149	573	536	536	536	536	374	536	88	374	441	199	565	565
OUTLET GRILL SIZE	3X10	3X10	3X10	4X10	4X10	3X10	3X10	4X10	4X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	4X10	3X10	3X10
TRUNK	D	D	E	B	A	C	B	B	A	D	B	C	F	F	F	D	B	D	B	C	B	C	A	A

RUN #	25	26	27	28	29	30	31
ROOM NAME	BAS	BAS	BAS	BAS	BAS	WIC-3	BAS
RM LOSS MBH	3.65	3.65	3.65	3.65	3.65	0.51	3.65
CFM PER RUN HEAT	82	82	82	82	82	12	82
RM GAIN MBH	0.82	0.82	0.82	0.82	0.82	0.86	0.82
CFM PER RUN COOLING	27	27	27	27	27	28	27
ADJUSTED PRESSURE	0.16	0.16	0.16	0.16	0.16	0.17	0.16
ACTUAL DUCT LGH	43	23	23	32	52	65	46
EQUIVALENT LENGTH	180	100	120	130	130	200	170
TOTAL EFFECTIVE LENGTH	223	123	143	162	182	265	216
ADJUSTED PRESSURE	0.07	0.13	0.11	0.1	0.09	0.06	0.08
ROUND DUCT SIZE	6	6	6	6	6	4	6
HEATING VELOCITY (ft/min)	418	418	418	418	418	138	418
COOLING VELOCITY (ft/min)	138	138	138	138	138	321	138
OUTLET GRILL SIZE	4X10	4X10	4X10	4X10	4X10	3X10	4X10
TRUNK	D	F	C	C	A	A	D

SUPPLY AIR TRUNK SIZE												RETURN AIR TRUNK SIZE											
TRUNK	STATIC	ROUND	DUCT	RECT	VELOCITY	TRUNK	STATIC	ROUND	DUCT	RECT	VELOCITY	TRUNK	STATIC	ROUND	DUCT	RECT	VELOCITY	TRUNK	STATIC	ROUND	DUCT	RECT	VELOCITY
TRUNK A	314	0.06	9.8	12	8	TRUNK G	0	0.00	0	0	0	TRUNK O	0	0.05	0	0	0	TRUNK X	0	0.05	0	0	0
TRUNK B	603	0.06	12.5	18	8	TRUNK H	0	0.00	0	0	0	TRUNK P	0	0.05	0	0	0	TRUNK Y	0	0.05	0	0	0
TRUNK C	974	0.06	14.9	26	8	TRUNK I	0	0.00	0	0	0	TRUNK Q	0	0.05	0	0	0	TRUNK Z	0	0.05	0	0	0
TRUNK D	392	0.07	10.2	12	8	TRUNK J	0	0.00	0	0	0	TRUNK R	0	0.05	0	0	0	TRUNK S	0	0.05	0	0	0
TRUNK E	1576	0.06	17.9	30	10	TRUNK K	0	0.00	0	0	0	TRUNK S	0	0.05	0	0	0	TRUNK T	0	0.05	0	0	0
TRUNK F	584	0.07	11.9	16	8	TRUNK L	0	0.00	0	0	0	TRUNK T	0	0.05	0	0	0	TRUNK U	0	0.05	0	0	0
TRUNK G	314	0.06	9.8	12	8	TRUNK M	0	0.00	0	0	0	TRUNK U	0	0.05	0	0	0	TRUNK V	0	0.05	0	0	0
TRUNK H	603	0.06	12.5	18	8	TRUNK N	0	0.00	0	0	0	TRUNK V	0	0.05	0	0	0	TRUNK W	0	0.05	0	0	0
TRUNK I	974	0.06	14.9	26	8	TRUNK O	0	0.00	0	0	0	TRUNK W	0	0.05	0	0	0	TRUNK X	0	0.05	0	0	0
TRUNK J	392	0.07	10.2	12	8	TRUNK P	0	0.00	0	0	0	TRUNK X	0	0.05	0	0	0	TRUNK Y	0	0.05	0	0	0
TRUNK K	1576	0.06	17.9	30	10	TRUNK Q	0	0.00	0	0	0	TRUNK Y	0	0.05	0	0	0	TRUNK Z	0	0.05	0	0	0
TRUNK L	584	0.07	11.9	16	8	TRUNK R	0	0.00	0	0	0	TRUNK Z	0	0.05	0	0	0	DROP	0	0.05	0	0	0
TRUNK M	314	0.06	9.8	12	8	TRUNK S	0	0.00	0	0	0	DROP	0	0.05	0	0	0						
TRUNK N	603	0.06	12.5	18	8	TRUNK T	0	0.00	0	0	0												
TRUNK O	974	0.06	14.9	26	8	TRUNK U	0	0.00	0	0	0												
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TRUNK Q	1576	0.06	17.9	30	10	TRUNK W	0	0.00	0	0	0												
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TYPE: 4006 - THE LILAC
SITE NAME: PINE VALLEY PH 2

LO # 96123
ELEV A & B - WOB

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	5 @ 10.6 cfm	53 cfm
Other Rooms	6 @ 10.6 cfm	63.6 cfm
Table 9.32.3.A.	TOTAL	190.8 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	190.8	cfm
Less Principal Ventil. Capacity	79.5	cfm
Required Supplemental Capacity	111.3	cfm

PRINCIPAL EXHAUST FAN CAPACITY	
Model: VANEE V150H	Location: BSMT
79.5 cfm	☒ HVI Approved

PRINCIPAL EXHAUST HEAT LOSS CALCULATION			
CFM	ΔT °F	FACTOR	% LOSS
79.5 CFM	X 76 F	X 1.08	X 0.25

SUPPLEMENTAL FANS		BY INSTALLING CONTRACTOR		
Location	Model	cfm	HVI	Sones
ENS	BY INSTALLING CONTRACTOR	50	☒	3.5
BATH	BY INSTALLING CONTRACTOR	50	☒	3.5
ENS-2	BY INSTALLING CONTRACTOR	50	☒	3.5

HEAT RECOVERY VENTILATOR		9.32.3.11.
Model: VANEE V150H		
150 cfm high	35 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: GOLD PARK 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:	April-22

CSA F280-12 Residential Heat Loss and Heat Gain Calculations																																																																			
Formula Sheet (For Air Leakage / Ventilation Calculation)																																																																			
LO#: 96123		Model: 4006 - THE LILAC		Builder: GOLD PARK HOMES		Date: 2022-04-11																																																													
Volume Calculation				Air Change & Delta T Data																																																															
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5.2.3.1 Heat Loss due to Air Leakage				6.2.6 Sensible Gain due to Air Leakage																																																															
$HL_{airb} = LR_{airh} \times \frac{V_b}{3.6} \times DTD_h \times 1.2$				$HG_{saib} = LR_{airc} \times \frac{V_b}{3.6} \times DTD_c \times 1.2$																																																															
0.407 x 384.78 x 42 °C x 1.2 = 7932 W				= 0.137 x 384.78 x 7 °C x 1.2 = 448 W																																																															
= 27065 Btu/h				= 1529 Btu/h																																																															
5.2.3.2 Heat Loss due to Mechanical Ventilation				6.2.7 Sensible heat Gain due to Ventilation																																																															
$HL_{vairb} = PVC \times DTD_h \times 1.08 \times (1 - E)$				$HL_{vairb} = PVC \times DTD_h \times 1.08 \times (1 - E)$																																																															
80 CFM x 76 °F x 1.08 x 0.25 = 1631 Btu/h				80 CFM x 13 °F x 1.08 x 0.25 = 275 Btu/h																																																															
5.2.3.3 Calculation of Air Change Heat Loss for Each Room (Floor Multiplier Section)																																																																			
$HL_{airr} = Level Factor \times HL_{airbv} \times \{(HL_{agcr} + HL_{bgr}) \div (HL_{aglevel} + HL_{bglevel})\}$																																																																			
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*HLairbv = Air leakage heat loss + ventilation heat loss

*For a balanced or supply only ventilation system HLairve = 0

Michael O'Rourke
BCIN# 19669

Michael O'Rourke

HEAT LOSS AND GAIN SUMMARY SHEET

MODEL: 4006 - THE LILAC	ELEV A & B - WOB	BUILDER: GOLD PARK HOMES
SFQT: 3373	LO# 96123	SITE: PINE VALLEY PH 2

DESIGN ASSUMPTIONS

HEATING	°F	COOLING	°F
OUTDOOR DESIGN TEMP.	-4	OUTDOOR DESIGN TEMP.	88
INDOOR DESIGN TEMP.	72	INDOOR DESIGN TEMP. (MAX 75°F)	75
		WINDOW SHGC	0.50

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):	48918.0	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:	7.0 ft
LENGTH: 63.0 ft	WIDTH: 33.0 ft	EXPOSED PERIMETER:	149.0 ft
WOB INSULATION CONFIGURATION	SCB_9	WOB EXPOSED PERIMETER	43.0 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	96%	-
HRV/ERV Minimum Efficiency	75%	-
Domestic Hot Water Heater Minimum EF	0.8	-

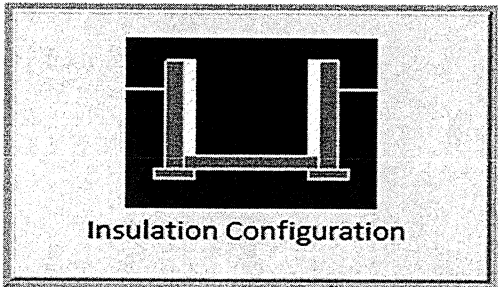
INDIVIDUAL BCIN: 19669

MICHAEL O'ROURKE



Residential Foundation Thermal Load Calculator

Supplemental tool for CAN/CSA-F280

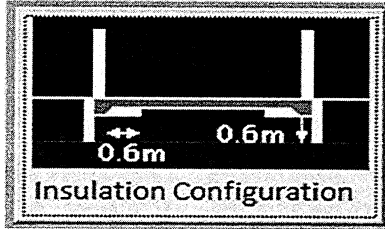
Weather Station Description		
Province:	Ontario	
Region:	Vaughan (Woodbridge)	
Site Description		
Soil Conductivity:	Normal conductivity: dry sand, loam, clay	
Water Table:	Normal (7-10 m, 23-33 ft)	
Foundation Dimensions		
Floor Length (m):	4.6	 Insulation Configuration
Floor Width (m):	10.1	
Exposed Perimeter (m):	45.4	
Wall Height (m):	3.0	
Depth Below Grade (m):	1.79	
Window Area (m ²):	0.3	
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):		736

TYPE: 4006 - THE LILAC
LO# 96123

ELEV A & B - WOB

Residential Slab on Grade Thermal Load Calculator

Supplemental tool for CAN/CSA-F280

Weather Station Description		
Province:	Ontario	
Region:	Vaughan (Woodbridge)	
Site Description		
Soil Conductivity:	Normal conductivity: dry sand, loam, clay	
Water Table:	Normal (7-10 m, 23-33 ft)	
Foundation Dimensions		
Length (m):	1.5	
Width (m):	10.1	
Exposed Perimeter (m):	13.1	
Radiant Slab		
Heated Fraction of the Slab:	0	
Fluid Temperature (°C):	33	
Design Months		
Heating Month	1	
Results		
Heating Load (Watts):		162

TYPE: 4006 - THE LILAC
LO# 96123

ELEV A & B - WOB



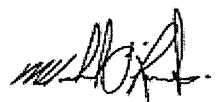
Air Infiltration Residential Load Calculator

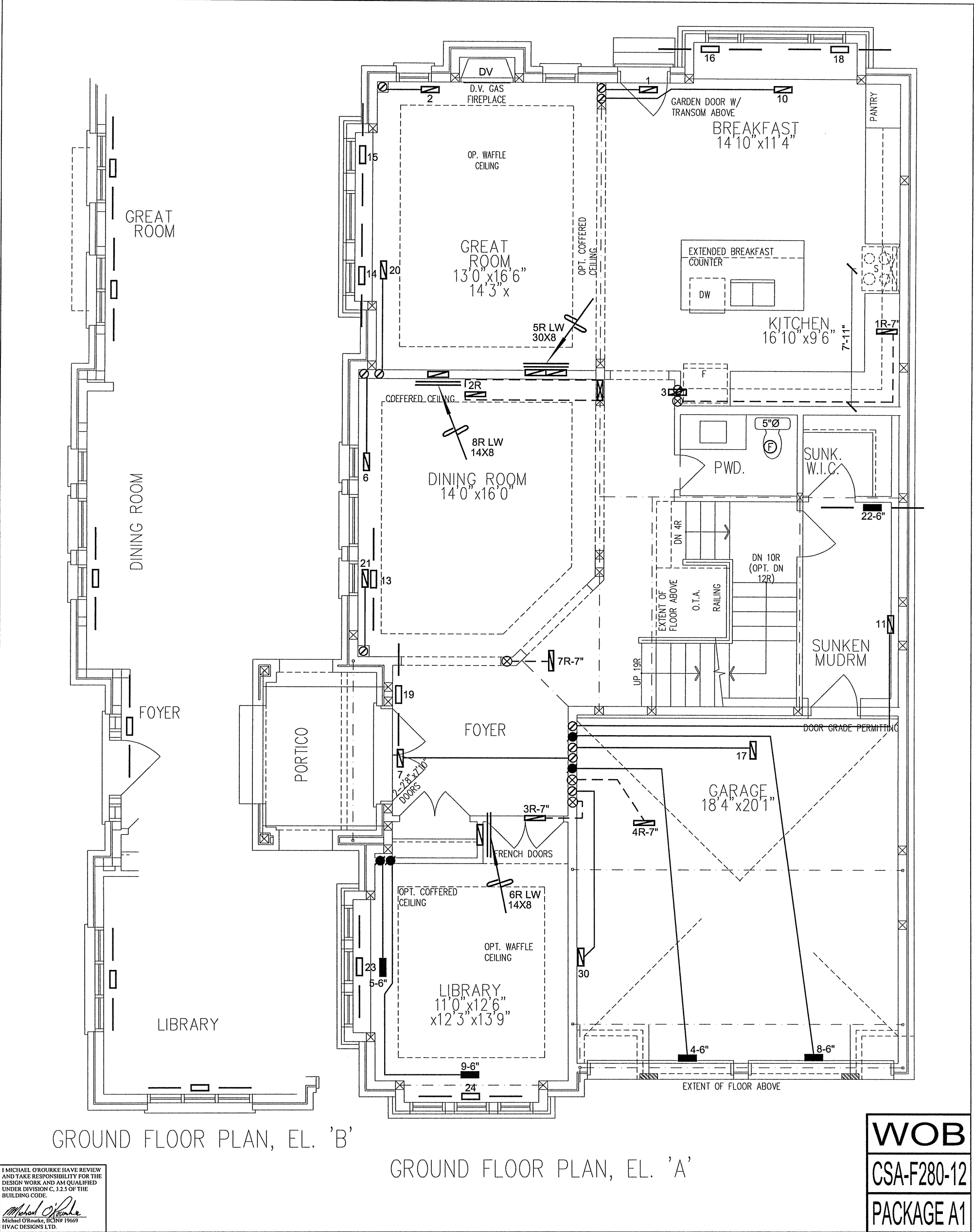
Supplemental tool for CAN/CSA-F280

Weather Station Description				
Province:	Ontario			
Region:	Vaughan (Woodbridge)			
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):	9.14			
Building Configuration				
Type:	Detached			
Number of Stories:	Two			
Foundation:	Full			
House Volume (m ³):	1385.2			
Air Leakage/Ventilation				
Air Tightness Type:	Present (1961-) (3.57 ACH)			
Custom BDT Data:	ELA @ 10 Pa.	1846.5 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):	0.407			
Cooling Air Leakage Rate (ACH/H):	0.137			

TYPE: 4006 - THE LILAC
LO# 96123

ELEV A & B - WOB

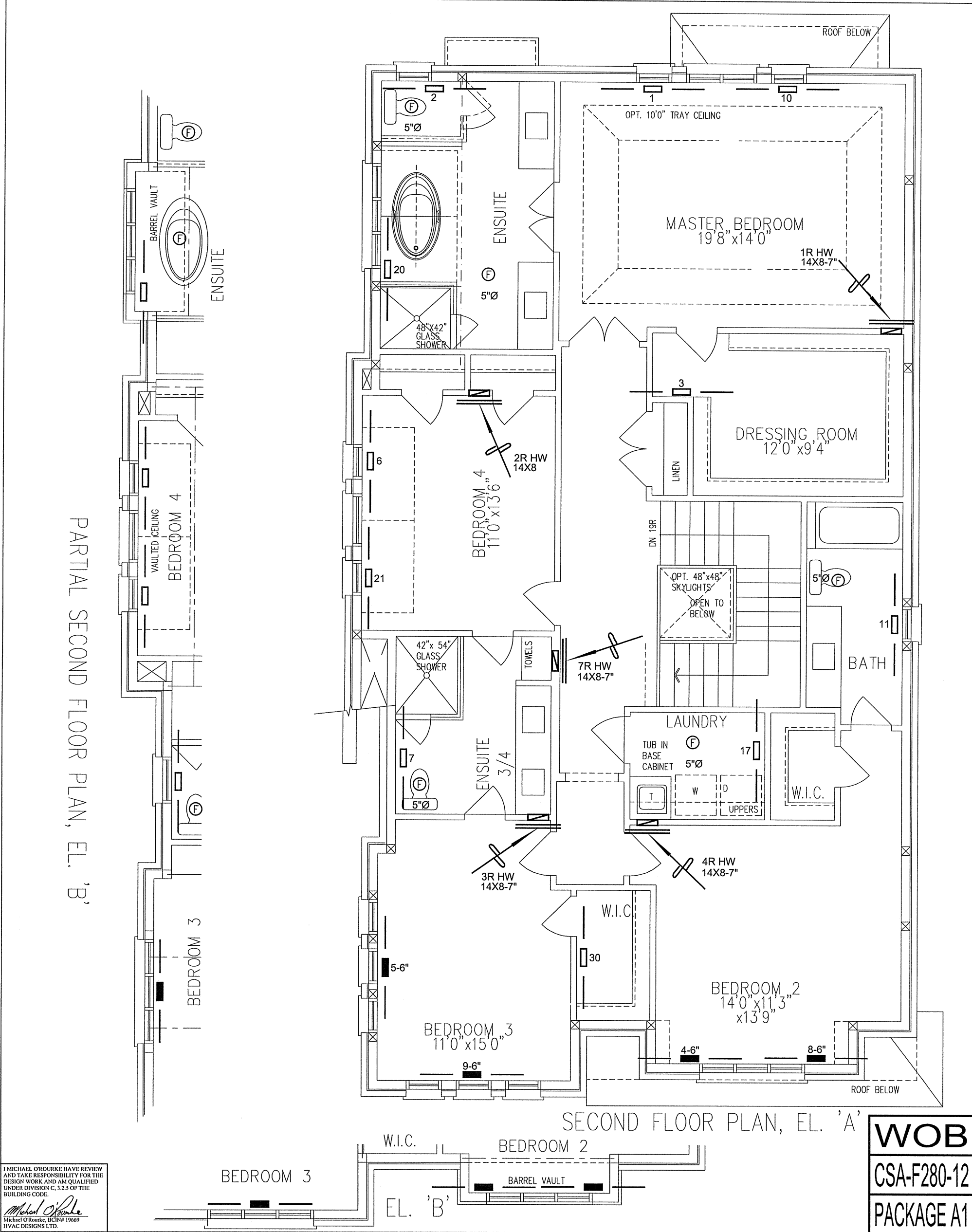




HVAC LEGEND								3.		
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	2.		
	SUPPLY AIR GRILLE		6" SUPPLY AIR BOOT ABOVE		14"x8" RETURN AIR GRILLE		RETURN AIR STACK ABOVE	1.		
	SUPPLY AIR GRILLE 6" BOOT		SUPPLY AIR STACK FROM 2nd FLOOR		30"x8" RETURN AIR GRILLE		RETURN AIR 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 GOLD PARK 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 FIRST FLOOR HEATING LAYOUT	
Project Name PINE VALLEY PH 2 VAUGHAN, ONTARIO WOB THE LILAC - ELEV A & B 4006 CNR 3373 sqft			Date APR/2022	
		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.	Scale 3/16" = 1'-0"	
			BCIN# 19669	
		LO# 96123		



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

WOB
CSA-F280-12
PACKAGE A1

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

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Client					Sheet Title
GOLD PARK HOMES					SECOND FLOOR HEATING LAYOUT
Project Name					Date
PINE VALLEY PH 2 VAUGHAN, ONTARIO WOB					APR/2022
THE LILAC - ELEV A & B 4006 CNR					Scale
3373 sqft					3/16" = 1'-0"
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				LO#	96123

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