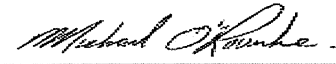


Schedule 1: Designer Information

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: 4000 - BRIARWOOD 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 14, 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

SITE NAME: PINE VALLEY PH 2
BUILDER: GOLD PARK HOMES
WOB TYPE: 4000 - BRIARWOOD
DATE: Apr-22
LO# 96116
GFA: 2827
WINTER NATURAL AIR CHANGE RATE 0.459
HEAT LOSS AT °F 76
HEAT GAIN AT °F 13
CSA-F280-12
SB-12 PACKAGE A1

ROOM USE	EXP. WALL	CLG. HT.	FACTORS	MBR	ENS	BED-2	BED-3	BED-4	BATH-2	MEDIA	WINTER NATURAL AIR CHANGE RATE	HEAT LOSS AT °F	HEAT GAIN AT °F
GRS.WALL AREA GLAZING	385		LOSS GAIN	385	143	253	108	418	126	180			
NORTH	21.3	16.0	0	0	22	488	351	18	383	288	0	0	0
EAST	21.3	41.6	0	0	0	0	0	0	0	0	50	1064	2078
SOUTH	21.3	24.9	0	0	0	0	0	0	0	0	0	0	0
WEST	21.3	41.6	42	894	1745	0	0	0	0	0	0	0	0
SKYLT.	37.2	101.5	0	0	0	0	0	0	0	0	0	0	0
DOORS	20.1	3.4	0	0	0	0	0	0	0	0	0	0	0
NET EXPOSED BSMT WALL ABOVE GR	4.5	0.8	343	1531	258	121	540	91	117	522	88	172	768
EXPOSED CLG	1.3	0.6	328	421	193	32	41	19	182	234	107	416	534
NO ATTIC EXPOSED CLG	2.7	1.3	0	0	0	0	0	0	0	0	0	0	0
EXPOSED FLOOR	2.6	0.4	0	0	0	0	0	0	77	196	33	28	71
BASEMENT/CRAWL HEAT LOSS													
SLAB ON GRADE HEAT LOSS													
SUBTOTAL HT LOSS	2845				1049	1499	1016	3896	1144	2139			
SUB TOTAL HT GAIN	0.30	0.37			0.30	0.37	0.20	0.72	0.20	0.72			
LEVEL FACTOR / MULTIPLIER	1046				386	551	736	2821	828	1549			
AIR CHANGE HEAT LOSS					37			217	197	369			
AIR CHANGE HEAT GAIN					0			407	40	330			
DUCT LOSS					0			240	0	0			
HEAT GAIN PEOPLE	240				0			914	0	914			
HEAT GAIN APPLIANCES/LIGHTS					1435			7389		4057			
TOTAL HT LOSS BTU/H	3891					2050	1751	7389	2169	4057			
TOTAL HT GAIN x 1.3 BTU/H				4896	648	2237	2147	5818	574	4721			

ROOM USE	EXP. WALL	CLG. HT.	FACTORS	FORM	KT/GT	LAUN	PWD	FOY	WOB	BAS
GRS.WALL AREA GLAZING	480		LOSS GAIN	480	1040	96	91	1140	410	1155
NORTH	21.3	16.0	0	0	0	0	0	0	0	0
EAST	21.3	41.6	0	0	0	0	0	0	0	0
SOUTH	21.3	24.9	58	1234	1444	0	0	22	468	914
WEST	21.3	41.6	0	0	0	0	0	0	0	0
SKYLT.	37.2	101.5	0	0	0	0	0	0	0	0
DOORS	20.1	3.4	0	0	0	0	0	0	0	0
NET EXPOSED WALL	4.5	0.8	422	1883	317	76	339	57	91	406
NET EXPOSED BSMT WALL ABOVE GR	3.6	0.6	0	0	0	0	0	0	0	0
EXPOSED CLG	1.3	0.6	188	216	99	0	0	0	0	0
NO ATTIC EXPOSED CLG	2.7	1.3	0	0	0	0	0	0	0	0
EXPOSED FLOOR	2.6	0.4	0	0	0	0	0	0	0	0
BASEMENT/CRAWL HEAT LOSS										
SLAB ON GRADE HEAT LOSS										
SUBTOTAL HT LOSS	3333				7853	740	406	6497	3894	4828
SUB TOTAL HT GAIN	0.30	0.37			0.30	0.37	0.30	0.37	0.30	0.37
LEVEL FACTOR / MULTIPLIER	1225				2886	272	149	2387	4062	170
AIR CHANGE HEAT LOSS					525		6	169		14836
AIR CHANGE HEAT GAIN					0		0	0		0
DUCT LOSS					0		0	0		0
DUCT GAIN					0		0	0		0
HEAT GAIN PEOPLE	240				0		0	0		0
HEAT GAIN APPLIANCES/LIGHTS					914		0	0		914
TOTAL HT LOSS BTU/H	4558				10739	1012	555	8884	3894	19664
TOTAL HT GAIN x 1.3 BTU/H				3800	10341	1363	96	2943	5280	2301

TOTAL HEAT GAIN BTU/H: 47440 TONS: 3.95
LOSS DUE TO VENTILATION LOAD BTU/H: 1631
STRUCTURAL HEAT LOSS: 72048
TOTAL COMBINED HEAT LOSS BTU/H: 73679

Michael O'Rourke

SITE NAME: PINE VALLEY PH 2
BUILDER: GOLD PARK HOMES

WOB
TYPE: 4000 - BRIARWOOD

DATE: Apr-22

GFA:	2827	IQ#	96116
------	------	-----	-------

GFA:	2827	IQ#	96116
------	------	-----	-------

	1575	1575	1575
	HEATING CFM	COOLING CFM	
	TOTAL HEAT LOSS	TOTAL HEAT GAIN	
	AIR FLOW RATE CFM	AIR FLOW RATE CFM	
RUN COUNT		1st	Bas
S/A	0	6	6
R/A	0	3	3
		2nd	
		3	1

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

[illegible]

RUN #	25	26
ROOM NAME	BAS	BAS
RM LOSS MBH	3.93	3.93
CFM PER RUN HEAT	86	86
RM GAIN MBH	1.26	1.26
CFM PER RUN COOLING	42	42
ADJUSTED PRESSURE	0.16	0.16
ACTUAL DUCT LGH	58	53
EQUIVALENT LENGTH	130	100
TOTAL EFFECTIVE LENGTH	188	153
ADJUSTED PRESSURE	0.09	0.11
ROUND DUCT SIZE	6	6
HEATING VELOCITY (ft/min)	438	438
COOLING VELOCITY (ft/min)	214	214
OUTLET GRILL SIZE	4X10	4X10
TRUNK	A	C

SUPPLY AIR TRUNK SIZE										RETURN AIR TRUNK SIZE									
TRUNK					VELOCITY					TRUNK					VELOCITY				
CFM					(ft/min)					CFM					(ft/min)				
TRUNK A					8					TRUNK G					8				
8.5					X					0					X				
TRUNK B					8					TRUNK H					8				
461					X					0					X				
TRUNK C					10					TRUNK I					8				
1198					X					0					X				
TRUNK D					10					TRUNK J					8				
1575					X					0					X				
TRUNK E					8					TRUNK K					8				
0					X					0					X				
TRUNK F					8					TRUNK L					8				
0					X					0					X				
TRUNK G					8					TRUNK M					8				
0					X					0					X				
TRUNK H					8					TRUNK N					8				
0					X					0					X				
TRUNK I					8					TRUNK O					8				
0					X					0					X				
TRUNK J					8					TRUNK P					8				
0					X					0					X				
TRUNK K					8					TRUNK Q					8				
0					X					0					X				
TRUNK L					8					TRUNK R					8				
0					X					0					X				
TRUNK M					8					TRUNK S					8				
0					X					0					X				
TRUNK N					8					TRUNK T					8				
0					X					0					X				
TRUNK O					8					TRUNK U					8				
0					X					0					X				
TRUNK P					8					TRUNK V					8				
0					X					0					X				
TRUNK Q					8					TRUNK W					8				
0					X					0					X				
TRUNK R					8					TRUNK X					8				
0					X					0					X				
TRUNK S					8					TRUNK Y					8				
0					X					0					X				
TRUNK T					8					TRUNK Z					8				
0					X					0					X				

[illegible]

I 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.

Wm. Michael O'Sullivan

INDIVIDUAL BCIN: 196669

MICHAEL O'ROURKE

TYPE: 4000 - BRIARWOOD
SITE NAME: PINE VALLEY PH 2

LO # 96116
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	4 @ 10.6 cfm	42.4 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	79.5	cfm
Required Supplemental Capacity	90.1	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-2	BY INSTALLING CONTRACTOR	50	☒	3.5
BATH-1	BY INSTALLING CONTRACTOR	50	☒	3.5
PWD	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 @ 32 deg F (0 deg C)	☒ HVI Approved	

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#: 96116		Model: 4000 - BRIARWOOD		Builder: GOLD PARK HOMES		Date: 4/14/2022			
Volume Calculation									
House Volume		Floor Area (ft²)	Floor Height (ft)	Volume (ft³)					
Level									
Bsmt	1746	10	17460						
First	1746	11	19206						
Second	1206	9	10854						
Third	0	9	0						
Fourth	0	9	0						
Total:				47,520.0 ft³					
Total:				1345.6 m³					
Air Change & Delta T Data									
				WINTER NATURAL AIR CHANGE RATE	0.459				
				SUMMER NATURAL AIR CHANGE RATE	0.153				
Design Temperature Difference									
				Tin °C	Tout °C	ΔT °C			
				22	-20	42			
				24	31	7			
				Winter DTDh		76			
				Summer DTDc		13			
6.2.6 Sensible Gain due to Air Leakage									
$HG_{salb} = LR_{airc} \times \frac{V_b}{3.6} \times DTD_c \times 1.2$									
0.459	x	373.78	x	42 °C	x	1.2	=	8696 W	
								=	29671 Btu/h
5.2.3.1 Heat Loss due to Air Leakage									
$HL_{airb} = LR_{airh} \times \frac{V_b}{3.6} \times DTD_h \times 1.2$									
0.459	x	373.78	x	42 °C	x	1.2	=	8696 W	
								=	29671 Btu/h
5.2.3.2 Heat Loss due to Mechanical Ventilation									
$HL_{vaib} = PVC \times DTD_h \times 1.08 \times (1 - E)$									
80 CFM	x	76 °F	x	1.08	x	0.25	=	1631 Btu/h	
								=	275 Btu/h
6.2.7 Sensible heat Gain due to Ventilation									
$HL_{vaib} = PVC \times DTD_h \times 1.08 \times (1 - E)$									
80 CFM	x	13 °F	x	1.08	x	0.25	=	275 Btu/h	
								=	275 Btu/h
5.2.3.3 Calculation of Air Change Heat Loss for Each Room (Floor Multiplier Section)									
$HL_{airr} = Level Factor \times HL_{airbv} \times \{(HL_{agcr} + HL_{bgcr}) \div (HL_{agclevel} + HL_{bgclevel})\}$									
Level		Level Factor (LF)	HLairbv Air Leakage + Ventilation Heat Loss (Btu/h)	Level Conductive Heat Loss: (HL _{level})		Air Leakage Heat Loss Multiplier (LF x HLairbv / HLlevel)			
1	0.5	29,671		8,722	1.701				
2	0.3			24,223	0.367				
3	0.2			8,194	0.724				
4	0			0	0.000				
5	0			0	0.000				
*HLairbv = Air leakage heat loss + ventilation heat loss *For a balanced or supply only ventilation system HLairve = 0									
				Michael O'Rourke BCIN# 19669 <i>Michael O'Rourke</i>					

HEAT LOSS AND GAIN SUMMARY SHEET

MODEL: 4000 - BRIARWOOD	WOB	BUILDER: GOLD PARK HOMES
SFQT: 2827	LO# 96116	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):	47520.0	ASSUMED (Y/N):	Y
INTERNAL SHADING:	BLINDS/CURTAINS	ASSUMED OCCUPANTS:	5
INTERIOR LIGHTING LOAD (Btu/h/ft²):	1.75	DC BRUSHLESS MOTOR (Y/N):	Y
FOUNDATION CONFIGURATION	BCIN_1	DEPTH BELOW GRADE:	7.0 ft
LENGTH: 70.0 ft	WIDTH: 33.0 ft	EXPOSED PERIMETER:	165.0 ft
WOB INSULATION CONFIGURATION	SCB_9	WOB EXPOSED PERIMETER	41.0 ft

2012 OBC - COMPLIANCE PACKAGE

Component

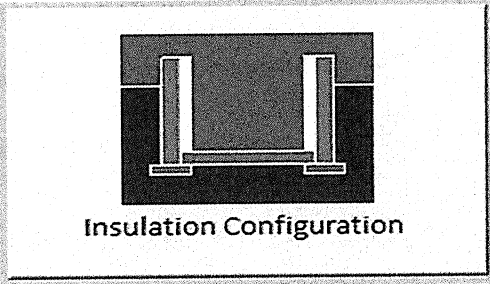
Compliance Package A1

Nominal	Min. Eff.
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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	-

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):	4.3	 Insulation Configuration
Floor Width (m):	10.1	
Exposed Perimeter (m):	50.3	
Wall Height (m):	3.0	
Depth Below Grade (m):	1.78	
Window Area (m ²):	0.6	
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):		738

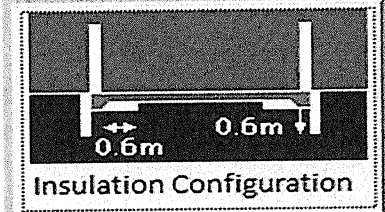
TYPE: 4000 - BRIARWOOD
LO# 96116

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):	1.2	 Insulation Configuration
Width (m):	10.1	
Exposed Perimeter (m):	12.5	
Radiant Slab		
Heated Fraction of the Slab:	0	
Fluid Temperature (°C):	33	
Design Months		
Heating Month	1	
Results		
Heating Load (Watts):		152

TYPE: 4000 - BRIARWOOD
LO# 96116

WOB



Air Infiltration Residential Load Calculator

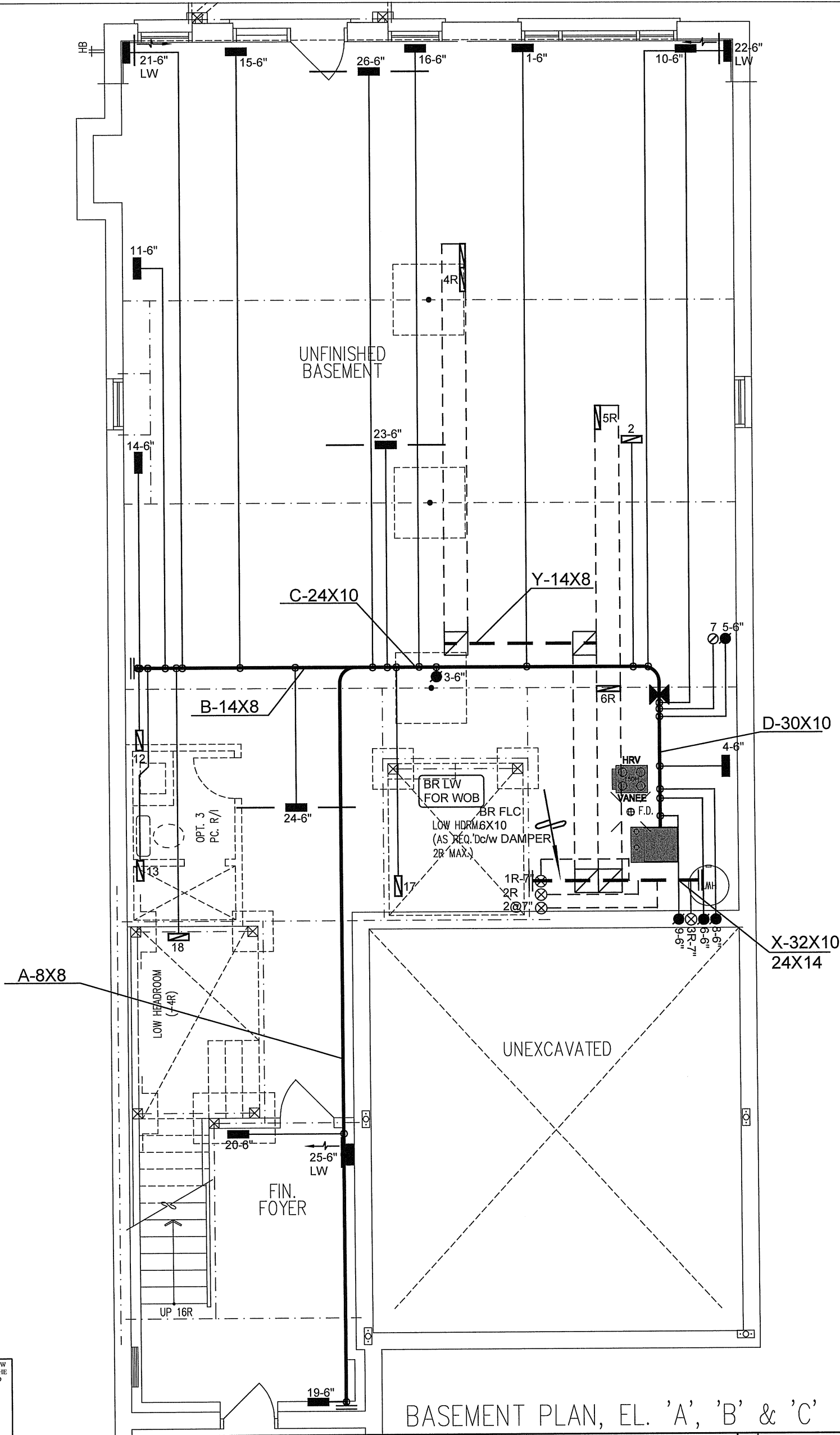
Supplemental tool for CAN/CSA-F280

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):	10.97			
Building Configuration				
Type:	Detached			
Number of Stories:	Two			
Foundation:	Full			
House Volume (m ³):	1345.6			
Air Leakage/Ventilation				
Air Tightness Type:	Present (1961-) (3.57 ACH)			
Custom BDT Data:	ELA @ 10 Pa.	1793.7 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):	0.459			
Cooling Air Leakage Rate (ACH/H):	0.153			

TYPE: 4000 - BRIARWOOD
LO# 96116

WOB





WOB
CSA-F280-12
PACKAGE A1

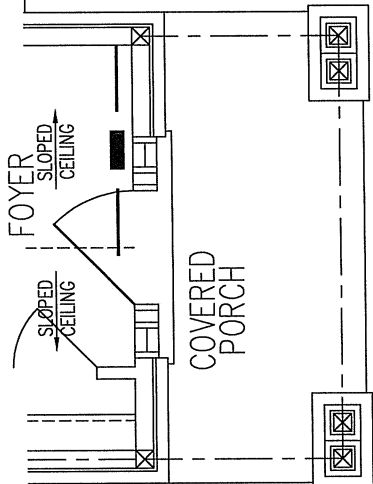
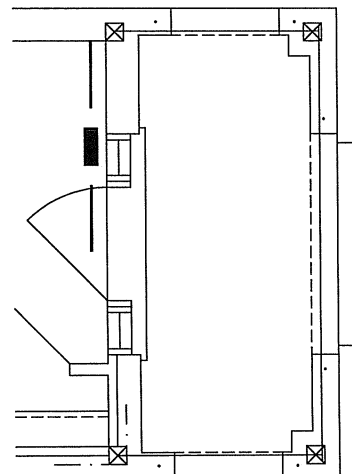
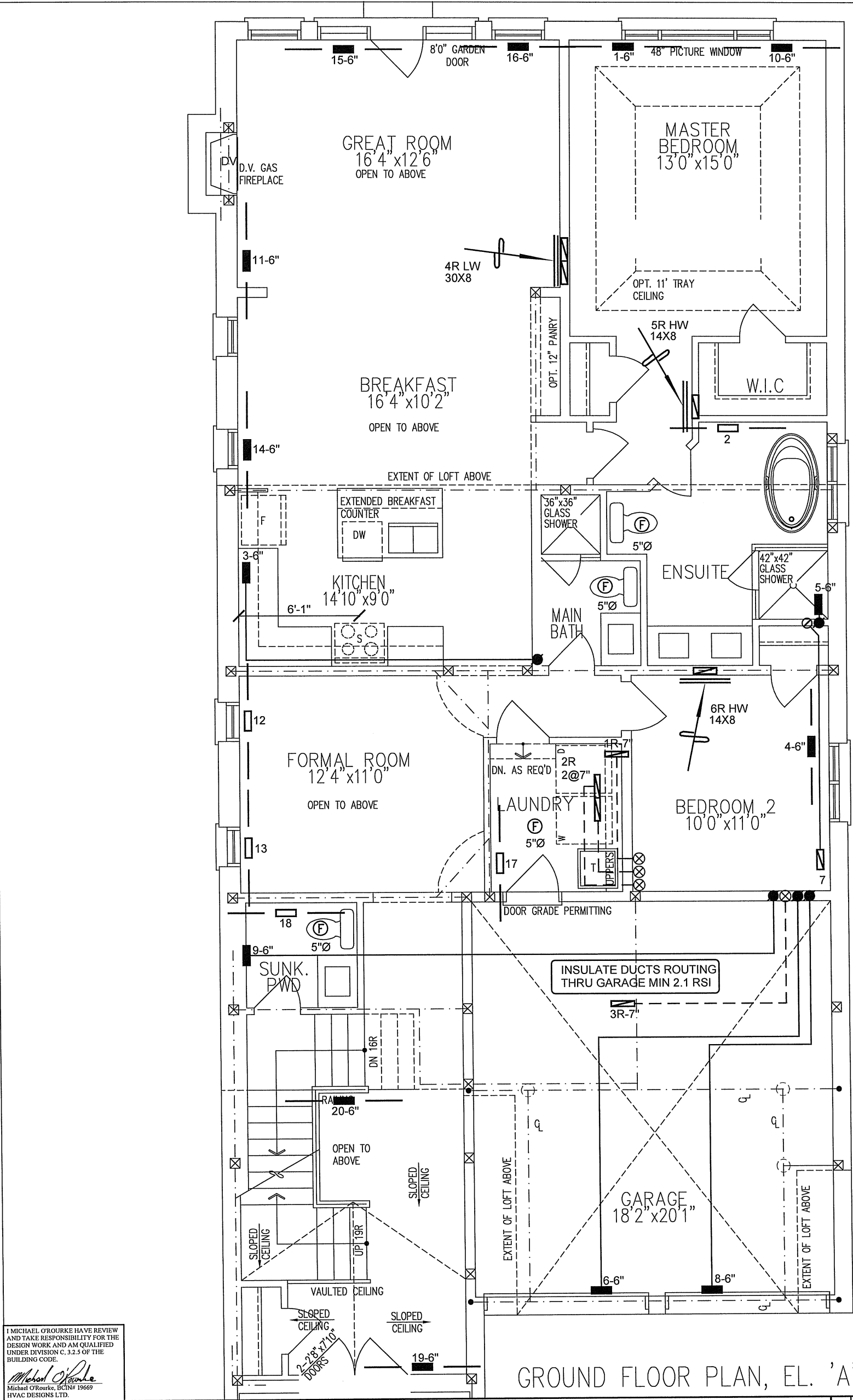
BASEMENT PLAN, EL. 'A', 'B' & 'C'

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.

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		HVACDESIGNS LTD. 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.	HEAT LOSS 73679 BTU/H UNIT DATA		# OF RUNS S/A R/A FANS				Sheet Title BASEMENT HEATING LAYOUT	
GOLD PARK HOMES			MAKE LENNOX		3RD FLOOR					
			2ND FLOOR		6 3 1					
			1ST FLOOR		14 3 5					
Project Name PINE VALLEY PH 2 VAUGHAN, ONTARIO			MODEL ML196UH090XE48C		BASEMENT		6 1 0		Date APR/2022	
WOB			INPUT 88 MBTU/H						Scale 3/16" = 1'-0"	
BRIARWOOD 4000			OUTPUT 85.6 MBTU/H		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	
2827 sqft		COOLING 4.0 TONS						LO# 96116		
		FAN SPEED 1575 cfm @ 0.6" w.c.								



GROUND FLOOR PLAN, EL. 'A'

ELEVATION C

ELEVATION B

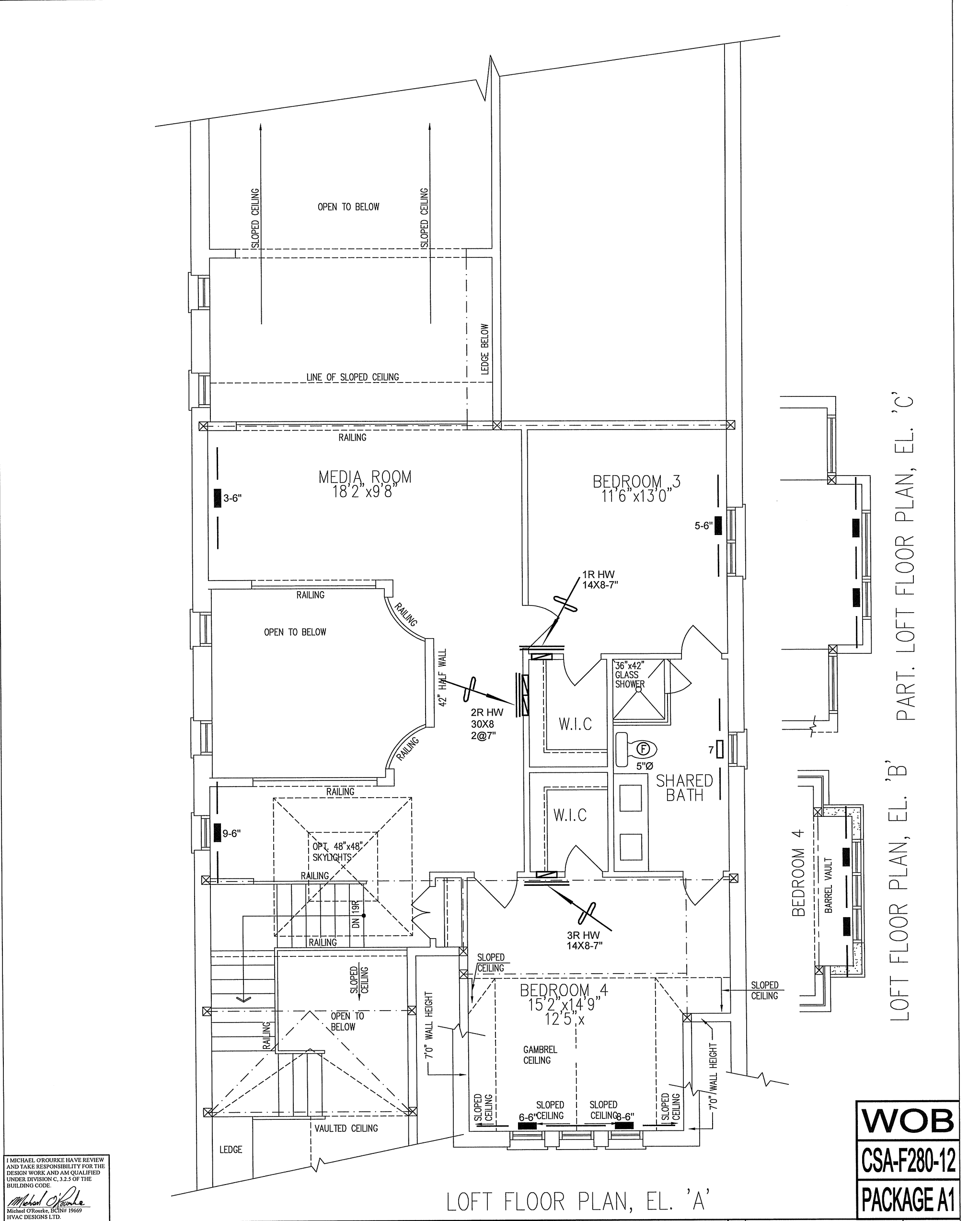
WOB
CSA-F280-12
PACKAGE A1

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Michael O'Rourke
Michael O'Rourke, BCIN# 19669
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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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GOLD PARK HOMES			FIRST FLOOR HEATING LAYOUT	
Project Name			Date	APR/2022
PINE VALLEY PH 2 VAUGHAN, ONTARIO			Scale	3/16" = 1'-0"
WOB		BCIN# 19669		
BRIARWOOD 4000		LO# 96116		
2827 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.		



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

WOB
CSA-F280-12
PACKAGE A1

HVAC LEGEND								3.		
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	2.		
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	SUPPLY AIR BOOT ABOVE		6" SUPPLY AIR STACK 2nd FLOOR		FRA- FLOOR RETURN AIR GRILLE		REDUCER	REVISIONS		

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GOLD PARK HOMES			SECOND FLOOR HEATING LAYOUT	
Project Name			Date	APR/2022
PINE VALLEY PH 2 VAUGHAN, ONTARIO			Scale	3/16" = 1'-0"
WOB			BCIN# 19669	
BRIARWOOD 4000			LO#	96116
2827 sqft				