

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: 3102 CNR Project: PINE VALLEY DRIVE	
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.			
May 3, 2021 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.

SITE NAME: PINE VALLEY DRIVE BUILDER: GOLD PARK HOMES										CNR TYPE: 3102		DATE: May-21 LO# 90622		WINTER NATURAL AIR CHANGE RATE SUMMER NATURAL AIR CHANGE RATE		HEAT LOSS ΔT °F. HEAT GAIN ΔT °F.		CSA-F20-12 SB-12 PACKAGE A1			
ROOM USE		EXP. WALL CLG. HT.		ENR		WIC		BED-2		BED-3		ENS-2		LAUN		ENS-3		B-BTH		MECH	
FACTORS		LOSS		GAIN		LOSS		GAIN		LOSS		GAIN		LOSS		GAIN		LOSS		GAIN	
GRS.WALL AREA		315		63		63		126		405		0		81		54		119		105	
GLAZING		0		0		0		0		0		0		0		0		0		0	
NORTH		21.3		16.0		0		0		0		0		0		0		0		0	
EAST		21.3		41.6		0		45		915		0		0		9		192		374	
SOUTH		21.3		24.9		0		0		22		0		22		0		0		0	
WEST		21.3		41.6		0		0		488		0		468		0		4		85	
SKYLT.		37.2		101.5		0		0		548		0		548		0		85		100	
DOORS		25.2		4.3		0		0		0		0		0		0		0		0	
NET EXPOSED WALL		4.5		0.8		0		0		0		0		0		0		0		0	
NET EXPOSED BSMT WALL ABOVE GR		3.6		0.6		0		0		286		0		263		44		201		34	
EXPOSED CLG		1.3		0.6		0		0		0		0		0		0		0		0	
NO ATTIC EXPOSED CLG		2.7		1.3		0		195		269		90		131		60		84		108	
EXPOSED FLOOR		2.6		0.4		0		0		69		0		0		0		0		0	
BASEMENT/CRAWL HEAT LOSS		0		0		0		195		0		90		230		17		84		214	
SLAB ON GRADE HEAT LOSS		0		0		0		0		0		0		0		0		0		0	
SUBTOTAL HT LOSS		2791		703		434		2067		3314		345		964		714		700		628	
SUB TOTAL HT GAIN		2524		770		117		2129		2780		92		669		453		120		118	
LEVEL FACTOR / MULTIPLIER		0.20		0.25		0.20		0.20		0.20		0.20		0.20		0.20		0.50		0.50	
AIR CHANGE HEAT LOSS		701		176		109		519		832		87		242		179		875		784	
AIR CHANGE HEAT GAIN		138		42		6		117		152		5		37		27		7		6	
DUCT LOSS		0		0		0		259		0		43		121		89		0		0	
DUCT GAIN		0		0		0		340		0		10		162		52		0		0	
HEAT GAIN PEOPLE		2		0		0		1		1		0		0		0		0		0	
HEAT GAIN APPLIANCES/LIGHTS		913		0		0		913		913		0		913		0		0		0	
TOTAL HT LOSS BTU/H		3491		879		543		2844		4147		475		1327		983		1575		1412	
TOTAL HT GAIN x 1.3 BTU/H		5272		1056		161		4860		5310		138		2315		744		165		161	

ROOM USE										MUD		FOY		WIR		KID/G		BAS	
EXP. WALL CLG. HT.										11 12		39 11		8 11		78 11		102 9	
FACTORS										LOSS GAIN		LOSS GAIN		LOSS GAIN		LOSS GAIN		LOSS GAIN	
GRS.WALL AREA										132		429		88		858		714	
GLAZING										0 0		0 0		0 0		0 0		0 0	
NORTH										0 0		0 0		0 0		0 0		0 0	
EAST										0 0		0 0		0 0		0 0		0 0	
SOUTH										0 0		22 468		0 0		48 1021		0 0	
WEST										0 0		0 0		0 0		119 2532		0 0	
SKYLT.										0 0		0 0		0 0		0 0		0 0	
DOORS										0 0		0 0		0 0		0 0		0 0	
NET EXPOSED WALL										0 0		43 1086		0 0		691 3084		0 0	
NET EXPOSED BSMT WALL ABOVE GR										0 0		0 0		0 0		88 393		0 0	
EXPOSED CLG										0 0		0 0		0 0		0 0		0 0	
NO ATTIC EXPOSED CLG										0 0		0 0		0 0		0 0		0 0	
EXPOSED FLOOR										0 0		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 0		0 0		0 0	

SITE NAME: PINE VALLEY DRIVE
BUILDER: GOLD PARK HOMES

CNR

TYPE: 3102

DATE: May-21

GFA: 2259 LO# 90622

HEATING CFM 1110 COOLING CFM 1110
TOTAL HEAT LOSS 42,978 TOTAL HEAT GAIN 35,314
AIR FLOW RATE CFM 25.83 AIR FLOW RATE CFM 31.43

ML196UH070XE36B

FAN SPEED 70

LOW 0

MEDIUM 985

HIGH 1275

AFUE = 96 %

INPUT (BTU/H) = 66,000

OUTPUT (BTU/H) = 63,900

DESIGN CFM = 1110

CFM @ .5" E.S.P.

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

All S/A runs 5'x2' unless noted otherwise on layout.

RUN #	1	2	3	4	5	6	7	8	9	10	11	13	14	15	16	18	19	20	21	22	23	24
ROOM NAME	MBR	ENS	WIC	BED-2	BED-3	BED-2	ENS-2	BED-3	LAUN	MBR	ENS-3	KID/G	KID/G	KID/G	KID/G	WIR	FOY	MUD	BAS	BAS	BAS	BAS
RM LOSS MBH	1.75	0.88	0.54	1.42	2.07	1.42	0.47	2.07	1.33	1.75	0.98	2.29	2.29	2.29	2.29	0.54	4.39	1.39	2.46	2.46	2.46	2.46
CFM PER RUN HEAT	45	23	14	37	54	37	12	54	34	45	25	59	59	59	59	14	113	36	63	63	63	63
RM GAIN MBH	2.64	1.06	0.16	2.43	2.66	2.43	0.14	2.66	2.31	2.64	0.74	2.58	2.58	2.58	2.58	0.09	1.38	1.42	0.48	0.48	0.48	0.48
CFM PER RUN COOLING	83	33	5	76	83	76	4	83	73	83	23	81	81	81	81	3	43	45	15	15	15	15
ADJUSTED PRESSURE	0.16	0.17	0.17	0.17	0.16	0.17	0.17	0.16	0.17	0.16	0.17	0.16	0.16	0.16	0.16	0.17	0.15	0.17	0.17	0.17	0.17	0.17
EQUIVALENT LENGTH	180	180	180	170	140	140	130	135	140	180	150	130	150	120	160	150	110	130	130	140	180	100
TOTAL EFFECTIVE LENGTH	228	226	226	222	188	197	173	181	169	218	187	146	176	153	199	166	143	169	181	176	218	137
ADJUSTED PRESSURE	0.07	0.08	0.08	0.08	0.09	0.09	0.1	0.09	0.1	0.07	0.09	0.11	0.09	0.1	0.08	0.11	0.11	0.11	0.1	0.1	0.08	0.13
ROUND DUCT SIZE	6	4	4	6	6	6	4	6	5	6	4	6	6	6	6	4	6	4	5	5	5	5
HEATING VELOCITY (ft/min)	229	264	161	189	275	189	138	275	250	229	287	301	301	301	301	161	576	413	463	463	463	463
COOLING VELOCITY (ft/min)	423	379	57	388	423	388	46	423	536	423	264	413	413	413	413	34	219	516	110	110	110	110
OUTLET GRILL SIZE	4X10	3X10	3X10	4X10	4X10	4X10	3X10	4X10	3X10	4X10	3X10	4X10	4X10	4X10	4X10	3X10	4X10	3X10	3X10	3X10	3X10	3X10
TRUNK	B	A	A	A	C	A	B	C	B	B	A	D	B	B	A	C	C	C	A	A	C	C

TEMPERATURE RISE 53 °F

ROOM NAME	B-BTH	MECH
RM LOSS MBH	1.58	1.41
CFM PER RUN HEAT	41	36
RM GAIN MBH	0.16	0.16
CFM PER RUN COOLING	5	5
ADJUSTED PRESSURE	0.17	0.17
ACTUAL DUCT LGH	16	6
EQUIVALENT LENGTH	90	110
TOTAL EFFECTIVE LENGTH	106	116
ADJUSTED PRESSURE	0.16	0.15
ROUND DUCT SIZE	4	4
HEATING VELOCITY (ft/min)	470	413
COOLING VELOCITY (ft/min)	57	57
OUTLET GRILL SIZE	3X10	3X10
TRUNK	D	D

SUPPLY AIR TRUNK SIZE	TRUNK	STATIC PRESS.	ROUND DUCT	RECT DUCT	VELOCITY (ft/min)	TRUNK CFM	STATIC PRESS.	ROUND DUCT	RECT DUCT	VELOCITY (ft/min)	RETURN AIR TRUNK SIZE	TRUNK CFM	STATIC PRESS.	ROUND DUCT	RECT DUCT	VELOCITY (ft/min)
TRUNK A	321	0.08	9.2	10	578	0	0.00	0	0	0	TRUNK O	0	0.06	0	0	8
TRUNK B	575	0.07	11.8	18	575	0	0.00	0	0	0	TRUNK P	0	0.06	0	0	8
TRUNK C	397	0.08	9.9	12	596	0	0.00	0	0	0	TRUNK Q	0	0.06	0	0	8
TRUNK D	1108	0.07	15.1	26	767	0	0.00	0	0	0	TRUNK R	0	0.06	0	0	8
TRUNK E	0	0.00	0	0	0	0	0.00	0	0	0	TRUNK S	0	0.06	0	0	8
TRUNK F	0	0.00	0	0	0	0	0.00	0	0	0	TRUNK T	0	0.06	0	0	8
RETURN AIR #	1	2	3	4	0	0	0	0	0	0	TRUNK U	0	0.06	0	0	8
AIR VOLUME	185	170	85	95	0	0	0	0	0	0	TRUNK V	0	0.06	0	0	8
PLENUM PRESSURE	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	TRUNK W	0	0.06	0	0	8
ACTUAL DUCT LGH	46	42	51	56	28	1	1	1	1	1	TRUNK X	1110	0.06	15.7	28	714
EQUIVALENT LENGTH	210	205	205	165	190	0	0	0	0	0	TRUNK Y	590	0.06	12.4	18	590
TOTAL EFFECTIVE LH	256	247	256	221	218	1	1	1	1	1	TRUNK Z	365	0.06	10.3	12	548
ADJUSTED PRESSURE	0.06	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.07	0.07	DROP	1110	0.06	15.7	24	666
ROUND DUCT SIZE	8	8	8	8	10.5	0	0	0	0	0						
INLET GRILL SIZE	X	X	X	X	X	X	X	X	X	X						
INLET GRILL SIZE	24	24	14	14	30	0	0	0	0	0						

TYPE: 3102
SITE NAME: PINE VALLEY DRIVE

LO # 90622
CNR

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	2	@ 10.6 cfm	21.2	cfm
Kitchen & Bathrooms	6	@ 10.6 cfm	63.6	cfm
Other Rooms	5	@ 10.6 cfm	53.0	cfm
Table 9.32.3.A.	TOTAL		180.2	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		63.6	cfm

SUPPLEMENTAL VENTILATION CAPACITY 9.32.3.5.	
Total Ventilation Capacity	180.2 cfm
Less Principal Ventil. Capacity	63.6 cfm
Required Supplemental Capacity	116.6 cfm

PRINCIPAL EXHAUST FAN CAPACITY			
Model: VANEE V150H	Location: BSMT		
63.6 cfm	☒ HVI Approved		
PRINCIPAL EXHAUST HEAT LOSS CALCULATION			
CFM	ΔT °F	FACTOR	% LOSS
63.6 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
ENS-2	BY INSTALLING CONTRACTOR	50	☒	3.5
ENS-3	BY INSTALLING CONTRACTOR	50	☒	3.5
W/R	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:	May-21

CSA F280-12 Residential Heat Loss and Heat Gain Calculations																																																																															
Formula Sheet (For Air Leakage / Ventilation Calculation)																																																																															
LO#: 90622	Model: 3102	Builder: GOLD PARK HOMES	Date: 5/3/2021																																																																												
Volume Calculation		Air Change & Delta T Data																																																																													
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Level	Floor Area (ft²)	Floor Height (ft)	Volume (ft³)																																																																												
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6.2.6 Sensible Gain due to Air Leakage																																																																															
$HG_{salb} = LR_{airc} \times \frac{V_b}{3.6} \times DTD_c \times 1.2$																																																																															
0.342	x	240.89	x																																																																												
		42 °C	x																																																																												
		1.2	=																																																																												
		4170 W																																																																													
		14226 Btu/h																																																																													
6.2.7 Sensible heat Gain due to Ventilation																																																																															
$HL_{vair-b} = PVC \times DTD_h \times 1.08 \times (1 - E)$																																																																															
64 CFM	x	76 °F	x																																																																												
		1.08	x																																																																												
		0.25	=																																																																												
		1305 Btu/h																																																																													
5.2.3.3 Calculation of Air Change Heat Loss for Each Room (Floor Multiplier Section)																																																																															
$HL_{airr} = Level Factor \times HL_{air-bv} \times \{ (HL_{agcr} + HL_{bgcr}) \div (HL_{aglevel} + HL_{bglevel}) \}$																																																																															
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*HLairbv = Air leakage heat loss + ventilation heat loss *For a balanced or supply only ventilation system HLairve = 0																																																																															

HEAT LOSS AND GAIN SUMMARY SHEET

MODEL: 3102	CNR	BUILDER: GOLD PARK HOMES
SFQT: 2259	LO# 90622	SITE: PINE VALLEY DRIVE

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

BUILDING DATA

ATTACHMENT:	ATTACHED	# 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):	30625.0	ASSUMED (Y/N):	Y
INTERNAL SHADING:	BLINDS/CURTAINS	ASSUMED OCCUPANTS:	4
INTERIOR LIGHTING LOAD (Btu/h/ft²):	2.00	DC BRUSHLESS MOTOR (Y/N):	Y
FOUNDATION CONFIGURATION	BCIN_1	DEPTH BELOW GRADE:	7.0 ft
LENGTH: 44.0 ft	WIDTH: 32.0 ft	EXPOSED PERIMETER:	134.0 ft

2012 OBC - COMPLIANCE PACKAGE

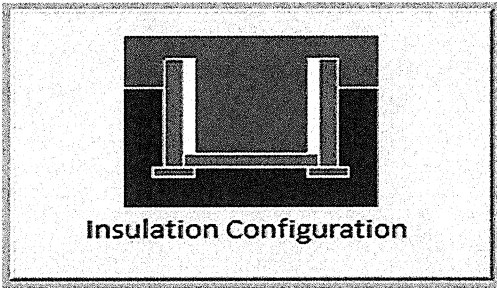
Component	Compliance Package A1	
	Nominal	Min. Eff.
Ceiling with Attic Space Minimum RSI (R)-Value	60	59.22
Ceiling Without Attic Space Minimum RSI (R)-Value	31	27.65
Exposed Floor Minimum RSI (R)-Value	31	29.80
Walls Above Grade Minimum RSI (R)-Value	22	17.03
Basement Walls Minimum RSI (R)-Value	20 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 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):	13.4	 Insulation Configuration
Floor Width (m):	9.8	
Exposed Perimeter (m):	40.8	
Wall Height (m):	2.7	
Depth Below Grade (m):	2.13	
Window Area (m ²):	1.5	
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):		1138

TYPE: 3102
LO# 90622

CNR

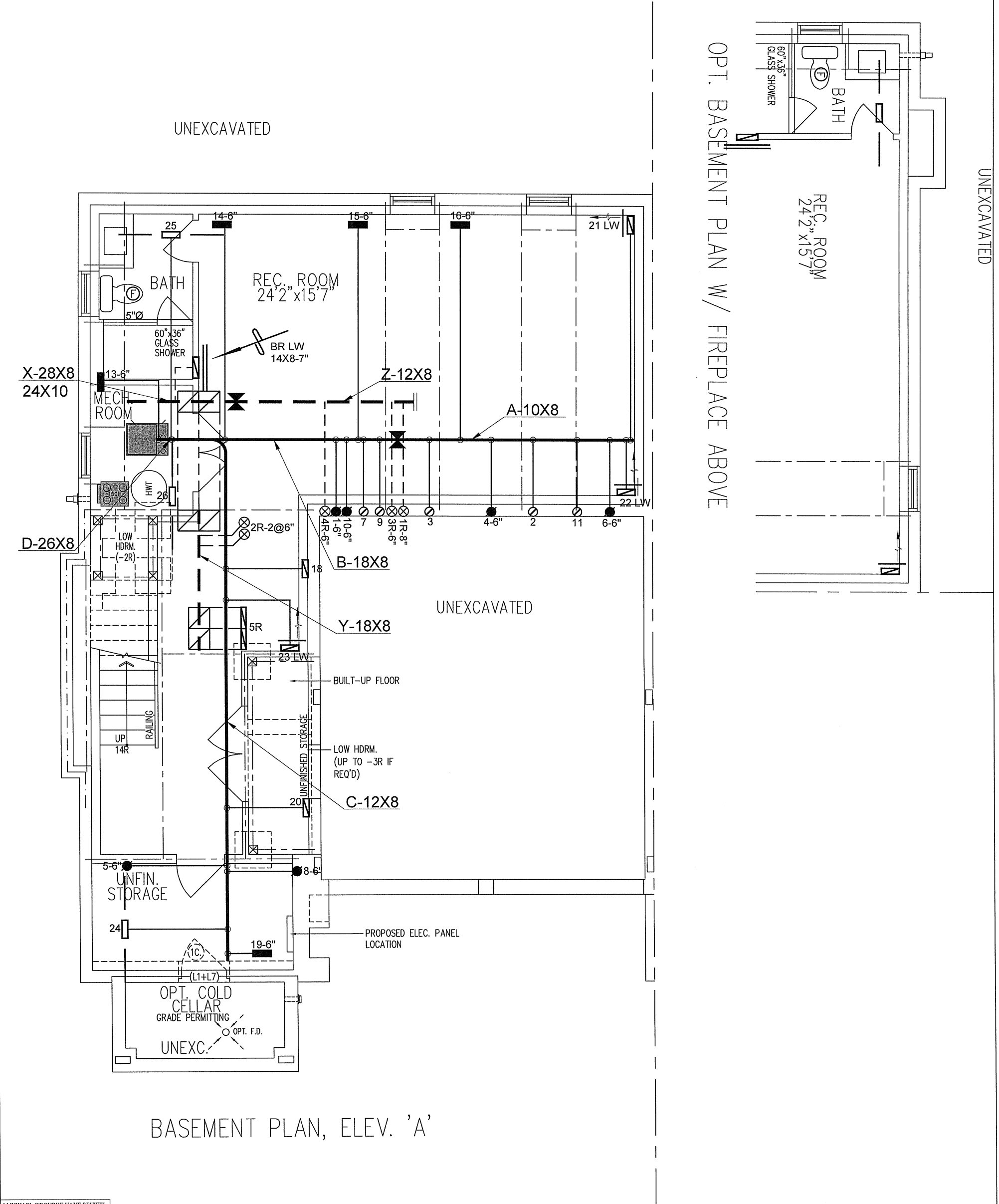
Air Infiltration Residential Load Calculator

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):	6.71			
Building Configuration				
Type:	Semi			
Number of Stories:	Two			
Foundation:	Full			
House Volume (m ³):	867.2			
Air Leakage/Ventilation				
Air Tightness Type:	Present (1961-) (3.57 ACH)			
Custom BDT Data:	ELA @ 10 Pa.	1156.0 cm ²		
	3.57	ACH @ 50 Pa		
Mechanical Ventilation (L/s):	Total Supply	Total Exhaust		
	30.0	30.0		
Flue Size				
Flue #:	#1	#2	#3	#4
Diameter (mm):	0	0	0	0
Natural Infiltration Rates				
Heating Air Leakage Rate (ACH/H):	0.342			
Cooling Air Leakage Rate (ACH/H):	0.111			

TYPE: 3102
LO# 90622

CNR



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.

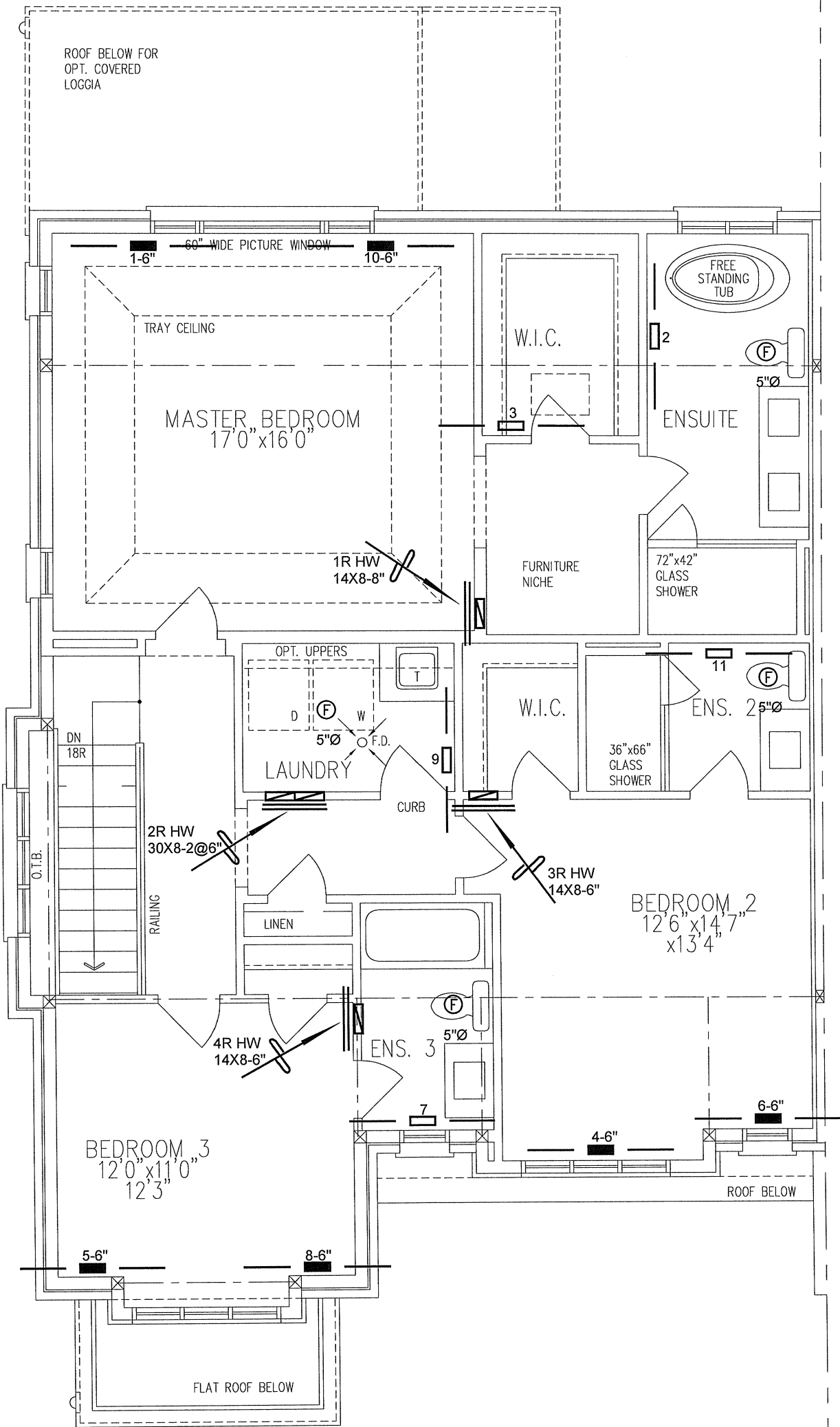
Michael O'Rourke
Michael O'Rourke, BCIN# 19669
HVAC DESIGNS LTD.

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		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 44283 BTU/H UNIT DATA		# OF RUNS S/A R/A FANS			Sheet Title BASEMENT HEATING LAYOUT				
Project Name PINE VALLEY DRIVE VAUGHAN, ONTARIO			MAKE LENNOX		3RD FLOOR							
			MODEL ML196UH070XE36B		2ND FLOOR					11	4	4
			INPUT 66 MBTU/H		1ST FLOOR			7	1	2		
			OUTPUT 63.9 MBTU/H		BASEMENT			6	1	1		
3102 - CNR			COOLING 3.0 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 APR/2021				
		FAN SPEED 1110 cfm @ 0.6" w.c.					Scale 3/16" = 1'-0"					
							BCIN# 19669					
2259 sqft							LO# 90622					



SECOND FLOOR PLAN, ELEV. '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.		
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	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	
GOLD PARK HOMES			SECOND FLOOR HEATING LAYOUT	
Project Name PINE VALLEY DRIVE VAUGHAN, ONTARIO			Date	APR/2021
			Scale	3/16" = 1'-0"
			BCIN# 19669	
3102 - CNR			LO#	90622
2259 sqft				