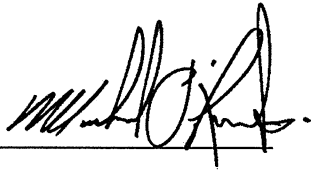


Schedule 1: Designer Information

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 BRAMPTON	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@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: SD-5 Project: ENCORE	
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.			
<u>March 7, 2017</u> 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: ENCORE
BUILDER: GOLD PARK HOMES
TYPE: SD-6
DATE: Mar-17
LO# 72733
GFA: 2195
WINTER NATURAL AIR CHANGE RATE 0.396
SUMMER NATURAL AIR CHANGE RATE 0.136
HEAT LOSS AT °F. 74
HEAT GAIN AT °F. 14
CSA-F280-12
SB-12 PACKAGE A1

ROOM USE EXP. WALL CLG. HT.	MBR	ENS	TYPE SD-6	GFA: 2195	LO# 72733	BATH	WINTER NATURAL AIR CHANGE RATE 0.396	SUMMER NATURAL AIR CHANGE RATE 0.136	HEAT LOSS AT °F. 74	HEAT GAIN AT °F. 14	CSA-F280-12 SB-12 PACKAGE A1
GRS.WALL AREA GLAZING	324	117	LOSS GAIN	90	290	0					
NORTH	0	0	0	0	0	0					
EAST	0	0	0	0	0	0					
SOUTH	0	0	0	0	0	0					
WEST	0	0	0	0	0	0					
SKYL.T.	0	0	0	0	0	0					
DOORS	0	0	0	0	0	0					
NET EXPOSED WALL	300	96	418	79	0	0					
NET EXPOSED BSMT WALL ABOVE GR	0	0	0	0	0	0					
EXPOSED CLG	308	187	166	96	0	0					
NO A T T I C EXPOSED CLG	0	0	0	0	0	0					
EXPOSED FLOOR	0	0	0	0	0	0					
BASEMENT/CRAWL HEAT LOSS	0	0	0	0	0	0					
SLAB ON GRADE HEAT LOSS	0	0	0	0	0	0					
SUBTOTAL HT LOSS	2192	1050	704	830	2256	124					
SUB TOTAL HT GAIN	1439	0.20	0.50	0.20	0.50	0.20					
LEVEL FACTORY / MULTIPLE	1097	626	75	416	1129	62					
AIR CHANGE HEAT LOSS	153	0	0	0	0	0					
AIR CHANGE HEAT GAIN	0	0	0	0	0	0					
DUCT LOSS	0	0	0	0	0	0					
DUCT GAIN	0	0	0	0	0	0					
HEAT GAIN PEOPLE	240	0	0	1	240	0					
HEAT GAIN APPLIANCES/LIGHTS	597	0	0	597	597	0					
TOTAL HT LOSS BTU/H	3288	1575	1788	1246	3385	186					
TOTAL HT GAIN x 1.3 BTU/H	3470			2262	4218	87					

ROOM USE EXP. WALL CLG. HT.	LVDN	KIT	FAM	PWD	FOY	WOB	BAS
GRS.WALL AREA GLAZING	100	420	168	60	288	288	711
NORTH	0	0	0	0	0	0	0
EAST	0	0	0	0	0	0	0
SOUTH	0	0	0	0	0	0	0
WEST	0	0	0	0	0	0	0
SKYL.T.	0	0	0	0	0	0	0
DOORS	0	0	0	0	0	0	0
NET EXPOSED WALL	60	1647	292	63	238	20	20
NET EXPOSED BSMT WALL ABOVE GR	0	0	0	0	0	0	0
EXPOSED CLG	0	0	0	0	0	0	0
NO A T T I C EXPOSED CLG	0	0	0	0	0	0	0
EXPOSED FLOOR	0	0	0	0	0	0	0
BASEMENT/CRAWL HEAT LOSS	0	0	0	0	0	0	0
SLAB ON GRADE HEAT LOSS	0	0	0	0	0	0	0
SUBTOTAL HT LOSS	1092	2897	2886	376	2270	524	4677
SUB TOTAL HT GAIN	1059	3015	3338	220	428	2184	7683
LEVEL FACTORY / MULTIPLE	0.30	0.51	0.30	0.30	0.30	0.50	0.82
AIR CHANGE HEAT LOSS	556	1474	1468	191	1154	8071	8071
AIR CHANGE HEAT GAIN	113	320	355	23	46	0	165
DUCT LOSS	0	0	435	0	0	0	0
DUCT GAIN	0	0	429	0	0	0	0
HEAT GAIN PEOPLE	240	0	0	0	0	0	0
HEAT GAIN APPLIANCES/LIGHTS	597	597	597	0	0	0	0
TOTAL HT LOSS BTU/H	1648	4371	4789	568	3424	2708	15754
TOTAL HT GAIN x 1.3 BTU/H	2299	5112	6135	317	616	407	1821

SITE NAME: ENCORE

BUILDER: GOLD PARK HOMES

TYPE: SD-5

DATE: Mar-17

GFA: 2195 LO# 72733

HEATING CFM	995	COOLING CFM	995
TOTAL HEAT LOSS	42,942	TOTAL HEAT GAIN	28,531
AIR FLOW RATE CFM	23.17	AIR FLOW RATE CFM	34.87

EL296UH070XE38B

LENNOX

70

FAN SPEED

LOW 0

MEDLOW 0

MEDIUM 995

MEDIUM HIGH 1100

HIGH 0

AFUE = 96 %
INPUT (BTU/H) = 66,000
OUTPUT (BTU/H) = 64,000

DESIGN CFM = 995

CFM @ 6" E.S.P.

TEMPERATURE RISE 60 °F

RUN COUNT	4th	3rd	2nd	1st	Bas
S/A	0	0	6	7	5
R/A	0	0	3	2	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
ROOM NAME	MBR	ENS	BED-3	BED-2	BED-3
RM LOSS MBH	3.29	1.58	1.69	1.25	1.69
CFM PER RUN HEAT	76	37	39	29	39
RM GAIN MBH	3.47	1.79	2.11	2.26	2.11
CFM PER RUN COOLING	121	62	74	79	74
ADJUSTED PRESSURE	0.15	0.17	0.17	0.17	0.17
ACTUAL DUCT LGH	59	26	32	67	38
EQUIVALENT LENGTH	140	160	180	220	180
TOTAL EFFECTIVE LENGTH	199	186	212	287	218
ADJUSTED PRESSURE	0.08	0.09	0.08	0.06	0.08
ROUND DUCT SIZE	6	5	5	6	5
HEATING VELOCITY (ft/min)	388	272	286	148	286
COOLING VELOCITY (ft/min)	617	455	543	403	543
OUTLET GRILL SIZE	3X10	3X10	3X10	4X10	3X10
TRUNK	B	B	C	A	C

RUN #	25
ROOM NAME	BAS
RM LOSS MBH	3.69
CFM PER RUN HEAT	86
RM GAIN MBH	0.45
CFM PER RUN COOLING	16
ADJUSTED PRESSURE	0.16
ACTUAL DUCT LGH	13
EQUIVALENT LENGTH	130
TOTAL EFFECTIVE LENGTH	143
ADJUSTED PRESSURE	0.11
ROUND DUCT SIZE	5
HEATING VELOCITY (ft/min)	631
COOLING VELOCITY (ft/min)	117
OUTLET GRILL SIZE	3X10
TRUNK	C

TRUNK	CFM	RECT	ROUND	STATIC PRESS.	TRUNK CFM	STATIC PRESS.	ROUND DUCT	RECT DUCT	VELOCITY (ft/min)
TRUNK A	393	0.06	10.6	0.06	0	0.00	0	0	8
TRUNK B	605	0.06	12.5	0.06	0	0.00	0	0	8
TRUNK C	391	0.08	9.9	0.08	0	0.00	0	0	8
TRUNK D	0	0.00	0	0.00	0	0.00	0	0	8
TRUNK E	0	0.00	0	0.00	0	0.00	0	0	8
TRUNK F	0	0.00	0	0.00	0	0.00	0	0	8

RETURN AIR #	1	2	3	4	5
AIR VOLUME	145	160	85	315	90
PLenum PRESSURE	0.15	0.15	0.15	0.15	0.15
ACTUAL DUCT LGH	71	44	52	21	24
EQUIVALENT LENGTH	150	145	175	135	165
TOTAL EFFECTIVE LH	221	189	227	156	189
ADJUSTED PRESSURE	0.07	0.08	0.07	0.09	0.08
ROUND DUCT SIZE	7	7.1	5.8	8.8	5.7
INLET GRILL SIZE	X	X	X	X	X
INLET GRILL SIZE	14	14	14	30	14

TRUNK	CFM	RECT	ROUND	STATIC PRESS.	TRUNK CFM	STATIC PRESS.	ROUND DUCT	RECT DUCT	VELOCITY (ft/min)
TRUNK G	0	0.00	0	0.00	0	0.00	0	0	8
TRUNK H	0	0.00	0	0.00	0	0.00	0	0	8
TRUNK I	0	0.00	0	0.00	0	0.00	0	0	8
TRUNK J	0	0.00	0	0.00	0	0.00	0	0	8
TRUNK K	0	0.00	0	0.00	0	0.00	0	0	8
TRUNK L	0	0.00	0	0.00	0	0.00	0	0	8

TRUNK	CFM	RECT	ROUND	STATIC PRESS.	TRUNK CFM	STATIC PRESS.	ROUND DUCT	RECT DUCT	VELOCITY (ft/min)
TRUNK M	0	0.00	0	0.00	0	0.00	0	0	8
TRUNK N	0	0.00	0	0.00	0	0.00	0	0	8
TRUNK O	0	0.00	0	0.00	0	0.00	0	0	8
TRUNK P	0	0.00	0	0.00	0	0.00	0	0	8
TRUNK Q	0	0.00	0	0.00	0	0.00	0	0	8
TRUNK R	0	0.00	0	0.00	0	0.00	0	0	8
TRUNK S	0	0.00	0	0.00	0	0.00	0	0	8
TRUNK T	0	0.00	0	0.00	0	0.00	0	0	8
TRUNK U	0	0.00	0	0.00	0	0.00	0	0	8
TRUNK V	0	0.00	0	0.00	0	0.00	0	0	8
TRUNK W	0	0.00	0	0.00	0	0.00	0	0	8
TRUNK X	910	0.07	14	0.07	910	0.07	14	0.07	8
TRUNK Y	305	0.07	9.3	0.07	305	0.07	9.3	0.07	8
TRUNK Z	0	0.07	0	0.07	0	0.07	0	0.07	8
DROP	995	0.07	14.5	0.07	995	0.07	14.5	0.07	10

Michael O'Rourke

TYPE: SD-5
SITE NAME: ENCORE

LO # 72733

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>2</u> @ 10.6 cfm	<u>21.2</u> cfm
Kitchen & Bathrooms	<u>4</u> @ 10.6 cfm	<u>42.4</u> cfm
Other Rooms	<u>4</u> @ 10.6 cfm	<u>42.4</u> cfm
Table 9.32.3.A.	TOTAL	<u>148.4</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
More than 5 - Part 6	TOTAL	<u>63.6</u> cfm

SUPPLEMENTAL VENTILATION CAPACITY		9.32.3.5.
Total Ventilation Capacity	<u>148.4</u>	cfm
Less Principal Ventil. Capacity	<u>139</u>	cfm
Required Supplemental Capacity	<u>9.4</u>	cfm

PRINCIPAL EXHAUST FAN CAPACITY			
Model:	VANEE 60H-V+ Location: BSMT		
<u>139.0</u> cfm	<u>3.0</u> sones ☒ HVI Approved		
PRINCIPAL EXHAUST HEAT LOSS CALCULATION			
CFM	ΔT °F	FACTOR	% LOSS
139.0 CFM	X 74 F	X 1.08	X 0.25

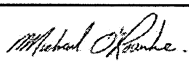
SUPPLEMENTAL FANS		NUTONE	HVI	Sones
Location	Model	cfm		
ENS	QTXEN050C	50	☒	0.3
BATH	QTXEN050C	50	☒	0.3
PWD	QTXEN050C	50	☒	0.3

HEAT RECOVERY VENTILATOR		9.32.3.11.
Model:	VANEE 60H-V+	
<u>139</u> cfm high	<u>50</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:	
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:	
HRAI #	001820
Date:	March-17

HEAT LOSS AND GAIN SUMMARY SHEET**MODEL:** SD-5**BUILDER:** GOLD PARK HOMES**SFQT:** 2195**LO#** 72733**SITE:** ENCORE**DESIGN ASSUMPTIONS**

HEATING	°F	COOLING	°F
OUTDOOR DESIGN TEMP.	-2	OUTDOOR DESIGN TEMP.	86
INDOOR DESIGN TEMP.	72	INDOOR DESIGN TEMP. (MAX 75°F)	72

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):	30716.0	ASSUMED (Y/N):	Y
INTERNAL SHADING:	BLINDS/CURTAINS	ASSUMED OCCUPANTS:	4
INTERIOR LIGHTING LOAD (Btu/h/ft²):	1.27	DC BRUSHLESS MOTOR (Y/N):	Y
FOUNDATION CONFIGURATION	BCIN_1	DEPTH BELOW GRADE:	4.0 ft
LENGTH: 47.0 ft	WIDTH: 25.0 ft	EXPOSED PERIMETER:	117.0 ft
WOB INSULATION CONFIGURATION	SCB_9	WOB EXPOSED PERIMETER	52.0 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	29.8
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	-

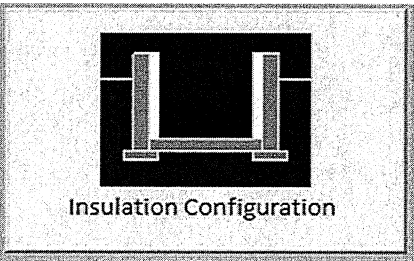
INDIVIDUAL BCIN: 19669

MICHAEL O'ROURKE



Residential Foundation Thermal Load Calculator

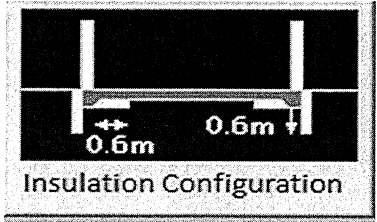
Supplemental tool for CAN/CSA-F280

Weather Station Description		
Province:	Ontario	
Region:	Brampton	
Site Description		
Soil Conductivity:	Normal conductivity: dry sand, loam, clay	
Water Table:	Normal (7-10 m, 23-33 ft)	
Foundation Dimensions		
Floor Length (m):	14.3	 Insulation Configuration
Floor Width (m):	7.6	
Exposed Perimeter (m):	35.7	
Wall Height (m):	2.7	
Depth Below Grade (m):	1.2	
Window Area (m ²):	2.0	
Door Area (m ²):	3.7	
Radiant Slab		
Heated Fraction of the Slab:	0	
Fluid Temperature (°C):	33	
Design Months		
Heating Month	1	
Foundation Loads		
Heating Load (Watts):		1370

TYPE: SD-5
LO# 72733

Residential Foundation Thermal Load Calculator

Supplemental tool for CAN/CSA-F280

Weather Station Description		
Province:	Ontario	
Region:	Brampton	
Site Description		
Soil Conductivity:	Normal conductivity: dry sand, loam, clay	
Water Table:	Normal (7-10 m, 23-33 ft)	
Foundation Dimensions		
Length (m):	6.1	
Width (m):	3.7	
Exposed Perimeter (m):	15.8	
Radiant Slab		
Heated Fraction of the Slab:	0	
Fluid Temperature (°C):	33	
Design Months		
Heating Month	1	
Results		
Heating Load (Watts):		153

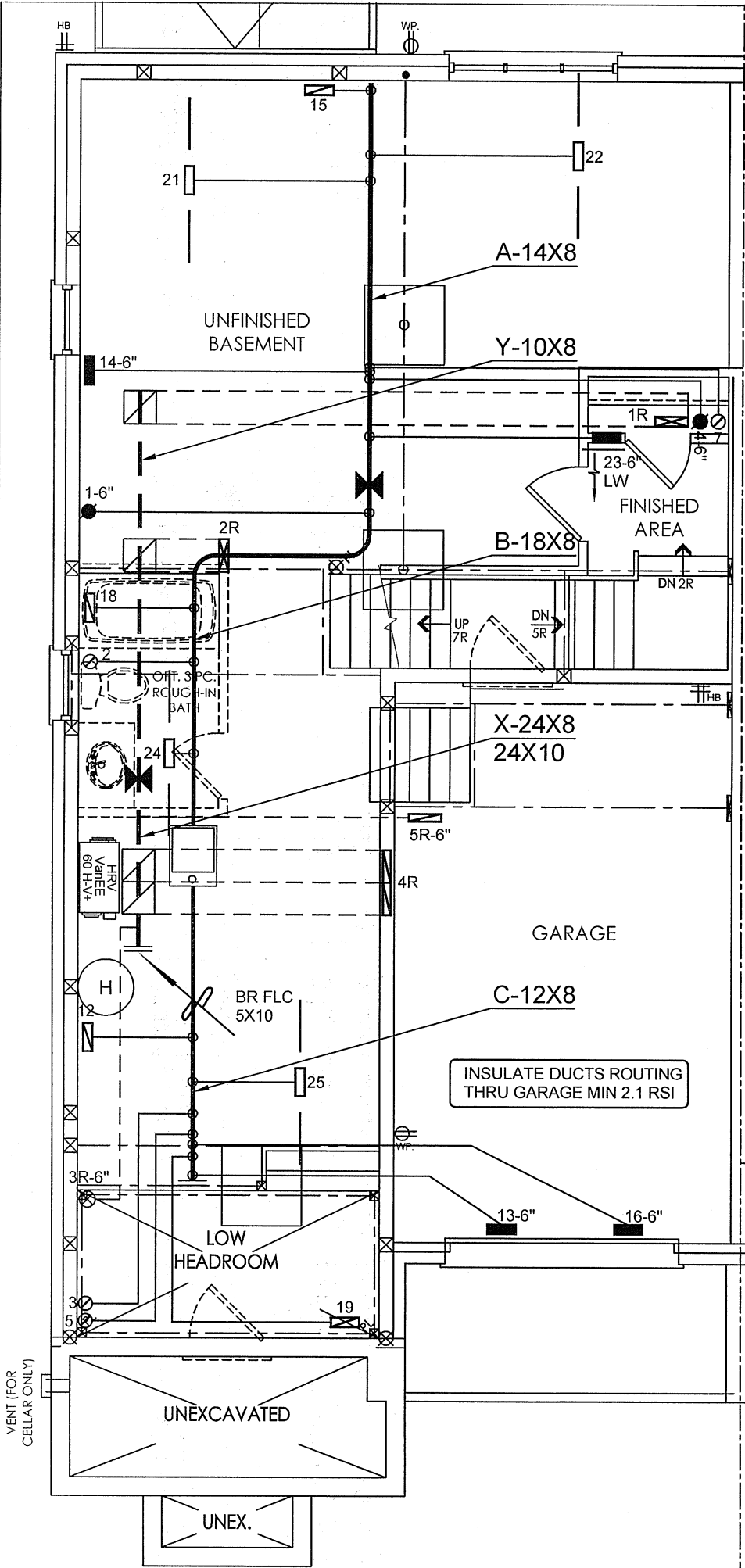
TYPE: SD-5
LO# 72733

Air Infiltration Residential Load Calculator

Supplemental tool for CAN/CSA-F280

Weather Station Description				
Province:	Ontario			
Region:	Brampton			
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):	8.53			
Building Configuration				
Type:	Semi			
Number of Stories:	Two			
Foundation:	Full			
House Volume (m ³):	869.8			
Air Leakage/Ventilation				
Air Tightness Type:	Present (1961-) (3.57 ACH)			
Custom BDT Data:	ELA @ 10 Pa.	1159.4 cm ²		
	3.57	ACH @ 50 Pa		
Mechanical Ventilation (L/s):	Total Supply	Total Exhaust		
	65.6	65.6		
Flue Size				
Flue #:	#1	#2	#3	#4
Diameter (mm):	0	0	0	0
Natural Infiltration Rates				
Heating Air Leakage Rate (ACH/H):	0.396			
Cooling Air Leakage Rate (ACH/H):	0.136			

TYPE: SD-5
LO# 72733



BASEMENT FLOOR ELEVATION 'A', 'C'



PARTIAL BASEMENT FLOOR ELEVATION 'B', 'D'

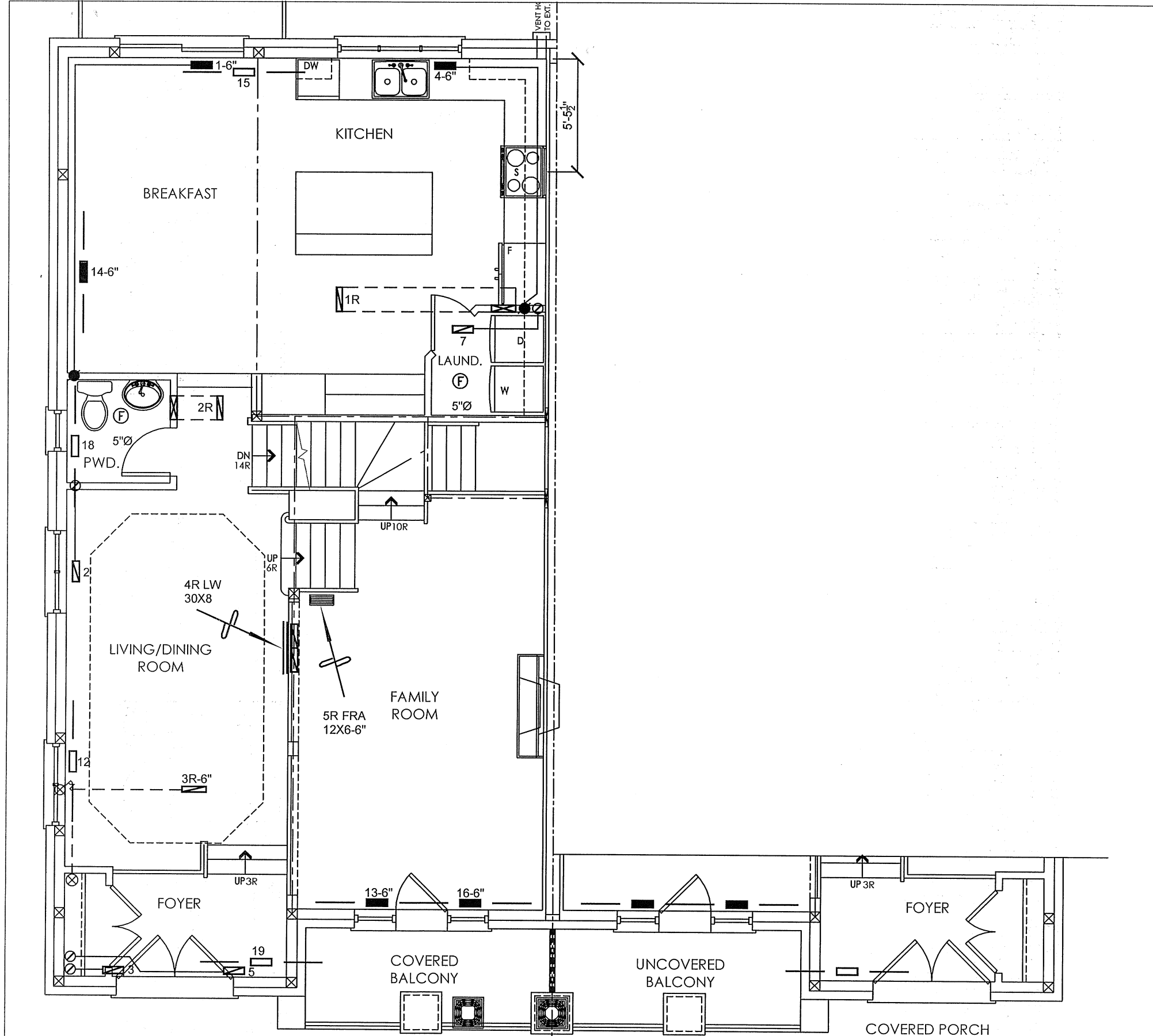
I MICHAEL O'ROURKE HAVE REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK AND AM QUALIFIED UNDER DIVISION C. 3.2.5 OF THE BUILDING CODE.
Michael O'Rourke
Michael O'Rourke, BCIN# 19669
HVAC DESIGNS LTD.

CSA-F280-12
PACKAGE A1

HVAC LEGEND								3.		
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	2.		
	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		

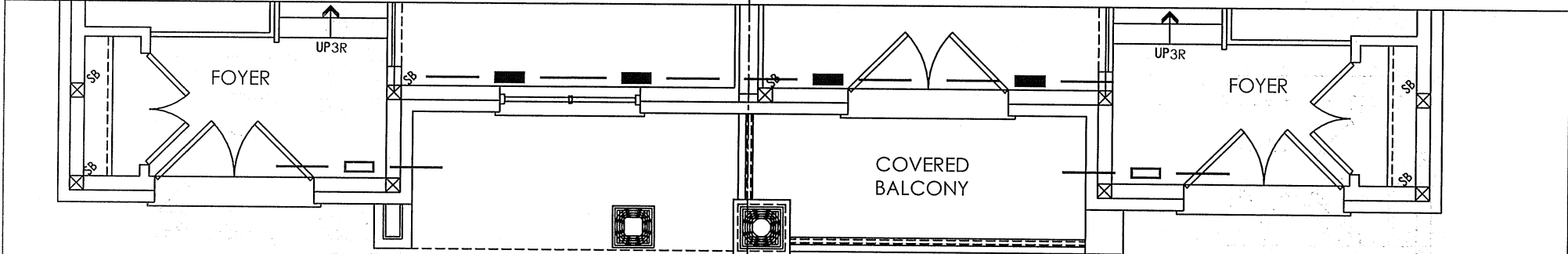
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Client GOLD PARK HOMES		 375 Finley Ave. Suite 202 - Ajax, Ontario L1S 2E2 Tel. 905.619.2300 - 905.420.5300 Fax 905.619.2375 Email: info@hvacdesigns.ca Web: www.hvacdesigns.ca Specializing in Residential Mechanical Design Services	HEAT LOSS 45727 BTU/H UNIT DATA		# OF RUNS S/A R/A FANS				Sheet Title		
Project Name ENCORE BRAMPTON, ONTARIO			MAKE LENNOX	3RD FLOOR					BASEMENT HEATING LAYOUT		
			MODEL EL296UH070XE36B	2ND FLOOR		6	3	2			
			INPUT 66 MBTU/H	1ST FLOOR		7	2	3			
			OUTPUT 64 MBTU/H	BASEMENT		5	1	0			
SD-5 2195 sqft		COOLING 2.5 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 MAR/2017		Scale 3/16" = 1'-0"		BCIN# 19669		
		FAN SPEED 995 cfm @ 0.6" w.c.					LO#		72733		
		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.									



GROUND FLOOR ELEVATION 'A'

PARTIAL GROUND FLOOR ELEVATION 'B'



PARTIAL GROUND FLOOR ELEVATION 'C'

PARTIAL GROUND FLOOR ELEVATION 'D'

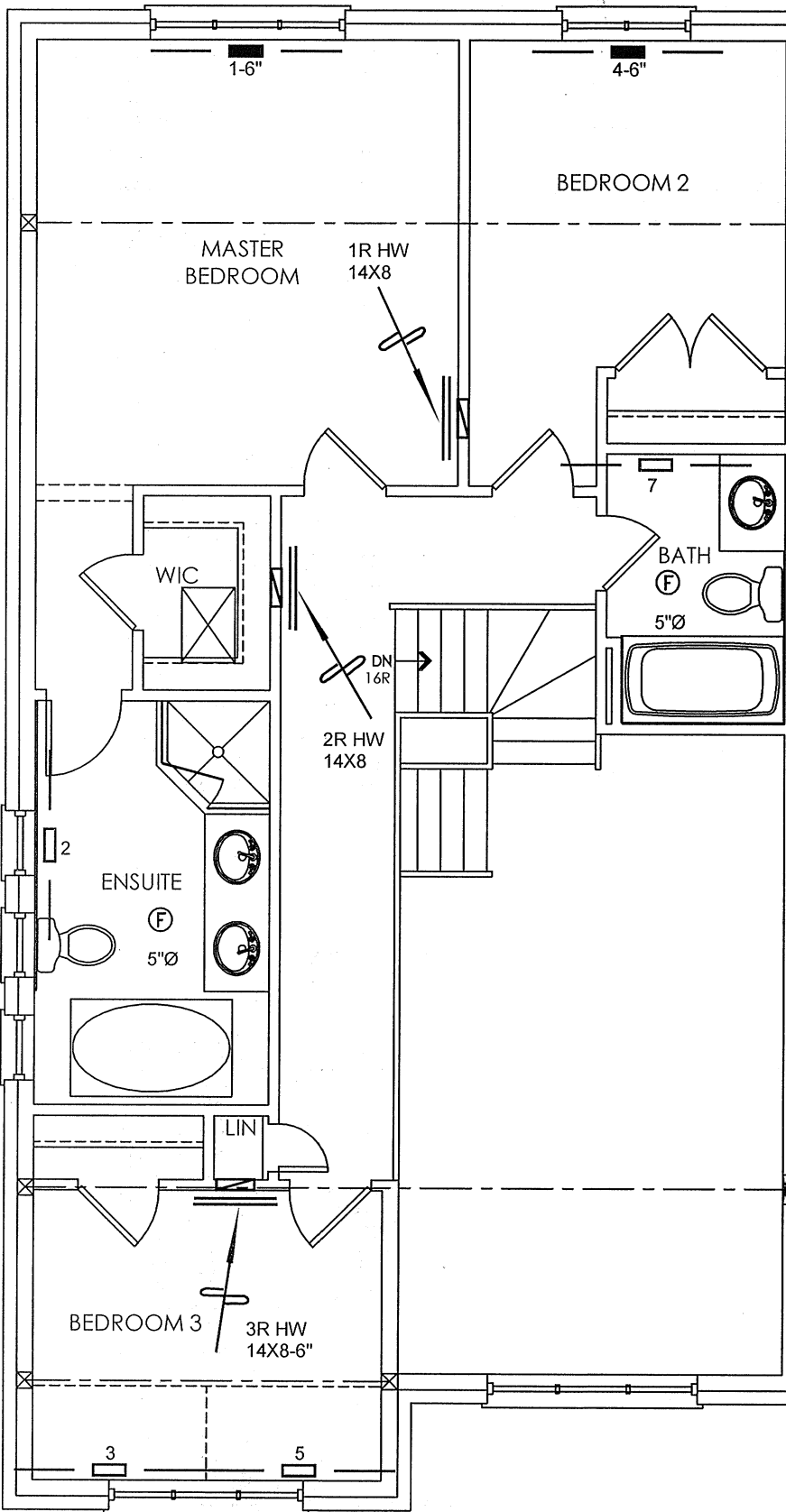
I MICHAEL O'ROURKE HAVE REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK AND AM QUALIFIED UNDER DIVISION C. 3.2.3 OF THE BUILDING CODE.
Michael O'Rourke
Michael O'Rourke, BCIN# 19669
HVAC DESIGNS LTD.

CSA-F280-12
PACKAGE A1

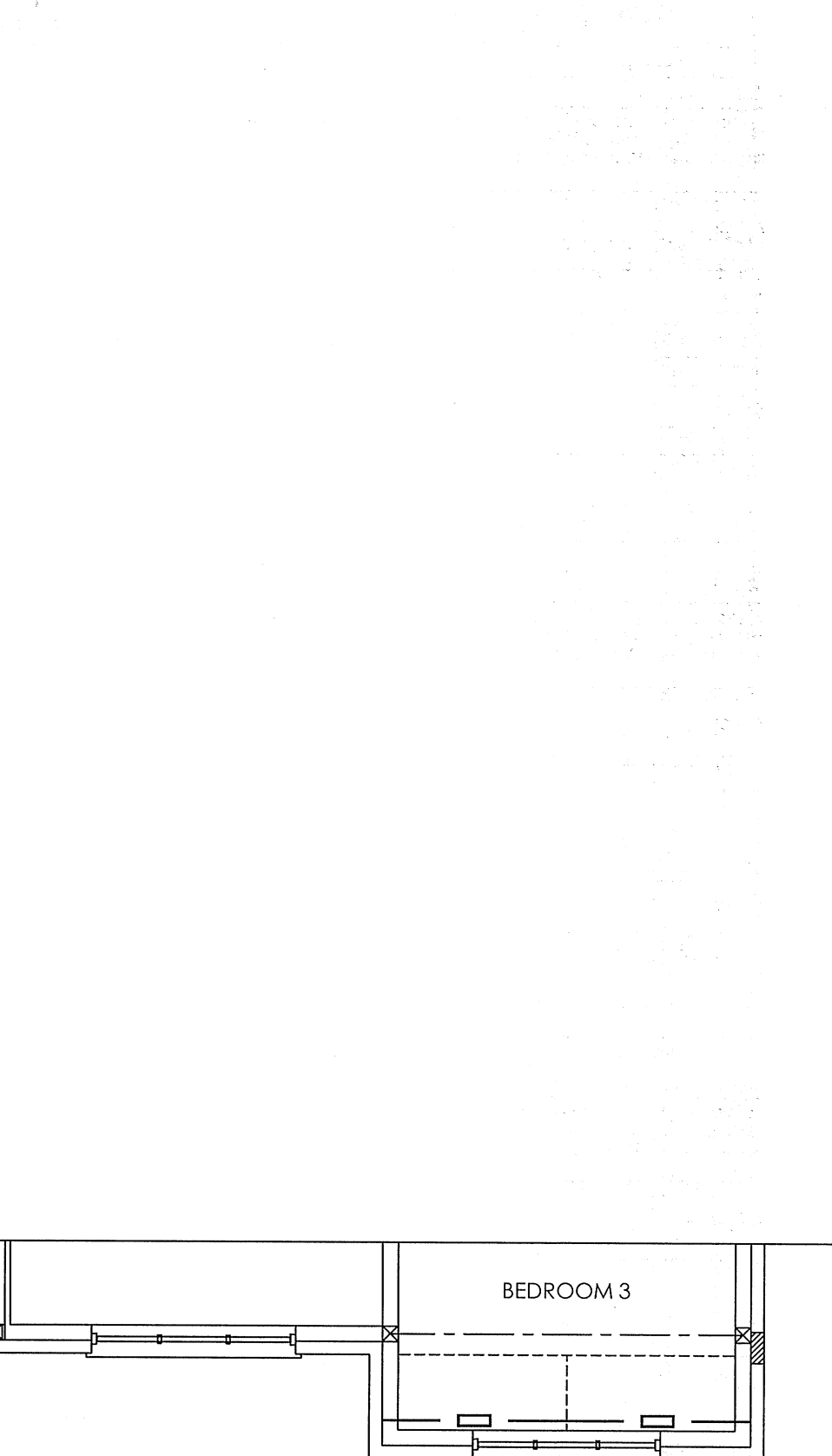
HVAC LEGEND								3.		
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	2.		
	FLOOR SUPPLY AIR GRILLE		6" SUPPLY AIR BOOT ABOVE		14"x8" RETURN AIR GRILLE		RETURN AIR STACK ABOVE	1.		
	FLOOR SUPPLY AIR GRILLE 6" BOOT		SUPPLY AIR STACK FROM 2nd FLOOR		30"x8" RETURN AIR GRILLE		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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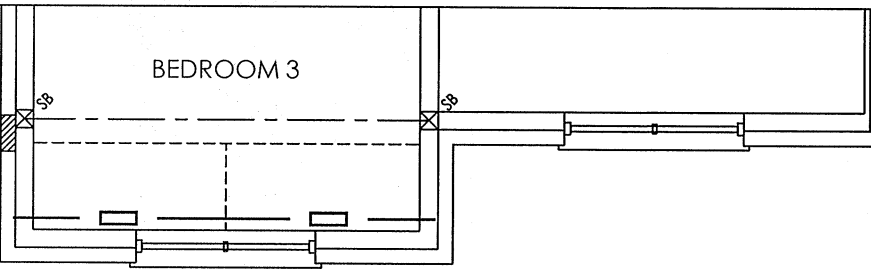
Client		 375 Finley Ave. Suite 202 - Ajax, Ontario L1S 2E2 Tel. 905.619.2300 - 905.420.5300 Fax 905.619.2375 Email: info@hvacdesigns.ca Web: www.hvacdesigns.ca Specializing in Residential Mechanical Design Services Installation to comply with the latest Ontario Building Code. All supply branch outlets 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	
GOLD PARK HOMES			FIRST FLOOR HEATING LAYOUT	
Project Name			Date	MAR/2017
ENCORE BRAMPTON, ONTARIO			Scale	3/16" = 1'-0"
			BCIN# 19669	
SD-5	2195 sqft	LO#	72733	



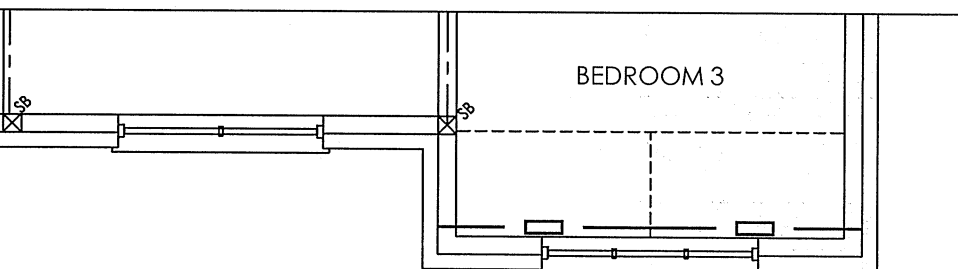
SECOND FLOOR ELEVATION 'A'



PARTIAL SECOND FLOOR ELEVATION 'B'



PARTIAL SECOND FLOOR ELEVATION 'C'



PARTIAL SECOND FLOOR ELEVATION 'D'

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.		
	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			SECOND FLOOR HEATING LAYOUT	
Project Name			Date	MAR/2017
ENCORE BRAMPTON, ONTARIO			Scale	3/16" = 1'-0"
SD-5			BCIN# 19669	
2195 sqft		LO#	72733	