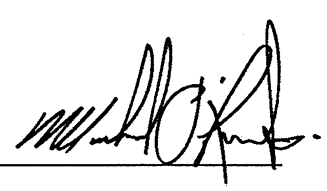


Schedule 1: Designer Information

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: 38-1 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.

ROOM USE	DIN	KTFM	LAUN	WIR	FOY	MUD	BAS
EXP. WALL	34	80	9	6	30	7	156
CLG. HT.	10	10	9	10	10	11	9
FACTORS							
GRS.WALL AREA	340	800	81	60	300	77	936
GLAZING	LOSS GAIN	LOSS GAIN	LOSS GAIN	LOSS GAIN	LOSS GAIN	LOSS GAIN	LOSS GAIN
NORTH	0	0	0	0	0	0	0
EAST	0	0	0	0	0	0	0
SOUTH	0	105	2176	4398	0	0	6
WEST	44	912	1110	0	0	0	124
SKYLT.	0	0	0	0	0	0	251
DOORS	20	492	93	0	0	0	62
NET EXPOSED WALL	4.3	0.8	0	0	0	0	76
NET EXPOSED BSMT WALL ABOVE GR	276	1199	227	695	3020	571	0
EXPOSED CLG	0	0	0	0	0	0	0
NO ATTIC 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	2603	5196	858	359	2214	739	5340
SUB TOTAL HT GAIN	1430	4970	675	196	419	140	7658
LEVEL FACTOR / MULTIPLIER	0.30	0.34	0.20	0.30	0.34	0.30	0.50
AIR CHANGE HEAT LOSS	887	1770	195	122	755	252	6310
AIR CHANGE HEAT GAIN	75	260	35	10	22	7	38
DUCT LOSS	0	0	0	0	0	0	0
DUCT GAIN	0	0	0	0	0	0	0
HEAT GAIN PEOPLE	0	0	0	0	0	0	0
HEAT GAIN APPLIANCES	401	401	401	0	401	401	0
TOTAL HT LOSS BTU/H	3490	6966	1053	481	2969	991	13968
TOTAL HT GAIN x 1.3 BTU/H	2477	7319	1444	268	1094	712	1520

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.

TOTAL HEAT GAIN BTU/H:	29867	TONS: 2.49	LOSS DUE TO VENTILATION LOAD BTU/H: 2777	STRUCTURAL HEAT LOSS: 42913	TOTAL COMBINED HEAT LOSS BTU/H: 45691
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Michael O'Rourke
INDIVIDUAL BCIN: 19669 MICHAEL O'ROURKE

SITE NAME: ENCORE

BUILDER: GOLD PARK HOMES

TYPE: 3B-1

DATE: Mar-17

GFA: 2189

LO# 72698

HEATING CFM 995 COOLING CFM 995
TOTAL HEAT LOSS 42,913 TOTAL HEAT GAIN 29,342
AIR FLOW RATE CFM 23.19 AIR FLOW RATE CFM 33.91

AFUE = 96 %
INPUT (BTU/H) = 66,000
OUTPUT (BTU/H) = 64,000
FAN SPEED 70
DESIGN CFM = 995
CFM @ 8" E.S.P. = 995

RUN COUNT	4th	3rd	2nd	1st	Bas
S/A	0	0	10	7	4
R/A	0	0	4	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	6	7	8	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-4	DIN	KT/FM	KT/FM	KT/FM	LAUN	WIR	FOY	MUD	BAS	BAS	BAS	BAS
RM LOSS MBH	2.47	1.29	0.70	2.16	2.11	1.30	0.60	1.30	3.49	2.32	2.32	2.32	1.05	0.48	2.97	0.99	3.49	3.49	3.49	3.49
CFM PER RUN HEAT	57	30	16	50	49	30	14	30	81	54	54	54	24	11	69	23	81	81	81	81
RM GAIN MBH	3.02	1.40	0.19	2.43	2.76	1.83	0.35	1.83	2.48	2.44	2.44	2.44	1.44	0.27	1.09	0.71	0.38	0.38	0.38	0.38
CFM PER RUN COOLING	102	47	6	83	94	62	12	62	84	83	83	83	49	9	37	24	13	13	13	13
ADJUSTED PRESSURE	0.16	0.17	0.17	0.16	0.16	0.17	0.17	0.17	0.16	0.16	0.16	0.16	0.17	0.17	0.17	0.17	0.16	0.16	0.16	0.16
EQUIVALENT LENGTH	57	29	36	55	44	26	29	22	6	36	27	49	40	20	28	13	40	32	12	24
TOTAL EFFECTIVE LENGTH	247	179	196	255	234	196	229	182	166	160	160	180	190	170	130	160	190	170	140	140
ADJUSTED PRESSURE	0.07	0.1	0.09	0.06	0.07	0.09	0.08	0.09	0.1	0.08	0.09	0.07	0.07	0.09	0.11	0.1	0.07	0.08	0.11	0.1
ROUND DUCT SIZE	6	4	4	6	6	5	4	5	5	6	5	6	5	4	5	4	6	5	5	5
HEATING VELOCITY (ft/min)	291	344	184	255	250	220	161	220	595	275	396	275	176	126	507	264	413	595	595	595
COOLING VELOCITY (ft/min)	520	539	69	423	479	455	138	455	617	423	609	423	360	103	272	275	66	95	95	95
OUTLET GRILL SIZE	4X10	3X10	3X10	4X10	4X10	3X10	3X10	3X10	3X10	4X10	3X10	4X10	3X10	3X10	3X10	3X10	4X10	3X10	3X10	3X10
TRUNK	A	B	D	A	C	D	D	D	D	A	B	A	C	C	C	B	A	B	D	C

RUN #	26
ROOM NAME	WIC-2
RM LOSS MBH	1.07
CFM PER RUN HEAT	25
RM GAIN MBH	0.71
CFM PER RUN COOLING	24
ADJUSTED PRESSURE	0.17
EQUIVALENT LENGTH	36
TOTAL EFFECTIVE LENGTH	160
ADJUSTED PRESSURE	0.09
ROUND DUCT SIZE	4
HEATING VELOCITY (ft/min)	287
COOLING VELOCITY (ft/min)	275
OUTLET GRILL SIZE	3X10
TRUNK	D

SUPPLY AIR TRUNK SIZE	TRUNK CFM	STATIC PRESS.	ROUND DUCT	RECT DUCT	STATIC PRESS.	TRUNK CFM	VELOCITY (ft/min)	ROUND DUCT	RECT DUCT	STATIC PRESS.	TRUNK CFM	VELOCITY (ft/min)	ROUND DUCT	RECT DUCT	STATIC PRESS.	TRUNK CFM	VELOCITY (ft/min)
TRUNK A	296	0.06	9.6	10	0.00	0	533	0	0	0.00	0	0	0	0	0.05	0	0
TRUNK B	484	0.06	11.5	16	0.00	0	545	0	0	0.00	0	0	0	0	0.05	0	0
TRUNK C	234	0.07	8.4	8	0.00	0	527	0	0	0.00	0	0	0	0	0.05	0	0
TRUNK D	511	0.07	11.3	14	0.00	0	657	0	0	0.00	0	0	0	0	0.05	0	0
TRUNK E	0	0.00	0	0	0.00	0	0	0	0	0.00	0	0	0	0	0.05	0	0
TRUNK F	0	0.00	0	0	0.00	0	0	0	0	0.00	0	0	0	0	0.05	0	0

RETURN AIR TRUNK SIZE	TRUNK CFM	STATIC PRESS.	ROUND DUCT	RECT DUCT	STATIC PRESS.	TRUNK CFM	VELOCITY (ft/min)	ROUND DUCT	RECT DUCT	STATIC PRESS.	TRUNK CFM	VELOCITY (ft/min)	ROUND DUCT	RECT DUCT	STATIC PRESS.	TRUNK CFM	VELOCITY (ft/min)
TRUNK G	0	0.00	0	0	0.00	0	0	0	0	0.00	0	0	0	0	0.05	0	0
TRUNK H	0	0.00	0	0	0.00	0	0	0	0	0.00	0	0	0	0	0.05	0	0
TRUNK I	0	0.00	0	0	0.00	0	0	0	0	0.00	0	0	0	0	0.05	0	0
TRUNK J	0	0.00	0	0	0.00	0	0	0	0	0.00	0	0	0	0	0.05	0	0
TRUNK K	0	0.00	0	0	0.00	0	0	0	0	0.00	0	0	0	0	0.05	0	0
TRUNK L	0	0.00	0	0	0.00	0	0	0	0	0.00	0	0	0	0	0.05	0	0
TRUNK M	0	0.00	0	0	0.00	0	0	0	0	0.00	0	0	0	0	0.05	0	0
TRUNK N	0	0.00	0	0	0.00	0	0	0	0	0.00	0	0	0	0	0.05	0	0
TRUNK O	0	0.00	0	0	0.00	0	0	0	0	0.00	0	0	0	0	0.05	0	0
TRUNK P	0	0.00	0	0	0.00	0	0	0	0	0.00	0	0	0	0	0.05	0	0
TRUNK Q	0	0.00	0	0	0.00	0	0	0	0	0.00	0	0	0	0	0.05	0	0
TRUNK R	0	0.00	0	0	0.00	0	0	0	0	0.00	0	0	0	0	0.05	0	0
TRUNK S	0	0.00	0	0	0.00	0	0	0	0	0.00	0	0	0	0	0.05	0	0
TRUNK T	0	0.00	0	0	0.00	0	0	0	0	0.00	0	0	0	0	0.05	0	0
TRUNK U	0	0.00	0	0	0.00	0	0	0	0	0.00	0	0	0	0	0.05	0	0
TRUNK V	0	0.00	0	0	0.00	0	0	0	0	0.00	0	0	0	0	0.05	0	0
TRUNK W	0	0.00	0	0	0.00	0	0	0	0	0.00	0	0	0	0	0.05	0	0
TRUNK X	995	0.05	15.7	28	0.05	15.7	28	0.05	15.7	28	0.05	15.7	28	0.05	15.7	28	0.05
TRUNK Y	495	0.05	12.1	18	0.05	12.1	18	0.05	12.1	18	0.05	12.1	18	0.05	12.1	18	0.05
TRUNK Z	0	0.00	0	0	0.00	0	0	0	0	0.00	0	0	0	0	0.05	0	0
DROP	995	0.05	15.7	24	0.05	15.7	24	0.05	15.7	24	0.05	15.7	24	0.05	15.7	24	0.05

TYPE: 38-1
SITE NAME: ENCORE

LO # 72698

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	4 @ 10.6 cfm	42.4 cfm
Other Rooms	5 @ 10.6 cfm	53.0 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	
More than 5 - Part 6	TOTAL	79.5 cfm

SUPPLEMENTAL VENTILATION CAPACITY		9.32.3.5.
Total Ventilation Capacity	169.6	cfm
Less Principal Ventil. Capacity	139	cfm
Required Supplemental Capacity	30.6	cfm

PRINCIPAL EXHAUST FAN CAPACITY	
Model: VANE 60H-V+	Location: BSMT
139.0 cfm	3.0 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		
Location	Model	cfm	HVI	Sones
ENS	QTXEN050C	50	☒	0.3
BATH	QTXEN050C	50	☒	0.3
W/R	QTXEN050C	50	☒	0.3

HEAT RECOVERY VENTILATOR		9.32.3.11.
Model: VANE 60H-V+		
139 cfm high	50 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:	March-17

HEAT LOSS AND GAIN SUMMARY SHEET

MODEL: 38-1

BUILDER: GOLD PARK HOMES

SFQT: 2189

LO# 72698

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:	DETACHED	# OF STORIES (+BASEMENT):	3
FRONT FACES:	WEST	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):	29411.0	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:	6.0 ft
LENGTH: 46.0 ft	WIDTH: 32.0 ft	EXPOSED PERIMETER:	156.0 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	-

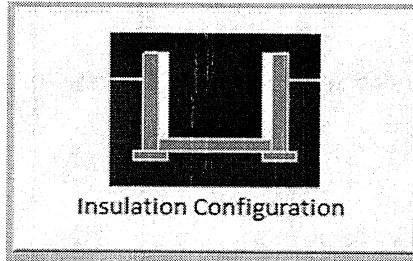
INDIVIDUAL BCIN: 19669

MICHAEL O'ROURKE

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):	14.0	 Insulation Configuration
Floor Width (m):	9.8	
Exposed Perimeter (m):	0.0	
Wall Height (m):	2.7	
Depth Below Grade (m):	1.8	
Window Area (m ²):	0.8	
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):		1565

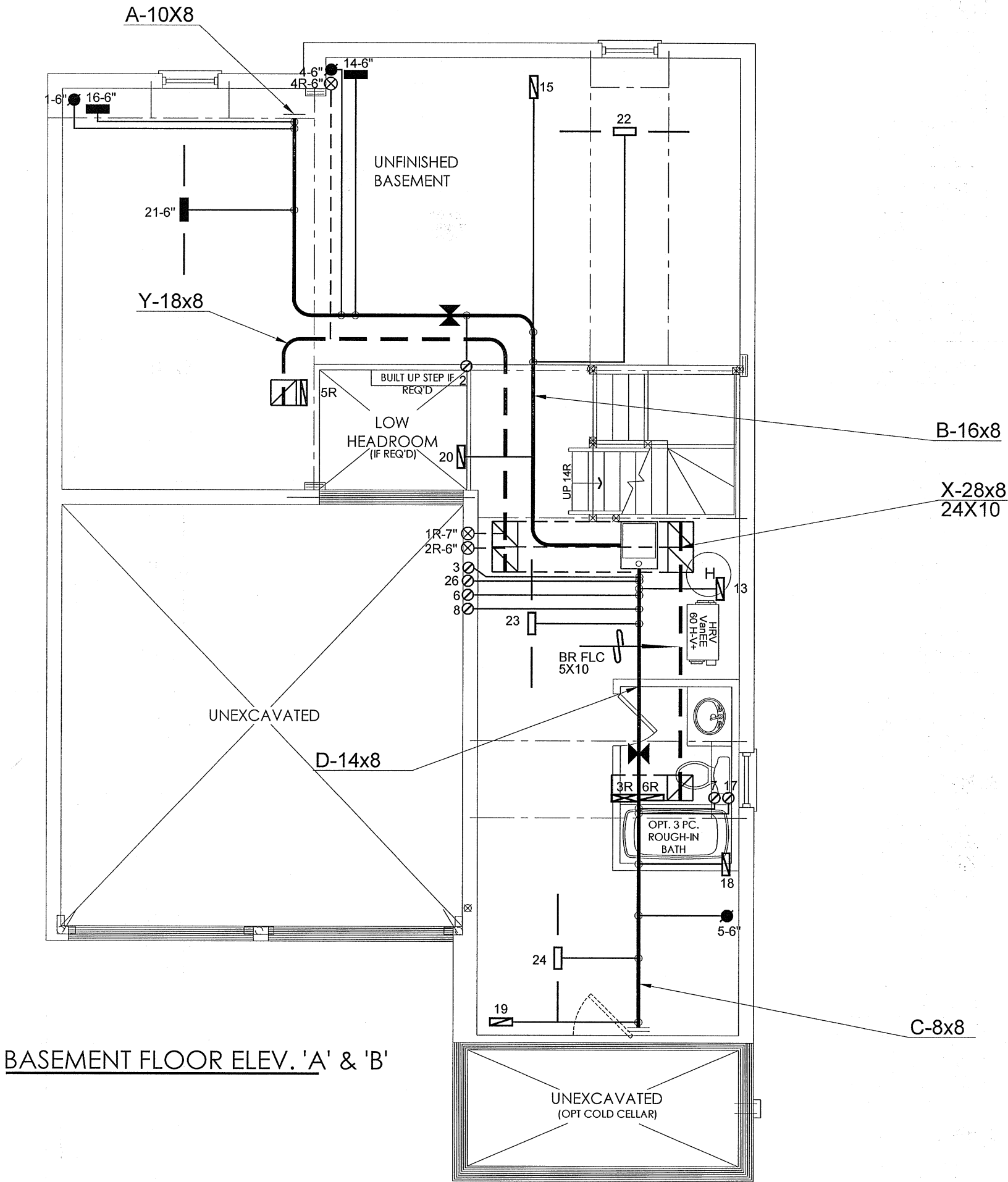
TYPE: 38-1
LO# 72698

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):	6.71			
Building Configuration				
Type:	Detached			
Number of Stories:	Two			
Foundation:	Full			
House Volume (m ³):	832.8			
Air Leakage/Ventilation				
Air Tightness Type:	Present (1961-) (3.57 ACH)			
Custom BDT Data:	ELA @ 10 Pa. 3.57	1110.2 cm ² ACH @ 50 Pa		
Mechanical Ventilation (L/s):	Total Supply 65.6	Total Exhaust 65.6		
Flue Size				
Flue #:	#1	#2	#3	#4
Diameter (mm):	0	0	0	0
Natural Infiltration Rates				
Heating Air Leakage Rate (ACH/H):	0.324			
Cooling Air Leakage Rate (ACH/H):	0.115			

TYPE: 38-1
LO# 72698



BASEMENT FLOOR ELEV. 'A' & 'B'

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	

ALL DRAWINGS, CALCULATIONS AND SPECIFICATIONS ARE THE PROPERTY OF HVAC DESIGNS LTD.© AND MAY NOT BE REPRODUCED, MODIFIED OR ALTERED WITHOUT EXPRESSED WRITTEN CONSENT. THE DRAWINGS ARE DATED AND USE OF THESE DRAWINGS AFTER ONE YEAR FROM THE DATED NOTED IS NOT AUTHORIZED. CONTRACTOR SHALL CHECK ALL CONDITIONS BEFORE PROCEEDING WITH WORK. LATEST MUNICIPAL APPROVED DRAWINGS ONLY TO BE USED DURING INSTALLATION OF HEATING SYSTEM. HVAC DESIGNS LTD. IS NOT LIABLE FOR ANY CLAIMS ARISING FROM UNAUTHORIZED USE OF THE DRAWINGS OR FROM ANY CHANGES TO ACCEPTED STANDARDS AND/OR THE ONTARIO BUILDING CODE.

Client

GOLD PARK HOMES

Project Name

ENCORE
BRAMPTON, ONTARIO

38-1

2189 sqft

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 45691 BTU/H
UNIT DATA

MAKE
LENNOX

MODEL
EL296UH070XE36B

INPUT
66 MBTU/H

OUTPUT
64 MBTU/H

COOLING
2.5 TONS

FAN SPEED
995 cfm @ 0.5" w.c.

OF RUNS S/A R/A FANS

3RD FLOOR
2ND FLOOR
1ST FLOOR
BASEMENT

10	4	2
7	2	2
4	1	0

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

Sheet Title

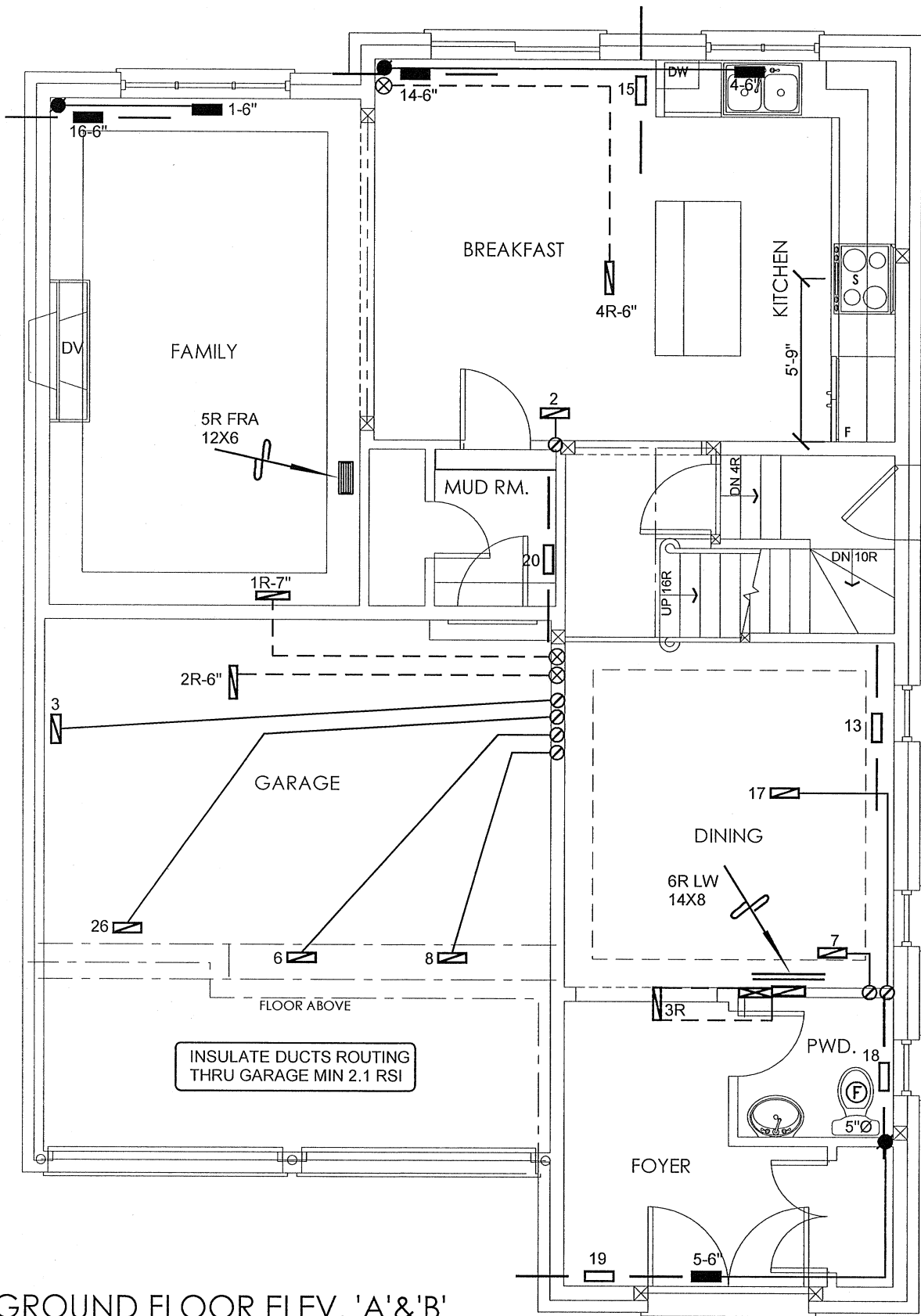
BASEMENT
HEATING
LAYOUT

Date
MAR/2016

Scale
3/16" = 1'-0"

BCIN# 19669

LO# 72698



PART. GROUND FLOOR ELEV. 'A' & 'B'

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.

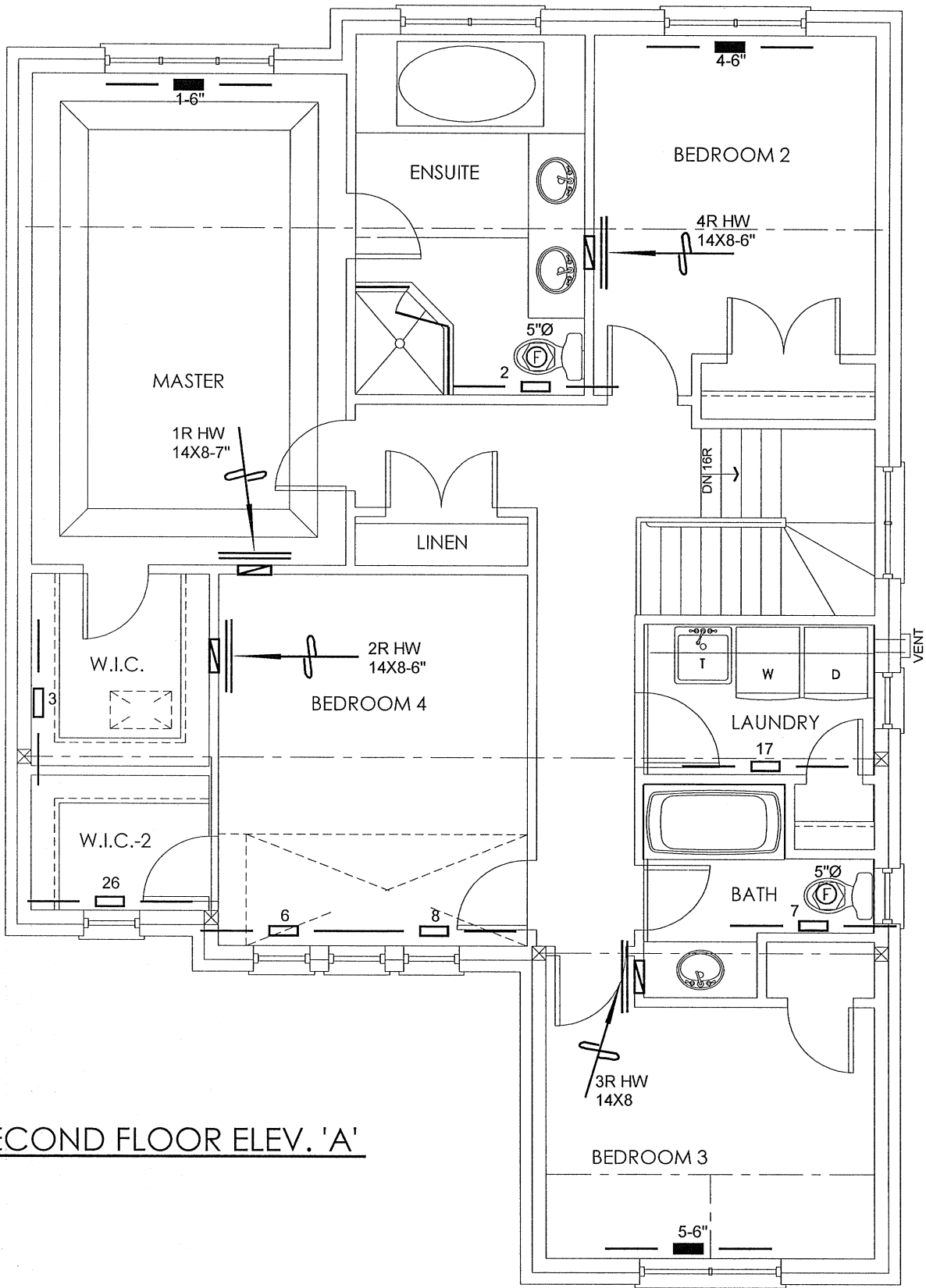
Michael O'Rourke
Michael O'Rourke, BCIN# 19669
HVAC DESIGNS LTD.

CSA-F280-12
PACKAGE A1

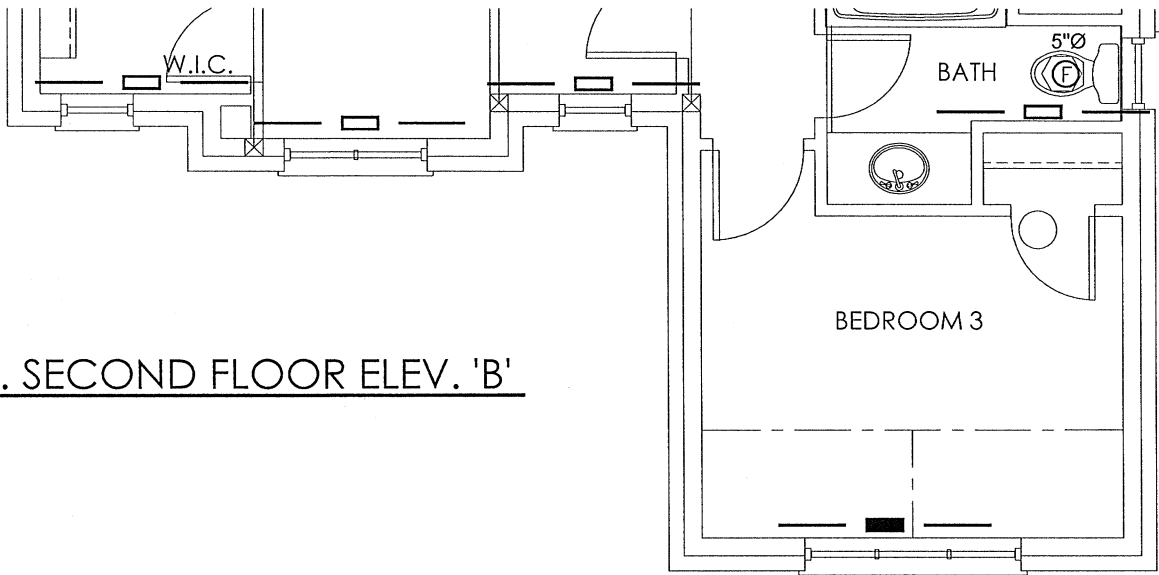
HVAC LEGEND								3.		
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	2.		
	FLOOR SUPPLY AIR GRILLE		6" SUPPLY AIR BOOT ABOVE		14"x8" RETURN AIR GRILLE		RETURN AIR STACK ABOVE	1.		
	FLOOR SUPPLY AIR GRILLE 6" BOOT		SUPPLY AIR STACK FROM 2nd FLOOR		30"x8" RETURN AIR GRILLE		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		 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/2016
ENCORE BRAMPTON, ONTARIO			Scale	3/16" = 1'-0"
			BCIN# 19669	
38-1	2189 sqft		LO#	72698



SECOND FLOOR ELEV. 'A'



PART. SECOND FLOOR ELEV. 'B'

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 ENCORE BRAMPTON, ONTARIO			Date	MAR/2016
			Scale	3/16" = 1'-0"
			BCIN# 19669	
38-1	2189 sqft	LO#	72698	