


Schedule 1: Designer Information

Type in the text you want to insert

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 MODEL CERTIFICATION		Unit no. N/A	Lot/con. N/A
Municipality KING CITY	Postal code N/A	Plan number/ other description N/A	
B. Individual who reviews and takes responsibility for design activities			
Name MICHAEL O'ROURKE		Firm HVAC DESIGNS LTD.	
Street address 65 CHURCH STREET SOUTH		Unit no.	Lot/con.
Municipality AJAX	Postal code L1S 6A7	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]			
<input type="checkbox"/> House	<input type="checkbox"/> √HVAC – House	<input type="checkbox"/> Building Structural	
<input type="checkbox"/> Small Buildings	<input type="checkbox"/> Building Services	<input type="checkbox"/> Plumbing – House	
<input type="checkbox"/> Large Buildings	<input type="checkbox"/> Detection, Lighting and Power	<input type="checkbox"/> Plumbing – All Buildings	
<input type="checkbox"/> Complex Buildings	<input type="checkbox"/> Fire Protection	<input type="checkbox"/> On-site Sewage Systems	
Description of designer's work Heat Loss/Gain Calculations Duct Sizing Residential Mechanical Ventilation Design Summary Residential System Design per Can/CSA-F280-M90		Model: 50-7 Project: CASTLES OF KING CITY	
D. Declaration of Designer			
I, <u>MICHAEL O'ROURKE</u> declare that (choose one as appropriate): (print name)			
<input type="checkbox"/> 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: _____			
<input type="checkbox"/> √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: <u>O.B.C. SENTENCE 3.2.4.1. (4)</u>			
<input type="checkbox"/> 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>JANUARY 28, 2014</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: CASTLES OF KING

BUILDER: ZANCOR HOMES

TYPE: 50-7

DATE: Jan-14

GFA: 4286

LO# 53733

CALCULATIONS per HRAI

PAGE 2 of 3

FURNACE CFM 1460
TOTAL HEAT LOSS 52221
AIR FLOW RATE CFM 27.96

FURNACE CFM 1460
TOTAL HEAT GAIN 42786
AIR FLOW RATE CFM 34.12

*LENNOX
ML195UH090XP48C 90
FAN SPEED
LOW 1285
MEDIUM 1460
DESIGN CFM = 1460

HI-BOY HI-EFFICIENCY
OUTPUT 85000 BTUH
CFM @ 5" E.S.P.

RUN COUNT	3rd	2nd	1st	Bas
S/A	0	13	13	4
R/A	0	4	3	1

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

All R/A runs 5"x2 unless noted otherwise on layout.

ROOM NAME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
MBR	1.57	1.22	1.85	2.35	2.19	1.73	0.78	2.04	2.19	1.57	1.89	1.41	0.00	2.15	2.15	2.15	1.19	0.91	1.35	2.15	2.90	2.90	2.90	2.90
CFM PER RUN HEAT	44	34	52	66	61	48	22	57	61	44	53	39	0	60	60	60	33	25	38	60	81	81	81	81
RM GAIN MBH	1.69	0.92	1.80	2.27	2.06	1.12	0.65	2.27	2.06	1.69	1.63	1.46	0.00	2.74	2.74	2.74	2.72	0.34	1.18	2.74	0.36	0.36	0.36	0.36
CFM PER RUN COOLING	58	31	61	77	70	38	22	77	70	58	56	50	0	94	94	94	93	11	40	94	12	12	12	12
ADJUSTED PRESSURE	0.125	0.13	0.125	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.125	0.13	0.13	0.13	0.13	0.13
EQUIVALENT LENGTH	190	170	190	190	170	150	150	190	150	170	150	130	0	140	190	140	160	160	160	130	130	140	160	190
TOTAL EFFECTIVE LH	246	224	244	233	227	191	258	219	215	215	192	179	1	182	220	184	223	203	203	184	162	188	171	236
ADJUSTED PRESSURE	0.05	0.06	0.05	0.05	0.05	0.06	0.07	0.05	0.06	0.06	0.07	0.07	12.5	0.07	0.06	0.07	0.06	0.06	0.06	0.07	0.08	0.07	0.07	0.05
ROUND DUCT SIZE	5	5	6	6	6	5	5	6	6	5	5	5	0	6	6	6	6	5	5	6	5	6	6	6
OUTLET GRILL SIZE	3X10	3X10	4X10	4X10	4X10	3X10	3X10	4X10	4X10	3X10	3X10	3X10	3X10	4X10	4X10	4X10	4X10	3X10	3X10	4X10	3X10	4X10	4X10	4X10
TRUNK	D	C	C	A	D	D	D	A	E	E	B	D		E	C	C	A	B	C	C	E	C	B	A

RUN #	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
RM LOSS MBH	0.00	0.00	0.00	1.22	0.20	0.00	1.41	1.86	0.82	1.14	1.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CFM PER RUN HEAT	0	0	0	34	6	0	39	52	23	32	32	0	0	0	0	0	0	0	0	0	0	0	0	0
RM GAIN MBH	0.00	0.00	0.00	0.92	0.10	0.00	1.46	0.83	0.88	1.16	1.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CFM PER RUN COOLING	0	0	0	31	4	0	50	28	30	40	40	0	0	0	0	0	0	0	0	0	0	0	0	0
ADJUSTED PRESSURE	0.125	0.13	0.125	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.125	0.13	0.13	0.13	0.13	0.13
EQUIVALENT LENGTH	1	1	1	43	41	1	38	52	45	42	56	1	1	1	1	1	1	1	1	1	1	1	1	1
TOTAL EFFECTIVE LH	1	1	1	223	201	1	228	212	205	212	226	1	1	1	1	1	1	1	1	1	1	1	1	1
ADJUSTED PRESSURE	12.5	12.5	12.5	0.06	0.06	12.5	0.05	0.06	0.06	0.06	0.06	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5
ROUND DUCT SIZE	0	0	0	5	5	0	5	5	5	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0
OUTLET GRILL SIZE	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10
TRUNK				C	B	C	C	D	A	A	A	A												

SUPPLY AIR TRUNK SIZE

TRUNK	STATIC PRESS.	ROUND DUCT	RECT DUCT
TRUNK A 324	0.05	10.3	12
TRUNK B 527	0.05	12.4	17
TRUNK C 420	0.05	11.4	15
TRUNK D 266	0.05	9.6	10
TRUNK E 512	0.05	12.3	17

RETURN AIR TRUNK SIZE

TRUNK	STATIC PRESS.	ROUND DUCT	RECT DUCT
TRUNK O	0.05	0	0
TRUNK P	0.05	0	0
TRUNK Q	0.05	0	0
TRUNK R	0.05	0	0
TRUNK S	0.05	0	0
TRUNK T	0.05	0	0
TRUNK U	0.05	0	0
TRUNK V	0.05	0	0
TRUNK W	0.05	0	0
TRUNK X	1200	0.05	16.9
TRUNK Y	310	0.05	10.2
TRUNK Z	0	0.05	0
DROP	1460	0.05	18.2

RETURN AIR #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
AIR VOLUME	175	135	125	155	400	155	155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PLENUM PRESSURE	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
ACTUAL DUCT LGH.	31	40	31	48	22	30	46	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
EQUIVALENT LENGTH	135	180	175	170	135	175	165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL EFFECTIVE LH	166	220	206	218	157	205	211	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
ADJUSTED PRESSURE	0.07	0.05	0.06	0.06	0.08	0.06	0.06	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
ROUND DUCT SIZE	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
INLET GRILL SIZE	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
INLET GRILL SIZE	14	14	14	14	30	14	14	14	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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.

MICHAEL O'ROURKE
BCIN: 19669

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.

INDIVIDUAL BCIN: 19669

LO # 53733

MICHAEL O'ROURKE

PAGE 3 of 3

TYPE: 50-7

SITE NAME: CASTLES OF KING

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	6	@ 10.6 cfm	63.6	cfm
Other Rooms	8	@ 10.6 cfm	84.8	cfm
Table 9.32.3.A.	TOTAL		222.6	cfm

PRINCIPAL VENTILATION CAPACITY REQUIRED 9.32.3.4.(1)

Master Bedroom	31.8 cfm
Two Bedrooms	47.7 cfm
Three Bedrooms	63.6 cfm
Four Bedrooms	79.5 cfm
Table 9.32.3.B.	TOTAL 79.5 cfm
More than 5 - Part 6	

SUPPLEMENTAL VENTILATION CAPACITY 9.32.3.5.

Total Ventilation Capacity	222.6	cfm
Less Principal Ventil. Capacity	120	cfm
Required Supplemental Capacity	102.6	cfm

PRINCIPAL EXHAUST FAN CAPACITY

Model:	VANEE 90H-V ECM	Location:	BSMT
120	cfm	<input checked="" type="checkbox"/>	HVI Approved
	0.6		sones

SUPPLEMENTAL FANS NUTONE

Location	Model	cfm	HVI	Sones
ENS	QTXEN050C	50	<input checked="" type="checkbox"/>	0.3
W/R	QTXEN050C	50	<input checked="" type="checkbox"/>	0.3
BATH	QTXEN050C	50	<input checked="" type="checkbox"/>	0.3
ENS-2	QTXEN050C	50	<input checked="" type="checkbox"/>	0.3

HEAT RECOVERY VENTILATOR 9.32.3.11.

Model:	VANEE 90H-V ECM
159	cfm high 65 cfm low
75	% Sensible Efficiency <input checked="" type="checkbox"/> HVI Approved
	@ 32 deg F (0 deg C)

LOCATION OF INSTALLATION

Lot:	Concession
Township	Plan:
Address	
Roll #	Building Permit #

BUILDER

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:

Michael O'Rourke

HRAI #

001820

Date:

January-14

ROOM USE	MBR	ENS	WIC	BED-2	BED-3	BED-4	BATH	ENS-3	LOFT	ENS-2	HALL	R2
EXP. WALL	36	32	15	29	35	14	9	0	0	25	21	0
RM AREA	301	213	195	208	285	268	153	102	0	152	128	0
CLG. HT.	11	11	10	11	11	10	10	10	10	10	9	9
COLD FLOOR	0	0	0	0	0	68	0	0	0	56	0	0
COLD CEILING	301	213	195	208	285	268	153	102	0	152	128	0
NO ATTIC EXPOSED CLG	0	0	0	0	0	0	0	0	0	0	0	0
GROSS WALL BAS ABOVE GRADE	0	0	0	0	0	0	0	0	0	0	0	0
GROSS WALL BAS BELOW GRADE	0	0	0	0	0	0	0	0	0	0	0	0
FACTORS												
GRS WALL AREA	396	352	150	319	385	140	90	0	0	250	189	0
GLAZING												
NORTH	19.50	13.96										
EASTWEST	19.50	33.00										
SOUTH	19.50	20.92										
SKYLT.	19.50	136.72										
DOORS	25.91	4.98										
NET EXPOSED WALL	2.92	0.56										
NET EXPOSED WALL BAS ABOVE GR	3.60	0.45										
EXPOSED CLG	1.48	0.70										
NO ATTIC EXPOSED CLG	2.42	1.15										
EXPOSED FLOOR	2.36	0.45										
EXPOSED WALL BAS BELOW GRADE	22.00											
BELOW GRADE HT LOSS FLOOR	1.08											
SUBTOTAL HT LOSS	1927	1067	1036	1772	3300	1299	590	151	0	1421	1538	0
SUB TOTAL HT GAIN	776	604	456	581	1082	426	193	50	0	466	504	0
HT LOSS AIR LEAKAGE FACTOR 0.328												
HT GAIN AIR LEAKAGE FACTOR 0.102												
HT GAIN PEOPLE/APPLANCES 240	2	1	1	1	1	1	1	0	0	1	1	0
TOTAL HT LOSS BTU/H	3383	1840	1795	2353	4382	1725	783	201	0	1886	2043	0
TOTAL HT GAIN x 1.3 BTU/H												

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.

INDIVIDUAL BCIN: 19689
MICHAEL O'ROURKE

ROOM USE	PAR	DIN	KTIFM	MUD	LAUN	WIR	FOY	DEN	R3	R4	WOB	BAS
EXP. WALL	12	26	84	27	10	20	11	36	0	0	0	0
RM AREA	0	0	0	0	160	0	0	0	0	0	0	0
CLG. HT.	10	10	12	10	10	10	10	10	9	9	9	9
COLD FLOOR	0	0	0	0	160	0	0	0	0	0	0	0
COLD CEILING	0	0	244	0	0	0	0	30	0	0	0	0
NO ATTIC EXPOSED CLG	0	0	0	0	0	0	0	0	0	0	0	0
GROSS WALL BAS ABOVE GRADE	0	0	0	0	0	0	0	0	0	0	0	0
GROSS WALL BAS BELOW GRADE	0	0	0	0	0	0	0	0	0	0	0	0
FACTORS												
GRS WALL AREA	120	260	1008	270	100	200	110	360	0	0	0	0
GLAZING												
NORTH	19.50	13.96										
EASTWEST	19.50	33.00										
SOUTH	19.50	20.92										
SKYLT.	19.50	136.72										
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NO ATTIC EXPOSED CLG	2.42	1.15										
EXPOSED FLOOR	2.36	0.45										
EXPOSED WALL BAS BELOW GRADE	22.00											
BELOW GRADE HT LOSS FLOOR	1.08											
SUBTOTAL HT LOSS	616	2120	6472	1399	895	684	1014	1722	0	0	0	0
SUB TOTAL HT GAIN	393	695	2122	459	293	224	332	565	0	0	0	0
HT LOSS AIR LEAKAGE FACTOR 0.328												
HT GAIN AIR LEAKAGE FACTOR 0.102												
HT GAIN PEOPLE/APPLANCES 240	1	0	6	1	5	0	1	1	0	0	0	0
TOTAL HT LOSS BTU/H	818	2815	8595	1857	1188	909	1346	2287	0	0	0	0
TOTAL HT GAIN x 1.3 BTU/H												

MODEL: 50-7
SFQT: 4286

LO# 53733

BUILDER: ZANCOR HOMES

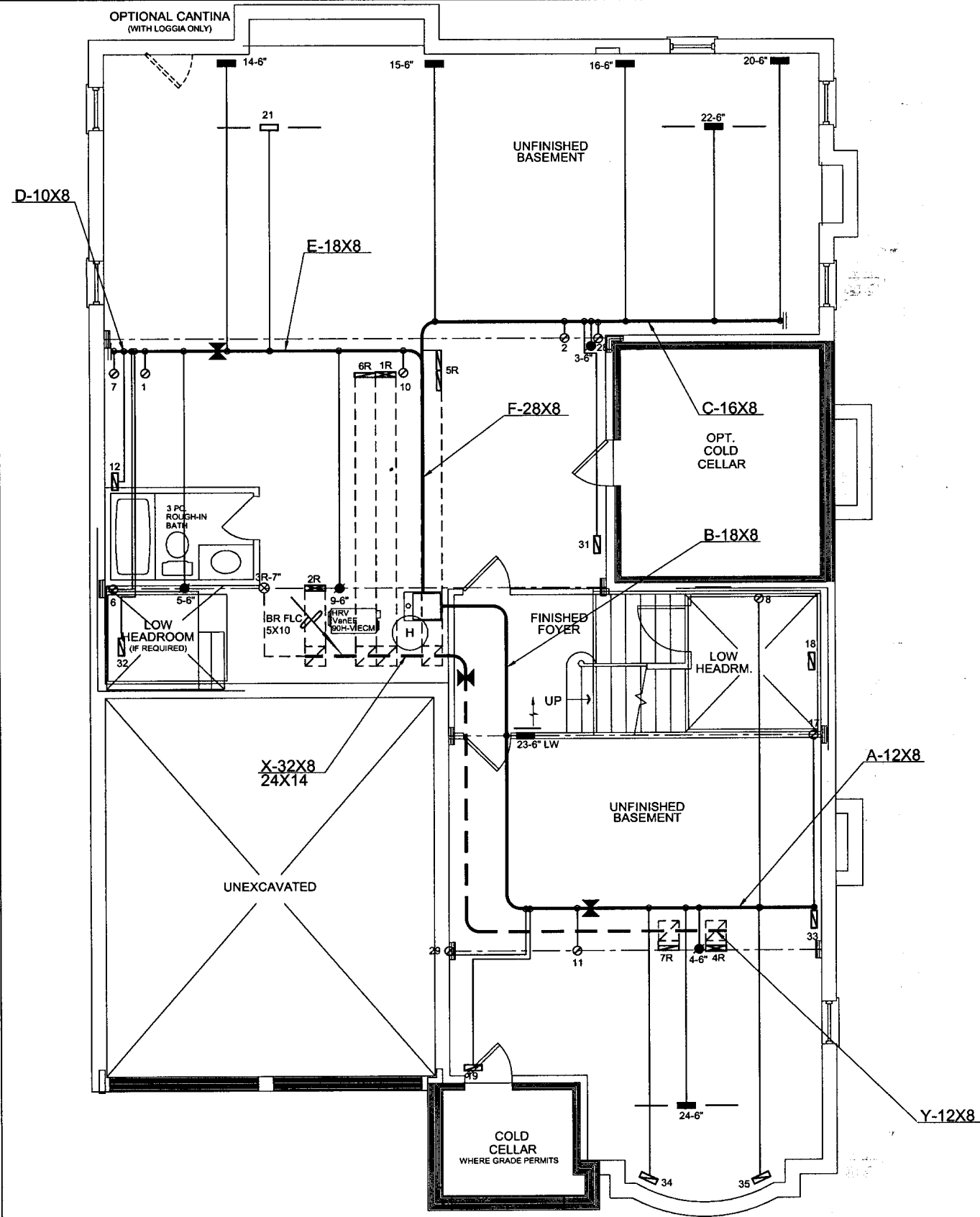
ENERGYSTAR 12.1

Component**Compliance Package****ZONE 1**

Ceiling with Attic Space Minimum RSI (R)-Value	50
Ceiling Without Attic Space Minimum RSI (R)-Value	31
Exposed Floor Minimum RSI (R)-Value	31
Walls Above Grade Minimum RSI (R)-Value	24
Basement Walls Minimum RSI (R)-Value	20
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
Heated Slab or Slab ≤ 600 mm below grade Minimum RSI (R)-Value	10
Windows and Sliding Glass Doors Maximum U-Value	ZONE C
Skylights Maximum U-Value	2.8
Space Heating Equipment Minimum AFUE	95%
HRV Minimum Efficiency	75%
Domestic Hot Water Heater Minimum EF	0.9

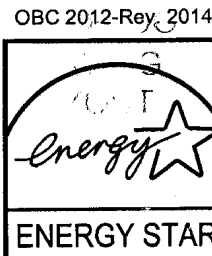


INDIVIDUAL BCIN: 19669
MICHAEL O'ROURKE



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.

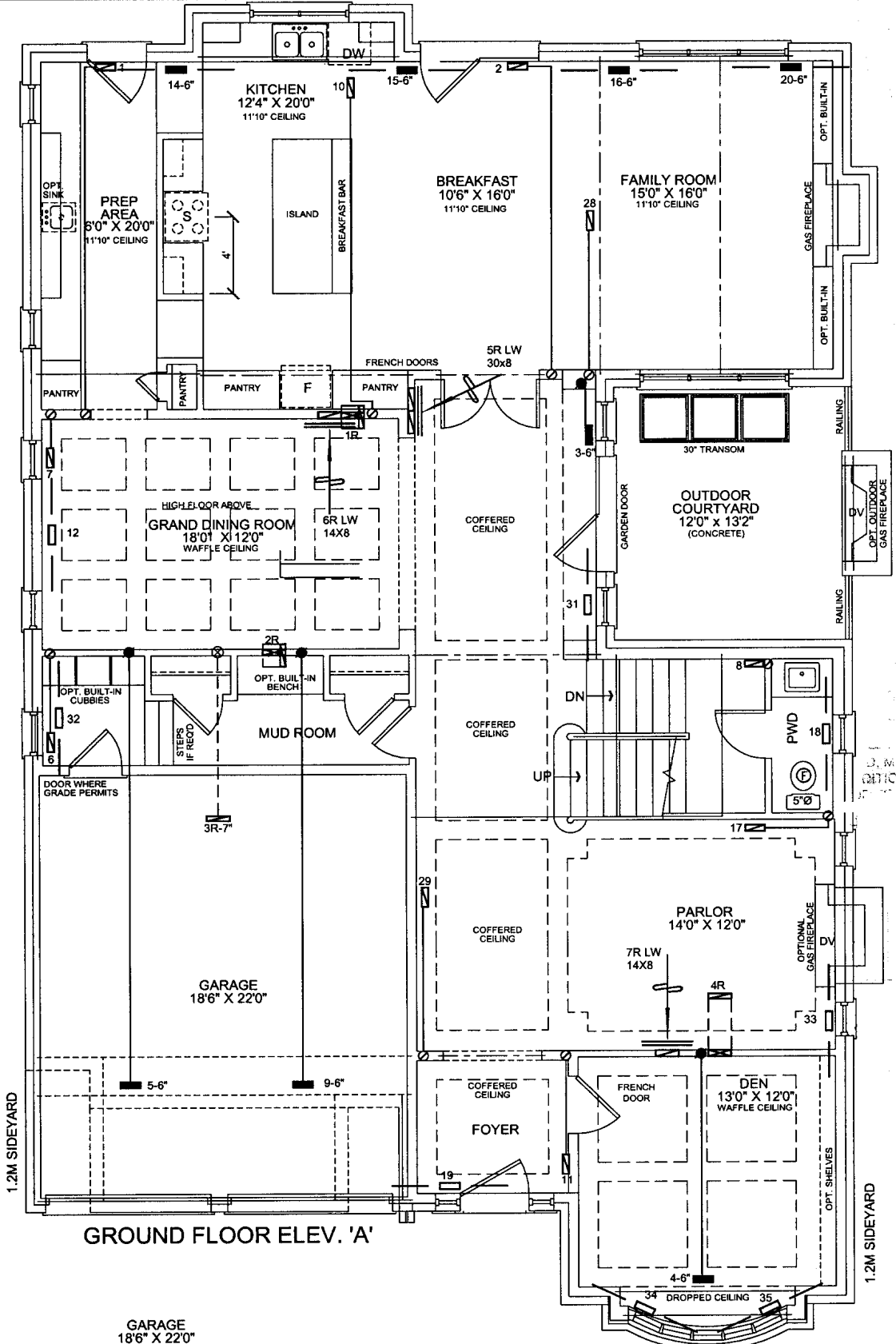
Michael O'Rourke
Michael O'Rourke, BCIN# 19669
HVAC DESIGNS LTD.



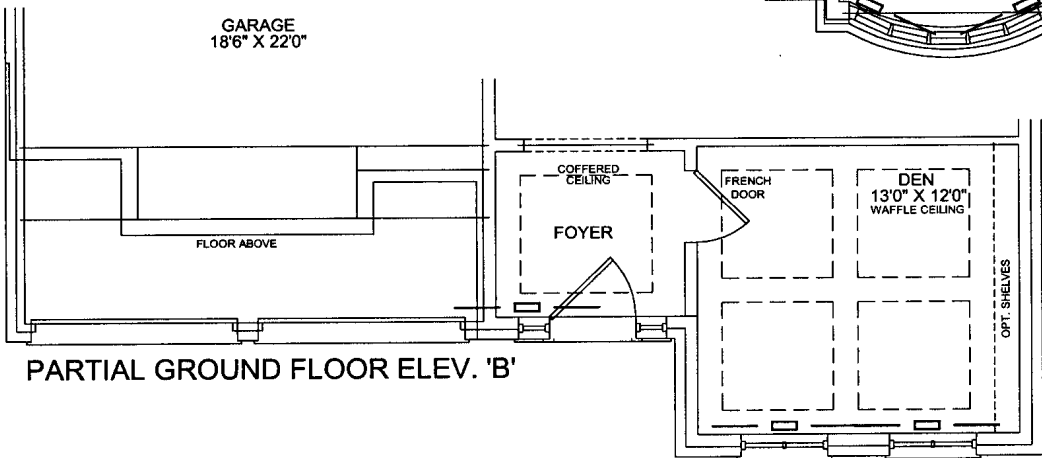
HVAC LEGEND								3.		
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	2.		
	FLOOR SUPPLY AIR GRILLE		6" SUPPLY AIR BOOT ABOVE		14"x8" RETURN AIR GRILLE		RETURN AIR STACK ABOVE	1.		
	FLOOR SUPPLY AIR GRILLE 6" BOOT		SUPPLY AIR STACK FROM 2nd FLOOR		30"x8" RETURN AIR GRILLE		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		

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 STANDARDS 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.

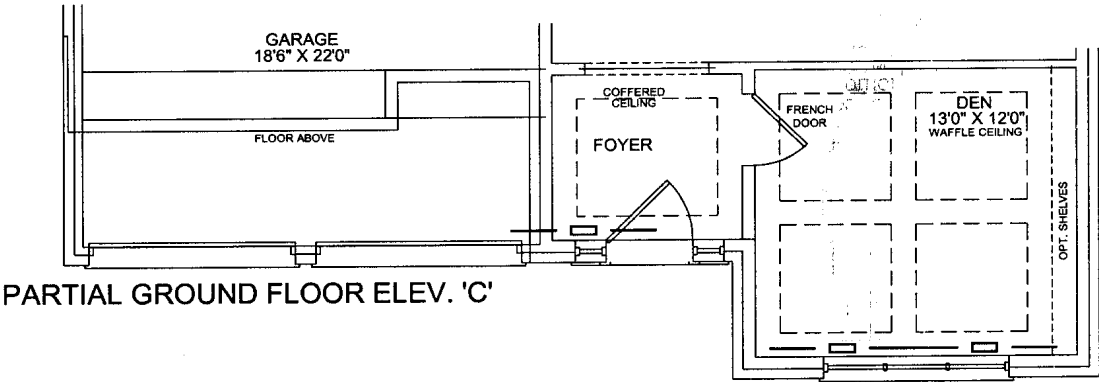
Client		<div><div>HVACDESIGNS LTD.</div><div>65 Church Street South - Ajax, Ontario L1S 6A7 Tel. 905.619.2300 - 905.420.5300 Fax 905.619.2375 Email: info@hvacdesigns.ca Web: www.hvacdesigns.ca Specializing in Residential Mechanical Design Services</div><div>Installation to comply with the latest Ontario 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.</div></div>	HEAT LOSS 70973 BTU/H		# OF RUNS S/A. R/A FANS			Sheet Title	
ZANCOR HOMES			UNIT DATA		3RD FLOOR			BASEMENT	
			MAKE		2ND FLOOR			HEATING	
			LENNOX		13 4 5			LAYOUT	
			MODEL		1ST FLOOR			Date	
			ML195UH090XP48C-90		13 3 2			JAN/2014	
			INPUT		BASEMENT			Scale	
			88 MBTU/H		4 1 0			3/16" = 1'-0"	
			OUTPUT		ALL S/A DIFFUSERS 4"x10"			BCIN# 19669	
			85 MBTU/H		UNLESS NOTED OTHERWISE ON LAYOUT. ALL S/A RUNS 5"Ø			LO# 53733	
COOLING		UNLESS NOTED OTHERWISE ON LAYOUT. UNDERCUT							
4.0 TONS		DOORS 1" min. FOR R/A							
FAN SPEED									
1460 cfm @ 0.5" w.c.									
Project Name									
THE CASTLES OF KING CITY									
KING CITY, ONTARIO									
50-7		4286 sqft							



GROUND FLOOR ELEV. 'A'



PARTIAL GROUND FLOOR ELEV. 'B'



PARTIAL GROUND FLOOR ELEV. '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, BCIN# 19669
HVAC DESIGNS LTD.

OBC 2012-Rev. 2014



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

ZANCOR HOMES

Project Name

THE CASTLES OF KING CITY
KING CITY, ONTARIO

HVAC DESIGNS LTD.

65 Church Street South - Ajax, Ontario
L1S 6A7 Tel. 905.619.2300 - 905.420.5300 Fax 905.619.2375
Email: info@hvacdesigns.ca
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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

FIRST FLOOR
HEATING
LAYOUT

Date

JAN/2014

Scale

3/16" = 1'-0"

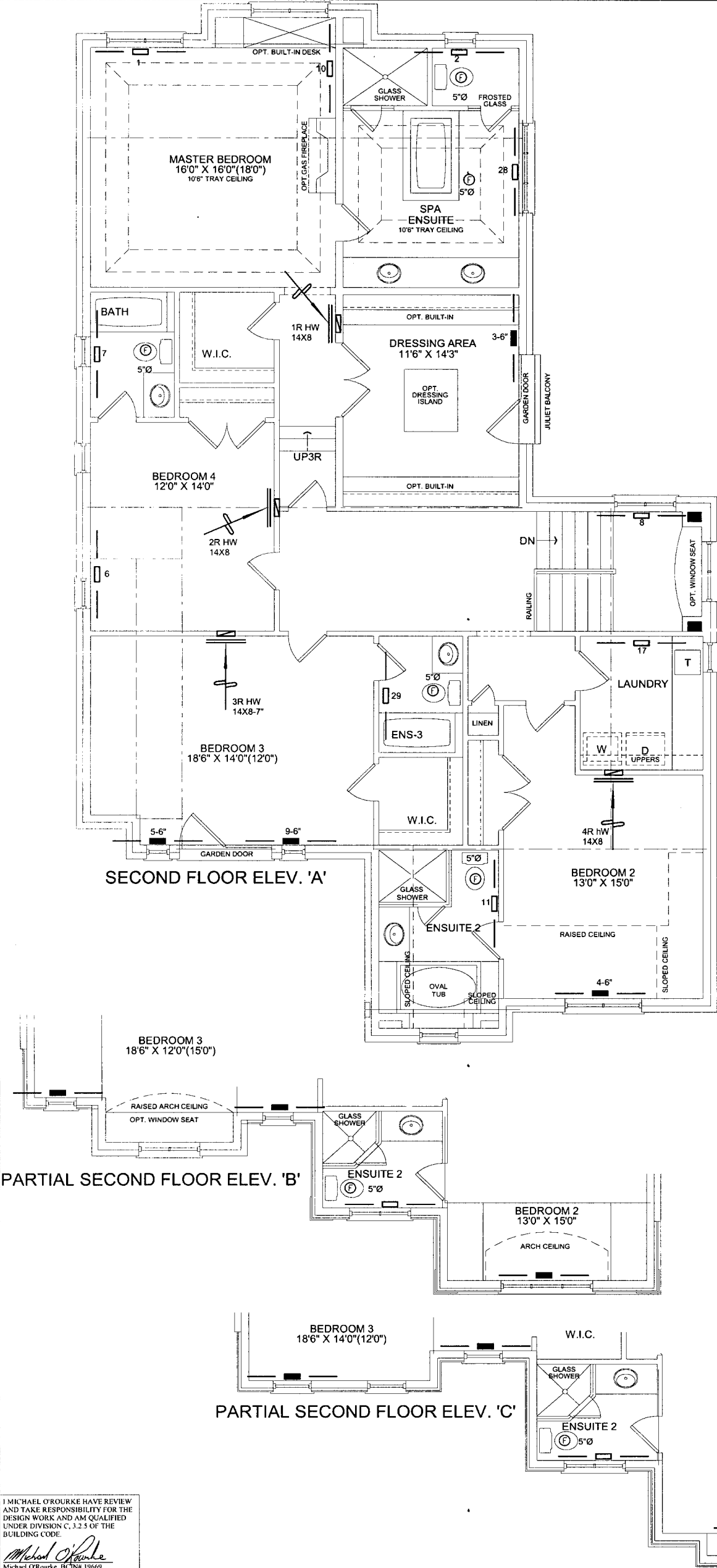
BCIN# 19669

LO#

53733

50-7

4286 sqft



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.

OBC 2012-Rev. 2014



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

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Client ZANCOR HOMES		 65 Church Street South - Ajax, Ontario L1S 6A7 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 SECOND FLOOR HEATING LAYOUT	
Project Name THE CASTLES OF KING CITY KING CITY, ONTARIO			Date JAN/2014	Scale 3/16" = 1'-0"
50-7 4286 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.	BCIN# 19669	
			LO#	53733

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.