

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@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: 4201- THE DEERBOURNE Project: PINE VALLEY & TESTON		
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.				
January 23, 2018				
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 & TESTON
BUILDER: GOLD PARK HOMES
TYPE: 4201- THE DEERBOURNE
DATE: Jan-18
LO# 77464
GFA: 2640
WINTER NATURAL AIR CHANGE RATE 0.335
HEAT LOSS AT °F. 76
HEAT GAIN AT °F. 16
CSA-F280-12
SB-12 PACKAGE A1

ROOM USE EXP. WALL CLG. HT.	MBR	ENS	BED-2	BED-3	BED-4	L-BATH	WINTER NATURAL AIR CHANGE RATE	HEAT LOSS AT °F.
GRS.WALL AREA	432	220	284	261	315	135		
GLAZING	LOSS	LOSS	LOSS	LOSS	LOSS	LOSS		
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	385	193	244	225	274	135		
NET EXPOSED BSMT WALL ABOVE GR	0	0	0	0	0	0		
EXPOSED CLG	0	0	0	0	0	0		
NO ATTIC 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	2550	1436	1516	1733	3222	686		
SUB TOTAL HT GAIN	1319	1324	1074	1154	1287	167		
LEVEL FACTOR / MULTIFIER	0.30	0.35	0.30	0.84	0.20	0.84		
AIR CHANGE HEAT LOSS	891	502	529	1453	2701	575		
AIR CHANGE HEAT GAIN	201	202	164	176	186	25		
DUCT LOSS	0	0	0	0	0	0		
DUCT GAIN	0	0	0	0	0	0		
HEAT GAIN PEOPLE	240	0	0	0	0	0		
HEAT GAIN APPLANCES/LIGHTS	480	0	0	0	0	0		
TOTAL HT LOSS BTU/H	3441	1938	2044	3186	6516	1261		
TOTAL HT GAIN x 1.3 BTU/H	3819	1983	3141	3260	8516	250		

ROOM USE EXP. WALL CLG. HT.	KIGID	PWD	FOY	MUD	BAS
GRS.WALL AREA	1240	110	473	77	1615
GLAZING	LOSS	LOSS	LOSS	LOSS	LOSS
NORTH	0	0	0	0	0
EAST	92	7	0	0	4
SOUTH	70	0	0	0	8
WEST	0	0	0	0	4
SKYL.T.	0	0	0	0	0
DOORS	0	0	0	0	0
NET EXPOSED WALL	1058	460	416	20	20
NET EXPOSED BSMT WALL ABOVE GR	0	0	0	0	0
EXPOSED CLG	421	0	210	0	505
NO ATTIC EXPOSED CLG	238	0	0	0	0
EXPOSED FLOOR	0	0	0	0	0
BASEMENT/CRAWL HEAT LOSS	0	0	0	0	0
SLAB ON GRADE HEAT LOSS	0	0	0	0	0
SUBTOTAL HT LOSS	9668	609	3565	759	9253
SUB TOTAL HT GAIN	7382	392	819	188	1028
LEVEL FACTOR / MULTIFIER	0.30	0.35	0.30	0.35	0.50
AIR CHANGE HEAT LOSS	3448	213	1246	265	11823
AIR CHANGE HEAT GAIN	1125	60	125	24	157
DUCT LOSS	0	0	0	0	0
DUCT GAIN	0	0	0	0	0
HEAT GAIN PEOPLE	240	0	0	0	0
HEAT GAIN APPLANCES/LIGHTS	938	0	0	0	938
TOTAL HT LOSS BTU/H	13316	821	4811	1025	21076
TOTAL HT GAIN x 1.3 BTU/H	12279	568	1227	1456	2759

TOTAL HEAT GAIN BTU/H: 35230 TONS: 2.94 TONS DUE TO VENTILATION LOAD BTU/H: 3181 STRUCTURAL HEAT LOSS: 59435 TOTAL COMBINED HEAT LOSS BTU/H: 62616

Michael O'Rourke

TYPE: 4201- THE DEERBOURNE
SITE NAME: PINE VALLEY & TESTON

LO # 77464

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	3 @ 10.6 cfm	31.8 cfm
Table 9.32.3.A.	TOTAL	159.0 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	159	cfm
Less Principal Ventil. Capacity	155	cfm
Required Supplemental Capacity	4.0	cfm

PRINCIPAL EXHAUST FAN CAPACITY	
Model: VANEE 65H	Location: BSMT
155.0 cfm	3.0 sones
☒ HVI Approved	

PRINCIPAL EXHAUST HEAT LOSS CALCULATION				
CFM	ΔT °F	FACTOR	% LOSS	
155.0 CFM	X 76 F	X 1.08	X	0.25

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

HEAT RECOVERY VENTILATOR		9.32.3.11.
Model: VANEE 65H		
155 cfm high	64 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:	January-18

CSA F280-12 Residential Heat Loss and Heat Gain Calculations																																									
Formula Sheet (For Air Leakage / Ventilation Calculation)																																									
LO#: 77464		Model: 4201- THE DEERBOURNE		Builder: GOLD PARK HOMES		Date: 01/23/2018																																			
Volume Calculation																																									
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>House Volume Level</th> <th>Floor Area (ft²)</th> <th>Floor Height (ft)</th> <th>Volume (ft³)</th> </tr> <tr> <td>Bsmt</td> <td>1791</td> <td>10</td> <td>17910</td> </tr> <tr> <td>First</td> <td>1791</td> <td>11</td> <td>19701</td> </tr> <tr> <td>Second</td> <td>1589</td> <td>9</td> <td>14301</td> </tr> <tr> <td>Third</td> <td>0</td> <td>9</td> <td>0</td> </tr> <tr> <td>Fourth</td> <td>0</td> <td>9</td> <td>0</td> </tr> <tr> <td colspan="2" style="text-align: right;">Total:</td> <td></td> <td>51,912.0 ft³</td> </tr> <tr> <td colspan="2" style="text-align: right;">Total:</td> <td></td> <td>1470.0 m³</td> </tr> </table>										House Volume Level	Floor Area (ft²)	Floor Height (ft)	Volume (ft³)	Bsmt	1791	10	17910	First	1791	11	19701	Second	1589	9	14301	Third	0	9	0	Fourth	0	9	0	Total:			51,912.0 ft³	Total:			1470.0 m³
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6.2.6 Sensible Gain due to Air Leakage																																									
$HG_{salb} = LR_{airc} \times \frac{V_b}{3.6} \times DTD_c \times 1.2$ <table style="width:100%;"> <tr> <td style="width:10%;">0.335</td> <td style="width:10%;">x</td> <td style="width:10%;">408.33</td> <td style="width:10%;">x</td> <td style="width:10%;">42 °C</td> <td style="width:10%;">x</td> <td style="width:10%;">1.2</td> <td style="width:10%;">=</td> <td style="width:10%;">6930 W</td> </tr> <tr> <td colspan="8"></td> <td>= 23646 Btu/h</td> </tr> </table>										0.335	x	408.33	x	42 °C	x	1.2	=	6930 W									= 23646 Btu/h														
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6.2.7 Sensible heat Gain due to Ventilation																																									
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155 CFM	x	76 °F	x	1.08	x	0.25	=	3181 Btu/h																																	
5.2.3.3 Calculation of Air Change Heat Loss for Each Room (Floor Multiplier Section)																																									
$HL_{atrr} = Level\ Factor \times HL_{airbv} \times \{ (HL_{agcr} + HL_{bgcr}) \div (HL_{agclevel} + HL_{bgclevel}) \}$ <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>Level</th> <th>Level Factor (LF)</th> <th>HLairbv Air Leakage + Ventilation Heat Loss (Btu/h)</th> <th>Level Conductive Heat Loss: (HL_{level})</th> <th>Air Leakage Heat Loss Multiplier (LF x HLairbv / HLlevel)</th> </tr> <tr> <td>1</td> <td>0.5</td> <td rowspan="5" style="text-align: center;">23,646</td> <td style="text-align: center;">9,253</td> <td style="text-align: center;">1.278</td> </tr> <tr> <td>2</td> <td>0.3</td> <td style="text-align: center;">20,302</td> <td style="text-align: center;">0.349</td> </tr> <tr> <td>3</td> <td>0.2</td> <td style="text-align: center;">5,642</td> <td style="text-align: center;">0.838</td> </tr> <tr> <td>4</td> <td>0</td> <td style="text-align: center;">0</td> <td style="text-align: center;">0.000</td> </tr> <tr> <td>5</td> <td>0</td> <td style="text-align: center;">0</td> <td style="text-align: center;">0.000</td> </tr> </table> *HLairbv = Air leakage heat loss + ventilation heat loss *For a balanced or supply only ventilation system HLairve = 0										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	23,646	9,253	1.278	2	0.3	20,302	0.349	3	0.2	5,642	0.838	4	0	0	0.000	5	0	0	0.000						
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HEAT LOSS AND GAIN SUMMARY SHEET**MODEL:** 4201- THE DEERBOURNE**BUILDER:** GOLD PARK HOMES**SFQT:** 2640**LO#** 77464**SITE:** PINE VALLEY & TESTON**DESIGN ASSUMPTIONS**

HEATING	°F	COOLING	°F
OUTDOOR DESIGN TEMP.	-4	OUTDOOR DESIGN TEMP.	88
INDOOR DESIGN TEMP.	72	INDOOR DESIGN TEMP. (MAX 75°F)	72

BUILDING DATA

ATTACHMENT:	DETACHED	# OF STORIES (+BASEMENT):	3
FRONT FACES:	NORTH	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):	51912.0	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:	7.5 ft
LENGTH: 68.0 ft	WIDTH: 33.0 ft	EXPOSED PERIMETER:	202.0 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	0.96	-
HRV Minimum Efficiency	75%	-
Domestic Hot Water Heater Minimum EF	0.8	-

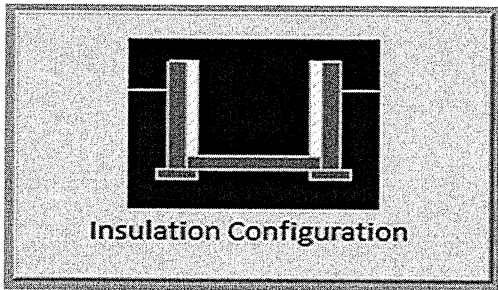
INDIVIDUAL BCIN: 19669

MICHAEL O'ROURKE



Residential Foundation Thermal Load Calculator

Supplemental tool for CAN/CSA-F280

Weather Station Description		
Province:	Ontario	
Region:	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):	20.7	 Insulation Configuration
Floor Width (m):	10.1	
Exposed Perimeter (m):	0.0	
Wall Height (m):	3.0	
Depth Below Grade (m):	2.29	
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):		1931

TYPE: 4201- THE DEERBOURNE
LO# 77464

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):	6.86			
Building Configuration				
Type:	Detached			
Number of Stories:	Two			
Foundation:	Full			
House Volume (m ³):	1470.0			
Air Leakage/Ventilation				
Air Tightness Type:	Present (1961-) (3.57 ACH)			
Custom BDT Data:	ELA @ 10 Pa.	1959.5 cm ²		
	3.57	ACH @ 50 Pa		
Mechanical Ventilation (L/s):	Total Supply	Total Exhaust		
	73.2	73.2		
Flue Size				
Flue #:	#1	#2	#3	#4
Diameter (mm):	0	0	0	0
Natural Infiltration Rates				
Heating Air Leakage Rate (ACH/H):	0.335			
Cooling Air Leakage Rate (ACH/H):	0.122			

TYPE: 4201- THE DEERBOURNE
LO# 77464

CSA-F280-12

PACKAGE A1

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

A-10X8

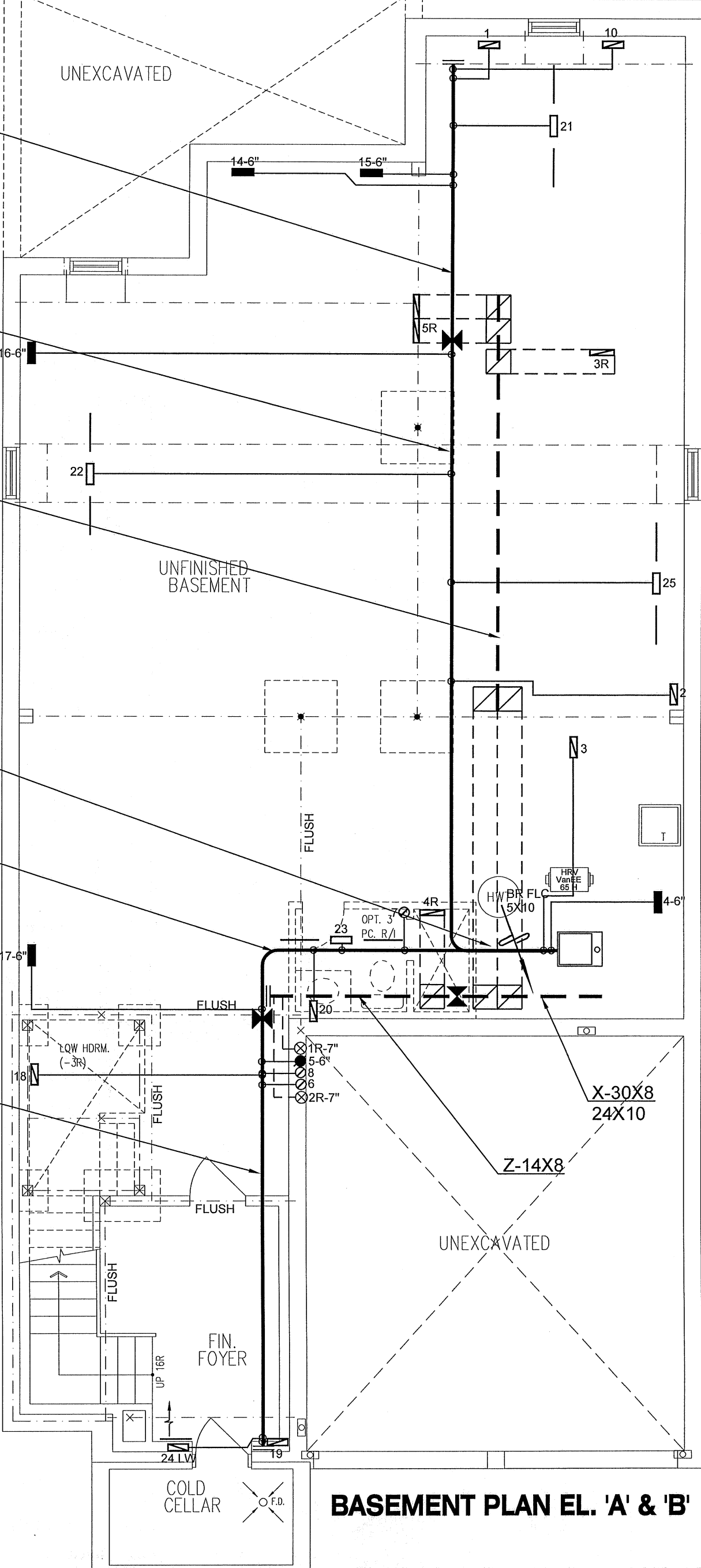
B-14X8

Y-18X8

E-26X8

D-14X8

C-10X8



BASEMENT PLAN EL. 'A' & 'B'

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Client	GOLD PARK HOMES
Project Name	PINE VALLEY & TESTON VAUGHAN, ONTARIO
	THE DEERBOURNE 4201 2640 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 62616 BTU/H UNIT DATA		# OF RUNS S/A R/A FANS		
MAKE	LENNOX	3RD FLOOR		
MODEL	EL296UH070XE36B	2ND FLOOR	4	2
INPUT	66 MBTU/H	1ST FLOOR	12	3
OUTPUT	64 MBTU/H	BASEMENT	5	1
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		
FAN SPEED	1100 cfm @ 0.6" w.c.			

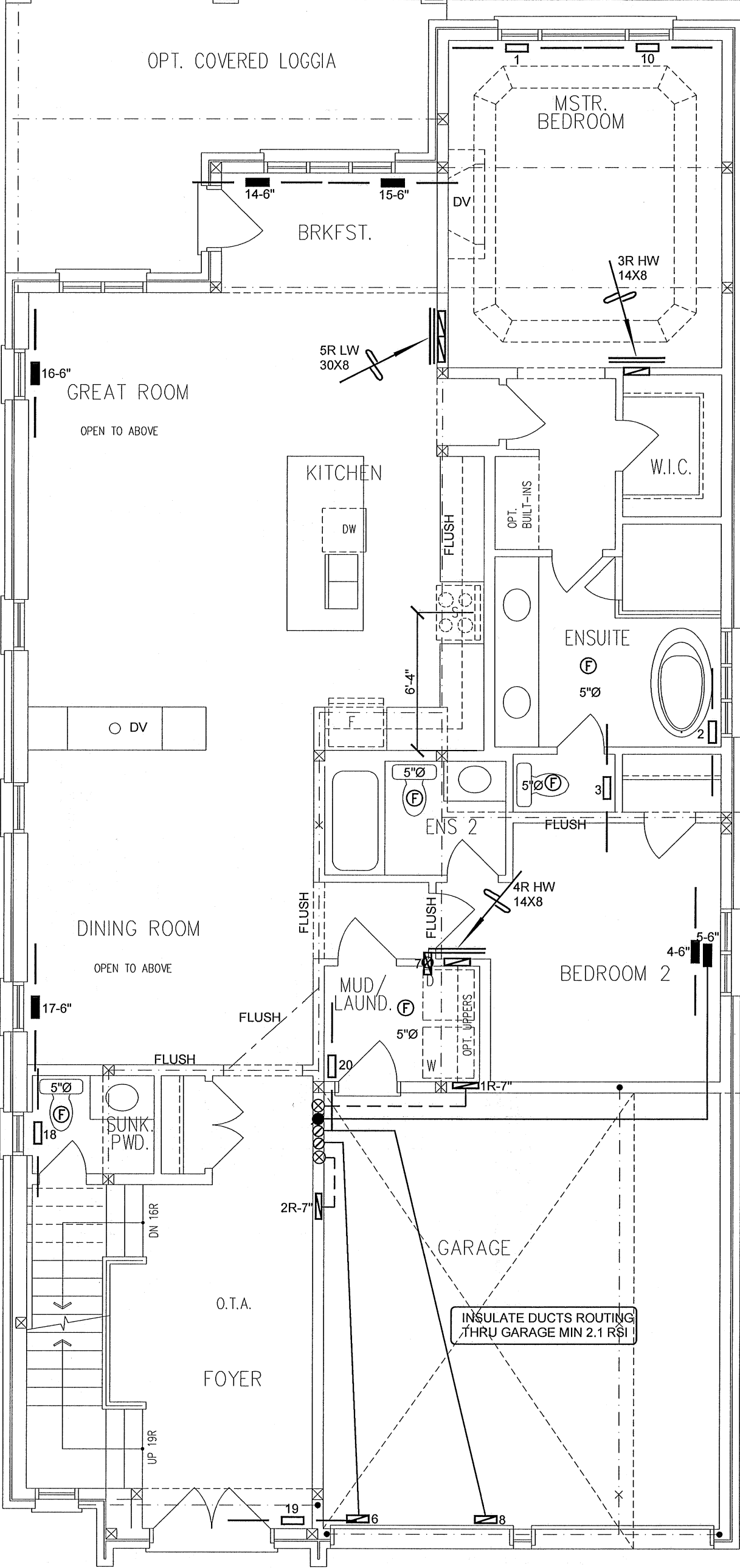
Sheet Title		BASEMENT HEATING LAYOUT
Date	JAN/2018	
Scale	3/16" = 1'-0"	
	BCIN# 19669	
LO#	77464	

CSA-F280-12
PACKAGE A1

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				
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	
	SUPPLY AIR GRILLE		6" SUPPLY AIR BOOT ABOVE	2.
	SUPPLY AIR GRILLE 6" BOOT		SUPPLY AIR STACK FROM 2nd FLOOR	1.
	SUPPLY AIR BOOT ABOVE		6" SUPPLY AIR STACK 2nd FLOOR	
	SUPPLY AIR GRILLE		6" SUPPLY AIR BOOT ABOVE	
	30"x6" RETURN AIR GRILLE		RETURN AIR STACK ABOVE	
	30"x6" RETURN AIR GRILLE		RETURN AIR STACK 2nd FLOOR	
	SUPPLY AIR GRILLE		REDUCER	
			REVISIONS	
			Description	Date



GROUND FLOOR PLAN EL. 'A' & 'B'

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Client
GOLD PARK HOMES

Project Name
**PINE VALLEY & TESTON
VAUGHAN, ONTARIO**

**THE DEERBOURNE
4201**

2640 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.

Sheet Title
**FIRST FLOOR
HEATING
LAYOUT**

Date
JAN/2018

Scale
3/16" = 1'-0"

BCIN# 19669

LO# **77464**

CSA-F280-12

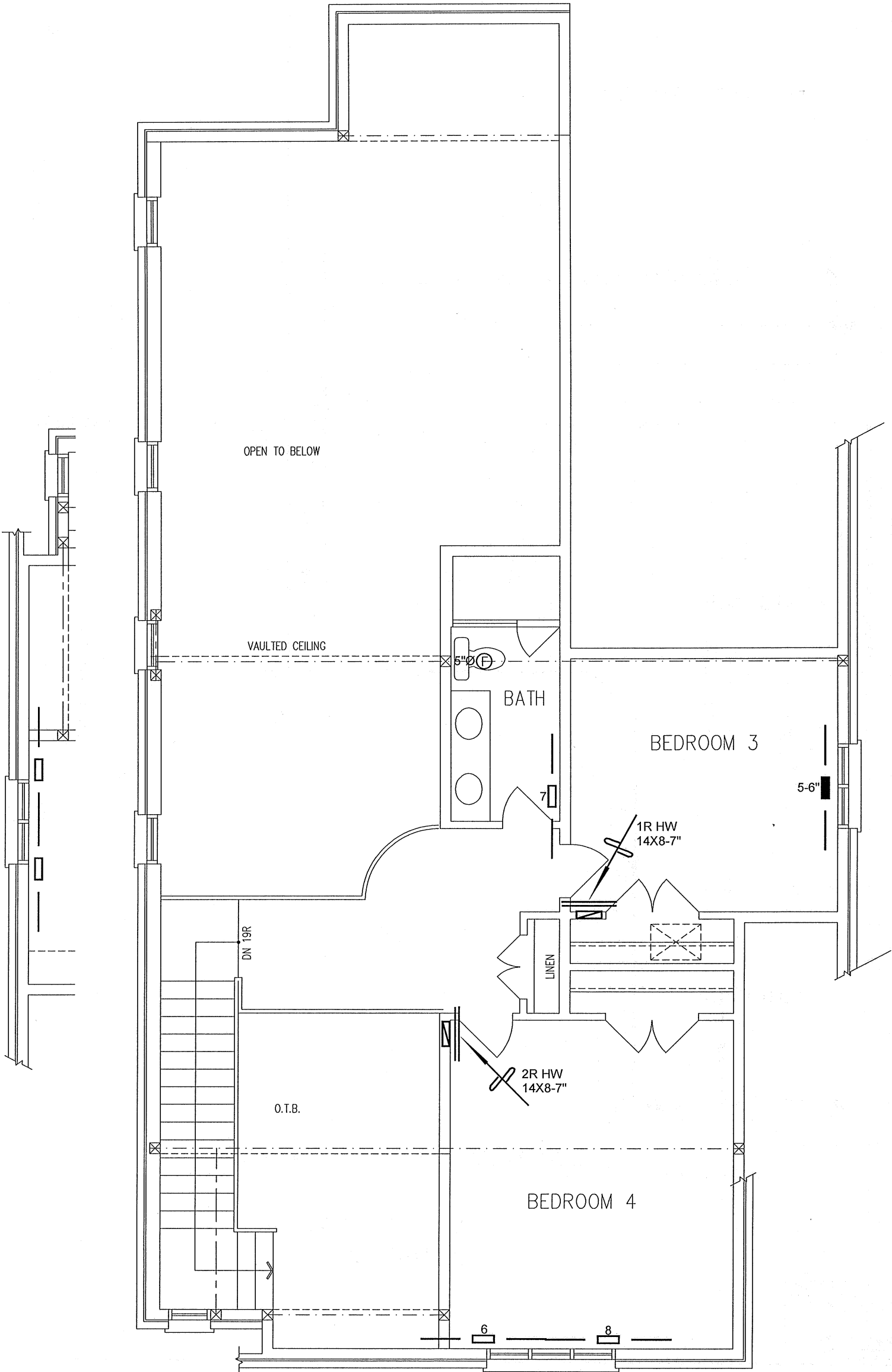
PACKAGE A1

I MICHAEL O'ROURKE HAVE REVIEW
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				
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	
	SUPPLY AIR GRILLE		6" SUPPLY AIR BOOT ABOVE	2.
	SUPPLY AIR GRILLE 6" BOOT		SUPPLY AIR STACK FROM 2nd FLOOR	1.
	SUPPLY AIR BOOT ABOVE		6" SUPPLY AIR STACK 2nd FLOOR	
HVAC LEGEND				
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	
	14"x8" RETURN AIR GRILLE		RETURN AIR STACK ABOVE	
	30"x8" RETURN AIR GRILLE		RETURN AIR STACK 2nd FLOOR	
	FRA- FLOOR RETURN AIR GRILLE		REDUCER	
REVISIONS				
No.	Description	Date		

PART LOFT FLOOR PLAN EL. 'B'



LOFT FLOOR PLAN EL. 'A'

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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			Date	JAN/2018
PINE VALLEY & TESTON VAUGHAN, ONTARIO			Scale	3/16" = 1'-0"
THE DEERBOURNE 4201			BCIN# 19669	
2640 sqft			LO#	77464