


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 INNISFIL	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@hvacadesigns.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"/> Small Buildings <input type="checkbox"/> Large Buildings <input type="checkbox"/> Complex Buildings <input checked="" type="checkbox"/> HVAC – House <input type="checkbox"/> Building Services <input type="checkbox"/> Detection, Lighting and Power <input type="checkbox"/> Fire Protection <input type="checkbox"/> Building Structural <input type="checkbox"/> Plumbing – House <input type="checkbox"/> Plumbing – All Buildings <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 CSA-F280-12		Model: 48-3 WOB Project: ALCONA	
D. Declaration of Designer			
I, <u>MICHAEL O'ROURKE</u> (print name)		declare that (choose one as appropriate):	
<input type="checkbox"/> 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: _____			
<input checked="" 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 and qualification: <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.			
June 23, 2017 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



375 Finley Ave. Suite 202 Ajax, ON L1S 2E2
 Tel: 905.619.2300 Fax: 905.619.2375
 Web: www.hvacdesigns.ca E-mail: info@hvacdesigns.ca

Town of Innisfil Certified Model
 02/01/2018 11:00:14 AM kgervais

SITE NAME: ALCONA BUILDER: BAYVIEW WELLINGTON	WOB		GFA: 3589		DATE: JUN-17		WINTER NATURAL AIR CHANGE RATE		SUMMER NATURAL AIR CHANGE RATE		HEAT LOSS AT T. 83		HEAT GAIN AT T. 12		CSA-P280-12	
	TYPE: 48-3	ENS	WIC	BED-2	BED-3	BED-4	BATH	BED-5	ENS-3	ENS-4	HEAT LOSS AT T. 83	HEAT GAIN AT T. 12	ENS-4	SB-12 PACKAGE A1		
ROOM USE	31	9	81	108	126	256	198	108	72	64	6	9	64			
EXP. WALL	31	9	81	108	126	256	198	108	72	64	6	9	64			
CLG. HT.	31	9	81	108	126	256	198	108	72	64	6	9	64			
FACTORS	279	81	81	108	126	256	198	108	72	64	6	9	64			
GRS. WALL AREA	340	81	81	108	126	256	198	108	72	64	6	9	64			
GLAZING	0	0	0	0	0	0	0	0	0	0	0	0	0			
NORTH	0	0	0	0	0	0	0	0	0	0	0	0	0			
EAST	0	0	0	0	0	0	0	0	0	0	0	0	0			
SOUTH	0	0	0	0	0	0	0	0	0	0	0	0	0			
WEST	0	0	0	0	0	0	0	0	0	0	0	0	0			
SKYLT.	0	0	0	0	0	0	0	0	0	0	0	0	0			
DOORS	0	0	0	0	0	0	0	0	0	0	0	0	0			
NET EXPOSED WALL	4.9	0.7	3.08	1506	221	253	1236	181	81	396	58	92	449			
NET EXPOSED BSMT WALL ABOVE GR	3.9	0.5	0	0	0	0	0	0	0	0	0	0	0			
EXPOSED CLG	1.4	0.6	329	482	190	228	320	132	63	89	36	228	320			
NO ATTIC EXPOSED CLG	3.0	1.2	0	0	0	0	0	0	0	0	0	0	0			
EXPOSED FLOOR	2.8	0.4	0	0	0	0	0	0	0	0	0	0	0			
BASEMENT/CRAWL HEAT LOSS	0	0	0	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	0	0	0			
SUB TOTAL HT LOSS	2712	1735	484	1304	1941	1536	1769	805	200	205	0.20	0.37	285			
LEVEL FACTOR/ MULTIPPLIER	0.20	0.37	0.20	0.37	0.20	0.37	0.20	0.37	0.20	0.37	0.20	0.37	285			
AIR CHANGE HEAT LOSS	1047	113	182	489	728	100	243	62	40	0	0	0	19			
AIR CHANGE HEAT GAIN	0	0	0	179	287	272	88	0	0	0	0	0	0			
DUCT LOSS	0	0	0	0	0	0	0	0	0	0	0	0	0			
DUCT GAIN	0	0	0	0	0	0	0	0	0	0	0	0	0			
HEAT GAIN PEOPLE	2	480	0	1	240	240	0	1	240	0	0	0	0			
HEAT GAIN APPLIANCES/LIGHTS	0	845	0	845	845	845	0	0	845	0	0	0	0			
TOTAL HT LOSS BTU/H	3730	4125	666	1973	2935	3881	2875	1226	2251	781	396	368	1887			
TOTAL HT GAIN X 1.3 BTU/H			1463	2274	3881	4072	4072	2251	2251	396	396	368	1887			

ROOM USE	WOB		GFA: 3589		DATE: JUN-17		WINTER NATURAL AIR CHANGE RATE		SUMMER NATURAL AIR CHANGE RATE		HEAT LOSS AT T. 83		HEAT GAIN AT T. 12		CSA-P280-12	
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GLAZING	0	0	0	0	0	0	0	0	0	0	0	0	0			
NORTH	0	0	0	0	0	0	0	0	0	0	0	0	0			
EAST	0	0	0	0	0	0	0	0	0	0	0	0	0			
SOUTH	0	0	0	0	0	0	0	0	0	0	0	0	0			
WEST	0	0	0	0	0	0	0	0	0	0	0	0	0			
SKYLT.	0	0	0	0	0	0	0	0	0	0	0	0	0			
DOORS	0	0	0	0	0	0	0	0	0	0	0	0	0			
NET EXPOSED WALL	4.9	0.7	3.08	1506	221	253	1236	181	81	396	58	92	449			
NET EXPOSED BSMT WALL ABOVE GR	3.9	0.5	0	0	0	0	0	0	0	0	0	0	0			
EXPOSED CLG	1.4	0.6	329	482	190	228	320	132	63	89	36	228	320			
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DUCT GAIN	0	0	0	0	0	0	0	0	0	0	0	0	0			
HEAT GAIN PEOPLE	2	480	0	1	240	240	0	1	240	0	0	0	0			
HEAT GAIN APPLIANCES/LIGHTS	0	845	0	845	845	845	0	0	845	0	0	0	0			
TOTAL HT LOSS BTU/H	3730	4125	666	1973	2935	3881	2875	1226	2251	781	396	368	1887			
TOTAL HT GAIN X 1.3 BTU/H			1463	2274	3881	4072	4072	2251	2251	396	396	368	1887			

TOTAL HEAT GAIN BTU/H: 48690 TONS: 4.06
 LOSS DUE TO VENTILATION LOAD BTU/H: 3122
 STRUCTURAL HEAT LOSS: 7322
 TOTAL COMBINED HEAT LOSS BTU/H: 76354

Michael O'Rourke

INDIVIDUAL BCIN: 13669
 MICHAEL O'ROURKE

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.

TYPE: 48-3
SITE NAME: ALCONA

LO # 74605
WOB

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	4	@ 10.6 cfm	42.4	cfm
Kitchen & Bathrooms	6	@ 10.6 cfm	63.6	cfm
Other Rooms	7	@ 10.6 cfm	74.2	cfm
Table 9.32.3.A.		TOTAL	222.6	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
	TOTAL	318.0	cfm

SUPPLEMENTAL VENTILATION CAPACITY 9.32.3.5.

Total Ventilation Capacity	222.6	cfm
Less Principal Ventil. Capacity	139	cfm
Required Supplemental Capacity	83.6	cfm

PRINCIPAL EXHAUST FAN CAPACITY

Model: VANE6 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 83 F	X 1.08	X 0.25

SUPPLEMENTAL FANS NUTONE

Location	Model	cfm	HVI	Sones
ENS	QTXEN050C	50	<input checked="" type="checkbox"/>	0.3
BATH	QTXEN050C	50	<input checked="" type="checkbox"/>	0.3
ENS-4	QTXEN050C	60	<input checked="" type="checkbox"/>	0.3
W/R	QTXEN050C	50	<input checked="" type="checkbox"/>	0.3

HEAT RECOVERY VENTILATOR 9.32.3.11.

Model: VANE6 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: BAYVIEW WELLINGTON

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: June-17

HEAT LOSS AND GAIN SUMMARY SHEET

MODEL: 48-3	WOB	BUILDER: BAYVIEW WELLINGTON
SFQT: 3599	LO# 74605	SITE: ALCONA

DESIGN ASSUMPTIONS

HEATING	°F	COOLING	°F
OUTDOOR DESIGN TEMP.	-11	OUTDOOR DESIGN TEMP.	84
INDOOR DESIGN TEMP.	72	INDOOR DESIGN TEMP. (MAX 75°F)	72

BUILDING DATA

ATTACHMENT:	DETACHED	# 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):	49490.0	ASSUMED (Y/N):	Y
INTERNAL SHADING:	BLINDS/CURTAINS	ASSUMED OCCUPANTS:	6
INTERIOR LIGHTING LOAD (Btu/h/ft²):	1.75	DC BRUSHLESS MOTOR (Y/N):	Y
FOUNDATION CONFIGURATION	BCIN_1	DEPTH BELOW GRADE:	6.0 ft
LENGTH: 57.0 ft	WIDTH: 40.0 ft	EXPOSED PERIMETER:	142.0 ft
WOB INSULATION CONFIGURATION	SCB_9	WOB EXPOSED PERIMETER	52.0 ft

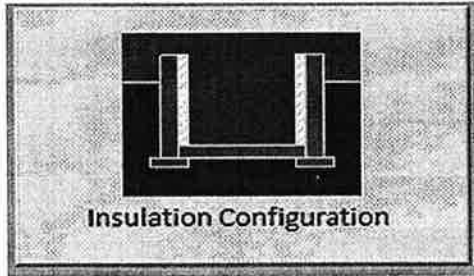
Component	2012 OBC - COMPLIANCE PACKAGE	
	Compliance Package A1	
	Nominal	Min. Eff.
Ceiling with Attic Space Minimum RSI (R)-Value	60	59.22
Ceiling Without Attic Space Minimum RSI (R)-Value	31	27.65
Exposed Floor Minimum RSI (R)-Value	31	29.8
Walls Above Grade Minimum RSI (R)-Value	22	17.03
Basement 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:	Barrie	
Site Description		
Soil Conductivity:	Normal conductivity: dry sand, loam, clay	
Water Table:	Normal (7-10 m, 23-33 ft)	
Foundation Dimensions		
Floor Length (m):	4.9	 <p style="text-align: center;">Insulation Configuration</p>
Floor Width (m):	12.2	
Exposed Perimeter (m):	43.3	
Wall Height (m):	2.7	
Depth Below Grade (m):	1.57	
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):	860	

TYPE: 48-3
 LO# 74605

WOB

Air Infiltration Residential Load Calculator

Supplemental tool for CAN/CSA-F280

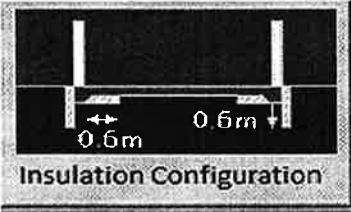
Weather Station Description				
Province:	Ontario			
Region:	Barrie			
Weather Station Location:	Open flat terrain, grass			
Anemometer height (m):	10			
Local Shielding				
Building Site:	Suburban, forest			
Walls:	Heavy			
Flue:	Heavy			
Highest Ceiling Height (m):	8.53			
Building Configuration				
Type:	Detached			
Number of Stories:	Two			
Foundation:	Full			
House Volume (m ³):	1401.4			
Air Leakage/Ventilation				
Air Tightness Type:	Present (1961-) (3.57 ACH)			
Custom BDT Data:	ELA @ 10 Pa.	1868.1 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):	0.391			
Cooling Air Leakage Rate (ACH/H):	0.102			

TYPE: 48-3
 LO# 74605

WOB

Residential Foundation Thermal Load Calculator

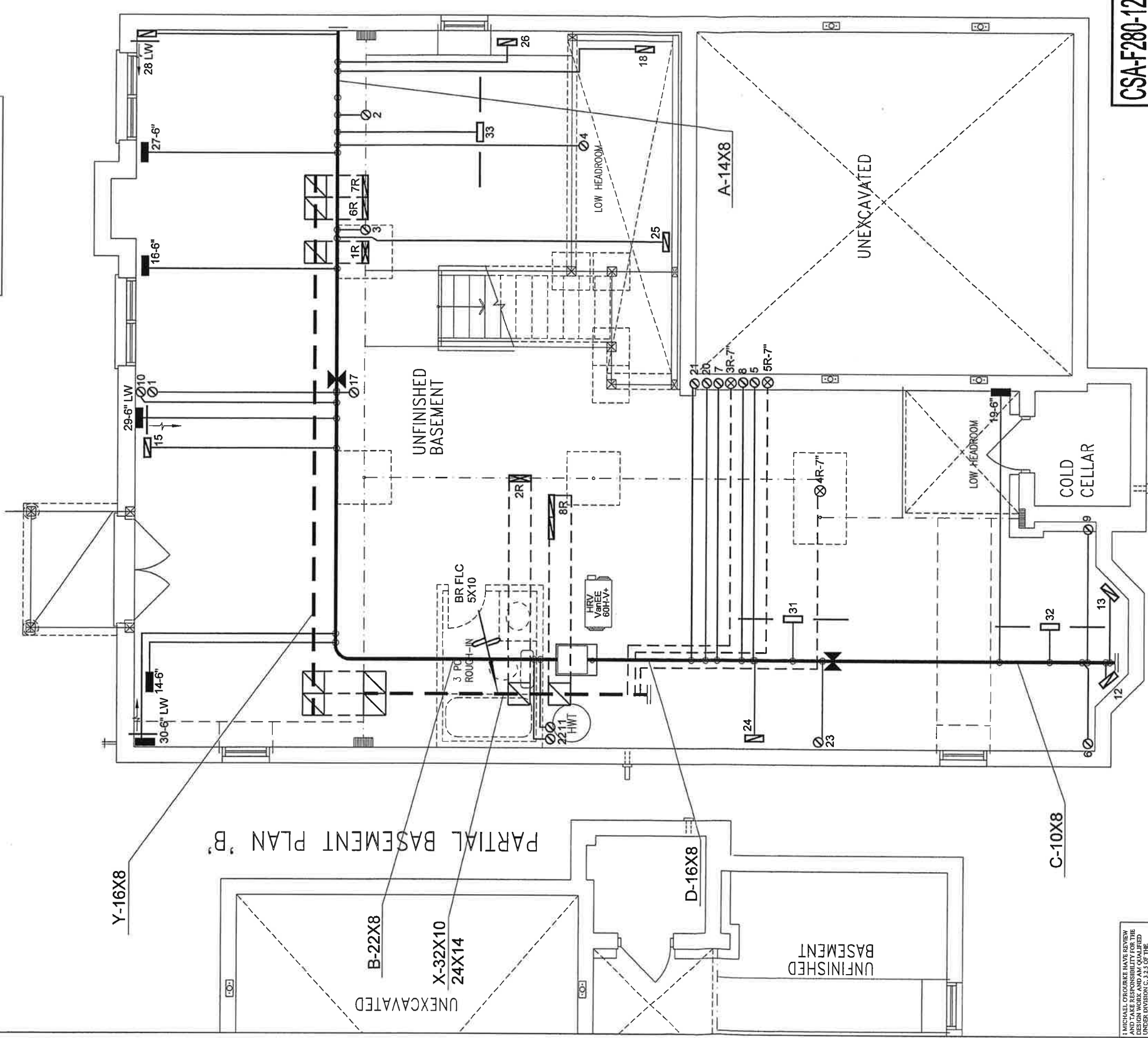
Supplemental tool for CAN/CSA-F280

Weather Station Description		
Province:	Ontario	
Region:	Barrie	
Site Description		
Soil Conductivity:	Normal conductivity: dry sand, loam, clay	
Water Table:	Normal (7-10 m, 23-33 ft)	
Foundation Dimensions		
Length (m):	1.8	 <p style="text-align: center; font-size: small;">Insulation Configuration</p>
Width (m):	12.2	
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):	229	

TYPE: 48-3
 LO# 74605

WOB

Town of Innisfil Certified Model
02/01/2018 11:29:32 AM lgervais



1 MICHAEL O'ROURKE HAVE REVIEW AND TAKE RESPONSIBILITY FOR THE WORK SHOWN ON THESE DRAWINGS UNDER DIVISION C. 2.3 OF THE BUILDING CODE.
Michael O'Rourke
Michael O'Rourke, BCIN# 19669
HVAC DESIGNS LTD.

CSA-F280-12
WOB PACKAGE A1

BASEMENT PLAN 'A'

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
[Symbol]	FLOOR SUPPLY AIR GRILLE	[Symbol]	14"x8" RETURN AIR GRILLE	[Symbol]	RETURN AIR STACK ABOVE	[Symbol]	2.
[Symbol]	FLOOR SUPPLY AIR GRILLE 6" BOOT	[Symbol]	30"x8" RETURN AIR GRILLE	[Symbol]	RETURN AIR STACK 2nd FLOOR	[Symbol]	1.
[Symbol]	SUPPLY AIR BOOT ABOVE	[Symbol]	FRA-FLOOR RETURN AIR GRILLE	[Symbol]	REDUCER	[Symbol]	No.

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.

REVISIONS	
No.	Description

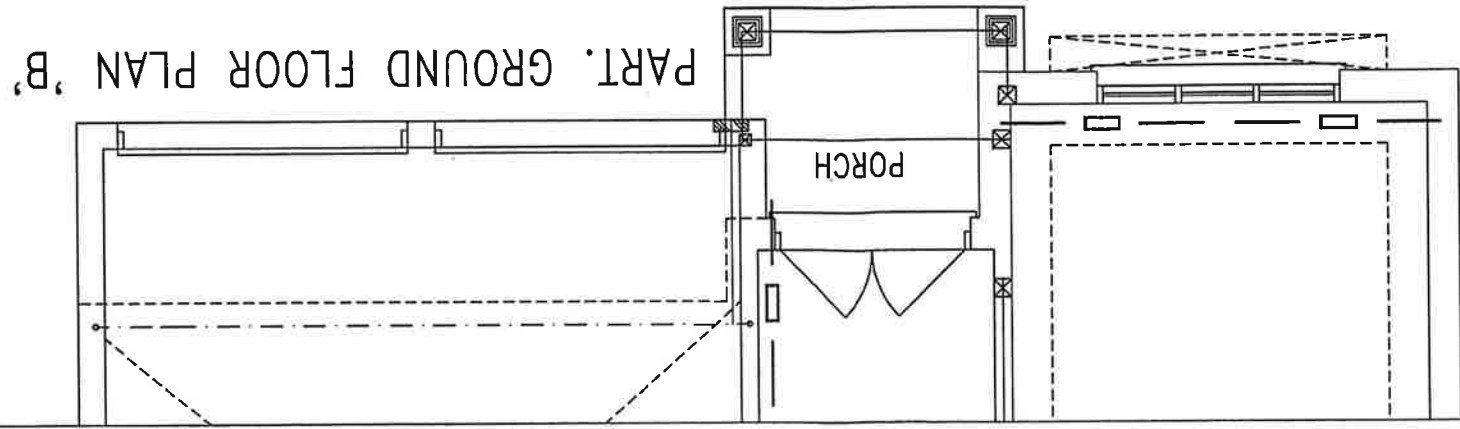
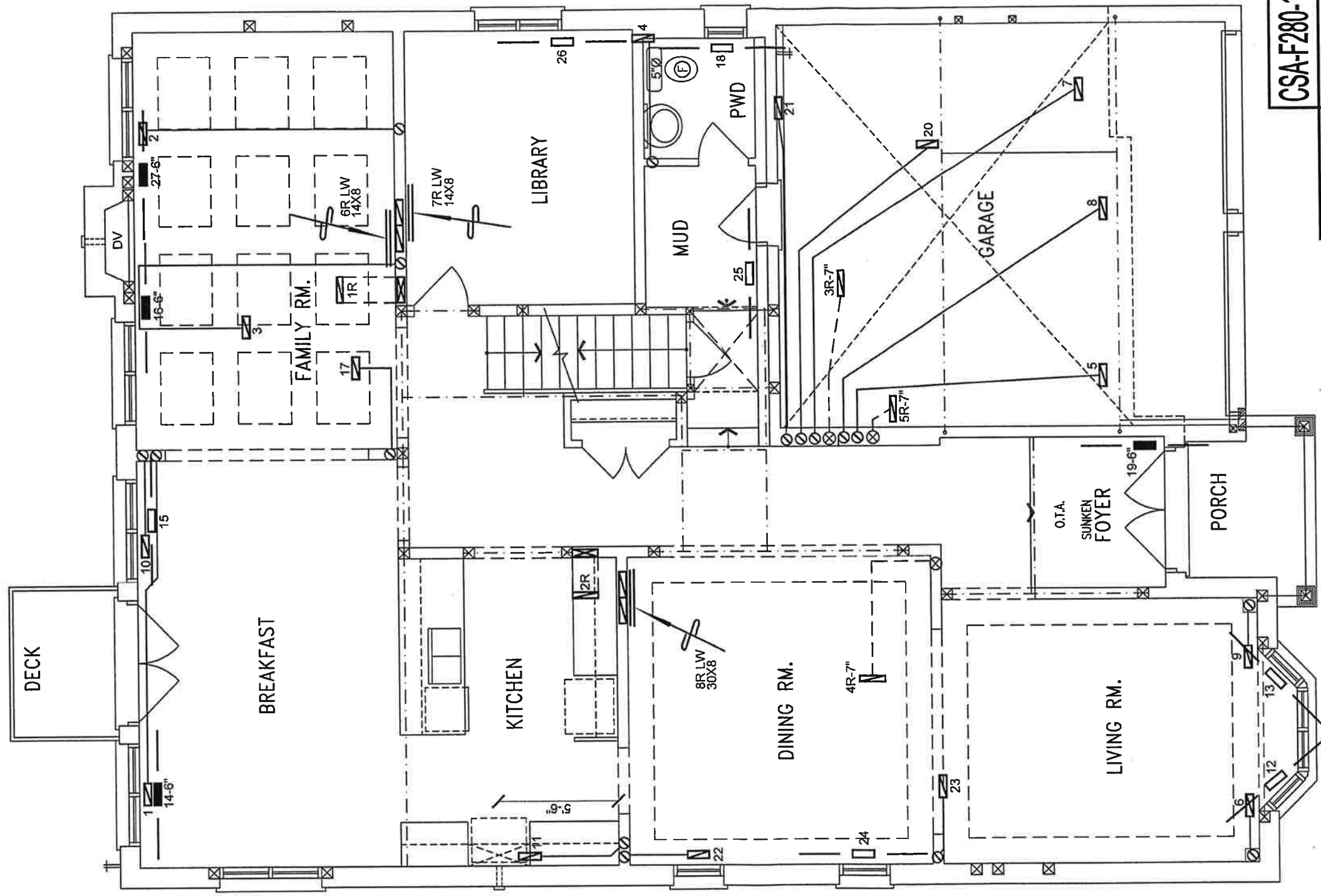
Client
BAYVIEW WELLINGTON
Project Name
ALCONA INNISFIL, ONTARIO
48-3 WOB 3599 sqft

HEAT LOSS 76354 BTU/H
UNIT DATA
MAKE LENNOX
MODEL EL296UH090XE48C
INPUT 88 MBTU/H
OUTPUT 85 MBTU/H
COOLING 4.0 TONS
FAN SPEED 1525 rpm @ 0.5" w.c.

Sheet Title
BASEMENT HEATING LAYOUT
Date JUNE/2017
Scale 3/16" = 1'-0"
BCIN# 19669
LO# 74605

HVAC DESIGNS 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.

Town of Innisfil Certified Model
02/01/2018 11:29:38 AM kgervais



MUST BE OBTAINED FROM THE REVIEWER AND TAKE RESPONSIBILITY FOR THE DESIGN WORK AND AM QUALIFIED UNDER DIVISION C.3.3.5 OF THE BUILDING CODE.
Michael O'Connell
Michael O'Connell, Techny 19669
HVAC DESIGNS LTD.

CSA-F280-12
WOB PACKAGE A1

GROUND FLOOR PLAN 'A'

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
[Symbol]	FLOOR SUPPLY AIR GRILLE	[Symbol]	6" SUPPLY AIR BOOT ABOVE	[Symbol]	14"x8" RETURN AIR GRILLE	[Symbol]	RETURN AIR STACK ABOVE
[Symbol]	FLOOR SUPPLY AIR GRILLE 6" BOOT	[Symbol]	SUPPLY AIR STACK FROM 2nd FLOOR	[Symbol]	30"x8" RETURN AIR GRILLE	[Symbol]	RETURN AIR STACK 2nd FLOOR
[Symbol]	SUPPLY AIR BOOT ABOVE	[Symbol]	6" SUPPLY AIR STACK 2nd FLOOR	[Symbol]	FRA- FLOOR RETURN AIR GRILLE	[Symbol]	REDUCER

3. 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.

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REVISIONS

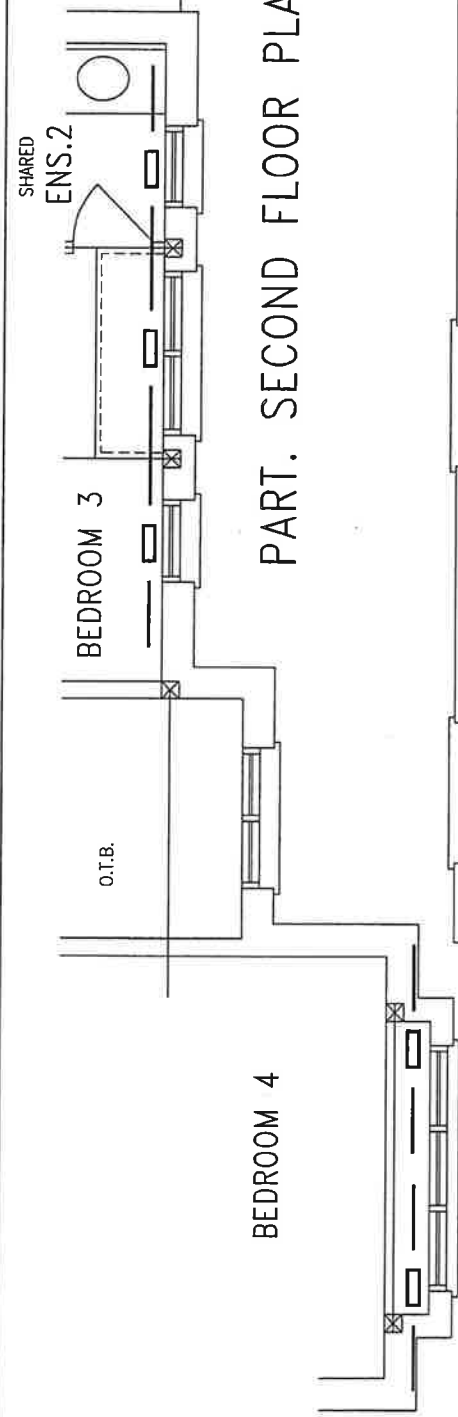
No.	Description	Date
1.		
2.		
3.		

Client
BAYVIEW WELLINGTON
Project Name
ALCONA INNISFIL, ONTARIO
3599 sqft

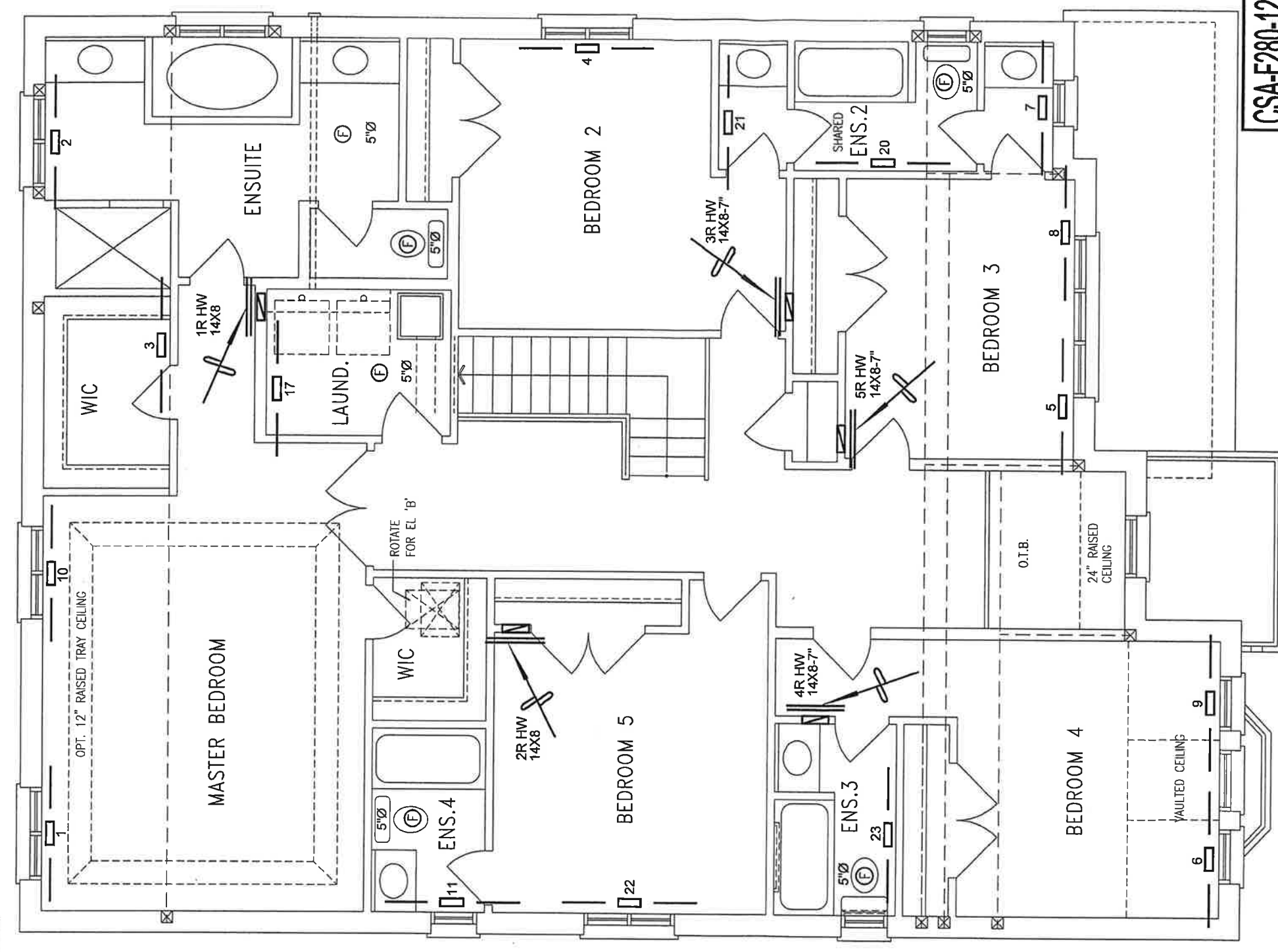
HVAC DESIGNS LTD.
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Email: info@hvacdesigns.ca
Web: www.hvacdesigns.ca
Specializing in Residential Mechanical Design Services
Installation to comply with the latest Ontario Building Code. All supply branch outlets shall be equipped with a manual balancing damper. Ductwork which passes through the garage or untreated spaces shall be adequately insulated and be gas-proofed.

Sheet Title
FIRST FLOOR HEATING LAYOUT
Date
JUNE/2017
Scale
3/16" = 1'-0"
BCIN# 19669
LO# 74605

Town of Innisfil Certified Model
02/01/2018 11:29:46 AM kgervais



PART. SECOND FLOOR PLAN 'B'



I, MICHAEL O'ROURKE HAVE REVIEWED AND TAKE RESPONSIBILITY FOR THE 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.

Michael O'Roarke
Michael O'Roarke, BACHELOR 1999
HVAC DESIGNS LTD.

CSA-F280-12

WOB PACKAGE A1

SECOND FLOOR PLAN 'A'

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
[Symbol]	FLOOR SUPPLY AIR GRILLE	[Symbol]	6" SUPPLY AIR BOOT ABOVE	[Symbol]	14"x8" RETURN AIR GRILLE	[Symbol]	RETURN AIR STACK ABOVE	[Symbol]	RETURN AIR STACK 2nd FLOOR	[Symbol]	REDUCER	[Symbol]	REDUCER	[Symbol]	REDUCER	[Symbol]	REDUCER
[Symbol]	FLOOR SUPPLY AIR GRILLE 6" BOOT	[Symbol]	SUPPLY AIR STACK FROM 2nd FLOOR	[Symbol]	30"x8" RETURN AIR GRILLE	[Symbol]	RETURN AIR STACK 2nd FLOOR	[Symbol]	REDUCER	[Symbol]	REDUCER	[Symbol]	REDUCER	[Symbol]	REDUCER	[Symbol]	REDUCER
[Symbol]	SUPPLY AIR BOOT ABOVE	[Symbol]	6" SUPPLY AIR STACK 2nd FLOOR	[Symbol]	FRA-FLOOR RETURN AIR GRILLE	[Symbol]	REDUCER	[Symbol]	REDUCER	[Symbol]	REDUCER	[Symbol]	REDUCER	[Symbol]	REDUCER	[Symbol]	REDUCER

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Client	BAYVIEW WELLINGTON	Project Name	ALCONA	Project Area	3599 sqft	
	INNISFIL, ONTARIO		48-3 WOB			
Sheet Title	SECOND FLOOR HEATING LAYOUT		Date	JUNE/2017	Scale	3/16" = 1'-0"
Sheet No.	74605	BCIN#	19669	LO#	74605	

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