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		The state of the s		
Building number, street name		2 1 1 8 2 years (1 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Unit no	. Lot/con.
Municipality	Postal code	Plan number/ other des	cription	
INNISFIL				
B. Individual who reviews ar	nd takes responsibility f	or design activities	V FALLERS A LABOR TO ME TO SERVICE STATE OF THE PROPERTY OF TH	
Name		Firm		
MICHAEL O'ROURKE Street address		HVAC DESIGNS LTD.		
375 FINLEY AVE			Unit no. 202	Lot/con.
Municipality	Postal code	Province	E-mail	N/A
AJAX	L1S 2E2	ONTARIO	info@hvacdesigns.ca	
Telephone number	Fax number		Cell number	
(905) 619-2300	(905) 619-2375		()	
C. Design activities undertak	en by individual identifi	ed in Section B. [Build	ing Code Table 3.5.2.	.1 OF Division Cl
☐ House ☐ Small Buildings		C – House		g Structural
☐ Large Buildings	Detect	ng Services tion, Lighting and Pov	U Plumbi ver □ Plumbi	ng — House ng — All Buildings
☐ Complex Buildings	☐ Fire P	rotection	☐ On-site	Sewage Systems
Description of designer's work		Model:	TH-11E	
HEAT LOSS / GAIN CALCULATION DUCT SIZING	DNS			
RESIDENTIAL MECHANICAL VEI	NTILATION DESIGN SUMM	IARY -		
RESIDENTIAL SYSTEM DESIGN	per CSA-F280-12	Project:	ALCONA	
D. Declaration of Designer				
MICHAEL O'RO	URKE		declare that (choos	se one as appropriate):
	(print name)		(are the de appropriate).
☐ I review and take respo Division C, of the Buildi classes/categories.	nsibility for the design work ng Code. I am qualified, and	on behalf of a firm registere the firm is registered, in th		4.of propriate
Individual Bo Firm BCIN:	CIŃ:			
I review and take respo designer" under subs	nsibility for the design and a ection 3.2.5.of Di visio	m qualified in the appropria on C, of the Building Code.	ate category as an "other	
Individual Bo				
Basis for exe	emption from registration and	d qualification:	O.B.C SENTENCE	3.2.4.1 (4)
The design work is exer Basis for exemption from	mpt from the registrat n registration and qualification	ion and qualification require	ements of the Building Co	ode.
I certify that:				
The information cor I have submitted thi	ntained in this sched s application with the knowle	ule is true to the best of my edge and consent of the fin	r knowledge. m.	
			and a star	21
June 14, 2018			Muchael Ox	ounte.
Date		•		ture of Designer
NOTE:				

^{1.} 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.

^{2.} 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.

MICHAEL O'ROURKE

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

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STRUCTURAL HEATLOSS: 43656

INDIVIDUAL BCIN: 19669

TOTAL COMBINED HEAT LOSS BTU/H: 45442

TONS: 2.03

24323

TOTAL HEAT GAIN BTUIH:

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

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			TRUE	TRUE	TRUM	TRUE		NIONI	ING		RETURN AIR #		111100000	AIN VOLUME	PLENUM PRESSURE	ACTUAL DUCT LGH.	FOUNT ENGTH	TOTAL FEFECTIVE I	ADJUSTED PRESSURE	ROHAN DIICT SIZE	INI ET GRIII SIZE	מוור מוור מוור	IN ET GRILL SIZE	





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

TO DESIGNS LTD.

TYPE: SITE NAME: TH-11E

ALCONA

LO# 78881

RESIDENTIAL MECHANICAL VENTILATION DESIGN SUMMARY

COMBUSTION APPLIANCES						
	9.32.3.1(1)	SUPPLEMENTAL	VENTILATION CAPACITY			9.32.3.5
a) Direct vent (sealed combustion) only		Total Ventilation Ca	pacity	159		cfm
b) Positive venting induced draft (except fireplaces)		Less Principal Vent	II. Capacity	79.5		cfm
c) Natural draft, B-vent or induced draft gas fireplace		Required Suppleme	ntal Capacity	79.5		cfm
d) Solid Fuel (including fireplaces)						
e) No Combustion Appliances		PRINCIPAL EXHA	JST FAN CAPACITY			
		Model:	VANEE 65H	Location:	Į.	BSMT
HEATING SYSTEM		79.5	cfm3.0son	es	~	HVI Approved
Forced Air Non Forced Air		PRINCIPAL EXHAL	JST HEAT LOSS CALCULATION	1		
		CFM	ΔT°F	FACTOR		% LOSS
Electric Space Heat		79.5 CFM	X 83 F X	1.08	Х	0.25
		SUPPLEMENTAL F		NUTONE		
HOUSE TYPE	9.32.1(2)	Location ENS	Model QTXEN050C	cfm 50	HVI T 🗸 T	Sones 0.3
		BATH	QTXEN050C	50	1	0.3
Type a) or b) appliance only, no solid fuel		LAUN	QTXEN050C	50	1	0.3
II Type I except with solid fuel (including fireplaces)	,	PWD	QTXEN050C	50	V	0.3
	, l	HEAT RECOVERY	VENTILATOR			9.32.3.11,
III Any Type c) appliance		Model:	VANEE 65H			
IV Type I, or II with electric space heat		155	_ cfm high	64	_	cfm low
		75	% Sensible Efficiency		V 1	HVI Approved
Other: Type I, II or IV no forced air			@ 32 deg F (0 deg C)	***************************************	<u> </u>	TYTAppioved
		LOCATION OF INST	TALLATION			-
SYSTEM DESIGN OPTIONS	O.N.H.W.P.					
1 Exhaust only/Forced Air System		Lot:		Concession		
		Township		Plan:		
2 HRV with Ducting/Forced Air System		Address				
HRV Simplified/connected to forced air system						
4 HRV with Ducting/non forced air system		Roll#		Building Perm	it#	
Part 6 Design		BUILDER:	BAYVIEW WELLINGTON			
		Name:				
TOTAL VENTILATION CAPACITY	9.32.3.3(1)	Address:				
Basement + Master Bedroom 2 @ 21.2 cfm 42.4	cfm	City:				
Other Bedrooms 3 @ 10.6 cfm 31.8						
	cfm	Telephone #:		Fax #:		
Kitchen & Bathrooms <u>4</u> @ 10.6 cfm <u>42.4</u>	cfm	INSTALLING CONTE	RACTOR			
Other Rooms <u>4</u> @ 10.6 cfm <u>42.4</u>	cfm	Name:	·			
Table 9.32.3.A. TOTAL <u>159.0</u>	cfm	Address:				
		City:				
RINCIPAL VENTILATION CAPACITY REQUIRED	9.32.3.4.(1)					
1 Bedroom 31.8	cfm	Telephone #:		Fax #:		
		DESIGNER CERTIFIC	CATION			
2 Bedroom 47.7	cfm		is ventilation system has been de	signed		
3 Bedroom 63.6	cfm	in accordance with the Name:	e Ontario Building Code. HVAC Designs Ltd.			
4 Bedroom 79.5	cfm	Signature:	ml.1.	Ofounde		
5 Bedroom 95,4	cfm	HRAI#	1111 feelfood	001820	•	
TOTAL 79.5 cfm I REVIEW AND TAKE RESPONIBILITY FOR THE DESIGN WORK AND AM QUAL	JFIED IN THE APPRO	Date: DPRIATE CATEGORY AS AN "C	OTHER DESIGNER" UNDER DIVISION C,	June-18 3.2.5 OF THE BUILD	ING CODE	



Town of innisfii Certified Model

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HEAT LOSS AND GAIN SUMMARY SHEET

MODEL: TH-11E **BUILDER: BAYVIEW WELLINGTON** SFQT: 2248 LO# 78881 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) 74 **BUILDING DATA** ATTACHMENT: **ATTACHED** # OF STORIES (+BASEMENT): 3 FRONT FACES: **EAST** ASSUMED (Y/N): AIR CHANGES PER HOUR: 3.57 ASSUMED (Y/N): AIR TIGHTNESS CATEGORY: **AVERAGE** ASSUMED (Y/N): WIND EXPOSURE: **SHELTERED** ASSUMED (Y/N): HOUSE VOLUME (ft3): 28659.0 ASSUMED (Y/N): Υ INTERNAL SHADING: **BLINDS/CURTAINS** ASSUMED OCCUPANTS: INTERIOR LIGHTING LOAD (Btu/h/ft2): 1.27 DC BRUSHLESS MOTOR (Y/N): FOUNDATION CONFIGURATION BCIN_1 **DEPTH BELOW GRADE:** 6.0 ft LENGTH: 55.0 ft WIDTH: 21.0 ft **EXPOSED PERIMETER:** 60.0 ft WOB INSULATION CONFIGURATION SCB_9 WOB EXPOSED PERIMETER 59.0 ft

2012 OBC - COMPLIANCE PACKAGE		
	Compliano	e Package
Component		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	<u>-</u>
HRV Minimum Efficiency	75%	-
Domestic Hot Water Heater Minimum EF	0.8	_

INDIVIDUAL BCIN: 19669 MICHAEL O'ROURKE





HVAC Designs Ltd. 375 Finley Ave, Suite 202 Ajax ON, L1S 2E2 905-619-2300

Residential Foundation Thermal Load Calculator

Supplemental tool for CAN/CSA-F280

	eather Sta	tion Description
Province:	Ontario	
Region:	Barrie	
	Site D	escription
Soil Conductivity:	Normal c	onductivity: dry sand, loam, clay
Water Table:	Normal (7-10 m, 23-33 ft)
	Foundatio	n Dimensions
Floor Length (m):	9.8	
Floor Width (m):	6.4	
Exposed Perimeter (m):	18.3	
Wall Height (m):	2.7	
Depth Below Grade (m):	1.61	Insulation Configuration
Window Area (m²):	2.5	
Door Area (m²):	0.0	
	Radia	int Slab
Heated Fraction of the Slab:	0	
Fluid Temperature (°C):	33	
	Design	Months
Heating Month	1	
	Foundat	ion Loads
Heating Load (Watts):		435

TYPE: TH-11E **LO#** 78881



HVAC Designs Ltd. 375 Finley Ave, Suite 202 Ajax ON, L1S 2E2 905-619-2300

Residential Foundation Thermal Load Calculator

Supplemental tool for CAN/CSA-F280

Wea	ther Sta	tion Description
Province:	Ontario	
Region:	Barrie	
	Site D	escription
Soil Conductivity:	Normal c	onductivity: dry sand, loam, clay
Water Table:	Normal (7-10 m, 23-33 ft)
Fo	undatio	n Dimensions
Length (m):	6.7	THE CONTRACTOR OF THE CONTRACT
Width (m):	6.4	0.6m +
Exposed Perimeter (m):	18.0	0.6m Insulation Configuration
	Radi	ant Slab
Heated Fraction of the Slab:	0	
Fluid Temperature (°C):	33	
	Desigr	Months
Heating Month	1	
	Re	sults
Heating Load (Watts):		228

TYPE: TH-11E **LO#** 78881



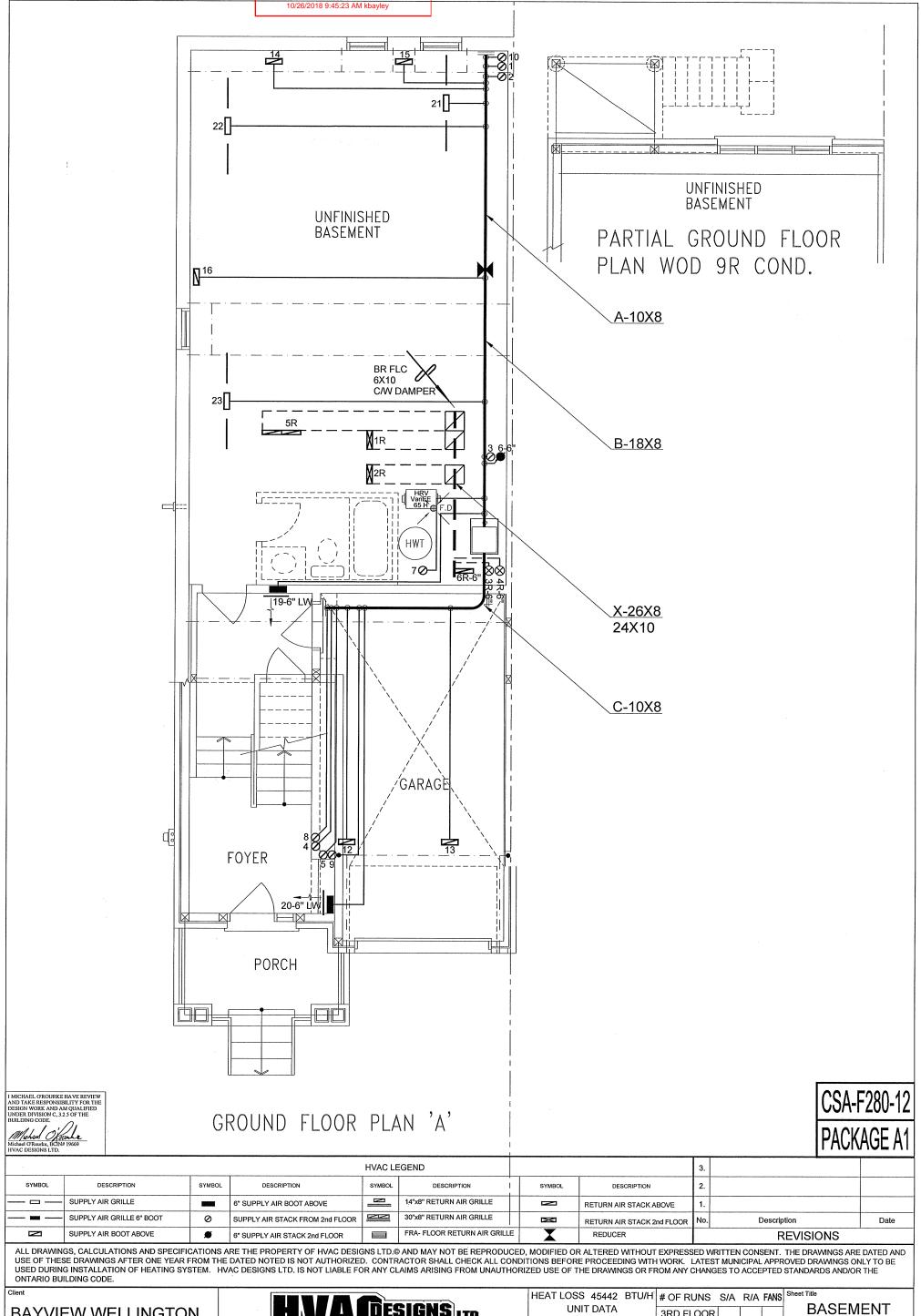
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Air Infiltration Residential Load Calculator

Supplemental tool for CAN/CSA-F280

Weather Stati	on De	scrip	tion		
Province:	Onta	rio			
Region:	Barr	ie			
Weather Station Location:	Ope	n flat te	errain,	grass	
Anemometer height (m):	10				
Local S	nieldir	ng			
Building Site:		rban, 1	orest		
Walls:	Heav				
Flue:	Heav	•			
Highest Ceiling Height (m):	8.53	•			
Building Co	nfigur	ation			, , , , , , , , , , , , , , , , , , , ,
Type:	Semi				
Number of Stories:	Two				
Foundation:	Full				
House Volume (m³):	811.	5			
Air Leakage,	/Venti	latio	า		
Air Tightness Type:	Prese	nt (19	61-) (3	.57 ACI	H)
Custom BDT Data:	ELA (2 10 Pa	a.		1081.8 cm ²
	3.57				ACH @ 50 Pa
Mechanical Ventilation (L/s):	To	otal Sup	ply		Total Exhaust
		37.5			37.5
Flue	Size				
Flue #:	#1	#2	#3	#4	
Diameter (mm):	0	0	0	0	
Natural Infilt	ration	Rate	es		
Heating Air Leakage Rate (ACH/H):		C	.41	0	
Cooling Air Leakage Rate (ACH/H):		0	.09	6	

TYPE: TH-11E **LO#** 78881



Town of innisfii Certified i

BAYVIEW WELLINGTON

Project Name **ALCONA** INNISFIL, ONTARIO

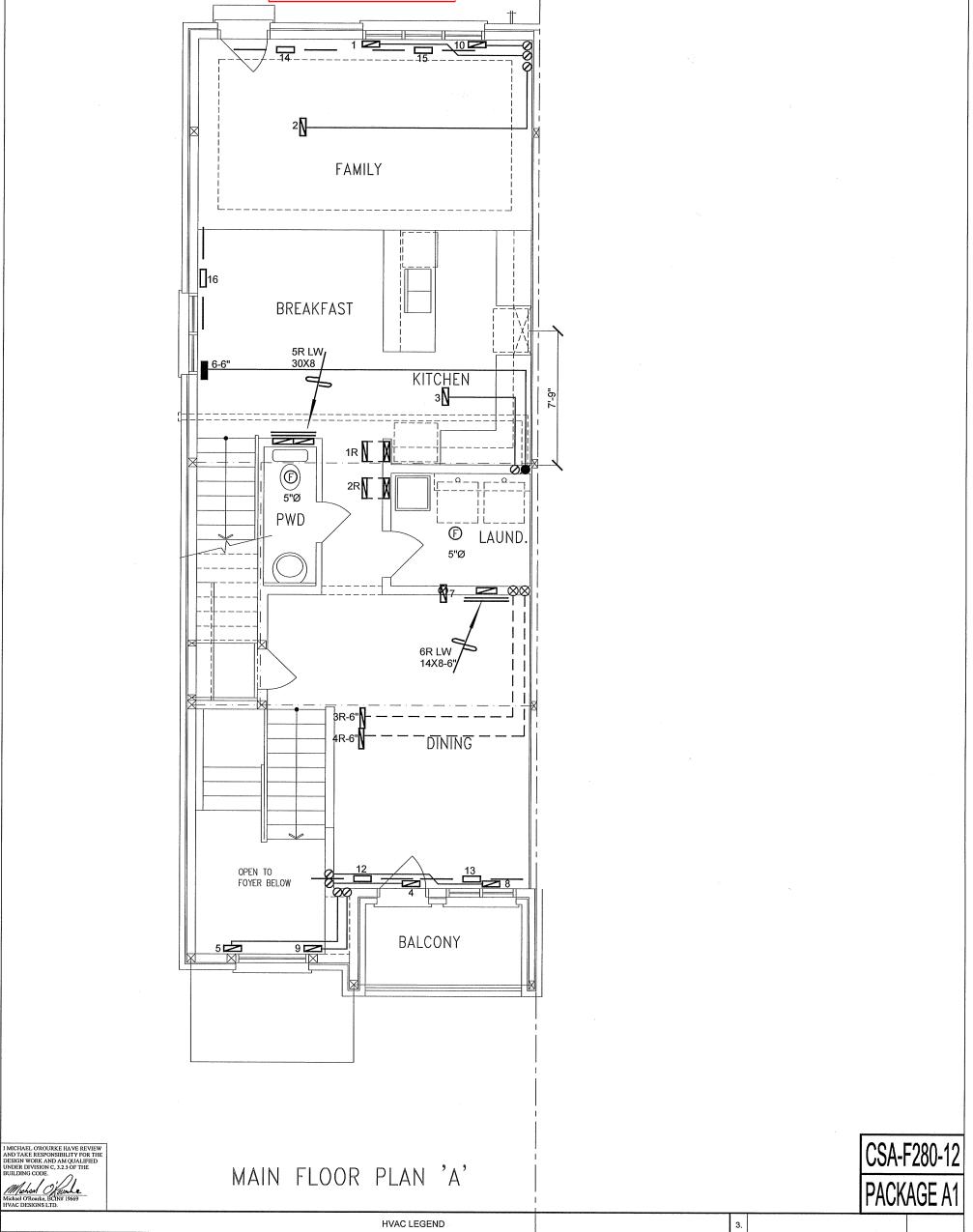
DESIGNS LTD.

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 2248 sqft adequately insulated and be gas-proofed.

	HEAT LO	SS 45442	BTU/H	# OF RUNS	S/A	R/A	FANS	Sheet Title	
	UNIT DATA		3RD FLOOR		l .		BA	SEMENT	
	LENNOX			2ND FLOOR	10	4	2	Н	IEATING
	MODEL EL196UH070XE36B			1ST FLOOR	5	2	3	LAYOUT	
	INPUT	66	мвти/н	BASEMENT	5	1	0	Date	JUNE/2018
е	OUTPUT	00	MBTU/H	ALL S/A DIFFUSERS 4 "x10"			Scale	3/16" = 1'-0"	
	COOLING	63	TONS	UNLESS NOTED OTHERWISE ON LAYOUT. ALL S/A RUNS 5"Ø UNLESS NOTED OTHERWISE ON LAYOUT. UNDERCUT DOORS 1" min. FOR R/A			BCIN# 19669		
	FAN SPEED	2.0	cfm @				ISE	I O#	78881
	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	985	0.6" w.c.				LU#	70001	

TH-11E



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SYMBOL DESCRIPTION SYMBOL SYMBOL 2. SUPPLY AIR GRILLE 14"x8" RETURN AIR GRILLE - 🗀 6" SUPPLY AIR BOOT ABOVE RETURN AIR STACK ABOVE 30"x8" RETURN AIR GRILLE SUPPLY AIR GRILLE 6" BOOT SUPPLY AIR STACK FROM 2nd FLOOR 0 \sim No Description RETURN AIR STACK 2nd FLOOR Date SUPPLY AIR BOOT ABOVE FRA- FLOOR RETURN AIR GRILLE ø 6" SUPPLY AIR STACK 2nd FLOOR REDUCER **REVISIONS**

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Client

BAYVIEW WELLINGTON

Project Name

ALCONA INNISFIL, ONTARIO

HVA DESIGNS LTD.

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L1S 2E2 Tel. 905.619.2300 - 905.420.5300 Fax 905.619.2375
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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.

FIRST FLOOR HEATING LAYOUT

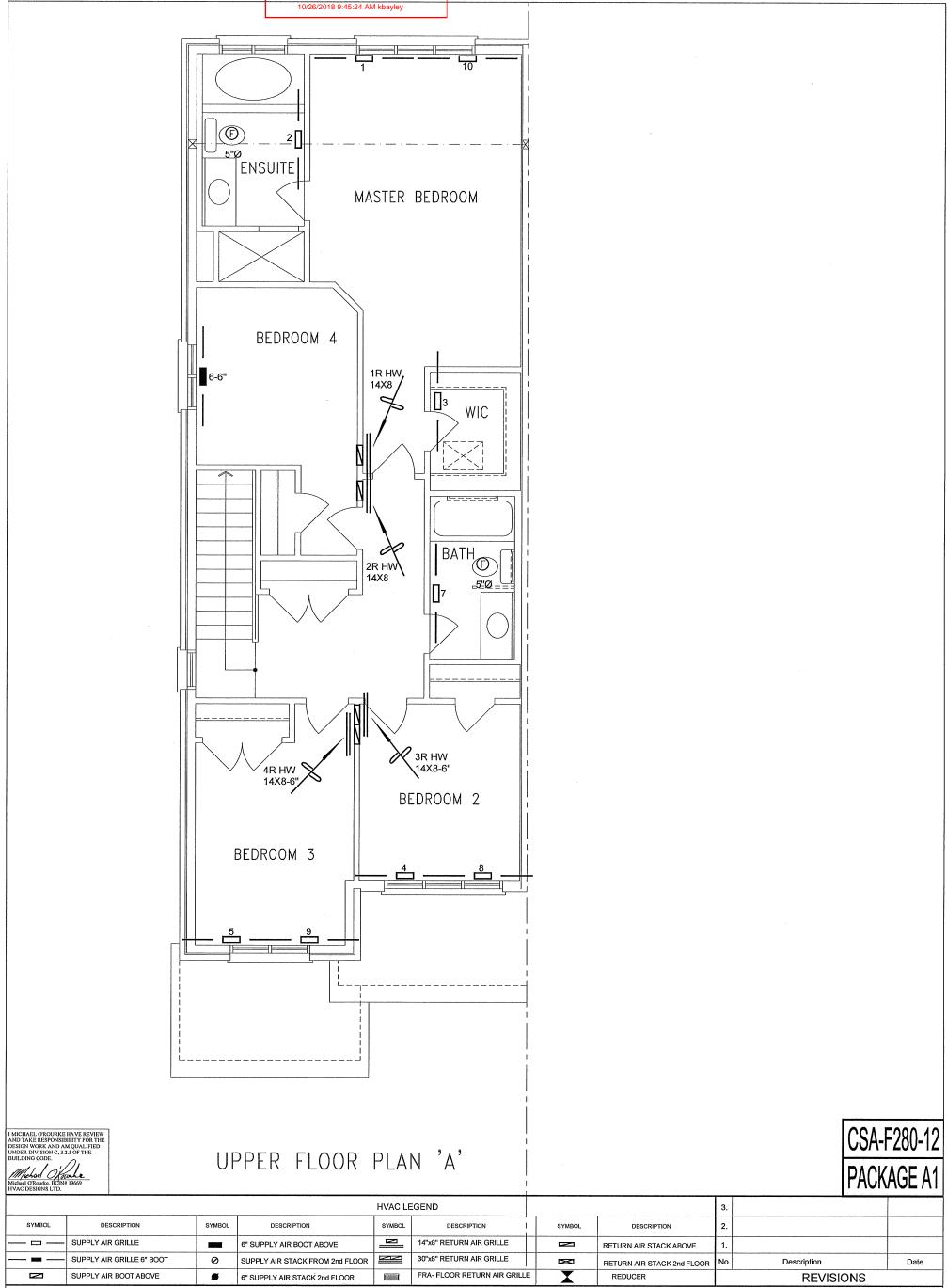
Date JUNE/2018
Scale 3/16" = 1'-0"

BCIN# 19669

78881

TH-11E

2248 sqft



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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.

SECOND FLOOR HEATING LAYOUT

Date JUNE/2018 Scale 3/16" = 1'-0" BCIN# 19669

0 11 700

LO# 78881

TH-11E

2248 sqft