


Use one form for each individual who reviews and takes responsibility for design activities with respect to the project.

<b>A. Project Information</b>					
Building number, street name <b>Barossa 7 S38-7C</b>				Lot: Lot/con.	
Municipality <b>Bradford</b>		Postal code	Plan number/ other description		
<b>B. Individual who reviews and takes responsibility for design activities</b>					
Name <b>David DaCosta</b>			Firm <b>gtaDesigns Inc.</b>		
Street address <b>2985 Drew Road, Suite 202</b>				Unit no.	Lot/con.
Municipality <b>Mississauga</b>		Postal code <b>L4T 0A4</b>	Province <b>Ontario</b>	E-mail <a href="mailto:dave@gtadesigns.ca">dave@gtadesigns.ca</a>	
Telephone number <b>(905) 671-9800</b>		Fax number <b>(647) 494-9643</b>		Cell number <b>(416) 268-6820</b>	
<b>C. Design activities undertaken by individual identified in Section B. [Building Code Table 3.5.2.1 of Division C]</b>					
<input type="checkbox"/> House <input checked="" 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					
<b>Description of designer's work</b>				<b>Model Certification</b>	
Heating and Cooling Load Calculations Air System Design Residential mechanical ventilation Design Summary Residential System Design per CAN/CSA-F280-12 Residential New Construction - Forced Air				Project #: <b>PJ-00204</b>	
				Layout #: <b>JB-04484</b>	
				Builder	<b>Bayview Wellington</b>
				Project	<b>Green Valley East</b>
				Model	<b>Barossa 7 S38-7C</b>
Area Sq ft: <b>2949</b>				SB-12	<b>Package A1</b>
<b>D. Declaration of Designer</b>					
I, <u>David DaCosta</u> declare that (choose one as appropriate): (print name)					
<input type="checkbox"/> I review and take responsibility for the design work on behalf of a firm registered under subsection 3.2.4 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>32964</u> Basis for exemption from registration: <u>Division C 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>March 12, 2018</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 qualifications under Subsections 3.2.4 . and 3.2.5. of Division C.
- Schedule 1 does not require to be completed 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 licence to practise, or a certificate of authorization, issued by the Association of Professional Engineers of Ontario.

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Heat loss and gain calculation summary sheet				CSA-F280-M12 Standard Form No. 1	
These documents issued for the use of <b>Bayview Wellington</b>				Layout No.	
and may not be used by any other persons without authorization. Documents for permit and/or construction are signed in red.				<b>JB-04484</b>	
Building Location					
Address (Model): <b>S38-7C</b>			Site: <b>Green Valley East</b>		
Model: <b>Barossa 7</b>			Lot:		
City and Province: <b>Bradford</b>			Postal code:		
Calculations based on					
Dimensional information based on:			<b>VA3 Design Jan/2018</b>		
Attachment: <b>Detached</b>			Front facing: <b>East/West</b>		Assumed? <b>Yes</b>
No. of Levels: <b>3</b>		Ventilated? <b>Included</b>	Air tightness: <b>1961-Present (ACH=3.57)</b>		Assumed? <b>Yes</b>
Weather location: <b>Bradford</b>			Wind exposure: <b>Sheltered</b>		
HRV? <b>LifeBreath</b>		<b>RNC155</b>	Internal shading: <b>Light-translucent</b>		Occupants: <b>5</b>
Sensible Eff. at -25C <b>71%</b>		Apparent Effect. at -0C <b>84%</b>	Units: <b>Imperial</b>		Area Sq ft: <b>2949</b>
Sensible Eff. at -0C <b>75%</b>					
Heating design conditions			Cooling design conditions		
Outdoor temp <b>-9.4</b> Indoor temp: <b>72</b> Mean soil temp: <b>48</b>			Outdoor temp <b>86</b> Indoor temp: <b>75</b> Latitude: <b>44</b>		
Above grade walls			Below grade walls		
Style A: <b>As per OBC SB12 Package A1 R 22</b>			Style A: <b>As per OBC SB12 Package A1 R 20ci</b>		
Style B: <b>Existing Walls (When Applicable) R 12</b>			Style B:		
Style C:			Style C:		
Style D:			Style D:		
Floors on soil			Ceilings		
Style A: <b>As per Selected OBC SB12 Package A1</b>			Style A: <b>As per Selected OBC SB12 Package A1 R 60</b>		
Style B:			Style B: <b>As per Selected OBC SB12 Package A1 R 31</b>		
Exposed floors			Style C:		
Style A: <b>As per Selected OBC SB12 Package A1 R 31</b>			Doors		
Style B:			Style A: <b>As per Selected OBC SB12 Package A1 R 4.00</b>		
Windows			Style B:		
Style A: <b>As per Selected OBC SB12 Package A1 R 3.55</b>			Style C:		
Style B: <b>Existing Windows (When Applicable) R 1.99</b>			Skylights		
Style C:			Style A: <b>As per Selected OBC SB12 Package A1 R 2.03</b>		
Style D:			Style B:		
Attached documents: <b>As per Shedule 1</b>		<b>Heat Loss/Gain Caculations based on CSA-F280-12 Effective R-Values</b>			
Notes:		<b>Residential New Construction - Forced Air</b>			
Calculations performed by					
Name: <b>David DaCosta</b>			Postal code: <b>L4T 0A4</b>		
Company: <b>gtaDesigns Inc.</b>			Telephone: <b>(905) 671-9800</b>		
Address: <b>2985 Drew Road, Suite 202</b>			Fax: <b>(416) 268-6820</b>		
City: <b>Mississauga</b>			E-mail: <b>dave@gtadesigns.ca</b>		

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Builder: **Bayview Wellington**

Date: **March 12, 2018**

Project: **Green Valley East**

Model: **Barossa 7 S38-7C**

**System 1**

I review and take responsibility for the design work and am qualified in the appropriate category as an "other designer" under Division C subsection 3.2.5. of the Building Code.

Individual BCIN: 32964 *David DaCosta* David DaCosta

Page 3  
Project # **PJ-00204**  
Layout # **JB-04484**

DESIGN LOAD SPECIFICATIONS		AIR DISTRIBUTION & PRESSURE		FURNACE/AIR HANDLER DATA:		BOILER/WATER HEATER DATA:		A/C UNIT DATA:	
Level 1 Net Load	15,527 btu/h	Equipment External Static Pressure	0.5 "w.c.	Make	Amana	Make	Type	Amana	3.0 Ton
Level 2 Net Load	21,590 btu/h	Additional Equipment Pressure Drop	0.225 "w.c.	Model	AMEC960803BNA	Model		Cond.-----	3.0
Level 3 Net Load	17,207 btu/h	Available Design Pressure	0.275 "w.c.	Input Btu/h	80000	Input Btu/h		Coil -----	3.0
Level 4 Net Load	0 btu/h	Return Branch Longest Effective Length	300 ft	Output Btu/h	76800	Output Btu/h			
Total Heat Loss	54,324 btu/h	R/A Plenum Pressure	0.138 "w.c.	E.s.p.	0.50	" W.C.			
Total Heat Gain	32,640 btu/h	S/A Plenum Pressure	0.14 "w.c.	Water Temp		deg. F.			
Combo System HL + 10%	59,756 Btu/h	Heating Air Flow Proportioning Factor	0.0216 cfm/btuh	AFUE	96%				
Building Volume Vb	34878 ft³	Cooling Air Flow Proportioning Factor	0.0359 cfm/btuh	Aux. Heat					
Ventilation Load	1,118 Btu/h.	R/A Temp	70 deg. F.	SB-12 Package	Package A1				
Ventilation PVC	79.5 cfm	S/A Temp	131 deg. F.						
Supply Branch and Grill Sizing		Diffuser loss	0.01 "w.c.	Temp. Rise>>>	61 deg. F.				

	Level 1														Level 2													
S/A Outlet No.	1	2	3	4											5	6	7	8	9	10	11	12	13	14	15			
Room Use	BASE	BASE	BASE	BASE											KIT	KIT	KIT	DIN	MUD	PWD	STUDY	STUDY	FOY	GRT	GRT			
Btu/Outlet	3882	3882	3882	3882											2238	2238	2238	2105	804	1001	2834	2834	2725	1287	1287			
Heating Airflow Rate CFM	84	84	84	84											48	48	48	45	17	22	61	61	59	28	28			
Cooling Airflow Rate CFM	16	16	16	16											83	83	83	80	4	5	89	89	49	58	58			
Duct Design Pressure	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	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13		
Actual Duct Length	40	45	22	44											46	49	45	10	31	34	50	51	37	29	37			
Equivalent Length	140	90	90	130	70	70	70	70	70	70	70	70	70	70	130	120	110	80	140	90	130	120	135	80	70	70	70	
Total Effective Length	180	135	112	174	70	70	70	70	70	70	70	70	70	70	176	169	155	90	171	124	180	171	172	109	107	70	70	70
Adjusted Pressure	0.07	0.10	0.12	0.07	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.07	0.08	0.08	0.14	0.08	0.10	0.07	0.08	0.08	0.12	0.12	0.19	0.19	0.19
Duct Size Round	6	6	6	6											6	6	6	6	3	4	6	6	5	5	5			
Outlet Size	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	3x10	3x10	4x10	4x10	3x10	3x10	3x10	4x10	4x10	4x10
Trunk	F	E	D	C											F	F	E	A	B	B	C	C	B	D	D			

	Level 3										Level 4																
S/A Outlet No.	16	17	18	19	20	21	22	23	24																		
Room Use	MAST	BED 2	BATH	BED 3	WIC	LAUN	BED 4	ENS 4	ENS																		
Btu/Outlet	3116	1763	826	3102	1041	1899	1967	1064	2431																		
Heating Airflow Rate CFM	67	38	18	67	22	41	42	23	52																		
Cooling Airflow Rate CFM	87	32	9	77	13	63	57	24	64																		
Duct Design Pressure	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	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
Actual Duct Length	68	49	50	60	58	58	39	59	69																		
Equivalent Length	125	140	130	180	170	120	105	155	150	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
Total Effective Length	193	189	180	240	228	178	144	214	219	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
Adjusted Pressure	0.07	0.07	0.07	0.05	0.06	0.07	0.09	0.06	0.06	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19
Duct Size Round	6	6	3	6	4	5	5	4	6																		
Outlet Size	4x10	4x10	3x10	4x10	3x10	3x10	3x10	3x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10
Trunk	E	B	B	C	C	B	A	F	F																		

Return Branch And Grill Sizing		Grill Pressure Loss 0.02 "w.c.									
R/A Inlet No.	1R	2R	3R	4R	5R	6R	7R	8R	9R	10R	11R
Inlet Air Volume CFM	170	490	81	81	155	105	90				
Duct Design Pressure	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
Actual Duct Length	12	31	57	50	31	57	23				
Equivalent Length	110	170	225	125	195	205	180	50	50	50	50
Total Effective Length	122	201	282	175	226	262	203	50	50	50	50
Adjusted Pressure	0.10	0.06	0.04	0.07	0.05	0.04	0.06	0.24	0.24	0.24	0.24
Duct Size Round	7.0	12.0	6.0	6.0	8.0	6.0	6.0				
Inlet Size	FLC	8	8	8	8	8	8				
" "	x	x	x	x	x	x	x	x	x	x	x
Inlet Size		30	14	14	14	14	14				
Trunk	Y	Y	Z	Z	Z	Y	Z				

Return Trunk Duct Sizing				
Trunk	CFM	Press.	Round	Rect. Size
Drop	1172	0.04	18.0	24x12
Z	1172	0.04	18.0	30x10 24x12
Y	765	0.04	15.0	26x8 20x10
X				
W				
V				
U				
T				
S				
R				
Q				

Supply Trunk Duct Sizing				
Trunk	CFM	Press.	Round	Rect. Size
A	1172	0.05	17.0	26x10 22x12
B	490	0.05	12.5	18x8 14x10
C	295	0.05	10.5	12x8 10x10
D	594	0.06	13.0	18x8 14x10
E	199	0.07	8.5	8x8
F	256	0.06	9.5	10x8
G				
H				
I				
J				
K				

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2012 OBC

Builder: Bayview Wellington

Date: March 12, 2018

Project: Green Valley East

Model: Barossa 7 S38-7C

System 1

Weather Data Bradford 44 -9.4 86 22 48.2

Heat Loss ^T 81.4 deg. F Ht gain ^T 11 deg. F GTA: 2949

Project # PJ-00204  
Layout # JB-04484

## Level 1

Run ft. exposed wall A	183	A	A	A	A	A	A	A	A	A	A	A	A	A
Run ft. exposed wall B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Ceiling height	2.0	AG	2.0	AG	2.0	AG	2.0	AG	2.0	AG	2.0	AG	2.0	AG
Floor area	1248	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area
Exposed Ceilings A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Exposed Ceilings B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Exposed Floors	Flr	Flr	Flr	Flr	Flr	Flr	Flr	Flr	Flr	Flr	Flr	Flr	Flr	Flr
Gross Exp Wall A	366													
Gross Exp Wall B														

Components	R-Values	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain
North Shaded	3.55	22.93	10.91														
East/West	3.55	22.93	27.35	29	665	793											
South	3.55	22.93	20.89	12	275	251											
WOB Windows	3.15	25.84	28.32														
Skylight	2.03	40.10	88.23														
Doors	4.00	20.35	2.75	21	427	58											
Net exposed walls A	21.12	3.85	0.52	304		158											
Net exposed walls B	14.49	5.62	0.76														
Exposed Ceilings A	59.22	1.37	0.64														
Exposed Ceilings B	22.86	3.56	1.66														
Exposed Floors	29.80	2.73	0.17														
Foundation Conductive Heatloss	On Grade ( ) or Above ( )			6252													
Total Conductive	Heat Loss			7619													
	Heat Gain				1260												
Air Leakage	Heat Loss/Gain	1.0080	0.0296	7680		37											
Ventilation	Case 1		0.07			0.05											
	Case 2		14.07			11.88											
	Case 3	x	0.03		228	69											
Heat Gain People			239														
Appliances Loads	1 = .25 percent		4943														
Duct and Pipe loss			10%														
Level 1 HL Total	15,527		Total HL for per room	15527													
Level 1 HG Total	1,776		Total HG per room x 1.3		1776												

## Level 2

Run ft. exposed wall A	56	A	23	A	5	A	16	A	37	A	24	A	22	A	A	A	A
Run ft. exposed wall B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Ceiling height	10.0		10.0		12.0		10.0		11.0		11.0		10.0		10.0		10.0
Floor area	396	Area	237	Area	48	Area	60	Area	129	Area	160	Area	217	Area	Area	Area	Area
Exposed Ceilings A	A	A	A	A	A	A	A	A	A	A	A	A	5	A	A	A	A
Exposed Ceilings B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Exposed Floors	Flr	Flr	Flr	Flr	Flr	Flr	Flr	Flr	Flr	Flr	Flr	Flr	Flr	Flr	Flr	Flr	Flr
Gross Exp Wall A	560		230		60		160		407		264		220				
Gross Exp Wall B																	

Components	R-Values	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain
North Shaded	3.55	22.93	10.91														
East/West	3.55	22.93	27.35	106	2431	2899											
South	3.55	22.93	20.89	29	665	606											
Existing Windows	1.99	40.90	22.15														
Skylight	2.03	40.10	88.23														
Doors	4.00	20.35	2.75														
Net exposed walls A	17.03	4.78	0.65	425	2031	275	202	966	130	39	186	25	160	765	103	301	1439
Net exposed walls B	8.50	9.58	1.29														
Exposed Ceilings A	59.22	1.37	0.64														
Exposed Ceilings B	22.86	3.56	1.66														
Exposed Floors	29.80	2.73	0.17														
Foundation Conductive Heatloss	On Grade ( ) or Above ( )																
Total Conductive	Heat Loss			5127				1608		614			765			4329	
	Heat Gain				3780				436		83			103		2966	
Air Leakage	Heat Loss/Gain	0.2795	0.0296	1433		112		449		13		172		2		214	
Ventilation	Case 1		0.02			0.05											
	Case 2		14.07			11.88											
	Case 3	x	0.03		153	206		48		24		18		5		23	
Heat Gain People			239														
Appliances Loads	1 = .25 percent		4943	1.0		1236	1.0		1236							0.5	618
Duct and Pipe loss			10%														
Level 2 HL Total	21,590		Total HL for per room	6713		6933		2105		804		1001		5668		2725	
Level 2 HG Total	18,991		Total HG per room x 1.3					2221		117		146		4983		1354	

I review and take responsibility for the design work and am qualified in the appropriate category as an "other designer" under

Division C subsection 3.2.5. of the Building Code. Individual BCIN:

32964

David DaCosta

SB-12 Package

Package A1

Total Heat Loss	54,324	btu/h
Total Heat Gain	32,640	btu/h

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2012 OBC	Builder: Bayview Wellington	Date: March 12, 2018	System 1	Weather Data	Bradford	44	-9.4	86	22	48.2		Page 5
	Project: Green Valley East	Model: Barossa 7 S38-7C		Heat Loss ^T	81.4 deg. F	Ht gain ^T	11 deg. F	GTA:	2949	Project # Layout #	PJ-00204 JB-04484	

Level 3				MAST		BED 2		BATH		BED 3		WIC		LAUN		BED 4		ENS 4		ENS								
Run ft. exposed wall A				33	A	18		A	6	A	25	A	13	A	23	A	17	A	11	A	24	A	A	A				
Run ft. exposed wall B					B			B		B		B		B		B		B		B		B	B	B				
Ceiling height				9.0		8.0			8.0		8.0		8.0		8.0		8.0		8.0		8.0		8.0		8.0			
Floor area				329	Area	213		Area	72	Area	174	Area	40	Area	132	Area	226	Area	57	Area	154	Area	Area	Area				
Exposed Ceilings A				329	A	213		A	72	A	174	A	40	A	132	A	226	A	57	A	154	A	A	A				
Exposed Ceilings B					B			B		B		B		B		B		B		B		B	B	B				
Exposed Floors					Flr	33		Flr	45	Flr	157	Flr	40	Flr	10	Flr		Flr		Flr		Flr	Flr	Flr				
Gross Exp Wall A				297		144			48		200		104		184		136		88		192							
Gross Exp Wall B																												
Components				R-Values	Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain		Loss	Gain	
North Shaded				3.55	22.93	10.91																						
East/West				3.55	22.93	27.35	33	757	903	18	413	196	8	183	87	34	780	930	5	115	137							
South				3.55	22.93	20.89																						
Existing Windows				1.99	40.90	22.15										23	527	480	33	757	689	19	436	397	22	504	602	
Skylight				2.03	40.10	88.23																						
Doors				4.00	20.35	2.75																						
Net exposed walls A				17.03	4.78	0.65	264	1262	171	126	602	81	40	191	26	166	793	107	99	473	64	161	770	104	103	492	67	
Net exposed walls B				8.50	9.58	1.29																						
Exposed Ceilings A				59.22	1.37	0.64	329	452	211	213	293	137	72	99	46	174	239	112	40	55	26	132	181	85	226	311	145	
Exposed Ceilings B				22.86	3.56	1.66																						
Exposed Floors				29.80	2.73	0.17				33	90	6	45	123	8	157	429	26	40	109	7	10	27	2				
Foundation Conductive HeatLoss																												
Total Conductive				Heat Loss			2471			1398			597		2241		752		1506		1560		844		1928			
				Heat Gain				1284		420		167		1175		233		671		901		478		1256				
Air Leakage				Heat Loss/Gain	0.2311	0.0296	571	38		323	12	138	5	518	35	174	7	348	20	360	27	195	14	445	37			
Ventilation				Case 1		0.02																						
				Case 2		14.07																						
				Case 3	x	0.03																						
Heat Gain People						239	2	74	70		42	23		18	9		67	64		22	13		45	37		47	49	
						239		478		1		239				1		239					0.5	618	1	47	239	
Appliances Loads				1 =.25 percent		4943																						
Duct and Pipe loss						10%																						
Level 3 HL Total				17,207		Total HL for per room	3116			1763		826		3102		1041		359		1899		1749		1967		1580		
Level 3 HG Total				11,873		Total HG per room x 1.3		2431			903		257			2151									674		1770	

Level 4				A	A	A	A	A	A	A	A	A	A	A	A
Run ft. exposed wall A				B	B	B	B	B	B	B	B	B	B	B	B
Run ft. exposed wall B															
Ceiling height															
Floor area	Area			Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area
Exposed Ceilings A	A			A	A	A	A	A	A	A	A	A	A	A	A
Exposed Ceilings B	B			B	B	B	B	B	B	B	B	B	B	B	B
Exposed Floors	Flr			Flr	Flr	Flr	Flr	Flr	Flr	Flr	Flr	Flr	Flr	Flr	Flr
Gross Exp Wall A															
Gross Exp Wall B															
Components	R-Values	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain
North Shaded	3.55	22.93	10.91												
East/West	3.55	22.93	27.35												
South	3.55	22.93	20.89												
Existing Windows	1.99	40.90	22.15												
Skylight	2.03	40.10	88.23												
Doors	4.00	20.35	2.75												
Net exposed walls A	17.03	4.78	0.65												
Net exposed walls B	8.50	9.58	1.29												
Exposed Ceilings A	59.22	1.37	0.64												
Exposed Ceilings B	22.86	3.56	1.66												
Exposed Floors	29.80	2.73	0.17												
Foundation Conductive Heatloss															
Total Conductive	Heat Loss														
	Heat Gain														
Air Leakage	Heat Loss/Gain	0.0000	0.0296												
Ventilation	Case 1		0.00		0.05										
	Case 2		14.07		11.88										
	Case 3	x	0.03		0.05										
Heat Gain People			239												
Appliances Loads	1 =.25 percent		4943												
Duct and Pipe loss			10%												
Level 4 HL Total	0		Total HL for per room												
Level 4 HG Total	0		Total HG per room x 1.3												

**SITE COPY**

Total Heat Loss	54,324	btu/h
Total Heat Gain	32,640	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 subsection 3.2.5. of the Building Code. Individual BCIN: 32964

David DaCosta

SB-12 Package

Package A1

I review and take responsibility for the design work and am qualified in the appropriate category as an "other designer" under Division C subsection 3.2.5. of the Building Code.

Individual BCIN: 32964



David DaCosta

**Package:** Package A1

**Project:** Bradford

**Model:**
**S38-7C**

## RESIDENTIAL MECHANICAL VENTILATION DESIGN SUMMARY

*For systems serving one dwelling unit & conforming to the Ontario Building Code, O.reg 332/12*

### Location of Installation

Lot #	Plan #
Township	
Bradford	
Roll #	Permit #
Address	

### Builder

Name	
Bayview Wellington	
Address	
City	
Tel	Fax

### Installing Contractor

Name	
Address	
City	
Tel	Fax

### Combustion Appliances 9.32.3.1(1)

- |    |                                     |  |
|----|-------------------------------------|--|
| a) | <input checked="" type="checkbox"/> | Direct vent (sealed combustion) only               |
| b) | <input type="checkbox"/>            | Positive venting induced draft (except fireplaces) |
| c) | <input type="checkbox"/>            | Natural draft, B-vent or induced draft fireplaces  |
| d) | <input type="checkbox"/>            | Solid fuel (including fireplaces)                  |
| e) | <input type="checkbox"/>            | No combustion Appliances                           |

### Heating System

- |                                     |  |
|-------------------------------------|--|
| <input checked="" type="checkbox"/> | Forced air                                     |
| <input type="checkbox"/>            | Non forced air                                 |
| <input type="checkbox"/>            | Electric space heat (if over 10% of heat load) |

### House Type 9.32.3.1(2)

- |       |                                     |   |
|-------|-------------------------------------|---|
| I     | <input checked="" type="checkbox"/> | Type a) or b) appliances only, no solid fuel        |
| II    | <input type="checkbox"/>            | Type I except with solid fuel (including fireplace) |
| III   | <input type="checkbox"/>            | Any type c) appliance                               |
| IV    | <input type="checkbox"/>            | Type I or II either electric space heat             |
| Other | <input type="checkbox"/>            | Type I, II or IV no forced air                      |

### System Design Option

- |   |                                     |   |
|---|-------------------------------------|---|
| 1 | <input type="checkbox"/>            | Exhaust only / forced air system                  |
| 2 | <input type="checkbox"/>            | HRV WITH DUCTING / forced air system              |
| 3 | <input checked="" type="checkbox"/> | HRV simplified connection to forced air system    |
| 4 | <input type="checkbox"/>            | HRV full ducting/not coupled to forced air system |
|   |                                     | Part 6 design                                     |

### Total Ventilation Capacity 9.32.3.3(1)

Bsmt & Master Bdrm	2 @ 21.2 cfm	42.4 cfm
Other Bedrooms	3 @ 10.6 cfm	31.8 cfm
Bathrooms & Kitchen	5 @ 10.6 cfm	53 cfm
Other rooms	5 @ 10.6 cfm	53 cfm
Total		<u>180.2</u>

### Principal Ventilation Capacity 9.32.3.4(1)

Master bedroom	1 @ 31.8 cfm	31.8 cfm
Other bedrooms	3 @ 15.9 cfm	47.7 cfm
Total		<u>79.5</u>

### Principal Exhaust Fan Capacity

Make	Model	Location
LifeBreath	RNC155	Base
132 cfm		Sones or Equiv.

### Heat Recovery Ventilator

Make	LifeBreath
Model	RNC155
	132 cfm high
	80 cfm low
Sensible efficiency @ -25 deg C	71%
Sensible efficiency @ 0 deg C	75%

Note: Installer to balance HRV/ERV to within 10 percent of PVC

### Supplemental Ventilation Capacity

Total ventilation capacity	180.2
Less principal exhaust capacity	79.5
REQUIRED supplemental vent. Capacity	<u>100.7</u> cfm

### Supplemental Fans 9.32.3.5.

Location	cfm	Model	Sones
Ens	50	XB50	0.3
Bath	50	XB50	0.3
Ens 4	50	XB50	0.3

all fans HVI listed      Make      Broan      or Equiv.

### Designer Certification

I hereby certify that this ventilation system has been designed in accordance with the Ontario Building Code.

Name      David DaCosta

Signature      

HRAI #      5190      BCIN #      32964

Date      March 12, 2018

# SITE COPY



2985 Drew Road, Suite 202, Mississauga, Ontario  
L4T 0A4 Tel: 905-671-9800 Fax: 647-494-9643  
e-mail dave@gtadesigns.ca

## Energy Efficiency Design Summary: Prescriptive Method (Building Code Part 9, Residential)

Page 7  
Project # PJ-00204  
Layout # JB-04484

This form is used by a designer to demonstrate that the energy efficiency design of a house complies with the building code using the prescriptive method described in Subsection 3.1.1. of SB-12. This form is applicable where the ratio of gross area of windows/sidelights/skylights/glazing in doors and sliding glass doors to the gross area of peripheral walls is not more than 22%.

For use by Principal Authority

Application No:

Model/Certification Number

### A. Project Information

Building number, street name	<b>Barossa 7 S38-7C</b>	Unit number	Lot/Con
Municipality	<b>Bradford</b>	Postal code	Reg. Plan number / other description

### B. Prescriptive Compliance [indicate the building code compliance package being employed in the house design]

SB-12 Prescriptive (input design package):

Package A1

Table: 3.1.1.2.A

### C. Project Design Conditions

Climatic Zone (SB-1):	Heat. Equip. Efficiency	Space Heating Fuel Source		
<input checked="" type="checkbox"/> Zone 1 (< 5000 degree days) <input type="checkbox"/> Zone 2 (≥ 5000 degree days)	<input checked="" type="checkbox"/> ≥ 92% AFUE <input type="checkbox"/> ≥ 84% < 92% AFUE	<input checked="" type="checkbox"/> Gas <input type="checkbox"/> Oil	<input type="checkbox"/> Propane <input type="checkbox"/> Electric	<input type="checkbox"/> Solid Fuel <input type="checkbox"/> Earth Energy
Ratio of Windows, Skylights & Glass (W, S & G) to Wall Area		Other Building Characteristics		
Area of Walls = <u>340.01</u> m <sup>2</sup> or <u>3659.9</u> ft <sup>2</sup>	W,S & G % = <u>17%</u>	<input type="checkbox"/> Log/Post&Beam <input type="checkbox"/> Slab-on-ground <input checked="" type="checkbox"/> Air Conditioning <input type="checkbox"/> Air Sourced Heat Pump (ASHP) <input type="checkbox"/> Ground Source Heat Pump (GSHP)		
Area of W, S & G = <u>56.205</u> m <sup>2</sup> or <u>605.0</u> ft <sup>2</sup>	Utilize Window Averaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> ICF Above Grade <input type="checkbox"/> Walkout Basement <input type="checkbox"/> Combo Unit		

### D. Building Specifications [provide values and ratings of the energy efficiency components proposed]

Energy Efficiency Substitutions			
<input type="checkbox"/> ICF (3.1.1.2.(5) & (6) / 3.1.1.3.(5)) <input type="checkbox"/> Combined space heating and domestic water heating systems (3.1.1.2(7) / 3.1.1.3.(7))			
<input type="checkbox"/> Airtightness substitution(s) Airtightness test required (Refer to Design Guide Attached)	<input type="checkbox"/> Table 3.1.1.4.B Required:		Permitted Substitution:
	<input type="checkbox"/> Table 3.1.1.4.C Required:		Permitted Substitution:
Building Component	Minimum RSI/R-Values or Maximum U-Value <sup>1</sup>		Efficiency Ratings
<b>Thermal Insulation</b>	Nominal	Effective	<b>Windows &amp; Doors</b> Provide U-Value <sup>(1)</sup> or ER rating
Ceiling with Attic Space	60		Windows/Sliding Glass Doors 1.6
Ceiling without Attic Space	31		Skylights 2.8
Exposed Floor	31		<b>Mechanicals</b>
Walls Above Grade	22		Heating Equip.(AFUE) 96%
Basement Walls	20.0ci		HRV Efficiency (SRE% at 0°C) 75%
Slab (all >600mm below grade)	x		DHW Heater (EF) 0.80
Slab (edge only ≤600mm below grade)	10		DWHR (CSA B55.1 (min. 42% efficiency)) #Showers 2
Slab (all ≤600mm below grade, or heated)	10		Combined Heating System

(1) U value to be provided in either W/(m<sup>2</sup>·K) or Btu/(h·ft<sup>2</sup>·F) but not both.

### E. Designer(s) [name(s) & BCIN(s), if applicable, of person(s) providing information herein to substantiate that design meets building code]

Name	BCIN	Signature
<b>David DaCosta</b>	<b>32964</b>	

Form authorized by OHBA, OBOA, LMCBO. Revised December 1, 2016.

# SITE COPY

Package: Project: Package A1 Bradford System: Model: System 1 S38-7C

## Air Leakage Calculations

Building Air Leakage Heat Loss				
B	LRairh	Vb	HL^T	HLleak
0.018	0.301	34878	81.4	15360

Building Air Leakage Heat Gain				
B	LRairh	Vb	HG^T	HG Leak
0.018	0.074	34878	11	514

Air Leakage Heat Loss/Gain Multiplier Table (Section 11)				
Level	Level Factor (LF)	Building Air	Level Conductive Heat Loss	Air Leakage Heat Loss Multiplier
Level 1	0.5	15360	7619	1.0080
Level 2	0.3		16489	0.2795
Level 3	0.2		13295	0.2311
Level 4	0		0	0.0000

Levels			
1	2	3	4
(LF)	(LF)	(LF)	(LF)
1.0	0.6	0.5	0.4
	0.4	0.3	0.3
		0.2	0.2
			0.1

HG LEAK		Air Leakage Heat Gain	
	514		0.0296
BUILDING CONDUCTIVE HEAT GAIN			17330

Levels this Dwelling	
3	

## Ventilation Calculations

### Ventilation Heat Loss

Ventilation Heat Loss				
C	PVC	HL^T	(1-E) HRV	HLbvent
1.08	79.5	81.4	0.16	1118

### Ventilation Heat Gain

Ventilation Heat Gain			
C	PVC	HG^T	HGbvent
1.1	79.5	11	944

### Case 1

#### Ventilation Heat Loss (Exhaust only Systems)

Case 1 - Exhaust Only				
Level	LF	HLbvent	LVL Cond. HL	Multiplier
Level 1	0.5	1118	7619	0.07
Level 2	0.3		16489	0.02
Level 3	0.2		13295	0.02
Level 4	0		0	0.00

### Case 1

#### Ventilation Heat Gain (Exhaust Only Systems)

Case 1 - Exhaust Only		Multiplier	
HGbvent	944	0.05	
Building	17330		

### Case 2

#### Ventilation Heat Loss (Direct Ducted Systems)

C	HL^T	(1-E) HRV	Multiplier
1.08	81.4	0.16	14.07

### Case 2

#### Ventilation Heat Gain (Direct Ducted Systems)

C	HG^T	Multiplier
1.08	11	11.88

### Case 3

#### Ventilation Heat Loss (Forced Air Systems)

HLbvent		Multiplier
Total Ventilation Load	1118	0.03

### Case 3

#### Ventilation Heat Gain (Forced Air Systems)

Vent Heat Gain		Multiplier
HGbvent	HG*1.3	0.05
944	1	

Foundation Conductive Heatloss Level 1

1832 Watts 6252 Btu/h

Foundation Conductive Heatloss Level 2

Watts Btu/h

# Envelope Air Leakage Calculator

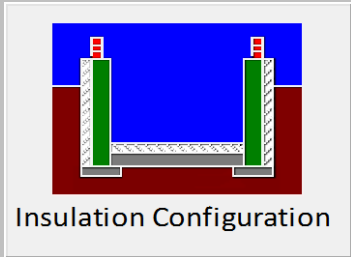
Supplemental tool for CAN/CSA-F280

Weather Station Description				
Province:	Ontario			
Region:	Bradford			
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):	6.10			
Building Configuration				
Type:	Detached			
Number of Stories:	Two			
Foundation:	Full			
House Volume (m <sup>3</sup> ):	987.74			
Air Leakage/Ventilation				
Air Tightness Type:	Present (1961-) (ACH=3.57)			
Custom BDT Data:	ELA @ 10 Pa. 322.44 cm <sup>2</sup>			
	3.57 ACH @ 50 Pa			
Mechanical Ventilation (L/s):	Total Supply:		Total Exhaust:	
	39.75		39.75	
Flue #:	#1	#2	#3	#4
Diameter (mm):	0	0	0	0
Heating Air Leakage Rate (ACH/H): 0.301				
Cooling Air Leakage Rate (ACH/H): 0.074				

**SITE COPY**



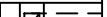













# Residential Foundation Thermal Load Calculator

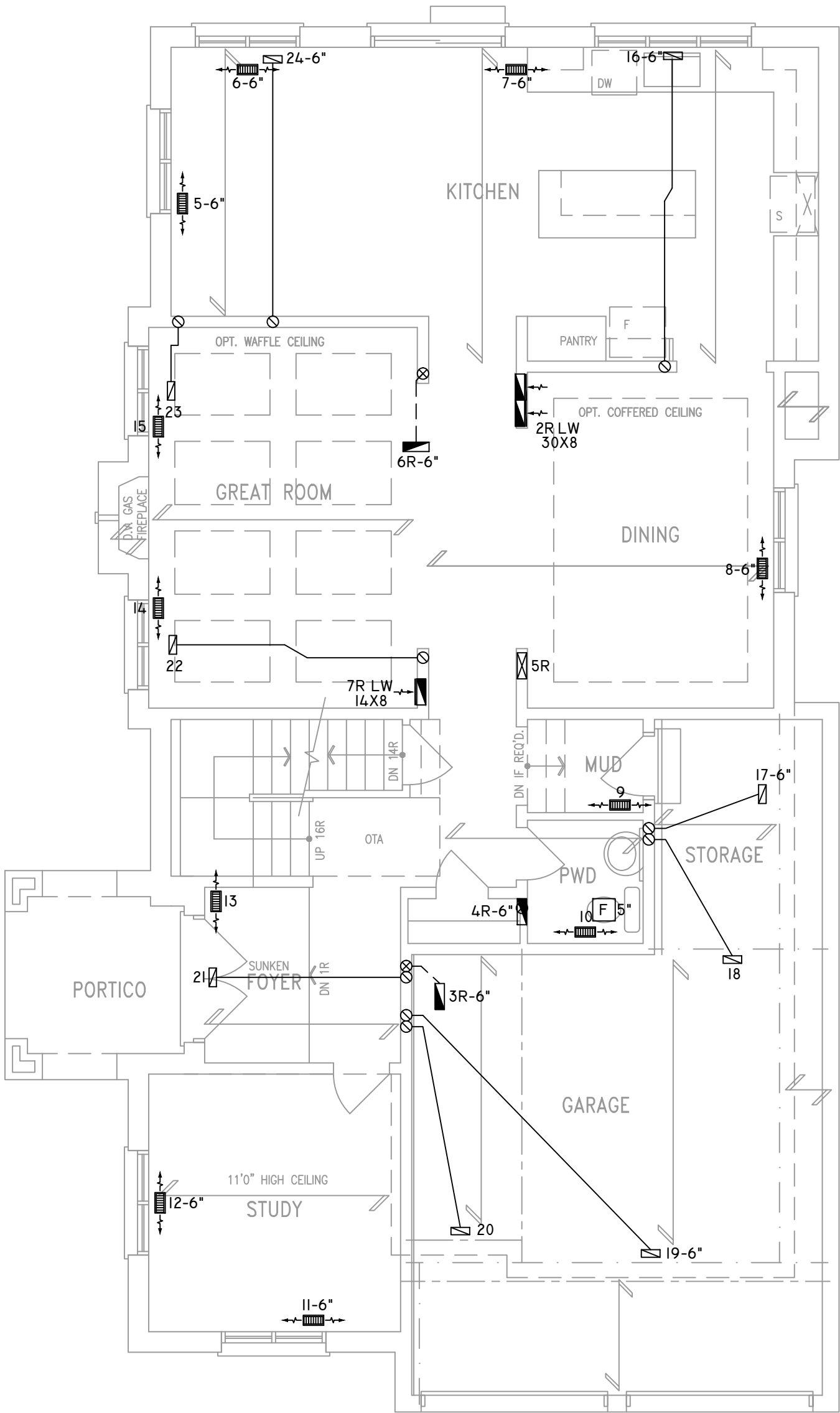
Supplemental tool for CAN/CSA-F280

Weather Station Description		
Province:	Ontario ▼	
Region:	Bradford ▼	
Site Description		
Soil Conductivity:	High conductivity: moist soil ▼	
Water Table:	Normal (7-10 m, 23-33 Ft) ▼	
Foundation Dimensions		
Floor Length (m):	22.81	 <p>Insulation Configuration</p>
Floor Width (m):	5.08	
Exposed Perimeter (m):	55.78	
Wall Height (m):	2.74	
Depth Below Grade (m):	2.13	
Window Area (m <sup>2</sup> ):	3.81	
Door Area (m <sup>2</sup> ):	1.95	
Radiant Slab		
Heated Fraction of the Slab:	0	
Fluid Temperature (°C):	33	
Design Months		
Heating Month	1	
Foundation Loads		
Heating Load (Watts):		1832

**SITE COPY**

ZONE I COMPLIANCE  
PACKAGE "AI" REF. TABLE 3.1.1.2.A

	FLEX DUCT		LOW/HIGH WALL/KICK SUPPLY DIFFUSER		DUCT CONNECTION TO JOIST LINING		RETURN AIR GRILLE (SIZE INDICATED ON DRAWING)	S.A.	SUPPLY AIR
	RIGID ROUND DUCT		HRV EXHAUST GRILLE		RETURN AIR PIPE RISER		RETURN AIR RISER UP TO FLOOR ABOVE	R.A.	RETURN AIR
	SUPPLY DIFFUSER		SUPPLY AIR PIPE RISER		RETURN ROUND DUCT		RETURN AIR FROM BASEMENT SECOND FLOOR		THERMOSTAT
			VOLUME DAMPER						PRINCIPAL EXHAUST FAN SWITCH
									W/R & PRINCIPAL EXHAUST FAN



KITCHEN EXHAUST  
100 CFM MIN. 6"

CIRCULATION PRINCIPAL  
FAN SWITCH  
TO BE CENTRALLY  
LOCATED

ALL DUCTWORK LOCATED IN  
CONDITIONED AREAS  
MUST BE SEALED TO CLASS  
C LEVEL AS PER OBC PART  
6-6.2.4.3.(12)

INSULATE ALL DUCTS IN  
UNCONDITIONED  
SPACES MIN. R12

FOR THE PURPOSE OF  
HEATLOSS/GAIN  
CALCULATIONS ALL  
ELEVATIONS HAVE BEEN  
CONSIDERED

THE UNDERSIGNED HAS REVIEWED AND TAKES RESPONSIBILITY FOR THIS DESIGN ON BEHALF OF GTA DESIGNS INC. AND HAS THE QUALIFICATIONS AND MEETS THE REQUIREMENTS SET OUT IN THE BUILDING CODE TO BE A DESIGNER

QUALIFICATION INFORMATION

REQUIRED UNLESS DESIGN IS EXEMPT UNDER DIVISION C 3.2.5.1 OF THE ONTARIO BUILDING CODE

DAVID DA COSTA  B.C.I.N. 32964

SIGNATURE OF DESIGNER

GROUND FLOOR PLAN 'A'

SITE COPY

OBC 2012

ZONE I COMPLIANCE  
PACKAGE "A1" REF. TABLE 3.1.1.2.A

NOTES

INSTALLATION TO COMPLY WITH THE LATEST ONTARIO BUILDING CODE.

ALL SUPPLY OUTLETS TO BE 5" DIA. UNLESS OTHERWISE SPECIFIED.

PROVIDE BALANCING DAMPERS ON ALL BRANCHES.

ALL R/A PARTITIONS 6" (FIRST FLOOR ONLY)

INSULATE DUCTS IN UNCONDITIONED SPACES R12 UNDERCUT ALL DOORS 1" MIN.

CONTRACTOR MUST WORK FROM APPROVED PLANS.

ANY ALTERATIONS TO THIS ORIGINAL PLAN ARE NOT THE RESPONSIBILITY OF GTA DESIGNS.

GTA DESIGNS MUST BE CONSULTED IF KITCHEN EXHAUST FAN EXCEEDS 700 CFM DEPRESSURIZATION MAY OCCUR WITH IN THE DWELLING.





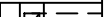













2985 DREW ROAD  
SUITE 202,  
MISSISSAUGA, ONT.  
L4T 0A4 TEL: 905-671-9800  
EMAIL: DAVE@GTADESIGNS.CA  
WEB: WWW.GTADESIGNS.CA

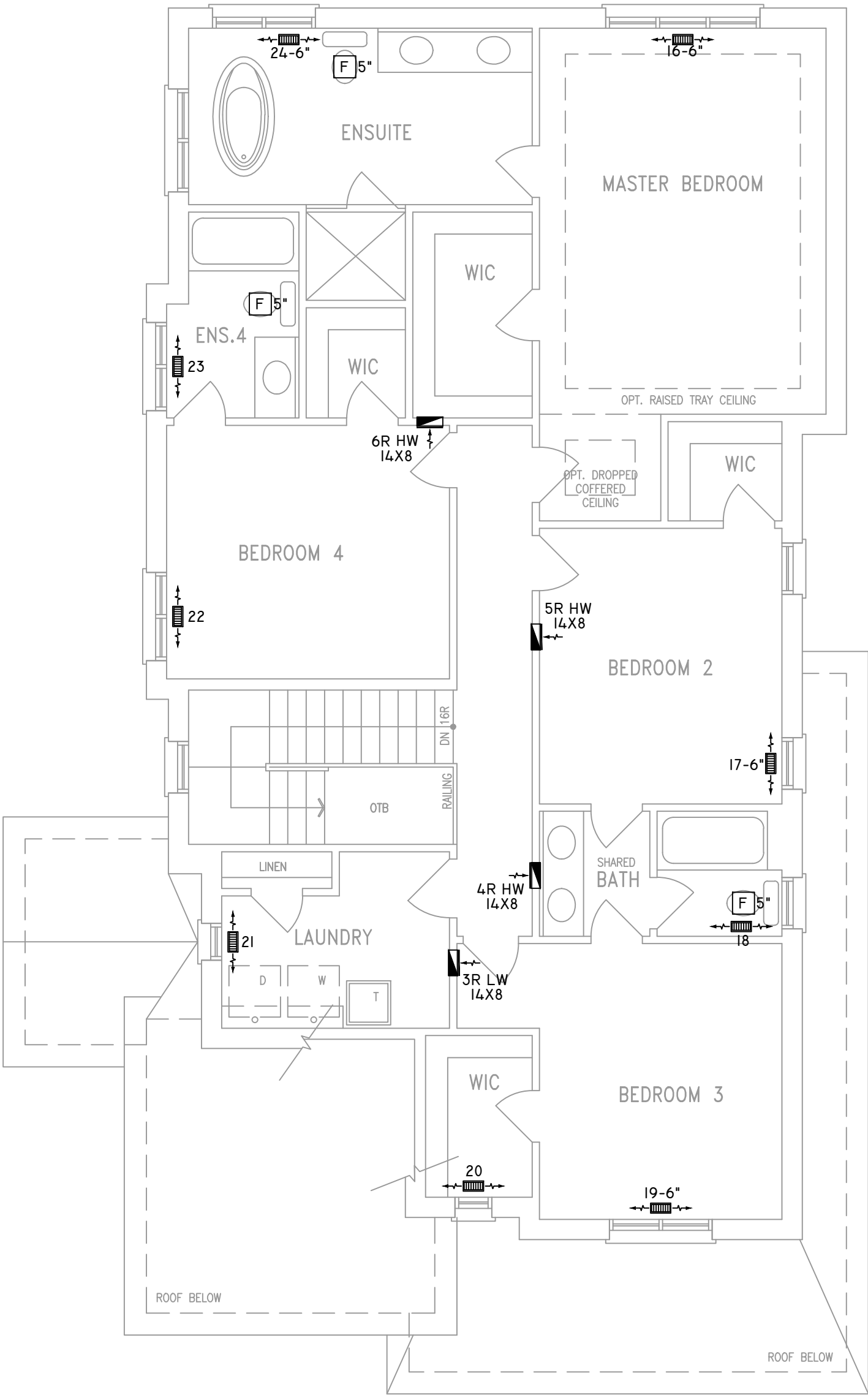
HEAT-LOSS	54,324	BTU/HR.
UNIT MAKE	AMANA	OR EQUAL.
UNIT MODEL	AMEC960803BNA	OR EQUAL.
UNIT HEATING INPUT	80,000	BTU/HR.
UNIT HEATING OUTPUT	76,800	BTU/HR.
A/C COOLING CAPACITY	3.0	TONS.
FAN SPEED	1172	CFM

# OF RUNS	S/A	R/A	FANS
3RD FLOOR			
2ND FLOOR	9	3	3
1ST FLOOR	11	2	2
BASEMENT	4	1	

FLOOR PLAN: GROUND FLOOR	
DRAWN BY: AP	CHECKED: DD
LAYOUT NO. JB-04484	SQFT 2949
	DRAWING NO. M2

DATE:	MARCH 12, 2018
CLIENT:	BAYVIEW WELLINGTON
MODEL:	S38-7C BAROSSA 7
PROJECT:	GREEN VALLEY EAST BRADFORD,ONT.
SCALE:	3/16" = 1'-0"

	FLEX DUCT		LOW/HIGH WALL/KICK SUPPLY DIFFUSER		DUCT CONNECTION TO JOIST LINING		RETURN AIR GRILLE (SIZE INDICATED ON DRAWING)	S.A.	SUPPLY AIR
	RIGID ROUND DUCT		HRV EXHAUST GRILLE		RETURN AIR PIPE RISER		RETURN AIR RISER UP TO FLOOR ABOVE	R.A.	RETURN AIR
	SUPPLY DIFFUSER		SUPPLY AIR PIPE RISER		RETURN ROUND DUCT		RETURN AIR FROM BASEMENT SECOND FLOOR		THERMOSTAT
			VOLUME DAMPER						PRINCIPAL EXHAUST FAN SWITCH
									W/R & PRINCIPAL EXHAUST FAN



ALL DUCTWORK LOCATED IN  
CONDITIONED AREAS  
MUST BE SEALED TO CLASS  
C LEVEL AS PER OBC PART  
6-6.2.4.3.(12)

INSULATE ALL DUCTS IN  
UNCONDITIONED  
SPACES MIN. R12

FOR THE PURPOSE OF  
HEATLOSS/GAIN  
CALCULATIONS ALL  
ELEVATIONS HAVE BEEN  
CONSIDERED

THE UNDERSIGNED HAS REVIEWED AND TAKES RESPONSIBILITY FOR THIS DESIGN ON BEHALF OF GTA DESIGNS INC. AND HAS THE QUALIFICATIONS AND MEETS THE REQUIREMENTS SET OUT IN THE BUILDING CODE TO BE A DESIGNER

**QUALIFICATION INFORMATION**

REQUIRED UNLESS DESIGN IS EXEMPT UNDER DIVISION C 3.2.5.1 OF THE ONTARIO BUILDING CODE

DAVID DA COSTA



B.C.I.N. 32964

SIGNATURE OF DESIGNER

SECOND FLOOR PLAN 'A'

**SITE COPY**

OBC 2012

ZONE I COMPLIANCE  
PACKAGE "AI" REF. TABLE 3.1.1.2.A

**NOTES**  
INSTALLATION TO COMPLY WITH THE LATEST ONTARIO BUILDING CODE.  
ALL SUPPLY OUTLETS TO BE 5" DIA. UNLESS OTHERWISE SPECIFIED.  
PROVIDE BALANCING DAMPERS ON ALL BRANCHES.  
ALL R/A PARTITIONS 6" (FIRST FLOOR ONLY)  
INSULATE DUCTS IN UNCONDITIONED SPACES R12 UNDERCUT ALL DOORS 1" MIN.  
CONTRACTOR MUST WORK FROM APPROVED PLANS.  
ANY ALTERATIONS TO THIS ORIGINAL PLAN ARE NOT THE RESPONSIBILITY OF GTA DESIGNS.  
GTA DESIGNS MUST BE CONSULTED IF KITCHEN EXHAUST FAN EXCEEDS 700 CFM DEPRESSURIZATION MAY OCCUR WITH IN THE DWELLING.



















2985 DREW ROAD  
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L4T 0A4 TEL: 905-671-9800  
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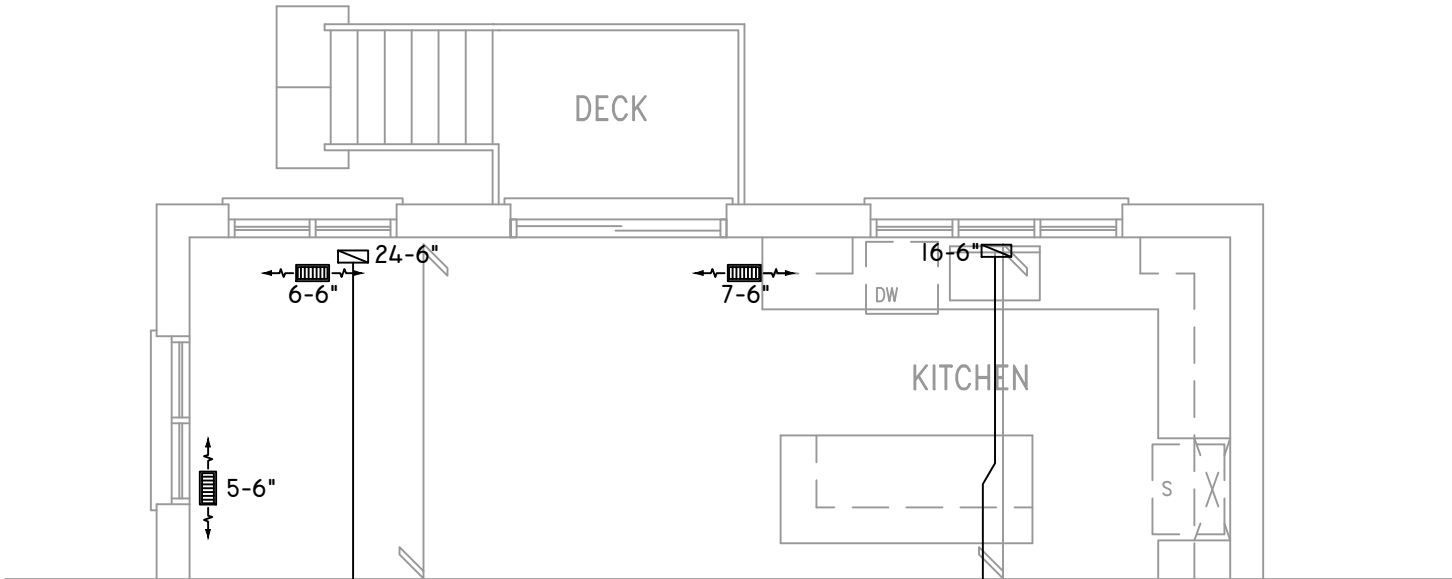
HEAT-LOSS	54,324	BTU/HR.
UNIT MAKE	AMANA	OR EQUAL.
UNIT MODEL	AMEC960803BNA	OR EQUAL.
UNIT HEATING INPUT	80,000	BTU/HR.
UNIT HEATING OUTPUT	76,800	BTU/HR.
A/C COOLING CAPACITY	3.0	TONS.
FAN SPEED	1172	CFM

# OF RUNS	S/A	R/A	FANS
3RD FLOOR			
2ND FLOOR	9	3	3
1ST FLOOR	11	2	2
BASEMENT	4	1	

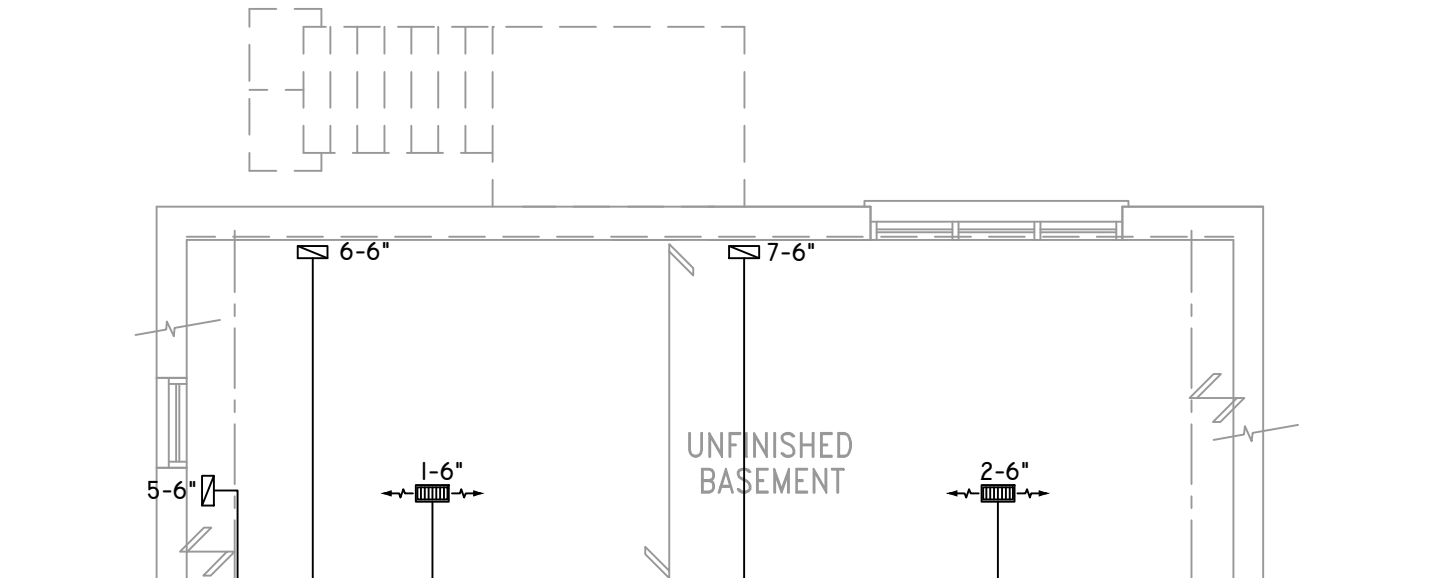
FLOOR PLAN: SECOND FLOOR		
DRAWN BY: AP	CHECKED: DD	SQFT 2949
LAYOUT NO. JB-04484	DRAWING NO. M3	

DATE:	MARCH 12, 2018
CLIENT:	BAYVIEW WELLINGTON
MODEL:	S38-7C BAROSSA 7
PROJECT:	GREEN VALLEY EAST BRADFORD,ONT.
SCALE:	3/16" = 1'-0"

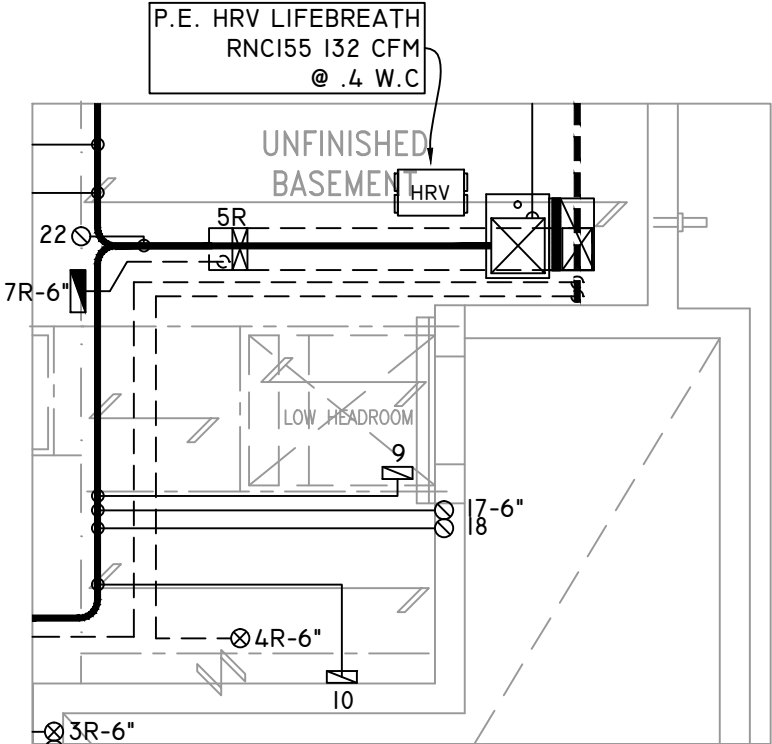
	FLEX DUCT		LOW/HIGH WALL/KICK SUPPLY DIFFUSER		DUCT CONNECTION TO JOIST LINING		RETURN AIR GRILLE (SIZE INDICATED ON DRAWING)	S.A.	SUPPLY AIR
	RIGID ROUND DUCT		HRV EXHAUST GRILLE		RETURN AIR PIPE RISER		RETURN AIR RISER UP TO FLOOR ABOVE	R.A.	RETURN AIR
	SUPPLY DIFFUSER		SUPPLY AIR PIPE RISER		RETURN ROUND DUCT		RETURN AIR FROM BASEMENT SECOND FLOOR		THERMOSTAT
			VOLUME DAMPER						PRINCIPAL EXHAUST FAN SWITCH
									W/R & PRINCIPAL EXHAUST FAN



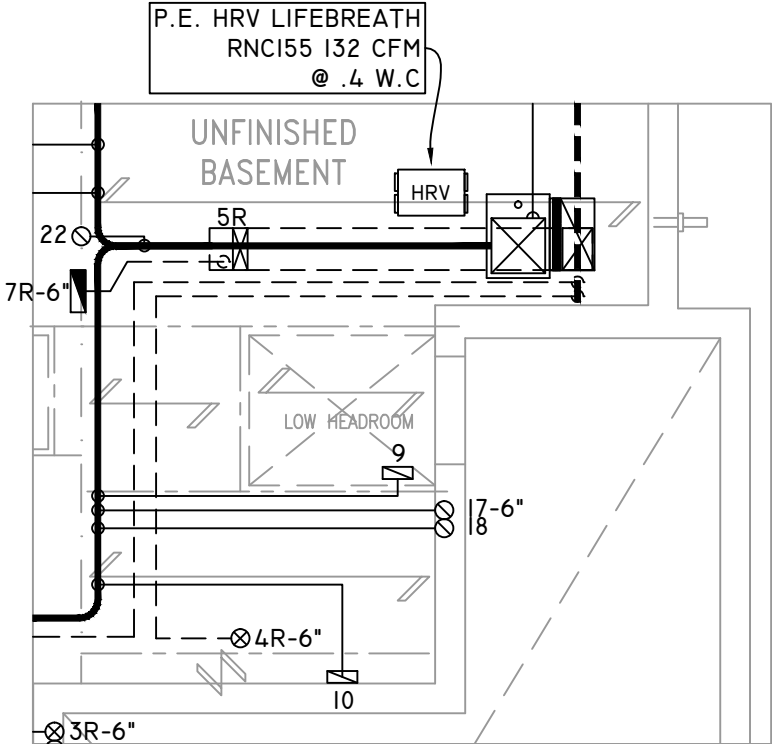
GROUND FLOOR PLAN 'A' – W.O.D. CONDITION  
ELEV. 'B' & 'C' SIMILAR



BASEMENT PLAN 'A' – W.O.D. CONDITION  
ELEV. 'B' & 'C' SIMILAR



PART. BSMT. PLAN  
MUDROOM SUNKEN > 1R



PART. BSMT. PLAN  
MUDROOM SUNKEN 1R

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**QUALIFICATION INFORMATION**

REQUIRED UNLESS DESIGN IS EXEMPT UNDER DIVISION C 3.2.5.1 OF THE ONTARIO BUILDING CODE

DAVID DA COSTA



B.C.I.N. 32964

SIGNATURE OF DESIGNER

SITE COPY

OBC 2012

ZONE I COMPLIANCE  
PACKAGE "A1" REF. TABLE 3.1.1.2.A

**NOTES**  
INSTALLATION TO COMPLY WITH THE LATEST ONTARIO BUILDING CODE.  
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INSULATE DUCTS IN UNCONDITIONED SPACES R12 UNDERCUT ALL DOORS 1" MIN.  
CONTRACTOR MUST WORK FROM APPROVED PLANS.  
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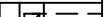













2985 DREW ROAD  
SUITE 202,  
MISSISSAUGA, ONT.  
L4T 0A4 TEL: 905-671-9800  
EMAIL: DAVE@GTADESIGNS.CA  
WEB: WWW.GTADESIGNS.CA

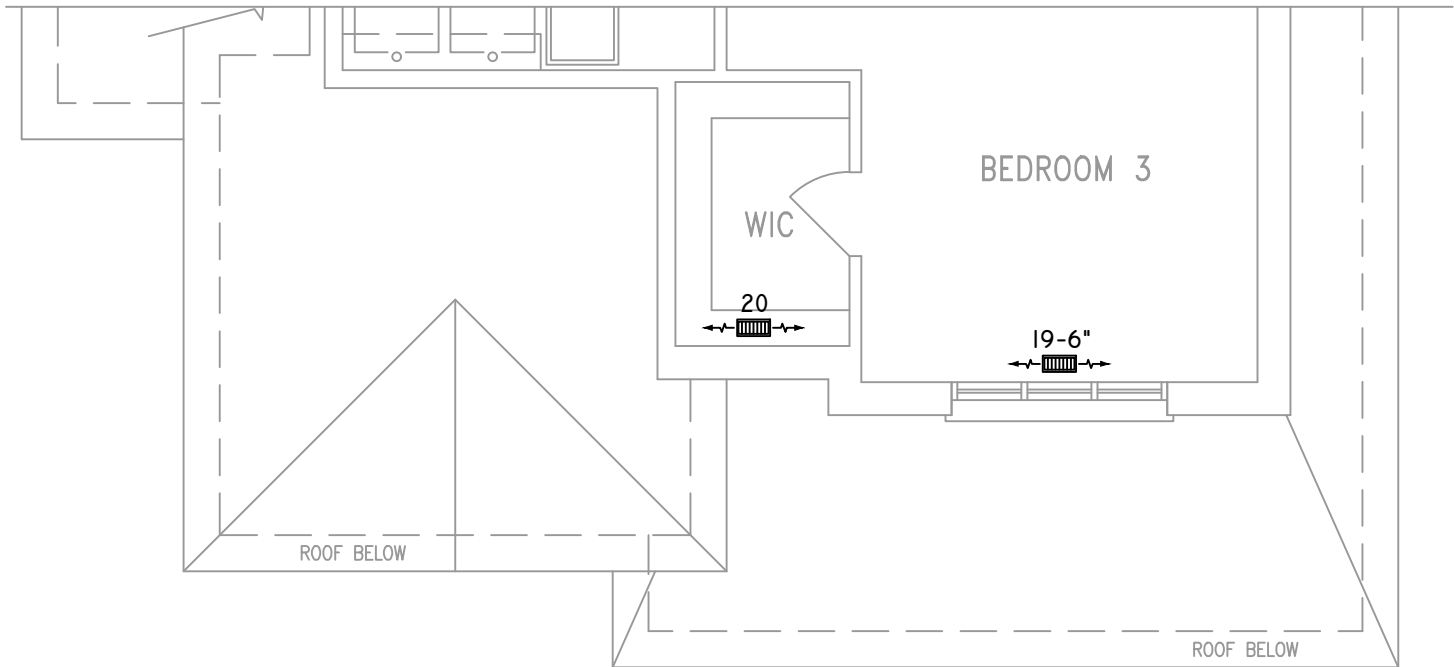
HEAT-LOSS	54,324	BTU/HR.
UNIT MAKE	AMANA	OR EQUAL.
UNIT MODEL	AMEC960803BNA	OR EQUAL.
UNIT HEATING INPUT	80,000	BTU/HR.
UNIT HEATING OUTPUT	76,800	BTU/HR.
A/C COOLING CAPACITY	3.0	TONS.
FAN SPEED	1172	CFM

# OF RUNS	S/A	R/A	FANS
3RD FLOOR			
2ND FLOOR	9	3	3
1ST FLOOR	11	2	2
BASEMENT	4	1	

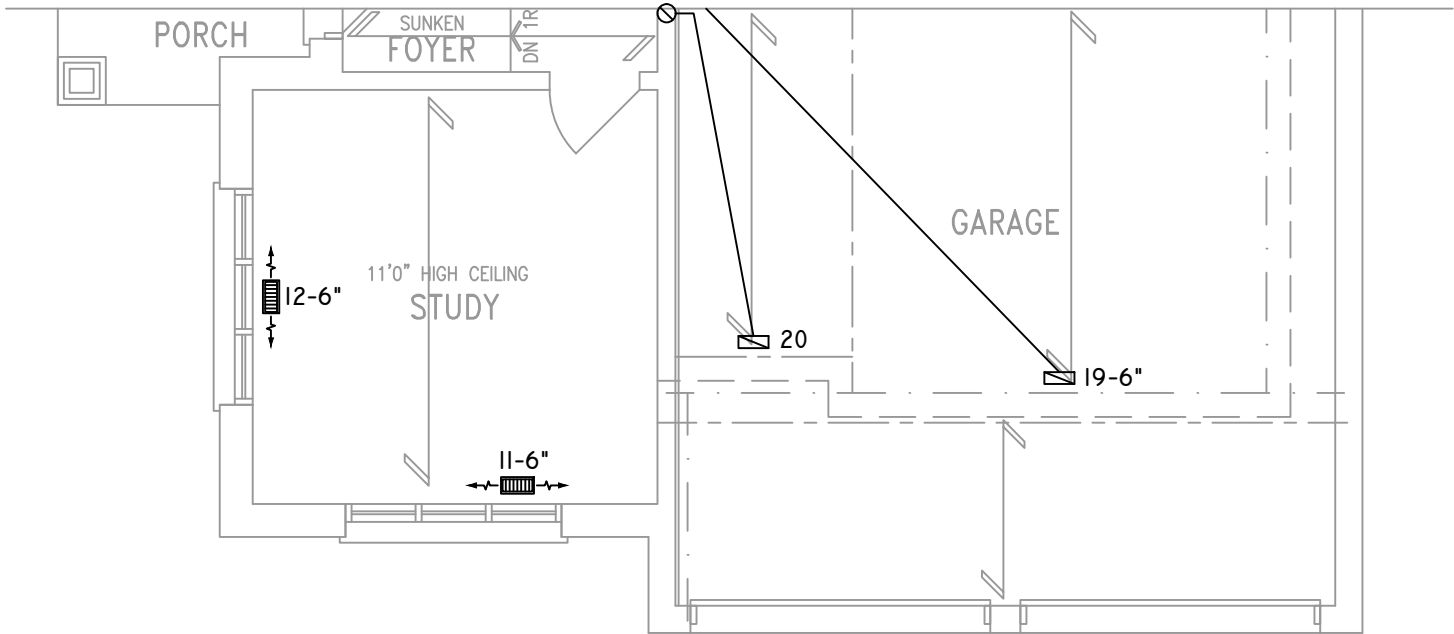
FLOOR PLAN: PARTIAL PLAN(S)	
DRAWN BY: AP	CHECKED: DD
LAYOUT NO: JB-04484	DRAWING NO: M4
SQFT 2949	

DATE:	MARCH 12, 2018
CLIENT:	BAYVIEW WELLINGTON
MODEL:	S38-7C BAROSSA 7
PROJECT:	GREEN VALLEY EAST BRADFORD,ONT.
SCALE:	3/16" = 1'-0"

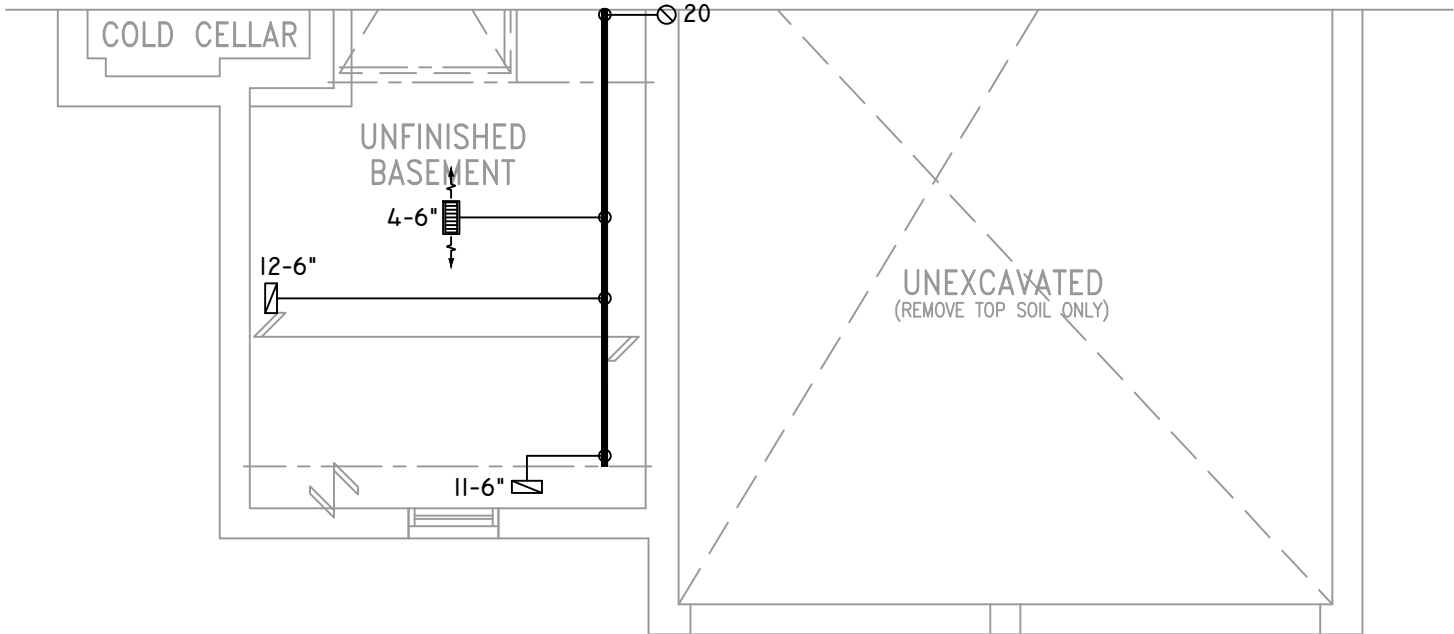
	FLEX DUCT		LOW/HIGH WALL/KICK SUPPLY DIFFUSER		DUCT CONNECTION TO JOIST LINING		RETURN AIR GRILLE (SIZE INDICATED ON DRAWING)	S.A.	SUPPLY AIR
	RIGID ROUND DUCT		HRV EXHAUST GRILLE		RETURN AIR PIPE RISER		RETURN AIR RISER UP TO FLOOR ABOVE	R.A.	RETURN AIR
	SUPPLY DIFFUSER		SUPPLY AIR PIPE RISER		RETURN ROUND DUCT		RETURN AIR FROM BASEMENT SECOND FLOOR		THERMOSTAT
			VOLUME DAMPER						PRINCIPAL EXHAUST FAN SWITCH
									W/R & PRINCIPAL EXHAUST FAN



PARTIAL SECOND FLOOR PLAN ELEV. 'B'



PARTIAL GROUND FLOOR PLAN ELEV. 'B'



PARTIAL BASEMENT PLAN 'B'

**SITE COPY**


OBC 2012

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**QUALIFICATION INFORMATION**

REQUIRED UNLESS DESIGN IS EXEMPT UNDER DIVISION C 3.2.5.1 OF THE ONTARIO BUILDING CODE

DAVID DA COSTA



B.C.I.N. 32964

SIGNATURE OF DESIGNER

ZONE I COMPLIANCE  
PACKAGE "A1" REF. TABLE 3.1.1.2.A

**NOTES**  
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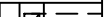













2985 DREW ROAD  
SUITE 202,  
MISSISSAUGA, ONT.  
L4T 0A4 TEL: 905-671-9800  
EMAIL: DAVE@GTADESIGNS.CA  
WEB: WWW.GTADESIGNS.CA

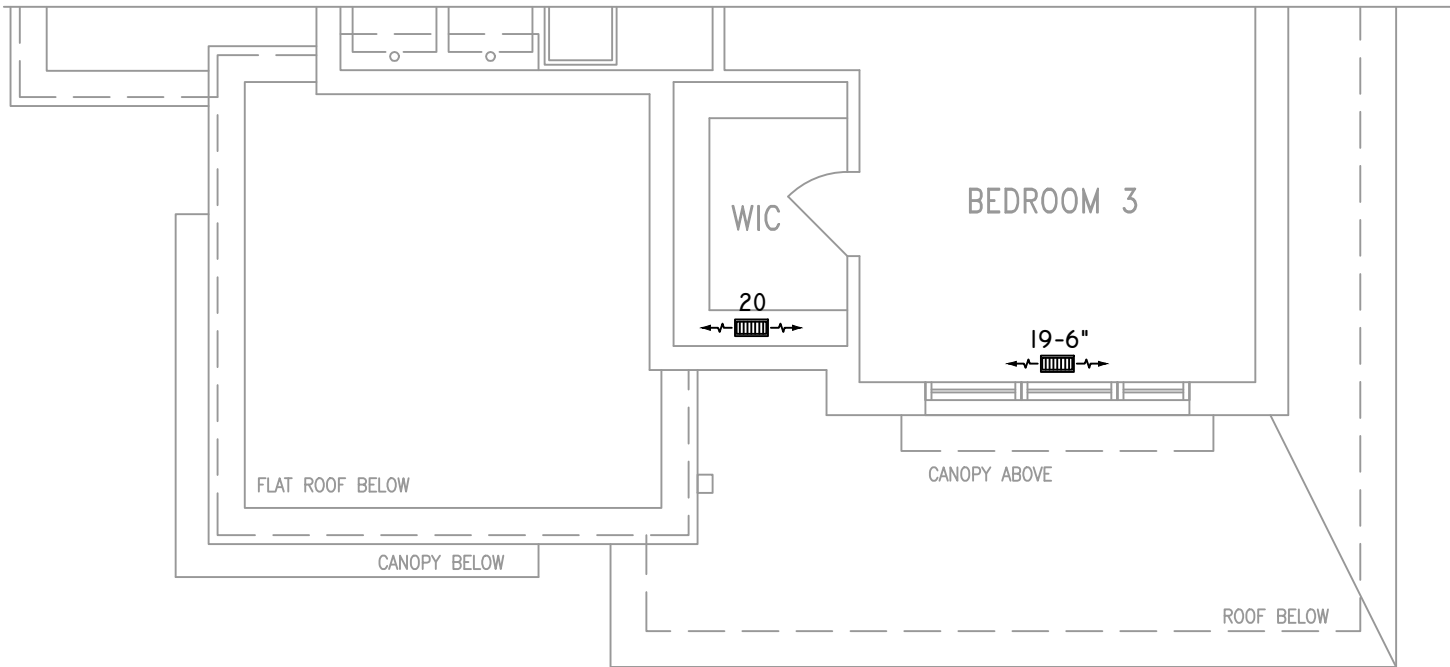
HEAT-LOSS	54,324	BTU/HR.
UNIT MAKE	AMANA	OR EQUAL.
UNIT MODEL	AMEC960803BNA	OR EQUAL.
UNIT HEATING INPUT	80,000	BTU/HR.
UNIT HEATING OUTPUT	76,800	BTU/HR.
A/C COOLING CAPACITY	3.0	TONS.
FAN SPEED	1172	CFM

# OF RUNS	S/A	R/A	FANS
3RD FLOOR			
2ND FLOOR	9	3	3
1ST FLOOR	11	2	2
BASEMENT	4	1	

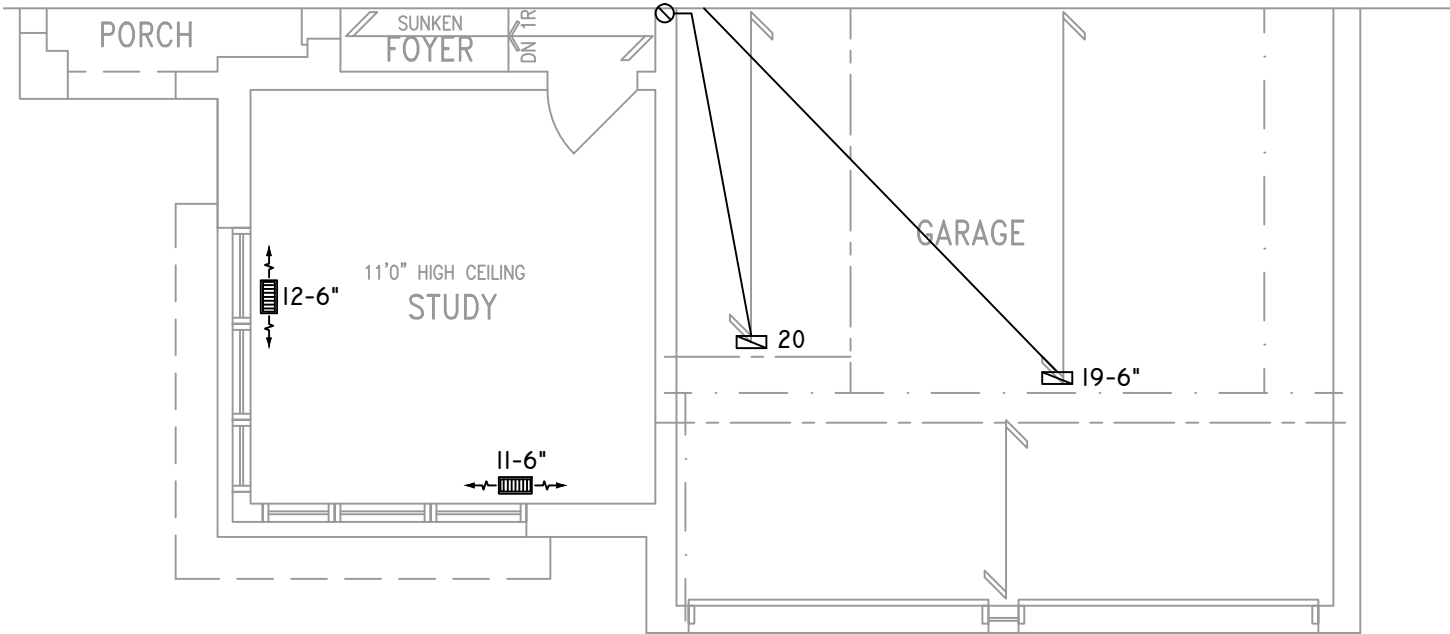
FLOOR PLAN: PARTIAL PLAN(S)	
DRAWN BY: AP	CHECKED: DD
LAYOUT NO. JB-04484	SQFT 2949
	DRAWING NO. M5

DATE:	MARCH 12, 2018
CLIENT:	BAYVIEW WELLINGTON
MODEL:	S38-7C BAROSSA 7
PROJECT:	GREEN VALLEY EAST BRADFORD,ONT.
SCALE:	3/16" = 1'-0"

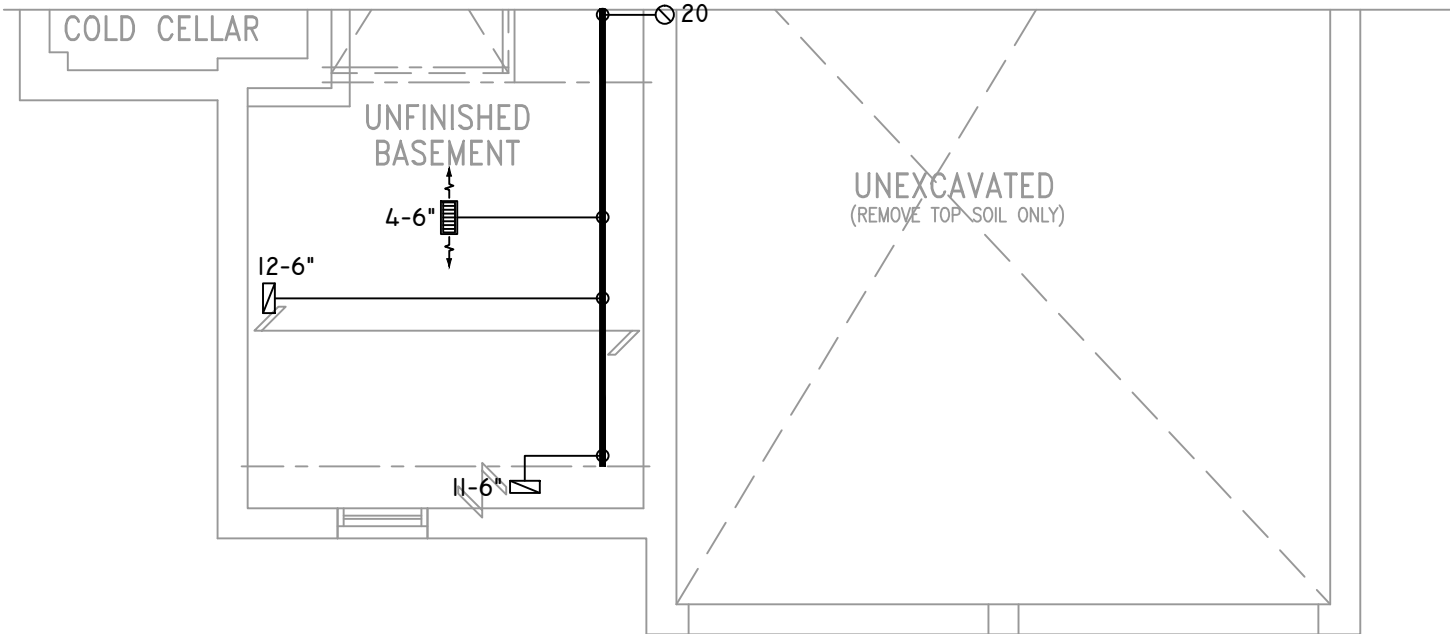
	FLEX DUCT		LOW/HIGH WALL/KICK SUPPLY DIFFUSER		DUCT CONNECTION TO JOIST LINING		RETURN AIR GRILLE (SIZE INDICATED ON DRAWING)	S.A.	SUPPLY AIR
	RIGID ROUND DUCT		HRV EXHAUST GRILLE		RETURN AIR PIPE RISER		RETURN AIR RISER UP TO FLOOR ABOVE	R.A.	RETURN AIR
	SUPPLY DIFFUSER		SUPPLY AIR PIPE RISER		RETURN ROUND DUCT		RETURN AIR FROM BASEMENT SECOND FLOOR		THERMOSTAT
			VOLUME DAMPER						PRINCIPAL EXHAUST FAN SWITCH
									W/R & PRINCIPAL EXHAUST FAN



PARTIAL SECOND FLOOR PLAN ELEV. 'C'



PARTIAL GROUND FLOOR PLAN ELEV. 'C'



PARTIAL BASEMENT PLAN 'C'

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DAVID DA COSTA  B.C.I.N. 32964

SIGNATURE OF DESIGNER

OBC 2012

ZONE I COMPLIANCE  
PACKAGE "A1" REF. TABLE 3.1.1.2.A

**NOTES**  
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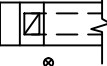







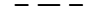






2985 DREW ROAD  
SUITE 202,  
MISSISSAUGA, ONT.  
L4T 0A4 TEL: 905-671-9800  
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WEB: WWW.GTADESIGNS.CA

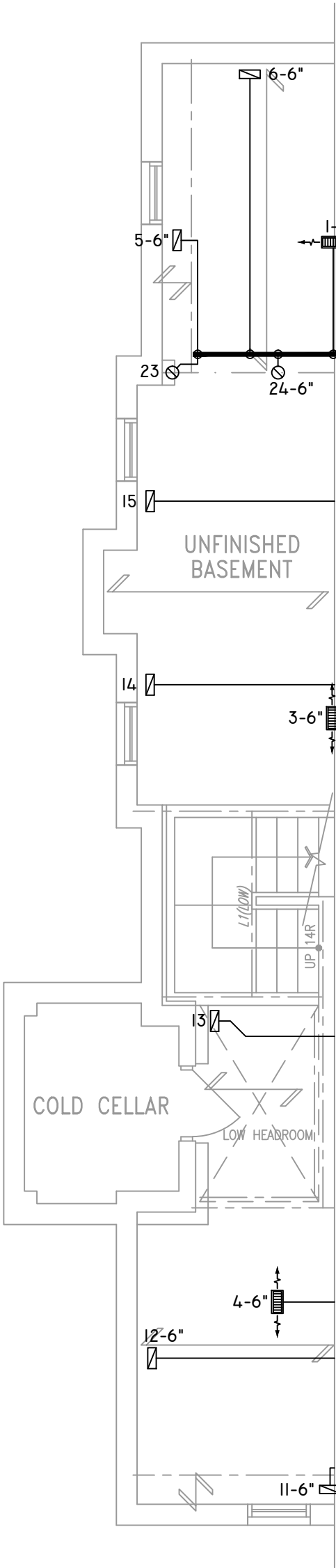
HEAT-LOSS	54,324	BTU/HR.
UNIT MAKE	AMANA	OR EQUAL.
UNIT MODEL	AMEC960803BNA	OR EQUAL.
UNIT HEATING INPUT	80,000	BTU/HR.
UNIT HEATING OUTPUT	76,800	BTU/HR.
A/C COOLING CAPACITY	3.0	TONS.
FAN SPEED	1172	CFM

# OF RUNS	S/A	R/A	FANS
3RD FLOOR			
2ND FLOOR	9	3	3
1ST FLOOR	11	2	2
BASEMENT	4	1	

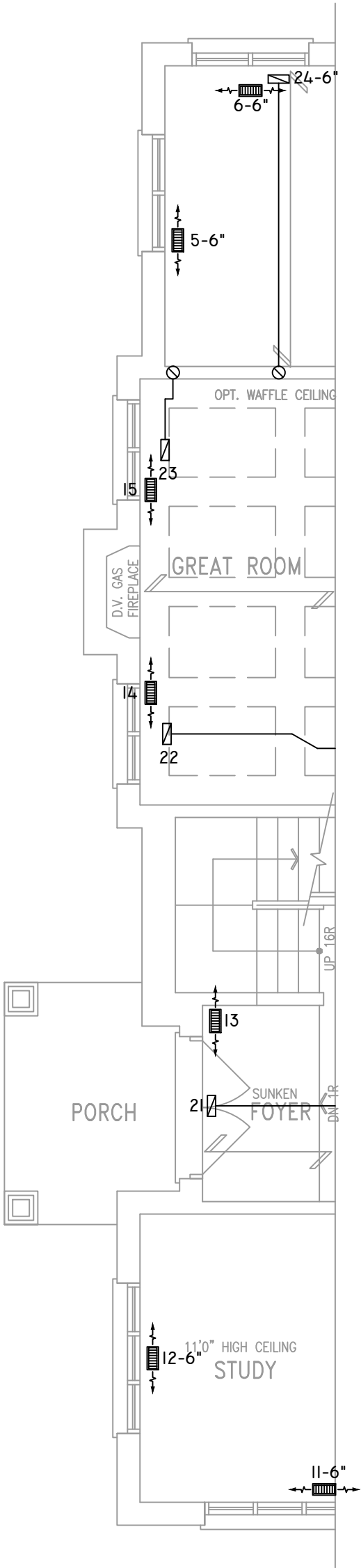
FLOOR PLAN: PARTIAL PLAN(S)	
DRAWN BY: AP	CHECKED: DD
LAYOUT NO. JB-04484	SQFT 2949
DRAWING NO. M6	

DATE:	MARCH 12, 2018
CLIENT:	BAYVIEW WELLINGTON
MODEL:	S38-7C BAROSSA 7
PROJECT:	GREEN VALLEY EAST BRADFORD,ONT.
SCALE:	3/16" = 1'-0"

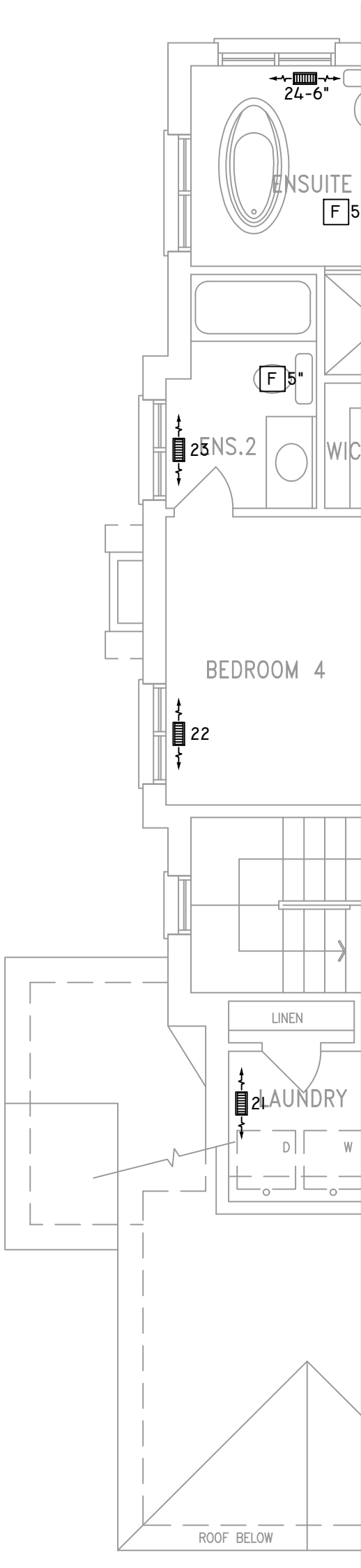
	FLEX DUCT		LOW/HIGH WALL/KICK SUPPLY DIFFUSER		DUCT CONNECTION TO JOIST LINING		RETURN AIR GRILLE (SIZE INDICATED ON DRAWING)	S.A.	SUPPLY AIR
	RIGID ROUND DUCT		HRV EXHAUST GRILLE		RETURN AIR PIPE RISER		RETURN AIR RISER UP TO FLOOR ABOVE	R.A.	RETURN AIR
	SUPPLY DIFFUSER		SUPPLY AIR PIPE RISER		RETURN ROUND DUCT		RETURN AIR FROM BASEMENT SECOND FLOOR		THERMOSTAT
			VOLUME DAMPER						PRINCIPAL EXHAUST FAN SWITCH
									W/R & PRINCIPAL EXHAUST FAN



BASEMENT PLAN ELEV. 'B'



GROUND FLOOR PLAN ELEV. 'B'




SECOND FLOOR PLAN ELEV. 'B'

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DAVID DA COSTA



B.C.I.N. 32964

SIGNATURE OF DESIGNER

SITE COPY

OBC 2012

ZONE I COMPLIANCE  
PACKAGE "A1" REF. TABLE 3.1.1.2.A

**NOTES**  
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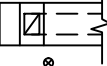














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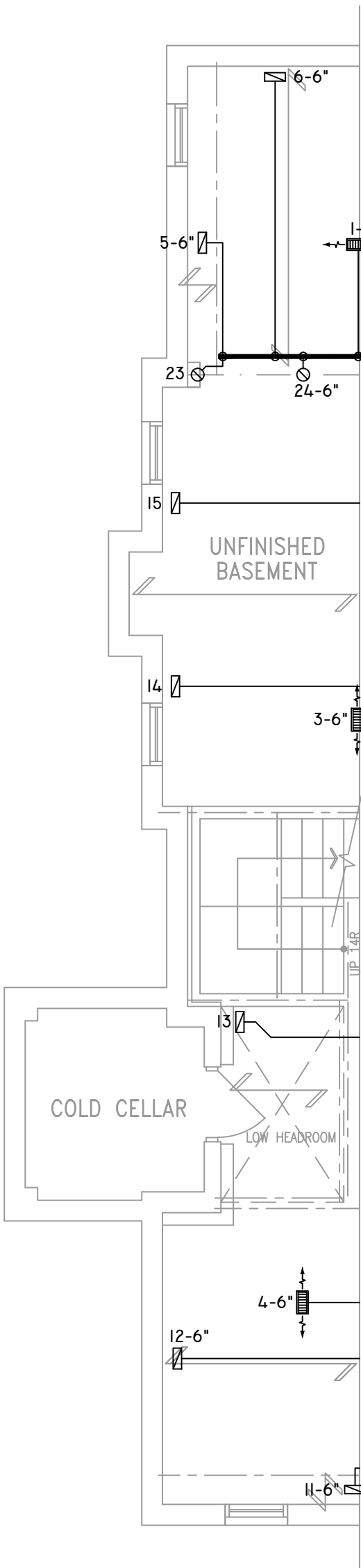
HEAT-LOSS	54,324	BTU/HR.
UNIT MAKE	AMANA	OR EQUAL.
UNIT MODEL	AMEC960803BNA	OR EQUAL.
UNIT HEATING INPUT	80,000	BTU/HR.
UNIT HEATING OUTPUT	76,800	BTU/HR.
A/C COOLING CAPACITY	3.0	TONS.
FAN SPEED	1172	CFM

# OF RUNS	S/A	R/A	FANS
3RD FLOOR			
2ND FLOOR	9	3	3
1ST FLOOR	11	2	2
BASEMENT	4	1	

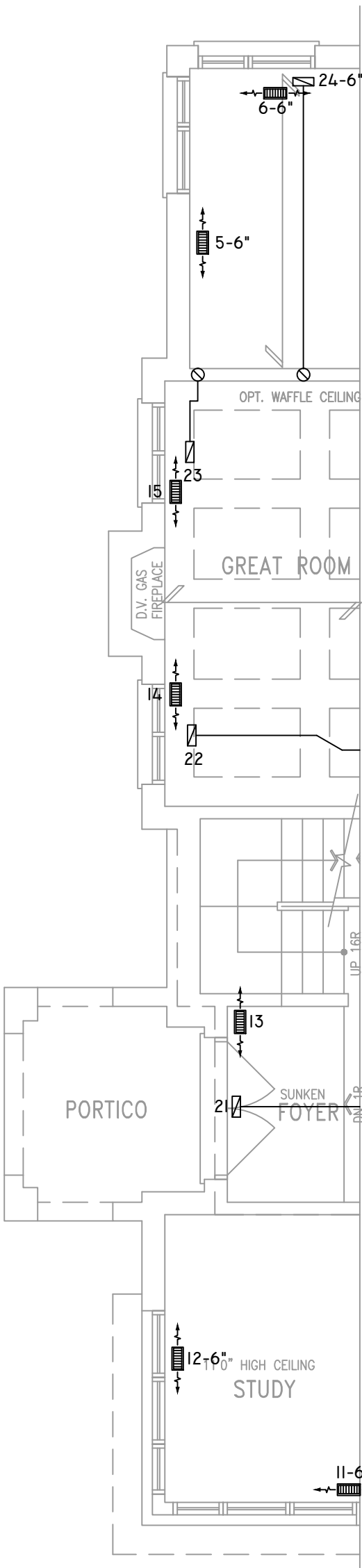
FLOOR PLAN:		
PARTIAL PLAN(S)		
DRAWN BY:	CHECKED:	SQFT
AP	DD	2949
LAYOUT NO.	DRAWING NO.	
JB-04484	M7	

DATE:	MARCH 12, 2018
CLIENT:	BAYVIEW WELLINGTON
MODEL:	S38-7C BAROSSA 7
PROJECT:	GREEN VALLEY EAST BRADFORD,ONT.
SCALE:	3/16" = 1'-0"

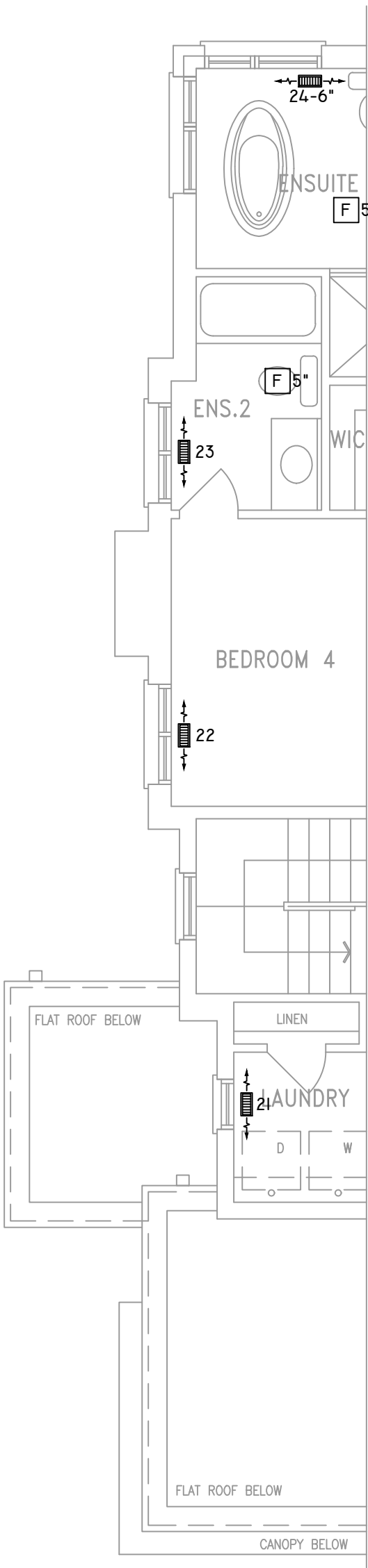
	FLEX DUCT		LOW/HIGH WALL/KICK SUPPLY DIFFUSER		DUCT CONNECTION TO JOIST LINING		RETURN AIR GRILLE (SIZE INDICATED ON DRAWING)	S.A.	SUPPLY AIR
	RIGID ROUND DUCT		HRV EXHAUST GRILLE		RETURN AIR PIPE RISER		RETURN AIR RISER UP TO FLOOR ABOVE	R.A.	RETURN AIR
	SUPPLY DIFFUSER		SUPPLY AIR PIPE RISER		RETURN ROUND DUCT		RETURN AIR FROM BASEMENT SECOND FLOOR		THERMOSTAT
			VOLUME DAMPER						PRINCIPAL EXHAUST FAN SWITCH
									W/R & PRINCIPAL EXHAUST FAN



BASEMENT PLAN ELEV. 'C'



GROUND FLOOR PLAN ELEV. 'C'




SECOND FLOOR PLAN ELEV. 'C'

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DAVID DA COSTA



B.C.I.N. 32964

SIGNATURE OF DESIGNER

SITE COPY

OBC 2012

ZONE I COMPLIANCE  
PACKAGE "A1" REF. TABLE 3.1.1.2.A

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UNIT HEATING OUTPUT	76,800	BTU/HR.
A/C COOLING CAPACITY	3.0	TONS.
FAN SPEED	1172	CFM

# OF RUNS	S/A	R/A	FANS
3RD FLOOR			
2ND FLOOR	9	3	3
1ST FLOOR	11	2	2
BASEMENT	4	1	

FLOOR PLAN:		
PARTIAL PLAN(S)		
DRAWN BY:	CHECKED:	SQFT
AP	DD	2949
LAYOUT NO.	DRAWING NO.	
JB-04484	M8	

DATE:	MARCH 12, 2018
CLIENT:	BAYVIEW WELLINGTON
MODEL:	S38-7C BAROSSA 7
PROJECT:	GREEN VALLEY EAST BRADFORD,ONT.
SCALE:	3/16" = 1'-0"