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	**Sonoma 5 Corner** **SD25-5C**	Lot: Lot/con.	
Municipality: **Bradford**	Postal code:	Plan number/ other description:	

B. Individual who reviews and takes responsibility for design activities

Name: **David DaCosta**		Firm: **gtaDesigns Inc.**	
Street address: **2985 Drew Road, Suite 202**		Unit no.	Lot/con.
Municipality: **Mississauga**	Postal code: **L4T 0A4**	Province: **Ontario**	E-mail: dave@gtadesigns.ca
Telephone number: **(905) 671-9800**	Fax number: **(647) 494-9643**	Cell number: **(416) 268-6820**	

C. Design activities undertaken by individual identified in Section B. [Building Code Table 3.5.2.1 of Division C]

❑ House	☒ HVAC – House	❑ Building Structural
❑ Small Buildings	❑ Building Services	❑ Plumbing – House
❑ Large Buildings	❑ Detection, Lighting and Power	❑ Plumbing – All Buildings
❑ Complex Buildings	❑ Fire Protection	❑ On-site Sewage Systems

Description of designer's work	**Model Certification**			**Project #:**	**PJ-00204**
				Layout #:	**JB-04401**
Heating and Cooling Load Calculations	**Main**	**X**	Builder	**Bayview Wellington**	
Air System Design	**Alternate**		Project	**Green Valley East**	
Residential mechanical ventilation Design Summary	**Area Sq ft:**	**2320**	Model	**Sonoma 5 Corner**	
Residential System Design per CAN/CSA-F280-12				**SD25-5C**	
Residential New Construction - Forced Air			SB-12	**Package A1**	

D. Declaration of Designer

I David DaCosta declare that (choose one as appropriate):

(print name)

❑ 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: _____

☒ 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: **32964**

Basis for exemption from registration: **Division C 3.2.4.1. (4)**

❑ 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.

February 15, 2018

Date

Signature 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 qualifications under Subsections 3.2.4 . and 3.2.5.of Division C.
2. Schedule 1 does not require to be completed a holder of a license, temporay license, or a certificate of authorization, issed by the Ontario Associstion 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.

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

Heat loss and gain calculation summary sheet

CSA-F280-M12
Standard Form No. 1

These documents issued for the use of **Bayview Wellington**

and may not be used by any other persons without authorization. Documents for permit and/or construction are signed in red.

Layout No. **JB-04401**

Building Location

Address (Model):	**SD25-5C**	Site:	**Green Valley East**
Model:	**Sonoma 5 Corner**	Lot:	
City and Province:	**Bradford**	Postal code:	

Calculations based on

Dimensional information based on: **VA3 Design Sept/2016**

Attachment:	**Semi**			Front facing:	**East/West** Assumed? **Yes**
No. of Levels:	**3**	Ventilated?	**Included**	Air tightness:	**1961-Present (ACH=3.57)** Assumed? **Yes**
Weather location:	**Bradford**			Wind exposure:	**Sheltered**
HRV?	**LifeBreath**		**RNC155**	Internal shading:	**Light-translucent** Occupants: **5**
Sensible Eff. at -25C	**71%**	Apparent Effect. at -0C	**84%**	Units:	**Imperial** Area Sq ft: **2320**
Sensible Eff. at -0C	**75%**				

Heating design conditions

Outdoor temp **-9.4** Indoor temp: **72** Mean soil temp **48**

Cooling design conditions

Outdoor temp **86** Indoor temp: **75** Latitude: **44**

Above grade walls

Style A:	**As per OBC SB12**	**Package A1**	**R**	**22**
Style B:	**Existing Walls (When Applicable)**		**R**	**12**
Style C:				
Style D:				

Below grade walls

Style A:	**As per OBC SB12**	**Package A1**	**R**	**20ci**
Style B:				
Style C:				
Style D:				

Floors on soil

Style A:	**As per Selected OBC SB12**	**Package A1**		
Style B:				

Ceilings

Style A:	**As per Selected OBC SB12**	**Package A1**	**R**	**60**
Style B:	**As per Selected OBC SB12**	**Package A1**	**R**	**31**
Style C:				

Exposed floors

Style A:	**As per Selected OBC SB12**	**Package A1**	**R**	**31**
Style B:				

Doors

Style A:	**As per Selected OBC SB12**	**Package A1**	**R**	**4.00**
Style B:				
Style C:				

Windows

Style A:	**As per Selected OBC SB12**	**Package A1**	**R**	**3.55**
Style B:	**Existing Windows (When Applicable)**		**R**	**1.99**
Style C:				
Style D:				

Skylights

Style A:	**As per Selected OBC SB12**	**Package A1**	**R**	**2.03**
Style B:				

Attached documents: **As per Shedule 1**

Heat Loss/Gain Caculations based on CSA-F280-12 Effective R-Values

Notes: **Residential New Construction - Forced Air**

Calculations performed by

Name:	**David DaCosta**	Postal code:	**L4T 0A4**
Company:	**gtaDesigns Inc.**	Telephone:	**(905) 671-9800**
Address:	**2985 Drew Road, Suite 202**	Fax:	**(416) 268-6820**
City:	**Mississauga**	E-mail	**dave@gtadesigns.ca**

Air System Design

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

SB-12 Package A1

Builder: Bayview Wellington | Date: February 15, 2018

Project: Green Valley East | Model: Sonoma 5 Corner SD25-5C

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

Project # PJ-00204
Layout # JB-04401

DESIGN LOAD SPECIFICATIONS

Level 1 Net Load	13,314	btu/h
Level 2 Net Load	16,225	btu/h
Level 3 Net Load	13,881	btu/h
Level 4 Net Load	0	btu/h
Total Heat Loss	43,420	btu/h
Total Heat Gain	27,996	btu/h
Combo System HL + 10%	47,762	Btuh.
Building Volume Vb	27153	ft³
Ventilation Load	1,118	Btuh.
Ventilation PVC	79.5	cfm
Supply Branch and Grill Sizing		

AIR DISTRIBUTION & PRESSURE

Equipment External Static Pressure	0.5	"w.c.
Additional Equipment Pressure Drop	0.225	"w.c.
Available Design Pressure	0.275	"w.c.
Return Branch Longest Effective Length	300	ft
R/A Plenum Pressure	0.138	"w.c.
S/A Plenum Pressure	0.14	"w.c.
Heating Air Flow Proportioning Factor	0.0269	cfm/btuh
Cooling Air Flow Proportioning Facter	0.0344	cfm/btuh
R/A Temp	70	deg. F.
S/A Temp	116	deg. F.
Diffuser loss	0.01	"w.c.

FURNACE/AIR HANDLER DATA:

Make	Amana	
Model	AMEC96-0603BNA	
Input Btu/h	60000	
Output Btu/h	57600	
E.s.p.	0.50	" W.C.
Water Temp		deg. F.
AFUE	96%	
Aux. Heat		
SB-12 Package	Package A1	
Temp. Rise>>>	46	deg. F.

BOILER/WATER HEATER DATA:

Make	Type	
Model		
Input Btu/h		
Output Btu/h		
Min.Output Btu/h	AWH	

Blower DATA:

Blower Speed Selected:	W2	
Heating Check	1170	cfm
Selected cfm>	1170	cfm

A/C UNIT DATA:

Amana	2.5	Ton
Cond.----------	2.5	
Coil ----------	2.5	
Blower Type	ECM	
	(Brushless DC OBC 12.3.1.5.(2))	
Cooling Check	963	cfm
Cooling Air Flow Rate	963	cfm

Level 1 / Level 2

	1	2	3	4											5		7	8	9	10	11	12	13	14				
S/A Outlet No.																												
Room Use	BASE	BASE	BASE	BASE											KIT		LIV/DIN	LIV/DIN	LIV/DIN	FOY	FAM	FAM	MUD	PWD				
Btu/Outlet	3328	3328	3328	3328											1622		2065	2065	2065	2194	2491	2491	840	392				
Heating Airflow Rate CFM	90	90	90	90											44		56	56	56	59	67	67	23	11				
Cooling Airflow Rate CFM	9	9	9	9											97		80	80	80	39	69	69	4	2				
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	0.13
Actual Duct Length	32	19	44	42											37		40	42	28	38	49	45	36	40				
Equivalent Length	130	80	90	150	70	70	70	70	70	70	70	70	70	70	100	70	110	120	70	100	120	120	140	140	70	70	70	70
Total Effective Length	162	99	134	192	70	70	70	70	70	70	70	70	70	70	137	70	150	162	98	138	169	165	176	180	70	70	70	70
Adjusted Pressure	0.08	0.13	0.10	0.07	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.09	0.19	0.09	0.08	0.13	0.09	0.08	0.08	0.07	0.07	0.19	0.19	0.19	0.19
Duct Size Round	6	6	6	6											6		6	6	6	5	6	6	4	3				
Outlet Size	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	3x10	4x10	4x10	3x10	3x10	4x10	4x10	4x10	4x10
Trunk	C	B	D	E											C		C	C	B	D	E	E	D	D				

Level 3 / Level 4

	15	16	17	18	19	20	21	22	23																			
S/A Outlet No.																												
Room Use	MAST	ENS	BED 4	VAN	BATH	BED 3	BED 3	BED 2	LAUN																			
Btu/Outlet	1771	2199	1760	1351	919	1822	1822	2031	206																			
Heating Airflow Rate CFM	48	59	47	36	25	49	49	55	6																			
Cooling Airflow Rate CFM	70	53	49	29	16	53	53	56	24																			
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	0.13
Actual Duct Length	51	63	42	50	56	66	66	51	40																			
Equivalent Length	100	150	110	120	165	150	110	180	150	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
Total Effective Length	151	213	152	170	221	216	176	231	190	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
Adjusted Pressure	0.09	0.06	0.09	0.08	0.06	0.06	0.07	0.06	0.07	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	0.19
Duct Size Round	6	6	5	4	4	5	5	6	4																			
Outlet Size	4x10	4x10	3x10	3x10	3x10	3x10	3x10	4x10	3x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10
Trunk	C	C	B	D	E	E	E	E	D																			

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	182	499	105	87	87	105	105				
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	7	17	47	40	48	57	38				
Equivalent Length	110	205	155	150	230	230	180	50	50	50	50
Total Effective Length	117	222	202	190	278	287	218	50	50	50	50
Adjusted Pressure	0.10	0.05	0.06	0.06	0.04	0.04	0.05	0.24	0.24	0.24	0.24
Duct Size Round	8.0	12.5	7.0	6.0	6.0	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	9x6	30	14	14	14	14	14				
Trunk	Y	Z	Z	Z	Z	Z	Y				

Return Trunk Duct Sizing

Trunk	CFM	Press.	Round	Rect. Size	
Drop	1170	0.04	18.0	24x12	
Z	1170	0.04	18.0	30x10	24x12
Y	287	0.05	10.0	12x8	10x10
X					
W					
V					
U					
T					
S					
R					
Q					

Supply Trunk Duct Sizing

Trunk	CFM	Press.	Round	Rect. Size	
A	1171	0.06	16.5	32x8	24x10
B	545	0.06	12.5	18x8	14x10
C	352	0.06	10.5	12x8	10x10
D	626	0.06	13.0	18x8	14x10
E	402	0.06	11.0	14x8	10x10
F					
G					
H					
I					
J					
K					

GTADESIGNS

Heatloss/Gain Calculations CSA-F280-12

2985 Drew Road, Suite 202, Mississauga, Ontario L4T 0A4 Tel: 905-671-9800 Fax: 647-494-9643

e-mail dave@gtadesigns.ca

2012 OBC

Builder: Bayview Wellington | Date: February 15, 2018 | Project: Green Valley East | Model: Sonoma 5 Corner SD25-5C | **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: 2320

Project # PJ-00204 | Layout # JB-04401

Level 1

		BASE																											
Run ft. exposed wall A		126	A			A			A			A			A			A			A			A			A		
Run ft. exposed wall B			B			B			B			B			B			B			B			B			B		
Ceiling height		3.7	AG		3.7	AG		3.7	AG		3.7	AG		3.7	AG		3.7	AG		3.7	AG		3.7	AG		3.7	AG		3.7	AG	
Floor area		963	Area			Area			Area			Area			Area			Area			Area			Area			Area			Area	
Exposed Ceilings A			A			A			A			A			A			A			A			A			A			A	
Exposed Ceilings B			B			B			B			B			B			B			B			B			B			B	
Exposed Floors			Flr			Flr			Flr			Flr			Flr			Flr			Flr			Flr			Flr			Flr	
Gross Exp Wall A		469																													
Gross Exp Wall B																															

Components		R-Values	Loss	Gain	BASE Loss	BASE Gain																														
North Shaded		3.55	22.93	10.91																																
East/West		3.55	22.93	27.35	13	298	356																													
South		3.55	22.93	20.89	6	138	125																													
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	429		223																													
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 Abo				5681																														
Total Conductive	Heat Loss					6544																														
	Heat Gain						762																														
Air Leakage	Heat Loss/Gain		0.9960	0.0289		6518	22																														
Ventilation	Case 1		0.09	0.06																																
	Case 2		14.07	11.88																																
	Case 3	x	0.04	0.06		252	48																													
Heat Gain People				239																																
Appliances Loads		1 =.25 percent		3854																																
Duct and Pipe loss				10%																																
Level 1 HL Total	13,314	Total HL for per room				13314																														
Level 1 HG Total	1,082	Total HG per room x 1.3					1082																													

Level 2

		KIT			LIV/DIN			FOY			FAM			MUD			PWD													
Run ft. exposed wall A		10	A		46	A		16	A		42	A		5	A		5	A		A			A			A			A	
Run ft. exposed wall B			B			B			B			B			B			B			B			B			B			B	
Ceiling height		10.0			10.0			11.0			10.0			12.0			12.0		10.0			10.0			10.0			10.0		
Floor area		269	Area		322	Area		93	Area		171	Area		66	Area		34	Area		Area			Area			Area			Area	
Exposed Ceilings A			A		4	A			A			A			A			A			A			A			A			A	
Exposed Ceilings B			B			B			B			B			B			B			B			B			B			B	
Exposed Floors			Flr			Flr			Flr			Flr			Flr			Flr			Flr			Flr			Flr			Flr	
Gross Exp Wall A		100			460			176			420			60			60													
Gross Exp Wall B																														

Components		R-Values	Loss	Gain	KIT Loss	KIT Gain		LIV/DIN Loss	LIV/DIN Gain		FOY Loss	FOY Gain		FAM Loss	FAM Gain		MUD Loss	MUD Gain		PWD Loss	PWD Gain										
North Shaded		3.55	22.93	10.91																										
East/West		3.55	22.93	27.35	39	894	1067	42	963	1149	24	550	656	47	1078	1286														
South		3.55	22.93	20.89				86	1972	1796				43	986	898														
Existing Windows		1.99	40.90	22.15																										
Skylight		2.03	40.10	88.23																										
Doors		4.00	20.35	2.75							21	427	58				21	427	58											
Net exposed walls A		17.03	4.78	0.65	61	292	39	332	1587	214	131	626	85	330	1577	213	39	186	25	60	287	39								
Net exposed walls B		8.50	9.58	1.29																										
Exposed Ceilings A		59.22	1.37	0.64				4	5	3																				
Exposed Ceilings B		22.86	3.56	1.66																										
Exposed Floors		29.80	2.73	0.17																										
Foundation Conductive Heatloss		On Grade ( ) or Abo			x																									
Total Conductive	Heat Loss					1186			4527			1604			3641			614			287									
	Heat Gain						1106			3162			799			2397			83			39									
Air Leakage	Heat Loss/Gain		0.3298	0.0289		391	32		1493	91		529	23		1201	69		202	2		95	1								
Ventilation	Case 1		0.03	0.06																										
	Case 2		14.07	11.88																										
	Case 3	x	0.04	0.06		46	70		174	199		62	50		140	151		24	5		11	2								
Heat Gain People				239																										
Appliances Loads		1 =.25 percent		3854	1.0		964	2.0		1927				0.5		482														
Duct and Pipe loss				10%																										
Level 2 HL Total	16,225	Total HL for per room				1622			6194			2194			4982			840			392									
Level 2 HG Total	15,152	Total HG per room x 1.3					2823			6994			1134			4028			118			55								

Total Heat Loss	43,420	btu/h
Total Heat Gain	27,996	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

GTADESIGNS

2985 Drew Road, Suite 202, Mississauga, Ontario L4T 0A4 Tel: 905-671-9800 Fax: 647-494-9643

e-mail dave@gtadesigns.ca

Heatloss/Gain Calculations CSA-F280-12

2012 OBC

Builder: Bayview Wellington | Date: February 15, 2018 | Weather Data: Bradford 44 -9.4 86 22 48.2

Project: Green Valley East | Model: Sonoma 5 Corner SD25-5C | **System 1**

Heat Loss ^T 81.4 deg. F | Ht gain ^T 11 deg. F | GTA: 2320

Project # PJ-00204 | Layout # JB-04401

Level 3

	MAST	ENS	BED 4	VAN	BATH	BED 3	BED 2	LAUN				
Run ft. exposed wall A	12 A	22 A	16 A	10 A	9 A	28 A	10 A	A	A	A	A	A
Run ft. exposed wall B	B	B	B	B	B	B	B	B	B	B	B	B
Ceiling height	8.0	8.0	8.0	10.0	10.0	10.0	8.0	8.0	8.0	8.0	8.0	8.0
Floor area	301 Area	107 Area	157 Area	115 Area	50 Area	156 Area	148 Area	83 Area	Area	Area	Area	Area
Exposed Ceilings A	301 A	107 A	157 A	115 A	50 A	156 A	148 A	83 A	A	A	A	A
Exposed Ceilings B	B	B	B	B	B	B	B	B	B	B	B	B
Exposed Floors	Flr	Flr	Flr	Flr	Flr	Flr	148 Flr	17 Flr	Flr	Flr	Flr	Flr
Gross Exp Wall A	96	176	128	100	90	280	80					
Gross Exp Wall B												

Components	R-Values	Loss	Gain	MAST Loss	MAST Gain	ENS Loss	ENS Gain	BED 4 Loss	BED 4 Gain	VAN Loss	VAN Gain	BATH Loss	BATH Gain	BED 3 Loss	BED 3 Gain	BED 2 Loss	BED 2 Gain	LAUN Loss	LAUN Gain				
North Shaded	3.55	22.93	10.91																				
East/West	3.55	22.93	27.35	28 642	766	13 298	356							36 825	985	25 573	684						
South	3.55	22.93	20.89			27 619	564	30 688	627	23 527	480	12 275	251	35 803	731								
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	68 325	44	136 650	88	98 468	63	77 368	50	78 373	50	209 999	135	55 263	36						
Net exposed walls B	8.50	9.58	1.29																				
Exposed Ceilings A	59.22	1.37	0.64	301 414	193	107 147	69	157 216	101	115 158	74	50 69	32	156 214	100	148 203	95	83 114	53				
Exposed Ceilings B	22.86	3.56	1.66																				
Exposed Floors	29.80	2.73	0.17													148 404	25	17 46	3				
Foundation Conductive Heatloss																							
Total Conductive — Heat Loss				1381		1714		1372		1053		717		2841		1444		161					
Total Conductive — Heat Gain					1003		1076		791		604		333		1951		839		56				
Air Leakage — Heat Loss/Gain		0.2440	0.0289	337	29	418	31	335	23	257	17	175	10	693	56	352	24	39	2				
Ventilation — Case 1		0.02	0.06																				
Ventilation — Case 2		14.07	11.88																				
Ventilation — Case 3	x	0.04	0.06	53	63	66	68	53	50	41	38	28	21	109	123	56	53	6	4				
Heat Gain People			239	2	478			1	239					1	239	1	239						
Appliances Loads	1 =.25 percent		3854															0.5	482				
Duct and Pipe loss			10%													1 180	108						
Level 3 HL Total	13,881	Total HL for per room		1771		2199		1760		1351		919		3644		2031		206					
Level 3 HG Total	11,763	Total HG per room x 1.3			2045		1527		1433		857		473		3080		1642		706				

Level 4

Run ft. exposed wall 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											
Ceiling height																							
Floor 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											
Exposed Ceilings 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											
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	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																							
Total Conductive — Heat Gain																							
Air Leakage — Heat Loss/Gain		0.0000	0.0289																				
Ventilation — Case 1		0.00	0.06																				
Ventilation — Case 2		14.07	11.88																				
Ventilation — Case 3	x	0.04	0.06																				
Heat Gain People			239																				
Appliances Loads	1 =.25 percent		3854																				
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																					

Total Heat Loss	43,420	btu/h
Total Heat Gain	27,996	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

GTADESIGNS

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

Project # PJ-00204
Layout # JB-04401

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:** SD25-5C

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)	x	Direct vent (sealed combustion) only
b)		Positive venting induced draft (except fireplaces)
c)		Natural draft, B-vent or induced draft fireplaces
d)		Solid fuel (including fireplaces)
e)		No combustion Appliances

Heating System

	x	Forced air
		Non forced air
		Electric space heat (if over 10% of heat load)

House Type 9.32.3.1(2)

I	x	Type a) or b) appliances only, no solid fuel
II		Type I except with solid fuel (including fireplace)
III		Any type c) appliance
IV		Type I or II either electric space heat
Other		Type I, II or IV no forced air

System Design Option

1		Exhaust only / forced air system
2		HRV WITH DUCTING / forced air system
3	x	HRV simplified connection to forced air system
4		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	4	@	10.6	cfm	42.4	cfm
Other rooms	5	@	10.6	cfm	53	cfm
			Total		169.6	

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		79.5	

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	169.6	
Less principal exhaust capacity	79.5	
REQUIRED supplemental vent. Capacity	90.1	cfm

Supplemental Fans 9.32.3.5.

Location	cfm	Model	Sones
Ens	50	XB50	0.3
Bath	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	February 15, 2018		

GTADESIGNS
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)

Project # PJ-00204
Layout # JB-04401

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		Unit number	Lot/Con
	Sonoma 5 Corner SD25-5C		
Municipality	**Postal code**	**Reg. Plan number / other description**	
Bradford			

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
☑ Zone 1 (< 5000 degree days)	☑ ≥ 92% AFUE	☑ Gas ☐ Propane ☐ Solid Fuel
☐ Zone 2 (≥ 5000 degree days)	☐ ≥ 84% < 92% AFUE	☐ Oil ☐ Electric ☐ Earth Energy

Ratio of Windows, Skylights & Glass (W, S & G) to Wall Area		Other Building Characteristics
Area of Walls = 329.71 m² or 3549.0 ft²	W,S &G % = 15%	☐ Log/Post&Beam ☐ ICF Above Grade ☐ ICF Basement ☐ Slab-on-ground ☐ Walkout Basement ☑ Air Conditioning ☐ Combo Unit
Area of W, S & G = 49.144 m² or 529.0 ft²	Utilize Window Averaging ☐ Yes ☑ No	☐ Air Sourced Heat Pump (ASHP) ☐ Ground Source Heat Pump (GSHP)

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

Energy Efficiency Substitutions

☐ ICF (3.1.1.2.(5) & (6) / 3.1.1.3.(5))

☐ Combined space heating and domestic water heating systems (3.1.1.2(7) / 3.1.1.3.(7))

☐ Airtightness substitution(s)	☐ Table 3.1.1.4.B	Required:	Permitted Substitution:
Airtightness test required (Refer to Design Guide Attached)	☐ Table 3.1.1.4.C	Required:	Permitted Substitution:
		Required:	Permitted Substitution:

Building Component	Minimum RSI/R-Values or Maximum U-Value[1]		Building Component	Efficiency Ratings
Thermal Insulation	Nominal	Effective	**Windows & Doors** Provide U-Value(1) 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		**Mechanicals**	
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/(m²·K) or Btu/(h·ft·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
David DaCosta	32964	

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

Project # PJ-00204
Layout # JB-04401

Package: Package A1 **System:** System 1
Project: Bradford **Model:** SD25-5C

Air Leakage Calculations

Building Air Leakage Heat Loss				
B	LRairh	Vb	HL^T	HLleak
0.018	0.328	27153	81.4	13036

Building Air Leakage Heat Gain				
B	LRairh	Vb	HG^T	HG Leak
0.018	0.081	27153	11	433

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	13036	6544	0.9960
Level 2	0.3		11859	0.3298
Level 3	0.2		10683	0.2440
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

		Air Leakage Heat Gain
HG LEAK	433	0.0289
BUILDING CONDUCTIVE HEAT GAIN	15000	

Levels this Dwelling
3

Ventilation Calculations

Vent

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	6544	0.09
Level 2	0.3		11859	0.03
Level 3	0.2		10683	0.02
Level 4	0		0	0.00

Ventilation Heat Gain (Exhaust Only Systems)

Case 1 - Exhaust Only		Multiplier
HGbvent	944	0.06
Building	15000	

Case 2

Ventilation Heat Loss (Direct Ducted Systems)

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

Ventilation Heat Gain (Direct Ducted Systems)

		Multiplier
C	HG^T	11.88
1.08	11	

Case 3

Ventilation Heat Loss (Forced Air Systems)

	HLbvent	Multiplier
Total Ventilation Load	1118	0.04

Ventilation Heat Gain (Forced Air Systems)

		Vent Heat Gain	Multiplier
HGbvent	HG*1.3	944	0.06
944	1		

Foundation Conductive Heatloss Level 1	1665	Watts	5681	Btu/h

Foundation Conductive Heatloss Level 2		Watts		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

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):	6.62

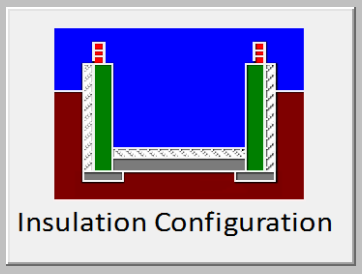
Building Configuration	
Type:	Semi-Detached
Number of Stories:	Two
Foundation:	Full
House Volume (m^3):	768.97

Air Leakage/Ventilation				
Air Tightness Type:	Present (1961-) (ACH=3.57)			
Custom BDT Data:	ELA @ 10 Pa.	322.44	cm^2	
	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

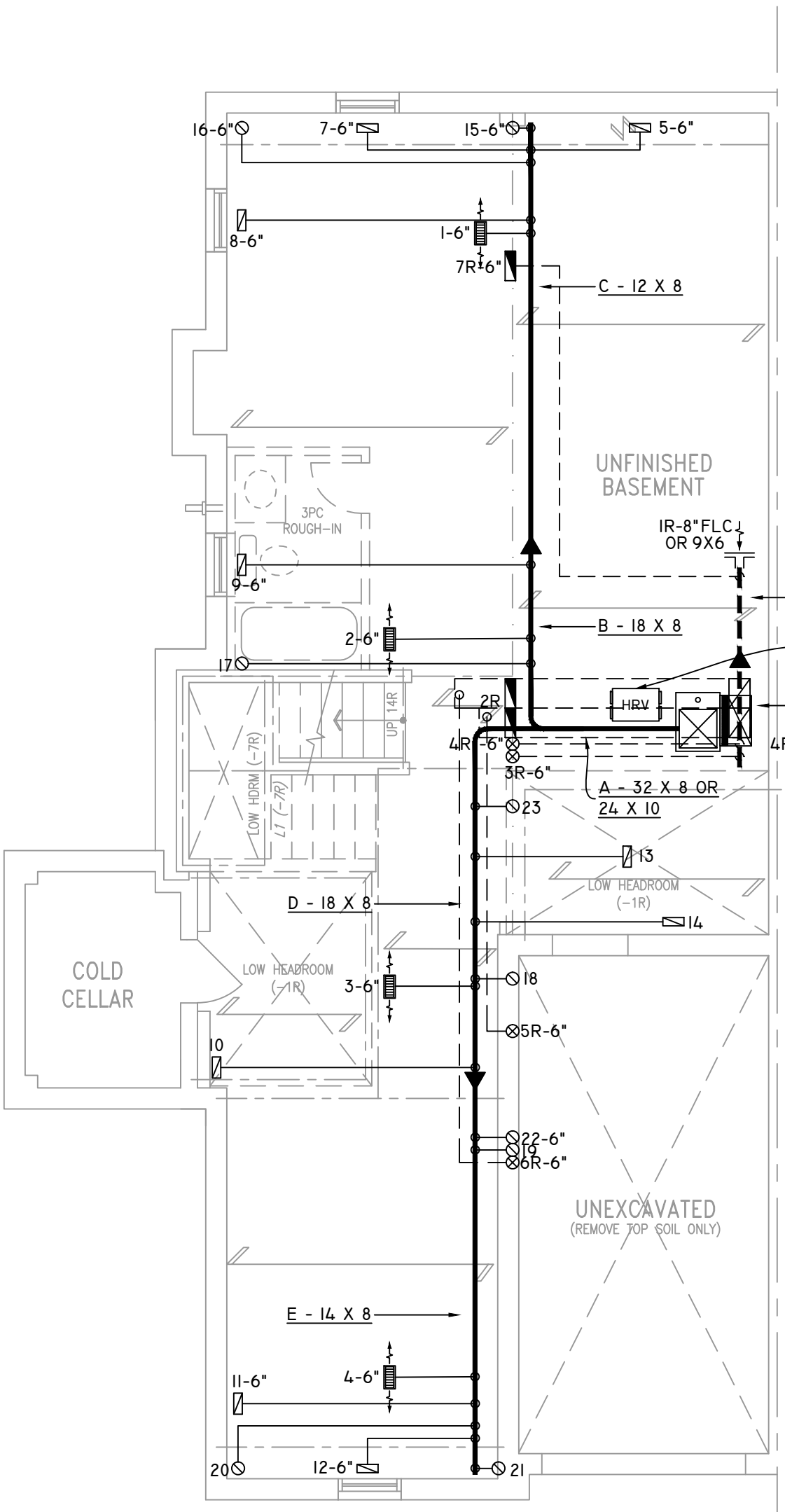
Heating Air Leakage Rate (ACH/H):	**0.328**
Cooling Air Leakage Rate (ACH/H):	**0.081**

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):	**19.49**	 Insulation Configuration
Floor Width (m):	**4.59**	
Exposed Perimeter (m):	**38.40**	
Wall Height (m):	**2.74**	
Depth Below Grade (m):	**1.61**	
Window Area (m^2):	**1.77**	
Door Area (m^2):	**1.95**	
Radiant Slab		
Heated Fraction of the Slab:	**0**	
Fluid Temperature (°C):	**33**	
Design Months		
Heating Month	**1**	
Foundation Loads		
Heating Load (Watts):	**1665**	

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



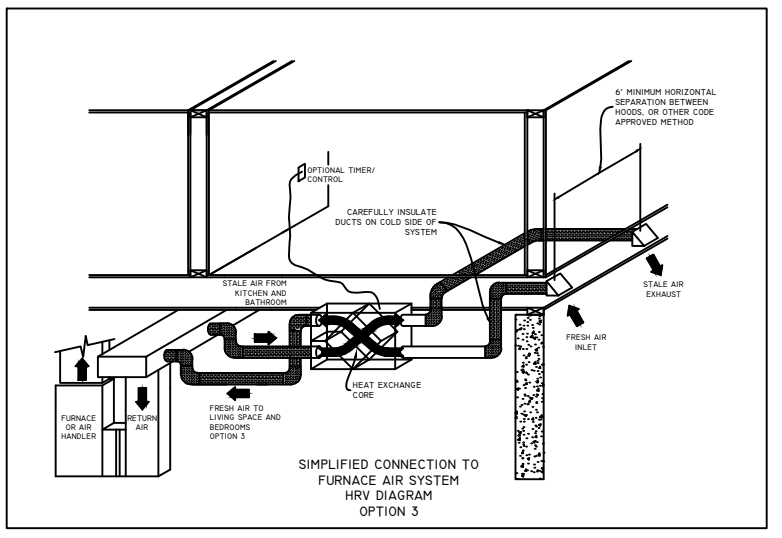
PART. BASEMENT PLAN FOR SUNKEN MUD ROOM (-2R OR -3R CONDITION)

FURNACE EQUIPPED WITH BRUSHLESS DC MOTOR AS PER OBC 12.3.1.5 (2)

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. RI2

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



SIMPLIFIED CONNECTION TO FURNACE AIR SYSTEM
HRV DIAGRAM
OPTION 3

BASEMENT PLAN 'A'

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

OBC 2012

ZONE 1 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 RI2 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.

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

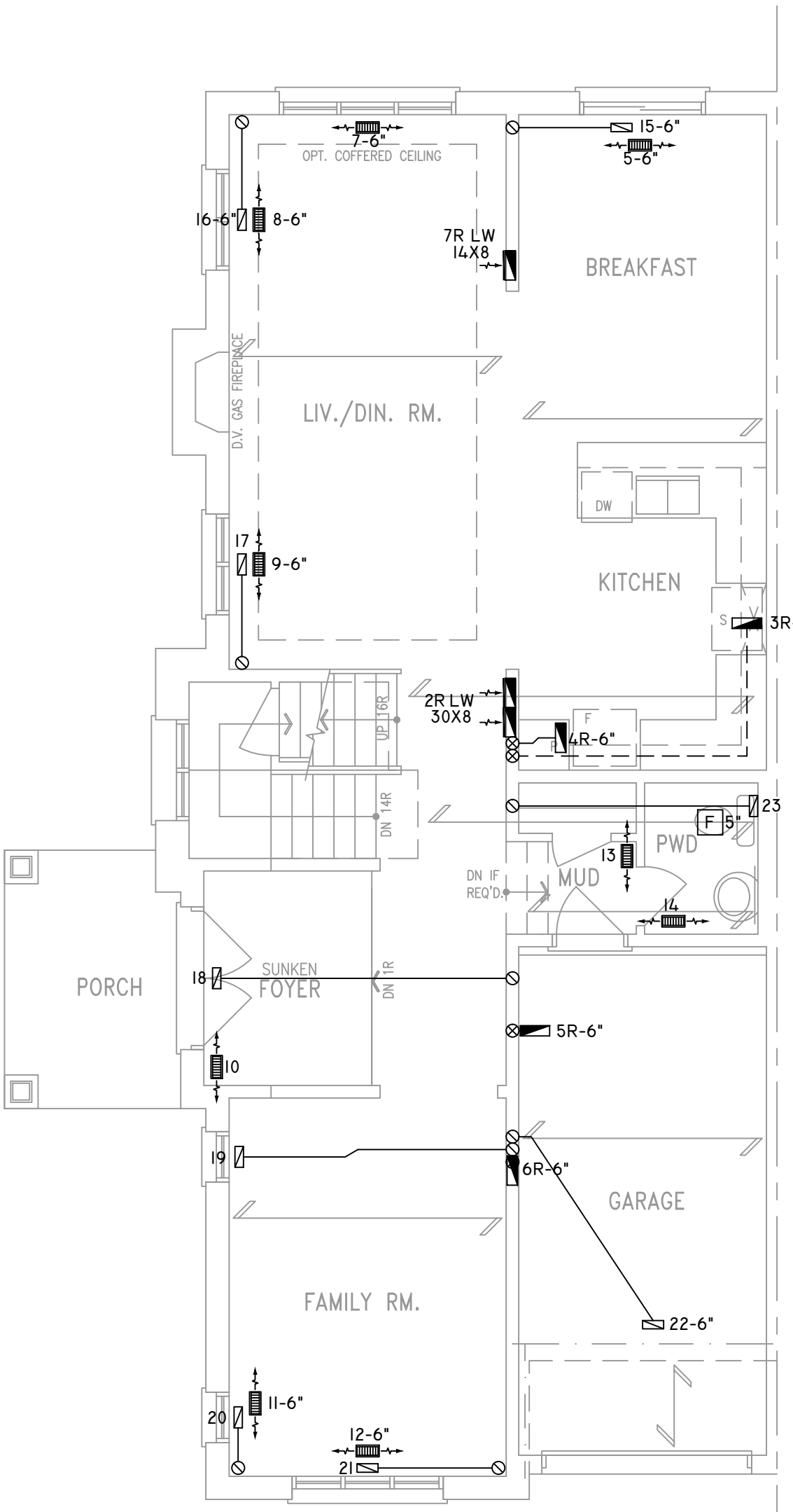
HEAT-LOSS	43,420 BTU/HR.
UNIT MAKE	AMANA OR EQUAL.
UNIT MODEL	AMEC96-0603BNA OR EQUAL.
UNIT HEATING INPUT	60,000 BTU/HR.
UNIT HEATING OUTPUT	57,600 BTU/HR.
A/C COOLING CAPACITY	2.5 TONS.
FAN SPEED	1170 CFM

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

FLOOR PLAN: BASEMENT		
DRAWN BY: AM	CHECKED: DD	SQFT 2320
LAYOUT NO. JB-04401		DRAWING NO. M1

DATE: FEBRUARY 15, 2018
CLIENT: BAYVIEW WELLINGTON
MODEL: SD25-5C SONOMA 5 CORNER
PROJECT: GREEN VALLEY EAST BRADFORD,ONT.
SCALE: 3/16" = 1'-0"

FLEX DUCT RIGID ROUND DUCT SUPPLY DIFFUSER	LOW/HIGH WALL/KICK SUPPLY DIFFUSER HRV EXHAUST GRILLE SUPPLY AIR PIPE RISER VOLUME DAMPER		DUCT CONNECTION TO JOIST LINING RETURN AIR PIPE RISER RETURN ROUND DUCT		RETURN AIR GRILLE (SIZE INDICATED ON DRAWING) RETURN AIR RISER UP TO FLOOR ABOVE RETURN AIR FROM BASEMENT SECOND FLOOR	S.A. R.A. T $ F PE	SUPPLY AIR RETURN AIR THERMOSTAT 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. RI2

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

GROUND FLOOR PLAN 'A'

OBC 2012

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

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

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 RI2 UNDERCUT ALL DOORS I" 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.

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

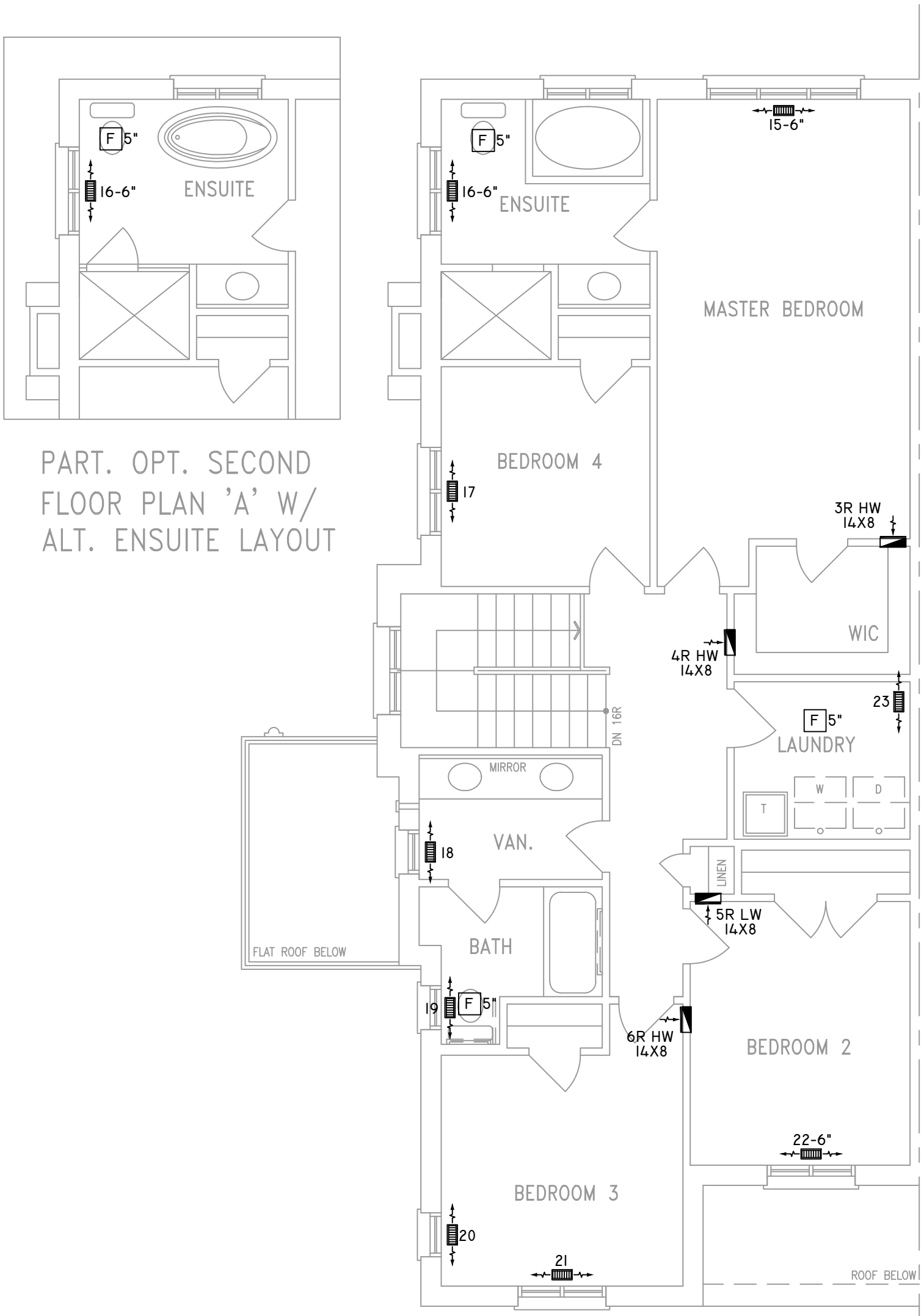
HEAT-LOSS	43,420 BTU/HR.
UNIT MAKE	AMANA OR EQUAL.
UNIT MODEL	AMEC96-0603BNA OR EQUAL.
UNIT HEATING INPUT	60,000 BTU/HR.
UNIT HEATING OUTPUT	57,600 BTU/HR.
A/C COOLING CAPACITY	2.5 TONS.
FAN SPEED	1170 CFM

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

FLOOR PLAN: GROUND FLOOR		
DRAWN BY: AM	CHECKED: DD	SQFT 2320
LAYOUT NO. JB-04401		DRAWING NO. M2

DATE: FEBRUARY 15, 2018
CLIENT: BAYVIEW WELLINGTON
MODEL: SD25-5C SONOMA 5 CORNER
PROJECT: GREEN VALLEY EAST BRADFORD,ONT.
SCALE: 3/16" = 1'-0"

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



PART. OPT. SECOND FLOOR PLAN 'A' W/ ALT. ENSUITE LAYOUT

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. RI2

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

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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

SECOND FLOOR PLAN 'A'

OBC 2012

ZONE 1 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 RI2 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.

GTADESIGNS
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L4T 0A4 TEL: 905-671-9800
EMAIL: DAVE@GTADESIGNS.CA
WEB: WWW.GTADESIGNS.CA

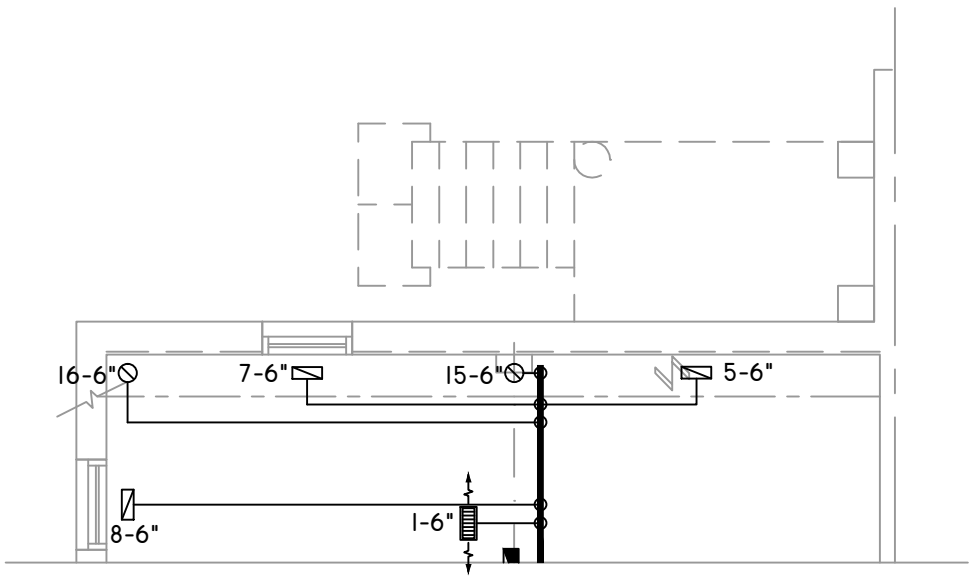
HEAT-LOSS	43,420 BTU/HR.
UNIT MAKE	AMANA OR EQUAL.
UNIT MODEL	AMEC96-0603BNA OR EQUAL.
UNIT HEATING INPUT	60,000 BTU/HR.
UNIT HEATING OUTPUT	57,600 BTU/HR.
A/C COOLING CAPACITY	2.5 TONS.
FAN SPEED	1170 CFM

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

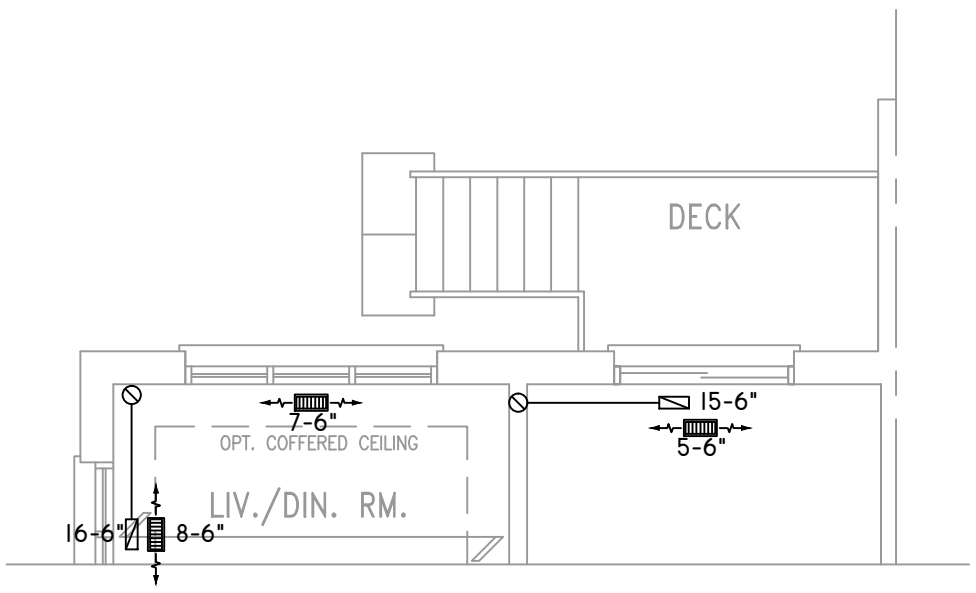
FLOOR PLAN: SECOND FLOOR		
DRAWN BY: AM	CHECKED: DD	SQFT 2320
LAYOUT NO. JB-04401		DRAWING NO. M3

DATE:	FEBRUARY 15, 2018
CLIENT:	BAYVIEW WELLINGTON
MODEL:	SD25-5C SONOMA 5 CORNER
PROJECT:	GREEN VALLEY EAST BRADFORD,ONT.
SCALE:	3/16" = 1'-0"

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



PARTIAL BASEMENT FLOOR PLAN
8R W.O.D. CONDITION



PARTIAL GROUND FLOOR PLAN
8R W.O.D. CONDITION

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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

OBC 2012

ZONE 1 COMPLIANCE
PACKAGE "A1" REF. TABLE 3.1.1.2.A

NOTES

INSTALLATION TO COMPLY WITH THE LATEST ONTARIO BUILDING CODE.
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PROVIDE BALANCING DAMPERS ON ALL BRANCHES.
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INSULATE DUCTS IN UNCONDITIONED SPACES RI2 UNDERCUT ALL DOORS 1" MIN.
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UNIT MODEL	AMEC96-0603BNA OR EQUAL.
UNIT HEATING INPUT	60,000 BTU/HR.
UNIT HEATING OUTPUT	57,600 BTU/HR.
A/C COOLING CAPACITY	2.5 TONS.
FAN SPEED	1170 CFM

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

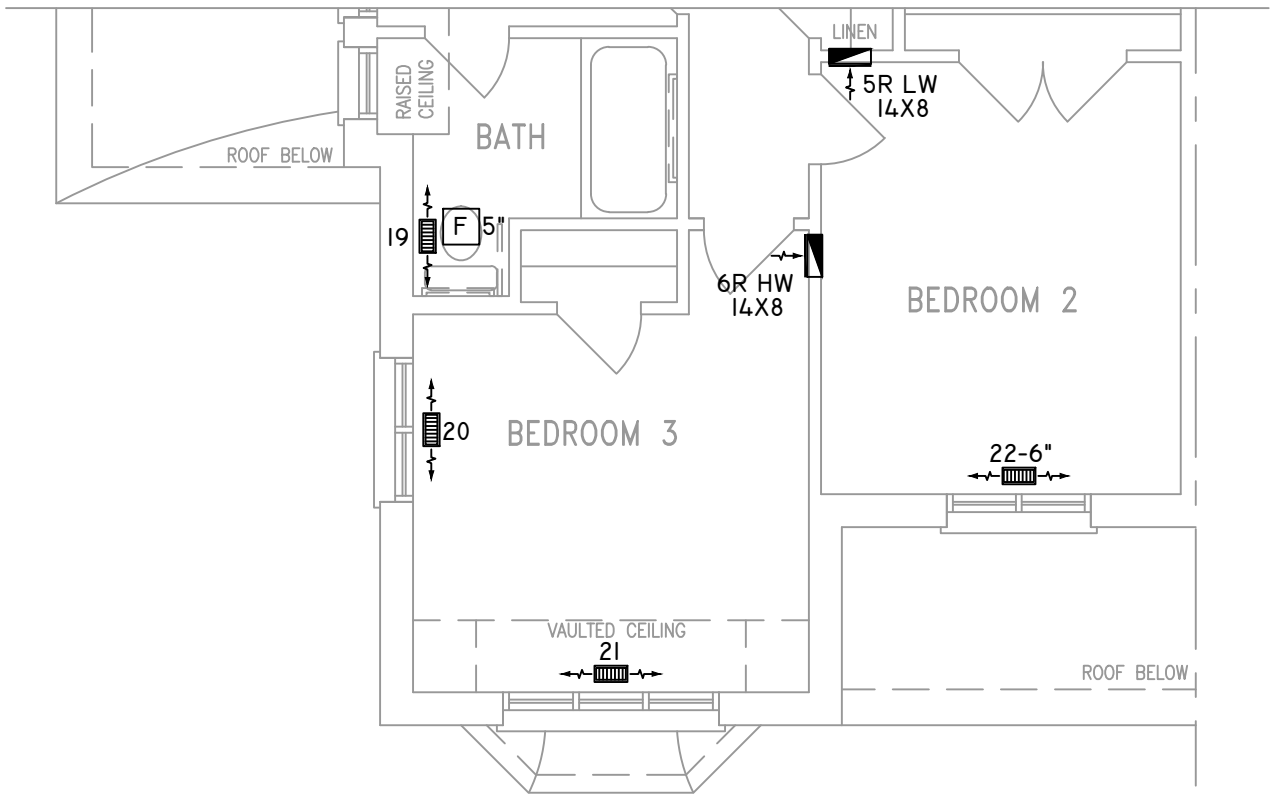
FLOOR PLAN: PARTIAL PLAN(S)

DRAWN BY:	CHECKED:	SQFT
AM	DD	2320

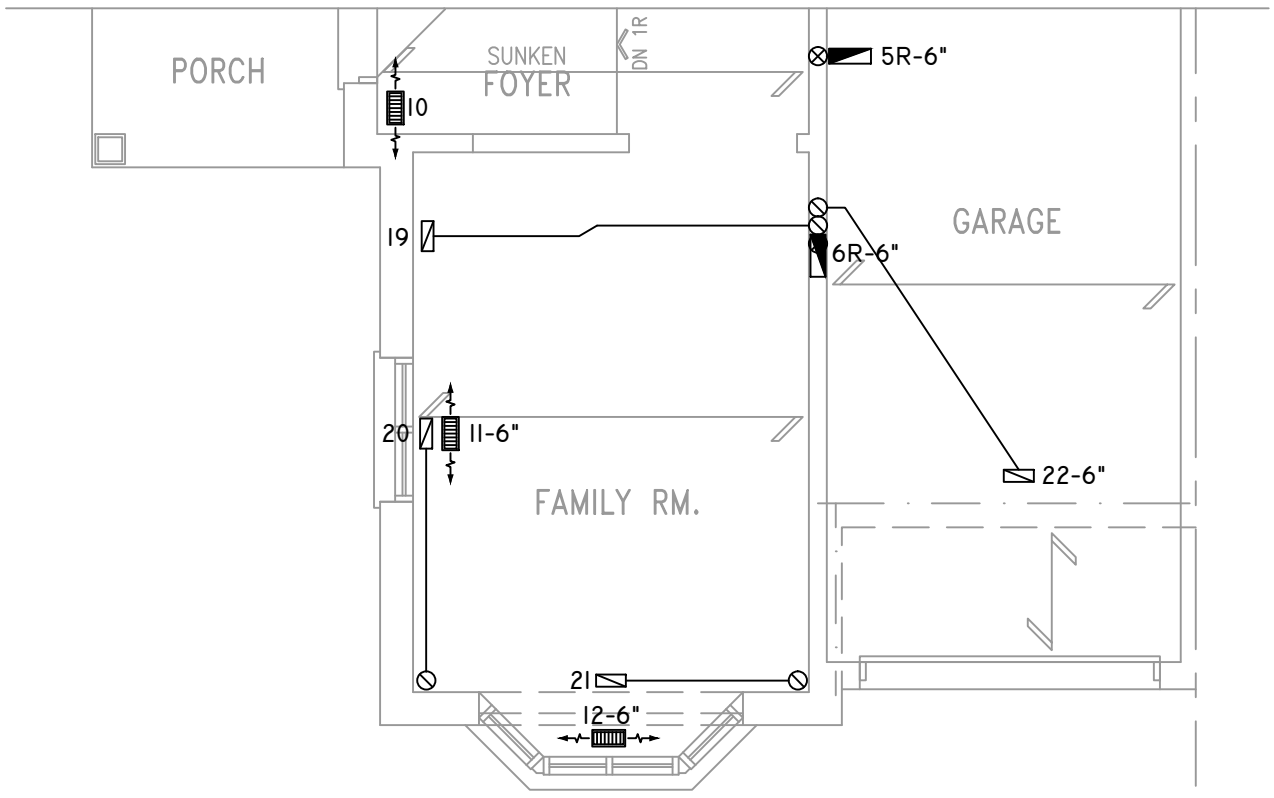
LAYOUT NO. JB-04401 DRAWING NO. M4

DATE: FEBRUARY 15, 2018
CLIENT: BAYVIEW WELLINGTON
MODEL: SD25-5C SONOMA 5 CORNER
PROJECT: GREEN VALLEY EAST BRADFORD,ONT.
SCALE: 3/16" = 1'-0"

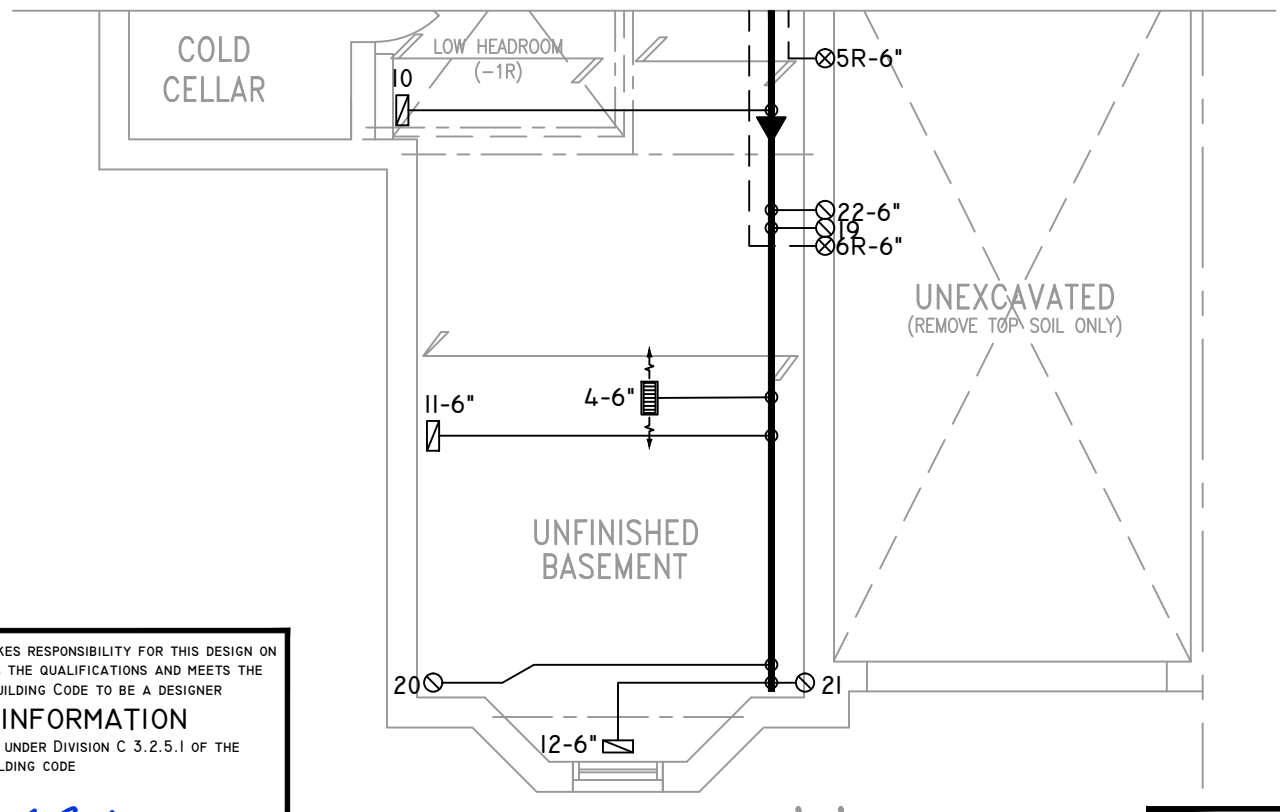
FLEX DUCT RIGID ROUND DUCT SUPPLY DIFFUSER	LOW/HIGH WALL/KICK SUPPLY DIFFUSER HRV EXHAUST GRILLE SUPPLY AIR PIPE RISER VOLUME DAMPER		DUCT CONNECTION TO JOIST LINING RETURN AIR PIPE RISER RETURN ROUND DUCT		RETURN AIR GRILLE (SIZE INDICATED ON DRAWING) RETURN AIR RISER UP TO FLOOR ABOVE RETURN AIR FROM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



SECOND FLOOR PLAN 'B'



GROUND FLOOR PLAN 'B'



BASEMENT PLAN 'B'

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

OBC 2012

ZONE 1 COMPLIANCE
PACKAGE "A1" REF. TABLE 3.1.1.2.A

NOTES

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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.
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WEB: WWW.GTADESIGNS.CA

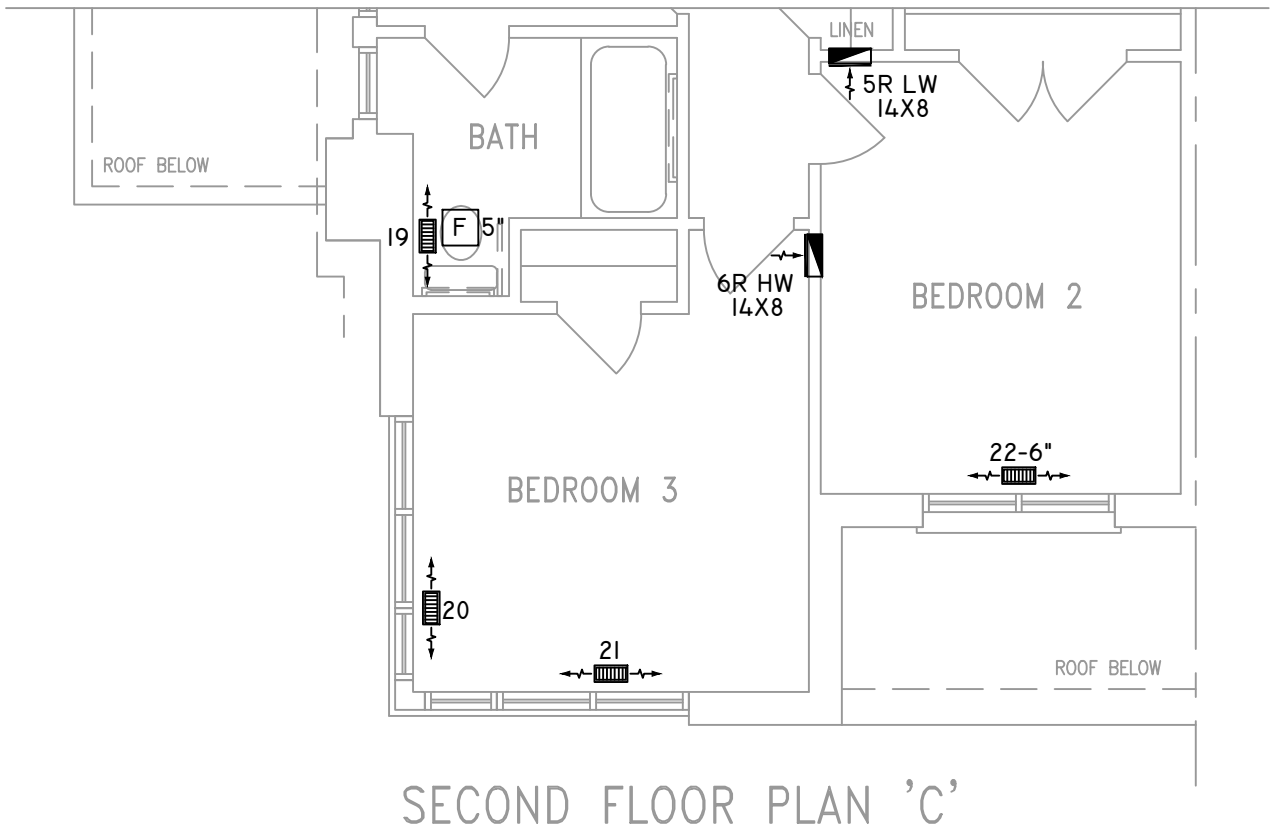
HEAT-LOSS	43,420 BTU/HR.
UNIT MAKE	AMANA OR EQUAL.
UNIT MODEL	AMEC96-0603BNA OR EQUAL.
UNIT HEATING INPUT	60,000 BTU/HR.
UNIT HEATING OUTPUT	57,600 BTU/HR.
A/C COOLING CAPACITY	2.5 TONS.
FAN SPEED	1170 CFM

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

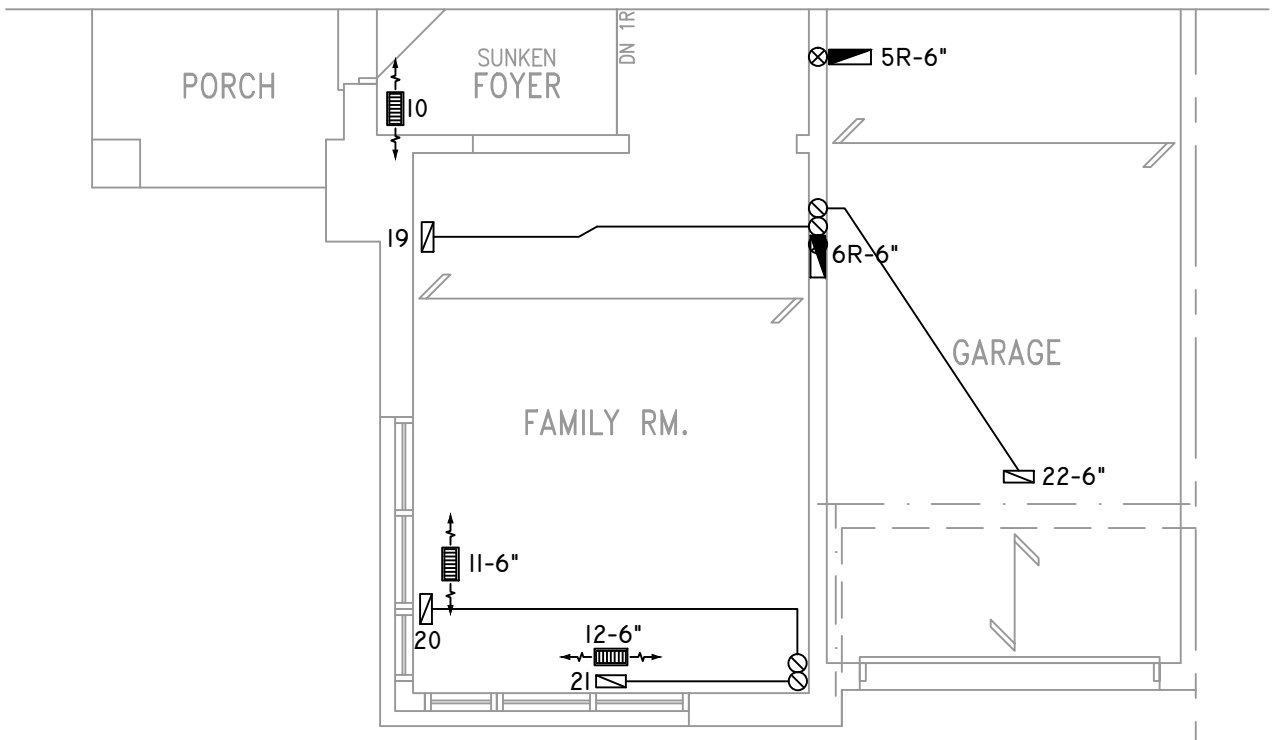
FLOOR PLAN: PARTIAL PLAN(S)		
DRAWN BY: AM	CHECKED: DD	SQFT 2320
LAYOUT NO. JB-04401	DRAWING NO. M5	

DATE: FEBRUARY 15, 2018
CLIENT: BAYVIEW WELLINGTON
MODEL: SD25-5C SONOMA 5 CORNER
PROJECT: GREEN VALLEY EAST BRADFORD,ONT.
SCALE: 3/16" = 1'-0"

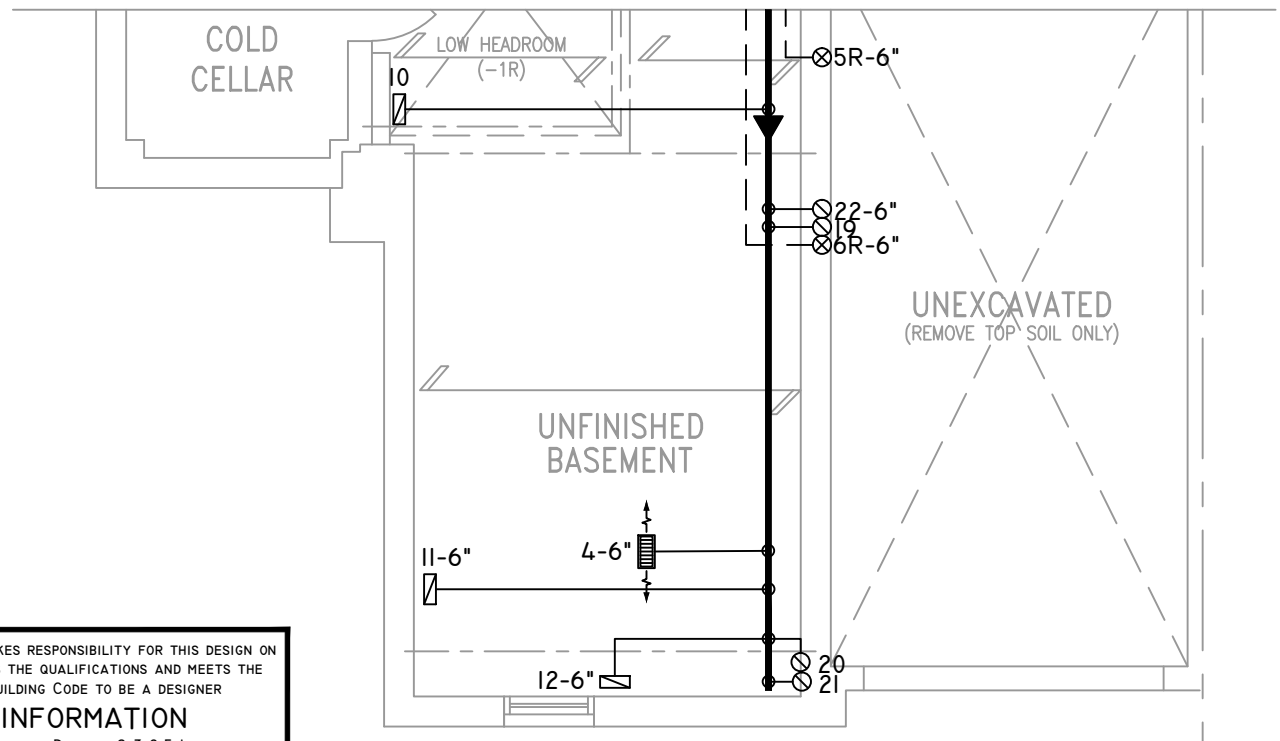
FLEX DUCT RIGID ROUND DUCT SUPPLY DIFFUSER	LOW/HIGH WALL/KICK SUPPLY DIFFUSER HRV EXHAUST GRILLE SUPPLY AIR PIPE RISER VOLUME DAMPER		DUCT CONNECTION TO JOIST LINING RETURN AIR PIPE RISER RETURN ROUND DUCT		RETURN AIR GRILLE (SIZE INDICATED ON DRAWING) RETURN AIR RISER UP TO FLOOR ABOVE RETURN AIR FROM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



SECOND FLOOR PLAN 'C'



GROUND FLOOR PLAN 'C'



BASEMENT PLAN 'C'

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QUALIFICATION INFORMATION

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DAVID DA COSTA — B.C.I.N. 32964

SIGNATURE OF DESIGNER

OBC 2012

ZONE 1 COMPLIANCE
PACKAGE "A1" REF. TABLE 3.1.1.2.A

NOTES

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FAN SPEED	1170 CFM

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

FLOOR PLAN: PARTIAL PLAN(S)

DRAWN BY:	CHECKED:	SQFT
AM	DD	2320

LAYOUT NO. JB-04401 — DRAWING NO. M6

DATE: FEBRUARY 15, 2018
CLIENT: BAYVIEW WELLINGTON
MODEL: SD25-5C SONOMA 5 CORNER
PROJECT: GREEN VALLEY EAST BRADFORD,ONT.
SCALE: 3/16" = 1'-0"