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	**Barossa 17** **S38-17**	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-04488**

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:**	**2511**	Model	**Barossa 17**
Residential System Design per CAN/CSA-F280-12				**S38-17**
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.

March 12, 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-04488**

Building Location

Address (Model):	**S38-17**	Site:	**Green Valley East**
Model:	**Barossa 17**	Lot:	
City and Province:	**Bradford**	Postal code:	

Calculations based on

Dimensional information based on: **VA3 Design Jan/2018**

Attachment:	**Detached**		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: **2511**
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: March 12, 2018 | Barossa 17 | **System 1**

Project: Green Valley East | Model: S38-17

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-04488

DESIGN LOAD SPECIFICATIONS

Level 1 Net Load	14,146	btu/h
Level 2 Net Load	16,313	btu/h
Level 3 Net Load	15,646	btu/h
Level 4 Net Load	0	btu/h
Total Heat Loss	46,105	btu/h
Total Heat Gain	24,568	btu/h
Combo System HL + 10%	50,716	Btuh.
Building Volume Vb	28974	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	0.0254	cfm/btuh
Cooling Air Flow Proportioning Facter	0.0392	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	AMEC960603BNA	
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

	Level 1														Level 2													
S/A Outlet No.	1	2	3	4											5	6	7	8	9	10	11	12						
Room Use	BASE	BASE	BASE	BASE											KIT	KIT	DIN	MUD	FOY	PWD	GRT	GRT						
Btu/Outlet	3536	3536	3536	3536											2021	2021	2616	1955	3166	910	1812	1812						
Heating Airflow Rate CFM	90	90	90	90											51	51	66	50	80	23	46	46						
Cooling Airflow Rate CFM	11	11	11	11											95	95	83	63	63	15	39	39						
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	30	40	12	31											40	45	13	14	41	34	28	39						
Equivalent Length	110	130	80	120	70	70	70	70	70	70	70	70	70	70	120	140	110	90	120	130	120	140	70	70	70	70	70	70
Total Effective Length	140	170	92	151	70	70	70	70	70	70	70	70	70	70	160	185	123	104	161	164	148	179	70	70	70	70	70	70
Adjusted Pressure	0.09	0.08	0.14	0.09	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.08	0.07	0.11	0.13	0.08	0.08	0.09	0.07	0.19	0.19	0.19	0.19	0.19	0.19
Duct Size Round	6	6	6	6											6	6	6	5	6	4	5	5						
Outlet Size	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	3x10	4x10	3x10	3x10	3x10	4x10	4x10	4x10	4x10	4x10	4x10
Trunk	B	C	A	D											B	C	A	A	D	D	B	B						

Level 3 / Level 4

	Level 3										Level 4																	
S/A Outlet No.	13	14	15	16	17	18	19	20	21	22																		
Room Use	MAST	MAST	ENS 2	BED 2	BED 3	BATH	BED 4	BED 4	LAUN	ENS																		
Btu/Outlet	1799	1799	558	1322	2869	942	1849	1849	1111	1550																		
Heating Airflow Rate CFM	46	46	14	34	73	24	47	47	28	39																		
Cooling Airflow Rate CFM	50	50	8	32	70	17	58	58	53	30																		
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	55	68	58	65	54	46	50	61	36	59																		
Equivalent Length	95	145	120	135	180	170	120	130	170	155	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
Total Effective Length	150	213	178	200	234	216	170	191	206	214	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
Adjusted Pressure	0.09	0.06	0.07	0.07	0.06	0.06	0.08	0.07	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	5	5	3	4	6	4	5	5	5	5																		
Outlet Size	3x10	3x10	3x10	3x10	4x10	3x10	3x10	3x10	3x10	3x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10
Trunk	B	C	C	C	D	D	D	D	B	B																		

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	178	480	152	90	90	90	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	8	22	41	41	55	53	45				
Equivalent Length	110	125	195	200	115	215	225	50	50	50	50
Total Effective Length	118	147	236	241	170	268	270	50	50	50	50
Adjusted Pressure	0.10	0.08	0.05	0.05	0.07	0.04	0.04	0.24	0.24	0.24	0.24
Duct Size Round	7.0	11.0	8.0	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		30	14	14	14	14	14				
Trunk	Y	Z	Z	Y	Z	Y	Z				

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	358	0.04	11.5	14x8	12x10
X					
W					
V					
U					
T					
S					
R					
Q					

Supply Trunk Duct Sizing

Trunk	CFM	Press.	Round	Rect. Size	
A	1170	0.06	16.5	32x8	24x10
B	580	0.06	12.5	18x8	14x10
C	234	0.06	9.0	8x8	10x7
D	384	0.06	11.0	14x8	10x10
E					
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: March 12, 2018 | Project: Green Valley East | Model: Barossa 17 S38-17 | **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: 2511

Project # PJ-00204 | Layout # JB-04488

Level 1

		BASE																									
Run ft. exposed wall A		156	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
Ceiling height		3.8	AG	3.8	AG	3.8	AG	3.8	AG	3.8	AG	3.8	AG	3.8	AG	3.8	AG	3.8	AG	3.8	AG	3.8	AG	3.8	AG	3.8	AG
Floor area		996	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		585																									
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
North Shaded		3.55	22.93	10.91	3	69	33																								
East/West		3.55	22.93	27.35	13	298	356																								
South		3.55	22.93	20.89	3	69	63																								
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	545		284																								
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				6252																								
Total Conductive	Heat Loss					7115																								
	Heat Gain						793																								
Air Leakage	Heat Loss/Gain		0.9521	0.0377		6774	30																								
Ventilation	Case 1		0.08	0.08																										
	Case 2		14.07	11.88																										
	Case 3	x	0.04	0.08		256	62																								
Heat Gain People				239																										
Appliances Loads		1 =.25 percent		4128																										
Duct and Pipe loss				10%																										
Level 1 HL Total	14,146	Total HL for per room				14146																								
Level 1 HG Total	1,150	Total HG per room x 1.3					1150																								

Level 2

		KIT		DIN		MUD		FOY		PWD		GRT															
Run ft. exposed wall A		37	A	26	A	19	A	25	A	10	A	39	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
Ceiling height		10.0		10.0		12.0		11.0		10.0		10.0		10.0		10.0		10.0		10.0		10.0		10.0		10.0	
Floor area		239	Area	238	Area	80	Area	75	Area	60	Area	297	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		370		260		228		275		100		390															
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
North Shaded		3.55	22.93	10.91				36	825	393																					
East/West		3.55	22.93	27.35	64	1467	1751							24	550	656				42	963	1149									
South		3.55	22.93	20.89										12	275	251	10	229	209												
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	306	1463	198	224	1071	145	207	989	134	218	1042	141	90	430	58	348	1663	225									
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 Abo		x																											
Total Conductive	Heat Loss					2930			1896			1417			2295			659			2626										
	Heat Gain						1948			538			191			1106			267			1374										
Air Leakage	Heat Loss/Gain		0.3438	0.0377		1007	73		652	20		487	7		789	42		227	10		903	52									
Ventilation	Case 1		0.03	0.08																											
	Case 2		14.07	11.88																											
	Case 3	x	0.04	0.08		105	153		68	42		51	15		83	87		24	21		94	108									
Heat Gain People				239																											
Appliances Loads		1 =.25 percent		4128	1.5		1548	1.0		1032	1.0		1032																		
Duct and Pipe loss				10%																											
Level 2 HL Total	16,313	Total HL for per room				4043			2616			1955			3166			910			3624										
Level 2 HG Total	12,565	Total HG per room x 1.3					4839			2122			1619			1604			387			1993									

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	46,105	btu/h
Total Heat Gain	24,568	btu/h

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: March 12, 2018 | Project: Green Valley East | Model: Barossa 17 S38-17 | **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: 2511

Project # PJ-00204 | Layout # JB-04488

Level 3

	MAST	ENS 2	BED 2	BED 3	BATH	BED 4	LAUN	ENS				
Run ft. exposed wall A	42 A	6 A	11 A	25 A	7 A	32 A	11 A	22 A	A	A	A	A
Run ft. exposed wall B	B	B	B	B	B	B	B	B	B	B	B	B
Ceiling height	9.0	8.0	8.0	8.0	8.0	10.0	8.0	8.0	8.0	8.0	8.0	8.0
Floor area	342 Area	50 Area	189 Area	175 Area	70 Area	202 Area	125 Area	112 Area	Area	Area	Area	Area
Exposed Ceilings A	342 A	50 A	189 A	175 A	70 A	202 A	125 A	112 A	A	A	A	A
Exposed Ceilings B	B	B	B	B	B	B	B	B	B	B	B	B
Exposed Floors	Flr	Flr	29 Flr	163 Flr	70 Flr	15 Flr	Flr	Flr	Flr	Flr	Flr	Flr
Gross Exp Wall A	378	48	88	200	56	320	88	176				
Gross Exp Wall B												

Components		R-Values	Loss	Gain	MAST Loss	MAST Gain	ENS 2 Loss	ENS 2 Gain	BED 2 Loss	BED 2 Gain	BED 3 Loss	BED 3 Gain	BATH Loss	BATH Gain	BED 4 Loss	BED 4 Gain	LAUN Loss	LAUN Gain	ENS Loss	ENS Gain	Loss	Gain	Loss	Gain	Loss	Gain
North Shaded		3.55	22.93	10.91			8	183	87	16	367	175														
East/West		3.55	22.93	27.35	32	734	875						24	550	656	7	161	191	42	963	1149				13	298	356						
South		3.55	22.93	20.89															18	413	376	16	367	334						
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	346	1654	223	40	191	26	72	344	47	176	841	114	49	234	32	260	1243	168	72	344	47	163	779	105						
Net exposed walls B		8.50	9.58	1.29																										
Exposed Ceilings A		59.22	1.37	0.64	342	470	219	50	69	32	189	260	121	175	241	112	70	96	45	202	278	130	125	172	80	112	154	72						
Exposed Ceilings B		22.86	3.56	1.66																										
Exposed Floors		29.80	2.73	0.17						29	79	5	163	445	27	70	191	12	15	41	3											
Foundation Conductive Heatloss																														
Total Conductive	Heat Loss					2858		443			1050			2077			682			2937			883			1231						
	Heat Gain						1318			145		347			910			280			1825			461			533					
Air Leakage	Heat Loss/Gain		0.2228	0.0377		637	50	99	5		234	13		463	34		152	11		654	69		197	17		274	20					
Ventilation	Case 1		0.02	0.08																										
	Case 2		14.07	11.88																										
	Case 3	x	0.04	0.08		103	103	16	11		38	27		75	71		25	22		106	143		32	36		44	42					
Heat Gain People				239	2		478			1		239	1		239				1		239										
Appliances Loads		1 =.25 percent		4128																		0.5		516							
Duct and Pipe loss				10%									1	254	115	1	83	28													
Level 3 HL Total	15,646	Total HL for per room				3597		558			1322			2869			942			3697			1111			1550					
Level 3 HG Total	10,853	Total HG per room x 1.3					2534		211			815			1780			442			2959			1339			773				

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	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	0.0377																								
Ventilation	Case 1		0.00	0.08																								
	Case 2		14.07	11.88																								
	Case 3	x	0.04	0.08																								
Heat Gain People				239																								
Appliances Loads		1 =.25 percent		4128																								
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	**46,105**	btu/h
Total Heat Gain	**24,568**	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-04488

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:** S38-17

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	5	@	10.6	cfm	53	cfm
Other rooms	4	@	10.6	cfm	42.4	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	March 12, 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-04488

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
	Barossa 17 **S38-17**		
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 = 330.91 m² or 3561.9 ft²	W,S &G % = 11%	☐ Log/Post&Beam ☐ ICF Above Grade ☐ ICF Basement ☐ Slab-on-ground ☐ Walkout Basement ☑ Air Conditioning ☐ Combo Unit
Area of W, S & G = 35.581 m² or 383.0 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	

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-04488

Package: Package A1 **System:** System 1
Project: Bradford **Model:** S38-17

Air Leakage Calculations

Building Air Leakage Heat Loss				
B	LRairh	Vb	HL^T	HLleak
0.018	0.319	28974	81.4	13549

Building Air Leakage Heat Gain				
B	LRairh	Vb	HG^T	HG Leak
0.018	0.079	28974	11	454

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	13549	7115	0.9521
Level 2	0.3		11824	0.3438
Level 3	0.2		12162	0.2228
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	454	0.0377
BUILDING CONDUCTIVE HEAT GAIN	12035	

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	7115	0.08
Level 2	0.3		11824	0.03
Level 3	0.2		12162	0.02
Level 4	0		0	0.00

Ventilation Heat Gain (Exhaust Only Systems)

Case 1 - Exhaust Only		Multiplier
HGbvent	944	0.08
Building	12035	

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	0.08
944	1		

Foundation Conductive Heatloss Level 1	1832	Watts	6252	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):	6.63

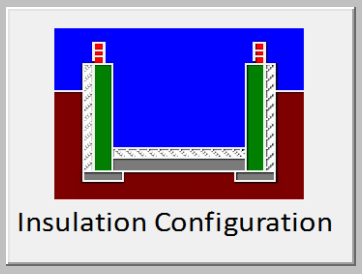
Building Configuration	
Type:	Detached
Number of Stories:	Two
Foundation:	Full
House Volume (m^3):	820.54

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):	**0.319**
Cooling Air Leakage Rate (ACH/H):	**0.079**

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):	**18.87**	 Insulation Configuration
Floor Width (m):	**4.90**	
Exposed Perimeter (m):	**47.55**	
Wall Height (m):	**2.74**	
Depth Below Grade (m):	**1.60**	
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):	**1832**	

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
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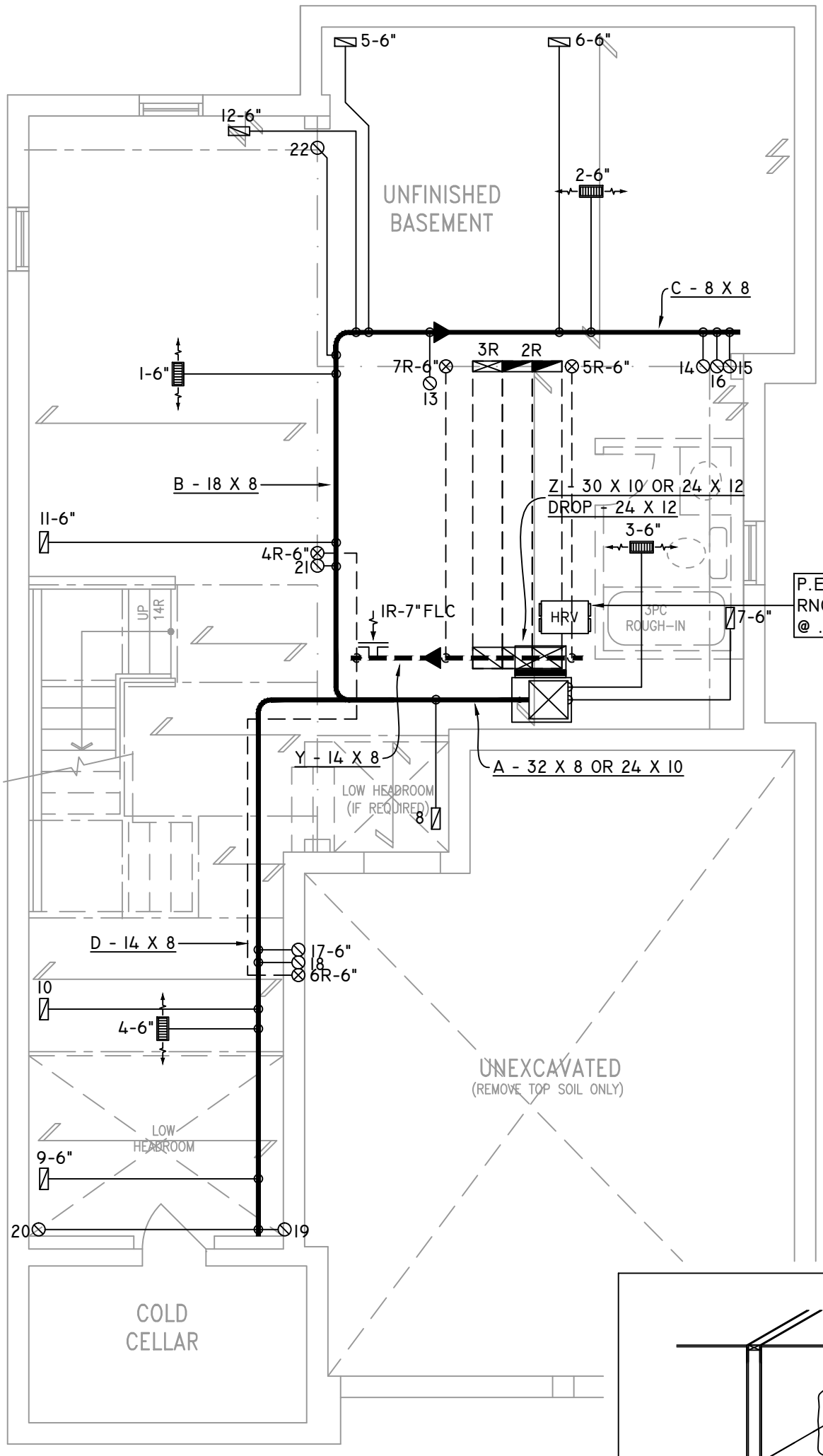
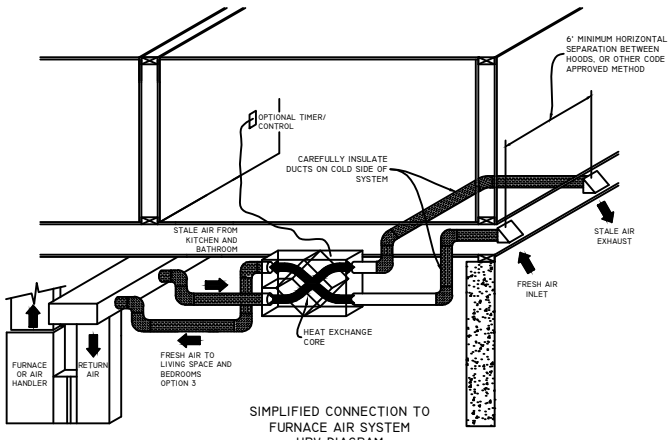


FURNACE EQUIPPED WITH BRUSHLESS DC MOTOR AS PER OBC 12.3.1.5 (2)

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

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

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

HEAT-LOSS	46,105 BTU/HR.
UNIT MAKE	AMANA OR EQUAL.
UNIT MODEL	AMEC960603BNA 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	10	4	3
IST FLOOR	8	1	2
BASEMENT	4	1	

FLOOR PLAN: BASEMENT		
DRAWN BY: AM	CHECKED: DD	SQFT 2511
LAYOUT NO. JB-04488	DRAWING NO. M1	

DATE: MARCH 12, 2018
CLIENT: BAYVIEW WELLINGTON
MODEL: S38-17 BAROSSA 17
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. SUPPLY AIR R.A. RETURN AIR T THERMOSTAT $ PRINCIPAL EXHAUST FAN SWITCH F PE W/R & PRINCIPAL EXHAUST FAN
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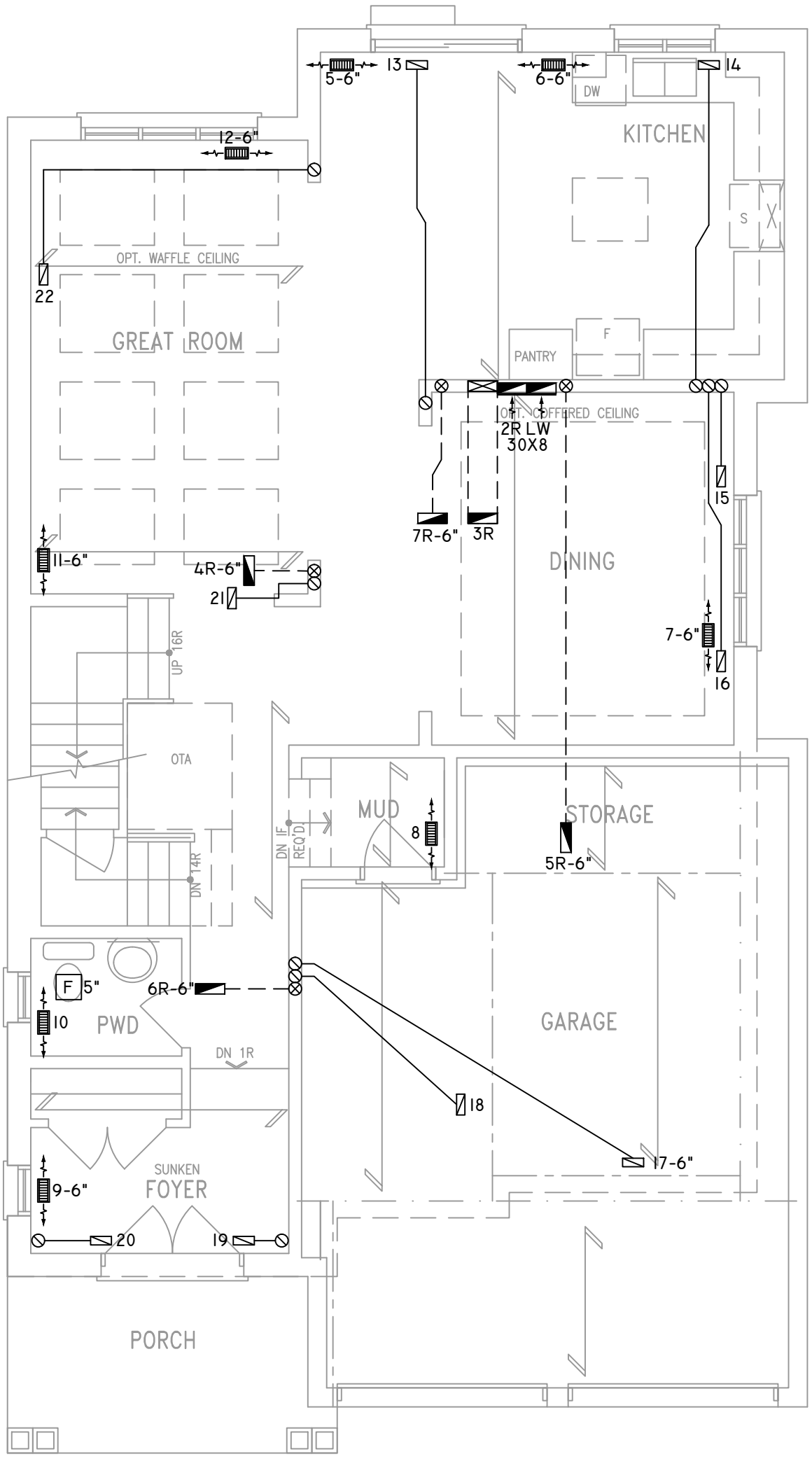

KITCHEN EXHAUST
100 CFM MIN. 6"

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

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'

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

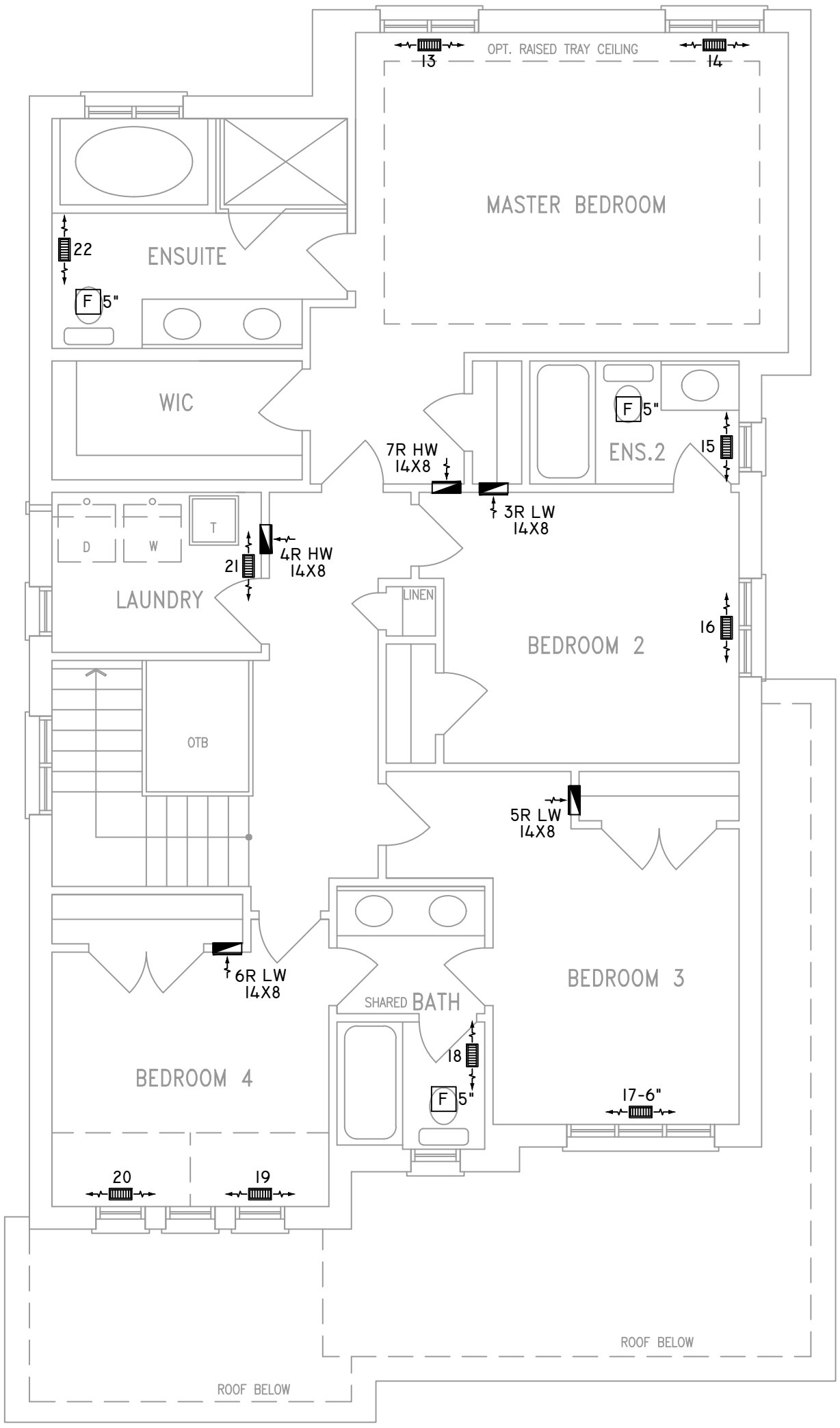
HEAT-LOSS	46,105 BTU/HR.
UNIT MAKE	AMANA OR EQUAL.
UNIT MODEL	AMEC960603BNA OR EQUAL.
UNIT HEATING INPUT	60,000 BTU/HR.
UNIT HEATING OUTPUT	57,600 BTU/HR.
A/C COOLING CAPACITY	2.5 TONS.
FAN SPEED	1170 CFM

# OF RUNS	S/A	R/A	FANS
3RD FLOOR			
2ND FLOOR	10	4	3
IST FLOOR	8	1	2
BASEMENT	4	1	

FLOOR PLAN: GROUND FLOOR			
DRAWN BY: AM	CHECKED: DD	SQFT 2511	
LAYOUT NO. JB-04488		DRAWING NO. M2	

DATE: MARCH 12, 2018
CLIENT: BAYVIEW WELLINGTON
MODEL: S38-17 BAROSSA 17
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		



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

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'

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

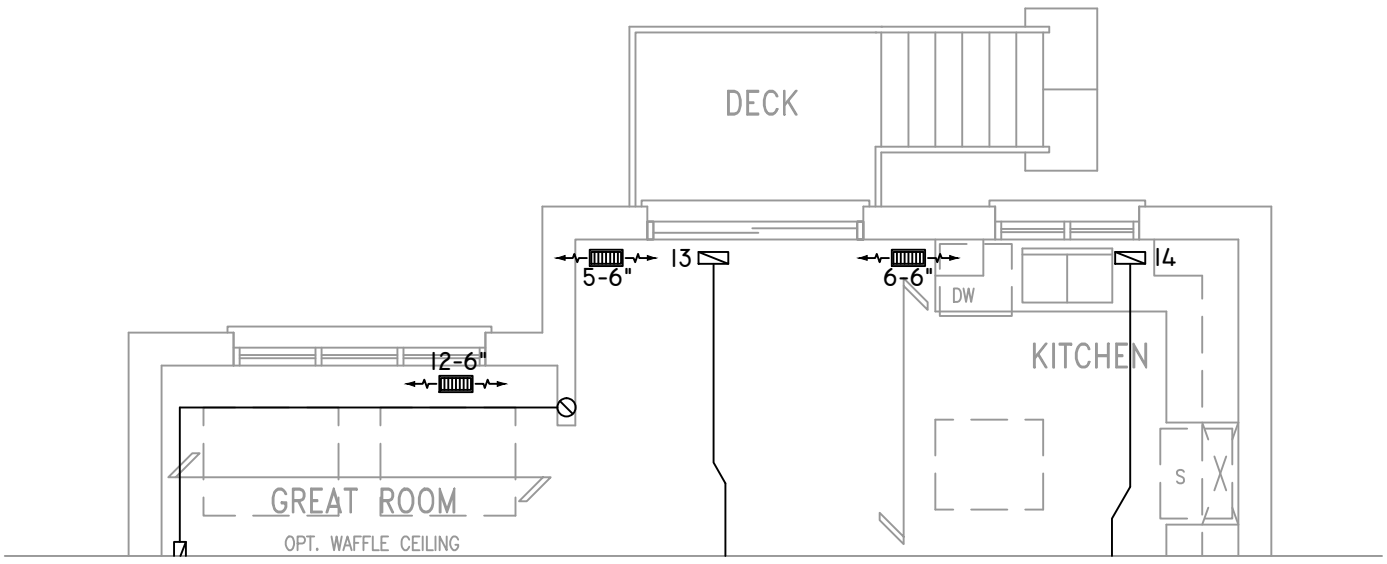
HEAT-LOSS	46,105 BTU/HR.
UNIT MAKE	AMANA OR EQUAL.
UNIT MODEL	AMEC960603BNA OR EQUAL.
UNIT HEATING INPUT	60,000 BTU/HR.
UNIT HEATING OUTPUT	57,600 BTU/HR.
A/C COOLING CAPACITY	2.5 TONS.
FAN SPEED	1170 CFM

# OF RUNS	S/A	R/A	FANS
3RD FLOOR			
2ND FLOOR	10	4	3
IST FLOOR	8	1	2
BASEMENT	4	1	

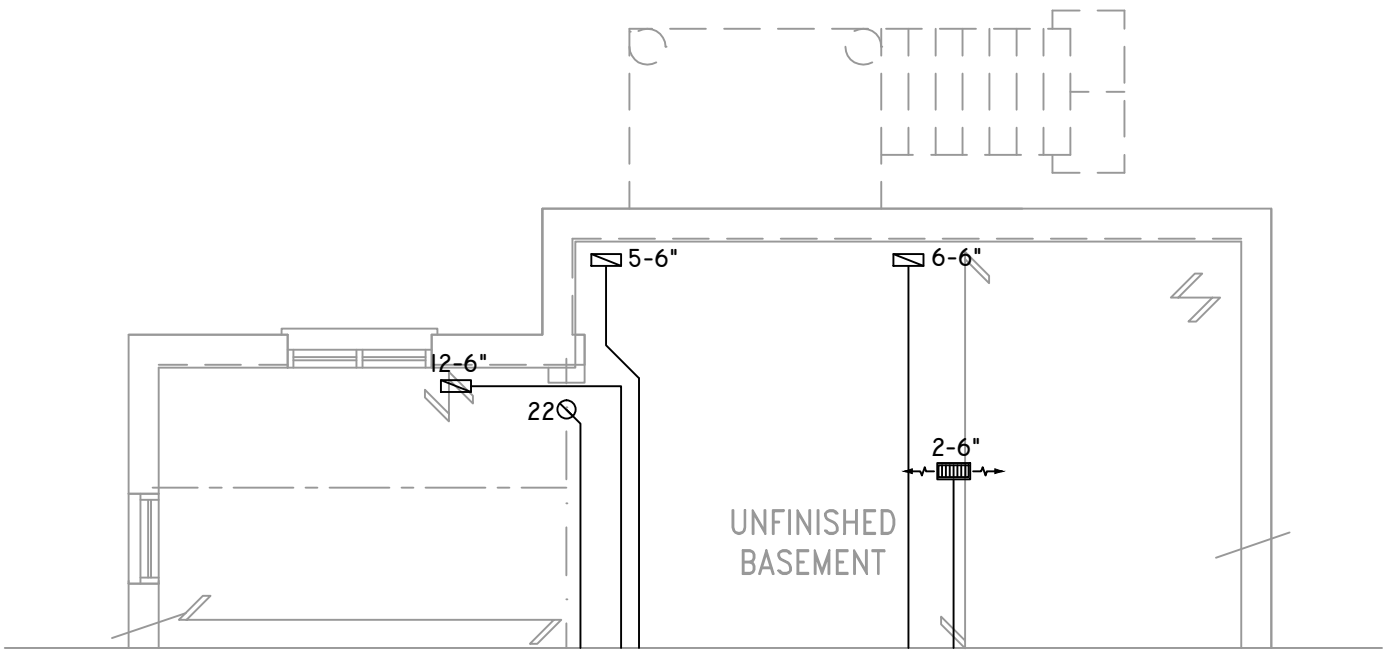
FLOOR PLAN: SECOND FLOOR			
DRAWN BY: AM	CHECKED: DD	SQFT 2511	
LAYOUT NO. JB-04488		DRAWING NO. M3	

DATE: MARCH 12, 2018
CLIENT: BAYVIEW WELLINGTON
MODEL: S38-17 BAROSSA 17
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. GROUND FLOOR PLAN EL. 'A', 'B' & 'C'
W/ 9R OR MORE W.O.D. CONDITION



PART. BASEMENT PLAN EL. 'A', 'B' & 'C'
W/ 9R OR MORE 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.
ALL SUPPLY OUTLETS TO BE 5" DIA. UNLESS OTHERWISE SPECIFIED.
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WEB: WWW.GTADESIGNS.CA

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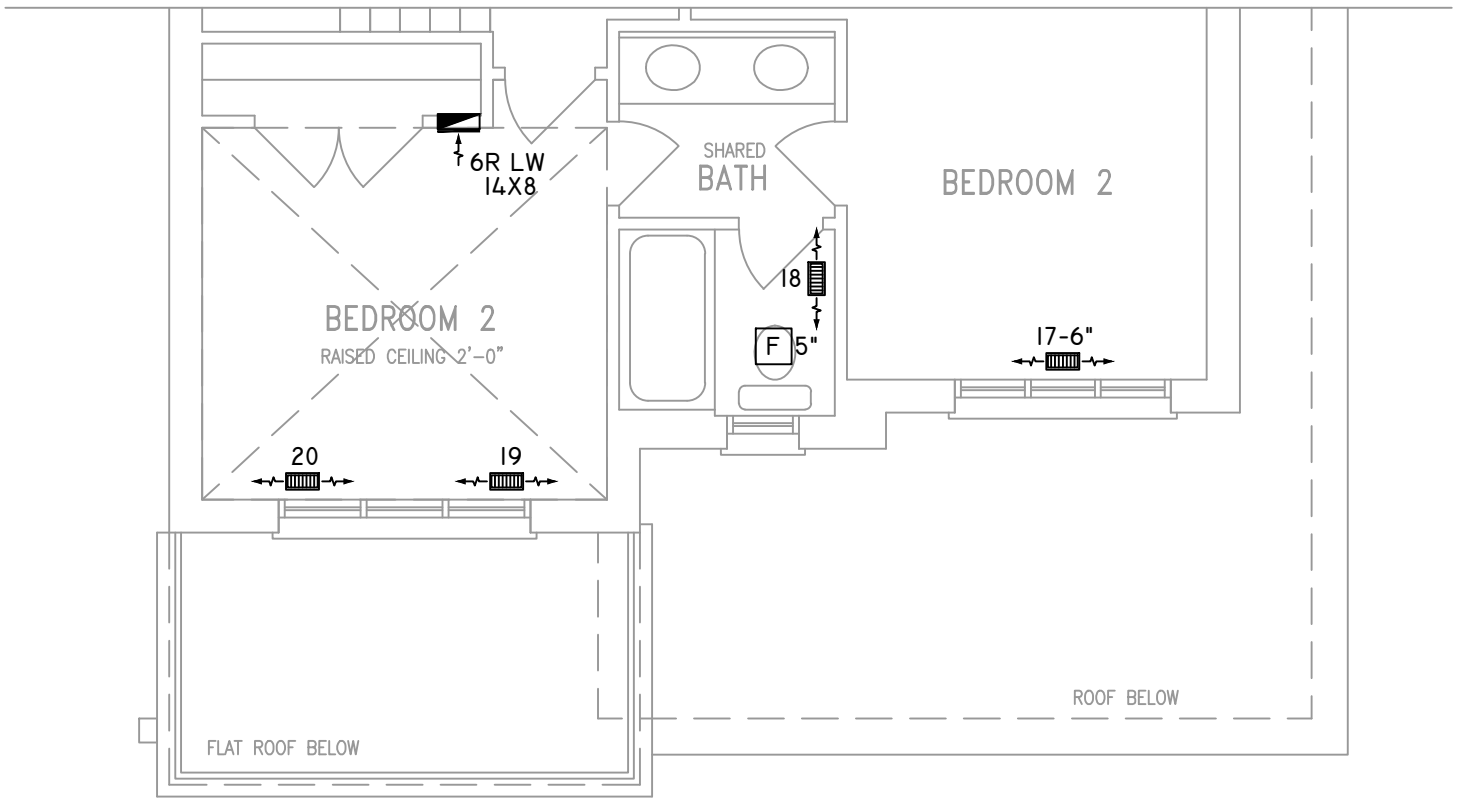
UNIT MAKE	AMANA OR EQUAL.
UNIT MODEL	AMEC960603BNA OR EQUAL.
UNIT HEATING INPUT	60,000 BTU/HR.
UNIT HEATING OUTPUT	57,600 BTU/HR.
A/C COOLING CAPACITY	2.5 TONS.
FAN SPEED	1170 CFM

# OF RUNS	S/A	R/A	FANS
3RD FLOOR			
2ND FLOOR	10	4	3
IST FLOOR	8	1	2
BASEMENT	4	1	

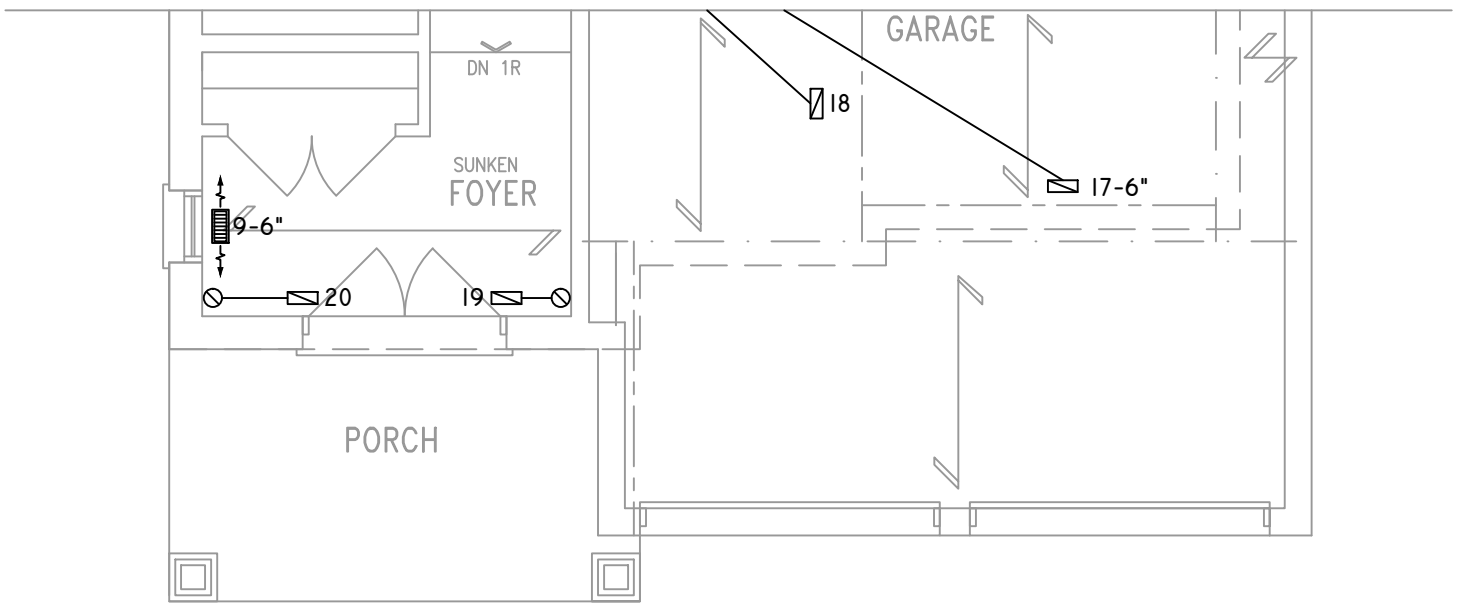
FLOOR PLAN: PARTIAL PLAN(S)		
DRAWN BY: AM	CHECKED: DD	SQFT 2511
LAYOUT NO. JB-04488		DRAWING NO. M4

DATE: MARCH 12, 2018
CLIENT: BAYVIEW WELLINGTON
MODEL: S38-17 BAROSSA 17
PROJECT: GREEN VALLEY EAST BRADFORD,ONT.
SCALE: 3/16" = 1'-0"

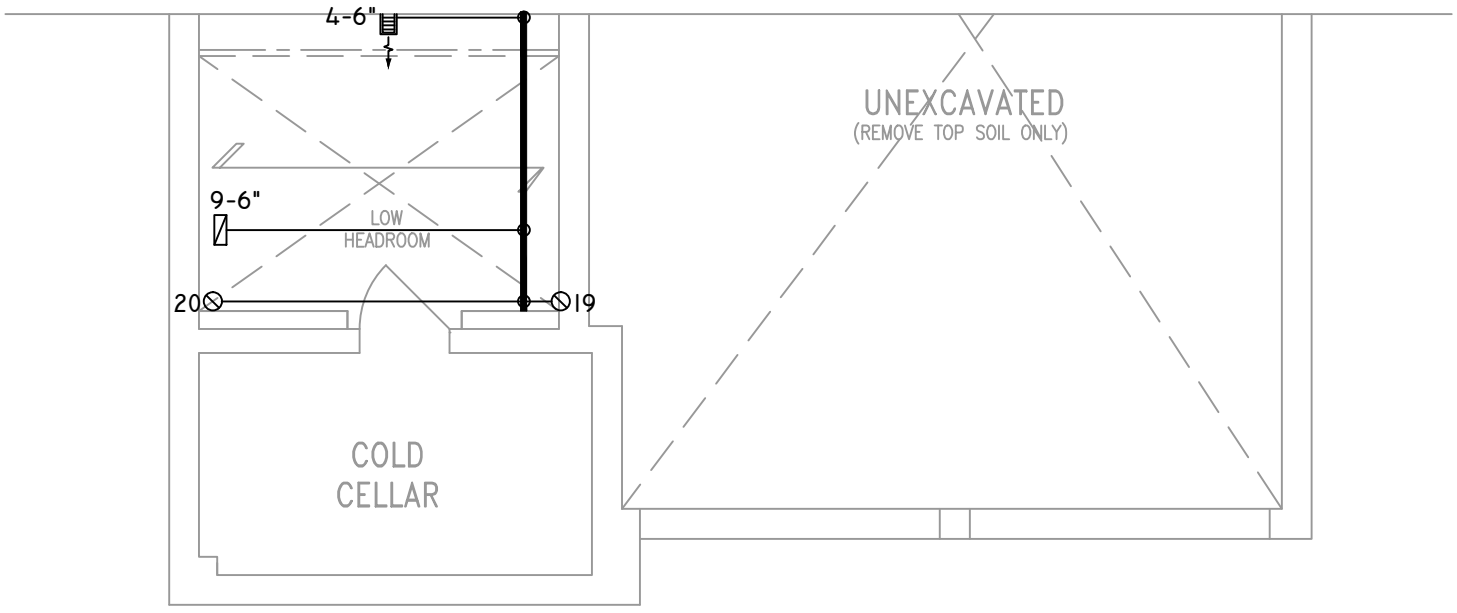
~~	FLEX DUCT		LOW/HIGH WALL/KICK SUPPLY DIFFUSER		DUCT CONNECTION TO JOIST LINING		RETURN AIR GRILLE (SIZE INDICATED ON DRAWING)	S.A.	SUPPLY AIR
——	RIGID ROUND DUCT		HRV EXHAUST GRILLE		RETURN AIR PIPE RISER		RETURN AIR RISER UP TO FLOOR ABOVE	R.A.	RETURN AIR
	SUPPLY DIFFUSER		SUPPLY AIR PIPE RISER	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



PART. SECOND FLOOR PLAN 'B'



PART. GROUND FLOOR PLAN 'B'



PART. 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

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.
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INSULATE DUCTS IN UNCONDITIONED SPACES RI2 UNDERCUT ALL DOORS 1" MIN.
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WEB: WWW.GTADESIGNS.CA

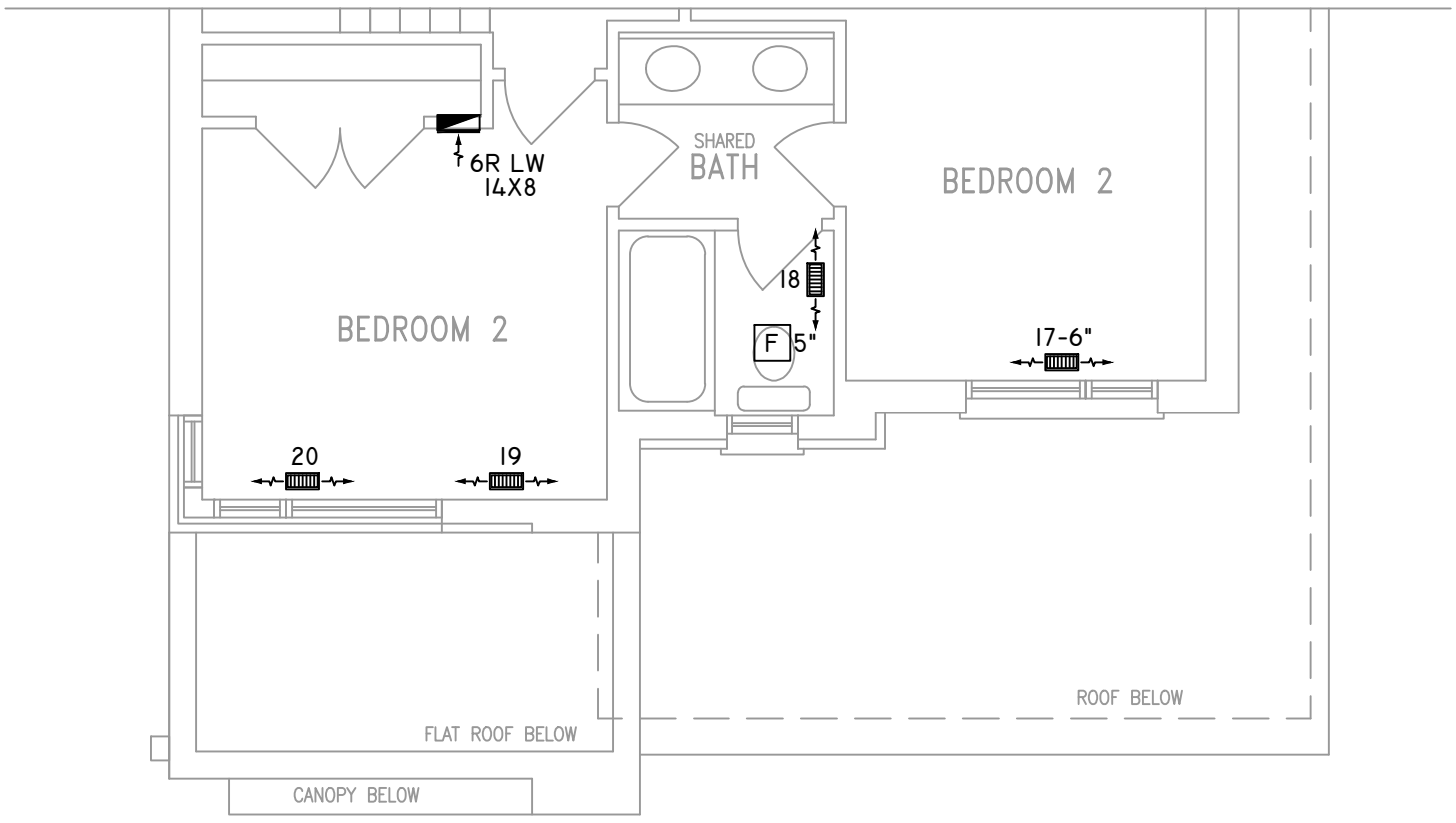
HEAT-LOSS	46,105 BTU/HR.
UNIT MAKE	AMANA OR EQUAL.
UNIT MODEL	AMEC960603BNA OR EQUAL.
UNIT HEATING INPUT	60,000 BTU/HR.
UNIT HEATING OUTPUT	57,600 BTU/HR.
A/C COOLING CAPACITY	2.5 TONS.
FAN SPEED	1170 CFM

# OF RUNS	S/A	R/A	FANS
3RD FLOOR			
2ND FLOOR	10	4	3
IST FLOOR	8	1	2
BASEMENT	4	1	

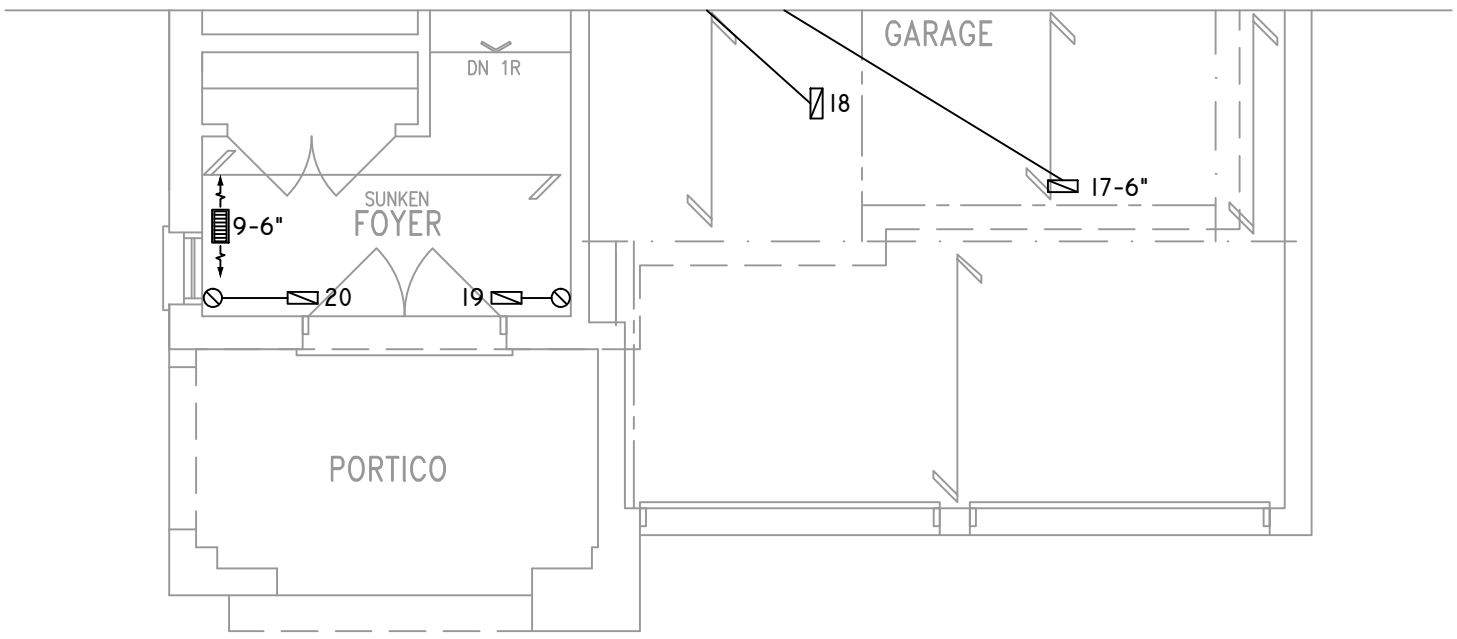
FLOOR PLAN: PARTIAL PLAN(S)		
DRAWN BY: AM	CHECKED: DD	SQFT 2511
LAYOUT NO. JB-04488		DRAWING NO. M5

DATE:	MARCH 12, 2018
CLIENT:	BAYVIEW WELLINGTON
MODEL:	S38-17 BAROSSA 17
PROJECT:	GREEN VALLEY EAST BRADFORD,ONT.
SCALE:	3/16" = 1'-0"

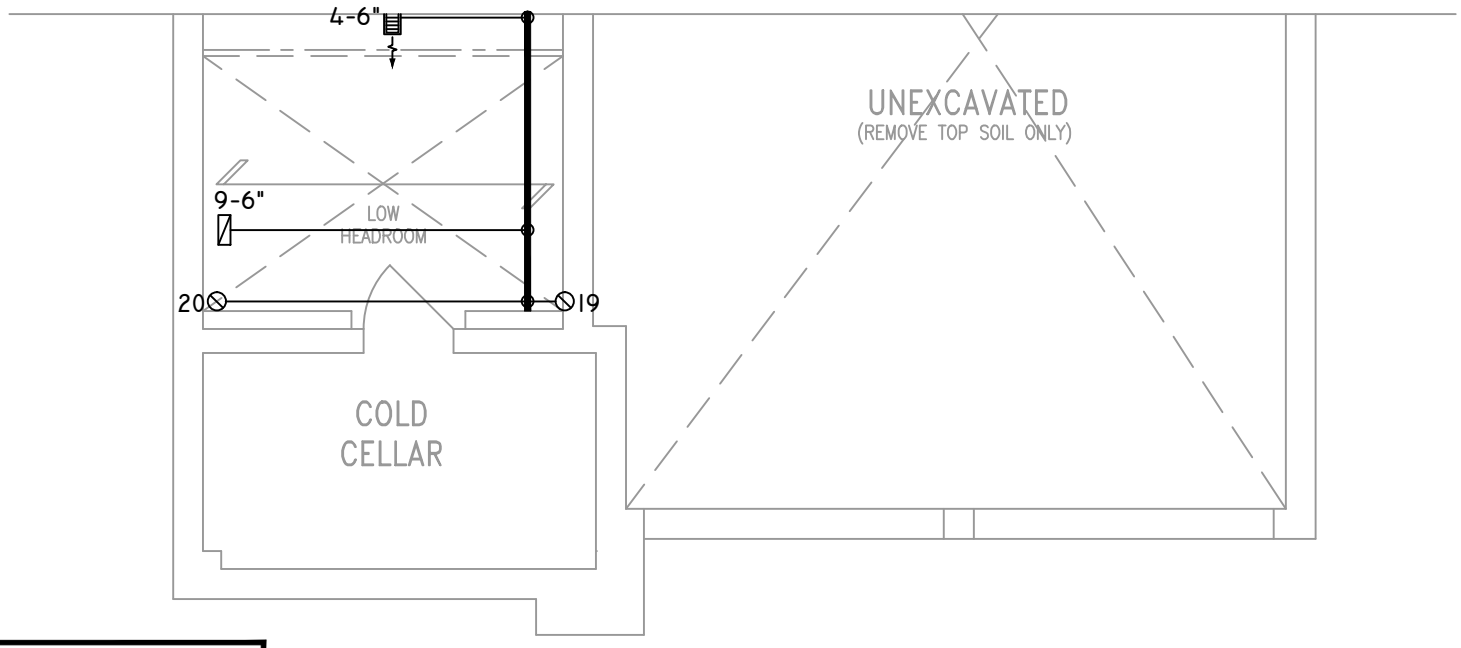
FLEX DUCT RIGID ROUND DUCT SUPPLY DIFFUSER	LOW/HIGH WALL/KICK SUPPLY DIFFUSER HRV EXHAUST GRILLE SUPPLY AIR PIPE RISER VOLUME DAMPER		DUCT CONNECTION TO JOIST LINING RETURN AIR PIPE RISER RETURN ROUND DUCT		RETURN AIR GRILLE (SIZE INDICATED ON DRAWING) RETURN AIR RISER UP TO FLOOR ABOVE RETURN AIR FROM 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. SECOND FLOOR PLAN 'C'



PART. GROUND FLOOR PLAN 'C'



PART. BASEMENT PLAN 'C'

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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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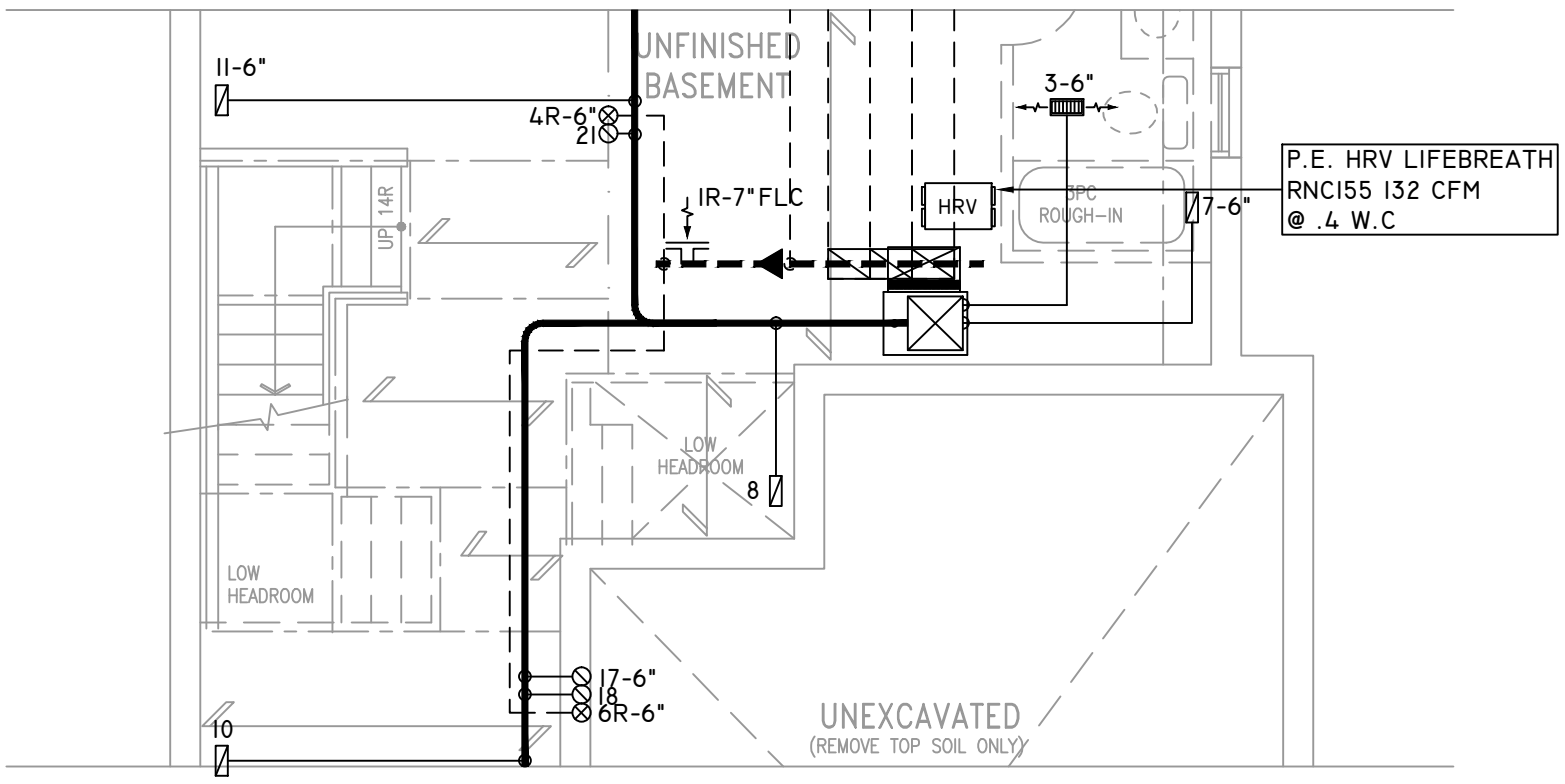
HEAT-LOSS	46,105 BTU/HR.
UNIT MAKE	AMANA OR EQUAL.
UNIT MODEL	AMEC960603BNA OR EQUAL.
UNIT HEATING INPUT	60,000 BTU/HR.
UNIT HEATING OUTPUT	57,600 BTU/HR.
A/C COOLING CAPACITY	2.5 TONS.
FAN SPEED	1170 CFM

# OF RUNS	S/A	R/A	FANS
3RD FLOOR			
2ND FLOOR	10	4	3
IST FLOOR	8	1	2
BASEMENT	4	1	

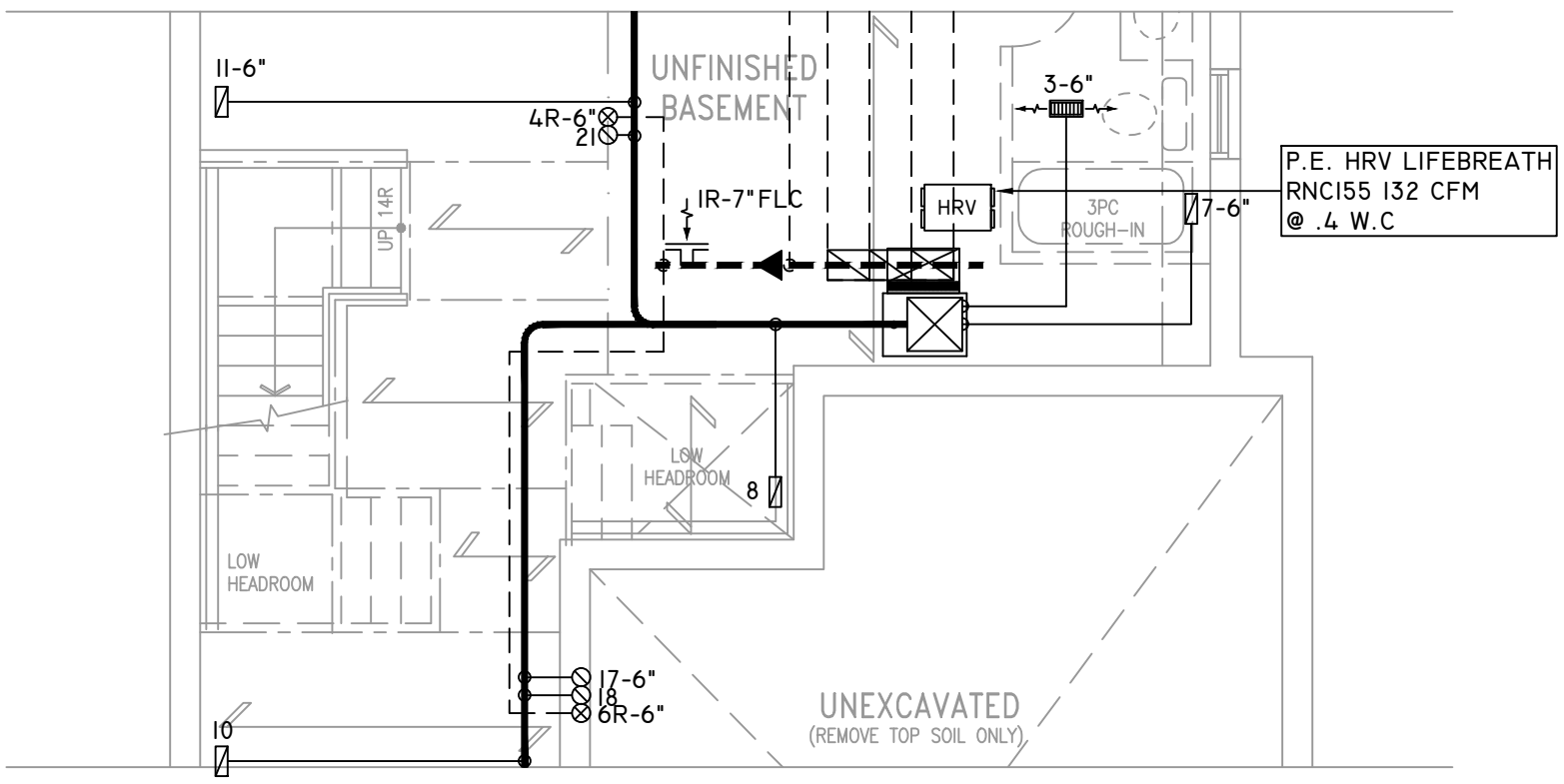
FLOOR PLAN: PARTIAL PLAN(S)		
DRAWN BY: AM	CHECKED: DD	SQFT 2511
LAYOUT NO. JB-04488		DRAWING NO. M6

DATE: MARCH 12, 2018
CLIENT: BAYVIEW WELLINGTON
MODEL: S38-17 BAROSSA 17
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. BASEMENT PLAN FOR SUNKEN MUD COND.



PART. BASEMENT PLAN FOR -2R OR MORE SUNKEN MUD COND.

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.
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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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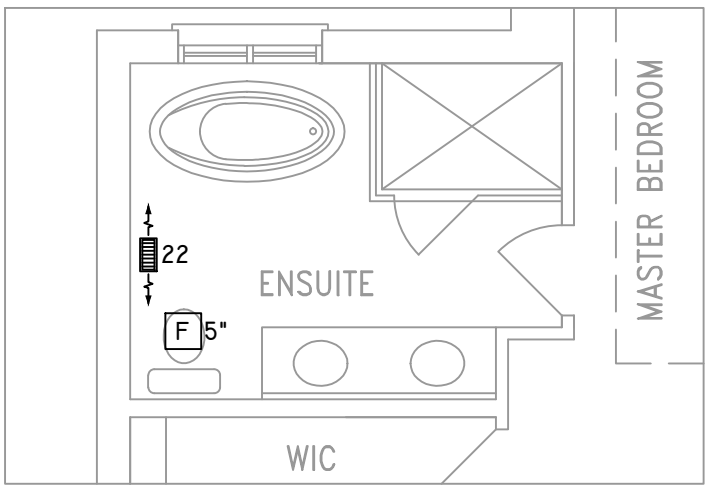
UNIT HEATING OUTPUT	57,600 BTU/HR.
A/C COOLING CAPACITY	2.5 TONS.
FAN SPEED	1170 CFM

# OF RUNS	S/A	R/A	FANS
3RD FLOOR			
2ND FLOOR	10	4	3
IST FLOOR	8	1	2
BASEMENT	4	1	

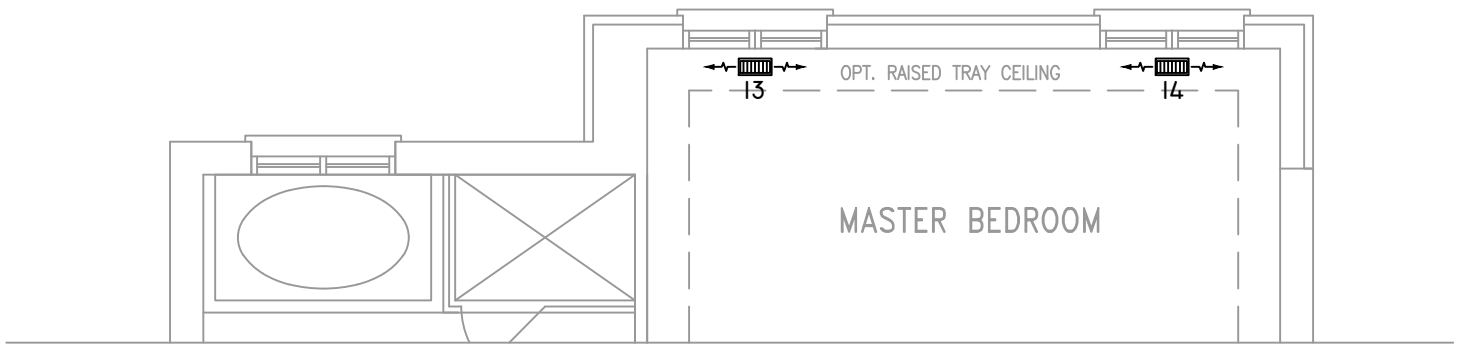
FLOOR PLAN: PARTIAL PLAN(S)			
DRAWN BY: AM	CHECKED: DD	SQFT 2511	
LAYOUT NO. JB-04488		DRAWING NO. M7	

DATE: MARCH 12, 2018
CLIENT: BAYVIEW WELLINGTON
MODEL: S38-17 BAROSSA 17
PROJECT: GREEN VALLEY EAST BRADFORD,ONT.
SCALE: 3/16" = 1'-0"

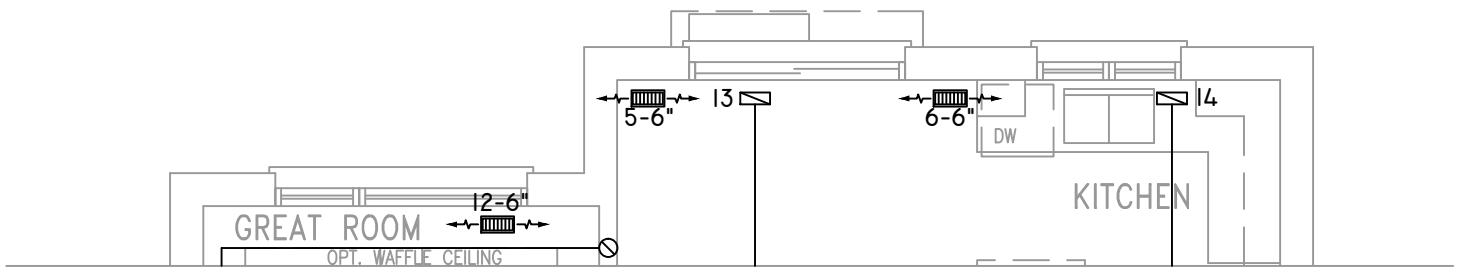
~~	FLEX DUCT		LOW/HIGH WALL/KICK SUPPLY DIFFUSER		DUCT CONNECTION TO JOIST LINING		RETURN AIR GRILLE (SIZE INDICATED ON DRAWING)	S.A.	SUPPLY AIR
——	RIGID ROUND DUCT		HRV EXHAUST GRILLE		RETURN AIR PIPE RISER		RETURN AIR RISER UP TO FLOOR ABOVE	R.A.	RETURN AIR
	SUPPLY DIFFUSER		SUPPLY AIR PIPE RISER	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



OPT. SECOND FLOOR W/
ALT. ENSUITE LAYOUT



PARTIAL SECOND FLOOR PLAN ELEVATION 'C' REAR UPGRADE



PARTIAL GROUND FLOOR PLAN ELEVATION 'C' REAR UPGRADE

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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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UNIT MAKE	AMANA OR EQUAL.
UNIT MODEL	AMEC960603BNA OR EQUAL.
UNIT HEATING INPUT	60,000 BTU/HR.
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A/C COOLING CAPACITY	2.5 TONS.
FAN SPEED	1170 CFM

# OF RUNS	S/A	R/A	FANS
3RD FLOOR			
2ND FLOOR	10	4	3
IST FLOOR	8	1	2
BASEMENT	4	1	

FLOOR PLAN: PARTIAL PLAN(S)

DRAWN BY:	CHECKED:	SQFT
AM	DD	2511

LAYOUT NO. JB-04488 DRAWING NO. M8

DATE: MARCH 12, 2018
CLIENT: BAYVIEW WELLINGTON
MODEL: S38-17 BAROSSA 17
PROJECT: GREEN VALLEY EAST BRADFORD,ONT.
SCALE: 3/16" = 1'-0"