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 3** **SD25-3 WOB**	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-04472

Heating and Cooling Load Calculations	**Main**		Builder	**Bayview Wellington**
Air System Design	**Alternate**	**x**	Project	**Green Valley East**
Residential mechanical ventilation Design Summary	**Area Sq ft:**	**2062**	Model	**Sonoma 3** **SD25-3 WOB**
Residential System Design per CAN/CSA-F280-12				
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-04472**

Building Location

Address (Model):	**SD25-3 WOB**	Site:	**Green Valley East**
Model:	**Sonoma 3**	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: **2062**
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 3 SD25-3 WOB

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-04472

DESIGN LOAD SPECIFICATIONS

Level 1 Net Load	14,121	btu/h
Level 2 Net Load	13,806	btu/h
Level 3 Net Load	12,268	btu/h
Level 4 Net Load	0	btu/h
Total Heat Loss	40,195	btu/h
Total Heat Gain	23,842	btu/h
Combo System HL + 10%	44,214	Btuh.
Building Volume Vb	24189	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	0.0291	cfm/btuh
Cooling Air Flow Proportioning Facter	0.0404	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	2.0	Ton
Cond.----------	2.0	
Coil ----------	2.0	

Blower Type ECM
(Brushless DC OBC 12.3.1.5.(2))
Cooling Check 963 cfm
Cooling Air Flow Rate 963 cfm

Level 1

S/A Outlet No.	1	2	3	19											4	5	6	7	8	9	10	11						
Room Use	BASE	BASE	BASE	BASE											BREAK	BREAK	DIN/KIT	DIN/KIT	LIV	FOY	MUD	PWD						
Btu/Outlet	3530	3530	3530	3530											1873	1873	1442	1442	1419	3201	2072	484						
Heating Airflow Rate CFM	103	103	103	103											55	55	42	42	41	93	60	14						
Cooling Airflow Rate CFM	23	23	23	23											81	81	80	80	75	46	12	3						
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	36	20	28	45											43	32	21	17	6	35	25	29						
Equivalent Length	110	80	120	110	70	70	70	70	70	70	70	70	70	70	100	100	110	140	90	100	130	110	70	70	70	70	70	70
Total Effective Length	146	100	148	155	70	70	70	70	70	70	70	70	70	70	143	132	131	157	96	135	155	139	70	70	70	70	70	70
Adjusted Pressure	0.09	0.13	0.09	0.08	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.09	0.10	0.10	0.08	0.14	0.10	0.08	0.09	0.19	0.19	0.19	0.19	0.19	0.19
Duct Size Round	6	6	6	6											6	6	6	6	6	6	5	3						
Outlet Size	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	3x10	3x10	4x10	4x10	4x10	4x10	4x10	4x10
Trunk	E	D	C	D											E	D	D	D	A	C	B	B						

Level 2

Level 3

S/A Outlet No.	12	13	14	15	16	17	18	19																				
Room Use	MAST	ENS	BED 4	BED 3	BED 3	BED 2	LAUN	BATH																				
Btu/Outlet	2491	1470	2133	1819	1819	2345	93	99																				
Heating Airflow Rate CFM	72	43	62	53	53	68	3	3																				
Cooling Airflow Rate CFM	88	30	68	59	59	83	23	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	68	23	28	67	62	50	44	43																				
Equivalent Length	110	145	100	125	110	140	100	125	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
Total Effective Length	178	168	128	192	172	190	144	168	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
Adjusted Pressure	0.07	0.08	0.10	0.07	0.08	0.07	0.09	0.08	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	0.19
Duct Size Round	6	5	5	5	5	6	4	2																				
Outlet Size	4x10	3x10	3x10	3x10	3x10	4x10	3x10	3x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10
Trunk	E	D	A	C	C	C	B	B																				

Level 4

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	206	494	155	105	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	13	26	46	46	48	35					
Equivalent Length	110	165	210	205	180	190	50	50	50	50	50
Total Effective Length	123	191	256	251	228	225	50	50	50	50	50
Adjusted Pressure	0.10	0.06	0.05	0.05	0.05	0.05	0.24	0.24	0.24	0.24	0.24
Duct Size Round	8.0	12.0	8.0	6.0	6.0	6.0					
Inlet Size	FLC	8	8	8	8	8					
" "	x	x	x	x	x	x	x	x	x	x	x
Inlet Size	9x6	30	14	14	14	14					
Trunk	Z	Z	Z	Y	Y	Y					

Return Trunk Duct Sizing

Trunk	CFM	Press.	Round	Rect. Size	
Drop	1170	0.05	17.0	24x12	
Z	1170	0.05	17.0	26x10	22x12
Y	315	0.05	10.5	12x8	10x10
X					
W					
V					
U					
T					
S					
R					
Q					

Supply Trunk Duct Sizing

Trunk	CFM	Press.	Round	Rect. Size	
A	553	0.07	12.0	16x8	12x10
B	80	0.08	6.0	8x8	8x7
C	370	0.07	10.5	12x8	10x10
D	617	0.07	12.5	18x8	14x10
E	230	0.07	9.0	8x8	10x7
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 3 SD25-3 WOB | **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: 2062

Project # PJ-00204 | Layout # JB-04472

Level 1

		BASE																											
Run ft. exposed wall A		78	A		A		A		A		A		A		A		A		A		A		A		A		A	
Run ft. exposed wall B		33	B		B		B		B		B		B		B		B		B		B		B		B		B	
Ceiling height		4.5	AG	4.5	AG	4.5	AG	4.5	AG	4.5	AG	4.5	AG	4.5	AG	4.5	AG	4.5	AG	4.5	AG	4.5	AG	4.5	AG	4.5	AG	4.5	AG
Floor area		674	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		351																											
Gross Exp Wall B		297																											

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																										
East/West		3.55	22.93	27.35																										
South		3.55	22.93	20.89	3	69	63																							
WOB Windows		3.55	22.93	27.35	41	940	1121																							
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	327		170																							
Net exposed walls B		14.49	5.62	0.76	256	1438	194																							
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				4963																								
Total Conductive	Heat Loss					7837																								
	Heat Gain						1607																							
Air Leakage	Heat Loss/Gain		0.7598	0.0323		5955	52																							
Ventilation	Case 1		0.07	0.08																										
	Case 2		14.07	11.88																										
	Case 3	x	0.04	0.08		329	124																							
Heat Gain People				239																										
Appliances Loads		1 =.25 percent		3208																										
Duct and Pipe loss				10%																										
Level 1 HL Total	14,121	Total HL for per room				14121																								
Level 1 HG Total	2,317	Total HG per room x 1.3					2317																							

Level 2

		BREAK		DIN/KIT		LIV		FOY		MUD		PWD																	
Run ft. exposed wall A		25	A	19	A	12	A	29	A	20	A	6	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		10.0		11.0		12.0		12.0		10.0		10.0		10.0		10.0		10.0		10.0		10.0		10.0	
Floor area		150	Area	235	Area	235	Area	93	Area	110	Area	25	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		250		190		120		319		240		72																	
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																										
East/West		3.55	22.93	27.35	42	963	1149	39	894	1067				20	459	547														
South		3.55	22.93	20.89	39	894	815	24	550	501	24	550	501																	
Existing Windows		1.99	40.90	22.15																										
Skylight		2.03	40.10	88.23																										
Doors		4.00	20.35	2.75										25	509	69	21	427	58											
Net exposed walls A		17.03	4.78	0.65	169	808	109	127	607	82	96	459	62	274	1310	177	219	1047	141	72	344	47								
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					2665			2052			1009			2277			1474			344									
	Heat Gain						2073			1650			563			793			199			47									
Air Leakage	Heat Loss/Gain		0.3638	0.0323		970	67		746	53		367	18		828	26		536	6		125	2								
Ventilation	Case 1		0.03	0.08																										
	Case 2		14.07	11.88																										
	Case 3	x	0.04	0.08		112	159		86	127		42	43		96	61		62	15		14	4								
Heat Gain People				239																										
Appliances Loads		1 =.25 percent		3208	1.0		802	1.5		1203	1.0		802																	
Duct and Pipe loss				10%																										
Level 2 HL Total	13,806	Total HL for per room				3746			2884			1419			3201			2072			484									
Level 2 HG Total	11,327	Total HG per room x 1.3					4031			3943			1855			1143			287			67								

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	40,195	btu/h
Total Heat Gain	23,842	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

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

2012 OBC | Project: Green Valley East | Model: Sonoma 3 SD25-3 WOB | **System 1** | Heat Loss ^T 81.4 deg. F | Ht gain ^T 11 deg. F | GTA: 2062 | Project # PJ-00204 | Layout # JB-04472

Level 3

	MAST	ENS	BED 4	BED 3	BED 2	LAUN	BATH					
Run ft. exposed wall A	25 A	19 A	19 A	30 A	10 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	8.0	8.0	8.0	9.0	10.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Floor area	321 Area	118 Area	183 Area	142 Area	141 Area	44 Area	55 Area	Area	Area	Area	Area	Area
Exposed Ceilings A	321 A	118 A	183 A	142 A	141 A	44 A	55 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	26 Flr	127 Flr	4 Flr	Flr	Flr	Flr	Flr	Flr	Flr
Gross Exp Wall A	200	152	152	270	100							
Gross Exp Wall B												

Components		R-Values	Loss	Gain	MAST Loss	MAST Gain	ENS Loss	ENS Gain	BED 4 Loss	BED 4 Gain	BED 3 Loss	BED 3 Gain	BED 2 Loss	BED 2 Gain	LAUN Loss	LAUN Gain	BATH Loss	BATH 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	28 642	766	13 298	356			44 1009	1204	34 780	930												
South		3.55	22.93	20.89					36 825	752	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																						
Net exposed walls A		17.03	4.78	0.65	172 822	111	139 664	90	116 554	75	216 1032	140	66 315	43												
Net exposed walls B		8.50	9.58	1.29																						
Exposed Ceilings A		59.22	1.37	0.64	321 441	206	118 162	76	183 252	117	142 195	91	141 194	90	44 60	28	55 76	35								
Exposed Ceilings B		22.86	3.56	1.66																						
Exposed Floors		29.80	2.73	0.17							26 71	4	127 347	21	4 11	1										
Foundation Conductive Heatloss																										
Total Conductive	Heat Loss				1905		1125		1631		2537		1636		71		76									
	Heat Gain					1083		521		944		1647		1084		29		35								
Air Leakage	Heat Loss/Gain		0.2652	0.0323	505	35	298	17	433	30	673	53	434	35	19	1	20	1								
Ventilation	Case 1		0.02	0.08																						
	Case 2		14.07	11.88																						
	Case 3	x	0.04	0.08	80	83	47	40	68	73	106	127	69	83	3	2	3	3								
Heat Gain People				239	2	478			1	239	1	239	1	239												
Appliances Loads		1 =.25 percent		3208											0.5	401										
Duct and Pipe loss				10%							1 321	189	1 207	132												
Level 3 HL Total	12,268	Total HL for per room			2491		1470		2133		3637		2345		93		99									
Level 3 HG Total	10,198	Total HG per room x 1.3				2183		751		1672		2931		2046		563		51								

Level 4

Run ft. exposed wall 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	
Ceiling height																										
Floor 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	
Exposed Ceilings 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	
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
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	0.0323																						
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		3208																						
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	40,195	btu/h
Total Heat Gain	23,842	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-04472

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:** SD25-3 WOB

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	4	@	10.6	cfm	42.4	cfm
				Total	159	

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	159.0	
Less principal exhaust capacity	79.5	
REQUIRED supplemental vent. Capacity	79.5	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-04472

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 3 **SD25-3 WOB**		
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 = 317.53 m² or 3417.9 ft²	W,S &G % = 12%	☐ Log/Post&Beam ☐ ICF Above Grade ☐ ICF Basement ☐ Slab-on-ground ☑ Walkout Basement ☑ Air Conditioning ☐ Combo Unit
Area of W, S & G = 36.881 m² or 397.0 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-04472

Package: Package A1 **System:** System 1
Project: Bradford **Model:** SD25-3 WOB

Air Leakage Calculations

Building Air Leakage Heat Loss				
B	LRairh	Vb	HL^T	HLleak
0.018	0.336	24189	81.4	11909

Building Air Leakage Heat Gain				
B	LRairh	Vb	HG^T	HG Leak
0.018	0.083	24189	11	396

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	11909	7837	0.7598
Level 2	0.3		9821	0.3638
Level 3	0.2		8981	0.2652
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	396	0.0323
BUILDING CONDUCTIVE HEAT GAIN	12275	

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	7837	0.07
Level 2	0.3		9821	0.03
Level 3	0.2		8981	0.02
Level 4	0		0	0.00

Ventilation Heat Gain (Exhaust Only Systems)

Case 1 - Exhaust Only		Multiplier
HGbvent	944	0.08
Building	12275	

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	1455	Watts	4963	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):	6.86

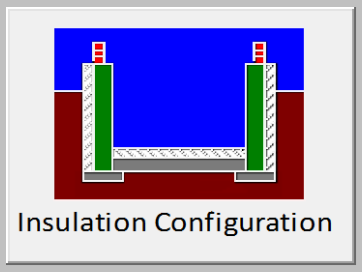
Building Configuration	
Type:	Semi-Detached
Number of Stories:	Two
Foundation:	Full
House Volume (m^3):	685.03

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):	**0.336**
Cooling Air Leakage Rate (ACH/H):	**0.083**

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):	**14.83**	 Insulation Configuration
Floor Width (m):	**4.22**	
Exposed Perimeter (m):	**23.77**	
Wall Height (m):	**2.74**	
Depth Below Grade (m):	**1.37**	
Window Area (m^2):	**0.28**	
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):	**1303**	

Residential Slab on Grade 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)	
Floor Dimensions		
Length (m):	**7.76**	 Insulation Configuration
Width (m):	**2.14**	
Exposed Perimeter (m):	**10.06**	
Radiant Slab		
Heated Fraction of the Slab:	**0**	
Fluid Temperature (°C):	**33**	
Design Months		
Heating Month	**1**	
Foundation Loads		
Heating Load (Watts):	**152**	

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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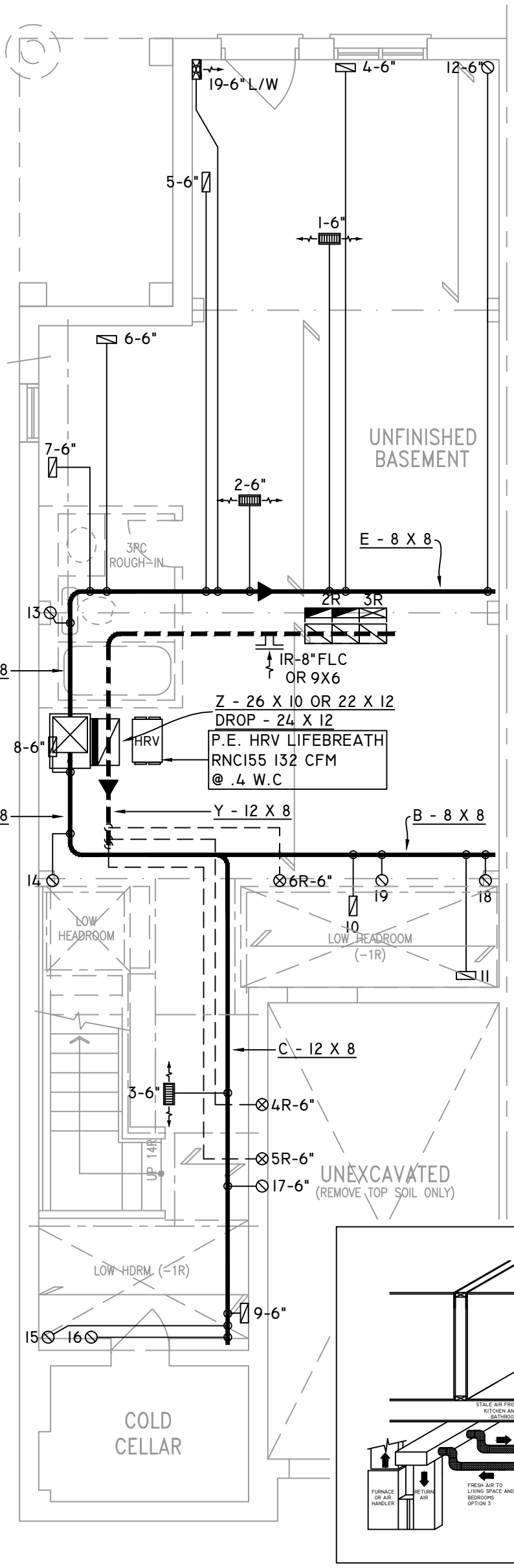


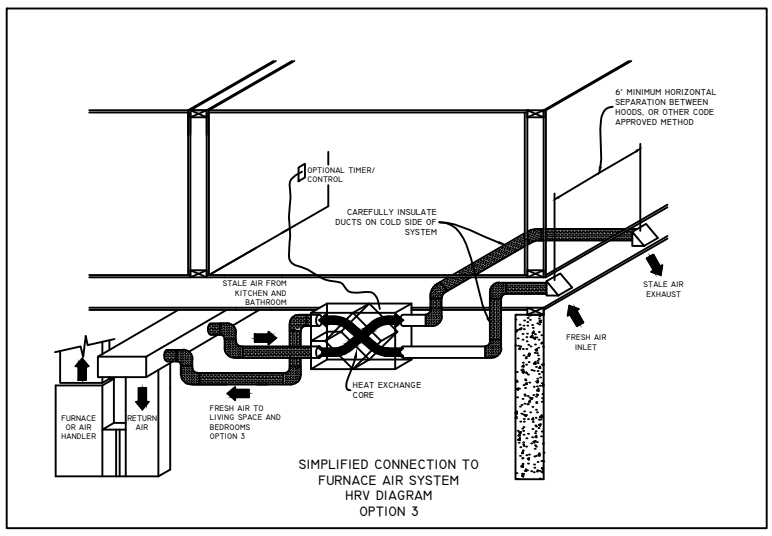
PART. BASEMENT PLAN
FOR SUNKEN MUD ROOM
(-2R OR -3R CONDITION)

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

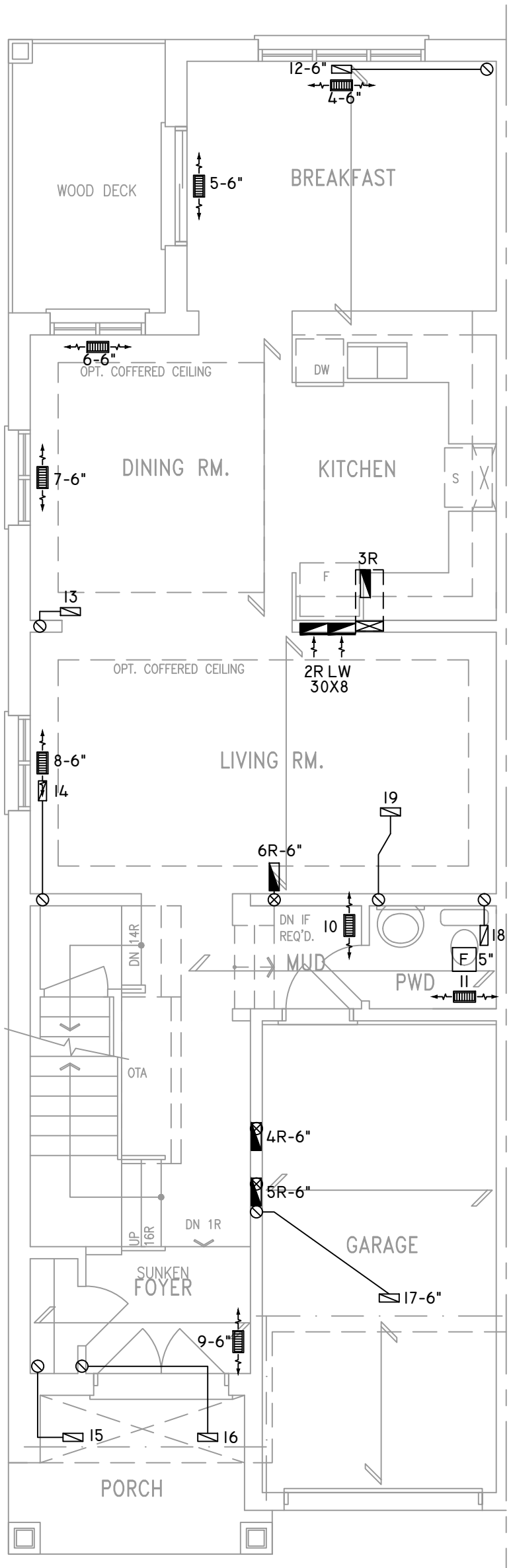
HEAT-LOSS	40,195 BTU/HR.
UNIT MAKE	AMANA OR EQUAL.
UNIT MODEL	AMEC96-0603BNA OR EQUAL.
UNIT HEATING INPUT	60,000 BTU/HR.
UNIT HEATING OUTPUT	57,600 BTU/HR.
A/C COOLING CAPACITY	2.0 TONS.
FAN SPEED	1170 CFM

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

FLOOR PLAN: BASEMENT		
DRAWN BY: AM	CHECKED: DD	SQFT 2062
LAYOUT NO. JB-00000		DRAWING NO. M1

DATE: FEBRUARY 15, 2018
CLIENT: BAYVIEW WELLINGTON
MODEL: SD25-3 WOB SONOMA 3
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
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L4T 0A4 TEL: 905-671-9800
EMAIL: DAVE@GTADESIGNS.CA
WEB: WWW.GTADESIGNS.CA

HEAT-LOSS	40,195 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	2.0 TONS.
FAN SPEED	1170 CFM

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

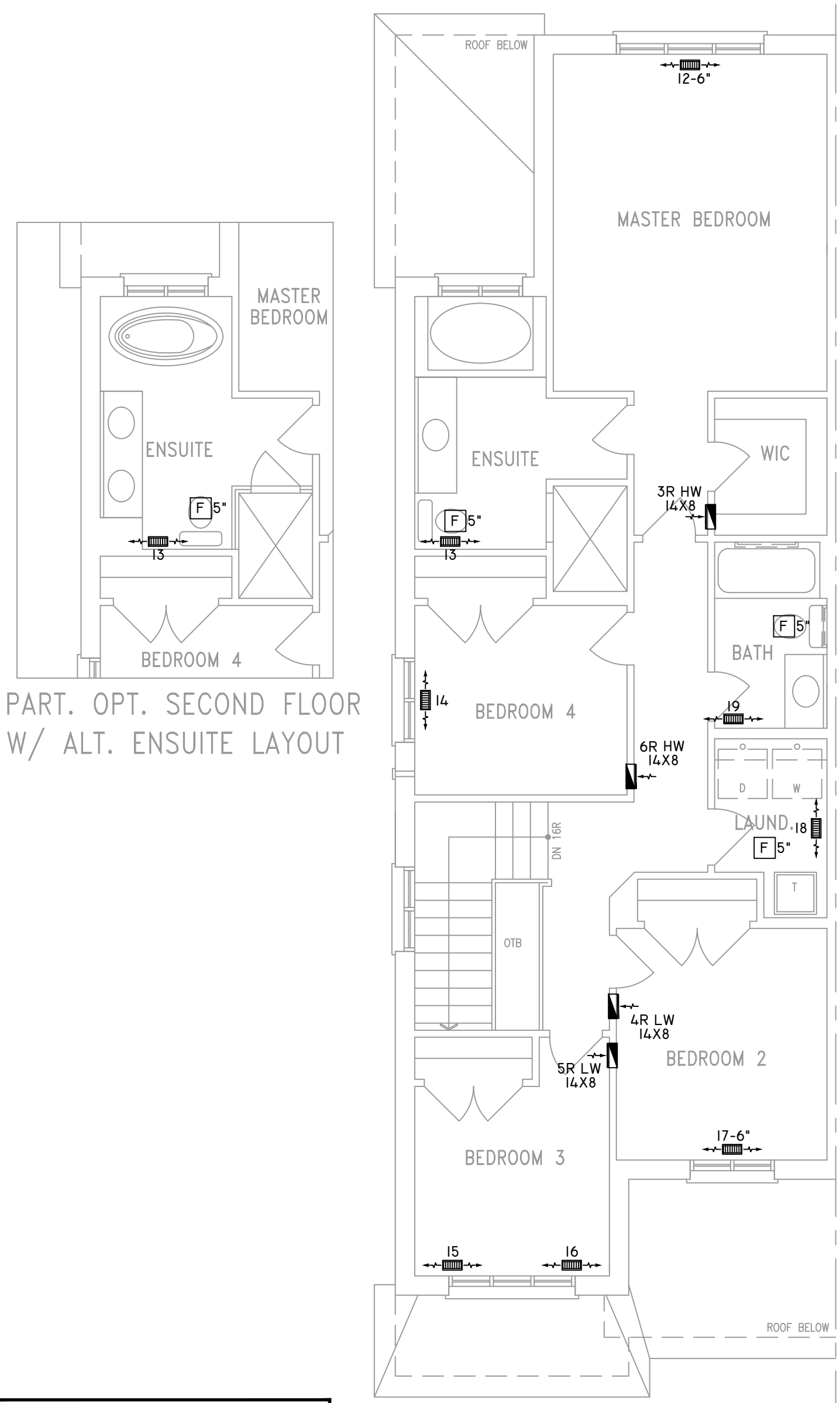
FLOOR PLAN: GROUND FLOOR

DRAWN BY:	CHECKED:	SQFT
AM	DD	2062

LAYOUT NO. JB-00000 DRAWING NO. M2

DATE: FEBRUARY 15, 2018
CLIENT: BAYVIEW WELLINGTON
MODEL: SD25-3 WOB SONOMA 3
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 W/ ALT. ENSUITE LAYOUT

SECOND FLOOR PLAN 'A'

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

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.
CONTRACTOR MUST WORK FROM APPROVED PLANS.
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L4T 0A4 TEL: 905-671-9800
EMAIL: DAVE@GTADESIGNS.CA
WEB: WWW.GTADESIGNS.CA

HEAT-LOSS	40,195 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	2.0 TONS.
FAN SPEED	1170 CFM

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

FLOOR PLAN: SECOND FLOOR

DRAWN BY:	CHECKED:	SQFT
AM	DD	2062

LAYOUT NO. JB-00000 DRAWING NO. M3

DATE: FEBRUARY 15, 2018

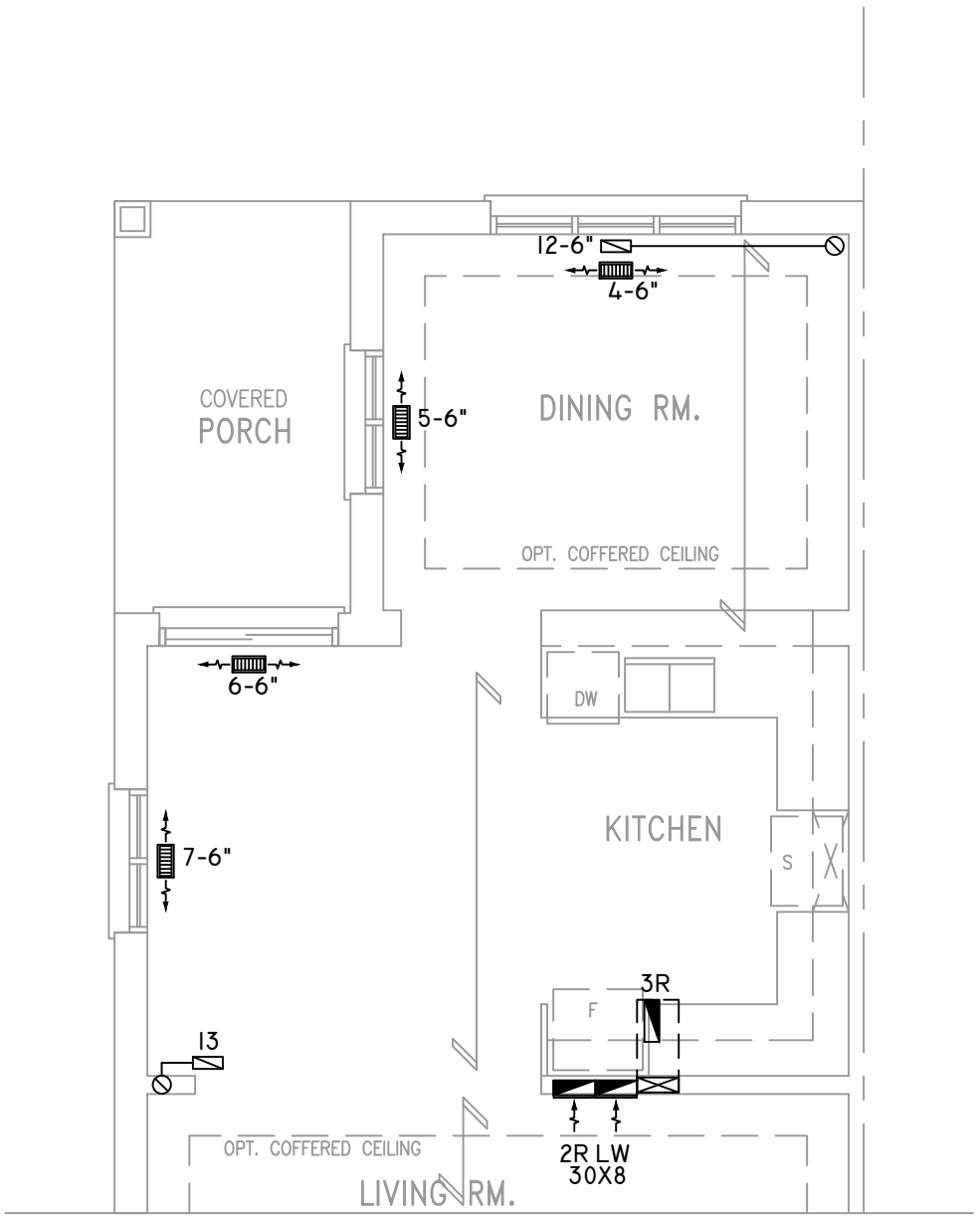
CLIENT: BAYVIEW WELLINGTON

MODEL: SD25-3 WOB SONOMA 3

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. OPT. ALT. GROUND FLOOR LAYOUT EL. 'A', 'B' & 'C'

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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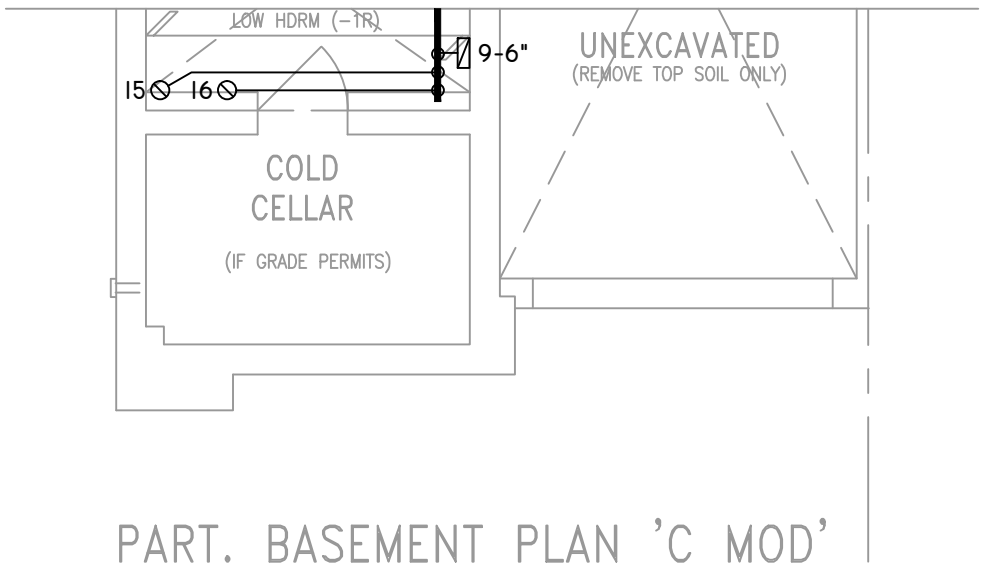
UNIT HEATING OUTPUT	57,600 BTU/HR.
A/C COOLING CAPACITY	2.0 TONS.
FAN SPEED	1170 CFM

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

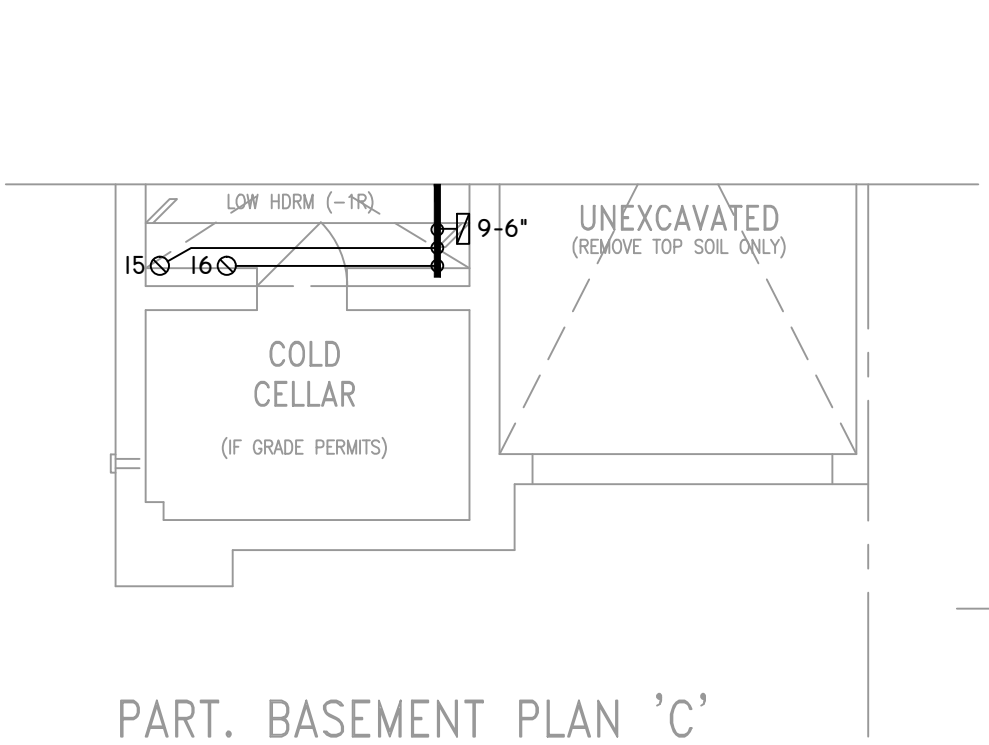
FLOOR PLAN: PARTIAL PLAN(S)
DRAWN BY: AM | CHECKED: DD | SQFT 2062
LAYOUT NO. JB-00000 | DRAWING NO. M4

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

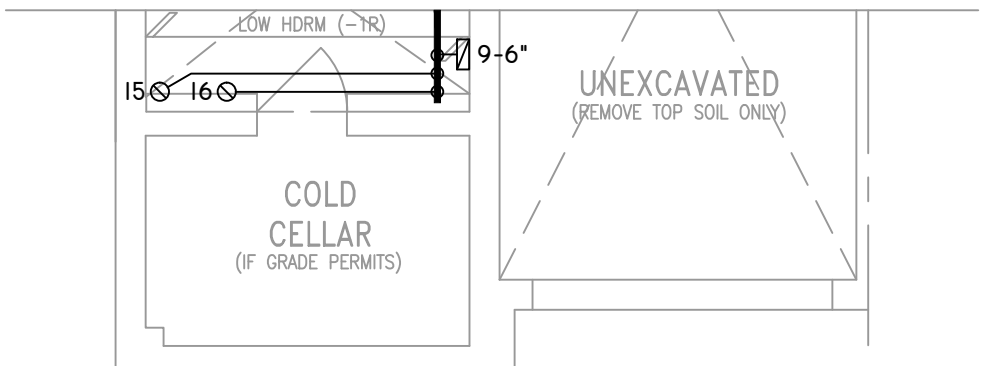
FLEX DUCT RIGID ROUND DUCT SUPPLY DIFFUSER	LOW/HIGH WALL/KICK SUPPLY DIFFUSER HRV EXHAUST GRILLE SUPPLY AIR PIPE RISER VOLUME DAMPER		DUCT CONNECTION TO JOIST LINING RETURN AIR PIPE RISER RETURN ROUND DUCT		RETURN AIR GRILLE (SIZE INDICATED ON DRAWING) RETURN AIR RISER UP TO FLOOR ABOVE RETURN AIR FROM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



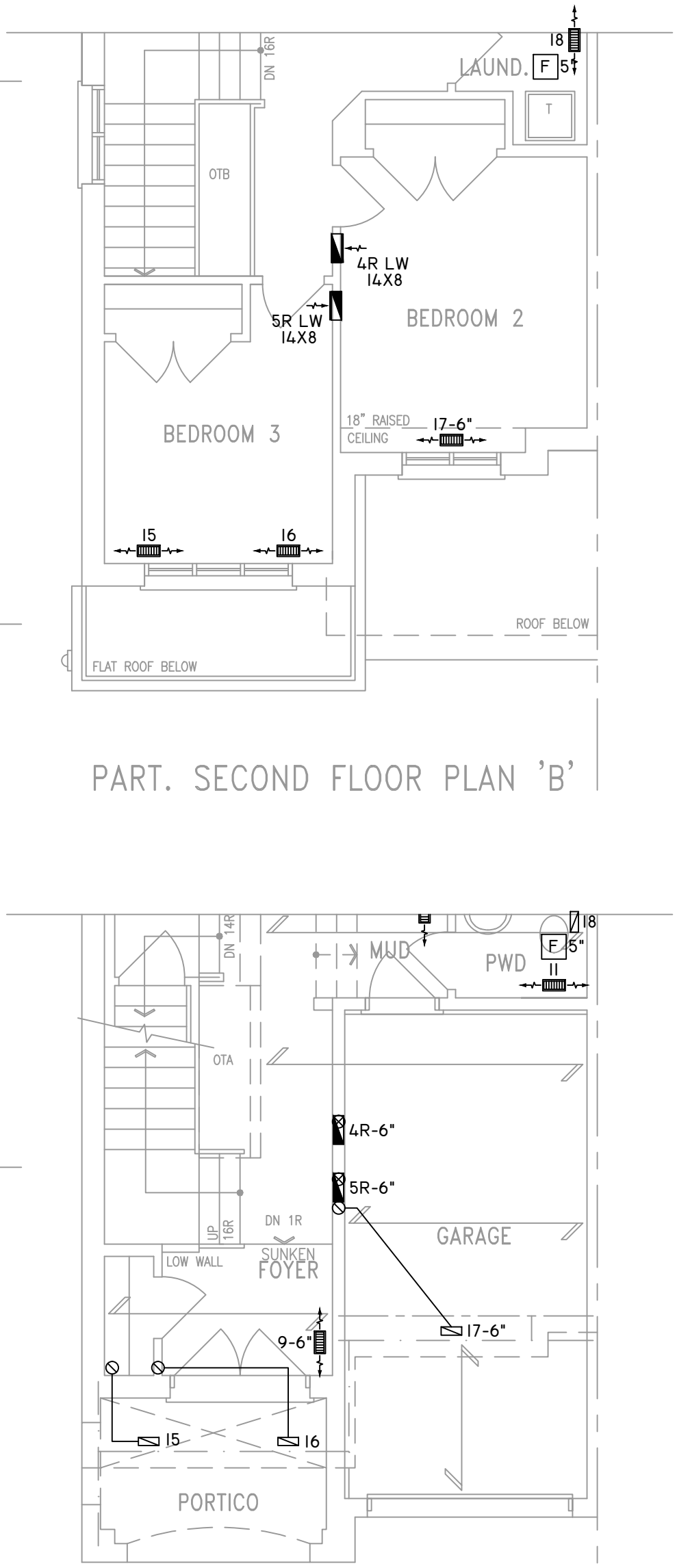
PART. BASEMENT PLAN 'C MOD'



PART. BASEMENT PLAN 'C'



PART. BASEMENT PLAN 'B'



PART. SECOND FLOOR PLAN 'B'

PART. GROUND FLOOR PLAN 'B'

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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 I COMPLIANCE
PACKAGE "AI" 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	8	3	3
IST FLOOR	8	2	2
BASEMENT	4	1	

FLOOR PLAN: PARTIAL PLAN(S)

DRAWN BY:	CHECKED:	SQFT
AM	DD	2062

LAYOUT NO.: JB-00000 DRAWING NO.: M5

DATE: FEBRUARY 15, 2018
CLIENT: BAYVIEW WELLINGTON
MODEL: SD25-3 WOB SONOMA 3
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
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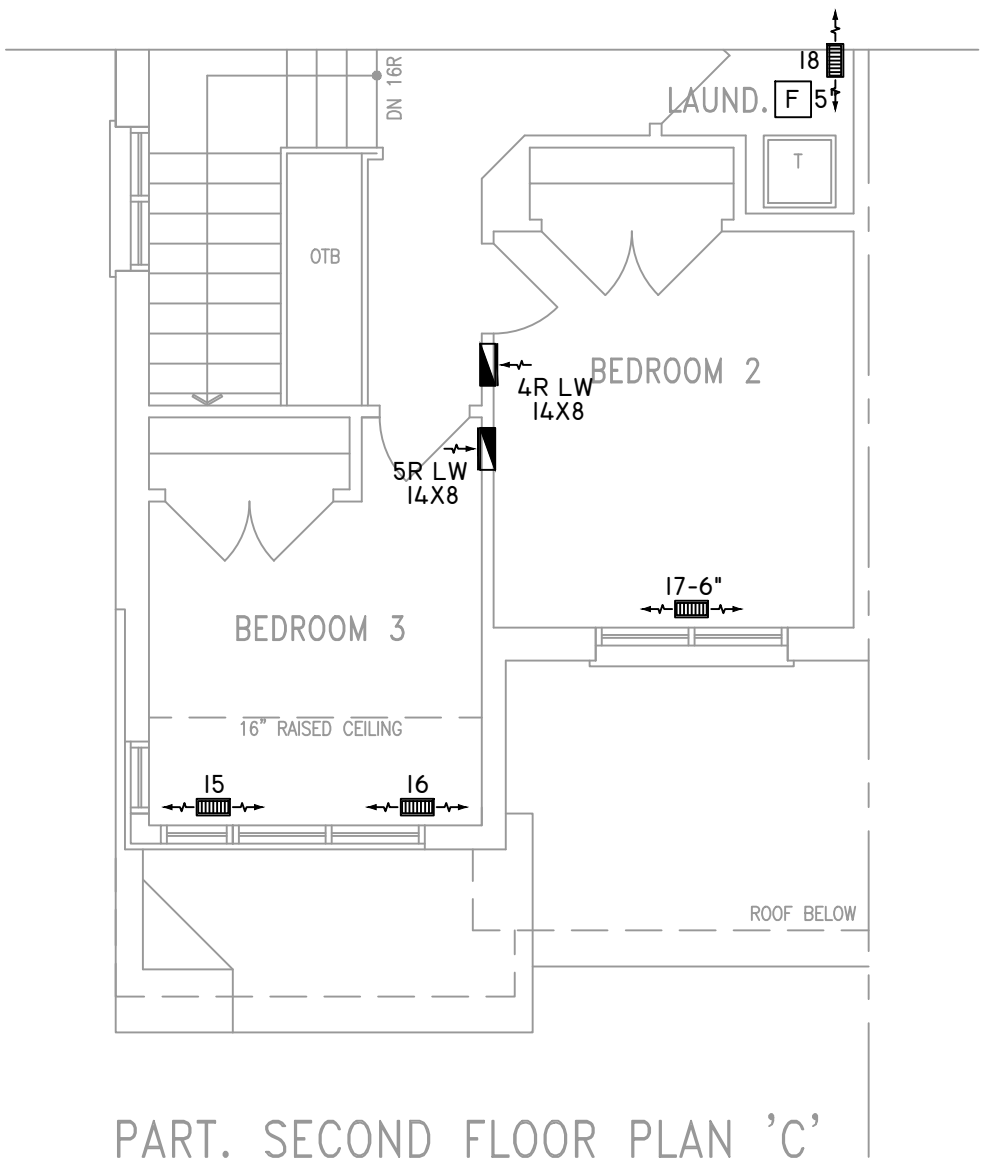
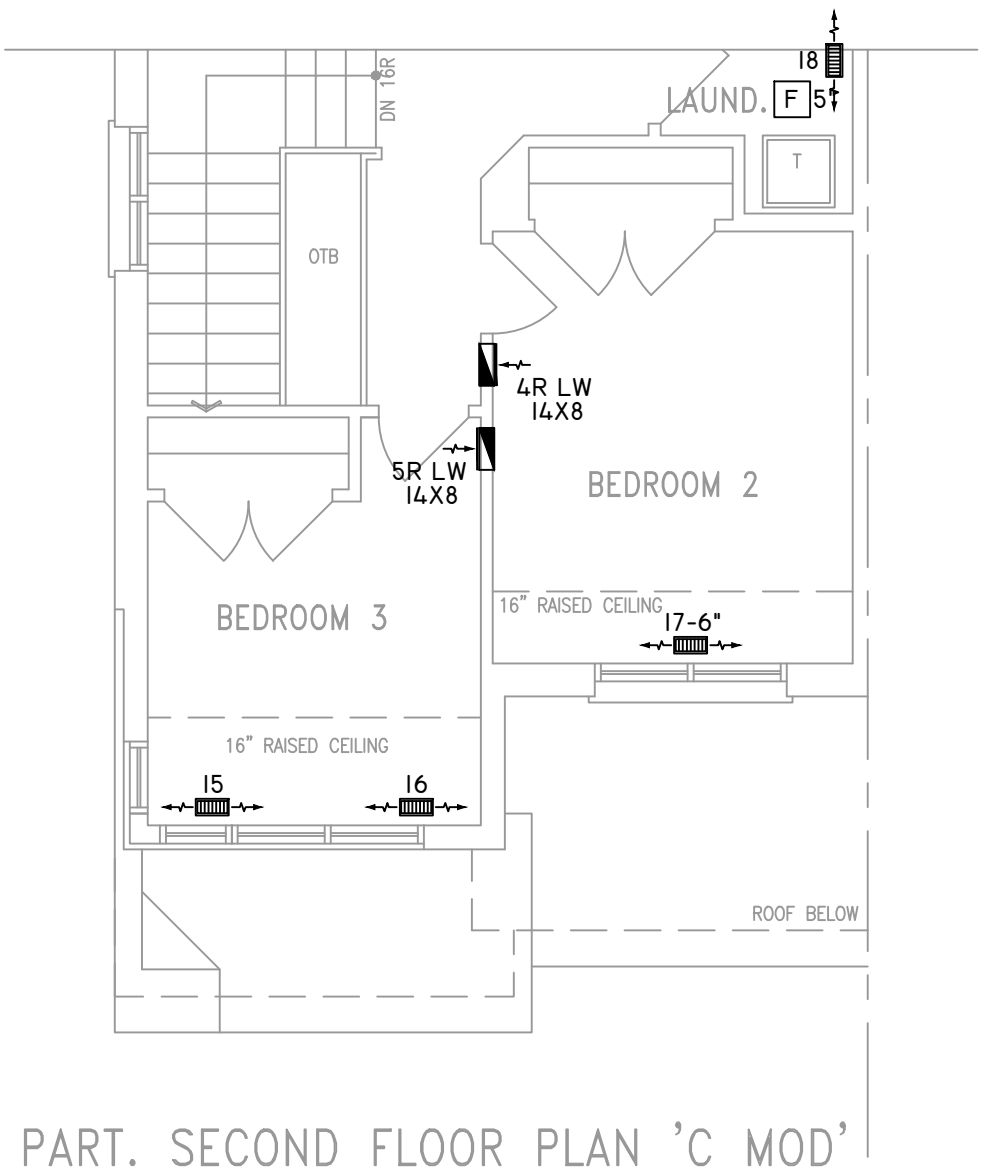
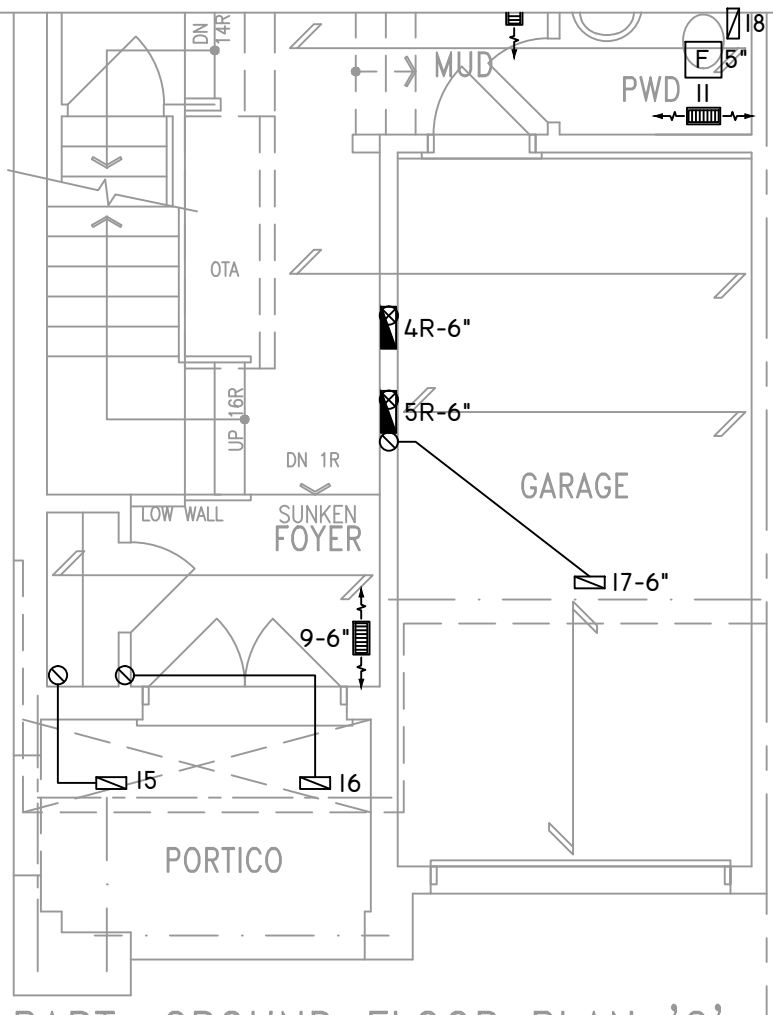


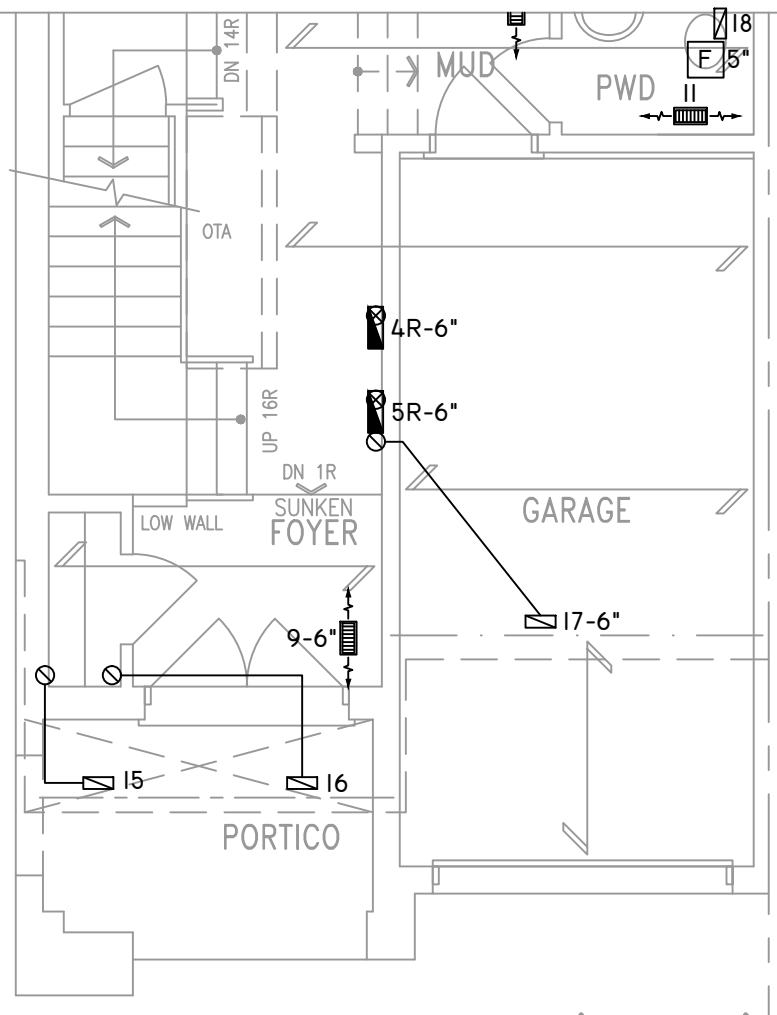
PART. SECOND FLOOR PLAN 'C'



PART. SECOND FLOOR PLAN 'C MOD'



PART. GROUND FLOOR PLAN 'C'



PART. GROUND FLOOR PLAN 'C MOD'

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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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3RD FLOOR			
2ND FLOOR	8	3	3
IST FLOOR	8	2	2
BASEMENT	4	1	

FLOOR PLAN: PARTIAL PLAN(S)		
DRAWN BY: AM	CHECKED: DD	SQFT 2062
LAYOUT NO. JB-00000	DRAWING NO. M6	

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