

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 Rideau 6				Lot: S42-6 Alt. 2nd FLR WOB	
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-04613
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: 3466		Model	Rideau 6
Residential System Design per CAN/CSA-F280-12					S42-6 Alt. 2nd FLR WOB
Residential New Construction - Forced Air				SB-12	Package A1
D. Declaration of Designer					
I, <u>David DaCosta</u> 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: <u>32964</u> Basis for exemption from registration: <u>Division C 3.2.4.1. (4)</u> ☐ 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: - The information contained in this schedule is true to the best of my knowledge. - I have submitted this application with the knowledge and consent of the firm.					
<u>April 4, 2018</u> Date			 Signature of Designer		

NOTE:

- For the purposes of this form, "individual" means the "person" referred to in Clause 3.2.4.7(1) d), of Division C, Article 3.2.5.1. of Division C and all other persons who are exempt from qualifications under Subsections 3.2.4 . and 3.2.5. of Division C.
- Schedule 1 does not require to be completed a holder of a license, temporary license, or a certificate of authorization, issued by the Ontario Association of Architects. Schedule 1 is also not required to be completed by a holder of a license to practise, a limited licence to practise, or a certificate of authorization, issued by the Association of Professional Engineers of Ontario.

Heat loss and gain calculation summary sheet				CSA-F280-M12 Standard Form No. 1	
These documents issued for the use of Bayview Wellington				Layout No.	
and may not be used by any other persons without authorization. Documents for permit and/or construction are signed in red.				JB-04613	
Building Location					
Address (Model): S42-6 Alt. 2nd FLR WOB			Site: Green Valley East		
Model: Rideau 6			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: 6
Sensible Eff. at -25C 71%		Apparent Effect. at -0C 84%	Units: Imperial		Area Sq ft: 3466
Sensible Eff. at -0C 75%					
Heating design conditions			Cooling design conditions		
Outdoor temp -9.4 Indoor temp: 72 Mean soil temp: 48			Outdoor temp 86 Indoor temp: 75 Latitude: 44		
Above grade walls			Below grade walls		
Style A: As per OBC SB12 Package A1 R 22			Style A: As per OBC SB12 Package A1 R 20ci		
Style B: Existing Walls (When Applicable) R 12			Style B:		
Style C:			Style C:		
Style D:			Style D:		
Floors on soil			Ceilings		
Style A: As per Selected OBC SB12 Package A1			Style A: As per Selected OBC SB12 Package A1 R 60		
Style B:			Style B: As per Selected OBC SB12 Package A1 R 31		
Exposed floors			Style C:		
Style A: As per Selected OBC SB12 Package A1 R 31			Doors		
Style B:			Style A: As per Selected OBC SB12 Package A1 R 4.00		
Windows			Style B:		
Style A: As per Selected OBC SB12 Package A1 R 3.55			Style C:		
Style B: Existing Windows (When Applicable) R 1.99			Skylights		
Style C:			Style A: As per Selected OBC SB12 Package A1 R 2.03		
Style D:			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		

Builder: **Bayview Wellington**

Date: **April 4, 2018**

Project: **Green Valley East**

Model: **S42-6 Alt. 2nd FLR 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

David DaCosta

Project # **PJ-00204**
Layout # **JB-04613**

Page 3

DESIGN LOAD SPECIFICATIONS		AIR DISTRIBUTION & PRESSURE		FURNACE/AIR HANDLER DATA:		BOILER/WATER HEATER DATA:		A/C UNIT DATA:	
Level 1 Net Load	21,811 btu/h	Equipment External Static Pressure	0.5 "w.c.	Make	Amana	Make	Type	Amana	3.0 Ton
Level 2 Net Load	23,383 btu/h	Additional Equipment Pressure Drop	0.225 "w.c.	Model	AMEC960803BNA	Model		Cond.-----	3.0
Level 3 Net Load	17,282 btu/h	Available Design Pressure	0.275 "w.c.	Input Btu/h	80000	Input Btu/h		Coil -----	3.0
Level 4 Net Load	674 btu/h	Return Branch Longest Effective Length	300 ft	Output Btu/h	76800	Output Btu/h			
Total Heat Loss	63,150 btu/h	R/A Plenum Pressure	0.138 "w.c.	E.s.p.	0.50 " W.C.	Min.Output Btu/h	AWH		
Total Heat Gain	34,740 btu/h	S/A Plenum Pressure	0.14 "w.c.	Water Temp	deg. F.	Blower DATA:			
Combo System HL + 10%	69,465 Btu/h	Heating Air Flow Proportioning Factor	0.0186 cfm/btuh	AFUE	96%	Blower Speed Selected:	W2	Blower Type	ECM
Building Volume Vb	40447 ft³	Cooling Air Flow Proportioning Factor	0.0337 cfm/btuh	Aux. Heat				(Brushless DC OBC 12.3.1.5.(2))	
Ventilation Load	1,610 Btu/h.	R/A Temp	70 deg. F.	SB-12 Package	Package A1	Heating Check	1172 cfm	Cooling Check	1172 cfm
Ventilation PVC	95.4 cfm	S/A Temp	131 deg. F.						
Supply Branch and Grill Sizing		Diffuser loss	0.01 "w.c.	Temp. Rise>>>	61 deg. F.	Selected cfm>	1172 cfm	Cooling Air Flow Rate	1172 cfm

	Level 1														Level 2													
S/A Outlet No.	1	2	3	4	29										5	6	7	8	9	10	11	12	13	14	15			
Room Use	BASE	BASE	BASE	BASE	BASE										KIT	KIT	STUDY	MUD	FOY	FOY	PWD	LIV/DIN	LIV/DIN	GRT	GRT			
Btu/Outlet	4362	4362	4362	4362	4362										2034	2034	1850	1635	4421	4421	761	1324	1324	1790	1790			
Heating Airflow Rate CFM	81	81	81	81	81										38	38	34	30	82	82	14	25	25	33	33			
Cooling Airflow Rate CFM	30	30	30	30	30										86	86	48	8	77	77	14	58	58	57	57			
Duct Design Pressure	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13		
Actual Duct Length	43	48	31	33	70										53	55	35	28	36	40	30	8	38	55	55			
Equivalent Length	100	160	120	110	150	70	70	70	70	70	70	70	70	70	110	150	130	150	90	100	110	90	90	130	70	70	70	
Total Effective Length	143	208	151	143	220	70	70	70	70	70	70	70	70	70	163	205	165	178	126	140	140	98	128	145	185	70	70	70
Adjusted Pressure	0.09	0.06	0.09	0.09	0.06	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.08	0.06	0.08	0.07	0.10	0.09	0.09	0.13	0.10	0.09	0.07	0.19	0.19	0.19
Duct Size Round	6	6	6	6	6										6	6	5	4	6	6	3	5	5	5	5			
Outlet Size	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	3x10	3x10	4x10	4x10	3x10	3x10	3x10	3x10	3x10	4x10	4x10	4x10
Trunk	D	C	B	F	C										C	C	B	E	F	F	E	A	B	D	C			

	Level 3											Level 3															
S/A Outlet No.	16	17	18	19	20	21	23	24	25	26	27	28															
Room Use	MAST	ENS	WC	ENS 2	BED 2	BED 3	LAUN	BATH	BED 4	BED 5	ENS 3	WIC															
Btu/Outlet	3100	1907	446	625	1287	2161	279	2473	3202	1716	86	674															
Heating Airflow Rate CFM	58	35	8	12	24	40	5	46	59	32	2	13															
Cooling Airflow Rate CFM	77	45	6	8	27	34	36	47	71	38	1	5															
Duct Design Pressure	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
Actual Duct Length	63	63	76	63	57	48	52	62	54	19	48	53															
Equivalent Length	130	150	180	100	120	170	70	140	120	110	130	70	100	70	70	70	70	70	70	70	70	70	70	70	70	70	70
Total Effective Length	193	213	256	163	177	218	70	192	182	164	129	178	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
Adjusted Pressure	0.07	0.06	0.05	0.08	0.07	0.06	0.19	0.07	0.07	0.08	0.10	0.07	0.19	0.19	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
Duct Size Round	6	5	3	3	4	6	5	5	6	4	2	3															
Outlet Size	4x10	3x10	3x10	3x10	3x10	4x10	4x10	3x10	3x10	4x10	3x10	3x10	4x10	4x10	3x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10
Trunk	D	C	C	B	B	E	E	E	E	A	B	B															

Return Branch and Grill Sizing		Grill Pressure Loss		0.02 "w.c.	
R/A Inlet No.	1R	2R	3R	4R	5R
Inlet Air Volume CFM	202	442	90	146	146
Duct Design Pressure	0.12	0.12	0.12	0.12	0.12
Actual Duct Length	12	23	53	44	38
Equivalent Length	110	205	155	155	160
Total Effective Length	122	228	208	199	233
Adjusted Pressure	0.10	0.05	0.06	0.06	0.05
Duct Size Round	8.0	12.0	6.0	7.5	8.0
Inlet Size	FLC	8	8	8	8
" "	x	x	x	x	x
Inlet Size	9x6	30	14	14	14
Trunk	Y	Z	Z	Z	Y

Return Trunk Duct Sizing		CFM		Press.	
Trunk					
Drop	1172	0.05	17.0	24x12	
Z	1082	0.05	16.5	32x8	24x10
Y	348	0.06	10.5	12x8	10x10
X					
W					
V					
U					
T					
S					
R					
Q					

Supply Trunk Duct Sizing		CFM		Press.	
Trunk					
A	1171	0.05	17.0	26x10	22x12
B	675	0.05	14.0	22x8	18x10
C	314	0.05	10.5	12x8	10x10
D	172	0.07	8.0	8x8	8x7
E	440	0.06	11.5	14x8	12x10
F	245	0.09	8.5	8x8	
G					
H					
I					
J					
K					

2012 OBC

Builder: Bayview Wellington

Date: April 4, 2018

Project: Green Valley East

Model: Rideau 6 S42-6 Alt. 2nd FLR 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: 3466

Project # PJ-00204
Layout # JB-04613

Level 1				BASE															
Run ft. exposed wall A	133	A		A		A		A		A		A		A		A		A	
Run ft. exposed wall B	44	B		B		B		B		B		B		B		B		B	
Ceiling height	4.1	AG		4.1	AG		4.1	AG		4.1	AG		4.1	AG		4.1	AG		4.1
Floor area	1291	Area		Area		Area		Area		Area		Area		Area		Area		Area	
Exposed Ceilings A	A			A		A		A		A		A		A		A		A	
Exposed Ceilings B	B			B		B		B		B		B		B		B		B	
Exposed Floors	Flr			Flr		Flr		Flr		Flr		Flr		Flr		Flr		Flr	
Gross Exp Wall A	548																		
Gross Exp Wall B	396																		
Components	R-Values	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	12	275	131													
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	85	1949	2325													
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	512		267													
Net exposed walls B	14.49	5.62	0.76	311		1747		236											
Exposed Ceilings A	59.22	1.37	0.64																
Exposed Ceilings B	22.86	3.56	1.66																
Exposed Floors	29.80	2.73	0.17																
Foundation Conductive Heatloss	On Grade () or Above ()																		
Total Conductive	Heat Loss																		
	Heat Gain																		
Air Leakage	Heat Loss/Gain	0.8123	0.0369																
Ventilation	Case 1		0.07	0.08															
	Case 2		14.07	11.88															
	Case 3	x	0.04	0.08															
Heat Gain People			239																
Appliances Loads	1 = .25 percent		5545																
Duct and Pipe loss			10%																
Level 1 HL Total	21,811	Total HL for per room		21811															
Level 1 HG Total	4,464	Total HG per room x 1.3			4464														

Level 2			KIT		STUDY		MUD		FOY		PWD		LIV/DIN		GRT		A		A		A		A	
Run ft. exposed wall A			36 A		19 A		15 A		44 A		7 A		22 A		33 A		A		A		A		A	
Run ft. exposed wall B			B		B		B		B		B		B		B		B		B		B		B	
Ceiling height			10.0		10.0		12.0		20.0		10.0		10.0		10.0		10.0		10.0		10.0		10.0	
Floor area			306 Area		153 Area		93 Area		209 Area		56 Area		392 Area		230 Area		Area		Area		Area		Area	
Exposed Ceilings A			A		A		A		173 A		A		A		5 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			360		190		180		880		70		220		330									
Gross Exp Wall B																								
Components			R-Values		Loss		Gain		Loss		Gain		Loss		Gain		Loss		Gain		Loss		Gain	
North Shaded			3.55		22.93		10.91		24		550		262											
East/West			3.55		22.93		27.35		44		1009		1204											
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		292		1396		189		166		793		107		159		760	
Net exposed walls B			8.50		9.58		1.29																	
Exposed Ceilings A			59.22		1.37		0.64																	
Exposed Ceilings B			22.86		3.56		1.66																	
Exposed Floors			29.80		2.73		0.17																	
Foundation Conductive Heatloss			On Grade () or Above ()		x																			
Total Conductive			Heat Loss						2955								1344				1187			
			Heat Gain								1654								369		160			
Air Leakage			Heat Loss/Gain		0.3381		0.0369		999		61						454		14		401		6	
Ventilation			Case 1		0.03		0.08																	
			Case 2		14.07		11.88																	
			Case 3		x		0.04		0.08		114		129				52		29		46		13	
Heat Gain People							239																	
Appliances Loads			1 = .25 percent		5545				1.5		2079		0.5				693							
Duct and Pipe loss					10%																			
Level 2 HL Total			23,383		Total HL for per room				4068								1850				1635			
Level 2 HG Total			18,559		Total HG per room x 1.3						5101								1436				233	

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

Handwritten signature

David DaCosta

SB-12 Package

Package A1

Site Copy

2012 OBC	Builder: Bayview Wellington	Date: April 4, 2018	Weather Data	Bradford	44	-9.4	86	22	48.2	Heat Loss ^T	81.4 deg. F	Ht gain ^T	11 deg. F	GTA: 3466	Project # PJ-00204	Layout # JB-04613
	Project: Green Valley East	Model: Rideau 6 S42-6 Alt. 2nd FLR WOB	System 1													

Level 3				MAST		ENS		WC		ENS 2		BED 2		BED 3		LAUN		BATH		BED 4		BED 5		ENS 3														
Run ft. exposed wall A				32 A		20 A		4 A		6 A		11 A		17 A		A		20 A		18 A		18 A		A														
Run ft. exposed wall B				B		B		B		B		B		B		B		B		B		B		B														
Ceiling height				9.0		8.0		8.0		8.0		8.0		8.0		8.0		8.0		9.0		8.0		8.0														
Floor area				318 Area		113 Area		26 Area		55 Area		184 Area		254 Area		55 Area		79 Area		193 Area		223 Area		47 Area														
Exposed Ceilings A				318 A		113 A		26 A		55 A		184 A		254 A		55 A		79 A		193 A		223 A		47 A														
Exposed Ceilings B				B		B		B		B		B		B		B		B		B		B		B														
Exposed Floors				Flr		Flr		Flr		Flr		Flr		Flr		42 Flr		79 Flr		187 Flr		Flr		Flr														
Gross Exp Wall A				288		160		32		48		88		136				160		162		144																
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	28	642	766																													
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	260	1243	168																													
Net exposed walls B				8.50	9.58	1.29																																
Exposed Ceilings A				59.22	1.37	0.64	318	437	204																													
Exposed Ceilings B				22.86	3.56	1.66																																
Exposed Floors				29.80	2.73	0.17																																
Foundation Conductive Heatloss																																						
Total Conductive		Heat Loss					2322			1428					1475			190		1688		2186		1285		65												
		Heat Gain				1138		924			119		159		339		427		42		884		1117		560		30											
Air Leakage		Heat Loss/Gain		0.2966	0.0369		689	42		424	34		99	4		139	6		286	13		438	16		56	2		501	33		648	41		381	21		19	1
Ventilation		Case 1			0.02	0.08																																
		Case 2			14.07	11.88																																
		Case 3		x		0.04	0.08																															
Heat Gain People						239	2	90	89												65	69		84	87		50	44		239	1		50	239		2	2	
Appliances Loads				1 =.25 percent	5545																																	
Duct and Pipe loss						10%																																
Level 3 HL Total		17,282		Total HL per room				3100			1907																											
Level 3 HG Total		11,559		Total HG per room x 1.3					2271		1339		173		230		802																					

Level 3				WIC		A		A		A		A		A		A		A		A		A		A	
Run ft. exposed wall A				10 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				8.0		8.0		8.0		8.0		8.0		8.0		8.0		8.0		8.0		8.0		8.0	
Floor area				89 Area		Area		Area		Area		Area		Area		Area		Area		Area		Area		Area	
Exposed Ceilings A				89 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				80																					
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	80	382	52																			
Net exposed walls B	8.50	9.58	1.29																						
Exposed Ceilings A	59.22	1.37	0.64	89	122	57																			
Exposed Ceilings B	22.86	3.56	1.66																						
Exposed Floors	29.80	2.73	0.17																						
Foundation Conductive Heatloss																									
Total Conductive																									
Air Leakage	Heat Loss/Gain	0.2966	0.0369																						
Ventilation	Case 1		0.02																						
	Case 2		14.07																						
	Case 3	x	0.04																						
Heat Gain People			239																						
Appliances Loads	1 =.25 percent		5545																						
Duct and Pipe loss			10%																						
Level 4 HL Total	674			674																					
Level 4 HG Total	158				158																				

Total Heat Loss	63,150	btu/h
Total Heat Gain	34,740	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

David DaCosta

SB-12 Package

Package A1

Site Copy

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: S42-6 Alt. 2nd FLR 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	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	4 @	10.6 cfm	42.4	cfm
Bathrooms & Kitchen	6 @	10.6 cfm	63.6	cfm
Other rooms	6 @	10.6 cfm	63.6	cfm
Total			212	

Principal Ventilation Capacity 9.32.3.4(1)				
Master bedroom	1 @	31.8 cfm	31.8	cfm
Other bedrooms	4 @	15.9 cfm	63.6	cfm
Total			95.4	

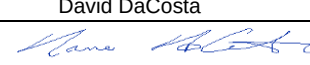
Principal Exhaust Fan Capacity				
Make	Model		Location	
LifeBreath	RNC155		Base	
132 cfm			Sones	or Equiv.

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	212.0	
Less principal exhaust capacity	95.4	
REQUIRED supplemental vent. Capacity	116.6 cfm	

Supplemental Fans 9.32.3.5.			
Location	cfm	Model	Sones
Ens	50	XB50	0.3
Bath	50	XB50	0.3
Ens 2	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	April 4, 2018		



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

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

Page 7
 Project # PJ-00204
 Layout # JB-04613

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 Rideau 6 S42-6 Alt. 2nd FLR WOB		Unit number	Lot/Con
Municipality Bradford	Postal code	Reg. Plan number / other description	

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

SB-12 Prescriptive (input design package): Package A1 Table: 3.1.1.2.A

C. Project Design Conditions

Climatic Zone (SB-1):	Heat. Equip. Efficiency	Space Heating Fuel Source		
☒ Zone 1 (< 5000 degree days) ☐ Zone 2 (≥ 5000 degree days)	☒ ≥ 92% AFUE ☐ ≥ 84% < 92% AFUE	☒ Gas ☐ Oil	☐ Propane ☐ Electric	☐ Solid Fuel ☐ Earth Energy
Ratio of Windows, Skylights & Glass (W, S & G) to Wall Area		Other Building Characteristics		
Area of Walls = <u>415.45</u> m ² or <u>4471.9</u> ft ²	W, S & G % = <u>13%</u>	☐ Log/Post&Beam ☐ Slab-on-ground ☒ Air Conditioning ☐ Air Sourced Heat Pump (ASHP) ☐ Ground Source Heat Pump (GSHP)		
Area of W, S & G = <u>54.625</u> m ² or <u>588.0</u> ft ²	Utilize Window Averaging ☐ Yes ☒ No	☐ ICF Above Grade ☒ Walkout Basement ☐ Combo Unit		

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) Airtightness test required (Refer to Design Guide Attached)	☐ Table 3.1.1.4.B Required:		Permitted Substitution:
	☐ Table 3.1.1.4.C Required:		Permitted Substitution:
Building Component	Minimum RSI/R-Values or Maximum U-Value ¹		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·ft²·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 David DaCosta	BCIN 32964	Signature
------------------------------	----------------------	---------------

Package: Package A1 System: System 1
Project: Bradford Model: S42-6 Alt. 2nd FLR WOB

Air Leakage Calculations

Building Air Leakage Heat Loss				
B	LRairh	Vb	HL^T	HLleak
0.018	0.323	40447	81.4	19143

Building Air Leakage Heat Gain				
B	LRairh	Vb	HG^T	HG Leak
0.018	0.080	40447	11	641

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	19143	11784	0.8123
Level 2	0.3		16984	0.3381
Level 3	0.2		12910	0.2966
Level 3	0.2		12910	0.2966

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

HG LEAK		Air Leakage Heat Gain	
	641		0.0369
BUILDING CONDUCTIVE HEAT GAIN			17379

Levels this Dwelling	
3	

Ventilation Calculations

Ventilation Heat Loss

Ventilation Heat Loss				
C	PVC	HL^T	(1-E) HRV	HLbvent
1.08	114.48	81.4	0.16	1610

Ventilation Heat Gain

Ventilation Heat Gain			
C	PVC	HG^T	HGbvent
1.1	114.48	11	1360

Case 1

Ventilation Heat Loss (Exhaust only Systems)

Case 1 - Exhaust Only				
Level	LF	HLbvent	LVL Cond. HL	Multiplier
Level 1	0.5	1610	11784	0.07
Level 2	0.3		16984	0.03
Level 3	0.2		12910	0.02
Level 3	0.2		12910	0.02

Case 1

Ventilation Heat Gain (Exhaust Only Systems)

Case 1 - Exhaust Only		Multiplier
HGbvent	1360	0.08
Building	17379	

Case 2

Ventilation Heat Loss (Direct Ducted Systems)

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

Case 2

Ventilation Heat Gain (Direct Ducted Systems)

C	HG^T	Multiplier
1.08	11	11.88

Case 3

Ventilation Heat Loss (Forced Air Systems)

		HLbvent	Multiplier
Total Ventilation Load		1610	0.04

Case 3

Ventilation Heat Gain (Forced Air Systems)

		Vent Heat Gain	Multiplier
HGbvent	HG*1.3	1360	0.08
1360	1		

Foundation Conductive Heatloss Level 1

2144 Watts 7316 Btu/h

Foundation Conductive Heatloss Level 2

Watts Btu/h

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David DaCosta

Site Copy

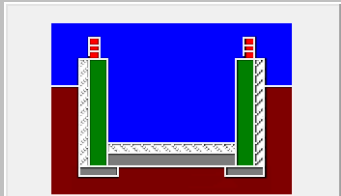
Envelope Air Leakage Calculator

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):	6.74			
Building Configuration				
Type:	Detached			
Number of Stories:	Two			
Foundation:	Full			
House Volume (m ³):	1145.46			
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:		
	47.7	47.7		
Flue #:	#1	#2	#3	#4
Diameter (mm):	0	0	0	0
Heating Air Leakage Rate (ACH/H): 0.323				
Cooling Air Leakage Rate (ACH/H): 0.080				

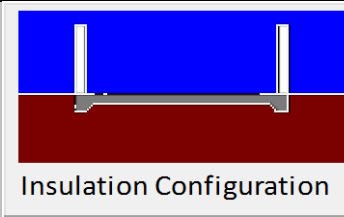
Residential Foundation Thermal Load Calculator

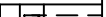
Supplemental tool for CAN/CSA-F280

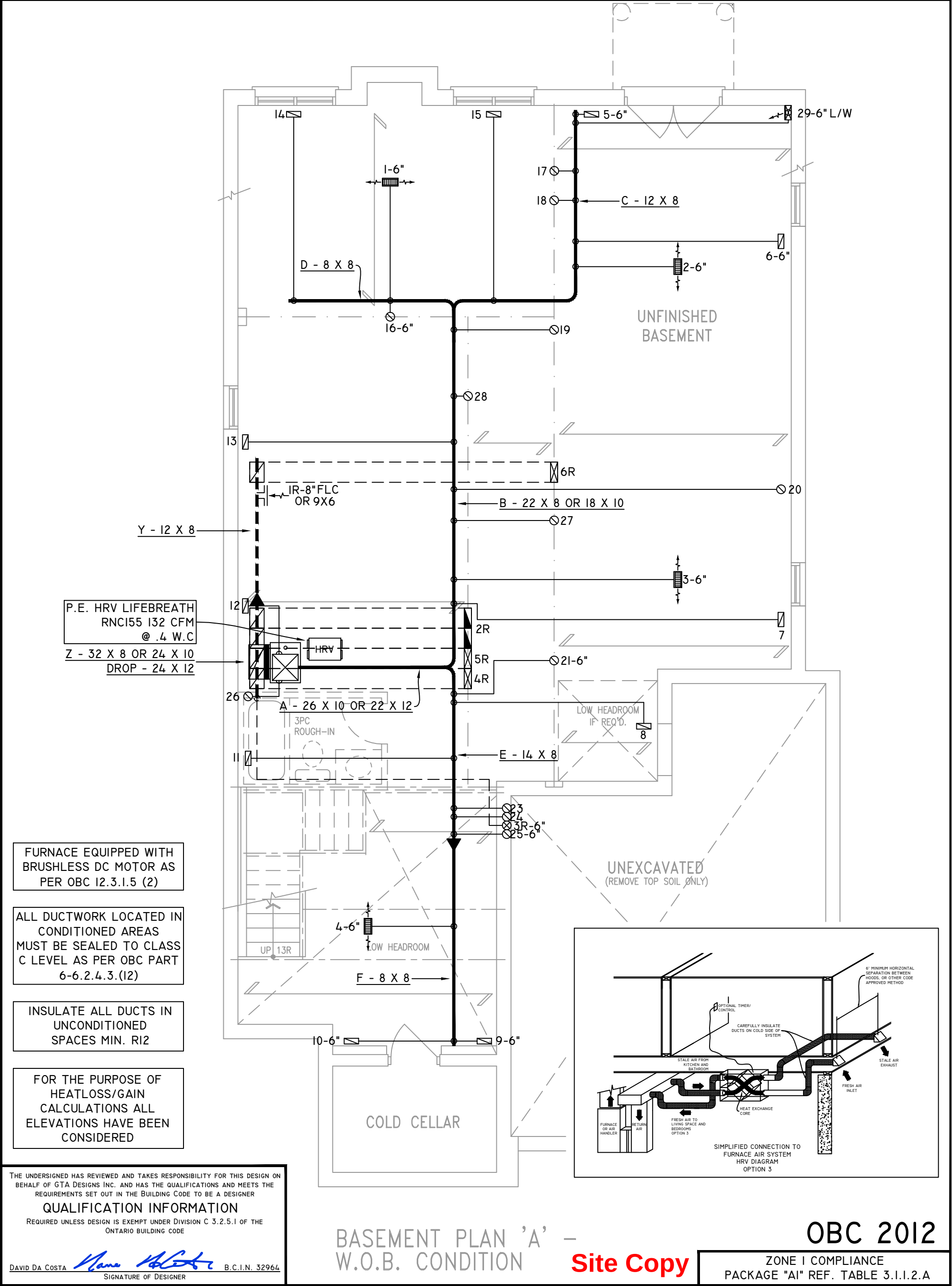
Weather Station Description		
Province:	Ontario ▼	
Region:	Bradford ▼	
Site Description		
Soil Conductivity:	High conductivity: moist soil ▼	
Water Table:	Normal (7-10 m, 23-33 Ft) ▼	
Foundation Dimensions		
Floor Length (m):	18.75	 Insulation Configuration
Floor Width (m):	6.40	
Exposed Perimeter (m):	40.54	
Wall Height (m):	2.74	
Depth Below Grade (m):	1.49	
Window Area (m ²):	1.39	
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):		1938

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):	10.22	 Insulation Configuration
Width (m):	1.36	
Exposed Perimeter (m):	13.41	
Radiant Slab		
Heated Fraction of the Slab:	0	
Fluid Temperature (°C):	33	
Design Months		
Heating Month	1	
Foundation Loads		
Heating Load (Watts):		206

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



NOTES

INSTALLATION TO COMPLY WITH THE LATEST ONTARIO BUILDING CODE.

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

PROVIDE BALANCING DAMPERS ON ALL BRANCHES.

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

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

CONTRACTOR MUST WORK FROM APPROVED PLANS.

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

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



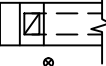
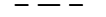
2985 DREW ROAD
SUITE 202,
MISSISSAUGA, ONT.
L4T 0A4 TEL: 905-671-9800
EMAIL: DAVE@GTADESIGNS.CA
WEB: WWW.GTADESIGNS.CA

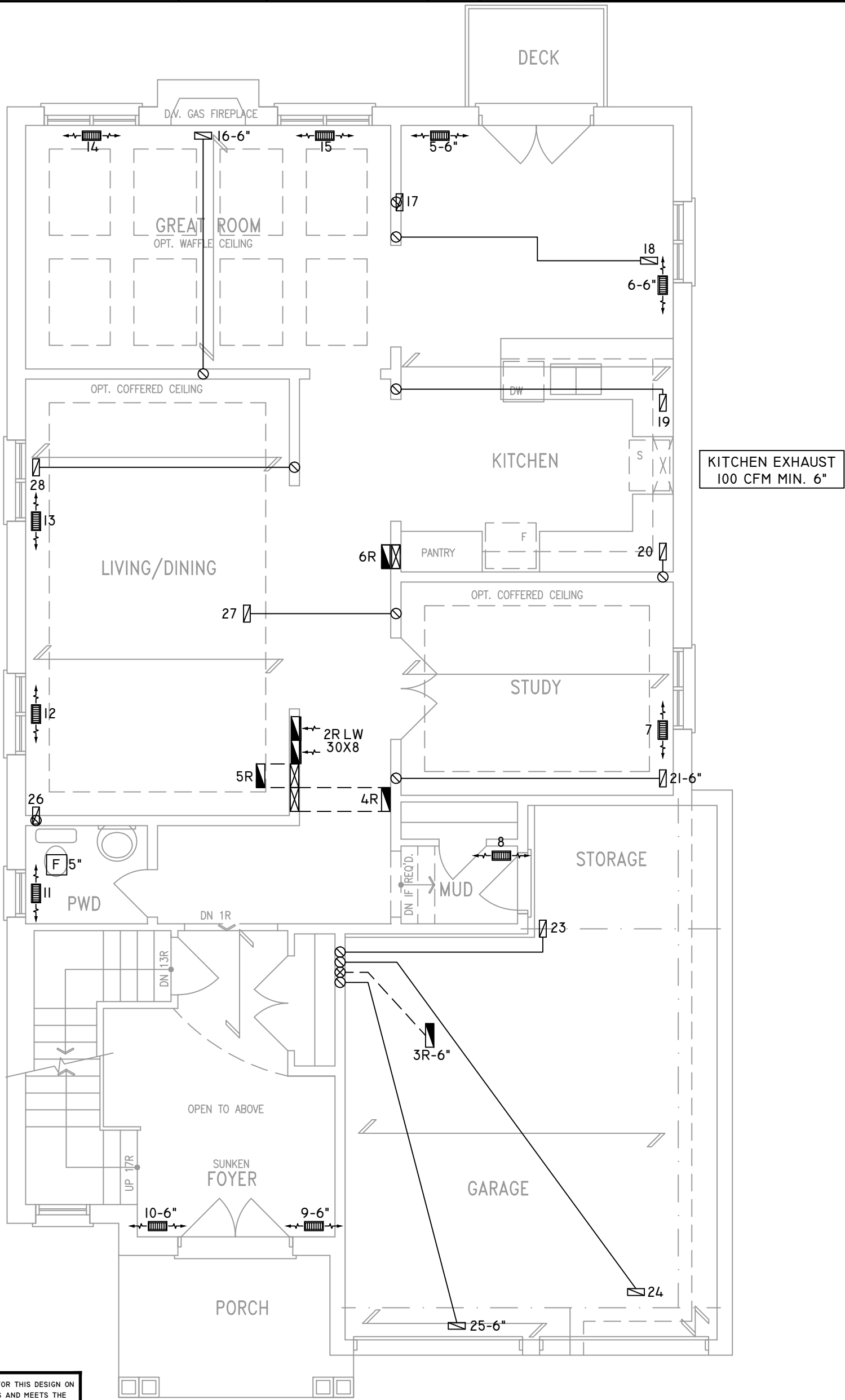
HEAT-LOSS	63,150	BTU/HR.
UNIT MAKE	AMANA	OR EQUAL.
UNIT MODEL	AMEC960803BNA	OR EQUAL.
UNIT HEATING INPUT	80,000	BTU/HR.
UNIT HEATING OUTPUT	76,800	BTU/HR.
A/C COOLING CAPACITY	3.0	TONS.
FAN SPEED	1172	CFM

# OF RUNS	S/A	R/A	FANS
3RD FLOOR			
2ND FLOOR	12	4	6
1ST FLOOR	11	1	2
BASEMENT	5	1	

FLOOR PLAN:	BASEMENT
DRAWN BY:	AM
CHECKED:	DD
LAYOUT NO.	JB-04613
SQFT	3466
DRAWING NO.	MI

DATE:	APRIL 1, 2018
CLIENT:	BAYVIEW WELLINGTON
MODEL:	S42-6 ALT 2ND FLR WOB RIDEAU 6
PROJECT:	GREEN VALLEY EAST BRADFORD,ONT.
SCALE:	3/16" = 1'-0"

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



CIRCULATION PRINCIPAL FAN SWITCH TO BE CENTRALLY LOCATED

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

INSULATE ALL DUCTS IN UNCONDITIONED SPACES MIN. R12

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

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

QUALIFICATION INFORMATION

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

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

SIGNATURE OF DESIGNER

GROUND FLOOR PLAN 'A' – W.O.B. CONDITION

Site Copy

OBC 2012

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

NOTES

INSTALLATION TO COMPLY WITH THE LATEST ONTARIO BUILDING CODE.

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

PROVIDE BALANCING DAMPERS ON ALL BRANCHES.

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

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

CONTRACTOR MUST WORK FROM APPROVED PLANS.

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

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



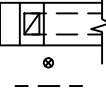
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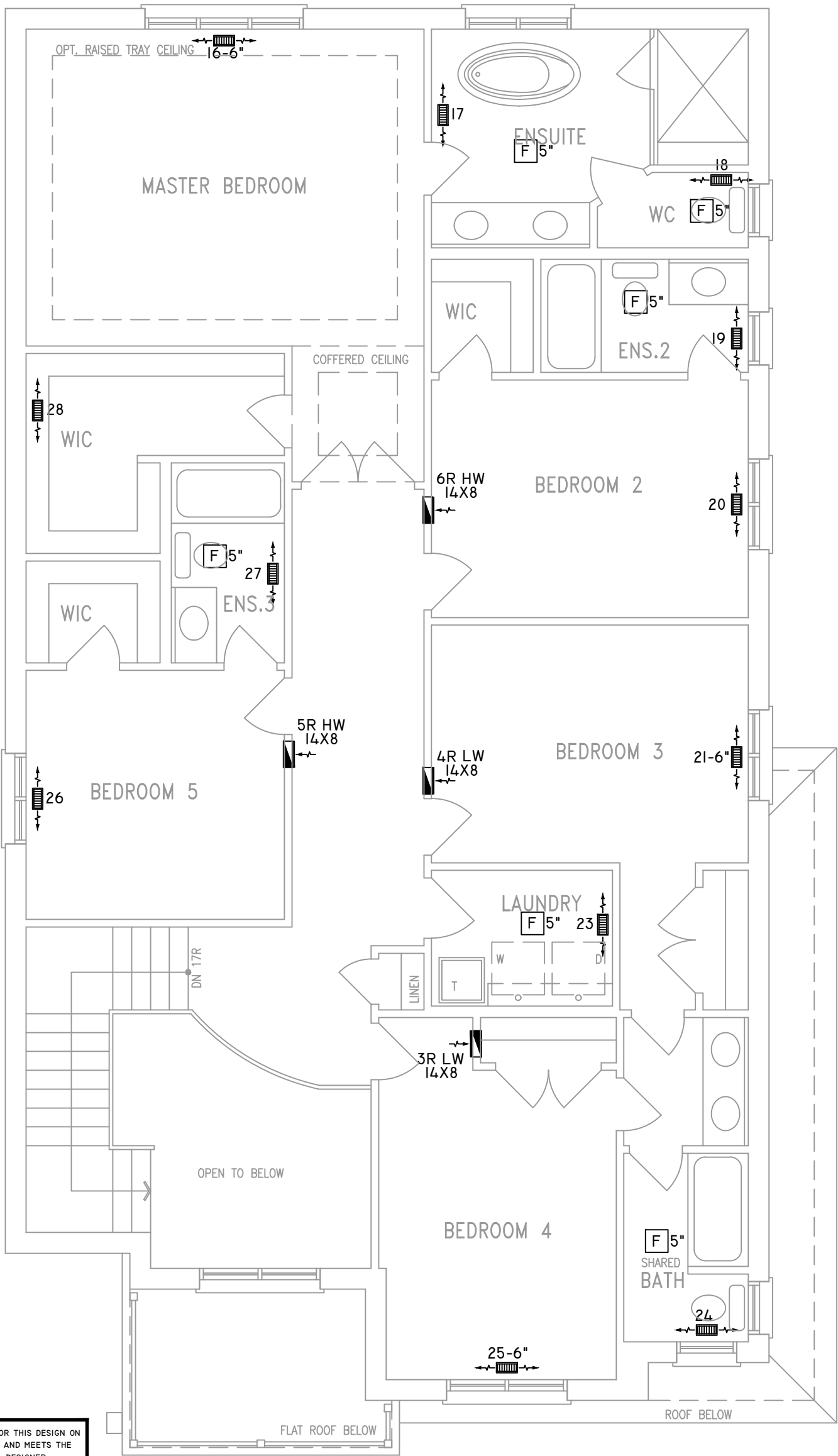
HEAT-LOSS	63,150	BTU/HR.
UNIT MAKE	AMANA	OR EQUAL.
UNIT MODEL	AMEC960803BNA	OR EQUAL.
UNIT HEATING INPUT	80,000	BTU/HR.
UNIT HEATING OUTPUT	76,800	BTU/HR.
A/C COOLING CAPACITY	3.0	TONS.
FAN SPEED	1172	CFM

# OF RUNS	S/A	R/A	FANS
3RD FLOOR			
2ND FLOOR	12	4	6
1ST FLOOR	11	1	2
BASEMENT	5	1	

FLOOR PLAN: GROUND FLOOR	
DRAWN BY: AM	CHECKED: DD
LAYOUT NO. JB-04613	DRAWING NO. M2
SQFT 3466	

DATE:	APRIL 1, 2018
CLIENT:	BAYVIEW WELLINGTON
MODEL:	S42-6 ALT 2ND FLR WOB RIDEAU 6
PROJECT:	GREEN VALLEY EAST BRADFORD,ONT.
SCALE:	3/16" = 1'-0"

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



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

INSULATE ALL DUCTS IN
UNCONDITIONED
SPACES MIN. R12

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

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

QUALIFICATION INFORMATION

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

DAVID DA COSTA  B.C.I.N. 32964
SIGNATURE OF DESIGNER

OPT. SECOND FLOOR PLAN 'A' **Site Copy** OBC 2012
5 BEDROOM W/ FOUR BATH

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

NOTES

INSTALLATION TO COMPLY WITH THE LATEST ONTARIO
BUILDING CODE.

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SPECIFIED.

PROVIDE BALANCING DAMPERS ON ALL BRANCHES.

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

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

CONTRACTOR MUST WORK FROM APPROVED PLANS.

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

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

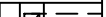

2985 DREW ROAD
SUITE 202,
MISSISSAUGA, ONT.
L4T 0A4 TEL: 905-671-9800
EMAIL: DAVE@GTADDESIGNS.CA
WEB: WWW.GTADDESIGNS.CA

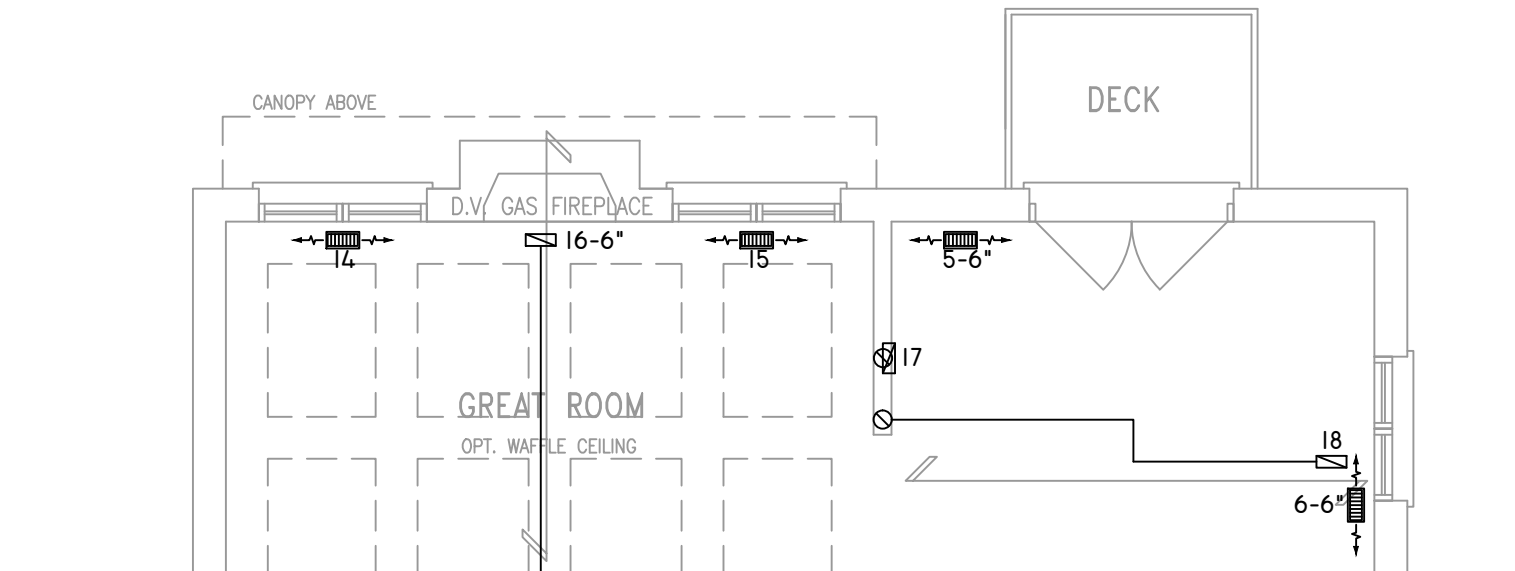
HEAT-LOSS	BTU/HR.
63,150	
UNIT MAKE	OR EQUAL.
AMANA	
UNIT MODEL	OR EQUAL.
AMEC960803BNA	
UNIT HEATING INPUT	BTU/HR.
80,000	
UNIT HEATING OUTPUT	BTU/HR.
76,800	
A/C COOLING CAPACITY	TONS.
3.0	
FAN SPEED	CFM
1172	

# OF RUNS	S/A	R/A	FANS
3RD FLOOR			
2ND FLOOR	12	4	6
1ST FLOOR	11	1	2
BASEMENT	5	1	

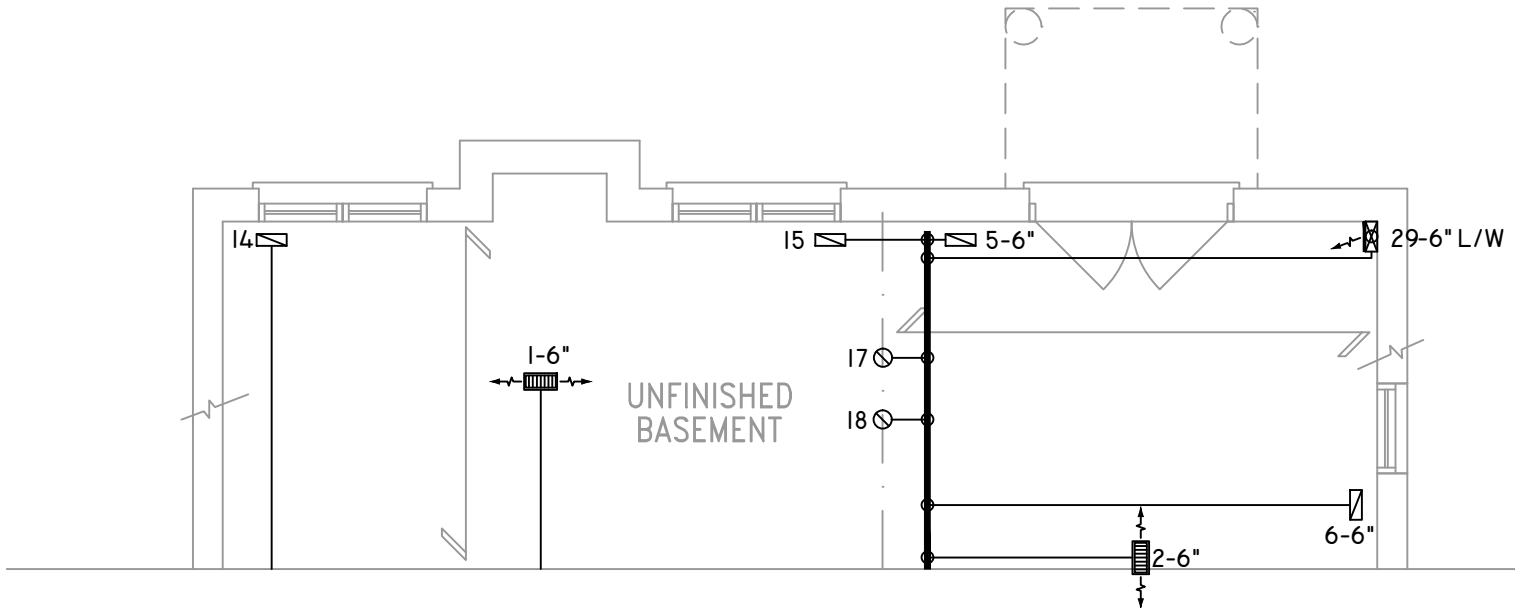
FLOOR PLAN: PARTIAL PLAN(S)		
DRAWN BY:	CHECKED:	SQFT
AM	DD	3466
LAYOUT NO.	DRAWING NO.	
JB-04613	M3	

DATE:	APRIL 1, 2018
CLIENT:	BAYVIEW WELLINGTON
MODEL:	S42-6 ALT 2ND FLR WOB RIDEAU 6
PROJECT:	GREEN VALLEY EAST BRADFORD,ONT.
SCALE:	3/16" = 1'-0"

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



PARTIAL GROUND FLOOR PLAN ELEV 'C' REAR
UPG WOB COND.



PARTIAL BASEMENT PLAN ELEV 'C' REAR
UPG WOB 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

Site Copy

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

NOTES

INSTALLATION TO COMPLY WITH THE LATEST ONTARIO BUILDING CODE.

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

PROVIDE BALANCING DAMPERS ON ALL BRANCHES.

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

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

CONTRACTOR MUST WORK FROM APPROVED PLANS.

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

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



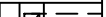
2985 DREW ROAD
SUITE 202,
MISSISSAUGA, ONT.
L4T 0A4 TEL: 905-671-9800
EMAIL: DAVE@GTADESIGNS.CA
WEB: WWW.GTADESIGNS.CA

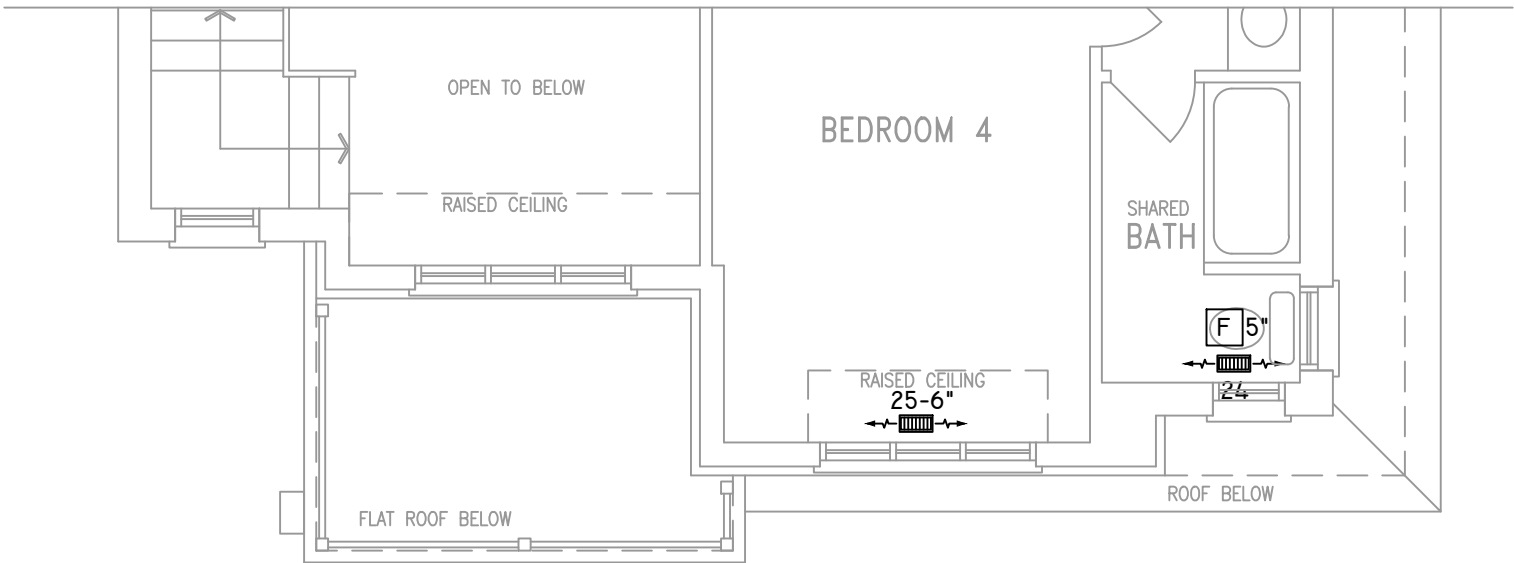
HEAT-LOSS	BTU/HR.
63,150	
UNIT MAKE	OR EQUAL.
AMANA	
UNIT MODEL	OR EQUAL.
AMEC960803BNA	
UNIT HEATING INPUT	BTU/HR.
80,000	
UNIT HEATING OUTPUT	BTU/HR.
76,800	
A/C COOLING CAPACITY	TONS.
3.0	
FAN SPEED	CFM
1172	

# OF RUNS	S/A	R/A	FANS
3RD FLOOR			
2ND FLOOR	12	4	6
1ST FLOOR	11	1	2
BASEMENT	5	1	

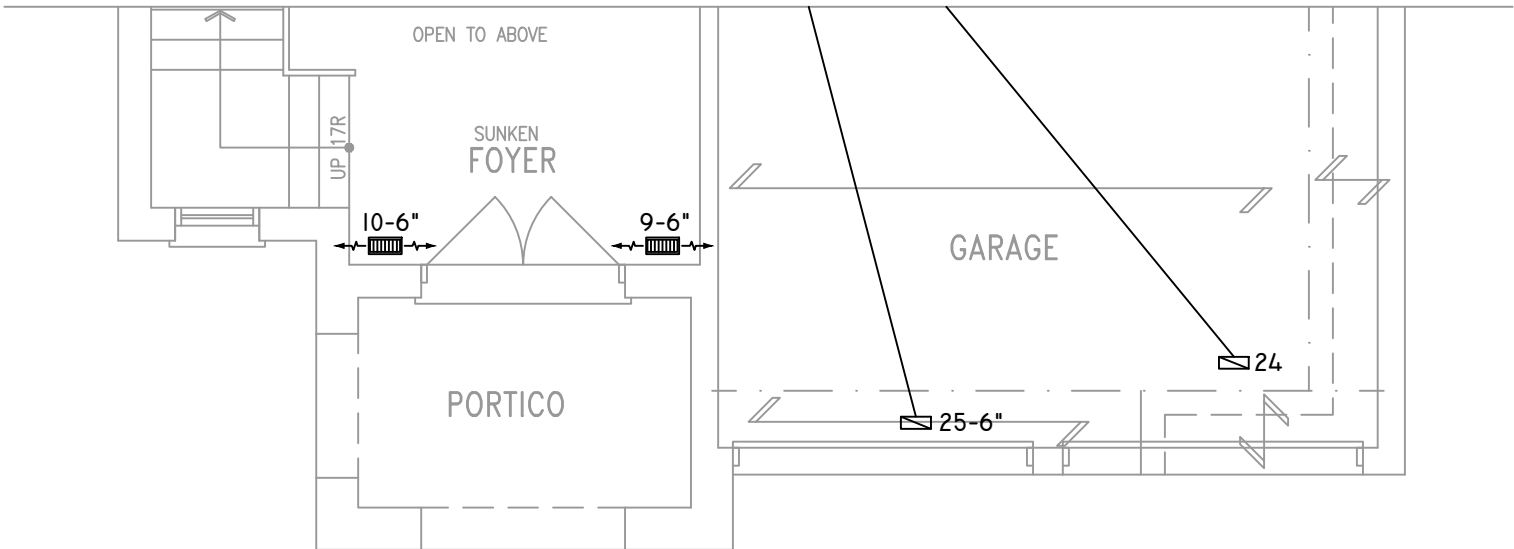
FLOOR PLAN:	
PARTIAL PLAN(S)	
DRAWN BY:	CHECKED:
AM	DD
LAYOUT NO.	DRAWING NO.
JB-04613	M4

DATE:	APRIL 1, 2018
CLIENT:	BAYVIEW WELLINGTON
MODEL:	S42-6 ALT 2ND FLR WOB RIDEAU 6
PROJECT:	GREEN VALLEY EAST BRADFORD,ONT.
SCALE:	3/16" = 1'-0"

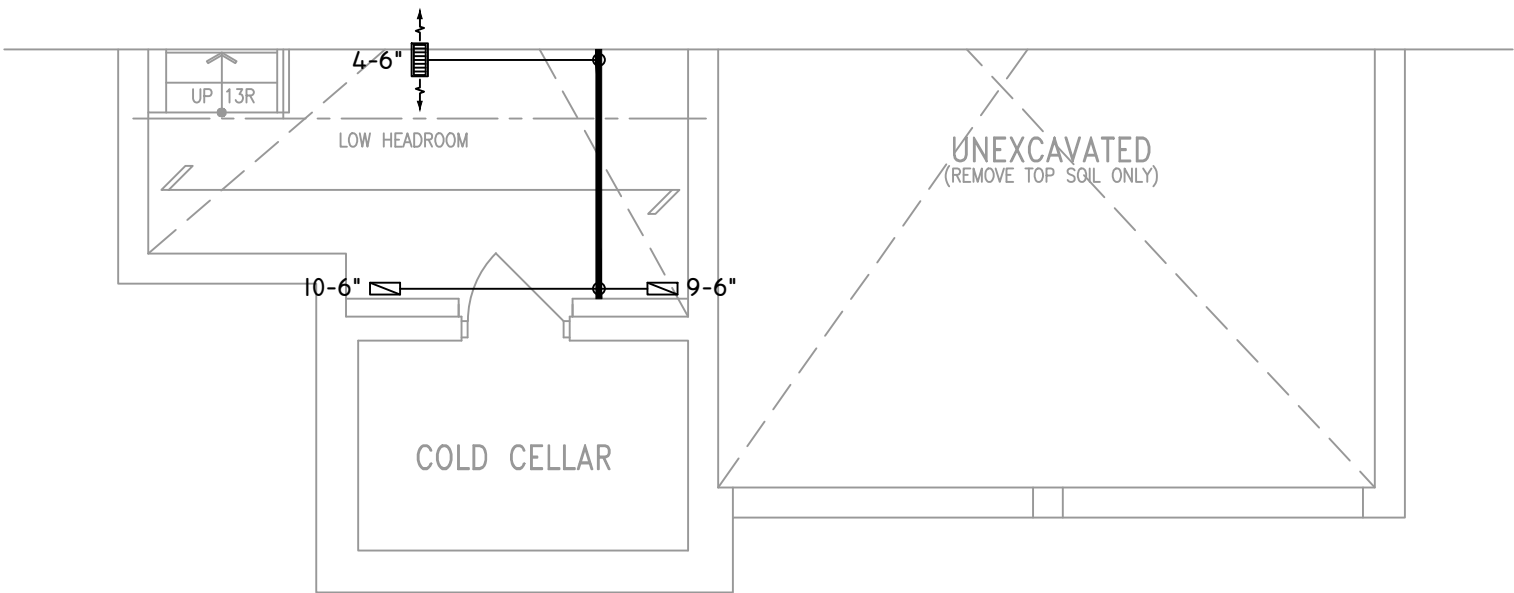
	FLEX DUCT		LOW/HIGH WALL/KICK SUPPLY DIFFUSER		DUCT CONNECTION TO JOIST LINING		RETURN AIR GRILLE (SIZE INDICATED ON DRAWING)	S.A.	SUPPLY AIR
	RIGID ROUND DUCT		HRV EXHAUST GRILLE		RETURN AIR PIPE RISER		RETURN AIR RISER UP TO FLOOR ABOVE	R.A.	RETURN AIR
	SUPPLY DIFFUSER		SUPPLY AIR PIPE RISER		RETURN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



PARTIAL OPT. SECOND FLOOR PLAN 'B'
5 BEDROOM W/ FOUR BATH



PARTIAL GROUND FLOOR PLAN 'B'



PARTIAL 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

Site Copy

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

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



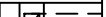
2985 DREW ROAD
SUITE 202,
MISSISSAUGA, ONT.
L4T 0A4 TEL: 905-671-9800
EMAIL: DAVE@GTADISGNS.CA
WEB: WWW.GTADISGNS.CA

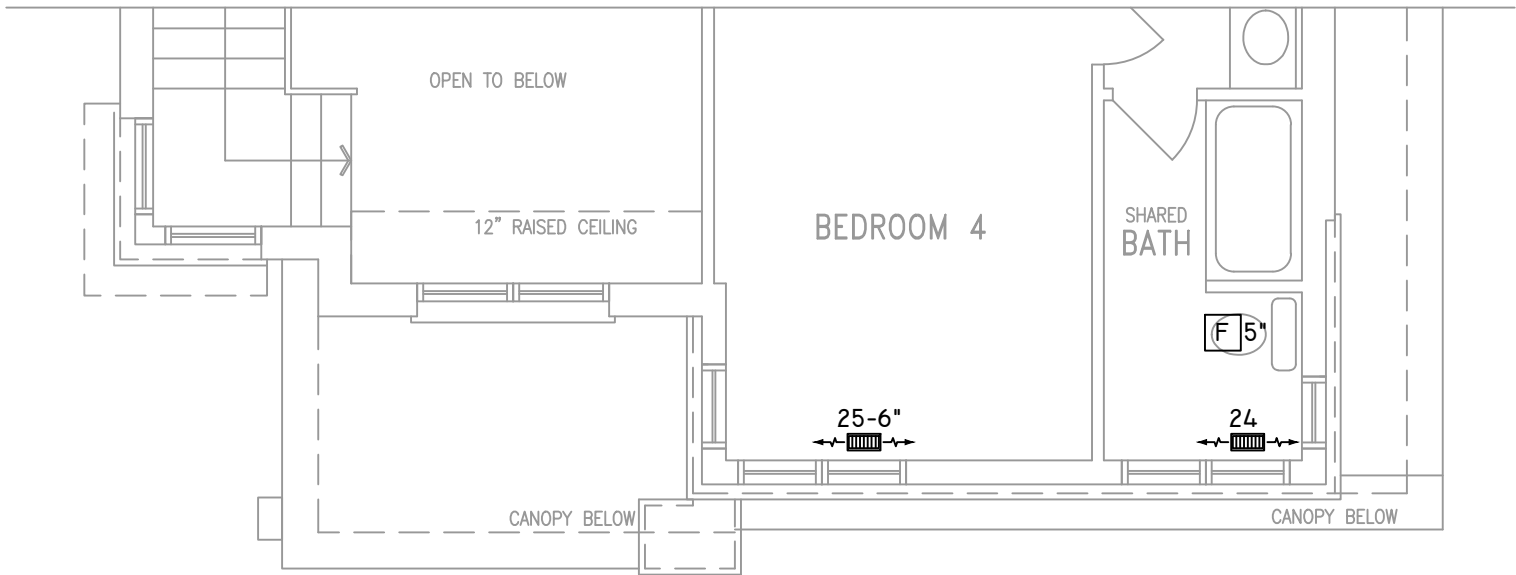
HEAT-LOSS	63,150	BTU/HR.
UNIT MAKE	AMANA	OR EQUAL.
UNIT MODEL	AMEC960803BNA	OR EQUAL.
UNIT HEATING INPUT	80,000	BTU/HR.
UNIT HEATING OUTPUT	76,800	BTU/HR.
A/C COOLING CAPACITY	3.0	TONS.
FAN SPEED	1172	CFM

# OF RUNS	S/A	R/A	FANS
3RD FLOOR			
2ND FLOOR	12	4	6
1ST FLOOR	11	1	2
BASEMENT	5	1	

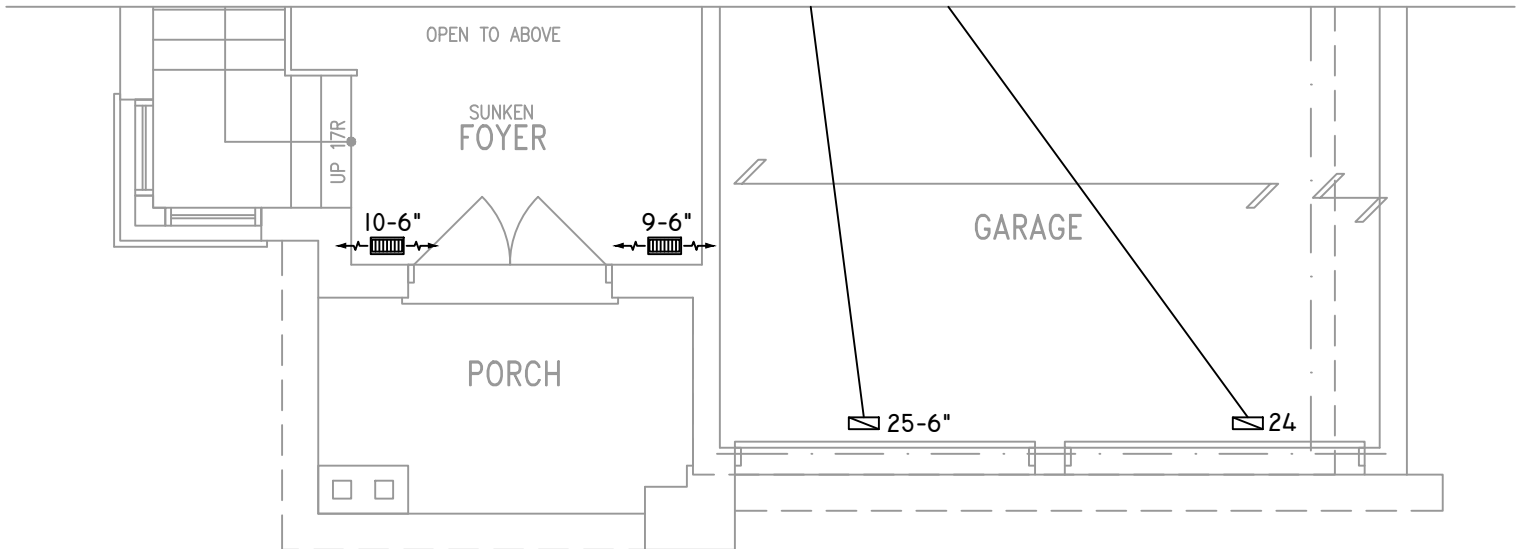
FLOOR PLAN: PARTIAL PLAN(S)	
DRAWN BY: AM	CHECKED: DD
LAYOUT NO. JB-04613	DRAWING NO. M5

DATE:	APRIL 1, 2018
CLIENT:	BAYVIEW WELLINGTON
MODEL:	S42-6 ALT 2ND FLR WOB RIDEAU 6
PROJECT:	GREEN VALLEY EAST BRADFORD,ONT.
SCALE:	3/16" = 1'-0"

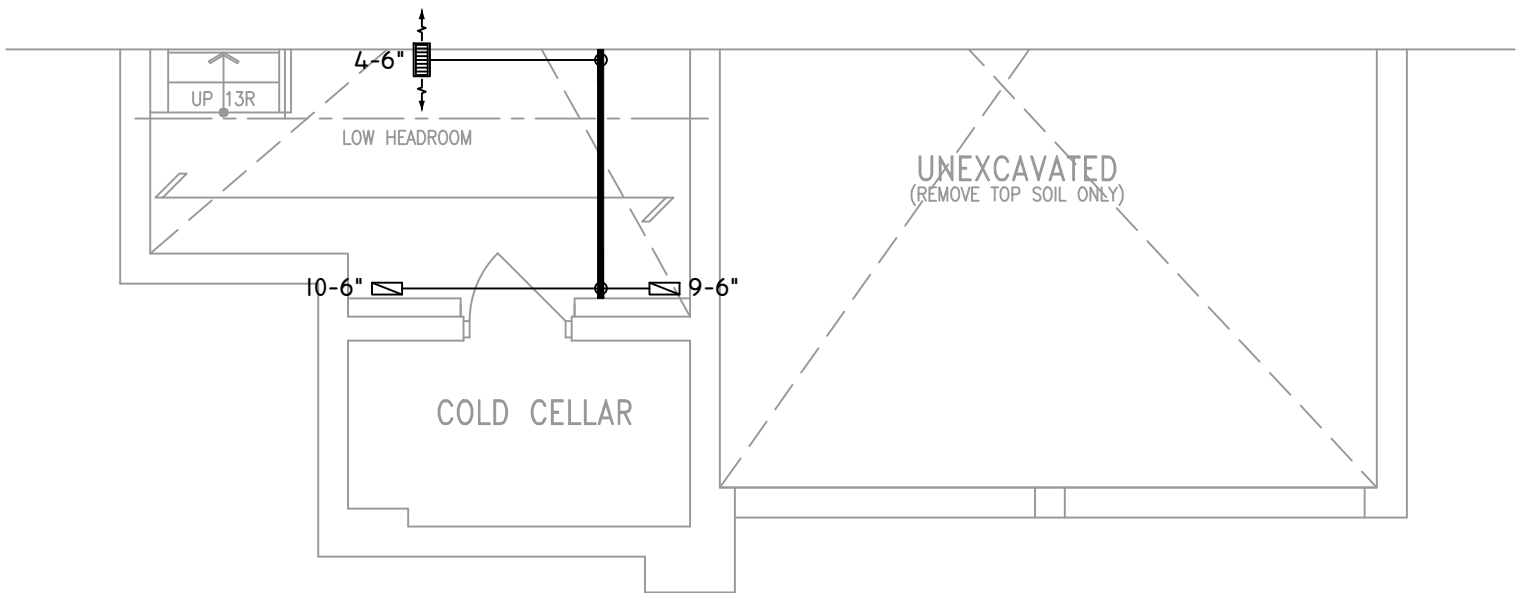
	FLEX DUCT		LOW/HIGH WALL/KICK SUPPLY DIFFUSER		DUCT CONNECTION TO JOIST LINING		RETURN AIR GRILLE (SIZE INDICATED ON DRAWING)	S.A.	SUPPLY AIR
	RIGID ROUND DUCT		HRV EXHAUST GRILLE		RETURN AIR PIPE RISER		RETURN AIR RISER UP TO FLOOR ABOVE	R.A.	RETURN AIR
	SUPPLY DIFFUSER		SUPPLY AIR PIPE RISER		RETURN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



PARTIAL OPT. SECOND FLOOR PLAN 'C'
5 BEDROOM W/ FOUR BATH



PARTIAL GROUND FLOOR PLAN 'C'



PARTIAL BASEMENT PLAN '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

Site Copy

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

OBC 2012

NOTES
INSTALLATION TO COMPLY WITH THE LATEST ONTARIO BUILDING CODE.
ALL SUPPLY OUTLETS TO BE 5" DIA. UNLESS OTHERWISE SPECIFIED.
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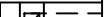
2985 DREW ROAD
SUITE 202,
MISSISSAUGA, ONT.
L4T 0A4 TEL: 905-671-9800
EMAIL: DAVE@GTADESIGNS.CA
WEB: WWW.GTADESIGNS.CA

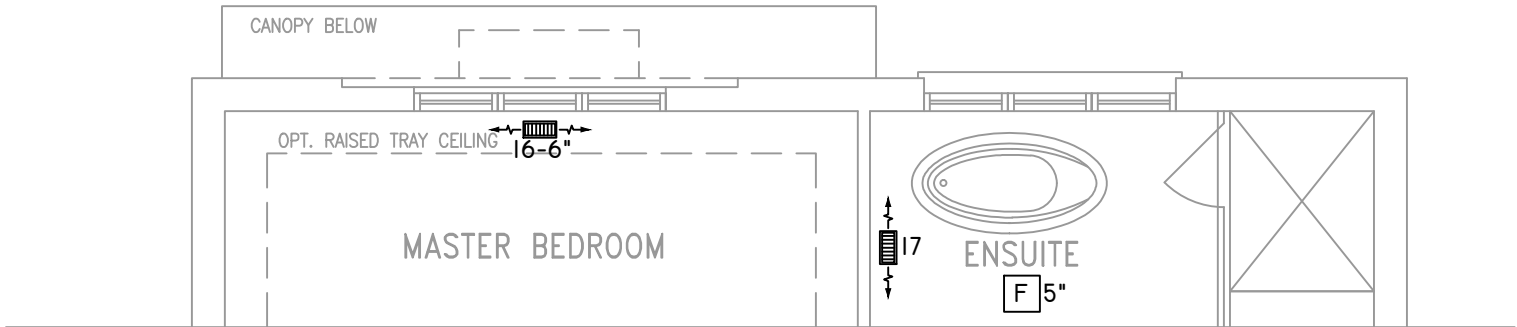
HEAT-LOSS	63,150	BTU/HR.
UNIT MAKE	AMANA	OR EQUAL.
UNIT MODEL	AMEC960803BNA	OR EQUAL.
UNIT HEATING INPUT	80,000	BTU/HR.
UNIT HEATING OUTPUT	76,800	BTU/HR.
A/C COOLING CAPACITY	3.0	TONS.
FAN SPEED	1172	CFM

# OF RUNS	S/A	R/A	FANS
3RD FLOOR			
2ND FLOOR	12	4	6
1ST FLOOR	11	1	2
BASEMENT	5	1	

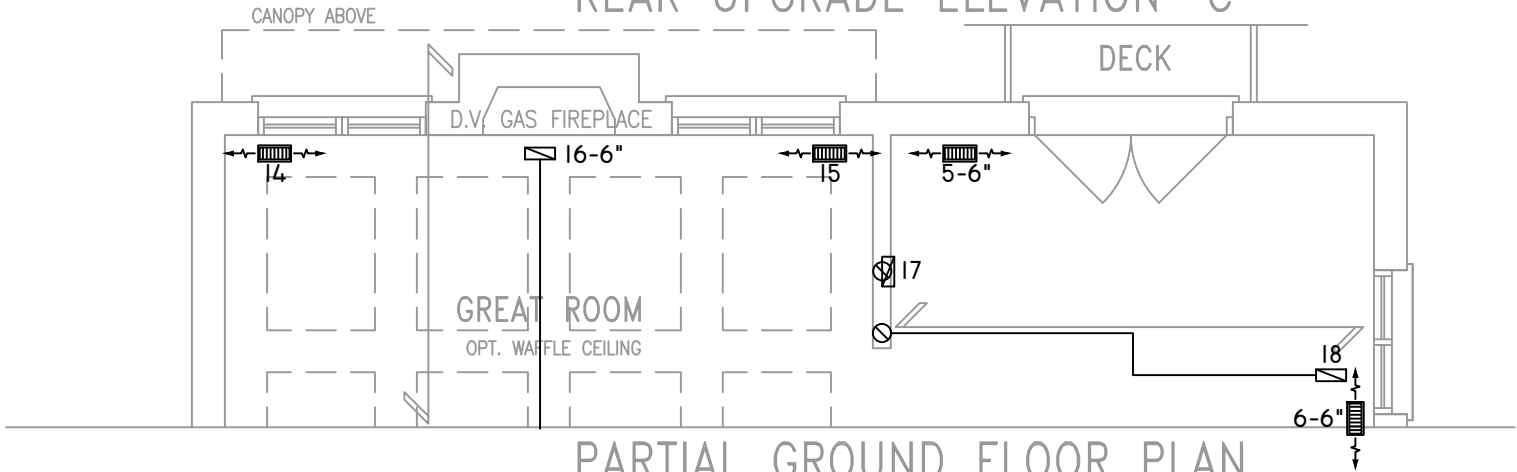
FLOOR PLAN:		
PARTIAL PLAN(S)		
DRAWN BY:	CHECKED:	SQFT
AM	DD	3466
LAYOUT NO.	DRAWING NO.	
JB-04613	M6	

DATE:	APRIL 1, 2018
CLIENT:	BAYVIEW WELLINGTON
MODEL:	S42-6 ALT 2ND FLR WOB RIDEAU 6
PROJECT:	GREEN VALLEY EAST BRADFORD,ONT.
SCALE:	3/16" = 1'-0"

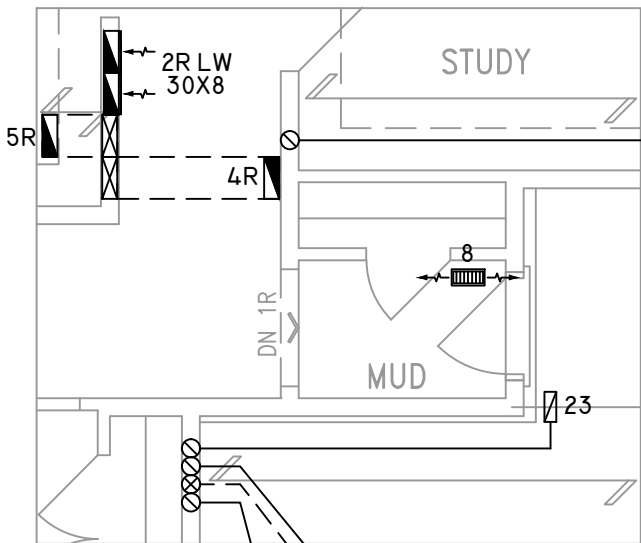
	FLEX DUCT		LOW/HIGH WALL/KICK SUPPLY DIFFUSER		DUCT CONNECTION TO JOIST LINING		RETURN AIR GRILLE (SIZE INDICATED ON DRAWING)	S.A.	SUPPLY AIR
	RIGID ROUND DUCT		HRV EXHAUST GRILLE		RETURN AIR PIPE RISER		RETURN AIR RISER UP TO FLOOR ABOVE	R.A.	RETURN AIR
	SUPPLY DIFFUSER		SUPPLY AIR PIPE RISER		RETURN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



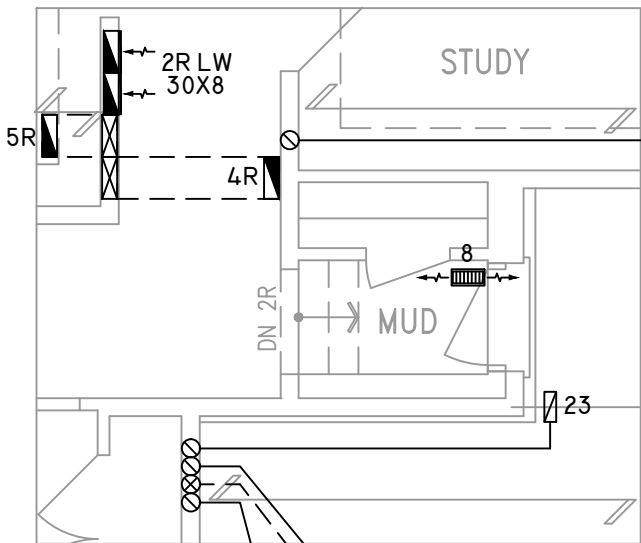
PARTIAL STD & OPT SECOND FLOOR PLAN
REAR UPGRADE ELEVATION 'C'



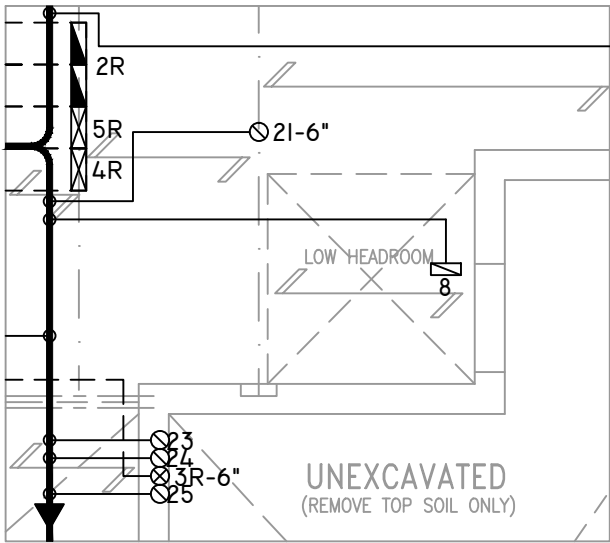
PARTIAL GROUND FLOOR PLAN
REAR UPGRADE ELEVATION 'C'



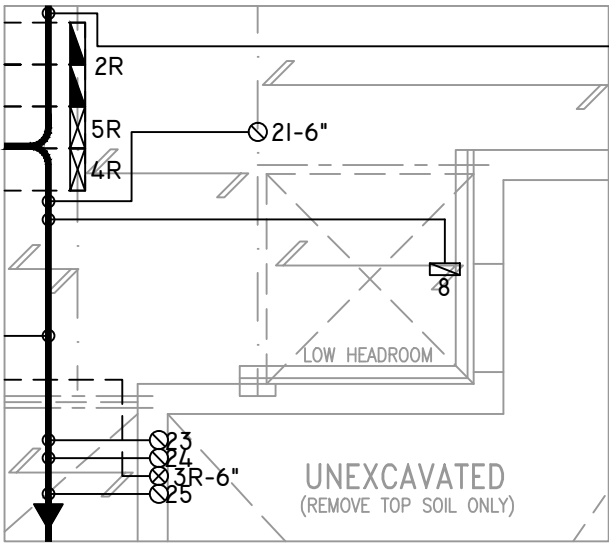
PARTIAL GROUND FLOOR PLAN SUNKEN
MUDROOM (-1R CONDITION)



PARTIAL GROUND FLOOR PLAN SUNKEN
MUDROOM (-2R TO -3R CONDITION)



PARTIAL BASEMENT PLAN SUNKEN
MUDROOM (-1R CONDITION)



PARTIAL BASEMENT PLAN
SUNKEN MUDROOM
(-2R TO -3R CONDITION)

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

Site Copy

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

NOTES

INSTALLATION TO COMPLY WITH THE LATEST ONTARIO BUILDING CODE.

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

PROVIDE BALANCING DAMPERS ON ALL BRANCHES.

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HEAT-LOSS	BTU/HR.
63,150	
UNIT MAKE	OR EQUAL.
AMANA	
UNIT MODEL	OR EQUAL.
AMEC960803BNA	
UNIT HEATING INPUT	BTU/HR.
80,000	
UNIT HEATING OUTPUT	BTU/HR.
76,800	
A/C COOLING CAPACITY	TONS.
3.0	
FAN SPEED	CFM
1172	

# OF RUNS	S/A	R/A	FANS
3RD FLOOR			
2ND FLOOR	12	4	6
1ST FLOOR	11	1	2
BASEMENT	5	1	

FLOOR PLAN:		SQFT
DRAWN BY:	CHECKED:	
AM	DD	3466
LAYOUT NO.	DRAWING NO.	
JB-04613	M7	

DATE:	APRIL 1, 2018
CLIENT:	BAYVIEW WELLINGTON
MODEL:	S42-6 ALT 2ND FLR WOB RIDEAU 6
PROJECT:	GREEN VALLEY EAST BRADFORD,ONT.
SCALE:	3/16" = 1'-0"