


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		Lot:	
S42-21		Lot/con.	
Municipality	Bradford	Postal code	Plan number/ other description
B. Individual who reviews and takes responsibility for design activities			
Name		Firm	
David DaCosta		gtaDesigns Inc.	
Street address		Unit no.	Lot/con.
2985 Drew Road, Suite 202			
Municipality	Postal code	Province	E-mail
Mississauga	L4T 0A4	Ontario	hvac@gtadesigns.ca
Telephone number	Fax number	Cell number	
(905) 671-9800			
C. Design activities undertaken by individual identified in Section B. [Building Code Table 3.5.2.1 of Division C]			
<input type="checkbox"/> House <input checked="" type="checkbox"/> HVAC – House <input type="checkbox"/> Building Structural <input type="checkbox"/> Small Buildings <input type="checkbox"/> Building Services <input type="checkbox"/> Plumbing – House <input type="checkbox"/> Large Buildings <input type="checkbox"/> Detection, Lighting and Power <input type="checkbox"/> Plumbing – All Buildings <input type="checkbox"/> Complex Buildings <input type="checkbox"/> Fire Protection <input type="checkbox"/> On-site Sewage Systems			
Description of designer's work		Model Certification	Project #:
			PJ-00041
			Layout #:
			JB-08347
Heating and Cooling Load Calculations	Main	X	Builder
Air System Design	Alternate		Project
Residential mechanical ventilation Design Summary	Area Sq ft:	3480	Model
Residential System Design per CAN/CSA-F280-12			S42-21
Residential New Construction - Forced Air			SB-12
			Package A1
D. Declaration of Designer			
<p>I, <u>David DaCosta</u> declare that (choose one as appropriate):</p> <p style="text-align: center;">(print name)</p> <p><input type="checkbox"/> I review and take responsibility for the design work on behalf of a firm registered under subsection 3.2.4 Division C of the Building Code. I am qualified, and the firm is registered, in the appropriate classes/categories.</p> <p style="margin-left: 150px;">Individual BCIN: _____</p> <p style="margin-left: 150px;">Firm BCIN: _____</p> <p><input checked="" type="checkbox"/> I review and take responsibility for the design and am qualified in the appropriate category as an "other designer" under subsection 3.2.5 of Division C, of the Building Code.</p> <p style="margin-left: 150px;">Individual BCIN: <u>32964</u></p> <p style="margin-left: 150px;">Basis for exemption from registration: <u>Division C 3.2.4.1. (4)</u></p> <p><input type="checkbox"/> The design work is exempt from the registration and qualification requirements of the Building Code.</p> <p style="margin-left: 150px;">Basis for exemption from registration and qualification:</p>			
<p>I certify that:</p> <p>1. The information contained in this schedule is true to the best of my knowledge.</p> <p>2. I have submitted this application with the knowledge and consent of the firm.</p>			
<u>July 20, 2022</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-08347	
Building Location					
Address (Model): S42-21			Site: Green Valley East		
Model:			Lot:		
City and Province: Bradford			Postal code:		
Calculations based on					
Dimensional information based on:			VA3 Design Oct/2021		
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? VanEE V150H75NS		Internal shading: Light-translucent		Occupants: 6	
Sensible Eff. at -25C 60%		Apparent Effect. at -0C 80%		Units: Imperial Area Sq ft: 3480	
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:			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:			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:		
City: Mississauga			E-mail hvac@gtadesigns.ca		

REVIEWED

SB-12 Package A1

Builder: Bayview Wellington

Date: July 20, 2022

Project: Green Valley East

Model: S42-21

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-00041
Layout # JB-08347

Page 3

DESIGN LOAD SPECIFICATIONS

Level 1 Net Load	25,543 btu/h
Level 2 Net Load	24,394 btu/h
Level 3 Net Load	14,033 btu/h
Level 4 Net Load	7,984 btu/h
Total Heat Loss	71,953 btu/h
Total Heat Gain	36,754 btu/h

Building Volume Vb	45900 ft³
Ventilation Load	1,677 Btu/h.
Ventilation PVC	95.4 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	0.0215 cfm/btuh
Cooling Air Flow Proportioning Factor	0.0420 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	AMEC960804CNA
Input Btu/h	80000
Output Btu/h	76800
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	Amana	3.5 Ton
Model	Cond.-----		3.5
Input Btu/h	Coil -----		3.5
Output Btu/h			
Min.Output Btu/h	AWH		
Blower DATA:			
Blower Speed Selected:	W2	Blower Type	ECM
		(Brushless DC OBC 12.3.1.5.(2))	
Heating Check	1545 cfm	Cooling Check	1545 cfm
Selected cfm>	1545 cfm	Cooling Air Flow Rate	1545 cfm

	Level 1														Level 2													
S/A Outlet No.	1	2	3	4	5	6								7	8	9	10	11	12	13	14	15						
Room Use	BASE	BASE	BASE	BASE	BASE	BASE								KIT/GRT	KIT/GRT	KIT/GRT	STUDY	MUD	FOY	PWD	LIV/DIN	LIV/DIN						
Btu/Outlet	4257	4257	4257	4257	4257	4257	4257								3403	3403	3403	1718	2349	3336	1808	2487	2487					
Heating Airflow Rate CFM	91	91	91	91	91	91	91								73	73	73	37	50	72	39	53	53					
Cooling Airflow Rate CFM	23	23	23	23	23	23	23								118	118	118	143	12	61	51	88	88					
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				
Actual Duct Length	6	23	26	37	42	59									41	23	32	8	11	76	66	53	41					
Equivalent Length	90	110	110	80	110	160	70	70	70	70	70	70	70	70	90	110	100	80	100	170	150	150	160	70	70	70	70	70
Total Effective Length	96	133	136	117	152	219	70	70	70	70	70	70	70	70	131	133	132	88	111	246	216	203	201	70	70	70	70	70
Adjusted Pressure	0.14	0.10	0.10	0.11	0.09	0.06	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.10	0.10	0.10	0.15	0.12	0.05	0.06	0.06	0.06	0.19	0.19	0.19	0.19	0.19
Duct Size Round	6	6	6	6	6	6	6								6	6	6	6	5	6	5	6	6					
Outlet Size	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	3x10	4x10	3x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10
Trunk	A	F	B	B	C	E								B	B	F	A	A	E	E	D	D						

	Level 3												Level 3														
S/A Outlet No.	16	17	18	19	20	21	22	23	24					25	26	27	28	29	30								
Room Use	P.BED	P.BED	ENS	WC	ENS 2	BED 2	LAUND	BED 3	BED 3					ENS 3	BED 4	BED 4	ENS 4	BED 5	WIC								
Btu/Outlet	1973	1973	1785	587	88	1885	869	2437	2437					1079	1965	1965	750	1675	550								
Heating Airflow Rate CFM	42	42	38	13	2	40	19	52	52					23	42	42	16	36	12								
Cooling Airflow Rate CFM	57	57	40	8	2	37	50	65	65					23	70	70	15	46	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	59	51	41	39	24	27	16	94	92					91	91	77	61	52	44								
Equivalent Length	160	120	140	110	140	100	110	160	150	70	70	70	70	140	190	180	150	150	150	70	70	70	70	70	70	70	70
Total Effective Length	219	171	181	149	164	127	126	254	242	70	70	70	70	231	281	257	211	202	194	70	70	70	70	70	70	70	70
Adjusted Pressure	0.06	0.08	0.07	0.09	0.08	0.10	0.10	0.05	0.05	0.19	0.19	0.19	0.19	0.06	0.05	0.05	0.06	0.06	0.07	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19
Duct Size Round	5	5	5	3	2	4	5	6	6					4	6	6	3	5	3								
Outlet Size	3x10	3x10	3x10	3x10	3x10	3x10	3x10	4x10	4x10	4x10	4x10	4x10	4x10	3x10	4x10	4x10	3x10	3x10	3x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10	4x10
Trunk	C	B	B	F	F	F	A	D	D					D	E	E	C	C	C								

Return Branch And Grill Sizing											
R/A Inlet No.	1R	2R	3R	4R	5R	6R	7R	8R	9R	10R	11R
Inlet Air Volume CFM	274	491	245	140	150	105	140				
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	11	46	8	67	62	67	62				
Equivalent Length	75	165	180	145	135	190	140	50	50	50	50
Total Effective Length	86	211	188	212	197	257	202	50	50	50	50
Adjusted Pressure	0.14	0.06	0.06	0.06	0.06	0.05	0.06	0.24	0.24	0.24	0.24
Duct Size Round	8.0	12.0	9.5	7.0	8.0	6.0	7.0				
Inlet Size	FLC	8	8	8	8	8	8				
" "	OR	x	x	x	x	x	x	x	x	x	x
Inlet Size	9x6	30	14	14	14	14	14				
Trunk	Z	Y	X	Z	Y	Y	Z				

Return Trunk Duct Sizing				
Trunk	CFM	Press.	Round	Rect. Size
Drop	1545	0.05	19.0	24x14
Z	1300	0.05	18.0	30x10 24x12
Y	746	0.05	14.5	24x8 18x10
X	245	0.06	9.5	10x8 12x7
W				
V				
U				
T				
S				
R				
Q				

Supply Trunk Duct Sizing					
Trunk	CFM	Press.	Round	Rect. Size	
A	1545	0.05	19.0	34x10	26x12
B	1129	0.05	17.0	26x10	22x12
C	719	0.05	14.5	24x8	18x10
D	521	0.05	12.5	18x8	14x10
E	286	0.05	10.0	12x8	10x10
F	219	0.08	8.5	8x8	10x7
G					
H					
I					
J					
K					

REVIEWED

2012 OBC

Builder: Bayview Wellington

Date: July 20, 2022

Project: Green Valley East

Model: S42-21

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: 3480

Project # PJ-00041
Layout # JB-08347

Level 1

BASE

Run ft. exposed wall A	181	A	A	A	A	A	A	A	A	A	A	A	A
Run ft. exposed wall B	B	B	B	B	B	B	B	B	B	B	B	B	B
Ceiling height	7.0	AG	7.0	AG	7.0	AG	7.0	AG	7.0	AG	7.0	AG	7.0
Floor area	1447	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	1267												
Gross Exp Wall B													

Components	R-Values	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain
North Shaded	3.55	22.93	11.62	3	69	35											
East/West	3.55	22.93	29.56	47	1078	1389											
South	3.55	22.93	22.50	6	138	135											
WOB Windows	3.55	22.93	27.86														
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	1190		620											
Net exposed walls B	17.03	4.78	0.65														
Exposed Ceilings A	59.22	1.37	0.64														
Exposed Ceilings B	27.65	2.94	1.37														
Exposed Floors	29.80	2.73	0.17														
Foundation Conductive Heatloss																	
Total Conductive																	
Air Leakage																	
Ventilation																	
Case 1																	
Case 2																	
Case 3	x																
Heat Gain People																	
Appliances Loads	1 = 25 percent																
Duct and Pipe loss																	
Level HL Total	25,543																
Level HG Total	3,224																

Level 2

KIT/GRT

STUDY

MUD

FOY

PWD

LIV/DIN

Run ft. exposed wall A	77	A	12	A	19	A	22	A	12	A	40	A	A	A	A	A	A
Run ft. exposed wall B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Ceiling height	11.0		11.0		13.0		12.0		12.0		11.0		11.0		11.0		11.0
Floor area	693	Area	121	Area	50	Area	102	Area	27	Area	448	Area	Area	Area	Area	Area	Area
Exposed Ceilings A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Exposed Ceilings B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
Exposed Floors	Flr	Flr	Flr	Flr	Flr	Flr	Flr	Flr	Flr	Flr	Flr	Flr	Flr	Flr	Flr	Flr	Flr
Gross Exp Wall A	847		132		247		264		144		440						
Gross Exp Wall B																	

Components	R-Values	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain	Loss	Gain
North Shaded	3.55	22.93	11.62														
East/West	3.55	22.93	29.56	138	3164	4079				27	619	798					
South	3.55	22.93	22.50							26	596	769					
Existing Windows	1.99	40.90	23.66														
Skylight	2.03	40.10	88.23														
Doors	4.00	20.35	2.75														
Net exposed walls A	17.03	4.78	0.65	709	3389	458	106	507	68	226	1080	146	212	1013	137	118	564
Net exposed walls B	8.50	9.58	1.29														
Exposed Ceilings A	59.22	1.37	0.64														
Exposed Ceilings B	27.65	2.94	1.37														
Exposed Floors	29.80	2.73	0.17														
Foundation Conductive Heatloss																	
Total Conductive																	
Air Leakage																	
Ventilation																	
Case 1																	
Case 2																	
Case 3	x																
Heat Gain People																	
Appliances Loads	1 = 25 percent																
Duct and Pipe loss																	
Level HL Total	24,394																
Level HG Total	19,004																

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

REVIEWED

2012 OBC

Builder: Bayview Wellington

Date: July 20, 2022

Project: Green Valley East

Model: S42-21

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: 3480

Level 3

Run ft. exposed wall A	31 A	P.BED	19 A	ENS	6 A	WC	A	ENS 2	19 A	BED 2	9 A	LAUND	27 A	BED 3	A	A	A	A
Run ft. exposed wall B	B		B		B		B		B		B		B		B	B	B	B
Ceiling height	11.0		9.0		9.0		9.0		9.0		9.0		11.0		9.0	9.0	9.0	9.0
Floor area	458 Area		129 Area		27 Area		46 Area		181 Area		59 Area		257 Area		Area	Area	Area	Area
Exposed Ceilings A	458 A		129 A		27 A		46 A		181 A		59 A		257 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		11 Flr		209 Flr		Flr	Flr	Flr	Flr
Gross Exp Wall A	341		171		54		171		81		297							
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
North Shaded	3.55	22.93	11.62																
East/West	3.55	22.93	29.56	32	734	946	16	367	473	7	161	81							
South	3.55	22.93	22.50																
Existing Windows	1.99	40.90	23.66																
Skylight	2.03	40.10	88.23																
Doors	4.00	20.35	2.75																
Net exposed walls A	17.03	4.78	0.65	309	1477	200	155	741	100	47	225	30		155	741	100	74	354	48
Net exposed walls B	8.50	9.58	1.29																
Exposed Ceilings A	59.22	1.37	0.64	458	630	294	129	177	83	27	37	17	46	63	30	181	249	116	59
Exposed Ceilings B	27.65	2.94	1.37																
Exposed Floors	29.80	2.73	0.17																
Foundation Conductive Heatloss																			
Total Conductive																			
Air Leakage	Heat Loss/Gain	0.3501	0.0481																
Ventilation	Case 1		0.02	0.06															
	Case 2		17.58	11.88															
	Case 3	x	0.04	0.06															
Heat Gain People			239																
Appliances Loads	1 =25 percent		5866																
Duct and Pipe loss			10%																
Level HL Total	14,033																		
Level HG Total	9,049																		

Level 3

Run ft. exposed wall A	7 A	ENS 3	26 A	BED 4	7 A	ENS 4	16 A	BED 5	7 A	WIC	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	9.0		11.0		9.0		9.0		9.0		9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
Floor area	64 Area		195 Area		81 Area		165 Area		69 Area		Area	Area	Area	Area	Area	Area	Area	Area
Exposed Ceilings A	64 A		195 A		81 A		165 A		69 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	57 Flr		25 Flr		Flr		Flr		Flr		Flr	Flr	Flr	Flr	Flr	Flr	Flr	Flr
Gross Exp Wall A	63		286		63		144		63									
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
North Shaded	3.55	22.93	11.62																
East/West	3.55	22.93	29.56	9	206	266	62	1422	1833	7	161	158	16	367	360				
South	3.55	22.93	22.50																
Existing Windows	1.99	40.90	23.66																
Skylight	2.03	40.10	88.23																
Doors	4.00	20.35	2.75																
Net exposed walls A	17.03	4.78	0.65	54	258	35	224	1071	145	56	268	36	128	612	83	63	301	41	
Net exposed walls B	8.50	9.58	1.29																
Exposed Ceilings A	59.22	1.37	0.64	64	88	41	195	268	125	81	111	52	165	227	106	69	95	44	
Exposed Ceilings B	27.65	2.94	1.37																
Exposed Floors	29.80	2.73	0.17	57	156	10	25	68	4										
Foundation Conductive Heatloss																			
Total Conductive																			
Air Leakage	Heat Loss/Gain	0.3501	0.0481																
Ventilation	Case 1		0.02	0.06															
	Case 2		17.58	11.88															
	Case 3	x	0.04	0.06															
Heat Gain People			239																
Appliances Loads	1 =25 percent		5866																
Duct and Pipe loss			10%																
Level HL Total	7,984																		
Level HG Total	5,477																		

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

REVIEWED

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:
S42-21

RESIDENTIAL MECHANICAL VENTILATION DESIGN SUMMARY

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

Location of Installation

Lot #	Plan #
Township	
Bradford	
Roll #	Permit #
Address	

Builder

Name	
Bayview Wellington	
Address	
City	
Tel	Fax

Installing Contractor

Name	
Address	
City	
Tel	Fax

Combustion Appliances 9.32.3.1(1)

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

Heating System

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

House Type 9.32.3.1(2)

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

System Design Option

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

Total Ventilation Capacity 9.32.3.3(1)

Bsmt & Master Bdrm	2 @ 21.2 cfm	42.4 cfm
Other Bedrooms	4 @ 10.6 cfm	42.4 cfm
Bathrooms & Kitchen	6 @ 10.6 cfm	63.6 cfm
Other rooms	5 @ 10.6 cfm	53 cfm
Total		201.4

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
------	-------	----------

VanEE	V150H75NS	Base
-------	-----------	------

127 cfm		Sones or Equiv.
---------	--	-----------------

Heat Recovery Ventilator

Make	VanEE
Model	V150H75NS
	127 cfm high
	80 cfm low
Sensible efficiency @ -25 deg C	60%
Sensible efficiency @ 0 deg C	75%

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

Supplemental Ventilation Capacity

Total ventilation capacity	201.4
Less principal exhaust capacity	95.4
REQUIRED supplemental vent. Capacity	106.0 cfm

Supplemental Fans 9.32.3.5.

Location	cfm	Model	Sones
Ens	50	XB50	0.3
Ens 2	50	XB50	0.3
Ens 3	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

July 20, 2022

REVIEWED



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-00041
Layout # JB-08347

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 S42-21		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		
<input checked="" type="checkbox"/> Zone 1 (< 5000 degree days) <input type="checkbox"/> Zone 2 (≥ 5000 degree days)	<input checked="" type="checkbox"/> ≥ 92% AFUE <input type="checkbox"/> ≥ 84% < 92% AFUE	<input checked="" type="checkbox"/> Gas <input type="checkbox"/> Oil	<input type="checkbox"/> Propane <input type="checkbox"/> Electric	<input type="checkbox"/> Solid Fuel <input type="checkbox"/> Earth Energy
Ratio of Windows, Skylights & Glass (W, S & G) to Wall Area		Other Building Characteristics		
Area of Walls = <u>471.47</u> m ² or <u>5074.9</u> ft ²	W,S & G % = <u>10.9%</u>	<input type="checkbox"/> Log/Post&Beam <input type="checkbox"/> Slab-on-ground <input checked="" type="checkbox"/> Air Conditioning <input type="checkbox"/> Air Sourced Heat Pump (ASHP) <input type="checkbox"/> Ground Source Heat Pump (GSHP)		
Area of W, S & G = <u>51.281</u> m ² or <u>552.0</u> ft ²	Utilize Window Averaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> ICF Above Grade <input type="checkbox"/> Walkout Basement <input type="checkbox"/> Combo Unit		

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

Energy Efficiency Substitutions			
<input type="checkbox"/> ICF (3.1.1.2.(5) & (6) / 3.1.1.3.(5)) <input type="checkbox"/> Combined space heating and domestic water heating systems (3.1.1.2(7) / 3.1.1.3.(7))			
<input type="checkbox"/> Airtightness substitution(s) Airtightness test required (Refer to Design Guide Attached)	<input type="checkbox"/> Table 3.1.1.4.B Required:		Permitted Substitution:
	<input type="checkbox"/> Table 3.1.1.4.C Required:		Permitted Substitution:
Building Component	Minimum RSI/R-Values or Maximum U-Value ¹		Efficiency Ratings
Thermal Insulation	Nominal	Effective	Windows & Doors Provide U-Value ⁽¹⁾ or ER rating
Ceiling with Attic Space	60	59.22	Windows/Sliding Glass Doors
Ceiling without Attic Space	31	27.65	Skylights
Exposed Floor	31	29.80	Mechanicals
Walls Above Grade	22	17.03	Heating Equip.(AFUE)
Basement Walls	20.0ci	21.12	HRV Efficiency (SRE% at 0°C)
Slab (all >600mm below grade)	x	x	DHW Heater (EF)
Slab (edge only ≤600mm below grade)	10	11.13	DWHR (CSA B55.1 (min. 42% efficiency))
Slab (all ≤600mm below grade, or heated)	10	11.13	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
------------------------------	----------------------	---------------

REVIEWED

Package:
Project:

Package A1
Bradford

System:
Model:

System 1
S42-21

Air Leakage Calculations

Building Air Leakage Heat Loss				
B	LRairh	Vb	HL^T	HLleak
0.018	0.403	45900	81.4	27072

Building Air Leakage Heat Gain				
B	LRairh	Vb	HG^T	HG Leak
0.018	0.099	45900	11	899

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	27072	11553	1.1716
Level 2	0.3		15657	0.5187
Level 3	0.2		15467	0.3501
Level 3	0.2		15467	0.3501

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	
		899		
BUILDING CONDUCTIVE HEAT GAIN			18705	0.0481

Levels this Dwelling	
3	

Ventilation Calculations

Vent	Ventilation Heat Loss					Ventilation Heat Gain				Vent	
	Ventilation Heat Loss					Ventilation Heat Gain					
	C	PVC	HL^T	(1-E) HRV	HLbvent	C	PVC	HG^T	HGbvent		
	1.08	95.4	81.4	0.20	1677	1.1	95.4	11	1133		
Case 1						Case 1					
Case 1	Ventilation Heat Loss (Exhaust only Systems)					Ventilation Heat Gain (Exhaust Only Systems)				Case 1	
	Case 1 - Exhaust Only					Case 1 - Exhaust Only		Multiplier			
	Level	LF	HLbvent	LVL Cond. HL	Multiplier	HGbvent	1133	0.06			
	Level 1	0.5	1677	11553	0.07						
	Level 2	0.3		15657	0.03						
	Level 3	0.2		15467	0.02						
Level 3	0.2	15467		0.02							
Case 2						Case 2					
Case 2	Ventilation Heat Loss (Direct Ducted Systems)					Ventilation Heat Gain (Direct Ducted Systems)				Case 2	
				Multiplier					Multiplier		
	C	HL^T	(1-E) HRV	17.58		C	HL^T	11.88			
	1.08	81.4	0.20			1.08	11				
Case 3						Case 3					
Case 3	Ventilation Heat Loss (Forced Air Systems)					Ventilation Heat Gain (Forced Air Systems)				Case 3	
			HLbvent	Multiplier				Vent Heat Gain	Multiplier		
	Total Ventilation Load		1677	0.04		HGbvent 1133		HG*1.3 1	1133		0.06

Foundation Conductive Heatloss Level 1	Level 1	2884	Watts	9842	Btu/h
Foundation Conductive Heatloss Level 2	Level 2		Watts		Btu/h
Slab on Grade Foundation Conductive Heatloss			Watts		Btu/h
Walk Out Basement Foundation Conductive Heatloss			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 DeCosta

David DeCosta

REVIEWED

Envelope Air Leakage Calculator

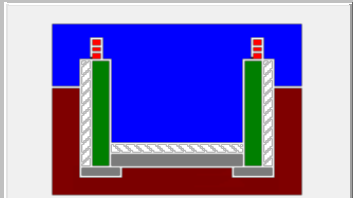
Supplemental tool for CAN/CSA-F280

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):	8.84			
Building Configuration				
Type:	Detached			
Number of Stories:	Two			
Foundation:	Shallow			
House Volume (m ³):	1299.89			
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): 0.403				
Cooling Air Leakage Rate (ACH/H): 0.099				



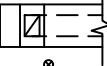












REVIEWED

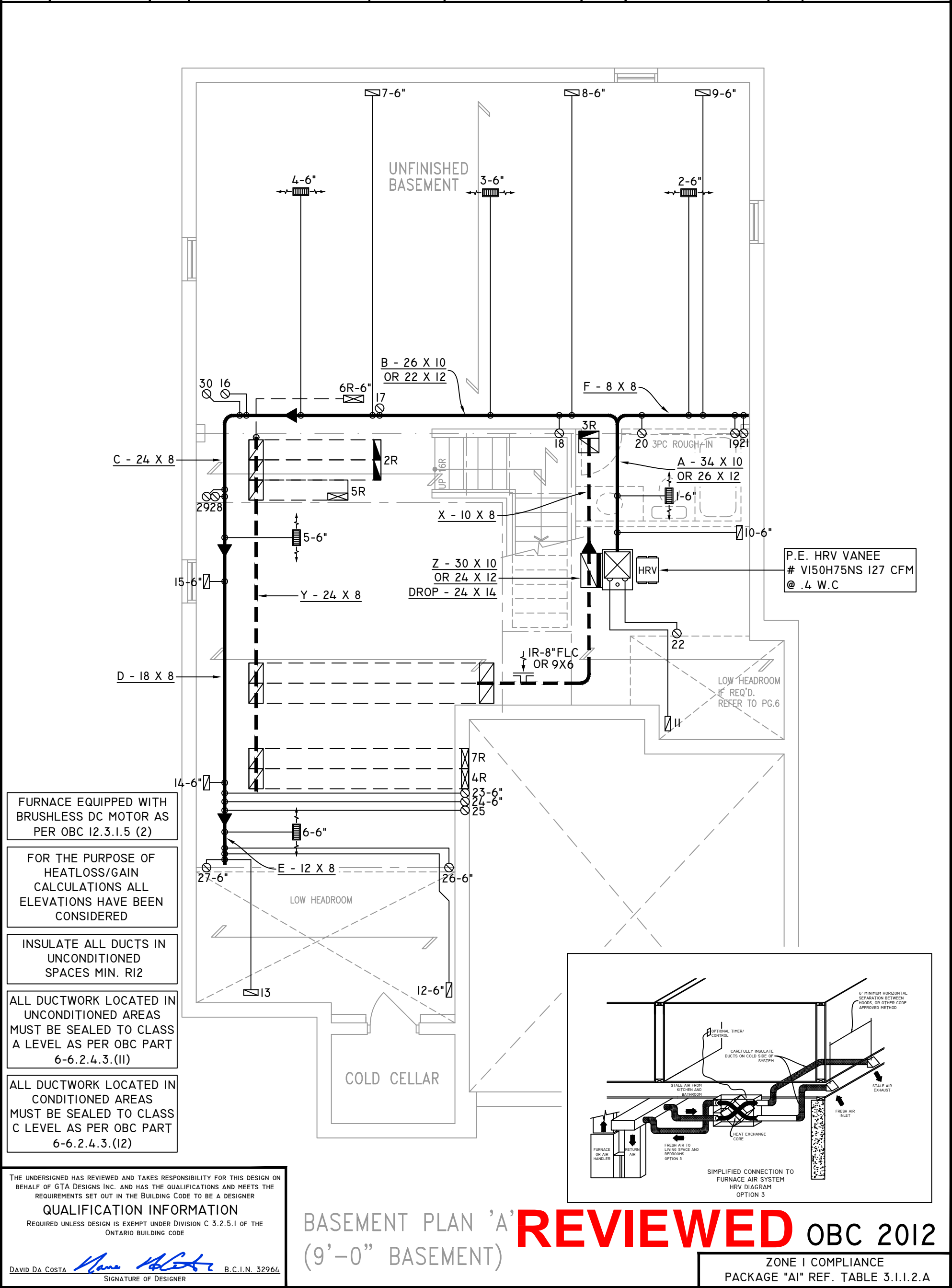
Residential Foundation Thermal Load Calculator

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):	21.26	 Insulation Configuration
Floor Width (m):	6.32	
Exposed Perimeter (m):	55.17	
Wall Height (m):	3.05	
Depth Below Grade (m):	0.91	
Window Area (m ²):	5.20	
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):		2884

REVIEWED

	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 VOLUME DAMPER		RETURN ROUND DUCT		RETURN AIR FROM BASEMENT SECOND FLOOR		THERMOSTAT
									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.

GTADESIGNS



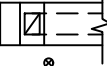







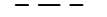





2985 DREW ROAD
SUITE 202,
MISSISSAUGA, ONT.
L4T 0A4 TEL: 905-671-9800
EMAIL: DAVE@GTADESIGNS.CA
WEB: WWW.GTADESIGNS.CA

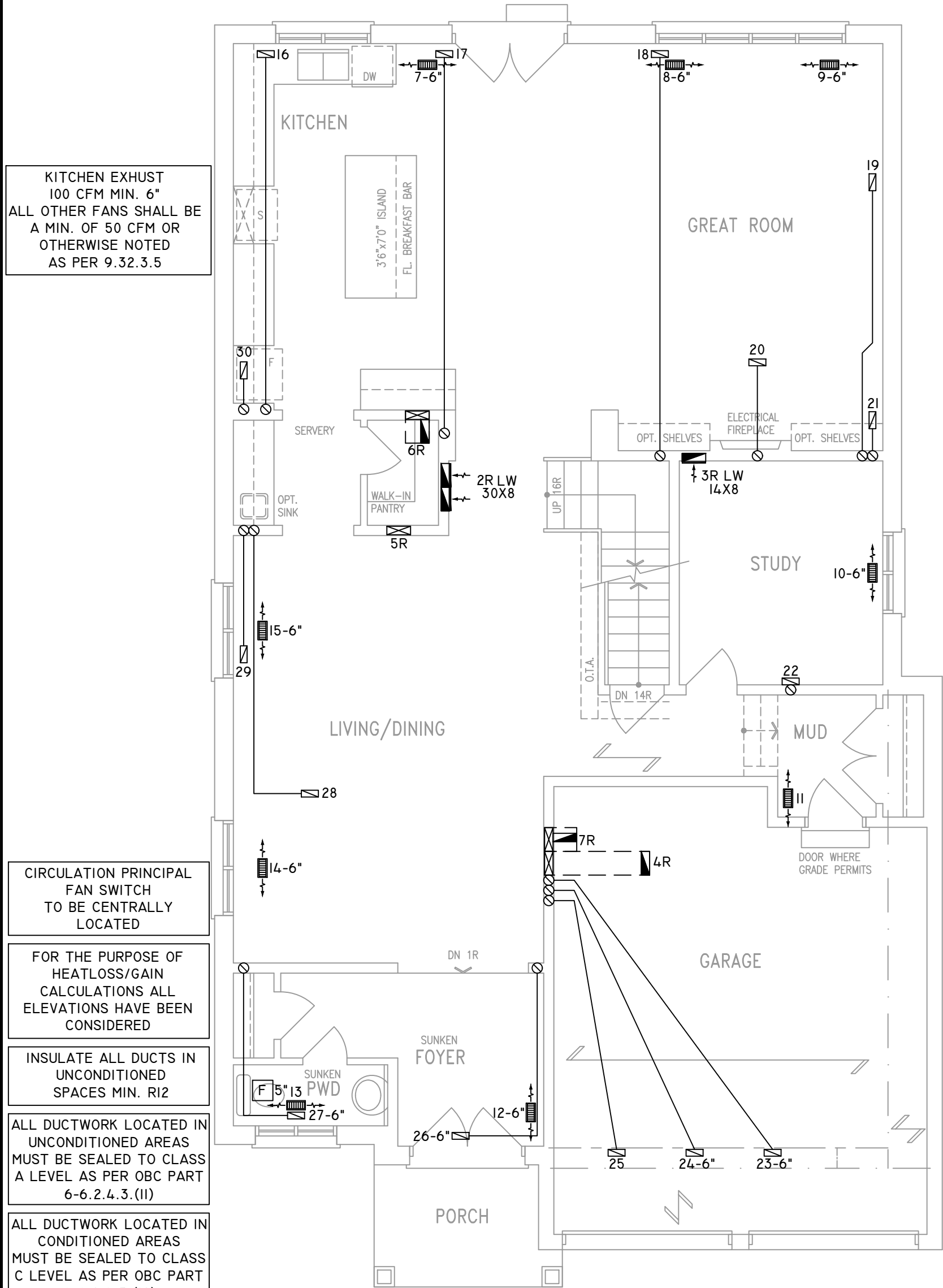
HEAT-LOSS	71,953	BTU/HR.
UNIT MAKE	AMANA	OR EQUAL.
UNIT MODEL	AMEC960804CNA	OR EQUAL.
UNIT HEATING INPUT	80,000	BTU/HR.
UNIT HEATING OUTPUT	76,800	BTU/HR.
A/C COOLING CAPACITY	3.5	TONS.
FAN SPEED	1545	CFM

# OF RUNS	S/A	R/A	FANS
3RD FLOOR			
2ND FLOOR	15	4	5
1ST FLOOR	9	2	2
BASEMENT	6	1	

FLOOR PLAN:	BASEMENT
DRAWN BY:	JL
CHECKED:	DD
LAYOUT NO.	JB-08347
SQFT	3480
DRAWING NO.	MI

DATE:	JULY 20, 2022
CLIENT:	BAYVIEW WELLINGTON
MODEL:	S42-21
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



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

REVIEWED OBC 2012

GROUND FLOOR PLAN 'A'

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

NOTES

INSTALLATION TO COMPLY WITH THE LATEST ONTARIO BUILDING CODE.

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

PROVIDE BALANCING DAMPERS ON ALL BRANCHES.

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

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

CONTRACTOR MUST WORK FROM APPROVED PLANS.

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

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





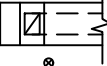







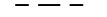





2985 DREW ROAD
SUITE 202,
MISSISSAUGA, ONT.
L4T 0A4 TEL: 905-671-9800
EMAIL: DAVE@GTADESIGNS.CA
WEB: WWW.GTADESIGNS.CA

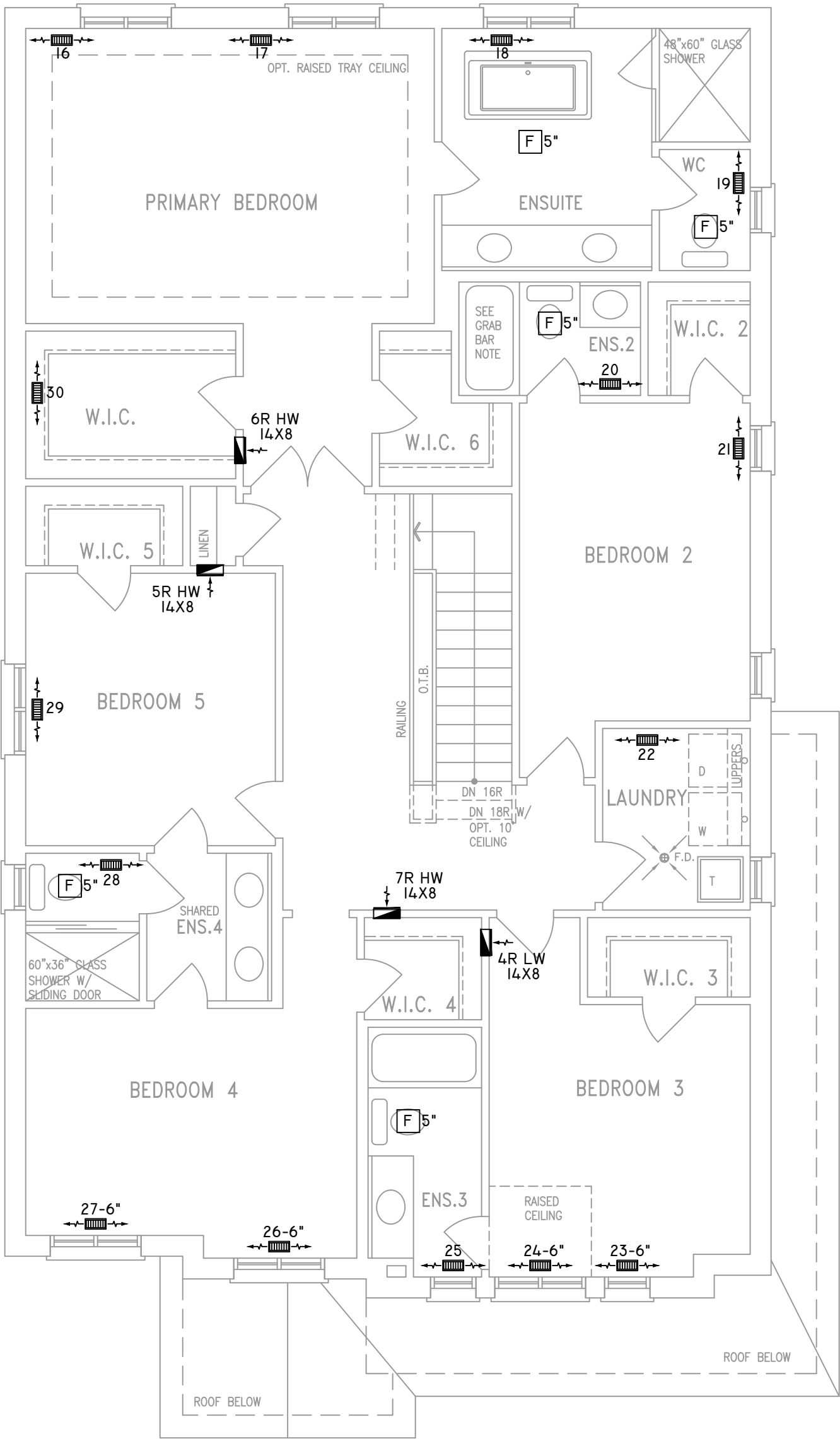
HEAT-LOSS	71,953	BTU/HR.
UNIT MAKE	AMANA	OR EQUAL.
UNIT MODEL	AMEC960804CNA	OR EQUAL.
UNIT HEATING INPUT	80,000	BTU/HR.
UNIT HEATING OUTPUT	76,800	BTU/HR.
A/C COOLING CAPACITY	3.5	TONS.
FAN SPEED	1545	CFM

# OF RUNS	S/A	R/A	FANS
3RD FLOOR			
2ND FLOOR	15	4	5
1ST FLOOR	9	2	2
BASEMENT	6	1	

FLOOR PLAN:	
GROUND FLOOR	
DRAWN BY: JL	CHECKED: DD
LAYOUT NO. JB-08347	SQFT 3480
	DRAWING NO. M2

DATE:	JULY 20, 2022
CLIENT:	BAYVIEW WELLINGTON
MODEL:	S42-21
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




- FOR THE PURPOSE OF HEATLOSS/GAIN CALCULATIONS ALL ELEVATIONS HAVE BEEN CONSIDERED
- INSULATE ALL DUCTS IN UNCONDITIONED SPACES MIN. R12
- ALL DUCTWORK LOCATED IN UNCONDITIONED AREAS MUST BE SEALED TO CLASS A LEVEL AS PER OBC PART 6-6.2.4.3.(11)
- ALL DUCTWORK LOCATED IN CONDITIONED AREAS MUST BE SEALED TO CLASS C LEVEL AS PER OBC PART 6-6.2.4.3.(12)

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

REVIEWED OBC 2012

SECOND FLOOR PLAN 'A'

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.





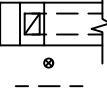












2985 DREW ROAD
SUITE 202,
MISSISSAUGA, ONT.
L4T 0A4 TEL: 905-671-9800
EMAIL: DAVE@GTADESIGNS.CA
WEB: WWW.GTADESIGNS.CA

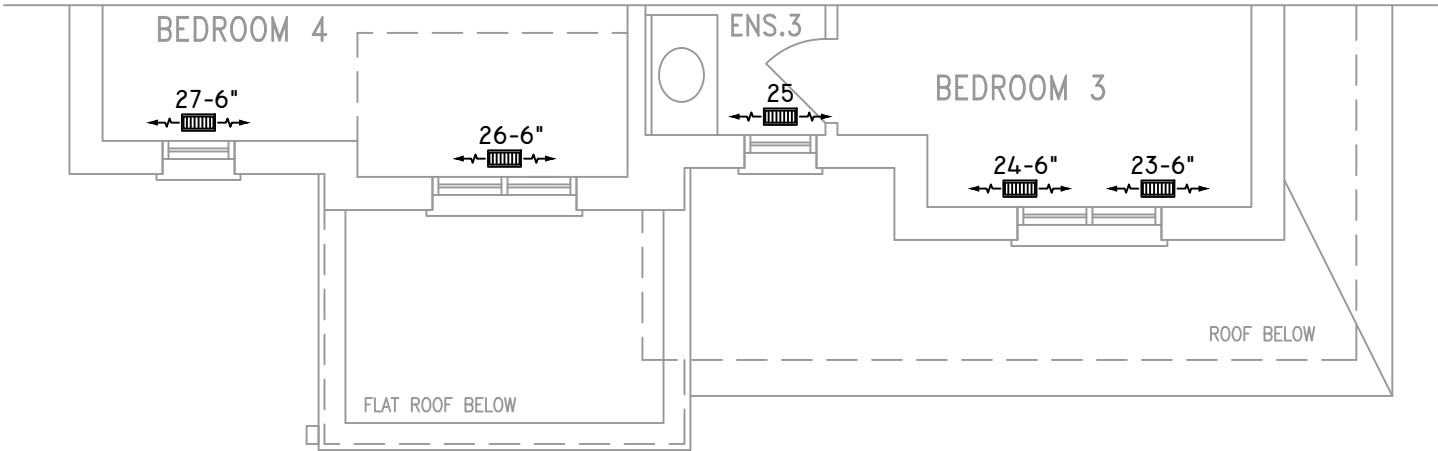
HEAT-LOSS	71,953	BTU/HR.
UNIT MAKE	AMANA	OR EQUAL.
UNIT MODEL	AMEC960804CNA	OR EQUAL.
UNIT HEATING INPUT	80,000	BTU/HR.
UNIT HEATING OUTPUT	76,800	BTU/HR.
A/C COOLING CAPACITY	3.5	TONS.
FAN SPEED	1545	CFM

# OF RUNS	S/A	R/A	FANS
3RD FLOOR			
2ND FLOOR	15	4	5
1ST FLOOR	9	2	2
BASEMENT	6	1	

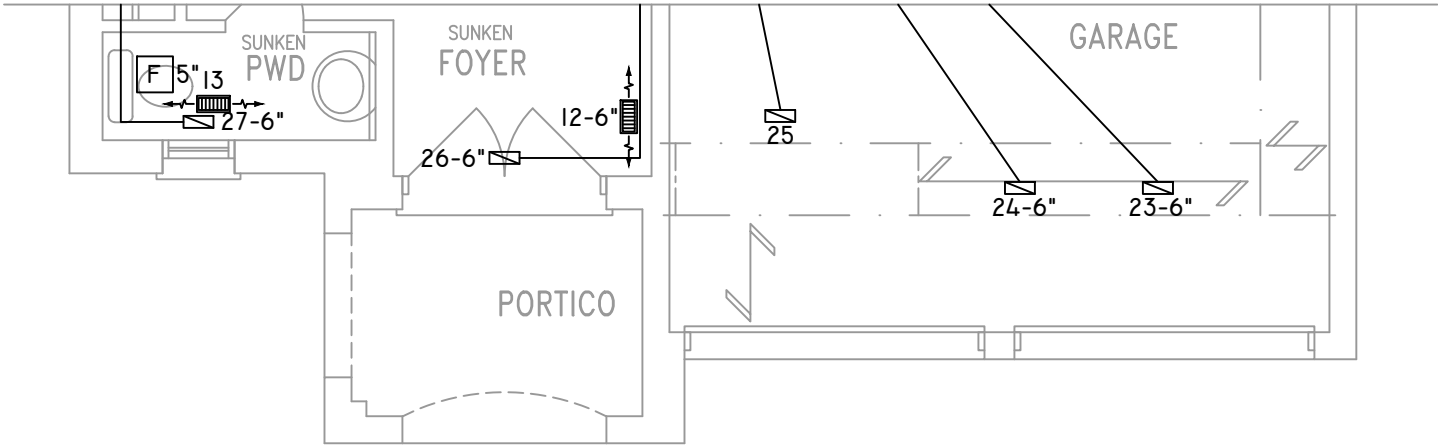
FLOOR PLAN:		
SECOND FLOOR		
DRAWN BY: JL	CHECKED: DD	SQFT 3480
LAYOUT NO. JB-08347	DRAWING NO. M3	

DATE:	JULY 20, 2022
CLIENT:	BAYVIEW WELLINGTON
MODEL:	S42-21
PROJECT:	GREEN VALLEY EAST BRADFORD,ONT.
SCALE:	3/16" = 1'-0"

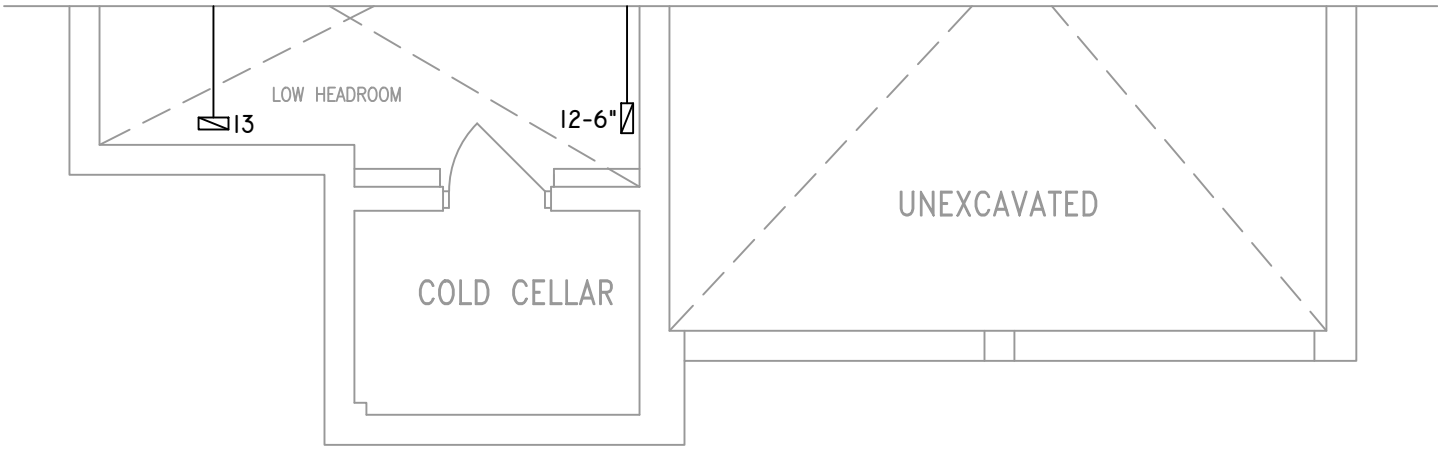
	FLEX DUCT		LOW/HIGH WALL/KICK SUPPLY DIFFUSER		DUCT CONNECTION TO JOIST LINING		RETURN AIR GRILLE (SIZE INDICATED ON DRAWING)	S.A.	SUPPLY AIR
	RIGID ROUND DUCT		HRV EXHAUST GRILLE		RETURN AIR PIPE RISER		RETURN AIR RISER UP TO FLOOR ABOVE	R.A.	RETURN AIR
	SUPPLY DIFFUSER		SUPPLY AIR PIPE RISER		RETURN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



PARTIAL SECOND FLOOR PLAN 'B'



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

REVIEWED OBC 2012

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

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





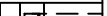







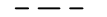





2985 DREW ROAD
SUITE 202,
MISSISSAUGA, ONT.
L4T 0A4 TEL: 905-671-9800
EMAIL: DAVE@GTADESIGNS.CA
WEB: WWW.GTADESIGNS.CA

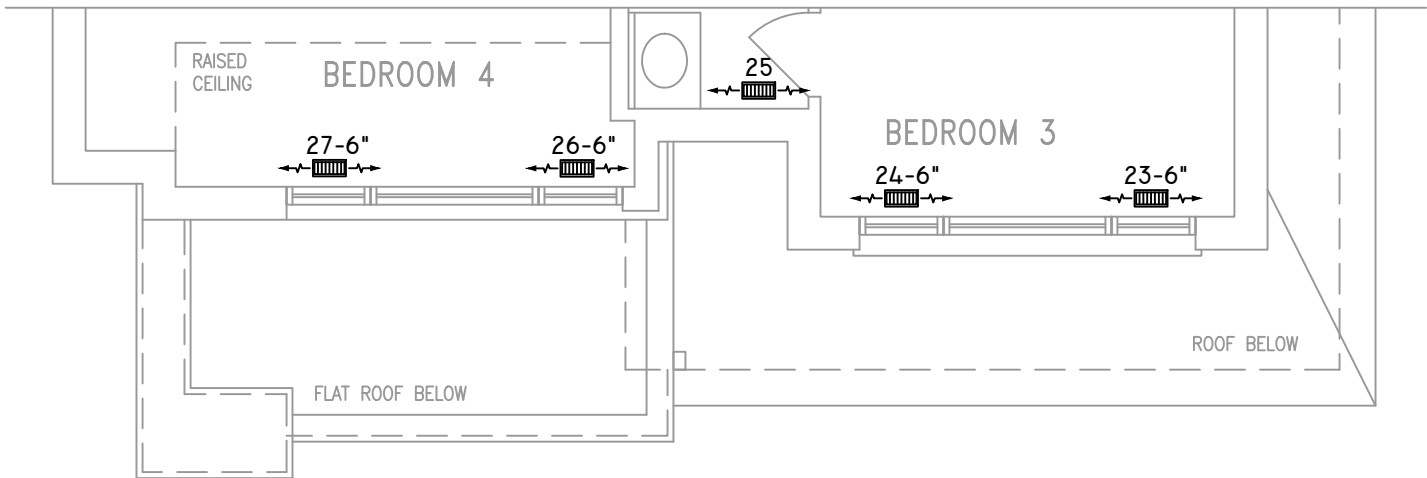
HEAT-LOSS	71,953	BTU/HR.
UNIT MAKE	AMANA	OR EQUAL.
UNIT MODEL	AMEC960804CNA	OR EQUAL.
UNIT HEATING INPUT	80,000	BTU/HR.
UNIT HEATING OUTPUT	76,800	BTU/HR.
A/C COOLING CAPACITY	3.5	TONS.
FAN SPEED	1545	CFM

# OF RUNS	S/A	R/A	FANS
3RD FLOOR			
2ND FLOOR	15	4	5
1ST FLOOR	9	2	2
BASEMENT	6	1	

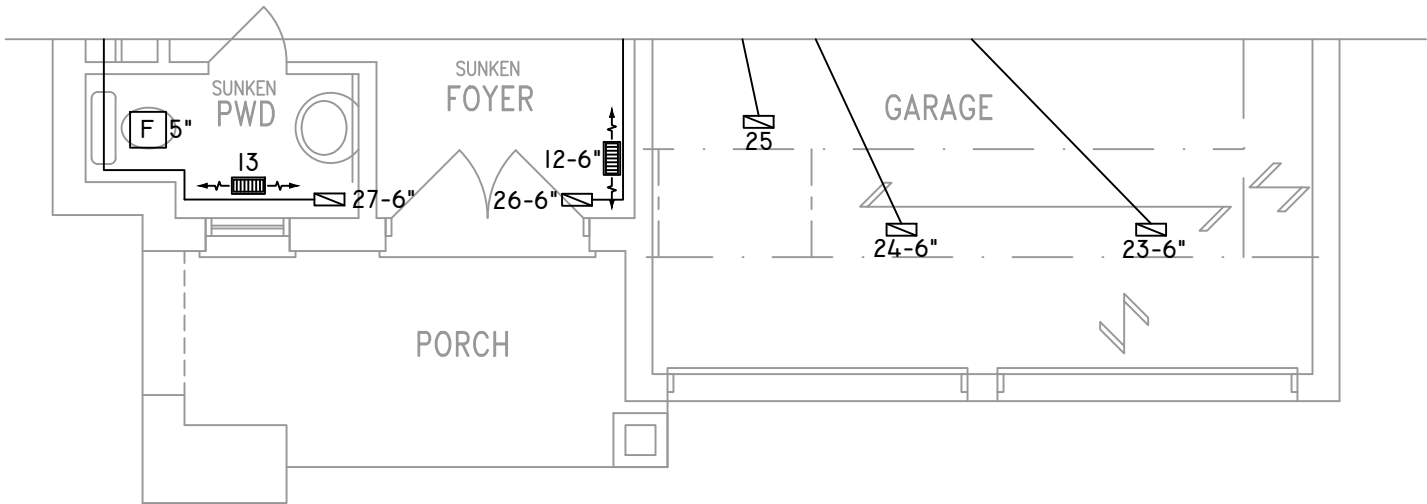
FLOOR PLAN: PARTIAL PLAN(S)	
DRAWN BY: JL	CHECKED: DD
LAYOUT NO. JB-08347	SQFT 3480
DRAWING NO. M4	

DATE:	JULY 20, 2022
CLIENT:	BAYVIEW WELLINGTON
MODEL:	S42-21
PROJECT:	GREEN VALLEY EAST BRADFORD,ONT.
SCALE:	3/16" = 1'-0"

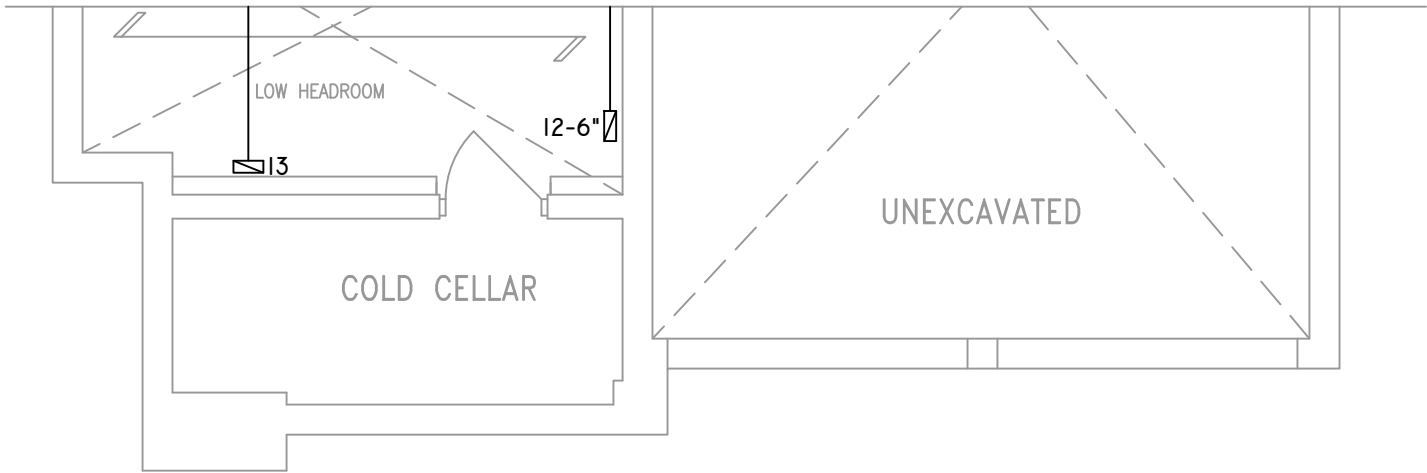
	FLEX DUCT		LOW/HIGH WALL/KICK SUPPLY DIFFUSER		DUCT CONNECTION TO JOIST LINING		RETURN AIR GRILLE (SIZE INDICATED ON DRAWING)	S.A.	SUPPLY AIR
	RIGID ROUND DUCT		HRV EXHAUST GRILLE		RETURN AIR PIPE RISER		RETURN AIR RISER UP TO FLOOR ABOVE	R.A.	RETURN AIR
	SUPPLY DIFFUSER		SUPPLY AIR PIPE RISER		RETURN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



PARTIAL SECOND FLOOR PLAN 'C'



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

REVIEWED OBC 2012

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

NOTES

INSTALLATION TO COMPLY WITH THE LATEST ONTARIO BUILDING CODE.

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

PROVIDE BALANCING DAMPERS ON ALL BRANCHES.

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

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

CONTRACTOR MUST WORK FROM APPROVED PLANS.

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

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





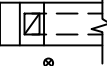







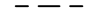





2985 DREW ROAD
SUITE 202,
MISSISSAUGA, ONT.
L4T 0A4 TEL: 905-671-9800
EMAIL: DAVE@GTADESIGNS.CA
WEB: WWW.GTADESIGNS.CA

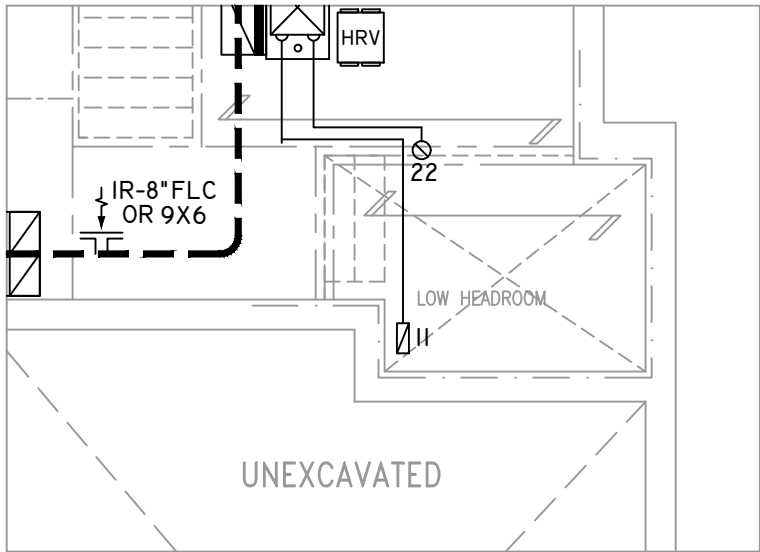
HEAT-LOSS	71,953	BTU/HR.
UNIT MAKE	AMANA	OR EQUAL.
UNIT MODEL	AMEC960804CNA	OR EQUAL.
UNIT HEATING INPUT	80,000	BTU/HR.
UNIT HEATING OUTPUT	76,800	BTU/HR.
A/C COOLING CAPACITY	3.5	TONS.
FAN SPEED	1545	CFM

# OF RUNS	S/A	R/A	FANS
3RD FLOOR			
2ND FLOOR	15	4	5
1ST FLOOR	9	2	2
BASEMENT	6	1	

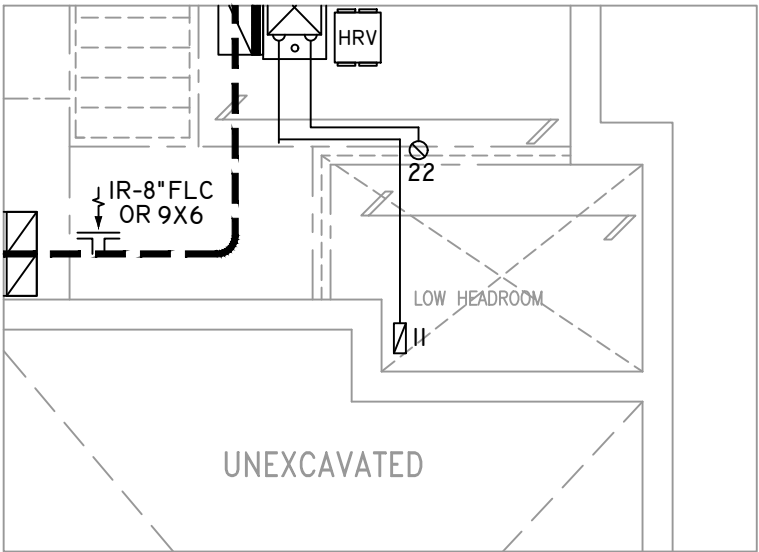
FLOOR PLAN: PARTIAL PLAN(S)	
DRAWN BY: JL	CHECKED: DD
LAYOUT NO. JB-08347	DRAWING NO. M5

DATE:	JULY 20, 2022
CLIENT:	BAYVIEW WELLINGTON
MODEL:	S42-21
PROJECT:	GREEN VALLEY EAST BRADFORD,ONT.
SCALE:	3/16" = 1'-0"

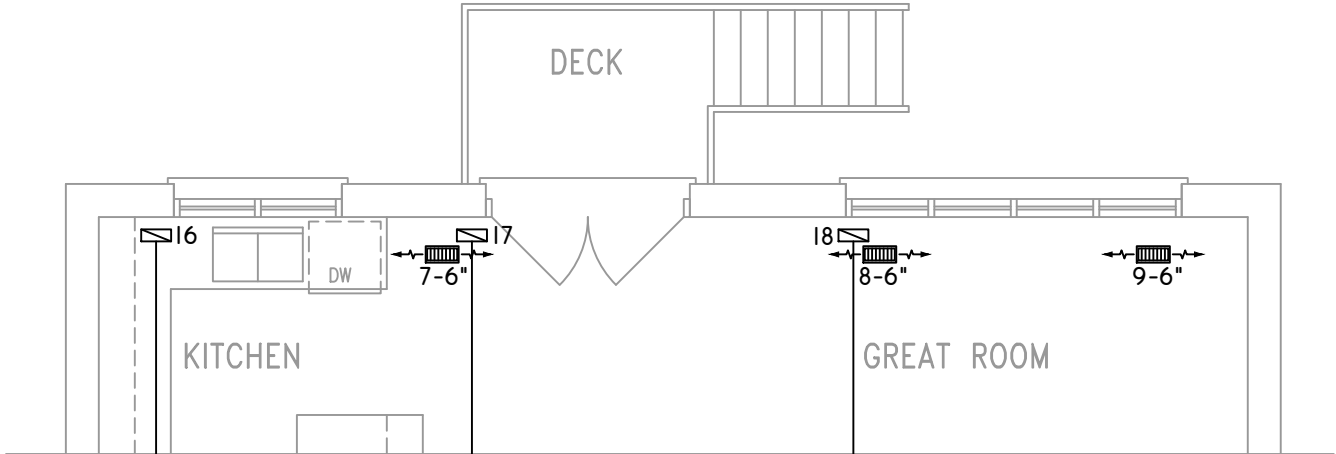
	FLEX DUCT		LOW/HIGH WALL/KICK SUPPLY DIFFUSER		DUCT CONNECTION TO JOIST LINING		RETURN AIR GRILLE (SIZE INDICATED ON DRAWING)	S.A.	SUPPLY AIR
	RIGID ROUND DUCT		HRV EXHAUST GRILLE		RETURN AIR PIPE RISER		RETURN AIR RISER UP TO FLOOR ABOVE	R.A.	RETURN AIR
	SUPPLY DIFFUSER		SUPPLY AIR PIPE RISER		RETURN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



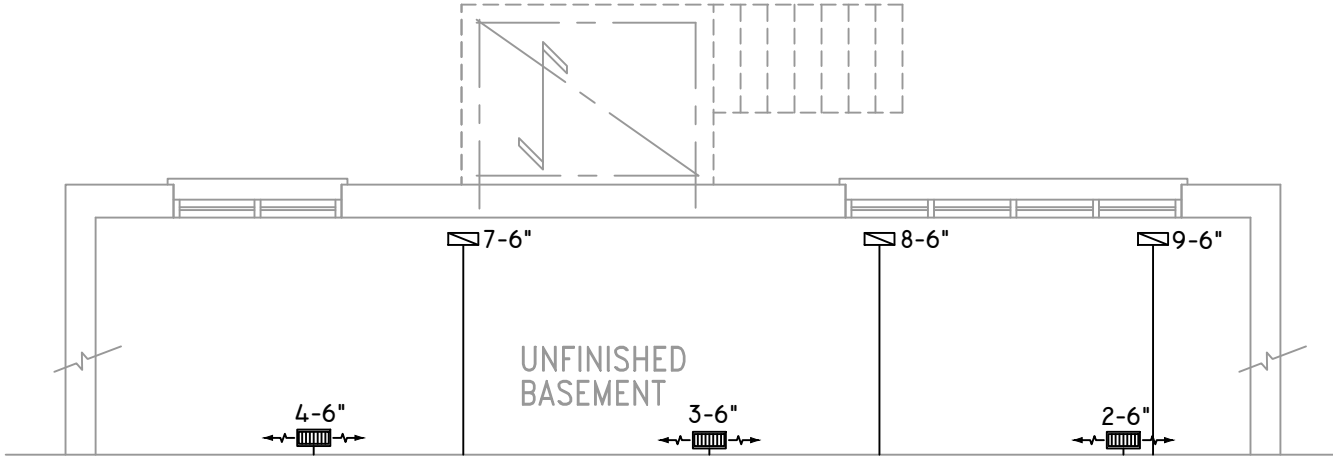
PARTIAL BASEMENT PLAN FOR
SUNKEN MUD ROOM
(-2R TO -3R CONDITION)



PARTIAL BASEMENT PLAN FOR
SUNKEN MUD ROOM
(-1R CONDITION)



PARTIAL GROUND FLOOR PLAN
W/ W.O.D. (9R OR MORE)




PARTIAL BASEMENT PLAN
W/ W.O.D. (9R OR MORE)

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

REVIEWED OBC 2012

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

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



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

HEAT-LOSS	71,953	BTU/HR.
UNIT MAKE	AMANA	OR EQUAL.
UNIT MODEL	AMEC960804CNA	OR EQUAL.
UNIT HEATING INPUT	80,000	BTU/HR.
UNIT HEATING OUTPUT	76,800	BTU/HR.
A/C COOLING CAPACITY	3.5	TONS.
FAN SPEED	1545	CFM

# OF RUNS	S/A	R/A	FANS
3RD FLOOR			
2ND FLOOR	15	4	5
1ST FLOOR	9	2	2
BASEMENT	6	1	

FLOOR PLAN:		
PARTIAL PLAN(S)		
DRAWN BY: JL	CHECKED: DD	SQFT 3480
LAYOUT NO. JB-08347	DRAWING NO. M6	

DATE:	JULY 20, 2022
CLIENT:	BAYVIEW WELLINGTON
MODEL:	S42-21
PROJECT:	GREEN VALLEY EAST BRADFORD,ONT.
SCALE:	3/16" = 1'-0"