

SITE NAME: LECCO RIDGE
BUILDER: GREENPARK HOMES

TYPE: IVY 3

GFA: 1880

DATE: Jan-17
LO# 71714

WINTER NATURAL AIR CHANGE RATE 0.253
SUMMER NATURAL AIR CHANGE RATE 0.085

HEAT LOSS ΔT °F. 72
HEAT GAIN ΔT °F. 14

CSA-F280-12
ENERGYSTAR

ROOM USE	EXP. WALL	CLG. HT.	FACTORS	MBR	ENS	BED-2	BED-3	BATH					
				24	5	11	22	0					
				9	9	9	9	9					
GRS.WALL AREA	LOSS	GAIN		206	43	96	189	0					
GLAZING	LOSS	GAIN				LOSS	LOSS	LOSS					
NORTH	20.4	16.3	0	0	0	0	0	0					
EAST	20.4	41.9	0	0	0	28	530	1090	43	877	1802		
SOUTH	20.4	25.3	0	0	0	0	0	0					
WEST	20.4	41.9	30	612	1267	0	0	0					
SKYLT.	35.7	102.2	0	0	0	0	0	0					
DOORS	24.1	4.7	0	0	0	0	0	0					
NET EXPOSED WALL	3.1	0.6	176	541	105	69	210	41	146	449	87		
NET EXPOSED BSMT WALL ABOVE GR	3.6	0.7	0	0	0	0	0	0					
EXPOSED CLG	1.4	0.7	284	411	204	130	188	94	195	282	140		
NO ATTIC EXPOSED CLG	2.3	1.2	0	0	0	0	0	0					
EXPOSED FLOOR	2.3	0.5	68	159	31	130	304	59	12	28	5		
BASEMENT/CRAWL HEAT LOSS			0		0	0		0					
SLAB ON GRADE HEAT LOSS			0		0	0		0					
SUBTOTAL HT LOSS				1723	583	1233		1636		264			
SUB TOTAL HT GAIN				1597	708	1283		2035		131			
LEVEL FACTOR / MULTIPLIER	0.20	0.28		0.20	0.28	0.20	0.28	0.20	0.28				
AIR CHANGE HEAT LOSS				490	166	360		465		75			
AIR CHANGE HEAT GAIN				149	66	120		190		12			
DUCT LOSS				221	0	168		210		0			
DUCT GAIN				267	0	209		291		0			
HEAT GAIN PEOPLE	240		2	480	0	1	240	1	240	0			
HEAT GAIN APPLIANCES/LIGHTS				447	0		447		447	0			
TOTAL HT LOSS BTU/H				2434	749	1741		2311		338			
TOTAL HT GAIN x 1.3 BTU/H				3823	1006	2988		4164		186			

TOWN OF MILTON
PLANNING AND DEVELOPMENT
IVY 3 MODEL

BUILDING: REVIEWED
SCOTT SHERRIFFS APR 7, 2017
PLANS EXAMINER DATE

Neither the issuance of a permit nor carrying out of inspections by the Town of Milton relieves the owner from full responsibility for compliance with the provisions of the Ontario Building Code Act and the Ontario Building Code, both as amended, as well as other applicable statutes and regulations of the Province of Ontario, By-laws of the Region of Halton and Town of Milton

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ROOM USE	EXP. WALL	CLG. HT.	FACTORS	LVDN	KT/FM	LAUN	FOY	MUD						WOD	BAS
				26	56	0	13	10						26	104
				10	10	9	10	11						9	9
GRS.WALL AREA	LOSS	GAIN		250	538	0	125	110						224	842
GLAZING	LOSS	GAIN			LOSS	LOSS	LOSS	LOSS						LOSS	LOSS
NORTH	20.4	16.3	0	0	0	0	0	0						12	245
EAST	20.4	41.9	28	571	1174	0	0	0						0	0
SOUTH	20.4	25.3	0	0	0	0	0	0						0	0
WEST	20.4	41.9	0	0	0	47	959	1970						0	0
SKYLT.	35.7	102.2	0	0	0	0	0	0						0	0
DOORS	24.1	4.7	0	0	0	20	481	93						0	0
NET EXPOSED WALL	3.1	0.6	222	680	131	471	1444	279						0	0
NET EXPOSED BSMT WALL ABOVE GR	3.6	0.7	0	0	0	0	0	0						0	0
EXPOSED CLG	1.4	0.7	0	0	0	120	174	86						144	621
NO ATTIC EXPOSED CLG	2.3	1.2	0	0	0	0	0	0						0	0
EXPOSED FLOOR	2.3	0.5	0	0	0	0	0	0						0	0
BASEMENT/CRAWL HEAT LOSS			0		0	0		0						0	0
SLAB ON GRADE HEAT LOSS			0		0	0		0						0	0
SUBTOTAL HT LOSS				1251	3057	226	907	757						766	3602
SUB TOTAL HT GAIN				1305	2429	78	175	146						297	129
LEVEL FACTOR / MULTIPLIER	0.30	0.40		0.30	0.40	0.20	0.28	0.30	0.40					0.50	0.92
AIR CHANGE HEAT LOSS				506	1236	64	367	306							4024
AIR CHANGE HEAT GAIN				122	226	7	16	14							40
DUCT LOSS				0	0	29	0	0							0
DUCT GAIN				0	0	53	0	0							0
HEAT GAIN PEOPLE	240		0	0	1	240	0	0						0	0
HEAT GAIN APPLIANCES/LIGHTS				447	447	447	0	447						0	447
TOTAL HT LOSS BTU/H				1757	4293	319	1274	1063						766	7625
TOTAL HT GAIN x 1.3 BTU/H				2436	4345	761	249	789						386	801

TOTAL HEAT GAIN BTU/H: 22377

TONS: 1.86

LOSS DUE TO VENTILATION LOAD BTU/H: 2286

STRUCTURAL HEAT LOSS: 24671

TOTAL COMBINED HEAT LOSS BTU/H: 26958

SITE NAME: LECCO RIDGE
BUILDER: GREENPARK HOMES

TYPE: IVY 3

DATE: Jan-17

GFA: 1880 LO# 71714

HEATING CFM 895 COOLING CFM 895
TOTAL HEAT LOSS 24,671 TOTAL HEAT GAIN 21,935
AIR FLOW RATE CFM 36.28 AIR FLOW RATE CFM 40.8

furnace pressure 0.6
furnace filter 0.05
a/c coil pressure 0.2
available pressure for s/a & r/a 0.35

#AMANA 30
AMEC960302BNA
FAN SPEED LOW
MEDLOW
MEDIUM
MEDIUM HIGH 557
HIGH 895

AFUE = 96 %
INPUT (BTU/H) = 30,000
OUTPUT (BTU/H) = 28,800

DESIGN CFM = 895
CFM @ .6" E.S.P.

TEMPERATURE RISE 30 °F

RUN COUNT	4th	3rd	2nd	1st	Bas
S/A	0	0	9	5	4
R/A	0	0	3	2	1

All S/A diffusers 4"x10" unless noted otherwise on layout.

All S/A runs 5'Ø unless noted otherwise on layout.

plenum pressure s/a 0.18
max s/a dif press. loss 0.02
min adjusted pressure s/a 0.16
r/a pressure 0.17
r/a grille press. Loss 0.02
adjusted pressure r/a 0.15

RUN #	1	2	3	4	5	6	7	10	12	14	15	17	19	20	21	22	23	24
ROOM NAME	MBR	ENS	BED-2	BED-2	BED-3	BED-3	BATH	MBR	LV/DN	KT/FM	KT/FM	LAUN	FOY	MUD	BAS	BAS	BAS	BAS
RM LOSS MBH.	1.22	0.75	0.87	0.87	1.16	1.16	0.34	1.22	1.76	2.15	2.15	0.32	1.27	1.06	2.10	2.10	2.10	2.10
CFM PER RUN HEAT	44	27	32	32	42	42	12	44	64	78	78	12	46	39	76	76	76	76
RM GAIN MBH.	1.91	1.01	1.49	1.49	2.08	2.08	0.19	1.91	2.44	2.17	2.17	0.76	0.25	0.79	0.30	0.30	0.30	0.30
CFM PER RUN COOLING	78	41	61	61	85	85	8	78	99	89	89	31	10	32	12	12	12	12
ADJUSTED PRESSURE	0.17	0.17	0.17	0.17	0.16	0.16	0.17	0.17	0.16	0.16	0.16	0.17	0.17	0.17	0.17	0.17	0.17	0.17
ACTUAL DUCT LGH.	44	49	44	48	62	50	54	39	45	24	20	50	36	6	22	23	27	41
EQUIVALENT LENGTH	130	120	125	135	130	160	170	200	100	90	130	145	90	100	120	110	130	110
TOTAL EFFECTIVE LENGTH	174	169	169	183	192	210	224	239	145	114	150	195	126	106	142	133	157	151
ADJUSTED PRESSURE	0.1	0.1	0.1	0.09	0.08	0.08	0.08	0.07	0.11	0.14	0.11	0.09	0.14	0.16	0.12	0.13	0.11	0.11
ROUND DUCT SIZE	5	4	5	5	6	6	4	6	5	5	5	4	4	4	5	5	5	5
HEATING VELOCITY (ft/min)	323	310	235	235	214	214	138	224	470	573	573	138	528	447	558	558	558	558
COOLING VELOCITY (ft/min)	573	470	448	448	433	433	92	398	727	653	653	356	115	367	88	88	88	88
OUTLET GRILL SIZE	3X10	3X10	3X10	3X10	4X10	4X10	3X10	4X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10
TRUNK	D	A	C	C	B	B	B	A	B	A	A	C	C	D	A	A	B	B

RUN #
ROOM NAME
RM LOSS MBH.
CFM PER RUN HEAT
RM GAIN MBH.
CFM PER RUN COOLING
ADJUSTED PRESSURE
ACTUAL DUCT LGH.
EQUIVALENT LENGTH
TOTAL EFFECTIVE LENGTH
ADJUSTED PRESSURE
ROUND DUCT SIZE
HEATING VELOCITY (ft/min)
COOLING VELOCITY (ft/min)
OUTLET GRILL SIZE
TRUNK

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SUPPLY AIR TRUNK SIZE															RETURN AIR TRUNK SIZE									
	TRUNK CFM	STATIC PRESS.	ROUND DUCT	RECT DUCT			VELOCITY (ft/min)		TRUNK CFM	STATIC PRESS.	ROUND DUCT	RECT DUCT		VELOCITY (ft/min)		TRUNK CFM	STATIC PRESS.	ROUND DUCT	RECT DUCT		VELOCITY (ft/min)			
TRUNK A	379	0.07	10.1	12	x	8	569		TRUNK G	0	0.00	0	0	x	8	0	TRUNK O	0	0.06	0	0	x	8	0
TRUNK B	312	0.08	9.1	10	x	8	562		TRUNK H	0	0.00	0	0	x	8	0	TRUNK P	0	0.06	0	0	x	8	0
TRUNK C	122	0.09	6.2	4	x	8	549		TRUNK I	0	0.00	0	0	x	8	0	TRUNK Q	0	0.06	0	0	x	8	0
TRUNK D	517	0.08	11	14	x	8	665		TRUNK J	0	0.00	0	0	x	8	0	TRUNK R	0	0.06	0	0	x	8	0
TRUNK E	0	0.00	0	0	x	8	0		TRUNK K	0	0.00	0	0	x	8	0	TRUNK S	0	0.06	0	0	x	8	0
TRUNK F	0	0.00	0	0	x	8	0		TRUNK L	0	0.00	0	0	x	8	0	TRUNK T	0	0.06	0	0	x	8	0
																	TRUNK U	0	0.06	0	0	x	8	0
																	TRUNK V	0	0.06	0	0	x	8	0
																	TRUNK W	0	0.06	0	0	x	8	0
																	TRUNK X	895	0.06	14.5	24	x	8	671
																	TRUNK Y	210	0.06	8.4	8	x	8	473
																	TRUNK Z	0	0.06	0	0	x	8	0
																	DROP	895	0.06	14.5	24	x	10	537

RETURN AIR #	1	2	3	4	5										BR
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
AIR VOLUME	130	130	130	210	145	0	0	0	0	0	0	0	0	0	150
PLENUM PRESSURE	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
ACTUAL DUCT LGH.	46	51	53	34	33	1	1	1	1	1	1	1	1	1	18
EQUIVALENT LENGTH	185	185	185	120	185	0	0	0	0	0	0	0	0	0	165
TOTAL EFFECTIVE LH	231	236	238	154	218	1	1	1	1	1	1	1	1	1	183
ADJUSTED PRESSURE	0.06	0.06	0.06	0.10	0.07	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	0.08
ROUND DUCT SIZE	7	7	7	7.4	7	0	0	0	0	0	0	0	0	0	6.9
INLET GRILL SIZE	8	8	8	8	8	0	0	0	0	0	0	0	0	0	8
	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
INI FT GRILL SIZE	14	14	14	14	14	0	0	0	0	0	0	0	0	0	14

TYPE: IVY 3
SITE NAME: LECCO RIDGE

LO # 71714

RESIDENTIAL MECHANICAL VENTILATION DESIGN SUMMARY

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 gas fireplace	
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

HOUSE TYPE		9.32.1(2)
<input checked="" type="checkbox"/>	I Type a) or b) appliance only, no solid fuel	
<input type="checkbox"/>	II Type I except with solid fuel (including fireplaces)	
<input type="checkbox"/>	III Any Type c) appliance	
<input type="checkbox"/>	IV Type I, or II with electric space heat	
<input type="checkbox"/>	Other: Type I, II or IV no forced air	

SYSTEM DESIGN OPTIONS		O.N.H.W.P.
<input type="checkbox"/>	1 Exhaust only/Forced Air System	
<input type="checkbox"/>	2 HRV with Ducting/Forced Air System	
<input checked="" type="checkbox"/>	3 HRV Simplified/connected to forced air system	
<input type="checkbox"/>	4 HRV with Ducting/non forced air system	
<input type="checkbox"/>	Part 6 Design	

TOTAL VENTILATION CAPACITY					9.32.3.3(1)
Basement + Master Bedroom	2	@ 21.2 cfm	42.4	cfm	
Other Bedrooms	2	@ 10.6 cfm	21.2	cfm	
Kitchen & Bathrooms	4	@ 10.6 cfm	42.4	cfm	
Other Rooms	6	@ 10.6 cfm	63.6	cfm	
Table 9.32.3.A.	TOTAL			169.6	cfm

PRINCIPAL VENTILATION CAPACITY REQUIRED				9.32.3.4.(1)
1	Bedroom	31.8	cfm	
2	Bedroom	47.7	cfm	
3	Bedroom	63.6	cfm	
4	Bedroom	79.5	cfm	
5	Bedroom	95.4	cfm	
More than 5 - Part 6		TOTAL	63.6	cfm

SUPPLEMENTAL VENTILATION CAPACITY			9.32.3.5.
Total Ventilation Capacity	169.6	cfm	
Less Principal Ventil. Capacity	86	cfm	
Required Supplemental Capacity	83.6	cfm	

PRINCIPAL EXHAUST FAN CAPACITY			
Model:	VANEE 40H+	Location:	BSMT
86.0	cfm	3.0	sones
			<input checked="" type="checkbox"/> HVI Approved

PRINCIPAL EXHAUST HEAT LOSS CALCULATION				
CFM	ΔT °F	FACTOR	% LOSS	
86.0 CFM	X 72 F	X 1.08	X	0.34

SUPPLEMENTAL FANS		NUTONE		
Location	Model	cfm	HVI	Sones
ENS	QTXEN050C	50	<input checked="" type="checkbox"/>	0.3
BATH	QTXEN050C	50	<input checked="" type="checkbox"/>	0.3

HEAT RECOVERY VENTILATOR				9.32.3.11.
Model:	VANEE 40H+			
86	cfm high	37	cfm low	
66	% Sensible Efficiency			<input checked="" type="checkbox"/> HVI Approved
@ 32 deg F (0 deg C)				

LOCATION OF INSTALLATION	
Lot:	C
Township	P
Address	
Roll #	

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IVY 3
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BUILDER:		TOWN OF MILTON PLANNING AND DEVELOPMENT IVY 3 MODEL	
Name:	G	BUILDING: REVIEWED	DATE
Address:		SCOTT SHERRIFFS	APR 7, 2017
City:		PLANS EXAMINER	
Telephone #:		Neither the issuance of a permit nor carrying out of inspections by the Town of Milton relieves the owner from full responsibility for compliance with the provisions of the Ontario Building Code Act and the Ontario Building Code, both as amended, as well as other applicable statutes and regulations of the Province of Ontario, By-laws of the Region of Halton and Town of Milton	

INSTALLING CONTRACTOR	
Name:	
Address:	
City:	
Telephone #:	Fax #:

DESIGNER CERTIFICATION	
I hereby certify that this ventilation system has been designed in accordance with the Ontario Building Code.	
Name:	HVAC Designs Ltd.
Signature:	<i>Michael O'Rourke</i>
HRAI #	001820
Date:	January-17

HEAT LOSS AND GAIN SUMMARY SHEET

MODEL: IVY 3	BUILDER: GREENPARK HOMES
SFQT: 1880	SITE: LECCO RIDGE
LO# 71714	

DESIGN ASSUMPTIONS

HEATING	°F	COOLING	°F
OUTDOOR DESIGN TEMP.	0	OUTDOOR DESIGN TEMP.	86
INDOOR DESIGN TEMP.	72	INDOOR DESIGN TEMP. (MAX 75°F)	72

BUILDING DATA

ATTACHMENT:	ATTACHED	# OF STORIES (+BASEMENT):	3
FRONT FACES:	EAST	ASSUMED (Y/N):	Y
AIR CHANGES PER HOUR:	3	ASSUMED (Y/N):	Y
AIR TIGHTNESS CATEGORY:	TIGHT	ASSUMED (Y/N):	Y
WIND EXPOSURE:	SHELTERED	ASSUMED (Y/N):	Y
HOUSE VOLUME (ft³):	24539.2	ASSUMED (Y/N):	Y
INTERNAL SHADING:	BLINDS/CURTAINS	ASSUMED OCCUPANTS:	4
INTERIOR LIGHTING LOAD (Btu/h/ft²):	1.30	DC BRUSHLESS MOTOR (Y/N):	Y
FOUNDATION CONFIGURATION	BCIN_1	DEPTH BELOW GRADE:	6.6 ft
LENGTH: 51.0 ft	WIDTH: 21.0 ft	EXPOSED PERIMETER:	104.0 ft

2012 OBC - COMPLIANCE PACKAGE		Compliance Package	
Component		ENERGYSTAR	
		Nominal	
Ceiling with Attic Space Minimum RSI (R)-Value		50	
Ceiling Without Attic Space Minimum RSI (R)-Value		31	
Exposed Floor Minimum RSI (R)-Value		31	
Walls Above Grade Minimum RSI (R)-Value		20+3.6	
Basement Walls Minimum RSI (R)-Value		20	
Below Grade Slab Entire surface > 600 mm below grade Minimum RSI (R)-Value		-	
Edge of Below Grade Slab ≤ 600 mm Below Grade Minimum RSI (R)-Value		10	
Heated Slab or Slab ≤ 600 mm below grade Minimum RSI (R)-Value		10	
Windows and Sliding Glass Doors Maximum U-Value		ZONE 2	
Skylights Maximum U-Value		ZONE 2	
Space Heating Equipment Minimum AFUE		0.95	
HRV Minimum Efficiency		65%	
Domestic Hot Water Heater Minimum EF		90% TE	

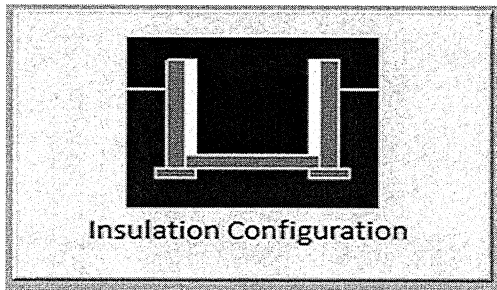
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BUILDING DIVISION

INDIVIDUAL BCIN: 19669
MICHAEL O'ROURKE

Michael O'Rourke

Residential Foundation Thermal Load Calculator

Supplemental tool for CAN/CSA-F280

Weather Station Description		
Province:	Ontario	
Region:	Milton	
Site Description		
Soil Conductivity:	Normal conductivity: dry sand, loam, clay	
Water Table:	Normal (7-10 m, 23-33 ft)	
Foundation Dimensions		
Floor Length (m):	15.5	 Insulation Configuration
Floor Width (m):	6.4	
Exposed Perimeter (m):	31.7	
Wall Height (m):	2.6	
Depth Below Grade (m):	2.01	
Window Area (m ²):	1.1	
Door Area (m ²):	1.9	
Radiant Slab		
Heated Fraction of the Slab:	0	
Fluid Temperature (°C):	33	
Design Months		
Heating Month	1	
Foundation Loads		
Heating Load (Watts):		859

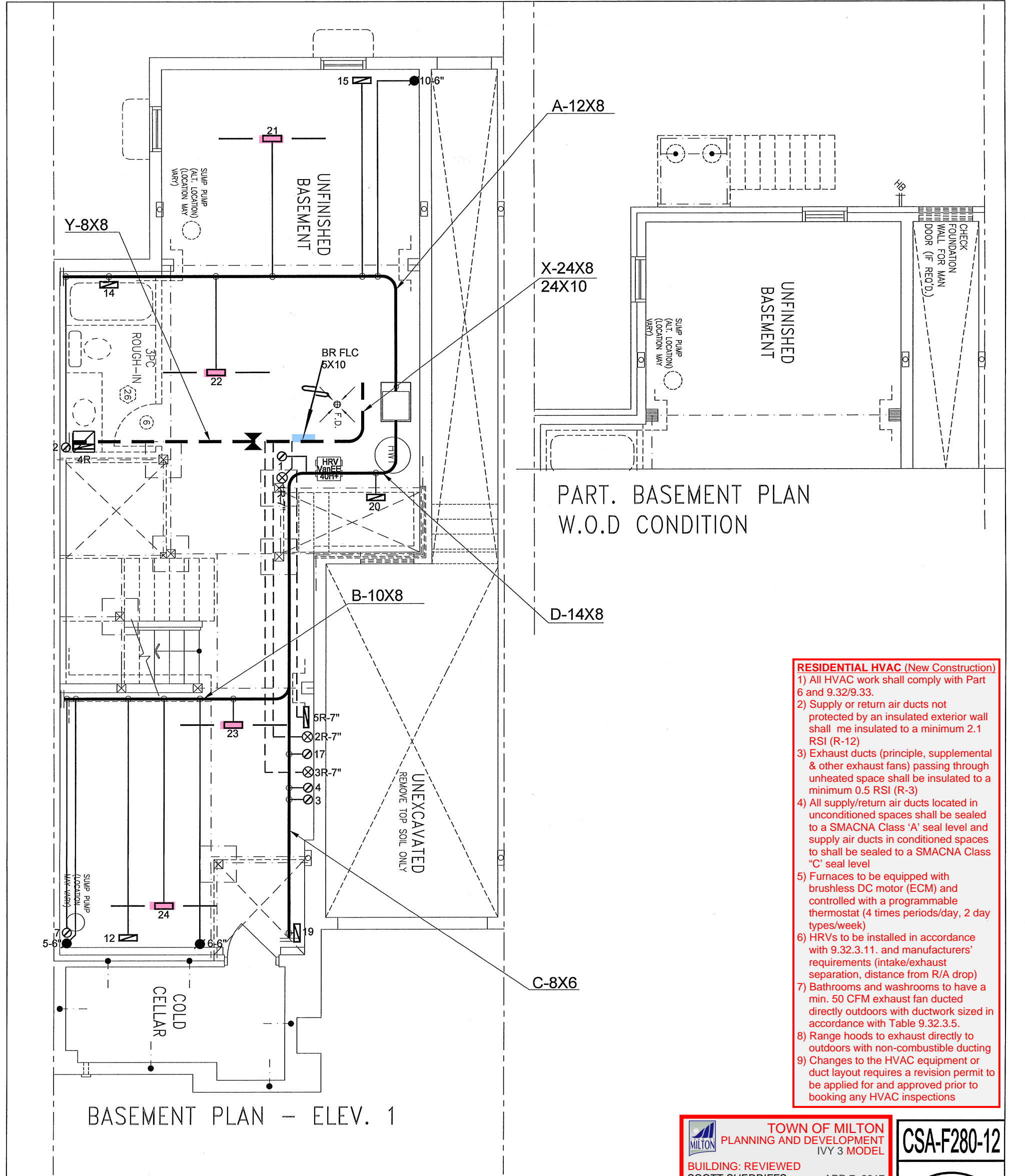
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Air Infiltration Residential Load Calculator

Supplemental tool for CAN/CSA-F280

Weather Station Description				
Province:	Ontario			
Region:	Milton			
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):	6.16			
Building Configuration				
Type:	Semi			
Number of Stories:	Two			
Foundation:	Full			
House Volume (m ³):	694.9			
Air Leakage/Ventilation				
Air Tightness Type:	Energy Star Attached (3.0 ACH)			
Custom BDT Data:	ELA @ 10 Pa.	778.4 cm ²		
	3.00	ACH @ 50 Pa		
Mechanical Ventilation (L/s):	Total Supply	Total Exhaust		
	40.6	40.6		
Flue Size				
Flue #:	#1	#2	#3	#4
Diameter (mm):	0	0	0	0
Natural Infiltration Rates				
Heating Air Leakage Rate (ACH/H):	0.253			
Cooling Air Leakage Rate (ACH/H):	0.085			

TYPE: IVY 3
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- RESIDENTIAL HVAC (New Construction)**
- 1) All HVAC work shall comply with Part 6 and 9.32/9.33.
 - 2) Supply or return air ducts not protected by an insulated exterior wall shall be insulated to a minimum 2.1 RSI (R-12)
 - 3) Exhaust ducts (principle, supplemental & other exhaust fans) passing through unheated space shall be insulated to a minimum 0.5 RSI (R-3)
 - 4) All supply/return air ducts located in unconditioned spaces shall be sealed to a SMACNA Class 'A' seal level and supply air ducts in conditioned spaces to shall be sealed to a SMACNA Class "C" seal level
 - 5) Furnaces to be equipped with brushless DC motor (ECM) and controlled with a programmable thermostat (4 times periods/day, 2 day types/week)
 - 6) HRVs to be installed in accordance with 9.32.3.11. and manufacturers' requirements (intake/exhaust separation, distance from R/A drop)
 - 7) Bathrooms and washrooms to have a min. 50 CFM exhaust fan ducted directly outdoors with ductwork sized in accordance with Table 9.32.3.5.
 - 8) Range hoods to exhaust directly to outdoors with non-combustible ducting
 - 9) Changes to the HVAC equipment or duct layout requires a revision permit to be applied for and approved prior to booking any HVAC inspections

I MICHAEL O'ROURKE HAVE REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK AND AM QUALIFIED UNDER DIVISION C, 3.2.5 OF THE BUILDING CODE.

Michael O'Rourke
Michael O'Rourke, BCIN# 19669
HVAC DESIGNS LTD.

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TOWN OF MILTON
PLANNING AND DEVELOPMENT
IVY 3 MODEL

BUILDING: REVIEWED
SCOTT SHERRIFFS
PLANS EXAMINER
APR 7, 2017
DATE

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CSA-F280-12

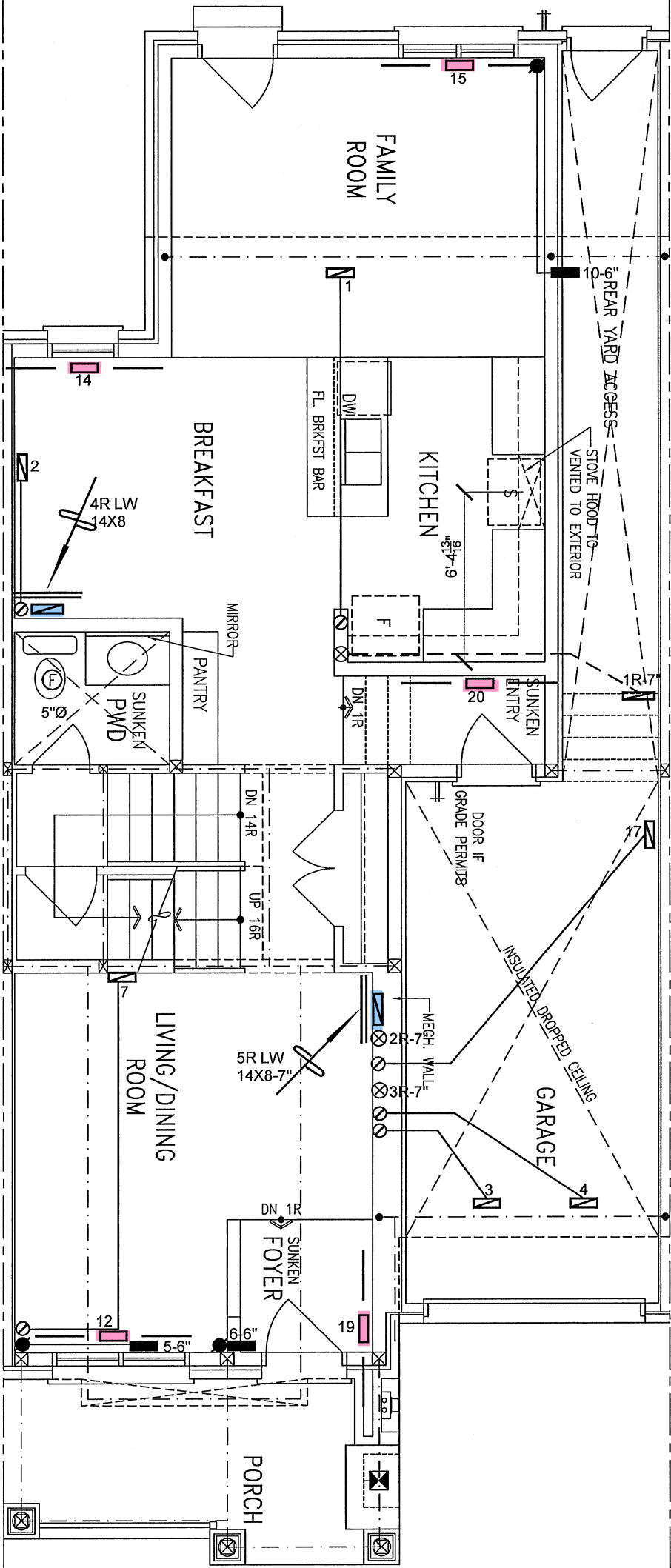


ENERGY STAR

HVAC LEGEND							3.	
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	2.
	FLOOR SUPPLY AIR GRILLE		6" SUPPLY AIR BOOT ABOVE		14"x8" RETURN AIR GRILLE		RETURN AIR STACK ABOVE	1.
	FLOOR SUPPLY AIR GRILLE 6" BOOT		SUPPLY AIR STACK FROM 2nd FLOOR		30"x8" RETURN AIR GRILLE		RETURN AIR STACK 2nd FLOOR	No.
	SUPPLY AIR BOOT ABOVE		6" SUPPLY AIR STACK 2nd FLOOR		FRA- FLOOR RETURN AIR GRILLE		REDUCER	
							REVISIONS	
							Description	Date

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Client		<div><div>HVACDESIGNS LTD.</div><div>375 Finley Ave. Suite 202 - Ajax, Ontario L1S 2E2 Tel. 905.619.2300 - 905.420.5300 Fax 905.619.2375 Email: info@hvacdesigns.ca Web: www.hvacdesigns.ca Specializing in Residential Mechanical Design Services</div><div>Installation to comply with the latest Ontario Building Code. All supply branch outlets shall be equipped with a manual balancing damper. Ductwork which passes through the garage or unheated spaces shall be adequately insulated and be gas-proofed.</div></div>	HEAT LOSS 26958 BTU/H UNIT DATA		# OF RUNS S/A R/A FANS			Sheet Title		
GREENPARK HOMES			MAKE AMANA	3RD FLOOR				BASEMENT HEATING LAYOUT		
Project Name LECCO RIDGE MILTON, ONTARIO			MODEL AMEC960302BNA-30	2ND FLOOR		9	3	3	Date JAN/2017	
IVY 3			INPUT 30 MBTU/H	1ST FLOOR		5	2	2		
1880 sqft			OUTPUT 28.8 MBTU/H	BASEMENT		4	1	0		Scale 3/16" = 1'-0"
			COOLING 2.0 TONS	ALL S/A DIFFUSERS 4"x10" UNLESS NOTED OTHERWISE ON LAYOUT. ALL S/A RUNS 5"Ø UNLESS NOTED OTHERWISE ON LAYOUT. UNDERCUT DOORS 1" min. FOR R/A						BCIN# 19669
			FAN SPEED 895 cfm @ 0.6" w.c.							LO# 71714



GROUND FLOOR PLAN

I MICHAEL O'ROURKE HAVE REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK AND AM QUALIFIED UNDER DIVISION C, 3.2.5 OF THE BUILDING CODE.

Michael O'Rourke
Michael O'Rourke, BCIN# 19669
HVAC DESIGNS LTD.

RECEIVED
TOWN OF MILTON
MAR 29, 2017
IVY 3
BUILDING DIVISION



TOWN OF MILTON
PLANNING AND DEVELOPMENT
IVY 3 MODEL

BUILDING: REVIEWED
SCOTT SHERRIFFS
PLANS EXAMINER

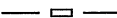











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CSA-F280-12

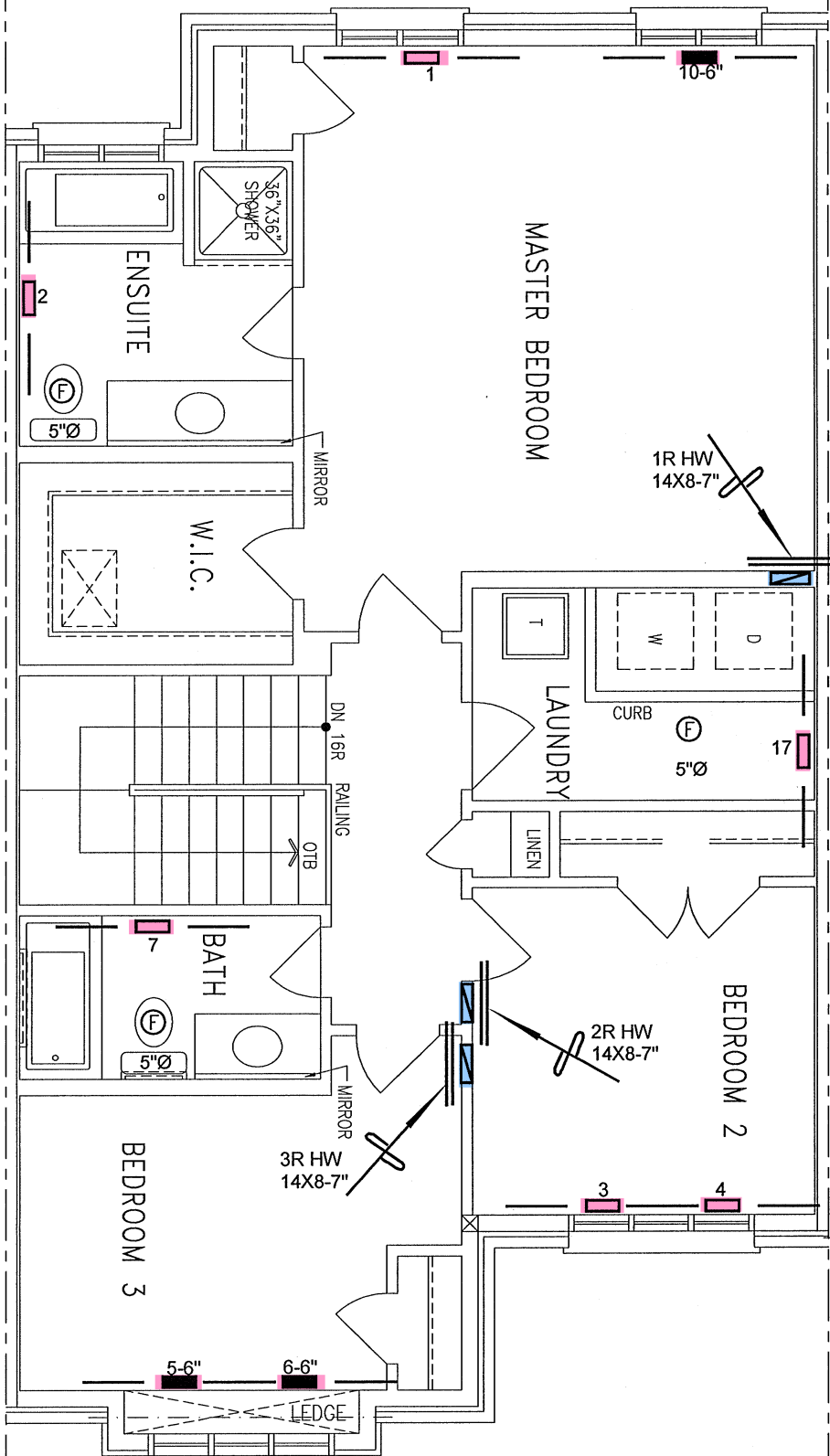


ENERGY STAR

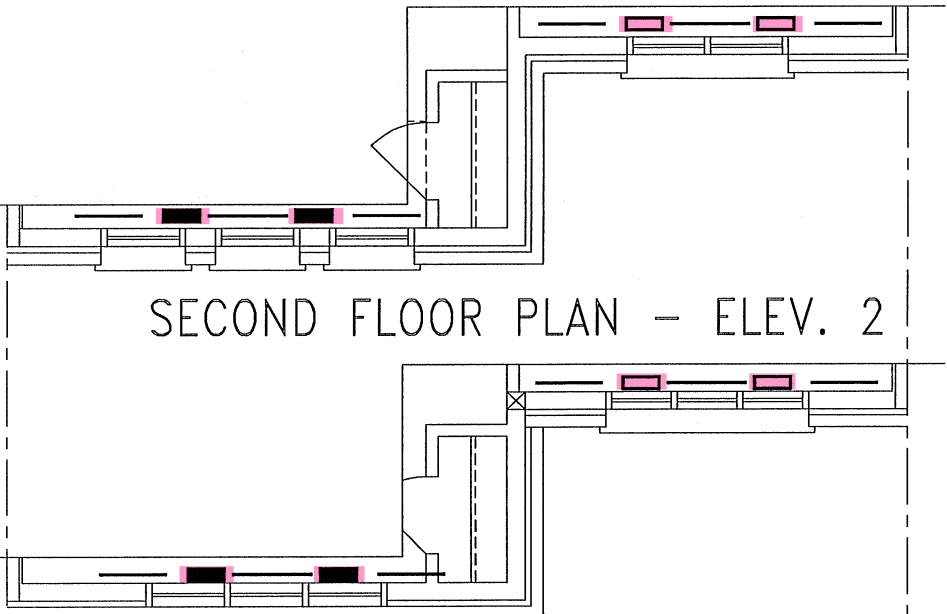
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Client		<div></div> <div>375 Finley Ave. Suite 202 - Ajax, Ontario L1S 2E2 Tel. 905.619.2300 - 905.420.5300 Fax 905.619.2375 Email: info@hvacdesigns.ca Web: www.hvacdesigns.ca Specializing in Residential Mechanical Design Services</div> <div>Installation to comply with the latest Ontario Building Code. All supply branch outlets shall be equipped with a manual balancing damper. Ductwork which passes through the garage or unheated spaces shall be adequately insulated and be gas-proofed.</div>	Sheet Title	
GREENPARK HOMES			FIRST FLOOR HEATING LAYOUT	
Project Name			Date	JAN/2017
LECCO RIDGE MILTON, ONTARIO			Scale	3/16" = 1'-0"
			BCIN# 19669	
IVY 3	1880 sqft	LO#	71714	



SECOND FLOOR PLAN – ELEV. 1



SECOND FLOOR PLAN – ELEV. 2

SECOND FLOOR PLAN – ELEV. 3

TOWN OF MILTON
PLANNING AND DEVELOPMENT
IVY 3 MODEL

BUILDING: REVIEWED
SCOTT SHERRIFFS

DATE
APR 7, 2017

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RECEIVED
TOWN OF MILTON

MAR 29, 2017

IVY 3
BUILDING DIVISION

CSA-F280-12

ENERGY STAR

I MICHAEL O'ROURKE HAVE REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK AND AM QUALIFIED UNDER DIVISION C, 3.2.5 OF THE BUILDING CODE.

Michael O'Rourke
Michael O'Rourke, BCIN# 19669
HVAC DESIGNS LTD.

HVAC LEGEND								3.		
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Client

GREENPARK HOMES

Project Name

LECCO RIDGE
MILTON, ONTARIO

IVY 3

1880 sqft

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L1S 2E2 Tel. 905.619.2300 - 905.420.5300 Fax 905.619.2375
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Specializing in Residential Mechanical Design Services
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Sheet Title

SECOND FLOOR
HEATING
LAYOUT

Date

JAN/2017

Scale

3/16" = 1'-0"

BCIN# 19669

LO#

71714