	TOWN OF MILTON	
	PLANNING AND DEVELOPMENT	
	JUNIPER 8 MODEL	
BUILDING : REVIEWED		
SCOTT SHERRIFFS	APR 11, 2017	
PLANS EXAMINER	DATE	
<p>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</p>		
	<div>RECEIVED TOWN OF MILTON MAR 29, 2017 JUNIPER 8 BUILDING DIVISION</div>	

TOTAL HEAT GAIN BTU/H:	40934	TONS: 3.41	LOSS DUE TO VENTILATION LOAD BTU/H: 2552	STRUCTURAL HEAT LOSS: 48182	TOTAL COMBINED HEAT LOSS BTU/H: 50734
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SITE NAME: LECCO RIDGE
BUILDER: GREENPARK HOMES

WUP
TYPE: JUNIPER 8

DATE: Feb-17

GFA: 3320 LO# 72386

HEATING CFM 1316 COOLING CFM 1316
TOTAL HEAT LOSS 48,182 TOTAL HEAT GAIN 40,441
AIR FLOW RATE CFM 27.31 AIR FLOW RATE CFM 32.54

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

~*AMANA
AMVC960804CNA 80
FAN SPEED 1316
LOW 0
MEDLOW 1389
MEDIUM 0
MEDIUM HIGH 1396
HIGH 1396

AFUE = 96.0 %
INPUT (BTU/H) = 80,000
OUTPUT (BTU/H) = 76,800
DESIGN CFM = 1316
CFM @ 6" E.S.P.
TEMPERATURE RISE 54 °F

RUN COUNT	4th	3rd	2nd	1st	Bas
S/A	0	0	12	9	5
R/A	0	0	5	3	1

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

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

RUN #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
ROOM NAME	MBR	ENS	BED-5	BED-2	BED-3	BED-4	BATH	BED-3	BED-4	MBR	ENS-2/3	LV/DN	LV/DN	KT/FM	KT/FM	KT/FM	LAUN	W/R	FOY	MUD	DEN	BAS	BAS	BAS
RM LOSS MBH	1.19	1.76	1.18	1.11	1.68	1.11	1.46	1.68	1.11	1.19	0.71	1.89	1.89	1.85	1.85	1.85	1.25	0.38	2.42	0.97	1.25	3.68	3.68	3.68
CFM PER RUN HEAT	33	48	32	30	46	30	40	46	30	33	19	52	52	51	51	51	34	10	66	26	34	100	100	100
RM GAIN MBH	2.04	1.74	2.10	1.92	2.26	1.96	1.97	2.26	1.96	2.04	0.34	2.52	2.52	2.58	2.58	2.58	2.44	0.06	1.91	0.16	1.44	0.21	0.21	0.21
CFM PER RUN COOLING	66	57	68	62	74	64	64	74	64	66	11	82	82	84	84	84	79	2	62	5	47	7	7	7
ADJUSTED PRESSURE	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.16	0.16	0.16	0.16	0.16	0.17	0.17	0.17	0.17	0.17	0.16	0.16	0.16
ACTUAL DUCT LGH	43	31	57	23	41	45	64	43	60	51	26	53	38	23	27	33	31	18	45	7	10	26	32	28
EQUIVALENT LENGTH	140	120	120	110	120	140	130	130	120	120	150	140	100	100	120	100	180	120	120	150	100	130	90	110
TOTAL EFFECTIVE LENGTH	183	151	177	133	161	185	194	173	180	171	176	193	138	123	147	133	211	138	165	157	110	156	122	138
ADJUSTED PRESSURE	0.09	0.11	0.1	0.13	0.11	0.09	0.09	0.1	0.1	0.1	0.1	0.08	0.12	0.13	0.11	0.12	0.08	0.12	0.1	0.11	0.16	0.1	0.13	0.12
ROUND DUCT SIZE	5	4	5	4	5	5	5	5	5	5	4	5	5	5	5	5	5	4	5	4	6	5	5	5
HEATING VELOCITY (ft/min)	242	551	235	344	338	220	294	338	220	242	218	382	382	374	374	374	250	115	485	298	390	510	734	734
COOLING VELOCITY (ft/min)	485	654	499	711	543	470	470	543	470	485	126	602	602	617	617	617	580	23	455	57	539	36	51	51
OUTLET GRILL SIZE	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	4X10	3X10	3X10	3X10
TRUNK	B	A	F	A	D	D	E	D	E	B	D	E	F	A	B	B	D	F	E	F	D	B	B	F

RUN #	25	26
ROOM NAME	BAS	BAS
RM LOSS MBH	3.68	3.68
CFM PER RUN HEAT	100	100
RM GAIN MBH	0.21	0.21
CFM PER RUN COOLING	7	7
ADJUSTED PRESSURE	0.16	0.16
ACTUAL DUCT LGH	45	32
EQUIVALENT LENGTH	130	130
TOTAL EFFECTIVE LENGTH	175	162
ADJUSTED PRESSURE	0.09	0.1
ROUND DUCT SIZE	6	6
HEATING VELOCITY (ft/min)	510	510
COOLING VELOCITY (ft/min)	36	36
OUTLET GRILL SIZE	4X10	4X10
TRUNK	E	A

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JUNIPER 8
BUILDING DIVISION

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	229	0.10	7.6	8	x	8	515	TRUNK G	0	0.00	0	0	x	8	0	TRUNK O	0	0.05	0	0	x	8	0	
TRUNK B	368	0.09	9.4	10	x	8	662	TRUNK H	0	0.00	0	0	x	8	0	TRUNK P	0	0.05	0	0	x	8	0	
TRUNK C	597	0.09	11.2	16	x	8	672	TRUNK I	0	0.00	0	0	x	8	0	TRUNK Q	0	0.05	0	0	x	8	0	
TRUNK D	209	0.08	7.8	8	x	8	470	TRUNK J	0	0.00	0	0	x	8	0	TRUNK R	0	0.05	0	0	x	8	0	
TRUNK E	288	0.08	8.8	10	x	8	518	TRUNK K	0	0.00	0	0	x	8	0	TRUNK S	0	0.05	0	0	x	8	0	
TRUNK F	508	0.08	10.9	14	x	8	653	TRUNK L	0	0.00	0	0	x	8	0	TRUNK T	0	0.05	0	0	x	8	0	
															TRUNK U	0	0.05	0	0	x	8	0		
															TRUNK V	0	0.05	0	0	x	8	0		
															TRUNK W	755	0.05	14.2	24	x	8	566		
															TRUNK X	1316	0.05	17.5	28	x	10	677		
															TRUNK Y	425	0.05	11.5	16	x	8	478		
															TRUNK Z	270	0.05	9.7	12	x	8	405		
															DROP	1316	0.05	17.5	24	x	12	658		

RETURN AIR #	1	2	3	4	5	6	7	8	BR									
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
AIR VOLUME	155	135	115	115	155	175	135	115	0	0	0	0	0	0	216			
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.	56	83	49	51	28	26	56	50	1	1	1	1	1	1	18			
EQUIVALENT LENGTH	195	230	185	190	205	185	225	185	0	0	0	0	0	0	165			
TOTAL EFFECTIVE LH	251	313	234	241	233	211	281	235	1	1	1	1	1	1	183			
ADJUSTED PRESSURE	0.06	0.05	0.06	0.06	0.06	0.07	0.05	0.06	14.80	14.80	14.80	14.80	14.80	14.80	0.08			
ROUND DUCT SIZE	7.5	7.5	6.7	6.7	7.5	7.5	7.5	6.7	0	0	0	0	0	0	7.9			
INLET GRILL SIZE	8	8	8	8	8	8	8	8	0	0	0	0	0	0	8			
	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
INLET GRILL SIZE	14	14	14	14	14	14	14	14	0	0	0	0	0	0	24			

RETURN AIR #	1	2	3	4	5	6	7	8																BR
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
AIR VOLUME	155	135	115	115	155	175	135	115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	216
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	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
ACTUAL DUCT LGH.	56	83	49	51	28	26	56	50	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	18
EQUIVALENT LENGTH	195	230	185	190	205	185	225	185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	165
TOTAL EFFECTIVE LH	251	313	234	241	233	211	281	235	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	183
ADJUSTED PRESSURE	0.06	0.05	0.06	0.06	0.06	0.07	0.05	0.06	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	14.80	0.08
ROUND DUCT SIZE	7.5	7.5	6.7	6.7	7.5	7.5	7.5	6.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7.9
INLET GRILL SIZE	8	8	8	8	8	8	8	8	0	0	0	0	0	0	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	X	X	X	X	X	X	X	X	X
INLET GRILL SIZE	14	14	14	14	14	14	14	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2

TYPE: JUNIPER 8
SITE NAME: LECCO RIDGE

LO # 72386
WUP

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	4 @ 10.6 cfm	42.4 cfm
Kitchen & Bathrooms	5 @ 10.6 cfm	53 cfm
Other Rooms	5 @ 10.6 cfm	53.0 cfm
Table 9.32.3.A.	TOTAL	190.8 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	95.4 cfm

SUPPLEMENTAL VENTILATION CAPACITY		9.32.3.5.
Total Ventilation Capacity	190.8	cfm
Less Principal Ventil. Capacity	96	cfm
Required Supplemental Capacity	94.8	cfm

PRINCIPAL EXHAUST FAN CAPACITY	
Model: VANEE 50H	Location: BSMT
96.0 cfm	3.0 sones
<input checked="" type="checkbox"/> HVI Approved	

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

SUPPLEMENTAL FANS		NUTONE	
Location	Model	cfm	HVI
ENS	QTXEN050C	50	<input checked="" type="checkbox"/>
BATH	QTXEN050C	50	<input checked="" type="checkbox"/>
ENS-2/3	QTXEN050C	50	<input checked="" type="checkbox"/>
W/R	QTXEN050C	50	<input checked="" type="checkbox"/>

HEAT RECOVERY VENTILATOR		9.32.3.11.
Model: VANEE 50H		
96	cfm high	47 cfm low
66	% Sensible Efficiency	<input checked="" type="checkbox"/> HVI Approved
@ 32 deg F (0 deg C)		

LOCATION OF INSTALLATION	
Lot:	C
Township	PI
Address	
Roll #	

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MAR 29, 2017
JUNIPER 8
BUILDING DIVISION

TOWN OF MILTON PLANNING AND DEVELOPMENT JUNIPER 8 MODEL	
BUILDING: REVIEWED	DATE
SCOTT SHERRIFFS	APR 11, 2017
PLANS EXAMINER	
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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:	February-17

HEAT LOSS AND GAIN SUMMARY SHEET

MODEL: JUNIPER 8	WUP	BUILDER: GREENPARK HOMES
SFQT: 3320	LO# 72386	SITE: LECCO RIDGE

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:	DETACHED	# OF STORIES (+BASEMENT):	3
FRONT FACES:	EAST	ASSUMED (Y/N):	Y
AIR CHANGES PER HOUR:	3.57	ASSUMED (Y/N):	Y
AIR TIGHTNESS CATEGORY:	AVERAGE	ASSUMED (Y/N):	Y
WIND EXPOSURE:	SHELTERED	ASSUMED (Y/N):	Y
HOUSE VOLUME (ft³):	45367.5	ASSUMED (Y/N):	Y
INTERNAL SHADING:	BLINDS/CURTAINS	ASSUMED OCCUPANTS:	6
INTERIOR LIGHTING LOAD (Btu/h/ft²):	1.40	DC BRUSHLESS MOTOR (Y/N):	Y
FOUNDATION CONFIGURATION	BCIN_1	DEPTH BELOW GRADE:	6.5 ft
LENGTH: 53.0 ft	WIDTH: 37.0 ft	EXPOSED PERIMETER:	180.0 ft

2012 OBC - COMPLIANCE PACKAGE

Component	Compliance Package ENERGYSTAR
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 + 5
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

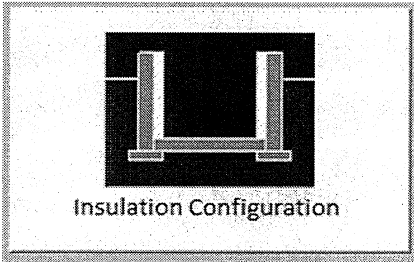
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INDIVIDUAL BCIN: 19669
MICHAEL O'ROURKE

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):	16.2	 Insulation Configuration
Floor Width (m):	11.3	
Exposed Perimeter (m):	0.0	
Wall Height (m):	2.9	
Depth Below Grade (m):	2.0	
Window Area (m ²):	0.8	
Door Area (m ²):	3.7	
Radiant Slab		
Heated Fraction of the Slab:	0	
Fluid Temperature (°C):	33	
Design Months		
Heating Month	1	
Foundation Loads		
Heating Load (Watts):		1770

TYPE: JUNIPER 8

WUP

LO# 72386

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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):	6.71			
Building Configuration				
Type:	Detached			
Number of Stories:	Two			
Foundation:	Full			
House Volume (m ³):	1284.7			
Air Leakage/Ventilation				
Air Tightness Type:	Present (1961-) (3.57 ACH)			
Custom BDT Data:	ELA @ 10 Pa.	1712.5 cm ²		
	3.57	ACH @ 50 Pa		
Mechanical Ventilation (L/s):	Total Supply	Total Exhaust		
	45.3	45.3		
Flue Size				
Flue #:	#1	#2	#3	#4
Diameter (mm):	0	0	0	0
Natural Infiltration Rates				
Heating Air Leakage Rate (ACH/H):	0.307			
Cooling Air Leakage Rate (ACH/H):	0.105			

TYPE: JUNIPER 8
LO# 72386

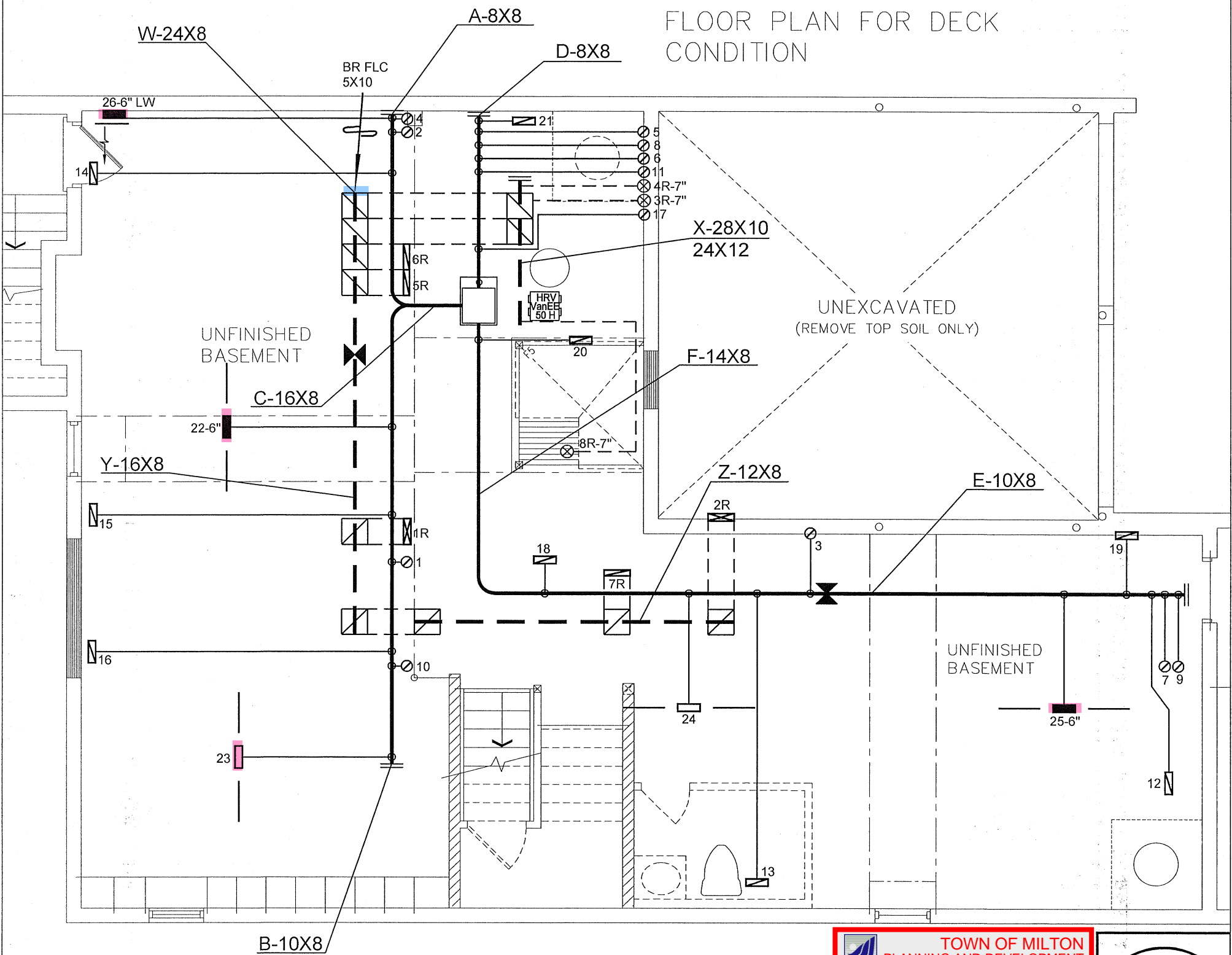
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BASEMENT FLOOR PLAN 3

BASEMENT FLOOR PLAN 2

FLOOR PLAN FOR DECK
CONDITION



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

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

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PLANNING AND DEVELOPMENT
JUNIPER 8 MODEL

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Energy

ENERGY STAR

CSA-F280-12

- 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

DESCRIPTION	3.		
R STACK ABOVE	2.		
R STACK 2nd FLOOR	1.		
R	No.	Description	Date
REVISIONS			
WITHOUT EXPRESSED WRITTEN CONSENT. THE DRAWINGS ARE DATED AND NG WITH WORK. LATEST MUNICIPAL APPROVED DRAWINGS ONLY TO BE IS OR FROM ANY CHANGES TO ACCEPTED STANDARDS AND/OR THE			

Client
GREENPARK HOMES

Project Name
**LECCO RIDGE
MILTON, ONTARIO**

JUNIPER 8 WUP 3320 sqft

HVACDESIGNS LTD.

375 Finley Ave - Suite 202 - Ajax, Ontario
L1S 2E2 Tel. 905.619.2300 - 905.420.5300 Fax 905.619.2375
Email: info@hvacdsgns.ca
Web: www.hvacdesigns.ca
Specializing in Residential Mechanical Design Services

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.

HEAT LOSS 50734 BTU/H UNIT DATA	# OF RUNS S/A R/A FANS
MAKE AMANA	3RD FLOOR
MODEL AMVC960804CNA	2ND FLOOR 12 5 4
INPUT 80 MBTU/H	1ST FLOOR 9 3 2
OUTPUT 76.8 MBTU/H	BASEMENT 5 1 0
COOLING 3.5 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
FAN SPEED 1316 cfm @ 0.5" w.g.	

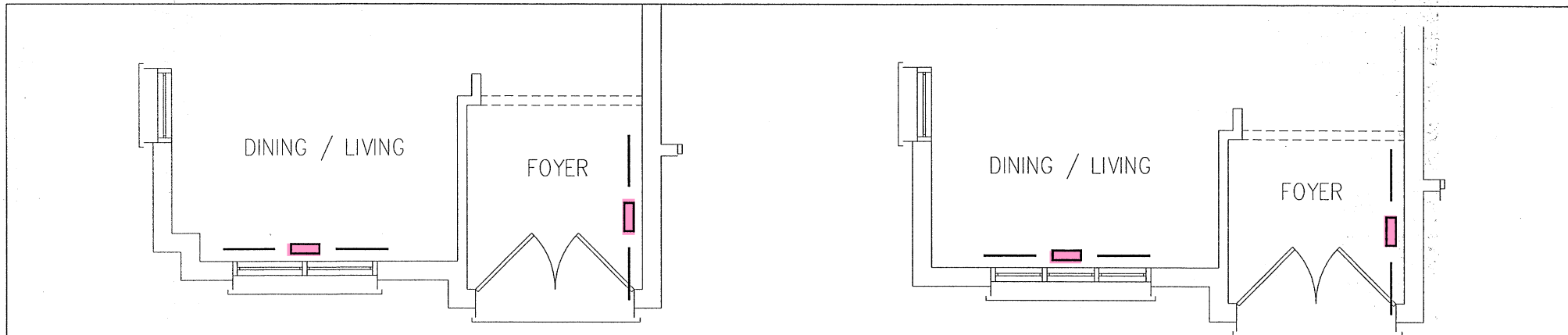
Sheet Title
BASEMENT HEATING LAYOUT

Date FEB/2017

Scale 3/16" = 1'-0"

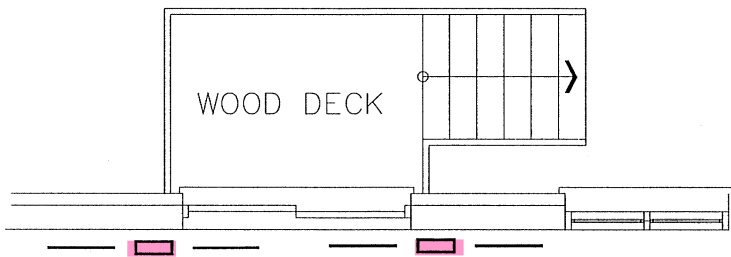
BCIN# 19669

LO# 72386

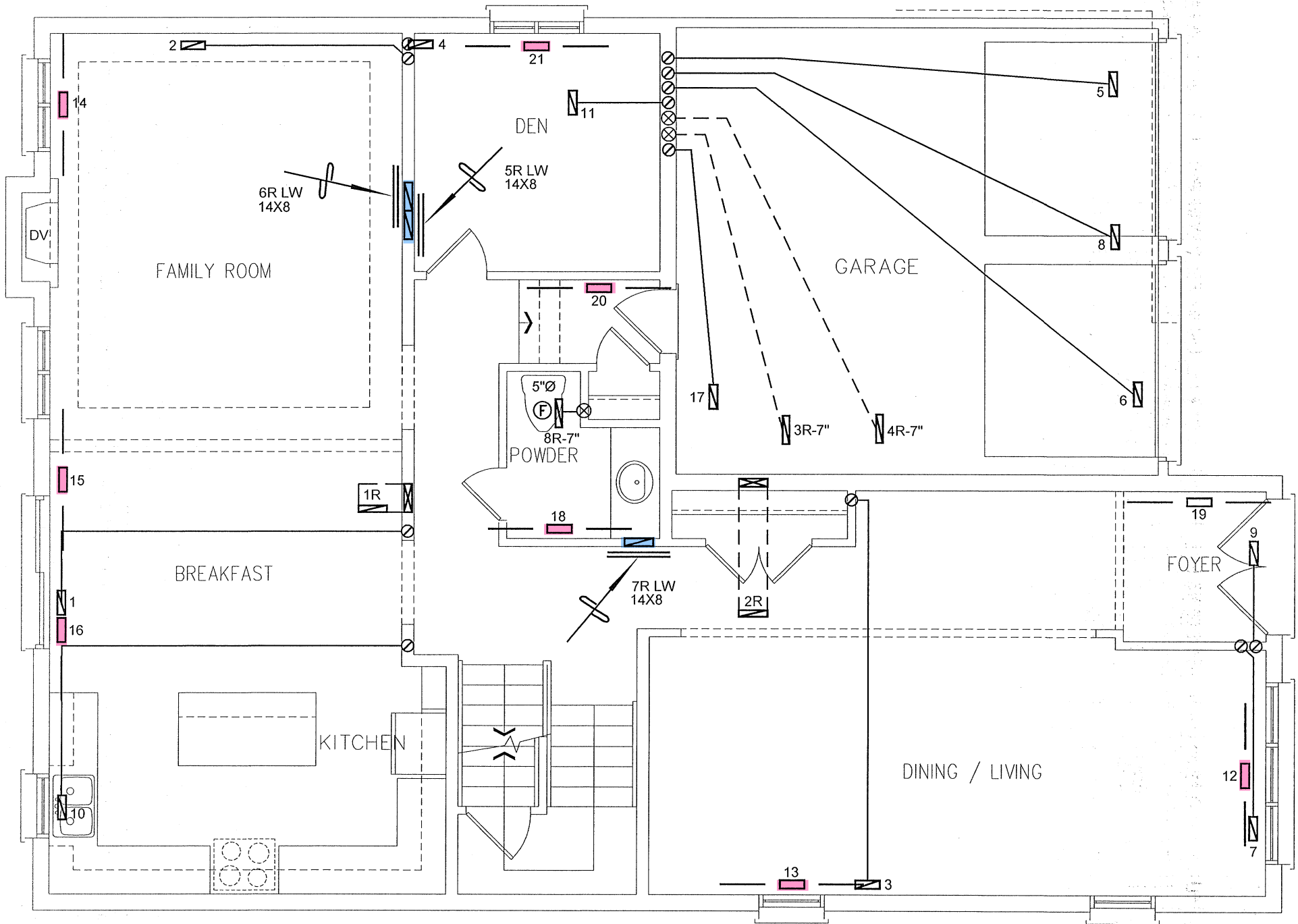


GROUND FLOOR PLAN 3

GROUND FLOOR PLAN 2



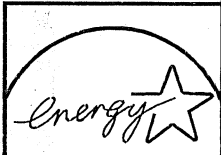
FLOOR PLAN FOR DECK CONDITION

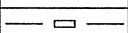



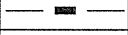



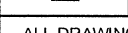





GROUND FLOOR PLAN 1

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.

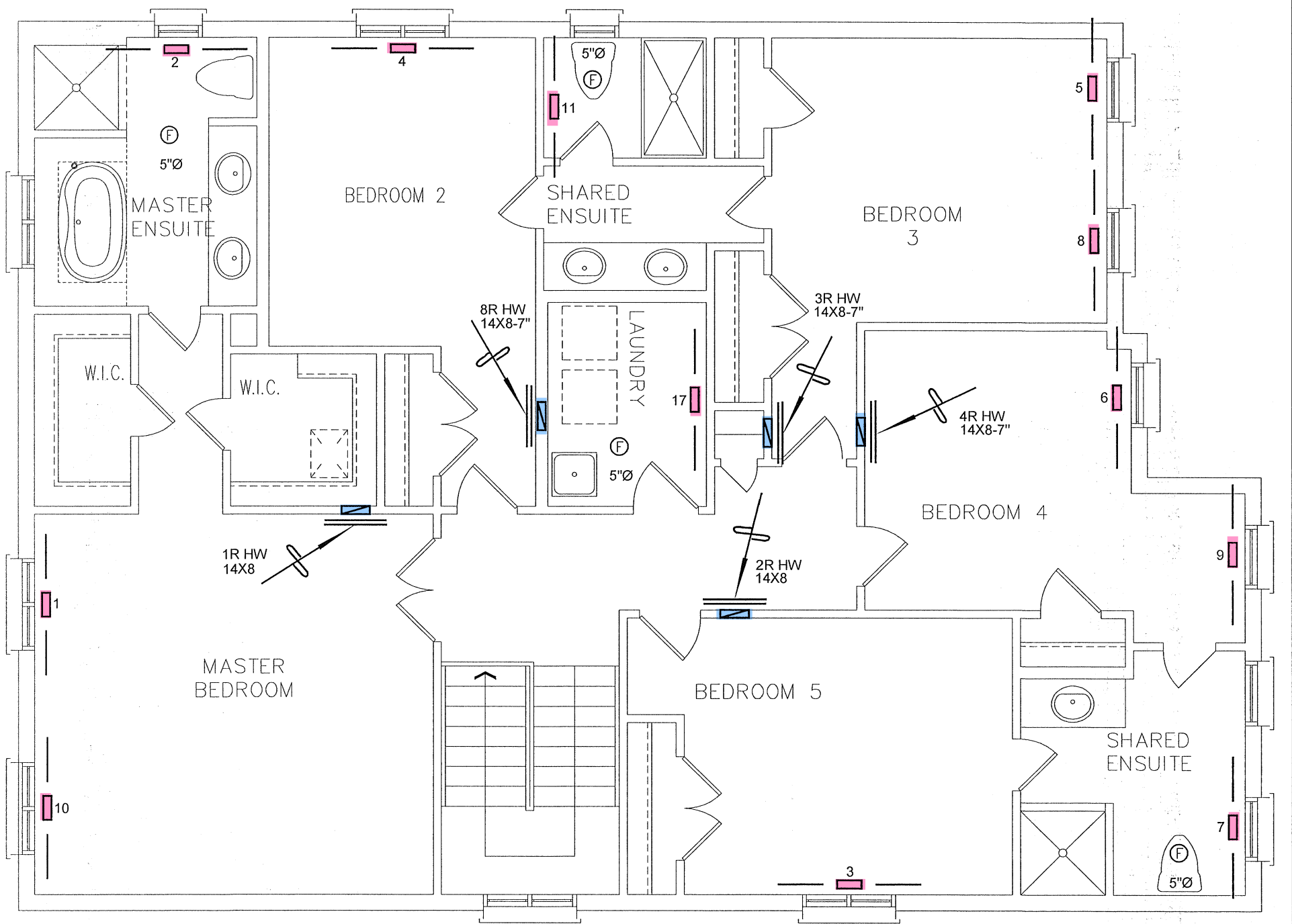
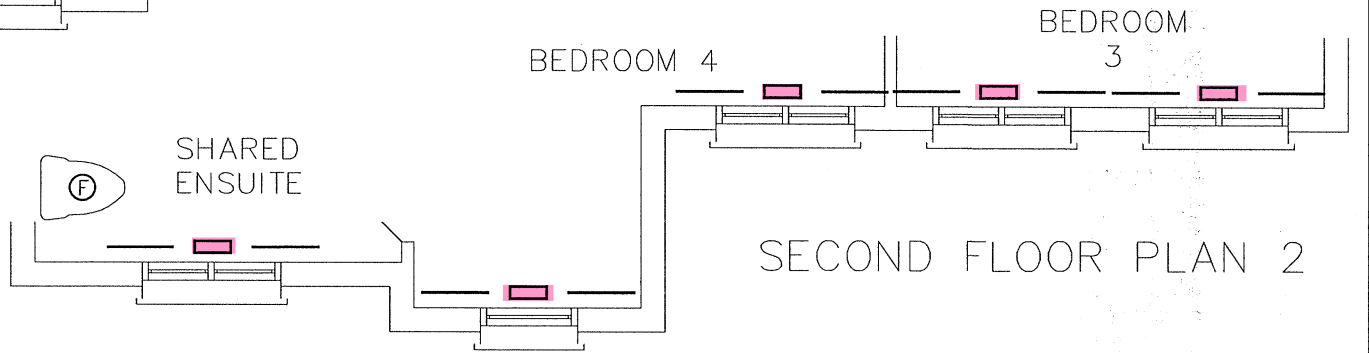
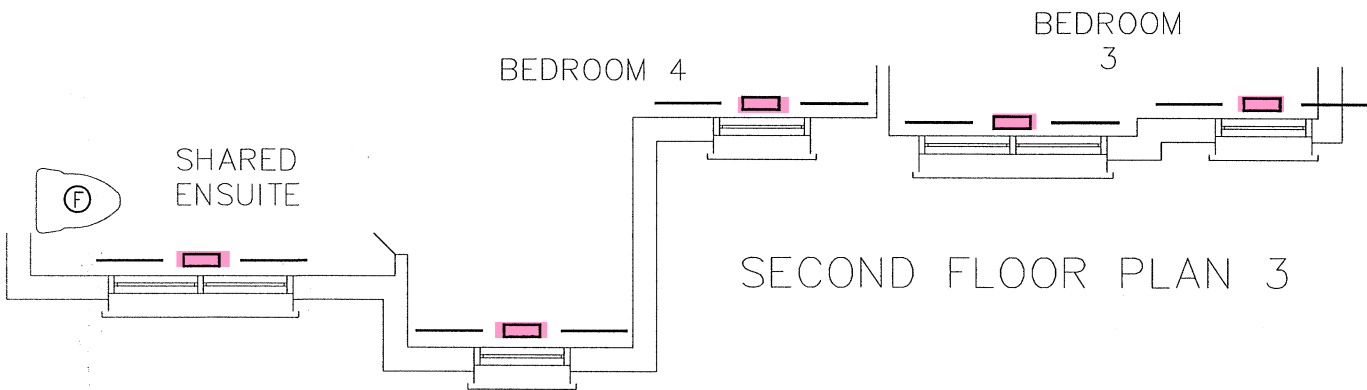
RECEIVED
TOWN OF MILTON
MAR 29, 2017
JUNIPER 8
BUILDING DIVISION


ENERGY STAR
CSA-F280-12

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.	Description	Date
	SUPPLY AIR BOOT ABOVE		6" SUPPLY AIR STACK 2nd FLOOR		FRA- FLOOR RETURN AIR GRILLE		REDUCER	REVISIONS		

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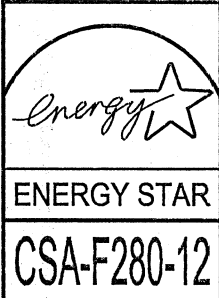
Client GREENPARK HOMES		 375 Finley Ave - Suite 202 - Ajax, Ontario L1S 2E2 Tel. 905.619.2300 - 905.420.5300 Fax 905.619.2375 Email: info@hvacdesigns.ca Web: www.hvacdesigns.ca Specializing in Residential Mechanical Design Services	 TOWN OF MILTON PLANNING AND DEVELOPMENT JUNIPER 8 MODEL BUILDING: REVIEWED SCOTT SHERRIFFS APR 11, 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	Sheet Title FIRST FLOOR HEATING LAYOUT	
Project Name LECCO RIDGE MILTON, ONTARIO					
JUNIPER 8 WUP 3320 sqft		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.		Date FEB/2017	
				Scale 3/16" = 1'-0"	
				BCIN# 19669	
				LO# 72386	



SECOND FLOOR PLAN 1

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
JUNIPER 8
BUILDING DIVISION



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.	Description	Date
	SUPPLY AIR BOOT ABOVE		6" SUPPLY AIR STACK 2nd FLOOR		FRA- FLOOR RETURN AIR GRILLE		REDUCER	REVISIONS		

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Client
GREENPARK HOMES

Project Name
**LECCO RIDGE
MILTON, ONTARIO**

JUNIPER 8 WUP 3320 sqft

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

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.

**TOWN OF MILTON
PLANNING AND DEVELOPMENT
JUNIPER 8 MODEL**
**BUILDING: REVIEWED
SCOTT SHERRIFFS APR 11, 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

Sheet Title
**SECOND FLOOR
HEATING
LAYOUT**

Date **FEB/2017**

Scale **3/16" = 1'-0"**

BCIN# 19669

LO# **72386**