

JUN 05 2013

SITE NAME: LAMBERT'S LANE PH.2

BUILDER: GREENPARK HOMES

TYPE: URBAN 12

GFA: 2294

DATE: Mar-19

LO# 81394

WINTER NATURAL AIR CHANGE RATE 0.355

HEAT LOSS AT °F. 74

CSA-F280-12

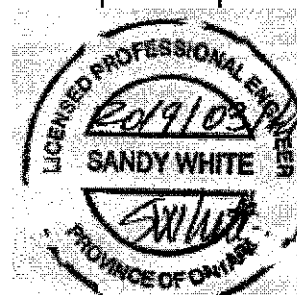
SUMMER NATURAL AIR CHANGE RATE 0.122

HEAT GAIN AT °F. 14

ENERGYSTAR

ROOM USE	EXP. WALL	CLG. HT.	MBR	ENS	BED-2	BED-3	BATH	PWD	STOR
			16	8	12	28	0	0	16
			10	9	9	9	9	10	9
FACTORS									
GRS.WALL AREA	LOSS	GAIN	160	72	108	252	0	0	144
GLAZING	LOSS	GAIN	LOSS	GAIN	LOSS	GAIN	LOSS	GAIN	LOSS
NORTH	18.6	15.9	0	0	0	0	0	0	0
EAST	18.6	41.5	0	0	0	0	0	0	0
SOUTH	18.6	24.8	0	0	0	0	0	0	0
WEST	18.6	41.5	42	779	1742	10	186	415	10
SKYLT.	31.2	101.2	0	0	0	0	0	0	0
DOORS	24.7	4.7	0	0	0	0	0	0	0
NET EXPOSED WALL	3.5	0.7	118	415	78	62	218	41	134
NET EXPOSED BSMT WALL ABOVE GR	3.5	0.7	0	0	0	0	0	0	471
EXPOSED CLG	1.3	0.6	342	429	208	69	86	42	89
NO ATTIC EXPOSED CLG	2.7	1.3	36	96	47	0	0	0	0
EXPOSED FLOOR	2.5	0.5	0	0	0	0	0	0	0
BASEMENT/CRAWL HEAT LOSS			0	0	0	0	0	0	0
SLAB ON GRADE HEAT LOSS			0	0	0	0	0	0	0
SUBTOTAL HT LOSS			1719	490	906	1753	70	0	657
SUB TOTAL HT GAIN			2075	498	681	1646	34	0	337
LEVEL FACTOR / MULTIPLIER	0.10	0.26	0.10	0.26	0.10	0.26	0.10	0.26	0.30
AIR CHANGE HEAT LOSS			440	125	232	448	18	0	458
AIR CHANGE HEAT GAIN			149	36	49	118	2	0	24
DUCT LOSS			0	0	0	0	0	0	0
DUCT GAIN			0	0	0	0	0	0	0
HEAT GAIN PEOPLE	240	2	480	0	1	240	1	240	0
HEAT GAIN APPLIANCES/LIGHTS			638	0	638	638	0	0	0
TOTAL HT LOSS BTU/H			2158	615	1138	2201	88	0	1115
TOTAL HT GAIN x 1.3 BTU/H			4344	693	2090	3434	47	0	470

ROOM USE	EXP. WALL	CLG. HT.	LV/DN	KIT	FAM	LAUN	WIR	FOY	DEN	BAS
			23	12	28	22	0	32	21	91
			10	10	10	9	10	9	9	9
FACTORS										
GRS.WALL AREA	LOSS	GAIN	230	120	280	198	0	288	188	546
GLAZING	LOSS	GAIN	LOSS	GAIN	LOSS	GAIN	LOSS	GAIN	LOSS	GAIN
NORTH	18.6	15.9	0	0	0	0	0	0	0	0
EAST	18.6	41.5	0	0	0	0	0	0	0	0
SOUTH	18.6	24.8	0	0	0	0	0	0	0	0
WEST	18.6	41.5	54	1002	2239	10	186	248	0	0
SKYLT.	31.2	101.2	0	0	0	0	0	0	0	0
DOORS	24.7	4.7	0	0	0	0	0	0	0	0
NET EXPOSED WALL	3.5	0.7	178	619	117	95	334	63	215	766
NET EXPOSED BSMT WALL ABOVE GR	3.5	0.7	0	0	0	0	0	0	0	0
EXPOSED CLG	1.3	0.6	0	0	0	0	0	0	0	0
NO ATTIC EXPOSED CLG	2.7	1.3	0	0	0	0	0	0	0	0
EXPOSED FLOOR	2.5	0.5	67	167	31	172	428	81	0	0
BASEMENT/CRAWL HEAT LOSS			0	0	0	0	0	0	0	0
SLAB ON GRADE HEAT LOSS			0	0	0	0	0	0	0	0
SUBTOTAL HT LOSS			1787	1226	1962	1147	105	2344	1281	3004
SUB TOTAL HT GAIN			2388	784	2422	1189	20	442	1798	4549
LEVEL FACTOR / MULTIPLIER	0.20	0.50	0.20	0.50	0.20	0.50	0.20	0.50	0.20	0.70
AIR CHANGE HEAT LOSS			889	610	975	800	52	1636	894	5051
AIR CHANGE HEAT GAIN			171	55	174	85	1	32	129	35
DUCT LOSS			268	184	0	0	16	0	0	0
DUCT GAIN			320	148	0	0	2	0	0	0
HEAT GAIN PEOPLE	240	0	0	0	0	0	0	0	0	0
HEAT GAIN APPLIANCES/LIGHTS			638	638	638	638	0	0	638	638
TOTAL HT LOSS BTU/H			2944	2019	2837	1948	172	3980	2175	9600
TOTAL HT GAIN x 1.3 BTU/H			4572	2084	4204	2485	30	616	3335	1500



SWhite

TOTAL HEAT GAIN BTU/H: 30147

TONS: 2.51

LOSS DUE TO VENTILATION LOAD BTU/H: 1274

STRUCTURAL HEAT LOSS: 33090

TOTAL COMBINED HEAT LOSS BTU/H: 34365

Michael O'Rourke

THIS STRUCTURE MUST BE
CONSTRUCTED TO MEET OR
EXCEED THE PROVISIONS OF
THE ONTARIO BUILDING CODE

SITE NAME: LAMBERT'S LANE PH.2

BUILDER: GREENPARK HOMES

TYPE: URBAN 12

AH - 1

DATE: Apr-19

GFA: 2294

LO# 81394

BCIN# 19669

PAGE 2 of 3

UNIT OUTPUT @ 140 °F	50700	BTU/H	CFM / OUTLET =	27.778	Water Heater	BOSCH	REDZONE	OUTPUT 50700 BTU/H @ 140 °F
OUTLETS for UNIT	36				Make & Model #	T9800 SE 160	DVS-1000	
BTU/H per OUTLET HEATING	1408				Input	160000	P2 - 2 ZONE	CFM @ 0.8" E.S.P.
UNIT OUTPUT COOLING	30000	BTU/H			Storage capacity	US/gal.		
OUTLETS for UNIT	36				Efficiency	99.0 %	RUNS/ZONE: 18	DESIGN CFM = 1000
BTU/H per OUTLET COOLING	833							A/C SIZE 2.5 TONS
								A/C SIZE 30000 BTU/H

FLOOR	3	3	3	3	3	2	2	2	1	2	1	1	8	1
ROOM NAME	MBR	ENS	BED-2	BED-3	BATH	LV/DN	KIT	FAM	LAUN	W/R	FOY	DEN	BAS	STOR
RM LOSS MBH	2.16	0.62	0.00	1.14	2.20	0.00	0.09	0.00	0.00	0.00	2.94	0.00	2.02	2.94
# of RUNS red'd HEATING	1.5	0.4	0.0	0.8	1.6	0.0	0.1	0.0	0.0	0.0	2.1	0.0	1.4	2.1
RM GAIN MBH	4.34	0.69	0.00	2.09	3.43	0.00	0.05	0.00	0.00	0.00	4.57	0.00	2.08	4.20
# of RUNS red'd COOLING	5.2	0.8	0.0	2.5	4.1	0.0	0.1	0.0	0.0	0.0	5.5	0.0	2.5	5.0
# of OUTLETS INSTALLED	3.0	1.0	2.0	2.0	1.0	3.0	2.0	3.0	2.0	1.0	3.0	4.0	8.0	1.0

Adjusted Total Runs 36
Actual Installed Flex 36

RETURN AIR #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	BR
FLOOR	3	3	3	2	1	1									8
AIR VOLUME	85	85	95	300	185	130	0	0	0	0	0	0	0	0	120
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	51	48	44	48	16	23	1	1	1	1	1	1	1	1	14
EQUIVALENT LENGTH	205	205	165	210	180	205	0	0	0	0	0	0	0	0	220
TOTAL EFFECTIVE LH	256	253	209	258	196	228	1	1	1	1	1	1	1	1	234
ADJUSTED PRESSURE	0.06	0.06	0.07	0.06	0.08	0.07	15	15	15	15	15	15	15	15	0.06
ROUND DUCT SIZE	6	6	6	9.5	7.5	6.8	0	0	0	0	0	0	0	0	6.8
INLET GRILL SIZE	4	4	4	8	8	8	0	0	0	0	0	0	0	0	8
INLET GRILL SIZE	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
INLET GRILL SIZE	10	10	10	30	14	14	0	0	0	0	0	0	0	0	14

RETURN AIR TRUNK SIZE

	TRUNK	STATIC	ROUND	RECT	
	CFM	PRESS.	DUCT	DUCT	
TRUNK O	0	0.06	0	0	x 8
TRUNK P	0	0.06	0	0	x 8
TRUNK Q	0	0.06	0	0	x 8
TRUNK R	0	0.06	0	0	x 8
TRUNK S	0	0.06	0	0	x 8
TRUNK T	0	0.06	0	0	x 8
TRUNK U	0	0.06	0	0	x 8
TRUNK V	0	0.06	0	0	x 8
TRUNK W	0	0.06	0	0	x 8
TRUNK X	815	0.06	14	22	x 8
TRUNK Y	0	0.06	0	0	x 8
TRUNK Z	0	0.06	0	0	x 8
DROP	1000	0.06	15.1	26	x 10
				21	x 10
				17	x 12
				15	x 14
				13	x 16
				11	x 18
				23	x 9
				19	x 11

INSTALLATION OF COMBO HEATING SYSTEM
TO COMPLY WITH UNIFIED CANADIAN
GUIDELINE FOR INTERGRATED (COMBINATION)
HEATING SYSTEMS LATEST ADDITION

MAXIMUM TEMPERATURE of HOT WATER SYSTEM
SUPPLIED TO PLUMBING FIXTURES SHALL
NOT EXCEED 120 ° F or 49° C

EXHAUST & COMBUSTION
AIR INTAKES SHALL
COMPLY with ALL LOCAL
CODES & AUTHORITIES

TOTAL COMBINED HEAT LOSS BTU/H 34365
TOTAL HEAT GAIN BTU/H 30147

+10%

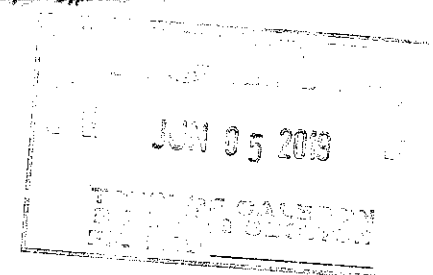
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I REVIEW AND TAKE RESPONSIBILITY FOR THE DESIGN WORK AND AM QUALIFIED IN THE
APPROPRIATE CATEGORY AS AN "OTHER DESIGNER" UNDER DIVISION C, 3.2.5 OF THE BUILDING CODE

INDIVIDUAL BCIN: 19669
Michael O'Rourke

Michael O'Rourke

THIS STRUCTURE MUST BE
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THE ONTARIO BUILDING CODE



TYPE: URBAN 12
 SITE NAME: LAMBERT'S LANE PH.2

LO# 81394

RESIDENTIAL MECHANICAL VENTILATION DESIGN SUMMARY

COMBUSTION APPLIANCES		9.32.3.1(1)
a)	☒ Direct vent (sealed combustion) only	
b)	☐ Positive venting induced draft (except fireplaces)	
c)	☐ Natural draft, B-vent or induced draft gas fireplace	
d)	☐ Solid Fuel (including fireplaces)	
e)	☐ No Combustion Appliances	

HEATING SYSTEM	
☒ Forced Air	☐ Non Forced Air
☐ Electric Space Heat	

HOUSE TYPE		9.32.1(2)
☒ I	Type a) or b) appliance only, no solid fuel	
☐ II	Type I except with solid fuel (including fireplaces)	
☐ III	Any Type c) appliance	
☐ IV	Type I, or II with electric space heat	
☐	Other: Type I, II or IV no forced air	

SYSTEM DESIGN OPTIONS		O.N.H.W.P.
☐ 1	Exhaust only/Forced Air System	
☐ 2	HRV with Ducting/Forced Air System	
☒ 3	HRV Simplified/connected to forced air system	
☐ 4	HRV with Ducting/non forced air system	
☐	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	6 @ 10.6 cfm	63.6 cfm
Other Rooms	4 @ 10.6 cfm	42.4 cfm
Table 9.32.3.A	TOTAL	159.0 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
TOTAL		63.6 cfm

SUPPLEMENTAL VENTILATION CAPACITY		9.32.3.5
Total Ventilation Capacity	159	cfm
Less Principal Ventil. Capacity	63.6	cfm
Required Supplemental Capacity	95.4	cfm

PRINCIPAL EXHAUST FAN CAPACITY	
Model: VANEE 65H	Location: BSMT
63.6 cfm	3.0 sones
☒ HVI Approved	

PRINCIPAL EXHAUST HEAT LOSS CALCULATION			
CFM	AT °F	FACTOR	% LOSS
63.6 CFM	74 F	1.08	0.25

SUPPLEMENTAL FANS		PANASONIC	HVI	Sones
Location	Model	cfm		
ENS	FV-05-11VK1	50	☒	0.3
BATH	FV-05-11VK1	50	☒	0.3
W/R	FV-05-11VK1	50	☒	0.3

HEAT RECOVERY VENTILATOR		9.32.3.11
Model: VANEE 65H		
159 cfm high	64 cfm low	
75 % Sensible Efficiency @ 32 deg F (0 deg C)	☒ HVI Approved	

LOCATION OF INSTALLATION	
Lot:	Concession
Township:	Plan
Address:	
Roll #	Building Permit #

BUILDER: GREENPARK HOMES	
Name:	
Address:	
City:	
Telephone #:	Fax #

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:	April-10

 I REVIEW AND TAKE RESPONSIBILITY FOR THE DESIGN WORK AND AM QUALIFIED IN THE APPROPRIATE CATEGORY AS AN "OTHER DESIGNER" UNDER DIVISION C, 3.2.6 OF THE BUILDING CODE.
 INDIVIDUAL BCIN: 19869 *Michael O'Rourke* MICHAEL O'ROURKE

 THIS STRUCTURE MUST BE
 CONSTRUCTED TO MEET
 EXISTING REQUIREMENTS
 OF THE BUILDING CODE

HEAT LOSS AND GAIN SUMMARY SHEET**MODEL:** URBAN 12**BUILDER:** GREENPARK HOMES**SFQT:** 2294**LO#** 81394**SITE:** LAMBERT'S LANE PH.2**DESIGN ASSUMPTIONS**

HEATING	°F	COOLING	°F
OUTDOOR DESIGN TEMP.	-2	OUTDOOR DESIGN TEMP.	86
INDOOR DESIGN TEMP.	72	INDOOR DESIGN TEMP. (MAX 75°F)	72

BUILDING DATA

ATTACHMENT:	ATTACHED	# OF STORIES (+BASEMENT):	4
FRONT FACES:	EAST	ASSUMED (Y/N):	Y
AIR CHANGES PER HOUR:	3.00	ASSUMED (Y/N):	Y
AIR TIGHTNESS CATEGORY:	TIGHT	ASSUMED (Y/N):	Y
WIND EXPOSURE:	SHELTERED	ASSUMED (Y/N):	Y
HOUSE VOLUME (ft³):	26706.0	ASSUMED (Y/N):	Y
INTERNAL SHADING:	BLINDS/CURTAINS	ASSUMED OCCUPANTS:	4
INTERIOR LIGHTING LOAD (Btu/h/ft²):	2.00	DC BRUSHLESS MOTOR (Y/N):	Y
FOUNDATION CONFIGURATION	BCIN_1	DEPTH BELOW GRADE:	6.0 ft
LENGTH: 36.0 ft	WIDTH: 25.0 ft	EXPOSED PERIMETER:	91.0 ft

2012 OBC - COMPLIANCE PACKAGE**Component**

Ceiling with Attic Space Minimum RSI (R)-Value
Ceiling Without Attic Space Minimum RSI (R)-Value
Exposed Floor Minimum RSI (R)-Value
Walls Above Grade Minimum RSI (R)-Value
Basement Walls Minimum RSI (R)-Value
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
Heated Slab or Slab ≤ 600 mm below grade Minimum RSI (R)-Value
Windows and Sliding Glass Doors Maximum U-Value
Skylights Maximum U-Value
Space Heating Equipment Minimum AFUE
HRV Minimum Efficiency
Domestic Hot Water Heater Minimum EF

**Compliance Package
ENERGYSTAR**

Nominal	Min. Eff.
60	59.20
31	27.70
31	29.80
22 + 5ci	21.10
20ci	21.12
-	-
10	10
10	11.13
ZONE 2	-
ZONE 2	-
COMBO	-
75%	-
TPF 0.93	-

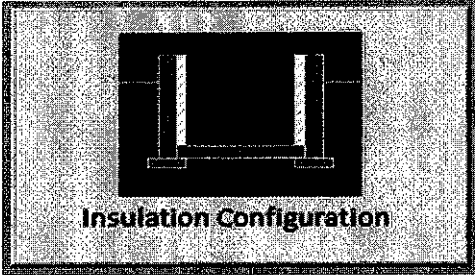
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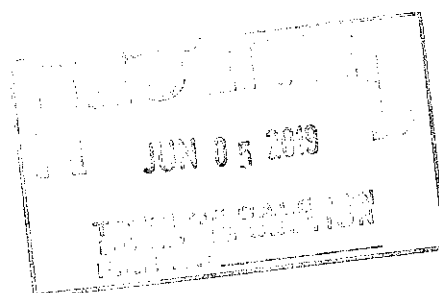
MICHAEL O'ROURKE

Michael O'Rourke
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Residential Foundation Thermal Load Calculator

Supplemental tool for CAN/CSA-F280

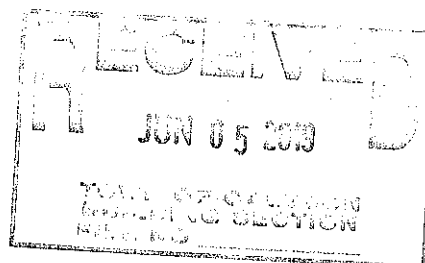
Weather Station Description		
Province:	Ontario	
Region:	Brampton	
Site Description		
Soil Conductivity:	Normal conductivity: dry sand, loam, clay	
Water Table:	Normal (7-10 m, 23-33 ft)	
Foundation Dimensions		
Floor Length (m):	11.0	 Insulation Configuration
Floor Width (m):	7.6	
Exposed Perimeter (m):	27.7	
Wall Height (m):	2.7	
Depth Below Grade (m):	1.83	
Window Area (m ²):	0.5	
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):		880

TYPE: URBAN 12
LO# 81394THIS STRUCTURE MUST BE
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Air Infiltration Residential Load Calculator

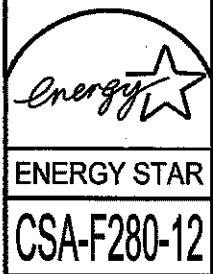
Supplemental tool for CAN/CSA-F280

Weather Station Description				
Province:	Ontario			
Region:	Brampton			
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):	9.45			
Building Configuration				
Type:	Semi			
Number of Stories:	Three			
Foundation:	Full			
House Volume (m ³):	756.2			
Air Leakage/Ventilation				
Air Tightness Type:	Energy Star Attached (3.0 ACH)			
Custom BDT Data:	ELA @ 10 Pa.	847.1 cm ²		
	3.00	ACH @ 50 Pa		
Mechanical Ventilation (L/s):	Total Supply	Total Exhaust		
	30.0	30.0		
Flue Size				
Flue #:	#1	#2	#3	#4
Diameter (mm):	0	0	0	0
Natural Infiltration Rates				
Heating Air Leakage Rate (ACH/H):	0.356			
Cooling Air Leakage Rate (ACH/H):	0.122			

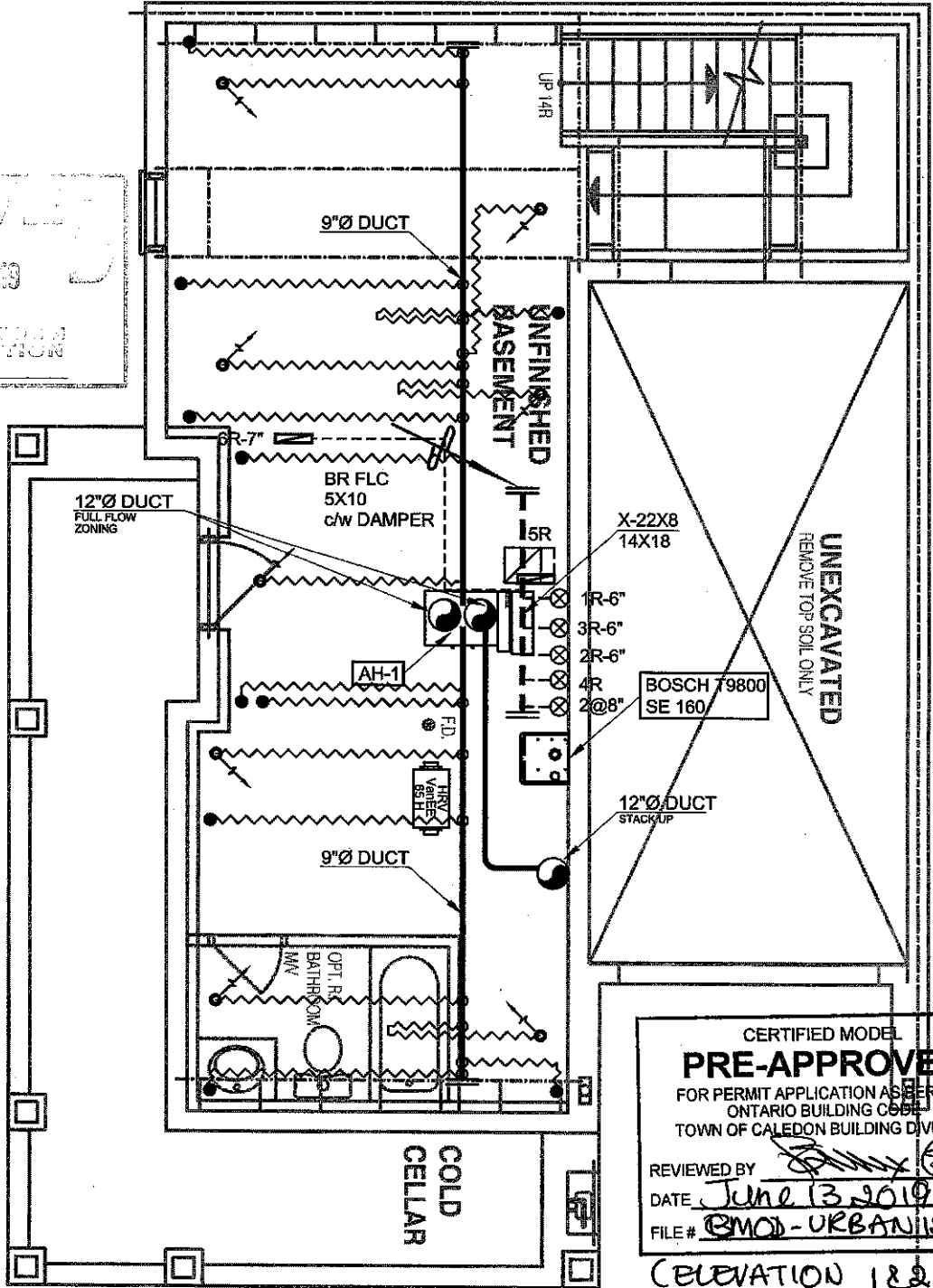
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HVAC LEGEND	
	OUTLET
	DUCTWORK
	FLEX DUCT
	RETURN AIR GRILLE
HW	HIGH WALL
LW	LOW WALL

METHOD 'A'
FLEX DUCT MIN LENGTH 6'
MAX LENGTH 10'



RECEIVED
JUN 05 2019
TOWN OF CALEDON
BUILDING DIVISION
FILE NO.



CERTIFIED MODEL
PRE-APPROVED
FOR PERMIT APPLICATION UNDER THE
ONTARIO BUILDING CODE
TOWN OF CALEDON BUILDING DIVISION
REVIEWED BY *[Signature]* (SA)
DATE June 13 2019
FILE # BMOD-URBAN12

(ELEVATION 1&2)

BASEMENT LEVEL PLAN - ELEVATION 1&2

- I. INSTALLATION TO COMPLY WITH THE LATEST EDITIONS OF THE ONTARIO BUILDING CODE AND REDZONE DESIGN AND INSTALLATION MANUALS
- II. VENT HOT WATER TANK OR BOILER TO MANUFACTURERS SPECS & ALL LOCAL CODES
- III. COMBUSTION AIR INTAKE (INSTALL per ALL LOCAL CODES)
- IV. MAXIMUM TEMPERATURE OF HOT WATER SUPPLIED TO PLUMBING FIXTURES SHALL NOT EXCEED 120°F OR 48°C
- V. CONTRACTOR SHALL SEAL SUPPLY DUCT JOINTS AND GORES WITH AN APPROVED SEALANT

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UNIT EQUIPMENT SUMMARY

UNIT	HEAT LOSS	REQUIRED HEAT LOSS (HEAT LOSS + 10%)	AIR HANDLER MODEL (REDZONE)	HEAT OUTPUT (BTU/H @ TEMP)	HEAT SOURCE (HOT WATER TANK / BOILER)	HEAT SOURCE INPUT (BTU/H)	HEAT GAIN LOAD (BTU/H)	A/C CONDENSER SIZE (TONS)
AH-1	34,365	37,801	DVS-1000 FULL FLOW ZONING	43,300 @ 130°F	BOSCH T9800 SE 160	160,000	30,147	2.5

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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@hvacdsgns.ca Web: www.hvacdsgns.ca Specializing in Residential Mechanical Design Services	THIS STRUCTURE MUST BE CONSTRUCTED TO MEET OR EXCEED THE PROVISIONS OF THE ONTARIO BUILDING CODE	Sheet Title BASEMENT HEATING LAYOUT	
Project Name LAMBERT'S LANE PH. 2 CALEDON, ONTARIO				Date MAR/2019	Scale 3/16" = 1'-0"
URBAN 12	2294 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.		LO#	81394

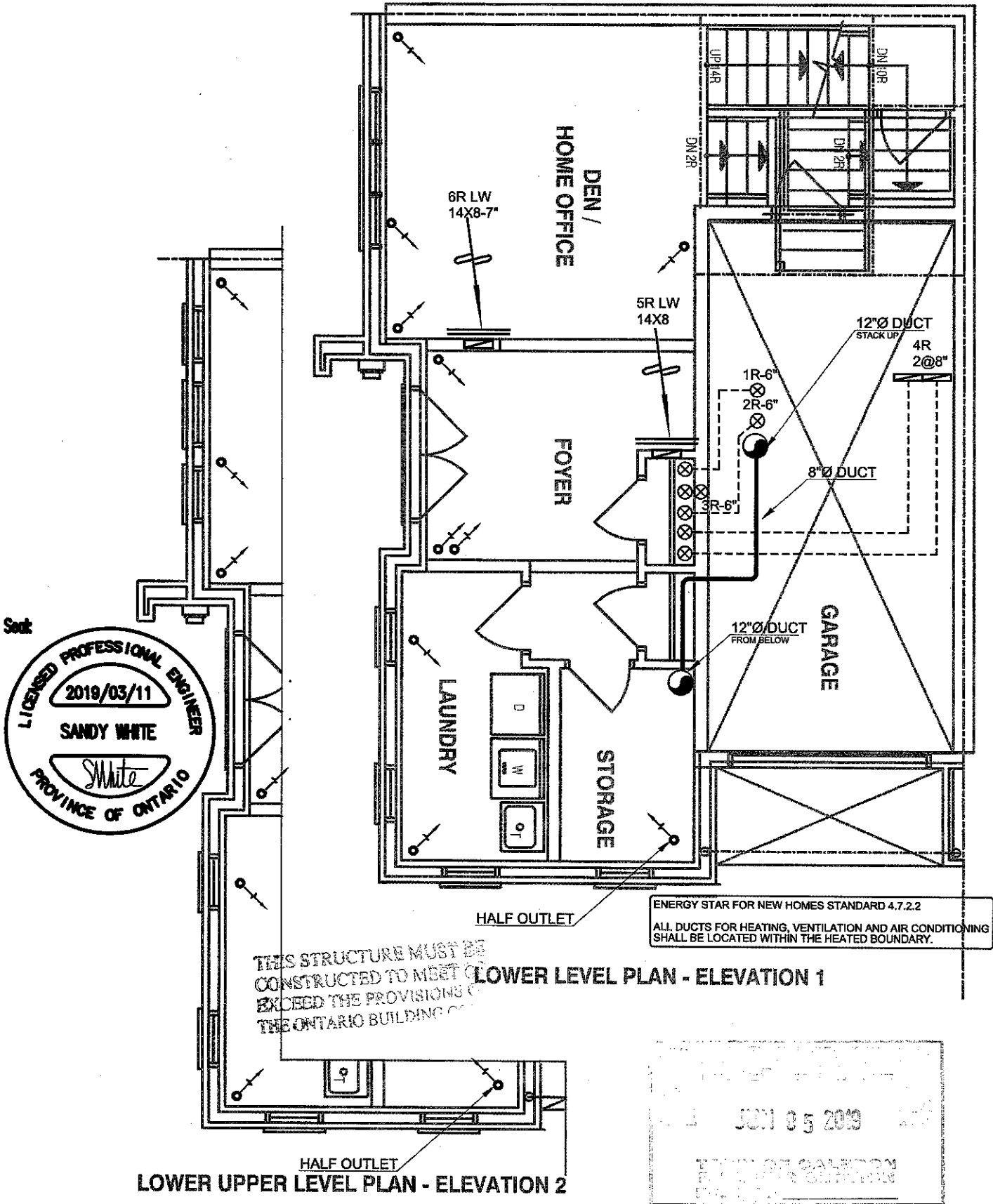
APPLICANT COPY

HVAC LEGEND	
	OUTLET
	DUCTWORK
	FLEX DUCT
	RETURN AIR GRILLE
HW	HIGH WALL
LW	LOW WALL

METHOD 'A'
FLEX DUCT MIN LENGTH 6'
MAX LENGTH 10'

ENERGY STAR

CSA-F280-12



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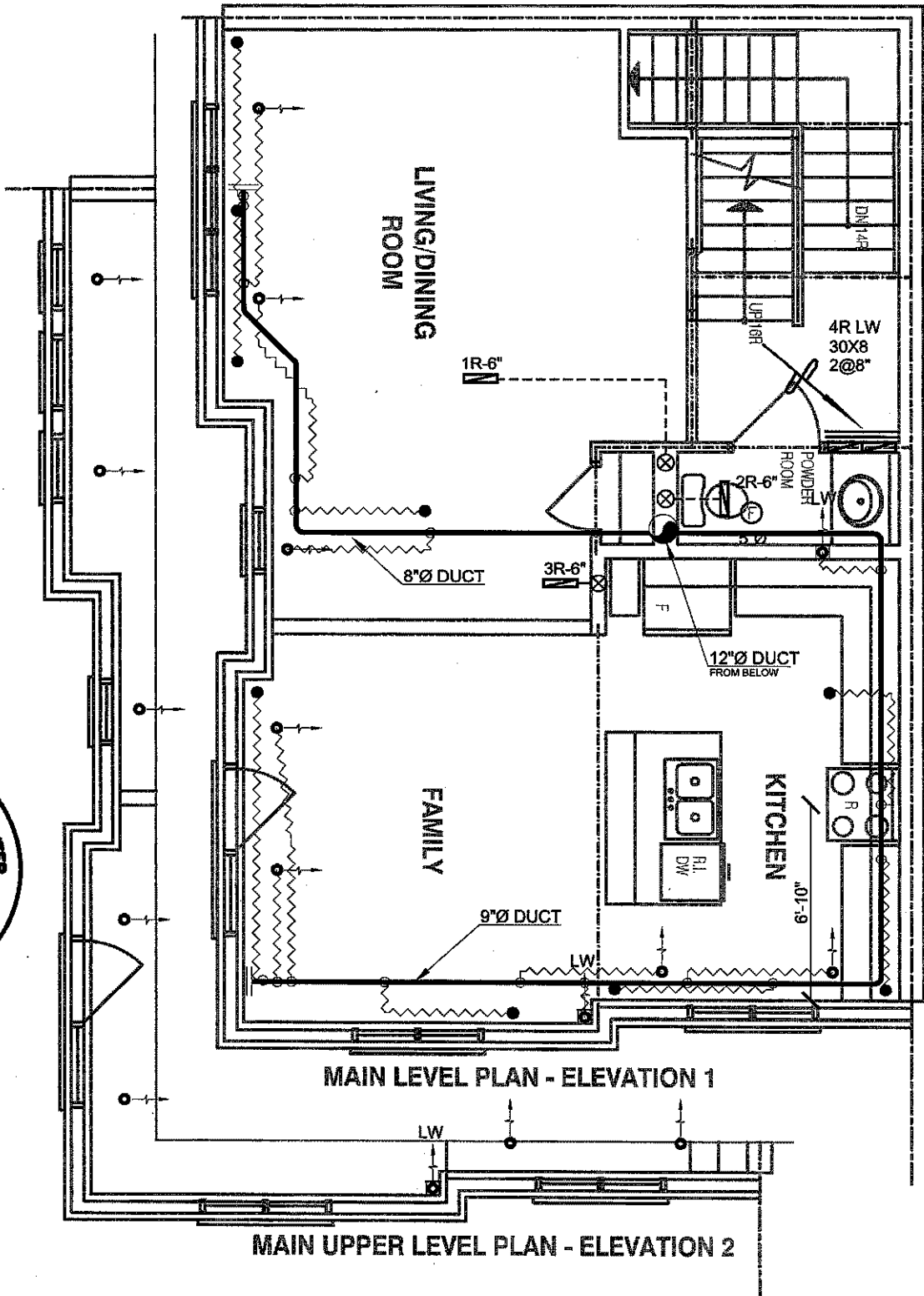
Client GREENPARK HOMES Project Name LAMBERT'S LANE PH. 2 CALEDON, ONTARIO URBAN 12 2294 sqft	375 Finley Ave. Suite 202 - Ajax, Ontario L1S 2E2 Tel. 905.619.2300 - 905.420.6300 Fax 905.619.2375 Email: info@hvacdsgns.ca Web: www.hvacdsgns.ca Specializing in Residential Mechanical Design Services Installation 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.	THIS STRUCTURE MUST BE CONSTRUCTED TO MEET OR EXCEED THE PROVISIONS OF THE ONTARIO BUILDING CODE	Sheet Title FIRST FLOOR HEATING LAYOUT
			Date MAR/2019 Scale 3/16" = 1'-0" LO# 81394

HVAC LEGEND	
	OUTLET
	DUCTWORK
	FLEX DUCT
	RETURN AIR GRILLE
HW	HIGH WALL
LW	LOW WALL

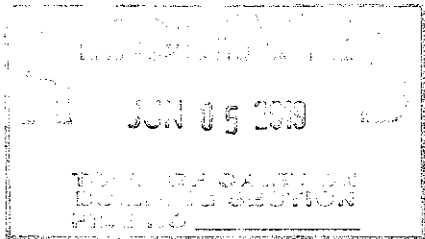
METHOD 'A'
FLEX DUCT MIN LENGTH 6'
MAX LENGTH 10'

ENERGY STAR

CSA-F280-12



THIS STRUCTURE MUST BE
CONSTRUCTED TO MEET OR
EXCEED THE PROVISIONS OF
THE ONTARIO BUILDING CODE

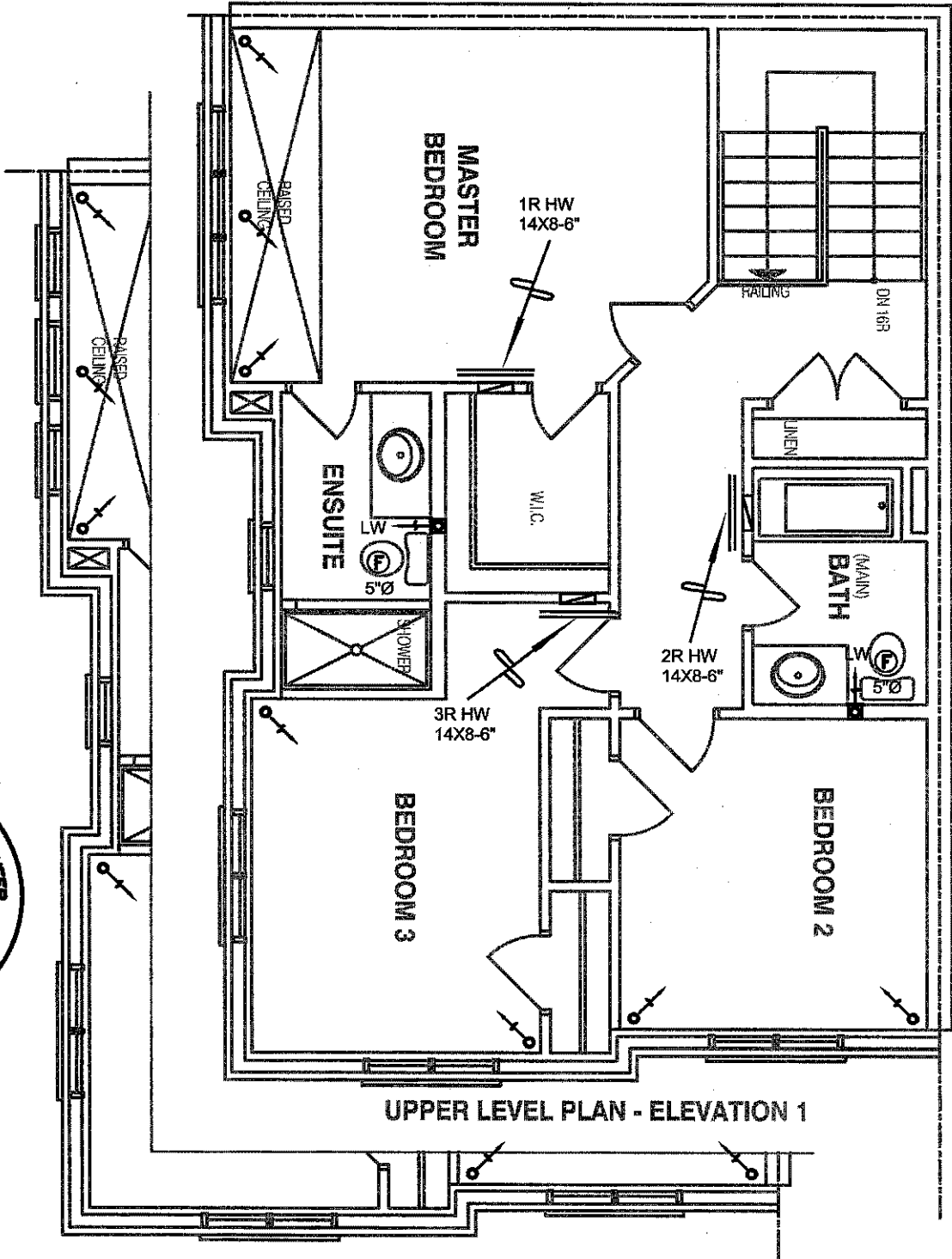
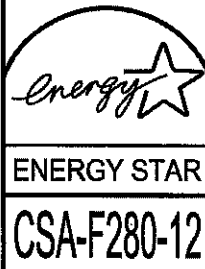


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Client GREENPARK HOMES	HVAC DESIGNS LTD. 375 Finley Ave. Suite 202 - Ajax, Ontario L1S 2E2 Tel: 905.619.2300 - 905.420.5300 Fax 905.619.2375 Email: info@hvacdsgns.ca Web: www.hvacdsgns.ca Specializing in Residential Mechanical Design Services	THIS STRUCTURE MUST BE CONSTRUCTED TO MEET OR EXCEED THE PROVISIONS OF THE ONTARIO BUILDING CODE	Sheet Title SECOND FLOOR HEATING LAYOUT
Project Name LAMBERT'S LANE PH. 2 CALEDON, ONTARIO	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 MAR/2019
URBAN 12 2294 sqft			Scale 3/16" = 1'-0"
			LO# 81394

HVAC LEGEND	
	OUTLET
	DUCTWORK
	FLEX DUCT
	RETURN AIR GRILLE
HW	HIGH WALL
LW	LOW WALL

METHOD 'A'
FLEX DUCT MIN LENGTH 6'
MAX LENGTH 10'



PARTIAL UPPER LEVEL PLAN - ELEVATION 2

RECEIVED
JUN 05 2019
TOWN OF CALEDON
BUILDING DEPARTMENT

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Client	GREENPARK HOMES
Project Name	LAMBERT'S LANE PH. 2 CALEDON, ONTARIO
URBAN 12	2294 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.hvacdsgns.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.
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THIS STRUCTURE MUST BE CONSTRUCTED TO MEET OR EXCEED THE PROVISIONS OF THE ONTARIO B

Sheet Title	THIRD FLOOR HEATING LAYOUT
Date	MAR/2019
Scale	3/16" = 1'-0"
LO#	81394