

DEPARTMENT OF INSPECTIONS, LICENSES & PERMITS 3430 COURT HOUSE DRIVE ELLICOTT CITY, MD 21043 PERMITS (410) 313-2455 INSPECTIONS (410) 313-1850	HOWARD COUNTY RESIDENTIAL HEATING-VENTILATION-AIR CONDITIONING AND REFRIGERATION PERMIT APPLICATION	HVACR PERMIT # <u>M1100803</u> BUILDING PERMIT #
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BUILDING ADDRESS: SUITE/APT: <u>5438 Autumn Field Court</u> SUBDIVISION: CENSUS TRACT: SECTION: AREA: LOT: TAX MAP: PARCEL: BLOCK: ZONE: PROPERTY ID: MAP COORDINATES: TYPE OF IMPROVEMENTS: <u>REPH</u> USE: <u>RES</u>	OWNERS NAME: <u>DAVID LEISAWITZ</u> ADDRESS: <u>5438 Autumn Field Court</u> CITY: <u>ELLICOTT CITY</u> STATE: <u>MD</u> ZIP CODE: <u>21043-7983</u> HOME PHONE: WORK PHONE:
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<u>CHECK ONE</u>	<u>HOW MANY</u>	COMPANY NAME: Ground Loop Heating & Air Cond., Inc.
SINGLE FAMILY DWELLING <input type="checkbox"/>	<u>1</u> ZONES	LICENSEE NAME: Michael E. Cullum
SINGLE FAMILY TOWNHOUSE <input type="checkbox"/>	___ ZONES	ADDRESS: 1701 Whiteford Road
MULTI-FAMILY / HOTEL/MOTEL <input type="checkbox"/>	___ ROOMS	CITY: Darlington
ASSISTED LIVING HOMES (16 OR FEWER RESIDENTS) <input type="checkbox"/>	___ ROOMS	STATE: MD ZIP CODE: 21034 PHONE: 410-836-1706 HVACR LICENSE NO: 6539

New <input type="checkbox"/> Heating and Air Conditioning <input type="checkbox"/> Geo Thermal System	<p><u>9/9/11</u> <u>O.K.</u> <u>BB</u> <u>GEOTHERMAL</u></p>	<input type="checkbox"/> Heating System Only <input type="checkbox"/> Ductless Mini Splits <input type="checkbox"/> Other Work (Describe): <input type="checkbox"/> Thru The Wall Systems
Replacement <input type="checkbox"/> Heating <input type="checkbox"/> Air Conditioning <input checked="" type="checkbox"/> Heating and Air Conditioning	Additions and Alterations <input type="checkbox"/> Heating <input type="checkbox"/> Air Conditioning <input type="checkbox"/> Heating and Air Conditioning	

****Replacement Geo Thermal Systems are not required; However, if a tax credit is being sought a permit is required****

Zones Permit Fee = # of Zones x \$40 = <u>40.00</u> Technology Fee (10% of Permit Fee) = <u>4.00</u> Plus Application Fee <u>50.00</u> Total Fees Due = <u>\$94.00</u>	Rooms Permit Fee = # of Rooms x \$80 = _____ Technology Fee (10% of Permit Fee) = _____ Plus Application Fee \$50 <u>50.00</u> Total Fees Due = _____
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I HAVE CAREFULLY EXAMINED AND READ THIS APPLICATION AND KNOW IT IS TRUE AND CORRECT. THE WORK DESCRIBED HEREIN WILL BE PERFORMED BY A STATE HVACR LICENSED PERSON(S), AND ALL WORK WILL BE PERFORMED IN COMPLIANCE WITH APPLICABLE CODES AND STANDARDS OF HOWARD COUNTY THE STATE OF MARYLAND.

Michael Cullum 7-29-11
 SIGNATURE OF LICENSEE DATE

MICHAEL CULLUM
 PRINT NAME OF LICENSEE

linda @groundloop.com
 Email Address

Make check payable to: DIRECTOR OF FINANCE OF HOWARD COUNTY

Word doc: T:\Updated Forms\hvac application
 Rev:10.2009

Validation	
Check Number: <u>13928</u>	Receipt Number: <u>249082</u>

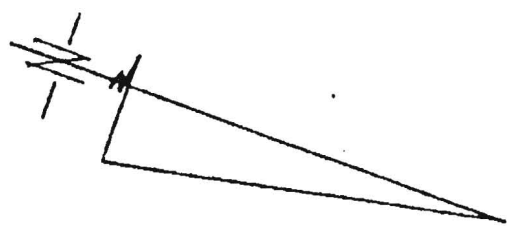
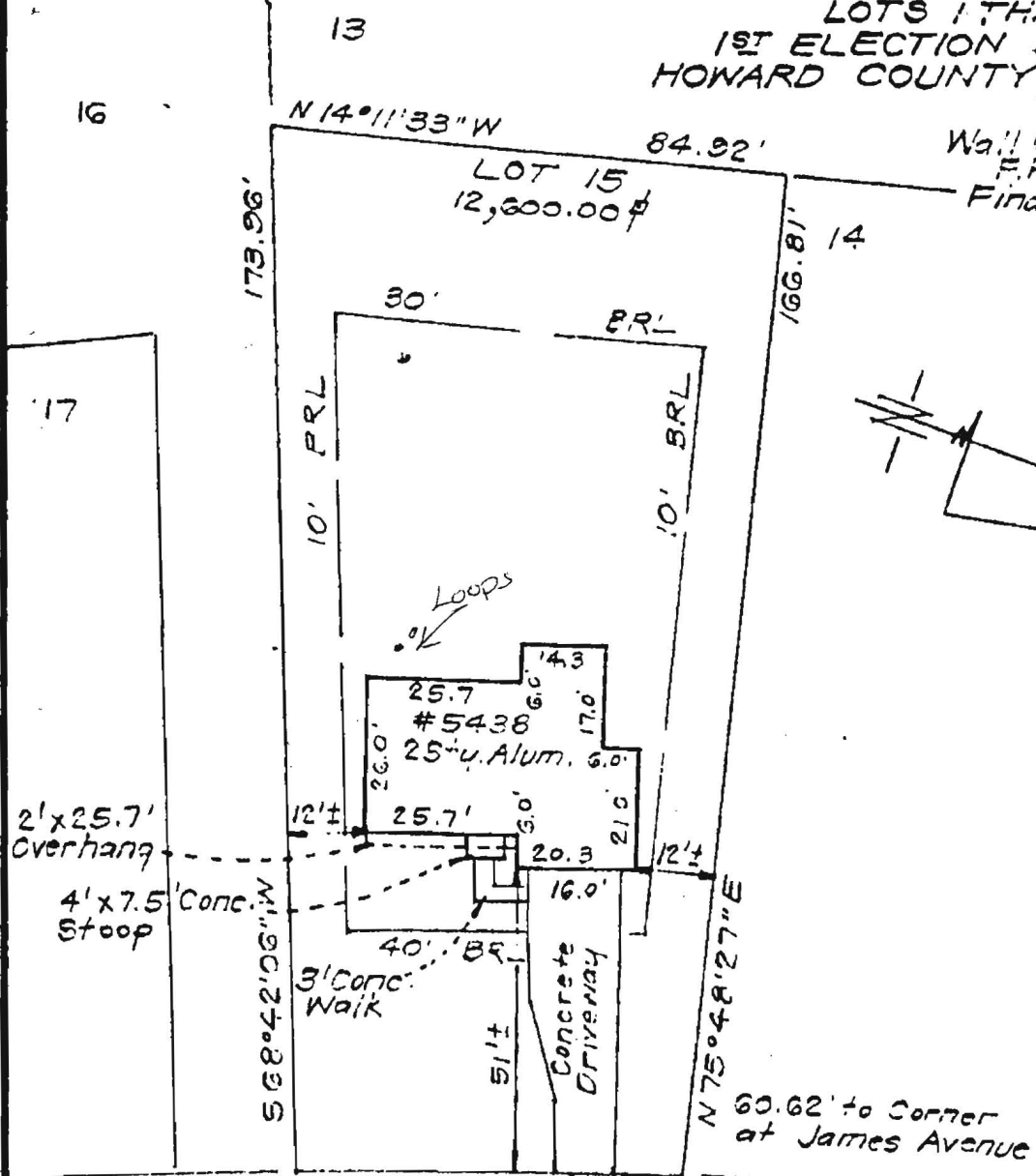
VERTICAL LOOPS
CITY WATER

M11000803

NOTE: This Lot lies in Zone C, as shown on Flood Insurance Rate Map for Howard Co., Md., Map Panel 29 of 45, dated Dec. 4, 1986.

LOCATION OF HOUSE
5438 AUTUMN FIELD COURT
LOT 15
STRAWBERRY FIELDS
SECTION ONE AREA ONE
LOTS 1 THRU 60
1ST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

Wall Check: 7-13-93
F.F. Elev.: 388.4
Final: 8-3-93



R=1175.00' A=63.68'
AUTUMN FIELD COURT
50' R/W

NOTE:
This survey not to be used for property line establishment.

88-104

SURVEYOR'S CERTIFICATE

I hereby certify that the position of all existing improvements on the above described property have been carefully established by a transit tape survey and that unless otherwise shown, there are no encroachments.

Ray [Signature] #304

CLARK • FINEFROCK & SACKETT, INC.

ENGINEERS • PLANNERS • SURVEYORS
7135 MINSTREL WAY COLUMBIA, MD. 21045
(410) 381-7500-BALTO. • (301) 621-8100-WASH.

REFERENCE	DRAWN BY KWC	CHECKED BY PAS
Plat 8991	DATE 8-4-93	FILE NO. 4645-W
	SCALE 1"=30'	

BRUNING 40-22 60545-01

M11000803

WaterFurnace Energy Analysis				
ASHRAE Single Zone Load Calculation Ver. 8.3				
Dealer-	Ground Loop Heating & Air Cond	Client-	Leisawitz	1ST floor
	1701 Whiteford Rd		5438 Autumn Field ct.	
	Darlington Md 21034		Ellicott City Md.21043	
Design Conditions-	Winter	Summer	Daily	
Outside Temp:	10 ° F	95 ° F	Range:	
Inside Temp:	70 ° F	75 ° F	23	
Difference:	60 ° F	20 ° F	° F	
General Information-				
Glass Type:	0 Clear	Exposed Ducts:	15%	
Roof Color:	0 Dark	Duct Loss Factor:	0.15	
Occupancy:	4 People	Duct Gain Factor:	0.15	
Light/Appliance:	2000 btuh			
Infiltration Evaluation:		Qty	Code	
Fireplace:		0	1	
Fans/Vents:		1	1	W/ Damper
Attic Access:		0	1	
Window AC:		0	0	
Fossil Furnace:		0	0	
Fossil DHW Heater:		0	0	
Exposed Duct System:		0		Poorly Sealed
Building # Stories:			1	
Wind Shielding:		2		Moderate
BUILDING LOAD SUMMARY - WHOLE HOUSE		AREA	LOSS	GAIN
WALLS/PARTITIONS-				
EXT. WALL- R13		892	6189	1987
CONCR-4' BEL GRD-R19		1008	2419	
WINDOWS/DOORS-				
D.H./SLDG-WOOD-DOUBLE		64	3310	1748
D.H./SLDG-WOOD-DOUBLE				
DOOR-WOOD-STRM		20	660	199
SLDG DR-WOOD-DOUBLE		32	1940	914
CEILINGS/FLOORS-				
FRAME CEILING-R7				
FRAME FLOOR-R13		950	4962	1237
PEOPLE				1200
LIGHT/APPLIANCE				2000
EXPOSED DUCT SYSTEM		15%	438	209
MOISTURE REMOVAL				2848
OTHER LOSS/GAIN-			0	0
TOTAL LOAD (BTU/HR)			19919	12342

WaterFurnace Energy Analysis				
ASHRAE Single Zone Load Calculation Ver. 8.3				
Dealer-	Ground Loop Heating & Air Cond 1701 Whiteford Rd Darlington Md 21034		Client-	Leisawitz 2nd 5438 Autumn Field ct. Ellicott City Md 21043
Design Conditions-	Winter	Summer	Daily	
Outside Temp:	10 ° F	95 ° F	Range:	
Inside Temp:	70 ° F	75 ° F	23	
Difference:	60 ° F	20 ° F	° F	
General Information-				
Glass Type:	0 Clear	Exposed Ducts:	15%	
Roof Color:	0 Dark	Duct Loss Factor:	0.15	
Occupancy:	4 People	Duct Gain Factor:	0.15	
Light/Appliance:	2000 btuh			
Infiltration Evaluation:	Qty	Code		
Fireplace:	0	1		
Fans/Vents:	1	1	W/ Damper	
Attic Access:	0	1		
Window AC:	0	0		
Fossil Furnace:	0	0		
Fossil DHW Heater:	0	0		
Exposed Duct System:		0	Poorly Sealed	
Building # Stories:		1		
Wind Shielding:		2	Moderate	
BUILDING LOAD SUMMARY - WHOLE HOUSE				
		AREA	LOSS	GAIN
WALLS/PARTITIONS-				
EXT. WALL- R13		954	6642	2130
CONCR-4' BEL GRD-R19				
WINDOWS/DOORS-				
D.H./SLDG-WOOD-DOUBLE		54	2802	1554
D.H./SLDG-WOOD-DOUBLE				
DOOR-WOOD-STRM				
SLDG DR-WOOD-DOUBLE				
CEILINGS/FLOORS-				
FRAME CEILING-R38		950	2118	1199
FRAME FLOOR-R13		950	4968	1238
PEOPLE				1200
LIGHT/APPLIANCE				2000
EXPOSED DUCT SYSTEM	15%		372	210
MOISTURE REMOVAL				2859
OTHER LOSS/GAIN-			0	0
TOTAL LOAD (BTU/HR)			16902	12390

EAST					SOUTH					WEST				
HEIGHT	LENGTH	EXPOSE			HEIGHT	LENGTH	EXPOSE			HEIGHT	LENGTH	EXPOSE		
8	25	0			8	38	0			8	25	0		
HEIGHT	WIDTH	DIRECT	SHADE	WALL	HEIGHT	WIDTH	DIRECT	SHADE	WALL	HEIGHT	WIDTH	DIRECT	SHADE	WALL
2	5	3	1	1	2	12	5	1	1					
LENGTH					LENGTH					LENGTH				
WIDTH					WIDTH					WIDTH				
EXPOSE					EXPOSE					EXPOSE				

SURFACES

					NORTH							
----- WALLS/PARTITIONS -----					TYPE	CNSTR	INFILT	HEIGHT	LENGTH	EXPOSE		
1	EXT. WALL- R13	1	3	2	8	38	0					
2	CONCR-4' BEL GRD-R19	3	5	2								
3												
4												
5												
----- WINDOWS/DOORS -----					TYPE	CNSTR	INFILT	HEIGHT	WIDTH	DIRECT	SHADE	WALL
6	D.H./SLDG-WOOD-DOUBLE	6	3	2	2	10	1	1	1			
7	D.H./SLDG-WOOD-DOUBLE	6	3	2								
8	DOOR-WOOD-STRM	10	2	2								
9	SLDG DR-WOOD-DOUBLE	9	3	2								
10												
11												
----- CEILINGS/FLOORS -----					TYPE	CNSTR	INFILT	LENGTH	WIDTH	EXPOSE		
12	FRAME CEILING-R38	11	8	2	38	25	0					
13												
14	FRAME FLOOR-R13	14	3	2	38	25	0					
15												
16												