

DEPARTMENT OF INSPECTIONS,
 LICENSES & PERMITS
 3438 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 # MI 3000425
 BUILDING PERMIT #

BUILDING ADDRESS: 6404 Michael Elizabeth Way
 SUITE/APT:

OWNERS NAME: Charles Fisher
 ADDRESS: 6404 Michael Elizabeth Way

SUBDIVISION:
 CENSUS TRACT: SECTION:
 LOT: TAX MAP: AREA:
 BLOCK: ZONE: PARCEL:

CITY: Hanover
 STATE: MD ZIP CODE: 21076

PROPERTY ID: MAP COORDINATES:

HOME PHONE: 410-379-0488 WORK PHONE: 443-654-4353

TYPE OF IMPROVEMENTS: USE:

CHECK ONE	HOW MANY
SINGLE FAMILY DWELLING <input checked="" type="checkbox"/>	1 ZONES
SINGLE FAMILY TOWNHOUSE <input type="checkbox"/>	_____ ZONES
MULTI-FAMILY / HOTEL/MOTEL <input type="checkbox"/>	_____ ROOMS
ASSISTED LIVING HOMES (16 OR FEWER RESIDENTS) <input type="checkbox"/>	_____ ROOMS

COMPANY NAME: Watermale Heating & Air Cond.
 LICENSEE NAME: Joseph F. Opdyke
 ADDRESS: 2116 Watermale Md.
 CITY: Fallston
 STATE: MD ZIP CODE: 21047
 PHONE: 410-879-0292 HVACR LICENSE NO: 7629

- New
- Heating and Air Conditioning
 - Geo Thermal System
 - Heating System Only
 - Ductless Mini Splits
 - Other Work (Describe):
 - Thru The Wall Systems

- Replacement
- Heating
 - Air Conditioning
 - Heating and Air Conditioning
- Replaces existing heat pump with new water furnace NOV 049 (4 ton) geothermal unit
- Additions and Alterations
- Heating
 - Air Conditioning
 - Heating and Air Conditioning

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

Zones	Rooms
Permit Fee = # of Zones x \$40 = 40.00	Permit Fee = # of Rooms x \$80 = _____
Technology Fee (10% of Permit Fee) = 4.00	Technology Fee (10% of Permit Fee) = _____
Plus Application Fee 50.00	Plus Application Fee \$50 50.00
Total Fees Due = 94.00	Total Fees Due = _____

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.

SIGNATURE OF LICENSEE: Joseph F. Opdyke
 DATE: _____
 PRINT NAME OF LICENSEE: Joseph F. Opdyke
 Email Address: watermalehvac@verizon.net

Validation
 Check Number: 20643
 Cash: _____
 Receipt Number: 316428

note: home is on "public" well & septic

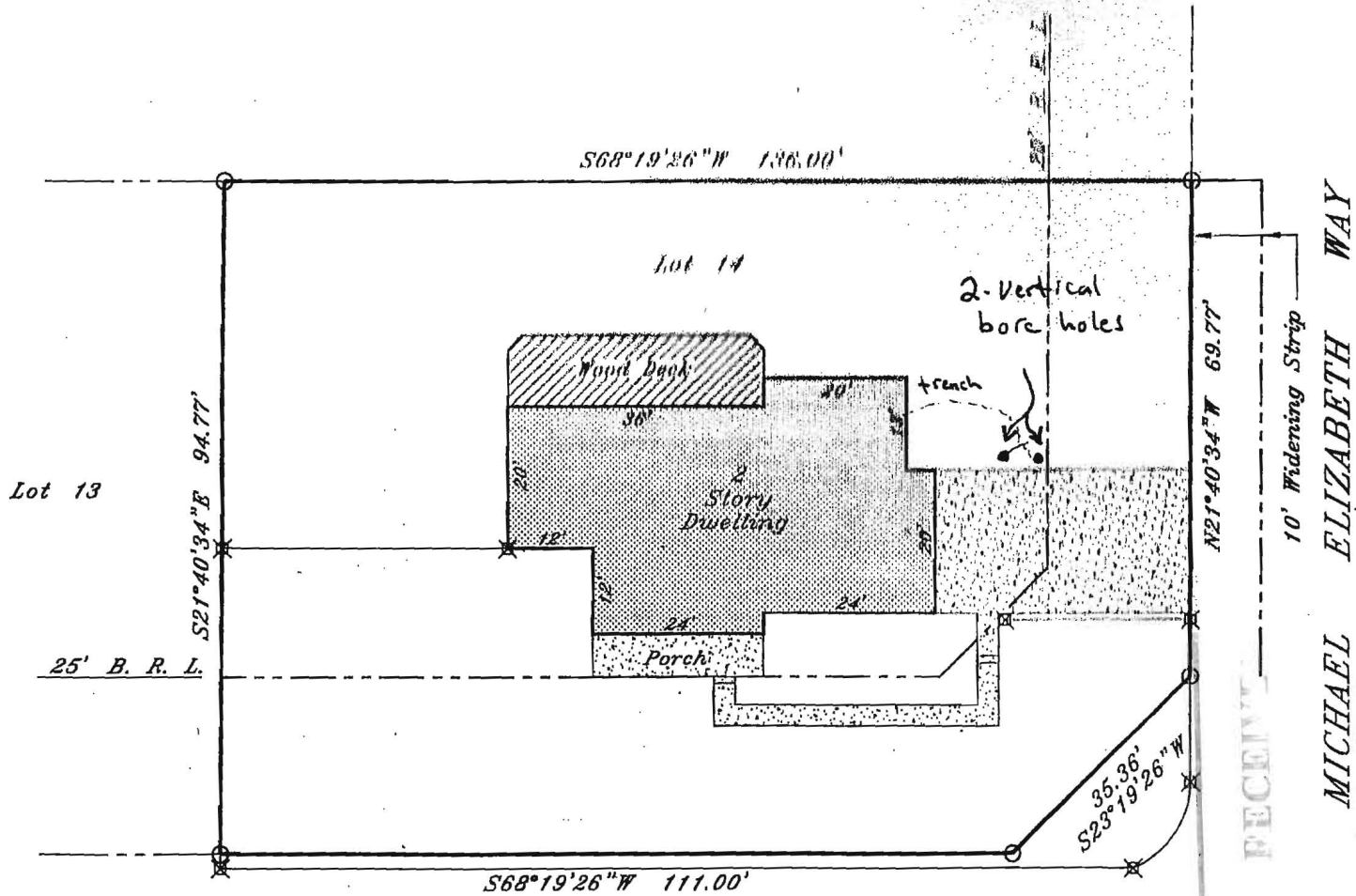
Make check payable to: DIRECTOR OF FINANCE OF HOWARD COUNTY

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

MAY 02 2013

Health & ... R.E.H.S. 5/8/13

Lot Number: 14
 Block/Section: -
 Plat Reference: C.M.P. No. 8540
 Title of Plat: Lindsay & Choteau



RECEIVED
 MICHAEL ELIZABETH WAY
 MAY 02 2013

HOWARD COUNTY
 DEPARTMENT OF ENVIRONMENTAL

MICHAEL ELIZABETH WAY

Dwelling lies in Flood Zone C
 F.E.M.A. Map Panel Number 240044 0036 B, Dated 12/04/86

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 mpany or its agent
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 bishment or location
 r other existing or
 r purpose to reflect
 vel of accuracy. This
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 may not be required
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1/30/02

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02BR3671



Project Report

General Project Information

Project Title: Fisher, Charles & Gina
 Designed By: Daren Harbaugh
 Project Date: Friday, April 12, 2013
 Client Name: Charles & Gina Fisher
 Client Address: 6404 Michael Elizabeth Way
 Client City: Hanover, MD 21076
 Company Name: Watervale Geothermal
 Company Representative: Daren Harbaugh
 Company Address: 2116 Watervale Road
 Company City: Fallston, MD 21047
 Company Phone: 443-255-4527
 Company E-Mail Address: daren@watervalegeothermal.com

Design Data

Reference City: Baltimore, Maryland
 Building Orientation: Front door faces Northwest
 Daily Temperature Range: Medium
 Latitude: 39 Degrees
 Elevation: 148 ft.
 Altitude Factor: 0.995
 Elevation Sensible Adj. Factor: 1.000
 Elevation Total Adj. Factor: 1.000
 Elevation Heating Adj. Factor: 1.000
 Elevation Heating Adj. Factor: 1.000

	Outdoor Dry Bulb	Outdoor Wet Bulb	Outdoor Rel.Hum	Indoor Rel.Hum	Indoor Dry Bulb	Grains Difference
Winter:	10	11.86	100%	n/a	70	n/a
Summer:	95	75	40%	50%	75	34

Check Figures

Total Building Supply CFM:	1,547	CFM Per Square ft.:	0.446
Square ft. of Room Area:	3,466	Square ft. Per Ton:	919
Volume (ft ³) of Cond. Space:	28,734		

Building Loads

Total Heating Required Including Ventilation Air:	51,426 Btuh	51.426 MBH
Total Sensible Gain:	42,325 Btuh	93 %
Total Latent Gain:	2,946 Btuh	7 %
Total Cooling Required Including Ventilation Air:	45,271 Btuh	3.77 Tons (Based On Sensible + Latent)

Notes

Rhvac is an ACCA approved Manual J and Manual D computer program.
 Calculations are performed per ACCA Manual J 8th Edition, Version 2, and ACCA Manual D.
 All computed results are estimates as building use and weather may vary.
 Be sure to select a unit that meets both sensible and latent loads according to the manufacturer's performance data at your design conditions.

