

# 92 GENUING ITHACA, NY CIRCLE





## Property Details

County: Tompkins | Town/City: Town of Dryden  
Zip: 14850 | Postal City: Ithaca  
City Neighborhood: East Hill  
Cross St: Snyder Hill  
School District: Ithaca  
Elem. School: Caroline Elementary

Acres: 49.57 | Lot Front: 13 | Lot Depth: 1,400  
Lot Shape: Irregular | Sq. Ft.: 13,725  
Sq. Ft. Source: Architect | Year Built: 2001

## Property Description

Luxury living in the beautiful Finger Lakes region of upstate NY and close to Cornell Univ. and Cayuga Lake, this distinctive 13,725 SF architect-designed home blends into the 50 acres of woods that surround it and offers complete privacy. While the exterior gives a nod to traditional Dutch design the interior wide-open spaces, high ceilings and walls of windows are strictly contemporary but warmed by the unique melding of multiple wood types. Built to ADA standards there are 2 primary suites, an elevator that services all 3 floors, a 19'x39' indoor Gunite pool, a dream kitchen with 2 islands and a butler's pantry, additional ensuite bedrooms, stained glass artwork, multiple other rooms plus a secret room and a tower for surveying your domain. The lower level has walls of windows, a family/game room, a wine room, and additional guest quarters. Two mechanical rooms house everything needed to run a house of this size plus a 3 car garage with partially finished space above for additional living quarters. Recently installed geothermal heating and AC.



# General Information

- 3-Stories
- Exterior: Stone, Wood
- Bedrooms: 6 | Total Rooms: 15
- Full Baths: 7
- Half Baths: 1
- Driveway: Blacktop, Parking Area, Stone/Gravel
- Roof Description: Asphalt, Metal, Shingles, Skylight
- Foundation: Poured
- Garage: 3-car, Attached
- Lot Info: Neighborhood Street, Secluded, Wooded Lot
- Attic: Full, Stair Access, Walk-in
- Basement: Exterior Walkout, Finished, Full
- Waterfront: No
- Riparian Rights: No

	Beds	Full	Half
1st Floor:	1	2	1
2nd Floor:	4	4	0
3rd Floor:	0	0	0
4th Floor:	0	0	0
Basement:	1	1	0
<b>Total:</b>	<b>6</b>	<b>7</b>	<b>1</b>

Directions: From Ithaca take either Ellis Hollow or Snyder Hill Rd. Turn onto Genung Rd, turn on Genung Circle. House not visible from road and no sign. DO NOT drive down the driveway without permission.

92 Genung Circle | MLS #: R1532993



# Interior & Exterior Features

Room	Floor
Bedroom 1	1st
Bedroom 2	2nd
Bedroom 3	2nd
Bedroom 4	2nd
Bedroom 5	Lower
Dining Room	1st
Kitchen	1st
Living Room	1st
Other 1	1st
Other 2	1st
Other 3	1st
Other 4	Lower

**Kitchen/Dining:** Breakfast Bar, Breakfast Room, Eat-In, Formal Dining Room, Granite Counter, Island, Kitchen/Family Room Combo, Living/Dining Combo

**Appliance:** Convection, Cooktop - Electric, Dishwasher, Double Oven, Dryer, Microwave, Refrigerator, Washer

**Floor:** Ceramic-Some, Hardwood-Some

**Total Fireplaces: 3**  
Gas: 2 | Wood: 1

**Additional Rooms:** 1st Floor Primary Suite, Basement / Rec Room, Den/Study, Family Room, Foyer/Entry Hall, Great Room, Laundry-1st Floor, Laundry-2nd Floor, Living Room, Loft, Morning Room, Office, Porch - Screened, Workshop

**Accessibility:** 32 Inch Doors - some, Accessible/ANSI - some, Built to ANSI standards, Elevator - ANSI standard, Entry Level Bedroom, Kitchen - Adj Cabinets, No Step Entry, Wheelchair Bathroom, Wheelchair Hall - 4 ft plus, Wheelchair Kitchen

**Additional Interior Features:** Ceiling Fan, Circuit Breakers - Some, Copper Plumbing - Some, Drapes - Some, Indoor Pool, Natural Woodwork - some, Security System - Leased, Skylight, Sliding Glass Door, Stained Glass - Some, Two Story Foyer, Water Purification System, Water Softener - Owned, Whirlpool Tub

**Additional Exterior Features:** Balcony, Deck, Garage Door Opener, High-Speed Internet, Hot Tub, Patio, Private Yard - see Remarks, Satellite Dish



## Utilities Information

HVAC Type: AC-Central, Forced Air, Heated Floors, Humidifier, Municipal Electric, Radiant

Heating Fuel: Geothermal

Water Heater Fuel: Other - see remarks

Emergency Backup: Generator - Permanent

Type of Well: Drilled

Water: Well

Well Location: East of House

Sewer: Septic

ENERGY STAR® Qualified: Appliances

Energy Equip: Propane Tank-Leased, Other

## Financing Information

Possible Financing: Cash, Conventional

Type of Sale: Normal

Equity: \$2,300,000

Assess Value: \$1,925,000

Town/County Tax: \$19,097

City/Village Tax: \$0

School tax: \$32,199

Total Taxes: \$51,296

HOA Pay Desc.: None

Annual Spc Access: \$0



## Main Floor

- All doors are solid cherry.
- Radiant heat throughout except carpeted part of the bedroom and closets.
- Most floors are quarter-sawn ash to accommodate the radiant heat.
- South-facing sunroom has 4 skylights and a tile floor.
- Large screened porch has a wood-burning fireplace and a dumb waiter to bring wood up from the lower level.
- Open kitchen has 2 islands, granite counters, a newer Induction cooktop,
- Dacor double oven with convection options, cherry cupboards, and a lower granite counter to fit a wheelchair.
- Butler's pantry with Corian counters, lighted top cupboards, 3 roll-top door cupboards for small appliances, sink, and 2nd dishwasher.
- Family room has a wall of windows that includes 2 sets of French doors leading to lpe deck; a custom-made maple cupboard for TV, electronics, and a gas fireplace.
- Eating nook with a custom-made circular cushioned booth made of curly maple with walnut and cherry accents.
- Bar area with bar fridge, glass, and lighted cherry cupboards.
- Dining room with 2 lighted stained glass windows, bay window, windowed pocket doors, tray ceiling, pocket door to pantry.
- Two story entry with antique stained glass window, custom door of maple, cherry, mahogany.
- Den with a wall of walnut cupboards, stained glass window, and Dutch door.
- Main floor master bedroom suite with universal design roll-in bathroom & shower, 2 sinks, heated towel bar, 2 walk-in closets, private deck.
- Indoor 5-foot-deep gunite pool with Jacuzzi at the shallow end. Locking safety cover, 6 skylights, full bath, changing room, wall of windows to deck

## Second Floor

- All doors are maple.
- Floors in 3 of 4 bedrooms are maple with cherry accents.
- Radiant heat in all 4 bathrooms.
- Master bedroom is carpeted, and has 2 sets of French doors to a deck and a skylight.
- The primary bath has a private water closet, double Corian vanity, conventional
- shower with 2 showerheads, jet shower with waterfall options, and entrance to his and her walk-in closets.
- Two other bedrooms have en-suite baths and walk-in closets with access to carpeted attic lofts.
- Fourth bedroom has a universal design bathroom with a steam shower just outside the door.
- Second laundry room.
- A secret room hidden by bookshelves with its own small balcony.

## Attic

- Spacious storage area.
- Two bedroom lofts.

## Tower

- A spiral wood staircase leads to a small tower room with windows that open on 3 sides.

## Lower Level

- 10-foot ceilings.
- Two zones of radiant heat.
- Wall of windows and doors on west-facing side.
- Large game room suitable for a pool table, ping pong table, etc.
- Media room with tall windows.
- Large bedroom/craft room with private entrance.
- Universal design bathroom.
- Wine room without radiant heat; insulated to maintain temperature.
- Two large rooms for mechanicals

## 3-Car Garage

- Wheelchair access to the house with space above for a potential living unit.
- Attached shed for gardening equipment, bikes, etc.
- Two conventional garage doors with a middle door higher to accommodate higher vehicles.
- Emergency propane generator housed below the shed will service house essentials and pool cover.

## Land

- Approximately 50 acres of mostly mature forest according to a recent survey
- Maintained trails
- 2 seasonal streams
- Small area of wetlands
- Cross-country ski trails are shared on 3 adjacent properties.

## Exterior

- Cedar siding (stained 2017)
- Stone on 2-story entry and up to main floor windows on east and south sides.
- Roof on the main house is architectural shingles (50-year shingles) with metal roofing over the pool and screened porch.
- Deck is constructed of white oak timbers and Ipe wood.

## Mechanicals

- Geothermal Heating System installed 2023 which includes 3 water-to-water heat pumps and 3 water-to-air heat pumps.
- The system services the radiant heat in every room except the wine room, main floor mudroom, and laundry rooms. (the heating tubes in the garage and asphalt driveway in front of garages have been disconnected).
- Central Air is in place with the new geothermal system
- Propane gas. A 1,000-gallon tank services 2 fireplaces, the oven, 1 set of washer and dryers, dehumidifiers in pool area, generator
- 3 air-to-air heat exchangers for fresh air in winter.
- Lower level dehumidifier
- Two dehumidifiers for the swimming pool room.
- Heater and filter for pool in a separate basement room with locked entry.
- Saltwater conversion system for the pool.
- The central vacuum system is in place but not functioning and conveys as is
- Security system with 3 touchpad stations in-house.
- Fiber optic cable was installed but not able to hook up; currently no cable on the road
- A sound system is available in the pool area. The whole house is wired for it.
- ~300 ft. well with a 1,000-gallon holding tank in the mechanical room.
- Water treatment system
- Standard septic system, rated for 5 bedrooms, with leach field. (pumped every 2 years)
- Direct TV, Internet is Starlink and satellite dishes
- Elevator for 3 levels.

# Property Condition Disclosure

92 Genung Circle | MLS #: R1532993



**Department of State  
Licensing Services**

New York State  
Department of State  
Division of Licensing Services  
P.O. Box 2200:  
Albany, NY 12201-200;  
Customer Service: (518) 474-4421  
<https://dos.ny.gov>

## Property Condition Disclosure Statement

Name of Seller or Sellers: Marcy Schaeffer

Property Address: 92 Genung Circle

### General Instructions:

The Property Condition Disclosure Act requires the seller of residential real property to cause this disclosure statement or a copy of thereof to be delivered to a buyer or buyer's agent prior to the signing by the buyer of a binding contract of sale.

### Purpose of Statement:

This is a statement of certain conditions and information concerning the property known to the seller. This Disclosure Statement is not a warranty of any kind by the seller or by any agent representing the seller in this transaction. It is not a substitute for any inspections or tests and the buyer is encouraged to obtain his or her own independent professional inspections and environmental tests and also is encouraged to check public records pertaining to the property.

A knowingly false or incomplete statement by the seller on this form may subject the seller to claims by the buyer prior to or after the transfer of title.

"Residential real property" means real property improved by a one to four family dwelling used or occupied, or intended to be used or occupied, wholly or partly, as the home or residence of one or more persons, but shall not refer to (a) unimproved real property upon which such dwellings are to be constructed or (b) condominium units or cooperative apartments or (c) property on a homeowners' association that is not owned in fee simple by the seller.

### Instruction to the Seller:

- Answer all questions based upon your actual knowledge.
- Attach additional pages with your signature if additional space is required.
- Complete this form yourself.
- If some items do not apply to your property, check "NA" (Non-applicable). If you do not know the answer check "Unkn" (Unknown).

### Seller's Statement:

The seller makes the following representations to the buyer based upon the seller's actual knowledge at the time of signing this document. The seller authorized his or her agent, if any, to provide a copy of this statement to a prospective buyer of the residential real property. The following are representations made by the seller and are not the representations of the seller's agent.

### GENERAL INFORMATION

- How long have you owned the property? ..... 22 years since bu  
11 1 1 1
- How long have you occupied the property? .....  
11 1
- What is the age of the structure or structures? .....  
*Note to buyer - If the structure was built before 1978 you are encouraged to investigate for the presence of lead based paint.*
- Does anybody other than yourself have a lease, easement or any other right to use or occupy any part of your property other than those stated in documents available in the public record, such as rights to use a road or path or cut trees or crops? .....  Yes  No  Unkn  N/
- Does anybody else claim to own any part of your property? If yes, explain below .....  Yes  No  Unkn  N/
- Has anyone denied you access to the property or made a formal legal claim challenging your title to the property? If yes, explain below .....  Yes  No  Unkn  NA

## Property Condition Disclosure Statement

- Are there any features of the property shared in common with adjoining landowners or a homeowner's association, such as walls, fences or driveways? If yes, describe below .....  Yes  No  Unkn  NA
- Are there any electric or gas utility surcharges for line extensions, special assessments or homeowner or other association fees that apply to the property? If yes, describe below .....  Yes  No  Unkn  NA
- Are there certificates of occupancy related to the property? If no, explain below .....  Yes  No  Unkn  NA

### ENVIRONMENTAL

#### Note to Seller:

In this section, you will be asked questions regarding petroleum products and hazardous or toxic substances that you know to have been spilled, leaked or otherwise been released on the property or from the property onto any other property. Petroleum products may include, but are not limited to, gasoline, diesel fuel, home heating fuel, and lubricants. Hazardous or toxic substances are products or other material that could pose short or long-term danger to personal health or the environment if they are not properly disposed of, applied or stored. These include, but are not limited to, fertilizers, pesticides and insecticides, paint including paint thinner, varnish remover and wood preservatives, treated wood, construction materials such as asphalt and roofing materials, antifreeze and other automotive products, batteries, cleaning solvents including septic tank cleaners, household cleaners, pool chemicals and products containing mercury and lead and indoor mold.

#### Note to Buyer:

If contamination of this property from petroleum products and/or hazardous or toxic substances is a concern to you, you are urged to consider soil and groundwater testing of this property.

- Is any or all of the property located in a Federal Emergency Management Agency (FEMA) designated floodplain? If yes, explain below .....  Yes  No  Unkn  NA
- Is any or all of the property located wholly or partially in the Special Flood Hazard Area ("SFHA"; "100-year floodplain") according to the Federal Emergency Management Agency's (FEMA's) current flood insurance rate maps for your area? If yes, explain below .....  Yes  No  Unkn  NA
- Is any or all of the property located wholly or partially in a Moderate Risk Flood Hazard Area ("500-year floodplain") according to FEMA's current flood insurance rate maps for your area? If yes, explain below .....  Yes  No  Unkn  N/
- Is the property subject to any requirement under federal law to obtain and maintain flood insurance on the property? If yes, explain below .....  Yes  No  Unkn  N/
  - Homes in the Special Flood Hazard Area, also known as High Risk Flood Zones, on FEMA's flood insurance rate maps with mortgages from federally regulated or insured lenders are required to obtain and maintain flood insurance. Even when not required, FEMA encourages homeowners in high risk, moderate risk, and low risk flood zones to purchase flood insurance that covers the structure(s) and the personal property within the structure(s). Also note that homes in coastal areas may be subject to increased risk of flooding over time due to projected sea level rise and increased extreme storms caused by climate change which may not be reflected in current flood insurance rate maps.



## Property Condition Disclosure Statement

14. Have you ever received assistance, or are you aware of any previous owners receiving assistance, from the Federal Emergency Management Agency (FEMA), the U.S. Small Business Administration (SBA), or any other federal disaster flood assistance for flood damage to the property? *If yes, explain below* .....  Yes  No  Unkn  NA  
• For properties that have received federal disaster assistance, the requirement to obtain flood insurance passes down to all future owners. Failure to obtain and maintain flood insurance can result in an individual being ineligible for future assistance.
15. Is there flood insurance on the property? *If yes, attach a copy of the policy* .....  Yes  No  Unkn  NA  
• A standard homeowner's insurance policy typically does not cover flood damage. You are encouraged to examine your policy to determine whether you are covered.
16. Is there a FEMA elevation certificate available for the property? *If yes, attach a copy of the certificate* .....  Yes  No  Unkn  NA  
• An elevation certificate is a FEMA form, completed by a licensed surveyor or engineer. The form provides critical information about the flood risk of the property and is used by flood insurance providers under the National Flood Insurance Program (NFIP) to help determine the appropriate flood insurance rating for the property. A buyer may be able to use the elevation certificate from a previous owner for their flood insurance policy.
17. Have you ever filed a claim for flood damage to the property with any insurance provider, including the National Flood Insurance Program (NFIP)? *If yes, explain below* .....  Yes  No  Unkn  NA
18. Is any or all of the property located in a designated wetland? *If yes, explain below* .....  Yes  No  Unkn  NA
19. Is the property located in an agricultural district? *If yes, explain below* .....  Yes  No  Unkn  NA
20. Was the property ever the site of a landfill? *If yes, explain below* .....  Yes  No  Unkn  NA
21. Are there or have there ever been fuel storage tanks above or below the ground on the property?  
• *If yes, are they currently in use?* .....  Yes  No  Unkn  NA  
• Location(s) East of R of garage  
• Are they leaking or have they ever leaked? *If yes, explain below* .....  Yes  No  Unkn  NA
22. Is there asbestos in the structure? *If yes, state location or locations below* .....  Yes  No  Unkn  NA
23. Is lead plumbing present? *If yes, state location or locations below* .....  Yes  No  Unkn  NA
24. Has a radon test been done? *If yes, attach a copy of the report* .....  Yes  No  Unkn  NA

## Property Condition Disclosure Statement

25. Has motor fuel, motor oil, home heating fuel, lubricating oil or any other petroleum product, methane gas, or any hazardous or toxic substance spilled, leaked or otherwise been released on the property or from the property onto any other property? *If yes, describe below* .....  Yes  No  Unkn  NA
26. Has the property been tested for the presence of motor fuel, motor oil, home heating fuel, lubricating oil, or any other petroleum product, methane gas, or any hazardous or toxic substance? *If yes, attach report(s)* .....  Yes  No  Unkn  NA
27. Has the property been tested for indoor mold? *If yes, attach a copy of the report* .....  Yes  No  Unkn
- ### STRUCTURAL
28. Is there any rot or water damage to the structure or structures? *If yes, explain below* .....  Yes  No  Unkn  NA
29. Is there any fire or smoke damage to the structure or structures? *If yes, explain below* .....  Yes  No  Unkn  NA
30. Is there any termite, insect, rodent or pest infestation or damage? *If yes, explain below* .....  Yes  No  Unkn  NA
31. Has the property been tested for termite, insect, rodent or pest infestation or damage? *If yes, please attach report(s)* .....  Yes  No  Unkn  NA
32. What is the type of roof/roof covering (slate, asphalt, other)? ..... asphalt + metal  
• Any known material defects? ..... no  
• How old is the roof? ..... 22  
• Is there a transferable warranty on the roof in effect now? *If yes, explain below* .....  Yes  No  Unkn  NA
33. Are there any known material defects in any of the following structural systems: footings, beams, girders, lintels, columns or partitions? *If yes, explain below* .....  Yes  No  Unkn  NA
- ### MECHANICAL SYSTEMS AND SERVICES
34. What is the water source? (Check all that apply) .....  Well  Private  Municipal  
 Other: \_\_\_\_\_  
• If municipal, is it metered? .....  Yes  No  Unkn  NA

# Property Condition Disclosure

92 Genung Circle | MLS #: R1532993

35. Has the water quality and/or flow rate been tested? *If yes, describe below* .....  Yes  No  Unkn  NA

not recently

36. What is the type of sewage system? (Check all that apply) .....  Public sewer  Private sewer

Septic  Cesspool

• If septic or cesspool, age? ..... 22

• Date last pumped? ..... 1 year ago

• Frequency of pumping? ..... every 2 years

• Any known material defects? *If yes, explain below* .....  Yes  No  Unkn  NA

37. Who is your electric service provider? ..... NYS&G

• What is the amperage? ..... 400

• Does it have circuit breakers or fuses? ..... breakers

• Private or public poles? ..... public

• Any known material defects? *If yes, explain below* .....  Yes  No  Unkn  NA

38. Are there any flooding, drainage or grading problems that resulted in standing water on any portion of the property? *If yes, state locations and explain below* .....  Yes  No  Unkn  NA

39. Has the structure(s) experienced any water penetration or damage due to seepage or a natural flood event, such as from heavy rainfall, coastal storm surge, tidal inundation or river overflow? *If yes, explain below* .....  Yes  No  Unkn  NA

Are there any known material defects in any of the following? *If yes, explain below. Use additional sheets if necessary.*

40. Plumbing system? .....  Yes  No  Unkn  NA

41. Security system? .....  Yes  No  Unkn  NA

42. Carbon monoxide detector? .....  Yes  No  Unkn  NA

43. Smoke detector? .....  Yes  No  Unkn  NA

44. Fire sprinkler system? .....  Yes  No  Unkn  NA

45. Sump pump? .....  Yes  No  Unkn  NA

46. Foundation/slab? .....  Yes  No  Unkn  NA

47. Interior walls/ceilings? .....  Yes  No  Unkn  NA

48. Exterior walls or siding? .....  Yes  No  Unkn  NA

49. Floors? .....  Yes  No  Unkn  NA

50. Chimney/fireplace or stove? .....  Yes  No  Unkn  NA

51. Patio/deck? .....  Yes  No  Unkn  NA

52. Driveway? .....  Yes  No  Unkn  NA

53. Air conditioner? .....  Yes  No  Unkn  NA

54. Heating system? .....  Yes  No  Unkn  NA

55. Hot water heater? .....  Yes  No  Unkn  NA

56. The property is located in the following school district Ithaca

**Note:** Buyer is encouraged to check public records concerning the property (e.g. tax records and wetland and FEMA's current flood insurance rate maps and elevation certificates).

*The seller should use this area to further explain any item above. If necessary, attach additional pages and indicate here the number of additional pages attached.*

## SELLER'S CERTIFICATION:

Seller certifies that the information in this Property Condition Disclosure Statement is true and complete to the seller's actual knowledge as of the date signed by the seller. If a seller of residential real property acquires knowledge which renders materially inaccurate a Property Condition Disclosure Statement provided previously, the seller shall deliver a revised Property Condition Disclosure Statement to the buyer as soon as practicable. In no event, however, shall a seller be required to provide a revised Property Condition Disclosure Statement after the transfer of title from the seller to the buyer or occupancy by the buyer, whichever is earlier.

Seller's Signature

X Marcy Schaeffer

Date

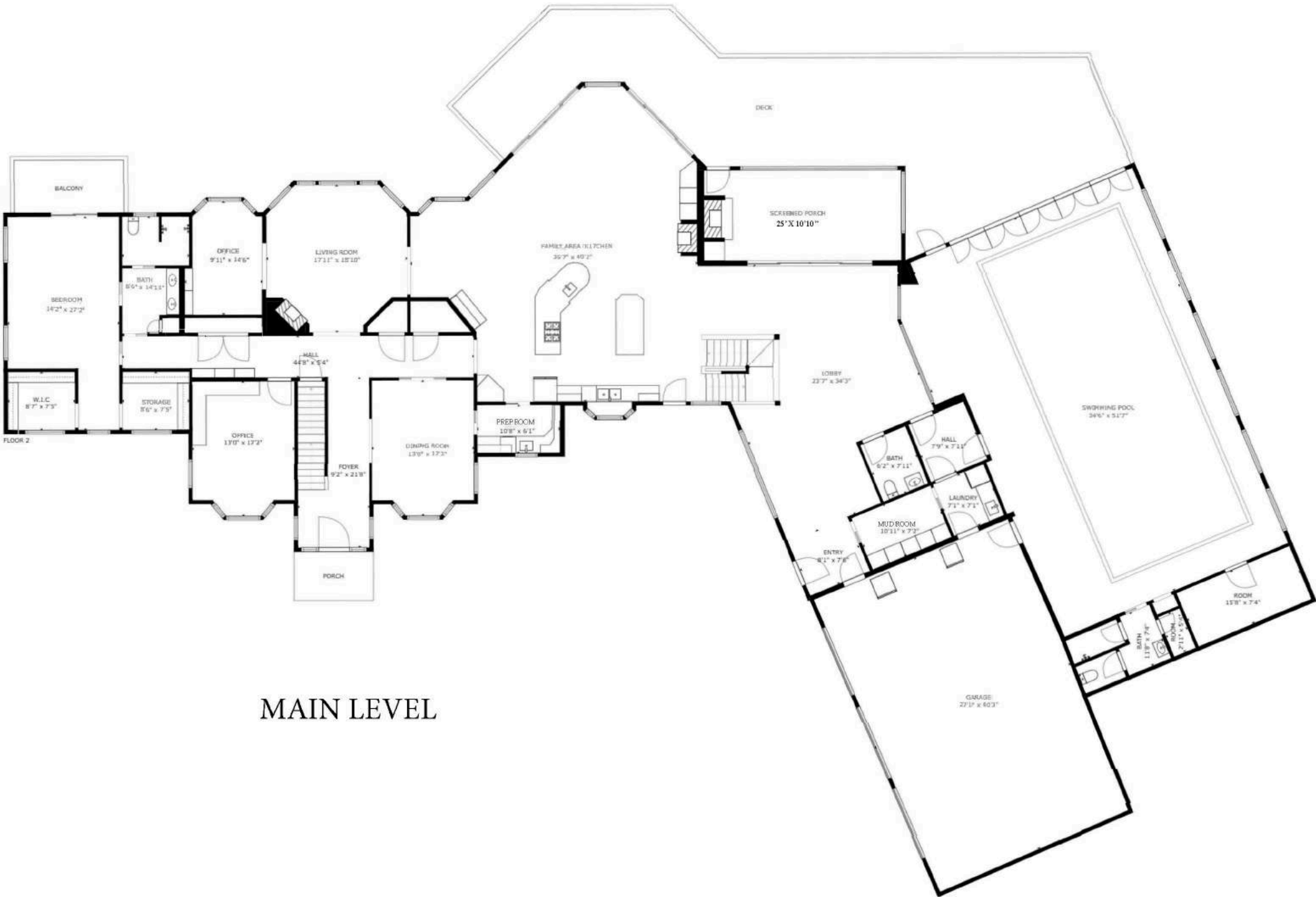
3/25/24

Seller's Signature

X \_\_\_\_\_

Date

\_\_\_\_\_

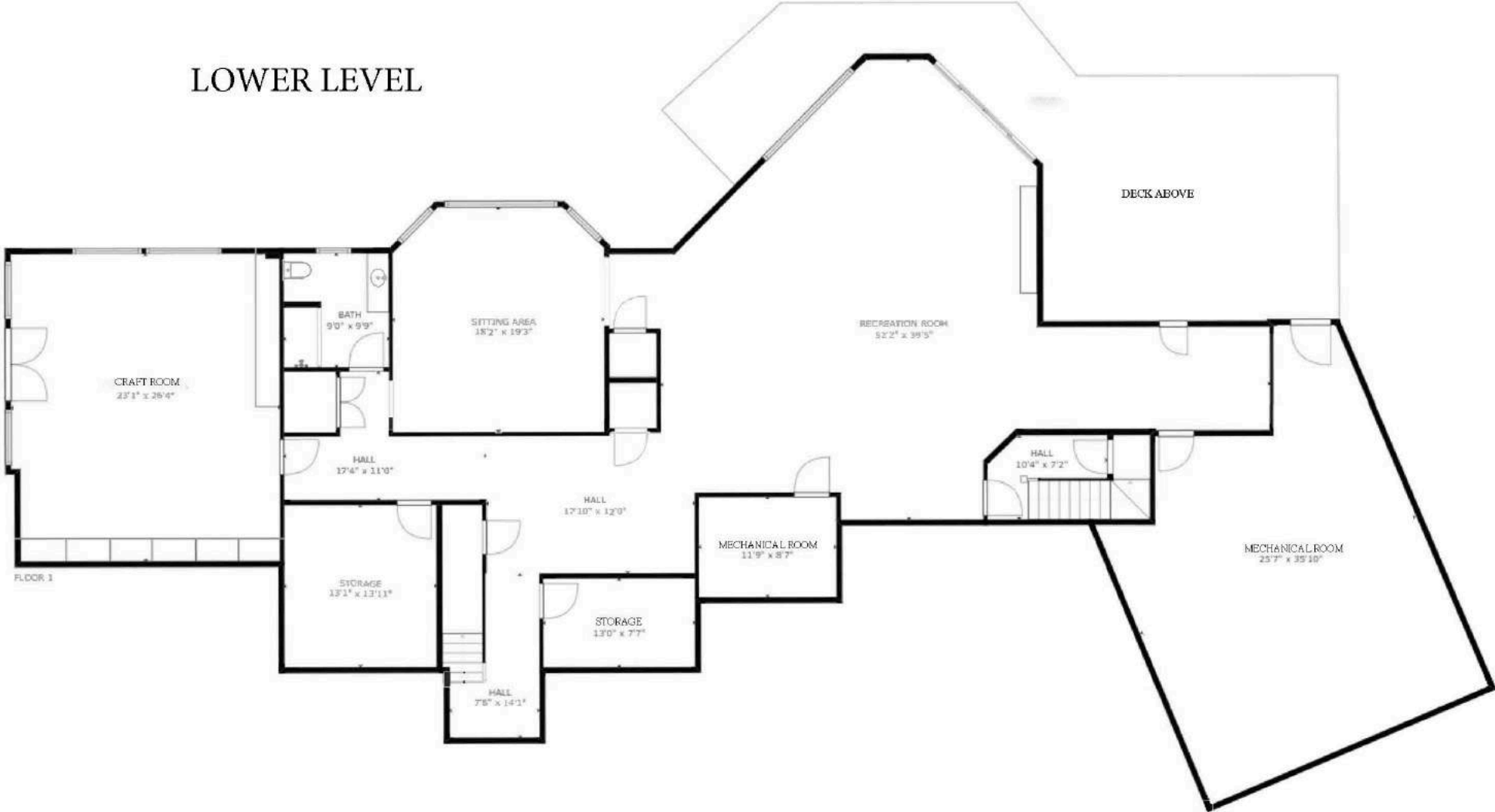


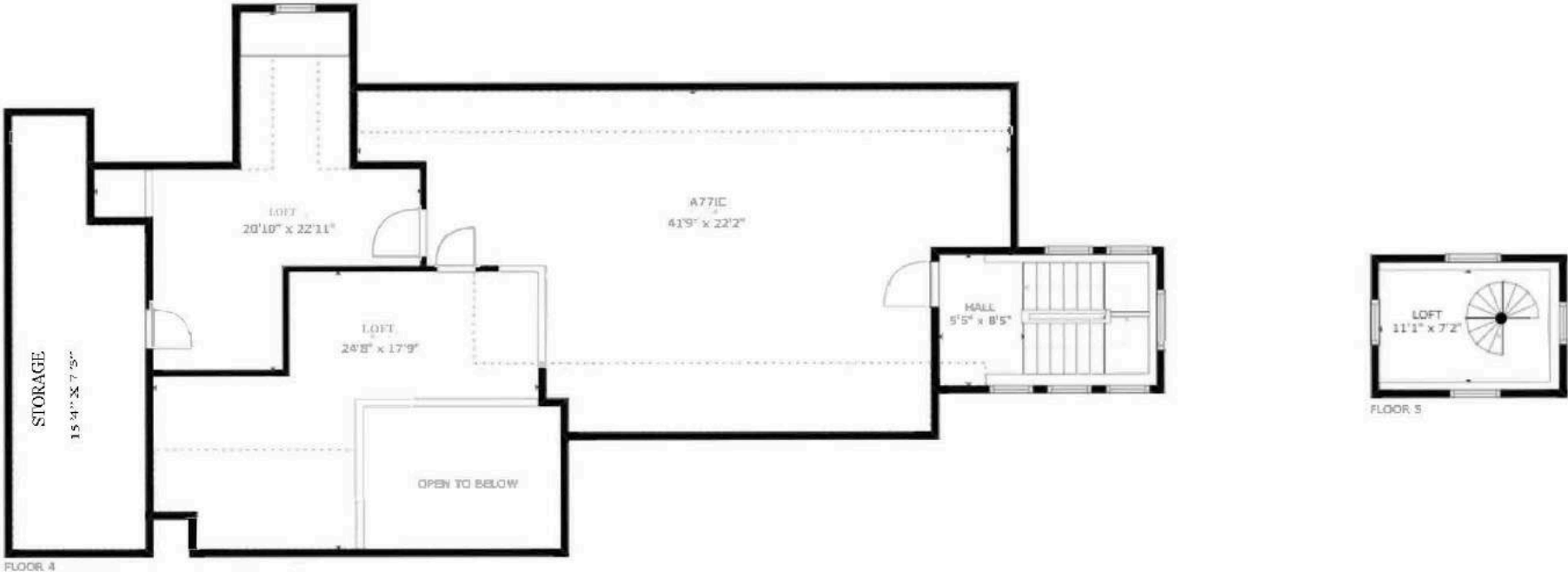
MAIN LEVEL

## SECOND LEVEL



## LOWER LEVEL





ATTIC & TOWER LOFT

## Guide to Geothermal Heat Pumps

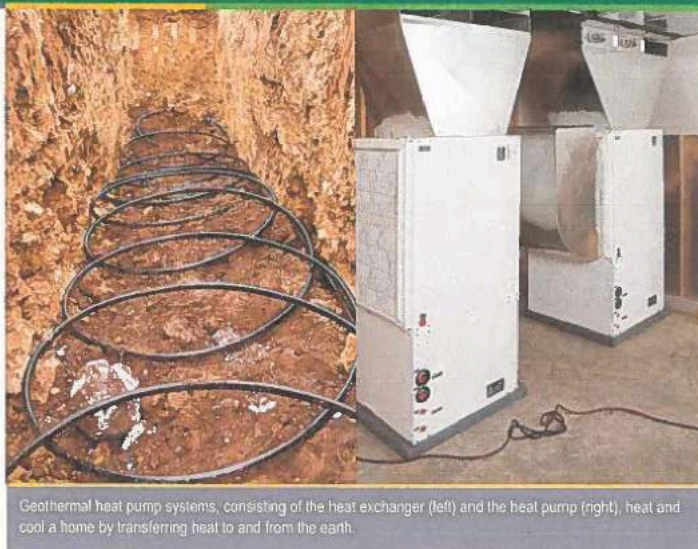
Geothermal heat pumps are among the most efficient and comfortable heating and cooling technologies available because they use the earth's natural heat to provide heating, cooling, and often, water heating.

### About Geothermal Heat Pumps

While many parts of the country experience seasonal temperature extremes – from scorching heat in the summer to sub-zero cold in the winter – a few feet below the earth's surface the ground remains a relatively constant temperature. The natural ground temperature is cooler than the natural air temperature in summer, and warmer than the natural air temperature in winter. While the margin of variation is small, seasonal changes in ground temperature give geothermal heat pumps a dependable and permanent wintertime heat source and summertime heat sink.

Geothermal heat pumps, also known as ground source heat pumps, geoechange, water-source, earth-coupled, and earth energy heat pumps, take advantage of this resource and represent one of the most efficient and durable options on the market to heat and cool your home.

Many heating, ventilation, and air conditioning systems use some sort of heat pump for heating and cooling.



Geothermal heat pump systems, consisting of the heat exchanger (left) and the heat pump (right), heat and cool a home by transferring heat to and from the earth.

### How Geothermal Heat Pumps Work

Using a heat exchanger, a geothermal heat pump can move heat from one space to another. In summer, the geothermal heat pump extracts heat from a building and transfers it to the ground for cooling. In winter, the geothermal heat pump takes natural heat from the ground and transfers it to the home or building for heating.

Installing a geothermal heat pump system can be the most cost-effective and energy-efficient home heating and cooling option. Geothermal heat pumps are a particularly good option if you are building a new home or planning a major renovation to an existing home by replacing, for example, an HVAC system.

### Geothermal vs. Air-Source Heat Pumps

While geothermal heat pumps operate similarly to the far more common air-source heat pump (ASHP), geothermal heat pumps are substantially more energy-efficient than even ASHPs because they take advantage of the relatively consistent ground temperatures, which are far more uniform than air temperatures. Geothermal systems can reduce energy consumption by approximately 25% to 50% compared to air source heat pump systems. Geothermal heat pumps reach high efficiencies (300%-600%) on the coldest of winter nights.

As with any heat pump, geothermal heat pumps are able to heat, cool, and, if so equipped, supply the house with hot water. Some models of geothermal systems are available with two-speed compressors and variable fans for more comfort and energy savings. Relative to ASHPs, they are quieter, last longer, need little maintenance, and do not depend on the temperature of the outside air.

A dual-source heat pump combines an ASHP with a geothermal heat pump. These appliances simultaneously provide the consumer with a more efficient alternative to the ASHP, and a more affordable alternative to the geothermal heat pump. Dual-source heat pumps have higher efficiency ratings than air-source units, but are not as efficient as geothermal units. The main advantage of dual-source systems is that they cost much less to install than a single geothermal unit, and work almost as well.

### Types of Geothermal Heat Pumps

Geothermal heat pumps come in four types of loop systems that loop the heat to or from the ground and your house. Three of these – horizontal, vertical, and pond/lake – are closed-loop systems. The fourth type of system is the open-loop option. Choosing the one that is best for your site depends on the climate, soil conditions, available land, and local installation costs at the site.

#### Closed-Loop Systems

- **Horizontal:** This type of installation is generally most cost-effective for residential installations, particularly for new construction where sufficient land is available. It requires trenches at least four feet deep.
- **Vertical:** This is often used for larger scale geothermal systems (such as in commercial buildings) where land is limited, or where the soil is too shallow to bury the horizontal loops in the trenches and some form of drilling into the bedrock is necessary. Vertical loop

systems can be more expensive, but they use less land and also minimize disturbance to the existing landscape.

- **Pond/Lake:** If the site has an adequate water body, this may be the least expensive option. A supply line pipe runs underground from the building to the water and coils into circles at least eight feet under the surface to prevent freezing. The coils should only be placed in a water source that meets minimum volume, depth, and quality criteria.

#### Open-Loop System

This type of system uses well or surface body water as the heat exchange fluid that circulates directly through the geothermal heat pump system. Once it has circulated through the system, the water returns to the ground through the well, a recharge well, or surface discharge. This option is practical only with an adequate supply of relatively clean water, and if all local codes and regulations regarding groundwater discharge are met.

### Energy-Efficient and Cost-Effective

Although installing a geothermal heat pump system is more expensive than installing an air source system of the same heating and cooling capacity, you can recoup the additional costs in energy savings in 5 to 10 years. An average geothermal heat pump system costs about \$2,500 per ton of capacity. If a home requires a 3-ton unit, then it would cost about \$7,500 (plus installation and drilling costs). A comparable ASHP system with air conditioning would cost about

\$4,000, but the energy costs could easily equate to the extra cost of installing a geothermal heat pump. Additionally, geothermal heat pump systems installed in new or existing homes by Dec. 31, 2016 are eligible for a 30% federal tax credit. See the *Financial Incentives* box for more information.

Geothermal heat pump systems have an average 20+ year life expectancy for the heat pump itself and 25 to 50 years for the underground infrastructure. Additionally, they move between three and five times the energy they consume between a building's interior space and the ground.

To determine the energy efficiency of a geothermal heat pump, look for: the Energy Efficiency Ratio (EER), and the Coefficient of Performance (COP). The cooling capacity is indicated by the EER while the heating capacity is indicated by the COP. To find current ENERGY STAR requirements and ratings, please see the ENERGY STAR link below.

### Further Resources

DOE Energy Savers: Geothermal Heat Pumps  
[www.energysavers.gov/geothermal\\_heat\\_pumps](http://www.energysavers.gov/geothermal_heat_pumps)

Energy 101: Geothermal Heat Pumps  
[www.eere.energy.gov/multimedia/video\\_geothermal\\_heat\\_pumps.html](http://www.eere.energy.gov/multimedia/video_geothermal_heat_pumps.html)

### Financial Incentives

Tax credits, incentives, and rebates may be available in your area. Please visit [www.energysavers.gov/taxcredits](http://www.energysavers.gov/taxcredits) for more information.



Site Radon Inspection Report

Date : 04/01/2024

Mr. Chad Ewell  
Brick & Mortar Home Services  
102 Berkley Lane  
Horseheads, NY 14845-

Client: Marcy Schaeffer  
Test Location: 92 Genung Circle  
Ithaca, NY 14850-

Individual Canister Results

Canister ID# : 4888628      Test Start : 03/26/2024 @ 10:00  
Canister Type : Charcoal Canister 4 inch      Test Stop : 03/28/2024 @ 11:00  
Location : Basement      Received: 04/01/2024 @ 11:01  
Radon Level : 3.1 pCi/L      Analyzed: 04/01/2024 @ 11:02  
Error for Measurement is: ± 0.3 pCi/L

Canister ID# : 4888631      Test Start : 03/26/2024 @ 10:00  
Canister Type : Charcoal Canister 4 inch      Test Stop : 03/28/2024 @ 11:00  
Location : Basement      Received: 04/01/2024 @ 11:01  
Radon Level : 2.8 pCi/L      Analyzed: 04/01/2024 @ 11:02

Average of Side by Side Canisters      3.0 pCi/L

Error for Measurement is: ± 0.3 pCi/L

The reported results indicate that radon levels in the building tested are below the United States Environmental Protection Agency (EPA) action level of 4.0 picoCuries per liter of air (pCi/L). The EPA recommends retesting if your living patterns change and you begin occupying a lower level of the building, such as a basement or if major remodeling is done.

General radon information may be obtained by consulting the EPA booklet: A Citizen's Guide to Radon ([www.epa.gov/radon/pubs/citguide.html](http://www.epa.gov/radon/pubs/citguide.html)). To request a copy or for further information, please contact your state health department. The EPA maintains a radon information website, including copies of its publications, at [www.epa.gov/iaq/radon](http://www.epa.gov/iaq/radon).

For New Jersey clients: Please see the attached guidance document entitled Radon Testing and Mitigation: The Basics for further information.

For New York clients: If the radon level of one or more testing devices is equal to or exceeds 20 pCi/L please contact the New York State Department of Health, Bureau of Environmental Radiation Protection, for technical advice and assistance at 518-402-7556 or toll free 1-800-458-1158.

PLEDGE OF ASSURED QUALITY

All procedures used for generating this report are in complete accordance with the current EPA protocols for the analysis of radon in air (EPA 402-R-92-004). The analytical results relate only to the samples tested, in the condition received by the lab, and that calculations were based upon the information supplied by client. RTCA and its personnel do not assume responsibility or liability, collectively and individually, for analysis results when detectors have been improperly handled or placed by the consumer, nor does RTCA and its personnel accept responsibility for any financial or health consequences of subsequent action or lack of action, taken by the customer or it's consultants based on RTCA-provided results



*Andreas C. George*

Andreas C. George  
Radon Measurement Specialist  
NJ MES 11089

*Dante Galan*

Dante Galan  
Laboratory Director

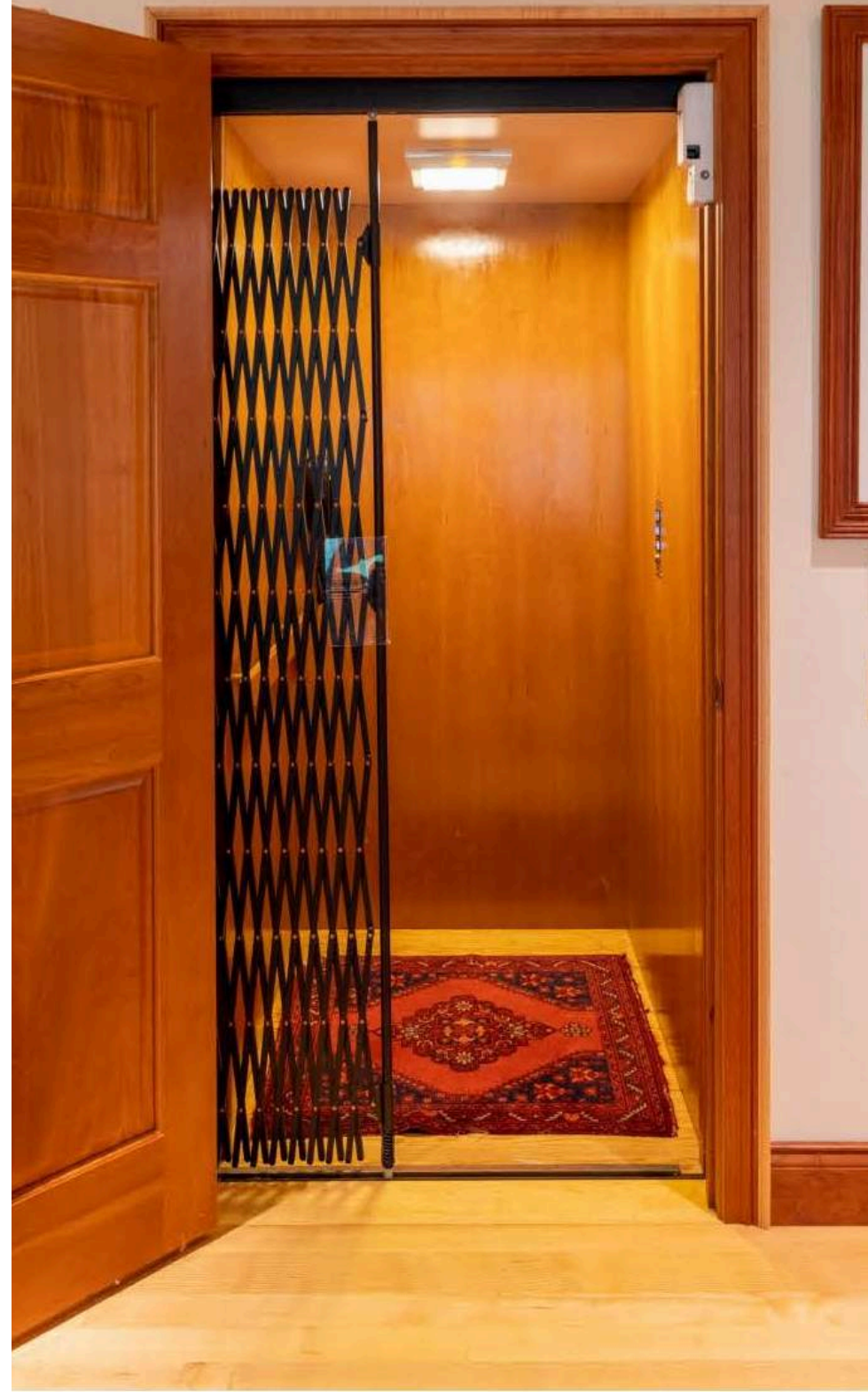
NRSB ARL0001  
NYS ELAP ID: 10806  
PADEP ID: 0346  
NJDEP ID: NY833  
NJ MEB 90036  
FL DOH RB1609  
IL RNL2000201

(914)345-3380  
FAX (914)345-8546

2 Hayes Street, Elmsford, NY 10523  
[www.rtca.com](http://www.rtca.com)











# 92 GENUING ITHACA, NY CIRCLE



"HOMES ARE FOR MAKING MEMORIES"

Linda Hirvonen

NYS LIC.ASSOC. REAL ESTATE BROKER  
CBR, CRS, GRI, GREEN, SRES, NOTARY PUBLIC

(C) 607-592-3665 ♦ (O) 607-257-0666

(E) LaHirvonen1969@gmail.com

Warren Real Estate 830 Hanshaw Road Ithaca, NY 14850

