#### New Hampshire Residential Energy Code Application

for Certification of Compliance for New Construction, Additions and/or Renovations of Detached One- and Two-family dwellings and multi-family dwellings (townhouses) not over 3 stories EC-1 Form

Minimum Provisions from 2015 IRC Chapter 11 Effective Date: September 15, 2019 Owner/Owner Builder: Company Name: (if applicable) General Contractor: Company Name: Bruce Tibbetts Mail Address: Mail Address: Town/City State: E-Mail E-Mail: 74 dyahoo.cor **Location of Proposed Structure:** Type of Construction: **Residential** O Small Commercial New Building O Renovation O Addition Street: O Thermally Isolated Sunroom 265 O Modular Home: the site contractor must submit this form detailing supplementary rooms and Floor and/or Town/City: Basement insulation unless the floor insulation is installed or PlainGo Sullwan provided by the manufacturer and no heated space is added. **Total New Conditioned\* Floor Area:** Zone 6 O All other NH counties and town of Durham ho . Basement or Crawl Space type: (\*a conditioned space is one being heated/cooled, containing uninsulated ducts or w/ a fixed opening into conditioned space. Walls must be insulated) Conditioned? O Yes (Walls must be insulated) O No ☐ Full Basement Walk Out Basement ☐ Slab on Grade ☐ Other Structure is EXEMPT because: Form Submitted by: ☐ Mobile Home On an historic register Owner Builder Other I hereby certify that all the information contained in this application is true and correct, and construction shall comply in all respects with the terms and specifications of the approval given by the local municipal code official or New Hampshire Public Utilities Com Signature Official Use Only Approved by: Date Complete Application Received: Date: Approval Number: Stamp:

### **New Hampshire Energy Code EC-1**

Certification No.:

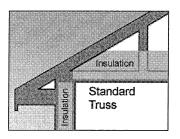
Directions: Complete the "Your Proposed Structure" columns. No measurements or calculations are needed. Copies of plans are NOT needed. If you at least meet the Energy Code requirements, your project will be approved. Write N/A in any section that does not apply to your project. If your planned structure does meet these requirements, consider downloading REScheck <a href="http://www.energycodes.gov/rescheck">http://www.energycodes.gov/rescheck</a> to explore energy modelling options. Please submit pages 1 and 2 only.

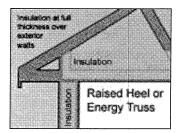
|  |  |  | YOUR PROPOSED STRUCTURE   |   |  |
|--|--|--|---|---|--|
| Building Section                                       | Required R   |  | Write Planned<br>R and L Values                                     |   |  |
| Window U Factor (lower U is better)                    | U30 (if log w  | valls in Zone 5)   | Write in U-Value  | Check if ☐ Sunroom ☐ Log Walls  |  |
| Skylights  | U .55 (or less)  |  |   |   |  |
| Flat Ceiling <sup>i</sup> or  Flat Ceiling with Raised | R-49 (Zone 5 or 6) if using the  | Raised Neel or Energy Truss  R-38 (Zone 5 or 6) if maintaining | Write in R-Value $RH^{G}$ $\rightarrow$                             | NOTE: R-38 will satisfy the requirement for R-49 if the full R-38 insulation value is maintained over the outside plates. If using only R-38 (Zone 5 or 6), you must certify that you will maintain R-38 over the plates by checking the box below.  By checking this box, I certify that |  |
| or Energy<br>Trusses<br>R-value                        | above construction technique  R-49 if log walls  | the full R value over the plates  R-49 if log walls            | If using only R-<br>38 in Zone 5 or 6<br>you must check<br>this box | this structure is being built with a raised energy truss or that the full R-value of the ceiling insulation will be maintained over the outside plates.   |  |
| Sloped or<br>Cathedral<br>Ceiling                      | R-30 (Zone 5 & 6) if less than 500 ft sq<br>or 20% of total ceiling area or as above<br>R-24 (Thermally Isolated Sunrooms only)                    |  | Write in R-Value  | Check if ☐ Sunroom  |  |
| Above Grade<br>Wall <sup>ii</sup><br>R-value           | R-20 Cavity Insulation only or R-13 plus R-5 Cavity plus Continuous Insulation R-13 (Thermally Isolated Sunrooms only)                             |  | Write in R-Value  | Log homes must comply with ICC400-2012, have an average minimum wall thickness of 5" or greater with specific gravity of ≤0.5 or 7" with specific gravity >0.5.  Check if Sunroom Log Walls   |  |
| Door U-Value   | U .32 (maximum)  |  | Write in U-Value  | One opaque door in the thermal envelope is exempt from the U-factor requirement.  |  |
| Floor R Value<br>(Basement ceiling)                    | or Insulation sufficie   |  | Write in R-Value  | If conditioning the basement you must insulate Basement Walls. If not, you may insulate either Floor or Basement Walls and/or Slab Edge   |  |
| Basement or<br>Crawl Space<br>Wall R Value             | For both Zone R-19 Cavity R-15 Continu   | Insulation or  | Write in R-Value  R15#  R21   |   |  |
| Slab Edge <sup>iii</sup><br>R Value                    | R-10 2' (Zone 5) 4' (Zone 6)<br>(see drawing pg 3)<br>add R-5 if the Slab is heated or R-15<br>under entire heated slab if a log home.             |  | Write in R-Value  | Check if Heated Slab  |  |
| Air Sealing  | A blower door test is <b>required</b> . The test must demonstrate an air exchange rate of <b>seven</b> Air Changes per Hour (ACH) or less @ 50 Pa. |  |   | If required by the code official, an approved third party may be required to conduct the blower door test.  |  |

Submit pages 1 and 2 to local municipal code official or NH Public Utilities Commission at  $\frac{energycodes@pue.nh.gov}{Phone: 603.271.2431.} \ \ \, Fax: 603.271.3878.$ 

### Footnotes to Residential Energy Code Application for Certification of Compliance

<sup>i</sup> <u>Ceilings with attic spaces</u>: R-38 in Zone 5 or 6 will be deemed to satisfy the requirement for R-49 wherever the full height of uncompressed R-38 insulation extends over the wall top plate at the eaves or the full R-value is maintained. This is often accomplished by using a raised heel or energy truss as shown in the diagram below or by using higher R-value insulation over the plates.



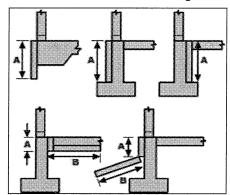


<sup>ii</sup> R-13 + R-5 means R-13 cavity insulation plus R-5 continuous insulated sheathing. If structural sheathing covers 25 percent or less of the exterior, R-5 sheathing is not required where the structural sheathing is placed. If structural sheathing covers more than 25 percent of exterior, the structural sheathing must be supplemented with insulated sheathing of at least R-2.

iii Slab edge insulation must start at the top of the slab edge and extend a total of two (Zone 5) or four feet (Zone 6). Insulation may go straight down, out at an angle away from the building, or along the slab edge and then under the slab. A slab is a concrete floor within 1' of grade level. See diagram below.

The top edge of insulation installed between the exterior wall and the interior slab may be mitered at a 45 degree angle away from the exterior wall.

### Allowable Slab Insulation Configurations



A or A+ B must equal two feet in Zone 5 or four feet in Zone 6

MODULAR HOMES must be certified by the NH Department of Safety. Unless the floor insulation is provided by the manufacturer this form may be submitted. This form may also be submitted if the basement is to be insulated or supplementary heated space is added to the home upon or after it is set.

## 2015 International Residential Code (IRC) effective Sept. 15, 2019 Residential Energy Code Requirements IRC Chapter 11

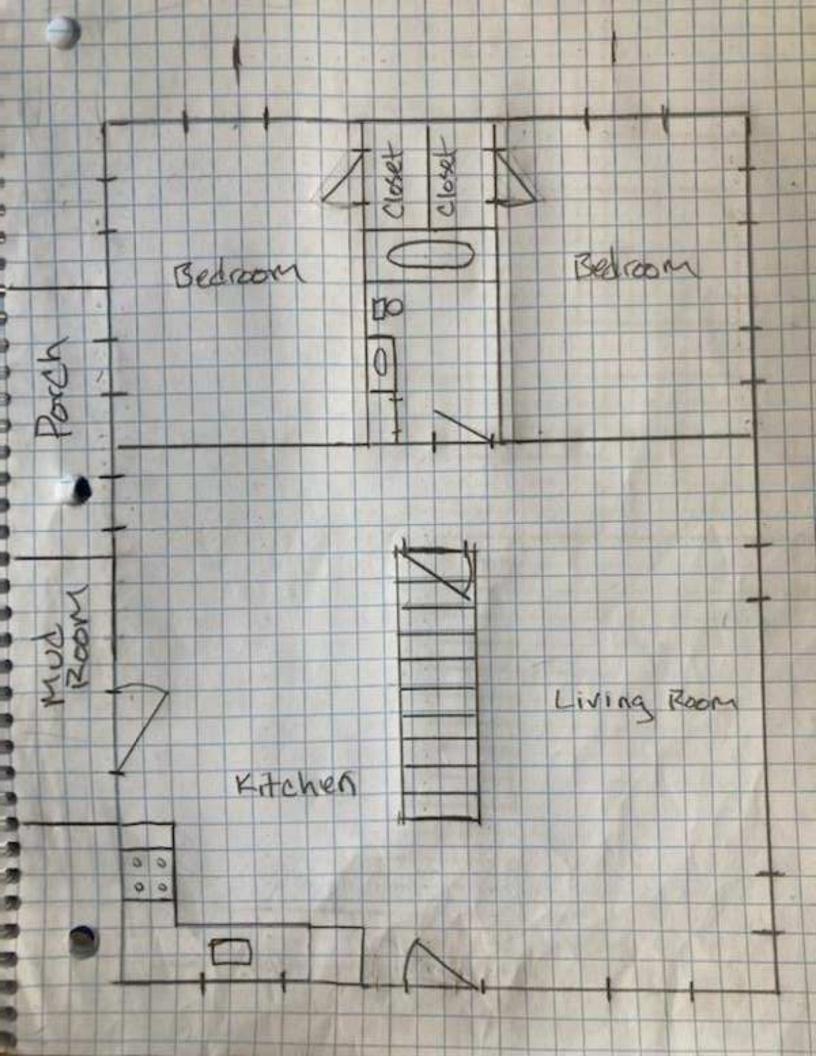
The following list is intended as a general summary of energy related requirements.

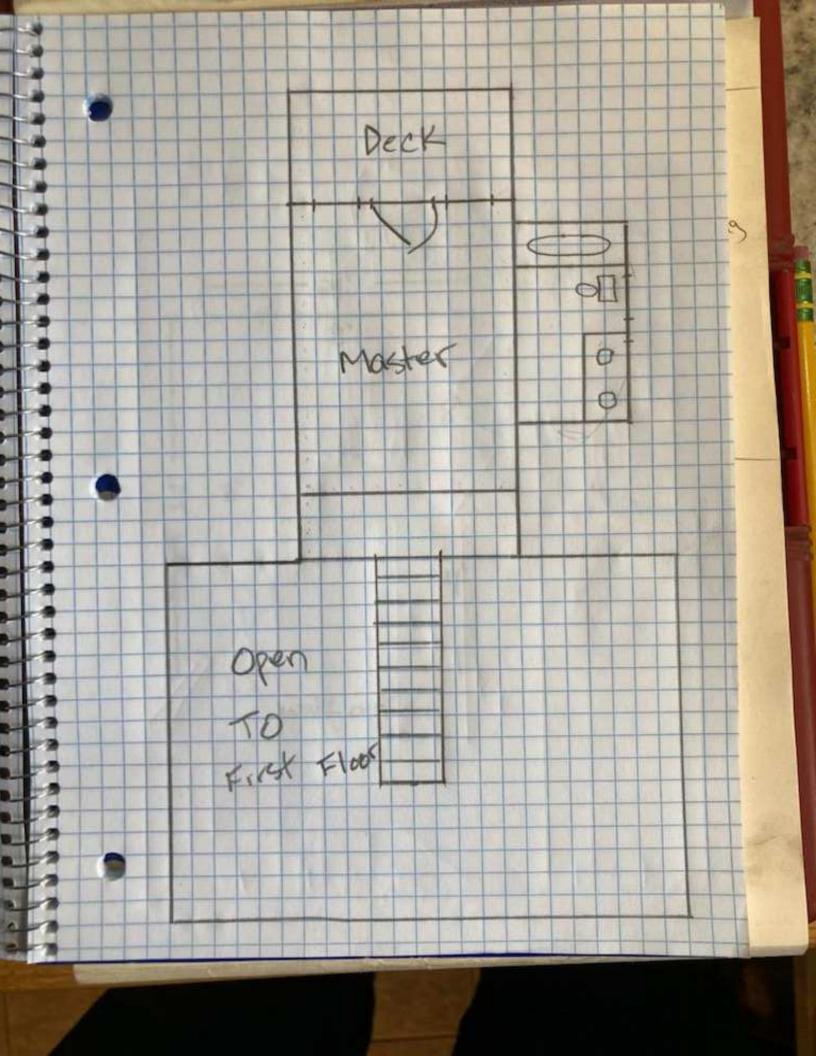
Please consult the 2015 IRC Chapter 11 for complete requirements.

| √ Check here  | Certification No.:   |
|---|--|
| Air Leakage<br>Code Section N1102.4                                       | The building thermal envelope shall be constructed to limit air leakage in accordance with the requirements of IRC Sections R1102.4.1 through R1102.4.4. The building thermal envelope must be durably sealed to limit infiltration. See Table N1102.4.1.1 for a list of thermal envelope elements and installation criteria.  |
|   | Building envelope air tightness shall be verified to comply by Blower Door testing to no exceed air leakage of 7 Air Changes per Hour (ACH) at 50 Pascals pressure. The local Building Official may require an independent 3 <sup>rd</sup> party to conduct the test.  |
| Turkur  | The Blower Door Test is the required method to demonstrate code compliance with the air leakage requirement.   |
| Testing   | Blower Door Test conducted by:   |
| Code Section N1102.4.1.2  | Result (at 50 Pa):CFM Interior VolumeCFACH   |
| Fireplaces Code Section N1102.4.2   | New wood-burning fireplaces shall have tight-fitting flue dampers or doors and outdoor combustion air.   |
| Recessed Lighting Code Section N1102.4.5                                  | Recessed lights in the thermal envelope must be type IC rated and labeled as meeting ASTM E 283 and sealed with a gasket or caulk between the housing and the interior wall or ceiling covering.   |
| High-Efficacy Lighting Code Section N1104.1                               | Not less than 75 percent of the lamps in permanenty installing lighting fixtures shall be highefficacy lamps or not less than 75 percent of the permanently installed lighting fixtures shall contain only high-efficacy lamps.  |
| Materials and Insulation Identification Code Section N1101.5 and N1101.10 | Materials, systems and equipment shall be identified in a manner that will allow a determination of code compliance. Manufacturer manuals for all installed heating, cooling and service water heating equipment must be provided. Insulation R-values, glazing and door U-values and heating and cooling equipment efficiency must be clearly marked on the building plans, drawings or specifications. |
| Pull-Down Attic Stairs, Attic Hatch, and Knee Wall Doors                  | Should be insulated to a level equal to the surrounding surfaces and tightly sealed and weather-stripped at the opening.   |
| Code Section N1102.2.4  |  |
| Full size Attic or<br>Basement Entry Doors<br>Code Section N1102.3.4      | All doors leading from a conditioned space into an unconditioned attic or enclosed attic or basement stairwell should be insulated and weather-stripped exterior rated door units meeting the U-factor requirement. One door is exempt.  |

|   | <b>Duct Insulation</b> Code Section N1103.3.1                 | <b>Supply and return</b> ducts in attics must be insulated to at least R-8 where 3 in. diameter or greater. All other ducts must be insulated to at least R-6. Exception: Ducts or portions thereof located completely inside the building thermal envelope.  |  |  |
|---|---|---|--|--|
|   | Duct Construction<br>Code Sections N1103.3.2<br>and N1103.3.5 | Ducts, air handlers and filter boxes shall be sealed. Joints and seams must comply with the <i>Int. Mech. Code</i> or Section M1601.4.1 of the <i>International Residential Code</i> . Building framing cavities <b>shall not</b> be used as ducts or plenums (neither supply nor return).  |  |  |
|   | Duct Testing Code Sections 1103.3.3                           | Ducts shall be pressure tested to determine air leakage by either 1) rough-in test or 2) post-construction test. See Code for requirement details.  Test conducted by:  Duct test result at 25 Pa:  Post construction or  Rough-in test   |  |  |
| 100                                     | Temperature Controls<br>Code Section N1103.1&1.1              | At least one thermostat must be provided for each separate heating and cooling system. The thermostat controlling the primary system must be equipped with a programmable thermostat.  Heat pumps having supplementary electric-resistance heat must have controls that, except during defrost, prevent supplemental heat operation when the heat pump compressor can meet the heating load   |  |  |
|   | Mechanical System Piping Insulation Code Section 1103.4       | Mechanical system piping capable of conveying fluids at temperatures above 105°F or below 55°F must be insulated to R-3.  |  |  |
|   | Circulating Hot Water<br>Systems<br>Code Section N1103.5      | Circulating service water systems must include an automatic or readily accessible manual switch that can turn off the hot water circulating pump when the system is not in use.  Circulating domestic hot water system piping shall be insulated to R-4.  |  |  |
|   | Mechanical Ventilation<br>Code Section N1103.6                | Outdoor air intakes and exhausts must have automatic or gravity dampers that close when the ventilation system is not operating.  |  |  |
| ,                                       | Equipment Sizing Code Section N1103.7                         | Heating and cooling equipment shall be sized in accordance with ACCA Manual J or other approved heating and cooling calculation methodologies. Equipment shall have an efficiency rating equal to or greater than applicable federal standards.   |  |  |
| *************************************** | Certificate<br>Code Section N1101.14                          | A permanent certificate, completed by the builder or registered design professional, must be posted on or in the electrical distribution panel. It must list the R-values of insulation installed in or on the ceiling, walls, foundation, and ducts outside the conditioned spaces; U-factors and SHGC for fenestration. The certificate must also list the type and efficiency of heating, cooling and service water heating equipment. |  |  |
| ,                                       | Existing Buildings and Structures See Appendix J of IRC       | The purpose of these provisions is to encourage continued use of existing buildings and structures. Work in existing buildings shall be classified into categories of repair, renovation, alteration and reconstruction. Consult this Appendix for specific requirements related to work in existing buildings.   |  |  |

NEW HAMPSHIRE ENERGY CODE Summary of Basic Requirements Page 2





### APPLICATION FOR DRIVEWAY PERMIT

Pursuant to the Provisions of the New Hampshire Revised Statutes Annotated, Chapter 236, sections 13 and 14 and amendments thereto, permission is requested to construct or

| NH, at a location that will  | ce(s) to my property on the<br>Road in the Town of Plainfield,<br>I meet the requirements specified<br>Llations enacted thereunder. |
|--|---|
| The driveway requested is  |   |
| Residen  |   |
| Residence,   | Business, Industry  |
| Tax Map Number   | F Lot Number  |
| As the landowner applicant,  | , I hereby agree to the following:  |
| purpose of securing access   | way entrances only for the bonafide<br>to private property - such that<br>used for no purpose other than                            |
| in accordance with statutes  | way entrances at permitted location<br>s, all provisions of driveway<br>standard drawings for driveway<br>on of Plainfield.         |
| appointed agents and employ  | perty damage sustained by reason of   |
| 4. To furnish and instancessary to maintain exist adequately handle increased development. | tall drainage structures that are<br>ting highway drainage and<br>i runoff resulting from   |
| **   | Yours truly,  |
|  | E4  |
| 4  | Signature of Landowner (applicant)  |
| gil Pierr  |   |
|  | Mailing Address   |
|  | Telephone Number:   |

Provide required map on reverse side or separate sheet



# **Driveway Permit Application**

| CONTACT INFORMATION:  |
|---|
| Applicant's Name Christopher Laundry  |
| Address 1420 Rt 12A Plainfield NH   |
| Business/Cell Number 802-319-0108   |
| Email Claundry 74@ yahoo. Com   |
| Owner's Name Sayle  |
| Address   |
| Business/Cell Number  |
| Email   |
| Professional Contractor's Name _ Crit Laundry Trucking  |
| Address   |
| Business/Cell Number  |
| Email   |
| *A current Certificate of Insurance (COI) must be supplied by the contractor at the time of submission*   |
| Location Address: 2105 Old County Rd Plaintield NH  |
| Zoning District: Parcel #:0626  |
| Estimated Start Date: ASAF Estimated Completion Date:   |
| Estimated Cost of Project Improvements:   |
| ( New Driveway ( ) Existing Driveway  |
| PLEASE ATTACH A SKETCH PLAN TO APPLICATION SHOWING THE FOLLOWING:   |
| () Property Line () Location of Home () Location of Proposed Driveway   |
| () Footage between both Side Yards and the Proposed Driveway () Driveway Width  |
| () Driveway Length () Left and Right Sight Distance Measurements  |
| () Road Name of Driveway Entry  |
| Per §21-203 and §21-212 of the Plainfield Township Code, the applicant of this application is required to pay a \$50.00 deposit at the time of submission along with the actual cost of the Township Engineer Review in accordance with the Township's Schedule of Rates for Professional Engineering Services and adopted Schedule of Fees by Resolution.  Signature:  Date: 8/8/2 |
| Printed Name: Christopher Lawadry Date: 8/8/21  |



### The State of New Hampshire

### Department of Environmental Services



Robert R. Scott, Commissioner

# APPROVAL FOR CONSTRUCTION OF INDIVIDUAL SEWAGE DISPOSAL SYSTEM (ISDS)

AS AUTHORIZED BY THE NH DEPARTMENT OF ENVIRONMENTAL SERVICES, WATER DIVISION PURSUANT TO RSA 485-A, WATER POLLUTION AND WASTE DISPOSAL AND ENV-WQ 1000, SUBDIVISION AND INDIVIDUAL SEWAGE DISPOSAL SYSTEM DESIGN RULES.

APPLICATION APPROVAL DATE: 4/27/2021

I. PROPERTY INFORMATION

Address: 265 OLD COUNTY RD PLAINFIELD NH 03781

Subdivision Approval No.: 5 PLUS ACRES

Subdivision Name: HAZELTON

County: SULLIVAN
Tax Map/Lot No.: 217/6

II. OWNER INFORMATION

Name: CHRISTOPHER LAUNDRY

Address: 220 MASCOMA STREET, UNIT 50

LEBANON NH 03766

APPROVAL NUMBER: eCA2021042712

III. APPLICANT INFORMATION

Name: VICTOR R ST PIERRE Address: 110 GREAT COUNTRY RD

CHARLESTOWN NH 03603

IV. DESIGNER INFORMATION

Name: VICTOR R ST PIERRE

Address: 110 GREAT COUNTRY RD

CHARLESTOWN NH 03603

Permit No.: 00200

V. SPECIFIC TERMS AND CONDITIONS: Applicable to this Approval for Construction

A. TYPE OF SYSTEM: ENVIROSEPTIC

B. NO. OF BEDROOMS: 3
C. APPROVED FLOW: 675 GPD

D. OTHER CONDITIONS AND WAIVERS:

- 1. This approval is valid for 4 years from date of approval, per Env-Wq 1004.13.
- 2. Approved for a 3-bedroom home @ 450 GPD, and a 1-bedroom ADU @ 225 GPD; total flow 675 GPD
- 3. If construction on this lot involves dredge or fill in a jurisdictional wetland or stream, DES Wetlands Bureau approval is required prior to construction per RSA 482-A.
- 4. No waivers have been approved.

**Travis Guest** 

Subsurface Systems Bureau

### VI. GENERAL TERMS AND CONDITIONS: Applicable to all Approvals for Construction

- A. This Approval for Construction is issued to construct the ISDS as identified on Page 1 of this Approval.
- B. This Approval is valid until 4/27/2025, unless an Approval for Operation has been granted.
- C. By exercising any rights under this approval, the parties have agreed to all terms and conditions.
- D. No liability is incurred by the State of New Hampshire by reason of any approval of any Approval for Construction. Approval by the
  Department of Environmental Services of sewage and waste disposal systems is based on plans and specifications supplied by the
  Applicant.
- E. The system must be constructed in strict accordance with the approved plans and specifications.
- F. The installed system must be left uncovered and cannot be used after construction until it is inspected and has received an Approval for Operation of Individual Sewage Disposal System (ISDS) by an authorized agent of the Department.
- G. This system must be installed by an installer holding a valid permit. An owner may install the system for his/primary domicile.
- H. This Approval for Construction does not supersede any equivalent or more stringent local ordinances or regulations. State standards are minimal and must be met statewide.

WORK NUMBER: 202102201-1

APPROVAL NUMBER: eCA2021042712
RECEIVED DATE: April 26, 2021
TYPE OF SYSTEM: ENVIROSEPTIC
NUMBER OF BEDROOMS: 3

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