

Lead-Based Paint Abatement Plan

**56 Hope Circle
Windsor, CT**

**Town of Windsor Housing
Rehabilitation Loan Program
Windsor Connecticut**

January 14, 2023

**EnviroPlan LLC
27 Trotwood Dr.
West Hartford, CT
06117**

January 14, 2023

Flavia Rey de Castro
Community Development Specialist
Town of Windsor
275 Broad Street
Windsor, CT 06095

**RE: Lead Based Paint Abatement Plan
56 Hope Circle, Windsor, CT
EnviroPlan Project No. 2019-152-13**

Dear Ms. Rey de Castro:

Enclosed please find the Lead-Based Paint Abatement Plan required for the above-referenced site. The plan has been prepared in accordance with the requirements of Title X 1012/1013 regulations 24 CFR Part 35. For the purpose of this abatement plan, all defective paint containing toxic levels of lead located within the dwelling unit is included.

If you have any questions regarding the contents of the Plan, please do not hesitate to contact us.

Sincerely,



Neal B. Freuden
President
Connecticut Certified Lead Inspector/Risk Assessor 000152
Connecticut Certified Lead Planner Project Designer 000989
EPA Certified Lead Abatement Supervisor
EPA Certified Lead Safe Renovator
EPA Certified Instructor for the following Courses: Lead Inspector, Risk Assessor, Planner
Project Designer, Abatement Supervisor and Renovator.

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Attachments

End of Report

EXHIBIT 1 - HOUSE FLOOR DIAGRAMS

3.

1 Introduction

Work outlined in this Section includes the lead paint abatement required by the Housing and Urban Development (HUD) standards for all components and surfaces containing toxic levels of lead paint in a defective condition. The work shall be conducted in conformance with HUD regulations (24 CFR, Part 35, et al.). The work is being conducted to satisfy the requirements of federal HUD standards. Testing was conducted in accordance with HUD and State of Connecticut requirements.

2 HUD Program Requirements

The property is part of the following programs:

- HUD Rehabilitation Assistance Program Category 3 (over \$25,000 per unit or in the case of a two family house, over \$50,000 for the house, including all interior and exterior surfaces)

The more stringent requirements associated with the HUD Rehabilitation Assistance Program have been utilized in the preparation of this plan. The program requires the following:

- Distribution of pamphlet
 - Risk Assessment of the property
 - Abatement of Lead Hazards
 - Clearance sampling following lead work
 - Notice to occupants of lead remaining in dwelling units
 - Ongoing Lead Paint maintenance

3 Property Information

Property Address: 56 Hope Circle
Windsor, Connecticut

4 Lead Consultant Contractor

Name: EnviroPlan LLC
Address: 27 Trotwood Dr.
West Hartford, Connecticut 06117
License Number 002085

5 Lead Inspector/Risk Assessor

Inspector/Risk Assessor's Name: Neal B. Freuden

Certificate Number: 000152

Date of Testing: December 19, 2022

Inspection/Risk Assessment Methodology: On-site x-ray fluorescence utilizing a Heuresis instrument was used for the inspection Testing performed in accordance with HUD Guidelines and State of Connecticut regulations. Dust wipe and bare soil samples were collected as a part of the risk assessment.

Clearance inspection will entail a visual of abatement work and if satisfactory, the collection of dust wipe samples.

6. Lead Planner Project Designer

Name: Neal B. Freuden

Firm/Address: EnviroPLan LLC

27 Trotwood Dr.

West Hartford, Connecticut 06117

Certificate Number: 000989

7 Preparation prior to Work

- A. Post Warning Signs - Warning signs shall be posted at all entrances and exits to the work area.
- B. Repair work prior to abatement shall include but not be limited to repair of defective plaster walls and ceilings.
- C. Residents may remain in the house during the abatement but must stay out of the work areas and must have access to the bathroom.

8 Lead Paint Abatement Procedures

Lead paint abatement is defined as any set of measures designed to permanently eliminate lead based paint or lead based paint hazards. Abatement work included herein is required due to the condition of components and surfaces.

The following containment preparations and work practices are recommended for use during lead paint abatement procedures in accordance with Connecticut regulation 19a-111. The following procedures shall apply for all work involving the complete abatement of lead paint.

A. Interior Preparation

1. Moveable objects belonging to residents must be removed from the abatement area. The belongings should be stored in an easily accessible location.
2. Cover and seal all non-work surfaces with 6-mil polyethylene as follows:
 - a. non-movable objects
 - b. air system(s) heating, ventilation, air conditioning (HVAC)
 - c. entrances to abatement areas
 - d. floors (2 layers)
3. Signage. Prior to the preparation of a dwelling for abatement, the Contractor shall place warning signs immediately outside all entrances and exits to the work area, warning that de-leading work is being conducted in the vicinity. The signs shall be at least 20" x 14" and read:

WARNING:
LEAD PAINT REMOVAL HAZARD
UNAUTHORIZED ENTRY PROHIBITED
NO SMOKING, EATING, OR DRINKING
ALLOWED IN THE WORK AREA

Signs shall be in bold lettering with lettering not smaller than two inches (2") tall.

4. Construct and maintain suitable polyethylene barriers within the building to isolate the work.
5. Construct mini-containment chambers in order to facilitate abatement in lieu of preparing entire rooms for abatement. Seal the mini-containment chamber to the interior wall a minimum of six inches (6") from the component. Seal walls of the chamber to the two layers of six-mil polyethylene. Cover the ceiling with one (1) layer of six-mil polyethylene. A pre-fabricated airtight containment system may be used if approved by the Consultant.
- 6.

6. Maintain polyethylene barriers, as long as needed for the safe and proper completion of the work. Any breaches in the work area barriers shall be corrected immediately and as necessary during the working day with such breaches reported immediately to the Owner.

B. Exterior Preparation:

1. Exterior abatement work shall require the installation of protective sheeting consisting of six-mil polyethylene sheeting from the foundation to at least 10 feet and if the property is a mid to high rise building, the sheeting should be extended to 20 feet. If the structure is less than 10 feet from the street or an adjacent property, vertical shrouds should be installed.

Build a small curb at perimeter of sheeting to contain any paint chips or dust. Doors and windows within 20'-0" of the work area at the level where work is taking place and all levels below, should be closed and sealed with protective sheeting.

2. Lead abatement workers should use protective shoe covers, tack pads or have available cleaning materials to wipe off shoes prior to stepping off of the protective sheeting.

C. Abatement Procedures

General

- D. Care must be taken so that leaded materials are not burned or abraded resulting in exposure to workers.
- E. Care shall be taken to avoid damage to adjacent areas during component removal procedures. The Contractor shall run a utility knife around the edge (score) of the component to cut any bonding between substrates.
- F. If components to be removed or enclosed contain areas of loose or peeling paint, these areas shall be wet scraped and HEPA vacuumed prior to abatement.
- G. All paint chips, debris, or components shall be temporarily containerized or wrapped for transport to appropriate waste disposal dumpsters.
- H. The following general abatement techniques shall be utilized in accordance with specific requirements of lead paint Scope of Work prepared for the site.

- a. Replacement means removing components such as windows, doors, and trim that have lead painted surfaces and installing new components free of lead paint. Replacement components as specified elsewhere.
- b. Rigid Encapsulation (enclosure): refers to processes that make lead paint inaccessible, by forming a barrier between lead based paint and the environment. The following are some types of rigid durable construction materials: gypsum dry wall, fiberglass, wood and vinyl siding. Materials must be mechanically fastened with seams sealed to prevent escape of lead dust. Provide extension plates at electrical outlets and switches as necessary.
- c. Liquid Encapsulation: means the application of a covering or coating that acts as a barrier between the lead based paint and the environment that relies for its durability on adhesion between the encapsulant and the painted surface, and the integrity of the existing bonds between paint layers and between the paint and the substrate. Encapsulants are liquid (flexible) or cementitious coatings that provide a long lasting barrier over lead paint. An encapsulant prevents lead paint from becoming part of household dust or accessible to occupants.
- d. Paint removal means stripping lead paint from the surfaces of components. The following are some of the paint removal processes that can be used; chemical stripping, mechanical stripping, and wet scraping.
 - **Chemical stripping:** Chemical strippers shall be applied in accordance with manufacturer's recommendations. Additional worker protection may be required when utilizing caustics.
 - **Mechanical stripping:** includes needle guns, belt and rotary sanders, abrasive blasting equipment. Mechanically powered abatement equipment requires the use of HEPA-equipped vacuum attachments to remove dust generated during the use of the equipment.
 - **Wet scraping:** involves misting the peeling paint before scraping and thus reducing the amount of lead dust generated during this process.
 - **Heat gun:** To prevent vaporization of the lead contained in the paint, the temperature of the heat gut should not exceed 700 degrees Fahrenheit in accordance with Connecticut regulations.

I. Worker Protection and Training

- J. Workers who will perform abatement work must have completed one of the following training courses:
 - EPA Lead Abatement Supervisor (40 hours)
 - EPA Lead Abatement Worker (32 hours)
- K. Employers shall be required to monitor worker exposure during abatement activities as required by The Department of Labor and The Occupational Safety and Health Administration (OSHA) regulation "Lead in Construction Final Rule and Notice" CFR 1926.62

- L. The minimum respiratory protection required for work shall be the half-face negative pressure respirator equipped with High Efficiency Particulate Air Filters (HEPA) capable of filtering 99.97 percent of mono-dispersed particles of .3 microns in diameter or greater. Additional respiratory protection shall be used if determined by personnel air monitoring data.
 - M. Workers shall be required to wear disposable Tyvek suits equipped with hoods and booties. No street clothes shall be permitted to be worn under Tyvek suits during abatement activities.
- E. Lead Abatement Contractor
- 1. If a Lead Abatement Contractor is utilized they shall be licensed in the State of Connecticut to perform lead abatement activities.
 - 2. If a Lead Abatement Contractor is utilized they shall possess insurance for lead paint abatement operations including pollution liability insurance.

9 Clean Up Procedures (Work Involving Abatement and to Eliminate Dust Hazards Identified at the Site)

General Cleaning Procedures

- 1. Debris - removed debris shall be wrapped in polyethylene sheeting for transport out of the abatement or interim control area.
- 2. Sheeting – Interior polyethylene sheeting shall be cleaned by HEPA vacuuming followed by wet misting. The polyethylene sheeting shall then be folded over upon itself to trap any remaining debris. Exterior polyethylene sheeting shall be wet misted and then folded over upon itself to trap any remaining debris.
- 3. Preliminary clean-up - After interior polyethylene sheeting has been removed, the vertical and horizontal surfaces in the work area shall be HEPA vacuumed and washed with a solution of Tri-Sodium phosphate (TSP).
- 4. The exterior surfaces shall be visually inspected by the Certified Renovator and any paint chips and other debris picked up and properly disposed.
- 5. Final cleaning (Interior abatement only) - Final cleaning shall be conducted no earlier than 1 hour after completion of active abatement. The abatement areas including all horizontal surfaces and floors shall be HEPA vacuumed, washed with TSP, and HEPA vacuumed again.

10 Re-occupancy

- A. Visual Inspection - After final cleaning, a licensed Lead Inspector or Lead Risk Assessor shall perform a visual inspection to identify any remaining dust.
- B. Clearance Sampling - Upon acceptance of the abatement area, wipe sampling shall be conducted on the floors, window sills or window troughs in locations where abatement took place within the dwelling unit.
- C. Clearance Wipe Sampling Criteria - The following dust wipe criteria shall be met prior to re-occupancy:
 1. floors – 10 ug/ft²
 2. window sills - 100 ug/ft²
 3. window wells - 400 ug/ft²
- D. Lead waste will be generated by the abatement activities as well as possibly by the renovation. To the extent that this lead contaminated waste is stored at the site as discussed in Item 11 below, and such storage in appropriate waste containers is on the ground, bare soil samples, subsequent to the removal of the waste, will be collected by a lead inspector for laboratory analysis and compared to the Connecticut standard of 400 mg/kg (ppm) If the result exceeds the standard, appropriate remediation of the soil must take place.

11 Waste Disposal

- A. Lead construction waste shall be properly disposed of. Disposal of lead waste shall be accordance with all local, state, and federal regulations. Resulting waste must be tested to determine disposal requirements and properly disposed **unless the building owner agrees to take possession in writing of up to 10 cubic yards of waste and dispose of it as ordinary household waste under the Connecticut household hazardous waste exemption.** Any waste in excess of 10 cubic yards must be characterized or assumed to be hazardous waste and disposed of properly.

Waste characterization shall be determined by the Toxic Characteristic Leachate Procedure (TCLP) before the interim control work starts. The collection of the TCLP sample will be performed by a certified lead inspector with the assistance of the contractor.

- 1. Hazardous Waste is characterized as greater than 5mg/L of leachable lead by the TCLP analyses.
- 2. Non-hazardous Solid Waste is characterized as 0-5mg/L by the TCLP Analysis

According to CTDPH, waste characterization is the responsibility of the Lead Consulting Contractor who can be assisted by the Lead Abatement Contractor in identifying the proper proportions of building components and substrates that comprise the waste stream. Under the direction of the lead consultant, the contractor can use various tools to create subsamples which will make up the ultimate sample which will be sent to a laboratory for TCLP analysis.

Owner _____

Signature_____

Date _____

LEAD-BASED PAINT ABATEMENT

56 HOPE CIRCLE, WINDSOR, CT

SCOPE OF WORK

GENERAL NOTES:

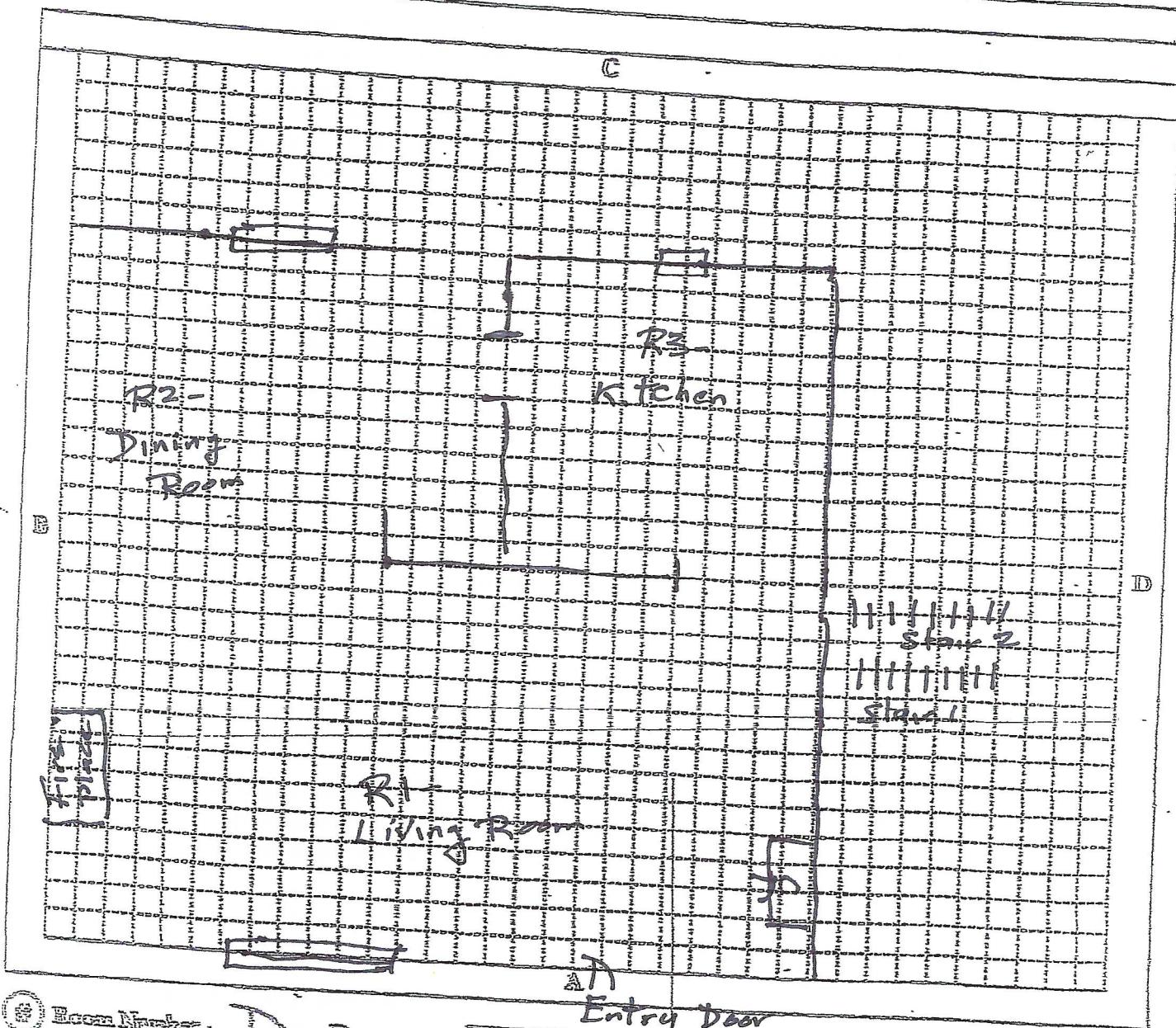
1. The property is a single family, 2200 square foot split level house with a finished basement constructed circa 1962. Window systems are wood. The exterior has vinyl siding.
2. The workers must be properly trained and certified to perform the lead abatement work. A licensed lead abatement contractor must be utilized in performing the required work.
3. All required lead paint abatement work shall be conducted in compliance with HUD regulation 24 CFR Part 35 and Connecticut Regulation 19a-111 through 19a-111-11
4. Abatement work involving removal of doors and related components (casings, jambs, kickboards and thresholds) and windows (sashes, trim, sills, etc.) must be performed in strict coordination with general trades work. Resulting waste must be tested to determine disposal requirements and properly disposed.
5. All defective lead based painted surfaces shall be abated per this plan. Any remaining lead-based paint in an intact condition, including that which has been encapsulated or enclosed per this abatement plan, is to be included in an in-place management plan and periodically inspected for defective paint.

LOCATION	COMPONENT	CONDITION	REMEDIATION METHOD
INTERIOR			
FIRST FLOOR			
R1-Living Room	Window Wells	Defective	Provide removal of any areas of loose flaking paint and prepare surfaces to be enclosed with aluminum coil stock with edges sealed.
LOWER LEVEL			
Bath 1	Window Well	Defective	Provide removal of any areas of loose flaking paint and prepare surfaces to be enclosed with aluminum coil stock with edges sealed.
SECOND FLOOR			
R10-Bedroom	Window Well	Defective	Provide removal of any areas of loose flaking paint and prepare surfaces to be enclosed with aluminum coil stock with edges sealed.
R12-Bedroom	Window Well	Defective	Provide removal of any areas of loose flaking paint and prepare surfaces to be enclosed with aluminum coil stock with edges sealed.
Bath 2	Window Well	Defective	Provide removal of any areas of loose flaking paint and prepare surfaces to be enclosed with aluminum coil stock with edges sealed.

HOUSE FLOOR DIAGRAMS

Project Name: Windsor Herbert 56 Hope Circle, L1B
Address: 56 Hope Circle, Windsor, L1B
Floor Floor 1 Room
Number of Doors: Diagram of Floor 1 No. of Windows:

Project Number: Z019-152-12
Appl.#/Bldg.#
Page of



Room Number: Date: Window:

Page of

C = Closet

Stair 1: 1st to 2nd Floor

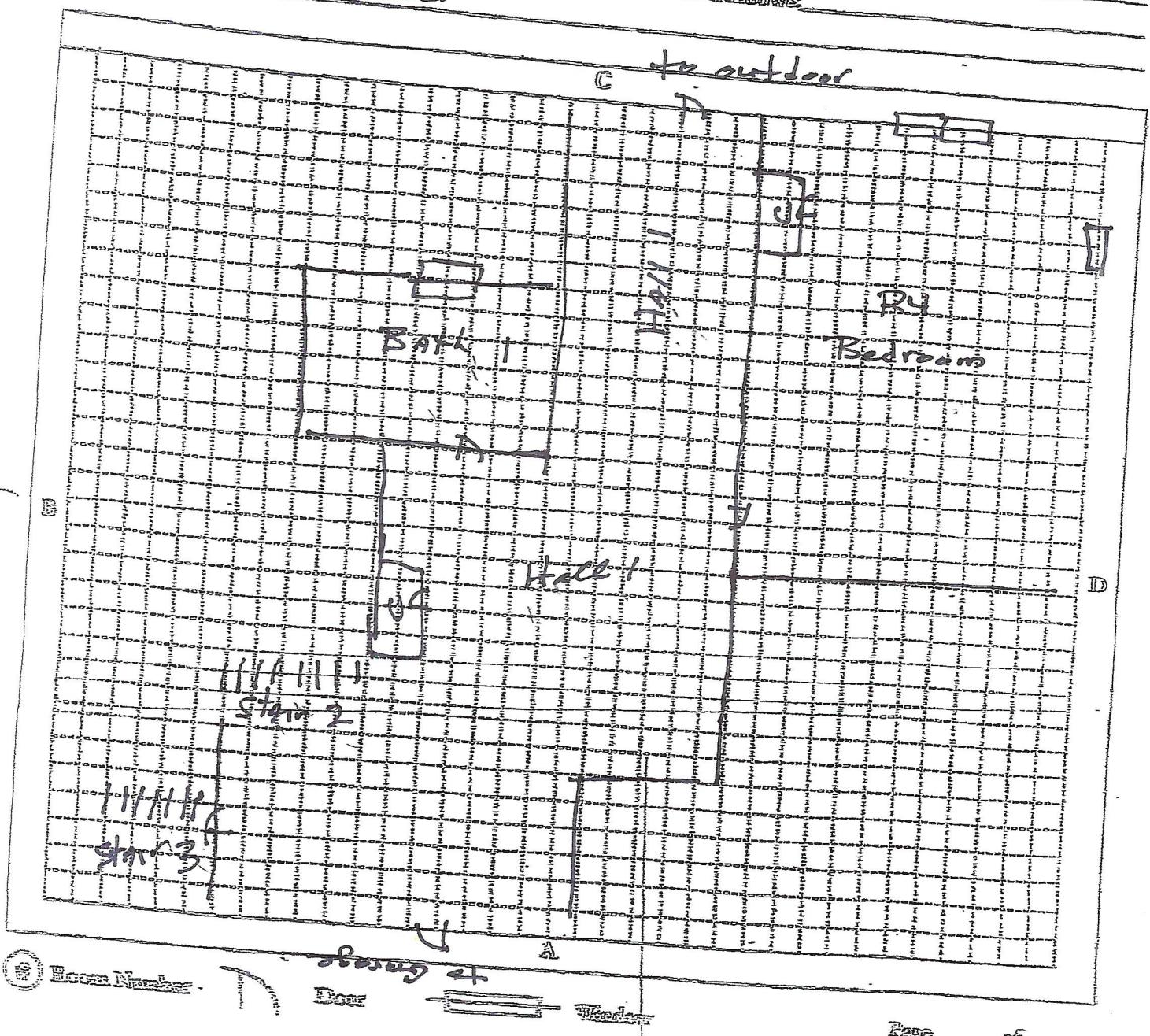
Stair 2: 1st Floor to Lower Level

Project Name: Windsor Heights 36 Home Circle, Largo
Address: 36 Home Circle, Largo, MD 20774
Floor: Second
Number of Decks:

Project Number: 2019-178-01
Appl. #/Bldg. #

Page _____ of _____

Diagram of Lower Level No. of Weddows:



(a) Room Number: 1

Door

Window

Page _____ of _____

Stair 2:

1st Floor to Lower level

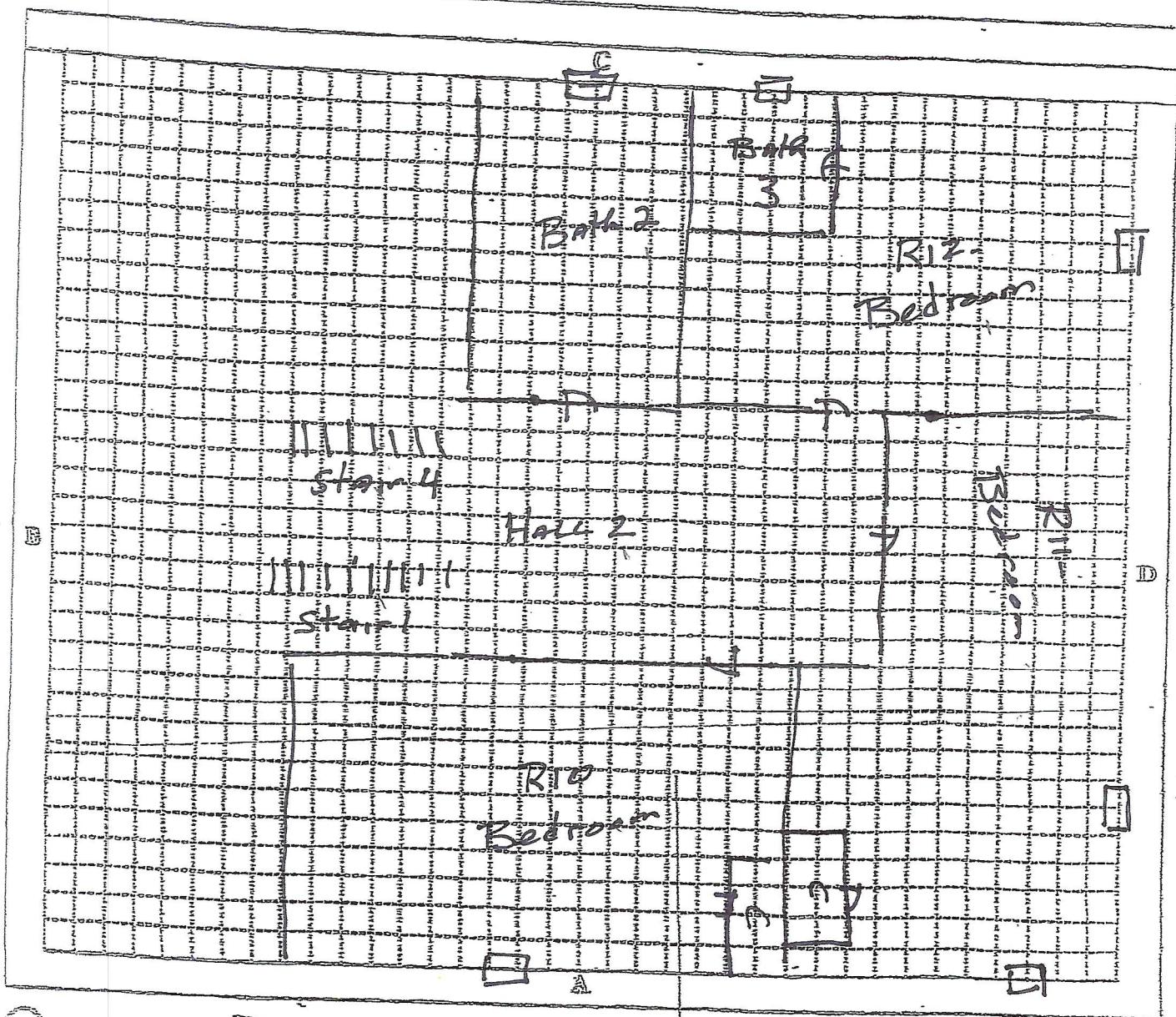
Stair 3: Lower level to Basement

Project Name: Windsor Harbor 36 Hwy. 661a
Address: 56 Hwy Circle, Windsor, CO
Floor: Floor 2 Room: _____
Number of Drives: _____
Diagram at: Floor 2 No. of Windows: _____

Project Number: 2019-108-013

Apt #/Bldg #

Page _____ of _____



Page _____ of _____

C = Closet

Stair 1: 1st to 2nd Floor

Stair 4: 2nd Floor to Attic

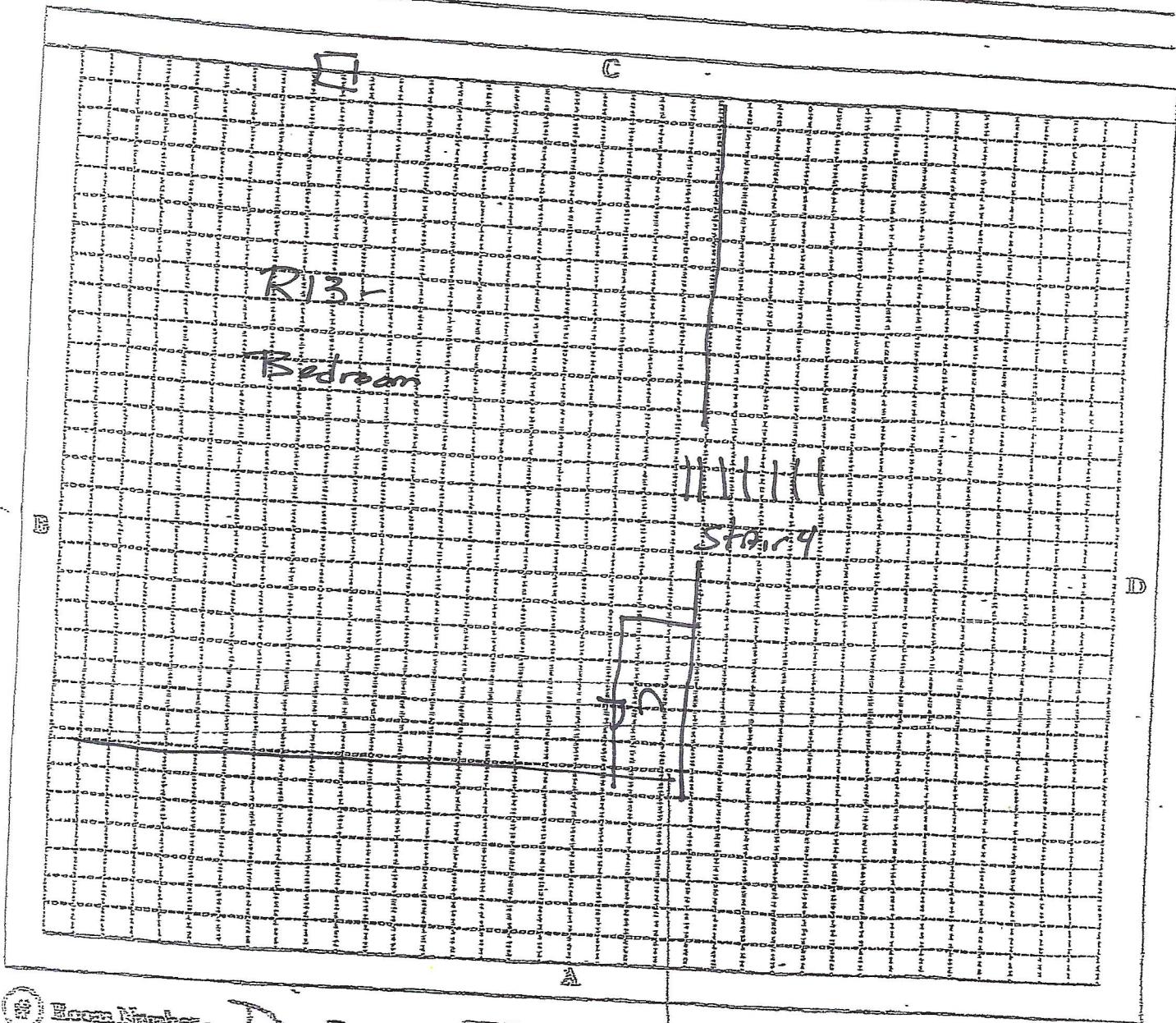
Attic

Project Name: Whidbey Harbor 36 Hwy 201A
Address: 56 Hwy 201A, Whidbey, WA
Floor: Attic
Number of Decks:
Diagram of: Attic

Project Number: 2019-156-13

Apt #/Bldg #

Page _____ of _____



House Number:

Door:

Stairs:

Attic:

Page:

of

Stair 4: Second Floor
to Attic

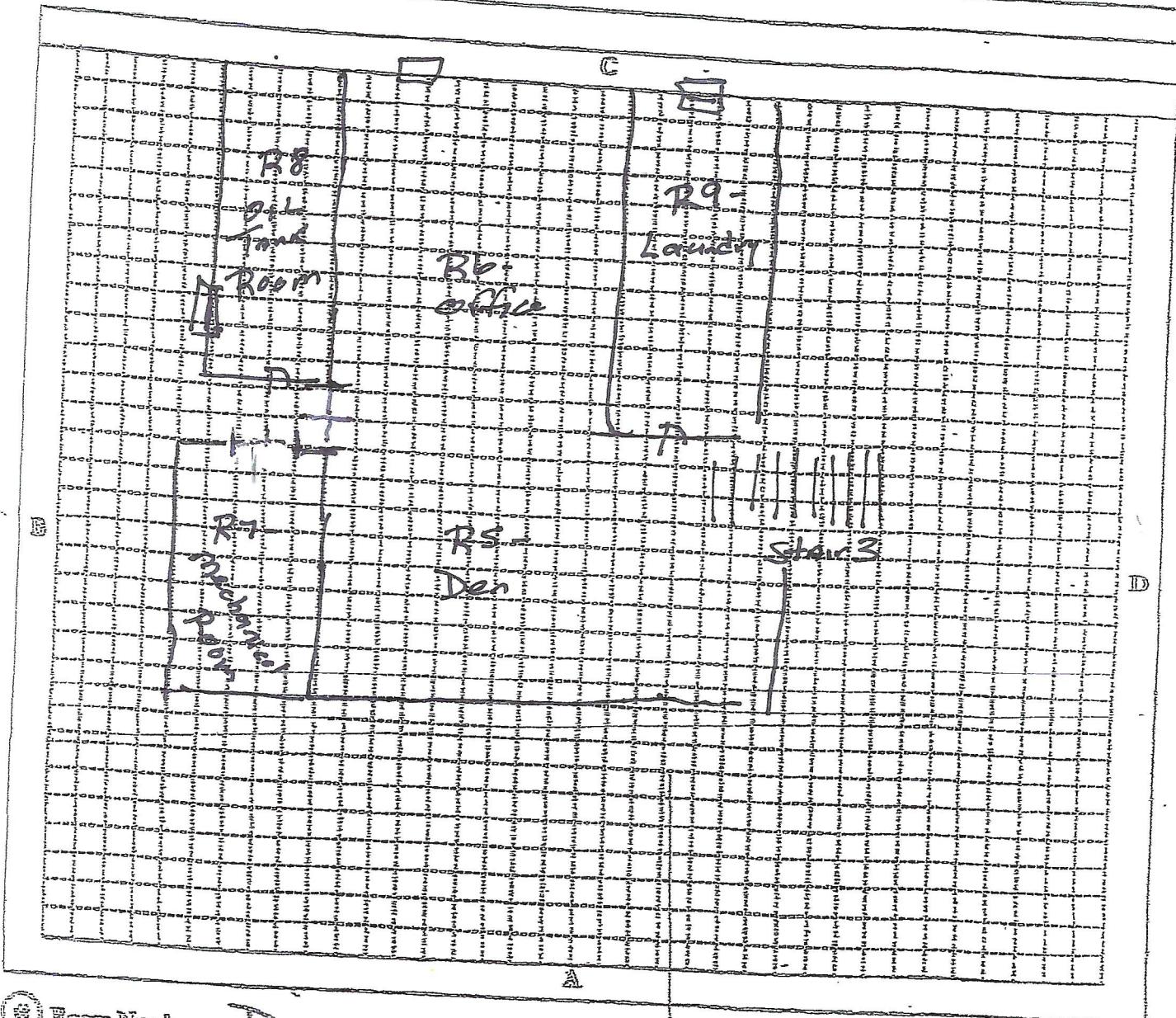
Project Name: Wardrobe Herbert 56 Hope Circle
Address: 56 Hope Circle, Wallingford
Floor: Basement Room: _____
Number of Doors: _____

Project Number: 2019-182-013

Apt #/Blk #:

Page _____ of _____

Diagram of Basement Level No. of Windows: _____



Room Number: _____ Date: _____

Page _____ of _____

Stair 3: Lower Level
to Basement