

# Village of New Denver Knox Hall Building Assessment



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## 1. Introduction

The purpose of this report is to proactively assess the current condition of Knox Hall, in the Village of New Denver. This is being done as part of determining how to allocate funds towards the continued use of the space and was not prompted by a destructive event such as a flood, fire, earthquake or vehicle impact. As such, this assessment covers the overall condition of the accessible and/or visible components of the building during the site visit and study period.

### a. Overview

Knox Hall, situated on 6<sup>th</sup> ave. in New Denver BC is estimated to have been constructed around the 1890s, and was bought by the Village of New Denver in 1974. The building underwent various renovations in the mid to late seventies, but has few records of work done since then. The building is currently used for various community activities including meetings and activities by brownies, guides, and senior citizens and has a capacity of 44 people (0.75 m<sup>2</sup> per person) as stated by the Fire Chief, with two points of exit from the main floor, and two points of exit from the basement Overall the building is considered to be in average condition for its age and construction; however, several improvements are recommended to improve the efficiency and durability of the building, ensuring service to the community for many years to come.

The rear addition foundation appears to have been poorly constructed, and is showing signs of potential structural deficiency. The main structure appears in good structural condition. Additional improvements can be made to the building envelope, such as installation of vapour barrier and insulation, to increase energy efficiency. This report contains the assessment performed on the building, as well as a proposed renovation plan. As built drawings provided by 9dot Engineering Inc. can be found in **Appendix A**.

9dot Engineering Inc. (9dot) recommends further consultation from professionals for review of building components outside the scope of this assessment, as listed below (Details can be found in Section 2):

- Septic system review;
- Vent pipe at front wall of building (possibly old oil tank); and,
- Yearly inspection by Fire Chief.

In total, 9dot estimates approximately \$94,700.00 in maintenance and upgrades and \$126,650.00 in major renovations are required, and an additional \$500.00 should be spent on further investigation of a few select issues as soon as possible. All other items listed in the budget provided are suggestions, which can be spread out over several years of maintenance and reparative action. The proposed renovation plan would cost an additional \$35,000.00 - \$50,000.00 to improve the layout and appearance of the space, depending on final design and finishes. A detailed breakdown of these estimates can be found in **Appendix B**.

**\*\* All budgetary estimates provided in this report are Class C estimates as defined below:**

*"Class C estimate (±25-40%): An estimate prepared with limited site information and based on probable conditions affecting the project. It represents the summation of all identifiable project elemental costs and is used for program planning, to establish a more specific definition of client needs and to obtain preliminary project approval." (APEG, Budget Guidelines for Consulting Engineering Services, 2009)*

**\*\* All totals do not include applicable taxes.**

## b. Building Bylaw

The Regional District of Central Kootenay (RDCK) Building Bylaw No. 2200, adopted December 9, 2010, provides building requirements for new buildings in the Central Kootenay area, which encompasses the Village of New Denver. While these requirements are not used to determine whether or not Knox Hall is in accordance to new building standards, climate and geological information is used when considering the structural integrity of the building. This information has been summarized in Table 1, below.

**Table 1 - Climate and Geological Data, RDCK Building Bylaw No. 2200, 2010**

Parameter		Design value
Temperature	2.5% Design Temp (January)	-24°C
	1% Design Temp (January)	-26°C
	2.5% Dry Bulb Temp (July)	33°C
	2.5% Wet Bulb Temp (July)	19°C
Degree days below 18°C		4303
Precipitation	Fifteen (15) minute rain	10mm
	One day rain	66mm
Max ground snow load		4.0kPa (83 lb/ft <sup>2</sup> )
Associated rain load		0.1kPa (2.075 lb/ft <sup>2</sup> )
Seismic Spectral Response Acceleration	Sa(0.2)	0.27
Hourly Wind Pressures	1/10 probability	0.24kPa
	1/50 probability	0.34kPa

## 2. Building Assessment

This building assessment is based on the condition of the building in August 2015. A pre-renovation inspection was conducted by Assured Homes Inspections Ltd. on August 24, 2015, and can be found in **Appendix D**. The live, dead, snow and seismic design loads of the building when it was initially built are not known. The design roof snow load recommended for the building is 39.5psf (Ultimate Limit State: 43.9psf). Calculations can be found in **Appendix C**.

### a. Site Analysis, Lot Grading, Drainage

Overall, the site on which Knox Hall is built on a low slope property with minor drainage concerns, particularly on the east side of the building, where slope runs towards the building. Drainage of water towards the building can result in moisture damage and accelerated deterioration of the structure. Drainage/grade improvement is advised to prevent existing drainage issues from developing.

### b. Retaining Walls

There are no existing retaining walls on the Knox Hall property.

### c. Wood Structure

With the exception of the exterior walls, the majority of the structure appears to be intact and requires little to no maintenance or repairs. The exterior walls show significant signs of aging and weathering, and are likely to require maintenance in the near future in order to preserve the structure. The wood frame building shows signs of rot and insect damage, as well as wood to soil contact, these issues have the potential to compromise the structural integrity of the building if not monitored and acted on.



Figure 1 – Exterior Deterioration

Condition of the wall stud framing could not be inspected during the site visit. There are visual signs of walls being out of plumb but this is not considered to be a major structural concern at this time, given the age of the building. Further inspection of the wall framing condition is recommended when/if wall insulation is installed.

#### **d. Foundation**

Following the Village of New Denver's purchase of Knox Hall, foundation work was conducted in 1974. This was the most recent foundation work conducted to date, and no detailed information on what was completed is available. The poured concrete perimeter foundation has evidence of minor spalling/deterioration, which is likely due to porous concrete material and freeze thaw cycles typical of the New Denver area. While this may continue to develop into a structural issue, it is presently mainly a moisture concern. As such, it is recommended that perimeter drainage be installed at the foundation wall to prevent further foundation deterioration and moisture issues (See Section 3).



Figure 2 - Foundation @North East Corner

#### **e. Basement and Crawl Space**

The crawlspace beneath the front porch was not accessible for proper inspection. It is recommended that a hatch be installed to access the area beneath the porch to check for structural issues, and to provide access for repairs of the porch substructure. The basement showed evidence of some moisture damage, but no serious structural issues. At the time of inspection, some stored items in the basement prevented the assessment of some areas and potentially structural elements. Moisture damage was noted, particularly on the wood subfloor of the crawlspace in the Northeast corner and on the wall of the mechanical room. The basement floor was noted to be uneven, which could indicate poor workmanship, rotting subfloor, or uneven settling of the building slab over time.





Figure 3 - Evidence of Moisture in Basement Stairwell

It is recommended that the wood subfloor be removed where possible, as moisture damage is evident. Wall interior faces show some signs of moisture damage (See Section 2.j).

#### **f. Building Envelope**

Overall, the main deficiency noted in the building envelope was moisture and air flow control. Generally, replacing deficient or deteriorated building components and sealing any holes, cracks or gaps will improve building performance. The components with the biggest impact at this time are the roof, which was installed without an underlay, allowing condensation to drip into the attic space, and the wall siding condition.

##### **f(1) Roof**

Only the rear porch roof was accessible for “on roof” inspection due to the steepness of the main roof. The metal roofing material appears poorly installed with a few notable leaks. Underlay appears to be missing or only partially installed, meaning that any moisture that gets under the metal sheets can cause damage to the roof structure beneath. It is recommended that the Village of New Denver plan to replace the metal roof and to complete the underlay below. For further information on the roof’s structural condition, please see Section 2.g.

Replacement of missing/loose fasteners is recommended if the roof is not replaced. Flashing details at the chimney and exterior walls is incomplete and should also be repaired and replaced as needed.



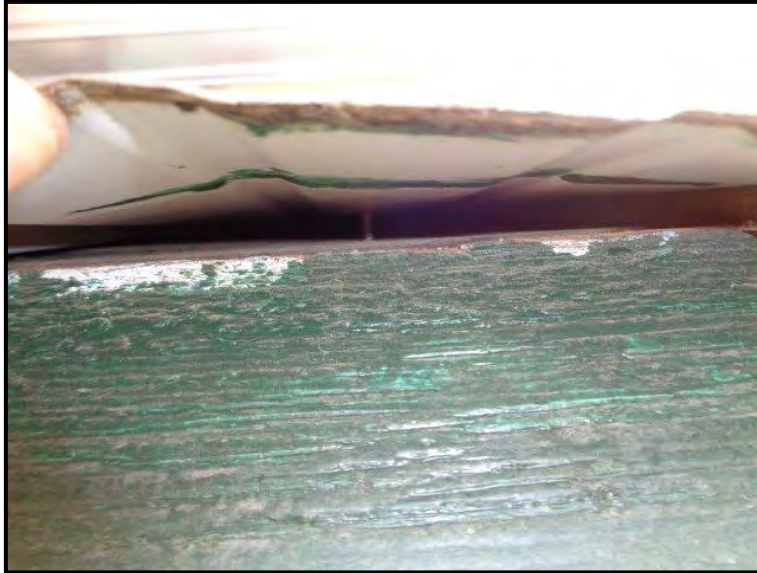


Figure 4 - Roof Missing Underlay, Some Missing/Loose Fasteners

### **f(2) Chimneys**

Knox Hall has one (1) brick chimney that appears to be unlined. The interior of the chimney and flue was not inspected at the time of this assessment. The existing chimney requires several minor repairs including some masonry repairs, a new chimney cap, and the flashing replaced. These actions will help reduce moisture and water infiltration into the building.



Figure 5 - Poor Flashing and Weather Sealing of Chimney

**f(3) Skylights**

The building does not contain any skylights.

**f(4) Flashing**

Proper head flashing at the exterior walls (windows and doors) and at some areas of the fascia is highly recommended to prevent moisture intrusion and further deterioration of the wood structure. Should the Village of New Denver choose to replace the windows in Knox Hall, flashing should be changed and/or installed along with the new windows.

**f(5) Eaves Troughs**

There are no existing eaves troughs or gutters installed on the building. Eaves troughs are not recommended for this building, as snow must slide off the roof in order to prevent over loading of the roof structure (see Section 2.g)

**f(6) Exterior Walls**

The exterior walls are in overall poor shape. The wood siding is very weathered, shows evidence of rot, warping and cracking, and is loose in some areas. There are indications of previous cosmetic repairs, which indicates that there are ongoing problems which have not been solved, meaning deterioration will accelerate over time, resulting in higher maintenance costs. Additionally, the slight overhangs on this building are likely not optimal, leaving the building susceptible to weather damage, water infiltration into the building envelope, and rot. It is highly recommended that the Village of New Denver restore and replace siding as needed. The particular areas of concern include:

- Rear wall shingles rotted.
- Rot at lower east wall. Replace siding with drop siding and fix grade-siding clearance.
- Rear addition exhibits poor building practices and exhibits board and batten siding deteriorating, siding grade clearance insufficient and likely rot.

Soil and debris should be cleared from areas of concern (rear addition and east wall) so that the structure can be properly checked for insect damage and rot below grade. Repair and replacement of soffits, fascia and trim is also recommended as needed as much of these components exhibit evidence of rot or weather, or are missing.

### **f(7) Windows**

Windows were last replaced in 1977, and replacement of the majority of exterior windows is recommended, as well as the installation of windows into old window casings that are currently not in use. Most windows exhibit evidence of condensation, damaged trim and sills etc. or are inoperable. New windows, and new window installation will improve the building envelope, leading to lower heating bills, and improved moisture management. Functional windows will also allow natural ventilation of the building when desired.



Figure 6 - Aging Lower Level Window

### **f(8) Doors**

Restoration of the main entry door is recommended. Weather stripping should be replaced to improve the building envelope, reducing moisture infiltration through the door. For aesthetic purposes restoration of the main door may include replacement of hardware and general minor repairs.

### **f(9) Foundation**

Porous foundation concrete and concrete deterioration is likely adding to moisture related issues in the basement and crawlspace of the building. Perimeter drainage will mitigate the impact of the porous foundation material on building performance, along with recommended waterproofing. Overall, the foundation of the original building appears to be structurally sound; however the foundation of the rear addition is causing issues and should be replaced.

### **g. Roof Structure**

Sag in the existing joists was noted; however they appear to be in solid condition upon visible inspection. The aging roof cannot currently carry the expected snow load for the area. As such, it must shed the snow load, and so The Village of New Denver must continue to use metal sheet as the roofing material for the building in order to help the structure shed snow weight. Additionally, eaves troughs/snow anchors must not be installed, as they would increase the snow load on the structure.



Figure 7 - Roof Structure

Reinforcing actions should be taken to add additional support to the existing roof structure including plywood gusset plates at the ridge of the roof, and additional collar ties above the existing collar ties to reduce further sagging of the roof.

### **h. Moisture Concerns**

Signs of moisture issues that were noted during the site visit include mould, mildew, and damp areas on wall surfaces and floors, and in the basement. Exterior moisture infiltration through the foundation, mechanical room, and library floor and walls is the primary source of moisture issues. In effort to better control these issues, it is recommended to divert site drainage away from the building, repair plumbing leaks noted in 2.o, Improve attic and crawlspace ventilation, waterproof the foundation and install proper kitchen and bathroom ventilation.

### **i. Porches, Decks and Balconies**

Knox hall has two deck structures; one raised front deck and one back, ground level. Some minor repairs and maintenance are required or recommended, as both show some signs of deterioration.

The small front deck and ramp has settled away from the structure with time, causing possible leaks into the crawl space below, which may lead to rot and deterioration. At this time, it is difficult to determine the condition of the lower structure, as the crawlspace is not accessible. As a result, it is highly recommended that crawlspace access be installed from the existing crawlspace to allow evaluation and eventual repairs of the lower deck structure, which is likely to have structural issues, indicated by rot at the joint between the concrete walkway and the wood frame wall. A screen should be placed over the hole to the crawl space under the front deck (Figure 8) to prevent animals and debris from entering. Some aesthetic issues that the Village of New Denver may wish to remedy include replacing the trim and rot damaged wood components of the deck. The elevated walkway leading to this deck is in good condition and does not require immediate attention.



Figure 8 - Front Deck





Figure 9 - Front Deck Crawlspace

The larger back deck should also have a drain installed in the pavers near the library door, to prevent moisture intrusion to the basement during heavy rain events. The Southeast post shows some signs of damage and misalignment, and should be realigned. Overall, the back deck is in good condition.



Figure 10 - Back Deck

## **j. Interior Walls, Ceilings and Floors**

The overall interior of the building is of moderate concern. Normal hairline cracks and slight damage can be seen on walls and ceilings, which can be repaired for aesthetic purposes. Existing upstairs carpet was installed in 1977, and is well overdue for replacement. The recommended action would be to remove all existing carpet and refinish the wood floor beneath, particularly in the bathroom and kitchen. Tile is firmly not recommended due to the building age and structure. Tile will add excess weight, which would likely cause framing to deflect excessively, cracking the grout.

The original building has three-drop ceilings that have been installed beneath the roof (See Figure). The first ceiling is not insulated, and curves down to meet the roof and walls. The underside of the first ceiling exhibits peeling paint which is likely due to moisture issues and should be handled with caution as there is a possibility that it is lead based paint. The second ceiling is insulated with blown-in insulation. The third and final drop ceiling is the ceiling visible from below and is not insulated. This third ceiling has electrical wiring laid over it.

It is recommended that any existing lath and plaster interior finish be replaced, or repaired where possible, to restore the original interior finish.

The basement level shows signs of moisture damage and it was noted that the carpet is worn and aged. Basement walls and floors in particular were stained damp in some areas (Mainly the mechanical room and the Northeast corner.

## **k. Attic, Ventilation and Insulation**

Leaks were noted in the roof sheathing. Evidence of past moisture in the attic was noted; however, the area was dry at the time of inspection.

Evidence of previous wasp/bee nests was noted in the attic. If users of the building note these pests to be a nuisance, a pest control company should be contacted.





Figure 11 - Wasp Nests Noted in Attic

Several ventilation and condensation issues have been noted in Knox Hall, as is typical with older buildings. As previously mentioned, attic, crawlspace, kitchen and bathroom ventilation should be improved/installed. In addition, cleaning of existing ductwork will help improve air quality throughout the building.

General improvements to the insulation of the building are recommended, as the existing insulation is unevenly distributed and insufficient in some areas. Insulation should be permanently installed to the attic access hatch and added to exposed fan ducts in the attic. Weather stripping should also be added to the access hatch. Insulation should be added to the exterior walls of the main building, as it was not installed at the time of construction, and would improve the energy efficiency of the building.

## **I. Kitchen and Bathrooms**

The main floor kitchen is in reasonably good shape overall, and may be renovated along with the proposed renovation plan (Section 3). Recommended maintenance items for the kitchen include grounding the existing electrical outlets (See Section 2.n) and installing a vent fan to the exterior for proper kitchen ventilation over the existing range and oven. Optional upgrades include repairs and refinishing, and potential replacement of the kitchen cabinets and carpet removal. While not strictly necessary, removal of the kitchen and main floor bathroom carpet is highly recommended to improve ease of cleaning.



Figure 12 - Carpeted Bathroom with Poor Ventilation

The main floor bathroom requires improvements to the existing ventilation system. It is recommended that a vent be installed in the exterior wall with a 30-minute timer. A heat source should also be provided for this bathroom (see Section 2.m). The existing wall hung sink is slightly loose and should be secured to the wall.

The basement bathroom is generally in good shape. Similarly to the main floor bathroom, it is recommended that grounding be added to the existing outlets, and that the Village of New Denver plans to install ventilation with a 30-minute timer.

The Village of New Denver may want to consider a full bathroom renovation in order to improve the aesthetics of the bathroom, as well as increase the functionality of the space.

### **m. Heating and Cooling Systems**

All existing heating systems appear to be satisfactory; however, some further work could be done to improve the existing heating and ventilation system, including installing heat supply to the main level bathroom and kitchen, and completing the cold air return shafts. Alternatively, baseboard heaters are recommended in the main level bathroom and kitchen. Cleaning of all interior ductwork would also improve air circulation and quality throughout the building, and is recommended. There is no existing cooling system in the building. An air source heat pump would provide additional heating and cooling capacity to the main floor of the building if desired.

During the site visit, what was possibly a vent pipe was noted at the front wall of the building, which could indicate a buried oil tank. It is recommended that an expert, such as a furnace specialist, be consulted on this matter.

## **n. Electrical System**

The electrical system in Knox Hall appears to be in good working condition, with room for expansion to the system and there is some evidence of recent upgrades to the system. There is exposed wiring around the lower exterior walls which should be covered and/or protected. During the site visit, items being stored in Knox Hall prevented the testing of some outlets and switches; however, the switches and outlets that were tested appear to be serviceable. There is some existing knob and tube wiring in the attic that appears to have been disconnected.



**Figure 13 - Disconnected Electrical in Attic**

A GFCI (Ground Fault Current Interrupter) Outlet should be installed at the kitchen, bathrooms, and exterior outlets for effective protection against electrical shock, and weatherproof protection is recommended for exterior outlets. The Village of New Denver may also want to consider adding extra room outlets; however, this is not required maintenance.

## **o. Plumbing System**

Overall, the plumbing system within the building is functional, with a leak apparent at the kitchen sink that should be repaired. One main issue with the plumbing system is the lack of shut off valve where the water enters the building. It is highly recommended that a shut off valve be installed as soon as possible, along with a PRV (pressure reducing valve). It is also recommended that the existing galvanized steel service pipe be replaced as a proactive measure.

A slab drain should be installed in the crawlspace and in the mechanical room where the hot water heater has been installed. A hose bib for the exterior water supply is also recommended, but is not urgent.



Figure 14 - Water Service Pipe

It should be noted that the private septic tank used by Knox Hall was not inspected as a part of this report. It is recommended that the Village of New Denver check with the local health unit and/or hire a private contractor to review the septic system to confirm that it has the required capacity, and is in good condition. There were no design drawings available to ensure that the septic system has adequate capacity for the number of bathrooms and maximum occupancy of the system. As a maintenance measure, it is recommended that the septic tank be pumped and cleaned every 5-7 years, or when the sludge level reaches 1/3 of the tank volume.

### 3. Proposed Main Floor Renovations

The renovation plan proposed for Knox Hall centers around adapting the building for more efficient use of the space as well as improving the layout of the main (upper) floor. The main components of this renovation include closing in the existing stairwell to the basement, renovation of the kitchen and bathroom, and removal of the wall between the addition and the main building, or adding double doors, and closing in the front porch to create a coat room.

One of the main concerns with renovating a building of this size and age is Building Code compliance. It is recommended that the Village of New Denver meet with a building inspector and/or seek expertise of a code consultant and/or architect to classify the building, and make recommendations for fire walls, travel distances, etc. as needed. It should also be noted that a building permit application may be required, at the discretion of a building inspector.

The closing of the existing stairwell will consist of demolition of the existing stairs and railing, and the addition of simple load bearing framing of the area. This will allow more usable floor space on the main floor and will provide closed storage in the basement. This renovation should be finished along with replacement of the existing main floor carpet.

Several proposed layouts have been provided for the kitchen and bathroom area for discussion purposes. It is understood that the building's heritage status will allow for only one main floor bathroom. The main goal of renovating the kitchen and bathroom area is to maximise the effective use of the space. This will be accomplished by reducing the size of the bathroom, allowing some of the space to be used by the kitchen. The chimney has been kept in the renovation plans to maintain the heritage feel of the building. The wall between the chimney and the existing door to the kitchen area can either be removed, providing more access to the kitchen, or could be replaced by an additional door, resulting in double doors to the kitchen. This second option would provide a separate area for preparation and storage during events at Knox Hall, but would make the space less open.

Closing in the front porch would allow dry storage of coats and boots when required, and would reduce the indoor space taken up by coat racks etc. This renovation would be relatively simple, but would greatly improve the functionality of the front entrance space.

Drawings of the proposed renovation layouts can be found in **Appendix A**.

## 4. Recommendations

The following renovations/modifications should be planned and budgeted for and completed as soon as possible:

- Waterproofing of foundation, grading and drainage
- Paint and restore siding to keep moisture away from wall structural components
- Reinforcement of the roof structure

These items are considered most crucial for maintaining the structural integrity of the building in order.

During all renovations and construction undertakings, the Village is advised to proceed with caution, as many of the building components may contain hazardous materials, and as such should be handled and disposed of with care. Components of particular concern include ceiling tiles (asbestos) and ceiling paint (lead).

## 5. Conclusion

The original structure appears to be in relatively good condition; however, the rear addition is showing signs of failure, particularly in the foundation. Overall, some preventative measures are required including waterproofing of the basement, reinforcement of the roof, and restoration of the original siding, in order to prevent serious deterioration of the structure. Detailed recommendations, as well as a renovation plan have been provided with this report to aid the Village of New Denver in determining how to maintain the integrity of Knox Hall. In total, 9dot estimates approximately \$94,700.00 in maintenance and upgrades and \$126,650.00 in major renovations are required, and an additional \$500.00 should be spent on further investigation of a few select issues as soon as possible. The proposed renovation plan (totalling \$35,000.00-\$50,000.00) outlines a course of action, which the VON may wish to take to maximize the functionality of the space, but is purely conceptual, and will require further elaboration, as well as consultation with authorities having jurisdiction to ensure that the renovations are permitted.

The next step that the Village of New Denver is recommended to take in order to address the recommendations in this report will be sending out a tender for pricing on the scope of work desired in order to confirm the suggested budget. Once the budget has been confirmed, the Village should consult with any authorities having jurisdiction (eg. building inspector) as needed, before proceeding with major renovations.



## **Appendix A – As Built and Proposed Drawings**





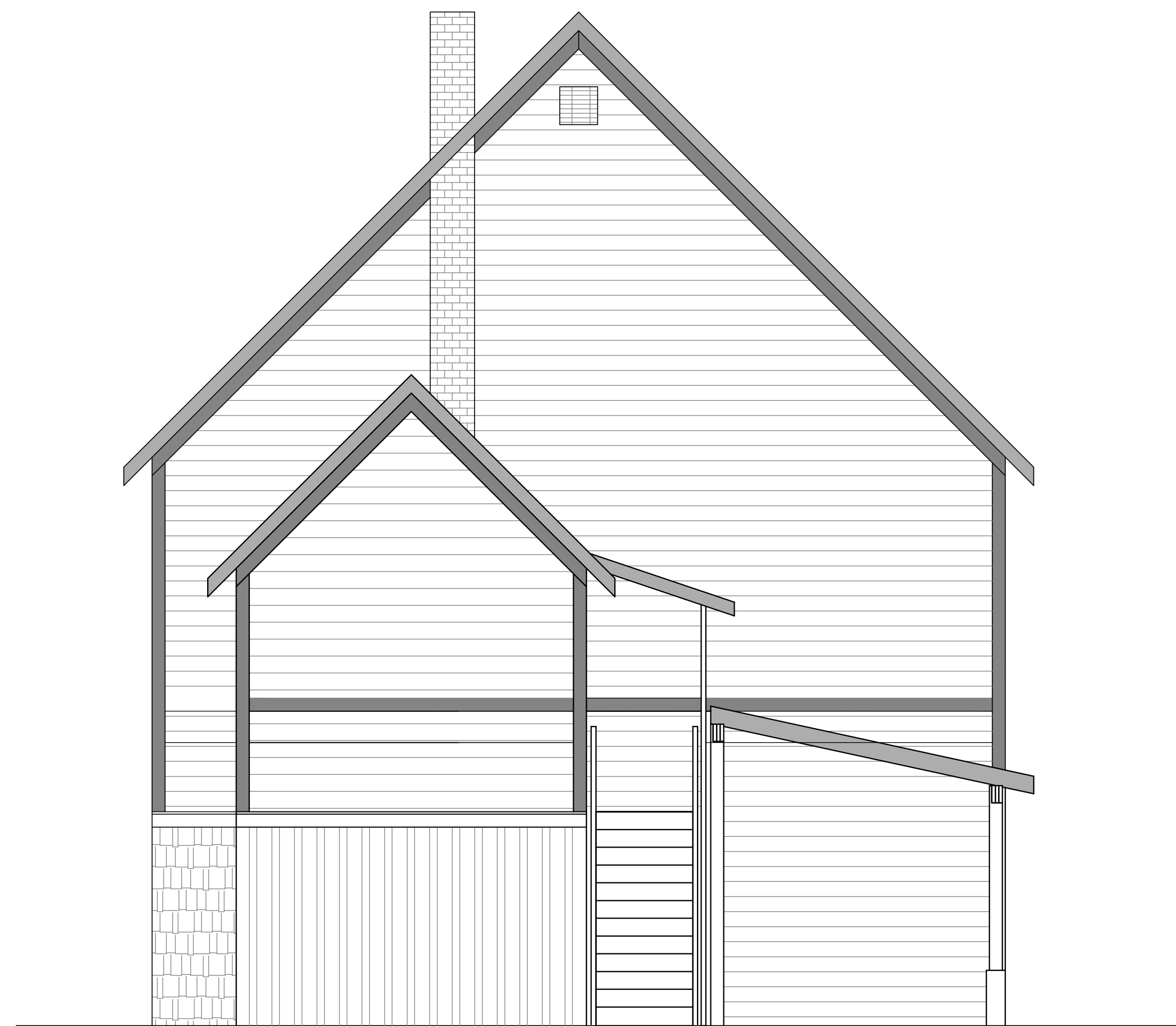




FRONT ELEVATION



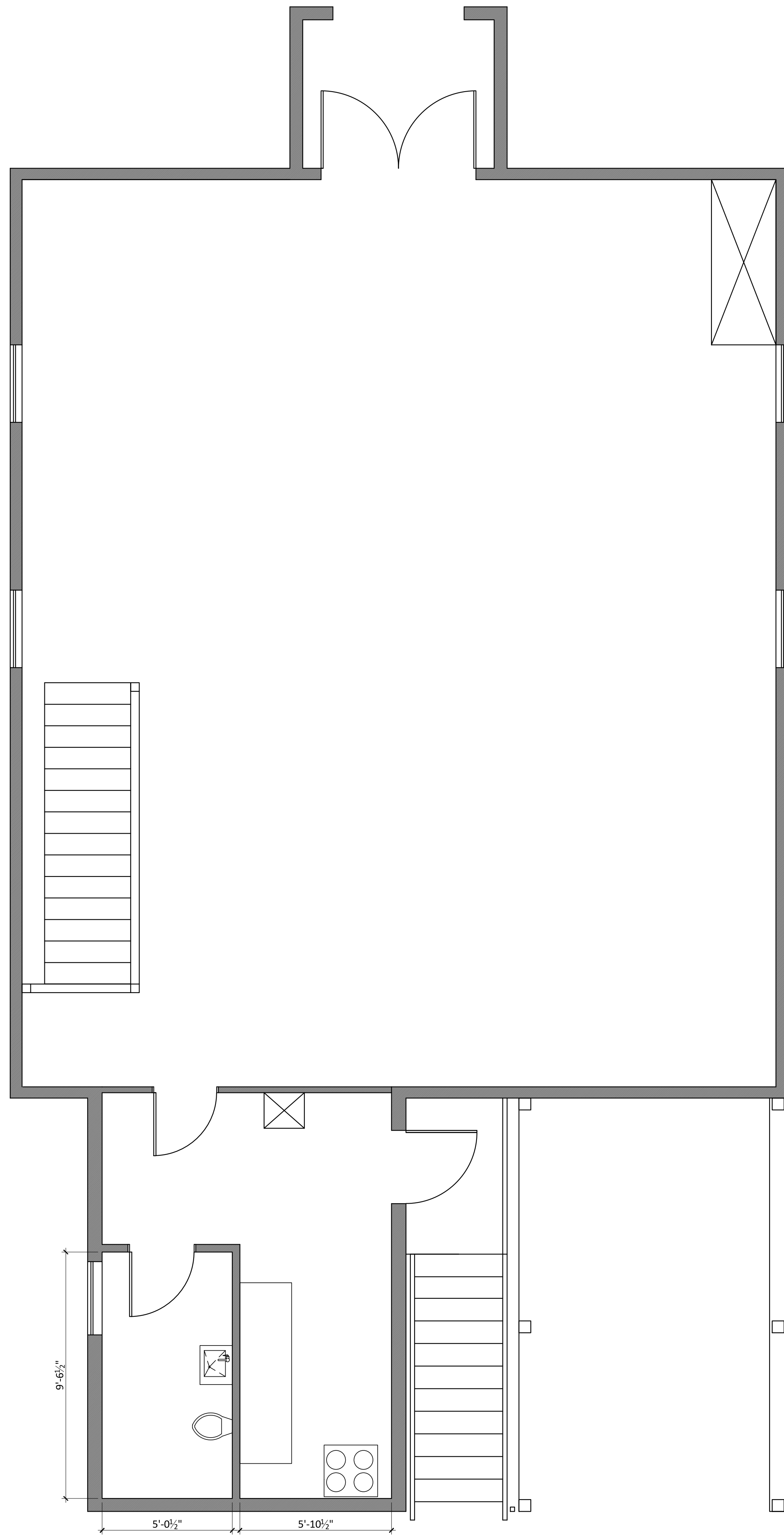
EAST ELEVATION



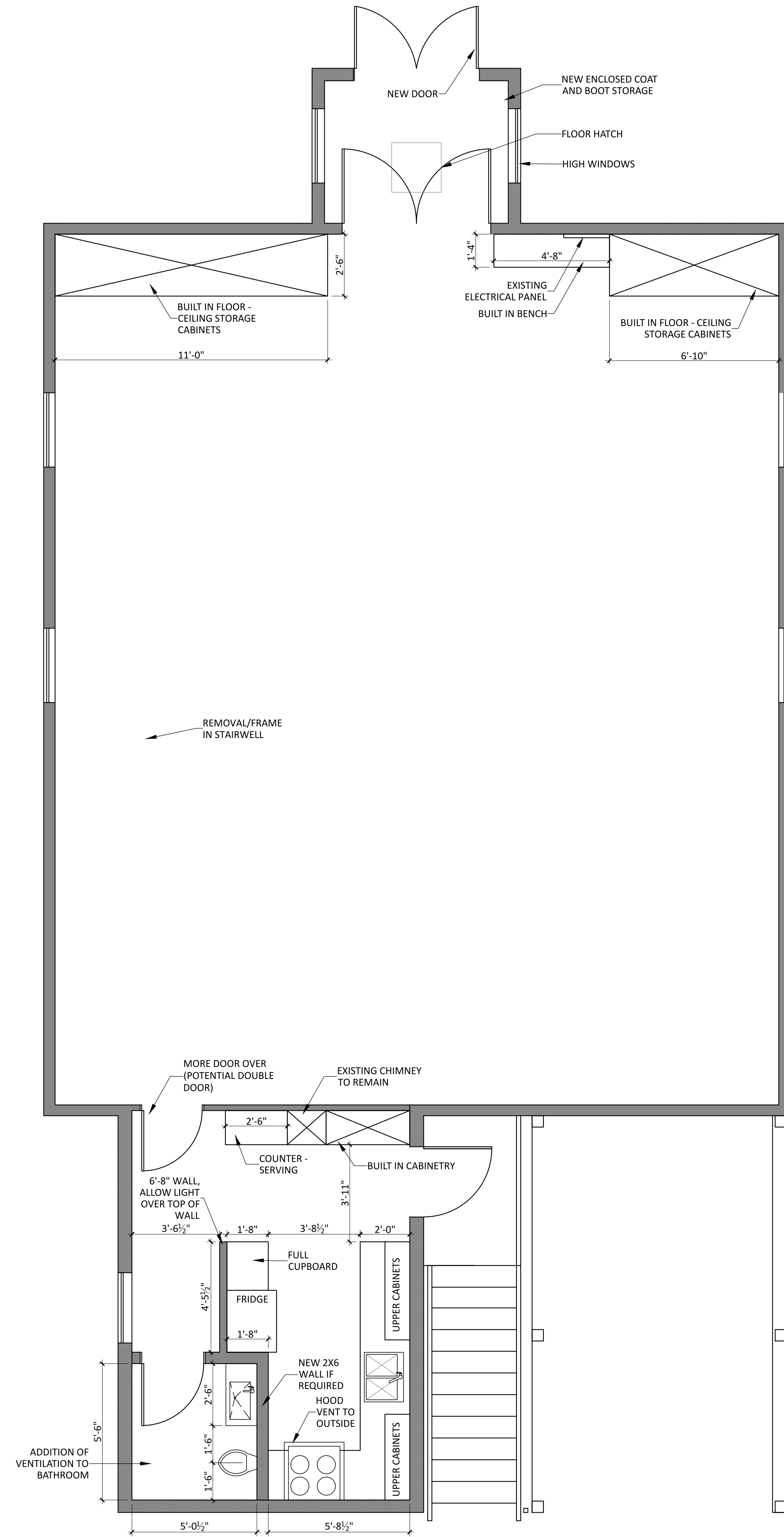
REAR ELEVATION



WEST ELEVATION



AS BUILT FLOOR PLAN



PROPOSED FLOOR PLAN

## **Appendix B – Renovation Plan Budget**

15-029 Knox Hall Renovation Plan				
Estimated Cost Breakdown				
September 29, 2015		Priority 1= high 5= low		
Major Renovations				
Priority	Item	Notes	Cost Estimate	
1	Perimeter drainage	Excavate, waterproof, add drainage, backfill	\$20,000.00	
1	Triming/removal of vegetation	Removal of trees touching building	\$1,500.00	
1	Roof replacement	Including: Installation/completion of roof underlay New metal roof	\$25,000.00	
1	Gutters/eaves troughs		\$650.00	
3	Replace, add windows	Most windows should be replaced, or should be restored such that they can be opened. If current windows are kept, appropriate weather flashing should be installed, and any gaps or cracks should be filled/sealed.	\$15,000.00	
3	Removal/replacement of wood subfloor (basement)	As needed	\$2,000.00	
3	Carpet removal/replacement (main floor)	Worn carpet should be removed and either replaced, or the wood floor beneath should be refinished.	\$5,000.00	
1	Wall/roof insulation	Remove existing sheeting and insulation. Install vapour barrier, drywall, paint etc.	\$50,000.00	
2	Reframing/Insulation of door		\$7,500.00	
Sub Total Major Renovations				\$126,650.00
Maintenance and Upgrades				
Priority	Item	Notes	Cost Estimate	
4	Grade improvement @ East side of building		\$200.00	
2	Replace/Install flashing as necessary		\$1,500.00	
2	Exterior siding refinish (siding repairs/replacement) as needed	Strip and repaint siding. When removing, further investigation of exterior wall condition is recommended	\$20,000.00	
1	Install hatch to crawlspace (Under front porch)	Further investigation of crawl space structural condition highly recommended	\$500.00	
4	Install exterior floor drains (Front and back porch and basement)		\$1,500.00	
4	Install heat to kitchen and bathroom	Baseboard heat	\$500.00	
1	Add GFCI to bathroom, kitchen and outdoor outlets	Assuming 5 outlets	\$500.00	
3	Chimney upgrades	Including flashing and chimney cap	\$500.00	
4	Replacement of existing galvanized water line	Proactive measure	\$1,500.00	
1	Install PRV and shutoff valve for water supply to building		\$500.00	
2	Add ventilation to kitchen and bathrooms		\$2,000.00	
3	Repair/replace soffit and fascia as needed		\$500.00	
4	Electrical	Assorted electrical upgrades including additional wall plugs and lighting replacement/installation	\$10,000.00	
4	Mechanical	New mechanical works/ventillation system	\$35,000.00	
4	Fix plaster interior	Repair and repaint existing plaster interior	\$20,000.00	
Sub Total Medium Maintenance				\$94,700.00
Minor Repairs				
Priority	Item	Notes	Cost Estimate	
5	Aesthetic restoration	Restoration and refinishing of interior and exterior doors, cupboards, secure main floor bathroom sink to wall	\$300.00	
2	Pump septic tank	Pump and clean septic tank (every 5-7 years)	\$7,500.00	
2	Clean existing ductwork	both heating and cooling system ducts should be cleaned	\$400.00	
5	Pest control	As needed	\$100.00	
Sub Total Minor Repairs				\$8,300.00
Further Consultation				
Priority	Item	Notes	Cost Estimate	
3	Septic system	Septic system was not reviewed as a part of this report	\$300.00	
5	Vent pipe at front wall of building	Possible buried oil tank	\$200.00	
Sub Total Further Consultation				\$500.00
Renovation Plan				
Priority	Item	Notes	Cost Estimate	
	Bathroom		\$15,000.00	
	Kitchen		\$20,000.00	
	Close in stairwell			
	Front entrance			
Sub Total Further Consultation				\$35,000.00
Subtotal				\$230,150.00
Tax				
Total Price				\$230,150.00