SAFE HOMES CANADA HOME INSPECTION REPORT

ADDRESS: x Lavender Hill Road, Dunedin, ON

BUYER: Jeffrey xx

Email:

INSPECTOR: Andrew Christie, CET (civil), RHI

DATE: December 12, 2022

AGE OF HOME: 120 years (approximately)

Scope of the Report

This inspection is intended to assess the structure (including foundations, floors, walls and roofs), building envelope (including roofing), mechanical systems (including heating and plumbing), the attic space (including insulation), electrical systems and windows.

It is a visual inspection only. The inspection was carried out on behalf of, and as a service to, the buyer. Any non-visible elements, including buried pipes and any water conditioning and filtering equipment are excluded from the inspection.

Occupant safety – including alarms and means of egress – are completely excluded from the inspection. Safety notes are provided as a courtesy.

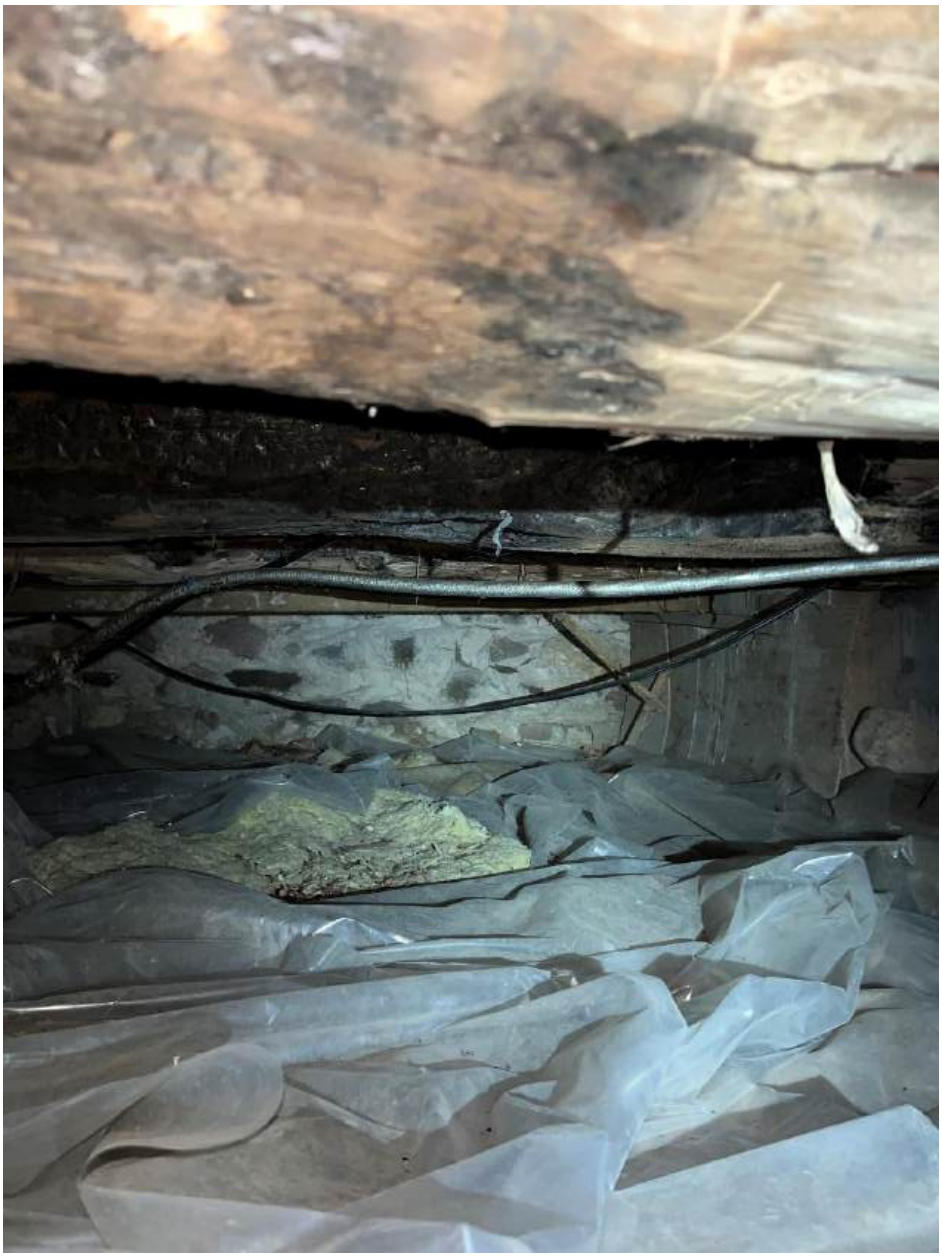
To provide a frame of reference, the 'front' of the home is the side facing Lavender Hill.

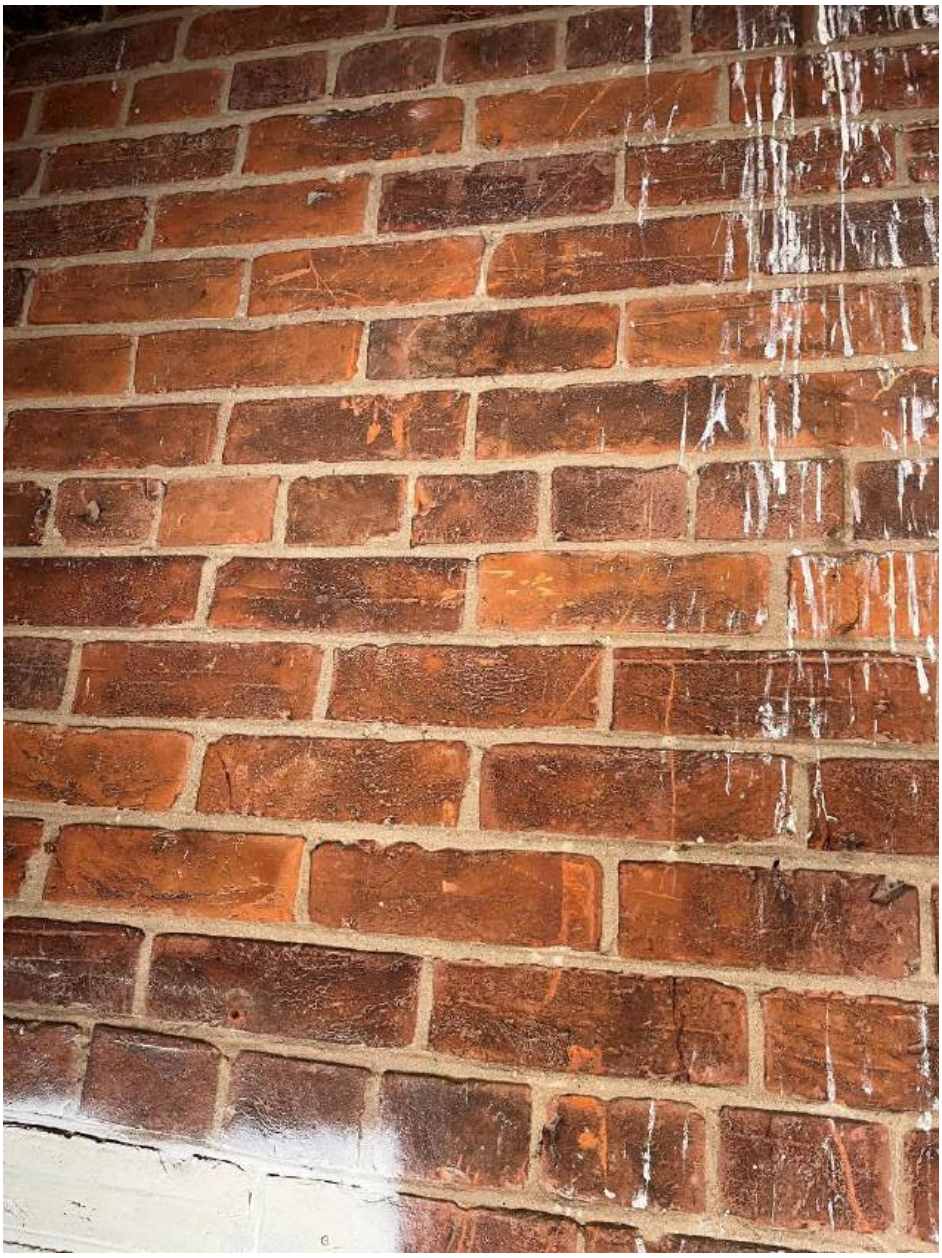
Celebration of Key Elements:

Sound Structural Elements

The Structural Elements, including foundation walls, wall assemblies and roof structure are all stable and free from significant damage and degradation, as observable.

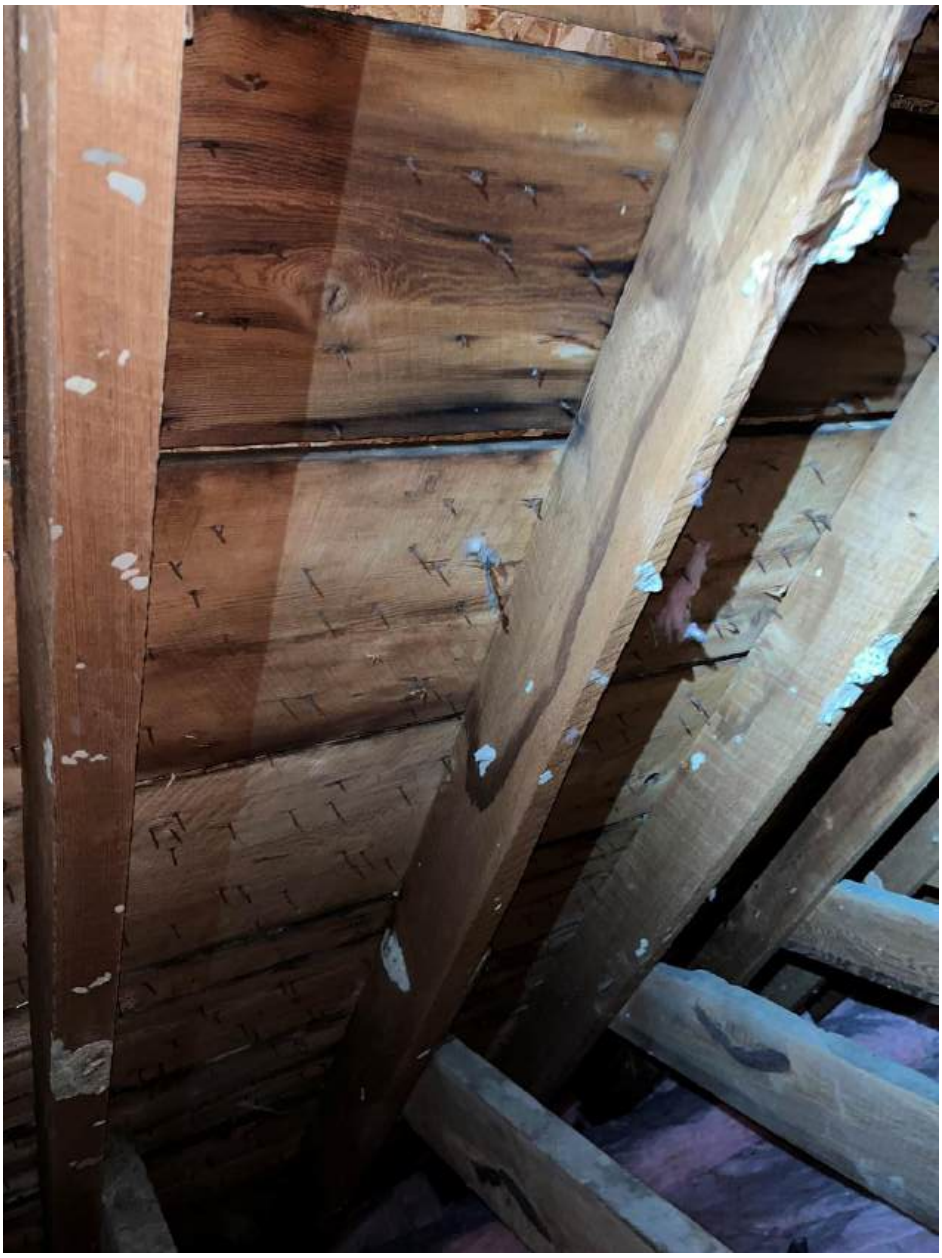
(The floor assemblies are stable underfoot, but significant work is required at piers and some wood elements; see the Key Issues section.)





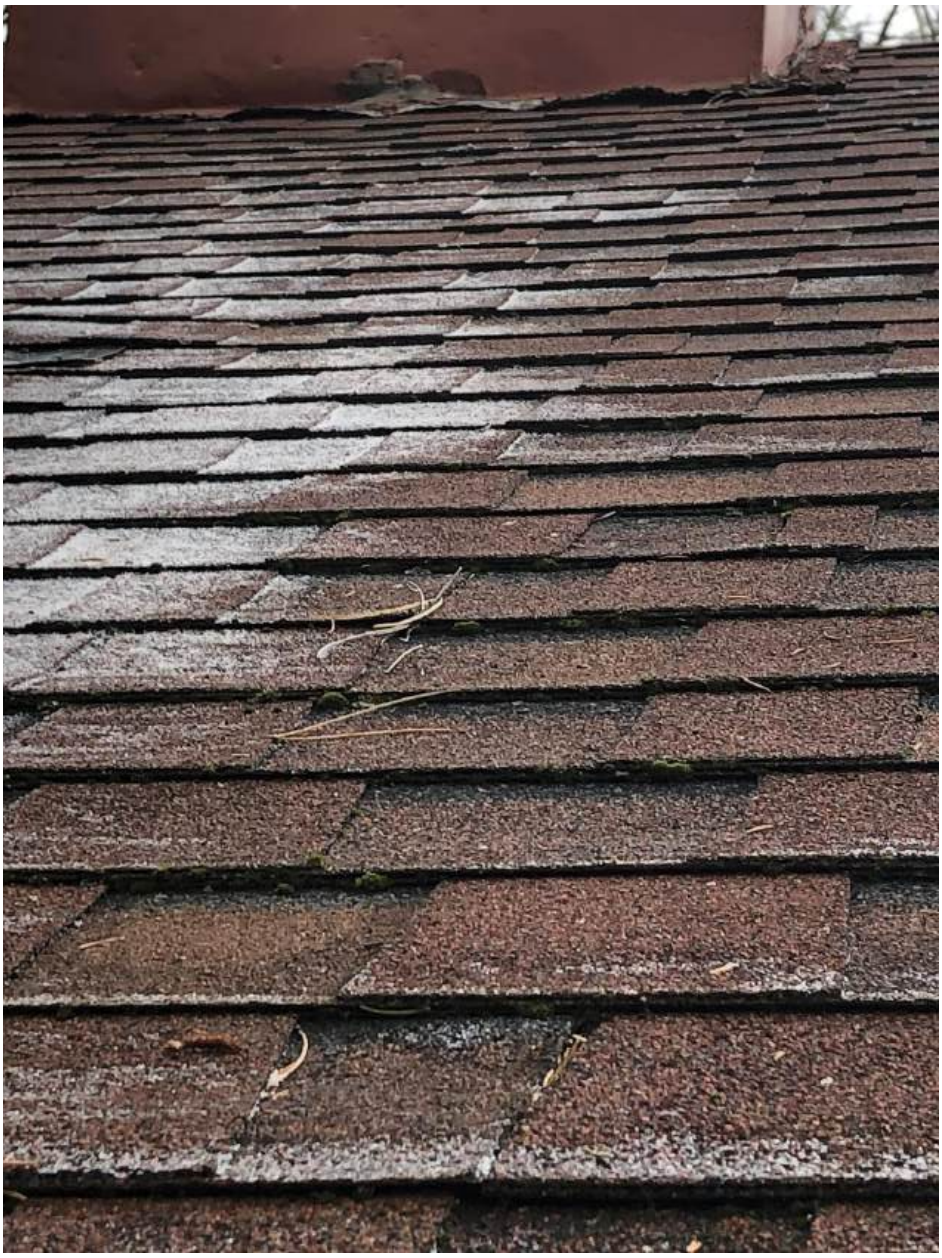
*Minor moisture decay is observable at a few locations; see Key Issues.

Waferboard has been added over the planks, which can be seen in the following photo; it is likely a benefit.



Newer Shingles:

Based upon partial observation, the shingles are newer and were well-nailed; re-shingling will not likely be necessary for between 14 and 18 years, best estimate.



As seen above, much of the roof surface was not observable due to snow and ice. That includes the shed roof. Note that the shed is to be removed by the buyer anyway.

The Absence of Asbestos and Significant Mould:

There is no asbestos at ducts, or in the attic, and there is no significant mould. (See Key Issues.)

Formal Repairs (already completed) at Brick System:

The repair work that has been executed at the brick masonry system appears to have been very well-executed.

Updated Electrical Circuits:

Most of the circuits have been updated. (They are newer, not old.) See Key Issues.

All accessible receptacles are grounded.

Key Issues/Deficiencies/Work Required/Expenses:

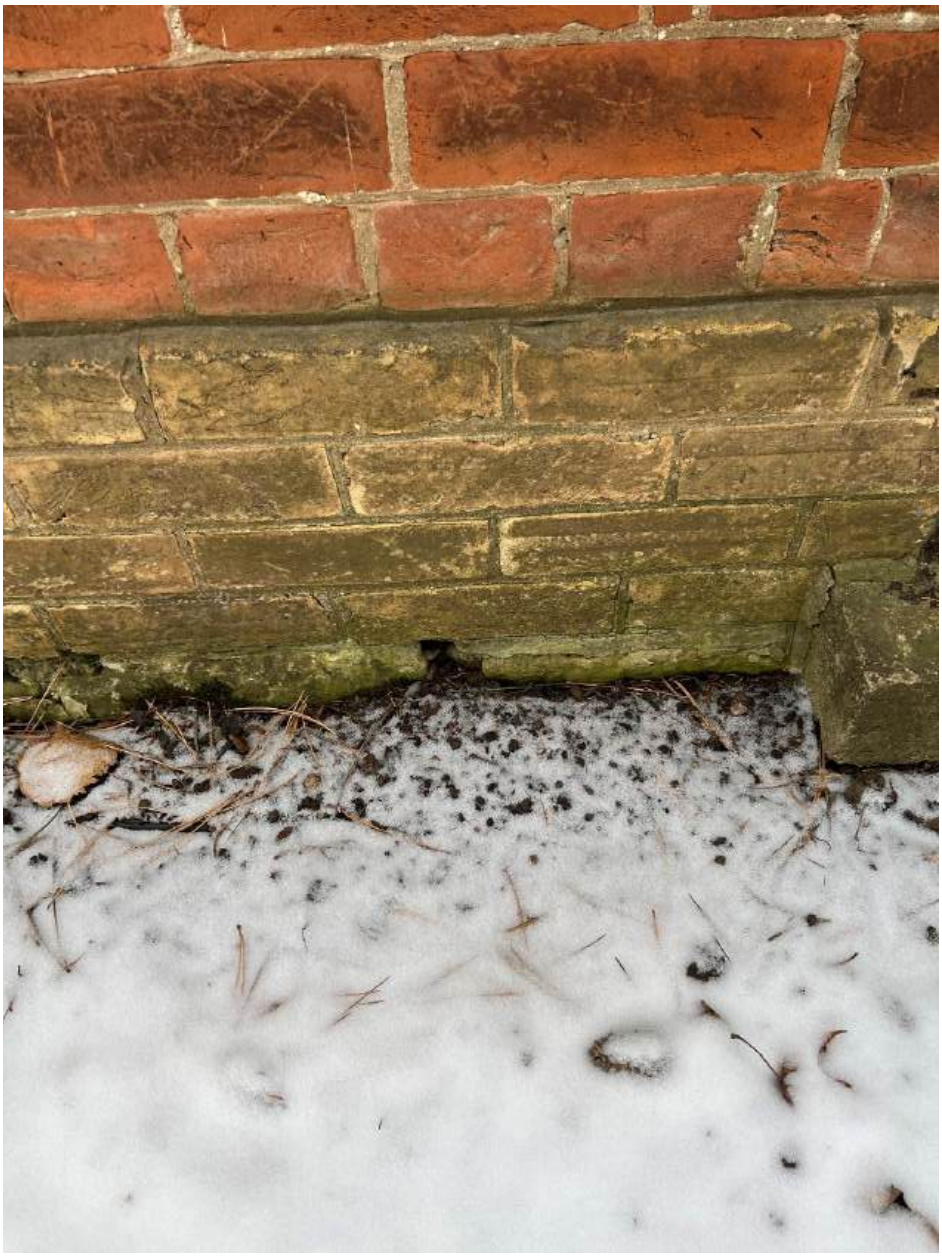
Floor Out of Level:

The floor is obviously out of level, most notably at the front left part of the home.

See the sections below that discuss possible causes and work required to prevent further settlement.

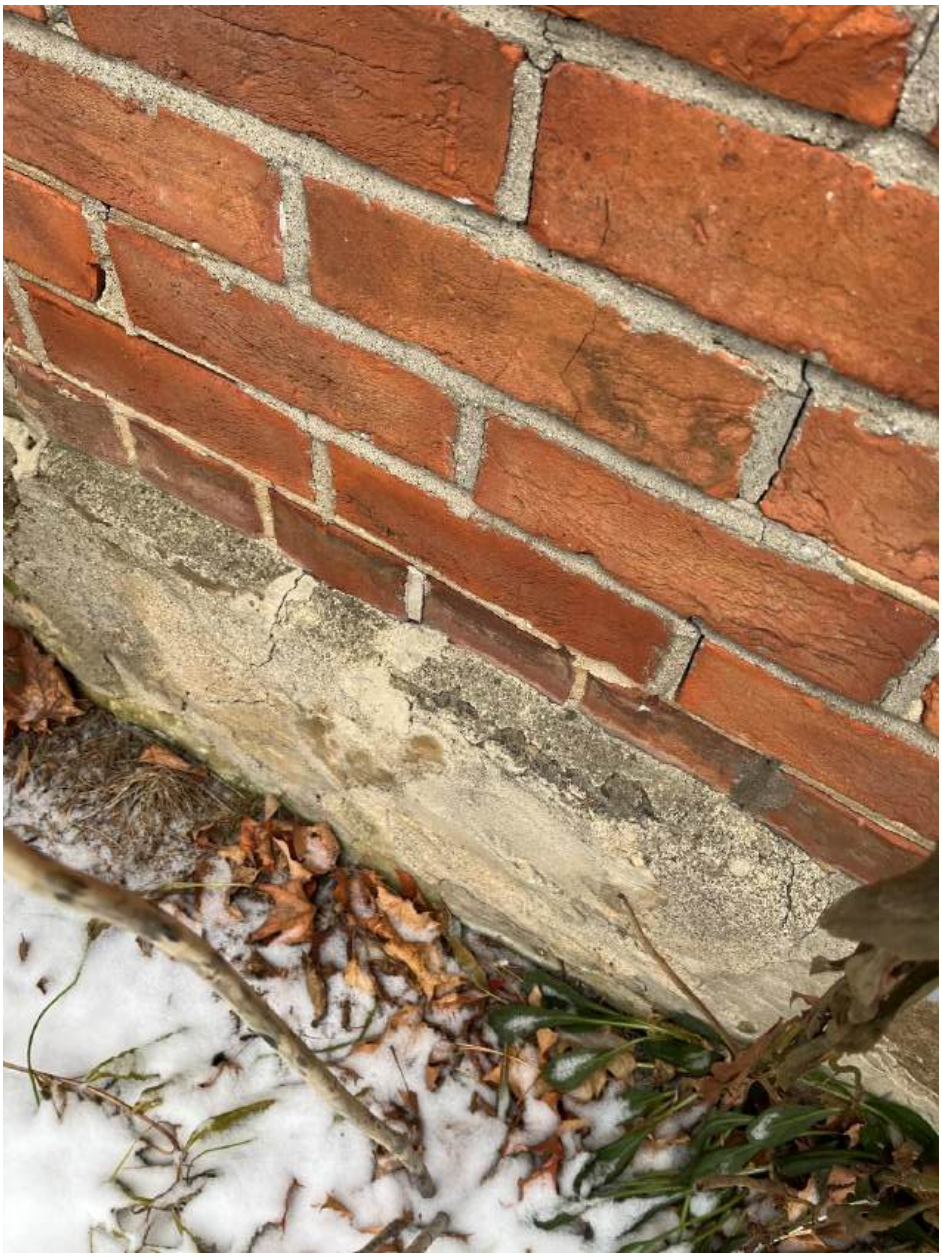
Patching at the Outside Face of the Stone Foundations:

While not critical work, it is recommended that the openings at the outside face of foundation walls (above grade) be sealed with a masonry patching product.



Sealing Top of Masonry Ledge:

While some parts are free of a gap, a sealant compound is recommended at the top of the masonry ‘ledge’, to prevent long-term water infiltration and degradation.

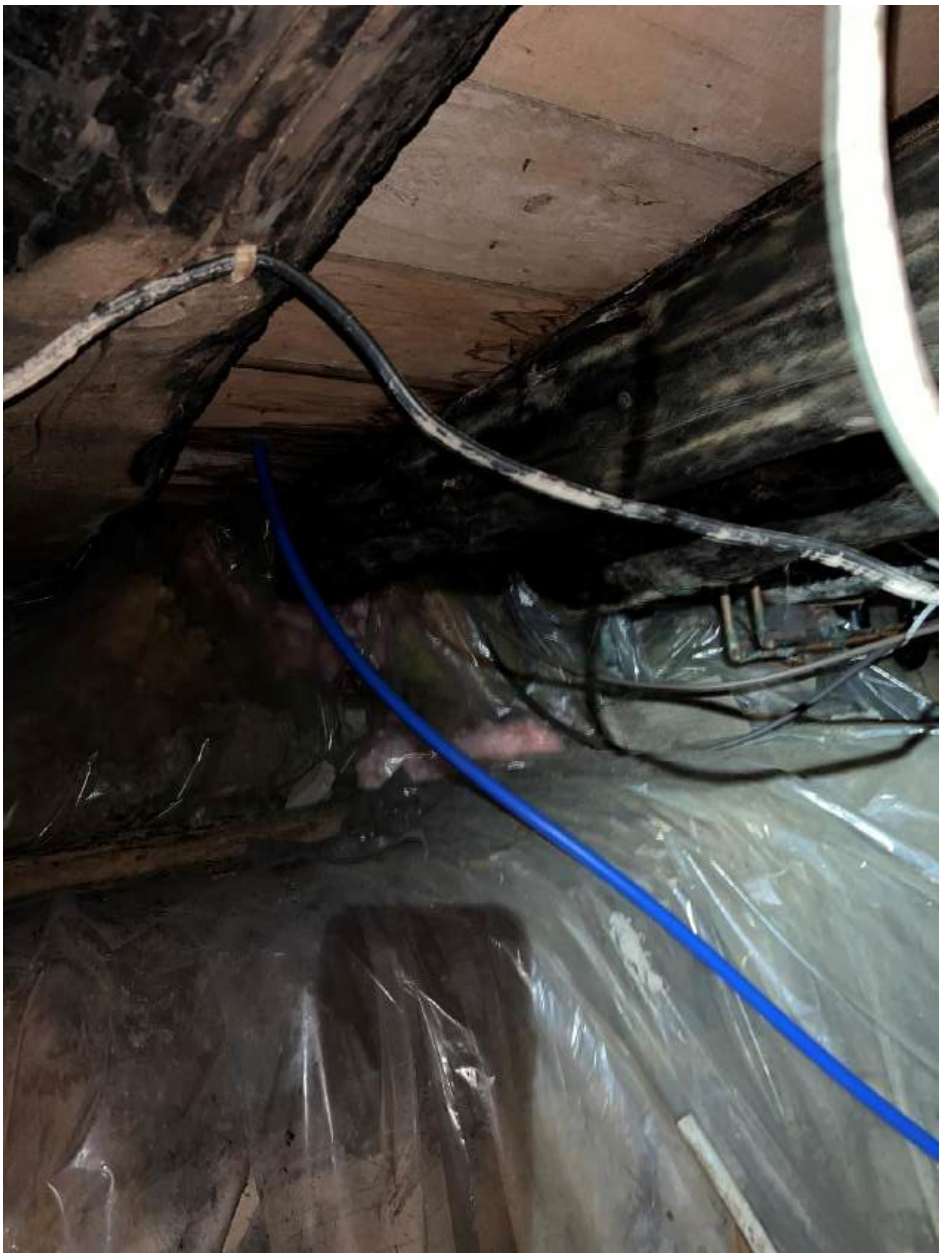


Possible Patching (Replacement) of Stones at the Inside Face of the Foundations AND Work at Insulation System:

The inside face of the foundation walls is not observable due to insulation and poly plastic. As noted, the foundations are stable, as observable. Loose stones are observable, at a few locations, at the bottom of the foundation, on the ground. This inspector feels the insulation system provides a home for insects and

rodents. Long term, it would likely be most practical to replace that system with a high-quality poly urethane insulation, which is moisture, wildlife and insect-resistant. If the existing system is removed at some point, that would provide an opportunity for a full assessment of the inside face of the foundation walls. Some patching of the stone system may well be required.


ATTENTION



Addition of a Pier at Partly-Rotted Log:

The right end of a log near the front of the building has rotted significantly, and exhibits a crack. While repairing it is an option, it may be most practical to add a pier just left of the damaged area.

Improvements Required at Informal/Incorrect Block Piers:

Concrete blocks have been aligned incorrectly at multiple locations. The cavities within blocks must be aligned vertically when blocks are significantly loaded. While the piers appear stable, the future structural performance of the piers cannot be confidently predicted. It is recommended that the piers be improved/formalized to prevent possible failure.

As seen in the photo above, wood components have been used informally at a number of locations. Work will be necessary to stabilize/improve/maintain the assemblies over time.

Some cracking was observed at the piers also. Again, it is difficult to assess whether the cracked blocks will fail.

One stone pier – which appears precarious – will require work to stabilize.

The mis-aligned blocks that are supporting the furnace are not likely a problem, as the load is fairly minimal.

Re-construction of Bottom of Wood Frame Bearing Wall:

The wood frame bearing wall at the right side of the crawlspace access cover exhibits moisture decay at its base pieces. It should be re-constructed so the bottom is not susceptible to moisture decay.

Air Quality:

Some minor moulds are observable at the bearing wall. Some dark earth is observable beyond and in between the plastic. There is a possible impact upon air quality, relating to moulds, organics, an earthy aroma, etc. It is recommended that a fully-sealed moisture barrier be installed to help maintain low relative humidity, and to

help promote air quality. A heat recovery ventilator is strongly recommended. A mould-resistant primer can be painted over the (possible) moulds.

Masonry Out of Level Front Section of Left Wall:

Although the masonry assembly is stable, it is out of plumb and level at the front part of the left wall. Further investigation is required at the inside face of the foundation. The keys to preventing further movement and failure of the brick system (and at the foundation level) are to transport all eaves trough water well away from the building, and eliminate all possible entry points for water. There might be a structural flaw at the foundation below this area, which might also

explain the floor being out of level rear of the crawlspace access. Further investigation will be necessary when the insulation is removed at the foundation wall.

Adding a Formal, Usable Access into The Attic:

The access into the attic is informal; access is very difficult by crawling through a tight truss opening. It is recommended that a formal access be created further to the rear, at a practical location in the middle of the attic (left to right middle).

Adding Attic Ventilation:

There is no significant attic ventilation. The most practical way to add attic ventilation likely involves adding a handful of surface vents. There is no easy way to add soffit venting, and it would be necessary to formally penetrate the masonry system to add gable vents.

Updating Insulation to Match Current Building Code Requirement:

Existing insulation provides about R40. It includes glass fibre batts and loose cellulose. While not critical work, it would be a benefit to update the insulation to R60, which would match the current building code requirement.

Sealant at Top of Bell Tower:

When safe access is available, a contractor should be invited to assess/identify and seal all possible entry points for water/insects/wildlife at the bell tower (including under the roof of it).

Fastening and Sealant Work at Flashings:

A number of junction flashings are open to water/insect/wildlife infiltration. They all should be fastened and fully sealed without delay.

The flashing where the rear wall meets the shed roof should be fastened and fully sealed without delay.

Work is also required at the metal caps at the skylights.

Electrical Deficiencies:

Some sloppy wiring requires checking/tidying in the crawlspace.

The sheathing at one location at a circuit at the front part of the right section of the crawlspace has failed due to contact with a hot water pipe. It should be repaired without delay. Also have all the older wiring inspected by the electrician when they are on site.

Also note that the rear, exterior GFCI receptacle is not functional.

Updating Fuse Panel:

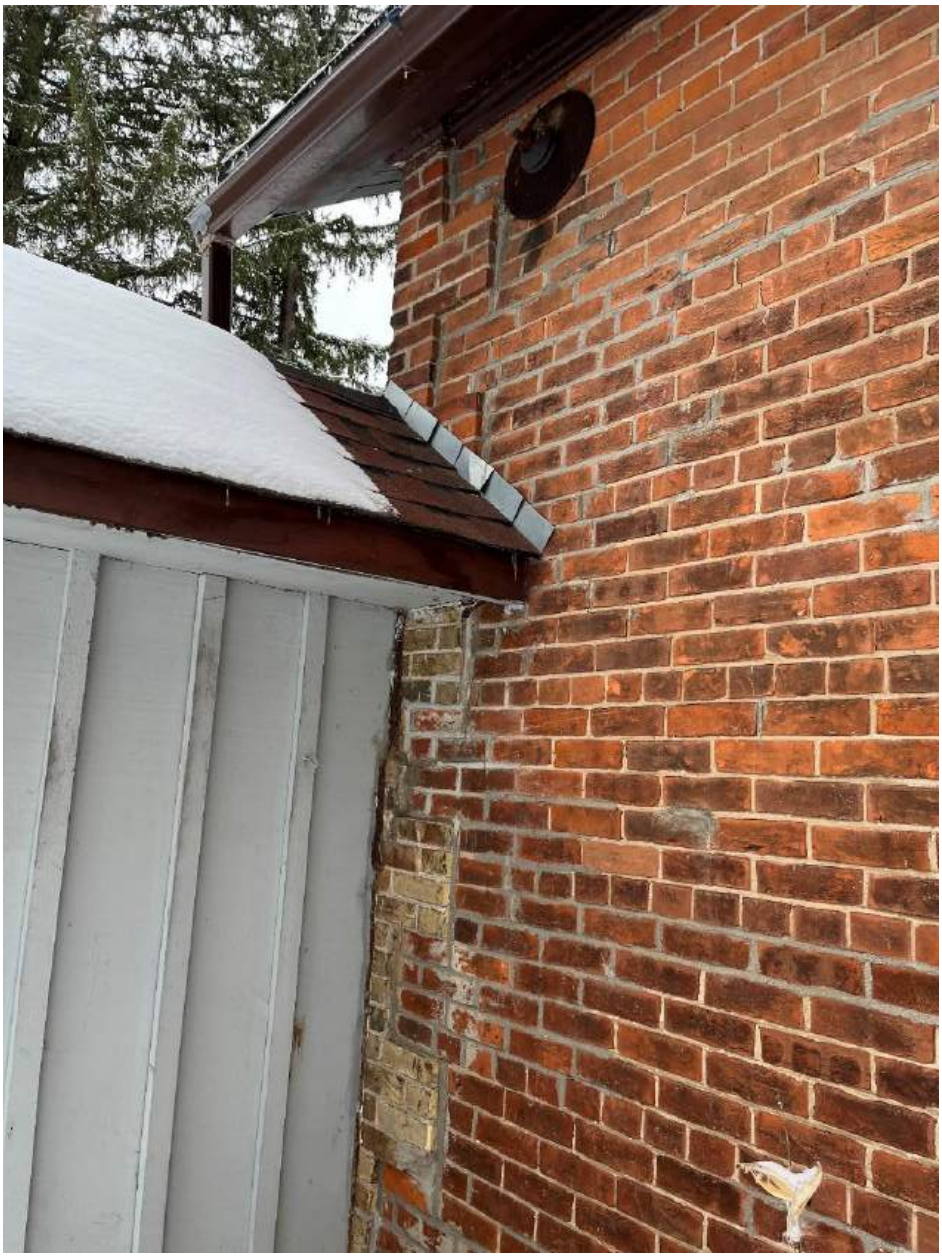
At some point, the home insurance company will likely require that the fuse panel – which is at the front wall of the shed - be replaced with a breaker panel.

Sealant Required at Minor Openings Above Windows:

All opening in the mortar joints at the tops of the decorative bricks above windows and doors must be fully sealed. A colour-matching flexible compound will likely be best for this purpose.

Work at Rear Shed:

Various deficiencies were identified at the rear, attached shed, but it is to be removed anyway. It is important that all junctions where the shed meets the main structure be fully sealed without delay.



Window Deficiencies:

The bathroom window is missing a layer of glass. Either add one or replace the window.

A small crack is observable at one of the large, right side, original units.

Most of the older windows have been sealed shut, by paint or caulking; thus they do not open readily. Work will be necessary to provide windows that open, and effective ventilation, if desired.

Wildlife and Insects:

A plethora of bees nests were observed in the attic.

There is evidence of probable squirrel activity in the crawlspace.

A small amount of bat guano was observed.

It is hoped that the habitation is in the past. Be sure to seal all possible entry points. See all other sections.

Plumbing Repairs:

A couple of plumbing repairs are required, including at the main floor mechanical room, and under the kitchen sink.

Eaves Trough Repair:

Some repair and additional fasteners are required at the eaves trough system.

A cap is missing at the front end of the left eaves trough.

Home Insurance and House Component Answer List:

Age of Home: 130 Years, approximately, best estimate

Type of Foundation: Stone Masonry**;** Concrete Block at Shed

Type of Floor Assembly:

Planks and plywood on logs and lumber joists.

Beams are supported by the foundation walls and concrete block piers.

Some wood piers are also in use.

Wall Claddings:

Brick Masonry

Wood siding

Type of Roof Assembly:

Planks and waferboard on Rafters

Electrical:

Total Power: 100 amps

Type of Wiring: Copper

Type of Electrical Panel: Main panel is breakers; fuses at the shed panel

Panel Location: Closet inside front door; fuse panel is at front wall of shed.

Water and Waste:

Water Supply: Well

Main Shutoff Valve: Beside pressure tank, and it is functional.

Water Supply Pipes: Copper and Pex plastic

Drain Pipes: ABS Plastic

Sanitary Disposal: septic system

Sewage Ejector Pump in Use? No

Sump Pit and Pump in Use? No

Backflow Prevention Device in Place? No

Age of Hot Water Tank: unknown

Type of Exhaust at HWT: n/a; it's electric

Heating and Cooling:

Type of Heating: Forced air gas

Age of Furnace: about 2 years old

Type of Furnace Venting: PVC (modern)

Age of AC: n/a

Gas Fireplace in Use? no

Type of Fireplace Venting: n/a

Wood Burning Appliance: Yes; NOT INSPECTED. Be sure to have the wood stove and all associated elements fully inspected – including the chimney liner – by a WETT-certified expert. (If not done recently.)

Roofing Elements:

Type of Shingles: asphalt

Age of Roof Shingles: Newer; approximately 7 or 8 years, best estimate.

Expected Remaining Useful Life of Shingles: Re-shingling will not likely be necessary for between 14 and 18 years, best estimate.

Insulation: See Key Issues.

Additional Notes For All Elements:

FOUNDATIONS

See the Celebration and Key Issues.

Water Infiltration:

The crawlspace appears to be fairly dry, but water entry is always a concern at old buildings.

All obvious, probable entry points for water must be formally sealed.

It is normally possible to eliminate and prevent water infiltration by transporting captured eaves trough water well away from the home, and by eliminating obvious entry points for water.

WALL SYSTEMS

See Celebration and Key Issues.

The wood outside windows is free from significant moisture decay.

Maintenance:

Be sure to maintain all caulking at joints around windows, and at the entire building envelope.

FLOOR STRUCTURE

More than half of the wood members were prodded.

See Celebration and Key Issues.

Most of the wood members are free from moisture decay.

ROOFING AND THE ATTIC

See Celebration, Key Issues and Insurance sections.

WINDOWS

Type of Windows:

Most of the windows are older non-thermal units.

A few thermal units are in place.

Non-thermal windows provide reasonable thermal resistance as long as two fully-sealed layers of glass are in place.

Thermal Seals:

See Key Issues.

Mechanical Function:

See Key Issues.

The skylights were not tested; in winter they are difficult to re-close.

Maintenance:

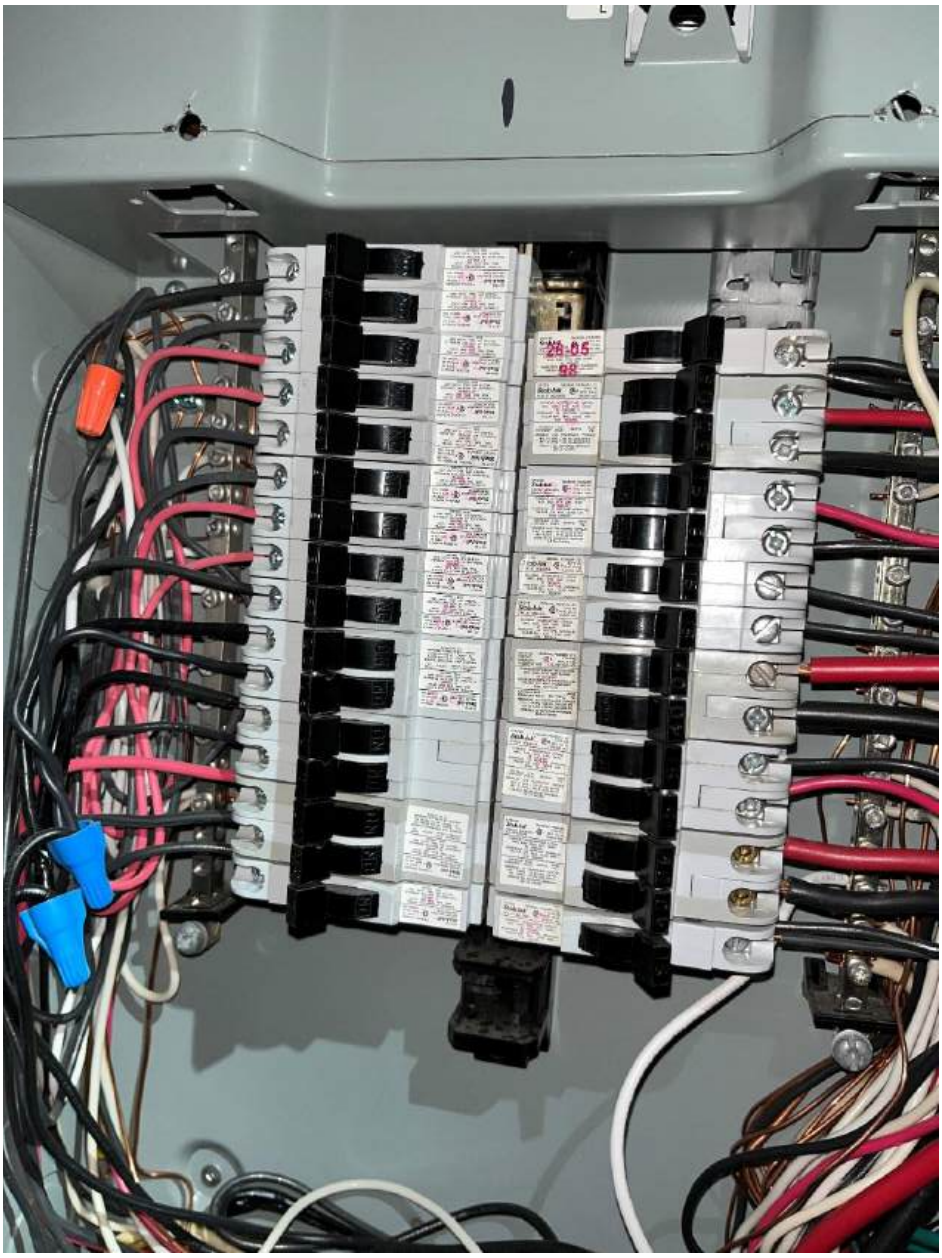
See the Wall section.

ELECTRICAL

The 100 amps is adequate for this home notwithstanding unusual occupant requirements.

See Key Issues and Insurance List.

There are no hot spots in the panels.



Two contactors have been doubled in the main panel; provide dedicated breakers if desired, mostly for identification purposes.

Ground Fault Circuit Interrupter Protection:

Bathroom GFCI's are functional.

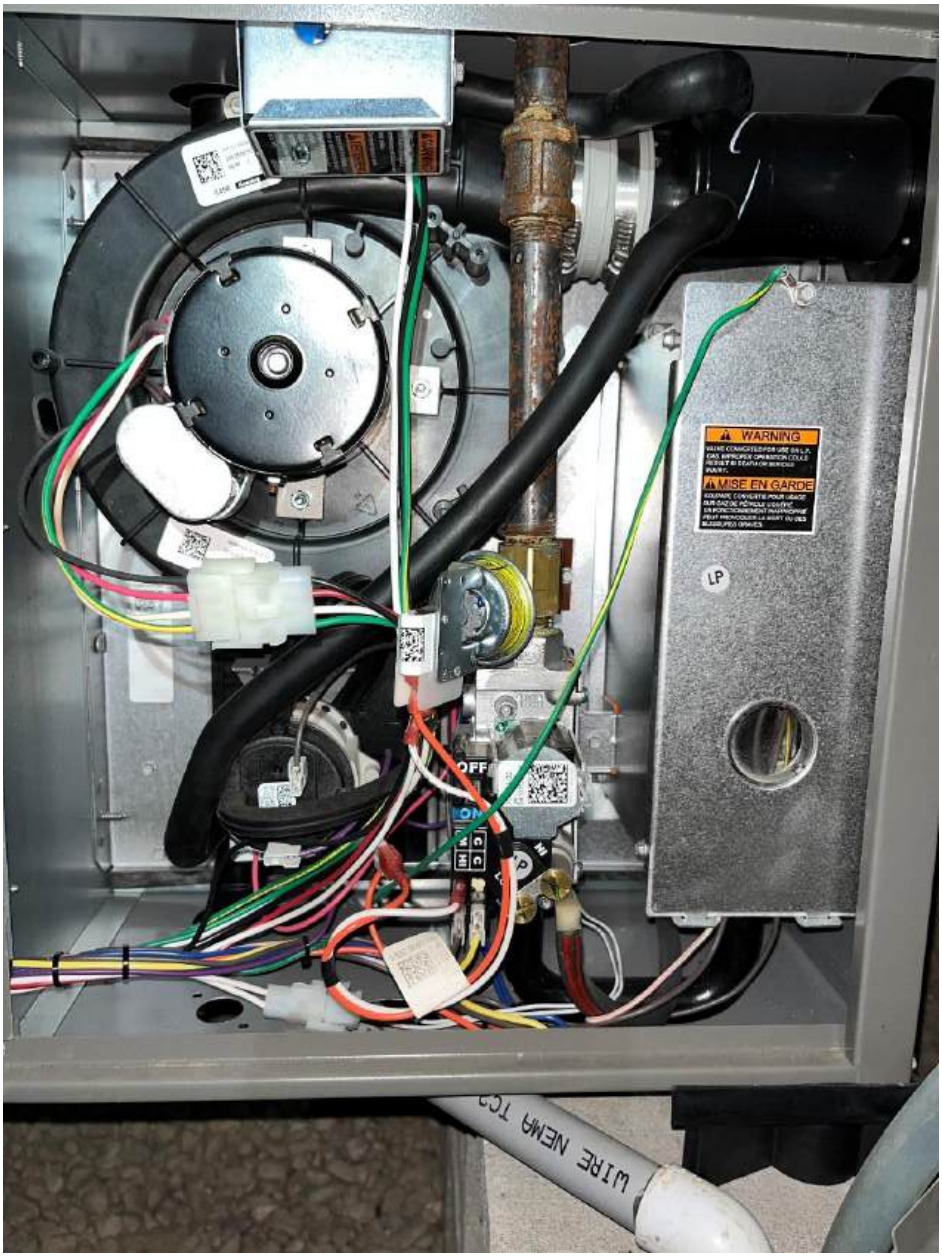
While not a requirement, it would be a benefit to add GFCI protection beside the kitchen sink, and for any exterior power that is not already protected.

Have all work carried out by a qualified electrician.

HEATING/COOLING

See the Insurance List.

There is no significant corrosion inside the furnace.



PLUMBING

See Key Issues and Insurance List.

Exclusions:

The plumbing vent system, hot water tank and hose bibs are excluded from the inspection.

INTERIOR FINISHES

Imperfections are observable at various locations.

Be sure to maintain a full seal at the key joints in the bathrooms.

Interior finishes are – for the most part – excluded from the inspection.

HOUSEHOLD APPLIANCES

The appliances were not tested. Be sure to test all appliances and alarms on the date of possession.

HOME AND CHILD SAFETY

See all other sections.

See the head hitting hazard at the interior stairs.

Beware the child/toddler falling hazard at beside the interior stair.

See Key Issues regarding Air Quality.

Be sure to strengthen the crawlspace access cover; it deflects underfoot!

OUTSIDE STRUCTURES

Fences and sheds were not inspected.

As noted, the shed is being removed.

Exhaust Fans:

This inspector did not make a note about exhaust fans.

If memory serves, there is no exhaust fan in the kitchen.

Add an exhaust fan in the kitchen if desired.

If there are no bathroom exhaust fans, add them if desired. (This inspector thinks there were functional bathroom exhaust fans. This can be re-examined, of course.)

Andrew Christie, CET (civil eng.), RHI