

## **SAFE HOMES CANADA HOME INSPECTION REPORT**

**ADDRESS:** 76 xxx Street, Acton, ON

**BUYER:** Daniel xxx

**INSPECTOR:** Andrew Christie, CET (civil), RHI

**DATE:** February 18, 2021

**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 xxx Street.



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### **Summary of Key Issues/Deficiencies/Work Required/Expenses:**

\*Note: Normal maintenance, including caulking, re-finishing, eaves trough work and improvements (due to code changes, for example), including at insulation, electrical, furnace venting, exhaust fans, etc. are not considered Key Issues/Deficiencies.

**Asbestos; see the Safety section.**

**The HRV air handler was likely manufactured in 1992, so could be approaching the end of its useful life.**

**Insulation and a vapour barrier should be installed at the perimeter of the back left third level office be insulated and a vapour barrier should be installed.**

**Degraded veranda elements.**

**Falling hazard at basement stairs.**

**Sealant work at inside face of foundation walls.**

**Replace front low strip of roofing.**

**Some drip edge/closure flashing work required including at front edge of front low roof to prevent insect/water/wildlife entry.**

**Significant and important project to re-finish (and possibly repair) exterior wood at high windows.**

**Major animal mess in garage attic requires formal cleanup.**

**Removal of galvanized pipe at a number of locations.**

**Replacement of main water shutoff and possibly feed from municipal supply.**

**Major window replacement work due to failed thermal seals.**

**Adding layers of glass at some windows and replacing broken window.**

**Creating access into back right crawlspace for multiple reasons, including to obtain vermiculite samples re asbestos.**

**Adding window wells or formally covering/sealing basement windows.**

**Replacing person doors at garage.**

**Adding formal support for some beams in garage.**

**Adding exhaust fan third level bathroom.**

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## **FOUNDATIONS**

### **Access:**

For the most part, the foundation walls are fully observable outside. Some parts are not observable due to snow.

The front foundation wall is not fully observable due to the veranda.

The inside face of the back left area foundation is not observable due to plywood.

**There is no access into the back right crawlspace. It is strongly recommended that an access be created, so all elements can be examined/assessed, and so the vermiculite can be sampled regarding the possible presence of asbestos.**



**Type of Foundation:**

Stone masonry

Possibly block in the rear parts.

**Stability/Condition:**

The foundation walls are completely stable, as observable.





Concrete piers are also in use, as well as interior masonry bearing walls.



**Settlement/Stress Cracks:**

One or two normal settlement/stress cracks are observable.



It would be completely normal to see half a dozen (or more) cracks at a house of this age, size and configuration.

It is recommended that the cracks shown above be fully exposed and formally sealed – at least long term – to prevent water entry and further degradation.

They should be accessed and examined at the inside face if possible; if memory serves, there may be finishes in place at this time.

### **Water Infiltration:**

The basement is systemically dry.

However, water staining was observable at a number of locations where the foundation wall meets the floor slab. Try sealing that junction and all obvious possible entry points for water using hydraulic cement and/or poly urethane or similar products.



**Buyers and all homeowners should know that it is normally possible to prevent and stop water infiltration by transporting eaves trough-captured water (and sump water) well away from the home, on top of the ground, and by sealing all possible/obvious entry points for water. All joints at basement windows must be fully sealed, including the horizontal joints below the sills. Covers – such as glued or screwed rigid plastic - are recommended at the faces of basement windows.**





**This inspector feels that buried down pipes often clog and/or freeze. Any in-ground pipes should be abandoned and capped, and down pipe extensions run atop the ground and well away from the home; then they can be monitored.**



It is critical that all joints be vigilantly maintained (sealed) at basement windows, and at door sills.



Openings/holes in the concrete slab are observable; be sure to fully seal them.





**Other work required:**

Be sure to patch minor openings at the outside face of the foundation.

Small window wells are required for the HRV/air handler vents at the left foundation.



**Sump Systems:**

An apparent sump pit is in place under the HRV/air handler at the front left part of the left crawlspace. It has no pump, and a condensate drain is draining into the

pit. It is recommended that the condensate be drained into a formal drain. Then monitor for possible water entry into the pit; install a pump if necessary.

### **Maintenance:**

**Note that some cleanout will likely be necessary at the eaves troughs.**

Eaves troughs require periodic re-fastening, re-caulking and cleaning.

Again, be sure to fully seal/maintain all joints at door sills, basement windows and at all mechanical penetrations/covers.

### **WALL SYSTEMS**

#### **Access:**

All wall sections were fully observable.

#### **Type of System:**

Brick masonry.

Vinyl siding.

Wood shingles.

#### **Condition of Walls:**

The brick masonry is stable, and was well-constructed.

**\*\*\*\*While a number of formal repairs have been carried out, the brick system here exhibits far less damage than most century homes in Ontario. The system should be considered in very good condition.**



**Settlement/Stress Cracking and Other Damage:**

A few normal settlement/stress cracks are observable at the brick system.

As noted, formal patches have been carried out at a number of locations.

No action is required at any crack, although minor cracks can be sealed if desired.





**Work Required:**

Minor caulking is required at a number of locations, including at the ends of some of the stone sills and at long vertical joints.



Be sure to reinstate the protective paint at all exterior wood including at the high windows, mouldings and dormers.



Be sure to protect the wood shingles and seal all junctions.



The wood soffits/ceilings require re-finishing.



**Roof Surface/Wall System Junctions:**

Be sure to maintain a full seal at all junction flashings.

**Maintenance:**

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

**FLOOR STRUCTURE**

**Access:**

Much of the floor assembly is not observable, due to interior finishes, which is normal.

The underside of the main floor assembly is fully observable.

**Condition/Stability:**

The floors are sound and stable underfoot.

There is no evidence of significant deflection, although some sections are out of level, including the floor in the large, right side second floor bedroom.

**Type of Floor Assembly:**

Plank and plywood sheathing bears upon lumber joists.



The joists bear upon the foundation walls, built-up and timber beams and central stone bearing walls.



**Moisture Decay:**

There is no evidence of moisture decay at floor members.

Many of the wood members were prodded.

**Deficiencies at the Floor Assembly:**



While not critical work, bracing hardware would be a benefit at a number of post/beam and beam/joist junctions, including at the back left crawlspace.



**Some pressure treated wood has been used; it is not meant for interior use, apparently because of the chemical coating. Treat it or seal it if desired. Perhaps restrict access into that area for children.**

## **ROOFING AND THE ATTIC**

### **Access:**

All roof surfaces were completely covered with snow, excluding the narrow strip of shingles outside the front door.

### **Type of Roofing System:**

Metal roof.

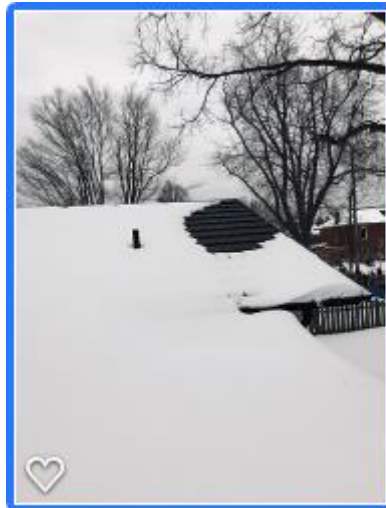
### **Condition/Age:**

The shingles outside the front door should be replaced without delay.



The metal roof could not be assessed. Invite this inspector back after winter to fully examine the roof. It does not appear 'old' based upon minimal observation. Best guess, the metal roof appears to be about 12 to 14 years old. Maintain fasteners and junctions.





**Deficiencies:**

**A narrow flashing is recommended to prevent insect/wildlife/water entry at some locations, notably at the front of the front low roof. Further investigation is required at the bottom edge of the high roof, perhaps using a drone.**

**ATTICS:**

**Access/ Thermal Barriers:**

The attic has been transformed into living space. The small attic above that living space is not accessible. A thermal camera was used in the finished area – including at perimeter walls and at the ceiling – and showed a consistent amount of thermal resistance.

**Insulation and a vapour barrier should be installed at the perimeter of the back left third level office be insulated and a vapour barrier should be installed.**

**Roof Structure:**

Unknown.

**Insulation:**

Unknown.

**Ventilation:**

Unknown.

**WINDOWS**

**Type of Windows:**

Windows are a combination of thermal and non thermal units.

**Thermal Seals and Mechanical Function:**

The basement windows are two layers, non thermal. One is stuck shut.

15 thermal seals have failed. It will be most practical to replace those windows, although an attempt can be made to reinstate the seals.

Sunroom windows are not mechanically functional.

At the front of main floor a second layer of glass is required at the big windows, and at the front door.

Second floor – a few double hung windows do not close fully flush.

Some of the older windows are mechanically functional, while some are not.

Add a layer of glass at one of the second floor windows.

Most are non thermal at the second floor.

One little crack is observable at one right side window.

Third floor newer thermals are in place in the bathroom. 1980's thermals are in place in the balance of the third level, and 3 seals have failed.

### **Maintenance:**

See the Wall section.

## **ELECTRICAL**

### **Total Power:**

The total power service is 200 amps, which is adequate for this home, notwithstanding unusual occupant requirements.

The distribution panel is at the front left in the basement.

### **Type of wiring:**

All wiring is copper, based upon observable circuits and removing the panel cover.

### **Electrical circuit details:**

All receptacles are grounded, excluding a few at the conduit power at the right of the basement, ironically, as they are newer circuits.

The old receptacles inside the front living room window are not live.

A hot/neutral reverse condition was found at the back right part of the main room, third level.

#### **Ground Fault Circuit Interrupter Protection:**

GFCI (ground fault circuit interrupter) protection is in place for the bathroom and kitchen sink area receptacles.

The rear exterior GFCI is not functional.

#### **Other Deficiencies:**

**There is no power at two kitchen receptacles: one at the front right corner, and one at the right end of the island, for reasons unknown. Have that issue investigated by an electrician.**

#### **HEATING/COOLING**

The home is heated by a newer gas-fired boiler and an air handler/HRV, which are providing heat throughout.

The third level is heated by a central rad.

There is no heat at the rad in the front right second floor bedroom.

**Note that the boiler system is beyond the expertise of this inspector, and it is being inspected by an expert. Make sure all components are assessed/inspected by the technician.**

The furnace was likely installed in 2019.

**The HRV air handler was likely manufactured in 1992, so could be approaching the end of its useful life.**

**Boiler Exhaust:**

The boiler is vented through a metal chimney that runs through a masonry chimney.

Some ice is observable at the top of the chimney. The reason for that buildup is unknown. Be sure to have a contractor access the top of the chimney to make sure the crown is fully sealed, as step one.

**Air Conditioning:**

Not tested.

**Fireplaces:**

Not inspected.

**PLUMBING****Water Supply:**

The water supply is municipal.



**Sanitary Disposal:**

The sanitary disposal system is town sewers.

**Main Shutoff:**

The main shutoff valve is at the back right corner in the basement. It is NOT functional.

**Plumbing Fixtures:**

The fixtures are functional.

The fixture at the upper bathtub is loose.

**Drains and Sewage Ejectors:**

Drains are ABS plastic, cast iron and another metal; have them assessed by a plumber. There may be insurance issues there.

**Supply Pipes:**

Supply pipes are copper, galvanized and Pex.

**The home insurance company will likely demand that all galvanized be removed.**

**Water Conditioning/Filtering/Treatment:**

These elements are excluded from the inspection.

**Hot Water Tank:**

n/a

**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.

**WATER CONTROL AND SITE DRAINAGE**

Make sure the down pipes transport water well away from the structure, as noted. Extend down pipes at least about 6 to 8 feet from the foundation walls.

Expect cleanout, re-caulking and re-spiking over the years at the eaves trough system.

See the Foundation section.

**HOUSEHOLD APPLIANCES**

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

**\*\*\*This inspector neglected to check the garage doors; be sure to open and close them during an upcoming visit.**

**HOME AND CHILD SAFETY**

See the Foundation, Fungi, Heating and Electrical sections.

**The kitchen exhaust fan does not vent outside. Note that a gas stove should not be used if an exhaust fan that vents outside is not in place. An exhaust fan should be used whenever the gas stove is used.**

There is no obvious (significant) mould in the home.

**Paper-like asbestos was found at a number of locations at pipes, at the exposed roof sheathing, and possibly at basement pipe wrap. Have all elements fully tested if desired.**

**It does not present a significant health concern if not disturbed, but may alarm prospective buyers in the future.**

**See the Foundation section regarding vermiculite – which may or may not contain asbestos – being present in the back right crawlspace.**

**Beware the child/toddler and general falling hazards at the basement stair. The basement stairs are quite steep, and there is no guard rail.**

**The ‘bullnose’ elevated lip presents somewhat of a trip hazard at the great room stair.**



**A major animal droppings mess requires formal remediation in the garage attic.**



Be sure to install carbon monoxide and smoke detectors at each level. They should be dual electric and battery powered.

### **OUTSIDE STRUCTURES**

Fences and sheds were not inspected.

All exterior elements were covered with snow.

**The veranda is partly rotted Be sure to repair and re-finish exterior wood as required.**



**Additional support is required at some of the newer beams in the garage.**



Be sure to stop water from entering the bottoms of the garage walls to prevent moisture decay at the bottoms of the wall assemblies.

## **FUNGI, WILDLIFE AND INSECTS**

See the Safety section.

There is no evidence of significant mould production or insect activity.

See the foundation section regarding work to carry out to help keep the basement dry and prevent mould production

Install bathroom exhausts fans if desired, where they are not in place, including at the third floor, where it can be run laterally out of the room, then up through the roof.

**The kitchen exhaust fan does not vent outside. Note that a gas stove should not be used if an exhaust fan that vents outside is not in place. The exhaust fan should be used whenever the gas stove is used.**

**Andrew Christie, CET (civil eng.), RHI**