NATIONAL
HOME
INSPECTION

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No: 6282

October 15, 1992

Mr. Ian Hassle
c/o Royal LePage Real Estate
Suite 200 - 1335 Carling Avenue
Ottawa, Ontario
K1Z 8N8

Dear Mr. Hassle:

Re: **INSPECTION REPORT**
PROPERTY: 32 Adelaide Street, Ottawa, Ontario

The following report is a summary of the inspection carried out by our firm at the above noted address on October 14, 1992. The description and comments concerning the various systems of the home are detailed under main headings with a summary at the end for quick reference. Prices quoted in the report are based on estimates obtained for similar works and assume the work is undertaken by outside tradesmen.

The scope and limitations of the inspection are detailed on the reverse side of this letter, and they should be considered an integral part of the report. This inspection has been carried out in accordance with the Standards of Practice of the American Society of Home Inspectors and its Ontario Chapter.

Should you have any questions concerning the report, please do not hesitate to contact the undersigned.

Respectfully submitted,

NATIONAL HOME INSPECTION (OTTAWA)

J. Sandwell

Phillip Bottriell, P.Eng.

for

ONTARIO ASSOCIATION OF
HOME INSPECTORS
AMERICAN SOCIETY OF
HOME INSPECTORS
MEMBER OF
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ONTARIO

DESCRIPTION

The following is a brief description of the home:

- two storey, row house
- the main house is about eighty plus years old with no additions
- for the purposes of this report, the front of the house is considered to face east.

GENERAL EXTERIOR

The surface water drainage scheme at the front and rear of the unit has been generally well planned. The land is flat or gradually slopes away from the house on all sides. This ensures good surface water drainage and reduces the possibility of having wet basement problems.

Window wells are designed to prevent water from overflowing around basement windows and to break wood/soil contacts. It is recommended that a window well be installed adjacent to the basement window on the front of the house **($300-$500)**. Alternatively, the opening can be reduced with concrete and a smaller basement window installed, and this should be considered.

The drainage piping and weeping tile below ground level could not be examined. There is not expected to be a weeping tile system on a home of this age.

The exterior wall finishes of the house include stucco on the front and wood drop siding on the rear. The stucco finish is in reasonable condition and can be maintained with no evidence of excessive bowing or cracking noted. Some of the painted finish has deteriorated around the front windows and this can be repaired. The wood drop siding on the rear is in poor condition and must be covered with a suitable siding **($2,000-$3,000)**. It would be wise to place insulation under the siding for improved heat efficiency **($300-$500)**. All of the exterior finishes on the wood siding require proper caulking around windows and door frames. The stucco siding can be considered for overlaying and this should be done in conjunction with the neighbours **($1,000)**.

The wood window frames and sills require painting and sealing around the home to prevent water infiltration and to better draught-proof the house.

The flat roof cover is in fair condition. This roof is a much older installation, and blistering of the building felts was noted. The top layer of gravel is deficient. This layer of gravel is beneficial in deflecting the harmful rays of the sun. A new roof cover is required **($1,500-$2,000)** and this should be undertaken in conjunction with the neighbour's roof to the south.

The chimney requires repair. The top section can be rebuilt **($500-$700)**. Alternatively, the brick chimney can be removed and capped since a metal liner has been installed for the furnace.

The landscape around the house includes retaining walls, steps, decks, walkways, fences etc. These are only commented on if they are considered to affect the integrity of the house. Cost estimates for this type of work can be provided upon request. The condition of pools and pool equipment is not within the scope of this inspection.

The wood porch located at the front of the house is in reasonable condition. Some rotting was noted in the wooden posts and this requires repair **($500-$1,000)**. A slight movement of the columns outward was noted and if the post is repaired this should not be a problem. The porch is supported on concrete piers and this is adequate. The decking of the porch is in good condition.

The deck on the rear of the house is satisfactory with the exception of the rot in the beam and this should be planned for replacement **($300-$500)**.

STRUCTURAL

The foundation appears to be in reasonable to good structural condition. The stone walls show no signs of major structural damage. The stonework has come loose or is missing along a section near the furnace on the north wall and should have proper concrete placed in this area **($300-$500)**. This will require removal of the parging on the exterior and replacement of the parging once the work has been completed **($300-$500)**. Some of the stonework on the exterior requires pointing or grouting and this can be done as part of regular maintenance of this type of foundation. It is integral to this type of foundation that the exterior grading and surface

water drainage be well planned to provide as dry an environment as possible around the foundation. The only large area of moisture collection is the courtyard between this unit and the unit to the north and this can be paved or concreted to improve drainage in this area.

No evidence of moisture seepage was detected in the accessible areas of the basement. Most basement water problems are a result of poor landscaping and grading on the exterior, or improperly functioning window wells, which causes water to collect or pool beside the house or against the basement windows. This is further discussed in the next section.

The exterior walls are wood framed. No signs of unusual bowing were noted, as viewed from the exterior. All exterior walls appear to be plumb and square. One section of stud wall is not properly supported and some sagging has occurred on the exterior as a result of the missing area of foundation as noted previously.

The floor framing is generally sound. Their size of 2" by 10" is sufficient for their maximum span of fifteen feet. Some sagging definitely has occurred in the past due to the weight of the interior partition walls and a previous lack of support between the units to the south. This has been improved with beams at the mid-spans of the floors and by installing a block wall between the two adjacent units. Where the beam is not sitting or resting directly on the block wall the wood posts should be replaced with a steel post, or additional steel posts should be added to reduce the span along the beam to six feet. This should be improved if cracking of the drywall becomes evident. It is recommended that posts be added below the opening of the kitchen to the living room area.

Due to the type of roof construction, the space above the top floor ceiling was not accessible and the roof framing could not be examined. However, there was no evidence of unusual sagging on the exterior. The roof was accessed by the inspector and was entirely walked. There was no evidence of soft spots.

ELECTRICAL

The electrical feed is overhead and adequate wire clearances were noted. The metal stack is not properly secured and this requires fastening.

This home is equipped with the original 60-amp service. The size of this service is considered inadequate and should be upgraded to a minimum of 100-amps **($1,000-$1,500)**. If the prospective owner does not plan to upgrade the service, care should be taken when operating more than one major appliance at a time, to avoid blowing the main fuses.

The main disconnect switch is located on the north wall in the rear of the basement. The electrical service is properly grounded with a cable connected from the switch to the supply plumbing system on the street side of the water meter.

The main distribution panel is located below with the main disconnect switch. The main panel rating is 100-amps, and this is adequate. The panel contains circuit breakers for 110-volt and 220-volt circuits as noted below.

There are six spaces to add terminals in the existing panel for the addition of more circuits.

There are three 220-volt circuits, servicing the following appliances:

kitchen stove	40-amp circuit breaker
dryer	20-amp circuit breaker
water heater	20-amp circuit breaker

There are nine 110-volt circuits which supply electricity to the various outlets, light fixtures and appliances throughout the house. Each circuit is properly equipped with a 15-amp circuit breaker.

Two of the 110-volt circuits service the split receptacle located in the kitchen. Each of the two outlets at a split receptacle is on a separate circuit. This is beneficial in an area such as the kitchen where electrical needs are usually greater.

GFCI's are recommended on the exterior and bathroom circuits as added protection from a ground in these more hazardous locations.

Current electrical practice requires separate circuits for major 110-volt circuits in the home including the dishwasher, refrigerator, outside circuit etc. These should be added as required or in conjunction with future electrical work. It would also be wise to consider installing additional split plugs in the kitchen **($100-$150)**.

The distribution wiring is entirely copper. Where it could be seen, the wiring and its sheathing were found to be in good condition. No knob-and-tube wiring was noted in the service in the basement however, there may be some of this wiring still in service to the second floor.

HEATING

The house is heated by a gas-fired gravity furnace. Based on the size of the home, its heating capacity should be sufficient for your heating requirements. The furnace is cast iron in excess of sixty years old.

The furnace was operated for a brief period during the inspection. It appears to be in good working order. The gas burner was operable. Typical signs of deterioration were noted on the visible sections of the heat exchanger. Having the furnace cleaned and serviced annually is a wise practice and will maintain a good level of heating efficiency. A more modern forced-air system will reduce the amount of room that this gravity furnace takes up and therefore it is recommended for replacement as desired **($2,000-$3,000)**.

The exhaust duct and the connection of the duct to the chimney flue are well sealed and should be maintained this way in future years.

There is no humidifier or filter on this system and these can be incorporated into a newer forced-air system.

The ductwork is all part of the original gravity furnace installation and therefore the heat supply ducts are on the inside walls, as opposed to modern forced-air systems where the heat supply ducts are located below windows on the outside walls. Most of the ducts are oversized and occupy much of the space in the basement. This type of system is expected to create cold spots on the exterior walls of the house. The ductwork in the basement should be improved in conjunction with upgrading of the furnace **($500-$1,000)**. The second floor heating ducts are typically left in place. There is

some asbestos insulation on the ductwork and this should be removed by a qualified company.

PLUMBING

The plumbing supply and waste pipes from the street to the house are underground and therefore not accessible to inspection. It should be confirmed with the present homeowner if problems have occurred in the past.

The main water shut-off for the municipal water supply is located at the front wall of the basement. The valve was operable at the time of the inspection.

The water distribution pipes are made of mostly newer copper with some galvanized steel. The pressure drop observed when two taps were fully opened was quite noticeable. This drop can be attributed to the condition of the galvanized steel. The water service entrance and shut-off valve are located at the front wall of the basement.

While copper plumbing normally lasts the lifetime of the house, galvanized steel has a finite lifespan of about forty years or so. It tends to rust from the inside out, which causes a reduction in water pressure over the years. Hot water accelerates the rusting process, and horizontal pipes deteriorate more quickly than vertical ones. When the water pressure becomes undesirably low, or leakage results from the pipes rusting through, then it is recommended to replace the remaining sections of galvanized steel plumbing with copper. Also note that if interior refinishing is to be done, it would be cost-effective to replace the galvanized steel at that time. It is recommended that the pipes be upgraded to the second floor bathroom in conjunction with renovation work in this location as discussed during the inspection.

The main drainage pipe discharges into the sewer system at the water service entrance valve. There is a cleanout as required. The elevation of the sewer pipe does not allow for the installation of a basement floor drain, however, the removal of the cleanout at the front will provide some basement drainage if and as required.

The waste drainage plumbing consists of cast iron and plastic, with the plastic likely having replaced older galvanized steel. Where visible it is in good condition and no leaks were found. If any galvanized steel is remaining as waste drainage it should be removed

during renovation work. If it serves as ventilation, there is no requirement for replacement.

The venting system for the waste plumbing prevents pressure changes in the piping which could affect the flow and cause traps to be siphoned. This could lead to poor drainage or could allow sewer gases to enter the home. The main stack is shared with the adjacent unit and appears to be properly vented. The kitchen sink and shower are not likely properly vented. This should be monitored and improved as required. Autovents can be installed to help prevent siphoning although these are not recommended.

The electric water heater is a rental unit which can be replaced at no charge when it reaches the end of its lifespan. Water heaters have an average lifespan of about fifteen years. Its capacity of forty imperial gallons should provide enough hot water for the needs of the household.

The condition of plumbing fixtures is noted in the interior section.

INSULATION

Since there is no access to the space above the top floor ceiling, the presence of insulation there could not be determined. The recommended thermal resistance level for this area of the house is R-31, which corresponds to about ten inches of fibreglass batts or eight inches of loose-fill cellulose fibre insulation. If the prospective homeowner is interested, drilling holes in the ceiling finish is one method of determining the amount of insulation there.

Insulation could not be found in the exterior walls by the removal of cover plates on electrical outlets. Insulation was not typically placed in the wall cavity of homes of this age, unless retrofitted at a later date. This should be confirmed with the present homeowner. Drilling holes is one method of determining the type and amount of insulation present in the exterior walls where not accessible.

There is no insulation on the interior foundation wall. Any open or draughty areas should be insulated and sealed as noted previously. The previous basement window opening at the rear should be fully insulated and sealed, and the front window should be replaced as discussed previously to provide adequate ventilation.

Besides insulation, an effective means of controlling heat loss is by ensuring that the interior of the house is well sealed. There is considerable air movement between the interior and exterior walls in most houses. Interior sealing is important to prevent warm air from escaping to the exterior. Areas which should be maintained include around the baseboards, window casings and door frames.

It would be a wise annual practice to check that all areas of air leakage are properly sealed. Ensure that the caulking on the window frames and the weatherstripping on exterior doors remains intact. Storm windows and doors were noted as required, which helps prevent heat loss in these areas, however, improvements certainly could be undertaken in these areas. The adequacy of the attic ventilation could not be confirmed.

GENERAL INTERIOR

The interior of this house is in reasonable to good condition for its age.

The walls and ceilings are well finished in a combination of plaster and drywall. There are two areas of water damage. Leakage from the second floor toilet and tiling has caused extensive plaster damage in the ceiling of the kitchen and this requires repair as noted below. Water damage was also evident in the second floor ceiling and this area also requires repair; leakage from the roof was the likely cause.

All floors are well finished and appear solid. It is common to have some unevenness in floors of older wood-framed homes, as discussed during the inspection. Repairs can be completed but are not always necessary or urgent.

The steps of the staircases appear sound. The handrails are secure.

The door jambs are not all square, however they allow good closure of interior doors. The hardware on all doors operates well.

The windows in the house are in fair to reasonable condition. The front windows have been replaced with double-hung windows; however, the lower window is damaged and requires repair **($300-$400)**. The rear units are a combination of the older double-hung window with aluminum storms and these can be upgraded as desired **($400-$800 each)**.

There are no exhaust fans in the kitchen or bathroom of this home and these should be added with renovation work where possible.

The supply of electrical outlets and fixtures is marginally adequate within all areas of the house. Additional split plugs in the kitchen are recommended. All of the plugs that were tested were found to be operable and grounded.

The plumbing fixtures in the house operate well with some minor repairs required. The caulking and tiling in the bathroom area requires immediate replacement. The toilet is leaking and the floor around this toilet is damaged. This bathroom should be completely renovated **($3,000-$4,000)**. Care should be taken to ensure that the caulking remains intact and provides a watertight seal in the future.

Ensuring a smoke alarm is installed on each floor of the house is a safe and wise practice.

SUMMARY

This home is generally in a reasonable state of repair for its age.

Recommendations in the report are presented here as follows:

- replacing the roof cover ($1,000-$2,000)
- repairing the front porch ($500-$1,000)
- covering the rear siding ($2,000-$3,000); replacing front siding in the future ($500-$1,000)
- adding structural posts in the basement for additional support at beams and stress points as required
- upgrading furnace as desired in the future, with improved ductwork ($3,000-$4,000)
- installing additional split plugs in kitchen
- repairing the beam on the rear deck ($500)
- installing a basement window on the front ($400)
- upgrading entire bathroom ($3,000-$4,000)
- repairing ceiling drywall in kitchen and second floor hallway ($1,000)
- adding attic insulation as required ($1,000) with suitable venting
- upgrading electrical service and adding some distribution wiring ($1,000-$1,500)
- repairing chimney ($500-$700)

Minor repairs as noted in the report can be attended to by the prospective homeowner.

Regular maintenance of the systems discussed will ensure your safety and comfort for years to come.