Property Condition Assessment Report

111 Main Street, Boise, Idaho
September 10, 200x

Prepared for:
Ms. Maria Client
Client's Company Limited
1111 Yonge St
Boise, ID 83709

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September 10, 200x

Preliminary Inspection Report

Property: 111 Main Street, Toronto, Ontario

1.0 Summary

This is a typical office building in which maintenance has been satisfactory, for the most part. No major structural deficiencies were noticed.

The electrical system was generally found to be in good repair. Improvements to loose and abandoned wiring in the second-floor and fourth-floor vacant spaces will be required.

The air-conditioning systems are in satisfactory condition; however, this equipment is nearing the end of its typical life expectancy. Replacing the condenser coils for the smaller air-conditioning units and rebuilding the larger compressors on the rooftop unit may be necessary within the next few years.

The space heating systems were found to be in satisfactory condition. The condition of the heating cables for the second-floor slab and the north parking slabs could not be determined, as these components are not visible.

The provision of fresh air to the building appears satisfactory. The roof-mounted exhaust fan for the washrooms does not appear to be operational.

The plumbing system was generally found to be in satisfactory repair. Updating corroded basins in the washrooms will likely be necessary within the next few years.

The roofing system is in serviceable condition. Repairs are required to several flashing details, to arrest active leakage. Owing to the age of the roof, reroofing may be required within the next 5 years.

The exterior walls, windows and doors were found to be in satisfactory condition, for the most part. Re-caulking around the curved metal panels is required to prevent further leakage into the

building. Replacement of cracked glazing units and units with lost seals should be undertaken.

The asphalt paving is in fair condition. Repairs to the catch basin should be undertaken.

Based on the Phase I Environmental Site Assessment, there is considered to be no significant potential for environmental liability from past and current conditions and activities at the subject property and neighboring lands. A Phase II Environmental Site Assessment is not considered warranted at this time.

The fire protection systems were generally found to be satisfactory. However, improvements are required to:

- Inadequate fire separations between floors and for doors at the mechanical rooms
- Improper or damaged door hardware
- The deactivated fire pump for the standpipe system
- The lack of s signal at the fire panel to indicated the fire pump has been shut off
- The open and abandoned sprinkler piping on the fourth floor

The elevator appears to be in satisfactory condition for the most part; however, owing to that age of this elevator, there is evidence of hydraulic oil being regularly added to the cylinder. We would recommend pressure-testing the cylinder to determine if there is any active leakage here. The installation of infrared multi-beam door protective devices is recommended.

No outstanding building code or fire code violations are on record with the local authorities.

1.1 Summary of Immediate Repairs

The following table summarizes the recommendations made in this report that should be addressed within the next year.

Recommendations	Report Reference	Budget Cost
• Air distribution improvements	5.2.9	$5,000 and up
• Roof repairs	8.2.2, 8.2.4	$1,000 to $3,000
• Exterior cladding repairs	Appendix B	$30,000
• Install fall arrest safety system	Appendix B	$10,000
• Repair slab above hydro vault	Appendix B	$6,000
• Sidewalk and walkway repairs	Appendix B	$5,000
• Necessary fire protection repairs	Appendix D	$9,000 to $13,000
• Install elevator infrared door devices	Appendix E	$2,500
		$68,000 to $74,000

1.2 Summary of Short-term Repairs

The following table summarizes the recommendations made in this report that should be addressed within the next 2 years.

Recommendations	Report Reference	Budget Cost
• Replace parking slab heating cables	Appendix B	$20,000
• Resurface asphalt paving	Appendix B	$20,000
• Paint steel lintels	Appendix B	$3,000
• Recommended fire protection repairs	Appendix D	$5,000
• Improve elevator barrier free access	Appendix E	$10,000
• Provide elevator machine room cooling	Appendix E	$5,000
• Replace elevator hydraulic cylinder	Appendix E	$25,000 to $35,000
		$88,000 to $98,000

1.3 Summary of Unpredictable Repairs

The following table summarizes the recommendations made in this report that are unpredictable by nature, but may require addressing within the next few years.

Recommendations	Report Reference	Budget Cost
• Replace main-floor air conditioning condensers	5.2.2	$1,500 to $2,000 each (2)
• Rebuild main air conditioning compressors *-or-* Replace rooftop air conditioning unit with three gas-fired heating/electric cooling units	5.2.3	$10,000 and up or $70,000 and up
• Eventual re-roofing	8.2.1	$40,000 to $50,000
		$51,000 to $124,000

2.0 Introduction

2.1 Inspection Authorization and Scope

As per the request of Client's Name of the Client's Company and in accordance with our proposal dated Proposal Date, a visual inspection was performed to identify the existing conditions of the following building components:

- Structure
- Heating System
- Plumbing System
- Ventilation System
- Insulation
- Fire Protection Systems
- Electrical Systems
- Air-conditioning System
- Roofing System
- Exterior Components
- Interior Components
- Elevators

A Phase I Environmental Site Assessment was also undertaken as part of this preliminary audit.

This assessment meets or exceeds the ASTM Standard E 2018-01 for Property Condition Assessments.

This report provides recommendations, preliminary cost estimates and priorities for:

- Remedying major deficiencies
- Updating ageing major components
- Undertaking further detailed investigations

The recommendations are for remedial actions that are considered to be beyond the normal maintenance of the building. Costs are provided for recommendations expected to exceed $3,000. The costs provided are only intended to provide an order of magnitude. Contractors should be contacted for exact quotations.

This report is intended for the exclusive use of our client. Use of the information contained within the report by any other party is not intended and, therefore, we accept no responsibility for such use.

This report is considered to be preliminary in nature. Before any major repairs are undertaken, we recommend that a specialist perform a detailed condition survey and develop a plan of action.

The site inspection was carried out on September 10, 200x, in the company of Ms. Maria Client and Ms Samantha Sales of Realty International. Our inspection was limited to components that were readily visible and not obstructed by storage, finishes, vegetations, etc.

Access was gained to all areas of the building, except for the offices of My Best Offices, on the third floor.

Only items specifically addressed in this report were examined. No comment is offered on building code and building bylaw compliance.

2.2 Building Description

This is a four-story office structure covering approximately 8,200 square feet per floor (very rough estimate) for the second, third and fourth floors. The first floor covers approximately 2,400 square feet (very rough estimate), as the majority of the first floor is used as parking below the second floor.

The visible evidence suggests the building was constructed in 19XX.

The building is presently used as a café on the main floor and offices on the second, third and fourth floors. The entire fourth floor and the rear portion of the second floor were vacant at the time of the inspection.

For the purpose of this report, the front of the building is considered to be facing south.

2.3 Plans

Drawing Number	Designer	Date
A1-A7	Amdrew Lloyd Wright, Architect	February 19xx
S1-S6	Alex Steel Associates Ltd	March 10, 19xx
M1-M4*	John Yarag Engineering Ltd	March 19xx
E1-E4	John Yarag Engineering Ltd	March 19xx

*Drawings M2 and M3 were not legible

These plans were not marked “as-built”, which limits there usefulness.

The plans were reviewed for general information only. The plans were not reviewed to ascertain fidelity of construction, verify building code compliance, or for the purpose of design analysis.

2.4 Inquiries to local authorities

As part of the Property Condition Assessment, inquiries were made at the local building department for any outstanding building code violations and to ensure a certificate of occupancy was issued for the building. An inquiry was made at the local fire department to check for any outstanding fire code violations.

The building department reports a certificate of occupancy was issued for the building and there are not outstanding building code violations.

The local fire department reports there are no outstanding fire code violations.

3.0 Electrical

3.1 Description

The building is equipped with a 1600-amp, 120/128-volt, three phase, four-wire service.

This capacity was determined by the rating of the main disconnect switch. This capacity was also indicated on the drawings provided.

The main service is divided into the following areas:

Location	Amperage
Humidifier	60 amps
3.4 kW A/C unit	60 amps
Roof A/C unit	Unknown
Panel G	200 amps
Panels 3A and 4A	200 amps
Panels 2A and 2B	200 amps
Panels 2C, 3C and 4C	Unknown
Panel S	200 amps
Panels 3B and 4B	200 amps
Snow melting*	100 amps
Elevator	100 amps
Fire pump	60 amps
Snow melting*	100 amps
Computer floor*	Unknown
Computer floor A/C unit	Unknown
Fire Alarm	60 amps
Unlabelled	60 amps

*The power to these areas was shut off

There is a single meter for the building. There is a separate sub-meter for the first-floor café. There were two separate meters, apparently for the computer floor and the computer floor air-conditioning units, but the wires at these meters have been disconnected.

The distribution panels employ circuit breakers. There is an electrical room on each floor of the building. On the second, third and fourth floors, there are three circuit breaker panels as follows:

1. For heating
2. For lighting
3. For receptacles

All wiring examined is copper.

The main transformer vault appears to be located below the driveway at the front of the building. The transformer vault is inaccessible. The equipment in these is often the responsibility of the water utility.

The electricity is supplied to the building by Idaho Power.

3.2 Observations and Discussion

3.2.1 While detailed load calculations were not performed, this service appears to be adequate for the present usage. The service size is consistent with that indicated on the drawings.

3.2.2 The distribution panels are well arranged. Having the three separate distribution panels on each floor of the building is a good arrangement.

Minor deficiencies noted at the distribution panels are as follows:

- There is poor access to the distribution panels in the first-floor cafeteria. All storage should be moved away from the distribution panels. Presently, the main disconnect box here cannot be opened as an enclosure has been built in front of this door. This should be improved.

- The unprotected panel openings in the third-floor and fourth-floor electrical rooms should be covered over.

3.2.3 Representative sample of accessible wiring were examined and electrical outlets and switches were spot tested in the areas inspected. The general condition is considered to be satisfactory; however, improvements are recommended as follows:

- The extension cord noted in the storage room of the café should be replaced with permanent wiring.

- Loose outlets, loose wiring and disconnected wiring was noted throughout the north portion of the second floor and the entire

fourth floor. As part of the renovations to these areas, all electrical deficiencies should be improved.

- Abandoned wiring was noted in the water meter room. This wiring should be removed or appropriately terminated.

- Abandoned wiring was also noted stemming from the main electrical room up to the fourth-floor electrical room This wiring appears to have serviced the computer room and the computer room air conditioning. This abandoned wiring should be removed.

- The wire to the air conditioning condensing coil for the café is damaged at the condenser unit. This should be repaired.

3.2.4 The main electrical ground connection at the domestic water entrance is loose. The electrical system should be properly grounded.

3.3 Recommendations, Costs and Priorities

Recommendation		Cost	Time Frame
3.3.1	Electrical Improvements	Less than $500	One Year

4.0 Heating

4.1 Description

The building is heated by baseboard electric resistance heaters. These heaters are operated by controls directly on the units.

The second-floor slab above the parking area appears to be heated by heating cables below the slab. According to the drawings, and from visual observation, it appears there are also heating cables imbedded in the concrete slab at the front entrance to the building and in the concrete slabs for the exposed areas of the parking lot.

4.2 Observation and Discussion

4.2.1 The electric baseboard heaters are properly located on exterior walls below windows (where practical) and should provide adequate heat for the building.

4.2.2 Electric heating systems have an indefinite life expectancy, since all parts can readily be replaced as long as they are available.

4.2.3 The operation of these units was spot-tested. All heaters tested operated satisfactorily.

4.2.4 Some heaters, such as those on the fourth-floor, were noted to be loose. These should be re-secured as necessary.

4.2.5 The heating cables for the slab areas could not be functionally tested. The life expectancy for the heating cables below grade level is discussed later in the Structural and Exterior Cladding section of this report.

4.2.6 The heating equipment is serviced by on-site staff

5.0 Air Conditioning

5.1 Description

The second, third and fourth floors of the building are air conditioned by a single rooftop unit. This unit has an approximate size of 50 tons.

The first-floor café and the main-floor elevator lobby are air-conditioned by two air-cooled, split systems. The unit for the elevator lobby has a capacity of 2 tons, and the unit for the café has a capacity of 3 tons.

There is a water-cooled air conditioning unit above the ceiling tile at the northeast corner of the second floor. This appears to provide localized cooling to the north portion of the second floor. This unit has an approximate capacity of 2 ½ tons. This unit is presently disconnected.

It appears that there were three air-cooled, split systems utilized on the fourth floor. The condenser coils that were on the roof have been removed; however, the refrigerant lines still penetrate the roof and tare terminated at the underside of the roof slab.

5.2 Observations and Discussion

5.2.1 While detailed heat gain calculations were not performed, no problems are suspected with cooling capacity.

5.2.2 All units in use are approximately 21 years old. The air conditioning compressor normally determined the life expectancy of this equipment. Air conditioning compressors have an average life span of 15 years.

Therefore, replacing or rebuilding compressors may be necessary within the next few years. Replacement compressors may be in place for the smaller units serving the main floor. If not, when compressor replacement proves necessary, it would likely be most cost effective to replace the entire condenser units. A serviceperson should be consulted.

5.2.3 In the case of the main rooftop unit, it would likely be most cost effective to rebuild the existing compressors when necessary. Alternatively, conversion from electric heating to natural gas heating could be accomplished by replacing the main rooftop unit with a gas-fired heating/electric cooling unit. Other aspects, such as providing three smaller units rather than one large unit, to improve efficiencies and provide better zone control, could be considered. A heating and air conditioning specialist should be consulted when updating proves necessary.

5.2.4 The air conditioning equipment was functioning properly al the time of this inspection.

However, maintenance of the smaller units in the parking area appears to have been lacking. The condenser coil for the café air conditioner is extremely dirty and should be cleaned.

5.2.5 The two smaller air conditioning units in the parking area are suspended from the ceiling. There are only 5 to 6 inches of clearance between the top of these units and the ceiling. As these are top-discharging units, this clearance is considered to be inadequate. Inadequate clearance will reduce efficiency of the units.

5.2.6 The water-cooled air conditioning unit on the second floor appears to have been added in response to a need for greater cooling, likely because of a heavy concentration of people or office equipment at this end of the floor. It does not appear as though this will be an essential component if the entire second floor is used for conventional office usage.

5.2.7 The main rooftop unit is equipped with an economizer unit. This unit allows fresh air from the exterior to enter into the return air plenum. This introduction of fresh air helps to improve indoor air quality as well as compensate for air that is expelled through exhaust fans.

The second function of the economizer is to provide “air-conditioning” on cool days. When the outdoor temperature is below 60 degrees F, the economizer can allow 100 percent fresh air into the building to provide cooling, as required. This is a desirable feature.

The economizer intake grilles are damaged and ideally would be replaced. This would not be a major expense.

The air-handling unit for the café is equipped with a fresh-air makeup duct. There does not appear to be a fresh-air makeup duct to the air handler for the elevator lobby; however, with the regular opening and closing of the entrance doors to the building, the provision of fresh air to this area should be sufficient.

5.2.8 Adequate air distribution is provided in most areas. As is typical, the space between the ceiling tile and the underside of the floor slab and roof slab is used as the air return plenum. Air return to the offices is via grilles in the ceiling.

There is a main chase at the east side of the building for the ductwork coming down from the rooftop unit. This chase is used as the return air plenum and there are openings above the ceiling tile on each of the second, third and fourth floors. However, at the bottom of the chase the drywall is badly damaged, apparently from previous roof leakage at this duct penetration. The drywall lat the bottom of this chase must be repaired to prevent air from the janitor's closet here being drawn into the return air plenum. The fumes given off by the chemicals stored n the janitor's closet would affect the air quality in the building.

5.2.9 The branch ductwork and diffusers have been removed from the central portion of the fourth floor. In this area, there were previously three split systems that provided air conditioning. As these systems have been removed, there is a need to replace the missing branch ductwork and diffusers.

It was reported by Peter at Centrifugal Associates Limited (the air conditioning service contractor) that the system does not currently use a set of pneumatic controls for adjusting the airflow to the different area of the building. Apparently, the main control setup is based on the return air temperature and adjustments are made to the supply air temperature based on that value. This is a less sophisticated way of controlling the air conditioning system.

A compressor for the pneumatic system was not found. There may be a compressor located in the rooftop unit.

5.2.10 The air conditioning equipment was reportedly serviced by AAA Air Conditioning. Jim Smith of AAA reports that the refrigerant used in these systems is R-22 (Freon).

5.3 Recommendations, Costs and Priorities

Recommendations		Costs	Time Frames
5.3.1	Air distribution improvements	$5,000 and up	One year
5.3.2	Replace main-floor air conditioning condenser units	$1,500 to $2,000 each (2)	Unpredictable
5.3.2	Rebuild main air conditioning compressors *-or-* Replace rooftop unit with three gas fired heating/electric cooling units (as desired)	$10,000 and up *-or-* $70,000 and up	Unpredictable Unpredictable

6.0 Ventilation

6.1 Description

There is a single exhaust fan cabinet on the roof. This fan appears to service the second-, third- and fourth-floor bathrooms

The café bathrooms are ventilated by individual exhaust fan units.

The man rooftop unit is equipped with an economizer unit. This unit allows fresh air from the exterior to enter into the return air plenum. This introduction of fresh air helps to improve indoor air quality as well as compensate for air that is expelled through exhaust fans.

There is also a fresh air makeup duct for the air handling system servicing the café.

There are exhaust fans located in the main electrical room and in the main elevator room. These exhaust fans are controlled by thermostats located in these rooms.

6.2 Observations and Discussion

6.2.1 The roof-mounted exhaust fan was not operating at the time of the inspection. At the distribution panel in the main-floor electrical room, this exhaust fan appeared to be on. A service person should be contacted to repair or replace the unit as necessary.

Typically, bathroom exhaust fans would be controlled by timer switches.

6.2.2 The café bathroom exhaust fans operated at the time of the inspection. These fans are noisy and require servicing.

6.2.3 The exhaust fan in the electrical room is inoperative and should be repaired or replaced.

The exhaust fan in the elevator room was operational.

6.2.4 The amount of fresh air provided to the office space appears to be satisfactory.

6.3 Recommendations, Costs and Priorities

Recommendations		Costs	Time Frames
6.3.1	Repair exhaust fan in electrical room	$150 to $300	One year
6.3.2	Repair or replace roof-mounted exhaust fan for bathrooms	$500 to $1,500	One year

7.0 Plumbing

7.1 Description

There is a combination water supply to the building. The main service line is a 2-inch diameter copper pipe. The main shutoff valve is located below the southeast staircase. There is a single water meter for the building.

All supply plumbing examined is copper. The visible waste piping is a combination of copper and cast iron.

There is a 100-gallon electric domestic water heater in the second-floor janitor's room. This appears to provide hot water to the bathrooms on the second, third, and fourth floors.

There is a sump pump located below the southeast staircase.

The domestic water supply to the building is provided by XYZ water department.

7.2 Observations and Discussion

7.2.1 The reduction in water flow noted, with two faucets flowing, was not considered excessive.

No active leaks were noted in the plumbing pipes, supply or waste.

Evidence of past leakage was noted below the second-, third- and fourth-floor bathrooms, in the form of water-damaged ceiling tiles. All areas were found to be dry at the time of the inspection.

7.2.2 As the cover for the sump pump has been bolted down, this unite was not tested. However, there is a drainpipe from the sprinkler system running directly over some of the bolts for this sump pump cover. Ideally, this drainpipe would be rerouted to provide easier access to these bolts.

There is a high water-level alarm unit for the sump pump. This is a desirable feature.

7.2.3 The domestic water heater is approximately 21 years old. While it is impossible to predict with certainty when a domestic water heater will fail, these units typically last 15 years. The water heater does not appear to be a rental unit. If problems occur, it can be replaced with a rental unit; consequently, there is very little concern about its condition.

7.2.4 Most plumbing fixtures that were tested operated satisfactorily.

Corroded basins were noted in many of the bathrooms. This is not considered unusual for 21-year-old plumbing fixtures. A program of updating corroded faucets and basins will likely be necessary over the next several years.

7.2.5 There did not appear to be a grease interceptor attached to the drainpipe from the kitchen sink in the café. There may be a grease build-up in the waste plumbing because of this. It should be ensured that the drain from the kitchen sink is equipped with a grease interceptor.

7.3 Recommendations, Costs, and Priorities

Recommendations		Costs	Time Frames
7.3.1	Replace corroded basins and faucets	$1,500 and up	Three years

8.0 Roofing

8.1 Description

The building is covered by an inverted roof membrane assembly. This assembly consists of a built-up asphalt membrane, covered by 4 inches of extruded polystyrene foam insulation and a large-stone ballast. The drawings indicate the membrane to be a three-ply system.

The roof drainage is via an interior collection system. There are two drains on the roof.
There are no chimneys above the roof.

8.2 Observations and Discussion

8.2.1 Since the roof is covered with insulation and a stone ballast, the membrane could not be closely examined.

This installation is estimated to be 21 years old. This type of system has an average life expectancy of 20 to 25 years.

8.2.2 Areas of roof leakage were noted at the roof access hatch and the roof penetration for the air conditioning ductwork. No repairs have been undertaken to the roof access hatch, but are required here.

Surface patching has been undertaken at several areas around the roof penetration around the air conditioning ductwork; however, it is not considered likely that this has properly remedied the situation. It will likely prove necessary to remove the metal counter flashing here to view the membrane and make repairs as necessary.

8.2.3 At the northwest and central areas of the roof, the insulation was noted to have floated or is missing. This is an indication of water ponding at these locations. The roof drainage should be improved when re-roofing. This entails ensuring a proper slope of the substrate below the membrane or, in the case of inverted roof membrane assemblies, using tapered insulation to promote drainage toward roof drains. Using tapered insulation also increases the heat loss at the roof drains, which in turn minimizes the potential for freeze-up at these locations.

A ballast-reducing fabric was not used in conjunction with this assembly. If using this type of system when re-roofing, a ballast-reducing fabric should also be installed. This helps protect the insulation from the sun, as well as hold the insulation in place.

8.2.4 The abandoned refrigerant lines from the rooftop equipment that has been removed are not properly sealed to be watertight. This should be improved.

The permanent metal flashings are corroded and ideally would be repainted. This is not considered to be a priority.

8.2.5 An inquiry was made to the building superintendent regarding whether there was a roof warranty or bond in effect. The building superintendent reports there is no roof warranty or bond in effect.

8.3 Recommendations, Costs and Priorities

Recommendations		Costs	Time Frames
8.3.1	Roof repairs	$1,000 to $3,000	One year
8.3.2	Eventual re-roofing	$40,000 to $50,000	Unpredictable

9.0 Interior

9.1 Description

The office ceiling finishes consist of suspended tile.

The office wall finishes consist of drywall.

The office floor coverings consist of carpet, ceramic tile and resilient tile.

9.2 Observations and Discussion

9.2.1 Since interior components are subjective to some degree, our comments here will be general, except where functional concerns are noted.

Walls are relatively plumb, doorjambs are square and floors are reasonably level.

Many of the ceiling tiles were missing from the fourth floor and the roof portion of the second floor. These will require replacement.

9.2.2 Some of the walls, ceilings, and floors show cosmetic imperfections. It is not difficult to eliminate these flaws during decorating.

9.2.3 Water stains were noted at several locations. The locations of staining and the suspected sources of moisture are as follows:

Location of stain	Suspected source
Men's and women's bathrooms on each floor	Previous plumbing leak and roof leak above
Second-floor south office	Leakage at joints in metal cladding
Third-floor lunchroom	Condensate drain leak from previous air conditioner on fourth floor

9.2.4 The stairwells are generally in satisfactory repair.

10.0 Insulation

10.1 Description

The presence of insulation in the exterior walls could only be spot-checked. Expanded polystyrene foam insulation, valued at an estimated R-8, was noted.

Extruded polystyrene foam insulation (Styrofoam), valued at approximately R-20, was noted on the roof.

Loose fiberglass insulation, valued at approximately R-15, was noted in the ceiling above the parking area.

10.2 Observations and Discussion

10.2.1 The recommended amount of insulation in flat roofs is R-10 to R-20. The current roof insulation is considered satisfactory.

10.2.2 Modern buildings utilize R-12 to R-20 valued insulation in exterior walls; however, the cost-effectiveness of adding insulation is questionable. A careful evaluation should be made of any proposed programs to upgrade exterior wall insulation.

10.2.3 The current standard for insulation in the floor above an unheated area is R-26. Even when properly insulated, the floor above an unheated space is often cooler that the remainder of the building.

11.0 Closing Comments

This report provides you with an overview of the condition of the major components in the building. Should you have any questions, please do not hesitate to contact us.

Please find photographs documenting conditions noted in Appendix A.