



BUILDING CONDITION ASSESSMENT

7672 Elgin Mills Road, Markham, Ontario
February 25, 2021

Prepared For:

Parks Canada Agency
3545 Kingston Road
Toronto, ON M1M 1R6
Contact: Caiti McLelland

Prepared By:

WSP Canada Inc.
2300 Yonge Street, Suite 2300
Toronto, ON M4P 1E4
Contact: Brian Campbell, P.Eng.

Project Number: 20M-01500-00



General Description

The property at 7672 Elgin Mills Road, Markham, is a 2-storey house with a basement. We could not confirm the original construction year but expect it was constructed in the early 1900's. Based on the varying construction, a two-storey addition with a basement was constructed to the east side followed by a subsequent single-storey addition with a crawlspace further to the east. It also appears that the south portion of the first addition was expanded southward slightly around the same time and a cast-in-place concrete foundation wall now sits beyond the stone masonry foundation wall creating a crawlspace below the south portion of the living room (visible from a window in the basement). There is a garage located to the north of the house with an enclosed connection to the house. We estimate the gross floor area at about 150 sq. m. (1,600 sq. ft.), not including the basement or garage.

For the purpose of this report, the front door faces south.

The structure is wood-framed. Joists span the width of the basement and are supported by the perimeter stone and mortar foundation walls. At the original house (west portion), there are larger 3" x 10" joists towards the outside walls and other joists are 2" x 10" on 24" centers. Retrofit posts and "sistering" of joists is noted in a few areas in the basement. There is a small portion of the basement foundation wall at the east side that is cast-in-place concrete. The second floor is framed by wood joists supported by perimeter and interior wood-framed walls. At the central portion of the house, there are visible 4" x 8" beams. The roofs are sloped and consist of plywood decking (likely added with recent roof replacement) on the original wood planks on rafters.

The house is clad with stucco. The stucco appears to be installed over a previous overclad material (faux brick asphalt shingle) over the original vertically oriented wood siding. We also note horizontally oriented tongue-and-groove wood siding at the attic opening (indicating the possible addition of the east side). The sloped roofs are covered by asphalt shingles and incorporate ridge vents. There are perforated aluminum soffits.

The windows are double-glazed vertical or horizontal sliders inset into the original wood frames. Date stamps indicate the windows are from the mid-late 1990s. The main entrance door is a reasonably modern metal-clad wood core door with vision panel.

There is an oil-fired furnace located in the basement with sheet metal ductwork throughout the house. There is a drilled well located northeast of the house and a plastic line feeds an expansion tank. Domestic hot water is provided by an electric tank heater. Plumbing distribution piping is copper. Sanitary drainage piping is a combination of plastic and copper which discharges into a septic tank at the southwest corner of the house.

Power is supplied overhead to a service conduit on the central south side. The meter has been removed. The conduit supplies the main 100A breaker panel in the basement. The visible wiring is mostly older cloth-sheathed with some circuits using modern plastic-sheathed.

The garage is wood-framed with a concrete slab-on-grade. There are two overhead garage doors.

Executive Summary

MANDATE

This report was prepared at the request of Parks Canada Agency as a capital plan for the property. Our review considers a 10-year capital renewal timeframe and a \$1,000 capital threshold.

GENERAL CONDITION - D1 - VERY POOR CONDITION AND UNINHABITABLE

The overall building condition is classified as D1 - Very poor condition and uninhabitable. The building structure and envelope are generally intact, however the overall condition requires major capital repairs to return the building to habitable standards.

The required restoration costs are estimated at ~\$180-200K. This excludes design, engineering and soft costs such as permits, etc. At \$225/sq. foot + \$50K for demolition, we estimate a modest re-construction cost at about \$410,000. The repair costs are approaching an amount that makes the justification for repair difficult relative to re-building.

The building appears to have been vacant for the last few years. Mechanical and electrical services are not in operating condition. The interior finishes are dated and in fair to poor condition and likely contain designated substances. Although review of environmental conditions are outside of our mandate, we suspect full abatement activities will be required followed by complete replacement of interior finishes.

The building structure is adequate and although covered by interior finishes throughout, it appears to be sound. There are localized areas in the basement and garage that require retrofit type repairs. Isolated joists require replacement or a "sister" joist to be installed and some additional framing/supports need more appropriate and robust retrofit repairs. Budgets are included. We were unable to review the crawlspace under the east portion of the kitchen but no obvious signs of structural distress are noted.

The stucco cladding is generally intact but aged and with a stained appearance. A budget to repair and repaint the stucco is included. Windows are relatively modern but are about 25 years old; replacement is anticipated within the report term. The roofing is in good condition and appears to be only a few years old and there is no evidence of ongoing leakage; replacement is not anticipated.

The furnace was not operational at the time of our review but it appears that the unit could be returned to operation. However, the oil tank is from 2005 and the furnace is from 2000 and both are approaching their typical expected service life so we expect replacement to be required. The tank heater is old (2002) and corroded so a replacement budget is included.

The electrical feed to the building is connected but the meter has been removed. The main panel is likely about 10-20 years old and can likely be maintained. However, the wiring is generally of older vintage and so general re-wiring is budgeted in conjunction with interior finish renewal.

As septic and well systems are excluded from our mandate, we have not included budgets for sanitary drainage modifications and/or the installation of a new septic system or the drilling of a new/additional well, if required. We recommend the condition of the well and septic services be confirmed prior to embarking upon any major renovation work.

We have included budgets for the following projects:

- Full abatement and removal and replacement of all interior finishes including installation of new kitchen and bathroom along with plumbing/electrical modifications to suit;
- Structural retrofits in the basement and breezeway to the garage;
- Repainting and local repair to stucco cladding and the exterior of the garage;
- Replacement of windows;
- Replacement of furnace and oil tank;
- Replacement of wiring;

- Replacement of domestic water equipment;

CLOSURE

No part of this report should be read in isolation. It is intended to be relied upon only in its entirety including the Scope of Work and Limitations.

Condition Assessment Rating Criteria

The general building condition rating is classified as follows:

A = Good Condition (systems are functional with minimal capital renewal anticipated in the near term)

B = Fair Condition (systems are functional but require major capital renewal in the near term)

C = Poor Condition (systems are problematic and require major capital renewal in the near term)

D = Abandoned and not habitable

- D1: Very poor condition and uninhabitable. The building structure and envelope are generally intact, however the overall condition requires major capital repairs to return the building to habitable standards.

- D2: Structurally Compromised. The building structure is compromised and the envelope is severely deteriorated, posing health and safety risks upon entry. With appropriate safety precautions, immediate abatement activities can be completed, before recommended deconstruction.

- D3: Structurally Unsafe. The building is partially collapsed and unfit to enter. It poses an imminent health and safety risk upon entry and within the immediate surrounding. Entry for investigation, rehabilitation or abatement is not feasible in its current condition. Demolition is recommended.

Building systems are classified as follows:

A = Good Condition (functional and not requiring notable repair)

B = Fair Condition (functional but aging or requiring maintenance)

C = Poor Condition (functional but requiring larger repairs or aged beyond a normal lifespan)

D = Unsafe, Failed or Replacement is Required

Capital Expenditures

The table on the following page summarizes our opinion of reasonable budgets for the capital expenditures identified over the term of this report. Deficiencies that can be remedied with routine maintenance or miscellaneous minor repairs, or minor conditions that generally do not present material physical deficiencies, have not been budgeted but are discussed when relevant.

The budgets assume a prudent level of ongoing maintenance. Dollars shown are inflated, and include contingencies (typically 5 to 15%) and may include allowances for design/project management (typically 5 to 15%). TAXES ARE EXCLUDED.

The budgets provided are intended as order-of-magnitude advice only and should be considered Class D level or lower. Estimates from licensed contractors, and some cases detailed engineering studies followed by a specification and tender process, will be required to confirm budget allocations.

Expenditure Table

Annual Budgets

Item	Description	Class	Status	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
1	Structure													
1.1.1	General Interior Renovation and Abatement	C	Forecasted	\$0	\$117,300	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1.1.2	Structural Retrofit Allowance in Basement	D	Forecasted	\$0	\$11,220	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1.1.3	Repair Raised Flooring Leading to Garage	C	Forecasted	\$0	\$2,040	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2	Building Envelope													
2.1.1	Repair and Repaint Stucco Cladding	C	Forecasted	\$0	\$13,105	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2.1.2	Repair and Repaint Garage Exterior	C	Forecasted	\$0	\$2,040	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2.2.1	Replace Windows	B	Forecasted	\$0	\$0	\$0	\$0	\$0	\$0	\$24,156	\$0	\$0	\$0	\$0
2.2.2	Replace Garage Doors	B	Forecasted	\$0	\$3,366	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3	HVAC													
3.1.1	Replace Furnace and Oil Tank	C	Forecasted	\$0	\$12,903	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4	Plumbing													
4.1.1	Upgrade/Replace Domestic Water Equipment	D	Forecasted	\$0	\$5,610	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5	Electrical													
5.1.1	Install Meter and Repair Electrical Panel	C	Forecasted	\$0	\$1,683	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5.1.2	General Wiring Replacement	D	Forecasted	\$0	\$10,098	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total				\$0	\$179,365	\$0	\$0	\$0	\$0	\$24,156	\$0	\$0	\$0	\$0
\$ / ft ²				\$0.00	\$112.10	\$0.00	\$0.00	\$0.00	\$0.00	\$15.10	\$0.00	\$0.00	\$0.00	\$0.00

1. Structure

1.1 Structural Frame

1.1.1 General Interior Renovation and Abatement

Present Cost	Inflated Cost	First Occur.	Cycle	# Occurrences	Class	Status
\$115,000	\$117,300	2021	N/A	One time	C	Forecasted

Budget Breakdown

Name	Comment	Quantity	Unit	Price	Total
Abatement Allowance		1	allow	\$15,000.00	\$15,000
General Re/Re of Finishes		1600	ft²	\$30.00	\$48,000
Re/Re Kitchen		1	allow	\$40,000.00	\$40,000
Re/Re Bathroom		1	allow	\$12,000.00	\$12,000
Catch-up Inflation Adjustment (2020 to 2020 dollars)					\$0
0% Contingency					\$0
0% PM / Engineering					\$0
0% Other					\$0
0% Tax					\$0
Total					\$115,000

1.1.2 Structural Retrofit Allowance in Basement

Present Cost	Inflated Cost	First Occur.	Cycle	# Occurrences	Class	Status
\$11,000	\$11,220	2021	N/A	One time	D	Forecasted

Budget Breakdown

Name	Comment	Quantity	Unit	Price	Total
Framing improvement/sister Joist	at top of basement stairs	1	allow	\$750.00	\$750
Replace Joist	half joist at concrete block wall	1	joists	\$750.00	\$750
Sister Joists	north side, these 2 joists only partially sistered	2	joists	\$1,000.00	\$2,000
Sister Joist	evidence of rot at west end	1	joists	\$1,000.00	\$1,000
Replace Joist at far north side	loose and rotten above sink	1	joists	\$1,500.00	\$1,500
Sister joist	at east portion of basement	1	joists	\$1,000.00	\$1,000
Install Joist/Beam at far east side opening	at cast-in-place concrete opening	1	locations	\$1,500.00	\$1,500
Framing Improvements, if required		1	allow	\$1,500.00	\$1,500
Catch-up Inflation Adjustment (2020 to 2020 dollars)					\$0
10% Contingency					\$1,000
0% PM / Engineering					\$0
0% Other					\$0
0% Tax					\$0
Total					\$11,000

Project Notes:

This project allows for retrofit structural repairs in the basement. Some retrofit work has been completed previously but is inadequate.

1.1.3 Repair Raised Flooring Leading to Garage

Present Cost	Inflated Cost	First Occur.	Cycle	# Occurrences	Class	Status
\$2,000	\$2,040	2021	N/A	One time	C	Forecasted

Budget Breakdown

Name	Comment	Quantity	Unit	Price	Total
Rebuild raised floor		1	allow	\$1,500.00	\$1,500
Repair Ceiling panels		1	allow	\$500.00	\$500
		0		\$0	\$0
Catch-up Inflation Adjustment (2020 to 2020 dollars)					\$0
0% Contingency					\$0
0% PM / Engineering					\$0
0% Other					\$0
0% Tax					\$0
Total					\$2,000

2. Building Envelope

2.1 Walls

2.1.1 Repair and Repaint Stucco Cladding

Present Cost	Inflated Cost	First Occur.	Cycle	# Occurrences	Class	Status
\$12,848	\$13,105	2021	N/A	One time	C	Forecasted

Budget Breakdown

Name	Comment	Quantity	Unit	Price	Total
Repair stucco	local patch repairs	1	allow	\$1,500.00	\$1,500
Repainting		217	m2	\$40.00	\$8,680
Access - scaffold		1	allow	\$1,500.00	\$1,500
Catch-up Inflation Adjustment (2020 to 2020 dollars)					\$0
10% Contingency					\$1,168
0% PM / Engineering					\$0
0% Other					\$0
0% Tax					\$0
Total					\$12,848

Project Notes:

This project includes for local patch repair and repainting of exterior stucco.

2.1.2 Repair and Repaint Garage Exterior

Present Cost	Inflated Cost	First Occur.	Cycle	# Occurrences	Class	Status
\$2,000	\$2,040	2021	N/A	One time	C	Forecasted

Budget Breakdown

Name	Comment	Quantity	Unit	Price	Total
Repair allowance for local board replacement		1	allow	\$1,500.00	\$1,500
Repainting		1	allow	\$500.00	\$500
		0		\$0	\$0
Catch-up Inflation Adjustment (2020 to 2020 dollars)					\$0
0% Contingency					\$0
0% PM / Engineering					\$0
0% Other					\$0
0% Tax					\$0
Total					\$2,000

2.2 Windows and Doors

2.2.1 Replace Windows

Present Cost	Inflated Cost	First Occur.	Cycle	# Occurrences	Class	Status
\$21,450	\$24,156	2026	25	Recurring	B	Forecasted

Budget Breakdown

Name	Comment	Quantity	Unit	Price	Total
Replace windows	small	9	window	\$1,500.00	\$13,500
Replace windows	medium	3	window	\$2,000.00	\$6,000
Replace Windows	large	0	window	\$2,500.00	\$0
Catch-up Inflation Adjustment (2020 to 2020 dollars)					\$0
10% Contingency					\$1,950
0% PM / Engineering					\$0
0% Other					\$0
0% Tax					\$0
Total					\$21,450

Project Notes:

This project is an allowance for window replacements. We suspect that the windows are maintainable for another several years.

2.2.2 Replace Garage Doors

Present Cost	Inflated Cost	First Occur.	Cycle	# Occurrences	Class	Status
\$3,300	\$3,366	2021	20	Recurring	B	Forecasted

Budget Breakdown

Name	Comment	Quantity	Unit	Price	Total
Re/Re Garage Doors		2	doors	\$1,500.00	\$3,000
		0		\$0	\$0
		0		\$0	\$0
Catch-up Inflation Adjustment (2020 to 2020 dollars)					\$0
10% Contingency					\$300
0% PM / Engineering					\$0
0% Other					\$0
0% Tax					\$0
Total					\$3,300

2.3 Roofing

N/A

3. HVAC

3.1 General HVAC

3.1.1 Replace Furnace and Oil Tank

Present Cost	Inflated Cost	First Occur.	Cycle	# Occurrences	Class	Status
\$12,650	\$12,903	2021	20	Recurring	C	Forecasted

Budget Breakdown

Name	Comment	Quantity	Unit	Price	Total
Re/Re Furnace	Std. size <100 MBH	1	furnace	\$5,500.00	\$5,500
Re/Re Oil Tank		1	200 gal tank	\$3,500.00	\$3,500
ductwork repairs/mods		1	allow	\$2,500.00	\$2,500
Catch-up Inflation Adjustment (2020 to 2020 dollars)					\$0
10% Contingency					\$1,150
0% PM / Engineering					\$0
0% Other					\$0
0% Tax					\$0
Total					\$12,650

4. Plumbing

4.1 Domestic Water Systems

4.1.1 Upgrade/Replace Domestic Water Equipment

Present Cost	Inflated Cost	First Occur.	Cycle	# Occurrences	Class	Status
\$5,500	\$5,610	2021	15	Recurring	D	Forecasted

Budget Breakdown

Name	Comment	Quantity	Unit	Price	Total
Re/Re Tank Heater	std. size, elec.	1	units	\$1,500.00	\$1,500
Re/Re Expansion Tank		1	tank	\$1,000.00	\$1,000
Filtration/Softening equipment		1	allow	\$2,500.00	\$2,500
Catch-up Inflation Adjustment (2020 to 2020 dollars)					\$0
10% Contingency					\$500
0% PM / Engineering					\$0
0% Other					\$0
0% Tax					\$0
Total					\$5,500

4.2 Drainage Systems

N/A

5. Electrical

5.1 Electric Supply and Distribution

5.1.1 Install Meter and Repair Electrical Panel

Present Cost	Inflated Cost	First Occur.	Cycle	# Occurrences	Class	Status
\$1,650	\$1,683	2021	N/A	One time	C	Forecasted

Budget Breakdown

Name	Comment	Quantity	Unit	Price	Total
Replace some breakers	100A	1	allow	\$1,000.00	\$1,000
New Meter		1	allow	\$500.00	\$500
		0		\$0	\$0
Catch-up Inflation Adjustment (2020 to 2020 dollars)					\$0
10% Contingency					\$150
0% PM / Engineering					\$0
0% Other					\$0
0% Tax					\$0
Total					\$1,650

5.1.2 General Wiring Replacement

Present Cost	Inflated Cost	First Occur.	Cycle	# Occurrences	Class	Status
\$9,900	\$10,098	2021	N/A	One time	D	Forecasted

Budget Breakdown

Name	Comment	Quantity	Unit	Price	Total
Re/Re Wiring		8	rooms	\$1,000.00	\$8,000
Re/Re Wiring		2	hallway	\$500.00	\$1,000
New Item		0		\$0	\$0
Catch-up Inflation Adjustment (2020 to 2020 dollars)					\$0
10% Contingency					\$900
0% PM / Engineering					\$0
0% Other					\$0
0% Tax					\$0
Total					\$9,900

Appendix - Floor Plans

SYMBOLS & LEGEND

Site Features

- Well Head (W)
- Septic Tank Cover (S)
- Hydro Pole (HP)
- Propane Tank (PT)
- Oil Fill and Vent (OFV)

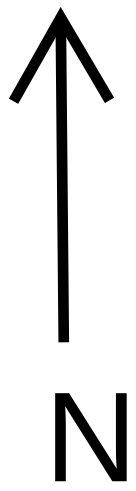
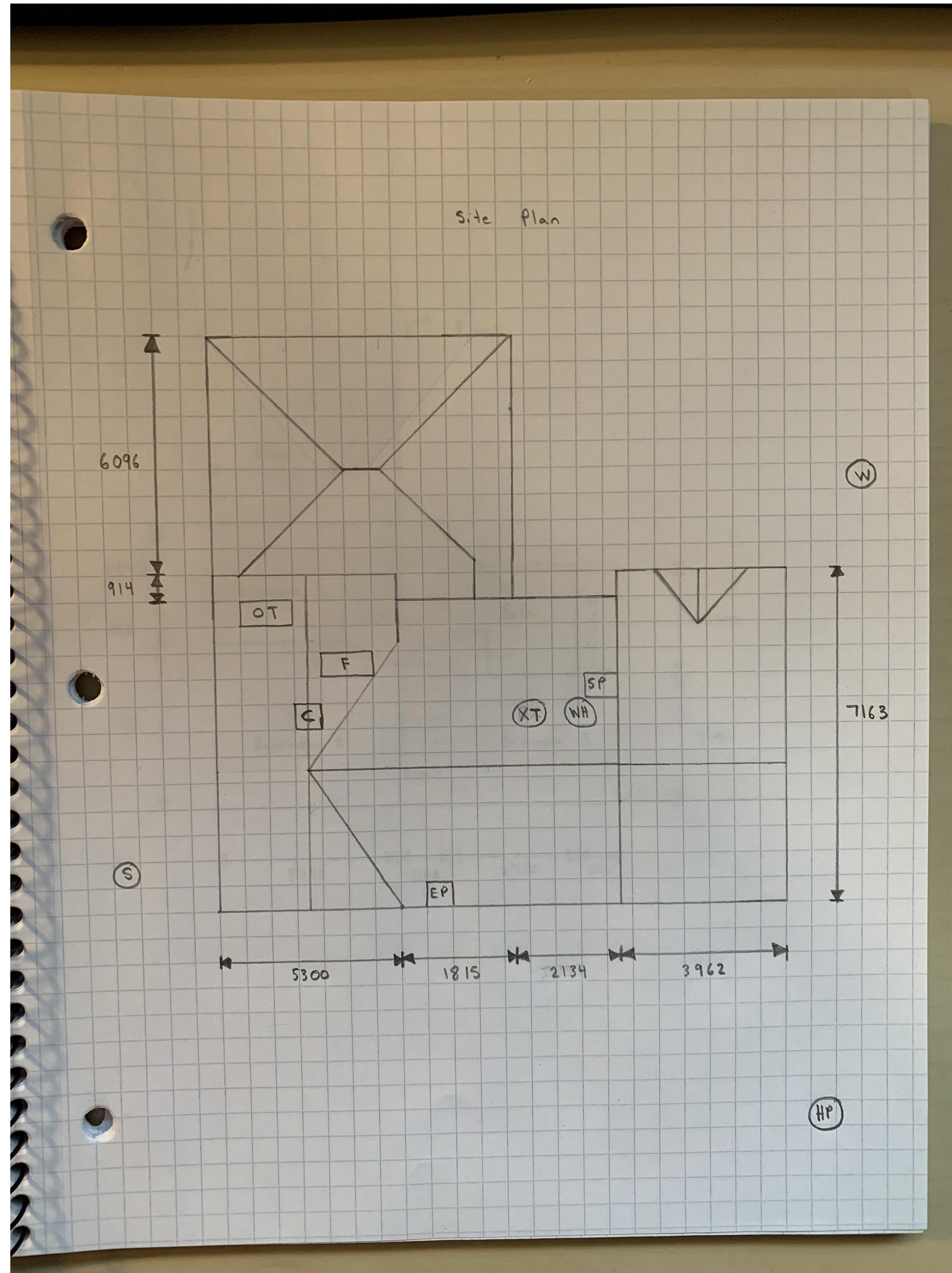
Interior Features

- Furnace (F)
- Oil Tank (OT)
- Incoming Cold Water Line (CW)
- Cold Water Tank (CWT)
- Hot Water Tank Heater (WH)
- Expansion Tank (XT)
- Main Electrical Panel (EP)
- Air Conditioner (AC)
- Chimney (C)
- Retrofit Structural Post (P)
- Sump Pit (SP)
- Wood Stove (WS)

SITE AND FLOOR PLANS

Not to scale

All dimensions in mm



2300 YONGE ST., SUITE 2300,
TORONTO, ON CANADA M4P 1E4

PHONE: 416.487.5256 FAX: 416.487.9766
www.wsp.com

UNAUTHORIZED USE IS PROHIBITED

7672 Elgin Mills Rd. East,
Markham

Site Plan

Project No. 201-09746-00

Drawing No. N/A



SYMBOLS & LEGEND

Site Features

- Well Head (W)
- Septic Tank Cover (S)
- Hydro Pole (HP)
- Propane Tank (PT)
- Oil Fill and Vent (OFV)

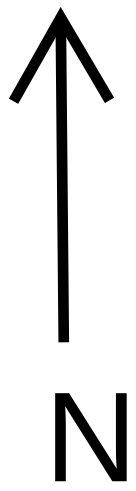
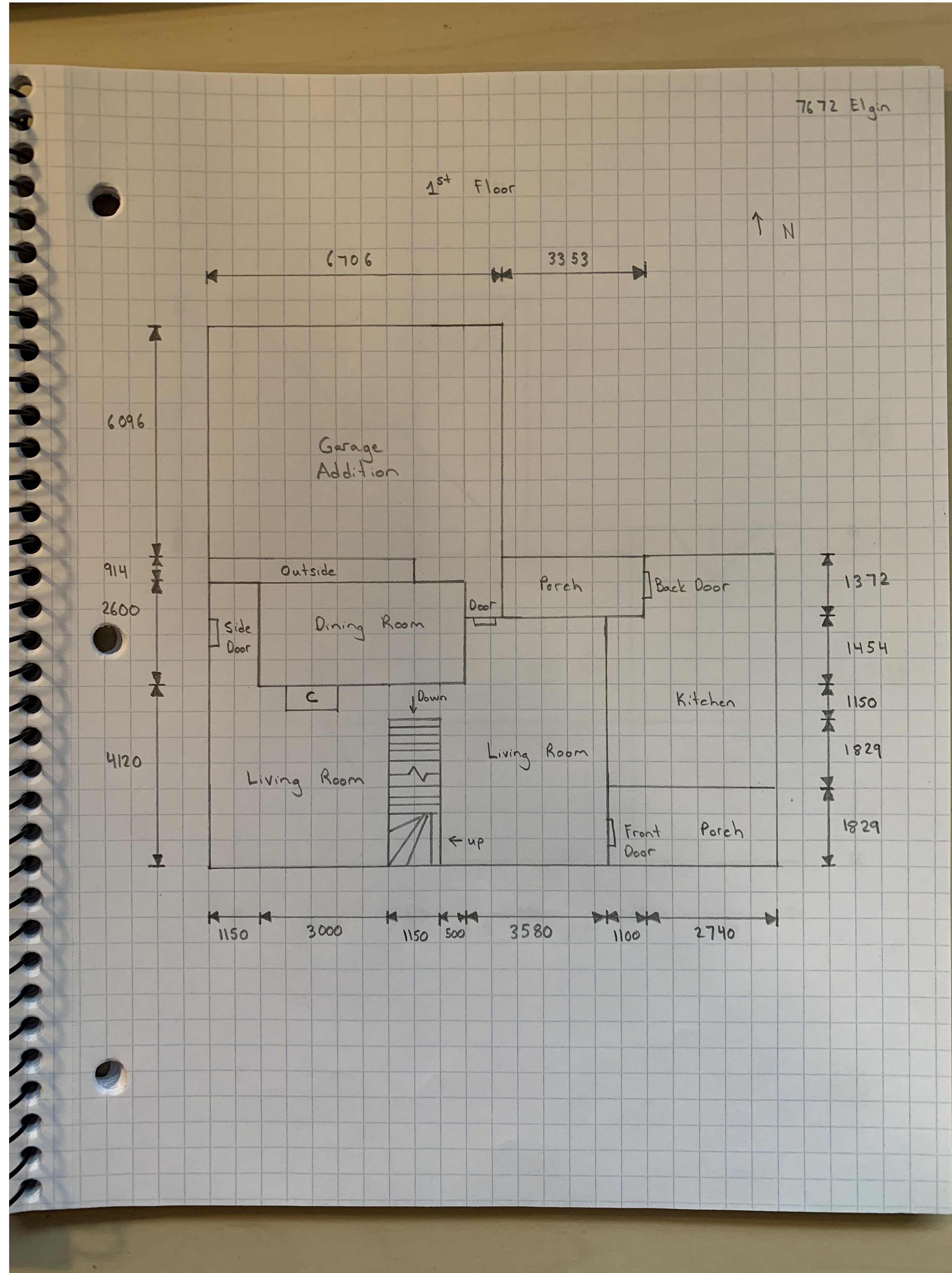
Interior Features

- Furnace (F)
- Oil Tank (OT)
- Incoming Cold Water Line (CW)
- Cold Water Tank (CWT)
- Hot Water Tank Heater (WH)
- Expansion Tank (XT)
- Main Electrical Panel (EP)
- Air Conditioner (AC)
- Chimney (C)
- Retrofit Structural Post (P)
- Sump Pit (SP)
- Wood Stove (WS)

SITE AND FLOOR PLANS

Not to scale

All dimensions in mm



2300 YONGE ST., SUITE 2300,
TORONTO, ON CANADA M4P 1E4

PHONE: 416.487.5256 FAX: 416.487.9766
www.wsp.com

UNAUTHORIZED USE IS PROHIBITED

7672 Elgin Mills Rd. East,
Markham

1st Floor

Project No. 201-09746-00

Drawing No. N/A



SITE AND FLOOR PLANS

Not to scale All dimensions in mm

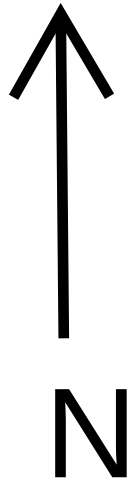
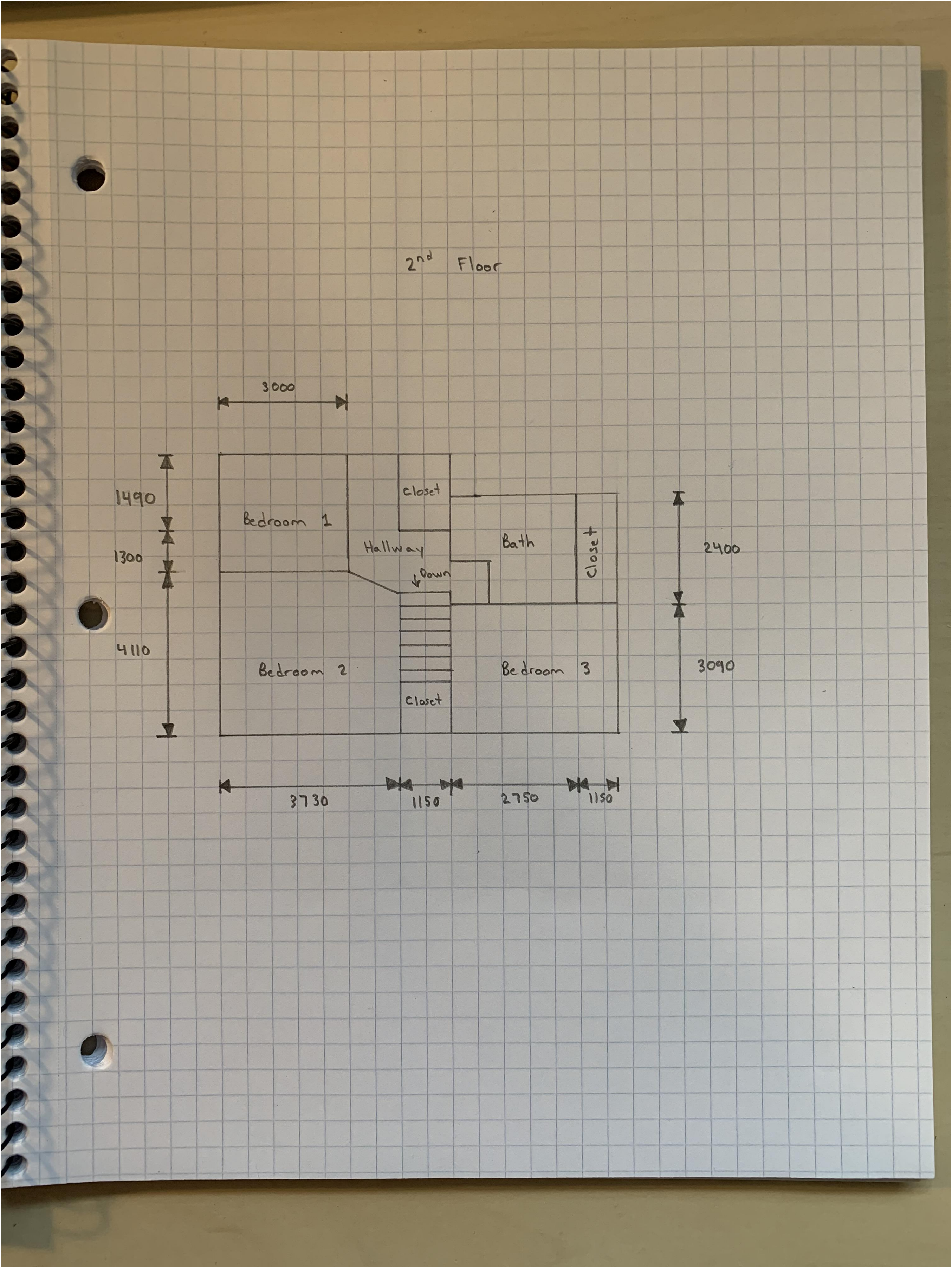
SYMBOLS & LEGEND

Site Features

- Well Head
- Septic Tank Cover
- Hydro Pole
- Propane Tank
- Oil Fill and Vent
- W
- S
- HP
- PT
- OFV

Interior Features

- Furnace
- Oil Tank
- Incoming Cold Water Line
- Cold Water Tank
- Hot Water Tank Heater
- Expansion Tank
- Main Electrical Panel
- Air Conditioner
- Chimney
- Retrofit Structural Post
- Sump Pit
- Wood Stove
- F
- OT
- CW
- CWT
- WH
- XT
- EP
- AC
- C
- P
- SP
- WS



2300 YONGE ST., SUITE 2300,
TORONTO, ON CANADA M4P 1E4

PHONE: 416.487.5256 FAX: 416.487.9766
www.wsp.com

UNAUTHORIZED USE IS PROHIBITED

7672 Elgin Mills Rd. East,
Markham

2nd Floor

Project No. 201-09746-00

Drawing No. N/A

wsp

Photos



Photo No. 1: South Elevation



Photo No. 2: Northwest Elevation



Photo No. 3: North Elevation and Garage



Photo No. 4: Attached Garage



Photo No. 5: Main Floor Structure



Photo No. 6: Additional Supports at East Side



Photo No. 7: Weak Joist with Support



Photo No. 8: Addition Attic



Photo No. 9: Original House Attic



Photo No. 10: Shingles



Photo No. 11: Furnace



Photo No. 12: DHW Heater and Expansion Tank



Photo No. 13: Oil Tank



Photo No. 14: Electrical Panel



Photo No. 15: Main Floor



Photo No. 16: Kitchen



Photo No. 17: Upstairs Bedroom

Scope Of Work

Authorization

This report was prepared at the request of Caiti McLelland of Parks Canada Agency as a capital plan for the property. WSP Canada Inc. prepared this report in accordance with the Standing Offer Agreement.

Mandate

The purpose of this report is to provide a general indication of the present physical condition of the building with respect to easily visible portions of the structure; enclosure; mechanical, electrical, and plumbing systems. Interior finishes, furniture, and tenant equipment, are specifically excluded from our mandate. We were to record deficiencies or conditions noted during a single visual walk-through review that, in our opinion, will likely require Capital expenditures by the Owner over the next 10 years. Capital expenditures are defined as expenditures that are expected to exceed an annual threshold of \$1,000, and are not normally associated with routine maintenance. Voluntary upgrades or improvements are excluded. Please refer to the Project Level Mandate and Limitations document for additional information.

Survey Method

WSP reviewed the building structure, envelope, portions of the interior, the site, and mechanical, electrical, and plumbing systems. The site visit was completed on December 10, 2020. Our field observer and primary report author was Brian Campbell, P.Eng. The report was reviewed by Adam Safadi, P.Eng.

The survey consisted of a visual review of all accessible portions of the house. Finishes and furnishings throughout limited our review. We reviewed the attics via a step-ladder. We observed the living room crawl space from a window in the basement wall so access was limited.

Mechanical and electrical systems were not operational. We did not access the interior of the furnace or remove the electrical panel cover. We did not operate windows.

We inspected the roof from ground. We did not mount to the main roof surface.

Information Provided

The house was vacant. No information was provided regarding the property history, performance of building systems and work previously performed. No drawings were available for review.

Respectfully submitted,
WSP Canada Inc.



Brian Campbell, P.Eng.
Project Manager



Gerard Gransaul, P.Eng.
Project Director

