



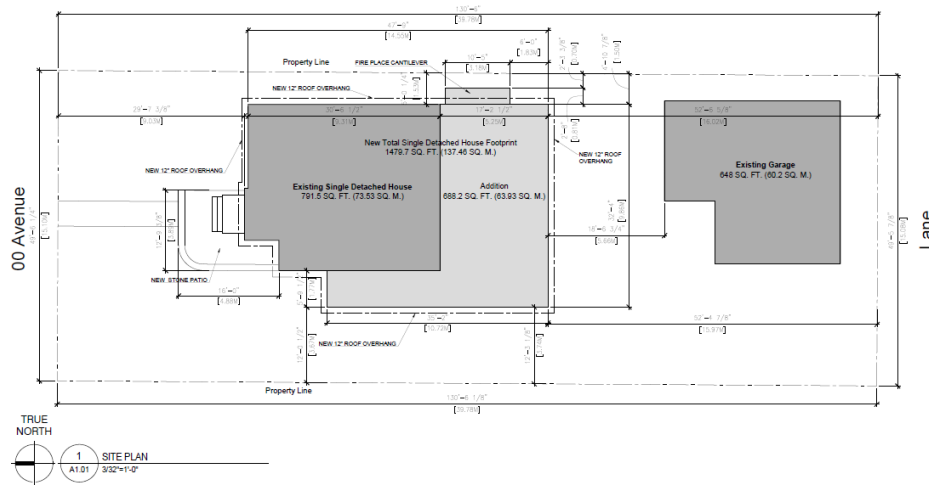
Sample Floor Plan and Elevation Drawings - Hand Drawn Addition - Home Improvement Permits



House Expansion and Additional Storey(s) additions require the drawings to include more information. Depending on the scope of the addition the drawings that are required will include Site Plan, Architectural Drawings (elevations, floor plans, sections) Engineered Designs, and any Energy Code requirements. Below is an example of architectural drawings. The dimensions can be in Meters or Feet/Inches, please use units consistently. For a full set of the sample drawings follow the link: [House Expansion and Additional Storey\(s\)](#)

Site Plan Checklist:

<ul style="list-style-type: none"> <input type="checkbox"/> Property address <input type="checkbox"/> Corresponding streets and avenues <input type="checkbox"/> North arrow <input type="checkbox"/> Caveats, Covenants and Easements 	<p>Property Measurements:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Front property line <input type="checkbox"/> Rear property line <input type="checkbox"/> Left side property line <input type="checkbox"/> Right Side property line
<p>Existing and Proposed Structure Measurements</p> <ul style="list-style-type: none"> <input type="checkbox"/> width <input type="checkbox"/> length 	<p>Existing and Proposed Structure Setbacks:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Left side setback <input type="checkbox"/> Right side setback <input type="checkbox"/> Rear setback <input type="checkbox"/> Front setback <input type="checkbox"/> Distance between proposed and existing structures



<p>Site Information: Address: 00000 - 00 AVENUE NW, Lot 00, Block 00, Plan 000 Neighborhood: Gambleau Ward: Papawest Ward Current Zone: Direct Development Control Provision (DC1) Overlays: Mature Neighbourhood Overlay Plan in Effect: Gambleau Area Redevelopment Plan</p>	<p>Site Analysis: Site Area: 599.654 m² Existing House Footprint: 791.5 SQ. FT. (73.53 SQ. M.) New Addition Footprint: 688.2 SQ. FT. (63.93 SQ. M.) New Total House Footprint: 1479.7 SQ. FT. (137.46 SQ. M.) Site Coverage House: 22.9% Existing Garage Footprint: 648 SQ. FT. (60.2 SQ. M.) Site Coverage Garage: 10% Allowable Building Height: 31' - 0" (9.45M) Existing Building Height: 25' - 0" (7.77M) Proposed Building Height: 25' - 11" (7.91M)</p>	<p>Setback Analysis: Site Depth: 39.73m Side Width: 15.08m Front Setback: Unchanged Min. Side Setback: 3m total Min. Rear Setback: 15.91m (40% of Site Depth) East Side Setback: 1.5m West Side Setback: 3.65m Total Side Setback: 5.18m Rear Setback: 15.97m</p>	<p>Cantilever Analysis: Min. Cantilever Setback: 0.6m Max. Cantilever Length (Wall Opening): 3.1m Cantilever Setback: 0.7m Cantilever Length (Wall Opening): 2.77m</p>
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SCALE: 1/8" = 1'-0"

DATE: 10/1/2024

DRAWN: [Name]

CHECKED: [Name]

REVISIONS AND APPROVALS

A1.01

Site Plan



Sample Floor Plan and Elevation Drawings - Hand Drawn Addition - Home Improvement Permits

Elevation Drawings Checklist:

Supply both existing and new elevation drawings showing the changes.

<ul style="list-style-type: none"><input type="checkbox"/> View(s) of the structure (existing and proposed)<input type="checkbox"/> Finishing materials	<p>Proposed Addition Measurements</p> <ul style="list-style-type: none"><input type="checkbox"/> Addition width<input type="checkbox"/> Addition length<input type="checkbox"/> Grade to top of finished floor<input type="checkbox"/> Top of finished floor to bottom of eaves<input type="checkbox"/> Bottom of eaves to roof ridge<input type="checkbox"/> Eave sizes
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Existing

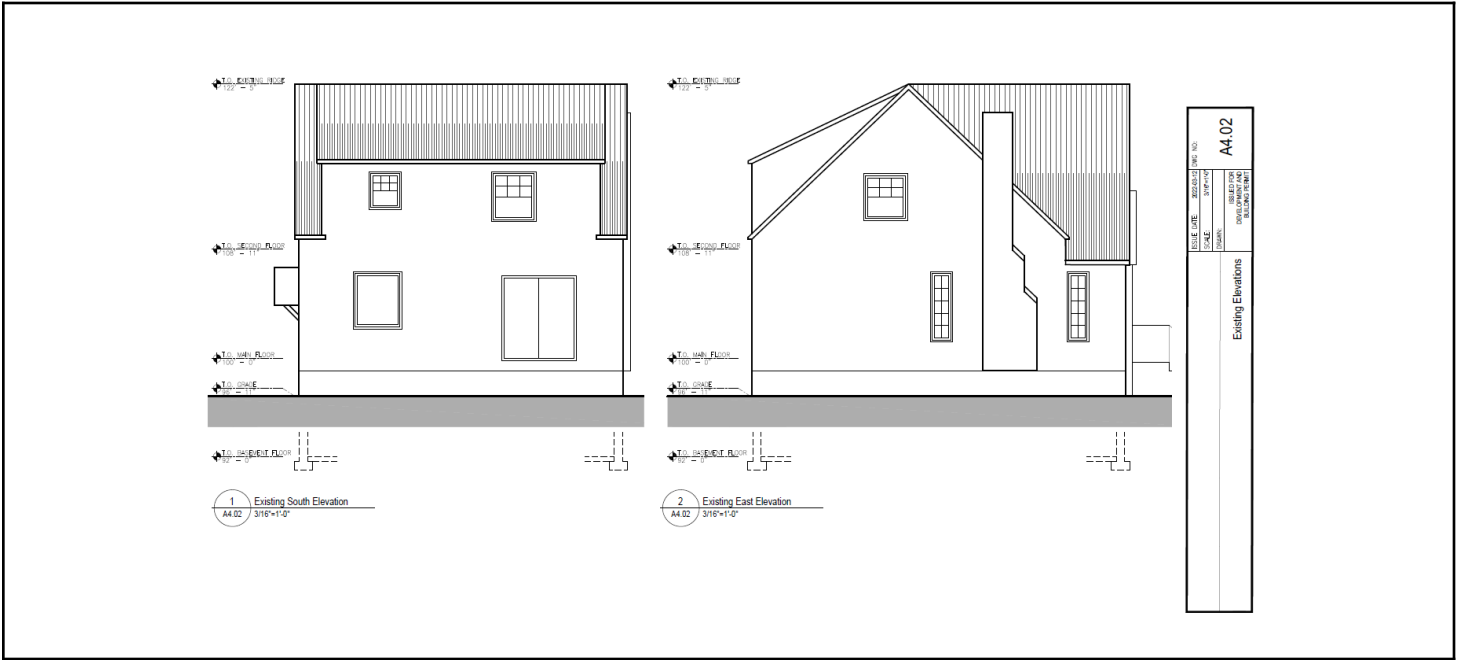
1 Existing North Elevation
A4.01 3/16"=1'-0"

2 Existing West Elevation
A4.01 3/16"=1'-0"

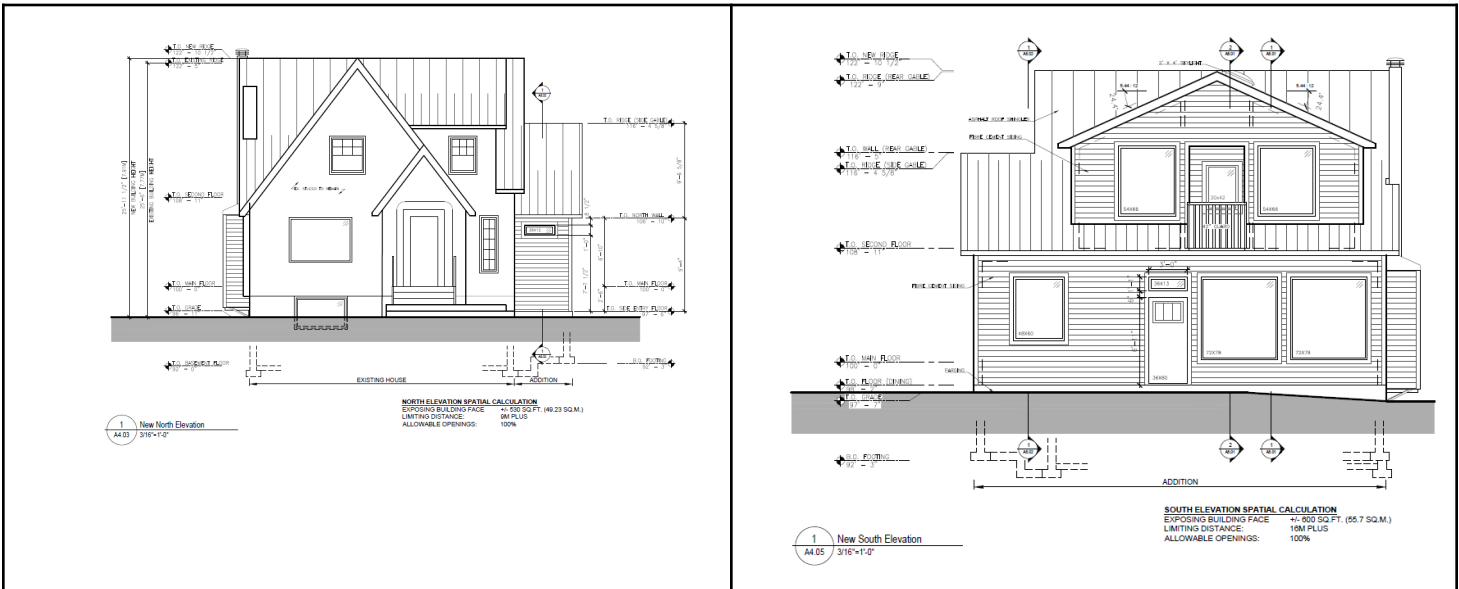
SCALE	DATE	REVISED FOR
3/16"=1'-0"	2016	ADDITIONAL WORK
A4.01		
Existing Elevations		



Sample Floor Plan and Elevation Drawings - Hand Drawn Addition - Home Improvement Permits

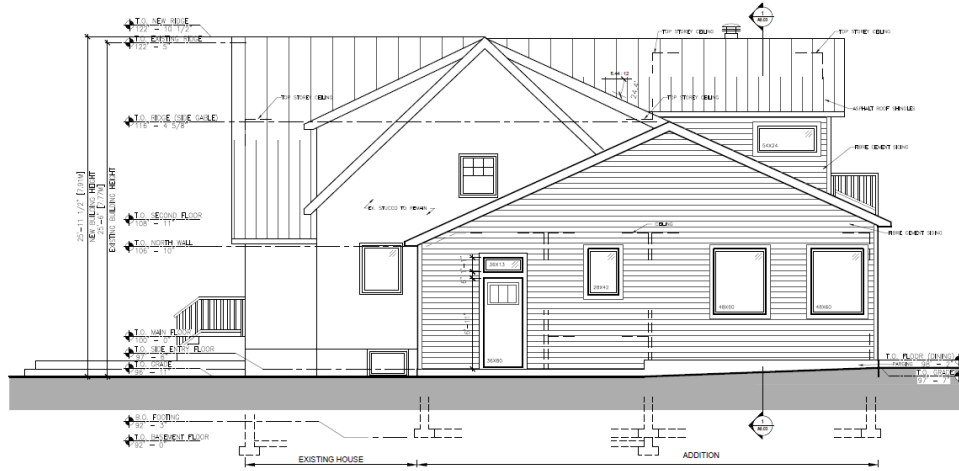


New Elevations





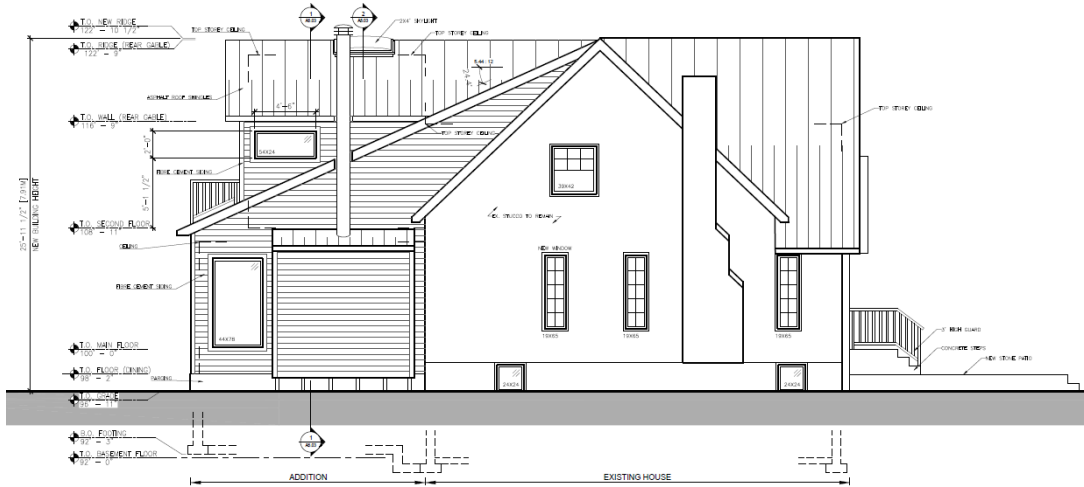
Sample Floor Plan and Elevation Drawings - Hand Drawn Addition - Home Improvement Permits



1 New West Elevation
A4.04 3/16"=1'-0"

WEST ELEVATION SPATIAL CALCULATION

EXPOSING BUILDING FACE	981.84 SQ.FT. (91.2 SQ.M.)
LIMITING DISTANCE	9.9M
ALLOWABLE OPENINGS:	18.2% = 150.03 SQ.FT. (14.77 SQ.M.)
BASEMENT WINDOW (EX.)	5.91 SQ.FT. (0.55 SQ.M.)
ENTRY (EX.)	10.45 SQ.FT. (0.97 SQ.M.)
DOOR (NEW)	4.00 SQ.FT. (0.37 SQ.M.)
ABOVE DOOR (NEW)	3.25 SQ.FT. (0.30 SQ.M.)
HALF BATH (NEW)	8.15 SQ.FT. (0.76 SQ.M.)
KITCHEN (NEW)	20.00 SQ.FT. (1.86 SQ.M.)
KITCHEN (NEW)	20.00 SQ.FT. (1.86 SQ.M.)
STAIR (EX.)	8.00 SQ.FT. (0.74 SQ.M.)
LAUNDRY (NEW)	9.00 SQ.FT. (0.83 SQ.M.)
TOTAL	88.77 SQ.FT. (8.24 SQ.M.)



1 New East Elevation
A4.05 3/16"=1'-0"

EAST ELEVATION SPATIAL CALCULATION

EXPOSING BUILDING FACE	976.44 SQ.FT. (90.7 SQ.M.)
LIMITING DISTANCE	1.0M
ALLOWABLE OPENINGS:	8% = 78.1 SQ.FT. (7.26 SQ.M.)
BASEMENT WINDOW (EX.)	4.00 SF (0.37 SQ.M.)
BASEMENT WINDOW (EX.)	4.00 SF (0.37 SQ.M.)
LIVING ROOM (EX.)	8.58 SF (0.80 SQ.M.)
LIVING ROOM (EX.)	8.58 SF (0.80 SQ.M.)
TV ROOM (NEW)	8.58 SF (0.80 SQ.M.)
DINING ROOM (NEW)	24.00 SF (2.22 SQ.M.)
BEDROOM (EX.)	11.38 SF (1.06 SQ.M.)
GYM/SITTING AREA (NEW)	9.0 SF (0.83 SQ.M.)
TOTAL	78.10 SF (7.26 SQ.M.)

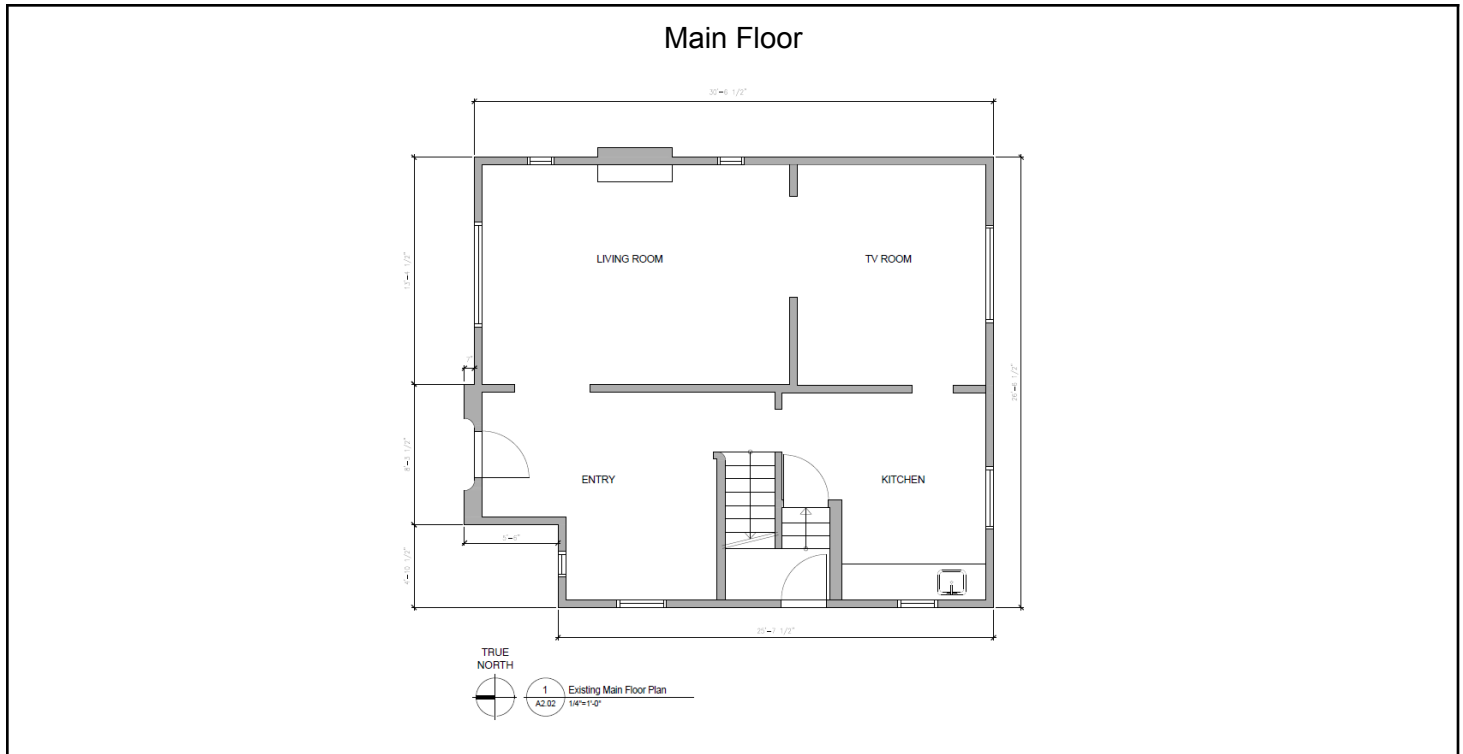


Floor Plan Checklist:

Existing floor layout (partial floor plan accepted)

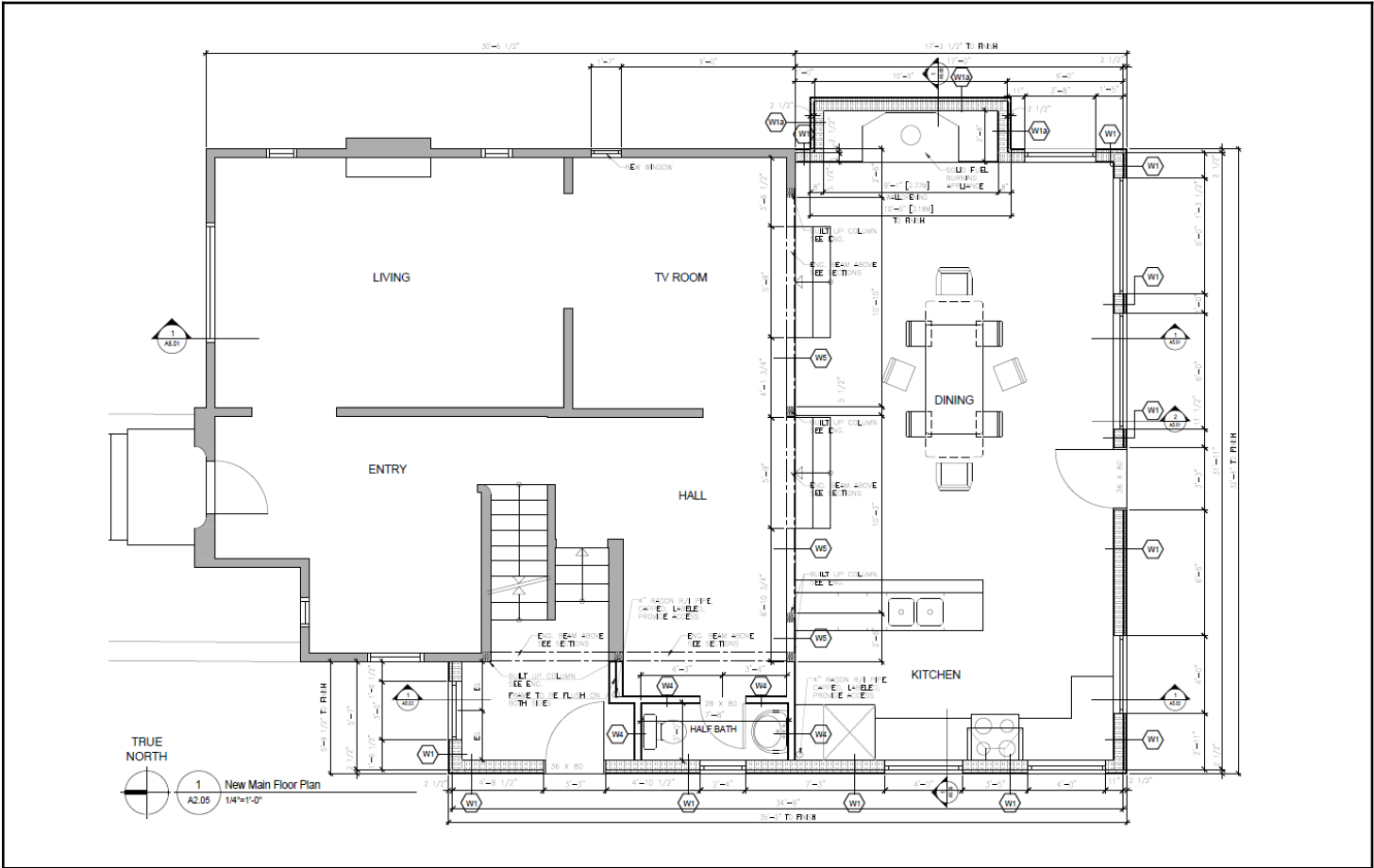
Proposed addition floor layout including exterior dimensions

Room labels





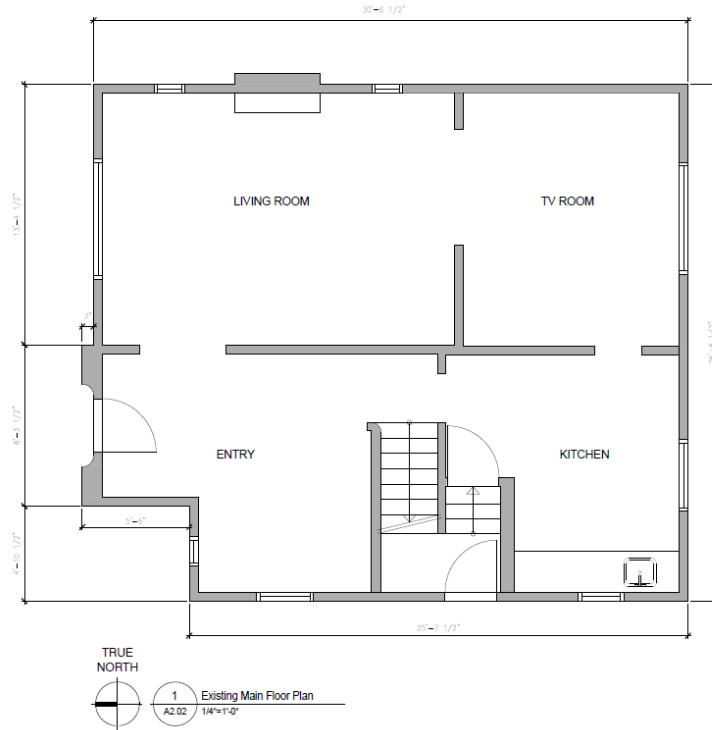
Sample Floor Plan and Elevation Drawings - Hand Drawn Addition - Home Improvement Permits

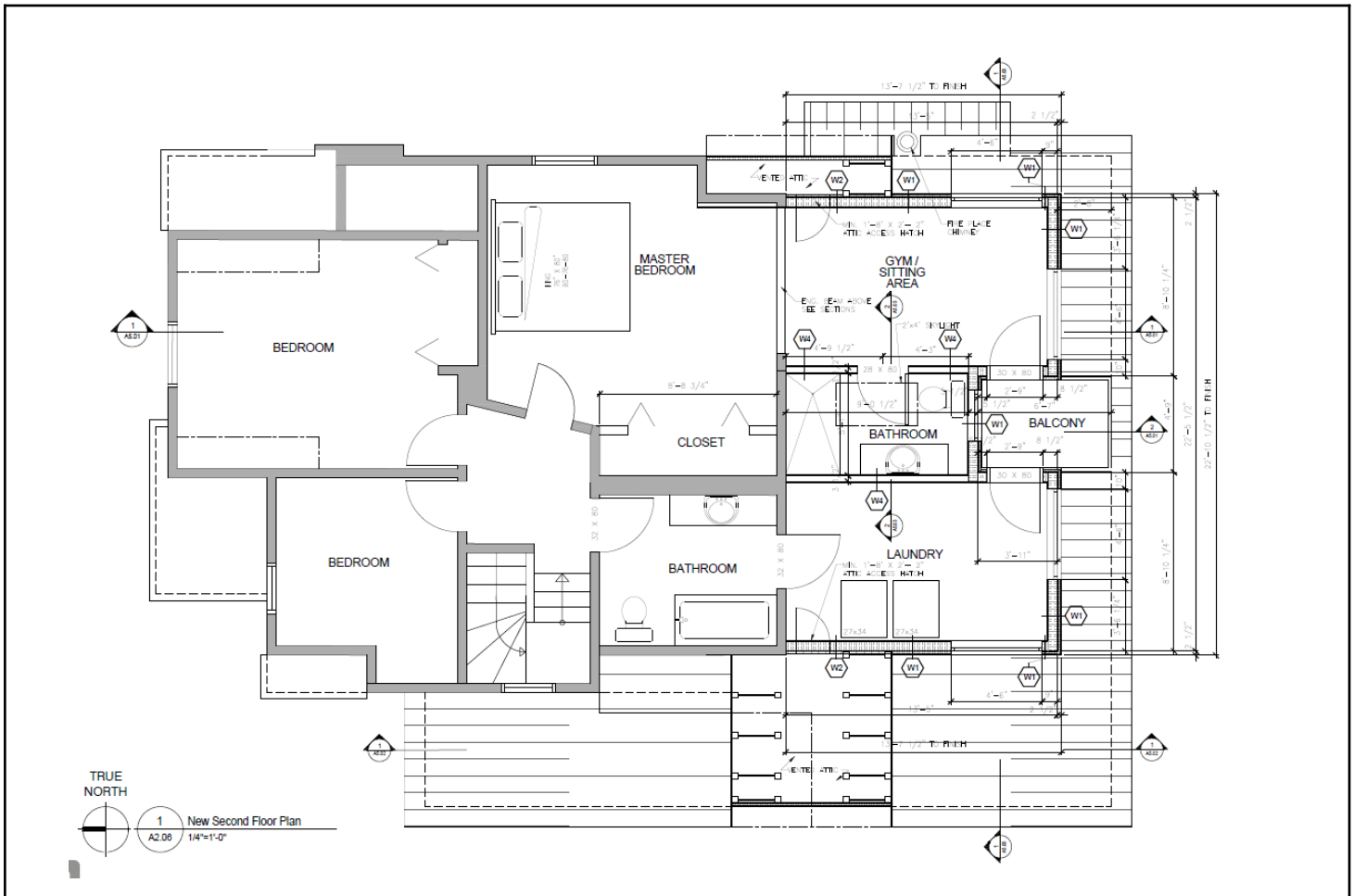


Second Floor



Sample Floor Plan and Elevation Drawings - Hand Drawn Addition - Home Improvement Permits





Section

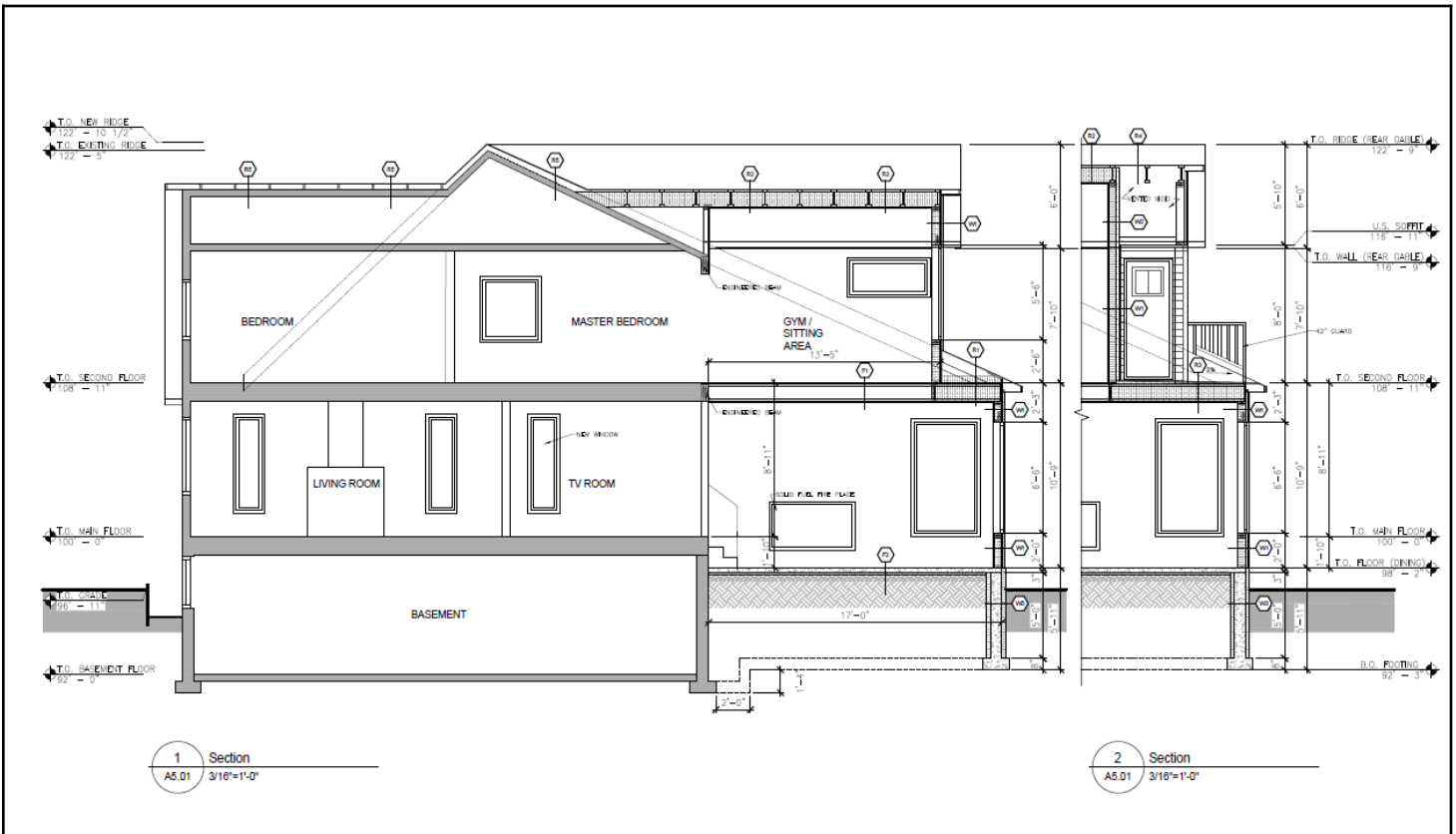
A Section is a view of a building that shows the structure sliced along an imaginary plane. They clarify building height, headroom heights, floor to floor heights, the building structure, etc. Details show more views of parts of the building.

Sections and details drawings must include:

- Sections through the highest roof structure and other locations as needed to clarify construction including headroom under roofs of half-storays
- Fully-labeled sections of all assemblies forming floors, walls, roofs, including assemblies corresponding to NBC(AE) 9.36 Clearly-defined position of air barrier on the assembly details



Sample Floor Plan and Elevation Drawings - Hand Drawn Addition - Home Improvement Permits

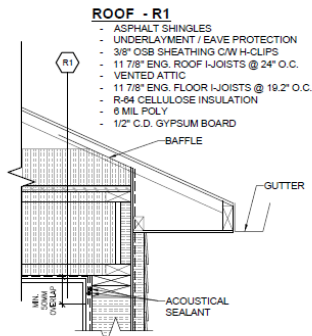


Energy Details

This shows the insulation efficiency of the property including the RSI calculations. Required for alterations if the original building permit was issued after October 31, 2016; National Building Code (Alberta Edition), Section 9.36 or NECB as applicable. See more in Energy Code Requirements

- Effective thermal resistance (ETR) calculations for all proposed above-ground AND below grade/in-ground-contact opaque assemblies, in Metric RSI. Ensure any unheated attached garage minimum required insulation is shown. Show source(s) used to generate the ETR values, such as
- NBC(AE) A-9.36.2;

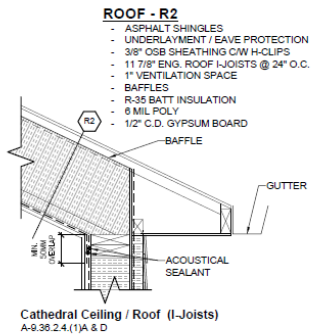
Sample Floor Plan and Elevation Drawings - Hand Drawn Addition - Home Improvement Permits



- ROOF - R1**
- ASPHALT SHINGLES
 - UNDERLAYMENT / EAVE PROTECTION
 - 3/8" OSB SHEATHING CW H-CLIPS
 - 11 7/8" ENG. ROOF I-JOISTS @ 24" O.C.
 - VENTED ATTIC
 - 11 7/8" ENG. FLOOR I-JOISTS @ 19.2" O.C.
 - R-4 CELLULOSE INSULATION
 - 6 MIL POLY
 - 1/2" C.D. GYPSUM BOARD

Ceiling Below Attic (I Joists)
A-9.36.2.4 (1)A & D

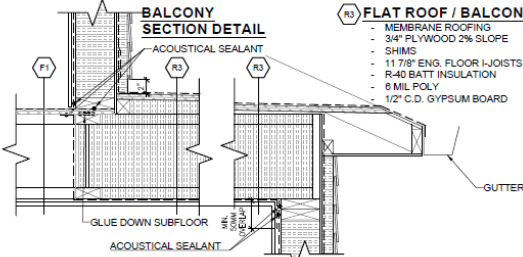
Required RSI (EFF): 10.43	RSI	Percentage	RSI (EFF)
Outside Air Film	0.03		0.03
0" (R22) Continuous Cellulose Insulation	3.81		6.58
I Joist @ 19.2" O.C.	2.56 RSI	7.5 %	0.08
R42 Cellulose Insulation	7.54 RSI	92.5 %	0.08
Poly	0.00		0.12
Gypsum Board	0.08		
Interior Air Film	0.12		
Total RSI			10.62



- ROOF - R2**
- ASPHALT SHINGLES
 - UNDERLAYMENT / EAVE PROTECTION
 - 3/8" OSB SHEATHING CW H-CLIPS
 - 11 7/8" ENG. ROOF I-JOISTS @ 24" O.C.
 - 1" VENTILATION SPACE
 - BAFFLES
 - R-35 BATT INSULATION
 - 6 MIL POLY
 - 1/2" C.D. GYPSUM BOARD

Cathedral Ceiling / Roof (I-Joists)
A-9.36.2.4 (1)A & D

Required RSI (EFF): 5.02	RSI	Percentage	RSI (EFF)
Outside Air Film	0.03		0.09
OSB Sheathing 3/8"	0.09		5.56
I-Joist Core	2.49 RSI	6 %	0.00
R35 Insulation	6.16 RSI	96 %	0.09
Poly	0.00		0.12
Gypsum Board	0.09		
Interior Air Film	0.12		
Total RSI			5.88

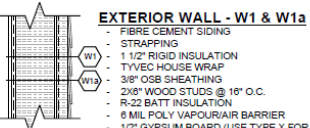


- BALCONY SECTION DETAIL**
- ASPHALT SHINGLES
 - UNDERLAYMENT / EAVE PROTECTION
 - 3/8" OSB SHEATHING CW H-CLIPS
 - 11 7/8" ENG. ROOF I-JOISTS @ 24" O.C.
 - 1" VENTILATION SPACE
 - BAFFLES
 - R-35 BATT INSULATION
 - 6 MIL POLY
 - 1/2" C.D. GYPSUM BOARD

Flat Roof / Balcony (I Joists)
A-9.36.2.4 (1)A & D

Required RSI (EFF): 5.02	RSI	Percentage	RSI (EFF)
Outside Air Film	0.03		0.00
Membrane Roofing	0.00		6.22
I Joist @ 19.2" O.C.	2.56 RSI	7.5 %	0.00
R40 Batt Insulation	7.04 RSI	92.5 %	0.08
Poly	0.00		0.12
Gypsum Board	0.08		
Interior Air Film	0.12		
Total RSI			6.45

- FLAT ROOF / BALCONY - R3**
- MEMBRANE ROOFING
 - 3/4" PLYWOOD 2% SLOPE
 - SHIMS
 - 11 7/8" ENG. FLOOR I-JOISTS @ 19.2" O.C.
 - R-40 BATT INSULATION
 - 6 MIL POLY
 - 1/2" C.D. GYPSUM BOARD

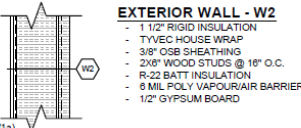


EXTERIOR WALL - W1 & W1a

- FIBRE CEMENT SIDING
- STRAPPING
- 1 1/2" RIGID INSULATION
- TYVEC HOUSE WRAP
- 3/8" OSB SHEATHING
- 2x6" WOOD STUDS @ 16" O.C.
- R-22 BATT INSULATION
- 6 MIL POLY VAPOUR/AIR BARRIER
- 1/2" GYPSUM BOARD (USE TYPE X FOR W1a)

Exterior Wall @16" O.C.
A-9.36.2.4 (1)D, A-9.36.2.6 (1)A

Required RSI (EFF): 3.08	RSI	Percentage	RSI (EFF)
Outside Air Film	0.03		0.03
Fibre Cement Siding 8mm	0.03		0.95
Strapping	0.32 RSI	10.00%	0.00
1 1/2" Rigid Insulation	1.05 RSI	90.00%	0.09
Sheathing paper	0.00		0.00
3/8" OSB Sheathing	0.09		2.55
2x6" @ 16" & R22 Batt Insulation	2.55		0.00
Poly	0.00		0.08
Gypsum Board	0.08		0.12
Interior Air Film	0.12		
Total RSI			3.75

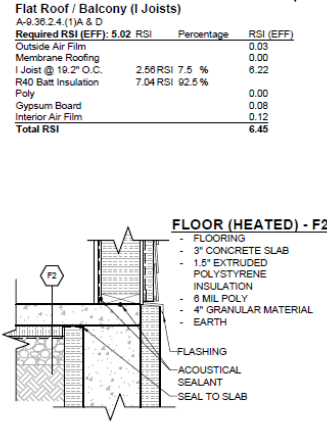


EXTERIOR WALL - W2

- 1 1/2" RIGID INSULATION
- TYVEC HOUSE WRAP
- 3/8" OSB SHEATHING
- 2x6" WOOD STUDS @ 16" O.C.
- R-22 BATT INSULATION
- 6 MIL POLY VAPOUR/AIR BARRIER
- 1/2" GYPSUM BOARD

Wall to Attic @16" O.C.
A-9.36.2.4 (1)D, A-9.36.2.6 (1)A

Required RSI (EFF): 3.08	RSI	Percentage	RSI (EFF)
Outside Air Film	0.03		1.05
1 1/2" Continuous Rigid Insulation	1.05		0.00
Sheathing paper	0.00		0.09
3/8" OSB Sheathing	0.09		2.55
2x6" @ 16" & R22 Batt Insulation	2.55		0.00
Poly	0.00		0.08
Gypsum Board	0.08		0.12
Interior Air Film	0.12		
Total RSI			3.92



FLOOR (HEATED) - F2

- FLOORING
- 3" CONCRETE SLAB
- 1.6" EXTRUDED POLYSTYRENE INSULATION
- 6 MIL POLY
- 4" GRANULAR MATERIAL
- EARTH

Slab on Ground (Heated) Above Frost Line
STANDAT 19-BCV-005

Required RSI EFF: 1.33	RSI (EFF)
Interior Air Film	0.16
Concrete Slab 3"	0.03
Extruded Polystyrene 1.5"	1.33
Total RSI	1.36

- FOUNDATION WALL - W3**
- PAGING ABOVE GROUND
 - 2.34" ICF INSULATION
 - 8" CONCRETE
 - 2.34" ICF INSULATION
 - EARTH

- INTERIOR WALL - W4**
- 1/2" GYPSUM BOARD
 - 2x4" @ 16" O.C.
 - 1/2" GYPSUM BOARD

- INTERIOR WALL - W5**
- 1/2" GYPSUM BOARD
 - 2x8" @ 16" O.C.
 - 1/2" GYPSUM BOARD

- SECOND FLOOR - F1**
- FLOORING
 - 3/4" OSB SUBFLOOR
 - 11 7/8" ENGINEERED FLOOR JOISTS @ 19.2" O.C.
 - 1/2" GYPSUM BOARD

- HALF BATH FLOOR - F3**
- FLOORING
 - 3/4" OSB SUBFLOOR
 - 11 7/8" ENGINEERED FLOOR JOISTS @ 19.2" O.C.
 - SUPPORTED ON KNEE WALL
 - CRACK SPACE
 - 3" CONCRETE SLAB
 - 1.5" EXTRUDED POLYSTYRENE INSULATION
 - 6 MIL POLY
 - 4" GRANULAR MATERIAL
 - EARTH

- ROOF OVER BALCONY - R4**
- ASPHALT SHINGLES
 - UNDERLAYMENT / EAVE PROTECTION
 - 3/8" OSB SHEATHING CW H-CLIPS
 - 11 7/8" ENG. ROOF I-JOISTS @ 24" O.C.
 - VENTED VOID

For a full set of the sample drawings follow the link: [House Expansion and Additional Storey\(s\)](#)