GENERAL NOTES

GENERAL NOTES
ALL MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO THE CURRENT EDITION OF THE BRITISH COLUMBIA BUILDING CODE (BCBC), GOOD CONSTRUCTION PRACTICE, AS WELL AS ANY OTHER LOCAL BUILDING CODES OR BYLAWS WHICH MAY TAKE PRECEDENCE

ALL MEASUREMENTS TO BE VERIFIED ON SITE BY BUILDER PRIOR TO CONSTRUCTION. COMMENCEMENT OF CONSTRUCTION OR ANY PART THEREOF CONSTITUTES ACCEPTANCE OF THE DRAWINGS/SITE CONDITIONS AND MEANS DIMENSIONS & ELEVATIONS HAVE BEEN VERIFIED & ARE ACCEPTABLE

IF ANY DISCREPANCIES ARISE, THEY SHOULD BE REPORTED TO THE DESIGNER

DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALE

FRAMING LUMBER SHALL BE GRADED #2 OR BETTER UNLESS OTHERWISE SPECIFIED

ALL INTERIOR FINISHES, CASINGS, WINDOW TYPES AND MILLWORK TO OWNERS APPROVAL

STAIR TREADS TO BE PLYWOOD OR OTHER ENGINEERED PRODUCT AND SECURED WITH SCREWS AND SUB-FLOOR ADHESIVE

TEMPORARY HEAT REQUIRED PRIOR TO DRYWALL INSTALLATION TO ASSIST IN DRYING OF FRAMEWORK. MOISTURE CONTENT OF FRAMEWORK MUST NOT EXCEED 19%

SITE PLAN
LAYOUT TO BE CONFIRMED BY A CURRENTLY REGISTERED BRITISH COLUMBIA LEGAL LAND SURVEYOR

ALL SET BACKS TO BE CONFIRMED BY THE OWNER AND BUILDER

ALL GRADE ELEVATIONS ARE THE RESPONSIBILITY OF THE OWNER AND BUILDER

VERIFY EXISTING AND PROPOSED GRADES PRIOR TO CONSTRUCTION

FOUNDATION
THE BUILDER IS RESPONSIBLE FOR LOCATING THE FOOT PRINT OF THE STRUCTURE IN THE PROPER PLACE AS PER PLANS

CONCRETE FOUNDATION WALLS NOT SUBJECT TO SURCHARGE SHALL BE INSTALLED ON COMPACTED, UNDISTURBED, INORGANIC STABLE SOILS BELOW THE DEPTH OF FROST PENETRATION WITH AN ALLOWABLE BEARING PRESSURE OF 75 kPa OR GREATER. IF SOFTER CONDITIONS APPLY, THE BEARING CAPACITY AND SIZE OF FOOTINGS ARE TO BE DESIGNED BY A QUALIFIED ENGINEER

THE SILL PLATE IS TO BE FASTENED TO THE FOUNDATION WALL WITH NOT LESS THAN 12.7mm Ø ANCHOR BOLTS SPACED NOT MORE THAN 2.4m O.C. OR FOR BRACED WALL PANELS 2 15mm Ø ANCHOR BOLTS PER BRACED WALL PANEL 500mm FROM THE ENDS OF THE FOUNDATION AND SPACED 1.7m O.C. EMBEDDED 100mm DEEP

ALL LUMBER IN CONTACT WITH CONCRETE SHALL BE TREATED OR PROTECTED BY A MOISTURE RESISTANT GASKET

IT IS THE RESPONSIBILITY OF THE OWNER/CONTRACTOR TO HAVE SITE SOIL CONDITIONS INSPECTED AND ADVISE THE DESIGNER OF ANY SOIL CONDITIONS WHICH MAY REQUIRE ENGINEERING

ALL FOUNDATION WALLS ARE 200mm THICK 20MPa CONCRETE UNLESS OTHERWISE SPECIFIED

FOUNDATION WALLS MAY BE A MAXIMUM OF 4' HIGH FROM GRADE TO UNDERSIDE OF FLOOR IF LATERALLY UNSUPPORTED AT TOP. ALL OTHER CONCRETE FOUNDATION WALLS TO BE ENGINEERED

FRAMING
ALL ENGINEERED COMPONENTS TO BE SIZED BY SUPPLIER

ALL SPANS AND LOADINGS SHALL CONFORM TO THE CURRENT VERSION OF THE BCBC. VERIFICATION OF ALL COMPONENTS IS THE RESPONSIBILITY OF THE OWNER/BUILDER. ANY COMPONENTS WHICH CANNOT BE DESIGNED WITH THE BCBC SHALL BE DESIGNED BY A QUALIFIED ENGINEER

TRUSSES AND LAYOUT ARE TO BE ENGINEERED AND INSTALLED ACCORDING TO MANUFACTURERS SPECIFICATIONS

IT IS ASSUMED THAT THE CONTRACTOR IS FAMILIAR WITH THE 2018 BCBC AND INDUSTRY STANDARDS FOR WOOD FRAME CONSTRUCTION. NOT EVERY DETAIL OF WOOD FRAMING IS SHOWN ON THESE DRAWINGS

ALL LINTELS DOUBLE 2X10 S.S. SPF FOR CLEAR SPANS UP TO 5' UNLESS OTHERWISE NOTED

EXTERIOR WALL THICKNESS SHOWN ARE MEASURED FROM OUTSIDE OF EXTERIOR SHEATHING TO INSIDE OF DRYWALL

INTERIOR WALL THICKNESS SHOWN ARE MEASURED FROM OUTSIDE OF DRYWALL TO OUTSIDE OF DRYWALL

ROOM MEASUREMENTS SHOWN ARE TO THE NEAREST INCH. DIMENSIONS SHOWN ARE TO THE NEAREST 1/4"

CONFIRM ALL VANITY'S, BATHTUBS, SHOWERS AND KITCHEN CUPBOARDS WITH OWNER PRIOR TO FRAMING AS THESE MAY REQUIRE MODIFICATIONS TO THE ROOM SIZES

TYPICAL DOOR AND WINDOW HEADER HEIGHT"
8' CEILINGS: 6'8"
9' CEILINGS: 7'0"
10' CEILINGS: VARIES

ROOFING
ALL ROOFING SHALL BE APPLIED TO THE MANUFACTURERS SPECIFICATIONS AND SHALL INCLUDE EAVE PROTECTION FROM ICE DAMMING AND SNOW BUILD UP

PLUMBING AND ELECTRICAL
ANY PLUMBING AND ELECTRICAL SHOWN ON THESE PLANS IS FOR ILLUSTRATIONAL PURPOSES ONLY AND MUST BE DESIGNED AND INSTALLED BY A QUALIFIED PROFESSIONAL

FLASHING
ALL PENETRATIONS THROUGH THE ROOF WILL REQUIRE FLASHING.

ALL ROOFING TO INCLUDE STEP FLASHING.

ALL EXPOSED OPENINGS TO INCLUDE FLASHING

ALL FLASHING END DAMS TO BE 25mm (1") HIGH

DOORS
FRAME OPENING TO BE 1 ½" WIDER THAN DOOR
FRAME HEIGHT 83" FOR EXTERIOR DOORS AND 82.5" FOR INTERIOR DOORS.
FRAME OPENING 1½" WIDER THAN BIFOLD DOORS AND FRAME HEIGHT IS 81.5"
ALL INTERIOR DOORS TO BE 30" WIDE UNLESS OTHERWISE SPECIFIED

FENESTRATION
ALL WINDOWS, DOORS & SKYLIGHTS TO CONFORM TO NAFS-08 AND THE CANADIAN SUPPLEMENT TO NAFS

FENESTRATION PERFORMANCE REQUIREMENTS:
CLASS R - PG 30 - +YE/-YE DP = 1440Pa/1440Pa - WATER PENETRATION RESISTANCE = 260Pa - CANADIAN AIR INFILTRATION/EXFILTRATION = A2

WINDOW/DOOR LABELS TO BE LEFT IN PLACE UNTIL FINAL INSPECTION

SUPPLY AND INSTALL ALL WINDOW TYPES, INTERIOR CASINGS AND MILLWORK TO OWNERS APPROVAL

ALL WINDOWS ADJACENT TO BATH TUBS TO BE SAFETY GLASS

GUARDS/HANDRAILS
INSTALL GRASPABLE HANDRAIL TO ALL INTERIOR STAIRS AT 34" TO 38" ABOVE STAIR NOSING

INSTALL GUARDS AT ALL BALCONIES, DECKS AND PORCHES GREATER THAN 2' ABOVE GRADE .
INSTALL GUARD AT 42" HEIGHT WHERE SURFACE IS GREATER THAN 6' ABOVE ADJACENT SURFACE, OTHERWISE 36" GUARDRAIL ALLOWABLE

TOPLESS GLASS GUARDS TO BE ENGINEERED WITH SEALED DRAWINGS

VENTILATION
PROVIDE ATTIC AND CRAWLSPACE ACCESS AND VENTILATION IN ACCORDANCE WITH BCBC

PROVIDE HEATING, MECHANICAL VENTILATION, AND AIR CONDITIONING WHERE REQUIRED IN ACCORDANCE WITH BCBC AND LOCAL BYLAWS

MECHANICAL CONTRACTOR TO PROVIDE MECHANICAL CHECKLIST COMPLETE WITH FAN & DUCT SIZES PRIOR TO FRAMING INSPECTION

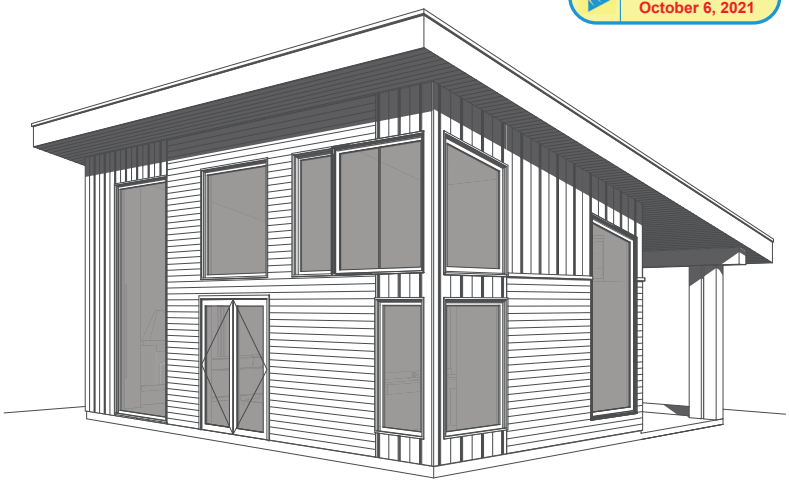
MISC:
SMOKE/CARBON MONOXIDE ALARMS TO BE PROVIDED ON EVERY FLOOR AND ARE TO BE HARDWIRED AND WITHIN 5m OF EACH BEDROOM IN EVERY SUITE AND INTERCONNECTED TO ALL FLOORS. SMOKE ALARMS TO ALSO BE PROVIDED IN EVERY BEDROOM. ALL SMOKE ALARM LOCATIONS WILL HAVE BOTH PHOTOELECTRIC AND IONIC DETECTION SYSTEMS

BEDROOM WINDOWS FOR EGRESS SHALL HAVE OPENINGS WITH AREAS NOT LESS THAN 3.81ft² WITH NO DIMENSION LESS THAN 15"

IT IS THE RESPONSIBILITY OF THE CONTRACTOR AND/OR OWNER TO CHECK AND VERIFY ALL ASPECTS OF THESE PLANS PRIOR TO START OF CONSTRUCTION OR DEMOLITION.
ADAPT DESIGN DOES NOT ACCEPT RESPONSIBILITY FOR THE FOLLOWING:
-INFORMATION PROVIDED ON EXISTING BUILDINGS OR SITE
-CONFORMITY OF PLANS TO SITE
-ERRORS AND/OR OMISSIONS
-ANY HOUSE BUILT FROM THESE PLANS
THESE PLANS REMAIN THE PROPERTY OF ADAPT DESIGN AND CAN BE RECLAIMED AT ANY TIME

COMMENCEMENT OF CONSTRUCTION OR DEMOLITION MEANS THAT YOU HEREBY EXPRESSLY WAIVE AND RELEASE ANY AND ALL CLAIMS WHICH HAVE OR MAY IN FUTURE HAVE, AGAINST ADAPT DESIGN, AND ITS OFFICERS, DIRECTORS, EMPLOYEES, AGENTS, REPRESENTATIVES, AFFILIATES, SHAREHOLDERS, SUCCESSORS, AND ASSIGNS (COLLECTIVELY, "RELEASEES"), ON ACCOUNT OF ERRORS OR OMISSIONS ON THE DRAWINGS WHICH MAY RESULT IN CONSEQUENTIAL LOSS, INJURY, DAMAGE INCLUDING BUT NOT LIMITED TO LOSS OF PROFITS AND LOSS OF MARKETS. I COVENANT NOT TO MAKE OR BRING ANY SUCH CLAIM, INCLUDING CLAIMS OF NEGLIGENCE, AGAINST ADAPT DESIGN OR ANY OTHER RELEASEE, AND FOREVER RELEASE AND DISCHARGE ADAPT DESIGN AND ALL OTHER RELEASEES FROM LIABILITY UNDER SUCH CLAIMS.

PROJECT:
NEW GARDEN SUITE



PERSPECTIVE VIEW
NOT TO SCALE

CITY OF VICTORIA
Revisions
Received Date: October 6, 2021

	Issued
COVER SHEET & GENERAL INFO	
A-001 COVER SHEET	☐
A-002 SITE PLAN	☐
PLANS	
A-101 FOUNDATION, MAIN FLOOR AND ROOF PLAN	☐
ELEVATIONS	
A-201 ELEVATIONS	☐
SECTIONS	
A-301 CROSS SECTION	☐
DETAILS	
A-401 DETAILS	☐

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COVER SHEET

A-001

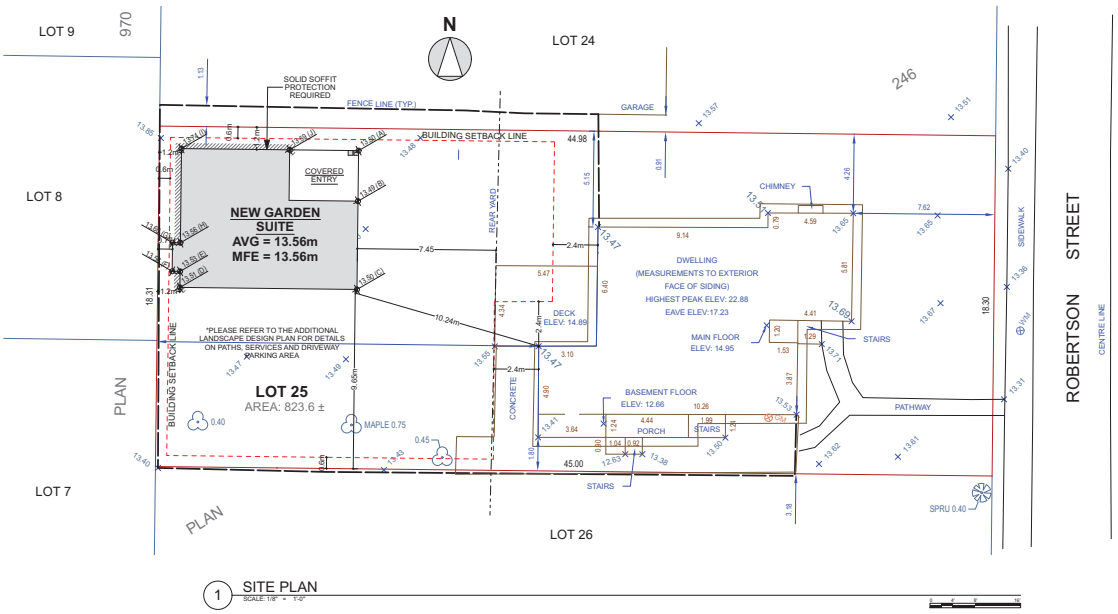
Printed: 2021-10-05

GRADE POINTS
A = 13.50m
B = 13.49m
C = 13.50m
D = 13.51m
E = 13.53m
F = 13.56m
G = 13.60m
H = 13.56m
I = 13.74m
J = 13.59m

GRADE POINTS	AVERAGE OF POINTS		DISTANCE BETWEEN GRADE POINTS		TOTALS
Points A&B	((13.50+13.49) / 2)	x	2.72m	=	36.71
Points B&C	((13.49+13.50) / 2)	x	4.75m	=	64.10
Points C&D	((13.50+13.51) / 2)	x	9.53m	=	128.70
Points D&E	((13.51+13.53) / 2)	x	0.86m	=	11.63
Points E&F	((13.53+13.56) / 2)	x	0.43m	=	5.82
Points F&G	((13.56+13.60) / 2)	x	1.54m	=	20.91
Points G&H	((13.60+13.56) / 2)	x	0.43m	=	5.84
Points H&I	((13.56+13.74) / 2)	x	5.07m	=	69.21
Points I&J	((13.74+13.59) / 2)	x	5.82m	=	79.53
Points J&K	((13.59+13.50) / 2)	x	3.71m	=	50.25
					472.70

PERIMITER OF BUILDING = 34.86m

GRADE CALCULATION: 472.70 / 34.86 = 13.56



1 SITE PLAN
SCALE: 1/8" = 1'-0"

Property Information

Project Type: New Garden Suite

Owners: Erika Lange

Site Address: 224 Robertson Street

Legal: Lot 25 Plan VIP246 Section 19 Land District 57 PID: 009-183-191

Zoning: R1-G

	Zoning	Proposed
Setbacks:		
Rear	0.6m	1.2m
Side	0.6m	1.2m/9.34m
House	2.4m	7.45m
Height:		
Roof Height	4.2m	4.18m
# of Storeys	1.5	1
Floor Area:		
Main	56m^2	55.6 m^2
Lot Coverage		
Lot Area		823.6 m^2
Rear Yard Area		354.2 m^2
House Area		141 m^2
Garden Suite Area		71.72 m^2
Lot Coverage	30%	25.8%
Rear Yard Lot Cov.	25%	20.2%
Open Site Space	50%	60.9%
Main Floor Elevation		13.56m
Average Grade		13.56m

Applicable Codes

-BC Building Code Current Edition (2018)

Energy

Compliance path: BCBC 9.36
Requirements applicable to this project: Step Code 3

Ventilation

BCBC 9.32

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224 ROBERTSON GARDEN SUITE

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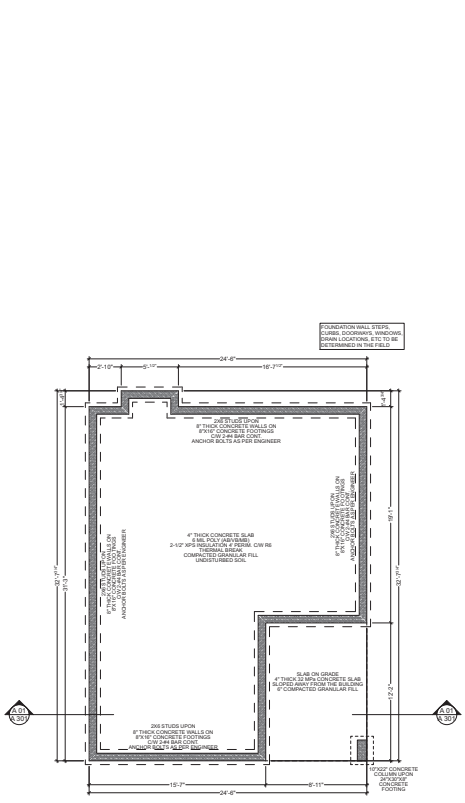
ISSUED:

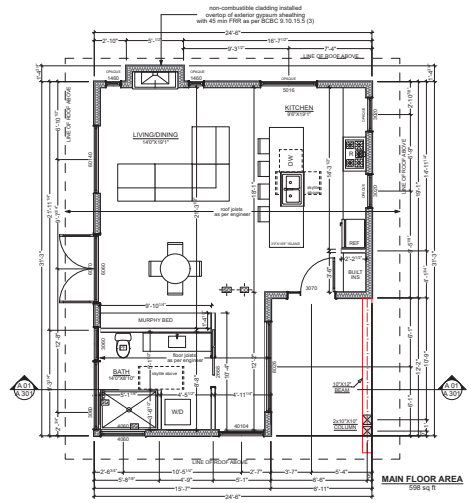
SITE PLAN

A-002

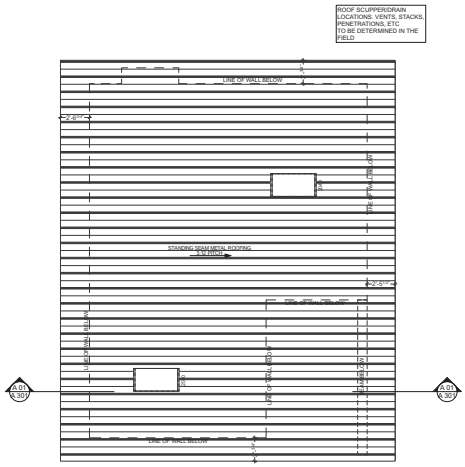
Printed: 2021-10-05



1 FOUNDATION PLAN
SCALE: 1/4" = 1'-0"



2 MAIN FLOOR PLAN
SCALE: 1/4" = 1'-0"



3 ROOF PLAN
SCALE: 1/4" = 1'-0"

PLAN LEGEND

- 2X4 PARTITION WALL
- 2X6 PARTITION WALL
- 2X6 GARAGE WALL
- 2X6 EXTERIOR WALL
- FOUNDATION WALL
- FOUNDATION AND FROST WALL
- COLUMN
- BEAM
- FLOOR DRAIN
- DIMENSION PLACEMENT

ROOM SIZES ARE INTERIOR DIMENSIONS WIDTH X DEPTH

- HARDWIRED INTERCONNECTED CO DETECTOR
- HARDWIRED INTERCONNECTED IONIC SMOKE DETECTOR
- HARDWIRED PHOTOELECTRIC SMOKE DETECTOR
- BATH FAN: VENTILATION RATE 25 L/S INTERMITTENT
- KITCHEN FAN: VENTILATION RATE 47 L/S INTERMITTENT
- CONTINUOUS PRINCIPAL EXHAUST FAN: VENTILATION RATE AS PER T9.32.3.4 - 9.32.3.5
- F FRESH AIR SUPPLY P PASSIVE AIR INLET

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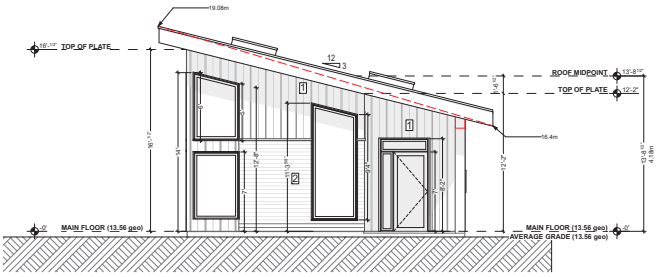
FOUNDATION, MAIN FLOOR AND ROOF PLAN

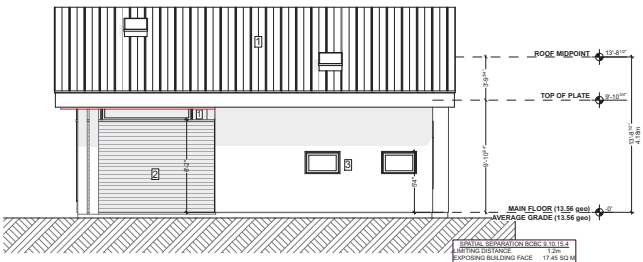
A-101

Printed: 2021-10-05



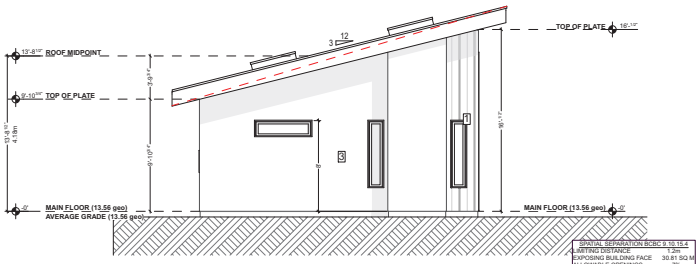
SPATIAL SEPARATION BCBC 9.10.15.4	
LIMITING DISTANCE	10.24m (HOUSE)
EXPOSING BUILDING FACE	30.81 SQ M
ALLOWABLE OPENINGS	100%

1 EAST ELEVATION
SCALE: 1/4" = 1'-0"



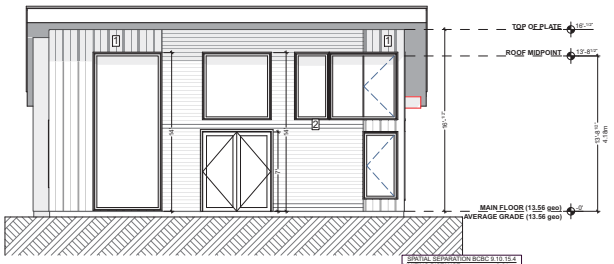
SPATIAL SEPARATION BCBC 9.10.15.4	
LIMITING DISTANCE	1.2m
EXPOSING BUILDING FACE	17.45 SQ M
ALLOWABLE OPENINGS	7%
PROPOSED AREA	0.68 SQ M
PROPOSED OPENINGS	3.9%

2 NORTH ELEVATION
SCALE: 1/4" = 1'-0"



SPATIAL SEPARATION BCBC 9.10.15.4	
LIMITING DISTANCE	1.2m
EXPOSING BUILDING FACE	30.81 SQ M
ALLOWABLE OPENINGS	7%
PROPOSED AREA	2.1 SQ M
PROPOSED OPENINGS	6.8%

3 WEST ELEVATION
SCALE: 1/4" = 1'-0"



SPATIAL SEPARATION BCBC 9.10.15.4	
LIMITING DISTANCE	9.84m
EXPOSING BUILDING FACE	49.0 SQ M
ALLOWABLE OPENINGS	100%

4 SOUTH ELEVATION
SCALE: 1/4" = 1'-0"

EXTERIOR CLADDING LEGEND

1 STANDING SEAM METAL ROOFING
2 TONGUE & GROOVE CEDER STAINED
3 HARDIE PANEL W/EZ TRIM

ADDITIONAL EXTERIOR FINISHINGS

GUTTERS	5" CONTINUOUS ALUMINUM (PREFINISHED)
FASCIA	SOFFIT VENTED ALUMINUM (PREFINISHED)
SOFFIT	VENTED ALUMINUM (PREFINISHED)
FASCIA	2X10 COMB FACED SPF (PAINTED)
WINDOW FRAME	SLIDING VINYL (PREFINISHED)
WINDOW TRIM	SHEET METAL REVEALS (PREFINISHED)
DOOR TRIM	SHEET METAL REVEALS (PREFINISHED)

NOTE:
WINDOW OPERATION SHALL BE AS PER OWNERS DIRECTION AND CONFORM TO BCBC EGRESS REQUIREMENTS. CONTRACTOR TO VERIFY ALL R.O. PRIOR TO ORDERING WDWS

FLASH OVER ALL MATERIAL TRANSITIONS, DOOR AND WINDOW HEADERS

ALL COLORS AS PER OWNER

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224 ROBERTSON GARDEN SUITE

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ISSUED:

ELEVATIONS

A-201

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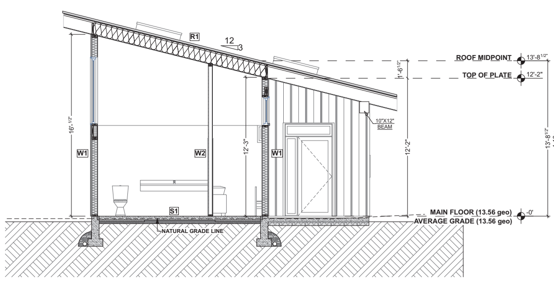
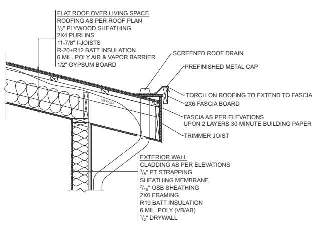


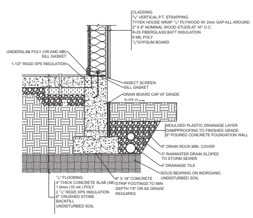
1 CROSS SECTION

SCALE: 1/4" = 1'-0"

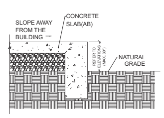
0 2' 4' 8'



- ROOF EAVE



- SLAB ON GRADE



- PATIO TURN DOWN

BCBC 9.36 PRESCRIPTIVE PATH CLIMATE ZONE 4

ASSEMBLY DESCRIPTION	EFF. RSI
TRUSS CEILING	6.91 RSI
CATHEDRAL CEILING & FLAT ROOF	4.67 RSI
EXTERIOR WALLS	2.78 RSI
FLOORS OVER GARAGE/UNHEATED SPACE	4.51 RSI
WALL @ GARAGE	2.62 RSI
HEATED CONCRETE SLABS	2.32 RSI
CONCRETE SLABS	1.96 RSI
FOUNDATION WALL BELOW GRADE	1.99 RSI

EXTERIOR WALL EFFECTIVE THERMAL RESISTANCE

INTERIOR AIR FILM	0.12 RSI
GYPSUM BOARD	0.08 RSI
2X6 STUD	1.19 RSI
7/16" OSB SHEATHING	0.11 RSI
AIR SPACE	0.15 RSI
WOOD SIDING	0.18 RSI
OUTSIDE AIR FILM	0.03 RSI
TOTAL EFF. R VALUE =	1.86 RSI @ 23% WALL AREA
INTERIOR AIR FILM	0.12 RSI
GYPSUM BOARD	0.08 RSI
R20 INSULATION	3.52 RSI
7/16" OSB SHEATHING	0.11 RSI
AIR SPACE	0.15 RSI
WOOD SIDING	0.18 RSI
OUTSIDE AIR FILM	0.03 RSI
TOTAL EFF. R VALUE =	4.19 RSI @ 77% WALL AREA

EFFECTIVE THERMAL RESISTANCE = 3.27 RSI
REQUIRED EFECTIVE THERMAL RESISTANCE = 2.78 RSI

VAULTED CEILING EFFECTIVE THERMAL RESISTANCE

INTERIOR AIR FILM	0.11 RSI
GYPSUM BOARD	0.08 RSI
2X10 RAFTERS	2.0 RSI
EXTERIOR AIR FILM	0.03 RSI
TOTAL EFF. R VALUE =	2.22 RSI @ 13% CEILING
INTERIOR AIR FILM	0.11 RSI
GYPSUM BOARD	0.08 RSI
R20 BATT INSULATION	3.52 RSI
R12 BATT INSULATION	2.11 RSI
OUTSIDE AIR FILM	0.03 RSI
TOTAL EFF. R VALUE =	5.85 RSI @ 87% CEILING

EFF. THERMAL RESISTANCE = 4.82 RSI
REQUIRED EFF. THERMAL RESISTANCE = 4.67 RSI

TRUSS ROOF EFFECTIVE THERMAL RESISTANCE

INTERIOR AIR FILM	0.11 RSI
GYPSUM BOARD	0.08 RSI
3-1/2" BOTTOM CHORD	0.76 RSI
OUTSIDE AIR FILM	0.03 RSI
TOTAL EFF. R VALUE @ 11% =	0.98 RSI
INTERIOR AIR FILM	0.11 RSI
GYPSUM BOARD	0.08 RSI
3-1/2" BLOWN INSULATION	1.67 RSI
OUTSIDE AIR FILM	0.03 RSI
TOTAL EFF. R VALUE @ 89% =	1.89 RSI

EFFECTIVE THERMAL INSULATION @ CAVITY = 1.71 RSI
12" BLOWN FG ABOVE FRAMING = 5.63 RSI

TOTAL EFF. THERMAL RESISTANCE = 7.34 RSI

REQUIRED EFF. THERMAL RESISTANCE = 6.91 RSI

FLOOR OVER UNHEATED SPACE EFFECTIVE THERMAL RESISTANCE

INTERIOR AIR FILM	0.11 RSI
FLOORING	0.12 RSI
3/4" SHEATHING	0.16 RSI
2X1O JOISTS	2.0 RSI
EXTERIOR AIR FILM	0.03 RSI
WOOD SOFFIT	0.12 RSI
TOTAL EFF. R VALUE =	2.54 RSI @ 13% FLOOR AREA
INTERIOR AIR FILM	0.11 RSI
FLOORING	0.12 RSI
3/4" SHEATHING	0.16 RSI
R28 BATT INSULATION	4.93 RSI
EXTERIOR AIR FILM	0.03 RSI
WOOD SOFFIT	0.12 RSI
TOTAL EFF. R VALUE =	5.47 RSI @ 87% FLOOR AREA

EFF. THERMAL RESISTANCE = 4.75 RSI
REQUIRED EFF. THERMAL RESISTANCE = 4.67 RSI

FLOORS OVER GARAGE EFFECTIVE THERMAL RESISTANCE

INTERIOR AIR FILM	0.16 RSI
WOOD FLOORING	0.12 RSI
SUB FLOOR	O.16 RSI
R28 INSULATION	4.93 RSI
GYPSUM BOARD	0.08 RSI
INTERIOR AIR FILM	0.11 RSI
TOTAL EFF. R VALUE =	5.56 RSI @ 87%
INTERIOR AIR FILM	0.16 RSI
WOOD FLOORING	0.12 RSI
SUB FLOOR	0.16 RSI
2X10 FLOOR JOISTS	1.99 RSI
GYPSUM BOARD	0.08 RSI
INTERIOR AIR FILM	0.03 RSI
TOTAL EFF. R VALUE =	2.46 RSI @ 13%

EFF. THERMAL RESISTANCE = 4.77 RSI
REQUIRED EFF. THERMAL RESISTANCE = 4.51 RSI

EXTERIOR WALL EFFECTIVE THERMAL RESISTANCE

INTERIOR AIR FILM	0.12 RSI
GYPSUM BOARD	0.08 RSI
2X6 STUD	1.19 RSI
7/16" OSB SHEATHING	0.11 RSI
AIR SPACE	0.15 RSI
WOOD SIDING	0.18 RSI
OUTSIDE AIR FILM	0.03 RSI
TOTAL EFF. R VALUE =	1.86 RSI @ 23% WALL AREA
INTERIOR AIR FILM	0.12 RSI
GYPSUM BOARD	0.08 RSI
R20 INSULATION	3.52 RSI
7/16" OSB SHEATHING	0.11 RSI
AIR SPACE	0.15 RSI
WOOD SIDING	0.18 RSI
OUTSIDE AIR FILM	0.03 RSI
TOTAL EFF. R VALUE =	4.19 RSI @ 77% WALL AREA

EFFECTIVE THERMAL RESISTANCE = 3.27 RSI
REQUIRED EFECTIVE THERMAL RESISTANCE = 2.79 RSI

WALL @ GARAGE EFFECTIVE THERMAL RESISTANCE

INTERIOR AIR FILM	0.12 RSI
GYPSUM BOARD	0.08 RSI
POLYETHYLENE	NIL
2X6 STUD	1.19 RSI
GYPSUM BOARD	0.08 RSI
INTERIOR AIR FILM	0.12 RSI
TOTAL EFF. R VALUE =	1.59 RSI @ 23% WALL AREA
INTERIOR AIR FILM	0.12 RSI
GYPSUM BOARD	0.08 RSI
POLYETHYLENE	NIL
R20 INSULATION	3.52 RSI
GYPSUM BOARD	0.08 RSI
INTERIOR AIR FILM	0.12 RSI
TOTAL EFF. R VALUE =	3.92 RSI @ 77% WALL AREA

EFFECTIVE THERMAL RESISTANCE = 2.93 RSI
REQUIRED EFECTIVE THERMAL RESISTANCE = 2.62 RSI

BASEMENT SLAB ABOVE FROST LINE EFFECTIVE THERMAL RESISTANCE

INTERIOR AIR FILM (FLOOR)	0.16 RSI
CONCRETE SLAB	0.04 RSI
RADIANT IN FLOOR HEATING	N/A
2-1/2" XPS	2.15 RSI

EFF. THERMAL INSULATION = 2.35 RSI (R13.3)
REQUIRED EFF. THERMAL INSULATION = 1.96 RSI (R13.2)

BASEMENT HEATED FLOOR EFFECTIVE THERMAL RESISTANCE

INTERIOR AIR FILM (FLOOR)	0.16 RSI
CONCRETE SLAB	0.04 RSI
RADIANT IN FLOOR HEATING	N/A
2-1/2" XPS	2.15 RSI

EFF. THERMAL RESISTANCE = 2.35 RSI
REQUIRED EFF. THERMAL RESISTANCE = 2.32 RSI

THERMAL BREAK BETWEEN SLAB AND FOUNDATION WALL EFFECTIVE INSULATION

1-1/2" XPS	1.32 RSI

50% REQUIRED HEATED CONCRETE SLAB 2.35 RSI X 50% = 1.18 RSI REQUIRED

EFF. THERMAL INSULATION = 1.32 RSI
REQUIRED EFF. THERMAL INSULATION = 1.18 RSI

CRAWLSPACE FOUNDATION WALLS EFFECTIVE INSULATION

INTERIOR AIR FILM (FLOOR)	0.16 RSI
R12 FOIL BACK INSULATION	0.04 RSI
8" THICK CONCRETE WALL	2.11 RSI

EFF. THERMAL RESISTANCE = 2.31 RSI
REQUIRED EFF. THERMAL RESISTANCE = 1.99 RSI

FOUNDATION WALL BELOW GRADE INTERIOR FURRING WALL

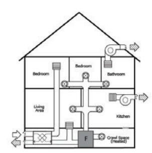
200mm CONCRETE	0.08 RSI
1/2" AIR SPACE	0.16 RSI
2X4 @ 24" OC FRAMING (13%)	0.76 RSI
R12 FG BATTS (87%)	2.11 RSI
1/2" GYPSUM BOARD	0.08 RSI
INTERIOR AIR FILM	0.12 RSI

ACTUAL EFF. THERMAL INSULATION = 2.22 RSI
REQUIRED EFF. THERMAL INSULATION MIN. = 1.99 RSI

FOUNDATION WALL BELOW GRADE EXTERIOR INSULATION

200mm CONCRETE	0.08 RSI
2-1/2" XPS CONTINUOUS INSULATION	2.15 RSI
INTERIOR AIR FILM	0.12 RSI

ACTUAL EFF. THERMAL RESISTANCE = 2.35 RSI
REQUIRED EFF. THERMAL RESISTANCE MIN. = 1.99 RSI



BCBC 9.32 MECHANICAL VENTILATION REQUIREMENTS FORCED AIR HEATING SYSTEM W/ HRV

HRV DRAWS SUPPLY AIR FROM EXTERIOR INTO THE RETURN AIR PLENUM OF FURNACE

HRV DRAWS EXHAUST AIR THROUGH DEDICATED DUCTING, ONE OF WHICH IS MIN. 2M ABOVE THE FLOOR OF THE UPPERMOST LEVEL

THE CAPACITY OF THE HRV IS TO BE NO LESS THAN THE AIR FLOW RATE AS PER BCBC T9.32.3.5

PRINCIPAL EXHAUST FAN AS SHOWN ON PLANS

CONTRACTOR TO SUPPLY BUILDING OFFICIAL WITH MECHANICAL VENTILATION CHECKLIST ON OR PRIOR TO FRAMING INSPECTION

MECHANICAL VENTILATION REQUIREMENTS PRINCIPAL DWELLING

ROOF TYPES

R1 - JOIST ROOF
METAL ROOFING
1/2" PLYWOOD C/W H CLIPS
2X4 CROSS PURLINS
JOISTS AS PER ENGINEER
R28 FG BATT INSULATION
6 MIL. POLY (AB/VB)
1/2" GYPSUM BOARD PAINTED
ROOF VENTED 1:150

SLAB TYPES

S1 - FLOOR SLAB
4" THICK CONCRETE SLAB
6 MIL. POLY.
2-1/2" XPS RIGID INSULATION 4' PERIMETER
2" THERMAL BREAK @ SLAB EDGE
COMPACTED 3/4" MINUS
UNDISTURBED SOIL

WALL TYPES

W1 - EXTERIOR WALL
CLADDING AS PER ELEVATIONS
3/8" P.T. STRAPPING FASTENED TO FRAMING
TYVEK HOUSE WRAP (MB)
7/16" OSB SHEATHING OR AS PER ENGINEER
2"X6" STUDS @ 16" O.C.
R-19 (COMPRESSED) BATT INSULATION
6 MIL POLY. (AB/VB)
1/2" GYPSUM BOARD PAINTED

W2 - INTERIOR WALL
1/2" GYPSUM BOARD PAINTED
2X4 STUDS @ 16" OC
1/2" GYPSUM BOARD PAINTED

ADAPT DESIGN

1500 Shorncliffe Road Victoria BC Canada
250.893.8127
www.adaptdesign.ca

224 ROBERTSON GARDEN SUITE

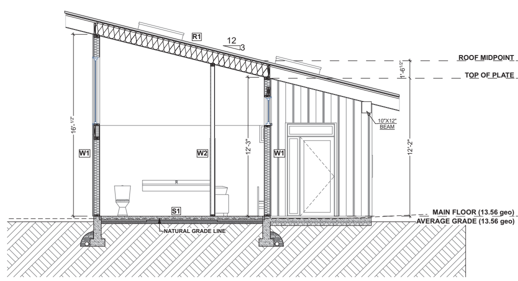
ISSUED FOR PERMIT

ISSUED:

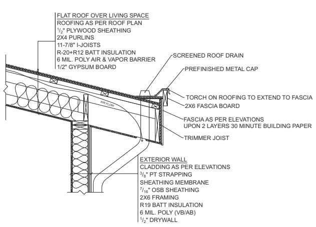
CROSS SECTION

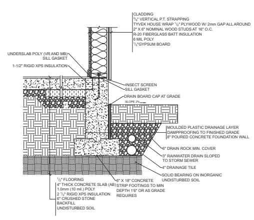
A-301

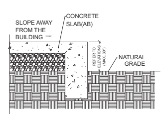
Printed: 2021-10-05



1 CROSS SECTION
SCALE: 1/4" = 1'-0"







- ROOF EAVE

- SLAB ON GRADE

- PATIO TURN DOWN

BCBC 9.36
PRESCRIPTIVE PATH
CLIMATE ZONE 4

ASSEMBLY DESCRIPTION	EFF. RSI
TRUSS CEILING	6.91 RSI
CATHEDRAL CEILING & FLAT ROOF	4.67 RSI
EXTERIOR WALLS	2.78 RSI
FLOORS OVER GARAGE/UNHEATED SPACE	4.51 RSI
WALL @ GARAGE	2.62 RSI
HEATED CONCRETE SLABS	2.32 RSI
CONCRETE SLABS	1.96 RSI
FOUNDATION WALL BELOW GRADE	1.99 RSI

EXTERIOR WALL EFFECTIVE THERMAL RESISTANCE

INTERIOR AIR FILM	0.12 RSI
GYPSUM BOARD	0.08 RSI
2X6 STUD	1.19 RSI
7/16" OSB SHEATHING	0.11 RSI
AIR SPACE	0.15 RSI
WOOD SIDING	0.18 RSI
OUTSIDE AIR FILM	0.03 RSI
TOTAL EFF. R VALUE =	1.86 RSI @ 23% WALL AREA
INTERIOR AIR FILM	0.12 RSI
GYPSUM BOARD	0.08 RSI
R20 INSULATION	3.52 RSI
7/16" OSB SHEATHING	0.11 RSI
AIR SPACE	0.15 RSI
WOOD SIDING	0.18 RSI
OUTSIDE AIR FILM	0.03 RSI
TOTAL EFF. R VALUE =	4.19 RSI @ 77% WALL AREA

EFFECTIVE THERMAL RESISTANCE = 3.27 RSI
REQUIRED EFECTIVE THERMAL RESISTANCE = 2.78 RSI

VAULTED CEILING EFFECTIVE THERMAL RESISTANCE

INTERIOR AIR FILM	0.11 RSI
GYPSUM BOARD	0.08 RSI
2X10 RAFTERS	2.0 RSI
EXTERIOR AIR FILM	0.03 RSI
TOTAL EFF. R VALUE =	2.22 RSI @ 13% CEILING
INTERIOR AIR FILM	0.11 RSI
GYPSUM BOARD	0.08 RSI
R20 BATT INSULATION	3.52 RSI
R12 BATT INSULATION	2.11 RSI
OUTSIDE AIR FILM	0.03 RSI
TOTAL EFF. R VALUE =	5.85 RSI @ 87% CEILING

EFF. THERMAL RESISTANCE = 4.82 RSI
REQUIRED EFF. THERMAL RESISTANCE = 4.67 RSI

TRUSS ROOF EFFECTIVE THERMAL RESISTANCE

INTERIOR AIR FILM	0.11 RSI
GYPSUM BOARD	0.08 RSI
3-1/2" BOTTOM CHORD	0.76 RSI
OUTSIDE AIR FILM	0.03 RSI
TOTAL EFF. R VALUE @ 11% =	0.98 RSI
INTERIOR AIR FILM	0.11 RSI
GYPSUM BOARD	0.08 RSI
3-1/2" BLOWN INSULATION	1.67 RSI
OUTSIDE AIR FILM	0.03 RSI
TOTAL EFF. R VALUE @ 89% =	1.89 RSI

EFFECTIVE THERMAL INSULATION @ CAVITY = 1.71 RSI
12" BLOWN FG ABOVE FRAMING = 5.63 RSI

TOTAL EFF. THERMAL RESISTANCE = 7.34 RSI

REQUIRED EFF. THERMAL RESISTANCE = 6.91 RSI

FLOOR OVER UNHEATED SPACE EFFECTIVE THERMAL RESISTANCE

INTERIOR AIR FILM	0.11 RSI
FLOORING	0.12 RSI
3/4" SHEATHING	0.16 RSI
2X1O JOISTS	2.0 RSI
EXTERIOR AIR FILM	0.03 RSI
WOOD SOFFIT	0.12 RSI
TOTAL EFF. R VALUE =	2.54 RSI @ 13% FLOOR AREA
INTERIOR AIR FILM	0.11 RSI
FLOORING	0.12 RSI
3/4" SHEATHING	0.16 RSI
R28 BATT INSULATION	4.93 RSI
EXTERIOR AIR FILM	0.03 RSI
WOOD SOFFIT	0.12 RSI
TOTAL EFF. R VALUE =	5.47 RSI @ 87% FLOOR AREA

EFF. THERMAL RESISTANCE = 4.75 RSI
REQUIRED EFF. THERMAL RESISTANCE = 4.67 RSI

FLOORS OVER GARAGE EFFECTIVE THERMAL RESISTANCE

INTERIOR AIR FILM	0.16 RSI
WOOD FLOORING	0.12 RSI
SUB FLOOR	O.16 RSI
R28 INSULATION	4.93 RSI
GYPSUM BOARD	0.08 RSI
INTERIOR AIR FILM	0.11 RSI
TOTAL EFF. R VALUE =	5.56 RSI @ 87%
INTERIOR AIR FILM	0.16 RSI
WOOD FLOORING	0.12 RSI
SUB FLOOR	0.16 RSI
2X10 FLOOR JOISTS	1.99 RSI
GYPSUM BOARD	0.08 RSI
INTERIOR AIR FILM	0.03 RSI
TOTAL EFF. R VALUE =	2.46 RSI @ 13%

EFF. THERMAL RESISTANCE = 4.77 RSI
REQUIRED EFF. THERMAL RESISTANCE = 4.51 RSI

EXTERIOR WALL EFFECTIVE THERMAL RESISTANCE

INTERIOR AIR FILM	0.12 RSI
GYPSUM BOARD	0.08 RSI
2X6 STUD	1.19 RSI
7/16" OSB SHEATHING	0.11 RSI
AIR SPACE	0.15 RSI
WOOD SIDING	0.18 RSI
OUTSIDE AIR FILM	0.03 RSI
TOTAL EFF. R VALUE =	1.86 RSI @ 23% WALL AREA
INTERIOR AIR FILM	0.12 RSI
GYPSUM BOARD	0.08 RSI
R20 INSULATION	3.52 RSI
7/16" OSB SHEATHING	0.11 RSI
AIR SPACE	0.15 RSI
WOOD SIDING	0.18 RSI
OUTSIDE AIR FILM	0.03 RSI
TOTAL EFF. R VALUE =	4.19 RSI @ 77% WALL AREA

EFFECTIVE THERMAL RESISTANCE = 3.27 RSI
REQUIRED EFECTIVE THERMAL RESISTANCE = 2.79 RSI

WALL @ GARAGE EFFECTIVE THERMAL RESISTANCE

INTERIOR AIR FILM	0.12 RSI
GYPSUM BOARD	0.08 RSI
POLYETHYLENE	NIL
2X6 STUD	1.19 RSI
GYPSUM BOARD	0.08 RSI
INTERIOR AIR FILM	0.12 RSI
TOTAL EFF. R VALUE =	1.59 RSI @ 23% WALL AREA
INTERIOR AIR FILM	0.12 RSI
GYPSUM BOARD	0.08 RSI
POLYETHYLENE	NIL
R20 INSULATION	3.52 RSI
GYPSUM BOARD	0.08 RSI
INTERIOR AIR FILM	0.12 RSI
TOTAL EFF. R VALUE =	3.92 RSI @ 77% WALL AREA

EFFECTIVE THERMAL RESISTANCE = 2.93 RSI
REQUIRED EFECTIVE THERMAL RESISTANCE = 2.62 RSI

BASEMENT SLAB ABOVE FROST LINE EFFECTIVE THERMAL RESISTANCE

INTERIOR AIR FILM (FLOOR)	0.16 RSI
CONCRETE SLAB	0.04 RSI
RADIANT IN FLOOR HEATING	N/A
2-1/2" XPS	2.15 RSI

EFF. THERMAL INSULATION = 2.35 RSI (R13.3)
REQUIRED EFF. THERMAL INSULATION = 1.96 RSI (R13.2)

BASEMENT HEATED FLOOR EFFECTIVE THERMAL RESISTANCE

INTERIOR AIR FILM (FLOOR)	0.16 RSI
CONCRETE SLAB	0.04 RSI
RADIANT IN FLOOR HEATING	N/A
2-1/2" XPS	2.15 RSI

EFF. THERMAL RESISTANCE = 2.35 RSI
REQUIRED EFF. THERMAL RESISTANCE = 2.32 RSI

THERMAL BREAK BETWEEN SLAB AND FOUNDATION WALL EFFECTIVE INSULATION

1-1/2" XPS	1.32 RSI

50% REQUIRED HEATED CONCRETE SLAB 2.35 RSI X 50% = 1.18 RSI REQUIRED

EFF. THERMAL INSULATION = 1.32 RSI
REQUIRED EFF. THERMAL INSULATION = 1.18 RSI

CRAWLSPACE FOUNDATION WALLS EFFECTIVE INSULATION

INTERIOR AIR FILM (FLOOR)	0.16 RSI
R12 FOIL BACK INSULATION	0.04 RSI
8" THICK CONCRETE WALL	2.11 RSI

EFF. THERMAL RESISTANCE = 2.31 RSI
REQUIRED EFF. THERMAL RESISTANCE = 1.99 RSI

FOUNDATION WALL BELOW GRADE INTERIOR FURRING WALL

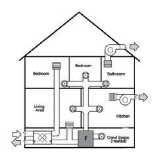
200mm CONCRETE	0.08 RSI
1/2" AIR SPACE	0.16 RSI
2X4 @ 24" OC FRAMING (13%)	0.76 RSI
R12 FG BATTS (87%)	2.11 RSI
1/2" GYPSUM BOARD	0.08 RSI
INTERIOR AIR FILM	0.12 RSI

ACTUAL EFF. THERMAL INSULATION = 2.22 RSI
REQUIRED EFF. THERMAL INSULATION MIN. = 1.99 RSI

FOUNDATION WALL BELOW GRADE EXTERIOR INSULATION

200mm CONCRETE	0.08 RSI
2-1/2" XPS CONTINUOUS INSULATION	2.15 RSI
INTERIOR AIR FILM	0.12 RSI

ACTUAL EFF. THERMAL RESISTANCE = 2.35 RSI
REQUIRED EFF. THERMAL RESISTANCE MIN. = 1.99 RSI



BCBC 9.32 MECHANICAL VENTILATION REQUIREMENTS
FORCED AIR HEATING SYSTEM W/ HRV

HRV DRAWS SUPPLY AIR FROM EXTERIOR INTO THE RETURN AIR PLENUM OF FURNACE

HRV DRAWS EXHAUST AIR THROUGH DEDICATED DUCTING, ONE OF WHICH IS MIN. 2M ABOVE THE FLOOR OF THE UPPERMOST LEVEL

THE CAPACITY OF THE HRV IS TO BE NO LESS THAN THE AIR FLOW RATE AS PER BCBC T9.32.3.5

PRINCIPAL EXHAUST FAN AS SHOWN ON PLANS

CONTRACTOR TO SUPPLY BUILDING OFFICIAL WITH MECHANICAL VENTILATION CHECKLIST ON OR PRIOR TO FRAMING INSPECTION

MECHANICAL VENTILATION REQUIREMENTS PRINCIPAL DWELLING

ROOF TYPES
R1 - JOIST ROOF
METAL ROOFING
1/2" PLYWOOD C/W H CLIPS
2X4 CROSS PURLINS
JOISTS AS PER ENGINEER
R28 FG BATT INSULATION
6 MIL. POLY (AB/VB)
1/2" GYPSUM BOARD PAINTED
ROOF VENTED 1:150

SLAB TYPES
S1 - FLOOR SLAB
4" THICK CONCRETE SLAB
6 MIL. POLY.
2-1/2" XPS RIGID INSULATION 4' PERIMETER
2" THERMAL BREAK @ SLAB EDGE
COMPACTED 3/4" MINUS
UNDISTURBED SOIL

WALL TYPES
W1 - EXTERIOR WALL
CLADDING AS PER ELEVATIONS
3/8" P.T. STRAPPING FASTENED TO FRAMING
TYVEK HOUSE WRAP (MB)
7/16" OSB SHEATHING OR AS PER ENGINEER
2"X6" STUDS @ 16" O.C.
R-19 (COMPRESSED) BATT INSULATION
6 MIL POLY. (AB/VB)
1/2" GYPSUM BOARD PAINTED

W2 - INTERIOR WALL
1/2" GYPSUM BOARD PAINTED
2X4 STUDS @ 16" OC
1/2" GYPSUM BOARD PAINTED

ADAPT DESIGN

1500 Shorncliffe Road Victoria BC Canada
250.893.8127
www.adaptdesign.ca

224 ROBERTSON GARDEN SUITE

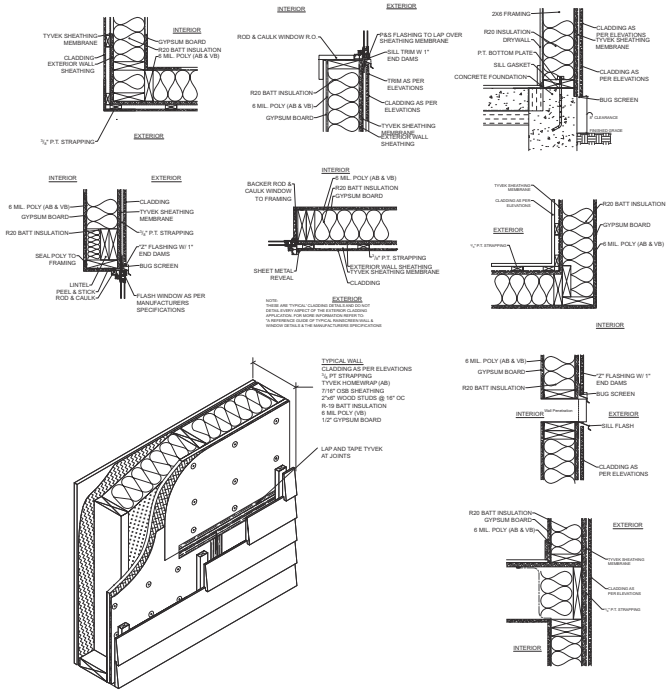
ISSUED FOR PERMIT

ISSUED:

CROSS SECTION

A-301

Printed: 2021-10-05



TYPICAL WALL ISOMETRIC

- CLADDING DETAILS

ADAPT DESIGN
1500 Shorncliffe Road Victoria BC Canada
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224 ROBERTSON GARDEN SUITE

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DETAILS

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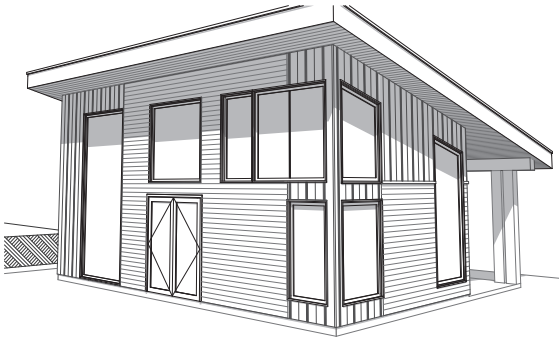
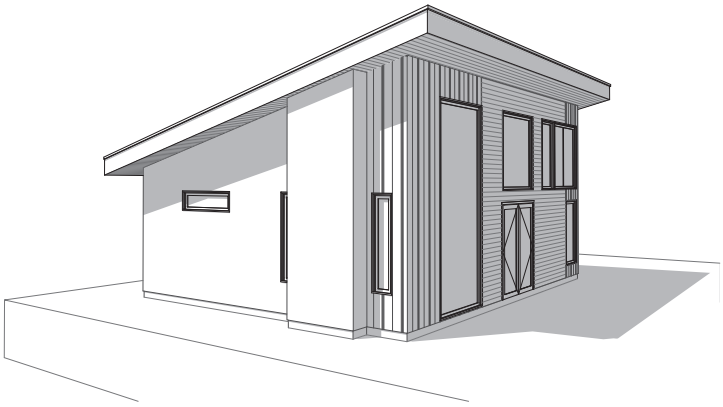


- PERSPECTIVE 1

- PERSPECTIVE 1



- PERSPECTIVE 3

ADAPT DESIGN

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224
ROBERTSON
GARDEN SUITE

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ISSUED:

3D PERSPECTIVES

A-501

Printed: 2021-10-05

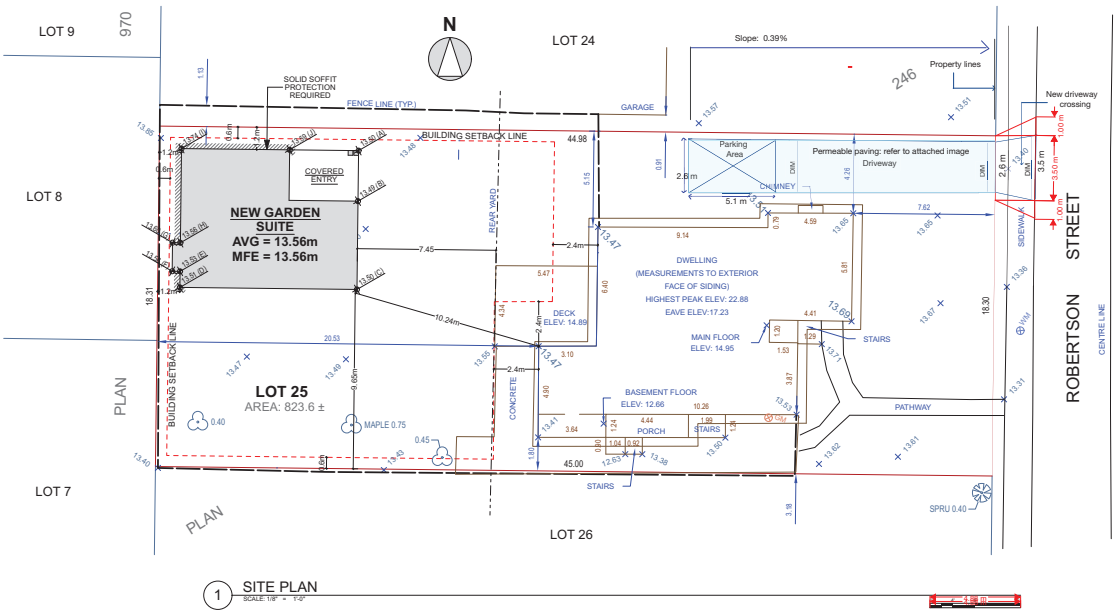
GRADE POINTS
A = 13.50m
B = 13.49m
C = 13.50m
D = 13.51m
E = 13.53m
F = 13.56m
G = 13.60m
H = 13.56m
I = 13.74m
J = 13.59m

GRADE POINTS	AVERAGE OF POINTS		DISTANCE BETWEEN GRADE POINTS		TOTALS
Points A&B	((13.50+13.49) / 2)	x	2.72m	=	36.71
Points B&C	((13.49+13.50) / 2)	x	4.75m	=	64.10
Points C&D	((13.50+13.51) / 2)	x	9.53m	=	128.70
Points D&E	((13.51+13.53) / 2)	x	0.86m	=	11.63
Points E&F	((13.53+13.56) / 2)	x	0.43m	=	5.82
Points F&G	((13.56+13.60) / 2)	x	1.54m	=	20.91
Points G&H	((13.60+13.56) / 2)	x	0.43m	=	5.84
Points H&I	((13.56+13.74) / 2)	x	5.07m	=	69.21
Points I&J	((13.74+13.59) / 2)	x	5.82m	=	79.53
Points J&K	((13.59+13.50) / 2)	x	3.71m	=	50.25
					472.70

PERIMITER OF BUILDING = 34.86m

GRADE CALCULATION: 472.70 / 34.86 = 13.56

Notes:
1. Dimensions (DIM) are to be shown in metres
2. Show parking location and dimensions in accordance with Schedule 'C' of the zoning bylaws
3. Show driveway crossing in accordance to city standards



1 SITE PLAN
SCALE: 1/8" = 1'-0"

Property Information

Project Type: New Garden Suite

Owners: Erika Lange

Site Address: 224 Robertson Street

Legal: Lot 25 Plan VIP246 Section 19 Land District 57 PID: 009-183-191

Zoning: R1-G

	Zoning	Proposed
Setbacks:		
Rear	0.6m	1.2m
Side	0.6m	1.2m/9.34m
House	2.4m	7.45m
Height:		
Roof Height	4.2m	4.18m
# of Storeys	1.5	1
Floor Area:		
Main	56m²	55.6 m²
Lot Coverage		
Lot Area		823.6 m²
Rear Yard Area		354.2 m²
House Area		141 m²
Garden Suite Area		71.72 m²
Lot Coverage	30%	25.8%
Rear Yard Lot Cov.	25%	20.2%
Open Site Space	50%	60.9%
Main Floor Elevation		13.56m
Average Grade		13.56m

Applicable Codes

-BC Building Code Current Edition (2018)

Energy

Compliance path: BCBC 9.36
Requirements applicable to this project: Step Code 3

Ventilation

BCBC 9.32

ADAPT DESIGN
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www.adaptdesign.ca

224 ROBERTSON GARDEN SUITE

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ISSUED:

SITE PLAN

A-002

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