GENERAL NOTES

GENERAL NOTES

ALL MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO THE CURRENT EDITION ALL ROOFING SHALL BE APPLIED TO THE MANUFACTURERS SPECIFICATIONS AND OF THE BRITISH COLUMBIA BUILDING CODE (BCBC), GOOD CONSTRUCTION PRACTICE, AS SHALL INCLUDE EAVE PROTECTION FROM ICE DAMMING AND SNOW BUILD UP 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 PURPOSES ONLY AND MUST BE DESIGNED AND INSTALLED BY A QUALIFIED OF THE DRAWINGS/SITE CONDITIONS AND MEANS DIMENSIONS & ELEVATIONS HAVE BEEN PROFESSIONAL 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 ALL FLASHING END DAMS TO BE 25mm (1") HIGH 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

SITE PLAN

SURVEYOR

FRAMEWORK. MOISTURE CONTENT OF FRAMEWORK MUST NOT EXCEED 19%

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 ¹/₂"

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

PLUMBING AND ELECTRICA

ANY PLUMBING AND ELECTRICAL SHOWN ON THESE PLANS IS FOR ILLUSTRATIONAL

FLASHING ALL PENETRATIONS THROUGH THE ROOF WILL REQUIRE FLASHING.

ALL ROOFING TO INCLUDE STEP FLASHING.

ALL EXPOSED OPENINGS TO INCLUDE FLASHING

DOORS

FRAME OPENING TO BE 1 ¹/₄" WIDER THAN DOOR

FRAME HEIGHT 83" FOR EXTERIOR DOORS AND 82.5" FOR INTERIOR DOORS. FRAME OPENING 1¹/₄" WIDER THAN BIFOLD DOORS AND FRAME HEIGHT IS 81.5" ALL INTERIOR DOORS TO BE 30" WIDE UNLESS OTHERWISE SPECIFIED

FENESTRATION LAYOUT TO BE CONFIRMED BY A CURRENTLY REGISTERED BRITISH COLUMBIA LEGAL LAND ALL WINDOWS, DOORS & SKYLIGHTS TO CONFORM TO NAFS-08 AND THE CANADIAN SUPPLEMENT TO NAFS

> FENESTRATION PERFORMANCE REQUIREMENTS: CLASS R - PG 30 - +'VE/-'VE 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 3.8ft² 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.

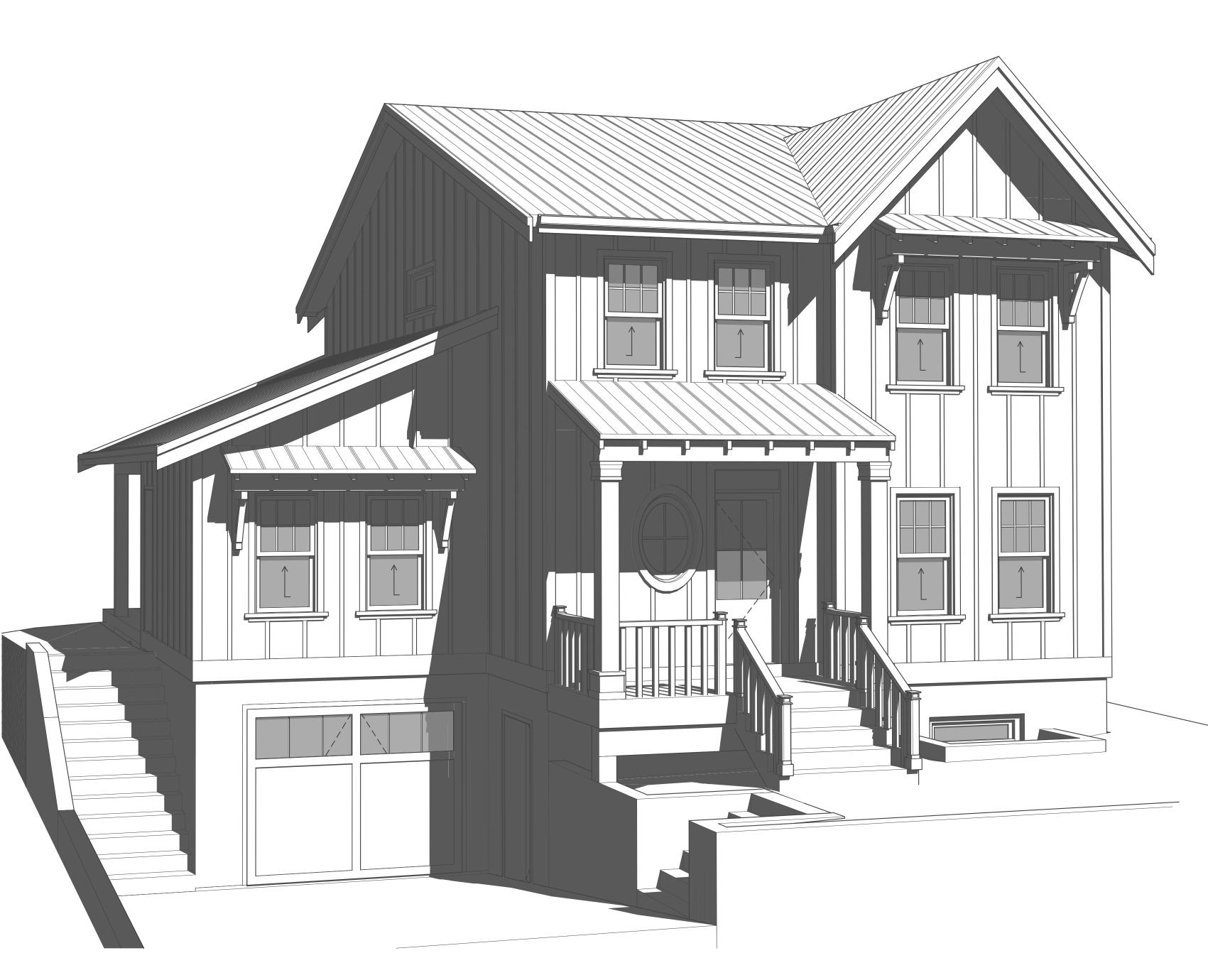
ADAPT DESIGN DOES NOT ACCEPT RESPONSIBILITY FOR THE FOLLOWING: -INFORMATION PROVIDED ON EXISTING BUILDINGS OR SITE

-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

PROJECT: **NEW SINGLE FAMILY DWELLING**







ATTACHMENT C

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COVER SHEE



Issued

COVER SHEET & GENERAL INFO					
A-001	COVER SHEET				
A-002	SITE PLAN				
A-003	LANDSCAPE PLAN				
PLANS					
A-101	BASEMENT AND MAIN FLOOR PLAN				
A-102	UPPER FLOOR AND ROOF PLAN				
ELEVATIONS					
A-201	ELEVATIONS				
A-202	ELEVATIONS				
SECTIONS					
A-301	CROSS SECTION				
PERSPECTIVE	VIEWS				

Property Information							
Project Type: NEW S.F.D. w/ S.S.							
Owners: Joanne and Quinn Martin							
Site Address: 737 Belton Ave, Victoria, BC							
Zoning: R1-S2 Zoning Proposed							
<u>Setbacks:</u> Front Verandah Verandah Stairs Concrete Stairs Rear Left (no windows) Right (no windows)	6.0m 6.0m 1.5m	4.0m 2.74m 1.78m *0.58m *3.34m 1.69m 1.55m					
Roof Height # of Storeys	7.5m 2	7.39m 2					
<u>Floor Area</u> : Basement Main Upper Garage Garage Allowance FA Total FSR	18.6 m² 156 m² 0.6	72.03 m ² 85.25 m ² 70.15 m ² 19.15 m ² 155.95 m ² 0.60					
Lot Area:260m²260m²Lot Width10m14.2mBuilding Footprint:95.65m²Porch Footprint:6.92m²Concrete Stairs Footprint:1.86m²							
Site Coverage:	40%	*40.16%					
Main Floor Elevation16.30mAverage Grade15.12m							
*DENOTES VARIANCE REQUIRED							

Dominion Rood	0000	A mountable "& "??"	sidewalk sidewalk
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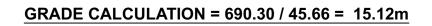
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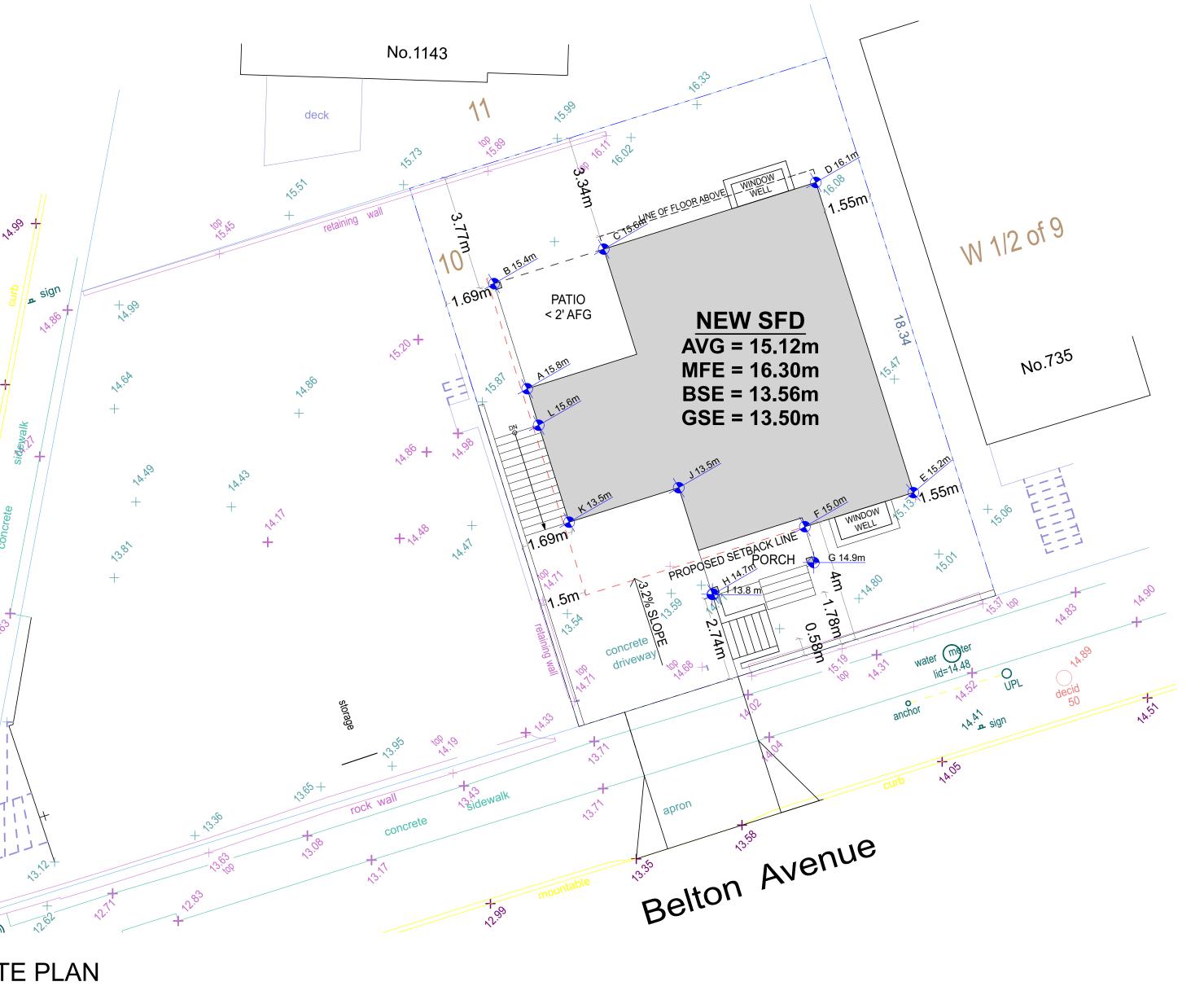
~⁴.99 +'

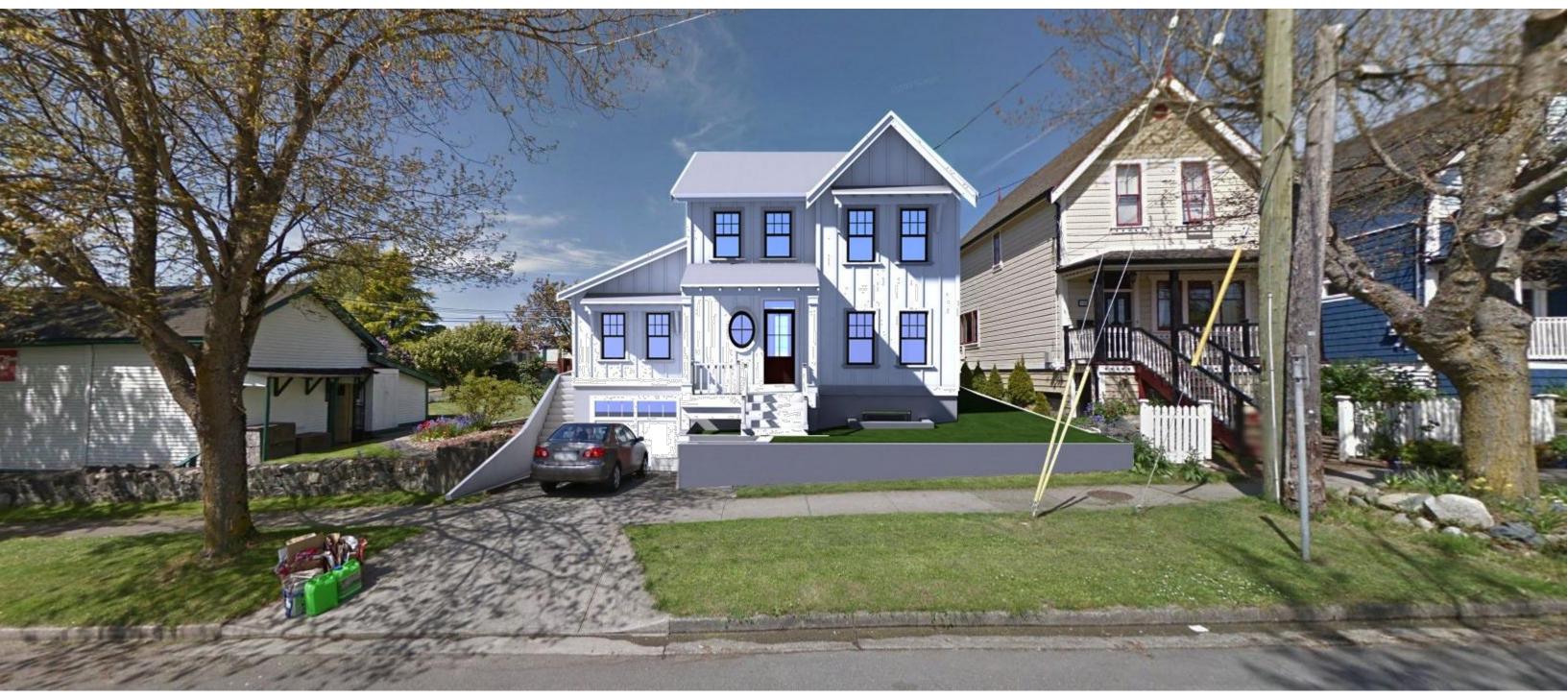
GRADE POINTS
A = 15.8m
B = 15.4m
C = 15.6m
D = 16.1m
E = 15.2m
F = 15.0m
G = 14.9m
H = 14.7m
I = 13.8m
J = 13.5m
K = 13.5m
L = 15.6m

GRADE POINTS	AVERAGE OF POIN	TS	DIST. BETWEE	<u>N</u>	TOTALS
POINTS A&B	((15.8+15.4) / 2)	Х	3.58m	=	55.85
POINTS B&C	((15.4+15.6) / 2)	Х	3.86m	=	59.83
POINTS C&D	((15.6+16.1)/2)	Х	7.23m	=	114.60
POINTS D&E	((16.1+15.2) / 2)	Х	10.57m	=	165.42
POINTS E&F	((15.2+15.0) / 2)	Х	3.70m	=	55.87
POINTS F&G	((15.0+14.9) / 2)	Х	1.2m	=	17.94
POINTS G&H	((14.9+14.7) / 2)	Х	3.46m	=	51.21
POINTS H&I	((14.7+13.8) / 2)	Х	0.03m	=	0.43
POINTS I&J	((13.8+13.5) / 2)	Х	3.63m	=	49.55
POINTS J&K	((13.5+13.5) / 2)	Х	3.86m	=	52.11
POINTS K&L	((13.5+15.6) / 2)	Х	3.30m	=	48.02
POINTS L&A	((15.6+15.8) / 2)	Х	1.24m	=	19.47
	TOTAL	=	<u>45.66</u>		690.30

-



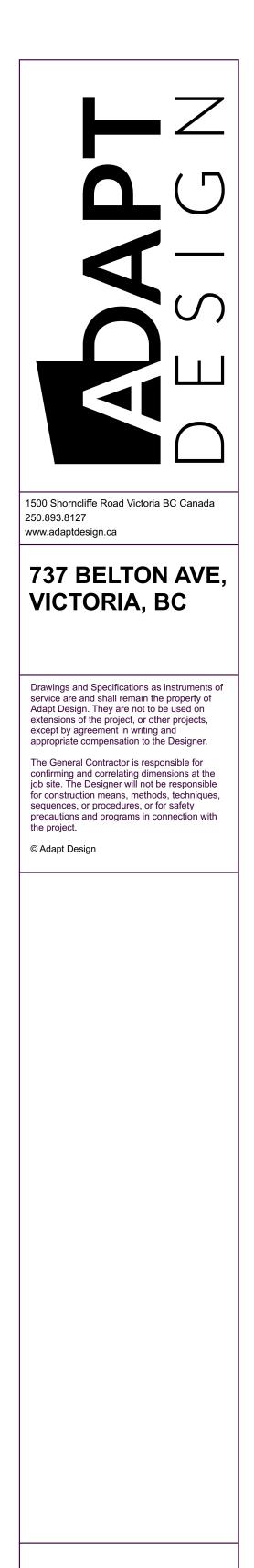




STREETSCAPE







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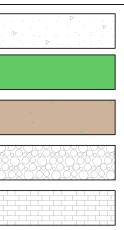
SITE PLAN







LANDSCAPE LEGEND



CONCRETE GRASS GARDEN BED

PEA GRAVEL PERMEABLE PAVERS



BOXWOOD



DOGWOOD TREE



EXISTING BLVD TREE

31

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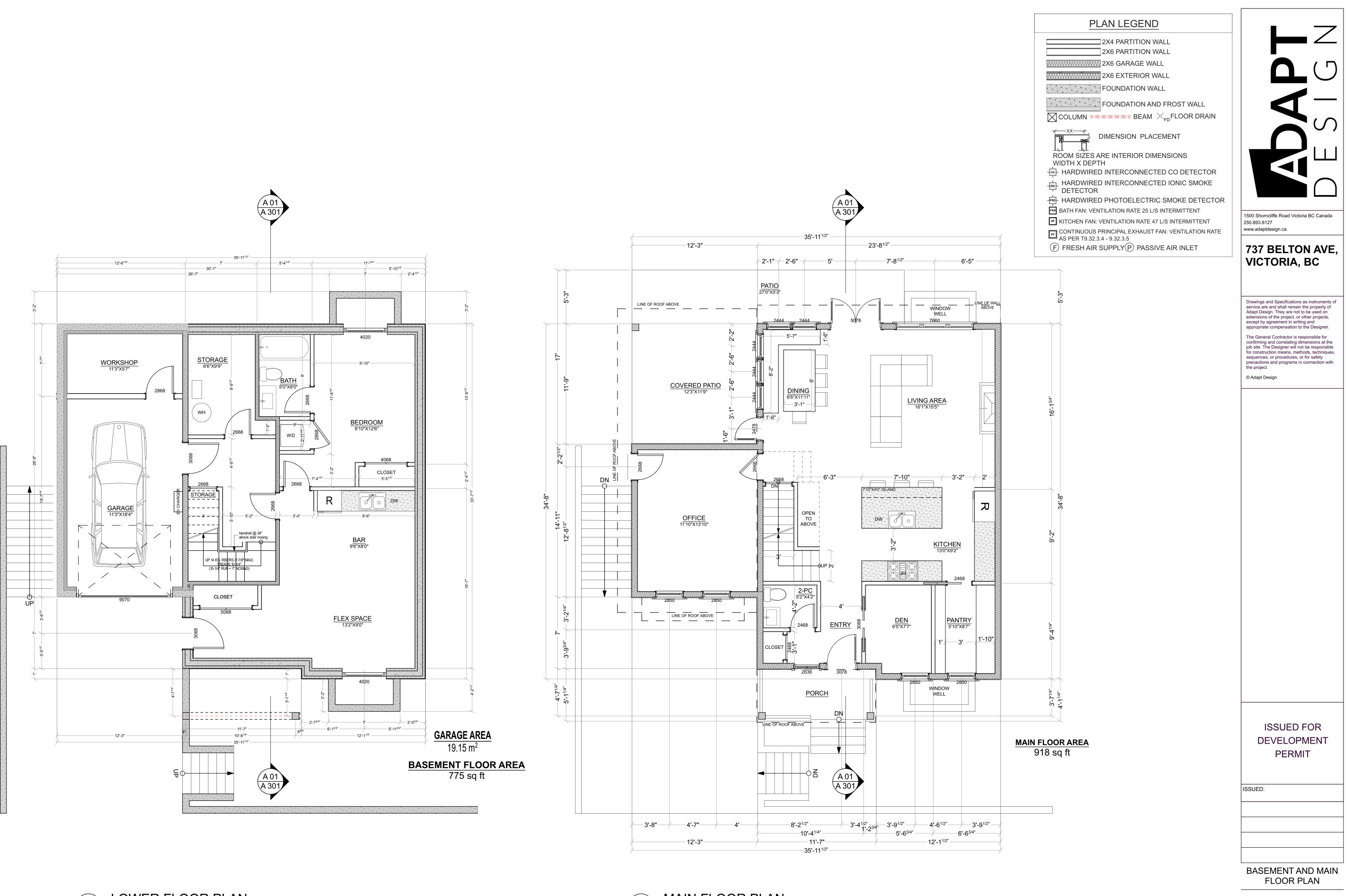
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ISSUED:

LANDSCAPE PLAN





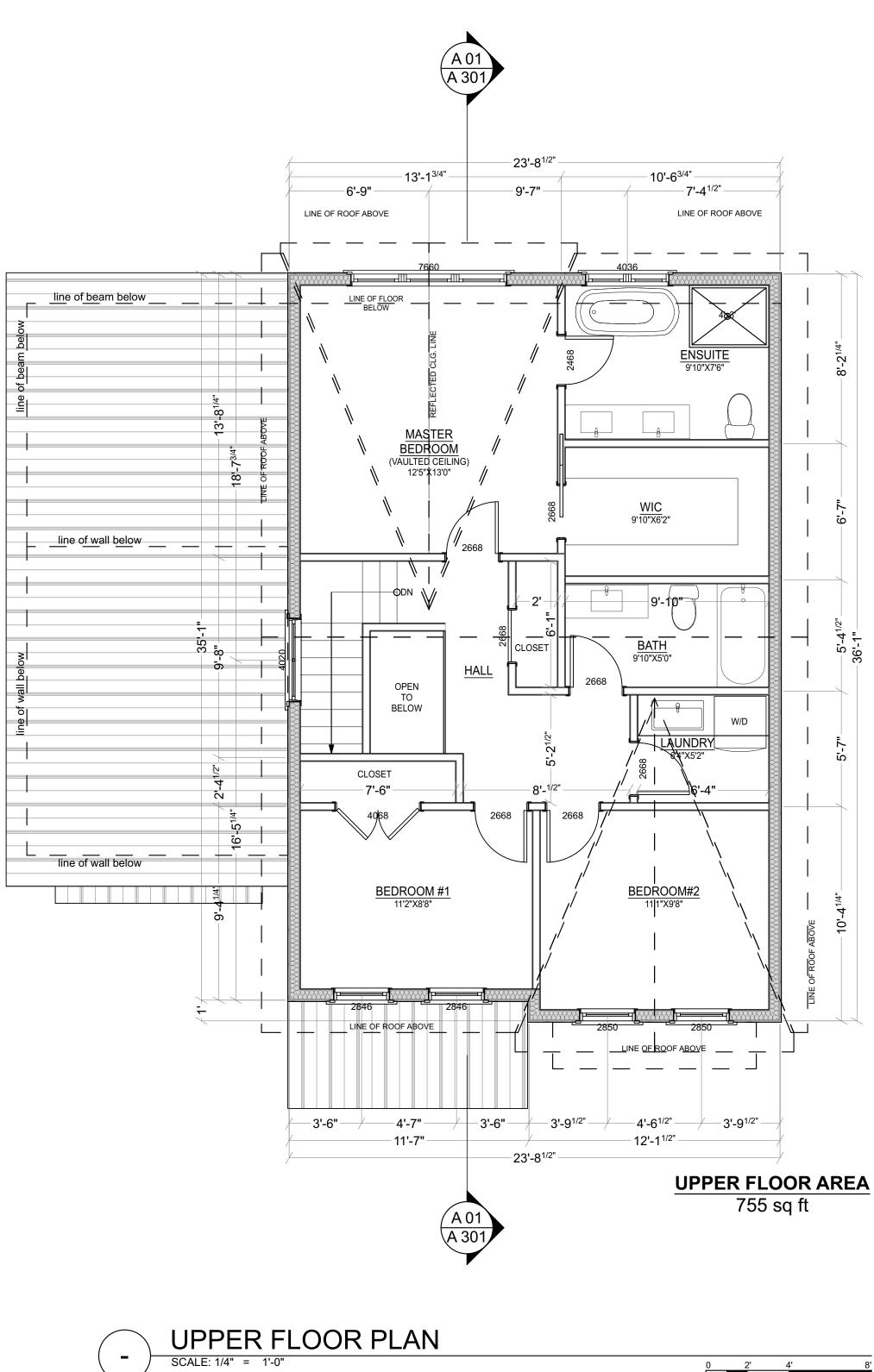
- LOWER FLOOR PLAN SCALE: 1/4" = 1'-0"

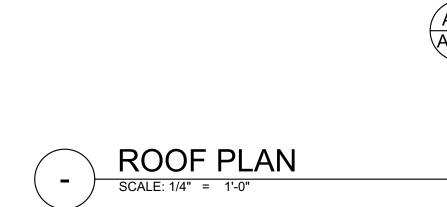
0 2' 4'

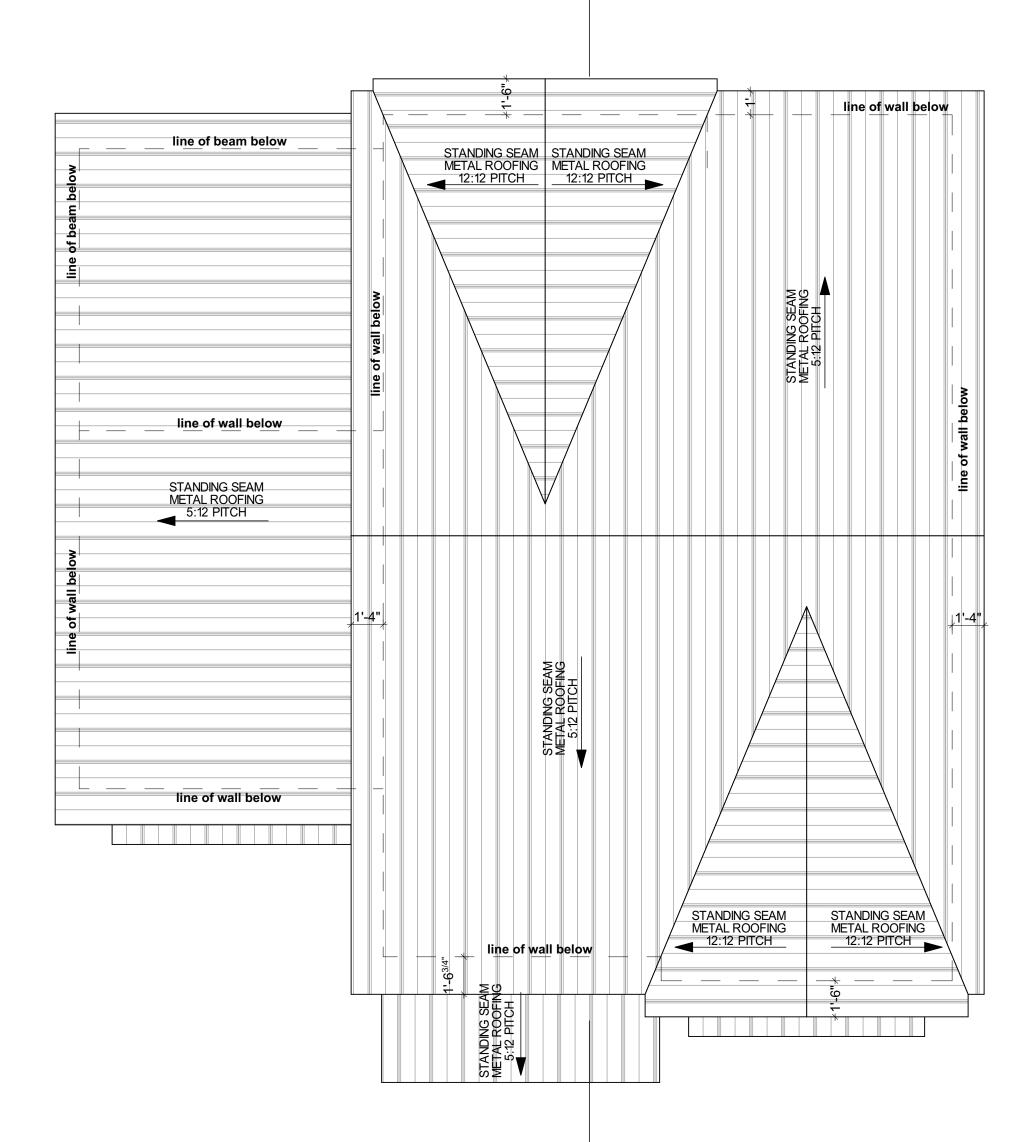
- MAIN FLOOR PLAN SCALE: 1/4" = 1'-0"



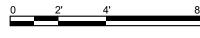
0 2' 4'







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PLAN LEGEND

 2X4 PARTITION WALL

 2X6 PARTITION WALL

 2X6 GARAGE WALL

 2X6 EXTERIOR WALL

 FOUNDATION WALL

FOUNDATION AND FROST WALL

DIMENSION PLACEMENT

ROOM SIZES ARE INTERIOR DIMENSIONS WIDTH X DEPTH

HARDWIRED INTERCONNECTED CO DETECTOR
 HARDWIRED INTERCONNECTED IONIC SMOKE
 DETECTOR

-maily - HARDWIRED PHOTOELECTRIC SMOKE DETECTOR

BATH FAN: VENTILATION RATE 25 L/S INTERMITTENT

HFKITCHEN FAN: VENTILATION RATE 47 L/S INTERMITTENTCONTINUOUS PRINCIPAL EXHAUST FAN: VENTILATION RATEAS PER T9.32.3.4 - 9.32.3.5

F FRESH AIR SUPPLY P PASSIVE AIR INLET



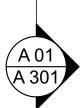
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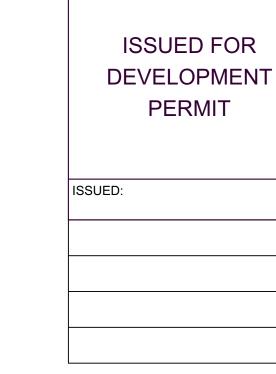
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0 2' 4'



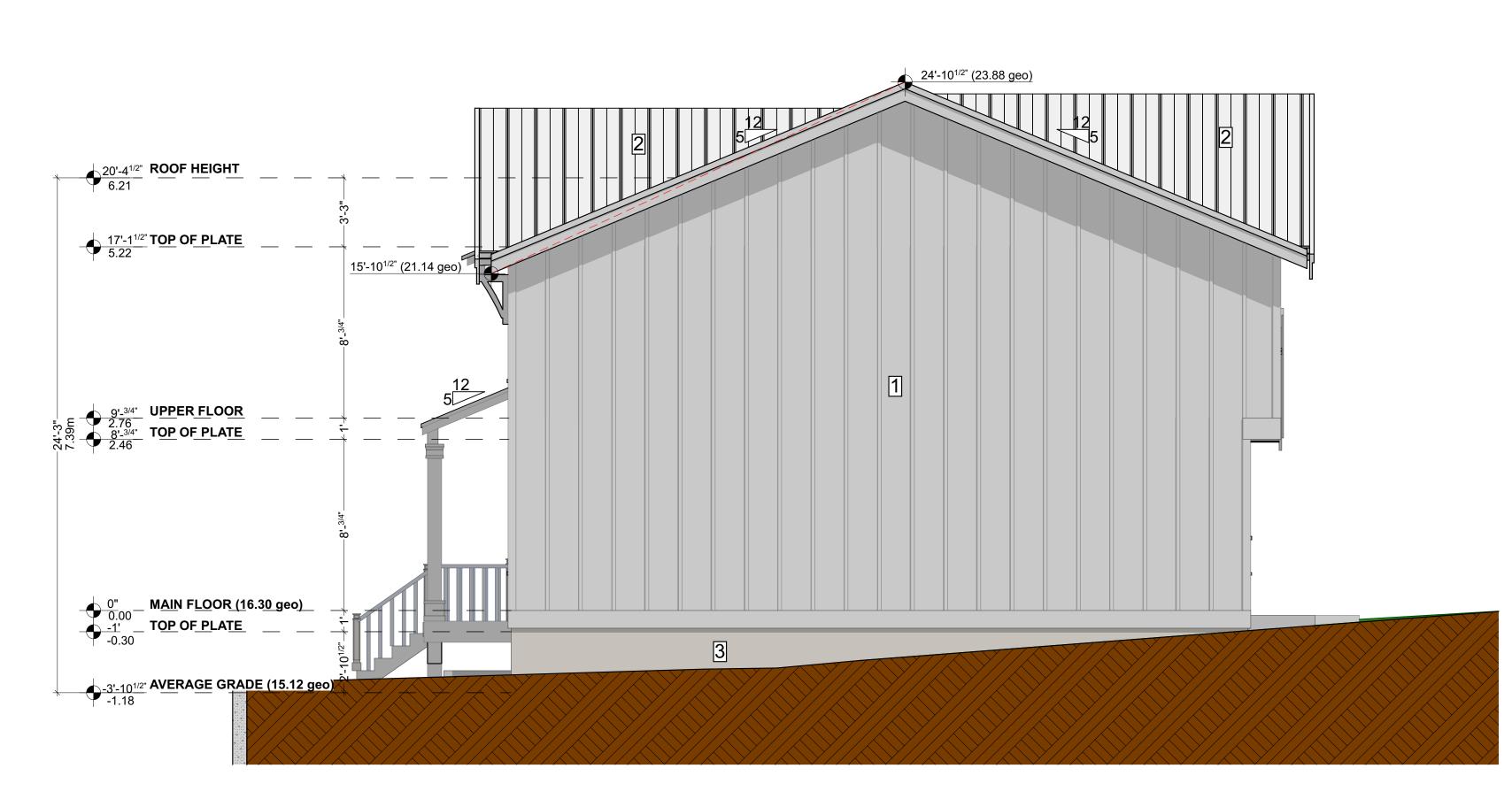
UPPER FLOOR AND ROOF PLAN

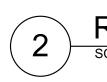




0 2' 4'







FRONT ELEVATION



0 2' 4' 8'

EXTERIOR CLADDING LEGEND						
1	CEMENT BOARD PANEL C/W 1X3 CFS BATTENS - PAINTED					
2	STANDING SEAM METAL ROOFING					
3	FINISHED CONCRETE PARGED					
דוחח						
ADDIT	IONAL EXTERIOR FINISHINGS					
ADDIT GUTTERS SOFFIT FASCIA BELLY BAN WINDOW T	5" CONTINUOUS ALUMINUM (PREFINISHED) C/W 4"X3" ALUMINUM DOWNSPOUT (PREFINISHED) 1X4 T&G HEMLOCK (STAINED) 2X12 COMB FACED SPF (PAINTED) D 2X10 COMB FACED SPF (PAINTED)					
GUTTERS SOFFIT FASCIA BELLY BAN	5" CONTINUOUS ALUMINUM (PREFINISHED) C/W 4"X3" ALUMINUM DOWNSPOUT (PREFINISHED) 1X4 T&G HEMLOCK (STAINED) 2X12 COMB FACED SPF (PAINTED) D 2X10 COMB FACED SPF (PAINTED) RIM 2X4 COMB FACED SPF (PAINTED) SILL & 2X4 SUBSILL (PAINTED) 4 2X4 COMB FACED SPF (PAINTED)					



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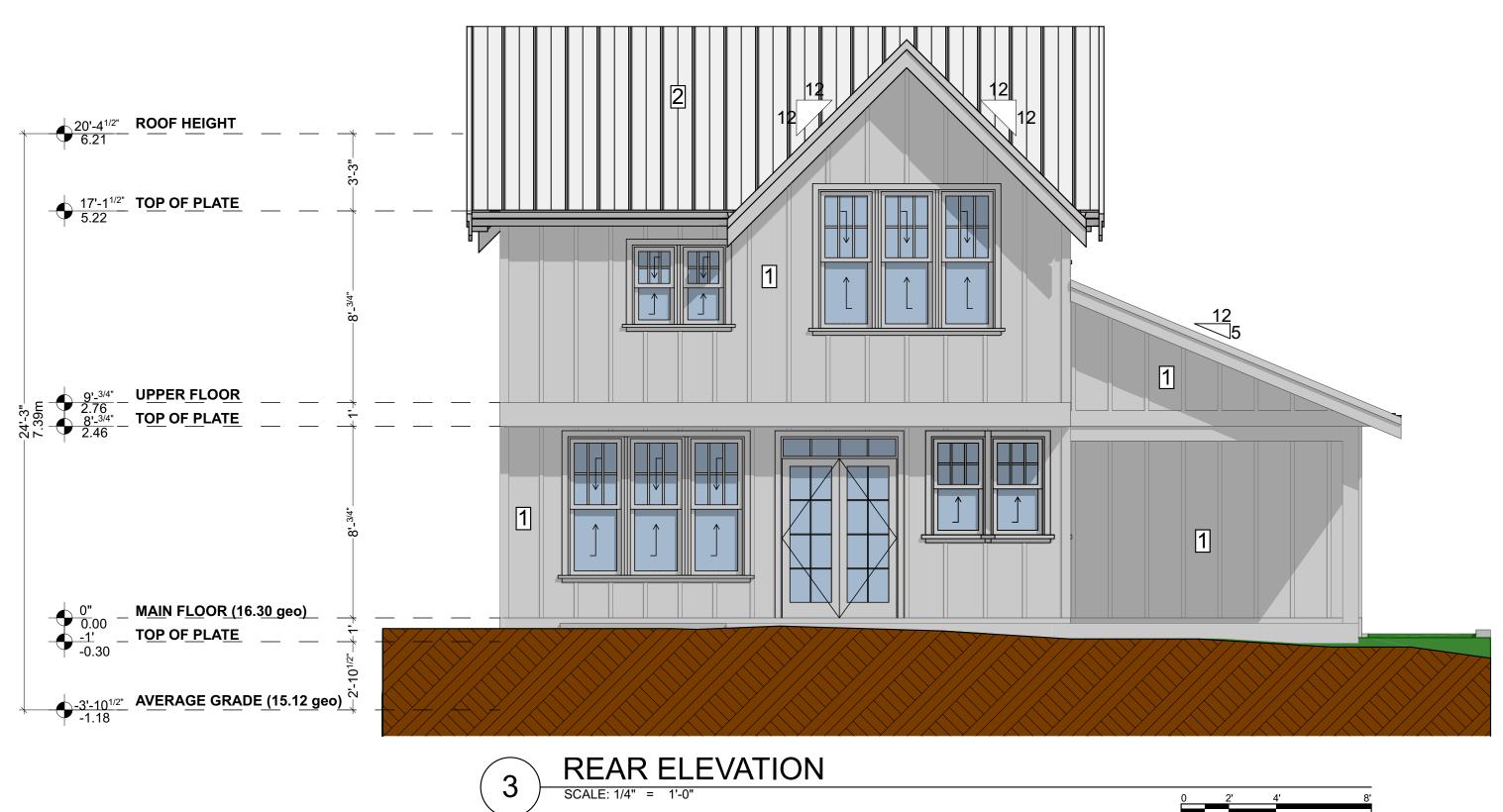
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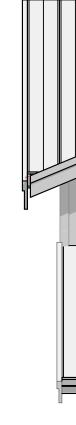
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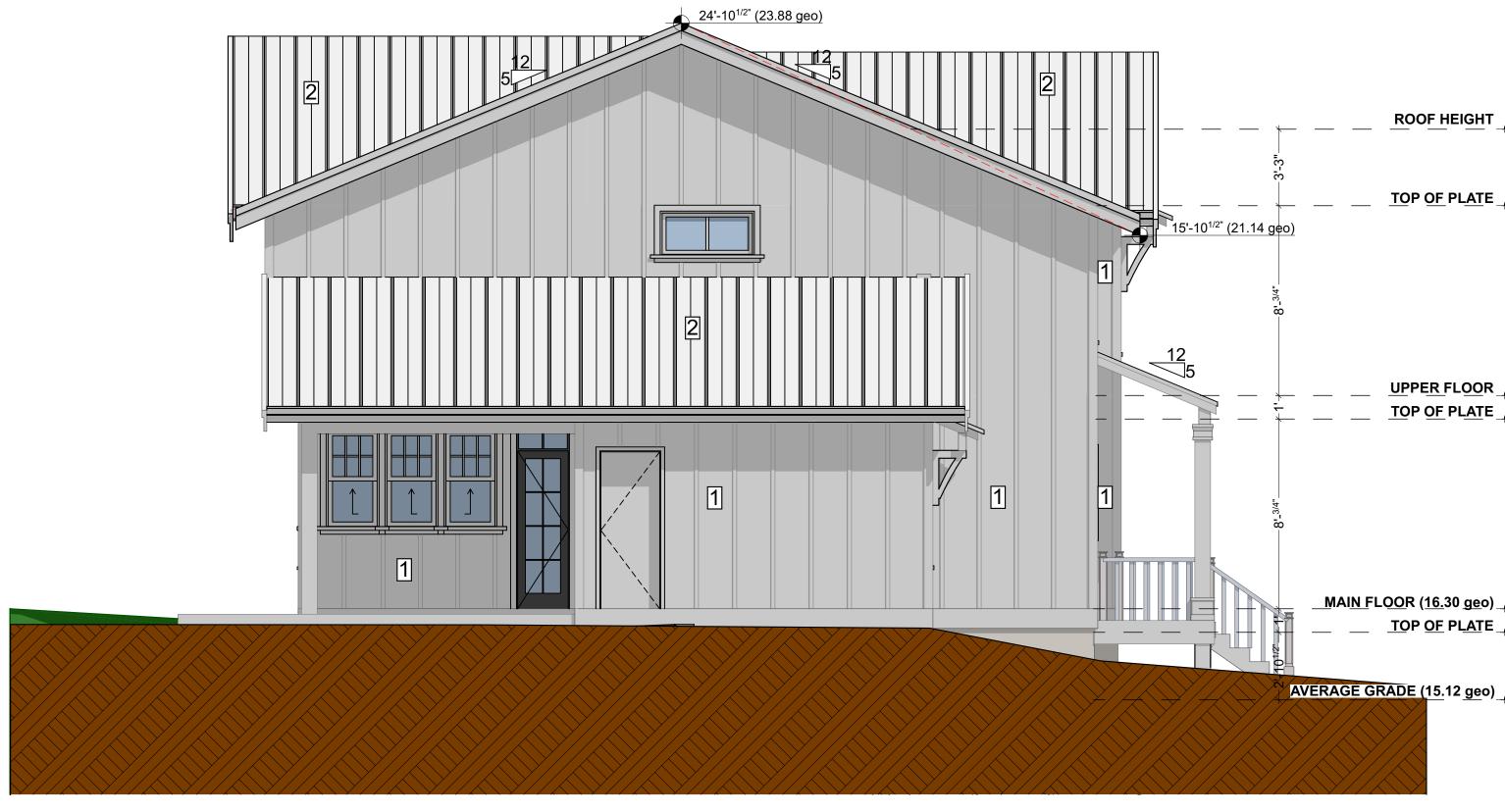
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ELEVATIONS

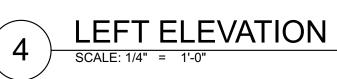












0 2' 4'

EXTERIOR CLADDING LEGEND					
1	CEMENT BOARD PANEL C/W 1X3 CFS BATTENS - PAINTED				
2	STANDING SEAM METAL ROOFING				
3	FINISHED CONCRETE PARGED				
ADDIT	IONAL EXTERIOR FINISHINGS				
GUTTERS SOFFIT FASCIA BELLY BAN WINDOW T DOOR TRIN CORNER T	RIM 2X4 COMB FACED SPF TOP/SIDES C/W 2X4 SLOPED SILL & 2X4 SUBSILL (PAINTED) A 2X4 COMB FACED SPF (PAINTED)				
NOTE: WINDOW OPERATION SHALL BE AS PER OWNERS DIRECTION AND CONFORM TO BCBC EGRESS REQUIREMENTS. CONTRACTOR TO VERIFY ALL R.O. PRIOR TO ORDERING WDW'S FLASH OVER ALL MATERIAL TRANSITIONS, DOOR AND WINDOW HEADERS ALL COLOURS AS PER OWNER					



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	•	20'-4 ^{1/2"} 6.21	\
PL <u>AT</u> E	•	<u>17'-1^{1/2'}</u> 5.22	-
L <u>OO</u> R 2L <u>AT</u> E	•	9'- ^{3/4"} 2.76 <u>8'-^{3/4"}</u> 2.46	24'-3" 7.39m
) <u>ge</u> o) PL <u>AT</u> E	•	<u>0"</u> 0.00 <u>-1'</u> -0.30	
2 <u>ge</u> o)	•	- <u>3'-10^{1/2"}</u> -1.18	

ELEVATIONS

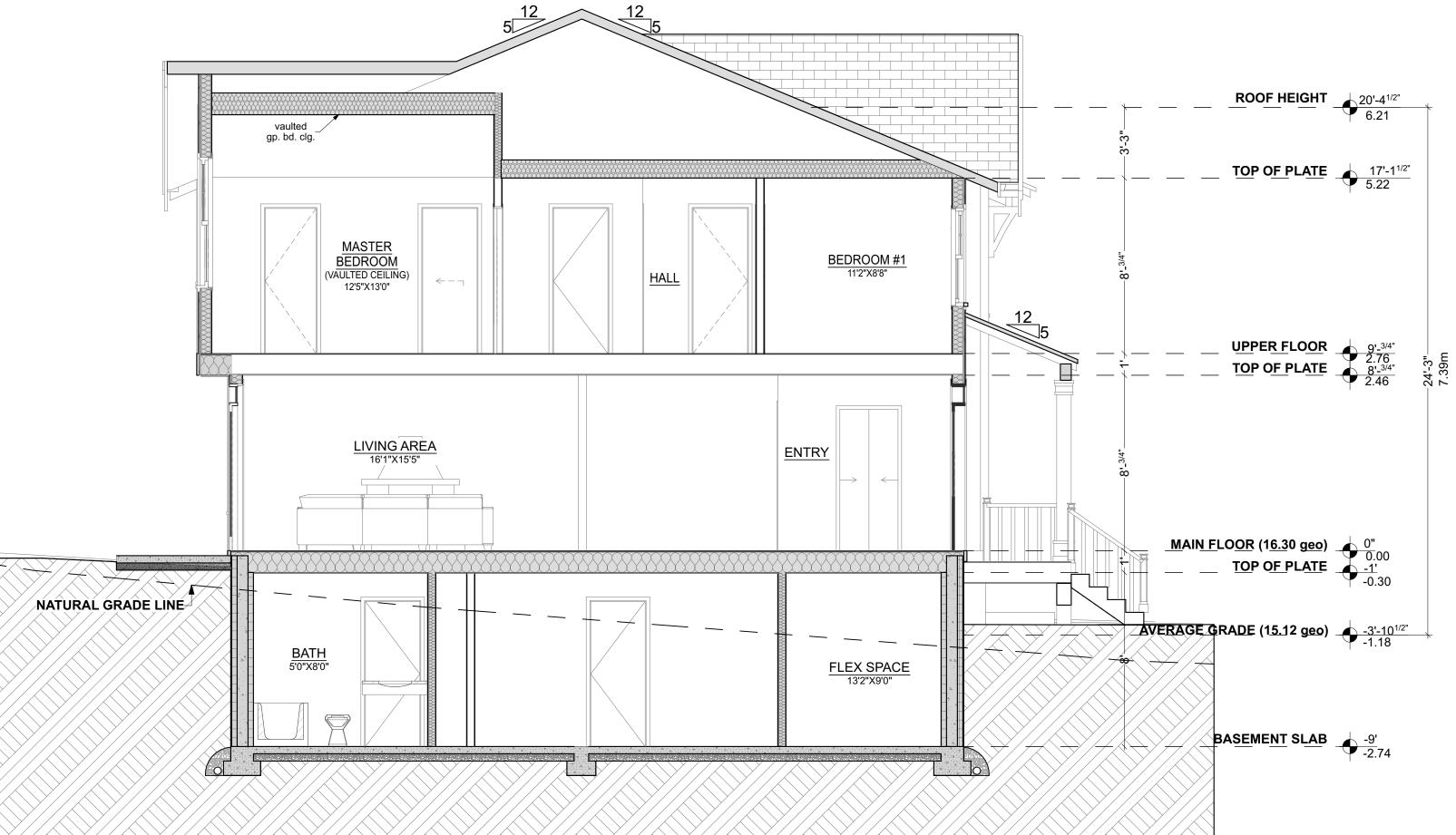
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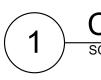
DEVELOPMENT

PERMIT

ISSUED:







BCBC 9.36	-	EXTERIOR WALL EFFECTIVE		VAULTED CEILING EFFECTI RESISTANCE	VE THERMAL
PRESCRIPTIVE	PATH	INTERIOR AIR FILM	0.12 RSI		
CLIMATE ZON		GYPSUM BOARD	0.08 RSI	INTERIOR AIR FILM	0.11 RS
CLIMATE ZON	$N \subseteq 4$	2X6 STUD	1.19 RSI	GYPSUM BOARD	0.08 RS
		7/16" OSB SHEATHING	0.11 RSI	2X10 RAFTERS	2.0 RSI
		AIR SPACE	0.15 RSI	EXTERIOR AIR FILM	0.03 RS
ASSEMBLY DESCRIPTIOI		WOOD SIDING	0.18 RSI	TOTAL EFF. R VALUE = 2.22 RSI	
EFF. RSI		OUTSIDE AIR FILM	0.03 RSI	TOTAL EFF. R VALUE = 2.22 RST	@ 13% CEILING
TRUSS CEILING	6.91 RSI	TOTAL EFF. R VALUE = 1.86 R			0.11 RS
			<u> </u>		
CATHEDRAL CEILING & F T F		INTERIOR AIR FILM	0.12 RSI	GYPSUM BOARD	0.08 RS
EXTERIOR WALLS	2.78 RSI	GYPSUM BOARD	0.08 RSI	R20 BATT INSULATION	3.52 RS
FLOORS OVER GARAGE/UNHE			3.52 RSI	R12 BATT INSULATION	2.11 RS
WALL @ GARAGE	2.62 RSI	7/ ₁₆ " OSB SHEATHING	0.11 RSI	OUTSIDE AIR FILM	0.03 RS
HEATED CONCRETE SLABS	2.32 RSI	AIR SPACE	0.15 RSI	TOTAL EFF. R VALUE = 5.85 RSI	@ 87% CEILING
CONCRETE SLABS	1.96 RSI	WOOD SIDING	0.18 RSI		
FOUNDATION WALL BELOW G	RADE 1.99 RSI	OUTSIDE AIR FILM	0.03 RSI	EFF. THERMAL RESISTANCE = 4.82	2 RSI
		TOTAL EFF. R VALUE = 4.19 R		REQUIRED EFF. THERMAL RESIST	ANCE = 4.67 RS
		EFFECTIVE THERMAL RESISTA REQUIRED EFECTIVE THERMA			
EXTERIOR WALL EFFECTIVE 1		WALL @ GARAGE EFFECTIVE T	HERMAL RESISTANCE 0.12 RSI	BASEMENT SLAB ABOVE FROST THERMAL RESISTA	NCE
ITERIOR AIR FILM	0.12 RSI	WALL @ GARAGE EFFECTIVE T INTERIOR AIR FILM GYPSUM BOARD	HERMAL RESISTANCE 0.12 RSI 0.08 RSI	THERMAL RESISTA INTERIOR AIR FILM (FLOOR)	
TERIOR AIR FILM (PSUM BOARD	0.12 RSI 0.08 RSI	WALL @ GARAGE EFFECTIVE T INTERIOR AIR FILM GYPSUM BOARD POLYETHYLENE	HERMAL RESISTANCE 0.12 RSI 0.08 RSI NIL	THERMAL RESISTA	NCE
TERIOR AIR FILM YPSUM BOARD (6 STUD	0.12 RSI 0.08 RSI 1.19 RSI	WALL @ GARAGE EFFECTIVE T INTERIOR AIR FILM GYPSUM BOARD POLYETHYLENE 2X6 STUD	HERMAL RESISTANCE 0.12 RSI 0.08 RSI NIL 1.19 RSI	THERMAL RESISTA INTERIOR AIR FILM (FLOOR)	NCE 0.16 RSI
TERIOR AIR FILM 'PSUM BOARD 6 STUD 5" OSB SHEATHING	0.12 RSI 0.08 RSI 1.19 RSI 0.11 RSI	WALL @ GARAGE EFFECTIVE T INTERIOR AIR FILM GYPSUM BOARD POLYETHYLENE 2X6 STUD GYPSUM BOARD	HERMAL RESISTANCE 0.12 RSI 0.08 RSI NIL 1.19 RSI 0.08 RSI	THERMAL RESISTA INTERIOR AIR FILM (FLOOR) CONCRETE SLAB RADIANT IN FLOOR HEATING	NCE 0.16 RSI 0.04 RSI N/A
TERIOR AIR FILM YPSUM BOARD 66 STUD 6" OSB SHEATHING R SPACE	0.12 RSI 0.08 RSI 1.19 RSI 0.11 RSI 0.15 RSI	WALL @ GARAGE EFFECTIVE T INTERIOR AIR FILM GYPSUM BOARD POLYETHYLENE 2X6 STUD GYPSUM BOARD INTERIOR AIR FILM	HERMAL RESISTANCE 0.12 RSI 0.08 RSI NIL 1.19 RSI 0.08 RSI 0.12 RSI	THERMAL RESISTA INTERIOR AIR FILM (FLOOR) CONCRETE SLAB RADIANT IN FLOOR HEATING 2-1/2" XPS	NCE 0.16 RSI 0.04 RSI N/A 2.15 RSI
ITERIOR AIR FILM YPSUM BOARD K6 STUD 16" OSB SHEATHING IR SPACE YOOD SIDING	0.12 RSI 0.08 RSI 1.19 RSI 0.11 RSI 0.15 RSI 0.18 RSI	WALL @ GARAGE EFFECTIVE T INTERIOR AIR FILM GYPSUM BOARD POLYETHYLENE 2X6 STUD GYPSUM BOARD	HERMAL RESISTANCE 0.12 RSI 0.08 RSI NIL 1.19 RSI 0.08 RSI 0.12 RSI	THERMAL RESISTA INTERIOR AIR FILM (FLOOR) CONCRETE SLAB RADIANT IN FLOOR HEATING 2-1/2" XPS EFF. THERMAL INSULATION = 2.35 F	NCE 0.16 RSI 0.04 RSI N/A 2.15 RSI RSI (R13.3)
TERIOR AIR FILM YPSUM BOARD 66 STUD 6" OSB SHEATHING R SPACE OOD SIDING UTSIDE AIR FILM	0.12 RSI 0.08 RSI 1.19 RSI 0.11 RSI 0.15 RSI 0.18 RSI 0.03 RSI	WALL @ GARAGE EFFECTIVE T INTERIOR AIR FILM GYPSUM BOARD POLYETHYLENE 2X6 STUD GYPSUM BOARD INTERIOR AIR FILM TOTAL EFF. R VALUE = 1.59 R	HERMAL RESISTANCE 0.12 RSI 0.08 RSI NIL 1.19 RSI 0.08 RSI 0.12 RSI SI @ 23% WALL AREA	THERMAL RESISTA INTERIOR AIR FILM (FLOOR) CONCRETE SLAB RADIANT IN FLOOR HEATING 2-1/2" XPS EFF. THERMAL INSULATION = 2.35 F REQUIRED EFF. THERMAL INSULAT	NCE 0.16 RSI 0.04 RSI N/A 2.15 RSI RSI (R13.3)
ITERIOR AIR FILM YPSUM BOARD K6 STUD I6" OSB SHEATHING IR SPACE OOD SIDING UTSIDE AIR FILM	0.12 RSI 0.08 RSI 1.19 RSI 0.11 RSI 0.15 RSI 0.18 RSI 0.03 RSI	WALL @ GARAGE EFFECTIVE T INTERIOR AIR FILM GYPSUM BOARD POLYETHYLENE 2X6 STUD GYPSUM BOARD INTERIOR AIR FILM TOTAL EFF. R VALUE = 1.59 R INTERIOR AIR FILM	HERMAL RESISTANCE 0.12 RSI 0.08 RSI NIL 1.19 RSI 0.08 RSI 0.12 RSI SI @ 23% WALL AREA 0.12 RSI	THERMAL RESISTA INTERIOR AIR FILM (FLOOR) CONCRETE SLAB RADIANT IN FLOOR HEATING 2-1/2" XPS EFF. THERMAL INSULATION = 2.35 F	NCE 0.16 RSI 0.04 RSI N/A 2.15 RSI RSI (R13.3)
TERIOR AIR FILM YPSUM BOARD 66 STUD 6" OSB SHEATHING R SPACE OOD SIDING JTSIDE AIR FILM DTAL EFF. R VALUE = 1.86 R	0.12 RSI 0.08 RSI 1.19 RSI 0.11 RSI 0.15 RSI 0.18 RSI 0.03 RSI SI @ 23% WALL AREA	WALL @ GARAGE EFFECTIVE T INTERIOR AIR FILM GYPSUM BOARD POLYETHYLENE 2X6 STUD GYPSUM BOARD INTERIOR AIR FILM TOTAL EFF. R VALUE = 1.59 R INTERIOR AIR FILM GYPSUM BOARD	HERMAL RESISTANCE 0.12 RSI 0.08 RSI NIL 1.19 RSI 0.08 RSI 0.12 RSI SI @ 23% WALL AREA 0.12 RSI 0.12 RSI 0.08 RSI	THERMAL RESISTA INTERIOR AIR FILM (FLOOR) CONCRETE SLAB RADIANT IN FLOOR HEATING 2-1/2" XPS EFF. THERMAL INSULATION = 2.35 F REQUIRED EFF. THERMAL INSULAT	NCE 0.16 RSI 0.04 RSI N/A 2.15 RSI RSI (R13.3)
ITERIOR AIR FILM YPSUM BOARD K6 STUD 16" OSB SHEATHING IR SPACE YOOD SIDING UTSIDE AIR FILM OTAL EFF. R VALUE = 1.86 R ITERIOR AIR FILM	0.12 RSI 0.08 RSI 1.19 RSI 0.11 RSI 0.15 RSI 0.18 RSI 0.03 RSI SI @ 23% WALL AREA 0.12 RSI	WALL @ GARAGE EFFECTIVE T INTERIOR AIR FILM GYPSUM BOARD POLYETHYLENE 2X6 STUD GYPSUM BOARD INTERIOR AIR FILM TOTAL EFF. R VALUE = 1.59 R INTERIOR AIR FILM GYPSUM BOARD POLYETHYLENE	HERMAL RESISTANCE 0.12 RSI 0.08 RSI NIL 1.19 RSI 0.08 RSI 0.12 RSI SI @ 23% WALL AREA 0.12 RSI 0.08 RSI 0.08 RSI NIL	THERMAL RESISTA INTERIOR AIR FILM (FLOOR) CONCRETE SLAB RADIANT IN FLOOR HEATING 2-1/2" XPS EFF. THERMAL INSULATION = 2.35 F REQUIRED EFF. THERMAL INSULAT	NCE 0.16 RSI 0.04 RSI N/A 2.15 RSI RSI (R13.3) TION = 1.96 RSI
ITERIOR AIR FILM YPSUM BOARD X6 STUD 16" OSB SHEATHING IR SPACE /OOD SIDING UTSIDE AIR FILM OTAL EFF. R VALUE = 1.86 R ITERIOR AIR FILM YPSUM BOARD	0.12 RSI 0.08 RSI 1.19 RSI 0.11 RSI 0.15 RSI 0.18 RSI 0.03 RSI SI @ 23% WALL AREA 0.12 RSI 0.08 RSI	WALL @ GARAGE EFFECTIVE T INTERIOR AIR FILM GYPSUM BOARD POLYETHYLENE 2X6 STUD GYPSUM BOARD INTERIOR AIR FILM TOTAL EFF. R VALUE = 1.59 R INTERIOR AIR FILM GYPSUM BOARD	HERMAL RESISTANCE 0.12 RSI 0.08 RSI NIL 1.19 RSI 0.08 RSI 0.12 RSI SI @ 23% WALL AREA 0.12 RSI 0.12 RSI 0.08 RSI	THERMAL RESISTA INTERIOR AIR FILM (FLOOR) CONCRETE SLAB RADIANT IN FLOOR HEATING 2-1/2" XPS EFF. THERMAL INSULATION = 2.35 F REQUIRED EFF. THERMAL INSULAT (R13.2) BASEMENT HEATED FLOOR EFF	NCE 0.16 RSI 0.04 RSI N/A 2.15 RSI RSI (R13.3) TION = 1.96 RSI
ITERIOR AIR FILM YPSUM BOARD X6 STUD 16" OSB SHEATHING IR SPACE /OOD SIDING UTSIDE AIR FILM OTAL EFF. R VALUE = 1.86 R ITERIOR AIR FILM YPSUM BOARD 20 INSULATION	0.12 RSI 0.08 RSI 1.19 RSI 0.11 RSI 0.15 RSI 0.18 RSI 0.03 RSI SI @ 23% WALL AREA 0.12 RSI 0.08 RSI 3.52 RSI	WALL @ GARAGE EFFECTIVE T INTERIOR AIR FILM GYPSUM BOARD POLYETHYLENE 2X6 STUD GYPSUM BOARD INTERIOR AIR FILM TOTAL EFF. R VALUE = 1.59 R INTERIOR AIR FILM GYPSUM BOARD POLYETHYLENE R20 INSULATION GYPSUM BOARD	HERMAL RESISTANCE 0.12 RSI 0.08 RSI NIL 1.19 RSI 0.08 RSI 0.12 RSI SI @ 23% WALL AREA 0.12 RSI 0.08 RSI 0.08 RSI NIL	THERMAL RESISTA INTERIOR AIR FILM (FLOOR) CONCRETE SLAB RADIANT IN FLOOR HEATING 2-1/2" XPS EFF. THERMAL INSULATION = 2.35 F REQUIRED EFF. THERMAL INSULAT (R13.2) BASEMENT HEATED FLOOR EFF RESISTANCE	NCE 0.16 RSI 0.04 RSI N/A 2.15 RSI RSI (R13.3) TON = 1.96 RSI FECTIVE THERM
NTERIOR AIR FILM GYPSUM BOARD X6 STUD 16" OSB SHEATHING IR SPACE VOOD SIDING DUTSIDE AIR FILM OTAL EFF. R VALUE = 1.86 R NTERIOR AIR FILM GYPSUM BOARD 120 INSULATION 16" OSB SHEATHING	0.12 RSI 0.08 RSI 1.19 RSI 0.11 RSI 0.15 RSI 0.18 RSI 0.03 RSI SI @ 23% WALL AREA 0.12 RSI 0.08 RSI 3.52 RSI 0.11 RSI	WALL @ GARAGE EFFECTIVE T INTERIOR AIR FILM GYPSUM BOARD POLYETHYLENE 2X6 STUD GYPSUM BOARD INTERIOR AIR FILM TOTAL EFF. R VALUE = 1.59 R INTERIOR AIR FILM GYPSUM BOARD POLYETHYLENE R20 INSULATION GYPSUM BOARD INTERIOR AIR FILM	HERMAL RESISTANCE 0.12 RSI 0.08 RSI NIL 1.19 RSI 0.08 RSI 0.12 RSI SI @ 23% WALL AREA 0.12 RSI 0.08 RSI NIL 3.52 RSI 0.08 RSI 0.12 RSI	THERMAL RESISTA INTERIOR AIR FILM (FLOOR) CONCRETE SLAB RADIANT IN FLOOR HEATING 2-1/2" XPS EFF. THERMAL INSULATION = 2.35 F REQUIRED EFF. THERMAL INSULAT (R13.2) BASEMENT HEATED FLOOR EFF RESISTANCE INTERIOR AIR FILM (FLOOR)	NCE 0.16 RSI 0.04 RSI N/A 2.15 RSI RSI (R13.3) TON = 1.96 RSI FECTIVE THERM 0.16 RSI
ITERIOR AIR FILM YPSUM BOARD X6 STUD ₁₆ " OSB SHEATHING IR SPACE /OOD SIDING UTSIDE AIR FILM OTAL EFF. R VALUE = 1.86 R ITERIOR AIR FILM YPSUM BOARD 20 INSULATION ₁₆ " OSB SHEATHING IR SPACE	0.12 RSI 0.08 RSI 1.19 RSI 0.11 RSI 0.15 RSI 0.18 RSI 0.03 RSI SI @ 23% WALL AREA 0.12 RSI 0.08 RSI 3.52 RSI 0.11 RSI 0.15 RSI	WALL @ GARAGE EFFECTIVE T INTERIOR AIR FILM GYPSUM BOARD POLYETHYLENE 2X6 STUD GYPSUM BOARD INTERIOR AIR FILM TOTAL EFF. R VALUE = 1.59 R INTERIOR AIR FILM GYPSUM BOARD POLYETHYLENE R20 INSULATION GYPSUM BOARD	HERMAL RESISTANCE 0.12 RSI 0.08 RSI NIL 1.19 RSI 0.08 RSI 0.12 RSI SI @ 23% WALL AREA 0.12 RSI 0.08 RSI NIL 3.52 RSI 0.08 RSI 0.12 RSI	THERMAL RESISTA INTERIOR AIR FILM (FLOOR) CONCRETE SLAB RADIANT IN FLOOR HEATING 2-1/2" XPS EFF. THERMAL INSULATION = 2.35 F REQUIRED EFF. THERMAL INSULAT (R13.2) BASEMENT HEATED FLOOR EFF RESISTANCE	NCE 0.16 RSI 0.04 RSI N/A 2.15 RSI RSI (R13.3) TON = 1.96 RSI FECTIVE THERM 0.16 RSI
ITERIOR AIR FILM YPSUM BOARD K6 STUD 16" OSB SHEATHING IR SPACE YOOD SIDING UTSIDE AIR FILM OTAL EFF. R VALUE = 1.86 R ITERIOR AIR FILM YPSUM BOARD 20 INSULATION 16" OSB SHEATHING IR SPACE YOOD SIDING	0.12 RSI 0.08 RSI 1.19 RSI 0.11 RSI 0.15 RSI 0.18 RSI 0.03 RSI SI @ 23% WALL AREA 0.12 RSI 0.08 RSI 3.52 RSI 0.11 RSI 0.15 RSI 0.18 RSI	WALL @ GARAGE EFFECTIVE T INTERIOR AIR FILM GYPSUM BOARD POLYETHYLENE 2X6 STUD GYPSUM BOARD INTERIOR AIR FILM TOTAL EFF. R VALUE = 1.59 R INTERIOR AIR FILM GYPSUM BOARD POLYETHYLENE R20 INSULATION GYPSUM BOARD INTERIOR AIR FILM	HERMAL RESISTANCE 0.12 RSI 0.08 RSI NIL 1.19 RSI 0.08 RSI 0.12 RSI SI @ 23% WALL AREA 0.12 RSI 0.08 RSI NIL 3.52 RSI 0.08 RSI 0.12 RSI	THERMAL RESISTA INTERIOR AIR FILM (FLOOR) CONCRETE SLAB RADIANT IN FLOOR HEATING 2-1/2" XPS EFF. THERMAL INSULATION = 2.35 F REQUIRED EFF. THERMAL INSULAT (R13.2) BASEMENT HEATED FLOOR EFF RESISTANCE INTERIOR AIR FILM (FLOOR)	NCE 0.16 RSI 0.04 RSI N/A 2.15 RSI RSI (R13.3) TON = 1.96 RSI FECTIVE THERM 0.16 RSI
ITERIOR AIR FILM YPSUM BOARD (6 STUD 16" OSB SHEATHING R SPACE OOD SIDING UTSIDE AIR FILM DTAL EFF. R VALUE = 1.86 R ITERIOR AIR FILM YPSUM BOARD 20 INSULATION 16" OSB SHEATHING R SPACE OOD SIDING UTSIDE AIR FILM	0.12 RSI 0.08 RSI 1.19 RSI 0.11 RSI 0.15 RSI 0.18 RSI 0.03 RSI SI @ 23% WALL AREA 0.12 RSI 0.08 RSI 3.52 RSI 0.11 RSI 0.15 RSI 0.18 RSI 0.18 RSI 0.03 RSI	WALL @ GARAGE EFFECTIVE T INTERIOR AIR FILM GYPSUM BOARD POLYETHYLENE 2X6 STUD GYPSUM BOARD INTERIOR AIR FILM TOTAL EFF. R VALUE = 1.59 R INTERIOR AIR FILM GYPSUM BOARD POLYETHYLENE R20 INSULATION GYPSUM BOARD INTERIOR AIR FILM	HERMAL RESISTANCE 0.12 RSI 0.08 RSI NIL 1.19 RSI 0.08 RSI 0.12 RSI 0.12 RSI 0.12 RSI 0.08 RSI 0.12 RSI 0.08 RSI NIL 3.52 RSI 0.08 RSI 0.12 RSI 0.08 RSI 0.12 RSI 0.13 RSI 0.14 RSI 0.15 RSI 0.15 RSI 0.15 RSI 0.15 RSI 0.12 RSI 0.12 RSI 0.12 RSI 0.12 RSI 0.12 RSI 0.13 RSI 0.12 RSI 0.12 RSI 0.12 RSI 0.13 RSI 0.12 RSI 0.13 RSI 0.14 RSI 0.15 RSI 0.15 RSI 0.15 RSI 0.17 RSI 0.17 RSI 0.18 RSI 0.18 RSI 0.12 RSI 0.12 RSI 0.18 RSI 0.12 RSI 0.13 RSI 0.14 RSI 0.15 RS	THERMAL RESISTA INTERIOR AIR FILM (FLOOR) CONCRETE SLAB RADIANT IN FLOOR HEATING 2-1/2" XPS EFF. THERMAL INSULATION = 2.35 F REQUIRED EFF. THERMAL INSULAT (R13.2) BASEMENT HEATED FLOOR EFF RESISTANCE INTERIOR AIR FILM (FLOOR) CONCRETE SLAB	NCE 0.16 RSI 0.04 RSI N/A 2.15 RSI RSI (R13.3) TON = 1.96 RSI FECTIVE THERM 0.16 RSI 0.04 RSI N/A
TERIOR AIR FILM (PSUM BOARD 6 STUD 7 OSB SHEATHING R SPACE DOD SIDING ITSIDE AIR FILM TAL EFF. R VALUE = 1.86 R TERIOR AIR FILM (PSUM BOARD 0 INSULATION 7 OSB SHEATHING R SPACE DOD SIDING ITSIDE AIR FILM	0.12 RSI 0.08 RSI 1.19 RSI 0.11 RSI 0.15 RSI 0.18 RSI 0.03 RSI SI @ 23% WALL AREA 0.12 RSI 0.08 RSI 3.52 RSI 0.11 RSI 0.15 RSI 0.18 RSI 0.18 RSI 0.03 RSI	WALL @ GARAGE EFFECTIVE T INTERIOR AIR FILM GYPSUM BOARD POLYETHYLENE 2X6 STUD GYPSUM BOARD INTERIOR AIR FILM TOTAL EFF. R VALUE = 1.59 R INTERIOR AIR FILM GYPSUM BOARD POLYETHYLENE R20 INSULATION GYPSUM BOARD INTERIOR AIR FILM TOTAL EFF. R VALUE = 3.92 R	HERMAL RESISTANCE 0.12 RSI 0.08 RSI NIL 1.19 RSI 0.08 RSI 0.12 RSI 0.12 RSI 0.12 RSI 0.12 RSI 0.08 RSI NIL 3.52 RSI 0.08 RSI 0.12 RSI SI @ 77% WALL AREA NCE = <u>2.93 RSI</u>	THERMAL RESISTA INTERIOR AIR FILM (FLOOR) CONCRETE SLAB RADIANT IN FLOOR HEATING 2-1/2" XPS EFF. THERMAL INSULATION = 2.35 F REQUIRED EFF. THERMAL INSULAT (R13.2) BASEMENT HEATED FLOOR EFF RESISTANCE INTERIOR AIR FILM (FLOOR) CONCRETE SLAB RADIANT IN FLOOR HEATING	NCE 0.16 RSI 0.04 RSI N/A 2.15 RSI RSI (R13.3) TON = 1.96 RSI FECTIVE THERM 0.16 RSI 0.04 RSI N/A
ITERIOR AIR FILM YPSUM BOARD X6 STUD 16" OSB SHEATHING IR SPACE /OOD SIDING UTSIDE AIR FILM OTAL EFF. R VALUE = 1.86 RS ITERIOR AIR FILM YPSUM BOARD 20 INSULATION 16" OSB SHEATHING IR SPACE /OOD SIDING UTSIDE AIR FILM OTAL EFF. R VALUE = 4.19 RS	0.12 RSI 0.08 RSI 1.19 RSI 0.11 RSI 0.15 RSI 0.15 RSI 0.03 RSI SI @ 23% WALL AREA 0.12 RSI 0.08 RSI 3.52 RSI 0.11 RSI 0.15 RSI 0.18 RSI 0.03 RSI SI @ 77% WALL AREA	WALL @ GARAGE EFFECTIVE T INTERIOR AIR FILM GYPSUM BOARD POLYETHYLENE 2X6 STUD GYPSUM BOARD INTERIOR AIR FILM TOTAL EFF. R VALUE = 1.59 R INTERIOR AIR FILM GYPSUM BOARD POLYETHYLENE R20 INSULATION GYPSUM BOARD INTERIOR AIR FILM TOTAL EFF. R VALUE = 3.92 R EFFECTIVE THERMAL RESISTAN	HERMAL RESISTANCE 0.12 RSI 0.08 RSI NIL 1.19 RSI 0.08 RSI 0.12 RSI 0.12 RSI 0.12 RSI 0.12 RSI 0.08 RSI NIL 3.52 RSI 0.08 RSI 0.12 RSI SI @ 77% WALL AREA NCE = <u>2.93 RSI</u>	THERMAL RESISTA INTERIOR AIR FILM (FLOOR) CONCRETE SLAB RADIANT IN FLOOR HEATING 2-1/2" XPS EFF. THERMAL INSULATION = 2.35 F REQUIRED EFF. THERMAL INSULAT (R13.2) BASEMENT HEATED FLOOR EFF RESISTANCE INTERIOR AIR FILM (FLOOR) CONCRETE SLAB RADIANT IN FLOOR HEATING 2-1/2" XPS	NCE 0.16 RSI 0.04 RSI N/A 2.15 RSI RSI (R13.3) TON = 1.96 RSI FECTIVE THERM 0.16 RSI 0.04 RSI N/A 2.15 RSI
EXTERIOR WALL EFFECTIVE T NTERIOR AIR FILM SYPSUM BOARD X6 STUD 16" OSB SHEATHING IR SPACE VOOD SIDING DUTSIDE AIR FILM OTAL EFF. R VALUE = 1.86 RS NTERIOR AIR FILM SYPSUM BOARD 20 INSULATION 16" OSB SHEATHING IR SPACE VOOD SIDING DUTSIDE AIR FILM OTAL EFF. R VALUE = 4.19 RS SFFECTIVE THERMAL RESISTAN REQUIRED EFECTIVE THERMAL	0.12 RSI 0.08 RSI 1.19 RSI 0.11 RSI 0.15 RSI 0.15 RSI 0.03 RSI SI @ 23% WALL AREA 0.12 RSI 0.08 RSI 3.52 RSI 0.11 RSI 0.15 RSI 0.13 RSI 0.03 RSI SI @ 77% WALL AREA NCE = <u>3.27 RSI</u>	WALL @ GARAGE EFFECTIVE T INTERIOR AIR FILM GYPSUM BOARD POLYETHYLENE 2X6 STUD GYPSUM BOARD INTERIOR AIR FILM TOTAL EFF. R VALUE = 1.59 R INTERIOR AIR FILM GYPSUM BOARD POLYETHYLENE R20 INSULATION GYPSUM BOARD INTERIOR AIR FILM TOTAL EFF. R VALUE = 3.92 R EFFECTIVE THERMAL RESISTAN REQUIRED EFECTIVE THERMAL RSI	HERMAL RESISTANCE 0.12 RSI 0.08 RSI NIL 1.19 RSI 0.08 RSI 0.12 RSI 0.12 RSI 0.12 RSI 0.12 RSI 0.08 RSI NIL 3.52 RSI 0.08 RSI 0.12 RSI SI @ 77% WALL AREA NCE = <u>2.93 RSI</u>	THERMAL RESISTA INTERIOR AIR FILM (FLOOR) CONCRETE SLAB RADIANT IN FLOOR HEATING 2-1/2" XPS EFF. THERMAL INSULATION = 2.35 F REQUIRED EFF. THERMAL INSULAT (R13.2) BASEMENT HEATED FLOOR EFF RESISTANCE INTERIOR AIR FILM (FLOOR) CONCRETE SLAB RADIANT IN FLOOR HEATING	NCE 0.16 RSI 0.04 RSI N/A 2.15 RSI RSI (R13.3) TON = 1.96 RSI -ECTIVE THERM 0.16 RSI 0.04 RSI N/A 2.15 RSI

RES	ISTANCE		
TERIOR AIR FILM (PSUM BOARD (10 RAFTERS (TERIOR AIR FILM)TAL EFF. R VALUE = TERIOR AIR FILM	2.22 RSI @ 13%	0.11 RSI 0.08 RSI 2.0 RSI 0.03 RSI CEILING 0.11 RSI	INTERIOR AIR FILM GYPSUM BOARD 3-1/2" BOTTOM CHOF OUTSIDE AIR FILM TOTAL EFF. R VALUE (INTERIOR AIR FILM GYPSUM BOARD
2 PSUM BOARD 20 BATT INSULATION 2 BATT INSULATION JTSIDE AIR FILM DTAL EFF. R VALUE =	5.85 RSI @ 87%	0.08 RSI 3.52 RSI 2.11 RSI 0.03 RSI	3-1/2" BLOWN INSULA OUTSIDE AIR FILM TOTAL EFF. R VALUE (EFFECTIVE THERMAL
F. THERMAL RESISTAN EQUIRED EFF. THERMA		= 4.67 RSI	RSI 12" BLOWN FG ABOVE
			TOTAL EFF. THERMAL REQUIRED EFF. THER
BASEMENT SLAB ABO\ THERMAL	/E FROST LINE E RESISTANCE	EFFECTIVE	THERMAL BREAK BET WALL EFF
ERIOR AIR FILM (FLOO NCRETE SLAB DIANT IN FLOOR HEATI '2" XPS	NG	0.16 RSI 0.04 RSI N/A 2.15 RSI	1-1/2" XPS 50% REQUIRED HEAT 50% = 1.18 RSI REQUI
THERMAL INSULATIO QUIRED EFF. THERMAL 3.2)			EFF. THERMAL INSULA REQUIRED EFF. THER
BASEMENT HEATED FI RES	LOOR EFFECTIV	E THERMAL	CRAWLSPACE FC
ERIOR AIR FILM (FLOC	DR)		
NCRETE SLAB DIANT IN FLOOR HEAT	ING	0.04 RSI N/A	INTERIOR AIR FILM (V
/2" XPS		2.15 RSI	3" EPS RIGID INSULAT
			6" THICK CONCRETE 3" EPS RIGID INSULAT
F. THERMAL RESISTAN			EFF. THERMAL RESIS
QUIRED EFF. THERMAL	_ RESISTANCE =	2.32 RSI	REQUIRED EFF. THER

CROSS SECTION 01

0 2' 4'

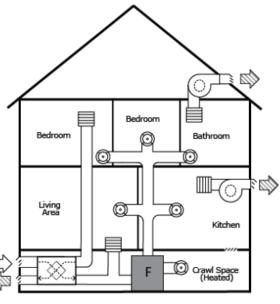
TRUSS ROOF EFFECTIVE THERMAL RE	ESISTANCE	FLOOR OVER UNHEATE
INTERIOR AIR FILM GYPSUM BOARD 3-1/2" BOTTOM CHORD OUTSIDE AIR FILM TOTAL EFF. R VALUE @ 11% = INTERIOR AIR FILM GYPSUM BOARD 3-1/2" BLOWN INSULATION OUTSIDE AIR FILM TOTAL EFF. R VALUE @ 89% = EFFECTIVE THERMAL INSULATION @ CRSI 12" BLOWN FG ABOVE FRAMING = 5.63 TOTAL EFF. THERMAL RESISTANCE = <u>7</u> REQUIRED EFF. THERMAL RESISTANCE	RSI .34 RSI	INTERIOR AIR FILM FLOORING ³ / ₄ " SHEATHING 2X10 JOISTS EXTERIOR AIR FILM WOOD SOFFIT TOTAL EFF. R VALUE = INTERIOR AIR FILM FLOORING ³ / ₄ " SHEATHING R28 BATT INSULATION EXTERIOR AIR FILM WOOD SOFFIT TOTAL EFF. R VALUE = EFF. THERMAL RESISTA REQUIRED EFF. THERM
THERMAL BREAK BETWEEN SLAB AND WALL EFFECTIVE INSULATI		
1-1/2" XPS 50% REQUIRED HEATED CONCRETE SI 50% = 1.18 RSI REQUIRED	1.32 RSI LAB 2.35 RSI X	
EFF. THERMAL INSULATION = <u>1.32 RSI</u> REQUIRED EFF. THERMAL INSULATION	= 1.18 RSI	

FOUNDATION WALLS EFFECTIVE					
INSULATION					
M (WALL)	0.11 RSI				

R FILM (WALL)	0.11 RSI					
) INSULATION	2.15 RSI					
NCRETE WALL	0.04 RSI					
) INSULATION	2.15 RSI					
AL RESISTANCE = <u>4.45 RSI</u>						
FF. THERMAL RESISTANCE = 1.99 RSI						

FLOOR OVER UNHEATED SPACE EFFECTIVE THERMAL RESISTANCE						
INTERIOR AIR FILM FLOORING ³ / ₄ " SHEATHING 2X10 JOISTS EXTERIOR AIR FILM WOOD SOFFIT TOTAL EFF. R VALUE =	0.11 RSI 0.12 RSI 0.16 RSI 2.0 RSI 0.03 RSI 0.12 RSI 2.54 RSI @ 13% FLOOR AREA					
INTERIOR AIR FILM FLOORING ³ / ₄ " SHEATHING R28 BATT INSULATION EXTERIOR AIR FILM WOOD SOFFIT	0.11 RSI 0.12 RSI 0.16 RSI 4.93 RSI 0.03 RSI 0.12 RSI					
TOTAL EFF. R VALUE = $5.47 \text{ RSI} \otimes 87\%$ FLOOR AREA EFF. THERMAL RESISTANCE = 4.75 RSI						
REQUIRED EFF. THERMAL RESISTANCE = 4.67 RSI						

FLOORS OVER GARAGE EFFECTIVE THERMAL RESISTANCE					
INTERIOR AIR FILM WOOD FLOORING SUB FLOOR R28 INSULATION GYPSUM BOARD INTERIOR AIR FILM TOTAL EFF. R VALUE =	0.16 RSI 0.12 RSI 0.16 RSI 4.93 RSI 0.08 RSI 0.11 RSI 5.56 RSI @ 87%				
INTERIOR AIR FILM WOOD FLOORING SUB FLOOR 2X10 FLOOR JOISTS GYPSUM BOARD INTERIOR AIR FILM TOTAL EFF. R VALUE = EFF. THERMAL RESISTANCE = REQUIRED EFF. THERMAL RES					



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



1500 Shorncliffe Road Victoria BC Canada 250.893.8127 www.adaptdesign.ca
737 BELTON AVE, VICTORIA, BC
Drawings and Specifications as instruments of service are and shall remain the property of Adapt Design. They are not to be used on extensions of the project, or other projects, except by agreement in writing and appropriate compensation to the Designer. The General Contractor is responsible for confirming and correlating dimensions at the job site. The Designer will not be responsible for construction means, methods, techniques, sequences, or procedures, or for safety precautions and programs in connection with the project. © Adapt Design

ISSUED FOR DEVELOPMENT PERMIT

ISSUED:

CROSS SECTION



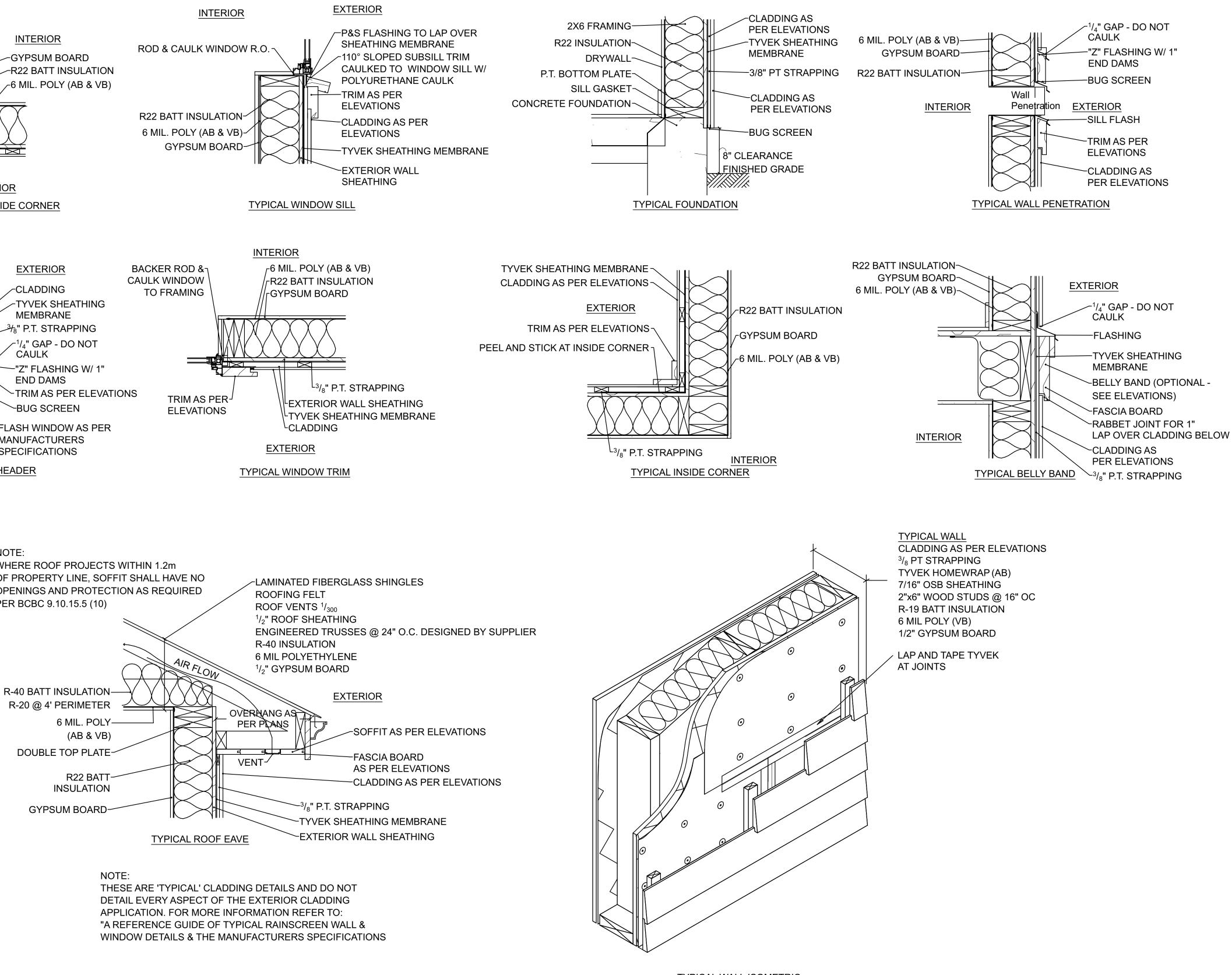


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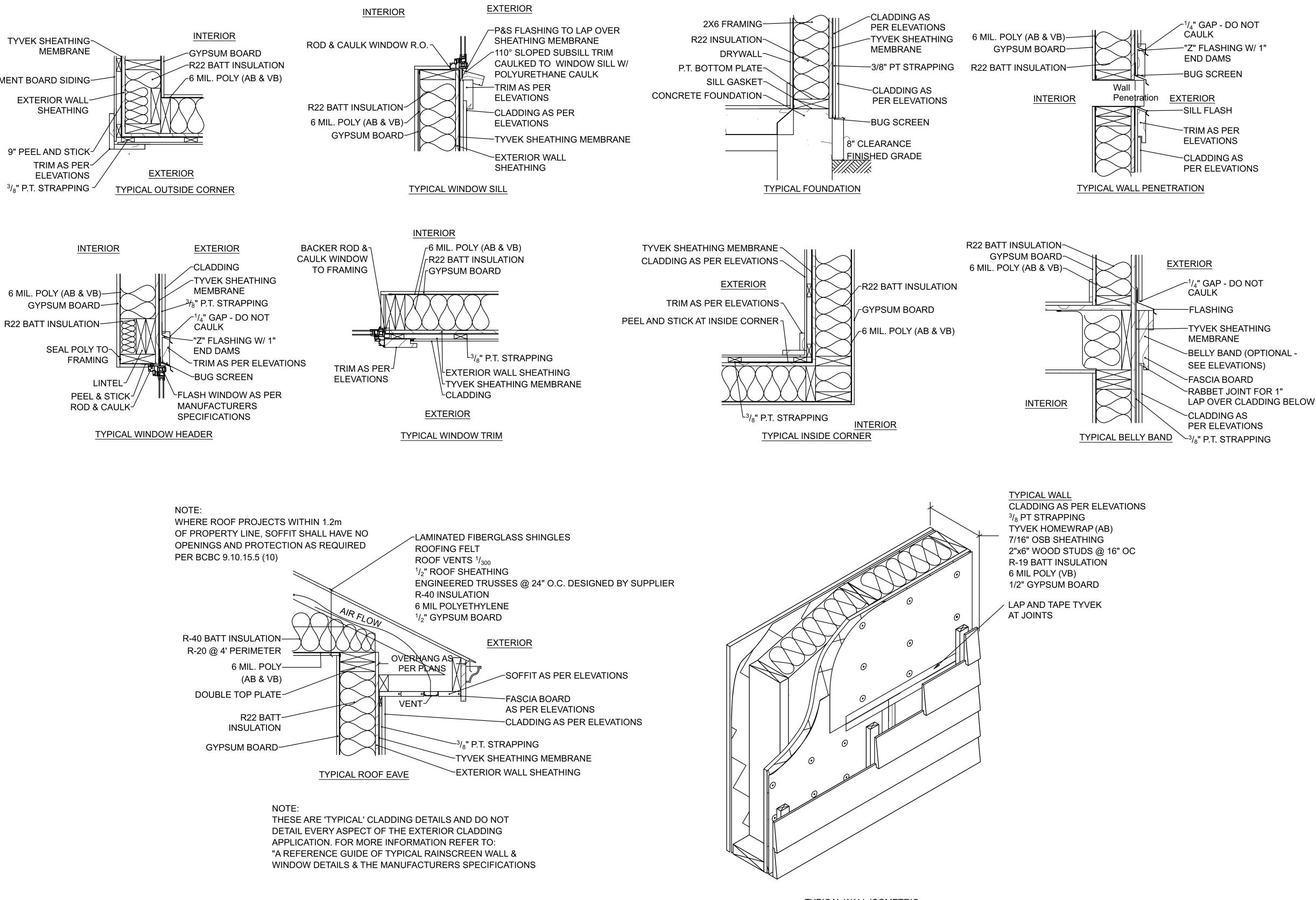
TYPICAL CLADDING DETAILS 1 ` A401/

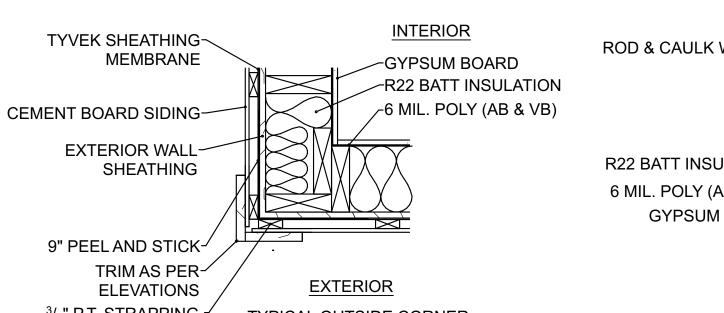


NOTE:

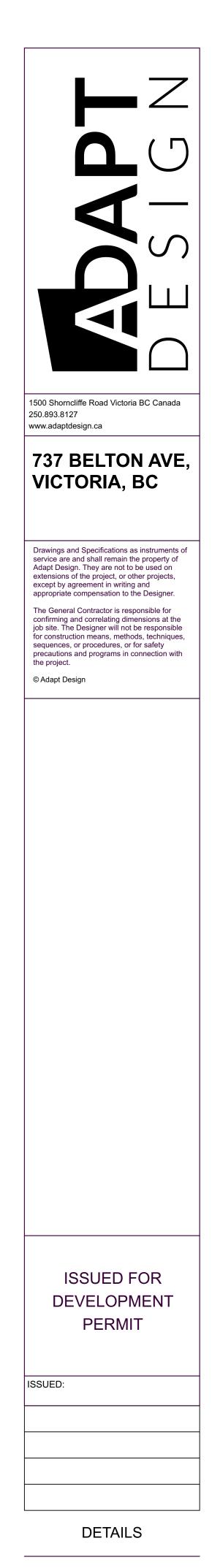


NOTE: WHERE ROOF PROJECTS WITHIN 1.2m





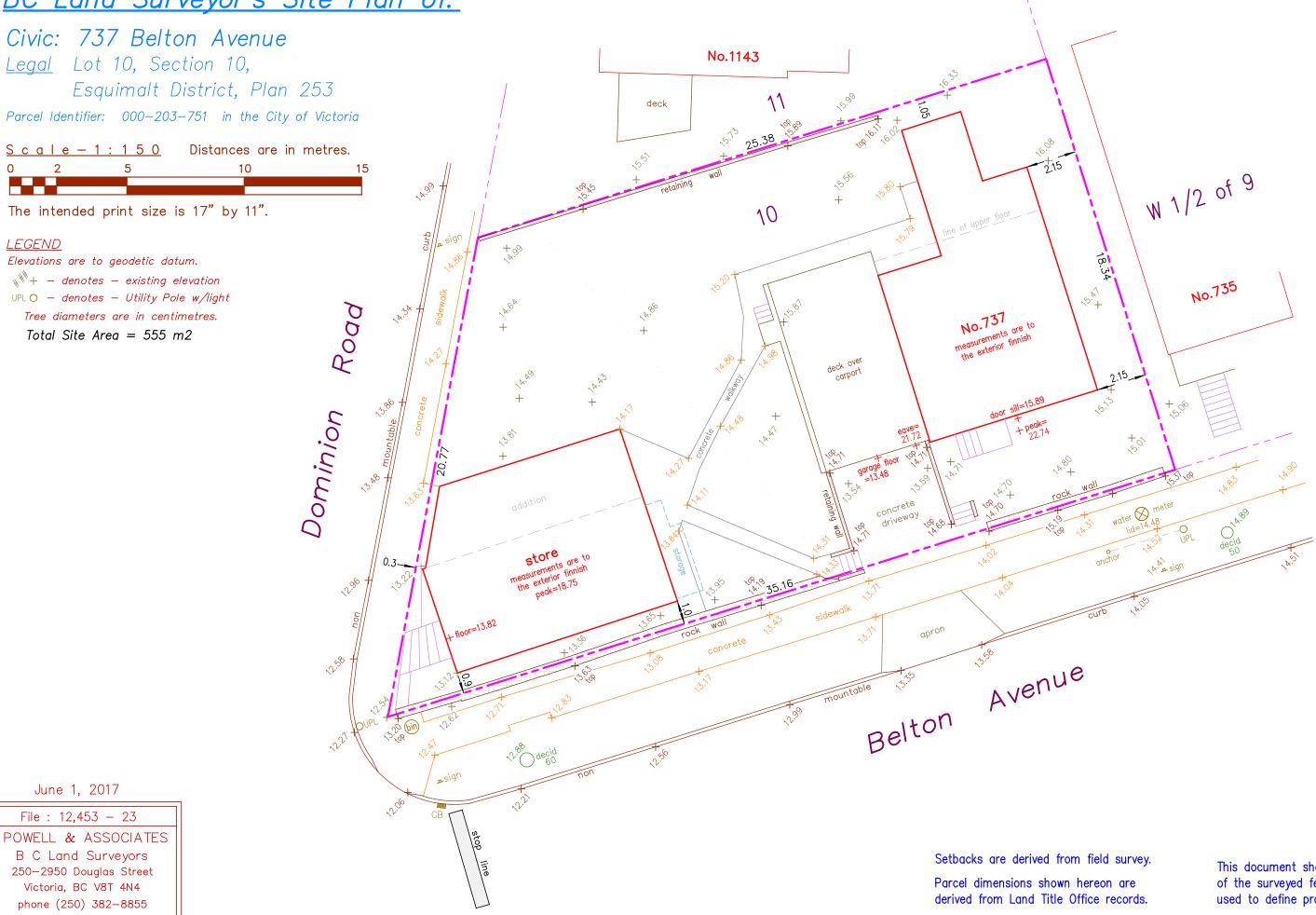
TYPICAL WALL ISOMETRIC





BC Land Surveyor's Site Plan of:

0



This document shows the relative location of the surveyed features and shall not be used to define property boundaries.

<u>LEGEND</u>

AVG – AVERAGE GRADE

BSE – BASEMENT SLAB ELEVATION

ASPHALT SURFACE

CONCRETE SURFACE

TREES (PROPOSED GREEN, EXISTING GREY);

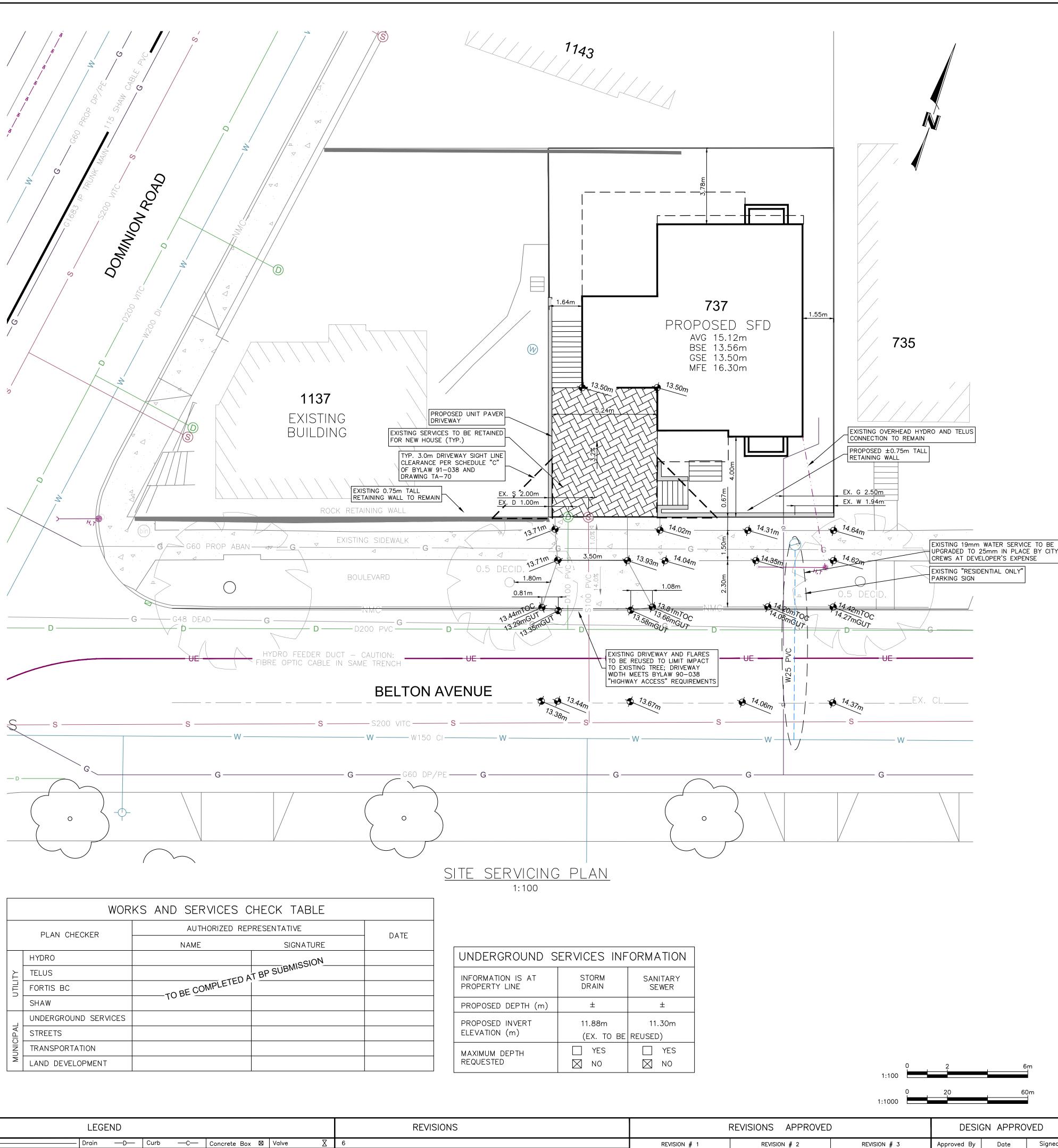
SEE LANDSCAPE PLAN FOR PROPOSED TRÉE TYPE

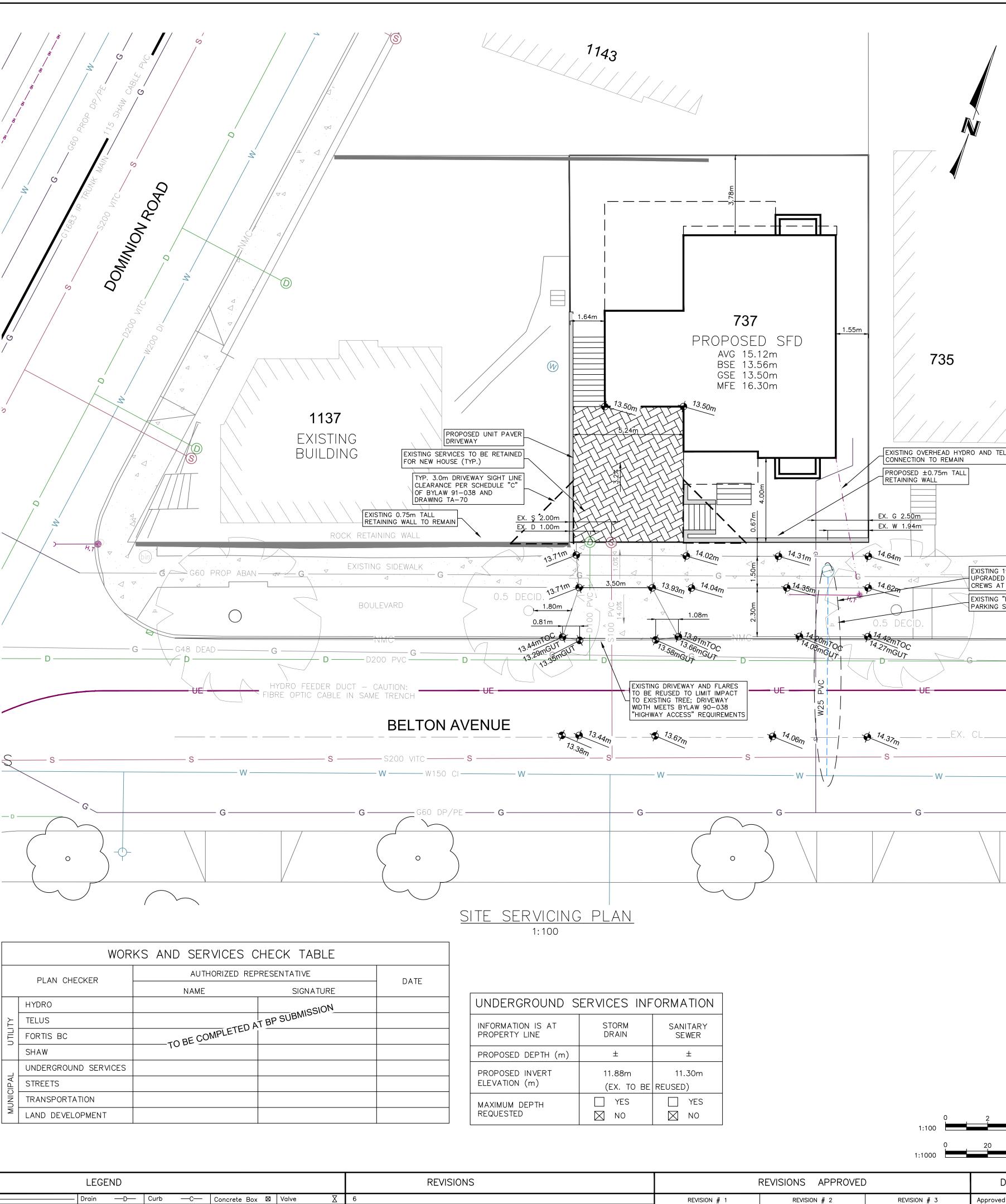
GRADE EXISTING SPOT ELEVATION

BRICK PAVERS

GSE – GARAGE SLAB ELEVATION

MFE - MAIN FLOOR ELEVATION





	WOR	KS	AND	SERVICES	С	HECK	TABLE
	PLAN CHECKER	AUTHORIZED REPRESENTATIVE					
FLAN UNLUKER				NAME	ç	SIGNATURE	
	HYDRO						NISSION
υτιμτγ	TELUS				ΠĂ	T BP SUE	SWI20.
	FORTIS BC		T 0	BE COMPLETE			
	SHAW						
	UNDERGROUND SERVICES						
MUNICIPAL	STREETS						
	TRANSPORTATION						
MI	LAND DEVELOPMENT						

THE CONTRACTOR IS TO CALL B.C. ONE CALL, AND HAVE EXISTING U/G SERVICES STAKED PRIOR TO ANY CONSTRUCTION

<u>1-800-474</u>-6886

ВС

CALL

CONFIRM UNDERGROUND LOCATIONS WITH UTILITY COMPANIES THE LOCATION AND ELEVATION OF THE EXISTING UNDERGROUND INFRASTRUCTURE SHOWN ON THIS DRAWING MAY NOT BE ACCURATE OR COMPLETE. THE ACTUAL HORIZONTAL AND VERTICAL LOCATIONS MUST BE CONFIRMED PRIOR TO THE START OF

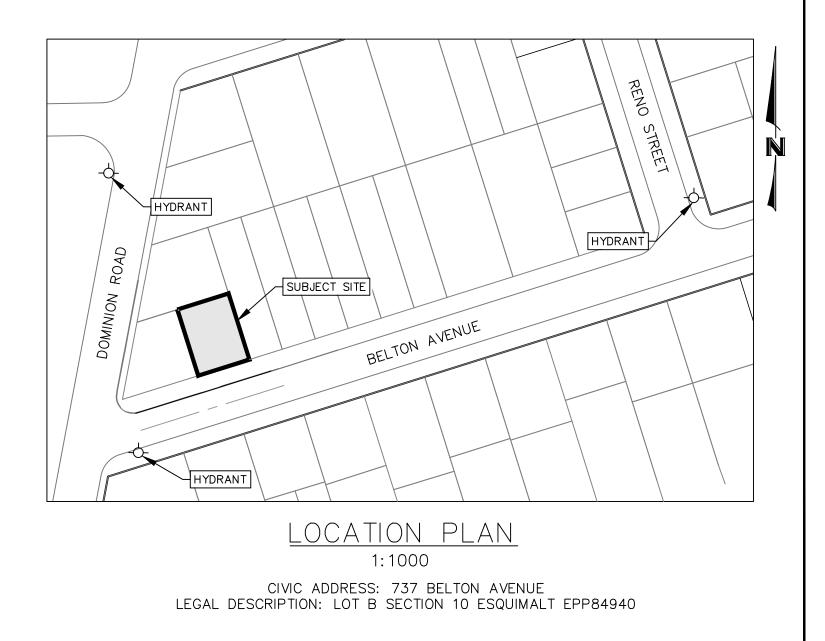
ANY EXCAVATION.

LEGEND							
Existing Municipal Infrastructure	Drain —D—	Curb —C—	Concrete Box 🛛	Valve 🛛			
Proposed Municipal Infrastructure	Ditch	Sidewalk <u>S/W</u>	Wood Box 🛛 🖉	Flush Valve ————————————————————————————————————			
Existing External U/G Utilities — e — t — g — c —	Sewer —S—	Manhole O	Catch Basin 🛛	Hydrant -♀-			
Proposed External U/G Utilities	Water — W—	Cleanout 🖸	Culvert)-	Reducer <u> </u>			
Street Lighting Pole Mount P Standard Mount O	Traffic Sign 👓	Silt Trap 🛛	Cap / Plug \longrightarrow	Air Valve 🛛 🚳			
Post Top 💠 Pedestrian Signal 📼 Traffic Signal 📧	Ctrl Monument 🛆	Traverse Hub 🛧	Gas Valve 🛛 😪	WaterMeter 🖯			

737 BELTON AVE SINGLE FAMILY DWELLING

GENERAL NOTES

- 1. ALL OFFSITE CONSTRUCTION AND MATERIALS TO BE IN ACCORDANCE WITH THE CITY OF VICTORIA SPECIFICATIONS AND STANDARDS, MMCD SPECIFICATIONS AND STANDARDS, AND CITY OF VICTORIA AMENDMENTS TO MMCD. ALL ONSITE WORK TO BE IN ACCORDANCE WITH THE LATEST VERSION OF THE B.C. PLUMBING CODE.
- 2. A ROAD WORKS PERMIT TO CONSTRUCT WORKS IN THE ROAD ALLOWANCE TO BE OBTAINED FROM THE CITY OF VICTORIA (CoV) PRIOR TO START OF ANY CONSTRUCTION.
- 3. CONTRACTOR TO BE RESPONSIBLE TO PROVIDE CONTINUOUS PEDESTRIAN ACCESS AT THE FRONTAGE OF THE SITE FOR THE DURATION OF THE PROJECT. PROVIDE BARRICADES AND SIGNAGE AT THE OFFSITE WORK AREAS TO THE SATISFACTION OF THE CITY. CONTRACTOR TO IDENTIFY AND COMPLY WITH ALL CITY AND WORKSAFE REGULATIONS REGARDING SAFE MOVEMENT OF PEDESTRIANS AND TRAFFIC DURING CONSTRUCTION AND TO ENSURE ALL GOVERNING AGENCIES ARE IN RECEIPT OF APPLICABLE PERMITS PRIOR TO CONSTRUCTION
- 4. ALL OFFSITE AREAS AFFECTED BY THE WORK ARE TO BE REINSTATED TO ORIGINAL OR BETTER CONDITION BY CONTRACTOR. ALL OFFSITE RESTORATION WORKS SHALL BE COMPLETED IN A PROMPT MANNER TO MINIMIZE LOCAL DISRUPTION.
- 5. ALL EXISTING SERVICES ARE TO BE EXPOSED AT CROSSING OR CONNECTION POINTS TO CONFIRM ELEVATION AND LOCATION PRIOR TO ANY CONSTRUCTION.
- 6. ALL WORK TO BE UNDERTAKEN AND COMPLETED IN SUCH A MANNER AS TO PREVENT THE RELEASE OF SEDIMENT LADEN WATER INTO THE AREA DRAINS OR ANY WATERCOURSES.
- 7. REFER TO ARCHITECT'S, MECHANICAL, ELECTRICAL AND LEGAL SURVEY PLANS FOR ADDITIONAL ONSITE REQUIREMENTS AND DIMENSIONS.
- 8. CONFIRM LOCATION OF PROPOSED UNDERGROUND UTILITIES AND COORDINATE WITH APPLICABLE UTILITY COMPANIES PRIOR TO INSTALLATION OF ANY OF THESE WORKS.
- 9. WATER, SEWER AND DRAIN CHAINAGES AND ELEVATIONS AT THE TIE-IN AND AT BUILDING CONNECTIONS TO BE SUPPLIED BY CONTRACTOR ON "AS-BUILTS".
- 10. REFER TO OTHERS FOR ONSITE INFORMATION. THIS DRAWING IS NOT TO BE USED FOR ANY ONSITE LAYOUT OR DESIGN.
- 11. CONTRACTOR TO ADJUST ALL EXISTING OFFSITE APPURTENANCES TO SUIT GRADES REQUIRED BY MECHANICAL ENGINEER.
- 12. THE CONTRACTOR TO ENSURE POSITIVE DRAINAGE OF ALL NEW PAVED ASPHALT, POURED CONCRETE, PAVER SIDEWALKS, AND BOULEVARD AREAS TO AN APPROVED OUTLET. MINIMUM GRADE TO BE 2.0% FOR GRASS AND 1.5% FOR ASPHALT AND 1.0% FOR CONCRETE SURFACES.
- 13. GRADE ALL ONSITE WORKS AT 1.0% MIN.
- 14. OBTAIN PERMIT FROM THE CITY FOR ANY WORK UNDER OR ADJACENT TO BY-LAW PROTECTED TREES. OWNER MUST WORK WITH VICTORIA CITY PARKS, AND MAY NEED TO HIRE AN ARBORIST TO SUPERVISE AND APPROVE CONSTRUCTION METHODS ADJACENT TO PROTECTED TREES.
- 15. ANY CHANGES TO EXISTING DRIVEWAYS AND THE ADDITION OF NEW DRIVEWAY CROSSINGS MUST COMPLY WITH HIGHWAY ACCESS BY-LAW No. 91-038.
- 16. CONTRACTOR TO COMPLETE ALL LAYOUT FOR SERVICES BY PRECISE SURVEY; ENGINEER MAY PERFORM CHECKS.
- 17. RESTORE ANY PAVEMENT MARKINGS (TRAFFIC ARROWS, CROSSWALKS ETC.) AFFECTED BY CONSTRUCTION TO THE CITY'S SATISFACTION.
- 18. ALL UTILITY TRENCHING TO BE IN ACCORDANCE WITH CITY OF VICTORIA STANDARD DETAIL SPECIFICATIONS AND MMCD STD. DWG. NO. SS G4 AND MMCD SECTION 31 23
- 19. ALL PAVING TO BE IN ACCORDANCE WITH MMCD SECTION 32 12 16.
- 20. ALL CONCRETE WALKS, CURBS AND GUTTERS TO BE IN ACCORDANCE WITH CITY OF VICTORIA SCHEDULE B3-1 SUPPLEMENTARY DRAWINGS - CONCRETE AND MMCD SECTION 03 30 20.
- 21. PROVIDE MINIMUM 48 HOURS FOR ENGINEER TO PERFORM CHECKS AND MAKE ANY ADJUSTMENTS <u>PRIOR</u> TO ANY CURB FORMS OR OTHER MILESTONE POINTS AS DISCUSSED AT PRE CONSTRUCTION MEETING.



2		6m 	APRIL 8, 2021 ISSUED FOR DEVELOPMENT PERMIT				E N G I N E 623 discov victoria, phone 25	NDER EERING ERY STREET B.C. V8T5G4 50.590.1200 angineering.com
DESIC	GN APPRO	OVED		CI	TY OF \	VICTORIA	ISLANDER FILE #	2500
Approved By	Date	Signed	-	737 BELTON AVE			MUNICIPAL DESIGN #	
Design Engineer				SITE SERVICING PLAN			REV. #	
Manager of Development					RIA 92B.044 11.21	2.011	DRAWING #	C01
Development Coordinator				Design: AJM Scale: Hor:	Drawn: AJM Vertical:	Checked: JJB Date: 2021–04–06	SHEET #	1 OF 1

Date Signed Approved Date Signed

Design Engineer

Manager of Development

Development Coordinator

Approved

Design Engineer

Manager of Development

Date

Signed

Approved

Design Engineer

Manager of Development

Development Coordinator