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NO	DATE	REVISION
3	2022 04 13	REVISIONS
2	2022 03 22	REVISIONS
1	2020 06 16	ISSUED FOR BUILDING PERMIT

SEAL:  
**SKYLINE ENGINEERING LTD.**  
PERMIT TO PRACTICE  
NO. 1001306

PROJECT NAME:  
**2109 SARITA ROAD**

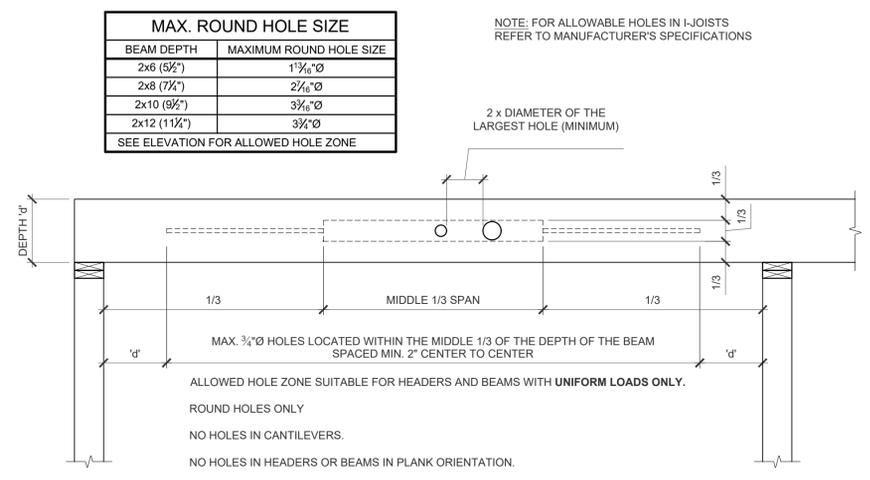
SHEET TITLE:  
**GENERAL NOTES**

PROJECT NO.: **10347.12**

SCALE: **AS NOTED**

DRAWN: **E.O.R. M.E. W.G.**

DRAWING NO.:  
**S1.01**



**1** MAX. ALLOWABLE OPENINGS IN SAWN LUMBER JOISTS  
S1.01 SCALE : 3/4" = 1'-0"

**GENERAL NOTES**

**DRAWINGS**  
S1.01 - GENERAL NOTES  
S2.01 - FOUNDATION PLAN / GROUND FLOOR PLAN W/ MAIN FL. FRAMING OVER / MAIN FLOOR PLAN W/ ROOF FRAMING OVER / SECTIONS

**GENERAL**  
ALL WORK TO CONFORM TO PART 9 OF THE BRITISH COLUMBIA BUILDING CODE (BCBC) 2018 AS A MINIMUM.  
THE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING ALL DIMENSIONS ON SITE. FABRICATION OR ORDERING OF MATERIALS SHALL NOT BE DONE FROM DIMENSIONING OFF OF PLANS.  
ON SITE SAFETY IS THE RESPONSIBILITY OF THE CONTRACTOR INCLUDING: HAZARDOUS MATERIALS, MOLD, ELECTRICAL SHOCKS, OR FALLING DEBRIS.  
THE CONTRACTOR IS RESPONSIBLE FOR ANY TEMPORARY SHORING OR SCAFFOLDING REQUIRED FOR THE PROJECT.

**CODES**  
THE STRUCTURAL DESIGN INDICATED ON THE ATTACHED DRAWINGS HAS BEEN DESIGNED IN SUBSTANTIAL ACCORDANCE WITH THE FOLLOWING CODES:  
BRITISH COLUMBIA BUILDING CODE 2018 (BCBC 2018)  
CSA 086-14  
CSA A23.3-14

**LOADS**  
THE MODIFICATION TO THIS STRUCTURE HAS BEEN DESIGNED FOR THE FOLLOWING LOADS:

	LIVE LOAD (psf)	DEAD LOAD (psf)	CONCENTRATED POINT LOAD (Kips)
ROOFS	S <sub>s</sub> = 50, S <sub>r</sub> = 6.3	15	0.3
FLOORS	40	20	

THE LATERAL SYSTEM FOR THIS BUILDING HAS BEEN REVIEWED AND AS PER GUIDELINES FOR PART 9 BUILDINGS BY APEGBC SECTION 3.6, THIS RENOVATION DOES NOT INCREASE THE LATERAL FORCES CARRIED BY THE INTACT ELEMENTS OF THE EXISTING STRUCTURE BY MORE THAN 5%.

**SEISMIC PARAMETERS:**  
SITE CLASS 'C' (ASSUMED)  
S<sub>a</sub> (0.2) = 1.26 PCA = 0.560  
S<sub>a</sub> (0.5) = 1.14 I<sub>e</sub> = 1.0  
S<sub>a</sub> (1.0) = 0.671 R<sub>d</sub> = 3.0  
S<sub>a</sub> (2.0) = 0.399 R<sub>o</sub> = 1.7

**WIND PARAMETERS:**  
q10 = 10 psf  
q50 = 13.2 psf

**CONCRETE**  
CONCRETE SHALL CONFORM TO CSA A23.3 AND SHALL BE 25 MPa MIN. COMPRESSIVE RESISTANCE AT 28 DAYS. SLABS ON GRADE SHALL NOT HAVE A WATER-CEMENT RATIO GREATER THAN 0.45 AND SHALL HAVE CONTROL JOINTS AT 16'-0" O.C. U.N.O.

**REINFORCING STEEL**  
REINFORCING STEEL SHALL CONFORM TO CSA G30, GRADE 400 MPa.  
ALL OPENINGS TO BE REINFORCED WITH 2 - #4 EACH SIDE AND TOP AND BOTTOM, EXTEND 2'-0" MIN. PAST EDGE OF OPENING TYPICAL. ALL CORNERS AND RETURNS TO HAVE HORIZONTAL LAP BARS TO MATCH MINIMUM SPACING, EXTEND MIN. 2'-0" EACH SIDE TYPICAL. THE FOLLOWING SUBSTITUTIONS ARE STRUCTURALLY ACCEPTABLE: 10M CAN BE SUBSTITUTED FOR #3, 15M CAN BE SUBSTITUTED FOR #4 & #5.

**WOOD FRAMING**  
ALL WOOD FRAMING SHALL CONFORM TO BCBC 2018 PART 9 AS A MINIMUM. ALL SAWN LUMBER STUDS SHALL BE S.P.F. STUD GRADE U.N.O. ALL SAWN LUMBER JOISTS SHALL BE S.P.F. NO.2 OR BETTER U.N.O. ALL CONNECTING HARDWARE SHALL BE SIMPSON STRONG TIE AND ALL JOIST AND BEAM HANGERS SHALL BE CAPABLE OF ACHIEVING 100 PERCENT OF THE MEMBER SHEAR CAPACITY. ALL WALL HEADERS TO BE 2-PLY 2x10 U.N.O. PROVIDE MIN. 1-PLY CRIPPLE AND ONE FULL STUD EACH END, TYPICAL.  
PRESSURE TREATED WOOD ELEMENTS REQUIRE STAINLESS STEEL OR HOT DIPPED CONNECTORS, INCLUDING HANGERS, CLIPS, NAILS, SCREWS AND BOLTS.

**ANCHOR BOLTS**  
SILL BOLTS SHALL BE 1/2" Ø CAST IN J-BOLTS @ 4'-0" O.C. WITH 5" EMBEDMENT. TYPICAL UNLESS NOTED OTHERWISE. SEE SHEAR WALL SCHEDULE FOR SILL BOLTS IN SHEAR WALLS. HILTI KWIK BOLTS OR POST INSTALLED EPOXY ANCHORS MAY BE SUBSTITUTED FOR J-BOLTS IF 4" OR GREATER EDGE DISTANCE TO CONCRETE EDGE.

**SHEATHING**  
WALLS SHALL BE SHEATHED WITH 1/2" PLY SHEATHING OR 1" (SHIP LAP) PLANKS AT 45° ANGLE TYP. FLOOR SHEATHING SHALL BE 5/8" T&G PLYWOOD SHEATHING U.N.O. SHEATHING TO BE PLACED IN STAGGERED PATTERN TYPICAL FOR FLOORS AND WALLS. MINIMUM NAILING FOR SHEATHING SHALL BE 2 1/2" NAILS @ 6" O.C. AT PANEL EDGES AND 12" O.C. AT INTERIOR PANEL SUPPORT FRAMING. SEE SHEAR WALL SCHEDULE FOR ADDITIONAL NAILING REQUIREMENTS.

**ROOF SHEATHING**  
ROOF ≥ 15% SLOPE SHALL BE 1/2" PLY SHEATHING WITH H - CLIPS U.N.O.  
ROOF < 15% SLOPE SHALL BE 5/8" T & G PLYWOOD SHEATHING U.N.O.

**TRUSSES**  
PRE-ENGINEERED TRUSSES ARE ENGINEERED BY OTHERS AND SHALL HAVE SHOP DRAWINGS PREPARED AND WET SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE PROVINCE OF THE PROJECT. SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD FOR REVIEW PRIOR TO FABRICATION. SHOP DRAWINGS SHALL INCLUDE ALL HARDWARE REQUIRED FOR TRUSS TO TRUSS AND TRUSS TO WALL/BEAM CONNECTIONS INCLUDING CONNECTIONS REQUIRED FOR UPLIFT. TRUSSES SHALL BE DESIGNED FOR A MINIMUM OF 20 psf FACTORED WIND UPLIFT.

**ENGINEERED WOOD**  
ENGINEERED LUMBER SHALL BE A TRUSS JOIST PRODUCT AS SPECIFIED ON PLAN. GLULAM BEAMS SHALL BE MINIMUM 24F-E QUALITY GRADE D.FIR PRODUCT, GLULAM POSTS SHALL BE MINIMUM 16C-E D.FIR, PSL BEAMS SHALL BE MINIMUM 2.2E PRODUCT, LVL SHALL BE MINIMUM 2.0E, LSL SHALL BE MINIMUM 1.5E. JOIST SIZING AND DIRECTIONS SHALL NOT CHANGE FROM PLAN WITHOUT PRIOR WRITTEN APPROVAL FROM THE STRUCTURAL ENGINEER OF RECORD. I-JOISTS SHALL BE TRUSS JOIST PRODUCT U.N.O. ALTERNATES MAY BE SUBMITTED FOR APPROVAL BY ENGINEER OF RECORD. ALL RIM BOARD SHALL BE 1 1/4" MIN. WIDE LSL OR LVL PRODUCT U.N.O. SUBMIT SHOP DRAWINGS SHOWING JOISTS, BEAMS, RIM BOARD, AND CONNECTING HARDWARE TO THE ENGINEER OF RECORD FOR REVIEW PRIOR TO ORDERING MATERIAL. FOR MULTI LAMINATED BEAMS, SUPPLIER TO PROVIDE ANY SPECIAL FASTENING REQUIREMENTS.

**FOUNDATIONS**  
FOUNDATIONS FOR THIS PROJECT HAVE BEEN DESIGNED FOR A MINIMUM SERVICE LEVEL ALLOWABLE BEARING PRESSURE OF 2000 psf. SUB GRADE SHALL BE APPROVED BY A GEOTECHNICAL ENGINEER OR THE MUNICIPALITY PRIOR TO PLACING ANY CONCRETE.  
RETAINING WALLS HAVE BEEN DESIGNED IN ACCORDANCE WITH CLAUSE 9.4.4.6 FOR A FREE DRAINED EQUIVALENT FLUID PRESSURE OF 4.7 kN/m<sup>3</sup>.

**RENOVATION**  
DO NOT REMOVE ANY LOAD BEARING ELEMENTS WITHOUT PRIOR CONSENT OF THE STRUCTURAL ENGINEER OF RECORD.  
INFORM THE ENGINEER OF RECORD OF ANY DISCREPANCIES FOUND WITH THE ONSITE FRAMING COMPARED TO THE EXISTING AND RENOVATION STRUCTURAL DRAWINGS IMMEDIATELY.  
REPORT ANY AREAS OF CONCERN WHEN FRAMING IS EXPOSED. AREAS OF CONCERN INCLUDE ROT, OVER CUT HOLES THROUGH STUDS AND BEAMS, MISSING BLOCKING OR MISSING BUILT-UP-POSTS TO THE ENGINEER OF RECORD.  
EXISTING FRAMING SHOWN ON THE STRUCTURAL DRAWINGS, IS FOR INFORMATION ONLY. SKYLINE ENGINEERING HAS NOT REVIEWED EXISTING FRAMING FOR ADEQUACY EXCEPT, WHERE DIRECTLY AFFECTED BY THE RENOVATIONS.

**NON STRUCTURAL**  
THIS DESIGN IS FOR THE BASE BUILDING STRUCTURE ONLY AND DOES NOT INCLUDE THE DESIGN OR ATTACHMENT OF NON STRUCTURAL ITEMS. EXAMPLES OF NON STRUCTURAL ITEMS ARE GUARD RAILING, STAIRS, WINDOWS, CLADDING, CLADDING ATTACHMENT, MECHANICAL AND ELECTRICAL EQUIPMENT, FIXTURES, AND OTHER ELEMENTS NOT CONSIDERED PART OF THE BASE BUILDING STRUCTURE. NON STRUCTURAL ELEMENTS ARE THE RESPONSIBILITY OF THE INSTALLER TO ENSURE THEY ARE ENGINEERED IN ACCORDANCE WITH THE BCBC 2018 CODE.

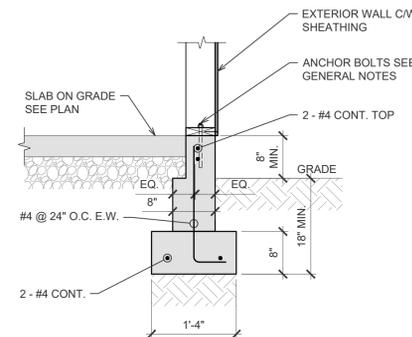
**FIELD REVIEW**  
SKYLINE ENGINEERING REQUIRES PERIODIC FIELD REVIEW OF THE WORK FOR GENERAL CONFORMITY WITH THE STRUCTURAL DRAWINGS. THE CONTRACTOR SHALL NOTIFY SKYLINE ENGINEERING AND REQUEST A REVIEW WITH 24 HOURS ADVANCE NOTICE PRIOR TO PLACING CONCRETE OR ENCLOSING THE STRUCTURE FRAMING.

**ABBREVIATION LEGEND**

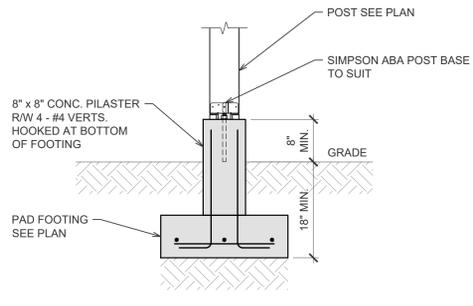
BOT.	-	BOTTOM
B.S.	-	BOTH SIDES
B.U.	-	BUILT UP
CANT.	-	CANTILEVER
CONT.	-	CONTINUOUS
CW	-	COMPLETE WITH
D.B.	-	DROP BEAM
D.H.	-	DROP HEADER
D.T.	-	DRAG TRUSS
E.W.	-	EACH WAY
F.B.	-	FLUSH BEAM
F.H.	-	FLUSH HEADER
G.T.	-	GIRDER TRUSS
H.T.	-	HIP TRUSS
HORZ.	-	HORIZONTAL
I.F.	-	INSIDE FACE
J.T.	-	JACK TRUSS
K.P.	-	KING POST
L.B.	-	LOAD BEARING
O.C.	-	ON CENTER
O.F.	-	OUTSIDE FACE
O.S.	-	ONE SIDE
RW	-	REINFORCED WITH
S.W.	-	SHEAR WALL
SIM.	-	SIMILAR
STG.	-	STAGGER
T.B.C.	-	TO BE CONFIRMED
TYP.	-	TYPICAL
U.N.O.	-	UNLESS NOTED OTHERWISE
VERT.	-	VERTICAL

**DRAWING LEGEND**

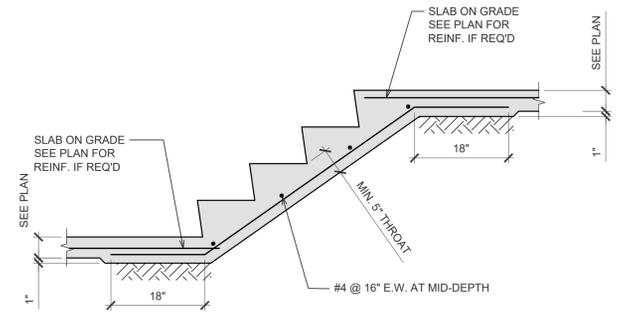
CONCRETE WALL	
EXISTING CONCRETE WALL	
LOAD BEARING WOOD FRAMED WALL	
EXISTING LOAD BEARING WOOD FRAMED WALL	
WOOD FRAMED SHEARWALL	
LOAD BEARING WALL ABOVE	
EXISTING LOAD BEARING WALL ABOVE	
WOOD BEAM	
EXISTING WOOD BEAM	
WOOD POST	
WOOD POST ABOVE	
SHEARWALL HOLD DOWN LOCATION	
JOIST / TRUSS FRAMING	
INDICATES EXTENT OF JOISTS AT SPACING SHOWN	
INDICATES SPAN DIRECTION OF JOISTS	
SECTION MARK	



**4** TYPICAL EXTERIOR FOUNDATION AT WALK-OUT LEVEL  
S2.01 SCALE : 3/4" = 1'-0"



**5** TYPICAL EXTERIOR POST DETAIL  
S2.01 SCALE : 3/4" = 1'-0"



**6** TYPICAL STAIRS ON GRADE  
S2.01 SCALE : 3/4" = 1'-0"

PAD FOOTING SCHEDULE		
TYPE	SIZE	REINFORCING
PF1	2'-6" x 2'-6" x 10" DP.	3 - #4 L.W. BOT., 3 - #4 S.W. BOT.

BEAM SCHEDULE		
TYPE	SIZE	NOTES
B1	2 x 6	
B2	2 x 8	
B3	2 x 10	
B4	2 x 12	
B5	1 1/2" x 9 1/2" LVL	
B6	1 1/2" x 11 1/8" LVL	

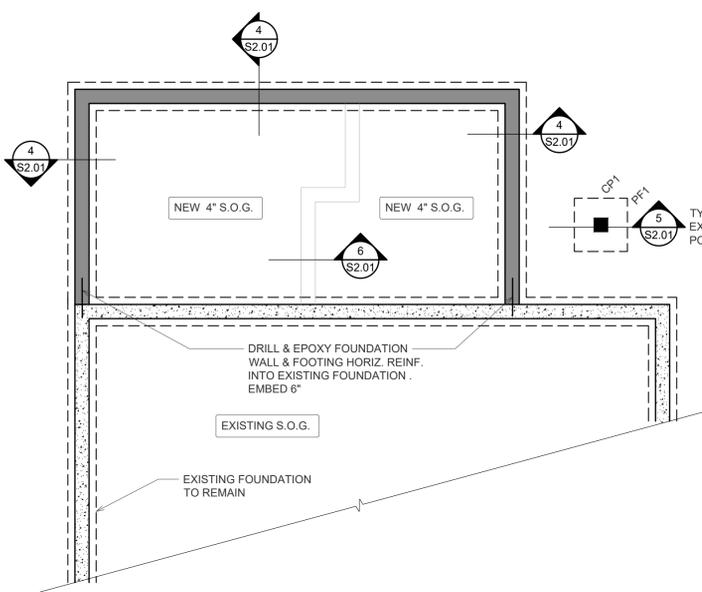
CONCRETE PILASTER SCHEDULE		
TYPE	SIZE	REINFORCING
CP1	8" x 8"	4 - #4 VERTS.

NOTE: ALL BEAMS TO BE MINIMUM 2B3 (2-PLY 2x10) DROP BEAMS UNLESS NOTED OTHERWISE. SOLID BEAMS (PSL) SHALL NOT BE SUBSTITUTED WITH LAMINATED BEAMS (LVL) UNLESS APPROVED BY SKYLINE.

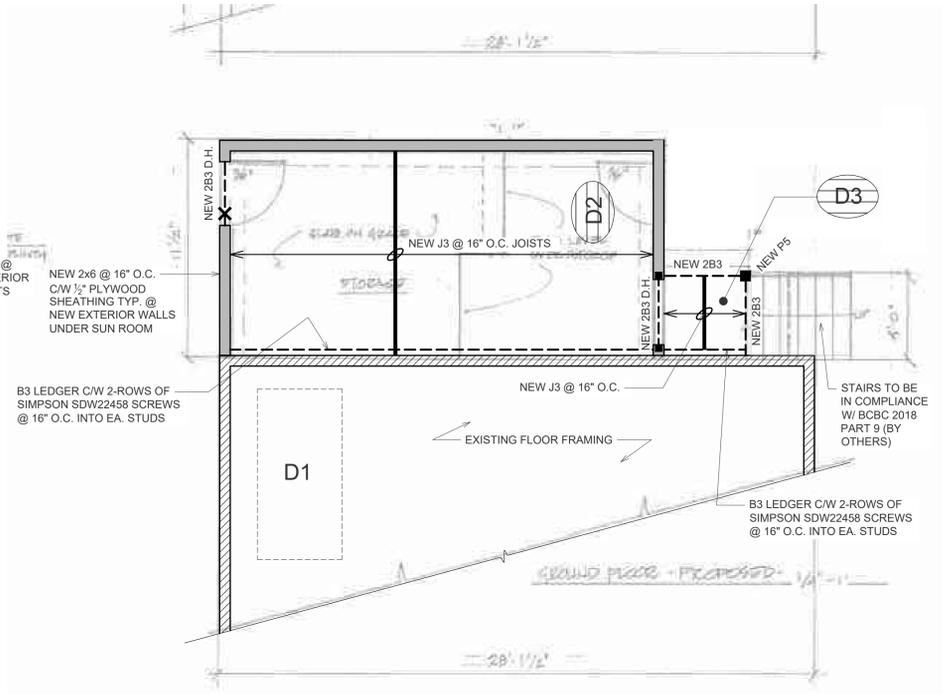
DECKING SCHEDULE		
TYPE	SIZE	
D1	EXISTING PLYWOOD SHEATHING	
D2	EXISTING 2x12 DECKING	
D3	NEW 2x12 DECKING TO MATCH EXISTING	

JOIST SCHEDULE		
TYPE	SIZE	NOTES
J1	2 x 6	SEE PLAN
J2	2 x 8	SEE PLAN
J3	2 x 10	SEE PLAN
J4	2 x 12	SEE PLAN
J5	9/8" DP. TJI	
J6	1 1/8" DP. TJI	

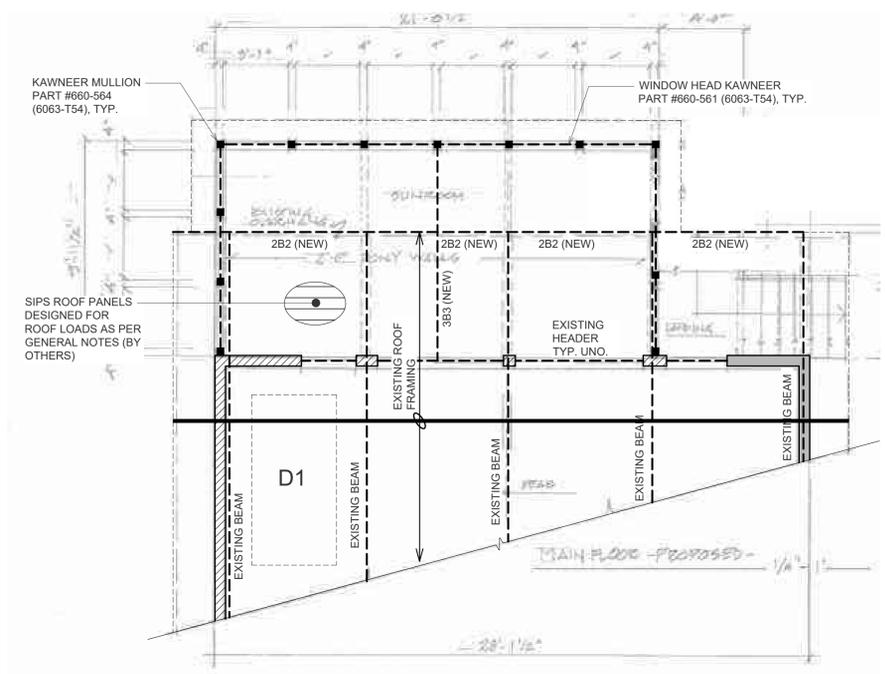
POST SCHEDULE		
TYPE	SIZE	
P1	2 x 4	
P2	2 x 6	
P3	2 x 8	
P4	4 x 4	
P5	6 x 6	



**1** FOUNDATION PLAN  
S2.01 SCALE : 1/4" = 1'-0"



**2** GROUND FLOOR PLAN W/ MAIN FL. FRAMING OVER  
S2.01 SCALE : 1/4" = 1'-0"



**3** MAIN FLOOR PLAN W/ ROOF FRAMING OVER  
S2.01 SCALE : 1/4" = 1'-0"

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PROJECT NAME:  
**2109 SARITA ROAD**

SHEET TITLE:  
**FLOOR PLANS SECTIONS**

PROJECT NO.: 10347.12

SCALE: AS NOTED

DRAWN: M.E. E.O.R.: W.G.

DRAWING NO.:  
**S2.01**