GENERAL NOTES

1. LIVE LOADS USED IN DESIGN:

A. ROOF	35 PSF (50 PSF GROUND)
B. TYPICAL FLOOR	40 PSF
C. WIND	
3 SECOND GUST	115 (ULTIMATE)
EXPOSURE	C

E. LIVE LOADS ARE REDUCED PER CODE IF APPLICABLE.

F. CODE USED IN DESIGN: 2018 IBC

2. FOUNDATIONS

A. MAXIMUM SOIL DESIGN PRESSURE 2500 PSF.

B. CONTRACTOR TO FOLLOW ALL RECOMMENDATIONS IN SOILS REPORT 20-1260 BY BEST ENGINEERING SOLUTION TECHNOLOGIES, LLC DATED DECEMBER 2, 2020.

C. ALL FOOTING BEARING ELEVATIONS SHOW AR ASUMED. EXACT BEARING ELEVATIONS SHALL BE VERIFIED IN THE FIELD WITH ACTUAL CONDITIONS BY CONTRACTOR WITH APPROVAL OF SOILS ENGINEER AND ALL BOTTOMS OF FOOTINGS SHALL BE A MINIMUM OF 36" BELOW EXTERIOR GRADE.

D. ALL FOOTINGS ARE TO PLACED ON FIRM, UNDISTURBED, NATURAL SOIL OR PROPERLY COMPACTED BACKFILL, APPROVED BY THE SOILS ENGINEER. BACKFILL SHALL BE COMPACTED TO 95% (MINIMUM) MODIFIED PROCTOR DENSITY PER ATSM D1557 UNLESS OTHERWISE RECOMMENDED IN THE SOILS REPORT. IF SOFT SPATS ARE ENCOUNTERED REMOVED SOIL AND RECOMPACT WITH THE APPORVED FILL (RE: SOIL REPORT FOR DESCRIPTION OF BEARING SOIL.)

E. CENTER ALL FOOTINGS UNDER WALLS, COLUMNS OR GRID LINES UNLESS NOTED OTHERWISE ON PLANS.

F. CONTRACTOR TO PROVIDE, AT HIS EXPENSE, FIELD DENSITY TEST ON COMPACTED FILL UNDER FOOTINGS AND INTERIOR SLABS-ON-GRADE.

G. NOTIFY SOILS ENGINEER WHEN EXCAVATION IS COMPLETE SO THAT CONDITIONS MAY BE INSPECTED PRIOR TO PLACEMENT OF ANY FILL OR CONCRETE.

3. SLAB ON GRADE

A. THE PREPARATION OF THE SUBGRADE FOR THE SLAB ON GRADE SHALL BE IN STRICT ACCORDANCE WITH THE PROJECT SOILS REPORT REFERENCED ABOVE. THE CONTRACTOR SHALL DIRECT QUESTIONS REGARDING THE SUBGRADE PREPARATION REQUIREMENTS TO THE GEOTECHNICAL ENGINEER.

4. CONCRETE

A. ALL CAST-IN-PLACE CONCRETE SHALL BE MADE WITH TYPE I/II PORTLAND CEMENT, STONE AGGREGATE AND SHALL SATISFY THE FOLLOWING REQUIREMENTS:

CONCRETE ITEM	F'C MIX TYPE	MAX W/C RATIO	% AIR REQ.
FOOTINGS	3000 psi STD	---	---
FOUNDATION WALLS	3000 psi STD	---	---
INTERIOR SLABS ON GRADE	3000 psi STD	0.50	---
EXTERIOR CONCRETE (++)	4500 psi STD	0.45	6%-8%

++ MAXIMUM SLUMP SHALL NOT EXCEED 4".

B. IF CONCRETE SUPPLIER PROPOSES USE OF FLYASH HE SHALL PROVIDE OWNER WITH LETTER INDICATING COST REDUCTION AT TIME OF BID. THE MODULUS OF ELASTICITY OF ALL CONCRETE SHALL EXCEED WC1.5 33 F'C (OR 57,000 F'C NORMAL WEIGHT CONCRETE).

C. CONTRACTOR SHALL SAWCUT OR TROWELCUT JOINTS IN SLABS ON GRADE. JOINTS SHALL BE SPACED 15 FEET AND SAWCUT OR TROWELCUT 1/4 OF SLAB DEPTH X 3/16" WIDE WITHIN 12 HOURS AFTER POURING. CARRY ALL SLAB REINFORCEMENT THROUGH JOINT.

D. SLABS, TOPPING, FOOTINGS, BEAMS AND WALLS SHALL NOT HAVE JOINTS IN A HORIZONTAL PLANE. ANY STOP IN CONCRETE WORK MUST BE MADE AT THIRD POINT OF SPAN WITH VERTICAL BULKHEADS AND HORIZONTAL SHEAR KEYS UNLESS OTHERWISE SHOWN. ALL CONSTRUCTION JOINTS SHALL BE AS DETAILED OR AS REVIEWED BY THE ENGINEER.

E. ALL CONCRETE WORK AND REINFORCEMENT DETAILING SHALL BE IN ACCORDANCE WITH ACI BUILDING CODE 318 LATEST EDITION, UNLESS NOTED OTHERWISE. USE STANDARD HOOKS FOR DOWELS UNLESS NOTED OTHERWISE. ALL EXPOSED EDGES OF CONCRETE WORK SHALL HAVE 3/4 INCH CHAMFER.

5. REINFORCEMENT

A. ALL REINFORCING SHALL BE HIGH-STRENGTH DEFORMED BARS CONFORMING TO ASTM A615, GRADE 60 EXCEPT TIES, STIRRUPS AND PLATE ANCHORS WHICH SHALL BE DEFORMED BARS, ASTM DESIGNATION A615, GRADE 40 OR ASTM A706 GRADE 60.

B. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185 GRADE 65 AND SHALL BE LAPPED ONE FULL MESH AT SIDE AND END SPLICES AND WIRED TOGETHER.

C. REINFORCEMENT PROTECTION UNLESS NOTED OTHERWISE:

1. CONCRETE POURED AGAINST EARTH	3"
2. CONCRETE POURED IN FORMS (EXPOSED TO WEATHER OR EARTH)	2"
3. COLUMNS AND BEAMS (TIE BARS)	1-1/2"
4. SLABS AND WALLS (NOT EXPOSED TO WEATHER)	3/4"

D. REINFORCEMENT PLACEMENT AND TOLERANCES SHALL BE IN ACCORDANCE WITH SECTIONS 7.5, 7.6 AND 7.7 OF ACI 318, LATEST EDITION.

E. NO SPLICES OF REINFORCEMENT SHALL BE MADE EXCEPT AS DETAILED OR AUTHORIZED BY THE STRUCTURAL ENGINEER. LAP SPLICES, WHERE PERMITTED, SHALL BE A MINIMUM OF 48 BAR DIAMETERS FOR #6 BARS AND SMALLER AND SHALL BE A MINIMUM OF 80 BAR DIAMETERS FOR #7 AND #8 REINFORCEMENT UNLESS NOTED OTHERWISE. MAKE ALL BARS CONTINUOUS AROUND CORNERS.

F. PLACE TWO #5 (PER 8" THICKNESS) WITH 2'-0" PROJECTION AROUND ALL OPENINGS IN CONCRETE WALLS, SLABS, AND BEAMS. ALSO PROVIDE TWO #5 X 4'-0" DIAGONALLY AT EACH CORNER.

G. CONTINUOUS TOP AND BOTTOM BARS IN WALLS AND BEAMS SHALL BE SPLICED AS FOLLOWS: TOP BARS AT MIDSPAN, BOTTOM BARS OVER SUPPORTS.

6. STRUCTURAL STEEL

A. ALL STRUCTURAL STEEL SHALL CONFORM TO ASTM A36 EXCEPT WIDE FLANGE BEAMS WHICH SHALL CONFORM TO ASTM 992, (50 KSI) AND EXCEPT PIPE COLUMNS WHICH SHALL CONFORM TO ASTM A53 AND TUBE COLUMNS TO ASTM A500, GRADE B, LATEST EDITIONS. STEEL SUPPLIER MAY PROVIDE ASTM A572, GRADE 50 AT HIS OPTION. MISCELLANEOUS EMBEDDED ITEMS SHALL BE A36 STEEL.

B. ALL STRUCTURAL BOLTS SHALL BE A325N INSTALLED TO A MINIMUM SNUG TIGHT CONDITION. ALL ANCHOR BOLTS SHALL CONFORM TO ASTM A307 UNLESS NOTED OTHERWISE.

C. STRUCTURAL STEEL SHALL BE DETAILED AND FABRICATED IN ACCORDANCE WITH THE LATEST PROVISIONS OF AISC "MANUAL OF STEEL CONSTRUCTION."

D. EXCEPT WHERE DETAILED OTHERWISE, FABRICATOR SHALL SELECT STEEL CONNECTIONS PER AISC "MANUAL OF STEEL CONSTRUCTION" (ASD), TABLE 11-A AND/OR AISC "SIMPLE SHEAR CONNECTION MANUAL" WITH A325 N BOLTS (OR WELDED EQUIVALENT) TO SUPPORT LOADS INDICATED ON THE STRUCTURAL DRAWINGS. WHEN LOADS ARE NOT SHOWN, SELECT CONNECTION TO SUPPORT 60% THE TOTAL UNIFORM LOAD CAPACITY PER AISC "MANUAL OF STEEL CONSTRUCTION" FOR EACH GIVEN BEAM AND SPAN FOR NON-COMPOSITE MEMBERS.

E. ALL WELDERS SHALL HAVE EVIDENCE OF PASSING THE AMERICAN WELDING SOCIETY STANDARD QUALIFICATIONS TESTS AS OUTLINED IN AWS-D1.1.

F. MINIMUM WELDS TO BE PER AISC TABLE J2.4 BUT NOT LESS THAN 3/16" CONTINUOUS FILLET UNLESS NOTED OTHERWISE.

G. FOR ALL BEAM/COLUMN OR BEAM/BEAM CONNECTIONS, PROVIDE HORIZONTAL SHORT SLOTS IN CONNECTION MEMBER ONLY (WT-SECTIONS, ANGLES OR SHEAR PLATES).

7. NON-SHRINK GROUT

A. NON-SHRINK GROUT SHALL BE PROVIDED:
1. BETWEEN COLUMN BASES AND CONCRETE OR MASONRY SUPPORTS.
2. BETWEEN BEAM BEARING PLATES AND CONCRETE OR MASONRY SUPPORTS.
3. GROUT SHALL BE COMPLETE AND HAVE A MINIMUM COMPRESSIVE STRENGTH OF 6000 PSI PRIOR TO ADDING BUILDING LOADS ABOVE.

8. WOOD

A. ALL FRAMING AND TRUSS LUMBER SHALL BE DRY HEM FIR GRADED BY WESTERN WOOD PRODUCTS ASSOCIATION AND CONFORMING TO INTERNATIONAL BUILDING CODE AS FOLLOWS:

2" THICK - 4" TO 6" WIDE (WALL STUD ONLY)	STUD Fb = 675 PSI
2" TO 4" THICK - 6" AND WIDER	NO. 2 Fb = 850 PSI
5" THICK - 5" AND WIDER	NO. 1 Fb = 1050 PSI

NOTED ALLOWABLE STRESSES ARE MINIMUMS AND FOR NONREPETITIVE USES PRIOR TO ALLOWABLE STRESS INCREASES.

B. WHEN PRESERVATIVE TREATED LUMBER IS REQUIRED BY CODE ALL CONNECTIONS AND NAILING SHALL BE ADEQUATELY GALVANIZED (DOUBLEDIPPED OR BETTER).

C. TREATED SILL PLATE LUMBER MAY BE HEM-FIR, STRUCTURAL #1 GRADE.

D. PROVIDE METAL CROSS BRIDGING NOT OVER 8' ON CENTER FOR ALL 2X WOOD JOISTS. SOLID BLOCKING BETWEEN ALL JOISTS AT ALL SUPPORTS AND ENDS OF CANTILEVERS IS REQUIRED.

E. FASTEN ALL WOOD MEMBERS WITH COMMON NAILS ACCORDING TO THE IBC SCHEDULE TABLE 2304-9.1 UNLESS NOTED OTHERWISE.

F. LAMINATED BEAMS
1. ALL LAMINATED MEMBERS SHALL BE FABRICATED OF DOUGLAS FIR LARCH AT 12 PERCENT MOISTURE CONTENT IN ACCORDANCE WITH WCLIB. ALL SIZES SHOWN ARE NET.
2. LAMINATED MEMBER SHALL BE DETAILED AND FABRICATED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR THE DESIGN AND FABRICATION OF STRUCTURAL GLUE LAMINATED TIMBER, LATEST EDITION AS PUBLISHED BY AITC.
3. PROVIDE UNITS CONFORMING TO AITC 117, 24FV8, D.F. FOR CONTINUOUS MEMBERS AND CANTILEVERS AND 24FV4, D.F. FOR SIMPLE SUPPORT MEMBERS. MEMBERS SHALL BE DESIGNED WITH ZERO CAMBER WITH TOP SURFACE CLEARLY STAMPED ON EACH MEMBER.

G. PLYWOOD DECK AND/OR ORIENTED STRAND BOARD.
1. PANEL THICKNESS SHALL BE AS SHOWN ON THE DRAWING. APPLICATION SHALL BE IN ACCORDANCE WITH RECOMMENDATIONS OF THE AMERICAN PLYWOOD ASSOCIATION.
2. EACH PANEL SHALL BE IDENTIFIED WITH THE GRADE-TRADEMARK OF THE AMERICAN PLYWOOD ASSOCIATION AND SHALL MEET THE REQUIREMENTS OF U.S. PRODUCTS STANDARD PS1, LATEST EDITION FOR PLYWOOD. ALL PANELS WHICH HAVE ANY EDGE OR SURFACE PERMANENTLY EXPOSED TO THE WEATHER SHALL BE OF THE EXTERIOR TYPE.
3. FOR FLOORING USE 3/4" T&G STURD-I-FLOOR SHEATHING GLUED AND NAILED WITH 10D NAILS AT 6" ON CENTER ALONG PANEL EDGES AND AT 12" ALONG INTERMEDIATE SUPPORTS.
4. FOR ROOF USE 7/16" (24/16 SPAN RATING) EXPOSURE I SHEATHING NAILED WITH 10D NAILS AT 4" ON CENTER ALONG PANEL EDGES AND AT 12" ALONG INTERMEDIATE SUPPORTS.
5. EXTERIOR WALLS SHALL HAVE ONE LAYER OF 7/16" EXPOSURE I PLYWOOD OR OSB SHEATHING NAILED WITH 8d NAILS AT 3" ON CENTER ALONG PANEL EDGES AND 12" ON CENTER AT INTERMEDIATE SUPPORTS. ALL PANEL EDGES SHALL BE BLOCKED.
6. FLOORS AND ROOF SHEATHING SHALL BE INSTALLED WITH THE FACE GRAIN PERPENDICULAR TO SUPPORTS WITH END JOINTS STAGGERED.
7. INSTALL SUITABLE EDGE SUPPORT BY USE OF PLYCLIPS, TONGUE AND GROOVE PANELS OR SOLID WOOD BLOCKING SUPPORTS.

H. PREFABRICATED WOOD MEMBERS SHALL BE THE TYPE NOTED ON THE DRAWINGS AND SHALL BE "BCI 3015T" AS MANUFACTURED BY BOISE CORPORATION. ALTERNATES SHALL BE REVIEWED BY THE ENGINEER. TO BE CONSIDERED, ALTERNATES SHALL HAVE A LOAD CAPACITY IN BENDING, SHEAR AND DEFLECTION EQUAL TO OR GREATER THAN THE SIZE SHOWN ON THE DRAWINGS. WEB BLOCKING AND BRIDGING TO BE AS REQUIRED BY THE JOIST MANUFACTURER.

I. LAMINATED VENEER LUMBER MEMBERS SHALL HAVE THE FOLLOWING STRESS CAPACITIES: FB = 2800 PSI, E = 2,000,000 PSI, FC = 750 PSI, FV = 285 PSI. BUILT UP MEMBERS SHALL BE CONNECTED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS. CONTRACTOR SHALL HAVE THE OPTION OF USING 3 1/2" OR 5 1/4" WIDE MEMBERS.

J. PREFABRICATED WOOD TRUSSES SHALL BE DESIGNED TO FULFILL STRESS REQUIREMENTS AND/OR LOADS NOTED ON DRAWINGS. SHOP DRAWINGS SHALL INCLUDE CALCULATIONS AND BEAR THE STAMP OF A REGISTERED ENGINEER. PROVIDE BRIDGING AND BLOCKING PER MANUFACTURER'S RECOMMENDATIONS UNLESS OTHERWISE NOTED. PROVIDE CONSTRUCTION BRACING AS REQUIRED ERECTION NOTE: CENTER WALL STUDS UNDER CENTER OF TRUSS LOCATIONS.

9. NON-STRUCTURAL ELEMENTS

A. ELEMENTS SUCH AS NON-BEARING PARTITIONS, ETC. ATTACHED TO AND/OR SUPPORTED BY THE STRUCTURE SHALL TAKE INTO ACCOUNT DEFLECTIONS AND OTHER STRUCTURAL MOVEMENTS.

B. FIRE PROTECTION FOR ALL STRUCTURAL PARTS SHALL BE PROVIDED AND SHALL MEET ALL CODE REQUIREMENTS FOR THE TYPE OF CONSTRUCTION SPECIFIED BY THE ARCHITECTURAL DRAWINGS. STRUCTURAL STEEL MEMBERS SHALL BE CONSIDERED UNRESTRAINED UNLESS NOTED OTHERWISE.

10. MASONRY

A. ALL MASONRY CONSTRUCTION REQUIRES SPECIAL INSPECTIONS PER CHAPTER 17 OF THE INTERNATIONAL BUILDING CODE.

B. CONCRETE BLOCK UNITS SHALL CONFORM TO ASTM C90, GRADE N. BRICK SHALL FULFILL ASTM C62, C216 OR C652. MORTAR SHALL BE ASTM C270 TYPE S OR M.

C. MASONRY SHALL CONSIST OF CONCRETE BLOCK WITH A MINIMUM COMPRESSIVE STRENGTH OF F'm OF 1500 PSI BASED ON NET AREA.

D. WALLS SHALL BE REINFORCED HORIZONTALLY AT 16" ON CENTER WITH 9 GAGE MINIMUM LADDER-TYPE REINFORCEMENT MEETING ASTM A82 MASONRY WALL REINFORCEMENT. HORIZONTAL REINFORCING SHALL BE CONTINUOUS AROUND CORNERS.

E. UNLESS NOTED OTHERWISE, MASONRY WALLS SHALL ALSO BE REINFORCED WITH ONE #5 VERTICALLY AT WALL ENDS, CORNERS, EACH SIDE OF DOOR OR WINDOW OPENINGS AND AT NOT OVER 4'-0" FEET ON CENTER TYPICALLY. REINFORCEMENT SHALL BE FULLY GROUTED IN PLACE. GROUT SHALL DEVELOP 3000 PSI IN 28 DAYS AND MEET ASTM C476.

F. ALL CMU WALLS REQUIRE A MINIMUM OF 2-#5 IN BOND BEAM ABOVE ALL DOORS AND WINDOWS, AT FLOOR AND ROOF LINES, AND TOP OF PARAPETS UNLESS OTHERWISE NOTED.

G. REFER TO ARCHITECTURAL DRAWINGS FOR CONSTRUCTION JOINT LOCATIONS.

H. FILL ALL VOIDS AND BLOCK CELLS SOLIDLY WITH ASTM C476 GROUT FOR A DISTANCE OF 24" BENEATH AND A MINIMUM OF 16" EACH SIDE OF ALL BEAM REACTIONS OR OTHER CONCENTRATED LOADS UNLESS NOTED OTHERWISE.

I. CMU SHALL BE FULLY GROUTED BELOW GRADE.

J. PROVIDE A THICKENED CONCRETE SLAB UNDER ALL MASONRY PARTITION WALLS. SEE ARCHITECTURAL DRAWINGS FOR LOCATION AND EXTENT OF WALLS AND FOR OPENINGS, ALL OF WHICH REQUIRE LINTELS. SEE LOOSE LINTEL SCHEDULE FOR FRAMING OVER NON-BEARING OPENINGS IF NOT SHOWN ON STRUCTURAL DRAWINGS. SEE MECHANICAL DRAWINGS FOR THOSE OPENINGS WHICH REQUIRE LINTELS.

K. ALL MULTIPLE WYTHE MASONRY WALLS SHALL BE GROUTED SOLID BETWEEN EACH WYTHE WITH ASTM C476 GROUT.

L. WHERE MASONRY LINTELS CROSS EXPANSION CONTROL JOINTS IN MASONRY, INSTALL LINTELS SO THAT THE LINTEL MAY SLIDE ON ONE END.

M. PROVIDE MASONRY TIES WHERE MASONRY ABUTS CONCRETE.

11. GENERAL

A. ENGINEER'S ACCEPTANCE MUST BE SECURED FOR ALL STRUCTURAL SUBSTITUTIONS.

B. VERIFY ALL OPENINGS THROUGH FLOORS, ROOF AND WALLS WITH MECHANICAL AND ELECTRICAL CONTRACTORS. VERIFICATION OF LOCATIONS, SIZES, LINTELS AND REQUIRED CONNECTIONS ARE CONTRACTOR'S COMPLETE RESPONSIBILITY.

C. PRIOR TO INSTALLATION OF MECHANICAL AND ELECTRICAL EQUIPMENT OR OTHER ITEMS TO BE ATTACHED TO THE STRUCTURE, ENGINEER'S APPROVAL OF CONNECTIONS AND SUPPORTS SHALL BE OBTAINED. UNLESS SPECIFICALLY DETAILED ON ARCHITECTURAL AND STRUCTURAL DRAWINGS, RESPECTIVE SUBCONTRACTOR SHALL FURNISH ALL HANGERS, CONNECTIONS, ETC., REQUIRED FOR INSTALLATION OF HIS ITEMS.

D. PROVIDE ALL EMBEDDED ITEMS IN STRUCTURE AS NOTED ON ARCHITECTURAL, MECHANICAL, ELECTRICAL AND STRUCTURAL DRAWINGS. MISCELLANEOUS EMBEDDED ITEMS AND ANCHOR BOLTS SHALL BE FURNISHED BY STEEL SUPPLIER AND INSTALLED BY CONCRETE CONTRACTOR. STEEL SHALL FULFILL ASTM A36.

E. PROVIDE ASPHALTIC MASTIC-COATING ON ALL STEEL AND WOOD EXPOSED TO EARTH.

F. SUBMIT SHOP AND ERECTION DRAWINGS TO ENGINEER FOR REVIEW OF ALL STRUCTURAL STEEL, WOOD TRUSSES.
THE MANUFACTURING OR FABRICATION OF ANY ITEMS PRIOR TO WRITTEN REVIEW OF SHOP DRAWINGS WILL BE ENTIRELY AT THE RISK OF THE CONTRACTOR.

G. WATERPROOFING, VAPOR BARRIERS, WATERSTOP, ETC., SHALL BE AS SHOWN ON THE ARCHITECTURAL DRAWINGS AND AS INDICATED IN THE SPECIFICATIONS.

H. ALL MASONRY AND STONE VENEERS SHALL BE ATTACHED TO INTERIOR AND EXTERIOR WALLS AS SPECIFIED IN SECTION 1405 OF THE INTERNATIONAL BUILDING CODE.

I. ALL DIMENSIONS ON STRUCTURAL DRAWINGS SHALL BE CHECKED AGAINST FIELD AND ARCHITECTURAL DRAWINGS.

J. PRE-MANUFACTURED STAIRS, HANDRAILS, AND GUARDRAILS NOTED ON PLAN SHALL HAVE ALL ENGINEERING, DESIGN AND DETAILING PROVIDED BY STAIR DESIGNER AND SHALL BE SUBMITTED FOR ARCHITECTS REVIEW BEARING THE SEAL OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF COLORADO. STAIRS SHALL BE DESIGNED TO SUPPORT A LIVE LOAD OF 100 PSF. SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL REQUIREMENTS AND CRITERIA.

5/18/2021 7:27:53 AM

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COLORADO REGISTERED CRAIG B. CARROLL 29008 PROFESSIONAL ENGINEER
05/18/2021

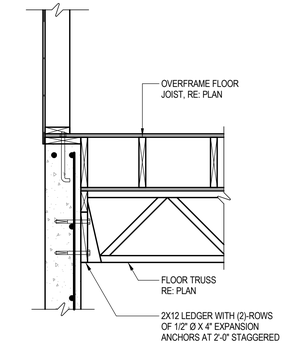
Digitally signed by craig carroll
DN: C=US, [redacted]
E=craig.b.carroll@imegcorp.com, O=IMEG Corp, CN="craig carroll"
Date: 2021.05.18 08:40:39-06'00'

04.23.2021

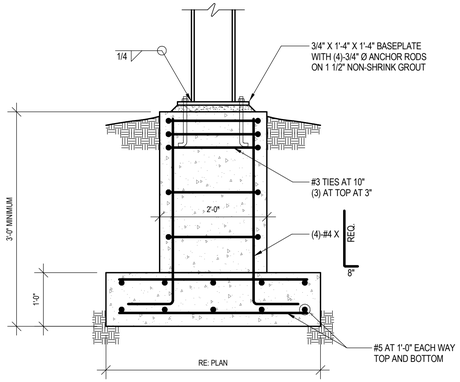
Date	Description
5/18/2021	Revision 1

GENERAL NOTES

S1.00



SECTION 9
3/4" = 1'-0"



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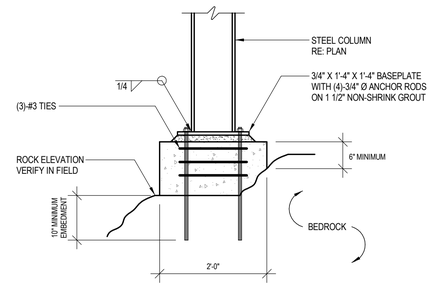

SECTION 6
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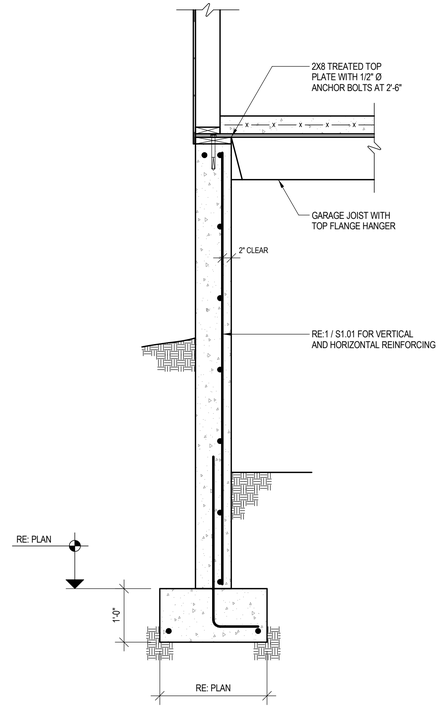

SECTION 3
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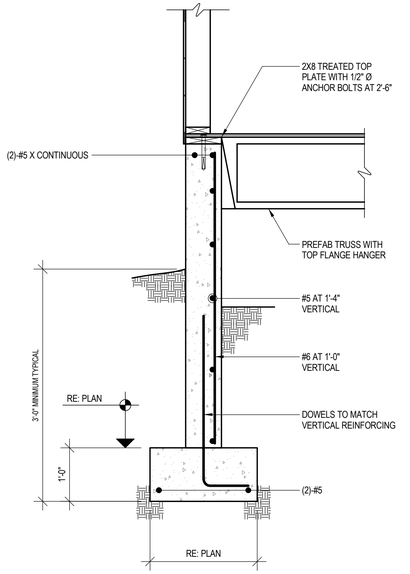

SECTION 1
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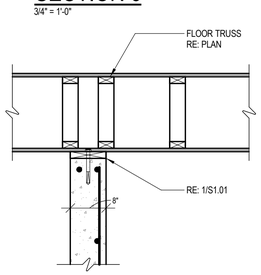

SECTION 7
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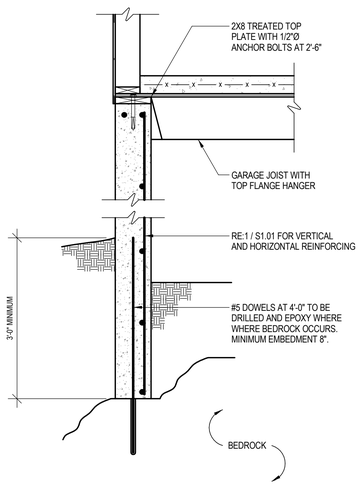
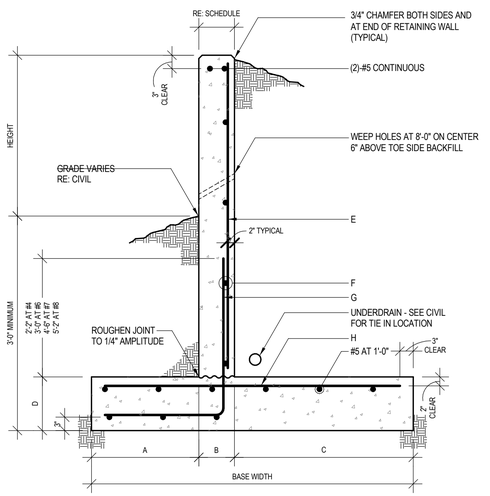


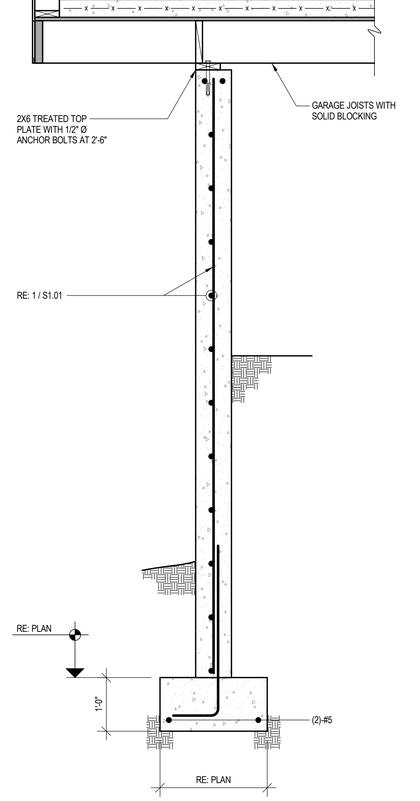
SECTION 8
3/4" = 1'-0"



NOTES:
1. REBAR GRADE 60
2. CONCRETE FC = 4000
3. SOIL BEARING 2500 PSF ON NATIVE SOIL 4000 PSF ON BEDROCK
4. ACTIVE PRESSURE 35 PCF
5. 40 PSF SURCHARGE LOAD

SECTION 4
3/4" = 1'-0"

RETAINING WALL SCHEDULE								
HEIGHT	A	B	C	D	E	F	G	H
0'-0" - 4'-0"	2'-0"	12"	3'-0"	1'-0"	#5 AT 1'-0"	#5 AT 1'-0"	#5 AT 1'-0"	#5 AT 1'-0"
6'-0" - 8'-0"	1'-6"	12"	4'-0"	1'-0"	#6 AT 1'-0"	#5 AT 1'-0"	#6 AT 1'-0"	#6 AT 1'-0"



SECTION 2
3/4" = 1'-0"

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COLORADO REGISTERED
CHRISTOPHER J. FOGEL
29039
PROFESSIONAL ENGINEER
05/18/2021

04.23.2021

Date	Description
5/18/2021	Revision 1

FOUNDATION SECTIONS

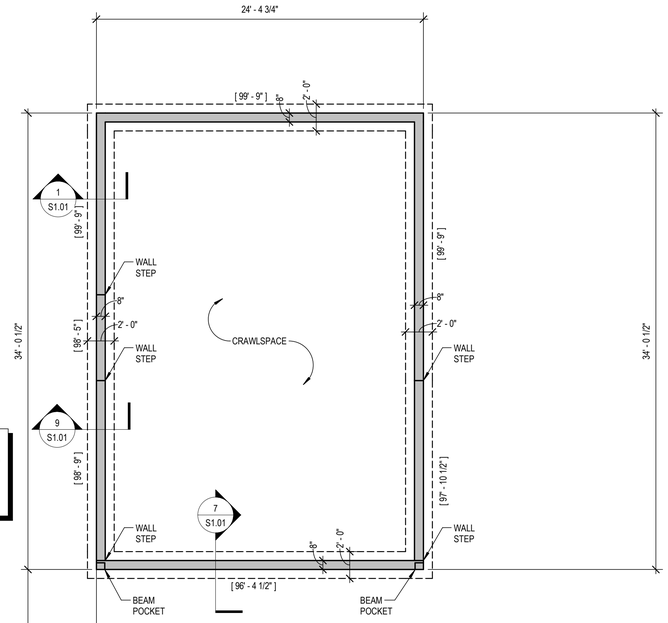
S1.01 119

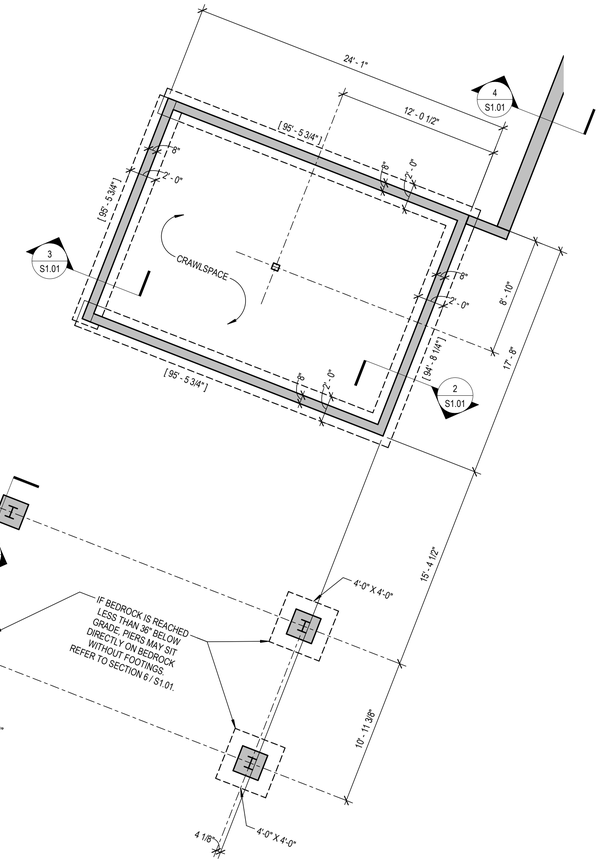
5/18/2021 7:27:53 AM

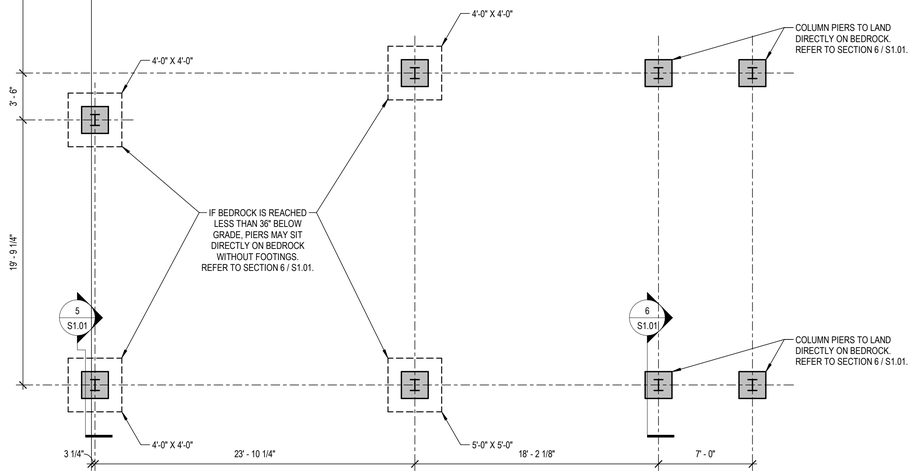
FOUNDATION NOTES:

1. DATUM ELEVATION 100'-0" EQUALS 6044' LEVEL FLOOR SHEATHING.
2. INDICATES ELEVATION OF TOP OF FLOOR SHEATHING OR TOP OF CONCRETE SLAB.
3. ALL SLAB-ON-GRADES ARE 4" THICK WITH 6x6-W2.1 x W2.1 W.W.F, U.N.O.
4. CONTRACTOR TO COORDINATE ALL DIMENSIONS AND DETAILS WITH ARCHITECTURAL DRAWINGS.
5. [XXX'-XX"] INDICATES TOP OF FOUNDATION WALL (GRADE BEAM) ELEVATION.
6. (XXX'-XX") INDICATES TOP OF FOOTING ELEVATION (PIER CAP). TOP OF FOOTING ELEVATION (PIER CAP) = (99'-0"), TYP. U.N.O.
7. (XXX'-XX") INDICATES TOP OF LEDGE ELEVATION.
8. GENERAL CONTRACTOR SHALL FOLLOW ALL REQUIREMENTS LISTED IN SOILS REPORT.
9. INDICATES TOP OF SLAB STEP.
10. ALL CONCRETE WALLS ARE 8" THICK, U.N.O.
11. CONTRACTOR TO PLACE (3)-#5 VERTICALLY FULL HEIGHT OF WALL AT HIGH SIDE OF ALL WALL STEPS GREATER THAN 4'-0" IN ADDITION TO WALL REINFORCING SHOWN OTHERWISE.
12. FOOTING ELEVATIONS SHOWN ARE MAXIMUMS AND MAY NEED TO BE LOWERED DUE TO SOIL CONDITIONS. VERIFY CHANGES WITH STRUCTURAL ENGINEER OF RECORD PRIOR TO CONSTRUCTION.
13. PROVIDE CONTROL JOINTS OR CONSTRUCTION JOINTS PER GENERAL NOTES. MAXIMUM SIZE OF EACH AREA SHALL NOT EXCEED 150 SQUARE FEET. CONTRACTOR TO COORDINATE JOINT LAYOUT WITH ARCHITECT.
14. ALL SITE WALLS NOT SHOWN ON THIS PLAN SHALL BE BUILT PER ARCHITECTURAL LANDSCAPE PLANS, DETAILS, AND ELEVATIONS. SITE WALLS SHALL NOT BE CONNECTED TO THE BUILDING UNLESS NOTED OTHERWISE.

IF BEDROCK IS REACHED AT A DEPTH LESS THAN 36" BELOW GRADE, FOUNDATION WALL CAN BEAR DIRECTLY WITH NO FOOTING. REFER TO SECTION 8 / S1.01.







FOUNDATION PLAN
3/16" = 1'-0"

FOGEL RESIDENCE

6129 WOODBINE WAY
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COLORADO REGISTERED CRAIG B. CAMPBELL 39208 PROFESSIONAL ENGINEER
05/18/2021

04.23.2021

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5/18/2021	Revision 1

FOUNDATION PLAN

S3.00 119

5/18/2021 7:27:53 AM

PREFABRICATED FLOOR TRUSS NOTES:

1. PREFABRICATED FLOOR TRUSS LOADS – AT RESIDENTIAL UNITS:

LIVE LOADS AT TOP CHORD	=	40 PSF
DEAD LOADS AT TOP CHORD	=	20 PSF*
DEAD LOADS AT BOTTOM CHORD	=	5 PSF*

   * DEAD LOADS DO NOT ACCOUNT FOR SELF WEIGHT OF FLOOR TRUSS. TRUSS SUPPLIER TO ACCOUNT FOR SELF WEIGHT OF TRUSS IN CALCULATIONS.

2. FLOOR TRUSS LIVE LOAD DEFLECTION SHALL NOT EXCEED 5/8", OR SPAN/600. TOTAL LOAD DEFLECTION SHALL NOT EXCEED SPAN/480. FLOOR TRUSS SPACING WHALL NOT EXCEED 2'-0".

3. SHOP DRAWINGS SHALL BE SUPPLIED BY MANUFACTURER AND REVIEWED BY GENERAL CONTRACTOR, ARCHITECT AND STRUCTURAL ENGINEER.

4. THE TRUSS SUPPLIER SHALL BE RESPONSIBLE FOR THE FOLLOWING ITEMS:
   a. ENGINEERING OF ALL TRUSSES AND CONNECTIONS, AND SHOWING OF ALL ON SHOP DRAWINGS.
   b. DESIGN AND SUPPLY OF ALL TRUSS BEARING CONNECTORS AND HOLD DOWNS. (NOTE – TRUSS SUPPLIER SHALL NOT EXCEED $F_{\perp}$ = 525 PSI TOP PLATE ALLOWABLE BEARING STRESS).
   c. PLACING OF TRUSSES TO ACCOMMODATE MECHANICAL EQUIPMENT WITHOUT CUTTING TRUSSES.
5. TRUSS SUPPLIER TO CONFIRM CEILING SLOPES AND CONFIGURATION WITH ARCHITECTURAL DRAWINGS PRIOR TO FABRICATION.

6. CALCULATIONS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD FOR REVIEW BEFORE SUBMITTING TO THE BUILDING DEPARTMENT. THE TRUSS DESIGN SHALL BE APPROVED BY THE BUILDING DEPARTMENT PRIOR TO TRUSSES BEING INSTALLED.

7. ALL PREFABRICATED TRUSSES TO BE ALIGNED WITH SUPPORTING WALL STUDS BELOW.

8. || INDICATES BLOCKOUT IN PREFABRICATED TRUSS FOR MECHANICAL EQUIPMENT. RE: ARCHITECTURAL AND MECHANICAL PLANS FOR EXACT SIZE AND LOCATION.

WOOD FLOOR FRAMING NOTES:

1. ALL WOOD FRAMING JOISTS SHALL BE BCI TYPE JOISTS AS MANUFACTURER BY BOISE CASCADE (WEYERHAEUSER COMPANY). ALTERNATES SHALL HAVE EQUAL OR GREATER CAPACITY AND SHALL BE REVIEWED BY THE ENGINEER OF RECORD.

2. "LVL" INDICATES VERSA-LAM BEAMS, AS MANUFACTURER BY BOISE CASCADE. ALTERNATES SHALL HAVE EQUAL OR GREATER CAPACITY AS LISTED IN THE STRUCTURAL GENERAL NOTES.

3. ☐ INDICATES COLUMN DOWN ONLY. MULTIPLE 2X FRAMING NOTED ON PLANS.

4. ■ INDICATES COLUMN UP AND DOWN UNLESS IT BEARS ON CONCRETE WALL OR FOOTING BELOW, OR IS LABELED AS UP ONLY.

5. <XXX'-XX"> INDICATES TOP OF BEAM ELEVATION OR WALL PLATE HEIGHT ELEVATION.

6. ⌖ INDICATES TOP OF STRUCTURAL FLOOR SHEATHING ELEVATION.

7. ▨ INDICATES INTERIOR BEARING WALLS.

8. HEADERS SHALL BE (3)-2X10 AT 2X6 WALLS OR (2)-2X10 AT 2X4 WALLS UNLESS NOTED OTHERWISE. ALL HEADERS SHALL BE BUILT OUT TO 5 ½" OR 3 ½" WIDTH BY ADDING PLYWOOD OR INSULATION SPACERS AS REQUIRED.

9. ALL COLUMNS SHALL BE (3)-2X6 AT 2X6 WALLS OR (3)-2X4 AT 2X4 WALLS UNLESS NOTED OTHERWISE.

10. WOOD COLUMNS SHALL BE CONTINUOUS FROM FLOOR TO FLOOR OR FLOOR TO ROOF. TRIMMERS SHALL BE ADDED TO NOTED COLUMN SIZES AS REQUIRED.

11. ALL EXTERIOR WALLS SHALL BE CONSTRUCTED USING 2X6 STUDS. ALL EXTERIOR WALLS SHALL HAVE CONTINUOUS STUDS FROM FLOOR TO FLOOR OR FLOOR TO ROOF (INCLUDING RAKE WALLS). REFER TO EXTERIOR WALL DETAILS FOR ADDITIONAL INFORMATION.

12. ALL BEAM-TO-BEAM AND BEAM-TO-COLUMN CONNECTIONS SHALL BE MADE WITH SIMPSON STEEL PLATE CONNECTORS UNLESS NOTED OTHERWISE.

13. RE: ARCHITECTURAL DRAWINGS FOR LOCATIONS AND SIZE OF ROUGH OPENINGS IN WOOD STUD WALLS.

14. RE: ARCHITECTURAL DRAWINGS FOR HANDRAIL AND STAIR FRAMING DETAILS.

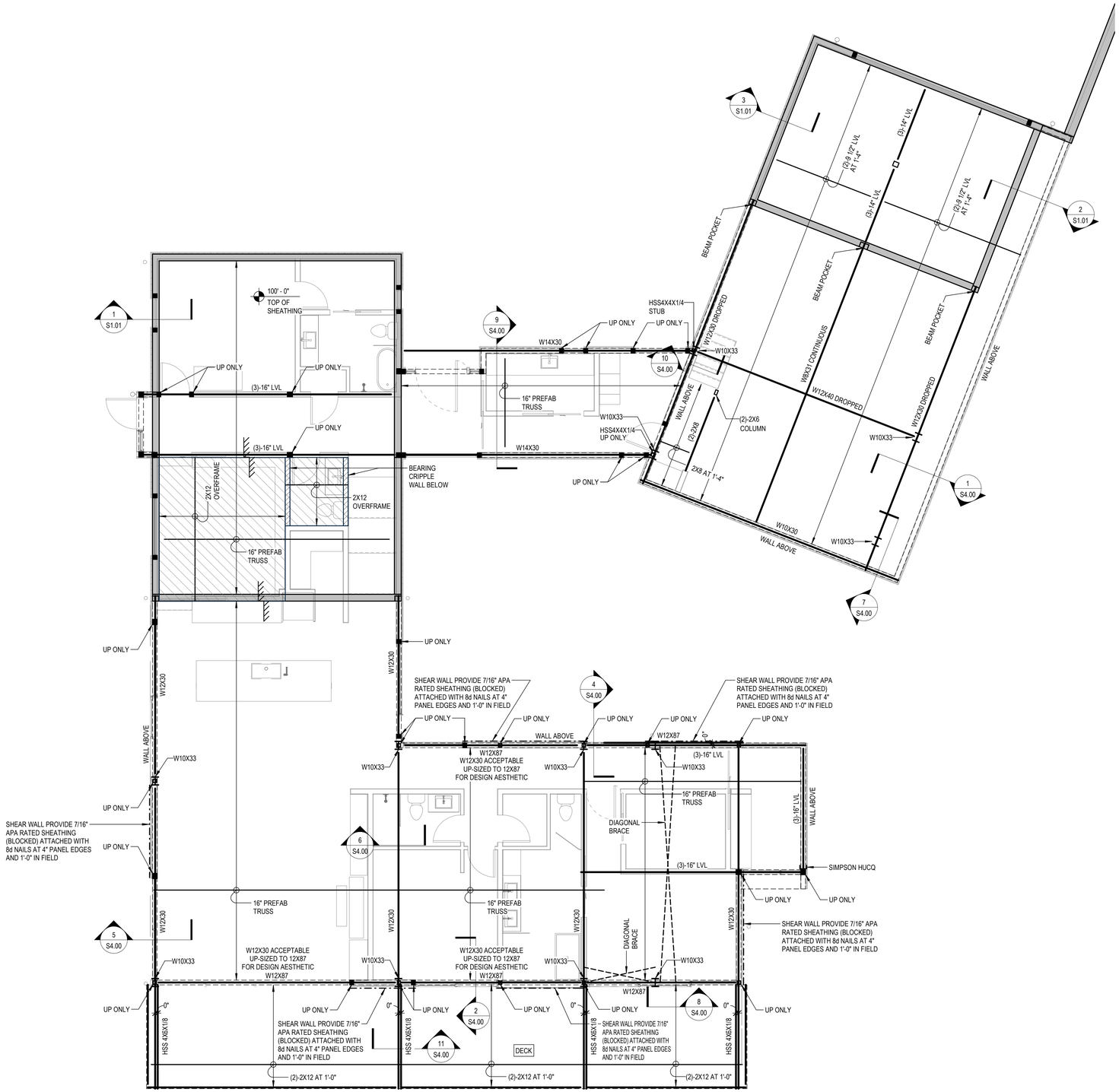
15. FASTEN BOTTOM PLATES OF SHEAR WALLS TO FLOOR SHEATHING WITH (3)-ROWS OF 16d NAILS AT 8" WHERE SHEAR WALLS DO NOT ALIGN VERTICALLY.

16. HOLD DOWNS OR STRAPS ARE CALLED OUT ON PLAN AT BOTTOM OF SHEAR WALL WHERE REQUIRED. MINIMUM HOLD DOWN COLUMN SHALL BE (2)-2X6 AT WALL ENDS, OR AS REQUIRED BY SHEAR WALL SCHEDULE.

17. STAGGER ALL SHEATHING JOINTS AND SILL PLATE NAILING.

18. NAIL HEADS SHALL NOT PENETRATE PLYWOOD.

19. PROVIDE 3/8" X 2" X 2" STEEL PLATE WASHER BETWEEN THE SILL PLATE AND NUT AT ALL ANCHOR BOLTS IN EXTERIOR WALLS AND DESIGNATED SHEAR WALLS.



MAIN LEVEL FRAMING PLAN

3/16" = 1'-0"

FOGEL RESIDENCE
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05/18/2021

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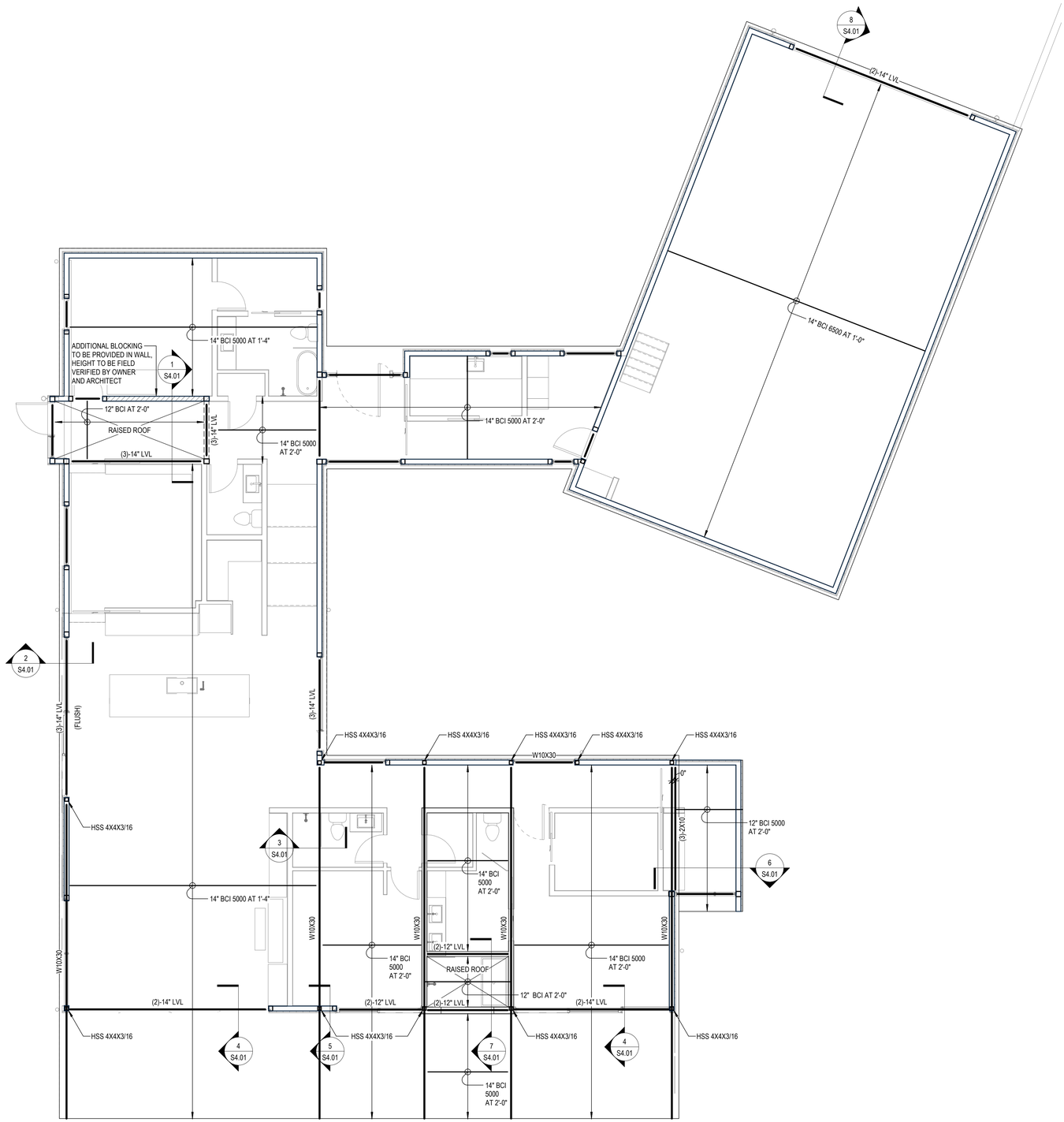
MAIN LEVEL FRAMING PLAN

S3.01 119

5/18/2021 7:27:55 AM

WOOD ROOF FRAMING NOTES:

1. ROOF SHEATHING 15/32" (22/16 SPAN RATING). STAGGER PANEL END JOINTS AND FASTEN WITH 10d NAILS AT 6" MAXIMUM ALL EDGES AND 1'-0" MAXIMUM OTHER SUPPORTS.
2. RE: ARCHITECT FOR ROOF SLOPES AND BEARING PLATE HEIGHTS NOT NOTED.
3. ALL HEADERS SHALL BE (3)-2X10 UNLESS OTHERWISE NOTED. ALL HEADERS SHALL BE BUILT OUT TO 5 1/2" OR 3 1/2" WIDTH BY ADDING PLYWOOD SHIMS AS REQUIRED.
4. ALL HEADERS LONGER THAN 6'-0" SHALL REQUIRE TWO TRIM STUDS AND TWO KING STUDS EACH SIDE.
5. ALL JOIST HANGERS SHALL BE SIMPSON LUS, WP OR LSSU TYPE UNLESS NOTED OTHERWISE.
6. ALL BEAM TO COLUMN CONNECTIONS, BOTH TOP AND BOTTOM SHALL USE SIMPSON PLATE CONNECTORS UNLESS NOTED OTHERWISE ON DETAILS.
7. ALL COLUMNS SHALL BE (3)-2X6 UNLESS NOTED OTHERWISE.
8. ALL EXTERIOR WALL HEADERS FLUSH FRAMED UNLESS NOTED OTHERWISE.



ROOF FRAMING PLAN

3/16" = 1'-0"

FOGEL RESIDENCE

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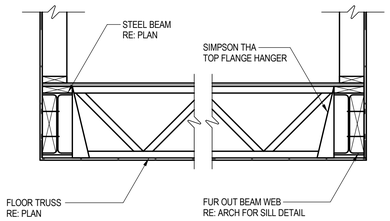
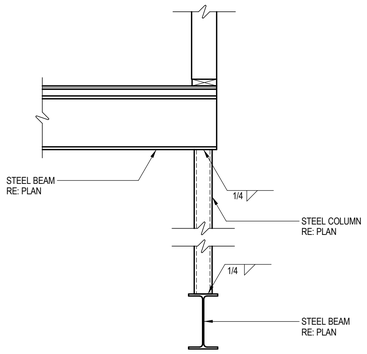
ROOF FRAMING PLAN

S3.02 | 119

5/18/2021 7:27:56 AM



SECTION 9
3/4" = 1'-0"



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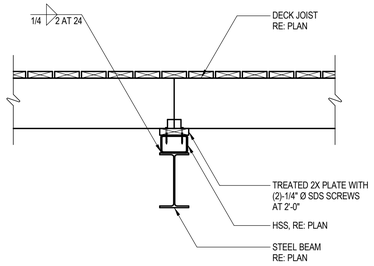

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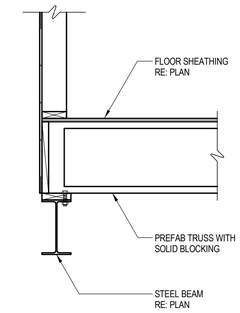

SECTION 5
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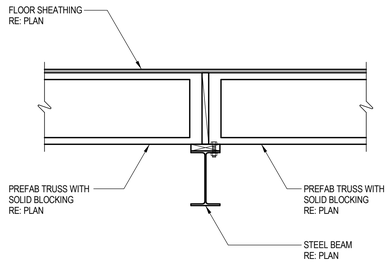

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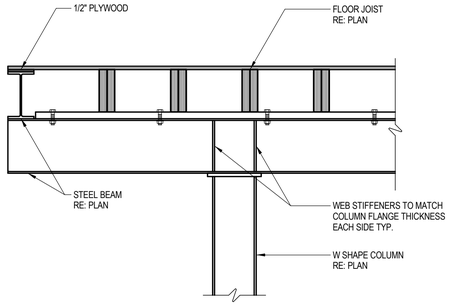
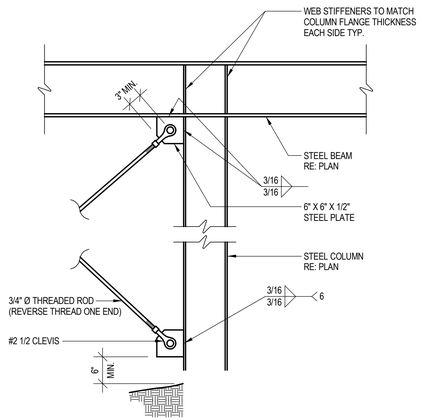
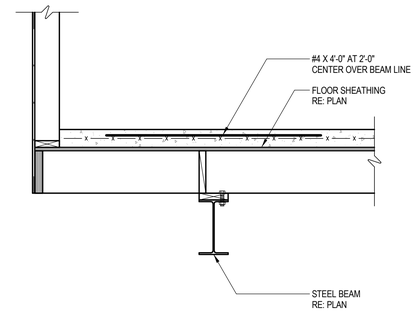


SECTION 7
3/4" = 1'-0"

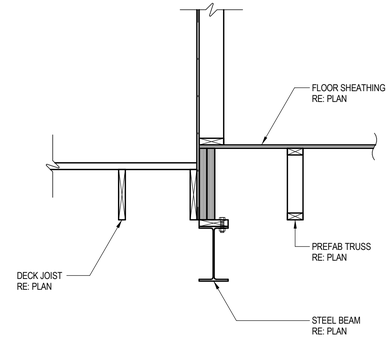


TYPICAL BRACE CONNECTION

SECTION 8
3/4" = 1'-0"

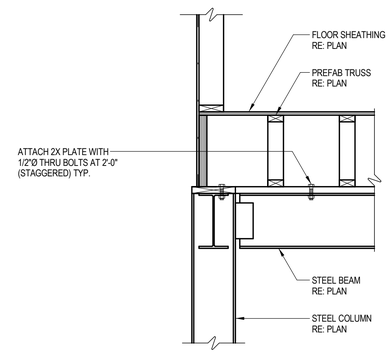


SECTION 1
3/4" = 1'-0"



SECTION 2
3/4" = 1'-0"

SECTION 3
3/4" = 1'-0"



SECTION 4
3/4" = 1'-0"

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05/18/2021

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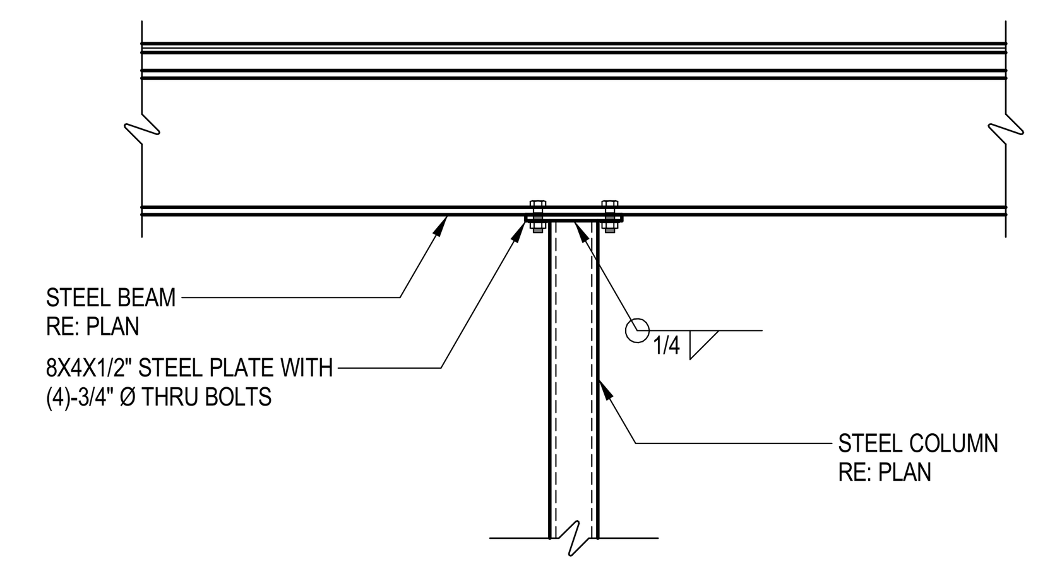
FLOOR FRAMING SECTIONS

S4.00

5/18/2021 7:27:56 AM



SECTION 5
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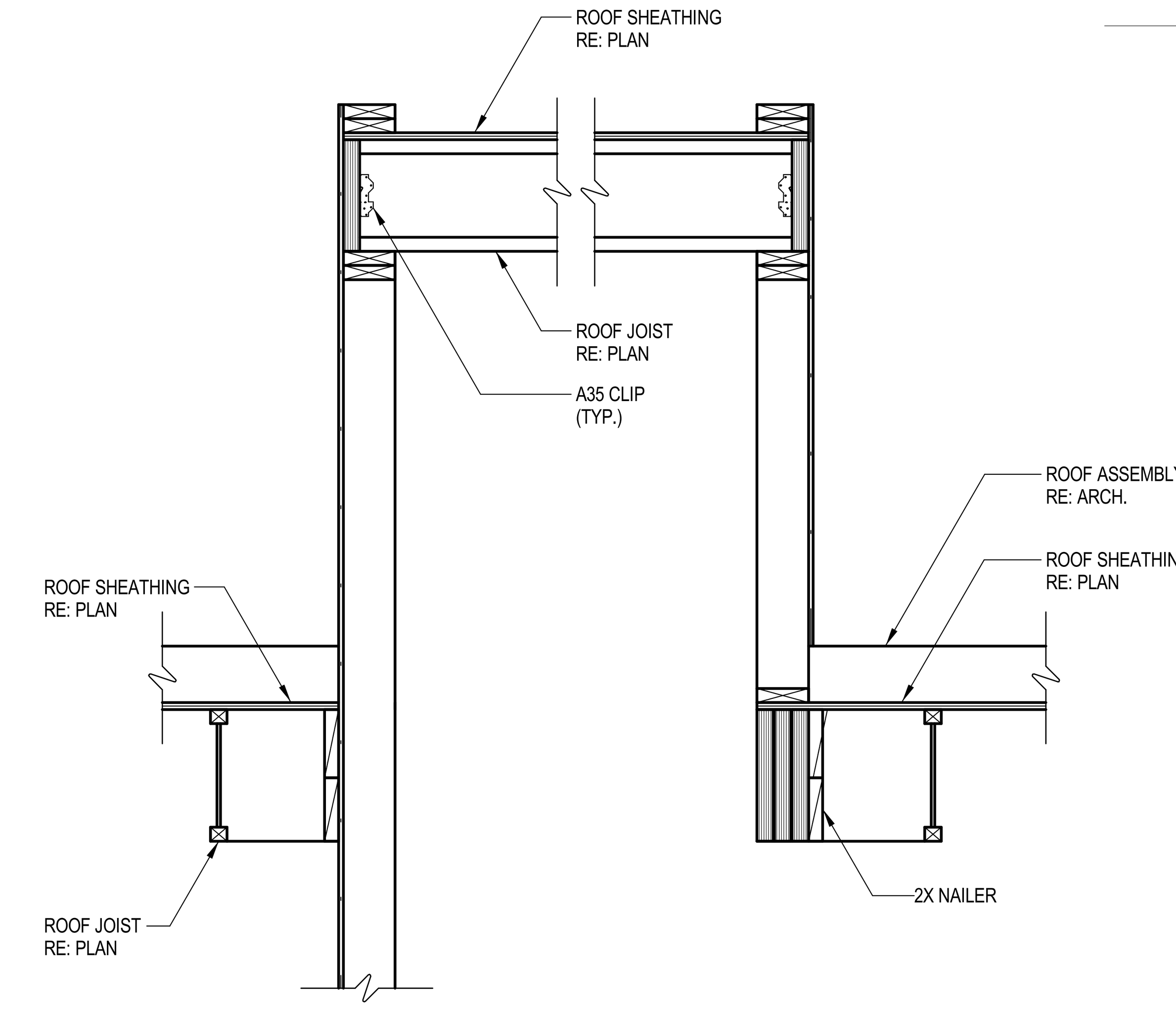

SECTION 1
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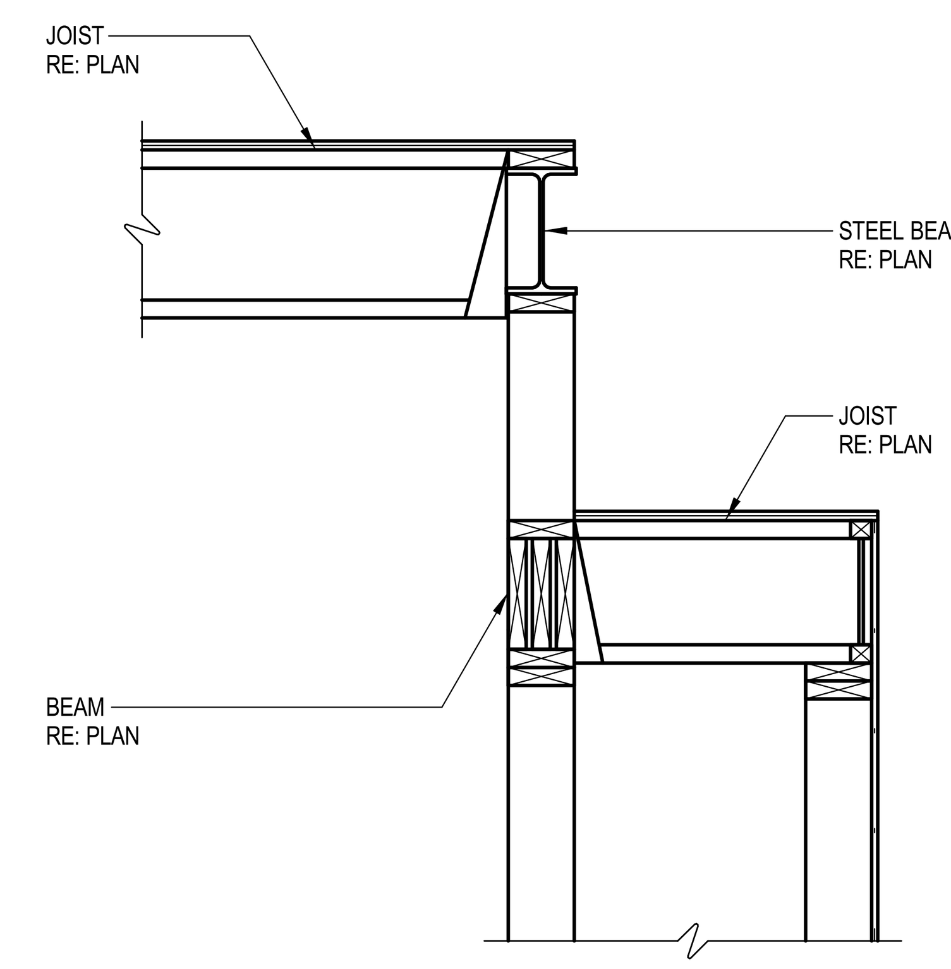
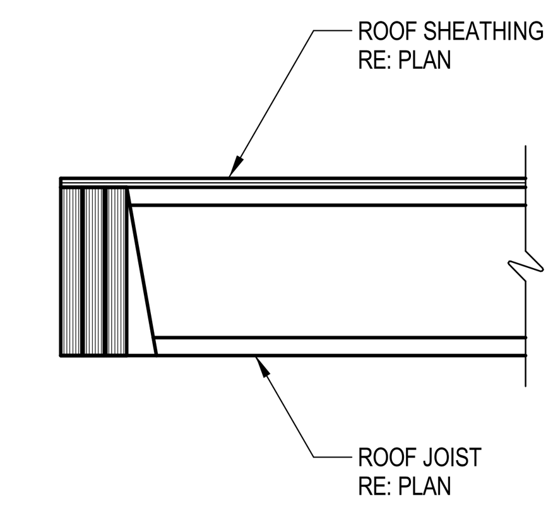


SECTION 6
3/4" = 1'-0"



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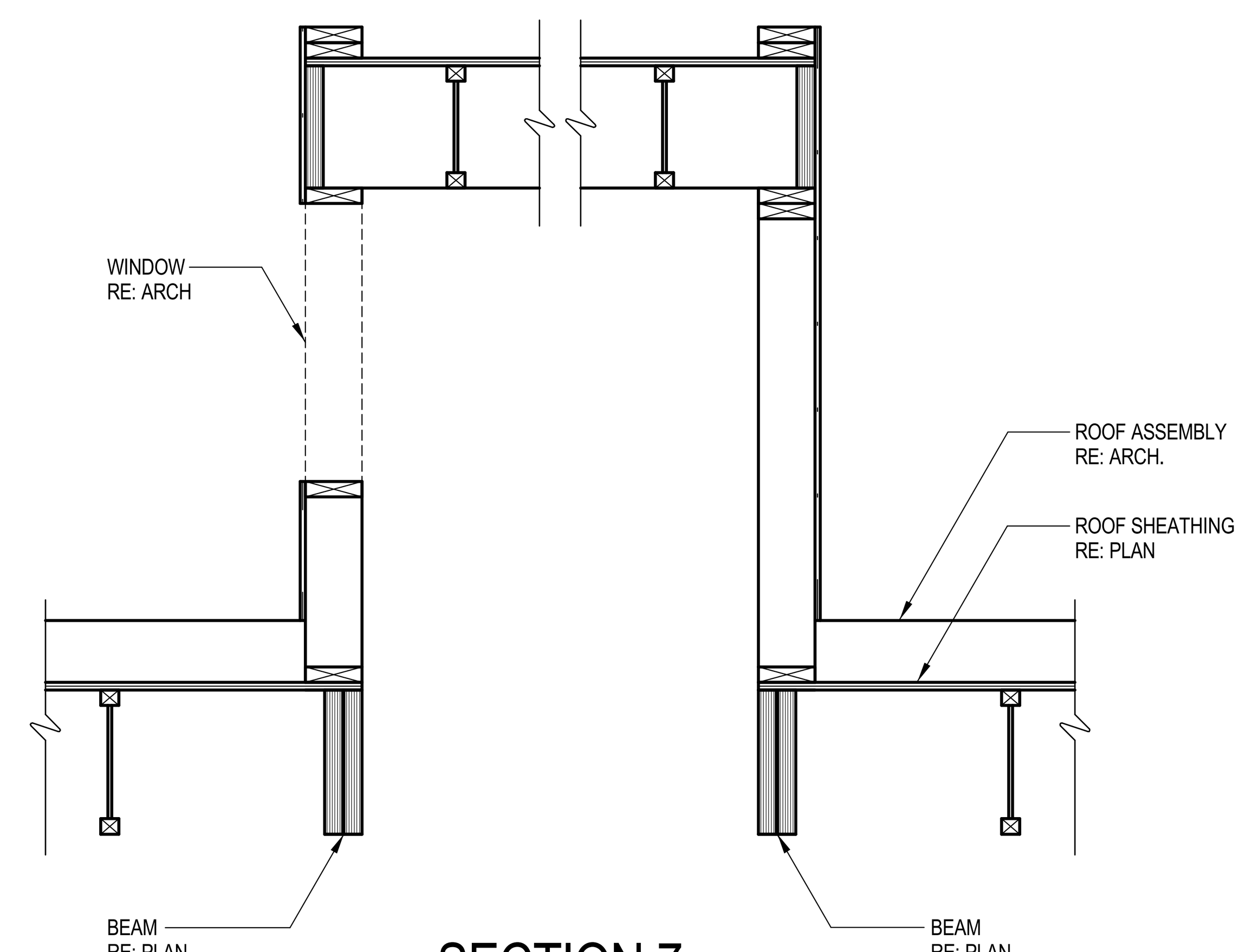

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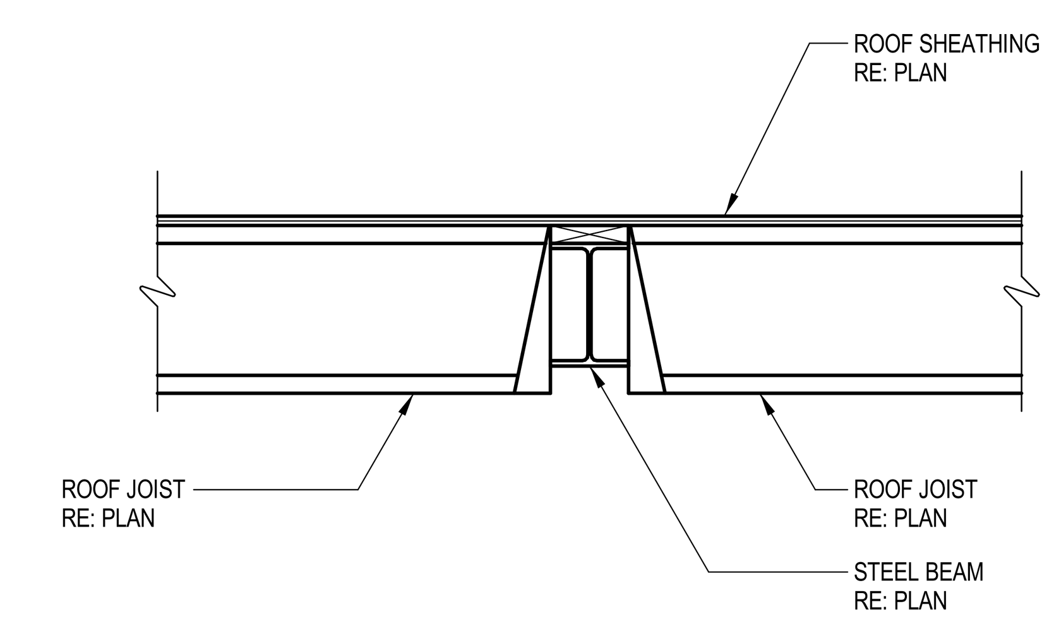
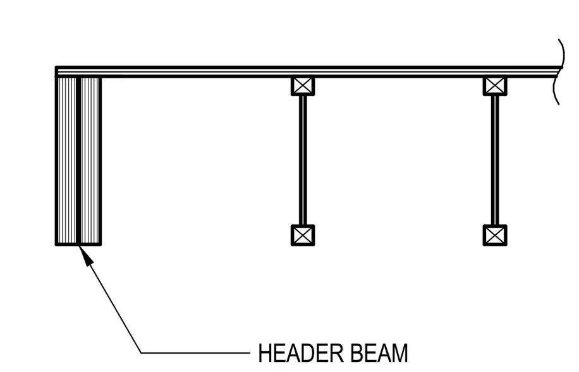
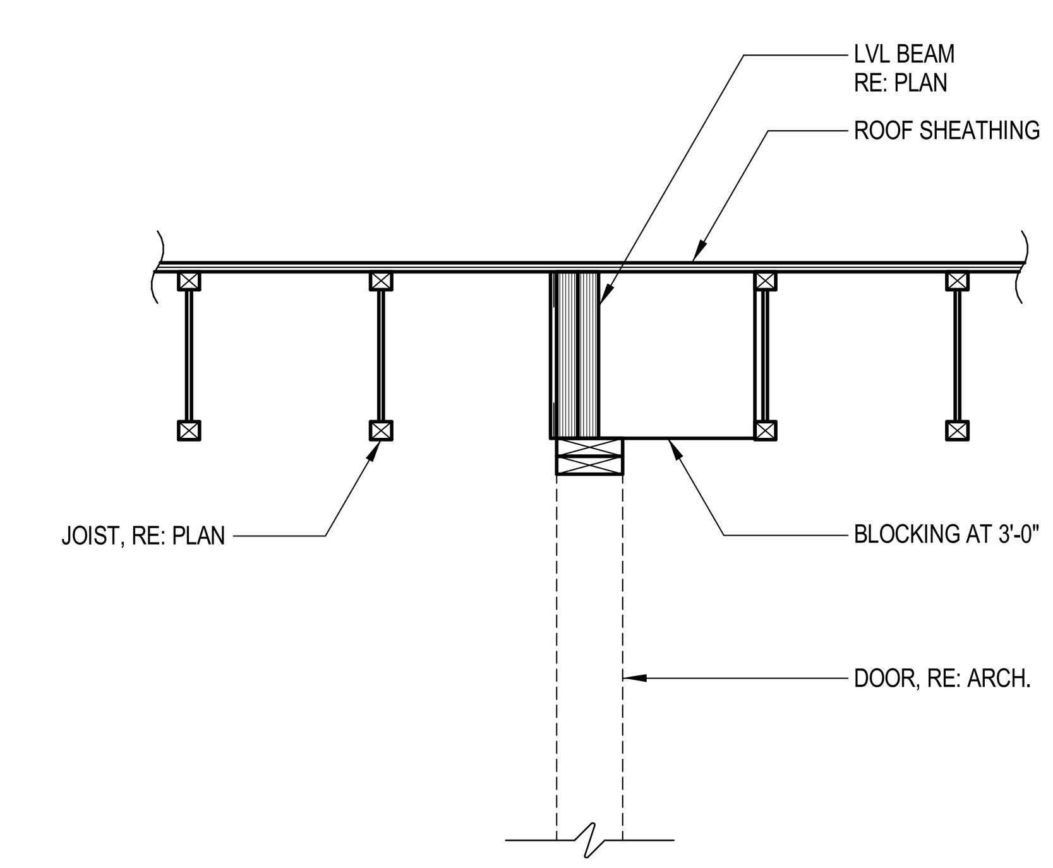
3/4" = 1'-0"



SECTION 3
3/4" = 1'-0"



SECTION 8
3/4" = 1'-0"



SECTION 4
3/4" = 1'-0"

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ROOF FRAMING SECTIONS

S4.01 119