Autodesk Docs://23-072 - Woodrow Residence & Barn/23-072 - Woodrow Residence - R24.rvt

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STRUCTURAL GENERAL NOTES

GOVERNING CODE: 2021 INTERNATIONAL RESIDENTIAL CODE (IRC) AND ALL LOCAL AMENDMENTS, EXCEPT AS NOTED: ANY STRUCTURAL ELEMENTS (IF ANY) NOT IN CONFORMANCE WITH THE IRC HAVE BEEN DESIGNED PER THE 2021 IBC PER IRC R301.1.3

DESIGN LOADS:

1. RISK CATEGORY: II, STANDARD
2. ROOF SNOW LOADS:
   A. GROUND SNOW LOAD (P_G): 144 PSF
   B. FLAT ROOF SNOW LOAD (P_F) (UNHEATED): 120 PSF
   C. SNOW EXPOSURE FACTOR (C_E): 1.0
   D. SNOW LOAD IMPORTANCE FACTOR (I_s): 1.0
   E. THERMAL FACTOR (CT) (UNHEATED): 1.2
   F. SLOPE FACTOR (C_s): 1.0
   G. SNOW DRIFTING AND UNBALANCED LOADS: IN ACCORDANCE WITH ASCE 7-16
3. FLOOR LIVE LOADS:
   A. RESIDENTIAL: 40 PSF
   B. EXTERIOR DECKS: SAME AS OCCUPANCY SERVED
4. ROOF AND FLOOR DEAD LOADS:
   A. ROOF - STANDING SEAM METAL: 20 PSF
   B. DECK: 15 PSF
5. WIND LOADS:
   A. BASICWIND SPEED, 3-SECOND GUST (V_{ULT}): 115 MPH
   B. ALLOWABLE STRESS DESIGN WIND SPEED (V_{ASD}): 89 MPH
   C. OCCUPANCY RISK CATEGORY: II
   D. INTERNAL PRESSURE COEFFICIENT (GC_{PI}): ±0.18
   E. WIND EXPOSURE: C
6. COMPONENTS AND CLADDING DESIGN WIND PRESSURES (PSF) (ASCE 7-16):
   A. ROOF ZONE (50 SQ FT)
      a. 3 WITHIN 12'-0" x 6'-0" OF CORNERS: +16.0 PSF, -44.8 PSF
      b. 2 WITHIN 12'-0" x 6'-0" OF EDGES AND RIDGES: +16.0 PSF, -27.4 PSF
      c. 1 INTERNALLY: +16.0 PSF, -24.5 PSF
   B. NOTE: ALL COMPONENT AND CLADDING PRESSURES ARE ULTIMATE PRESSURES. TO CONVERT TO ALLOWABLE STRESS DESIGN PRESSURES, MULTIPLY ULTIMATE PRESSURES BY 0.6.
7. SEISMIC LOADS: EXEMPT PER IBC SECTION 1613.1, EXCEPTION #1

FOUNDATION DESIGN:

1. FOUNDATION DESIGN IS IN ACCORDANCE WITH RECOMMENDATIONS CONTAINED IN SOILS INVESTIGATION REPORT NUMBER 23-12920 PREPARED BY NORTHWEST COLORADO CONSULTANTS, INC. DATED JANUARY 20, 2023.
2. SOIL CONDITIONS SHALL BE VERIFIED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF FORMWORK OR CONCRETE. IF DIFFERENT SOIL CONDITIONS EXIST, THE STRUCTURAL ENGINEER SHALL BE NOTIFIED TO RE-EVALUATE THE FOUNDATION DESIGN AT ADDITIONAL EXPENSE TO THE OWNER.
3. SLOPE FINAL GRADES DOWN AND AWAY FROM FOUNDATION WALLS A MINIMUM OF 6 INCHES IN FIRST 10 FEET PER IRC.
4. FOOTINGS:
   A. FOOTINGS, SELECTED BY THE OWNER SHALL BEAR ON THE NATURAL, UNDISTURBED SOILS, OR APPROVED COMPACTED STRUCTURAL FILL.
   B. EXTERIOR FOOTINGS SHALL BEAR BELOW FROST DEPTH
      a. MINIMUM FROST DEPTH SHALL BE 4'-0" BELOW ADJACENT EXTERIOR FINISHED GRADE
   C. DESIGN OF FOOTINGS IS BASED ON:
      a. MAXIMUM ALLOWABLE BEARING PRESSURE: 3,000 PSF
      b. MINIMUM DEAD LOAD PRESSURE: 800 PSF
5. EARTH RETAINING STRUCTURES:
   A. EARTH EQUIVALENT FLUID LATERAL PRESSURE:
      a. AT REST PRESSURE: 55 PCF
      b. ACTIVE PRESSURE: 45 PCF
      c. PASSIVE PRESSURE: 250 PCF
      d. COEFFICIENT OF SLIDING FRICTION: 0.4

REINFORCED CONCRETE:

1. CONCRETE DESIGN IS BASED ON THE AMERICAN CONCRETE INSTITUTE "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" (ACI 318) AND SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR STRUCTURAL CONCRETE" (ACI 301).
2. STRUCTURAL CONCRETE SHALL HAVE THE FOLLOWING PROPERTIES (NORMAL WEIGHT CONCRETE UNLESS NOTED OTHERWISE):
   A. CEMENT TYPE: I/II
   B. MAXIMUM AGGREGATE SIZE: 3/4"
   C. MINIMUM 28 DAY COMPRESSIVE STRENGTH (f'_C) AS FOLLOWS:

	f'c	w/cm (MAX)	ENTRAINED AIR %	SLUMP
a. FOOTINGS:	3,500 PSI	0.52	1.5% (± 1.5%)	5 INCHES (± 1")
b. COLUMNS:	4,000 PSI	0.45	3.0% (± 1.5%)	4 INCHES (± 1")
c. EXTERIOR SLABS-ON-GRADE: (EXCLUDES FLATWORK)	3,500 PSI	0.45	6.0% (± 1.5%)	4 INCHES (± 1")

3. REINFORCING STEEL SHALL BE FABRICATED AND PLACED IN ACCORDANCE WITH ACI 315 "DETAILS AND DETAILING OF CONCRETE REINFORCEMENT."
4. WHEN COLD WEATHER CONDITIONS EXIST, PLACE AND CURE CONCRETE IN ACCORDANCE WITH ACI 306.
5. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185.
6. DEFORMED REINFORCEMENT SHALL BE DOMESTIC NEW BILLET STEEL CONFORMING TO ASTM A615, GRADE 60 INCLUDING STIRRUPS AND TIES, EXCEPT THAT REINFORCING WHICH IS REQUIRED TO BE WELDED SHALL CONFORM TO ASTM A706.
7. EPOXY COATED REINFORCING BARS SHALL CONFORM TO ASTM A775.
8. ZINC COATED (GALVANIZED) REINFORCING BARS SHALL CONFORM TO ASTM A767.
9. UNLESS OTHERWISE NOTED ON THE STRUCTURAL DRAWINGS, LAP BARS 50 DIAMETERS (50 x BAR DIAMETER MINIMUM).
10. REINFORCING AT ALL ABUTTING CONCRETE (INCLUDING FOOTINGS) SHALL BE CONTINUOUS THROUGH OR AROUND ALL CORNERS AND INTERSECTIONS, OR USE MATCHING CORNER BARS OF EQUAL SIZE AND SPACING TO REINFORCING IN THE ABUTTING MEMBERS.
11. INSTALL (2) #5 BARS (MINIMUM) AROUND ALL SIDES OF ALL OPENINGS IN CONCRETE AND EXTEND 3'-0" PAST EDGES OF OPENINGS, UNLESS OTHERWISE NOTED.
12. IN CONTINUOUS MEMBERS, SPLICE TOP BARS AT MID-SPAN BETWEEN SUPPORTS AND SPLICE BOTTOM BARS OVER SUPPORTS.
13. FORM INTERMITTENT SHEAR KEYS AT ALL CONSTRUCTION JOINTS AND AS SHOWN ON THE STRUCTURAL DRAWINGS.
14. UNLESS OTHERWISE NOTED ON THE DRAWINGS, MINIMUM CONCRETE COVER OVER REINFORCING SHALL BE AS FOLLOWS:
   A. UNFORMED SURFACE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH: 3"
   B. FORMED SURFACE EXPOSED TO EARTH OR WEATHER:
      a. #6 THROUGH #18 BARS: 2"
      b. #5 BAR, W31 OR D31 WIRE, AND SMALLER: 1 1/2"
   C. FORMED SURFACE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND:
      a. SLABS, WALLS, JOISTS: #11 BARS AND SMALLER: 3/4"
   D. BEAMS AND COLUMNS:
      a. PRIMARY REINFORCEMENT: 1 1/2"
      b. STIRRUPS, TIES, SPIRALS: 1 1/2"
15. INSTALL CHAIRS, BOLSTERS, ADDITIONAL REINFORCEMENT, AND ACCESSORIES NECESSARY TO SUPPORT REINFORCEMENT AT POSITION SHOWN ON DRAWINGS. SUPPORT OF REINFORCEMENT ON WOOD, BRICK, OR OTHER UNACCEPTABLE MATERIALS SHALL NOT BE PERMITTED.
16. KEEP REINFORCEMENT CLEAN AND FREE OF DIRT AND OIL. OIL FORMS PRIOR TO PLACING REINFORCEMENT.
17. FIBER ADMIXTURE SHALL BE 100% VIRGIN POLYPROPYLENE, FIBRILLATED FIBERS, TYPE III 4.1.3, PERFORMANCE LEVEL ONE, PER ASTM C1116.
18. PROPERLY PLACE, ACCURATELY POSITION AND MAINTAIN SECURELY IN PLACE ALL EMBEDDED ITEMS PRIOR TO AND DURING CONCRETE PLACEMENT.
19. ANCHOR BOLTS AND RODS FOR BEAM AND COLUMN-BEARING PLATES SHALL BE PLACED WITH SETTING TEMPLATES.
20. UNLESS OTHERWISE SHOWN IN THE ARCHITECTURAL DRAWINGS, PROVIDE 3/4" CHAMFERS AT ALL COLUMN, WALL, SLAB OR BEAM EDGES THAT ARE EXPOSED TO VIEW IN THE FINISHED STRUCTURE.

STRUCTURAL WOOD & TIMBER:

1. DESIGN IS BASED ON ANSI/AF&PA NDS "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION WITH SUPPLEMENT: DESIGN VALUES FOR WOOD CONSTRUCTION" AND ANSI/AF&PA SDPWS "SPECIAL DESIGN PROVISIONS FOR WIND AND SEISMIC."
2. 2x FRAMING LUMBER SHALL BE S4S DOUGLAS FIR-LARCH AND BETTER UNLESS NOTED OTHERWISE.
3. ALL LUMBER SHALL BE 19% OR LESS MAXIMUM MOISTURE CONTENT, UNLESS NOTED OTHERWISE.
4. SOLID TIMBER BEAMS AND POSTS SHALL BE KILN DRIED DOUGLAS FIR-LARCH NO. 1, UNO.
5. 2x STUD BEARING WALLS SHALL BE 2x6 @ 16" (UNO) DOUGLAS FIR-LARCH STUD GRADE OR BETTER.
6. 2x TOP AND BOTTOM PLATES SHALL BE DOUGLAR FIR-LARCH NO. 2 OR BETTER.
7. USE OF WOOD BEARING WALLS SHOWN ON DRAWINGS WITH LATERALLY UNSUPPORTED HEIGHTS IN EXCESS OF THAT SHOWN IN IBC 2308.5.1 HAVE BEEN JUSTIFIED BY ANTHEM'S ANALYSIS.
8. FASTENERS FOR USE WITH TREATED WOOD SHALL COMPLY WITH IRC SECTION R317.3.
9. WOOD IN CONTACT WITH CONCRETE SHALL BE PRESSURE-TREATED DOUGLAS FIR-LARCH OR SOUTHERN YELLOW PINE.
10. PRESERVATIVE TREATED WOOD SHALL BE TREATED IN ACCORDANCE WITH AWPA U1 AND AWPA M4.
11. CONVENTIONAL LIGHT FRAMING SHALL COMPLY WITH IRC SECTIONS R502, R602, AND R802.
12. MINIMUM NAILING SHALL BE PROVIDED AS SPECIFIED IN IRC TABLE R602.3(1) "FASTENER SCHEDULE FOR STRUCTURAL MEMBERS."
13. METAL FRAMING ANCHORS SHOWN OR REQUIRED, SHALL BE SIMPSON STRONG-TIE OR EQUAL CODE APPROVED CONNECTORS AND INSTALLED PER THE HANGER SCHEDULE. NOTE THAT HEAVY-DUTY HANGERS AND SKEWED HANGERS MAY NOT BE STOCKED LOCALLY AND REQUIRE SPECIAL ORDER FROM THE FACTORY.
14. GLUE WOOD NAILER PLATES TO STEEL BEAMS AND ATTACH WITH EITHER 1/2"Ø BOLTS @ 32" O.C., STAGGERED OR 0.145"Ø POWDER ACTUATED DRIVE PINS @ 16" O.C. STAGGERED. WIDTH OF NAILER PLATE SHALL MATCH BEAM WIDTH + 1/8" MIN (1/4" MAX) OVERHANG EACH SIDE.
15. LEAD HOLES FOR LAG SCREWS SHALL BE 40%-70% OF THE SHANK DIAMETER AT THE THREADED SECTION AND EQUAL TO THE SHANK DIAMETER AT THE UNTHREADED SECTION PER NDS SECTION 12.1.4.
16. CONNECTOR BOLTS AND LAG SCREWS SHALL CONFORM TO ANSI/ASME B18.2.1 AND ASTM SAE J429 GRADE 1.
17. NAILS AND SPIKES SHALL CONFORM TO ASTM F1667.
18. WOOD SCREWS SHALL CONFORM TO ANSI/ASME B18.6.1.

WOOD FRAMING NOTES:

1. INSTALL SOLID BLOCKING BETWEEN JOISTS UNDER JAMB STUDS OF OPENINGS.
2. COLUMNS MUST HAVE A CONTINUOUS LOAD PATH TO FOUNDATION.
3. UNLESS NOTED OTHERWISE, INSTALL TWO LENGTHS OF SOLID BLOCKING x JOIST DEPTH x 12 INCHES LONG IN FLOOR FRAMING UNDER COLUMN LOADS.
4. BUILT-UP STUD COLUMNS SHALL CONSIST OF 2x4, 2x6, OR 2x8 STUDS WITH NUMBER OF LAMINATIONS NOTED ON PLAN AND EACH LAMINATION SHALL BE NAILED TOGETHER WITH (2) ROWS OF 12d GUN NAILS (0.131"Ø x 3 1/4") @ 6" FULL HEIGHT OF COLUMN. DO NOT SPLICE LAMINATIONS.
5. ALL BEAMS AND TRUSSES SHALL BE BRACED AGAINST ROTATION AT POINTS OF BEARING.
6. UNLESS NOTED OTHERWISE, LOWER CHORD OF GABLE END TRUSSES SHALL BE ANCHORED TO WALL PLATE WITH FRAMING ANCHORS AT 4'-0" SPACING AND LATERALLY BRACED TO ROOF FRAMING AT 8'-0" SPACING.
7. PROVIDE CONTINUOUS WALL STUDS EACH SIDE OF OPENINGS EQUAL TO ONE-HALF OR GREATER THE NUMBER OF STUDS INTERRUPTED BY OPENING UNLESS NOTED OTHERWISE.
8. ALL WALL STUDS SHALL BE CONTINUOUS FROM FLOOR TO FLOOR OR FROM FLOOR TO ROOF.
9. PROVIDE SOLID BLOCKING OR RIM JOISTS AT ALL JOIST SUPPORTS AND JOIST ENDS.
10. SOLE PLATE AT ALL PERIMETER WALLS AND AT DESIGNATED SHEAR WALLS SHALL BE NAILED WITH (4) 0.131"Ø x 3" NAILS AT 16" MINIMUM.
11. ALL ROOF RAFTERS, JOISTS, TRUSSES, BEAMS SHALL BE ANCHORED TO SUPPORTS WITH METAL FRAMING ANCHORS.

STRUCTURAL GLUED LAMINATED TIMBER:

1. MATERIALS, MANUFACTURE, AND QUALITY CONTROL SHALL BE IN CONFORMANCE WITH ANSI/AITC A190.1 "STRUCTURAL GLUED LAMINATED TIMBER" AND AITC 117 "STANDARD SPECIFICATIONS FOR STRUCTURAL GLUED LAMINATED TIMBER OF SOFTWOOD SPECIES, DESIGN AND MANUFACTURING REQUIREMENTS."
2. SIMPLE SPAN BEAMS SHALL BE DOUGLAS FIR COMBINATION SYMBOL 24F-V4 DF/DF WITH NO CAMBER.
3. CONTINUOUS AND CANTILEVERED MEMBERS SHALL BE DOUGLAS FIR COMBINATION SYMBOL 24F-V8 DF/DF WITH NO CAMBER.
4. COLUMNS SHALL BE COMBINATION #2 OR BETTER.
5. ALL GLUED LAMINATED TIMBER SHALL HAVE LESS THAN 16% MOISTURE CONTENT, UNLESS NOTED OTHERWISE.
6. MEMBERS SHALL BE ARCHITECTURAL APPEARANCE GRADE.
7. ADHESIVES SHALL MEET THE REQUIREMENTS FOR WET CONDITIONS OF SERVICE.
8. SEAL CUT EDGES AND ENDS EXPOSED TO WEATHERING.
9. THE FABRICATOR SHALL FURNISH ALL ITEMS OF CONNECTION STEEL AND HARDWARE FOR JOINING TIMBER MEMBERS TO EACH OTHER AND TO THEIR SUPPORTS; EXCLUSIVE OF ANCHORAGE EMBEDDED IN MASONRY, SETTING PLATES, AND ITEMS FIELD-WELDED TO STRUCTURAL STEEL.

TONGUE AND GROOVE DECKING:

1. TONGUE AND GROOVE DECKING SHALL BE DOUGLAS FIR-LARCH AND HAVE THE FOLLOWING MINIMUM ALLOWABLE DESIGN VALUES:
   A. F_B = 1,750 PSI F_V = 165 PSI E = 1800 KSI
2. TONGUE AND GROOVE DECKING SHALL COMPLY WITH SECTION 2304.9 OF THE IBC INSTALLED IN A COMBINATION SIMPLE SPAN TWO SPAN CONTINUOUS LAYUP PATTERN.

LOOSE LINTELS:

1. UNLESS NOTED OTHERWISE, PROVIDE LOOSE LINTELS AS FOLLOWS: (ONE ANGLE FOR EACH 4" OF WALL THICKNESS TO BEAR 4" MINIMUM EACH END)
2. **OPENING** — **ANGLE**
   A. 0'-8" TO 4'-0" — L3 1/2X3 1/2X1/4
   B. 4'-1" TO 5'-4" — L5X3 1/2X1/4 (LLV)
   C. 5'-5" TO 10'-0" — L6X3 1/2X5/16 (LLV)

CONSTRUCTION ADMINISTRATION:

1. SHOP DRAWINGS:
   A. THE STRUCTURAL DRAWINGS ARE COPYRIGHTED AND SHALL NOT BE COPIED FOR USE AS ERECTION PLANS OR SHOP DETAILS. USE OF ANTHEM'S ELECTRONIC FILES AS THE BASIS FOR SHOP DRAWINGS REQUIRES PRIOR APPROVAL BY ANTHEM, A SIGNED RELEASE OF LIABILITY BY THE GENERAL CONTRACTOR AND/OR HIS SUBCONTRACTORS, AND DELETION OF ANTHEM'S NAME AND LOGO FROM ALL SHEETS SO USED.
   B. THE GENERAL CONTRACTOR SHALL SUBMIT IN WRITING ANY REQUESTS TO MODIFY THE STRUCTURAL DRAWINGS OR PROJECT SPECIFICATIONS.
   C. ALL SHOP AND ERECTION DRAWINGS SHALL BE CHECKED AND STAMPED BY THE GENERAL CONTRACTOR PRIOR TO SUBMISSION FOR STRUCTURAL ENGINEER'S REVIEW; SHOP DRAWING SUBMITTALS NOT CHECKED BY THE GENERAL CONTRACTOR PRIOR TO SUBMISSION TO THE STRUCTURAL ENGINEER WILL BE RETURNED WITHOUT REVIEW.
   D. FURNISH TWO (2) PRINTS OF SHOP AND ERECTION DRAWINGS TO THE STRUCTURAL ENGINEER FOR REVIEW PRIOR TO FABRICATION FOR:
      a. REINFORCING STEEL,
      b. STRUCTURAL STEEL,
      c. PLANT FABRICATED WOOD JOISTS,
      d. GLUED-LAMINATED TIMBER,
   E. SUBMIT IN A TIMELY MANNER TO PERMIT 10 WORKING DAYS FOR REVIEW BY THE STRUCTURAL ENGINEER.
   F. SHOP DRAWINGS SUBMITTED FOR REVIEW DO NOT CONSTITUTE "REQUEST FOR CHANGE IN WRITING" UNLESS SPECIFIC SUGGESTED CHANGES ARE CLEARLY MARKED. IN ANY EVENT, CHANGES MADE BY MEANS OF THE SHOP DRAWING SUBMITTAL PROCESS BECOME THE RESPONSIBILITY OF THE ONE INITIATING THE CHANGE.
2. REQUESTS FOR INFORMATION (RFI):
   A. SUBMIT IN A TIMELY MANNER TO PERMIT 5 WORKING DAYS FOR REVIEW BY THE STRUCTURAL ENGINEER.
3. FIELD OBSERVATIONS:
   A. CONTRACTOR SHALL PROVIDE 5 WORKING DAYS ADVANCE NOTICE FOR ALL FIELD OBSERVATIONS.

FIELD VERIFICATION OF EXISTING CONDITIONS:

1. THE GENERAL CONTRACTOR SHALL THOROUGHLY INSPECT AND SURVEY THE EXISTING STRUCTURE TO VERIFY CONDITIONS THAT AFFECT THE WORK SHOWN ON THE DRAWINGS.
2. THE GENERAL CONTRACTOR SHALL REPORT ANY VARIATIONS OR DISCREPANCIES TO THE ARCHITECT AND STRUCTURAL ENGINEER BEFORE PROCEEDING.

STRUCTURAL ERECTION AND BRACING REQUIREMENTS:

1. THE STRUCTURAL DRAWINGS ILLUSTRATE AND DESCRIBE THE COMPLETED STRUCTURE WITH ELEMENTS IN THEIR FINAL POSITIONS, PROPERLY SUPPORTED, CONNECTED, AND/OR BRACED.
2. THE STRUCTURAL DRAWINGS ILLUSTRATE TYPICAL AND REPRESENTATIVE DETAILS TO ASSIST THE GENERAL CONTRACTOR. DETAILS SHOWN APPLY AT ALL SIMILAR CONDITIONS UNLESS OTHERWISE INDICATED. ALTHOUGH DUE DILIGENCE HAS BEEN APPLIED TO MAKE THE DRAWINGS AS COMPLETE AS POSSIBLE, NOT EVERY DETAIL IS ILLUSTRATED AND NOT EVERY EXCEPTIONAL CONDITION IS ADDRESSED.
3. ALL PROPRIETARY CONNECTIONS AND ELEMENTS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS' RECOMMENDATIONS.
4. ALL WORK SHALL BE ACCOMPLISHED IN A WORKMANLIKE MANNER AND IN ACCORDANCE WITH THE APPLICABLE CODES AND LOCAL ORDINANCES.
5. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF ALL WORK, INCLUDING LAYOUT AND DIMENSION VERIFICATION, MATERIALS COORDINATION, SHOP DRAWING REVIEW, AND THE WORK OF SUBCONTRACTORS. ANY DISCREPANCIES OR OMISSIONS DISCOVERED IN THE COURSE OF THE WORK SHALL BE IMMEDIATELY REPORTED TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR RESOLUTION. CONTINUATION OF WORK WITHOUT NOTIFICATION OF DISCREPANCIES RELIEVES THE ARCHITECT AND STRUCTURAL ENGINEER FROM ALL CONSEQUENCES.
6. UNLESS OTHERWISE SPECIFICALLY INDICATED, THE STRUCTURAL DRAWINGS DO NOT DESCRIBE METHODS OF CONSTRUCTION.
7. THE GENERAL CONTRACTOR, IN THE PROPER SEQUENCE, SHALL PERFORM OR SUPERVISE ALL WORK NECESSARY TO ACHIEVE THE FINAL COMPLETED STRUCTURE, AND TO PROTECT THE STRUCTURE, WORKMEN, AND OTHERS DURING CONSTRUCTION. SUCH WORK SHALL INCLUDE, BUT NOT BE LIMITED TO TEMPORARY BRACING, SHORING FOR CONSTRUCTION EQUIPMENT, SHORING FOR EXCAVATION, FORMWORK, SCAFFOLDING, SAFETY DEVICES AND PROGRAMS OF ALL KINDS, SUPPORT AND BRACING FOR CRANES AND OTHER ERECTION EQUIPMENT.
8. DO NOT BACKFILL AGAINST BASEMENT OR RETAINING WALLS UNTIL SUPPORTING SLABS AND FLOOR FRAMING ARE IN PLACE AND SECURELY ANCHORED, UNLESS ADEQUATE TEMPORARY BRACING IS INSTALLED.
9. TEMPORARY BRACING SHALL REMAIN IN PLACE UNTIL ALL FLOORS, WALLS, ROOFS AND ANY OTHER SUPPORTING ELEMENTS ARE IN PLACE.
10. THE ARCHITECT AND STRUCTURAL ENGINEER BEAR NO RESPONSIBILITY FOR THE ABOVE ITEMS, AND OBSERVATION VISITS TO THE SITE DO NOT IN ANY WAY INCLUDE INSPECTIONS OF THESE ITEMS.
11. THESE PLANS HAVE BEEN ENGINEERED FOR CONSTRUCTION AT ONE SPECIFIC BUILDING SITE. BUILDER ASSUMES ALL RESPONSIBILITY FOR USE OF THESE PLANS AT ANY OTHER BUILDING SITE. PLANS SHALL NOT BE USED FOR CONSTRUCTION AT ANY OTHER BUILDING SITE WITHOUT SPECIFIC REVIEW BY THE ENGINEER.

PRECAUTIONARY NOTES ON STRUCTURAL BEHAVIOR:

1. INTERIOR ARCHITECTURAL FINISH DETAILING MUST ACCOMMODATE THE RELATIVE DIFFERENTIAL MOVEMENTS OF SUPPORTING STRUCTURAL ELEMENTS.
2. WHERE THE ROOF FRAMING ELEMENT SPANS ARE LONG, APPLIED LOADING WILL NATURALLY CAUSE SUBSTANTIAL DEFLECTION. INTERIOR ELEMENTS HUNG FROM THE ROOF STRUCTURE WILL DEFLECT WITH THE ROOF.
3. THE FLOOR IS A FLOATING CONCRETE SLAB-ON-GRADE AND MAY EXPERIENCE MOVEMENTS INDEPENDENT OF THE STRUCTURAL FOUNDATIONS. INTERIOR ELEMENTS SUPPORTED ON THE SLAB-ON-GRADE FLOOR WILL MOVE WITH THE FLOOR. INTERIOR ELEMENTS SUPPORTED ON FOUNDATIONS AND COLUMNS WILL NOT EXPERIENCE SIMILAR OR MEASURABLE MOVEMENTS.
4. EXTERIOR/PERIMETER WALL ASSEMBLIES HUNG FROM THE EDGE OF THE BUILDING STRUCTURE WILL BE DIRECTLY AFFECTED (TO SOME DEGREE) BY CHANGES IN EXTERNAL TEMPERATURE AND FLOOR DEFLECTION.
5. EXTERIOR/PERIMETER AND INTERIOR ARCHITECTURAL FINISH DETAILS SHOULD ALLOW FOR RELATIVE MOVEMENTS BETWEEN ELEMENTS WITH DIFFERENT SUPPORT CONDITIONS.
6. THE FOUNDATION DESIGN SHOWN ASSUMES THAT THE OWNER/BUILDER IS AWARE OF THE PRESENCE OF EXPANSIVE SOILS, AND THAT HE HAS READ THE PREVIOUSLY REFERENCED SOILS REPORT. USE OF THESE PLANS IS INDICATION THAT THE OWNER/BUILDER ACCEPTS THE RISKS ASSOCIATED WITH BUILDING ON THIS SITE, ESPECIALLY THOSE RELATED TO SLAB ON GRADE CONSTRUCTION IN FINISHED AREAS. ANTHEM, LLC WILL NOT BE HELD LIABLE FOR DAMAGES CAUSED BY SLAB MOVEMENT.

LETTERS OF CONSTRUCTION COMPLIANCE:

1. THE GENERAL CONTRACTOR SHALL DETERMINE FROM THE LOCAL BUILDING AUTHORITY, AT THE TIME THE BUILDING PERMIT IS OBTAINED, WHETHER ANY LETTERS OF CONSTRUCTION COMPLIANCE WILL BE REQUESTED FROM THE STRUCTURAL ENGINEER.
2. THE CONTRACTOR SHALL NOTIFY THE STRUCTURAL ENGINEER OF ALL SUCH REQUIREMENTS IN WRITING PRIOR TO THE START OF CONSTRUCTION.
3. TWO DAY ADVANCE NOTICE SHALL BE GIVEN WHEN REQUESTING SITE VISITS NECESSARY AS THE BASIS FOR THE COMPLIANCE LETTER.
4. THE GENERAL CONTRACTOR SHALL PROVIDE COPIES OF ALL THIRD-PARTY TESTING AND INSPECTION REPORTS TO THE ARCHITECT AND STRUCTURAL ENGINEER A MINIMUM OF ONE WEEK PRIOR TO THE DATE THAT THE COMPLIANCE LETTER IS NEEDED.

INSPECTIONS:

1. INSPECTIONS AND TESTING SHALL BE PERFORMED BY A QUALIFIED INSPECTOR IN ACCORDANCE WITH IRC SECTION R109.
2. THE INSPECTOR SHALL BE A QUALIFIED PERSON WHO SHALL DEMONSTRATE COMPETENCE, TO THE SATISFACTION OF THE BUILDING OFFICIAL, FOR INSPECTION OF THE PARTICULAR TYPE OF CONSTRUCTION OR OPERATION REQUIRING INSPECTION.
3. EXCEPT AS NOTED, THE INSPECTIONS OUTLINED IN THE IRC ARE IN ADDITION TO, AND BEYOND THE SCOPE OF, PERIODIC STRUCTURAL OBSERVATIONS. STRUCTURAL OBSERVATIONS ARE INCLUDED IN THE STRUCTURAL ENGINEERING DESIGN AND CONSTRUCTION ADMINISTRATION SERVICES PROVIDED BY THE STRUCTURAL ENGINEER.

SHEET LIST

LEGEND

Symbol	Description	Symbol	Description
(X)K,(Y)T	"X" KING STUDS, "Y" TRIMMER STUDS, STUDS TO MATCH WALL THICKNESS (E.G. "2K,1T" = 2 KING STUDS + 1 TRIMMER STUD)		CMU
C	INDICATES COLUMN CONTINUOUS THROUGH LEVEL SHOWN		CONCRETE
A	BOT OF COL AT LVL SHOWN, SEE FRAMING LEVEL ABOVE FOR SIZE; INSTALL SQUASH BLKG IN FLOOR CAVITIES BETWEEN COLUMNS, WIDTH TO MATCH COL ABOVE		EARTH FILL
2xX	INDICATES SIZE OF COLUMN BELOW		POROUS FILL (I.E. GRAVEL)
XXXX, STUB	INDICATES TOP OF COLUMN AND TYPE BELOW FRAMING LEVEL. STUB INDICATES SHORTER COLUMN THAT EXTENDS VERTICALLY BETWEEN BEAMS	XX'-XX"	INDICATES TOP OF CONCRETE SLAB OR WOOD SUBFLOOR ELEVATION
BPX	INDICATES BASEPLATE		INTERIOR WOOD BEARING WALL
	INDICATES STEP IN FLOOR ELEVATION		WOOD SHEAR WALL
	INDICATES DIRECTION OF SLOPE		STRUCTURAL WALL ABOVE FRAMING
FD	INDICATES FLOOR DRAIN	WXXXX	INDICATES WOOD STUD WALL TYPE, SEE SCHEDULE
(XX'-XX") {XX'-XX"}	INDICATES TOP OF FOOTING OR PIER ELEVATION INDICATES MINIMUM PIER PENETRATION INTO BEDROCK	BWX	INDICATES BUILDING WALL TYPE, SEE SCHEDULE
FXX	CONTINUOUS SPREAD FOOTING. SEE SCHEDULE FOR SIZE AND REINFORCING	SWX	INDICATES SHEAR WALL, SEE SCHEDULE FOR SHEATHING TYPE AND NAILING
FX.X	ISOLATED PAD FOOTING. SEE SCHEDULE FOR SIZE AND REINFORCING	HDX	INDICATES HOLDOWN, SEE SCHEDULE FOR DESCRIPTION
TC=XX'-XX" BC=XX'-XX"	INDICATES TOP OF CONCRETE ELEVATION INDICATES BOTTOM OF CONCRETE ELEVATION		JOIST, OR TRUSS BEARS ON WALL OR BEAM BELOW
STEP BC	INDICATES STEP IN BOTTOM OF CONCRETE WALL ELEVATION (E.G. LOCATION WHERE TOP OF FOOTING STEPS)		BEAM, JOIST, OR TRUSS CONNECTED TO SUPPORT WITH METAL HANGER
TL=XX'-XX"	INDICATES TOP OF CONCRETE LEDGE ELEVATION		BEAM, JOIST, OR TRUSS CONNECTED TO SUPPORT WITH CONCEALED HANGER
PKT XxY	INDICATES BEAM POCKET IN CONCRETE WALL (X = POCKET WIDTH PERPENDICULAR TO BEAM, Y = POCKET DEPTH PARALLEL TO BEAM)		INDICATES STEEL DECK OR CONCRETE SLAB SPAN DIRECTION
	INDICATES STEP IN TOP OF CONCRETE WALL OR LEDGE ELEVATION. ARROW POINTS TOWARD LOWER ELEVATION	[XX'-XX"]	INDICATES TOP OF STEEL BEAM ELEVATION
(E)	INDICATES 'EXISTING'		INDICATES LOCATION OF BEND IN BENT BEAM
(N)	INDICATES 'NEW'		INDICATES MOMENT CONNECTION
(R)	INDICATES 'TO BE REMOVED'		INDICATES CONSTRUCTION SHORING

ABBREVIATIONS KEY

AB	ANCHOR BOLT	GA	GAUGE	OWSJ	OPEN WEB STEEL JOIST
ADDL	ADDITIONAL	GB	GRADE BEAM		
AFF	ABOVE FINISH FLOOR	GC	GENERAL CONTRACTOR, CONSTRUCTION	PAF	POWDER ACTUACTED FASTENER
AFG	ABOVE FINISH GRADE	GEN	GENERAL	PC	PRECAST
AHJ	AUTHORITY HAVING JURISDICTION	GL	GLUE LAMINATED, GLU-LAM	PE	PRE-ENGINEERED
ALT	ALTERNATE	GW	GRADE WALL	PEMB	PRE-ENGINEERED METAL BUILDING
ARCH	ARCHITECT	GYP	GYPSUM	PERP	PERPENDICULAR
AVG	AVERAGE			PJP	PARTIAL JOINT PENETRATION
		H	HEIGHT	PL	PLATE
BC	BOTTOM OF CONCRETE	HAS	HEADED ANCHOR STUD	PLF	POUNDS PER LINEAL FOOT
BLKG	BLOCKING	HD	HOLDDOWN	PLY	PLYWOOD
BM	BEAM	HDG	HOT DIP GALVANIZED	PSL	PARALLEL STRAND LUMBER
BOT	BOTTOM	HDR	HEADER	PT	PRESSURE TREATED, POST-TENSIONING
BP	BASE PLATE, BEAM POCKET	HGR	HANGER		
BRG	BEARING	HK	HOOK	QTY	QUANTITY
BS	BOTH SIDES	HORIZ	HORIZONTAL		
BTWN	BETWEEN			RE	REFERENCE, REFER TO
		IF	INSIDE FACE	REINF	REINFORCE(MENT), REINFORCING
CANT	CANTILEVER	INT	INTERIOR	REQ	REQUIRED
CFS	COLD FORM STEEL	INV	INVERTED	RET	RETAINING WALL
CIP	CAST IN PLACE			RO	ROUGH OPENING
CJ	CONTROL JOINT, CONSTRUCTION JOINT	JNT	JOINT		
CJP	COMPLETE JOINT PENETRATION	JST	JOIST	SC	SLIP CRITICAL
CL	CENTER LINE			SCHED	SCHEDULE
CLR	CLEAR(ANCE)	K	KIP (1000 POUNDS)	SCL	STRUCTURAL COMPOSITE LUMBER
CLT	CROSS LAMINATED TIMBER	KLF	1000 POUNDS PER LINEAL FOOT	SDST	SELF-DRILLING / SELF-TAPPING
CMU	CONCRETE MASONRY UNIT			SHTG	SHEATHING
COL	COLUMN	L	LENGTH	SIM	SIMILAR
CONC	CONCRETE	LAT	LATERAL	SIP	STRUCTURAL INSULATED PANEL
CONN	CONNECTION	Ld	REBAR DEVELOPMENT LENGTH	SOG	SLAB ON GRADE
CONST	CONSTRUCTION	LLH	LONG LEG HORIZONTAL	SP	SPACING, SPACE
CONT	CONTINUOUS, CONTINUE	LLV	LONG LEG VERTICAL	SPEC	SPECIFICATION
		LONG	LONGITUDINAL	SS	STAINLESS STEEL
D	DEPTH	Ls	REBAR SPLICE LENGTH	STD	STANDARD
DEMO	DEMOLITION	LSL	LAMINATED STRAND LUMBER	STIFF	STIFFENER
DIA	DIAMETER	LSV	LONG SIDE VERTICAL	STL	STEEL
DIM	DIMENSION	LVL	LAMINATED VENEER LUMBER	SUBFLR	SUBFLOOR
DTL	DETAIL	LW	LIGHT WEIGHT	SW	SHEAR WALL, SELF-WEIGHT
DWG	DRAWING				
DWL	DOWEL	MAS	MASONRY	t	THICKNESS
		MATL	MATERIAL	T&B	TOP AND BOTTOM
(E)	EXISTING	MAX	MAXIMUM	T&G	TONGUE AND GROOVE
EA	EACH	MECH	MECHANICAL	T.O.	TOP OF
EF	EACH FACE	MIN	MINIMUM, MINUTE	T/	TOP OF
EJ	EXPANSION JOINT	MISC	MISCELLANEOUS	TC	TOP OF CONCRETE
ELEV	ELEVATION	MNFR	MANUFACTURER	THK	THICK(NESS)
EO	EDGE OF	MTL	METAL	TL	TOP OF CONCRETE LEDGE
EOD	EDGE OF DECK			TOS	TOP OF STEEL
EOR	ENGINEER OF RECORD	(N)	NEW CONSTRUCTION	TRANS	TRANVERSE
EOS	EDGE OF SLAB	No.	NUMBER	TYP	TYPICAL
EQ	EQUAL	NOM	NOMINAL		
EW	EACH WAY	NS	NEAR SIDE	UNO	UNLESS NOTED OTHERWISE
EXP	EXPANSION	NTS	NOT TO SCALE		
EXT	EXTERIOR	NW	NORMAL WEIGHT	VERT	VERTICAL
				VIF	VERIFY IN FIELD
FDN	FOUNDATION	OC	ON CENTER		
FLR	FLOOR	OF	OUTSIDE FACE	W	WIDTH
FO	FACE OF	OH	OVERHEAD	WP	WORK POINT
FS	FAR SIDE	OPNG	OPENING	WWF	WELDED WIRE FABRIC
FTG	FOOTING	OPP	OPPOSITE HAND		
		OSB	ORIENTED STRAND BOARD	Ø	DIAMETER

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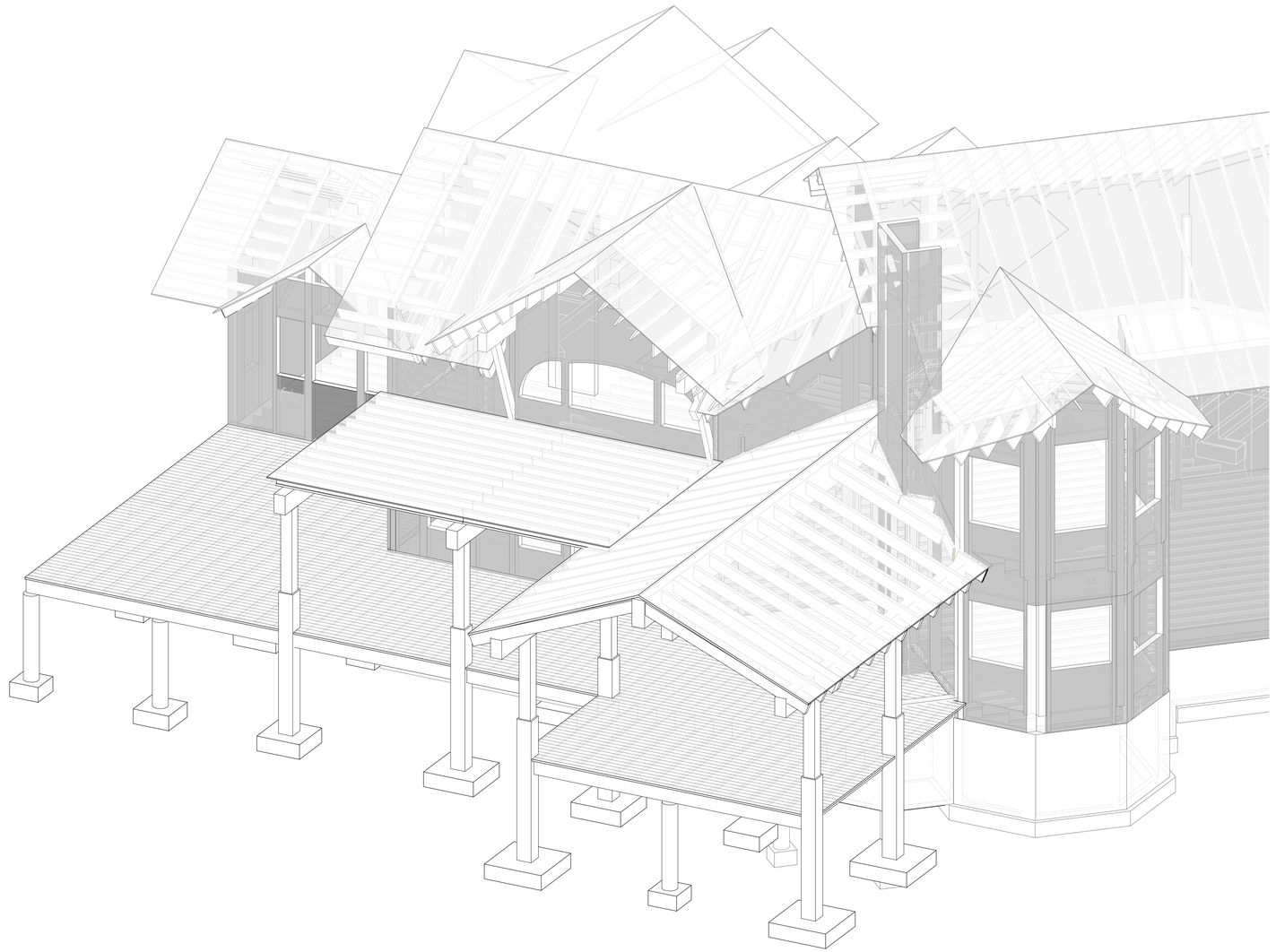
31555 GREEN RIDGE DRIVE

STRUCTURAL COVER SHEET

DATE	ISSUANCE
02/16/2024	ISSUED FOR PRICING
05/24/2024	ISSUED FOR PRICING
06/12/2024	PERMIT

S0.1



3D PLOT VIEW

FOR ILLUSTRATIVE PURPOSES ONLY

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3D VIEWS

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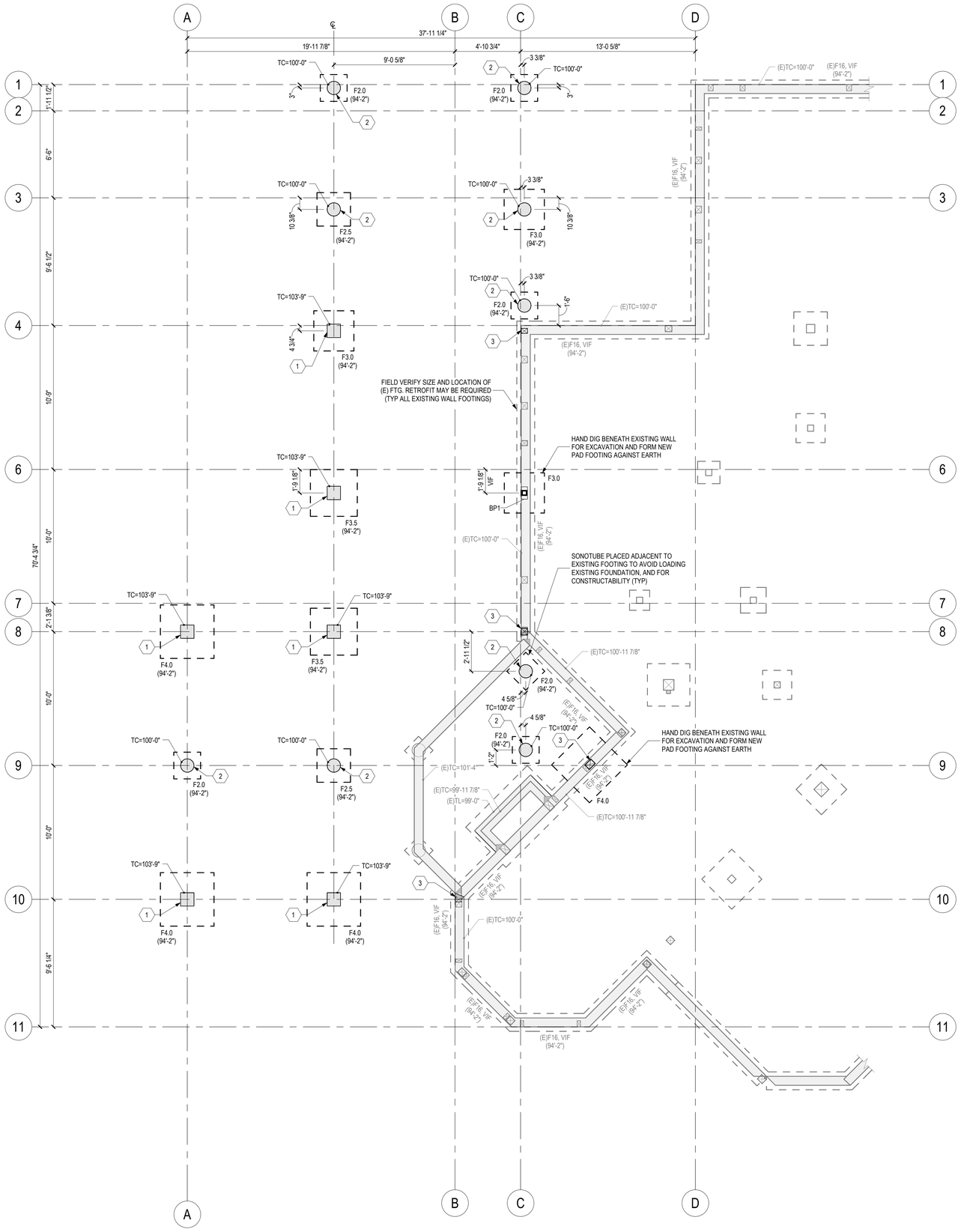

FOUNDATION PLAN
1/4" = 1'-0"
NORTH

FOUNDATION PLAN NOTES

1. SEE **S0.1** & **S0.2** FOR GENERAL STRUCTURAL NOTES, LEGEND, ABBREVIATIONS KEY, SPECIAL INSPECTIONS, AND 3D VIEWS.
2. SEE **S3.0** FOR DETAILS.
3. SEE **S6.0** FOR SCHEDULES.
4. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION AND DIMENSIONS.
5. VIF (E) CONDITIONS PRIOR TO NEW CONSTRUCTION AND NOTIFY ANTHEM OF ANY DISCREPANCIES.
6. FOOTINGS TO BEAR ON APPROVED SUBGRADE PER GEOTECH REPORT. SEE GENERAL NOTES.
7. WALL FRAMING AND COLUMNS SHOWN SUPPORT THE FRAMING ON THE LEVEL ABOVE.

KEYNOTE SCHEDULE — FOUNDATION

X	DESCRIPTION
1	1'-0"x1'-0" CONC PIER W/ (4)#5 VERT BARS & #4 TIES @10"; (3) AT TOP OF PIER.
2	12"Ø SONOTUBE W/ (4)#5 VERT BARS & #4 TIES @10"; (3) AT TOP OF SONOTUBE. ATTACH TIMBER BEAM TO SONOTUBE WITH SIMPSON ABU TYPE POST BASE & 5/8"Øx6" TITEN HD SCREW ANCHOR(S).
3	ATTACH BASE OF POST TO EXISTING CONCRETE WALL WITH SIMPSON ABU TYPE POST BASE & 5/8"Øx6" TITEN HD SCREW ANCHOR.

CONCRETE FOOTING SCHEDULE (ISO PADS)

TAG	LENGTH	WIDTH	THICKNESS	REINFORCEMENT
F2.0	2'-0"	2'-0"	1'-0"	(3) #5 EA WAY BOT
F2.5	2'-6"	2'-6"	1'-0"	(3) #5 EA WAY BOT
F3.0	3'-0"	3'-0"	1'-0"	(3) #5 EA WAY BOT
F3.5	3'-6"	3'-6"	1'-0"	(4) #5 EA WAY BOT
F4.0	4'-0"	4'-0"	1'-0"	(4) #5 EA WAY BOT

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FOUNDATION PLAN

DATE	ISSUANCE
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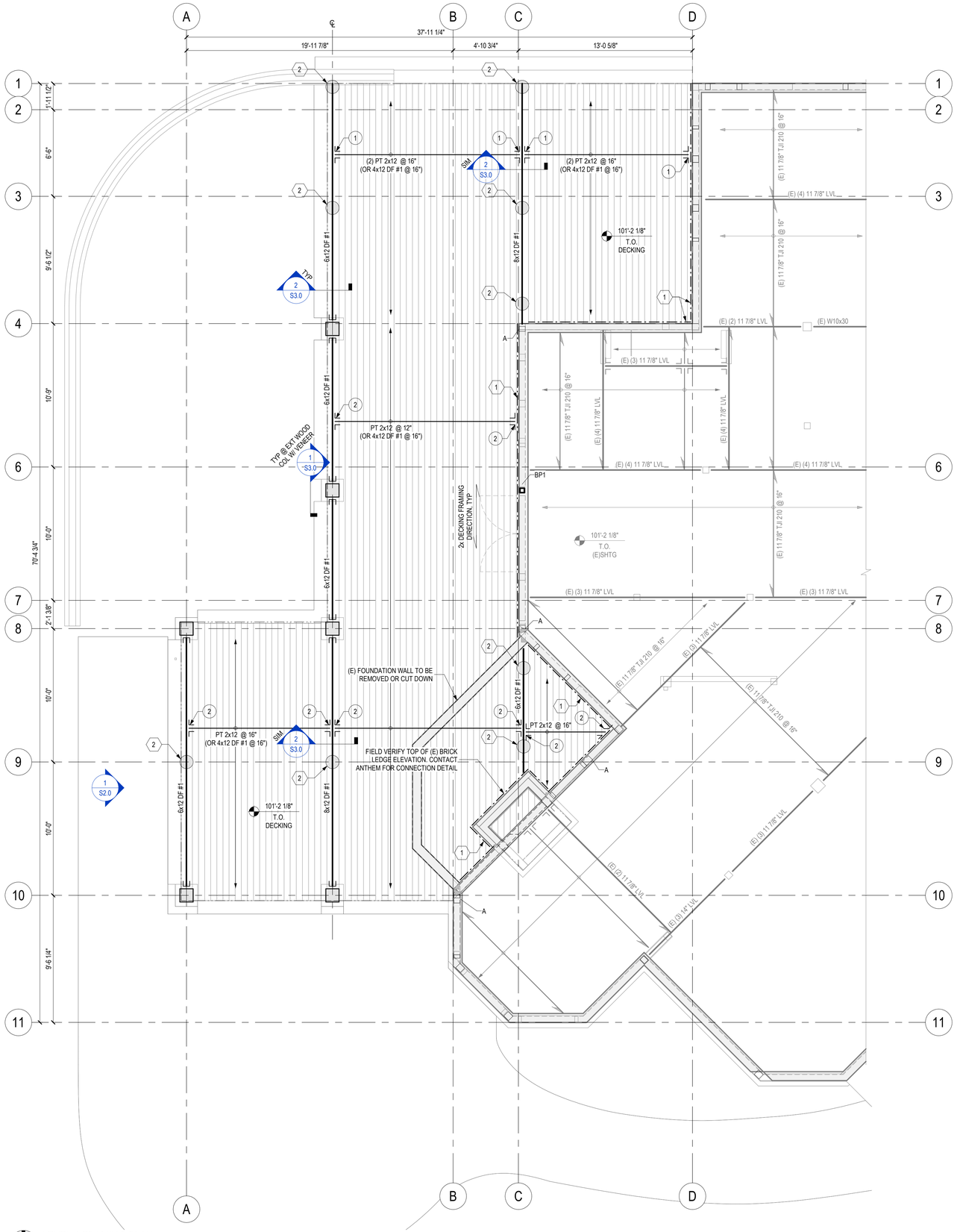
05/24/2024	ISSUED FOR PRICING
06/12/2024	PERMIT

S1.0



LEVEL 1 FRAMING PLAN
1/4" = 1'-0"
NORTH

LEVEL 1 FRAMING PLAN NOTES

1. SEE **S0.1** & **S0.2** FOR GENERAL STRUCTURAL NOTES, LEGEND, ABBREVIATIONS KEY, SPECIAL INSPECTIONS, AND 3D VIEWS.
2. SEE **S3.0** FOR DETAILS.
3. SEE **S6.0** FOR SCHEDULES.
4. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION AND DIMENSIONS.
5. VIF (E) CONDITIONS PRIOR TO NEW CONSTRUCTION AND NOTIFY ANTHEM OF ANY DISCREPANCIES.
6. WALL FRAMING AND COLUMNS SHOWN SUPPORT THE FRAMING ON THIS LEVEL.
7. **TYPICAL DECK CONSTRUCTION (UNO)**: EXTERIOR DECKING PER ARCH OVER WOOD JOISTS PER PLAN. LAY DECKING PERPENDICULAR TO FRAMING AND FASTEN DECKING TO JOIST W/ (2) #8x3" EXTERIOR DECK SCREWS PER BOARD. FLASH TOP OF MULTI-PLY JOISTS / BEAMS.

KEYNOTE SCHEDULE — LEVEL 1

X	DESCRIPTION
1	PT (2)2x12 LEDGER. ATTACH TO (E) CONC WALL W/ (2) 5/8"Ø x 6" MIN EMBED TITEN HD @ 24"
2	ATTACH TIMBER BEAM TO SONOTUBE WITH SIMPSON ABU TYPE POST BASE & 5/8"Ø X6" TITEN HD SCREW ANCHOR(S).

HANGER SCHEDULE

1. ALL HANGERS NOTED TO BE INSTALLED WITH NUMBER AND SIZE FASTENERS SPECIFIED BY MNFR. ANY SUBSTITUTIONS SHALL BE REVIEWED AND APPROVED BY ANTHEM

2. INSTALL HANGERS NOTED OR APPROVED EQUIVALENT

X	DESCRIPTION	HEADER FASTENERS	JOIST FASTENERS
1	(2)2x12: HU212-2 / HUC212-2 4x12: HU412 / HUC412	(16) 0.162" Ø x 2 1/2"	(6) 0.148" Ø x 3"
2	2x12: LUS210 4x12: HU412 / HUC412	(8) 0.148" Ø x3" (16) 0.162" Ø x 2 1/2"	(4) 0.148" Ø x3" (6) 0.148" Ø x 3"
3	LSSR410Z	(20) 0.162" Ø x 2 1/2"	(13) 0.162" Ø x 2 1/2"

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LEVEL 1 FRAMING PLAN

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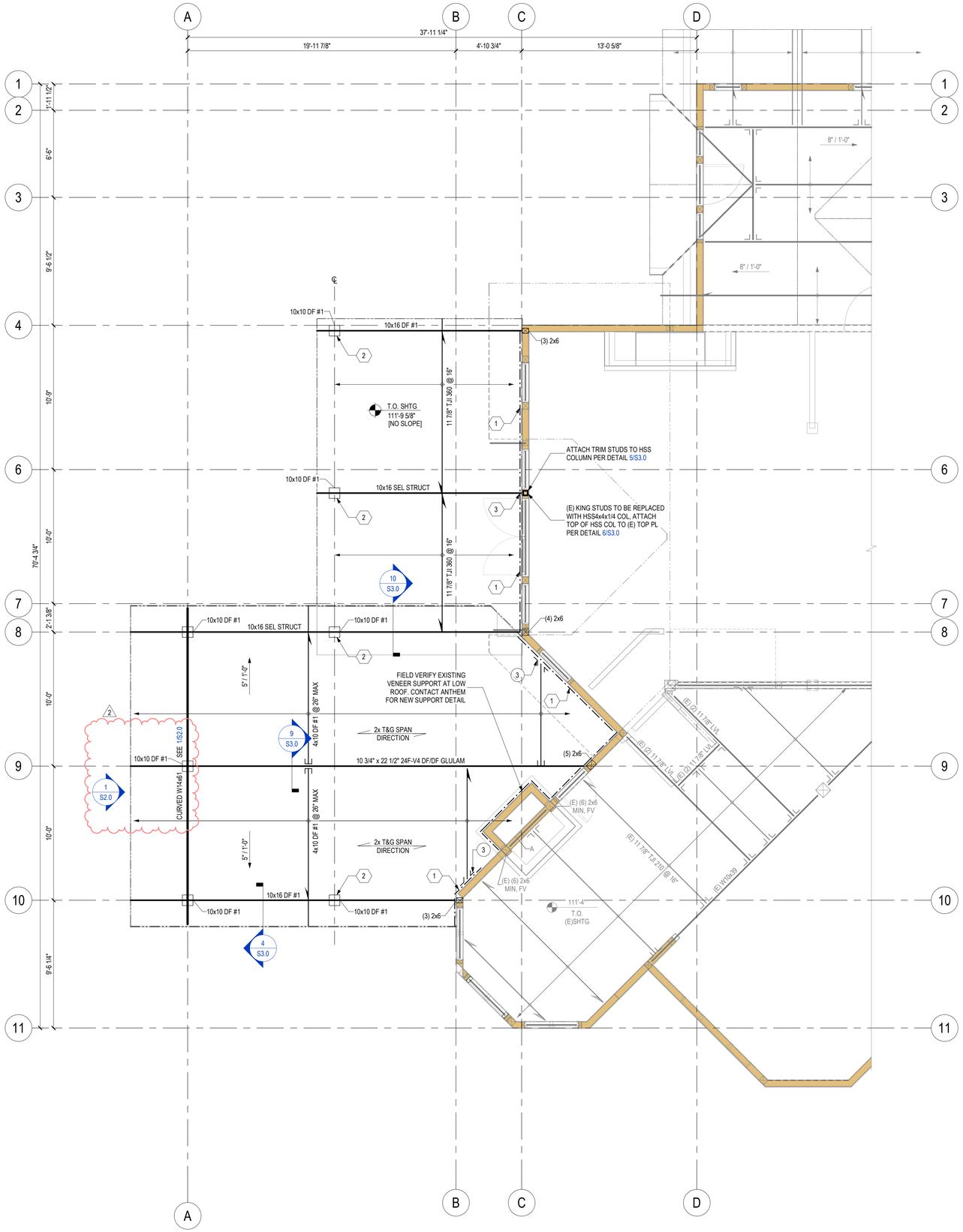
05/24/2024	ISSUED FOR PRICING
08/12/2024	PERMIT

S1.1



ROOF FRAMING PLAN
1/4" = 1'-0"
NORTH

ROOF FRAMING PLAN NOTES

1. SEE **S0.1** & **S0.2** FOR GENERAL STRUCTURAL NOTES, LEGEND, ABBREVIATIONS KEY, SPECIAL INSPECTIONS, AND 3D VIEWS.
2. SEE **S3.0** FOR DETAILS.
3. SEE **S6.0** FOR SCHEDULES.
4. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION AND DIMENSIONS.
5. VIF (E) CONDITIONS PRIOR TO NEW CONSTRUCTION AND NOTIFY ANTHEM OF ANY DISCREPANCIES.
6. TOP OF COLUMN HEIGHT = PER ARCH
7. WALL FRAMING AND COLUMNS SHOWN SUPPORT THE FRAMING ON THIS LEVEL.
8. **TYPICAL ROOF CONSTRUCTION (UNO):** 5/8" NOMINAL APA 40/20 RATED SHEATHING OVER RAFTERS. SEE PLAN. FASTEN SHEATHING TO RAFTERS, RIMS, LEDGERS, AND NAILERS WITH 0.113" x 2 3/8" NAILS @ 4" OC ALONG PANEL EDGES, AND @ 8" OC ALONG INTERMEDIATE FRAMING MEMBERS. LAY PANELS PERPENDICULAR TO FRAMING MEMBERS AND STAGGER PANEL JOINTS.
9. **TONGUE & GROOVE ROOF CONSTRUCTION:** 5/8" NOMINAL APA 40/20 RATED SHEATHING OVER 1 1/2"x5 1/2" DFL TONGUE & GROOVE DECKING . FASTEN SHEATHING THROUGH T&G WITH 0.113"x2 3/8" NAILS @ 4" OC ALONG PANEL EDGES, AND @ 8" OC ALONG INTERMEDIATE FRAMING MEMBERS AND STAGGER PANEL JOINTS. FASTEN EACH T&G MEMBER TO EACH SUPPORT MEMBER W/ (2)10d NAILS OR 1/4"x3" WOOD SCREWS.

KEYNOTE SCHEDULE — ROOF

X	DESCRIPTION
1	11 7/8" LVL LEDGER. ATTACH TO EXT WALL W/ (3) 1/4"Ø x 4 1/2" SDS SCREWS INTO EA STUD (16" MAX SPACING)
2	ATTACH TIMBER BEAM TO TIMBER COL PER DETAIL 3/S3.0
3	ATTACH NEW BEAM TO HSS COLUMN PER DETAIL 7/S3.0

HANGER SCHEDULE

1. ALL HANGERS NOTED TO BE INSTALLED WITH NUMBER AND SIZE FASTENERS SPECIFIED BY MNFR. ANY SUBSTITUTIONS SHALL BE REVIEWED AND APPROVED BY ANTHEM

2. INSTALL HANGERS NOTED OR APPROVED EQUIVALENT

X	DESCRIPTION	HEADER FASTENERS	JOIST FASTENERS
1	(2)2x12: HU212-2 / HUC212-2 4x12: HU412 / HUC412	(16) 0.162" Ø x 2 1/2"	(6) 0.148" Ø x 3"
2	2x12: LUS210 4x12: HU412 / HUC412	(8) 0.148" Ø x3" (16) 0.162" Ø x 2 1/2"	(4) 0.148" Ø x3" (6) 0.148" Ø x 3"
3	LSSR410Z	(20) 0.162" Ø x 2 1/2"	(13) 0.162" Ø x 2 1/2"

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ROOF FRAMING PLAN

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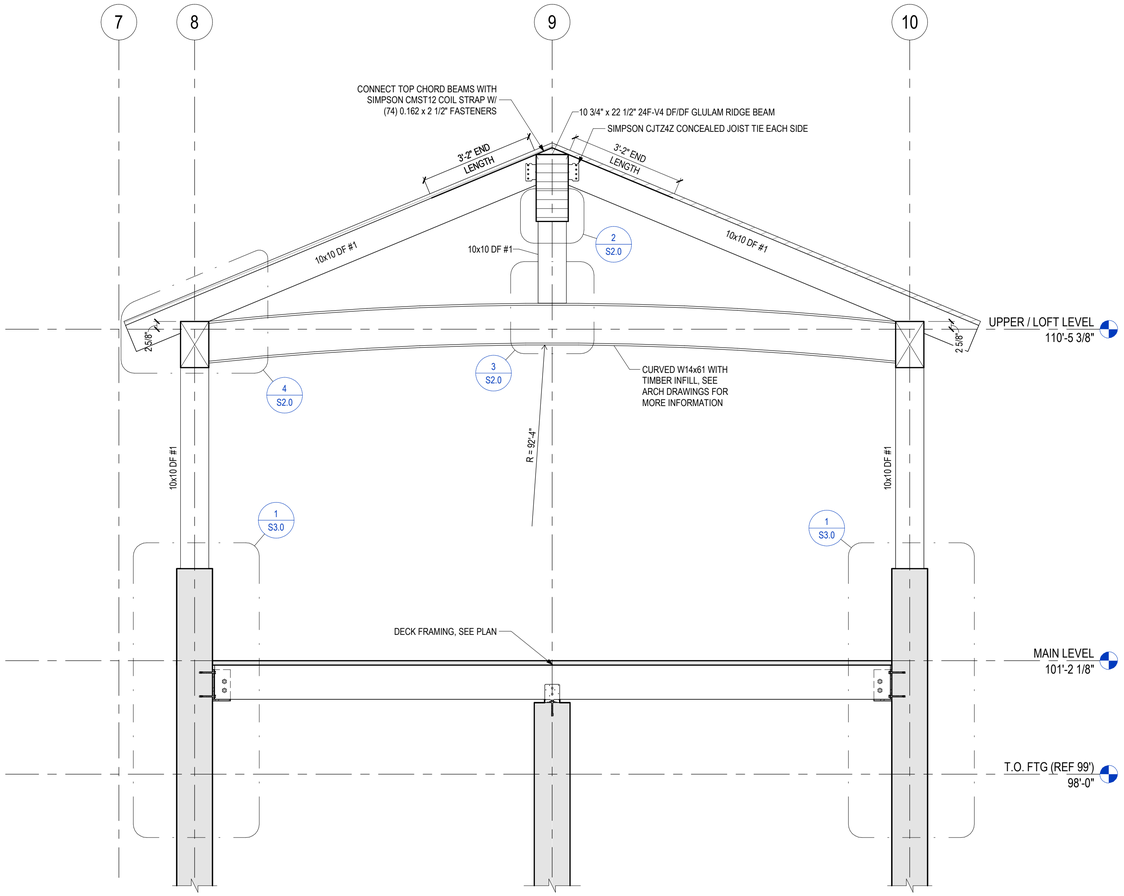
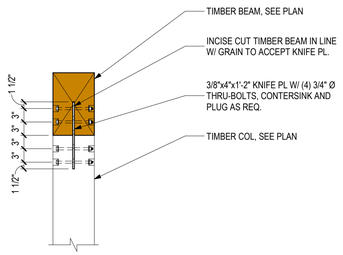
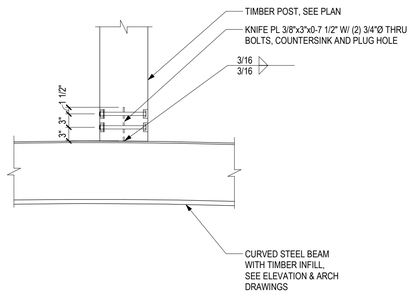
S1.2



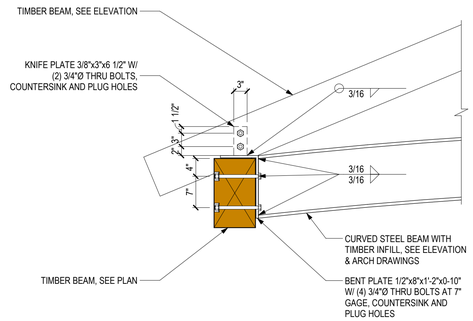
1 HAMMER TRUSS STRUCTURAL ELEVATION
1/2" = 1'-0"



2 RIDGE BEAM TO COLUMN CONNECTION W/ KNIFE PLATE
3/4" = 1'-0"



3 TIMBER POST TO STEEL BEAM CONNECTION
3/4" = 1'-0"



4 STEEL BEAM TO TIMBER BEAM CONNECTION
3/4" = 1'-0"

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STRUCTURALTRUSS ELEVATION & DETAILS

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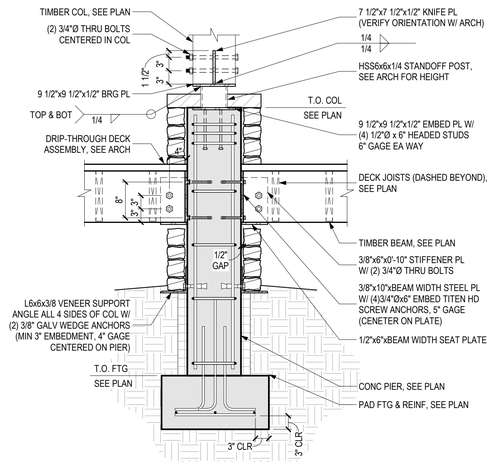
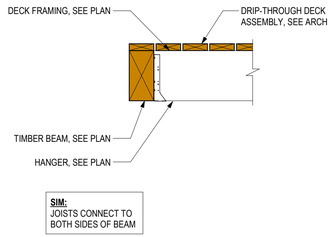
02/16/2024	ISSUED FOR PRICING
05/24/2024	ISSUED FOR PRICING
06/12/2024	PERMIT
7/10/2024	REVISION 1
12/23/2024	REVISION 2

S2.0



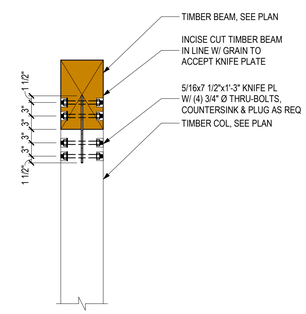
1 TIMBER COLUMN TO CONCRETE PIER CONNECTION
NOT TO SCALE



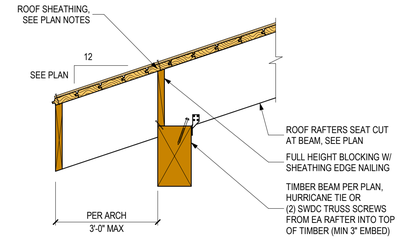
SIM: JOISTS CONNECT TO BOTH SIDES OF BEAM

2 DECK FRAMING AT TIMBER BEAM
NOT TO SCALE

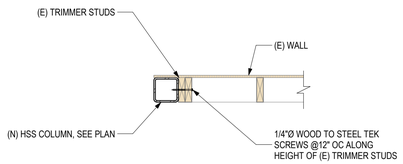
NOTE: RAFTERS NOT SHOWN FOR CLARITY



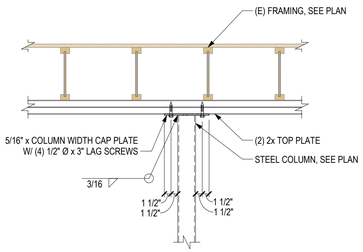
3 TIMBER BEAM TO TIMBER COLUMN
NOT TO SCALE



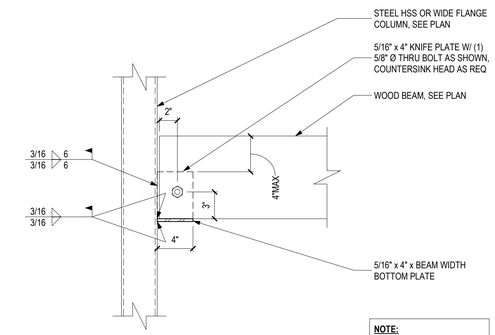
4 RAFTERS AT DROPPED TIMBER BEAM
NOT TO SCALE



5 NEW HSS COLUMN IN (E) WALL
NOT TO SCALE



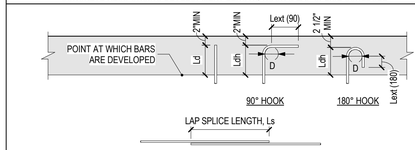
6 TOP OF STEEL COLUMN CONNECTION TO TOP PLATE
NOT TO SCALE



NOTE: WALL AND FLOOR FRAMING NOT SHOWN FOR CLARITY

7 WOOD BEAM TO STEEL COLUMN CONN
NOT TO SCALE

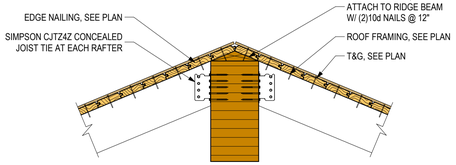
CONCRETE REINFORCING DEVELOPMENT LENGTH, HOOK & LAP SPLICE SCHEDULE



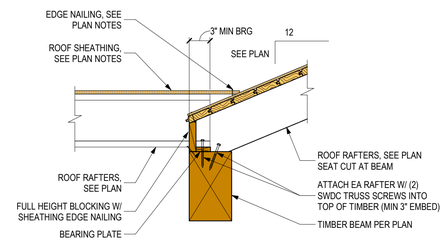
BAR SIZE	NORMAL WEIGHT CONCRETE REINFORCING SCHEDULE (3,000 PSI MIN)					
	DEVELOPMENT LENGTH (Ld)	DEVELOPMENT HOOKS (Ldh)	LAP SPLICE (Ls)	D	Lext (90)	Lext (180)
#3	17"	12"	22"	2 1/4"	4 1/2"	2 1/2"
#4	22"	12"	29"	3"	6"	2 1/2"
#5	28"	12"	36"	3 3/4"	7 1/2"	2 1/2"
#6	33"	12"	43"	4 1/2"	9"	3"
#7	48"	14"	63"	5 1/4"	10 1/2"	3 1/2"
#8	55"	16"	72"	6"	12"	4"

NOTES:
1. ALL VALUES LISTED ARE FOR ASTM A615 GRADE 60 STEEL.
2. WHEN SPLICING DIFFERENT SIZE BARS, USE LAP LENGTH OF LARGER BAR.
3. ALL LAP SPLICES ARE TO BE IN CONTACT AND WIRED TIED. STAGGER SPLICES SO THAT NO MORE THAN 50% OF REINFORCING IS SPLICED AT ONE LOCATION.
4. FOR LIGHTWEIGHT CONCRETE, ALL TABULATED VALUES SHALL BE ADJUSTED BY x 1.30.
5. FOR EPOXY COATED REBAR, ALL TABULATED VALUES SHALL BE ADJUSTED BY x 1.50.
6. D = BEND DIAMETER; Lext = STRAIGHT BAR EXTENSION NOT INCLUDING BEND DIAMETER, Ldh = HOOK DEVELOPMENT LENGTH.

8 CONCRETE REINFORCING SCHEDULE
NOT TO SCALE



9 TIMBER RIDGE BEAM
NOT TO SCALE



10 ROOF TRANSITION
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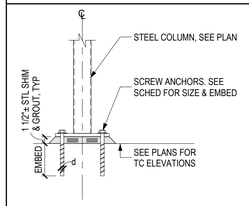
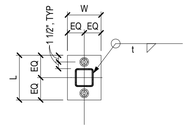
STRUCTURAL DETAILS

DATE	ISSUANCE
06/12/2024	PERMIT

S3.0

BASE PLATE SCHEDULE

ANCHOR TYPES	BASE PLATE TYPES
	
ANCHOR TYPE A	BASE PLATE TYPE 1

ANCHOR TYPE NOTES:
1. LEVELING NUTS MAY BE PROVIDED ON ANCHORS TOP OF CONC AND BOT OF BASE PLATE IN LIEU OF STEEL SHIMS.

BASE PLATE TYPE NOTES:
1. HOLE SIZE TO BE 5/16" LARGER THAN ANCHOR BOLT DIAMETER, UNO.
2. DO NOT WELD FILLETED/CURVED SURFACES OR FLANGE TIPS.

MARK	AB TYPE	AB DIAMETER [Ø]	AB EMBED	PLATE TYPE	DIM [L]	DIM [W]	PLATE THICKNESS	WELD [t]
BP1	A	5/8"	6"	1	11"	5 1/2"	1/2"	1/4"

CRAFT
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SKYLER M FUESNER
12/23/2024
61029
PROFESSIONAL ENGINEER

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anthemstructural.com Job #23-072

REVIEWED
FOR CODE
COMPLIANCE

01/23/2025

WOODROW RESIDENCE

31555 GREEN RIDGE DRIVE

SCHEDULES

DATE	ISSUANCE
02/16/2024	ISSUED FOR PRICING
05/24/2024	ISSUED FOR PRICING
06/12/2024	PERMIT

S6.0