GENERAL STRUCTURAL NOTES

GENERAL

1. DESIGN AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH PROVISIONS OF THE 2012 EDITION OF THE INTERNATIONAL BUILDING CODE (IBC)

2. ELEVATIONS (XXX'-XX") SHOWN ON PLANS ARE TO TOP OF CONCRETE, STEEL, OR WOOD DECK U.N.O.. ELEVATIONS SHOWN ARE BASED ON FIRST FLOOR ELEVATION OF 100'-00" CONFIRM WITH ARCHITECTURAL.

3. ALL CONTRACTORS AND ANY SUB-CONTRACTORS SHALL VERIFY AND COORDINATE ALL DIMENSIONS AND DETAILS AS SHOWN ON STRUCTURAL DRAWINGS WITH ARCHITECTURAL DRAWINGS. WHERE DISCREPANCIES ARISE THE ARCHITECT AND ENGINEER SHALL BE NOTIFIED.

4. ALL CONTRACTORS AND ANY SUB-CONTRACTORS SHALL CONSULT ARCHITECTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS FOR VERIFICATION OF LOCATION AND DIMENSIONS OF CURBS, PADS, INSERTS, SLEEVES, DRIPS, REGLETS, REVEALS,FINISHES, DEPRESSIONS, DOOR CLOSERS, AND OTHER PROJECT REQUIREMENTS NOT SHOWN ON THE STRUCTURAL DRAWINGS.

5. SIZE AND LOCATION OF ALL ROOF, FLOOR, AND WALL OPENINGS TO BE VERIFIED WITH MECHANICAL AND ELECTRICAL DRAWINGS AND CONTRACTORS. OPENINGS LESS THAN 12 INCHES ARE GENERALLY NOT SHOWN.

6. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR THE ACTS, ERRORS, OR OMISSIONS OF THE CONTRACTOR OR ANY SUB-CONTRACTOR, OR ANY OF THE CONTRACTOR OR SUBCONTRACTORS AGENTS OR EMPLOYEES, OR ANY OTHER PERSONS PERFORMING ANY OF THE WORK. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE MEANS AND MANNER OF CONSTRUCTION AND FOR THE SAFETY OF PERSONS AND PROPERTY. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL SAFETY PRECAUTIONS AND REGULATION DURING THE WORK. THE ENGINEER WILL NOT ADVISE ON NOR ISSUE DIRECTION AS TO SAFETY PRECAUTION AND PROGRAMS.

7. THE ARCHITECT, CONTRACTOR, OWNER, AND END-USER OF THE STRUCTURE SHOULD EXPECT TO SEE SOME DEGREE OF RANDOM CRACKING IN THE SLAB-ON-GRADE. RANDOM CRACKING INCLUDES, BUT IS NOT LIMITED TO: SHRINKAGE CRACKS, CRACKS AT RE-ENTRANT CORNERS, AND CRACKS ADJACENT TO POINTS OF SLAB FIXITY. RANDOM CRACKING GENERALLY DOES NOT INCLUDE CRACKS WITH VERTICAL DISPLACEMENT. RANDOM CRACKS WITHIN THE SLAB-ON-GRADE DO NOT TYPICALLY IMPACT THE STRUCTURAL INTEGRITY OF THE SLAB AND ARE NOT NECESSARILY INDICATIVE OF STRUCTURAL ISSUES OR CONCERNS.

8. MECHANICAL UNITS AND EQUIPMENT SUPPORTED BY ROOF AND ELEVATED FLOOR STRUCTURE ARE SUBJECT TO THE APPROVAL OF THE STRUCTURAL ENGINEER, AND MUST BE SUBMITTED TO THE STRUCTURAL ENGINEER FOR VERIFICATION OF UNIT SIZE, WEIGHT, AND LOCATION.

9. THE STRUCTURAL DRAWINGS HEREIN REPRESENT THE FINISHED STRUCTURE. DURING ERECTION OF THE BUILDING, THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR TEMPORARY GUYING, SHORING, BRACING, FORMING, ETC., TO HOLD THE STRUCTURE IN PROPER ALIGNMENT AND TO WITHSTAND ALL LOADS TO WHICH THE STRUCTURE MAY BE SUBJECTED; INCLUDING LATERAL LOADS, TEMPERATURE DIFFERENTIALS, AND STOCKPILES OF MATERIAL AND EQUIPMENT. SUCH MEASURES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED FOR SAFETY AND UNTIL ALL FRAMING AND CONNECTIONS ARE IN PLACE. THE INVESTIGATION, DESIGN, SAFETY, ADEQUACY AND INSPECTION OF SUCH TEMPORARY MEASURES ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

10. CONSTRUCTION DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY SHOWN, SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED, SUBJECT TO APPROVAL BY THE ENGINEER.

11. ALL STRUCTURAL SYSTEMS WHICH ARE TO BE COMPOSED OF COMPONENTS TO BE FIELD ERECTED SHALL BE SUPERVISED BY THE SUPPLIER DURING MANUFACTURING, DELIVERY, HANDLING, STORAGE, AND ERECTION IN ACCORDANCE WITH THE SUPPLIERS INSTRUCTIONS AND REQUIREMENTS.

12. CONTRACTOR AND SUB-CONTRACTORS SHALL THOROUGHLY REVIEW ALL DRAWINGS AND SPECIFICATIONS PRIOR TO SUBMITTING BIDS. MISCELLANEOUS FASTENERS, CLIPS, ETC., THAT ARE NOT DETAILED ON THE DRAWINGS BUT ARE PART OF THE REQUIREMENTS FOR FULL INSTALLATION OF ALL STRUCTURAL SYSTEMS ARE TO BE PART OF THE BID. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO THE BID TO ASCERTAIN CONDITIONS WHICH MY ADVERSELY AFFECT THE BID.

13. ALL OMISSIONS AND CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE CONSTRUCTION DRAWINGS AND/OR SPECIFICATION AND/OR EXISTING CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THE WORK.

14. CONTRACTOR SHALL REVIEW, STAMP, SIGN, AND DATE ALL SHOP DRAWINGS PRIOR TO FORWARDING TO THE ARCHITECT/ENGINEER. THE ENGINEER'S REVIEW IS TO BE FOR CONFORMANCE WITH THE DESIGN CONCEPT AND GENERAL COMPLIANCE WITH THE RELEVANT CONTRACT DOCUMENTS. THE ENGINEER'S REVIEW DOES NOT RELIEVE THE CONTRACTOR OF THE SOLE RESPONSIBILITY TO REVIEW, CHECK, AND COORDINATE THE SHOP DRAWINGS PRIOR TO SUBMISSION. THE CONTRACTOR REMAINS SOLELY RESPONSIBLE FOR ERRORS AND OMISSIONS ASSOCIATED WITH THE PREPARATION OF THE SHOP DRAWINGS AS THEY PERTAIN TO MEMBER SIZES, DETAILS, DIMENSION, ETC..

15. THE CONTRACTOR SHALL COORDINATE WITH ALL TRADES ALL DEPRESSIONS, DIMENSIONS, ELEVATIONS, SLEEVES, CHASES, HANGERS, OPENING, INSERTS, ANCHORS, EQUIPMENT SUPPORTS, AND DETAILS WITH THE ENTIRE CONTRACT DOCUMENT PACKAGE, INCLUDING SPECIFICATIONS AND ARCHITECTURAL, STRUCTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS. FOR CONCRETE CONSTRUCTION, THE INSERTS, EMBEDDED PLATES, ETC., SHALL NOT INTERFERE WITH REINFORCEMENT LOCATIONS.

16. THESE DRAWINGS INCLUDE SPECIFIED COMPONENTS AND PRODUCTS, I.E. EPOXY, METAL DECK. IF A SUPPLIER/MANUFACTURER DIFFERENT THAN SPECIFIED ON THESE DRAWINGS IS DESIRED AS A SUBSTITUTE, A SUBMITTAL SHOWING THE SUBSTITUTE IS EQUIVALENT TO THE PRODUCT SPECIFIED MUST BE PROVIDED TO AND APPROVED BY THE ENGINEER OF RECORD. IT IS THE SUBMITTERS RESPONSIBILITY TO SHOW THE SUBSTITUTE IS EQUIVALENT, NOT THE ENGINEER OF RECORD.

17. THE OWNER SHALL EMPLOY A SPECIAL INSPECTOR TO PERFORM INSPECTIONS IN ACCORDANCE WITH CHAPTER 17 OF THE IBC AS REQUIRED BY THE BUILDING OFFICIAL. INSPECTION REPORTS FOR THE ITEMS LISTED IN THE SPECIAL INSPECTION SCHEDULE SHALL BE FURNISHED TO THE STRUCTURAL ENGINEER OF RECORD IN A TIMELY MANNER AND SHALL INDICATE THAT WORK INSPECTED WAS DONE IN CONFORMANCE TO APPROVED CONSTRUCTION DOCUMENTS. DISCREPANCIES THAT ARE NOT CORRECTED SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER OF RECORD PRIOR TO THE COMPLETION OF THAT PHASE OF WORK. A FINAL REPORT DOCUMENTING THE REQUIRED SPECIAL INSPECTIONS AND CORRECTION OF ANY DISCREPANCIES NOTED IN THE INSPECTIONS SHALL BE SUBMITTED TO THE OWNER AND STRUCTURAL ENGINEER OF RECORD.

DESIGN LOADS

1.	ROOF LIVE LOAD	20 PSF
2.	FLOOR LIVE LOAD (FIRST FLOOR)	100 PSF
3.	FLOOR LIVE LOAD (SECOND FLOOR)	40/100 PSF
4.	GROUND SNOW LOAD	20 PSF
5.	ROOF SNOW LOAD	14 PSF
6.	OCCUPANCY CATEGORY	II
7.	BASIC WIND SPEED (ASCE/SEI 7)	110 M.P.H. EXPOSURE C
8.	WIND COMPONENTS AND CLADDING	25 PSF (WALLS)
9.	SEISMIC DESIGN CATEGORY (ASCE/SEI 7)	B
	SDS	0.081
	SD1	0.077
	SITE CLASS	D
	SEISMIC FORCE RESISTING SYSTEM	SHEAR WALLS

EXISTING CONSTRUCTION

1. FIELD VERIFY GRADES, SIZES, LOCATIONS AND CONDITIONS OF ALL ITEMS ON PLANS AND DETAILS BEFORE STARTING WORK. REPORT DISCREPANCIES THAT WILL PREVENT CONFORMANCE TO CONSTRUCTION DOCUMENTS TO THE ENGINEER OF RECORD.

2. EXISTING STRUCTURE TO REMAIN IS SHOWN SCREENED (LIGHT). EXISTING STRUCTURE TO BE REMOVED IS NOT SHOWN.

3. ALL EXISTING CONSTRUCTION AFFECTED BY DEMOLITION SHALL BE SHORED UNTIL NEW CONSTRUCTION SUPPORT MEMBERS ARE IN PLACE.

FOUNDATION

1. DESIGN ALLOWABLE SOIL BEARING PRESSURE OF 1,500 PSF ASSUMED. ALL EXTERIOR FOOTINGS TO BE 3'-0" BELOW FINISH GRADE UNO.

2. UNLESS NOTED OTHERWISE; CENTER COLUMN FOOTINGS ON COLUMN CENTERLINES, CENTER WALL FOOTINGS ON FOUNDATION WALLS.

3. SLAB ON GRADE SHALL BE UNDERLAIN BY VAPOR BARRIER AND 6 INCHES MINIMUM OF CRUSHED ROCK OR CONCRETE. REINFORCE ALL SLABS ON GRADE WITH #3 AT 18 INCHES EACH WAY IN TOP 1/3 OF SLAB UNLESS NOTED OTHERWISE. AT DROPPED OR DEPRESSED SLABS ON GRADE MAINTAIN GRAVEL THICKNESS, SLAB DEPTH, REINFORCEMENT AND REINFORCEMENT POSITION.

4. BACK FILL AROUND THE EXTERIOR FOUNDATION WALLS WITH A FREE DRAINING GRANULAR MATERIAL TO THE ELEVATION OF THE ROUGH GRADE. PLACEMENT OF BACKFILL IS NOT ALLOWED UNTIL THE SLAB ON GRADE IS IN PLACE AND THE MAIN FLOOR DIAPHRAGM IS COMPLETED. TUNNEL CONCRETE WORK, FREE STANDING AND FOUNDATION WALLS SHALL BE COMPLETE AND AT DESIGN STRENGTH BEFORE BACKFILL IS PLACED.

5. CONTRACTOR TO KEEP EXCAVATIONS DRY AND PROTECTED FROM FROST AT ALL TIMES DURING THE FOUNDATION CONSTRUCTION. NOTIFY ENGINEER IF NATURE OF SOIL AT DEPTHS SHOWN IS NOT SUITABLE FOR FOUNDATIONS.

CAST-IN-PLACE CONCRETE

1. MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS

FOOTINGS	3500 PSI MAX. W/C RATIO OF 0.50
INTERIOR SLABS ON GRADE	4000 PSI MAX. W/C RATIO OF 0.45
SLABS OVER STEEL DECK	3500 PSI MAX. W/C RATIO OF 0.45
EXPOSED CONCRETE SLABS AND GARAGE SLABS	4000 PSI MAX. W/C RATIO OF 0.45
FOUNDATION WALLS, WALLS, COLUMNS AND BEAMS	4000 PSI MAX. W/C RATIO OF 0.45

2. EXTERIOR EXPOSED CONCRETE SHALL HAVE 4 TO 8% ENTRAINED AIR. SLABS WITH HARD TROWELLED FINISH TO HAVE NO AIR ENTRAINMENT ADDED. COORDINATE WITH ARCHITECTURAL FOR FINISHES.

3. AGGREGATE FOR NORMAL WEIGHT CONCRETE SHALL MEET ASTM C33. MIX DESIGN SHALL CONTAIN A MINIMUM OF 50% COARSE AGGREGATES BY GRADATION REQUIREMENTS (NO.67 GRADING) SET FORTH IN ASTM C33.

4. NO ALUMINUM SHALL BE PLACED IN THE CONCRETE.

5. CONSTRUCTION TO BE IN ACCORDANCE WITH ACI 318-05 (R-05), "CHAPTER 3 FOR STANDARDS FOR TESTS & MATERIALS, CHAPTERS 4, 5, 6 & 7 FOR CONSTRUCTION REQUIREMENTS". REFER TO ACI 302.1R-04 FOR SLAB ON GRADE MIX DESIGN.

6. PIPE OR ELECTRICAL CONDUIT EMBEDDED IN CONCRETE SHALL NOT BE LARGER IN OUTSIDE DIAMETER AT ITS WIDEST (OR FITTING) THAN 1/3 THE THICKNESS OF THE SLAB OR WALL. SLEEVES, CONDUIT, OR PIPES THROUGH SLABS AND WALLS SHALL BE PLACED NO CLOSER THAN THREE DIAMETERS ON CENTER AND THEY DO NOT DISPLACE REINFORCING. DO NOT CUT HOLES IN CONCRETE SLABS, BEAMS, COLUMNS, OR WALLS WITHOUT PRIOR APPROVAL OF THE ENGINEER.

7. LOCATION OF ALL CONSTRUCTION AND CONTROL JOINTS SHALL BE LOCATED AND DETAILED ON SHOP DRAWINGS AND ARE SUBJECT TO ENGINEERS APPROVAL. IF SLAB ON GRADE CONTROL JOINTS ARE NOT SPECIFICALLY LOCATED ON DRAWINGS, PROVIDE CONTROL JOINTS AT 10'-0" ON CENTER MAXIMUM WITH A LENGTH TO WIDTH RATIO OF 1.5. PROVIDE (2) #4x4'-0" AT ALL NON-CONTINUOUS CONTROL JOINTS. PROVIDE (2) #4x4'-0" AND (1) #4x24"x24" CORNER BAR AT ALL REENTRANT CORNERS OF SLAB ON GRADE.

8. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATION AND DIMENSION OF CONCRETE REVEALS, NOTCHES, REGLETS, DRIPS, PADS, CURBS, CHAMFERS BLOCKOUTS AT DOORWAYS, AND ALL OTHER PROJECT REQUIREMENTS NOT SHOWN ON STRUCTURAL DRAWINGS. CHAMFER ALL EXPOSED CORNERS OF BEAMS, COLUMNS, JOISTS AND WALLS, SUBJECT TO ARCHITECTS APPROVAL.

REINFORCING STEEL

1. TRUSS TYPE MASONRY JOINT REINFORCEMENT: W1.7 (9 GAGE), ASTM A1064, FY=70,000 PSI

2. WELDED WIRE REINFORCING (WWR): ASTM A82 AND A185

3. DEFORMED BARS (REBAR): ASTM A615, GRADE 40 FOR #3; GRADE 60 FOR #4 AND LARGER; ASTM A706 FOR WELDED CONDITIONS.

4. LAP SPLICES:

MASONRY:	48-BAR DIAMETERS AT CELLS WITH SINGLE BAR (HORIZ. AND VERT.)
	64-BAR DIAMETERS AT CELLS WITH TWO BARS (HORIZ. AND VERT.)
CONCRETE:	CLASS "B" LAP SPLICE, TYPICAL UNLESS NOTED OTHERWISE.
WELDED WIRE FABRIC:	WIRE SPACING +2"

5. CONCRETE COVER FOR CAST-IN-PLACE AND NON-PRE-STRESSED CONCRETE SHALL BE AS SPECIFIED BELOW U.N.O. ON THESE DRAWINGS:

CONCRETE CAST AGAINST SOIL	3"
FORMED CONCRETE EXPOSED TO EARTH OR WEATHER (#6 OR GREATER)	2"
FORMED CONCRETE EXPOSED TO EARTH OR WEATHER (#5 OR LESS)	1 1/2"
CONCRETE NOT EXPOSED TO EARTH OR WEATHER (SLAB, WALL, JOIST)	3/4"
CONCRETE NOT EXPOSED TO EARTH OR WEATHER (BEAM, COLUMN)	1 1/2"
SLAB ON GRADE	1 1/2"

6. SECURELY TIE ALL REINFORCING IN PLACE WITH DOUBLE ANNEALED 16-GAUGE IRON WIRE OR APPROVED CLIPS PRIOR TO CONCRETE OR GROUT PLACEMENT.

7. SUBMIT SHOP DRAWINGS OF REINFORCING STEEL FOR REVIEW BY THE ARCHITECT AND ENGINEER PRIOR TO FABRICATION.

TYPICAL CMU WALL REINFORCING

1. UNLESS NOTED OTHERWISE ON THESE DRAWINGS, REINFORCE CMU WALLS AS FOLLOWS:

8" CMU WALLS
#5 VERT @ 48" O.C. CENTER OF WALL
(2) #5 VERT AT EACH CORNER OF WALL
TRUSS TYPE HORIZ JOINT REINFORCEMENT @ 16" O.C.

SOLID GROUT AT REINFORCED CELLS ONLY UNO
PROVIDE (2) TYPICAL VERT FULL HEIGHT JAMB STEEL EACH SIDE OF OPENINGS
PROVIDE (2) #4 HORIZ BOND BEAM AT FLOOR AND ROOF LEVELS AND TOP OF WALL
PROVIDE (2) #5 LINTEL BOND BEAM AT DOOR OPENINGS

COLD FORMED STEEL

1. ALL STRUCTURAL COLD FORMED STEEL FRAMING SHALL CONFORM TO THE CURRENT EDITION OF AISI STANDARD

33 & 43 MILS MATERIAL	ASTM C955 GR. 33 KSI
54, 68 & 97 MILS MATERIAL	ASTM C955 GR. 50 KSI

2. ALL STRUCTURAL PROPERTIES COMPUTED IN ACCORDANCE WITH AISI "NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS" (AISI NAS-01). DESIGNATIONS GIVEN ON DRAWINGS ARE STEEL STUD MANUFACTURER'S ASSOCIATION (S.S.M.A.).

3. U.N.O. ON THESE DRAWINGS, STUD WALL TRACK TO BE OF THE SAME MATERIAL AND GAUGE AS STUDS. PROVIDE HORIZONTAL BRIDGING AT 5'-0" O.C. MAXIMUM AT NON- BEARING WALLS AND 3'-4" O.C. MAXIMUM AT BEARING WALLS. BEARING WALLS TO BE ERECTED WITH STUD ENDS SEATED AGAINST TRACK WEB TOP AND BOTTOM.

4. SUBMIT SHOP DRAWINGS SHOWING STUD AND JOIST LAYOUT, DIMENSION, SIZES, BRIDGING AND REQUIRED CONNECTION DETAILS FOR REVIEW BY THE ARCHITECT AND ENGINEER OF RECORD.

MASONRY

1. LIGHT WEIGHT, RUNNING BOND, ASTM C90 CONCRETE MASONRY UNITS WITH NET AREA MINIMUM COMPRESSIVE STRENGTH OF 1,900 PSI. ASTM C270 MORTAR TYPE S, MINIMUM COMPRESSIVE STRENGTH OF 1,800 PSI AT 28 DAYS. ASTM C476 GROUT WITH MINIMUM COMPRESSIVE STRENGTH OF 2,000 PSI AT 28 DAYS. NET AREA COMPRESSIVE STRENGTH OF MASONRY, F'M = 1,500 PSI.

2. FILL ALL CELLS WITH REINFORCING, AND OTHER CELLS INDICATED ON DRAWINGS, WITH GROUT IN LIFTS NOT EXCEEDING 5'-4" IN HEIGHT. ALL REINFORCING SHALL BE IN PLACE AND HELD PRIOR TO GROUTING. GROUT SHALL BE CONSOLIDATED AND RE-CONSOLIDATED AFTER INITIAL WATER LOSS BY MECHANICAL VIBRATION.

3. CONTRACTOR SHALL PROVIDE BRACING FOR MASONRY WALLS, AS REQUIRED, UNTIL CONNECTION TO FLOOR AND/OR ROOF DIAPHRAGMS ARE COMPLETED.

4. STRENGTH OF MASONRY ASSEMBLY SHALL BE DETERMINED BY THE UNIT STRENGTH METHOD IN ACCORDANCE WITH SECTION 2105.2.2.1 OF THE 2006 IBC.

5. PROVIDE HORIZONTAL TRUSS-TYPE REINFORCING AT 16" ON CENTER MAXIMUM UNO.

6. NON-BEARING INTERIOR PARTITIONS SHALL STOP 1" BELOW STRUCTURAL SLABS OR STEEL FRAMING U.N.O.

7. WHERE BOND BEAMS INTERSECT AT CORNERS AT DIFFERENT ELEVATIONS, RUN EACH BOND BEAM AROUND CORNER FOR TWO BLOCK LENGTHS MINIMUM.

8. WHERE BOND BEAMS INTERSECT PARALLEL AT DIFFERENT ELEVATIONS, LAP BOND BEAMS FOUR BLOCK LENGTHS MINIMUM.

9. PROVIDE CORNER AND INTERSECTION BARS IN ALL BOND BEAMS.

10. CONTROL AND EXPANSION JOINTS SHALL BE PROVIDED IN MASONRY WALLS AT 30' MAXIMUM PER TYPICAL MASONRY DETAILS. SEE ARCHITECTURAL FOR LOCATIONS.

11. PROVIDE (2) #4 VERTICAL EACH SIDE OF ALL OPENINGS IN MASONRY WALLS UNO. COORDINATE WITH LINTEL SCHEDULE AND PROVIDE GREATER REINFORCING REQUIREMENTS.

12. PROVIDE (2) #4 VERTICAL AT ALL WALL CORNERS, ENDS AND INTERSECTIONS UNO. COORDINATE WITH LINTEL SCHEDULE AND PROVIDE GREATER REINFORCING REQUIREMENTS.

13. PROVIDE BOND BEAM WITH (2) #4 CONTINUOUS BENEATH ALL SLAB AND BEAM BEARINGS UNO.

14. PROVIDE 1/2" AIR GAP AROUND SIDES, TOP AND END OF WOOD STRUCTURAL MEMBERS BEARING ON MASONRY.

STEEL JOISTS

1. STEEL JOISTS BEARING CONNECTIONS SHALL BE BY WELDED UNO. PROVIDE ERECTION BOLTS AT LOCATION REQUIRED BY SJI SPECIFICATIONS. WHERE JOIST BEARING CONDITIONS REQUIRE NON-STANDARD BEARING ENDS, JOIST FABRICATOR SHALL PROVIDE SPECIAL BEARING ENDS AS REQUIRED TO ACCOMMODATE SUCH CONDITIONS.

2. SUSPENSION OF ANY MISCELLANEOUS ITEMS FROM THE JOISTS SHALL BE ONLY AT TOP AND BOTTOM CHORD PANEL POINTS UNLESS SPECIFICALLY DETAILED OTHERWISE.

3. JOIST FABRICATOR SHALL PROVIDE JOIST BRIDGING PER SJI RECOMMENDATIONS. ALL JOISTS AND JOIST BRIDGING SHALL BE DESIGNED TO RESIST THE UPLIFT PRESSURES SHOWN ON THE PLANS.

4. UNLESS NOTED OTHERWISE:
ALL ROOF JOISTS TO BE DESIGNED FOR A 150 LB ADD-LOAD AND 150 LB BEND-CHECK
ALL FLOOR JOISTS TO BE DESIGNED FOR A 300 LB ADD-LOAD AND 300 LB BEND-CHECK

5. JOIST MANUFACTURER MAY NOT DESIGN JOISTS FOR LESS THAN LOADS SPECIFIED IN THE SJI CAPACITY TABLES FOR JOIST DESIGNATIONS SHOWN ON PLANS. JOIST MANUFACTURER SHALL DESIGN JOISTS FOR ADDITIONAL LOADS AT LOCATIONS SHOWN.

STRUCTURAL AND MISCELLANEOUS STEEL

1. STEEL CONSTRUCTION MANUAL, 14TH EDITION MATERIAL SPECIFICATIONS U.N.O.

WIDE FLANGE AND S SHAPES	ASTM A992, FY=50KSI
CHANNELS, ANGLES, PLATES AND BARS	ASTM A36, FY=36KSI
HOLLOW STRUCTURAL SHAPES (HSS)	ASTM A500 GR. B, FY=46KSI
PIPE	ASTM A53, GR. B, FY=35KSI
STRUCTURAL BOLTS (U.N.O.)	ASTM A325
MACHINE BOLTS (WHERE NOTED)	ASTM A307
ANCHOR BOLTS AND RODS AND THREADED RODS	ASTM F1554 GRADE 36KSI
HIGH STRENGTH ANCHOR BOLTS AND RODS (AS NOTED)	ASTM F1554 GRADE 105KSI
HEADED OR THREADED STUD ANCHORS (H.S.A. OR T.S.A.)	ASTM A108-69T
DEFORMED BAR ANCHORS (D.B.A.)	ASTM A496 OR ASTM A706
WELDING ELECTRODES	E70XX
NON-SHRINK GROUT (7,000 PSI)	ASTM C1107, GR. A
POWDER ACTUATED FASTENER (PAF OR PDF)	HILTI X-U (0.157" DIA)
EXPANSION BOLTS (CONCRETE)	HILTI KWIK BOLT TZ
EXPANSION BOLTS (MASONRY)	HILTI KWIK BOLT 3
EPOXY ADHESIVE - CONCRETE	HILTI HIT-HY 200
EPOXY ADHESIVE - MASONRY	HILTI HIT-HY 70 W/ SCREEN TUBE

2. ALL STRUCTURAL STEEL ERECTION AND FABRICATION SHALL BE ACCORDING TO THE CURRENT EDITION OF AISC "SPECIFICATIONS FOR DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS".

3. ALL STRUCTURAL BOLTED CONNECTIONS SHALL BE ACCORDING TO THE CURRENT EDITION OF RCSC "SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH-STRENGTH BOLTS" FOR SNUG TIGHTENED, PRETENSIONED, OR SLIP-CRITICAL JOINTS. ALL STRUCTURAL BOLTED CONNECTIONS TO BE SNUG TIGHTENED UNO. FOR SLIP-CRITICAL JOINTS, AS NOTED, THE USE OF TENSION INDICATING WASHERS OR TWIST-OFF BOLT ASSEMBLIES SHALL BE PERMITTED ONLY ACCORDING TO THE ABOVE MENTIONED STANDARD.

4. ALL WELDING SHALL BE PREFORMED IN ACCORDANCE WITH AWS D1.1. ALL WELDING SHALL BE PREFORMED BY AWS CERTIFIED WELDERS. ALL WELDING OF STRUCTURAL STEEL SHALL BE PREFORMED IN THE SHOP WHENEVER PRACTICAL. AN EFFORT HAS BEEN MADE TO INDICATE WELDS THAT CAN BE OR SHOULD BE FIELD WELDED. IT IS, HOWEVER, THE FABRICATORS RESPONSIBILITY TO DECIDE WHERE AND HOW THE WELDING IS TO BE ACCOMPLISHED TO ACHIEVE THE INTENDED RESULT.

5. COMPLETE JOINT PENETRATION (CJP) WELDING: PROVIDE BACKER BARS, RUN OFF TABS, AND ACCESS HOLES PER AWS D1.1. BACKER BARS SHALL BE REMOVED AFTER WELDING, THE ROOT WELD BACK GOUGED AND REPAIRED IF NECESSARY AND REINFORCED WITH A FILLET. RUN OFF TABS SHALL BE REMOVED AFTER WELDING WITH THE FLANGE EDGE GROUND SMOOTH.

6. STEEL FABRICATOR SHALL BE AN AISC CERTIFIED SHOP FOR CATEGORY 1 STEEL STRUCTURES AND SHALL MAINTAIN DETAILED QUALITY CONTROL PROCEDURES.

7. BEAMS SHALL BE FABRICATED FOR PLACEMENT OF NATURAL CAMBER UP.

8. STRUCTURAL STEEL SUPPLIER SHALL FURNISH COLUMN ANCHOR RODS.

9. HOLES IN STEEL SHALL BE DRILLED OR PUNCHED. ALL SLOTTED HOLES SHALL BE PROVIDED WITH SMOOTH EDGES. BURNING OF HOLES AND TORCH CUTTING AT THE SITE IS NOT PERMITTED. PROVIDE CONNECTIONS REQUIRED FOR ATTACHMENT OF WOOD AND STEEL MEMBERS.

10. USE CONNECTIONS AS DETAILED ON PLANS. WHEREVER CONNECTIONS ARE NOT DETAILED FABRICATOR SHALL REQUEST ENGINEER TO SUPPLY CONNECTION DETAIL.

11. ALL COLUMNS, ANCHOR BOLTS, BASE PLATES, ETC., HAVE BEEN DESIGNED FOR THE FINAL COMPLETED CONDITION AND HAVE NOT BEEN INVESTIGATED FOR POTENTIAL LOADINGS ENCOUNTERED DURING STEEL ERECTION AND CONSTRUCTION. CONFORMANCE TO OR DEVIATION FROM ALLOWABLE CAPACITIES DURING STEEL ERECTION IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR (SEE GENERAL SECTION OF G.S.N.)

12. PRIOR TO GROUTING, COLUMNS SHALL BE ERECTED AND ALIGNED AS TO PLUMBNESS AND ELEVATION BY MEANS OF STEEL SHIMS OR LEVELING NUTS UNDER THE BASE PLATES. SETTING PLATES SHALL ONLY BE USED AS TEMPLATES TO LOCATE ANCHOR BOLTS DURING CONCRETE PLACEMENT.

WOOD

1. ALL WOOD BEARING ON CONCRETE OR MASONRY, IF LESS THAN 4'-0" ABOVE FINISH GRADE, SHALL BE PRESSURE TREATED. WHEREVER NECESSARY TO CUT OR DRILL TREATED LUMBER, TREAT THE CUT OR BORED SURFACES WITH TWO HEAVY COATS OF THE SAME PRESERVATIVE AS USED IN ORIGINAL TREATMENT.

LUMBER MINIMUM PROPERTIES SCHEDULE

SPECIES/PRODUCT	GRADE	Fb (PSI)	Ft (PSI)	Fv (PSI)	Fc (PSI)	Fc (PSI)	E (PSI)
SPRUCE-PIN-FIR (NORTH)	No. 2	875	450	135	425	1150	1,400,000
MICROLLAM LVL	1.9E	2,600	1,555	285	750	2,510	1,900,000
PARALLAM PSL	1.8E	2,400	1,755	190	425	2,500	1,800,000
PARALLAM PSL	2.0E	2,900	2,025	290	750	2,900	2,000,000
TIMBERSTRAND LSL	1.55E	2,325	1,070	310	800	2,050	1,550,000

2. PLYWOOD SHEATHING SHALL CONFORM TO THE CURRENT EDITION OF THE U.S. DEPARTMENT OF COMMERCE VOLUNTARY PRODUCT STANDARD 1 OR 2 (DOC PS 1 OR 2) OR THE APA PANEL DESIGN SPECIFICATION (PDS) AND SHALL BE INSTALLED IN STAGGERED PATTERN AND BE FIRE-RETARDANT.

3. BOLT HOLES IN WOOD SHALL BE DRILLED 1/16" MAXIMUM OVERSIZE. HOLES FOR SCREWS AND LAG SCREWS SHALL BE FIRST BORED FOR THE SAME DEPTH AND DIAMETER OF THE SHANK, THEN THE REMAINDER OCCUPIED BY THE THREAD PORTION SHALL BE BORED NOT LARGER IN DIAMETER THAN THE ROOT OF THE THREAD. ALL SCREWS SHALL BE SCREWED NOT DRIVEN INTO PLACE. PROVIDE WASHERS UNDER ALL NUTS AND HEADS OF BOLTS AND LAG SCREWS.

4. PROVIDE SOLID BLOCKING AT MID-HEIGHT OF ALL WALLS U.N.O.

5. PROVIDE SOLID BLOCKING BETWEEN JOISTS AT ALL SUPPORTS.

6. WOOD FRAMING AND CONSTRUCTION SHALL CONFORM TO THE CURRENT EDITION OF THE NATIONAL DESIGN SPECIFICATION (NDS) FOR WOOD CONSTRUCTION.

7. ALL COLUMNS SHOWN ON STRUCTURAL DRAWINGS SHALL BE CONTINUOUS U.N.O.

8. SET ALL JOISTS WITH CROWN UP.

9. TYPICAL FRAMING ANCHORS SHALL BE "SIMPSON STRONG TIE" OR APPROVED EQUIVALENT AS INDICATED ON DRAWINGS. INSTALL AND CONNECT PER MANUFACTURER RECOMMENDATIONS.

10. CONNECTORS, ANCHORS, AND FASTENERS ATTACHED TO PRESSURE TREATED WOOD TREATED WITH ACQ-C OR ACQ-D SHALL BE GALVANIZED AND SHALL MEET ONE OF THE FOLLOWING SPECIFICATIONS: ASTM-A653-G185 OR GREATER; ASTM-A123-2.0 OZ/FT2 MIN; ASTM-A153; ASTM-B695-CLASS 110.

11. IF WOOD TREATMENT IS OTHER THAN LISTED ABOVE, CONTACT THE TREATMENT SUPPLIER FOR CORROSION PROTECTION REQUIREMENTS AND SUBMIT TO ARCHITECT/ENGINEER FOR APPROVAL. CONNECTIONS SHOULD NOT INCORPORATE DISSIMILAR METALS OR METALLIC COATINGS IN CONTACT WITH EACH OTHER.

COLD FORMED STEEL TRUSSES

1. TRUSS DESIGN LOADS PER DESIGN LOAD SECTION OF THE GENERAL STRUCTURAL NOTES.

2. TRUSS DESIGNS AND ERECTION PLANS SHALL BE BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF THE PROJECT CONSTRUCTION. TRUSS DESIGN DRAWINGS SHALL SHOW TRUSS SPACING, TRUSS MARK NUMBERS (CORRESPONDING TO THE DESIGN CALCULATIONS), CONCENTRATED LOADS, PERMANENT LATERAL RESTRAINT AND DIAGONAL BRACING OF INDIVIDUAL TRUSS MEMBERS, ERECTION TEMPORARY LATERAL RESTRAINT AND DIAGONAL BRACING OF INDIVIDUAL TRUSS MEMBERS, PERMANENT BUILDING STABILITY BRACING OF THE TRUSSES. ALL OF THE PREVIOUSLY MENTIONED COMPONENTS OF THE TRUSS PACKAGE SHALL B

SCHEDULE OF SPECIAL INSPECTION SERVICES

MATERIAL / ACTIVITY	SERVICE	INSPECTION EXTENT	INSPECTION AGENT*
1704.2.5 Inspection of Fabricators			
Verify fabrication/quality control procedures	In-plant review (3)	Periodic	S.I.
1705.1.1 Special Cases (work unusual in nature, including but not limited to alternative materials and systems, unusual design applications, materials and systems with special manufacturer's requirements)	Submittal review, shop (3) and/or field inspection		S.I.
1705.2 Steel Construction			
1. Fabricator and erector documents (Verify reports and certificates as listed in AISC 360, chapter N, paragraph 3.2 for compliance with construction documents)	Submittal Review	Each submittal	S.I.
2. Material verification of structural steel	Shop (3) and field inspection	Periodic	S.I.
3. Embedments (Verify diameter, grade, type, length, embedment. See 1705.3 for anchors)	Field inspection	Periodic	S.I.
4. Verify member locations, braces, stiffeners, and application of joint details at each connection comply with construction documents	Field inspection	Periodic	S.I.
5. Structural steel welding:			S.I.
a. Inspection tasks Prior to Welding (Observe, or perform for each welded joint or member, the QA tasks listed in AISC 360, Table N5.4-1)	Shop (3) and field inspection	Observe or Perform as noted (4)	S.I.
b. Inspection tasks During Welding (Observe, or perform for each welded joint or member, the QA tasks listed in AISC 360, Table N5.4-2)	Shop (3) and field inspection	Observe (4)	S.I.
c. Inspection tasks After Welding (Observe, or perform for each welded joint or member, the QA tasks listed in AISC 360, Table N5.4-3)	Shop (3) and field inspection	Observe or Perform as noted (4)	S.I.
d. Nondestructive testing (NDT) of welded joints: *see Commentary*			
1) Complete penetration groove welds 5/16" or greater in *risk category* III or IV	Shop (3) or field ultrasonic testing - 100%	Periodic	S.I.
2) Complete penetration groove welds 5/16" or greater in *risk category* II	Shop (3) or field ultrasonic testing - 10% of welds minimum	Periodic	S.I.
3) Thermally cut surfaces of access holes when material t > 2"	Shop (3) or field magnetic Partical or Penetrant testing	Periodic	S.I.
4) Welded joints subject to fatigue when required by AISC 360, Appendix 3, Table A-3.1	Shop (3) or field radiographic or Ultrasonic testing	Periodic	S.I.
5) Fabricator's NDT reports when fabricator performs NDT	Verify reports	Each submittal (5)	S.I.
6. Structural steel bolting:	Shop (3) and field inspection		S.I.
a. Inspection tasks Prior to Bolting (Observe, or perform tasks for each bolted connection, in accordance with QA tasks listed in AISC 360, Table N5.6-1)		Observe or Perform as noted (4)	S.I.
b.Inspection tasks During Bolting (Observe the QA tasks listed in AISC 360, Table N5.6-2)		Observe (4)	S.I.
1) Pre-tensioned and slip-critical joints			S.I.
a) Turn-of-nut with matching markings		Periodic	S.I.
b) Direct tension indicator		Periodic	S.I.
c) Twist-off type tension control bolt		Periodic	S.I.
d) Turn-of-nut without matching markings		Continuous	S.I.
e) Calibrated wrench		Continuous	S.I.
2) Snug-tight joints		Periodic	S.I.
c. Inspection tasks After Bolting (Perform tasks for each bolted connection in accordance with QA tasks listed in AISC 360, Table N5.6-3)		Perform (4)	S.I.
7. Inspection of steel elements of composite construction prior to concrete placement in accordance with QA tasks listed in AISC 360, Table N6.1	Shop (3) and field inspection and testing	Observe or Perform as noted (4)	S.I.
1705.2.2 Steel Construction Other Than Structural Steel			
1. Material verification of cold-formed steel deck:			S.I.
a. Identification markings	Field inspection	Periodic	S.I.
b. Manufacturer's certified test reports	Submittal Review	Each submittal	S.I.
2. Connection of cold-formed steel deck to supporting structure:	Shop (3) and field inspection		S.I.
a. Welding		Periodic	S.I.
b. Other fasteners (in accordance with AISC 360,Section N6)			S.I.
1) Verify fasteners are in conformance with approved submittal		Periodic	S.I.
2) Verify fastener installation is in conformance with approved submittal and manufacturer's recommendations		Periodic	S.I.
1705.3 Concrete Construction			
1. Inspection of reinforcing steel installation (see 1705.2.2 for welding)	Shop (3) and field inspection	Periodic	S.I.
3. Inspection of anchors cast in concrete	Shop (3) and field inspection	Periodic	S.I.
4. Inspection of anchors and reinforcing steel post-installed in hardened concrete: Per research reports including verification of anchor type, anchor dimensions, hole dimensions, hole cleaning procedures, anchor spacing, edge distances, concrete minimum thickness, anchor embedment and tightening torque	Field inspection	Periodic or as required by the research report issued by an approved source	S.I.
5. Verify use of approved design mix	Shop (3) and field inspection	Periodic	S.I.
6. Fresh concrete sampling, perform slump and air content tests and determine temperature of concrete	Shop (3) and field inspection	Continuous	S.I.
7. Inspection of concrete placement for proper application techniques	Shop (3) and field inspection	Continuous	S.I.
8. Inspection for maintenance of specified curing temperature and techniques	Shop (3) and field inspection	Periodic	S.I.

SCHEDULE OF SPECIAL INSPECTION SERVICES

MATERIAL / ACTIVITY	SERVICE	INSPECTION EXTENT	INSPECTION AGENT*
1705.4 Masonry Construction			
Level - B - Quality Assurance			
(A) Level A, B and C Quality Assurance:			
1. Verify compliance with approved submittals	Field Inspection	Periodic	S.I.
(B) Level B Quality Assurance:			
1. Verification of f'm and f'_{AAC} prior to construction	Testing by unit strength method or prism test method	Periodic	S.I.
(D) Levels B and C Quality Assurance:			
1. Verification of Slump Flow and Visual Stability Index (VSI) of self-consolidating grout as delivered to the project	Field testing	Continuous	S.I.
2. Verify compliance with approved submittals	Field inspection	Periodic	S.I.
3. Verify proportions of site-mixed mortar, grout and prestressing grout for bonded tendons	Field Inspection	Periodic	S.I.
4. Verify grade, type, and size of reinforcement and anchor bolts, and prestressing tendons and anchorages	Field Inspection	Periodic	S.I.
5. Verify construction of mortar joints	Field Inspection	Periodic	S.I.
6. Verify placement of reinforcement, connectors, and prestressing tendons and anchorages	Field Inspection	Level B - Periodic Level C - Continuous	S.I. S.I.
7. Verify grout space prior to grouting	Field Inspection	Level B - Periodic Level C - Continuous	S.I. S.I.
8. Verify placement of grout and prestressing grout for bonded tendons	Field Inspection	Continuous	S.I.
9. Verify size and location of structural masonry elements	Field Inspection	Periodic	S.I.
10. Verify type, size, and location of anchors, including details of anchorage of masonry to structural members, frames, or other construction.	Field inspection	Level B - Periodic Level C - Continuous	S.I. S.I.
12. Verify preparation, construction, and protestion of masonry during cold weather (temperature below 40°F) or hot weather (temperature above 90°F)	Field inspection	Periodic	S.I.
13. Verify application and measurement of prestressing force	Field Inspection	Continuous	S.I.
14. Verify placement of AAC masonry units and construction of thin-bed mortar joints (first 5000 SF of AAC masonry)	Field inspection	Continuous	S.I.
15. Verify placement of AAC masonry units and construction of thin-bed mortar joints (after the first 5000 SF of AAC masonry)	Field inspection	Level B - Periodic Level C - Continuous	S.I. S.I.
16. Verify properties of thin-bed mortar for AAC masonry (first 5000 SF of AAC masonry)	Field inspection	Continuous	S.I.
17. Verify properties of thin-bed mortar forAAC masonry (after the first 5000 SF of AAC masonry)	Field inspection	Level B - Periodic Level C - Continuous	S.I. S.I.
18. Prepare grout and mortar specimens	Field testing	Level B - Periodic Level C - Continuous	S.I. S.I.
19. Observe preparation of prisms	Field inspection	Level B - Periodic Level C - Continuous	S.I. S.I.
20. Inspection of anchors and reinforcing steel post-installed (epoxy, expansion, etc.): Per research reports including verification of anchor type, anchor dimensions, hole dimensions, hole cleaning procedures, anchor spacing, edge distances, location to masonry joints, masonry minimum thickness, anchor embedment and tightening torque	Field inspection	Periodic or as required by the research report issued by an approved source	S.I.

*** INSPECTION AGENTS**

	FIRM	ADDRESS
1.	G.E. Geotechnical Engineer	
2.	S.I. Special Inspector - Not Yet Selected	
3.		
4.		

Notes: 1. The inspection and testing agent(s) shall be engaged by the Owner or the Owner's Agent, and not by the Contractor or Subcontractor whose work is to be inspected or tested. Any conflict of interest must be disclosed to the Building Official prior to commencing work. The qualifications of the Special Inspector(s) and/or testing agencies may be subject to the approval of the Building Official and/or the Design Professional.

2. If the list of Inspection Agents is noted as "Not Yet Selected" the General Contractor shall coordinate submittal of special inspection agencies for approval by the Building Offical and the Design Professional.

3. Special Insepctions as required by Section 1704.2.5 are not required where the fabricator is approved in accordance with IBC Section 1704.2.5.2

4. Observe on a random basis, operations need not be delayed pending these inspections. Perform these tasks for each welded joint, bolted connection, or steel element.

5. NDT of welds completed in an approved fabricator's shop may be performed by that fabricator when approved by the AHJ. Refer to AISC 360, N7.

STATEMENT OF SPECIAL INSPECTIONS

1. THIS STRUCTURAL STATEMENT OF SPECIAL INSPECTIONS IS INCLUDED AS A CONDITION FOR PERMIT ISSUANCE IN ACCORDANCE WITH THE BUILDING CODE. THE TABLE OF REQUIRED SPECIAL INSPECTIONS IDENTIFIES THE STRUCTURAL ITEMS TO BE INSPECTED APPLICABLE TO THIS PROJECT AS WELL AS IDENTIFYING THE APPROVED AGENCIES TO BE RETAINED FOR CONDUCTING THESE INSPECTIONS AND TESTS.

2. SPECIAL INSPECTIONS SHALL BE PERFORMED BY PERSONNEL AS INDICATED IN THE TABLE.

   S.I. SPECIAL INSPECTOR
   G.E. GEOTECHNICAL ENGINEER

3. IF SPECIAL INSPECTION IS WAIVED BY THE GOVERNING AUTHORITIES, THE GENERAL CONTRACTOR SHALL PROVIDE THE ENGINEER OF RECORD A COPY OF THE BUILDING OFFICIALS WRITTEN EXEMPTION FOR SPECIAL INSPECTION PRIOR TO STARTING WORK.

ENGINEERING CONSULTANTS, P.A.
1227 NORTH MAIN STREET
P.O. BOX 932
HUTCHINSON, KS 67504-0932
620-662-0574
www.engineering-consultants.com
info@engineering-consultants.com

JonesGillamRenz
730 N. Ninth
Salina, KS 67401
785.827.038
1881 Main Street, Suite 301
Kansas City, MO 64108
jgr@jgrarchitects.com

101 N. SANTA FE AVE.

REMODEL and ADDITIONS: PELE'S PLAYGROUND, APARTMENTS and ROOF TOP BAR

SALINA KANSAS

BRANDON FUQUA LICENSED 24769 3/20/2025 KANSAS PROFESSIONAL ENGINEER

REVISION:

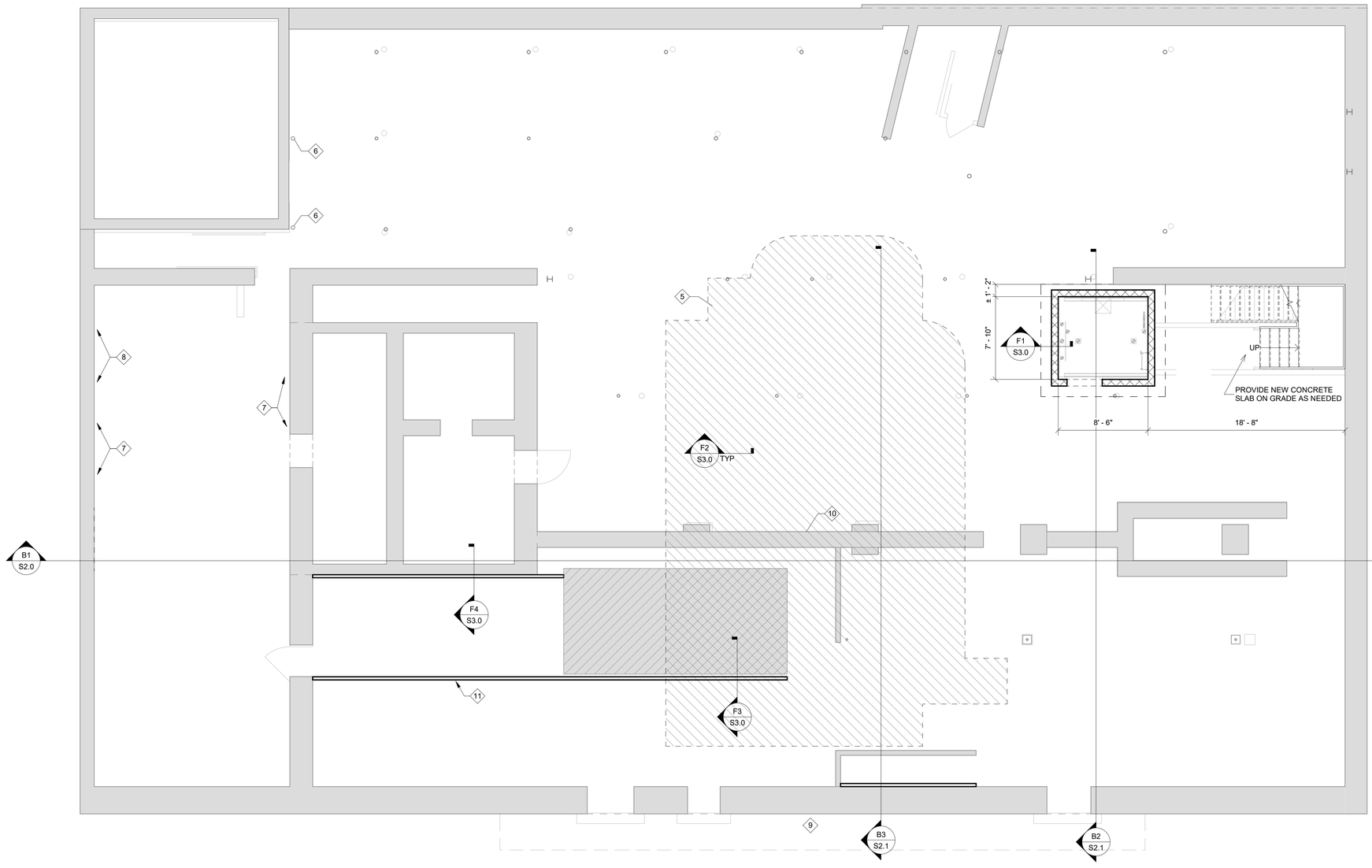
DATE: 3/20/2025
JOB: 24-3421
SHEET NO.:

S0.1

PLAN NOTES

1. FOR GENERAL STRUCTURAL NOTES (GSN) SEE SHEET S0.0
2. DIMENSIONS SHOWN HERE APPLY TO STRUCTURAL ELEMENTS ONLY. SEE ARCHITECTURAL FOR ANY DIMENSIONS NOT NOTED HERE.
3. ALL BEARING WALLS TO BE:
   2x6 SPF No 2 @ 16" O.C. UNLESS NOTED OTHERWISE
4. SEE GSN SHEET S0.0 FOR TYPICAL CMU WALL REINFORCING.

5. PLACE POST BELOW EACH PLAYGROUND COLUMN PER DETAIL
6. 4" POST COLUMN WELDED UNDER EXISTING BEAM AT WALL W/ 8"x8"x1/2" BASE PLATE W/ (4) EXPANSION ANCHORS INTO FLOOR SLAB.
7. VOIDS IN EXISTING STONE WALL TO BE CLEANED AND FILLED WITH CONCRETE PATCHING MATERIAL.
8. JOIST BEARING ON DEGRADED BRICK SHORE JOIST AND REPAIR BRICK FOR FULL SOUND BEARING CONDITION PER ARCH BRICK REPAIR NOTES.
9. EXISTING PASSAGE UNDER SIDE WALK AS ACCESSIBLE, VERIFY IN SOUND CONDITION AND PROVIDE REPAIRS AS NEEDED.
10. INFILL AND PATCH HOLE IN EXISTING STONE WALL.
11. PROVIDE 42" OPENING IN STUD WALL W/ (3) 2x8 HEADER W/ (2) TRIMMER STUDS EACH END.



1 BASEMENT
3/16" = 1'-0"
NORTH

ENGINEERING CONSULTANTS, P.A.
1227 NORTH MAIN STREET
P.O. BOX 932
HUTCHINSON, KS 67504-0932
620-663-5434
www.engineering-consultants.com
info@engineering-consultants.com

JonesGillamRenz
730 N. Ninth
Salina, KS 67401
785.827.038
1881 Main Street, Suite 301
Kansas City, MO 64108
jgr@jgrarchitects.com

101 N. SANTA FE AVE.

REMODEL and ADDITIONS: PELE'S PLAYGROUND, APARTMENTS and ROOF TOP BAR

SALINA KANSAS

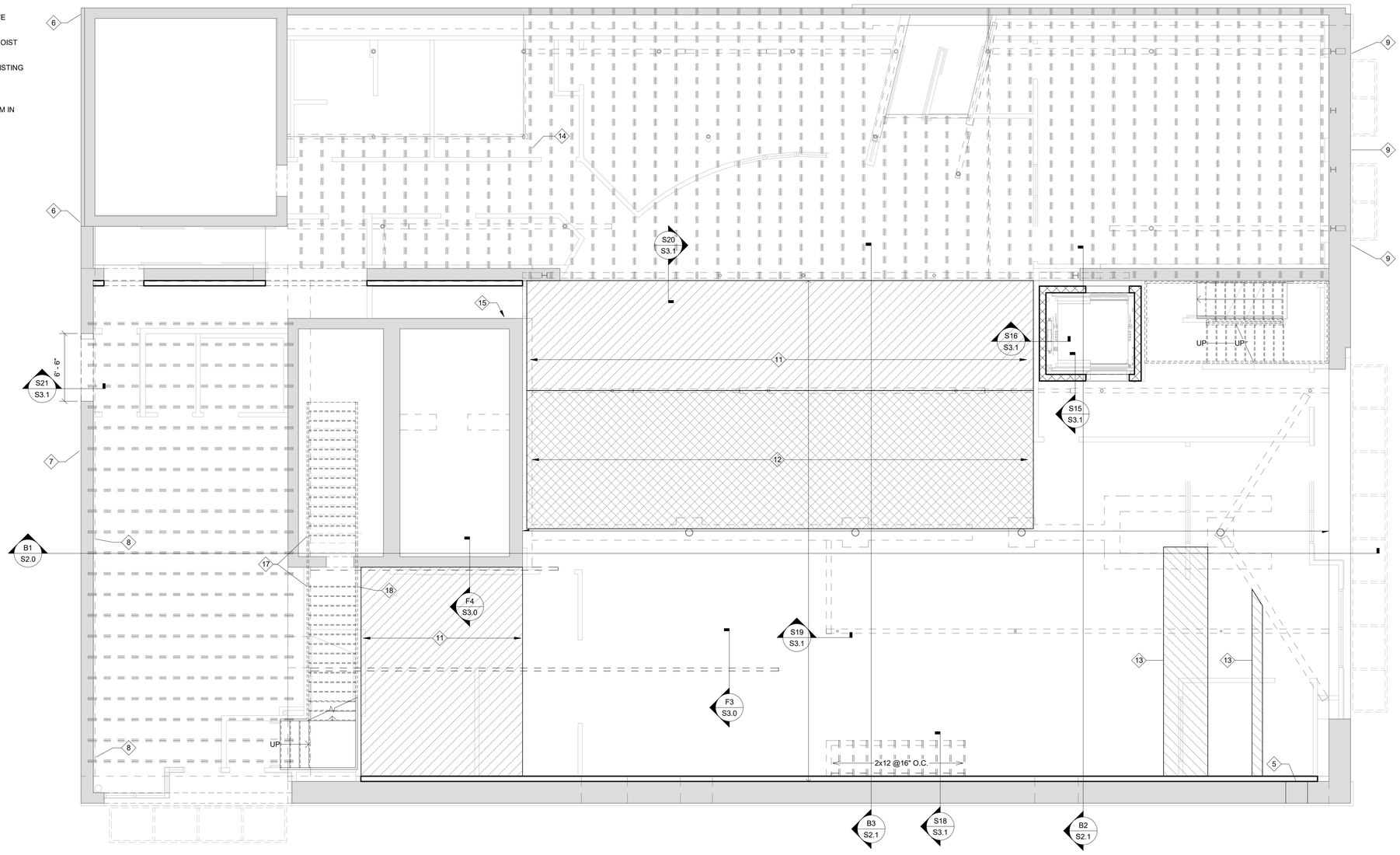
BRANDON FUQUA LICENSED 24769 3/20/2025 KANSAS PROFESSIONAL ENGINEER

REVISION:	
DATE:	3/20/2025
JOB:	24-3421
SHEET NO.:	S1.0

PLAN NOTES

1. FOR GENERAL STRUCTURAL NOTES (GSN) SEE SHEET S0.0
2. DIMENSIONS SHOWN HERE APPLY TO STRUCTURAL ELEMENTS ONLY. SEE ARCHITECTURAL FOR ANY DIMENSIONS NOT NOTED HERE.
3. ALL BEARING WALLS TO BE:
   600S162-43 CFS @ 14" O.C. COORDINATE W/ EXISTING 2ND FLOOR FRAMING UNLESS NOTED OTHERWISE
4. SEE GSN SHEET S0.0 FOR TYPICAL CMU WALL REINFORCING

5. REMOVE LOOSE BRICK. INFILL HOLE W/ MATCHING 4 WYTHE BRICK TOOTHED IN AND FULLY GROUTED.
6. REMOVE EXISTING DETERIORATED BRICK VENEER. EVALUATE CMU WALL AND NOTIFY ARCH AND ENGINEER IF DAMAGE FOUND. PROVIDE WATER PROOFING AT CMU PER ARCH. REBUILD BRICK VENEER W/ BRICK TIES TO CMU PER ARCH.
7. EXTERIOR OF MULTI-WYTHE BRICK WALL DETERIORATED AND DELAMINATING AT AREAS. EVALUATE WALL AND REPLACE OUTER WYTHE AT DAMAGED AREAS. REPLACEMENT TO BE IN LIKE KIND TO ORIGINAL WALL BONDED AND W/ HEADER BRICKS TO INNER WYTHE.
8. INTERIOR OF MULTI-WYTHE BRICK WALL DETERIORATED AND CRUMBLING AT BASE. REPLACE IN LIKE KIND TO ORIGINAL WALL BONDED AND W/ HEADER BRICKS TO INNER WYTHE.
9. PATCH HOLES AND VOIDS IN WALL TO SOLID AND SOUND CONDITION.
10. TYPICAL AROUND INTERIOR OF BUILDING AT HOLES, JOIST POCKETS, VOIDS, PATCH AND REPLACE BRICK TO SOLID AND SOUND CONDITION.
11. FULL LENGTH SISTER JOIST W/ 1-3/4"x9-1/2" MICROLLAM LVL 1.9E.
12. APPROXIMATLY HALF OF JOISTS ARE NOTCHED AND REQUIRE A FULL LENGTH SISTER W/ 1-3/4"x9-1/2" MICROLLAM LVL 1.9E.
13. JOISTS HAVE TERMITE DAMAGED. FULL LENGTH SISTER W/ 1-3/4"x9-1/2" MICROLLAM LVL 1.9E.
14. JOIST CHORD BENT STRAIGHTEN AS POSSIBLE AND REINFORCE W/ 1/4"x4" PLATE ALONG BOTTOM W/ 1/8" 2-6 SKIP WELD. PLATE TO EXTEND 8" BEYOND DAMAGE.
15. PROVIDE LUS28 JOIST HANGER AT EACH JOIST PROVIDE NEW OR SISTER 2x12 JOIST AT NOTCHED JOIST.
16. ALL NEW SISTER JOISTS TO BE TIGHT TO FLOOR DECK AND CONNECTED TO EXISTING JOIST W/ (2) ROWS OF 10d NAILS @12" O.C.
17. STAIR LANDING BEAM PER DETAILS TO BEAR ON STUD PACK IN WALLS.
18. STAIR LANDING BEAM PER DETAILS W/ S-LBV HANGER TO 1000S162-54 BOX BEAM IN STUD WALLS.



NORTH

1 1ST FLOOR PLAN
3/16" = 1'-0"

ENGINEERING CONSULTANTS, P.A.
1227 NORTH MAIN STREET
P.O. BOX 932
HUTCHINSON, KS 67504-0932
620-663-5434
www.engineering-consultants.com
info@engineering-consultants.com

JonesGillamRenz
730 N. Ninth
Salina, KS 67401
785.827.038
1881 Main Street, Suite 301
Kansas City, MO 64108
jgr@jgrarchitects.com

101 N. SANTA FE AVE.

REMODEL and ADDITIONS: PELE'S PLAYGROUND, APARTMENTS and ROOF TOP BAR

SALINA KANSAS

BRANDON FUQUA LICENSED 24769 3/20/2025 KANSAS PROFESSIONAL ENGINEER

REVISION:

DATE: 3/20/2025
JOB: 24-3421
SHEET NO.:

S1.1

PLAN NOTES

1. FOR GENERAL STRUCTURAL NOTES (GSN) SEE SHEET S0.0
2. DIMENSIONS SHOWN HERE APPLY TO STRUCTURAL ELEMENTS ONLY. SEE ARCHITECTURAL FOR ANY DIMENSIONS NOT NOTED HERE.
3. SEE GSN SHEET S0.0 FOR TYPICAL CMU WALL REINFORCING
4. ALL FLOOR JOISTS TO BE DESIGNED PER REQUIREMENTS IN STEEL JOIST SECTION OF GENERAL STRUCTURAL NOTES.

1 MEZANINE
3/16" = 1'-0"

ENGINEERING CONSULTANTS, P.A.
1227 NORTH MAIN STREET
P.O. BOX 932
HUTCHINSON, KS 67504-0932
620-663-5434
www.engineering-consultants.com
info@engineering-consultants.com

JonesGillamRenz
730 N. Ninth
Salina, KS 67401
785.827.038
1881 Main Street, Suite 301
Kansas City, MO 64108
jgr@jgrarchitects.com

101 N. SANTA FE AVE.

REMODEL and ADDITIONS: PELE'S PLAYGROUND, APARTMENTS and ROOF TOP BAR

SALINA KANSAS

BRANDON FUQUA LICENSED 24769 3/20/2025 KANSAS PROFESSIONAL ENGINEER

REVISION:

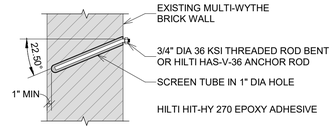
DATE: 3/20/2025
JOB: 24-3421
SHEET NO.:

S1.2

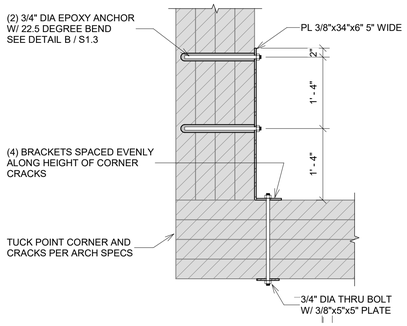
PLAN NOTES

1. FOR GENERAL STRUCTURAL NOTES (GSN) SEE SHEET S0.0
2. DIMENSIONS SHOWN HERE APPLY TO STRUCTURAL ELEMENTS ONLY. SEE ARCHITECTURAL FOR ANY DIMENSIONS NOT NOTED HERE.
3. SEE GSN SHEET S0.0 FOR TYPICAL CMU WALL REINFORCING
4. ALL CFS FLOOR TRUSSES TO BE DESIGNED PER REQUIREMENTS IN COLD FORMED STEEL JOIST SECTION OF GENERAL STRUCTURAL NOTES.
5. FLOOR SHEATHING: 3/4" APA OSB OR PLYWOOD ATTACHED W/ #8 SCREWS @6" O.C. EDGE AND @12" O.C. FIELD.

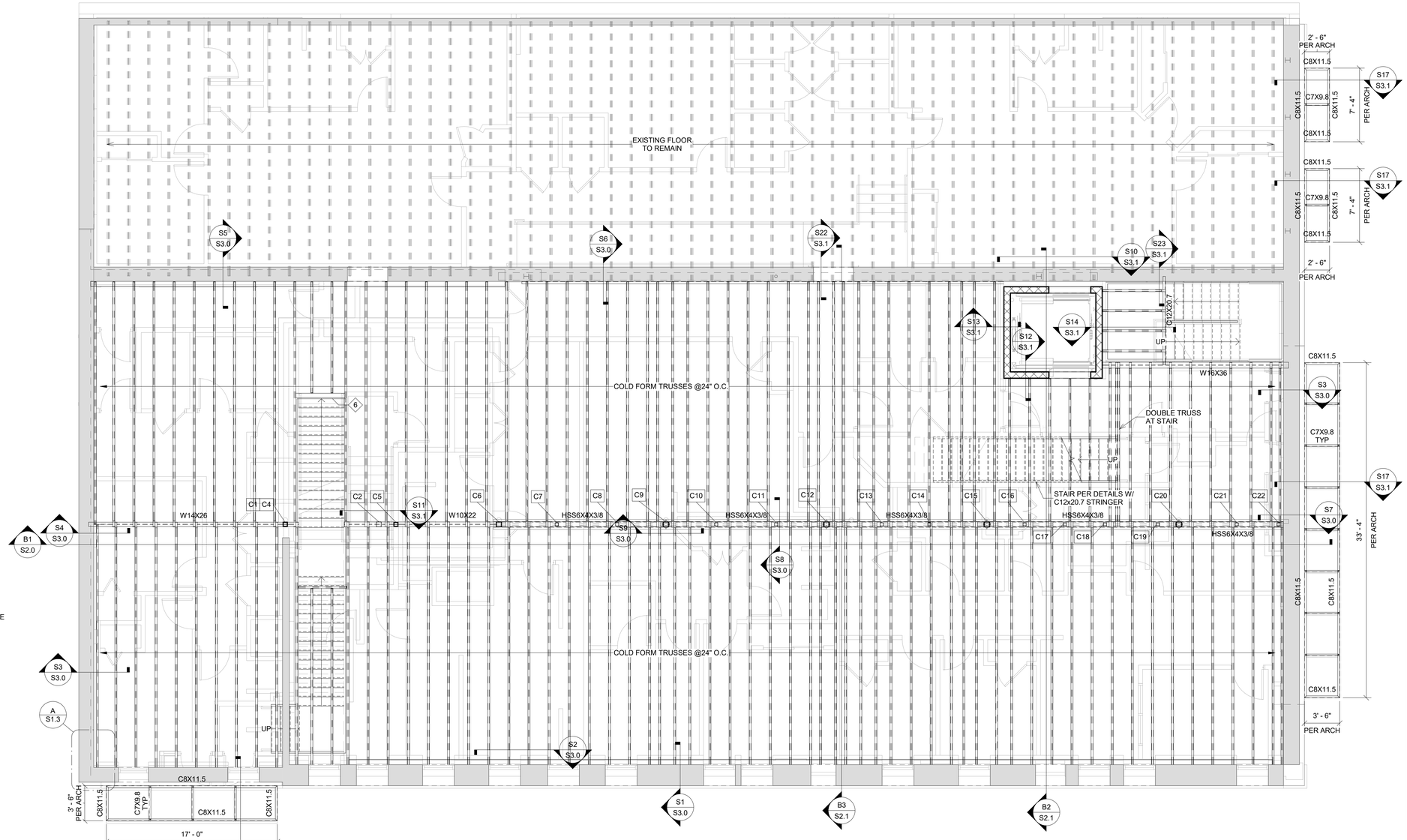
◇6 STAIR LANDING BEAM TO BEAR ON CFS STUD WALL.



B 22.5 DEGREE BENT ANCHOR DETAIL
3/4" = 1'-0"



A Section A
3/4" = 1'-0"



1 2ND FLOOR FRAMING
3/16" = 1'-0"

NORTH

ENGINEERING CONSULTANTS, P.A.
1227 NORTH MAIN STREET
P.O. BOX 932
HUTCHINSON, KS 67504-0932
620-663-5434
www.engineering-consultants.com
info@engineering-consultants.com

JonesGillamRenz
730 N. Ninth
Salina, KS 67401
785.827.038
1881 Main Street, Suite 301
Kansas City, MO 64108
jgr@jgrarchitects.com

101 N. SANTA FE AVE.

REMODEL and ADDITIONS: PELE'S PLAYGROUND, APARTMENTS and ROOF TOP BAR

SALINA KANSAS

BRANDON FUQUA LICENSED 24769 3/20/2025 KANSAS PROFESSIONAL ENGINEER

REVISION:

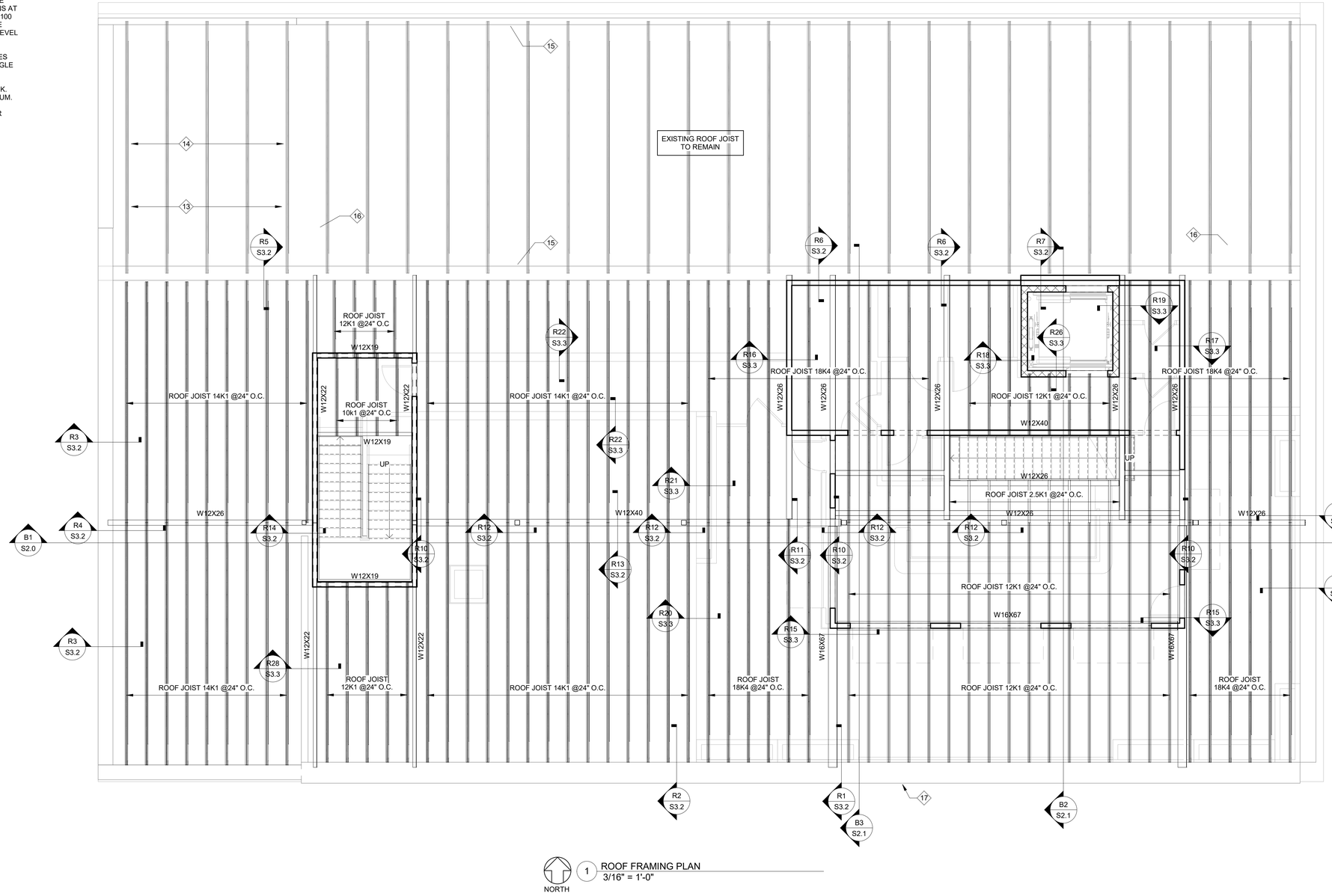
DATE: 3/20/2025
JOB: 24-3421
SHEET NO.:

S1.3

PLAN NOTES

1. FOR GENERAL STRUCTURAL NOTES (GSN) SEE SHEET S0.0
2. DIMENSIONS SHOWN HERE APPLY TO STRUCTURAL ELEMENTS ONLY. SEE ARCHITECTURAL FOR ANY DIMENSIONS NOT NOTED HERE.
3. ALL EXTERIOR STUD WALLS AND INTERIOR BEARING WALLS TO BE 600S162-33 CFS @ 16" O.C. W/ 33 MIL TRACK AND HILTI-SHOT NAILS @16" O.C.
4. ROOF SHEATHING: 5/8" APA OSB FIRE-RETARDANT ATTACHED WITH 10d (0.148"x3") RING SHANK NAILS @ 6" O.C. EDGES & 12" O.C. FIELD
5. ROOF DECK: 1 ½" DEEP 22 GA. TYPE B "1.5B22" STEEL DECK. DECK SHALL BE BY "NEW MILLENNIUM BUILDING SYSTEMS" OR APPROVED EQUIVALENT. 3 SPAN MINIMUM FOR STEEL DECK. ATTACH DECK TO PERPENDICULAR SUPPORTS WITH #12 TEK SCREWS AT EVERY FLUTE. ATTACH DECK TO PARALLEL SUPPORTS WITH #12 TEK SCREWS @ 24" O.C. NO DECK SIDE LAP CONNECTION.
6. ALL ROOF JOISTS TO BE DESIGNED PER REQUIREMENTS IN STEEL JOIST SECTION OF GENERAL STRUCTURAL NOTES.
7. ROOF JOISTS SUPPORTING ROOF TOP EQUIPMENT SHALL BE DESIGNED FOR A 500 LB ADD-LOAD AND A 500 LB BEND-CHECK.
8. ROOF TRUSS DESIGN PER GSN LOADS AND REQUIREMENTS
9. COORDINATE LOCATION OF ALL MECHANICAL EQUIPMENT AND THEIR NOTED SUPPORTS WITH MECHANICAL DRAWINGS. ALL MECHANICAL UNITS MAY NOT BE SHOWN ON THE STRUCTURAL DRAWINGS, VERIFY ALL MECHANICAL UNITS WITH MECHANICAL DRAWINGS.
10. LINTELS PER LINTEL SCHEDULE.
11. SW-X DENOTES SHEAR WALL TYPE AND LOCATION. SHEAR WALL TYPE AND HOLD DOWNS PER SHEAR WALL SCHEDULE.
12. THE ROOF PLANS ARE DIAGRAMMATIC TO ASSIST TRUSS FABRICATOR IN FRAMING CONCEPTS. SUBMIT TRUSS SHOP DRAWINGS IN ACCORDANCE WITH SPECIFICATIONS NAD GSN'S PRIOR TO FABRICATION. FABRICATOR AND ERECTOR TO NOTE THAT PLANS DO NOT DEFINE THE ACTUAL NUMBER OF PIECES TO BE PLACED. TRUSS FABRICATOR SHALL PROVIDE GALVANIZED METAL TIE DOWNS AT EXTERIOR BEARING WALLS AND AT ALL LOCATIONS OF UPLIFT IN EXCESS OF 100 LBS. TRUSS FABRICATOR TO PROVIDE GALVANIZED METAL HANGERS WHERE TRUSS ARE SUPPORTED BY GIRDERS, DOUBLE TRUSSES, ETC TO MAINTAIN LEVEL CEILING BELOW.

13. EXISTING BAR JOISTS HAVE CORROSION AT METAL DECK. CLEAN AND IF HOLES FOUND REINFORCE TOP CHORD WITH 3/4"ø ROD W/ 1/4" 2-8 SKIP WELD TO ANGLE CHORD. 48" MIN LENGTH TO EXTEND TO PANEL POINT BEYOND DAMAGE.
14. HOLES AND CORROSION IN METAL DECK. REPLACE AREAS OF DAMAGED DECK. REPLACEMENT TO BE JOIST CENTER TO JOIST CENTER AND 24" WIDTH MINIMUM.
15. HOLES AND VOIDS IN MASONRY WALL TO BE PATCHED AND FILLED IF LARGER THAN 6"ø.
16. PROVIDE L3x3x1/4 FRAME AROUND EXISTING ROOF DECK OPENING.
17. SOLID INFILL OF BOTTOM OF EXISTING WINDOWS PER ARCH, TYP.



1 ROOF FRAMING PLAN
3/16" = 1'-0"

NORTH

ENGINEERING CONSULTANTS, P.A.
1227 NORTH MAIN STREET
P.O. BOX 932
HUTCHINSON, KS 67504-0932
620-663-5434
www.engineering-consultants.com
info@engineering-consultants.com

JonesGillamRenz
730 N. Ninth
Salina, KS 67401
785.827.038
1881 Main Street, Suite 301
Kansas City, MO 64108
jgr@jgrarchitects.com

101 N. SANTA FE AVE.

REMODEL and ADDITIONS: PELE'S PLAYGROUND, APARTMENTS and ROOF TOP BAR

SALINA KANSAS

BRANDON FUQUA LICENSED 24769 3/20/2025 KANSAS PROFESSIONAL ENGINEER

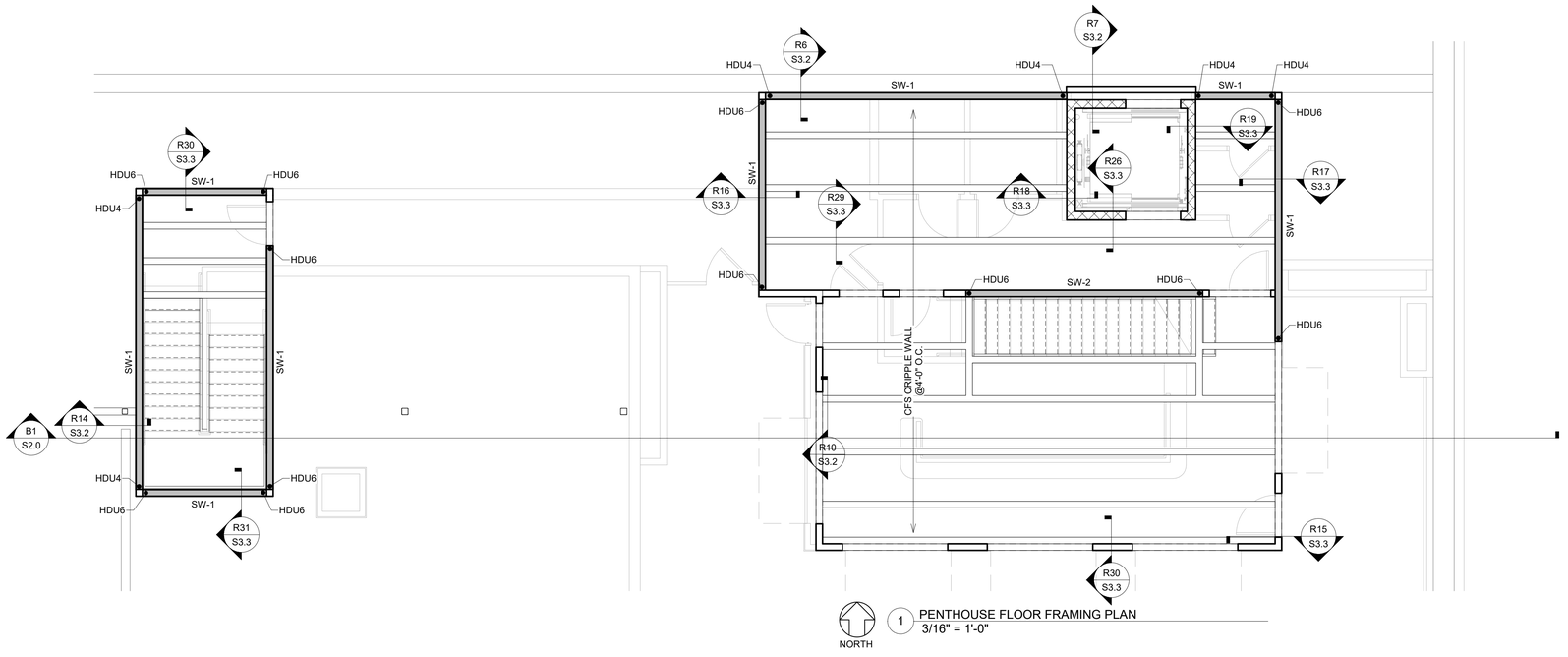
REVISION:

DATE: 3/20/2025
JOB: 24-3421
SHEET NO.:

S1.4

PLAN NOTES

1. FOR GENERAL STRUCTURAL NOTES (GSN) SEE SHEET S0.0
2. DIMENSIONS SHOWN HERE APPLY TO STRUCTURAL ELEMENTS ONLY. SEE ARCHITECTURAL FOR ANY DIMENSIONS NOT NOTED HERE.
3. SEE GSN SHEET S0.0 FOR TYPICAL CMU WALL REINFORCING
4. ALL FLOOR JOISTS TO BE DESIGNED PER REQUIREMENTS IN STEEL JOIST SECTION OF GENERAL STRUCTURAL NOTES.
5. CONCRETE SLAB OVER METAL DECK:
   4" TOTAL SLAB DEPTH OVER 1" 22 GAUGE DECK W/ 4x4-W2.9xW2.9 WWR
6. CRIPPLE WALLS TO BE 362S162-33 CFS @16" O.C. PER PLAN W/ HILTI SHOT NAILS @16" O.C.
7. ALL EXTERIOR STUD WALLS AND INTERIOR BEARING WALLS TO BE 600S162-33 CFS @ 16" O.C. W/ 33 MIL TRACK AND HILTI-SHOT NAILS @16" O.C.
8. SW-X DENOTES SHEAR WALL PER SHEAR WALL SCHEDULE
9. HDUxx DENOTES SIMPSON STRONG-TIE SHEAR WALL HOLD DOWN
   HDU4 - HDU4-SDS2.5 W/ (1) 600S162-33 W/ 5/8" DIA x4" TSA THRU SILL TRACK TO CHANNEL
   HDU6 - HDU6-SDS2.5 W/ (2) BACK TO BACK 600S162-33 W/ 5/8" DIA x4" TSA THRU SILL TRACK TO CHANNEL



1 PENTHOUSE FLOOR FRAMING PLAN
3/16" = 1'-0"

ENGINEERING CONSULTANTS, P.A.
1227 NORTH MAIN STREET
P.O. BOX 932
HUTCHINSON, KS 67504-0932
620-663-5434
www.engineering-consultants.com
info@engineering-consultants.com

JonesGillamRenz
730 N. Ninth
Salina, KS 67401
785.827.038
1881 Main Street, Suite 301
Kansas City, MO 64108
jgr@jgrarchitects.com

101 N. SANTA FE AVE.

REMODEL and ADDITIONS: PELE'S PLAYGROUND, APARTMENTS and ROOF TOP BAR

SALINA KANSAS

BRANDON FUQUA LICENSED 24769 3/20/2025 KANSAS PROFESSIONAL ENGINEER

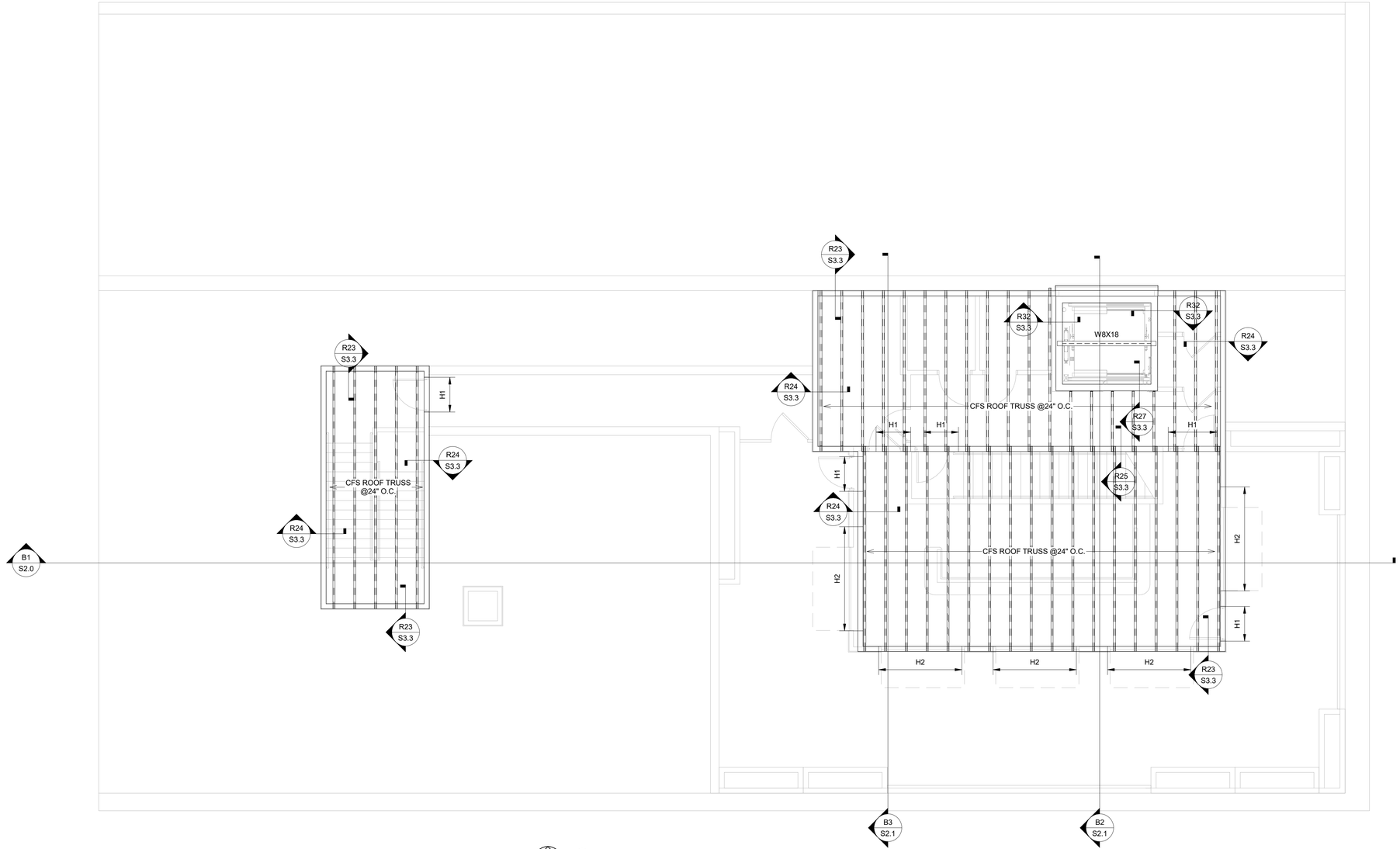
REVISION:

DATE: 3/20/2025
JOB: 24-3421
SHEET NO.:

S1.5

PLAN NOTES

1. FOR GENERAL STRUCTURAL NOTES (GSN) SEE SHEET S0.0
2. DIMENSIONS SHOWN HERE APPLY TO STRUCTURAL ELEMENTS ONLY. SEE ARCHITECTURAL FOR ANY DIMENSIONS NOT NOTED HERE.
3. ALL EXTERIOR STUD WALLS AND INTERIOR BEARING WALLS TO BE 600S162-33 CFS @ 16" O.C. W/ 33 MIL TRACK AND HILTI-SHOT NAILS @16" O.C.
4. ROOF SHEATHING: 5/8" APA OSB FIRE-RETARDANT ATTACHED WITH 10d (0.148"x3") RING SHANK NAILS @ 6" O.C. EDGES & 12" O.C. FIELD
5. ROOF DECK: 1 ½" DEEP 22 GA. TYPE B "1.5B22" STEEL DECK. DECK SHALL BE BY "NEW MILLENNIUM BUILDING SYSTEMS" OR APPROVED EQUIVALENT. 3 SPAN MINIMUM FOR STEEL DECK. ATTACH DECK TO PERPENDICULAR SUPPORTS WITH #12 TEK SCREWS AT EVERY FLUTE. ATTACH DECK TO PARALLEL SUPPORTS WITH #12 TEK SCREWS @ 24" O.C. DECK SIDE LAP CONNECTION TO BE (2) #10 TEK SCREWS PER DECK SPAN.
6. ALL ROOF JOISTS TO BE DESIGNED PER REQUIREMENTS IN STEEL JOIST SECTION OF GENERAL STRUCTURAL NOTES.
7. ROOF JOISTS SUPPORTING ROOF TOP EQUIPMENT SHALL BE DESIGNED FOR A 500 LB ADD-LOAD AND A 500 LB BEND-CHECK.
8. ROOF TRUSS DESIGN PER GSN LOADS AND REQUIREMENTS
9. COORDINATE LOCATION OF ALL MECHANICAL EQUIPMENT AND THEIR NOTED SUPPORTS WITH MECHANICAL DRAWINGS. ALL MECHANICAL UNITS MAY NOT BE SHOWN ON THE STRUCTURAL DRAWINGS, VERIFY ALL MECHANICAL UNITS WITH MECHANICAL DRAWINGS.
10. LINTELS PER LINTEL SCHEDULE.
11. SW-X DENOTES SHEAR WALL TYPE AND LOCATION. SHEAR WALL TYPE AND HOLD DOWNS PER SHEAR WALL SCHEDULE.
12. THE ROOF PLANS ARE DIAGRAMMATIC TO ASSIST TRUSS FABRICATOR IN FRAMING CONCEPTS. SUBMIT TRUSS SHOP DRAWINGS IN ACCORDANCE WITH SPECIFICATIONS NAD GSN"S PRIOR TO FABRICATION. FABRICATOR AND ERECTOR TO NOTE THAT PLANS DO NOT DEFINE THE ACTUAL NUMBER OF PIECES TO BE PLACED. TRUSS FABRICATOR SHALL PROVIDE GALVANIZED METAL TIE DOWNS AT EXTERIOR BEARING WALLS AND AT ALL LOCATIONS OF UPLIFT IN EXCESS OF 100 LBS. TRUSS FABRICATOR TO PROVIDE GALVANIZED METAL HANGERS WHERE TRUSS ARE SUPPORTED BY GIRDERS, DOUBLE TRUSSES, ETC TO MAINTAIN LEVEL CEILING BELOW.



NORTH

1 PENTHOUSE ROOF FRAMING
3/16" = 1'-0"

ENGINEERING CONSULTANTS, P.A.
1227 NORTH MAIN STREET
P.O. BOX 932
HUTCHINSON, KS 67504-0932
620-663-5434
www.engineering-consultants.com
info@engineering-consultants.com

JonesGillamRenz
730 N. Ninth
Salina, KS 67401
785.827.038
1881 Main Street, Suite 301
Kansas City, MO 64108
jgr@jgrarchitects.com

101 N. SANTA FE AVE.

REMODEL and ADDITIONS: PELE'S PLAYGROUND, APARTMENTS and ROOF TOP BAR

SALINA KANSAS

BRANDON FUQUA LICENSED 24769 3/20/2025 KANSAS PROFESSIONAL ENGINEER

REVISION:			

DATE: 3/20/2025
JOB: 24-3421
SHEET NO.:

S1.6

B1 Section B1
3/16" = 1'-0"

ENGINEERING CONSULTANTS, P.A.
1227 NORTH MAIN STREET
P.O. BOX 932
HUTCHINSON, KS 67504-0932
620-663-5434
www.engineering-consultants.com
info@engineering-consultants.com

JonesGillamRenz
730 N. Ninth
Salina, KS 67401
785.827.038
1881 Main Street, Suite 301
Kansas City, MO 64108
jgr@jgrarchitects.com

101 N. SANTA FE AVE.

REMODEL and ADDITIONS: PELE'S PLAYGROUND, APARTMENTS and ROOF TOP BAR

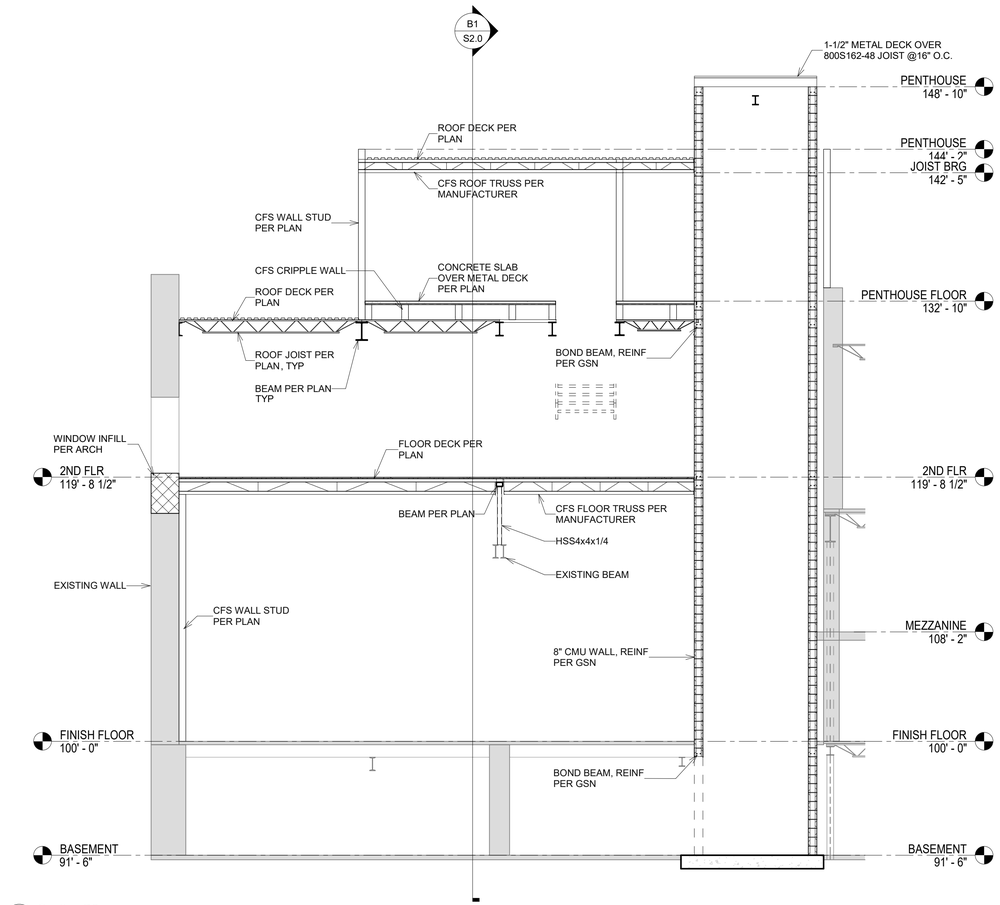
SALINA KANSAS

BRANDON FUQUA LICENSED 24769 3/20/2025 KANSAS PROFESSIONAL ENGINEER

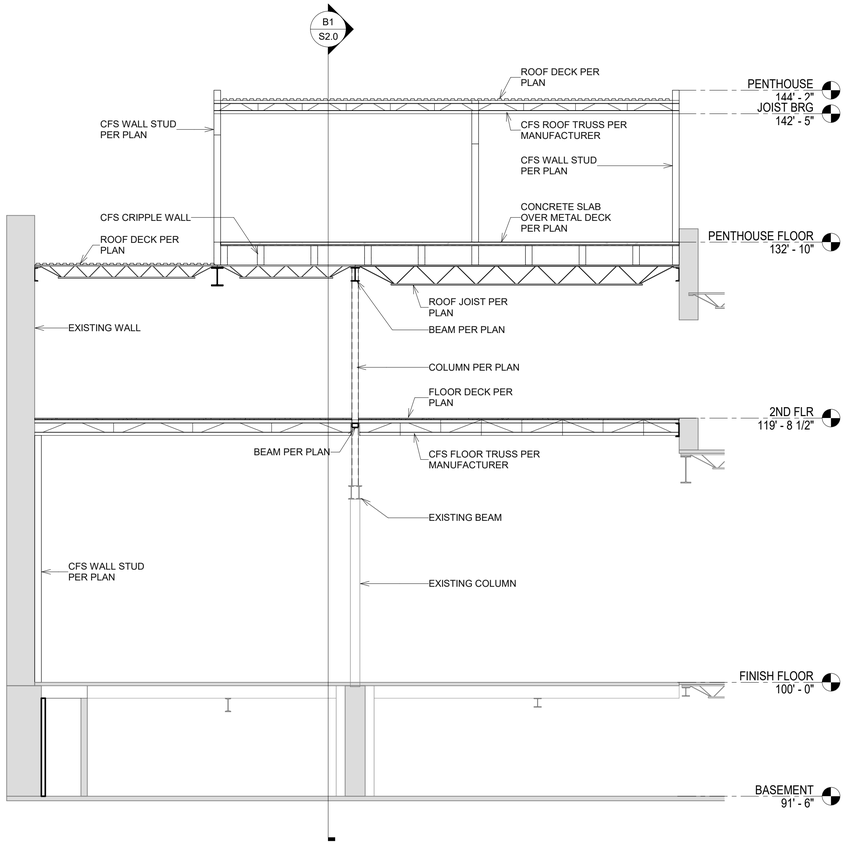
REVISION:

DATE: 3/20/2025
JOB: 24-3421
SHEET NO.:

S2.0



B2 Section B2
3/16" = 1'-0"



B3 Section B3
3/16" = 1'-0"

ENGINEERING CONSULTANTS, P.A.
1227 NORTH MAIN STREET
P.O. BOX 932
HUTCHINSON, KS 67504-0932
620-663-5434
www.engineering-consultsnrs.com
info@engineering-consultsnrs.com

JonesGillamRenz
730 N. Ninth
Salina, KS 67401
785.827.038
1881 Main Street, Suite 301
Kansas City, MO 64108
jgr@jgrarchitects.com

101 N. SANTA FE AVE.

REMODEL and ADDITIONS: PELE'S PLAYGROUND, APARTMENTS and ROOF TOP BAR

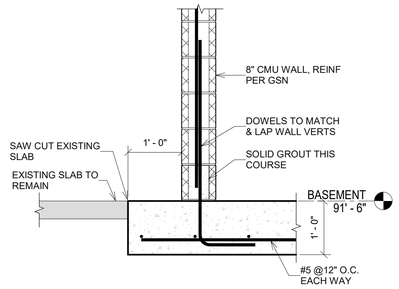
SALINA KANSAS

BRANDON FUQUA LICENSED 24769 3/20/2025 KANSAS PROFESSIONAL ENGINEER

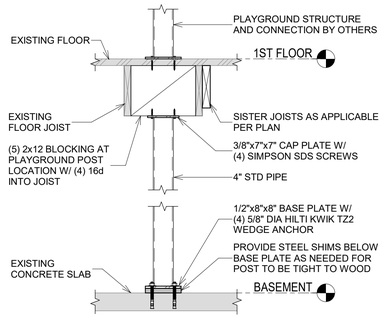
REVISION:

DATE: 3/20/2025
JOB: 24-3421
SHEET NO.:

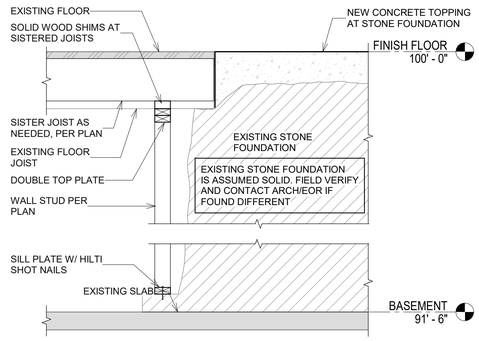
S2.1



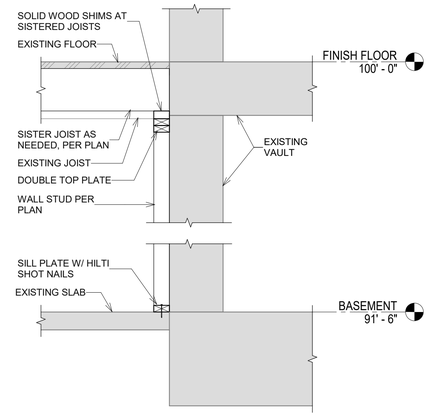
F1 Section F1
3/4" = 1'-0"



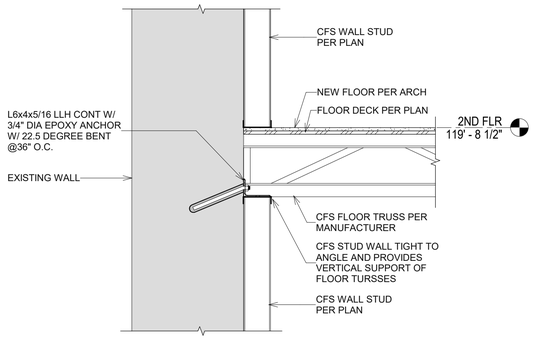
F2 COLUMN AT PLAYGROUND DETAIL
3/4" = 1'-0"



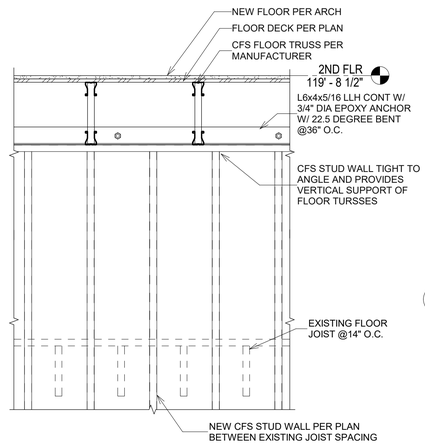
F3 Section F3
3/4" = 1'-0"



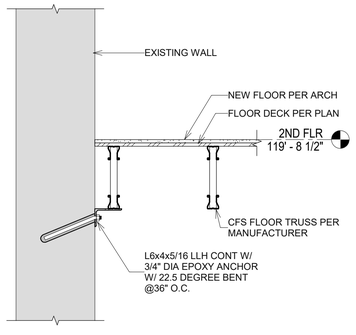
F4 Section F4
3/4" = 1'-0"



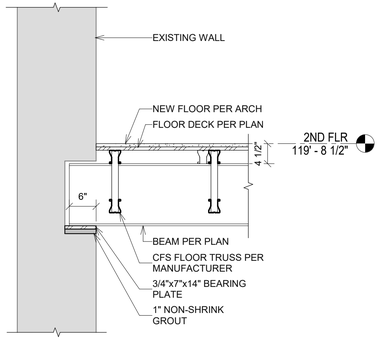
S1 Section S1
3/4" = 1'-0"



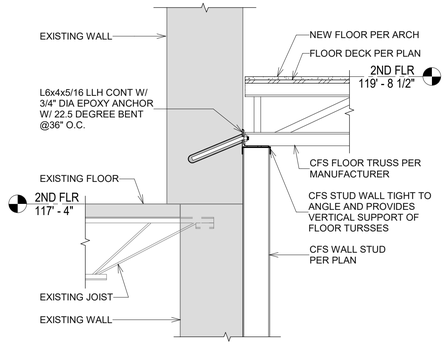
S2 Section S2
3/4" = 1'-0"



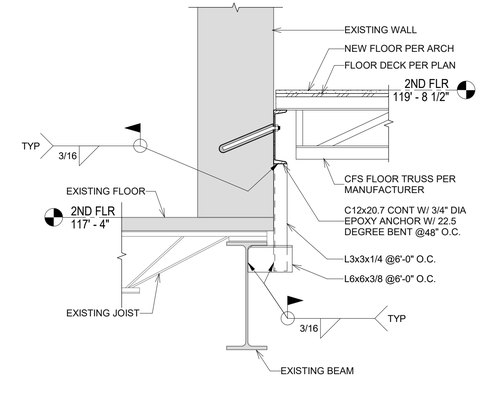
S3 Section S3
3/4" = 1'-0"



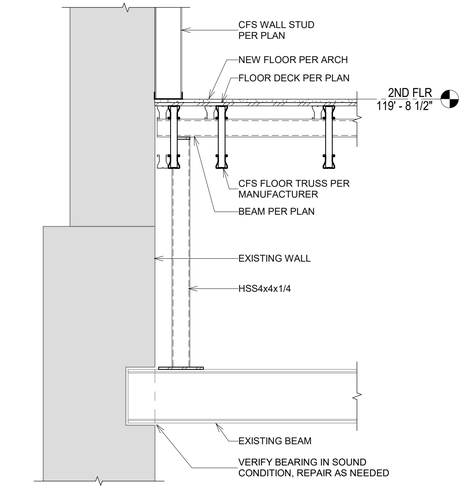
S4 Section S4
3/4" = 1'-0"



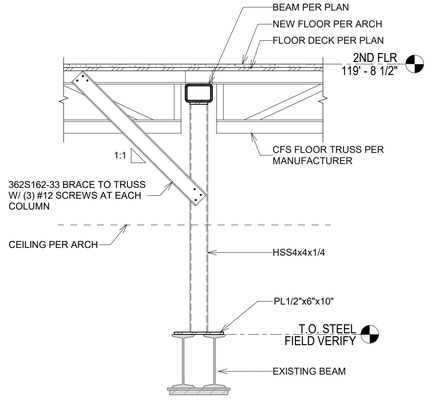
S5 Section S5
3/4" = 1'-0"



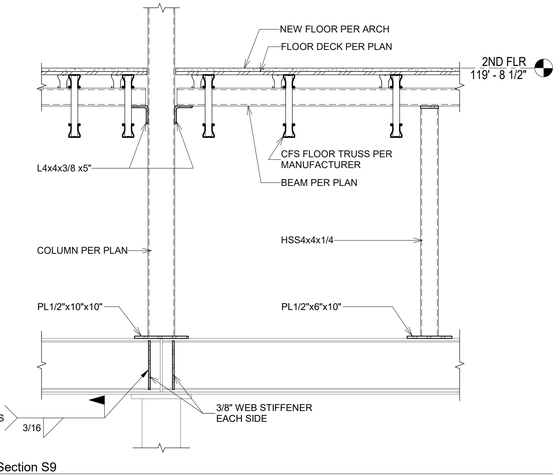
S6 Section S6
3/4" = 1'-0"



S7 Section S7
3/4" = 1'-0"



S8 Section S8
3/4" = 1'-0"



S9 Section S9
3/4" = 1'-0"

ENGINEERING CONSULTANTS, P.A.
1227 NORTH MAIN STREET
P.O. BOX 932
HUTCHINSON, KS 67504-0932
620-662-0574
www.engineering-consultants.com
info@engineering-consultants.com

JonesGillamRenz
730 N. Ninth
Salina, KS 67401
785.827.038
1881 Main Street, Suite 301
Kansas City, MO 64108
jgr@jgrarchitects.com

101 N. SANTA FE AVE.

REMODEL and ADDITIONS: PELE'S PLAYGROUND, APARTMENTS and ROOF TOP BAR

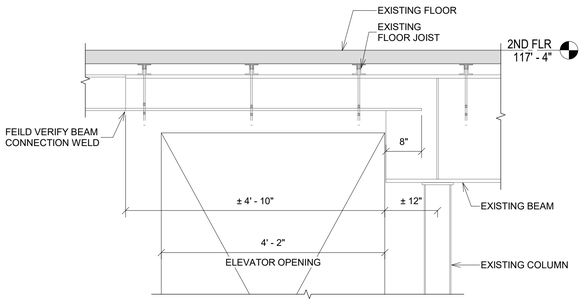
SALINA KANSAS

BRANDON FUQUA LICENSED 24769 3/20/2025 KANSAS PROFESSIONAL ENGINEER

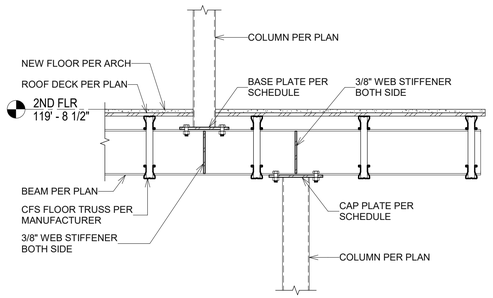
REVISION:		

DATE: 3/20/2025
JOB: 24-3421
SHEET NO.:

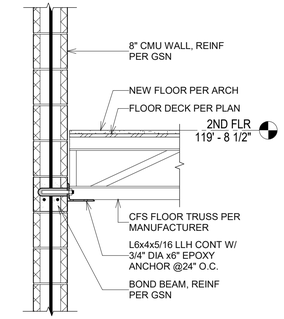
S3.0



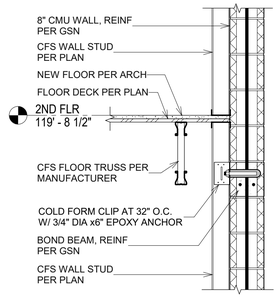
S10 Section S10
3/4" = 1'-0"



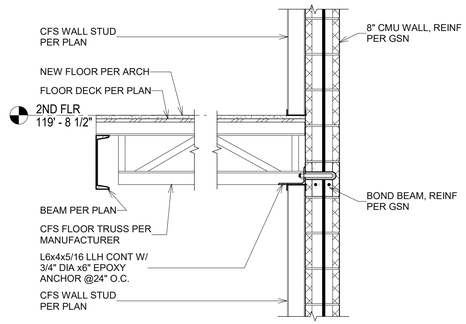
S11 Section S11
3/4" = 1'-0"



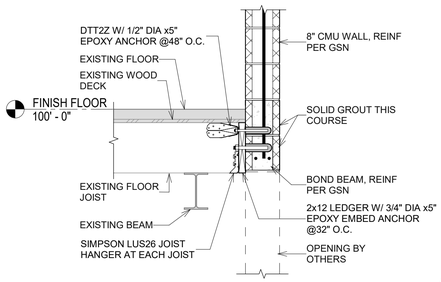
S12 Section S12
3/4" = 1'-0"



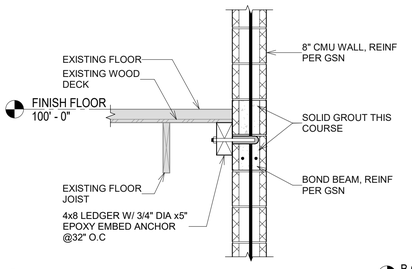
S13 Section S13
3/4" = 1'-0"



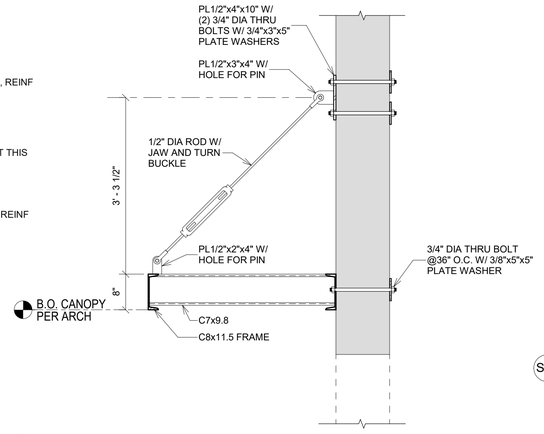
S14 Section S14
3/4" = 1'-0"



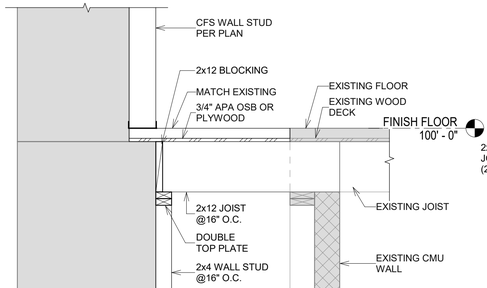
S15 Section S15
3/4" = 1'-0"



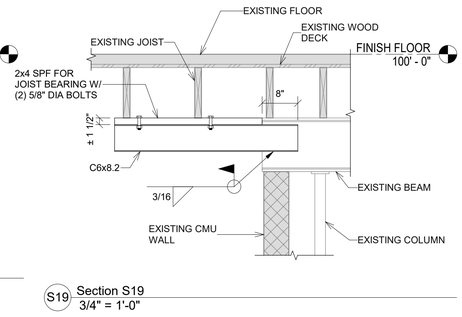
S16 Section S16
3/4" = 1'-0"



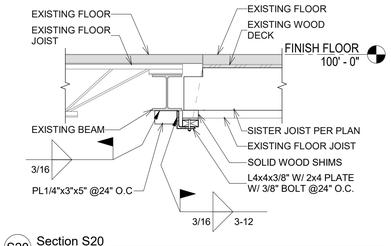
S17 Section S17
3/4" = 1'-0"



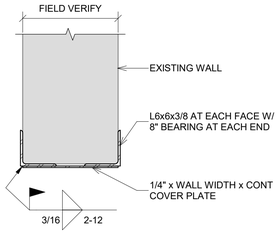
S18 Section S18
3/4" = 1'-0"



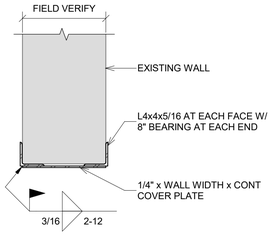
S19 Section S19
3/4" = 1'-0"



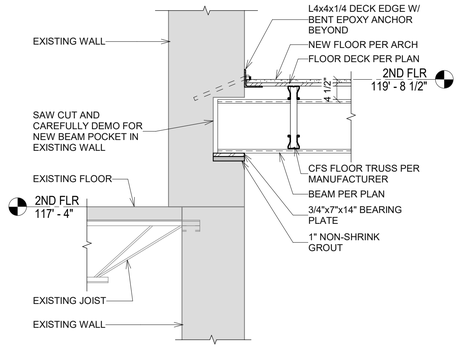
S20 Section S20
3/4" = 1'-0"



S21 Section S21
1" = 1'-0"



S22 Section S22
1" = 1'-0"



S23 Section S23
3/4" = 1'-0"

ENGINEERING CONSULTANTS, P.A.
1227 NORTH MAIN STREET
P.O. BOX 932
HUTCHINSON, KS 67504-0932
620-662-0474
www.engineering-consultants.com
info@engineering-consultants.com
ENGINEERING CONSULTANTS P.A.

JonesGillamRenz
730 N. Ninth
Salina, KS 67401
785.827.038
1881 Main Street, Suite 301
Kansas City, MO 64108
jgr@jgrarchitects.com

101 N. SANTA FE AVE.

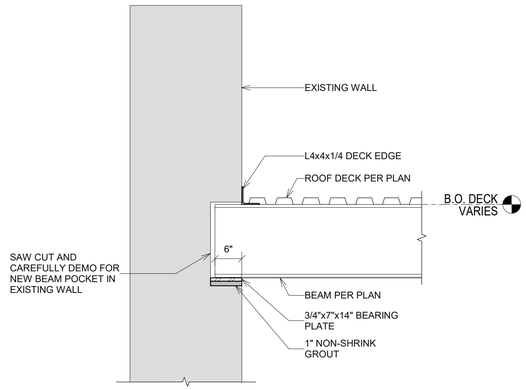
REMODEL and ADDITIONS: PELE'S PLAYGROUND, SALINA KANSAS
APARTMENTS and ROOF TOP BAR

BRANDON FUQUA LICENSED 24769 3/20/2025 KANSAS PROFESSIONAL ENGINEER

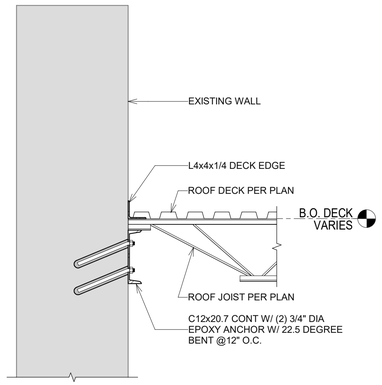
REVISION:		

DATE: 3/20/2025
JOB: 24-3421
SHEET NO.:

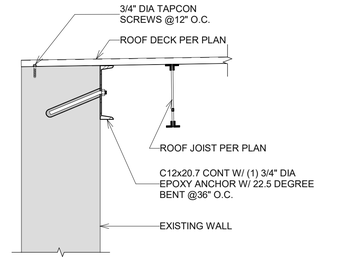
S3.1



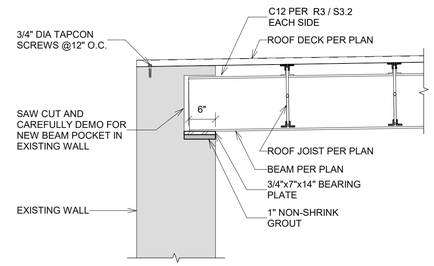
R1 Section R1
3/4" = 1'-0"



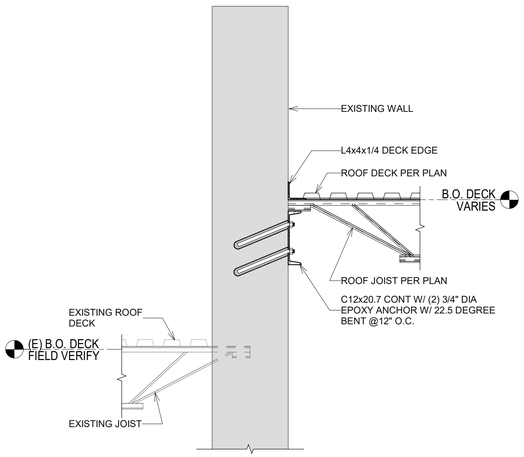
R2 Section R2
3/4" = 1'-0"



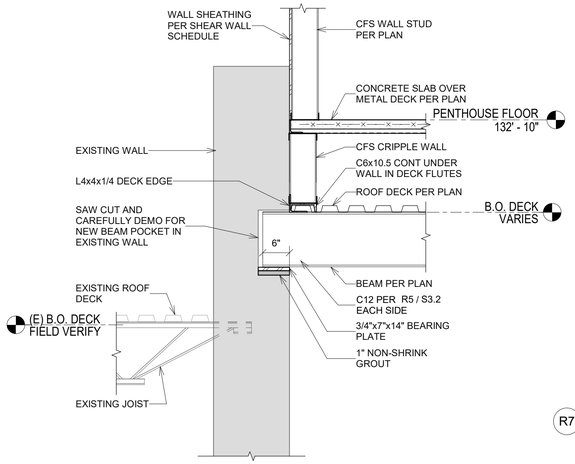
R3 Section R3
3/4" = 1'-0"



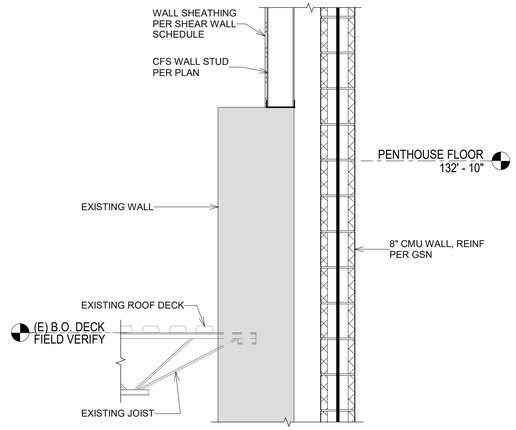
R4 Section R4
3/4" = 1'-0"



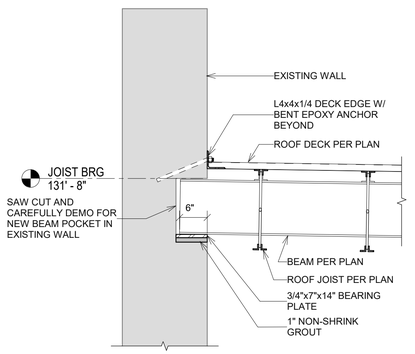
R5 Section R5
3/4" = 1'-0"



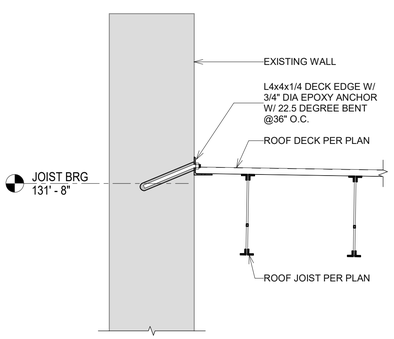
R6 Section R6
3/4" = 1'-0"



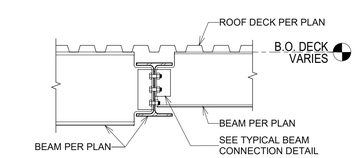
R7 Section R7
3/4" = 1'-0"



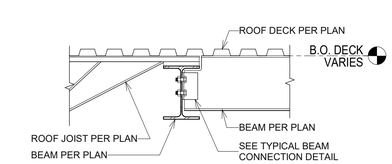
R8 Section R8
3/4" = 1'-0"



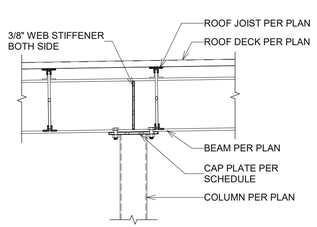
R9 Section R9
3/4" = 1'-0"



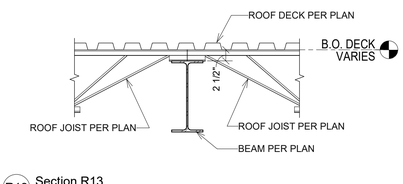
R10 Section R10
3/4" = 1'-0"



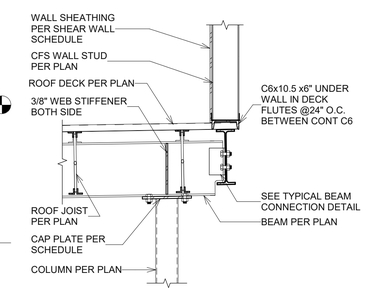
R11 Section R11
3/4" = 1'-0"



R12 Section R12
3/4" = 1'-0"



R13 Section R13
3/4" = 1'-0"



R14 Section R14
3/4" = 1'-0"

ENGINEERING CONSULTANTS, P.A.
1227 NORTH MAIN STREET
P.O. BOX 932
HUTCHINSON, KS 67504-0932
620-663-5434
www.engineering-consultants.com
info@engineering-consultants.com
ENGINEERING CONSULTANTS P.A.
CERTIFICATE OF AUTHORIZATION E-2016

JonesGillamRenz
730 N. Ninth
Salina, KS 67401
785.827.038
1881 Main Street, Suite 301
Kansas City, MO 64108
jgr@jgrarchitects.com

101 N. SANTA FE AVE.

REMODEL and ADDITIONS: PELE'S PLAYGROUND, APARTMENTS and ROOF TOP BAR

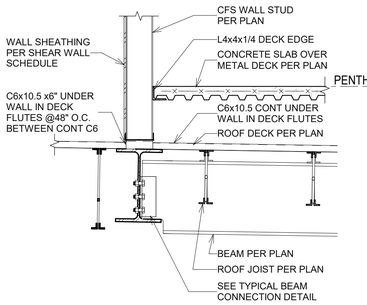
SALINA KANSAS

BRANDON FUQUA LICENSED 24769 3/20/2025 KANSAS PROFESSIONAL ENGINEER

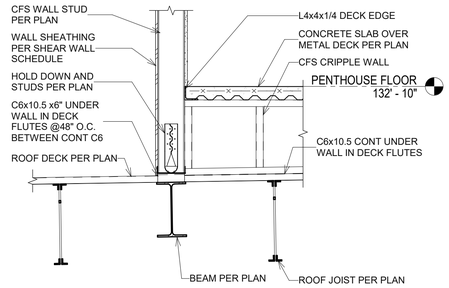
REVISION:

DATE: 3/20/2025
JOB: 24-3421
SHEET NO.:

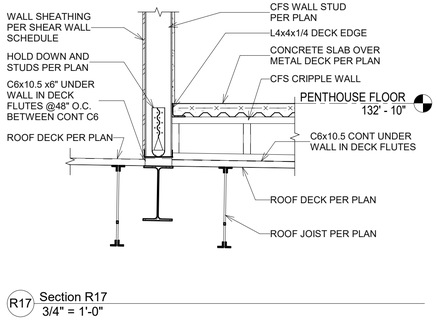
S3.2



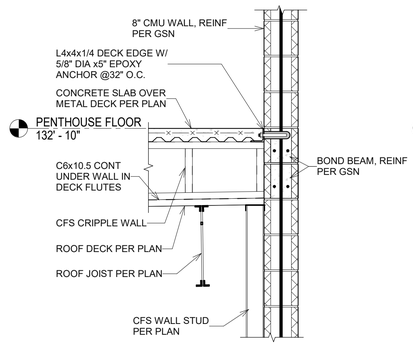
R15 Section R15
3/4" = 1'-0"



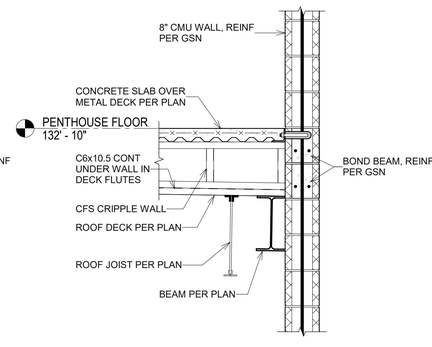
R16 Section R16
3/4" = 1'-0"



R17 Section R17
3/4" = 1'-0"

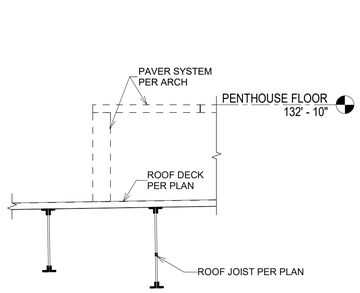


R18 Section R18
3/4" = 1'-0"

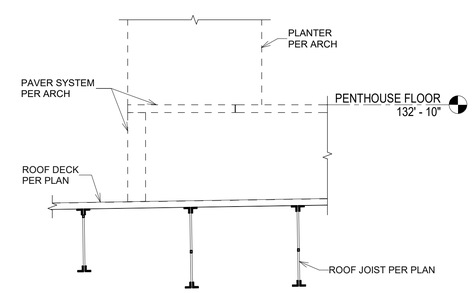


R19 Section R19
3/4" = 1'-0"

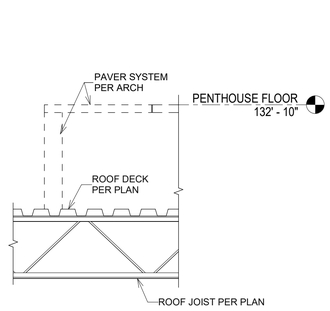
ENGINEERING CONSULTANTS, P.A.
1227 NORTH MAIN STREET
P.O. BOX 932
HUTCHINSON, KS 67504-0932
620-662-0474
www.engineering-consultants.com
info@engineering-consultants.com



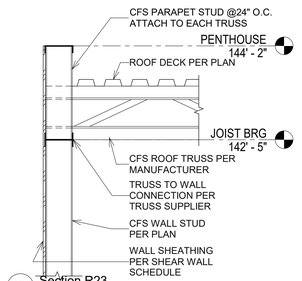
R20 Section R20
3/4" = 1'-0"



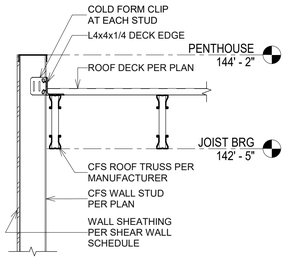
R21 Section R21
3/4" = 1'-0"



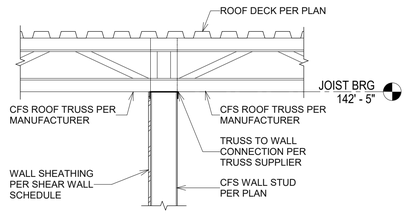
R22 Section R22
3/4" = 1'-0"



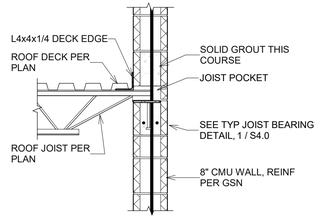
R23 Section R23
3/4" = 1'-0"



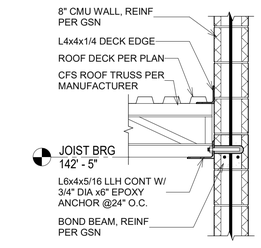
R24 Section R24
3/4" = 1'-0"



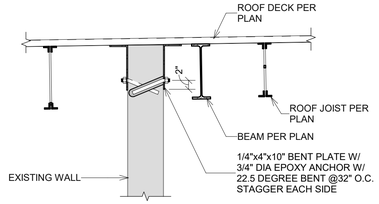
R25 Section R25
3/4" = 1'-0"



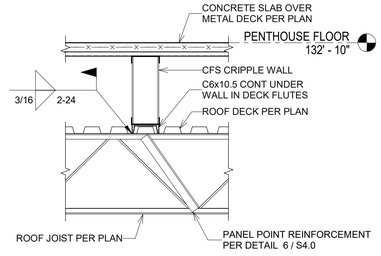
R26 Section R26
3/4" = 1'-0"



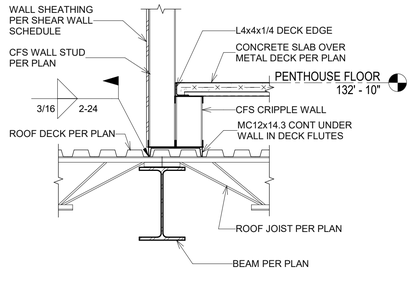
R27 Section R27
3/4" = 1'-0"



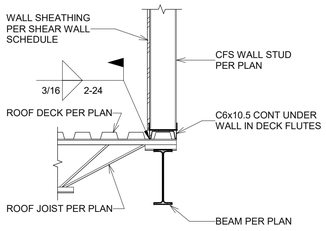
R28 Section R28
3/4" = 1'-0"



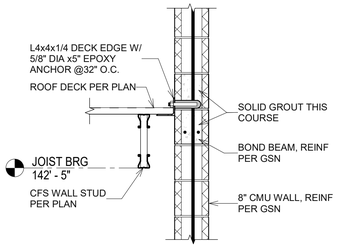
R29 Section R29
3/4" = 1'-0"



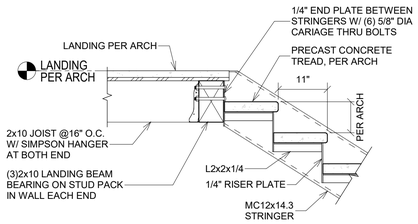
R30 Section R30
3/4" = 1'-0"



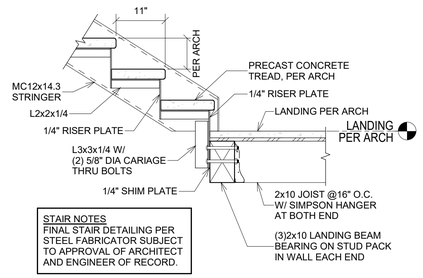
R31 Section R31
3/4" = 1'-0"



R32 Section R32
3/4" = 1'-0"



ST1 TYICAL STAIR SECTION
3/4" = 1'-0"



ST2 TYPICAL STAIR SECTION
3/4" = 1'-0"

JonesGillamRenz
730 N. Ninth
Salina, KS 67401
785.827.038
1881 Main Street, Suite 301
Kansas City, MO 64108
jgr@jgrarchitects.com

101 N. SANTA FE AVE.

REMODEL and ADDITIONS: PELE'S PLAYGROUND, APARTMENTS and ROOF TOP BAR

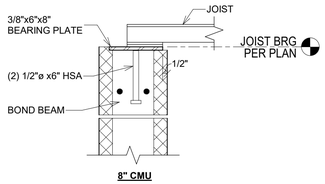
SALINA KANSAS

BRANDON FUQUA LICENSED 24769 3/20/2025 KANSAS PROFESSIONAL ENGINEER

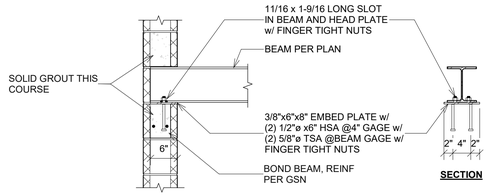
REVISION:		

DATE: 3/20/2025
JOB: 24-3421
SHEET NO.:

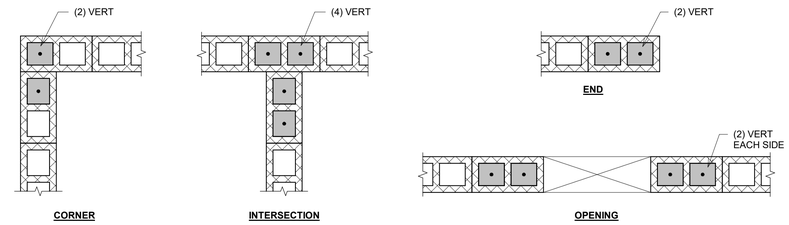
S3.3



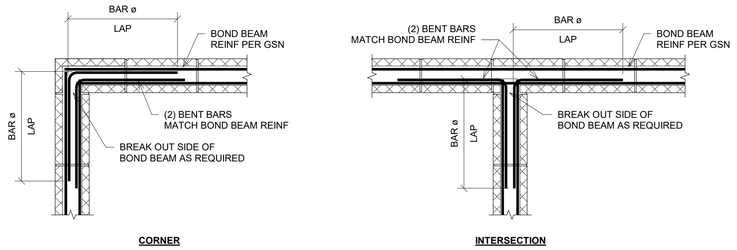
1 TYPICAL JOIST BEARING IN CMU
1 1/2" = 1'-0"



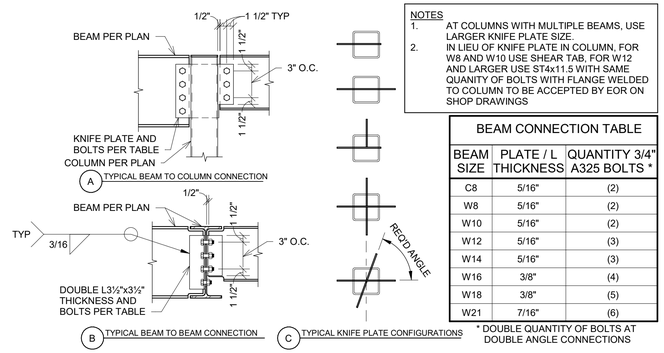
2 TYPICAL BEAM BEARING IN CMU
3/4" = 1'-0"



3 TYPICAL CMU VERTICAL REINF. DETAIL
3/4" = 1'-0"



4 TYPICAL CMU BOND BEAM DETAILS
3/4" = 1'-0"



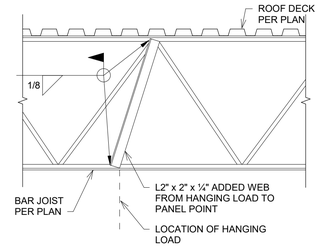
NOTES
1. AT COLUMNS WITH MULTIPLE BEAMS, USE LARGER KNIFE PLATE SIZE.
2. IN LIEU OF KNIFE PLATE IN COLUMN, FOR W8 AND W10 USE SHEAR TAB, FOR W12 AND LARGER USE ST4x11.5 WITH SAME QUANITY OF BOLTS WITH FLANGE WELDED TO COLUMN TO BE ACCEPTED BY EOR ON SHOP DRAWINGS

BEAM CONNECTION TABLE

BEAM SIZE	PLATE / L THICKNESS	QUANTITY 3/4" A325 BOLTS *
C8	5/16"	(2)
W8	5/16"	(2)
W10	5/16"	(2)
W12	5/16"	(3)
W14	5/16"	(3)
W16	3/8"	(4)
W18	3/8"	(5)
W21	7/16"	(6)

* DOUBLE QUANTITY OF BOLTS AT DOUBLE ANGLE CONNECTIONS

5 TYPICAL BEAM CONNECTION
3/4" = 1'-0"



NOTE:
USE THIS DETAIL FOR MISCELLANEOS LOADS TO BE SUPPORTED BY BAR JOIST NOT AT A PANEL POINT. IF LOAD IS LARGER THAN 100 LBS CONTACT ENGINEER.

6 MISC HANGING LOAD
3/4" = 1'-0"

COLUMN SCHEDULE

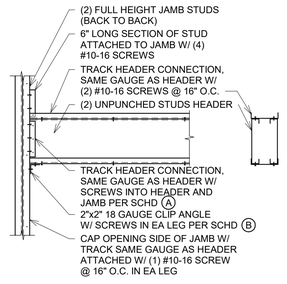
COLUMN MARK	SIZE	BASE PLATE	ANCHOR BOLTS	Base Level	CAP PLATE	CAP PLATE BOLTS	REMARKS
C1	HSS6X6X1/4	1/2"x12"x12"	(4) 3/4"ø EPOXY	EL. 108'-2"	1/2"x6"x12"	(4) 3/4"ø	
C2	HSS6X6X1/4	1/2"x12"x12"	(4) 3/4"ø EPOXY	EL. 108'-2"	1/2"x6"x12"	(4) 3/4"ø	
C3	HSS6X6X1/4	1/2"x12"x12"	(4) 3/4"ø EPOXY	EL. 108'-2"	3/4"x8"x12"	N/A	
C4	HSS5X5X1/4	1/2"x6"x11"	(4) 3/4"ø	EL. 119'-8 1/2"	1/2"x6"x11"	(4) 3/4"ø	
C5	HSS5X5X1/4	1/2"x6"x11"	(4) 3/4"ø	EL. 119'-8 1/2"	1/2"x5"x5"	N/A	
C6	HSS6X6X1/4	1/2"x10"x10"	N/A	EL. 115'-0"	1/2"x6-1/2"x12"	(4) 3/4"ø	
C7	HSS4X4X1/4	1/2"x6"x10"	N/A	EL. 115'-0"	N/A	N/A	
C8	HSS4X4X1/4	1/2"x6"x10"	N/A	EL. 115'-0"	N/A	N/A	
C9	HSS6X6X1/4	1/2"x10"x10"	N/A	EL. 115'-0"	1/2"x6-1/2"x12"	(4) 3/4"ø	
C10	HSS4X4X1/4	1/2"x6"x10"	N/A	EL. 115'-0"	N/A	N/A	
C11	HSS4X4X1/4	1/2"x6"x10"	N/A	EL. 115'-0"	N/A	N/A	
C12	HSS6X6X1/4	1/2"x10"x10"	N/A	EL. 115'-0"	1/4"x6"x6"	N/A	
C13	HSS4X4X1/4	1/2"x6"x10"	N/A	EL. 115'-0"	N/A	N/A	
C14	HSS4X4X1/4	1/2"x6"x10"	N/A	EL. 115'-0"	N/A	N/A	
C15	HSS6X6X1/4	1/2"x10"x10"	N/A	EL. 115'-0"	1/2"x6-1/2"x12"	(4) 3/4"ø	
C16	HSS4X4X1/4	1/2"x6"x10"	N/A	EL. 115'-0"	N/A	N/A	
C17	HSS4X4X1/4	1/2"x6"x10"	N/A	EL. 115'-0"	N/A	N/A	
C18	HSS4X4X1/4	1/2"x6"x10"	N/A	EL. 115'-0"	N/A	N/A	
C19	HSS4X4X1/4	1/2"x6"x10"	N/A	EL. 115'-0"	N/A	N/A	
C20	HSS6X6X1/4	1/2"x10"x10"	N/A	EL. 115'-0"	1/4"x6"x6"	N/A	
C21	HSS4X4X1/4	1/2"x6"x10"	N/A	EL. 115'-0"	N/A	N/A	
C22	HSS4X4X1/4	1/2"x6"x10"	N/A	EL. 115'-0"	N/A	N/A	

SHEAR WALL SCHEDULE

MARK	SHEATHING THICKNESS	#8 SCREW SPACING EDGES	#8 SCREW SPACING FIELD	SILL PLATE HILTI SHOT NAIL	HOLD DOWN	NOTES
SW-1	7/16"	6"	12"	@ 16" O.C.	PER PLAN	1, 2, 3, 4
SW-2	7/16"	4"	12"	@ 12" O.C.	PER PLAN	1, 2, 3, 4, 5

NOTES:
1. OSB OR PLYWOOD SHEATHING APPLIED TO ONE FACE OF STUD WALL. SHEATHING SHALL BE INSTALLED WITH THE LONG DIMENSION HORIZONTAL. SHEATHING TO BE FIRE-RETARDANT.
2. USE SHEAR WALL TYPE SW-1 ON ALL EXTERIOR CFS FRAMED WALLS U.N.O.
3. PROVIDE CONTINUOUS 33 MIL FLAT STRAP "BLOCKING" AT ALL HORIZONTAL SHEATHING JOINTS AND PROVIDE SOLID BLOCKING BETWEEN THE FIRST TWO END STUDS AT EACH END OF SHEAR WALL SEGMENT.
4. SHEAR WALL BOTTOM TRACK TO BE 43 MIL MINIMUM.
5. SIMPSON HOLD DOWN TO BE PER PLAN PER MANUFATURERS RECOMMENDATION.

7 SHEAR WALL SCHEDULE
12" = 1'-0"



CFS BOX HEADER SCHEDULE

HEADER MARK	MAX OPENING WIDTH	HEADER SIZE	#10-16 SCREWS A	#10-16 SCREWS B
H1	3' - 6"	6" 18 GA (600S162-43)	(8)	(3)
H2	10' - 0"	6" 16 GA (600S162-54)	(10)	(3)
H3	3'-10"	6" 16 GA (600S162-54)	(8)	(3)
H4	9'-9"	8" 14 GA (800S200-68)	(10)	(3)

PROVIDE L7x4x3/8 BRICK LINTEL AT OPENINGS WITH BRICK OR STONE. ANGLE TO BEAR 8" MINIMUM EACH SIDE OF OPENING. ATTACH ANGLE TO CFS BOX HEADER WITH (3) #10 SCREWS @ 16" O.C. PRE-DRILL HOLES FOR SCREWS IN ANGLE.

ENGINEERING CONSULTANTS, P.A.
1227 NORTH MAIN STREET
P.O. BOX 932
HUTCHINSON, KS 67504-0932
620-663-4004
www.engineering-consultants.com
info@engineering-consultants.com
ENGINEERING CONSULTANTS P.A.
CERTIFICATE OF AUTHORIZATION #E-1146

JonesGillamRenz
730 N. Ninth
Salina, KS 67401
785.827.038
1881 Main Street, Suite 301
Kansas City, MO 64108
jgr@jgrarchitects.com
JGR

101 N. SANTA FE AVE.

REMODEL and ADDITIONS: PELE'S PLAYGROUND, APARTMENTS and ROOF TOP BAR

SALINA KANSAS

BRANDON FUQUA LICENSED 24769 3/20/2025 KANSAS PROFESSIONAL ENGINEER

REVISION:

DATE: 3/20/2025
JOB: 24-3421
SHEET NO.:

S4.0