GENERAL NOTES:

THE STRUCTURAL COMPONENTS OF THIS PROJECT HAVE BEEN DESIGNED IN ACCORDANCE WITH THE PROVISIONS OF THE IBC CODE, 2021 EDITION, WITH LOCAL AMENDMENTS. THE DESIGN LOADS ARE AS FOLLOWS.

1. ROOF DEAD LOADS:
   ROOF STRUCTURE 10 PSF
   COLLATERAL DEAD LOADS 10 PSF

2. FOUNDATION LEVEL LIVE LOAD 125 PSF

3. SLOPING ROOFS (=>1:12) LIVE & SNOW LOADS:
   SNOW LOAD 5 PSF
   TOP CHORD LIVE LOAD 20 PSF
   BOTTOM CHORD LIVE LOAD 10 PSF

4. LOW SLOPE ROOFS (<1:12) LIVE & SNOW LOADS:
   SNOW LOAD 20 PSF
   TOP CHORD LIVE LOAD 50 PSF
   BOTTOM CHORD LIVE LOAD 10 PSF

5. MECHANICAL EQUIPMENT ROOFTOP LOADS:
   IN AREAS WHERE MECHANICAL ROOFTOP EQUIPMENT IS SHOWN ON THE ROOF PLAN OR MEP DRAWINGS, DESIGN THE ROOFS FOR LIVE LOAD OF 50 PSF, OR FOR A LIVE LOAD OF 20 PSF PLUS THE WEIGHT OF THE ACTUAL ROOFTOP EQUIPMENT, WHICHEVER PRODUCES THE MOST CONSERVATIVE DESIGN.

6. DESIGN ALL HAND RAILS, GUARD RAILS, AND GRAB BARS FOR THE WORST CASE OF A RAILING LOAD OF 50 PLF OR A 200 POUND CONCENTRATED LOAD.

OTHER LOADS USED FOR THE DESIGN OF THE STRUCTURAL COMPONENTS HAVE BEEN BASED UPON THE PROVISIONS OF CHAPTER 16 AS FOLLOWS:

OCCUPANCY CATEGORY OF BUILDING = III FOR SNOW, SEISMIC, & WIND

GROUND SNOW LOAD P(g) = 5 PSF; C(e) = 1.0; I(s) = 1.0; C(t) = 1.0

WIND DESIGN DATA:
BASIC WIND SPEED V(ult) = 112 MPH, V(asd) = 87 MPH
EXPOSURE = C; I(w) = 1.0; MEAN ROOF HEIGHT = 20'-0"

WIND FORCES FOR 1 & 2 STORY TALL BUILDINGS (ULTIMATE PRESSURES):
MAIN WIND FORCE RESISTING SYSTEMS = 31.2 PSF ULT. (18.8 PSF ASD)
WALL COMPONENTS AND CLADDING = 40.7 PSF ULT. (24.4 PSF ASD)
ROOF COMPONENTS AND CLADDING = 88.0 PSF ULT. (52.8 PSF ASD)

EARTHQUAKE DESIGN DATA:
S(s) = 0.102g; S(1) = 0.053g; SOIL SITE CLASS = C; I(s) = 1.25
SEISMIC USE GROUP = I; S(DS) = 0.088g; S(D1) = 0.053g
SEISMIC DESIGN CATEGORY = A
SFRS = LIGHT FRAMED STUD WITH GYP. BOARD WALLS; R = 2.0
ANALYSIS PROCEDURE USED = EQUIVALENT LATERAL FORCE

NOTES: REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS AND CONSTRUCTION DETAILS FOR ALL FIRE RATED WALLS AND PLAN DIMENSIONS. BOTTOM CHORD LIVE LOADS DO NOT HAVE TO BE APPLIED CONCURRENTLY WITH TOP CHORD LIVE LOADS.

FOUNDATION NOTES

F1. A GEOTECHNICAL SOILS REPORT FOR THIS SITE WAS PRODUCED BY HBC/TERRACON OF DALLAS, TEXAS, REPORT No. 94055004, DATED FEBRUARY 9, 2005. THE FOUNDATION DESIGN IS BASED UPON THE RECOMMENDATIONS CONTAINED WITH THIS SOILS REPORT, KNOWLEDGE OF THE EXISTING SOILS AS SHOWN IN THE BORING LOGS, AND PER THE DESIGN REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE. THE CONTRACTOR SHALL OBTAIN, READ, & BE FAMILIAR WITH THE RECOMMENDATIONS AND THE BORING LOGS AS GIVEN IN THE GEOTECHNICAL REPORT.

F2. DUE TO THE LOCATION OF THE NEW SLAB AND THE PROXIMITY TO THE EXISTING STRUCTURES, IT MIGHT NOT BE POSSIBLE TO LIMIT THE AMOUNT OF SEASONAL MOVEMENTS TO LESS THAN 1.0 INCHES. DUE TO THE DIFFERENT EXISTING FOUNDATION SYSTEMS, THERE IS AN INCREASED POTENTIAL FOR DIFFERENTIAL MOVEMENTS BETWEEN THE DIFFERENT FOUNDATION SYSTEMS.

F3. EARTHWORK: ALL EXISTING DEBRIS, VEGETATION, PAVEMENT, AND TOPSOIL CONTAINING ORGANIC MATERIALS SHALL BE CLEARED AND REMOVED FROM THE FOUNDATION FOOTPRINT.

F4. EXCAVATE TO A DEPTH OF 2'-6" BELOW FINISHED SLAB ELEVATION. THE EXPOSED SURFACE AFTER EXCAVATION OF THE SUBGRADE SOIL SHOULD BE SCARIFIED TO A DEPTH OF 8 INCHES AND MIXED WITH A MINIMUM OF 8 PERCENT HYDRATED LIME (BY DRY SOIL WEIGHT) IN CONFORMANCE WITH TXDOT STANDARD SPECIFICATIONS ITEM 260. ASSUMING AN IN-PLACE UNIT WEIGHT OF 100 PCF FOR THE PAVEMENT SUBGRADE SOILS, THIS PERCENTAGE OF LIME EQUATES TO ABOUT 36 LBS OF LIME PER SQ YARD OF TREATED SUBGRADE. THE ACTUAL AMOUNT OF LIME REQUIRED SHOULD BE CONFIRMED BY ADDITIONAL LABORATORY TESTS (ASTM C 977 APPENDIX XI) PRIOR TO CONSTRUCTION.

F5. EXTEND LIME STABILIZATION PROCEDURES 1 FT BEYOND THE EDGE OF THE FOUNDATION, WHERE POSSIBLE. THE SOIL-LIME MIXTURE SHOULD BE COMPACTED TO AT LEAST 95 PERCENT OF STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM D 698) AND WITHIN THE RANGE OF 0 TO 4 PERCENTAGE POINTS ABOVE THE MIXTURE'S OPTIMUM MOISTURE CONTENT. IN AREAS WHERE HYDRATED LIME IS USED TO STABILIZE THE SUBGRADE SOIL, ATTERBERG-LIMIT TESTS SHOULD BE PERFORMED TO VERIFY THE RESULTING PLASTICITY INDEX OF THE SOIL-LIME MIXTURE IS AT/OR BELOW 15.

F6. PROVIDE COMPACTED LIME STABILIZED OR SELECT FILL SOILS TO THE BOTTOM OF THE FOUNDATION SLABS. THE FINAL BUILDING PAD ELEVATION SHOULD BE SET AT ROUGHLY 6 INCHES BELOW FINISHED FLOOR. IF FILL SOILS ARE REQUIRED, PROVIDE THESE PER NOTES F7 & F8. A GEOTECHNICAL ENGINEER SHALL BE PRESENT DURING SUBGRADE PREPARATION TO VERIFY THE FILL MATERIALS, COMPACTION, AND MOISTURE CONTENT OF THE SOILS UNDER THE FOUNDATIONS. THE FOUNDATION SLAB SHALL BE PLACED UPON A 10 MIL VAPOR BARRIER OVER THE PREPARED SUBGRADE.

F7. SELECT FILL: SELECT FILL SHALL BE USED TO OBTAIN FINISHED CIVIL GRADES AS NEEDED. SELECT FILL SHALL BE PLACED AS SOON AS POSSIBLE AFTER COMPLETION OF MOISTURE CONDITIONING OF THE SUBGRADE TO LIMIT MOISTURE LOSS OF THE SOIL. SELECT FILL SHALL NOT EXTEND BEYOND THE LIMITS OF THE FOUNDATION ELEMENTS, BUT SHALL INCLUDE THE EXTENTS OF ANY COVERED WALKWAYS AND/OR ENTRIES. LOW PI SELECT FILL MATERIAL SHALL CONSIST OF CLAYEY SANDS OR SANDY CLAY SOILS WITH A PI BETWEEN 5 AND 15, AND A LIQUID LIMIT OF LESS THAN 35. THE SELECT FILL SHALL BE FREE OF ORGANIC MATTER, ROCKS, DEBRIS AND DELETERIOUS MATERIALS. THE SELECT FILL MATERIALS SHALL BE APPROVED BY THE LICENSED GEOTECHNICAL ENGINEER.

F8. COMPACTION OF SELECT FILL: SELECT FILL REQUIRED BENEATH THE GRADE SLAB SHALL BE PLACED IN 6 TO 8 INCH THICK LOOSE LIFTS AND COMPACTED TO A MINIMUM OF 95 PERCENT OF MAXIMUM DRY DENSITY AT A MOISTURE CONTENT BETWEEN -1 AND +3 PERCENT OF OPTIMUM AS DETERMINED BY THE STANDARD PROCTOR METHOD, ASTM SPECIFICATION D-698.

FOUNDATION NOTES: (CONTINUED)

F9. SITE FILL: FILL PLACED ALONG THE OUTSIDE OF EXTERIOR GRADE BEAMS SHALL BE ON-SITE SOILS. THE SITE FILL IS INTENDED TO REDUCE SURFACE WATER INFILTRATION BENEATH THE STRUCTURE. COMPACTION OF THE SITE FILL SHALL BE AS PER THE SOILS REPORT. THE FINISHED GRADES OF THE SITE FILL SHALL BE AS PER THE CIVIL GRADING PLANS. CARE SHALL BE TAKEN THAT NO LOW SPOTS EXIST THAT ALLOW WATER TO COLLECT AT OR NEAR THE BUILDING.

F10. POSITIVE SURFACE DRAINAGE AWAY FROM THE STRUCTURES SHALL BE ESTABLISHED AND MAINTAINED AT ALL TIMES BOTH DURING AND AFTER CONSTRUCTION. AT NO TIME SHALL WATER BE ALLOWED TO COLLECT NEAR THE BUILDING FOUNDATION (WITHIN 10 FEET). DUE TO THE NATURE OF THE SOILS ON THIS SITE, WE ARE REQUIRING THAT ANY AND ALL DOWNSPOUTS DISCHARGE THE ROOF WATER AT LEAST 10 FEET AWAY FROM ALL BUILDINGS. EXTERIOR GRADING SHALL SLOPE AWAY FROM THE FOUNDATION 0.6" PER FOOT (1:20) FOR AT LEAST 10 FEET.

F11. UTILITY LINE TRENCHES: UTILITY LINES RUNNING UNDER THE EXTERIOR GRADE BEAMS SHALL HAVE A CLAY PLUG TO PREVENT WATER INFILTRATION BENEATH THE STRUCTURE THROUGH POROUS TRENCH BACKFILL MATERIALS. CLAY PLUGS SHALL BE LOCATED IMMEDIATELY OUTSIDE OF THE EXTERIOR GRADE BEAM. THE CLAY PLUG SHALL CONSIST OF A 5'-0" MINIMUM LENGTH OF TRENCH BACKFILLED WITH ON-SITE CLAYS COMPACTED IN ACCORDANCE WITH NOTE 4.

F12. SIDEWALKS AND PAVEMENT SHOULD NOT BE STRUCTURALLY CONNECTED TO THE BUILDING, EXCEPT AT ENTRIES AND EXITS, AND SHOULD SLOPE AWAY FROM THE BUILDING SO THAT WATER WILL BE DRAINED AWAY FROM THE STRUCTURES. PLANTER BEDS, PAVEMENT, AND SIDEWALKS SHALL BE PLACED AND DRAINED SUCH THAT THEY DO NOT TRAP SURFACE WATER NEAR THE FOUNDATIONS.

F13. A LICENSED GEOTECHNICAL ENGINEER SHALL BE PRESENT DURING SUBGRADE PREPARATION TO VERIFY THE COMMON AND SELECT FILL MATERIALS, COMPACTION, MOISTURE CONTENT, AND BEARING CAPACITY OF THE COMMON AND SELECT FILL SOILS. THE LICENSED GEOTECHNICAL ENGINEER SHALL CERTIFY THAT THE FOUNDATION PAD HAS BEEN PREPARED ACCORDING TO THE GUIDELINES OF THE FOUNDATION NOTES ON THIS SHEET. THE ALLOWABLE SOILS BEARING CAPACITY SHALL BE MEASURED AND BE AT LEAST 2000 PSF.

F14. LIMITATIONS: THE ENGINEERING SERVICES PROVIDED BY KWS ARE CONDUCTED IN A MANNER CONSISTENT WITH THAT LEVEL OF CARE AND SKILL ORDINARILY EXCERCISED BY MEMBERS OF THE PROFESSION CURRENTLY PRACTICING UNDER SIMILAR CONDITIONS. NO WARRANTIES, EXPRESSES OR IMPLIED, ARE MADE. WE DO NOT WARRANT OR GUARANTEE THE ACCURACY OR QUALITY OF THE WORK OR MATERIALS PROVIDED BY OTHER MEMBERS OF THE DESIGN TEAM, NOR ANY MEMBERS OF THE CONSTRUCTION TEAM.

CONCRETE NOTES

C1. ALL STRUCTURAL CONCRETE SHALL WEIGH 140 TO 155 LBS. PER CU. FT., AND BE OF A HARDROCK AGGREGATE. ALL CEMENT SHALL BE TYPE I/II.

C2. MINIMUM CONCRETE STRENGTHS AT 28 DAY BREAK:

SLABS, GRADE BEAMS, AND FOOTINGS . . . . . 3500 PSI

CONCRETE SLUMP SHALL BE:

SLABS, GRADE BEAMS, AND FOOTINGS . . . . 3 IN. MIN./5 IN. MAX.

C3. CONCRETE MIX DESIGNS AND TEST RESULTS SHALL BE SUBMITTED TO THE ARCHITECT/ENGINEER FOR EVALUATION AND APPROVAL. ALL CONCRETE SHALL CONTAIN A MINIMUM OF 376 POUNDS OF CEMENT PLUS 94 POUNDS OF FLY ASH PER CUBIC YARD. MAXIMUM SIZE OF AGGREGATE FOR FOOTINGS, GRADE BEAMS, AND SLAB ON GRADE SHALL BE 1½". MAXIMUM SIZE OF AGGREGATE FOR SLABS ON FORM DECK SHALL BE 1". CONCRETE EXPOSED TO THE WEATHER SHALL HAVE 5% AIR-ENTRAINMENT.

C4. ALL CAST-IN-PLACE CONCRETE WORK SHALL BE IN ACCORDANCE WITH ACI-301, LATEST EDITION, SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS.

C5. ALL REINFORCING STEEL SHALL BE PLACED IN ACCORDANCE WITH "PLACING REINFORCING BARS", PUBLISHED BY THE CONCRETE REINFORCING STEEL INSTITUTE, LATEST EDITION.

C6. CONCRETE REINFORCING: REINFORCING STEEL SHALL BE NEW DOMESTIC DEFORMED BILLET STEEL CONFORMING TO ASTM A615, GRADE 60 BARS.

C7. SLABS ON GRADE: SLABS ON GRADE SHALL BE OF HARDROCK CONCRETE OF THE THICKNESS AND WITH REINFORCEMENT AS SHOWN ON FOUNDATION PLAN. SLAB REINFORCING FOR SLABS ON GRADE SHALL BE CENTERED IN SLAB. SLAB REINFORCING FOR SLABS ON FORM DECK SHALL BE CENTERED IN SLAB THICKNESS ABOVE THE FORM DECK. CARE SHALL BE TAKEN TO MAINTAIN SLAB REINFORCEMENT POSITION DURING POURING OPERATION. SAW CUT CONTROL JOINTS IN THE SLABS-ON-GRADE AT 10'-0" TO 15'-0" O.C.E.W., UNLESS OTHERWISE RECOMMENDED BY THE ARCHITECT.

C8. APPLY SEAL & CURE COMPOUND, SEALTIGHT 1100 BY W.R. MEADOWS, TO ALL FOUNDATION AND FLOOR SLABS AS PER THE MANUFACTURER'S SPECIFICATIONS.

C9. FOOTINGS: GRADE BEAMS & FOOTINGS SHALL BE OF HARDROCK CONCRETE OF SIZE AND REINFORCEMENT AS INDICATED ON PLANS. FOOTINGS MAY BE POURED NEAT, EXCEPT THAT EXPOSED SURFACES SHALL BE FORMED. CARE SHALL BE TAKEN TO ACCURATELY TRENCH FOOTINGS TO WIDTHS AND DEPTHS INDICATED. TRENCHES SHALL BE KEPT CLEAN AND CARE SHALL BE TAKEN TO PREVENT SLOUGHING OF TRENCH SIDES. DETAIL REINFORCING AND PROVIDE CORNER BARS AT FOOTING INTERSECTIONS TO MATCH HORIZONTAL REINFORCING.

C10. MINIMUM COVERAGE ON REINFORCING STEEL:

CONCRETE CAST AGAINST EARTH . . 3" CLEAR TO STIRRUP
CONCRETE CAST AGAINST FORMS. . . 2" CLEAR TO STIRRUP
FOOTINGS . . . . . 2" TOP, 3" BOTTOM, 2" ON FORMED SIDES
SLABS ON GRADE . . . . . CENTER REINFORCING IN SLAB

C11. ALL OPENINGS FOR MECHANICAL EQUIPMENT, TRENCHES, SLOPES TO DRAINS, ETC., SHALL BE VERIFIED BY GENERAL CONTRACTOR AND INDICATED ON SHOP DRAWINGS. COORDINATE LOCATIONS AND SIZES OF ALL OPENINGS WITH APPLICABLE TRADES.

C12. THE MINIMUM REBAR LAP SPLICE LENGTH FOR ALL SLAB ON GRADE SLABS, FOOTINGS, AND GRADE BEAMS SHALL BE 48 BAR DIAMETERS. SPLICE TOP GRADE BEAM REBAR MIDSPAN BETWEEN PIERS AND BOTTOM GRADE BEAM REBAR OVER PIERS, PER THE STRUCTURAL DETAILS.

SPECIAL INSPECTIONS:

STRUCTURAL SPECIAL INSPECTIONS ARE REQUIRED FOR THIS PROJECT PER CHAPTER 17 OF THE INTERNATIONAL BUILDING CODE AND THE CITY BUILDING INSPECTION DEPARTMENT. INDEPENDENT THIRD PARTY INSPECTORS SHALL BE SELECTED BY THE OWNER OR THE OWNER'S REPRESENTATIVE AND THEIR SERVICES SHALL BE PAID FOR BY THE OWNER. THE GENERAL CONTRACTOR SHALL COORDINATE TIMING OF INSPECTIONS WITH THE SPECIAL INSPECTORS REGARDING THE VARIOUS PHASES OF THE CONSTRUCTION OF THE PROJECT. THE QUALIFICATIONS OF THE SPECIAL INSPECTORS SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER FOR APPROVAL PRIOR TO FINAL SELECTION. THE FOLLOWING STRUCTURAL SPECIAL INSPECTIONS ARE REQUIRED FOR THIS PROJECT.

SI1. SOIL PREPARATION - A LICENSED GEOTECHNICAL ENGINEER SHALL TEST AND CERTIFY THE SOIL PREPARATION TO INCLUDE COMPACTION, BEARING CAPACITY, MOISTURE CONTENT, SELECT FILL, EXCAVATION DEPTHS, ETC. PER THE SECTION TITLED "FOUNDATION NOTES" ON THIS SHEET, FOR ALL SOILS UNDERNEATH THE FOUNDATIONS OF THIS BUILDING. ALSO REFER TO CHAPTER 17 OF THE IBC FOR SPECIAL INSPECTION REQUIREMENTS.

SI2. CONCRETE FOUNDATIONS - A THIRD PARTY TESTING AND INSPECTION COMPANY SHALL CERIFY THAT THE FOUNDATIONS ARE PLACED PER THE STRUCTURAL PLANS, NOTES, AND DETAILS. ALSO REFER TO CHAPTER 17 OF THE IBC FOR SPECIAL INSPECTION REQUIREMENTS.

SI3. STRUCTURAL STEEL - A THIRD PARTY TESTING AND INSPECTION COMPANY SHALL CERTIFY THAT ALL STRUCTURAL STEEL AND OTHER MISCELLANEOUS METAL BUILDING COMPONENTS ARE INSTALLED PER THE METAL BUILDING PLANS, NOTES, AND DETAILS. ALSO REFER TO SECTION 1705.2 OF THE IBC & AISC 341 & 360 FOR SPECIAL INSPECTION REQUIREMENTS.

MISCELLANEOUS:

M1. IF STRUCTURAL OR ARCHITECTURAL PLANS AND SPECIFICATIONS DIFFER FROM THE REQUIRED MINIMUM STANDARDS SET FORTH IN THE BUILDING CODES AND ORDINANCES OF ALL GOVERNING AGENCIES, THE CODES AND ORDINANCES SHALL GOVERN.

M2. THE STRUCTURAL ENGINEER SHALL NOT BE RESPONSIBLE FOR ANY WATERPROOFING, FLASHING, WALL OR ROOF ASSEMBLY DETAILING (CHAPTERS 14 & 15 OF IBC), AS THESE ARE NOT WITHIN THE SCOPE OF SERVICES OF THE STRUCTURAL ENGINEER FOR THIS PROJECT. ALL WATERPROOFING AND FLASHING OF THE ROOF AND WALLS SHALL BE THE RESPONSIBILITY OF THE ARCHITECT AND/OR CONTRACTOR. DRAINAGE AREA CALCULATIONS, DOWNSPOUT SIZING, AND OVERFLOW DRAINS SHALL BE THE RESPONSIBILITY OF THE ARCHITECT AND/OR CONTRACTOR.

M3. IT IS NOT WITHIN THE SCOPE OF THE STRUCTURAL ENGINEER TO SHOW OR PROVIDE FIRE RATINGS OR RATED ASSEMBLIES FOR THE STRUCTURAL MEMBERS, NOT OF THE VARIOUS BUILDING ASSEMBLIES.

M4. WHERE CONFLICTS EXIST BETWEEN THE PROJECT SPECIFICATIONS AND/OR WITHIN THE STRUCTURAL PLANS AND DETAILS, THE MORE RESTRICTIVE SHALL GOVERN. THE CONTRACTOR SHALL BRING THE DISCREPANCY TO THE ATTENTION OF THE ARCHITECT AND ENGINEER.

M5. THE ELEVATIONS SHOWN ON THE STRUCTURAL SET OF PLANS ARE BASED UPON A FINISHED FLOOR ELEVATION OF 100'-0", AND NOT AN ELEVATION RELATIVE TO SEA LEVEL. TAKE THIS INTO CONSIDERATION DURING CONSTRUCTION.

M7. ALL PLUMBING PENETRATIONS IN THE FOUNDATION SHALL BE SLEEVED AND/OR PLACED PRIOR TO THE PLACEMENT OF CONCRETE. THE CONTRACTOR SHALL NOT CORE DRILL THROUGH THE CONCRETE FOUNDATION FOR PENETRATIONS UNLESS SPECIFICALLY APPROVED BY THE STRUCTURAL ENGINEER. IF CORE DRILLING IS REQUIRED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH PLUMBING / STRUCTURAL CONFLICTS THAT MAY OCCUR, INCLUDING ANY STRUCTURAL REPAIRS, ADDITIONAL STRUCTURAL MEMBERS, AND THE STRUCTURAL ENGINEER'S TIME ON AN HOURLY RATE TO RESOLVE ANY CONFLICTS.

M8. REFER TO THE ARCHITECTURAL DRAWINGS FOR THE DIMENSIONAL LOCATIONS FOR ALL BEARING AND NON-BEARING STUD WALLS. BE AWARE THAT THE ARCHITECTURAL DIMENSIONS MAY BE TO EDGE OF SHEATHING INSTEAD OF EDGE OF STUDS.

M9. THE ENGINEERING SERVICES PROVIDED BY KWS ARE CONDUCTED IN A MANNER CONSISTENT WITH THAT LEVEL OF CARE AND SKILL ORDINARILY EXCERCISED BY MEMBERS OF THE PROFESSION CURRENTLY PRACTICING UNDER SIMILAR CONDITIONS. NO WARRANTIES, EXPRESSED OR IMPLIED, ARE MADE.

M10. A SEPARATE STRUCTURAL DETAIL IS NOT PROVIDED FOR EVERY SINGLE CONDITION THAT OCCURS IN THIS BUILDING, AS THAT WOULD NOT BE COMMON. LACK OF A DETAIL FOR A PARTICULAR CONDITION DOES NOT CONSTITUTE AN "ERROR OR OMISSION". THE CONTRACTOR SHALL BRING UP ANY QUESTIONS THAT ARISE WHERE THE STRUCTURAL PLANS AND DETAILS DO NOT PROVIDE SPECIFIC INSTRUCTIONS, AND THE CONTRACTOR IS UNSURE HOW TO PROCEED.

M11. WHERE THERE ARE CONFLICTS BETWEEN THE STRUCTURAL DRAWINGS AND THE DRAWINGS OF OTHER DISCIPLINES, THE CONTRACTOR SHALL BRING THIS TO THE ATTENTION OF THE ARCHITECT AND STRUCTURAL ENGINEER IMMEDIATELY. DO NOT PROCEED WITH CONSTRUCTION OF AREAS WHERE THERE ARE CONFLICTS BETWEEN DISCIPLINES UNTIL THEY HAVE BEEN RESOLVED.

LIGHT GAGE STEEL:

LG1. INTERIOR WALL LIGHT GAGE METAL STUDS SHALL BE SIZED BASED UPON A 5 psf LATERAL LOAD AND A MAXIMUM LATERAL DEFLECTION OF L/360. EXTERIOR METAL WALL STUDS SHALL BE PER THE PLANS, OR SHALL BE SIZED AND BRACED BY THE CONTRACTOR TO LIMIT THE LATERAL DEFLECTIONS TO L/360 MAXIMUM. (TYPICAL)

LG2. STRUCTURAL LIGHT GAGE FRAMING SHALL BE PER THE STRUCTURAL PLANS, SECTIONS, DETAILS, SCHEDULES, AND NOTES.

LG3. THE CONTRACTOR IS TO PROVIDE ENGINEERED AND SEALED SHOP DRAWINGS FOR ALL LIGHT GAGE WALLS (BOTH INTERIOR AND EXTERIOR WALLS, BOTH BEARING AND NON-LOAD BEARING), LIGHT GAGE FLOORS, AND ANY LIGHT GAGE FRAMED ROOFS OR CEILINGS.

FIRE SPRINKLERS:

FS1. IT IS NOT IN THE SCOPE OF THE FOUNDATION ENGINEER (KWS STRUCTURAL INC.) TO INSPECT OR DESIGN THE INSTALLATION AND ATTACHMENT OF FIRE SPRINKLER SYSTEMS. THE METAL BUILDING COMPANY SHALL DESIGN ALL STEEL COLUMNS, STEEL BEAMS, AND ROOF PURLINS TO SUPPORT THE WEIGHT OF THE SPRINKLER WATER FILLED PIPES PLUS A TEMPORARY INSTALLER POINT LOAD OF 250 POUNDS.

FS2. THE DESIGN AND INSTALLATION OF THE FIRE SPRINKLER SYSTEM SHALL BE BY A QUALIFIED FIRE SPRINKLER COMPANY. IF ANY STRUCTURAL ENGINEERING IS REQUIRED FOR THE DESIGN, INSPECTION, OR ATTACHMENT TO THE STRUCTURE, THIS ENGINEERING SHALL BE DONE BY THE METAL BUILDING COMPANY, OR BY A THIRD PARTY ENGINEER PAID FOR BY THE OWNER OR THE FIRE SPRINKLER COMPANY.

STRUCTURAL STEEL:

S1. ALL WIDE FLANGE SECTIONS AND CHANNELS SHALL BE ASTM A992, GRADE 50. ALL BARS AND PLATES SHALL BE ASTM A572, GRADE 50. ALL ANGLES SHALL BE ASTM A36, GRADE 36. ALL HSS TUBES SHALL BE ASTM A500, GRADE B. ALL PIPE SHALL BE ASTM A53, GRADE B.

S2. STRUCTURAL STEEL SHALL BE DESIGNED, DETAILED, FABRICATED, AND ERECTED IN ACCORDANCE WITH THE A.I.S.C. "STEEL CONSTRUCTION MANUAL", FIFTEENTH EDITION.

S3. ALL SHOP AND FIELD WELDING SHALL BE EXECUTED IN ACCORDANCE WITH THE LATEST EDITION OF THE AMERICAN WELDING SOCIETY SPECIFICATIONS. ALL WELDS SHALL BE CONTINUOUS WHERE LENGTH IS NOT GIVEN. ALL WELDS SHALL DEVELOP THE FULL STRENGTH OF THE WEAKER MEMBER. ALL WELDS SHALL BE MADE WITH E70XX ELECTRODES.

S4. SHOP CONNECTIONS SHALL BE WELDED UNLESS NOTED OTHERWISE. FIELD CONNECTIONS SHALL BE AS INDICATED ON THE DRAWINGS.

S5. ALL ERECTION BOLTS SHALL BE A.S.T.M. A-325. ALL PERMANENT BOLTS SHALL BE A.S.T.M. A-325, BEARING TYPE, 3/4 INCH DIAMETER, UNLESS NOTED. ANCHOR BOLTS SHALL BE A.S.T.M. F-1554, GRADE 55, U.N.O., WITH LENGTHS AND HOOKS AS SHOWN ON THE DRAWINGS. THE MINIMUM YIELD STRENGTH FOR ANCHOR BOLTS AND HEADED EMBED STUDS SHALL BE 50 KSI.

S6. ALL STRUCTURAL STEEL, EXCEPT EMBEDDED ITEMS, SHALL BE PAINTED WITH ONE SHOP COAT OF RUST INHIBITIVE PAINT AND FIELD RETOUCHED WHERE THE SHOP COAT HAS BEEN DAMAGED DUE TO PLACING, HANDLING, OR WELDING. GALVANIZE ALL STEEL ITEMS SET IN, ON, OR AT THE BUILDING EXTERIOR. STEEL LINTELS AND SHELF ANGLES SUPPORTING MASONRY SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION. ALL EXPOSED STRUCTURAL STEEL AND ANY STEEL OUTSIDE OF THE AIR CONDITIONED BUILDING ENVELOPE SHALL BE BOTH GALVANIZED AND PAINTED.

S7. UNLESS NOTED ON THE DRAWINGS, ALL BEAM CONNECTIONS ARE SIMPLE FRAMED CONNECTIONS. UNLESS NOTED OTHERWISE ON THE STRUCTURAL PLANS AND/OR DETAILS, ALL CONNECTION PLATES, BOLTS, AND WELDS SHALL BE DETAILED FOR A REACTION FORCE EQUAL TO OR GREATER THAN ONE-HALF OF THE TOTAL ALLOWABLE UNIFORM LOAD FOR THE ACTUAL LENGTH OF THE SMALLER MEMBER BEING CONNECTED, BASED UPON THE TABLES OF UNIFORM LOAD CONSTANTS, SECTION TWO, OF THE AISC "MANUAL OF STEEL CONSTRUCTION," THIRTEENTH EDITION. WHERE END REACTIONS OR MOMENTS ARE SHOWN ON THE DRAWINGS, THE CONNECTION SHALL BE DESIGNED TO TRANSFER THESE FORCES.

S8. STRUCTURAL STEEL SHOP DRAWINGS SHOWING PLACEMENT OF STRUCTURAL STEEL, CONNECTION DETAILS, ETC., SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO FABRICATION OF MATERIALS.

S9. ALL FULL PENETRATION WELDS SHALL BE VISUALLY INSPECTED BY AN APPROVED TESTING LABORATORY. THE ENGINEER OF RECORD SHALL REVIEW THE RESULTS OF THE VISUAL INSPECTION AND MAY, AT HIS OPTION, REQUIRE ULTRA-SONIC TESTING, ASTM A435, BEFORE CONNECTIONS ARE APPROVED.

S10. ROOF DECK: ROOF DECK SHALL BE 1.5" DEEP, 22 GAGE "B" DECK BY VULCRAFT (OR EQUAL) WITH THE G60 GALVANIZED FINISH. THE PANELS SHALL BE INSTALLED WITH THE NARROW RIBS DOWN ONTO THE ROOF TRUSSES AND THE WIDE RIBS UP. ROOF DECK SHALL BE ATTACHED TO SUPPORTING STEEL WITH 5/8" DIAMETER FULL FUSION PUDDLE WELDS. ALL WELDS SHALL BE MADE AWS E70 ELECTRODES AND METAL AROUND WELDS SHALL BE COMPLETELY INTACT AFTER WELDING. EDGES OF ADJOINING DECK SHEETS SHALL BE FASTENED TOGETHER USING BUILDEX #10 TEK SELF-DRILLING SCREWS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND DECK SETTING PLANS. ROOF DECK FASTENER LAYOUT SHALL BE IN A 36/7 PATTERN WITH 3 SIDELAP FASTENERS PER SPAN. END LAPS SHALL BE 2 INCHES AND SHALL OCCUR OVER A SUPPORT.

S11. FRAMING OF THE LIGHT GAGE COMPONENTS SHALL BE PER THE STRUCTURAL PLANS AND DETAILS, AND PER THE PROJECT SPECIFICATIONS.

S12. GALVANIZE STEEL ITEMS SET IN, ON, OR AT THE BUILDING EXTERIOR. STEEL LINTELS AND SHELF ANGLES SUPPORTING MASONRY SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION.

S13. NOT ALL STRUCTURAL STEEL CONNECTIONS ARE DETAILED IN THIS SET OF DRAWINGS. THE STEEL DETAILER SHALL PROVIDE CONNECTION DESIGN TO BE REVIEWED DURING THE SHOP DRAWING PHASE FOR ALL CONNECTIONS NOT SHOWN IN THE STRUCTURAL PLANS OR DETAILS.

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DATE: 02/14/2025

ISSUE:

REVISION:

SHEET TITLE:
STRUCTURAL
GENERAL NOTES

S1.1

LOAD BEARING LIGHT GAGE WALL SCHEDULE

MARK	FLOOR LEVEL SUPPORTED	TYPICAL STUD FRAMING
W1 3 5/8" LOAD BEARING WALL UNO	SUPPORTING ROOF RAFTERS OR CEILING JOISTS	362S200-54 (50) AT 24" O.C.
W2 6" LOAD BEARING WALL UNO	SUPPORTING ROOF RAFTERS OR CEILING JOISTS	600S200-54 (50) AT 24" O.C.
W3	WHERE NOTED	-----

NOTES:

1. LOAD BEARING WALL STUDS SHOWN IN THE TABLE ABOVE SHALL BE SSMA STUDS.
2. PROVIDE A PATH TO THE FOUNDATION FOR ALL LOADS.
3. FOR WALL BRIDGING, USE 54 MIL CRC, TSN BRIDGEBAR, OR EQUAL, AT 48" ON CENTER FOR ALL 43 MIL AND 54 MIL LOAD BEARING WALLS. USE DIAGONAL X-BRACING ANCHORAGE IN ALL LOAD BEARING WALLS AT A SPACING NOT TO EXCEED 12'-0" ON CENTER PER TSN DETAILS.
4. ALL TRACK IS TO MATCH STUD GAGE, EXCEPT THAT THE TOP TRACKS FASTENED TO THE ROOF JOISTS AND RAFTERS SHALL BE 16 GAGE MINIMUM.
5. YIELD STRESS FOR 16, 14, AND 12 GAGE IS 50 KSI MINIMUM. (TYPICAL)
6. REFER TO THE STRUCTURAL DETAILS AND THE SUPPLIER FOR TYPICAL WALL DETAILS.
7. THE SIZES PROVIDED ARE BASED UPON A LATERAL DEFLECTION OF LESS THAN L/360.
8. ON SIDES OF OPENINGS OR FRAMED INFILLS, STUDS MAY NEED TO BE DOUBLED OR TRIPLED. STUDS SHALL BE DOUBLED OR TRIPLED AT ALL BUILDING CORNERS.

(W3) = NON-TYPICAL WALL TYPE MARK; REFER TO TABLE ABOVE

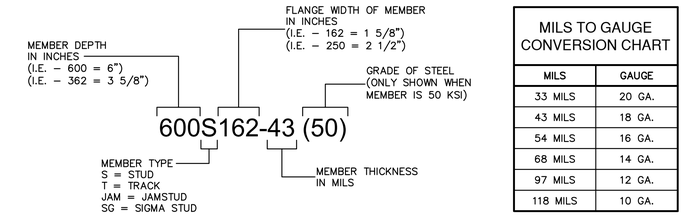
LOAD BEARING HEADER SCHEDULE

MARK	FLOOR LEVEL SUPPORTED	HEADER MEMBERS	JAMB STUD MEMBERS	DETAIL
H1	SUPPORTING ROOF ONLY	(2) 1200S162-68 (50) (2) 362T150-43*	362S200-68 JACK + 362S200-68 KING STUD	S1.201
H2 TYP. FOR OPENINGS UP TO 3'-4" UNO	SUPPORTING ROOF ONLY	(2) 600S200-54 (50) (2) 600T150-54*	600S200-54 JACK + 600S200-54 KING STUD	S1.201
H3	PER PLAN	---	---	S1.201

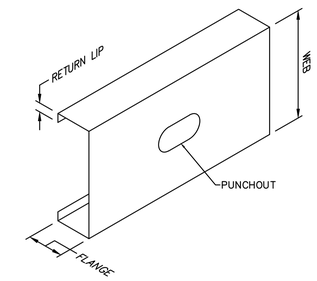
NOTES:

1) ALL HEADER MATERIAL IS TO BE UNPUNCHED.
2) YIELD STRESS FOR 16, 14, AND 12 GAGE IS 50 KSI MINIMUM. (TYPICAL)
3) HEADERS SHALL BE BOXED WITH A TOP AND BOTTOM RUNNER WHERE NOTED ON THE TABLE ABOVE.
4) REFER TO THE STRUCTURAL DETAILS AND THE SUPPLIER FOR TYPICAL DETAILS.
6) * USE A MIN. 54 MIL TOP TRACK FOR ALL ROOF LOAD BEARING WALLS AND HEADERS.
7) THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN, DETAILING, AND CONSTRUCTION OF ALL NON-LOAD BEARING WALL.

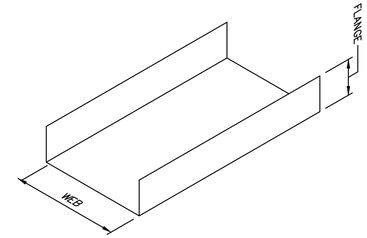
(H3) = LIGHT GAGE HEADER MARK; REFER TO TABLE ABOVE



MILS TO GAUGE CONVERSION CHART	
MILS	GAUGE
33 MILS	20 GA.
43 MILS	18 GA.
54 MILS	16 GA.
68 MILS	14 GA.
97 MILS	12 GA.
118 MILS	10 GA.



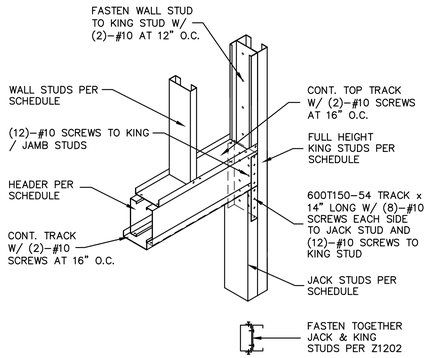
STUD SECTION



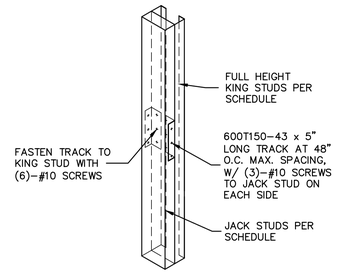
TRACK SECTION

LOOSE STEEL ANGLE LINTEL SCHEDULE FOR MASONRY VENEER

CLEAR SPAN	MINIMUM ANGLE SIZE FOR 4" MASONRY	LINTEL NOTES
4'-0" OR LESS	L 3½ x 3½ x 1/4	1) PROVIDE 8" MINIMUM BEARING FOR ALL STEEL ANGLE LINTELS SPANNING MORE THAN 2'-6" (MIN. 4" FOR UNDER 2'-6"). PROVIDE CONTINUOUS LINTEL ANGLES BETWEEN ADJACENT EXTERIOR OPENINGS SEPARATED BY LESS THAN 1'-4".
5'-0"	L 3½ x 3½ x 5/16	
6'-0"	L 4 x 3½ x 5/16	2) THIS TABLE APPLIES ONLY TO NON-LOAD BEARING MASONRY VENEER.
7'-0"	L 5 x 3½ x 5/16	
8'-0"	L 6 x 3½ x 3/8	3) MEMBER SIZES INDICATED WITHIN THIS TABLE SHALL ONLY SUPPLEMENT INFORMATION FOUND ELSEWHERE IN THIS SET OF PLANS AND SHALL NOT SUPERCEDE MEMBER SIZES EXPLICITY NOTES ON SECTIONS, DETAILS, OR PLANS.
UP TO 10'-0"	L 7 x 4 x 3/8	
OVER 10'-0"	SEE PLAN OR DETAILS	4) ALL LINTEL ANGLES SHALL BE INSTALLED WITH THE LONG LEG VERTICAL.



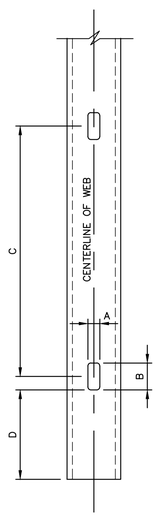
S1.201 HEADER-JAMB DETAIL
3/4"= 1'-0"



S1.202 JACK TO KING DETAIL
3/4"= 1'-0"

LIGHT GAGE GENERAL NOTES:

1. VERIFY ALL DIMENSIONS AND WALL THICKNESSES WITH THE FINAL ARCHITECTURAL DRAWINGS. BRING TO THE ATTENTION OF THE ARCHITECT AND/OR ENGINEER ANY DISCREPANCIES THAT ARE FOUND TO EXIST.
2. MECHANICAL STUD BRIDGING SHALL BE USED IN ALL CASES WHERE INDICATED. INSTALLATION OF BRIDGING MUST BE COMPLETED BEFORE ANY LOADS ARE APPLIED TO THE SYSTEM. STUDS SHALL BE BRACED AGAINST ROTATION BY SHEATHING ON BOTH SIDES OF ALL WALLS, OR MAY BE TEMPORARILY BRACED.
3. ALL FRAMING COMPONENTS SHALL BE CUT SQUARELY FOR ATTACHMENT TO PERPENDICULAR MEMBERS. STUD ENDS MUST SEAT TIGHTLY INTO TRACKS IN ALL BEARING APPLICATIONS. CODE LIMITS THE GAPS BETWEEN TRACKS AND STUDS TO NO MORE THAN 1/8 INCHES.
4. NO SPLICES IN STUDS, JOISTS, HEADERS, OR OTHER LOAD CARRYING MEMBERS MAY BE MADE WITHOUT PRIOR ENGINEERING REVIEW AND SPECIFIC DETAILS FOR ANY SUCH REVISION TO THE DESIGN.
5. THE DESIGN VALUES USED IN THESE DRAWINGS ARE BASED UPON PUBLISHED MANUFACTURER SPECIFICATIONS AND SOFTWARE PROGRAMS. ALL SCREW AND WELD VALUES ARE BASED ON THE AISI NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS. WELDING PROCEDURE SHALL BE IN ACCORDANCE WITH AWS-D1.3-98. CONTRACTOR SHALL CONFIRM WITH THE MANUFACTURER THAT THE CONNECTORS HE INTENDS TO USE MEET OR EXCEED THE DESIGN VALUES REQUIRED.
6. THE CONTRACTOR IS RESPONSIBLE TO NOT OVER LOAD MEMBERS DURING CONSTRUCTION OR ERECTION AND TO SUPPLY ADEQUATE TEMPORARY BRACING UNTIL PERMANENT BRIDGING PROVIDING STABILITY TO BOTH FLANGES IS IN PLACE.
7. TOUCH-UP ALL WELDS WITH ZINC-RICH PAINT (ASTM A-780).
8. FIELD CUTTING OF COLD-FORMED MEMBERS SHALL BE DONE BY SAWING OR SHEARING. TORCH CUTTING OF COLD-FORMED MEMBERS IS NOT PERMITTED.
9. DO NOT BEAR OR CONNECT COLD-FORMED MEMBERS WITHIN TEN INCHES OF THE PUNCHED OPENINGS IN THE MEMBER WEBS UNLESS THE MEMBERS ARE REINFORCED WITH A MINIMUM 18" LONG UNPUNCHED TRACK OR STUD AT THE PUNCH OPENING. THE TRACK OR STUD REINFORCING PIECE SHALL BE THE SAME SIZE AND GAGE AS THE PUNCHED MEMBER. FASTEN THE REINFORCING PIECE TO THE MEMBER WITH A MINIMUM OF FOUR SCREWS.
10. SMOKE WALLS, ONE HOUR RATED WALLS, FIRE BARRIERS, AND FIRE WALLS SHALL BE DETAILED AND LOCATED AS SHOWN ON THE ARCHITECTURAL DRAWINGS. THESE WALL SHALL CONSIST OF WALL STUDS WITH A MINIMUM THICKNESS (IN SOME INSTANCES 33 MILS) SO AS TO MEET THE UL FIRE RATED ASSEMBLIES. REFER TO THE ARCHITECTURAL UL ASSEMBLIES FOR THE MINIMUM STUD THICKNESSES FOR NON-BEARING FIRE RATED WALLS.

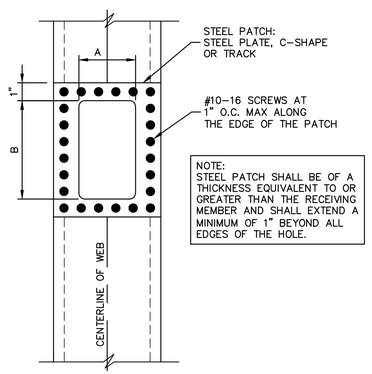


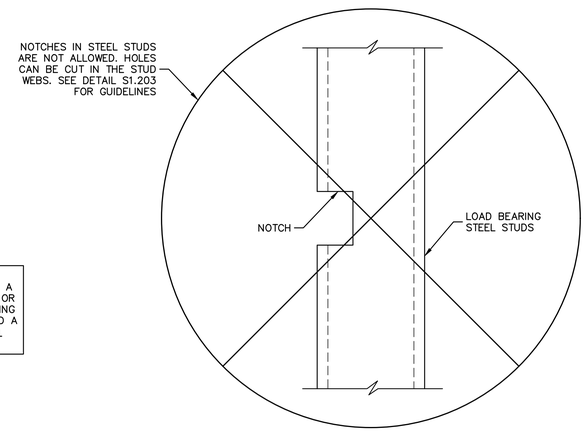
MAXIMUM HOLE SIZE WITH REINFORCING				
STUD SIZE	MAXIMUM HOLE DEPTH (A)	MAXIMUM HOLE LENGTH (B)	MINIMUM HOLE SPACING (C)	MINIMUM HOLE EDGE DISTANCE (D)
3 5/8" STUD	2"	6"	16"	10"
6" STUD	3 5/8"	6"	16"	10"
8" STUD	4 5/8"	9"	24"	10"
* ALL HEADER MATERIAL TO BE UNPUNCHED; NO PUNCHED HOLES IN STUDS WITHIN 10" TOP & BOTTOM				

MAXIMUM HOLE SIZE WITHOUT REINFORCING (WALL FRAMING)				
STUD SIZE	MAXIMUM HOLE DEPTH (A)	MAXIMUM HOLE LENGTH (B)	MINIMUM HOLE SPACING (C)	MINIMUM HOLE EDGE DISTANCE (D)
3 5/8" STUD	1 1/2"	4"	12"	10"
6" STUD	2 5/8"	4"	16"	10"
* ALL HEADER MATERIAL TO BE UNPUNCHED; NO PUNCHED HOLES IN STUDS WITHIN 10" TOP & BOTTOM				

MAXIMUM HOLE SIZE WITHOUT REINFORCING (ROOR FRAMING)				
STUD SIZE	MAXIMUM HOLE DEPTH (A)	MAXIMUM HOLE LENGTH (B)	MINIMUM HOLE SPACING (C)	MINIMUM HOLE EDGE DISTANCE (D)
10" STUD (16 & 14 GA.)	4 3/4"	6"	24"	10"
* ALL HEADER MATERIAL TO BE UNPUNCHED				

S1.205 MAXIMUM HOLE SIZE IN STUDS DETAIL
N.T.S.





S1.204 NO NOTCHES IN STEEL STUDS
N.T.S.

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2-14-25
Kevin W. Schmuhl

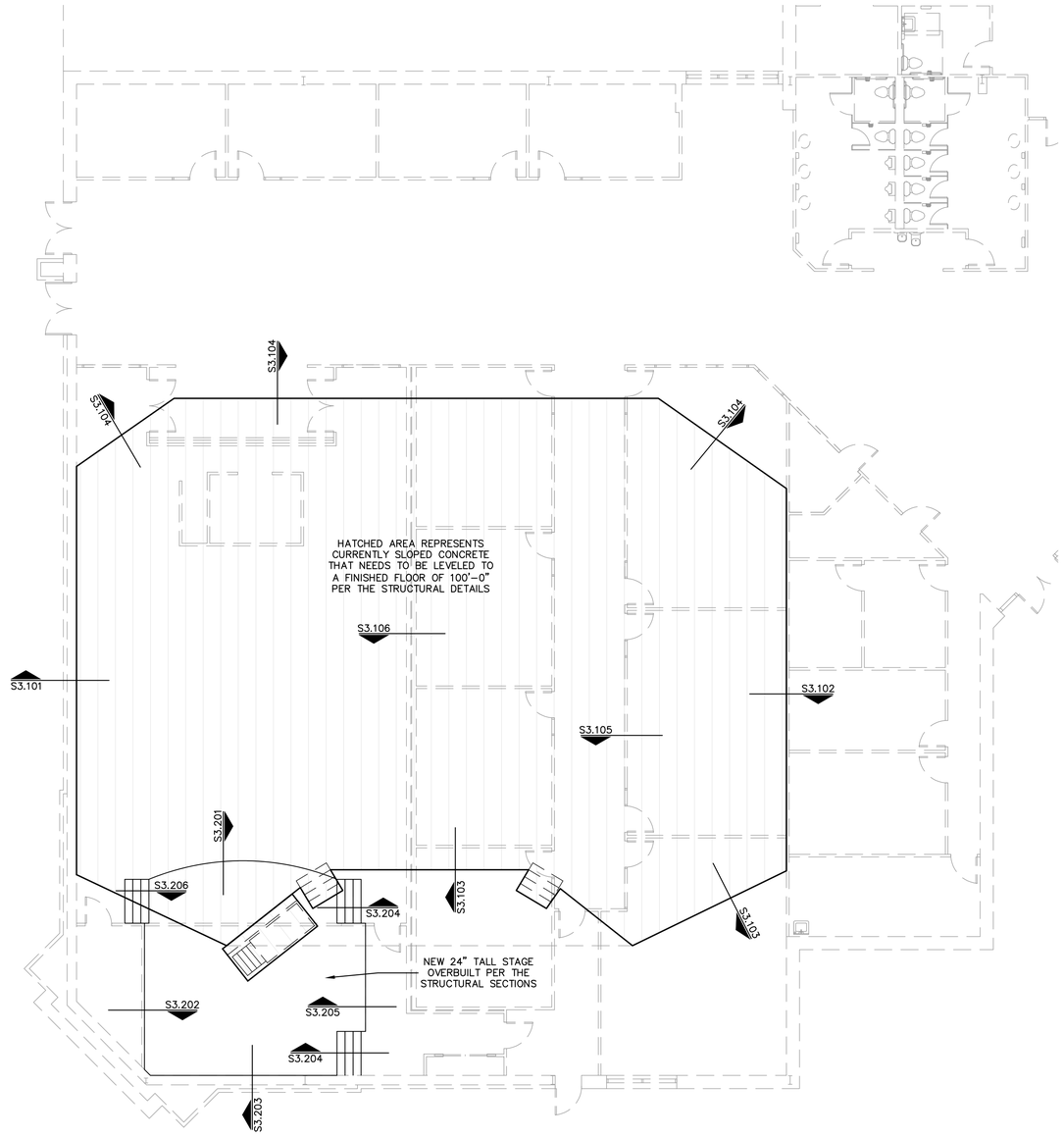
DATE: 02/14/2025

ISSUE:

REVISION:

SHEET TITLE:
LIGHT GAGE NOTES
SCHEDULES AND
DETAILS

S1.2



S2.101 FOUNDATION PLAN
1/8" = 1'-0"

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OLD SANCTUARY
NEW CHAPEL
FOUND. PLAN

S2.1

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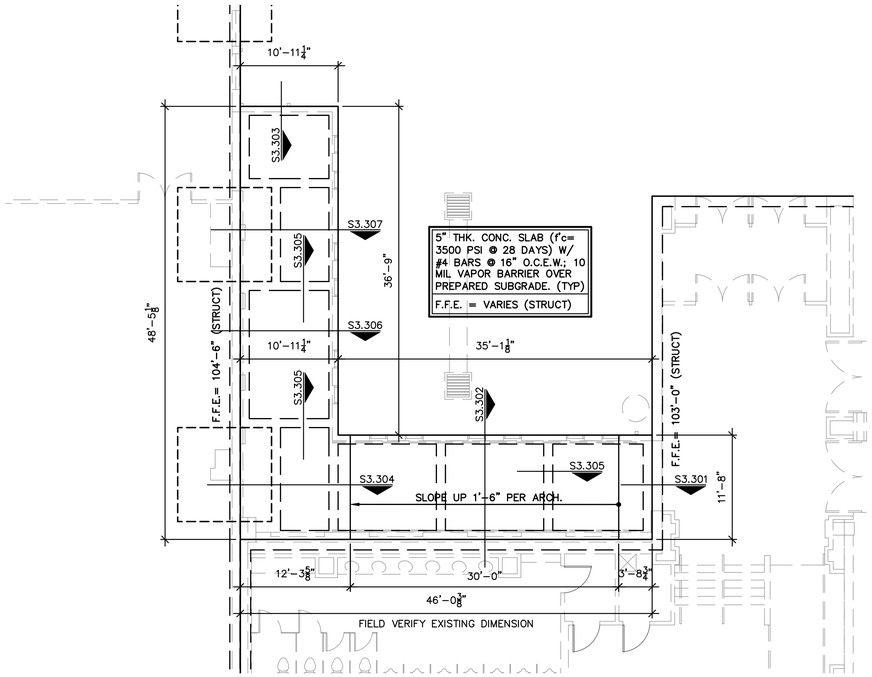
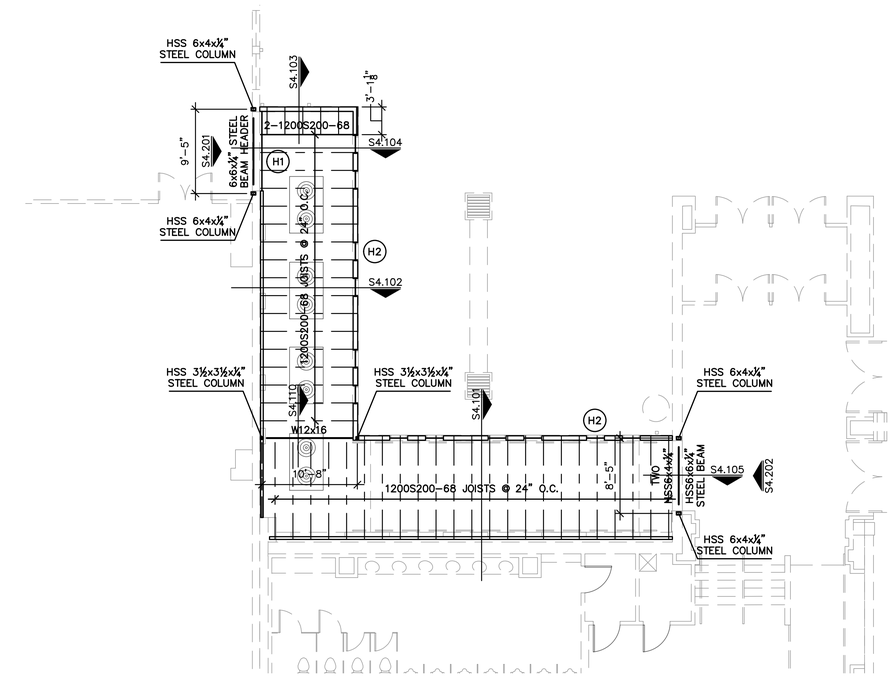


S2.201 NEW CONNECTOR FOUNDATION PLAN
1/8" = 1'-0"



S2.202 NEW CONNECTOR FRAMING PLAN
1/8" = 1'-0"

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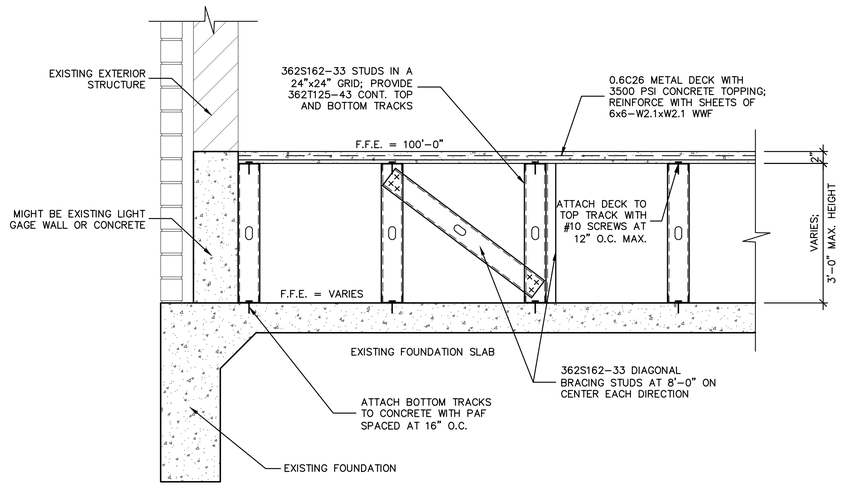
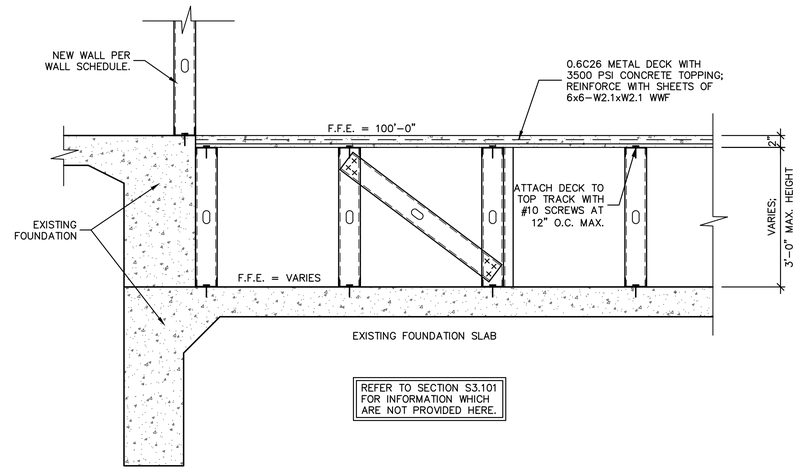
NEW CONNECTOR FOUNDATION & FRAMING PLAN

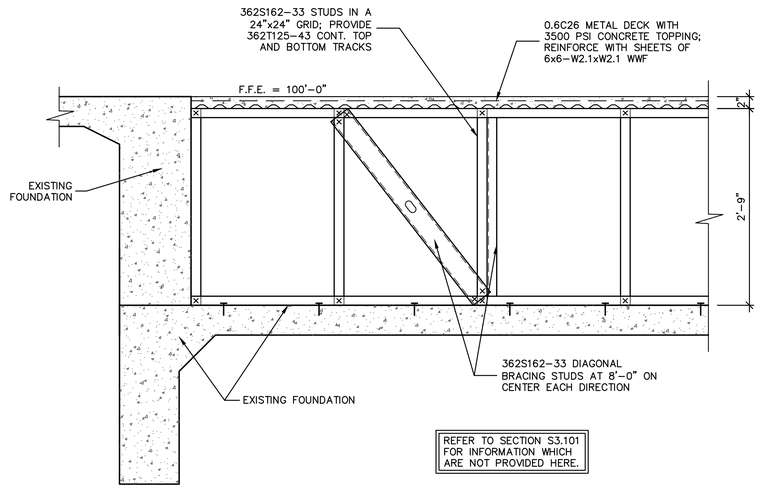
S2.2



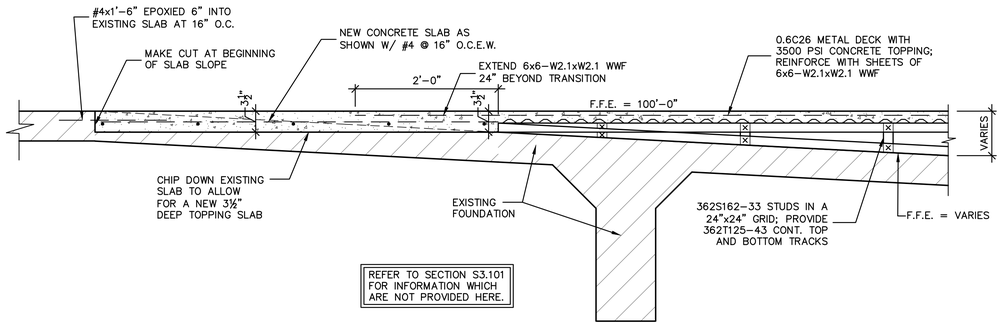
S3.101 SECTION AT PERIMETER
1" = 1'-0"



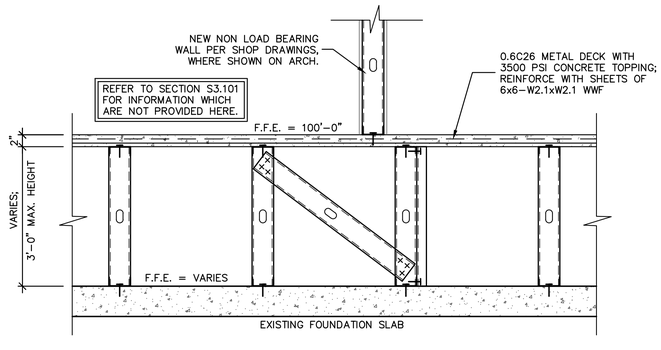
S3.102 SECTION AT INTERIOR SLAB DROP
1" = 1'-0"



S3.103 SECTION AT EXISTING STAGE
1" = 1'-0"



S3.104 SECTION AT INTERIOR SLAB SLOP
1" = 1'-0"



S3.105 SECTION AT INTERIOR SLAB DROP
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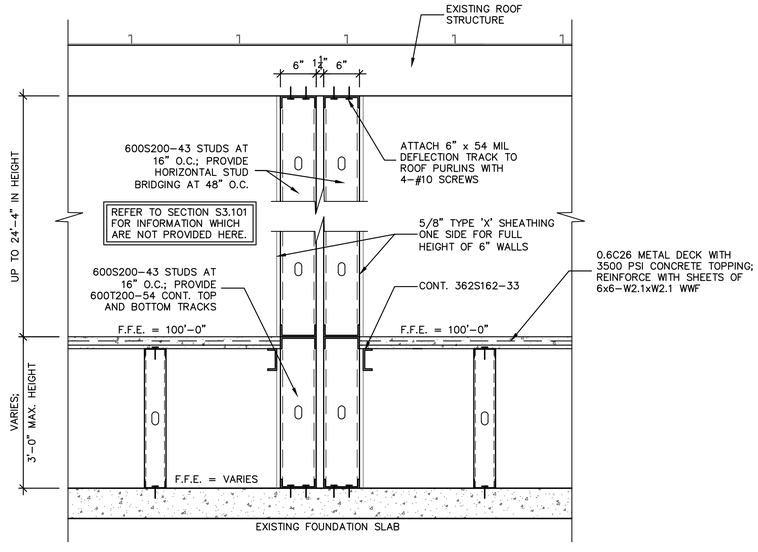

S3.106 SECTION AT INTERIOR DIVIDING WALL
1" = 1'-0"

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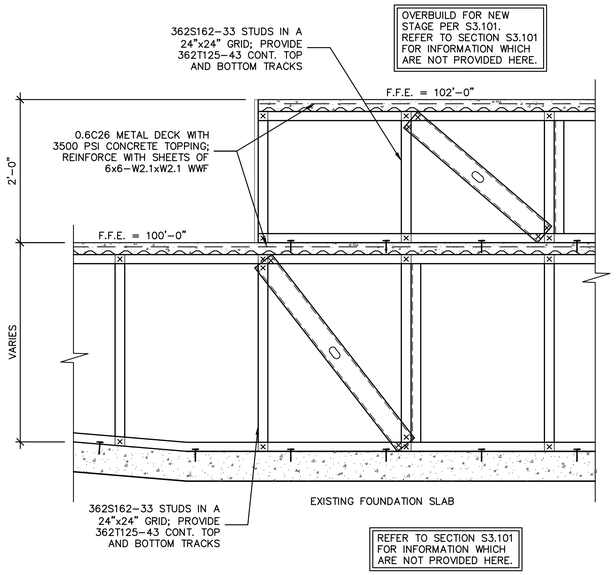
FOUNDATION SECTIONS & DETAILS

S3.1



S3.201 SECTION AT NEW STAGE
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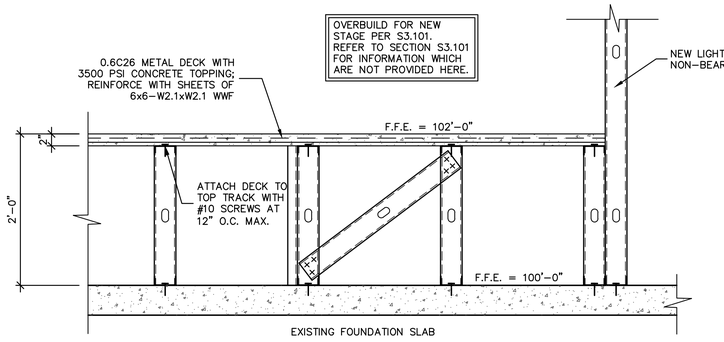

S3.202 SECTION AT NEW STAGE
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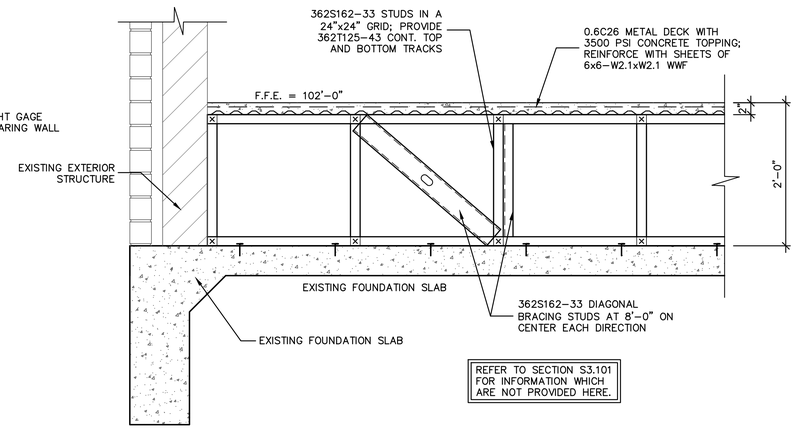

S3.203 SECTION AT NEW STAGE
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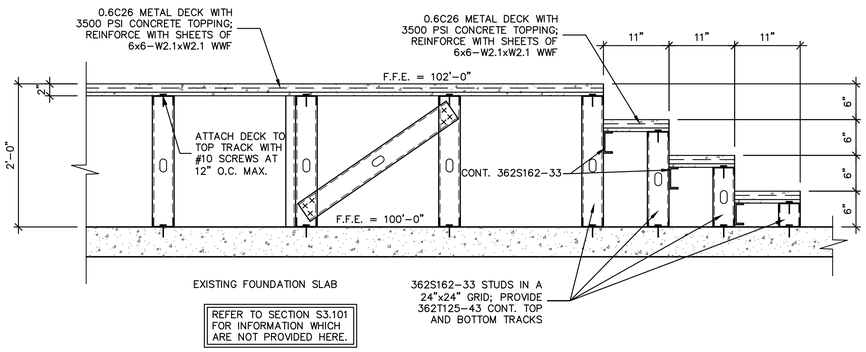
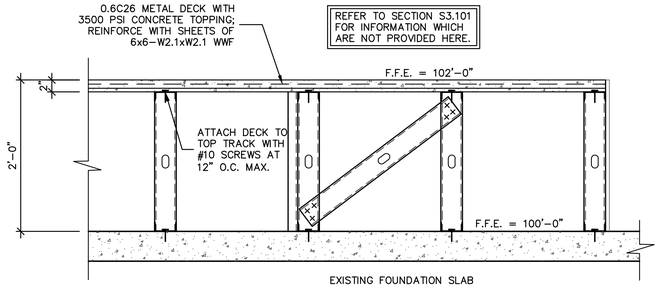


S3.204 SECTION AT NEW STAGE STAIRS
1" = 1'-0"



S3.205 SECTION AT NEW STAGE
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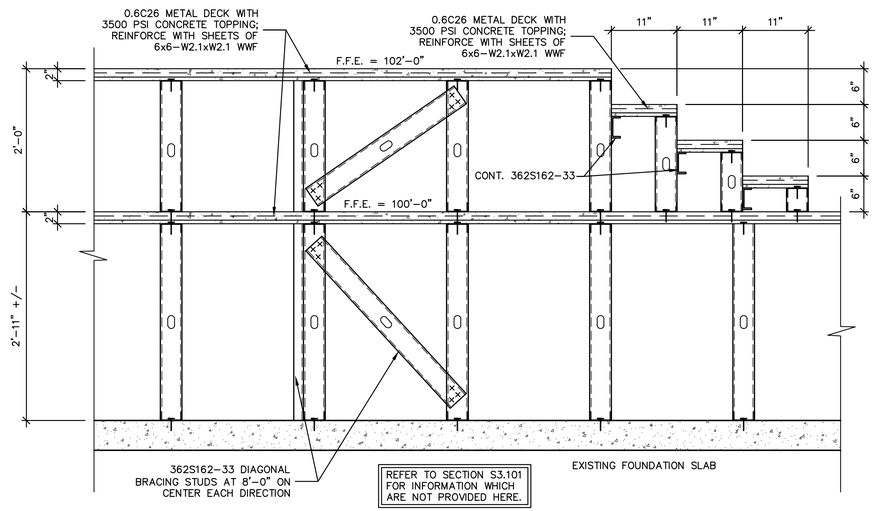

S3.206 SECTION AT NEW STAGE
1" = 1'-0"

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S3.2

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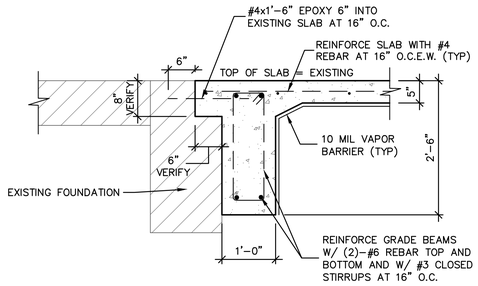
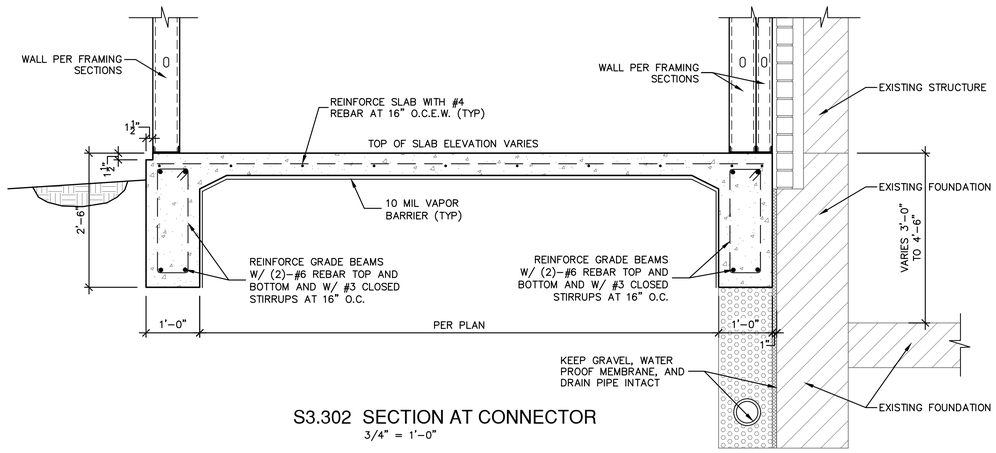


S3.301 SECTION AT CONNECTOR ENTRY
3/4" = 1'-0"



S3.302 SECTION AT CONNECTOR
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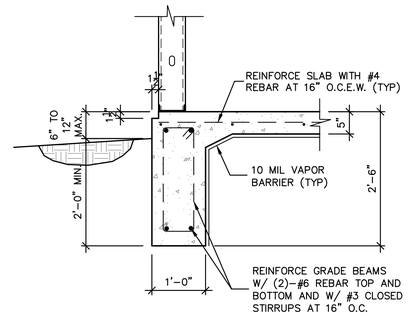
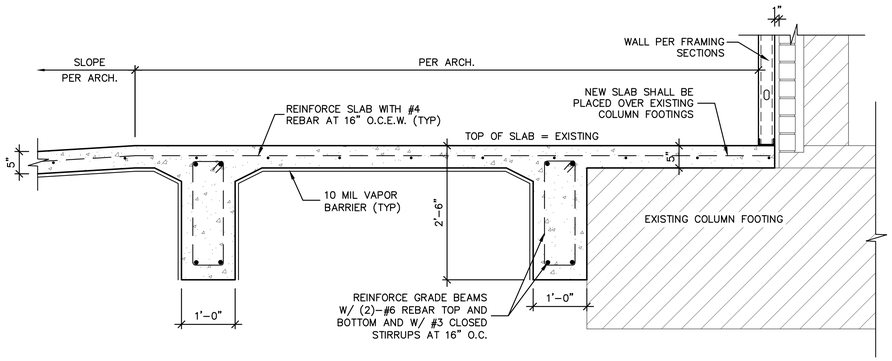


S3.303 FOUNDATION SECTION AT CONNECTOR
3/4" = 1'-0"



S3.304 FOUNDATION SECTION AT CONNECTOR
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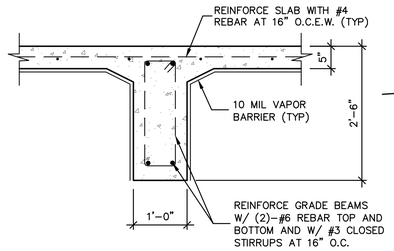

S3.305 SECTION AT CONNECTOR
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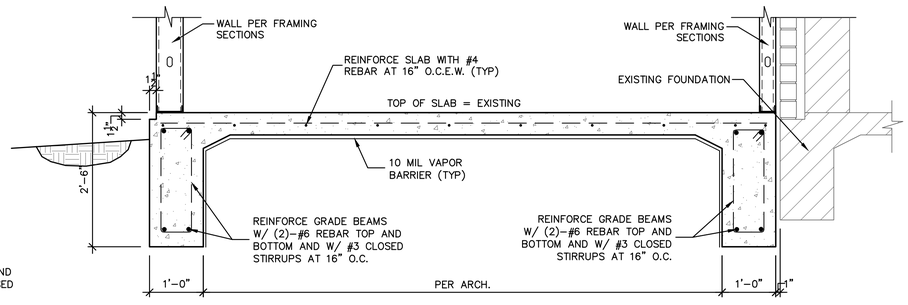

S3.306 FOUNDATION SECTION AT CONNECTOR
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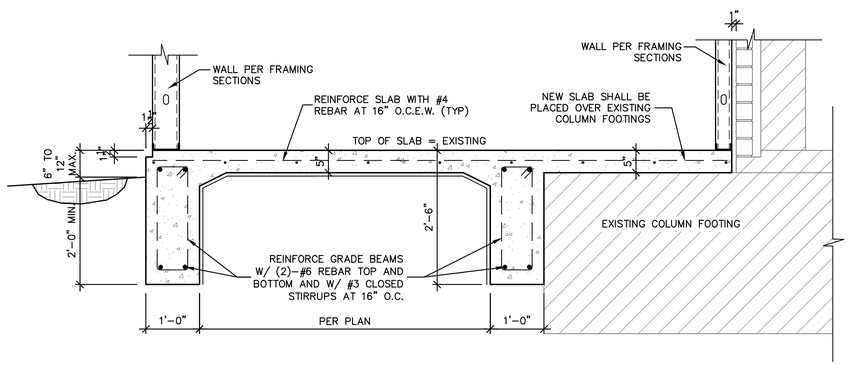
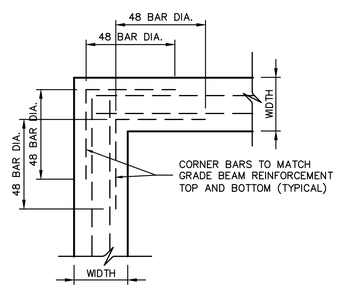
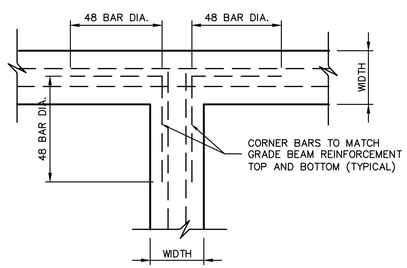


S3.307 FOUNDATION SECTION AT CONNECTOR
3/4" = 1'-0"



S3.308 CORNER BAR DETAIL (TYP.)
3/4" = 1'-0"



S3.309 TYP. INTERSECTION BAR DETAIL
3/4" = 1'-0"

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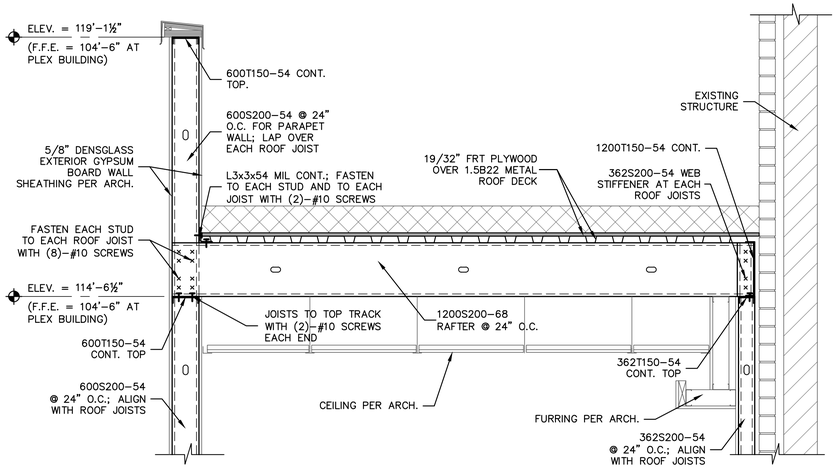
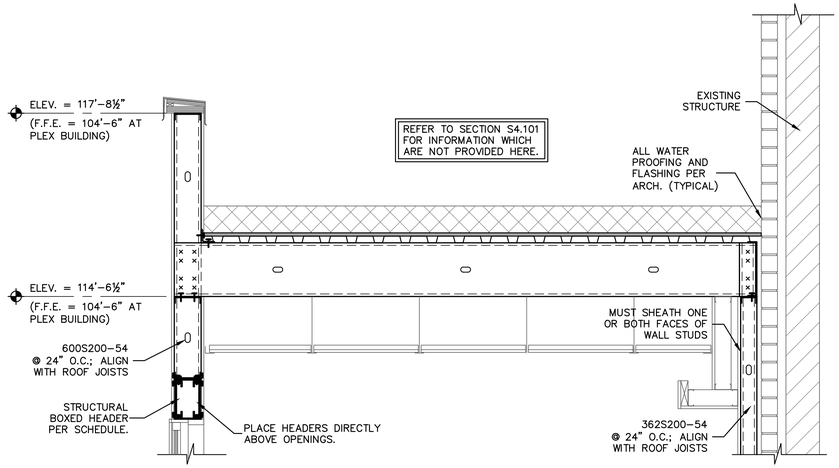
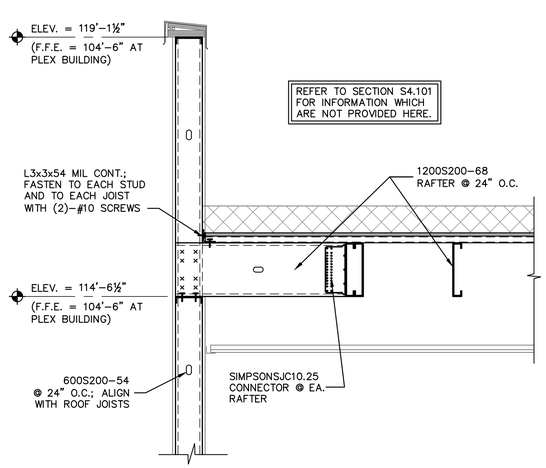
S3.3



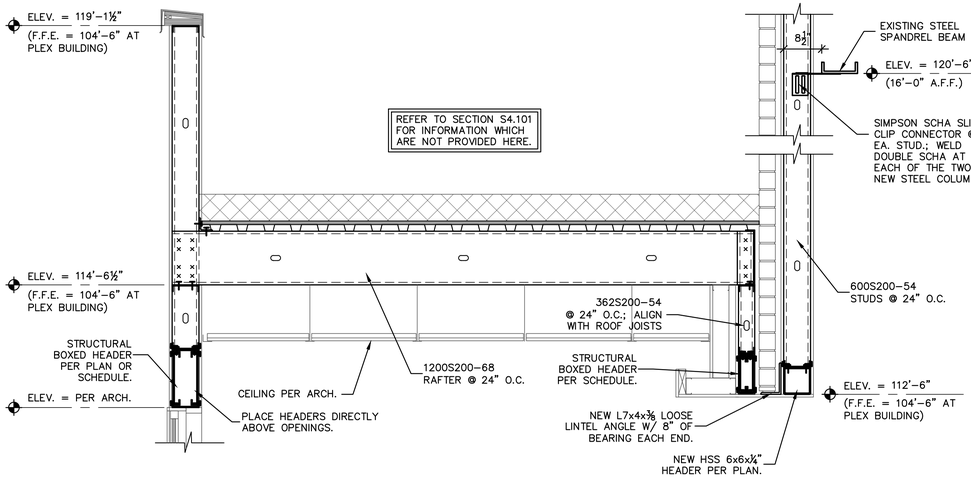
S4.101 FRAMING SECTION AT CONNECTOR
3/4" = 1'-0"



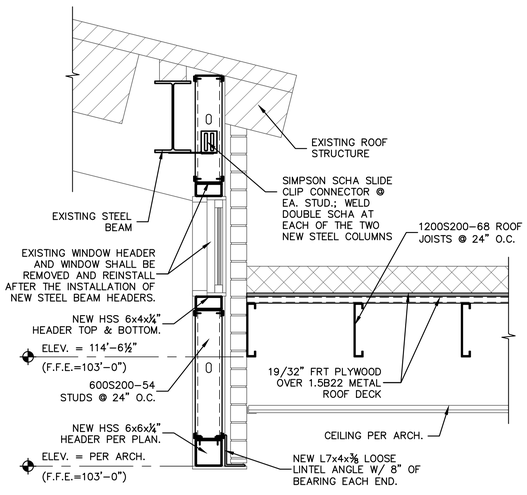
S4.102 FRAMING SECTION AT CONNECTOR
3/4" = 1'-0"



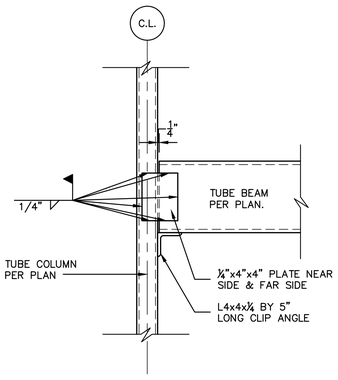
S4.103 FRAMING SECTION AT CONNECTOR
3/4" = 1'-0"



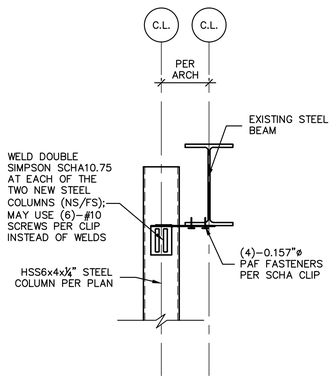
S4.104 FRAMING SECTION AT CONNECTOR
3/4" = 1'-0"



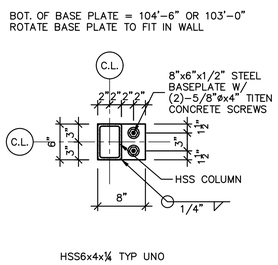
S4.105 FRAMING SECTION AT CONNECTOR
NOT TO SCALE



S4.106 TUBE TO TUBE CONNX.
1" = 1'-0"

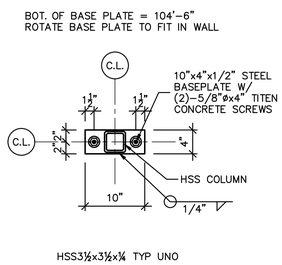


S4.107 COLUMN TO BEAM CONNX.
1" = 1'-0"



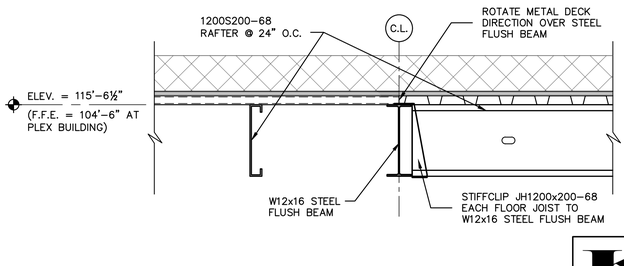
HSS6x4x¼ TYP UNO

S4.108 BASEPLATE 'A'
1" = 1'-0"



HSS3½x3½x¼ TYP UNO

S4.109 BASEPLATE 'B'
1" = 1'-0"



S4.110 SECTION AT FLUSH BEAM
1" = 1'-0"

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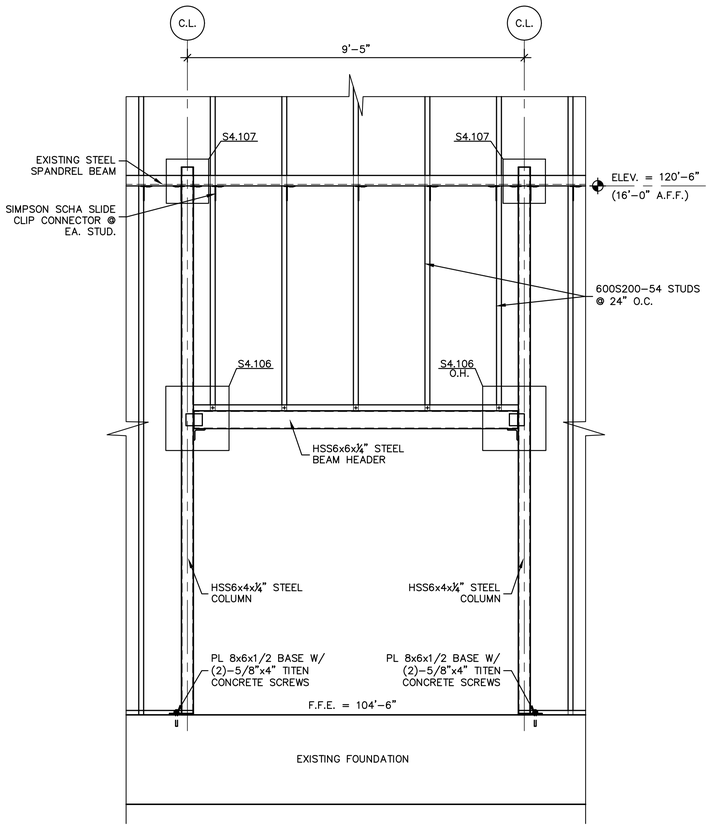
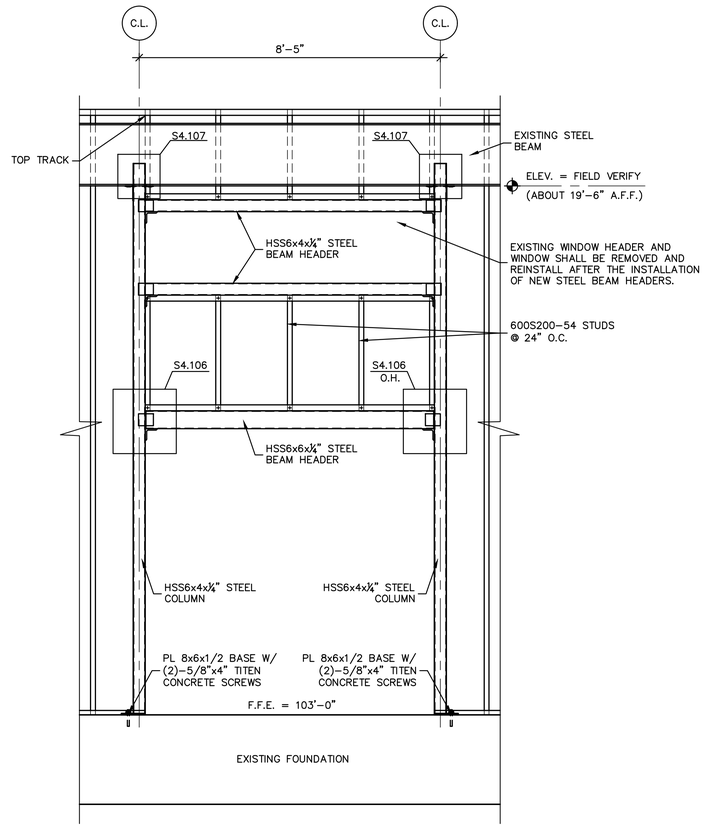
S4.1



S4.201 ELEVATION AT NEW CASED OPENING
1/2" = 1'-0"



S4.202 ELEVATION AT NEW CASED OPENING
1/2" = 1'-0"

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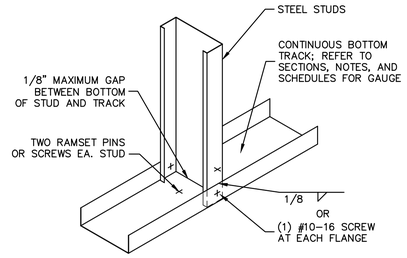
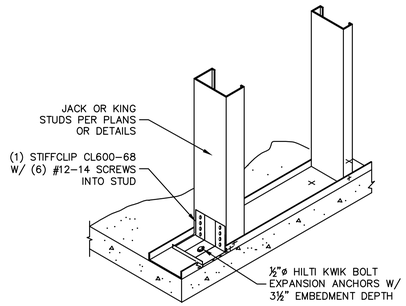
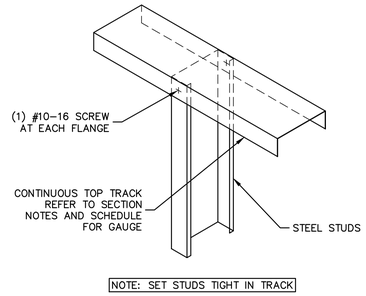
S4.2



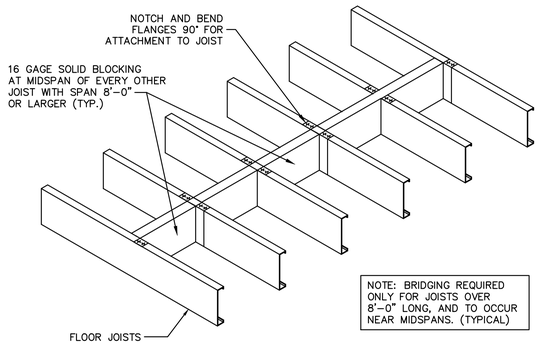
S4.301 TYPICAL STUD TO TRACK
N.T.S.



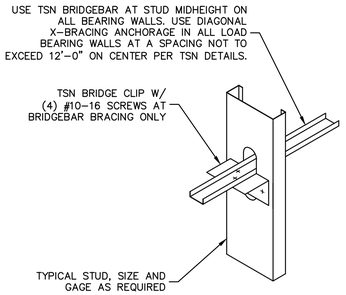
S4.302 JACK/KING STUDS TO TRACK
N.T.S.



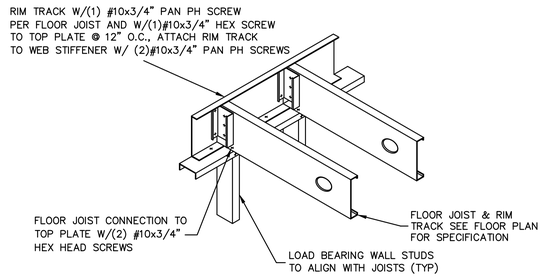
S4.303 STUD TO TRACK CONNECTION
N.T.S.



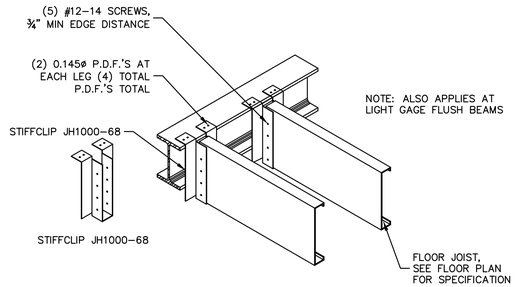
S4.304 TYPICAL FLOOR JOIST BLOCKING
N.T.S.



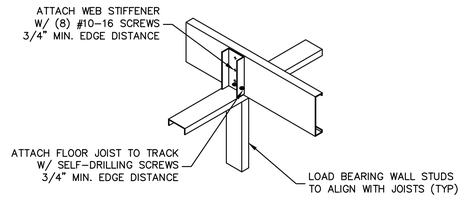
S4.305 BRIDGING ATTACHMENTS
N.T.S.



S4.306 JOIST BEARING ON LSF WALL BELOW
N.T.S.



S4.307 STEEL JOIST TO STEEL BEAM
N.T.S.



S4.308 JOIST CROSS OVER INTERIOR BEARING WALL
N.T.S.

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