#### 11 12 STRUCTURAL - GENERAL NOTES SPECIALTY ENGINEER SHOP DRAWING SUBMITTALS STRUCTURAL CONCRETE TO THE BEST OF OUR KNOWLEDGE. THE STRUCTURAL PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE SPECIALTY ENGINEER: SHALL BE AN EMPLOYEE OR OFFICER OF A FABRICATOR. AN EMPLOYEE OR OFFICER OF AN ENTITY SUPPLYING REQUIREMENTS OF THE FOLLOWING GOVERNING DESIGN CODES: COMPONENTS TO A FABRICATOR, OR AN INDEPENDENT CONSULTANT RETAINED BY THE FABRICATOR OR HIS SUPPLIER. FLORIDA BUILDING CODE 2023 EDITION SECTION 03 30 00. AISC STEEL CONSTRUCTION MANUAL (16TH EDITION) BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE, (ACI 318-19) THE FOLLOWING SYSTEMS AND COMPONENTS AS A MINIMUM REQUIRE FABRICATION AND ERECTION DRAWINGS WITH INPUT BY A 2. MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES (ASCE 7-22) SPECIALTY ENGINEER, BUT ARE NOT LIMITED TO: WINDOW SYSTEMS, STOREFRONT SYSTEM, ROOF SYSTEMS (JOIST SYSTEMS DAY STRENGTH): AWS D1.1/D1.1M 2018: AMERICAN WELDING SOCIETY, STRUCTURAL WELDING CODE AND ATTACHMENTS, AND PRE-ENGINEERED STAIRS) AND ALL LIGHT GAUGE FRAMING. SJI 100-20: 45TH EDITION STANDARD SPECIFICATIONS, LOAD TABLES AND WEIGHT TABLES FOR K-SERIES, LH-SERIES, DLH-SERIES AND JOIST GIRDERS THE SPECIALTY ENGINEER OR MANUFACTURER SHALL DESIGN, PROVIDE, AND INSTALL THEIR COMPONENTS AND THE SDI ROOF DECK DESIGN MANUAL (CURRENT EDITION) COMPONENT CONNECTIONS TO THE PRIMARY STRUCTURE PER THE CRITERIA STATED IN THESE NOTES OR THE CURRENT TMS 402/602: BUILDING CODE REQUIREMENTS AND SPECIFICATIONS FOR MASONRY STRUCTURES GOVERNING BUILDING CODES, WHICHEVER IS MORE STRINGENT. THE STRUCTURAL DOCUMENTS ARE TO BE USED IN CONJUNCTION WITH THE ARCHITECTURAL, MECHANICAL. PLUMBING SUBMITTALS SHALL CLEARLY IDENTIFY THE SPECIFIC PROJECT AND APPLICABLE CODES, LIST THE DESIGN CRITERIA, AND SHOW WITH ACI 318-19. TELECOM AND ELECTRICAL. USE THESE NOTES IN CONJUNCTION WITH THE PROJECT SPECIFICATIONS. IF A CONFLICT EXISTS, ALL DETAILS AND PLANS NECESSARY FOR PROPER FABRICATION AND INSTALLATION. CALCULATIONS AND SHOP DRAWINGS SHALL IDENTIFY SPECIFIC PRODUCT UTILIZED, GENERIC PRODUCTS WILL NOT BE ACCEPTED THE MORE STRINGENT GOVERNS. SEE PROJECT SPECIFICATIONS FOR TESTING REQ'S. SHOP DRAWINGS AND CALCULATIONS REQUIRE THE SEAL, DATE AND SIGNATURE OF THE SPECIALTY ENGINEER. COMPUTER PRINTOUTS ARE AN ACCEPTABLE SUBSTITUTE FOR MANUAL COMPUTATIONS PROVIDED THEY ARE ACCOMPANIED BY SUFFICIENT THE CONTRACTOR SHALL REVIEW ALL CONTRACT DOCUMENTS; INCLUDING DIMENSIONS, AND SITE CONDITIONS AND DESCRIPTIVE INFORMATION TO PERMIT THEIR PROPER EVALUATION. SUCH DESCRIPTIVE INFORMATION SHALL BEAR THE SEAL BARS. USE THE FOLLOWING COVER: COORDINATE WITH FIELD DIMENSIONS AND PROJECT SHOP DRAWINGS PRIOR TO CONSTRUCTION. ANY AND ALL DISCREPANCIES AND SIGNATURE OF THE SPECIALTY ENGINEER AS AN INDICATION THAT HE HAS ACCEPTED RESPONSIBILITY FOR THE RESULTS. SHALL BE SUBMITTED IN WRITING TO THE ARCHITECT AND ENGINEER. DO NOT MODIFY OR CHANGE THE SIZE OR DIMENSIONS OF STRUCTURAL MEMBERS WITHOUT WRITTEN INSTRUCTIONS FROM THE ARCHITECT/ ENGINEER OFFICER. REVIEW BY THE STRUCTURAL ENGINEER OF RECORD OF SUBMITTALS IS LIMITED TO VERIFYING THE FOLLOWING THAT THE SPECIFIED STRUCTURAL SUBMITTALS HAVE BEEN FURNISHED. IT SHALL BE THE RESPONSIBILITY OF THE SUBCONTRACTOR TO LOCATE ANY AND ALL EXISTING UTILITIES WHETHER SHOWN THAT THE STRUCTURAL SUBMITTALS HAVE BEEN SIGNED AND SEALED BY THE SPECIALTY ENGINEER. REINFORCEMENT LARGER THAN #5 . . HEREON OR NOT, AND TO PROTECT EXISTING FACILITIES, STRUCTURES AND UTILITY LINES FROM ALL DAMAGE. EACH THAT THE SPECIALTY ENGINEER HAS UNDERSTOOD THE DESIGN INTENT AND HAS USED THE SPECIFIED STRUCTURAL CONTRACTOR SHALL PROTECT HIS WORK, ADJACENT PROPERTY AND THE PUBLIC. EACH CONTRACTOR IS SOLELY RESPONSIBLE CRITERIA. (NO DETAILED CHECK OF CALCULATIONS WILL BE MADE.) THAT THE CONFIGURATION SET FORTH IN THE STRUCTURAL SUBMITTALS IS CONSISTENT WITH THE CONTRACT FOR DAMAGE OR INJURY DUE TO HIS ACT OR NEGLECT. DOCUMENTS. (NO DETAILED CHECK OF DIMENSIONS OR QUANTITIES WILL BE MADE.) WHERE A CONSTRUCTION DETAIL IS NOT SHOWN OR NOTED, THE DETAIL SHALL BE THE SAME AS FOR OTHER SIMILAR WORK. DETAILS LABELED "TYPICAL DETAILS" ON THE DRAWINGS APPLY TO ALL SITUATIONS THAT ARE THE SAME OR SIMILAR TO THOSE SUBMITTALS NOT MEETING THE ABOVE REQUIREMENTS WILL NOT BE REVIEWED AND WILL BE RETURNED TO CONTRACTOR SPECIFICALLY DETAILED, ANY QUESTIONS REGARDING APPLICABILITY OF TYPICAL DETAILS SHALL BE RESOLVED BY THE MARKED REVISE AND RESUBMIT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DELAYS WHICH MAY RESULT. ARCHITECT / ENGINEER. THE CONTRACTOR SHALL ENGAGE AN PROFESSIONAL ENGINEER LICENSED IN THE STATE OF FLORIDA TO PROVIDE SHORING **DESIGN LOAD CRITERIA:** DRAWINGS AND CALCULATIONS FOR SUPPORT ELEVATED SLABS AT ELEVATOR SHAFTS AND STAIRS. WITH ACI 318. BUILDING OCCUPANCY CATEGORY..... IN ADDITION TO SUBMITTALS REQUIRED BY THE PROJECT SPECIFICATIONS AND CONSTRUCTION DOCUMENTS. THE FOLLOWING GRAVITY LOADS: SLAB ON GRADE (U.N.O.). . "STRUCTURAL SUBMITTALS" ARE REQUIRED FOR REVIEW BY THE STRUCTURAL ENGINEER OF RECORD. LIGHT GAUGE FRAMING: DESIGN CALCULATIONS AND FABRICATION AND ERECTION DRAWINGS. ANCHOR BOLTS, DOWELS, ETC. ROOF LIVE LOAD. CONCRETE WORK: CONCRETE MIX DESIGNS AND REBAR SHOP DRAWINGS. ROOF DEAD LOAD . 20 PSF METAL DECK: DECK SHOP DRAWINGS AND ATTACHMENT DRAWINGS. 2<sup>ND</sup> FLOOR LIVE LOAD CLASSROOMS..... . 40 PSF STRUCTURAL STEEL: STEEL SHOP DRAWINGS DETAILING MEMBERS AND CONNECTIONS. ..... SAME AS OCCUPANCY AREA JOISTS: JOIST SHOP DRAWINGS DETAILING JOIST SIZE AND CONNECTIONS TEMPORARY SHORING DRAWINGS FOR CMU WALLS: PROVIDE CALCULATIONS AND SHORING DRAWINGS FOR REVIEW BY THE STRUCTURAL EOR. TIME IS EXCEEDED. ALL STRUCTURAL SUBMITTALS SHALL BE PREPARED BY THE SPECIALTY ENGINEER. WIND LOADS: ULTIMATE DESIGN WIND SPEED. DRAWINGS PREPARED SOLELY AS A GUIDE FOR ERECTION AND INSTALLATION AND CATALOG INFORMATION WILL NOT REQUIRE NOMINAL DESIGN WIND SPEED. .121 MPH WIND EXPOSURE CATEGORY... AN ENGINEERS SEAL; HOWEVER, THEY SHALL BEAR THE ENGINEERS SIGNATURE AND AN INDICATION THAT THE WORK WAS SEISMIC LOADS SEISMIC RESPONSE, Ss SHALLOW FOUNDATION REQ'S SEISMIC RESPONSE, S1. SPECTRAL RESPONSE, Sds. . GEOTECHNICAL REPORT - FOUNDATION DESIGN CRITERIA WAS TAKEN FROM RECOMMENDATIONS SET FORTH IN GEOTECHNICAL SPECTRAL RESPONSE, Sd1. . .0.08g REPORT BY LARRY M. JACOBS & ASSOCIATES. INC.. PROJECT NO. 23-203 DATED AUGUST 10. 2023. FOUNDATION DESIGN SHALL BE SEISMIC FORCE RESISTING SYSTEM. . . STEEL ORD. CONC. BRACED FRAMES BASED ON A MAXIMUM ALLOWABLE SOIL BEARING CAPACITY OF 2000 PSF FOR FOUNDATIONS. RECOMMENDATIONS IN THIS DESIGN BASE SHEAR. REPORT SHALL BE FOLLOWED. CONSULT SOILS REPORT BY NOVA FOR FOUNDATION PREPARATION AND EXCAVATION SEISMIC RESPONSE COEFFICIENT, Cs..... INFORMATION. . .3.25 IF BEARING SOIL IS DISTURBED DURING FOUNDATION PREPARATION, THE CONTRACTOR SHALL RECOMPACT TO REQUIRED SEISMIC DESIGN CATEGORY. . DENSITY. AS DEFINED BY THE GEOTECHNICAL ENGINEER. THE SPECIALTY ENGINEER, DEFINED AS - A PROFESSIONAL ENGINEER, LICENSED IN THE STATE WHERE THE PROJECT IS ALL WALLS AND COLUMNS SHALL BE CENTERED ON THE FOOTINGS U.N.O. LOCATED. WHO PERFORMS SPECIALTY STRUCTURAL ENGINEERING SERVICES FOR SELECTED SPECIALTY-ENGINEERED. ELEMENTS IDENTIFIED IN THE CONTRACT DOCUMENTS, AND WHO HAS EXPERIENCE AND TRAINING IN THE SPECIALTY. DO NOT EXCAVATE FOR ANY PURPOSE WITHIN ONE FOOT OF THE ANGLE OF REPOSE OF ANY SOIL BEARING FOOTING OR DOCUMENTS SIGNED AND SEALED BY THE SPECIALTY ENGINEER SHALL BE COMPLETED BY OR UNDER THE DIRECT SUPERVISION FOUNDATION UNLESS FOOTING OR FOUNDATION IS FIRST PROPERLY PROTECTED AGAINST SETTLEMENT. OF THE SPECIALTY ENGINEER, AT MINIMUM STEEL JOISTS, LIGHT GAUGE FRAMING (INCLUDING ALL EXTERIOR WALLS, SOFFITS). STEEL STAIRS, ETC. AND THEIR ATTACHMENTS TO THE STRUCTURE SHALL BE DESIGNED BY A SPECIALTY ENGINEER TO THE CONTRACTOR IS RESPONSIBLE FOR THE DISPOSAL OF ALL ACCUMULATED WATER FROM EXCAVATIONS AND DEWATERING CONFORM TO ALL LOADING REQUIREMENTS INCLUDING WIND AND IMPACT RESISTANCE. OPERATIONS IN SUCH A WAY AS NOT TO CAUSE INCONVENIENCE TO THE WORK AND DAMAGE TO THE STRUCTURAL ELEMENTS. **SLAB ON GRADE NOTES** DO NOT SCALE THE DRAWINGS, USE DIMENSIONS SHOWN ON PLAN IN CONJUNCTION WITH CONTRACTOR FIELD VERIFIED CHEMICAL ADHESIVE FOR ANCHORAGE CONFLICTS. PLACEMENT. ADHESIVE ANCHORS SHALL BE AS SPECIFIED ON THE CONSTRUCTION DRAWINGS OR APPROVED EQUIVALENT. ACCEPTABLE SYSTEMS SHALL INCLUDE: SIMPSON, HILTI (EPOXY OR POLYESTER RESIN ADHESIVE) ANCHORS OR APPROVED EQUIVALENT WITH SHOP DRAWING SUBMITTALS DIAMETER AND EMBEDMENT LENGTH AS NOTED ON THE DRAWINGS OR IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS. INSTALL ALL ANCHORAGE PER THE MANUFACTURERS RECOMMENDATIONS. THE REVIEW OF SUBMITTALS AND/ OR SHOP DRAWINGS DONE BY THE STRUCTURAL ENGINEER DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY TO REVIEW AND CHECK SHOP DRAWINGS BEFORE SUBMITTAL TO THE STRUCTURAL DIAMETER OF HOLE SHALL BE AS RECOMMENDED BY MANUFACTURER FOR THE PARTICULAR PRODUCT SPECIFIED IN THE ENGINEER. THE REVIEW BY THE STRUCTURAL ENGINEER IS FOR GENERAL CONFORMANCE ONLY. IF SHOP DRAWINGS HAVE NOT DRAWINGS BEEN REVIEWED AND APPROVED BEFORE SUBMITTAL TO THE STRUCTURAL ENGINEER. THEY SHALL BE RETURNED WITHOUT

THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ANY AND ALL ERRORS AND OMISSIONS ASSOCIATED WITH THE PREPARATION

REPRODUCING THE CONTRACT DOCUMENTS FOR USE AS SHOP DRAWINGS IS NOT ALLOWED, AND SHOP DRAWINGS WILL BE

SUBMIT SHOP DRAWINGS AND ANY OTHER SPECIAL INFORMATION NECESSARY FOR PROPER FABRICATION, ERECTION, AND PLACEMENT OF STRUCTURAL FABRICATIONS. INCLUDE PLANS, ELEVATIONS, AND SECTIONS. CLEARLY SHOW

ANCHORAGES, CONNECTIONS, AND ACCESSORY ITEMS, THE DETAILER MUST INTERPRET THE CONTRACT DOCUMENTS

CLEARLY SHOW ELEVATIONS OF ALL BEARING AND SHEAR WALLS. INDICATE OPENINGS, DETAILS OF ALL

REINFORCING WITH LOCATIONS OF SPLICES AND HOOKS, CONTROL JOINTS, EXPANSION JOINTS, LINTELS, BOND

CLEARLY SHOW FOUNDATION REINFORCING. INDICATE BAR LENGTHS, LOCATION AND SPLICES OF CONTINUOUS BARS, AND BAR SUPPORTS. CLEARLY SHOW LOCATIONS OF ALL DOWELS ON PLAN. INDICATE FOOTING STEP

CLEARLY SHOW BEAM ELEVATIONS AND SECTIONS. INDICATE BAR LENGTHS, HOOKS, STIRRUP SPACING, LAP

AND CLEARLY CONVEY THIS INTERPRETATION TO THE FIELD IN THE FORM OF PLACING OR ERECTION DRAWINGS.

CONCRETE AND CMU REINFORCING DETAILER- PROVIDE PLACING DRAWINGS FOR FABRICATION AND PLACING OF

REINFORCING STEEL. THESE DRAWINGS SHALL INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING: BAR LISTS,

CLEARLY SHOW ELEVATION, SECTIONS, AND DETAILS OF ALL BEAM TO COLUMN CONNECTIONS.

ALL MODIFICATIONS MADE FOR SUBMITTALS THAT ARE RE-SUBMITTED SHALL CLEARLY NOTE ALL CHANGES.

SCHEDULES, BENDING DETAILS, PLACING DETAILS, PLACING PLANS, AND PLACING ELEVATIONS.

SPLICES, OFFSETS, AND LOCATION OF BARS WITH RESPECT TO ALL SUPPORTS.

OF ALL SHOP DRAWINGS IN RELATIONSHIP TO THE CONSTRUCTION DOCUMENTS.

RETURNED WITHOUT APPROVAL.

GENERAL SHOP DRAWING REQUIREMENTS:

BEAMS, AND PILASTERS.

LOCATIONS AND PROVIDE DETAILS.

- UNLESS NOTED, ANCHOR SPACING AND ANCHOR EDGE DISTANCE SHALL BE ACCORDING TO THE MANUFACTURER'S MOST 3. CURRENT PUBLICATION IN ORDER TO DEVELOP MAXIMUM WORKING LOADS.
- DO NOT EXCEED MANUFACTURER'S MAX. RECOMMENDED TIGHTENING TORQUE.

MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS (MPII)

- ALL ANCHORS SHALL BE INSTALLED AS PER MANUFACTURER'S RECOMMENDATIONS AND UNDER MANUFACTURER'S SUPERVISION IN ORDER TO DEVELOP THE MOST CURRENT PUBLISHED WORKING LOADS.
- INSTALLATION OF ALL ANCHORS SHALL BE PERFORMED BY PERSONNEL CERTIFIED BY AN APPLICABLE CERTIFICATION PROGRAM. CERTIFICATION SHALL INCLUDE WRITTEN AND PERFORMANCE TESTS IN ACCORDANCE WITH ACI/CRSI ADHESIVE ANCHOR INSTALLER CERTIFICATION PROGRAM OR EQUIVALENT.
- ALL ANCHORS INSTALLED SHALL BE CONTINUOUSLY INSPECTED DURING INSTALLATION BY AN INSPECTOR SPECIALLY APPROVED. FOR THAT PURPOSE BY THE BUILDING OFFICIAL. THE SPECIAL INSPECTOR SHALL FURNISH A REPORT TO THE LICENSED DESIGN PROFESSIONAL AND BUILDING OFFICIAL THAT THE WORK COVERED BY THE REPORT HAS BEEN PERFORMED AND THE MATERIALS USED AND THE INSTALLATION PROCEDURES USED CONFORM WITH THE APPROVED CONTRACT DOCUMENTS AND THE
- TESTING OF EPOXIED ANCHORAGE SHALL BE REQUIRED. THE CONTRACTOR SHALL TEST A MINIMUM OF 10% OF EACH DAYS PRODUCTION AND NOT LESS THAN TWO ANCHORS. THE TEST SHALL BE ACCOMPLISHED BY A APPLYING A TENSILE LOAD OF 1000 POUNDS TO THE EMBED ANCHOR. IF ANY TEST FAILS THE LOAD TEST, ALL APPLICATIONS FOR THAT DAY SHALL BE TESTED. THE TESTING RESULTS SHALL BE REVIEWED BY THE STRUCTURAL ENGINEER.

- ALL CAST-IN-PLACE CONCRETE WORK SHALL BE IN ACCORDANCE WITH ACI 318-19 AND ACI 301, EXCEPT AS MODIFIED BY THE PROJECT CONSTRUCTION DOCUMENTS. ALL CONCRETE WORK SHALL BE PERFORMED IN ACCORDANCE WITH SPECIFICATION
- ALL CONCRETE SHALL MEET THE PROJECT SPECIFICATIONS AND SHALL DEVELOP COMPRESSIVE STRENGTHS AS FOLLOWS (28

NORMAL WEIGHT CONCRETE (145 PCF) PILASTERS & ELEVATED SLAB CONCRETE..... . 4000 PSI FOUNDATION & SLABS ON GRADE .....

PROVIDE CURRENT (MAX. 1 YEAR OLD) STATISTICAL DATA FOR EACH CONCRETE MIX SUBMITTED IN ACCORDANCE

- ALL REINFORCING BARS FOR CONCRETE SHALL HAVE A MINIMUM YIELD STRENGTH OF 60,000 PSI AND MEET THE REQUIREMENTS OF ASTM A-615. FOR PLACEMENT OF REINFORCING CONFORM TO ACI-301, ACI-315, ACI-318, AND CRSI "MANUAL OF STANDARD PRACTICE". ALL REINFORCING SHALL BE ACCURATELY PLACED, RIGIDLY SUPPORTED, AND FIRMLY TIED IN PLACE WITH BAR SUPPORTS AND SPACERS IN ACCORDANCE WITH THE ABOVE REQUIREMENTS. PROVIDE CLASS "B" LAP SPLICE FOR CONTINUOUS
  - CONCRETE COVER REQUIREMENTS FOR REINFORCEMENT, U.N.O.
  - CONCRETE CAST AGAINST EARTH. . CONCRETE POURED IN FORMS BUT EXPOSED TO WEATHER OR EARTH
    - #5 REINFORCEMENT AND SMALLER . . . . . 1 1/2"
    - WELDED WIRE FABRIC . . 1" FROM TOP OF SLAB CONCRETE POURED IN FORMS BUT NOT EXPOSED TO WEATHER OR EARTH.
    - #11 REINFORCEMENT AND SMALLER. .
- USE PLAIN, COLD-DRAWN ELECTRICALLY-WELDED STEEL WIRE FABRIC CONFORMING TO ASTM A-185. SUPPLY IN FLAT SHEETS ONLY (NOT ROLLED). LAP SPLICES SHALL BE TWICE THE SPACING OF THE CROSS WIRES PLUS TWO (2) INCHES.
- NO CONDUIT PLACED IN CONCRETE SLAB SHALL HAVE AN OUTSIDE DIAMETER GREATER THAN 1/3 THE THICKNESS OF THE SLAB. NO CONDUIT SHALL BE EMBED IN A SLAB THAT IS LESS THAN 4" THICK. MINIMUM CLEAR DISTANCE SHALL BE IN ACCORDANCE
- ALL REINFORCING BARS, ANCHOR BOLTS, DOWELS AND OTHER CONCRETE INSERTS SHALL BE SECURED ADEQUATELY IN POSITION PRIOR TO PLACEMENT OF CONCRETE. CONTRACTOR SHALL USE TEMPLATES TO INSURE ACCURATE PLACEMENT OF
- ALL CONCRETE SHALL BE CONSOLIDATED BY USE OF A MECHANICAL VIBRATOR OR OTHER MEANS APPROVED BY THE ENGINEER.
- CONCRETE SHALL COMPLY WITH ALL THE REQUIREMENTS OF ASTM STANDARD C94 FOR MEASURING, MIXING, TRANSPORTING, ETC. CONCRETE TICKETS SHALL BE TIME STAMPED WHEN CONCRETE IS BATCHED. CONCRETE SHALL BE PLACED IN ITS FINAL POSITION WITHIN 90 MINUTES AFTER ADDITION OF BATCH WATER. CONCRETE SHALL BE DISCARDED IF THE FOREGOING ELAPSED

# TENSION DEVELOPMENT AND LAP SPLICE LENGTHS FOR BARS IN WALLS, SLABS

AND FOC	TINGS (AC	1 25.4.2.3)						
BAR SIZE	CONCRETE COVER = 0.75 IN.		CONCRETE COVER = 1.5 IN.			E COVER 0 IN.	CONCRETE COVER = 3.0 IN.	
	TOP	OTHER	TOP	OTHER	TOP	OTHER	TOP	OTHER
#4	28	22	23	17	23	17	23	17
#5	41	32	28	22	28	22	28	22
#6	56	43	34	26	34	26	34	26
#7	90	69	55	43	49	38	49	38
#8	86	66	54	41	43	33	43	33
#9	135	104	86	66	69	53	63	48
#10	162	125	105	81	85	66	71	55

- ENSURE THAT REINFORCEMENT IS LOCATED IN SLAB CORRECTLY BY CHAIRING REINFORCING ADEQUATELY DURING CONCRETE
- USE 15 MIL. POLYETHYLENE (VAPOR BARRIER) SHEETING BETWEEN COMPACTED SOIL AND CONCRETE SLAB MIN., U.N.O. PLEASE NOTE THAT ARCHITECT WILL PROVIDE FINAL VAPOR BARRIER SPECIFICATIONS AND THIS MAY INCLUDE THICKER VAPOR BARRIERS AS REQUIRED. 15 MIL SHALL BE THE MINIMUM SPECIFIED IF NOT SPECIFIED BY THE ARCHITECT.
- PROVIDE POROUS DRAINAGE LAYER UNDER INTERIOR PORTIONS OF 4" SLAB ON GRADE, DRAINAGE LAYER SHALL CONSIST OF CLEAN, FREE-DRAINAGE PEA GRAVEL, CRUSHED STONE, OR COARSE SAND. THIS DRAINAGE LAYER SHALL CONSIST OF NATURAL SAND WITH A MAXIMUM 50% PASSING THE NO. 50 SIEVE AND 5% PASSING A NO. 200 SIEVE AS MINIMUM. SEE PROJECT GEOTECHNICAL REPORT FOR GUIDELINES. THE CONTRACTOR SHALL COORDINATE THESE REQUIREMENTS WITH THE GEOTECHNICAL ENGINEER OF RECORD PRIOR TO FOUNDATION PREPARATION. NOTE THAT INSITU MATERIAL MAY SATISFY THIS REQUIREMENT, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE WITH THE GEOTECHNICAL ENGINEER TO FULFIL
- PLACE CRACK CONTROL JOINTS USING A MAXIMUM 2:1 LENGTH TO WIDTH RATIO WITH 20'-0" MAXIMUM SPACING. UNLESS LOCATED ON PLANS. PLACE MANDATORY CONSTRUCTION JOINTS AS SHOWN.



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**DESIGN DEVELOPMENT:** 8/21/2023

CONSTRUCTION **DOCUMENTS:** 

REVISION 1 - 2/20/24 CIVIL ONLY REVISION 2 - 2/28/24 RFI REVISIONS REVISION 3 - 3/21/24 CP COMMENTS

11/17/2023

4/16/2024

CONFORMANCE SET

PROJECT TEAM:

**KENNETH HORNE & ASSOCIATES** 

FORME DESIGN GROUP STRUCTURAL MCCARTHY ENGINEERING

**ARCHITECTURA** CALDWELL ASSOCIATES FIRE PROTECTION

H.M. YONGE & ASSOCIATES MECHANICAL/PLUMBING

H.M. YONGE & ASSOCIATES **ELECTRICAL** KLOCKE & ASSOCIATES

PROJECT:

**CREATIVE LEARNING ACADEMY** 

3151 HYDE PARK RD. PENSACOLA, FL

SEAL

PROJECT NO.: SHEET TITLE:

**GENERAL NOTES** 

SHEET NUMBER

# STRUCTURAL STEEL NOTES OSHA REQUIREMENTS: U.N.O HSS SECTIONS SURFACES. MINIMUM FILLET WELD SIZE IS 3/16". PROCEDURES. A325 BOLTS: STEEL JOINTS. DO NOT USE TYPE 2 BOLTS. WAX 140. ASSEMBLY TO BE PAINTED PER ARCH. DETAILS. STEEL JOISTS

REFERENCE STANDARDS: STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE AISC STEEL CONSTRUCTION MANUAL AND THE AISC CODE OF STANDARD PRACTICE (REFERENCED EDITION) WITH EXCEPTION NOTED IN THE PROJECT SPECIFICATIONS.

- THE CONTRACTOR SHALL PROVIDE ADDITIONAL ANCHORS, BOLTS, STABILIZERS, STIFFENERS,
  - BRIDGING, BRACING, ETC. AS NECESSARY TO COMPLY WITH CURRENT OSHA REGULATIONS. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY SHORING TO INSURE A STABLE STRUCTURE DURING THE INSTALLATION OF STRUCTURAL STEEL MEMBERS.
- MATERIAL REQUIREMENTS OF STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING DESIGNATIONS
  - ASTM 992, GRADE 50 WIDE FLANGE SHAPES.
  - ANGLES, CHANNELS, AND PLATES . . . . ASTM A36 OR ASTM A572, GRADE 50 . ASTM A500, GRADE "B" (Fy = 46KSI)
  - HIGH STRENGTH BOLTS ...... . .ASTM A325 OR ASTM A490
  - . ASTM F1554, GRADE 36 (WELDABLE) ANCHOR BOLTS . WELDING ELECTRODES . . . . . . . . . . . . . . . . . AWS D1.1 E70
  - USE STRUCTURAL STEEL THAT IS FULLY WELDABLE INCLUDING WHEN WELDING BETWEEN DIFFERENT GRADES OF STEEL. SHOP WELDING SHALL BE UTILIZED IN LIEU OF FIELD WELDING WHEN OBTAINABLE.
- ALL SHOP AND FIELD WELDING SHALL CONFORM TO THE STRUCTURAL WELDING CODE AWS D1.1, LATEST EDITION, PUBLISHED BY THE AMERICAN WELDING SOCIETY (AWS). USE ELECTRODES CONFORMING TO AWS D1.1, E70 SERIES, U.N.O. SHOW ALL SHOP WELDS ON THE FABRICATION DRAWINGS AND ALL FIELD WELDS ON THE ERECTION DRAWINGS. WELD SIZES AND LENGTHS ARE SHOWN ON THE DRAWINGS. WELD SIZES ARE THE NET EFFECTIVE SIZE REQUIRED. INCREASE THE WIDTH OF THE WELD IF A GAP EXISTS AT FAYING
- ALL SHOP AND FIELD WELDERS, WELDING OPERATORS, AND TACKERS SHALL BE CERTIFIED ACCORDING TO AWS PROCEDURES AND HAVE EVIDENCE OF PASSING THE AWS STANDARD QUALIFICATION TESTS. CERTIFICATION MUST BE CURRENT.
- ALL JOINT WELDING PROCEDURES TO BE USED SHALL BE PREPARED BY THE FABRICATOR OR CONTRACTOR AS WRITTEN PROCEDURE SPECIFICATIONS AND SUBMITTED TO THE ARCHITECT/ENGINEER FOR THEIR RECORD. ALL JOINT WELDING PROCEDURES SHALL BE QUALIFIED PRIOR TO USE ACCORDING TO AWS
  - A325 BOLTS SHALL CONFORM TO ASTM A 325 TYPE 1, HIGH STRENGTH BOLTS FOR STRUCTURAL
- PROVIDE HARDENED WASHERS CONFORMING TO ASTM F 436. PLACE HARDENED WASHERS UNDER PART BEING TURNED
- LOAD INDICATOR WASHERS OR TENSION CONTROLLED BOLTS SHALL BE USED ON ALL A325 BOLTS. ALL BOLTS SHALL BE NEW AND DOMESTICALLY MANUFACTURED. DO NOT REUSE BOLTS. USE ONLY NON-GALVANIZED NUTS AND BOLTS THAT ARE CLEAN, RUST-FREE, AND WELL LUBRICATED. BOLTS AND NUTS SHALL BE WAX DIPPED BY THE BOLT SUPPLIER OR LUBRICATED WITH JOHNSON'S STICK
- FIELD MODIFICATION OF STRUCTURAL STEEL SHALL NOT BE CUT IN FIELD OR MODIFIED WITHOUT PRIOR APPROVAL OF THE ENGINEER. SPLICING STEEL MEMBERS IS NOT PERMITTED EXCEPT WHERE EXPLICITLY SHOWN ON THE STRUCTURAL DRAWINGS OR WHERE APPROVED BY THE ENGINEER OF RECORD. SPLICES SHALL NOT OCCUR AT LOCATIONS OF MAXIMUM STRESS AND SHALL DEVELOP THE FULL CAPACITY OF THE MEMBER. SPLICE DETAILS SHALL BE SUBMITTED FOR APPROVAL PRIOR TO BEGINNING WORK.
- WHEN HOLES ARE REQUIRED IN METAL SURFACE, THEY SHALL BE CUT, DRILLED, OR PUNCHED HOLES PERPENDICULAR TO METAL SURFACE. IN NO INSTANCE IS IT ADEQUATE TO USE A FLAME TO CUT OR ENLARGE HOLES IN STRUCTURAL STEEL MEMBERS.
- THE STEEL SUPPLIER SHALL PROVIDE ALL MISCELLANEOUS STRUCTURAL STEEL ITEMS NECESSARY TO FULFILL THE INTENT OF THE STRUCTURAL DRAWINGS WHETHER OR NOT THE ITEMS ARE SHOWN ON THE STRUCTURAL DRAWINGS. SUCH ITEMS MAY INCLUDE BUT ARE NOT LIMITED TO EDGE ANGLES, CLOSURE PLATES, AND DECK SUPPORT FRAMING.
- ALL EXTERIOR EXPOSED STEEL SHALL BE HOT DIP GALVANIZED. WHEN WELDING GALVANIZED MATERIAL, REMOVE GALVANIZATION BY GRINDING, WELD, THEN APPLY A MINIMUM OF TWO COATS OF COLD GALVANIZATION TO WELDED ASSEMBLY.
- ALL STRUCTURAL STEEL SHALL BE PRIME PAINTED WITH A MINIMUM DRY FILM THICKNESS OF 2.0 MILS. FINAL
- 14. SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL MISCELLANEOUS STEEL THAT WILL BE REQUIRED.
- STEEL JOISTS SHALL BE DESIGNED, FABRICATED, AND ERECTED IN ACCORDANCE WITH THE STEEL JOIST
- INSTITUTE (SJI). K-SERIES JOISTS SHALL HAVE MINIMUM Fy=50 KSI.
- CONTRACTOR SHALL PROVIDE NECESSARY OSHA SAFETY FEATURES WHEN ATTACHING JOISTS TO BEAMS
- IF THE FLANGE OF A BEAM SUPPORTING JOISTS IS TOO NARROW TO PROVIDE MINIMUM LENGTH OF BEARING WHEN THE JOISTS ENDS ARE ALIGNED, THE JOISTS SHALL BE OFFSET TO PROVIDE FULL BEARING ON A BEAM FLANGE PER SJI REQUIREMENTS.
- STEEL JOIST MANUFACTURER SHALL SUBMIT ERECTION AND SHOP DRAWINGS SHOWING JOIST LOCATIONS, BRIDGING, CONNECTIONS AND DETAILS, SPECIAL AND EXTENDED ENDS (WHEN APPLICABLE).
- JOISTS SHALL BE STORED PROPERLY ON DRY AND LEVEL GROUND, SO THAT DEFORMATION OF THE JOIST DOES NOT OCCUR. IN INSTANCES WHERE JOISTS ARE DAMAGED, THEY SHALL BE REPLACED AT THE
- ALL JOIST SHALL BE PAINTED WITH A GRAY RUST INHIBITIVE PRIMER, UNLESS NOTED OTHERWISE BY THE
- STEEL JOIST BEARING AT EXTERIOR BEAMS SHALL BE DESIGNED TO RESIST 1,000 POUNDS LATERAL FORCE PERPENDICULAR TO K-SERIES JOISTS AND 1,400 POUNDS PARALLEL FORCE TO K-SERIES JOIST (IN PLANE OF THE JOIST, EXTERIOR WIND PRESSURES ACTING ON WALL).
- ANY SINGLE PANEL POINT OF THE LOWER CHORD OF JOISTS MUST BE CAPABLE OF SAFELY SUPPORTING A SUSPENDED CONCENTRATED LOAD OF 400 POUNDS IN ADDITION TO OTHER LOADS. ROOF JOISTS SHALL HAVE SUFFICIENT CAPACITY TO SUPPORT 400 LB POINT LOAD POINT FOR MECHANICAL UNITS. POINT LOADS SHALL BE DETERMINED BY EQUIPMENT PLANS.
- JOIST SEATS SHALL EXTEND A DISTANCE OF NOT LESS THAN 5" OVER 8" MASONRY OR CONCRETE SUPPORTS AND CONNECT TO STEEL EMBED PLATES.
- UNLESS NOTED ON PLANS, DESIGN OF JOIST K-SERIES STEEL JOISTS SHALL BE CONNECTED TO STEEL BY 1/8" WELD, 3" LONG EACH SIDE.
- BRIDGING SHALL BE PROVIDED IN ACCORDANCE WITH S.J.I. REQUIREMENTS.
- HORIZONTAL BRIDGING SHALL BE AN ANGLE AT TOP AND BOTTOM, DESIGNED FOR L/R LESS THAN OR EQUAL
- 13. DIAGONAL BRIDGING SHALL BE AN ANGLE DESIGNED FOR L/R LESS THAN OR EQUAL TO 200.
- UNLESS NOTED, 2ND AND 3RD JOIST SPACES FROM WALLS AND 1ST AND 2ND JOIST SPACES FROM DISCONTINUITIES SHALL HAVE CROSS BRIDGING (TO BE ALIGNED WITH HORIZONTAL BRIDGING).
- JOIST BRIDGING SHALL NOT BE USED TO SUPPORT EQUIPMENT, PIPING, CONDUITS, DUCTWORK, ETC.
- WHERE FIELD WELDING IS REQUIRED AT TOP OR BOTTOM CHORDS OF JOISTS, TEMPORARILY SHORE AT
- EACH SIDE OF WELDING LOCATION. SEE MECHANICAL DRAWINGS FOR DUCT LOCATIONS. DUCTS MAY TRANSVERSE THROUGH JOIST WEBS, SEE MECHANICAL DRAWINGS JOIST MANUFACTURER SHALL ACCOUNT FOR SIZE AND ADDITIONAL LOADING.
- 18. ALL JOIST SEATS SHALL BE 5" DEEP.

#### CONCRETE MASONRY UNITS (CMU) NOTES

ALL MASONRY WORK SHALL CONFORM TO TMS 402/602 SPECIFICATION FOR MASONRY STRUCTURES.

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- CONSTRUCT REINFORCED MASONRY AS NOTED ON THE PLANS AND DETAILS IN ACCORDANCE WITH THE REQUIREMENTS OF MASONRY SPECIFICATION SECTIONS.
- CONCRETE MASONRY UNITS SHALL CONFORM TO ASTM SPECIFICATIONS ASTM C90. THE MINIMUM NET COMPRESSIVE STRENGTH OF MASONRY UNITS SHALL BE 2000 PSI (fm=1500 PSI FOR MASONRY SYSTEM). PERFORM I'm AND C90 COMPLIANCE BY UNIT TEST METHOD. USE ONLY MASONRY UNITS THAT ARE A MIN. OF
- MORTAR SHALL CONFORM TO ASTM C270. USE TYPE "S" MORTAR WITH 3/8" FULL-BEDDED JOINTS FOR ALL MASONRY UNITS. REMOVE EXCESS MORTAR PROTRUDING INTO CELL CAVITIES THAT ARE TO BE REINFORCED AND GROUTED. ALLOW A MIN. OF 24 HOURS FOR MORTAR TO CURE BEFORE PLACING GROUT.
- ALL GROUT USED TO FILL REINFORCED MASONRY CAVITIES SHALL CONFORM TO ASTM C-476 AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI IN 28 DAYS. TESTED IN ACCORDANCE WITH ASTM C1019. AGGREGATE TO CONFORM TO ASTM C404 FOR COARSE GROUT AND SLUMP OF 8" TO 11". TEST SAMPLES FOR COMPRESSIVE STRENGTH. TEST EVERY 30 YARDS OR EACH DAY'S GROUTING AND AS INDICATED IN THE PROJECT SPECIFICATIONS.
- PROVIDE HORIZONTAL JOINT REINFORCEMENT IN ALL CMU WALLS, U.N.O. HORIZONTAL JOINT REINFORCING SHALL BE (9 GAUGE SIDE RODS WITH 9 GAUGE CROSS RODS) LADDER TYPE, HOT DIP GALVANIZED AFTER FABRICATION. VERTICAL SPACING OF REINFORCING SHALL BE 16" O.C. MAX. IF REQUIRED, TIES SHALL BE LOCATED WITHIN 8" OF WALL DISCONTINUITIES (MCJ, DOORS, WINDOWS, ETC.) USE PREFABRICATED CORNERS AND TEES AT WALL INTERSECTIONS. OVERLAP DISCONTINUOUS ENDS A MIN. OF 12". HORIZONTAL REINFORCING SHALL CONFORM TO ASTM A-82.
- ALL REINFORCING STEEL UTILIZED FOR REINFORCING MASONRY SHALL BE ASTM A-615 GRADE 60 REINFORCING STEEL.
- IN HIGH-LIFT GROUTING USE A MAX. LIFT OF 5'-0" WITH MIN. HALF HOUR MAX. ONE HOUR BETWEEN LIFTS. VIBRATE EACH LIFT AND RECONSOLIDATE PREVIOUS LIFT AFTER PLACING NEXT LIFT.
- WHERE ANCHOR BOLTS ARE SET IN MASONRY WALL, FILL BLOCK CELLS WITH GROUT FOR BOLTED COURSE, ONE COURSE ABOVE AND TWO COURSES BELOW ANCHOR ELEVATION.
- USE PRESSURE-TREATED WOOD FOR ALL WOOD IN CONTACT WITH MASONRY.
- MASONRY WALLS ARE TO BE LATERALLY BRACED DURING CONSTRUCTION IN ACCORDANCE WITH "STANDARD PRACTICE FOR BRACING MASONRY WALLS UNDER CONSTRUCTION" BY THE COUNCIL FOR MASONRY WALL BRACING AND THE MASON CONTRACTORS ASSOCIATION OF AMERICA. TEMPORARY BRACING SHALL REMAIN IN PLACE UNTIL PERMANENT SUPPORTING ELEMENTS OF THE STRUCTURE ARE IN
- CELLS TO BE GROUTED SHALL HAVE A MINIMUM CLEAR DIMENSION OF 2 INCHES AND CLEAR AREA OF 8 SQUARE INCHES FOR 8" CMU. GROUTING SHALL BE DONE IN A CONTINUOUS OPERATION IN LIFTS ASS DEFINED PREVIOUSLY. THE GROUT SHALL BE CONSOLIDATED BETWEEN LIFTS BY MECHANICAL VIBRATION. GROUT TO STOP MIN. 1" BELOW JOINT IN BLOCK TO FORM A KEY IF SUBSEQUENT POURS ARE TO CONTINUE UPWARDS.
- MASONRY WALLS ARE TO BE LATERALLY BRACED DURING CONSTRUCTION IN ACCORDANCE WITH "STANDARD PRACTICE FOR BRACING MASONRY WALLS UNDER CONSTRUCTION" BY THE COUNCIL FOR MASONRY WALL BRACING AND THE MASON CONTRACTORS ASSOCIATION OF AMERICA. TEMPORARY BRACING SHALL REMAIN IN PLACE UNTIL PERMANENT SUPPORTING ELEMENTS OF THE STRUCTURE ARE IN PLACE.
- PROVIDE HORIZONTAL BOND BEAMS AT 4'-0" O.C., VERTICALLY (MAX), U.N.O. IN 8" CMU WALLS, REINF. W/ (2) #5
- CMU CONTROL JOINTS ARE NOT TO EXCEED 24'-0" U.N.O. & THE FOLLOWING CRITERIA:
- AT CHANGES IN WALL HEIGHT OR THICKNESS
- **NEAR WALL INTERSECTIONS** AT POINTS OF STRESS CONCENTRATION
- AT CONTROL JOINTS IN FOUNDATION WALLS WHERE A SLAB JOINT PASSES BENEATH A WALL
- THE CONTROL JOINTS SHALL BE LOCATED A MINIMUM OF 2'-0" FROM DOOR OR WINDOW OPENINGS SO THAT CONTROL JOINT DOES NOT INTERFERE WITH LINTEL REINFORCEMENT. THE HORIZONTAL JOINT REINFORCING SHALL BE TERMINATED 2" FROM EACH SIDE OF JOINT. ALL BOND BEAM REINFORCING SHALL CONTINUE THRU THE CMU JOINT.

# MISC. STEEL NOTES

- OTHER MISCELLANEOUS STEEL NOT SHOWN ON THE STRUCTURAL DOCUMENTS MAY BE IDENTIFIED IN THE ARCHITECTURAL AND/ OR MECHANICAL DRAWINGS. ALL OTHER MISCELLANEOUS SHAPES SHALL BE AT MINIMUM A36 STRUCTURAL STEEL, U.N.O.
- EDGE ANGLES, CLIP ANGLES, PLATES, BARS AND OTHER MISCELLANEOUS ROLLED SHAPES SHALL BE ASTM A36 STRUCTURAL STEEL, U.N.O. EDGE OF SLAB CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO SHOP DRAWING SUBMITTAL TO OUR OFFICE.

# COMPOSITE DECK - 2ND FLOOR

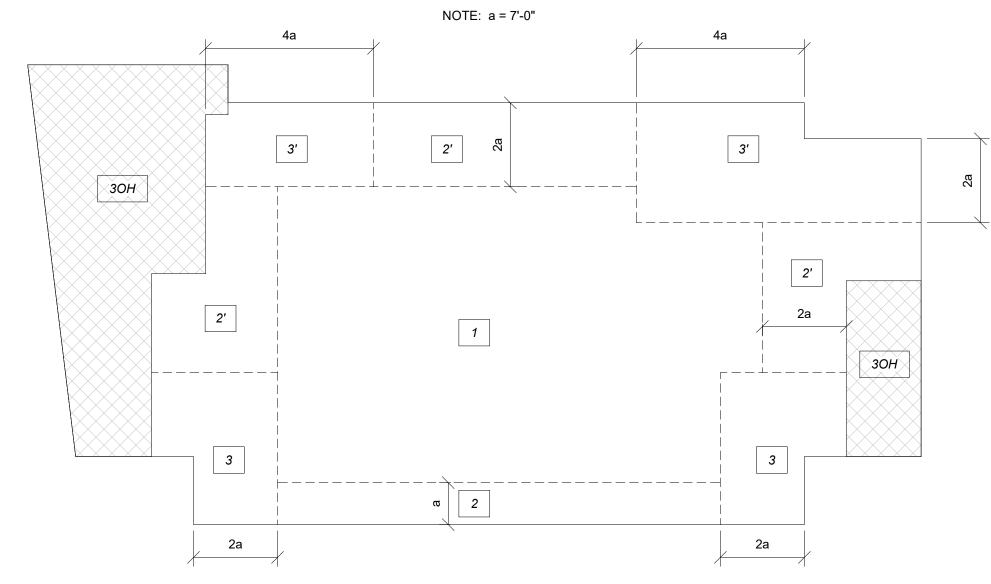
- USE 2 INCH DEEP, COMPOSITE STEEL DECK UNITS (AS SPECIFIED ON THE DRAWINGS), FORMED OF 20 GAUGE STEEL SHEETS RESPECTIVELY CONFORMING TO ASTM A-446, HAVING A MINIMUM YIELD POINT OF 60 KSI, WITH A PROTECTIVE COATING OF ZINC CONFORMING TO ASTM A-653 G90. W/3" CONCRETE TOPPING.
- 2 INCH DEEP DECK-18GA. VULCRAFT 2VLI
  - Sp= 0.485 in^3/FT Sn= 0.500 in^3/FT
  - lp= 0.557 in^4/FT
- DESIGN, MANUFACTURE, AND INSTALL THE COMPOSITE STEEL DECK IN CONFORMANCE WITH THE "SPECIFICATIONS FOR DESIGN OF LIGHT-GAUGE COLD-FORMED STEEL STRUCTURAL MEMBERS", AND THE STEEL DECK INSTITUTE'S RECOMMENDED SPECIFICATIONS.

# **ROOF DECK**

- STEEL DECK SHALL BE DESIGNED, FABRICATED, AND INSTALLED IN ACCORDANCE WITH THE MOST CURRENT STANDARDS OF THE STEEL DECK INSTITUTE (SDI)
- 1-1/2" DEEP, 20 GAGE, TYPE-B GALVANIZED METAL ROOF DECK SHALL HAVE THE FOLLOWING PROPERTIES:
  - Sp= 0.221 in^3/FT
  - Sn= 0.227 in^3/FT
  - $Ip = 0.195 in^4/FT$ Fv= 50 KSI
- GALVANIZING: G90
- THE DECK SHALL BE CAPABLE OF SUPPORTING A UNIFORMLY DISTRIBUTED TOTAL SUPERIMPOSED GRAVITY LOAD OF 55 PSF AND WIND UPLIFT AND SHEAR LOADS AS SPECIFIED ON THE DRAWINGS.
- THE DECK SHALL BE CONNECTED TO THE STRUCTURE AS DETAILED ON THE DRAWINGS.
- DECK SHALL HAVE MINIMUM 2" BEARING AT SUPPORTS.
- DECK SHALL BE 3 SPAN CONTINUOUS WHEREVER POSSIBLE
- PLACING OF DECK UNITS SHALL BE ARRANGED SO THAT END LAPS ARE STAGGERED.
  - SUPER IMPOSED LOADS THAT MAY BE HUNG FROM THE DECK SHALL NOT EXCEED 10 PSF AND NO SINGLE CONCENTRATED LOAD SHALL EXCEED 50 POUNDS.

#### **ROOF WIND PRESSURE DIAGRAM**

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#### COMPONENTS AND CLADDING WIND

NOTE: a = 7'-0"	INTERNAL PRESSURE COEFFICIENT = +/-0.18	INTERNAL	

	WIND PRESSURE (+) / SUCTION (-) IN POUNDS PER SF									
	EFFECTIVE WIND AREA (FE						T SQUARE)			
ZONE	10		20		50		100			
(SEE FIGURE)	+	-	+	-	+	-	+	-		
ROOF ZONE 1	24.9	-66.4	23.3	-66.4	21.3	-66.4	19.7	-66.4		
ROOF ZONE 2		-76.8		-75.2		-73.2		-71.6		
ROOF ZONE 2'		-92.4		-90.8		-88.7		-87.2		
ROOF ZONE 3		-103		-93.4		-81.0		-71.6		
ROOF ZONE 3'		-144.0		-129.0		-108.0		-92.4		
ROOF ZONE 30H		-164.9		-145.2		-120.0		-100.8		
WALL ZONE 4		-60.7	53.6	-58.2	50.3	-54.9	47.8	-52.5		
WALL ZONE 5	56.0	-74.7		-69.8		-63.2		-58.2		

- POSITIVE SIGN INDICATES THAT THE PRESSURE IS ACTING TOWARDS THE SURFACE. NEGATIVE SIGN INDICATES THAT THE PRESSURE IS ACTING AWAY FROM THE STRUCTURE
- THE WIND LOADS SHOWN HAVE BEEN CALCULATED PER FLORIDA BUILDING CODE 2023 EDITION W/ HVHZ AND ASCE 7-22. LINEAR INTERPOLATION MAY BE APPLIED FOR LOADING AREAS BETWEEN THE PROVIDED. LOADS SHOWN ARE ULTIMATE LOADS AND MAY BE FACTORED BY 0.6 WHEN APPLICABLE TO REDUCE TO ASD LOADING PRESSURES.

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11/17/2023

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CONFORMANCE SET

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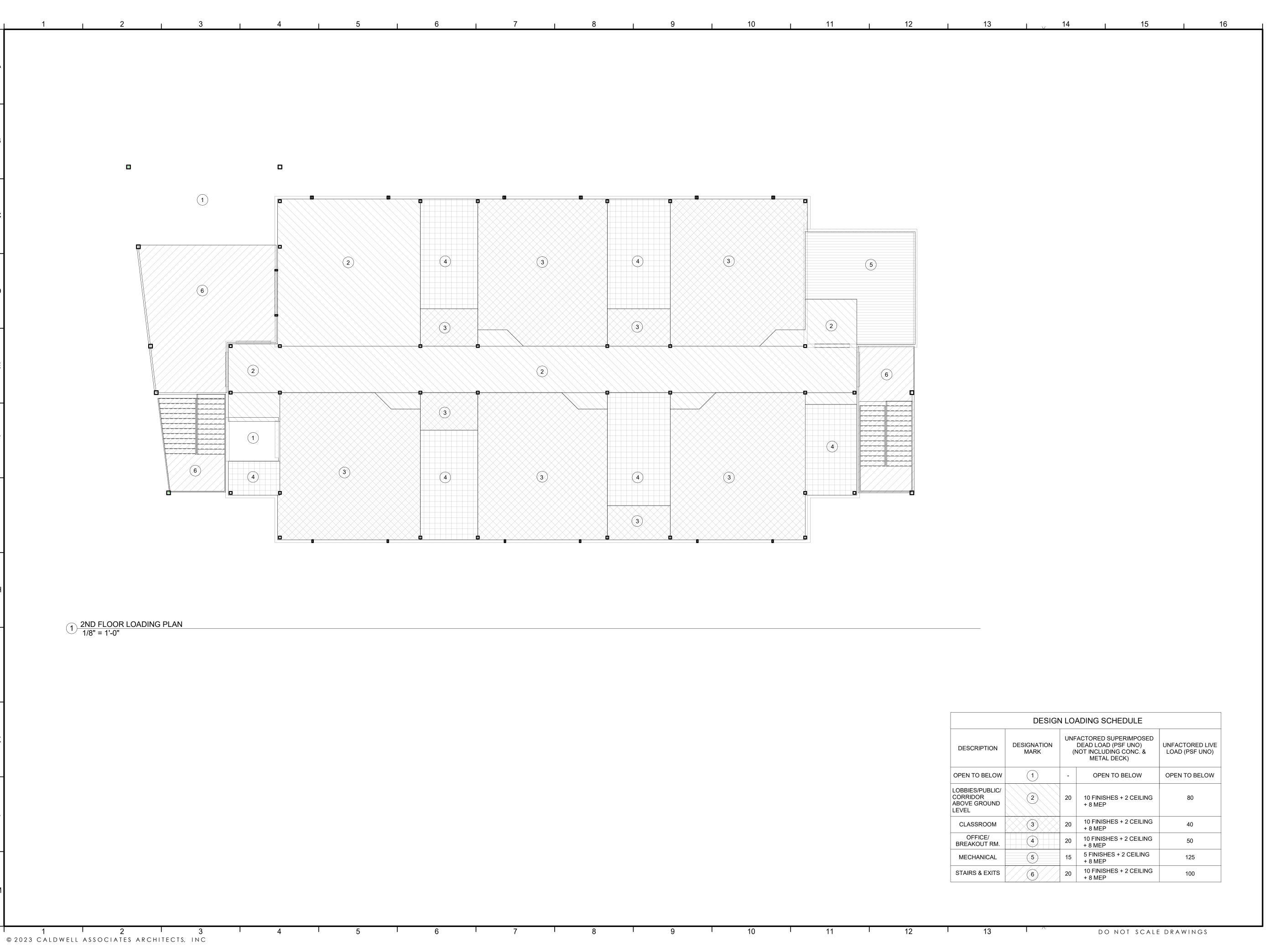
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**GENERAL NOTES &** WIND PRESSURES

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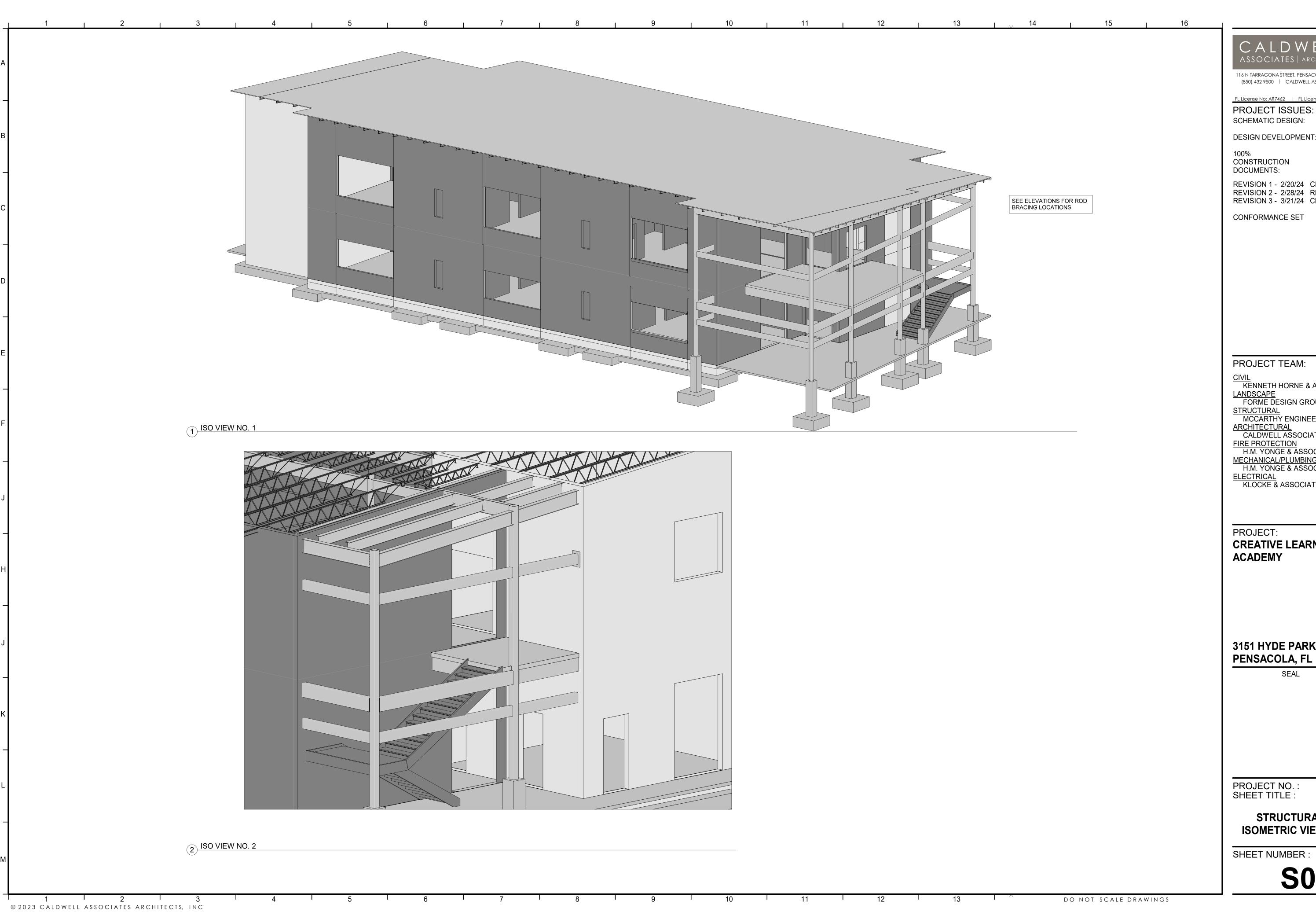
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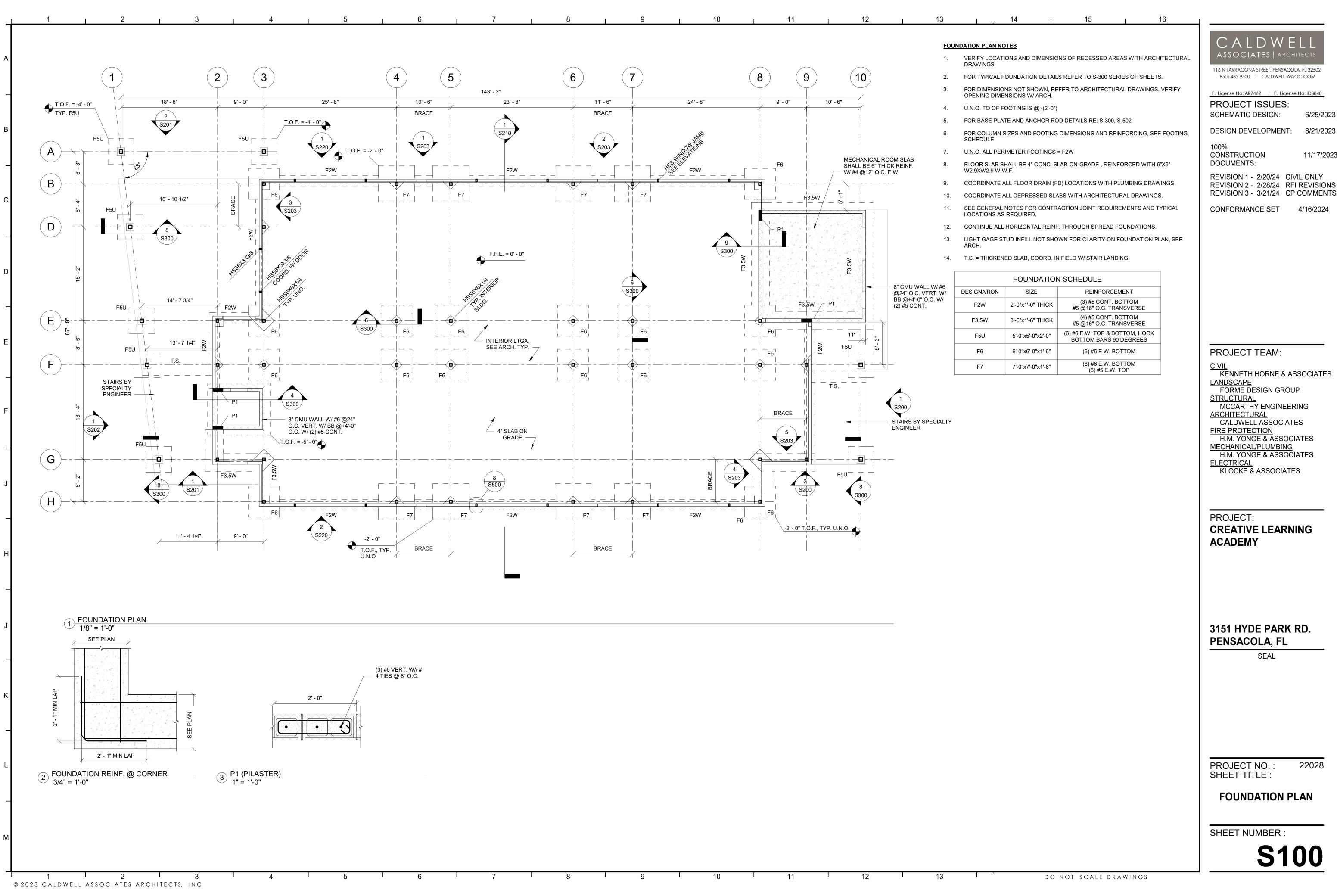
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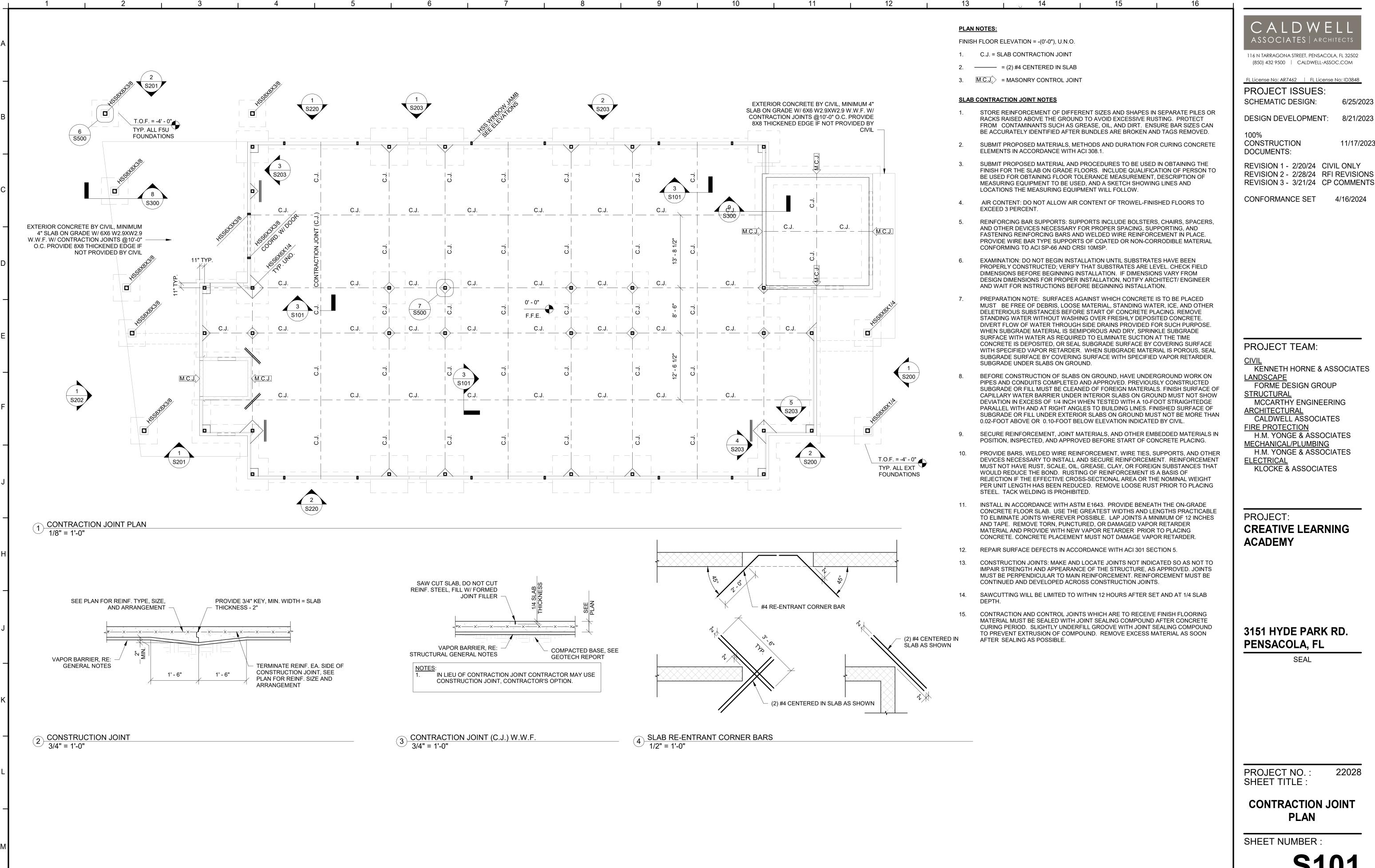
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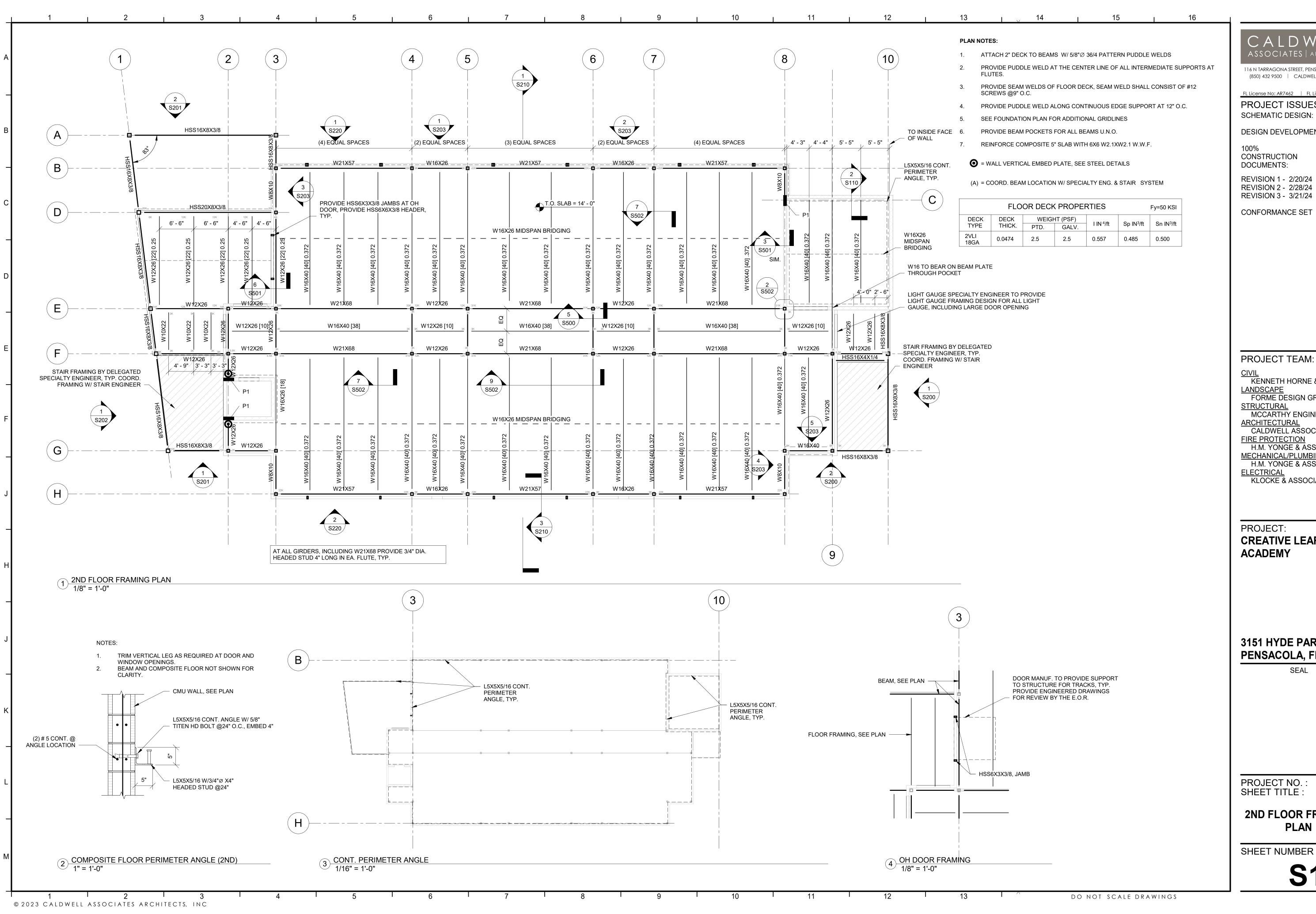
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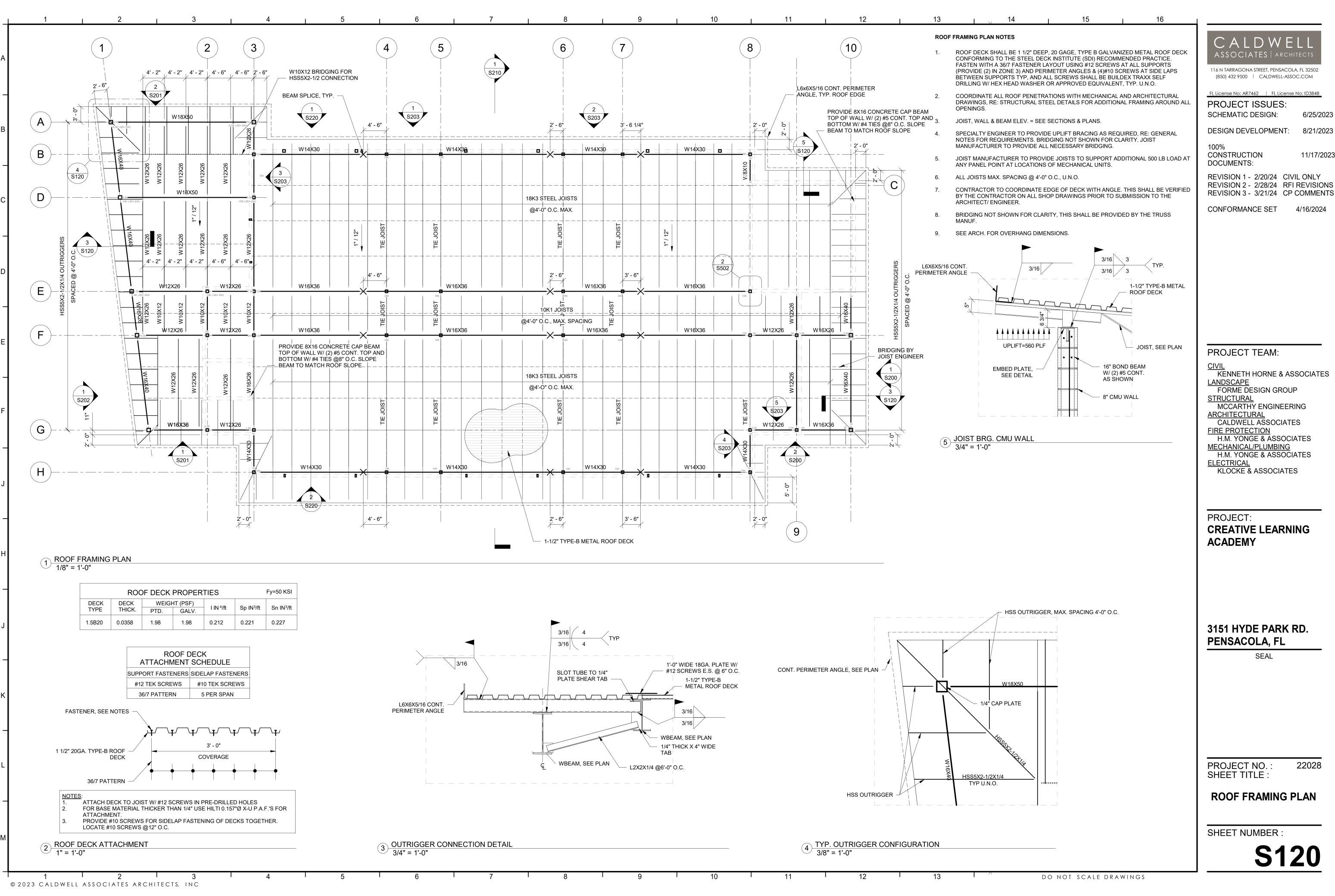
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**2ND FLOOR FRAMING PLAN** 

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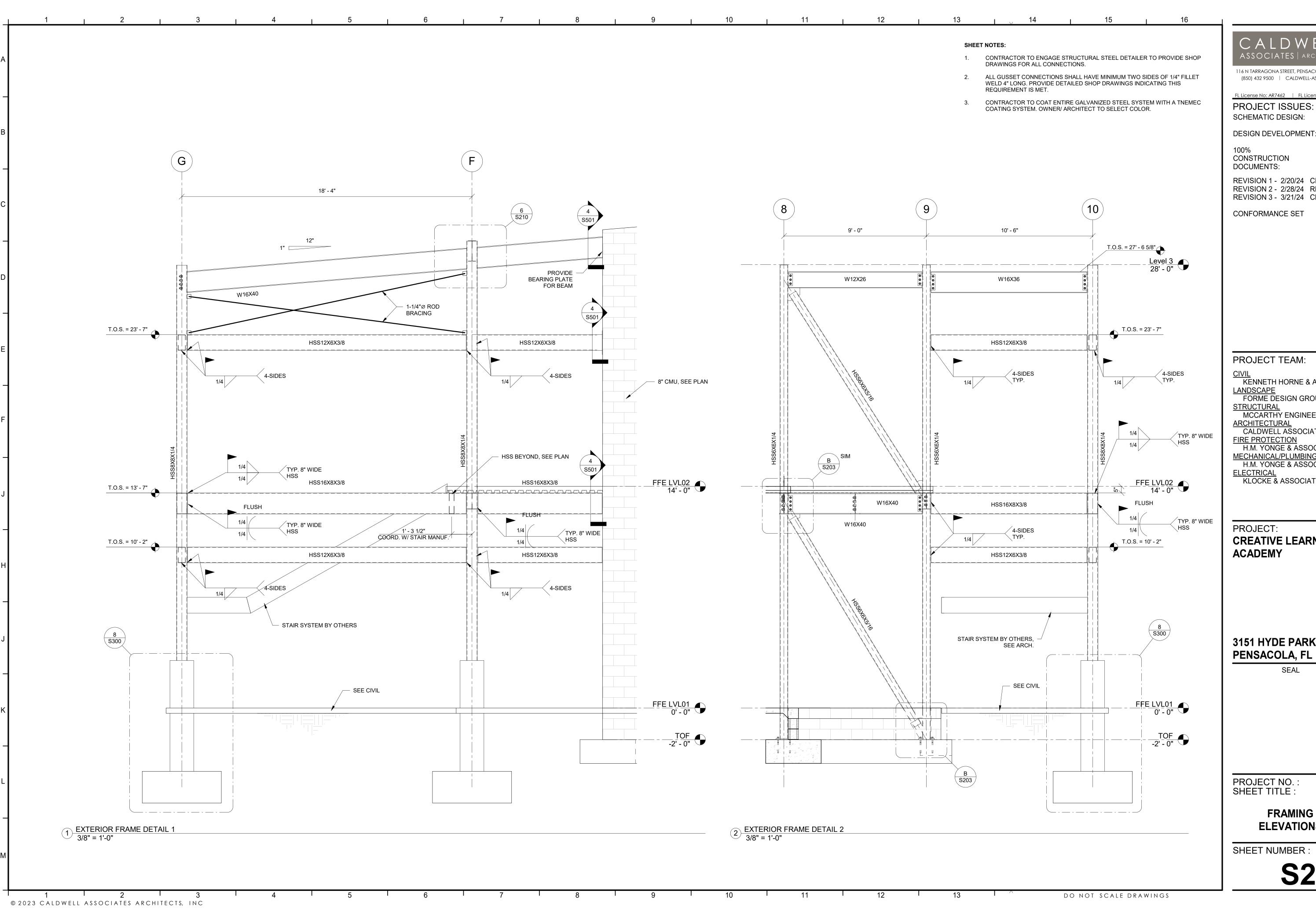
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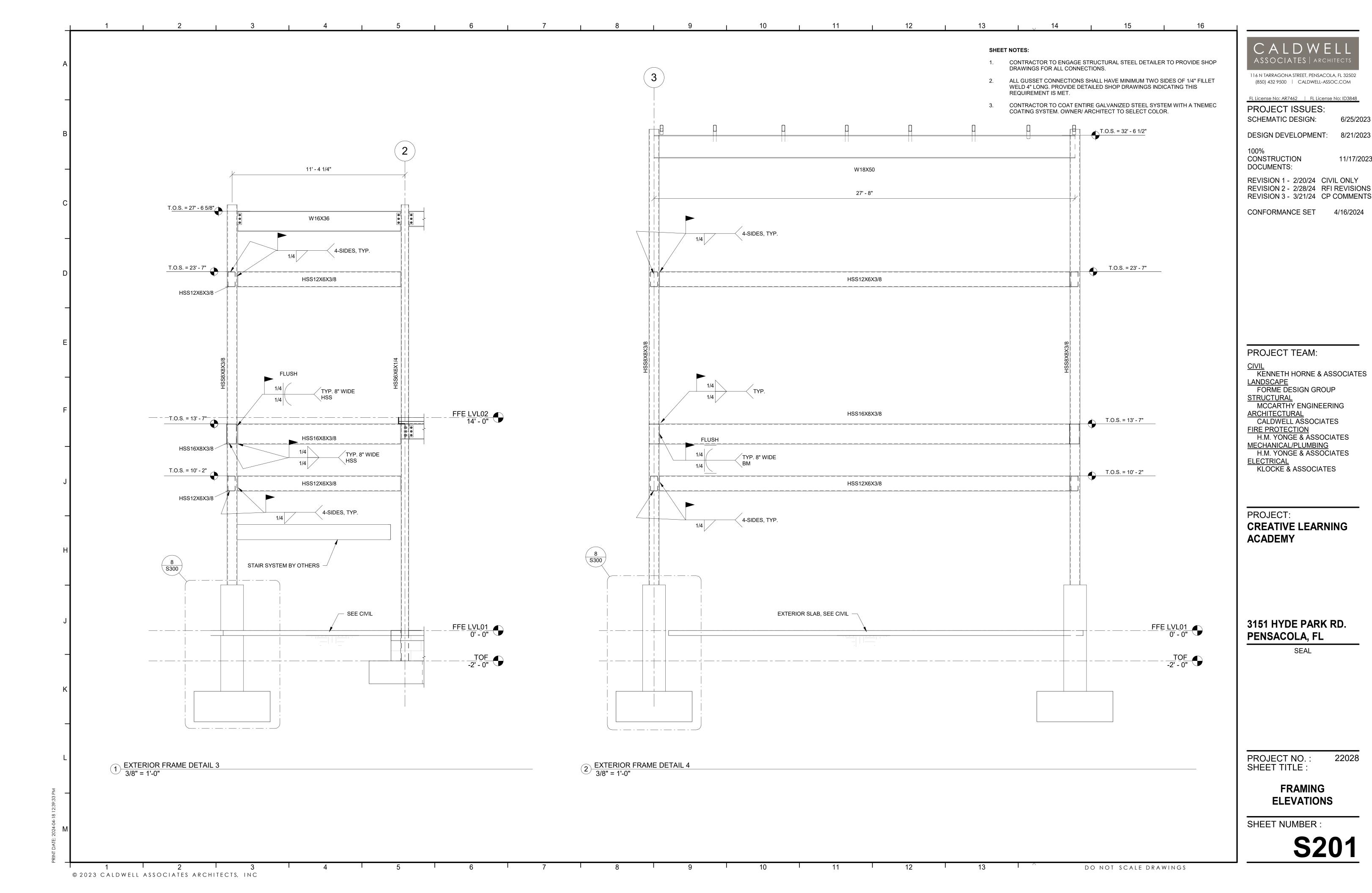
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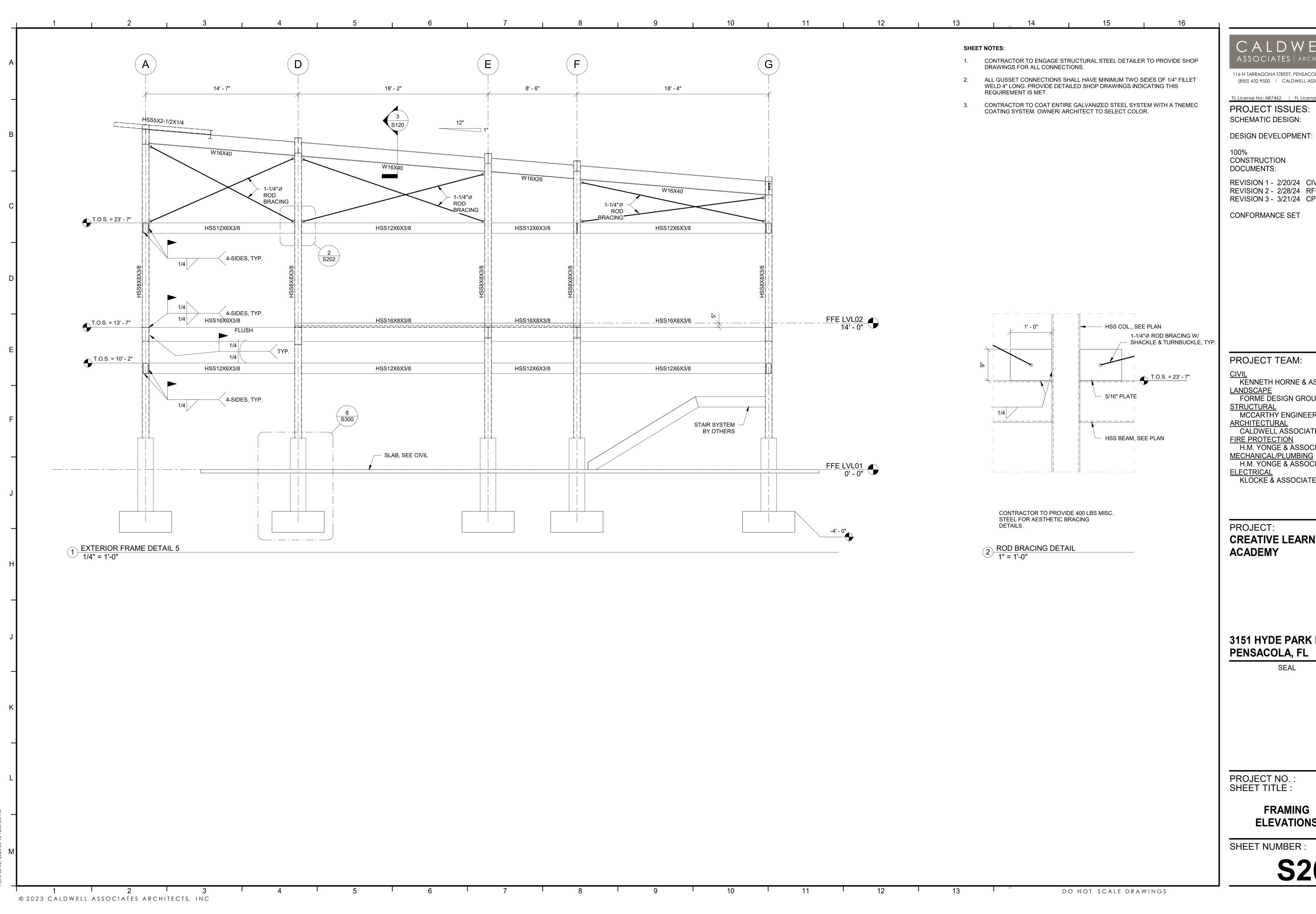
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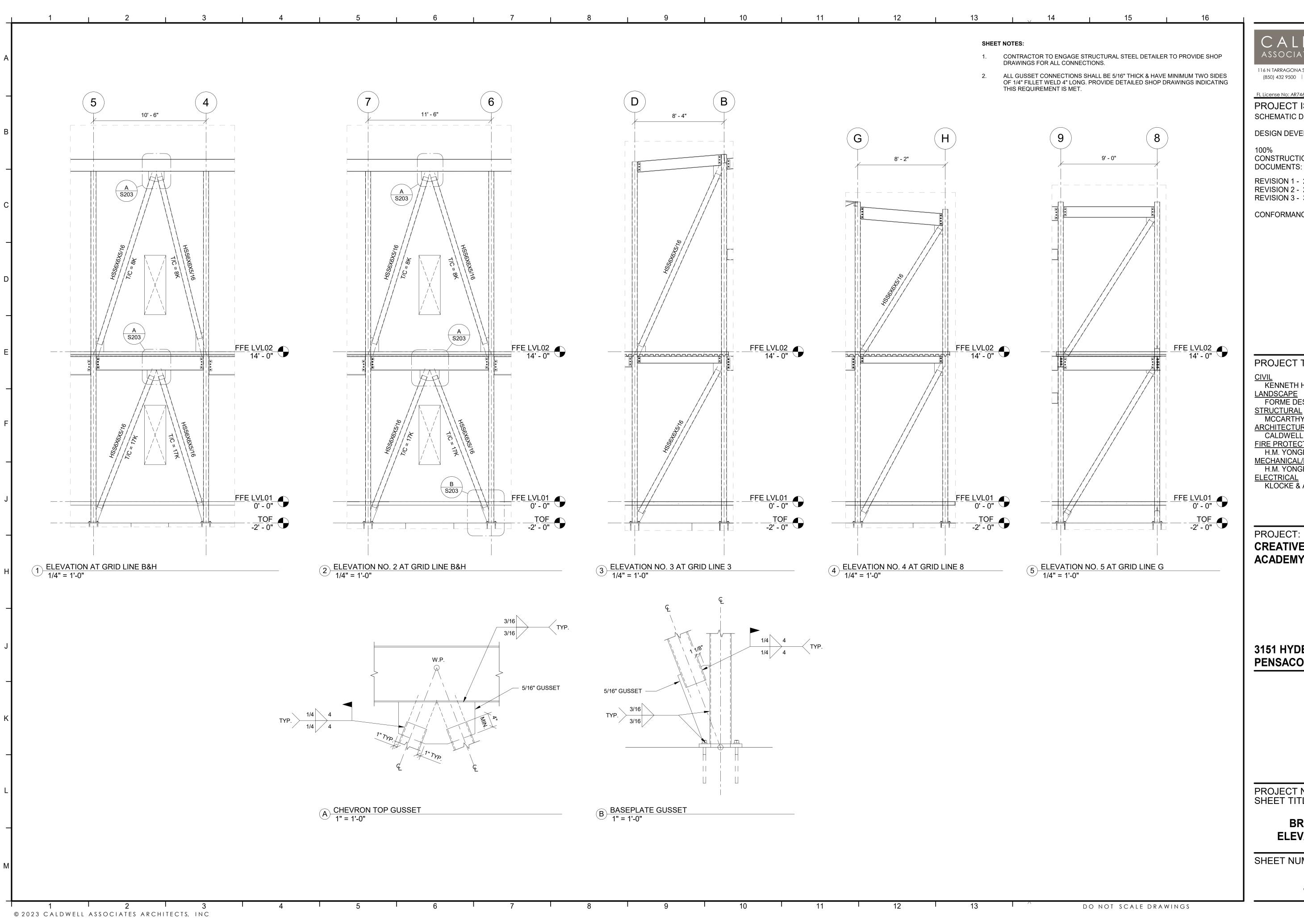
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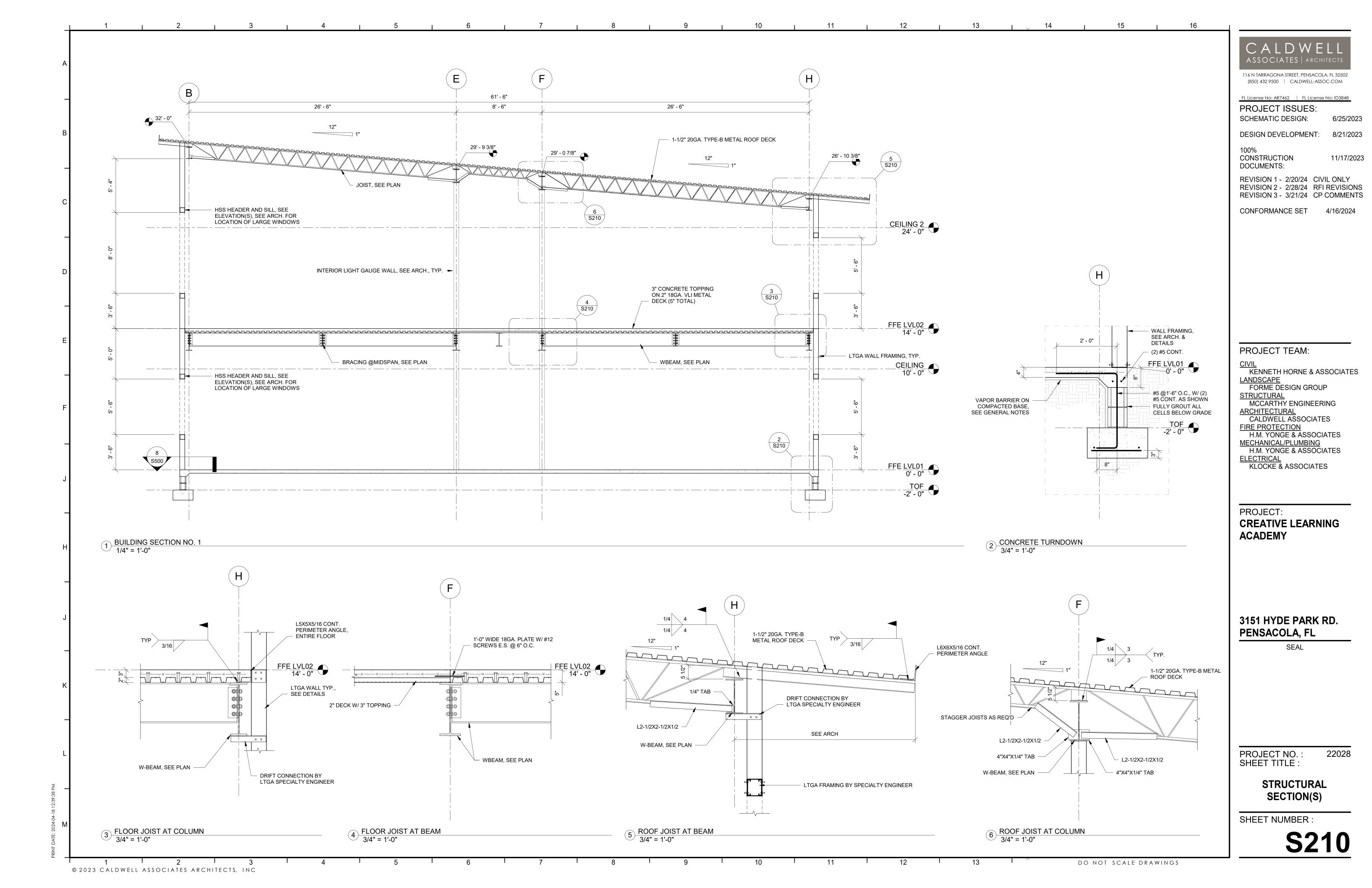
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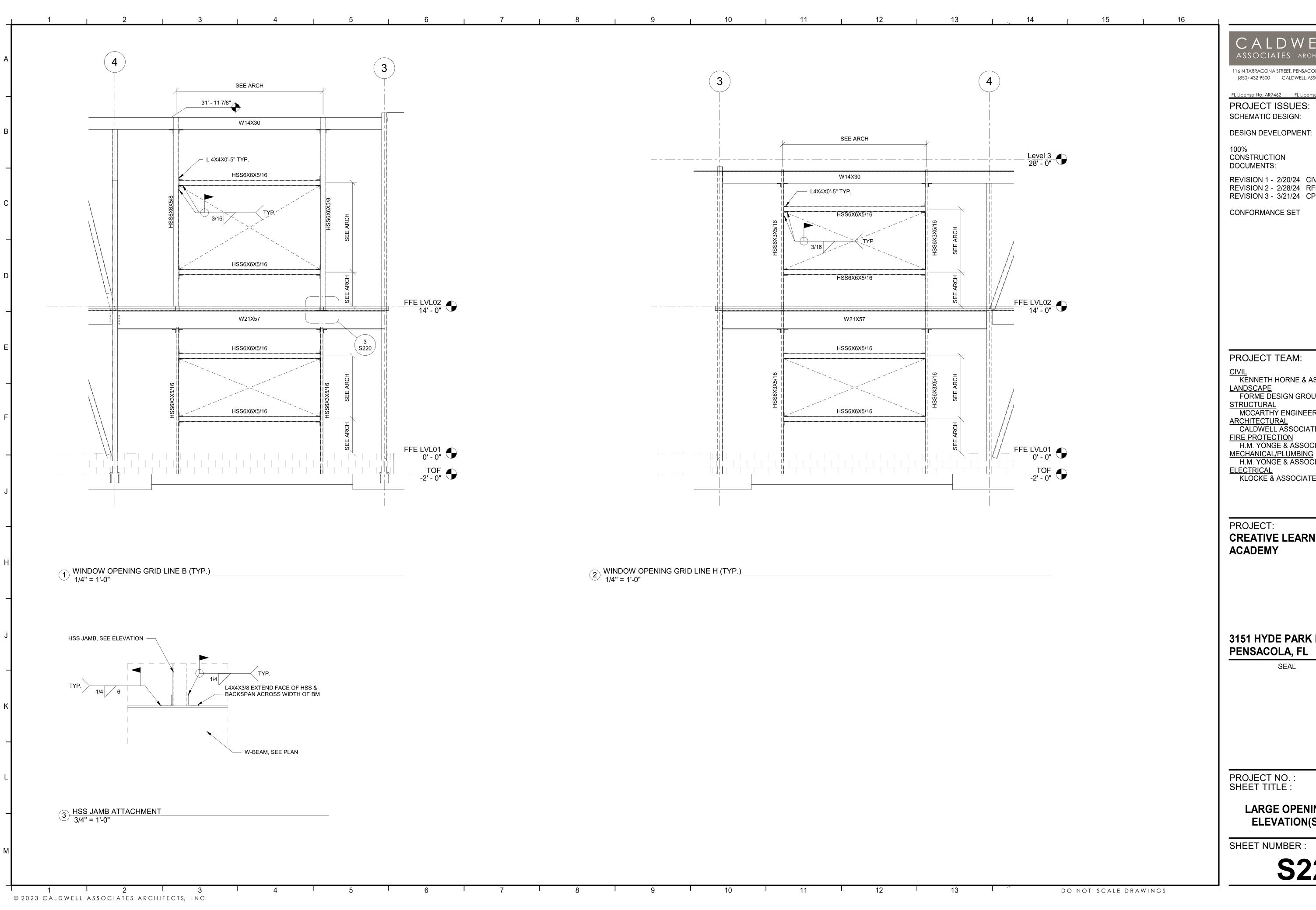
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CIVIL KENNETH HORNE & ASSOCIATES LANDSCAPE FORME DESIGN GROUP **STRUCTURAL** MCCARTHY ENGINEERING

CALDWELL ASSOCIATES FIRE PROTECTION H.M. YONGE & ASSOCIATES MECHANICAL/PLUMBING

H.M. YONGE & ASSOCIATES ELECTRICAL KLOCKE & ASSOCIATES

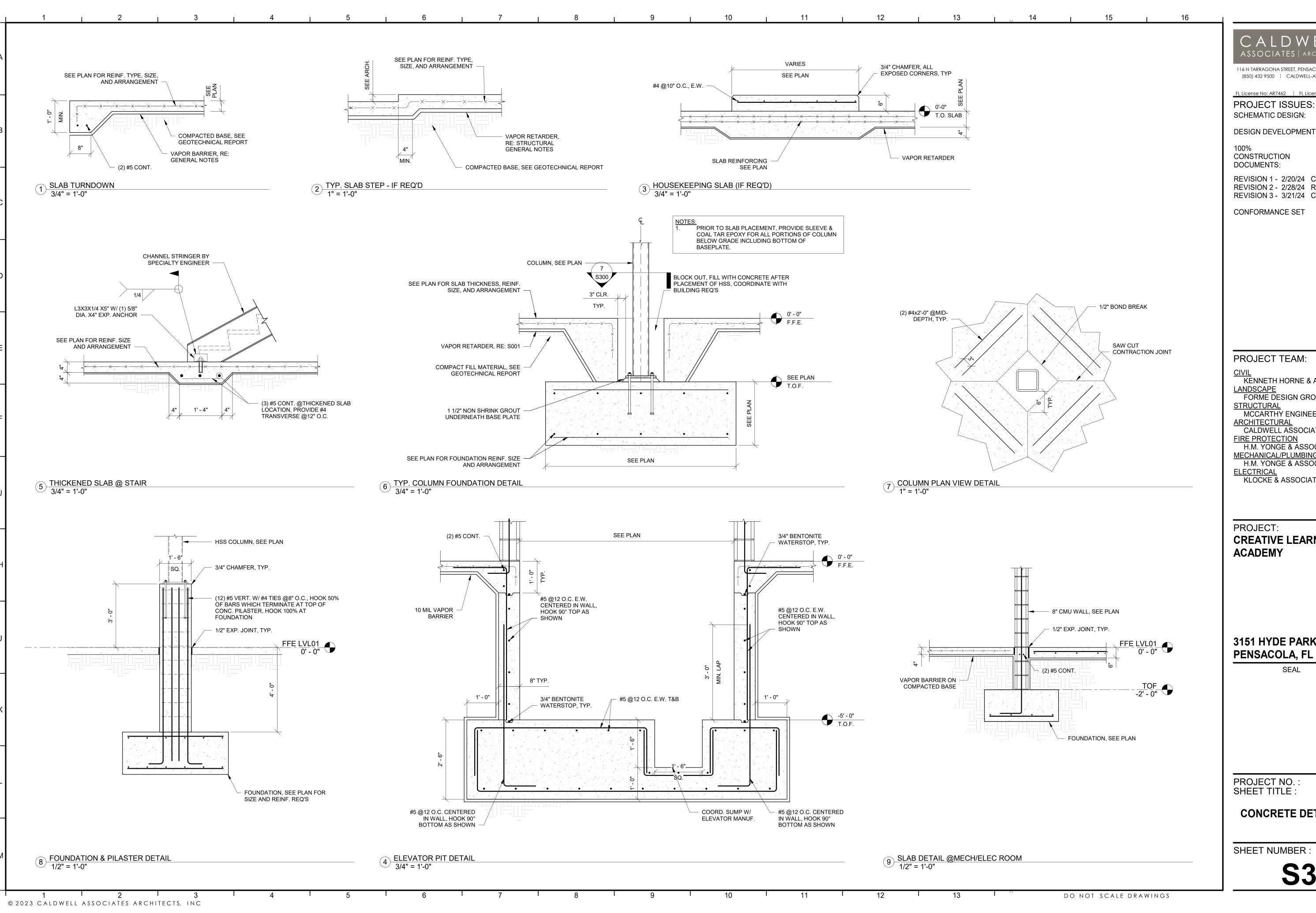
**CREATIVE LEARNING ACADEMY** 

3151 HYDE PARK RD. PENSACOLA, FL

SEAL

LARGE OPENING **ELEVATION(S)** 

SHEET NUMBER:



116 N TARRAGONA STREET, PENSACOLA, FL 32502 (850) 432 9500 | CALDWELL-ASSOC.COM

FL License No: AR7462 | FL License No: ID3848

SCHEMATIC DESIGN: 6/25/2023

DESIGN DEVELOPMENT: 8/21/2023

CONSTRUCTION DOCUMENTS:

REVISION 1 - 2/20/24 CIVIL ONLY

REVISION 2 - 2/28/24 RFI REVISIONS REVISION 3 - 3/21/24 CP COMMENTS

11/17/2023

4/16/2024

CONFORMANCE SET

PROJECT TEAM:

CIVIL KENNETH HORNE & ASSOCIATES FORME DESIGN GROUP **STRUCTURAL** 

MCCARTHY ENGINEERING **ARCHITECTURAL** CALDWELL ASSOCIATES FIRE PROTECTION

H.M. YONGE & ASSOCIATES MECHANICAL/PLUMBING H.M. YONGE & ASSOCIATES **ELECTRICAL** 

KLOCKE & ASSOCIATES

PROJECT:

**CREATIVE LEARNING ACADEMY** 

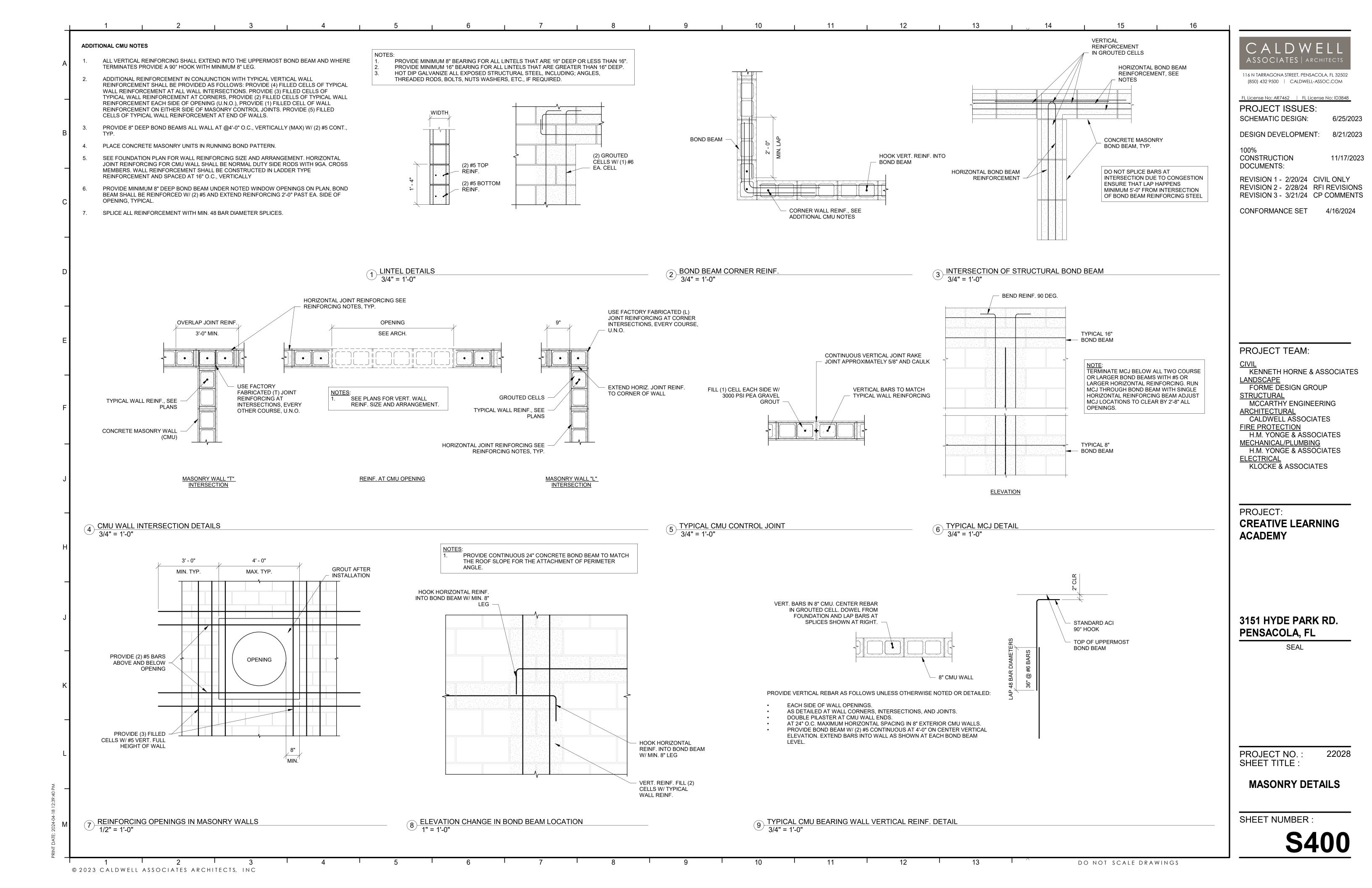
3151 HYDE PARK RD. PENSACOLA, FL

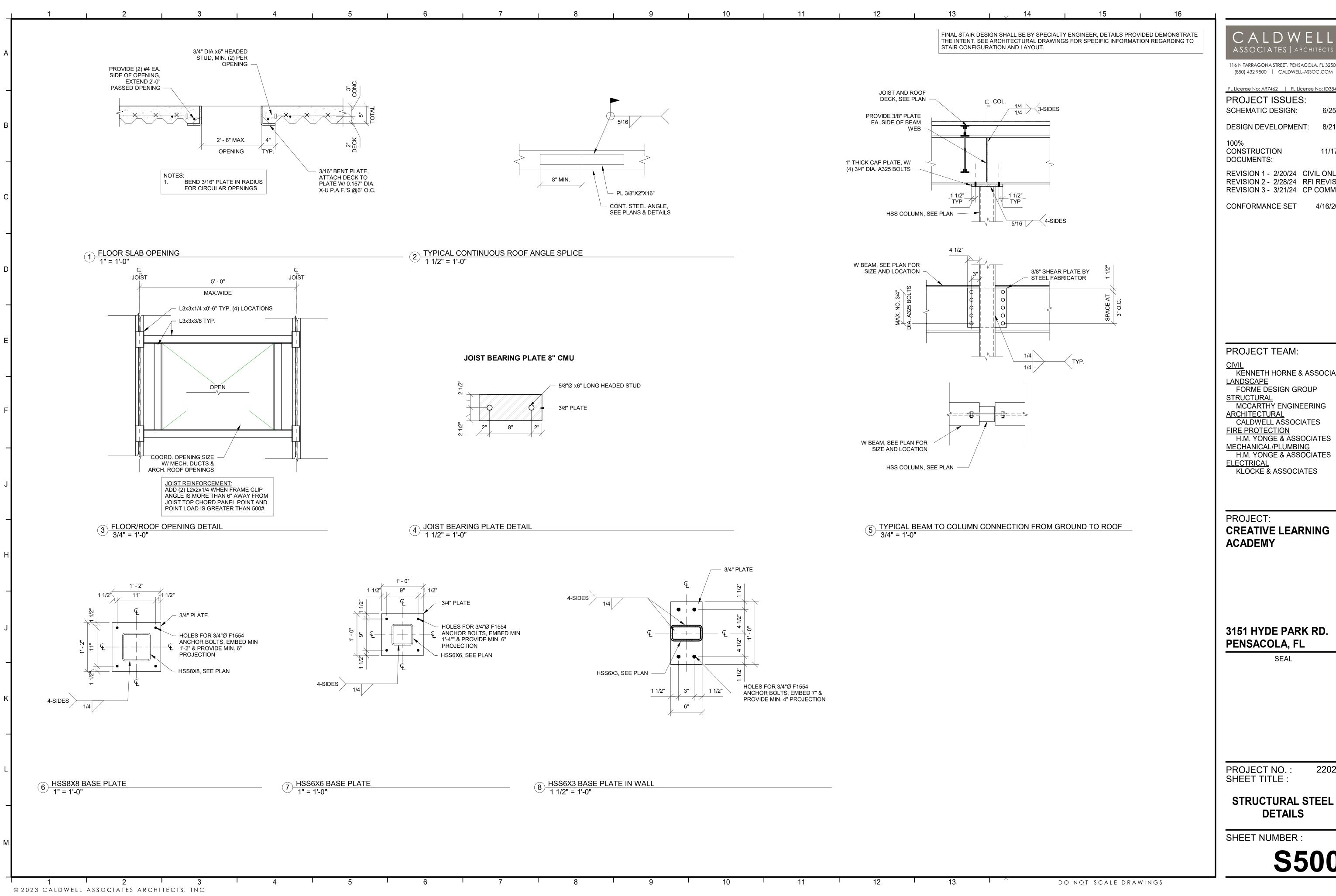
SEAL

PROJECT NO.: SHEET TITLE:

**CONCRETE DETAILS** 

22028





116 N TARRAGONA STREET, PENSACOLA, FL 32502

FL License No: AR7462 | FL License No: ID3848

PROJECT ISSUES:

SCHEMATIC DESIGN: 6/25/2023

CONSTRUCTION DOCUMENTS:

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CONFORMANCE SET

PROJECT TEAM:

CIVIL KENNETH HORNE & ASSOCIATES FORME DESIGN GROUP **STRUCTURAL** MCCARTHY ENGINEERING **ARCHITECTURAL** 

CALDWELL ASSOCIATES FIRE PROTECTION H.M. YONGE & ASSOCIATES MECHANICAL/PLUMBING

H.M. YONGE & ASSOCIATES **ELECTRICAL** KLOCKE & ASSOCIATES

PROJECT:

**CREATIVE LEARNING ACADEMY** 

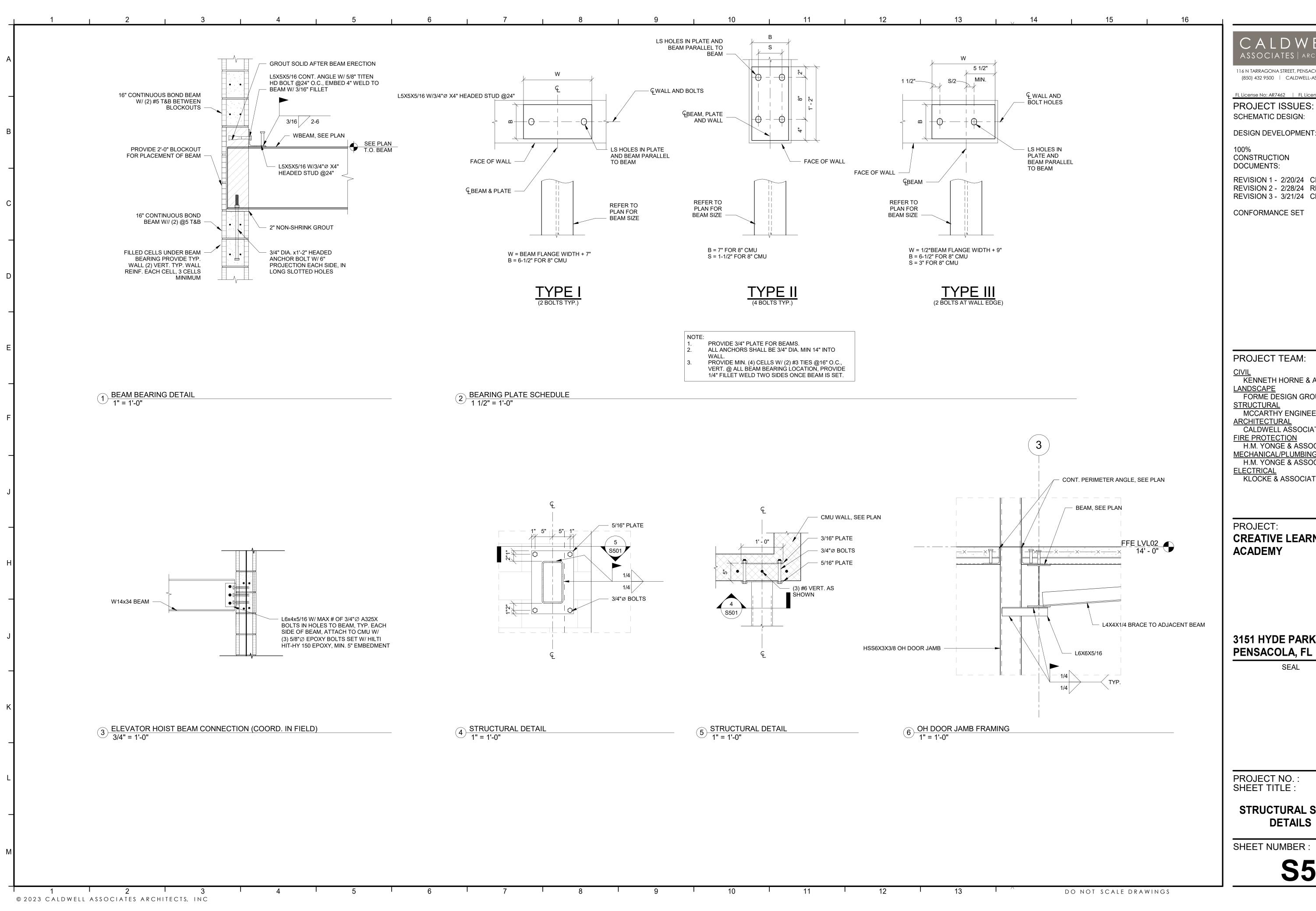
3151 HYDE PARK RD. PENSACOLA, FL

SEAL

PROJECT NO.: SHEET TITLE :

> STRUCTURAL STEEL **DETAILS**

SHEET NUMBER:



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FL License No: AR7462 | FL License No: ID3848

SCHEMATIC DESIGN: 6/25/2023

DESIGN DEVELOPMENT: 8/21/2023

CONSTRUCTION DOCUMENTS:

REVISION 1 - 2/20/24 CIVIL ONLY REVISION 2 - 2/28/24 RFI REVISIONS REVISION 3 - 3/21/24 CP COMMENTS

11/17/2023

CONFORMANCE SET 4/16/2024

PROJECT TEAM:

CIVIL
KENNETH HORNE & ASSOCIATES FORME DESIGN GROUP **STRUCTURAL** MCCARTHY ENGINEERING

**ARCHITECTURAL** CALDWELL ASSOCIATES FIRE PROTECTION

H.M. YONGE & ASSOCIATES MECHANICAL/PLUMBING H.M. YONGE & ASSOCIATES

**ELECTRICAL** KLOCKE & ASSOCIATES

PROJECT:

**CREATIVE LEARNING ACADEMY** 

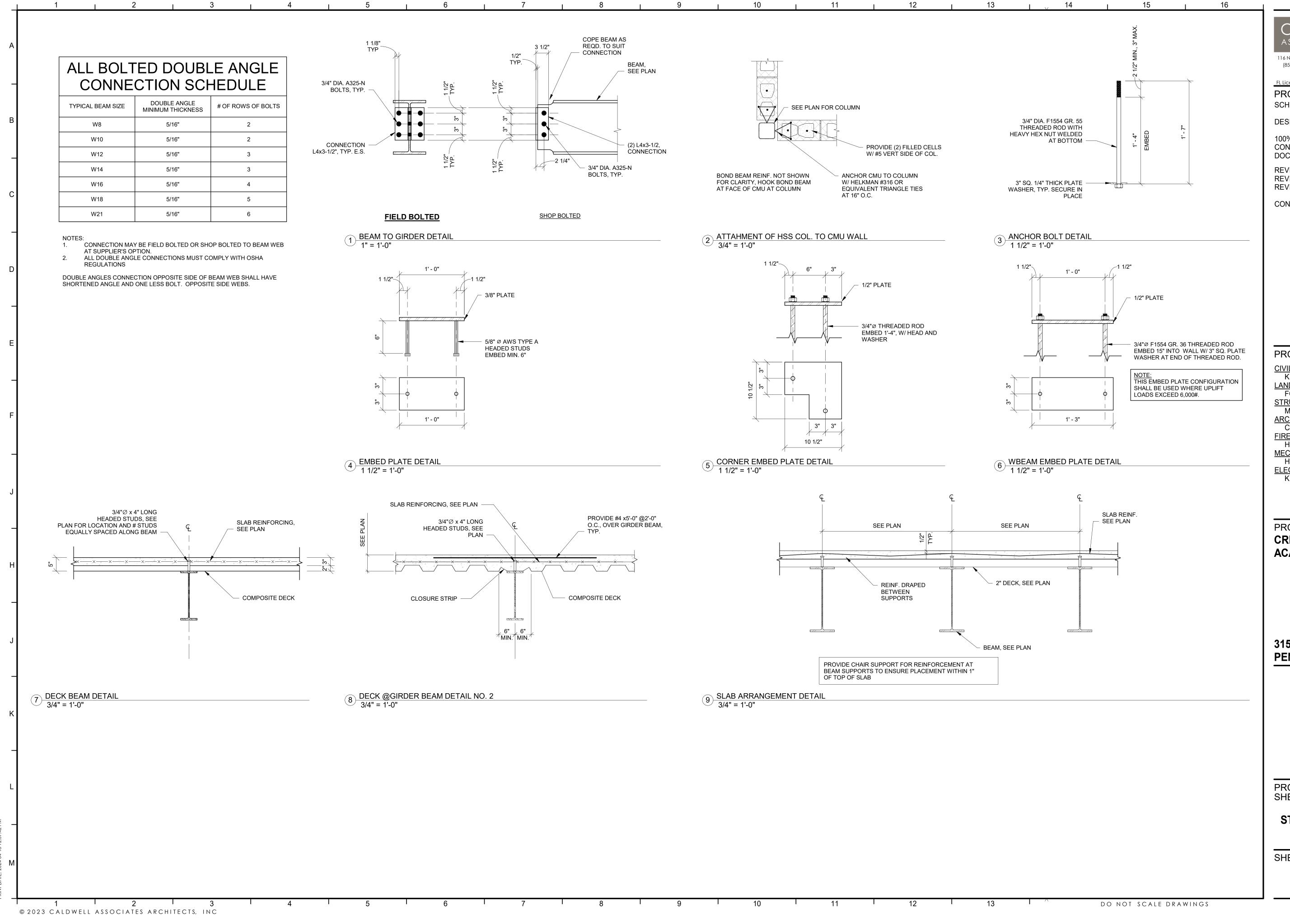
3151 HYDE PARK RD. PENSACOLA, FL

SEAL

PROJECT NO.: SHEET TITLE:

> STRUCTURAL STEEL **DETAILS**

22028



CALDWELL
ASSOCIATES | ARCHITECTS

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FL License No: AR7462 | FL License No: ID3848
PROJECT ISSUES:

SCHEMATIC DESIGN:

DESIGN DEVELOPMENT: 8/21/2023

CONSTRUCTION

DOCUMENTS:

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6/25/2023

11/17/2023

4/16/2024

CONFORMANCE SET

PROJECT TEAM:

CIVIL
KENNETH HORNE & ASSOCIATES
LANDSCAPE
FORME DESIGN GROUP

STRUCTURAL

MCCARTHY ENGINEERING

ARCHITECTURAL

CALDWELL ASSOCIATES

FIRE PROTECTION

H.M. YONGE & ASSOCIATES

MECHANICAL/PLUMBING

H.M. YONGE & ASSOCIATES

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ELECTRICAL

KLOCKE & ASSOCIATES

PROJECT:

CREATIVE LEARNING ACADEMY

3151 HYDE PARK RD. PENSACOLA, FL

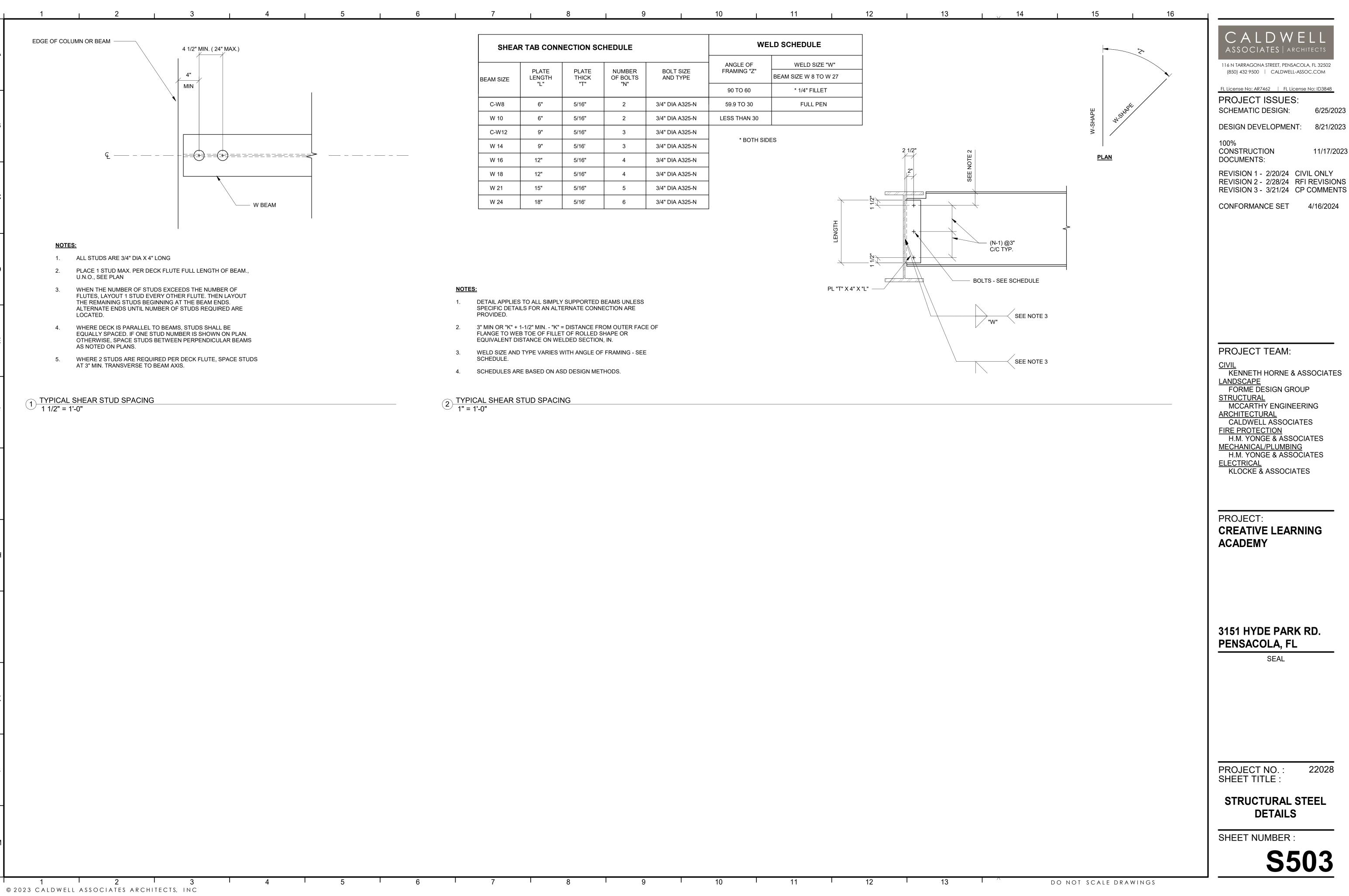
SEAL

PROJECT NO. : SHEET TITLE :

STRUCTURAL STEEL DETAILS

SHEET NUMBER:

**S502** 



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PROJECT ISSUES: 6/25/2023

DESIGN DEVELOPMENT: 8/21/2023

CONSTRUCTION

REVISION 1 - 2/20/24 CIVIL ONLY REVISION 2 - 2/28/24 RFI REVISIONS

11/17/2023

CONFORMANCE SET 4/16/2024

PROJECT TEAM:

CIVIL KENNETH HORNE & ASSOCIATES FORME DESIGN GROUP **STRUCTURAL** MCCARTHY ENGINEERING **ARCHITECTURAL** 

MECHANICAL/PLUMBING H.M. YONGE & ASSOCIATES

KLOCKE & ASSOCIATES

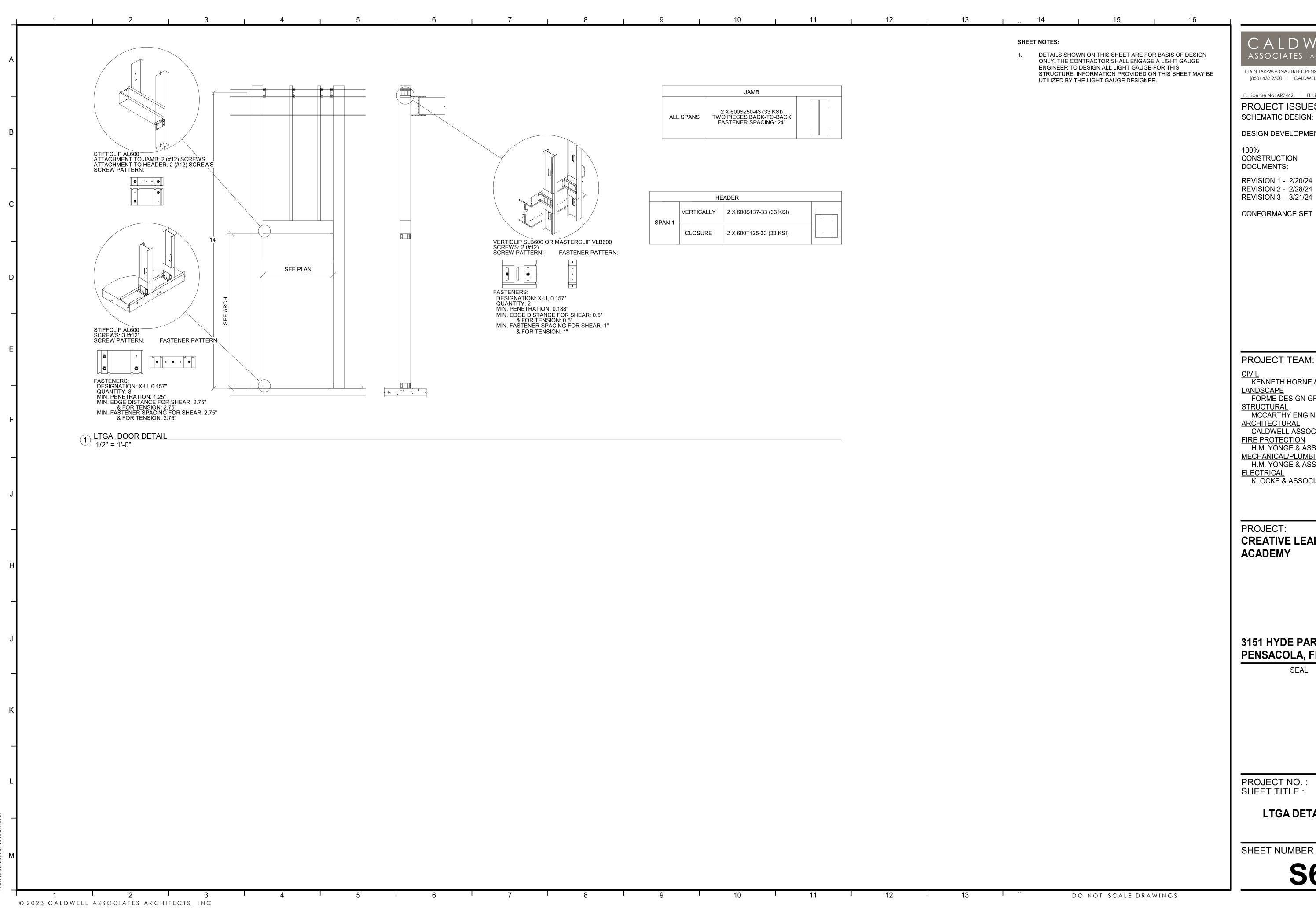
**ACADEMY** 

3151 HYDE PARK RD. PENSACOLA, FL

SEAL

STRUCTURAL STEEL **DETAILS** 

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PROJECT ISSUES:

8/21/2023 DESIGN DEVELOPMENT:

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CONFORMANCE SET

PROJECT TEAM:

CIVIL KENNETH HORNE & ASSOCIATES LANDSCAPE FORME DESIGN GROUP STRUCTURAL

MCCARTHY ENGINEERING <u>ARCHITECTURAL</u> CALDWELL ASSOCIATES FIRE PROTECTION

H.M. YONGE & ASSOCIATES MECHANICAL/PLUMBING H.M. YONGE & ASSOCIATES

**ELECTRICAL** 

KLOCKE & ASSOCIATES

PROJECT:

**CREATIVE LEARNING ACADEMY** 

3151 HYDE PARK RD. PENSACOLA, FL

SEAL

PROJECT NO.: SHEET TITLE:

LTGA DETAILS

SHEET NUMBER:

