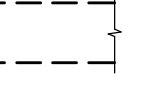
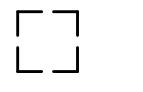
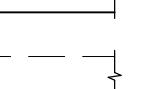
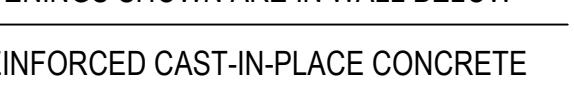
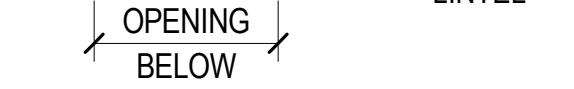
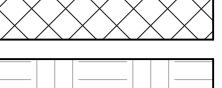
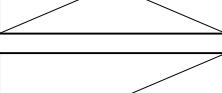
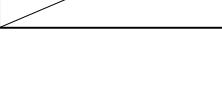


## ABBREVIATIONS AND SYMBOLS

# ABBREVIATIONS AND SYMBOLS

|        |                                   |        |                                    |        |                               |
|--------|-----------------------------------|--------|------------------------------------|--------|-------------------------------|
| A/E    | ARCHITECT/ENGINEER                | FDN    | FOUNDATION                         | PAF    | POWDER ACTUATED FASTENER      |
| ABV    | ABOVE                             | FF     | FINISHED FLOOR                     | PRL    | PARALLEL                      |
| ADDL   | ADDITIONAL                        | FL     | FLOOR                              | PCF    | POUNDS PER CUBIC FOOT         |
| ADJ    | ADJACENTV                         | FP     | FIREPROOF(ING)                     | PCI    | POUNDS PER CUBIC INCH         |
| AFF    | ABOVE FINISHED FLOOR              | FS     | FAR SIDE                           | PEMB   | PRE-ENGINEERED METAL BUILDING |
| AHU    | AIR HANDLING UNIT                 | FT     | FOOT/FEET                          | PERM   | PERIMETER                     |
| ALT    | ALTERNATE                         | FTG    | FOOTING                            | PERP   | PERPENDICULAR                 |
| APPROX | APPROXIMATE(LY)                   | GA     | GAUGE/GAGE                         | PJP    | PARTIAL JOINT PENETRATION     |
| ARCH   | ARCHITECT(URAL)                   | GALV   | GALVANIZED                         | PL     | PLATE                         |
| AT     | ANTITERRORISM                     | GB     | GRADE BEAM                         | PLF    | POUNDS PER LINEAR FOOT        |
| Avg    | AVERAGE                           | GC     | GENERAL CONTRACTOR                 | PC     | PRECAST                       |
| AWTS   | AUTOMATIC WELDED THREADED STUDS   | HORIZ  | HORIZONTAL                         | PREFAB | PREFABRICATED                 |
| B PL   | BASE PLATE OR BEARING PLATE       | HP     | HIGH POINT                         | PSF    | POUNDS PER SQUARE FOOT        |
| B/     | BOTTOM OF                         | HSA    | HEADED STUD ANCHOR                 | PSI    | POUNDS PER SQUARE INCH        |
| BD     | BOARD                             | HT     | HEIGHT                             | PT     | PRE/POST-TENSIONING           |
| BF     | BRACED FRAME                      | I/F    | INSIDE FACE                        | PTW    | PRESSURE TREATED WOOD         |
| BFF    | BELOW FINISHED FLOOR              | ID     | INSIDE DIAMETER                    | PVMT   | PAVEMENT                      |
| BLDG   | BUILDING                          | IN     | INCH(ES)                           | QTY    | QUANTITY                      |
| BLK    | BLOCK(ING)                        | INCL   | INCLUDE                            | RAD    | RADIUS                        |
| BLW    | BELOW                             | INFO   | INFORMATION                        | RE:    | REFER TO                      |
| BM     | BEAM                              | INT    | INTERIOR                           | REINF  | REINFORCEMENT                 |
| BOT    | BOTTOM                            | ISO JT | ISOLATION JOINT                    | REQD   | REQUIRED                      |
| BRG    | BEARING                           | JST    | JOIST                              | REV    | REVISE(ION)                   |
| BS     | BOTH SIDES                        | JT     | JOINT                              | RO     | ROUGH OPENING                 |
| BTWN   | BETWEEN                           | K      | KIP(S)                             | RTU    | ROOF TOP UNIT                 |
| CC     | CENTER TO CENTER                  | KB     | KNEE BRACE                         | SC     | SLIP CRITICAL                 |
| CF     | CUBIC FOOT OR CUBIC FEET          | KCF    | KIPS PER CUBIC FEET                | SCHED  | SCHEDULE                      |
| CFMF   | COLD-FORMED METAL FRAMING         | KLF    | KIPS PER LINEAR FOOT               | SECT   | SECTION                       |
| CIP    | CAST IN PLACE                     | KSF    | KIPS PER SQUARE FEET               | SF     | SQUARE FOOT                   |
| CJ     | CONTROL JOINT/CONSTRUCTION JOINT  | KSI    | KIPS PER SQUARE INCH               | SHT    | SHEET                         |
| CJP    | COMPLETE JOINT PENETRATION        | L      | LENGTH                             | SIM    | SIMILAR                       |
| CL     | CENTERLINE                        | LAT    | LATERAL                            | SL     | SLOPE(D) OR SLOPING           |
| CLR    | CLEAR OR CLEAR COVER              | LBS    | POUNDS                             | SLV    | SLEEVE                        |
| CMU    | CONCRETE MASONRY UNIT             | ld     | DEVELOPMENT LENGTH                 | SOG    | SLAB ON GRADE                 |
| COL    | COLUMN                            | Ldh    | HOOK DEVELOPMENT LENGTH            | SOD    | SLAB ON METAL DECK            |
| CONC   | CONCRETE                          | Lst    | LAP SPLICING LENGTH                | SP     | SPACE(S) OR SPACING           |
| CONN   | CONNECTION                        | Lsc    | LAP SPLICING LENGTH                | SPEC   | SPECIFY OR SPECIFICATIONS     |
| CONST  | CONSTRUCTION                      | LF     | LINEAR FOOT                        | SQ     | SQUARE                        |
| CONT   | CONTINUOUS                        | LL     | LIVE LOAD                          | SS     | STAINLESS STEEL               |
| CONTR  | CONTRACTOR                        | LLH    | LONG LEG HORIZONTAL                | STD    | STANDARD                      |
| COORD  | COORDINATE                        | LLV    | LONG LEG VERTICAL                  | STIFF  | STIFFENER                     |
| CTR    | CENTER(ED)                        | LONG   | LONGITUDINAL                       | STL    | STEEL                         |
| CY     | CUBIC YARD                        | LP     | LOW POINT                          | STRUCT | STRUCTURAL                    |
| db     | BAR DIAMETER                      | LSH    | LONG SIDE HORIZONTAL               | SUSP   | SUSPEND(ED) OR SUSPENSION     |
| DBA    | DEFORMED BAR ANCHOR               | LSV    | LONG SIDE VERTICAL                 | T&B    | TOP AND BOTTOM                |
| DBL    | DOUBLE                            | LWT    | LIGHT WEIGHT                       | T/     | TOP OF                        |
| DET    | DETAIL                            | MEP    | MECHANICAL, ELECTRICAL, & PLUMBING | TEMP   | TEMPORARY                     |
| DIA    | DIAMETER                          | MATL   | MATERIAL                           | THD    | THREAD(ED)                    |
| DIAG   | DIAGONAL                          | MAX    | MAXIMUM                            | THK    | THICKNESS                     |
| DIM    | DIMENSION                         | MCJ    | MASONRY CONTROL JOINT              | TL     | TOTAL LOAD                    |
| DL     | DEAD LOAD                         | MECH   | MECHANICAL                         | TRANS  | TRANSVERSE                    |
| DN     | DOWN                              | MEZZ   | MEZZANINE                          | TRTD   | TREATED                       |
| DTL    | DETAIL                            | MFR    | MANUFACTURE(R)                     | TYP    | TYPICAL                       |
| DWG    | DRAWING                           | MID    | MIDDLE                             | UNO    | UNLESS NOTED OTHERWISE        |
| DWL    | DOWEL                             | MIN    | MINIMUM                            | VERT   | VERTICAL                      |
| E/     | EDGE OF                           | MISC   | MISCELLANEOUS                      | VIF    | VERIFY IN FIELD               |
| EA     | EACH                              | MULT   | MULTIPLE                           | W      | WIDTH                         |
| EF     | EACH FACE                         | MO     | MASONRY OPENING                    | W/     | WITH                          |
| EIFS   | EXTERIOR INSULATION FINISH SYSTEM | MTL    | METAL                              | W/C    | WATER TO CEMENT RATIO         |
| EJ     | EXPANSION JOINT                   | MWT    | MEDIUM WEIGHT                      | W/O    | WITHOUT                       |
| ELEC   | ELECTRICAL                        | NF     | NEAR FACE                          | WL     | WIND LOAD                     |
| ELEV   | ELEVATION(S)                      | NIC    | NOT IN CONTRACT                    | WP     | WORKING POINT                 |
| EMBED  | EMBED(ED)(MENT)                   | NUM    | NUMBER                             | WT     | WEIGHT                        |
| ENG    | ENGINEER                          | NOM    | NOMINAL                            | WWR    | WELDED WIRE REINFORCEMENT     |
| EOR    | ENGINEER OF RECORD                | NS     | NEAR SIDE                          | @      | AT / AT EACH                  |
| EQ     | EQUAL                             | NTS    | NOT TO SCALE                       | (°)    | DEGREE                        |
| EQUIP  | EQUIPMENT                         | NWT    | NORMAL WEIGHT                      | Ø      | DIAMETER                      |
| EST    | ESTIMATED                         | O/F    | OUTSIDE FACE                       | #      | NUMBER                        |
| EW     | EACH WAY                          | OC     | ON CENTER                          | o FD   | FLOOR DRAIN                   |
| EXCL   | EXCLUDE(ING)                      | OD     | OUTSIDE DIAMETER                   | o RD   | ROOF DRAIN                    |
| (E)    | EXISTING                          | OPNG   | OPENING                            |        |                               |
| EXP    | EXPANSION                         | OPP    | OPPOSITE                           |        |                               |
| EXT    | EXTERIOR                          | OH     | OPPOSITE HAND                      |        |                               |
| F/     | FACE OF                           | OVH    | OVERHEAD                           |        |                               |
| F/F    | FACE TO FACE                      | OWJ    | OPEN WEB STEEL JOIST               |        |                               |

## DRAWING LEGEND

| DRAWING LEGEND   |   |   |
|--|---|---|
| GENERAL ANNOTATIONS  | CONCRETE CONSTRUCTION   | STEEL CONSTRUCTION  |
| FS# CONC SPREAD FTG TAG  |  CONC SPREAD FOOTING               |  STEEL COLUMN (W SHAPES)                       |
| FC# CONC CONTINUOUS FTG TAG  |  CONC CONTINUOUS FOOTING           |  STEEL COLUMN (HSS)                            |
| XC# COLUMN TAG   |  CONC WALL                         |  STEEL COLUMN (HSS ROUND)                      |
| XW# WALL TAG   |  FOUNDATION PEDESTAL               |  STEEL BEAM / GIRDER                           |
| XB# BEAM TAG   |  CONC COLUMN                       |  STEEL GIRDER TRUSS                            |
| XP# PIER TAG   |  CONC COLUMN BELOW                |  STEEL JOIST                                  |
| 'X' = MATERIAL<br>C = CONCRETE<br>M = MASONRY<br>S = STEEL<br>W = WOOD<br># = NUMERICAL DESIGNATION                |  CONC PIER                       |  STEEL TRUSS JOIST                           |
| REF XX' - YY" ELEVATION CALLOUT (SECTION / DETAILS)  |  CONC BEAM                       |  DRAG STRUT CONNECTION                       |
| REF XX' - YY" ELEVATION CALLOUT (PLAN)   |  CONC BEAM/WALL BELOW            |  FULLY RESTRAINED MOMENT CONNECTION          |
| REF = T/OBJECT OR B/OBJECT<br>XX' - YY" = OBJECT ELEVATION FROM DATUM  |  CONC LINTEL<br>OPENING BELOW    |  PARTIALLY RESTRAINED MOMENT CONNECTION      |
| CHANGE IN TOP OF ELEV  | NOTE: AT FLOOR OR ROOF FRAMING PLANS, OPENINGS SHOWN ARE IN WALL BELOW  |   |
| SLOPE → START OF SLOPE WHERE SHOWN   | REINFORCED CAST-IN-PLACE CONCRETE SUSPENDED SLAB  |   |
| PLAN REFERENCE   |  CS # (1 WAY) CS # (2 WAY)       |   |
| TYPICAL (TYP) OR SIMILAR (SIM) DETAIL  | CONCRETE SLAB ON GRADE  |   |
| SHEET REFERENCE  |  SOG #                           |   |
| DETAIL, SECTION OR ELEVATION REFERENCE   | MASONRY CONSTRUCTION  |   |
| TYPICAL (TYP) OR SIMILAR (SIM) DETAIL  |  MASONRY WALL                    |   |
| SHEET REFERENCE  |  MASONRY COLUMN                  |   |
| GREY TONE DESIGNATES EXISTING CONSTRUCTION   |  MASONRY PIER                    |   |
| BLACK TONE DESIGNATES NEW CONSTRUCTION UNLESS NOTED OTHERWISE  |  MASONRY LINTEL<br>OPENING BELOW |   |
| NEW CONST  | NOTE: AT FLOOR OR ROOF FRAMING PLANS, OPENINGS SHOWN ARE IN WALL BELOW  |   |
| EXIST CONST  |   |   |
| MATERIALS  |   |   |
|  CONCRETE                     |  STEEL                           |  BAR GRATING                                 |
|  CMU                          |  ALUMINUM                        |  SPECIAL DECK OR FLOOR AREA (SEE PLAN NOTES) |
|  UNDISTURBED SOIL             |  SAND                            |  CONTINUOUS WOOD FRAMING                     |
|  ENGINEERED OR COMPACTED FILL |  BRICK                           |  WOOD BLOCKING OR SHIM                       |
|  GRAVEL OR POROUS FILL        |   |   |

## DESIGN CRITERIA

## DC-1 BUILDING CODE:

- A. INTERNATIONAL BUILDING CODE (IBC) 2021 AS AMENDED BY
  - 1. UFC 1-200-01 W/ CHANGE 3, DATED 26 FEB 2024
  - 2. UFC 3-301-01 W/ CHANGE 1, DATED 11 APR 2023
- B. EDITION OF ALL REFERENCED STANDARDS NOTED HEREIN ARE AS NOTED IN THE BUILDING CODE.

## DC-2 VERTICAL LOADS

|   |                |
|---|----------------|
| A. DEAD LOADS (INCLUDES SELF-WEIGHT)                                      |                |
| 1. ROOF   | 30 PSF         |
| A. MINIMUM (FOR UPLIFT)   | 12 PSF         |
| B. LIVE LOADS   |                |
| 1. ROOF (REDUCIBLE PER ASCE 7)  | 20 PSF MINIMUM |
| 2. FLOORS (REDUCIBLE PER ASCE 7)  |                |
| A. TYPICAL GROUND FLOOR   | 100 PSF        |
| B. HANGARS  | 200 PSF        |
| C. STORAGE  | 125 PSF        |
| D. MECHANICAL   | 150 PSF        |
| C. SNOW LOADS   |                |
| 1. GROUND SNOW LOAD ( $P_g$ )   | 5 PSF          |
| 2. ADDITIONAL SNOW DRIFT AND SLIDING SNOW AS PER APPLICABLE BUILDING CODE |                |
| REFER TO S-005.   |                |
| D. CONSTRUCTION LOADS   | 20 PSF         |

## DC-3 LATERAL LOADS

|  |                |
|--|----------------|
| DO-3 LATERAL LOADS                                     | III            |
| A. RISK CATEGORY                                       |                |
| B. WIND DESIGN CRITERIA                                |                |
| 1. BASIC DESIGN WIND SPEED (V)                         | 105 MPH        |
| 2. ALLOWABLE DESIGN WIND SPEED ( $V_{asd}$ )           | 82 MPH         |
| 3. EXPOSURE CATEGORY                                   | C              |
| 4. INTERNAL PRESSURE COEFFICIENT                       |                |
| A. PARTIALLY ENCLOSED (FULL WIND SPEED)                | +/- 0.55       |
| 5. COMPONENTS AND CLADDING                             | RE: S-005      |
| 6. WIND ULTIMATE BASE SHEAR                            |                |
| A. PLAN EAST/WEST (AREA A,D)                           | 101 K          |
| B. PLAN EAST/WEST (AREA B,C)                           | 125 K          |
| C. PLAN NORTH/SOUTH (AREA A,D)                         | 174 K          |
| D. PLAN NORTH/SOUTH (AREA B,C)                         | 187 K          |
| C. SEISMIC DESIGN CRITERIA                             |                |
| 1. SEISMIC IMPORTANCE FACTOR ( $I_e$ )                 | 1.25           |
| 2. SITE CLASS  | D              |
| 3. MAPPED SPECTRAL RESPONSE ACCELERATION               |                |
| A. SHORT PERIOD ( $S_s$ )                              | 0.724          |
| B. ONE SECOND ( $S_1$ )                                | 0.226          |
| 4. DESIGN SPECTRAL RESPONSE ACCELERATION PARAMETERS    |                |
| A. SHORT PERIOD ( $S_{DS}$ )                           | 0.589          |
| B. ONE SECOND ( $S_{D1}$ )                             | 0.324          |
| 5. SEISMIC DESIGN CATEGORY                             | D              |
| 6. SEISMIC RESPONSE COEFFICIENT ( $C_s$ )              | 0.123          |
| 7. SEISMIC DESIGN BASE SHEAR                           |                |
| A. PLAN EAST/WEST (AREA A,D)                           | 84 K           |
| B. PLAN EAST/WEST (AREA B,C)                           | 79 K           |
| C. PLAN NORTH/SOUTH (AREA A,D)                         | 84 K           |
| D. PLAN NORTH/SOUTH (AREA B,C)                         | 79 K           |
| 8. SEISMIC RESISTING SYSTEM:                           |                |
| A. STEEL SPECIAL CONCENTRIC BRACED FRAMES              |                |
| 1. RESPONSE MODIFICATION                               | $R = 6$        |
| 2. DEFLECTION AMPLIFICATION                            | $C_D = 5$      |
| 3. OVERSTRENGTH FACTOR                                 | $\Omega_0 = 2$ |
| 9. ANALYSIS METHOD: EQUIVALENT LATERAL FORCE PROCEDURE |                |

## DC-4 FOUNDATION DESIGN CRITERIA

A. FOUNDATION DESIGN IS BASED UPON THE FOLLOWING SOIL PARAMETERS AS PROVIDED IN THE GEOTECHNICAL ENGINEERING REPORT LISTED BELOW:

|  |              |
|--|--------------|
| 1. REPORT AGENCY                       | UES          |
| 2. REPORT #                            | 4030.2400199 |
| 3. REPORT DATE                         | 2025-04-17   |
| B. NET ALLOWABLE SOIL BEARING PRESSURE |              |
| 1. SPREAD FOOTINGS                     | 3000 PSF     |
| 2. CONTINUOUS FOOTINGS                 | 3000 PSF     |
| C. LATERAL EARTH PRESSURE PARAMETERS   |              |
| 1. SOIL DENSITY                        | 120 PCF      |
| 2. ANGLE OF INTERNAL FRICTION          | 30 DEGREES   |
| 3. COEFFICIENT OF FRICTION (u)         | 0.36         |
| 4. WIND/SEISMIC INCREASE               | 1/3 INCREASE |
| 5. PASSIVE EARTH PRESSURE (Kp)         | 3.00         |
| D. MODULUS OF SUB-GRADE REACTION (ks)  |              |
| E. MINIMUM BEARING DEPTH               | 24 INCHES    |

## DC-5 ANTITERRORISM (AT) CRITERIA

A. THIS FACILITY HAS BEEN DESIGNED IN ACCORDANCE WITH THE ANTITERRORISM REQUIREMENTS SET FORTH IN UFC 4-010-01, DATED 24 MAY 2024. BUILDING ANTITERRORISM STRUCTURAL DESIGN CRITERIA ARE AS FOLLOWS:

## ANTITERRORISM STRUCTURE B. AT FACILITY CRITERIA

| STANDARD        | DESCRIPTION   | NOTES |
|-----------------|---|-------|
| 1. STANDARD 1:  | BUILDING STANDOFF DISTANCE<br>> 50 FT TO PERIMETER                | 3     |
| 2. STANDARD 2:  | UNOBSTRUCTED SPACE  | N     |
| 3. STANDARD 5:  | PARKING BENEATH BUILDINGS<br>OR ON ROOFTOPS                       | N     |
| 4. STANDARD 6:  | PROGRESSIVE COLLAPSE  | N     |
| 5. STANDARD 7:  | STRUCTURAL ISOLATION  | N     |
| 6. STANDARD 8:  | BUILDING OVERHANGS AND<br>BREEZEWAYS                              | N     |
| 7. STANDARD 9:  | EXTERIOR MASONRY WALLS<br>#5@32" OC MAX VERTICAL REINF            | N     |
| 8. STANDARD 15: | OVERHEAD MOUNTED ARCH<br>FEATURES                                 |       |
| 9. STANDARD 19: | RE: DELEGATED DESIGN<br>EQUIPMENT BRACING<br>RE: DELEGATED DESIGN |       |



# US Army Corps of Engineers ®

|  |  |                              |                                     |
|--|--|------------------------------|-------------------------------------|
| US ARMY CORPS OF ENGINEERS<br>LOS ANGELES DISTRICT                       |  | DESIGNED BY:<br>A. VALENCIA  | ISSUE DATE:<br>NOVEMBER 13, 2025    |
|  |  | DRAWN BY:<br>R. CARLSON      | SOLICITATION NO.:<br>W912PL25RA0012 |
|  |  | CHECKED BY:<br>D. CLAYSON    | CONTRACT NO.:<br>W912PL25C0037      |
|  |  | SUBMITTED BY:<br>P. PASZCZUK | SIZE:<br>ANSI D                     |
| KORTE CONSTRUCTION<br>5700 OAKLAND AVE, SUITE 275<br>ST. LOUIS, MO 63110 |  |                              |                                     |

CREECH AIR FORCE BASE, CLARK COUNTY, NV  
DISASTER RESILIENCY PROGRAM (DRP) - PHASE 2

494137

STRUCTURAL DESIGN CRITERIA, LEGEND, AND  
ABBREVIATIONS

SHEET ID  
S-001

US Army Corps  
of Engineers ®**GENERAL**

G-1 METHODS, PROCEDURES AND SEQUENCES OF CONSTRUCTION ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTING THE NECESSARY PRECAUTIONS TO MAINTAIN THE INTEGRITY OF THE STRUCTURE AT EACH STAGE OF CONSTRUCTION.

G-2 STRUCTURAL ENGINEER WILL NOT BE RESPONSIBLE FOR ACTIVITIES UNDER THE CONTROL OF THE CONTRACTOR SUCH AS CONSTRUCTION SITE SAFETY, MEANS, METHODS AND SEQUENCES OF CONSTRUCTION. STRUCTURAL ENGINEER WILL NOT BE RESPONSIBLE FOR FABRICATION, ERECTION AND CONSTRUCTION REQUIREMENTS AS PRESCRIBED BY OSHA OR OTHER REGULATORY AGENCIES REGARDLESS OF INDICATION IN THESE DOCUMENTS. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL SAFETY REGULATIONS, PROGRAMS AND PRECAUTIONS RELATED TO ALL WORK ON THE PROJECT.

G-3 WHERE SUPPORTED SLABS OR ROOFS ARE TO BE USED FOR STAGING OR TEMPORARY CONSTRUCTION LOADS, THE CONTRACTOR MUST VERIFY THAT APPLIED LOADS DO NOT EXCEED THE DESIGN LOADS FOR THE SUPPORTING FLOORS OR ROOFS. DURING AND AFTER CONSTRUCTION, CONTRACTOR AND/OR CONTRACTING OFFICER MUST KEEP LOADS ON THE STRUCTURE WITHIN THE LIMITS OF THE DESIGN LOADS AS NOTED IN THESE DRAWINGS.

G-4 THE STRUCTURAL SYSTEMS SHOWN IN THESE DRAWINGS MUST NOT BE CONSIDERED STABLE UNTIL ALL STRUCTURAL ELEMENTS ARE IN PLACE AND COMPLETED. TEMPORARY BRACING, SHEETING, SHORING, ETC. REQUIRED TO ENSURE THE STRUCTURAL INTEGRITY/STABILITY OF THE EXISTING BUILDINGS, SIDEWALKS, UTILITIES, ETC, DURING CONSTRUCTION IS THE RESPONSIBILITY OF THE CONTRACTOR AND MUST BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER EMPLOYED BY THE CONTRACTOR.

G-5 WHEN NOT SPECIFICALLY INDICATED ON THE STRUCTURAL DRAWINGS, THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING SLEEVE AND BLOCK-OUT REQUIREMENTS FOR PENETRATIONS PRIOR TO FABRICATION OR ERECTION OF THE STRUCTURE. PENETRATIONS OF STRUCTURAL MEMBERS ARE SUBJECT TO APPROVAL BY THE EOR. THE CONTRACTOR IS ALSO RESPONSIBLE FOR DETERMINING ANCHORAGE AND HANGER REQUIREMENTS REQUIRED FOR SUPPORTING EQUIPMENT, FINISHES, UTILITIES ET CETERA NOT INDICATED ON THE STRUCTURAL DRAWINGS.

G-6 CONTRACTOR MUST COORDINATE WITH ALL TRADES THE LOCATIONS AND DIMENSIONS OF ALL OPENINGS THROUGH FLOORS, ROOFS AND WALLS REGARDLESS OF IF THEY ARE SHOWN ON THE STRUCTURAL DRAWINGS.

G-7 THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING DIMENSIONS AND INSTALLATION REQUIREMENTS OF EQUIPMENT WITH THE SUPPORTING STRUCTURE.

G-8 THE STRUCTURAL DRAWINGS ARE SUPPLEMENTARY TO THE ARCHITECTURAL AND OTHER DISCIPLINE DRAWINGS. DO NOT ATTEMPT TO BID NOR CONSTRUCT ANY PORTION OF THIS PROJECT WITHOUT CONSULTING OTHER DISCIPLINES' DRAWINGS WITHIN THIS PROJECT. ALL CONFLICTS OR OMISSIONS, INCLUDING DIMENSIONS, BETWEEN THE VARIOUS ELEMENTS OF THE STRUCTURAL DRAWINGS AND/OR SPECIFICATIONS MUST BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER BEFORE PROCEEDING WITH ANY WORK INVOLVED. IN CASE THERE IS A CONFLICT BETWEEN DRAWINGS, SUBMIT A REQUEST FOR INFORMATION, AND PROCEED AS DIRECTED BY THE ENGINEER. ANY WORK DONE BY THE CONTRACTOR AFTER DISCOVERY OF SUCH DISCREPANCY WITHOUT OFFICIAL DIRECTION WILL BE DONE AT THE CONTRACTOR'S RISK.

G-9 FIREPROOFING, IF REQUIRED, OF STRUCTURAL ELEMENTS IS NOT SHOWN ON THE STRUCTURAL DRAWINGS. REFER TO THE SPECIFICATIONS, FIRE PROTECTION DRAWINGS AND/OR ARCHITECTURAL DRAWINGS.

G-10 IN CASE OF CONFLICT BETWEEN THE GENERAL NOTES, SPECIFICATIONS, DRAWINGS, OR WITHIN THESE DOCUMENTS, THE MOST STRINGENT REQUIREMENTS AS DETERMINED BY THE ENGINEER WILL GOVERN.

G-11 WORK NOT INDICATED ON A PART OF THE DRAWINGS, BUT REASONABLY IMPLIED TO BE SIMILAR TO THAT SHOWN AT CORRESPONDING LOCATIONS, IS TO BE REPEATED.

G-12 TYPICAL DETAILS ARE GENERALLY NOT REFERENCED ON THE DRAWINGS AND WILL APPLY IN AREAS WHERE CONDITIONS ARE SIMILAR AS DESCRIBED IN THE DETAILS. THE CONTRACTOR MUST IDENTIFY, COORDINATE AND APPLY THESE DETAILS AS NEEDED. TYPICAL DETAILS MAY BE REFERENCED ON PLANS OR DETAILS TO CLARIFY OR IDENTIFY A PARTICULAR CONDITION. THE PRESENCE OF SUCH A REFERENCE DOES NOT ALTER THE OBLIGATION OF THE CONTRACTOR TO APPLY THE DETAIL(S) AS NEEDED EVEN IF THEY ARE NOT REFERENCED.

G-13 THE STRUCTURAL DOCUMENTS HAVE BEEN DRAWN TO SCALE AS INDICATED ON THESE DRAWINGS. THIS IS TO CONFIRM GENERAL GEOMETRIC TOLERANCES TO THE GREATEST EXTENT POSSIBLE. HOWEVER, SOME COMPONENTS MAY NOT BE DRAWN TO SCALE TO REFLECT DESIGN INTENT. IF DIMENSIONAL INFORMATION IS NOT INDICATED AND/OR PROVIDED, THE ENGINEER MUST BE NOTIFIED IN WRITING. DO NOT SCALE DRAWINGS.

**CONSTRUCTION ADMINISTRATION**

CA-1 CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL SIZES, DIMENSIONS, AND ELEVATIONS ON SUBMITTALS AS RELATED TO DESIGN DOCUMENTS PRIOR TO DELIVERY TO THE ENGINEER FOR REVIEW.

CA-2 PREPARATION OF SHOP DRAWING SUBMITTALS FOR STRUCTURAL ELEMENTS WILL REQUIRE INFORMATION (I.E. DIMENSIONS, ETC.) FOUND IN THE ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING AND OTHER DISCIPLINE DRAWINGS. CONTRACTOR IS TO FURNISH SUFFICIENT INFORMATION, INCLUDING PROJECT SPECIFICATIONS, TO THE SUB-CONSULTANT CREATING THE SHOP DRAWING SUBMITTAL TO ALLOW FOR A COMPETE SUBMITTAL.

CA-3 SHOP DRAWINGS:

- A. SHOP DRAWINGS FOR MATERIALS MUST BE SUBMITTED TO THE ENGINEER AND CONTRACTING OFFICER FOR REVIEW PRIOR TO THE START OF FABRICATION OR COMMENCEMENT OF WORK.

B. SHOP DRAWINGS MUST BE CHECKED AND STAMPED BY THE CONTRACTOR PRIOR TO SUBMISSION. THE CONTRACTOR'S STAMP OF APPROVAL WILL CONSTITUTE CERTIFICATION THAT HE HAS VERIFIED FIELD MEASUREMENTS, CONSTRUCTION CRITERIA, MATERIALS AND SIMILAR DATA AND HAS CHECKED EACH DRAWING FOR COMPLETENESS, COORDINATION, AND COMPLIANCE WITH THE CONTRACT DOCUMENTS. SHOP DRAWINGS SUBMITTED WITHOUT THE CONTRACTOR'S STAMP AND REVIEW WILL BE RETURNED WITHOUT REVIEW BY THE ENGINEER.

C. REPRODUCTION OF ANY PORTION OF THE STRUCTURAL CONTRACT DRAWINGS FOR SUBMITTAL AS SHOP DRAWINGS IS PROHIBITED. SUBMITTALS PROVIDED THAT INCLUDE REPRODUCTION OF THE CONTRACT DRAWINGS WILL BE RETURNED WITHOUT REVIEW BY THE ENGINEER.

D. CHANGES TO SHOP DRAWINGS THAT ARE RE-SUBMITTED MUST BE CLOUDED OR SOMEHOW INDICATE THAT A CHANGE HAS BEEN MADE TO PREVIOUSLY ISSUED AND REVIEWED DRAWINGS. REVISED SHOP DRAWINGS PROVIDED WITHOUT CLOUDS OR CHANGES INDICATED WILL BE RETURNED WITHOUT REVIEW BY THE ENGINEER.

E. THE CONTRACTOR IS TO PROVIDE THE ENGINEER AND CONTRACTING OFFICER WITH WRITTEN NOTICE OF DEVIATIONS OF ANY TYPE FROM THE REQUIREMENTS OF THE CONSTRUCTION DOCUMENTS. THE NOTICE MUST BE RECEIVED PRIOR TO SHOP DRAWING SUBMITTAL. THE CONTRACTOR REMAINS LIABLE FOR ANY DEVIATION UNLESS REVIEWED BY THE ENGINEER AND CONTRACTING OFFICER AND ACKNOWLEDGED IN WRITING, PRIOR TO THE RECEIPT OF THE SHOP DRAWINGS.

F. CONTRACTOR IS NOT RELIEVED OF ANY REQUIREMENT OF THE CONTRACT DOCUMENTS BY VIRTUE OF ENGINEER OR CONTRACTING OFFICER REVIEW OF SUBMITTALS.

G. REVIEW OF SUBMITTALS BY THE ENGINEER IS FOR GENERAL COMPLIANCE WITH THE CONTRACT DOCUMENTS ONLY AND IS NOT INTENDED AS APPROVAL.

CA-4 UNLESS NOTED OTHERWISE, ALLOW 10 BUSINESS DAYS FOR THE ENGINEER'S REVIEW.

CA-5 A QUALIFIED TESTING AGENCY MUST PERFORM TESTS AND SPECIAL INSPECTIONS. UPON COMPLETION OF WORK, THE TESTING AGENCY MUST FURNISH A CERTIFICATE OF COMPLIANCE, SIGNED BY THE PROFESSIONAL ENGINEER RESPONSIBLE FOR MANAGEMENT OF THE AGENCY. THE PROFESSIONAL ENGINEER MUST BE REGISTERED IN THE UNITED STATES.

**FOUNDATIONS**

F-1 FOUNDATIONS HAVE BEEN DESIGNED AND MUST BE CONSTRUCTED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT FOR THIS PROJECT AS LISTED IN THE DESIGN CRITERIA WHICH IS CONSIDERED AS THE BASIS OF FOUNDATION DESIGN. CONTRACTOR IS RESPONSIBLE FOR REVIEWING AND UNDERSTANDING REQUIREMENTS SET FORTH WITHIN THE REPORT AS THEY APPLY TO THIS FOUNDATION DESIGN. THE STRUCTURAL ENGINEER IS NOT LIABLE OR RESPONSIBLE FOR THE ACCURACY OF RECOMMENDATIONS PRESENTED WITHIN THE GEOTECHNICAL REPORT.

F-2 FOUNDATIONS MUST BE PLACED ON A MINIMUM OF 30" LAYER OF COMPAKTED SELECT FILL AND A 6" LAYER OF SCARIFIED RE-COMPAKTED SUBGRADE, CONFORMING TO RECOMMENDATIONS PROVIDED IN THE GEOTECHNICAL REPORT (MAXIMUM FILL LIFT = 8").

F-3 THE CONTRACTOR IS TO RETAIN THE SERVICES OF A PROFESSIONAL GEOTECHNICAL ENGINEER, SUBJECT TO THE APPROVAL OF THE CONTRACTING OFFICER, TO VERIFY THAT THE MATERIAL ON WHICH FOUNDATIONS BEAR HAS AT LEAST THE CAPACITY AS NOTED IN THE DESIGN CRITERIA. PRIOR TO PLACING CONCRETE, AND AFTER COMPAKTION OF SUBGRADE, ALL FOUNDATION EXCAVATIONS SHALL BE INSPECTED AND TESTED WHICH MUST INCLUDE IN PLACE DENSITY TESTING. IF THE SUBGRADE HAS LESS THAN THE STATED ALLOWABLE BEARING CAPACITY, THE WEAK SUBGRADE SHALL BE REMOVED, RECOMPACTED, AND RETESTED UNTIL IT IS SATISFACTORY AT NO ADDITIONAL COST TO THE OWNER. CONCRETE PLACEMENT SHALL NOT PROCEED UNTIL THE SUBGRADE MEETS THE MINIMUM DENSITY REQUIREMENTS OF THE SPECIFICATIONS AND THE GEOTECHNICAL REPORT, WHICHEVER IS MORE STRINGENT.

F-4 EXTERIOR FOUNDATIONS ARE TO BEAR BELOW THE MINIMUM BEARING DEPTH FROM FINISHED GRADE GIVEN IN DESIGN CRITERIA GENERAL NOTE DC-4. INTERIOR FOUNDATIONS TO BEAR THE MINIMUM BEARING DEPTH OR AS INDICATED. FINAL BEARING ELEVATIONS MAY VARY TO SUIT SUBSURFACE SOIL CONDITIONS OR BELOW GRADE UTILITIES. NOTIFY THE ENGINEER AND CONTRACTING OFFICER OF ANY CHANGES. PROVIDE FOUNDATION STEPS AS NECESSARY.

F-5 NO BACKFILLING AGAINST WALLS IS ALLOWED UNTIL THE SLABS AT THE TOP AND BOTTOM HAVE BEEN PLACED OR ADEQUATE SHORING HAS BEEN PROVIDED. WALLS AND GRADE BEAMS HAVING BACKFILL AGAINST BOTH SIDES ARE TO HAVE BACKFILL PLACED ON BOTH SIDES UNIFORMLY SO AS NOT TO EXCEED AN 8" DIFFERENTIAL.

F-6 FOUNDATION DRAINAGE, INSULATION AND/OR WATERPROOFING IS NOT SHOWN OR SPECIFIED WITHIN THE STRUCTURAL PORTION OF THE CONSTRUCTION DOCUMENTS. REFERENCE OTHER PORTIONS OF THE CONSTRUCTION DOCUMENTS FOR DRAINAGE, INSULATION AND/OR WATERPROOFING, OR ITEMS ASSOCIATED WITH OTHER DISCIPLINES.

**REINFORCED CONCRETE**

C-1 REINFORCED CONCRETE WORK MUST BE IN ACCORDANCE WITH THE AMERICAN CONCRETE INSTITUTE (ACI) "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE - ACI 318" AND THE "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS- ACI 301."

C-2 MAXIMUM MIX DESIGN W/C RATIO MUST NOT BE EXCEEDED. APPROVED ADMIXTURES SUCH AS PLASTICIZERS OR SUPERPLASTICIZERS MAY BE USED ON SITE TO INCREASE SLUMP AND FLOWABILITY AS REQUIRED FOR PLACEMENT. REFER TO ACI 311.5 FOR DOCUMENTATION REQUIREMENTS AND IBC CHAPTER 1703 FOR INSPECTION REQUIREMENTS.

C-3 CAST-IN-PLACE CONCRETE MUST HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH (f<sub>c</sub>) AS INDICATED ON THE CONCRETE MIX DESIGN TABLE.

C-4 THE STRUCTURE SUPPORTING ELEVATED FLOORS IS DESIGNED TO HAVE AN INITIAL (PRE-COMPLETE) DEFLECTION OF NOT MORE THAN  $\frac{1}{4}$  IN. DUE TO THE WEIGHT OF THE CONCRETE SLAB. THE CONTRACTOR MUST TAKE THIS DEFLECTION INTO ACCOUNT WHEN DETERMINING THE AMOUNT OF CONCRETE NECESSARY TO OBTAIN A LEVEL FLOOR AND MONITOR DEFLECTION DURING CONCRETE PLACEMENT.

C-5 REINFORCEMENT AND EMBEDDED ITEMS:

- A. PROVIDE STANDARD HOOKS ON BARS TERMINATING AT A CONCRETE FACE UNLESS NOTED SUCH AS AT EDGES OF OPENINGS, SLAB EDGES, EXPANSION JOINTS, ENDS OF BEAMS AND ENDS OF WALLS.

B. SEE CONCRETE REINFORCEMENT DEVELOPMENT LENGTH AND SPLICE TABLE FOR ALL REQUIRED DEVELOPMENT AND SPLICE LENGTHS.

C. PROVIDE ADEQUATE CONCRETE COVER IN ACCORDANCE WITH THE REQUIREMENTS AS SET FORTH BY ACI 318 AND AS PROVIDED WITHIN THE CONCRETE COVER TABLE IN THE SPECIFICATIONS.

D. HOOKED BARS TO HAVE STANDARD ACI HOOKS UNLESS NOTED OTHERWISE. UNLESS NOTED OTHERWISE, HOOKS CAN BE ORIENTED AS REQUIRED.

E. CONTINUOUS REINFORCING BARS MUST BE TURNED AND LAPPED AT CORNERS AND INTERSECTIONS OF WALLS AND FOOTINGS.

F. WELDING OF REINFORCEMENT IS PROHIBITED, UNLESS NOTED OTHERWISE AND MUST CONFORM TO ASTM A706.

G. PROVIDE EMBEDS (INCLUDING ANCHORS), AS REQUIRED, FOR ALL SUPPORTING NON-STRUCTURAL ELEMENTS INCLUDING BUT NOT LIMITED TO HAND RAILS, CANOPIES, WINDOW WASHING DAVITS, MISCELLANEOUS STEEL, ETC. REFER TO ARCHITECTURAL AND MEP DRAWINGS FOR ADDITIONAL INFORMATION.

C-6 CONCRETE SLABS MUST BE CURED BY METHOD COMPATIBLE WITH SPECIFIED FLOOR FINISH. WHERE ACCEPTABLE USE A LIQUID MEMBRANE-CURING COMPOUND AT THE MANUFACTURERS RECOMMENDED COVERAGE.

C-7 CONCRETE SLAB CONTROL JOINT PLACEMENT AND LAYOUT PER GC AND SUBMITTED AS SHOP DRAWING FOR REVIEW.

C-8 SLEEVES, INSERTS, MECHANICAL OPENINGS, CONDUITS, PIPES, RECESSES, DEPRESSIONS, CURBS AND OTHER EMBEDDED ITEMS MUST BE PROVIDED AS SHOWN ON THE ARCHITECTURAL, MECHANICAL, FIRE PROTECTION, PLUMBING AND ELECTRICAL DRAWINGS AND BY EQUIPMENT MANUFACTURERS. INSTALLATION OF THESE ITEMS MUST BE COORDINATED AND PROVIDED FOR PRIOR TO PLACING CONCRETE.

C-9 OPENINGS IN CONCRETE SLABS AND/OR CONCRETE WALLS MUST HAVE ADDITIONAL REINFORCEMENT PER THE TYPICAL DETAILS. NO PENETRATIONS ARE PERMITTED THROUGH ANY CONCRETE BEAM, JOIST, COLUMN, PIER OR JAMB WITHOUT THE ENGINEER'S WRITTEN APPROVAL. PENETRATIONS MUST BE RE-Routed AS REQUIRED AT THESE LOCATIONS.

C-10 PENETRATIONS THROUGH CONCRETE SLABS AND/OR CONCRETE WALLS MUST BE PLACED DURING CONSTRUCTION OF THE WALL WITH THE APPROPRIATE SLEEVE.

C-11 REFER TO CONCRETE TABLES ON S-004 FOR ADDITIONAL INFORMATION.

**MASONRY**

M-1 MASONRY WORK MUST BE IN CONFORMANCE WITH THE MASONRY SOCIETY (TMS) "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES - TMS 402" AND THE "SPECIFICATIONS FOR MASONRY STRUCTURES - TMS 602".

M-2 REINFORCEMENT AND EMBEDDED ITEMS:

- A. REINFORCING TO BE DISCONTINUOUS AT CONTROL JOINTS UNLESS NOTED OTHERWISE. BOND BEAM REINFORCING AT THE TOPS AND BOTTOMS OF WALLS IS TO BE CONTINUOUS THROUGH JOINT.
- B. DOWEL REINFORCED MASONRY WALLS TO FOUNDATION. SIZE DOWELS TO MATCH WALL REINFORCEMENT. LOCATE DOWELS IN CELLS TO CONTAIN WALL REINFORCEMENT. LAP DOWELS WITH WALL REINFORCEMENT PER MASONRY LAP TABLE.
- C. UNLESS NOTED OTHERWISE, PLACE TYPICAL CMU REINFORCEMENT IN CENTER OF FULLY GROUTED CELLS AND SPACE AS FOLLOWS:
  - 1. FOR 8" CMU: (1) #5 VERTICAL AT 32" ON CENTER, MINIMUM.
  - 2. FOR 12" CMU: (1) #5 VERTICAL AT 24" ON CENTER, MINIMUM.
  - 3. PROVIDE ADDITIONAL BARS AT CORNERS AND OPENINGS PER TYPICAL DETAILS.
- D. VERTICAL REINFORCING TO BE HELD SECURELY IN PLACE DURING GROUT PLACEMENT TO PREVENT DISPLACEMENT OF REINFORCEMENT.
- E. WELDING OF REINFORCEMENT IS PROHIBITED, UNLESS NOTED OTHERWISE.
- F. PROVIDE EMBEDS (INCLUDING ANCHORS) FOR SUPPORTING STRUCTURAL AND NON-STRUCTURAL ELEMENTS INCLUDING BUT NOT LIMITED TO: HANDRAILS, CANOPIES, MISCELLANEOUS STEEL, ETC.

M-3 MASONRY ERECTION:

- A. GROUT CELLS SOLID AT: INSERTS, ANCHORS, AND ELEVATOR GUIDE RAILS IN ADDITION TO LOCATIONS SHOWN IN THE TYPICAL DETAILS.
- B. DO NOT FULLY GROUT WALLS UNLESS SPECIFICALLY CALLED OUT ON STRUCTURAL DRAWINGS.
- C. CONTROL JOINT SPACING IN MASONRY WALLS MUST BE PROVIDED WHERE INDICATED ON THE STRUCTURAL DRAWINGS, OR A MAXIMUM OF 24'-0" ON CENTER.
- D. MASONRY WALLS TO BE TEMPORARILY BRACED UNTIL FLOOR OR ROOF SYSTEM HAS BEEN INSTALLED AND HAS BECOME CAPABLE OF STABILIZING THE WALLS.
- E. COORDINATE BLOCKOUTS, REVEALS, HOLES, OPENINGS AND BUILT-IN ITEMS WITH ALL CONTRACT DOCUMENTS AND DISCIPLINES.
- F. PROVIDE VERTICAL MASONRY VENEER CONTROL JOINTS AS INDICATED ON THE ARCHITECTURAL DRAWINGS.

M-4 REFER TO MASONRY TABLES ON S-004 FOR ADDITIONAL INFORMATION.

**POST-INSTALLED ANCHORS**

PI-1 ALL ADHESIVE OR MECHANICAL ANCHORS MUST BE INSTALLED, INCLUDING HOLE DRILLING, DRILL BIT TYPE, PREPARATION, AND CLEANING IN ACCORDANCE WITH AN APPROVED INDEPENDENT EVALUATION REPORT (ICC-ES, IAPMO, OR APPROVED EQUAL), THE PROJECT DRAWINGS AND SPECIFICATIONS, AND IN ACCORDANCE WITH ALL MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS (MPII).

PI-2 POST-INSTALLED ANCHORS HAVE BEEN DESIGNED WITH HILTI ANCHORS (NOTED BELOW) AS THE BASIS OF DESIGN. PROVIDE APPROPRIATE ANCHOR WITH SIZE AND FINISH AS NOTED AND EQUIVALENT SHEAR AND TENSION CAPACITIES AFTER MODIFICATION DUE TO EMBODIMENT, SPACING AND EDGE DISTANCES. OTHER AVAILABLE MANUFACTURERS INCLUDE SIMPSON, ITW RED HEAD AND DEWALT.

- A. EXPANSION ANCHORS: KWIK BOLT 3
- B. SCREW ANCHORS: KH-EZ SCREW ANCHOR
- C. ADHESIVE ANCHORS
  - 1. CONCRETE: HIT HY-200
  - 2. GROUTED CMU: HIT HY-270
- D. SCREEN TUBE ANCHORS: HIT HY-270

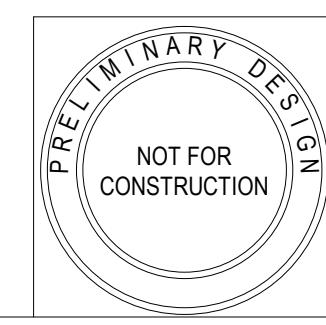
PI-3 SUBSTITUTION REQUEST FOR ALTERNATIVE PRODUCTS MUST BE APPROVED IN WRITING BY THE STRUCTURAL ENGINEER PRIOR TO THE USE. SUBSTITUTION REQUEST MUST INCLUDE AN APPROVED INDEPENDENT EVALUATION REPORT (ICC-ES, IAPMO OR APPROVED EQUAL) AND SUPPORTING CALCULATIONS INDICATING COMPLIANCE WITH DESIGN INTENT. SUBSTITUTIONS MUST BE EVALUATED FOR THEIR COMPLIANCE WITH RELEVANT BUILDING CODES FOR SEISMIC USES, LOAD RESISTANCE, INSTALLATION CATEGORY, AND AVAILABILITY OF COMPREHENSIVE INSTALLATION INSTRUCTIONS. ADHESIVE ANCHOR EVALUATIONS MUST CONSIDER INSTALLED SUBSTITUTION ANCHORS IN CONCRETE MUST BE SUITABLE FOR USE IN CRACKED CONCRETE APPLICATIONS.

PI-4 DO NOT DISTURB, MAKE ATTACHMENTS, OR APPLY LOAD TO ADHESIVE ANCHORS PRIOR TO THE FULL CURE OF THE ADHESIVE. ADHESIVE ANCHORS MUST NOT BE FULLY LOADED UNTIL CONCRETE HAS REACHED 28-DAY DESIGN STRENGTH.

PI-5 CONCRETE TEMPERATURE AT THE TIME OF INSTALLATION MUST BE MONITORED BY THE CONTRACTOR. CONTRACTOR MUST COMPLY WITH ALL MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS RELATIVE TO SUBSTRATE TEMPERATURE.

CREECH AIR FORCE BASE, CLARK COUNTY, NV  
DISASTER RESILIENCY PROGRAM (DRP) - PHASE 2  
494137

GENERAL STRUCTURAL NOTES

ISSUE DATE: NOVEMBER 13, 2025  
SOLICITATION NO.: W912PL25-R-0012  
CONTRACT NO.: W912PL25-C0037DESIGNED BY: A. VALENCIA  
DRAWN BY: R. CARLSON  
CHECKED BY: D. CLAYSON  
SUBMITTED BY: P. PASZCZUK  
SIZE: ANSI D  
US ARMY CORPS OF ENGINEERS  
LOS ANGELES DISTRICT  
KORTE CONSTRUCTION  
5700 OAKLAND AVE SUITE 275  
ST. LOUIS, MO 63110SHEET ID  
S-002

DP-1 95% SUBMISSION

US Army Corps  
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PI-6 INSTALLATION OF ADHESIVE ANCHORS HORIZONTALLY OR UPWARDLY INCLINED TO SUPPORT SUSTAINED TENSION LOADS MUST BE PERFORMED BY PERSONNEL CERTIFIED BY AN APPLICABLE CERTIFICATION PROGRAM. CERTIFICATION MUST INCLUDE WRITTEN AND PERFORMANCE TEST IN ACCORDANCE WITH THE ACI/RSI ADHESIVE ANCHOR INSTALLER CERTIFICATION PROGRAM, OR APPROVED EQUIVALENT, IN ACCORDANCE WITH ACI. PROOF OF CURRENT CERTIFICATION MUST BE SUBMITTED TO THE ENGINEER AND CONTRACTING OFFICER FOR APPROVAL PRIOR TO INSTALLATION. CONTINUOUS SPECIAL INSPECTION IS REQUIRED FOR THESE ANCHORS.

PI-7 IF REINFORCING IS ENCOUNTERED DURING DRILLING, THAT HOLE IS TO BE ABANDONED. DO NOT DAMAGE REINFORCING TO MAINTAIN STRUCTURAL INTEGRITY OF SUBSTRATE COMPONENT. FILL ABANDONED HOLES WITH NON-SHRINK GROUT AND CONTACT THE STRUCTURAL ENGINEER FOR NEW LOCATIONS AND FURTHER INSTALLATION INSTRUCTIONS.

PI-8 POST-INSTALLED ANCHORS TO BE GALVANIZED WHERE EXPOSED TO EXTERIOR AND/OR CORROSIVE ENVIRONMENTS UNLESS THE ANCHOR IS OTHERWISE PROTECTED.

PI-9 SUBSTITUTION OF POST-INSTALLED ANCHORS FOR EMBEDDED ANCHORS SHOWN ON THE DRAWINGS IS NOT PERMITTED.

### STRUCTURAL STEEL

S-1 STRUCTURAL STEEL WORK IS TO BE DETAILED AND CONSTRUCTED IN ACCORDANCE WITH THE FOLLOWING STANDARD(S):

- A. THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) 360 "SPECIFICATIONS FOR STRUCTURAL STEEL BUILDINGS"
- B. THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) 341 "SEISMIC PROVISIONS FOR STRUCTURAL STEEL BUILDINGS"

S-2 PRIOR TO FABRICATION, THE STEEL FABRICATOR IS TO SUBMIT TO THE CONTRACTING OFFICER FOR REVIEW SHOP DRAWINGS SHOWING ERECTION PLANS, PIECE DRAWINGS, AND CONNECTION DETAILS.

S-3 STRUCTURAL STEEL FABRICATOR IS TO PROVIDE FOR VERTICAL AND HORIZONTAL FIELD ADJUSTMENT OF SUPPORT ASSEMBLIES.

S-4 STEEL BEAMS ARE TO BE EQUALLY SPACED IN BAYS UNLESS OTHERWISE NOTED.

S-5 FABRICATE AND INSTALL BEAMS WITH NATURAL CAMBER UP UNLESS CAMBER IS NOTED ON THE DRAWINGS.

S-6 STRUCTURAL STEEL FRAMES AND TRUSSES ARE TO BE SECURELY BRACED UNTIL FLOOR SLABS, ROOF DECKS AND SHEAR WALLS HAVE BEEN INSTALLED AND BECOME CAPABLE OF STABILIZING THE FRAMES.

S-7 UNLESS OTHERWISE NOTED, STRUCTURAL STEEL CONNECTIONS TO BE SHOP WELDED AND FIELD BOLTED.

S-8 BOLTED CONNECTIONS:

- A. BOLTS, TYPICAL: 3/4" MINIMUM DIAMETER ASTM F 3125 GR. A325N UNO WITH MATCHING WASHERS AND HEAVY HEX NUTS. BOLTS MUST BE INSTALLED IN A SNUG TIGHT CONDITION WHICH IS ACHIEVED WHEN CONNECTED PARTS ARE IN FIRM CONTACT.
- B. DO NOT REUSE ANY BOLTS, NUTS, AND/OR WASHERS.
- C. DO NOT APPLY ANY WELD TO BOLTS, NUTS, OR WASHERS UNO.

S-9 WELDED CONNECTIONS:

- A. USE E70XX ELECTRODES UNLESS OTHERWISE INDICATED ON THE DRAWINGS. E60XX MAY BE USED FOR WELDING COLD-FORMED STEEL DECKS AND FRAMING.
- B. WELDING OF DEFORMED BAR ANCHORS AND/OR HEADED STUD ANCHORS IS TO BE IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
- C. FILLET WELD SIZES NOT DESIGNATED MUST BE THE SAME AS THE THINNEST CONNECTED PARTS OR 1/8-INCH FILLET WELD ALL AROUND.

S-10 SUBSTITUTION OF POST-INSTALLED ANCHORS FOR EMBEDDED ANCHORS SHOWN ON THE DRAWINGS IS NOT PERMITTED.

S-11 PAINT AND PROTECTION:

- A. EXPOSED STRUCTURAL STEEL TO RECEIVE PAINTED FINISH TO BE SHOP CLEANED AND PRIME PAINTED IN ACCORDANCE WITH SPECIFICATION SECTION 05 12 00 PART 2 - PRODUCTS. REFERENCE ARCHITECTURE FOR FINISH PAINT SYSTEMS.
- B. EXPOSED STRUCTURAL STEEL FOR SCREEN WALLS, EQUIPMENT PLATFORMS, LOOSE ANGLE LINTELS ETC, TO BE HOT DIPPED GALVANIZED PER ASTM A 123
- C. GALVANIZED FASTENERS AND ACCESSORIES TO BE HOT DIPPED GALVANIZED PER ASTM A 153/A 153M.
- D. PROVIDE MINIMUM 3" CONCRETE COVER FOR STEEL BELOW GRADE.

### MISCELLANEOUS STEEL

MS-1 COORDINATE ALL MISCELLANEOUS STEEL ITEMS WITH STRUCTURAL STEEL NOTES.

MS-2 PRIOR TO FABRICATION, THE STEEL FABRICATOR IS TO SUBMIT THE FOLLOWING TO THE CONTRACTING OFFICER FOR REVIEW:

- A. SHOP DRAWINGS SHOWING ERECTION PLANS, PIECE DRAWINGS, AND CONNECTION DETAILS.

MS-3 MANUFACTURE STEEL GRATING IN ACCORDANCE WITH THE "METAL BAR GRATING MANUAL" AS PUBLISHED BY THE NATIONAL ASSOCIATION OF ARCHITECTURAL METAL MANUFACTURERS.

- A. STEEL FOR GRATING TO CONFORM TO ASTM A 1011/A 1011M. GRATING TO BE TYPE W-19-6 (1" x 3/16") WITH GALVANIZED FINISH.
- B. ALUMINUM FOR GRATING TO CONFORM TO ASTM B221. GRATING TO BE TYPE AS NOTED WITH MILL FINISH, UNO.

### OPEN WEB STEEL JOISTS

J-1 DESIGN, FABRICATION AND ERECTION OF OPEN WEB STEEL JOISTS MUST CONFORM TO THE STEEL JOIST INSTITUTE (SJI) "STANDARD SPECIFICATIONS AND LOAD TABLES FOR STEEL JOISTS AND JOIST GIRDERS."

J-2 DESIGN ALL JOISTS, INCLUDING SLOPE, CAMBER AND BEARING ENDS. PROVIDE ALL BRIDGING LOCATIONS AND LAYOUTS. ALL DESIGNS MUST BE IN ACCORDANCE WITH SJI SPECIFICATIONS WITH A MAXIMUM DEFLECTION OF TL/180 AND LL/240.

J-3 STEEL JOISTS ARE TO BE DESIGNED FOR ALL LOADS INDICATED AS WELL AS WIND UPLIFT AS SHOWN ON SHEET S-005.

J-4 PROVIDE BRIDGING, BOTTOM CHORD EXTENSIONS AND ASSOCIATED ANCHORAGE IN ACCORDANCE WITH SJI REQUIREMENTS. BRIDGING, BOTTOM CHORD EXTENSIONS AND ASSOCIATED ANCHORAGE IS BY THE JOIST MANUFACTURER UNLESS NOTED OTHERWISE. WHERE ERECTION BRIDGING IS REQUIRED, HAVE IN PLACE A ROW OF BOLTED BRIDGING BEFORE RELEASING HOIST LINES.

J-5 BOTTOM CHORD EXTENSIONS TO BE INSTALLED AS REQUIRED BY OSHA AND THE STEEL JOIST SUPPLIER. DO NOT FULLY CONNECT EXTENSIONS TO THE SUPPORTING STRUCTURE UNTIL APPLICABLE DEAD LOAD HAS BEEN APPLIED.

J-6 STEEL JOIST MANUFACTURER IS TO PROVIDE ADDITIONAL BOTTOM CHORD BRIDGING FOR UPLIFT LOADS.

J-7 PROVIDE ANCHORS AND FASTENERS REQUIRED FOR INSTALLATION OF JOISTS, BRIDGING AND BOTTOM CHORD EXTENSIONS.

J-8 STEEL JOISTS ARE TO BE EQUALLY SPACED IN BAYS UNO. DO NOT EXCEED JOIST SPACING INDICATED ON THE DRAWINGS.

J-9 JOIST SEATS HAVE BEEN ASSUMED TO BE AS LISTED BELOW, UNO. MODIFICATIONS TO THE STRUCTURE FOR ALTERNATE DEPTHS MUST BE COORDINATED BY THE GENERAL CONTRACTOR.

A. ALL SERIES: 5"

J-10 HANGERS SUPPORTING MECHANICAL, ELECTRICAL OR OTHER EQUIPMENT ARE TO BE PLACED AT JOIST PANEL POINTS (WELDING NOT PERMITTED) AND APPLIED LOADS ARE TO BE COORDINATED WITH STEEL JOIST MANUFACTURER. DO NOT SUSPEND EQUIPMENT FROM BRIDGING OR METAL DECK.

J-11 STEEL JOIST MANUFACTURER TO VERIFY SIZE, LOCATION AND WEIGHT OF SUPPORTED MECHANICAL UNITS AND ASSOCIATED OPENINGS PRIOR TO FABRICATION.

### METAL DECK

D-1 METAL DECK MUST BE DETAILED IN ACCORDANCE WITH THE STEEL DECK INSTITUTE (SDI) "DESIGN MANUAL FOR COMPOSITE DECKS, FORM DECKS AND ROOF DECKS".

D-2 DECK UNITS HAVE BEEN DESIGNED TO BE A MINIMUM OF THREE (3) SPANS CONTINUOUS WITH LAPS PLACED OVER SUPPORTS.

D-3 REFER TO ROOF DECK SCHEDULE ON S-603 WHICH INCLUDES DEPTH PROFILE, THICKNESS, AND ATTACHMENT.

### LIGHT GAGE STEEL FRAMING

LG-1 STRUCTURAL MEMBERS MUST BE DESIGNED IN ACCORDANCE WITH THE AMERICAN IRON AND STEEL INSTITUTE (AISI) "NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS" (LATEST EDITION).

LG-2 STRUCTURAL MEMBERS TO BE FORMED FROM CORROSION RESISTANT STEEL CONFORMING TO ASTM A 653/A 653M WITH MINIMUM YIELD STRESS (Fy) ACCORDING TO STRUCTURAL PERFORMANCE.

LG-3 LIGHT GAGE MEMBERS AND DETAILS SHOWN ON THE ARCHITECTURAL OR STRUCTURAL DRAWINGS ARE FOR BID PURPOSES ONLY. STRUCTURAL STUD AND/OR JOIST FRAMING MEMBERS AND CONNECTIONS ARE TO BE ENGINEERED BY THE MANUFACTURER. DESIGN CALCULATIONS AND SHOP DRAWINGS INDICATING JAMBS, POSTS, HEADERS, BRACING AND PIECES NECESSARY FOR CONSTRUCTION MUST BE SUBMITTED TO THE CONTRACTING OFFICER FOR REVIEW. DESIGN CALCULATIONS ARE TO BE PREPARED BY OR UNDER THE SUPERVISION OF A PROFESSIONAL ENGINEER REGISTERED IN THE UNITED STATES AND BEARING THE SEAL OF THAT PROFESSIONAL ENGINEER.

LG-4 MAXIMUM STUD SPACING TO BE 16" ON CENTER WITH DOUBLED STUDS (MINIMUM) AT EACH SIDE OF OPENINGS.

LG-5 FRAMING COMPONENTS ARE TO BE CUT SQUARELY FOR ATTACHMENT TO PERPENDICULAR MEMBERS OR AS AN ANGULAR FIT AGAINST ABUTTING MEMBERS.

LG-6 FIELD CUTTING OF STUDS MUST BE DONE BY SAWING OR SHEARING, TORCH CUTTING OF COLD-FORMED MEMBERS IS UNACCEPTABLE.

LG-7 FASTENING OF COMPONENTS IS TO BE WITH SELF-DRILLING SCREWS OR WELDING. WELDING OF STUDS MUST COMPLY WITH AWS D1.3/D1.3M. WELDS TO BE TOUCHED-UP WITH ZINC-RICH PAINT. SCREWS AND WELDS TO BE OF SUFFICIENT SIZE TO ENSURE THE STRENGTH OF THE CONNECTION. WIRE TYING OF COMPONENTS IS NOT PERMITTED.

LG-8 LIGHT GAGE STEEL FRAMING MEMBERS ARE TO BE SECURELY ATTACHED TO THE STRUCTURE WHERE INDICATED ON THE DRAWINGS OR APPROVED SHOP DRAWINGS. FASTENERS TO BE COMPATIBLE WITH THE STRUCTURAL MEMBERS. POWDER DRIVEN FASTENERS ARE NOT ACCEPTABLE FOR STRUCTURAL APPLICATIONS.

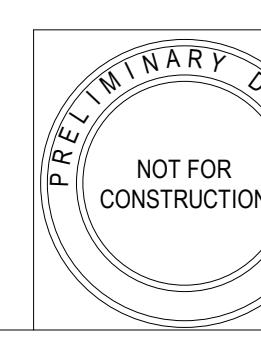
LG-9 PROVIDE VERTICAL SLIDE TRACKS, OR SLIDE CLIPS, WHERE INDICATED ON THE DRAWINGS OR OTHERWISE REQUIRED TO ALLOW FOR VERTICAL STRUCTURAL MOVEMENTS. MAXIMUM EXPECTED STRUCTURE LIVE LOAD DEFLECTION IS L/360 AT FLOORS AND L/240 AT ROOFS.

LG-10 REFERENCE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION, INCLUDING SHEATHING TYPE, FINISHES, OPENINGS, LOCATIONS ETC.

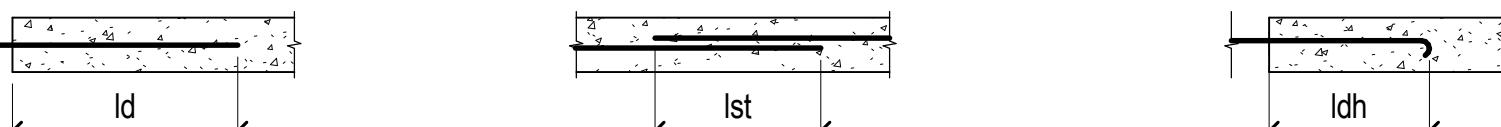
CREECHE AIR FORCE BASE, CLARK COUNTY, NV  
DISASTER RELIEF PROGRAM (DRP) - PHASE 2  
494137

GENERAL STRUCTURAL NOTES

SHEET ID  
S-003



## CONCRETE REINFORCING DEVELOPMENT AND LAP SPLICE TABLE



DEVELOPMENT LENGTH LAP SPLICE LENGTH HOOK DEVELOPMENT LENGTH

 $f_c = 4500 \text{ PSI}$ 

| BAR SIZE         | #3 | #4 | #5 | #6 | #7 | #8 | #9 | #10 | #11 |
|------------------|----|----|----|----|----|----|----|-----|-----|
| ld (TOP BARS)    | 18 | 24 | 30 | 35 | 51 | 59 | 66 | 74  | 82  |
| ld (OTHER BARS)  | 14 | 18 | 23 | 27 | 40 | 45 | 51 | 57  | 64  |
| lsp (TOP BARS)   | 24 | 32 | 39 | 46 | 67 | 77 | 86 | 97  | 107 |
| lsp (OTHER BARS) | 18 | 24 | 30 | 35 | 51 | 59 | 66 | 74  | 82  |
| ldh              | 12 | 12 | 12 | 14 | 17 | 19 | 21 | 24  | 27  |

 $f_c = 5000 \text{ PSI}$ 

| BAR SIZE         | #3 | #4 | #5 | #6 | #7 | #8 | #9 | #10 | #11 |
|------------------|----|----|----|----|----|----|----|-----|-----|
| ld (TOP BARS)    | 17 | 23 | 28 | 34 | 49 | 56 | 63 | 71  | 78  |
| ld (OTHER BARS)  | 13 | 17 | 22 | 26 | 38 | 43 | 48 | 54  | 60  |
| lsp (TOP BARS)   | 23 | 30 | 37 | 45 | 64 | 73 | 82 | 93  | 102 |
| lsp (OTHER BARS) | 17 | 23 | 28 | 34 | 49 | 56 | 63 | 71  | 78  |
| ldh              | 12 | 12 | 12 | 14 | 16 | 18 | 20 | 23  | 25  |

## NOTES:

1. LENGTHS SHOWN ARE IN INCHES.
2. LENGTHS SHOWN ABOVE ARE FOR SINGLE REINFORCING BARS WITH MAXIMUM YIELD STRENGTH OF 60ksi.
3. LENGTHS SHOWN ASSUME CLEAR SPACING OF BARS ARE AT LEAST 2 TIMES BAR DIAMETER AND CLEAR COVER OF AT..
4. LENGTHS SHOWN ABOVE ARE FOR NORMAL WEIGHT CONCRETE. FOR LIGHT WEIGHT CONCRETE, MULTIPLY VALUES BY...
5. FOR EPOXY COATED BARS, MULTIPLY VALUES BY 1.5.
6. WHEN SPLICING BARS OF DIFFERENT SIZES, USE SPLICE LENGTH FOR LARGER BAR.
7. SPLICES (LAPS) OF REINFORCING BARS MUST BE CLASS 'B' TENSION SPLICES PER ACI 318, UNLESS NOTED OTHERWISE.
8. TOP BARS ARE HORIZONTAL REINFORCING BARS WITH 12 INCHES OR MORE OF FRESH CONCRETE IS PLACED BELOW.
9. OTHER BARS ARE ANY REINFORCING BARS THAT DO NOT MEET QUALIFICATION FOR TOP BARS.

| ELEMENT                           | $f_c$ (PSI), WEIGHT | EXPOSURE CLASS (NOTES 1 & 2) |
|-----------------------------------|---------------------|------------------------------|
| FOOTINGS                          | 4500, NW            | F0, S2, W0, C1               |
| FOUNDATION (STEM) WALLS           | 4500, NW            | F1, S2, W0, C1               |
| ADMIN INTERIOR SLAB ON GRADE      | 4500, NW            | F0, S2, W0, C0               |
| HANGAR BAY INTERIOR SLAB ON GRADE | 5000, NW            | F0, S2, W0, C1               |
| EXTERIOR SLABS                    | 4500, NW            | F1, S2, W0, C1               |
| LEVELING GROUT                    | 5000, NW            |                              |

## NOTES:

1. EXPOSURE CLASS INDICATES THE SEVERITY OF THE ANTICIPATED EXPOSURE OF CONCRETE MEMBERS, IN ACCORDANCE WITH ACI 318, CHAPTER 18.
2. PROVIDE TYPE V OR EQUIVALENT SULFATE RESISTANT CEMENT (AS APPROVED BY THE ENGINEER) IN ALL CONCRETE.
3. CONCRETE STRENGTH,  $f_c$ , IS THE COMPRESSIVE STRENGTH AT 28 DAYS UNLESS NOTED OTHERWISE.
4. NORMAL WEIGHT (NW) CONCRETE SHALL HAVE A DRY DENSITY OF 145 ±4 PCF, UNO. LIGHTWEIGHT CONCRETE (LW) MUST HAVE A DRY DENSITY OF 115 ±5 PCF UNO.
5. MIX DESIGNS MUST BE IN ACCORDANCE WITH ACI 301.
6. WHERE CONCRETE IS EXPOSURE CLASS F3, RESTRICTIONS ON MAXIMUM FLY ASH AND/OR OTHER CEMENTITIOUS MATERIALS APPLY. REFER TO ACI 318, TABLE 26.4.2.2(B) FOR REQUIREMENTS.
7. AIR CONTENT FOR F1 EXPOSURE MUST BE BETWEEN 4.5% TO 6% UNLESS APPROVED OTHERWISE BY THE ENGINEER. THERE IS NO AIR CONTENT REQUIREMENT FOR THE F0 EXPOSURE CONCRETE.
8. MAXIMUM W/C RATIO MUST NOT BE EXCEEDED. APPROVED ADMIXTURES SUCH AS PLASTICIZERS MAY BE USED ON SITE.
9. CONCRETE FLEXURAL STRENGTH OF HANGAR BAY SOG WILL BE 550 PSI MIN AND 650 PSI MAX AT 90 DAYS.

## MASONRY STRENGTH TABLE

| ELEMENT                    | SPECIFIED COMPRESSIVE STRENGTH            |
|----------------------------|---|
| CONCRETE MASONRY           | $f_m = 2000 \text{ PSI}$                  |
| GROUT FOR CONCRETE MASONRY | $f_g \geq f_m (2000 \text{ PSI MINIMUM})$ |

## NOTES:

1. PROVIDE MEDIUM WEIGHT HOLLOW CONCRETE MASONRY UNITS FOR GENERAL USE UNLESS OTHERWISE NOTED.
2. MORTAR FOR CONCRETE MASONRY MUST BE TYPE S AT EXTERIOR WALLS AND TYPE N AT INTERIOR WALLS.

## MASONRY REINFORCING SPLICE TABLE

| BAR SIZE | SINGLE REINFORCING |         |         | DOUBLE REINFORCING |         |         |
|----------|--------------------|---------|---------|--------------------|---------|---------|
|          | 8" CMU             | 10" CMU | 12" CMU | 8" CMU             | 10" CMU | 12" CMU |
| #3       | 12                 | 12      | 12      | 13                 | 13      | 13      |
| #4       | 13                 | 12      | 12      | 22                 | 22      | 22      |
| #5       | 19                 | 16      | 13      | 35                 | 35      | 35      |
| #6       | 37                 | 29      | 24      | 54                 | 54      | 54      |
| #7       | -                  | 40      | 33      | -                  | 63      | 63      |
| #8       | -                  | -       | 50      | -                  | -       | 72      |

## NOTES:

1. LAP SPLICE LENGTHS ARE IN INCHES.
2. LAP SPLICES IN REINFORCED MASONRY MUST HAVE MINIMUM LENGTHS AS DEFINED ABOVE UNLESS NOTED OTHERWISE.
3. TABULATED VALUES ARE CALCULATED IN ACCORDANCE WITH TMS 402/602-16 CHAPTER 6.
4. SPLICE AND DEVELOPMENT LENGTHS ARE THE SAME VALUE FOR HORIZONTAL AND VERTICAL BARS.
5. SINGLE REINFORCING IS A SINGLE BAR CENTERED IN CMU BLOCK CELL, DOUBLE REINFORCING IS TWO BARS IN A CMU BLOCK CELL WITH 2 INCH MINIMUM CLEAR COVER FROM OUTSIDE FACE OF BLOCK.
6. TABULATED VALUES BASED ON UNCOATED REINFORCEMENT WITH A YEILD STRENGTH,  $F_y = 60 \text{ ksi}$
7. TABULATED VALUES BASED ON MASONRY COMPRESSIVE STRENGTH,  $f_m = 2000 \text{ PSI}$



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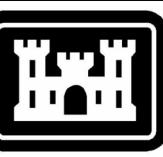
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|-----------------------------|---------------------------------|
| US ARMY CORPS OF ENGINEERS  | ISSUE DATE: NOVEMBER 13, 2025   |
| LOS ANGELES DISTRICT        | SOLICITATION NO.: W912PL25R0012 |
|                             | CONTRACT NO.: W912PL25C0037     |
| KORTE CONSTRUCTION          | SIZE:                           |
| 5700 OAKLAND AVE, SUITE 275 | ANSID:                          |
| ST. LOUIS, MO 63110         |                                 |

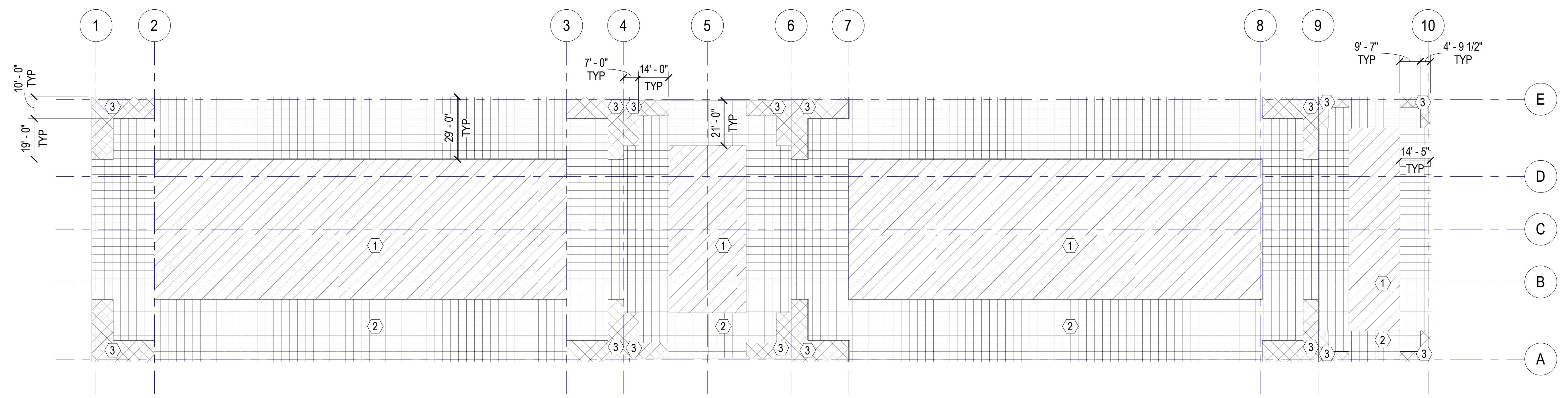
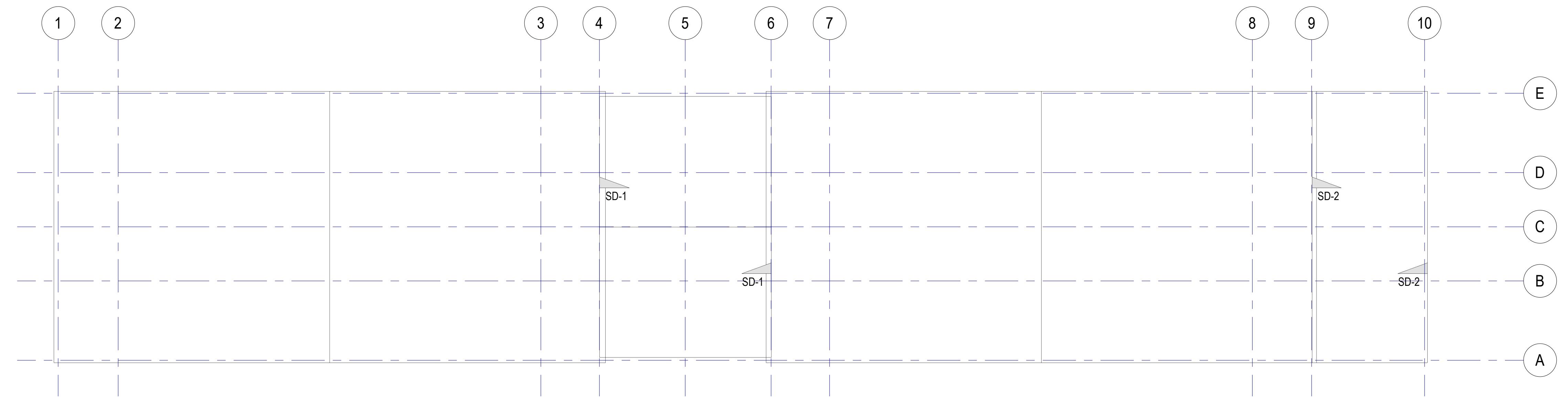
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|---|--------------------------|
| CREECH AIR FORCE BASE, CLARK COUNTY, NV     | GENERAL STRUCTURAL NOTES |
| DISASTER RESILIENCY PROGRAM (DRP) - PHASE 2 | 494137                   |

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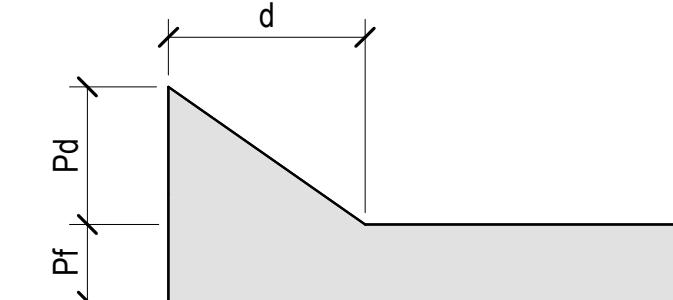
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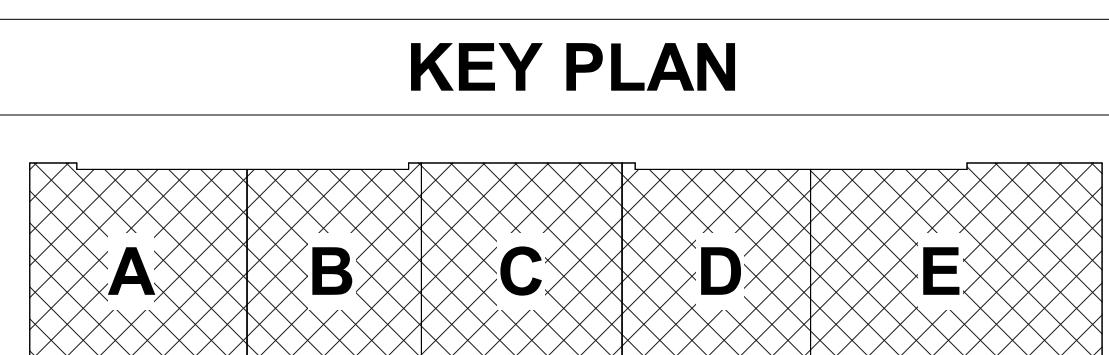
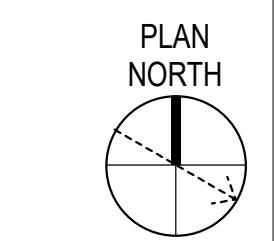


| SNOW DRIFT LOAD KEY |                    |                 |                         |
|---------------------|--------------------|-----------------|-------------------------|
| MARK                | SURCHAGE LOAD (Pd) | DRIFT WIDTH (d) | BALANCED SNOW LOAD (Pf) |
| SD-1                | 41.8 psf           | 10 ft           | 21 psf                  |
| SD-2                | 29.9 psf           | 23 ft           | 3.9 psf                 |



| WIND LOAD MAP KEY |         |                             |                    |                     |                     |  |
|-------------------|---------|-----------------------------|--------------------|---------------------|---------------------|--|
| MARK              | PATTERN | USAGE                       | WIND LOAD (psf)    |                     |                     |  |
|                   |         |                             | 50 ft <sup>2</sup> | 100 ft <sup>2</sup> | 500 ft <sup>2</sup> |  |
| ①                 | ▨▨▨▨    | INTERIOR ROOF ZONE (ZONE 1) | -50.8<br>23.0      | -47.6<br>23.0       | -40.1<br>23.0       |  |
| ②                 | ▨▨▨     | ROOF END ZONE (ZONE 2)      | -67.0<br>23.0      | -60.1<br>23.0       | -50.5<br>23.0       |  |
| ③                 | ▨▨▨▨▨   | ROOF END ZONE (ZONES 3)     | -77.9<br>23.0      | -69.7<br>23.0       | -50.5<br>23.0       |  |

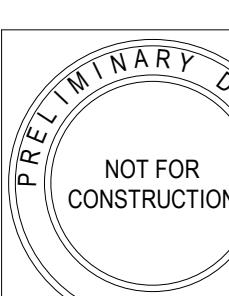
1" = 30'-0" 0 15' 30' 60' 90'

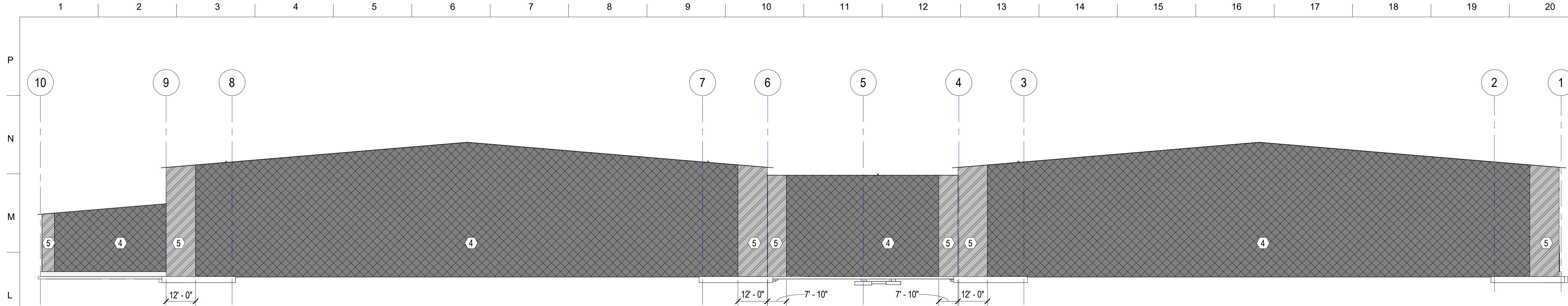


CREECH AIR FORCE BASE, CLARK COUNTY, NV  
DISASTER RESILIENCY PROGRAM (DRP) - PHASE 2  
494137

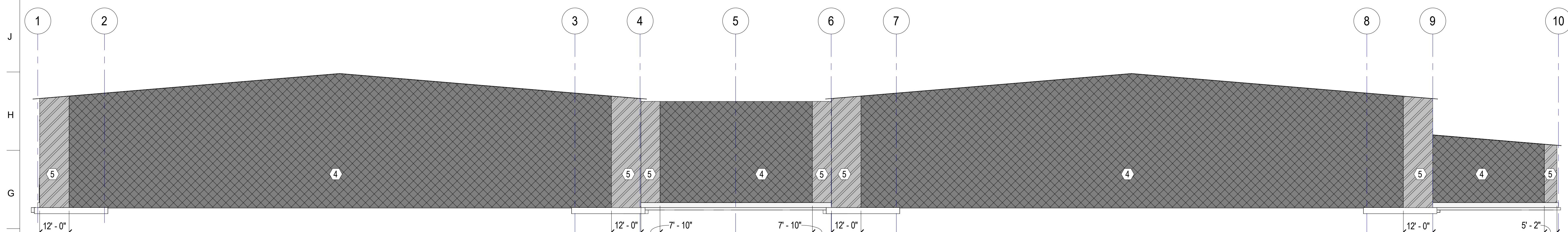
LOADING PLANS

SHEET ID  
S-005

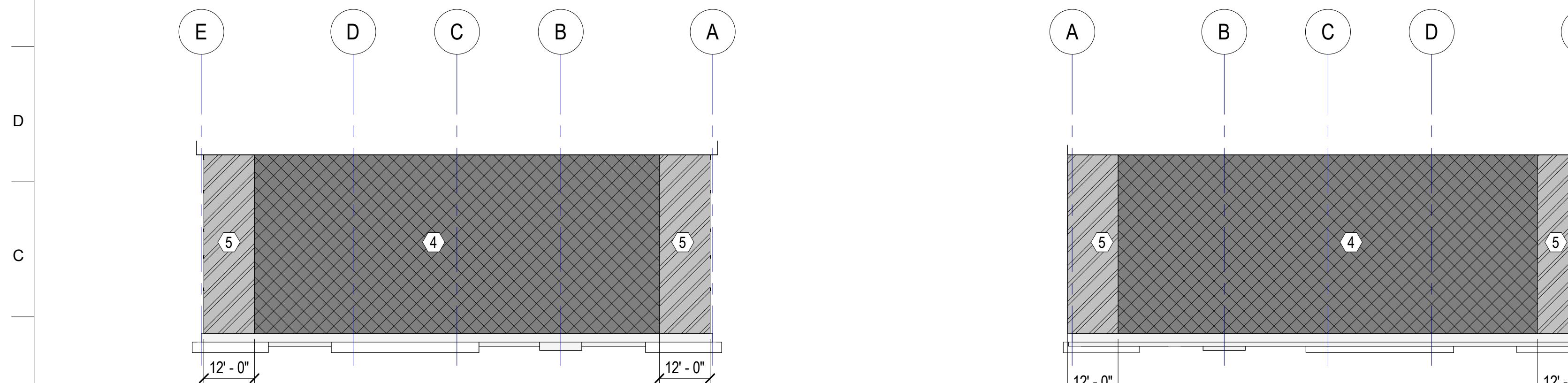




**K1** WIND LOAD ELEVATION - NORTH FACE  
3/64" = 1'-0"



**F1** WIND LOAD ELEVATION - SOUTH FACE  
3/64" = 1'-0"



**B1** WIND LOAD ELEVATION - WEST FACE  
3/64" = 1'-0"

**B7** WIND LOAD ELEVATION - EAST FACE  
3/64" = 1'-0"

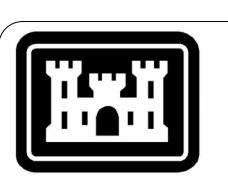
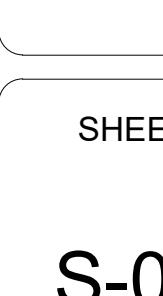
| WIND LOAD MAP KEY |         |                             |                    |                     |                     |
|-------------------|---------|-----------------------------|--------------------|---------------------|---------------------|
| MARK              | PATTERN | USAGE                       | WIND LOAD (psf)    |                     |                     |
|                   |         |                             | 10 ft <sup>2</sup> | 100 ft <sup>2</sup> | 200 ft <sup>2</sup> |
| ④                 | █       | INTERIOR WALL ZONE (ZONE 4) | -39.9<br>+37.5     | -35.8<br>+33.4      | -34.5<br>+32.2      |
| ⑤                 | ▨       | EXTERIOR WALL ZONE (ZONE 5) | -46.9<br>+37.5     | -38.6<br>+33.4      | -36.2<br>+32.2      |

CREECH AIR FORCE BASE, CLARK COUNTY, NV  
DISASTER RESILIENCY PROGRAM (DRP) - PHASE 2  
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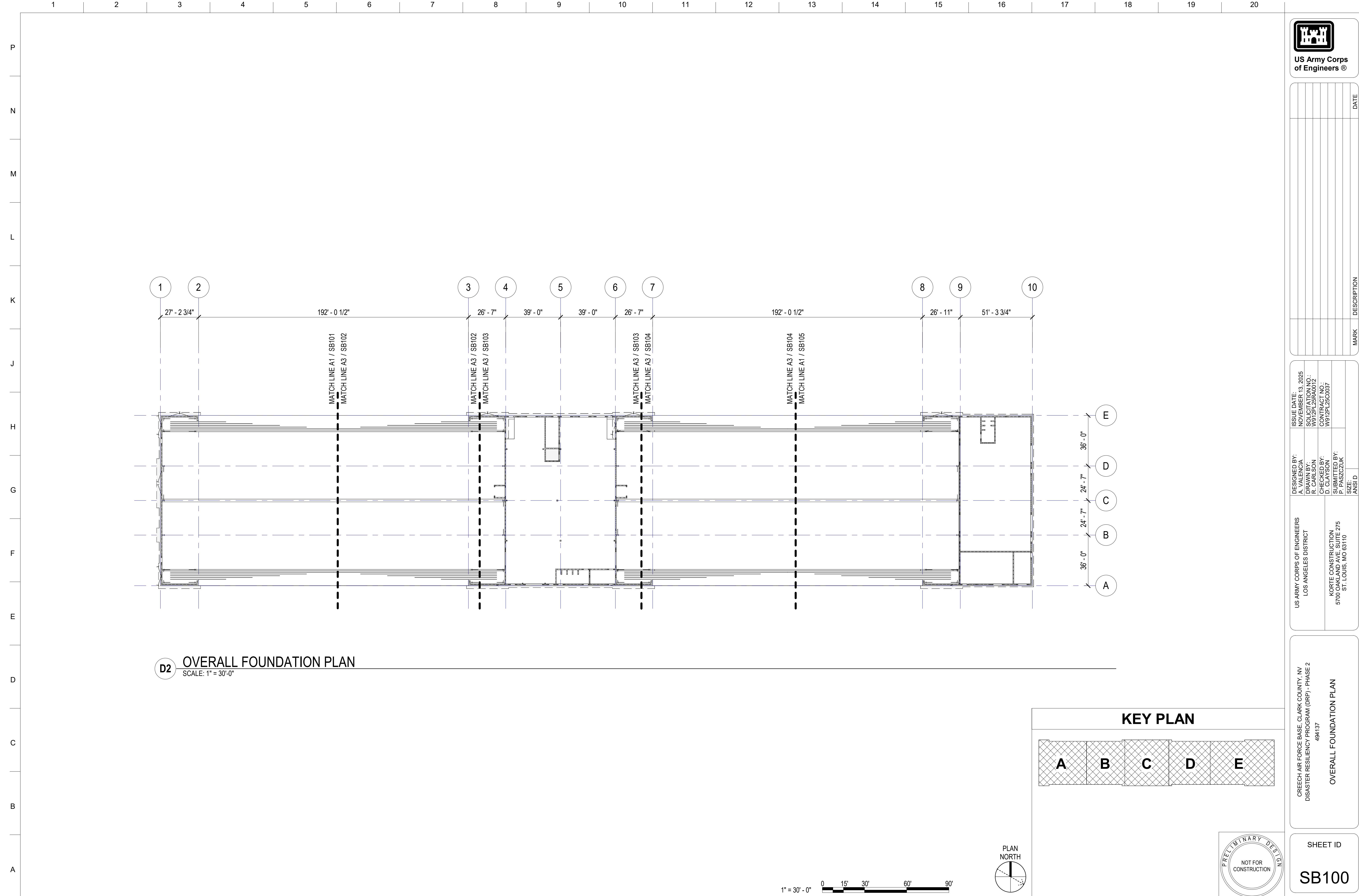
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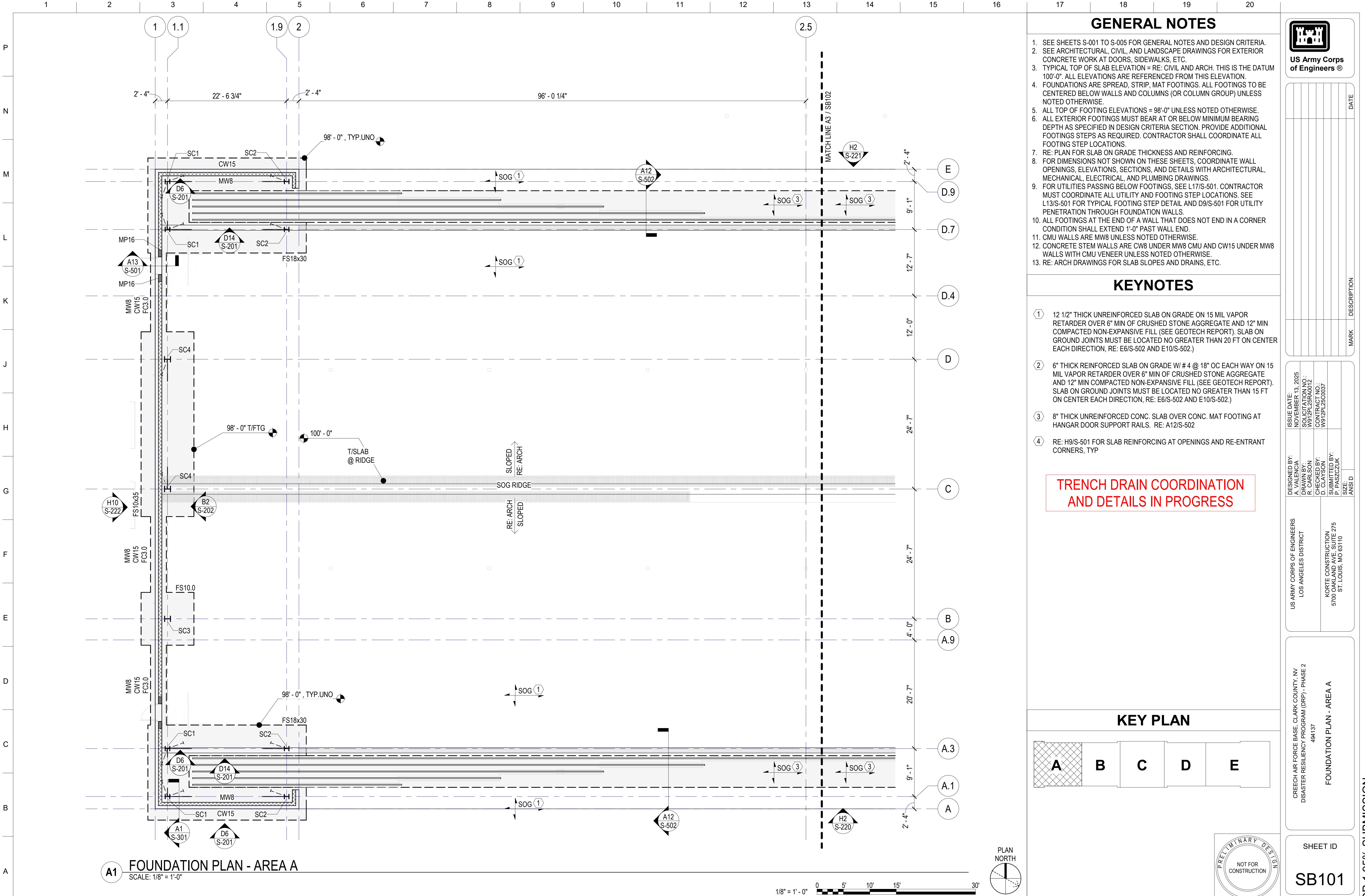
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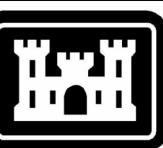
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DATE

## GENERAL NOTES

1. SEE SHEETS S-001 TO S-005 FOR GENERAL NOTES AND DESIGN CRITERIA.
2. SEE ARCHITECTURAL, CIVIL, AND LANDSCAPE DRAWINGS FOR EXTERIOR CONCRETE WORK AT DOORS, SIDEWALKS, ETC.
3. TYPICAL TOP OF SLAB ELEVATION = RE: CIVIL AND ARCH. THIS IS THE DATUM 100'-0". ALL ELEVATIONS ARE REFERENCED FROM THIS ELEVATION.
4. FOUNDATIONS ARE SPREAD, STRIP, MAT FOOTINGS. ALL FOOTINGS TO BE CENTERED BELOW WALLS AND COLUMNS (OR COLUMN GROUP) UNLESS NOTED OTHERWISE.
5. ALL TOP OF FOOTING ELEVATIONS = 98'-0" UNLESS NOTED OTHERWISE.
6. ALL EXTERIOR FOOTINGS MUST BEAR AT OR BELOW MINIMUM BEARING DEPTH AS SPECIFIED IN DESIGN CRITERIA SECTION. PROVIDE ADDITIONAL FOOTINGS STEPS AS REQUIRED. CONTRACTOR SHALL COORDINATE ALL FOOTING STEP LOCATIONS.
7. RE: PLAN FOR SLAB ON GRADE THICKNESS AND REINFORCING.
8. FOR DIMENSIONS NOT SHOWN ON THESE SHEETS, COORDINATE WALL OPENINGS, ELEVATIONS, SECTIONS, AND DETAILS WITH ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS.
9. FOR UTILITIES PASSING BELOW FOOTINGS, SEE L17/S-501. CONTRACTOR MUST COORDINATE ALL UTILITY AND FOOTING STEP LOCATIONS. SEE L13/S-501 FOR TYPICAL FOOTING STEP DETAIL AND D9/S-501 FOR UTILITY PENETRATION THROUGH FOUNDATION WALLS.
10. ALL FOOTINGS AT THE END OF A WALL THAT DOES NOT END IN A CORNER CONDITION SHALL EXTEND 1'-0" PAST WALL END.
11. CMU WALLS ARE MW8 UNLESS NOTED OTHERWISE.
12. CONCRETE STEM WALLS ARE CW8 UNDER MW8 CMU AND CW15 UNDER MW8 WALLS WITH CMU VENEER UNLESS NOTED OTHERWISE.
13. RE: ARCH DRAWINGS FOR SLAB SLOPES AND DRAINS, ETC.

# KEYNOTES

- 1 12 1/2" THICK UNREINFORCED SLAB ON GRADE ON 15 MIL VAPOR RETARDER OVER 6" MIN OF CRUSHED STONE AGGREGATE AND 12" MIN COMPACTED NON-EXPANSIVE FILL (SEE GEOTECH REPORT). SLAB ON GROUND JOINTS MUST BE LOCATED NO GREATER THAN 20 FT ON CENTER EACH DIRECTION, RE: E6/S-502 AND E10/S-502.)
- 2 6" THICK REINFORCED SLAB ON GRADE W/ # 4 @ 18" OC EACH WAY ON 15 MIL VAPOR RETARDER OVER 6" MIN OF CRUSHED STONE AGGREGATE AND 12" MIN COMPACTED NON-EXPANSIVE FILL (SEE GEOTECH REPORT). SLAB ON GROUND JOINTS MUST BE LOCATED NO GREATER THAN 15 FT ON CENTER EACH DIRECTION, RE: E6/S-502 AND E10/S-502.)
- 3 8" THICK UNREINFORCED CONC. SLAB OVER CONC. MAT FOOTING AT HANGAR DOOR SUPPORT RAILS. RE: A12/S-502
- 4 RE: H9/S-501 FOR SLAB REINFORCING AT OPENINGS AND RE-ENTRANT CORNERS, TYP

# TRENCH DRAIN COORDINATION AND DETAILS IN PROGRESS

|  |  |  |  |
|--|--|--|--|
| KORTE CONSTRUCTION<br>5700 OAKLAND AVE, SUITE 275<br>ST. LOUIS, MO 63110 |  | A. VALENCIA<br>DRAWN BY:<br>R. CARLSON | NOVEMBER 13, 2025<br>SOLICITATION NO.:<br>W912PL25RA0012 |
|  |  | CHECKED BY:<br>D. CLAYSON              | CONTRACT NO.:<br>W912PL25C0037                           |
|  |  | SUBMITTED BY:<br>P. PASZCZUK           | SIZE:<br>ANSI D  |

**CREECH AIR FORCE BASE, CLARK COUNTY, NV**  
**DISASTER RESILIENCY PROGRAM (DRP) - PHASE 2**

494137

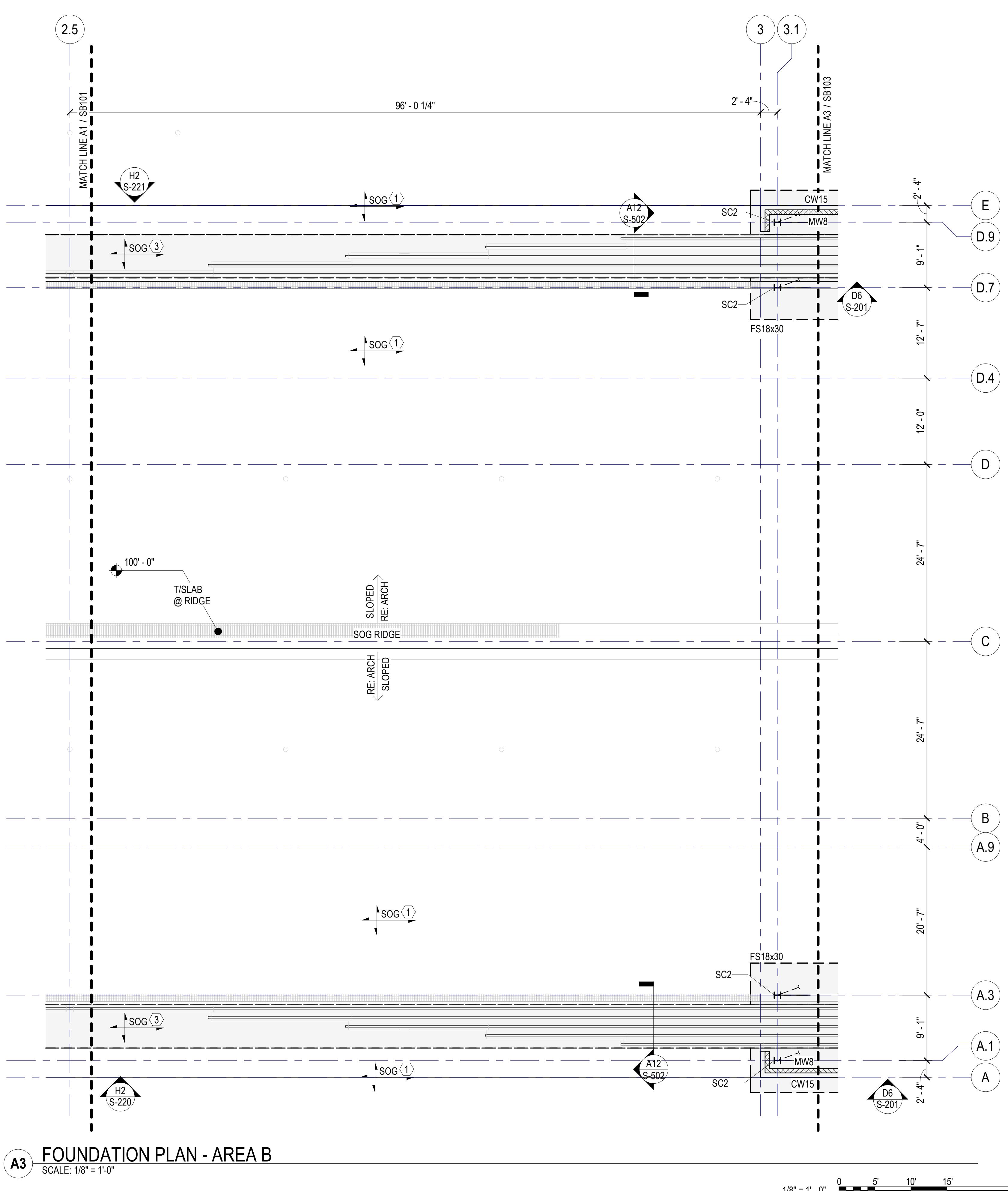
**FOUNDATION PLAN - AREA B**

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SHEET ID

SB102

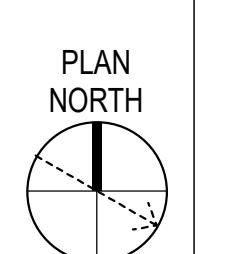
## DP-1 95% SUMMARY



# A3 FOUNDATION PLAN - AREA B

**A3** SCALE: 1/8" =

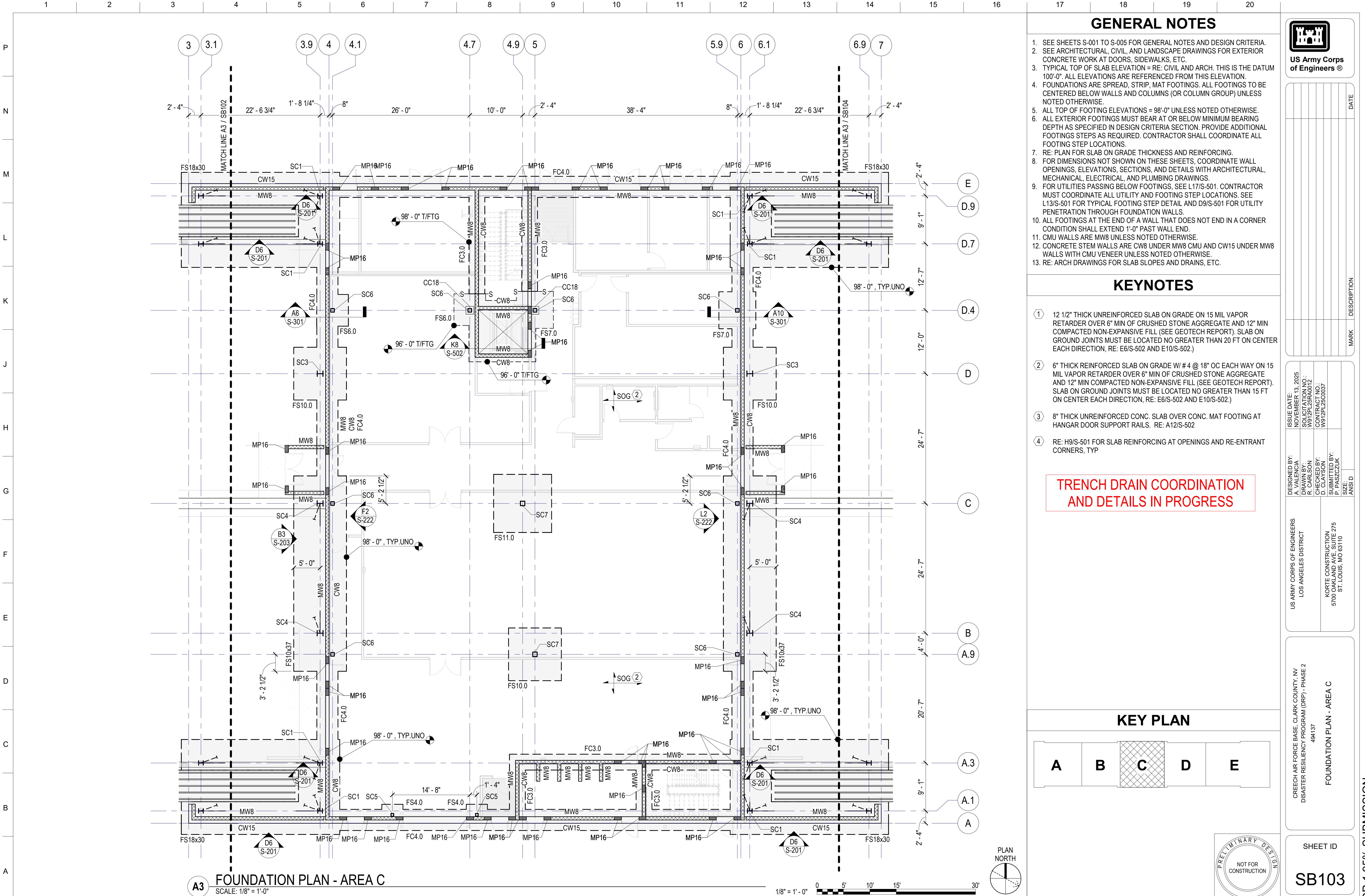
A scale bar for architectural drawings. It features a black and white checkered pattern followed by a solid black line. Above the bar, numerical markings are present: '0' at the start, '5' at the first tick, '10' at the second tick, '15' at the third tick, and '30' at the end of the bar. Below the '0' marking, the text '1/8" = 1' - 0"' is printed, indicating the scale factor.



SHEET ID

SB102

SB102



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## GENERAL NOTES

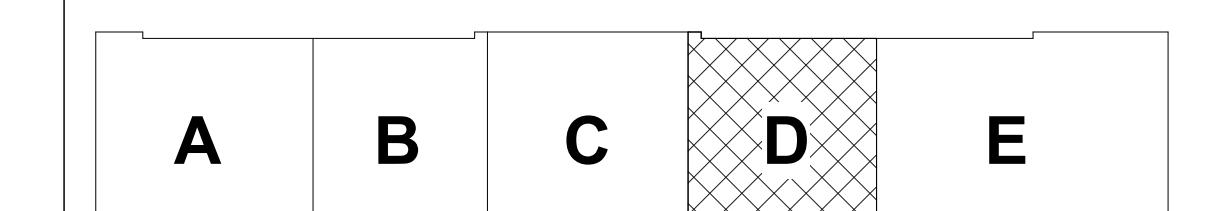
1. SEE SHEETS S-001 TO S-005 FOR GENERAL NOTES AND DESIGN CRITERIA.
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- 3 8" THICK UNREINFORCED CONC. SLAB OVER CONC. MAT FOOTING AT HANGAR DOOR SUPPORT RAILS. RE: A12/S-502
- 4 RE: H9/S-501 FOR SLAB REINFORCING AT OPENINGS AND RE-ENTRANT CORNERS, TYP

# TRENCH DRAIN COORDINATION AND DETAILS IN PROGRESS

## KEY PLAN

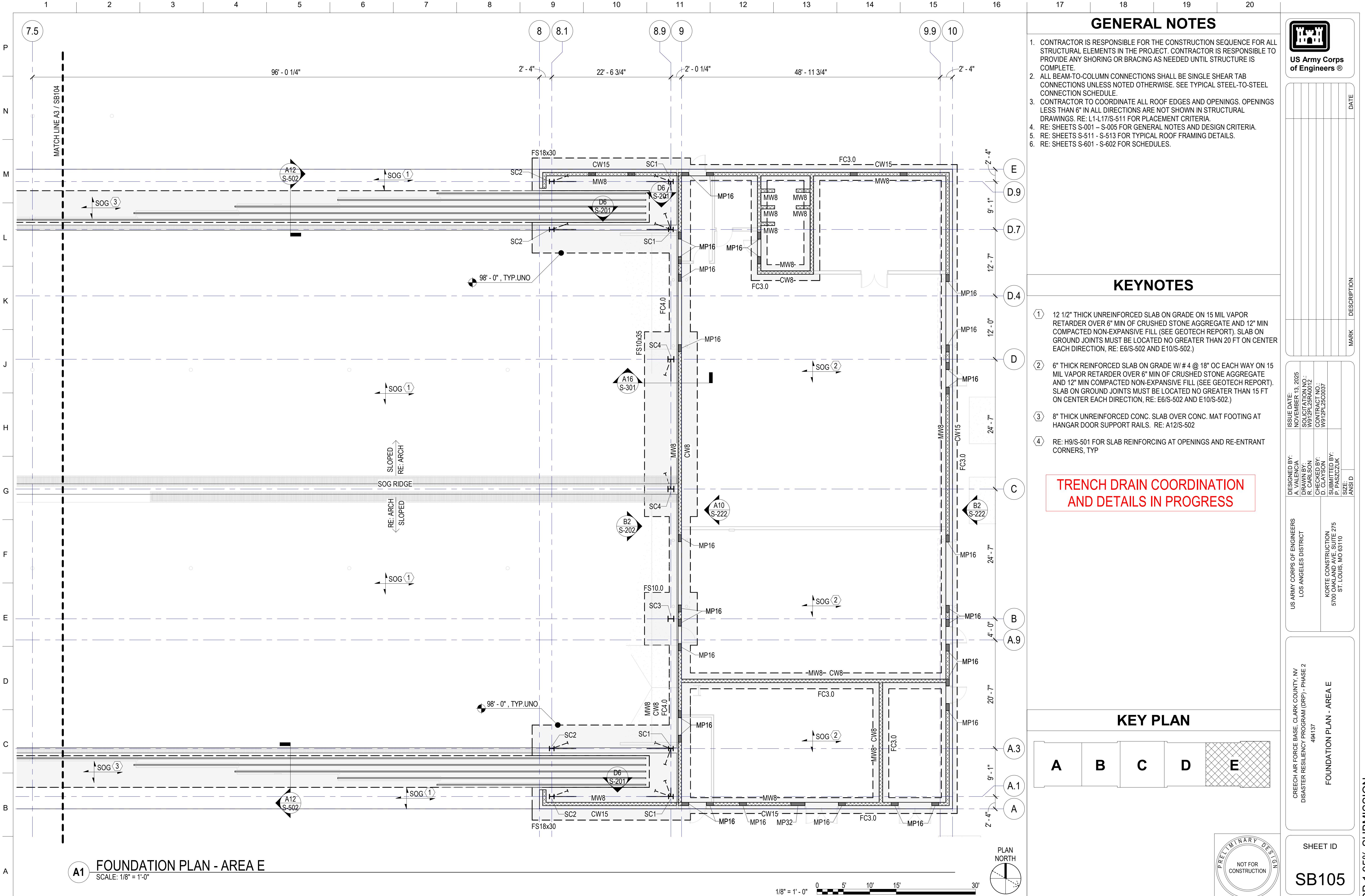


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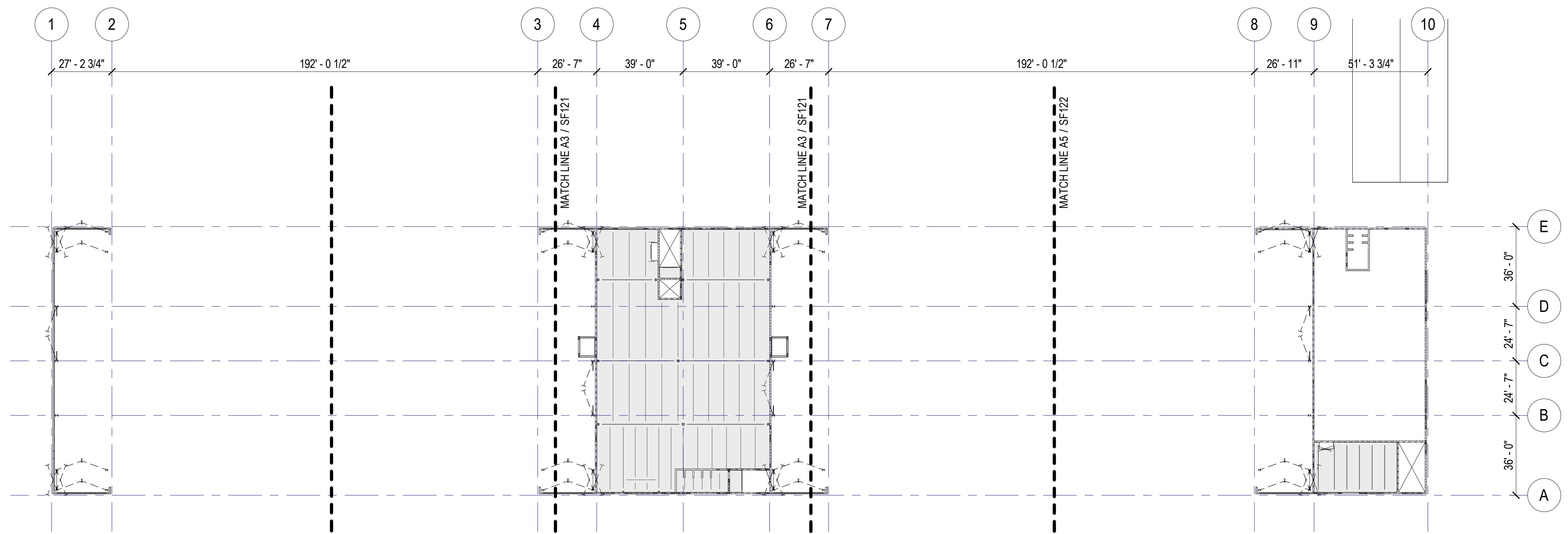
SB104

## DP-1 95% SUBMISSION



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

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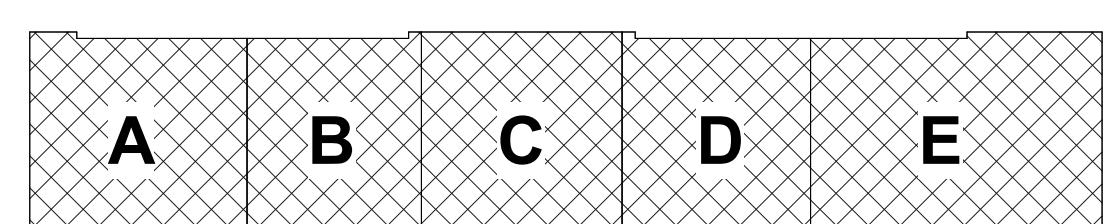


D1) OVERALL SECOND AND MEZZANINE FLOOR FRAMING PLAN  
1" = 30'-0"

1" = 30'-0" 0 15' 30' 60' 90'



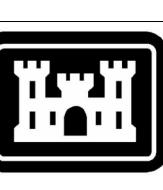
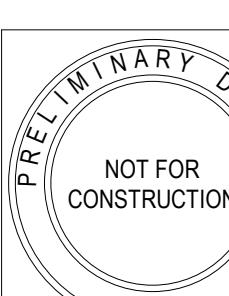
### KEY PLAN



CZECH AIR FORCE BASE, CLARK COUNTY, NV  
DISASTER RESILIENCY PROGRAM (DRP) - PHASE 2  
494137  
OVERALL SECOND AND MEZZANINE FLOOR  
FRAMING PLAN

SHEET ID

SF120



US Army Corps  
of Engineers ®

DATE

MARK DESCRIPTION

ANSI D

SIZE:

PASZCZUK

DRAWN BY:

A. VALENCIA

ISSUE DATE:

NOVEMBER 13, 2025

SOLICITATION NO.:

W912PL25R0012

CONTRACT NO.:

W912PL25C0037

CHECKED BY:

D. CLAYSON

SUBMITTED BY:

P. PASZCZUK

ANSI D

SIZE:

PASZCZUK

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SUBMITTED BY:

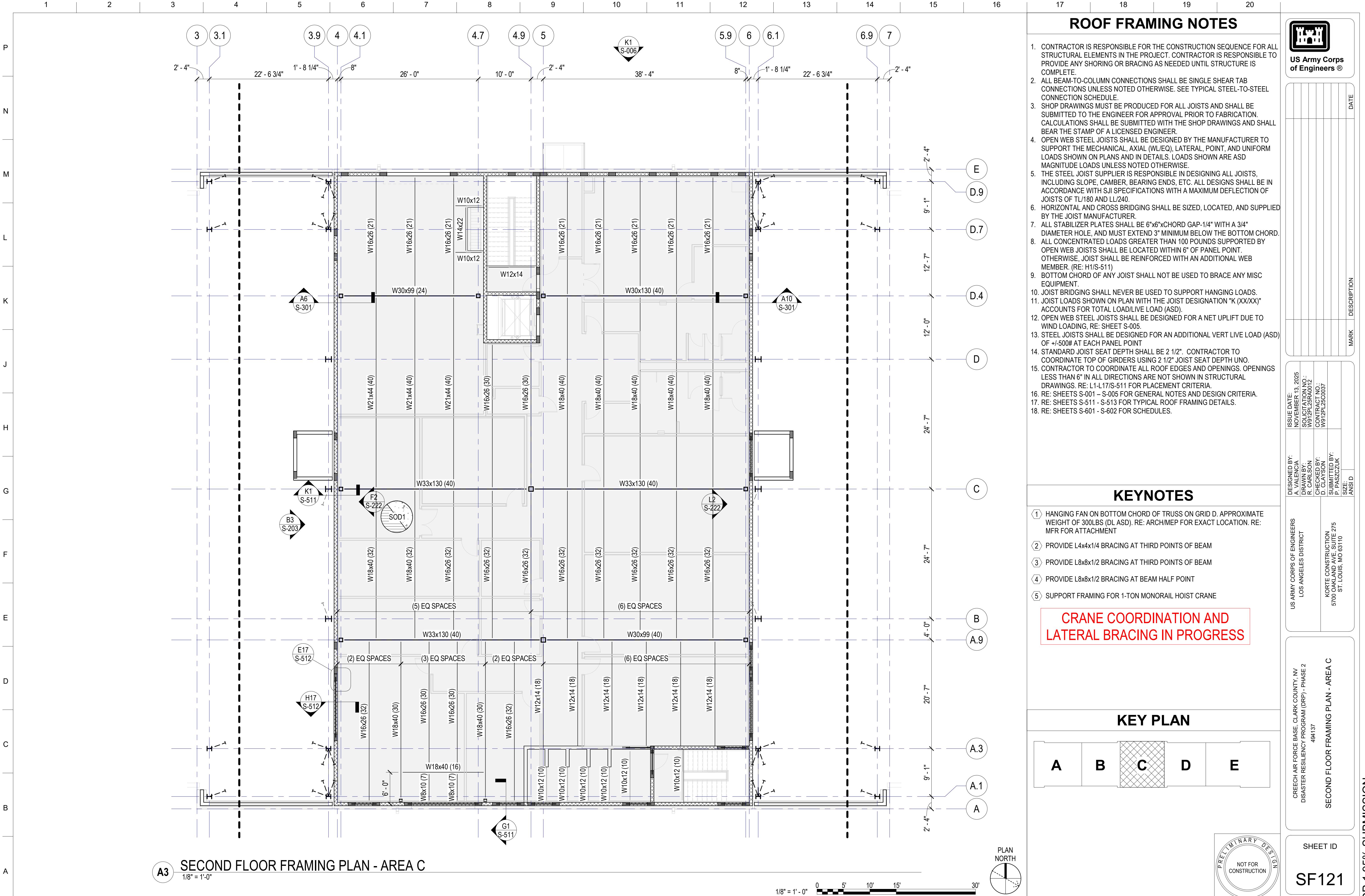
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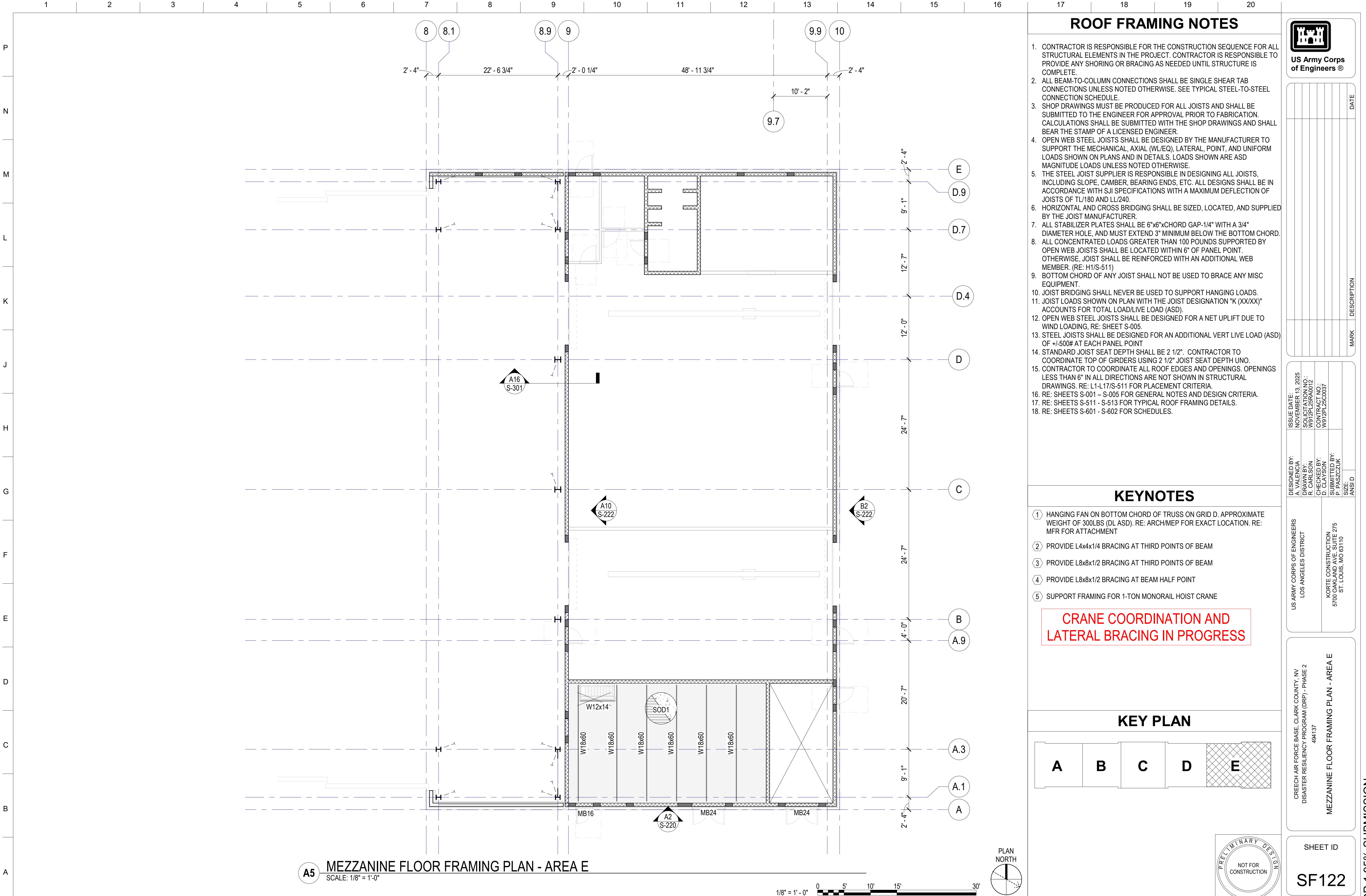
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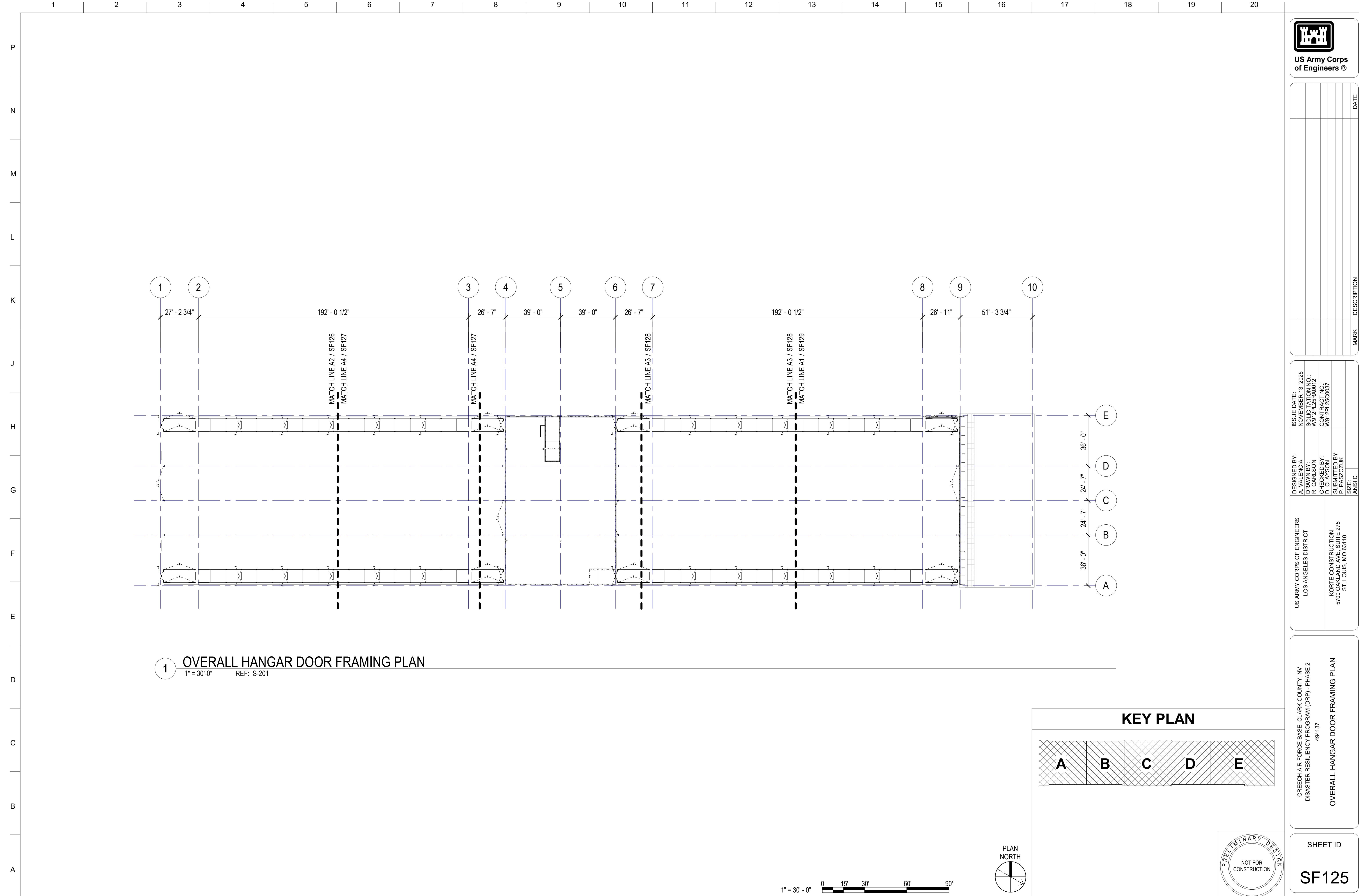
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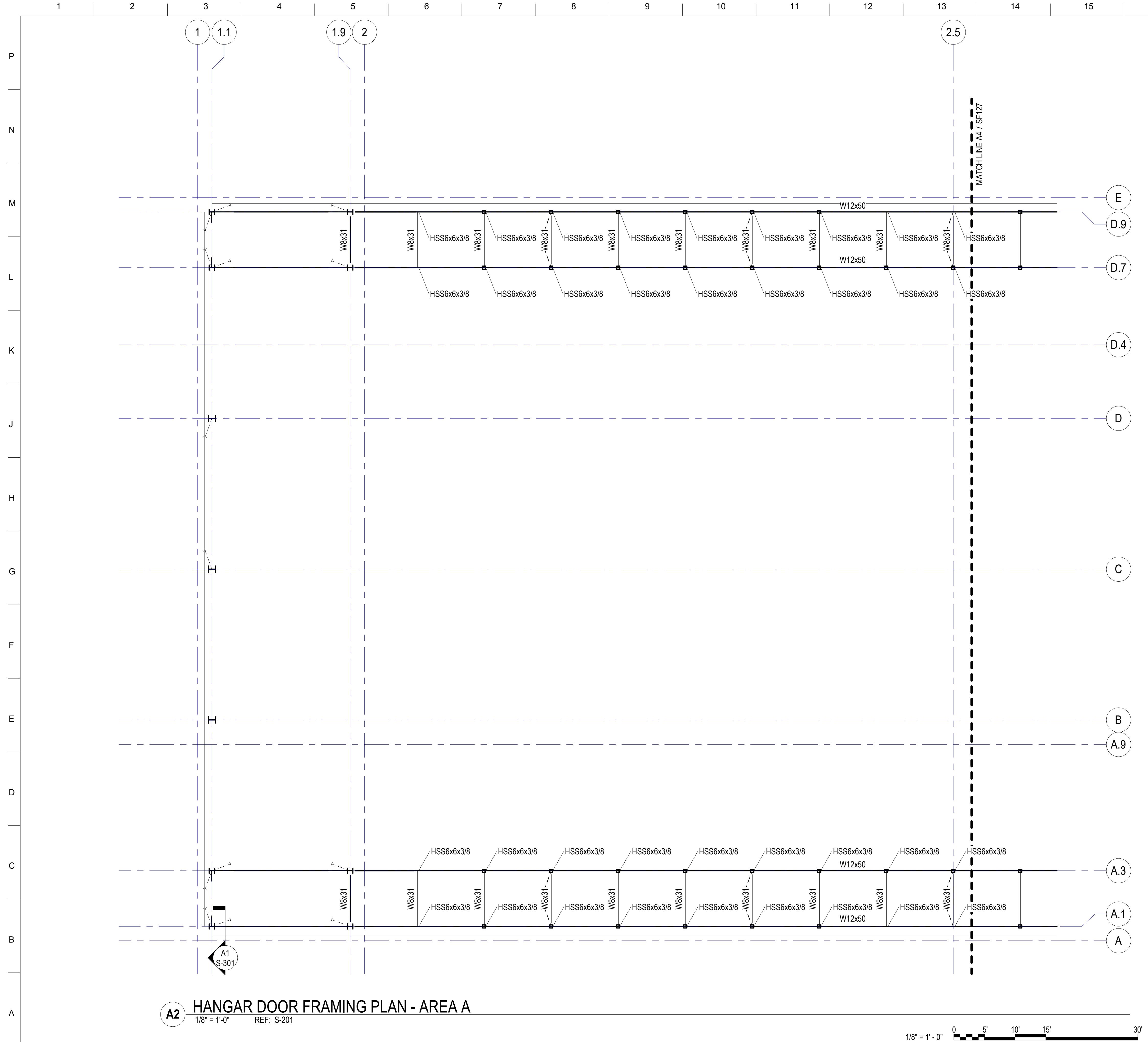
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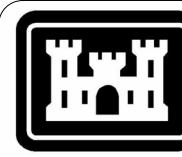






# FRAMING NOTES

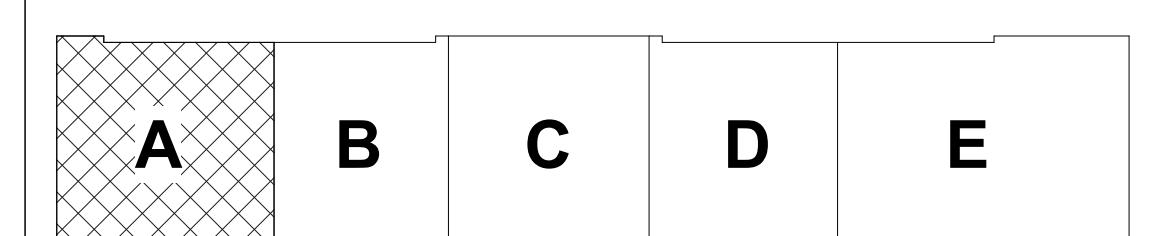
1. CONTRACTOR IS RESPONSIBLE FOR THE CONSTRUCTION SEQUENCE FOR ALL STRUCTURAL ELEMENTS IN THE PROJECT. CONTRACTOR IS RESPONSIBLE TO PROVIDE ANY SHORING OR BRACING AS NEEDED UNTIL STRUCTURE IS COMPLETE.
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3. CONTRACTOR TO COORDINATE ALL ROOF EDGES AND OPENINGS. OPENINGS LESS THAN 6" IN ALL DIRECTIONS ARE NOT SHOWN IN STRUCTURAL DRAWINGS. RE: L1-L17/S-511 FOR PLACEMENT CRITERIA.
4. RE: SHEETS S-001 – S-005 FOR GENERAL NOTES AND DESIGN CRITERIA.
5. RE: SHEETS S-511 - S-513 FOR TYPICAL ROOF FRAMING DETAILS.
6. RE: SHEETS S-601 - S-602 FOR SCHEDULES.



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|  |  |                              |                                     |
|--|--|------------------------------|-------------------------------------|
| US ARMY CORPS OF ENGINEERS<br>LOS ANGELES DISTRICT                       |  | DESIGNED BY:<br>A. VALENCIA  | ISSUE DATE:<br>NOVEMBER 13, 2025    |
|  |  | DRAWN BY:<br>R. CARLSON      | SOLICITATION NO.:<br>W912PL25RA0012 |
|  |  | CHECKED BY:<br>D. CLAYSON    | CONTRACT NO.:<br>W912PL25C0037      |
| KORTE CONSTRUCTION<br>5700 OAKLAND AVE, SUITE 275<br>ST. LOUIS, MO 63110 |  | SUBMITTED BY:<br>P. PASZCZUK | SIZE:<br>ANSI D                     |

## KEY PLAN



**CREECH AIR FORCE BASE, CLARK COUNTY, NV  
DISASTER RESILIENCY PROGRAM (DRP) - PHASE 2**

494137

**ANGAR DOOR FRAMING PLAN - AREA A**

EECH A

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# SF126

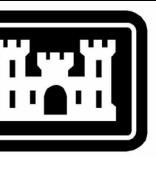
DP-1 95% SUBMISSION





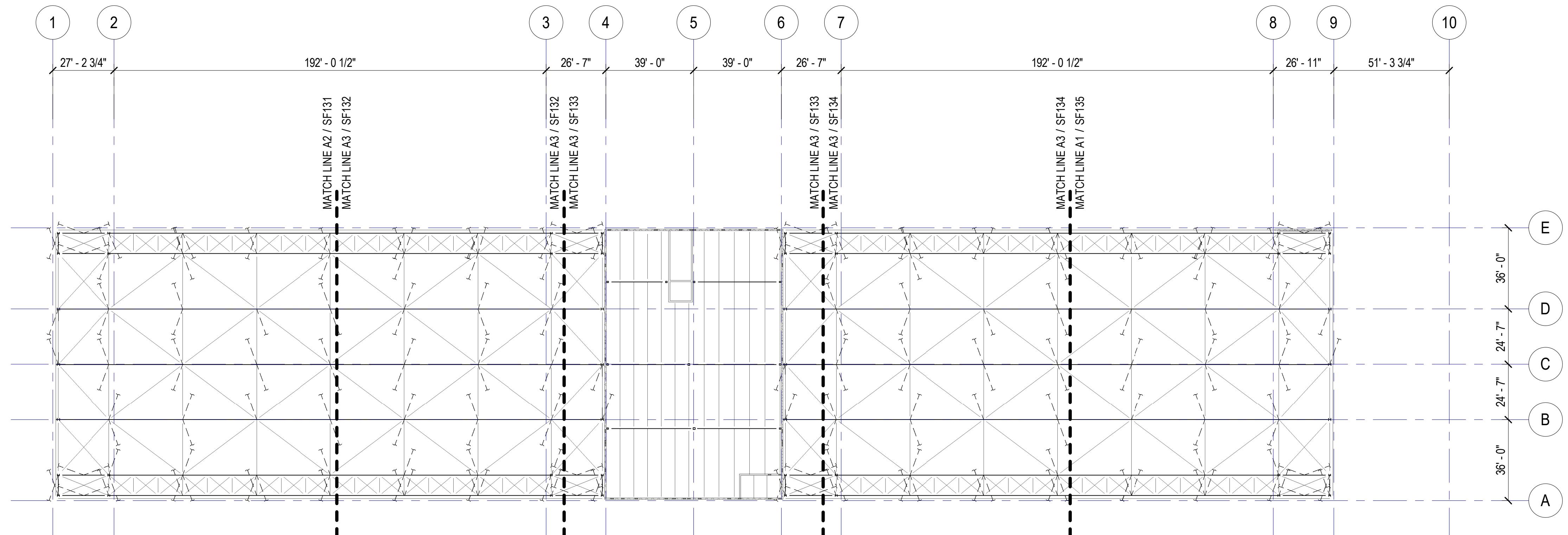


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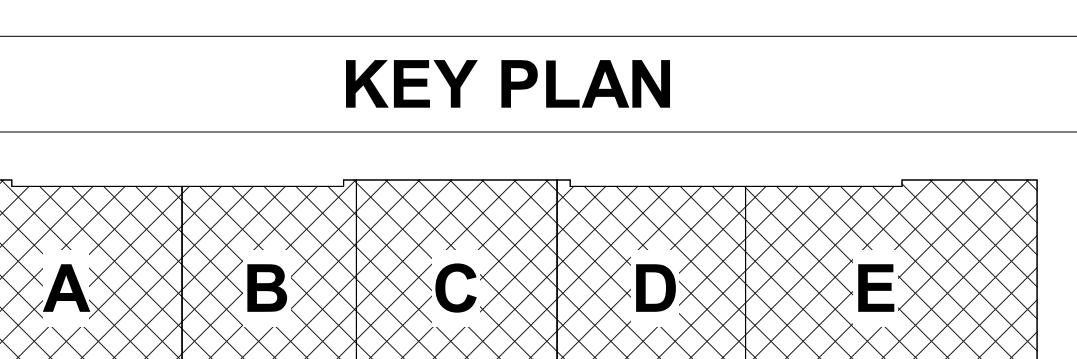
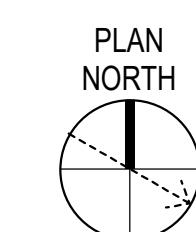
US Army Corps  
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**D3** OVERALL BOTTOM CHORD FRAMING PLAN  
SCALE: 1" = 30'-0"

1" = 30'-0" 0 15' 30' 60' 90'



CZECH AIR FORCE BASE, CLARK COUNTY, NV  
DISASTER RESILIENCY PROGRAM (DRP) - PHASE 2  
494137  
OVERALL BOTTOM CHORD FRAMING PLAN

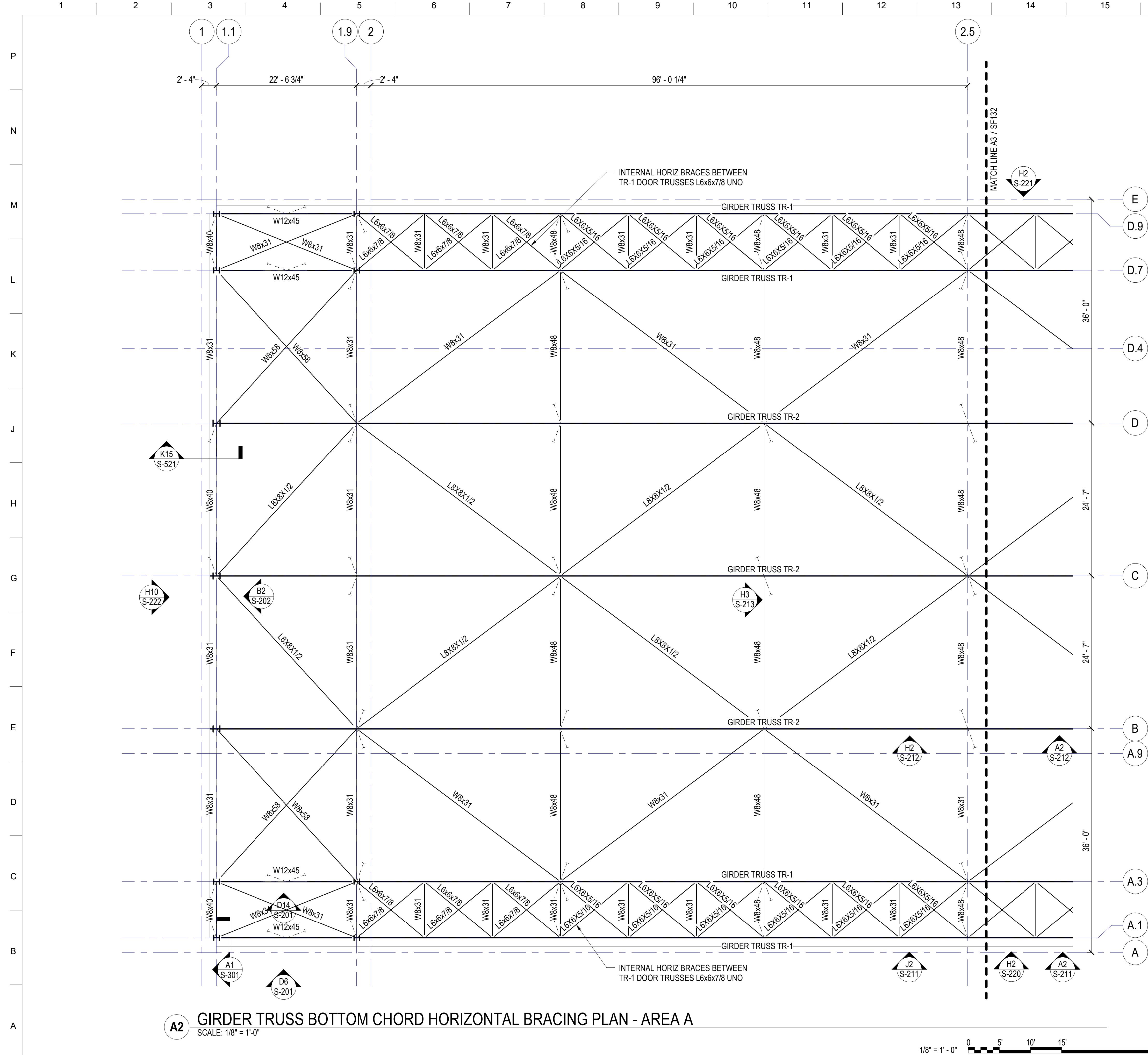
SHEET ID

SF130

PRELIMINARY DESIGN  
NOT FOR CONSTRUCTION  
N 9137

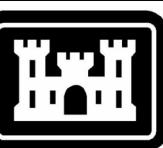
DATE

DP-1 95% SUBMISSION



# FRAMING NOTES

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4. RE: SHEETS S-001 – S-005 FOR GENERAL NOTES AND DESIGN CRITERIA.
5. RE: SHEETS S-511 - S-513 FOR TYPICAL ROOF FRAMING DETAILS.
6. RE: SHEETS S-601 - S-602 FOR SCHEDULES.



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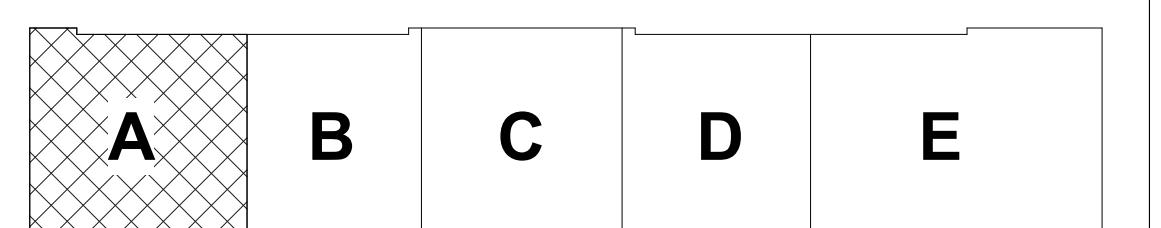
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## KEYNOTES

- ① PROVIDE L4x4x1/4 BRACING AT THIRD POINTS OF BEAM, RE: K15/S-521
- ② PROVIDE L2x2x1/4 BRACING AT THIRD POINTS OF BEAM, RE: K10/S-521
- ③ PROVIDE L8x8x1/2 BRACING AT THIRD POINTS OF BEAM, RE: E4/S-521
- ④ PROVIDE L8x8x1/2 BRACING AT BEAM HALF POINT, RE: E4/S-521 (SIM)
- ⑤ PROVIDE L8x8x1/2 BRACING AT THIRD POINTS OF BEAM, RE: A12/S-213

|   |  |                              |                                     |
|---|--|------------------------------|-------------------------------------|
| US ARMY CORPS OF ENGINEERS<br>LOS ANGELES DISTRICT                                |  | DESIGNED BY:<br>A. VALENCIA  | ISSUE DATE:<br>NOVEMBER 13, 2025    |
|   |  | DRAWN BY:<br>R. CARLSON      | SOLICITATION NO.:<br>W912PL25RA0012 |
|   |  | CHECKED BY:<br>D. CLAYSON    | CONTRACT NO.:<br>W912PL25C0037      |
|   |  | SUBMITTED BY:<br>P. PASZCZUK | SIZE:<br>ANSI D                     |
| <p>KORTE CONSTRUCTION<br/>5700 OAKLAND AVE, SUITE 275<br/>ST. LOUIS, MO 63110</p> |  |                              |                                     |

## KEY PLAN



CREECH AIR FORCE BASE, CLARK COUNTY, NV  
DISASTER RESILIENCY PROGRAM (DRP) - PHASE 2

494137

OTTOM CHORD FRAMING PLAN - AREA A

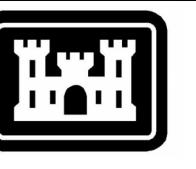
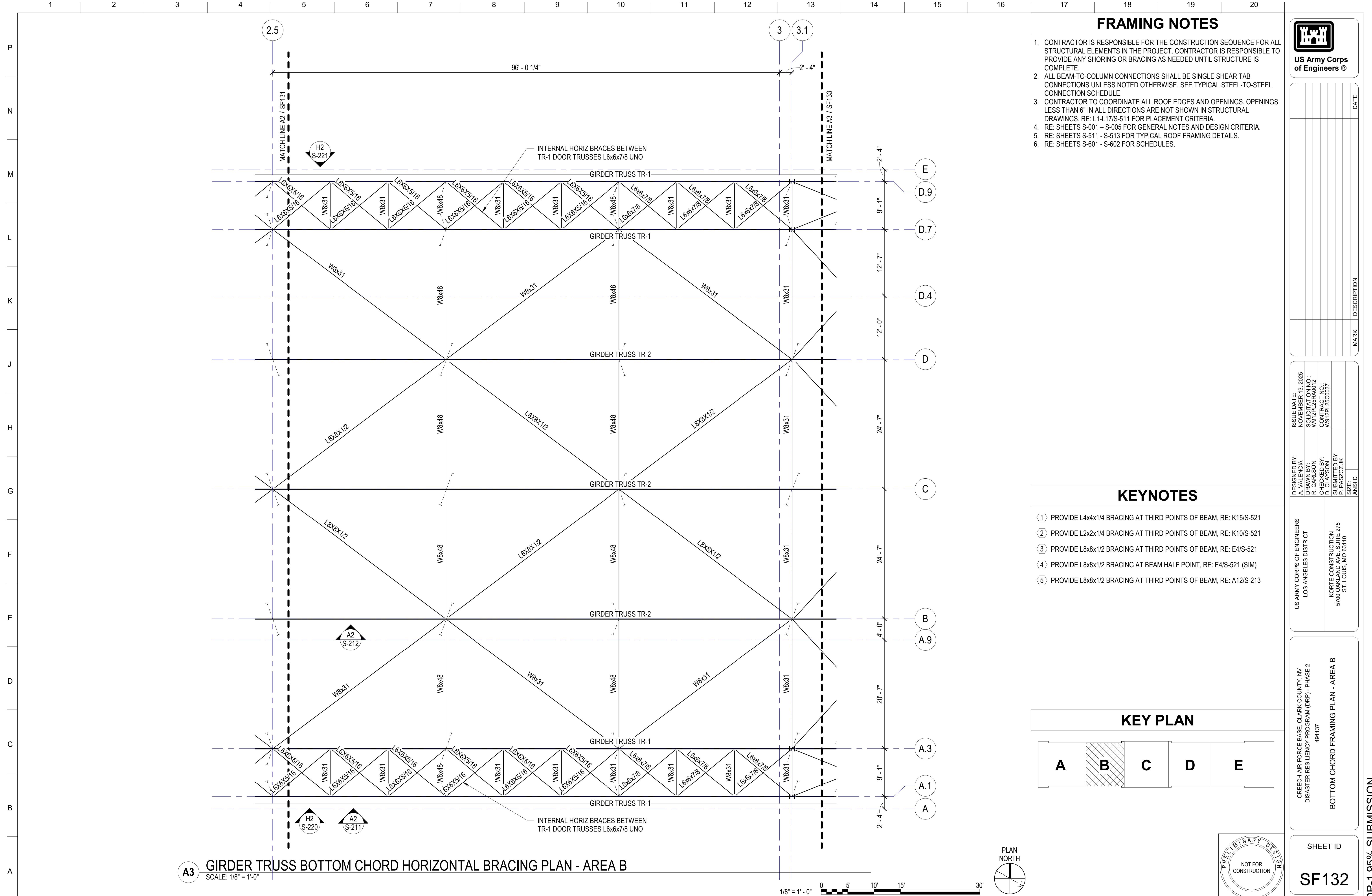
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SHEET ID

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# FRAMING NOTES

CONTRACTOR IS RESPONSIBLE FOR THE CONSTRUCTION SEQUENCE FOR ALL STRUCTURAL ELEMENTS IN THE PROJECT. CONTRACTOR IS RESPONSIBLE TO PROVIDE ANY SHORING OR BRACING AS NEEDED UNTIL STRUCTURE IS COMPLETE.

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RE: SHEETS S-001 – S-005 FOR GENERAL NOTES AND DESIGN CRITERIA.

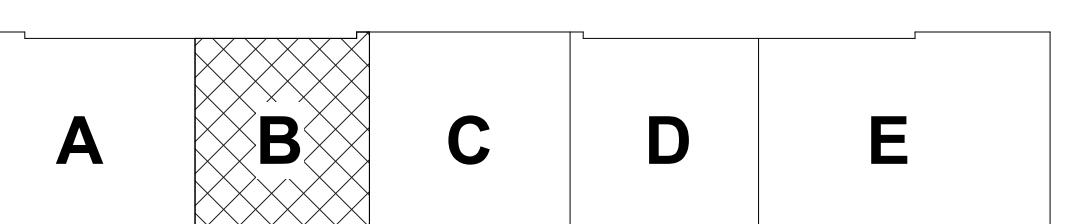
RE: SHEETS S-511 - S-513 FOR TYPICAL ROOF FRAMING DETAILS.

RE: SHEETS S-601 - S-602 FOR SCHEDULES.

## KEYNOTES

- PROVIDE L4x4x1/4 BRACING AT THIRD POINTS OF BEAM, RE: K15/S-521
- PROVIDE L2x2x1/4 BRACING AT THIRD POINTS OF BEAM, RE: K10/S-521
- PROVIDE L8x8x1/2 BRACING AT THIRD POINTS OF BEAM, RE: E4/S-521
- PROVIDE L8x8x1/2 BRACING AT BEAM HALF POINT, RE: E4/S-521 (SIM)
- PROVIDE L8x8x1/2 BRACING AT THIRD POINTS OF BEAM, RE: A12/S-213

# KEY PLAN



**CREECH AIR FORCE BASE, CLARK COUNTY, NV**  
**DISASTER RESILIENCY PROGRAM (DRP) - PHASE 2**

494137

**BOTTOM CHORD FRAMING PLAN - AREA E**

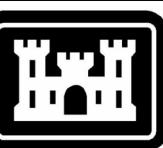
**CREECH AIR FORCE BASE  
DISASTER RESILIENCY PLAN**

## SHEET ID

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# FRAMING NOTES

CONTRACTOR IS RESPONSIBLE FOR THE CONSTRUCTION SEQUENCE FOR ALL STRUCTURAL ELEMENTS IN THE PROJECT. CONTRACTOR IS RESPONSIBLE TO PROVIDE ANY SHORING OR BRACING AS NEEDED UNTIL STRUCTURE IS COMPLETE.

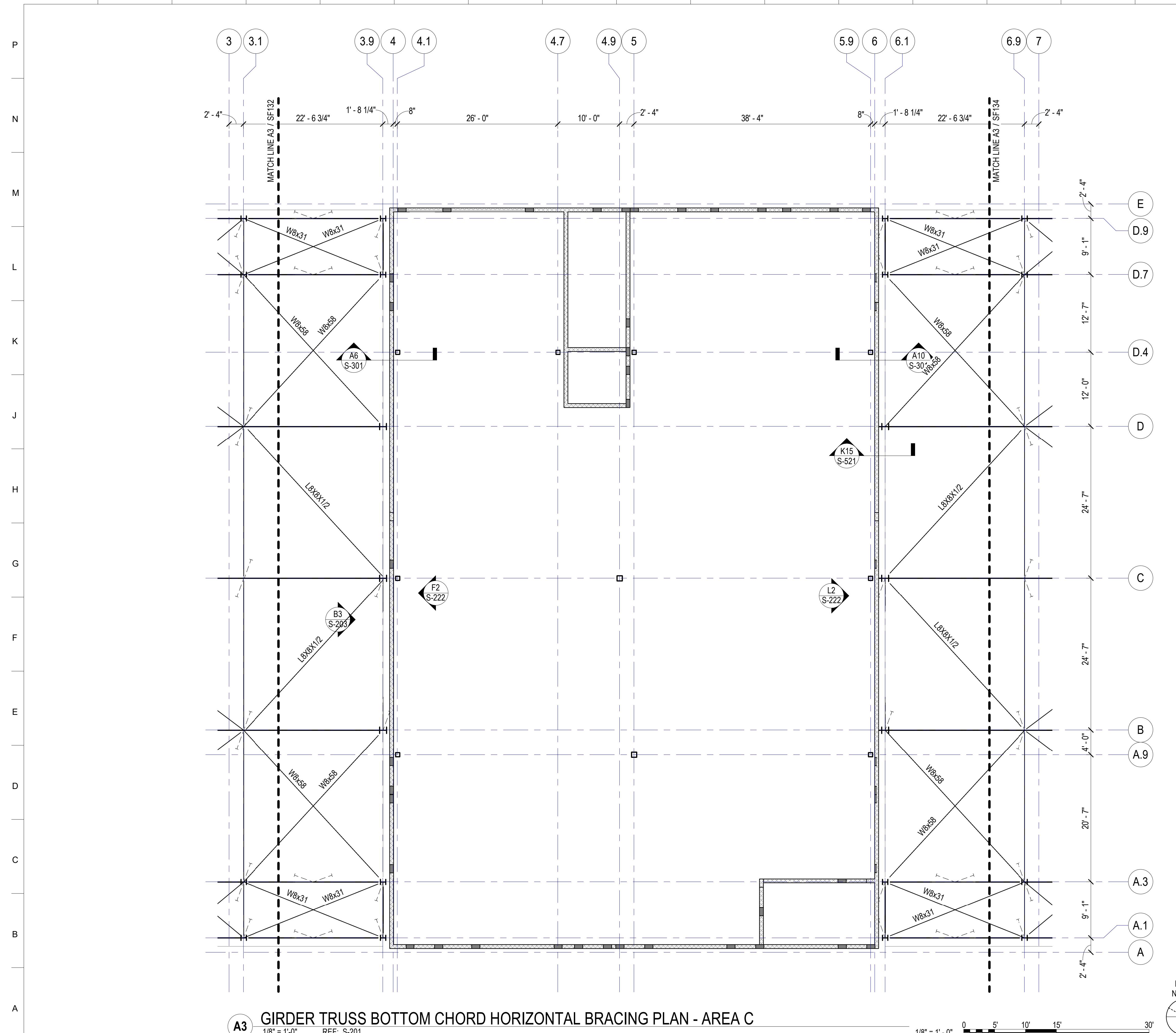
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- › PROVIDE L8x8x1/2 BRACING AT BEAM HALF POINT, RE: E4/S-521 (SIM)
- › PROVIDE L8x8x1/2 BRACING AT THIRD POINTS OF BEAM, RE: A12/S-213

KORTE CONSTRUCTION  
100 OAKLAND AVE, SUITE 275  
ST. LOUIS, MO 63110

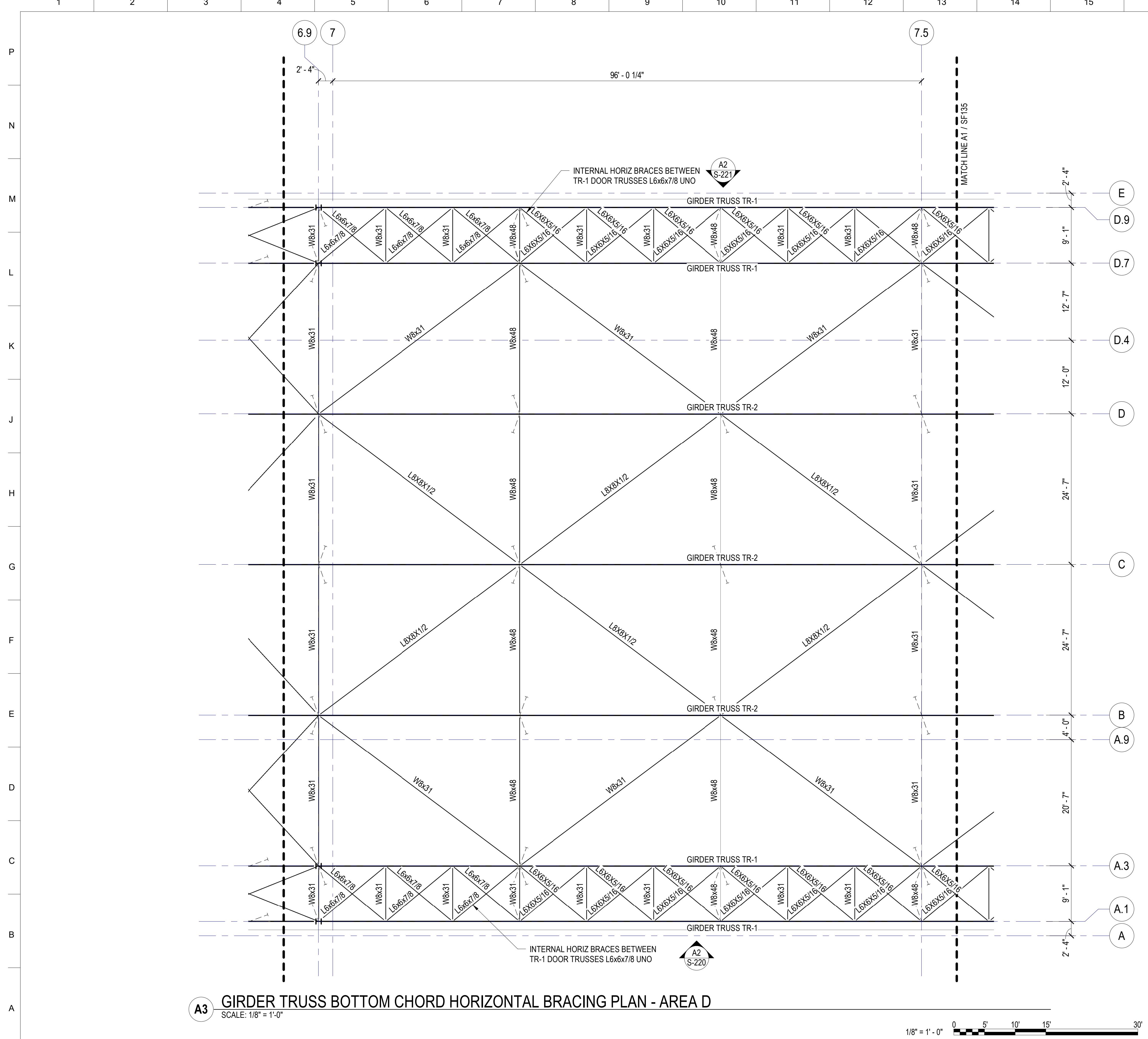
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OTTOM CHORD FRAMING PLAN  
CREECH AIR FORCE BASE, CLARK COU  
DISASTER RESILIENCY PROGRAM (DRP)  
494137

SHEET ID

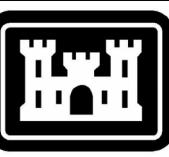
SF133

## DP-1 95% SUMMARY



# FRAMING NOTES

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# US Army Corps of Engineers ®

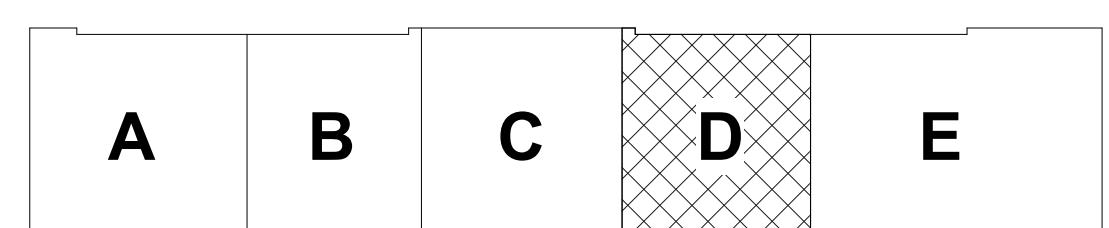
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|  |   |   |
|--|---|---|
| US ARMY CORPS OF ENGINEERS<br>LOS ANGELES DISTRICT                       | DESIGNED BY:<br>A. VALENCIA<br>DRAWN BY:<br>R. CARLSON    | ISSUE DATE:<br>NOVEMBER 13, 2025<br>SOLICITATION NO.:<br>W912PL25RA0012 |
| KORTE CONSTRUCTION<br>5700 OAKLAND AVE, SUITE 275<br>ST. LOUIS, MO 63110 | CHECKED BY:<br>D. CLAYSON<br>SUBMITTED BY:<br>P. PASZCZUK | CONTRACT NO.:<br>W912PL25C0037<br>SIZE:<br>ANSID                        |

# KEY PLAN



CREECH AIR FORCE BASE, CLARK COUNTY, NV  
DISASTER RESILIENCY PROGRAM (DRP) - PHASE 2  
494137

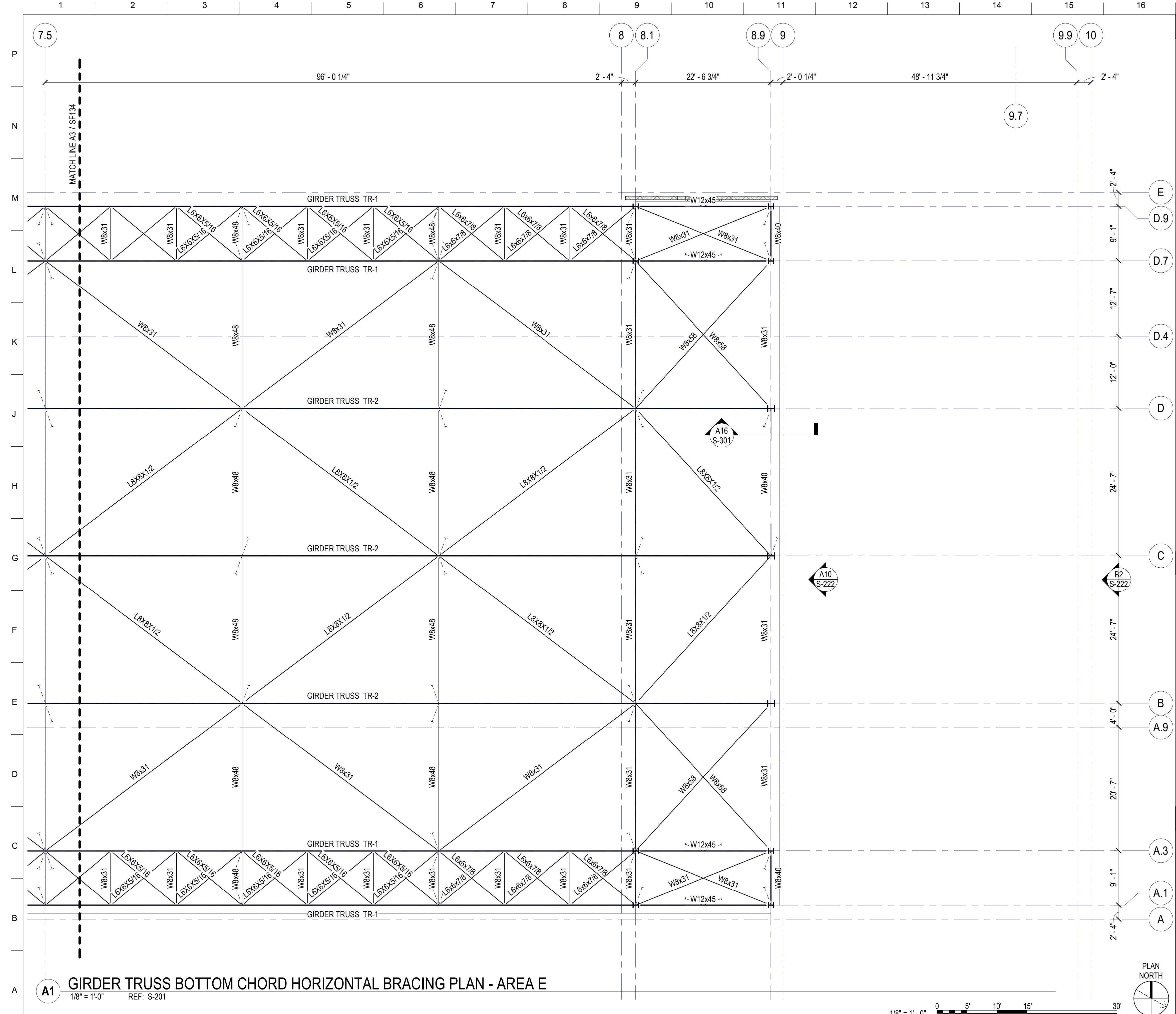
OTTOM CHORD FRAMING PLAN - AREA

SHEET ID

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# FRAMING NOTES

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- RE: SHEETS S-601 - S-602 FOR SCHEDULES.



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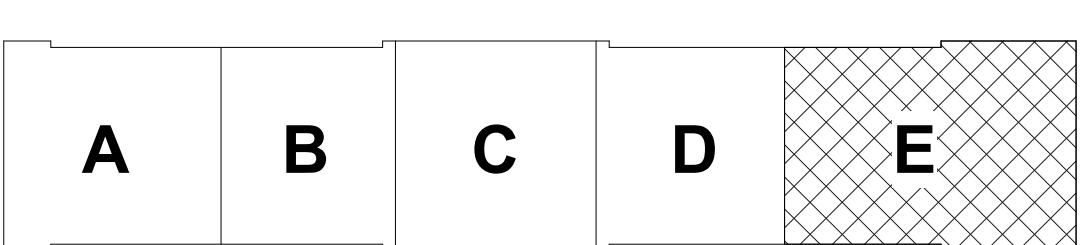
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ARMY CORPS OF ENGINEERS  
LOS ANGELES DISTRICT

KORTE CONSTRUCTION  
7700 OAKLAND AVE, SUITE 275  
ST. LOUIS, MO 63110

## KEY PLAN



CREECH AIR FORCE BASE, CLARK COUNTY, NV  
DISASTER RESILIENCY PROGRAM (DRP) - PHASE 2  
494137

OTTOM CHORD FRAMING PLAN - AREA E

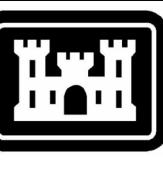
## DP-1 95% SUBMISSION

SHEET ID

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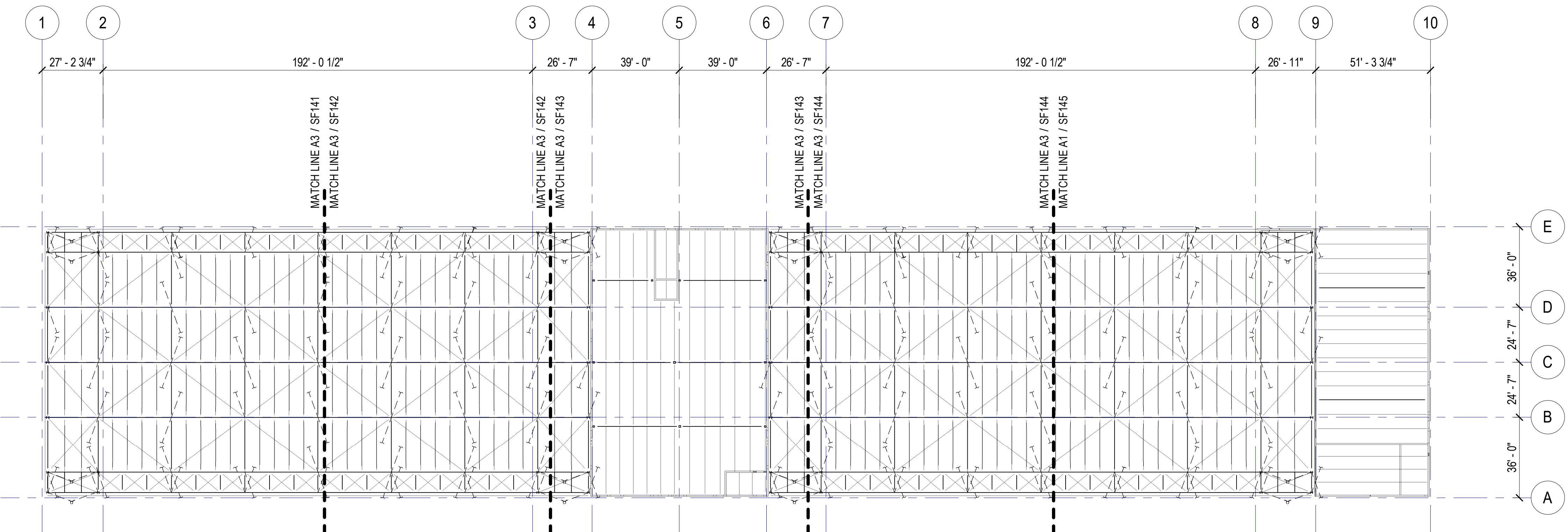
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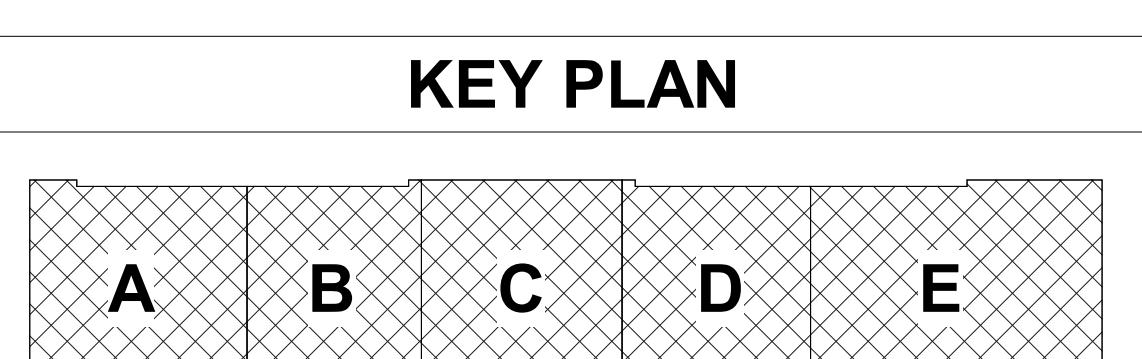
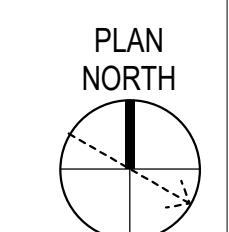
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**E3** OVERALL ROOF FRAMING PLAN  
SCALE: 1" = 30'-0"

1" = 30'-0" 0 15' 30' 60' 90'



CZECH AIR FORCE BASE, CLARK COUNTY, NV  
DISASTER RESILIENCY PROGRAM (DRP) - PHASE 2  
494137

OVERALL ROOF FRAMING PLAN

**SHEET ID**  
N91  
PRELIMINARY DESIGN  
NOT FOR CONSTRUCTION

**SF140**

DATE

MARK DESCRIPTION

ANSI D

ISSUE DATE: NOVEMBER 13, 2025

SOLICITATION NO.: W912PL25-F-0012

CONTRACT NO.: W912PL25-C-0037

SUBMITTED BY: P. PASZCZUK

SIZE:

ANSI D

DESIGNED BY: A. VALENCIA

DRAWN BY: R. CARLSON

CHECKED BY: D. CLAYSON

SUBMITTED BY: P. PASZCZUK

SIZE:

ANSI D

US ARMY CORPS OF ENGINEERS  
LOS ANGELES DISTRICT

KORTE CONSTRUCTION  
5700 OAKLAND AVE, SUITE 275  
ST. LOUIS, MO 63110

DP-1 95% SUBMISSION

DP-1 95% SUBMISSION

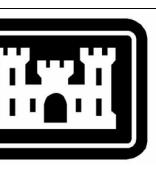








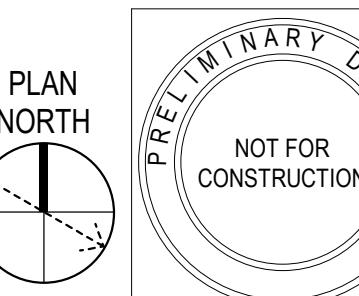
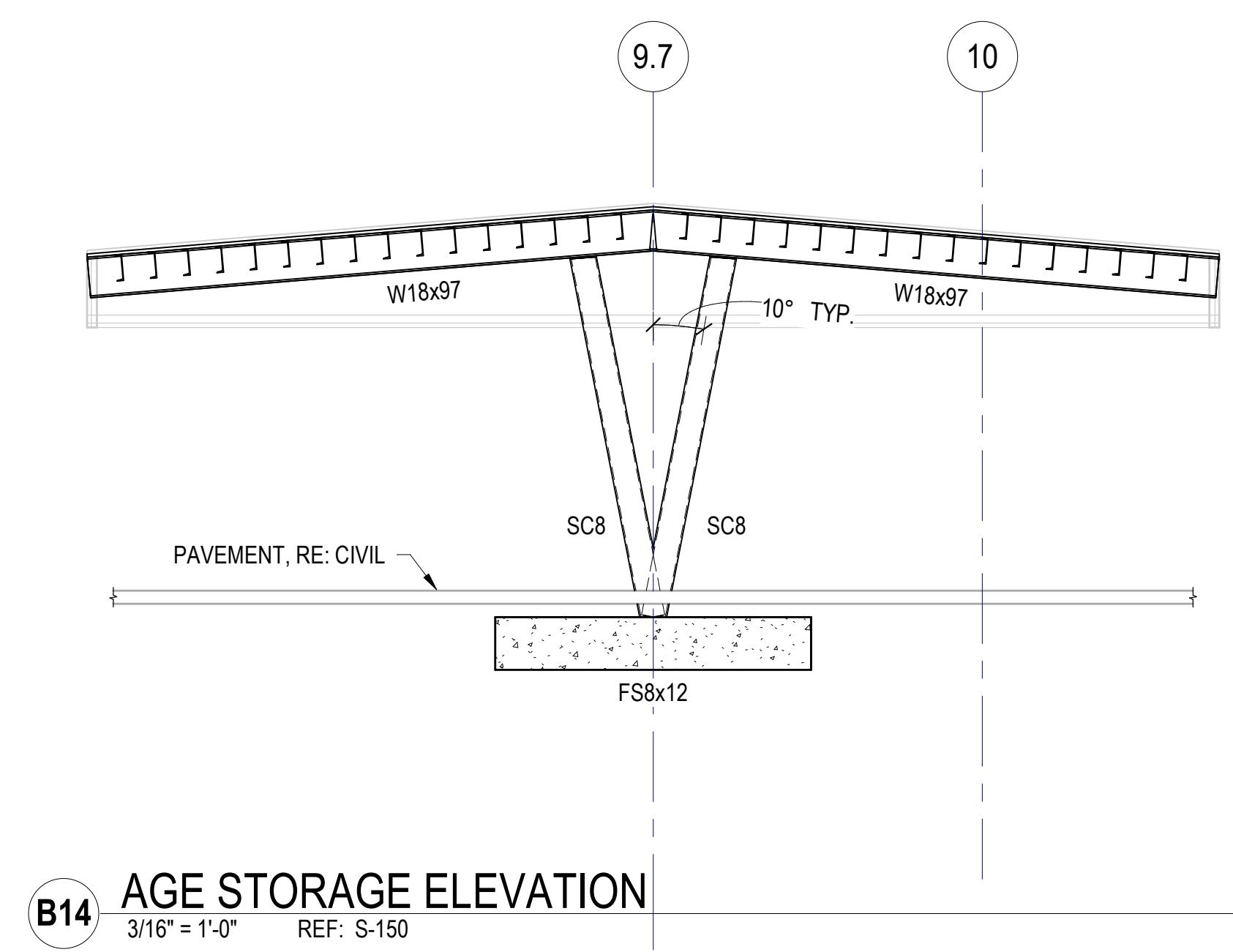
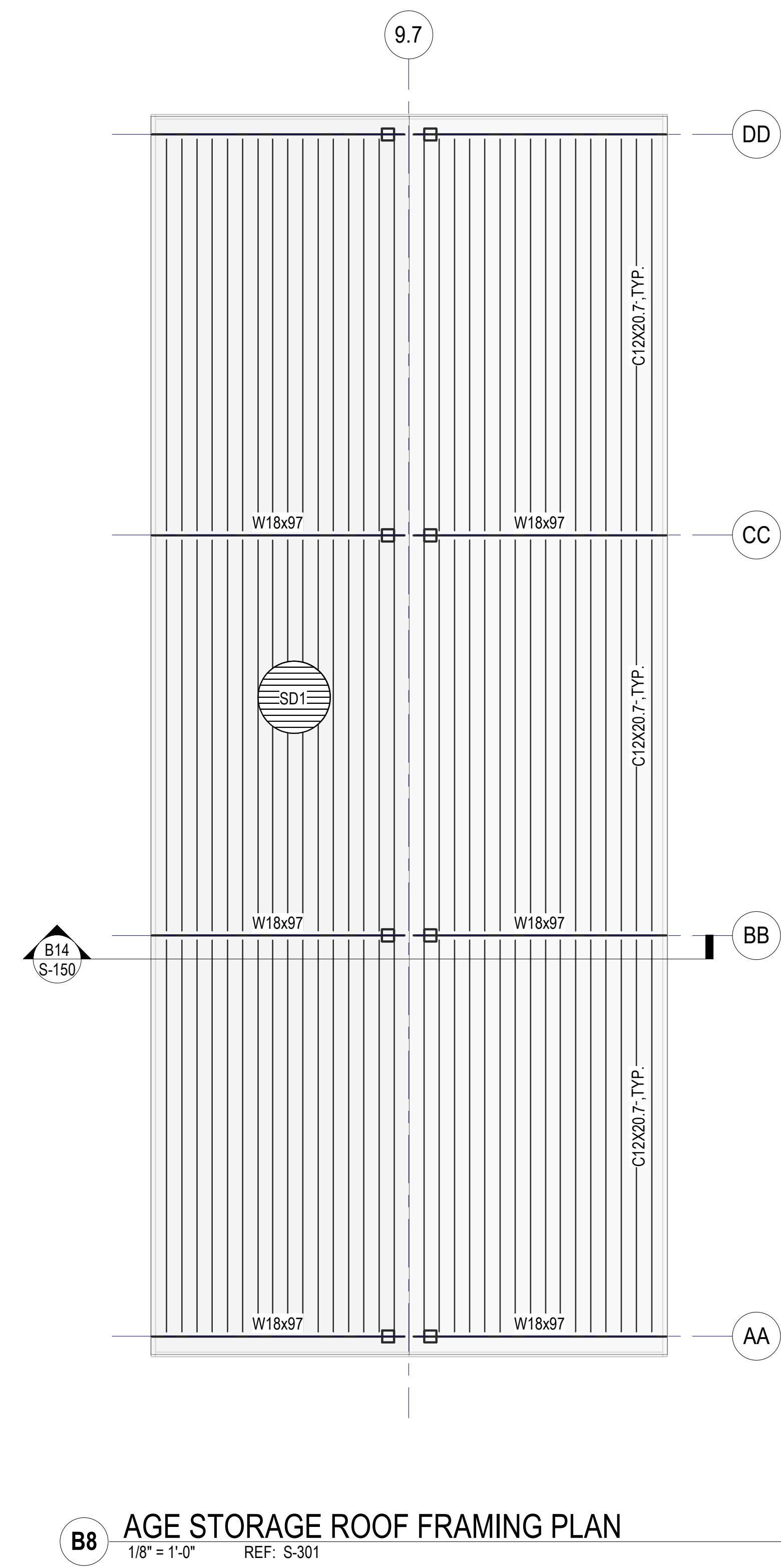
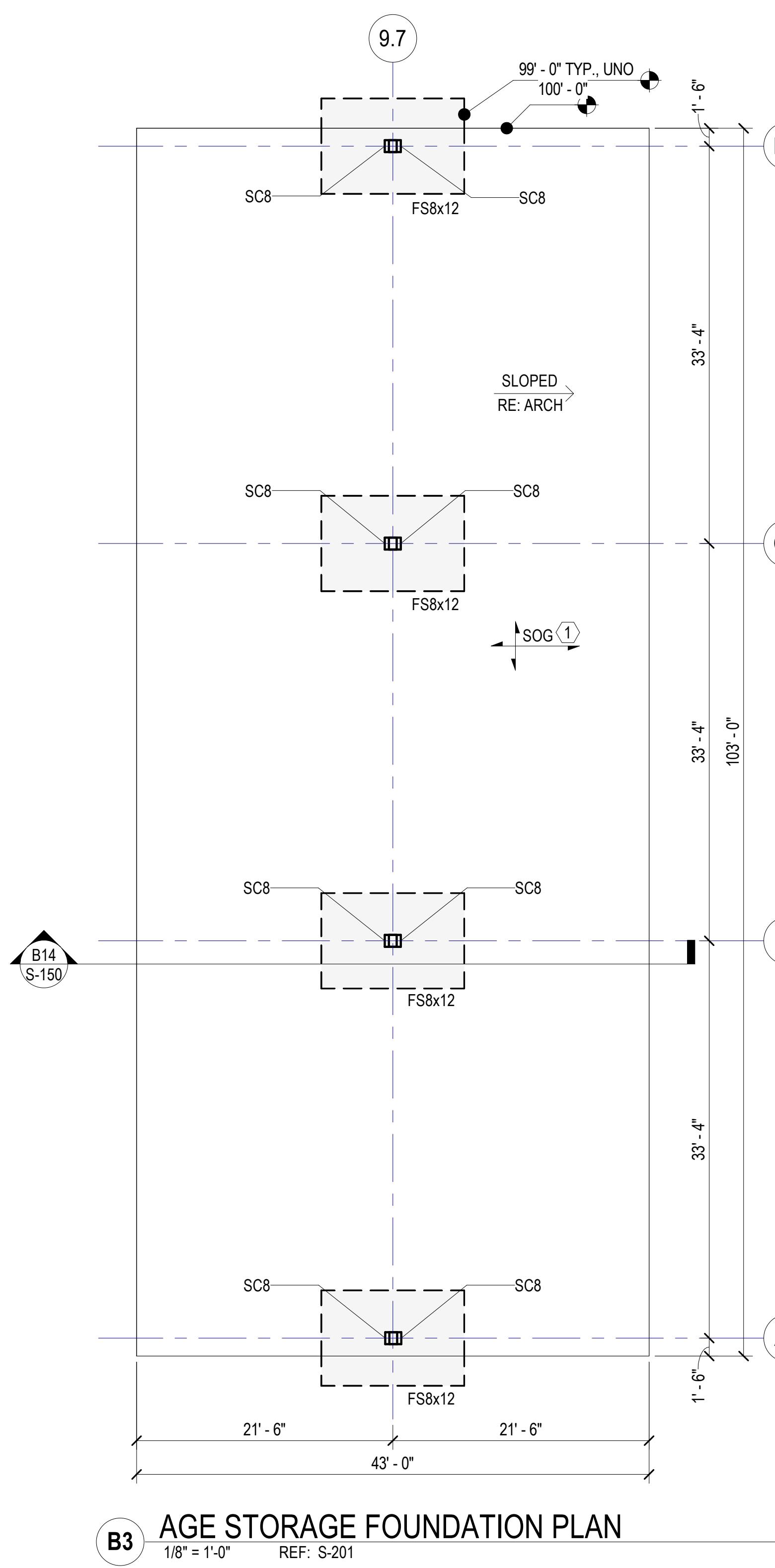




US Army Corps  
of Engineers ®

DATE

CONNECTION  
DETAILS IN  
PROGRESS



SHEET ID  
S-150

DP-1 95% SUBMISSION

CREECH AIR FORCE BASE, CLARK COUNTY, NV  
DISASTER RESILIENCY PROGRAM (DRP) - PHASE 2  
494137

AGE STORAGE PLAN & ELEVATION

DATE

DESIGNED BY:  
A. VALENCIA

ISSUE DATE:  
NOVEMBER 13, 2025

SOLICITATION NO.:  
W912PL25-R-0012

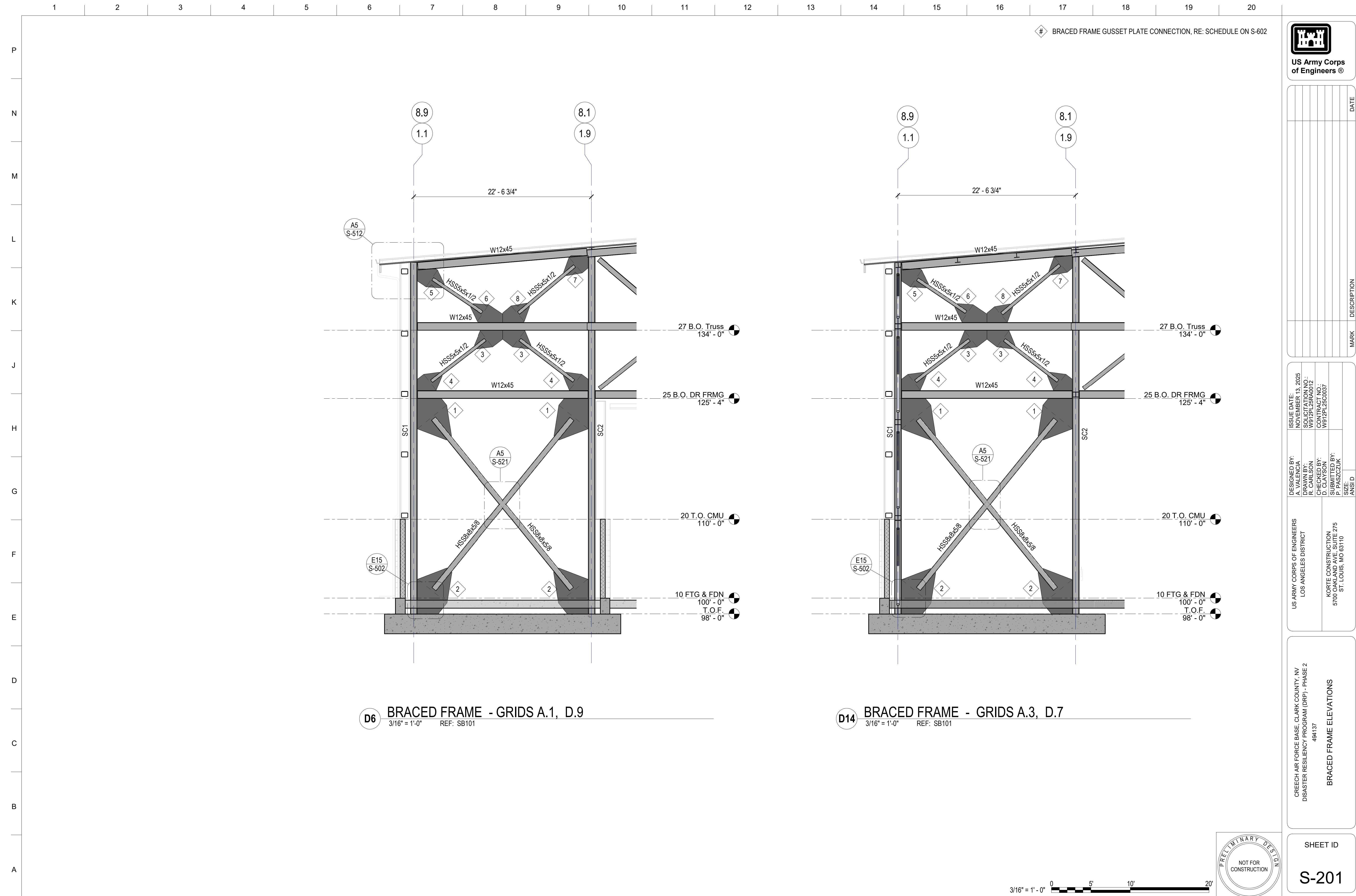
CONTRACT NO.:  
W912PL25-C-0037

SUBMITTED BY:  
P. PASZCZUK

SIZE:  
ANSI D

US ARMY CORPS OF ENGINEERS  
LOS ANGELES DISTRICT

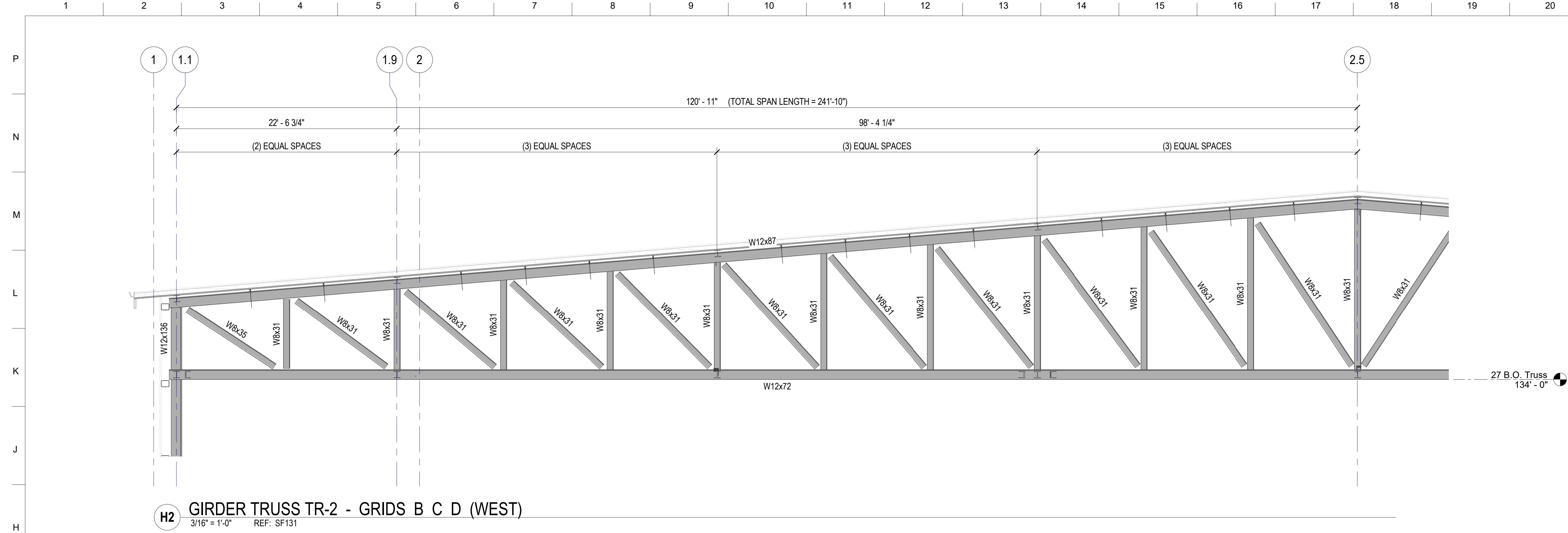
KORTE CONSTRUCTION  
5700 OAKLAND AVE, SUITE 275  
ST. LOUIS, MO 63110



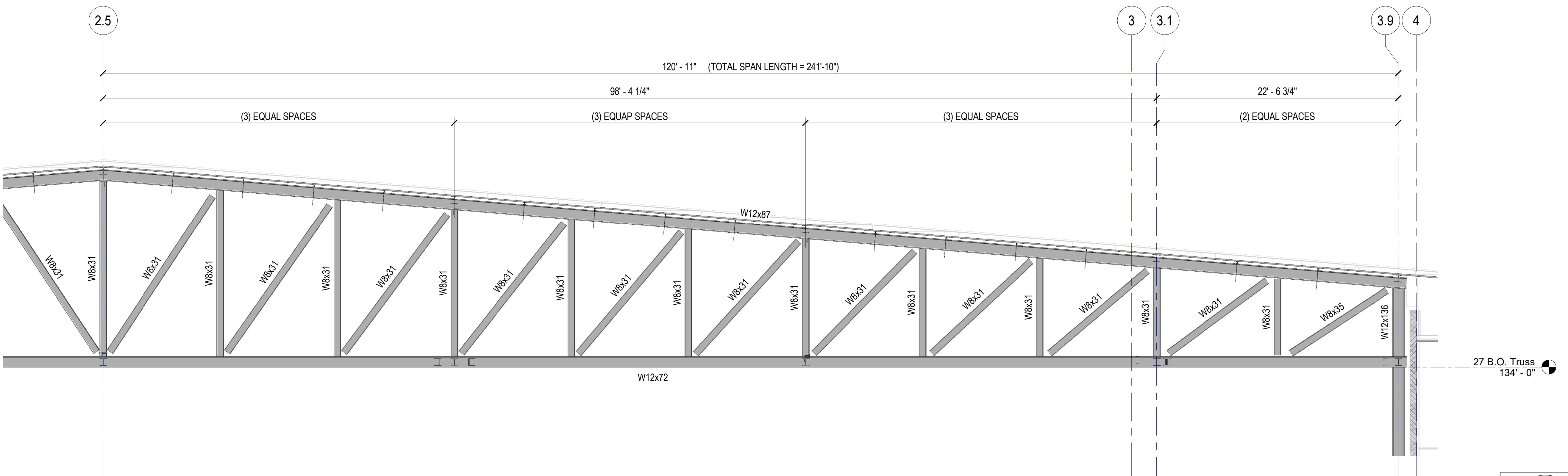




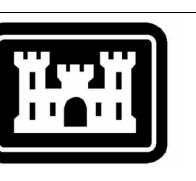




**H2** GIRDER TRUSS TR-2 - GRIDS B C D (WEST)  
3/16" = 1'-0" REF: SF131



**A2** GIRDER TRUSS TR-2 - GRIDS B C D (EAS)  
3/16" = 1'-0" REF: SF131



# U.S. Army Corps Engineers ®

|                   |  |
|-------------------|--|
| NOVEMBER 13, 2025 |  |
| SOLICITATION NO.: |  |
| W912PL25RA0012    |  |
| CONTRACT NO.:     |  |
| W912PL25C0037     |  |

|  |                              |
|--|------------------------------|
| US ARMY CORPS OF ENGINEERS   | A. VALENCIA                  |
| LOS ANGELES DISTRICT   | DRAWN BY:<br>R. CARLSON      |
|  | CHECKED BY:<br>D. CLAYSON    |
|  | SUBMITTED BY:<br>P. PASZCZUK |
|  | SIZE:<br>ANSI D              |
| KORTE CONSTRUCTION<br>5700 OAKLAND AVE, SUITE 275<br>ST. LOUIS, MO 63110 |                              |

CREECH AIR FORCE BASE, CLARK COUNTY, NV  
DISASTER RESILIENCY PROGRAM (DRP) - PHASE 2

494137

GIRDER TRUSS ELEVATIONS

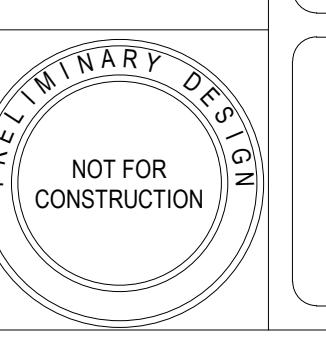
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## SHEET ID

S 212

S-212

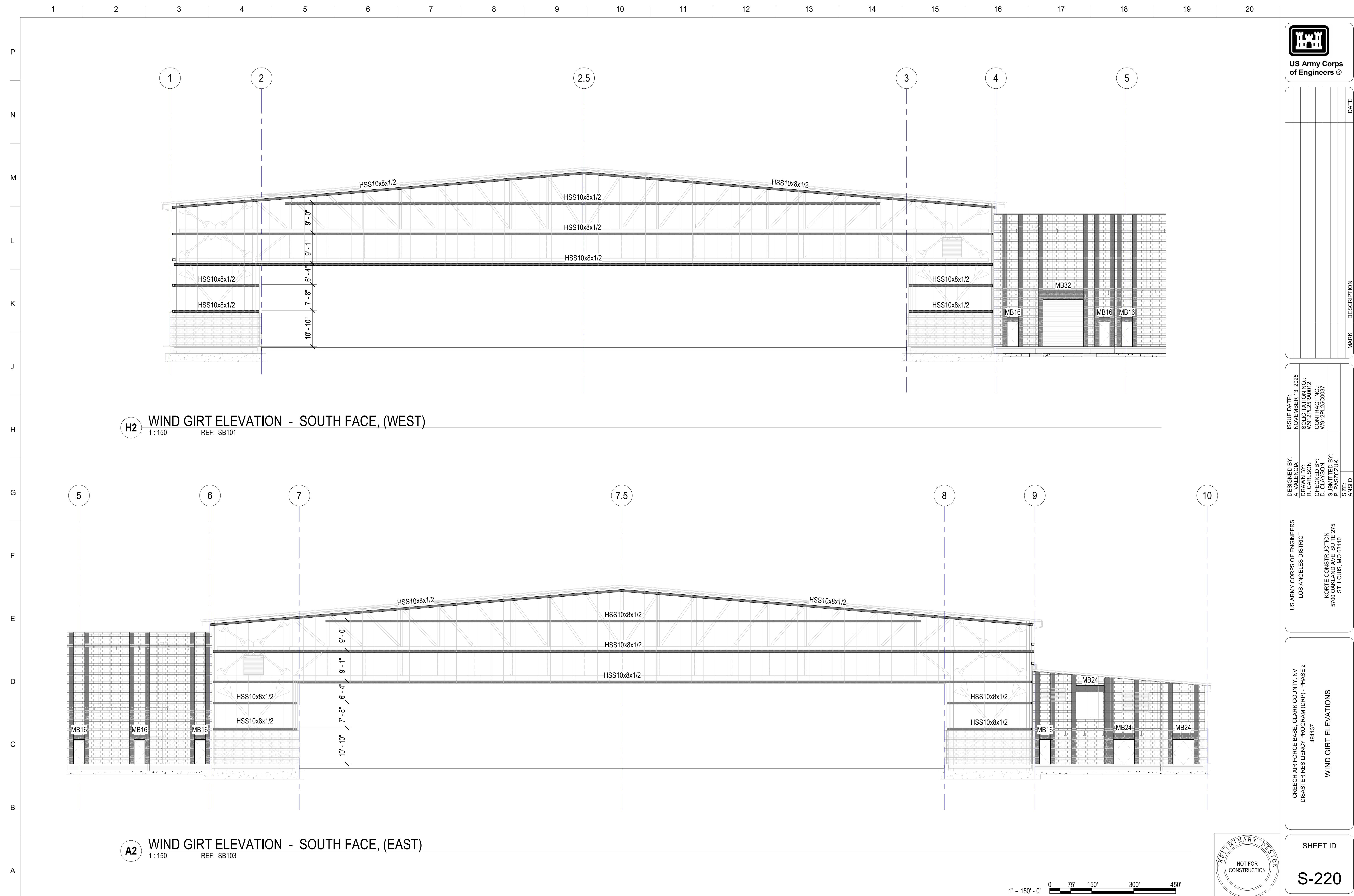
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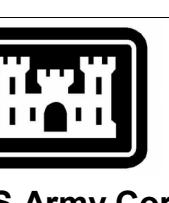
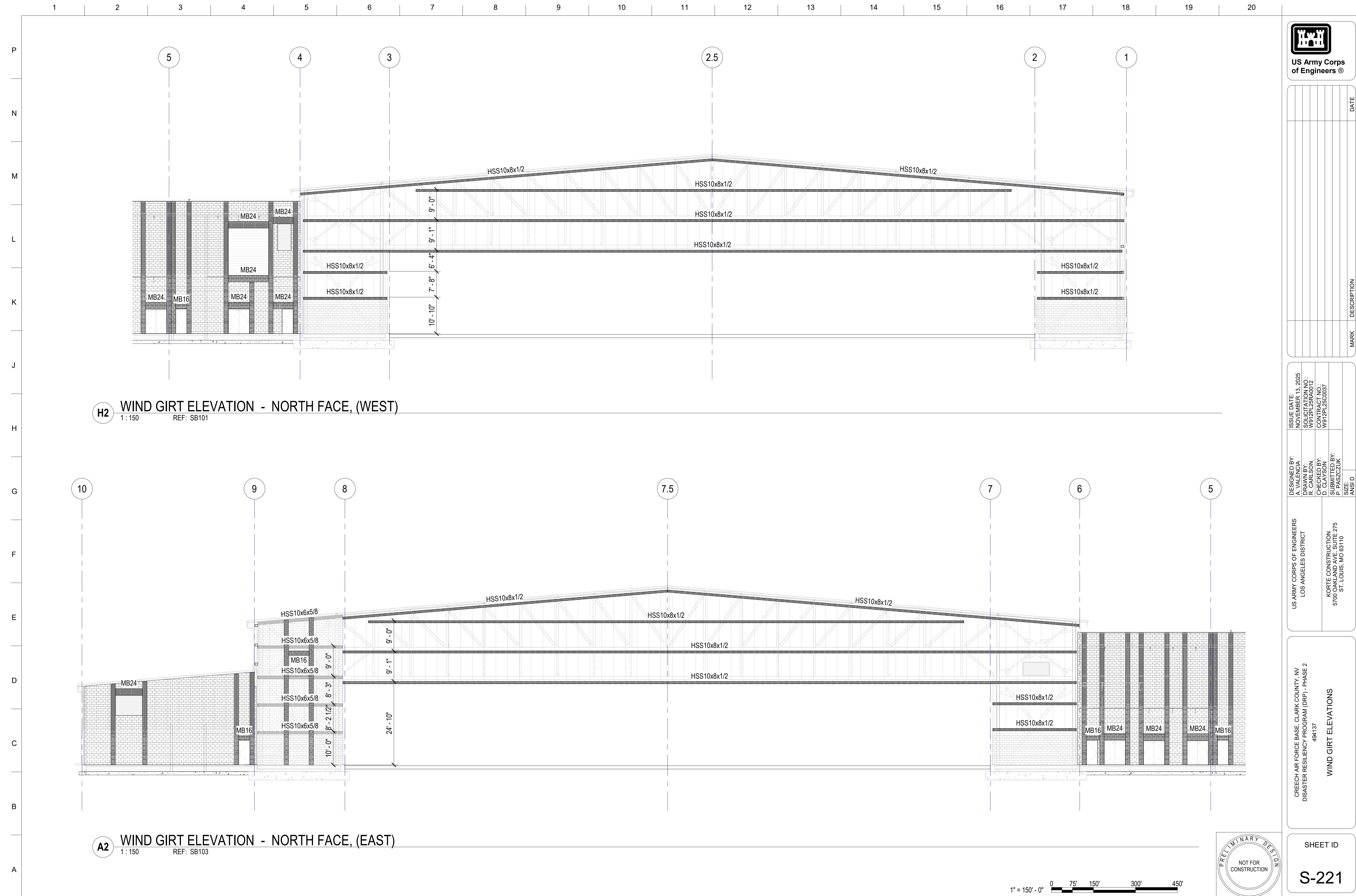


A scale bar representing a distance of 1 foot (1'). The bar is divided into four equal segments. The first segment is labeled '0' at its left end. The second segment is labeled '5'' at its center. The third segment is labeled '10'' at its center. The fourth segment is labeled '20'' at its center. The total length of the bar is 1 foot. The text '3/16" = 1' - 0"' is written to the left of the scale bar.

S-212



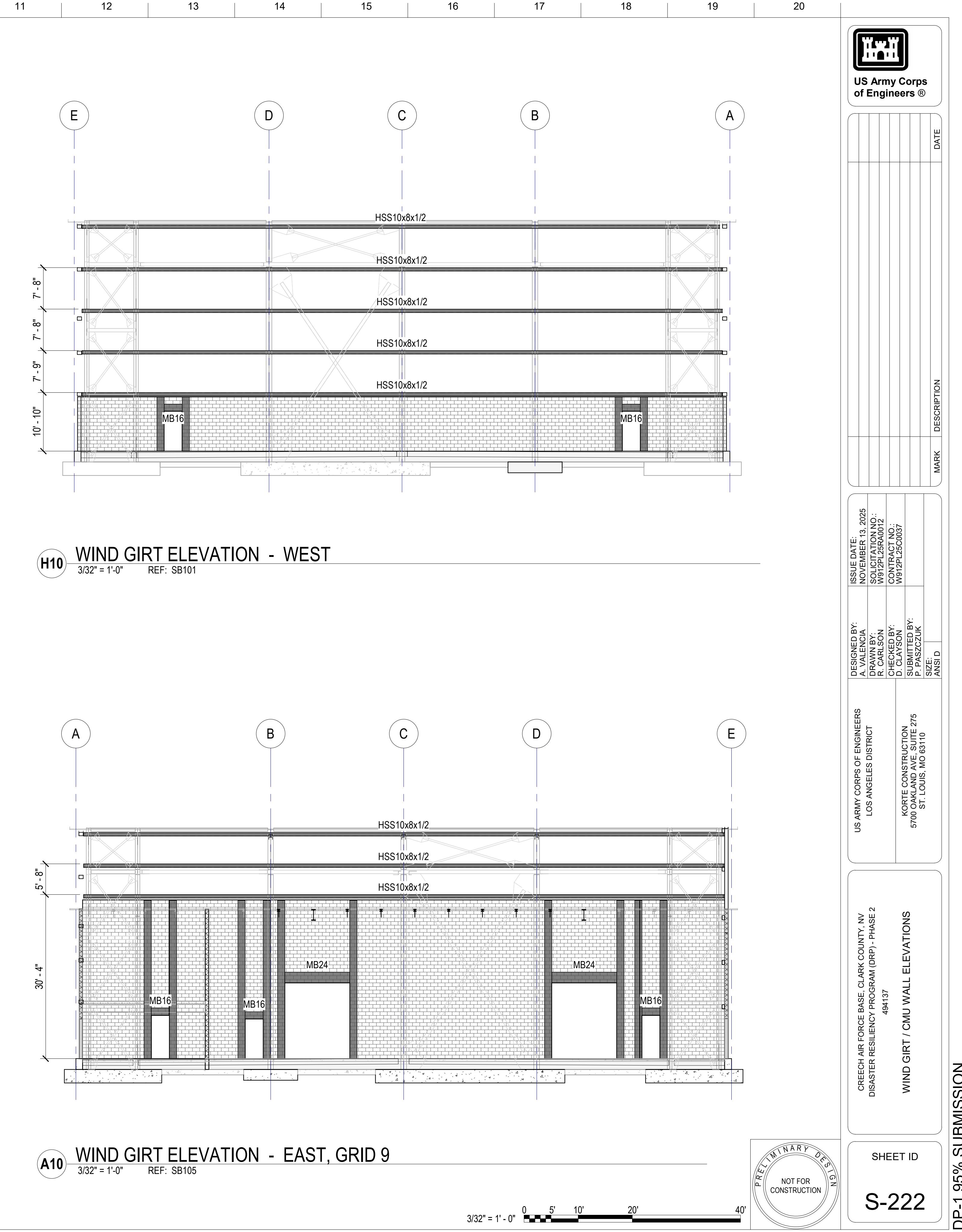
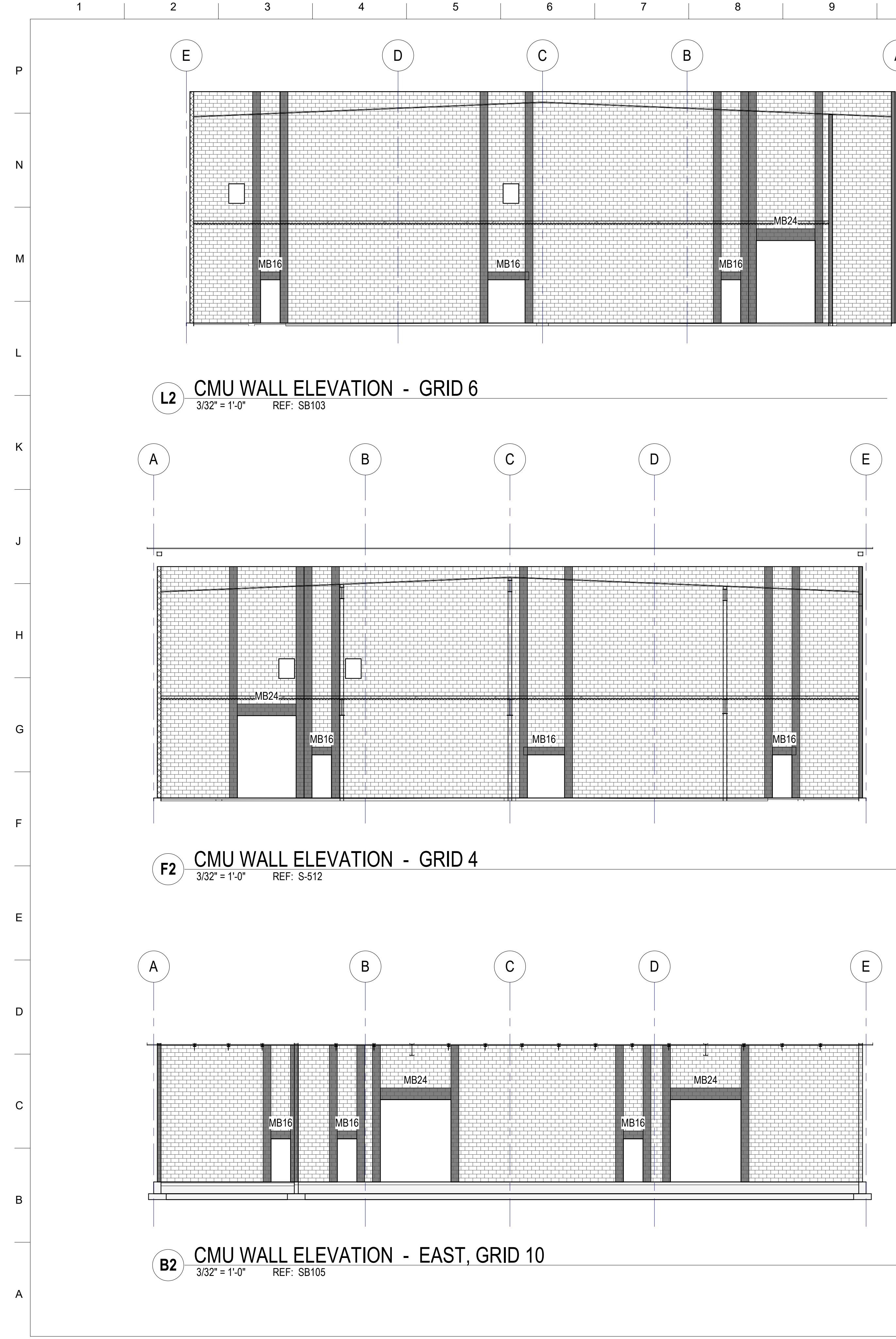




US Army Corps  
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DATE

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CREECH AIR FORCE BASE, CLARK COUNTY, NV  
DISASTER RESILIENCY PROGRAM (DRP) - PHASE 2  
494137

WIND GIRT / CMU WALL ELEVATIONS

SHEET ID  
N-911

S-222

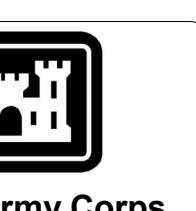
PRELIMINARY DESIGN  
NOT FOR CONSTRUCTION

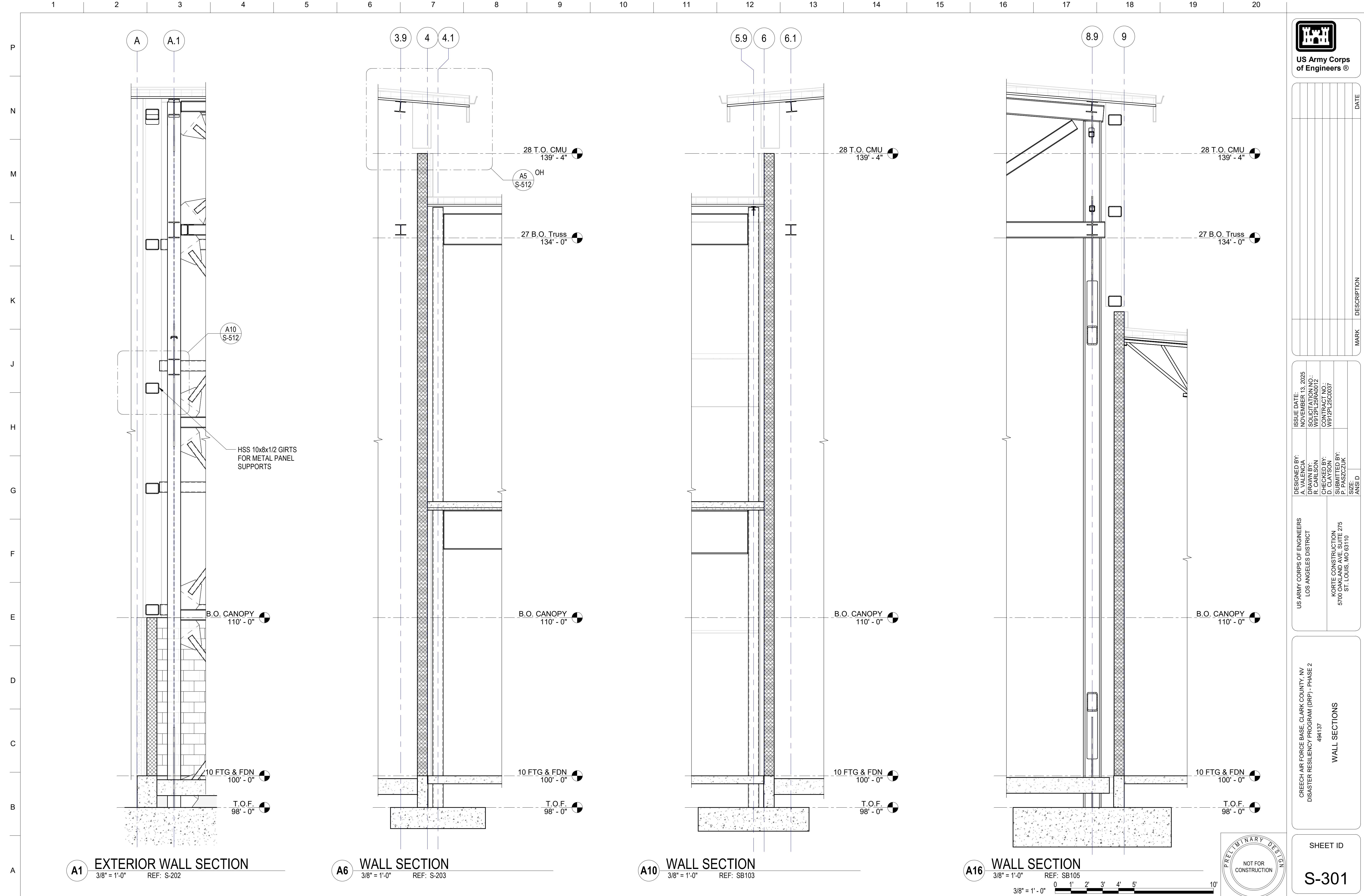
US ARMY CORPS OF ENGINEERS  
LOS ANGELES DISTRICT  
KORTE CONSTRUCTION  
5700 OAKLAND AVE, SUITE 275  
ST. LOUIS, MO 63110

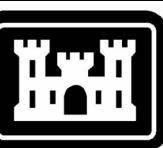
DESIGNED BY:  
A. VALENCIA  
DRAWN BY:  
R. CARLSON  
CHECKED BY:  
D. CLAYSON  
SUBMITTED BY:  
P. PASZCZUK  
SIZE:  
ANSI D

ISSUE DATE: NOVEMBER 13, 2025  
SOLICITATION NO.: W912PL25-R-0012  
CONTRACT NO.: W912PL25-C-0037

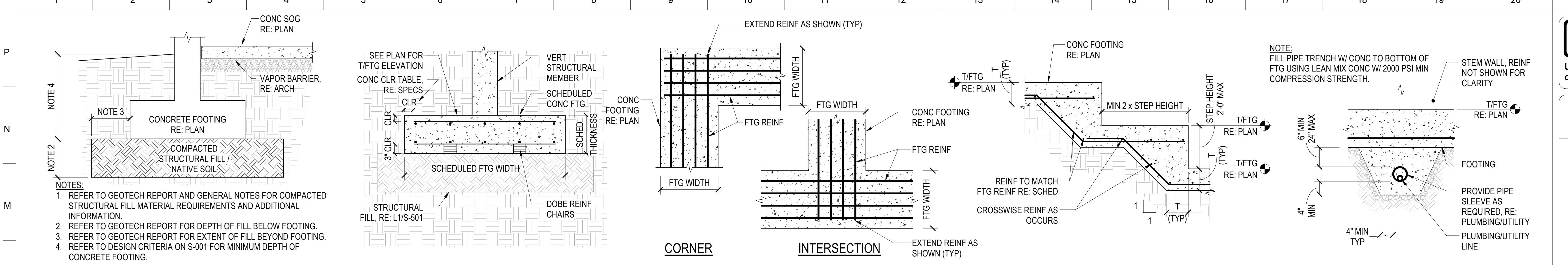
DATE





US Army Corps  
of Engineers ®

DATE



L1 TYP CONCRETE FOOTING PLACEMENT

NTS

L5 TYP FOOTING REINF

NTS

L9 TYP FOOTING CORNER REINF

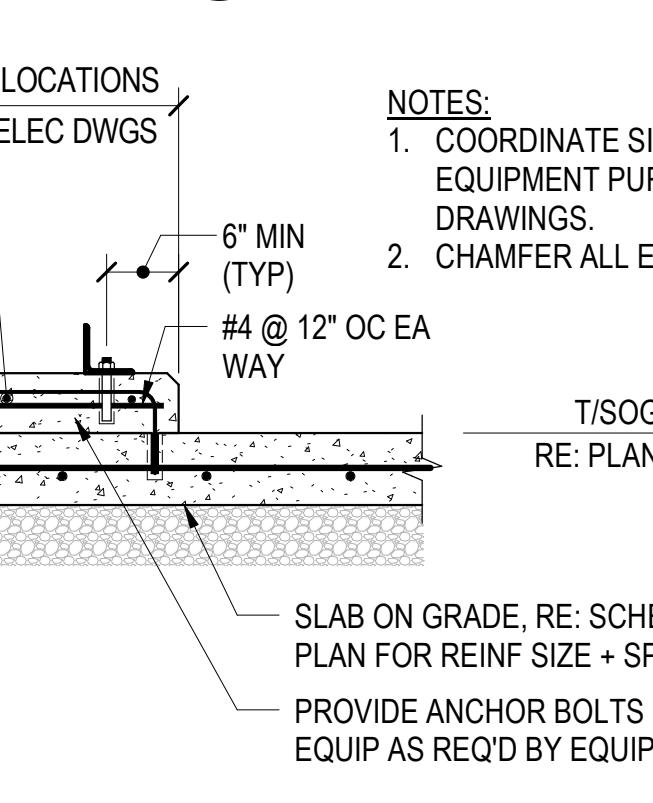
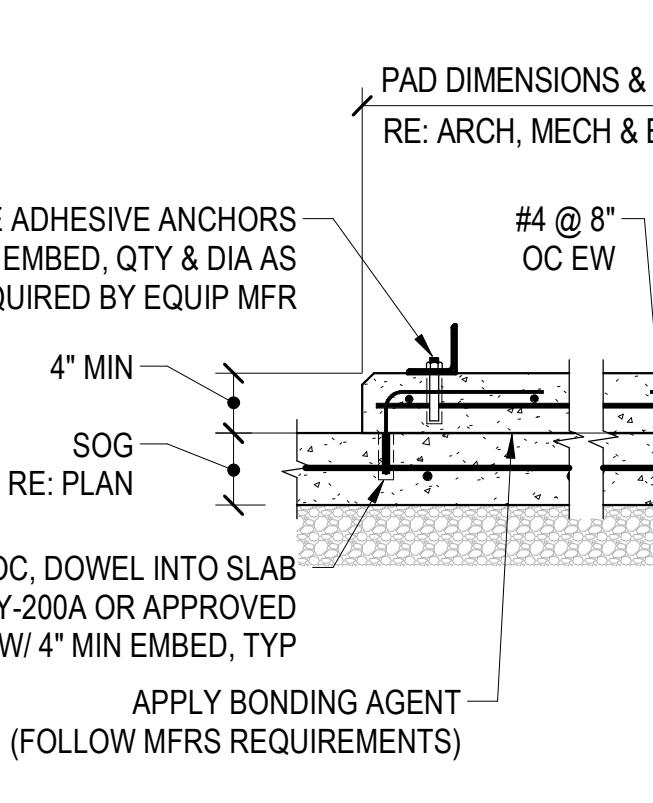
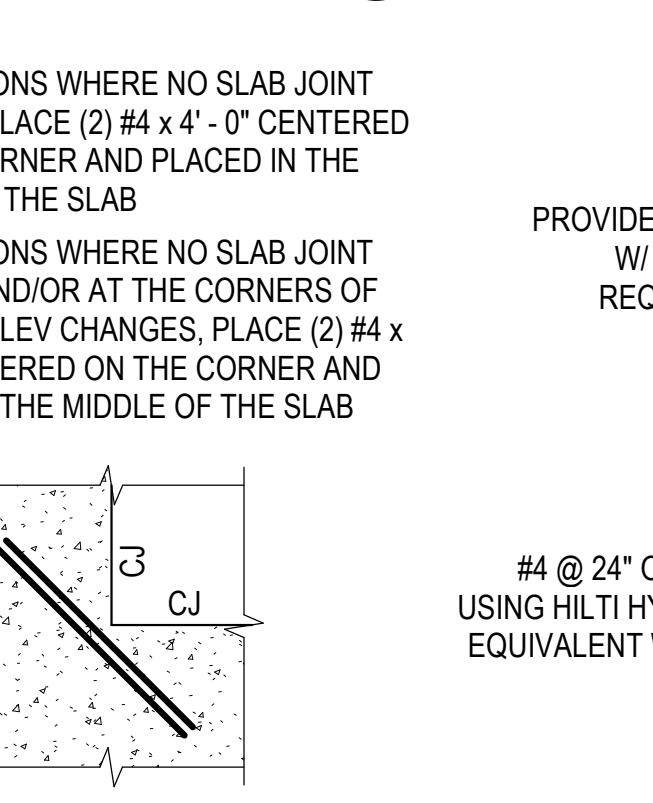
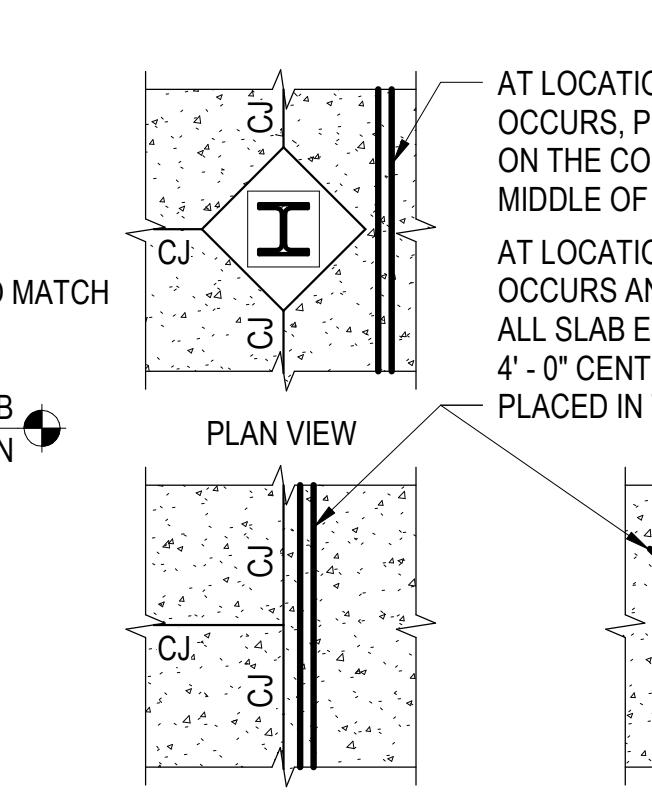
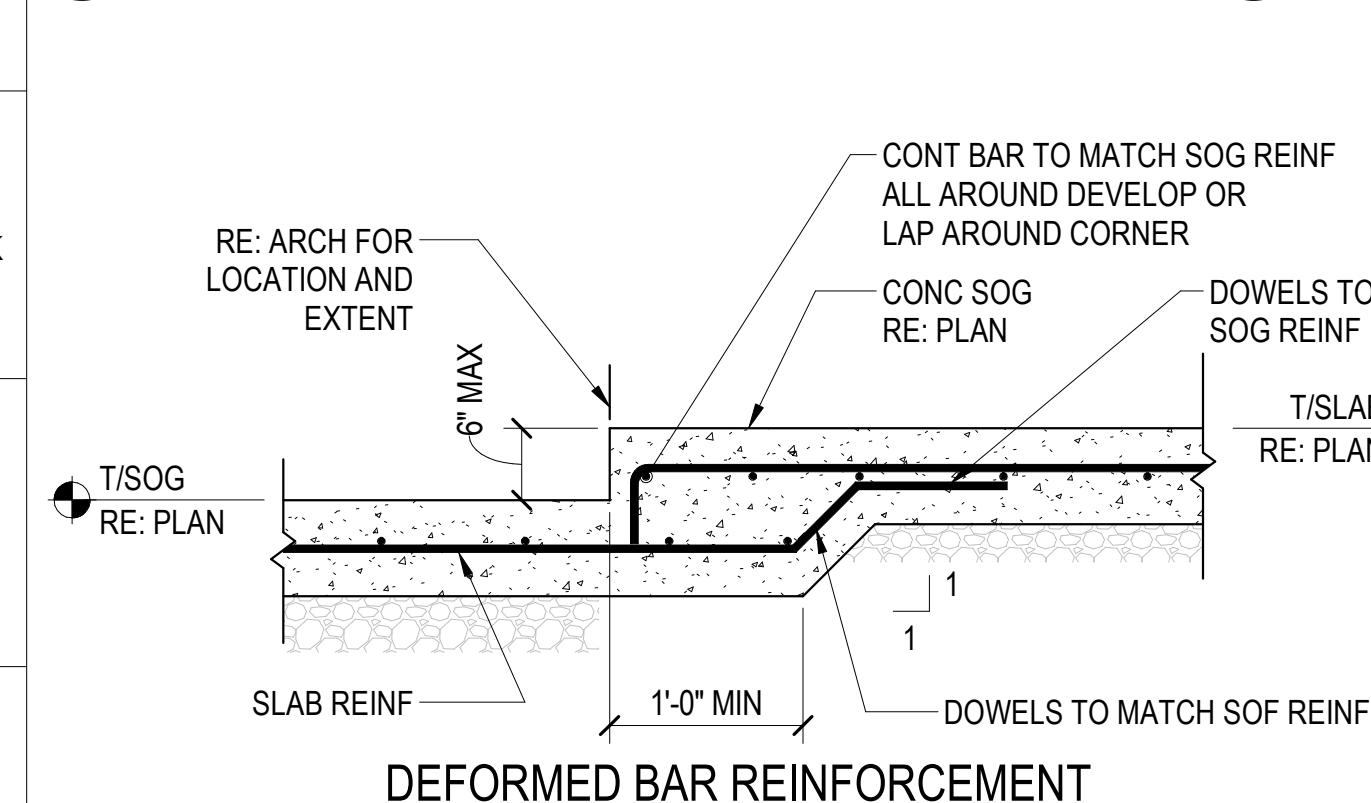
NTS

L13 TYP STEPPED FOOTING DETAIL

3/4" = 1'-0"

L17 TYP SLEEVED PIPE UNDER CONT FTG

NTS



H1 TYP DEPRESSED SLAB

NTS

H5 TYP DISCONTINUOUS JOINT REINF

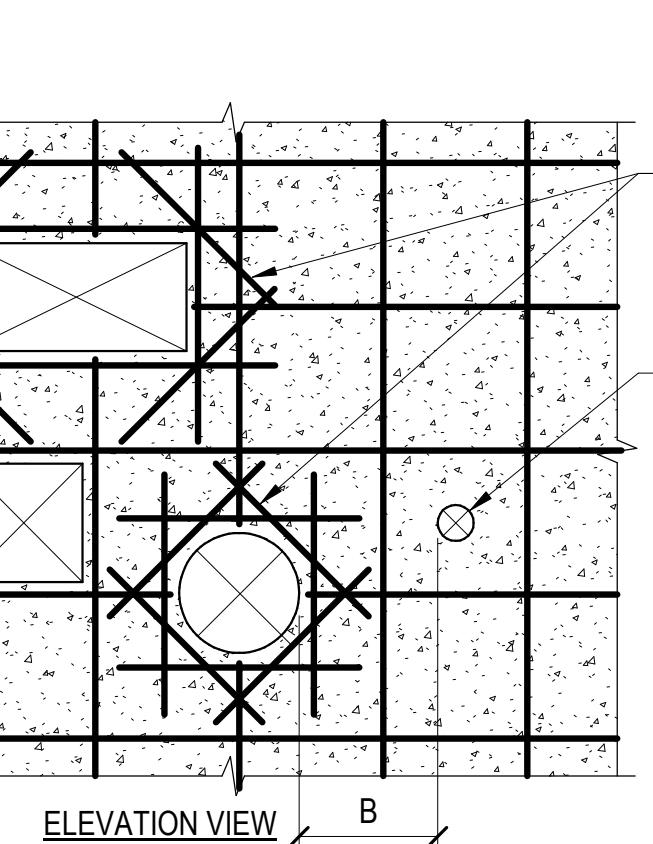
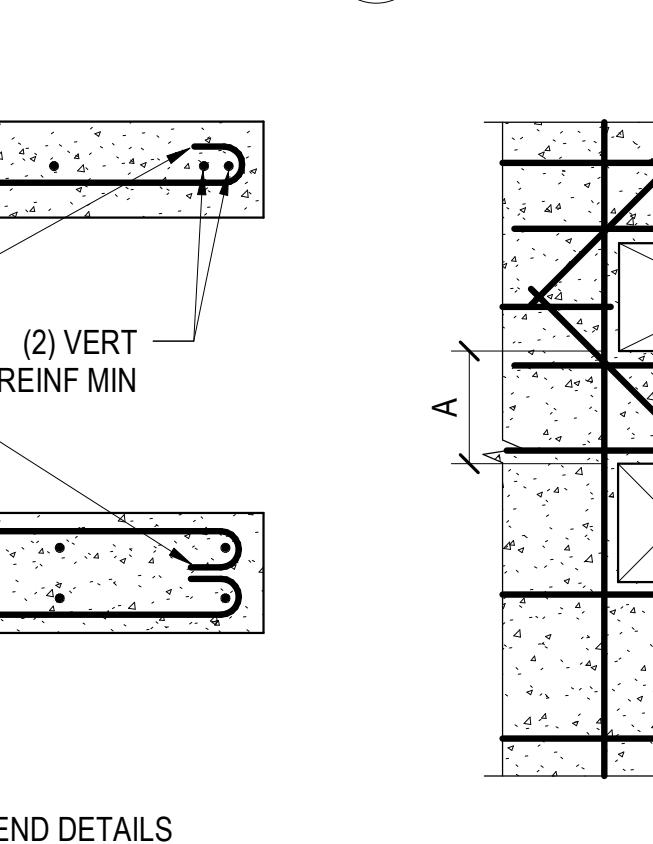
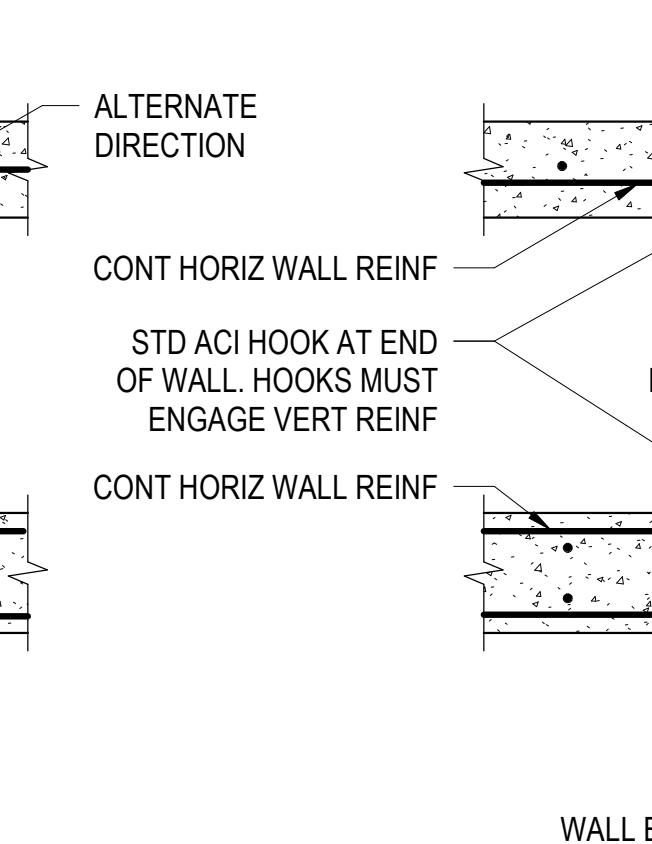
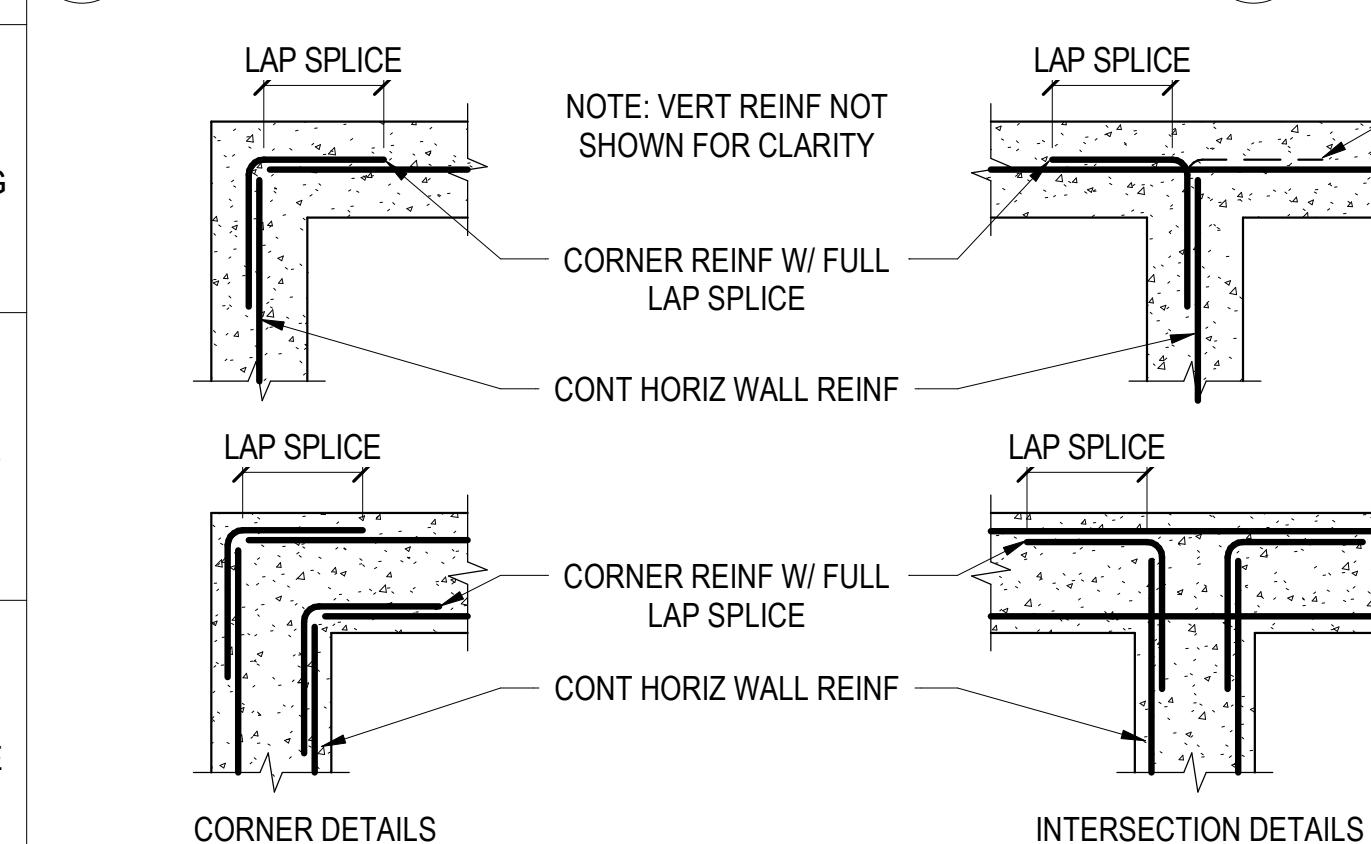
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H9 TYP EQUIPMENT PAD ON PAVEMENT/SOG

NTS

H17 TYP EQUIPMENT PAD (NO SOG)

3/4" = 1'-0"



D1 TYP CONC WALL HORIZ REINFORCING

NTS

D9 TYP MISC OPENINGS IN REINF CONC WALLS

NTS

D17 MASONRY WALL FOOTING DETAIL

NTS



A13 TYPICAL EXTERIOR THRESHOLD

NTS

A17 TYP STEEL COL INT FTG

NTS

REF: SB101

REF: SB101

S-501

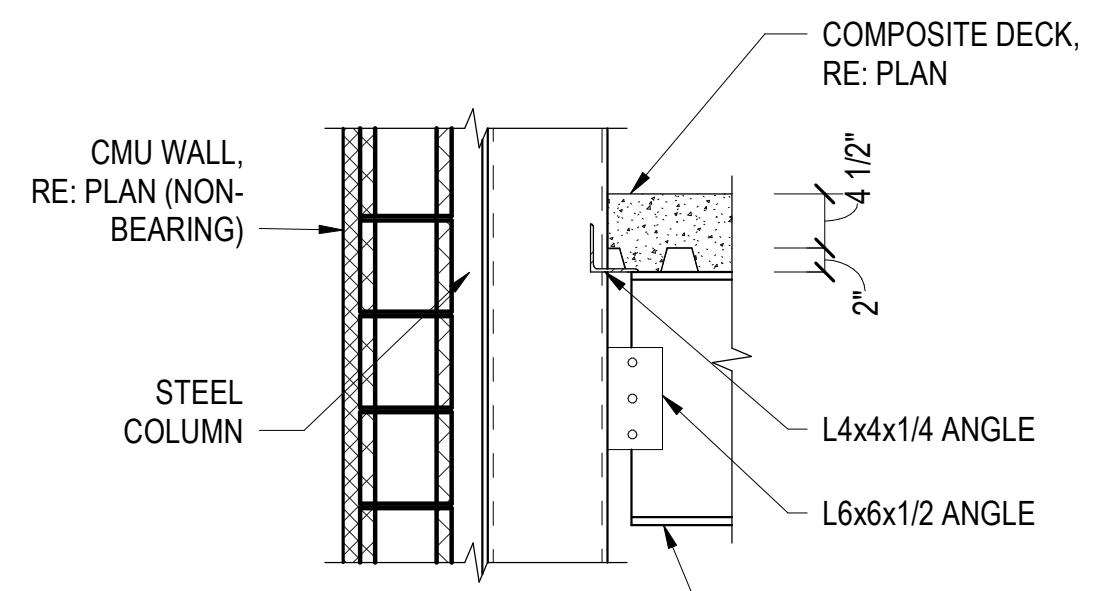
CREECH AIR FORCE BASE, CLARK COUNTY, NV  
DISASTER RESILIENCY PROGRAM (DRP) - PHASE 2  
494137

FOUNDATION DETAILS

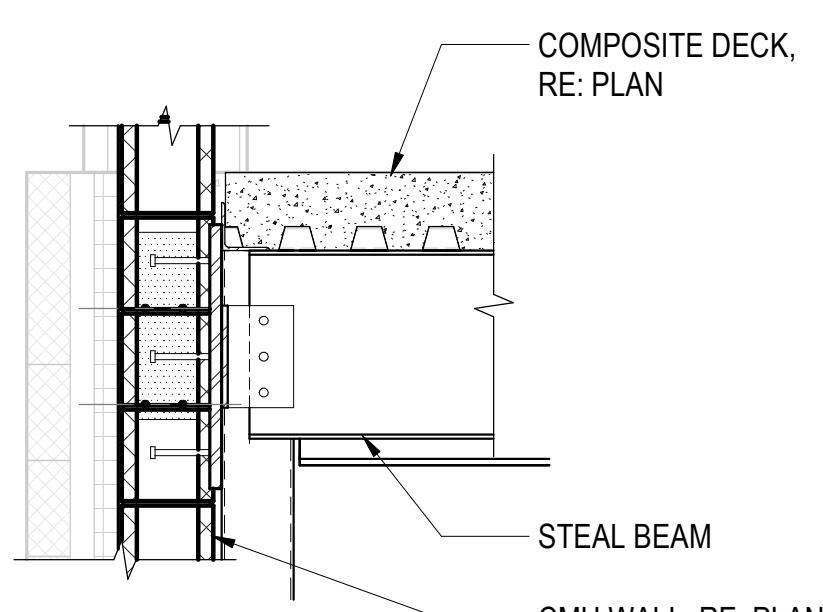
PRELIMINARY DESIGN  
NOT FOR CONSTRUCTION  
SHEET ID

DP-1 95% SUBMISSION

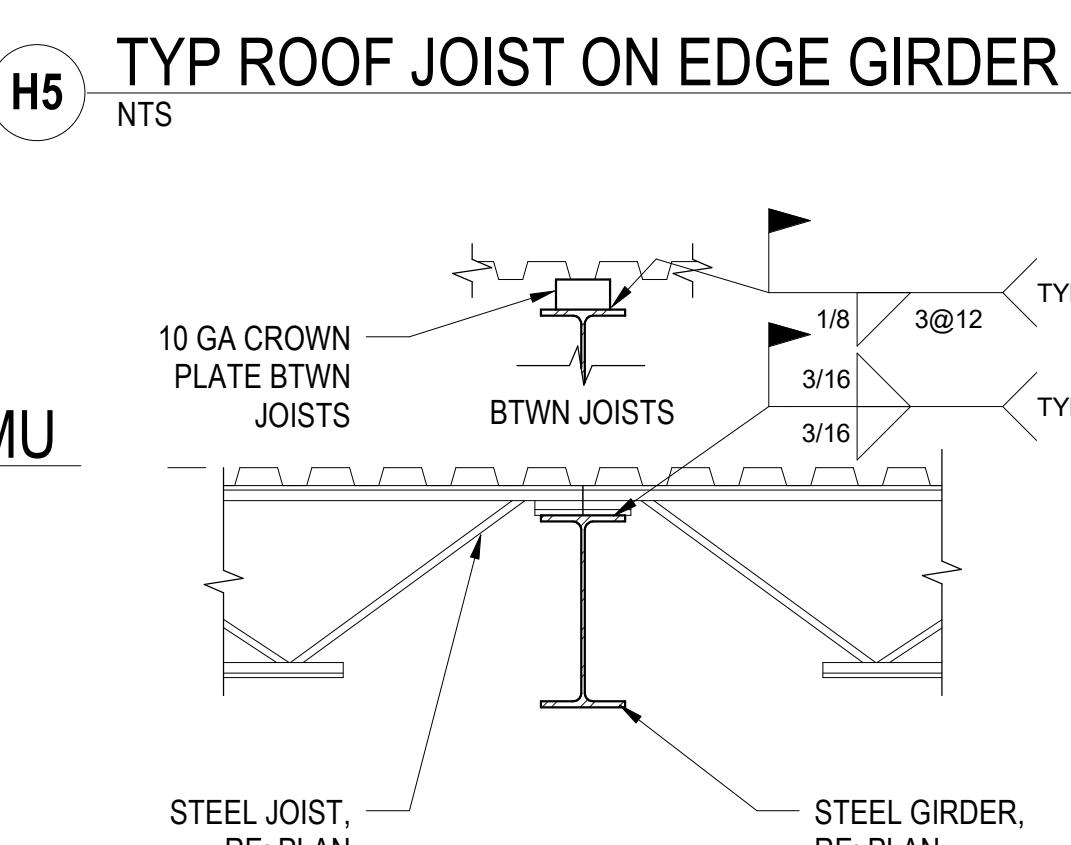




**K1** TYP. COMPOSITE DESK EDGE AT CMU  
REF: SF121

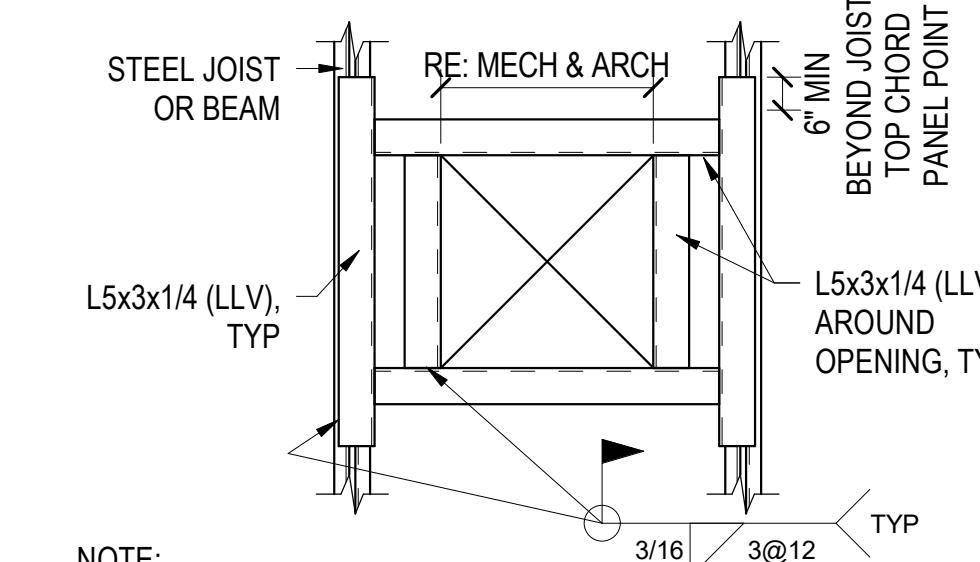


**G1** TYP. COMPOSITE DESK EDGE AT CMU  
REF: SF121



**H5** TYP ROOF JOIST ON EDGE GIRDER  
REF: SF121

**D5** TYP ROOF JOIST ON GIRDER  
REF: SF121



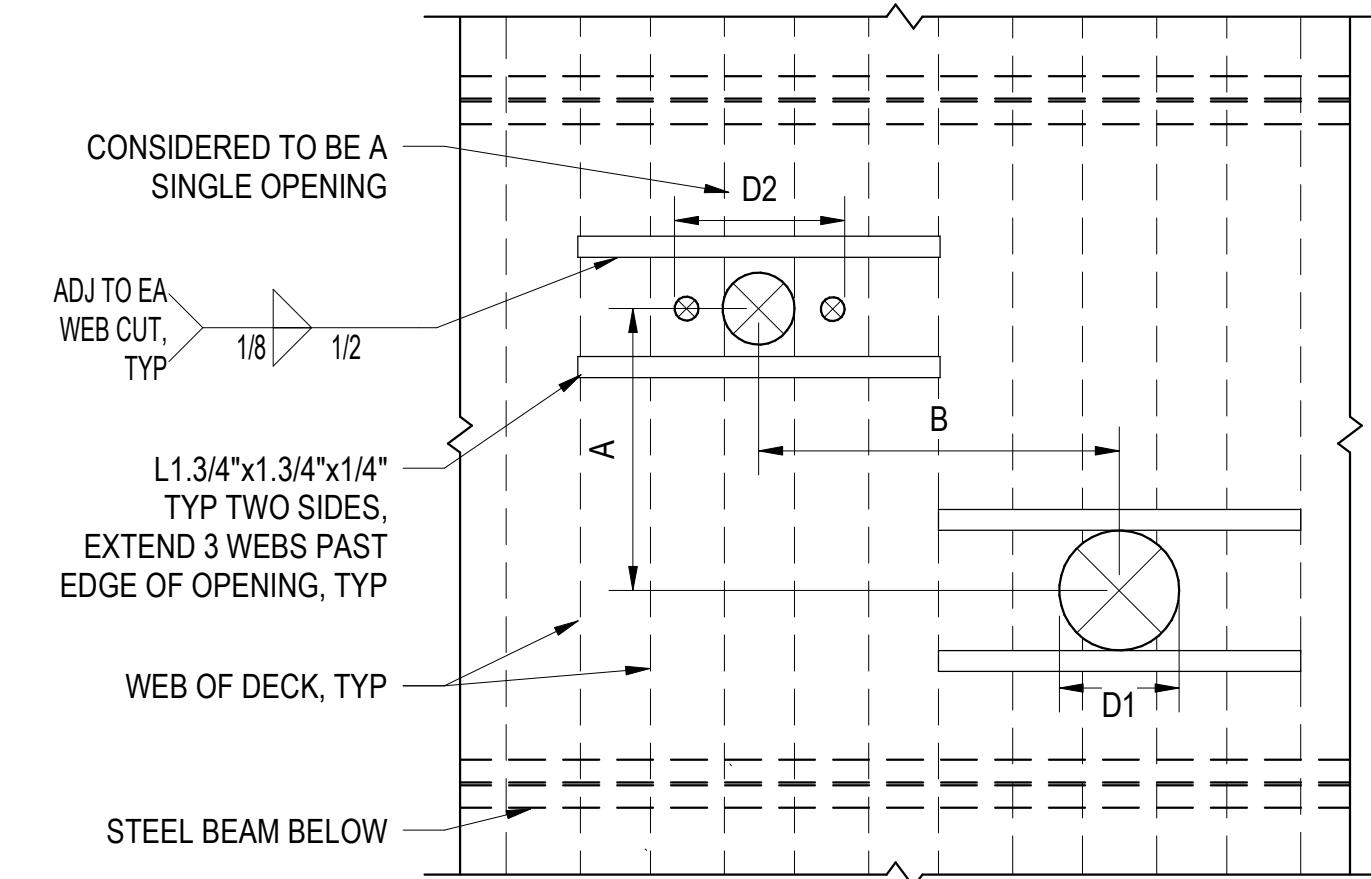
**A5** TYP ROOF OPENING SUPPORT  
REF: SF121

USE THIS DETAIL FOR HOLES CUTTING INTO MORE THAN:  
3 ADJACENT WEBS FOR 6" AND 8" MODULE DECK OR  
2 ADJACENT WEBS FOR 12" MODULE DECK

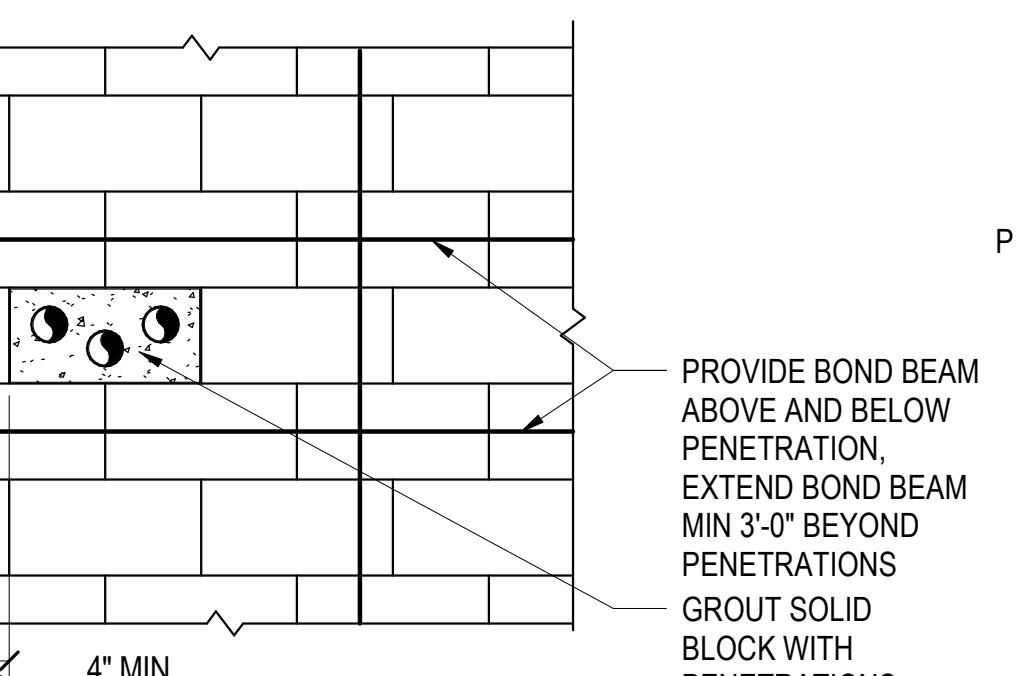
PRIOR TO CONCRETE POUR, SMALL OPENINGS SHOULD BE BLOCKED OUT AND FLOOR DECK LEFT INTACT. HOLES LESS THAN 6" IN DIAMETER AND CUTTING NO MORE THAN 1 WEB NEED NO REINFORCING. AFTER THE CONCRETE HAS CURED, THE BLOCKOUT CAN BE REMOVED AND THE FLOOR DECK IN THE AREA OF THE HOLE REMOVED.

## NOTES:

1. ANGLES SHALL BE PLACED ON TOP OF THE DECK
2. IF DIMENSION 'A' IS GREATER THAN 4X01, 4X02, OR 32" (WHICHEVER IS LARGER), THEN THERE IS NO RESTRICTION ON DIMENSION 'B'.
3. IF DIMENSION 'B' IS GREATER THAN 4X01, 4X02, OR 32" (WHICHEVER IS LARGER), THEN THERE IS NO RESTRICTION ON DIMENSION 'A'.
4. IF DIMENSIONS 'A' AND 'B' ARE LESS THAN 4X01, 4X02, OR 32" (WHICHEVER IS LARGER), THE OPENING GROUP WILL BE CONSIDERED AS A SINGLE HOLE, AND MUST BE REINFORCED AS REQUIRED FOR THE LARGER OPENING.

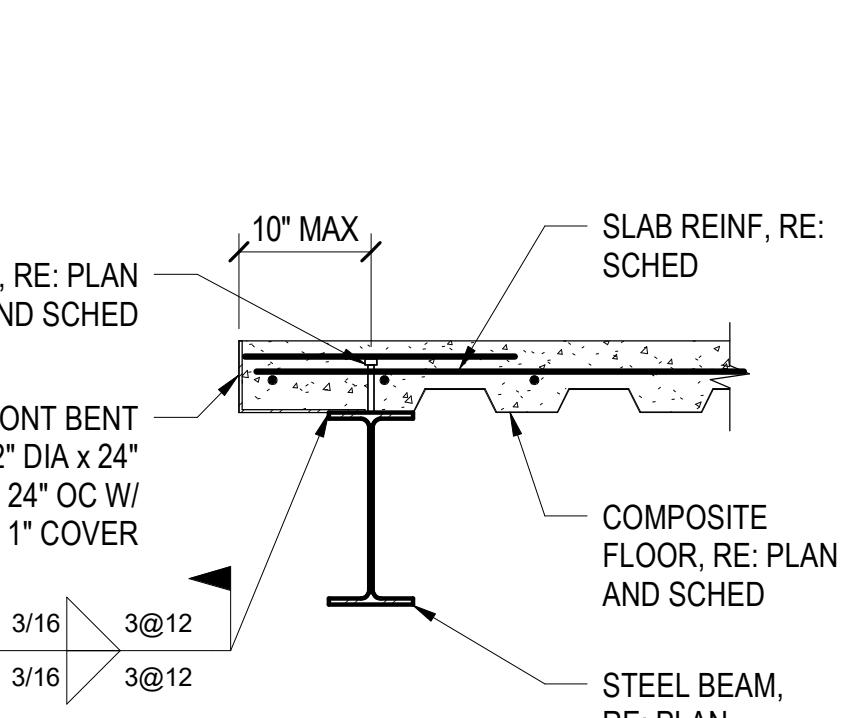


**H9** TYPICAL OPENINGS IN COMPOSITE DECK  
REF: SF121



NOTES:  
1. A MAXIMUM OF ONE BLOCK (1'-4") BETWEEN VERTICAL WALL REINFORCING LOCATIONS MAY BE SLEVED FOR UTILITY PENETRATIONS.  
2. DO NOT PLACE OR ENCROACH UPON CELLS CONTAINING VERTICAL WALL REINFORCING.

**D9** PENETRATION THROUGH  
MASONRY WALL  
REF: SF121



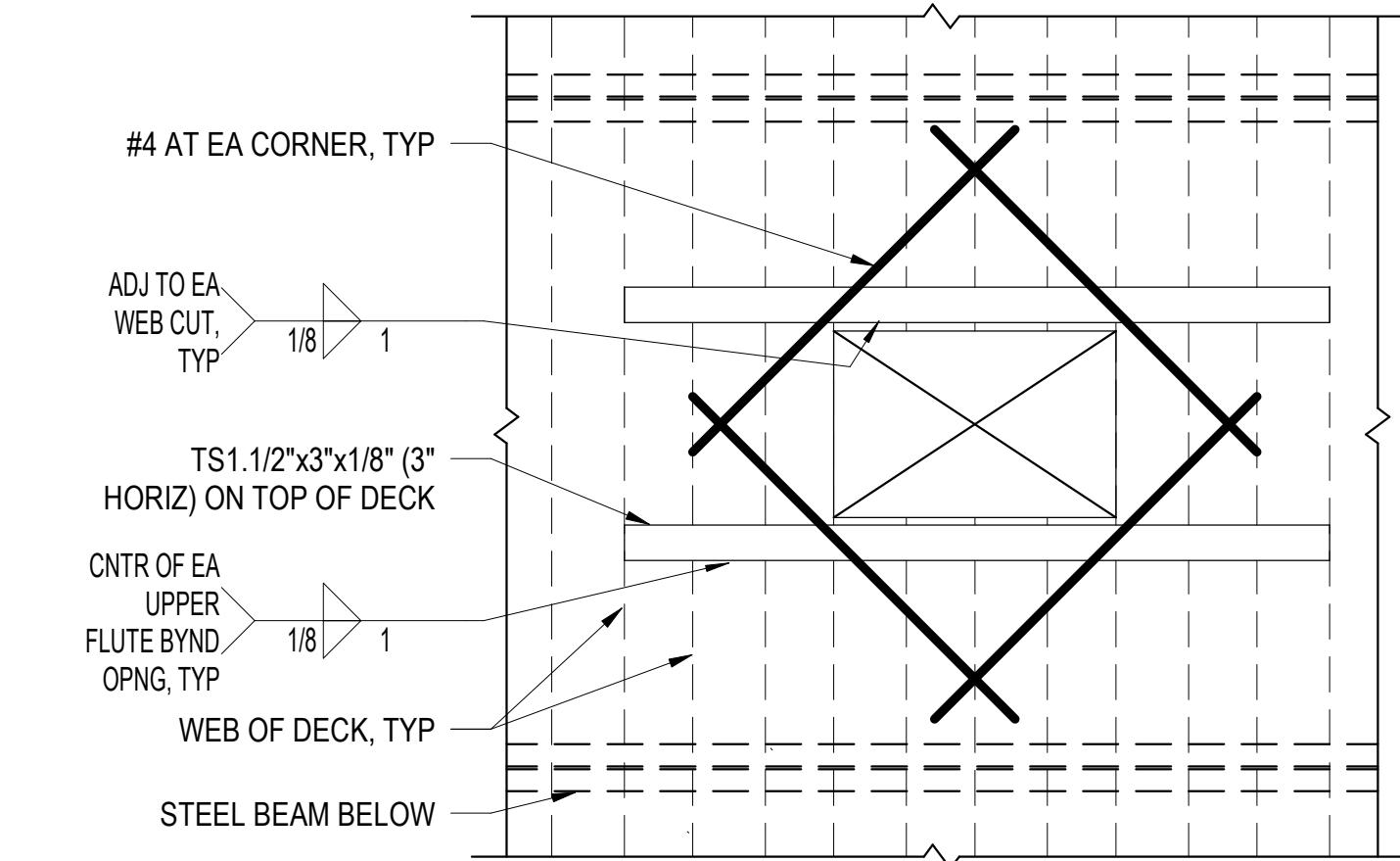
**A9** TYP COMPOSITE FLOOR SLAB EDGE  
REF: SF121

USE THIS DETAIL FOR LARGER HOLES, RECTANGULAR OR SQUARE

PRIOR TO CONCRETE POUR, SMALL OPENINGS SHOULD BE BLOCKED OUT AND FLOOR DECK LEFT INTACT. HOLES LESS THAN 6" IN DIAMETER AND CUTTING NO MORE THAN 1 WEB NEED NO REINFORCING. AFTER THE CONCRETE HAS CURED, THE BLOCKOUT CAN BE REMOVED AND THE FLOOR DECK IN THE AREA OF THE HOLE REMOVED.

## NOTES:

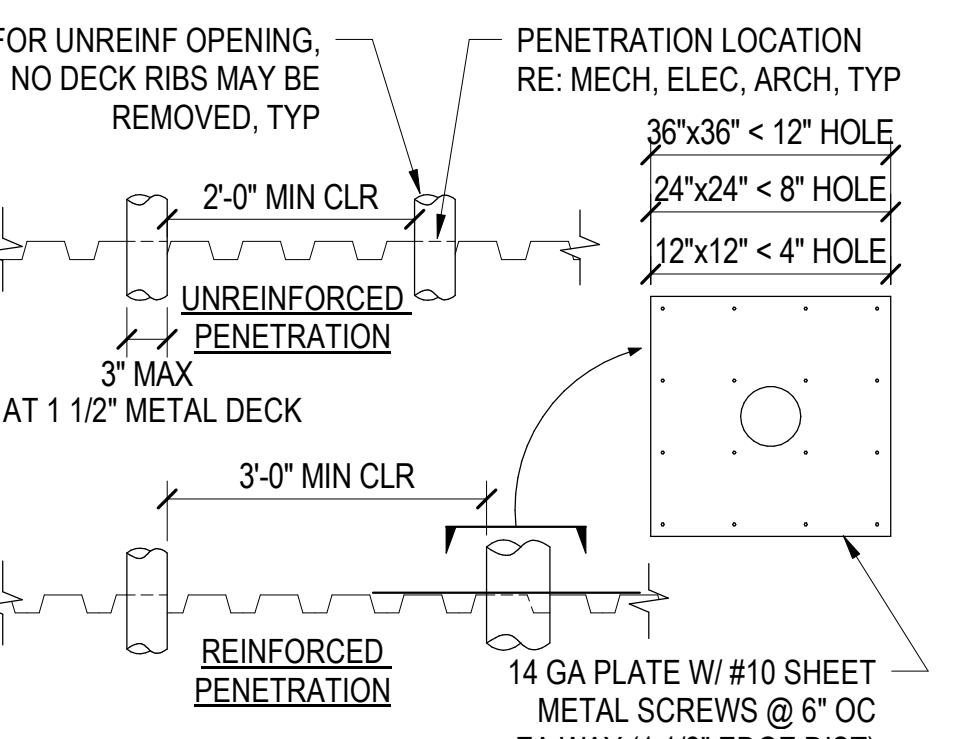
1. IF THE OPENING OR GROUP OF OPENINGS OCCURS IN ONE DECKING UNIT, THE OPENING OR OPENING GROUP MAY BE CUT PRIOR TO POURING OF CONCRETE.
2. IF THE OPENING OR GROUP OF OPENINGS CUTS THROUGH TWO DECKING UNITS, THE DECKING SHALL NOT BE CUT UNTIL CONCRETE HAS BEEN PLACED AND CURED. AT THE TIME OF POURING, SUITABLE SLEEVES OR BULKHEADS SHALL BE PLACED AROUND THE OPENING.
3. WHEN THE MAX DIMENSION OF AN OPENING OR OPENING GROUP EXCEEDS 24", PROVIDE W8x10 HEADER BEAMS BELOW THE DECK AT ALL SIDES.



**A13** CMU STEEL GIRT  
REF: SF121

NOTE:  
1. THIS DETAIL APPLIES WHEN SUPPORT AT A PANEL POINT IS IMPOSSIBLE. CONTACT THE EOR AND JOIST MANUFACTURER TO REVIEW CONCENTRATED LOADS > 100# THAT ARE NOT SPECIFICALLY RECORDED ON THE CONTRACT DRAWINGS AND PART OF THE INITIAL JOIST DESIGN.  
2. CONCENTRATED POINT LOADS TOTALING 100# OR LESS CAN BE LOCATED AT ANY POINT ALONG THE TOP OR BOTTOM CHORD OF AN OPEN WEB JOIST OR GIRDER BETWEEN ADJACENT PANEL POINTS WITHOUT MEETING THESE REQUIREMENTS.  
3. WHEN CONCENTRATED LOADS GREATER THAN 100# ON OPEN WEB JOISTS OR GIRDERS ARE LOCATED MORE THAN 6" FROM THE PANEL WORKPOINTS AT EITHER THE TOP OR BOTTOM CHORD, ADDITIONAL DIAGONAL WEB MEMBERS MUST BE FURNISHED AND INSTALLED BY THE CONTRACTOR AS SHOWN IN THIS DETAIL.  
4. A LIMIT OF (4) CONCENTRATED 100# POINT LOADS PER JOIST OR GIRDER WILL BE PERMITTED ON SPANS OF 12'-0" AND GREATER. JOIST BRIDGING MUST NEVER BE USED TO SUPPORT HANGING LOADS.

REF: SF121

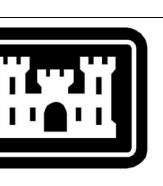
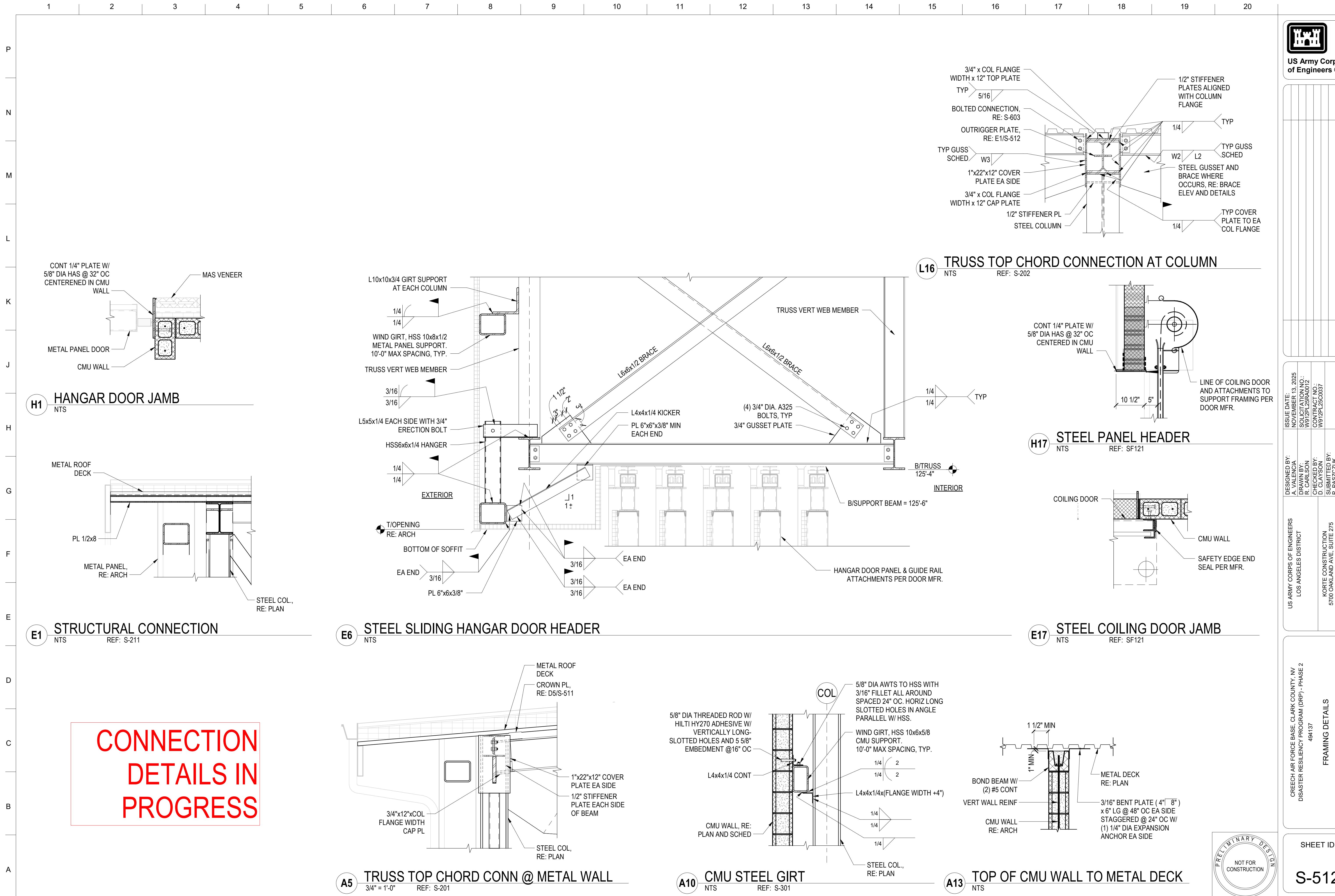


**A17** TYP ROOF OPENING < 12" DIAMETER  
REF: SF121

CREECH AIR FORCE BASE, CLARK COUNTY, NV  
DISASTER RESILIENCY PROGRAM (DRP) - PHASE 2  
494137

FRAMING DETAILS

SHEET ID  
S-511  
PRELIMINARY DESIGN  
NOT FOR CONSTRUCTION



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of Engineers ®

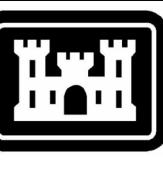
DATE

ISSUE DATE: NOVEMBER 13, 2025  
SOLICITATION NO.: W912PL25-R-0012  
CONTRACT NO.: W912PL25-C-0037  
SUBMITTED BY: P. PASZCZUK  
SIZE: ANSI D  
US ARMY CORPS OF ENGINEERS  
LOS ANGELES DISTRICT  
KORTE CONSTRUCTION  
5700 OAKLAND AVE, SUITE 275  
ST. LOUIS, MO 63110

CREECH AIR FORCE BASE, CLARK COUNTY, NV  
DISASTER RESILIENCY PROGRAM (DRP) - PHASE 2  
494137

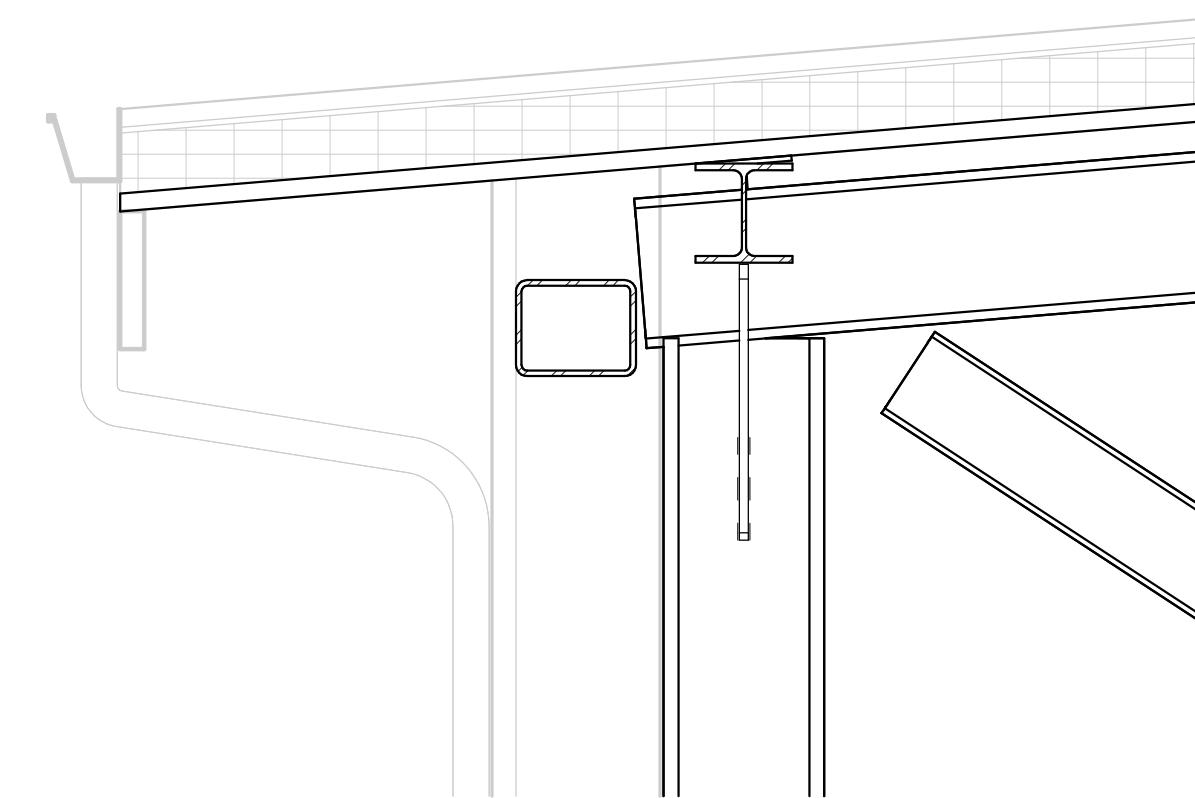
FRAMING DETAILS

DP-1 95% SUBMISSION

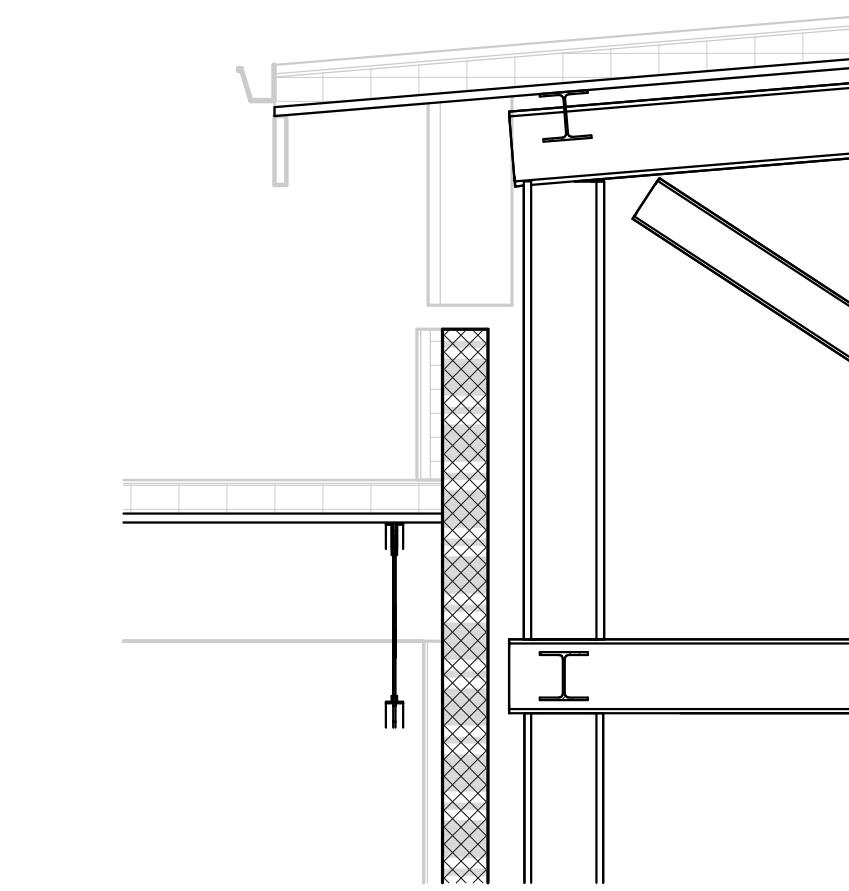
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of Engineers ®

DATE

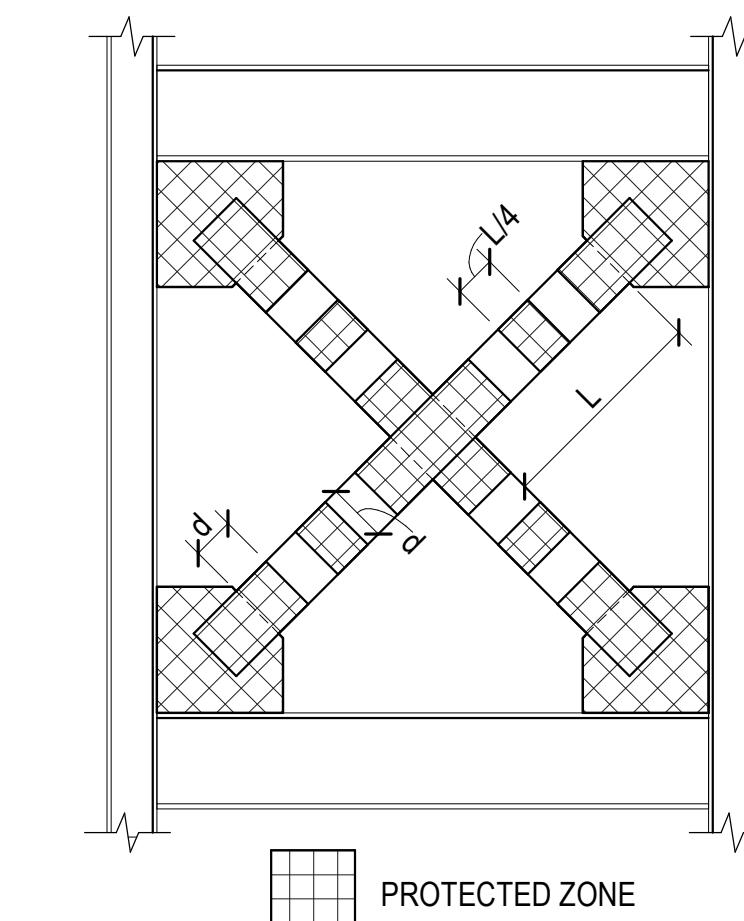
# CONNECTION DETAILS AND LATERAL BRACING DETAILS IN PROGRESS



**K10** Section 36  
3/4" = 1'-0" REF: SF141



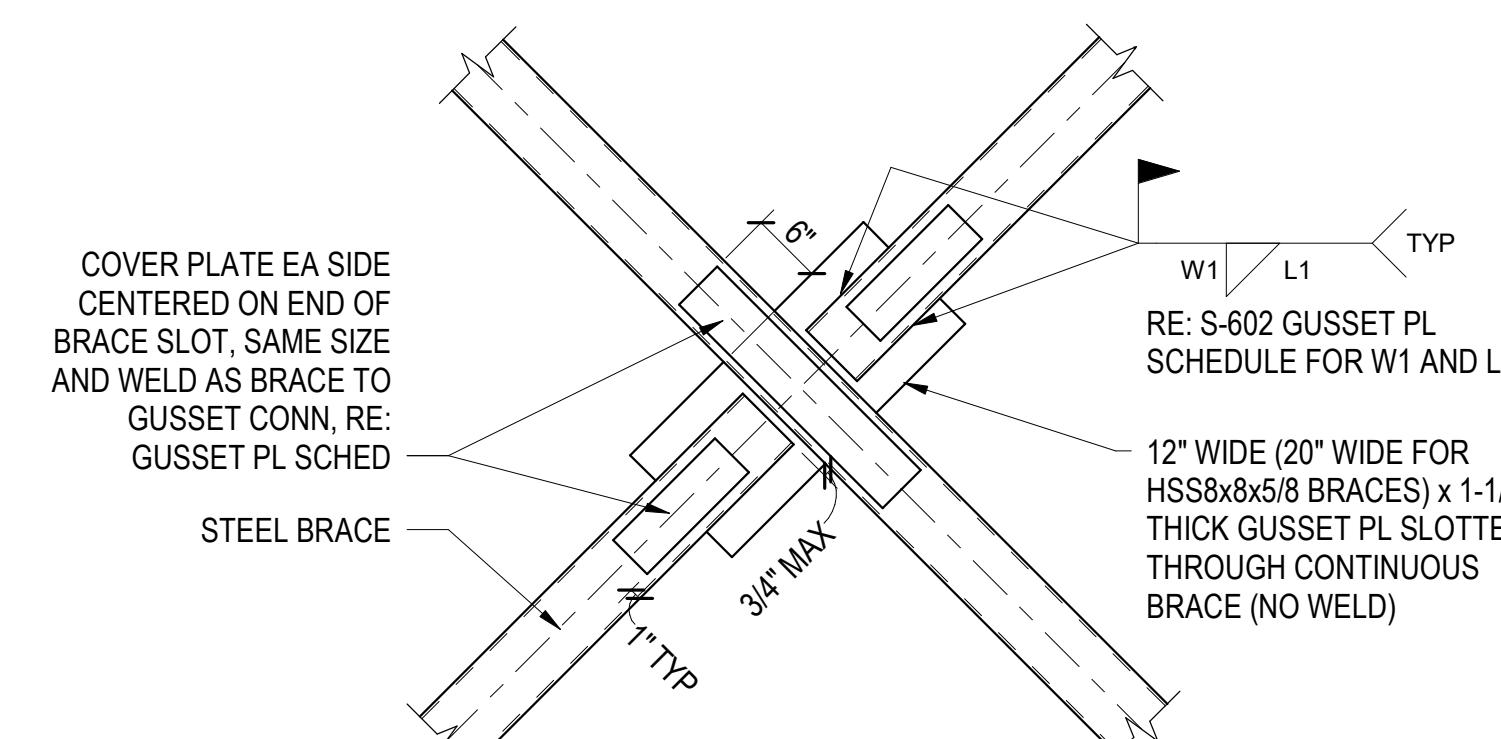
**K15** Section 34  
3/8" = 1'-0" REF: SF131



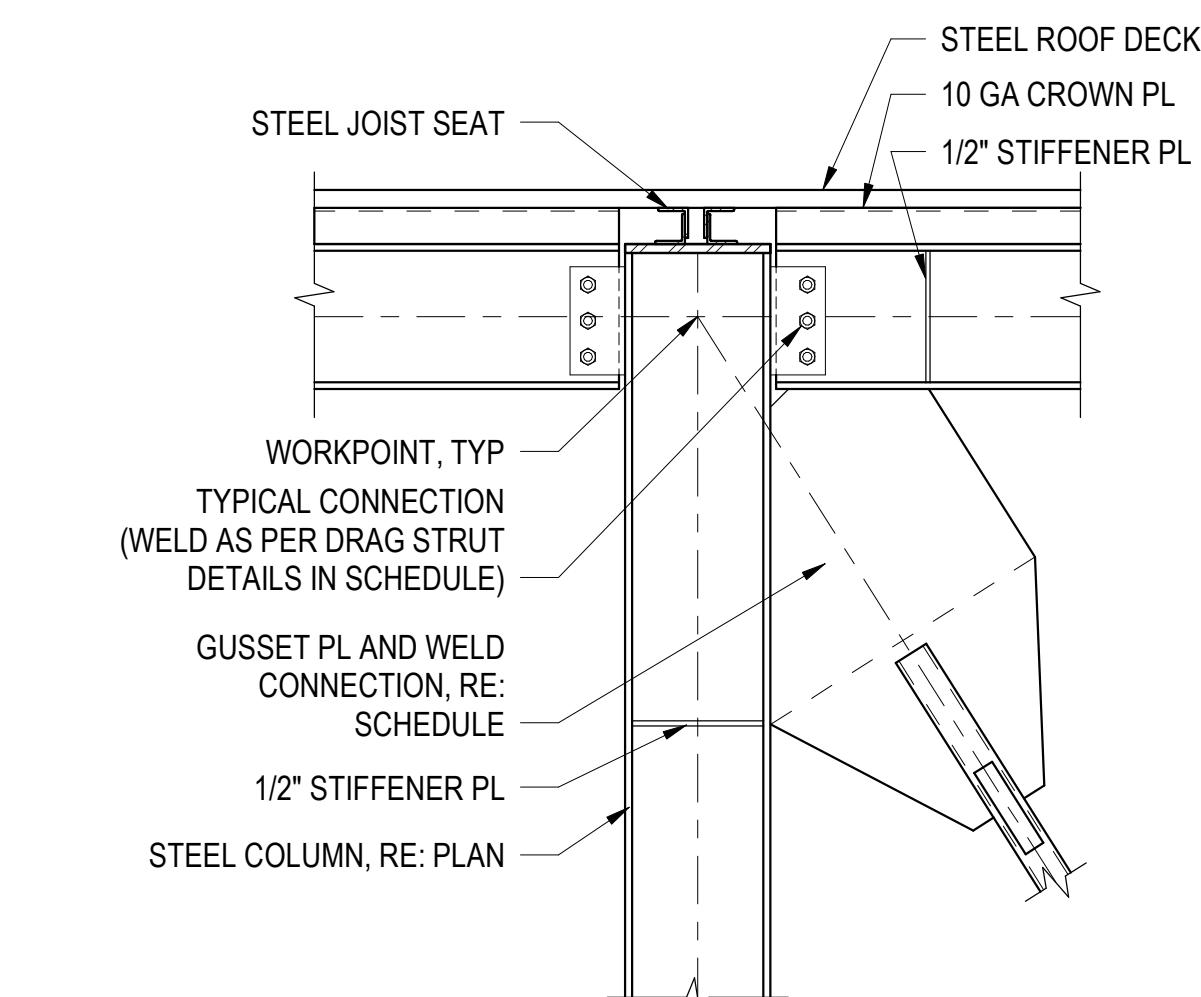
**E10** PROTECTED ZONE OF X-BRACED FRAME  
NTS

**NOTES:**

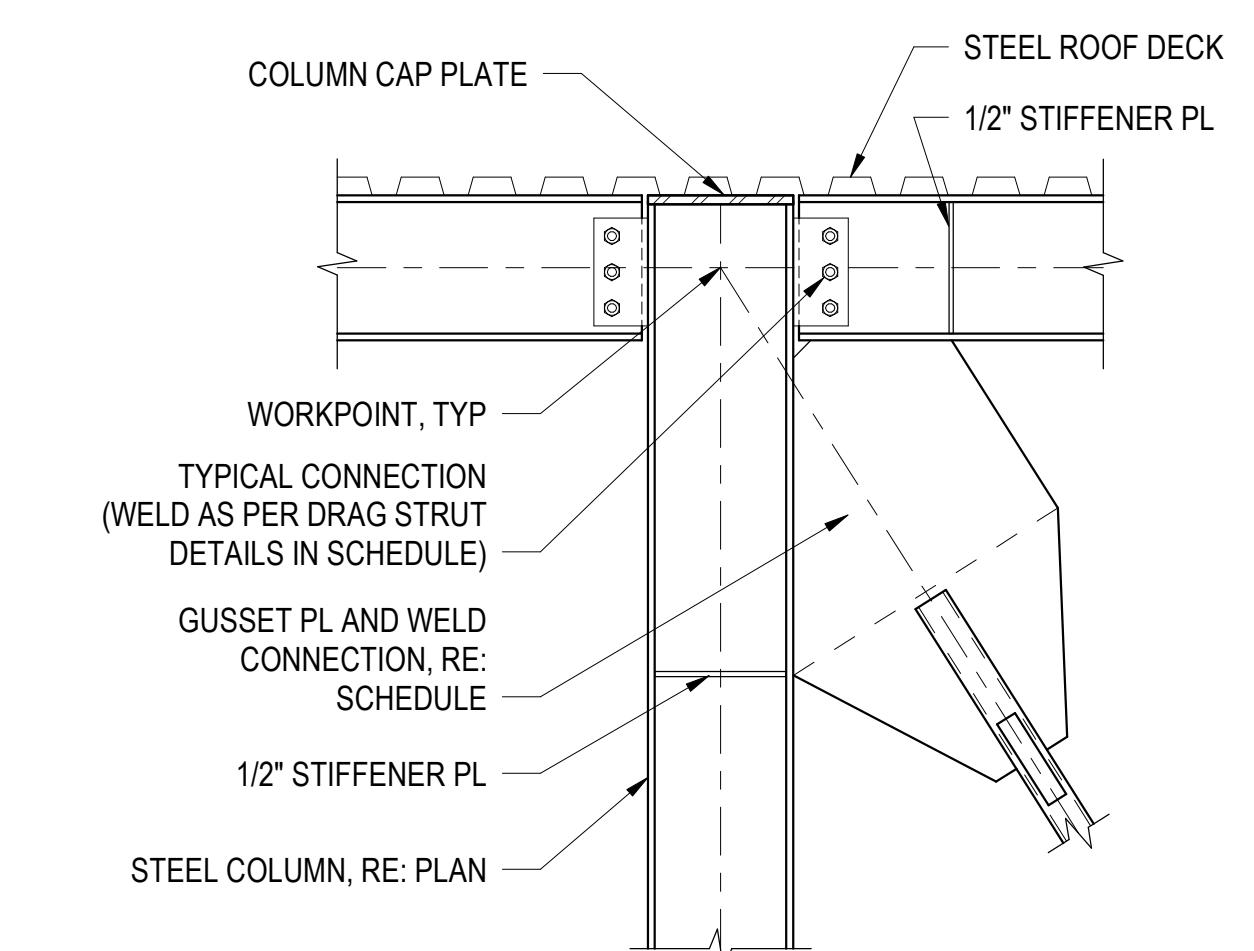
1. DISCONTINUITIES RESULTING FROM FABRICATION AND ERECTION PROCEDURES AND FROM OTHER ATTACHMENTS ARE PROHIBITED IN THE REGION OF A MEMBER OR A CONNECTION ELEMENT DESIGNATED AS A PROTECTED ZONE.
2. WELDED STEEL HEADED STUD ANCHORS AND OTHER CONNECTIONS ARE PERMITTED IN PROTECTED ZONES.
3. WITHIN THE PROTECTED ZONE, HOLES, TACK WELDS, ERECTION AIDS, AIR-ARC GOUGING, AND UNSPECIFIED THERMAL CUTTING FROM FABRICATION OR ERECTION OPERATIONS SHALL BE REPAIRED AS REQUIRED BY THE ENGINEER OF RECORD (EOR).
4. STEEL HEADED STUD ANCHORS SHALL NOT BE PLACED ON BEAM FLANGE WITHIN THE PROTECTED ZONE.
5. ARC SPOT WELDS AS REQUIRED TO ATTACH DECKING ARE PERMITTED.
6. DECKING ATTACHMENTS THAT PENETRATE THE BEAM FLANGE SHALL NOT BE PLACED ON BEAM FLANGES WITHIN THE PROTECTED ZONE, EXCEPT POWER-ACTUATED FASTENERS UP TO 0.18 IN (4.6 MM) DIAMETER ARE PERMITTED.
7. WELDED, BOLTED, OR SCREWED ATTACHMENTS OR POWER-ACTUATED FASTENERS FOR PERIMETER EDGE ANGLES, EXTERIOR FACADES, PARTITIONS, DUCT WORK, PIPING, OR OTHER CONSTRUCTION SHALL NOT BE PLACED WITHIN THE PROTECTED ZONE. EXCEPTION: OTHER ATTACHMENTS ARE PERMITTED WHERE DESIGNATED OR APPROVED BY THE EOR.
8. PROTECTED ZONES BE PERMANENTLY MARKED BY THE FABRICATOR AND RE-MARKED BY THE OWNER'S DESIGNATED REPRESENTATIVE IF THOSE MARKINGS ARE OBSCURED IN THE FIELD, SUCH AS BY APPLICATION OF FIREPROOFING.



**A5** TYP X-BRACE INTERSECTION DETAIL  
NTS REF: S-201



**A10** TYP BRACED FRAME ROOF CONNECTION  
NTS REF: S-202



**A15** TYP BRACED FRAME ROOF CONNECTION  
NTS REF: S-203

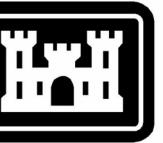
CREECH AIR FORCE BASE, CLARK COUNTY, NV  
DISASTER RESILIENCY PROGRAM (DRP) - PHASE 2  
494137

BRACED FRAME DETAILS

SHEET ID

S-521

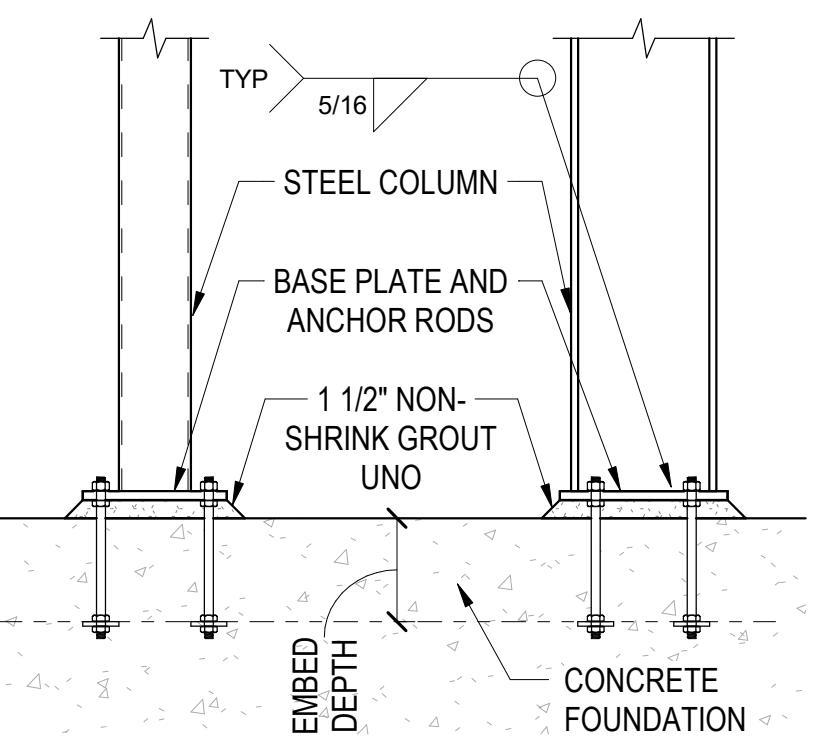


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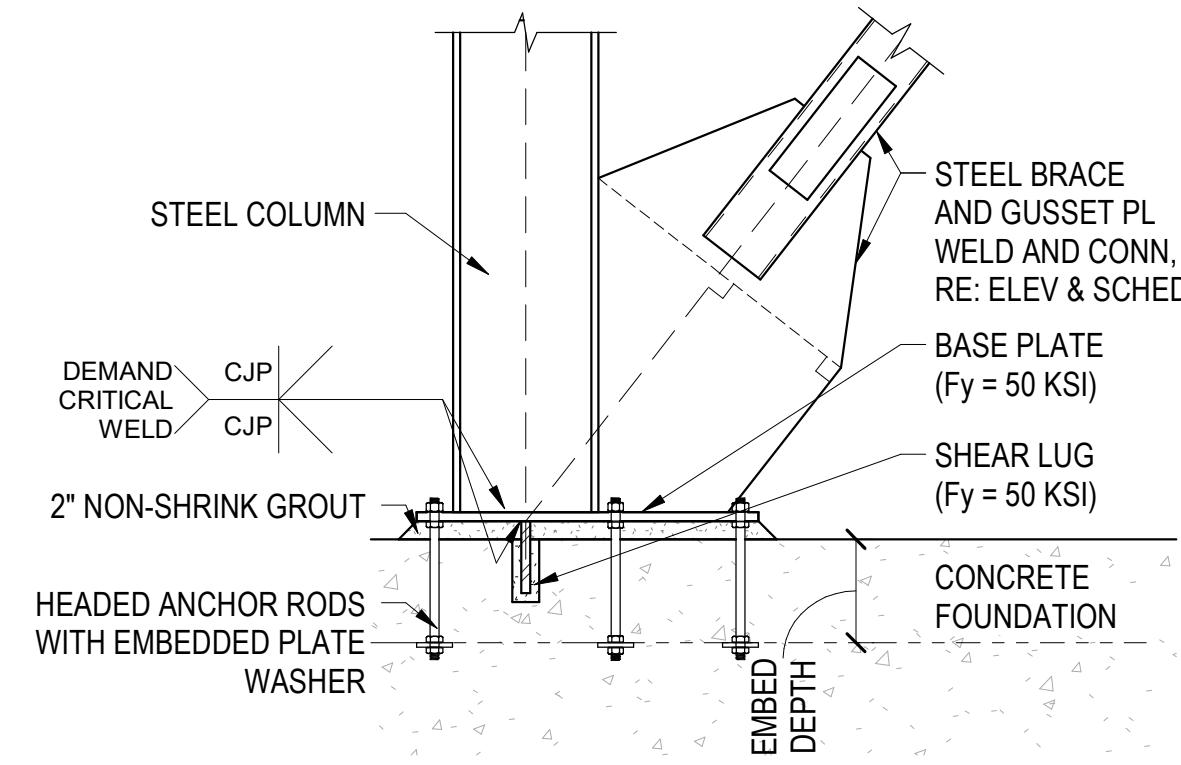
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## STEEL BRACED FRAME COLUMN &amp; BASE PLATE SCHEDULE

| COLUMN MARK | Structural Shape | BASE PLATE |           |         |         |         | ANCHOR ROD |        | SHEAR LUG |           | NOTES  |                 |
|-------------|------------------|------------|-----------|---------|---------|---------|------------|--------|-----------|-----------|--------|-----------------|
|             |                  | TYPE       | THICKNESS | "M" DIM | "N" DIM | "A" DIM | "P" DIM    | DIA.   | EMBED     | THICKNESS | DEPTH  |                 |
| SC1         | W10x68           | LWC        | 1 7/8"    | 48"     | 20"     | 2 1/2"  | 30"        | 1 1/2" | 28"       | 2 3/4"    | 8 1/2" | GR. 105 ANCHORS |
| SC2         | W10x68           | LWB        | 1 3/4"    | 48"     | 20"     | 2 1/2"  | N/A        | 1 1/2" | 28"       | 2 3/4"    | 8 1/2" | GR. 105 ANCHORS |
| SC3         | W12x120          | WA         | 3/4"      | 14"     | 14"     | 2"      | N/A        | 3/4"   | 12"       | N/A       | N/A    |                 |
| SC4         | W12x136          | LWA        | 1 7/8"    | 45"     | 20"     | 2 1/2"  | N/A        | 1 1/2" | 28"       | 2 3/4"    | 8 1/2" | GR. 105 ANCHORS |
| SC5         | HSS6x6x1/4       | HB         | 3/4"      | 12"     | 8"      | 1 1/2"  | N/A        | 3/4"   | 9"        | N/A       | N/A    |                 |
| SC6         | HSS8x8x1/2       | HA         | 3/4"      | 14"     | 14"     | 1 1/2"  | N/A        | 3/4"   | 9"        | N/A       | N/A    |                 |
| SC7         | HSS10x10x1/2     | HA         | 3/4"      | 16"     | 16"     | 1 1/2"  | N/A        | 3/4"   | 9"        | N/A       | N/A    |                 |
| SC8         | HSS12x12x5/8     | HA         | 3/4"      | 18"     | 18"     | 1 1/2"  | N/A        | 1"     | 12"       | N/A       | N/A    |                 |



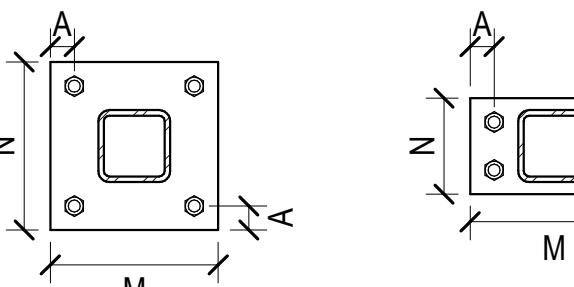
TYPICAL COLUMN BASE CONDITION



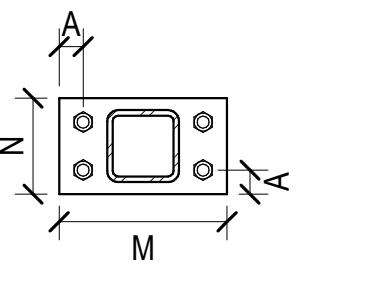
TYPICAL BRACED FRAME COLUMN BASE CONDITION

## NOTES:

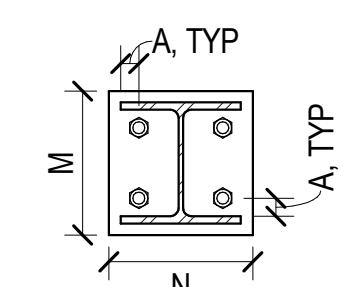
- ALL BASE PLATES AND SHEAR LUGS MUST BE ASTM A572 GR50 STEEL, TYP UNO
- ALL ANCHOR RODS MUST BE ASTM F-1554 GR55 MIN UNO. THEY MUST BE HEADED ANCHOR RODS W/ 3"x3"x3/8" PLATE WASHERS WITH DOUBLE NUTS OR EMBED PLATE EMBEDDED IN CONCRETE AT THE EMBEDMENT DEPTH SPECIFIED, TYP UNO.
  - ALL ANCHOR RODS MUST HAVE HARDENED WASHERS AND NUTS, WITH FULL HEIGHT OF EXTENSIONS THREADED
  - WASHERS MUST CONFORM TO AISC STEEL CONSTRUCTION MANUAL TABLE 14-2
  - C. BASE PLATE HOLES MAY INCREASE PER AISC STEEL CONSTRUCTION MANUAL TABLE 14-2
- ALL BASE PLATES MUST BEAR ON MIN 1 1/2" THICK (2" THICK AT BRACED FRAMES) 5000 PSI NON-SHRINK GROUT AND MUST HAVE LEVELING NUTS, TYP UNO
- ALL BASE PLATES MUST BE WELDED TO THE COLUMN WITH A 1/4" FILLET WELD ALL AROUND, TYP UNO
- ALL ANCHOR RODS MUST BE SET IN PLACE WITH A TEMPLATE. THEY MUST BE PLUMB AND AT THE CORRECT DEPTH AND EXTENSION
- THE WIDTH OF ALL SHEAR LUGS IS THE SAME AS THE 'N' DIMENSION SHOWN IN BASE PLATE TYPES
- NOTCH SHEAR LUGS AS REQ'D TO ACCOMMODATE REINF STEEL
- SEE THE STRUCTURAL GENERAL NOTES FOR ADDITIONAL INFORMATION



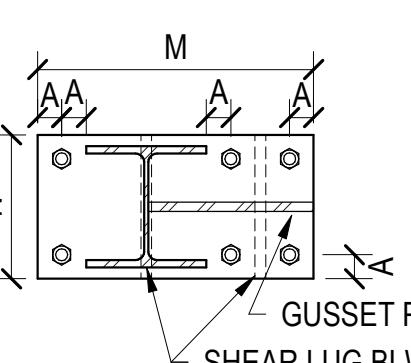
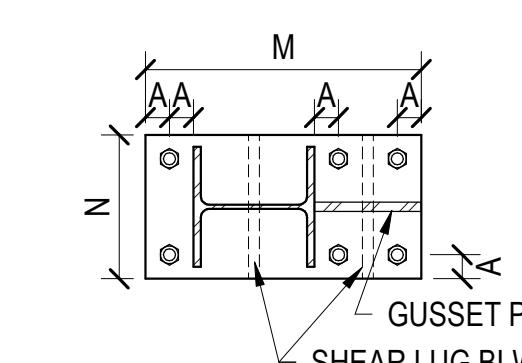
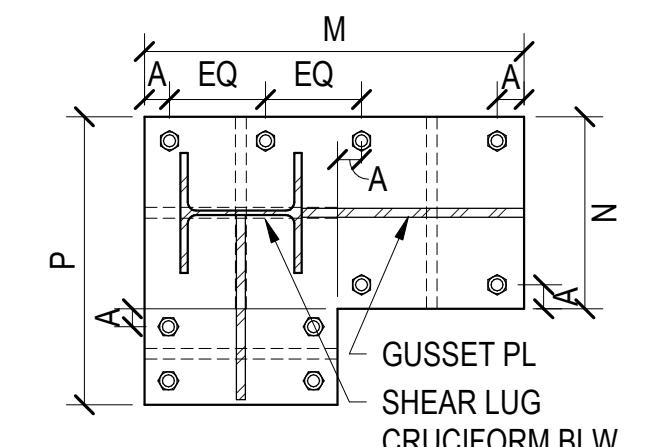
TYPE-HA



TYPE-HB



TYPE-WA

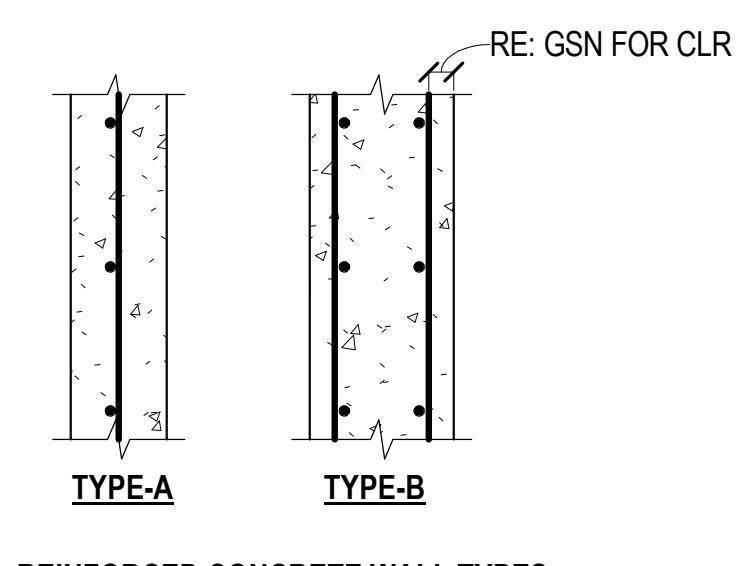
TYPE-LWA  
\*PROVIDE EMBED PLATE, RE: K15/S-502TYPE-LWB  
\*PROVIDE EMBED PLATE, RE: K15/S-502TYPE-LWC  
\*PROVIDE EMBED PLATE, RE: K15/S-502

## CONCRETE WALL SCHEDULE

| MARK | WIDTH   | TYPE   | WALL REINFORCING |                | NOTES |
|------|---------|--------|------------------|----------------|-------|
|      |         |        | HORIZONTAL       | VERTICAL       |       |
| CW8  | 8"      | TYPE A | #5 @ 12" OC      | #5 @ 12" OC    |       |
| CW15 | 1' - 3" | TYPE B | #5 @ 12" OC EF   | #5 @ 12" OC EF |       |

NOTES:

- SEE TYPICAL DETAILS FOR REINFORCING AT CORNERS, INTERSECTIONS, AND OPENINGS.
- PROVIDE DOWELS WITH STANDARD HOOKS AND/OR PROPER LAP LENGTH TO THE STRUCTURE ABOVE AND BELOW WITH SIZE AND SPACING TO MATCH THE VERT REINF IN THE WALL, TYP UNO.
- THE LAP SPLICE LENGTH OF VERT REINF MUST BE AS SHOWN IN THE CONCRETE REINF DEVELOPMENT AND LAP SPLICE TABLE IN THE GENERAL NOTES. ADJUST HEIGHT OF EACH LIFT AS REQUIRED.
- WHEN A SINGLE CURTAIN OF REINF IS SPECIFIED, PLACE THE VERT REINF IN THE CENTER OF THE WALL, TYP UNO.
- AT TOP AND BTM OF WALL, INCLUDING ALL DECK BEARING ELEVATIONS, PROVIDE (2) #5 CONT IN ADDITION TO SCHEDULED REINFORCING.
- ALL HORIZONTAL REINF MUST TERMINATE AT ENDS OF WALLS AND ALL JAMBS WITH A STANDARD 180 DEGREE HOOK. END OF WALL IS DEFINED AS ANY WALL SEGMENT THAT EITHER CHANGES DIRECTION AND/OR CHANGES TO A DIFFERENT WALL TYPE.
- SEE GENERAL STRUCTURAL NOTES FOR ALL OTHER REQUIREMENTS.



REINFORCED CONCRETE WALL TYPES

## FOOTING SCHEDULE

| MARK    | WIDTH    | LENGTH   | THICK   | TRANSVERSE REINFORCING |      | LONGITUDINAL REINFORCING |      | NOTES        |
|---------|----------|----------|---------|------------------------|------|--------------------------|------|--------------|
|         |          |          |         | NO.                    | SIZE | NO.                      | SIZE |              |
| FS3.0   | 3' - 0"  | 3' - 0"  | 1' - 0" | (4)                    | #5   | (4)                      | #5   |              |
| FS4.0   | 4' - 0"  | 4' - 0"  | 1' - 0" | (5)                    | #5   | (5)                      | #5   |              |
| FS6.0   | 6' - 0"  | 6' - 0"  | 1' - 4" | (7)                    | #6   | (7)                      | #6   |              |
| FS7.0   | 7' - 0"  | 7' - 0"  | 1' - 6" | (8)                    | #6   | (8)                      | #6   | TOP & BOTTOM |
| FS8x12  | 8' - 0"  | 12' - 0" | 2' - 0" | (13)                   | #7   | (9)                      | #7   | TOP & BOTTOM |
| FS10.0  | 10' - 0" | 10' - 0" | 2' - 0" | (11)                   | #7   | (11)                     | #7   | TOP & BOTTOM |
| FS10x35 | 10' - 0" | 35' - 0" | 2' - 6" | (36)                   | #8   | (11)                     | #8   | TOP & BOTTOM |
| FS10x37 | 10' - 0" | 37' - 0" | 2' - 6" | (38)                   | #8   | (11)                     | #8   | TOP & BOTTOM |
| FS11.0  | 11' - 0" | 11' - 0" | 2' - 0" | (12)                   | #7   | (12)                     | #7   | TOP & BOTTOM |
| FS18x30 | 18' - 0" | 30' - 0" | 2' - 6" | (31)                   | #8   | (19)                     | #8   | TOP & BOTTOM |
| FC3.0   | 3' - 0"  | CONT     | 1' - 0" | (4)                    | #5   | --                       | --   | #5 @ 12" OC  |
| FC4.0   | 4' - 0"  | CONT     | 1' - 0" | (5)                    | #6   | --                       | --   | #5 @ 12" OC  |

## NOTES:

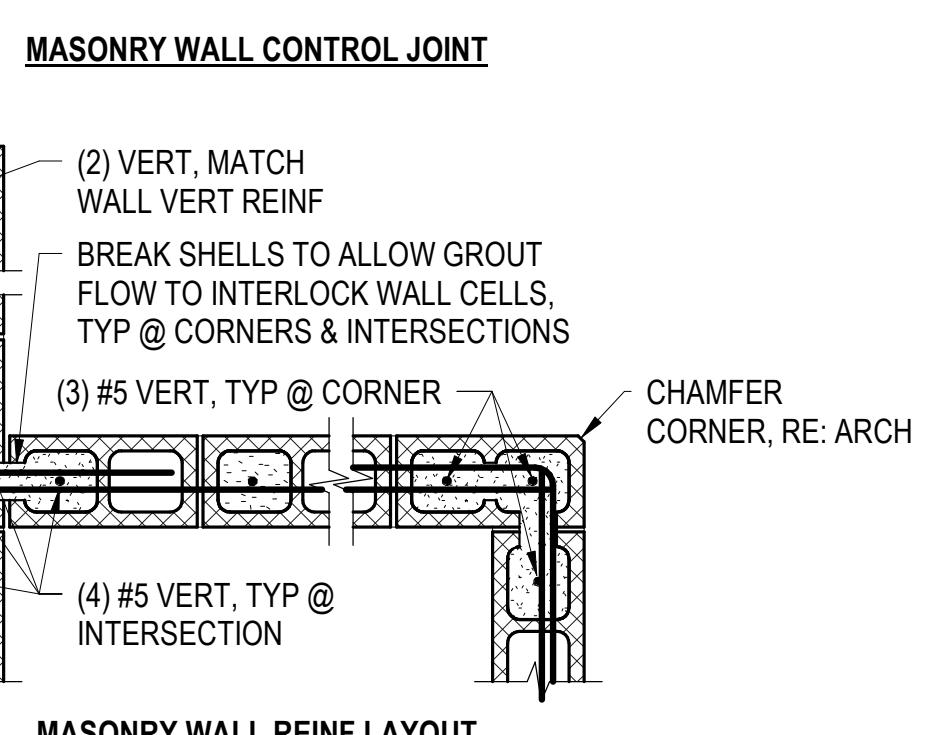
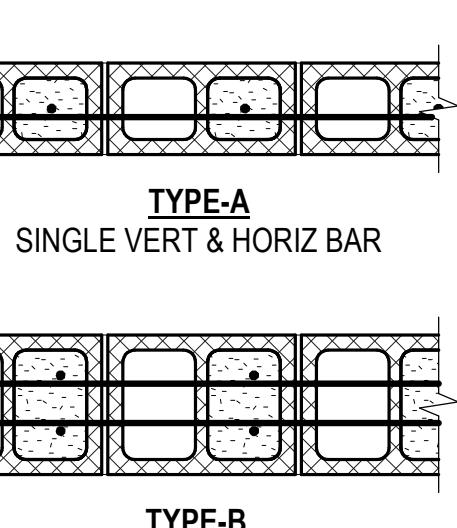
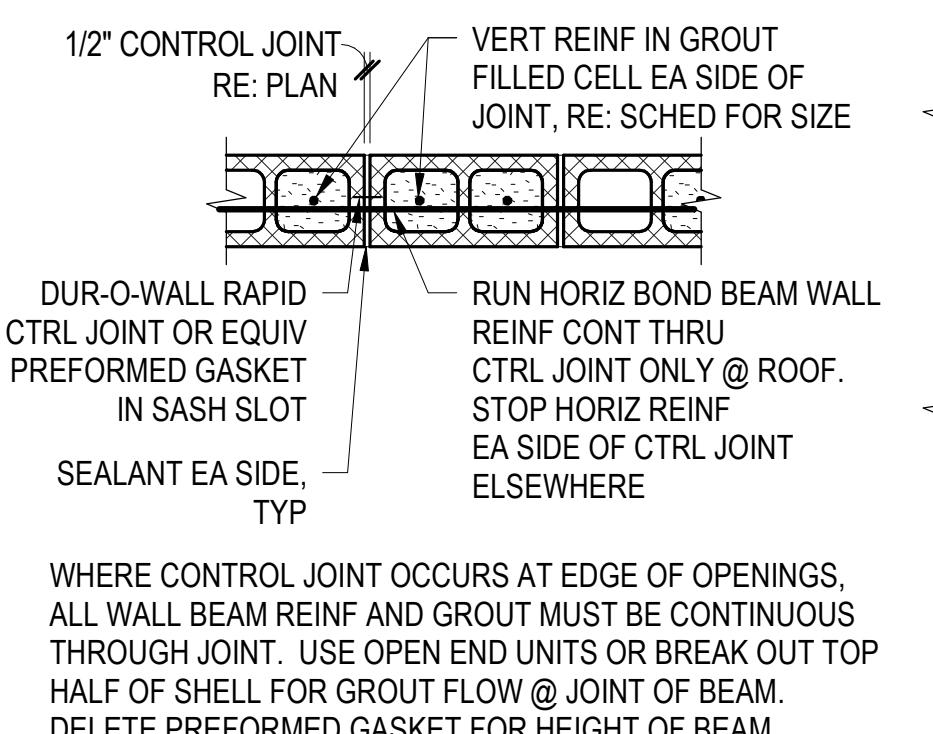
- ALL FOOTINGS MUST BEAR ON PROPERLY PREPARED MATERIAL. SEE FOUNDATION SECTION OF THE STRUCTURAL GENERAL NOTES.
- ALL FOOTINGS MUST BE CENTERED BELOW THE WALL AND/OR COLUMN ABOVE, TYP UNO.
- ALL EARTH FORMED FOOTINGS MUST HAVE REQUIRED CONCRETE COVER FOR REINFORCEMENT PER THE CONCRETE COVER TABLE.
- ALL EXTERIOR FOOTINGS MUST BEAR BELOW THE EFFECTS OF FROST. SEE THE DESIGN CRITERIA SECTION OF THE STRUCTURAL GENERAL NOTES FOR MINIMUM BEARING DEPTH.
- PROVIDE MINIMUM COVER FOR ALL REINFORCING PER THE STRUCTURAL GENERAL NOTES AND/OR THE CONCRETE COVER SCHEDULE.
- PLACE ALL FOOTING REINFORCING IN BOTTOM OF FOOTING WITH 3" CLEAR CONCRETE COVER, TYP UNO.
- PLACE TRANSVERSE REINFORCING NEAREST EARTH AND LONGITUDINAL REINFORCING ON TOP OF TRANSVERSE REINFORCING.
- PLACE TOP REINFORCING IF NOTED ON SCHEDULE. AS A MINIMUM, ALL FOOTINGS GREATER THAN OR EQUAL TO 18" IN THICKNESS REQUIRE #6 @ 12" OC EA WAY IN THE TOP OF FOOTING UNLESS THE SCHEDULE PROVIDES MORE STRINGENT REQUIREMENTS.
- EXTEND CONTINUOUS FOOTINGS 12" MINIMUM PAST EDGE OF WALL, UNLESS OTHERWISE NOTED ON PLANS.
- REINFORCING IN CONTINUOUS FOOTINGS MUST PASS THROUGH INTERSECTING SPOT FOOTINGS.
- ALL REINFORCING FOR SPOT FOOTINGS AND MAT FOOTINGS AT BRACED FRAMES AND MOMENT FRAMES MUST HAVE A 90 DEGREE HOOK AT EA END.
- PROVIDE DOWELS WITH STANDARD HOOKS FROM FOOTINGS TO ANY REINFORCED ELEMENT ABOVE WITH SIZE AND SPACING TO MATCH VERTICAL REINFORCING IN THE ELEMENT ABOVE.
- ANY INCREASE IN THE SIZE OF FOOTINGS SHOWN MAY REQUIRE ADDITIONAL REINFORCING. COORDINATE WITH THE ENGINEER OF RECORD.
- PENETRATIONS THROUGH FOOTINGS ARE NOT ALLOWED WITHOUT PRIOR WRITTEN APPROVAL FROM THE ENGINEER OF RECORD.
- ALL CONTINUOUS FOOTINGS MUST BE FC2.0 MINIMUM, AND ALL SPOT FOOTINGS MUST BE FS3.0 MINIMUM UNO ON PLANS.
- SEE THE STRUCTURAL GENERAL NOTES FOR ADDITIONAL INFORMATION.

## MASONRY WALL SCHEDULE

| MARK | WIDTH | TYPE | WALL REINFORCING |             | NOTES |
|------|-------|------|------------------|-------------|-------|
|      |       |      | HORIZONTAL       | VERTICAL    |       |
| MW8  | 8"    | A    | #5 @ 48" OC      | #5 @ 32" OC |       |

## NOTES:

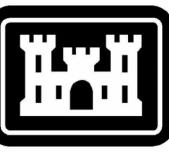
- SEE TYPICAL DETAILS FOR REINFORCING AT CORNERS, INTERSECTIONS, AND OPENINGS.
- GROUT ALL CELLS SOLID THAT CONTAIN REINFORCING, EMBEDS, AND/OR BOLTS, TYP.
- DO NOT SOLID GROUT WALLS UNO.
- ALL MASONRY BELOW GRADE MUST BE GROUTED SOLID.
- LAY ALL BLOCK IN RUNNING BOND, TYP UNO.
- HORIZONTAL WALL REINF MUST CONTINUE THROUGH LINTELS. WHERE BOTH HORIZ WALL AND LINTEL REINF OCCUR IN THE SAME COURSE, USE THE LARGER REINFORCEMENT ONLY.
- ALL HORIZ REINF MUST TERMINATE AT ENDS OF WALL AND JAMBS WITH STANDARD 180 DEG HOOKS. PLACE ADDITIONAL VERT BAR IN CENTER OF WALL IF NECESSARY.
- PROVIDE SCHEDULED BOUNDARY COLUMNS AT END OF WALLS. SEE TYP MASONRY ELEVATION.
- AT TOP AND BOTTOM OF WALL PROVIDE (2) #5 CONT IN ADDITION TO SCHEDULED REINFORCING.
- AT ALL DECK AND JOIST EMBED LOCATIONS, PROVIDE (2) #5 CONT IN ADDITION TO SCHEDULED REINFORCING.
- PROVIDE DOWELS WITH STANDARD HOOKS AND/OR PROPER LAP LENGTH TO THE STRUCTURE ABOVE AND BELOW WITH SIZE AND SPACING TO MATCH THE VERT REINF IN THE WALL, TYP UNO.
- THE LAP SPLICE LENGTH OF VERT REINF MUST BE AS SHOWN IN THE MASONRY REINF LAP SPLICE TABLE IN THE GENERAL NOTES. ADJUST HEIGHT OF EACH LIFT AS REQUIRED.
- WHEN A SINGLE CURTAIN OF REINF IS SPECIFIED, PLACE THE VERT REINF IN THE CENTER OF THE WALL, TYP UNO.
- WHEN A DOUBLE CURTAIN OF REINF IS SPECIFIED, PLACE EACH CURTAIN AT THE FACE OF THE WALL WITH THE VERT REINF CLOSEST TO THE SHELL WITH A CLEAR DISTANCE BETWEEN 1/2" AND 1" TO THE INSIDE FACE OF THE SHELL.
- ALL WALLS MUST INCLUDE LADDER TYPE JOINT REINF SPACED AT 16" OC VERTICALLY WITH AT LEAST TWO WIRES OF W1.7 (GALVANIZED).
- SEE GENERAL STRUCTURAL NOTES FOR ALL OTHER REQUIREMENTS.

CZECH AIR FORCE BASE, CLARK COUNTY, NV  
DISASTER RESILIENCY PROGRAM (DRP) - PHASE 2  
49137

STRUCTURAL SCHEDULES

SHEET ID  
S-601  
PRELIMINARY DESIGN  
NOT FOR CONSTRUCTION  
N.G.

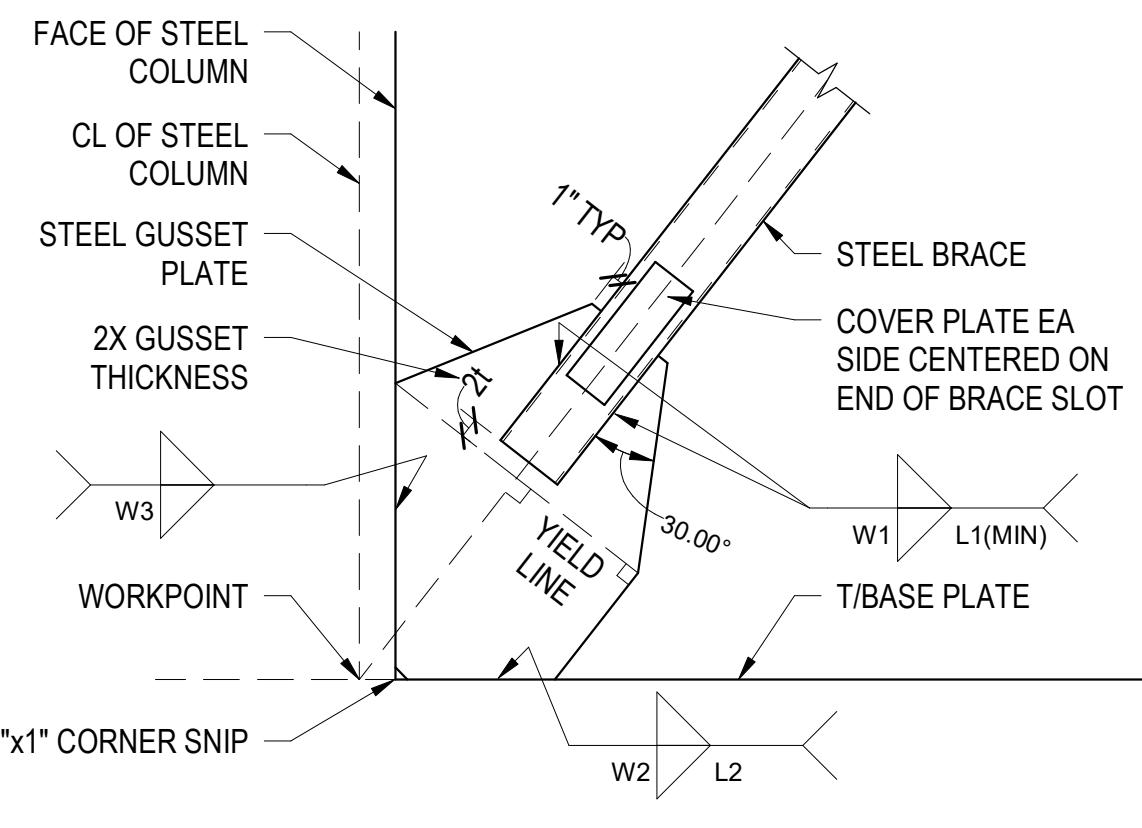
DP-1 95% SUBMISSION

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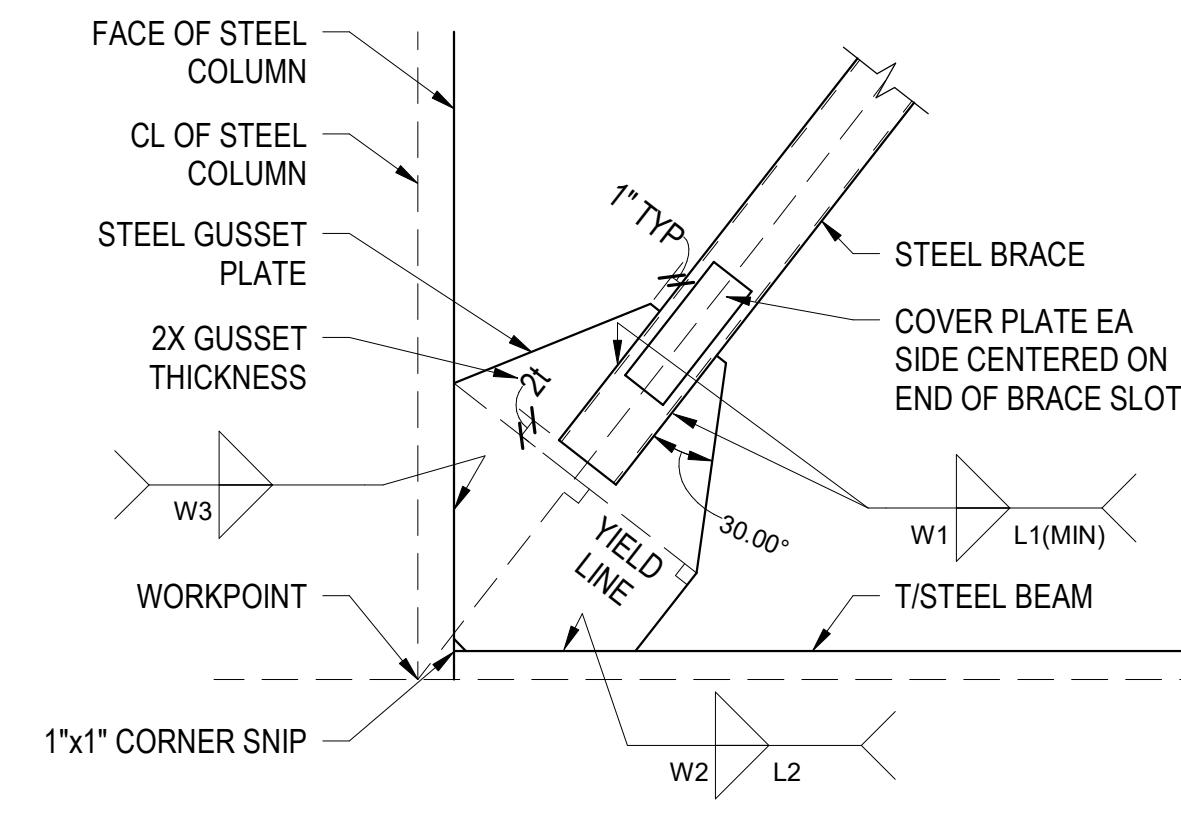
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## STEEL GUSSET PLATE CONNECTION SCHEDULE

| MARK | GUSSET PLATE THICKNESS | GEOMETRY AND WELDING INFORMATION |           |         |           | COVER PLATE INFO |               | NOTES |
|------|------------------------|----------------------------------|-----------|---------|-----------|------------------|---------------|-------|
|      |                        | W1 SIZE                          | L1 LENGTH | W2 SIZE | L2 LENGTH | W3 SIZE          | PLATE SIZE    |       |
| 1    | 1"                     | 5/16                             | 3'-3"     | 7/16    | 3'-1"     | 7/16             | 1/2"x4"x1'-0" | 1/4   |
| 2    | 1"                     | 5/16                             | 3'-3"     | 7/16    | 2'-8"     | 7/16             | 1/2"x4"x1'-0" | 1/4   |
| 3    | 7/8"                   | 5/16                             | 1'-7"     | 5/16    | 2'-10"    | 3/8              | 1/2"x4"x1'-0" | 1/4   |
| 4    | 7/8"                   | 5/16                             | 1'-7"     | 5/16    | 2'-5"     | 3/8              | 1/2"x4"x1'-0" | 1/4   |
| 5    | 7/8"                   | 5/16                             | 1'-7"     | 5/16    | 2'-5"     | 3/8              | 1/2"x4"x1'-0" | 1/4   |
| 6    | 7/8"                   | 5/16                             | 1'-7"     | 5/16    | 3'-1"     | 3/8              | 1/2"x4"x1'-0" | 1/4   |
| 7    | 7/8"                   | 5/16                             | 1'-7"     | 5/16    | 2'-3"     | 3/8              | 1/2"x4"x1'-0" | 1/4   |
| 8    | 7/8"                   | 5/16                             | 1'-7"     | 5/16    | 2'-8"     | 3/8              | 1/2"x4"x1'-0" | 1/4   |
| 9    | 7/8"                   | 5/16                             | 3'-3"     | 7/16    | 3'-1"     | 3/8              | 1/2"x5"x1'-0" | 1/4   |
| 10   | 7/8"                   | 5/16                             | 3'-3"     | 7/16    | 2'-10"    | 7/16             | 1/2"x5"x1'-0" | 1/4   |
| 11   | 3/4"                   | 5/16                             | 1'-0"     | 1/4     | 3'-2"     | 1/4              | 1/2"x5"x1'-0" | 1/4   |
| 12   | 3/4"                   | 5/16                             | 1'-0"     | 1/4     | 4'-3"     | 1/4              | 1/2"x5"x1'-0" | 1/4   |
| 13   | 3/4"                   | 5/16                             | 1'-0"     | 3/8     | 1'-5"     | 3/8              | 1/2"x5"x1'-0" | 1/4   |
| 14   | 3/4"                   | 5/16                             | 1'-0"     | 5/16    | 1'-1"     | 3/8              | 1/2"x5"x1'-0" | 1/4   |
| 15   | 3/4"                   | 5/16                             | 1'-0"     | 5/16    | 1'-8"     | 5/16             | 1/2"x5"x1'-0" | 1/4   |
| 16   | 3/4"                   | 5/16                             | 1'-0"     | 5/16    | 1'-10"    | 5/16             | 1/2"x5"x1'-0" | 1/4   |



TYPICAL STEEL GUSSET PLATE TO BASE PLATE DETAIL



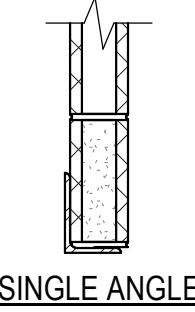
TYPICAL STEEL GUSSET PLATE TO STEEL BEAM DETAIL

## NOTES:

1. RE-BRACED FRAME ELEVATIONS FOR MARKED LOCATIONS OF EACH GUSSET ASSEMBLY.
2. ALL GUSSET PLATES MUST BE A572 GRADE 50 STEEL.
3. ALL COVER PLATES MUST BE A572 GRADE 50 STEEL.
4. AT CONTRACTOR'S OPTION, FILLET WELDS MAY BE REPLACED WITH CJP WELDS SO LONG AS REQUIRED TESTING IS PERFORMED PER GOVERNING BUILDING CODE.
5. YIELD LINE SHOULD EXACTLY INTERSECT WITH COLUMN FACE OR BASE PLATE/BEAM FACE DEPENDING ON THE GEOMETRY.
6. LENGTH L1 IS A MINIMUM WELD LENGTH. USE LENGTH L2 AS A BASELINE TO ESTABLISH THE YIELD LINE.
7. PLACE 1/2" THICK FOAM EACH SIDE OF GUSSET PLATE WHEN CONCRETE POURS AROUND GUSSET PLATE.

## VENEER LINTEL SCHEDULE

| LOOSE LINTEL SCHEDULE FOR NON-LOAD BEARING MASONRY WALLS |                   |
|--|-------------------|
| OPENING WIDTH  | WALL THICKNESS    |
| UP TO 4'-0"  | 4" WALL           |
| 4'-0" TO 6'-0"   | L4x3 1/2x5/16 LLV |
| 6'-0" TO 8'-0"   | L5x3 1/2x5/16 LLV |
| 8'-0" TO 12'-0"  | L6x3 1/2x5/16 LLV |
| 12'-0" TO 16'-0"   | L8x6x5/8 LLV      |



SINGLE ANGLE

## NOTES:

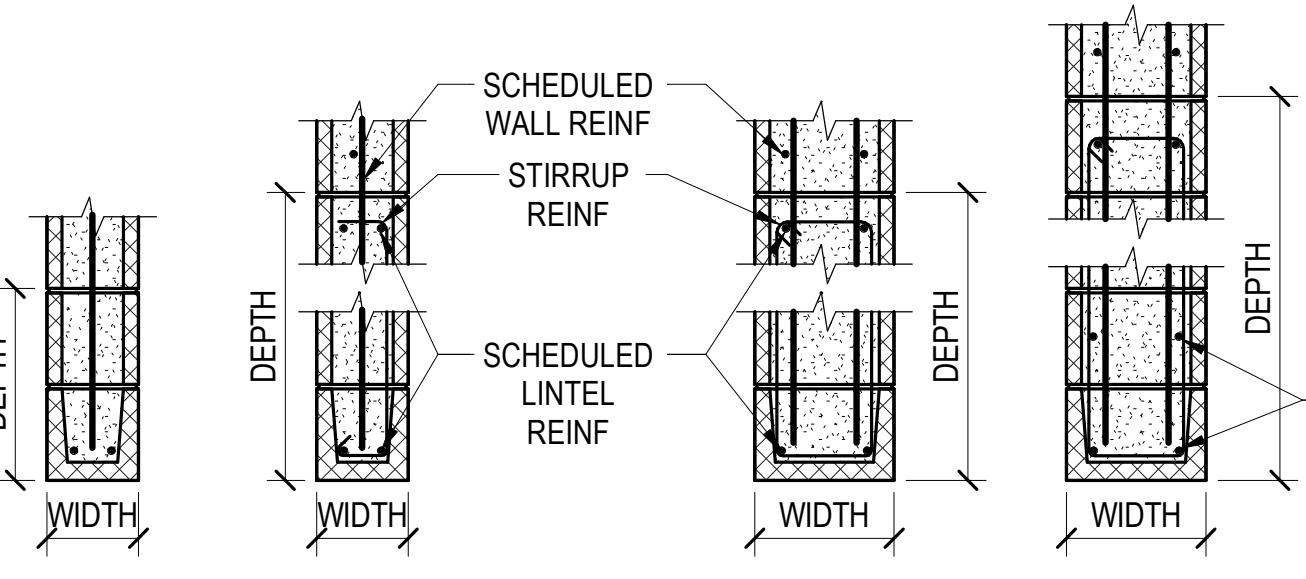
1. RE: STRUCTURAL, ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS FOR OPENING SIZE AND LOCATION.
2. CONNECT ALL DOUBLE ANGLES BACK TO BACK AT 2'-0" OC MAXIMUM SPACING.
3. PROVIDE 6" MINIMUM BEARING AT FIRST FULL MASONRY CELL AT EACH END OF LOOSE LINTEL.
4. FOR OPENINGS 6'-0" AND WIDER, FULLY GROUT FIRST FULL CELL EACH SIDE OF OPENING FOR FULL HEIGHT OF WALL.
5. FOR OPENINGS LESS THAN 6'-0" WIDE, FULLY GROUT FIRST FULL CELL EACH SIDE OF OPENING FOR MINIMUM HEIGHT OF 8", BUT NOT LESS THAN THE FULL CELL HEIGHT, BELOW LINTEL BEARING ELEVATION.
6. FULLY GROUT ALL CELLS WHERE LOOSE LINTELS ARE LOCATED.
7. ANGLES IN EXTERIOR WALLS ARE TO BE GALVANIZED.

## MASONRY LINTEL SCHEDULE

| MARK | WIDTH  | DEPTH | TYPE | LINTEL REINFORCING |          | NOTES |
|------|--------|-------|------|--------------------|----------|-------|
|      |        |       |      | HORIZONTAL         | STIRRUPS |       |
| MB16 | 7 5/8" | 1'-4" | A    | (2) #5             | N/A      |       |
| MB24 | 7 5/8" | 2'-0" | A    | (2) #6 T+B         | N/A      |       |
| MB32 | 7 5/8" | 2'-8" | A    | (2) #5             | N/A      |       |

## NOTES:

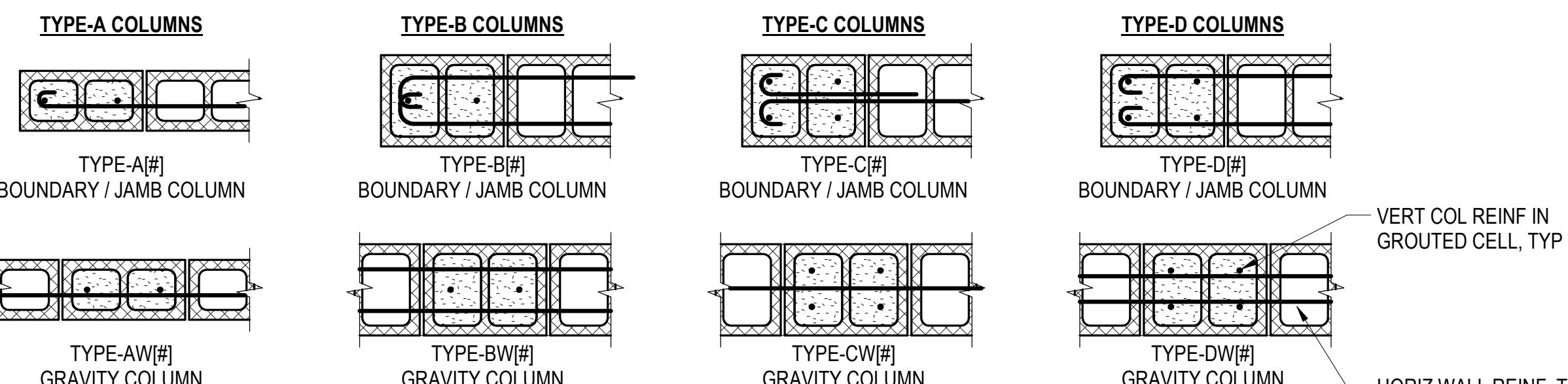
1. LINTELS MUST BE OF THE SAME MATERIAL AND WIDTH AS THE WALL IN WHICH THEY ARE CONSTRUCTED.
2. LINTELS MUST BE GROUTED MONOLITHICALLY WITH THE SUPPORTING WALL AND COLUMNS.
3. GROUT LINTELS SOLID FOR DEPTH SHOWN IN THE SCHEDULE, PLUS AS PER DETAILS, STRUCTURAL NOTES, AND/OR WALL SCHEDULE.
4. EXTEND HORIZONTAL REINFORCING 48 BAR DIAMETERS MIN BEYOND THE EDGE OF ALL OPENINGS. PROVIDE A 90° STANDARD HOOK WHERE THIS CANNOT BE ACCOMPLISHED.
5. NO DUCTS, OPENINGS, OR PENETRATIONS WILL OCCUR THROUGH BEAMS UNO.
6. REINFORCING INDICATED IN LINTEL SCHEDULE IS IN ADDITION TO WALL HORIZ AND VERT REINFORCING.
7. SEE GENERAL STRUCTURAL NOTES FOR ALL OTHER REQUIREMENTS.



MASONRY LINTEL TYPES

## MASONRY JAMB AND COLUMN SCHEDULE

| MARK | SIZE | TYPE | COLUMN REINFORCING |      | NOTES |
|------|------|------|--------------------|------|-------|
|      |      |      | VERTICAL           | TIES |       |
| MP16 | 8x16 | A2   | #5 EA CELL         | N/A  |       |
| MP32 | 8x32 | A4   | #6 EA CELL         | N/A  |       |



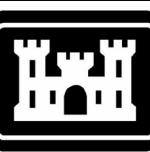
## NOTES:

1. DESIGNATION "TYPE A[#]" WHERE "A" EQUALS THE WALL TYPE IN WHICH THE COLUMN/JAMB OCCURS AND WHERE [#] EQUALS THE NUMBER OF VERTICALLY GROUTED CELLS CONTAINING REINFORCING.
2. HORIZONTAL WALL REINF MUST RUN CONTINUOUS THROUGH MASONRY COLUMNS.
3. GROUT ALL REINFORCED CELLS AND VOIDS SOLID.
4. MASONRY COLUMN REINF MUST EXTEND FULL HEIGHT FROM MARK ON PLAN DOWN TO FOUNDATION AND TERMINATE WITH A STANDARD 90° HOOK. FOR CONC FOUNDATION WALL HEIGHTS OVER 50", VERT MASONRY REINF MUST DOWEL 4" MIN INTO FOUNDATION WALL.
5. NUMBER OF VERT BARS IS TOTAL NUMBER OF BARS.
6. SEE ARCHITECTURAL DRAWINGS FOR SPECIAL COURSING ARRANGEMENTS.
7. ALL TIES MUST TERMINATE WITH A STANDARD MASONRY HOOK.
8. SEE MASONRY REINFORCING SPLICE LENGTH TABLES FOR REINF LAP LENGTHS.
9. SEE GENERAL STRUCTURAL NOTES FOR ALL OTHER REQUIREMENTS.

CREECH AIR FORCE BASE, CLARK COUNTY, NV  
DISASTER RESILIENCY PROGRAM (DRP) - PHASE 2  
494137

STRUCTURAL SCHEDULES

SHEET ID  
S-602PRELIMINARY DESIGN  
NOT FOR CONSTRUCTION

US Army Corps  
of Engineers ®

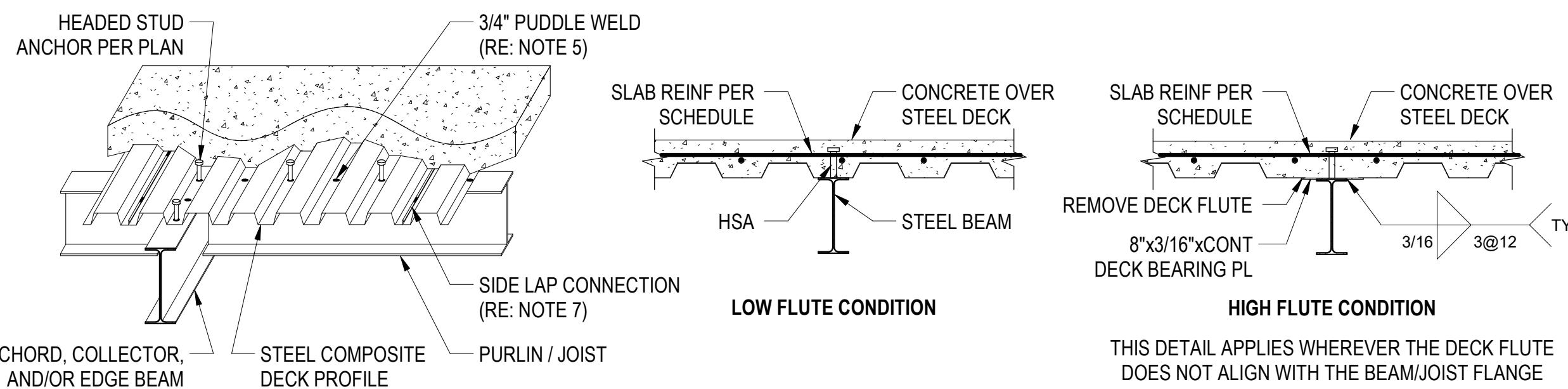
DATE

## STEEL COMPOSITE DECK SCHEDULE

| MARK | STEEL DECK           |       |        | CONCRETE FILL |                    | TOTAL DECK THICKNESS | COMMENTS |
|------|----------------------|-------|--------|---------------|--------------------|----------------------|----------|
|      | PROFILE              | GAUGE | FINISH | WEIGHT        | REINF              |                      |          |
| SD01 | W2 W/ 4 1/2" NW CONC | 20 GA | G60    | 145 PSF NW    | #4 @ 18" OC EA WAY | 6 1/2"               |          |

## NOTES:

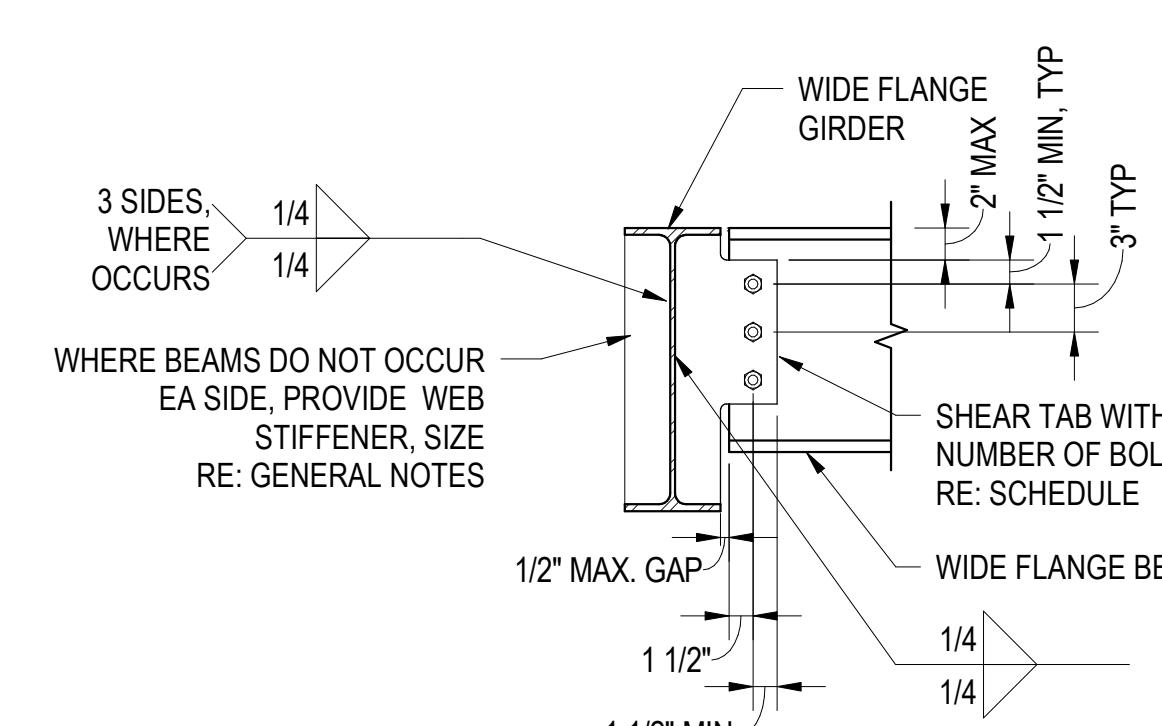
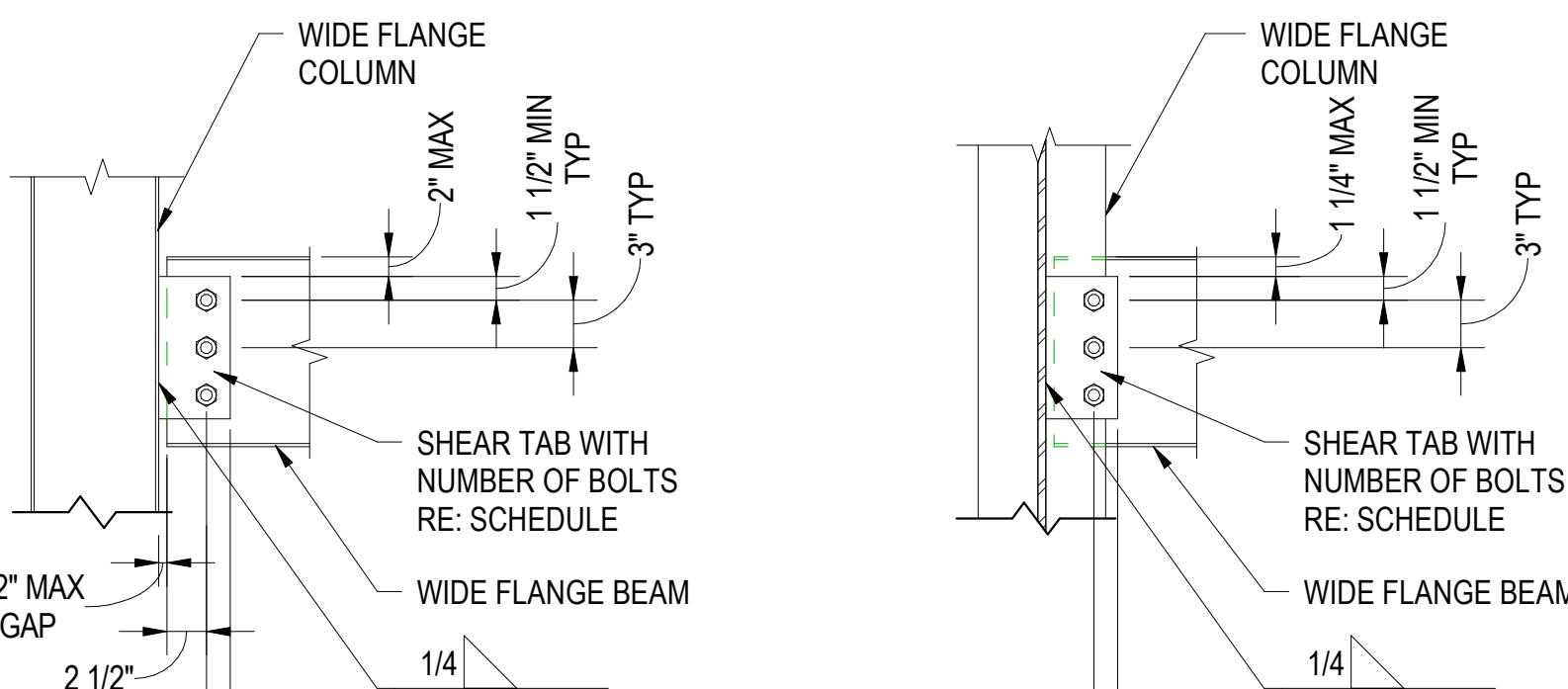
1. STEEL FLOOR DECK MUST COMPLY WITH THE LATEST REQUIREMENTS OF THE STEEL DECK INSTITUTE (SDI).
2. WHEN FIRE PROOFING IS TO BE USED, DECK MUST BE COATED WITH SPECIAL PAINT IN ORDER TO PROPERLY RECEIVE FIRE PROOFING.
3. ALL DECK MUST BE INSTALLED WITH INTERLOCKING SIDE SEAMS, AND MUST BE CRIMPED PRIOR TO CONNECTING.
4. ALL DECK MUST BE 3-SPAN CONTINUOUS MINIMUM. CONTRACTOR MUST CONTACT ENGINEER AND PROVIDE OPTIONS WHEN 3-SPAN IS NOT POSSIBLE.
5. FLOOR DECK MUST BE WELDED TO SUPPORTING FRAME MEMBERS WITH 3/4" DIAMETER PUDDLE WELDS IN A (3/6/4) TYPE WELD PATTERN AND AT 12" OC AT ALL PERIMETERS AND 12" OC AT OTHER SUPPORTS PARALLEL TO CORRUGATIONS.
6. WHEN STUDS WELD THROUGH THE FLOOR DECK TO THE BEAMS BELOW, THEY MAY TAKE THE PLACE OF DESIGNATED PUDDLE WELDS.
7. ATTACH INTERLOCKING SEAMS WITH BUTTON PUNCH AT 18" OC OR 1 1/2" LONG TOP SEAM WELDS AT 24" OC. SIDE SEAMS MUST BE CRIMPED BEFORE WELDING.
8. MINIMUM DECK BEARING MUST BE 2".
9. ICC REPORT MUST BE SUBMITTED TO SHOW A MINIMUM ALLOWABLE DIAPHRAGM SHEAR VALUE OF XXXX LBS/FT FOR A 8'-0" DECK SPAN.
10. ALL DECK DESIGNATED AS G60 OR G90 IS GALVANIZED DECK.
11. CONCRETE SLAB ON STEEL FLOOR DECK MUST BE REINFORCED AS INDICATED IN THE SCHEDULE. REINFORCING IS TO BE PLACED 1 1/2" BELOW THE TOP OF THE SLAB.
12. GENERAL CONTRACTOR TO FOLLOW MANUFACTURER GUIDELINES FOR ALL DECK, CONNECTION, ATTACHMENTS, ETC.
13. FOR FINAL FINISH SEE ARCHITECT DRAWINGS AND SPECIFICATIONS.
14. RE: PLAN FOR NUMBER AND SIZE OF STUDS REQUIRED AT EACH BEAM. MAXIMUM STUD SPACING AT 12" OC.



STEEL COMPOSITE DECK FASTENING PATTERN TO SUPPORT

TYPICAL COMPOSITE STEEL DECK CONNECTION

| TYPICAL STEEL-TO-STEEL CONNECTION SCHEDULE |                 |
|--|-----------------|
| BEAM SIZE                                  | NUMBER OF BOLTS |
| W8   | (2) 3/4" DIA    |
| W10  | (2) 3/4" DIA    |
| W12  | (3) 3/4" DIA    |
| W14  | (3) 3/4" DIA    |
| W16  | (4) 3/4" DIA    |
| W18  | (5) 3/4" DIA    |
| W21  | (5) 3/4" DIA    |
| W24  | (6) 7/8" DIA    |
| W27  | (7) 7/8" DIA    |
| W30  | (8) 7/8" DIA    |
| W33  | (9) 7/8" DIA    |
| W36  | (10) 7/8" DIA   |
| W40  | (11) 7/8" DIA   |
| W44  | (12) 7/8" DIA   |



NOTES:

1. BEAM TOP OF STEEL AS SHOWN ON PLAN.
2. SEE PLANS FOR BEAM AND/OR COLUMN SIZES.
3. AT BRACED FRAMES, SEE BRACED FRAME ELEVATIONS/DETAILS FOR ALL STEEL SIZES AND CONNECTIONS.
4. ALL BOLTS SHALL BE A325-N UNLESS NOTED OTHERWISE.
5. ALL SHEAR TABS SHALL BE 3/8" UNLESS NOTED OTHERWISE.
6. DECK NOT SHOWN, SEE PLANS FOR FLOOR AND/OR ROOF STRUCTURE.
7. PROVIDE STANDARD OR HORIZONTAL SHORT SLOTTED HOLES IN SHEAR TAB.
8. FOR SHEAR TABS WELDED TO WIDE FLANGE OR HSS COLUMNS WITH 3/16" WALLS, USE 5/16" SHEAR PLATES.
9. FOR CONNECTIONS DESIGNATED AS DOUBLE-ANGLE CONNECTIONS, USE L5x3 ANGLES ON EACH SIDE OF THE BEAM INSTEAD OF A SHEAR PLATE. FOLLOW THE ANGLE SIZE AND SUPPORTING CONNECTION DETAILS SHOWN ON THE STEEL EMBED SCHEDULE. AT CONTRACTOR'S OPTION, DOUBLE-ANGLE CONNECTIONS CAN BE ALL BOLTED IN LIEU OF WELDING ANGLES TO SUPPORTING MEMBERS AS SHOWN ON THE EMBED SCHEDULE. IF ALL BOLTED, USE THE SAME NUMBER OF 3/4" BOLTS AND SPACING AS SHOWN ON THE SHEAR TABS OF THE STEEL CONNECTION SCHEDULE.

BEAMS MARKED WITH SEISMIC DRAG STRUT CONNECTION ARE CONNECTED SIMILAR TO THOSE SHOWN ABOVE BUT THE SHEAR TAB OR ANGLE SHALL BE WELDED TO THE BEAM WEB WITH A 3-SIDED 1/4" FILLET WELD.

## STEEL DECK SCHEDULE

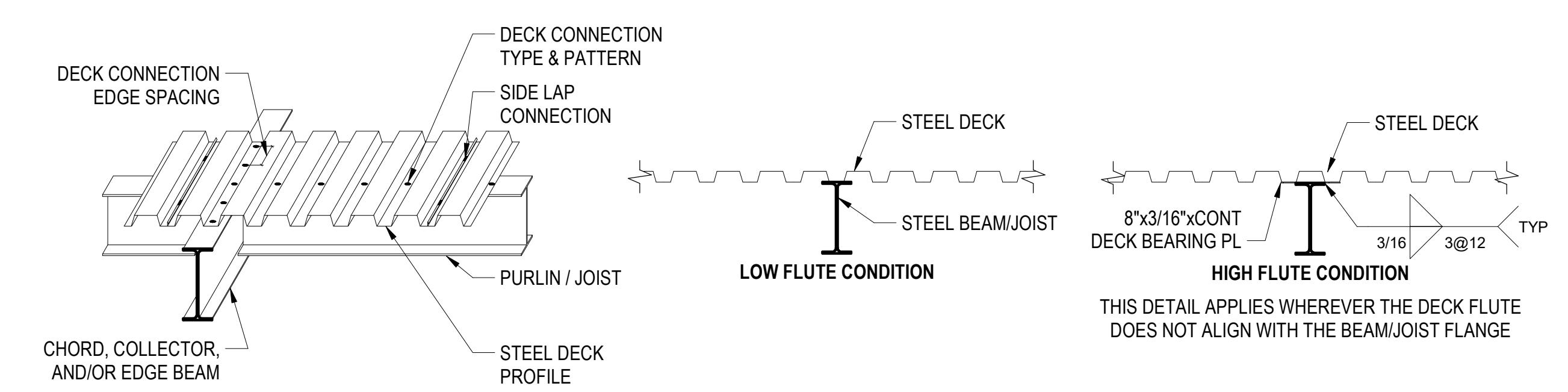
| MARK | STEEL DECK    |       |        | DECK CONNECTION   |         |              | SIDE LAP CONNECTION | DECK PERFORMANCE |
|------|---------------|-------|--------|-------------------|---------|--------------|---------------------|------------------|
|      | PROFILE       | GAUGE | FINISH | TYPE              | PATTERN | EDGE SPACING |                     |                  |
| SD1  | 1 1/2" PLB-36 | 20    | G60    | HILTI X-HSN24 PAF | 36/7    | 6" OC        | VSC2                | 8" OC            |

## NOTES:

1. STEEL ROOF DECK MUST COMPLY WITH THE LATEST REQUIREMENTS OF THE STEEL DECK INSTITUTE (SDI).
2. WHEN FIRE PROOFING IS TO BE USED, DECK MUST BE COATED WITH SPECIAL PAINT IN ORDER TO PROPERLY RECEIVE FIRE PROOFING.
3. ALL DECK MUST BE INSTALLED WITH INTERLOCKING SIDE SEAMS, AND MUST BE CRIMPED PRIOR TO CONNECTING.
4. MINIMUM SHEAR DENOTED IN SCHEDULE REPRESENTS THE MINIMUM ALLOWABLE DECK SHEAR FOR A 6'-0" SPAN REQUIRED FOR APPLICATION IN THIS PROJECT.
5. ALL DECK MUST BE 3-SPAN CONTINUOUS MINIMUM. CONTRACTOR MUST CONTACT ENGINEER AND PROVIDE OPTIONS WHEN 3-SPAN IS NOT POSSIBLE.
6. MINIMUM DECK BEARING MUST BE 2".
7. DO NOT SUPPORT ANY HANGING LOADS FROM STEEL ROOF DECK.
8. ALL DECK DESIGNATED AS G60 OR G90 IS GALVANIZED DECK.
9. GENERAL CONTRACTOR TO FOLLOW MANUFACTURER GUIDELINES FOR ALL DECK, CONNECTION, ATTACHMENTS, ETC.
10. FOR FINAL FINISH SEE ARCHITECT DRAWINGS AND SPECIFICATIONS.

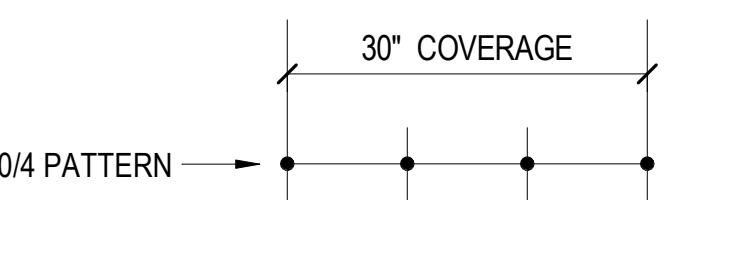
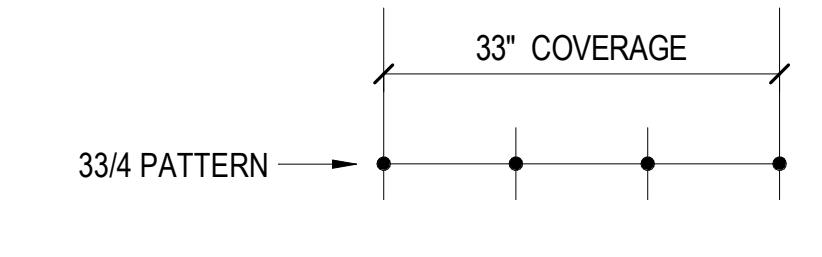
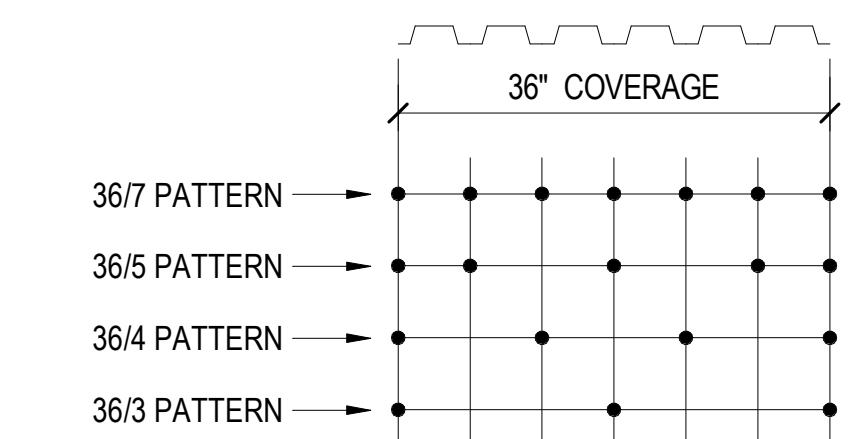
## LEGEND:

ASW = 3/4" ARC SPOT WELD (PUDDLE WELD)  
 BTN = BUTTON PUNCH (3/16")  
 PIN = PIN CONNECTIONS (POWDER ACTUATED FASTENER)  
 SCR = #10 SCREW  
 TBD = DECK CONNECTION AND SIDELAP SPACING TO BE DETERMINED BY CONTRACTOR TO MEET THE MINIMUM ALLOWABLE SHEAR AND FLEXIBILITY REQUIREMENTS LISTED IN SCHEDULE. CONTRACTOR TO SUBMIT ICC REPORT.  
 TSW = TOP SEAM WELD (1 1/2" IN LENGTH MINIMUM)  
 VSC2 = VERO PUNCHLOCK II SYSTEM  
 VST = VERO SHEARTRANZ II-42 SYSTEM

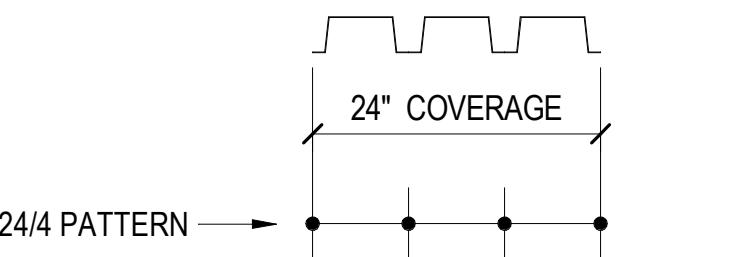
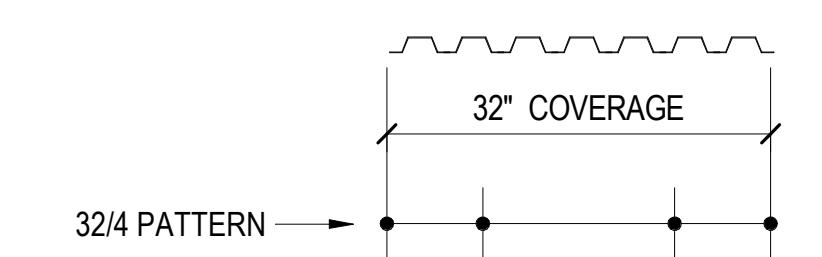
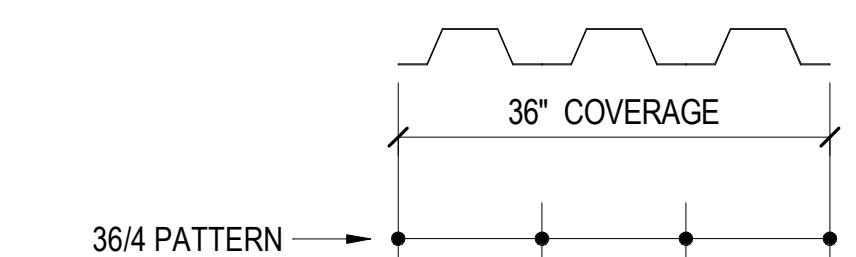


STEEL DECK FASTENING PATTERN TO SUPPORT

CHORD / COLLECTOR DECK CONNECTION



FASTENING PATTERNS FOR 1.5 (B,F,A,VL) DECK



FASTENING PATTERN FOR 2VLI AND 3VLI DECK

FASTENING PATTERN FOR 1.3C DECK

FASTENING PATTERN FOR 3N DECK

|               |             |                   |                   |
|---------------|-------------|-------------------|-------------------|
| DESIGNED BY:  | J. CORSON   | ISSUE DATE:       | NOVEMBER 13, 2025 |
| DRAWN BY:     | R. CARLSON  | SOLICITATION NO.: | W912PL25-R-0012   |
| CHECKED BY:   | D. CLAYSON  | CONTRACT NO.:     | W912PL25-C-0037   |
| SUBMITTED BY: | P. PASZCZUK | SIZE:             | ANSI D            |

|                             |                      |
|-----------------------------|----------------------|
| US ARMY CORPS OF ENGINEERS  | LOS ANGELES DISTRICT |
| 5700 OAKLAND AVE, SUITE 275 | ST. LOUIS, MO 63110  |

|   |   |
|---|---|
| CREECH AIR FORCE BASE, CLARK COUNTY, NV | DISASTER RESILIENCY PROGRAM (DRP) - PHASE 2 |
| 49137                                   |   |

STRUCTURAL SCHEDULES

|          |  |
|----------|--|
| SHEET ID |  |
|----------|--|

DP-1 95% SUBMISSION

S-603

