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 SPLICE LENGTH	SP	SPACE(S) OR SPACING
CONN	CONNECTION	Lsc	LAP SPLICE 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	THICK(NESS)
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		
EQ	EQUAL	NTS	NOT TO SCALE	@	AT / AT EACH
EQUIP	EQUIPMENT	NWT	NORMAL WEIGHT	( )°	DEGREE
EST	ESTIMATED	O/F	OUTSIDE FACE	⌀	DIAMETER
EW	EACH WAY	OC	ON CENTER	#	NUMBER
EXCL	EXCLUDE(ING)	OD	OUTSIDE DIAMETER		
(E)	EXISTING	OPNG	OPENING	o FD	FLOOR DRAIN
EXP	EXPANSION	OPP	OPPOSITE		
EXT	EXTERIOR	OH	OPPOSITE HAND	o RD	ROOF DRAIN
F/	FACE OF	OVH	OVERHEAD		
F/F	FACE TO FACE	OWJ	OPEN WEB STEEL JOIST		

DRAWING LEGEND

GENERAL ANNOTATIONS

FS# CONC SPREAD FTG TAG
FC# CONC CONTINUOUS FTG TAG
XC# COLUMN TAG
XW# WALL TAG
XB# BEAM TAG
XP# PIER TAG

'X' = MATERIAL
C = CONCRETE
M = MASONRY
S = STEEL
W = WOOD
# = NUMERICAL DESIGNATION

REF XX' - YY" — ELEVATION CALLOUT (SECTION / DETAILS)
REF XX' - YY" — ELEVATION CALLOUT (PLAN)
REF = T/OBJECT OR B/OBJECT
XX' - YY" = OBJECT ELEVATION FROM DATUM

CHANGE IN TOP OF ELEV
SLOPE — SLOPE DESIGNATION (SEE ARCH FOR ACTUAL SLOPES)
START OF SLOPE WHERE SHOWN
PLAN REFERENCE
TYPICAL (TYP) OR SIMILAR (SIM) DETAIL
SHEET REFERENCE
DETAIL, SECTION OR ELEVATION REFERENCE
TYPICAL (TYP) OR SIMILAR (SIM) DETAIL
SHEET REFERENCE

GREY TONE DESIGNATES EXISTING CONSTRUCTION
BLACK TONE DESIGNATES NEW CONSTRUCTION
UNLESS NOTED OTHERWISE
NEW CONST
EXIST CONST

CONCRETE CONSTRUCTION

CONC SPREAD FOOTING
CONC CONTINUOUS FOOTING
CONC WALL
FOUNDATION PEDESTAL
CONC COLUMN
CONC COLUMN BELOW
CONC PIER
CONC BEAM
CONC BEAM/WALL BELOW
CONC LINTEL — OPENING BELOW

NOTE: AT FLOOR OR ROOF FRAMING PLANS, OPENINGS SHOWN ARE IN WALL BELOW

REINFORCED CAST-IN-PLACE CONCRETE SUSPENDED SLAB
CS # (1 WAY)
CS # (2 WAY)
CONCRETE SLAB ON GRADE
SOG #

MASONRY CONSTRUCTION

MASONRY WALL
MASONRY COLUMN
MASONRY PIER
MASONRY LINTEL — OPENING BELOW

NOTE: AT FLOOR OR ROOF FRAMING PLANS, OPENINGS SHOWN ARE IN WALL BELOW

STEEL CONSTRUCTION

STEEL COLUMN (W SHAPES)
STEEL COLUMN (HSS)
STEEL COLUMN (HSS ROUND)
STEEL BEAM / GIRDER
STEEL GIRDER TRUSS
STEEL JOIST
STEEL TRUSS JOIST
DRAG STRUT CONNECTION
FULLY RESTRAINED MOMENT CONNECTION
PARTIALLY RESTRANED MOMENT CONNECTION
BF — BRACED FRAME (RE: STRUCTURAL ELEVATIONS)
SPLICE CONNECTION
BEAM SIZE (X) C=Y" — Z — Z
BEAM SIZE = BEAM DESIGNATION
X = # OF HEADED STUDS (SPACED UNIFORMLY)
Y = BEAM CAMBER (CROWN UPWARD @ MIDSPAN)
Z = SPECIAL REACTIONS (kips) OR OTHER NOTES
STEEL ROOF DECK
CONCRETE SLAB ON STEEL DECK

MATERIALS

CONCRETE
CMU
UNDISTURBED SOIL
ENGINEERED OR COMPACTED FILL
GRAVEL OR POROUS FILL
STEEL
ALUMINUM
SAND
BRICK
BAR GRATING
SPECIAL DECK OR FLOOR AREA (SEE PLAN NOTES)
CONTINUOUS WOOD FRAMING
WOOD BLOCKING OR SHIM

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
1. NOT TO EXCEED THE DESIGN LIVE LOADS.

DC-3 LATERAL LOADS
A. RISK CATEGORY III
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 Ω_O = 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) 120 PCI
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:
B. AT FACILITY CRITERIA
1. STANDARD 1: BUILDING STANDOFF DISTANCE > 50 FT TO PERIMETER
2. STANDARD 2: UNOBSTRUCTED SPACE 33 FT
3. STANDARD 5: PARKING BENEATH BUILDINGS OR ON ROOFTOPS N/A
4. STANDARD 6: PROGRESSIVE COLLAPSE N/A
5. STANDARD 7: STRUCTURAL ISOLATION N/A
6. STANDARD 8: BUILDING OVERHANGS AND BREEZEWAYS N/A
7. STANDARD 9: EXTERIOR MASONRY WALLS #5@32" OC MAX VERTICAL REINF
8. STANDARD 15: OVERHEAD MOUNTED ARCH FEATURES RE: DELEGATED DESIGN
9. STANDARD 19: EQUIPMENT BRACING RE: DELEGATED DESIGN

PRELIMINARY DESIGN — NOT FOR CONSTRUCTION

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: Designer
DRAWN BY: Author
CHECKED BY: Checker
SUBMITTED BY:
ISSUE DATE: JULY 17, 2025
SOLICITATION NO.:
CONTRACT NO.:
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

STRUCTURAL DESIGN CRITERIA, LEGEND, AND ABBREVIATIONS

SHEET ID
S-001

FOR REVIEW

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 SOLEY 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 WTIHOUT 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 MANGEMENT 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 COMPACTED SELECT FILL AND A 6" LAYER OF SCARIFIED RE-COMPACTED 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 COMPACTION 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 FOUNDATONS 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'c) AS INDICATED ON THE CONCRETE MIX DESIGN TABLE.

C-4 THE STRUCTURE SUPPORTING ELEVATED FLOORS IS DESIGNED TO HAVE AN INITIAL (PRE-COMPOSITE) DEFLECTION OF NOT MORE THAN ¾" 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 A 706.
- 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 UNESS NOTED OTHERWISE. BOND BEAM REINFORCING AT THE TOPS AND BOTTOMS OF WALLS IS TO BE CONTINOUS 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, MIMINUM.
  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 EMBEDMENT, 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 HINSTALLED 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.

PRELIMINARY DESIGN NOT FOR CONSTRUCTION

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: Designer
DRAWN BY: Author
CHECKED BY: Checker
SUBMITTED BY:
ISSUE DATE: JULY 17, 2025
SOLICITATION NO.:
CONTRACT NO.:
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

GENERAL STRUCTURAL NOTES

SHEET ID
S-002

FOR REVIEW

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/CRSI 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 ¼-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"x3/16") WITH GALVANIZED FINISH.
- B. ALUMINUM FOR GRATING TO CONFORM TO ASTM B 221. 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.

PRELIMINARY DESIGN NOT FOR CONSTRUCTION

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

ISSUE DATE: JULY 17, 2025
SOLICITATION NO.:
CONTRACT NO.:

DESIGNED BY: Designer
DRAWN BY: Author
CHECKED BY: Checker
SUBMITTED BY:
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LOS ANGELES DISTRICT

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

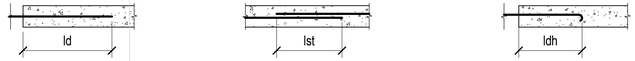
CREECH AIR FORCE BASE, CLARK COUNTY, NV
DISASTER RESILIENCY PROGRAM (DRP) - PHASE 2
494137

GENERAL STRUCTURAL NOTES

SHEET ID
S-003

FOR REVIEW

CONCRETE REINFORCING DEVELOPMENT AND LAP SPLICE TABLE



DEVELOPMENT LENGTH | LAP SPLICE LENGTH | HOOK DEVELOPMENT LENGTH

f'c = 4500 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
lst (TOP BARS)	24	32	39	46	67	77	86	97	107
lst (OTHER BARS)	18	24	30	35	51	59	66	74	82
ldh	12	12	12	14	17	19	21	24	27

f'c = 5000 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
lst (TOP BARS)	23	30	37	45	64	73	82	93	102
lst (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 LAPS PER ACI 318, UNLESS NOTED OTHERWISE. lst VALUES ABOVE TO BE DIVIDED BY 1.3 FOR CLASS 'A' SPLICE.
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 PSI
GROUT FOR CONCRETE MASONRY	f'g ≥ f'm (2000 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 HAVEMINIMUM LENGTHS AS DEFINED ABOVE UNLESS NOTE OTHERWISE
3. TABULATED VAULES ARE CALCUATED 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 REINFORCMENT WITH A YEILD STRENGTH, Fy =60 KSI
7. TABULATED VALUES BASED ON MASONRY COMPRESSIVE STRENGTH, f'm =2000 PSI

PRELIMINARY DESIGN
NOT FOR CONSTRUCTION

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

ISSUE DATE: JULY 17, 2025
SOLICITATION NO.:
CONTRACT NO.:

DESIGNED BY: Designer
DRAWN BY: Author
CHECKED BY: Checker
SUBMITTED BY:
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LOS ANGELES DISTRICT

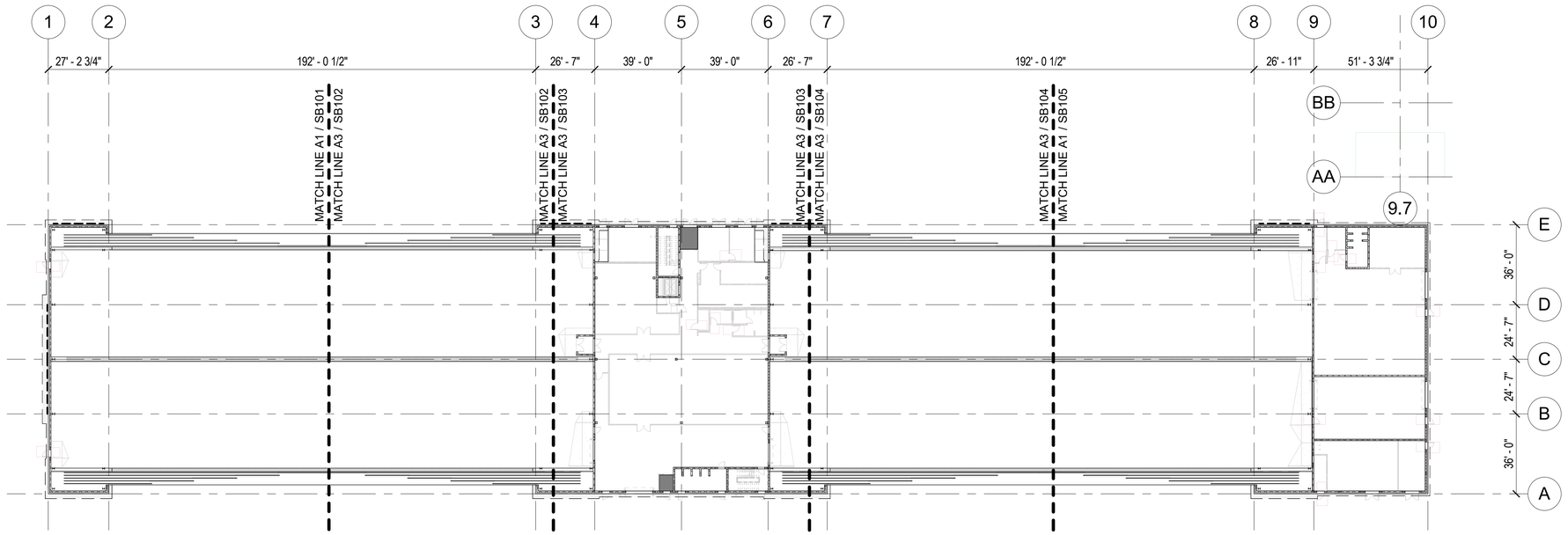
KORTE CONSTRUCTION
5700 OAKLAND AVE, SUITE 275
ST. LOUIS, MO 63110

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

GENERAL STRUCTURAL NOTES

SHEET ID
S-004

FOR REVIEW



D1 OVERALL FOUNDATION PLAN
SCALE: 1" = 30'-0"

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

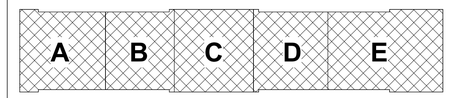
PLAN NORTH

GENERAL NOTES

KEYNOTES

LEGEND

KEY PLAN



PRELIMINARY DESIGN
NOT FOR CONSTRUCTION

FOR REVIEW

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: Designer
DRAWN BY: Author
CHECKED BY: Checker
SUBMITTED BY:
SIZE: ANSI D

ISSUE DATE: JULY 17, 2025
SOLICITATION NO.:
CONTRACT NO.:

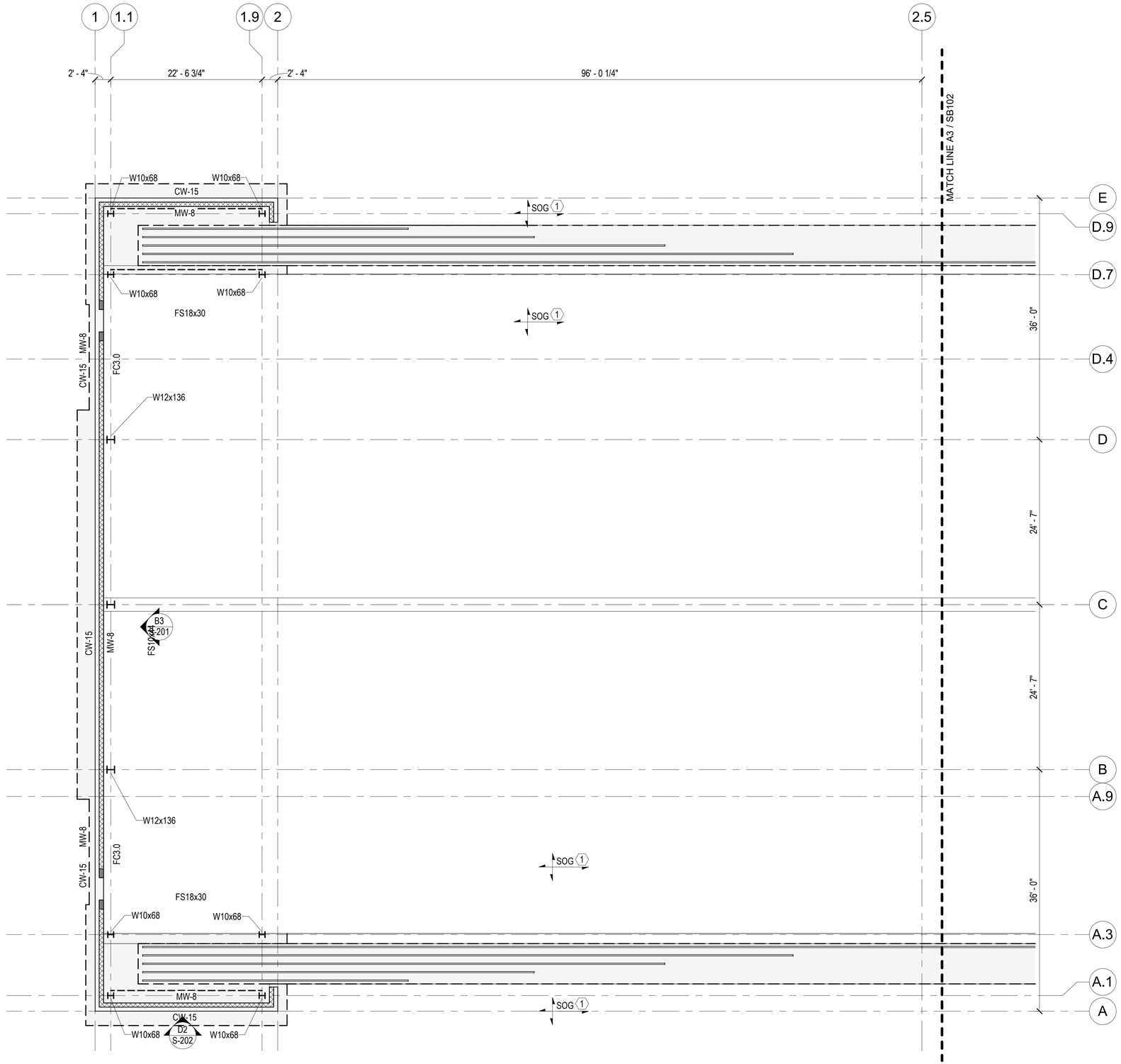
US ARMY CORPS OF ENGINEERS
LOS ANGELES DISTRICT

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

OVERALL FOUNDATION PLAN

SHEET ID
SB100



A1 FOUNDATION PLAN - AREA A

SCALE: 1/8" = 1'-0"

PLAN NORTH

1/8" = 1' - 0" 0 5' 10' 15' 30'

GENERAL NOTES

KEYNOTES

LEGEND

KEY PLAN

A | B | C | D | E

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

ISSUE DATE: JULY 17, 2025
SOLICITATION NO.:
CONTRACT NO.:

DESIGNED BY: Designer
DRAWN BY: Author
CHECKED BY: Checker
SUBMITTED BY:
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

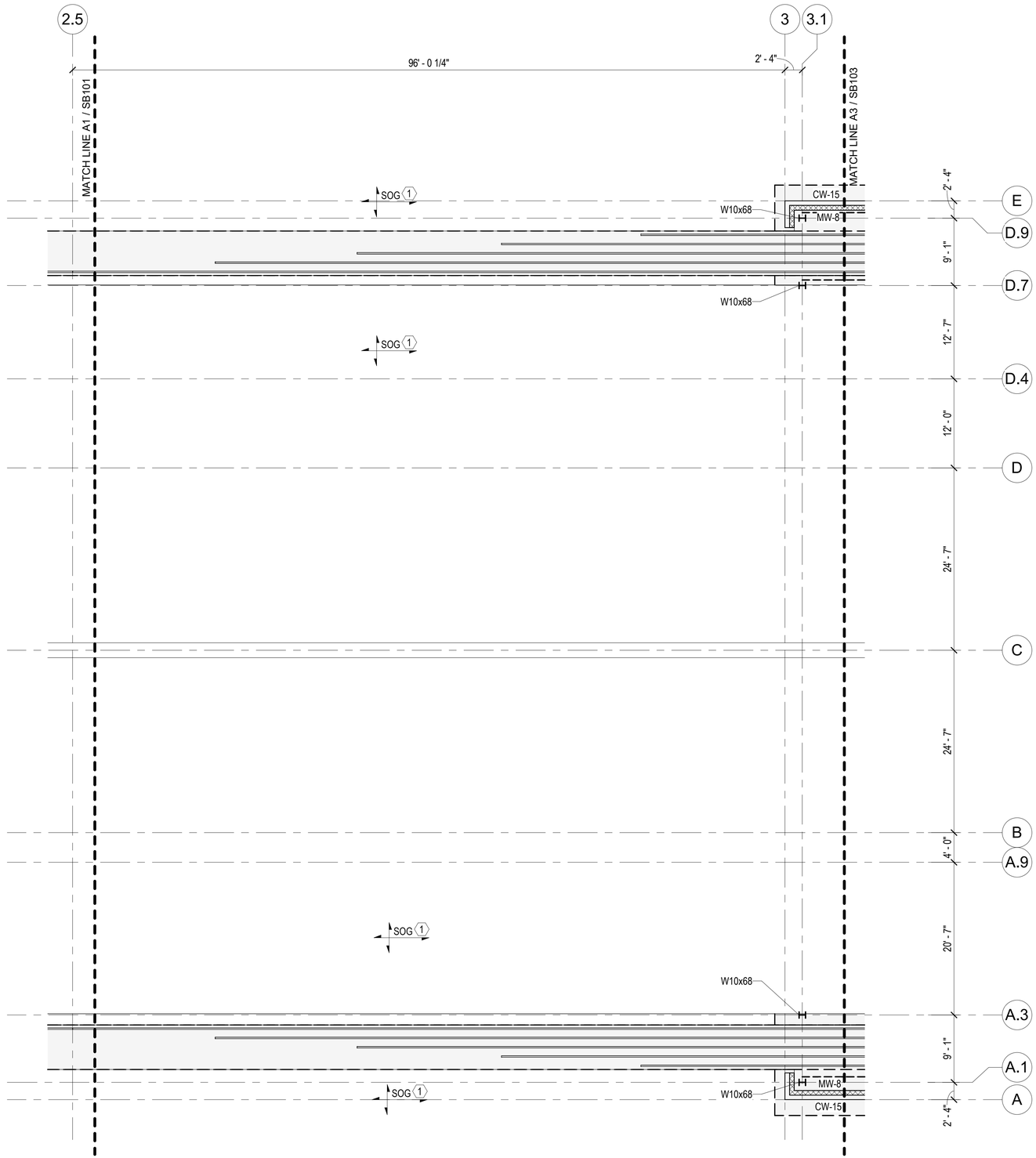
FOUNDATION PLAN - AREA A

PRELIMINARY DESIGN
NOT FOR CONSTRUCTION

SHEET ID

SB101

FOR REVIEW



A3 FOUNDATION PLAN - AREA B
SCALE: 1/8" = 1'-0"

PLAN NORTH

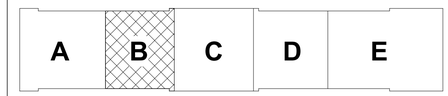
1/8" = 1' - 0" 0 5' 10' 15' 30'

GENERAL NOTES

KEYNOTES

LEGEND

KEY PLAN



US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

ISSUE DATE: JULY 17, 2025
SOLICITATION NO.:
CONTRACT NO.:

DESIGNED BY: Designer
DRAWN BY: Author
CHECKED BY: Checker
SUBMITTED BY:
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LOS ANGELES DISTRICT

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

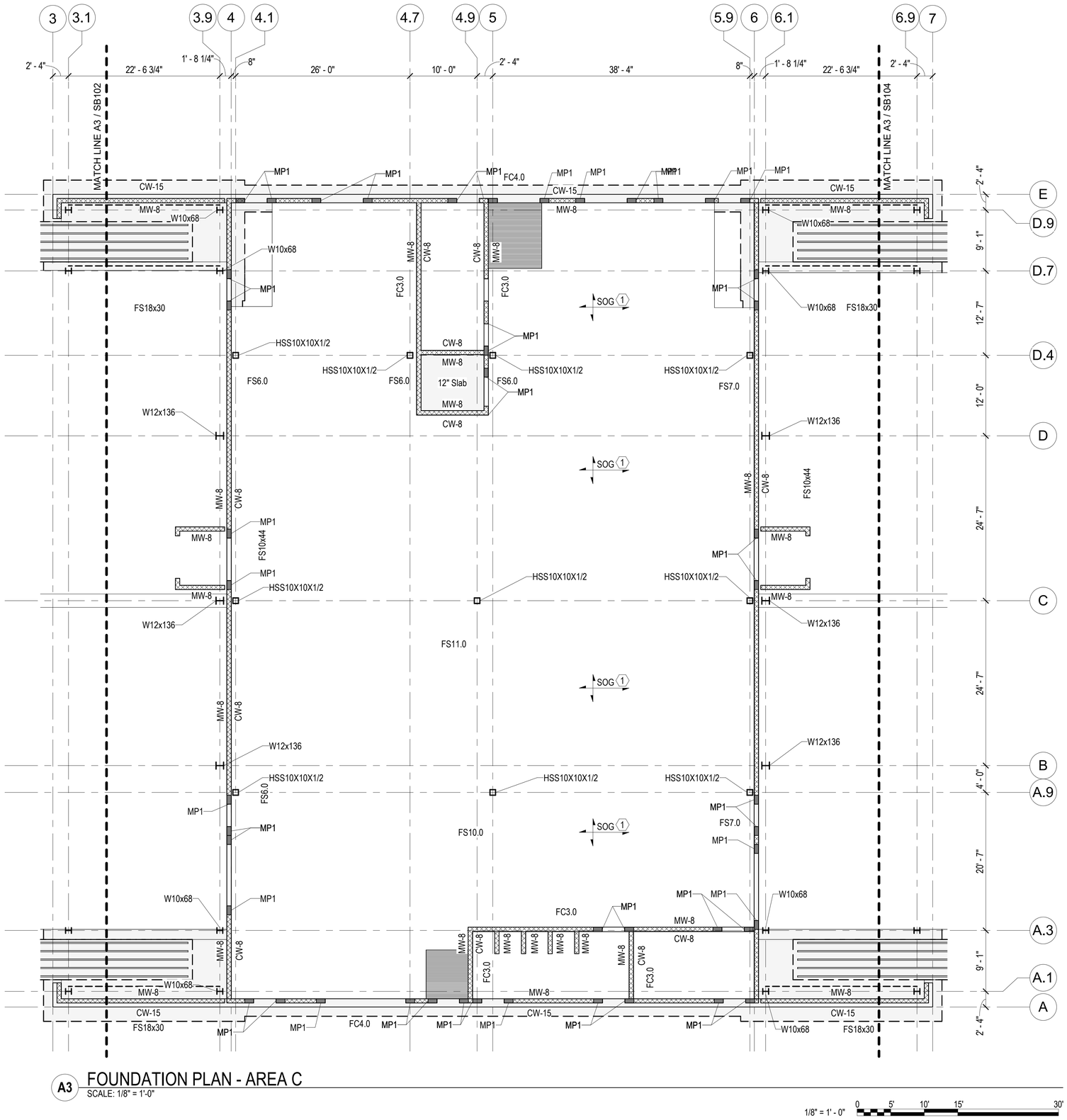
CREECH AIR FORCE BASE, CLARK COUNTY, NV
DISASTER RESILIENCY PROGRAM (DRP) - PHASE 2
494137

FOUNDATION PLAN - AREA B

PRELIMINARY DESIGN
NOT FOR CONSTRUCTION

SHEET ID
SB102

FOR REVIEW



A3 FOUNDATION PLAN - AREA C
SCALE: 1/8" = 1'-0"

PLAN NORTH

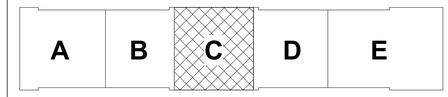
1/8" = 1' - 0" 0 5' 10' 15' 30'

GENERAL NOTES

KEYNOTES

LEGEND

KEY PLAN



US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: Designer
DRAWN BY: Author
CHECKED BY: Checker
SUBMITTED BY:
SIZE: ANSI D

ISSUE DATE: JULY 17, 2025
SOLICITATION NO.:
CONTRACT NO.:

US ARMY CORPS OF ENGINEERS
LOS ANGELES DISTRICT

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

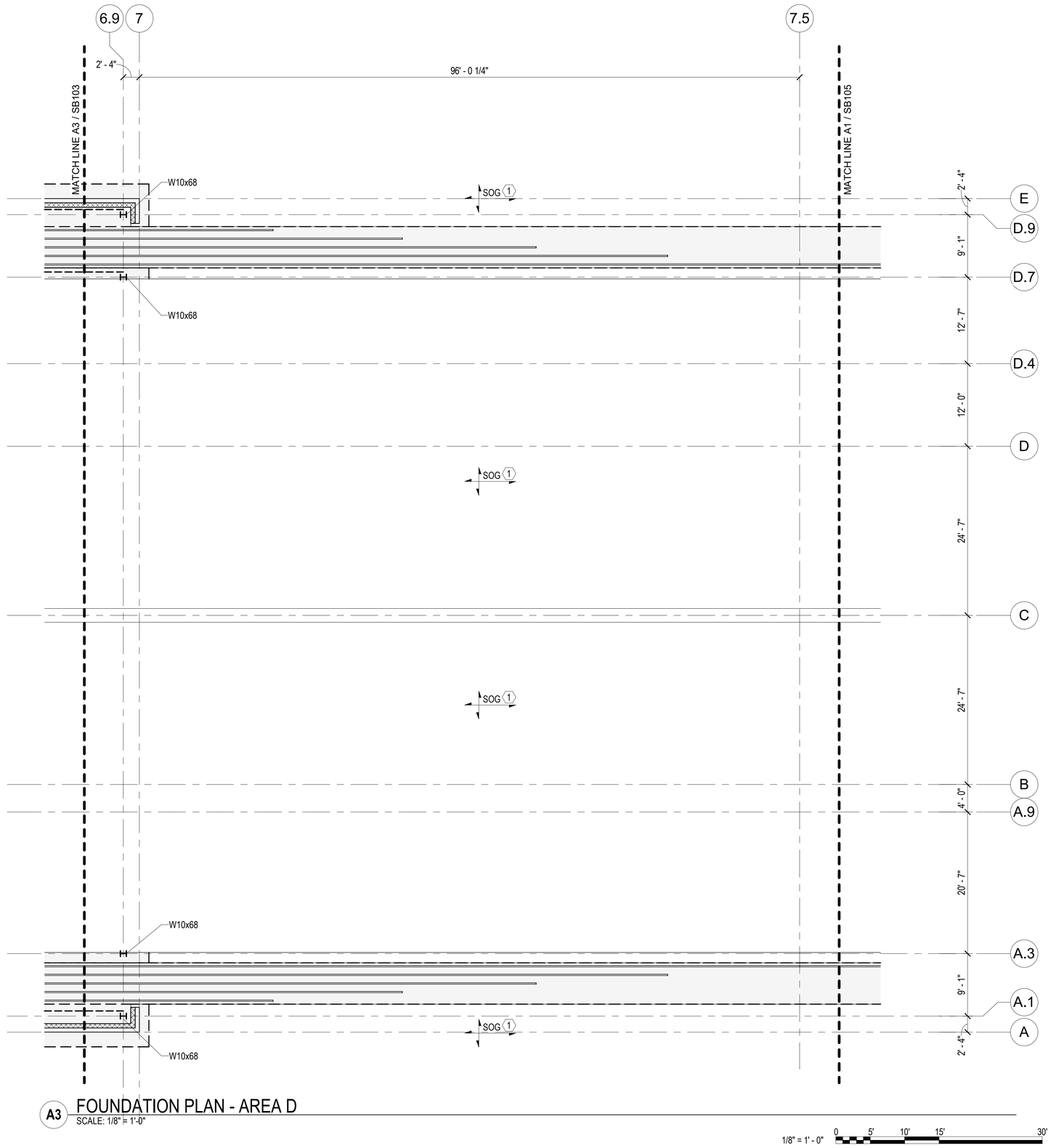
CREECH AIR FORCE BASE, CLARK COUNTY, NV
DISASTER RESILIENCY PROGRAM (DRP) - PHASE 2
494137

FOUNDATION PLAN - AREA C

PRELIMINARY DESIGN
NOT FOR CONSTRUCTION

SHEET ID
SB103

FOR REVIEW



A3 FOUNDATION PLAN - AREA D
SCALE: 1/8" = 1'-0"

1/8" = 1' - 0" 0 5' 10' 15' 30'

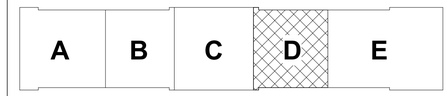
PLAN NORTH

GENERAL NOTES

KEYNOTES

LEGEND

KEY PLAN



PRELIMINARY DESIGN
NOT FOR CONSTRUCTION

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

ISSUE DATE: JULY 17, 2025
SOLICITATION NO.:
CONTRACT NO.:

DESIGNED BY: Designer
DRAWN BY: Author
CHECKED BY: Checker
SUBMITTED BY:
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

FOUNDATION PLAN - AREA D

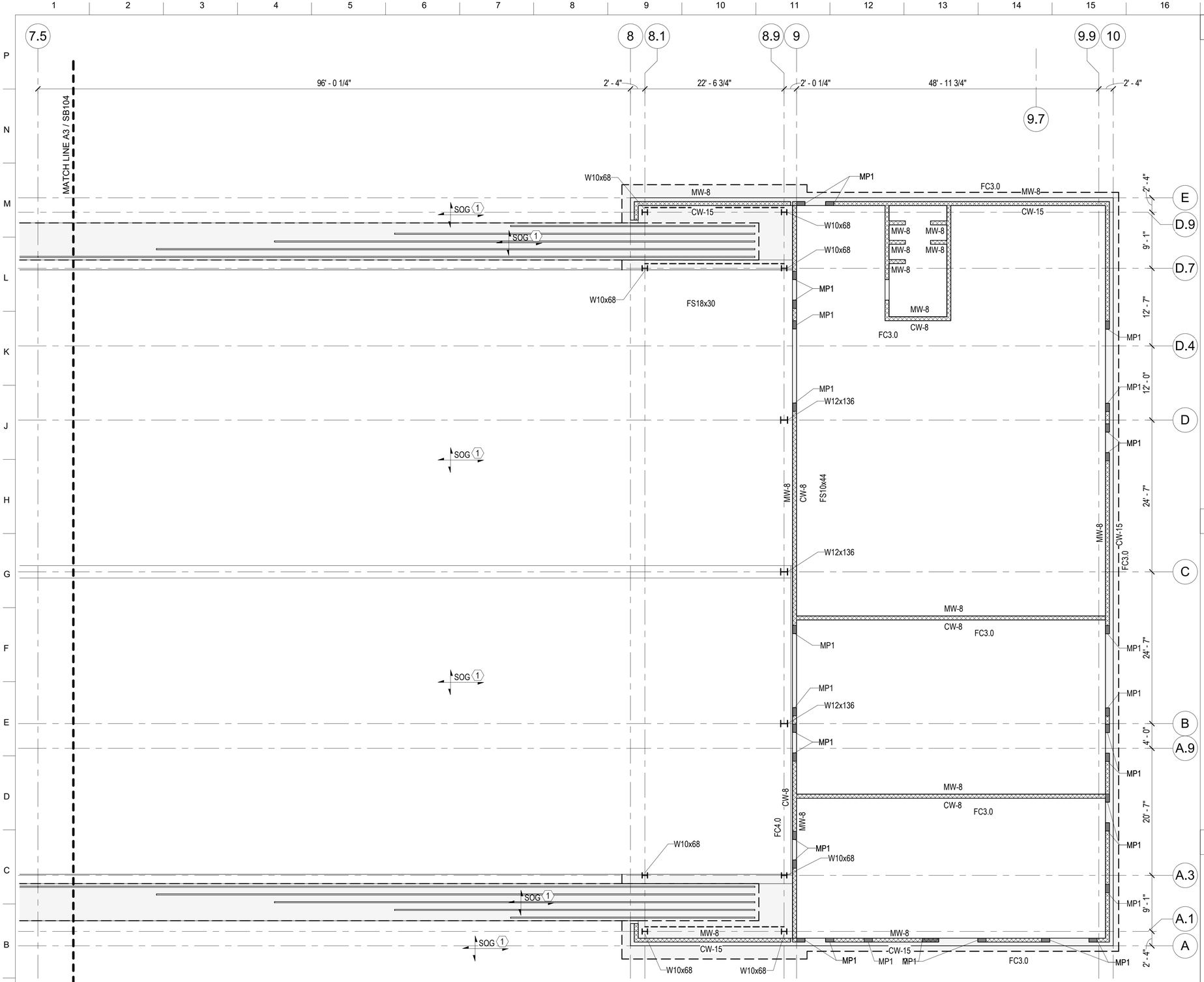
SHEET ID

SB104

FOR REVIEW

A1 FOUNDATION PLAN - AREA E

SCALE: 1/8" = 1'-0"



PLAN NORTH

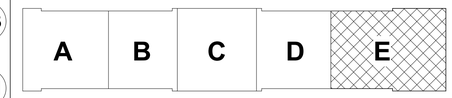
1/8" = 1' - 0"

0 5' 10' 15' 30'

GENERAL NOTES

LEGEND

KEY PLAN



US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

ISSUE DATE: JULY 17, 2025
SOLICITATION NO.:
CONTRACT NO.:

DESIGNED BY: Designer
DRAWN BY: Author
CHECKED BY: Checker
SUBMITTED BY:
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

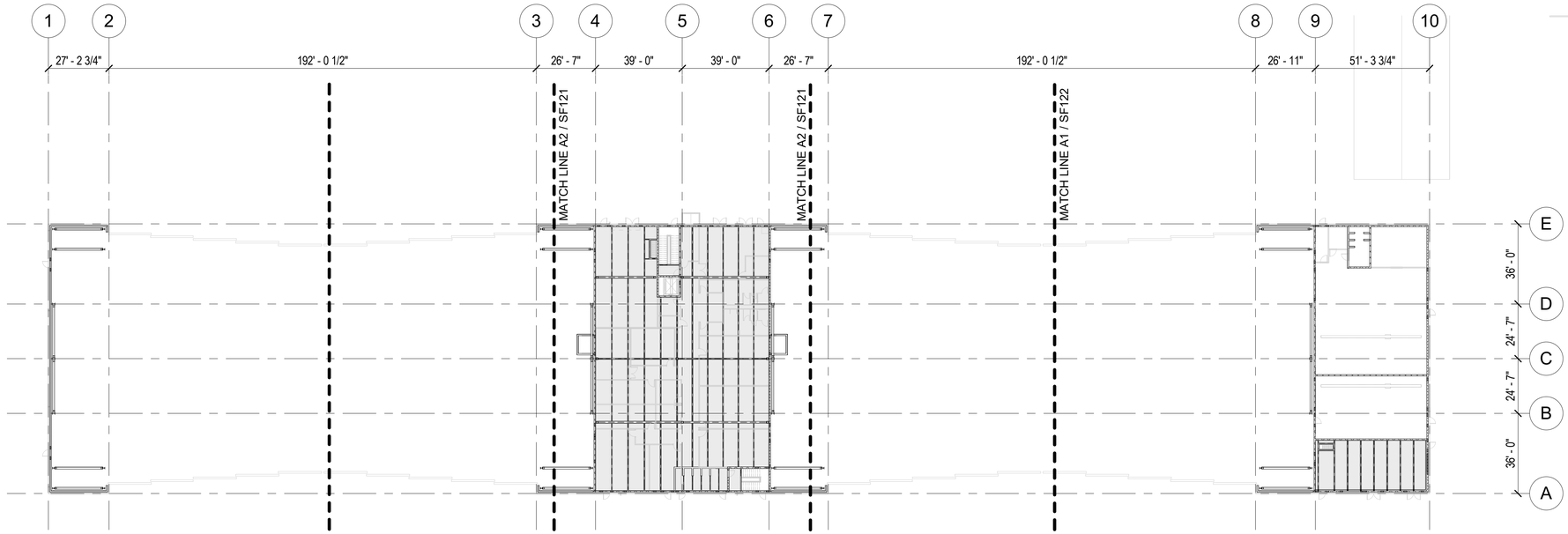
FOUNDATION PLAN - AREA E

PRELIMINARY DESIGN
NOT FOR CONSTRUCTION

SHEET ID

SB105

FOR REVIEW



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

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

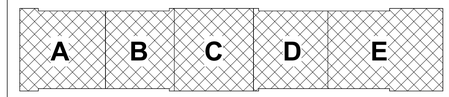
PLAN NORTH

GENERAL NOTES

KEYNOTES

LEGEND

KEY PLAN



PRELIMINARY DESIGN
NOT FOR CONSTRUCTION

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

ISSUE DATE: JULY 17, 2025
SOLICITATION NO.:
CONTRACT NO.:

DESIGNED BY: Designer
DRAWN BY: Author
CHECKED BY: Checker
SUBMITTED BY:
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LOS ANGELES DISTRICT

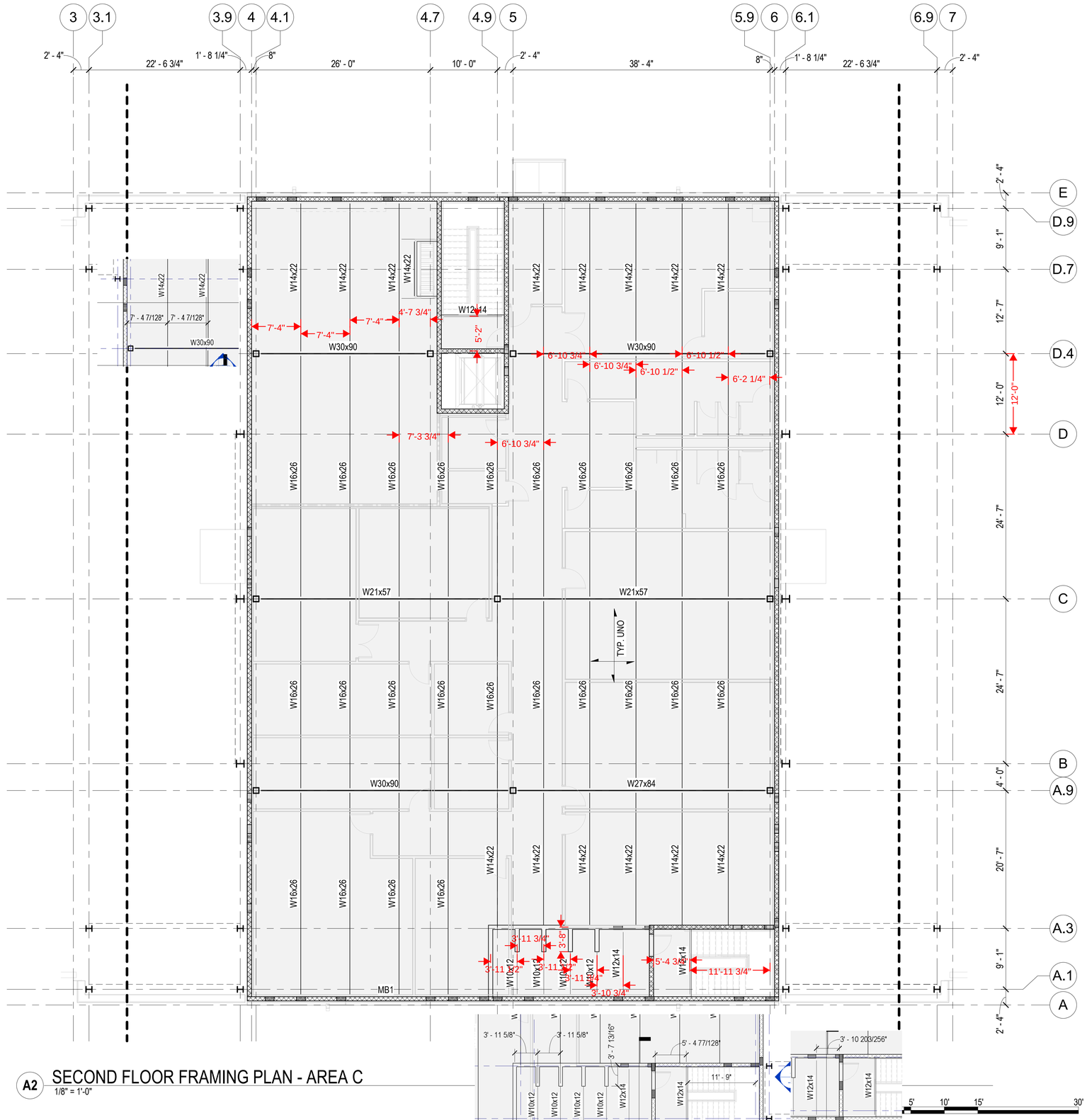
KORTE CONSTRUCTION
5700 OAKLAND AVE, SUITE 275
ST. LOUIS, MO 63110

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

OVERALL SECOND AND MEZZANINE FLOOR FRAMING PLAN

SHEET ID
SF120

FOR REVIEW



A2 SECOND FLOOR FRAMING PLAN - AREA C
1/8" = 1'-0"

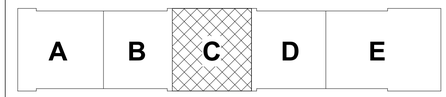
PLAN NORTH

GENERAL NOTES

KEYNOTES

LEGEND

KEY PLAN



PRELIMINARY DESIGN
NOT FOR CONSTRUCTION

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

ISSUE DATE: JULY 17, 2025
SOLICITATION NO.:
CONTRACT NO.:

DESIGNED BY: Designer
DRAWN BY: Author
CHECKED BY: Checker
SUBMITTED BY:
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LOS ANGELES DISTRICT

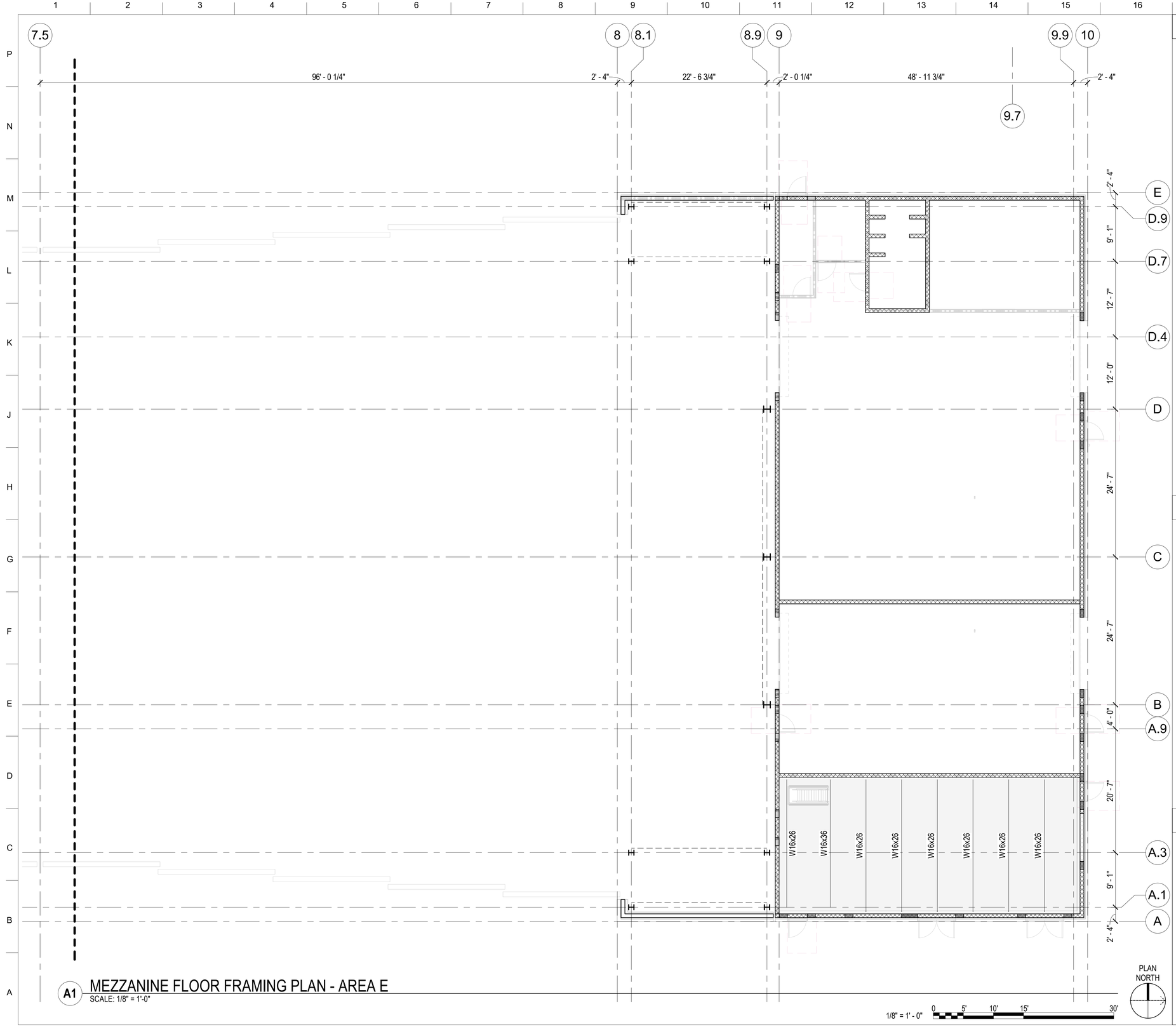
KORTE CONSTRUCTION
5700 OAKLAND AVE, SUITE 275
ST. LOUIS, MO 63110

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

SECOND FLOOR FRAMING PLAN - AREA C

SHEET ID
SF121

FOR REVIEW

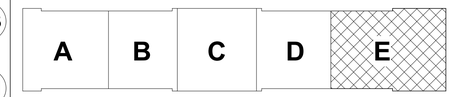


A1 MEZZANINE FLOOR FRAMING PLAN - AREA E
SCALE: 1/8" = 1'-0"

GENERAL NOTES

LEGEND

KEY PLAN



US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

ISSUE DATE: JULY 17, 2025
SOLICITATION NO.:
CONTRACT NO.:

DESIGNED BY: Designer
DRAWN BY: Author
CHECKED BY: Checker
SUBMITTED BY:
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LOS ANGELES DISTRICT

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

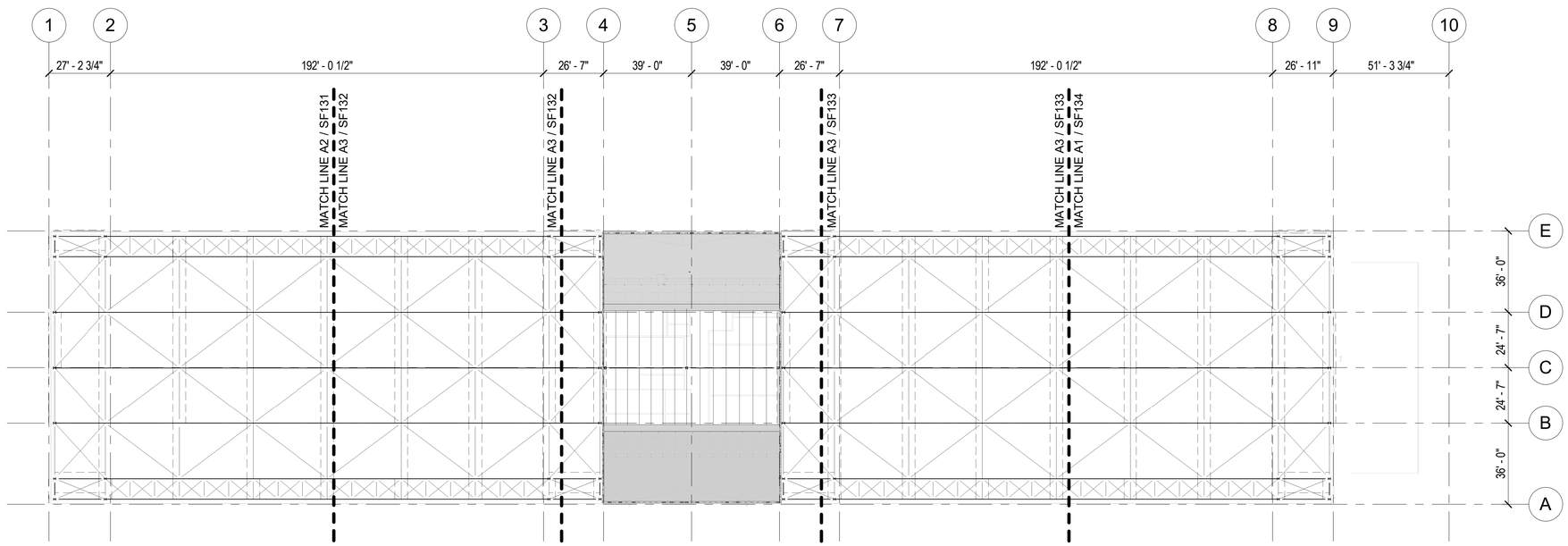
CREECH AIR FORCE BASE, CLARK COUNTY, NV
DISASTER RESILIENCY PROGRAM (DRP) - PHASE 2
494137

MEZZANINE FLOOR FRAMING PLAN - AREA E

PRELIMINARY DESIGN
NOT FOR CONSTRUCTION

SHEET ID
SF122

FOR REVIEW



D1 COMPREHENSIVE BOTTOM CHORD FRAMING PLAN
SCALE: 1" = 30'-0"

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

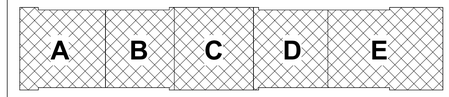
PLAN NORTH

GENERAL NOTES

KEYNOTES

LEGEND

KEY PLAN



PRELIMINARY DESIGN
NOT FOR CONSTRUCTION

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

ISSUE DATE: JULY 17, 2025
SOLICITATION NO.:
CONTRACT NO.:

DESIGNED BY: Designer
DRAWN BY: Author
CHECKED BY: Checker
SUBMITTED BY:
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LOS ANGELES DISTRICT

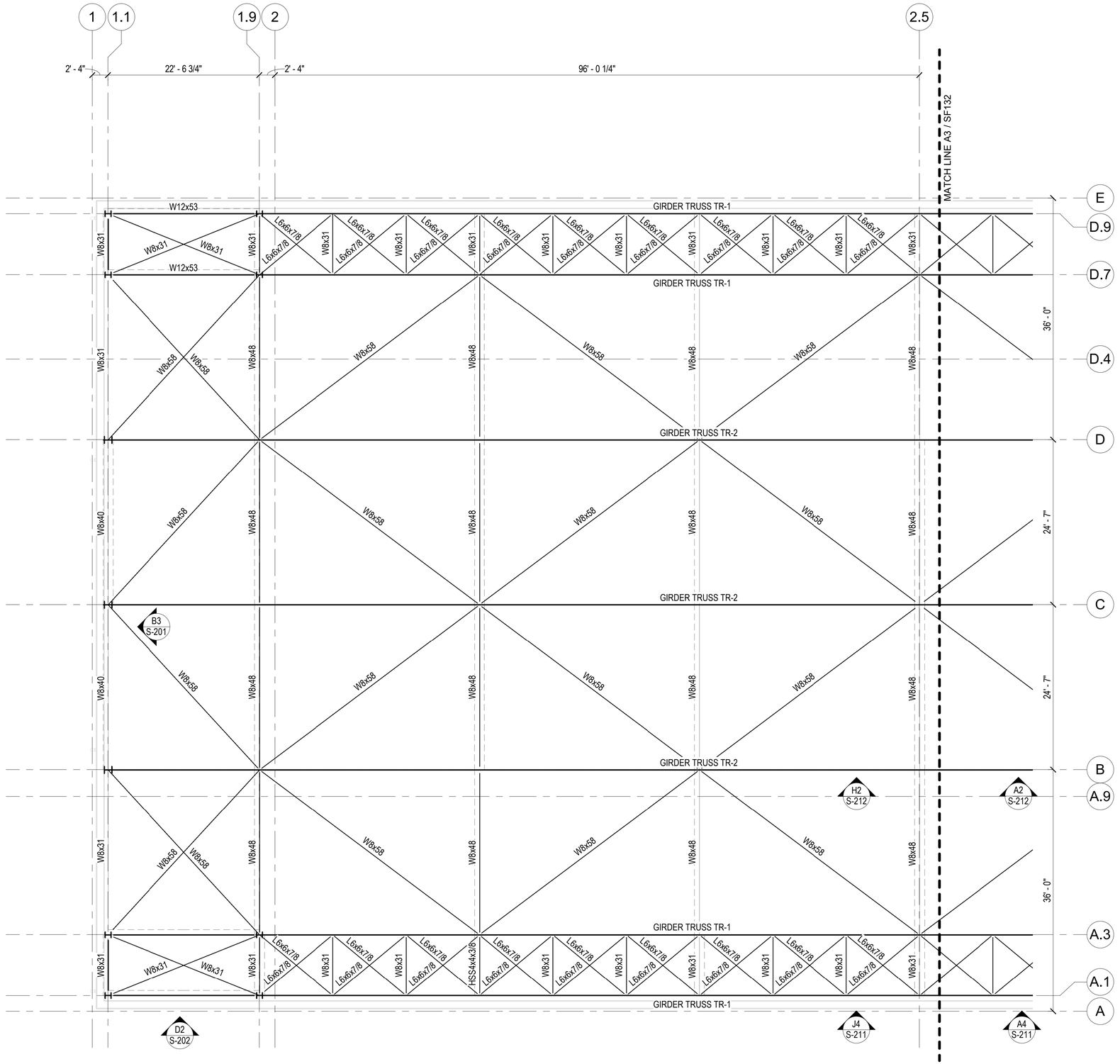
KORTE CONSTRUCTION
5700 OAKLAND AVE. SUITE 275
ST. LOUIS, MO 63110

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

OVERALL BOTTOM CHORD FRAMING PLAN

SHEET ID
SF130

FOR REVIEW



A2 GIRDER TRUSS BOTTOM CHORD HORIZONTAL BRACING PLAN - AREA A

SCALE: 1/8" = 1'-0"

PLAN NORTH

1/8" = 1' - 0"

0 5' 10' 15' 30'

GENERAL NOTES

KEYNOTES

LEGEND

KEY PLAN

A | B | C | D | E

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: Designer
DRAWN BY: Author
CHECKED BY: Checker
SUBMITTED BY:
SIZE: ANSI D

ISSUE DATE: JULY 17, 2025
SOLICITATION NO.:
CONTRACT NO.:

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

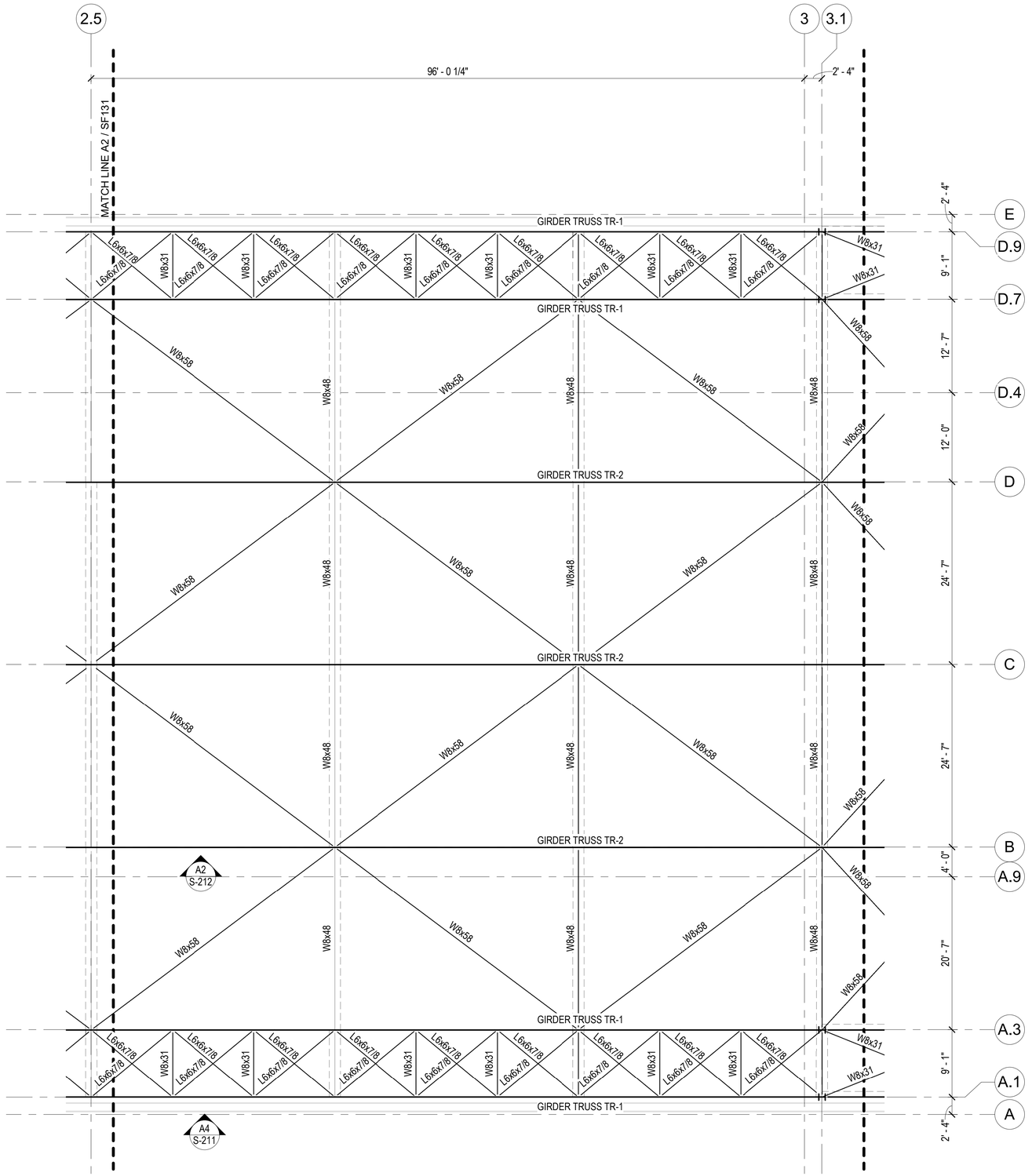
BOTTOM CHORD FRAMING PLAN - AREA A

PRELIMINARY DESIGN
NOT FOR CONSTRUCTION

SHEET ID

SF131

FOR REVIEW



A3 GIRDER TRUSS BOTTOM CHORD HORIZONTAL BRACING PLAN - AREA B

SCALE: 1/8" = 1'-0"

PLAN NORTH

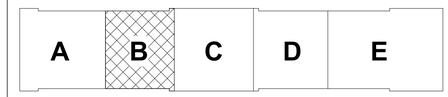
1/8" = 1' - 0" 0 5' 10' 15' 30'

GENERAL NOTES

KEYNOTES

LEGEND

KEY PLAN



US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: Designer
DRAWN BY: Author
CHECKED BY: Checker
SUBMITTED BY:
SIZE: ANSI D

ISSUE DATE: JULY 17, 2025
SOLICITATION NO.:
CONTRACT NO.:

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

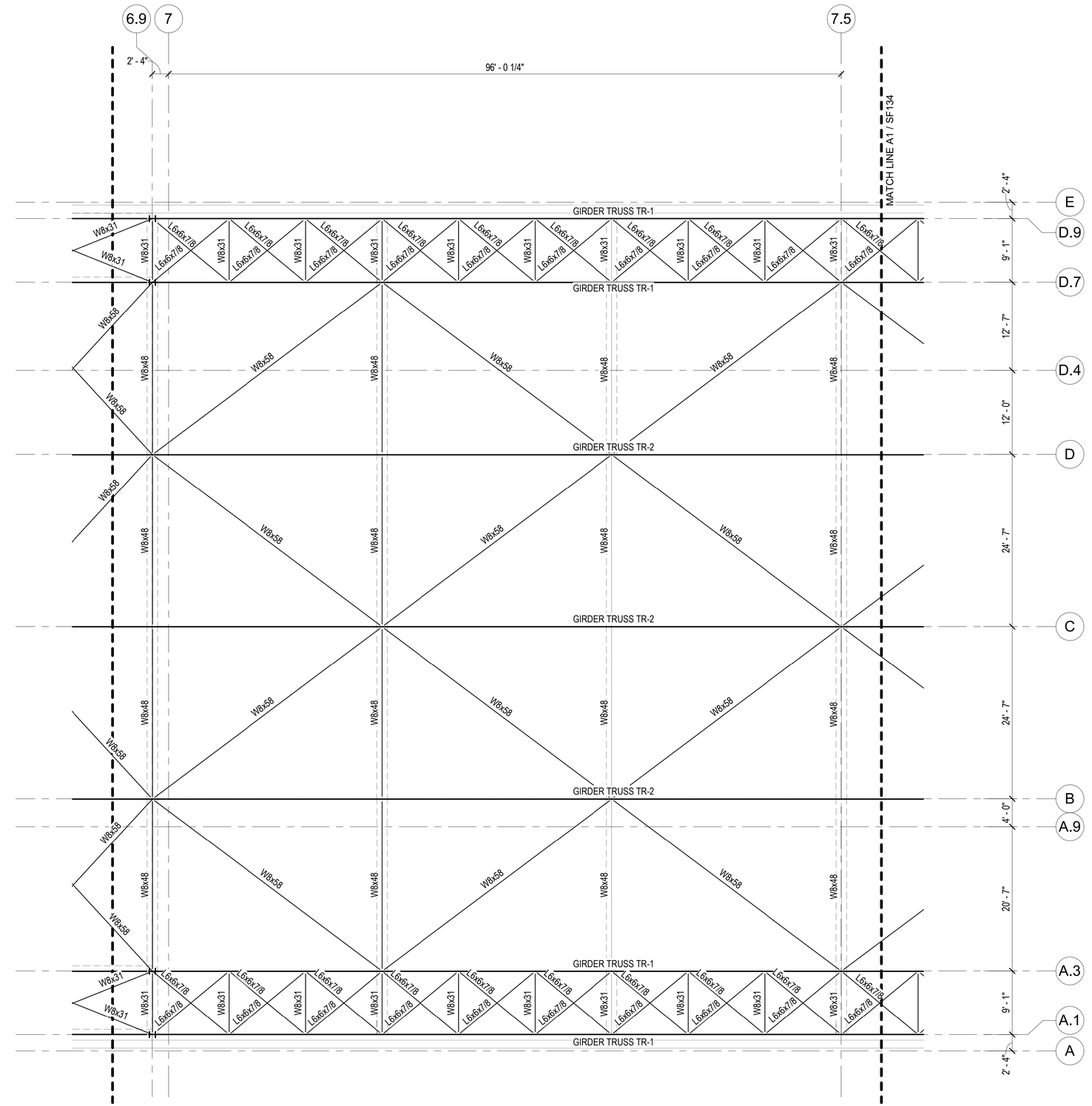
BOTTOM CHORD FRAMING PLAN - AREA B

PRELIMINARY DESIGN
NOT FOR CONSTRUCTION

SHEET ID

SF132

FOR REVIEW



A3 GIRDER TRUSS BOTTOM CHORD HORIZONTAL BRACING PLAN - AREA D

SCALE: 1/8" = 1'-0"

1/8" = 1' - 0" 0 5' 10' 15' 30'

PLAN NORTH

GENERAL NOTES

KEYNOTES

LEGEND

KEY PLAN

A | B | C | D | E

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

ISSUE DATE: JULY 17, 2025
SOLICITATION NO.:
CONTRACT NO.:

DESIGNED BY: Designer
DRAWN BY: Author
CHECKED BY: Checker
SUBMITTED BY:
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

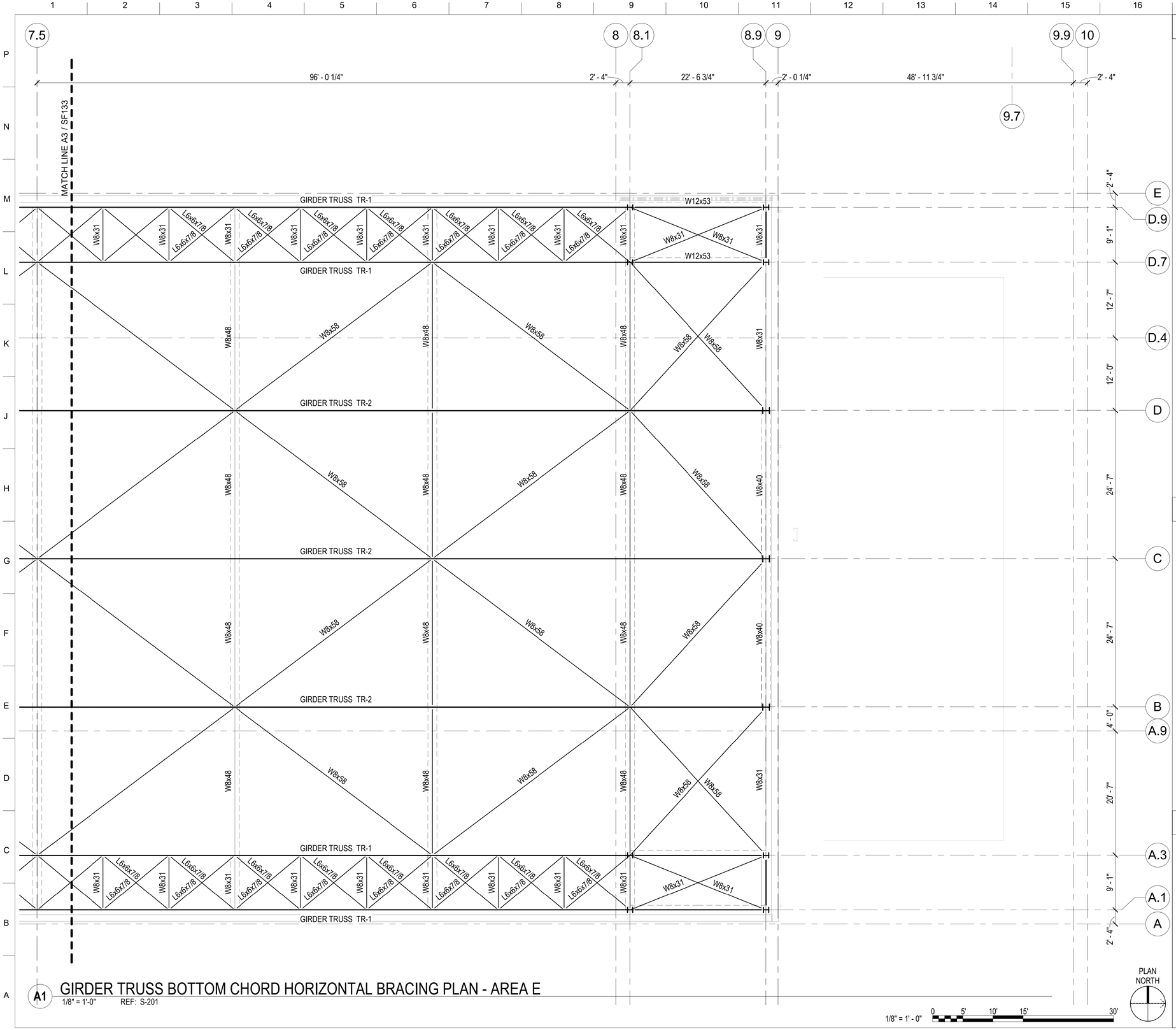
BOTTOM CHORD FRAMING PLAN - AREA D

PRELIMINARY DESIGN
NOT FOR CONSTRUCTION

SHEET ID

SF133

FOR REVIEW



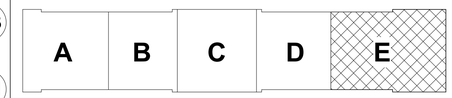
A1 GIRDER TRUSS BOTTOM CHORD HORIZONTAL BRACING PLAN - AREA E

1/8" = 1'-0" REF: S-201

GENERAL NOTES

LEGEND

KEY PLAN



US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

ISSUE DATE: JULY 17, 2025
SOLICITATION NO.:
CONTRACT NO.:

DESIGNED BY: Designer
DRAWN BY: Author
CHECKED BY: Checker
SUBMITTED BY:
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

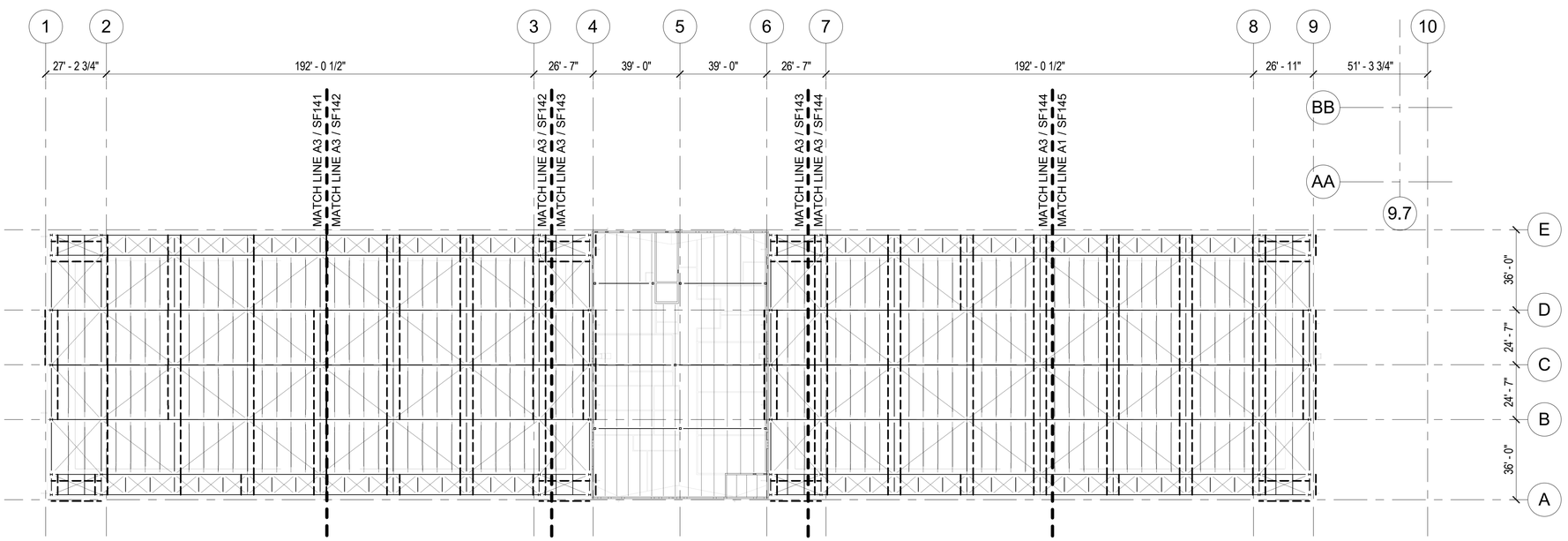
BOTTOM CHORD FRAMING PLAN - AREA E

PRELIMINARY DESIGN
NOT FOR CONSTRUCTION

SHEET ID

SF134

FOR REVIEW



D1 COMPREHENSIVE ROOF PLAN
SCALE: 1" = 30'-0"

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

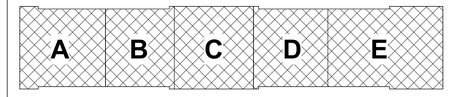
PLAN NORTH

GENERAL NOTES

KEYNOTES

LEGEND

KEY PLAN



PRELIMINARY DESIGN
NOT FOR CONSTRUCTION

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

ISSUE DATE: JULY 17, 2025
SOLICITATION NO.:
CONTRACT NO.:

DESIGNED BY: Designer
DRAWN BY: Author
CHECKED BY: Checker
SUBMITTED BY:
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LOS ANGELES DISTRICT

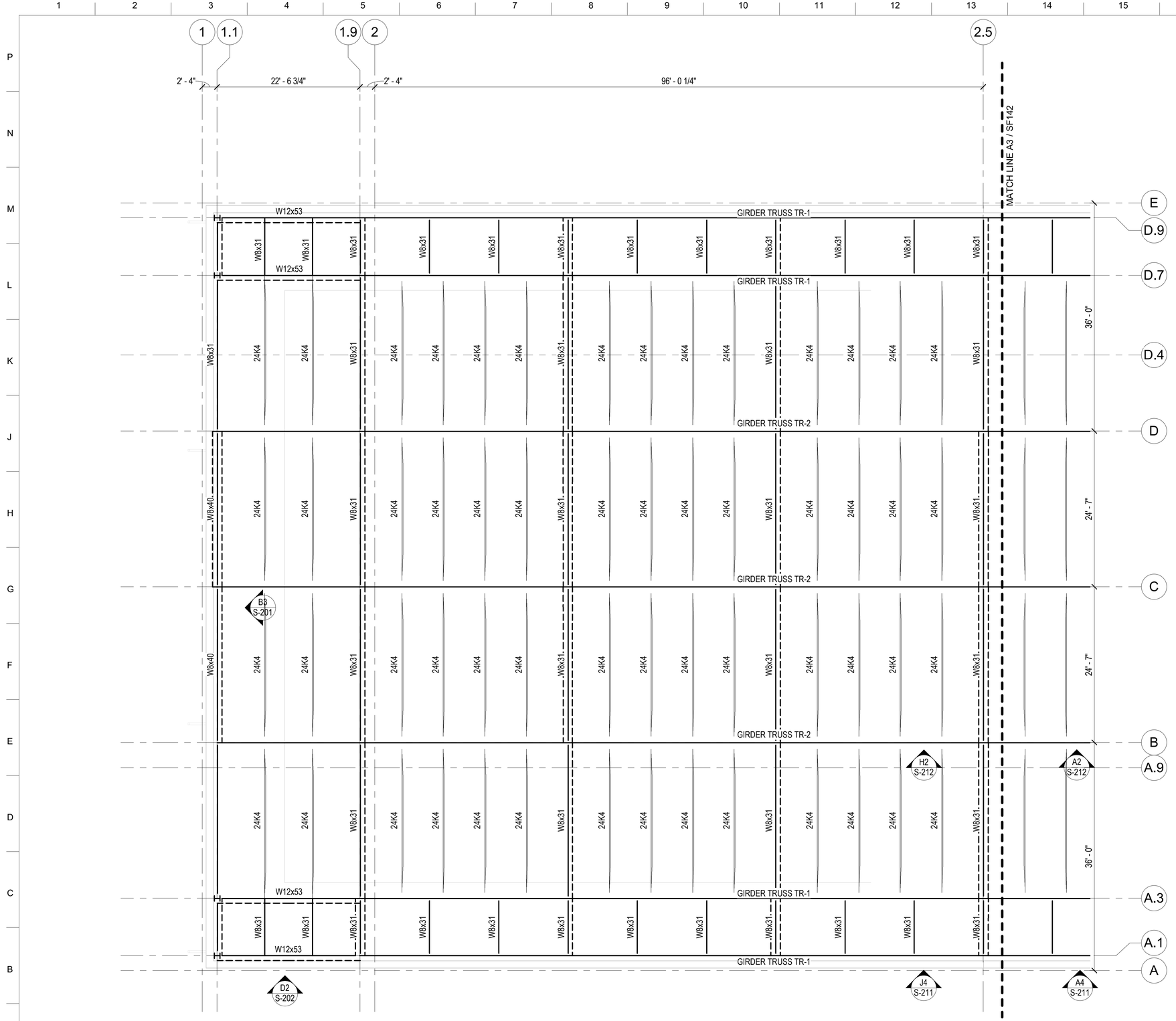
KORTE CONSTRUCTION
5700 OAKLAND AVE, SUITE 275
ST. LOUIS, MO 63110

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

OVERALL ROOF FRAMING PLAN

SHEET ID
SF140

FOR REVIEW



A3 ROOF PLAN - AREA A
SCALE: 1/8" = 1'-0"

PLAN NORTH

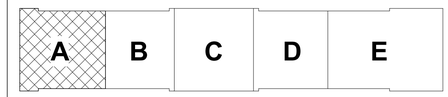
1/8" = 1' - 0" 0 5' 10' 15' 30'

GENERAL NOTES

KEYNOTES

LEGEND

KEY PLAN



US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: Designer
DRAWN BY: Author
CHECKED BY: Checker
SUBMITTED BY:
SIZE: ANSI D

ISSUE DATE: JULY 17, 2025
SOLICITATION NO.:
CONTRACT NO.:

US ARMY CORPS OF ENGINEERS
LOS ANGELES DISTRICT

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

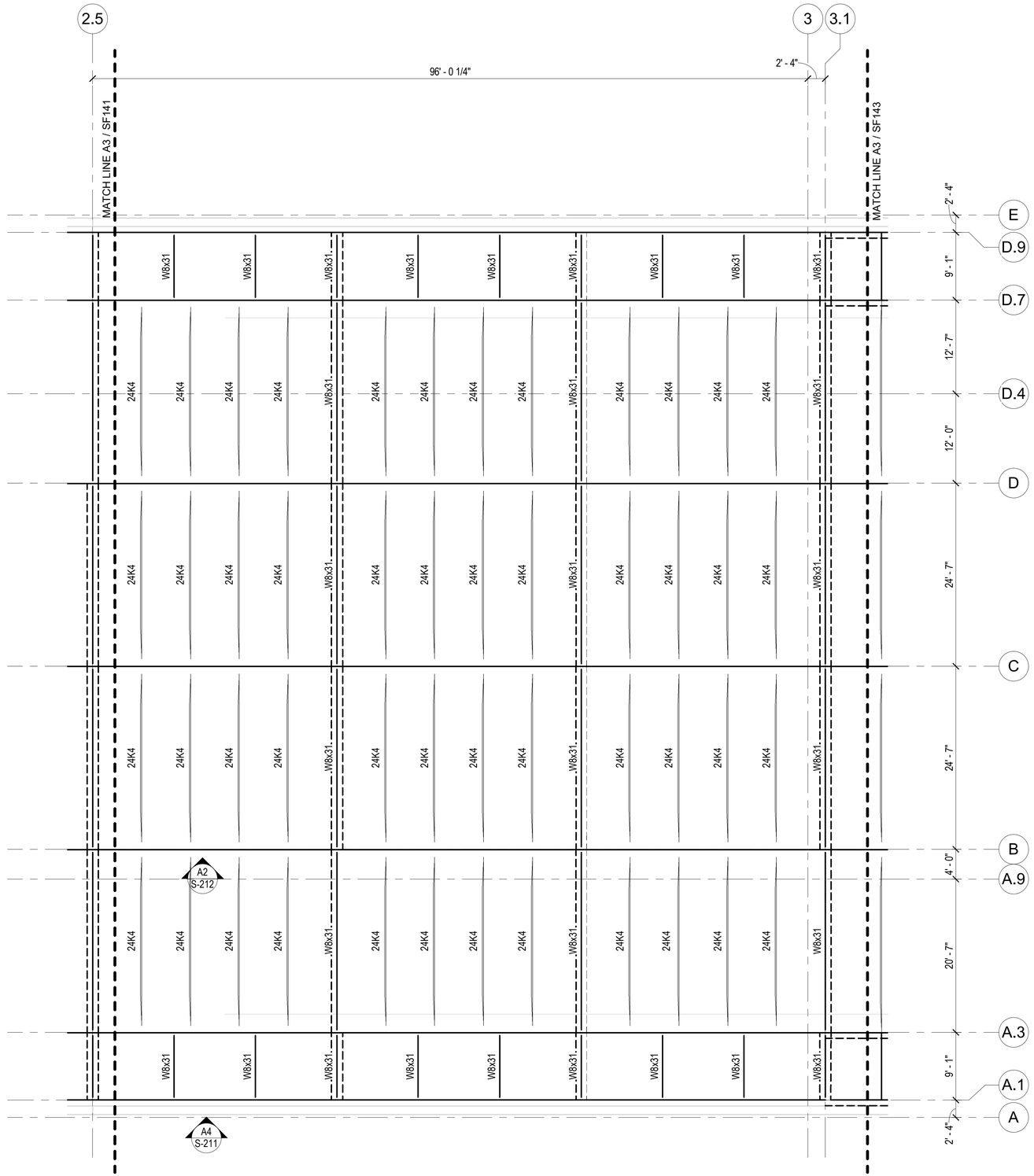
CREECH AIR FORCE BASE, CLARK COUNTY, NV
DISASTER RESILIENCY PROGRAM (DRP) - PHASE 2
494137

ROOF PLAN - AREA A

PRELIMINARY DESIGN
NOT FOR CONSTRUCTION

SHEET ID
SF141

FOR REVIEW



A3 ROOF PLAN - AREA B
1/8" = 1'-0"

PLAN NORTH

1/8" = 1' - 0"

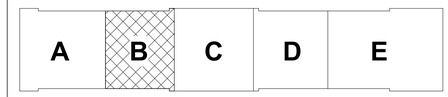
0 5' 10' 15' 30'

GENERAL NOTES

KEYNOTES

LEGEND

KEY PLAN



US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: Designer
DRAWN BY: Author
CHECKED BY: Checker
SUBMITTED BY:
SIZE: ANSI D

ISSUE DATE: JULY 17, 2025
SOLICITATION NO.:
CONTRACT NO.:

US ARMY CORPS OF ENGINEERS
LOS ANGELES DISTRICT

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

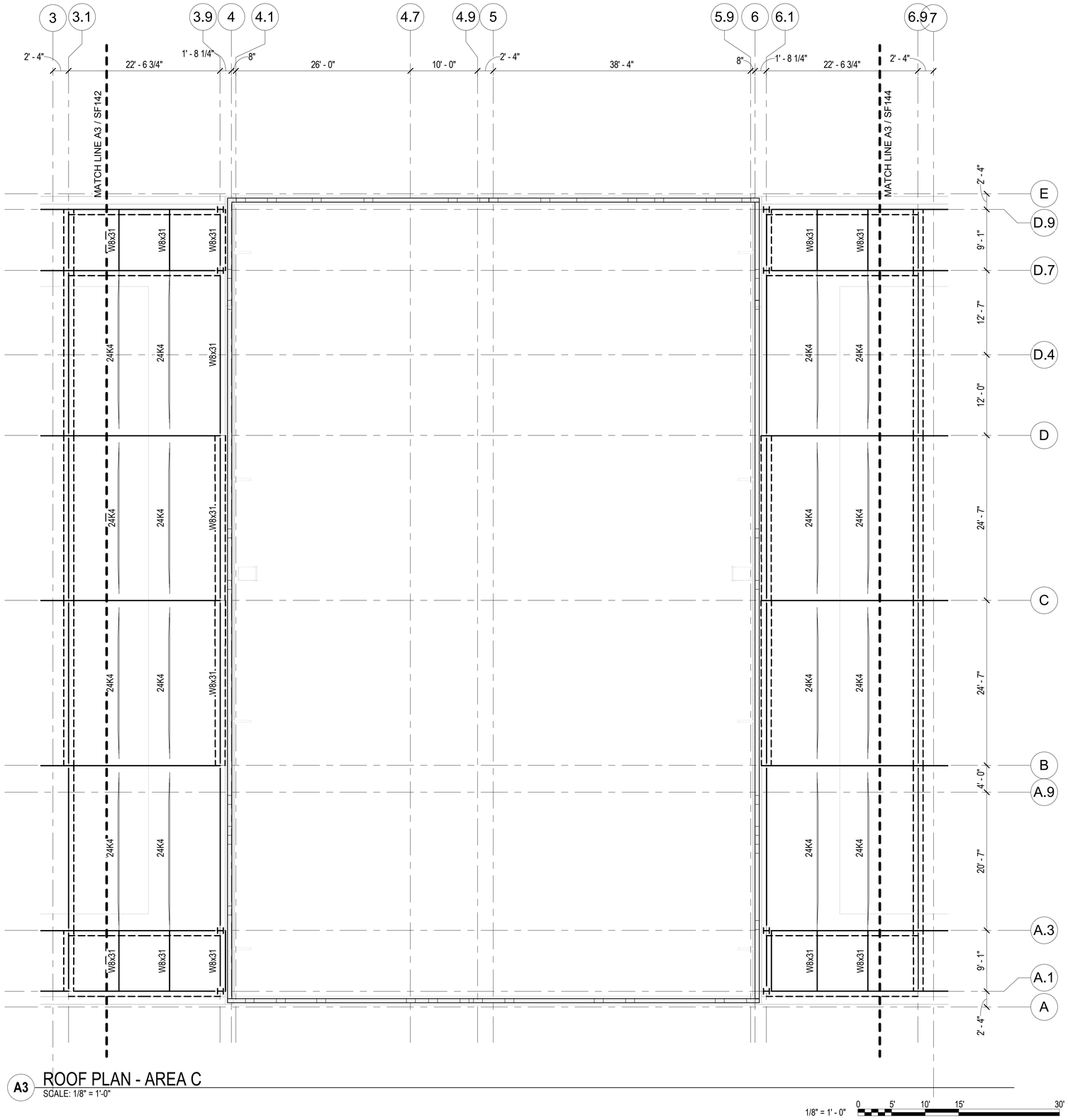
CREECH AIR FORCE BASE, CLARK COUNTY, NV
DISASTER RESILIENCY PROGRAM (DRP) - PHASE 2
494137

ROOF PLAN - AREA B

PRELIMINARY DESIGN
NOT FOR CONSTRUCTION

SHEET ID
SF142

FOR REVIEW



A3 ROOF PLAN - AREA C
SCALE: 1/8" = 1'-0"

PLAN NORTH

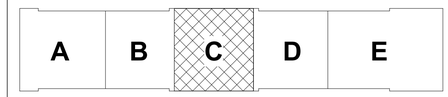
1/8" = 1' - 0" 0 5' 10' 15' 30'

GENERAL NOTES

KEYNOTES

LEGEND

KEY PLAN



US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

ISSUE DATE: JULY 17, 2025
SOLICITATION NO.:
CONTRACT NO.:

DESIGNED BY: Designer
DRAWN BY: Author
CHECKED BY: Checker
SUBMITTED BY:
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LOS ANGELES DISTRICT

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

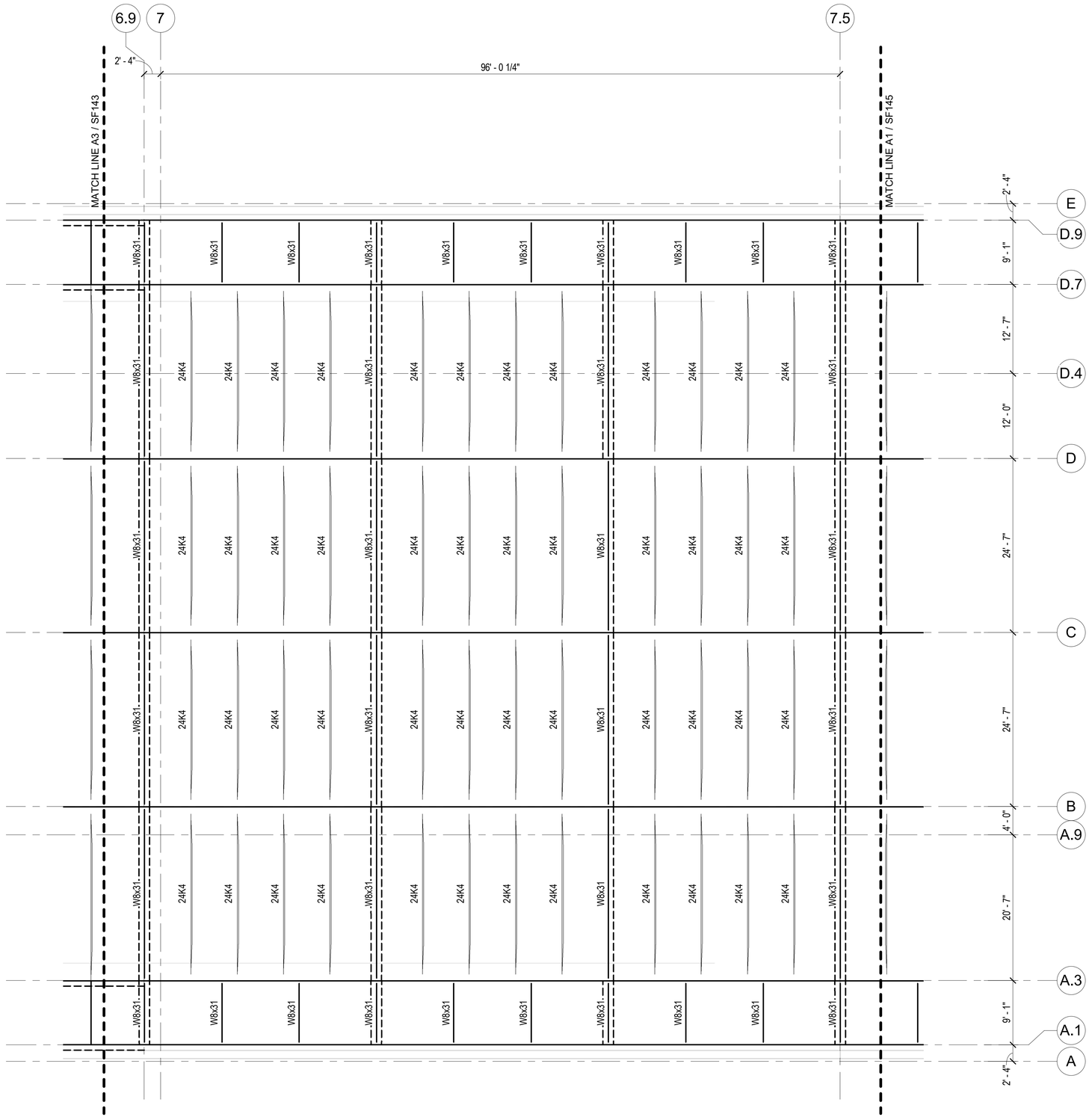
CREECH AIR FORCE BASE, CLARK COUNTY, NV
DISASTER RESILIENCY PROGRAM (DRP) - PHASE 2
494137

ROOF PLAN - AREA C

PRELIMINARY DESIGN
NOT FOR CONSTRUCTION

SHEET ID
SF143

FOR REVIEW



A3 ROOF PLAN - AREA D
SCALE: 1/8" = 1'-0"

PLAN NORTH

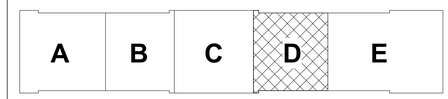
1/8" = 1' - 0" 0 5' 10' 15' 30'

GENERAL NOTES

KEYNOTES

LEGEND

KEY PLAN



US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: Designer
DRAWN BY: Author
CHECKED BY: Checker
SUBMITTED BY:
SIZE: ANSI D

ISSUE DATE: JULY 17, 2025
SOLICITATION NO.:
CONTRACT NO.:

US ARMY CORPS OF ENGINEERS
LOS ANGELES DISTRICT

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

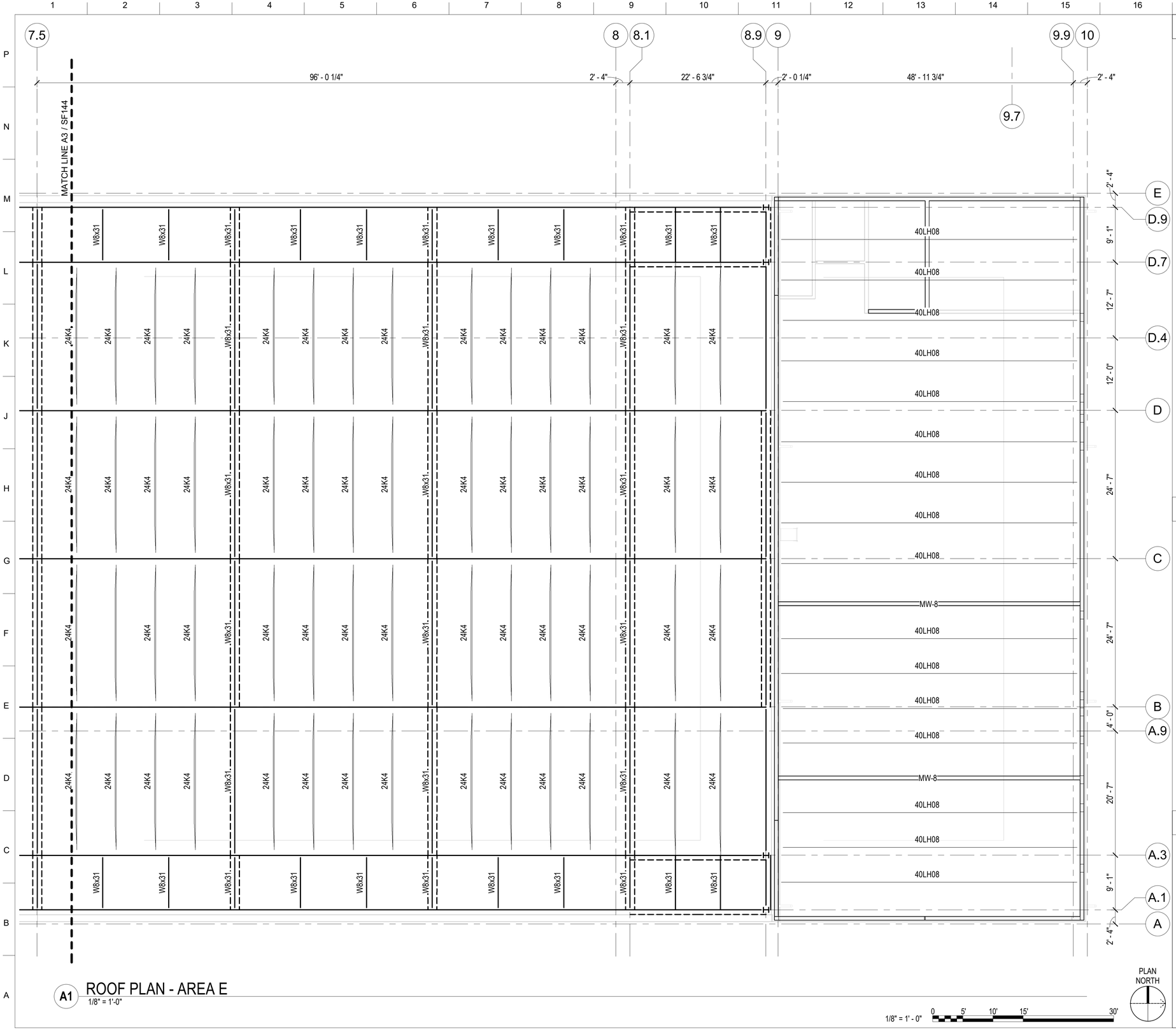
CREECH AIR FORCE BASE, CLARK COUNTY, NV
DISASTER RESILIENCY PROGRAM (DRP) - PHASE 2
494137

ROOF PLAN - AREA D

PRELIMINARY DESIGN
NOT FOR CONSTRUCTION

SHEET ID
SF144

FOR REVIEW



A1 ROOF PLAN - AREA E

1/8" = 1'-0"

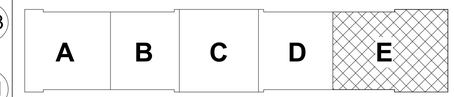
PLAN NORTH

1/8" = 1' - 0" 0 5' 10' 15' 30'

GENERAL NOTES

LEGEND

KEY PLAN



US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

ISSUE DATE: JULY 17, 2025
SOLICITATION NO.:
CONTRACT NO.:

DESIGNED BY: Designer
DRAWN BY: Author
CHECKED BY: Checker
SUBMITTED BY:
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

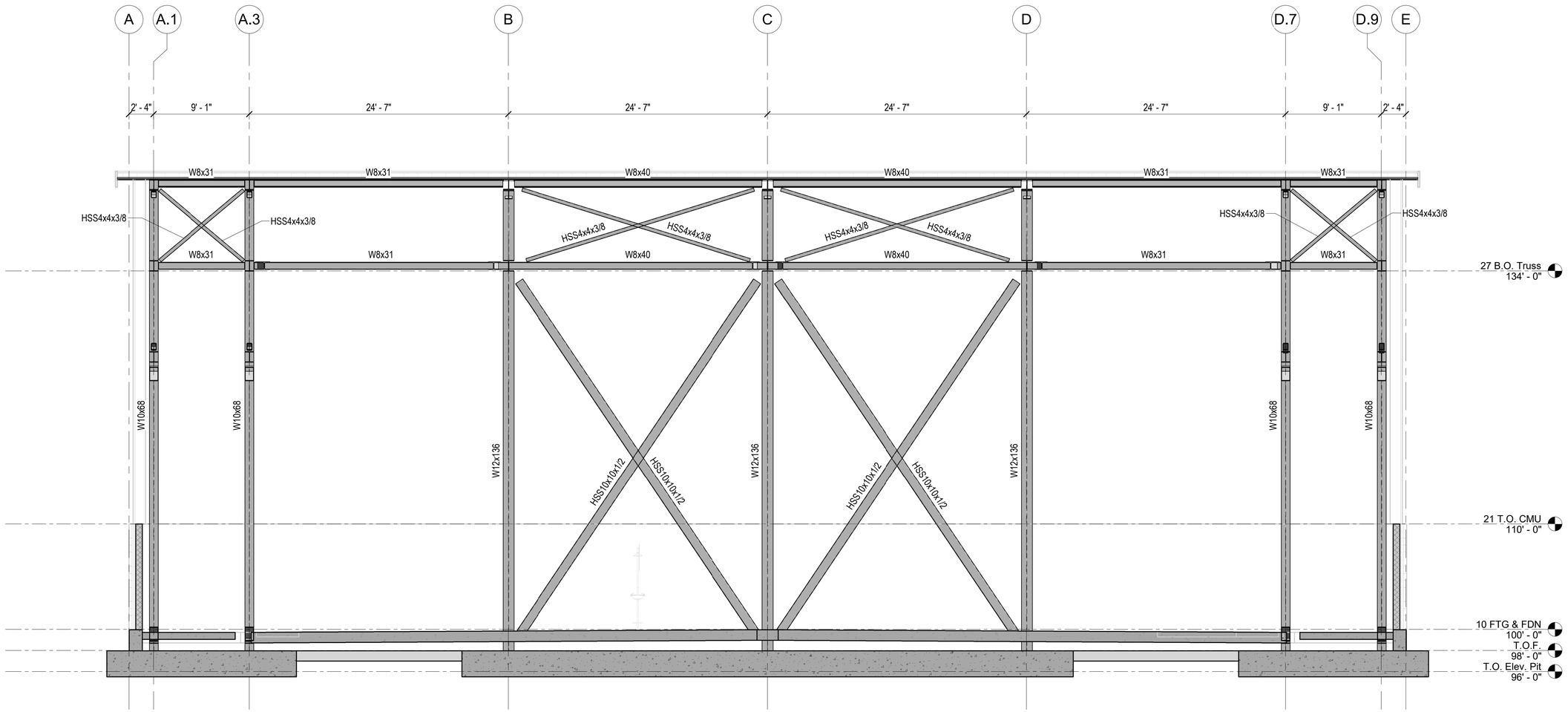
ROOF PLAN - AREA E

PRELIMINARY DESIGN
NOT FOR CONSTRUCTION

SHEET ID

SF145

FOR REVIEW



B3 BRACED FRAME - GRIDS 1, 3.9, 6.1, 8.9

3/16" = 1'-0" REF: SB101

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

ISSUE DATE: JULY 17, 2025
SOLICITATION NO.:
CONTRACT NO.:

DESIGNED BY: J. CORSON
DRAWN BY: R. CARLSON
CHECKED BY: D. CARLSON
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

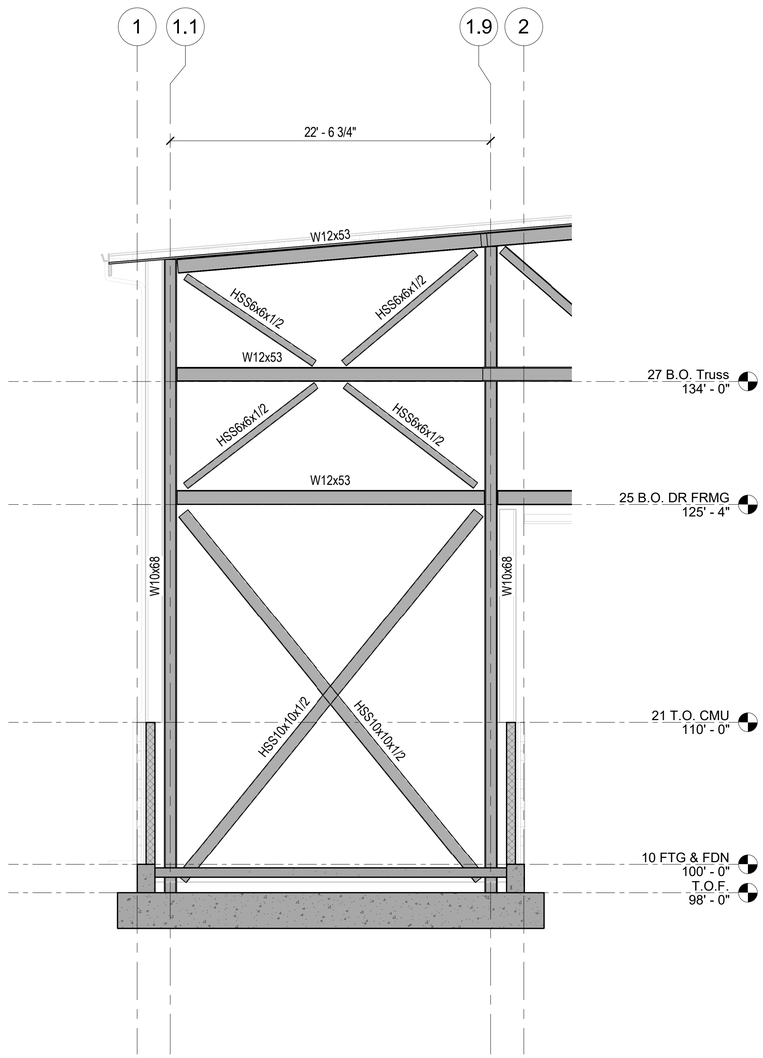
CREECH AIR FORCE BASE, CLARK COUNTY, NV
DISASTER RESILIENCY PROGRAM (DRP) - PHASE 2
494137

BRACED FRAME ELEVATIONS

PRELIMINARY DESIGN
NOT FOR CONSTRUCTION

SHEET ID
S-201

FOR REVIEW



D2 BRACED FRAME - TRUSS TR-1

3/16" = 1'-0" REF: SB101

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

ISSUE DATE: JULY 17, 2025
SOLICITATION NO.:
CONTRACT NO.:

DESIGNED BY: J. CORSON
DRAWN BY: R. CARLSON
CHECKED BY: D. CLARKSON
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

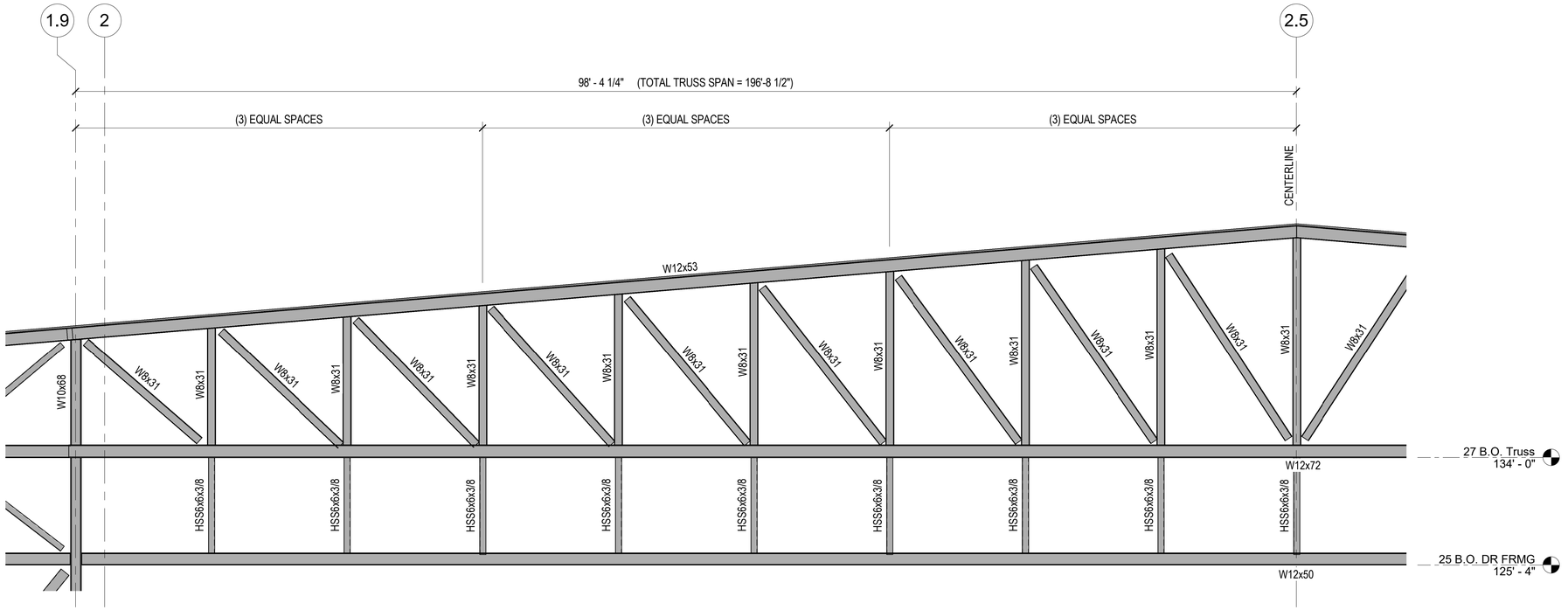
BRACED FRAME ELEVATIONS

PRELIMINARY DESIGN
NOT FOR CONSTRUCTION

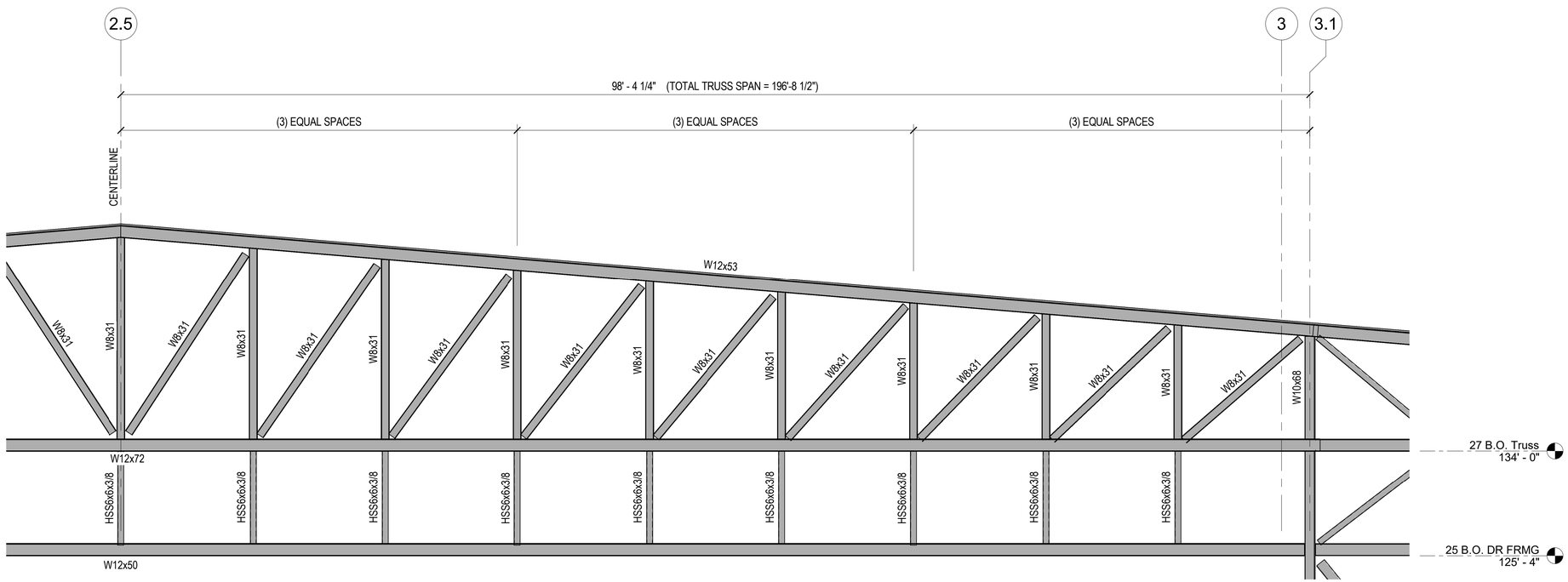
SHEET ID

S-202

FOR REVIEW



J4 GIRDER TRUSS TR-1 - GRIDS A.1 A.3 D.7 D.9 (WEST)
3/16" = 1'-0" REF: SF131



A4 GIRDER TRUSS TR-1 - GRIDS A.1 A.3 D.7 D.9 (EAST)
3/16" = 1'-0" REF: SF131

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: J. CORSON
DRAWN BY: R. CARLSON
CHECKED BY: D. CARLSON
SUBMITTED BY: P. PASZCZUK
SIZE: ANSI D

ISSUE DATE: JULY 17, 2025
SOLICITATION NO.:
CONTRACT NO.:

US ARMY CORPS OF ENGINEERS
LOS ANGELES DISTRICT

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

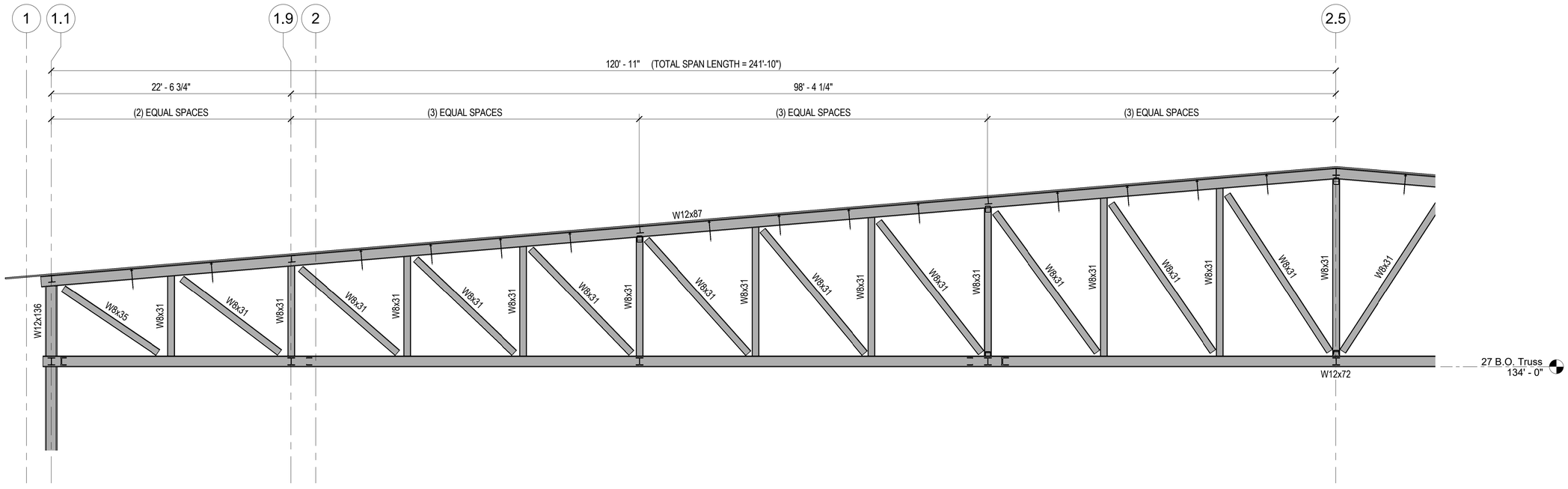
CREECH AIR FORCE BASE, CLARK COUNTY, NV
DISASTER RESILIENCY PROGRAM (DRP) - PHASE 2
494137

GIRDER TRUSS ELEVATIONS

PRELIMINARY DESIGN
NOT FOR CONSTRUCTION

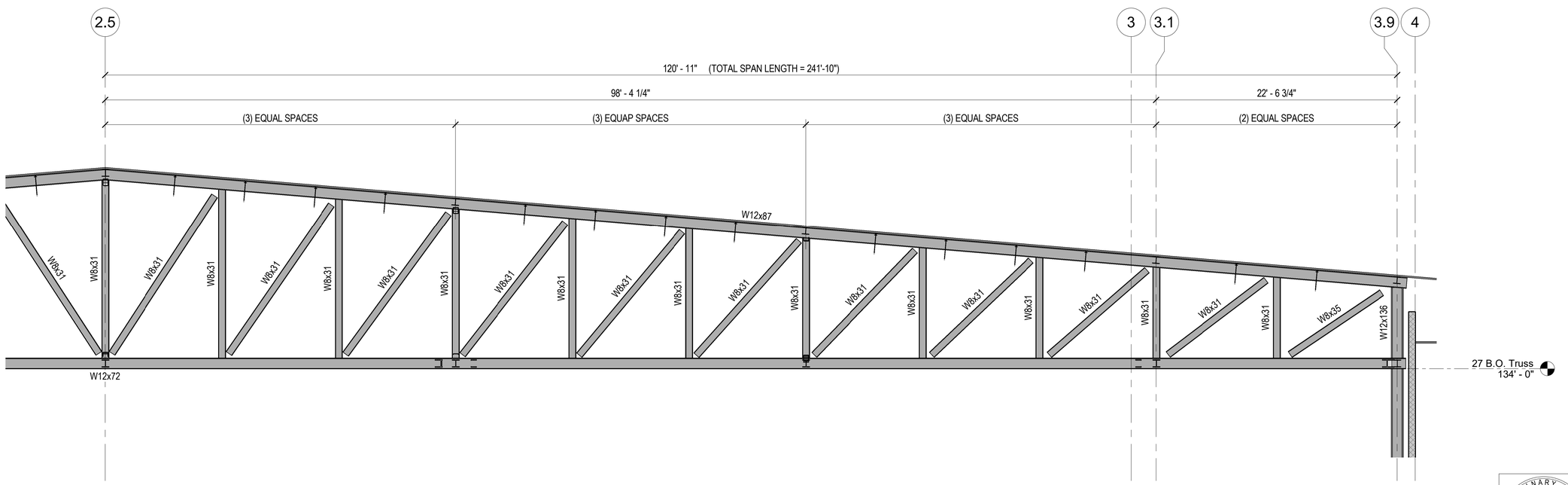
SHEET ID
S-211

FOR REVIEW



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 (EAST)

3/16" = 1'-0" REF: SF131

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: J. CORSON
DRAWN BY: R. CARLSON
CHECKED BY: D. CARLSON
SUBMITTED BY: P. PASZCZUK
SIZE: ANSI D

ISSUE DATE: JULY 17, 2025
SOLICITATION NO.:
CONTRACT NO.:

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

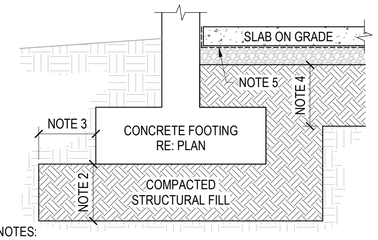
GIRDER TRUSS ELEVATIONS

PRELIMINARY DESIGN
NOT FOR CONSTRUCTION

SHEET ID

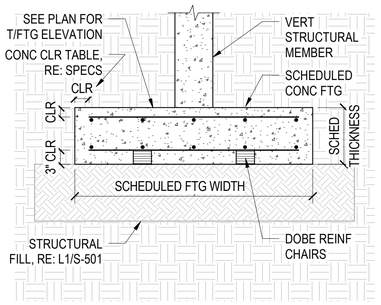
S-212

FOR REVIEW

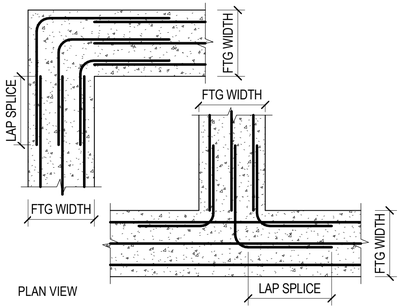


NOTES:
1. SEE GEOTECH REPORT AND GENERAL NOTES FOR COMPACTED STRUCTURAL FILL MATERIAL REQUIREMENTS AND ADDITIONAL INFORMATION.
2. SEE GEOTECH REPORT FOR DEPTH OF FILL BELOW FOOTING, 3'-0" MIN.
3. SEE GEOTECH REPORT FOR EXTENT OF FILL BEYOND FOOTINGS, 4'-0" MIN.
4. SEE GEOTECH REPORT FOR DEPTH OF FILL BELOW SLABS, 2'-0" MIN.
5. VAPOR RETARDER (15 MIL), RE: ARCH DETAILS

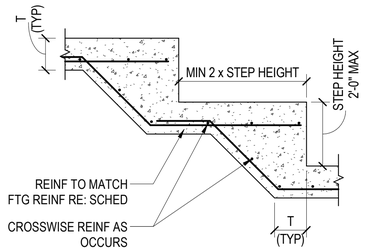
L1 TYP COMPACTED STRUCTURAL FILL
NTS



L5 TYP FOOTING REINF
NTS

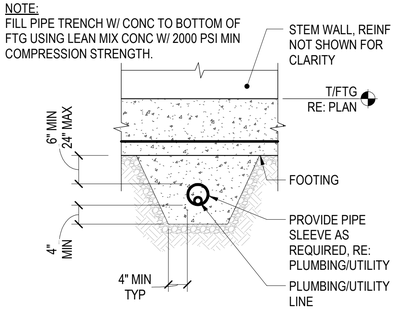


L9 TYP FOOTING CORNER REINF
NTS



L13 TYP STEPPED FOOTING DETAIL
NTS

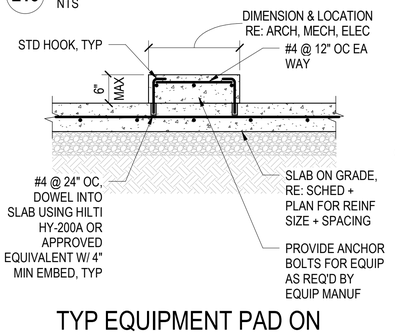
NOTE:
FILL PIPE TRENCH W/ CONC TO BOTTOM OF FTG USING LEAN MIX CONC W/ 2000 PSI MIN COMPRESSION STRENGTH.



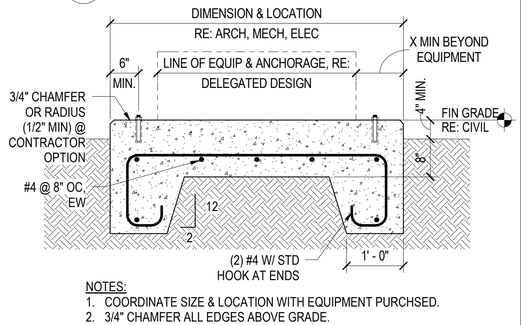
L17 TYP SLEEVED PIPE UNDER CONT FTG
NTS

H5 TYP DEPRESSED SLAB
NTS

H9 TYP DISCONTINUOUS JOINT REINF
NTS

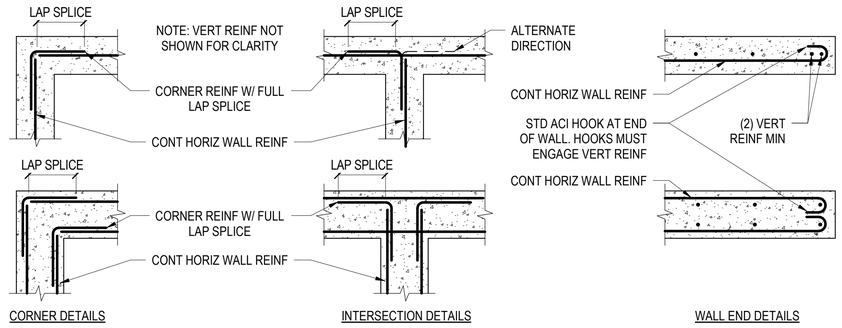


TYP EQUIPMENT PAD ON PAVEMENT/SOG
NTS

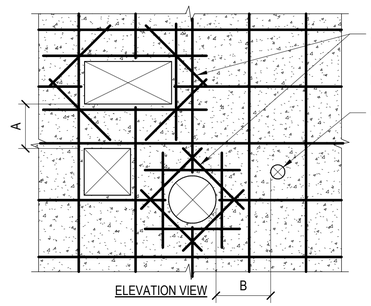


NOTES:
1. COORDINATE SIZE & LOCATION WITH EQUIPMENT PURCHSED.
2. 3/4" CHAMFER ALL EDGES ABOVE GRADE.

H17 TYP EQUIPMENT PAD (NO SOG)
NTS



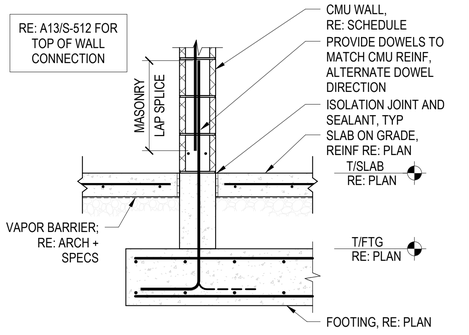
D1 TYP CONC WALL HORIZ REINFORCING
NTS



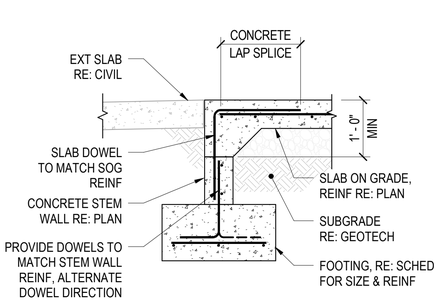
NOTES FOR REINFORCING AROUND OPENINGS:
1. ALL OPENINGS REQUIRE ADDITIONAL REINFORCING EXCEPT WHERE OPENING SIZE OR LOCATION IS SUCH THAT NO REINFORCING STEEL IS INTERRUPTED (I.E. CONDUITS, SMALL PIPES, ETC.). WHERE OPENINGS ARE LARGER THAN THIS SPACING, PROVIDE REINFORCING AROUND THE PERIMETER OF THE OPENING EQUAL TO THE AMOUNT INTERRUPTED AND PLACE HALF AT EACH SIDE OF THE OPENING. EXTEND A FULL LAP LENGTH BEYOND OPENING.

NOTES FOR ADJACENT OPENINGS MIN SPACING:
A = THE LARGEST HEIGHT OR DIAMETER OF THE TWO ADJACENT OPENINGS DIVIDED BY 2 (WALL THICKNESS MIN)
B = THE LARGEST WIDTH OR DIAMETER OF THE TWO ADJACENT OPENINGS DIVIDED BY 2 (WALL THICKNESS MIN)

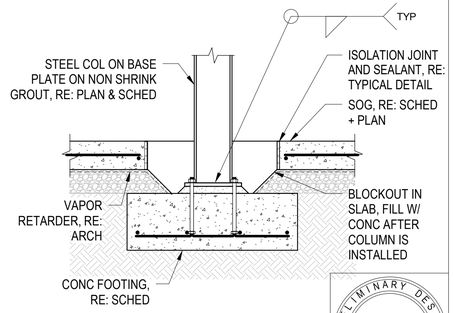
D9 TYP MISC OPENINGS IN REINF CONC WALLS
NTS



D17 MASONRY WALL FOOTING DETAIL
NTS



A13 TYPICAL EXTERIOR THRESHOLD
NTS



A17 TYP STEEL COL INT FTG
NTS

PRELIMINARY DESIGN
NOT FOR CONSTRUCTION

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

ISSUE DATE: JULY 17, 2025
SOLICITATION NO.:
CONTRACT NO.:

DESIGNED BY: J. CORSON
DRAWN BY: R. CARLSON
CHECKED BY: D. CLARK
SUBMITTED BY: P. PASZCZUK
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LOS ANGELES DISTRICT

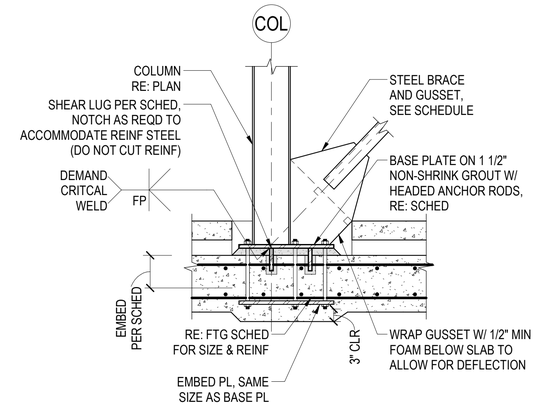
KORTE CONSTRUCTION
5700 OAKLAND AVE, SUITE 275
ST. LOUIS, MO 63110

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

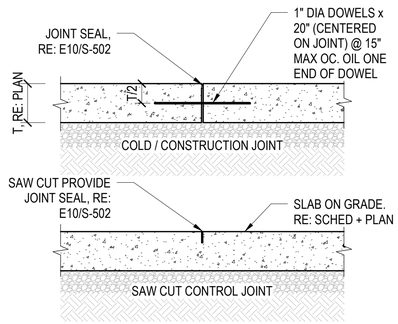
FOUNDATION DETAILS

SHEET ID
AOF
S-501

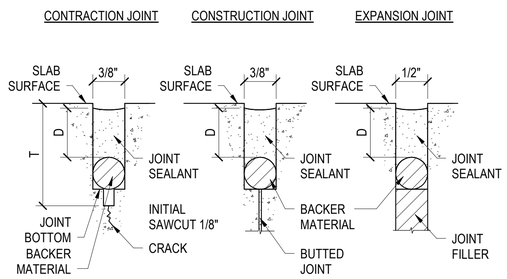
FOR REVIEW



K15 BRACED FRAME @ FOOTING W/ EMBED PLATE
NTS



E6 TYP SOG JOINTS
NTS

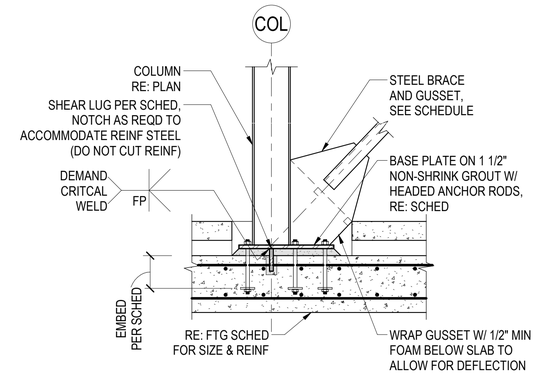


T = DEPTH OF INITIAL SAWCUT
- A. 1/4 SLAB THICKNESS + 1/2" FOR SLABS LESS THAN 12 INCHES.
- B. 3 INCHES FOR SLAB 12-18 INCHES.
- C. 1/6 SLAB THICKNESS FOR SLABS MORE THAN 18 INCHES.
- D. DIAMETER OF BACKER MATERIAL = JOINT WIDTH PLUS 1/8 INCH

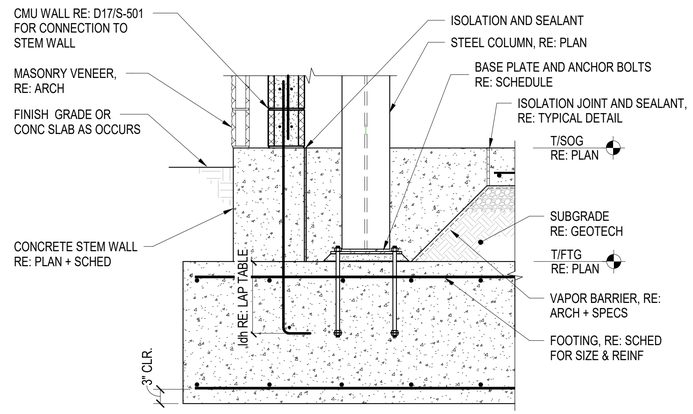
D = DEPTH OF SEALANT AS REQUIRED BY SEALANT MANUFACTURER

NOTE: TOP OF SEALANT TO BE 1/4" TO 1/16" BELOW TOP OF SLAB

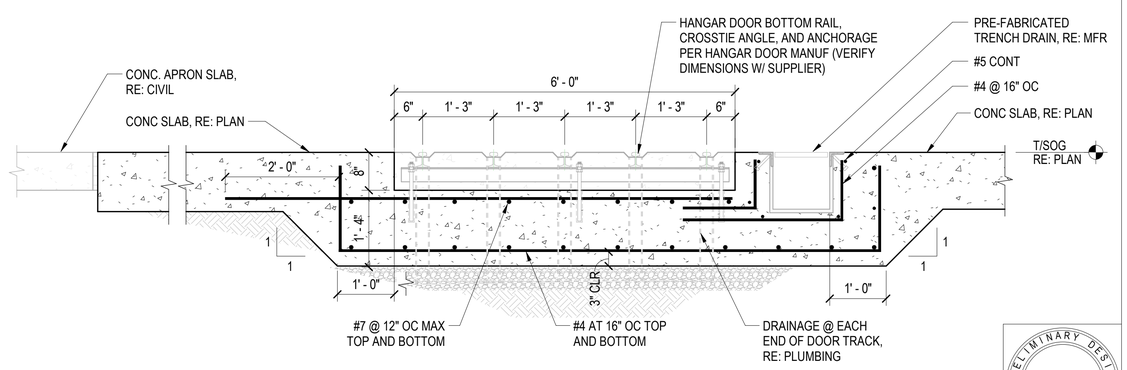
E10 TYP JOINT SEALANT @ CONC SOG
NTS



E15 TYP BRACED FRAME @ FOOTING DETAIL
NTS



A5 TYP. EXTERIOR FOOTING DETAIL
NTS



A12 HANGAR DOOR SUPPORT RAILS AND FOUNDATION
NTS

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

ISSUE DATE:	JULY 17, 2025
SOLICITATION NO.:	
CONTRACT NO.:	
DESIGNED BY:	J. CORSON
DRAWN BY:	R. CARLSON
CHECKED BY:	D. LAWSON
QA/QC BY:	J. CORSON
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

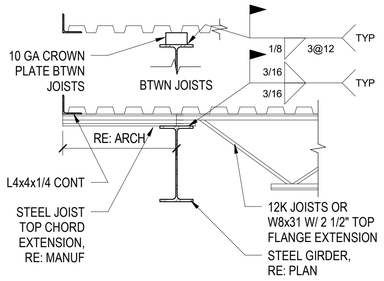
CREECH AIR FORCE BASE, CLARK COUNTY, NV
DISASTER RESILIENCY PROGRAM (DRP) - PHASE 2
494137

FOUNDATION DETAILS

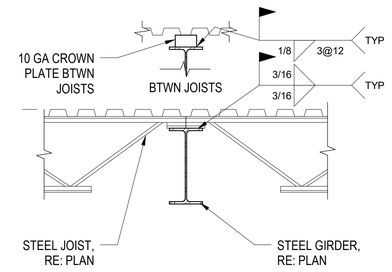
PRELIMINARY DESIGN
NOT FOR CONSTRUCTION

SHEET ID
AOF
S-502

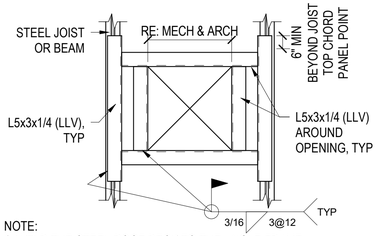
FOR REVIEW



H5 TYP ROOF JOIST ON EDGE GIRDER
NTS



D5 TYP ROOF JOIST ON GIRDER
NTS



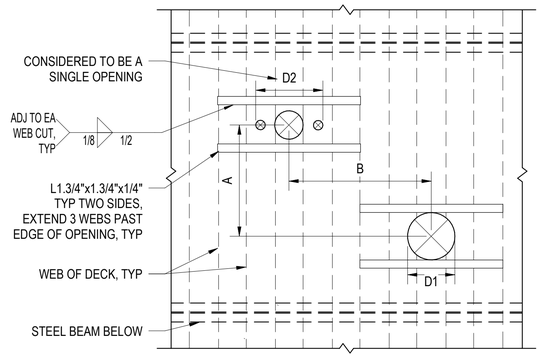
NOTE:
1. WELD THE STEEL ROOF DECK TO THE ANGLE FRAME.
2. PRE-ENGINEERED ADJUSTABLE FRAMES MAY BE USED IN LIEU OF WELDED ANGLES IF APPROVED BY EOR.

A5 TYP ROOF OPENING SUPPORT
NTS

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 4XD1, 4XD2, OR 32" (WHICHEVER IS LARGER), THEN THERE IS NO RESTRICTION ON DIMENSION 'B'.
3. IF DIMENSION 'B' IS GREATER THAN 4XD1, 4XD2, OR 32" (WHICHEVER IS LARGER), THEN THERE IS NO RESTRICTION ON DIMENSION 'A'.
4. IF DIMENSIONS 'A' AND 'B' ARE LESS THAN 4XD1, 4XD2, 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.

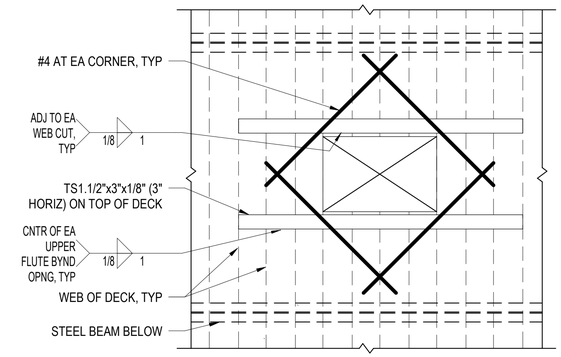


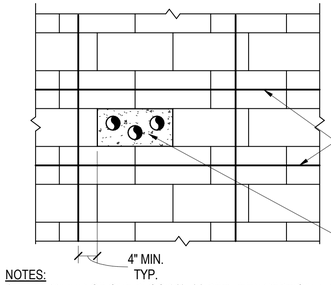
H9 TYPICAL OPENINGS IN COMPOSITE DECK
NTS

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.

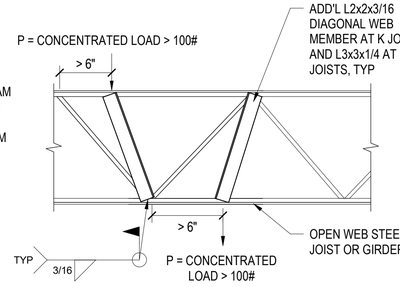
NOTES:
1. IF THE OPENING OR GROUP OF OPENINGS OCCURS IN ONE DECKING UNIT, THE OPENING OR OPENING GROUP MAY BE CUT PRIOR TO POURING OF CONCRETE.
2. IF THE OPENING OR GROUP OF OPENINGS CUTS THROUGH TWO DECKING UNITS, THE DECKING SHALL NOT BE CUT UNTIL CONCRETE HAS BEEN PLACED AND CURED. AT THE TIME OF 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.





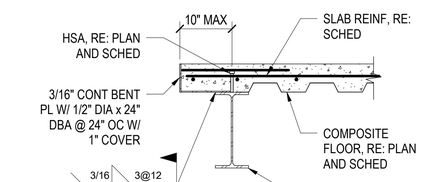
NOTES:
1. A MAXIMUM OF ONE BLOCK (1'-4") BETWEEN VERTICAL WALL REINFORCING LOCATIONS MAY BE SLEEVED FOR UTILITY PENETRATIONS.
2. DO NOT PLACE OF ENCROACH UPON CELLS CONTAINING VERTICAL WALL REINFORCING.

D9 PENETRATION THROUGH MASONRY WALL
NTS

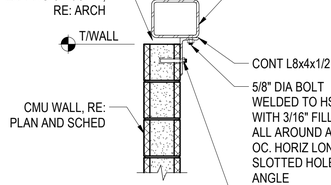


NOTE:
1. THIS DETAIL APPLIES WHEN SUPPORT AT A PANEL POINT IS IMPOSSIBLE. CONTACT THE EOR AND JOIST MANUFACTURER TO REVIEW CONCENTRATED LOADS > 100# THAT ARE NOT SPECIFICALLY RECORDED ON THE CONTRACT DRAWINGS AND PART OF THE INITIAL JOIST DESIGN.
2. CONCENTRATED POINT LOADS TOTALING 100# OR LESS CAN 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.

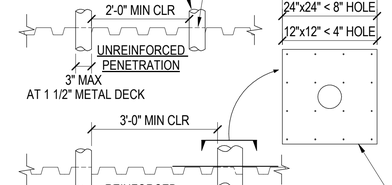
D13 TYP JOIST REINFORCING DETAIL
NTS



A9 TYP COMPOSITE FLOOR SLAB EDGE
NTS



A13 CMU STEEL GIRT
NTS



A17 TYP ROOF OPENING < 12" DIAMETER
NTS

PRELIMINARY DESIGN
NOT FOR CONSTRUCTION

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: J. CORSON
DRAWN BY: R. CARLSON
CHECKED BY: D. LAMBERT
SUBMITTED BY: P. PASZCZUK
SIZE: ANSI D

ISSUE DATE: JULY 17, 2025
SOLICITATION NO.:
CONTRACT NO.:

US ARMY CORPS OF ENGINEERS
LOS ANGELES DISTRICT

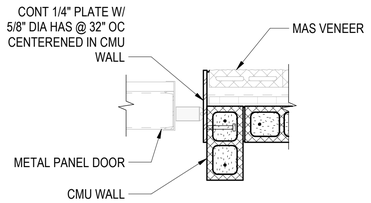
KORTE CONSTRUCTION
5700 OAKLAND AVE. SUITE 275
ST. LOUIS, MO 63110

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

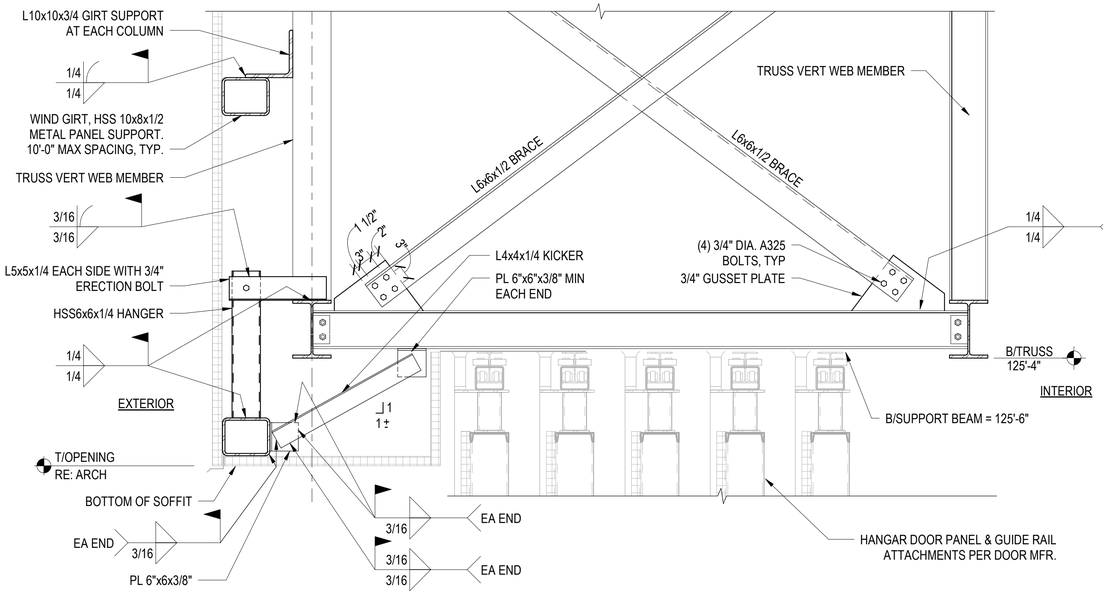
FRAMING DETAILS

SHEET ID
S-511

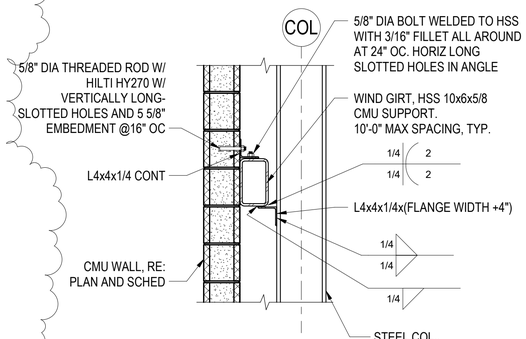
FOR REVIEW



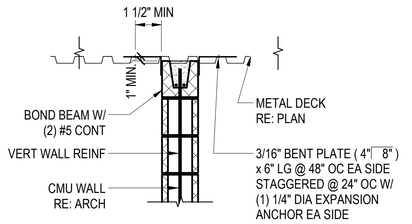
H1 HANGAR DOOR JAMB
NTS



E6 STEEL SLIDING HANGAR DOOR HEADER
NTS



A10 CMU STEEL GIRT
NTS



A13 TOP OF CMU WALL TO METAL DECK
NTS

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE
1	Revision 1	Date 1

DESIGNED BY: J. CORSON
DRAWN BY: R. CARLSON
CHECKED BY: D. CARLSON
SUBMITTED BY: P. PASZCZUK
SIZE: ANSI D

ISSUE DATE: JULY 17, 2025
SOLICITATION NO.:
CONTRACT NO.:

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

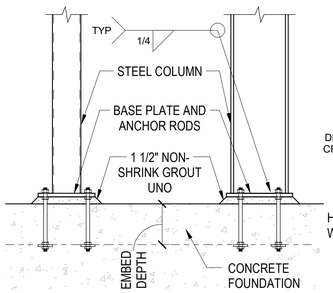
PRELIMINARY DESIGN
NOT FOR CONSTRUCTION

SHEET ID
AOF
S-512

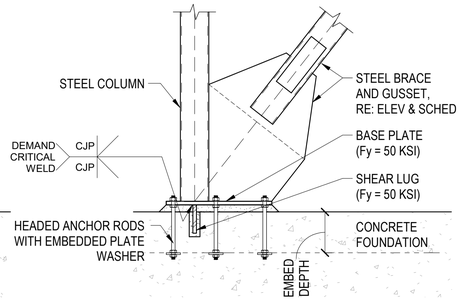
FOR REVIEW

STEEL BRACED FRAME COLUMN & BASE PLATE SCHEDULE

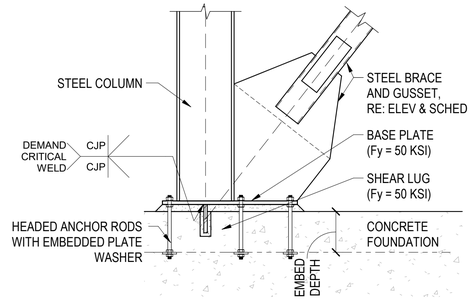
COLUMN MARK	COLUMN SIZE	BASE PLATE						ANCHOR ROD		SHEAR LUG		NOTES
		TYPE	THICKNESS	"M" DIM	"N" DIM	"A" DIM	"P" DIM	DIA.	EMBED	THICKNESS	DEPTH	



TYPICAL COLUMN BASE CONDITION



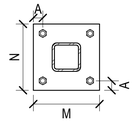
TYPICAL BRACED FRAME COLUMN BASE CONDITION



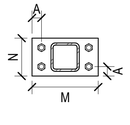
TYPICAL BRACED FRAME COLUMN BASE CONDITION

NOTES:

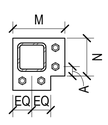
1. ALL BASE PLATES AND SHEAR LUGS MUST BE ASTM A572 GR50 STEEL, TYP UNO
2. ALL ANCHOR RODS MUST BE ASTM F-1554 GR55 MIN UNO. THEY MUST BE HEADED ANCHOR RODS W/ 3"x3"x3/8" PLATE WASHERS WITH DOUBLE NUTS EMBEDDED IN CONCRETE AT THE EMBEDMENT DEPTH SPECIFIED, TYP UNO.
   A. ALL ANCHOR RODS MUST HAVE HARDENED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



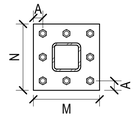
TYPE-HA



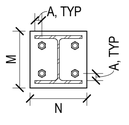
TYPE-HB



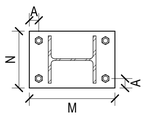
TYPE-HC



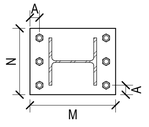
TYPE-HD



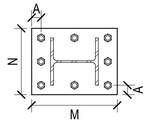
TYPE-WA



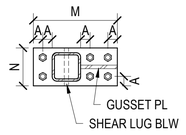
TYPE-WB



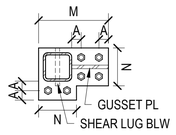
TYPE-WC



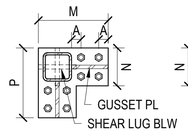
TYPE-WD



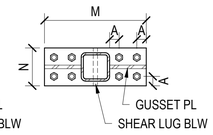
TYPE-LHA



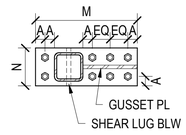
TYPE-LHB



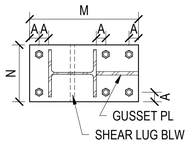
TYPE-LHC



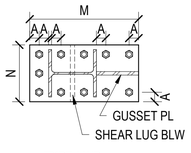
TYPE-LHD



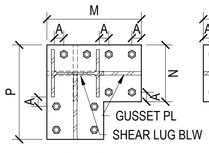
TYPE-LHE



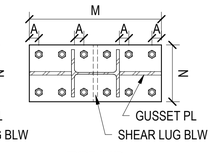
TYPE-LWA



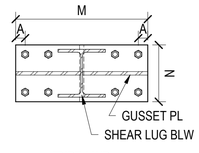
TYPE-LWB



TYPE-LWC



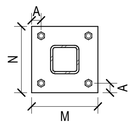
TYPE-LWD



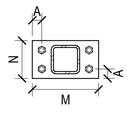
TYPE-LWD

STEEL COLUMN & BASE PLATE SCHEDULE

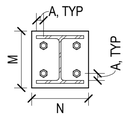
COLUMN MARK	COLUMN SIZE	BASE PLATE					ANCHOR ROD		NOTES
		TYPE	THICKNESS	"M" DIM	"N" DIM	"A" DIM	DIA.	EMBED	



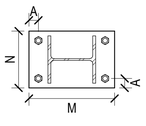
TYPE-HA



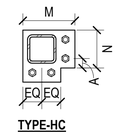
TYPE-HB



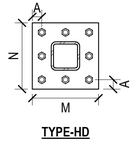
TYPE-WA



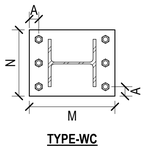
TYPE-WB



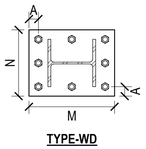
TYPE-HC



TYPE-HD



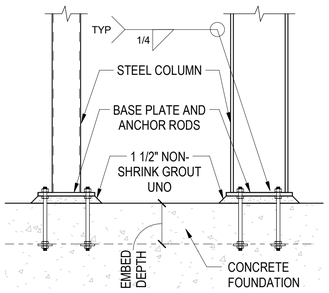
TYPE-WC



TYPE-WD

HSS COLUMN BASE PLATE TYPES

WIDE FLANGE COLUMN BASE PLATE TYPES



TYPICAL COLUMN BASE CONDITION

NOTES:

1. ALL BASE PLATES MUST BE ASTM A572 GR50 STEEL, TYP UNO
2. ALL ANCHOR RODS MUST BE ASTM F-1554 GR55 MIN UNO. THEY MUST BE HEADED ANCHOR RODS OR HAVE A DOUBLE NUT AT THE BASE, TYP UNO.
   A. ALL ANCHOR RODS MUST HAVE HARDENED WASHERS AND NUTS, WITH FULL HEIGHT OF EXTENSIONS THREADED
   B. 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
3. ALL BASE PLATES MUST BEAR ON MIN 1 1/2" THICK 5000 PSI NON-SHRINK GROUT AND MUST HAVE LEVELING NUTS, TYP UNO
4. ALL BASE PLATES MUST BE WELDED TO THE COLUMN WITH A 1/4" FILLET WELD ALL AROUND, TYP UNO
5. ALL ANCHOR RODS MUST BE SET IN PLACE WITH A TEMPLATE. THEY MUST BE PLACED PLUMB AND AT THE CORRECT DEPTH AND EXTENSION.
6. SEE THE STRUCTURAL GENERAL NOTES FOR ADDITIONAL INFORMATION

FOOTING SCHEDULE

MARK	WIDTH	LENGTH	THICK	TRANSVERSE REINFORCING		LONGITUDINAL REINFORCING		NOTES
				NO.	SIZE	NO.	SIZE	
FS6.0	6' - 0"	6' - 0"	1' - 0"	(5)	#6	(5)	#6	
FS7.0	7' - 0"	7' - 0"	1' - 0"	(5)	#6	(5)	#6	
FS10.0	10' - 0"	10' - 0"	1' - 6"	(5)	#6	(5)	#6	
FS[illegible]	5[illegible]' - 0"	[illegible]CONC"	2' - 6"	(4)	#5	--	#5 @ 12" OC	TOP & BOTTOM
FS[illegible]	1[illegible]' - 0"	[illegible]CONC"	1' - 6"	(5)	#6	(6)	#5 @ 12" OC	
FS18x30	18' - 0"	30' - 0"	2' - 6"					TOP & BOTTOM

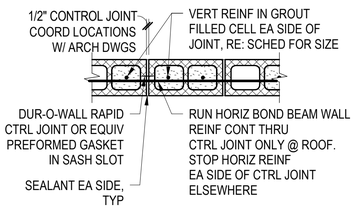
NOTES:

1. ALL FOOTINGS MUST BEAR ON PROPERLY PREPARED MATERIAL. SEE FOUNDATION SECTION OF THE STRUCTURAL GENERAL NOTES.
2. ALL FOOTINGS MUST BE CENTERED BELOW THE WALL AND/OR COLUMN ABOVE, TYP UNO.
3. ALL EARTH FORMED FOOTINGS MUST HAVE REQUIRED CONCRETE COVER FOR REINFORCEMENT PER THE CONCRETE COVER TABLE.
4. ALL EXTERIOR FOOTINGS MUST BEAR BELOW THE EFFECTS OF FROST. SEE THE DESIGN CRITERIA SECTION OF THE STRUCTURAL GENERAL NOTES FOR MINIMUM BEARING DEPTH.
5. PROVIDE MINIMUM COVER FOR ALL REINFORCING PER THE STRUCTURAL GENERAL NOTES AND/OR THE CONCRETE COVER SCHEDULE.
6. PLACE ALL FOOTING REINFORCING IN BOTTOM OF FOOTING WITH 3" CLEAR CONCRETE COVER, TYP UNO.
7. PLACE TRANSVERSE REINFORCING NEAREST EARTH AND LONGITUDINAL REINFORCING ON TOP OF TRANSVERSE REINFORCING.
8. 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.
9. EXTEND CONTINUOUS FOOTINGS 12" MINIMUM PAST EDGE OF WALL, UNLESS OTHERWISE NOTED ON PLANS.
10. REINFORCING IN CONTINUOUS FOOTINGS MUST PASS THROUGH INTERSECTING SPOT FOOTINGS.
11. ALL REINFORCING FOR SPOT FOOTINGS AND MAT FOOTINGS AT BRACED FRAMES AND MOMENT FRAMES MUST HAVE A 90 DEGREE HOOK AT EA END.
12. PROVIDE DOWELS WITH STANDARD HOOKS FROM FOOTINGS TO ANY REINFORCED ELEMENT ABOVE WITH SIZE AND SPACING TO MATCH VERTICAL REINFORCING IN THE ELEMENT ABOVE.
13. ANY INCREASE IN THE SIZE OF FOOTINGS SHOWN MAY REQUIRE ADDITIONAL REINFORCING. COORDINATE WITH THE ENGINEER OF RECORD.
14. PENETRATIONS THROUGH FOOTINGS ARE NOT ALLOWED WITHOUT PRIOR WRITTEN APPROVAL FROM THE ENGINEER OF RECORD.
15. ALL CONTINUOUS FOOTINGS MUST BE FC2.0 MINIMUM, AND ALL SPOT FOOTINGS MUST BE FS3.0 MINIMUM UNO ON PLANS.
16. SEE THE STRUCTURAL GENERAL NOTES FOR ADDITIONAL INFORMATION.

MASONRY WALL SCHEDULE

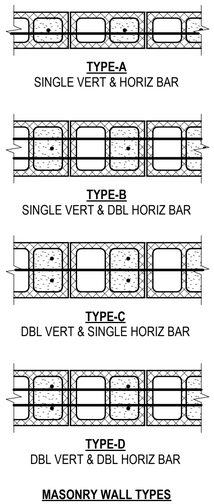
MARK	WIDTH	TYPE	WALL REINFORCING		NOTES
			HORIZONTAL	VERTICAL	
MW-8	8"	A	#5 @ 48" OC	#5 @ 32" OC	

NOTES:
1. SEE TYPICAL DETAILS FOR REINFORCING AT CORNERS, INTERSECTIONS, AND OPENINGS.
2. GROUT ALL CELLS SOLID THAT CONTAIN REINFORCING, EMBEDS, AND/OR BOLTS, TYP.
3. DO NOT SOLID GROUT WALLS UNO.
4. ALL MASONRY BELOW GRADE MUST BE GROUTED SOLID.
5. LAY ALL BLOCK IN RUNNING BOND, TYP UNO.
6. HORIZONTAL WALL REINF MUST CONTINUE THROUGH LINTELS. WHERE BOTH HORIZ WALL AND LINTEL REINF OCCUR IN THE SAME COURSE, USE THE LARGER REINFORCEMENT ONLY.
7. 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.
8. PROVIDE SCHEDULED BOUNDARY COLUMNS AT END OF WALLS. SEE TYP MASONRY ELEVATION.
9. AT TOP AND BOTTOM OF WALL PROVIDE (2) #5 CONT IN ADDITION TO SCHEDULED REINFORCING.
10. AT ALL DECK AND JOIST EMBED LOCATIONS, PROVIDE (2) #5 CONT IN ADDITION TO SCHEDULED REINFORCING.
11. 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.
12. 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.
13. WHEN A SINGLE CURTAIN OF REINF IS SPECIFIED, PLACE THE VERT REINF IN THE CENTER OF THE WALL, TYP UNO.
14. 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.
15. ALL WALLS MUST INCLUDE LADDER TYPE JOINT REINF SPACED AT 16" OC VERTICALLY WITH AT LEAST TWO WIRES OF W1.7 (GALVANIZED).
16. SEE GENERAL STRUCTURAL NOTES FOR ALL OTHER REQUIREMENTS.

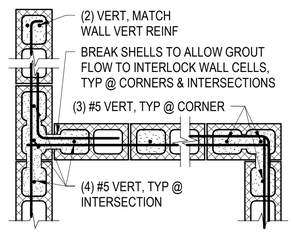


WHERE CONTROL JOINT OCCURS AT EDGE OF OPENINGS, ALL WALL BEAM REINF AND GROUT MUST BE CONTINUOUS THROUGH JOINT. USE OPEN END UNITS OR BREAK OUT TOP HALF OF SHELL FOR GROUNT FLOW @ JOINT OF BEAM. DELETE PREFORMED GASKET FOR HEIGHT OF BEAM

MASONRY WALL CONTROL JOINT



MASONRY WALL TYPES

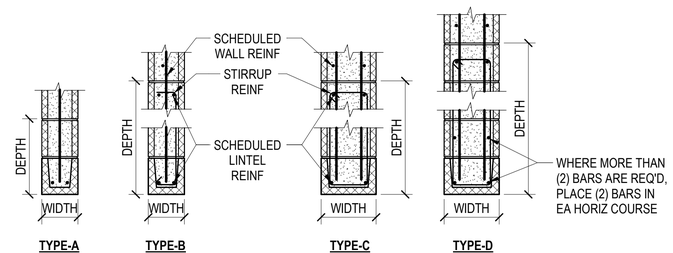


MASONRY WALL REINF LAYOUT

MASONRY LINTEL SCHEDULE

MARK	WIDTH	DEPTH	TYPE	LINTEL REINFORCING		NOTES
				HORIZONTAL	STIRRUPS	
MB1	7 5/8"	1' - 4"	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.



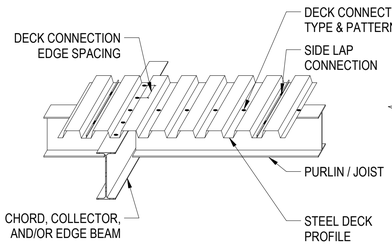
MASONRY LINTEL TYPES

STEEL ROOF DECK SCHEDULE

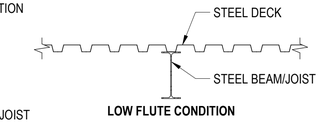
MARK	STEEL DECK			DECK CONNECTION			SIDE LAP CONNECTION		DECK PERFORMANCE	
	PROFILE	GAUGE	FINISH	TYPE	PATTERN	EDGE SPACING	TYPE	SPACING	MIN SHEAR	MIN FLEXIBILITY

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.

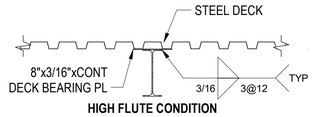
LEGEND:
ASW = 3/4" ARC SPOT WELD (PUDDLE WELD)
BTN = BUTTON PUNCH (3/16")
PIN = PIN CONNECTIONS (POWDER ACTUATED FASTENER)
ACCEPTABLE FASTENERS:
HILTI X-HSN-24 @ SUPPORTS 3/16" THROUGH 3/8" THICK
HILTI X-ENP-19 @ SUPPORTS 1/4" THICK AND GREATER
SCR = #10 SCREW
TBD = DECK CONNECTION AND SIDELAP SPACING 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 = VERCO PUNCHLOCK II SYSTEM
VST = VERCO SHEARTRANZ II-42 SYSTEM



STEEL DECK FASTENING PATTERN TO SUPPORT



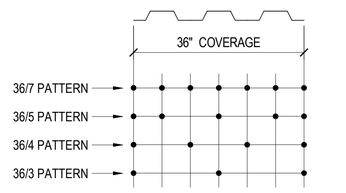
LOW FLUTE CONDITION



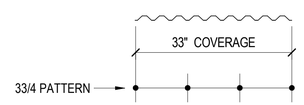
HIGH FLUTE CONDITION

THIS DETAIL APPLIES WHEREVER THE DECK FLUTE DOES NOT ALIGN WITH THE BEAM/JOIST FLANGE

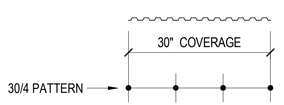
CHORD / COLLECTOR DECK CONNECTION



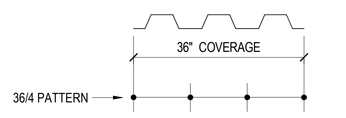
FASTENING PATTERNS FOR 1.5 (B,F,A,VL) DECK



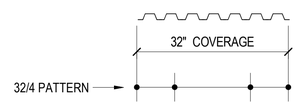
FASTENING PATTERN FOR 1.0C DECK



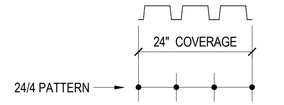
FASTENING PATTERN FOR 0.6C DECK



FASTENING PATTERN FOR 2VLI AND 3VLI DECK



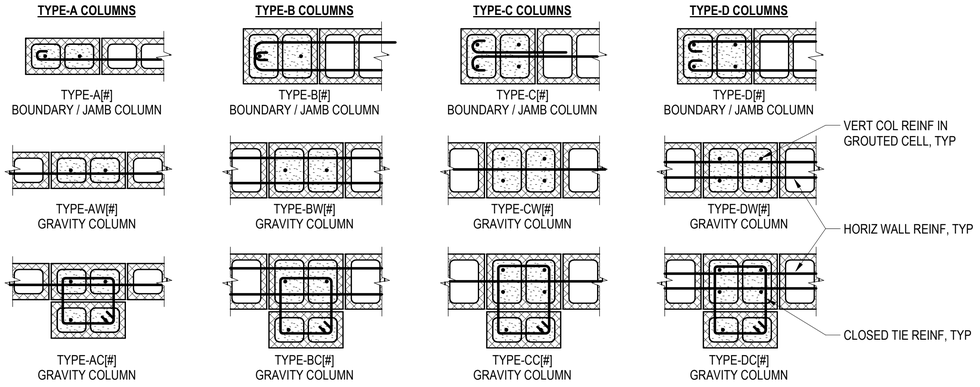
FASTENING PATTERN FOR 1.3C DECK



FASTENING PATTERN FOR 3N DECK

MASONRY JAMB AND COLUMN SCHEDULE

MARK	SIZE	TYPE	COLUMN REINFORCING		NOTES
			VERTICAL	TIES	
MP16	8x16	A2	#5 EA CELL	N/A	
MP32	8x16	A2	#5 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 5'0", VERT MASONRY REINF MUST DOWEL 4'0" 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.

PRELIMINARY DESIGN NOT FOR CONSTRUCTION

US Army Corps of Engineers ®

DATE | DESCRIPTION | MARK

DESIGNED BY: Designer
DRAWN BY: Author
CHECKED BY: Checker
ISSUE DATE: JULY 17, 2025
SOLICITATION NO.:
CONTRACT NO.:
SUBMITTED BY:
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

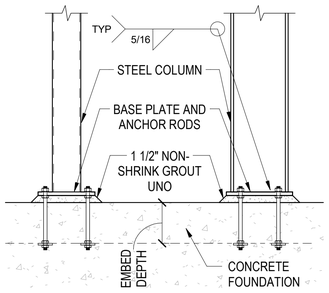
STRUCTURAL SCHEDULES

SHEET ID
S-602

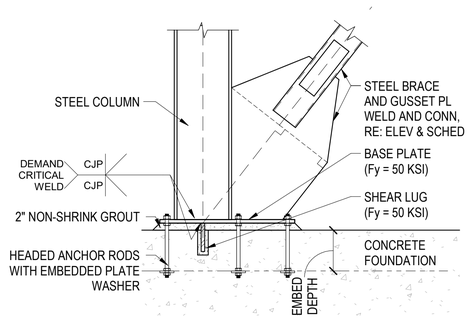
FOR REVIEW

STEEL BRACED FRAME COLUMN & BASE PLATE SCHEDULE

COLUMN MARK	COLUMN SIZE	BASE PLATE						ANCHOR ROD		SHEAR LUG		NOTES
		TYPE	THICKNESS	"M" DIM	"N" DIM	"A" DIM	"P" DIM	DIA.	EMBED	THICKNESS	DEPTH	

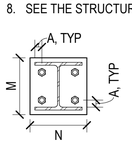


TYPICAL COLUMN BASE CONDITION

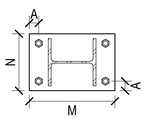


TYPICAL BRACED FRAME COLUMN BASE CONDITION

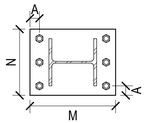
NOTES:
1. ALL BASE PLATES AND SHEAR LUGS MUST BE ASTM A572 GR50 STEEL, TYP UNO
2. ALL ANCHOR RODS MUST BE ASTM F-1554 GR55 MIN UNO. THEY MUST BE HEADED ANCHOR RODS W/ 3"x3"x3/8" PLATE WASHERS WITH DOUBLE NUTS OR EMBED PLATE EMBEDDED IN CONCRETE AT THE EMBEDMENT DEPTH SPECIFIED, TYP UNO.
   A. ALL ANCHOR RODS MUST HAVE HARDENED WASHERS AND NUTS, WITH FULL HEIGHT OF EXTENSIONS THREADED
   B. 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
3. 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
4. ALL BASE PLATES MUST BE WELDED TO THE COLUMN WITH A 1/4" FILLET WELD ALL AROUND, TYP UNO
5. ALL ANCHOR RODS MUST BE SET IN PLACE WITH A TEMPLATE. THEY MUST BE PLACED PLUMB AND AT THE CORRECT DEPTH AND EXTENSION
6. THE WIDTH OF ALL SHEAR LUGS IS THE SAME AS THE 'N' DIMENSION SHOWN IN BASE PLATE TYPES
7. NOTCH SHEAR LUGS AS REQ'D TO ACCOMMODATE REINF STEEL
8. SEE THE STRUCTURAL GENERAL NOTES FOR ADDITIONAL INFORMATION



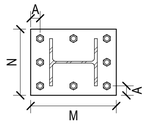
TYPE-WA



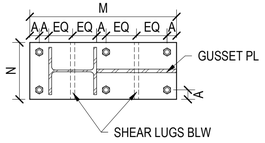
TYPE-WB



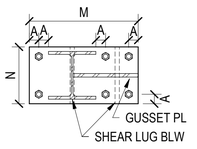
TYPE-WC



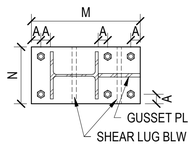
TYPE-WD



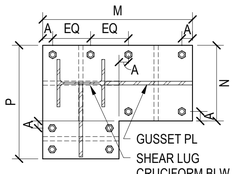
TYPE-LWE
*PROVIDE EMBED PLATE, RE: K15/S-502



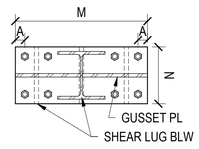
TYPE-LWA
*PROVIDE EMBED PLATE FOR SC9, RE: K15/S-502



TYPE-LWB



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

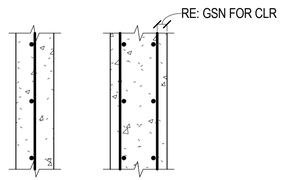


TYPE-LWD

CONCRETE WALL SCHEDULE

MARK	WIDTH	TYPE	WALL REINFORCING		NOTES
			HORIZONTAL	VERTICAL	
CW-8	8"	TYPE A	#5 @ 12" OC	#5 @ 12" OC	
CW-15	1' - 3"	TYPE A	#5 @ 12" OC	#5 @ 12" OC	

NOTES:
1. SEE TYPICAL DETAILS FOR REINFORCING AT CORNERS, INTERSECTIONS, AND OPENINGS.
2. 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.
3. 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.
4. WHEN A SINGLE CURTAIN OF REINF IS SPECIFIED, PLACE THE VERT REINF IN THE CENTER OF THE WALL, TYP UNO.
5. AT TOP AND BTM OF WALL, INCLUDING ALL DECK BEARING ELEVATIONS, PROVIDE (2) #5 CONT IN ADDITION TO SCHEDULED REINFORCING.
6. 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.
7. SEE GENERAL STRUCTURAL NOTES FOR ALL OTHER REQUIREMENTS.



TYPE-A **TYPE-B**

REINFORCED CONCRETE WALL TYPES

FOOTING SCHEDULE

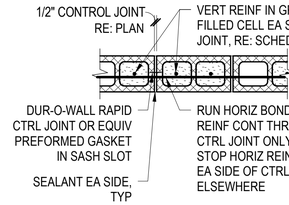
MARK	WIDTH	LENGTH	THICK	TRANSVERSE REINFORCING		LONGITUDINAL REINFORCING		NOTES
				NO.	SIZE	NO.	SIZE	
FS6.0	6' - 0"	6' - 0"	1' - 0"	(5)	#6	(5)	#6	
FS7.0	7' - 0"	7' - 0"	1' - 0"	(5)	#6	(5)	#6	
FS10.0	10' - 0"	10' - 0"	1' - 6"	(5)	#6	(5)	#6	
FS10x44	58' - 0"	10' - 0"	2' - 6"					TOP & BOTTOM
FS3.0	3' - 0"	CONT	1' - 0"	(5)	#6	(5)	#5 @ 12" OC	
FC2.00	18' - 0"	CONT	2' - 6"	(5)	#6	--	#5 @ 12" OC	TOP & BOTTOM

NOTES:
1. ALL FOOTINGS MUST BEAR ON PROPERLY PREPARED MATERIAL. SEE FOUNDATION SECTION OF THE STRUCTURAL GENERAL NOTES.
2. ALL FOOTINGS MUST BE CENTERED BELOW THE WALL AND/OR COLUMN ABOVE, TYP UNO.
3. ALL EARTH FORMED FOOTINGS MUST HAVE REQUIRED CONCRETE COVER FOR REINFORCEMENT PER THE CONCRETE COVER TABLE.
4. ALL EXTERIOR FOOTINGS MUST BEAR BELOW THE EFFECTS OF FROST. SEE THE DESIGN CRITERIA SECTION OF THE STRUCTURAL GENERAL NOTES FOR MINIMUM BEARING DEPTH.
5. PROVIDE MINIMUM COVER FOR ALL REINFORCING PER THE STRUCTURAL GENERAL NOTES AND/OR THE CONCRETE COVER SCHEDULE.
6. PLACE ALL FOOTING REINFORCING IN BOTTOM OF FOOTING WITH 3" CLEAR CONCRETE COVER, TYP UNO.
7. PLACE TRANSVERSE REINFORCING NEAREST EARTH AND LONGITUDINAL REINFORCING ON TOP OF TRANSVERSE REINFORCING.
8. 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.
9. EXTEND CONTINUOUS FOOTINGS 12" MINIMUM PAST EDGE OF WALL, UNLESS OTHERWISE NOTED ON PLANS.
10. REINFORCING IN CONTINUOUS FOOTINGS MUST PASS THROUGH INTERSECTING SPOT FOOTINGS.
11. ALL REINFORCING FOR SPOT FOOTINGS AND MAT FOOTINGS AT BRACED FRAMES AND MOMENT FRAMES MUST HAVE A 90 DEGREE HOOK AT EA END.
12. PROVIDE DOWELS WITH STANDARD HOOKS FROM FOOTINGS TO ANY REINFORCED ELEMENT ABOVE WITH SIZE AND SPACING TO MATCH VERTICAL REINFORCING IN THE ELEMENT ABOVE.
13. ANY INCREASE IN THE SIZE OF FOOTINGS SHOWN MAY REQUIRE ADDITIONAL REINFORCING. COORDINATE WITH THE ENGINEER OF RECORD.
14. PENETRATIONS THROUGH FOOTINGS ARE NOT ALLOWED WITHOUT PRIOR WRITTEN APPROVAL FROM THE ENGINEER OF RECORD.
15. ALL CONTINUOUS FOOTINGS MUST BE FC2.0 MINIMUM, AND ALL SPOT FOOTINGS MUST BE FS3.0 MINIMUM UNO ON PLANS.
16. SEE THE STRUCTURAL GENERAL NOTES FOR ADDITIONAL INFORMATION.

MASONRY WALL SCHEDULE

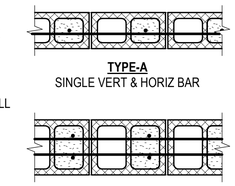
MARK	WIDTH	TYPE	WALL REINFORCING		1 NOTES
			HORIZONTAL	VERTICAL	
MW-8	8"	A	#5 @ 48" OC	#5 @ 32" OC	

NOTES:
1. SEE TYPICAL DETAILS FOR REINFORCING AT CORNERS, INTERSECTIONS, AND OPENINGS.
2. GROUT ALL CELLS SOLID THAT CONTAIN REINFORCING, EMBEDS, AND/OR BOLTS, TYP.
3. DO NOT SOLID GROUT WALLS UNO.
4. ALL MASONRY BELOW GRADE MUST BE GROUTED SOLID.
5. LAY ALL BLOCK IN RUNNING BOND, TYP UNO.
6. HORIZONTAL WALL REINF MUST CONTINUE THROUGH LINTELS. WHERE BOTH HORIZ WALL AND LINTEL REINF OCCUR IN THE SAME COURSE, USE THE LARGER REINFORCEMENT ONLY.
7. 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.
8. PROVIDE SCHEDULED BOUNDARY COLUMNS AT END OF WALLS. SEE TYP MASONRY ELEVATION.
9. AT TOP AND BOTTOM OF WALL PROVIDE (2) #5 CONT IN ADDITION TO SCHEDULED REINFORCING.
10. AT ALL DECK AND JOIST EMBED LOCATIONS, PROVIDE (2) #5 CONT IN ADDITION TO SCHEDULED REINFORCING.
11. 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.
12. 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.
13. WHEN A SINGLE CURTAIN OF REINF IS SPECIFIED, PLACE THE VERT REINF IN THE CENTER OF THE WALL, TYP UNO.
14. 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.
15. ALL WALLS MUST INCLUDE LADDER TYPE JOINT REINF SPACED AT 16" OC VERTICALLY WITH AT LEAST TWO WIRES OF W1.7 (GALVANIZED).
16. SEE GENERAL STRUCTURAL NOTES FOR ALL OTHER REQUIREMENTS.

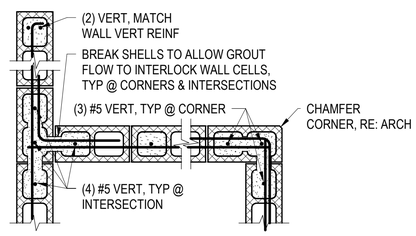


WHERE CONTROL JOINT OCCURS AT EDGE OF OPENINGS, ALL WALL BEAM REINF AND GROUT MUST BE CONTINUOUS THROUGH JOINT. USE OPEN END UNITS OR BREAK OUT TOP HALF OF SHELL FOR GROUNT FLOW @ JOINT OF BEAM. DELETE PREFORMED GASKET FOR HEIGHT OF BEAM

MASONRY WALL CONTROL JOINT



MASONRY WALL TYPES



MASONRY WALL REINF LAYOUT

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE
1	Revision 1	Date 1

DESIGNED BY: J. CORSON
DRAWN BY: R. CARLSON
CHECKED BY: D. CARLSON
SUBMITTED BY: P. PASZCZUK
SIZE: ANSI D
ISSUE DATE: JULY 17, 2025
SOLICITATION NO.:
CONTRACT NO.:

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

STRUCTURAL SCHEDULES

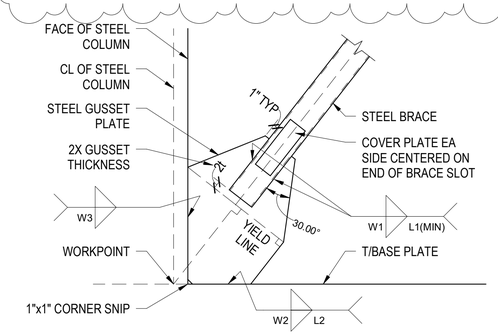
PRELIMINARY DESIGN
NOT FOR CONSTRUCTION

SHEET ID
AOF
S-603

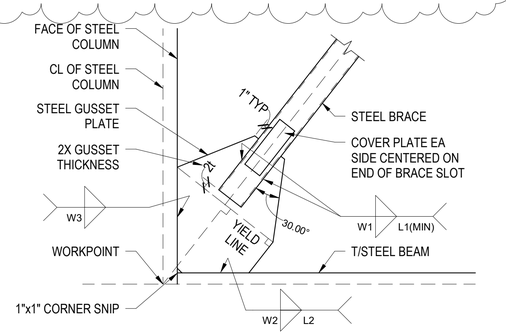
FOR REVIEW

STEEL GUSSET PLATE CONNECTION SCHEDULE

#	GUSSET PLATE	GEOMETRY AND WELDING INFORMATION					COVER PLATE INFO		
MARK	THICKNESS	W1 SIZE	L1 LENGTH	W2 SIZE	L2 LENGTH	W3 SIZE	PLATE SIZE	WELD	NOTES



TYPICAL STEEL GUSSET PLATE TO BASE PLATE DETAIL

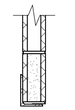


TYPICAL STEEL GUSSET PLATE TO STEEL BEAM DETAIL

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	
	WALL THICKNESS
OPENING WIDTH	4" WALL
UP TO 4'-0"	L4x3 1/2x5/16 LLV
4'-0" TO 6'-0"	L5x3 1/2x5/16 LLV
6'-0" TO 8'-0"	L6x3 1/2x5/16 LLV
8'-0" TO 12'-0"	L6x6x1/2
12'-0" TO 16'-0"	L8x6x5/8 LLV



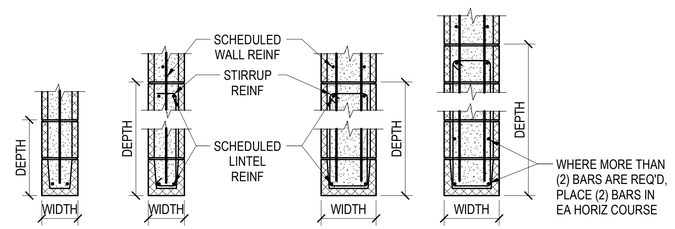
SINGLE ANGLE

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

				LINTEL REINFORCING		
MARK	WIDTH	DEPTH	TYPE	HORIZONTAL	STIRRUPS	NOTES
MB1	7 5/8"	1' - 4"	A	(2) #5	N/A	

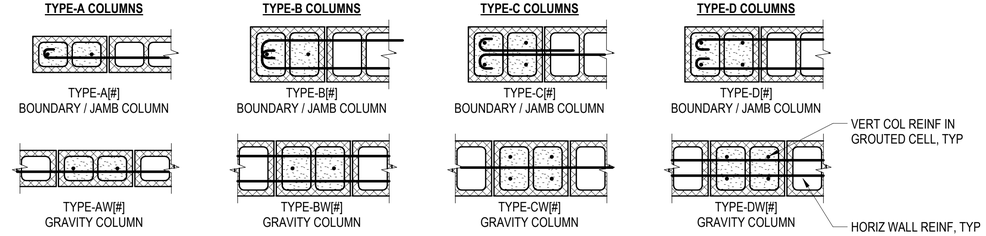
NOTES:
1. LINTELS MUST BE OF THE SAME MATERIAL AND WIDTH AS THE WALL IN WHICH THEY ARE CONSTRUCTED.
2. LINTELS MUST BE GROUTED MONOLITHICALLY WITH THE SUPPORTING WALL AND COLUMNS.
3. GROUT LINTELS SOLID FOR DEPTH SHOWN IN THE SCHEDULE, PLUS AS PER DETAILS, STRUCTURAL NOTES, AND/OR WALL SCHEDULE.
4. EXTEND 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

			COLUMN REINFORCING		
MARK	SIZE	TYPE	VERTICAL	TIES	NOTES
MP16	8x16	A2	#5 EA CELL	N/A	
MP32	8x16	A2	#5 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 5'0", VERT MASONRY REINF MUST DOWEL 4'0" 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.

PRELIMINARY DESIGN
NOT FOR CONSTRUCTION

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE
1	Revision 1	Date 1

ISSUE DATE: JULY 17, 2025
SOLICITATION NO.:
CONTRACT NO.:

DESIGNED BY: J. CORSON
DRAWN BY: R. CARLSON
CHECKED BY: D. CAMPION
SUBMITTED BY: P. PAS2C2JK
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LOS ANGELES DISTRICT

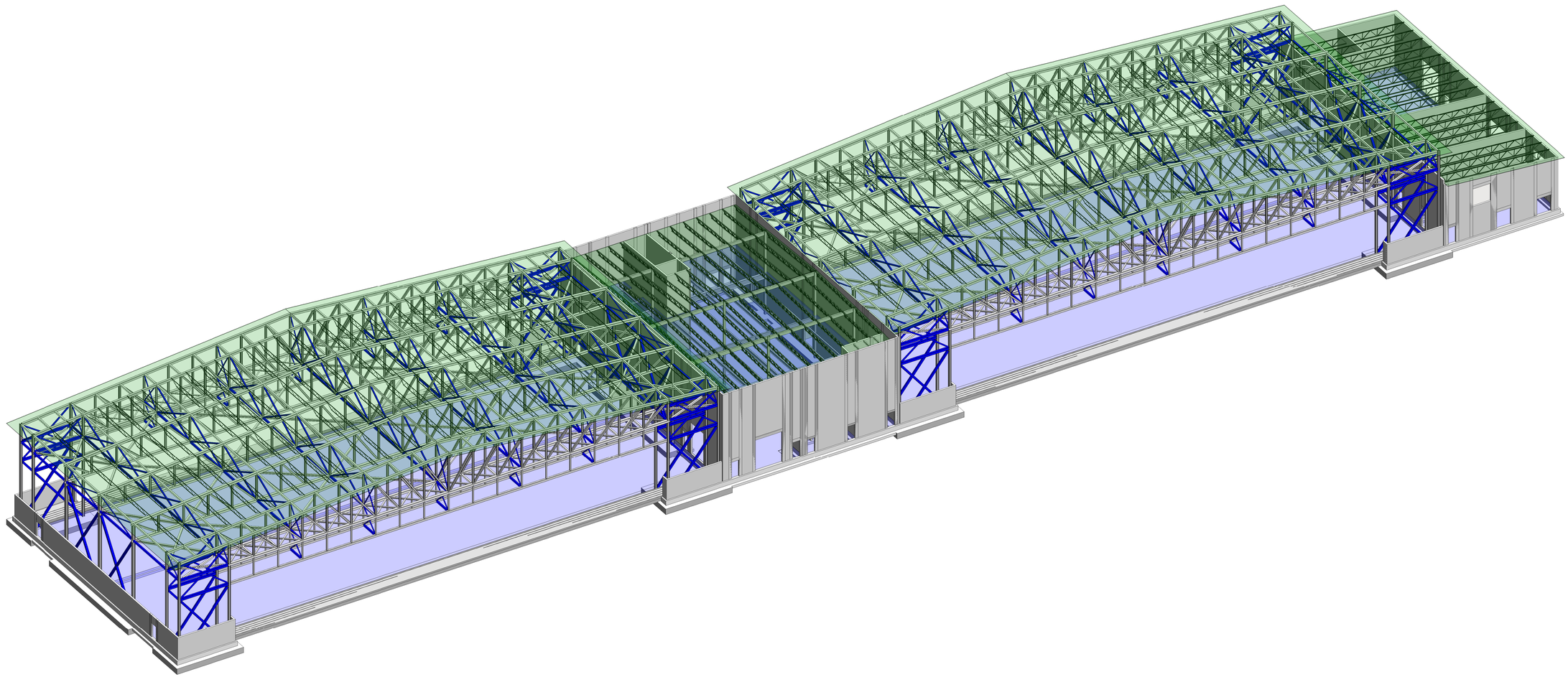
KORTE CONSTRUCTION
5700 OAKLAND AVE, SUITE 275
ST. LOUIS, MO 63110

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

STRUCTURAL SCHEDULES

SHEET ID
AOF
S-604

FOR REVIEW



3D REFERENCE VIEW

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: Designer
DRAWN BY: Author
CHECKED BY: Checker
SUBMITTED BY:
ISSUE DATE: JULY 17, 2025
SOLICITATION NO.:
CONTRACT NO.:
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

3D REFERENCE VIEW

PRELIMINARY DESIGN
NOT FOR CONSTRUCTION

SHEET ID
S-901

FOR REVIEW