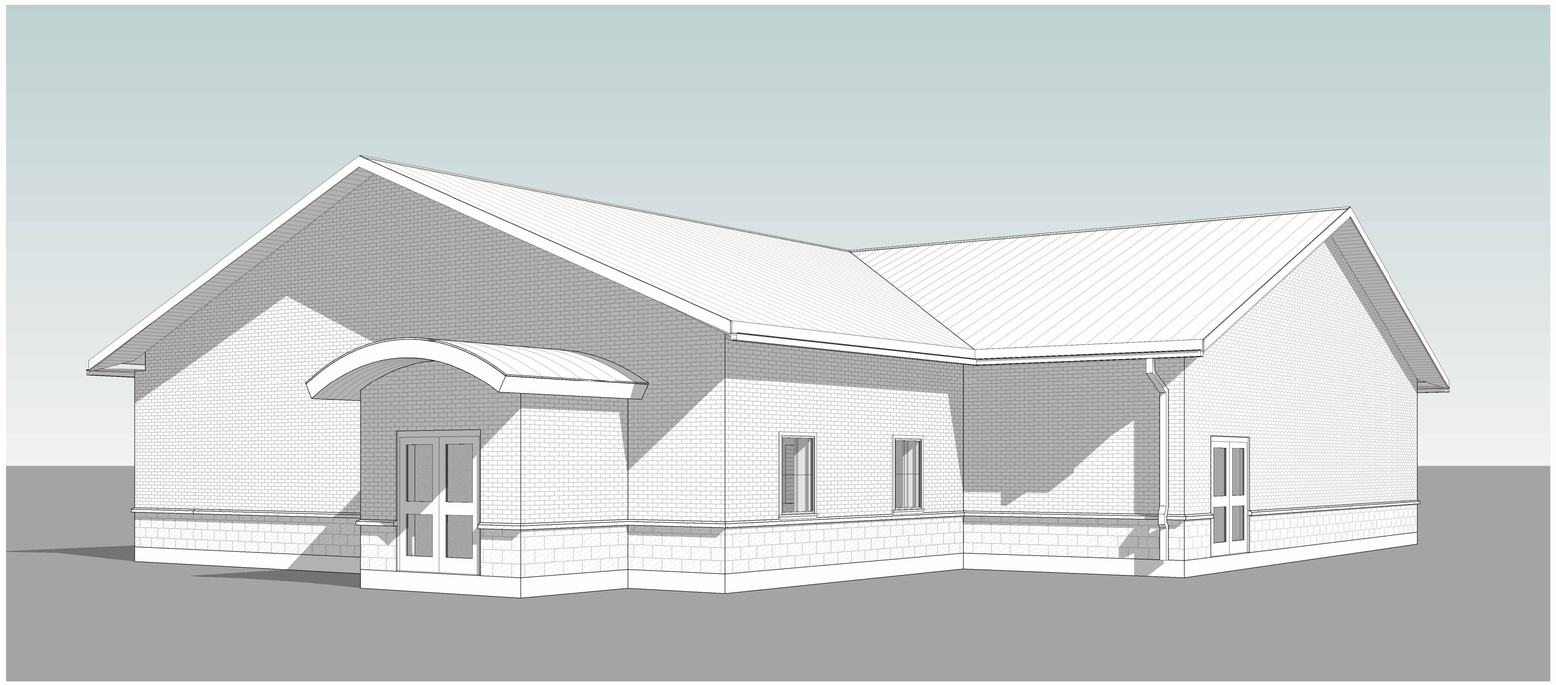
US Army Corps
of Engineers ®
LITTLE ROCK DISTRICT

ACCESS CONTROL POINT- PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS



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US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HANA-KENALL 8A JV
2500 CITYWEST BLVD
SUITE 700
HOUSTON, TX 77042

ACCESS CONTROL POINT- PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

COVER SHEET

SHEET ID
G-001

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

SHEET INDEX

SHEET NO.	BUILDING I.D.	SHEET NAME
GENERAL		
G-001		COVER SHEET
G-002		SHEET INDEX
G-003		GENERAL NOTES AND ABBREVIATIONS
G-004		ARCHITECTURAL GENERAL NOTES
G-005		ACCESSIBLE ACCESSORY MOUNTING HEIGHT
G-100		CODE ANALYSIS
G-101	VCC	LIFE SAFETY PLAN
G-111	G-HOUSE	LIFE SAFETY PLAN
CIVIL		
GI001		SHEET INDEX, LEGEND AND ABBREVIATIONS
GI002		GENERAL CIVIL NOTES
GC101		HAUL ROUTE
GC102		CONSTRUCTION PHASING PLAN - PHASE 1
GC103		TEMPORARY ROADWAY CONNECTION
GC104		CONSTRUCTION PHASING PLAN - PHASE 2
GC105		PHASE 2 DETOUR PLAN
VF101		TOPOGRAPHIC SURVEY MAP
B-100		SUBSURFACE INVESTIGATION PLAN
B-101		BORING LOGS - 1
B-102		BORING LOGS - 2
B-103		BORING LOGS - 3
B-104		BORING LOGS - 4
B-105		BORING LOGS - 5
B-106		BORING LOGS - 6
B-107		BORING LOGS - 7
B-108		BORING LOGS - 8
CD101		DEMOLITION PLAN - 1
CD102		DEMOLITION PLAN - 2
CD103		DEMOLITION PLAN - 3
CS101		EXISTING SITE PLAN - 1
CS102		EXISTING SITE PLAN - 2
CS103		EXISTING SITE PLAN - 3
CS104		PLAINVIEW GATE OVERVIEW
CS105		PROPOSED SITE PLAN - 1
CS106		PROPOSED SITE PLAN - 2
CS107		PROPOSED SITE PLAN - 3
CS108		AVB SITE PLAN
CS109		SITE LAYOUT PLAN - 1
CS110		SITE LAYOUT PLAN - 2
CS111		SITE LAYOUT PLAN - 3
CU101		UTILITIES LAYOUT PLAN - 1
CU102		UTILITIES LAYOUT PLAN - 2
CU103		UTILITIES LAYOUT PLAN - 3
CU104		SANITARY SEWER PIPE NETWORK
CU105		SANITARY SEWER PLAN AND PROFILE - 1
CU106		SANITARY SEWER PLAN AND PROFILE - 2
CU107		DRAINAGE PIPES NETWORK
CU108		DRAINAGE PROFILE - 1
CU109		DRAINAGE PROFILE - 2
CU110		DRAINAGE PROFILE - 3
CU111		DRAINAGE PROFILE - 4
CU112		DRAINAGE PROFILE - 5
CU113		DRAINAGE PROFILE - 6
CU114		WATER PIPES NETWORK
CU115		WATER PROFILE - 1
CU116		WATER PROFILE - 2
CU117		WATER PROFILE - 3
CG101		GRADING AND DRAINAGE PLAN - 1
CG102		GRADING AND DRAINAGE PLAN - 2
CG103		GRADING AND DRAINAGE PLAN - 3
CG104		GRADING INSET PLAN
CG105		EROSION CONTROL PLAN - 1
CG106		EROSION CONTROL PLAN - 2
CG107		EROSION CONTROL PLAN - 3
CG501		EROSION CONTROL DETAILS
C-101		SIGNING AND MARKING PLAN - 1
C-102		SIGNING AND MARKING PLAN - 2
C-103		SIGNING AND MARKING PLAN - 3
C-201		ROAD PAVEMENT PROFILE
C-301		TYPICAL SECTIONS - ROADS
C-302		TYPICAL SECTIONS - DETENTION POND AND DITCHES
C-303		ROAD PAVEMENT CROSS SECTION - STA 0+00 TO STA 13+00
C-501		SITE DETAILS - 1
C-502		SITE DETAILS - 2
C-503		SITE DETAILS - 3
C-504		SITE DETAILS - 4
C-505		SITE DETAILS - 5
C-506		SITE DETAILS - 6
C-507		SITE DETAILS - 7
C-508		SITE DETAILS - 8
C-509		SITE DETAILS - 9
C-510		SITE DETAILS - 10
C-511		SITE DETAILS - 11
C-512		SITE DETAILS - 12
C-513		SITE DETAILS - 13
C-514		SITE DETAILS - 14
C-515		SITE DETAILS - 15
C-516		SITE DETAILS - 16
C-517		SITE DETAILS - 17
C-518		SITE DETAILS - 18
C-519		SITE DETAILS - 19
C-520		SITE DETAILS - 20
C-521		SITE DETAILS - 21
C-522		SITE DETAILS - 22
C-523		SITE DETAILS - 23
C-524		SITE DETAILS - 24
C-525		SITE DETAILS - 25
C-526		SITE DETAILS - 26
C-527		SITE DETAILS - 27
C-701		ALIGNMENT DATA TABLE
C-702		DEMOLITION LAYOUT POINT TABLES
C-703		PROPOSED LAYOUT POINT TABLES
C-704		CURVE TABLES
C-705		DRAINAGE PIPE TABLES
C-706		DRAINAGE STRUCTURES TABLES

SHEET NO.	BUILDING I.D.	SHEET NAME
LANDSCAPE		
L-101		LANDSCAPE PLAN
L-102		LANDSCAPE DETAILS
STRUCTURE		
S-001		GENERAL NOTES + SHEET INDEX
S-002		TYPICAL CONCRETE + CMU DETAILS
S-003		TYPICAL LIGHT GAGE + STEEL DETAILS
S-004		WIND LOADS + DIAGRAMS
S-005		SNOW LOADS + DIAGRAMS
S-006		OVERWATCH FOUNDATION PLAN + SECTION
S-101	VCC	VCC FOUNDATION PLAN
S-102	VCC	VCC ROOF FRAMING PLAN
S-103	VCC	VCC ENLARGED STORM SHELTER PLAN
S-111	G-HOUSE	GATEHOUSE FOUNDATION PLAN
S-112	G-HOUSE	GATEHOUSE ROOF FRAMING PLAN
S-121	ID-CHECK	I.D. CHECK AREA FOUNDATION PLAN
S-122	ID-CHECK	I.D. CHECK AREA ROOF FRAMING PLAN
S-131	T-SEARCH	TRUCK SEARCH AREA FOUNDATION PLAN
S-132	T-SEARCH	TRUCK SEARCH AREA ROOF FRAMING PLAN
S-201	VCC	VCC BUILDING SECTIONS
S-202	VCC	VCC BUILDING SECTIONS
S-211	G-HOUSE	GATEHOUSE BUILDING SECTIONS
S-221	ID-CHECK	I.D. CHECK AREA BUILDING SECTIONS
S-231	T-SEARCH	TRUCK SEARCH AREA BUILDING SECTIONS
S-301	VCC	VCC FOUNDATION SECTIONS + DETAILS
S-302	VCC	ROOF FRAMING SECTIONS + DETAILS
S-303	VCC	VCC STORM SHELTER SECTIONS + DETAILS
S-311	G-HOUSE	GATEHOUSE FOUNDATION SECTIONS + DETAILS
S-312	G-HOUSE	GATEHOUSE ROOF FRAMING SECTIONS + DETAILS
S-321	ID-CHECK	I.D. CHECK AREA FOUNDATION SECTIONS + DETAILS
S-322	ID-CHECK	I.D. CHECK AREA ROOF FRAMING SECTIONS + DETAILS
S-331	T-SEARCH	TRUCK SEARCH AREA FOUNDATION SECTIONS + DETAILS
S-332	T-SEARCH	TRUCK SEARCH AREA ROOF FRAMING SECTIONS + DETAILS
ARCHITECTURE		
AB001	VCC	VCC - AIR BARRIER FLOOR PLAN
AB002	VCC	VCC - AIR BARRIER BUILDING SECTIONS
AB003	G-HOUSE	GATEHOUSE - AIR BARRIER FLOOR PLAN AND BUILDING SECTIONS
A-001		SITE PLAN
A-101	VCC	VCC FLOOR PLAN
A-104	VCC	VCC ROOF PLAN
A-105	VCC	VCC REFLECTED CEILING PLAN
A-111	G-HOUSE	GATEHOUSE FLOOR PLAN/ ROOF PLAN
A-115	G-HOUSE	GATEHOUSE REFLECTED CEILING PLAN
A-121	ID-CHECK	I.D. CHECK AREA FLOOR PLAN
A-131	T-SEARCH	TRUCK SEARCH AREA FLOOR PLAN
A-141	O-WATCH	OVERWATCH BOOTH PLANS
A-201	VCC	NORTH AND SOUTH ELEVATIONS
A-202	VCC	EAST AND WEST ELEVATIONS
A-211	G-HOUSE	GATEHOUSE NORTH AND SOUTH ELEVATIONS
A-212	G-HOUSE	GATEHOUSE EAST AND WEST ELEVATIONS
A-221	ID-CHECK	I.D. CHECK AREA ELEVATIONS
A-231	T-SEARCH	TRUCK SEARCH AREA NORTH AND SOUTH ELEVATIONS
A-232	T-SEARCH	TRUCK SEARCH AREA EAST AND WEST ELEVATIONS
A-301	VCC	VCC BUILDING CROSS SECTIONS
A-303	VCC	VCC WALL SECTIONS
A-310	G-HOUSE	GATEHOUSE BUILDING CROSS SECTIONS
A-400	VCC	VCC ENLARGED CORE PLANS
A-402	VCC	VCC INTERIOR ELEVATIONS
A-530		PARTITION TYPES
A-531		PARTITION TYPES
A-532		PARTITION TYPES
A-541		DOOR DETAILS
A-603	VCC	VCC DOOR SCHEDULE AND TYPES
A-613	G-HOUSE	GATEHOUSE DOOR & WINDOW SCHEDULE & DOOR & WINDOW TYPES
INTERIORS		
I-001	VCC	INTERIOR NOTES AND FINISH LEGEND
I-101	VCC	INTERIOR FINISH PLAN
I-102	VCC	INTERIOR CASEWORK DETAILS
I-103	VCC	FLOOR TRANSITION DETAILS
I-104		WALL PROTECTION DETAILS
I-111	G-HOUSE	INTERIOR FINISH PLAN
IF101	VCC	FURNITURE PLAN
IF111	G-HOUSE	FURNITURE PLAN
IW101	VCC	INTERIOR WAYFINDING PLAN
IW111	G-HOUSE	INTERIOR WAYFINDING PLAN
FIRE PROTECTION		
F-001	VCC	FIRE PROTECTION GENERAL NOTES AND LEGEND
F-011	G-HOUSE	FIRE PROTECTION GENERAL NOTES AND LEGEND
FA101	VCC	FIRE ALARM AND MASS NOTIFICATION PLAN
FA102	VCC	ACOUSTICALLY DISTINGUISHABLE SPACE (ADS) PLAN
FA111	G-HOUSE	FIRE ALARM PLAN
FX101	VCC	FIRE SUPPRESSION PLAN
FX111	G-HOUSE	FIRE SUPPRESSION PLAN

SHEET NO.	BUILDING ID.	SHEET NAME
PLUMBING		
P-001		PLUMBING GENERAL NOTES AND ABBREVIATIONS
P-101	VCC	PLUMBING UNDER FLOOR PLAN
P-102	VCC	PLUMBING FLOOR PLAN
P-111	G-HOUSE	PLUMBING FLOOR PLANS
P-501		PLUMBING DETAILS
P-502		PLUMBING DETAILS
P-601		PLUMBING SCHEDULES
P-602		PLUMBING MATERIAL LIST
P-901	VCC	PLUMBING ISOMETRIC DIAGRAMS
P-902	VCC	PLUMBING ISOMETRIC DIAGRAMS
P-911	G-HOUSE	PLUMBING ISOMETRIC DIAGRAMS
MECHANICAL		
M-001		MECHANICAL GENERAL NOTES, ABBREVIATIONS
M-101	VCC	MECHANICAL FLOOR PLAN
M-111	G-HOUSE	MECHANICAL FLOOR PLAN
M-301	VCC	MECHANICAL SECTIONS
M-501		MECHANICAL DETAILS
M-502		MECHANICAL DETAILS
M-503		MECHANICAL DETAILS
M-601		MECHANICAL SCHEDULES
M-602		MECHANICAL SCHEDULES
M-701		MECHANICAL CONTROLS
M-702		MECHANICAL CONTROLS
M-703		MECHANICAL CONTROLS
M-704		MECHANICAL CONTROLS
M-705		MECHANICAL CONTROLS
M-706		MECHANICAL CONTROLS
M-707		MECHANICAL CONTROLS
ELECTRICAL		
E-001	VCC	ELECTRICAL LEGEND
ED101		ELECTRICAL SITE PLAN DEMOLITION
ES101		ELECTRICAL SITE PLAN
ES102		ELECTRICAL SITE PLAN
ES103		ELECTRICAL LIGHTING PLAN
EG101		ELECTRICAL GROUNDING FLOOR PLAN
EG102	VCC	GROUNDING PLAN
EG103	G-HOUSE	GROUNDING PLAN
E-101	VCC	LIGHTING PLAN
E-102	VCC	POWER PLAN
E-103	VCC	HVAC POWER PLAN
E-104	G-HOUSE	LIGHTING PLAN
E-105	G-HOUSE	POWER PLAN
E-106	G-HOUSE	HVAC POWER PLAN
E-401	VCC	ENLARGED PLAN
E-501	VCC	ELECTRICAL DETAILS
E-502	VCC	ELECTRICAL DETAILS
E-503	VCC	ELECTRICAL DETAILS
E-504	VCC	ELECTRICAL DETAILS
E-601	VCC	ONE-LINE DIAGRAM
E-602	VCC	ELECTRICAL SCHEDULES
E-603	VCC	ELECTRICAL PANEL SCHEDULES
E-604	VCC	ELECTRICAL PANEL SCHEDULES
E-605	VCC	ELECTRICAL PANEL SCHEDULES
E-606	VCC	ELECTRICAL PANEL SCHEDULES
E-607	G-HOUSE	ELECTRICAL PANEL SCHEDULES
TELECOMMUNICATIONS		
T-001	VCC	TELECOMMUNICATIONS SYSTEMS LEGEND
T-100		TELECOM SITE PLAN
T-101	VCC	TELECOMMUNICATIONS SYSTEMS PLAN - VISITOR CONTROL CENTER
T-111	G-HOUSE	TELECOMMUNICATIONS SYSTEMS PLAN - GATEHOUSE
T-121	ID-CHECK	TELECOMMUNICATIONS SYSTEMS PLAN - I.D. CHECK AREA
T-131	T-SEARCH	TELECOMMUNICATIONS SYSTEMS PLAN - TRUCK SEARCH AREA
T-141	O-WATCH	TELECOMMUNICATIONS SYSTEMS PLAN - OVERWATCH
T-411.1	VCC	TELECOMMUNICATIONS ENLARGED COMM ROOM-119
T-411.2	G-HOUSE	TELECOMMUNICATIONS ENLARGED COMM ROOM-105
T-501		TELECOMMUNICATIONS SYSTEMS DETAILS
T-502		TELECOMMUNICATIONS SYSTEMS DETAILS
T-503		TELECOMMUNICATIONS SYSTEMS DETAILS
T-504		TELECOMMUNICATIONS SYSTEMS DETAILS
T-601		TELECOMMUNICATIONS SYSTEMS RISERS
TY001		SECURITY SYSTEMS LEGEND
TY101	VCC	SECURITY SYSTEMS PLAN - VISITOR CONTROL CENTER
TY111	G-HOUSE	SECURITY SYSTEMS PLAN - GATEHOUSE
TY121	ID-CHECK	SECURITY SYSTEMS PLAN - I.D. CHECK AREA
TY131	T-SEARCH	SECURITY SYSTEMS PLAN - TRUCK SEARCH AREA
TY141	O-WATCH	SECURITY SYSTEMS PLAN - OVERWATCH
TY501		SECURITY SYSTEMS DETAILS
TY502		SECURITY SYSTEMS DETAILS
TY503		SECURITY SYSTEMS DETAILS
TY504		SECURITY SYSTEMS DETAILS
TY505		SECURITY SYSTEMS DETAILS
TY506		SECURITY SYSTEMS DETAILS
TY507		SECURITY SYSTEMS DETAILS
TY508		SECURITY SYSTEMS DETAILS
TY509		SECURITY SYSTEMS DETAILS
TY510		SECURITY SYSTEMS DETAILS

BUILDING I.D. LEGEND

VCC	VISITOR CONTROL CENTER
G-HOUSE	GATEHOUSE
ID-CHECK	I.D. CHECK AREA
T-SEARCH	TRUCK SEARCH AREA
O-WATCH	OVERWATCH BOOTH

US Army Corps of Engineers ®

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SHEET INDEX

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G-002

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DRAWING ABBREVIATIONS

A	----------
A LABEL	CLASS A DOOR
A/C	AIR CONDITION
A/C UNIT	AIR CONDITIONING UNIT
A/E	ARCHITECT/ENGINEER
AB	ANCHOR BOLT
ACC	ACCESSIBLE
ACS	AUTOMATIC CONTROL SYSTEM
ACS DR	ACCESS DOOR
ACS PNL	ACCESS PANEL
ACT	ACOUSTICAL CEILING TILE
ADA	AMERICANS WITH DISABILITIES ACT
ADMIN	ADMINISTRATION
AFC	ABOVE FINISHED COUNTER
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AFS	ABOVE FINISHED SLAB
AGGR	AGGREGATE
AHU	AIR HANDLING UNIT
AIB	AIR INFILTRATION BARRIER
ALT	ALTERNATE
ALUM	ALUMINUM
ANOD	ANODIZE
APC	ACOUSTICAL PANEL CEILING
APPROX	APPROXIMATE
AR	AS REQUIRED
ARCH	ARCHITECT
ASC	ABOVE SUSPENDED CEILING
ASSY	ASSEMBLY
ATC	ACOUSTICAL TILE CEILING
AVG	AVERAGE
AW	ARCHITECTURAL WOODWORK
AWT	ACOUSTICAL WALL TREATMENT
B	----------
B LABEL	CLASS B DOOR
BALC	BALCONY
BB	BASEBOARD
BC	BOOKCASE
BD	BOARD
BDRY	BOUNDARY
BFF	BELOW FINISH FLOOR
BHMA	BUILDER'S HARDWARE MANUFACTURER'S ASSOCIATION
BLDG	BUILDING
BLKG	BLOCKING
BLT IN	BUILT-IN
BN	BULLNOSE
BOS	BOTTOM OF STEEL
BOT	BOTTOM
BP	BUILDING PAPER
BRKT	BRACKET
BSMT	BASEMENT
BTWN	BETWEEN
BUR	BUILT-UP ROOFING
C	----------
C CONC	CAST CONCRETE
C LABEL	CLASS C DOOR
CAB	CABINET
CATW	CATWALK
CAV	CAVITY
CBB	CEMENTITIOUS (BACKER) BOARD
CD	CONSTRUCTION DOCUMENTS
CDW	CHILLED DRINKING WATER
CEM PLAS	CEMENT PLASTER
CER	CERAMIC
CF	CONTRACTOR FURNISHED
CF/CI	CONTRACTOR FURNISHED/CONTRACTOR INSTALLED
CFE	CONTRACTOR FURNISHED EQUIPMENT
CFLG	COUNTERFLASHING
CFM	CUBIC FEET PER MINUTE
CFMF	COLD-FORMED METAL FRAMING
CFS	CUBIC FEET PER SECOND
CG	CORNER GUARD
CI	CAST IRON
CIP	CAST-IN-PLACE
CJ	CONTROL JOINT
CL	CENTER LINE
CLG	CEILING
CLG DIFF	CEILING DIFFUSER
CLG HT	CEILING HEIGHT
CLL	COLUMN LINE
CLO	CLOSET
CLR	COLOR
CLRM	CLASSROOM
CMU	CONCRETE MASONRY UNIT
CNDS	CONDENSATE
CDR	CARD READER
CO	CLEANOUT
COL	COLUMN
COMM	COMMUNICATION
CONC	CONCRETE
CONC FLR	CONCRETE FLOOR
CONF	CONFERENCE
CONT	CONTINUE
COORD	COORDINATE
CORR	CORRIDOR
CP	CONCRETE PIPE
CPT	CARPET
CR	CONTROL ROOM
CS	CAST STONE
CSWK	CASEWORK
CT	CERAMIC TILE
CTB	CERAMIC TILE BASE
CTF	CERAMIC TILE FLOOR
CTR	CENTER
CU FT	CUBIC FEET
CW	CASEMENT WINDOW
D	----------
D	DEPTH
D LABEL	CLASS D DOOR
DBL	DOUBLE
DEMO	DEMOLITION
DEPT	DEPARTMENT
DET	DETAIL
DIA	DIAMETER
DIR	DIRECTION
DIST	DISTANCE
DOC	DOCUMENT
DR	DOOR
DS	DOWNSPOUT

E	----------
E LABEL	CLASS E DOOR
EA	EACH
EF	EACH FACE
EIFS	EXTERIOR INSULATION AND FINISH SYSTEM
EJ	EXPANSION JOINT
ES	EACH SIDE
EL	ELEVATION
ELEV	ELEVATOR
ENTR	ENTRANCE
EPS	EXPANDED POLYSTYRENE BOARD (INSULATION)
EQ	EQUAL
EWC	ELECTRIC WATER COOLER
EXP	EXPOSED
EXT	EXTERIOR
EXT	EXTINGUISHER
EXT GR	EXTERIOR GRADE
F	----------
FA	FIRE ALARM
FAAP	FIRE ALARM ANNUNCIATOR PANEL
FAS BD	FASCIA BOARD
FC BRK	FACE BRICK
FCO	FLOOR CLEANOUT
FD	FLOOR DRAIN
FDTN	FOUNDATION
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET
FED	FEDERAL
FF	FINISH FACE
FF EL	FINISH FLOOR ELEVATION
FF INSUL	FOIL BACKED INSULATION
FGL	FIBERGLASS
FH	FIRE HOSE
FHP	FULL HEIGHT PARTITION
FIN	FINISH
FIN BS	FINISH BOTH SIDES
FIN FLR	FINISH FLOOR
FIN GR	FINISH GRADE
FIXT	FIXTURE
FLDG	FOLDING
FLEX	FLEXIBLE
FLG	FLOORING
FLMT	FLUSH MOUNT
FLR	FLOOR
FM	FACTORY MUTUAL
FOC	FACE OF CONCRETE
FOM	FACE OF MASONRY
FR	FIRE RESISTANT
FRG	FIBER REINFORCED GYPSUM
FRMG	FRAMING
FRP	FIBERGLASS REINFORCED PLASTIC
FRTW	FIRE RETARDANT TREATED WOOD
FS	FEDERAL SPECIFICATION
FSTNR	FASTENER
FT	FEET
FTG	FOOTING
FWC	FABRIC WALLCOVERING
G	----------
G	NATURAL GAS
GALV	GALVANIZED
GB	GRAB BAR
GFCI	GOVERNMENT FURNISHED CONTRACTOR INSTALLED
GFGI	GOVERNMENT INSTALLED GOVERNMENT INSTALLED
GFRG	GLASS-FIBER-REINFORCED GYPSUM
GLZ	GLAZING
GR FL	GROUND FLOOR
GUT	GUTTER
GYP BD	GYPSUM BOARD
GYP PLAS	GYPSUM PLASTER
H	----------
HB	HOSE BIBB
HDPE	HIGH DENSITY POLYETHYLENE
HDW	HARDWARE
HDWD	HARDWOOD
HEPA	HIGH EFFICIENCY PARTICULATE AIR (FILTER)
HM	HOLLOW METAL
HMD	HOLLOW METAL DOOR
HORIZ	HORIZONTAL
HT	HEIGHT
HYDR	HYDRAULIC
I	----------
IBC	INTERNATIONAL BUILDING CODE
INSUL	INSULATION
INT	INTERIOR
ILO	IN LIEU OF
J	----------
JAN	JANITOR
K	----------
KPD	KEYPAD
KIT	KITCHEN
KPL	KICKPLATE
L	----------
LAM	LAMINATE
LAV	LAVATORY
LBR	LUMBER
LBS	POUND
LDG	LANDING
LF	LINEAR FEET (FOOT)
LIB	LIBRARY
LIN	LINEAR
LKR	LOCKER
LOC	LOCATION
LT	LIGHT
LVDR	LOUVER DOOR
LVR	LOUVER

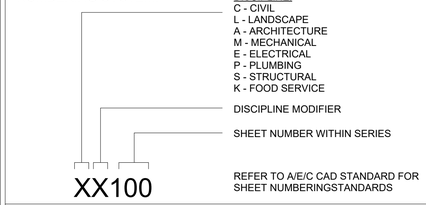
M	----------
MACH RM	MACHINE ROOM
MATL	MATERIAL
MAX	MAXIMUM
MC	MOISTURE CONTENT
MD	METAL DECK
MECH	MECHANICAL
MECH RM	MECHANICAL ROOM
MEMB	MEMBRANE
MF	MILL FINISH
MFR	MANUFACTURER
MID	MIDDLE
MIL STD	MILITARY STANDARD
MIN	MINIMUM, MINUTE
MIRR	MIRROR
MISC	MISCELLANEOUS
MLDG	MOLDING (MOULDING)
MO	MASONRY OPENING
MOD	MODIFY
MB	MOISTURE BARRIER
MTG	MOUNTING
MTL	METAL
MVBL	MOVABLE
MWP	MEMBRANE WATERPROOFING
N	----------
N	NORTH
NA	NOT APPLICABLE
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NIC	NOT IN CONTRACT
NO	NUMBER
NOM	NOMINAL
NP	NO PAINT
NRC	NOISE REDUCTI
O	----------
OA	OVERALL
OC	ON CENTER
OD	OUTSIDE DIAMETER
OFD	OVERFLOW DRAIN
OFF	OFFICE
OGL	OBSCURE GLASS
OPH	OPPOSITE HAND
OPNG	OPENING
OPP	OPPOSITE
OPQ	OPAQUE
OWSJ	OPEN WEB STEEL JOIST
OPR	OPERABLE
ORD	OVERFLOW ROOF DRAIN
ORIG	ORIGINAL
P	----------
PA	PUBLIC ADDRESS
PAR	PARAPET
PAT	PATTERN
PB	PULL BOX
PBD	PARTICLEBOARD
PCC	PRECAST CONCRETE
PCF	POUNDS PER CUBIC FOOT
PCT	PERCENT
PERF	PERFORATED
PERIM	PERIMETER
PH	PHASE
PIL	PILASTER
PL	PROPERTY LINE
PL GL	PLATE GLASS
PLAM	PLASTIC LAMINATE
PLAS	PLASTER
PLBG	PLUMBING
PLG	PILING
PLYWD	PLYWOOD
PNL	PANEL
PP PL	PUSH/PULL PLATE
PR	PAIR
PRCST	PRECAST
PRKG	PARKING
PS CONC	PRESTRESSED CONCRETE
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	PRESSURE TREATED
PTD	PAPER TOWEL DISPENSER
PTDR	PAPER TOWEL DISPENSER AND RECEPTACLE
PTN	PARTITION
PWR	POWER
Q	----------
QT	QUARRY TILE
QTY	QUANTITY
R	----------
RB	RESILIENT BASE
RBM	REINFORCED BRICK MASONRY
RBR	RUBBER
RC	REINFORCED CONCRETE
RCP	REFLECTED CEILING PLAN
RD	ROOF DRAIN
RDG INS	RIGID INSULATION, SOLID
REC	RECESSED
REC ROOM	RECREATION ROOM
REF	REFERENCE
REM	REMOVABLE
REP	REPAIR
REPL	REPLACE
REQ	REQUIRE
REQD	REQUIRED
RESIL	RESILIENT
REST	RESTROOM
RF	RESILIENT FLOORING
RFG	ROOFING
RH	ROOF HATCH
RHR	RIGHT HAND REVERSE
RL	ROOF LEADER
RLG	RAILING
RM	ROOM
RO	ROUGH OPENING
RSD	ROLLING STEEL DOOR
RV	ROOF VENT
RVL	REVEAL

S	----------
SB	SPLASH BLOCK
SCHED	SCHEDULE
SD	SMOKE DETECTOR
SF	SQUARE FOOT (FEET)
SFTWD	SOFTWOOD
SGL	SINGLE
SHT MTL FLASH (FLASHING)	SHEET METAL
SHTHG	SHEATHING
SHV	SHELVING
SIM	SIMILAR
SJ	SCORED JOINT
SKLT	SKYLIGHT
SLNT	SEALANT
SMK	SMOKE
SMLS	SEAMLESS
SP EL	SPOT ELEVATION
SPEC	SPECIFICATION
SQ	SQUARE
SQ IN	SQUARE INCH
SQ YD	SQUARE YARD
SST	STAINLESS STEEL
ST	STAIRS
STD	STANDARD
STL JST	STEEL JOIST
STL RF DK	STEEL ROOF DECK
STOR	STORAGE
STR	STRINGERS
STRB/HRN	STROBE/HORN
SUB FL	SUBFLOOR
SV	SHEET VINYL
SW	SIDEWALK
T	----------
T	TREAD
T/S	TUB/SHOWER
TC	TERRA COTTA
TD	TRENCH DRAIN
TEL	TELEPHONE
TEMP	TEMPORARY
TER	TERRAZZO
TFF	TOP OF FINISH FLOOR
THK	THICKNESS
TK BD	TACKBOARD
TMPD GL	TEMPERED GLASS
TN	TRUE NORTH
TOF	TOP OF FOOTING
TOM	TOP OF MASONRY
TOP	TOP OF PARAPET
TOPO	TOPOGRAPHY
TOS	TOP OF SLAB
TRANS	TRANSOM
TRTD	TREATED
TV	TELEVISION

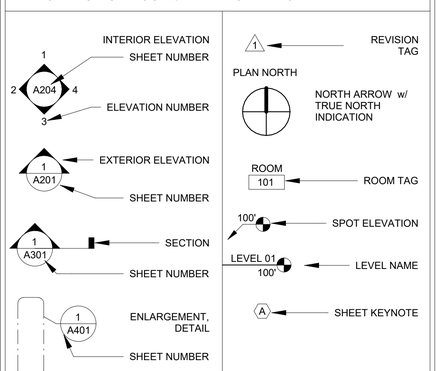
BUILDING SUMMARY

INDEX OF DRAWINGS

NUMBERING SYSTEM:



ANNOTATION CALLOUTS/DRAWING SYMBOLS



GENERAL NOTES

1. THESE GENERAL NOTES APPLY TO ALL DRAWINGS.
2. CONTRACTOR SHALL VERIFY ALL EXISTING SITE CONDITIONS PRIOR TO STARTING WORK AND NOTIFY CONTRACTING OFFICER OF ANY DISCREPANCIES.
3. THE CONTRACTOR SHALL ENDEAVOR TO COMPLY WITH ALL APPLICABLE CODES, RULES AND REGULATIONS. WHEN REQUIRED BY CODE, ALL WORK MUST BE INSPECTED AND APPROVED IN ACCORDANCE WITH CONTRACT REQUIREMENTS.
4. PENETRATIONS THROUGH FIRE RATED ASSEMBLIES SHALL BE SEALED WITH APPROVED MATERIALS AND METHODS MEETING AGENCY HAVING JURISDICTION REQUIREMENTS.
5. ALL EXISTING CONDITIONS AND DIMENSIONS SHALL BE VERIFIED BY THE CONTRACTOR(S) PRIOR TO FABRICATION AND CONSTRUCTION. ANY DISCREPANCIES BETWEEN EXISTING CONDITIONS AND THESE DRAWINGS, WHICH AFFECT THE SCOPE AND INTENT OF THE WORK DESCRIBED IN CONSTRUCTION DOCUMENTS, SHALL BE BROUGHT TO THE ATTENTION OF THE CONTRACTING OFFICER IMMEDIATELY.
6. SCRIBE GYPSUM BOARD PARTITIONS TO IRREGULARITIES OF ADJACENT SURFACES. SEAL TIGHT AROUND ALL WALL AND CEILING PENETRATIONS.
7. GENERAL CONTRACTOR SHALL COORDINATE ALL MECHANICAL AND ELECTRICAL CHASE SIZES AND LOCATIONS.
8. DIMENSIONS OF ALL OPENINGS FOR DOORS AND WINDOWS SHALL BE FIELD VERIFIED PRIOR TO FABRICATIONS.
9. ALL SPACES REQUIRING CABINETS, COUNTERS, CASEWORK, ETC. TO BE FIELD VERIFIED PRIOR TO FABRICATION.
10. WALL OUTLETS, SWITCHES, THERMOSTATS, ETC. TO BE INSTALLED LEVEL WITH EACH OTHER AND PLUMB.
11. PROVIDE ADEQUATE BLOCKING AND ANCHORAGE FOR CEILING AND WALL-MOUNTED EQUIPMENT (E.G., DRAPERY TRACK, DOOR STOPS, TOILET ACCESSORIES, FIRE EXTINGUISHER CABINETS, ETC.) AND WALL SHELVING.
12. ALL ELEVATIONS ARE REFERENCED FROM THE TOP OF THE FINISHED FIRST FLOOR CONCRETE SLAB OR RAISED FLOOR SYSTEM HAVING ASSUMED ELEVATION OF 0'-0".
13. GYPSUM WALLBOARD AT INTERIOR PARTITION SHALL TERMINATE 6" (MINIMUM) ABOVE THE HIGHEST ADJACENT CEILING UNLESS NOTED OTHERWISE.
14. ALL NON-BEARING MASONRY WALLS EXTEND TO THE BOTTOM OF ROOF DECK/ STRUCTURE, UNLESS NOTED OTHERWISE.
15. MAINTAIN 2% MIN. POSITIVE DRAINAGE AWAY FROM BUILDINGS AT ALL LANDSCAPE AND HARDSCAPE GRADES AT BUILDING PERIMETER, INCLUDING CONCRETE WALKS AND DOORWAY LANDINGS.
16. SPECIFICATIONS AND DRAWINGS WORK IN TANDEM AND ONE CANNOT BE USED WITHOUT THE OTHER. CONTRADICTIONS ARE TO BE VERIFIED WITH THE CONTRACTING OFFICER.
17. SCREENING OR SHADING OF WORK IS USED TO INDICATE EXISTING COMPONENTS OR TO DE-EMPHASIZE PROPOSED IMPROVEMENTS TO HIGHLIGHT SELECTED TRADE WORK. REFER TO CONTEXT OF EACH SHEET FOR USAGE.
18. CONTRACTOR TO PERFORM A SURVEY OF THE LIMIT OF CONSTRUCTION; INCLUDING UNDER-FLOOR UTILITIES, ABOVE CEILINGS, SUPPORTING MECHANICAL SPACES AND UNDERGROUND UTILITIES; OF THE EXISTING FACILITY PRIOR TO PERFORMING ANY WORK. SUBMIT SURVEY TO CONTRACTING OFFICER.

US Army Corps of Engineers ®

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US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HANA-KENALL 8A JV
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SUITE 700
HOUSTON, TX 77042

ACCESS CONTROL POINT- PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

GENERAL NOTES AND ABBREVIATIONS

SHEET ID

G-003

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

GENERAL ARCHITECTURAL NOTES

1. NIC: CONSTRUCTION OF WORK INDICATED ON DRAWINGS AS "NIC" IS NOT IN THE CONTRACT. HOWEVER, THE CONTRACTOR SHALL COORDINATE ITS WORK WITH WORK INDICATED AS NIC. SEE SPECIFICATIONS.
2. SITE COORDINATION: COORDINATE ALL SITE OPERATIONS WITH CONTRACTING OFFICER, INCLUDING STAGING AREAS, MATERIAL STORAGE, ACCESS TO WORK, TIMING OF WORK, NOISY OPERATIONS, INTERRUPTION OF UTILITIES, ETC. SEE SPECIFICATIONS.
3. TRADE COORDINATION: CONTRACTOR SHALL COORDINATE THE PLACEMENT OF EACH TRADE'S WORK SO THAT THERE ARE NO CONFLICTS AND NO SYSTEM'S OPERATION OR FUNCTION IS IMPAIRED. IT IS ESPECIALLY IMPORTANT TO COORDINATE PENETRATIONS THROUGH FOUNDATIONS, FLOORS, WALLS AND CEILING SPACES. SEE SPECIFICATIONS.
4. PROVIDE GALVANIC SEPARATION MATERIAL, ACCEPTABLE TO THE CONTRACTING OFFICER, BETWEEN DISSIMILAR METALS. SEE SPECIFICATIONS.
5. ON CONTINUOUS WALL SURFACES WITH DISSIMILAR FINISH MATERIAL THICKNESS, ALIGN FACES OF FINISH, UNLESS NOTED OTHERWISE. PROVIDE CASING BEADS AT GYPSUM BOARD EDGES WHEREVER GYPSUM BOARD ABUTS A DIFFERENT MATERIAL.
6. ON FLOORS, USE TRANSITION OR LEVEL REDUCING STRIPS BETWEEN MATERIALS OF DIFFERENT FINISH HEIGHT. CARPET AND/OR OTHER FLOOR FINISHES SHALL RUN UNDER MOVEABLE CASEWORK. SEE SPECIFICATIONS.
7. ALL CASEWORK, CABINETS AND STORAGE RACKS SHALL BE SECURELY ANCHORED TO COMPLY WITH CODE REQUIRED SUPPORT.
8. ELEVATIONS DO NOT SHOW ALL EQUIPMENT, FIXTURES, DEVICES, MECHANICAL, PLUMBING OR ELECTRICAL ITEMS. SEE ARCHITECTURAL, INTERIOR, MECHANICAL AND ELECTRICAL PLANS FOR ADDITIONAL ELEVATION COORDINATION.
9. ELECTRICAL DEVICE BOXES SHALL NOT BE MOUNTED BACK TO BACK. SEPARATE BY AT LEAST 15".
10. DOOR AND WINDOW ELEVATIONS AND PLANS ARE DEPICTED SCHEMATICALLY; SEE DOOR AND WINDOW SCHEDULES AND TYPES FOR ACTUAL APPEARANCE AND DETAILS.
11. UNLESS OTHERWISE INDICATED, PARTITION STUDS SHALL EXTEND TO THE DECKING OR STRUCTURE ABOVE AND SHALL HAVE DEFLECTION TOLERANT CONNECTIONS. NON-RATED PARTITIONS ABOVE THE CEILING SHALL HAVE AT LEAST ONE SIDE COVERED WITH TAPED GYPSUM BOARD THAT IS SCRIBED TO THE DECKING OR STRUCTURE, AND CAULKED AS REQUIRED TO RESIST NOISE AND/OR SMOKE TRANSFER. WHERE PARTITIONS ARE SHOWN TO STOP ABOVE THE CEILING,THEY SHALL BE SECURELY BRACED TO STRUCTURE.

CEILINGS

12. FIRE SPRINKLER SYSTEM: NO PIPES, DRAIN VALVES OR OTHER COMPONENTS OF THE FIRE SPRINKLER SYSTEM, EXCEPT SPRINKLER HEADS, SHALL BE EXPOSED TO PUBLIC VIEW EXCEPT AS NOTED OR AS ACCEPTABLE TO THE CONTRACTING OFFICER.
13. SPACES ABOVE CEILINGS SHALL BE ACCESSIBLE. WHERE THERE IS A HARD CEILING, PROVIDE ACCESS DOORS. CONTRACTOR SHALL PROVIDE 20" x 30" MIN. ACCESS PANELS, WITH DOORS OR AS OTHERWISE REQUIRED BY CODE, FOR SYSTEM ACCESS, ESPECIALLY FOR VALVES, DRAIN VALVES, TEST LOCATIONS, ETC. PANELS SHALL BE A FLUSH DESIGN AND PAINTED TO MATCH ADJACENT SURFACES AND FIRE RATED WHERE REQUIRED. PANEL DOORS SHALL HAVE KEYED LOCKS WHEN IN PUBLIC AREAS OR IN EXTERIOR LOCATIONS. SPRINKLER SUBCONTRACTOR SHALL PROVIDE SHOP DRAWINGS INDICATING PANEL STYLE AND CONSTRUCTION AND PROPOSED LOCATIONS FOR THE CONTRACTING OFFICER'S APPROVAL.

PERMITS

14. CONTRACTOR IS RESPONSIBLE FOR ALL PERMITS ASSOCIATED WITH THIS PROJECT.

GENERAL ARCHITECTURAL DIMENSION NOTES

1. ALTHOUGH SIGNIFICANT EFFORTS HAVE BEEN MADE TO COORDINATE DIMENSIONS, THERE MAY BE DISCREPANCIES AND/OR OMISSIONS. IF ENCOUNTERED, CONTACT THE CONTRACTING OFFICER FOR ADDITIONAL INFORMATION. IF THERE IS A DIMENSIONAL VARIANCE BETWEEN DISCIPLINES OR SIGNIFICANT OMISSION OR CONFLICT WITHIN A DISCIPLINE, CONTACT THE CONTRACTING OFFICER.
2. ACTUAL CONSTRUCTION CONDITIONS AND/OR MATERIAL AND EQUIPMENT SIZES MAY NOT BE THOSE ANTICIPATED BY THE DESIGNERS. THROUGH FIELD INVESTIGATION AND SHOP DRAWINGS THE CONTRACTOR SHALL VERIFY DIMENSIONS AND RECOMMEND DIMENSIONAL MODIFICATIONS AS REQUIRED.
3. ARCHITECTURAL DIMENSIONS MAY BE FOUND ON FLOOR PLANS, ENLARGED PLANS, REFLECTED CEILING PLANS, SECTIONS, DETAILS, DOOR, WINDOW AND LOUVER SCHEDULES, INTERIOR ELEVATIONS AND EXTERIOR ELEVATIONS. SOME DIMENSIONS MAY NOT BE SHOWN ON THE ARCHITECTURAL DRAWINGS.
4. ADDITIONAL DIMENSIONS MAY BE SHOWN WITHIN OTHER DISCIPLINES INCLUDING SITE WORK AND INFORMATION RELATED TO EQUIPMENT SIZES AND CLEARANCES.
5. DESIGNATIONS ARE NOTED AS NOMINAL, NOT ACTUAL (2X4 STUD); DIMENSIONS SHOWN AS ACTUAL, NOT NOMINAL (1-1/2"X3-1/2" STUD) DIMENSIONS ARE NOT ROUNDED, BUT UN-ROUNDED DIMENSIONS SHOULD NOT BE VIEWED AS A MAXIMUM CONSTRUCTION TOLERANCE. (FOR INSTANCE, MASONRY OPENING DIMENSIONS MAY BE SHOWN IN 16THS OF AN INCH, BUT STANDARD MASONRY CONSTRUCTION TOLERANCE MAY BE +- 1/4").

ARCHITECTURAL SITE PLAN DIMENSIONS

1. CHECK CIVIL, LANDSCAPE, ELECTRICAL SITE AND ARCHITECTURAL DRAWINGS FOR ADDITIONAL DIMENSIONS.
2. THE BUILDING CONTROL POINT (BCP) SHALL BE USED TO LOCATE THE BUILDING. THE BCP MAY BE LOCATED AT THE CORNER OF THE FOUNDATION (OR AT THE INTERSECTION OF GRID LINES A AND 1). A SECOND BCP MAY BE USED TO ORIENT THE BUILDING, OR THE BUILDING MAY BE ALIGNED WITH A PROPERTY LINE OR ADJACENT BUILDING (OR AS NOTED ON THE DRAWING). IF THE BCP IS NOT INDICATED, ASSUME THAT IT IS PARALLEL TO A MAJOR EXISTING BUILDING OR TO THE NEAREST SITE BOUNDARY OR STREET AS VISUALLY DEPICTED ON THE DRAWING. CONFIRM BUILDING LOCATION WITH CONTRACTING OFFICER PRIOR TO STARTING CONSTRUCTION.
3. UN-DIMENSIONED HARDSCAPE (PAVING, PARKING, PLAY AREAS, PATIOS, ETC.) MAY BE LOCATED BY SCALING FROM DIMENSIONED OR EXISTING FIXED ELEMENTS. CONFIRM ALL SCALED OR ASSUMED DIMENSIONS WITH THE CONTRACTING OFFICER PRIOR TO STARTING CONSTRUCTION.
4. ALL DIMENSIONS READ FROM THE EXPOSED SURFACE OF EXISTING WALLS, PARTITIONS, COLUMNS ETC. NEW STUD PARTITIONS ARE DIMENSIONED TO THE FACE OF THE STUD, VERIFY ALL DIMENSIONS ON SITE.

FLOOR PLAN DIMENSIONS

1. GRID LINE IDENTIFICATION: GRID LINES IDENTIFY AND PROVIDE POINTS FOR DIMENSIONING MAJOR ALIGNED ELEMENTS (I.E., GRID LINES B AND 2).
2. GRID LINE LOCATIONS: UNLESS NOTED OTHERWISE GRID LINES ARE SHOWN AT THE CENTERLINES OF COLUMNS WHEN COLUMNS ARE THE PRINCIPAL VERTICAL STRUCTURAL ELEMENTS.
3. DOOR AND WINDOW OPENING DIMENSIONS IN FRAME CONSTRUCTION (WOOD OR STEEL STUDS) ARE TYPICALLY SHOWN AT THEIR CENTERLINES. HOWEVER, WHEN THE EDGE OF THE DOOR OR WINDOW PLACEMENT IS IMPORTANT OR MAKES THE PLACEMENT CLEARER, THE DIMENSION MAY BE TO THE ACTUAL FRAME EDGE.
4. SOME DIMENSIONS REQUIRED TO BE CLEAR, SUCH AS AT REQUIRED EXIT WAYS, APPLIANCE COVES OR PREFABRICATED STAIR ENCLOSURES, ARE NOTED "CLR" AND SHOWN TO THE FACES OF FINISHES.
5. WALL WIDTHS MAY CHANGE MID RUN, FOR INSTANCE WHEN A WALL CHANGES FROM 3 5/8" STUDS TO 6" STUDS OR CHANGES FROM A STUD WALL TO A MASONRY WALL. IN CASES WHERE THIS OCCURS AT A CORRIDOR, MAINTAIN THE CLEAR WIDTH OF THE CORRIDOR. IF THERE IS AN UNRESOLVED CONFLICT ON THE OPPOSITE SIDE OF THE WALL, SUCH AS WITH CASEWORK, CONTACT THE CONTRACTING OFFICER FOR INSTRUCTIONS.

GENERAL ARCHITECTURAL DIM. CONTINUED

6. UNLESS OTHERWISE NOTED, DIMENSIONING ON PLANS AS FOLLOWS:
   TO FACE OF MASONRY
   TO FACE OF CONCRETE
   TO FACE OF FRAMING MEMBER IN FRAMED PARTITIONS
   GRID LINES: TO CENTERLINE OF COLUMNS.
7. DOOR OPENINGS NOT LOCATED BY DIMENSIONS ARE CENTERED ON THE WALL OR ARE LOCATED AS FOLLOWS: STUD CONSTRUCTION, 4" MIN. FROM FINISH WALL TO FACE OF JAMB, MASONRY CONSTRUCTION, AS NEAR AS POSSIBLE CONSISTENT WITH JOINTS, TYPICAL DOOR FRAME CLEARANCE DIMENSIONS TO ADJACENT WALLS, BETWEEN FRAME AND FACES OF STUDS, OR FACES OF MASONRY OR CONCRETE, AT NEARBY PERPENDICULAR WALLS ARE TYPICALLY 4", DEPENDING ON HARDWARE CLEARANCES AND FRAME REQUIREMENTS (2.5 DOOR HANDLE PLUS 1" WALL STOP PLUS 5/8" GB = 4.0"). DOORS WITH COAT HOOKS REQUIRE 6" DIMENSION. SEE DETAILS FOR SPECIFIC DIMENSIONS.

REFLECTED CEILING PLAN (RCP) DIMENSIONS
WHEN THERE IS ANY QUESTION REGARDING THE LOCATIONS OF LIGHTING FIXTURES, CEILING GRIDS, OR EQUIPMENT, CONTACT THE CONTRACTING OFFICER.

1. CEILING GRIDS. UNLESS SHOWN OR DIMENSIONED OTHERWISE, SUSPENDED CEILING GRIDS ARE SHOWN CENTERED SO THAT NO BORDER TILE DIMENSION IS LESS THAN HALF ITS ORIGINAL SIZE. UNLESS DIMENSIONED OTHERWISE, LIGHTING, AND GRILLS, REGISTERS AND DIFFUSERS (GRIDS) ARE CENTERED.
2. DIMENSIONS SHOWN ON THE UNDERLYING FLOOR PLANS MAY DEFINE CEILING DIMENSIONS. IN GENERAL, SOFFITS, LIGHTING, EQUIPMENT, DISPLAYS AND WOODWORK SHALL BE ALIGNED WITH ARCHITECTURAL ELEMENTS AND EQUALLY SPACED AS REQUIRED. UN-DIMENSIONED EXPOSED DUCTWORK, CABLE TRAYS AND PLUMBING MAY BE SCALED IF THERE IS NO OBVIOUS RELATIONSHIP WITH OTHER ARCHITECTURAL ELEMENTS. WHEN IN DOUBT, CHECK WITH THE CONTRACTING OFFICER FOR ADDITIONAL INFORMATION.
3. UN-DIMENSIONED LIGHTS IN RECTANGULAR HARD-SURFACED CEILINGS ARE CENTERED, AND/OR EQUALLY SPACED FROM WALLS, UNLESS OTHERWISE DIMENSIONED.
4. FINISH FLOOR ELEVATION (FFE) IS THE ELEVATION OF THE TOP OF THE FLOOR FINISH ELEMENTS SUCH AS CONCRETE SLAB-ON-GRADE, GYPSUM TOPPING SLAB, FLOOR SHEATHING, ETC., BUT IT DOES NOT INCLUDE FINISHES SUCH AS CARPET, VINYL, FINISH WOOD FLOORING OR CERAMIC TILE (UNLESS NOTED). WHEN CEILINGS, WINDOW HEADS AND DOOR HEADS ARE NOTED AS AFF (ABOVE FINISH FLOOR) BUT THE FLOOR IS RECESSED FOR THICK SET TILE, SLOPES TO DRAIN, OR HAS PERMANENT RISERS, THE "FINISH FLOOR" IS DEFINED AS THE COMMON PLANE FOR THAT FLOOR OR MEZZANINE LEVEL.
5. UNLESS NOTED OTHERWISE, ALL CEILING HEIGHTS ARE FROM THE "FINISH FLOOR" TO THE FACE OF THE CEILING FINISH.

VERTICAL DIMENSIONS

1. UNLESS NOTED OTHERWISE, THE FIRST FLOOR REFERENCE ELEVATION IS 0'-0". THIS IS REFERENCED TO A GROUND ELEVATION AS SHOWN IN CIVIL OR STRUCTURAL DRAWINGS. ELEVATIONS BELOW 0'-0" ARE "-" (PREFIXED WITH A MINUS SIGN).
2. UNLESS NOTED OTHERWISE BUILDING, FLOOR AND ROOF HEIGHTS SHOWN ON ARCHITECTURAL DRAWINGS ARE TO TOP OF DECKING OR SHEATHING, BUT DO NOT INCLUDE FINISHES OR ROOFING MATERIALS.
3. WALL OPENINGS: WINDOW, STOREFRONT, DOOR AND LOUVER HEIGHTS ARE TO FINISH HEIGHTS (UNLESS THEY ARE IN LOAD-BEARING MASONRY OR CONCRETE WALLS, WHERE THEY ARE TO ROUGH OPENINGS). HEIGHT REFERENCES SHOULD BE TO THE NEXT LOWER FINISH FLOOR ELEVATION (A WINDOW SILL ON THE SECOND FLOOR WILL LIKELY BE SHOWN AS 3'-0" AFF; ABOVE THE SECOND FINISH FLOOR LEVEL).
4. UNLESS NOTED OTHERWISE LIGHTING HEIGHTS ON WALLS ARE TO CENTERLINES OF THE ELECTRICAL BOXES. EQUIPMENT, VENT, PLUMBING AND FIXTURE ELEVATIONS ARE TO CENTERLINES OF THE WALL PENETRATIONS.
5. SOME VERTICAL DIMENSIONS ARE SHOWN ON PLANS FOR DEPRESSIONS, RIDGES, CURBS, AND ELEVATION CHANGES. A PLAN ELEVATION CHANGE SYMBOL LOOKS LIKE A STEP OR VERTICAL "Z" AND INDICATES THE + OR - ELEVATION CHANGE IN INCHES FROM THE AREA NEXT TO IT.

GENERAL PAINTING NOTES

1. STANDARDS: GENERAL PAINTING SPECIFICATIONS FOR THIS PROJECT ARE DEFINED BY THE PROJECT MANUAL AND ARE BASED ON THE MPI ARCHITECTURAL PAINTING SPECIFICATION MANUAL FOR NEW WORK AND THE MPI MAINTENANCE REPAINTING MANUAL FOR RENOVATION OR REPAINTING WORK.
2. PAINTING WORK INCLUDES TAPING, SURFACE PREPARATION, CLEANING, DE-RUSTING, PRIMING, FIELD PAINTING AND FINISHING AS REQUIRED BY STANDARD PRACTICE, MANUFACTURER OR SPECIFICATION. REQUIRED COATS OF PAINT OR STAIN ARE IN ADDITION TO SHOP PRIMING, SURFACE TREATMENT AND FINISHING. THE WORK ALSO INCLUDES PAINTING, CLEANUP AND REMOVAL OF OVERSPRAY DRIPS AND SPLATTERS. THE SPECIFICATIONS MAY REQUIRE OTHER TYPES OF PAINTING, INCLUDING, BUT NOT LIMITED TO FIELD APPLIED SPECIAL COATINGS AND FACTORY PRIMER.
3. PROJECT PAINTING SCOPE: EXCEPT AS NOTED OTHERWISE, CONTRACTOR IS TO FIELD PAINT INTERIOR AND EXTERIOR EXPOSED ITEMS AND BUILDING SURFACES, WHETHER OR NOT PREVIOUSLY PAINTED, AND ALL NEW ITEMS AND SURFACES. THIS INCLUDES, BUT IS NOT LIMITED TO, FACTORY-PRIMED ITEMS, GALVANIZED SHEET METAL AND EXPOSED PIPING AND FITTINGS (INCLUDING IRON AND PVC). PAINTING SCOPE ITEMS MAY BE FOUND IN FINISH SCHEDULES, DRAWINGS. SPECIFICATIONS AND PAINTING GENERAL NOTES. THESE SOURCES ARE COMPLEMENTARY, NOT MUTUALLY EXCLUSIVE.
4. MECHANICAL AND ELECTRICAL PAINTING INCLUDES FIELD PAINTING OF INTERIOR AND EXTERIOR EXPOSED PIPES, DUCTS, HANGERS, EXPOSED STEEL AND IRON WORK AND PRIMED METAL SURFACES OF EQUIPMENT IN EXPOSED AREAS INSTALLED UNDER MECHANICAL AND ELECTRICAL WORK EXCEPT AS OTHERWISE INDICATED. PAINTING OF MECHANICAL AND ELECTRICAL WORK IN MECHANICAL AND ELECTRICAL ROOMS IS REQUIRED. UNLESS NOTED OTHERWISE IN THE PROJECT MANUAL COLOR CODING OF PIPING FOR MECHANICAL AND PLUMBING WORK IS COVERED IN THE PAINTING SPECIFICATIONS.
5. EXTERIOR FLATWORK PAINTING INCLUDES FIELD PAINTING OF GAME LINES, INFORMATIONAL, DIRECTIONAL OR TRAFFIC WORDS AND SYMBOLS, ACCESSIBILITY AND LOGO SYMBOLS, FIRE OR NO PARKING CURBS, STRIPING AND WARNING AREAS, ETC. FOR ASPHALTIC AND CEMENT CONCRETE SURFACES. THIS WORK MAY BE SHOWN IN ARCHITECTURAL, LANDSCAPE AND/OR CIVIL DRAWINGS AND SPECIFICATIONS OR REQUIRED BY CODE.
6. APPLICATION OF EACH COAT OF PAINT SHALL TERMINATE AT AN EDGE OR CORNER, CHANGE OF MATERIALS OR CHANGE OF PAINT COLOR. COMPLETED PAINTING SHALL NOT IMPEDE THE INTENDED OPERATION OF ANY ITEM SUCH AS WINDOWS, DRAWERS, HINGES, DOORS AND ETC.
7. TOUCH UP SURFACES REQUIRING TOUCH-UP SHALL BE REPAIRED AS REQUIRED. PAINT TEXTURE, GLOSS AND COLOR SHALL MATCH EXISTING. IF TOTAL TOUCH UP AREA ON ONE SURFACE IS LARGER THAN 1 SQUARE FOOT, OR IF TEXTURE, GLOSS AND COLOR CANNOT BE MATCHED THE ENTIRE SURFACE SHALL BE REPAINTED TO ENCLOSING EDGES OR CORNERS.
8. UNLESS OTHERWISE INDICATED, DO NOT PAINT ITEMS THAT ARE SPECIFIED FACTORY FINISHED OR INSTALLER-FINISHED. ALSO, UNLESS OTHERWISE INDICATED, DO NOT PAINT SUCH ITEMS AS TOILET PARTITIONS AND SCREENS, VINYL OR ALUMINUM WINDOW FRAMES, MESH SCREENS, ACOUSTIC MATERIALS, FABRIC COVERED ITEMS, CUSTOM CASEWORK (PLASTIC-LAMINATE, MELAMINE OR PLASTIC SURFACED MATERIALS), APPLIED WALL COVERINGS (VINYL, PAPER, ETC), LAY-IN CEILING SYSTEMS, GLASS, FLOOR COVERINGS (CERAMIC TILE, VINYL, CARPET, PREFINISHED WOOD, MATS, ETC.), INTERIOR WINDOW COVERINGS, PRE-FINISHED ELEVATOR DOORS, ELEVATOR FRAMES AND INTERIOR CAB SURFACES, HARDWARE, PRE-FINISHED FIXTURES AND EQUIPMENT, PRE-FINISHED METAL ROOFING AND SHEET METAL, SEALANTS (EXCLUDING PAINTED CAULKING), PRE-FINISHED MECHANICAL AND ELECTRICAL EQUIPMENT, SWITCH AND OUTLET PLATES, THERMOSTATS, LIGHTING FIXTURES, SWITCHGEAR, MOTORS, DISTRIBUTION PANELS AND INTERIOR AND EXTERIOR SIGNAGE. IF THERE IS A QUESTI0N WHETHER OR NOT TO PAINT AN ITEM OR SURFACE, CONTACT THE CONTRACTING OFFICER FOR INSTRUCTIONS PRIOR TO PAINTING.
9. UNLESS OTHERWISE INDICATED DO NOT PAINT METAL SURFACES OF ANODIZED ALUMINUM, STAINLESS STEEL, NICKEL, CHROMIUM PLATE, COPPER, BRASS, BRONZE AND SIMILAR FINISHED METALS.

GENERAL PAINTING NOTES CONTINUED

10. UNLESS OTHERWISE INDICATED, DO NOT PAINT SURFACES SUCH AS WALLS OR CEILINGS IN CONCEALED AND GENERALLY INACCESSIBLE AREAS, INCLUDING FURRED AREAS, UTILITY TUNNELS, PIPE SPACES, CHASES AND DUCT SHAFTS.
11. UNLESS OTHERWISE INDICATED, DO NOT PAINT MOVING PARTS OF OPERATING UNITS SUCH AS VALVES, DAMPER OPERATORS, LINKAGES, MOTOR AND FAN SHAFTS, SPRINKLER HEADS, SMOKE OR FIRE SENSING DEVICES, LIGHT SENSING OR EMITTING DEVICES SUCH AS CAMERAS, INFRA- RED DEVICES OR SIMILAR ITEMS THAT MAY NOT FUNCTION PROPERLY IF PAINTED.
12. DO NOT PAINT OVER CODE REQUIRED LABELS.
13. UNLESS INDICATED OTHERWISE, DO NOT PAINT DUCTWORK, CONDUIT OR PIPING IN ATTIC SPACES, FURRED AREAS, UTILITY TUNNELS, CHASES AND SHAFTS, EXCEPT AS NOTED IN SPECIFICATIONS (COLOR CODING PIPE, ETC.)

GENERAL DEMO NOTES

1. DEMOLITION DRAWINGS DO NOT SHOW OR CALL OUT EVERY ITEM FOR DEMOLITION OR REMOVAL BUT INDICATE A SCHEMATIC SENSE OF THE SCOPE OF WORK. CONTRACTOR SHALL VERIFY EXTENT OF ALL DEMOLITION REQUIRED TO PROPERLY COMPLETE WORK SHOWN IN THE DOCUMENTS. SITE VISITATION IS IMPORTANT FOR AN UNDERSTANDING OF THE DEMOLITION SCOPE
2. REMOVE ALL DEMOLITION MATERIAL FROM SITE AND PROPERLY DISPOSE.
3. SEE SPECIFICATION SECTIONS 'DEMOLITION & DECONSTRUCTION' FOR MORE INFORMATION.
4. WHENEVER EXISTING EQUIPMENT, FIXTURES, PIPING, DUCTS, ETC. ARE REQUIRED TO BE REMOVED, SUCH REMOVAL SHALL INCLUDE ALL ANCHORS, HANGERS, BASE, ETC.
5. PATCH ALL EXISTING WALLS WITHIN THE LIMITS OF CONSTRUCTION THAT ARE DENTED OR DAMAGED AND FILL ALL NAIL HOLES, ETC. SO AS TO BE READY FOR FINISH.
6. ALL EQUIPMENT AND FIXTURES TO BE SALVAGED SHALL BE CLEANED, INVENTORIED, PROTECTED AND STORED IN A SECURE LOCATION UNTIL THEY ARE TURNED OVER TO THE GOVERNMENT.

GENERAL SEALANT NOTES

1. THE PRIMARY OBJECTIVE OF APPLYING SEALANT IS TO FACILITATE WEATHER TIGHTNESS AT THE EXTERIOR BUILDING ENVELOPE AND WATER TIGHTNESS AT INTERIOR WET/DAMP LOCATIONS. PROPER PRIMING MUST BE USED WITH SEALANTS.
2. THE PRIMARY OBJECTIVE OF APPLYING CAULKING IS TO ENHANCE APPEARANCE AND FINISH AT INTERIOR APPLICATIONS AND IN SOME SITUATIONS TO REDUCE AIRFLOW, SUCH AS AT DUCTS. INTERIOR SIDES OF THE EXTERIOR ENVELOPE AND AT FIREWALL/SMOKE BARRIER PENETRATIONS (FIRE CAULKING) AND TO DECREASE SOUND TRANSMISSION THROUGH WALLS AND CEILINGS. OTHER USES MAY BE NOTED IN THE SPECIFICATIONS AND/OR ON THE DRAWINGS. IF THERE ARE QUESTIONS ABOUT WHERE OR WHAT TYPE OF SEALANT OR CAULKING SHOULD BE USED, CONTACT THE CONTRACTING OFFICER.
3. SPECIFIED SEALANT (AND BACKER RODS, AS REQUIRED) SHALL BE USED AT HORIZONTAL AND VERTICAL TILE CONTROL JOINTS AND AS NOTED.
4. SPECIFIED SEALANT AND BACKER RODS, OR EXPANSION JOINT MATERIAL, AS REQUIRED, SHALL BE USED AT MASONRY AND CONCRETE CONTROL JOINTS.
5. APPLY SEALANT TAPE OR TWO CONTINUOUS BEADS OF SEALANT BETWEEN PERIMETER SOLE PLATES AND FOUNDATIONS, SLABS AND FLOOR DECKS. UNLESS NOTED OTHERWISE SET EXTERIOR THRESHOLDS IN SEALANT.
6. SPECIFIED SEALANT OR CAULK SHALL BE USED ALL AROUND BOTH SIDES OF DOOR AND WINDOW FRAMES, ELEVATOR FRAMES AND ALUMINUM STOREFRONT FRAMES.
7. SPECIFIED SEALANT OR CAULK SHALL BE USED ALL AROUND INTERIOR WALL MOUNTED EQUIPMENT FRAMES AND EXPOSED SUPPORTS.
8. SPECIFIED SEALANT OR CAULK SHALL BE USED AT JOINTS BETWEEN DIFFERENT WALL MATERIALS (TILE TO BRICK, CMU TO GYPSUM BOARD, WOOD TO STONE, METAL PANEL TO PLASTIC LAMINATE, ETC.).
9. USE SPECIFIED CAULK OR SEALANT AT WALL MATERIAL GAPS OF 1/16" OR MORE UNLESS THE GAP IS SHOWN AS AN ARCHITECTURAL "REVEAL".
10. SPECIFIED SEALANT SHALL BE USED AS FILETS AT COUNTERTOPS AND AT BACK SPLASHES. FULLY BED EXPOSED EDGES AND ENDS OF WOOD COUNTERTOPS AND BACK SPLASHES IN SEALANT WHERE THEY MEET WALLS.
11. SET FAUCETS, LAVATORIES, SINKS, SOAP DISPENSERS AND OTHER COUNTER MOUNTED FIXTURES IN A CONTINUOUS BEAD OF SPECIFIED SEALANT.
12. SEAL ALL AROUND FLOOR AND WALL MOUNTED WATER CLOSETS, BATHTUBS, PRE-MANUFACTURED SHOWER BASES, URINALS, MOP SINKS AND OTHER WALL AND FLOOR MOUNTED FIXTURES.
13. SEAL ALL AROUND FLOOR ATTACHMENTS TO, AND PENETRATIONS THROUGH, SHOWER WALLS.
14. ACOUSTICAL CAULKING: USE SPECIFIED SEALANT OR CAULK AT THE INTERSECTIONS OF STUD WALLS, FLOORS AND HARD CEILINGS (BUT NOT ACOUSTICAL OR LAY-IN CEILINGS) TO AID ACOUSTICAL SEPARATION. AT A MINIMUM, THIS SHALL INCLUDE CORRIDOR WALLS, CONFERENCE ROOM WALLS, OFFICE WALLS, BEDROOMS WALLS, TOILET ROOM WALLS, EXTERIOR WALLS AND WALLS INDICATED AS ACOUSTICAL. SEAL AROUND ELECTRICAL BOXES AND OTHER WALL PENETRATIONS.
15. USE SPECIFIED SEALANT AROUND WALL, FLOOR AND CEILING PIPE PENETRATIONS. WHERE ESCUTCHEONS ARE SPECIFIED OR APPROVED, SET THE ESCUTCHEON IN A BEAD OF SEALANT.
16. USE SPECIFIED CAULK OR SEALANT AROUND PENETRATIONS IN EXTERIOR WALLS AND SOFFITS, SUCH AS AT HOSE BIBS, FIRE DEPARTMENT CONNECTIONS, ELECTRIC SERVICE ENTRIES, GAS PIPE ENTRIES, ELECTRIC OUTLETS, LIGHTING, VENTS, ETC.
17. USE FIRE-RATED CAULKING AT ALL PENETRATIONS OF RATED WALLS AND FLOORS AS REQUIRED BY CODES AND SPECIFICATIONS. IT IS IMPORTANT THAT CONCEALED SPACES HAVE BEEN FIRE-CAULKED PRIOR TO ENCLOSURE.
18. PENETRATIONS THROUGH FIRE RATED ASSEMBLIES SHALL BE SEALED WITH APPROVED MATERIALS AND METHODS MEETING AGENCY HAVING JURISDICTION REQUIREMENTS.

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

File Path: Autodesk Docs://Pinebluff Arsenal ACP/ALP/BA_VCC_Central.rvt

Plot Date: 4/14/2026 2:54:54 PM

DESIGNED BY: SG
DRAWN BY: AG
CHECKED BY: SG
SUBMITTED BY:
ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W912TS24F6002
CONTRACT NO.: W912TS23D0035
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HANA-KENALL 8A JV
2500 CITYWEST BLVD
SUITE 700
HOUSTON, TX 77042

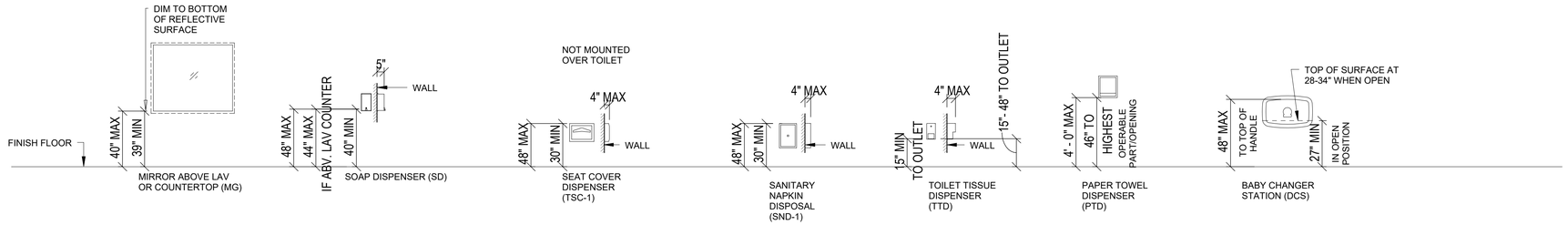
ACCESS CONTROL POINT- PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

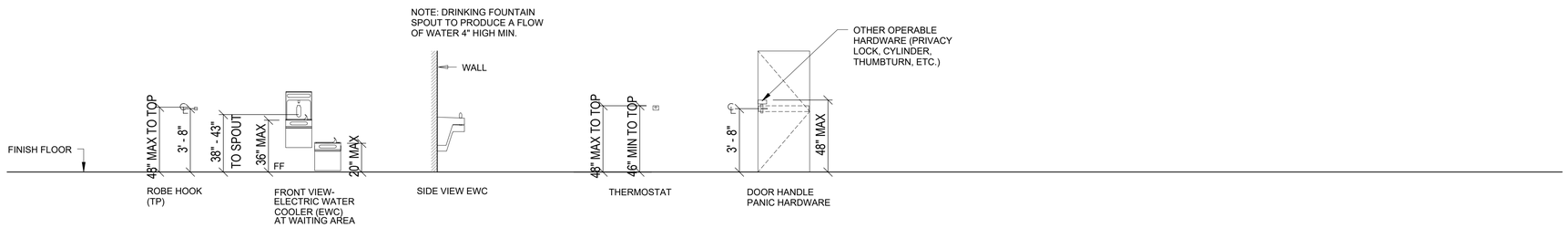
ARCHITECTURAL GENERAL NOTES

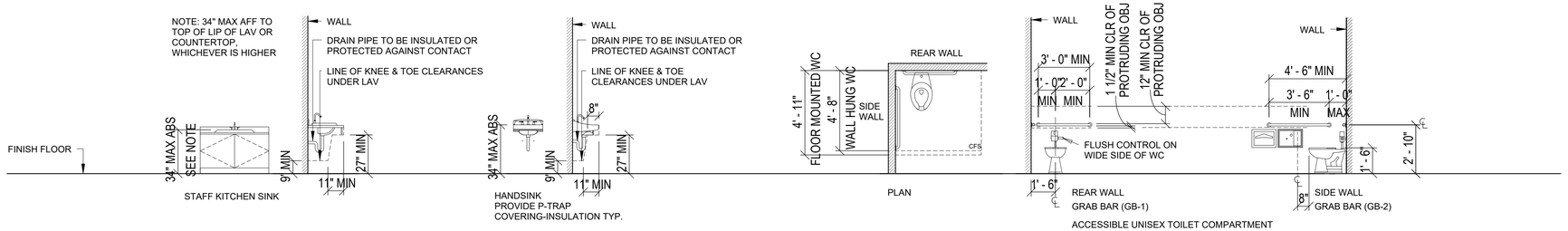
SHEET ID
G-004

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

ADULT ACCESSIBLE ACCESSORY MOUNTING HEIGHTS







GENERAL NOTES

1. ALL DIMENSIONS SHOWN ARE TO FINISH FLOOR.
2. PROVIDE BLOCKING IN WALL FOR FIXTURES AND ACCESSORIES.
3. SEE INTERIOR ELEVATIONS FOR MOUNTING HEIGHTS NOT SHOWN.
4. CONTRACTOR TO VERIFY THAT THE ACCESSIBLE MOUNTING HEIGHTS MEET THE ARCHITECTURAL BARRIERS ACT (ABA) FOR ACCESSIBILITY.
5. REFER TO PLANS FOR ABA MANEUVERING CLEARANCES.

SHEET KEYNOTES

SHEET LEGEND

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

File Path: Autodesk Docs://Pinebluff Arsenal ACP/APBA_VCC_Central.rvt

Plot Date: 4/14/2026 2:54:21 PM

DESIGNED BY: Designer
DRAWN BY: Author
CHECKED BY: Checker
SUBMITTED BY:
ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W9127S24FE002
CONTRACT NO.: W9127S25D6035
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
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ACCESS CONTROL POINT, PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

ACCESSIBLE ACCESSORY NOTES

SHEET ID

G-005

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

FIRE PROTECTION / LIFE SAFETY CODE ANALYSIS

REFERENCED CODES AND STANDARDS:

UNIFIED FACILITIES CRITERIA (UFC)

UFC 1-200-01	DOD BUILDING CODE, 01 SEPT 2022, CHANGE 4, 17 DEC 2024
UFC 3-600-01	FIRE PROTECTION ENGINEERING FOR FACILITIES, 8 AUG 2016, CHANGE 6, 6 MAY 2021
UFC 3-601-02	OPERATION AND MAINTENANCE: INSPECTION, TESTING AND MAINTENANCE OF FIRE PROTECTION SYSTEMS, 7 OCT 2021
UFC 4-010-01	DOD MINIMUM ANTITERRORISM STANDARDS FOR BUILDINGS, 12 DEC 2018, CHANGE 3, 24 MAY 2024
UFC 4-021-01	DESIGN AND O&M: MASS NOTIFICATION SYSTEMS, 9 APRIL 2008, W CHANGE 1 JAN 2010

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 1	FIRE CODE, 2024 EDITION
NFPA 10	STANDARD FOR PORTABLE FIRE EXTINGUISHERS, 2022 EDITION
NFPA 13	STANDARD FOR THE INSTALLATION OF AUTOMATIC SPRINKLERS, 2025 EDITION
NFPA 70	NATIONAL ELECTRIC CODE, 2023 EDITION
NFPA 72	NATIONAL FIRE ALARM CODE AND SIGNALING CODE, 2025 EDITION
NFPA 80	STANDARD FOR FIRE DOORS AND OTHER OPENING PROTECTIVES, 2025 EDITION
NFPA 90A	STANDARD FOR THE INSTALLATION OF AIR-CONDITIONING AND VENTILATION SYSTEMS, 2024 EDITION
NFPA 101	LIFE SAFETY CODE, 2024 EDITION.
NFPA 170	FIRE SAFETY SYMBOLS, 2024 EDITION
NFPA 220	STANDARD ON TYPES OF BUILDING CONSTRUCTION, 2024 EDITION
NFPA 241	SAFEGUARDS DURING CONSTRUCTION, 2022 EDITION

OTHER REFERENCES

INTERNATIONAL CODE COUNCIL, INTERNATIONAL BUILDING CODE (IBC), 2024 EDITION (AS AMENDED BY UFC 1-200-01)

ARCHITECTURAL BARRIERS ACT (ABA) STANDARDS, 2015 EDITION

PROJECT DESCRIPTION

NEW ACCESS CONTROL FACILITY

GENERAL REQUIREMENTS

ALL ASPECTS OF THE LIFE SAFETY DESIGN, FIRE SUPPRESSION DESIGN, AND FIRE ALARM / MASS NOTIFICATION DESIGN WILL BE IN ACCORDANCE WIFH UFC 1-200-01, UFC 3-600-01, UFC 4-021-01, NFPA 10, NFPA 13, NFPA 72, NFPA 101, AND IBC.

USE AND OCCUPANCY CLASSIFICATION:

IBC CHAPTER 3 AND UFC 3-600-01 APPLY.		UFC 1-200-01 § 2-3
IBC APPLIES TO OCCUPANCY CLASSIFICATION AS IT RELATES TO BUILDING HEIGHT, BUILDING AREA, BUILDING SEPARATION AND OCCUPANCY SEPARATION.		UFC 3-600-01 § 3-2.1.2
• IBC OCCUPANCY CLASSIFICATIONS - MIXED USE/NON SEPARATED		IBC § 508.2
	ASSEMBLY USE ONLY	IBC § 303 (ASSEMBLY)
GROUP B	BUSINESS USE AND OCCUPANCY	IBC § 304 (BUSINESS)
GROUP S-1	MODERATE-HAZARD STORAGE AS INCIDENTAL USE AND OCCUPANCY	IBC § 311 (STORAGE)
NFPA 101 APPLIES TO OCCUPANCY CLASSIFICATION AS IT RELATES TO FIRE/SMOKE RESISTANCE RATING OF INTERIOR LOAD-BEARING PARTITIONS (OTHER THAN OCCUPANCY SEPARATION), INTERIOR FINISH, FIRE PROTECTION FEATURES AND MEANS OF EGRESS.		UFC 3-600-01 § 3-3.1.2
• NFPA OCCUPANCY CLASSIFICATIONS - MIXED USE/NON SEPARATED		NFPA 101 § 6.1.14.3
ASSEMBLY USE		NFPA 101 CHAPTER 13
NEW BUSINESS USE AND OCCUPANCY		NFPA 101 CHAPTER 38
STORAGE USE AND OCCUPANCY	ORDINARY-HAZARD	NFPA 101 CHAPTER 42

GENERAL BUILDING HEIGHTS AND AREAS:

IBC CHAPTER 5 AND UFC 3-600-01 APPLY.		UFC 1-200-01 § 2-5
• TYPE IIB CONSTRUCTION (IBC) - TYPE II (000) PER NFPA 220		IBC § 602 & TABLE 601
• BUILDING IS FULLY PROTECTED WITH AUTOMATIC SPRINKLERS.		
• ALLOWABLE BUILDING AREA: ALLOWABLE AREA PER FLOOR IS 27,000 SF (NO CREDIT FOR FRONTAGE). TOTAL ALLOWABLE BUILDING AREA IS 27,000 X 3 (STORIES) = 81,000 SF.		IBC § 506 & TABLE 506.2
• ACTUAL BUILDING AREA: 5,128 SF		IBC § 506 & TABLE 506.2
• ALLOWABLE HEIGHT: 60 FT AND 3 STORIES FOR FULLY SPRINKLERED BUILDINGS		IBC § 504.1
• ACTUAL BUILDING HEIGHT AND STORIES:	23 FT 1 IN AND 1 STORIES	IBC § 504.1

TYPES OF CONSTRUCTION:

IBC CHAPTER 6 AND UFC 3-600-01 APPLY.		UFC 1-200-01 § 2-6
• II-B (IBC), II(000) (NFPA 220)		IBC § 602 & TABLE 601
REQUIRED STRUCTURAL ELEMENTS:		
• STRUCTURAL FRAME (INCLUDING COLUMNS, GIRDERS, AND TRUSSES):	0 HOUR	IBC 601 & TABLE 602
• BEARING WALLS - EXTERIOR SEPARATION DISTANCE >30 FT:	0 HOUR	
• BEARING WALLS - INTERIOR:	0 HOUR	
• NON-BEARING WALLS - EXTERIOR SEPARATION DISTANCE >30 FT:	0 HOUR	
• NON-BEARING WALLS & PARTITIONS - INTERIOR:	0 HOUR	
• FLOOR CONSTRUCTION (INCLUDING SUPPORTING BEAMS AND JOISTS):	0 HOUR	
• ROOF CONSTRUCTION (INCLUDING SUPPORTING BEAMS AND JOISTS):	0 HOUR	

FIRE AND SMOKE PROTECTION FEATURES:

IBC CHAPTER 7 AND UFC 3-600-01 APPLY.	UFC 1-200-01 § 2-7
CONFORM TO THE REQUIREMENTS OF NFPA 101 CHAPTER 8, EXCEPT WHERE IBC CHAPTERS 5 AND 6 SPECIFICALLY REFERENCE IBC CHAPTER 7.	UFC 3-600-01 § 7-1

INTERIOR FINISHES:

USE UFC 3-600-01 AND UFC 3-120-10 IN LIEU OF IBC CHAPTER 8.	UFC 1-200-01 § 2-8
CONFORM TO THE REQUIREMENTS OF NFPA 101 CHAPTER 10.	UFC 3-600-01 § 8-1

INTERIOR WALL, CEILING, AND FLOOR FINISHES: NFPA 101 CHAPTER 10 TABLE A.10.2.2

GROUP	WITH SPRINKLER SYSTEM			
	EXITS	EXIT ACCESS CORRIDORS	ROOMS AND ENCLOSED SPACES	INTERIOR FINISH FLOOR
NEW BUSINESS	A, B OR C	A, B, OR C	A, B, OR C	CLASS I OR II
STORAGE	A, B OR C	A, B, OR C	A, B, OR C	CLASS I OR II

FIRE PROTECTION SYSTEMS:

USE UFC 3-600-01 IN LIEU OF IBC CHAPTER 9.	UFC 1-200-01 § 2-9

FIRE FLOW FOR FACILITIES

• FIRE FLOW FOR SPRINKLERED FACILITIES MUST BE A MINIMUM OF 1,000 GPM AT 20 PSI.	UFC 3-600-01 § 9-2.1
• FIRE FLOW IS INDEPENDENT OF SPRINKLER SYSTEM DEMAND.	UFC 3-600-01 § 9-2.1
SEE THE FIRE AND LIFE SAFETY DESIGN ANALYSIS FOR THE FIRE FLOW ANALYSIS AND TEST RESULTS	

AUTOMATIC SPRINKLER PROTECTION

• AUTOMATIC SPRINKLER PROTECTION IS REQUIRED THROUGHOUT DUR TO LIMITED FIRE FLOW.	

STANDPIPE SYSTEMS

• STANDPIPE SYSTEM IS NOT REQUIRED.	
• THE BUILDING DOES NOT EXCEED 4 STORIES AND ALL AREAS CAN BE REACHED WITHIN 450 FEET FROM AN EXTERIOR DOOR.	UFC 3-600-01 § 9-10.2.2

PORTABLE FIRE EXTINGUISHERS

• PORTABLE FIRE EXTINGUISHERS WILL BE LOCATED IN ACCORDANCE WITH NFPA 10.	UFC 3-600-01 § 9-17.2.1 SPECIFICATION 10 44 16

FIRE ALARM AND MASS NOTIFICATION SYSTEM (MNS)

• FIRE ALARM SYSTEM IS REQUIRED THROUGHOUT.	
• BUSINESS OCCUPANCY - FIRE ALARM REQUIRED FOR OCCUPANT LOAD > 300 PERSONS. OR WITH MORE THAN 50 OCCUPANTS ABOVE OR BELOW LEVEL OF EXIT DISCHARGE.	NFPA 101 § 12.3.4.1.1 NFPA 101 § 38.3.4.1
• MASS NOTIFICIATION SYSTEM IS REQUIRED THROUGHOUT.	
• BUILDING TO BE INHABITED (ROUTINELY OCCUPIED BY 11 OR MORE OCCUPANTS).	UFC 4-011 § 1-8
• FIRE ALARM SYSTEM TO BE INSTALL IN ACCORDANCE WITH UFC-3-600-01, NFPA 70, NFPA 72 AND ABA.	UFC 3-600-01 § 9-18.3.1
• MASS NOTIFICIATION SYSTEM TO BE INSTALLED IN ACCORDANCE WITH UFC 4-021-01.	UFC 3-600-01 § 9-18.4
• MANUAL PULL STATION AT ALL EXIT DOORS.	UFC 3-600-01 § 9-18.7.4
• SPRINKLER VALVE SUPERVISION - SEPARATE ADDRESS FOR EACH VALVE.	UFC 3-600-01 § 9-18.7.3
• NOTIFICATION TO BE PROVIDED THROUGHOUT ENTIRE BUILDING.	UFC 3-600-01 § 9-18.6.1
• MASS NOTIFICATION SYSTEM PROVIDED WHERE OCCUPANT LOAD IS 11 OR MORE PERSONS.	UFC 4-010-01 § B-4.6
• LOCAL OPERATOR CONSOLE (LOC) INSTALLED SO OCCUPANTS DO NOT NEED TO TRAVEL MORE THAN 200 FT OR TRAVEL TO OTHER FLOORS TO ACCESS LOC.	UFC 4-021-01 § 4-5.1
• VOICE INTELLIGIBILITY TO BE PROVIDED THROUGHOUT (CIS >0.8 OR STI > 0.70).	UFC 4-021-01 § 4-6.1.2
• THE FIRE ALARM EVACUATION SIGNAL WILL BROADCAST OVER THE MNS SYSTEM.	UFC 3-600-01 § 9-18.1.2.1
• BREAKER LOCK WILL BE PROVIDED FOR FIRE ALARM AND MNS IAW UFC 3-520-01.	UFC 3-600-01 § 9-18.11.1
• SURGE PROTECTION DEVICE WILL BE PROVIDED FOR ALL 120 VAC POWERED FIRE ALARM AND MNS EQUIPMENT.	UFC 3-600-01 § 9-18.11.2

MEANS OF EGRESS (SEE LIFE SAFETY PLANS):

USE UFC 3-600-01 IN LIEU OF IBC CHAPTER 10.	UFC 1-200-01 § 2-10
• DO NOT USE IBC CHAPTER 10, EXCEPT WHERE REFERENCED BY ARCHITECTURAL BARRIERS ACT (ABA) STANDARDS.	
• WHERE ABA STANDARDS REFERENCES PREVIOUS VERSIONS OF IBC, THE APPLICABLE REQUIREMENTS OF THE 2021 IBC ARE ACCEPTABLE.	

DOOR LEAF SWING DIRECTION

• DOORS WILL SWING IN THE DIRECTION OF TRAVEL WHERE SERVING MORE THAN 50 PERSONS.	NFPA 101 § 7.2.1.4.2 (1)

DOOR LEAF ENCROACHMENT

• DOOR LEAVES SWINGING INTO THE THE MEANS OF EGRESS WILL LEAVE NOT LESS THAN ON HALF OF THE REQUIRED EGRESS WIDTH.	NFPA 101 § 7.2.1.4.3.1

OCCUPANCY LOAD FACTORS

• ASSEMBLY USE:	LESS CONCENTRATED WITHOUT FIXED SEATING 15 SQ FT/PERSON NET AREA	
• BUSINESS USE:	150 SQ FT/PERSON GROSS FLOOR AREA	NFPA 101 TABLE 7.3.1.2
• STORAGE USE:	500 SQ FT/PERSON GROSS FLOOR AREA	
• MECHANICAL/ELECTRICAL ROOMS:	500 SQ FT/PERSON GROSS FLOOR AREA	UFC 3-600-01, TABLE 10-1

REMOTENESS OF EXITS

• MINIMUM DISTANCE SEPARATION BETWEEN EXITS AND EXIT ACCESS DOORS WILL BE NOT LESS THAN 1/3RD THE MAXIMUM OVERALL DIAGONAL DIMENSION OF THE BUILDING OR AREA TO BE SERVED.	NFPA 101 § 7.5.1.3.3

TRAVEL DISTANCE TO AN EXIT

• NEW BUSINESS, (SPRINKLERED):	300 FT	NFPA 101 § 38.2.6.3
• STORAGE, (SPRINKLERED):	400 FT (ORDINARY HAZARD)	NFPA 101 § 42.2.6

COMMON PATH OF TRAVEL

• NEW BUSINESS, SPRINKLERED:	100 FT	NFPA 101 § 38.2.5.3.1
• STORAGE, SPRINKLERED:	100 FT, 75 FT SINGLE MEANS OF EGRESS (ORD-HAZ)	NFPA 101 § 42.2.5

DEAD-END LIMITS

• NEW BUSINESS, SPRINKLERED:	50 FT	NFPA 101 § 38.2.5.2.1
• STORAGE, SPRINKLERED:	100 FT (ORDINARY HAZARD)	NFPA 101 § 42.2.5

ILLUMINATION OF MEANS OF EGRESS

• MINIMUM ILLUMINATION FOR MEANS OF EGRESS WILL BE AT LEAST 10 FC (MEASURED FROM WALKING SURFACE).	NFPA 101 § 7.8.1.3 (1)
• MINIMUM ILLUMINATION FOR FLOORS AND OTHER WALKING SURFACES WILL BE AT LEAST 1 FC.	NFPA 101 § 7.8.1.3 (2)

MARKING MEANS OF EGRESS

• EXITS OTHER THAN MAIN EXTERIOR EXIT DOORS THAT ARE OBVIOUSLY AND CLEARLY IDENTIFIED AS EXITS, WILL BE MARKED BY APPROVED SIGNS.	NFPA 101 § 7.10.1.2.1
• ACCESS TO EXITS WILL BE MARKED BY APPROVED, READILY VISIBLE SIGNS IN ALL CASES WHERE THE EXIT OR WAY TO REACH EXITIS NOT READILY APPARENT TO OCCUPANTS.	NFPA 101 § 7.10.1.5.1
• A SIGN WITH DIRECTIONAL INDICATOR SHOWING DIRECTION OF TRAVEL WILL BE PLACED IN LOCATIONS WHERE DIRECTION OF TRAVEL TO REACH THE NEAREST EXIT IS NOT APPARENT.	NFPA 101 § 7.10.2.1
• EVERY EXIT OR DIRECTIONAL SIGN WILL BE ILLUMINATED BY A RELIABLE LIGHT SOURCE.	NFPA 101 § 7.10.5.1

FIRE PROTECTION SITE PLAN

- A FIRE PROTECTION SITE PLAN WILL BE DEVELOPED AND INCLUDED IN NEXT SUBMITTAL

TYPICAL ALL LIFE SAFETY PLANS, FIRE SPRINKLER PLANS, FIRE ALARM PLANS

- THE FLOOR PLAN LAYOUT IS BASED ON THE CONCEPTUAL PLANS PROVIDED BY THE GOVERNMENT IN THE RFP. THE LAYOUT (INCLUSIVE OF DOOR OPENINGS, WALL TYPES AND CONSTRUCTION, FLOOR TYPES AND CONSTRUCTION, ETC.) IS SUBJECT TO CHANGE BASED ON THE COMPLETION OF THE STRUCTURAL ANALYSIS OF THE BUILDING AND A SITE SURVEY BY THE DESIGN TEAM AFTER COMPLETION OF ABATEMENT AND DEMOLITION.

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: W. BURRUS
DRAWN BY: J. MARTINEZ
CHECKED BY: D. EMANUS
SUBMITTED BY:

ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W912T524F6002
CONTRACT NO.: W912T526B035
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HDR ENGINEERING, INC
613 NW LOOP 410, STE 700
SAN ANTONIO, TX 78216
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLANVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

VCC - CODE ANALYSIS

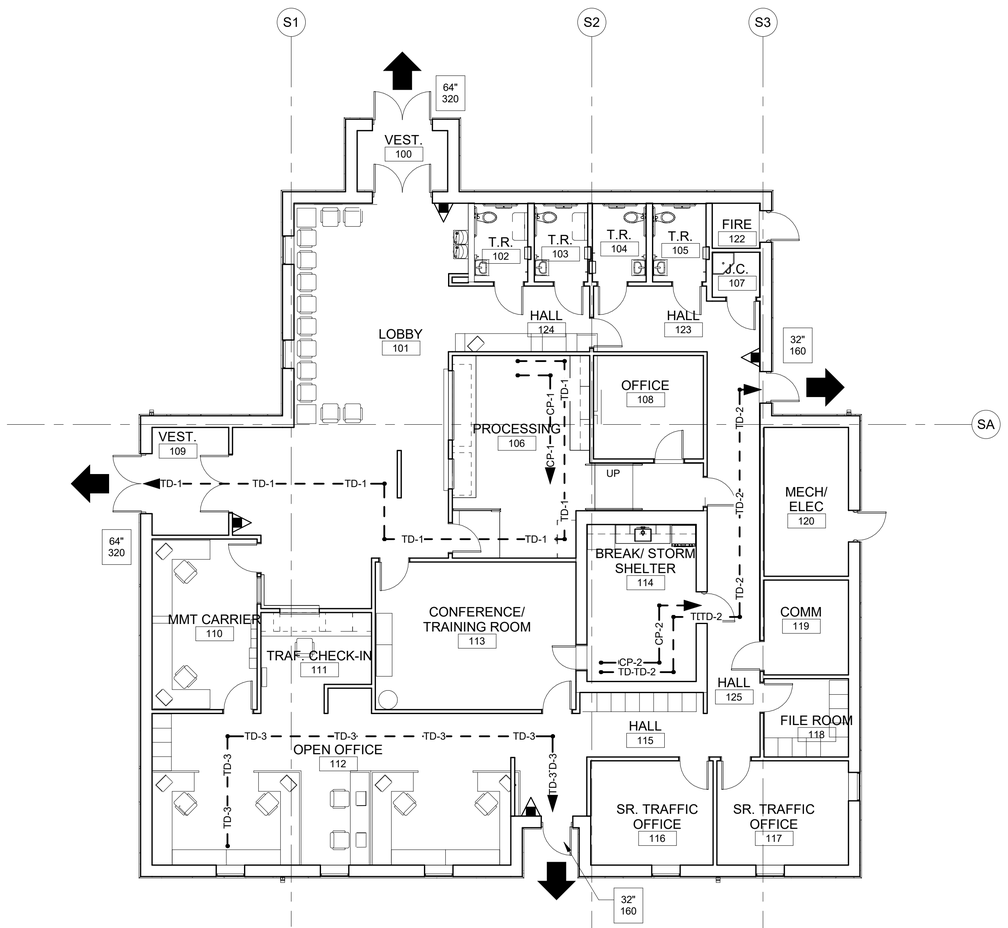
SHEET ID
G-100

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

MEANS OF EGRESS				
EGRESS PATH ID	OCCUPANCY	SPRINKLER	PROVIDED	MAXIMUM PERMITTED
CP-1	BUSINESS	YES	15' - 0"	100' - 0"
CP-2	ASSEMBLY	YES	16' - 6"	75' - 0"
TD-1	BUSINESS	YES	74' - 0"	300' - 0"
TD-2	ASSEMBLY	YES	47' - 0"	250' - 0"
TD-3	ASSEMBLY	YES	54' - 0"	250' - 0"

OCCUPANT LOAD SCHEDULE

ROOM #	ROOM DESCRIPTION	OCCUPANT USE TYPE	AREA (SQ SF)	OCCUPANT LOAD FACTOR (SQ SF/PERSON)	OCCUPANT LOAD
100	VEST	BUSINESS (GROSS)	62	150	1
101	LOBBY	ASSEMBLY USE	786	15	53
102	T.R.	BUSINESS (GROSS)	47	150	1
103	T.R.	BUSINESS (GROSS)	47	150	1
104	T.R.	BUSINESS (GROSS)	47	150	1
105	T.R.	BUSINESS (GROSS)	47	150	1
106	PROCESSING	BUSINESS (GROSS)	365	150	3
107	J.C.	STORAGE (GROSS)	24	500	1
108	OFFICE	BUSINESS (GROSS)	127	150	1
109	VEST	BUSINESS (GROSS)	92	150	1
110	MMT CARRIER	BUSINESS (GROSS)	200	150	2
111	TRAF. CHECK-IN	BUSINESS (GROSS)	109	150	1
112	OPEN OFFICE	BUSINESS (GROSS)	624	150	5
113	CONFERENCE/TRAINING ROOM	ASSEMBLY USE	335	15	23
114	BREAK ROOM	ASSEMBLY USE	189	15	13
115	HALL	BUSINESS (GROSS)	162	150	2
116	SR. TRAFFIC OFFICE	BUSINESS (GROSS)	142	150	1
117	SR. TRAFFIC OFFICE	BUSINESS (GROSS)	153	150	2
118	FILE ROOM	STORAGE (GROSS)	74	500	1
119	COMM	IT EQUIPMENT ROM	89	300	1
120	MECH/ELEC ROOM	MECHANICAL/ELECTRICAL ROOM	140	500	1
122	FIRE	MECHANICAL/ELECTRICAL ROOM	24	500	1
123	HALL	BUSINESS (GROSS)	113	150	1
124	HALL	BUSINESS (GROSS)	89	150	1
125	HALL	BUSINESS (GROSS)	242	150	2
				TOTAL	121



A1 LIFE SAFETY PLAN - VCC

1/8" = 1'-0"

PLAN NORTH

0 4' 8' 16'

GENERAL NOTES

SHEET KEYNOTES

SHEET LEGEND

LIFE SAFETY PLAN LEGEND

NOTE: ALL SYMBOLS MAY NOT BE USED.

EXITS

XX" CLEAR DOOR WIDTH [FEET - INCHES]

XXX EXIT EGRESS CAPACITY [NO.OF PEOPLE]

EGRESS PATH

TRAVEL DISTANCE — — TD →

COMMON PATH — — CP →

DEAD END — — DE →

EGRESS DISCHARGE

EXIT DISCHARGE

FIRE EXTINGUISHERS

FIRE EXTINGUISHER

EXIT SIGNS

EXIT SYMBOL
(ARROW INDICATES DIRECTION OF TRAVEL)

1. REFER TO ELECTRICAL LIGHTING DRAWINGS FOR EXIT SIGNS AND EMERGENCY LIGHTING.

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W912TS24F6002
CONTRACT NO.: W912TS26D0035

DESIGNED BY: W. BURRUS
DRAWN BY: J. MARTINEZ
CHECKED BY: D. EMMONS
SUBMITTED BY:
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HDR ENGINEERING, INC.
613 NW LOOP 410, STE 700
SAN ANTONIO, TX 78216
Texas P.E. Firm Registration No. F-754

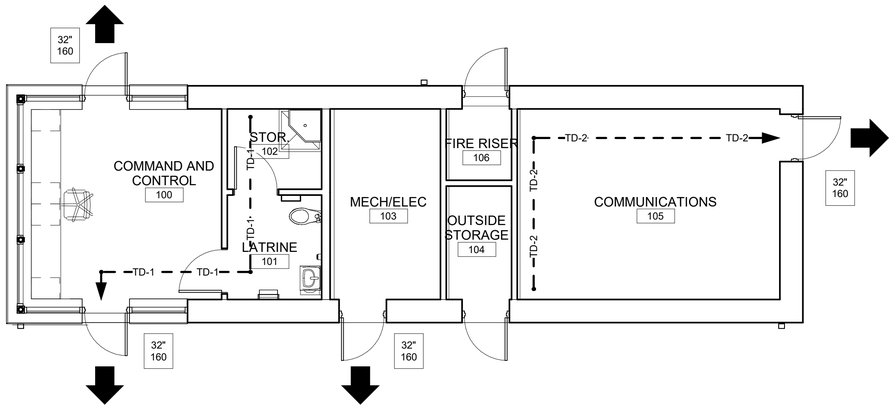
ACCESS CONTROL POINT - PLANVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

VCC - LIFE SAFETY PLAN

SHEET ID
VCC
G-101

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

MEANS OF EGRESS				
EGRESS PATH ID	OCCUPANCY	SPRINKLER	PROVIDED	MAXIMUM PERMITTED
TD-1	STORAGE	YES	23' - 6"	400' - 0"
TD-2	BUSINESS	YES	28' - 0"	300' - 0"



PLAN NORTH

A1 LIFE SAFETY PLAN - GATEHOUSE

3/16" = 1'-0"

0 2' 4' 8' 12'

GENERAL NOTES

SHEET KEYNOTES

SHEET LEGEND

LIFE SAFETY PLAN LEGEND

NOTE: ALL SYMBOLS MAY NOT BE USED.

EXITS

X'-X" CLEAR DOOR WIDTH [FEET - INCHES]

XXX EXIT EGRESS CAPACITY [NO.OF PEOPLE]

EGRESS PATH

TRAVEL DISTANCE — — TD →

COMMON PATH — — CP →

DEAD END — — DE →

EGRESS DISCHARGE

EXIT DISCHARGE

FIRE EXTINGUISHERS

FIRE EXTINGUISHER

EXIT SIGNS

EXIT SYMBOL
(ARROW INDICATES DIRECTION OF TRAVEL)

1. REFER TO ELECTRICAL LIGHTING DRAWINGS FOR EXIT SIGNS AND EMERGENCY LIGHTING.

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: Designer
DRAWN BY: Author
CHECKED BY: Checker
SUBMITTED BY:
ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S25D0035
SIZE: ANSI D

Plot Date: 4/17/2026 11:14:11 AM File Path: C:\vt\2025\104000\76-F-PBA_GATEHOUSE_jorge.martinez\PKTM.rvt

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HDR Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

GATEHOUSE - LIFE SAFETY PLAN

SHEET ID
G-HOUSE
G-111

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

SHEET INDEX:

GI001 SHEET INDEX, LEGEND AND ABBREVIATIONS
GI002 GENERAL CIVIL NOTES

GC101 HAUL ROUTE
GC102 CONSTRUCTION PHASING PLAN - PHASE 1
GC103 TEMPORARY ROADWAY CONNECTION
GC104 CONSTRUCTION PHASING PLAN - PHASE 2
GC105 PHASE 2 DETOUR PLAN

VF101 TOPOGRAPHIC SURVEY MAP

B-100 SUBSURFACE INVESTIGATION PLAN
B-101 BORING LOGS - 1
B-102 BORING LOGS - 2
B-103 BORING LOGS - 3
B-104 BORING LOGS - 4
B-105 BORING LOGS - 5
B-106 BORING LOGS - 6
B-107 BORING LOGS - 7
B-108 BORING LOGS - 8

CD101 DEMOLITION PLAN - 1
CD102 DEMOLITION PLAN - 2
CD103 DEMOLITION PLAN - 3

CS101 EXISTING SITE PLAN - 1
CS102 EXISTING SITE PLAN - 2
CS103 EXISTING SITE PLAN - 3
CS104 PLAINVIEW GATE OVERVIEW
CS105 PROPOSED SITE PLAN - 1
CS106 PROPOSED SITE PLAN - 2
CS107 PROPOSED SITE PLAN - 3
CS108 AVB SITE PLAN
CS109 SITE LAYOUT PLAN - 1
CS110 SITE LAYOUT PLAN - 2
CS111 SITE LAYOUT PLAN - 3

CU101 UTILITIES LAYOUT PLAN - 1
CU102 UTILITIES LAYOUT PLAN - 2
CU103 UTILITIES LAYOUT PLAN - 3
CU104 SANITARY SEWER PIPE NETWORK
CU105 SANITARY SEWER PROFILE - 1
CU106 SANITARY SEWER PROFILE - 2
CU107 STORM DRAIN NETWORK
CU108 DRAINAGE PROFILE - 1
CU109 DRAINAGE PROFILE - 2
CU110 DRAINAGE PROFILE - 3
CU111 DRAINAGE PROFILE - 4
CU112 DRAINAGE PROFILE - 5
CU113 DRAINAGE PROFILE - 6
CU114 WATER PIPE NETWORK
CU115 WATER PROFILE - 1
CU116 WATER PROFILE - 2
CU117 WATER PROFILE - 3

CG101 GRADING AND DRAINAGE PLAN - 1
CG102 GRADING AND DRAINAGE PLAN - 2
CG103 GRADING AND DRAINAGE PLAN - 3
CG104 GRADING INSET PLAN - SWING GATES

SHEET INDEX:

CG105 EROSION CONTROL PLAN - 1
CG106 EROSION CONTROL PLAN - 2
CG107 EROSION CONTROL PLAN - 3
CG 501 EROSION CONTROL DETAILS

C-101 SIGNING AND MARKING PLAN - 1
C-102 SIGNING AND MARKING PLAN - 2
C-103 SIGNING AND MARKING PLAN - 3

C-201 ROAD PAVEMENT PROFILE

C-301 ROADWAY TYPICAL SECTIONS
C-302 TYPICAL SECTIONS - DETENTION POND AND DITCHES
C-303 ROAD CROSS SECTIONS - STA 7+00 TO 13+00

C-501 SITE DETAILS - 1
C-502 SITE DETAILS - 2
C-503 SITE DETAILS - 3
C-504 SITE DETAILS - 4
C-505 SITE DETAILS - 5
C-506 SITE DETAILS - 6
C-507 SITE DETAILS - 7
C-508 SITE DETAILS - 8
C-509 SITE DETAILS - 9
C-510 SITE DETAILS - 10
C-511 SITE DETAILS - 11
C-512 SITE DETAILS - 12
C-513 SITE DETAILS - 13
C-514 SITE DETAILS - 14
C-515 SITE DETAILS - 15
C-516 SITE DETAILS - 16
C-517 SITE DETAILS - 17
C-518 SITE DETAILS - 18
C-519 SITE DETAILS - 19
C-520 SITE DETAILS - 20
C-521 SITE DETAILS - 21
C-522 SITE DETAILS - 22
C-523 SITE DETAILS - 23
C-524 SITE DETAILS - 24
C-525 SITE DETAILS - 25
C-526 SITE DETAILS - 26
C-527 SITE DETAILS - 27

C-701 ALIGNMENT DATA TABLES
C-702 DEMOLITION LAYOUT POINTS TABLES
C-703 PROPOSED LAYOUT POINTS TABLES
C-704 CURVE TABLES
C-705 DRAINAGE PIPES TABLES
C-706 DRAINAGE STRUCTURES TABLES

SITE SYMBOLOGY

- VAULT (AS NOTED)
- MANHOLE (AS NOTED)
- PROPOSED SANITARY MANHOLE
- SANITARY SEWER CLEANOUT
- ELECTRIC METER
- ELECTRIC PEDESTAL
- ELECTRIC TRANSFORMER
- FIBER OPTIC PEDESTAL
- TELEVISION PEDESTAL
- TELEPHONE PEDESTAL
- SIGN (AS NOTED)
- TREE
- BUSH
- FIRE HYDRANT
- WATER METER
- PROPOSED WATER MANHOLE
- WATER VALVE
- IRRIGATION CONTROL VALVE
- GAS PIPELINE SIGN
- GAS METER
- GAS RISER OR SERVICE
- GAS VENT PIPE
- GAS VENT PIPE
- GUY WIRE
- LIGHT POLE
- LIGHT POLE W/ PEDESTAL
- POWER POLE
- POWER POLE WITH TRANSFORMER
- POWER POLE WITH LIGHT
- MAILBOX
- ASPHALT
- CONCRETE
- GRAVEL
- SOD
- MEDIAN
- CONCRETE SHOULDER
- CONTRACTOR STAGING AND STOCKPILE AREA

LINETYPE LEGEND:

- BOUNDARY LINE
- LOT LINE
- BUILDING
- BUILDING OVERHANG
- BURIED ELECTRIC LINE
- OVERHEAD ELECTRIC
- TELEPHONE CABLE
- FIBER OPTIC CABLE
- UNDERGROUND COMMUNICATION LINE
- GAS LINE
- PROPOSED GAS LINE
- SANITARY SEWER
- PROPOSED SANITARY SEWER
- STORM SEWER
- WATERLINE
- PROPOSED WATERLINE
- BARB WIRE FENCE
- GUARD RAIL
- CONCRETE CURB
- DITCH LAYOUT LINE
- FLOW LINE CREEK
- RIGHT-OF-WAY LINE
- CENTER LINE OF ROAD
- TRAFFIC LIGHT POLE

ABBREVIATIONS:

BLDG	BUILDING
IN	INCH
INV	INVERT ELEVATION
PB	PASSIVE BARRIER
TC	TOP OF CURB
BC	BOTTOM OF CURB
TG	TOP OF GRADE
SE	SOUTHEAST
SW	SOUTHWEST
DEMO	DEMOLITION
DP	DETENTION POND
NE	NORTHEAST
NW	NORTHWEST
SY	SQUARE YARD
SS	SANITARY SEWER
CMP	CORRUGATED METAL PIPE
MISC.	MISCELLANEOUS
PVC	POLYVINYL CHLORIDE
ETC	ELECTRICAL/TELECOMMUNICATIONS CONDUIT
VCC	VISITOR CONTROL CENTER
PCC	PORTLAND CEMENT CONCRETE
TYP	TYPICAL
CCTV	CLOSED CIRCUIT TELEVISION
FF	FINISHED FLOOR
EL	ELEVATION
SE	SOUTH EAST
SD	STORM DRAIN
SSMH	SANITARY SEWER MANHOLE
SW	SOUTHWEST
LF	LINEAR FEET
SY	SQUARE YARD
W/	WITH
WO/	WITHOUT
PIV	POST INDICATOR VALVE
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
CO	CLEANOUT
DI	DROP INLET
ACP	ACCESS CONTROL POINT
COMM	COMMUNICATION
EX	EXISTING
RD	ROOF DRAIN
MAX	MAXIMUM
MIN	MINIMUM
FDC	FIRE DEPARTMENT CONNECTION
PSI	POUNDS PER SQUARE INCH
HDPE	HIGH DENSITY POLYETHYLENE
GH	GATEHOUSE
WL	WATERLINE

ABBREVIATIONS:

CU	COPPER
SERV	SERVICE
HORIZ	HORIZONTAL
VERT	VERTICAL
CI	CAST IRON
POB	POINT OF BEGINNING
PI	POINT OF INTERSECTION
POE	POINT OF END
PC	POINT OF CURVE
PT	POINT OF TANGENT
FG	FINISHED GROUND
FT	FEET
R	RADIUS
EG	EXISTING GROUND
C TO C	CENTER TO CENTER
CL	CENTER LINE
CO	COORDINATE
CLR	CLEARANCE
C&G	CURB AND GUTTER
OC	ON CENTER
OD	OUTSIDE DIAMETER
ID	INSIDE DIAMETER
GA	GALVANIZED
RCP	REINFORCED CONCRETE PIPE
DEG	DEGREE
NO.	NUMBER
STR	STRUCTURE
L	LENGTH
W	WIDTH
PBA	PINE BLUFF ARSENAL

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
SUBMITTED BY: R.TOLIKONDA
SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)
ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D0035
FILE NUMBER:

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

SHEET INDEX, LEGEND AND ABBREVIATIONS

SHEET ID
GI001

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

GENERAL NOTES

1. THE INFORMATION SHOWN ON THE DRAWINGS CONCERNING TYPE AND LOCATION OF THE UNDERGROUND, ABOVEGROUND AND OTHER UTILITIES ARE NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. IT IS THE CONTRACTORS RESPONSIBILITY TO FIELD VERIFY HORIZONTAL AND VERTICAL LOCATIONS AND OWNERSHIP OF ALL EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION. THE INFORMATION FURNISHED ON THESE DRAWINGS IS FOR GENERAL INFORMATION ONLY. THE CONTRACTOR IS RESPONSIBLE TO DETERMINE ALL UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO.
2. PRIOR TO ANY CONSTRUCTION THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE CONTRACT DOCUMENTS AND SPECIFICATIONS. THE PLANS INCLUDING ALL NOTES, AND ANY OTHER APPLICABLE STANDARDS OR SPECIFICATIONS RELEVANT TO THE PRIOR COMPLETION OF THE WORK SPECIFIED. FAILURE ON THE PART OF THE CONTRACTOR TO FAMILIARIZE THEMSELVES WITH ALL THE STANDARDS OR SPECIFICATIONS PERTAINING TO THIS WORK SHALL IN NO WAY RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR PERFORMING THE WORK IN ACCORDANCE WITH ALL SUCH APPLICABLE STANDARDS AND SPECIFICATIONS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE CONTRACTING OFFICER REPRESENTATIVE (COR).
3. THE CONTRACTOR SHALL SUBMIT NAMES AND 24 HOUR PHONE NUMBERS OF SUPERINTENDENT TO THE COR PRIOR TO COMMENCEMENT OF WORK. SUPERINTENDENT MUST BE ON JOB-SITE AT ALL TIMES WHILE WORK IS BEING PERFORMED.
4. THE CONTRACTOR SHALL NOT PLACE FILL OR WASTE MATERIAL WITHOUT PRIOR WRITTEN PERMISSION FROM THE PROPER PINE BLUFF ARSENAL (PBA) AUTHORITY. NO EXCESS EXCAVATED MATERIAL SHALL BE DEPOSITED IN LOW AREAS OR ALONG NATURAL DRAINAGE WAYS THAT WILL RESTRICT THE NATURAL FLOW OF WATER. IF THE CONTRACTOR PLACES EXCAVATED MATERIAL IN LOW AREAS THAT WILL CAUSE FLOW DAMAGE, CONTRACTOR WILL BE RESPONSIBLE FOR ALL DAMAGE RESULTING FROM SUCH FILL AND SHALL REMOVE AT CONTRACTOR'S EXPENSE. DAMAGES TO BE REPAIRED IMMEDIATELY OR SAME DAY AS FLOODING EVENT.
5. THE CONTRACTOR SHALL REMOVE FROM THE SITE ALL EXCESS CONSTRUCTION MATERIALS AND DEBRIS AT THE END OF THE PROJECT. CONTRACTOR SHALL PLACE IMPERMEABLE TARP OVER STOCKPILES STORED DURING NON-WORKING HOURS.
6. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING SUITABLE ACCESS TO PBA PERSONNEL, AUTHORITIES, VEHICLES, FIRE TRUCKS, AMBULANCES, AND OTHER EMERGENCY VEHICLES TO THE EXISTING BUILDINGS AND ROADWAYS AT ALL TIMES DURING CONSTRUCTION.
7. ANY DAMAGE TO EXISTING INFRASTRUCTURE, UTILITIES, CURB AND GUTTER, AND/OR PAVEMENT SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE.
8. ALL TRENCH EXCAVATION SHALL BE IN ACCORDANCE WITH THE USACE SAFETY AND HEALTH REQUIREMENTS MANUAL (385-1-1). THE CONTRACTOR IS RESPONSIBLE FOR ALL TRENCH SAFETY. THE CONTRACTOR SHALL CONSTRUCT THE PROPOSED WORK UTILIZING A TRENCH SAFETY PLAN, PREPARED BY A PROFESSIONAL ENGINEER FOR THIS PROJECT.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING GENERAL SAFETY AT AND ADJACENT TO THE PROJECT SITE INCLUDING THE PERSONAL SAFETY OF THE CONSTRUCTION CREW, GENERAL PUBLIC, AND PBA PERSONNEL.
10. NO PARKING OF VEHICLES, EQUIPMENT, OR MATERIALS ON ANY ROADS OR PARKING AREA NOT DESIGNATED AS CONTRACTOR STAGING OR LAYDOWN AREA WILL BE PERMITTED.
11. CONTROL POINTS HAVE BEEN ESTABLISHED BY THE ENGINEER. CONTRACTOR SHALL PROTECT THESE CONTROL POINTS. CONTRACTOR SHALL PROVIDE ANY ADDITIONAL STAKING AND CONTROL TO CONSTRUCT THE WORK, AT NO EXTRA COST TO THE GOVERNMENT. ANY DAMAGE BY THE CONTRACTOR TO THE CONTROL POINTS RESULTING IN THEIR LOSS WILL BE REPLACED OR REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.
12. ANY FENCE DAMAGED OR REMOVED BY CONSTRUCTION ACTIVITIES NOT SHOWN ON THE DRAWINGS SHALL BE REMOVED AND REPLACED WITH A FENCE OF EQUAL OR SUPERIOR QUALITY AT NO ADDITIONAL COST TO GOVERNMENT.
13. A PRE-CONSTRUCTION VIDEO IS REQUIRED TO BE SUBMITTED BY THE CONTRACTOR TO THE COR PRIOR TO BEGINNING CONSTRUCTION TO VERIFY ALL PRE-EXISTING CONDITIONS FOR STRUCTURES, TRESS, TRAILS, PAVEMENT, ROADWAYS, AND OTHER FEATURES ADJACENT TO THE CONSTRUCTION AREA.
14. CONTRACTOR SHALL HAVE IN THEIR POSSESSION, PRIOR TO CONSTRUCTION, ALL NECESSARY PERMITS, LICENSES, ETC. INCLUDING ANY SPECIAL PBA PERMITS UNTIL CONSTRUCTION IS COMPLETED. THE CONTRACTOR SHALL HAVE AT LEAST ONE SET OF APPROVED ENGINEERING PLANS AND SPECIFICATIONS ON-SITE AT ALL TIMES.
15. CONTRACTOR SHALL COMPLY WITH ALL PBA RESTRICTIONS. ALL COSTS INCURRED FOR COMPLIANCE SHALE BE AT NO ADDITIONAL COST TO THE GOVERNMENT.
16. CONSTRUCTION SURVEY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR INCLUDING BUT NOT LIMITED TO SURVEY DATA OF ALL INSTALLED AND EXISTING UTILITIES, STRUCTURES, AND ROADWAYS IN THE DESIGNATED PROJECT COORDINATES.
17. CONTRACTOR SHALL PROVIDE WASTE SITE AT NO ADDITIONAL EXPENSE OR RESPONSIBILITY OF THE GOVERNMENT.
18. HORIZONTAL DATUM IS ARKANSAS STATE PLANE, SOUTH ZONE, NAD83.
19. THE SURVEY VERTICAL DATUM IS NAVD88 (GEOID 88).
20. THE LINES AND GRADES SHOWN ON THE DRAWINGS MAY BE VARIED SLIGHTLY BY THE GOVERNMENT IN THE FIELD. THE CONTRACTOR SHALL NOT BE ENTITLED TO AN EXTRA PAYMENT.
21. ANY TRAFFIC CONTROL REQUIREMENTS SHALL BE COMPLETED AT CONTRACTOR'S EXPENSE.
22. ALL WORK SHALL BE DONE IN THOROUGH AND CONSCIENTIOUS MANNER ACCORDING TO INDUSTRY STANDARDS AND SHALL BE SUBJECT TO INSPECTION AND ACCEPTANCE BY THE GOVERNMENT. WORK THAT IS DEEMED SUBSTANDARD AND NOT TO INDUSTRY STANDARD WILL BE SUBJECTED TO REPLACEMENT AND REPAIR AT NO EXTRA COST TO THE GOVERNMENT.
23. IN THE INSTALLATION OF THIS WORK, CONTRACTOR WILL COMPLY IN EVERY WAY WITH THE REQUIREMENTS OF LOCAL LAWS AND ORDINANCES, THE LAWS OF THE STATE OF ARKANSAS, AND FEDERAL REQUIREMENTS.
24. BASED ON THE REVIEW OF NFIP FIRM, CITY OF PINE BLUFF, JEFFERSON COUNTY, ARKANSAS, MAP NUMBER 05069C0165D, MAP EFFECTIVE: MARCH 16, 2009, AND BY GRAPHIC PLOTTING ONLY, THE SUBJECT PROPERTY LIES WITHIN ZONE X, AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN, SURVEYOR AND DESIGN TEAM ASSUMES NO LIABILITY FOR THE CORRECTNESS OF CITED MAP.
25. CONTOUR INTERVALS SHOWN IN THE SURVEY INFORMATION ARE ONE-FOOT, AS DEPICTED. LAST DATE OF FIELD SURVEY IS JUNE 6, 2024.
26. THE EXISTENCE, SIZE AND/OR LOCATION OF UTILITIES ARE NOT GUARANTEED BY THE SURVEY. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION. A DIG PERMIT SHALL BE OBTAINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. ANY UTILITY DAMAGED SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE GOVERNMENT. PROVIDE REPAIRS THAT ARE EQUAL TO OR EXCEED THE QUALITY OF THE CONSTRUCTION PRIOR TO DAMAGE. UTILITIES NOT SHOWN ON DRAWINGS WILL BE COVERED UNDER SOLICITATION CLAUSE DIFFERING SITE CONDITIONS.
27. 6-INCH UNDERGROUND MAIN FIRE SERVICE SHALL BE DUCTILE IRON PIPE, CEMENT-MORTAR LINED, CONFORMING TO AWWA C151 AND C104, MINIMUM PRESSURE CLASS 350, INSTALLED IN ACCORDANCE WITH AWWA C600.
28. "DESIGN AND INSTALLATION OF UNDERGROUND FIRE SERVICE PIPING, INCLUDING JOINT RESTRAINT AND THRUST RESTRAINT, SHALL COMPLY WITH UFC 3-600-01 AND NFPA 24.
29. DOMESTIC WATER SERVICE FROM MAIN TO BUILDING SHALL BE PVC PRESSURE PIPE CONFORMING TO AWWA C900, DR18 (235 PSI) MINIMUM UNLESS NOTED OTHERWISE, BLUE IN COLOR, WITH GASKETED BELL-AND-SPIGOT JOINTS; MATERIALS AND INSTALLATION SHALL CONFORM TO AWWA C605.

EROSION AND SEDIMENTATION CONTROL NOTES:

1. THE CONTRACTOR SHALL CONTROL EROSION AND SEDIMENTATION PER APPLICABLE PERMITS, LAWS, AND REGULATIONS.
2. IN THE EVENT OF HEAVY RAIN THAT MAY OCCUR DURING CONSTRUCTION, THE CONTRACTOR SHALL SECURE ALL CONSTRUCTED IMPROVEMENTS AND EQUIPMENT.
3. ALL EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO ANY CONSTRUCTION ACTIVITIES. WHEN THE PROJECT IS COMPLETE AND THE ENTIRE PROJECT SITE IS COMPLETELY STABILIZED, THE SEDIMENT CONTROL DEVICES AND ACCUMULATED SEDIMENT SHALL BE REMOVED AND DISPOSED OF IN AN APPROVED MANNER. THE CONTRACTOR HAS THE ULTIMATE RESPONSIBILITY FOR THE EFFECTIVE CONTROL OF EROSION AND SEDIMENTATION.
4. THE SITE SHALL BE REVIEWED WEEKLY OR AFTER EVERY STORM EVENT TO VERIFY EROSION CONTROL IS FUNCTIONING PROPERLY. ADJUSTMENTS OR REPAIRS TO THE EROSION CONTROL SHALL BE MADE AS NEEDED.
5. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING EROSION CONTROL ON STOCKPILES MATERIALS AND CANNOT BLOCK DRAINAGE, STAGING OR STOCKPILE AREA SHALL BE SURROUNDED ON THE DOWNSTREAM SIDE WITH ORGANIC FILTER TUBES (6' DIA.) TO BE INSTALLED AS SUBSIDIARY TO THE CONTRACT.
6. ALL EROSION AND SEDIMENT CONTROL SHALL BE PLACED AS SHOWN ON THE PLANS AND IN ACCORDANCE WITH THE SWPPP.
7. THE ARKANSAS DIVISION OF ENVIRONMENTAL QUALITY MANDATES OBTAINING A CONSTRUCTION PERMIT THAT INCLUDES A STORM WATER POLLUTION PREVENTION PLAN. IT'S ESSENTIAL FOR THE CONTRACTOR TO FREQUENTLY COORDINATE WITH PBA ENVIRONMENTAL DIVISION FROM THE OUTSET TO ENSURE COMPLIANCE WITH ALL PERMIT REQUIREMENTS, INCLUDING THE IMPLEMENTATION OF EROSION AND SEDIMENT CONTROLS/BMPS THROUGHOUT EACH PHASE OF CONSTRUCTION.

TESTING

1. EMPLOY AN APPROVED USACE TESTING LABORATORY TO FIELD VERIFY AND PERFORM LAB TESTS OF THE CONCRETE, FILL AND MATERIAL, AND OPERATIONS.
2. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH TESTING LABORATORY PRIOR TO PERFORMING TESTS AND COMMENCING WORK.
3. NOTIFY THE GOVERNMENT IN WRITING UPON COMPLETION OF THE TESTS. SUBMIT REPORTS TO GOVERNMENT IN ACCORDANCE WITH THE SUBMITTAL REGISTER.

UTILITIES

1. OBTAIN A DIG PERMIT, IF REQUIRED, FROM PBA PRIOR TO POTHOLING EXISTING UTILITIES AND CONSTRUCTION.
2. POTHOLE ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. PROVIDE FIELD INFORMATION TO THE GOVERNMENT INCLUDING UTILITY LOCATION, DEPTH OF COVER, SIZE, AND MATERIAL OF UTILITY IN A LEGIBLE MANNER.
3. NOTIFY ALL EXISTING UTILITY COMPANIES OR OWNERS A MINIMUM OF SEVENTY TWO (72) HOURS BEFORE PERFORMING ANY WORK IN THIS AREA. CONTACT INFORMATION TO BE PROVIDED. CALL ARKANSAS 811 PRIOR TO EXCAVATION.
4. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS AND COORDINATION TO ENSURE THAT ELECTRIC POWER, TELEPHONE POLES, COMMUNICATION LINES, AND SERVICES ARE NOT DISTURBED DURING CONSTRUCTION. ALL COSTS INCURRED FOR SUPPORTING OR MOVING ELECTRIC POWER AND TELEPHONE POLES SHALL BE INCLUDED IN THE BID.
5. THE CONTRACTOR SHALL PROTECT AND SUPPORT EXISTING UTILITIES IN ACCORDANCE WITH STANDARD, PROCEDURES, POLICIES, AND REQUIREMENTS OF THE OWNERS OF THE UTILITIES. PROTECTION AND SUPPORT OF EXISTING UTILITIES SHALL INCLUDE PROTECTION AND SUPPORT OF UTILITIES LINES, VAULTS, BOXES, VALVES AND POLES.
6. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING THE LIGHT POLES AND UTILITIES TO REMAIN. IF DAMAGED DURING CONSTRUCTION THE CONTRACTOR SHALL REPAIR OR REPLACE LIGHTING OR UTILITIES TO EQUAL OR SUPERIOR QUALITY AT NO ADDITIONAL COST TO THE GOVERNMENT.
7. THE CONTRACTOR SHALL NOTIFY PBA AND USACE IMMEDIATELY UPON IDENTIFICATION OF ANY UTILITY CONFLICT.
8. REMOVAL OF ANY ABANDONED UTILITIES SHALL BE INCIDENTAL AND NO SEPARATE PAYMENT SHALL BE MADE.

SECURITY

1. THE CONTRACTOR SHALL ENSURE COMPLIANCE WITH ALL SECURITY REGULATIONS AND ACCESS REQUIREMENTS FOR ALL CONTRACTOR PERSONNEL ENTERING THE PROJECT SITE. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL BADGING REQUIRED FOR THE ACCESS TO THE INSTALLATION
2. CLOSE COORDINATION WITH THE PBA IS A REQUIREMENT OF THIS CONTRACT.
3. CONTRACTOR VEHICLES SHALL ABIDE BY PBA TRAFFIC REGULATIONS INCLUDING SPEED LIMITS AND RESTRICTIONS ON CELL PHONE USAGE. COMMERCIAL VEHICLES AND HEAVY EQUIPMENT MUST TRAVEL ALONG PREDETERMINED HAUL ROUTES AND PASS THROUGH SECURITY ACCESS POINTS AS SHOWN ON THE DRAWINGS.
4. ALL CONTRACTOR PERSONNEL SHALL BE BRIEFED ON APPROVED HAUL ROUTES AND RESTRICTED AREAS.
5. VISITORS TO THE PROJECT SITE MUST BE ACCOMPANIED BY AN APPROVED SPONSOR AT ALL TIMES.

ENVIRONMENTAL

1. DURING THE DEMOLITION, CONTRACTOR SHALL BE AWARE OF ENVIRONMENTAL IMPACTS AND HAZMAT MATERIALS AND SHALL FOLLOW APPLICABLE LAWS AND REGULATIONS.
2. CONTRACTOR SHALL REFER TO HAZMAT SURVEY REPORT (ECS PROJECT NO. 49:23938) PRIOR TO DEMOLITION AND FOLLOW APPLICABLE LAWS AND REGULATIONS.
3. ASBESTOS-CONTAINING MATERIALS (ACMS) WERE NOT REPORTED. HOWEVER, ACMS MAY REMAIN WITHIN THE BUILDINGS HIDDEN BEHIND INACCESSIBLE AREAS. IF UNANTICIPATED SUSPECT ASBESTOS-CONTAINING MATERIALS ARE IDENTIFIED DURING CONSTRUCTION, CEASE OPERATIONS AND NOTIFY COR FOR FURTHER DIRECTION. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR COLLECT AND/OR ANALYZE BULK SAMPLES OF SUSPECT MATERIALS WITHOUT THE APPROVAL OF COR.
4. CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH OSHA 29 CFR 1926.62: LEAD EXPOSURE IN CONSTRUCTION; INTERIM FINAL RULE FOR ALL ACTIVITIES DURING WHICH AN EMPLOYEE MAY BE OCCUPATIONALLY EXPOSED TO LEAD.
5. LEAD TESTING HAS BEEN PERFORMED ON REPRESENTATIVE BUILDING COMPONENTS THAT WILL BE DEMOLISHED BY THIS PROJECT. THE FOLLOWING MATERIALS HAVE BEEN IDENTIFIED TO BE COVERED WITH LEAD-BASED PAINT: EXTERIOR WINDOWS AND WALLS OF THE GUARD SHACKS. REFER TO HAZMAT SURVEY REPORT (ECS PROJECT NO. 49:23938). CONTRACTOR TO FOLLOW OSHA GUIDELINES REFERENCED UNDER 29 CFR 1926.62.
6. FURNISHING OF HAZMAT SURVEY REPORT INFORMATION IS NOT INTENDED TO RELIEVE CONTRACTORS OF THEIR RESPONSIBILITIES UNDER OSHA TO DETERMINE THE ACMS LEAD-CONTAINING MATERIALS THAT THEIR EMPLOYEES AND SUBCONTRACTORS MAY BE EXPOSED TO, AND TO WARN THEIR EMPLOYEES OF THE POTENTIAL DANGERS OF THE DISTURBANCE OF LEAD-CONTAINING MATERIALS. CONTRACTOR IS RESPONSIBLE FOR CHARACTERIZING ALL WASTE USING EPA METHOD 1311, TOXIC CHARACTERISTIC LEACHING PROCEDURE (TCLP). SUBMIT COPIES OF ALL LABORATORY RESULTS, WASTE TRANSPORTER, AND LANDFILL PERMITS, PRIOR TO REMOVING WASTE FROM THE SITE.

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
SUBMITTED BY: R.TOLIKONDA
SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)
ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F8002
CONTRACT NO.: W9127S23D8035
FILE NUMBER:

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

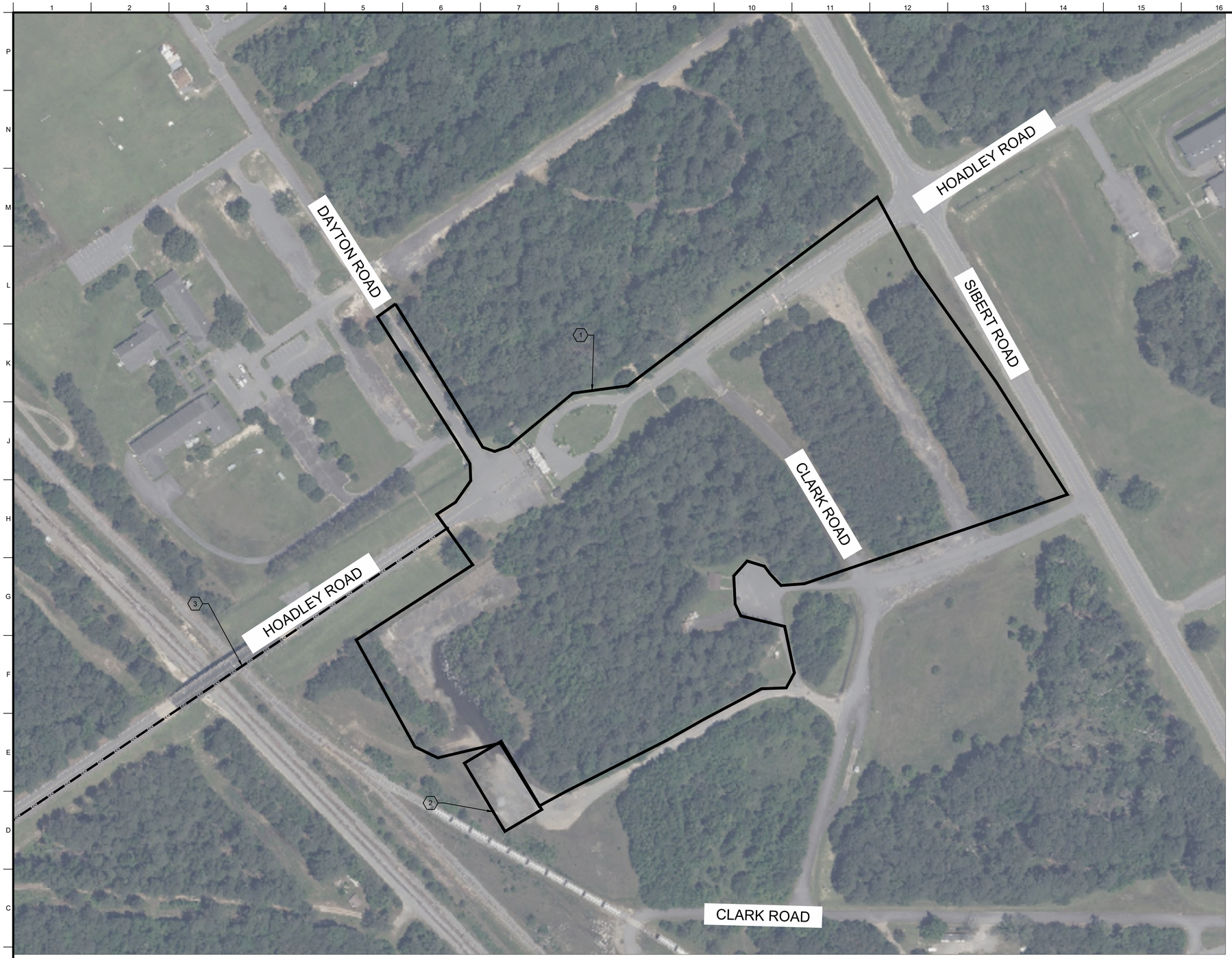
HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

GENERAL CIVIL NOTES

SHEET ID
GI002

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



SHEET KEYNOTES

1. PROJECT AREA
2. STAGING AREA
3. CONTRACTOR PRIMARY HAUL ROUTE

PLAN NORTH

0 100' 200'

A1 HAUL ROUTE
SCALE: 1" = 100'

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: B.BANDA	ISSUE DATE: 04/17/2026
DRAWN BY: R.ISLAM	SOLICITATION NO.: W9127S24F6002
CHECKED BY: R.TOLIKONDA	CONTRACT NO.: W9127S23D6035
SUBMITTED BY: R.TOLIKONDA	FILE NUMBER:
SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)	

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

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PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

HAUL ROUTE

SHEET ID
GC101

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

A1 CONSTRUCTION PHASING PLAN - PHASE 1

SCALE: 1" = 80'

GENERAL NOTES

1. MAINTAIN EXISTING STRIPING AND LANE CONFIGURATIONS UNLESS OTHERWISE NOTED. (EXISITING STRIPING NOT LABELED ON PLAN)
2. SIGNS SHALL CONFORM TO MUTCD.
3. REFER TO SHEET GC105 FOR DETOUR PLAN.
4. REFER TO GC103 FOR TEMPORARY ROADWAY CONNECTION PLAN AND PROFILE.

SHEET KEYNOTES

1. CONSTRUCTION ROAD
2. CONSTRUCTION FENCE

LEGEND

- TEMPORARY SIGN
- TYPE III BARRICADE
- CONSTRUCTION
- COMPLETED WORK
- TRAFFIC

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
SUBMITTED BY: R.TOLIKONDA
SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)
ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D6035
FILE NUMBER:

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

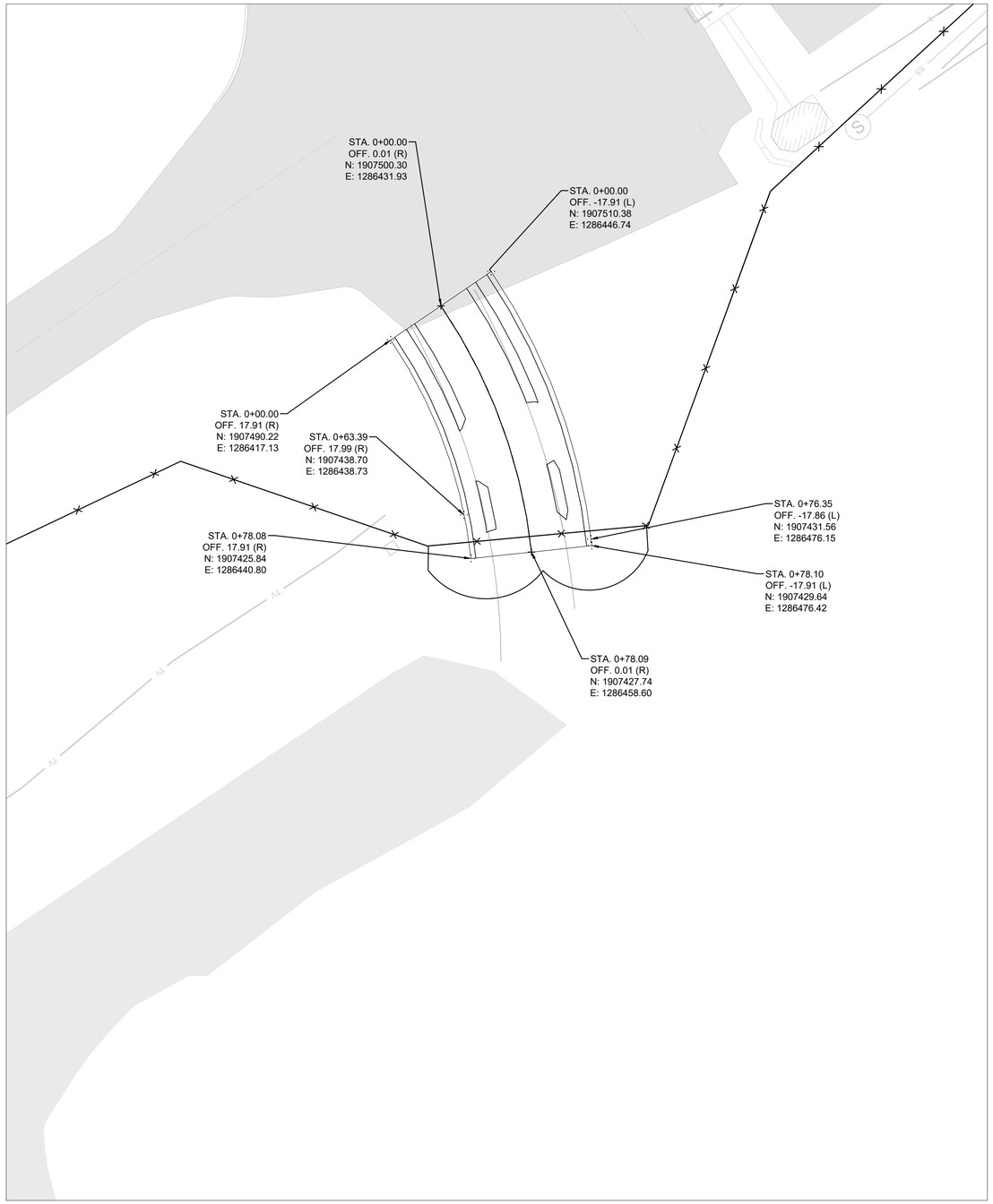
HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

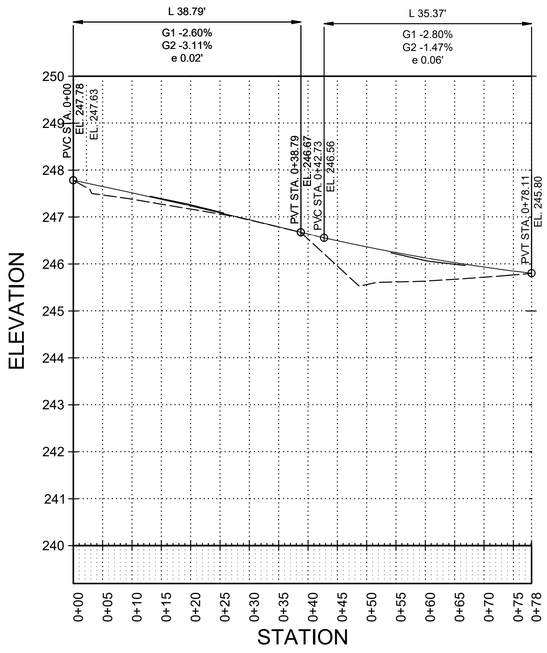
CONSTRUCTION PHASING PLAN

SHEET ID
GC102

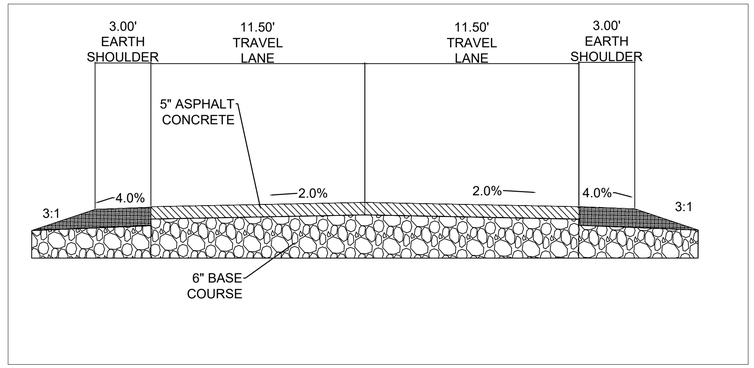
CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



A1 PHASE 1 TEMPORARY ROADWAY CONNECTION LAYOUT
SCALE: 1" = 20'



F11 TEMPORARY ROADWAY CONNECTION PROFILE
SCALE: 1" = 40' HORIZONTAL, 1" = 8' VERTICAL



B12 TEMPORARY ROADWAY CONNECTION TYPICAL SECTION
SCALE: NOT TO SCALE

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
SUBMITTED BY: R.TOLIKONDA
ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D6035
FILE NUMBER:
SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)

U.S. ARMY CORPS OF ENGINEERS
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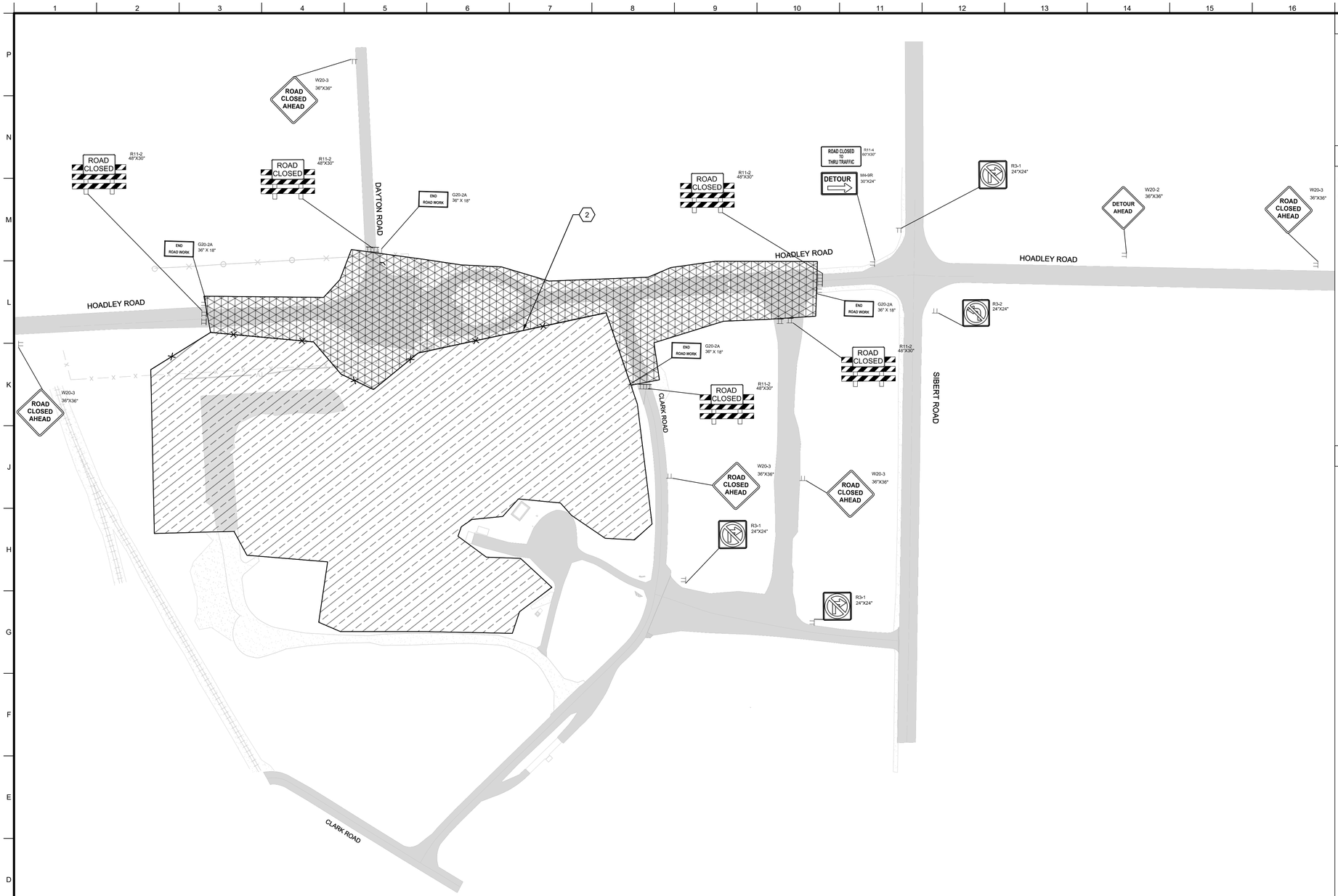
PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

TEMPORARY ROADWAY CONNECTION

SHEET ID
GC103

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



A1 CONSTRUCTION PHASING PLAN - PHASE 2

SCALE: 1" = 100'

PLAN NORTH

0 80' 160'

GENERAL NOTES

1. MAINTAIN EXISTING STRIPING AND LANE CONFIGURATIONS UNLESS OTHERWISE NOTED. (EXISITING STRIPING NOT LABELED ON PLAN)
2. SIGNS SHALL CONFORM TO MUTCD.
3. REFER TO SHEET GC105 FOR DETOUR PLAN.
4. REFER TO GC103 FOR TEMPORARY ROADWAY CONNECTION PLAN AND PROFILE.

SHEET KEYNOTES

1. CONSTRUCTION ROAD
2. CONSTRUCTION FENCE

LEGEND

- TEMPORARY SIGN
- TYPE III BARRICADE
- CONSTRUCTION
- COMPLETED WORK
- TRAFFIC

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLUKONDA
SUBMITTED BY: R.TOLUKONDA
SCALE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)
ISSUE DATE: 04/17/2026
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CONTRACT NO.: W9127S23D6035
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U.S. ARMY CORPS OF ENGINEERS
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2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

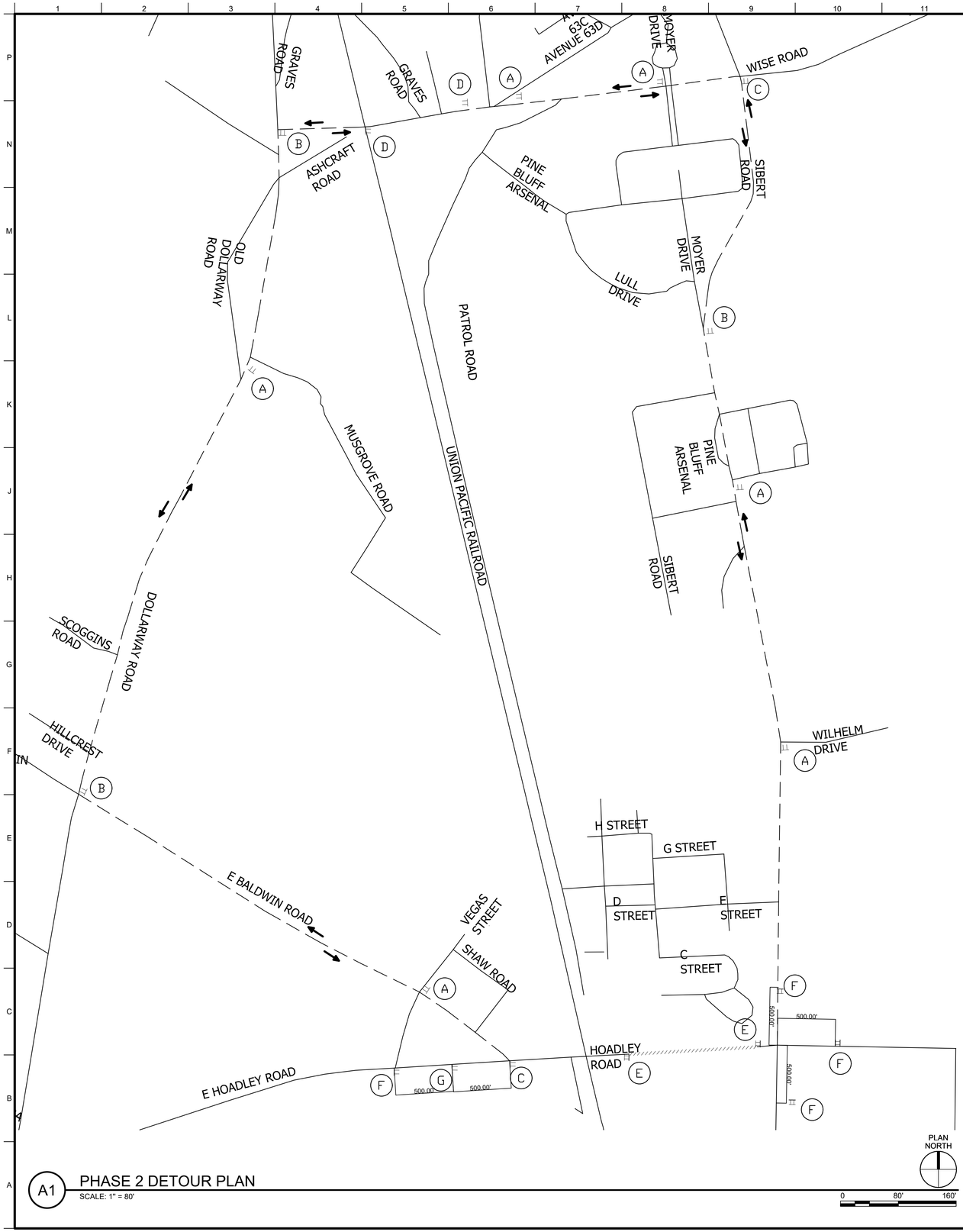
PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

CONSTRUCTION PHASING PLAN

SHEET ID

GC104

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



A1 PHASE 2 DETOUR PLAN
SCALE: 1" = 80'

A	HOADLEY ROAD	SPECIAL	
	DETOUR	M4-9R 30"X24"	
B	HOADLEY ROAD	SPECIAL	
	DETOUR	M4-9R 30"X24"	
C	HOADLEY ROAD	SPECIAL	
	DETOUR	M4-9L 30"X24"	
D	HOADLEY ROAD	SPECIAL	
	END DETOUR	M4-8A 24"X18"	
E	THIS ROAD TO BE CLOSED FOR CONSTRUCTION MM/DD/YYYY	W23-101 96"X48"	
F	PLAINVIEW GATE CLOSED AHEAD FOR CONSTRUCTION USE DEXTER GATE	CUSTOM 96"X48"	
G	DETOUR 500 FT	W20-2 36"X36"	

NOTE: THIS SIGN TO BE PLACED NEAR POINTS OF CLOSURE TWO WEEKS PRIOR TO CLOSURE OF E HOADLY ROAD AND REMOVED UPON CLOSURE.

GENERAL NOTES

1. MAINTAIN EXISTING STRIPING AND LANE CONFIGURATIONS UNLESS OTHERWISE NOTED. (EXISITING STRIPING NOT LABELED ON PLAN)
2. SIGNS SHALL CONFORM TO MUTCD.
3. REFER TO SHEET GC102-GC104 FOR CONSTRUCTION PHASING PLAN

SHEET KEYNOTES

LEGEND

- TEMPORARY SIGN
- TYPE III BARRICADE
- (X) SIGN LETTER
- ROAD CLOSURE
- DETOUR ROUTE
- TRAFFIC FLOW

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
SUBMITTED BY: R.TOLIKONDA
SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)
ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D6035
FILE NUMBER:

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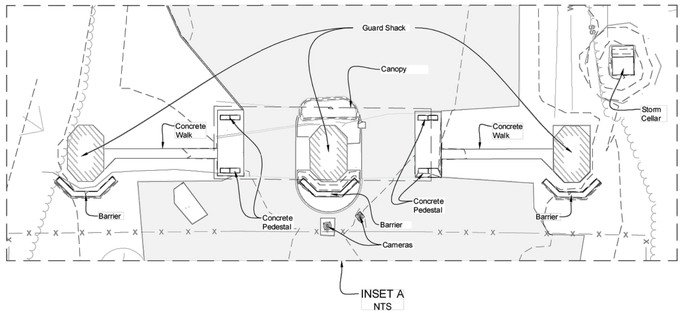
PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

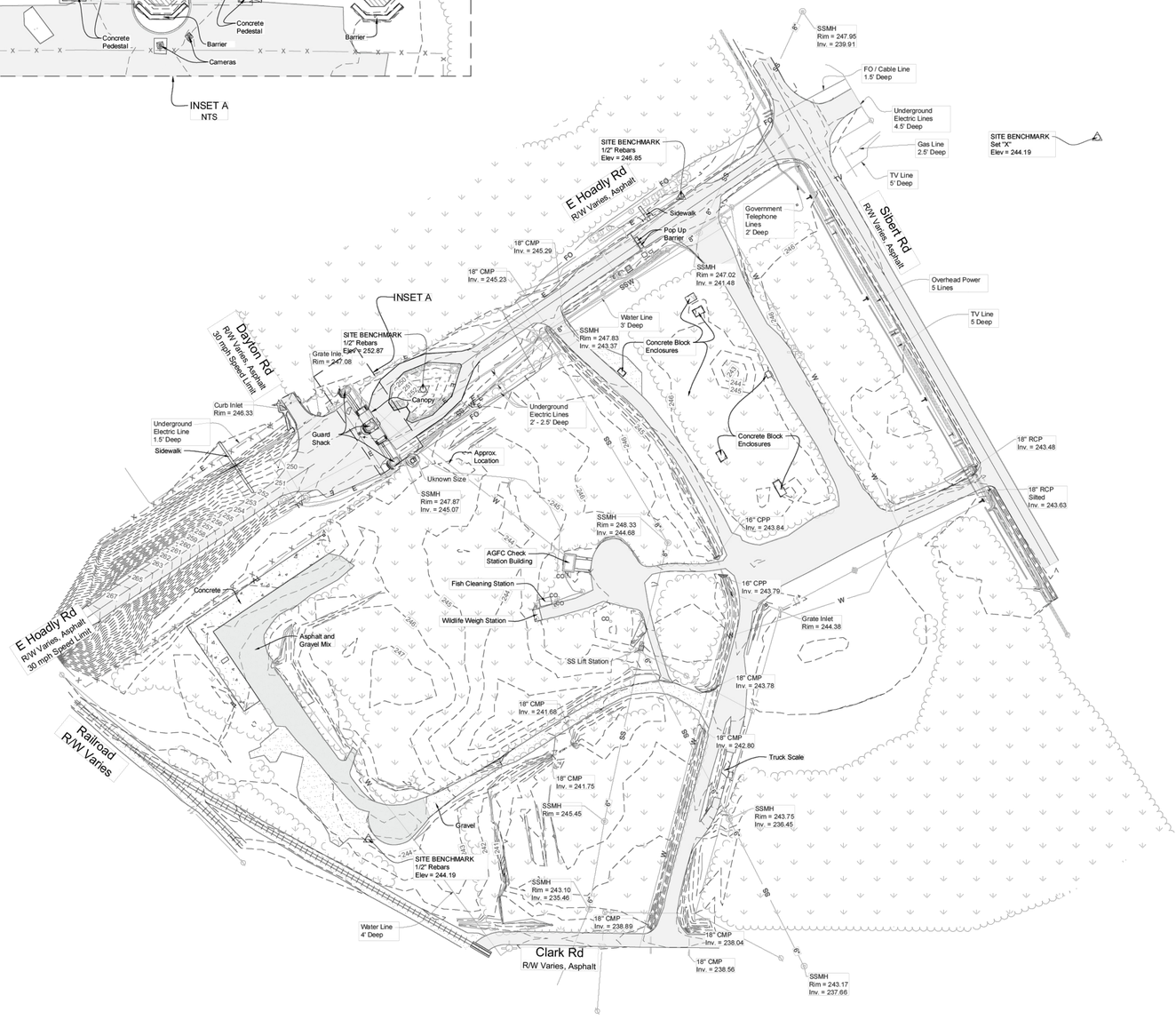
PHASE 2 DETOUR PLAN

SHEET ID
GC105

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



INSET A
NTS



GRAPHIC SCALE
0 50 100 200
1"=100'

LEGEND

- Boundary Line
- Lot Line
- Building
- Building Overhang
- Buried Electric Line
- Overhead Electric
- Telephone Cable
- Fiber Optic Cable
- Gas Line
- Sanitary Sewer
- Storm Sewer
- Waterline
- Barb Wire Fence
- Pavement Line
- Concrete Curb
- Gutter
- Flow Line Creek
- Right-of-way Line
- Center Line Of Road

Asphalt | Concrete | Gravel | Landscaping | Tree Line and Woods

- Vault (as Noted)
- Manhole (as noted)
- Sanitary Sewer Cleanout
- Electric Meter
- Electric Pedestal
- Electric Transformer
- Fiber Optic Pedestal
- Television Pedestal
- Telephone Pedestal
- Sign (as noted)
- Tree
- Bush
- Traffic Light Pole
- Fire Hydrant
- Water Meter
- Water Valve
- Irrigation Control Valve
- Gas Pipeline Sign
- Gas Meter
- Gas Riser or Service
- Gas Vent Pipe
- Gas Vent Pipe
- Guy Wire
- Light Pole
- Light Pole W/ Pedestal
- Power Pole
- Power Pole With Transformer
- Power Pole With Light
- Mailbox

GENERAL NOTES:

- Vertical Datum: NAVD88 Vertical Datum: NAVD88 (Geoid 18). Orthometric heights and contours are derived from Terrestrial and RT Kinematics GNSS Observations based on OPUS processed solution having an orthometric height of: 74.49 m/ 244.398 feet.
- Flood Information: Based upon review of NFIP FIRM, City of Pine Bluff, Jefferson County, Arkansas, Map Number 05069C0165D, Map Effective: March 16, 2009, and by graphic plotting only, the subject property lies within: Zone X, areas determined to be outside the 0.2% annual chance floodplain. Surveyor assumes no liability for the correctness of cited map.
- Existing utilities shown hereon were located by reasonable visual observed surface improvements and the painted markings per the Arkansas One Call Utility Locate System; Ticket Number 240531-1934, unless noted otherwise. Actual locations of utilities shown, or the existence of additional subsurface improvements not shown hereon, should be verified before any excavations. Locations or existence of surface or subsurface improvements may differ from those shown hereon.
- Contour intervals are one-foot, as depicted hereon.
- Last Date of Field Survey: June 6, 2024.

Design of Plainview Pine Bluff Arsenal
TASK ORDER NUMBER: 8114

Jefferson County, Arkansas

halff
5704 EUPER LN., SUITE 200
FORT SMITH, ARKANSAS 72903
TEL. (479) 452-1933

No.	DATE	REVISION DESCRIPTION

TOPOGRAPHIC SURVEY MAP

PROJECT NO:	53632.002
ISSUED:	10/22/2025
DRAWN BY:	PWH
CHECKED BY:	DWM

SHEET TITLE:
SUE Exhibit

VF101

PAGE: 1 OF 1

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY:	
DRAWN BY:	
CHECKED BY:	
SUBMITTED BY:	
FILE NUMBER:	
SIZE:	ANSI FULL BLEED D (22.00 X 34.00 INCHES)
ISSUE DATE:	04/17/2026
SOLICITATION NO.:	W9127S24F8002
CONTRACT NO.:	W9127S23D6035

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

TOPOGRAPHIC SURVEY MAP

SHEET ID
VF101

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

A:\53000s\53632\002\SURVCADD\Sheets\53632.002 Pine Bluff Arsenal.dwg
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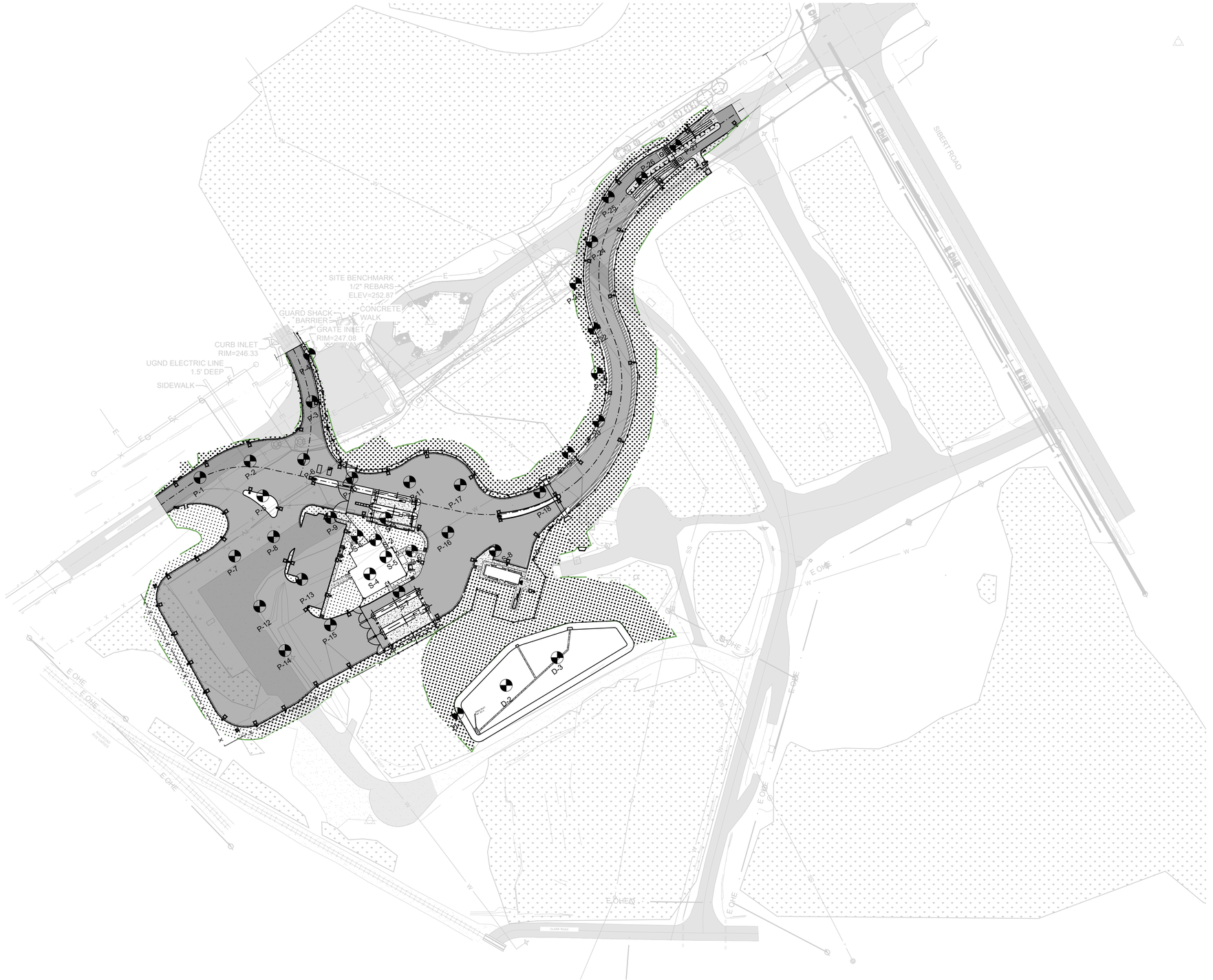

A1 SUBSURFACE INVESTIGATION PLAN
SCALE: 1" = 80'

PLAN NORTH

0 80' 160'

BORE HOLE LOCATIONS

BORE HOLE	NORTHING	EASTING
S-1	1907347.800	1286474.140
S-2	1907342.040	1286501.860
S-3	1907375.580	1286517.550
S-4	1907269.350	1286493.110
S-5	1907315.380	1286517.890
S-6	1907324.290	1286557.560
S-7	1907262.290	1286537.940
S-8	1907325.320	1286685.920
D-1	1907078.060	1286629.610
D-2	1907118.710	1286702.470
D-3	1907161.330	1286780.880
P-1	1907437.500	1286232.640
P-2	1907462.800	1286309.390
P-3	1907554.070	1286404.580
P-4	1907626.740	1286400.470
P-5	1907409.390	1286329.070
P-6	1907465.450	1286391.690
P-7	1907316.970	1286286.000
P-8	1907346.830	1286345.580
P-9	1907376.060	1286433.320
P-10	1907437.020	1286465.860
P-11	1907430.800	1286554.190
P-12	1907240.050	1286324.170
P-13	1907281.350	1286388.790
P-14	1907172.080	1286363.990
P-15	1907211.210	1286432.830
P-16	1907353.590	1286613.080
P-17	1907426.210	1286632.040
P-18	1907415.330	1286754.100
P-19	1907476.190	1286797.360
P-20	1907524.140	1286844.980
P-21	1907597.610	1286842.390
P-22	1907666.360	1286842.390
P-23	1907735.450	1286809.160
P-24	1907799.500	1286834.000
P-25	1907868.080	1286859.290
P-26	1907897.350	1286910.230
P-27	1907947.530	1286962.620

SHEET LEGEND

BORE HOLE LOCATION

NOTES

SEE GEOTECHNICAL REPORT TITLED GEOTECHNICAL EXPLORATION AND ENGINEERING REPORT DATED 15 DECEMBER 2025 AND PREPARED BY HANA ENGINEERS AND CONSUTANTS, LLC FOR ADDITIONAL INFORMATION.

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLUKONDA
SUBMITTED BY: R.TOLUKONDA
ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D6035
FILE NUMBER:
SCALE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)

U.S. ARMY CORPS OF ENGINEERS
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HOADLEY ROAD, WHITE HALL, AR 71602

SUBSURFACE INVESTIGATION PLAN

SHEET ID
B-100

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

Boring Designation S-1

DRILLING LOG — DIVISION: Southwestern — INSTALLATION: N/A — Sheet 1 of 2

1. PROJECT: Pine Bluff Arsenal Access Control Point, Jefferson County	10. COORDINATE SYSTEM: NAD 1983 StatePlane Arkansas South FIPS 0302 Feet		VERTICAL: NAVD88
	LOCATION COORDINATES: N: 1907329.21 E: 1286450.05		LOCATION METHOD:
2. HOLE NUMBER: S-1	3. DRILLING AGENCY: Terracon	11. DATE BORING: STARTED: Aug 28 2024	COMPLETED: Aug 28 2024
4. NAME OF DRILLER: Dakota Sloan		12. HAMMER TYPE: Automatic	EFFICIENCY (%)
5. EQUIPMENT: CME 55 Drill Rig 546		13. SIZE AND TYPE OF BIT: 3.75" HSA	
6. DIRECTION OF BORING: Vertical	DEG FROM VERTICAL: 0	BEARING:	14. ELEVATION SURFACE: 243.4'
7. THICKNESS OF OVERBURDEN: 35.0'			15. ELEVATION GROUND WATER:
8. DEPTH DRILLED INTO ROCK:			16. TOTAL NUMBER CORE BOXES:
9. TOTAL DEPTH OF BORING: 35.0'			17. SIGNATURE AND TITLE OF INSPECTOR: JB

ELEV	DEPTH	BLOWS/0.5ft	N	LEGEND	FIELD CLASSIFICATION OF MATERIALS (Description)	% REC	Samp No.	LAB: Gravel	Sand	Fines	LL	PI	MC	ASTM Class	REMARKS
243.11	0.30	4 5 7	12		Topsoil, 3 inches LEAN CLAY WITH SAND (CL) light gray and light brown, stiff to hard		S-1						23		
		14 18 30	48				S-2								
238.91	4.50	7 14 22	36		SANDY SILT (ML) light gray and light brown, hard		ST-1 S-3			57	NP	NP	13		
237.41	6.00	18 20 22	42		POORLY GRADED SAND WITH SILT (SP-SM) light gray and light brown, loose to dense		S-4								
		4 7 10	17				S-5								
		4 2 3	5		*clay seam at about 10 feet*		S-6								
		12 15 18	33				S-7			10	NP	NP	10		
		8 9 11	20				S-8								
219.91	23.50	7 8 10	18		LEAN CLAY (CL) gray and reddish brown, stiff to very stiff		S-9								
		4 4 5	9				S-10								

(continued on next page)

USACE FORM 1836 — Boring Designation S-1 — Sheet 1 of 2

Boring Designation S-3

DRILLING LOG — DIVISION: Southwestern — INSTALLATION: N/A — Sheet 1 of 2

1. PROJECT: Pine Bluff Arsenal Access Control Point, Jefferson County	10. COORDINATE SYSTEM: NAD 1983 StatePlane Arkansas South FIPS 0302 Feet		VERTICAL: NAVD88
	LOCATION COORDINATES: N: 1907358.72 E: 1286483.95		LOCATION METHOD:
2. HOLE NUMBER: S-3	3. DRILLING AGENCY: Terracon	11. DATE BORING: STARTED: Aug 28 2024	COMPLETED: Aug 28 2024
4. NAME OF DRILLER: Dakota Sloan		12. HAMMER TYPE: Automatic	EFFICIENCY (%)
5. EQUIPMENT: CME 55 Drill Rig 546		13. SIZE AND TYPE OF BIT: 3.75" HSA	
6. DIRECTION OF BORING: Vertical	DEG FROM VERTICAL: 0	BEARING:	14. ELEVATION SURFACE: 246.0'
7. THICKNESS OF OVERBURDEN: 35.0'			15. ELEVATION GROUND WATER:
8. DEPTH DRILLED INTO ROCK:			16. TOTAL NUMBER CORE BOXES:
9. TOTAL DEPTH OF BORING: 35.0'			17. SIGNATURE AND TITLE OF INSPECTOR: JB

ELEV	DEPTH	BLOWS/0.5ft	N	LEGEND	FIELD CLASSIFICATION OF MATERIALS (Description)	% REC	Samp No.	LAB: Gravel	Sand	Fines	LL	PI	MC	ASTM Class	REMARKS
245.68	0.30	15 20 27	47		Topsoil, Cleared Soils (disturbed), 4 inches LEAN CLAY WITH SAND (CL) light gray, hard to very hard		S-1				28	13			
		24 20 20	40				S-2								
		18 20 21	41				S-3								
		22 30 30	60				S-4								
239.48	6.50	25 26 30	56		POORLY GRADED SAND WITH SILT (SP-SM) light gray and light brown, medium dense to very dense, with clay seams		S-5								
		22 25 25	50				S-6				NP	NP	6		
		10 10 15	25				S-7								
		6 8 8	16				S-8								
222.98	23.00				LEAN CLAY WITH SAND (CL) gray and light brown, stiff		ST-1								
		4 4 6	10				S-9				39	23	23		

(continued on next page)

USACE FORM 1836 — Boring Designation S-3 — Sheet 1 of 2

Boring Designation S-4

DRILLING LOG — DIVISION: Southwestern — INSTALLATION: N/A — Sheet 1 of 2

1. PROJECT: Pine Bluff Arsenal Access Control Point, Jefferson County	10. COORDINATE SYSTEM: NAD 1983 StatePlane Arkansas South FIPS 0302 Feet		VERTICAL: NAVD88
	LOCATION COORDINATES: N: 1907263.94 E: 1286488.19		LOCATION METHOD:
2. HOLE NUMBER: S-4	3. DRILLING AGENCY: Terracon	11. DATE BORING: STARTED: Aug 29 2024	COMPLETED: Aug 29 2024
4. NAME OF DRILLER: Dakota Sloan		12. HAMMER TYPE: Automatic	EFFICIENCY (%)
5. EQUIPMENT: CME 55 Drill Rig 546		13. SIZE AND TYPE OF BIT: 3.75" HSA	
6. DIRECTION OF BORING: Vertical	DEG FROM VERTICAL: 0	BEARING:	14. ELEVATION SURFACE: 246.5'
7. THICKNESS OF OVERBURDEN: 35.0'			15. ELEVATION GROUND WATER:
8. DEPTH DRILLED INTO ROCK:			16. TOTAL NUMBER CORE BOXES:
9. TOTAL DEPTH OF BORING: 35.0'			17. SIGNATURE AND TITLE OF INSPECTOR: JB

ELEV	DEPTH	BLOWS/0.5ft	N	LEGEND	FIELD CLASSIFICATION OF MATERIALS (Description)	% REC	Samp No.	LAB: Gravel	Sand	Fines	LL	PI	MC	ASTM Class	REMARKS
246.23	0.30	12 16 16	32		Topsoil, Cleared Soils (disturbed), 4 inches SANDY LEAN CLAY (CL) light brown and light gray, very stiff to very hard		S-1								
		15 20 25	34				S-2								
		18 25 40	68				S-3						10		
		13 16 22	38				S-4								
		38 38 40	78				S-5								
		35 50/3	50/3"				S-6								
		8 11 13	24				S-7								
228.03	18.50	15 17 19	36		SILTY SAND (SM) light brown and light gray, dense		S-8			15	NP	NP	4		
223.33	23.20	4 5 7	12		LEAN CLAY (CL) gray and light brown, stiff		S-9								
		6 7 7	14				S-10								

(continued on next page)

USACE FORM 1836 — Boring Designation S-4 — Sheet 1 of 2

Boring Designation S-1

DRILLING LOG (Cont Sheet) — INSTALLATION: N/A — Sheet 2 of 2

PROJECT: Pine Bluff Arsenal Access Control Point, Jefferson County — COORDINATE SYSTEM: NAD 1983 StatePlane Arkansas South FIPS 0302 Feet — VERTICAL: NAVD88 — LOCATION COORDINATES: N: 1907329.21 E: 1286450.05 — LOCATION METHOD:

ELEV	DEPTH	BLOWS/0.5ft	N	LEGEND	FIELD CLASSIFICATION OF MATERIALS (Description)	% REC	Samp No.	LAB: Gravel	Sand	Fines	LL	PI	MC	ASTM Class	REMARKS
					LEAN CLAY (CL) gray and reddish brown, stiff to very stiff										
208.41	35.00	5 7 9	16				S-11								
					Borehole finished at 35.0										

USACE FORM 1836 — Boring Designation S-1 — Sheet 2 of 2

Boring Designation S-3

DRILLING LOG (Cont Sheet) — INSTALLATION: N/A — Sheet 2 of 2

PROJECT: Pine Bluff Arsenal Access Control Point, Jefferson County — COORDINATE SYSTEM: NAD 1983 StatePlane Arkansas South FIPS 0302 Feet — VERTICAL: NAVD88 — LOCATION COORDINATES: N: 1907358.72 E: 1286483.95 — LOCATION METHOD:

ELEV	DEPTH	BLOWS/0.5ft	N	LEGEND	FIELD CLASSIFICATION OF MATERIALS (Description)	% REC	Samp No.	LAB: Gravel	Sand	Fines	LL	PI	MC	ASTM Class	REMARKS
					LEAN CLAY WITH SAND (CL) gray and light brown, stiff										
212.48	33.50	6 7 8	15		SANDY LEAN CLAY (CL) light gray and reddish brown, stiff to very stiff		S-10								
210.98	35.00				Borehole finished at 35.0										

USACE FORM 1836 — Boring Designation S-3 — Sheet 2 of 2

Boring Designation S-4

DRILLING LOG (Cont Sheet) — INSTALLATION: N/A — Sheet 2 of 2

PROJECT: Pine Bluff Arsenal Access Control Point, Jefferson County — COORDINATE SYSTEM: NAD 1983 StatePlane Arkansas South FIPS 0302 Feet — VERTICAL: NAVD88 — LOCATION COORDINATES: N: 1907263.94 E: 1286488.19 — LOCATION METHOD:

ELEV	DEPTH	BLOWS/0.5ft	N	LEGEND	FIELD CLASSIFICATION OF MATERIALS (Description)	% REC	Samp No.	LAB: Gravel	Sand	Fines	LL	PI	MC	ASTM Class	REMARKS
					LEAN CLAY (CL) gray and light brown, stiff										
211.53	35.00	5 6 8	14				S-11								
					Borehole finished at 35.0										

USACE FORM 1836 — Boring Designation S-4 — Sheet 2 of 2

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
SUBMITTED BY: R.TOLIKONDA
SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)
ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D6035
FILE NUMBER: DNDA

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

BORING LOGS - 1

SHEET ID
B-101

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

Boring Designation S-5

DRILLING LOG | DIVISION: Southwestern | INSTALLATION: N/A | Sheet 1 of 2

1. PROJECT: Pine Bluff Arsenal Access Control Point, Jefferson County
10. COORDINATE SYSTEM: NAD 1983 StatePlane Arkansas South FIPS 0302 Feet | VERTICAL: NAVD88
LOCATION COORDINATES: N: 1907312.03 E: 1286511.32 | LOCATION METHOD:
2. HOLE NUMBER: S-5 | 3. DRILLING AGENCY: Terracon | 11. DATE BORING: STARTED Aug 29 2024 | COMPLETED Aug 29 2024
4. NAME OF DRILLER: Dakota Sloan | 12. HAMMER TYPE: Automatic | EFFICIENCY (%)
5. EQUIPMENT: CME 55 Drill Rig 546 | 13. SIZE AND TYPE OF BIT: 3.75" HSA
6. DIRECTION OF BORING: Vertical | DEG FROM VERTICAL: 0 | BEARING | 14. ELEVATION SURFACE: 245.9'
7. THICKNESS OF OVERBURDEN: 35.0' | 15. ELEVATION GROUND WATER
8. DEPTH DRILLED INTO ROCK | 16. TOTAL NUMBER CORE BOXES
9. TOTAL DEPTH OF BORING: 35.0' | 17. SIGNATURE AND TITLE OF INSPECTOR: JB

ELEV	DEPTH	BLOWS/ 0.5ft	N	LEGEND	FIELD CLASSIFICATION OF MATERIALS (Description)	% REC	Samp No.	LAB: Gravel	Sand	Fines	LL	PI	MC	ASTM Class	REMARKS
245.62	0.30	5 15 20	35		Topsoil, Cleared Soils (disturbed), 4 inches LEAN CLAY WITH SAND (CL) light gray and light brown, hard		S-1								
		20 18 20	38				S-2		87	28	11	7			
		20 40 50/5"					S-3								
		12 13 17	30				S-4								
		10 12 16	28				S-5								
		21 44 50/5"					S-6				34	22	8		
232.42	13.50	6 7 9	16		SANDY LEAN CLAY (CL) light gray and light brown, stiff to very stiff		S-7								12
		7 9 10	19				S-8								
222.42	23.50	3 4 5	9		LEAN CLAY (CL) gray and reddish brown, stiff, trace sand		S-9								
		4					ST-1								

(continued on next page)

USACE FORM 1836 | Boring Designation S-5 | Sheet 1 of 2

Boring Designation S-6

DRILLING LOG | DIVISION: Southwestern | INSTALLATION: N/A | Sheet 1 of 2

1. PROJECT: Pine Bluff Arsenal Access Control Point, Jefferson County
10. COORDINATE SYSTEM: NAD 1983 StatePlane Arkansas South FIPS 0302 Feet | VERTICAL: NAVD88
LOCATION COORDINATES: N: 1907307.32 E: 1286562.04 | LOCATION METHOD:
2. HOLE NUMBER: S-6 | 3. DRILLING AGENCY: Terracon | 11. DATE BORING: STARTED Aug 29 2024 | COMPLETED Aug 30 2024
4. NAME OF DRILLER: Dakota Sloan | 12. HAMMER TYPE: Automatic | EFFICIENCY (%)
5. EQUIPMENT: CME 55 Drill Rig 546 | 13. SIZE AND TYPE OF BIT: 3.75" HSA
6. DIRECTION OF BORING: Vertical | DEG FROM VERTICAL: 0 | BEARING | 14. ELEVATION SURFACE: 245.7'
7. THICKNESS OF OVERBURDEN: 35.0' | 15. ELEVATION GROUND WATER
8. DEPTH DRILLED INTO ROCK | 16. TOTAL NUMBER CORE BOXES
9. TOTAL DEPTH OF BORING: 35.0' | 17. SIGNATURE AND TITLE OF INSPECTOR: JB

ELEV	DEPTH	BLOWS/ 0.5ft	N	LEGEND	FIELD CLASSIFICATION OF MATERIALS (Description)	% REC	Samp No.	LAB: Gravel	Sand	Fines	LL	PI	MC	ASTM Class	REMARKS
245.41	0.30	10 27 31	58		Topsoil, Cleared Soils (disturbed), 4 inches SANDY LEAN CLAY (CL) light gray and reddish brown, very stiff to hard		S-1								
		22 14 12	26				S-2								
		15 12 18	30				S-3								
		22 21 29	43				S-4								
		10 20 22	42				S-5								
		13 17 18 25	35				S-6				34	22	8		
							ST-1				39	28	12		
		8 12 19	30				S-7								
227.21	18.50	10 11 13	24		CLAYEY SAND (SC) light gray and reddish brown, medium dense		S-8								
		10 13 13	26				S-9								
217.21	28.50	4 5 6	11		FAT CLAY (CH) gray and reddish brown, stiff, trace sand		S-10				94	65	48	26	

(continued on next page)

USACE FORM 1836 | Boring Designation S-6 | Sheet 1 of 2

Boring Designation S-7

DRILLING LOG | DIVISION: Southwestern | INSTALLATION: N/A | Sheet 1 of 2

1. PROJECT: Pine Bluff Arsenal Access Control Point, Jefferson County
10. COORDINATE SYSTEM: NAD 1983 StatePlane Arkansas South FIPS 0302 Feet | VERTICAL: NAVD88
LOCATION COORDINATES: N: 1907242.01 E: 1286542.05 | LOCATION METHOD:
2. HOLE NUMBER: S-7 | 3. DRILLING AGENCY: Terracon | 11. DATE BORING: STARTED Aug 30 2024 | COMPLETED Aug 30 2024
4. NAME OF DRILLER: Dakota Sloan | 12. HAMMER TYPE: Automatic | EFFICIENCY (%)
5. EQUIPMENT: CME 55 Drill Rig 546 | 13. SIZE AND TYPE OF BIT: 3.75" HSA
6. DIRECTION OF BORING: Vertical | DEG FROM VERTICAL: 0 | BEARING | 14. ELEVATION SURFACE: 246.8'
7. THICKNESS OF OVERBURDEN: 35.0' | 15. ELEVATION GROUND WATER
8. DEPTH DRILLED INTO ROCK | 16. TOTAL NUMBER CORE BOXES
9. TOTAL DEPTH OF BORING: 35.0' | 17. SIGNATURE AND TITLE OF INSPECTOR: JB

ELEV	DEPTH	BLOWS/ 0.5ft	N	LEGEND	FIELD CLASSIFICATION OF MATERIALS (Description)	% REC	Samp No.	LAB: Gravel	Sand	Fines	LL	PI	MC	ASTM Class	REMARKS
246.48	0.30	12 20 20	40		Topsoil, Cleared Soils (disturbed), 4 inches LEAN CLAY WITH SAND (CL) light gray and reddish brown, very stiff to hard		S-1								
		17 12 12	24				S-2			84			12		
		10 14 20	34				S-3								
		12 20 48	68				S-4					34	16	7	
		35 50/3"					S-5								
		48 50/3"					S-6								
228.78	18.00	5 8 9	17				S-7			72	42	28	15		
		12 14 16	30		SANDY SILT (ML) light brown and light gray, dense		ST-1				18	1	15		
							S-8								
223.28	23.50	6 10 8	18		SANDY LEAN CLAY (CL) gray and reddish brown, stiff to very stiff		S-9								
		5 6 8	14				S-10								

(continued on next page)

USACE FORM 1836 | Boring Designation S-7 | Sheet 1 of 2

Boring Designation S-5

DRILLING LOG (Cont Sheet) | INSTALLATION: N/A | Sheet 2 of 2

PROJECT: Pine Bluff Arsenal Access Control Point, Jefferson County
COORDINATE SYSTEM: NAD 1983 StatePlane Arkansas South FIPS 0302 Feet | VERTICAL: NAVD88
LOCATION COORDINATES: N: 1907312.03 E: 1286511.32 | LOCATION METHOD:

ELEV	DEPTH	BLOWS/ 0.5ft	N	LEGEND	FIELD CLASSIFICATION OF MATERIALS (Description)	% REC	Samp No.	LAB: Gravel	Sand	Fines	LL	PI	MC	ASTM Class	REMARKS
		4 5 4	9		LEAN CLAY (CL) gray and reddish brown, stiff, trace sand		S-10								
210.92	35.00	6 6 7	13				S-11								
					Borehole finished at 35.0										

USACE FORM 1836 | Boring Designation S-5 | Sheet 2 of 2

Boring Designation S-6

DRILLING LOG (Cont Sheet) | INSTALLATION: N/A | Sheet 2 of 2

PROJECT: Pine Bluff Arsenal Access Control Point, Jefferson County
COORDINATE SYSTEM: NAD 1983 StatePlane Arkansas South FIPS 0302 Feet | VERTICAL: NAVD88
LOCATION COORDINATES: N: 1907307.32 E: 1286562.04 | LOCATION METHOD:

ELEV	DEPTH	BLOWS/ 0.5ft	N	LEGEND	FIELD CLASSIFICATION OF MATERIALS (Description)	% REC	Samp No.	LAB: Gravel	Sand	Fines	LL	PI	MC	ASTM Class	REMARKS
					FAT CLAY (CH) gray and reddish brown, stiff, trace sand										
		4 5 6	11				S-11								
210.71	35.00				Borehole finished at 35.0										

USACE FORM 1836 | Boring Designation S-6 | Sheet 2 of 2

Boring Designation S-7

DRILLING LOG (Cont Sheet) | INSTALLATION: N/A | Sheet 2 of 2

PROJECT: Pine Bluff Arsenal Access Control Point, Jefferson County
COORDINATE SYSTEM: NAD 1983 StatePlane Arkansas South FIPS 0302 Feet | VERTICAL: NAVD88
LOCATION COORDINATES: N: 1907242.01 E: 1286542.05 | LOCATION METHOD:

ELEV	DEPTH	BLOWS/ 0.5ft	N	LEGEND	FIELD CLASSIFICATION OF MATERIALS (Description)	% REC	Samp No.	LAB: Gravel	Sand	Fines	LL	PI	MC	ASTM Class	REMARKS
					SANDY LEAN CLAY (CL) gray and reddish brown, stiff to very stiff										
213.28	33.50	4 5 4	9		FAT CLAY (CH) gray, stiff		S-11								
211.78	35.00				Borehole finished at 35.0										

USACE FORM 1836 | Boring Designation S-7 | Sheet 2 of 2

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
SUBMITTED BY: R.TOLIKONDA
DATE: 04/17/2026
ANSI FULL BLEED D (22.00 X 34.00 INCHES)

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D6035
FILE NUMBER:

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

BORING LOGS - 2

SHEET ID
B-102

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

Boring Designation S-8

DRILLING LOG — Division: Southwestern — Sheet 1 of 2

1. PROJECT: Pine Bluff Arsenal Access Control Point, Jefferson County
2. HOLE NUMBER: S-8
3. DRILLING AGENCY: Terracon
4. NAME OF DRILLER: Dakota Sloan
5. EQUIPMENT: CME 55 Drill Rig 546
6. DIRECTION OF BORING: Vertical — DEG FROM VERTICAL: 0 — BEARING:
7. THICKNESS OF OVERBURDEN: 35.0'
8. DEPTH DRILLED INTO ROCK:
9. TOTAL DEPTH OF BORING: 35.0'
10. COORDINATE SYSTEM: NAD 1983 StatePlane Arkansas South FIPS 0302 Feet — VERTICAL: NAVD88
LOCATION COORDINATES: N: 1907313.79 E: 1286686.71 — LOCATION METHOD:
11. DATE BORING: STARTED Aug 30 2024 — COMPLETED Aug 30 2024
12. HAMMER TYPE: Automatic — EFFICIENCY (%):
13. SIZE AND TYPE OF BIT: 3.75" HSA
14. ELEVATION SURFACE: 243.7'
15. ELEVATION GROUND WATER:
16. TOTAL NUMBER CORE BOXES:
17. SIGNATURE AND TITLE OF INSPECTOR: JB

ELEV	DEPTH	BLOWS/0.5ft	N	LEGEND	FIELD CLASSIFICATION OF MATERIALS (Description)	% REC	Samp No.	LAB: Gravel	Sand	Fines	LL	PI	MC	ASTM Class	REMARKS
243.36	0.30				Topsoil, Cleared Soils (disturbed), 4 inches										
		5			LEAN CLAY WITH SAND (CL) light gray and reddish brown, very stiff to hard										
		10	22				S-1								
		12													
		9					S-2				38	21			
		10	25												
		16					S-3								
		15													
		25	50				S-4								
		26													
		23					S-5								
		25	49												
		24					S-6								
		10													
		10	20												
235.66	8.00	10			SANDY LEAN CLAY (CL) light gray and light brown, very stiff to hard										
		13													
		20	40												
		20													
		18													
							ST-1				21	8	14		
229.16	14.50				SANDY SILT (ML) light gray and light brown, very stiff to hard										
		7					S-7				NP	NP	12		
		8	22												
		14													
							S-8								
		10													
		12	25												
		13													
220.16	23.50				LEAN CLAY WITH SAND (CL) light gray and reddish brown, stiff to very stiff										
		8					S-9								
		10	22												
		12													
							S-10								
		8													
		7	15												
		8													

(continued on next page)

239 234 229 224 219 214

USACE FORM 1836 — Boring Designation S-8 — Sheet 1 of 2

Boring Designation S-8

DRILLING LOG (Cont Sheet) — Sheet 2 of 2

PROJECT: Pine Bluff Arsenal Access Control Point, Jefferson County
COORDINATE SYSTEM: NAD 1983 StatePlane Arkansas South FIPS 0302 Feet — VERTICAL: NAVD88
LOCATION COORDINATES: N: 1907313.79 E: 1286686.71 — LOCATION METHOD:

ELEV	DEPTH	BLOWS/0.5ft	N	LEGEND	FIELD CLASSIFICATION OF MATERIALS (Description)	% REC	Samp No.	LAB: Gravel	Sand	Fines	LL	PI	MC	ASTM Class	REMARKS
		7			LEAN CLAY WITH SAND (CL) light gray and reddish brown, stiff to very stiff										
208.66	35.00	7	13				S-11								
		6			Borehole finished at 35.0										

209 204 199 194 189 184 179

USACE FORM 1836 — Boring Designation S-8 — Sheet 2 of 2

Boring Designation P-1

DRILLING LOG — Division: Southwestern — Sheet 1 of 1

1. PROJECT: Pine Bluff Arsenal Access Control Point, Jefferson County
2. HOLE NUMBER: P-1
3. DRILLING AGENCY: Terracon
4. NAME OF DRILLER: Dakota Sloan
5. EQUIPMENT: CME 55 Drill Rig 546
6. DIRECTION OF BORING: Vertical — DEG FROM VERTICAL: 0 — BEARING:
7. THICKNESS OF OVERBURDEN: 10.5'
8. DEPTH DRILLED INTO ROCK:
9. TOTAL DEPTH OF BORING: 10.5'
10. COORDINATE SYSTEM: NAD 1983 StatePlane Arkansas South FIPS 0302 Feet — VERTICAL: NAVD88
LOCATION COORDINATES: N: 1907413.44 E: 1286220.26 — LOCATION METHOD:
11. DATE BORING: STARTED Aug 28 2024 — COMPLETED Aug 28 2024
12. HAMMER TYPE: Automatic — EFFICIENCY (%):
13. SIZE AND TYPE OF BIT: 3.75" HSA
14. ELEVATION SURFACE: 258.3'
15. ELEVATION GROUND WATER:
16. TOTAL NUMBER CORE BOXES:
17. SIGNATURE AND TITLE OF INSPECTOR: JB

ELEV	DEPTH	BLOWS/0.5ft	N	LEGEND	FIELD CLASSIFICATION OF MATERIALS (Description)	% REC	Samp No.	LAB: Gravel	Sand	Fines	LL	PI	MC	ASTM Class	REMARKS
257.75	0.50				Asphalt, 6 inches										
256.75	1.50				Concrete, 11 inches										
		3			SANDY LEAN CLAY (CL) light brown and light gray, FILL										
		2	4				S-1			69			16		
255.25	3.00	2													
		2			LEAN CLAY WITH SAND (CL) light gray and light brown, soft to stiff, with sand seams		S-2								
		3	6												
		3					S-3								
		4	7												
		5					S-4								
		4	8												
		4					S-5								
		1													
		2	4				S-6								
		2													
247.75	10.50	0													
		2	5												
		3			Borehole finished at 10.5										

254 249 244 239 234 229

USACE FORM 1836 — Boring Designation P-1 — Sheet 1 of 1

Boring Designation P-2

DRILLING LOG — Division: Southwestern — Sheet 1 of 1

1. PROJECT: Pine Bluff Arsenal Access Control Point, Jefferson County
2. HOLE NUMBER: P-2
3. DRILLING AGENCY: Terracon
4. NAME OF DRILLER: Dakota Sloan
5. EQUIPMENT: CME 55 Drill Rig 546
6. DIRECTION OF BORING: Vertical — DEG FROM VERTICAL: 0 — BEARING:
7. THICKNESS OF OVERBURDEN: 10.0'
8. DEPTH DRILLED INTO ROCK:
9. TOTAL DEPTH OF BORING: 10.0'
10. COORDINATE SYSTEM: NAD 1983 StatePlane Arkansas South FIPS 0302 Feet — VERTICAL: NAVD88
LOCATION COORDINATES: N: 1907439.59 E: 1286272.36 — LOCATION METHOD:
11. DATE BORING: STARTED Aug 28 2024 — COMPLETED Aug 28 2024
12. HAMMER TYPE: Automatic — EFFICIENCY (%):
13. SIZE AND TYPE OF BIT: 3.75" HSA
14. ELEVATION SURFACE: 254.6'
15. ELEVATION GROUND WATER:
16. TOTAL NUMBER CORE BOXES:
17. SIGNATURE AND TITLE OF INSPECTOR: JB

ELEV	DEPTH	BLOWS/0.5ft	N	LEGEND	FIELD CLASSIFICATION OF MATERIALS (Description)	% REC	Samp No.	LAB: Gravel	Sand	Fines	LL	PI	MC	ASTM Class	REMARKS
254.33	0.30				Topsoil, 3 inches										
		7			LEAN CLAY WITH SAND (CL) light brown and brown, medium stiff to stiff										
		4	9				S-1								
		5													
		3					S-2								
		3	6												
		3					S-3								
249.63	5.00	3	5												
		3			LEAN CLAY WITH SAND (CL) light gray and brown, medium stiff to stiff		S-4								
		4	9												
		5					S-5								
		3	7												
		4					S-6								
		5	12												
		7													
244.63	10.00	15													
					Borehole finished at 10.0										

250 245 240 235 230 225

USACE FORM 1836 — Boring Designation P-2 — Sheet 1 of 1

Boring Designation P-3

DRILLING LOG — Division: Southwestern — Sheet 1 of 1

1. PROJECT: Pine Bluff Arsenal Access Control Point, Jefferson County
2. HOLE NUMBER: P-3
3. DRILLING AGENCY: Terracon
4. NAME OF DRILLER: Dakota Sloan
5. EQUIPMENT: CME 55 Drill Rig 546
6. DIRECTION OF BORING: Vertical — DEG FROM VERTICAL: 0 — BEARING:
7. THICKNESS OF OVERBURDEN: 10.0'
8. DEPTH DRILLED INTO ROCK:
9. TOTAL DEPTH OF BORING: 10.0'
10. COORDINATE SYSTEM: NAD 1983 StatePlane Arkansas South FIPS 0302 Feet — VERTICAL: NAVD88
LOCATION COORDINATES: N: 1907519.33 E: 1286416.69 — LOCATION METHOD:
11. DATE BORING: STARTED Aug 28 2024 — COMPLETED Aug 28 2024
12. HAMMER TYPE: Automatic — EFFICIENCY (%):
13. SIZE AND TYPE OF BIT: 3.75" HSA
14. ELEVATION SURFACE: 249.1'
15. ELEVATION GROUND WATER:
16. TOTAL NUMBER CORE BOXES:
17. SIGNATURE AND TITLE OF INSPECTOR: JB

ELEV	DEPTH	BLOWS/0.5ft	N	LEGEND	FIELD CLASSIFICATION OF MATERIALS (Description)	% REC	Samp No.	LAB: Gravel	Sand	Fines	LL	PI	MC	ASTM Class	REMARKS
248.13	1.00				Asphalt, Asphaltic Cement Concrete - 12 inches										
		8			LEAN CLAY (CL) gray and brown, stiff, trace sand, FILL										
		4	9				S-1								
246.63	2.50	5													
		4			LEAN CLAY WITH SAND (CL) gray and brown, soft to very stiff, with sand seams		S-2						17		
		4	9												
		5					S-3								
		1													
		2	4				S-4								
		2													
		6					S-5								
		10	22												
		12					S-6								
		3													
		5	11												
		6													
		9													
239.13	10.00	8	16												
					Borehole finished at 10.0										

245 240 235 230 225 220

USACE FORM 1836 — Boring Designation P-3 — Sheet 1 of 1

Boring Designation P-4

DRILLING LOG — Division: Southwestern — Sheet 1 of 1

1. PROJECT: Pine Bluff Arsenal Access Control Point, Jefferson County
2. HOLE NUMBER: P-4
3. DRILLING AGENCY: Terracon
4. NAME OF DRILLER: Dakota Sloan
5. EQUIPMENT: CME 55 Drill Rig 546
6. DIRECTION OF BORING: Vertical — DEG FROM VERTICAL: 0 — BEARING:
7. THICKNESS OF OVERBURDEN: 10.0'
8. DEPTH DRILLED INTO ROCK:
9. TOTAL DEPTH OF BORING: 10.0'
10. COORDINATE SYSTEM: NAD 1983 StatePlane Arkansas South FIPS 0302 Feet — VERTICAL: NAVD88
LOCATION COORDINATES: N: 1907641.68 E: 1286379.13 — LOCATION METHOD:
11. DATE BORING: STARTED Aug 28 2024 — COMPLETED Aug 28 2024
12. HAMMER TYPE: Automatic — EFFICIENCY (%):
13. SIZE AND TYPE OF BIT: 3.75" HSA
14. ELEVATION SURFACE: 246.7'
15. ELEVATION GROUND WATER:
16. TOTAL NUMBER CORE BOXES:
17. SIGNATURE AND TITLE OF INSPECTOR: JB

ELEV	DEPTH	BLOWS/0.5ft	N	LEGEND	FIELD CLASSIFICATION OF MATERIALS (Description)	% REC	Samp No.	LAB: Gravel	Sand	Fines	LL	PI	MC	ASTM Class	REMARKS
246.20	0.50				Asphalt, Asphaltic Cement Concrete - 6 inches										
		11			LEAN CLAY WITH GRAVEL (CL) reddish brown and brown, stiff, FILL										
		7	10				S-1			50			11		
244.70	2.00	3													
		3			LEAN CLAY WITH SAND (CL) light gray and light brown, stiff to hard, becoming sandier with depth		S-2								
		4	11												
		7					S-3								
		4													
		8	20				S-4								
		12													
		10					S-5								
		9	17												
		8					S-6								
		4	10												
		6													
		15													
		16	34												
236.70	10.00	18													
		17			Borehole finished at 10.0										

242 237 232 227 222 217

USACE FORM 1836 — Boring Designation P-4 — Sheet 1 of 1

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
SUBMITTED BY: R.TOLIKONDA
SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)
ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D6035
FILE NUMBER:

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

BORING LOGS - 3

SHEET ID
B-103

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

Boring Designation P-5

DRILLING LOG

DIVISION: Southwestern	INSTALLATION: N/A		Sheet 1 of 1
1. PROJECT: Pine Bluff Arsenal Access Control Point, Jefferson County	10. COORDINATE SYSTEM: NAD 1983 StatePlane Arkansas South FIPS 0302 Feet		VERTICAL: NAVD88
	LOCATION COORDINATES: N: 1907377.96	E: 1286290.72	LOCATION METHOD:
2. HOLE NUMBER: P-5	3. DRILLING AGENCY: Terracon	11. DATE BORING: STARTED: Aug 28 2024	COMPLETED: Aug 28 2024
4. NAME OF DRILLER: Dakota Sloan	12. HAMMER TYPE: Automatic		EFFICIENCY (%)
5. EQUIPMENT: CME 55 Drill Rig 546	13. SIZE AND TYPE OF BIT: 3.75" HSA		
6. DIRECTION OF BORING: Vertical / DEG FROM VERTICAL: 0 / BEARING:	14. ELEVATION SURFACE: 246.7'		
7. THICKNESS OF OVERBURDEN: 10.0'	15. ELEVATION GROUND WATER		
8. DEPTH DRILLED INTO ROCK	16. TOTAL NUMBER CORE BOXES		
9. TOTAL DEPTH OF BORING: 10.0'	17. SIGNATURE AND TITLE OF INSPECTOR: JB		

ELEV	DEPTH	BLOWS/0.5ft	N	LEGEND	FIELD CLASSIFICATION OF MATERIALS (Description)	% REC	Samp No.	LAB: Gravel	Sand	Fines	LL	PI	MC	ASTM Class	REMARKS
246.45	0.20	8 9 6	15		Topsoil, Grass										
		6 6 8	14		LEAN CLAY WITH SAND (CL) brown and light gray, stiff to hard		S-1						19		
		18 16 16	32				S-2								
		5 6 8	14				S-3								
240.15	6.50	12 15 22	37		SANDY LEAN CLAY (CL) light gray and brown, hard		S-4								
		18 14 12	32				S-5								
236.65	10.00				Borehole finished at 10.0		S-6								

USACE FORM 1836 — Boring Designation P-5 — Sheet 1 of 1

Boring Designation P-6

DRILLING LOG

DIVISION: Southwestern	INSTALLATION: N/A		Sheet 1 of 1
1. PROJECT: Pine Bluff Arsenal Access Control Point, Jefferson County	10. COORDINATE SYSTEM: NAD 1983 StatePlane Arkansas South FIPS 0302 Feet		VERTICAL: NAVD88
	LOCATION COORDINATES: N: 1907435.50	E: 1286398.15	LOCATION METHOD:
2. HOLE NUMBER: P-6	3. DRILLING AGENCY: Terracon	11. DATE BORING: STARTED: Aug 28 2024	COMPLETED: Aug 28 2024
4. NAME OF DRILLER: Dakota Sloan	12. HAMMER TYPE: Automatic		EFFICIENCY (%)
5. EQUIPMENT: CME 55 Drill Rig 546	13. SIZE AND TYPE OF BIT: 3.75" HSA		
6. DIRECTION OF BORING: Vertical / DEG FROM VERTICAL: 0 / BEARING:	14. ELEVATION SURFACE: 246.5'		
7. THICKNESS OF OVERBURDEN: 10.0'	15. ELEVATION GROUND WATER		
8. DEPTH DRILLED INTO ROCK	16. TOTAL NUMBER CORE BOXES		
9. TOTAL DEPTH OF BORING: 10.0'	17. SIGNATURE AND TITLE OF INSPECTOR: JB		

ELEV	DEPTH	BLOWS/0.5ft	N	LEGEND	FIELD CLASSIFICATION OF MATERIALS (Description)	% REC	Samp No.	LAB: Gravel	Sand	Fines	LL	PI	MC	ASTM Class	REMARKS
246.33	0.20	5 5 6	11		Topsoil, Grass										
		8 10 14	24		LEAN CLAY WITH SAND (CL) light brown and light gray, stiff to hard		S-1								
		15 15 27	42				S-2								
		12 12 20	32				S-3								
240.03	6.50	17 21 20	41		SANDY LEAN CLAY (CL) brown and light brown, hard		S-4								
		18 20 19	39				S-5								
236.53	10.00				Borehole finished at 10.0		S-6								

USACE FORM 1836 — Boring Designation P-6 — Sheet 1 of 1

Boring Designation P-7

DRILLING LOG

DIVISION: Southwestern	INSTALLATION: N/A		Sheet 1 of 1
1. PROJECT: Pine Bluff Arsenal Access Control Point, Jefferson County	10. COORDINATE SYSTEM: NAD 1983 StatePlane Arkansas South FIPS 0302 Feet		VERTICAL: NAVD88
	LOCATION COORDINATES: N: 1907278.93	E: 1286251.23	LOCATION METHOD:
2. HOLE NUMBER: P-7	3. DRILLING AGENCY: Terracon	11. DATE BORING: STARTED: Aug 27 2024	COMPLETED: Aug 27 2024
4. NAME OF DRILLER: Dakota Sloan	12. HAMMER TYPE: Automatic		EFFICIENCY (%)
5. EQUIPMENT: CME 55 Drill Rig 546	13. SIZE AND TYPE OF BIT: 3.75" HSA		
6. DIRECTION OF BORING: Vertical / DEG FROM VERTICAL: 0 / BEARING:	14. ELEVATION SURFACE: 245.0'		
7. THICKNESS OF OVERBURDEN: 10.0'	15. ELEVATION GROUND WATER		
8. DEPTH DRILLED INTO ROCK	16. TOTAL NUMBER CORE BOXES		
9. TOTAL DEPTH OF BORING: 10.0'	17. SIGNATURE AND TITLE OF INSPECTOR: JB		

ELEV	DEPTH	BLOWS/0.5ft	N	LEGEND	FIELD CLASSIFICATION OF MATERIALS (Description)	% REC	Samp No.	LAB: Gravel	Sand	Fines	LL	PI	MC	ASTM Class	REMARKS
244.88	0.10	7 8 10	18		Asphalt, Asphaltic Cement Concrete - less than 1 inch										
		30 27 22	49		LEAN CLAY (CL) light gray and light brown, stiff to hard		S-1			30	12	22			
		16 15 12	27				S-2								
		4 7 7	14				S-3								
		7 8 10	18		*with sand lenses at about 6.5 feet*		S-4								
		10 12 12	24				S-5								
234.98	10.00				Borehole finished at 10.0		S-6								

USACE FORM 1836 — Boring Designation P-7 — Sheet 1 of 1

Boring Designation P-8

DRILLING LOG

DIVISION: Southwestern	INSTALLATION: N/A		Sheet 1 of 1
1. PROJECT: Pine Bluff Arsenal Access Control Point, Jefferson County	10. COORDINATE SYSTEM: NAD 1983 StatePlane Arkansas South FIPS 0302 Feet		VERTICAL: NAVD88
	LOCATION COORDINATES: N: 1907325.35	E: 1286310.00	LOCATION METHOD:
2. HOLE NUMBER: P-8	3. DRILLING AGENCY: Terracon	11. DATE BORING: STARTED: Aug 27 2024	COMPLETED: Aug 27 2024
4. NAME OF DRILLER: Dakota Sloan	12. HAMMER TYPE: Automatic		EFFICIENCY (%)
5. EQUIPMENT: CME 55 Drill Rig 546	13. SIZE AND TYPE OF BIT: 3.75" HSA		
6. DIRECTION OF BORING: Vertical / DEG FROM VERTICAL: 0 / BEARING:	14. ELEVATION SURFACE: 245.8'		
7. THICKNESS OF OVERBURDEN: 10.0'	15. ELEVATION GROUND WATER		
8. DEPTH DRILLED INTO ROCK	16. TOTAL NUMBER CORE BOXES		
9. TOTAL DEPTH OF BORING: 10.0'	17. SIGNATURE AND TITLE OF INSPECTOR: JB		

ELEV	DEPTH	BLOWS/0.5ft	N	LEGEND	FIELD CLASSIFICATION OF MATERIALS (Description)	% REC	Samp No.	LAB: Gravel	Sand	Fines	LL	PI	MC	ASTM Class	REMARKS
245.74	0.10	4 5 15	20		Asphalt, Asphaltic Cement Concrete - less than 1 inch										
		24 24 19	43		LEAN CLAY (CL) light gray and light brown, very stiff to hard, becoming sandy with depth		S-1								
		13 11 11	22				S-2								
240.84	5.00	7 9 12	21		SANDY LEAN CLAY (CL) light gray and light brown, medium stiff to very stiff, with sand lenses		S-3								
		10 10 10	20				S-4								
		2 3 2	5				S-5								
235.84	10.00				Borehole finished at 10.0		S-6								

USACE FORM 1836 — Boring Designation P-8 — Sheet 1 of 1

Boring Designation P-9

DRILLING LOG

DIVISION: Southwestern	INSTALLATION: N/A		Sheet 1 of 1
1. PROJECT: Pine Bluff Arsenal Access Control Point, Jefferson County	10. COORDINATE SYSTEM: NAD 1983 StatePlane Arkansas South FIPS 0302 Feet		VERTICAL: NAVD88
	LOCATION COORDINATES: N: 1907330.37	E: 1286410.69	LOCATION METHOD:
2. HOLE NUMBER: P-9	3. DRILLING AGENCY: Terracon	11. DATE BORING: STARTED: Aug 27 2024	COMPLETED: Aug 27 2024
4. NAME OF DRILLER: Dakota Sloan	12. HAMMER TYPE: Automatic		EFFICIENCY (%)
5. EQUIPMENT: CME 55 Drill Rig 546	13. SIZE AND TYPE OF BIT: 3.75" HSA		
6. DIRECTION OF BORING: Vertical / DEG FROM VERTICAL: 0 / BEARING:	14. ELEVATION SURFACE: 244.3'		
7. THICKNESS OF OVERBURDEN: 10.0'	15. ELEVATION GROUND WATER		
8. DEPTH DRILLED INTO ROCK	16. TOTAL NUMBER CORE BOXES		
9. TOTAL DEPTH OF BORING: 10.0'	17. SIGNATURE AND TITLE OF INSPECTOR: JB		

ELEV	DEPTH	BLOWS/0.5ft	N	LEGEND	FIELD CLASSIFICATION OF MATERIALS (Description)	% REC	Samp No.	LAB: Gravel	Sand	Fines	LL	PI	MC	ASTM Class	REMARKS
244.17	0.10				Asphalt, Asphaltic Cement Concrete - less than 1 inch, grass grown on top of asphalt										
243.97	0.30	7 8 10	18		Crushed stone, Aggregate Base Course - 2 inches										
		30 27 22	49		LEAN CLAY (CL) light gray and light brown, very stiff to hard		S-1								
		15 15 12	27				S-2		79				13		
		5 7 7	14				S-3								
		7 8 10	18				S-4								
236.27	8.00						S-5								
		10 12 12	24		SANDY LEAN CLAY (CL) brown and light brown, very stiff		S-6								
234.27	10.00				Borehole finished at 10.0										

USACE FORM 1836 — Boring Designation P-9 — Sheet 1 of 1

Boring Designation P-10

DRILLING LOG

DIVISION: Southwestern	INSTALLATION: N/A		Sheet 1 of 1
1. PROJECT: Pine Bluff Arsenal Access Control Point, Jefferson County	10. COORDINATE SYSTEM: NAD 1983 StatePlane Arkansas South FIPS 0302 Feet		VERTICAL: NAVD88
	LOCATION COORDINATES: N: 1907412.19	E: 1286461.08	LOCATION METHOD:
2. HOLE NUMBER: P-10	3. DRILLING AGENCY: Terracon	11. DATE BORING: STARTED: Aug 27 2024	COMPLETED: Aug 27 2024
4. NAME OF DRILLER: Dakota Sloan	12. HAMMER TYPE: Automatic		EFFICIENCY (%)
5. EQUIPMENT: CME 55 Drill Rig 546	13. SIZE AND TYPE OF BIT: 3.75" HSA		
6. DIRECTION OF BORING: Vertical / DEG FROM VERTICAL: 0 / BEARING:	14. ELEVATION SURFACE: 245.5'		
7. THICKNESS OF OVERBURDEN: 10.0'	15. ELEVATION GROUND WATER		
8. DEPTH DRILLED INTO ROCK	16. TOTAL NUMBER CORE BOXES		
9. TOTAL DEPTH OF BORING: 10.0'	17. SIGNATURE AND TITLE OF INSPECTOR: JB		

ELEV	DEPTH	BLOWS/0.5ft	N	LEGEND	FIELD CLASSIFICATION OF MATERIALS (Description)	% REC	Samp No.	LAB: Gravel	Sand	Fines	LL	PI	MC	ASTM Class	REMARKS
244.99	0.50				Cleared Soils (disturbed), 6 inches										
		6 8 12	20		LEAN CLAY WITH SAND (CL) light brown, very stiff to hard, becoming sandier with depth		S-1								
		9 10 9	19				S-2								
		4 7 9	16				S-3								
		5 10 20	30				S-4								
238.99	6.50	27 48 44	92		CLAYEY SAND (SC) light gray and light brown, very dense		S-5								
		30 35 34	69				S-6								
235.49	10.00				Borehole finished at 10.0										

USACE FORM 1836 — Boring Designation P-10 — Sheet 1 of 1

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
SUBMITTED BY: R.TOLIKONDA
SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)

ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D6035
FILE NUMBER:

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

BORING LOGS - 4

SHEET ID
B-104

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

Boring Designation P-11

DRILLING LOG — DIVISION: Southwestern — INSTALLATION: N/A — Sheet 1 of 1

1. PROJECT: Pine Bluff Arsenal Access Control Point, Jefferson County
10. COORDINATE SYSTEM: NAD 1983 StatePlane Arkansas South FIPS 0302 Feet — VERTICAL: NAVD88
LOCATION COORDINATES: N: 1907407.59, E: 1286573.32 — LOCATION METHOD:
2. HOLE NUMBER: P-11 — 3. DRILLING AGENCY: Terracon
11. DATE BORING: STARTED: Aug 27 2024 — COMPLETED: Sep 04 2024
4. NAME OF DRILLER: Dakota Sloan — 12. HAMMER TYPE: Automatic — EFFICIENCY (%)
5. EQUIPMENT: CME 55 Drill Rig 546 — 13. SIZE AND TYPE OF BIT: 3.75" HSA
6. DIRECTION OF BORING: Vertical — DEG FROM VERTICAL: 0 — BEARING
14. ELEVATION SURFACE: 246.4'
7. THICKNESS OF OVERBURDEN: 10.0' — 15. ELEVATION GROUND WATER
8. DEPTH DRILLED INTO ROCK — 16. TOTAL NUMBER CORE BOXES
9. TOTAL DEPTH OF BORING: 10.0' — 17. SIGNATURE AND TITLE OF INSPECTOR: JB

ELEV	DEPTH	BLOWS/ 0.5ft	N	LEGEND	FIELD CLASSIFICATION OF MATERIALS (Description)	% REC	Samp No.	LAB: Gravel	Sand	Fines	LL	PI	MC	ASTM Class	REMARKS
245.91	0.50	13 15 14	29		Topsoil, Cleared Soils (disturbed), 6 inches LEAN CLAY (CL) reddish brown, very stiff to very hard		S-1								
		17 20 20	40				S-2								
		18 20 23	43				S-3								
		15 15 18	33				S-4								
239.41	7.00	23 30 38	68		LEAN CLAY (CL) gray and brown, hard		S-5								
236.41	10.00	30 28 34	62				S-6								
		35			Borehole finished at 10.0										

242 237 232 227 222 217

USACE FORM 1836 — **Boring Designation** P-11 — Sheet 1 of 1

Boring Designation P-12

DRILLING LOG — DIVISION: Southwestern — INSTALLATION: N/A — Sheet 1 of 1

1. PROJECT: Pine Bluff Arsenal Access Control Point, Jefferson County
10. COORDINATE SYSTEM: NAD 1983 StatePlane Arkansas South FIPS 0302 Feet — VERTICAL: NAVD88
LOCATION COORDINATES: N: 1907195.92, E: 1286302.36 — LOCATION METHOD:
2. HOLE NUMBER: P-12 — 3. DRILLING AGENCY: Terracon
11. DATE BORING: STARTED: Aug 27 2024 — COMPLETED: Aug 27 2024
4. NAME OF DRILLER: Dakota Sloan — 12. HAMMER TYPE: Automatic — EFFICIENCY (%)
5. EQUIPMENT: CME 55 Drill Rig 546 — 13. SIZE AND TYPE OF BIT: 3.75" HSA
6. DIRECTION OF BORING: Vertical — DEG FROM VERTICAL: 0 — BEARING
14. ELEVATION SURFACE: 243.7'
7. THICKNESS OF OVERBURDEN: 10.0' — 15. ELEVATION GROUND WATER
8. DEPTH DRILLED INTO ROCK — 16. TOTAL NUMBER CORE BOXES
9. TOTAL DEPTH OF BORING: 10.0' — 17. SIGNATURE AND TITLE OF INSPECTOR: JB

ELEV	DEPTH	BLOWS/ 0.5ft	N	LEGEND	FIELD CLASSIFICATION OF MATERIALS (Description)	% REC	Samp No.	LAB: Gravel	Sand	Fines	LL	PI	MC	ASTM Class	REMARKS
243.47	0.20				Asphalt, 1.5 inches										
243.17	0.50	10 15 15	30		Crushed stone, Aggregate Base Course, 3 inches SANDY LEAN CLAY (CL) brown and light gray, medium stiff to hard, with lean clay lenses		S-1				33	17	15		
		13 12 13	25				S-2								
		12 14 14	28				S-3								
		10 10 8	18				S-4								
		5 4 4	8				S-5								
		7 10 12	22				S-6								
233.67	10.00	10			Borehole finished at 10.0										

239 234 229 224 219 214

USACE FORM 1836 — **Boring Designation** P-12 — Sheet 1 of 1

Boring Designation P-13

DRILLING LOG — DIVISION: Southwestern — INSTALLATION: N/A — Sheet 1 of 1

1. PROJECT: Pine Bluff Arsenal Access Control Point, Jefferson County
10. COORDINATE SYSTEM: NAD 1983 StatePlane Arkansas South FIPS 0302 Feet — VERTICAL: NAVD88
LOCATION COORDINATES: N: 1907247.50, E: 1286384.69 — LOCATION METHOD:
2. HOLE NUMBER: P-13 — 3. DRILLING AGENCY: Terracon
11. DATE BORING: STARTED: Aug 27 2024 — COMPLETED: Aug 27 2024
4. NAME OF DRILLER: Dakota Sloan — 12. HAMMER TYPE: Automatic — EFFICIENCY (%)
5. EQUIPMENT: CME 55 Drill Rig 546 — 13. SIZE AND TYPE OF BIT: 3.75" HSA
6. DIRECTION OF BORING: Vertical — DEG FROM VERTICAL: 0 — BEARING
14. ELEVATION SURFACE: 246.0'
7. THICKNESS OF OVERBURDEN: 10.0' — 15. ELEVATION GROUND WATER
8. DEPTH DRILLED INTO ROCK — 16. TOTAL NUMBER CORE BOXES
9. TOTAL DEPTH OF BORING: 10.0' — 17. SIGNATURE AND TITLE OF INSPECTOR: JB

ELEV	DEPTH	BLOWS/ 0.5ft	N	LEGEND	FIELD CLASSIFICATION OF MATERIALS (Description)	% REC	Samp No.	LAB: Gravel	Sand	Fines	LL	PI	MC	ASTM Class	REMARKS
245.80	0.20	17 22 19	41		Topsoil, 2 inches LEAN CLAY WITH SAND (CL) light brown, very stiff to hard		S-1								
		16 38 50/4"	50/3"				S-2								
		50 50/5"	50/5"				S-3								
		3 10 15	28				S-4								
239.50	6.50	18 20 25	53		SANDY LEAN CLAY (CL) light brown, hard		S-5								
238.00	8.00	28 40 32	52		CLAYEY SAND (SC) light brown and light gray, very dense		S-6								
236.00	10.00	20 16			Borehole finished at 10.0										

241 236 231 226 221 216

USACE FORM 1836 — **Boring Designation** P-13 — Sheet 1 of 1

Boring Designation P-14

DRILLING LOG — DIVISION: Southwestern — INSTALLATION: N/A — Sheet 1 of 1

1. PROJECT: Pine Bluff Arsenal Access Control Point, Jefferson County
10. COORDINATE SYSTEM: NAD 1983 StatePlane Arkansas South FIPS 0302 Feet — VERTICAL: NAVD88
LOCATION COORDINATES: N: 1907127.23, E: 1286345.12 — LOCATION METHOD:
2. HOLE NUMBER: P-14 — 3. DRILLING AGENCY: Terracon
11. DATE BORING: STARTED: Aug 26 2024 — COMPLETED: Aug 26 2024
4. NAME OF DRILLER: Dakota Sloan — 12. HAMMER TYPE: Automatic — EFFICIENCY (%)
5. EQUIPMENT: CME 55 Drill Rig 546 — 13. SIZE AND TYPE OF BIT: 3.75" HSA
6. DIRECTION OF BORING: Vertical — DEG FROM VERTICAL: 0 — BEARING
14. ELEVATION SURFACE: 243.7'
7. THICKNESS OF OVERBURDEN: 10.0' — 15. ELEVATION GROUND WATER
8. DEPTH DRILLED INTO ROCK — 16. TOTAL NUMBER CORE BOXES
9. TOTAL DEPTH OF BORING: 10.0' — 17. SIGNATURE AND TITLE OF INSPECTOR: DT

ELEV	DEPTH	BLOWS/ 0.5ft	N	LEGEND	FIELD CLASSIFICATION OF MATERIALS (Description)	% REC	Samp No.	LAB: Gravel	Sand	Fines	LL	PI	MC	ASTM Class	REMARKS
		5 7 2	9		LEAN CLAY (CL) gray and brown, stiff to very stiff		S-1								
		12 11 12	23				S-2								
		10 11 13	24				S-3								
		4 4 6	10		*sandy lean clay at about 6.5 to 8.5 feet*		S-4								
		4 5 4	9				S-5								
		4 5 8	18				S-6								
233.67	10.00	10			Borehole finished at 10.0										

239 234 229 224 219 214

USACE FORM 1836 — **Boring Designation** P-14 — Sheet 1 of 1

Boring Designation P-15

DRILLING LOG — DIVISION: Southwestern — INSTALLATION: N/A — Sheet 1 of 1

1. PROJECT: Pine Bluff Arsenal Access Control Point, Jefferson County
10. COORDINATE SYSTEM: NAD 1983 StatePlane Arkansas South FIPS 0302 Feet — VERTICAL: NAVD88
LOCATION COORDINATES: N: 1907169.70, E: 1286421.63 — LOCATION METHOD:
2. HOLE NUMBER: P-15 — 3. DRILLING AGENCY: Terracon
11. DATE BORING: STARTED: Aug 27 2024 — COMPLETED: Aug 27 2024
4. NAME OF DRILLER: Dakota Sloan — 12. HAMMER TYPE: Automatic — EFFICIENCY (%)
5. EQUIPMENT: CME 55 Drill Rig 546 — 13. SIZE AND TYPE OF BIT: 3.75" HSA
6. DIRECTION OF BORING: Vertical — DEG FROM VERTICAL: 0 — BEARING
14. ELEVATION SURFACE: 246.2'
7. THICKNESS OF OVERBURDEN: 8.9' — 15. ELEVATION GROUND WATER
8. DEPTH DRILLED INTO ROCK — 16. TOTAL NUMBER CORE BOXES
9. TOTAL DEPTH OF BORING: 8.9' — 17. SIGNATURE AND TITLE OF INSPECTOR: JB

ELEV	DEPTH	BLOWS/ 0.5ft	N	LEGEND	FIELD CLASSIFICATION OF MATERIALS (Description)	% REC	Samp No.	LAB: Gravel	Sand	Fines	LL	PI	MC	ASTM Class	REMARKS
245.96	0.20	16 24 22	46		Topsoil, 2 inches LEAN CLAY (CL) light brown and light gray, hard, with sand seams		S-1								
		12 14 45	59				S-2			40	24	11			
		50 50/5"	50/5"				S-3								
		50 50/5"	50/5"				S-4								
		6 12 18	30				S-5								
237.26	8.90	50 50/5"	50/5"		Borehole finished at 8.9		S-6								

242 237 232 227 222 217

USACE FORM 1836 — **Boring Designation** P-15 — Sheet 1 of 1

Boring Designation P-16

DRILLING LOG — DIVISION: Southwestern — INSTALLATION: N/A — Sheet 1 of 1

1. PROJECT: Pine Bluff Arsenal Access Control Point, Jefferson County
10. COORDINATE SYSTEM: NAD 1983 StatePlane Arkansas South FIPS 0302 Feet — VERTICAL: NAVD88
LOCATION COORDINATES: N: 1907308.09, E: 1286623.82 — LOCATION METHOD:
2. HOLE NUMBER: P-16 — 3. DRILLING AGENCY: Terracon
11. DATE BORING: STARTED: Sep 30 2024 — COMPLETED: Aug 30 2024
4. NAME OF DRILLER: Dakota Sloan — 12. HAMMER TYPE: Automatic — EFFICIENCY (%)
5. EQUIPMENT: CME 55 Drill Rig 546 — 13. SIZE AND TYPE OF BIT: 3.75" HSA
6. DIRECTION OF BORING: Vertical — DEG FROM VERTICAL: 0 — BEARING
14. ELEVATION SURFACE: 244.9'
7. THICKNESS OF OVERBURDEN: 10.0' — 15. ELEVATION GROUND WATER
8. DEPTH DRILLED INTO ROCK — 16. TOTAL NUMBER CORE BOXES
9. TOTAL DEPTH OF BORING: 10.0' — 17. SIGNATURE AND TITLE OF INSPECTOR: JB

ELEV	DEPTH	BLOWS/ 0.5ft	N	LEGEND	FIELD CLASSIFICATION OF MATERIALS (Description)	% REC	Samp No.	LAB: Gravel	Sand	Fines	LL	PI	MC	ASTM Class	REMARKS
244.55	0.30	10 12 10	22		Topsoil, Cleared Soils (disturbed), 4 inches SANDY LEAN CLAY (CL) light gray and reddish brown, very stiff to very hard		S-1								
		12 10 9	19				S-2								
		4 10 30	40				S-3								
		45 50/5"	50/5"				S-4								
		23 43 49	92				S-6								
236.85	8.00	15 20 21	41		CLAYEY SAND (SC) light gray and reddish brown, dense		S-7								
234.85	10.00	21			Borehole finished at 10.0										

240 235 230 225 220 215

USACE FORM 1836 — **Boring Designation** P-16 — Sheet 1 of 1

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
SUBMITTED BY: R.TOLIKONDA
SIZE: ANSI F/11 BLEED D (22.00 X 34.00 INCHES)
ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D6035
FILE NUMBER:

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

BORING LOGS - 5

SHEET ID
B-105

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

Boring Designation P-17

DRILLING LOG — DIVISION: Southwestern — INSTALLATION: N/A — Sheet 1 of 1

1. PROJECT: Pine Bluff Arsenal Access Control Point, Jefferson County
10. COORDINATE SYSTEM: NAD 1983 StatePlane Arkansas South FIPS 0302 Feet — VERTICAL: NAVD88
LOCATION COORDINATES: N: 1907408.02, E: 1286641.81 — LOCATION METHOD:
2. HOLE NUMBER: P-17 — 3. DRILLING AGENCY: Terracon
11. DATE BORING: STARTED: Aug 27 2024 — COMPLETED: Sep 04 2024
4. NAME OF DRILLER: Dakota Sloan
12. HAMMER TYPE: Automatic — EFFICIENCY (%)
5. EQUIPMENT: CME 55 Drill Rig 546
13. SIZE AND TYPE OF BIT: 3.75" HSA
6. DIRECTION OF BORING: Vertical — DEG FROM VERTICAL: 0 — BEARING:
14. ELEVATION SURFACE: 245.9'
7. THICKNESS OF OVERBURDEN: 10.0'
15. ELEVATION GROUND WATER:
8. DEPTH DRILLED INTO ROCK:
16. TOTAL NUMBER CORE BOXES:
9. TOTAL DEPTH OF BORING: 10.0'
17. SIGNATURE AND TITLE OF INSPECTOR: JB

ELEV	DEPTH	BLOWS/ 0.5ft	N	LEGEND	FIELD CLASSIFICATION OF MATERIALS (Description)	% REC	Samp No.	LABORATORY: Gravel	Sand	Fines	LL	PI	MC	ASTM Class	REMARKS
245.37	0.50				Topsoil, Cleared Soils (disturbed), 6 inches										
		8			LEAN CLAY (CL) reddish brown, very stiff to hard										
		9	17				S-1								
		8													
		10													
		10	21				S-2								
		11													
		12													
		23	40				S-3								
240.87	5.00	17													
		12			LEAN CLAY (CL) gray and brown, hard										
		15	33				S-4								
		16													
		17													
		20	45				S-5								
		25													
		15													
		18	40				S-6								
		22													
235.87	10.00	26													
					Borehole finished at 10.0										

USACE FORM 1836 — Boring Designation P-17 — Sheet 1 of 1

Boring Designation P-18

DRILLING LOG — DIVISION: Southwestern — INSTALLATION: N/A — Sheet 1 of 1

1. PROJECT: Pine Bluff Arsenal Access Control Point, Jefferson County
10. COORDINATE SYSTEM: NAD 1983 StatePlane Arkansas South FIPS 0302 Feet — VERTICAL: NAVD88
LOCATION COORDINATES: N: 1907405.82, E: 1286759.61 — LOCATION METHOD:
2. HOLE NUMBER: P-18 — 3. DRILLING AGENCY: Terracon
11. DATE BORING: STARTED: Sep 03 2024 — COMPLETED: Sep 03 2024
4. NAME OF DRILLER: Dakota Sloan
12. HAMMER TYPE: Automatic — EFFICIENCY (%)
5. EQUIPMENT: CME 55 Drill Rig 546
13. SIZE AND TYPE OF BIT: 3.75" HSA
6. DIRECTION OF BORING: Vertical — DEG FROM VERTICAL: 0 — BEARING:
14. ELEVATION SURFACE: 244.6'
7. THICKNESS OF OVERBURDEN: 10.0'
15. ELEVATION GROUND WATER:
8. DEPTH DRILLED INTO ROCK:
16. TOTAL NUMBER CORE BOXES:
9. TOTAL DEPTH OF BORING: 10.0'
17. SIGNATURE AND TITLE OF INSPECTOR: EB

ELEV	DEPTH	BLOWS/ 0.5ft	N	LEGEND	FIELD CLASSIFICATION OF MATERIALS (Description)	% REC	Samp No.	LABORATORY: Gravel	Sand	Fines	LL	PI	MC	ASTM Class	REMARKS
244.05	0.50				Topsoil, Cleared Soils (disturbed), 6 inches										
		25			SILT WITH SAND (ML) reddish brown, very stiff to hard										
		40	78				S-1			77			6		
		38													
		30					S-2								
		20	43												
		23					S-3								
		10	18												
		11					S-4								
		7													
		10	40												
238.05	6.50	17													
		23			SILTY SAND (SM) light gray and brown, very dense										
		18					S-5			48			15		
		20	50												
		30													
		30					S-6								
		21	51												
		30													
234.55	10.00	35													
					Borehole finished at 10.0										

USACE FORM 1836 — Boring Designation P-18 — Sheet 1 of 1

Boring Designation P-19

DRILLING LOG — DIVISION: Southwestern — INSTALLATION: N/A — Sheet 1 of 1

1. PROJECT: Pine Bluff Arsenal Access Control Point, Jefferson County
10. COORDINATE SYSTEM: NAD 1983 StatePlane Arkansas South FIPS 0302 Feet — VERTICAL: NAVD88
LOCATION COORDINATES: N: 1907453.32, E: 1286824.26 — LOCATION METHOD:
2. HOLE NUMBER: P-19 — 3. DRILLING AGENCY: Terracon
11. DATE BORING: STARTED: Sep 03 2024 — COMPLETED: Sep 03 2024
4. NAME OF DRILLER: Dakota Sloan
12. HAMMER TYPE: Automatic — EFFICIENCY (%)
5. EQUIPMENT: CME 55 Drill Rig 546
13. SIZE AND TYPE OF BIT: 3.75" HSA
6. DIRECTION OF BORING: Vertical — DEG FROM VERTICAL: 0 — BEARING:
14. ELEVATION SURFACE: 244.5'
7. THICKNESS OF OVERBURDEN: 10.0'
15. ELEVATION GROUND WATER:
8. DEPTH DRILLED INTO ROCK:
16. TOTAL NUMBER CORE BOXES:
9. TOTAL DEPTH OF BORING: 10.0'
17. SIGNATURE AND TITLE OF INSPECTOR: EB

ELEV	DEPTH	BLOWS/ 0.5ft	N	LEGEND	FIELD CLASSIFICATION OF MATERIALS (Description)	% REC	Samp No.	LABORATORY: Gravel	Sand	Fines	LL	PI	MC	ASTM Class	REMARKS
244.00	0.50				Topsoil, Cleared Soils (disturbed), 6 inches										
		16			SANDY LEAN CLAY (CL) reddish brown and gray, stiff to hard										
		21	42				S-1								
		21													
		11					S-2								
		15	33												
		18					S-3								
		5													
		5	10												
		5					S-4								
		6	11												
		5													
		5					S-5								
236.50	8.00	21	31												
		22			CLAYEY SAND (SC) light gray and brown, medium dense to dense										
		18	32				S-6								
234.50	10.00	14													
		10													
					Borehole finished at 10.0										

USACE FORM 1836 — Boring Designation P-19 — Sheet 1 of 1

Boring Designation P-20

DRILLING LOG — DIVISION: Southwestern — INSTALLATION: N/A — Sheet 1 of 1

1. PROJECT: Pine Bluff Arsenal Access Control Point, Jefferson County
10. COORDINATE SYSTEM: NAD 1983 StatePlane Arkansas South FIPS 0302 Feet — VERTICAL: NAVD88
LOCATION COORDINATES: N: 1907497.78, E: 1286877.21 — LOCATION METHOD:
2. HOLE NUMBER: P-20 — 3. DRILLING AGENCY: Terracon
11. DATE BORING: STARTED: Sep 03 2024 — COMPLETED: Sep 03 2024
4. NAME OF DRILLER: Dakota Sloan
12. HAMMER TYPE: Automatic — EFFICIENCY (%)
5. EQUIPMENT: CME 55 Drill Rig 546
13. SIZE AND TYPE OF BIT: 3.75" HSA
6. DIRECTION OF BORING: Vertical — DEG FROM VERTICAL: 0 — BEARING:
14. ELEVATION SURFACE: 246.8'
7. THICKNESS OF OVERBURDEN: 10.0'
15. ELEVATION GROUND WATER:
8. DEPTH DRILLED INTO ROCK:
16. TOTAL NUMBER CORE BOXES:
9. TOTAL DEPTH OF BORING: 10.0'
17. SIGNATURE AND TITLE OF INSPECTOR: EB

ELEV	DEPTH	BLOWS/ 0.5ft	N	LEGEND	FIELD CLASSIFICATION OF MATERIALS (Description)	% REC	Samp No.	LABORATORY: Gravel	Sand	Fines	LL	PI	MC	ASTM Class	REMARKS
246.27	0.50				Topsoil, Cleared Soils (disturbed), 6 inches										
		30			SANDY LEAN CLAY (CL) reddish brown, hard										
		50	50/5				S-1								
		"													
		36					S-2								
		38	69												
		31					S-3								
		20													
		17	52												
		22					S-4								
		33													
		53	86												
240.27	6.50	48													
		45			CLAYEY SAND WITH GRAVEL (SC) light gray and brown, dense to very dense										
		46	50/2				S-5						5		
		"													
		15													
		20	42				S-6			32					
236.77	10.00	22													
		24													
					Borehole finished at 10.0										

USACE FORM 1836 — Boring Designation P-20 — Sheet 1 of 1

Boring Designation P-21

DRILLING LOG — DIVISION: Southwestern — INSTALLATION: N/A — Sheet 1 of 1

1. PROJECT: Pine Bluff Arsenal Access Control Point, Jefferson County
10. COORDINATE SYSTEM: NAD 1983 StatePlane Arkansas South FIPS 0302 Feet — VERTICAL: NAVD88
LOCATION COORDINATES: N: 1907572.41, E: 1286880.75 — LOCATION METHOD:
2. HOLE NUMBER: P-21 — 3. DRILLING AGENCY: Terracon
11. DATE BORING: STARTED: Sep 03 2024 — COMPLETED: Sep 03 2024
4. NAME OF DRILLER: Dakota Sloan
12. HAMMER TYPE: Automatic — EFFICIENCY (%)
5. EQUIPMENT: CME 55 Drill Rig 546
13. SIZE AND TYPE OF BIT: 3.75" HSA
6. DIRECTION OF BORING: Vertical — DEG FROM VERTICAL: 0 — BEARING:
14. ELEVATION SURFACE: 246.4'
7. THICKNESS OF OVERBURDEN: 10.0'
15. ELEVATION GROUND WATER:
8. DEPTH DRILLED INTO ROCK:
16. TOTAL NUMBER CORE BOXES:
9. TOTAL DEPTH OF BORING: 10.0'
17. SIGNATURE AND TITLE OF INSPECTOR: EB

ELEV	DEPTH	BLOWS/ 0.5ft	N	LEGEND	FIELD CLASSIFICATION OF MATERIALS (Description)	% REC	Samp No.	LABORATORY: Gravel	Sand	Fines	LL	PI	MC	ASTM Class	REMARKS
245.89	0.50				Topsoil, Cleared Soils (disturbed), 6 inches										
		11			SILT WITH SAND (ML) reddish brown, very stiff to hard										
		13	27				S-1						6		
		14													
		12					S-2								
		14	34												
		20					S-3								
		9													
		15	53												
		38					S-4								
		50	50/5												
		"													
		50	50/5				S-5								
238.39	8.00	"													
		10			SILTY SAND (SM) light gray and brown, dense										
		14					S-6								
236.39	10.00	17	31												
		24													
					Borehole finished at 10.0										

USACE FORM 1836 — Boring Designation P-21 — Sheet 1 of 1

Boring Designation P-22

DRILLING LOG — DIVISION: Southwestern — INSTALLATION: N/A — Sheet 1 of 1

1. PROJECT: Pine Bluff Arsenal Access Control Point, Jefferson County
10. COORDINATE SYSTEM: NAD 1983 StatePlane Arkansas South FIPS 0302 Feet — VERTICAL: NAVD88
LOCATION COORDINATES: N: 1907647.26, E: 1286864.78 — LOCATION METHOD:
2. HOLE NUMBER: P-22 — 3. DRILLING AGENCY: Terracon
11. DATE BORING: STARTED: Sep 03 2024 — COMPLETED: Sep 03 2024
4. NAME OF DRILLER: Dakota Sloan
12. HAMMER TYPE: Automatic — EFFICIENCY (%)
5. EQUIPMENT: CME 55 Drill Rig 546
13. SIZE AND TYPE OF BIT: 3.75" HSA
6. DIRECTION OF BORING: Vertical — DEG FROM VERTICAL: 0 — BEARING:
14. ELEVATION SURFACE: 246.3'
7. THICKNESS OF OVERBURDEN: 10.0'
15. ELEVATION GROUND WATER:
8. DEPTH DRILLED INTO ROCK:
16. TOTAL NUMBER CORE BOXES:
9. TOTAL DEPTH OF BORING: 10.0'
17. SIGNATURE AND TITLE OF INSPECTOR: EB

ELEV	DEPTH	BLOWS/ 0.5ft	N	LEGEND	FIELD CLASSIFICATION OF MATERIALS (Description)	% REC	Samp No.	LABORATORY: Gravel	Sand	Fines	LL	PI	MC	ASTM Class	REMARKS
245.81	0.50				Topsoil, Cleared Soils (disturbed), 6 inches										
		14			SANDY FAT CLAY (CH) reddish brown, hard										
		18	38				S-1								
		20													
		16					S-2			56	39	9			
		14	34												
		20					S-3								
		20													
		18	34												
		16					S-4								
		28													
		32	65												
		33					S-5								
		30													
		28	63				S-6								
		35													
		40	50/5												
		50	"												
236.31	10.00														
					Borehole finished at 10.0										

USACE FORM 1836 — Boring Designation P-22 — Sheet 1 of 1

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: B. BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R. TOLIKONDA
SUBMITTED BY: R. TOLIKONDA
SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)

ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D6035
FILE NUMBER:

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

BORING LOGS - 6

SHEET ID
B-106

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

Boring Designation P-23

DRILLING LOG

DIVISION: Southwestern	INSTALLATION: N/A		Sheet 1 of 1
1. PROJECT: Pine Bluff Arsenal Access Control Point, Jefferson County	10. COORDINATE SYSTEM: NAD 1983 StatePlane Arkansas South FIPS 0302 Feet		VERTICAL: NAVD88
	LOCATION COORDINATES: N: 1907727.18	E: 1286845.57	LOCATION METHOD:
2. HOLE NUMBER: P-23	3. DRILLING AGENCY: Terracon	11. DATE BORING: STARTED: Sep 03 2024	COMPLETED: Sep 03 2024
4. NAME OF DRILLER: Dakota Sloan		12. HAMMER TYPE: Automatic	EFFICIENCY (%)
5. EQUIPMENT: CME 55 Drill Rig 546		13. SIZE AND TYPE OF BIT: 3.75" HSA	
6. DIRECTION OF BORING: Vertical	DEG FROM VERTICAL: 0	BEARING:	14. ELEVATION SURFACE: 245.6'
7. THICKNESS OF OVERBURDEN: 10.0'			15. ELEVATION GROUND WATER:
8. DEPTH DRILLED INTO ROCK:			16. TOTAL NUMBER CORE BOXES:
9. TOTAL DEPTH OF BORING: 10.0'			17. SIGNATURE AND TITLE OF INSPECTOR: EB

ELEV	DEPTH	BLOWS/0.5ft	N	LEGEND	FIELD CLASSIFICATION OF MATERIALS (Description)	% REC	Samp No.	LAB: Gravel	Sand	Fines	LL	PI	MC	ASTM Class	REMARKS
244.57	1.00	4			Topsoil, 12 inches										
		5	15		SANDY LEAN CLAY (CL) reddish brown and light gray, stiff to hard		S-1								
		10													
		32					S-2								
		48	96												
		48													
		13					S-3								
		17	33												
		16													
		21					S-4								
		23	58												
		35													
		25					S-5								
		28	60												
237.57	8.00	32													
		25			CLAYEY SAND (SC) light gray and brown, dense		S-6								
		27	47												
235.57	10.00	20													
					Borehole finished at 10.0										

Boring Designation P-24

DRILLING LOG

DIVISION: Southwestern	INSTALLATION: N/A		Sheet 1 of 1
1. PROJECT: Pine Bluff Arsenal Access Control Point, Jefferson County	10. COORDINATE SYSTEM: NAD 1983 StatePlane Arkansas South FIPS 0302 Feet		VERTICAL: NAVD88
	LOCATION COORDINATES: N: 1907800.07	E: 1286864.83	LOCATION METHOD:
2. HOLE NUMBER: P-24	3. DRILLING AGENCY: Terracon	11. DATE BORING: STARTED: Aug 29 2024	COMPLETED: Aug 29 2024
4. NAME OF DRILLER: Dakota Sloan		12. HAMMER TYPE: Automatic	EFFICIENCY (%)
5. EQUIPMENT: CME 55 Drill Rig 546		13. SIZE AND TYPE OF BIT: 3.75" HSA	
6. DIRECTION OF BORING: Vertical	DEG FROM VERTICAL: 0	BEARING:	14. ELEVATION SURFACE: 246.3'
7. THICKNESS OF OVERBURDEN: 10.0'			15. ELEVATION GROUND WATER:
8. DEPTH DRILLED INTO ROCK:			16. TOTAL NUMBER CORE BOXES:
9. TOTAL DEPTH OF BORING: 10.0'			17. SIGNATURE AND TITLE OF INSPECTOR: DT

ELEV	DEPTH	BLOWS/0.5ft	N	LEGEND	FIELD CLASSIFICATION OF MATERIALS (Description)	% REC	Samp No.	LAB: Gravel	Sand	Fines	LL	PI	MC	ASTM Class	REMARKS
246.15	0.20	10			Topsoil, 2 inches										
		9	15		SANDY LEAN CLAY (CL) light brown and light gray, stiff to hard		S-1								
		7													
		6	13				S-2								
		7													
		6					S-3								
		10	25												
		15					S-4								
		16	31												
		15					S-5								
		4													
		6	16				S-6								
		10													
		10													
		12	25												
236.35	10.00	13													
					Borehole finished at 10.0										

Boring Designation P-25

DRILLING LOG

DIVISION: Southwestern	INSTALLATION: N/A		Sheet 1 of 1
1. PROJECT: Pine Bluff Arsenal Access Control Point, Jefferson County	10. COORDINATE SYSTEM: NAD 1983 StatePlane Arkansas South FIPS 0302 Feet		VERTICAL: NAVD88
	LOCATION COORDINATES: N: 1907879.76	E: 1286896.81	LOCATION METHOD:
2. HOLE NUMBER: P-25	3. DRILLING AGENCY: Terracon	11. DATE BORING: STARTED: Aug 29 2024	COMPLETED: Aug 29 2024
4. NAME OF DRILLER: Dakota Sloan		12. HAMMER TYPE: Automatic	EFFICIENCY (%)
5. EQUIPMENT: CME 55 Drill Rig 546		13. SIZE AND TYPE OF BIT: 3.75" HSA	
6. DIRECTION OF BORING: Vertical	DEG FROM VERTICAL: 0	BEARING:	14. ELEVATION SURFACE: 248.5'
7. THICKNESS OF OVERBURDEN: 10.0'			15. ELEVATION GROUND WATER:
8. DEPTH DRILLED INTO ROCK:			16. TOTAL NUMBER CORE BOXES:
9. TOTAL DEPTH OF BORING: 10.0'			17. SIGNATURE AND TITLE OF INSPECTOR: JB

ELEV	DEPTH	BLOWS/0.5ft	N	LEGEND	FIELD CLASSIFICATION OF MATERIALS (Description)	% REC	Samp No.	LAB: Gravel	Sand	Fines	LL	PI	MC	ASTM Class	REMARKS
247.81	0.70				Asphalt, 8 inches										
		6			SANDY SILT WITH GRAVEL (ML) light gray, FILL		S-1			68			15		
		6	17												
246.01	2.50	8													
		3			LEAN CLAY WITH SAND (CL) light gray and reddish brown, medium stiff to hard, with sand seams		S-2								
		2	5												
		3					S-3								
		4													
		12	24												
		12					S-4								
		10													
		12	26												
		14					S-5								
		14													
		20	60												
		40													
238.01	10.50	40													
					Borehole finished at 10.0										

Boring Designation P-26

DRILLING LOG

DIVISION: Southwestern	INSTALLATION: N/A		Sheet 1 of 1
1. PROJECT: Pine Bluff Arsenal Access Control Point, Jefferson County	10. COORDINATE SYSTEM: NAD 1983 StatePlane Arkansas South FIPS 0302 Feet		VERTICAL: NAVD88
	LOCATION COORDINATES: N: 1907913.14	E: 1286941.48	LOCATION METHOD:
2. HOLE NUMBER: P-26	3. DRILLING AGENCY: Terracon	11. DATE BORING: STARTED: Aug 29 2024	COMPLETED: Aug 29 2024
4. NAME OF DRILLER: Dakota Sloan		12. HAMMER TYPE: Automatic	EFFICIENCY (%)
5. EQUIPMENT: CME 55 Drill Rig 546		13. SIZE AND TYPE OF BIT: 3.75" HSA	
6. DIRECTION OF BORING: Vertical	DEG FROM VERTICAL: 0	BEARING:	14. ELEVATION SURFACE: 248.5'
7. THICKNESS OF OVERBURDEN: 10.0'			15. ELEVATION GROUND WATER:
8. DEPTH DRILLED INTO ROCK:			16. TOTAL NUMBER CORE BOXES:
9. TOTAL DEPTH OF BORING: 10.0'			17. SIGNATURE AND TITLE OF INSPECTOR: JB

ELEV	DEPTH	BLOWS/0.5ft	N	LEGEND	FIELD CLASSIFICATION OF MATERIALS (Description)	% REC	Samp No.	LAB: Gravel	Sand	Fines	LL	PI	MC	ASTM Class	REMARKS
247.81	0.70				Asphalt, 8 inches										
247.51	1.00	3			LEAN CLAY WITH GRAVEL (CL) light gray, FILL										
		3	7		LEAN CLAY WITH SAND (CL) light gray and reddish brown, medium stiff to hard, with sand seams		S-1								
		4													
		5	9				S-2								
		4													
		3					S-3								
		2	6												
		4													
		14					S-4								
		19	33												
		14													
		12					S-5								
		14	26												
		12													
		13					S-6								
		14													
238.51	10.00	16	30												
					Borehole finished at 10.0										

Boring Designation P-27

DRILLING LOG

DIVISION: Southwestern	INSTALLATION: N/A		Sheet 1 of 1
1. PROJECT: Pine Bluff Arsenal Access Control Point, Jefferson County	10. COORDINATE SYSTEM: NAD 1983 StatePlane Arkansas South FIPS 0302 Feet		VERTICAL: NAVD88
	LOCATION COORDINATES: N: 1907932.36	E: 1286995.07	LOCATION METHOD:
2. HOLE NUMBER: P-27	3. DRILLING AGENCY: Terracon	11. DATE BORING: STARTED: Aug 29 2024	COMPLETED: Aug 29 2024
4. NAME OF DRILLER: Dakota Sloan		12. HAMMER TYPE: Automatic	EFFICIENCY (%)
5. EQUIPMENT: CME 55 Drill Rig 546		13. SIZE AND TYPE OF BIT: 3.75" HSA	
6. DIRECTION OF BORING: Vertical	DEG FROM VERTICAL: 0	BEARING:	14. ELEVATION SURFACE: 247.6'
7. THICKNESS OF OVERBURDEN: 10.0'			15. ELEVATION GROUND WATER:
8. DEPTH DRILLED INTO ROCK:			16. TOTAL NUMBER CORE BOXES:
9. TOTAL DEPTH OF BORING: 10.0'			17. SIGNATURE AND TITLE OF INSPECTOR: JB

ELEV	DEPTH	BLOWS/0.5ft	N	LEGEND	FIELD CLASSIFICATION OF MATERIALS (Description)	% REC	Samp No.	LAB: Gravel	Sand	Fines	LL	PI	MC	ASTM Class	REMARKS
246.82	0.80				Asphalt, 9 inches										
246.62	1.00	8			LEAN CLAY WITH GRAVEL (CL) light gray, FILL										
		12	28		SILT WITH SAND (ML) gray, very stiff to hard		S-1								
		16													
		6					S-2								
		6	16												
		10					S-3						14		
		10	22												
		12					S-4								
		20	58												
		28					S-5								
		30													
		8					S-6								
		10	18												
		8													
		8													
		10	22												
237.62	10.00	12													
					Borehole finished at 10.0										

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
SUBMITTED BY: R.TOLIKONDA
ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D6035
FILE NUMBER:
SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

HANA-KENALL 8A JV
2600 CITYWEST BLVD. STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

BORING LOGS - 7

SHEET ID
B-107

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

Boring Designation D-1

DRILLING LOG

DIVISION: Southwestern	INSTALLATION: N/A		Sheet 1 of 1
1. PROJECT: Pine Bluff Arsenal Access Control Point, Jefferson County	10. COORDINATE SYSTEM: NAD 1983 StatePlane Arkansas South FIPS 0302 Feet		VERTICAL: NAVD88
2. HOLE NUMBER: D-1	3. DRILLING AGENCY: Terracon	LOCATION COORDINATES: N: 1907052.03, E: 1286640.36	LOCATION METHOD:
4. NAME OF DRILLER: Dakota Sloan	11. DATE BORING: STARTED Aug 26 2024		COMPLETED Aug 26 2024
5. EQUIPMENT: CME 55 Drill Rig 546	12. HAMMER TYPE: Automatic		EFFICIENCY (%)
6. DIRECTION OF BORING: Vertical; DEG FROM VERTICAL: 0; BEARING:	13. SIZE AND TYPE OF BIT: 3.75" HSA		
7. THICKNESS OF OVERBURDEN: 10.0'	14. ELEVATION SURFACE: 243.6'		
8. DEPTH DRILLED INTO ROCK	15. ELEVATION GROUND WATER		
9. TOTAL DEPTH OF BORING: 10.0'	16. TOTAL NUMBER CORE BOXES		
	17. SIGNATURE AND TITLE OF INSPECTOR: DT		

ELEV	DEPTH	BLOWS/0.5ft	N	LEGEND	FIELD CLASSIFICATION OF MATERIALS (Description)	% REC	Samp No.	LAB: Gravel	Sand	Fines	LL	PI	MC	ASTM Class	REMARKS
		14, 17, 19	36		SILTY SAND (SM) brown and gray, dense		S-1								
		13, 16, 31	47				S-2								
		50, 50/5"					S-3								
		16, 32, 37	69				S-4			35			6		
		21, 14, 24	38				S-5								
		21, 21, 17	38				S-7								
233.59	10.00	15			Borehole finished at 10.0										

239 / 234 / 229 / 224 / 219 / 214

USACE FORM 1836 — Boring Designation D-1 — Sheet 1 of 1

Boring Designation D-2

DRILLING LOG

DIVISION: Southwestern	INSTALLATION: N/A		Sheet 1 of 1
1. PROJECT: Pine Bluff Arsenal Access Control Point, Jefferson County	10. COORDINATE SYSTEM: NAD 1983 StatePlane Arkansas South FIPS 0302 Feet		VERTICAL: NAVD88
2. HOLE NUMBER: D-2	3. DRILLING AGENCY: Terracon	LOCATION COORDINATES: N: 1907096.66, E: 1286720.07	LOCATION METHOD:
4. NAME OF DRILLER: Dakota Sloan	11. DATE BORING: STARTED Aug 26 2024		COMPLETED Aug 26 2024
5. EQUIPMENT: CME 55 Drill Rig 546	12. HAMMER TYPE: Automatic		EFFICIENCY (%)
6. DIRECTION OF BORING: Vertical; DEG FROM VERTICAL: 0; BEARING:	13. SIZE AND TYPE OF BIT: 3.75" HSA		
7. THICKNESS OF OVERBURDEN: 20.5'	14. ELEVATION SURFACE: 242.7'		
8. DEPTH DRILLED INTO ROCK	15. ELEVATION GROUND WATER: 231.7'		
9. TOTAL DEPTH OF BORING: 20.5'	16. TOTAL NUMBER CORE BOXES		
	17. SIGNATURE AND TITLE OF INSPECTOR: DT		

ELEV	DEPTH	BLOWS/0.5ft	N	LEGEND	FIELD CLASSIFICATION OF MATERIALS (Description)	% REC	Samp No.	LAB: Gravel	Sand	Fines	LL	PI	MC	ASTM Class	REMARKS
		5, 11, 11	22		SILTY SAND (SM) brown and gray, medium dense, trace clay		S-1								
240.74	2.00	5, 6, 7	13		SANDY LEAN CLAY (CL) brown, stiff to very stiff		S-2								
		5, 8, 16	24				S-3			66			15		
237.74	5.00	25, 50, "	50/4"		CLAYEY SAND (SC) brown, very dense		S-4								
		"					S-5								
234.74	8.00	8, 8, 7	15		SANDY LEAN CLAY (CL) brown, stiff to very stiff		S-6								
							ST-1								
231.24	11.50	4, 6, 8	14		SILTY SAND (SM) brown and gray, medium dense		S-7								
		3, 4, 6	10				S-8								
		7, 8, 9	17				S-9			17	NP	NP	19		
		6, 8, 9	17				S-10								
		10, 12, 10	22				S-11								
222.24	20.50	8, 10, 12	22				S-12								
					Borehole finished at 20.5										

238 / 233 / 228 / 223 / 218 / 213

USACE FORM 1836 — Boring Designation D-2 — Sheet 1 of 1

Boring Designation D-3

DRILLING LOG

DIVISION: Southwestern	INSTALLATION: N/A		Sheet 1 of 1
1. PROJECT: Pine Bluff Arsenal Access Control Point, Jefferson County	10. COORDINATE SYSTEM: NAD 1983 StatePlane Arkansas South FIPS 0302 Feet		VERTICAL: NAVD88
2. HOLE NUMBER: D-3	3. DRILLING AGENCY: Terracon	LOCATION COORDINATES: N: 1907140.87, E: 1286804.06	LOCATION METHOD:
4. NAME OF DRILLER: Dakota Sloan	11. DATE BORING: STARTED Aug 26 2024		COMPLETED Aug 26 2024
5. EQUIPMENT: CME 55 Drill Rig 546	12. HAMMER TYPE: Automatic		EFFICIENCY (%)
6. DIRECTION OF BORING: Vertical; DEG FROM VERTICAL: 0; BEARING:	13. SIZE AND TYPE OF BIT: 3.75" HSA		
7. THICKNESS OF OVERBURDEN: 11.0'	14. ELEVATION SURFACE: 244.2'		
8. DEPTH DRILLED INTO ROCK	15. ELEVATION GROUND WATER		
9. TOTAL DEPTH OF BORING: 11.0'	16. TOTAL NUMBER CORE BOXES		
	17. SIGNATURE AND TITLE OF INSPECTOR: DT		

ELEV	DEPTH	BLOWS/0.5ft	N	LEGEND	FIELD CLASSIFICATION OF MATERIALS (Description)	% REC	Samp No.	LAB: Gravel	Sand	Fines	LL	PI	MC	ASTM Class	REMARKS
		10, 11, 14	25		LEAN CLAY (CL) brown, very stiff to hard		S-1								
		17, 18, 20	38				S-2			80			11		
		23, 25, 27	52				S-3								
239.20	5.00	38, 50, "	50/5"		LEAN CLAY WITH SAND (CL) brown, hard		S-4								
		"					S-5								
236.20	8.00	18, 24, 18	42				S-6			32			18		
		13, 12, 15	27		SILTY SAND (SM) brown and gray, medium dense		S-7								
233.20	11.00	8, 9, 8	17												
					Borehole finished at 11.0										

240 / 235 / 230 / 225 / 220 / 215

USACE FORM 1836 — Boring Designation D-3 — Sheet 1 of 1

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
SUBMITTED BY: R.TOLIKONDA
SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)

ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D6035
FILE NUMBER:

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

BORING LOGS - 8

SHEET ID
B-108

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

DAYTON ROAD
R/W VARIES, ASPHALT
30 MPH SPEED LIMIT

SIDEWALK

UGND ELECTRIC LINE
1.5' DEEP

CURB INLET
RIM=246.33

GUARD RAIL

CONCRETE
WALK

SITE BENCHMARK
REBARS
E=252.87

REMOVE 651 LF
BARB FENCE
INCLUDING GATES

REMOVE POWER POLE

DEMOLISH
STORM INLET

REMOVE 3845 SY OF
GRAVEL AND CONCRETE
UP TO SUBGRADE

TREE AND BRUSH REMOVAL
APPROX. REMOVAL AREA : 3.6 ACRES
SEE NOTE 1

REMOVE
FIRE HYDRANT

TREE AND BRUSH REMOVAL
APPROX. REMOVAL AREA : 0.27 ACRES
SEE NOTE 1

MATCHLINE - SEE SHEET CD102

MATCHLINE - SEE SHEET CD103

PLAN
NORTH

0 30' 60'

A1 CIVIL DEMOLITION PLAN - 1
SCALE: 1" = 30'

GENERAL NOTES

1. ALL TREES AND BRUSH INSIDE THE PROJECT CONSTRUCTION EASEMENT AS SHOWN ON THE DRAWINGS TO BE REMOVED IN ACCORDANCE WITH SPECIFICATION REFERENCE SECTION 31 11 00.
2. CONTRACTOR MUST REMOVE ALL CONCRETE, ASPHALT, GROUTED AND NON-GROUTED RIP-RAP, AND OTHER TRASH OR DEBRIS THAT WOULD INFRINGE ON CONSTRUCTING THE PROJECT UNLESS INDICATED OTHERWISE.
3. ALL DEMOLITION QUANTITIES SHOWN ARE APPROXIMATE. REFERENCE SPECIFICATION SECTION 02 41 00 FOR MEASUREMENT AND PAYMENT OF DEMOLITION ITEMS.
4. EXCAVATIONS RESULTING FROM REQUIRED DEMOLITION ACTIVITIES MUST BE FILLED ACCORDING TO SPECIFICATION 31 00 00.
5. REFER TO SHEET C-702 FOR DEMOLITION LAYOUT POINT TABLES.
6. CONTRACTOR SHALL REFER TO HAZMAT SURVEY REPORT (ECS PROJECT NO. 49:23938) PRIOR TO DEMOLITION AND FOLLOW APPLICABLE LAWS AND REGULATIONS.

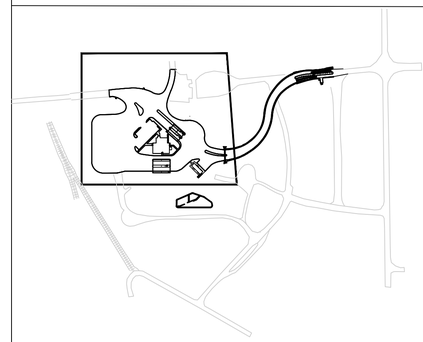
SHEET KEYNOTES

1. REMOVE BUILDING # 24-010
2. REMOVE BUILDING # 24-020
3. REMOVE BUILDING # 24-030
4. REMOVE BUILDING # 24-021
5. REMOVE SIGNS
6. REMOVE AND REINSTALL 24" CMP
7. REMOVE BUILDING # 24-040
8. REMOVE EXISTING 8" VC SS LINE
   REPLACE WITH NEW 8" PVC SS LINE
9. POP UP ACTIVE VEHICLE BARRIER TO REMAIN
   IN PLACE UNTIL NEW BARRIERS ARE INSTALLED
10. REMOVE 15" CMP PIPE
11. REMOVE 18" CMP PIPE
12. REMOVE BUILDING # 24-560

SHEET LEGEND

- APPROXIMATE LIMIT OF TREE AND BRUSH REMOVAL
- APPROXIMATE LIMIT OF GRASS REMOVAL
- ASPHALT ROAD REMOVAL
- BUILDING REMOVAL
- MISC. STRUCTURES, SLABS, FOOTINGS, ETC. REMOVAL
- CONCRETE REMOVAL
- CURB AND GUTTER TO BE REMOVED
- DEMOLISH BARBED WIRE FENCE
- DEMOLISH GUARD RAIL
- DEMOLISH POWER POLE
- DEMOLISH SS MANHOLE
- UTILITY REMOVAL
- LAYOUT POINT

KEY MAP



US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
SUBMITTED BY: R.TOLIKONDA
SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)

ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F8002
CONTRACT NO.: W9127S23D0035
FILE NUMBER:

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

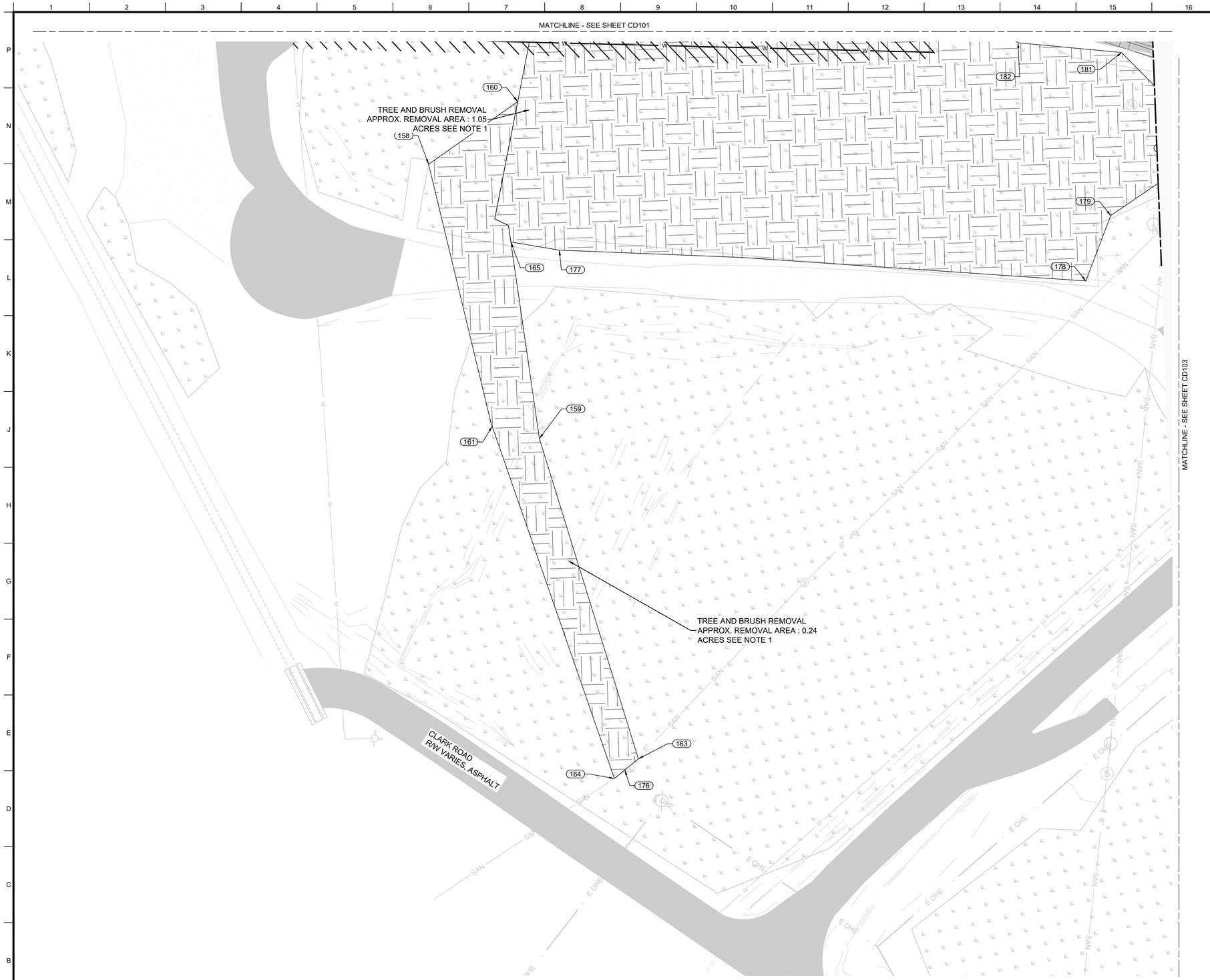
HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

CIVIL DEMOLITION PLAN - 1

SHEET ID
CD101

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



A1 CIVIL DEMOLITION PLAN - 2
SCALE: 1" = 30'

GENERAL NOTES

1. ALL TREES AND BRUSH INSIDE THE PROJECT CONSTRUCTION EASEMENT AS SHOWN ON THE DRAWINGS TO BE REMOVED IN ACCORDANCE WITH SPECIFICATION REFERENCE SECTION 31 11 00.
2. CONTRACTOR MUST REMOVE ALL CONCRETE, ASPHALT, GROUTED AND NON-GROUTED RIP-RAP, AND OTHER TRASH OR DEBRIS THAT WOULD INFRINGE ON CONSTRUCTING THE PROJECT UNLESS INDICATED OTHERWISE.
3. ALL DEMOLITION QUANTITIES SHOWN ARE APPROXIMATE. REFERENCE SPECIFICATION SECTION 02 41 00 FOR MEASUREMENT AND PAYMENT OF DEMOLITION ITEMS.
4. EXCAVATIONS RESULTING FROM REQUIRED DEMOLITION ACTIVITIES MUST BE FILLED ACCORDING TO SPECIFICATION 31 00 00.
5. REFER TO SHEET C-702 FOR DEMOLITION LAYOUT POINT TABLES.
6. CONTRACTOR SHALL REFER TO HAZMAT SURVEY REPORT (ECS PROJECT NO. 49:23938) PRIOR TO DEMOLITION AND FOLLOW APPLICABLE LAWS AND REGULATIONS.

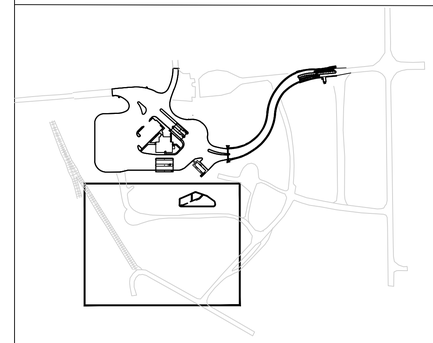
SHEET KEYNOTES

1. REMOVE BUILDING # 24-010
2. REMOVE BUILDING # 24-020
3. REMOVE BUILDING # 24-030
4. REMOVE BUILDING # 24-021
5. REMOVE SIGNS
6. REMOVE AND REINSTALL 24" CMP
7. REMOVE BUILDING # 24-040
8. REMOVE EXISTING 8" VC SS LINE
   REPLACE WITH NEW 8" PVC SS LINE
9. POP UP ACTIVE VEHICLE BARRIER TO REMAIN
   IN PLACE UNTIL NEW BARRIERS ARE INSTALLED
10. REMOVE 15" CMP PIPE
11. REMOVE 18" CMP PIPE
12. REMOVE BUILDING # 24-560

SHEET LEGEND

- APPROXIMATE LIMIT OF TREE AND BRUSH REMOVAL
- APPROXIMATE LIMIT OF GRASS REMOVAL
- ASPHALT ROAD REMOVAL
- BUILDING REMOVAL
- MISC. STRUCTURES, SLABS, FOOTINGS, ETC. REMOVAL
- CONCRETE REMOVAL
- CURB AND GUTTER TO BE REMOVED
- DEMOLISH BARBED WIRE FENCE
- DEMOLISH GUARD RAIL
- DEMOLISH POWER POLE
- DEMOLISH SS MANHOLE
- UTILITY REMOVAL
- LAYOUT POINT (1)

KEY MAP



US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F8002
CONTRACT NO.: W9127S23D0035
FILE NUMBER:

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
SUBMITTED BY: R.TOLIKONDA
SIZE: ANSI Full BLEED D (22.00 X 34.00 INCHES)

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

CIVIL DEMOLITION PLAN - 2

SHEET ID
CD102

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

GENERAL NOTES

1. ALL TREES AND BRUSH INSIDE THE PROJECT CONSTRUCTION EASEMENT AS SHOWN ON THE DRAWINGS TO BE REMOVED IN ACCORDANCE WITH SPECIFICATION REFERENCE SECTION 31 11 00.
2. CONTRACTOR MUST REMOVE ALL CONCRETE, ASPHALT, GROUTED AND NON-GROUTED RIP-RAP, AND OTHER TRASH OR DEBRIS THAT WOULD INFRINGE ON CONSTRUCTING THE PROJECT UNLESS INDICATED OTHERWISE.
3. ALL DEMOLITION QUANTITIES SHOWN ARE APPROXIMATE. REFERENCE SPECIFICATION SECTION 02 41 00 FOR MEASUREMENT AND PAYMENT OF DEMOLITION ITEMS.
4. EXCAVATIONS RESULTING FROM REQUIRED DEMOLITION ACTIVITIES MUST BE FILLED ACCORDING TO SPECIFICATION 31 00 00.
5. REFER TO SHEET C-702 FOR DEMOLITION LAYOUT POINT TABLES.
6. CONTRACTOR SHALL REFER TO HAZMAT SURVEY REPORT (ECS PROJECT NO. 49:23938) PRIOR TO DEMOLITION AND FOLLOW APPLICABLE LAWS AND REGULATIONS.

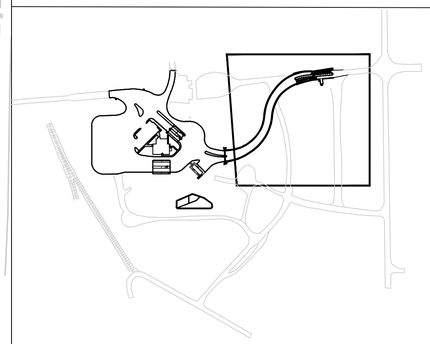
SHEET KEYNOTES

1. REMOVE BUILDING # 24-010
2. REMOVE BUILDING # 24-020
3. REMOVE BUILDING # 24-030
4. REMOVE BUILDING # 24-021
5. REMOVE SIGNS
6. REMOVE AND REINSTALL 24" CMP
7. REMOVE BUILDING # 24-040
8. REMOVE EXISTING 8" VC SS LINE REPLACE WITH NEW 8" PVC SS LINE
9. POP UP ACTIVE VEHICLE BARRIER TO REMAIN IN PLACE UNTIL NEW BARRIERS ARE INSTALLED
10. REMOVE 15" CMP PIPE
11. REMOVE 18" CMP PIPE
12. REMOVE BUILDING # 24-560

SHEET LEGEND

- APPROXIMATE LIMIT OF TREE AND BRUSH REMOVAL
- APPROXIMATE LIMIT OF GRASS REMOVAL
- ASPHALT ROAD REMOVAL
- BUILDING REMOVAL
- MISC. STRUCTURES, SLABS, FOOTINGS, ETC. REMOVAL
- CONCRETE REMOVAL
- CURB AND GUTTER TO BE REMOVED
- DEMOLISH BARBED WIRE FENCE
- DEMOLISH GUARD RAIL
- DEMOLISH POWER POLE
- DEMOLISH SS MANHOLE
- UTILITY REMOVAL
- LAYOUT POINT

KEY MAP



PLAN NORTH

0 30' 60'

A1 CIVIL DEMOLITION PLAN - 3
SCALE: 1" = 30'

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F8002
CONTRACT NO.: W9127S23D0035
FILE NUMBER:
ANSI FULL BLEED D (22.00 X 34.00 INCHES)

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
SUBMITTED BY: R.TOLIKONDA
SIZE:

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

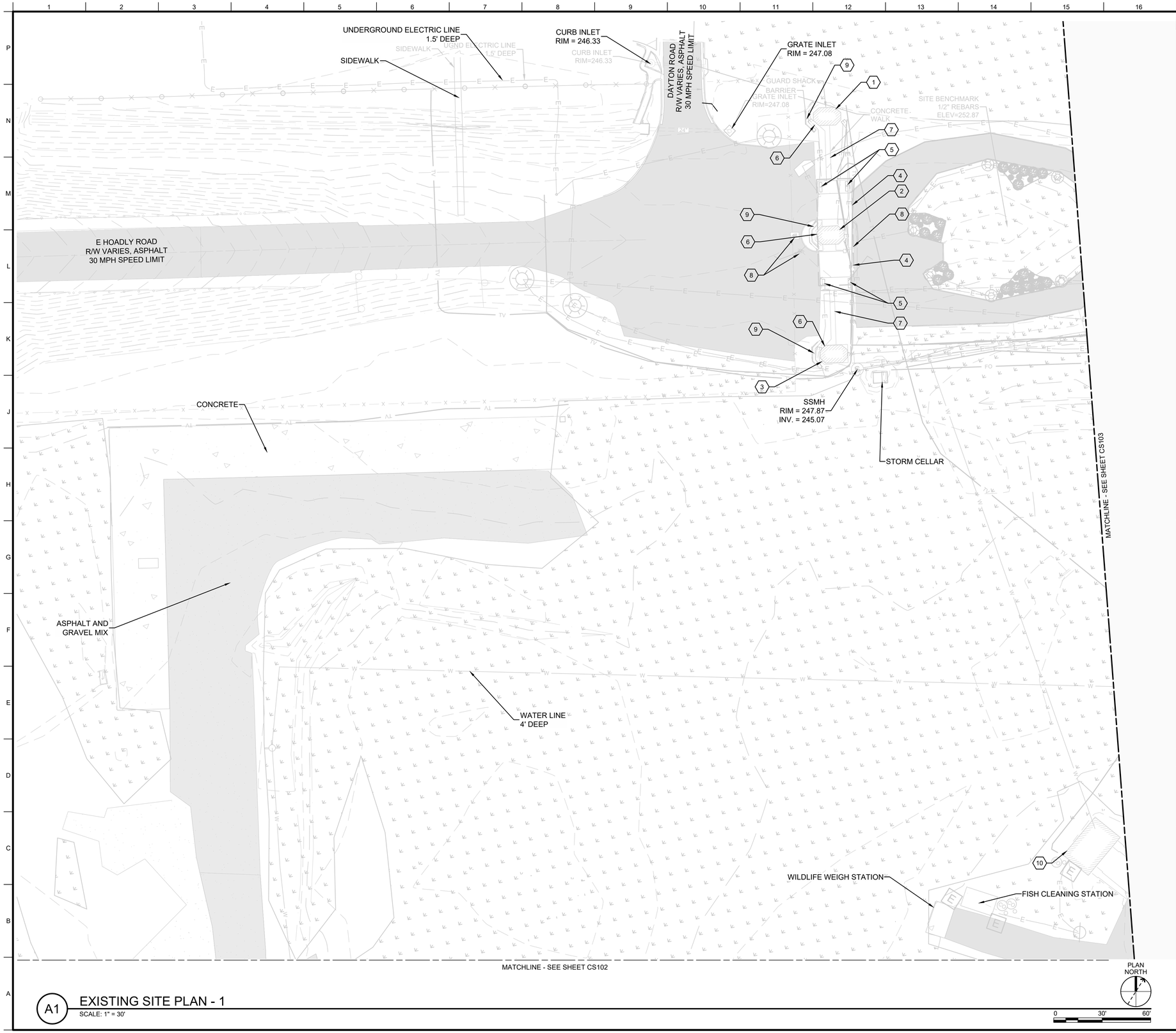
HANA-KENALL 8A JV
2600 CITYWEST BLVD. STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

CIVIL DEMOLITION PLAN - 3

SHEET ID
CD103

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



A1 EXISTING SITE PLAN - 1

SCALE: 1" = 30'

SURVEY CONTROL NOTES

1. VERTICAL DATUM: NAVD88 (GEOID 18), ORTHOMETRIC HEIGHTS AND CONTOURS ARE DERIVED FROM TERRESTRIAL AND RT KINEMATICS GNSS OBSERVATIONS BASED ON OPUS PROCESSED SOLUTION HAVING AN ORTHOMETRIC HEIGHT OF 74.49 M / 244.398 FEET.
2. BASED UPON REVIEW OF NFIP FIRM, CITY OF PINE BLUFF, JEFFERSON COUNTY, ARKANSAS, MAP NUMBER 05069C0165D, MAP EFFECTIVE: MARCH 16, 2009, AND BY GRAPHIC PLOTTING ONLY, THE SUBJECT PROPERTY LIES WITHIN: ZONE X, AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN. SURVEY OR ASSUMES NO LIABILITY FOR THE CORRECTNESS OF CITED MAP.
3. EXISTING UTILITIES SHOWN HEREON WERE LOCATED BY REASONABLE VISUAL OBSERVED SURFACE IMPROVEMENTS AND THE PAINTED MARKINGS PER THE ARKANSAS ONE CALL UTILITY LOCATE SYSTEM, TICKET NUMBER 240531-1934, UNLESS NOTED OTHERWISE, ACTUAL LOCATIONS OF UTILITIES SHOWN, OR THE EXISTENCE OF ADDITIONAL SUBSURFACE IMPROVEMENTS NOT SHOWN HEREON, SHOULD BE VERIFIED BEFORE ANY EXCAVATIONS. LOCATIONS OR EXISTENCE OF SURFACE OR SUBSURFACE IMPROVEMENTS MAY DIFFER FROM THOSE SHOWN HEREON.
4. CONTOUR INTERVALS ARE ONE-FOOT, AS DEPICTED HEREON.
5. REVISE THIS #5 TO FOLLOWING IN ALL EXISTING CONDITIONS SHEETS: EXISTING CONDITIONS ARE SHOWN BASED UPON EXISTING CONDITIONS PER DESIGN SURVEY COMPLETED BY HANA-KENALL JV TEAM IN JUNE 2024. WORK AREA SHALL BE FIELD VERIFIED BY CONTRACTOR PRIOR TO COMMENCEMENT OF CONSTRUCTION.

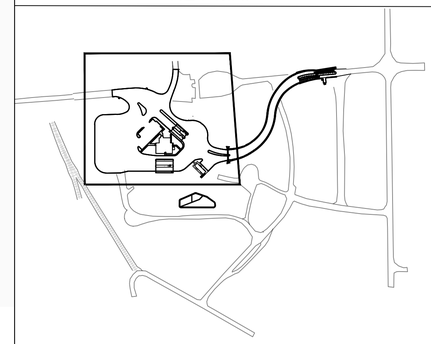
SHEET KEYNOTES

1. BUILDING # 24-010
2. BUILDING # 24-020
3. BUILDING # 24-030
4. CANOPY
5. CONCRETE PEDESTAL
6. GUARD SHACK
7. CONCRETE SIDEWALK
8. CAMERAS
9. BARRIERS
10. AGFC CHECK STATION BUILDING
11. EXISTING SWALE

SHEET LEGEND

- ASPHALT ROADWAY
- GRAVEL
- CONCRETE
- BURIED ELECTRIC LINE
- TELEPHONE CABLE
- FIBER OPTIC CABLE
- GAS LINE
- SANITARY SEWER
- STORM SEWER
- WATERLINE
- BARBED WIRE FENCE

KEY MAP



US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
SUBMITTED BY: R.TOLIKONDA
ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F8002
CONTRACT NO.: W9127S23D6035
FILE NUMBER:
SCALE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

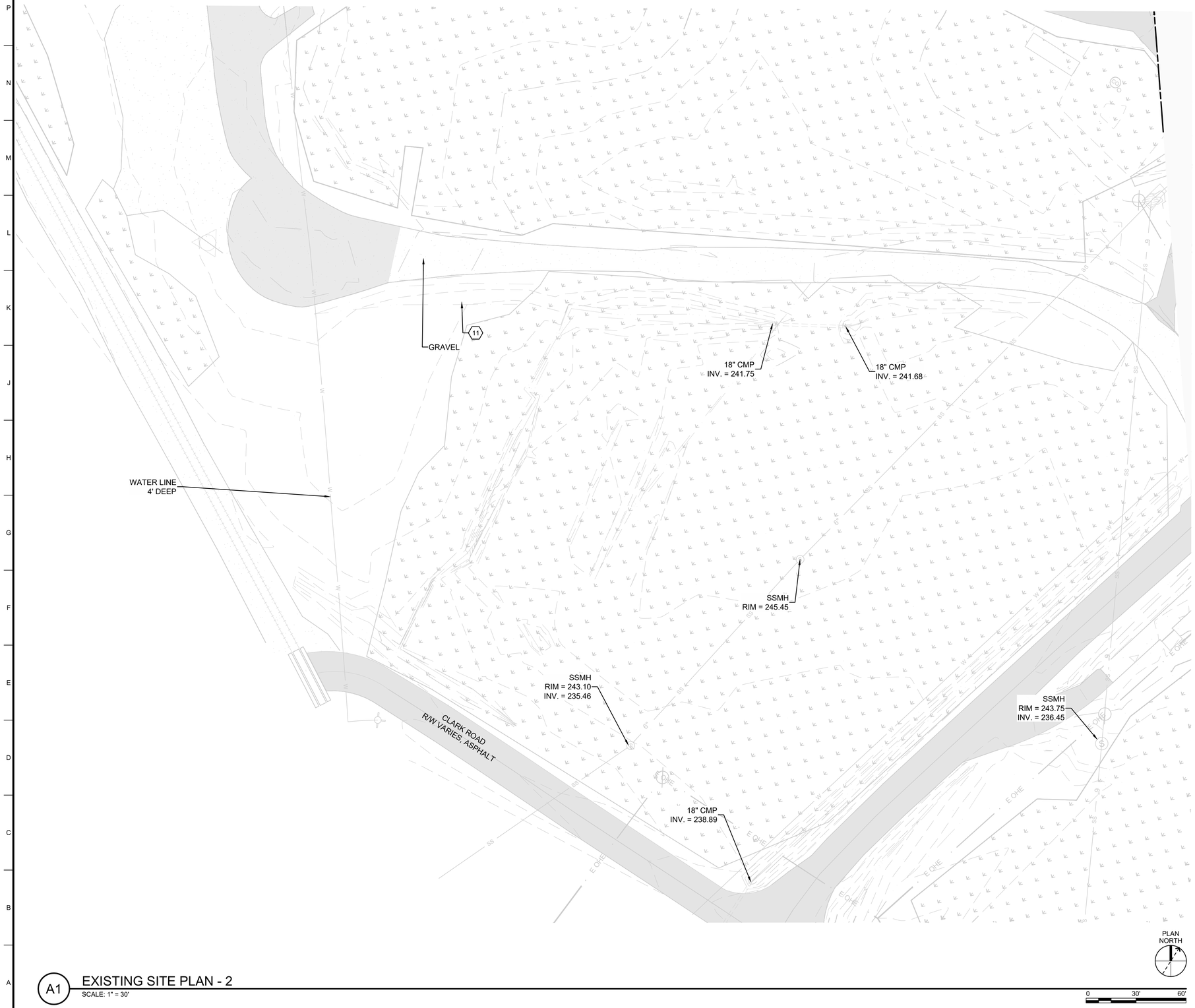
HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

EXISTING SITE PLAN - 1

SHEET ID
CS101

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



MATCHLINE - SEE SHEET CS103

SURVEY CONTROL NOTES

1. VERTICAL DATUM: NAVD88 (GEOID 18), ORTHOMETRIC HEIGHTS AND CONTOURS ARE DERIVED FROM TERRESTRIAL AND RT KINEMATICS GNSS OBSERVATIONS BASED ON OPUS PROCESSED SOLUTION HAVING AN ORTHOMETRIC HEIGHT OF 74.49 M / 244.398 FEET.
2. BASED UPON REVIEW OF NFIP FIRM, CITY OF PINE BLUFF, JEFFERSON COUNTY, ARKANSAS, MAP NUMBER 05069C0165D, MAP EFFECTIVE: MARCH 16, 2009, AND BY GRAPHIC PLOTTING ONLY, THE SUBJECT PROPERTY LIES WITHIN: ZONE X, AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN. SURVEY OR ASSUMES NO LIABILITY FOR THE CORRECTNESS OF CITED MAP.
3. EXISTING UTILITIES SHOWN HEREON WERE LOCATED BY REASONABLE VISUAL OBSERVED SURFACE IMPROVEMENTS AND THE PAINTED MARKINGS PER THE ARKANSAS ONE CALL UTILITY LOCATE SYSTEM, TICKET NUMBER 240531-1934, UNLESS NOTED OTHERWISE, ACTUAL LOCATIONS OF UTILITIES SHOWN, OR THE EXISTENCE OF ADDITIONAL SUBSURFACE IMPROVEMENTS NOT SHOWN HEREON, SHOULD BE VERIFIED BEFORE ANY EXCAVATIONS. LOCATIONS OR EXISTENCE OF SURFACE OR SUBSURFACE IMPROVEMENTS MAY DIFFER FROM THOSE SHOWN HEREON.
4. CONTOUR INTERVALS ARE ONE-FOOT, AS DEPICTED HEREON.
5. REVISE THIS #5 TO FOLLOWING IN ALL EXISTING CONDITIONS SHEETS: EXISTING CONDITIONS ARE SHOWN BASED UPON EXISTING CONDITIONS PER DESIGN SURVEY COMPLETED BY HANA-KENALL JV TEAM IN JUNE 2024. WORK AREA SHALL BE FIELD VERIFIED BY CONTRACTOR PRIOR TO COMMENCEMENT OF CONSTRUCTION.

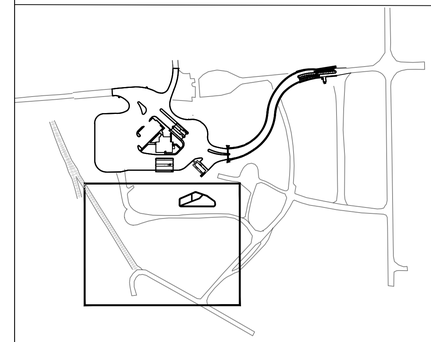
SHEET KEYNOTES

1. BUILDING # 24-010
2. BUILDING # 24-020
3. BUILDING # 24-030
4. CANOPY
5. CONCRETE PEDESTAL
6. GUARD SHACK
7. CONCRETE SIDEWALK
8. CAMERAS
9. BARRIERS
10. AGFC CHECK STATION BUILDING
11. EXISTING SWALE

SHEET LEGEND

- ASPHALT ROADWAY
- GRAVEL
- CONCRETE
- BURIED ELECTRIC LINE
- TELEPHONE CABLE
- FIBER OPTIC CABLE
- GAS LINE
- SANITARY SEWER
- STORM SEWER
- WATERLINE
- BARBED WIRE FENCE

KEY MAP



A1 EXISTING SITE PLAN - 2
SCALE: 1" = 30'

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
SUBMITTED BY: R.TOLIKONDA
ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F8002
CONTRACT NO.: W9127S23D6035
FILE NUMBER:
SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

EXISTING SITE PLAN - 2

SHEET ID
CS102

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

A1 EXISTING SITE PLAN - 3

SCALE: 1" = 30'

SURVEY CONTROL NOTES

1. VERTICAL DATUM: NAVD88 (GEOID 18), ORTHOMETRIC HEIGHTS AND CONTOURS ARE DERIVED FROM TERRESTRIAL AND RT KINEMATICS GNSS OBSERVATIONS BASED ON OPUS PROCESSED SOLUTION HAVING AN ORTHOMETRIC HEIGHT OF 74.49 M / 244.398 FEET.
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3. EXISTING UTILITIES SHOWN HEREON WERE LOCATED BY REASONABLE VISUAL OBSERVED SURFACE IMPROVEMENTS AND THE PAINTED MARKINGS PER THE ARKANSAS ONE CALL UTILITY LOCATE SYSTEM, TICKET NUMBER 240531-1934, UNLESS NOTED OTHERWISE, ACTUAL LOCATIONS OF UTILITIES SHOWN, OR THE EXISTENCE OF ADDITIONAL SUBSURFACE IMPROVEMENTS NOT SHOWN HEREON, SHOULD BE VERIFIED BEFORE ANY EXCAVATIONS. LOCATIONS OR EXISTENCE OF SURFACE OR SUBSURFACE IMPROVEMENTS MAY DIFFER FROM THOSE SHOWN HEREON.
4. CONTOUR INTERVALS ARE ONE-FOOT, AS DEPICTED HEREON.
5. REVISE THIS #5 TO FOLLOWING IN ALL EXISTING CONDITIONS SHEETS: EXISTING CONDITIONS ARE SHOWN BASED UPON EXISTING CONDITIONS PER DESIGN SURVEY COMPLETED BY HANA-KENALL JV TEAM IN JUNE 2024. WORK AREA SHALL BE FIELD VERIFIED BY CONTRACTOR PRIOR TO COMMENCEMENT OF CONSTRUCTION.

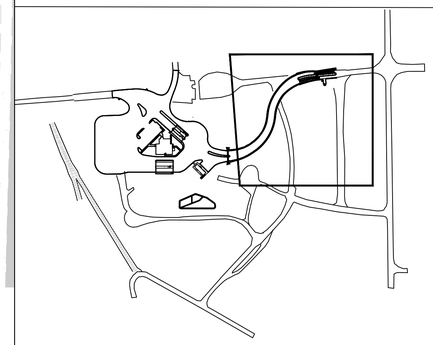
SHEET KEYNOTES

1. BUILDING # 24-010
2. BUILDING # 24-020
3. BUILDING # 24-030
4. CANOPY
5. CONCRETE PEDESTAL
6. GUARD SHACK
7. CONCRETE SIDEWALK
8. CAMERAS
9. BARRIERS
10. AGFC CHECK STATION BUILDING
11. EXISTING SWALE

SHEET LEGEND

- ASPHALT ROADWAY
- GRAVEL
- CONCRETE
- BURIED ELECTRIC LINE
- TELEPHONE CABLE
- FIBER OPTIC CABLE
- GAS LINE
- SANITARY SEWER
- STORM SEWER
- WATERLINE
- BARBED WIRE FENCE

KEY MAP



US Army Corps of Engineers®

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DRAWN BY: R.ISLAM
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ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F8002
CONTRACT NO.: W9127S23D6035
FILE NUMBER:
SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

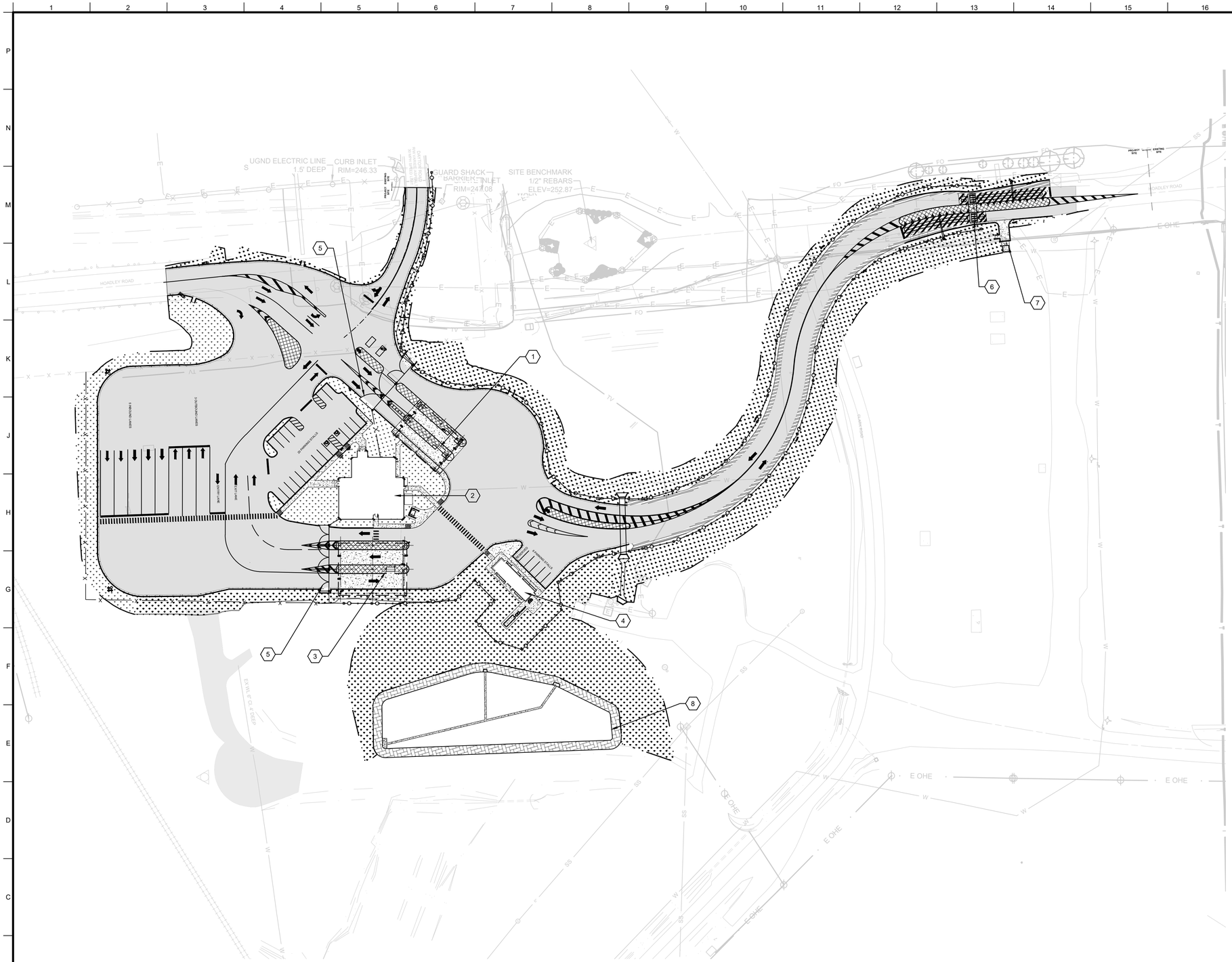
HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

EXISTING SITE PLAN - 3

SHEET ID
CS103

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



A1 PLAINVIEW GATE OVERVIEW

SCALE: 1" = 60'

TRUE NORTH

0 60' 120'

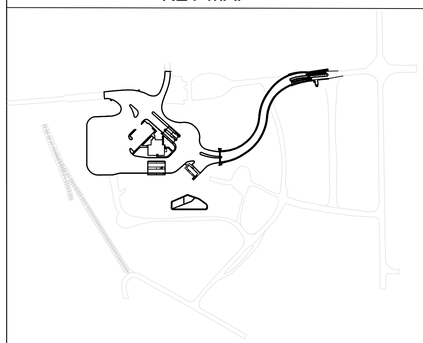
SHEET KEYNOTES

1. ID CHECK AREA AND GUARD BOOTH
2. VISITOR CONTROL CENTER
3. SEARCH AREA
4. GATE HOUSE
5. CLOSURE GATE
6. FINAL DENIAL BARRIER
7. OVERWATCH BOOTH
8. DETENTION POND

SHEET LEGEND

- ASPHALT ROADWAY
- 8" PORTLAND CEMENT CONCRETE PAVING
- NEW CONCRETE SIDEWALK
- 4" PCC MEDIAN
- FENCE
- ASTM M50 PASSIVE VEHICLE BARRIER
- ASTM M40 PASSIVE VEHICLE BARRIER
- LIMITS OF GRADING

KEY MAP



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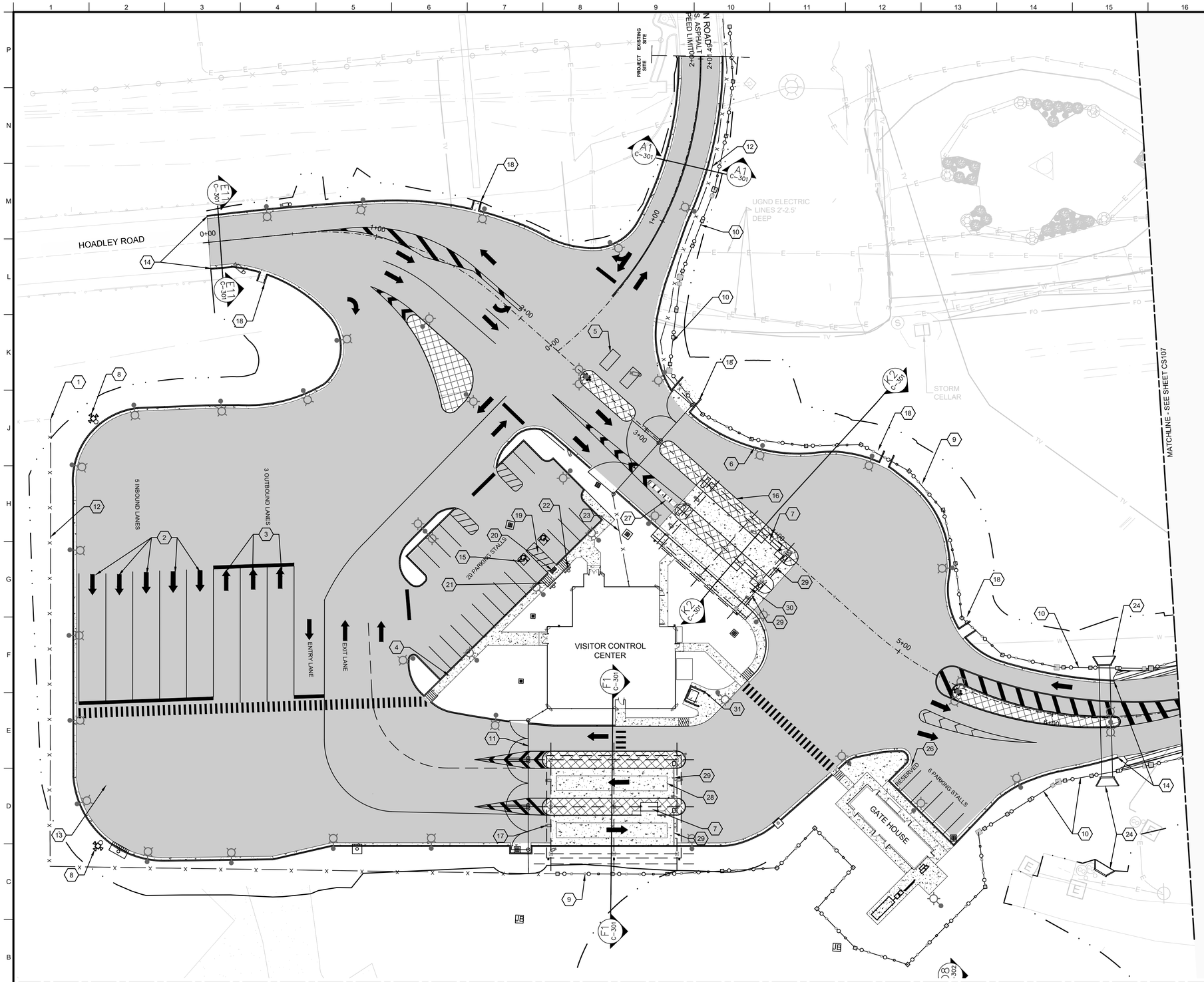
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

PLAINVIEW GATE OVERVIEW

SHEET ID
CS104

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



A1 PROPOSED SITE PLAN - 1

SCALE: 1" = 30'

GENERAL NOTES

1. REFER TO SHEET C-201 FOR ROAD PAVEMENT PROFILE
2. REFER TO SHEETS CU101, CU102 AND CU103 FOR UTILITIES LAYOUT PLAN
3. REFER TO C-701 FOR ALIGNMENT DATA
4. REFER TO SHEETS C-301 TO C-303 FOR CROSS SECTIONS

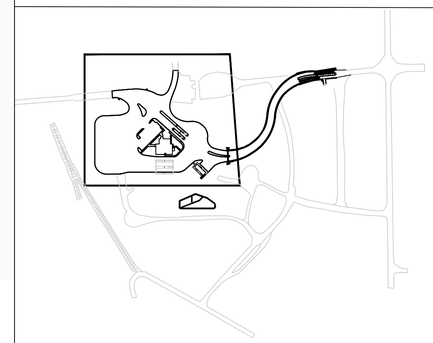
SHEET KEYNOTES

1. TIE FENCE TO EXISTING
2. INBOUND TRUCK QUEUING/HOLDING AREA
3. OUTBOUND TRUCK QUEUING/HOLDING AREA
4. PROPOSED CONCRETE SIDEWALK (TYP.), REFER K1/C-503
5. WRONG WAY DETECTION
6. PROPOSED CONCRETE CURB AND GUTTER (TYP.) REFER F2/C-501 FOR DETAILS
7. PREFABRICATED GUARD BOOTH
8. CCTV EQUIPMENT
9. ASTM M40 SINGLE RUN PASSIVE VEHICLE BARRIER (TYP.)
10. ASTM M50 SINGLE RUN PASSIVE VEHICLE BARRIER (TYP.)
11. PROPOSED CHAIN LINK SECURITY FENCE GATE (TYP.), REFER TO C-517
12. PROPOSED CHAIN LINK FENCE (TYP.), REFER C-517
13. ASPHALT PAVEMENT DETAILS (TYP.), REFER D8/C-503
14. PROPOSED CURB TRANSITION (TYP.), REFER D1/C-503
15. ACCESSIBLE SYMBOL, REFER SHEET C1/C-504 FOR DETAILS
16. ID CHECK CANOPY. REFER TO ARCHITECTURAL DRAWINGS FOR DETAILS
17. SEARCH AREA CANOPY. REFER TO ARCHITECTURAL DRAWING FOR DETAILS
18. NEW CURB CUT. REFER B12/C-501 FOR DETAILS
19. NO PARKING STRIPING. REFER SHEET J1/C-504 FOR DETAILS
20. NEW 2'X4' TRUNCATED DOMES
21. MEET AND MATCH PAVEMENT FLUSH
22. NEW ACCESSIBLE SIGN AND POST. REFER H5/C-504
23. 6' HIGH BARBED FENCE
24. HEADWALL. REFER SHEET C-525 FOR DETAILS
25. OVERWATCH BOOTH. REFER TO A-141 FOR DETAILS
26. CHASE VEHICLE PARKING
27. TL-1 MASH COMPLIANT ATTENUATORS, PCC BASE AND INSTALLATION PER SPEC 32 31 13.53
28. TRUCK SCALE PIT. REFER TO S-131 FOR DETAILS
29. BARRIER GATE ARM. SEE 2.17 PER SPEC 34 75 13.13
30. PCC PAVEMENT DETAILS (TYP.), REFER D12/C-503
31. ASTM M50 BOLLARD (TYP.)

SHEET LEGEND

- ASPHALT ROADWAY
- 8" PORTLAND CEMENT CONCRETE PAVING
- NEW CONCRETE SIDEWALK
- 4" PCC MEDIAN
- CONCRETE SHOULDER
- LIMITS OF GRADING

KEY MAP



US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

ISSUE DATE:	04/17/2026
SOLICITATION NO.:	W9127S24F8002
CONTRACT NO.:	W9127S23D0035
FILE NUMBER:	
DESIGNED BY:	B.BANDA
DRAWN BY:	R.ISLAM
CHECKED BY:	R.TOLIKONDA
SUBMITTED BY:	R.TOLIKONDA
SIZE:	ANSI FULL BLEED D (22.00 X 34.00 INCHES)

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

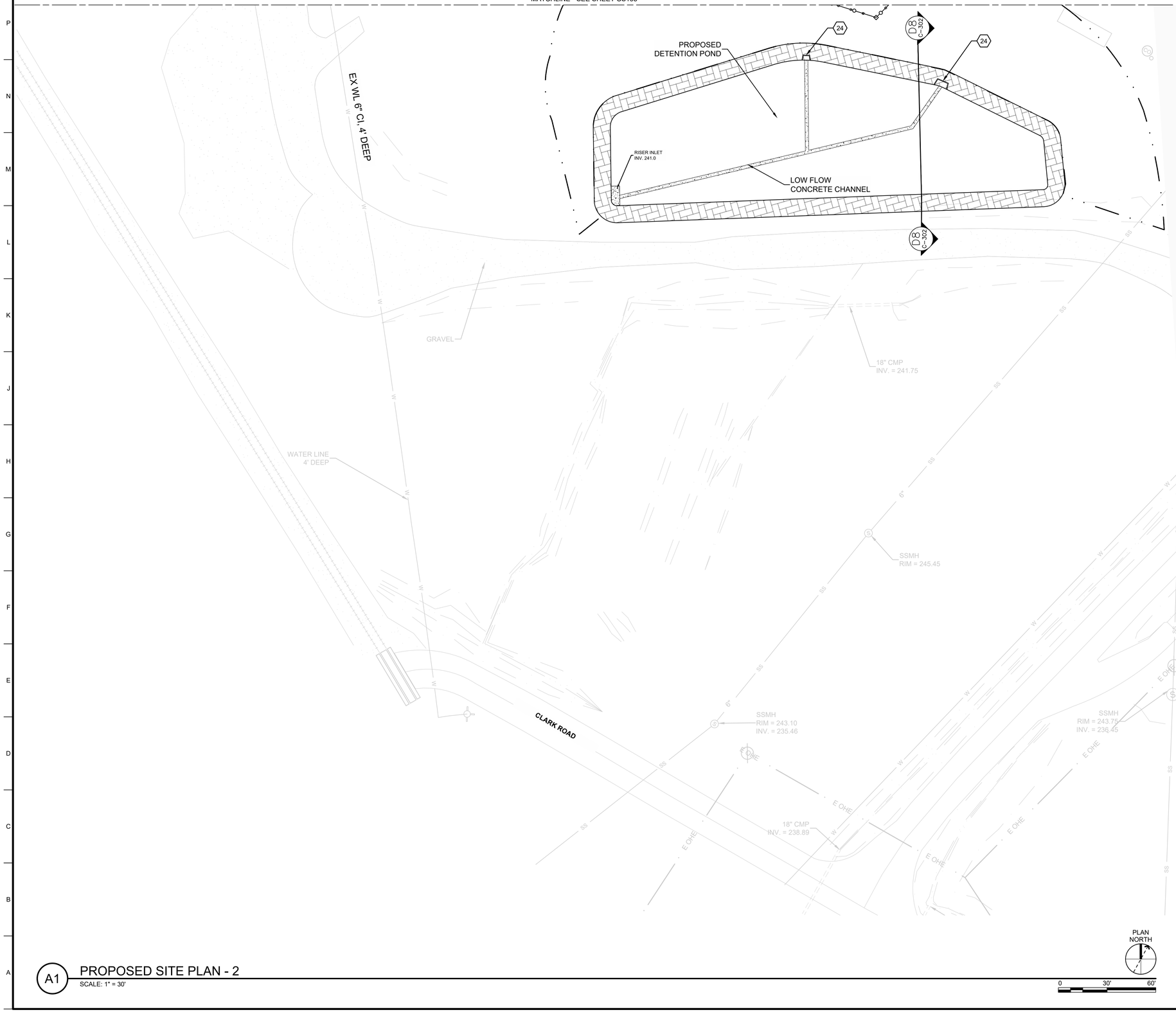
PROPOSED SITE PLAN - 1

SHEET ID

CS105

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

MATCHLINE - SEE SHEET CS105



A1 PROPOSED SITE PLAN - 2
SCALE: 1" = 30'

GENERAL NOTES

1. REFER TO SHEET C-201 FOR ROAD PAVEMENT PROFILE
2. REFER TO SHEETS CU101, CU102 AND CU103 FOR UTILITIES LAYOUT PLAN
3. REFER TO C-701 FOR ALIGNMENT DATA
4. REFER TO SHEETS C-301 TO C-303 FOR CROSS SECTIONS

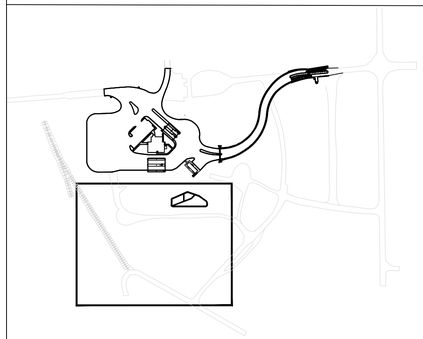
SHEET KEYNOTES

1. TIE FENCE TO EXISTING
2. INBOUND TRUCK QUEUING/HOLDING AREA
3. OUTBOUND TRUCK QUEUING/HOLDING AREA
4. PROPOSED CONCRETE SIDEWALK (TYP.), REFER K1/C-503
5. WRONG WAY DETECTION
6. PROPOSED CONCRETE CURB AND GUTTER (TYP.) REFER F2/C-501 FOR DETAILS
7. PREFABRICATED GUARD BOOTH
8. CCTV EQUIPMENT
9. ASTM M40 SINGLE RUN PASSIVE VEHICLE BARRIER (TYP.)
10. ASTM M50 SINGLE RUN PASSIVE VEHICLE BARRIER (TYP.)
11. PROPOSED CHAIN LINK SECURITY FENCE GATE (TYP.), REFER TO C-517
12. PROPOSED CHAIN LINK FENCE (TYP.), REFER C-517
13. ASPHALT PAVEMENT DETAILS (TYP.), REFER D8/C-503
14. PROPOSED CURB TRANSITION (TYP.), REFER D1/C-503
15. ACCESSIBLE SYMBOL, REFER SHEET C1/C-504 FOR DETAILS
16. ID CHECK CANOPY. REFER TO ARCHITECTURAL DRAWINGS FOR DETAILS
17. SEARCH AREA CANOPY. REFER TO ARCHITECTURAL DRAWING FOR DETAILS
18. NEW CURB CUT. REFER B12/C-501 FOR DETAILS
19. NO PARKING STRIPING. REFER SHEET J1/C-504 FOR DETAILS
20. NEW 2'X4' TRUNCATED DOMES
21. MEET AND MATCH PAVEMENT FLUSH
22. NEW ACCESSIBLE SIGN AND POST. REFER H5/C-504
23. 6' HIGH BARBED FENCE
24. HEADWALL. REFER SHEET C-525 FOR DETAILS
25. OVERWATCH BOOTH. REFER TO A-141 FOR DETAILS
26. CHASE VEHICLE PARKING
27. TL-1 MASH COMPLIANT ATTENUATORS, PCC BASE AND INSTALLATION PER SPEC 32 31 13.53
28. TRUCK SCALE PIT. REFER TO S-131 FOR DETAILS
29. BARRIER GATE ARM. SEE 2.17 PER SPEC 34 75 13.13
30. PCC PAVEMENT DETAILS (TYP.), REFER D12/C-503
31. ASTM M50 BOLLARD (TYP.)

SHEET LEGEND

- ASPHALT ROADWAY
- 8" PORTLAND CEMENT CONCRETE PAVING
- NEW CONCRETE SIDEWALK
- 4" PCC MEDIAN
- CONCRETE SHOULDER
- LIMITS OF GRADING

KEY MAP



US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
SUBMITTED BY: R.TOLIKONDA
ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F8002
CONTRACT NO.: W9127S23D0035
FILE NUMBER:
SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

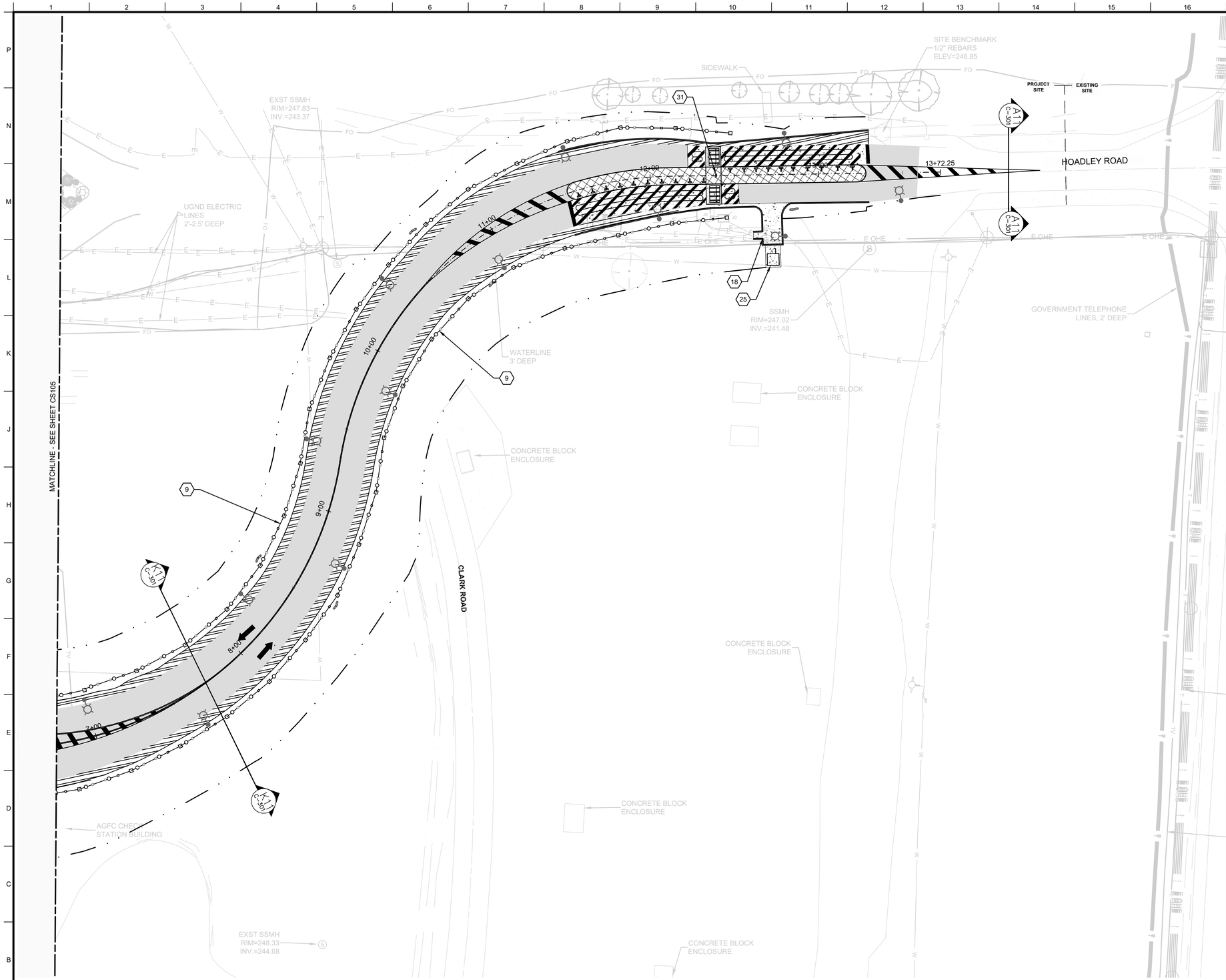
HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

PROPOSED SITE PLAN - 2

SHEET ID
CS106

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



A1 PROPOSED SITE PLAN - 3

SCALE: 1" = 30'

GENERAL NOTES

1. REFER TO SHEET C-201 FOR ROAD PAVEMENT PROFILE
2. REFER TO SHEETS CU101, CU102 AND CU103 FOR UTILITIES LAYOUT PLAN
3. REFER TO C-701 FOR ALIGNMENT DATA
4. REFER TO SHEETS C-301 TO C-303 FOR CROSS SECTIONS

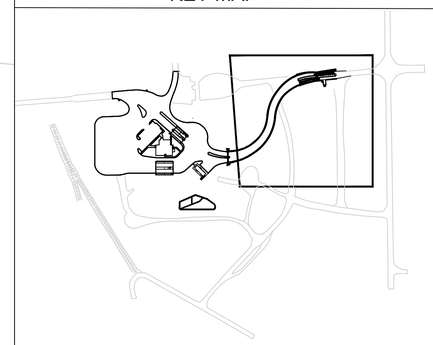
SHEET KEYNOTES

1. TIE FENCE TO EXISTING
2. INBOUND TRUCK QUEUING/HOLDING AREA
3. OUTBOUND TRUCK QUEUING/HOLDING AREA
4. PROPOSED CONCRETE SIDEWALK (TYP.), REFER K1/C-503
5. WRONG WAY DETECTION
6. PROPOSED CONCRETE CURB AND GUTTER (TYP.) REFER F2/C-501 FOR DETAILS
7. PREFABRICATED GUARD BOOTH
8. CCTV EQUIPMENT
9. ASTM M40 SINGLE RUN PASSIVE VEHICLE BARRIER (TYP.)
10. ASTM M50 SINGLE RUN PASSIVE VEHICLE BARRIER (TYP.)
11. PROPOSED CHAIN LINK SECURITY FENCE GATE (TYP.), REFER TO C-517
12. PROPOSED CHAIN LINK FENCE (TYP.), REFER C-517
13. ASPHALT PAVEMENT DETAILS (TYP.), REFER D8/C-503
14. PROPOSED CURB TRANSITION (TYP.), REFER D1/C-503
15. ACCESSIBLE SYMBOL, REFER SHEET C1/C-504 FOR DETAILS
16. ID CHECK CANOPY. REFER TO ARCHITECTURAL DRAWINGS FOR DETAILS
17. SEARCH AREA CANOPY. REFER TO ARCHITECTURAL DRAWING FOR DETAILS
18. NEW CURB CUT. REFER B12/C-501 FOR DETAILS
19. NO PARKING STRIPING. REFER SHEET J1/C-504 FOR DETAILS
20. NEW 2'X4' TRUNCATED DOMES
21. MEET AND MATCH PAVEMENT FLUSH
22. NEW ACCESSIBLE SIGN AND POST. REFER H5/C-504
23. 6' HIGH BARBED FENCE
24. HEADWALL. REFER SHEET C-525 FOR DETAILS
25. OVERWATCH BOOTH. REFER TO A-141 FOR DETAILS
26. CHASE VEHICLE PARKING
27. TL-1 MASH COMPLIANT ATTENUATORS, PCC BASE AND INSTALLATION PER SPEC 32 31 13.53
28. TRUCK SCALE PIT. REFER TO S-131 FOR DETAILS
29. BARRIER GATE ARM. SEE 2.17 PER SPEC 34 75 13.13
30. PCC PAVEMENT DETAILS (TYP.), REFER D12/C-503
31. ASTM M50 BOLLARD (TYP.)

SHEET LEGEND

- ASPHALT ROADWAY
- 8" PORTLAND CEMENT CONCRETE PAVING
- NEW CONCRETE SIDEWALK
- 4" PCC MEDIAN
- CONCRETE SHOULDER
- LIMITS OF GRADING

KEY MAP



US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY:	B.BANDA
DRAWN BY:	R.ISLAM
CHECKED BY:	R.TOLIKONDA
SUBMITTED BY:	R.TOLIKONDA
SIZE:	ANSI FULL BLEED D (22.00 X 34.00 INCHES)

ISSUE DATE: 04/17/2026
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U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

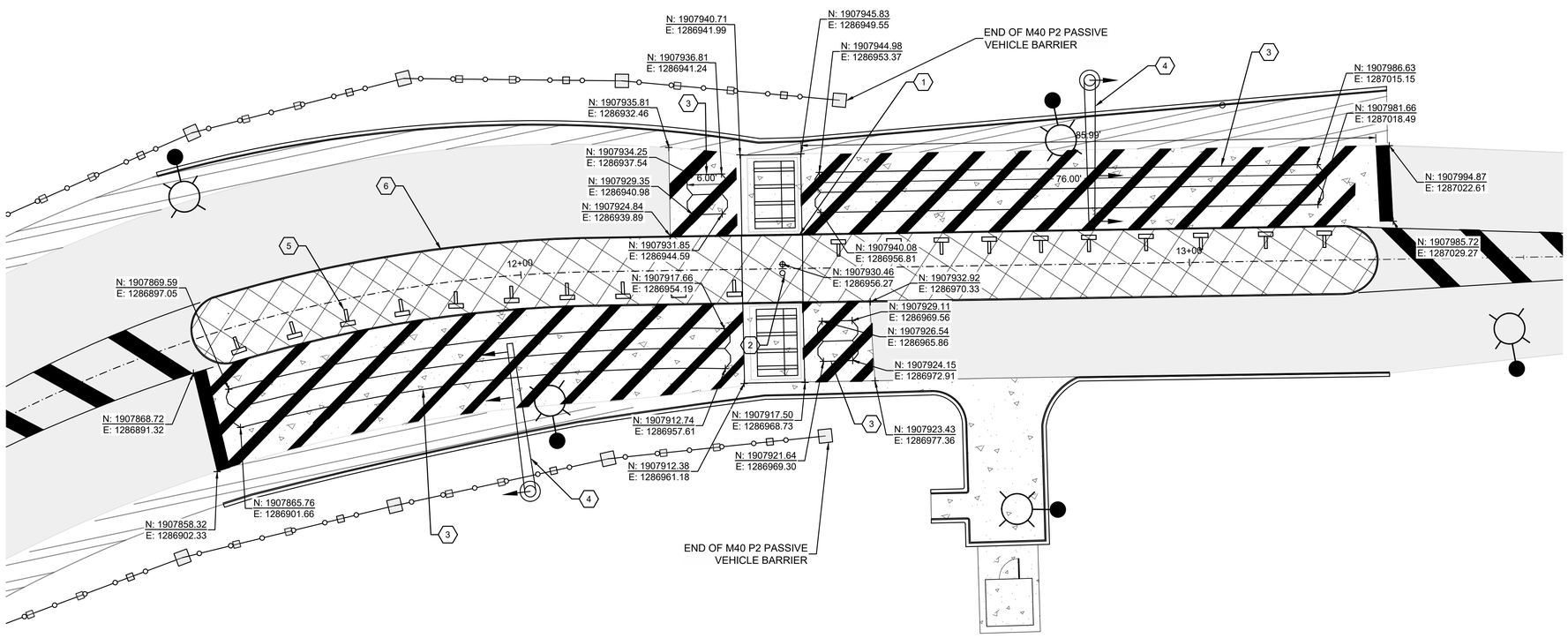
HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

PROPOSED SITE PLAN - 3

SHEET ID
CS107

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



D1 AVB SITE PLAN
SCALE: 1"=10'

GENERAL NOTES

1. REFER TO SHEET ES102 FOR AVB ELECTRICAL INFORMATION
2. REFER TO SHEET T-100 FOR AVB SECURITY INFORMATION
3. REFER TO SHEETS C-101, C-102 AND C-103 FOR AVB SIGNING AND MARKING PLAN

SHEET KEYNOTES

1. CURB OVER AVB FOUNDATION
2. ASTM M50 BOLLARD ON 2'-4" CENTERS, TYP - BOLLARD REINFORCING SHALL MAINTAIN 3" CLEARANCE TO AVB CARRIAGE BOLTS. BOLLARD SLAB MAY BE POURED MONOLITHICALLY WITH AVB SLAB.
3. VEHICLE DETECTION LOOPS - REFER TO "ACP SECURITY DETAILS" SHEET
4. AVB BARRIER SIGNAL
5. GUARD RAIL
6. CONCRETE ISLAND

SHEET LEGEND

ASPHALT ROADWAY PAVING, REFER SHEET D8 AND D12/C-503 FOR DETAILS

US Army Corps of Engineers®

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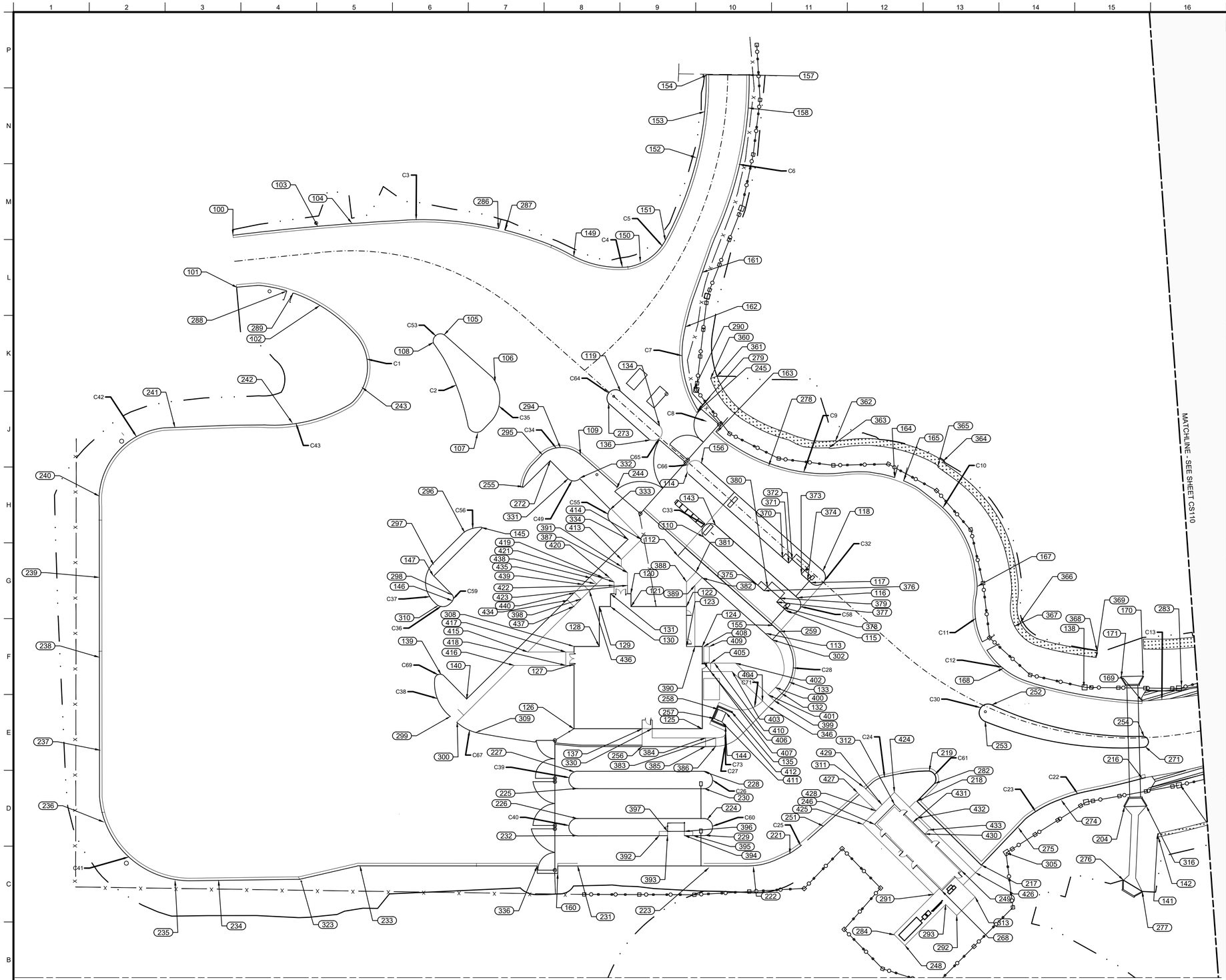
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

AVB SITE PLAN

SHEET ID
CS108

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



GENERAL NOTES

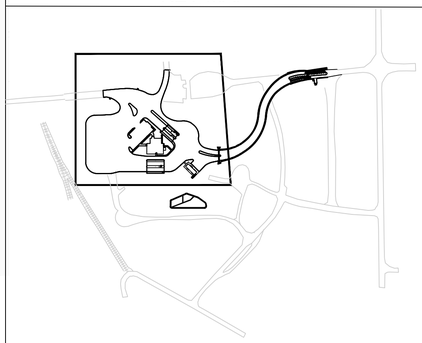
1. REFER TO SHEETS C-701, C-703 AND C-704 FOR COORDINATE TABLES AND ALIGNMENT DATA

SHEET KEYNOTES

SHEET LEGEND

- 1 — LAYOUT POINT
- C1 — CURVE NUMBER
- FENCE
- PASSIVE VEHICLE BARRIER
- LIMITS OF GRADING
- DITCH

KEY MAP



A1 SITE LAYOUT PLAN - 1
SCALE: 1"= 30'

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
SUBMITTED BY: R.TOLIKONDA
SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)

ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F8002
CONTRACT NO.: W9127S23D0035
FILE NUMBER:

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

HANA-KENALL 8A JV
2600 CITYWEST BLVD, SITE 700
HOUSTON, TX 77042

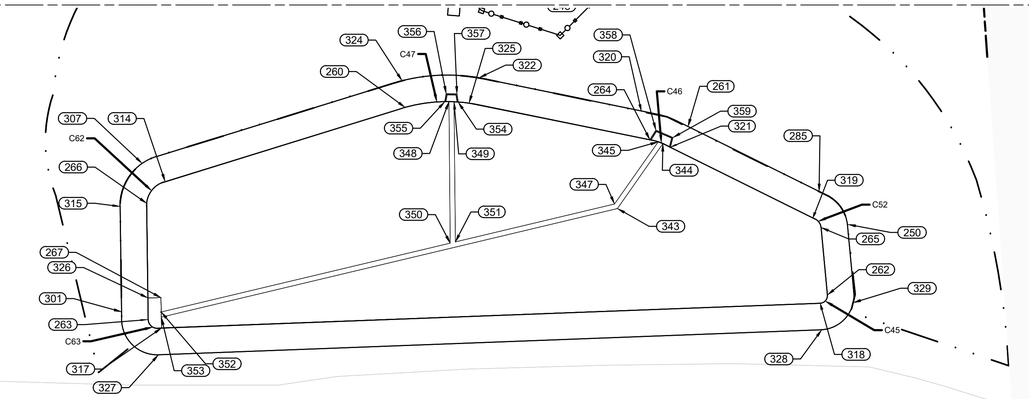
PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

SITE LAYOUT PLAN - 1

SHEET ID
CS109

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

MATCHLINE - SEE SHEET CS109



GENERAL NOTES

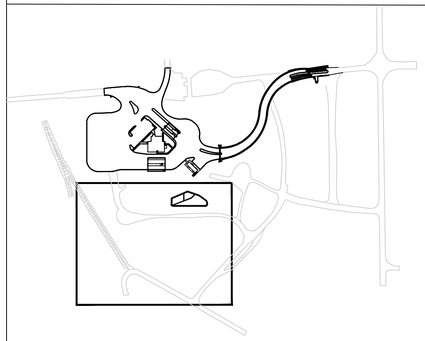
1. REFER TO SHEETS C-701, C-703 AND C-704 FOR COORDINATE TABLES AND ALIGNMENT DATA

SHEET KEYNOTES

SHEET LEGEND

- 1 — LAYOUT POINT
- C1 — CURVE NUMBER
- —— x —— FENCE
- —▫—▫—▫— PASSIVE VEHICLE BARRIER
- — · · — LIMITS OF GRADING
- DITCH

KEY MAP



PLAN NORTH

0 30' 60'

A1 SITE LAYOUT PLAN - 2
SCALE: 1" = 30'

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
SUBMITTED BY: R.TOLIKONDA
ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F8002
CONTRACT NO.: W9127S23D0035
FILE NUMBER:
SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

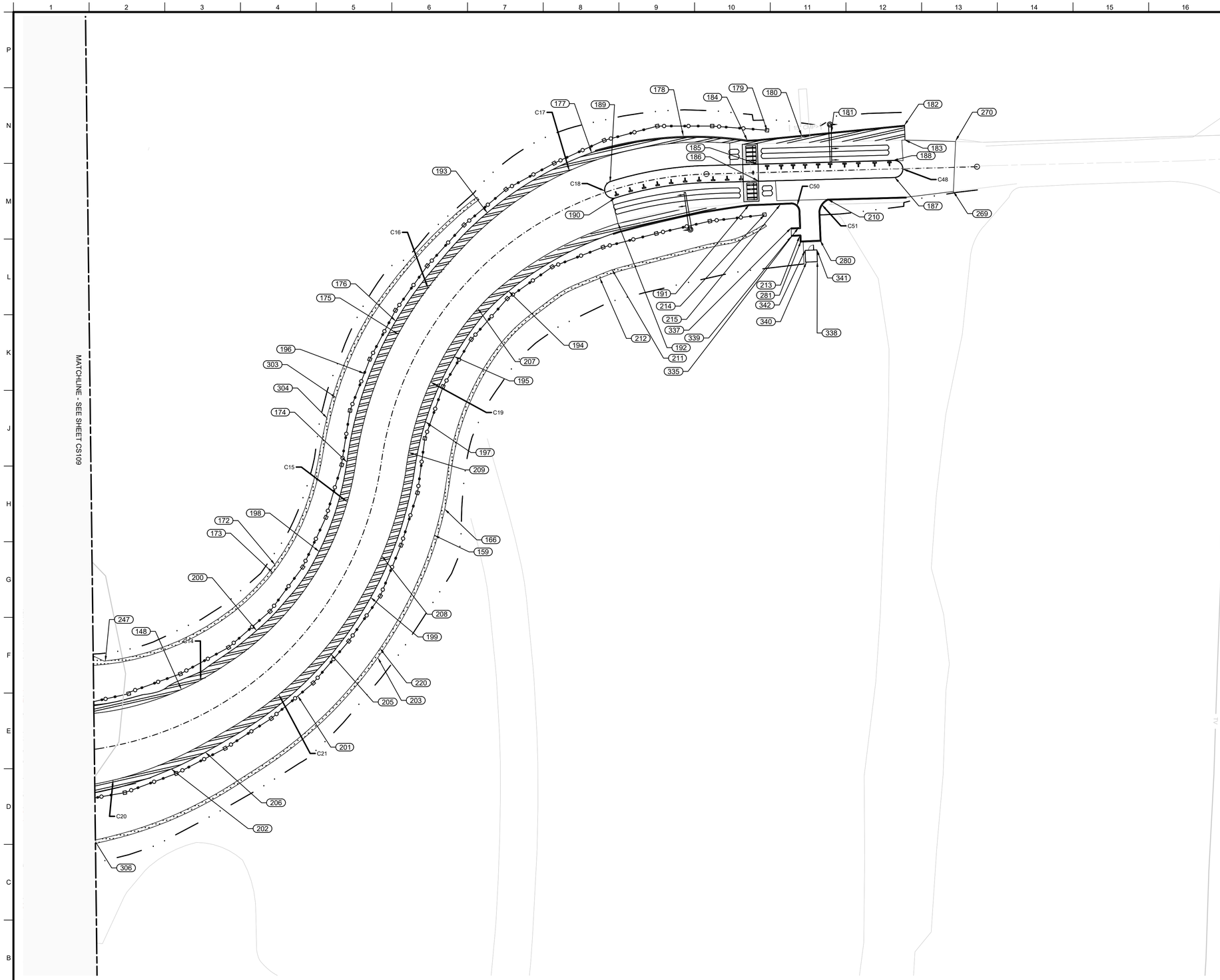
HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

SITE LAYOUT PLAN - 2

SHEET ID
CS110

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



PLAN NORTH

0 30' 60'

A1 SITE LAYOUT PLAN - 3
SCALE: 1" = 30'

GENERAL NOTES

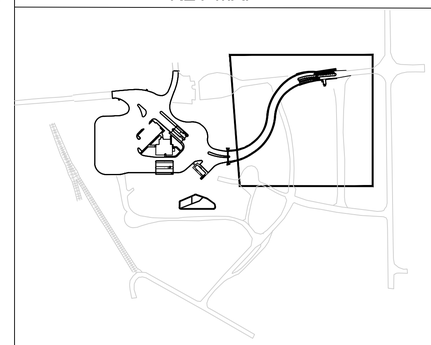
1. REFER TO SHEETS C-701, C-703 AND C-704 FOR COORDINATE TABLES AND ALIGNMENT DATA

SHEET KEYNOTES

SHEET LEGEND

- 1 — LAYOUT POINT
- C1 — CURVE NUMBER
- —— x —— FENCE
- PASSIVE VEHICLE BARRIER
- LIMITS OF GRADING
- DITCH

KEY MAP



US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
SUBMITTED BY: R.TOLIKONDA
DATE: 04/17/2026
SCALE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

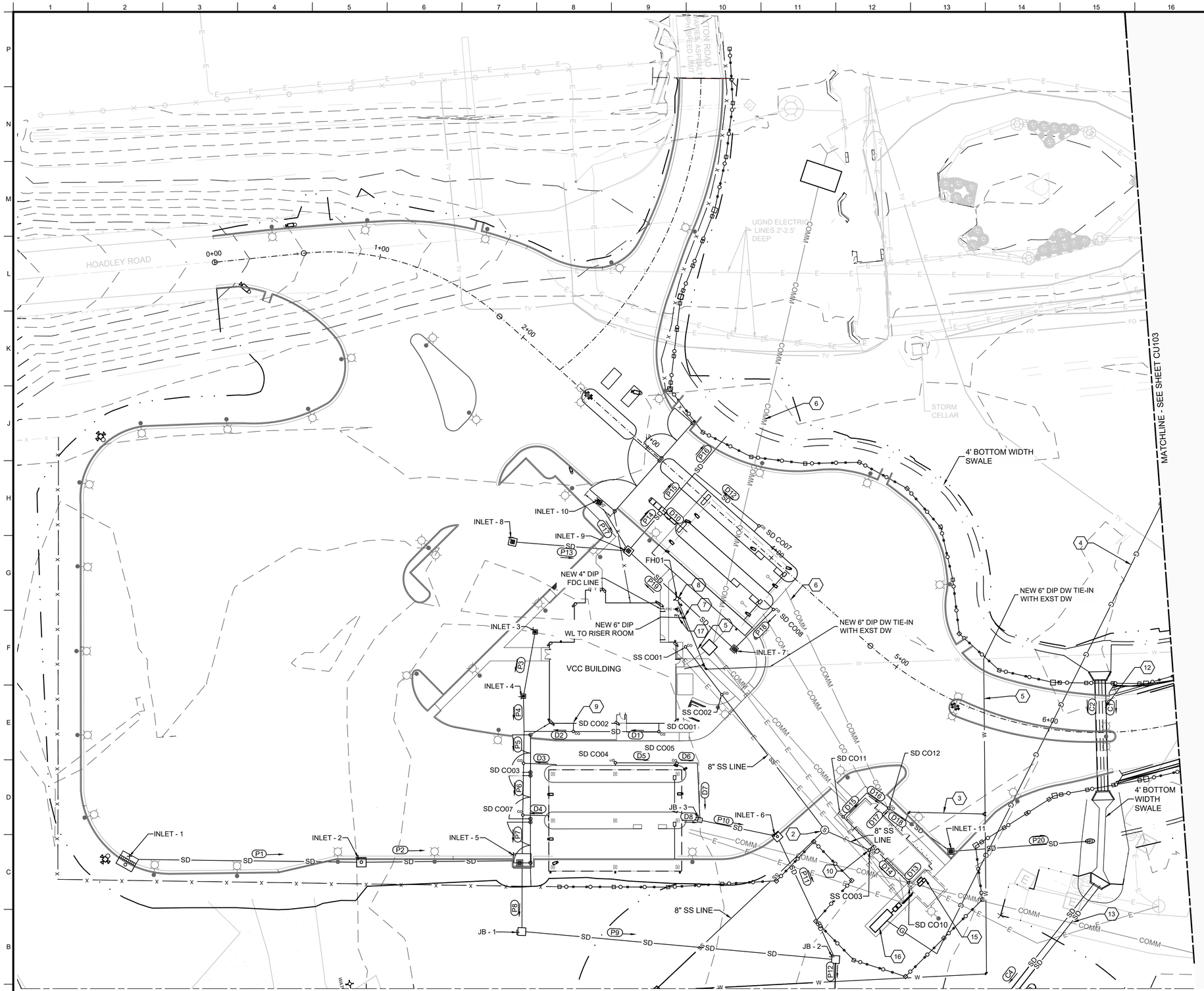
ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F8002
CONTRACT NO.: W9127S23D0035
FILE NUMBER:

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

SITE LAYOUT PLAN - 3

SHEET ID
CS111

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



A1 UTILITIES LAYOUT PLAN - 1

SCALE: 1" = 30'

GENERAL NOTES

1. THE LOCATION OF EXISTING UTILITIES SHOWN ON THESE PLANS ARE BASED ON FIELD SURVEY. UTILITY LOCATIONS ARE PROVIDED BY THE BASE. UTILITY LOCATION TO BE COORDINATED WITH CONSTRUCTION MANAGER 14 DAYS PRIOR TO EXCAVATION.
2. EXISTING UTILITY LOCATIONS ARE SHOWN APPROXIMATELY AND ARE FOR GENERAL INFORMATION PURPOSES ONLY. THE CONTRACTOR IS TO VERIFY THE LOCATION, DEPTH AND INVERT OF ALL EXISTING UTILITIES AND FACILITIES.
3. REFER TO SHEET T-101 FOR TELECOM SITE PLAN.
4. REFER TO SHEET ED101, ES101 AND ES102 FOR ELECTRICAL DEMOLITION PLAN AND SITE PLAN.
5. REFER TO P-101 G-HOUSE AND P-101 VCC FOR PLUMBING UTILITIES CONNECTION.
6. REFER TO SHEETS CG101-CG103 GRADING AND DRAINAGE PLAN.
7. REFER TO SHEETS CU104, CU107 AND CU114 FOR UTILITIES PIPES NETWORK.
8. REFER TO SHEETS C-705 AND C-706 FOR DRAINAGE PIPES AND STRUCTURES TABLES.

CALL BEFORE YOU DIG

THE CONTRACTOR SHALL CALL ARKANSAS AT 811 OR 1800 482 8998 AT LEAST 2 WORKING DAYS PRIOR TO PERFORMING ANY EXCAVATION.

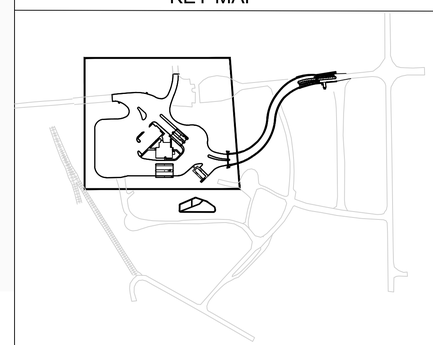
SHEET KEYNOTES

1. REMOVE AND REPLACE EXST SS LINE BY NEW 8" PVC SANITARY SEWER LINE.
2. NEW SANITARY SEWER MANHOLE. REFER SHEET C-524 FOR DETAILS.
3. NEW 1" DOMESTIC WATER LINE
4. NEW GAS LINE
5. NEW 6" DIP WATER LINE. REFER SHEET B1/C-513 FOR RESTRAINED JOINT DETAILS
6. NEW TELECOM UTILITY LINES
7. INSTALL 6" x 6" MJ TEE, 6" MJ GATE VALVE & BOX
8. NEW FH. REFER SHEET C-514 FOR CONNECTION DETAILS. SEE WATERMAIN PROFILES ON CU111 THRU CU113
9. ROOF DRAIN. REFER SHEET K14/C-503 FOR DETAILS
10. 8" SANITARY SEWER LINE TIE-IN TO GATEHOUSE
11. EXISTING 6" SANITARY SEWER LINE TO REMAIN
12. 2-24" CONCRETE CULVERT PIPES
13. 2-24" HDPE CULVERT PIPE
14. SANITARY SEWER CONC. ENCASEMENT. REFER SHEET B13/C-513 FOR DETAILS
15. BUILDING SERVICE TRANSFORMER. REFER SHEET ES101 FOR DETAILS
16. NG GENERATOR. REFER SHEET ES101 FOR DETAILS
17. FDC AND PIV CONNECTIONS, REFER SHEET C-502 FOR DETAILS
18. REFER SHEET DETAIL-A / C-527 FOR EXISTING MANHOLE WALL PIPE PENETRATION DETAIL

SHEET LEGEND

- PROPOSED LIGHT POLE
- EXISTING LIGHT POLE
- PROPOSED FIRE HYDRANT
- E — PROPOSED UNDERGROUND ELECTRIC LINE
- COMM — PROPOSED UNDERGROUND COMM LINE
- G — PROPOSED GAS LINE
- W — PROPOSED WATER LINE
- SS — PROPOSED SANITARY SEWER LINE
- SD — PROPOSED STORM DRAIN LINE
- PROPOSED HEADWALL

KEY MAP



US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY:	B.BANDA
DRAWN BY:	R.ISLAM
CHECKED BY:	R.TOLIKONDA
SUBMITTED BY:	R.TOLIKONDA
SIZE:	ANSI FULL BLEED D (22.00 X 34.00 INCHES)
ISSUE DATE:	04/17/2026
SOLICITATION NO.:	W9127S24F6002
CONTRACT NO.:	W9127S23D6035
FILE NUMBER:	

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

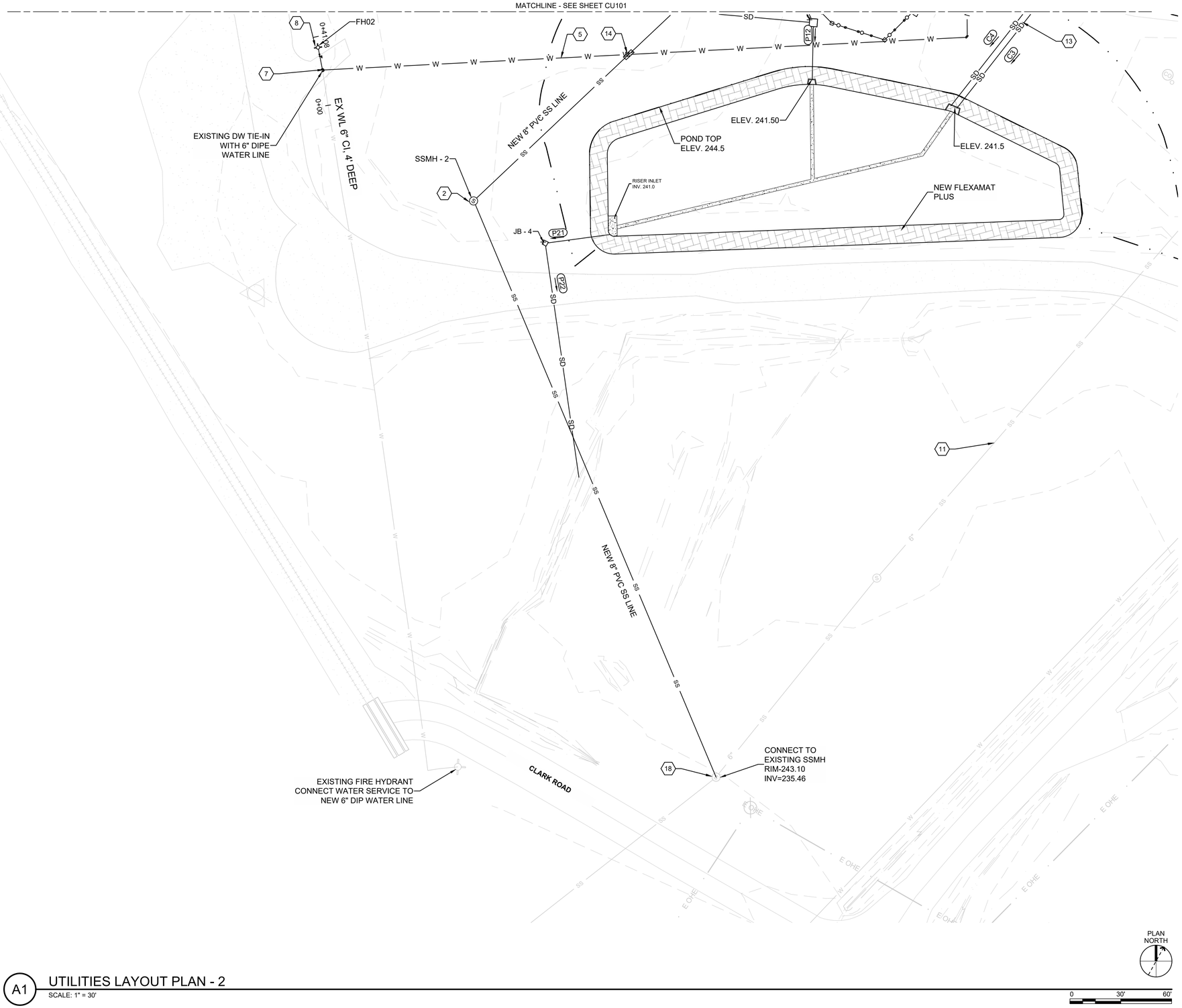
PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

UTILITIES LAYOUT PLAN - 1

SHEET ID

CU101

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



A1 UTILITIES LAYOUT PLAN - 2

SCALE: 1" = 30'

GENERAL NOTES

1. THE LOCATION OF EXISTING UTILITIES SHOWN ON THESE PLANS ARE BASED ON FIELD SURVEY. UTILITY LOCATIONS ARE PROVIDED BY THE BASE. UTILITY LOCATION TO BE COORDINATED WITH CONSTRUCTION MANAGER 14 DAYS PRIOR TO EXCAVATION.
2. EXISTING UTILITY LOCATIONS ARE SHOWN APPROXIMATELY AND ARE FOR GENERAL INFORMATION PURPOSES ONLY. THE CONTRACTOR IS TO VERIFY THE LOCATION, DEPTH AND INVERT OF ALL EXISTING UTILITIES AND FACILITIES.
3. REFER TO SHEET T-101 FOR TELECOM SITE PLAN.
4. REFER TO SHEET ED101, ES101 AND ES102 FOR ELECTRICAL DEMOLITION PLAN AND SITE PLAN.
5. REFER TO P-101 G-HOUSE AND P-101 VCC FOR PLUMBING UTILITIES CONNECTION.
6. REFER TO SHEETS CG101-CG103 GRADING AND DRAINAGE PLAN.
7. REFER TO SHEETS CU104, CU107 AND CU114 FOR UTILITIES PIPES NETWORK.
8. REFER TO SHEETS C-705 AND C-706 FOR DRAINAGE PIPES AND STRUCTURES TABLES.

CALL BEFORE YOU DIG

THE CONTRACTOR SHALL CALL ARKANSAS AT 811 OR 1800 482 8998 AT LEAST 2 WORKING DAYS PRIOR TO PERFORMING ANY EXCAVATION.

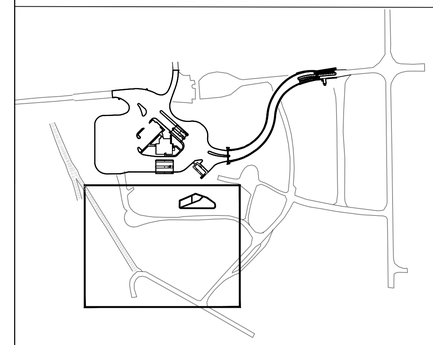
SHEET KEYNOTES

1. REMOVE AND REPLACE EXST SS LINE BY NEW 8" PVC SANITARY SEWER LINE.
2. NEW SANITARY SEWER MANHOLE. REFER SHEET C-524 FOR DETAILS.
3. NEW 1" DOMESTIC WATER LINE
4. NEW GAS LINE
5. NEW 6" DIP WATER LINE. REFER SHEET B1/C-513 FOR RESTRAINED JOINT DETAILS
6. NEW TELECOM UTILITY LINES
7. INSTALL 6" x 6" MJ TEE, 6" MJ GATE VALVE & BOX
8. NEW FH. REFER SHEET C-514 FOR CONNECTION DETAILS. SEE WATERMAIN PROFILES ON CU111 THRU CU113
9. ROOF DRAIN. REFER SHEET K14/C-503 FOR DETAILS
10. 8" SANITARY SEWER LINE TIE-IN TO GATEHOUSE
11. EXISTING 6" SANITARY SEWER LINE TO REMAIN
12. 2-24" CONCRETE CULVERT PIPES
13. 2-24" HDPE CULVERT PIPE
14. SANITARY SEWER CONC. ENCASEMENT. REFER SHEET B13/C-513 FOR DETAILS
15. BUILDING SERVICE TRANSFORMER. REFER SHEET ES101 FOR DETAILS
16. NG GENERATOR. REFER SHEET ES101 FOR DETAILS
17. FDC AND PIV CONNECTIONS, REFER SHEET C-502 FOR DETAILS
18. REFER SHEET DETAIL-A / C-527 FOR EXISTING MANHOLE WALL PIPE PENETRATION DETAIL

SHEET LEGEND

- PROPOSED LIGHT POLE
- EXISTING LIGHT POLE
- PROPOSED FIRE HYDRANT
- E — PROPOSED UNDERGROUND ELECTRIC LINE
- COMM — PROPOSED UNDERGROUND COMM LINE
- G — PROPOSED GAS LINE
- W — PROPOSED WATER LINE
- SS — PROPOSED SANITARY SEWER LINE
- SD — PROPOSED STORM DRAIN LINE
- PROPOSED HEADWALL

KEY MAP



US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
SUBMITTED BY: R.TOLIKONDA
ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D6035
FILE NUMBER:
SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

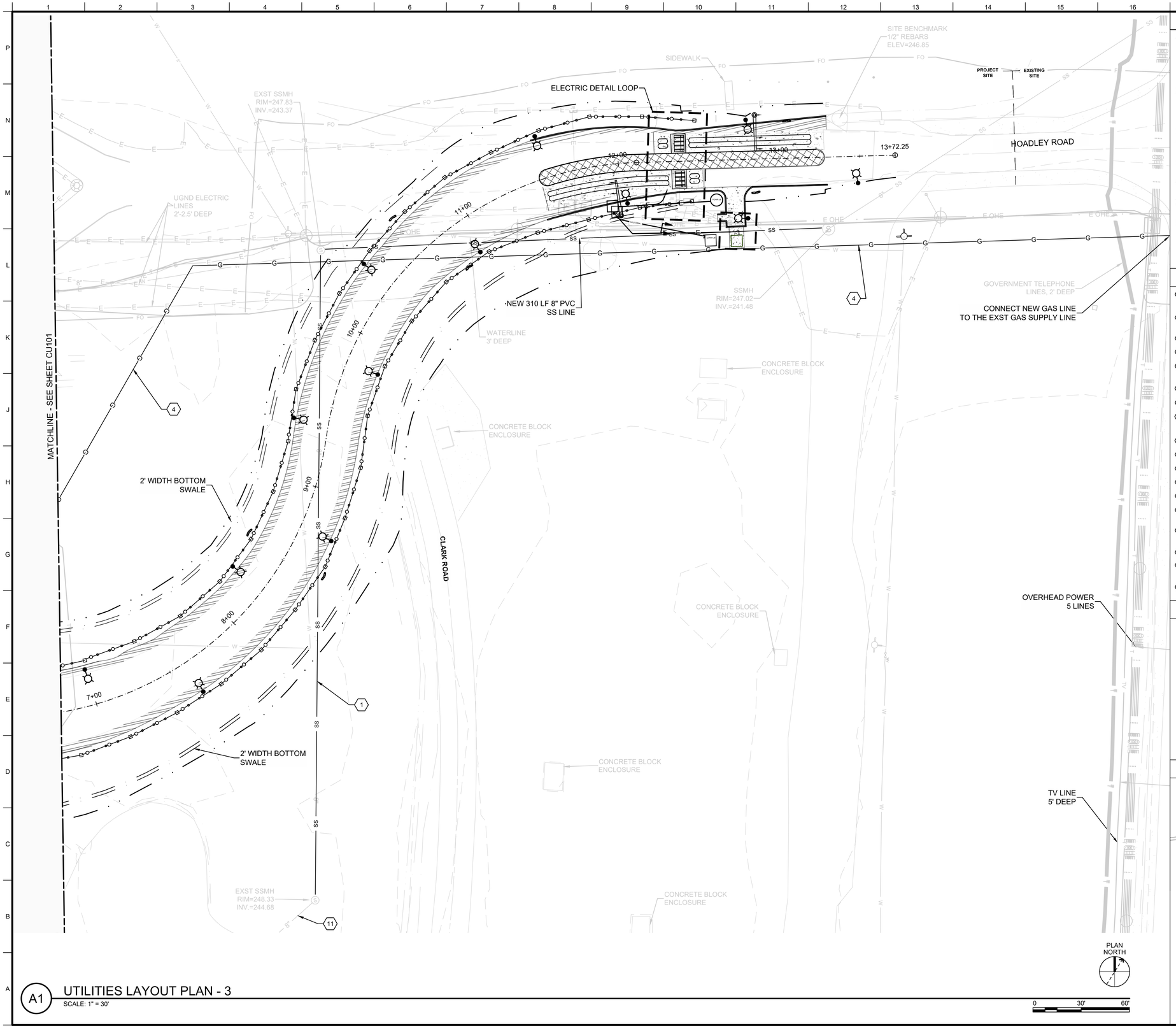
HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

UTILITIES LAYOUT PLAN - 2

SHEET ID
CU102

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



GENERAL NOTES

1. THE LOCATION OF EXISTING UTILITIES SHOWN ON THESE PLANS ARE BASED ON FIELD SURVEY. UTILITY LOCATIONS ARE PROVIDED BY THE BASE. UTILITY LOCATION TO BE COORDINATED WITH CONSTRUCTION MANAGER 14 DAYS PRIOR TO EXCAVATION.
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3. REFER TO SHEET T-101 FOR TELECOM SITE PLAN.
4. REFER TO SHEET ED101, ES101 AND ES102 FOR ELECTRICAL DEMOLITION PLAN AND SITE PLAN.
5. REFER TO P-101 G-HOUSE AND P-101 VCC FOR PLUMBING UTILITIES CONNECTION.
6. REFER TO SHEETS CG101-CG103 GRADING AND DRAINAGE PLAN.
7. REFER TO SHEETS CU104, CU107 AND CU114 FOR UTILITIES PIPES NETWORK.
8. REFER TO SHEETS C-705 AND C-706 FOR DRAINAGE PIPES AND STRUCTURES TABLES.

CALL BEFORE YOU DIG

THE CONTRACTOR SHALL CALL ARKANSAS AT 811 OR 1800 482 8998 AT LEAST 2 WORKING DAYS PRIOR TO PERFORMING ANY EXCAVATION.

SHEET KEYNOTES

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2. NEW SANITARY SEWER MANHOLE. REFER SHEET C-524 FOR DETAILS.
3. NEW 1" DOMESTIC WATER LINE
4. NEW GAS LINE
5. NEW 6" DIP WATER LINE. REFER SHEET B1/C-513 FOR RESTRAINED JOINT DETAILS
6. NEW TELECOM UTILITY LINES
7. INSTALL 6" x 6" MJ TEE, 6" MJ GATE VALVE & BOX
8. NEW FH. REFER SHEET C-514 FOR CONNECTION DETAILS. SEE WATERMAIN PROFILES ON CU111 THRU CU113
9. ROOF DRAIN. REFER SHEET K14/C-503 FOR DETAILS
10. 8" SANITARY SEWER LINE TIE-IN TO GATEHOUSE
11. EXISTING 6" SANITARY SEWER LINE TO REMAIN
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13. 2-24" HDPE CULVERT PIPE
14. SANITARY SEWER CONC. ENCASEMENT. REFER SHEET B13/C-513 FOR DETAILS
15. BUILDING SERVICE TRANSFORMER. REFER SHEET ES101 FOR DETAILS
16. NG GENERATOR. REFER SHEET ES101 FOR DETAILS
17. FDC AND PIV CONNECTIONS, REFER SHEET C-502 FOR DETAILS
18. REFER SHEET DETAIL-A / C-527 FOR EXISTING MANHOLE WALL PIPE PENETRATION DETAIL

SHEET LEGEND

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- EXISTING LIGHT POLE
- PROPOSED FIRE HYDRANT
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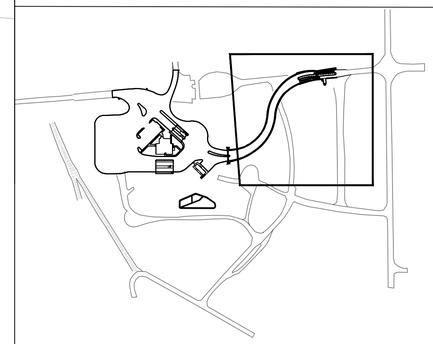
KEY MAP



A1 UTILITIES LAYOUT PLAN - 3
SCALE: 1" = 30'

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
SUBMITTED BY: R.TOLIKONDA
ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D6035
FILE NUMBER:
SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

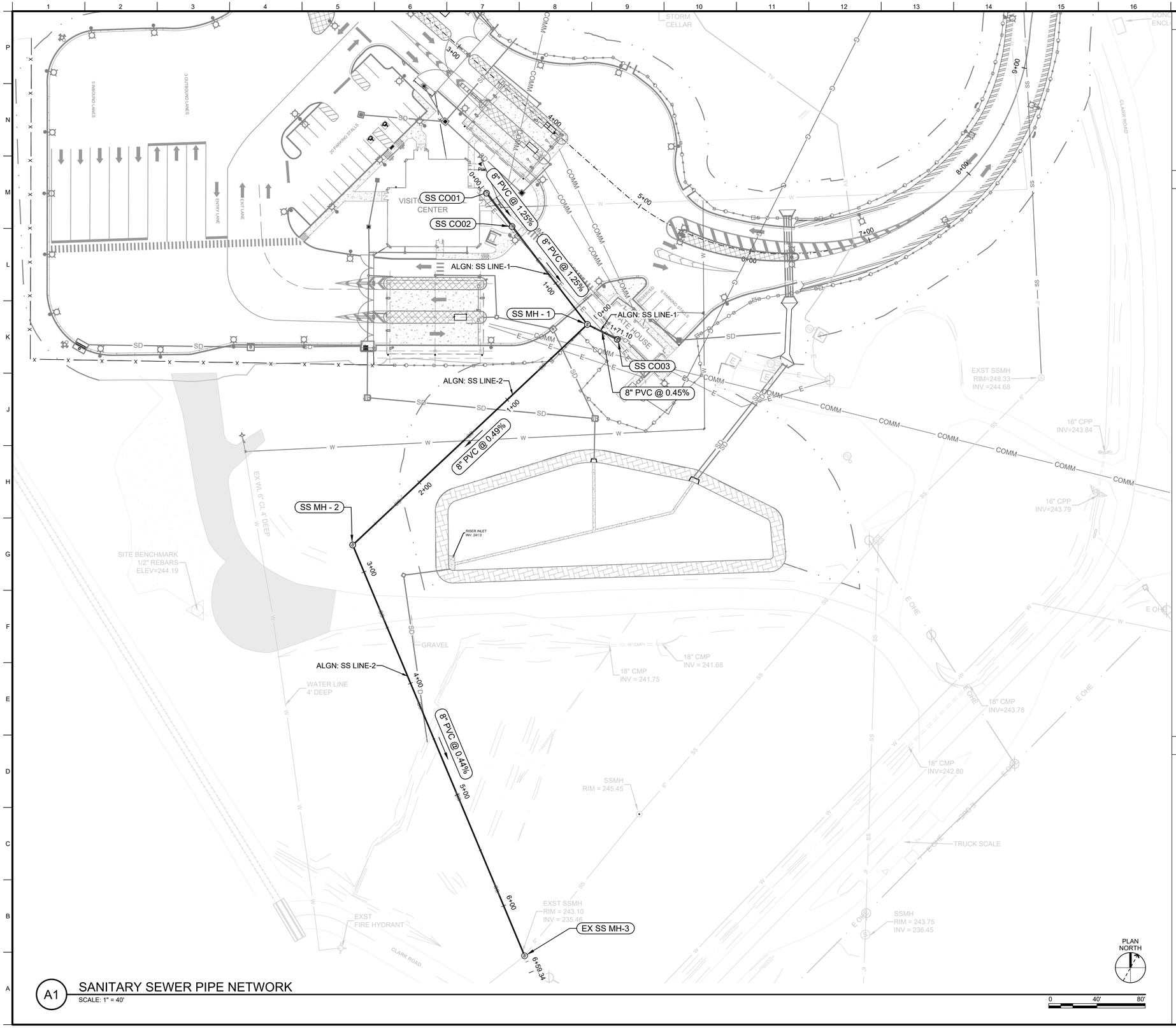
HANA-KENALL 8A JV
2500 CITYWEST BLVD. STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

UTILITIES LAYOUT PLAN - 3

SHEET ID
CU103

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



A1 SANITARY SEWER PIPE NETWORK
SCALE: 1" = 40'

GENERAL NOTES

1. REFER TO SHEETS CU101, CU102 AND CU103 FOR UTILITIES PLAN LAYOUT.
2. REFER TO SHEET CU104 FOR SANITARY SEWER PIPE NETWORK.
3. REFER TO SHEET CU107 FOR DRAINAGE PIPES NETWORK.
4. REFER TO SHEET CU114 FOR WATER PIPES NETWORK.
5. REFER TO SHEETS CU105 AND CU106 FOR SANITARY SEWER PROFILES.
6. REFER TO SHEETS CU108 THRU CU113 FOR DRAINAGE PROFILES.
7. REFER TO SHEETS CU115, CU116 AND CU117 FOR WATER PROFILES.
8. REFER TO SHEET C-705 FOR STORM PIPES TABLE
9. REFER TO SHEET C-706 FOR STORM STRUCTURES TABLE

SHEET KEYNOTES

SHEET LEGEND

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.ISLAM
SUBMITTED BY: R.TOLUKONDA
ISSUE DATE: 04/17/2026
SOLICITATION NO.: W912725Z4F6002
CONTRACT NO.: W912725D0035
FILE NUMBER:
SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

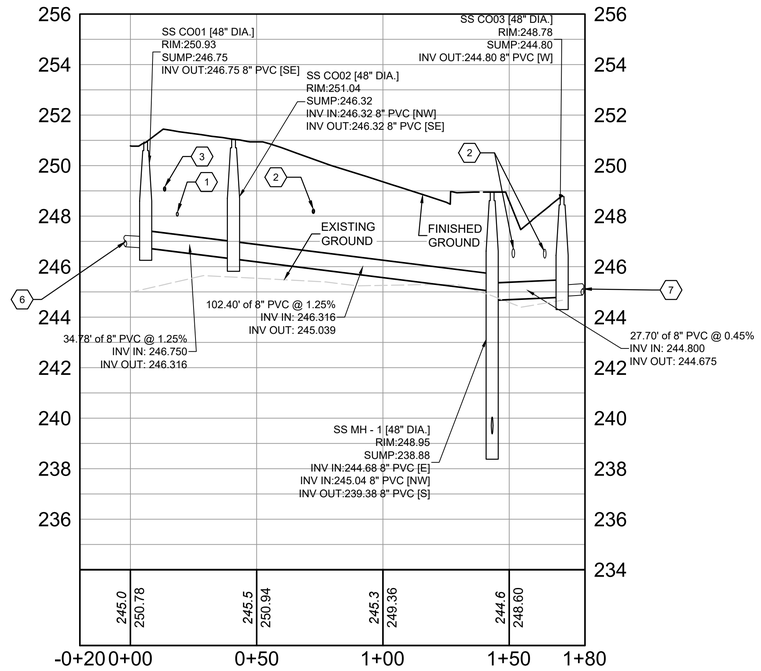
HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

SANITARY SEWER PIPE NETWORK

SHEET ID
CU104

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



F5 SEWER PROFILE - ALGN SS LINE-1
SANITARY SEWER VCC AND GATE HOUSE : STA -0+10 - STA 1+80
SCALE: HORIZONTAL - 1"=30' VERTICAL - 1"=2'

GENERAL NOTES

1. ALL ELEVATIONS ARE IN NORTH AMERICAN VERTICAL DATUM 1988 (NAVD1988).
2. PIPE CONNECTION SHOULD BE PROVIDED WITH GASKET OR SEALS TO PREVENT EXFILTRATION.
3. THE END AND START OF PIPE SECTION TO THE MANHOLE AND FROM THE MANHOLE WILL BE FLUSH WITH CONCRETE.
4. CONTRACTORS TO FIELD VERIFY ALL THE INVERT ELEVATIONS AND EXACT LOCATION OF THE PIPES.
5. ENSURE THAT THE VERTICAL AND HORIZONTAL SEPARATIONS BETWEEN THE WATER LINE AND SANITARY SEWER LINE TO THE APPLICABLE STANDARDS AND REGULATIONS.
6. DETAILS OF THESE SEPARATIONS SHOULD BE COORDINATED WITH THE PLUMBING, MECHANICAL, OR OTHER RELEVANT DETAILS PROVIDED.
7. FOR PIPE CONNECTION DETAILS AND REQUIREMENTS, REFER TO THE MECHANICAL AND PLUMBING SHEETS. COORDINATE FINAL LAYOUT AND INSTALLATION WITH MECHANICAL AND PLUMBING DRAWINGS AS INDICATED.
8. REFER TO SHEET CU104 FOR SANITARY SEWER PIPES NETWORK.
9. REFER TO SHEETS CU105 AND CU106 FOR SANITARY SEWER PROFILES.

SHEET KEYNOTES

1. NEW UNDERGROUND 1 1/2" CU SERVICE WATER LINE.
2. NEW UNDERGROUND ELECTRIC LINE
3. NEW UNDERGROUND COMM LINE
4. NEW UNDERGROUND GAS LINE
5. NEW 18 INCH CMP STORM DRAIN
6. REFER TO SHEET P-101 VCC FOR CONTINUATION
7. REFER TO SHEET P-101 G-HOUSE FOR CONTINUATION

SHEET LEGEND

US Army Corps of Engineers®

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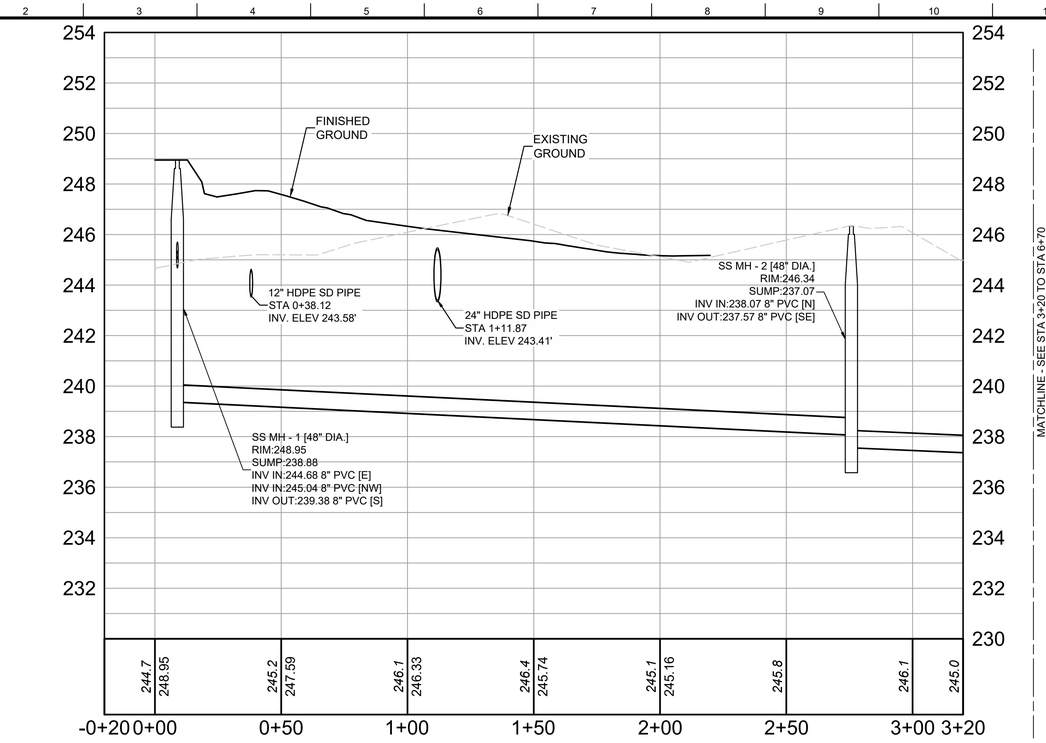
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

SANITARY SEWER PROFILE - 1

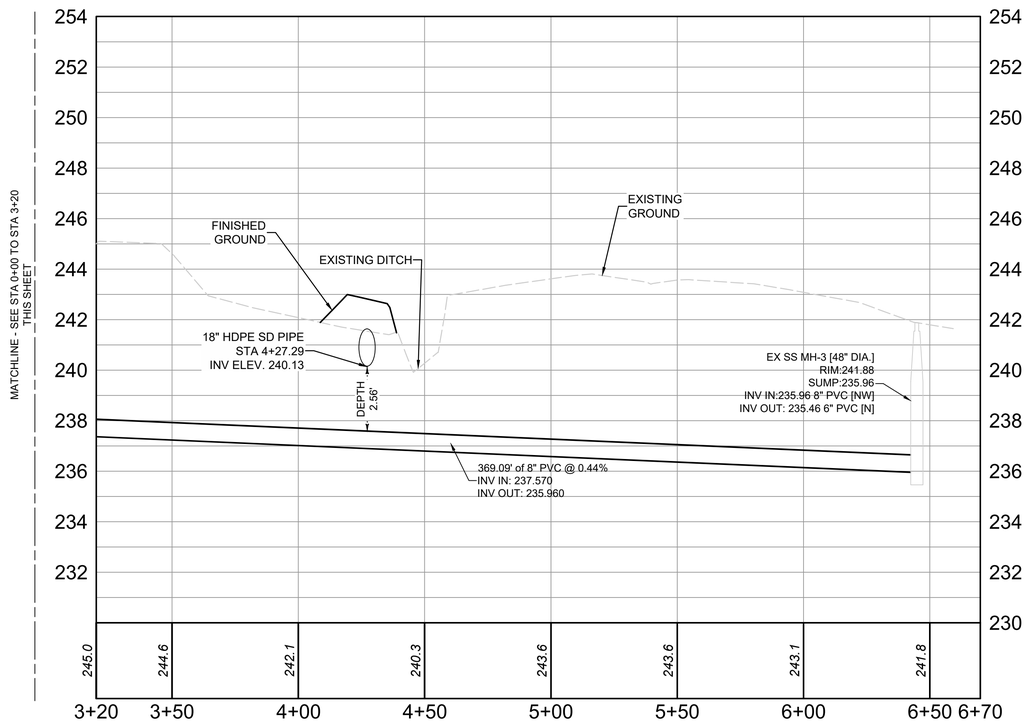
SHEET ID
CU105

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



H2 SEWER PROFILE - ALGN SS LINE-2: 8" PVC MAIN LINE : STA -0+20 TO 3+20

SCALE: HORIZONTAL - 1"=30' VERTICAL - 1"=2'



A2 SEWER PROFILE - ALGN SS LINE-2: 8" PVC MAIN LINE : STA 3+20 TO 6+60

SCALE: HORIZONTAL - 1"=30' VERTICAL - 1"=2'

GENERAL NOTES

1. ALL ELEVATIONS ARE IN NORTH AMERICAN VERTICAL DATUM 1988 (NAVD1988).
2. PIPE CONNECTION SHOULD BE PROVIDED WITH GASKET OR SEALS TO PREVENT EXFILTRATION.
3. THE END AND START OF PIPE SECTION TO THE MANHOLE AND FROM THE MANHOLE WILL BE FLUSH WITH CONCRETE.
4. CONTRACTORS TO FIELD VERIFY ALL THE INVERT ELEVATIONS AND EXACT LOCATION OF THE PIPES.
5. ENSURE THAT THE VERTICAL AND HORIZONTAL SEPARATIONS BETWEEN THE WATER LINE AND SANITARY SEWER LINE TO THE APPLICABLE STANDARDS AND REGULATIONS.
6. DETAILS OF THESE SEPARATIONS SHOULD BE COORDINATED WITH THE PLUMBING, MECHANICAL, OR OTHER RELEVANT DETAILS PROVIDED.
7. FOR PIPE CONNECTION DETAILS AND REQUIREMENTS, REFER TO THE MECHANICAL AND PLUMBING SHEETS. COORDINATE FINAL LAYOUT AND INSTALLATION WITH MECHANICAL AND PLUMBING DRAWINGS AS INDICATED.
8. REFER TO SHEET CU104 FOR SANITARY SEWER PIPES NETWORK.
9. REFER TO SHEETS CU105 AND CU106 FOR SANITARY SEWER PROFILES.

SHEET KEYNOTES

1. NEW UNDERGROUND 1 1/2" CU SERVICE WATER LINE.
2. NEW UNDERGROUND ELECTRIC LINE
3. NEW UNDERGROUND COMM LINE
4. NEW UNDERGROUND GAS LINE
5. NEW 18 INCH CMP STORM DRAIN
6. REFER TO SHEET P-101 VCC FOR CONTINUATION
7. REFER TO SHEET P-101 G-HOUSE FOR CONTINUATION

SHEET LEGEND

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D6035
FILE NUMBER:

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
SUBMITTED BY: R.TOLIKONDA
SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

HANA-KENALL 8A JV
2500 CITYWEST BLVD. STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

SANITARY SEWER PROFILE - 2

SHEET ID
CU106

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

GENERAL NOTES

1. REFER TO SHEETS CU101, CU102 AND CU103 FOR UTILITIES PLAN LAYOUT.
2. REFER TO SHEET CU104 FOR SANITARY SEWER PIPE NETWORK.
3. REFER TO SHEET CU107 FOR DRAINAGE PIPES NETWORK.
4. REFER TO SHEET CU114 FOR WATER PIPES NETWORK.
5. REFER TO SHEETS CU105 AND CU106 FOR SANITARY SEWER PROFILES.
6. REFER TO SHEETS CU108 THRU CU113 FOR DRAINAGE PROFILES.
7. REFER TO SHEETS CU115, CU116 AND CU117 FOR WATER PROFILES.
8. REFER TO SHEET C-705 FOR STORM PIPES TABLE
9. REFER TO SHEET C-706 FOR STORM STRUCTURES TABLE

SHEET KEYNOTES

1. DRAINAGE PROFILE - 1 (ALGN 1)
2. DRAINAGE PROFILE - 2 (ALGN 2)
3. DRAINAGE PROFILE - 3 (ALGN 3)
4. DRAINAGE PROFILE - 4 & 5 (ALGN 4)
5. DRAINAGE PROFILE - 6 (ALGN 5)
6. DRAINAGE PROFILE - 7 (ALGN 6)
7. DRAINAGE PROFILE - 8 (ALGN 7)
8. DRAINAGE PROFILE - 9 (ALGN 8)
9. DRAINAGE PROFILE - 10 (DS ALGN 1)
10. DRAINAGE PROFILE - 14 (DS ALGN 2)
11. DRAINAGE PROFILE - 15 (DS ALGN 3)
12. DRAINAGE PROFILE - 5 (DS ALGN 4)
13. DRAINAGE PROFILE - 11 (DS ALGN 5)
14. DRAINAGE PROFILE - 12 (DS ALGN 6)
15. DRAINAGE PROFILE - 13 (DS ALGN 7)

SHEET LEGEND

A1 STORM DRAIN NETWORK
SCALE: 1" = 40'

PLAN NORTH

0 40' 80'

US Army Corps of Engineers®

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DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
SUBMITTED BY: R.TOLIKONDA
SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)
ISSUE DATE: 04/17/2026
SOLICITATION NO.: W912S7-24-F-6002
CONTRACT NO.: W912S7-25-C-B035
FILE NUMBER:

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

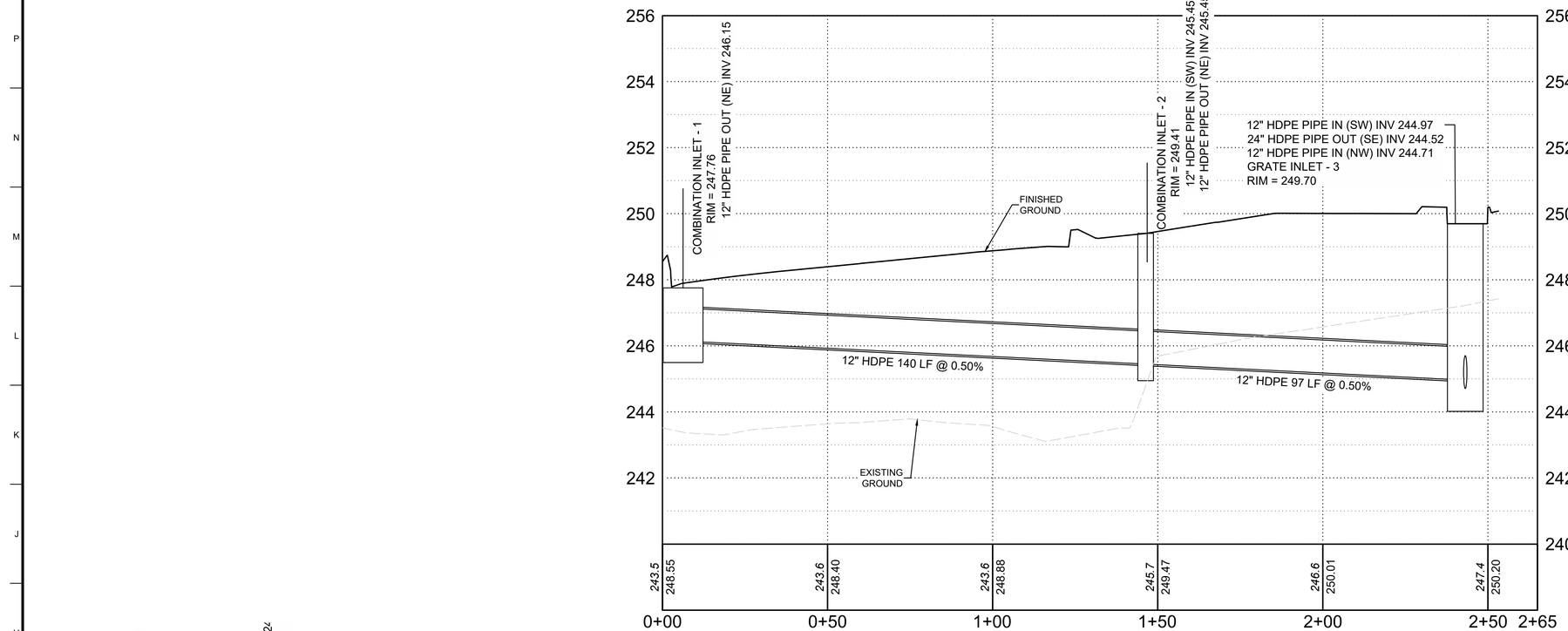
HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 2700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

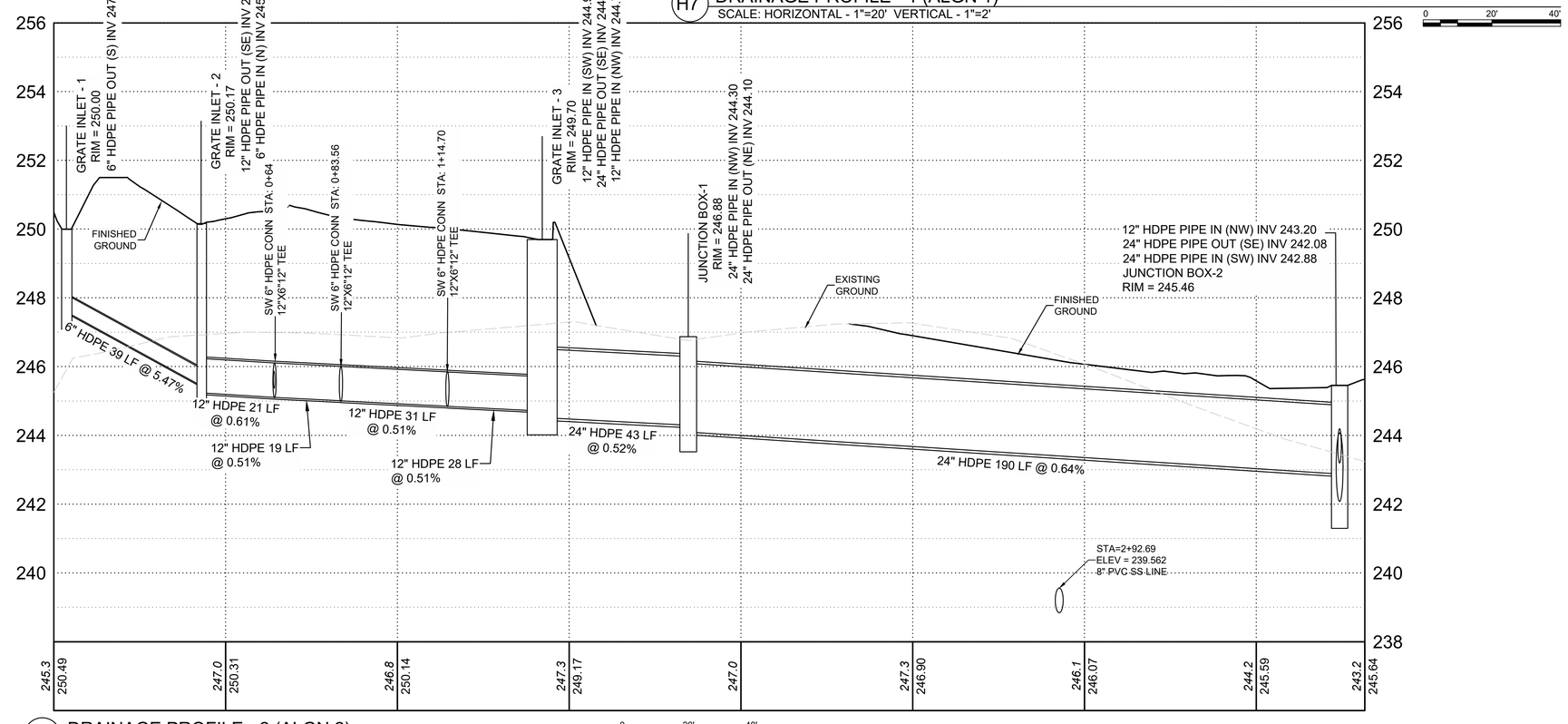
STORM DRAIN NETWORK

SHEET ID
CU107

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



H7 DRAINAGE PROFILE - 1 (ALGN 1)
SCALE: HORIZONTAL - 1"=20' VERTICAL - 1"=2'



A1 DRAINAGE PROFILE - 2 (ALGN 2)
SCALE: HORIZONTAL - 1"=20' VERTICAL - 1"=2'

GENERAL NOTES

1. REFER TO SHEETS CU101, CU102 AND CU103 FOR STORM DRAIN PLAN LAYOUT.
2. REFER TO SHEET CU107 FOR DRAINAGE PIPE NETWORK.
3. REFER TO SHEETS CU108, CU109, CU110, CU111, CU112 AND CU113 FOR DRAINAGE PROFILES.

SHEET KEYNOTES

SHEET LEGEND

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

ISSUE DATE:	04/17/2026
SOLICITATION NO.:	W9127S24F6002
CONTRACT NO.:	W9127S23D0035
FILE NUMBER:	
SIZE:	ANSI FULL BLEED D (22.00 X 34.00 INCHES)

DESIGNED BY:	B.BANDA
DRAWN BY:	R.ISLAM
CHECKED BY:	R.TOLIKONDA
SUBMITTED BY:	R.TOLIKONDA

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

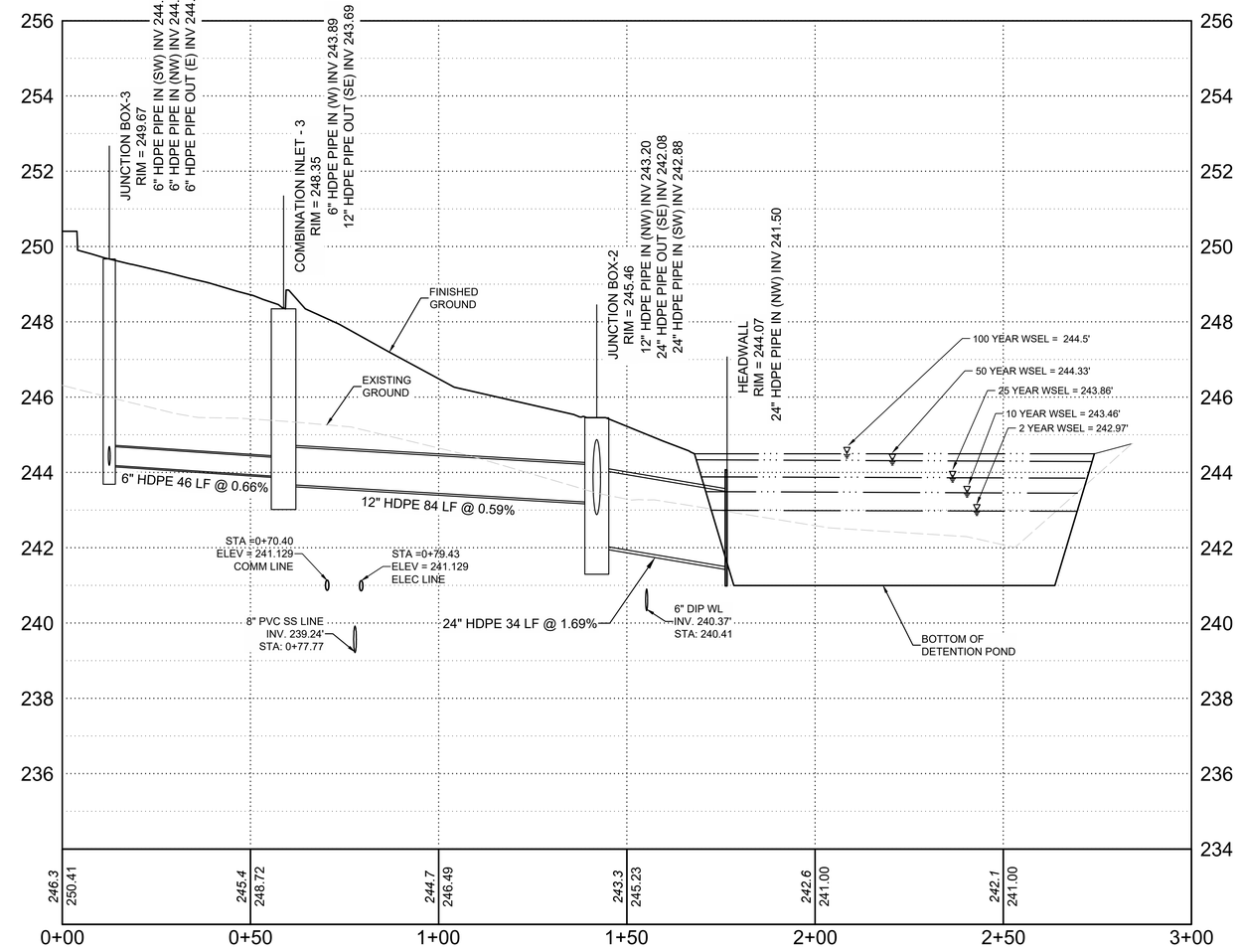
HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

DRAINAGE PROFILES - 1

SHEET ID
CU108

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



D4 DRAINAGE PROFILE - 3 (ALGN 3)

SCALE: HORIZONTAL - 1"=20' VERTICAL - 1"=2'

0 20' 40'

GENERAL NOTES

1. REFER TO SHEETS CU101, CU102 AND CU103 FOR STORM DRAIN PLAN LAYOUT.
2. REFER TO SHEET CU107 FOR DRAINAGE PIPE NETWORK.
3. REFER TO SHEETS CU108, CU109, CU110, CU111, CU112 AND CU113 FOR DRAINAGE PROFILES.

SHEET KEYNOTES

SHEET LEGEND

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MARK	DESCRIPTION	DATE

ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D0035
FILE NUMBER:

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
SUBMITTED BY: R.TOLIKONDA
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U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

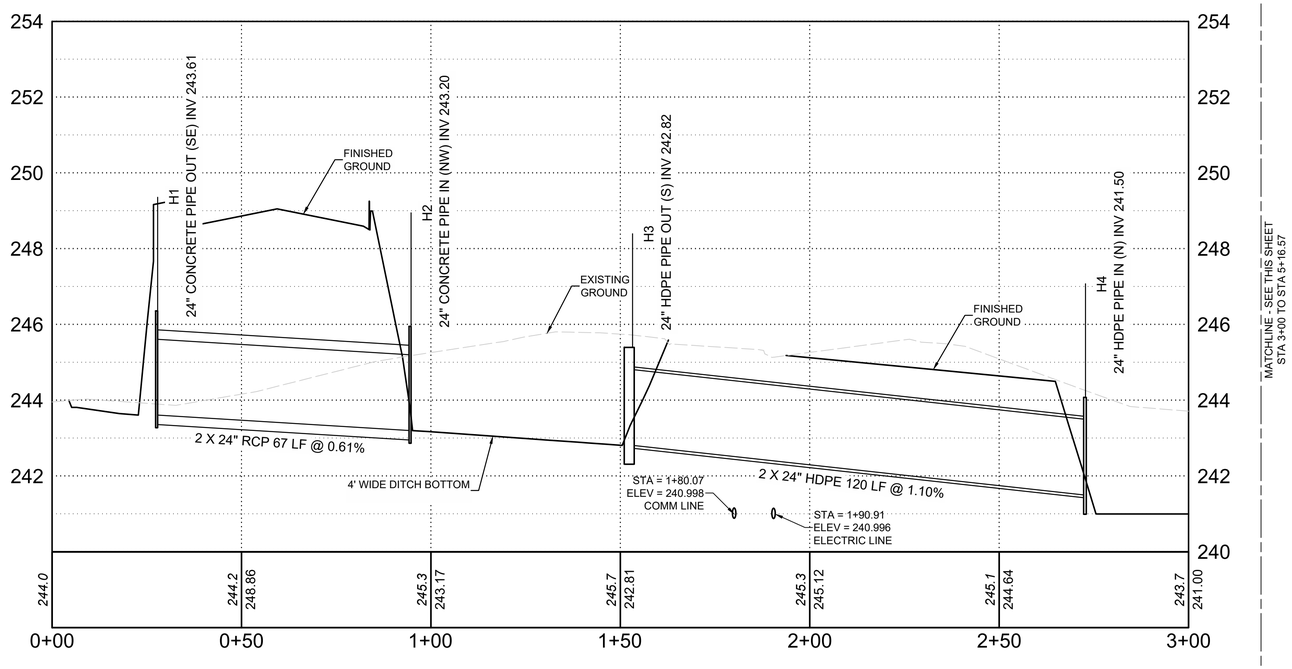
HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

DRAINAGE PROFILES - 2

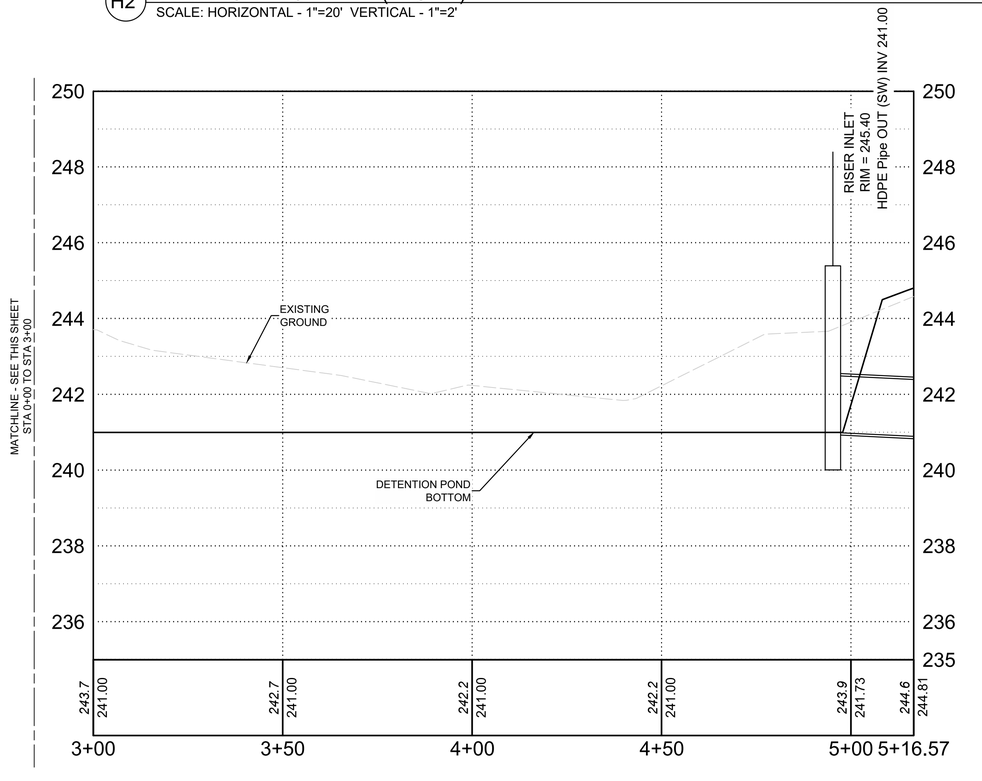
SHEET ID
CU109

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



H2 DRAINAGE PROFILE - 4 (ALGN 4)
SCALE: HORIZONTAL - 1"=20' VERTICAL - 1"=2'

0 20' 40'



A2 DRAINAGE PROFILE - 4 (ALGN 4)
SCALE: HORIZONTAL - 1"=20' VERTICAL - 1"=2'

0 20' 40'

GENERAL NOTES

1. REFER TO SHEETS CU101, CU102 AND CU103 FOR STORM DRAIN PLAN LAYOUT.
2. REFER TO SHEET CU107 FOR DRAINAGE PIPE NETWORK.
3. REFER TO SHEETS CU108, CU109, CU110, CU111, CU112 AND CU113 FOR DRAINAGE PROFILES.

SHEET KEYNOTES

SHEET LEGEND

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DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
SUBMITTED BY: R.TOLIKONDA
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ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D6035
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U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

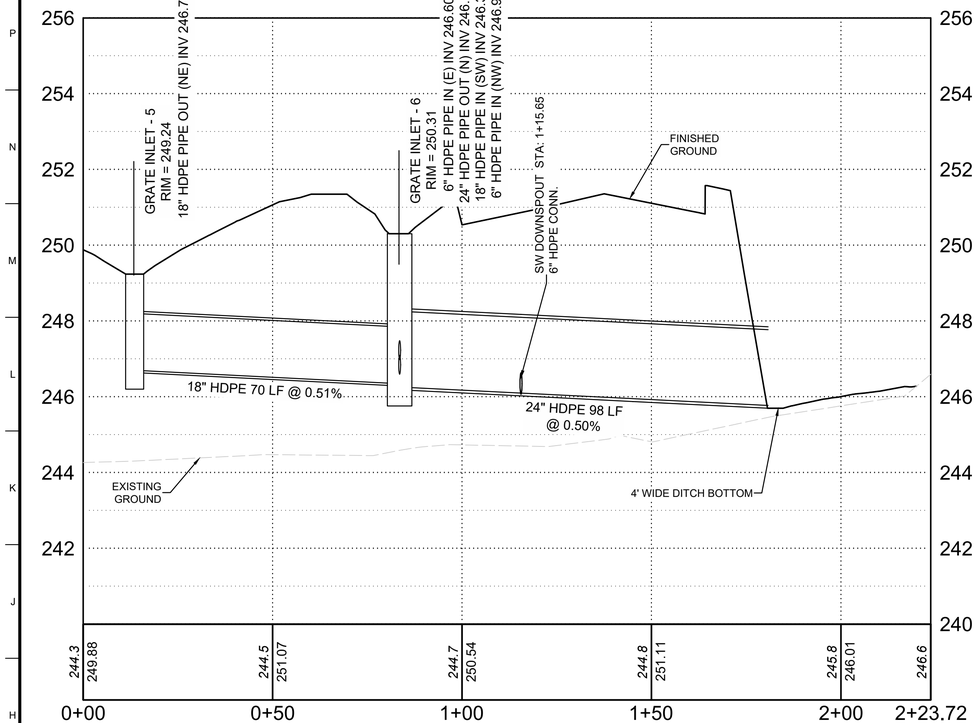
HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

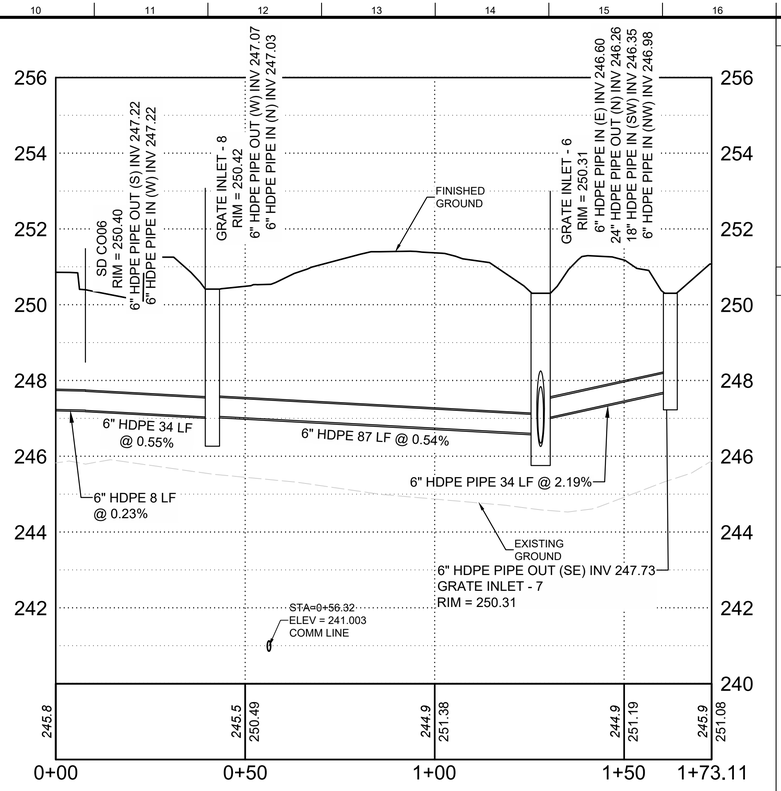
DRAINAGE PROFILES - 3

SHEET ID
CU110

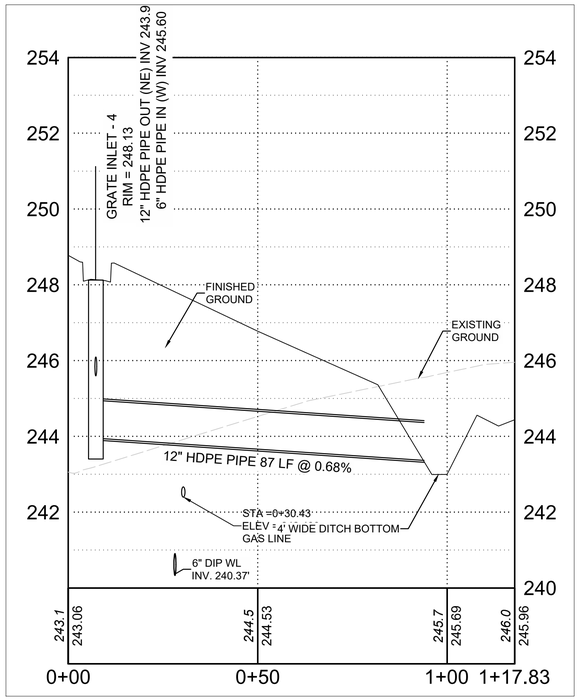
CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



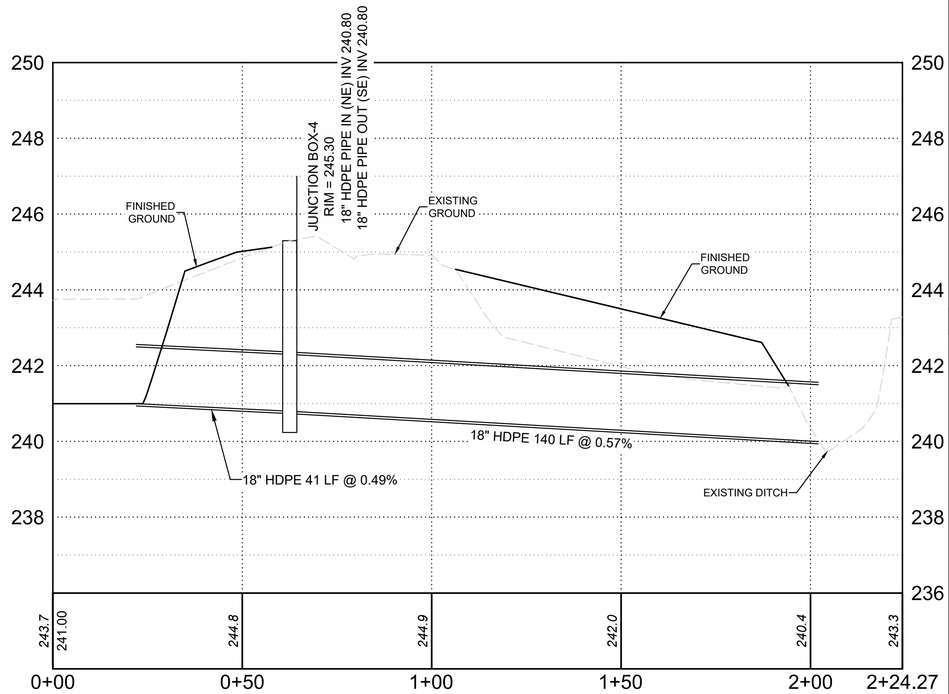
H1 DRAINAGE PROFILE - 6 (ALGN 5)
SCALE: HORIZONTAL - 1"=20' VERTICAL - 1"=2'



G10 DRAINAGE PROFILE - 7 (ALGN 6)
SCALE: HORIZONTAL - 1"=20' VERTICAL - 1"=2'



A1 DRAINAGE PROFILE - 8 (ALGN 7)
SCALE: HORIZONTAL - 1"=20' VERTICAL - 1"=2'



A8 DRAINAGE PROFILE - 9 (ALGN 8)
SCALE: HORIZONTAL - 1"=20' VERTICAL - 1"=2'

GENERAL NOTES

1. REFER TO SHEETS CU101, CU102 AND CU103 FOR STORM DRAIN PLAN LAYOUT.
2. REFER TO SHEET CU107 FOR DRAINAGE PIPE NETWORK.
3. REFER TO SHEETS CU108, CU109, CU110, CU111, CU112 AND CU113 FOR DRAINAGE PROFILES.

SHEET KEYNOTES

SHEET LEGEND

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DRAWN BY: R.ISLAM
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SUBMITTED BY: R.TOLIKONDA
SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)
ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D0035
FILE NUMBER:

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

DRAINAGE PROFILE - 4

SHEET ID
CU111

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

C:\USERS\VIMALKAL.SARIYA\DOCUMENTS\KENALL\PINEBLUFF ARSENAL ACP\PROJECT FILES\2 CAD_BIM_SHEETS\CU108-CU113.DWG
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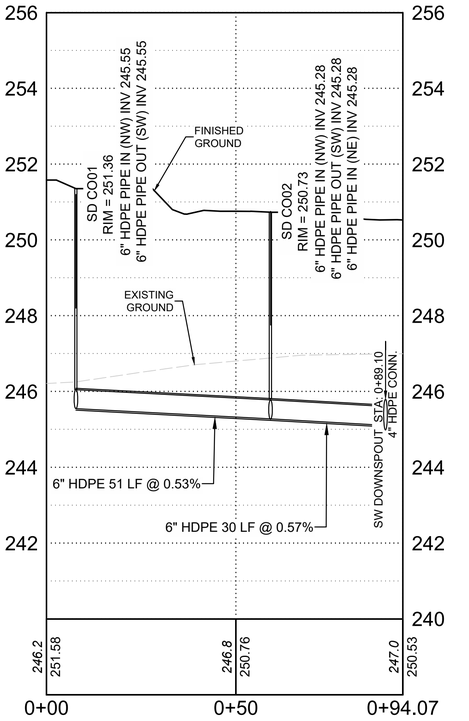
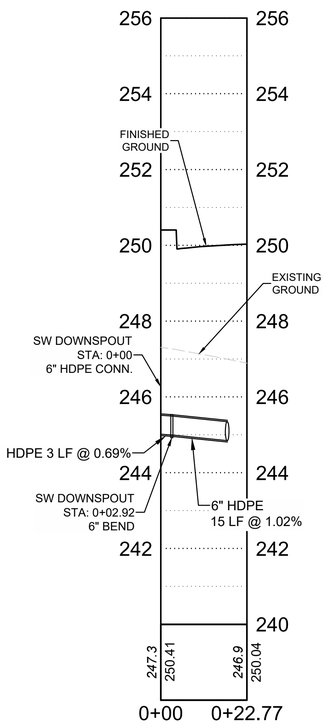
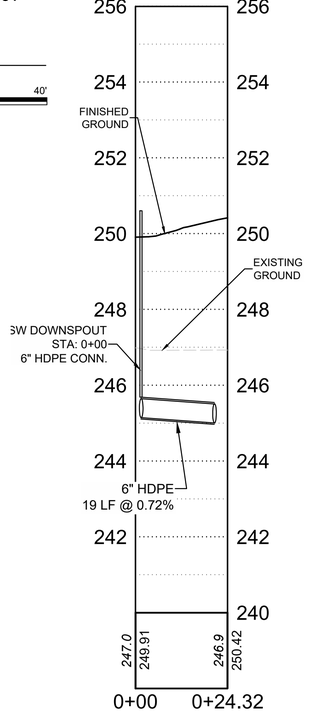


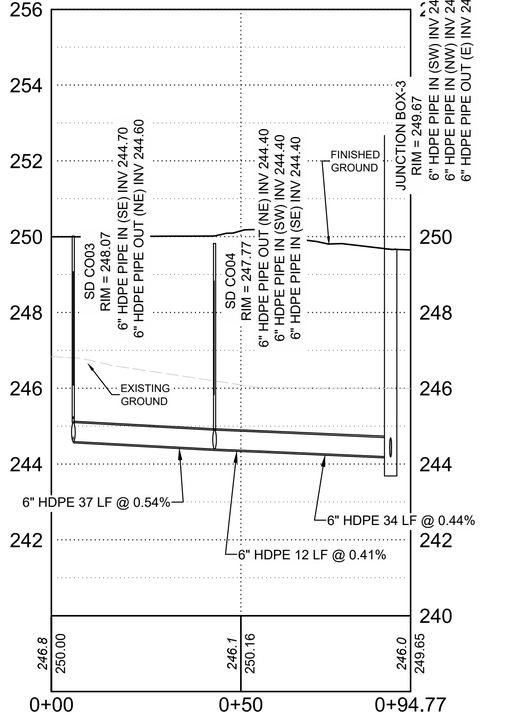
G1 DRAINAGE PROFILE - 10 (DS ALGN 1)
SCALE: HORIZONTAL - 1"=20' VERTICAL - 1"=2'
0 20' 40'



H7 DRAINAGE PROFILE - 15 (DS ALGN 3)
SCALE: HORIZONTAL - 1"=20' VERTICAL - 1"=2'
0 20' 40'



A5 DRAINAGE PROFILE - 14 (DS ALGN 2)
SCALE: HORIZONTAL - 1"=20' VERTICAL - 1"=2'
0 20' 40'



A11 DRAINAGE PROFILE - 5 (DS ALGN 4)
SCALE: HORIZONTAL - 1"=20' VERTICAL - 1"=2'
0 20' 40'

GENERAL NOTES

1. REFER TO SHEETS CU101, CU102 AND CU103 FOR STORM DRAIN PLAN LAYOUT.
2. REFER TO SHEET CU107 FOR DRAINAGE PIPE NETWORK.
3. REFER TO SHEETS CU108, CU109, CU110, CU111, CU112 AND CU113 FOR DRAINAGE PROFILES.

SHEET KEYNOTES

SHEET LEGEND

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U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

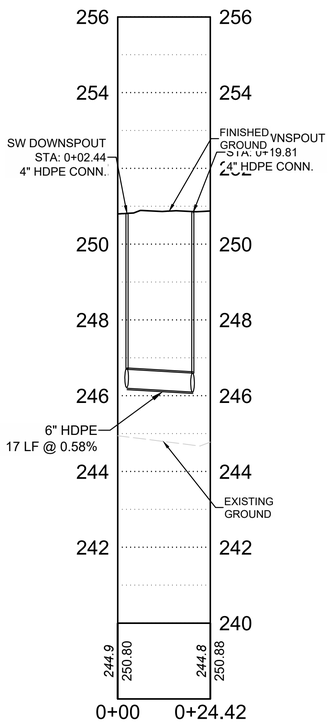
HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

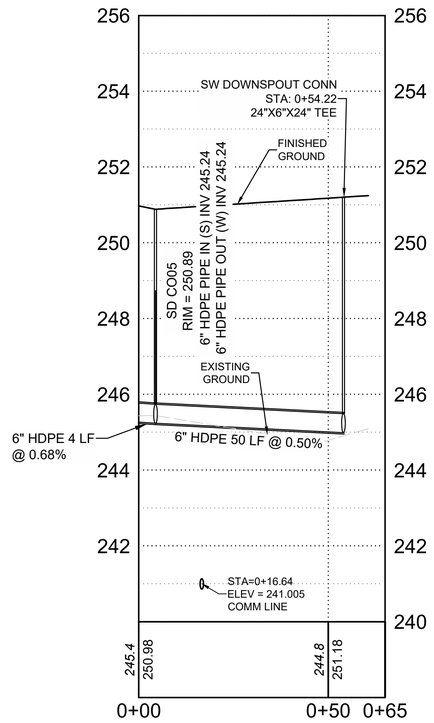
DRAINAGE PROFILE - 5

SHEET ID
CU112

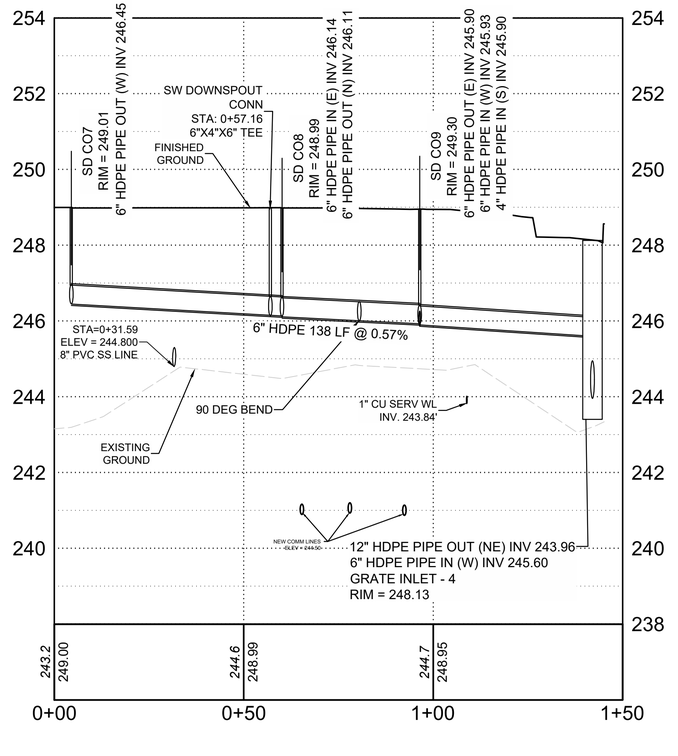
CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



G1 DRAINAGE PROFILE - 11 (DS ALGN 5)
SCALE: HORIZONTAL - 1"=20' VERTICAL - 1"=2'
0 20' 40'



G5 DRAINAGE PROFILE - 12 (DS ALGN 6)
SCALE: HORIZONTAL - 1"=20' VERTICAL - 1"=2'
0 20' 40'



G10 DRAINAGE PROFILE - 13 (DS ALGN 7)
SCALE: HORIZONTAL - 1"=20' VERTICAL - 1"=2'
0 20' 40'

GENERAL NOTES

1. REFER TO SHEETS CU101, CU102 AND CU103 FOR STORM DRAIN PLAN LAYOUT.
2. REFER TO SHEET CU107 FOR DRAINAGE PIPE NETWORK.
3. REFER TO SHEETS CU108, CU109, CU110, CU111, CU112 AND CU113 FOR DRAINAGE PROFILES.

SHEET KEYNOTES

SHEET LEGEND

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

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DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
SUBMITTED BY: R.TOLIKONDA
SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)
ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D6035
FILE NUMBER:

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

DRAINAGE PROFILE - 6

SHEET ID
CU113

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

GENERAL NOTES

1. REFER TO SHEETS CU101, CU102 AND CU103 FOR UTILITIES PLAN LAYOUT.
2. REFER TO SHEET CU104 FOR SANITARY SEWER PIPE NETWORK.
3. REFER TO SHEET CU107 FOR DRAINAGE PIPES NETWORK.
4. REFER TO SHEET CU114 FOR WATER PIPES NETWORK.
5. REFER TO SHEETS CU105 AND CU106 FOR SANITARY SEWER PROFILES.
6. REFER TO SHEETS CU108 THRU CU113 FOR DRAINAGE PROFILES.
7. REFER TO SHEETS CU115, CU116 AND CU117 FOR WATER PROFILES.
8. REFER TO SHEET C-705 FOR STORM PIPES TABLE
9. REFER TO SHEET C-706 FOR STORM STRUCTURES TABLE

SHEET KEYNOTES

SHEET LEGEND

A1 WATER PIPE NETWORK
SCALE: 1" = 40'

PLAN NORTH

0 40' 80'

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY:	B.BANDA
DRAWN BY:	R.ISLAM
CHECKED BY:	R.TOLIKONDA
SUBMITTED BY:	R.TOLIKONDA
SIZE:	ANSI FULL BLEED D (22.00 X 34.00 INCHES)

ISSUE DATE: 04/17/2026
SOLICITATION NO.: W912T524F6002
CONTRACT NO.: W912T523D0035
FILE NUMBER:

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

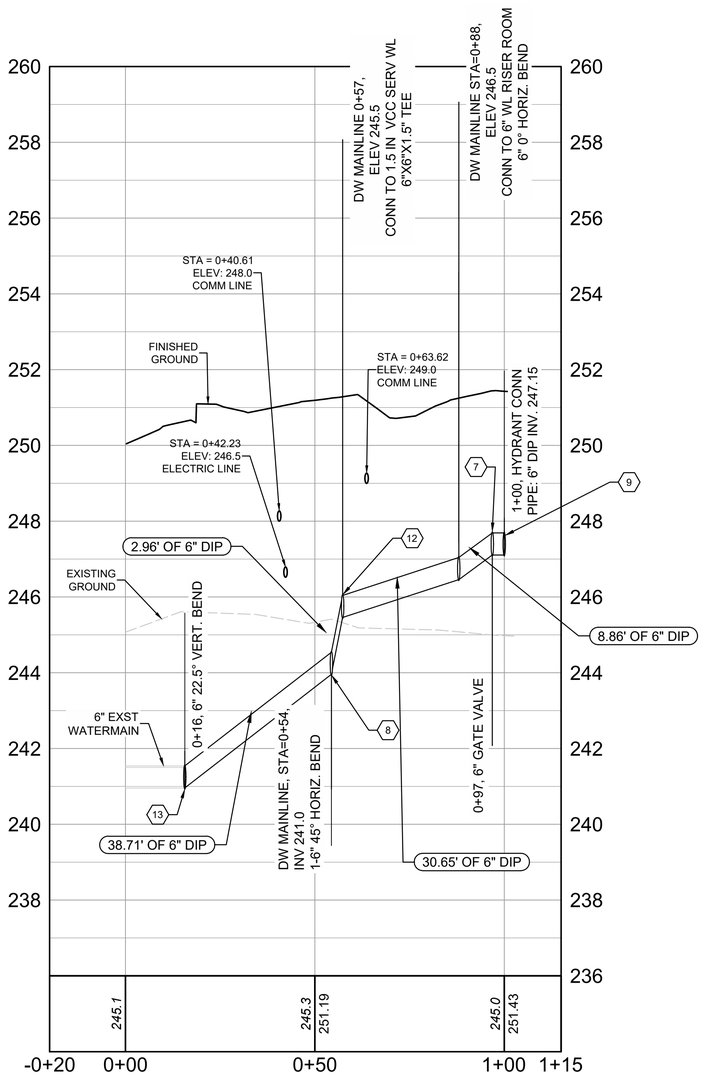
HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 1070
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

WATER PIPE NETWORK

SHEET ID
CU114

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



WATER PROFILES 1 - DOMESTIC WATER MAIN LINE CONNECTION TO VCC BLDG AND FIRE HYDRANT

D2

SCALE: HORIZ 1" = 20', VERT 1" = 2'

WATER PROFILE - 2 SERVICE WATER LINE CONNECTION TO VCC BLDG

D8

SCALE: HORIZ 1" = 20', VERT 1" = 2'

GENERAL NOTES

1. REFER TO SHEETS CU101, CU102 AND CU103 FOR WATER LINES PLAN LAYOUT.
2. REFER TO SHEET CU114 FOR WATER PIPES NETWORK.
3. REFER TO SHEETS CU115, CU116 AND CU117 FOR WATER PROFILES.

SHEET KEYNOTES

1. 6"X6"X6" TEE,
   DW EXISTING MAINLINE = SW NEW MAINLINE STA: 0+02
   N: 1907411.87, E: 1286693.59
   6" DIP INV: 240.37 = 6" CI WL (EXISTING)
2. 6"X1"X6" TEE
   DW MAINLINE STA: 0+93.36 = DW SERVICE GH STA: 0+00
   N: 1907330.71, E: 1286739.61
   6" DIP INV: 240.37 = 1" CU CONNECTION
3. 1-6" 90° ELBOW
   DW MAINLINE STA: 1+91.52
   N: 1907247.04 E: 1286787.05
4. HYDRANT CONN
   1-6"X6"X6" TEE
   DW MAINLINE STA: 5+72.70 = FH LINE STA: 0+21.09
   6" DIP INV: 240.37 = 6" CI WL (EXISTING)
   N: 1907045.46 E: 1286463.53
5. 6" GATE VALVE, DUCTILE IRON, ELEV: 240.37
   N: 1907052.23 E: 1286457.86
6. FIRE HYDRANT
   6" DIP INV. 240.37
   1 - 6" FH ASSY GV
   N: 1907055.21 E: 1286455.35
7. 6" GATE VALVE, DUCTILE IRON, ELEV: 247.15
   E: 1286515.99, N: 1907352.94
8. 1-6" 90° ELBOW
   DW MAINLINE STA: 0+38.80
   N: 1907325.16 E: 1286550.26
9. HYDRANT CONN,
   6" DIP INV. 247.15
   1 - 6" FH ASSY GV
   DW MAINLINE STA: 0+03
   N: 1907353.504 E: 1286515.31
10. 1-1" 45° ELBOW
    DW SERV LINE STA: 0+46.02
    1" CU INV. 243.0
    N: 1907309.38 E: 1286698.85
11. GH CONN
    DW SERV LINE STA: 0+58.03
    1" CU INV. 245.0
    N: 1907297.45 E: 1286700.36
12. 6"X1.5"X6" TEE
    DW MAINLINE STA: 0+45.19 = DW SERVICE VCC STA: 0+00
    N: 1907319.39, E: 1286538.97
    6" DIP INV: 245.5 = 1.5" CU CONNECTION TO VCC
13. 1- 6" 22.5° BEND
    DW MAINLINE STA: 0+86.85
    N: 1907345.38, E: 1286583.39
    6" DIP INV: 241.0
14. VCC CONN
    DW SERV LINE STA: 0+12.77
    1" CU INV. 247.5
    N: 1907319.39 E: 1286538.98

SHEET LEGEND

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: J.TOLLIVER
SUBMITTED BY: R.TOLIKONDA
ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127524F6002
CONTRACT NO.: W9127324D0035
FILE NUMBER:
SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

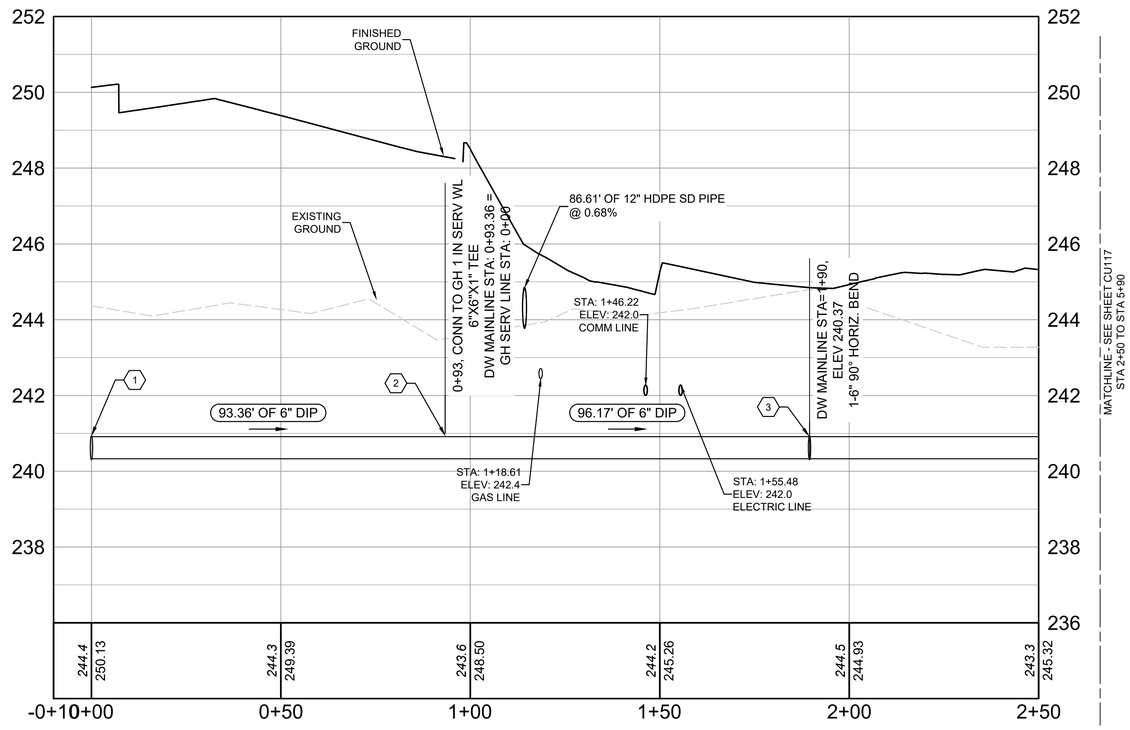
HANA+KENALL 8A JV
2500 CITYWEST BLVD, STE 2700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

WATER PROFILE - 1

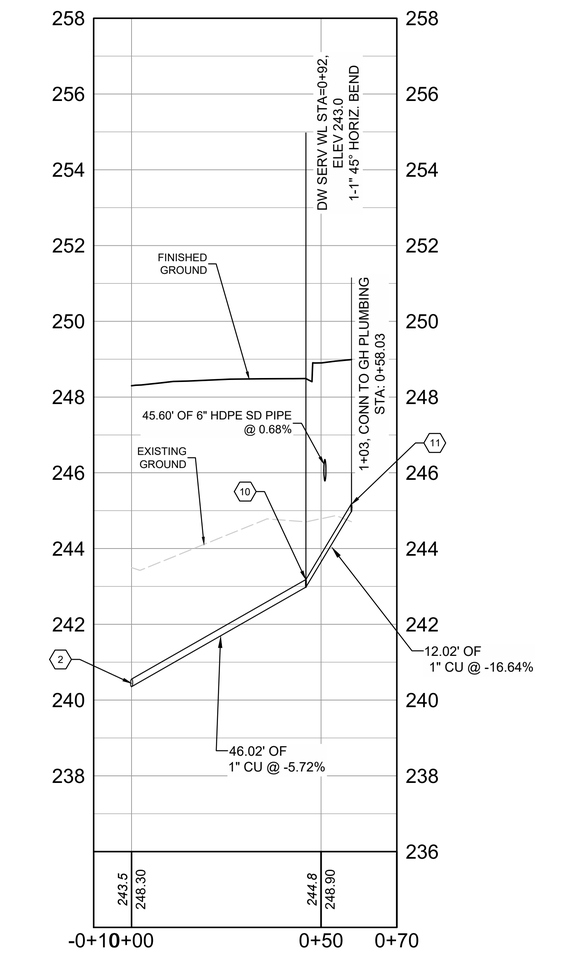
SHEET ID
CU115

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



E1 WATER PROFILE - 3 DOMESTIC WATER MAIN LINE : STA 0+00 TO 2+50

SCALE: HORIZ 1" = 20', VERT 1" = 2'



E12 WATER PROFILE - 4 DOMESTIC WATER MAIN LINE CONNECTION TO GH

SCALE: HORIZ 1" = 20', VERT 1" = 2'

GENERAL NOTES

1. REFER TO SHEETS CU101, CU102 AND CU103 FOR WATER LINES PLAN LAYOUT.
2. REFER TO SHEET CU114 FOR WATER PIPES NETWORK.
3. REFER TO SHEETS CU115, CU116 AND CU117 FOR WATER PROFILES.

SHEET KEYNOTES

1. 6"X6"X6" TEE,
   DW EXISTING MAINLINE = SW NEW MAINLINE STA: 0+02
   N: 1907411.87, E: 1286693.59
   6" DIP INV: 240.37 = 6" CI WL (EXISTING)
2. 6"X1"X6" TEE
   DW MAINLINE STA: 0+93.36 = DW SERVICE GH STA: 0+00
   N: 1907330.71, E: 1286739.61
   6" DIP INV: 240.37 = 1" CU CONNECTION
3. 1-6" 90° ELBOW
   DW MAINLINE STA: 1+91.52
   N: 1907247.04 E: 1286787.05
4. HYDRANT CONN
   1-6"X6"X6" TEE
   DW MAINLINE STA: 5+72.70 = FH LINE STA: 0+21.09
   6" DIP INV: 240.37 = 6" CI WL (EXISTING)
   N: 1907045.46 E: 1286463.53
5. 6" GATE VALVE, DUCTILE IRON, ELEV: 240.37
   N: 1907052.23 E: 1286457.86
6. FIRE HYDRANT
   6" DIP INV. 240.37
   1 - 6" FH ASSY GV
   N: 1907055.21 E: 1286455.35
7. 6" GATE VALVE, DUCTILE IRON, ELEV: 247.15
   E: 1286515.99, N: 1907352.94
8. 1-6" 90° ELBOW
   DW MAINLINE STA: 0+38.80
   N: 1907325.16 E: 1286550.26
9. HYDRANT CONN,
   6" DIP INV. 247.15
   1 - 6" FH ASSY GV
   DW MAINLINE STA: 0+03
   N: 1907353.504 E: 1286515.31
10. 1-1" 45° ELBOW
    DW SERV LINE STA: 0+46.02
    1" CU INV. 243.0
    N: 1907309.38 E: 1286698.85
11. GH CONN
    DW SERV LINE STA: 0+58.03
    1" CU INV. 245.0
    N: 1907297.45 E: 1286700.36
12. 6"X1.5"X6" TEE
    DW MAINLINE STA: 0+45.19 = DW SERVICE VCC STA: 0+00
    N: 1907319.39, E: 1286538.97
    6" DIP INV: 245.5 = 1.5" CU CONNECTION TO VCC
13. 1- 6" 22.5° BEND
    DW MAINLINE STA: 0+86.85
    N: 1907345.38, E: 1286583.39
    6" DIP INV: 241.0
14. VCC CONN
    DW SERV LINE STA: 0+12.77
    1" CU INV. 247.5
    N: 1907319.39 E: 1286538.98

SHEET LEGEND

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
SUBMITTED BY: R.TOLIKONDA
SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)
ISSUE DATE: 04/17/2026
SOLICITATION NO.:
CONTRACT NO.: W912QR23D6035
FILE NUMBER:

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

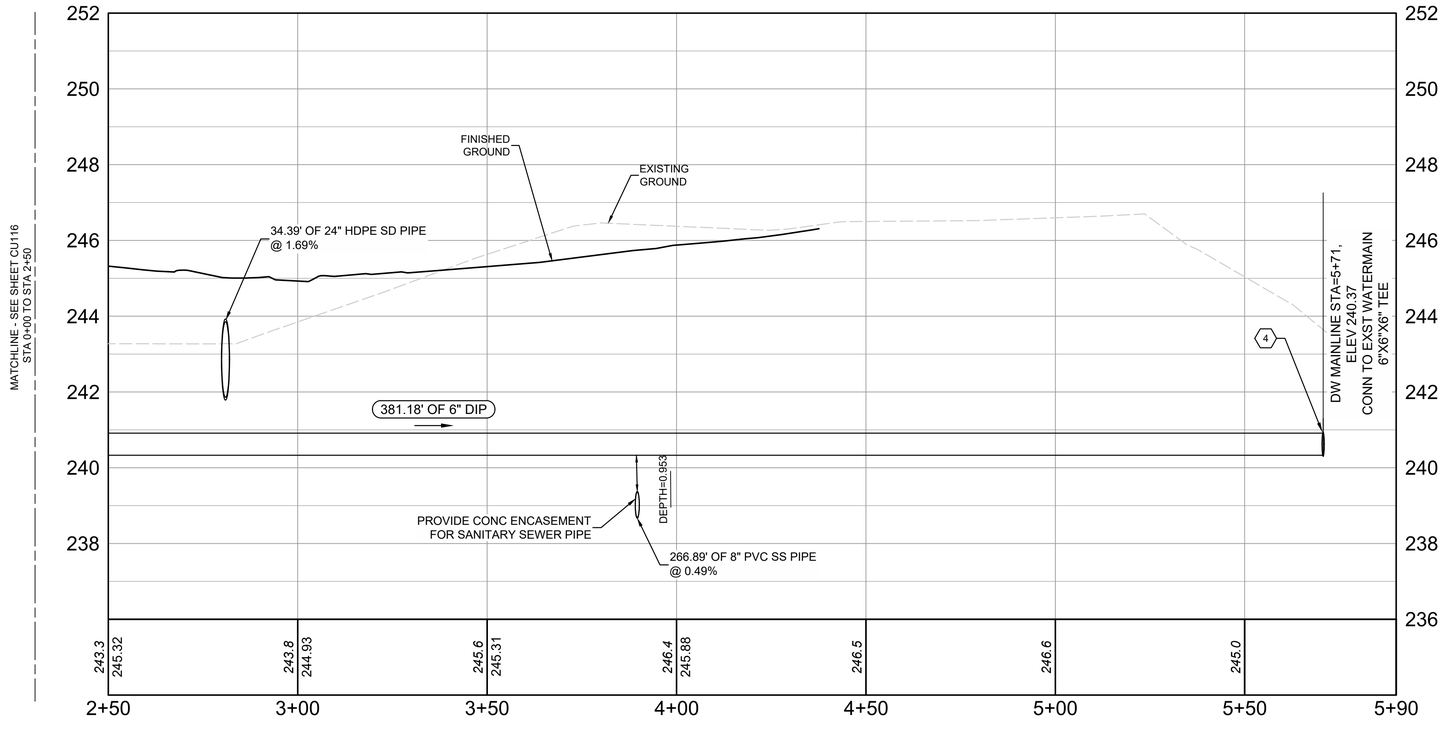
HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

WATER PROFILE - 2

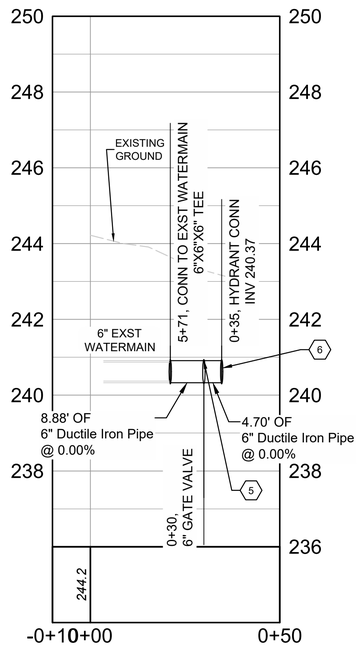
SHEET ID
CU116

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



H3 WATER PROFILE - 3 DOMESTIC WATER MAIN LINE : STA 2+50 TO 5+90

SCALE: HORIZ 1" = 20', VERT 1" = 2'



WATER PROFILE - 5 DOMESTIC WATER MAIN LINE CONNECTION TO FIRE HYDRANT ASSEMBLY : STA 0+00 TO 0+50

A7

SCALE: HORIZ 1" = 20', VERT 1" = 2'

GENERAL NOTES

1. REFER TO SHEETS CU101, CU102 AND CU103 FOR WATER LINES PLAN LAYOUT.
2. REFER TO SHEET CU114 FOR WATER PIPES NETWORK.
3. REFER TO SHEETS CU115, CU116 AND CU117 FOR WATER PROFILES.

SHEET KEYNOTES

1. 6"X6"X6" TEE,
   DW EXISTING MAINLINE = SW NEW MAINLINE STA: 0+02
   N: 1907411.87, E: 1286693.59
   6" DIP INV: 240.37 = 6" CI WL (EXISTING)
2. 6"X1"X6" TEE
   DW MAINLINE STA: 0+93.36 = DW SERVICE GH STA: 0+00
   N: 1907330.71, E: 1286739.61
   6" DIP INV: 240.37 = 1" CU CONNECTION
3. 1-6" 90° ELBOW
   DW MAINLINE STA: 1+91.52
   N: 1907247.04 E: 1286787.05
4. HYDRANT CONN
   1-6"X6"X6" TEE
   DW MAINLINE STA: 5+72.70 = FH LINE STA: 0+21.09
   6" DIP INV: 240.37 = 6" CI WL (EXISTING)
   N: 1907045.46 E: 1286463.53
5. 6" GATE VALVE, DUCTILE IRON, ELEV: 240.37
   N: 1907052.23 E: 1286457.86
6. FIRE HYDRANT
   6" DIP INV. 240.37
   1 - 6" FH ASSY GV
   N: 1907055.21 E: 1286455.35
7. 6" GATE VALVE, DUCTILE IRON, ELEV: 247.15
   E: 1286515.99, N: 1907352.94
8. 1-6" 90° ELBOW
   DW MAINLINE STA: 0+38.80
   N: 1907325.16 E: 1286550.26
9. HYDRANT CONN,
   6" DIP INV. 247.15
   1 - 6" FH ASSY GV
   DW MAINLINE STA: 0+03
   N: 1907353.504 E: 1286515.31
10. 1-1" 45° ELBOW
    DW SERV LINE STA: 0+46.02
    1" CU INV. 243.0
    N: 1907309.38 E: 1286698.85
11. GH CONN
    DW SERV LINE STA: 0+58.03
    1" CU INV. 245.0
    N: 1907297.45 E: 1286700.36
12. 6"X1.5"X6" TEE
    DW MAINLINE STA: 0+45.19 = DW SERVICE VCC STA: 0+00
    N: 1907319.39, E: 1286538.97
    6" DIP INV: 245.5 = 1.5" CU CONNECTION TO VCC
13. 1- 6" 22.5° BEND
    DW MAINLINE STA: 0+86.85
    N: 1907345.38, E: 1286583.39
    6" DIP INV: 241.0
14. VCC CONN
    DW SERV LINE STA: 0+12.77
    1" CU INV. 247.5
    N: 1907319.39 E: 1286538.98

SHEET LEGEND

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R. TOLIKONDA
SUBMITTED BY: R. TOLIKONDA
SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)

ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D6035
FILE NUMBER:

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

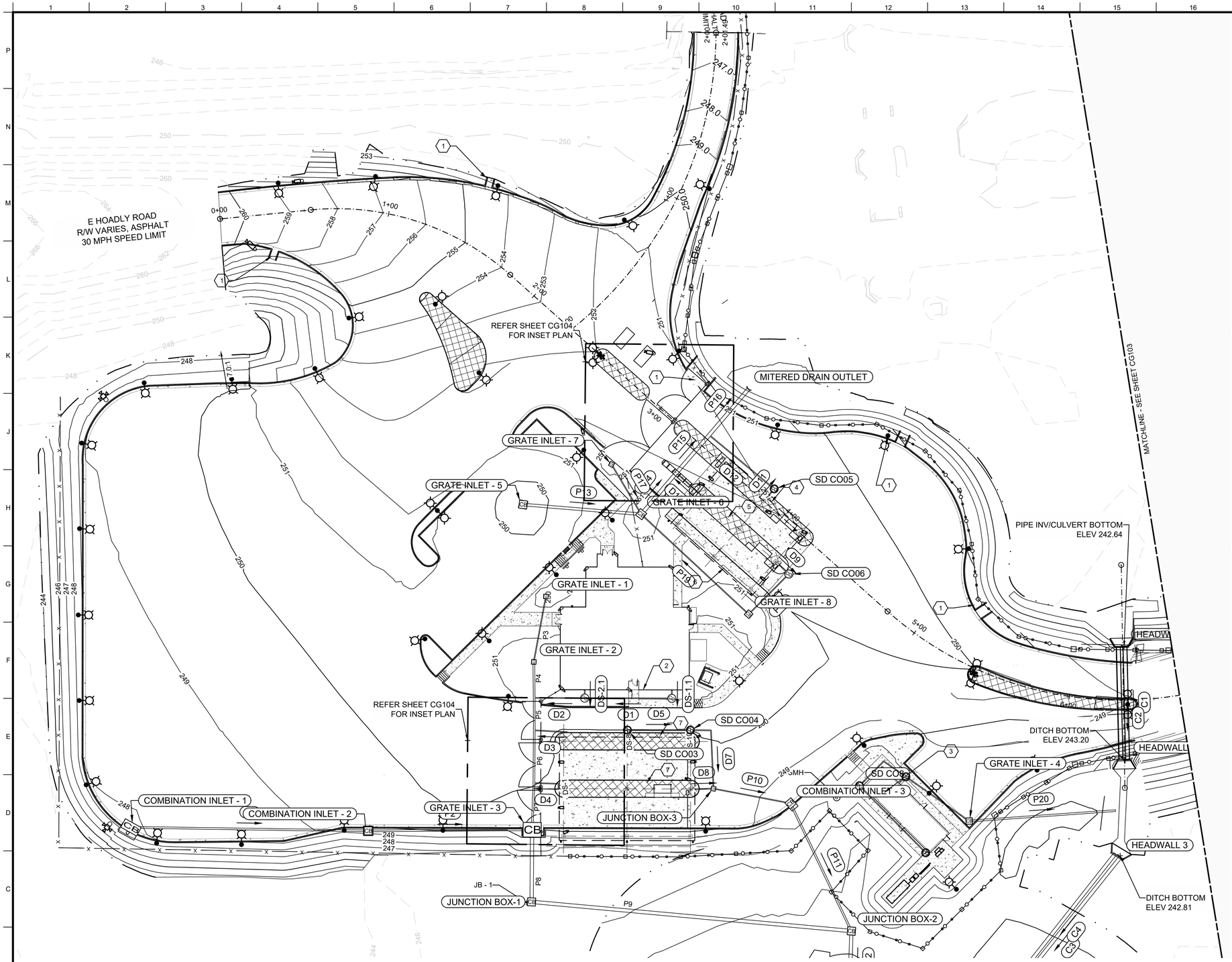
HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

WATER PROFILE - 3

SHEET ID
CU117

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



GENERAL NOTES

1. REFER TO SHEET C-705 FOR ALL DRAINAGE PIPES AND STRUCTURES TABLES.
2. ALL SWALES, DITCHES, AND CHANNELS SHOULD BE LINED WITH FLEXAMAT PLUS AS PER STANDARD DETAILS. REFER SHEETS C-522 AND C-523.
3. SLOPE PROTECTION FOR SWALES, DITCHES, CHANNELS, AND OUTLET PROTECTION FOR PIPE/CULVERT/CURB CUT OUTLETS SHOULD BE ENSURED BY FLEXAMAT PLUS AS PER STANDARD DETAILS.
4. PROVIDE A 2 FT BERM CLEARANCE BETWEEN THE EDGE OF THE PASSIVE BARRIER AND THE TOP EDGE OF THE SWALE.
5. ALL SWALES AND DITCHES SHALL BE PROVIDED WITH TURF AND NECESSARY TOPSOIL.
6. ADJUST CURB CUT LOCATION LONGITUDINALLY +/- 5' TO AVOID CONFLICT WITH PASSIVE BARRIER POST.

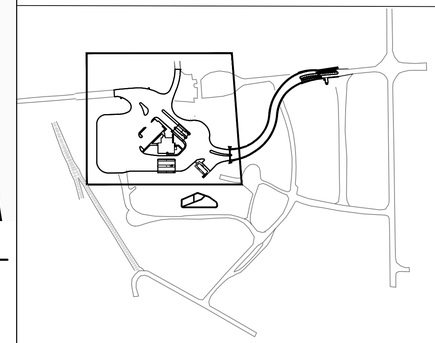
SHEET KEYNOTES

1. CURB CUT, SEE DETAIL B12 SHEET C-501
2. VCC FF= 251.60
3. GATE HOUSE FF= 249.0
4. MEDIAN-1 TOP EL = 251.50 BOTTOM EL = 251.00
5. MEDIAN-2 TOP EL = 251.38 BOTTOM EL = 250.88
6. SIDEWALK TOP EL = 251.27 BOTTOM EL = 250.77
7. MEDIAN-1 TOP EL = 250.41 BOTTOM EL = 249.91
8. GUARD BOOTH FF = 249.080

SHEET LEGEND

- 375 — PROPOSED GROUND CONTOURS
- 375 — EXISTING GROUND CONTOURS
- CURB CUT
- NEW FLEXAMAT PLUS

KEY MAP



A1 GRADING AND DRAINAGE PLAN - 1
SCALE: 1" = 30'

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
SUBMITTED BY: R.TOLIKONDA
ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D6035
FILE NUMBER:
SCALE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

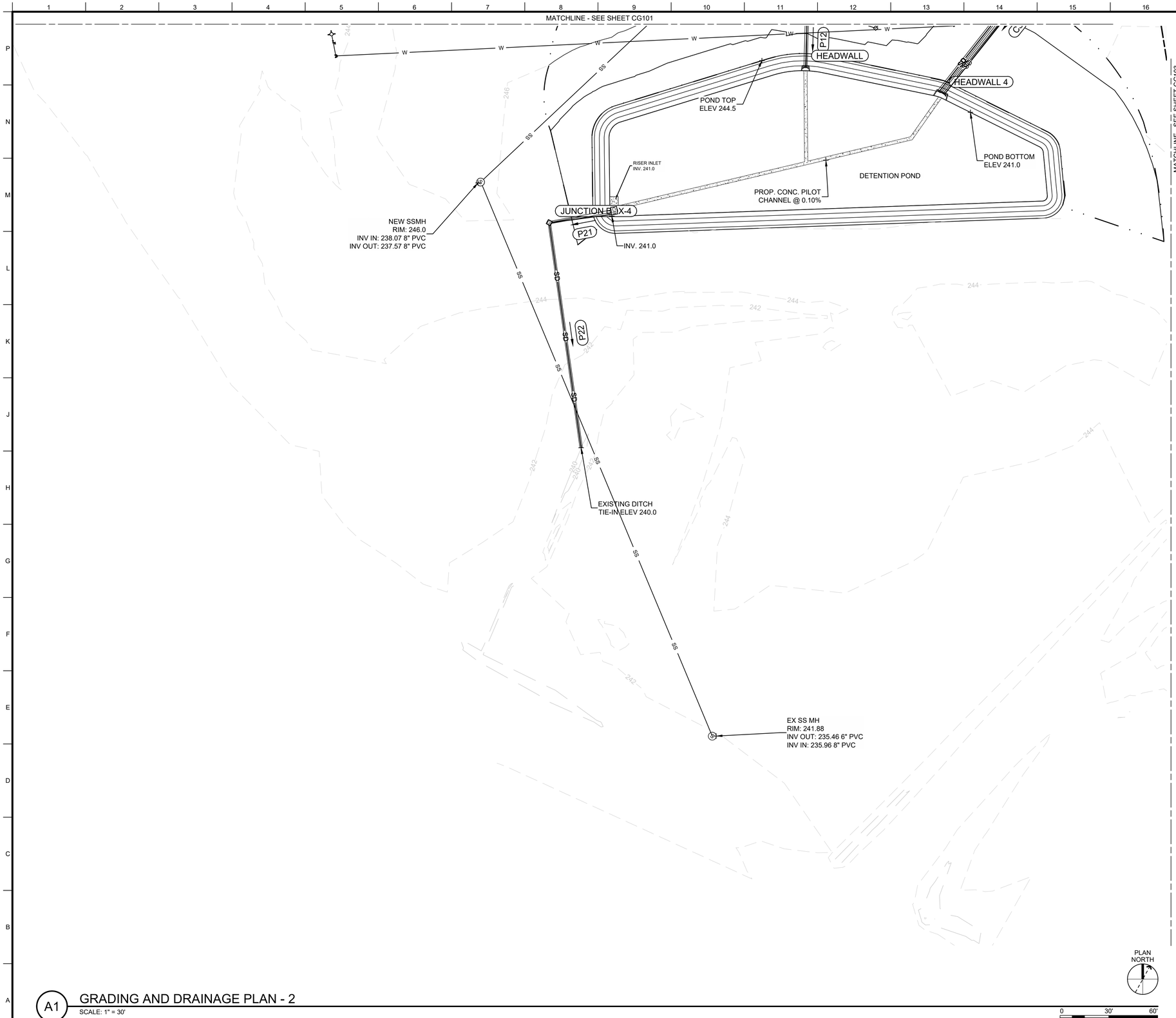
HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

GRADING AND DRAINAGE PLAN - 1

SHEET ID
CG101

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



GENERAL NOTES

1. REFER TO SHEET C-705 FOR ALL DRAINAGE PIPES AND STRUCTURES TABLES.
2. ALL SWALES, DITCHES, AND CHANNELS SHOULD BE LINED WITH FLEXAMAT PLUS AS PER STANDARD DETAILS. REFER SHEETS C-522 AND C-523.
3. SLOPE PROTECTION FOR SWALES, DITCHES, CHANNELS, AND OUTLET PROTECTION FOR PIPE/CULVERT/CURB CUT OUTLETS SHOULD BE ENSURED BY FLEXAMAT PLUS AS PER STANDARD DETAILS.
4. PROVIDE A 2 FT BERM CLEARANCE BETWEEN THE EDGE OF THE PASSIVE BARRIER AND THE TOP EDGE OF THE SWALE.
5. ALL SWALES AND DITCHES SHALL BE PROVIDED WITH TURF AND NECESSARY TOPSOIL.
6. ADJUST CURB CUT LOCATION LONGITUDINALLY +/- 5' TO AVOID CONFLICT WITH PASSIVE BARRIER POST.

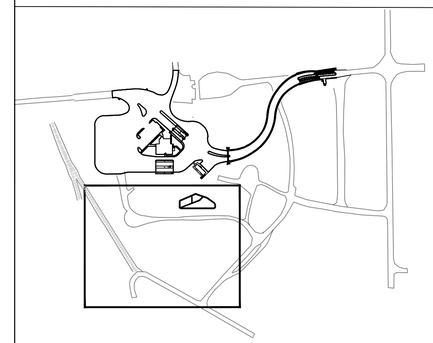
SHEET KEYNOTES

1. CURB CUT, SEE DETAIL B12 SHEET C-501
2. VCC FF= 251.60
3. GATE HOUSE FF= 249.0
4. MEDIAN-1 TOP EL = 251.50 BOTTOM EL = 251.00
5. MEDIAN-2 TOP EL = 251.38 BOTTOM EL = 250.88
6. SIDEWALK TOP EL = 251.27 BOTTOM EL = 250.77
7. MEDIAN-1 TOP EL = 250.41 BOTTOM EL = 249.91
8. GUARD BOOTH FF = 249.080

SHEET LEGEND

- 375 — PROPOSED GROUND CONTOURS
- 375 — EXISTING GROUND CONTOURS
- CURB CUT
- NEW FLEXAMAT PLUS

KEY MAP



A1 GRADING AND DRAINAGE PLAN - 2
SCALE: 1" = 30'

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLUKONDA
SUBMITTED BY: R.TOLUKONDA
ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D6035
FILE NUMBER:
SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

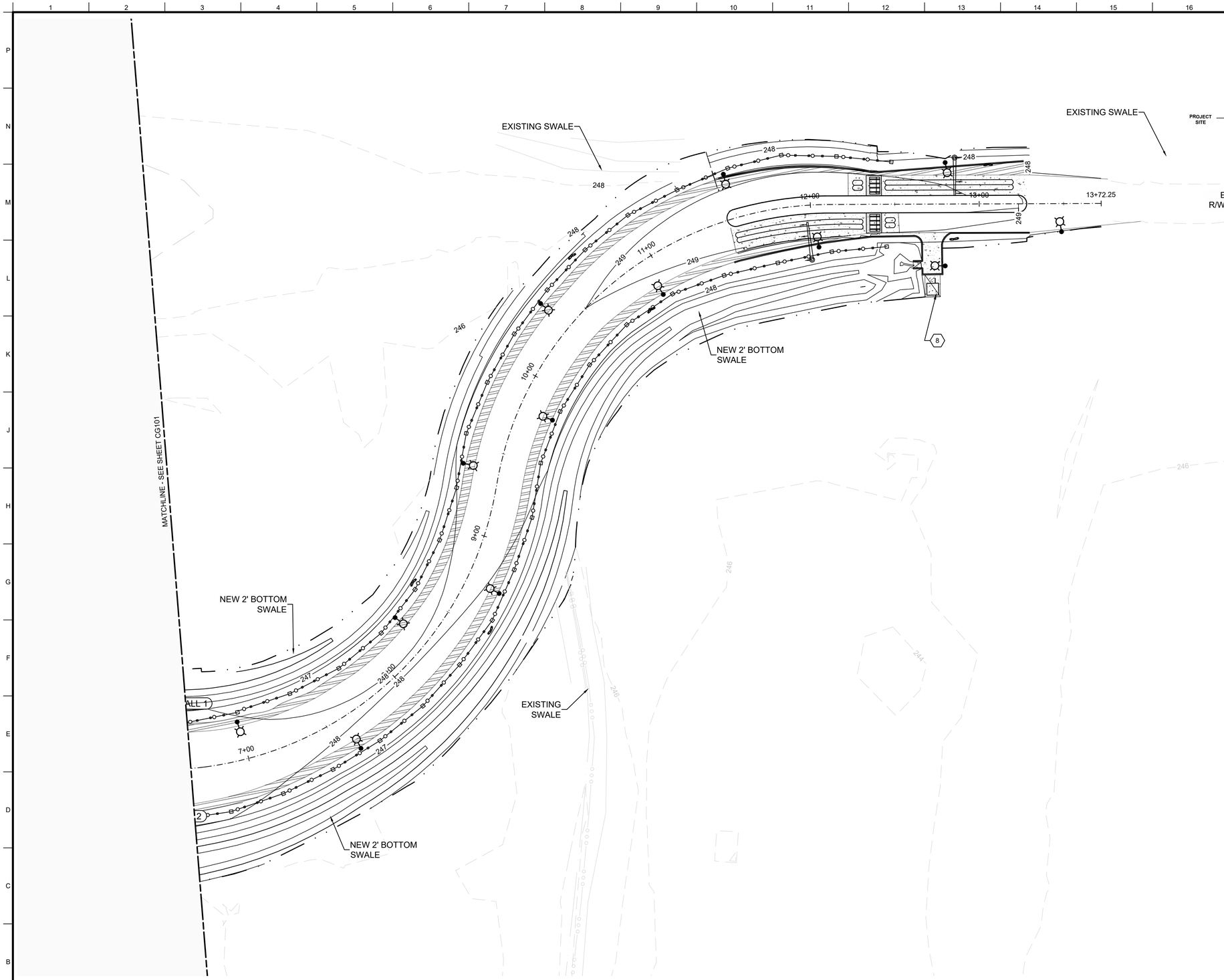
HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

GRADING AND DRAINAGE PLAN - 2

SHEET ID
CG102

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



A1 GRADING AND DRAINAGE PLAN - 3

SCALE: 1" = 30'

GENERAL NOTES

1. REFER TO SHEET C-705 FOR ALL DRAINAGE PIPES AND STRUCTURES TABLES.
2. ALL SWALES, DITCHES, AND CHANNELS SHOULD BE LINED WITH FLEXAMAT PLUS AS PER STANDARD DETAILS. REFER SHEETS C-522 AND C-523.
3. SLOPE PROTECTION FOR SWALES, DITCHES, CHANNELS, AND OUTLET PROTECTION FOR PIPE/CULVERT/CURB CUT OUTLETS SHOULD BE ENSURED BY FLEXAMAT PLUS AS PER STANDARD DETAILS.
4. PROVIDE A 2 FT BERM CLEARANCE BETWEEN THE EDGE OF THE PASSIVE BARRIER AND THE TOP EDGE OF THE SWALE.
5. ALL SWALES AND DITCHES SHALL BE PROVIDED WITH TURF AND NECESSARY TOPSOIL.
6. ADJUST CURB CUT LOCATION LONGITUDINALLY +/- 5' TO AVOID CONFLICT WITH PASSIVE BARRIER POST.

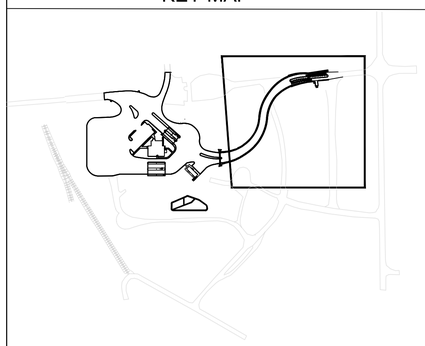
SHEET KEYNOTES

1. CURB CUT, SEE DETAIL B12 SHEET C-501
2. VCC FF= 251.60
3. GATE HOUSE FF= 249.0
4. MEDIAN-1 TOP EL = 251.50 BOTTOM EL = 251.00
5. MEDIAN-2 TOP EL = 251.38 BOTTOM EL = 250.88
6. SIDEWALK TOP EL = 251.27 BOTTOM EL = 250.77
7. MEDIAN-1 TOP EL = 250.41 BOTTOM EL = 249.91
8. GUARD BOOTH FF = 249.080

SHEET LEGEND

- 375 — PROPOSED GROUND CONTOURS
- 375 --- EXISTING GROUND CONTOURS
- CURB CUT
- NEW FLEXAMAT PLUS

KEY MAP



US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D6035
FILE NUMBER:

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
SUBMITTED BY: R.TOLIKONDA
SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

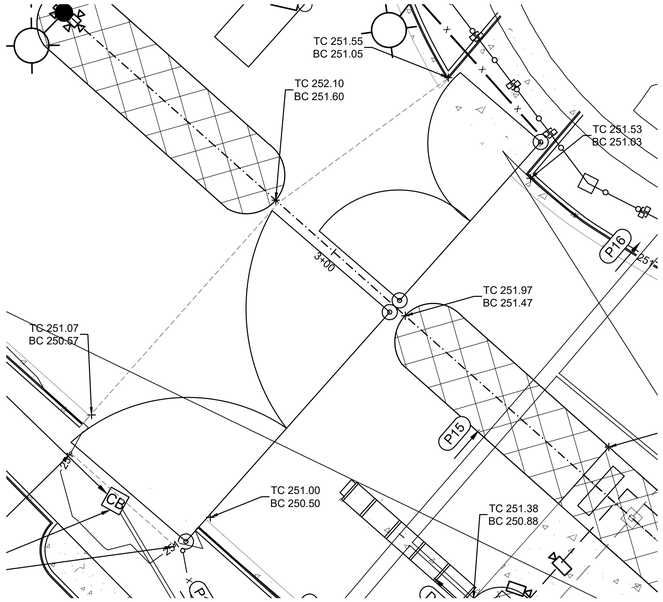
HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

GRADING AND DRAINAGE PLAN - 3

SHEET ID
CG103

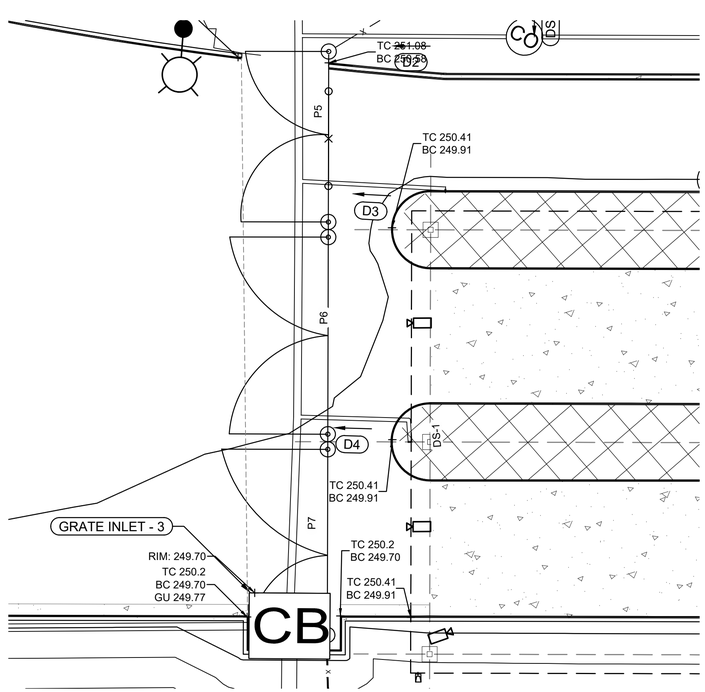
CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



J1 GRADING INSET PLAN - ID CHECK CANOPY SWING GATES

SCALE: 1" = 10'

0 10' 20'



PLAN NORTH

A1 GRADING INSET PLAN - SEARCH CANOPY SWING GATES

SCALE: 1" = 10'

0 10' 20'

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D6035
FILE NUMBER:

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
SUBMITTED BY: R.TOLIKONDA
SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

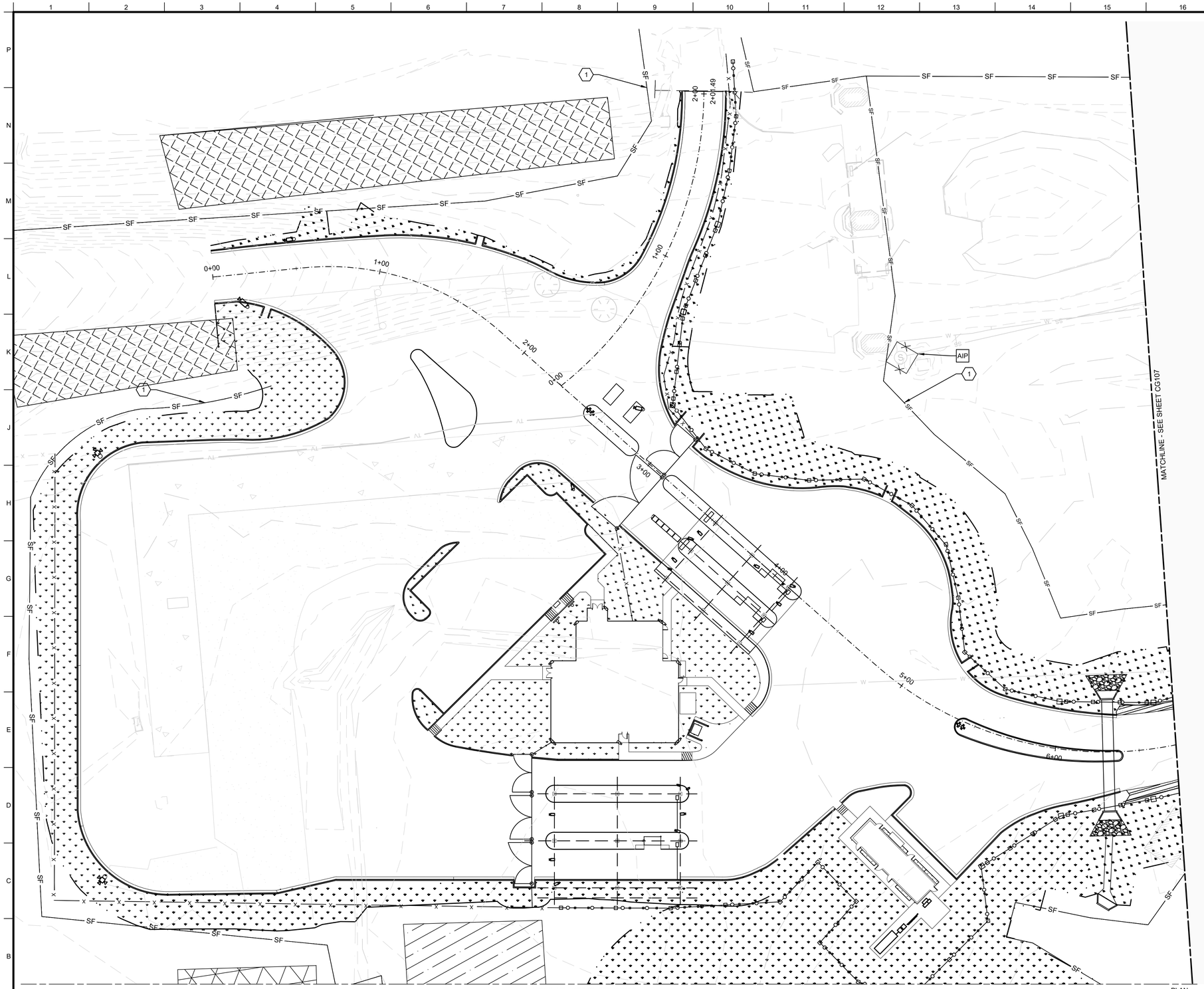
HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

GRADING INSET PLAN - SWING GATES

SHEET ID
CG104

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



GENERAL NOTES

1. PROPOSED LOCATIONS FOR LIMITS OF CONSTRUCTION AND PROVIDED COORDINATES ARE APPROXIMATE AND ARE SUBJECT TO APPROVAL BY THE GOVT COR.
2. CONTRACTOR SHALL PLACE SILT FENCE ALONG THE PERIMETER OF EACH STAGING AREA USED DURING CONSTRUCTION.
3. CONTRACTOR SHALL REPAIR ALL DISTURBED AREAS WITH SEED/SOD. REFER TO LANDSCAPE SHEETS FOR SPECIFICATIONS.
4. REFER STORMWATER MANAGEMENT NOTES ON SHEET GI002 FOR ADDITIONAL DIRECTION ON STORMWATER POLLUTION PREVENTION AND EROSION CONTROL.
5. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL AND MAINTAIN ANY ADDITIONAL EROSION AND SEDIMENT CONTROL BMPS.
6. REFER SHEET CG501 FOR EROSION CONTROLS DETAILS.

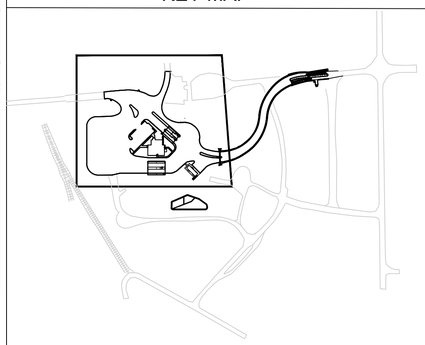
SHEET KEYNOTES

1. INSTALL SILT FENCE, SEE B1/CG501
2. INSTALL CONCRETE WASHOUT, SEE G10/ CG501

SHEET LEGEND

- SF — SILT FENCE
- AIP — AREA INLET PROTECTION, REFER A1/CG501
- CONTRACTOR STAGING AREA
- NEW SOD
- CONCRETE WASHOUT, REFER G10/ CG501
- CONTRACTOR STOCKPILE AREA, REFER H12/C-505
- RIPRAP, REFER A11/CG501
- TURF REINFORCEMENT MAT

KEY MAP



PLAN NORTH

0 30' 60'

A1 EROSION CONTROL PLAN - 1

SCALE: 1" = 30'

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
SUBMITTED BY: R.TOLIKONDA
DATE: ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F8002
CONTRACT NO.: W9127S23D6035
FILE NUMBER:
SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

HANA-KENALL 8A JV
2600 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

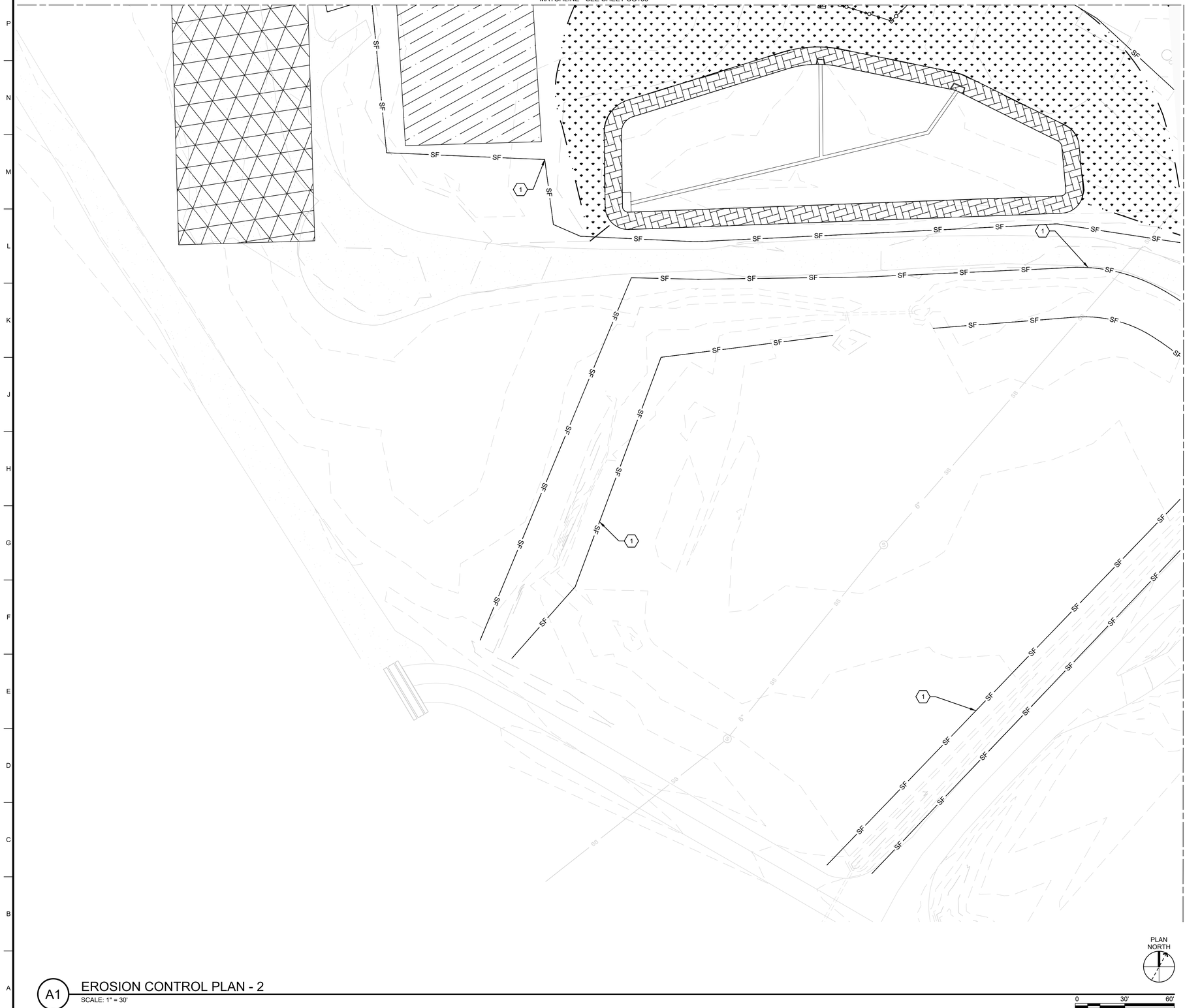
PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

EROSION CONTROL PLAN - 1

SHEET ID

CG105

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



GENERAL NOTES

1. PROPOSED LOCATIONS FOR LIMITS OF CONSTRUCTION AND PROVIDED COORDINATES ARE APPROXIMATE AND ARE SUBJECT TO APPROVAL BY THE GOVT COR.
2. CONTRACTOR SHALL PLACE SILT FENCE ALONG THE PERIMETER OF EACH STAGING AREA USED DURING CONSTRUCTION.
3. CONTRACTOR SHALL REPAIR ALL DISTURBED AREAS WITH SEED/SOD. REFER TO LANDSCAPE SHEETS FOR SPECIFICATIONS.
4. REFER STORMWATER MANAGEMENT NOTES ON SHEET GI002 FOR ADDITIONAL DIRECTION ON STORMWATER POLLUTION PREVENTION AND EROSION CONTROL.
5. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL AND MAINTAIN ANY ADDITIONAL EROSION AND SEDIMENT CONTROL BMPS.
6. REFER SHEET CG501 FOR EROSION CONTROLS DETAILS.

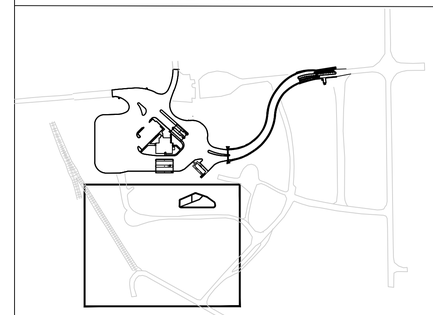
SHEET KEYNOTES

1. INSTALL SILT FENCE, SEE B1/CG501
2. INSTALL CONCRETE WASHOUT, SEE G10/ CG501

SHEET LEGEND

- SILT FENCE
- AIP — AREA INLET PROTECTION, REFER A1/CG501
- CONTRACTOR STAGING AREA
- NEW SOD
- CONCRETE WASHOUT, REFER G10/ CG501
- CONTRACTOR STOCKPILE AREA, REFER H12/C-505
- RIPRAP, REFER A11/CG501
- TURF REINFORCEMENT MAT

KEY MAP



A1 EROSION CONTROL PLAN - 2
SCALE: 1" = 30'

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
SUBMITTED BY: R.TOLIKONDA
ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F8002
CONTRACT NO.: W9127S23D0035
FILE NUMBER:
SCALE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

HANA-KENALL 8A JV
2600 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

EROSION CONTROL PLAN - 2

SHEET ID
CG106

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

A1 EROSION CONTROL PLAN - 3
SCALE: 1"= 30'

GENERAL NOTES

1. PROPOSED LOCATIONS FOR LIMITS OF CONSTRUCTION AND PROVIDED COORDINATES ARE APPROXIMATE AND ARE SUBJECT TO APPROVAL BY THE GOVT COR.
2. CONTRACTOR SHALL PLACE SILT FENCE ALONG THE PERIMETER OF EACH STAGING AREA USED DURING CONSTRUCTION.
3. CONTRACTOR SHALL REPAIR ALL DISTURBED AREAS WITH SEED/SOD. REFER TO LANDSCAPE SHEETS FOR SPECIFICATIONS.
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5. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL AND MAINTAIN ANY ADDITIONAL EROSION AND SEDIMENT CONTROL BMPS.
6. REFER SHEET CG501 FOR EROSION CONTROLS DETAILS.

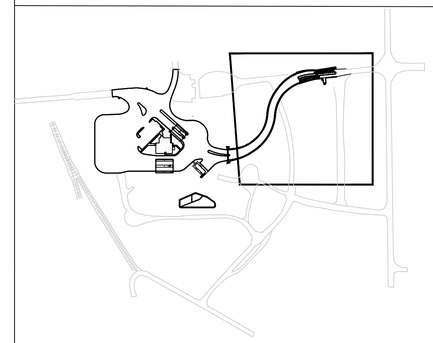
SHEET KEYNOTES

1. INSTALL SILT FENCE, SEE B1/CG501
2. INSTALL CONCRETE WASHOUT, SEE G10/ CG501

SHEET LEGEND

- SILT FENCE
- AREA INLET PROTECTION, REFER A1/CG501
- CONTRACTOR STAGING AREA
- NEW SOD
- CONCRETE WASHOUT, REFER G10/ CG501
- CONTRACTOR STOCKPILE AREA, REFER H12/C-505
- RIPRAP, REFER A11/CG501
- TURF REINFORCEMENT MAT

KEY MAP



US Army Corps of Engineers®

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U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

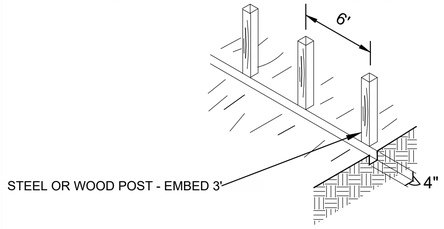
PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

EROSION CONTROL PLAN - 3

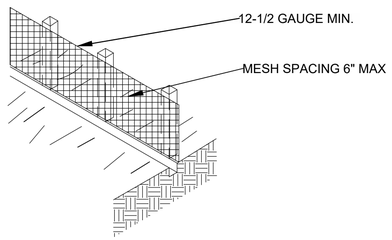
SHEET ID
CG107

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

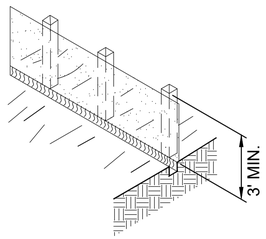
1. SET POSTS AND EXCAVATE A 4" X 4" TRENCH UPSLOPE ALONG THE LINE OF POSTS.



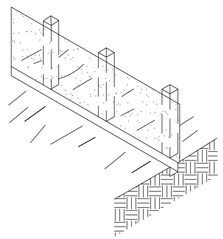
2. STAPLE WIRE FENCING TO THE POSTS.



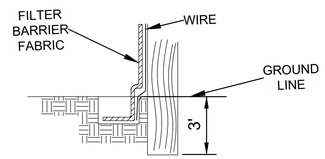
3. ATTACH THE FILTER BARRIER FABRIC TO THE WIRE FENCE AND EXTEND IT INTO THE TRENCH.



4. BACKFILL AND COMPACT THE EXCAVATED SOIL.



EXTENSION OF FABRIC AND WIRE INTO THE TRENCH.

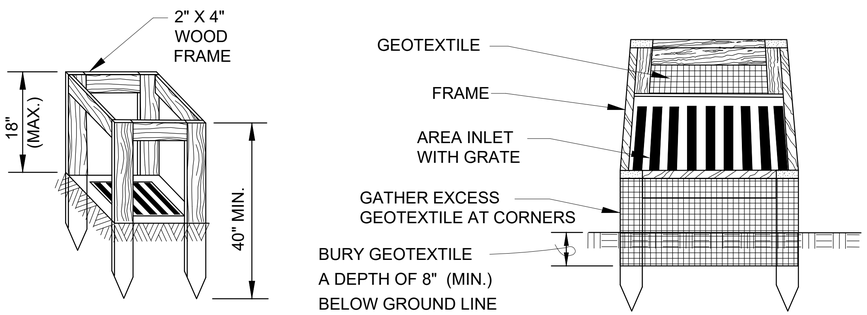


NOTES:

1. SILT FENCE MAY BE INSTALLED USING EITHER TRENCH OR SOIL SLICING CONSTRUCTION METHOD.
2. WHEN ASSEMBLING SILT FENCE ON-SITE, COMPACT THE BACKFILL SOIL IMMEDIATELY NEXT TO THE SILT FENCE GEOTEXTILE. COMPACT THE UPSTREAM SIDE FIRST, AND THEN THE DOWNSTREAM SIDE. WHEN INSTALLING PRE-ASSEMBLED SILT FENCE, CARE SHALL BE TAKEN TO SUFFICIENTLY COMPACT SOIL ADJACENT TO THE INSTALLED GEOTEXTILE AND POSTS. THE SOIL ADJACENT TO THE BURIED SILT FENCE GEOTEXTILE SHALL BE COMPACTED TO ACHIEVE NO LESS THAN 50% OF ITS ORIGINAL IN-SITU DENSITY.

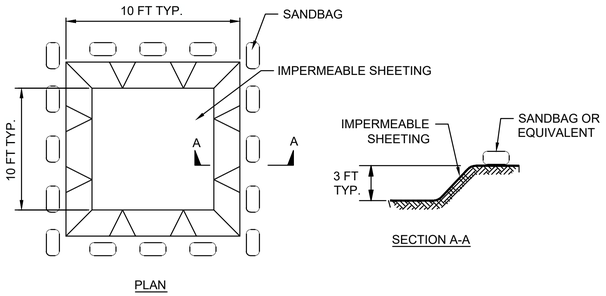
E1 SILT FENCE

SCALE: NOT TO SCALE



A1 AREA INLET PROTECTION

SCALE: NOT TO SCALE



EXCAVATED WASHOUT STRUCTURE

NOTE: WASHOUT MUST BE EXCAVATED BELOW EXISTING GRADE-CONSTRUCTING WITH STRAW BALES IS NOT AN ACCEPTABLE ALTERNATIVE

MAINTENANCE

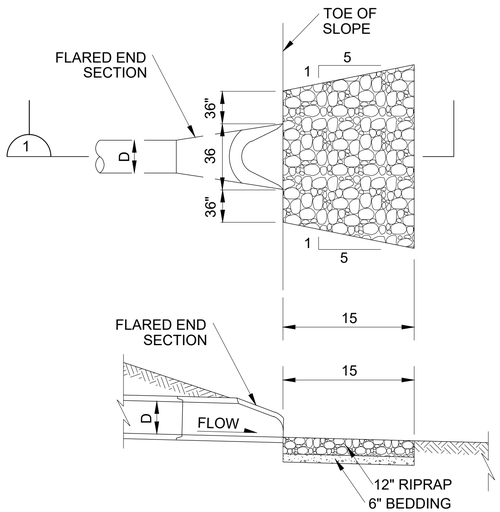
1. ALL CONCRETE WASHOUT FACILITIES SHOULD BE INSPECTED DAILY. DAMAGED OR LEAKING WASHOUTS SHOULD BE DEACTIVATED AND REPAIRED OR REPLACED IMMEDIATELY. KEEP CONCRETE WASHOUT STRUCTURE WATER REPLACE IMPERMEABLE LINER IF DAMAGED (E.G., RIPPED OR PUNCTURED)
2. ACCUMULATED MATERIALS SHOULD BE REMOVED WHEN THEY REACH 75% CAPACITY AND DISPOSE OF ACCUMULATED MATERIALS PROPERLY.
3. DO NOT REUSE PLASTIC LINER. PLASTIC LINERS SHOULD BE REPLACED WITH EACH CLEANING OF THE WASHOUT FACILITY.
4. WET-VACUUM STORED LIQUIDS THAT HAVE NOT EVAPORATED AND DISPOSE OF IN AN APPROVED MANNER. PRIOR TO FORECASTED RAINSTORMS, REMOVE LIQUIDS OR COVER STRUCTURE TO PREVENT OVERFLOWS. REMOVE HARDENED SOLIDS, WHOLE OR BROKEN UP, FOR DISPOSAL OR RECYCLING. MAINTAIN RUNOFF DIVERSION AROUND EXCAVATED WASHOUT STRUCTURE UNTIL STRUCTURE IS REMOVED.

CONSTRUCTION SPECIFICATIONS:

1. LOCATE WASHOUT STRUCTURE A MINIMUM OF 50 FEET AWAY FROM OPEN CHANNELS, STORM DRAIN INLETS, SENSITIVE AREAS, WETLANDS, BUFFERS AND WATER COURSES AND AWAY FROM CONSTRUCTION TRAFFIC.
2. SIZE WASHOUT STRUCTURE FOR VOLUME NECESSARY TO CONTAIN WASH
3. WATER AND SOLIDS AND MAINTAIN AT LEAST 12 INCHES OF FREEBOARD ABOVE THE LIQUID AND SOLID WASTE ANTICIPATED BETWEEN CLEANOUT INTERVALS. TYPICAL DIMENSIONS ARE 10 FEET X 10 FEET X 3 FEET DEEP.
4. PREPARE SOIL BASE FREE OF ROCKS OR OTHER DEBRIS THAT MAY CAUSE TEARS OR HOLES IN THE LINER. FOR LINER, USE 10 MIL OR THICKER UV RESISTANT, IMPERMEABLE SHEETING, FREE OF HOLES AND TEARS OR OTHER DEFECTS THAT COMPROMISE IMPERMEABILITY OF THE MATERIAL.
5. PROVIDE A SIGN FOR THE WASHOUT IN CLOSE PROXIMITY TO THE FACILITY.

G10 CONCRETE WASHOUT

SCALE: NOT TO SCALE



NOTES:

ALL APRONS SHALL BE CONSTRUCTED TO THE DIMENSIONS SHOWN. TERMINAL WIDTHS SHALL BE ADJUSTED AS NECESSARY TO MATCH RECEIVING CHANNELS.

ALL APRONS SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EACH RUNOFF DISPLACED RIPRAP WITHIN THE APRON SHALL BE REPLACED IMMEDIATELY.

GEOTEXTILE FABRIC SPECIFICATIONS SHALL BE IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.

A11 RIPRAP DETAILS

SCALE: NOT TO SCALE

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D0035
FILE NUMBER:

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
SUBMITTED BY: R.TOLIKONDA
SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

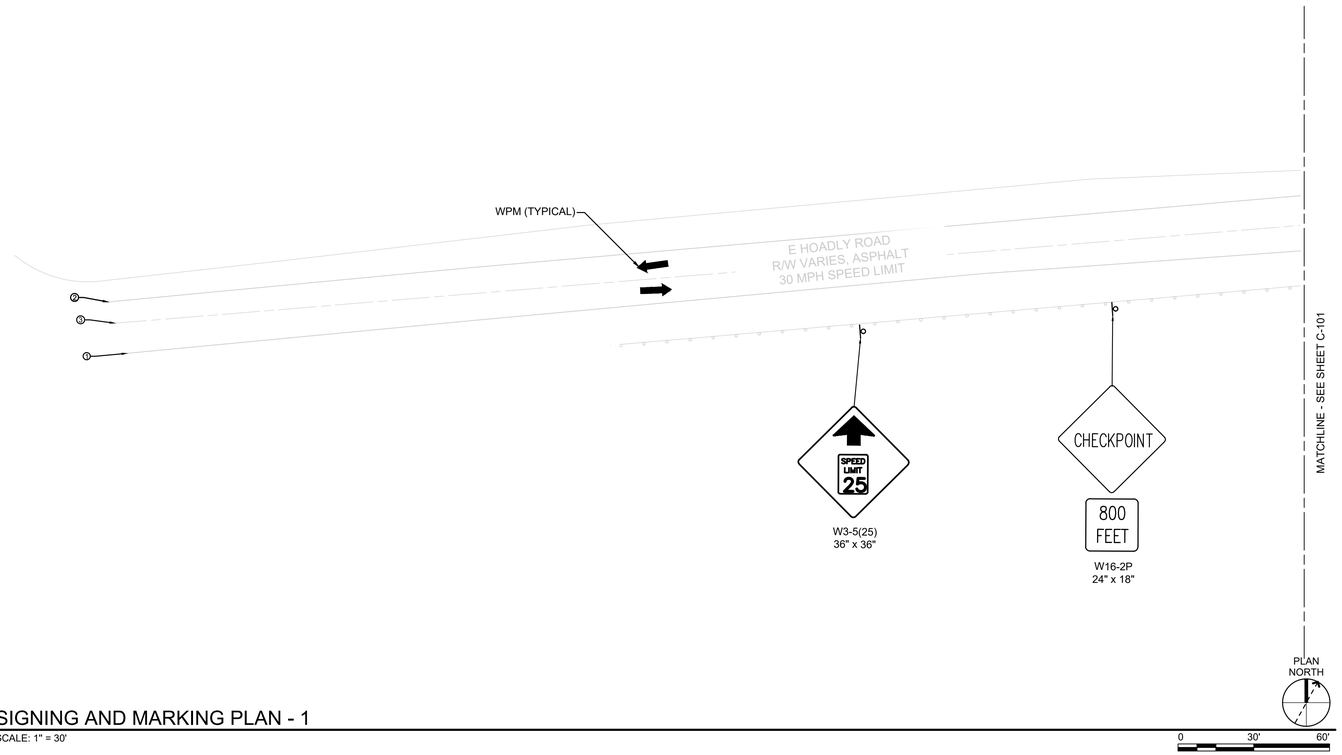
HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

EROSION CONTROL DETAILS

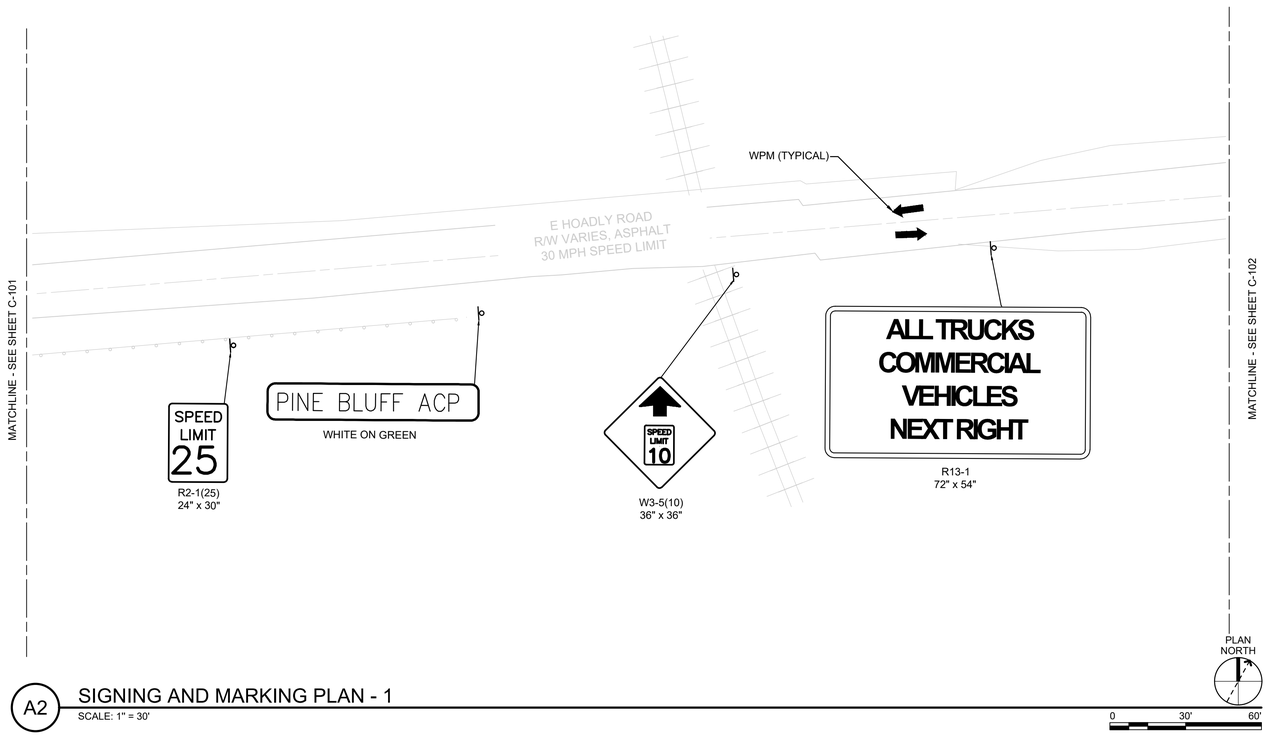
SHEET ID
CG501

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



H1 SIGNING AND MARKING PLAN - 1

SCALE: 1" = 30'



A2 SIGNING AND MARKING PLAN - 1

SCALE: 1" = 30'

GENERAL NOTES

1. REFER TO SHEET C-506 FOR MARKING DETAILS
2. REFER TO SHEET C-103 FOR PAVEMENT MARKING LAYOUT POINTS TABLE
3. REFER TO SHEET C-504 FOR ACCESSIBLE SIGN AND POST DETAILS

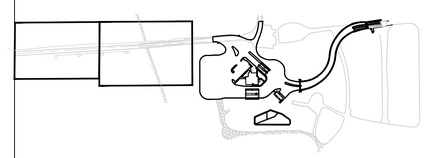
SHEET KEYNOTES

1. TYPICAL OBSTRUCTION MARKINGS - L6/C-506
2. 45° GORE HATCHING - L1/C-506
3. CROSSWALK MARKING - D14/C-506
4. NO PARKING STRIPING - H1/C-504

LEGEND

W/XX	WHITE PAVEMENT MARKING / WIDTH
Y/XX	YELLOW PAVEMENT MARKING / WIDTH
BW/XX	BROKEN WHITE PAVEMENT MARKING WIDTH (10'-30" SKIP)
DY/XX	DOUBLE YELLOW PAVEMENT MARKING / WIDTH
WPM	WHITE PAVEMENT MESSAGE
DW/X	DOTTED WHITE PAVEMENT MARKING /WIDTH

KEY MAP



US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
SUBMITTED BY: R.TOLIKONDA
SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)
ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F8002
CONTRACT NO.: W9127S23D6035
FILE NUMBER:

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

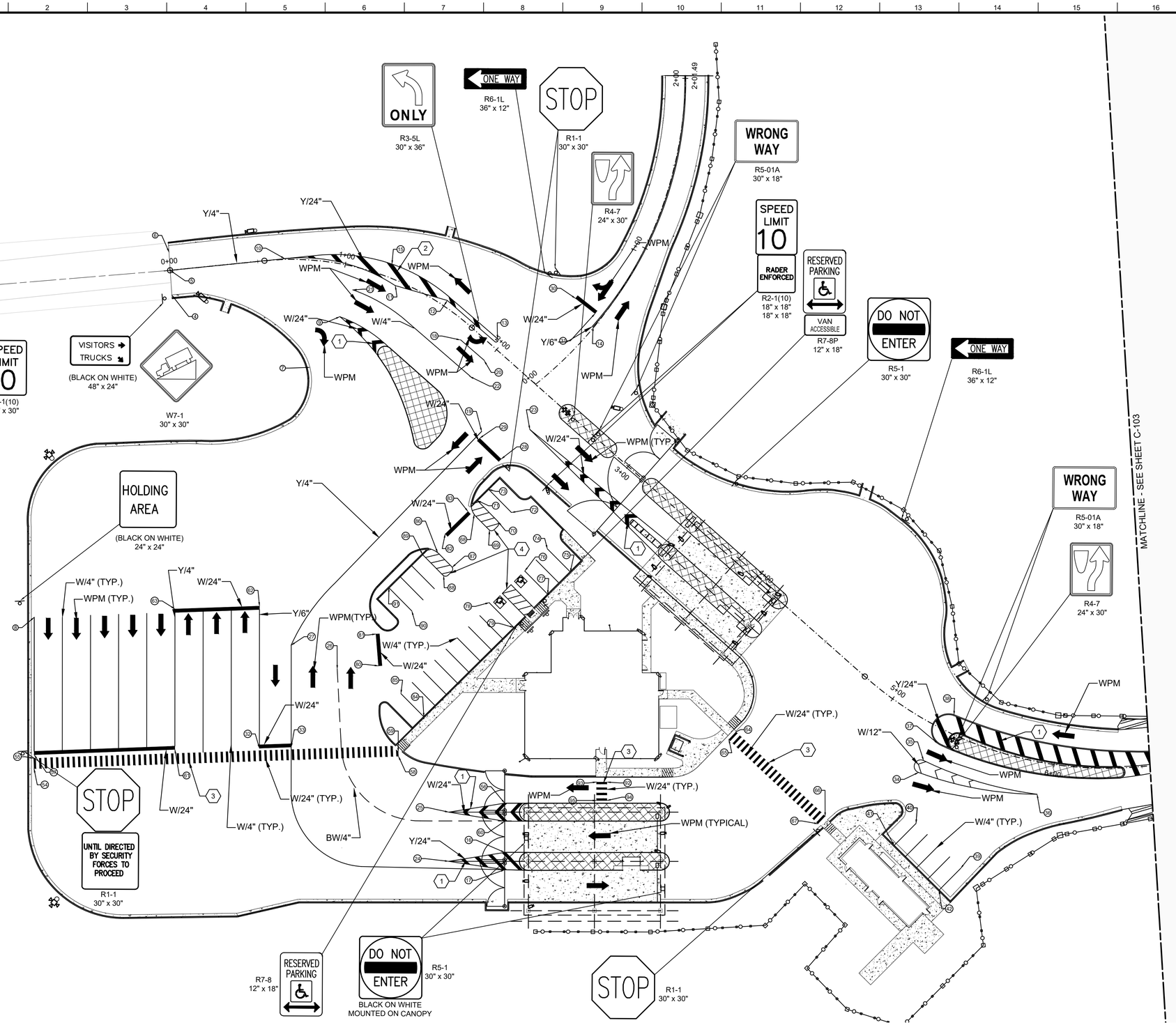
HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

SIGNING AND MARKING PLAN - 1

SHEET ID
C-101

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



A1 SIGNING AND MARKING PLAN - 2

SCALE: 1" = 30"

GENERAL NOTES

1. REFER TO SHEET C-506 FOR MARKING DETAILS
2. REFER TO SHEET C-103 FOR PAVEMENT MARKING LAYOUT POINTS TABLE
3. REFER TO SHEET C-504 FOR ACCESSIBLE SIGN AND POST DETAILS

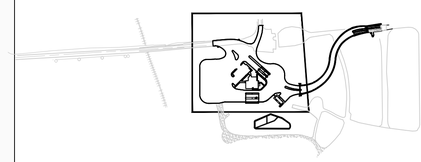
SHEET KEYNOTES

1. TYPICAL OBSTRUCTION MARKINGS - L6/C-506
2. 45° GORE HATCHING - L1/C-506
3. CROSSWALK MARKING - D14/C-506
4. NO PARKING STRIPING - H1/C-504

LEGEND

W/XX	WHITE PAVEMENT MARKING / WIDTH
Y/XX	YELLOW PAVEMENT MARKING / WIDTH
BW/XX	BROKEN WHITE PAVEMENT MARKING WIDTH (10'-30" SKIP)
DY/XX	DOUBLE YELLOW PAVEMENT MARKING / WIDTH
WPM	WHITE PAVEMENT MESSAGE
DW/X	DOTTED WHITE PAVEMENT MARKING /WIDTH

KEY MAP



US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

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DRAWN BY: R.ISLAM
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SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)

ISSUE DATE: 04/17/2026
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U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

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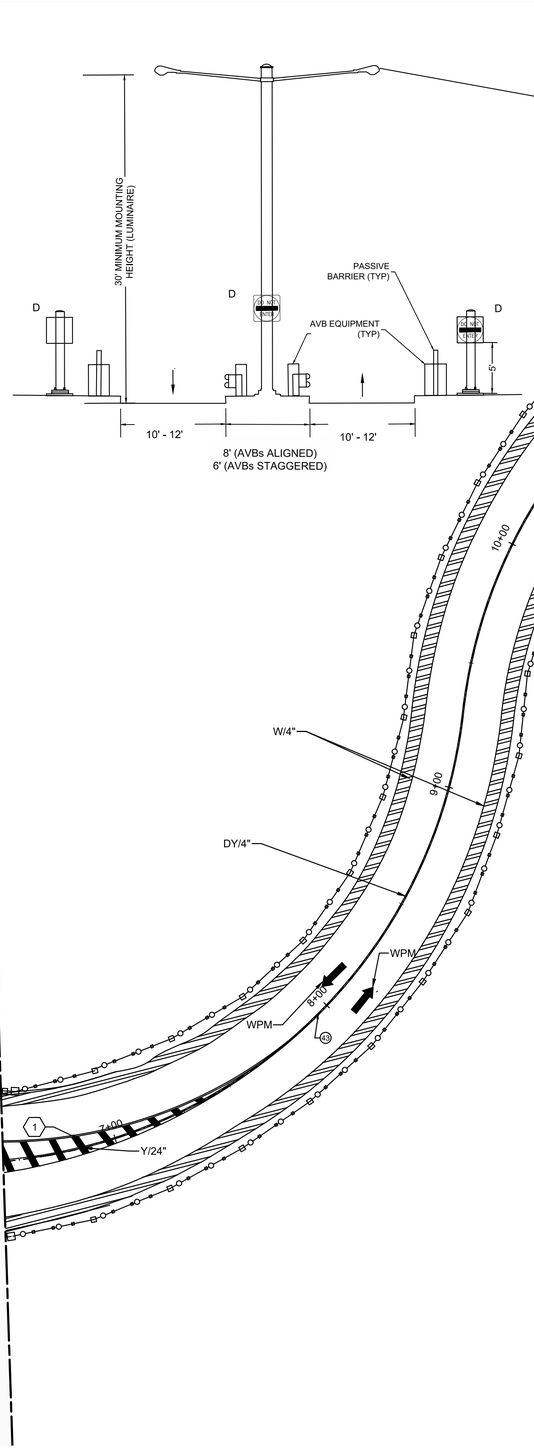
2600 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

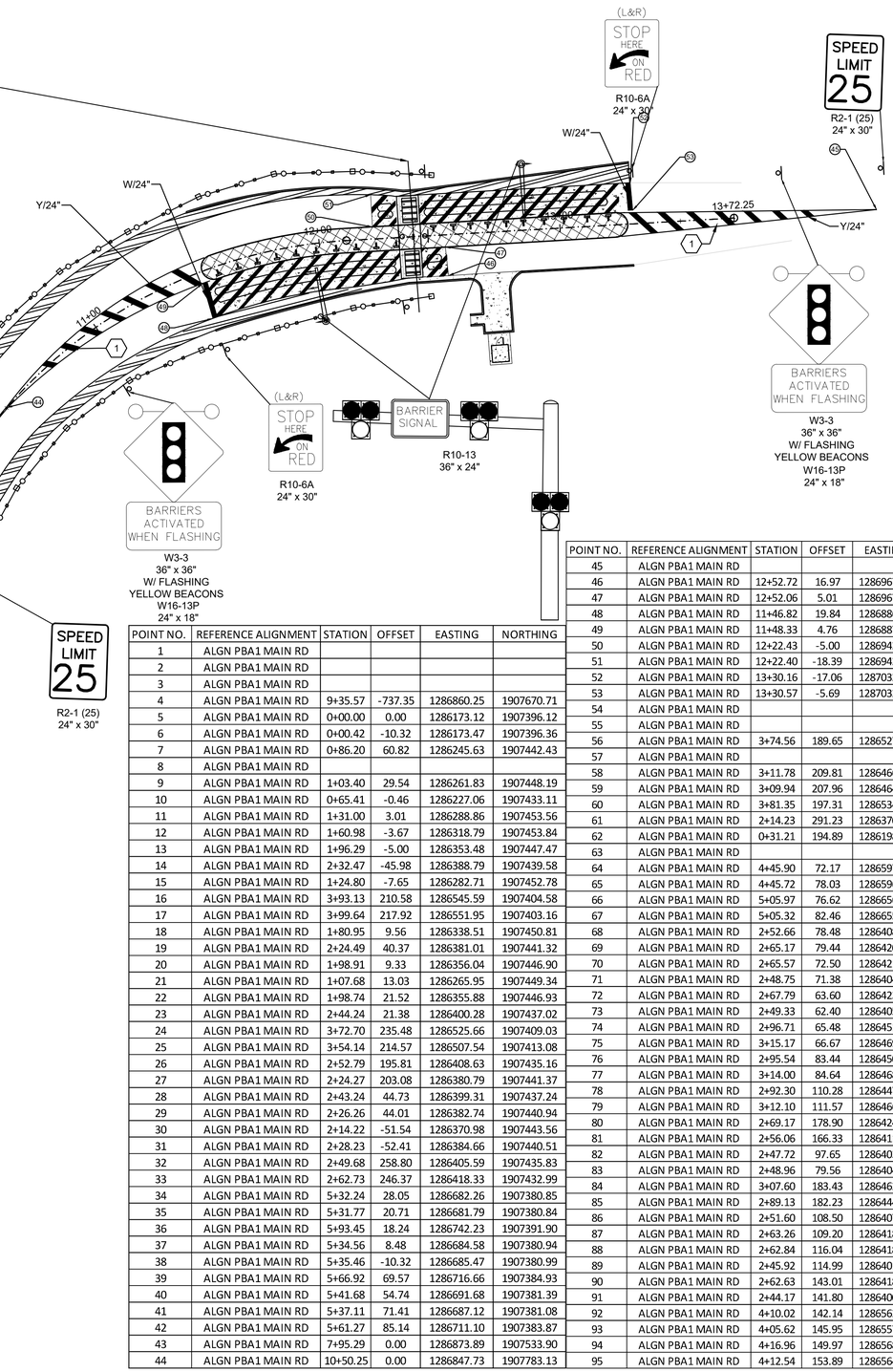
PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

SIGNING AND MARKING PLAN - 2

SHEET ID
C-102

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION





POINT NO.	REFERENCE ALIGNMENT	STATION	OFFSET	EASTING	NORTHING
1	ALGN PBA1 MAIN RD				
2	ALGN PBA1 MAIN RD				
3	ALGN PBA1 MAIN RD				
4	ALGN PBA1 MAIN RD	9+35.57	-737.35	1286860.25	1907670.71
5	ALGN PBA1 MAIN RD	0+00.00	0.00	1286173.12	1907396.12
6	ALGN PBA1 MAIN RD	0+00.42	-10.32	1286173.47	1907396.36
7	ALGN PBA1 MAIN RD	0+86.20	60.82	1286245.63	1907442.43
8	ALGN PBA1 MAIN RD				
9	ALGN PBA1 MAIN RD	1+03.40	29.54	1286261.83	1907448.19
10	ALGN PBA1 MAIN RD	0+65.41	-0.46	1286227.06	1907433.11
11	ALGN PBA1 MAIN RD	1+31.00	3.01	1286288.86	1907453.56
12	ALGN PBA1 MAIN RD	1+60.98	-3.67	1286318.79	1907453.84
13	ALGN PBA1 MAIN RD	1+96.29	-5.00	1286353.48	1907447.47
14	ALGN PBA1 MAIN RD	2+32.47	-45.98	1286388.79	1907439.58
15	ALGN PBA1 MAIN RD	1+24.80	-7.65	1286282.71	1907452.78
16	ALGN PBA1 MAIN RD	3+93.13	210.58	1286545.59	1907404.58
17	ALGN PBA1 MAIN RD	3+99.64	217.92	1286551.95	1907403.16
18	ALGN PBA1 MAIN RD	1+80.95	9.56	1286338.51	1907450.81
19	ALGN PBA1 MAIN RD	2+24.49	40.37	1286381.01	1907441.32
20	ALGN PBA1 MAIN RD	1+98.91	9.33	1286356.04	1907446.90
21	ALGN PBA1 MAIN RD	1+07.68	13.03	1286265.95	1907449.34
22	ALGN PBA1 MAIN RD	1+98.74	21.52	1286355.88	1907446.93
23	ALGN PBA1 MAIN RD	2+44.24	21.38	1286400.28	1907437.02
24	ALGN PBA1 MAIN RD	3+72.70	235.48	1286525.66	1907409.03
25	ALGN PBA1 MAIN RD	3+54.14	214.57	1286507.54	1907413.08
26	ALGN PBA1 MAIN RD	2+52.79	195.81	1286408.63	1907435.16
27	ALGN PBA1 MAIN RD	2+24.27	203.08	1286380.79	1907441.37
28	ALGN PBA1 MAIN RD	2+43.24	44.73	1286399.31	1907437.24
29	ALGN PBA1 MAIN RD	2+26.26	44.01	1286382.74	1907440.94
30	ALGN PBA1 MAIN RD	2+14.22	-51.54	1286370.98	1907443.56
31	ALGN PBA1 MAIN RD	2+28.23	-52.41	1286384.66	1907440.51
32	ALGN PBA1 MAIN RD	2+49.68	258.80	1286405.59	1907435.83
33	ALGN PBA1 MAIN RD	2+62.73	246.37	1286418.33	1907432.99
34	ALGN PBA1 MAIN RD	5+32.24	28.05	1286682.26	1907380.85
35	ALGN PBA1 MAIN RD	5+31.77	20.71	1286681.79	1907380.84
36	ALGN PBA1 MAIN RD	5+93.45	18.24	1286742.23	1907391.90
37	ALGN PBA1 MAIN RD	5+34.56	8.48	1286684.58	1907380.94
38	ALGN PBA1 MAIN RD	5+35.46	-10.32	1286685.47	1907380.99
39	ALGN PBA1 MAIN RD	5+66.92	69.57	1286716.66	1907384.93
40	ALGN PBA1 MAIN RD	5+41.68	54.74	1286691.68	1907381.39
41	ALGN PBA1 MAIN RD	5+37.11	71.41	1286687.12	1907381.08
42	ALGN PBA1 MAIN RD	5+61.27	85.14	1286711.10	1907383.87
43	ALGN PBA1 MAIN RD	7+95.29	0.00	1286873.89	1907533.90
44	ALGN PBA1 MAIN RD	10+50.25	0.00	1286847.73	1907783.13

POINT NO.	REFERENCE ALIGNMENT	STATION	OFFSET	EASTING	NORTHING
45	ALGN PBA1 MAIN RD				
46	ALGN PBA1 MAIN RD	12+52.72	16.97	1286967.89	1907937.50
47	ALGN PBA1 MAIN RD	12+52.06	5.01	1286967.34	1907937.13
48	ALGN PBA1 MAIN RD	11+46.82	19.84	1286886.65	1907870.48
49	ALGN PBA1 MAIN RD	11+48.33	4.76	1286887.58	1907871.67
50	ALGN PBA1 MAIN RD	12+22.43	-5.00	1286942.77	1907920.57
51	ALGN PBA1 MAIN RD	12+22.40	-18.39	1286942.74	1907920.55
52	ALGN PBA1 MAIN RD	13+30.16	-17.06	1287032.11	1907980.78
53	ALGN PBA1 MAIN RD	13+30.57	-5.69	1287032.45	1907981.01
54	ALGN PBA1 MAIN RD				
55	ALGN PBA1 MAIN RD				
56	ALGN PBA1 MAIN RD	3+74.56	189.65	1286527.47	1907408.63
57	ALGN PBA1 MAIN RD				
58	ALGN PBA1 MAIN RD	3+11.78	209.81	1286466.20	1907422.31
59	ALGN PBA1 MAIN RD	3+09.94	207.96	1286464.40	1907422.71
60	ALGN PBA1 MAIN RD	3+81.35	197.31	1286534.10	1907407.15
61	ALGN PBA1 MAIN RD	2+14.23	291.23	1286370.99	1907443.56
62	ALGN PBA1 MAIN RD	0+31.21	194.89	1286198.74	1907413.94
63	ALGN PBA1 MAIN RD				
64	ALGN PBA1 MAIN RD	4+45.90	72.17	1286597.10	1907393.08
65	ALGN PBA1 MAIN RD	4+45.72	78.03	1286596.93	1907393.12
66	ALGN PBA1 MAIN RD	5+05.97	76.62	1286656.01	1907381.63
67	ALGN PBA1 MAIN RD	5+05.32	82.46	1286655.37	1907381.69
68	ALGN PBA1 MAIN RD	2+52.66	78.48	1286408.50	1907435.18
69	ALGN PBA1 MAIN RD	2+65.17	79.44	1286420.71	1907432.46
70	ALGN PBA1 MAIN RD	2+65.57	72.50	1286421.10	1907432.37
71	ALGN PBA1 MAIN RD	2+48.75	71.38	1286404.68	1907436.04
72	ALGN PBA1 MAIN RD	2+67.79	63.60	1286423.27	1907431.89
73	ALGN PBA1 MAIN RD	2+49.33	62.40	1286405.25	1907435.91
74	ALGN PBA1 MAIN RD	2+96.71	65.48	1286451.49	1907425.59
75	ALGN PBA1 MAIN RD	3+15.17	66.67	1286469.51	1907421.57
76	ALGN PBA1 MAIN RD	2+95.54	83.44	1286450.35	1907425.84
77	ALGN PBA1 MAIN RD	3+14.00	84.64	1286468.36	1907421.82
78	ALGN PBA1 MAIN RD	2+92.30	110.28	1286447.19	1907426.55
79	ALGN PBA1 MAIN RD	3+12.10	111.57	1286466.52	1907422.23
80	ALGN PBA1 MAIN RD	2+69.17	178.90	1286424.62	1907431.59
81	ALGN PBA1 MAIN RD	2+56.06	166.33	1286411.82	1907434.44
82	ALGN PBA1 MAIN RD	2+47.72	97.65	1286403.68	1907436.26
83	ALGN PBA1 MAIN RD	2+48.96	79.56	1286404.89	1907435.99
84	ALGN PBA1 MAIN RD	3+07.60	183.43	1286462.12	1907423.22
85	ALGN PBA1 MAIN RD	2+89.13	182.23	1286444.10	1907427.24
86	ALGN PBA1 MAIN RD	2+51.60	108.50	1286407.46	1907435.42
87	ALGN PBA1 MAIN RD	2+63.26	109.20	1286418.85	1907432.88
88	ALGN PBA1 MAIN RD	2+62.84	116.04	1286418.44	1907432.97
89	ALGN PBA1 MAIN RD	2+45.92	114.99	1286401.92	1907436.65
90	ALGN PBA1 MAIN RD	2+62.63	143.01	1286418.23	1907433.01
91	ALGN PBA1 MAIN RD	2+44.17	141.80	1286400.22	1907437.03
92	ALGN PBA1 MAIN RD	4+10.02	142.14	1286562.08	1907400.90
93	ALGN PBA1 MAIN RD	4+05.62	145.95	1286557.79	1907401.86
94	ALGN PBA1 MAIN RD	4+16.96	149.97	1286568.85	1907399.39
95	ALGN PBA1 MAIN RD	4+12.54	153.89	1286564.54	1907400.35

PLAN NORTH

0 30' 60'

GENERAL NOTES

1. REFER TO SHEET C-506 FOR MARKING DETAILS
2. REFER TO SHEET C-103 FOR PAVEMENT MARKING LAYOUT POINTS TABLE
3. REFER TO SHEET C-504 FOR ACCESSIBLE SIGN AND POST DETAILS

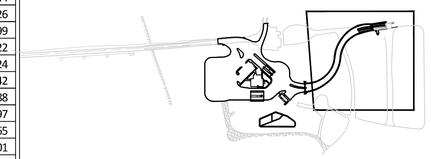
SHEET KEYNOTES

1. TYPICAL OBSTRUCTION MARKINGS - L6/C-506
2. 45° GORE HATCHING - L1/C-506
3. CROSSWALK MARKING - D14/C-506
4. NO PARKING STRIPING - H1/C-504

LEGEND

W/XX	WHITE PAVEMENT MARKING / WIDTH
Y/XX	YELLOW PAVEMENT MARKING / WIDTH
BW/XX	BROKEN WHITE PAVEMENT MARKING WIDTH (10'-30" SKIP)
DY/XX	DOUBLE YELLOW PAVEMENT MARKING / WIDTH
WPM	WHITE PAVEMENT MESSAGE
DW/X	DOTTED WHITE PAVEMENT MARKING /WIDTH

KEY MAP



A1 SIGNING AND MARKING PLAN - 3
SCALE: 1" = 30"

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
SUBMITTED BY: R.TOLIKONDA
SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)
ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F8002
CONTRACT NO.: W9127S23D0035
FILE NUMBER:

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

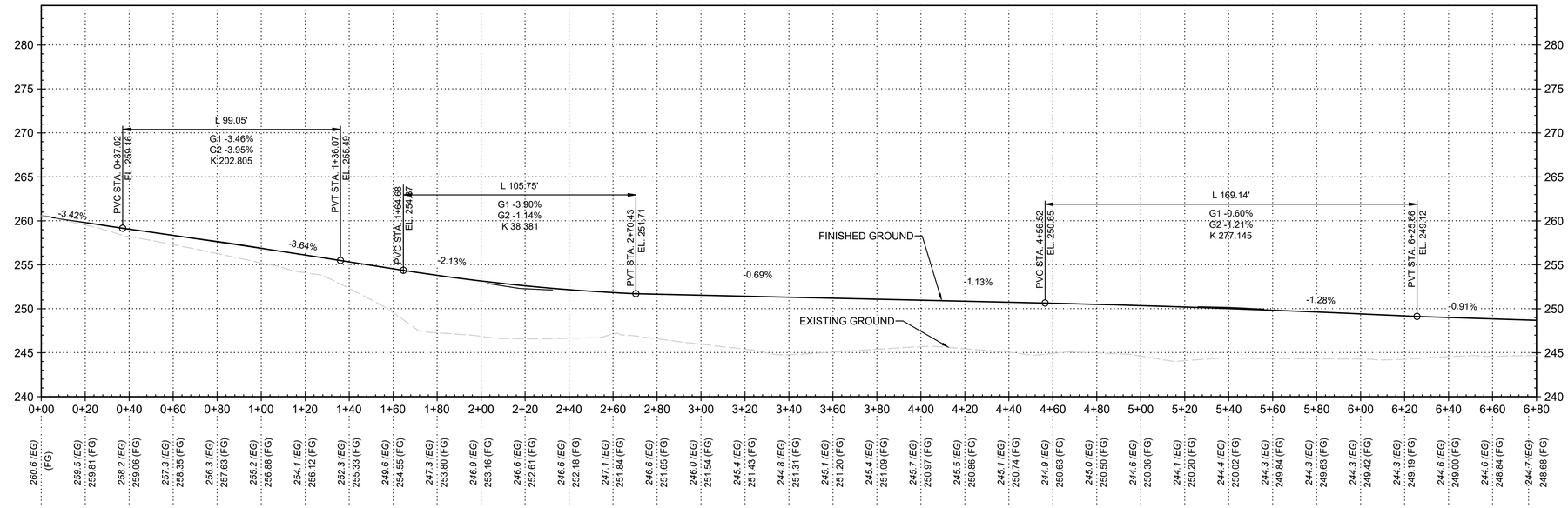
HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

SIGNING AND MARKING PLAN - 3

SHEET ID
C-103

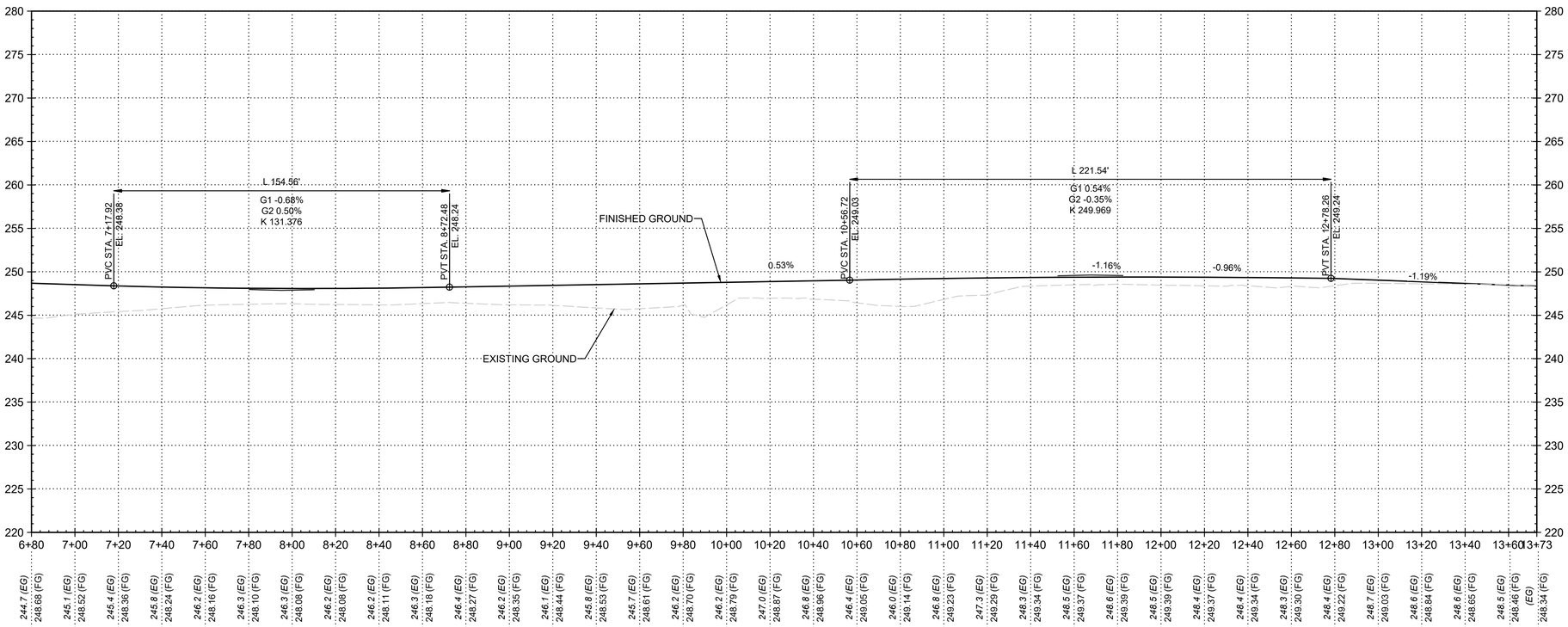
CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



J2 ROAD PAVEMENT PROFILE - ALGN PBA1 MAIN RD: STA 0+00 - STA 6+80

SCALE: HORIZONTAL - 1" = 20' VERTICAL - 1" = 5'

0 20' 40'



A2 ROAD PAVEMENT PROFILE - ALGN PBA1 MAIN RD: STA 6+80 - STA 13+73

SCALE: HORIZONTAL - 1" = 20" VERTICAL - 1" = 5'

0 20' 40'

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY:	B.BANDA
DRAWN BY:	R.ISLAM
CHECKED BY:	R.TOLIKONDA
SUBMITTED BY:	R.TOLIKONDA
SIZE:	ANSI FULL BLEED D (22.00 X 34.00 INCHES)
ISSUE DATE:	04/17/2026
SOLICITATION NO.:	W9127S24F6002
CONTRACT NO.:	W9127S23D6035
FILE NUMBER:	

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

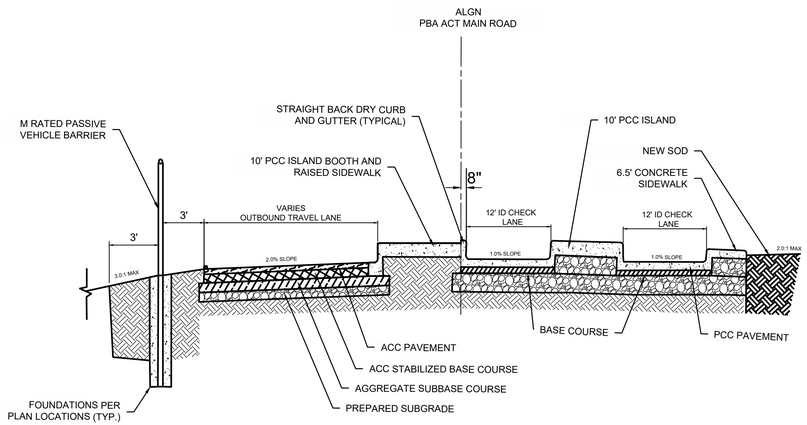
HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

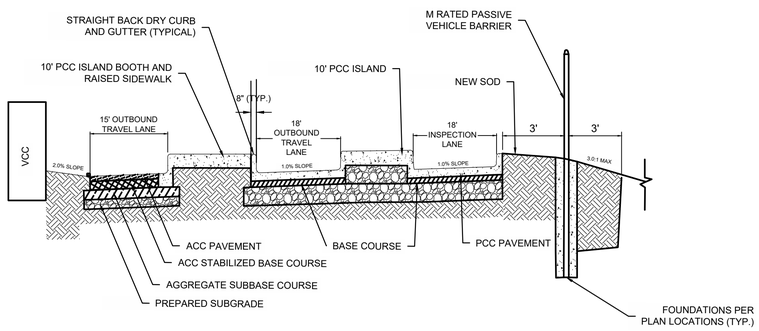
ROAD PAVEMENT PROFILE

SHEET ID
C-201

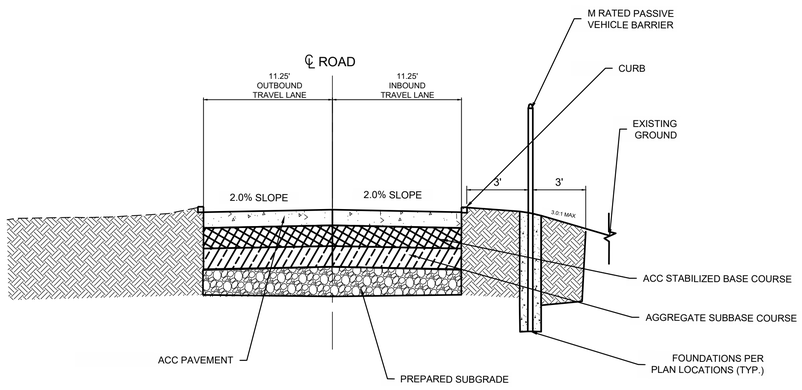
CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



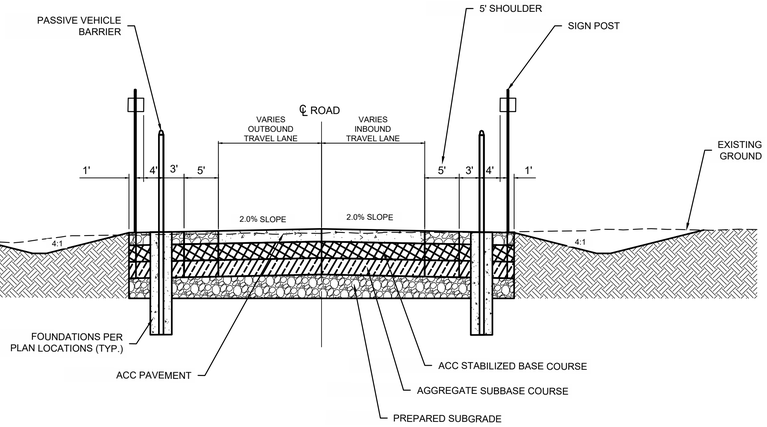
K2 TYPICAL SECTION - ACP ID CHECK AREA
SCALE: NOT TO SCALE



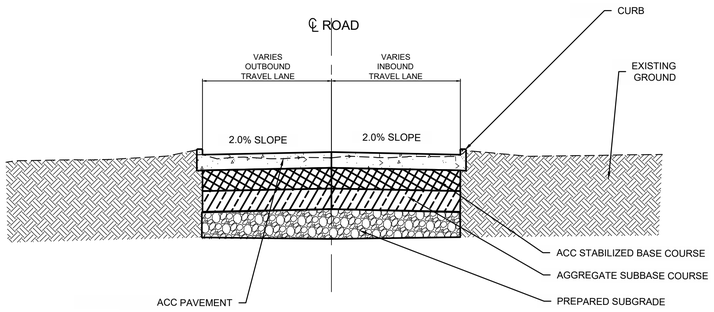
E1 TYPICAL SECTION - SEARCH ROAD
SCALE: NOT TO SCALE



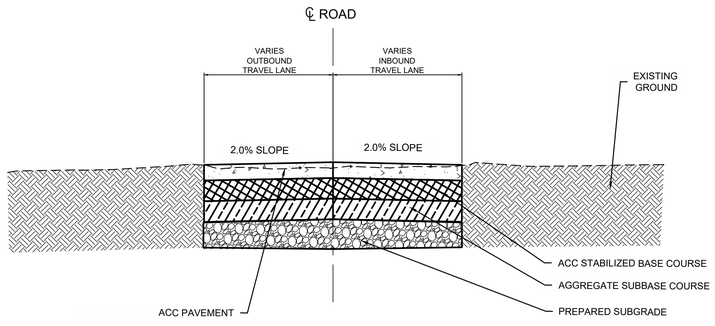
A1 TYPICAL SECTION - DAYTON ROAD
SCALE: NOT TO SCALE



K10 TYPICAL SECTION - ACP RESPONSE ZONE
SCALE: NOT TO SCALE



E10 TYPICAL SECTION - PINE BLUFF ARSENAL ENTRY ROAD TIE-IN
SCALE: NOT TO SCALE



A10 TYPICAL SECTION - HOADLY ROAD TIE-IN
SCALE: NOT TO SCALE

GENERAL NOTES

1. REFER TO SHEET C-503 FOR PAVEMENT DETAILS.

SHEET KEYNOTES

SHEET LEGEND

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D6035
FILE NUMBER:
SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
SUBMITTED BY: R.TOLIKONDA

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

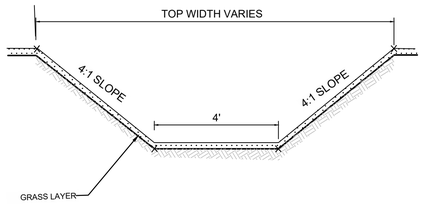
HANA-KENALL 8A JV
2500 CITYWEST BLVD. STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71601

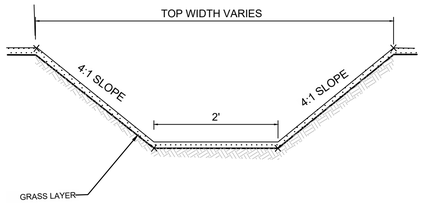
TYPICAL SECTIONS - ROADS

SHEET ID
C-301

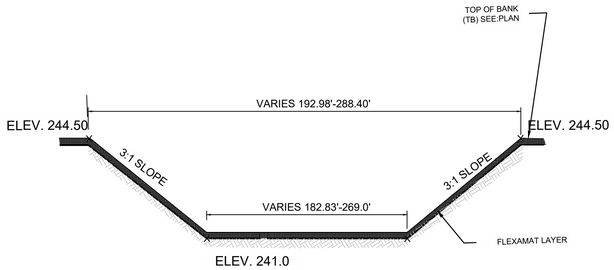
CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



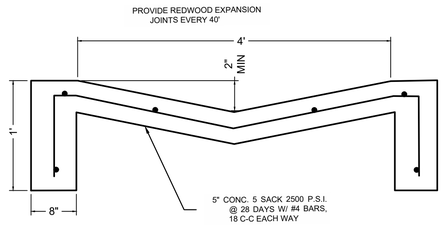
J3 TYPICAL DITCH SECTION - ACCESS CONTROL ZONE
SCALE: NOT TO SCALE



J13 TYPICAL DITCH SECTION - ROAD SIDE DITCH
SCALE: NOT TO SCALE



D4 TYPICAL DETENTION POND SECTION
SCALE: NOT TO SCALE



D13 CONCRETE PILOT CHANNEL DETAIL
SCALE: NOT TO SCALE

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
SUBMITTED BY: R.TOLIKONDA
ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D6035
FILE NUMBER:
SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

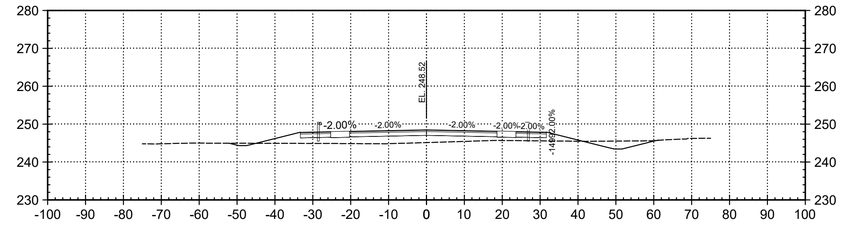
HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

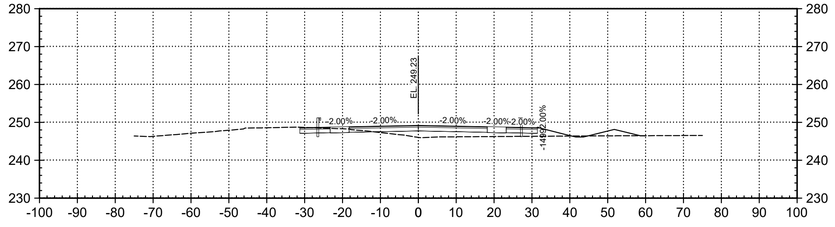
TYPICAL SECTIONS
DETENTION POND AND DITCHES

SHEET ID
C-302

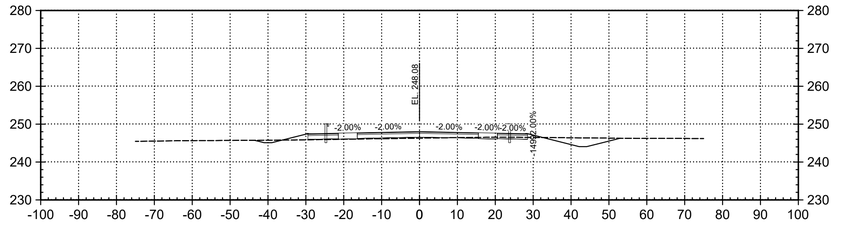
CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



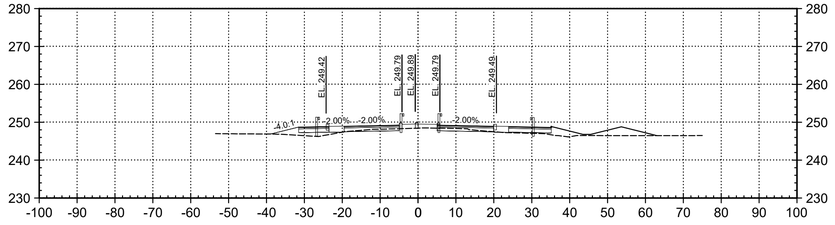
7+00



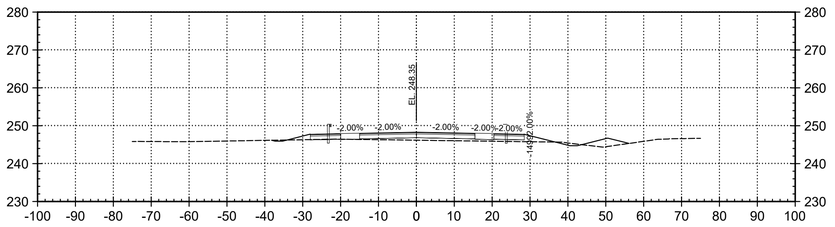
11+00



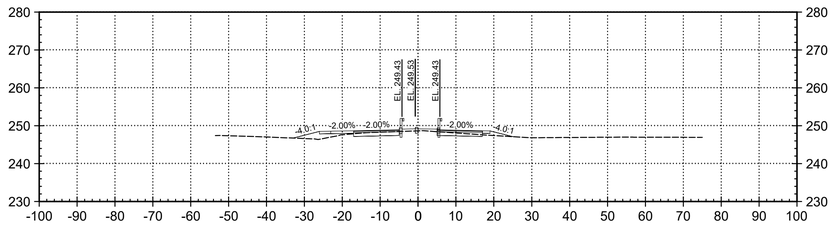
8+00



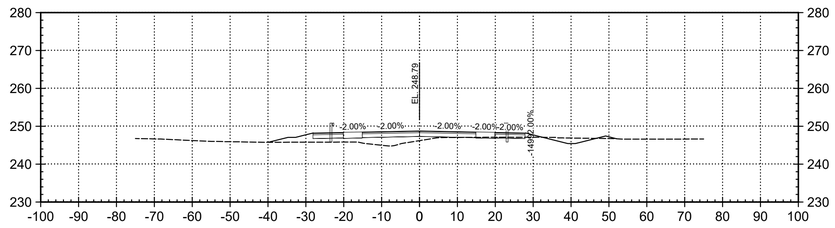
12+00



9+00



13+00



10+00

A2 ROAD PAVEMENT CROSS SECTIONS

SCALE: HORIZONTAL - 1"=20' VERTICAL - 1"=20'

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
SUBMITTED BY: R.TOLIKONDA
SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)

ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D6035
FILE NUMBER:

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

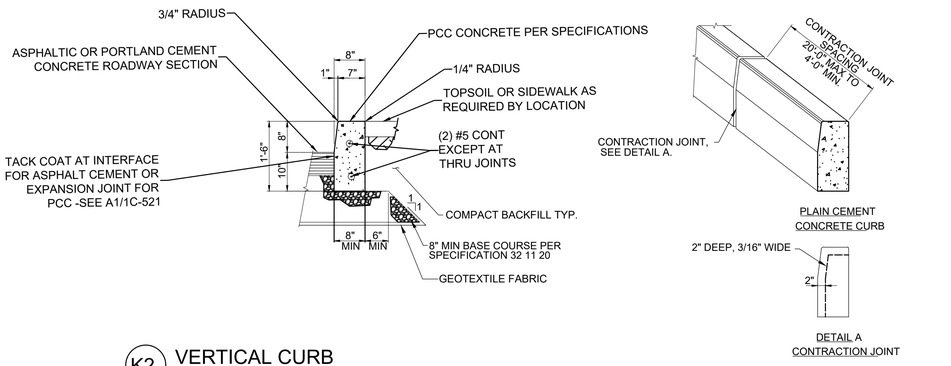
HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

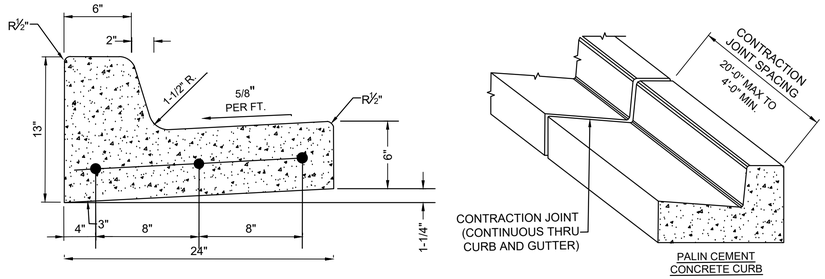
ROADWAY CROSS SECTIONS
STA 7+00 TO 13+00

SHEET ID
C-303

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

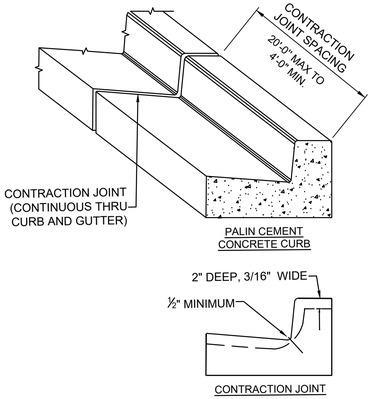


K2 VERTICAL CURB
SCALE: NOT TO SCALE

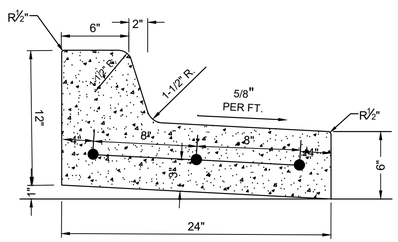


CURB NOTES:

1. PLACE 20 (3/4") THICK PREMOLDED EXPANSION JOINT FILLER MATERIAL AT STRUCTURES AND AT THE END OF THE WORK DAY. CUT MATERIAL TO CONFORM TO CROSS SECTIONAL AREA OF CURB.



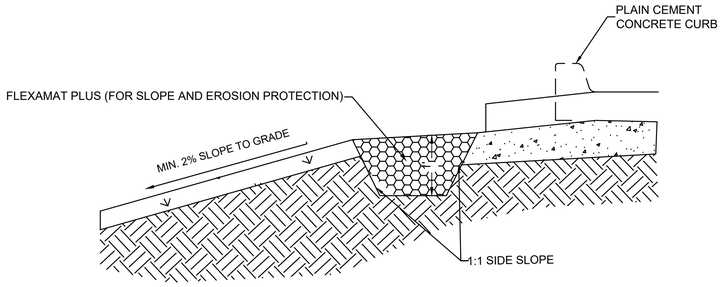
F2 PLAIN CEMENT CONCRETE CURB GUTTER
SCALE: NOT TO SCALE



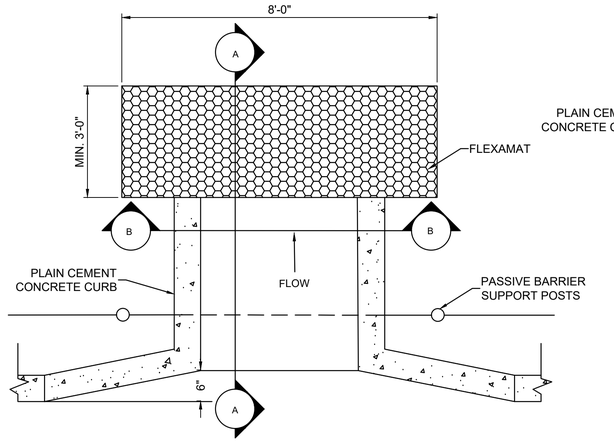
NOTE:

1. 3/4" ISOLATION JOINTS WITH 5/8" DIA. X 2' SMOOTH DOWELS SHALL BE PLACED AT RADIUS POINTS AND AT 15' INTERVALS. THESE DOWEL BARS SHALL BE GREASED AND WRAPPED ON ONE END WITH EXPANSION TUBES.
2. 1" DEEP CONTRACTION JOINTS SHALL BE INSTALLED AT APPROXIMATELY 10' INTERVALS. THESE JOINTS SHALL PASS ACROSS THE ENTIRE CURB SECTION.
3. FIX DOWEL BARS WITH BAR SUPPORTS.
4. DEPTH OF CURB SHALL BE A MINIMUM OF 8" THROUGH THE HANDICAP ACCESS RAMP.
5. CONCRETE SHALL CONFORM TO PROJECT SPECIFICATIONS.
6. SUBGRADE COMPACTION SHALL EXTEND UNDER ADJACENT CURB SECTIONS AND TWO FEET (2.0') BEYOND THE BACK OF CURB.

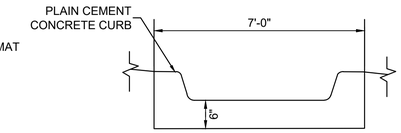
B2 STRAIGHT BACK DRY CURB & GUTTER (TYPE CG-1 DRY)
SCALE: NOT TO SCALE



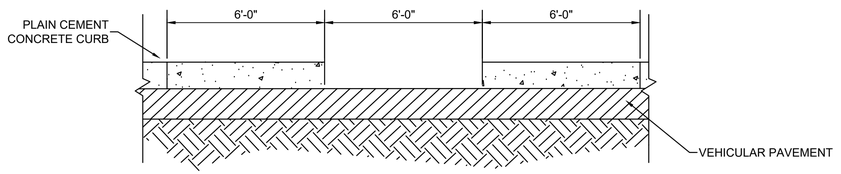
SECTION A-A



PLAN



SECTION B-B



SECTION

B12 CONCRETE CURB CUT OPENING WITH FLUME
SCALE: NOT TO SCALE

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLUKONDA
SUBMITTED BY: R.TOLUKONDA
SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)
ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D6035
FILE NUMBER:

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

SITE DETAILS - 1

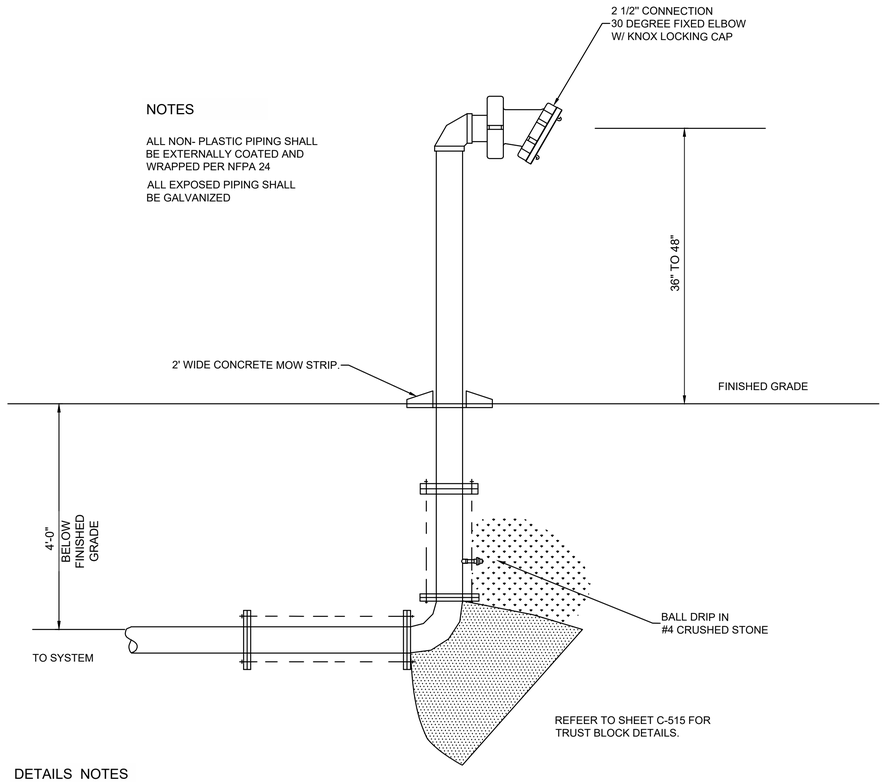
SHEET ID
C-501

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

NOTES

ALL NON- PLASTIC PIPING SHALL BE EXTERNALLY COATED AND WRAPPED PER NFPA 24

ALL EXPOSED PIPING SHALL BE GALVANIZED

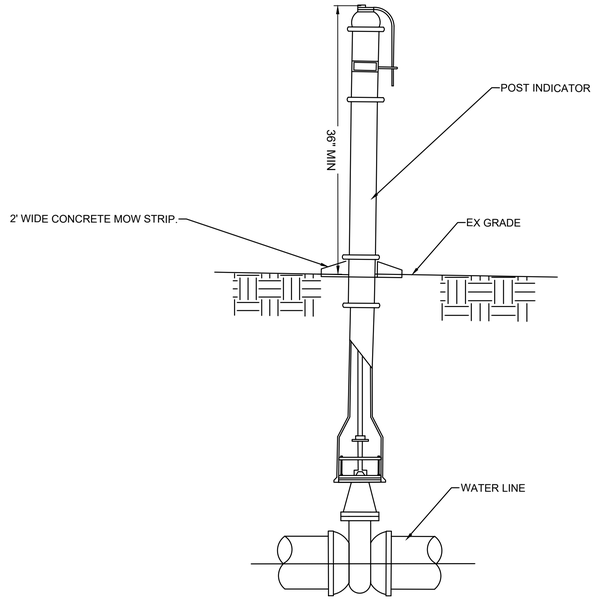


DETAILS NOTES

1. FIRE DEPARTMENT CONNECTION SHALL HAVE FEMALE INLETS, 2 1/2 INCH DIAMETER AMERICAN NATIONAL FIRE HOUSE CONNECTION SCREW THREADS PER NFPA 1963.
2. THE FDC SHALL BE LOCATED NOT LESS THAN 18 INCHES AND NOT MORE THAN 4 FEET ABOVE GRADE LEVEL
3. PROVIDE A MIN. ¼ INCH SPACING BETWEEN THE MOW STRIP AND THE PIPE.

B2 TYPICAL REMOTE FIRE DEPARTMENT CONNECTION(FDC) DETAILS

SCALE: NOT TO SCALE



C14 POST INDICATOR VALVE

SCALE: NOT TO SCALE

US Army Corps of Engineers®

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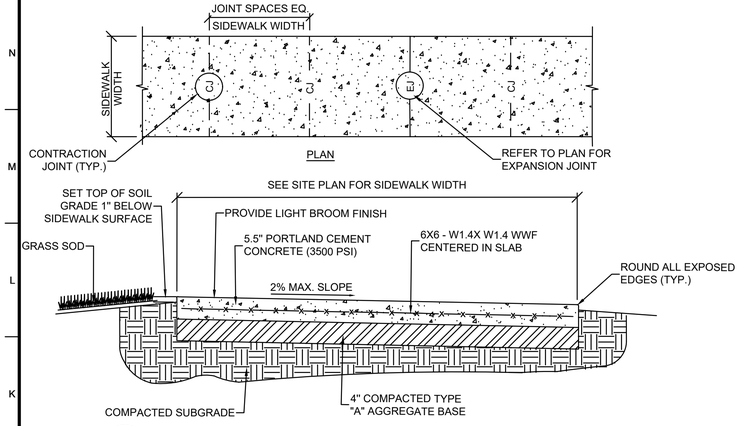
HOADLEY ROAD, WHITE HALL, AR 71602

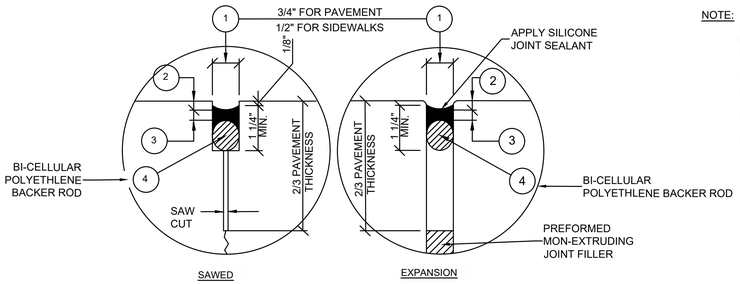
SITE DETAILS - 2

SHEET ID
C-502

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



K1 CONCRETE SIDEWALK
SCALE: NOT TO SCALE



JOINT TREATMENT TABLE			
JOINT WIDTH (1)	SEALANT DEPTH (2)	SEALANT THICKNESS (3)	BACKER ROD DIA. (4)
1/2"	1/4"	1/4"	5/8"
3/4"	1/4"	3/8"	7/8"

DETAIL NOTES:
1. CLEAN JOINTS PRIOR TO APPLYING SEALANT.
2. BACKER ROD ARE AS FOLLOWS:
   → USE 7/8 INCH BACKER ROD FOR 3/4-INCH JOINTS
   → USE 5/8 INCH BACKER ROD FOR 1/2-INCH JOINTS
3. JOINT SEALANT: PROVIDE AND INSTALL SILICONE JOINT SEALANT DOWSIL 888 OR APPROVED EQUAL.

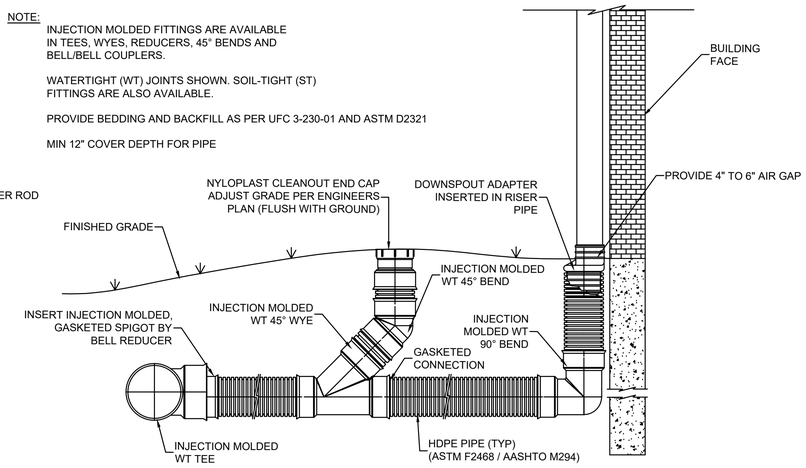
K8 PAVEMENT JOINTS
SCALE: NOT TO SCALE

NOTE:
INJECTION MOLDED FITTINGS ARE AVAILABLE IN TEES, WYES, REDUCERS, 45° BENDS AND BELL/BELL COUPLERS.

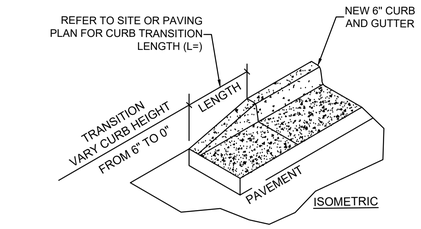
WATERTIGHT (WT) JOINTS SHOWN. SOIL-TIGHT (ST) FITTINGS ARE ALSO AVAILABLE.

PROVIDE BEDDING AND BACKFILL AS PER UFC 3-230-01 AND ASTM D2321

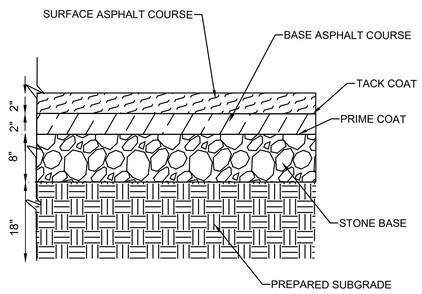
MIN 12" COVER DEPTH FOR PIPE



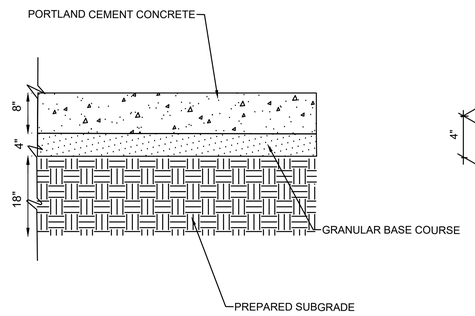
K14 ROOF DRAIN DETAILS
SCALE: NOT TO SCALE



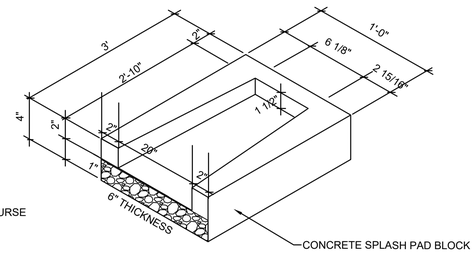
D1 TYPICAL CURB TRANSITION
SCALE: NOT TO SCALE



D8 ASPHALT PAVEMENT DETAILS
SCALE: NOT TO SCALE



D12 PCC PAVEMENT DETAILS
SCALE: NOT TO SCALE



D15 CONCRETE SPLASH BLOCK DETAIL
SCALE: NOT TO SCALE

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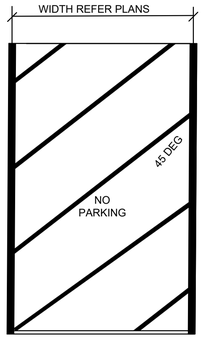
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

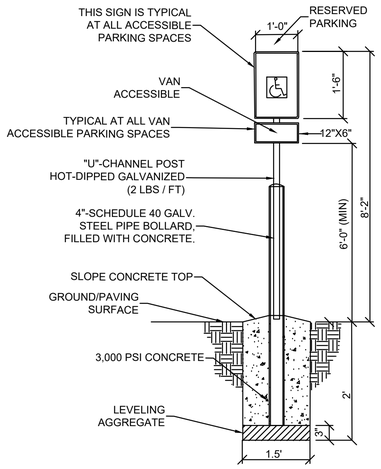
SITE DETAILS - 3

SHEET ID
C-503

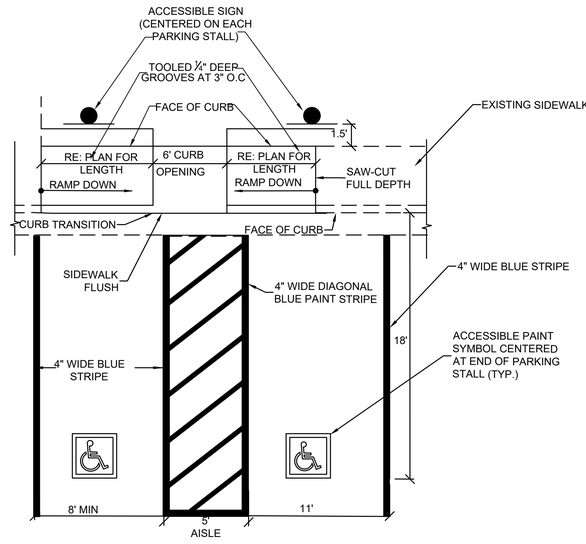
CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



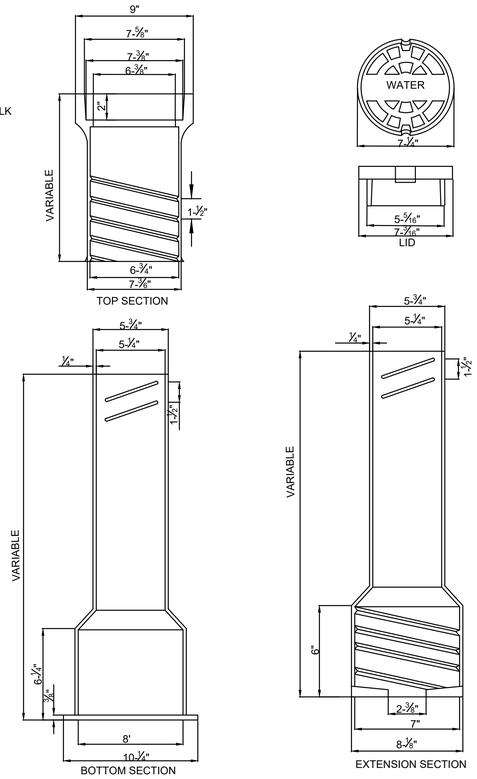
J1 CROSS WALK STRIPING
SCALE: NOT TO SCALE



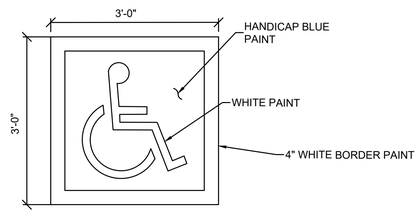
J5 ACCESSIBLE SIGN AND POST
SCALE: NOT TO SCALE



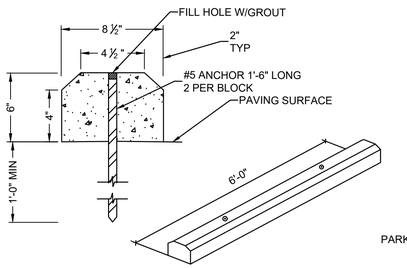
J9 TYPICAL ACCESSIBLE STALL
SCALE: NOT TO SCALE



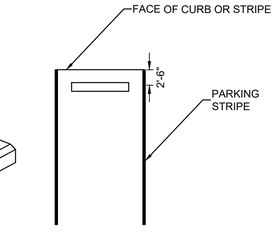
G15 CAST IRON VALVE BOX INSTALLATION
SCALE: NOT TO SCALE

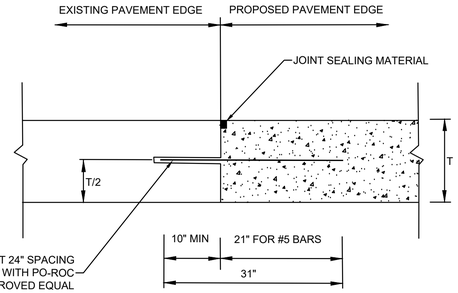


C1 ACCESSIBLE SYMBOL
SCALE: NOT TO SCALE



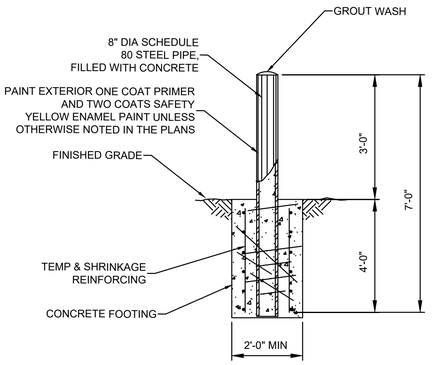
C5 PARKING WHEEL STOP DETAIL
SCALE: NOT TO SCALE





1. PRIOR TO COMMENCING ANY WIDENING WORK, THE SUBCONTRACTOR MUST DEMONSTRATE THAT THE BOND STRENGTH OF THE EPOXY-GROUTED TIE BARS MEET OR EXCEED THE FOLLOWING MINIMUM REQUIREMENTS:
   ►BOND STRENGTH (ASTM C882): MINIMUM 1,800 PSI AT 2 DAYS
   ► PULLOUT STRENGTH: MINIMUM 22,500 lbs AT 24 HOURS
2. SPACE TIE BARS AT 24" SPACING. USE#5 BARS FOR LESS THAN 8" AND LESS THICK SLABS.
3. THE TRANSVERSE JOINTS OF PROPOSED PAVEMENT SHALL COINCIDE WITH EXISTING PAVEMENT JOINTS UNLESS OTHERWISE SHOWN ON THE PLANS.

B11 PAVEMENT JOINT DETAIL
SCALE: NOT TO SCALE



1. NOTE: WHERE APPLICABLE, LOCATE EDGE OF BOLLARDS 1.5' MINIMUM FROM THE BACK OF CURB

B15 STANDARD BOLLARD
SCALE: NOT TO SCALE

US Army Corps of Engineers®

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SUBMITTED BY: R.TOLIKONDA
SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)
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PINE BLUFF ARSENAL PLAINVIEW GATE

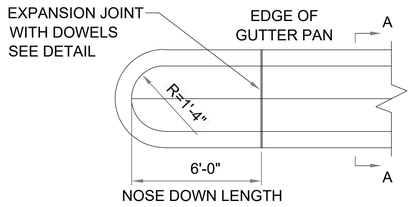
HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

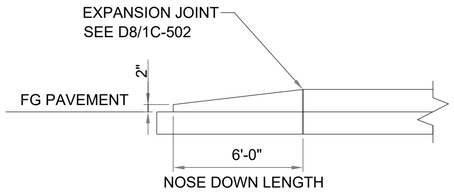
SITE DETAILS - 4

SHEET ID
C-504

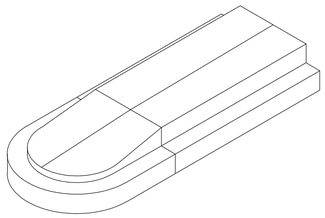
CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



CONCRETE NOSE DOWN
PLAN VIEW

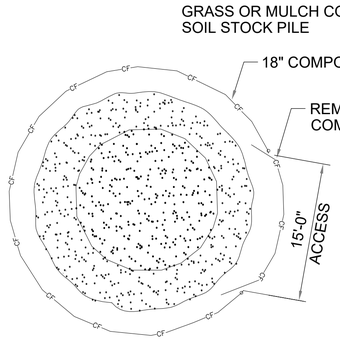


CONCRETE NOSE DOWN
PROFILE VIEW

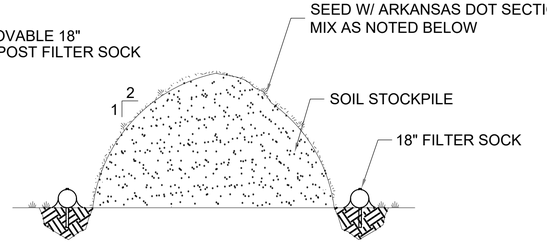


CONCRETE NOSE DOWN
ISOMETRIC VIEW

H3 CONCRETE MEDIAN NOSE DOWN
SCALE: NOT TO SCALE



PLAN VIEW

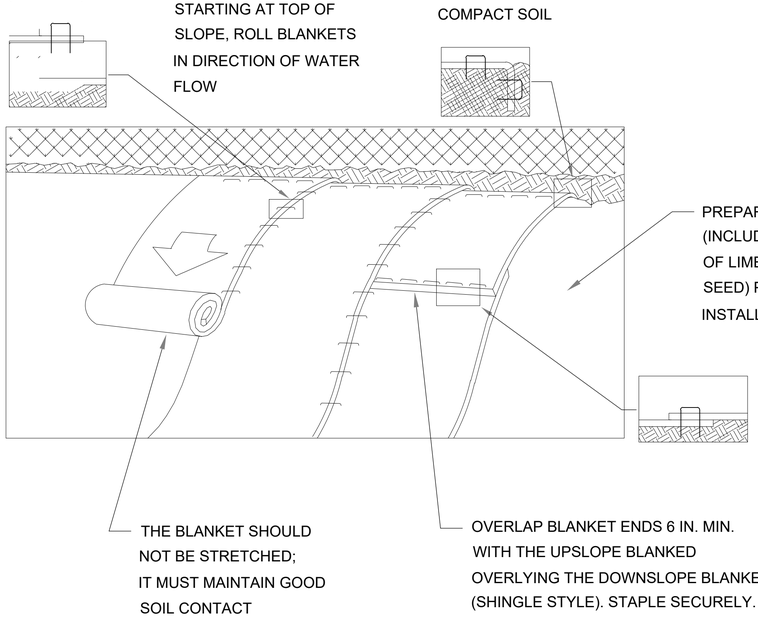


SECTION VIEW

NOTES:

1. SOIL STOCKPILE SHALL BE ENCIRCLED WITH 18" COMPOST FILTER SOCKS. PROVIDE A 15' WIDE REMOVABLE PORTION FOR EQUIPMENT ACCESS.
2. IMMEDIATELY PROVIDE ARKANSAS DOT SECTION 620 SEED MIX FOR TEMPORARY GRASS COVER ON STOCKPILE IF CONSTRUCTION IS DELAYED OR STOCKPILE IS TO BE UNDISTURBED. TEMPORARY COVER SHALL CONSIST OF PRACTICES IN CONFORMANCE WITH SOIL STABILIZATION TECHNIQUES SUCH AS SEEDING, MULCHING, ETC.
3. PASSAGEWAY IS TO REMAIN CLOSED WHEN STOCKPILE IS INACTIVE AND NIGHTLY.
4. SIDE SLOPES SHALL NOT BE STEEPER THAN 2H:1V.

H12 SOIL STOCKPILE
SCALE: NOT TO SCALE



A2 EROSION CONTROL BLANKET INSTALLATION
SCALE: NOT TO SCALE

NOTES:

SEED AND SOIL AMENDMENTS SHALL BE APPLIED ACCORDING TO THE RATES IN THE PLAN DRAWINGS PRIOR TO INSTALLING THE BLANKET.

PROVIDE ANCHOR TRENCH AT TOE OF SLOPE IN SIMILAR FASHION AS AT TOP OF SLOPE.

SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS, AND GRASS.

BLANKET SHALL HAVE GOOD CONTINUOUS CONTACT WITH UNDERLYING SOIL THROUGHOUT ENTIRE LENGTH. LAY BLANKET LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH SOIL. DO NOT STRETCH BLANKET.

THE BLANKET SHALL BE NORTH AMERICAN GREEN (NAG) S75BN OR APPROVED EQUAL, INSTALLED ON ALL DISTURBED SLOPES 3:1 AND STEEPER, AND STAPLED PER TYPE 'C' ON DETAIL A8 SHEET 1C-521.

BLANKETED AREAS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT UNTIL PERENNIAL VEGETATION IS ESTABLISHED TO A MINIMUM UNIFORM 70% COVERAGE THROUGHOUT THE BLANKETED AREA. DAMAGED OR DISPLACED BLANKETS SHALL BE RESTORED OR REPLACED WITHIN 4 CALENDAR DAYS.

US Army Corps of Engineers®

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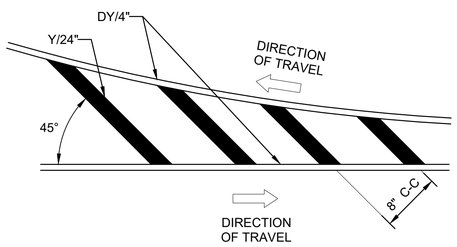
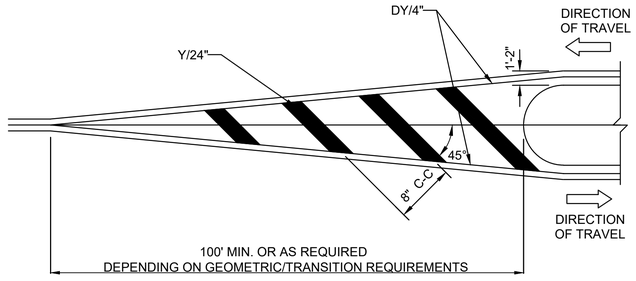
HOADLEY ROAD, WHITE HALL, AR 71602

SITE DETAILS - 5

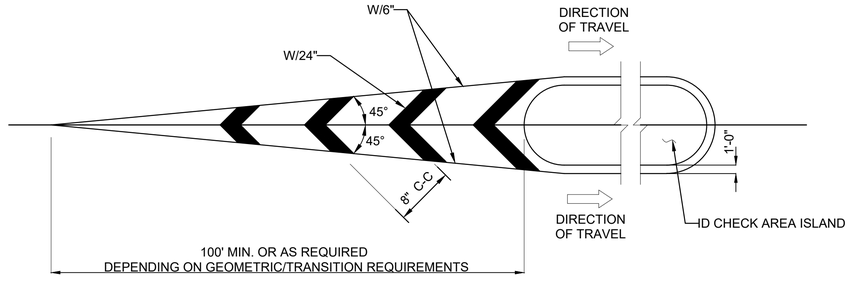
SHEET ID
C-505

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION





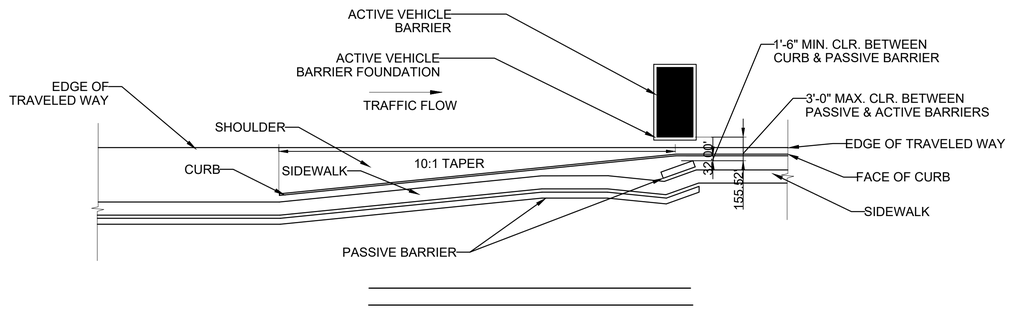
OPPOSING DIRECTIONS



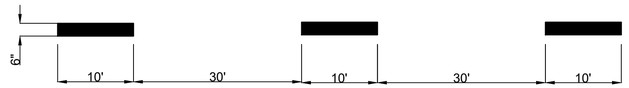
SAME DIRECTION

L1 45°GORE HATCHING
SCALE: NOT TO SCALE

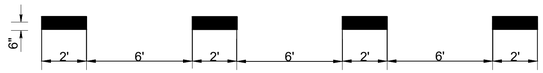
L6 TYPICAL OBSTRUCTION MARKINGS
SCALE: NOT TO SCALE



F1 EXAMPLE - ACTIVE VEHICLE BARRIER IN A SHOULDER TO CURB TRANSITION (WITH SIDEWALK)
SCALE: NOT TO SCALE



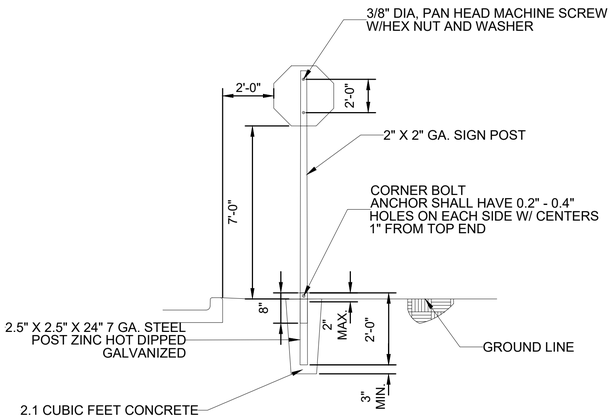
H11 6" BROKEN LANE LINE
SCALE: NOT TO SCALE



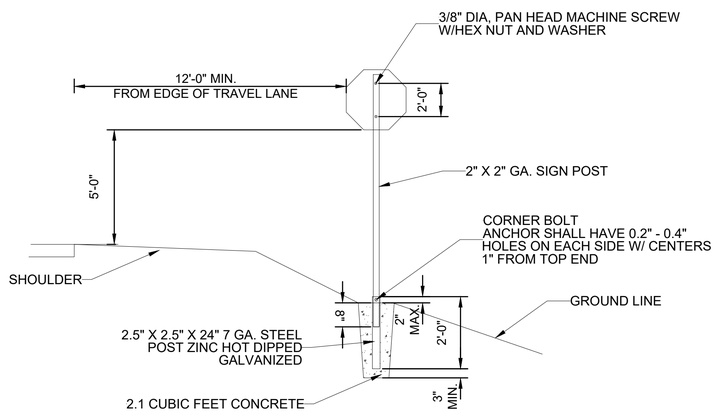
F11 6" DASHED LINE
SCALE: NOT TO SCALE

SIGN MOUNTING NOTES:

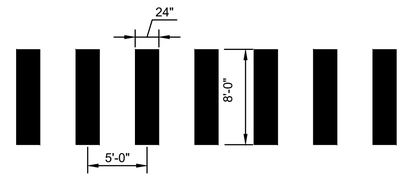
1. PROVIDE ALL SIGN POSTS WITH A BREAKAWAY DESIGN AS SET FORTH IN AASHTO RSDG-4 (2011 ROADSIDE DESIGN GUIDE) OR AS REQUIRED BY THE LOCAL/STATE DEPARTMENT OF TRANSPORTATION.



A2 SIGN MOUNTING BEHIND CURB
SCALE: NOT TO SCALE



A8 SIGN MOUNTING (NO CURB)
SCALE: NOT TO SCALE



D14 CROSSWALK MARKING
SCALE: NOT TO SCALE

A15 100mm (4") DOUBLE YELLOW/WHITE LINE
SCALE: NOT TO SCALE

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D6035
SUBMITTED BY: R.TOLIKONDA
FILE NUMBER:
SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

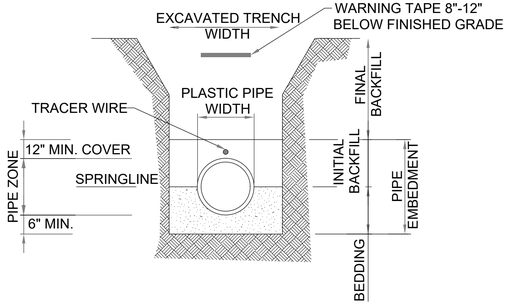
HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

SITE DETAILS - 6

SHEET ID
C-506

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



NOTES:
1. PROVIDE BEDDING IN ACCORDANCE WITH THE SPECIFICATIONS.
2. EXCAVATED WIDTH SHALL BE 1' MAX. WIDER THAN PIPE WIDTH.
3. TRACER WIRE MUST BE ELECTRICALLY CONTINUOUS AND MUST EXTEND ABOVE GRADE ADJACENT TO EVERY RISER/VALVE BOX.

J3 TRENCH FOR PLASTIC PIPE

SCALE: NOT TO SCALE

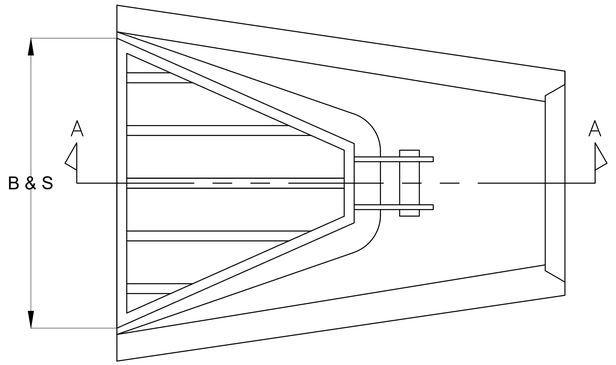
MAXIMUM TRENCH WIDTH "W" TAKEN AT TOP OF PIPE

PIPE DIA "D"	MAXIMUM "A"
6" TO 15"	8"
18" TO 21"	10"
24" TO 30"	12"
33" TO 42"	15"
48" & LARGER	18"

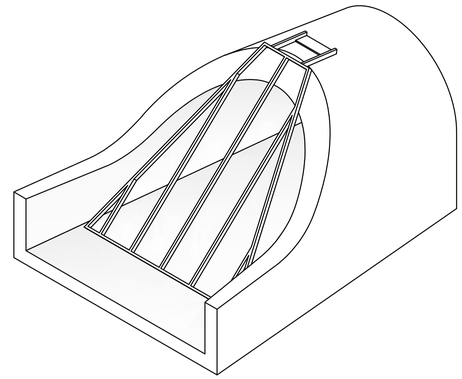
NOTES:
1. PROVIDE BEDDING IN ACCORDANCE WITH THE SPECIFICATIONS.
2. TRACER WIRE MUST BE ELECTRICALLY CONTINUOUS AND MUST EXTEND ABOVE GRADE ADJACENT TO EVERY RISER/VALVE BOX.

C3 TRENCH FOR NON-PLASTIC PIPE

SCALE: NOT TO SCALE

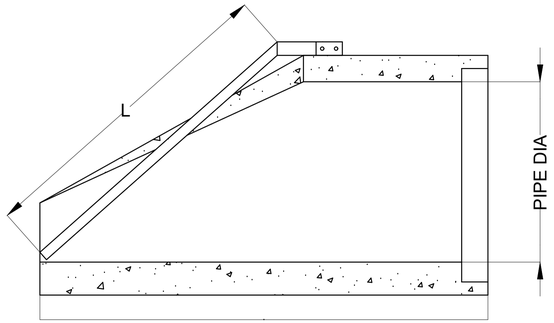


PLAN VIEW

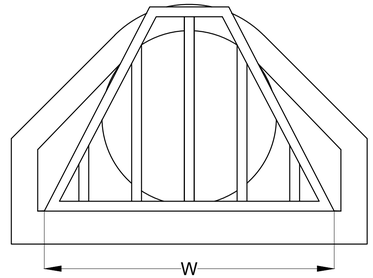


ISOMETRIC VIEW

FOR REFERENCE ONLY)



SECTION A-A



END VIEW

PIPE DIAMETER	TRASH RACK WIDTH W (IN.)	TRASH RACK LENGTH (IN.)	TOTAL # OF BARS B	BAR SPACING (IN.)
12"	21.00"	30.00"	3	6.0"
15"	28.00"	32.00"	3	6.5"
18"	33.00"	34.00"	3	8.0"
24"	40.00"	47.50"	5	8.0"
30"	55.00"	63.00"	5	9.0"
36"	58.00"	71.25"	6	8.0"
42"	64.00"	76.00"	7	8.0"
48"	70.00"	82.75"	9	8.0"
54"	84.00"	84.00"	14	6.0"
60"	94.00"	90.00"	22	6.0"
72"	106.0"	106.0"	22	6.0"

A6 CULVERT TRASH GUARD DETAILS

SCALE: NOT TO SCALE

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
SUBMITTED BY: R.TOLIKONDA
SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)
ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D6035
FILE NUMBER:

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

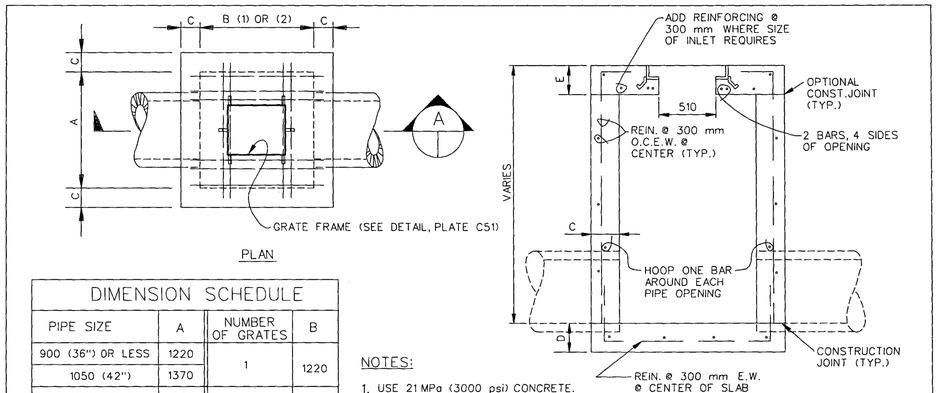
HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

SITE DETAILS - 7

SHEET ID
C-507

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



DIMENSION SCHEDULE			
PIPE SIZE	A	NUMBER OF GRATES	B
900 (36") OR LESS	1220	1	1220
1050 (42")	1370		
1200 (48")	1520	2	1830
1350 (54")	1680		
1500 (60")	1830		
1650 (66")	2130	3	2440
1800 (72")	2290		
2100 (84")	2590		

NOTES:
1. USE 21 MPa (3000 psi) CONCRETE.
2. ALL LAPS AND EXTENSIONS OF REINF. TO BE 30x DIAM. OF BAR.
3. STD. PRE-CAST SURFACE INLETS MAY BE USED INSTEAD WHERE ECONOMICAL.

DIMENSION SCHEDULE	C	D	E
NON-TRAFFIC AREA	150	200	200
UP TO 40 kN WHEEL LOAD	150	250	250
UP TO 110 kN WHEEL LOAD	200	250	300

NOTES TO DESIGNER:
1. WHERE PIPE IS REQUIRED FOR A "T" OR 4-WAY INTERSECTION, USE DIMENSION "A" UNDER DIMENSION SCHEDULE.
2. USE THE LARGER APPLICABLE DIMENSION OF "A" OR "B".
3. REINFORCEMENT BAR SIZE: NON-TRAFFIC #13
   WHEEL LOADS UP TO 40 kN #16
   WHEEL LOADS UP TO 110 kN #19

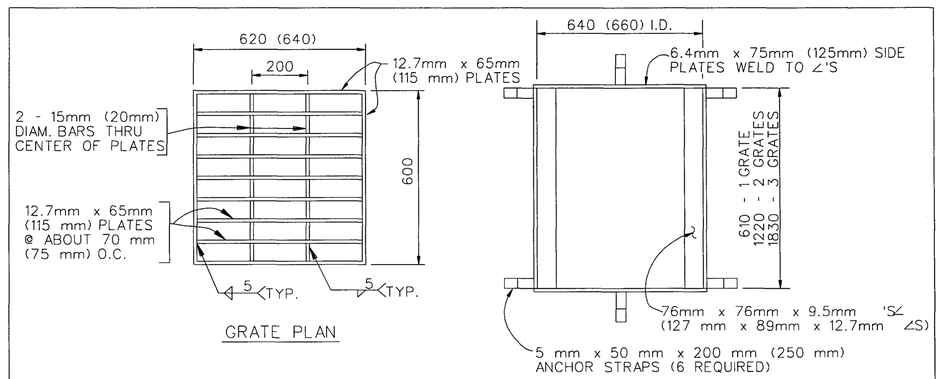
PLATE C50

STANDARD SURFACE INLET

N.T.S.

NOTES:
UNIT CONVERSION:
SI TO FPS UNITS
25.4 MM = 1"
1 KG = 2.2 LB
1 KN = 0.224809 KIPS

SOURCE: THIS DETAILS WERE EXTRACTED FROM SOUTHWESTERN DIVISION ARCHITECTURAL AND ENGINEERING INSTRUCTIONS MANUAL (AEIM)



NOTES TO DESIGNER:
1. ALL DIMENSIONS APPLY TO NON-TRAFFIC, 4000kg, AND 11 300kg LOADING EXCEPT AS NOTED BY PARENTHESES.
2. DIMENSIONS IN PARENTHESES APPLY TO 110 kN LOADING ONLY.

PLATE C51

SURFACE INLET GRATE AND FRAME

N.T.S.

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
SUBMITTED BY: R.TOLIKONDA
SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)
ISSUE DATE: 04/17/2026
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PINE BLUFF ARSENAL PLAINVIEW GATE

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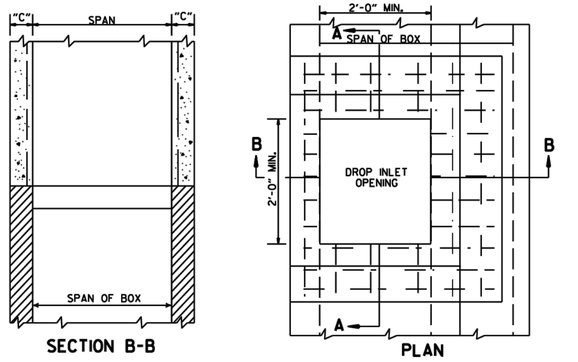
PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

SITE DETAILS - 8

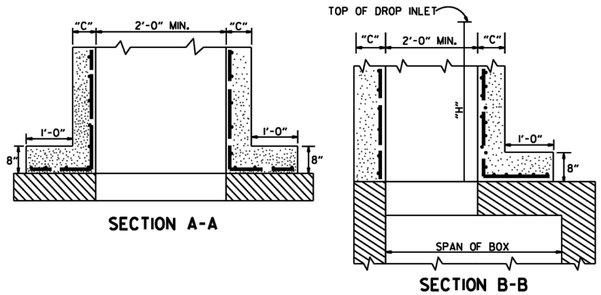
SHEET ID
C-508

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



SECTION B-B

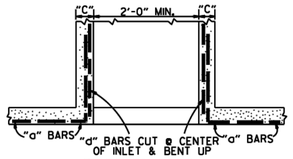
PLAN



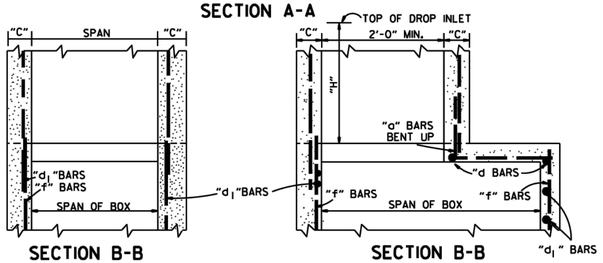
SECTION A-A

SECTION B-B

METHOD OF CONSTRUCTING DROP INLET ON EXISTING R.C. BOX CULVERT

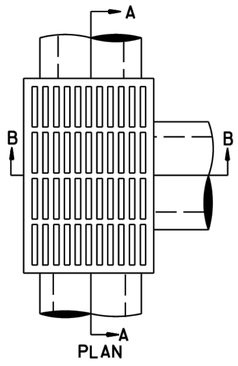


SECTION A-A

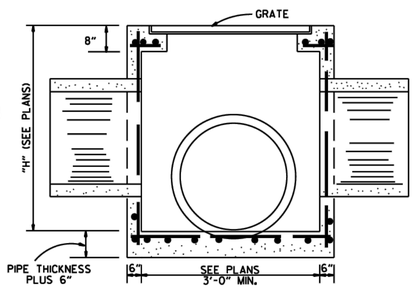


METHOD OF CONSTRUCTING DROP INLET ON NEW R.C. BOX CULVERT

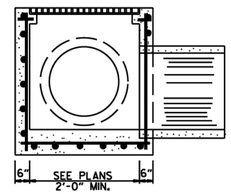
NOTE: "C" DIMENSIONS AND REINFORCING BAR SIZES, SHALL CONFORM TO THOSE SHOWN ON STANDARD DRAWING FOR DROP INLET.



PLAN

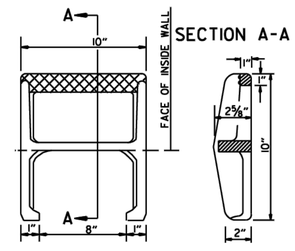


SECTION A-A



SECTION B-B

DROP INLET (TYPE E)

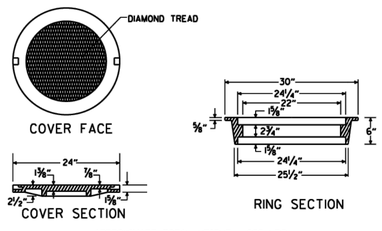


APPROX. WEIGHT = 11 LBS. (CAST IRON)

PLAN

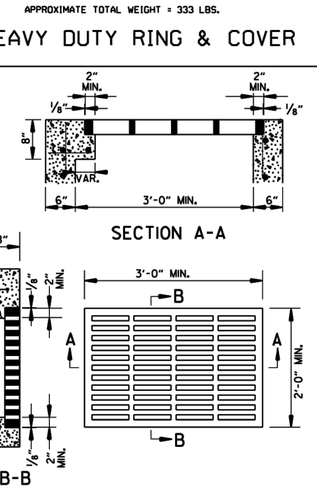
NOTE: THIS DETAIL IS TYPICAL. OTHERS MAY BE USED WITH PRIOR APPROVAL OF THE ENGINEER.

DETAIL OF STEP FOR DROP INLET



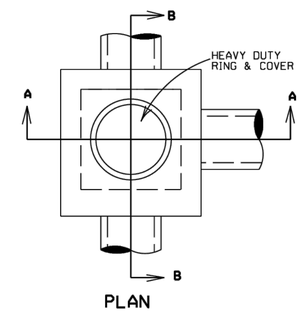
APPROXIMATE TOTAL WEIGHT = 333 LBS.

HEAVY DUTY RING & COVER

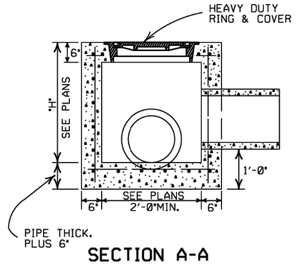


APPROXIMATE MINIMUM WATERWAY OPENING = 260 SQ. IN.

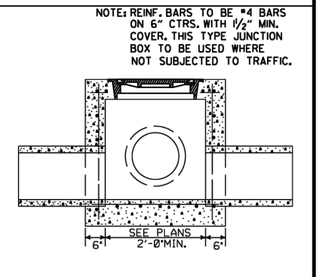
GRATE FOR TYPE E DROP INLET



PLAN

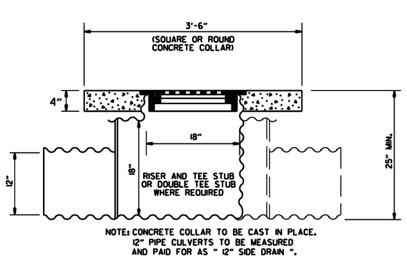


SECTION A-A



SECTION B-B

JUNCTION BOX (TYPE E)



DETAIL OF YARD DRAIN

GENERAL NOTES:

1. ALL EXPOSED CORNERS SHALL BE ¾" CHAMFERED.
2. STEPS SHALL BE INSTALLED ON 16" CENTERS ON ALL INLETS 4'-0" HIGH OR OVER, OR AS APPROVED BY THE ENGINEER.
3. EXPANSION JOINT MATERIAL SHALL BE ¾" PREFORMED FIBER.
4. GRATE OR GRATE AND FRAME SHALL BE CONSTRUCTED OF CAST IRON AND SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR GRAY IRON CASTINGS AASHTO M 105 CLASS 35B. GRATE MAY BE USED WITHOUT FRAME.
5. GRATE AND FRAME SHALL NOT BE PAINTED.
6. GRATE SHALL BE BICYCLE SAFE.
7. HEAVY DUTY RING SHALL ALWAYS BE INSTALLED WITH FLANGE ON TOP.
8. HEAVY DUTY RING AND COVER SHALL BE CONSTRUCTED OF CAST IRON AND SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR GRAY IRON CASTINGS AASHTO M105 CLASS 35B & AASHTO M306.
9. HEAVY DUTY RING AND COVER SHALL NOT BE PAINTED.
10. DIMENSIONS SHOWN FOR RING AND COVER ARE TYPICAL. THE CONTRACTOR MAY SUBSTITUTE SIMILAR CASTINGS WITH THE APPROVAL OF THE ENGINEER. REQUESTING APPROVAL FOR CASTING DESIGNS MAY BE MADE BY REFERRING TO PREVIOUSLY APPROVED DRAWINGS.

DATE REV.	REVISION	DATE FILMED
11-16-01	ADDED NOTE 10	
1-12-00	REVISED HEAVY DUTY RING & COVER	
7-02-98	CHANGED GRATE DETAIL, DELETED DI(TYPE D), REPLACED RING & COVER W/HEAVY DUTY RING & COVER, ADDED JUNCTION BOX (TYPE E)	
6-26-97	ADDED DIMENSION TO TYPE IV-A	
10-18-96	ADDED DETAIL OF YARD DRAIN	
8-15-91	DELETE TYPE IV GRATE	
7-15-88	REVISED STEP DETAIL	
5-20-83	REVISED DETAILS OF GRATES (TYPE IV & IV-A)	
2-4-83	ADDED GENERAL NOTE NO. 4	
3-2-81	ADDED TYPE IV-A GRATE	
5-22-74	DELETED INLET (TYPE F) & GRATE (TYPE III)	
10-2-72	REVISED AND REDRAWN	

ARKANSAS STATE HIGHWAY COMMISSION

DETAILS OF DROP INLETS & JUNCTION BOXES

STANDARD DRAWING FPC-9

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
SUBMITTED BY: R.TOLIKONDA
SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)
ISSUE DATE: 04/17/2026
SOLICITATION NO.:
CONTRACT NO.: W9127S23D0035
FILE NUMBER:

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

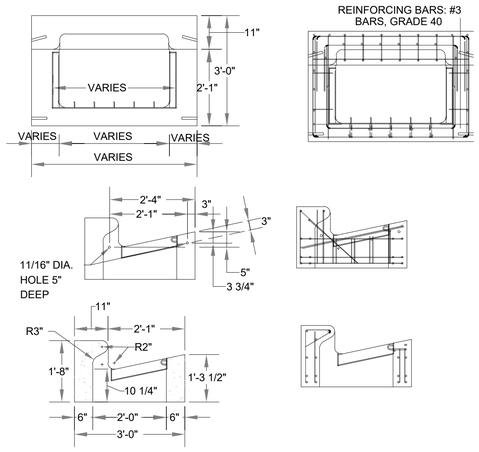
HANA-KENALL 8A JV
2600 CITYWEST BLVD. SITE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

SITE DETAILS - 9

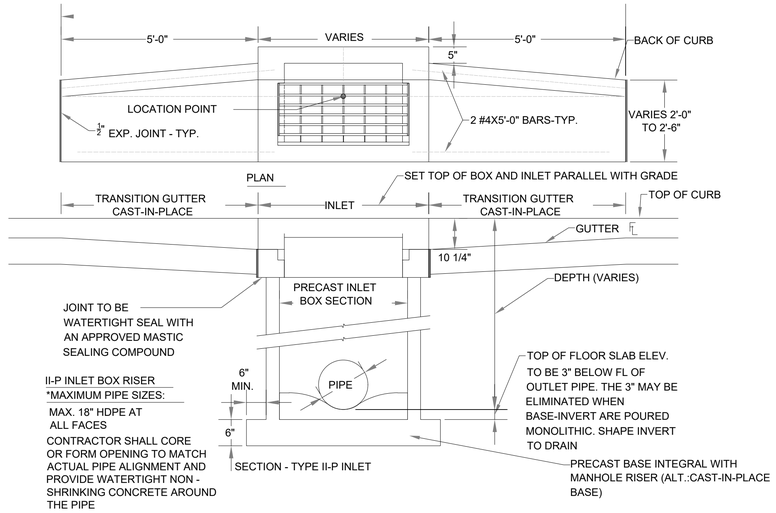
SHEET ID
C-509

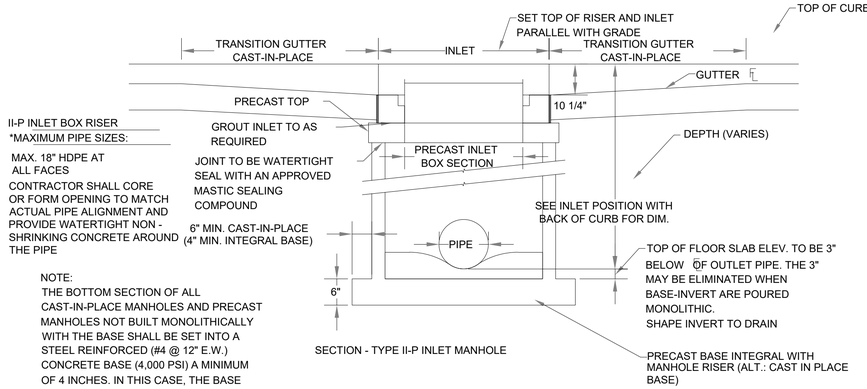
CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



J5 TYPE II CURB INLET - 1,550 LBS

SCALE: NOT TO SCALE





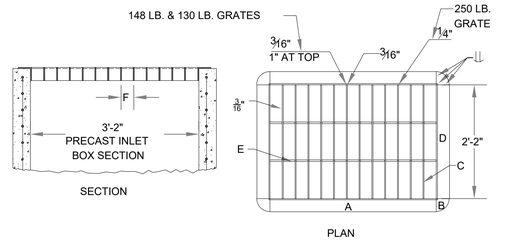
E11 TYPE II INLET (COMBINATION INLET) DETAILS

SCALE: NOT TO SCALE

130 LB. YARD GRATE	
A	2 EA. <) 1/2x3x3x3'-1 1/2"
B	4 EA. ℄ 1/2X3x0'-3"
C	12 EA. ℄ 1/2x3x2'-1 3/8"
D	2 EA. <) 1/2x3x3x2'-1 1/2"
E	26 EA. ℄ 3/8Øx0'-2 3/8"
F	2 3/8" O.C.

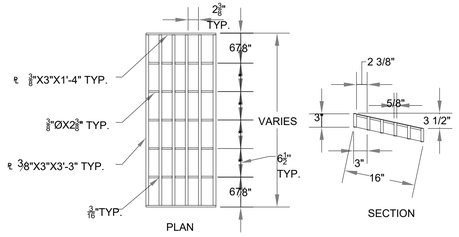
148 LB. PEDESTRIAN GRATE	
A	2 EA. <) 1/2x3x3x3'-1 1/2"
B	4 EA. ℄ 1/2X3x0'-3"
C	25 EA. ℄ 1/2x2x2'-1 1/2"
D	2 EA. <) 1/2x3x3x2'-1 1/2"
E	52 EA. ℄ 1/16x1 1/2x0'-1 5/8"
F	1-7/16"O.C.

250 LB. TRAFFIC GRATE	
A	2 EA. <) 1/2x3x3x3'-1 5/8"
B	4 EA. ℄ 1/2X3x0'-3"
C	12 EA. ℄ 1/2x3x2'-5/8"
D	2 EA. <) 1/2x3x3x2'-1"
E	26 EA. ℄ 3/8Øx0'-2 5/8"
F	2 5/8" O.C.



B2 THREW GUTTER AREA INLET GRATE

SCALE: NOT TO SCALE



B9 THREW GUTTER INLET GRATE- WEIGHT 140LBS

SCALE: NOT TO SCALE

NOTE:
THE BOTTOM SECTION OF ALL CAST-IN-PLACE MANHOLES AND PRECAST MANHOLES NOT BUILT MONOLITHICALLY WITH THE BASE SHALL BE SET INTO A STEEL REINFORCED (#4 @ 12" E.W.) CONCRETE BASE (4,000 PSI) A MINIMUM OF 4 INCHES. IN THIS CASE, THE BASE THICKNESS SHALL BE INCREASED BY 4 INCHES.

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
SUBMITTED BY: R.TOLIKONDA
SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)
ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D6035
FILE NUMBER:

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

SITE DETAILS - 10

SHEET ID
C-510

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

REINFORCED CONCRETE ARCH PIPE DIMENSIONS

EQUIV. DIA.	SPAN		RISE	
	AASHTO M 206	ARDOT NOMINAL	AASHTO M 206	ARDOT NOMINAL
INCHES	INCHES			
15	18	18	11	11
18	22	22	13½	14
21	26	26	15½	16
24	28½	29	18	18
30	36¼	36	22½	23
36	43⅜	44	26⅝	27
42	51⅛	51	31⅝	31
48	58½	59	36	36
54	65	65	40	40
60	73	73	45	45
72	88	88	54	54
84	102	102	62	62
90	115	115	72	72
96	122	122	77½	77
108	138	138	87⅛	87
120	154	154	96⅞	97
132	168¾	169	106½	107

THE MEASURED SPAN AND RISE SHALL NOT VARY MORE THAN ± 2 PERCENT FROM THE VALUES SPECIFIED BY AASHTO M206.

REINFORCED CONCRETE HORIZONTAL ELLIPTICAL PIPE DIMENSIONS

EQUIV. DIA.	AASHTO M 207	
	SPAN	RISE
INCHES	INCHES	
18	23	14
24	30	19
27	34	22
30	38	24
33	42	27
36	45	29
39	49	32
42	53	34
48	60	38
54	68	43
60	76	48
66	83	53
72	91	58
78	98	63
84	106	68

THE MEASURED SPAN AND RISE SHALL NOT VARY MORE THAN ± 2 PERCENT FROM THE VALUES SPECIFIED BY AASHTO M207.

CONSTRUCTION SEQUENCE

1. PLACE STRUCTURAL BEDDING MATERIAL TO GRADE. DO NOT COMPACT.
2. INSTALL PIPE TO GRADE.
3. COMPACT STRUCTURAL BEDDING OUTSIDE THE MIDDLE THIRD OF THE PIPE.
4. PLACE AND COMPACT THE HAUNCH AREA UP TO THE MIDDLE OF THE PIPE.
5. COMPLETE BACKFILL ACCORDING TO SUBSECTION 606.03.(f)(1).

NOTE: HAUNCH AND STRUCTURAL BEDDING MATERIAL WILL NOT BE PAID FOR SEPARATELY, BUT COMPENSATION WILL BE CONSIDERED TO BE INCLUDED IN THE PRICE BID PER LINEAR FOOT OF CONCRETE PIPE.

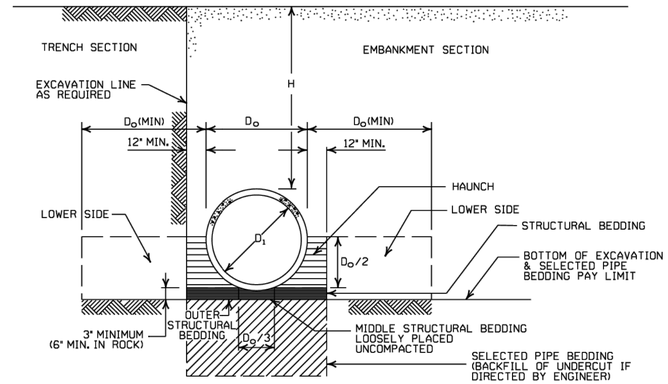
- LEGEND -

D_1 = NORMAL INSIDE DIAMETER OF PIPE
D_O = OUTSIDE DIAMETER OF PIPE
H = FILL COVER HEIGHT OVER PIPE (FEET)
MIN. = MINIMUM
= UNDISTURBED SOIL

INSTALLATION TYPE	MATERIAL REQUIREMENTS FOR HAUNCH AND STRUCTURAL BEDDING
TYPE 1	AGGREGATE BASE COURSE (CLASS 5 OR CLASS 7)
TYPE 2	SELECTED MATERIALS (CLASS SM-1, SM-2, OR SM-4) OR TYPE 1 INSTALLATION MATERIAL*
TYPE 3**	AASHTO CLASSIFICATION A-1 THRU A-6 SOIL OR TYPE 1 OR 2 INSTALLATION MATERIAL

* SM-3 WILL NOT BE ALLOWED.

** MATERIALS SHALL NOT INCLUDE ORGANIC MATERIALS OR STONES LARGER THAN 3 INCHES.



EMBANKMENT AND TRENCH INSTALLATIONS

1. MATERIAL IN THE HAUNCH AND OUTER STRUCTURAL BEDDING SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY ACCORDING TO THE TYPE OR CLASS OF MATERIAL USED.
2. FOR TRENCHES WITH WALLS OF NATURAL SOIL, THE DENSITY OF THE SOIL IN THE LOWER SIDE ZONE SHALL BE AS FIRM AS THE 95% DENSITY REQUIRED FOR THE HAUNCH. IF THE EXISTING SOIL DOES NOT MEET THIS CRITERIA, IT SHALL BE REMOVED AND RECOMPACTED TO 95% OF THE MAXIMUM DENSITY ACCORDING TO THE TYPE OF MATERIAL USED.
3. FOR EMBANKMENTS, THE MATERIAL IN THE LOWER SIDE ZONE SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY ACCORDING TO THE TYPE OR CLASS OF MATERIAL USED.

GENERAL NOTES

1. CONCRETE PIPE CULVERT CONSTRUCTION SHALL CONFORM TO ARKANSAS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (CURRENT EDITION), WITH APPLICABLE SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS. UNLESS OTHERWISE NOTED IN THE PLANS, SECTION AND SUBSECTION REFER TO THE STANDARD CONSTRUCTION SPECIFICATIONS.
2. CONCRETE PIPE CULVERT DESIGN SHALL CONFORM TO AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, FIFTH EDITION (2010) WITH 2010 INTERIMS.
3. ALL PIPE SHALL CONFORM TO SECTION 606. CIRCULAR R.C. PIPE CULVERTS SHALL CONFORM TO AASHTO M170, R.C. ARCH PIPE CULVERTS SHALL CONFORM TO AASHTO M206 AND HORIZONTAL ELLIPTICAL PIPE CULVERTS SHALL CONFORM TO AASHTO M207.
4. ALL PIPE SHALL BE PROTECTED DURING CONSTRUCTION BY A COVER SUFFICIENT TO PREVENT DAMAGE FROM PASSAGE OF EQUIPMENT.
5. THE MINIMUM TRENCH WIDTH SHALL BE THE OUTSIDE DIAMETER OF THE PIPE PLUS 24 INCHES. THE MAXIMUM ALLOWABLE TRENCH WIDTH SHALL BE THE MINIMUM WIDTH PRACTICABLE FOR WORKING CONDITIONS.
6. MULTIPLE PIPE CULVERTS SHALL BE INSTALLED WITH A MINIMUM CLEARANCE OF 24 INCHES BETWEEN STRINGS OF PIPE. REFER TO STD. DWG. FES-2 FOR MINIMUM CLEARANCE WHERE FLARED END SECTIONS ARE USED.
7. IMPERVIOUS MATERIAL SHOULD BE PLACED AS DIRECTED BY THE ENGINEER AT THE ENDS OF THE CULVERT TO PREVENT LOSS OF STRUCTURAL BEDDING WHEN PERVIOUS MATERIAL IS USED FOR STRUCTURAL BEDDING AND/OR BACKFILL.
8. NOT MORE THAN ONE LIFTING HOLE MAY BE PROVIDED IN CONCRETE PIPE TO FACILITATE HANDLING. HOLE MAY BE CAST IN PLACE, CUT INTO THE FRESH CONCRETE AFTER FORMS ARE REMOVED, OR DRILLED. THE HOLE SHALL NOT BE MORE THAN TWO INCHES IN DIAMETER OR TWO INCHES SQUARE. CUTTING OR DISPLACEMENT OF REINFORCEMENT WILL NOT BE PERMITTED. SPALLED AREAS AROUND THE HOLE SHALL BE REPAIRED IN A WORKMANLIKE MANNER. LIFTING HOLE SHALL BE FILLED WITH MORTAR, CONCRETE, OR OTHER METHOD AS APPROVED BY THE ENGINEER.
9. WHEN DIRECTED BY THE ENGINEER, UNSUITABLE MATERIAL THAT IS ENCOUNTERED AT THE BOTTOM OF THE EXCAVATED TRENCH (BELOW THE AREA IDENTIFIED AS "STRUCTURAL BEDDING" ABOVE) WILL BE EXCAVATED AND REPLACED WITH SELECTED PIPE BEDDING. THE QUANTITY OF MATERIAL REQUIRED TO BACKFILL THE UNDERCUT AREA UP TO THE SELECTED PIPE BEDDING PAY LIMIT DESIGNATED ABOVE WILL BE MEASURED AND PAID FOR AS "SELECTED PIPE BEDDING."
10. WHEN THE EXISTING MATERIAL EXCAVATED FOR THE PIPE TRENCH IS DETERMINED BY THE ENGINEER TO BE UNSUITABLE FOR BACKFILLING THE PIPE (ABOVE THE AREA IDENTIFIED ABOVE AS THE HAUNCH), BORROW MATERIAL OR MATERIAL FROM THE ROADWAY EXCAVATION WILL BE USED TO BACKFILL THE PIPE. IF SUITABLE MATERIAL IS NOT AVAILABLE, THE ENGINEER MAY AUTHORIZE THE USE OF "SELECTED PIPE BACKFILL."

MINIMUM HEIGHT OF FILL "H" OVER CIRCULAR R.C. PIPE CULVERTS

	CLASS OF PIPE			
	CLASS III		CLASS IV	CLASS V
INSTALLATION TYPE	TYPE 1 OR 2	TYPE 3	ALL	ALL
PIPE ID (IN.)	FEET			
12-15	2	2.5	2	1
18-24	2.5	3	2	1
27-33	3	4	2	1
36-42	3.5	5	2	1
48	4.5	5.5	2	1
54-60	5	7	2	1
66-78	6	8	2	1
84-108	7.5	8	2	1

NOTE: FOR MINIMUM COVER VALUES, "H" SHALL INCLUDE A MINIMUM OF 12" OF PAVEMENT AND/OR BASE.

MAXIMUM HEIGHT OF FILL "H" OVER CIRCULAR R.C. PIPE CULVERTS

INSTALLATION TYPE	CLASS OF PIPE		
	CLASS III	CLASS IV	CLASS V
	FEET		
TYPE 1	21	32	50
TYPE 2	16	25	39
TYPE 3	12	20	30

NOTE: IF FILL HEIGHT EXCEEDS 50 FEET, A SPECIAL DESIGN CONCRETE PIPE WILL BE REQUIRED USING TYPE 1 INSTALLATION.

MINIMUM HEIGHT OF FILL "H" OVER R.C. ARCH & HORIZONTAL ELLIPTICAL PIPE CULVERTS

INSTALLATION TYPE	CLASS OF PIPE	
	CLASS III	CLASS IV
	FEET	
TYPE 2 OR TYPE 3	2.5	1.5

NOTE: TYPE 1 INSTALLATION WILL NOT BE ALLOWED FOR ARCH & HORIZONTAL ELLIPTICAL PIPE CULVERTS.

NOTE: FOR MINIMUM COVER VALUES, "H" SHALL INCLUDE A MINIMUM OF 12" OF PAVEMENT AND/OR BASE.

MAXIMUM HEIGHT OF FILL "H" OVER R.C. ARCH & HORIZONTAL ELLIPTICAL PIPE CULVERTS

INSTALLATION TYPE	CLASS OF PIPE	
	CLASS III	CLASS IV
	FEET	
TYPE 2	13	21
TYPE 3	10	16

NOTE: TYPE 1 INSTALLATION WILL NOT BE ALLOWED FOR ARCH & HORIZONTAL ELLIPTICAL PIPE CULVERTS.

DATE	REVISION	DATE FILMED
2-27-14	REVISED GENERAL NOTE 1.	
12-15-11	REVISED FOR LRFD DESIGN SPECIFICATIONS	
5-18-00	REVISED TYPE 3 BEDDING & ADDED NOTE	
3-30-00	REVISED INSTALLATIONS	
11-06-97	ISSUED	

ARKANSAS STATE HIGHWAY COMMISSION

CONCRETE PIPE CULVERT FILL HEIGHTS & BEDDING

STANDARD DRAWING PCC-1

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D6035
FILE NUMBER:

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
SUBMITTED BY: R.TOLIKONDA
SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

HANA-KENALL 8A JV
2600 CITYWEST BLVD. STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

SITE DETAILS - 11

SHEET ID
C-511

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

INSTALLATION TYPE	•• MATERIAL REQUIREMENTS FOR STRUCTURAL BACKFILL AND STRUCTURAL BEDDING
TYPE 2	•SELECTED MATERIALS (CLASS SM-1, SM-2 OR SM-4)

• AGGREGATE BASE COURSE (CLASS 4, 5, 6, OR 7) MAY BE USED IN LIEU OF SELECTED MATERIAL.

SM3 WILL NOT BE ALLOWED.

•• STRUCTURAL BEDDING MATERIAL SHALL HAVE A MAXIMUM PARTICLE SIZE OF 1INCH. STRUCTURAL BACKFILL MATERIAL SHALL BE FREE OF ORGANIC MATERIAL, STONES LARGER THAN 1.50 INCH IN GREATEST DIMENSION, OR FROZEN LUMPS.

STRUCTURAL BACKFILL AND STRUCTURAL BEDDING MATERIAL WILL NOT BE PAID FOR SEPARATELY, BUT COMPENSATION WILL BE CONSIDERED TO BE INCLUDED IN THE PRICE BID PER LINEAR FOOT OF HDPE PIPE.

MULTIPLE INSTALLATION OF HIGH DENSITY POLYETHYLENE PIPES

PIPE DIAMETER	CLEAR DISTANCE BETWEEN PIPES
18"	1'-6"
24"	2'-0"
30"	2'-6"
36"	3'-0"
42"	3'-6"
48"	4'-0"

MINIMUM TRENCH WIDTH BASED ON FILL HEIGHT "H"

PIPE DIAMETER	TRENCH WIDTH (FEET) "H" < 10'-0"	TRENCH WIDTH (FEET) "H" >OR= 10'-0"
18"	4'-6"	4'-6"
24"	5'-0"	6'-0"
30"	5'-6"	7'-6"
36"	6'-0"	9'-0"
42"	7'-0"	10'-6"
48"	8'-0"	12'-0"

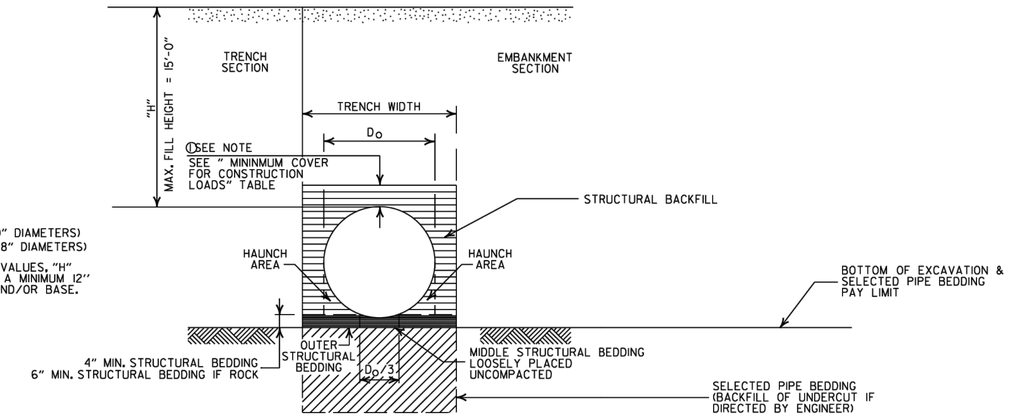
①NOTE:
18" MIN. (18" - 30" DIAMETERS)
24" MIN. (36" - 48" DIAMETERS)

MINIMUM COVER VALUES, "H" SHALL INCLUDE A MINIMUM 12'' OF PAVEMENT AND/OR BASE.

MINIMUM COVER FOR CONSTRUCTION LOADS

PIPE DIAMETER	② MIN. COVER (FEET) FOR INDICATED CONSTRUCTION LOADS 18.0-50.0 (KIPS)	50.0-75.0 (KIPS)	75.0-110.0 (KIPS)	110.0-175.0 (KIPS)
36" OR LESS	2'-0"	2'-6"	3'-0"	3'-0"
42" OR GREATER	3'-0"	3'-0"	3'-6"	4'-0"

②MINIMUM COVER SHALL BE MEASURED FROM TOP OF PIPE TO TOP OF THE MAINTAINED CONSTRUCTION ROADWAY SURFACE. THE SURFACE SHALL BE MAINTAINED.



TYPE 2 EMBANKMENT AND TRENCH INSTALLATIONS

1. STRUCTURAL BACKFILL, EMBANKMENT, AND OUTER STRUCTURAL BEDDING MATERIAL SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY ACCORDING TO THE TYPE OR CLASS OF MATERIAL USED.

CONSTRUCTION SEQUENCE

1. PLACE STRUCTURAL BEDDING MATERIAL TO GRADE. DO NOT COMPACT.
2. INSTALL PIPE TO GRADE.
3. COMPACT STRUCTURAL BEDDING OUTSIDE THE MIDDLE THIRD OF THE PIPE.
4. THE STRUCTURAL BACKFILL SHALL BE PLACED AND COMPACTED IN LAYERS NOT EXCEEDING 8". THE LAYERS SHALL BE BROUGHT UP EVENLY AND SIMULTANEOUSLY TO THE ELEVATION OF THE MINIMUM COVER.
5. PIPE INSTALLATION MAY REQUIRE THE USE OF RESTRAINTS, WEIGHTING OR OTHER APPROVED METHODS IN ORDER TO HELP MAINTAIN GRADE AND ALIGNMENT.

GENERAL NOTES

1. PIPE SHALL CONFORM TO AASHTO M294, TYPE S. INSTALLATION SHALL CONFORM TO JOB SPECIAL PROVISION "PLASTIC PIPE" AND SECTION 606 OF THE STANDARD SPECIFICIATIONS FOR HIGHWAY CONSTRUCTION (CURRENT EDITION).
2. PLASTIC PIPE CULVERT DESIGN SHALL CONFORM TO AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, FIFTH EDITION (2010) WITH 2010 INTERIMS.
3. THE MAXIMUM ALLOWABLE TRENCH WIDTH SHALL BE THE MINIMUM WIDTH PLUS A SUFFICIENT WIDTH TO ENSURE WORKING ROOM TO PROPERLY AND SAFELY PLACE AND COMPACT HAUNCHING AND OTHER BACKFILL MATERIAL.
4. IMPERVIOUS MATERIAL SHOULD BE PLACED AS DIRECTED BY THE ENGINEER AT THE ENDS OF THE CULVERT TO PREVENT LOSS OF STRUCTURAL BEDDING WHEN PERVIOUS MATERIAL IS USED FOR STRUCTURAL BEDDING AND/OR BACKFILL.
5. WHEN DIRECTED BY THE ENGINEER, UNSUITABLE MATERIAL THAT IS ENCOUNTERED AT THE BOTTOM OF THE EXCAVATED TRENCH (BELOW THE AREA IDENTIFIED AS "STRUCTURAL BEDDING" ABOVE) WILL BE EXCAVATED AND REPLACED WITH SELECTED PIPE BEDDING. THE QUANTITY OF MATERIAL REQUIRED TO BACKFILL THE UNDERCUT AREA UP TO THE SELECTED PIPE BEDDING PAY LIMIT DESIGNATED ABOVE WILL BE MEASURED AND PAID FOR AS "SELECTED PIPE BEDDING."
6. WHEN THE EXISTING MATERIAL EXCAVATED FOR THE PIPE TRENCH IS DETERMINED BY THE ENGINEER TO BE UNSUITABLE FOR BACKFILLING THE PIPE (ABOVE THE AREA IDENTIFIED ABOVE AS STRUCTURAL BACKFILL), BORROW MATERIAL OR MATERIAL FROM THE ROADWAY EXCAVATION WILL BE USED TO BACKFILL THE PIPE. IF SUITABLE MATERIAL IS NOT AVAILABLE, THE ENGINEER MAY AUTHORIZE THE USE OF "SELECTED PIPE BACKFILL."
7. FOR PIPE TYPES THAT ARE NOT SMOOTH ON THE OUTSIDE (CORRUGATED OR PROFILE WALLS), BACKFILL GRADATIONS SHOULD BE SELECTED THAT WILL PERMIT THE FILLING OF THE CORRUGATION OR PROFILE VALLEY.
8. HIGH DENSITY POLYETHYLENE PIPES OF DIAMETERS OTHER THAN SHOWN WILL NOT BE ALLOWED.
9. JOINTS FOR HDPE PIPE SHALL MEET THE REQUIREMENTS FOR SOIL TIGHTNESS AS SPECIFIED IN AASHTO SECTION 26.4.2.4 AND 30.4.2 "AASHTO LRFD BRIDGE CONSTRUCTION SPECIFICATIONS." JOINTS SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.

- LEGEND -

H = FILL HEIGHT (FT.)
Ø = OUTSIDE DIAMETER OF PIPE
MAX. = MAXIMUM
MIN. = MINIMUM

= STRUCTURAL BACKFILL MATERIAL

= UNDISTURBED SOIL

DATE	REVISION	DATE FILMED
2-27-14	REVISED GENERAL NOTE 1.	
12-15-11	REVISED GENERAL NOTES & MINIMUM COVER NOTE	
11-17-10	ISSUED	

ARKANSAS STATE HIGHWAY COMMISSION

PLASTIC PIPE CULVERT (HIGH DENSITY POLYETHYLENE)

STANDARD DRAWING PCP-1

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
SUBMITTED BY: R.TOLIKONDA
SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)
ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F6002
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U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

SITE DETAILS - 12

SHEET ID
C-512

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

PVC							
RESTRAINT LENGTH VALUES (FT)							
	A	B	C	D	E	F	G
PIPE SIZE	90 BEND	45 BEND	22.5 BEND	11.25 BEND	DEAD END	VERTICAL OFFSET	VERTICAL OFFSET
6"	41	17	9	5	92	39	9
8"	54	23	11	6	120	50	12

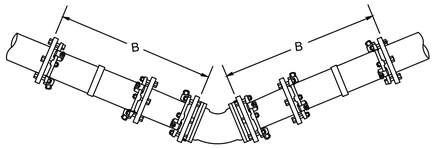
DIP							
RESTRAINT LENGTH VALUES (FT)							
	A	B	C	D	E	F	G
PIPE SIZE	90 BEND	45 BEND	22.5 BEND	11.25 BEND	DEAD END	VERTICAL OFFSET	
6IN	49	21	10	5	141	59	11
8IN	63	26	13	7	183	76	14

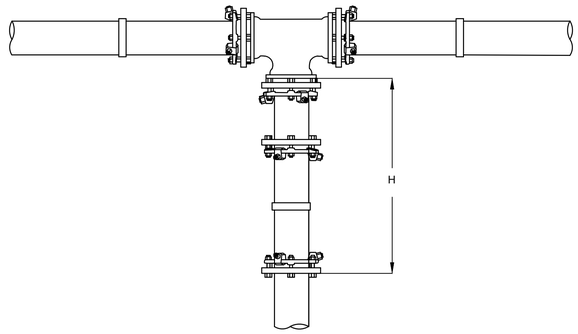
TEE RESTRAINT LENGTH VALUES (FT) NOMINAL VS. BRANCH				
H				
PIPE SIZE	6IN	8IN	10IN	12IN
6IN	81	-	-	-
8IN	77	109	-	-

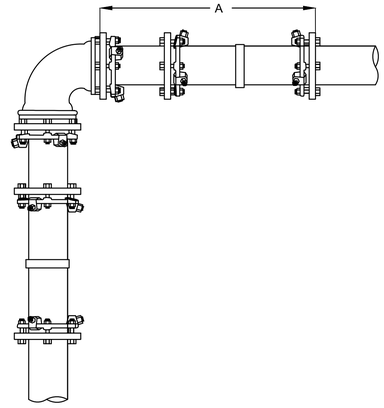
REDUCER RESTRAINT LENGTH VALUES (FT) NOMINAL VS. BRANCH				
I				
PIPE SIZE	4IN	6IN	8IN	10IN
6IN	48	-	-	-
8IN	87	51	-	-

TEE RESTRAINT LENGTH VALUES (FT) NOMINAL VS. BRANCH				
H				
PIPE SIZE	6IN	8IN	10IN	12IN
6IN	124	-	-	-
8IN	118	166	-	-

REDUCER RESTRAINT LENGTH VALUES (FT) NOMINAL VS. BRANCH				
I				
PIPE SIZE	4IN	6IN	8IN	10IN
6IN	73	-	-	-
8IN	132	77	-	-







A1 RESTRAINED JOINT DETAILS
SCALE: NOT TO SCALE

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F6002
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DRAWN BY: R.ISLAM
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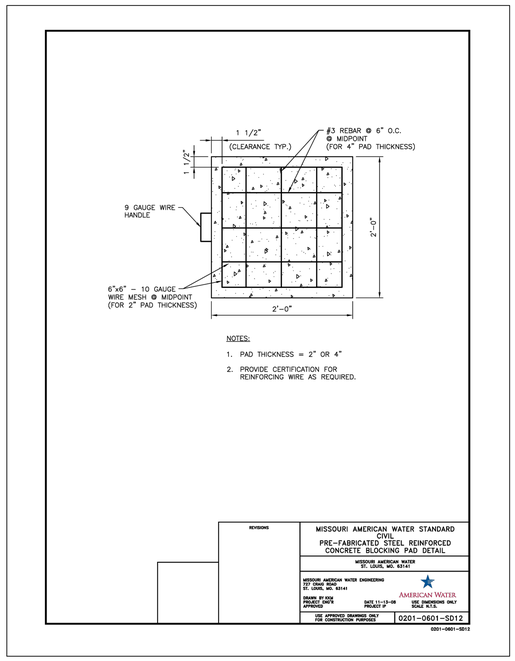
PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

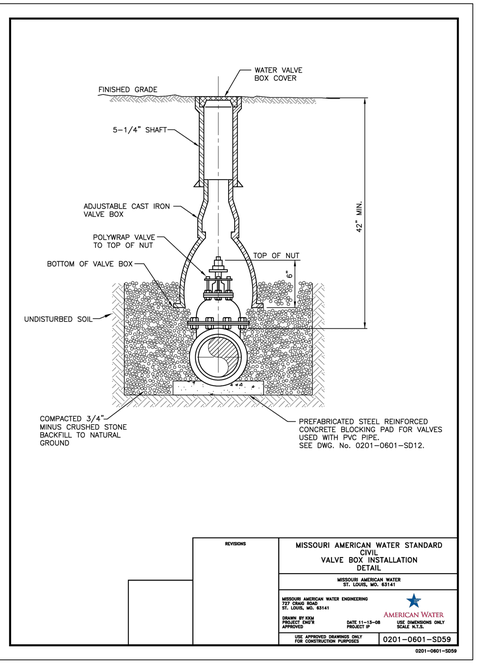
SITE DETAILS - 13

SHEET ID
C-513

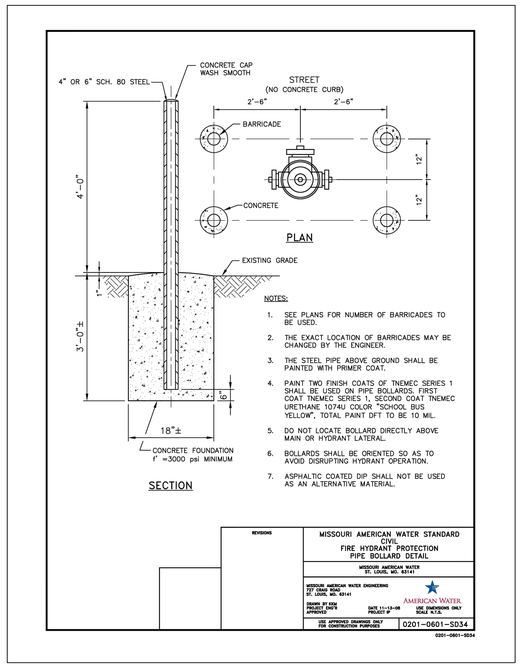
CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



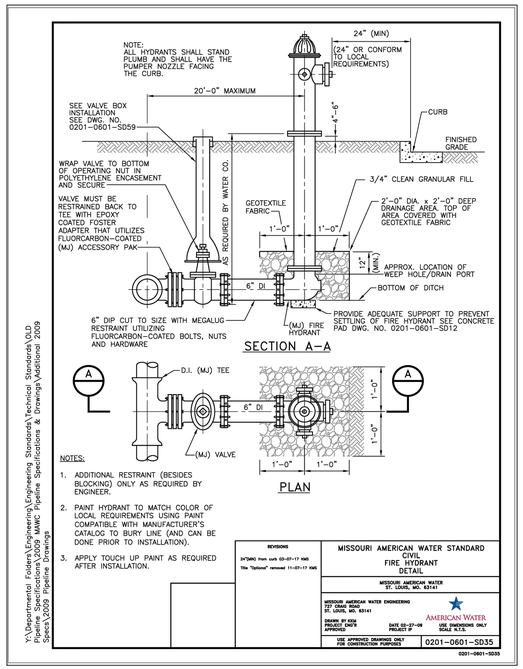
H5 PRE-FABRICATED STEEL REINFORCED CONCRETE BLOCKING PAD DETAIL
SCALE: NOT TO SCALE



H11 VALVE BOX INSTALLATION DETAIL
SCALE: NOT TO SCALE



A5 FIRE HYDRANT PROTECTION PIPE BOLLARD DETAIL
SCALE: NOT TO SCALE



A11 FIRE HYDRANT DETAIL
SCALE: NOT TO SCALE

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

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DRAWN BY: R.ISLAM
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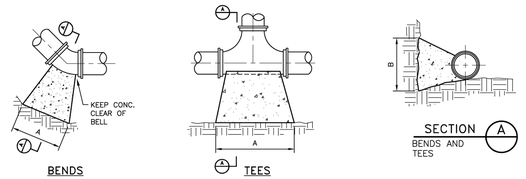
HOADLEY ROAD, WHITE HALL, AR 71602

SITE DETAILS - 14

SHEET ID
C-514

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



NOTES:

1. COVER OVER TOP OF PIPE SHALL BE 42". IF GRADING PLANS RECEIVED BY THE ENGINEER/OWNER WITH THE REQUEST FOR WATER MAIN LAYOUT, INDICATE ADJUSTMENTS TO EXISTING GRADE, THEN PIPE SHALL BE INSTALLED TO MEET MINIMUM AND MAXIMUM COVER FROM PROPOSED GRADES SHOWN ON SAID PLANS. TOP OF FINISH CONCRETE TO BE A MINIMUM OF 26" FROM FINISH GRADE.
2. THRUST BLOCKS SHALL BE BUILT AGAINST UNDISTURBED SOIL TO PREVENT MOVEMENT OF FITTING.
3. NO THRUST BLOCKS TO BE PLACED IN SEWER LATERAL DITCHES,.
4. THRUST BLOCKING MUST FIT IN EASEMENT, IN SOME CASES ADDITIONAL RESTRAINT MAY BE REQUIRED.
5. POLYETHYLENE ENCASEMENT ON ALL D.I. PIPE AND FITTINGS.
6. PIPE JOINTS AND BOLTS MUST BE ACCESSIBLE.
7. ALLOW SUFFICIENT CLEARANCE BETWEEN CONCRETE AND BOLTS FOR FUTURE MAINTENANCE.
8. ALL BOLTS SHALL BE PTFE POLYMER COATED BOLTS (EX. XYLAN, FLUOROKOTE #1), MINIMUM 1/2" DIAMETER. COAT EXPOSED ROD WITH APPROVED COATING AFTER CONCRETE HAS SET.
9. THRUST BLOCKING DETAILS ARE SHOWN HERE FOR TYPICAL INSTALLATIONS. IN SOME CASES, ADDITIONAL RESTRAINT MAY BE REQUIRED.
10. PORTLAND CEMENT CONCRETE USED FOR THRUST BLOCKS SHALL BE MIN 3000 PSI CONCRETE.
11. FOR UNSTABLE SOIL CONDITIONS, CHECK WITH ENGINEER FOR THRUST BLOCK DIMENSIONS.
12. FOR MAIN SIZES GREATER THAN 12", SEE ENGINEER FOR THRUST BLOCK DIMENSIONS.

REQUIRED MINIMUM BEARING AREA ON UNDISTURBED SOIL

PIPE SIZE	90 DEGREE BENDS AREA (SQ. FT.)	45 DEGREE BENDS AREA (SQ. FT.)	22.5 DEGREE BENDS AREA (SQ. FT.)	11.25 DEGREE BENDS AREA (SQ. FT.)	TEES/PLUGS AREA (SQ. FT.)
6	8.0	4.5	2.0	1.0	6.0
8	14.0	7.5	4.0	2.0	10.0
10	20.5	11.0	6.0	3.0	14.5
12	29.0	16.0	8.0	4.0	20.5

NOTES:

1. BEARING TABLE AREA IS BASED ON 200 PSI MAXIMUM WITH SOIL BEARING CAPACITY OF 2000 LBS/SQUARE FOOT WITH A 1.5 SAFETY FACTOR.
2. FOR HIGHER WATER PRESSURES OR LOWER SOIL PRESSURES, CONSULT ENGINEER FOR ADJUSTMENTS.
3. A SAFETY FACTOR AND ADDITIONAL BEARING AREA MAY BE REQUIRED AS DIRECTED BY THE ENGINEER.
4. FOR DEVELOPER LAY PROJECTS, THE DEVELOPER SHALL VERIFY SOIL BEARING CAPACITIES.
5. SEE DWG. NO. 0201-0601-SD19 AND DWG. NO. 0201-0601-SD20 FOR ADDITIONAL BLOCKING INFORMATION.

REVISIONS

MISSOURI AMERICAN WATER STANDARD CIVIL
THRUST BLOCK DETAILS

MISSOURI AMERICAN WATER
ST. LOUIS, MO. 63141

MISSOURI AMERICAN WATER ENGINEERING
727 CRAIG ROAD
ST. LOUIS, MO. 63141

DRAWN BY KDK
PROJECT ENG'R
APPROVED
DATE 08-18-11
PROJECT IP

AMERICAN WATER

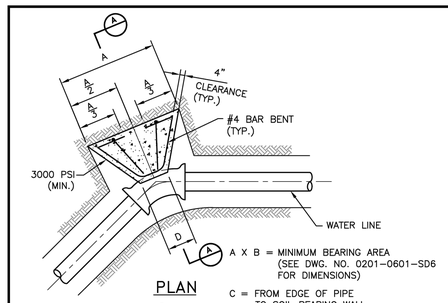
USE DIMENSIONS ONLY
SCALE N.T.S.

USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES

0201-0601-SD6

0201-0601-SD6

H1 THRUST BLOCK LESS DETAIL
SCALE: NOT TO SCALE



GENERAL NOTES:

1. COVER OVER TOP OF PIPE SHALL BE 42" MINIMUM. IF GRADING PLANS RECEIVED BY THE ENGINEER/OWNER WITH THE REQUEST FOR WATER MAIN LAYOUT, INDICATE ADJUSTMENTS TO EXISTING GRADE, THEN PIPE SHALL BE INSTALLED TO MEET MINIMUM AND MAXIMUM COVER FROM PROPOSED GRADES SHOWN ON SAID PLANS.
2. THRUST BLOCKS SHALL BE BUILT AGAINST UNDISTURBED SOIL WITH ADEQUATE BACKING TO PREVENT MOVEMENT OF FITTING.
3. NO THRUST BLOCKS TO BE PLACED IN SEWER LATERAL DITCHES OR OTHER UTILITY TRENCHES.
4. THRUST BLOCKING MUST FIT IN EASEMENT, IN SOME CASES ADDITIONAL RESTRAINT MAY BE REQUIRED.
5. POLYETHYLENE ENCASEMENT ON ALL D.I. PIPE AND FITTINGS.
6. PIPE JOINTS AND BOLTS MUST BE ACCESSIBLE.
7. ALL BOLTS SHALL BE PTFE POLYMER COATED BOLTS (EX. XYLAN, FLUOROKOTE #1), MINIMUM 1/2" DIAMETER. COAT EXPOSED ROD WITH APPROVED MATERIAL AFTER CONCRETE HAS SET.
8. ALLOW SUFFICIENT CLEARANCE BETWEEN CONCRETE AND BOLTS FOR FUTURE MAINTENANCE.
9. THRUST BLOCKING DETAILS ARE SHOWN HERE FOR TYPICAL INSTALLATIONS. IN SOME CASES, ADDITIONAL RESTRAINT MAY BE REQUIRED.
10. PORTLAND CEMENT CONCRETE USED FOR THRUST BLOCKS SHALL BE 3000 PSI CONCRETE MINIMUM.

* BEARING AREAS ARE BASED ON SOIL HAVING AN ALLOWABLE SAFE LATERAL BEARING OF 2000 POUNDS PER SQUARE FOOT AND 200 PSI TEST PRESSURE AND A 1.5 FACTOR OF SAFETY. AREA MUST BE REVISED FOR SOILS WITH A LOWER BEARING CAPACITY OR HIGHER TEST PRESSURE.

REVISIONS

MISSOURI AMERICAN WATER STANDARD CIVIL
THRUST BLOCK AT HORIZONTAL BENDS (EXCEEDING 3 FT. IN THICKNESS) - DETAIL

MISSOURI AMERICAN WATER
ST. LOUIS, MO. 63141

MISSOURI AMERICAN WATER ENGINEERING
727 CRAIG ROAD
ST. LOUIS, MO. 63141

DRAWN BY KKM
PROJECT ENG'R
APPROVED
DATE 08-18-11
PROJECT IP

AMERICAN WATER

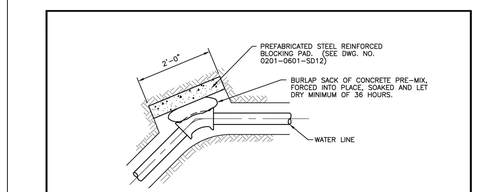
USE DIMENSIONS ONLY
SCALE N.T.S.

USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES

0201-0601-SD20

0201-0601-SD20

H12 THRUST BLOCK AT HORIZONTAL BENDS (EXCEEDING 3 FT, IN THICKNESS)DETAIL
SCALE: NOT TO SCALE



PIPE SIZE

2" – USE 1 SACK (MIN.)
4" – USE 2 SACKS (MIN.)
6" – USE 2 SACKS AND BLOCKING PAD (MIN.)

NOTE:

FOR BLOCKING OF PIPE SIZES 8" AND LARGER, SEE DWG. NO. 0201-0601-SD6

REVISIONS

MISSOURI AMERICAN WATER STANDARD CIVIL
THRUST BLOCK AT HORIZONTAL BENDS 6" OR LESS DETAIL

MISSOURI AMERICAN WATER
ST. LOUIS, MO. 63141

MISSOURI AMERICAN WATER ENGINEERING
727 CRAIG ROAD
ST. LOUIS, MO. 63141

DRAWN BY XXX
PROJECT ENG'R
APPROVED
DATE 11-13-08
PROJECT IP

AMERICAN WATER

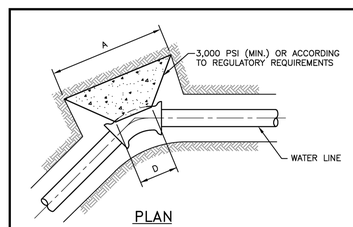
USE DIMENSIONS ONLY
SCALE N.T.S.

USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES

0201-0601-SD17

0201-0601-SD17

A2 THRUST BLOCK AT HORIZONTAL BENDS 6" OR LESS DETAIL
SCALE: NOT TO SCALE



GENERAL NOTES:

1. COVER OVER TOP OF PIPE SHALL BE A MINIMUM OF 42". IF GRADING PLANS RECEIVED BY THE ENGINEER/OWNER WITH THE REQUEST FOR WATER MAIN LAYOUT, INDICATE ADJUSTMENTS TO EXISTING GRADE, THEN PIPE SHALL BE INSTALLED TO MEET MINIMUM AND MAXIMUM COVER FROM PROPOSED GRADES SHOWN ON SAID PLANS.
2. THRUST BLOCKS SHALL BE BUILT AGAINST UNDISTURBED SOIL WITH ADEQUATE BACKING TO PREVENT MOVEMENT OF FITTING.
3. NO THRUST BLOCKS TO BE PLACED IN SEWER LATERAL DITCHES OR OTHER UTILITY TRENCHES.
4. THRUST BLOCKING MUST FIT IN EASEMENT, IN SOME CASES ADDITIONAL RESTRAINT MAY BE REQUIRED.
5. POLYETHYLENE ENCASEMENT ON ALL D.I. PIPE AND FITTINGS.
6. PIPE JOINTS AND BOLTS MUST BE ACCESSIBLE.
7. ALL BOLTS SHALL BE PTFE POLYMER COATED BOLTS (EX. XYLAN, FLUOROKOTE #1), MINIMUM 1/2" DIAMETER. COAT EXPOSED ROD WITH APPROVED MATERIAL AFTER CONCRETE HAS SET.
8. ALLOW SUFFICIENT CLEARANCE BETWEEN CONCRETE AND BOLTS FOR FUTURE MAINTENANCE.
9. THRUST BLOCKING DETAILS ARE SHOWN HERE FOR TYPICAL INSTALLATIONS. IN SOME CASES, ADDITIONAL RESTRAINT MAY BE REQUIRED.
10. PORTLAND CEMENT CONCRETE USED FOR THRUST BLOCKS SHALL BE 3000 PSI CONCRETE (MIN.).

* BEARING AREAS ARE BASED ON SOIL HAVING AN ALLOWABLE SAFE LATERAL BEARING OF 2000 POUNDS PER SQUARE FOOT AND 200 PSI TEST PRESSURE AND A 1.5 FACTOR OF SAFETY. AREA MUST BE REVISED FOR SOILS WITH A LOWER BEARING CAPACITY OR HIGHER TEST PRESSURE.

REVISIONS

MISSOURI AMERICAN WATER STANDARD CIVIL
THRUST BLOCK AT HORIZONTAL BENDS (LESS THAN 3 FEET IN THICKNESS)-DETAIL

MISSOURI AMERICAN WATER
ST. LOUIS, MO. 63141

MISSOURI AMERICAN WATER ENGINEERING
727 CRAIG ROAD
ST. LOUIS, MO. 63141

DRAWN BY KKM
PROJECT ENG'R
APPROVED
DATE 08-18-11
PROJECT IP

AMERICAN WATER

USE DIMENSIONS ONLY
SCALE N.T.S.

USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES

0201-0601-SD19

0201-0601-SD19

A8 THRUST BLOCK AT HORIZONTAL BENDS (LESS THAN 3 FT IN THICKNESS)DETAIL
SCALE: NOT TO SCALE

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
SUBMITTED BY: R.TOLIKONDA
SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)
ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D0035
FILE NUMBER:

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

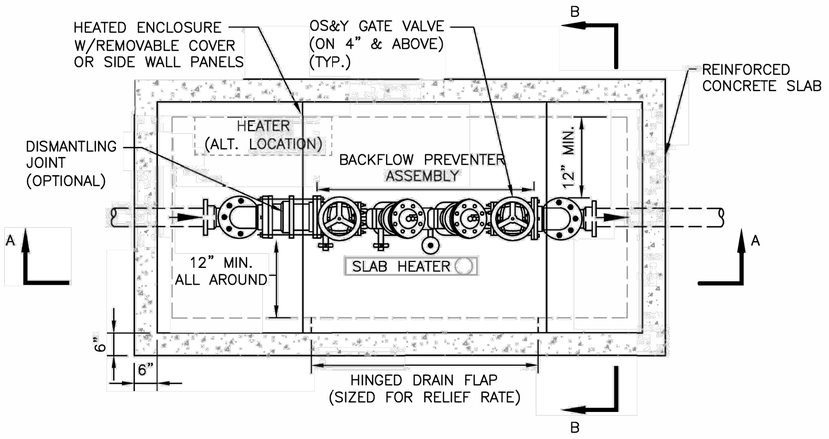
HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

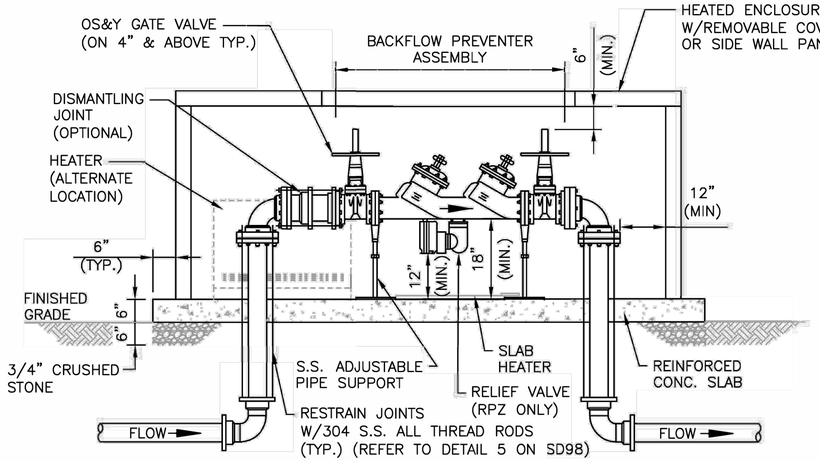
SITE DETAILS - 15

SHEET ID
C-515

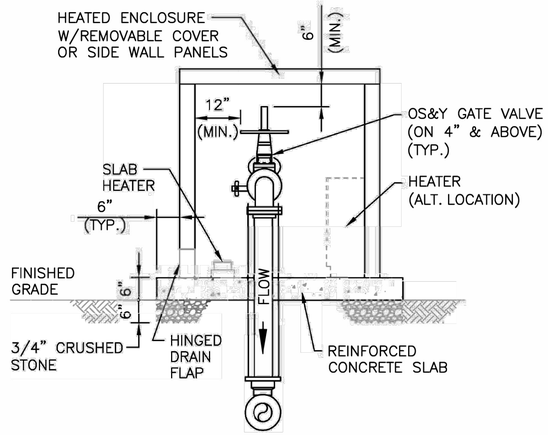
CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



PLAN



SECTION A–A



SECTION B–B

NOTES:

1. BACKFLOW PREVENTER ASSEMBLY SHALL NOT BE SUBJECT TO FLOODING.
2. BACKFLOW PREVENTER MUST BE INSTALLED ABOVE NATURAL GROUND, ABOVE THE 100 YEAR FLOOD LEVEL, UNLESS OTHERWISE APPROVED BY NJAW.
3. ENCLOSURE MUST MEET OSHA 29 CRF 1910.145 AND ASSE 1060 CLASS 1.
4. INSULATED HEATED ENCLOSURE CHARACTERISTICS:
   A. ENCLOSURE–5052–H32 MARINE GRADE ALUMINUM (0.050/18 GAUGE), MILL FINISH, OR 1/8" POLYESTER RESIN REINFORCED WITH FIBERGLASS STRAND
   B. INSULATION– 1–1/2" (R9) POLYISOCYANURATE FOAM
   C. HEATING SYSTEM– SLAB OR WALL MOUNT THERMOSTATICALLY CONTROLLED ELECTRIC HEATER MEETING SECTION 49 OF UL–2021 FOR DAMP OR WET LOCATIONS, WITH GFI RECEPTACLE, U.L. 943 NEMA 3R MOUNTED 8" (MIN.) ABOVE SLAB.
   D. HEATER(S) SHALL BE PROVIDED AS NECESSARY TO MAINTAIN TEMPERATURE ABOVE 40° F AT ALL TIMES.
6. ENCLOSURE MUST BE A SUFFICIENT SIZE TO HOUSE ALL REQUIRED PIPING. ENCLOSURE SHALL BE LOCKABLE. ACCESS PANELS SHALL BE ABOVE THE CENTERLINE OF THE ASSEMBLY, OR IN SIDE WALLS. ENCLOSURE TO HAVE HINGED ONE–WAY DRAIN FLAP SIZED FOR FULL PORT BACKFLOW DISCHARGE TO SURROUNDING GRADE

NEW JERSEY AMERICAN WATER

REVISIONS		REVISIONS	
△		△	
△		△	
△		△	
△		△	
△		△	

LICENSED PROFESSIONAL ENGINEER NO.

AMERICAN WATER ENGINEERING
3906 CHURCH RD.
MT. LAUREL, NJ 08054
AMERICAN WATER

DRAWN BY R. BEATTY
PROJECT ENG'R R. SCHWATRZ
DATE 08–24–18
PROJECT

STANDARD DETAIL
SINGLE SERVICE BACKFLOW PREVENTER IN HEATED ENCLOSURE

NEW JERSEY AMERICAN WATER | STANDARDS | USE DIMENSIONS ONLY SCALE AS SHOWN
USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES | | 0201–0601–SD94

02010601SD94

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY:	B.BANDA
DRAWN BY:	R.ISLAM
CHECKED BY:	R.TOLIKONDA
SUBMITTED BY:	R.TOLIKONDA
SIZE	ANSI FULL BLEED D (22.00 X 34.00 INCHES)
ISSUE DATE:	04/17/2026
SOLICITATION NO.:	W9127S24F6002
CONTRACT NO.:	W9127S23D6035
FILE NUMBER:	

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

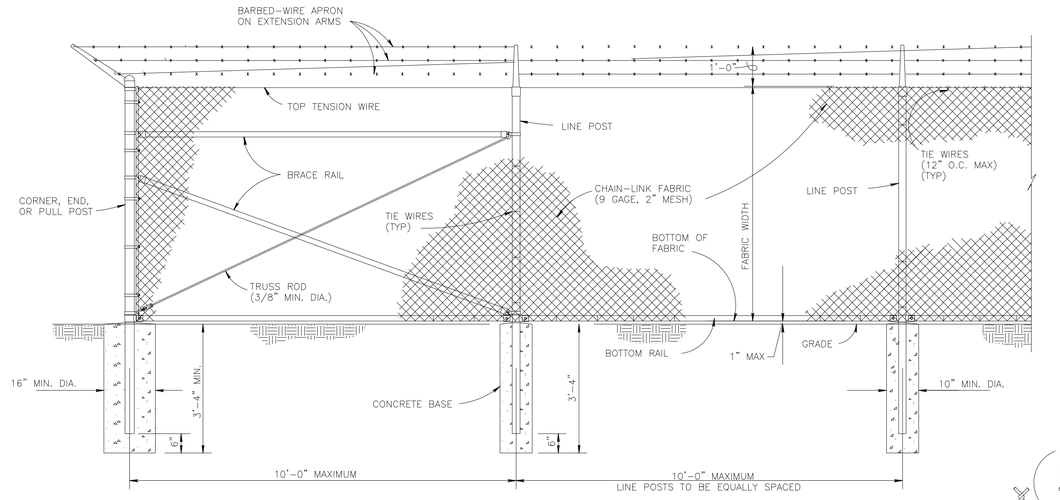
HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

SITE DETAILS -16

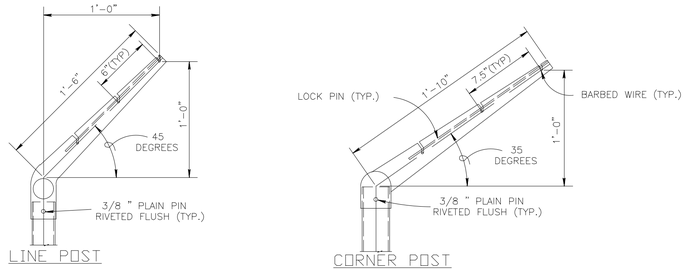
SHEET ID
C-516

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



CHAIN-LINK SECURITY FENCE DETAIL

NO SCALE



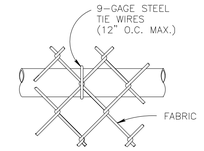
LINE POST

CORNER POST

EXTENSION ARM DETAILS

NO SCALE

STEEL POST SCHEDULE			
USE AND SECTION	MINIMUM OUTSIDE DIMENSIONS (NOMINAL)		
	FABRIC WIDTH 72" OR LESS	FABRIC WIDTH 84" TO 96"	FABRIC WIDTH 108" AND OVER
CORNER, END & PULL POSTS			
TUBULAR – ROUND	2.375" O.D.	2.875" O.D.	4.00" O.D.
LINE POSTS			
TUBULAR – ROUND	1.90" O.D.	2.375" O.D.	2.875" O.D.
BOTTOM & BRACE RAILS			
TUBULAR – ROUND	1.66" O.D.		
TUBULAR – SQUARE	1.50" SQ.		
H-SECTION	1.625" X 1.50"		
C-SECTION (ROLL-FORMED)	1.625" X 1.25"		



BRACE RAIL ATTACHMENT

NOTES:

1. WIRE TIES, RAILS, POSTS, AND BRACES SHALL BE CONSTRUCTED ON THE SECURE SIDE OF THE FENCE ALIGNMENT. CHAIN-LINK FABRIC SHALL BE PLACED ON THE SIDE OPPOSITE THE SECURE AREA.

(2) 2. ONLY 9-GAGE GALVANIZED STEEL TIE WIRES SHALL BE USED FOR FASTENING THE FENCE FABRIC TO FENCE POSTS AND RAILS. 16-GAGE, STAINLESS STEEL TIE WIRES SHALL BE USED FOR FASTENING FENCE FABRIC TO TENSION WIRES. HOG RINGS SHALL NOT BE ALLOWED ON SENSORED FENCES.

3. BOTTOM RAIL SHALL BE ATTACHED TO DOUBLE RAIL ENDS USING 3/8 " CARRIAGE BOLTS AS SHOWN. ADDITIONAL HOLES SHALL BE DRILLED THROUGH THE BOTTOM RAIL ENDS TO INSURE THAT CARRIAGE BOLTS PASS THROUGH THE BOTTOM RAIL AS SHOWN.

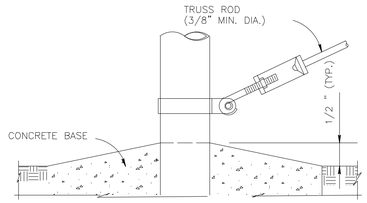
FENCE LEGEND:

TYPE FE5 – CHAIN-LINK FENCE WITHOUT BARBED-WIRE APRON
TYPE FE6 – CHAIN-LINK FENCE W/BARBED-WIRE ON SINGLE OUTRIGGER
TYPE FE7 – CHAIN-LINK FENCE W/BARBED-WIRE ON DOUBLE OUTRIGGER
TYPE FE8 – CHAIN-LINK FENCE W/BARBED-WIRE AND BARBED-TAPE ON DOUBLE OUTRIGGER
TR – FENCE WITH TOP RAIL AND TENSION WIRE AT BOTTOM
TBR – FENCE WITH TOP AND BOTTOM RAILS
TWB – TENSION WIRE TOP AND BOTTOM
TWBR – FENCE WITH TOP TENSION WIRE AND BOTTOM RAIL
FINAL NUMBER IS FABRIC WIDTH IN INCHES.

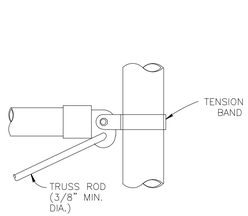
EXAMPLES:

FE6-TR-72 – CHAIN-LINK SECURITY FENCE WITH BARBED-WIRE ON SINGLE OUTRIGGER, TOP RAIL, AND 72 INCH FABRIC WIDTH.

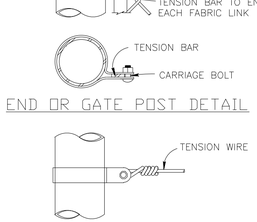
FE5-TWB-84 – CHAIN-LINK SECURITY FENCE WITH NO APRON, TOP AND BOTTOM TENSION WIRE, AND 84 INCH FABRIC WIDTH.



TRUSS ROD AND BAND



BRACE RAIL CLAMP DETAIL

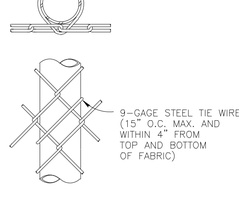


END OR GATE POST DETAIL

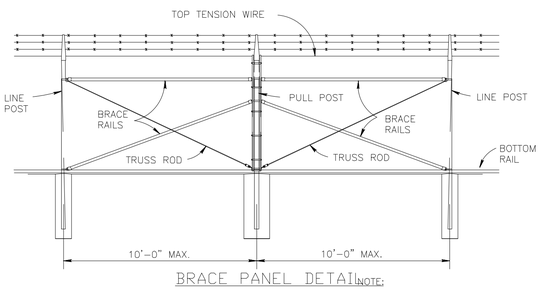
TENSION BAND DETAIL

FASTENING DETAILS

NO SCALE



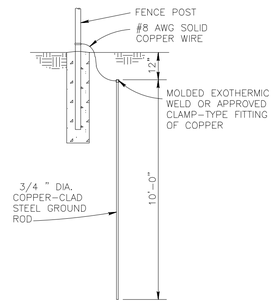
LINE POST ATTACHMENTS



BRACE PANEL DETAIL

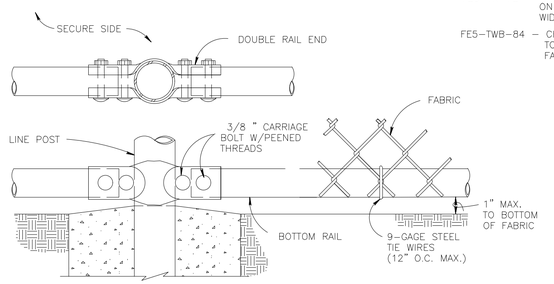
NOTE:
PROVIDE BRACE PANEL WHENEVER STRAIGHT RUNS EXCEED 500 FEET.

NO SCALE



GROUNDING DETAIL

NO SCALE



BOTTOM RAIL DETAILS

NO SCALE

$$ - THINK VALUE ENGINEERING - $$

Revisions			
Symbol	Descriptions	Date	Approved
(2)	REV #0001 – GENERAL REVISIONS	5/17/05	JWE
(1)	REV #0001 – NEW SHEET ADDED	3/17/04	JWE

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
OMAHA, NEBRASKA

Designed by: X	BASE NAME	BASE LOCATION: A
Drawn by: X	STANDARD DETAILS FOR CHAIN-LINK SECURITY FENCES, FARM STYLE FENCES AND A DOUBLE CABLE BARRIER	
Checked by: X	FE6 CHAIN-LINK SECURITY FENCE DETAILS FOR SENSORED FENCE	
Reviewed by: X	Plot Scale Ratio: 1:1	Date: 03/17/04
Submitted by:	Design File: 4_FE6FENCE.B.DGN	Sheet reference number:
Chief: X Section	Spec. No.:	Drawing Code: STD 872-90-04
	Contract No.:	04

COMPUTER AIDED DESIGN & DRAFTING

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
SUBMITTED BY: R.TOLIKONDA
SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)
ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D6035
FILE NUMBER:

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

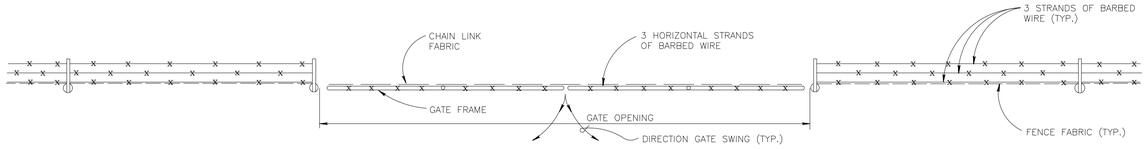
HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

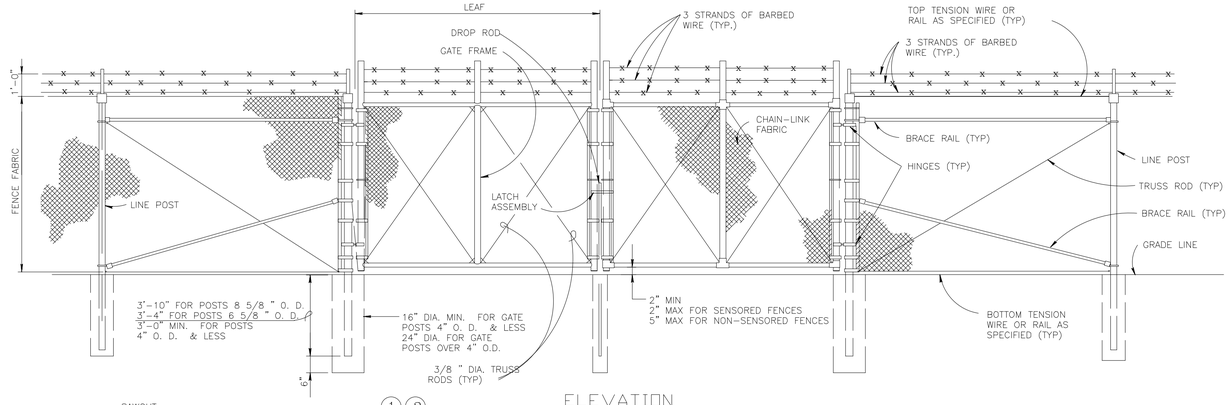
SITE DETAILS - 17

SHEET ID
C-517

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



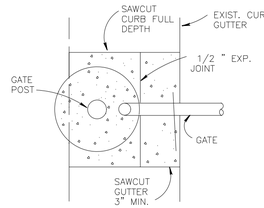
PLAN



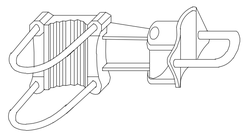
(1) (2) ELEVATION

DOUBLE SWING GATE (TYPE FE-6 FENCE)

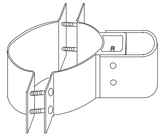
NO SCALE



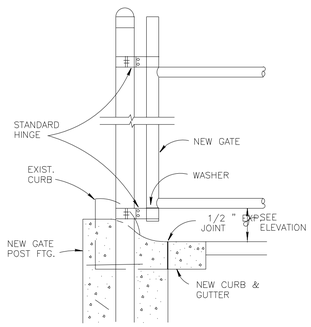
(1) PLAN



OFFSET HINGE

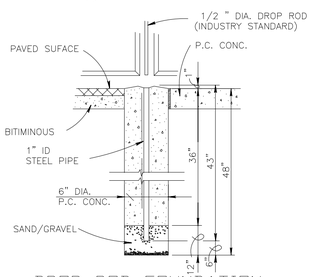


STANDARD HINGE

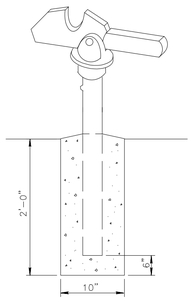


(1) GATE POST SECTION AT CURB AND GUTTER

NO SCALE

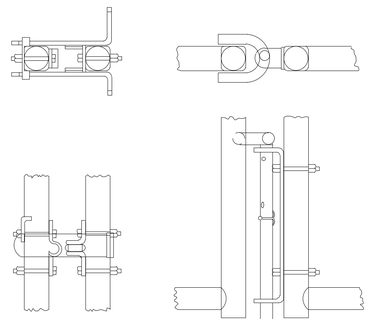


DROP ROD FOUNDATION



GATE KEEPER

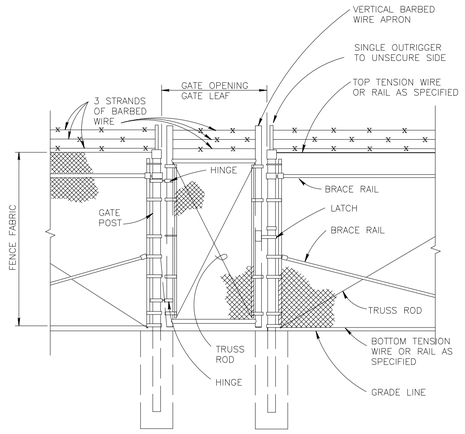
(TO HOLD GATE OPEN)



LATCH ASSEMBLY DROP ROD ASSEMBLY

SWING GATE DETAILS

NO SCALE



(1) PERSONNEL GATE TYPE FE-6 FENCE

NO SCALE

(1) (2)

GATE POST SCHEDULE	
GATE LEAF WIDTH (NOMINAL)	OUTSIDE DIMENSION (NOMINAL)
6' OR LESS	2.875" OD 2.5" SQ
GREATER THAN 6' TO 12'	4.0" OD
GREATER THAN 12' TO 18'	6.625" OD
MORE THAN 18'	8.625" OD

(1) (2) NOTES:

1. FOR NON-SENSORED FENCES, DETAILS SHOWN ARE TO CLARIFY REQUIREMENTS AND ARE NOT INTENDED TO LIMIT OTHER TYPE OF FENCE SECTIONS AND METHODS OF INSTALLATION WHICH COMPLY WITH THE SPECIFICATIONS.
2. SWING GATES SHALL BE CONSTRUCTED WITH DROP RODS, PADLOCKS, LATCH ASSEMBLY AND GATE KEEPERS EXCEPT AS NOTED.
3. ALL GATE FRAMES SHALL MEET THE MINIMUM REQUIREMENTS OF ASTM F900 1.90" NOMINAL (ROUND) OR 2.00" NOMINAL (SQUARE). GATE FRAMES SHALL BE OF WELDED CONSTRUCTION OR SHALL BE ASSEMBLED USING HEAVY FITTINGS. AT CONTRACTOR'S OPTION A WELDED HORIZONTAL BRACE MAY BE USED IN LIEU OF TRUSS RODS TO BRACE ALL-WELDED GATE FRAMES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER RIGID CONSTRUCTION OF ALL GATES SUPPLIED.
4. GATES SHALL BE DESIGNATED AS FOLLOWS:
   FENCE TYPE – FE5, FE6, ETC.
   FENCE HEIGHT – INCHES
   TYPE OPENING – SO (SINGLE)
   – DO (DOUBLE)
   HINGE – RA (STANDARD)
   – HO (OFFSET)
   OPENING – FEET (CLEAR OPENING BETWEEN GATE POSTS)

   EXAMPLES: FE6-84-DO-RA-24
   FE5-48-SO-HO-6

(1)

$$ - THINK VALUE ENGINEERING - $$

Revisions			
Symbol	Descriptions	Date	Approved
(2)	REV #0002 – GENERAL REVISIONS	3/28/05	JWE
(1)	REV #0001 – GENERAL REVISIONS	3/17/04	JWE

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
OMAHA, NEBRASKA

Designed by: X	BASE NAME	BASE LOCATION
Drawn by: X	STANDARD DETAILS FOR CHAIN-LINK SECURITY FENCES, FARM STYLE FENCES AND A DOUBLE CABLE BARRIER	
Checked by: X	FE6 CHAIN-LINK SECURITY FEN GATE DETAILS	
Reviewed by:	Plot Scale Ratio: 1:1 / Design File: 09_FEGGATED.DGN / Date: 03/17/04	Sheet reference number:
Submitted by:	Spec. No.: / Contract No.: / Drawing Code: STD 872-90-09	09
Chief: X Section		

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
SUBMITTED BY: R.TOLIKONDA
SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)
ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D6035
FILE NUMBER:

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

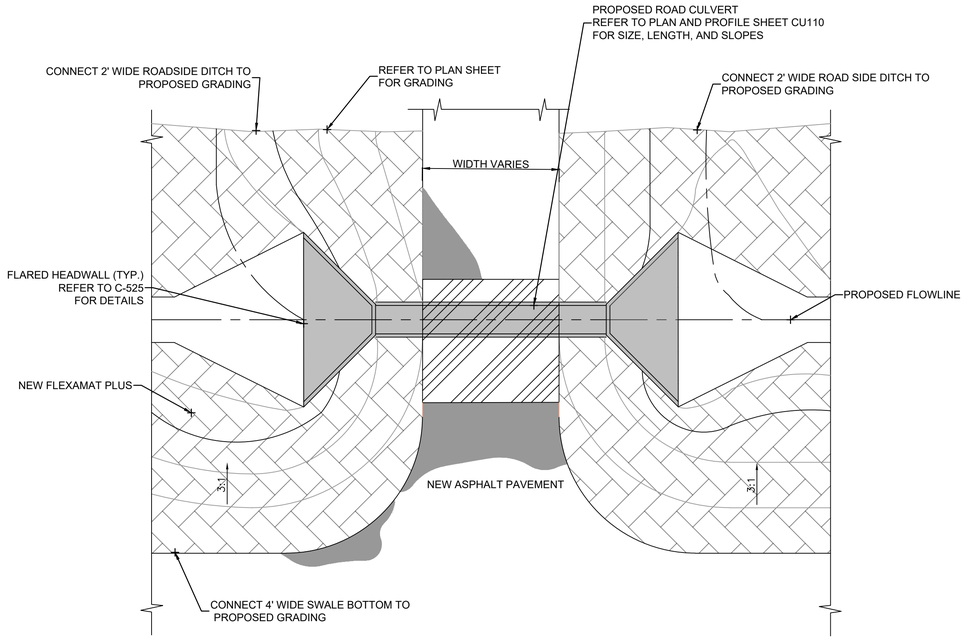
HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

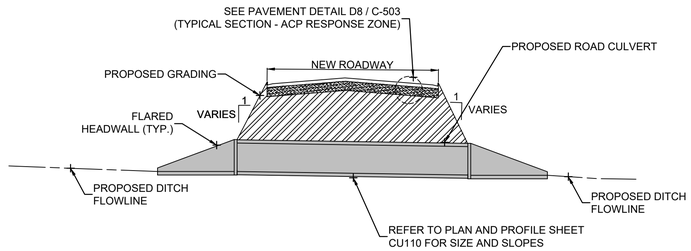
SITE DETAILS - 18

SHEET ID
C-518

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

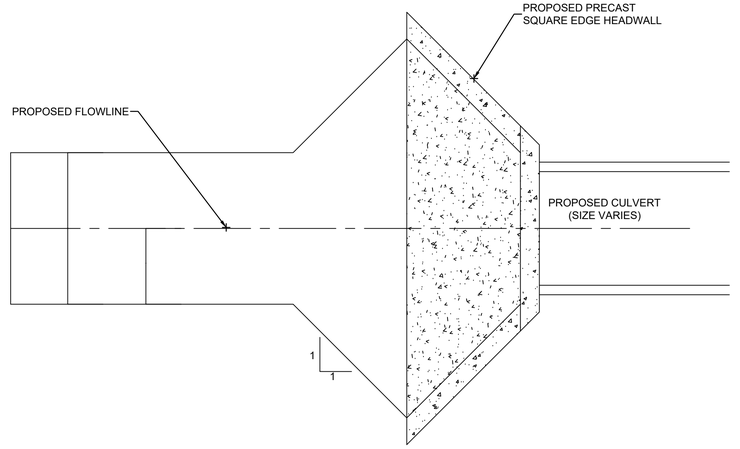


TYPICAL PLAN VIEW

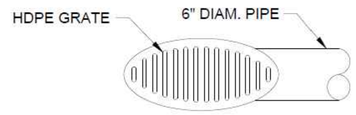


TYPICAL PROFILE SECTION

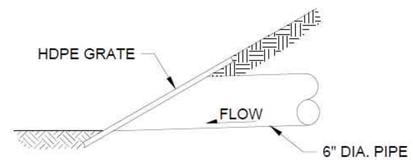
C3 TYPICAL ROADWAY CULVERT DETAILS
SCALE: NOT TO SCALE



H11 FLUME TO HEADWALL CONNECTION
SCALE: NOT TO SCALE



PLAN



PROFILE

C13 METERED DRAIN OUTLET
SCALE: NOT TO SCALE

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
SUBMITTED BY: R.TOLIKONDA
SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)
ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D6035
FILE NUMBER:

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

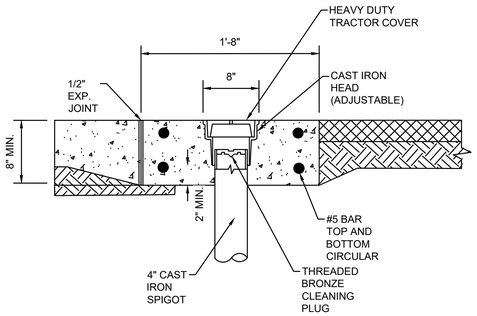
HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

SITE DETAILS - 19

SHEET ID
C-519

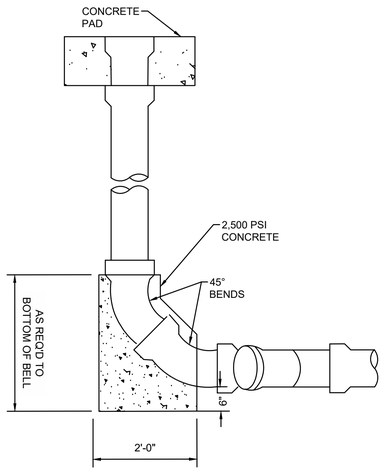
CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



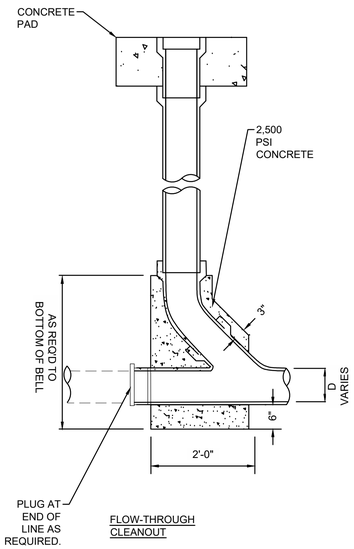
DETAIL NOTE:

1. CONSTRUCT ROUND PADS IN ASPHALT PAVEMENT OR TURFED AREAS AND SQUARE PADS IN CONCRETE PAVEMENT.

CLEANOUT PAD DETAIL



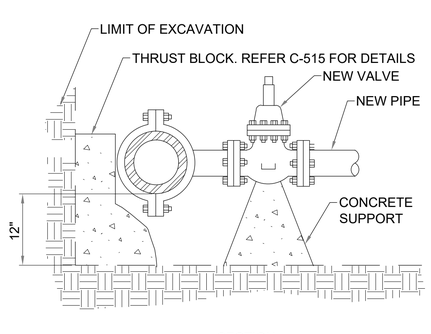
CLEANOUT AT BEND



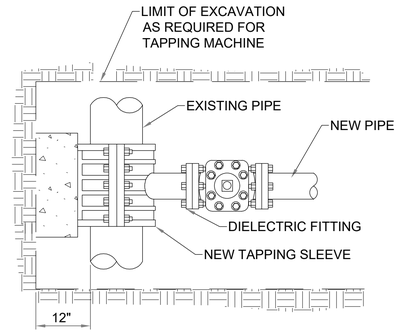
FLOW-THROUGH CLEANOUT

G2 CLEANOUT DETAILS

SCALE: NOT TO SCALE



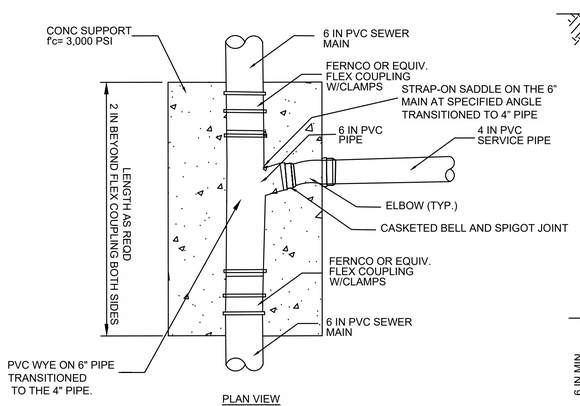
SECTION



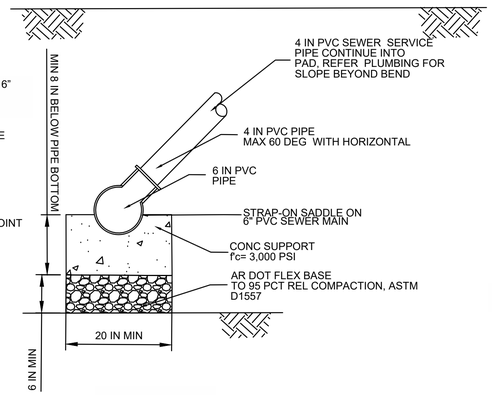
PLAN

J15 TAPPING SLEEVE WITH VALVE

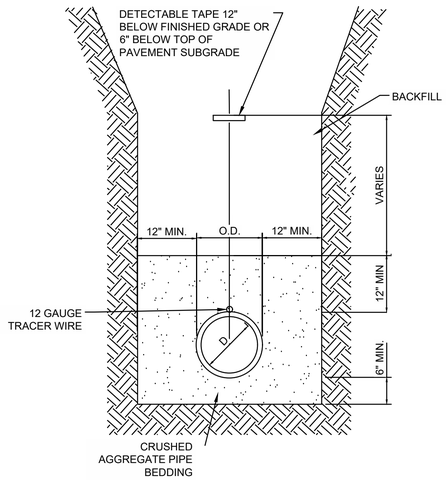
NOT TO SCALE



PLAN VIEW

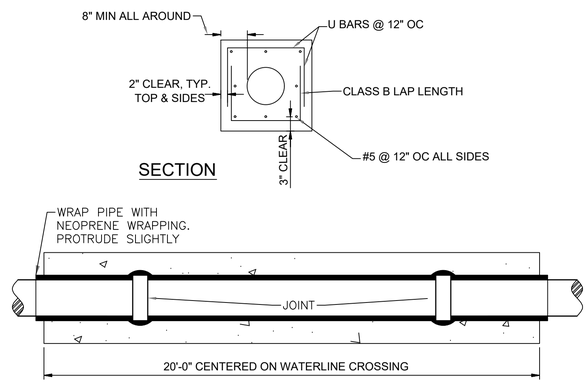


SECTION VIEW



B1 SEWER SERVICE CONNECTION

SCALE: NOT TO SCALE



SECTION

B15 SEWERLINE CONCRETE ENCASEMENT

SCALE: NOT TO SCALE

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
SUBMITTED BY: R.TOLIKONDA
SIZE: ANSI FULL
ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D6035
FILE NUMBER:
BLEED D (22.00 X 34.00 INCHES)

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

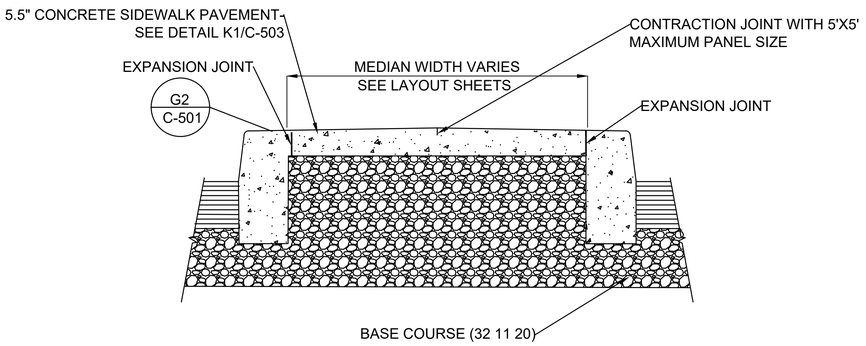
HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

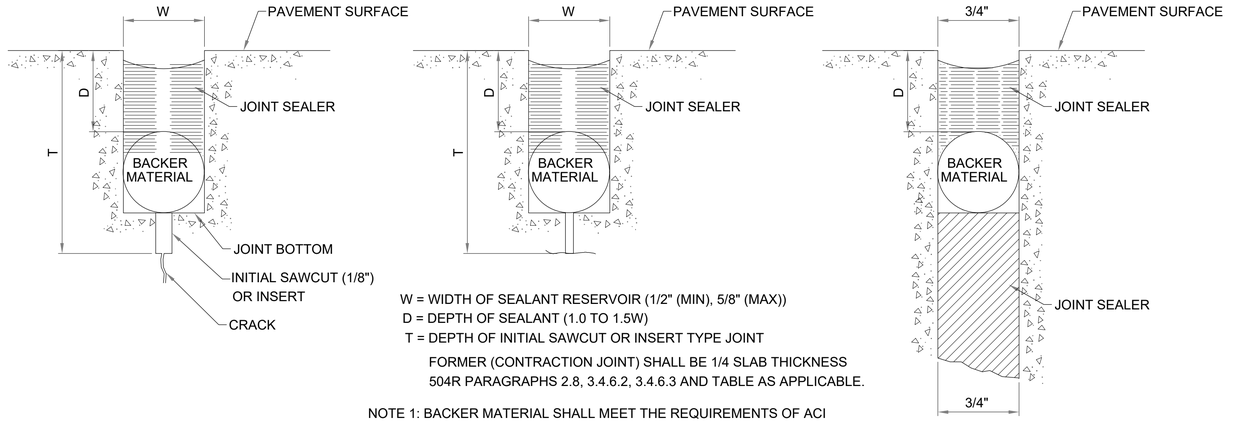
SITE DETAILS - 20

SHEET ID
C-520

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



E2 MEDIAN AND ISLAND PAVEMENT
SCALE: NOT TO SCALE

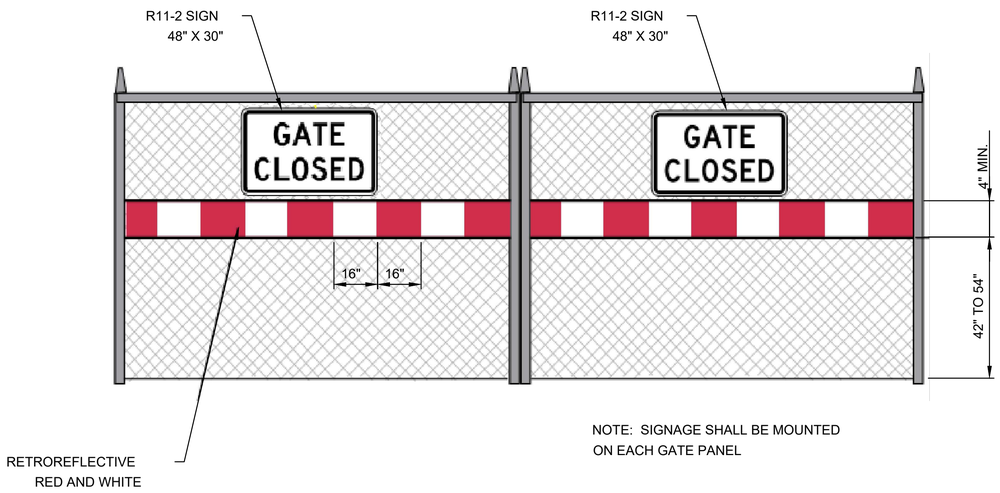


W = WIDTH OF SEALANT RESERVOIR (1/2" (MIN), 5/8" (MAX))
D = DEPTH OF SEALANT (1.0 TO 1.5W)
T = DEPTH OF INITIAL SAWCUT OR INSERT TYPE JOINT
FORMER (CONTRACTION JOINT) SHALL BE 1/4 SLAB THICKNESS
504R PARAGRAPHS 2.8, 3.4.6.2, 3.4.6.3 AND TABLE AS APPLICABLE.

NOTE 1: BACKER MATERIAL SHALL MEET THE REQUIREMENTS OF ACI

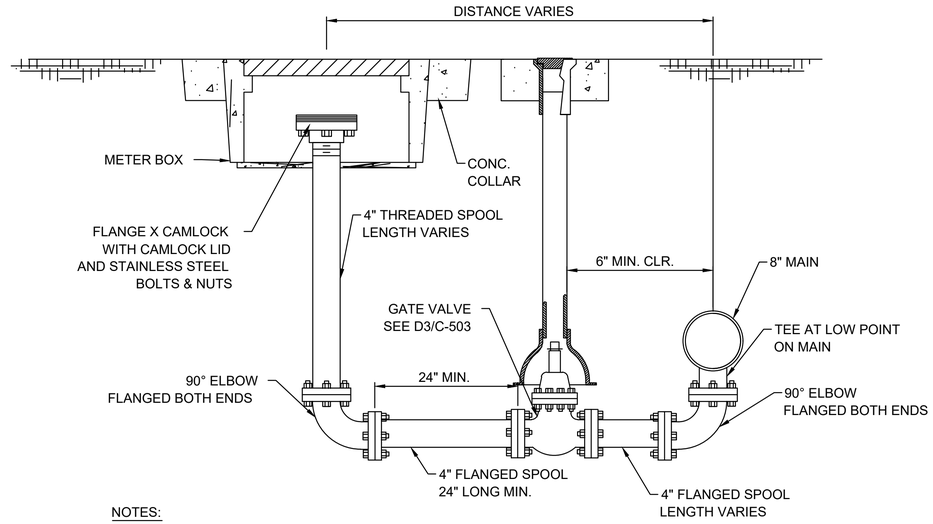
NOTE 2: TOP OF SEALANT WILL BE 1/8" TO 1/4" BELOW TOP OF PAVEMENT SURFACE FOR EXTERIOR PAVEMENTS

B10 JOINT SEALANT DETAIL
SCALE: NOT TO SCALE



NOTE: SIGNAGE SHALL BE MOUNTED ON EACH GATE PANEL

B2 SWING GATE CLOSURE SIGNAGE
SCALE: NOT TO SCALE



NOTES:

1. ALL DUCTILE IRON PIPE AND CAST IRON FITTINGS SHALL BE POLYETHYLENE ENCASED.
2. PROVIDE $\frac{1}{8}$" THICK CLOTH RUBBER GASKET BETWEEN ALL FLANGES.
3. ALL FLANGE BOLTS & NUTS SHALL BE STAINLESS STEEL.

B13 IN-LINE BLOWOFF INSTALLATION
SCALE: NOT TO SCALE

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
SUBMITTED BY: R.TOLIKONDA
SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)
ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D6035
FILE NUMBER:

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

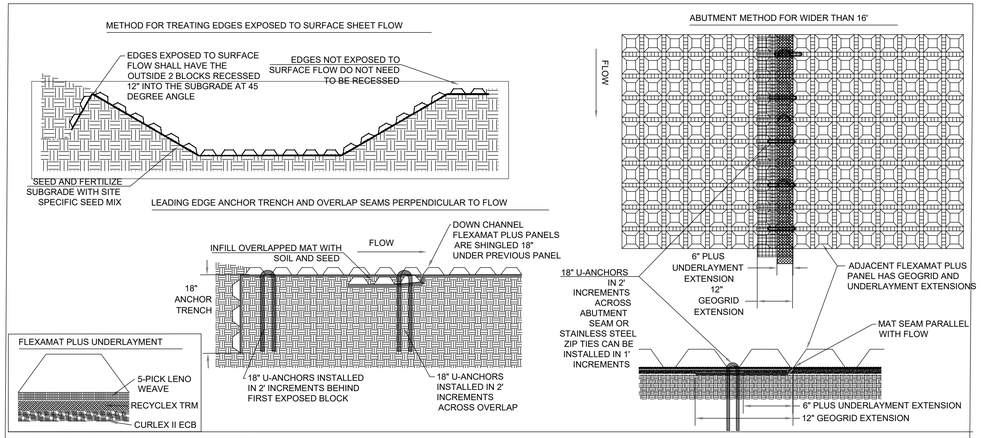
HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

SITE DETAILS - 21

SHEET ID
C-521

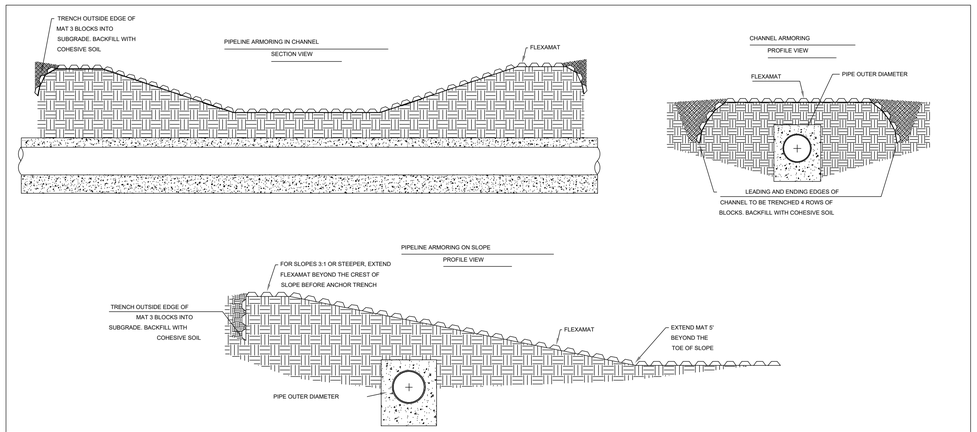
CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



FLEXAMAT PLUS CHANNEL - LAYOUT PARALLEL TO FLOW

CONSTRUCTION NOTES:

1. AN ENGINEER OR MANUFACTURES REPRESENTATIVE SHALL BE ONSITE FOR THE START OF THE INSTALLATION.
2. GRADE CHANNEL SO THAT WATER WILL FLOW DOWN CENTER OF THE CHANNEL AND BE CONTAINED TO THE CHANNEL. ALL SUBGRADE SURFACES PREPARED FOR PLACEMENT OF MATS SHALL BE SMOOTH AND FREE OF ALL ROCKS, STICKS, ROOTS, OTHER PROTRUSIONS, OR DEBRIS OF ANY KIND.
3. PRIOR TO FLEXAMAT PLUS INSTALLATION SEED AND FERTILIZE THE PREPARED SUBGRADE WITH SITE SPECIFIC SEED MIX AND IN ACCORDANCE WITH THE PROJECT PLANS AND SPECIFICATIONS.
4. INSTALL FLEXAMAT PLUS ROLLS, USING THE WIDEST ROLLS POSSIBLE TO AVOID SEAMS.
   - 4.1. FOR CHANNELS THAT ARE WIDER THAN 16', INSTALL 15.5' WIDE FLEXAMAT PLUS ROLLS THAT INCLUDE 12" GEOGRID EXTENSIONS WITH A 6" PLUS UNDERLAYMENT EXTENSIONS. THESE SEAMS ARE PARALLEL WITH FLOW, THE ADJACENT MAT INSTALLED OVER THE EXTENSIONS. ENSURE GEOGRID AND TRM EXTENSIONS ARE LAYING FLAT ON SUBGRADE PRIOR TO INSTALLING ADJACENT MAT.
   - 4.2. SECURE THE ABUTMENT PARALLEL WITH FLOW BY INSTALLING 18" U-ANCHORS IN 2' INCREMENTS OR 20" STAINLESS STEEL ZIP TIES IN 1' INCREMENTS THROUGH THE EXTENSION OVERLAP. U ANCHORS OR ZIP TIES TO BE INSTALLED PERPENDICULAR TO FLOW. ZIP TIES SHALL ENCOMPASS 3 CORDS OF GEOGRID FROM EACH MAT.
5. FOR ADDITIONAL SECTIONS OF MAT, SECURE SEAM PERPENDICULAR WITH FLOW BY OVERLAPPING THE DOWNSTREAM SECTION 18" WITH UPSTREAM SECTION OF MAT. PRIOR TO INSTALLING OVERLAP, FLIP UPSTREAM MAT BACK 24", EXCAVATE 2.25" OF SOIL 18" FROM END OF UPSTREAM MAT. DOWNSTREAM SECTION IS LAID IN THE SHALLOW TRENCH. RETURN AND TAMP SOIL OVER INITIAL EDGE AND SEED. FLIP END OF UPSTREAM MAT OVER THE SOIL COVERED AND SEEDED INITIAL LEADING EDGE OF DOWNSTREAM MAT.
   - 5.1. SECURE OVERLAPS PERPENDICULAR TO FLOW BY INSTALLING 18" U-ANCHORS IN 2' INCREMENTS OR 20" STAINLESS STEEL ZIP TIES IN 1' INCREMENTS THROUGH THE OVERLAP. ZIP TIES SHALL ENCOMPASS 3 CORDS OF GEOGRID FROM EACH MAT.
6. AT THE INITIAL LEADING EDGE OF THE FLEXAMAT PLUS ARMORED CHANNEL, EMBED THE MAT 18" IN A VERTICAL ANCHOR TRENCH. FILL AND COMPACT ANCHOR TRENCH WITH SUITABLE FILL. AT ENDING EDGE OF PROTECTION, EMBED THE MAT 18" IN A TERMINATION TRENCH. THE TRENCH SHALL BE FILLED AND COMPACTED WITH SUITABLE FILL, AS DETERMINED BY THE ENGINEER OF RECORD.



FLEXAMAT - PIPELINE ARMORING

CONSTRUCTION NOTES:

1. BEDDING SURFACE SHALL BE BROUGHT TO GRADE PER PLAN/PROFILE DRAWINGS, AND ALL SUBGRADE SURFACES PREPARED FOR PLACEMENT OF MATS SHALL BE SMOOTH AND FREE OF ALL ROCKS, STICKS, ROOTS, OTHER PROTRUSIONS, OR DEBRIS OF ANY KIND.
2. FLEXAMAT ROLLS CAN BE MANUFACTURED UP TO 16' WIDE AND 100' LONG. IT IS RECOMMENDED TO USE THE LARGEST MATS POSSIBLE TO REDUCE OVERLAP AND ABUTMENT SEAMS.
3. CONSULT THE MANUFACTURER FOR A LAYOUT OF THE PIPELINE ARMORING

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
SUBMITTED BY: R.TOLIKONDA
SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)
ISSUE DATE: 04/17/2026
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U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

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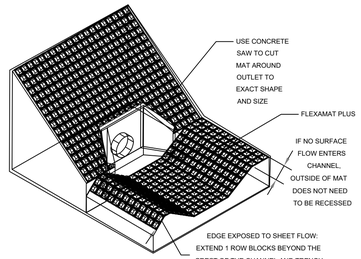
HOADLEY ROAD, WHITE HALL, AR 71602

SITE DETAILS - 22

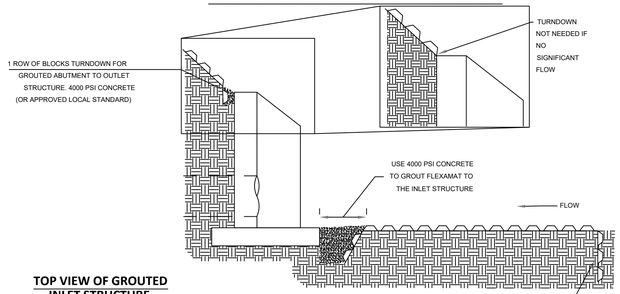
SHEET ID
C-522

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

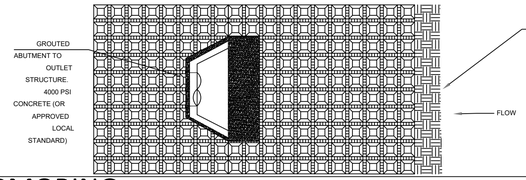
ISOMETRIC VIEW OF INLET AND SLOPE PROTECTION



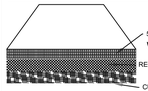
PROFILE VIEW OF TRANSITION TO INLET STRUCTURE



TOP VIEW OF GROUTED INLET STRUCTURE



FLEXAMAT PLUS UNDERLAYMENT

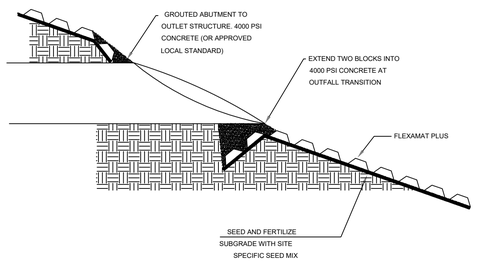


FLEXAMAT PLUS - INLET ARMORING

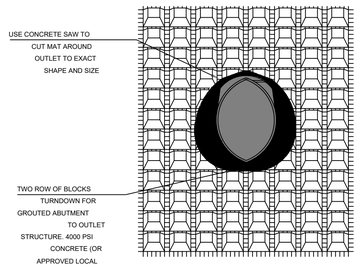
CONSTRUCTION NOTES:

1. GRADE CHANNEL SO THAT WATER WILL FLOW DOWN CENTER OF THE CHANNEL AND BE CONTAINED TO THE CHANNEL.
2. ALL SUBGRADE SURFACES PREPARED FOR PLACEMENT OF MATS SHALL BE SMOOTH AND FREE OF ALL ROCKS, STICKS, ROOTS, OTHER PROTRUSIONS, OR DEBRIS OF ANY KIND. THE PREPARED SURFACE SHALL PROVIDE A FIRM UNYIELDING FOUNDATION FOR THE MATS.
2. PRIOR TO FLEXAMAT PLUS INSTALLATION SEED AND FERTILIZER SUBGRADE WITH SITE SPECIFIC SEED MIX IN ACCORDANCE WITH THE PROJECT PLANS AND SPECIFICATIONS.
3. INSTALL FLEXAMAT ROLLS. AVAILABLE WIDTHS ARE 4', 5.5', 8', 10', 12', AND 16' AVAILABLE IN CUSTOM LENGTHS. FOR WIDTHS WIDER THAN 16', INSTALL MAT WITH GEOGRID EXTENSION AND PLUS UNDERLAYMENT EXTENSIONS.
   - 3.1. WHERE POSSIBLE AVOID LONGITUDINAL ABUTMENT SEAMS IN CHANNEL BOTTOM.
   - 3.2. FOR INLET PROTECTION WIDER THAN 16' SEE CHANNEL PARALLEL TO FLOW INSTALLATION DETAIL.
   - 3.3. FOR INLET PROTECTION THAT REQUIRES MORE THAN 1 MAT IN LENGTH TO COVER CHANNEL SEE CHANNEL PARALLEL TO FLOW INSTALLATION DETAIL.
4. AT THE TRANSITION TO THE INLET STRUCTURE, USE 4,000 PSI CONCRETE TO TRANSITION TO THE INLET STRUCTURE.
5. AT THE BEGINNING OF THE ARMORED AREA, ALONG THE INITIAL LEADING EDGE EXPOSED TO FLOW, EMBED THE MAT 18" IN A TERMINATION TRENCH. FILL AND COMPACT TERMINATION TRENCH WITH COHESIVE FILL.

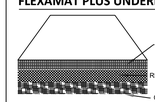
SIDE VIEW OF OUTLET AND SLOPE PROTECTION



FRONT VIEW OF SPLASH PAD AND GROUTED ANCHOR TRENCHES



FLEXAMAT PLUS UNDERLAYMENT



FLEXAMAT PLUS - PIPE OUTFALL ARMORING

CONSTRUCTION NOTES:

1. GRADE OUTFALL SO THAT WATER WILL FLOW DOWN CENTER OF THE ARMOR AND BE CONTAINED TO THE ARMORED AREA.
2. ALL SUBGRADE SURFACES PREPARED FOR PLACEMENT OF MATS SHALL BE SMOOTH AND FREE OF ALL ROCKS, STICKS, ROOTS, OTHER PROTRUSIONS, OR DEBRIS OF ANY KIND. THE PREPARED SURFACE SHALL PROVIDE A FIRM UNYIELDING FOUNDATION FOR THE MATS.
3. PRIOR TO FLEXAMAT PLUS INSTALLATION SEED AND FERTILIZER SUBGRADE WITH SITE SPECIFIC SEED MIX IN ACCORDANCE WITH THE PROJECT PLANS AND SPECIFICATIONS.
4. INSTALL FLEXAMAT ROLLS. AVAILABLE WIDTHS ARE 4', 5.5', 8', 10', 12', AND 16' AVAILABLE IN CUSTOM LENGTHS. FOR WIDTHS WIDER THAN 16', INSTALL 15.5' WIDE MAT WITH 12" GEOGRID EXTENSION AND 6" UNDERLAYMENT EXTENSION.
   - 4.1. WHERE POSSIBLE AVOID MAT SEAMS IN ARMORED AREA.
   - 4.2. FOR OUTLET PROTECTION WIDER THAN 16' SEE CHANNEL PARALLEL TO FLOW INSTALLATION DETAIL.
5. INSTALL FLEXAMAT OVER PIPE OUTFALL AND USE CONCRETE SAW TO CUT MAT TO FIT TIGHTLY AROUND OUTFALL PIPE.
6. USE 4000 PSI CONCRETE (OR APPROVED LOCAL STANDARD) TO GROUT AROUND PIPE OUTFALL.
7. AT THE INITIAL LEADING EDGE OF FLEXAMAT EXPOSED TO CONCENTRATED FLOW FROM PIPE OUTFALL, EMBEDDED TWO BLOCKS INTO INTO 4.000 PSI CONCRETE.
8. AT THE END OF THE ARMORED PIPE OUTFALL, EMBED THE MAT 18" IN A TERMINATION TRENCH. FILL AND COMPACT TERMINATION TRENCH WITH A COHESIVE FILL.

GUIDANCE TABLE

PIPE DIAMETER	CFS	FLEXAMAT WIDTH
12"	8 CFS	5.5'
18"	20 CFS	8'
24"	30 CFS	8'
36"	75 CFS	12'
48"	100 CFS	16'
60"	150 CFS	20'

*CONSULT MANUFACTURER FOR GUIDANCE IF DESIGN DISCHARGE VARIES SIGNIFICANTLY FROM VALUES LISTED IN TABLE.

*LENGTH OF PROTECTION WILL VARY ON THE LENGTH OF THE SLOPE, DEGREE OF SLOPE, OR IF IT IS DISCHARGING ONTO A FLAT AREA. OUTFALLS DISCHARGING ONTO SLOPES, IT IS RECOMMENDED TO EXTEND FLEXAMAT PLUS THE LENGTH OF THE SLOPE AND 3' PAST THE TOE.

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
SUBMITTED BY: R.TOLIKONDA
SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)
ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D6035
FILE NUMBER:

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

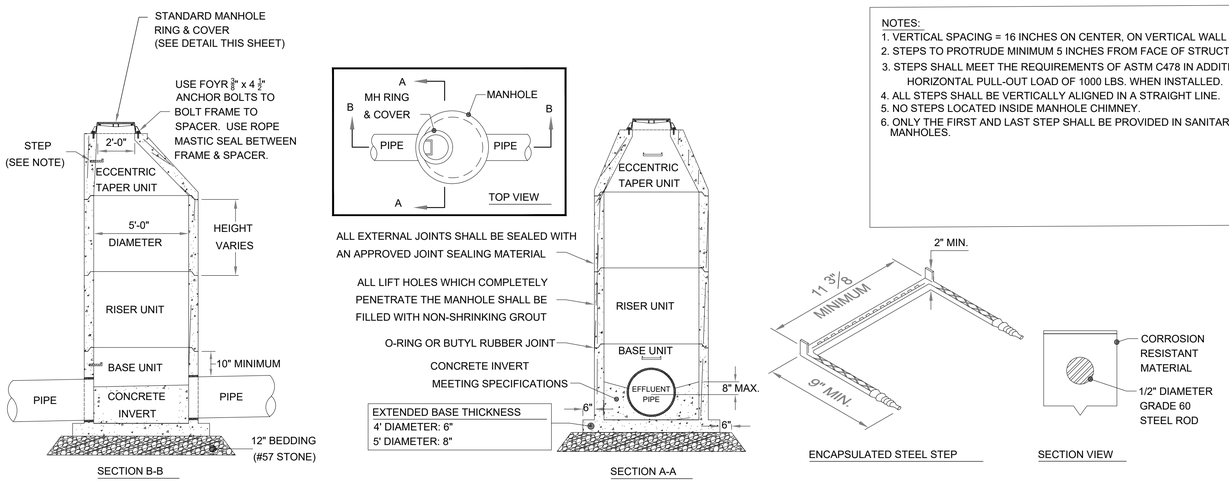
HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

SITE DETAILS - 23

SHEET ID
C-523

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

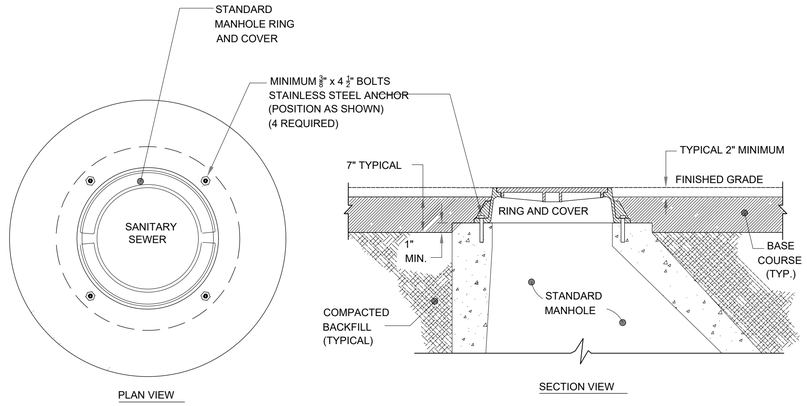


NOTES:
1. VERTICAL SPACING = 16 INCHES ON CENTER, ON VERTICAL WALL ONLY.
2. STEPS TO PROTRUDE MINIMUM 5 INCHES FROM FACE OF STRUCTURE WALL.
3. STEPS SHALL MEET THE REQUIREMENTS OF ASTM C478 IN ADDITION TO A HORIZONTAL PULL-OUT LOAD OF 1000 LBS. WHEN INSTALLED.
4. ALL STEPS SHALL BE VERTICALLY ALIGNED IN A STRAIGHT LINE.
5. NO STEPS LOCATED INSIDE MANHOLE CHIMNEY.
6. ONLY THE FIRST AND LAST STEP SHALL BE PROVIDED IN SANITARY SEWER MANHOLES.

MANHOLE STEPS

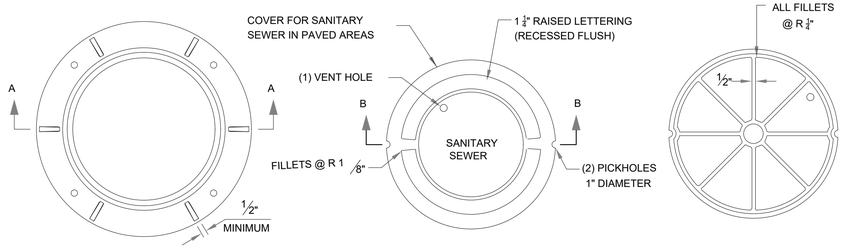
NOTES:
1. ALL MANHOLE CONNECTIONS SHALL BE PREFABRICATED OR CORED WITH A CONCRETE CORING MACHINE.
2. ALL MANHOLES SHALL BE VACUUM TESTED.
3. EXTENDED BASE REQUIRED FOR ALL MANHOLES WITH MORE THAN 12-FT DEPTH OF BURY.
4. PROVIDE A MINIMUM 0.1 FOOT IN-OUT DROP FOR STRAIGHT RUNS AND 0.2 FOOT IN-OUT DROP FOR ANGLE RUNS.
5. PROVIDE ONLY FIRST AND LAST STEP IN MANHOLE.

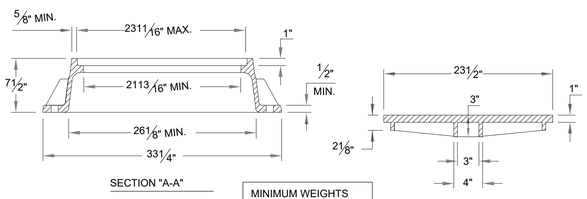
H1 STANDARD PRECAST CONCRETE MANHOLE
SCALE: NOT TO SCALE



NOTE:
1. MANHOLE RING TO BE BOLTED AS SHOWN W/ ROPE MASTIC SEAL BETWEEN FRAME & SPACER.

J13 STANDARD MANHOLE RING AND COVER INSTALLATION
SCALE: NOT TO SCALE



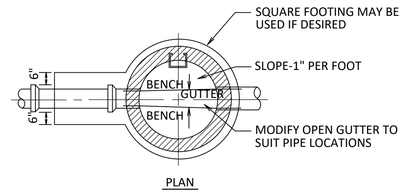


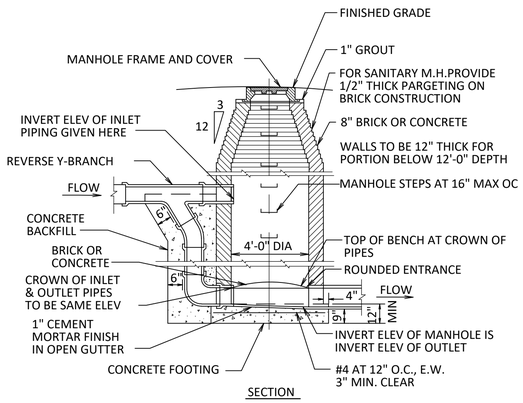
MINIMUM WEIGHTS

RING	180
COVER	125
TOTAL	305

SPECIFICATIONS:
1. CLASS 35 GRAY IRON.
2. COMPLIES WITH ASTM A48 CL35B.
3. ALL LETTERING SHALL BE CLEAN, CRISP, AND CLEARLY LEGIBLE.
4. DOMESTICALLY MADE & MANUFACTURED IN THE USA.

B2 STANDARD MANHOLE RING AND COVER
SCALE: NOT TO SCALE





B11 DROP MANHOLE
SCALE: NOT TO SCALE

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D6035
FILE NUMBER:

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
SUBMITTED BY: R.TOLIKONDA
SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

SITE DETAILS -24

SHEET ID
C-524

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

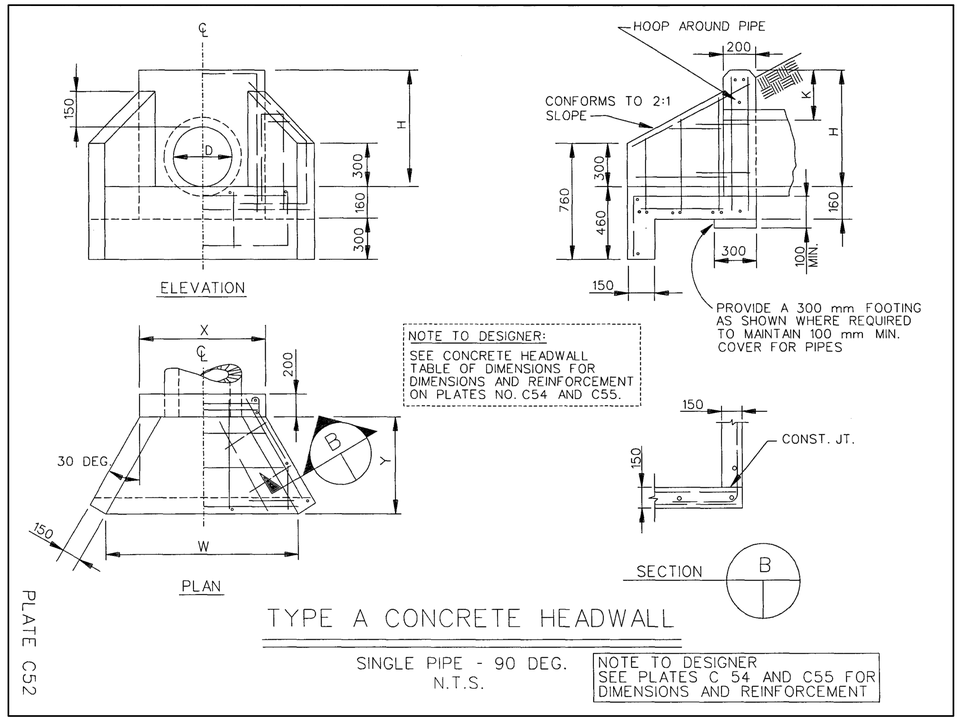
NO. OF PIPES	DIAM. OF PIPES	TABLE OF DIMENSIONS TYPE "A" AND "B"						
		G	K	X	H	Y	W	BAR SIZE x
1	300(12")	--	300	710	610	300	710	#10
2	"	250	"	1270	"	"	1270	"
3	"	"	"	1830	"	"	1830	"
4	"	"	"	2390	"	"	2390	"
1	380(15")	--	300	800	690	460	980	#10
2	"	300	"	1490	"	"	1660	"
3	"	"	"	2170	"	"	2350	"
4	"	"	"	2860	"	"	3040	"
1	450(18")	--	300	890	760	610	1240	#10
2	"	360	"	1700	"	"	2050	"
3	"	"	"	2510	"	"	2870	"
4	"	"	"	3330	"	"	3680	"
1	600(24")	--	300	1070	910	910	1770	#10
2	"	430	"	2110	"	"	2810	"
3	"	"	"	3150	"	"	3850	"
4	"	"	"	4190	"	"	4900	"
1	750(30")	--	300	1240	1070	1220	2300	#10
2	"	510	"	2510	"	"	3570	"
3	"	"	"	3780	"	"	4840	"
4	"	"	"	5050	"	"	6110	"
1	900(36")	--	300	1420	1220	1520	2830	#13
2	"	580	"	2920	"	"	4330	"
3	"	"	"	4420	"	"	5830	"
4	"	"	"	5920	"	"	7330	"

CONCRETE HEADWALL

FOR CONCRETE PIPE - 90° - SINGLE AND MULTIPLE PIPES

x - REINFORCING BARS AT 300 mm O.C.E.W.

PLATE C54

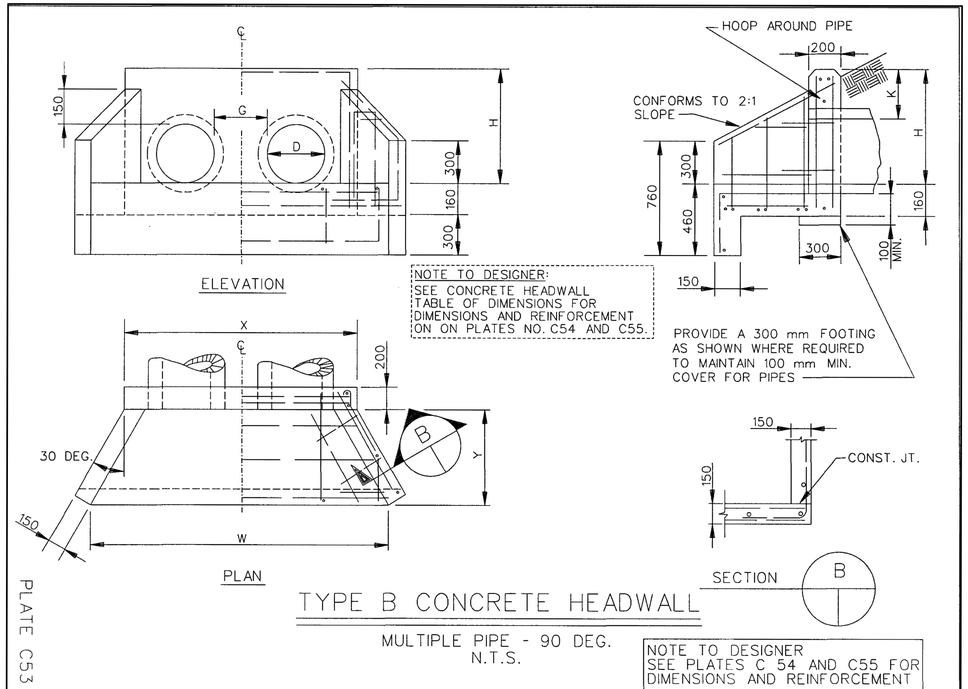


TYPE A CONCRETE HEADWALL

SINGLE PIPE - 90 DEG.
N.T.S.

NOTE TO DESIGNER
SEE PLATES C 54 AND C55 FOR DIMENSIONS AND REINFORCEMENT

PLATE C52



TYPE B CONCRETE HEADWALL

MULTIPLE PIPE - 90 DEG.
N.T.S.

NOTE TO DESIGNER
SEE PLATES C 54 AND C55 FOR DIMENSIONS AND REINFORCEMENT

PLATE C53

GENERAL NOTES

1. THESE DETAILS ARE BASED ON THE SOUTHWESTERN DIVISION ARCHITECTURAL AND ENGINEERING INSTRUCTIONS MANUAL (AEIM).THESE DETAILS ARE BASED ON THE SOUTHWESTERN DIVISION ARCHITECTURAL AND ENGINEERING INSTRUCTIONS MANUAL (AEIM).

   UNIT CONVERSIONS (SI TO FPS):

   25.4 MM = 1 IN
   1 KG = 2.2 LB
   1 KN = 0.224809 KIPS
2. FOR THE HEAD ENTRANCE OR ENDWALL EXIT REFER TO FLEXAMAT PLUS DETAILS APPLICABLE FOR PIPE OUTLET PROTECTION OR ARMOR PROTECTION C-523 & C-524.
3. REFER TO SHEET C519 FOR CULVERT HEADWALL OR END WALL TIE-IN POINTS WITH PROPOSED GRADING.

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
SUBMITTED BY: R.TOLIKONDA
SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)
ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D6035
FILE NUMBER:

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

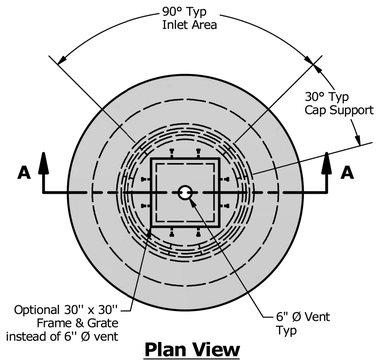
HANA-KENALL 8A JV
2600 CITYWEST BLVD. STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

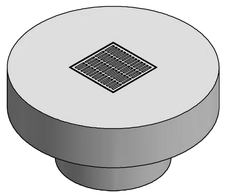
SITE DETAILS - 25

SHEET ID
C-525

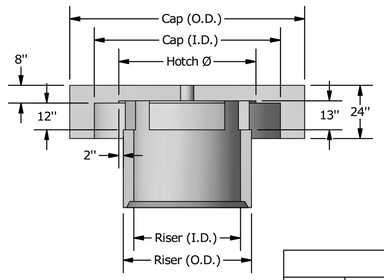
CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



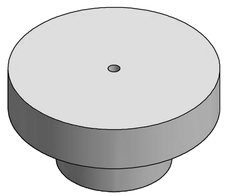
Plan View



Isometric View
Optional Frame & Grate



SECTION A-A



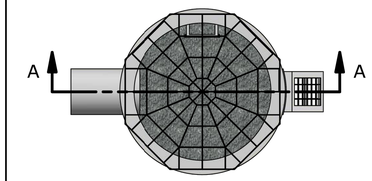
Isometric View
6'' Ø Vent Typ

Standard Dimensions					
Riser ID	Riser OD	Cap ID	Cap OD	Notch Dia	Appr Cap wt (tons)
24''	30''	48''	58''	34''	1.49
27''	33 ½''	60''	72''	37 ½''	2.28
30''	37''	60''	72''	41''	2.26
36''	44''	60''	72''	48''	2.22
42''	51''	72''	86''	55''	3.16
48''	58''	84''	100''	62''	4.27
54''	66 ½''	84''	100''	70 ½''	4.20
60''	72''	96''	114''	76''	5.48
66''	80 ½''	96''	114''	84 ½''	5.39
72''	86''	108''	128''	90''	6.83
78''	94 ½''	126''	147''	98 ½''	8.97
84''	100''	126''	147''	104''	8.90

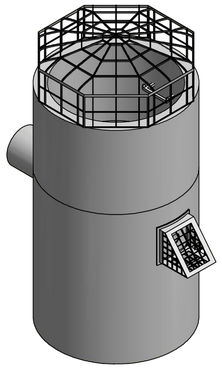
Notes
1) Precast Anti-Vortex device (Cap & Riser) conform to ASTM C478.
2) Dimensions subject to permissible variations of ASTM C478.
3) Inlet area (area between device I.D. and riser O.D) is greater than outlet area (area of riser I.D.).

TITLE	DATE
Precast Anti-Vortex Device (Cap & Riser)	01-06-17

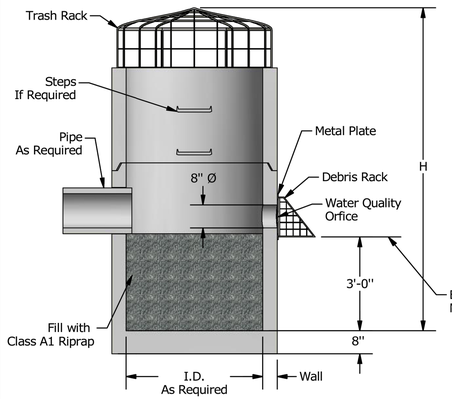
CP&P CONCRETE PIPE & PRECAST, LLC



Plan View



Isometric View

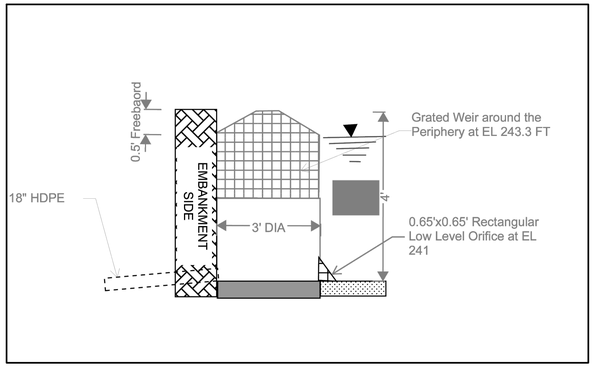


SECTION A-A

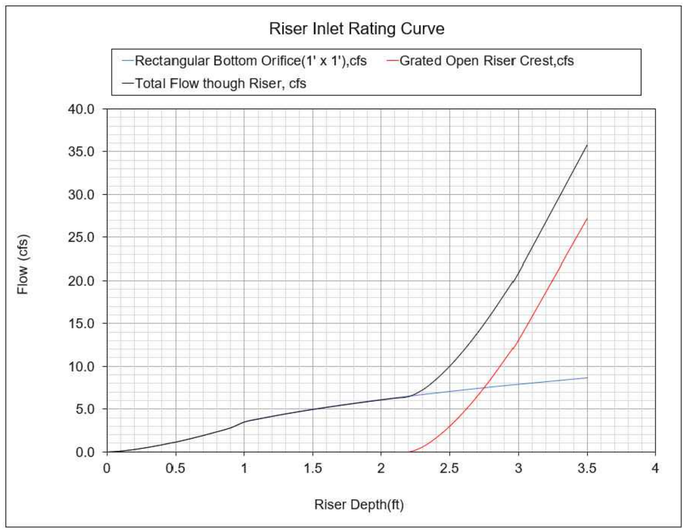
Notes
1) Manhole sections conform to ASTM C478.

TITLE	DATE
Precast SWM-1 Stormwater Management Structure	01-12-17

CP&P CONCRETE PIPE & PRECAST, LLC



K15 RISER INLET SECTION
SCALE: NOT TO SCALE



D15 RISER INLET SECTION
SCALE: NOT TO SCALE

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
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SUBMITTED BY: R.TOLIKONDA
SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)
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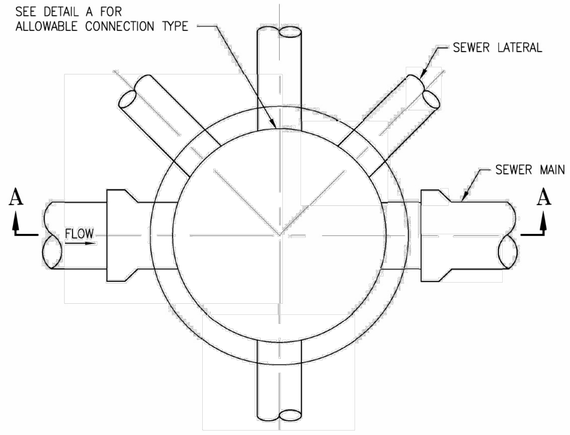
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

SITE DETAILS - 26

SHEET ID
C-526

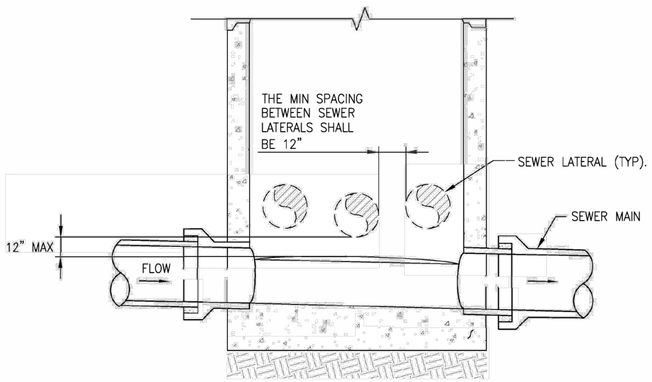
CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



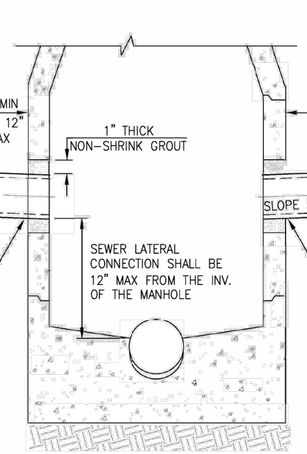
PLAN
NOT TO SCALE

NOTES:

1. SEWER LATERAL CONNECTIONS SHALL BE FLUSH WITH INSIDE FACE OF MANHOLE WALL.
2. SEWER LATERAL CONNECTIONS SHALL BE MINIMUM 8" FROM PRECAST MANHOLE BARREL SECTION JOINTS.
3. MORE THAN THREE LATERAL CONNECTIONS INTO A MANHOLE WILL REQUIRE REVIEW AND APPROVAL BY SFPUC.



SECTION–A
NOT TO SCALE



NOTE: THIS DETAIL REPRESENTS TWO ALLOWABLE MANHOLE CONNECTIONS.

DETAIL–A
NOT TO SCALE

APPLICABLE TO BOTH COMBINED AND SANITARY SEWER SYSTEMS

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
SUBMITTED BY: R.TOLIKONDA
SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)
ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D6035
FILE NUMBER:

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

SITE DETAILS - 27

SHEET ID
C-527

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

PROPOSED PINE BLUFF ARSENAL CL ALIGNMENT DATA

NO.	STATION	NORTHING	EASTING	Δ(DMS)	T(FEET)	L(FEET)	R(FEET)	P.C STATION	NORTHING P.C. COORD.	EASTING P.C. COORD.	P.T. STATION	NORTHING P.T. COORD.	EASTING P.T. COORD.
POB	0+00.00	1907396.12	1286173.124										
PI	1+21.45	1907465.471	1286272.825	47° 24' 21.337"	67.6108	127.418	154	0+53.84	1907426.863	1286217.321	1+81.26	1907450.741	1286338.811
PI	5+84.68	1907362.849	1286732.546	53° 48' 33.388"	104.8707	194.0939	206.67	4+79.81	1907385.696	1286630.195	6+73.91	1907431.961	1286811.422
PI	8+23.03	1907530.236	1286923.58	73° 3' 52.210"	149.1222	256.6883	201.29	6+73.91	1907431.961	1286811.422	9+30.60	1907666.157	1286862.237
PI	10+30.50	1907757.218	1286821.141	53° 17' 51.933"	99.9044	185.1885	199.08	9+30.60	1907666.157	1286862.237	11+15.78	1907844.59	1286869.587
PI	11+64.46	1907887.158	1286893.191	27° 0' 52.499"	48.6744	95.5387	202.63	11+15.78	1907844.59	1286869.587	12+11.32	1907914.361	1286933.554
POE	13+72.25	1908004.298	1287067.004										

PROPOSED DAYTON ROAD CL ALIGNMENT DATA

NO.	STATION	NORTHING	EASTING	Δ(DMS)	T(FEET)	L(FEET)	R(FEET)
POB	0+00.00	1907396.12	1286173.124				
PI	1+08.02	1907465.471	1286272.825	51° 10' 58.852"	108.0243	201.4864	-225.5498
POE	2+01.49	1908004.298	1287067.004				

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
SUBMITTED BY: R.TOLIKONDA
SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)

ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D6035
FILE NUMBER:

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

ALIGNMENT DATA TABLE

SHEET ID
C-701

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

DEMOLITION LAYOUT POINTS

POINT NO.	NORTHING	EASTING
100	1907409.63	1286165.24
101	1907384.19	1286183.36
102	1907422.86	1286233.25
103	1907518.70	1286330.10
104	1907498.10	1286344.24
105	1907502.12	1286379.59
106	1907507.40	1286403.00
107	1907494.33	1286417.88
108	1907538.61	1286516.31
109	1907520.84	1286530.08
110	1907353.59	1286283.03
111	1907555.39	1286504.77
112	1907561.31	1286519.77
113	1907583.69	1286506.86
114	1907632.59	1286475.35
115	1907650.79	1286488.57
116	1907596.00	1286524.91
117	1907625.93	1286458.07
118	1907646.34	1286442.82
119	1907640.99	1286383.90
120	1907630.86	1286365.32
121	1907854.06	1286827.73
122	1907437.22	1286406.55
123	1907726.91	1286683.69
124	1908043.09	1287212.30

DEMOLITION LAYOUT POINTS

POINT NO.	NORTHING	EASTING
125	1908023.12	1287056.35
126	1907991.00	1287075.09
127	1907881.90	1286851.70
128	1907918.30	1286963.53
129	1907831.92	1286837.57
130	1907817.35	1286821.45
131	1907810.77	1286821.98
132	1907789.73	1286828.66
133	1907708.63	1286907.98
134	1907695.32	1286893.08
135	1907788.98	1286774.08
136	1907782.99	1286764.51
137	1907775.74	1286809.95
138	1907711.50	1286672.07
139	1907658.35	1286651.17
140	1907641.11	1286474.61
141	1907572.85	1286538.04
142	1907560.37	1286538.29
143	1907545.65	1286536.17
144	1907397.29	1286428.22
145	1907274.30	1286183.28
146	1907376.76	1286468.90
147	1907302.93	1286360.46
148	1907293.91	1286341.55
149	1907216.32	1286330.78

DEMOLITION LAYOUT POINTS

POINT NO.	NORTHING	EASTING
150	1907113.44	1286395.20
151	1907077.55	1286330.44
152	1907100.41	1286340.02
153	1907087.55	1286324.45
154	1907147.43	1286308.52
155	1907128.88	1286278.58
156	1907107.26	1286241.54
157	1907278.12	1286173.44
158	1907026.35	1286572.57
159	1906926.62	1286716.89
160	1907086.39	1286596.24
161	1906917.32	1286689.47
162	1907259.06	1286315.25
163	1906800.30	1286870.38
164	1906782.69	1286864.86
165	1907014.69	1286638.63
174	1907427.09	1286411.23
175	1907123.57	1286580.98
176	1906790.34	1286867.26
177	1907026.47	1286665.34
178	1907182.90	1286936.07
179	1907223.37	1286927.04
180	1907291.51	1286955.16
181	1907307.69	1286879.32
182	1907278.73	1286824.78

DEMOLITION LAYOUT POINTS

POINT NO.	NORTHING	EASTING
183	1907282.19	1286758.26
184	1907299.67	1286752.01
185	1907327.22	1286769.72
186	1907356.76	1286812.60
187	1907400.25	1286821.17
188	1907431.28	1286890.36
189	1907417.57	1286993.04
190	1907442.05	1287040.36
191	1907489.68	1287040.67
192	1907202.74	1286328.67
193	1907745.71	1286824.17
196	1907497.88	1287541.26
197	1907490.36	1287543.43
198	1907760.61	1286821.76
199	1907203.82	1286332.95
200	1907936.73	1286993.33
201	1907422.98	1286925.32
202	1907400.89	1286824.22
203	1907398.91	1286846.98
204	1907368.39	1286822.48
205	1907366.02	1286845.30
206	1907144.81	1286488.77
207	1907105.75	1286418.64
208	1907068.15	1286336.17
209	1907057.72	1286318.72

DEMOLITION LAYOUT POINTS

POINT NO.	NORTHING	EASTING
212	1907463.13	1286246.84
213	1907264.71	1286228.97
214	1907677.55	1286443.04
215	1907670.80	1286442.05
216	1907663.95	1286446.58
217	1907662.65	1286453.22
218	1907676.82	1286447.88
219	1907682.02	1286455.70
220	1907681.47	1286460.76
221	1907677.77	1286463.11
222	1907673.19	1286462.21
223	1907667.23	1286453.65
224	1907556.07	1286524.95
225	1907549.40	1286523.79
226	1907542.57	1286528.46
227	1907541.20	1286535.26
228	1907554.79	1286530.17
229	1907559.80	1286543.29
230	1907556.12	1286545.74
231	1907551.52	1286544.84
232	1908033.32	1287219.67

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D6035
SUBMITTED BY: R.TOLIKONDA
FILE NUMBER:
SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

DEMOLITION LAYOUT POINT TABLES

SHEET ID
C-702

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

PROPOSED LAYOUT POINTS

POINT #	NORTHING	EASTING	ELEVATION
100	1907409.20	1286164.61	260.5000
101	1907383.22	1286182.10	260.4750
102	1907397.55	1286229.94	257.3173
103	1907438.23	1286205.95	259.0000
104	1907449.56	1286222.93	258.4194
105	1907418.22	1286303.00	254.4339
106	1907408.51	1286342.98	252.5161
107	1907376.91	1286348.68	252.0023
108	1907411.18	1286299.59	254.6121
109	1907395.27	1286408.22	251.4602
110	1907387.98	1286495.88	250.7352
112	1907370.75	1286487.96	251.2662
113	1907355.96	1286556.11	251.2700
114	1907417.04	1286468.71	251.3323
115	1907373.71	1286559.83	250.8534
116	1907383.49	1286562.01	250.8659
117	1907395.20	1286564.62	250.8839
118	1907404.72	1286567.56	250.7909
119	1907439.64	1286410.89	251.8110
120	1907337.58	1286474.46	251.6000
121	1907330.89	1286478.22	251.6000
122	1907346.90	1286507.04	251.5998
123	1907326.20	1286518.53	251.6000
124	1907330.74	1286526.69	251.5057
125	1907288.05	1286550.37	251.5908
126	1907251.08	1286483.78	250.7693
127	1907284.82	1286465.25	251.6000
128	1907301.19	1286473.13	251.5992
129	1907321.84	1286461.87	251.6000
130	1907325.06	1286467.68	251.6000
131	1907331.76	1286463.98	251.6000
132	1907329.35	1286581.33	250.6728
133	1907337.40	1286582.10	250.6478
134	1907432.96	1286441.10	251.5261
135	1907305.27	1286560.89	251.1389
136	1907423.04	1286440.27	251.4914
137	1907270.73	1286519.19	250.7720
138	1907419.61	1286736.44	249.6458
139	1907241.03	1286399.22	251.3500
140	1907235.56	1286419.63	251.3500
141	1907364.80	1286816.95	243.0165
142	1907363.24	1286818.21	243.0190
143	1907397.57	1286498.68	250.9207
144	1907296.02	1286561.69	251.0687
145	1907328.99	1286377.82	251.5070
146	1907282.61	1286383.82	251.1481
147	1907290.00	1286366.79	251.5070
148	1907488.37	1286834.26	247.8923
149	1907496.27	1286347.66	251.3576
150	1907512.48	1286383.85	250.8646
151	1907530.87	1286390.64	249.7327
152	1907582.69	1286382.72	248.8691
153	1907608.98	1286373.90	246.9876
154	1907628.93	1286364.76	246.0977
155	1907362.20	1286557.45	250.7736
156	1907425.74	1286473.51	251.3374
157	1907640.63	1286386.16	246.0953
158	1907623.53	1286395.66	247.5550
159	1907646.31	1286912.21	244.7491
160	1907171.40	1286516.99	249.8626

PROPOSED LAYOUT POINTS

POINT #	NORTHING	EASTING	ELEVATION
161	1907524.97	1286419.03	250.0225
162	1907491.83	1286425.97	251.2852
163	1907446.54	1286472.65	251.7267
164	1907474.03	1286577.86	249.4487
165	1907474.91	1286583.48	249.3926
166	1907662.76	1286909.04	244.8395
167	1907441.25	1286652.21	249.3322
168	1907406.29	1286689.31	249.9899
169	1907429.16	1286770.78	249.1110
170	1907442.37	1286763.96	243.6100
171	1907435.75	1286752.94	243.7365
172	1907580.78	1286841.48	245.4488
173	1907576.02	1286843.01	245.4011
174	1907655.20	1286844.93	248.0678
175	1907735.77	1286829.99	248.5012
176	1907741.55	1286824.49	248.4205
177	1907888.57	1286869.05	249.0000
178	1907926.23	1286909.71	249.0000
179	1907955.68	1286949.99	248.2119
180	1907964.07	1286968.90	248.8409
181	1907975.10	1286983.00	248.7073
182	1908002.01	1287017.38	248.2319
183	1907994.77	1287022.32	248.3839
184	1907944.37	1286943.18	249.4631
185	1907935.70	1286956.23	249.2379
186	1907927.48	1286961.73	249.2389
187	1907972.76	1287029.16	248.9315
188	1907980.56	1287022.84	249.0000
189	1907879.77	1286887.66	249.2632
190	1907873.35	1286895.40	249.2643
191	1907912.51	1286964.78	248.9700
192	1907861.46	1286904.90	248.9613
193	1907825.10	1286835.92	248.7169
194	1907792.53	1286871.60	248.6491
195	1907742.40	1286865.18	248.4136
196	1907705.25	1286825.44	248.2174
197	1907700.48	1286871.50	248.2104
198	1907601.48	1286859.48	247.8100
199	1907594.83	1286900.10	247.7559
200	1907541.85	1286853.29	247.6381
201	1907522.16	1286894.89	247.6180
202	1907445.14	1286854.69	247.9809
203	1907566.85	1286922.84	244.2957
204	1907369.25	1286791.99	243.7193
205	1907553.61	1286898.39	247.6707
206	1907464.44	1286866.45	247.8723
207	1907774.12	1286861.50	248.6721
208	1907619.25	1286892.38	247.9559
209	1907679.72	1286872.93	248.2204
210	1907940.34	1287002.54	248.8523
211	1907836.36	1286916.60	246.4047
212	1907828.13	1286913.29	246.2802
213	1907912.92	1287000.13	248.0079
214	1907912.46	1286975.63	247.4285
215	1907922.64	1286980.37	248.8551
216	1907389.02	1286793.14	249.0055
217	1907297.77	1286734.46	248.1839
218	1907312.23	1286682.59	249.0590
219	1907331.60	1286680.33	248.9094
220	1907572.17	1286920.99	244.3250

PROPOSED LAYOUT POINTS

POINT #	NORTHING	EASTING	ELEVATION
221	1907248.50	1286631.82	249.1158
222	1907231.14	1286616.63	249.6420
223	1907217.86	1286593.82	250.2084
224	1907242.43	1286579.02	250.3901
225	1907221.30	1286502.92	250.2472
226	1907205.56	1286511.66	250.4100
227	1907228.92	1286496.42	250.0000
228	1907266.40	1286563.68	250.4100
229	1907233.61	1286582.56	250.2423
230	1907257.67	1286568.53	250.2420
231	1907181.04	1286525.15	250.0696
232	1907196.81	1286516.49	250.2472
233	1907118.40	1286412.16	249.2081
234	1907070.13	1286342.94	248.3941
235	1907057.62	1286320.35	248.6268
236	1907067.37	1286266.67	248.3851
237	1907103.62	1286244.03	248.1680
238	1907151.60	1286216.91	248.4383
239	1907193.01	1286193.77	248.9317
240	1907235.22	1286170.41	248.9673
241	1907292.66	1286189.91	249.2846
242	1907328.77	1286249.61	251.0168
243	1907367.29	1286275.42	253.9503
244	1907388.32	1286436.67	251.0643
245	1907450.55	1286456.42	251.0530
246	1907288.11	1286667.30	248.9987
247	1907478.40	1286787.12	244.2255
248	1907234.09	1286717.97	248.9867
249	1907289.05	1286725.80	248.9997
250	1907211.82	1286881.06	244.5027
251	1907272.49	1286641.46	248.9286
252	1907383.81	1286693.77	249.9424
253	1907373.39	1286695.13	249.7818
254	1907411.26	1286781.96	249.0059
255	1907362.07	1286387.57	251.4077
256	1907261.68	1286524.20	251.1441
257	1907296.96	1286553.81	251.3543
258	1907302.80	1286553.05	251.3497
259	1907360.95	1286562.62	250.8548
260	1907167.26	1286705.24	241.0066
261	1907214.98	1286806.85	244.4857
262	1907183.42	1286887.47	241.0055
263	1907044.49	1286657.02	241.0000
264	1907203.07	1286796.20	241.0000
265	1907205.55	1286872.32	241.0011
266	1907084.41	1286634.20	241.0262
267	1907054.51	1286657.19	241.0000
268	1907273.00	1286721.28	249.0000
269	1907984.37	1287063.05	248.1664
270	1908010.52	1287048.00	248.0458
271	1907406.33	1286785.46	248.9098
272	1907383.55	1286394.31	251.5070
273	1907430.06	1286408.07	251.8405
274	1907354.37	1286757.33	248.7657
275	1907327.72	1286742.95	248.6655
276	1907330.83	1286812.61	243.6257
277	1907330.33	1286825.52	243.5944
278	1907443.77	1286509.13	250.6553
279	1907452.31	1286456.34	251.0227
280	1907917.31	1287011.88	248.8023

PROPOSED LAYOUT POINTS

POINT #	NORTHING	EASTING	ELEVATION
281	1907910.76	1287002.43	248.8552
282	1907326.54	1286686.77	247.8790
283	1907448.32	1286786.81	248.2349
284	1907236.49	1286709.44	248.9921
285	1907217.66	1286864.67	244.4857
286	1907489.09	1286300.41	253.1689
287	1907490.26	1286304.60	253.0843
288	1907395.49	1286208.58	258.9225
289	1907396.29	1286212.67	258.6713
290	1907461.66	1286448.35	251.6918
291	1907268.74	1286718.07	249.0000
292	1907264.45	1286736.21	248.9869
293	1907266.99	1286727.32	248.9907
294	1907393.08	1286395.88	251.4954
295	1907384.22	1286388.51	251.5037
296	1907321.57	1286370.47	251.4414
297	1907295.92	1286363.65	251.5070
298	1907285.55	1286381.96	251.3662
299	1907221.92	1286416.01	250.8492
300	1907220.68	1286421.40	250.8555
301	1907042.03	1286646.33	244.4975
302	1907354.45	1286561.17	251.2671
303	1907684.08	1286818.82	246.4042
304	1907671.01	1286820.77	246.3043
305	1907311.19	1286743.78	247.3589
306	1907396.52	1286814.68	248.2822
307	1907097.37	1286624.98	244.4927
308	1907293.92	1286460.02	251.5683
309	1907221.08	1286433.94	250.8618
310	1907275.96	1286377.77	251.0063
311	1907304.33	1286650.98	248.6370
312	1907304.23	1286671.90	249.0000
313	1907279.38	1286740.42	248.9893
314	1907095.51	1286636.37	241.0000
315	1907078.24	1286625.57	244.4975
316	1907375.80	1286803.13	243.8736
317	1907044.13	1286663.26	241.0000
318	1907179.15	1286886.55	241.0175
319	1907207.29	1286867.66	241.0000
320	1907211.39	1286787.66	244.4835
321	1907204.37	1286804.64	241.0000
322	1907191.67	1286725.15	244.5006
323	1907093.86	1286385.72	249.1810
324	1907175.89	1286699.06	244.5022
325	1907181.00	1286726.56	241.0000
326	1907051.92	1286652.77	241.0000
327	1907034.25	1286667.32	244.5042
328	1907170.28	1286892.16	244.5015
329	1907185.72	1286897.89	244.5008
330	1907273.78	1286524.36	251.5489
331	1907379.37	1286408.80	251.4763
332	1907382.98	1286414.64	251.3591
333	1907375.15	1286439.39	251.3495
334	1907365.08	1286457.54	251.3500
335	1907916.84	1286996.86	247.9445
336	1907169.43	1286504.21	249.7002
337	1907914.35	1286993.22	247.5000
338	1907905.76	1287017.15	249.0000
339	1907910.19	1286996.03	247.5000
340	1907902.07	1287011.83	249.0000

PROPOSED LAYOUT POINTS

POINT #	NORTHING	EASTING	ELEVATION
341	1907911.51	1287013.16	250.9445
342	1907907.52	1287007.41	249.0000
343	1907173.03	1286798.17	241.0000
344	1907204.20	1286801.44	241.0000
345	1907203.93	1286799.46	241.0155
346	1907318.60	1286578.46	250.9419
347	1907174.02	1286796.28	241.0000
348	1907177.63	1286719.30	241.0000
349	1907178.63	1286721.07	241.0000
350	1907128.92	1286746.92	241.0000
351	1907130.33	1286748.46	241.0000
352	1907049.58	1286660.07	241.0000
353	1907047.82	1286661.10	241.0000
354	1907179.31	1286722.56	241.0082
355	1907176.87	1286717.86	241.0158
356	1907179.89	1286716.83	242.0522
357	1907181.89	1286720.58	242.0584
358	1907207.52	1286796.46	242.3938
359	1907208.25	1286803.73	242.2932
360	1907472.36	1286453.86	246.7835
361	1907475.30	1286456.57	246.7831
362	1907475.80	1286536.65	245.3598
363	1907470.34	1286535.22	245.3946
364	1907496.41	1286598.37	244.8893
365	1907492.12	1286597.12	244.8849
366	1907434.66	1286684.82	244.0490
367	1907431.26	1286682.99	244.0454
368	1907442.25	1286732.88	243.6379
369	1907438.54	1286734.37	243.6379
370	1907400.10	1286542.66	250.9252
371	1907399.01	1286547.54	250.9696
372	1907401.94	1286548.19	250.9837
373	1907396.83	1286557.30	250.9264
374	1907395.75	1286562.18	250.8981
375	1907378.67	1286537.89	250.7426
376	1907377.51	1286542.75	250.8842
377	1907375.33	1286552.50	250.8749
378	1907374.26	1286557.40	250.8543
379	1907378.28	1286553.17	250.8843
380	1907380.45	1286543.41	250.8954
381	1907367.62	1286502.02	251.2704
382	1907366.31	1286506.85	251.2733
383	1907287.22	1286559.96	250.9400
384	1907284.30	1286554.72	251.3362
385	1907279.93	1286557.14	251.2035
386	1907282.84	1286562.38	250.9363
387	1907347.57	1286466.63	251.5080
388	1907359.78	1286499.89	251.3498
389	1907360.44	1286505.26	251.3508
390	1907328.63	1286522.91	251.6000
391	1907349.00	1286461.66	251.4280
392	1907220.24	1286558.76	249.9298
393	1907222.62	1286563.15	249.9100
394	1907227.63	1286571.81	250.2472
395	1907230.05	1286576.19	250.2120
396	1907229.69	1286570.67	250.4100
397	1907224.85	1286561.92	250.4100
398	1907320.43	1286450.01	251.3397
399	1907323.43	1286579.75	250.9419
400	1907330.68	1286576.51	250.9928

PROPOSED LAYOUT POINTS

POINT #	NORTHING	EASTING	ELEVATION
401	1907324.72	1286574.91	250.9400
402	1907331.74	1286548.75	251.2540
403	1907326.38	1286549.41	251.2539
404	1907319.89	1286573.62	250.9400
405	1907324.56	1286535.83	251.5498
406	1907320.19	1286538.25	251.5494
407	1907323.02	1286532.01	250.7700
408	1907331.17	1286527.48	250.7700
409	1907332.76	1286530.35	250.7700
410	1907325.59	1286537.92	251.5025
411	1907297.31	1286558.62	251.2065
412	1907303.29	1286558.04	251.2033
413	1907352.70	1286459.62	251.3508
414	1907368.86	1286464.34	251.3500
415	1907277.71	1286437.67	251.3504
416	1907266.79	1286434.48	251.3489
417	1907288.66	1286457.40	251.5501
418	1907281.66	1286461.28	251.5449
419	1907337.98	1286455.31	251.3511
420	1907339.87	1286458.58	251.4292
421	1907338.87	1286462.31	251.5092
422	1907337.10	1286463.29	251.5505
423	1907340.98	1286470.29	251.5505
424	1907310.45	1286668.40	248.9503
425	1907284.77	1286661.16	248.9500
426	1907292.10	1286733.55	248.9384
427	1907299.65	1286649.31	248.6371
428	1907295.48	1286664.11	248.9503
429	1907300.41	1286665.49	248.9503
430	1907297.57	1286696.24	248.9984
431	1907300.25	1286686.67	248.9986
432	1907303.56	1286687.59	248.9645
433	1907300.87	1286697.17	248.9644
434	1907316.06	1286443.68	251.3500
435	1907332.48	1286452.85	251.3390
436	1907327.10	1286452.13	251.3510
437	1907314.65	1286448.48	251.3494
438	1907334.24	1286449.01	251.3486
439	1907328.57	1286446.80	250.8554
440	1907321.94	1286444.88	250.8526

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D6035
SUBMITTED BY: R.TOLIKONDA
FILE NUMBER:
SCALE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

PROPOSED LAYOUT POINT TABLES

SHEET ID
C-703

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

CURVE TABLE

CURVE #	RADIUS	START NORTHING	START EASTING	END NORTHING	END EASTING
C1	28.96'	1907390.647	1286261.290	1907378.047	1286273.131
C2	145.66'	1907377.884	1286342.054	1907411.744	1286299.291
C3	269.26'	1907472.841	1286260.388	1907462.483	1286243.058
C4	58.86'	1907506.402	1286378.697	1907500.911	1286368.481
C5	34.24'	1907530.516	1286391.150	1907512.290	1286384.347
C6	251.27'	1907578.959	1286410.307	1907598.864	1286404.626
C7	63.24'	1907470.991	1286435.635	1907477.852	1286431.401
C8	54.68'	1907448.553	1286464.930	1907456.018	1286450.589
C9	101.15'	1907452.610	1286533.848	1907444.133	1286486.669
C10	64.10'	1907467.580	1286624.389	1907472.837	1286609.115
C11	44.82'	1907406.338	1286688.809	1907432.885	1286655.663
C12	44.82'	1907406.338	1286688.809	1907432.885	1286655.663
C13	344.17'	1907450.909	1286801.200	1907429.092	1286770.712
C14	172.85'	1907516.016	1286849.226	1907450.909	1286801.200
C15	171.61'	1907659.317	1286848.867	1907516.016	1286849.226
C16	224.62'	1907798.702	1286834.563	1907659.317	1286848.867
C17	198.68'	1907881.081	1286869.770	1907798.702	1286834.563
C18	5.04'	1907873.347	1286895.405	1907879.767	1286887.663
C19	184.62'	1907668.875	1286877.663	1907726.202	1286860.904
C20	345.21'	1907390.345	1286794.504	1907423.176	1286831.125
C21	215.25'	1907505.159	1286880.714	1907668.875	1286877.663
C22	76.45'	1907361.270	1286762.686	1907363.682	1286765.154
C23	57.94'	1907341.019	1286747.331	1907350.855	1286753.688
C24	102.16'	1907312.432	1286656.074	1907331.421	1286680.306
C25	99.20'	1907253.446	1286634.144	1907258.460	1286636.314

CURVE TABLE

CURVE #	RADIUS	START NORTHING	START EASTING	END NORTHING	END EASTING
C26	4.75'	1907266.402	1286563.683	1907264.048	1286570.498
C27	20.85'	1907286.275	1286566.956	1907282.563	1286561.900
C28	25.62'	1907349.642	1286577.875	1907341.745	1286581.400
C30	5.25'	1907373.352	1286694.591	1907383.807	1286693.896
C32	5.05'	1907405.022	1286566.758	1907395.203	1286564.621
C33	5.05'	1907387.985	1286495.882	1907397.562	1286498.699
C34	17.41'	1907386.414	1286389.449	1907395.542	1286404.745
C35	19.21'	1907409.667	1286340.337	1907385.505	1286351.740
C36	5.67'	1907278.063	1286382.012	1907276.202	1286377.725
C37	15.85'	1907277.577	1286372.484	1907284.251	1286364.833
C38	25.63'	1907221.999	1286416.183	1907229.649	1286402.106
C39	4.98'	1907221.271	1286502.837	1907229.987	1286498.006
C40	4.99'	1907196.762	1286516.413	1907205.494	1286511.582
C41	53.86'	1907060.445	1286278.528	1907055.396	1286308.705
C42	43.32'	1907289.403	1286184.530	1907272.676	1286170.335
C43	90.44'	1907331.898	1286254.417	1907324.627	1286244.366
C45	3.00'	1907179.154	1286886.546	1907183.422	1286887.470
C46	20.45'	1907204.366	1286804.636	1907203.325	1286797.009
C47	61.64'	1907181.002	1286726.560	1907167.263	1286705.241
C48	5.01'	1907981.057	1287023.571	1907972.758	1287029.164
C49	5.04'	1907382.817	1286414.800	1907379.431	1286408.565
C50	5.00'	1907926.675	1286985.303	1907925.416	1286992.261
C51	9.13'	1907931.410	1287002.105	1907940.139	1287002.396
C52	4.43'	1907205.554	1286872.318	1907207.292	1286867.664
C53	4.52'	1907411.554	1286299.429	1907418.212	1286303.797

CURVE TABLE

CURVE #	RADIUS	START NORTHING	START EASTING	END NORTHING	END EASTING
C55	5.47'	1907372.344	1286439.828	1907375.530	1286439.703
C56	20.01'	1907323.935	1286371.949	1907326.905	1286374.825
C58	5.03'	1907383.480	1286562.011	1907373.709	1286559.835
C59	3.00'	1907285.546	1286381.962	1907282.772	1286383.821
C60	5.08'	1907242.439	1286578.049	1907233.484	1286582.511
C61	4.70'	1907331.421	1286680.306	1907326.570	1286686.627
C62	9.89'	1907094.059	1286635.194	1907084.412	1286634.199
C63	3.84'	1907044.487	1286657.020	1907044.153	1286663.246
C64	5.07'	1907430.055	1286408.068	1907439.679	1286409.549
C65	5.07'	1907432.884	1286441.354	1907423.012	1286439.720
C66	5.06'	1907416.322	1286469.851	1907425.904	1286472.822
C67	32.44'	1907221.010	1286433.712	1907221.999	1286416.183
C69	3.00'	1907237.406	1286397.186	1907241.102	1286400.629
C71	16.80'	1907307.608	1286561.016	1907319.894	1286573.618
C73	2.41'	1907293.650	1286562.137	1907289.480	1286563.064

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D6035
SUBMITTED BY: R.TOLIKONDA
FILE NUMBER:
SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

CURVE TABLES

SHEET ID
C-704

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

STORM SEWER PIPE SCHEDULE

PIPE ID	US STR	DS STR	PIPE SIZE (INCH)	LENGTH (LF)	SLOPE	INV UP	INV DN	MATERIAL
D1	SD CO01	SD CO02	6"	51.43'	0.53%	245.55	245.28	HDPE PIPE
D2	SD CO02	TEE	6"	29.92'	0.57%	245.28	245.11	HDPE PIPE
D3	ROOF DRAIN	TEE-1	6"	19.37'	0.72%	245.15	245.01	HDPE PIPE
D4	ROOF DRAIN	TEE-2	6"	14.68'	1.02%	245.00	244.85	HDPE PIPE
D5	SD CO03	SD CO04	6"	37.18'	0.54%	244.60	244.40	HDPE PIPE
D7	BEND	JUNCTION BOX-3	6"	34.40'	0.44%	244.35	244.20	HDPE PIPE
D8	ROOF DRAIN	JUNCTION BOX-3	6"	10.88'	0.55%	244.25	244.19	HDPE PIPE
D10	RD	TEE-3	6"	17.37'	0.58%	246.20	246.10	HDPE PIPE
D12	SD CO05	TEE-4	6"	49.83'	0.50%	245.24	244.99	HDPE PIPE
DS-1.1	ROOF DRAIN	SD CO01	6"	5.04'	0.99%	245.60	245.55	HDPE PIPE
DS-2.1	ROOF DRAIN	SD CO02	6"	4.97'	0.81%	245.32	245.28	HDPE PIPE
P1	COMBINATION INLET - 1	COMBINATION INLET - 2	12"	140.10'	0.50%	246.15	245.45	HDPE PIPE
P2	COMBINATION INLET - 2	GRATE INLET - 3	12"	96.79'	0.50%	245.45	244.97	HDPE PIPE
P3	GRATE INLET - 1	GRATE INLET - 2	6"	39.29'	5.47%	247.59	245.44	HDPE PIPE
P4	GRATE INLET - 2	TEE	12"	21.15'	0.61%	245.24	245.11	HDPE PIPE
P5	TEE	TEE-1	12"	19.25'	0.51%	245.11	245.01	HDPE PIPE
P6	TEE-1	TEE-2	12"	31.10'	0.51%	245.01	244.85	HDPE PIPE
P7	TEE-2	GRATE INLET - 3	12"	27.61'	0.51%	244.85	244.71	HDPE PIPE
P8	GRATE INLET - 3	JUNCTION BOX-1	24"	42.54'	0.52%	244.52	244.30	HDPE PIPE
P9	JUNCTION BOX-1	JUNCTION BOX-2	24"	189.60'	0.64%	244.10	242.88	HDPE PIPE
P10	JUNCTION BOX-3	COMBINATION INLET - 3	6"	46.32'	0.66%	244.20	243.89	HDPE PIPE
P11	COMBINATION INLET - 3	JUNCTION BOX-2	12"	83.53'	0.59%	243.69	243.20	HDPE PIPE
P12	JUNCTION BOX-2	HEADWALL	24"	34.39'	1.69%	242.08	241.50	HDPE PIPE
P13	GRATE INLET - 5	GRATE INLET - 6	18"	69.94'	0.51%	246.70	246.35	HDPE PIPE
P14	GRATE INLET - 6	TEE-3	24"	32.09'	0.50%	246.26	246.10	HDPE PIPE
P15	TEE-3	TEE-4	24"	29.53'	0.50%	246.10	245.95	HDPE PIPE
P16	TEE-4	MITERED DRAIN OUTLET	24"	35.70'	0.50%	245.95	245.77	HDPE PIPE
P17	GRATE INLET - 7	GRATE INLET - 6	6"	34.25'	2.19%	247.73	246.98	HDPE PIPE
P18	SD CO06	GRATE INLET - 8	6"	33.53'	0.55%	247.22	247.03	HDPE PIPE
P19	GRATE INLET - 8	GRATE INLET - 6	6"	86.64'	0.54%	247.07	246.60	HDPE PIPE

STORM DRAINAGE PIPE TABLE-GATE HOUSE

NAME	FROM	TO	DIA.	LENGTH	SLOPE	INV UP	INV DN	NOTES
D14	SD CO10	SD CO11	6"	55.62'	0.58%	246.46	246.14	6 " HDPE PIPE
D15	SD CO11	90 DEG BEND	6"	20.33'	0.50%	246.11	246.01	6 " HDPE PIPE
D16	90 DEG BEND	SD CO12	6"	16.03'	0.50%	246.01	245.93	6 " HDPE PIPE
D17	DOWNSPOUT	SD CO12	6"	5.09'	0.59%	245.95	245.92	6 " HDPE PIPE
D18	SD CO12	INLET - 7	6"	45.60'	0.66%	245.80	245.50	6 " HDPE PIPE
P20	INLET - 7	SWALE	12"	86.61'	0.60%	243.42	242.90	12" HDPE PIPE

DRAINAGE PIPE TABLE: NETWORK - CULVERT PIPES

PIPE TYPE AND NO.	BEGIN STRUCTURE	END STRUCTURE	LENGTH (FT.)	START INV EL.	END INV EL.	SLOPE (FT/FT)	DESCRIPTION
C1	HEADWALL 1	HEADWALL 2	66.90'	243.61	243.20	0.61%	24 INCH CONCRETE PIPE
C2	HEADWALL 1	HEADWALL 1	66.89'	242.61	242.20	0.61%	24 INCH CONCRETE PIPE
C3	HEADWALL 3	HEADWALL 4	120.33'	242.82	241.50	1.10%	24 INCH HDPE PIPE
C4	HEADWALL 3	HEADWALL 3	120.87'	242.82	241.50	1.09%	24 INCH HDPE PIPE

DRAINAGE PIPE TABLE: NETWORK - POND

PIPE TYPE AND NO.	BEGIN STRUCTURE	END STRUCTURE	LENGTH (FT.)	START INV EL.	END INV EL.	SLOPE (FT/FT)	DESCRIPTION
P21	RISER INLET	JUNCTION BOX-4	40.56'	241.00	240.80	0.49%	18 INCH HDPE PIPE
P22	JUNCTION BOX-4	SWALE	139.56'	240.80	240.00	0.57%	18 INCH HDPE PIPE

DRAINAGE PIPE TABLE: VCC BUILDING and PARKING LOT

PIPE TYPE AND NO.	BEGIN STRUCTURE	END STRUCTURE	LENGTH (FT.)	START INV EL.	END INV EL.	SLOPE (FT/FT)	DESCRIPTION
D9	DOWNSPOUT	SD CO08	7.79'	247.24	247.22	0.23%	6 INCH HDPE PIPE
D10	DOWNSPOUT	TEE	17.37'	246.20	246.10	0.58%	6 INCH HDPE PIPE
D11	DOWNSPOUT	SD CO07	4.44'	245.27	245.24	0.68%	6 INCH HDPE PIPE
D12	SD CO07	TEE	49.83'	245.24	244.99	0.50%	6 INCH HDPE PIPE
P13	INLET - 8	INLET - 9	69.94'	246.70	246.35	0.51%	18 INCH HDPE PIPE
P14	INLET - 9	TEE	32.09'	246.26	246.10	0.50%	24 INCH HDPE PIPE
P15	TEE	TEE	29.53'	246.10	245.95	0.50%	24 INCH HDPE PIPE
P16	TEE	MITERED DRAIN OUTLET	35.70'	245.95	245.77	0.50%	24 INCH HDPE PIPE
P17	INLET - 10	INLET - 9	34.25'	247.73	246.98	2.19%	6 INCH HDPE PIPE
P18	SD CO08	INLET- 7	33.53'	247.22	247.03	0.55%	6 INCH HDPE PIPE
P19	INLET- 7	INLET - 9	86.64'	247.07	246.60	0.54%	6 INCH HDPE PIPE

GENERAL NOTES

1. REFER TO SHEETS CU101, CU102 AND CU103 FOR UTILITIES PLAN LAYOUT.
2. REFER TO SHEET CU107 FOR DRAINAGE PIPES NETWORK.
3. REFER TO SHEETS CU108 THRU CU113 FOR DRAINAGE PROFILES.
4. REFER TO SHEET C-705 FOR STORM PIPES TABLE
5. REFER TO SHEET C-706 FOR STORM STRUCTURES TABLE

SHEET KEYNOTES

SHEET LEGEND

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
SUBMITTED BY: R.TOLIKONDA
SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)

ISSUE DATE: 04/17/2026
SOLICITATION NO.: W912725Z4F6002
CONTRACT NO.: W912725D0035
FILE NUMBER:

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 700
HOUSTON, TX 77042

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

DRAINAGE PIPES TABLES

SHEET ID
C-705

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

STORM DRAINAGE STRUCTURE TABLE

NAME	NORTHING	EASTING	RIM	INVERT	CONNECTED PIPES	NOTES
COMBINATION INLET - 1	1907056.85	1286301.99	247.76	246.00	12" HDPE INV OUT = 246.15 NE	120 IN X 60 IN INLET
COMBINATION INLET - 2	1907123.23	1286425.37	249.41	245.45	12" HDPE INV IN = 245.45 SW 12" HDPE INV OUT = 245.45 NE	RECTANGULAR JUNCTION STRUCTURE NF
COMBINATION INLET - 3	1907258.83	1286635.24	248.35	243.52	6" HDPE INV IN = 243.89 W 12" HDPE INV OUT = 243.69 SE	RECTANGULAR JUNCTION STRUCTURE NF
GRATE INLET - 1	1907295.14	1286449.64	250.00	247.59	6" HDPE INV OUT = 247.59 S	RECTANGULAR JUNCTION STRUCTURE NF
GRATE INLET - 2	1907257.92	1286462.21	250.17	245.24	6" HDPE INV IN = 245.44 N 12" HDPE INV OUT = 245.24 SE	RECTANGULAR JUNCTION STRUCTURE NF
GRATE INLET - 3	1907170.90	1286509.61	249.70	244.52	12" HDPE INV IN = 244.97 SW 12" HDPE INV IN = 244.71 NW 24" HDPE INV OUT = 244.52 SE	RECTANGULAR JUNCTION STRUCTURE NF
GRATE INLET - 5	1907336.01	1286411.49	249.24	246.70	18" HDPE INV OUT = 246.70 NE	RECTANGULAR JUNCTION STRUCTURE NF
GRATE INLET - 6	1907364.94	1286475.16	250.31	246.26	6" HDPE INV IN = 246.60 E 18" HDPE INV IN = 246.35 SW 6" HDPE INV IN = 246.98 NW 24" HDPE INV OUT = 246.26 N	RECTANGULAR JUNCTION STRUCTURE NF
GRATE INLET - 7	1907382.11	1286445.52	250.31	247.73	6" HDPE INV OUT = 247.73 SE	RECTANGULAR JUNCTION STRUCTURE NF
GRATE INLET - 8	1907344.30	1286559.31	250.42	246.77	6" HDPE INV IN = 247.03 N 6" HDPE INV OUT = 247.07 W	RECTANGULAR JUNCTION STRUCTURE NF
JUNCTION BOX-1	1907133.59	1286530.04	246.88	244.02	24" HDPE INV IN = 244.30 NW 24" HDPE INV OUT = 244.10 NE	RECTANGULAR JUNCTION STRUCTURE NF
JUNCTION BOX-2	1907210.47	1286703.35	245.46	241.80	12" HDPE INV IN = 243.20 NW 24" HDPE INV IN = 242.88 SW 24" HDPE INV OUT = 242.08 SE	48 IN X 48 IN INLET
JUNCTION BOX-3	1907244.24	1286591.28	249.67	244.19	6" HDPE INV IN = 244.19 SW 6" HDPE INV IN = 244.20 NW 6" HDPE INV OUT = 244.20 E	RECTANGULAR JUNCTION STRUCTURE NF
SD CO01	1907278.80	1286543.85	251.36	245.55	6" HDPE INV IN = 245.55 NW 6" HDPE INV OUT = 245.55 SW	48 IN MH
SD CO02	1907253.90	1286498.85	250.73	245.28	6" HDPE INV IN = 245.28 NW 6" HDPE INV IN = 245.28 NE 6" HDPE INV OUT = 245.28 SW	48 IN MH
SD CO03	1907249.70	1286530.07	248.07	244.60	6" HDPE INV IN = 244.70 SE 6" HDPE INV OUT = 244.60 NE	48 IN MH
SD CO04	1907267.82	1286562.54	247.77	244.40	6" HDPE INV IN = 244.40 SW 6" HDPE INV IN = 244.40 SE 6" HDPE INV OUT = 244.40 NE	48 IN MH
SD CO05	1907416.26	1286536.47	250.89	245.24	6" HDPE INV IN = 245.24 S 6" HDPE INV OUT = 245.24 W	48 IN MH
SD CO06	1907376.56	1286568.46	250.40	247.07	6" HDPE INV IN = 247.22 W 6" HDPE INV OUT = 247.22 S	CLEANOUT

DRAINAGE STRUCTURE TABLE: NETWORK - CULVERT PIPES

STR. TYPE AND NO.	STRUCTURE DESCRIPTIONS	INV IN	INV OUT	NORTHING	EASTING
HEADWALL	38 x 6 x 37 inch Concrete Rectangular Headwall	244.07		1907179.94	1286719.17
HEADWALL 1	51 x 6 x 37 inch Concrete Rectangular Headwall	246.36	243.61	1907435.95	1286762.59
HEADWALL 2	51 x 6 x 37 inch Concrete Rectangular Headwall	245.95		1907378.28	1286796.50
HEADWALL 3	51 x 6 x 37 inch Concrete Rectangular Headwall	245.40	242.82	1907325.81	1286820.82
HEADWALL 4	51 x 6 x 37 inch Concrete Rectangular Headwall	244.08		1907207.13	1286800.92
MITERED DRAIN OUTLET	38 x 6 x 37 inch Concrete Rectangular Headwall	248.35		1907460.32	1286494.48

STORM DRAINAGE STRUCTURE TABLE

NAME	NORTHING	EASTING	RIM	INVERT	CONNECTED PIPES	NOTES
JUNCTION BOX-4	1907019.87	1286628.06	245.30	240.74	18" HDPE INV IN = 240.80 NE 18" HDPE INV OUT = 240.80 SE	24 IN X 24 IN INLET

STORM DRAINAGE STRUCTURE TABLE

NAME	NORTHING	EASTING	RIM	INVERT	CONNECTED PIPES	NOTES
GRATE INLET - 4	1907301.03	1286732.48	248.13	243.91	6" HDPE INV IN = 245.60 W 12" HDPE INV OUT = 243.96 NE	RECTANGULAR JUNCTION STRUCTURE NF
SD CO7	1907272.20	1286719.17	249.01	246.45	6" HDPE INV OUT = 246.45 W	CLEANOUT
SD CO8	1907287.71	1286665.76	248.99	246.11	6" HDPE INV IN = 246.14 E 6" HDPE INV OUT = 246.11 N	CLEANOUT
SD CO9	1907305.68	1286687.12	249.30	245.90	6" HDPE INV IN = 245.93 W 4" HDPE INV IN = 245.90 S 6" HDPE INV OUT = 245.90 E	CLEANOUT

GENERAL NOTES

1. REFER TO SHEETS CU101, CU102 AND CU103 FOR UTILITIES PLAN LAYOUT.
2. REFER TO SHEET CU107 FOR DRAINAGE PIPES NETWORK.
3. REFER TO SHEETS CU108 THRU CU113 FOR DRAINAGE PROFILES.
4. REFER TO SHEET C-705 FOR STORM PIPES TABLE
5. REFER TO SHEET C-706 FOR STORM STRUCTURES TABLE

SHEET KEYNOTES

SHEET LEGEND

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: B.BANDA
DRAWN BY: R.ISLAM
CHECKED BY: R.TOLIKONDA
SUBMITTED BY: R.TOLIKONDA
SIZE: ANSI FULL BLEED D (22.00 X 34.00 INCHES)

ISSUE DATE: 04/17/2026
SOLICITATION NO.: W9127524F6002
CONTRACT NO.: W9127523D0035
FILE NUMBER:

U.S. ARMY CORPS OF ENGINEERS
PINE BLUFF ARSENAL PLAINVIEW GATE

HANA-KENALL 8A JV
2500 CITYWEST BLVD, STE 2700
HOUSTON, TX 77042

HANA+Kenall ENGINEERS & CONSULTANTS, LLC

PINE BLUFF ARSENAL PLAINVIEW GATE
HOADLEY ROAD, WHITE HALL, AR 71602

DRAINAGE STRUCTURES TABLES

SHEET ID
C-706

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

SEEDING AND SODDING NOTE:

ALL DISTURBED AREAS UNDER A 15% SLOPE SHALL BE TOPSOILED TO A MINIMUM DEPTH OF 4" FERTILIZED AT A RATE OF 250 POUNDS PER ACRE AND SEEDED WITH ANNUAL RYE GRASS AT A RATE OF 3-4 POUNDS PER 1000 SQUARE FEET AND TURF-TYPE BERMUDA AT A RATE OF 8 POUNDS PER 1000 SQUARE FEET, OR SODDED WITH BERMUDA GRASS IF THE AREA IS DESIGNATED FOR SOD. THE AREA MUST ALSO BE MULCHED. THE CONTRACTOR SHALL WATER AND MAINTAIN THE GRASS UNTIL A HEALTHY PERMANENT STAND IS ESTABLISHED.

ALL AREAS OVER 15% SHALL BE PLANTED AS ABOVE, BUT SHALL BE COVERED WITH EROSION CONTROL FABRIC EDGES.

Fence
Note Refer to Civil Plans
for exact locations.

Limit of Seed
(typ.)

(5) Loblolly Pine

(1) Shumard Oak

(1,844 sf) Sod

(39) Mexican Feather Grass

(1,813 sf) Sod

(914 sf) Sod

(3) Oklahoma Redbud

(316 sf) Sod

(492 sf) Sod

(11) Inkberry Holly

(6) Mexican Feather Grass

(38) Mexican Feather Grass

Steel Edging
(Typ.)

20 PARKING STALLS

6 PARKING STALLS

RESERVED

GATE HOUSE

VISITOR CONTROL CENTER

3 OUTBOUND LANES

5 INBOUND LANES

ENTRY LANE

EXIT LANE

(229 sf) Sod

(2,791 sf) Sod

(12) Loblolly Pine

RISER INLET
INV. 341.0

0+00
1+00
3+00
4+00
5+00
7+00

PLAN NORTH

0 15' 30' 60'

GENERAL NOTES

LANDSCAPE NOTES:

1. THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, TOOLS, EQUIPMENT, AND RELATED ITEMS REQUIRED FOR THE COMPLETE INSTALLATION OF LANDSCAPE.
2. ALL PLANT MATERIAL SHALL BE NURSERY GROWN. PLANT MATERIAL SIZES AND GRADING SHALL COMPLY WITH THE LATEST EDITION OF AMERICAN STANDARDS FOR NURSERY STOCK, PUBLISHED BY THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION.
3. ALL PLANT MATERIAL SHALL BE HEALTHY AND FREE FROM ALL VISIBLE SIGNS OF DISEASE OR PEST INFESTATION.
4. CONTRACTOR SHALL ASCERTAIN LOCATION OF ALL UTILITIES PRIOR TO EXCAVATION. PRIOR TO COMMENCING ANY WORK, CONTACT 1-800-482-8998, OR BY DIALING 811.
5. NO CHANGES TO APPROVED PLANT SCHEDULE WILL BE ALLOWED WITHOUT THE APPROVAL OF THE OWNER.
6. ALL TREES SHALL BE INSTALLED, MULCHED, GUYED AND STAKED PER THE DETAILS. ALL SHRUBS SHALL BE INSTALLED AND MULCHED PER THE DETAILS.
7. 2-INCH BROWN RIVER ROCK MULCH, A MINIMUM OF 2" DEEP INSTALLED OVER LANDSCAPE WEED BARRIER FABRIC, SHALL BE APPLIED TO ALL PLANTING BEDS SHOWN ON THIS PLAN.
8. PROVIDE A MULCH RING WITH A 4" SHREDDED HARDWOOD MULCH SAUCER AROUND TREES FOR ALL TREES LOCATED IN TURF AND MASS PLANTING AREAS. REVIEW SUBSURFACE DRAINAGE CONDITIONS. INSTALL TREES "HIGH" IF NECESSARY DUE TO SUBSURFACE CONDITIONS.
9. THE CONTRACTOR SHALL PROVIDE A ONE YEAR MINIMUM WARRANTY FOR ALL PLANT MATERIALS AND INSTALLATION FROM THE DATE OF ACCEPTANCE.
10. THE CONTRACTOR SHALL SPOIL AND EXCESS TOPSOIL LOCATED ON THE SITE THAT IS NOT REQUIRED TO PERFORM LANDSCAPE OPERATIONS. IF SUFFICIENT TOPSOIL IS NOT PRESENT ON SITE, THE CONTRACTOR SHALL IMPORT TO THE SITE IN ORDER TO COMPLETE THE LANDSCAPE OPERATIONS. THE CONTRACTOR SHALL PERFORM A SOIL TEST ON THE EXISTING AND IMPORTED TOPSOIL AND APPLY LIME AND FERTILIZER AS RECOMMENDED BY THE TESTING AGENCY.
11. IN ALL PLANTING BEDS, SOD SHALL BE REMOVED ENTIRELY AND SOIL SHALL BE AMENDED WITH TWELVE INCHES OF TOPSOIL AND A MINIMUM OF 6 INCHES OF COMPOST TILLED INTO THE BEDS.
12. IRRIGATION TO BE DESIGNED AND INSTALLED ON SITE WITH HUNTER PGP ROTARY HEADS, HUNTER "8" TYPE SPRAY HEADS, HUNTER ICC 40 STATION CONTROLLER, RAIN AND FREEZE SENSORS, RAINBIRD PROFESSIONAL SERIES VALVES. ALL PROPOSED SOD AND BED AREAS SHALL BE IRRIGATED.
13. ALL LAWN AREAS ARE TO BE IRRIGATED ON SEPARATE STATIONS AS LANDSCAPE BEDS.
14. CONTRACTOR SHALL PROVIDE A THREE YEAR WARRANTY ON THE IRRIGATION SYSTEMS PARTS AND LABOR.
15. LOWEST LIMB HEIGHT OF TREES SHOULD BE 48" OFF GROUND.

SHEET KEYNOTES

SHEET LEGEND

PLANT SCHEDULE

SYMBOL	QTY	BOTANICAL / COMMON NAME	CONT	CAL	HT
TREES					
	3	Cercis canadensis 'Oklahoma' / Oklahoma Redbud	Container Grown	2" Cal	8'-9' Ht
	17	Pinus taeda / Loblolly Pine	Container Grown	2" Cal min.	12'-14' Ht
	6	Quercus shumardii / Shumard Oak	Container Grown	2" Cal min.	12'-14' Ht

SYMBOL	QTY	BOTANICAL / COMMON NAME	CONT	___	HT
SHRUBS					
	11	Ilex glabra / Inkberry Holly	5 gal.		
	83	Nassella tenuissima / Mexican Feather Grass	1 gal.		

SYMBOL	QTY	BOTANICAL / COMMON NAME	CONT
TURF			
	113,062 sf	Cynodon dactylon / U-3 Bermuda & Rye Seed	Seed
	8,399 sf	Cynodon dactylon / U-3 Bermuda Sod	Solid Sod

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY:	RJC
DRAWN BY:	RJC
CHECKED BY:	MDT
SUBMITTED BY:	
SIZE:	ANSI D
ISSUE DATE:	16 DEC 2025
SOLICITATION NO.:	W9127S24F6002
CONTRACT NO.:	W9127S25D0035

File Path:

Plot Date: 9/18/2024 4:29:42 PM

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HANA-KENALL 8A JV
2500 CITYWEST BLVD
SUITE 700
HOUSTON, TX 77042

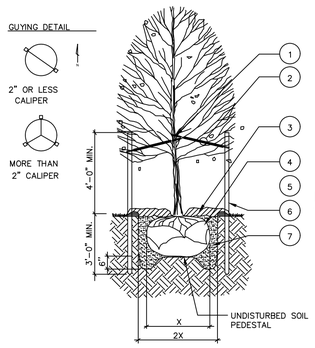
ACCESS CONTROL POINT, PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

LANDSCAPE PLAN

SHEET ID

L-101

CONCEPT DESIGN-NOT FOR CONSTRUCTION



DECIDUOUS TREE PLANTING LEGEND

SYMBOL	DESCRIPTION
1	TREE STRAP LOOP AT FIRST BRANCH. USE RUBBER HOSE OR APPROVED EQUAL TO PREVENT DAMAGE TO TREE
2	12 GAUGE GALVANIZED WIRE & 1-1/2 PVC PIPE AND SURVEYOR'S TAPE. REF. SPECS.
3	4" ORGANIC MULCH PER SPECIFICATIONS. DO NOT PLACE MULCH AGAINST TREE TRUNK
4	REMOVE WIRE BASKET AND REMOVE BURLAP & ROPE FROM TOP 1/3 OF ROOT BALL
5	TREE SAUCER (FORMED BY MIN. 4" THICK MULCH)
6	8' TREE SUPPORT STAKE. KEEP STAKE PLUMB AND SECURED OUTSIDE OF TREE PIT. REF. SPECS FOR SIZE AND MATERIAL.
7	PREPARED BACKFILL--TAMP TO PREVENT SETTLEMENT. SOAK BACKFILL AFTER PLANTING.

PLANTING NOTES

A. RETAIN NATURAL SHAPE. DO NOT SHEAR OR CUT CENTRAL LEADER. TREES WITH CENTRAL LEADERS ARE NOT ACCEPTED IF LEADER IS DAMAGED OR REMOVED.

B. PRUNE ALL DAMAGED TWIGS AFTER PLANTING

C. WRAP TREES TO FIRST BRANCH IF PLANTED IN FALL. DO NOT WRAP IF PLANTED IN SPRING.

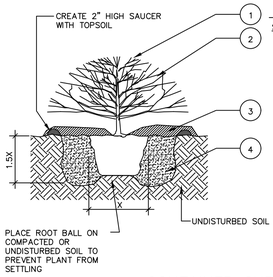
D. TREES TO BE INSTALLED SO TOP OF ROOT BALLS LEVEL WITH ADJACENT GRADE. TREE SHALL BEAR SAME RELATION TO FINISH GRADE AS MAINTAINED AT NURSERY

E. PLACE TREE BALL ON FIRM UNDISTURBED SOIL.

F. IF POSSIBLE MARK TREE TRUNK ON THE NORTHERN SIDE AT THE NURSERY AND PLANT TREE WITH MARK FACING NORTH

G. TOPSOIL USED SHALL BE AS SPECIFIED IN THE LANDSCAPE SPECIFICATIONS.

TREE PLANTING DETAIL — N.T.S. — LD 01



SHRUB PLANTING LEGEND

SYMBOL	DESCRIPTION
1	PRUNE BROKEN AND DAMAGED TWIGS AFTER PLANTING DO NOT PRUNE OR DAMAGE CENTRAL LEADER.
2	PLACE PLANT IN VERTICAL, PLUMB POSITION. REMOVE CONTAINER AND PLANT LABEL PRIOR TO PLACING BACKFILL.
3	3" – 4" OF MULCH AS SPECIFIED. DO NOT PLACE MULCH DIRECTLY AGAINST STEMS.
4	PREPARED BACKFILL AND FERTILIZE PER SPECIFICATION. TAMP AND SOAK BACKFILL AFTER PLANTING. MAINTAIN AFTER PLANTING PER SPECIFICATIONS.

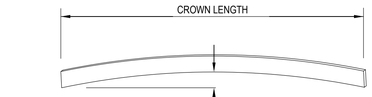
PLANTING NOTES

A. HOLE DIAMETER SHOULD BE AT LEAST TWICE THE DIAMETER OF THE SHRUB ROOT BALL. SHRUB CROWN SHOULD BE PLACED SLIGHTLY HIGHER (1–2") ABOVE THAN SURROUNDING FINISHED GRADE.

B. SCORE ROOTBALL BY CUTTING 1/8–1" VERTICAL GROVES 3" APART

C. SPACE PLANTS PER PLANTING PLAN

CONTAINER SHRUB PLANTING DETAIL — N.T.S. — LD 02



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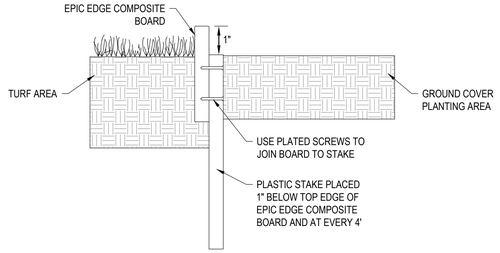

SECTION VIEW

PRODUCT NUMBER	NOMINAL	COLOR	ACTUAL DIMENSION	MIN. RADIUS	GAP	MAX. CROWN H / L
100041851	4 X 20	CARMEL BROWN	1/2" X 3 3/8" X 20'	36"	1/8"	19" / 20'
100036756	6 X 20		1/2" X 5 3/8" X 20'			9" / 20'

SPECIFICATIONS:
MATERIAL: HIGH-DENSITY POLYETHYLENE RECYCLED PLASTIC AND WOOD COMPOSITES
MANUFACTURERS NOTES:
1. ALLOW FOR THERMAL EXPANSION AND SHRINKAGE BY LEAVING GAPS BETWEEN END OF BOARDS.
2. DO NOT SCREW CONNECTING BOARDS TOGETHER.

NOTES:
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. DO NOT SCALE DRAWING.
3. THIS DRAWING IS INTENDED FOR USE BY ARCHITECTS, ENGINEERS, CONTRACTORS, CONSULTANTS AND DESIGN PROFESSIONALS FOR PLANNING PURPOSES ONLY. THIS DRAWING MAY NOT BE USED FOR CONSTRUCTION.
4. ALL INFORMATION CONTAINED HEREIN WAS CURRENT AT THE TIME OF DEVELOPMENT BUT MUST BE REVIEWED AND APPROVED BY THE PRODUCT MANUFACTURER TO BE CONSIDERED ACCURATE.

RECYCLED PLASTIC EDGING DETAIL — N.T.S. — LD 03

GENERAL NOTES

SHEET KEYNOTES

SHEET LEGEND

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

ISSUE DATE: 16 DEC 2025
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S25B0035

DESIGNED BY: RJC
DRAWN BY: RJC
CHECKED BY: MDT
SUBMITTED BY:
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HANA-KENALL 8A JV
2500 CITYWEST BLVD
SUITE 700
HOUSTON, TX 77042

ACCESS CONTROL POINT, PLANNVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

LANDSCAPE DETAILS

SHEET ID
L-102

File Path:
Plot Date: 9/18/2024 4:29:42 PM

CONCEPT DESIGN-NOT FOR CONSTRUCTION

GENERAL NOTES

DESIGN CRITERIA

1. **DESIGN LOADS,** STRUCTURAL ANALYSIS AND PROPORTIONING OF STRUCTURAL MEMBERS IS BASED UPON THE FOLLOWING:
   - A. INTERNATIONAL BUILDING CODE 2021 EDITION
   - B. ASCE 7-22
   - C. STEEL DECK INSTITUTE (SDI), DESIGN MANUAL FOR COMPOSITE DECKS, FORMS DECKS, ROOF DECKS, AND CELLULAR METAL FLOOR DECK WITH ELECTRICAL DISTRIBUTION: AMERICAN IRON AND STEEL INSTITUTE (AISI), (ANSI/SDI SD-2022)
   - D. COLD-FORMED STEEL DESIGN MANUAL:
   - E. AMERICAN INSTITUTE OF STEEL CONSTRUCTION, INC. (AISC), AISC STEEL CONSTRUCTION MANUAL, SIXTEENTH EDITION; (ASD); AND
   - F. AMERICAN CONCRETE INSTITUTE (ACI) BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE, ACI 318-19.
   - G. BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES (ACI 530-16/ASCE 5-1/TMS 402-16.
   - H. ICC 500-23
2. **FOUNDATION DESIGN** BASED ON GEOTECHNICAL ENGINEERING REPORT PREPARED BY HANA ENGINEERS AND CONSULTANTS DATED OCTOBER 23, 2024, HANA PROJECT NUMBER 64707
   MAXIMUM ALLOWABLE BEARING PRESSURE 3,000 PSF
   FROST DEPTH 14 IN.
3. **DESIGN LIVE LOADS:**
   ROOF (REDUCED) 20 PSF
4. **DESIGN SNOW LOAD** 20 PSF
5. **DESIGN WIND LOADS** BASED ON ASCE 7-16:
   WIND SPEED: 105 MPH
   WIND EXPOSURE: C
   RISK CATEGORY II
6. **SEISMIC DESIGN:**
   DESIGN CATEGORY: D
   SITE CLASS: D
   $S_S = S_{MS}$ 0.46G
   $S_1 = S_{M1}$ 0.16G
   SEISMIC USE GROUP II
7. **TORNADO SHELTER**
   Risk Category: III
   Roof Live Load: 100 PSF
   Tornado Wind Speed V_T: 250 MPH
   GCP_{si}: +/- 0.55
   K_{dt}: 1.0
   K_{dtor}: 1.0
   K_{it}: 1.0
   K_{vt}: 1.2
   MISSILE SPEED FOR TORNADO SHELTER:
   HORIZONTAL SURFACES 100 MPH
   VERTICAL SURFACES 67 MPH

CAST-IN-PLACE CONCRETE

1. VERIFY ALL DIMENSIONS. COORDINATE WITH SPECIFICATIONS AND ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION AND NOTIFY COR OF ANY DISCREPANCIES.
2. CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE AMERICAN CONCRETE INSTITUTE SPECIFICATIONS, ACI 318 AND ACI 301, LATEST EDITION.
3. DETAILING, FABRICATION AND ERECTION OF REINFORCING BARS, AND ALL ACCESSORIES UNLESS OTHERWISE NOTED, SHALL BE IN ACCORDANCE WITH THE ACI "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE", ACI 315 LATEST EDITION.
4. CONCRETE SHALL DEVELOP 4000 PSI IN COMPRESSION IN 28 DAYS BUT NOT LESS THAN 4-1/2 SACKS OF CEMENT SHALL BE USED PER CUBIC YARD OF CONCRETE REGARDLESS OF STRENGTH OBTAINED. SLUMP SHALL NOT EXCEED FIVE (5) INCHES.
5. CONCRETE SHALL CONTAIN A WATER-REDUCING ADMIXTURE AS PER THE MANUFACTURER'S SPECIFICATIONS, IN ACCORDANCE WITH ASTM C494. NO CALCIUM CHLORIDE WILL BE PERMITTED IN CONCRETE.
6. NO HORIZONTAL CONSTRUCTION JOINTS WILL BE PERMITTED IN SLABS OR BEAMS.
7. VERTICAL CONSTRUCTION JOINTS IN SLABS ARE TO BE AS SHOWN ON PLANS, OR IF NOT SHOWN, AS APPROVED BY COR.
8. REINFORCING BARS SHALL BE NEW DOMESTIC BILLET STEEL AND SHALL CONFORM TO ASTM A-615, GRADE 60 SPECIFICATIONS.
9. PROVIDE CORNER BARS TOP AND BOTTOM AT ALL BEAM CORNERS AND DEAD END BEAM INTERSECTIONS. BARS TO BE OF EQUAL SIZE AND QUANTITY AS THE NOTED BEAM STEEL. BARS SHALL LAP BEAM REINFORCEMENT 48 BAR DIAMETERS.
10. BARS DETAILED AS CONTINUOUS SHALL BE LAPPED 48 BAR DIAMETERS AT SPLICES.
11. EXTEND THE SLAB REINFORCING STEEL, PERPENDICULAR TO BEAM, TO THE TOP OUTSIDE REINFORCING BAR OF PERIMETER BEAMS. START THE SLAB REINFORCING STEEL, PARALLEL TO BEAM, NOT MORE THAN 6" FROM THE TOP INSIDE REINFORCING BAR OF PERIMETER BEAMS.
12. ALL CONDUIT AND PLUMBING LINES IN SLAB SHALL BE PLACED BELOW SLAB REINFORCING. DO NOT BUNDLE CONDUITS OR PLUMBING LINES; PROVIDE 1 1/2" CLEAR BETWEEN EACH MEMBER.
13. THE VAPOR RETARDER BELOW ALL FOUNDATION AREAS SHALL BE A MINIMUM 10-MIL POLYETHYLENE WITH ALL JOINTS LAPPED 12" CONTINUOUS AND SEALED. DROP VAPOR RETARDER DOWN THE SIDES OF ALL BEAM TRENCHES. **DO NOT PLACE VAPOR BARRIER ACROSS TRENCH BOTTOM**.
14. CLAY MASONRY BRICK IS NOT ACCEPTABLE FOR CHAIRS. SOLID CONCRETE BRICK MAY BE USED AS CHAIRS PROVIDING THEY ARE LARGE ENOUGH AND SPACED TO DISTRIBUTE CONSTRUCTION TRAFFIC WEIGHTS WITHOUT DAMAGING THE VAPOR RETARDER.
15. CONCRETE SHALL NOT BE PLACED ON SOILS THAT HAVE BEEN DISTURBED BY RAINFALL OR SEEPAGE.
16. IF BEARING SOILS ARE SOFTENED BY SURFACE WATER INTRUSIONS DURING EXPOSURE OR BY DESICCATION, THE UNSUITABLE SOILS MUST BE REMOVED FROM THE FOUNDATION EXCAVATION PRIOR TO PLACEMENT OF CONCRETE.
17. IN ALL INSTANCES MINIMUM SLAB THICKNESS SHALL BE MAINTAINED. COORDINATE SLAB FINISHES WITH ARCHITECTURAL PLANS.
18. BACKFILL AROUND PERIMETER TO PROVIDE POSITIVE DRAINAGE AWAY FROM THE FOUNDATION.
19. ALL OPENINGS IN THE SLAB (FOR PIPING, DRAINS, ETC.) SHALL BE SEALED.

REINFORCED CONCRETE MASONRY UNIT WALLS

1. MASONRY WALLS MUST BE TEMPORARILY BRACED AGAINST LATERAL LOADS AND DISPLACEMENT UNTIL THE FLOOR DECK/ROOF DECK HAS BEEN PERMANENTLY ATTACHED TO JOISTS AND DECK ANGLES.
2. CONCRETE MASONRY UNITS (CMU) SHALL CONFORM TO ASTM C90, GRADE N. TYPE 1.
3. REQUIRED STRENGTH OF THE CONCRETE MASONRY ASSEMBLAGE (F'M) SHALL BE 2000 PSI.
4. MORTAR SHALL BE TYPE "S".
5. CEMENT SHALL CONFORM TO ASTM C150 TYPE I, LOW ALKALI. MORTAR CEMENT CONFORMING TO ASTM C 1329-96 MAY BE USED. HOWEVER, MASONRY CEMENTS ARE NOT ALLOWED.
6. PROVIDE GROUT IN ACCORDANCE WITH ASTM C-476 AND SUBMIT DESIGN MIX FOR APPROVAL.
7. ALL REINFORCING BARS SHALL BE NEW BILLET STEEL AND SHALL CONFORM TO ASTM A-615, GRADE 60.
8. ALL WALLS REQUIRING VERTICAL REINFORCEMENT AS NOTED ON PLANS. ADD TWO (2) #5 AT JAMBS OF ALL OPENINGS, AND WALL ENDS, THREE (3) #5 AT CORNERS (ONE IN EACH OF THREE ADJOINING CELLS). PROVIDE ADDITIONAL VERTICAL REINFORCEMENT FOR SPECIAL CONDITIONS AS DETAILED. ALL VERTICAL REINFORCEMENT TO BE IN GROUT FILLED CELLS. PROVIDE DOWELS FROM FOUNDATION, SAME SIZE & SPACING.
9. LAP SPLICES OF REINFORCING STEEL SHALL BE A MINIMUM OF 48 BAR DIAMETERS UNLESS OTHERWISE NOTED.
10. VERTICAL CELLS TO BE FILLED SHALL HAVE VERTICAL ALIGNMENT SUFFICIENT TO MAINTAIN A CLEAR, UNOBSTRUCTED CONTINUOUS VERTICAL CELL MEASURING NOT LESS THAN 2 INCHES BY 3 INCHES. EXCESSIVE MORTAR FINS AND ANY OTHER OBSTRUCTION SHALL BE REMOVED FROM THE CELLS TO BE GROUTED. METAL LATH MAY BE PLACED OVER CELLS NOT CONTAINING REINFORCEMENT TO PREVENT FILLING WITH GROUT.
11. ALL CELLS CONTAINING VERTICAL REINFORCEMENT SHALL BE FILLED SOLIDLY WITH GROUT WITH A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS. GROUT SHALL BE A WORKABLE MIX SUITABLE FOR PUMPING WITHOUT SEGREGATION AND SHALL BE THOROUGHLY MIXED. GROUT SHALL BE PLACED BY PUMPING OR AN APPROVED ALTERNATE METHOD AND SHALL BE PLACED BEFORE INITIAL SET OR HARDENING OCCURS.
12. ALL REINFORCING SHALL BE IN PLACE PRIOR TO PLACING GROUT. VERTICAL REINFORCING BARS SHALL BE HELD IN POSITION AT THE TOP, BOTTOM AND AT INTERVALS NOT FARTHER APART THAN 10'-0".
13. ALLOW C.M.U. WALLS TO SET AT LEAST 24 HOURS AFTER COMPLETION BEFORE GROUTING. GROUT SHALL BE CONSOLIDATED BY PUDDLING OR MECHANICAL VIBRATION DURING PLACING AND RESOLIDATION AFTER EXCESS MOISTURE HAS BEEN ABSORBED BUT BEFORE WORKABILITY IS LOST. THE FILLING OF ANY SECTION OF A WALL SHALL BE COMPLETED IN ONE DAY WITHOUT INTERRUPTIONS GREATER THAN ONE HOUR, AND PLACED IN LAYERS OF **4 FEET MAXIMUM**.
14. WHERE THE GROUT POUR EXCEEDS 4 FEET IN HEIGHT, CLEANOUTS SHALL BE PROVIDED BY SUITABLE OPENINGS IN THE FACE SHELLS IN THE BOTTOM COURSE OF EACH CELL TO BE FILLED, OR OTHER APPROVED LOCATIONS. THE CLEANOUTS SHALL BE SEALED AFTER INSPECTION AND BEFORE BEING FILLED.
15. WHEN CELL FILLING IS STOPPED FOR ONE HOUR OR LONGER, HORIZONTAL CONSTRUCTION JOINT SHALL BE FORMED BY STOPPING THE POUR OF GROUT APPROXIMATELY 1/2 INCH ABOVE OR BELOW BED JOINT.
16. END WALLS AND CROSS WEBS FORMING CELLS TO BE FILLED SHALL BE FULL BEDDED IN MORTAR TO PREVENT LEAKAGE OF GROUT UNLESS WALL IS TO BE POURED SOLID.
17. TYPICAL HORIZONTAL REINFORCEMENT SHALL BE TWO (2) #5 CONTINUOUS IN 8"X8" OR 8"X16" DEEP CONTINUOUS CONCRETE FILLED BOND BEAM BELOW EACH FLOOR AND ROOF LEVEL, UNLESS NOTED OTHERWISE. IF "U" BLOCK (LINTEL BLOCK) IS USED FOR A BOND AT TOP OF WALL, HOLES MUST BE MADE THRU THE "U" BLOCK SO VERTICAL REINFORCEMENT CAN EXTEND INTO THE "U" BLOCK. PROVIDE STANDARD LADDER-(TRUSS-) MESH TYPE REINFORCING OR REVIEWED EQUIVALENT EVERY OTHER COURSE (16" ON CENTER) AND AS PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE ADDITIONAL BOND BEAMS AND LINTEL BEAMS AS DETAILED, NOTED, OR REQUIRED FOR A COMPLETE JOB.
18. WALLS DESIGNATED AS SPANNING HORIZONTAL REQUIRE HORIZONTAL, TRUSS-MESH TYPE, DOUBLE WIRE REINFORCEMENT WITH ADJUSTABLE EYE-WIRE OR AS INDICATED ON DRAWINGS
19. PROVIDE VERTICAL CONTROL JOINTS AT A MAXIMUM SPACING OF 20' STARTING AT 10' FROM CORNERS. DO NOT CONTINUE THE TYPICAL LADDER-(TRUSS-) MESH TYPE JOINT REINFORCEMENT THROUGH THE JOINT.
20. CONTINUE BOND BEAM REINFORCEMENT THROUGH THE JOINT.
21. PROVIDE HORIZONTAL JOINT REINFORCEMENT EVERY OTHER COURSE WHERE HORIZONTAL BAR REINFORCEMENT IS NOT SPECIFIED.
22. CARE SHALL BE TAKEN IN BACKFILLING AGAINST RETAINING WALLS. BACKFILLING SHALL NOT BE PERMITTED UNTIL AT LEAST 7 DAYS AFTER GROUTING. HEAVY EQUIPMENT ROOM SHALL NOT APPROACH CLOSER TO THE WALL THAN A DISTANCE EQUAL TO THE WALL HEIGHT.
23. WALL LENGTHS LESS THAN OR EQUAL TO FOUR (4) TIMES ITS' THICKNESS SHALL BE REINFORCED WITH #5 VERTICAL REINFORCING IN FILLED CELLS, PROVIDE 1/4" DIAMETER TIES IN EVERY COURSE (8" ON CENTER) IN LIEU OF DUR-O-WAL REINFORCING. PLACE AS DETAILED.

STRUCTURAL STEEL

1. COMPLY WITH AMERICAN INSTITUTE OF STEEL CONSTRUCTION, INC. (AISC) CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES.
2. WIDE FLANGE MEMBERS SHALL BE **ASTM A992, 50 KSI.**
3. ROLLED STEEL PLATES, SHAPES, AND BARS SHALL BE STRUCTURAL QUALITY CARBON STEEL COMPLYING WITH **ASTM A-36**, EXCEPT WHERE OTHER TYPE STEEL IS SHOWN.
4. HOLLOW STRUCTURAL SECTIONS (HSS) PRODUCTS SHALL COMPLY WITH **ASTM A500**, **GRADE B**, **46 KSI**. [INCLUDES SQUARE, RECTANGLE AND ROUND]
4A. **(OPTION FOR PIPE)** - STEEL PIPE PRODUCTS SHALL BE COLD-FORMED STRUCTURAL QUALITY CARBON STEEL, COMPLYING WITH **ASTM A53, TYPE E** OR **S, GRADE B.**
5. ALL STRUCTURAL STEEL SHALL BE FABRICATED, ERECTED AND PAINTED IN ACCORDANCE WITH THE SPECIFICATIONS FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS AS AMENDED TO DATE AND THE CODE OF STANDARD PRACTICE, LATEST EDITION AS ADOPTED BY THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION.
6. WELDING SHALL BE DONE IN ACCORDANCE WITH THE STANDARD CODE FOR ARC AND GAS WELDING IN BUILDING CONSTRUCTION AS PUBLISHED BY THE AMERICAN WELDING SOCIETY, EXCEPT THAT ALL WELDING SHALL BE DONE BY THE ELECTRIC ARC PROCESS. ALL WELDING SHALL BE **PERFORMED BY CERTIFIED WELDERS** AND SHALL CONFORM TO THE LATEST CODE OF THE AWS.
7. DETAILED AND/OR SCHEDULED CONNECTIONS HAVE BEEN DESIGNED BY STRUCTURAL ENGINEER. ANY CONNECTION NOT DETAILED OR SCHEDULED, OR ALTERED FOR FABRICATION PURPOSES, SHALL BE SIZED AND DETAILED BY THE FABRICATOR AND SHALL BE MARKED FOR ENGINEER'S VERIFICATION.
8. THE ERECTOR SHALL EXAMINE AREAS AND CONDITIONS UNDER WHICH STRUCTURAL STEEL WORK IS TO BE INSTALLED AND NOTIFY CONTRACTOR IN WRITING OF CONDITIONS DETRIMENTAL TO PROPER AND TIMELY COMPLETION OF WORK. DO NOT PROCEED WITH WORK UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED IN A MANNER ACCEPTABLE TO THE ERECTOR.
9. PROVIDE TEMPORARY SHORING AND BRACING MEMBERS WITH CONNECTIONS OF SUFFICIENT STRENGTH TO BEAR IMPOSED LOADS. REMOVE TEMPORARY MEMBERS AND CONNECTIONS WHEN PERMANENT MEMBERS ARE IN PLACE AND FINAL CONNECTIONS MADE. PERMANENT MEMBERS SHALL INCLUDE BUT ARE NOT LIMITED TO COLUMNS, BEAMS, JOISTS, AND METAL DECK. PROVIDE TEMPORARY GUY LINES TO ACHIEVE PROPER ALIGNMENT OF STRUCTURE AS ERECTION PROCEEDS.
10. IN ADDITION TO INDICATED WELDING REFERENCE. ADD AWS D1.1 AND WELDING ELECTRODES TO CONFORM TO E70XX.

MANUFACTURED LIGHT GAGE STEEL ROOF TRUSS

1. STRUCTURAL DESIGN, DIMENSIONS, TRUSS CONFIGURATION, REQUIRED PERMANENT BRACING OF TRUSS MEMBERS, AND QUANTITY IS THE RESPONSIBILITY OF THE PRE-ENGINEERED TRUSS SUPPLIER. VERIFY PLAN DIMENSIONS AND ROOF PITCHES WITH ARCHITECTURAL PLANS.
2. TRUSS PROFILES ARE SHOWN FOR FRAMING INTENT FOR TRANSFER OF TRUSS LOADS TO BEARING POINTS ONLY.
3. TRUSSES TO BE DESIGNED FOR THE FOLLOWING LOADS:
   LIVE LOAD 20 PSF
   DEAD LOAD AS PER ARCHITECTURAL PLAN
4. ALL STRUCTURAL STEEL TRUSS MEMBERS SHALL BE DESIGNED IN ACCORDANCE WITH AMERICAN IRON AND STEEL INSTITUTE (AISI) " COLD-FORMED STEEL DESIGN MANUAL", **LATEST EDITION**.
5. ALL FRAMING MEMBERS AND ACCESSORIES SHALL BE FORMED FROM CORROSION-RESISTANT STEEL WHICH MEETS OR EXCEEDS THE SPECIFICATIONS ASTM A446 GRADE C WITH A MINIMUM YIELD STRENGTH OF 45 KSI, AND WITH A MINIMUM G-60 GALVANIZED COATING PER THE SPECIFICATIONS OF ASTM A 525.
6. TRUSS DESIGNS AND LAYOUTS SHALL BE SEALED BY A STRUCTURAL ENGINEER LICENSED TO PRACTICE IN THE STATE OF ARKANSAS.
7. PRIOR TO FABRICATION THE CONTRACTOR SHALL SUBMIT FABRICATION AND ERECTION SHOP DRAWINGS TO THE COR TO OBTAIN APPROVAL.
8. TRUSSES SHALL BE FULLY FABRICATED, WITH COMPONENTS ATTACHED IN A MANNER AS TO PREVENT RACKING AND TO MINIMIZE DISTORTION WHILE LIFTING.
9. ALL FRAMING COMPONENTS SHALL BE CUT SQUARELY FOR ATTACHMENT TO PERPENDICULAR MEMBERS, OR, AS REQUIRED, FOR AN ANGULAR FIT AGAINST ABUTTING MEMBERS.
10. FASTENING OF TRUSS COMPONENTS SHALL BE WITH SELF-DRILLING SCREWS. SCREWS SHALL BE OF SUFFICIENT SIZE TO INSURE THE STRENGTH OF THE CONNECTION. WIRE TYING OF COMPONENTS SHALL NOT BE PERMITTED. DAMAGED AREAS SHALL BE TOUCHED UP WITH A ZINC-RICH PAINT.
11. TEMPORARY BRACING, WHERE REQUIRED, SHALL BE PROVIDED UNTIL ERECTION IS COMPLETED.
12. ALL TRUSSES TO BE CONNECTED TO BEARING BEAM WITH TYPE A21 ANGLE CONNECTOR (18 GAGE) WITH 4-#10 SCREW FASTENERS (TWO TO BEAM, TWO TO TRUSS) AS MANUFACTURED BY "SIMPSON STRONG TIE" OR A REVIEWED EQUIVALENT.
13. CHORD AND WEB MEMBERS SHALL NOT BE CUT OR REMOVED WITHOUT THE APPROVAL OF THE TRUSS DESIGN ENGINEER.

METAL DECK

1. ROOF DECK SHALL BE 1.0C-18 GAGE, PAINTED.
2. END LAPS SHALL BE A MINIMUM OF 2" AND SHALL ALWAYS OCCUR OVER SUPPORTS. SIDE LAPS SHALL REQUIRE A MINIMUM OF ONE-HALF FLUTE.
3. DECK UNITS SHALL BE 3 OR MORE SPANS AND SHALL BE ATTACHED TO THE STRUCTURAL SUPPORTS AT THE END LAP JOINTS BY WELDS NOT LESS THAN 5/8 INCH IN DIAMETER, SPACED NOT MORE THAN 12 INCHES O.C. ACROSS THE WIDTH. ATTACHMENT AT INTERIOR SUPPORTS SHALL BE BY WELDS NOT LESS THAN 5/8 INCH IN DIAMETER SPACED NOT MORE THAN 12 INCHES O.C. ACROSS THE WIDTH. . (AN ELONGATED WELD WITH AN EQUAL PERIMETER SHALL BE ACCEPTABLE.) WELDS METAL SHALL PENETRATE ALL THICKNESSES OF MATERIAL AND SHALL HAVE GOOD FUSION TO THE SUPPORTING MEMBER.
4. ALL FIELD WELDING OF DECK SHALL BE IN STRICT ACCORDANCE WITH **ANSI/AWS D1.3. STRUCTURAL WELDING CODE – SHEET STEEL**.
5. CARE SHALL BE EXERCISED IN THE SELECTION OF ELECTRODES AND AMPERAGE TO PROVIDE A POSITIVE WELD AND PREVENT HIGH AMPERAGE BLOW HOLES.
6. WELDING WASHERS SHALL BE PROVIDED AND USED AS RECOMMENDED BY THE DECK MANUFACTURER.
7. SIDE LAPS OF ADJACENT UNITS SHALL BE FASTENED WITH #10 TEK SELF-DRILLING SCREWS AT NOT MORE THAN 36 INCHES ON CENTER.
8. THE DECK (ENDS AND SIDES) SHALL BE ATTACHED TO THE DECK SUPPORT ANGLE WITH WELDS NOT LESS THAN 5/8 INCH IN DIAMETER AND SPACED @ 12 INCHES O.C. MAXIMUM AT THE BUILDING PERIMETER AND AROUND ALL LARGE OPENINGS THROUGH THE DECK. IN ADDITION TO INDICATED WELDING REFERENCE. ADD AWS D1.1 AND WELDING ELECTRODES TO CONFORM TO E70XX.

SHEET INDEX

S-001 GENERAL NOTES + SHEET INDEX
S-002 TYPICAL CONCRETE + CMU DETAILS
S-003 TYPICAL LIGHT GAGE + STEEL DETAILS
S-004 WIND LOADS + DIAGRAMS
S-005 SNOW LOADS + DIAGRAMS
S-006 O-WATCH FOUNDATION PLAN + SECTION

S-101 VCC - FOUNDATION PLAN
S-102 VCC - ROOF FRAMING PLAN
S-103 VCC - ENLARGED STORM SHELTER PLANS
S-111 G-HOUSE - FOUNDATION PLAN
S-112 G-HOUSE - ROOF FRAMING PLAN
S-121 ID-CHECK - FOUNDATION PLAN
S-122 ID-CHECK - ROOF FRAMING PLAN
S-131 T-SEACH AREA - FOUNDATION PLAN
S-132 T-SEACH AREA - ROOF FRAMING PLAN

S-201 VCC - BUILDING SECTIONS
S-202 VCC - BUILDING SECTIONS
S-211 G-HOUSE - BUILDING SECTIONS
S-221 ID-CHECK - BUILDING SECTIONS
S-231 T-SEACH AREA - BUILDING SECTIONS

S-301 VCC - FOUNDATION SECTIONS + DETAILS
S-302 VCC - ROOF FRAMING SECTIONS + DETAILS
S-303 VCC -STORM SHELTER SECTIONS + DETAILS
S-311 G-HOUSE - FOUNDATION SECTIONS + DETAILS
S-312 G-HOUSE - ROOF FRAMING SECTIONS + DETAILS
S-321 ID-CHECK - FOUNDATION SECTIONS + DETAILS
S-322 ID-CHECK - ROOF FRAMING SECTIONS + DETAILS
S-331 T-SEACH AREA - FOUNDATION SECTIONS + DETAILS
S-332 T-SEARCH AREA - ROOF FRAMING SECTIONS + DETAILS

US Army Corps of Engineers ®

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ISSUE DATE: 17 APRIL 2026
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CONTRACT NO.: W912T523D0035

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HANA-KENALL 8A JV
2500 CITYWEST BLVD
SUITE 700
HOUSTON, TX 77042

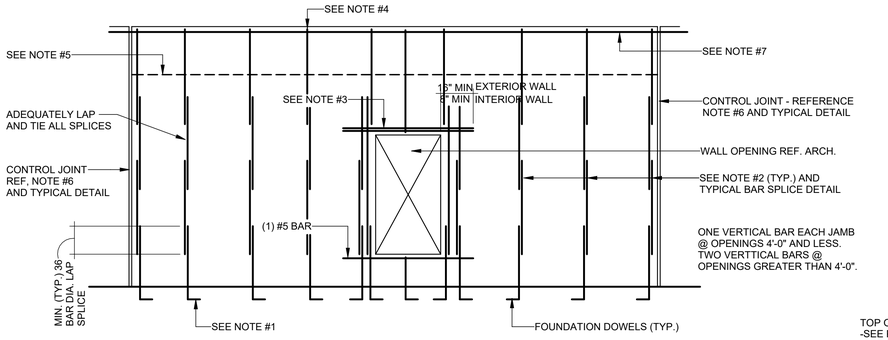
ACCESS CONTROL POINT- PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

GENERAL NOTES + SHEET INDEX

SHEET ID
S-001

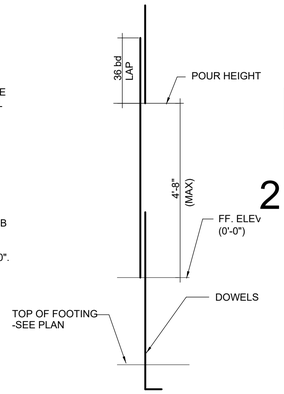
CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

TYPICAL CONCRETE MASONRY UNIT DETIALS

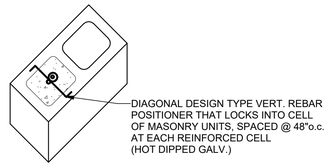


MASONRY WALL REINFORCING NOTES

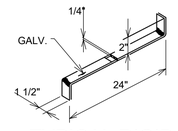
1. VERTICAL WALL REINFORCING SHALL ALIGN WITH VERTICAL FOUNDATION DOWELS. DOWELS SHALL BE PLACED IN CENTER OF CMU WALL WITH ACI STANDARD HOOK. PLACE HOOKS DIRECTLY ON TOP OF BOTTOM LAYER OF FOOTING REINFORCING.
2. TYPICAL VERTICAL WALL REINFORCEMENT TO BE PLACED IN CENTER OF WALL. GROUT CELLS FULL THAT CONTAIN REINFORCEMENT FOR CLARITY, ALL VERTICAL AND HORIZONTAL REINFORCING IS SHOWN CONTINUOUS, HOWEVER VERTICAL SHALL BE LAPPED AND SPLICED TO ACCOMODATE MAXIMUM GROUT LIFTS OF 4'-0" AND HORIZONTAL BARS SHALL BE LAPPED AND SPLICED AS REQUIRED. ALL VERTICAL BARS SHALL BE ACCURATELY LOCATED WITHIN THE CELL WITH REBAR POSITIONERS PRIOR TO PLACING GROUT IN CELLS. ALL LAPS SHALL BE 48 BAR DIAMETERS UNLESS NOTED OTHERWISE.
3. REFERENCE CMU LINTEL SCHEDULE FOR SIZE, LOCATION AND QUANTITY OF LINTEL REINFORCEMENT.
4. ALL VERTICAL REINFORCING SHALL STOP 2" CLEAR FROM TOP OF WALL UNLESS NOTED OTHERWISE.
5. HORIZONTAL JOINT REINFORCING SHALL BE LADDER TYPE AT 16"o.c. - DISCONTINUE AT CONTROL JOINTS.
6. MASONRY CONTROL JOINTS SHALL BE DISCONTINUOUS AT ALL BOND BEAMS AND SHALL NOT EXTEND BELOW GRADE. COORDINATE EXACT LOCATION OF MASONRY CONTROL JOINTS WITH THE ARCHITECT.
7. REFERENCE SECTIONS AND DETAILS FOR SIZE AND LOCATION OF BOND BEAMS AND QUANTITY OF REINFORCING. PROVIDE CORNER BARS AT ALL BOND BEAM INTERSECTIONS TO MATCH HORIZONTAL REINF.
8. REFERENCE ARCHITECTURAL DRAWINGS FOR SIZE AND LOCATION OF ALL OPENINGS IN MASONRY WALLS.



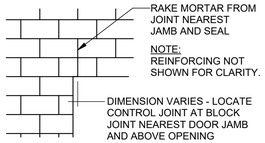
4 TYPICAL BAR SPLICE DETAIL
NOT TO SCALE



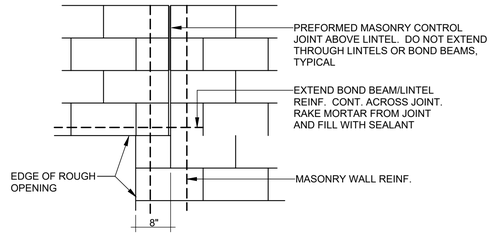
2 TYPICAL REBAR POSITIONER
NOT TO SCALE



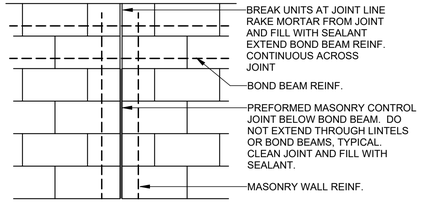
1 TYPICAL RIGID ANCHOR
NOT TO SCALE



3 CONTROL JOINT DETAIL AT OPENING
NOT TO SCALE



6 TYPICAL MASONRY CONTROL JOINT ADJACENT TO OPENING
NOT TO SCALE



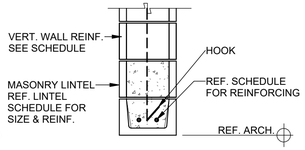
5 TYPICAL MASONRY CONTROL JOINT ELEVATION AT BOND BEAM
NOT TO SCALE

CMU + VENEER LINTEL SCHEDULE

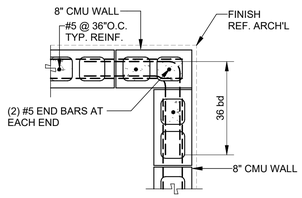
WALL THICKNESS	CLEAR SPAN	LINTEL DEPTH	BOTTOM REINFORCING	TOP REINFORCING	STEEL VENEER LINTEL WHERE APPLICABLE
8	4'-0" MAX.	8"	(1) #5	———	L6X4X5/16
8	6'-0" MAX	16"	(2) #5	———	L6X4X5/16

MASONRY LINTEL NOTES:

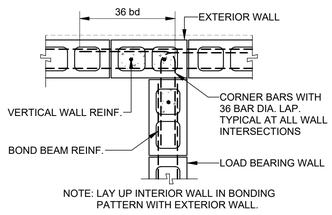
1. GROUTED LINTEL BLOCKS IN EXTERIOR WALLS SHALL EXTEND A MINIMUM OF 16 INCHES BEYOND FACE OF OPENING EACH SIDE. THE FIRST TWO VERTICAL CELLS ON EACH SIDE OF THE OPENING SHALL BE GROUTED AND CONTAIN ONE #5 IN EACH CELL CONT. TO THE TOP OF THE WALL UNLESS NOTED OTHERWISE.
2. GROUTED LINTEL BLOCKS INTERIOR WALLS SHALL EXTEND A MINIMUM OF 8 INCHES BEYOND FACE OF OPENING EACH SIDE. THE FIRST VERTICAL CELL ON EACH SIDE OF THE OPENING SHALL BE GROUTED AND CONTAIN ONE #5 IN EACH CELL CONT. TO THE TOP OF THE WALL.
3. GROUT FOR LINTELS SHALL BE PLACED IN SINGLE LIFTS AND WITHOUT COLD JOINTS UNLESS OTHERWISE APPROVED BY THE ENGINEER. USE A FINISHED GROUT MIX FOR ALL LINTELS OVER 2'-0" DEEP.
4. ALL STEEL BRICK VENEER LINTELS SHALL BE HOT-DIPPED GALVANIZED AND HAVE A MINIMUM BEARING OF 6 INCHES AT EACH END.



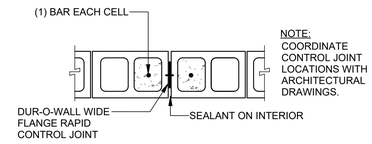
10 TYPICAL CMU LINTEL
NOT TO SCALE



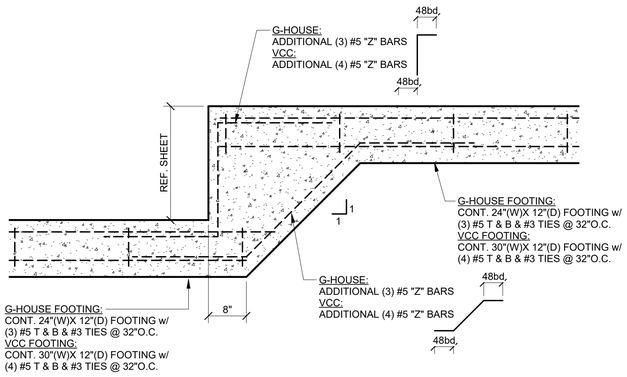
9 TYPICAL CORNER AT CMU WALLS
NOT TO SCALE



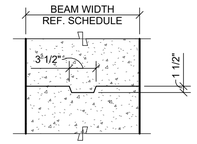
8 TYPICAL BOND BEAM INTERSECTON
NOT TO SCALE



7 TYPICAL REINF. AT CONTROL JOINTS
NOT TO SCALE

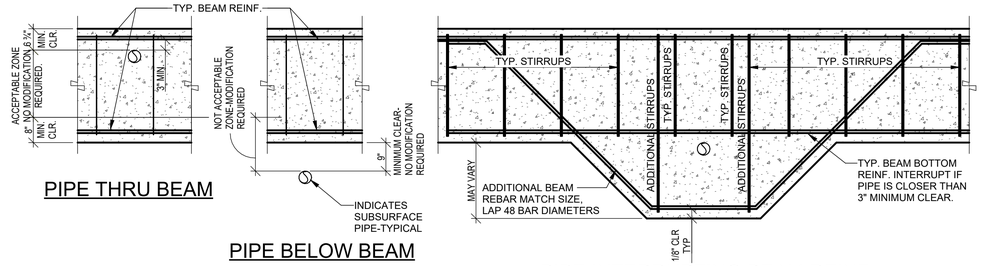


13 TYPICAL FOOTING STEP DETAIL
NOT TO SCALE



12 CONT. 1 1/2"x 3 1/2" KEYWAY TYPICAL DETAIL
NOT TO SCALE

TYPICAL FOUNDATION DETAILS



11 TYPICAL BEAM DETAILS AT PIPE/DRAIN + KEYWAY
NOT TO SCALE

US Army Corps of Engineers ®

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ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W912S724F6002
CONTRACT NO.: W912S23D0035

US ARMY CORPS OF ENGINEERS LITTLE ROCK DISTRICT LITTLE ROCK, AR

HANA-KENALL 8A JV
2500 CITYWEST BLVD
SUITE 700
HOUSTON, TX 77042

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

TYPICAL CONCRETE + CMU DETAILS

SHEET ID
S-002

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

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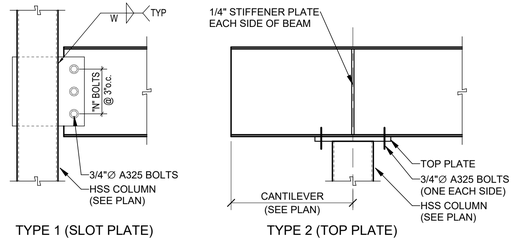
TYPICAL SCHEDULES

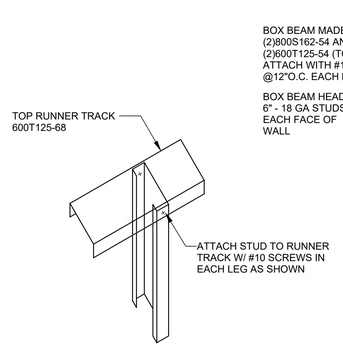
BEAM CONNECTION SCHEDULE				
MEMBER	TYPE	CONNECTION PLATE - TYPE 1 KNIFE PLATE - TYPE 2	WELD SIZE (W)	NO. OF BOLTS (N) 3/4" DIA. A325
W16	1	3/8"x4 1/2"x12" PLATE	5/16	4
W16	2	3/4"x5 1/2"x12" PLATE	5/16	4



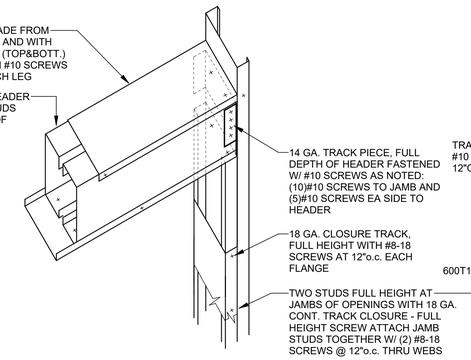
TYPE 1 (SLOT PLATE) TYPE 2 (TOP PLATE)

9 TYPICAL BEAM TO COLUMN CONNECTIONS
NOT TO SCALE

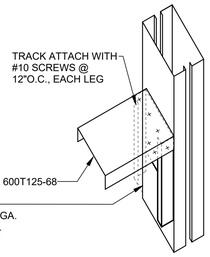
TYPICAL LIGHT GAUGE METAL STUD DETAILS



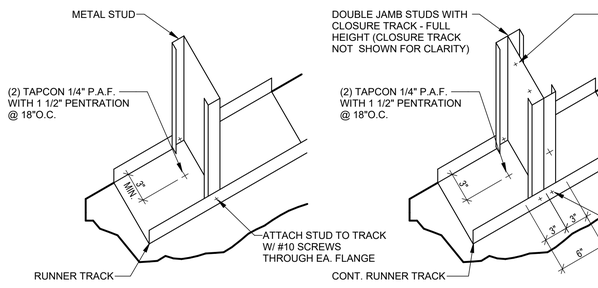
3 TYPICAL HEAD TO STUD CONNECTION
NOT TO SCALE



2 TYPICAL JAMB & HEAD (MAX 6'-0")
NOT TO SCALE



1 TYPICAL SILL TO JAMB CONNECTION
NOT TO SCALE



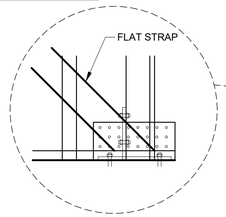
6 TYPICAL RUNNER TRACK TO CONCRETE SLAB
NOT TO SCALE

5 TYPICAL JAMB ANCHORAGE AT TO CONCRETE SLAB
NOT TO SCALE

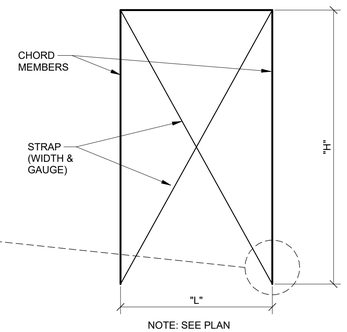
4 TYPICAL LATERAL BRACING
NOT TO SCALE

SHEAR WALL FLAT STRAP SCHEDULE					
STRAP WIDTH (IN)	STRAP THICKNESS (MIL)	YIELD STRENGTH (KSI)	RECOMMENDED # OF SCREWS/ ROW (#)	ALLOWABLE TENSION IN SINGEL STRAP (KIPS)	NO. OF #12 SCREWS FOR MAX. STRAP TENSION # (KIPS)
4	54	50	4	5.77	11 (6.26)
6	54	50	46	8.65	11 (9.10)
8	54	50	8	11.54	21 (11.95)
8	68	50	8	14.53	19 (14.76)
10	68	50	10	18.17	24 (18.65)

BRACE TABLE					
	FORCE	ADJUD FORCE	BRACE		CHORDS
			WIDTH	GAUGE	
TYPE	(KIPS)	(KIPS)	(IN)	(MIL)	
X1	14.14	14.14	10	68	(2)-600S162-97
X2	7.98	7.98	8	68	(2)-600S162-97
X3	3.62	3.62	6	54	(2)-600S162-97
Y1	4.20	4.20	6	54	(2)-600S137-68
Y2	12.60	12.60	10	68	(2)-600S137-68
Y3	8.4	8.4	10	68	(2)-600S137-68



8 FLAT STRAP DETAIL
NOT TO SCALE



NOTE: SEE PLAN

7 TYPICAL BRACE ELEVATION
NOT TO SCALE

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US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HANA-KENALL 8A JV
2500 CITYWEST BLVD
SUITE 700
HOUSTON, TX 77042

ACCESS CONTROL POINT- PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

TYPICAL LIGHT GAGE + STEEL DETAILS

SHEET ID
S-003

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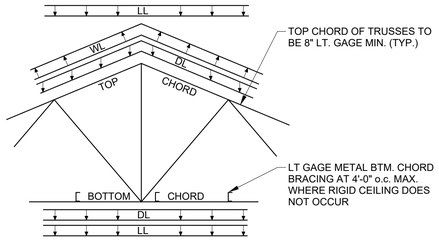


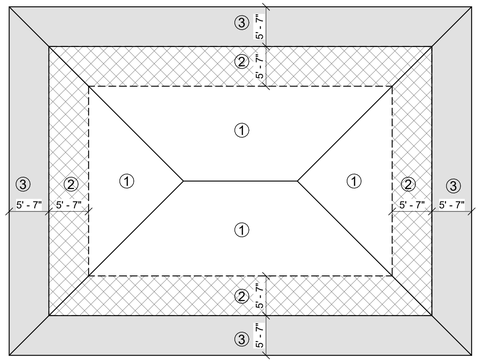
TYPICAL ROOF TRUSS LOAD DIAGRAM

NOTE: THIS DIAGRAM IS A SCHEMATIC SHOWING THE APPLICATION OF LOADS STATED HEREIN. LOADS SHALL BE COMBINED AS PROVIDED BY THE GOVERNING BUILDING CODE TO DETERMINE THE MOST UNFAVORABLE EFFECT.

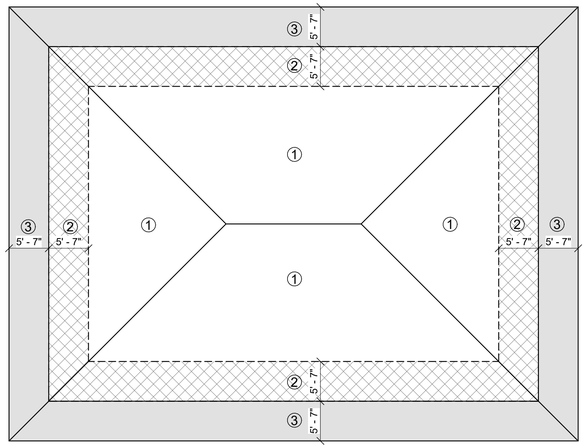
PREFABRICATED ROOF TRUSS DESIGN CRITERIA:

DL = REFERENCE GENERAL NOTES
LL = 20 PSF TOP CHORD
WL = REFERENCE GENERAL NOTES
DL = 12 PSF BOTTOM CHORD
LL = 5 PSF BOTTOM CHORD

COMPONENT AND CLADDING WIND PRESSURE SCHEDULE (PSF)					
T-SEARCH & ID-CHECK					
Zone 3		Zone 2		Zone 1	
38.13	-38.13	29.47	-29.47	19.07	-19.07
29.47	-29.47	29.47	-29.47	19.07	-19.07
19.07	-19.07	19.07	-19.07	19.07	-19.07

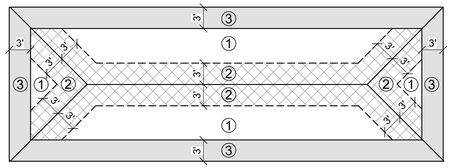


ID-CHECK WIND LOADS (ROOF) COMPONENTS AND CLADDING



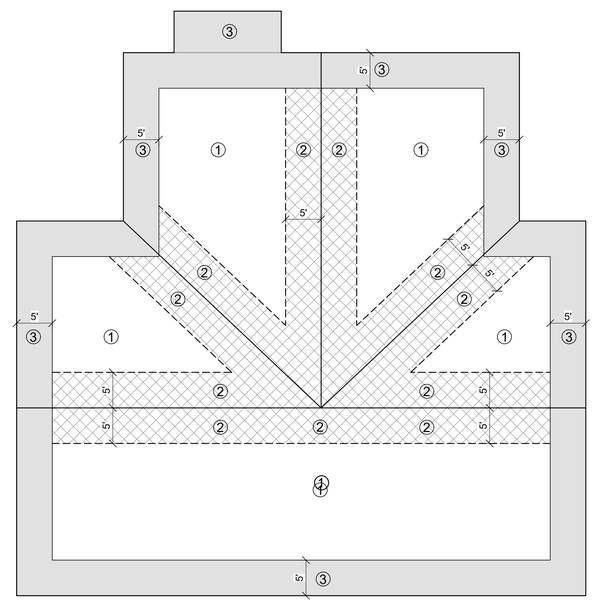
T-SEARCH AREA WIND LOADS (ROOF) COMPONENTS AND CLADDING

COMPONENT AND CLADDING WIND PRESSURE SCHEDULE (PSF)						
GATE HOUSE						
ZONE	EFFECTIVE WIND AREA (FT^2)					
	10 OR LESS	20	50	100	200	500 OR MORE
1	17.94 -40.38	15.49 -35.66	12.24 -29.42	9.79 -24.70	9.79 -19.98	9.79 -19.98
2	17.94 -52.61	15.49 -47.42	12.24 -40.56	9.79 -35.37	9.79 -30.18	9.79 -30.18
3	17.94 -56.7	15.49 -51.0	12.24 -43.5	9.79 -37.9	9.79 -32.2	9.79 -32.2
4	24.06 -26.10	22.98 -25.02	21.55 -23.58	20.46 -22.50	18.96 -21.42	17.94 -19.98
5	24.06 -32.22	22.98 -27.18	21.55 -30.05	20.46 -25.02	18.96 -22.85	17.94 -19.98



G-HOUSE WIND LOAD LOADS (ROOF) COMPONENTS AND CLADDING

COMPONENT AND CLADDING WIND PRESSURE SCHEDULE (PSF)						
VCC BUILDING						
ZONE	EFFECTIVE WIND AREA (FT^2)					
	10 OR LESS	20	50	100	200	500 OR MORE
1	19.00 -34.11	16.40 -30.21	12.96 -25.06	10.36 -21.16	10.36 -21.16	10.36 -21.16
2	19.00 -47.07	16.40 -40.57	12.96 -31.98	10.36 -25.48	10.36 -25.48	10.36 -25.48
3	19.00 -47.1	16.40 -40.6	12.96 -32.0	10.36 -25.5	10.36 -25.5	10.36 -25.5
4	25.48 -27.64	24.33 -26.49	22.81 -24.97	21.66 -23.82	20.08 -22.68	19.00 -21.16
5	25.48 -34.11	24.33 -28.78	22.81 -31.82	21.66 -26.49	20.08 -24.19	19.00 -21.16



VCC BUILDING WIND LOADS (ROOF) COMPONENTS AND CLADDING

GENERAL NOTES

SHEET KEYNOTES

SHEET LEGEND

① = ZONE ONE

② = ZONE TWO

③ = ZONE THREE (OVERHANG)

US Army Corps of Engineers ®

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CONTRACT NO.: W912ZS23D6035

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HANA-KENALL 8A JV
2500 CITYWEST BLVD
SUITE 700
HOUSTON, TX 77042

ACCESS CONTROL POINT- PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

WIND LOADS + DIAGRAMS

SHEET ID
S-004

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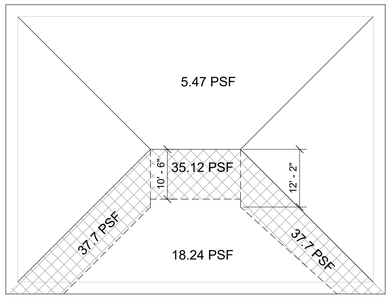
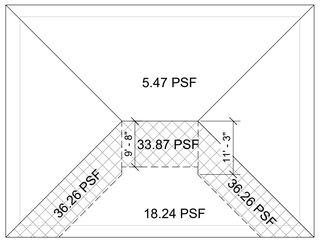
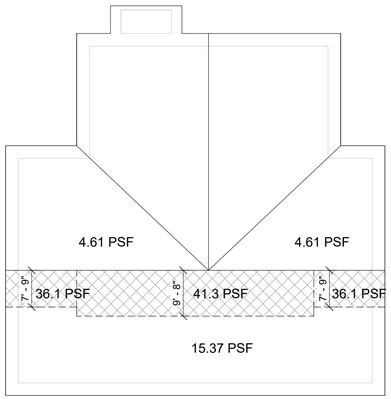


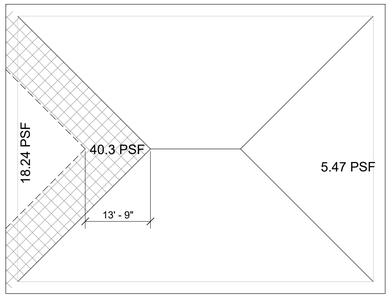
T-SEARCH SNOW DIAGRAM PLAN
(WIND FROM NORTH TO SOUTH)



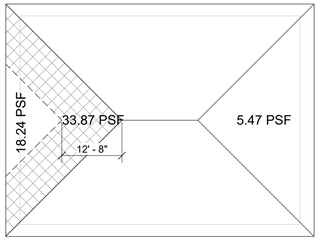
ID-CHECK SNOW DIAGRAM PLAN
(WIND FROM NORTH TO SOUTH)



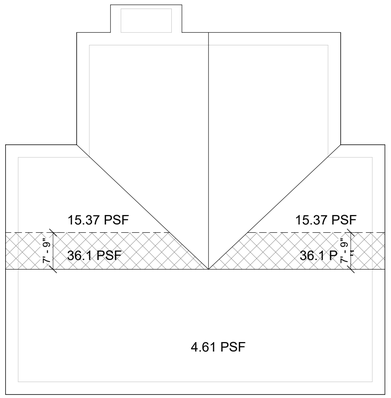
VCC BUILDING SNOW DIAGRAM PLAN
(WIND FROM NORTH TO SOUTH



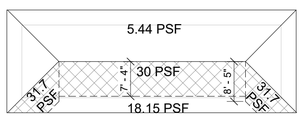
T-SEARCH SNOW DIAGRAM PLAN
(WIND FROM EAST TO WEST)



ID-CHECK SNOW DIAGRAM PLAN
(WIND FROM EAST TO WEST)

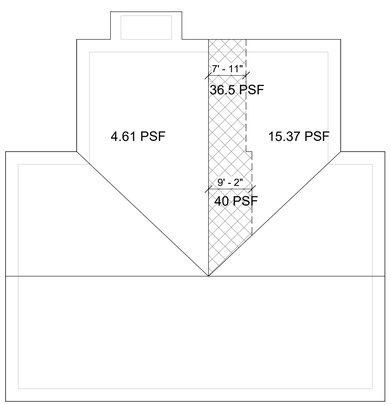


VCC BUILDING SNOW DIAGRAM PLAN
(WIND FROM SOUTH TO NORTH)



G-HOUSE SNOW DIAGRAM PLAN
(WIND FROM NORTH TO SOUTH)

G-HOUSE SNOW DIAGRAM PLAN
(WIND FROM EAST TO WEST)



VCC BUILDING SNOW DIAGRAM PLAN
(WIND FROM EAST TO WEST)

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SUBMITTED BY:	
DRW	
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US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HANA-KENALL 8A JV
2500 CITYWEST BLVD
SUITE 700
HOUSTON, TX 77042

ACCESS CONTROL POINT- PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

SNOW LOADS + DIAGRAMS

SHEET ID
S-005

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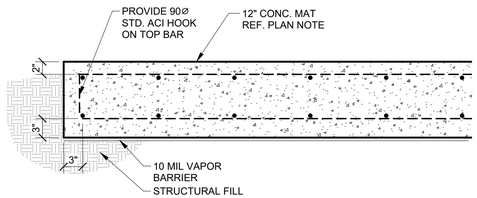
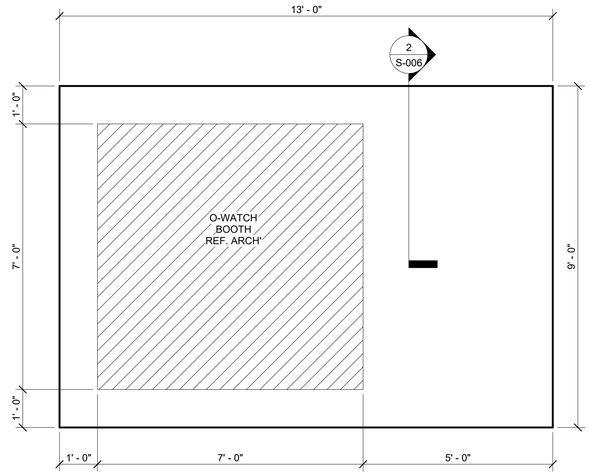
O-WATCH FOUNDATION SLAB NOTE

12" CONCRETE MAT SLAB TO BE REINFORCED W/
(2) LAYERS OF #5 @ 12"O.C., EACH WAY



2 SECTION-MAT SLAB @ O-WATCH

1" = 1'-0"



1 O-WATCH FOUNDATION PLAN

1/2" = 1'-0"

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DRW	W9127S23D6035
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DRW	
SIZE:	
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LITTLE ROCK DISTRICT
LITTLE ROCK, AR

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2500 CITYWEST BLVD
SUITE 700
HOUSTON, TX 77042

ACCESS CONTROL POINT- PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

OVER WATCH FOUNDATION PLAN + SECTION

SHEET ID
O-WATCH
S-006

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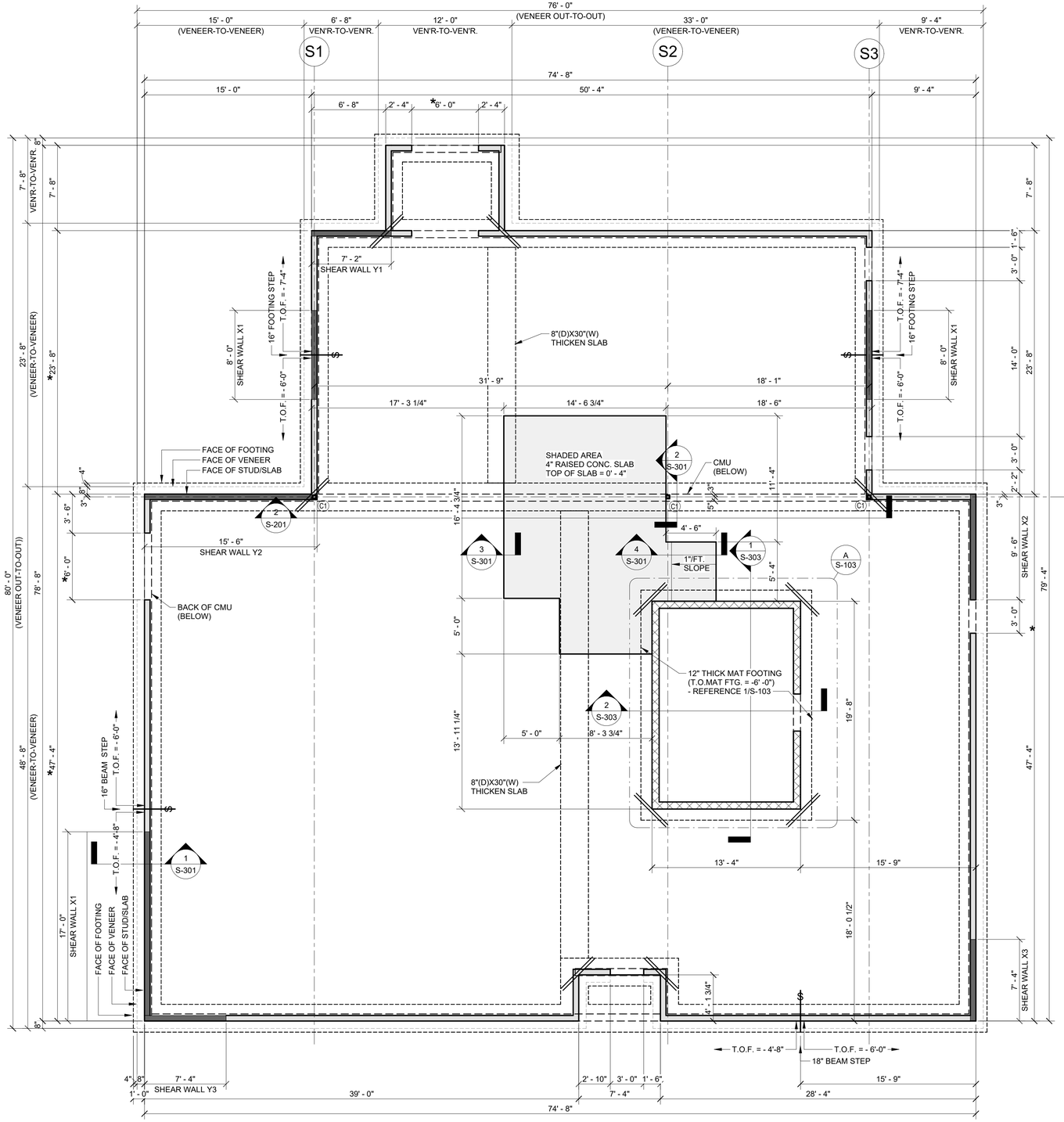

A VCC FOUNDATION PLAN

3/16" = 1'-0"

VCC FINISH FLOOR
TOP OF SLAB = 0' - 0"
(DATUM EL. 251.06)

PLAN NORTH

0 4' 8' 16'

GENERAL NOTES

CONCRETE SLAB NOTE

5" C.I.P. CONCRETE SLAB TO BE REINFORCED W/ #4 @ 16"O.C., EACH WAY

ARCHITECTURAL DIMENSION NOTE

* = REFERECHE ARCHITECTUAL FOR DIMESION

FROST DEPTH = 12"

SHEET KEYNOTES

SHEET LEGEND

STEEL COLUMN NOTE

C1 = HSS 3 1/2X3 1/2X1/4

CORNER BAR NOTE

= (2) #4 X 48" LG. CORNER BARS 2" BELOW TOP OF SLAB

FOOTING STEP NOTE

= REFERENCE PLAN FOR FOOTING STEP DEPTH AND REFERENCE TYPICAL FOOTING STEP DETAIL 13/S003 FOR REINFORCING

SHEAR WALL NOTE

= SHEAR WALL REF. PLAN FOR LENGTH AND SEE TYPICAL DETAIL AND STRAP SCHEDULE SHEET S-003.

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ACCESS CONTROL POINT- PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

FOUNDATION PLAN

SHEET ID
VCC
S-101

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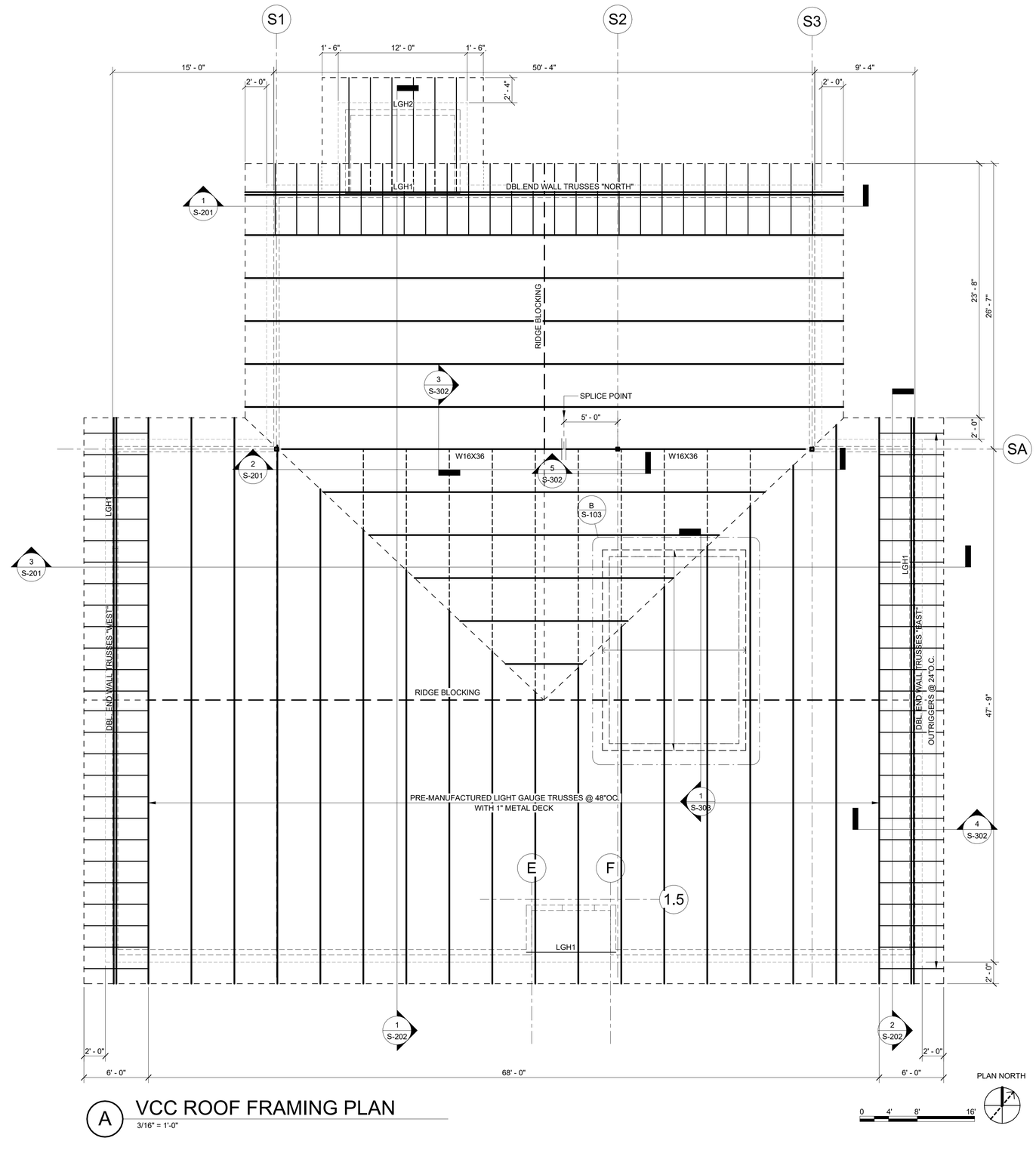

A VCC ROOF FRAMING PLAN

3/16" = 1'-0"

GENERAL NOTES

ROOF FRAMING + DECK NOTE

1"-18GA. METAL DECK SUPPORTED ON LIGHT GAGE METAL PRE-FABRICATED TRUSSES @ 48"OC.

LIGHT GAUGE HEADER SIZE NOTE

LGH1 = (2) 1000S162-68 (50 ksi) WITH
(2) 600T125-86 TRACKS TOP & BOTTOM

LGH2 = (2) 1000S162-68 (50 ksi) WITH
(2) 600T150-97 TRACKS TOP & BOTTOM

SHEET KEYNOTES

SHEET LEGEND

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US ARMY CORPS OF ENGINEERS
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ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

ROOF FRAMING PLAN

SHEET ID
VCC
S-102

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Plot Date: 4/14/2026 12:10:17 PM

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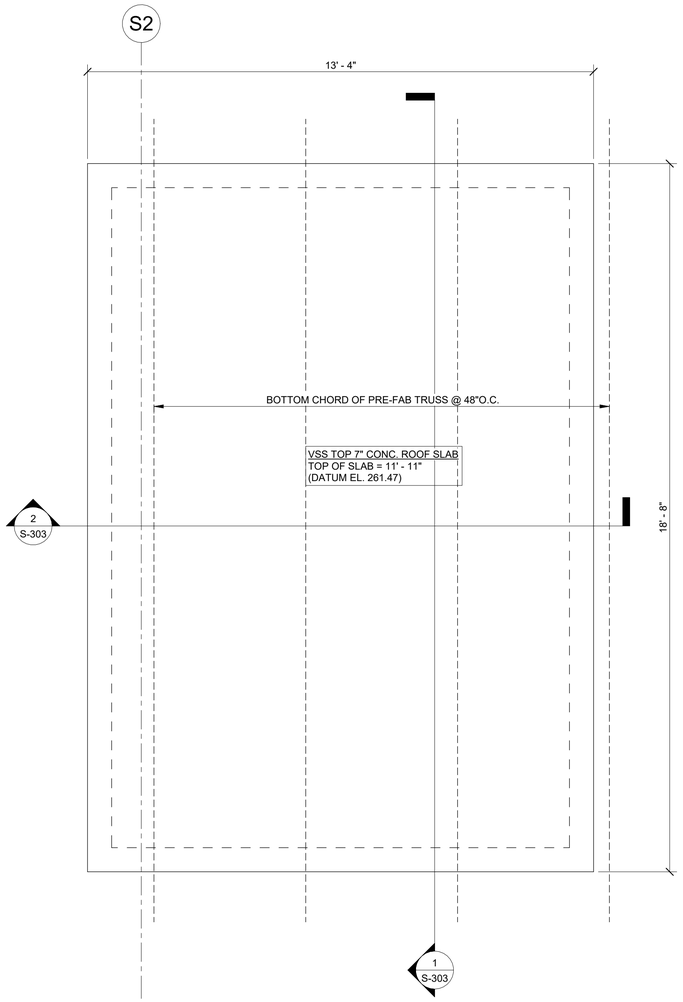
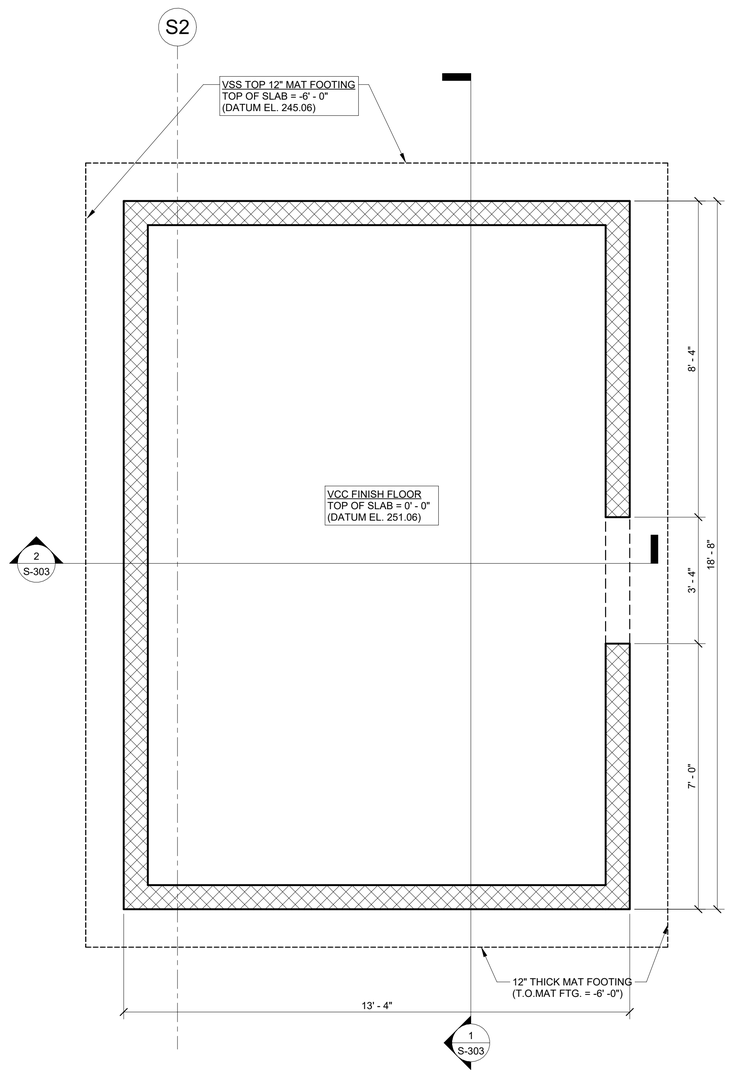


B VCC ENLARGED STORM SHELTER ROOF PLAN

1/2" = 1'-0"



A VCC ENGLARGED STORM SHELTER FOUNDATION PLAN

1/2" = 1'-0"

PLAN NORTH

0 4' 8' 16'

GENERAL NOTES

SHELTER CONCRETE MAT FOOTING NOTE

12" C.I.P. CONCRETE MAT TO BE REINFORCED W/
#5 @ 12"O.C., TOP AND BOTTOM, EACH WAY

SHELTER CONCRETE ROOF SLAB NOTE

7" C.I.P. CONCRETE SLAB TO BE REINFORCED W/
(2) LAYERS OF #4 @ 6"O.C., TOP AND BOTTOM.

SHELTER CMU WALL NOTE

8" CMU WALL FULLY GROUTED WITH #4 @ 8"O.C. (VERTICALLY)
AND #4 @ 16"O.C. (HORIZONTALLY)

SHEET KEYNOTES

SHEET LEGEND

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: DRW / KS
DRAWN BY: SEC
CHECKED BY: DRW
SUBMITTED BY: DRW
SIZE: ANSI D

ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W912TS24F6002
CONTRACT NO.: W912TS23D6035

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HANA-KENALL 8A JV
2500 CITYWEST BLVD
SUITE 700
HOUSTON, TX 77042

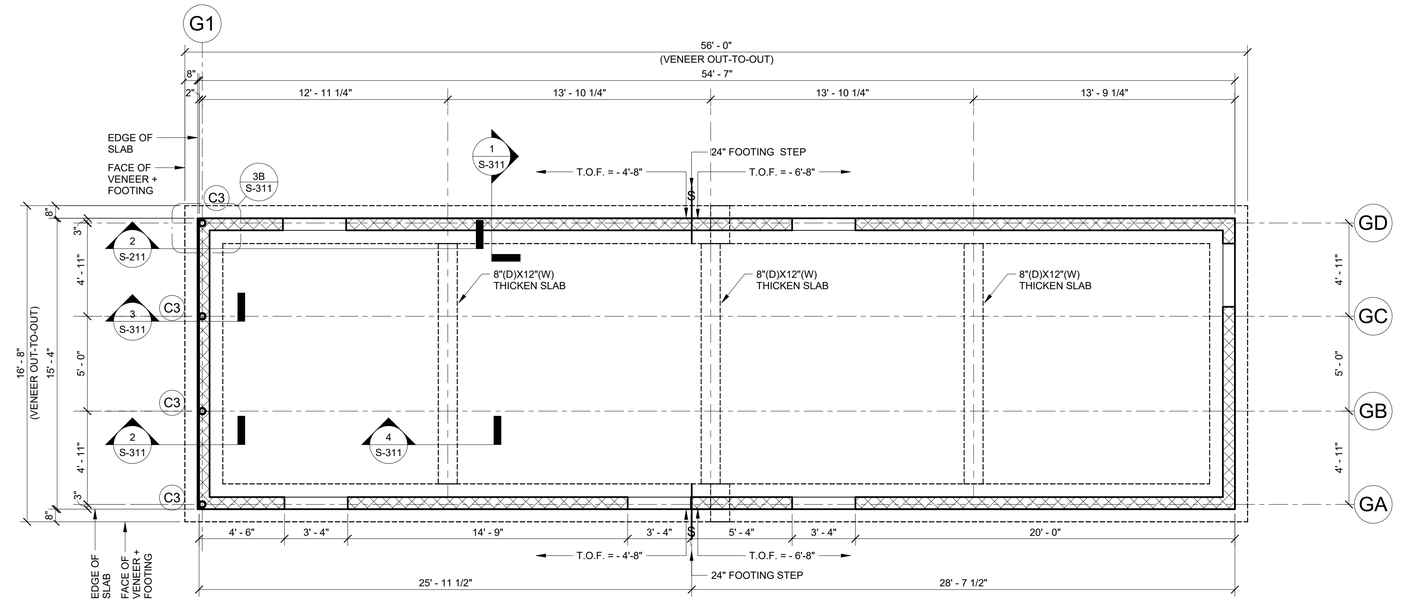
ACCESS CONTROL POINT- PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

ENLARGED STORM SHELTER PLAN

SHEET ID
VCC
S-103

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

Plot Date: 4/14/2026 12:10:17 PM File Path: Autodesk Docs://RVT 23/VCC Building.rvt



A G-HOUSE FOUNDATION PLAN

1/4" = 1'-0"

GATEHOUSE FINISH FLOOR
TOP OF SLAB = 0' - 0"
(DATUM EL. 249.00)

PLAN NORTH

0 4' 8' 16'

GENERAL NOTES

CONCRETE SLAB NOTE

5" C.I.P. CONCRETE SLAB TO BE REINFORCED W/ #4 @ 12"O.C., EACH WAY

FROST DEPTH = 12"

SHEET KEYNOTES

SHEET LEGEND

STEEL COLUMN NOTE

C3 = HSS 4.00X0.313 (ROUND)

FOOTING STEP NOTE

= REFERENCE PLAN FOR FOOTING STEP DEPTH AND REFERENCE TYPICAL FOOTING STEP DETAIL 13/S003 FOR REINFORCING

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: DRW / KS
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SIZE: ANSI D

ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D6035

Plot Date: 4/14/2026 12:11:30 PM File Path: Autodesk Docs://RVT 23/Gatehouse.rvt

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

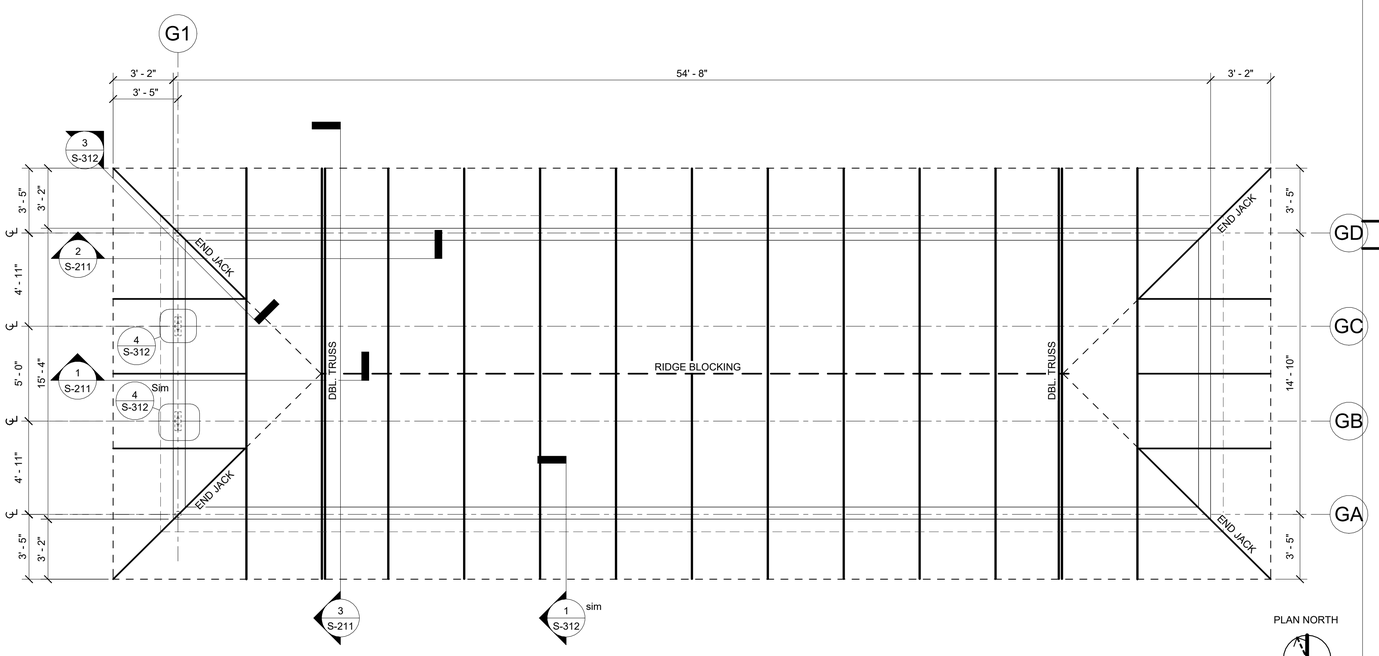
HANA-KENALL 8A JV
2500 CITYWEST BLVD
SUITE 700
HOUSTON, TX 77042

ACCESS CONTROL POINT- PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

FOUNDATION PLAN

SHEET ID
G-HOUSE
S-111

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



A G-HOUSE ROOF FRAMING PLAN
1/4" = 1'-0"

0 4' 8' 16'

PLAN NORTH

GENERAL NOTES

ROOF FRAMING + DECK NOTE

1"-18GA. METAL DECK SUPPORTED ON LIGHT GAGE METAL PRE-FABRICATED TRUSSES @ 48"OC.

SHEET KEYNOTES

SHEET LEGEND

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: DRW / KS
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SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D6035

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HANA-KENALL 8A JV
2500 CITYWEST BLVD
SUITE 700
HOUSTON, TX 77042

ACCESS CONTROL POINT- PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

FRAMING PLAN

SHEET ID
G-HOUSE
S-112

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

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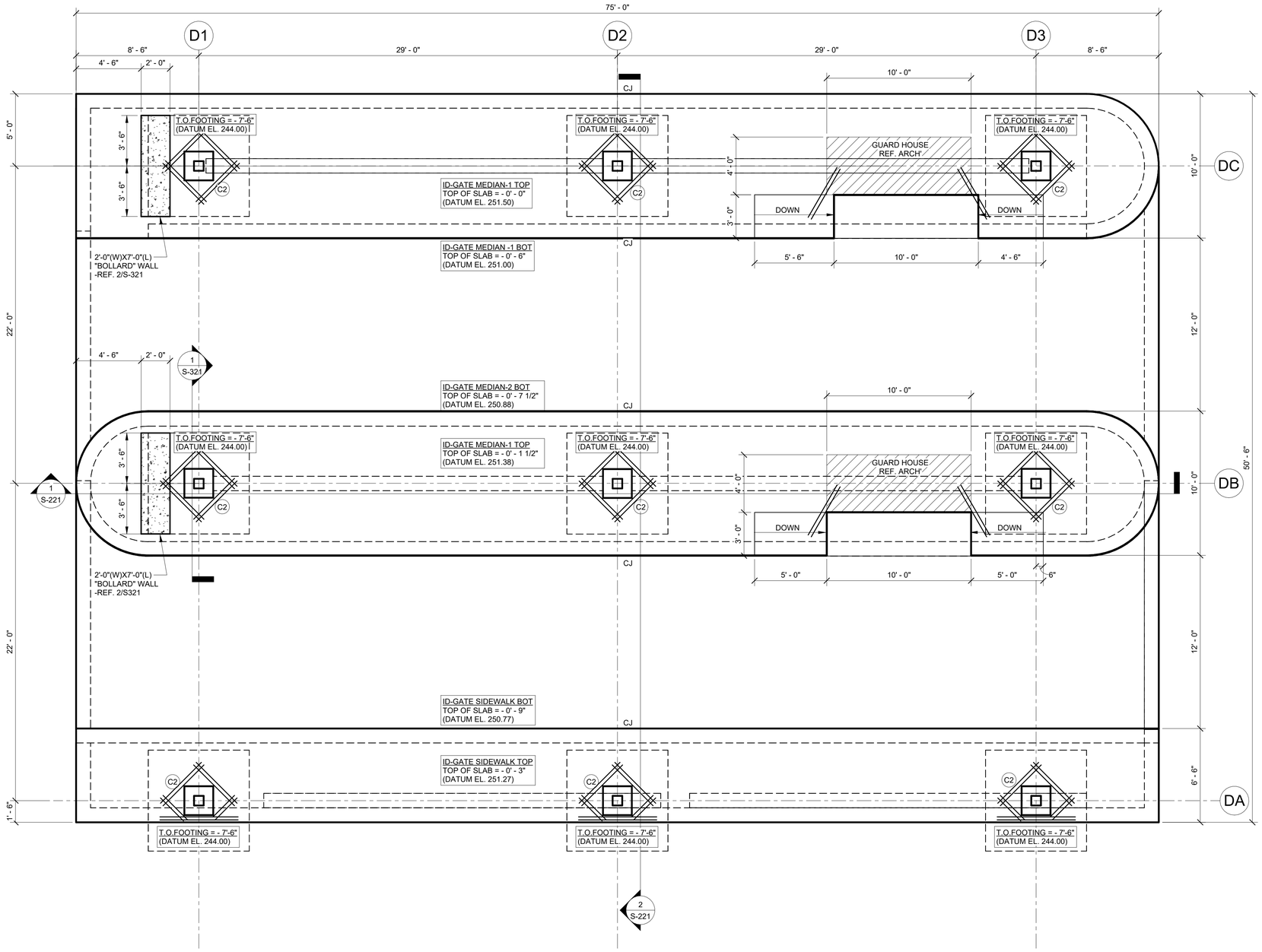

A ID-CHECK FOUNDATION PLAN

1/4" = 1'-0"

PLAN NORTH

0 4' 8' 16'

GENERAL NOTES

CONCRETE SLAB NOTE

6" C.I.P. CONCRETE SLAB TO BE REINFORCED W/ #4 @ 16"O.C., EACH WAY

FROST DEPTH = 12"

SHEET KEYNOTES

SHEET LEGEND

STEEL COLUMN NOTE

C2 = HSS 8X8X5/16

CORNER BAR NOTE

= (2) #4 X 48" LG. CORNER BARS 2" BELOW TOP OF SLAB

CJ = CONTROL JOINT

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

File Path: Autodesk Docs://RVT 23/ID-CHECK.rvt

Plot Date: 4/14/2026 12:18:03 PM

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DRAWN BY: SEC
CHECKED BY: DRW
SUBMITTED BY: DRW
SIZE: ANSI D

ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W912TS24F6002
CONTRACT NO.: W912TS23D6035

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

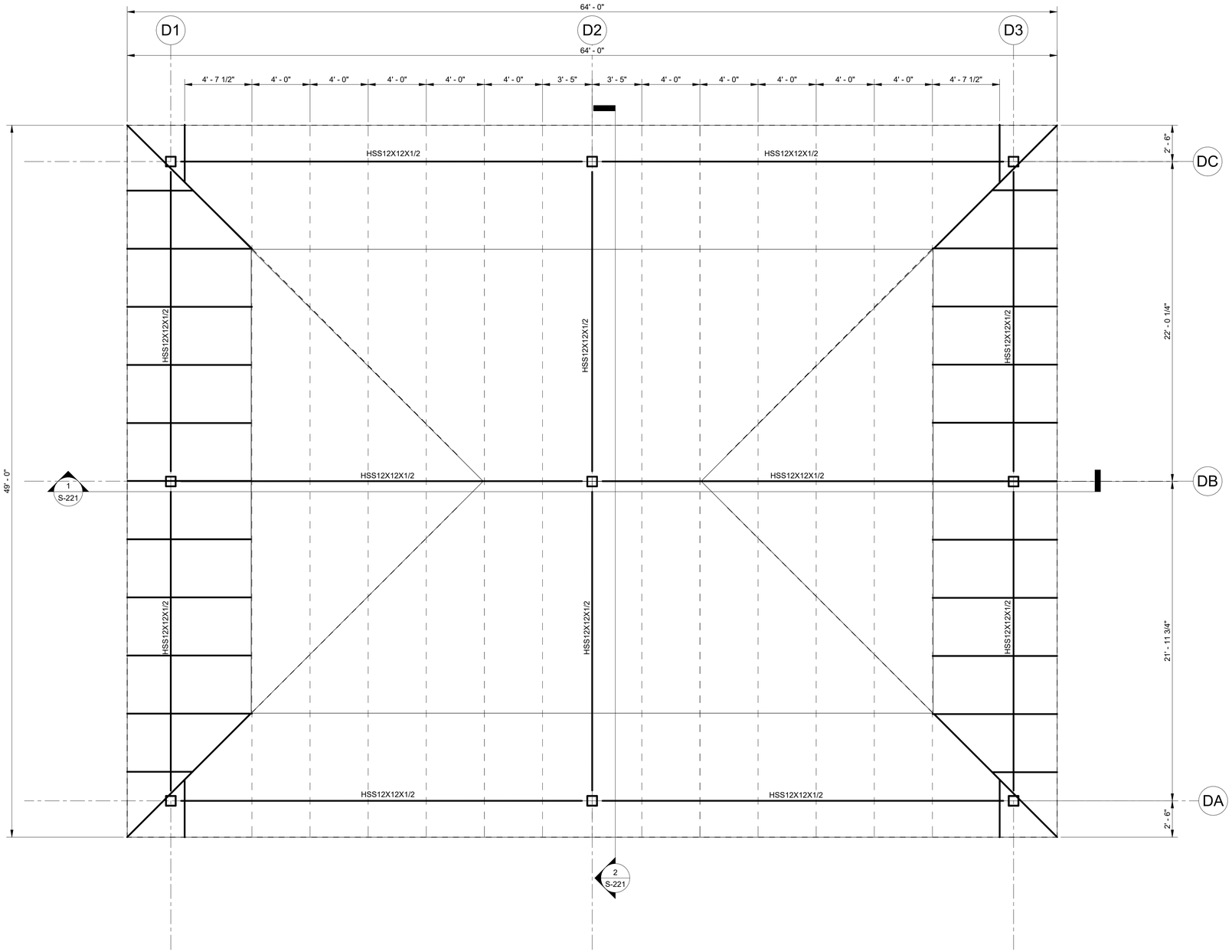
HANA-KENALL 8A JV
2500 CITYWEST BLVD
SUITE 700
HOUSTON, TX 77042

ACCESS CONTROL POINT- PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

FOUNDATION PLAN

SHEET ID
ID-CHECK
S-121

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



A ID-CHECK ROOF FRAMING PLAN
1/4" = 1'-0"

PLAN NORTH

0 4' 8' 16'

GENERAL NOTES

ROOF FRAMING + DECK NOTE

1"-18GA. METAL DECK SUPPORTED ON LIGHT GAGE METAL PRE-FABRICATED TRUSSES @ 48"OC.

SHEET KEYNOTES

SHEET LEGEND

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MARK	DESCRIPTION	DATE

DESIGNED BY:	ISSUE DATE:
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SEC	W9127S24F6002
CHECKED BY:	CONTRACT NO.:
DRW	W9127S23D6035
SUBMITTED BY:	
DRW	
SIZE:	
ANSI D	

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HANA-KENALL 8A JV
2500 CITYWEST BLVD
SUITE 700
HOUSTON, TX 77042

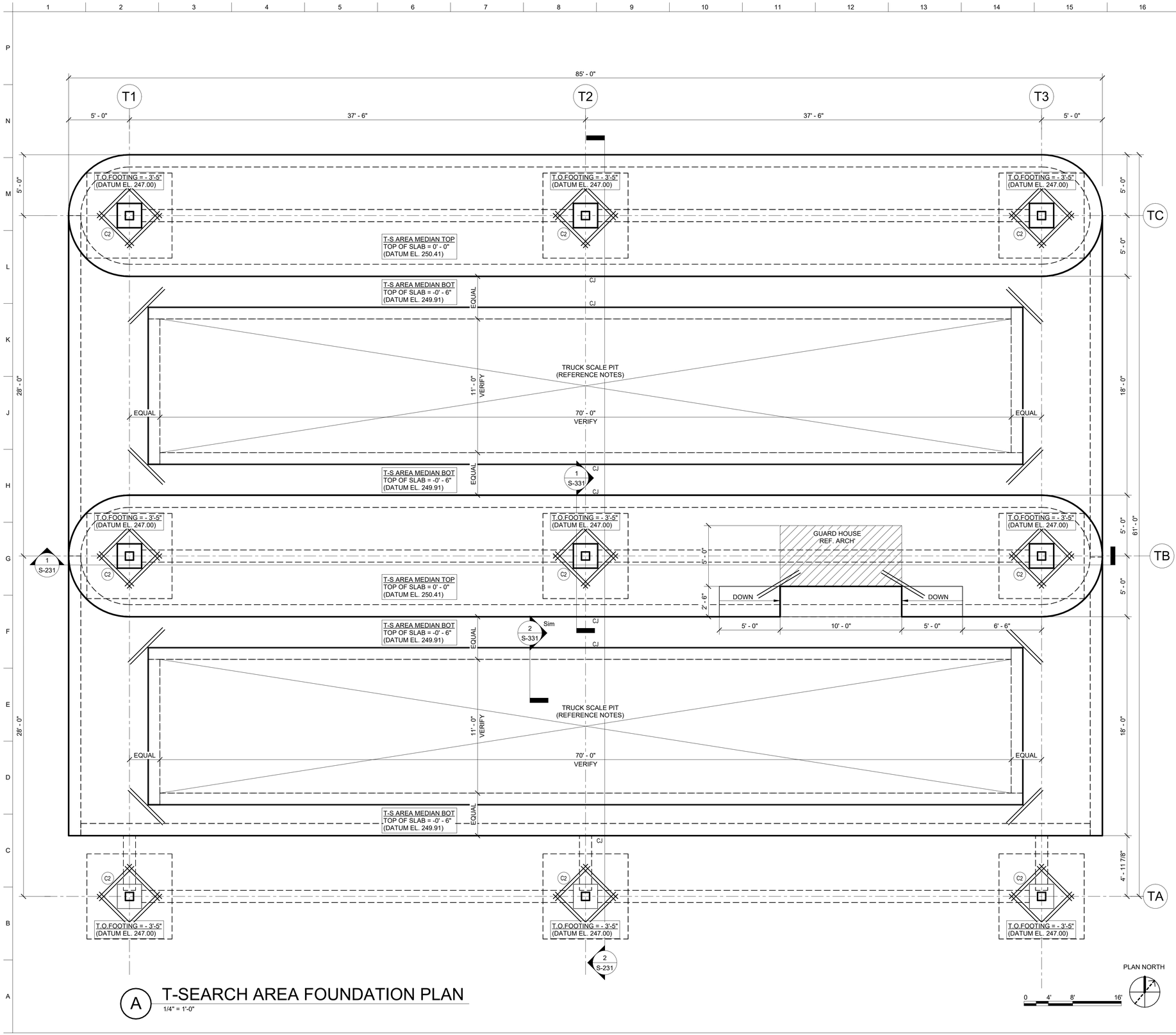
ACCESS CONTROL POINT- PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

ROOF FRAMING PLAN

SHEET ID
ID-CHECK
S-122

Plot Date: 4/14/2026 12:18:03 PM File Path: Autodesk Docs://RVT 23/ID-CHECK.rvt

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



A T-SEARCH AREA FOUNDATION PLAN

1/4" = 1'-0"

GENERAL NOTES

CONCRETE SLAB NOTE

6" C.I.P. CONCRETE SLAB TO BE REINFORCED W/ #4 @ 16"O.C., EACH WAY

TRUCK SCALE NOTES:

1. TYPE OF SCALE: WEIGHBRIDGE – SINGLE DECK
2. INSTALLATION TYPE:PIT-MOUNTED
3. MINIMUM SIZE - LENGTH X WIDTH: 70'.X 11' (VERIFY WITH MANUFACTURER)
4. MAXIMUM GROSS CAPACITY REQUIRED: 135 TONS
5. FREQUENCY OF WEIGHS: 5 TRUCKS PER DAY
6. DECK MATERIAL PREFERENCE IS TO BE CONCRETE
7. WEIGHT PROCESS TO BE MANNED
8. GENERAL CONTRACTOR REQUIRED TO INCLUDE A WARRANTY AND MAINTENANCE FOR 12 MONTHS FROM FINAL ACCEPTANCE

FROST DEPTH = 12"

SHEET KEYNOTES

SHEET LEGEND

STEEL COLUMN NOTE

C2 = HSS 8X8X5/16

CORNER BAR NOTE

= (2) #4 X 48" LG. CORNER BARS 2" BELOW TOP OF SLAB

CJ = CONTROL JOIST

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: DRW / KS
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CHECKED BY: DRW
SUBMITTED BY: DRW
SIZE: ANSI D
ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D6035

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HANA-KENALL 8A JV
2500 CITYWEST BLVD
SUITE 700
HOUSTON, TX 77042

ACCESS CONTROL POINT- PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

FOUNDATION PLAN

SHEET ID
T-SEARCH
S-131

File Path: Autodesk Docs://RVT 23/T-SEARCH AREA.rvt
Plot Date: 4/14/2026 12:21:11 PM

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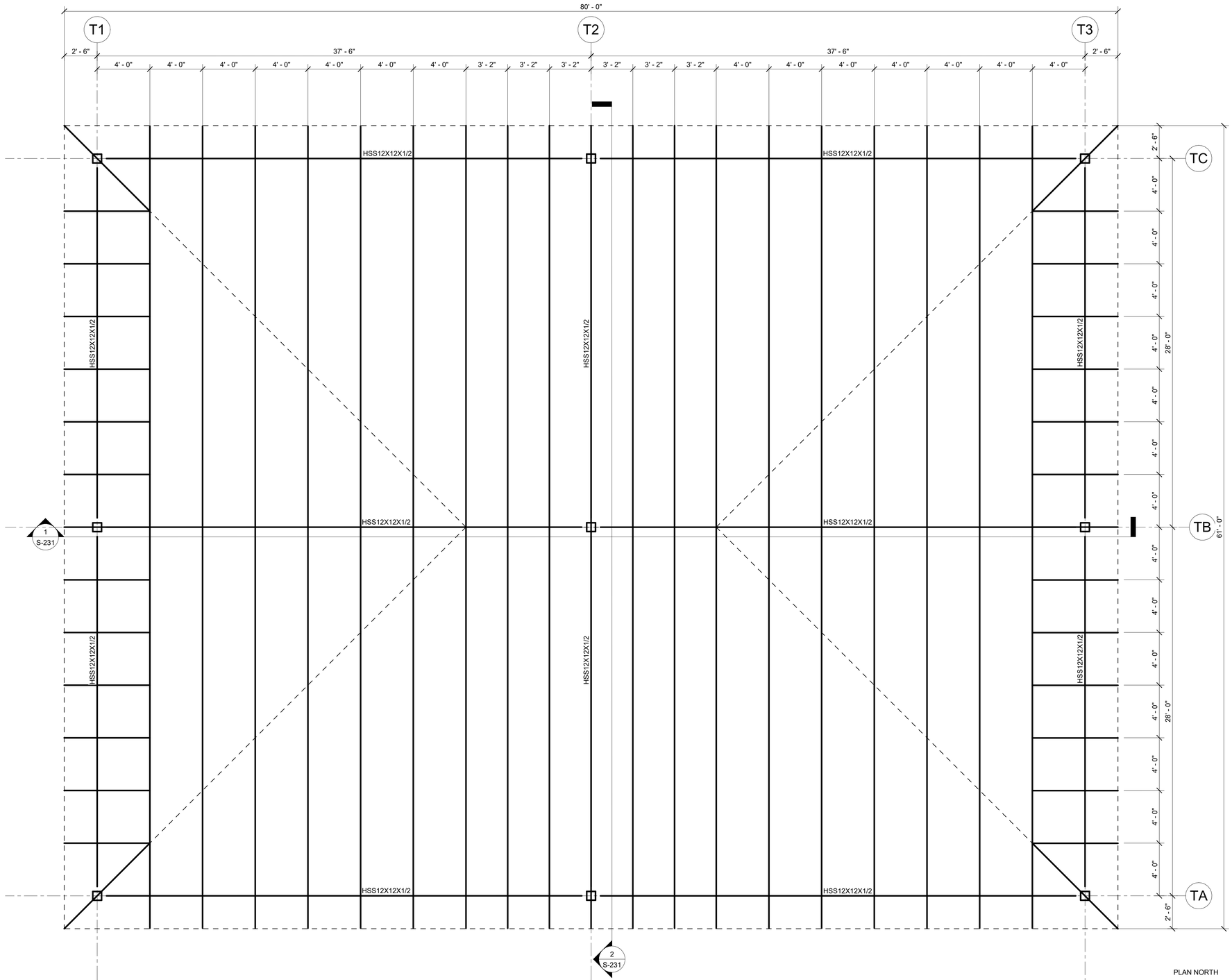

A T-SEARCH AREA ROOF FRAMING PLAN

1/4" = 1'-0"

GENERAL NOTES

ROOF FRAMING + DECK NOTE

1"-18GA. METAL DECK SUPPORTED ON LIGHT GAGE METAL PRE-FABRICATED TRUSSES @ 48"OC.

SHEET KEYNOTES

SHEET LEGEND

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MARK	DESCRIPTION	DATE

DESIGNED BY: DRW / KS
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CHECKED BY: DRW
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SIZE: ANSI D

ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D6035

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HANA-KENALL 8A JV
2500 CITYWEST BLVD
SUITE 700
HOUSTON, TX 77042

ACCESS CONTROL POINT- PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

ROOF FRAMING PLAN

SHEET ID
T-SEARCH
S-132

File Path: Autodesk Docs://RVT 23/T-SEARCH AREA.rvt
Plot Date: 4/14/2026 12:21:12 PM

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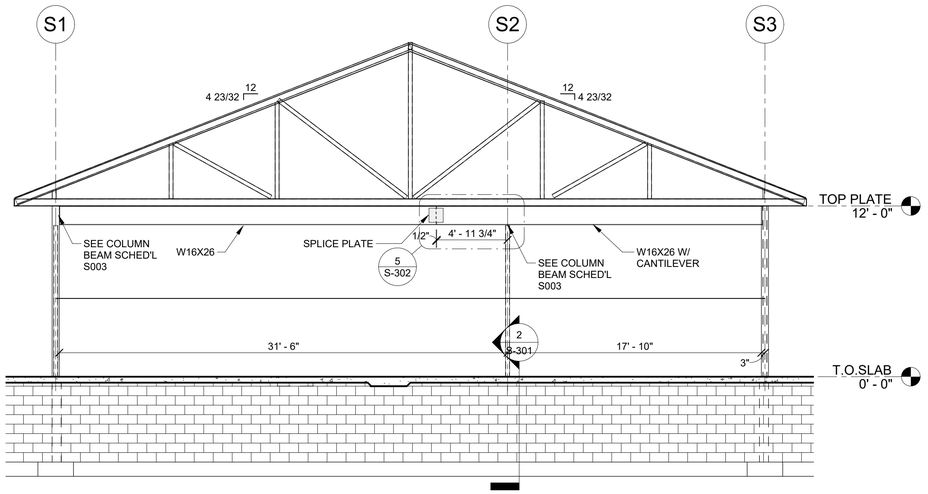
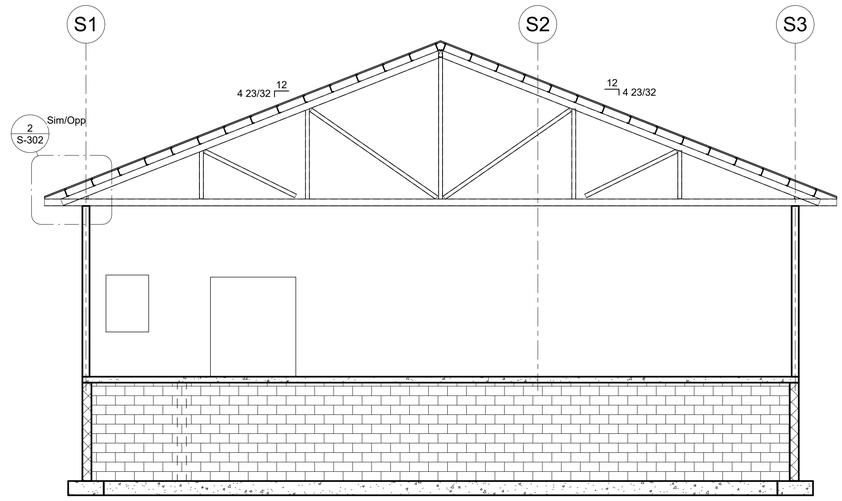


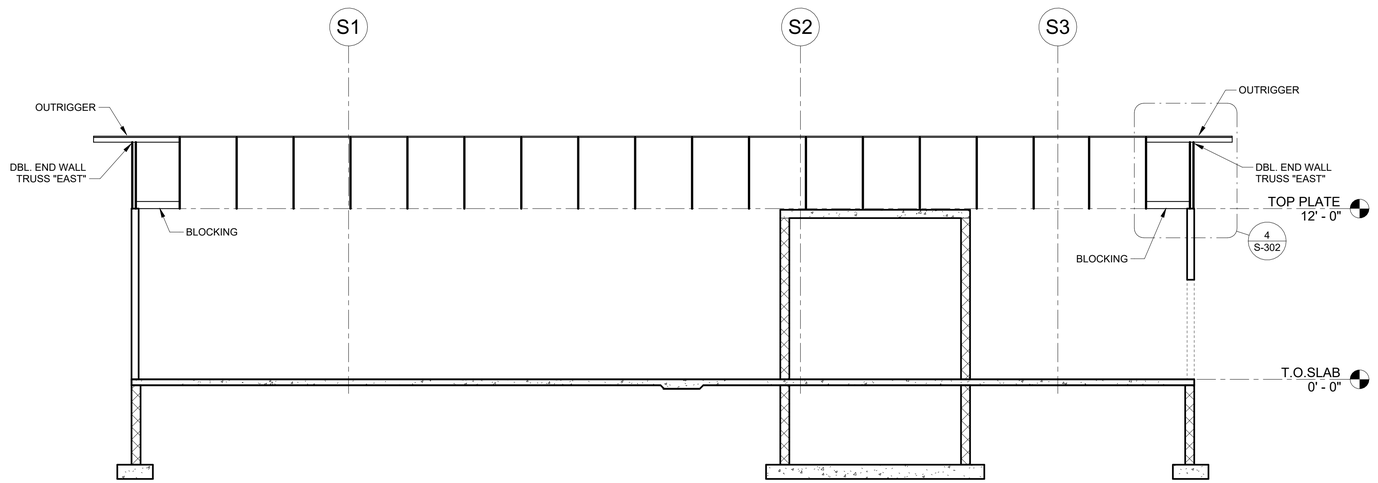
2 BLDG SECTION EAST/WEST @ BEAM

3/16" = 1'-0"



1 BLDG SECTION - NORTH END WALL TRUSS

3/16" = 1'-0"



3 BLDG SECTION EAST/WEST

3/16" = 1'-0"

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: DRW / KS
DRAWN BY: SEC
CHECKED BY: DRW
SUBMITTED BY: DRW
SIZE: ANSI D

ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W912ZS24F6002
CONTRACT NO.: W912ZS23D6035

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HANA-KENALL 8A JV
2500 CITYWEST BLVD
SUITE 700
HOUSTON, TX 77042

ACCESS CONTROL POINT- PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

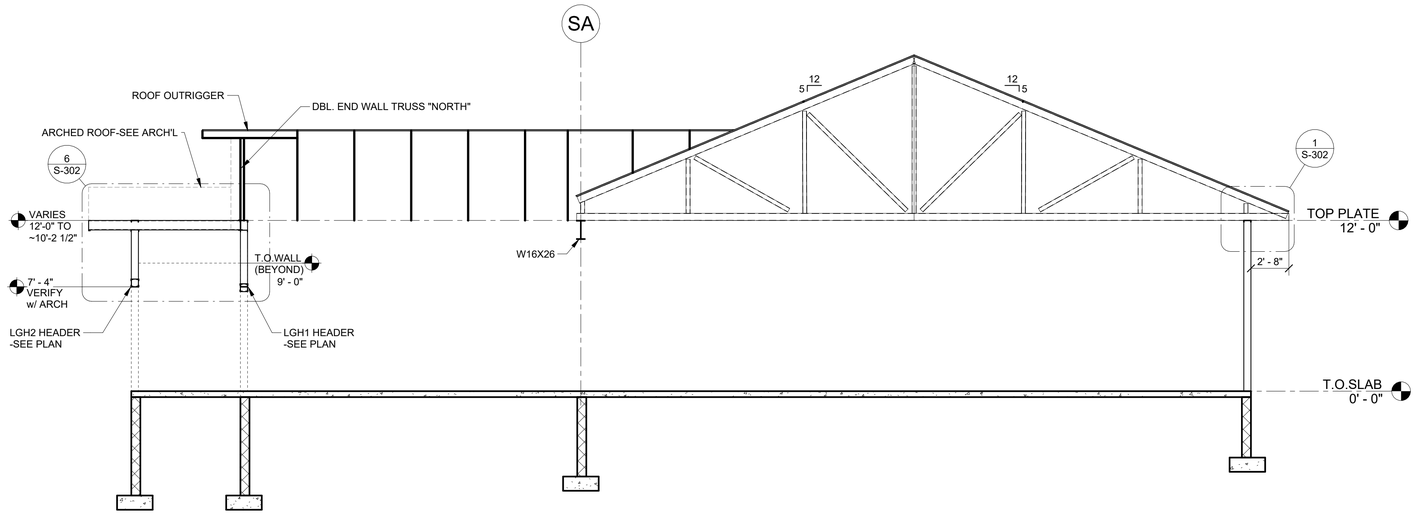
BUILDING SECTIONS

SHEET ID
VCC
S-201

File Path: Autodesk Docs://RVT 23/VCC Building.rvt

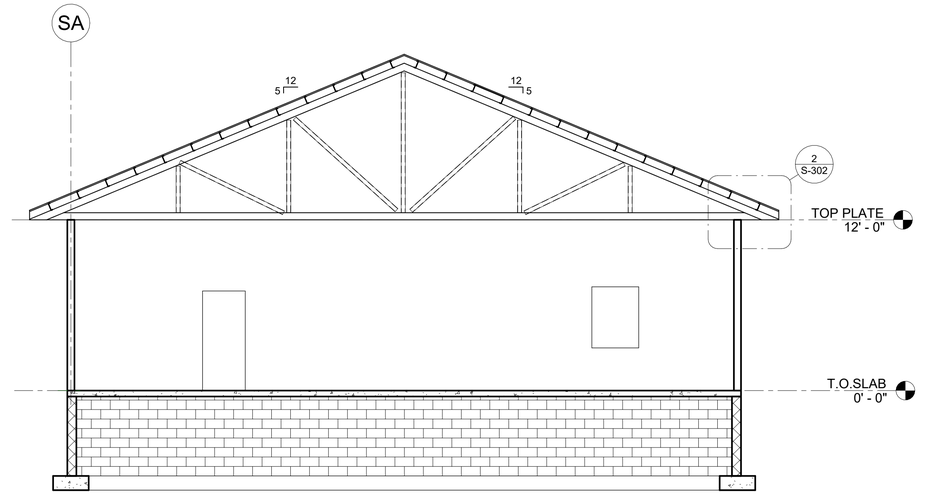
Plot Date: 4/14/2026 12:10:18 PM

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



1 BLDG SECTION NORTH/SOUTH

3/16" = 1'-0"



2 BLDG SECTION - EAST/WEST END WALL TRUSS

3/16" = 1'-0"

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: DRW / KS
DRAWN BY: SEC
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SUBMITTED BY: DRW
SIZE: ANSI D
ISSUE DATE: 17 APRIL 2026
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CONTRACT NO.: W912TS23D6035

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US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

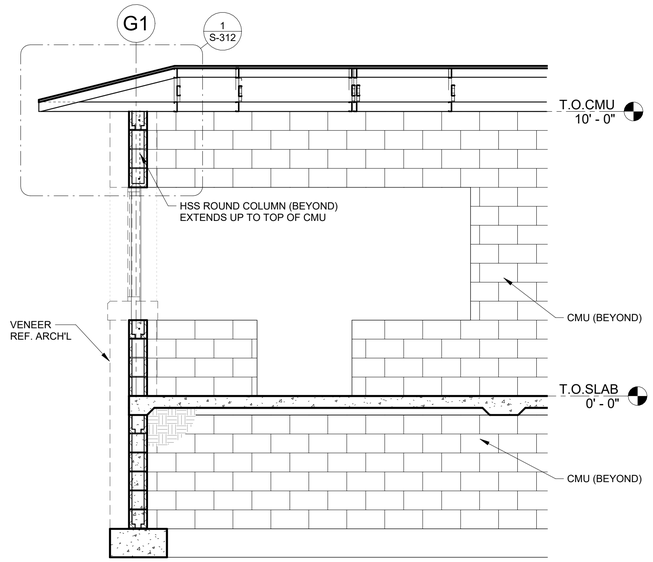
HANA-KENALL 8A JV
2500 CITYWEST BLVD
SUITE 700
HOUSTON, TX 77042

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

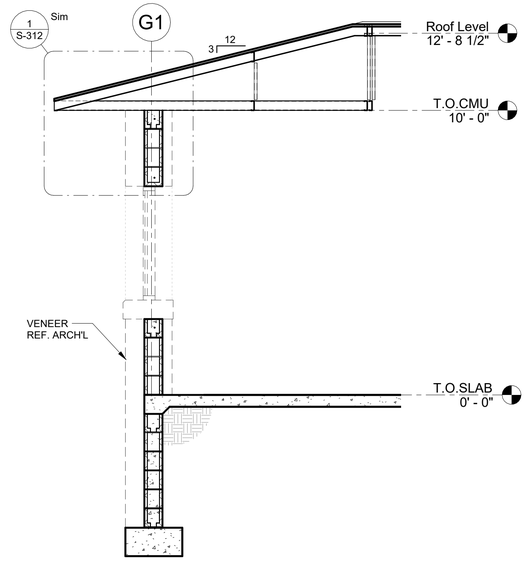
BUILDING SECTIONS

SHEET ID
VCC
S-202

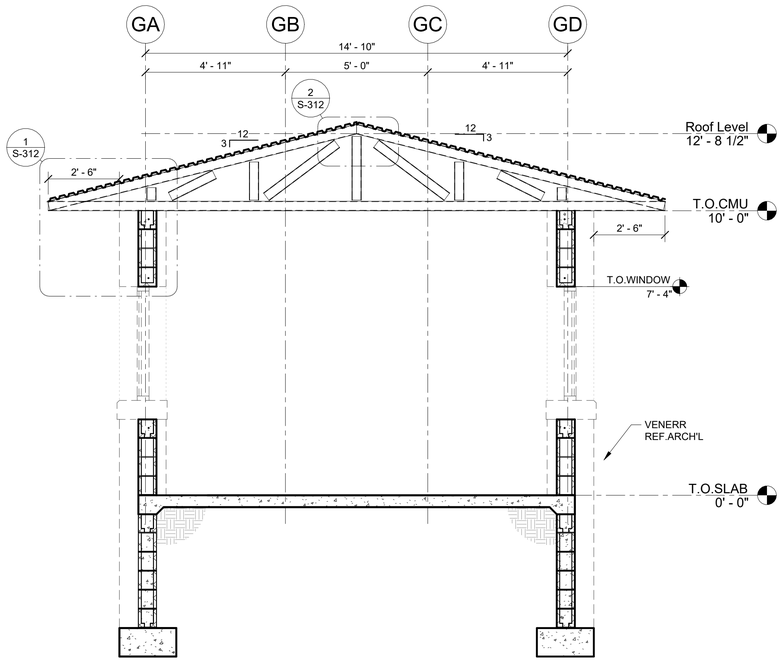
CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



2 END SECTION 2
3/8" = 1'-0"



1 END SECTION 1
3/8" = 1'-0"



3 THRU SECTION 1
3/8" = 1'-0"

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: DRW / KS
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SOLICITATION NO.: W912TS24F6002
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US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

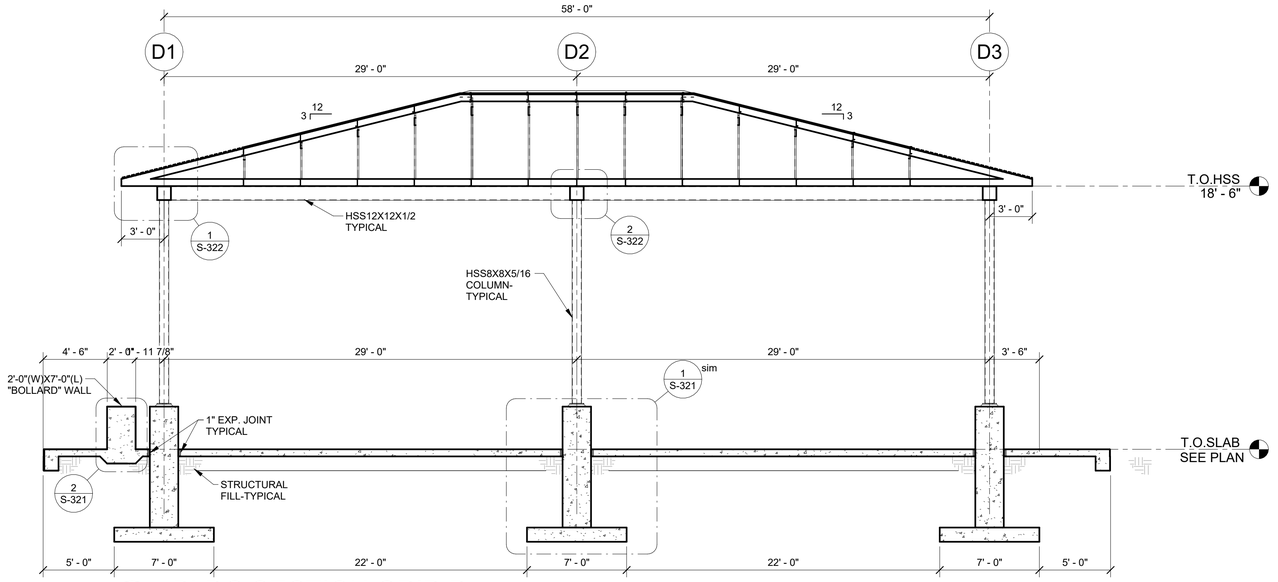
HANA-KENALL 8A JV
2500 CITYWEST BLVD
SUITE 700
HOUSTON, TX 77042

ACCESS CONTROL POINT- PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

BUILDING SECTIONS

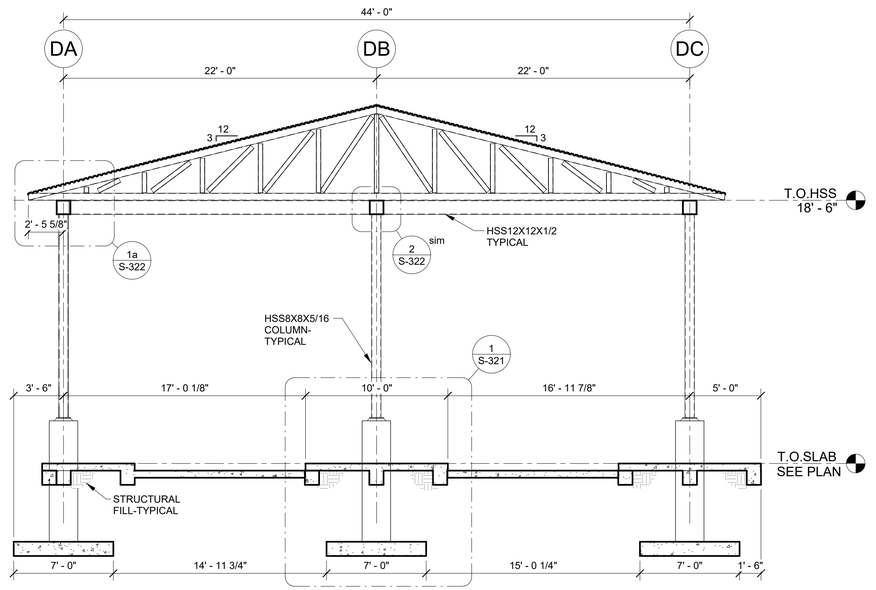
SHEET ID
G-HOUSE
S-211

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



1 BLDG SECTION GRID B

3/16" = 1'-0"



2 BLDG SECTION GRID 2

3/16" = 1'-0"

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY:	ISSUE DATE:
DRW / KS	17 APRIL 2026
DRAWN BY:	SOLICITATION NO.:
SEC	W9127S24F6002
CHECKED BY:	CONTRACT NO.:
DRW	W9127S23D6035
SUBMITTED BY:	
DRW	
SIZE:	
ANSI D	

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HANA-KENALL 8A JV
2500 CITYWEST BLVD
SUITE 700
HOUSTON, TX 77042

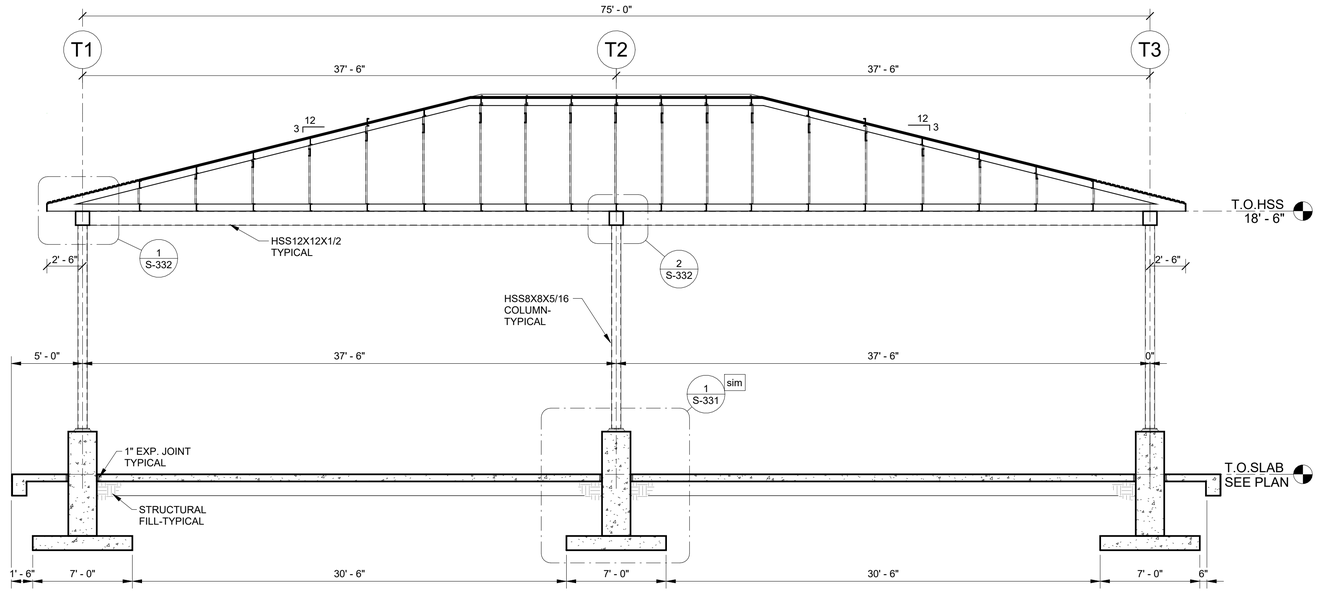
ACCESS CONTROL POINT- PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

BUILDING SECTIONS

SHEET ID
ID-CHECK
S-221

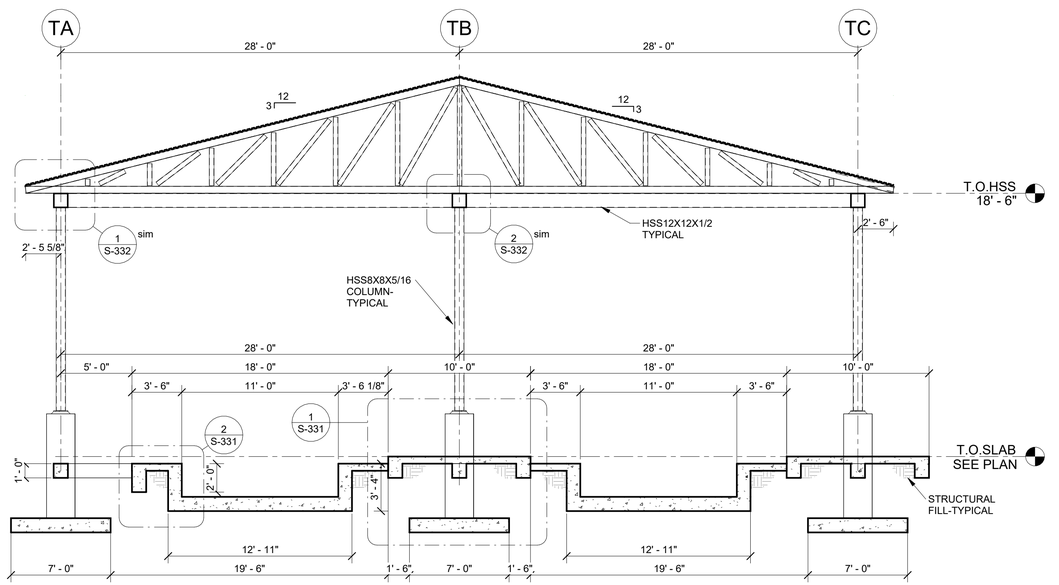
Plot Date: 4/14/2026 12:18:03 PM File Path: Autodesk Docs://RVT 23/ID-CHECK.rvt

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



1 BLDG SECTION GRID B

3/16" = 1'-0"



2 BLDG SECTION GRID 2

3/16" = 1'-0"

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: DRW / KS
DRAWN BY: SEC
CHECKED BY: DRW
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ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W912TS24F6002
CONTRACT NO.: W912TS23D6035

Plot Date: 4/14/2026 12:21:12 PM File Path: Autodesk Docs://RVT 23/T-SEARCH AREA.rvt

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

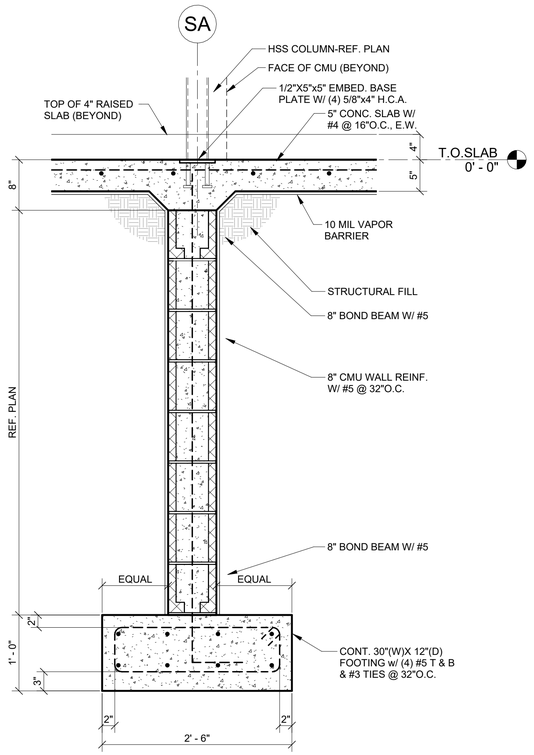
HANA-KENALL 8A JV
2500 CITYWEST BLVD
SUITE 700
HOUSTON, TX 77042

ACCESS CONTROL POINT- PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

BUILDING SECTIONS

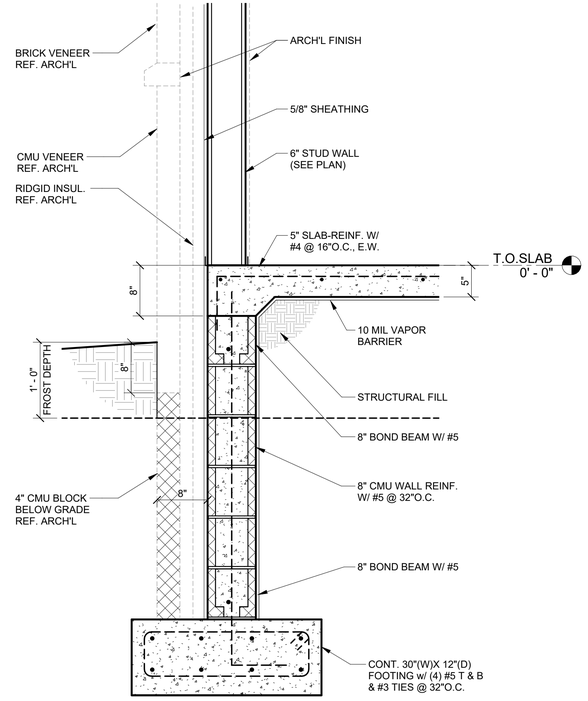
SHEET ID
T-SEARCH
S-231

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



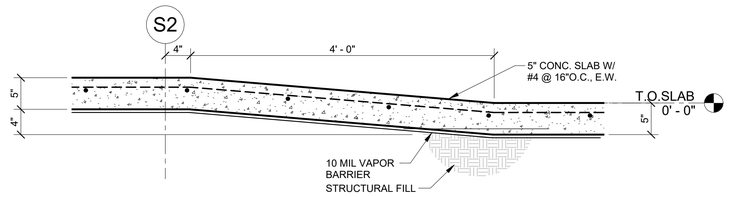
2 TYPICAL INTERIOR COLUMN SECTION

1" = 1'-0"



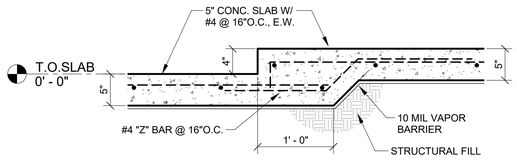
1 TYPICAL EXTERIOR SECTION

1" = 1'-0"



4 SECTION @ PROCESSING SLOPED SLAB

1" = 1'-0"



3 SECTION @ PROCESSING RAISED SLAB

1" = 1'-0"

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: DRW / KS
DRAWN BY: SEC
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SUBMITTED BY: DRW
SIZE: ANSI D
ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D6035

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HANA-KENALL 8A JV
2500 CITYWEST BLVD
SUITE 700
HOUSTON, TX 77042

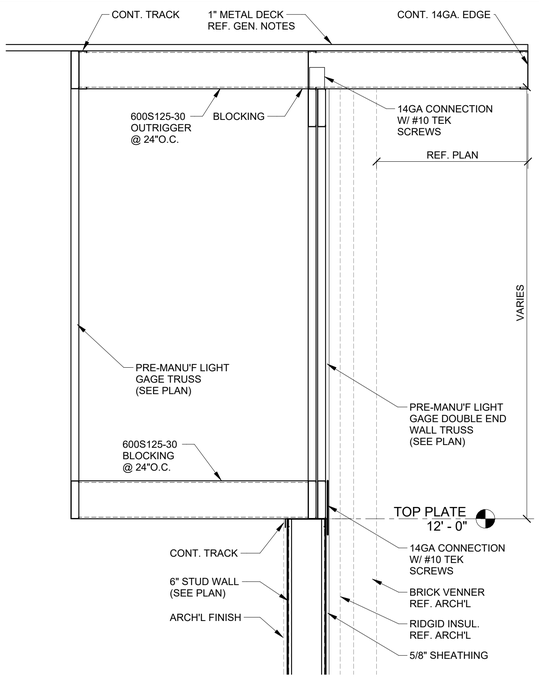
ACCESS CONTROL POINT- PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

FOUNDATION SECTIONS + DETAILS

SHEET ID
VCC
S-301

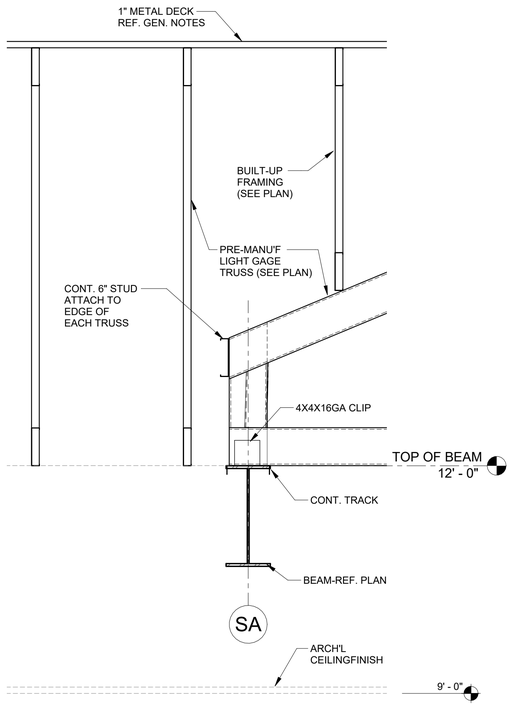
CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

Plot Date: 4/14/2026 12:10:18 PM File Path: Autodesk Docs://RVT 23/VCC Building.rvt



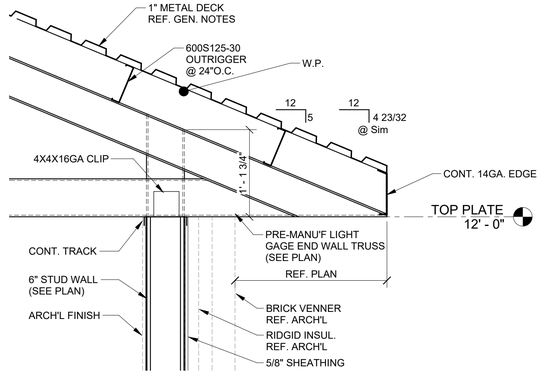
4 OUTRIGGER OVER DOUBLE TRUSS

1" = 1'-0"



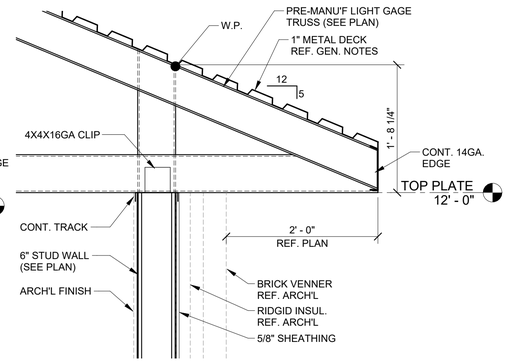
3 TRUSS ON BEAM AT GRID S1

1" = 1'-0"



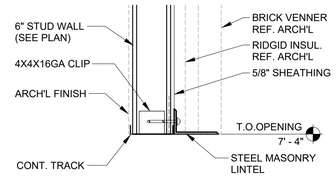
2 END WALL TRUSS OUTRIGGERS

1" = 1'-0"



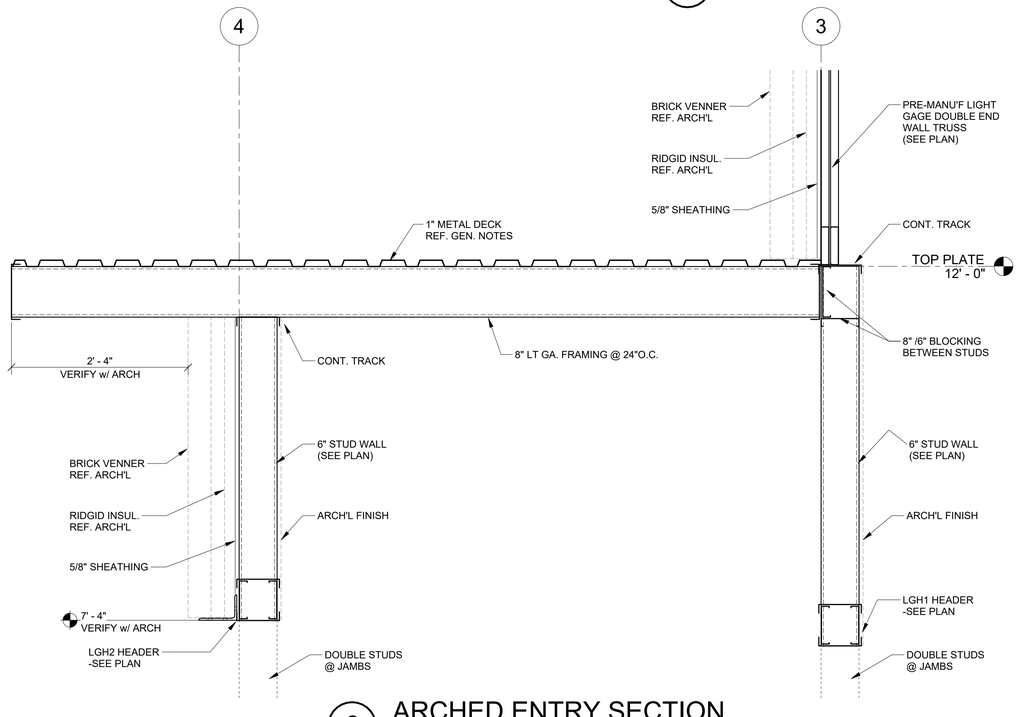
1 TRUSS WALL BEARINGS

1" = 1'-0"



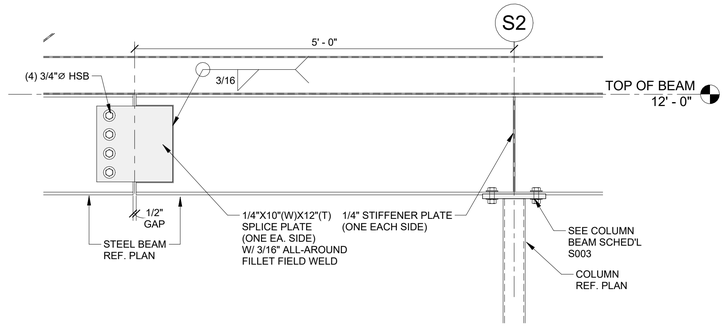
1a TRUSS WALL LINTEL

1" = 1'-0"



6 ARCHED ENTRY SECTION

1" = 1'-0"



5 DETAIL - BEAM SPLICE

1" = 1'-0"

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: DRW / KS
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CONTRACT NO.: W912T2S23D6035

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US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

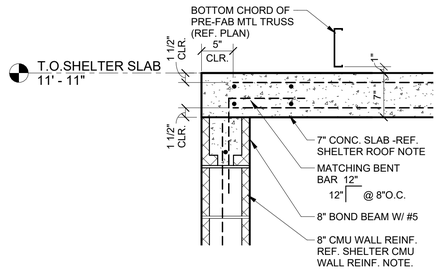
HANA-KENALL 8A JV
2500 CITYWEST BLVD
SUITE 700
HOUSTON, TX 77042

ACCESS CONTROL POINT- PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

ROOF FRAMING SECTIONS + DETAILS

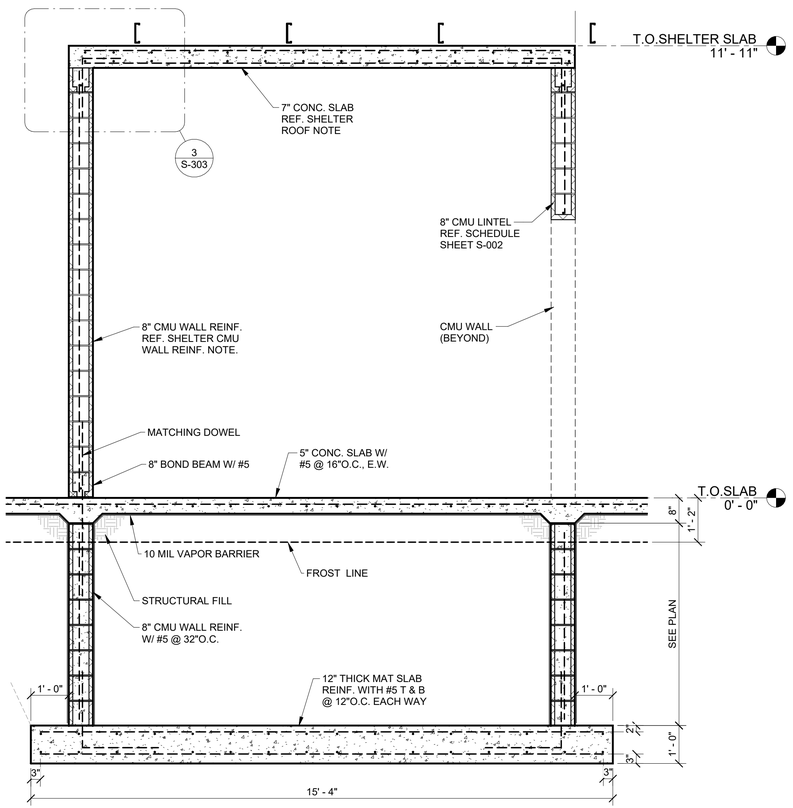
SHEET ID
VCC
S-302

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



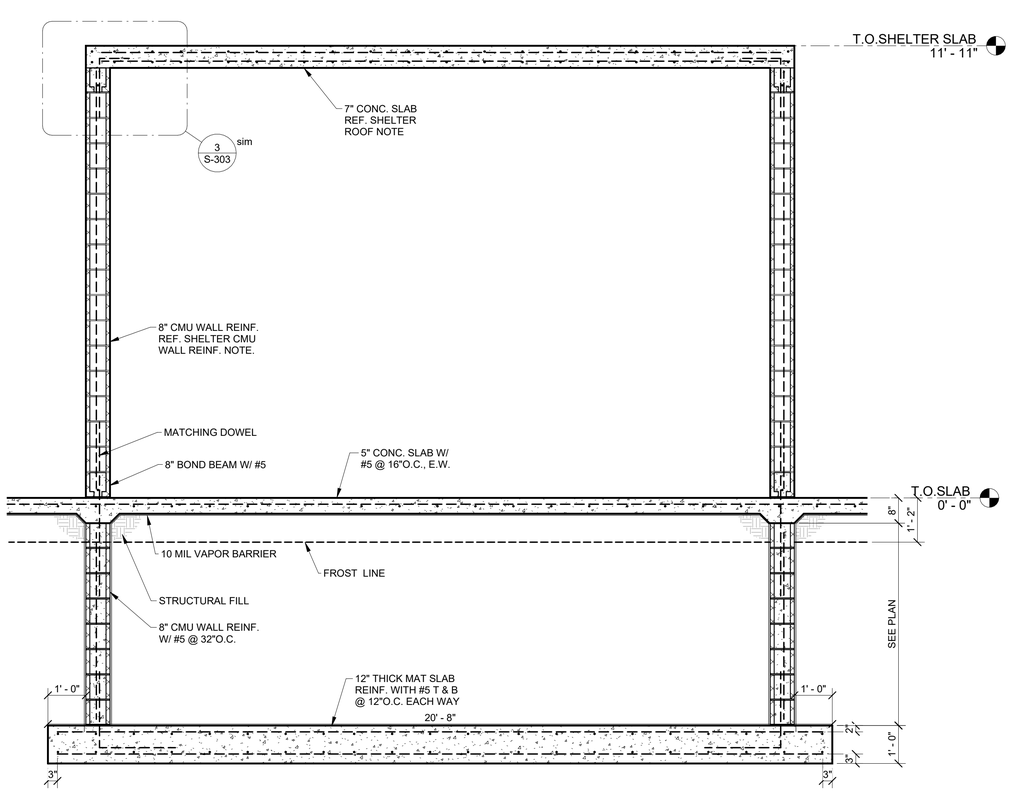
3 DETAIL - SHELTER SLAB TO CMU WALL

1" = 1'-0"



2 VCC STORM SHELTER SECTION SHORT

1/2" = 1'-0"



1 VCC STORM SHELTER SECTION LONG

1/2" = 1'-0"

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D6035

DESIGNED BY: DRW / KS
DRAWN BY: SEC
CHECKED BY: DRW
SUBMITTED BY: DRW
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HANA-KENALL 8A JV
2500 CITYWEST BLVD
SUITE 700
HOUSTON, TX 77042

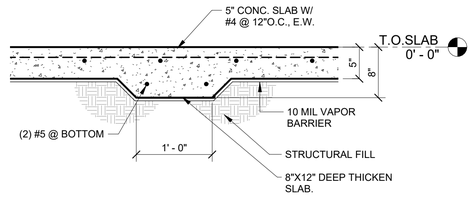
ACCESS CONTROL POINT- PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

STORM SHELTER SECTIONS + DETAILS

SHEET ID
VCC
S-303

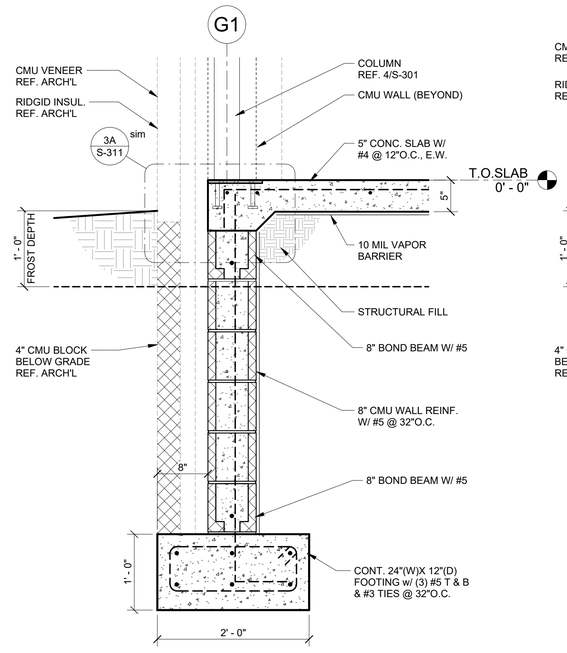
CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

Plot Date: 4/14/2026 12:10:20 PM File Path: Autodesk Docs://RVT 23/VCC Building.rvt



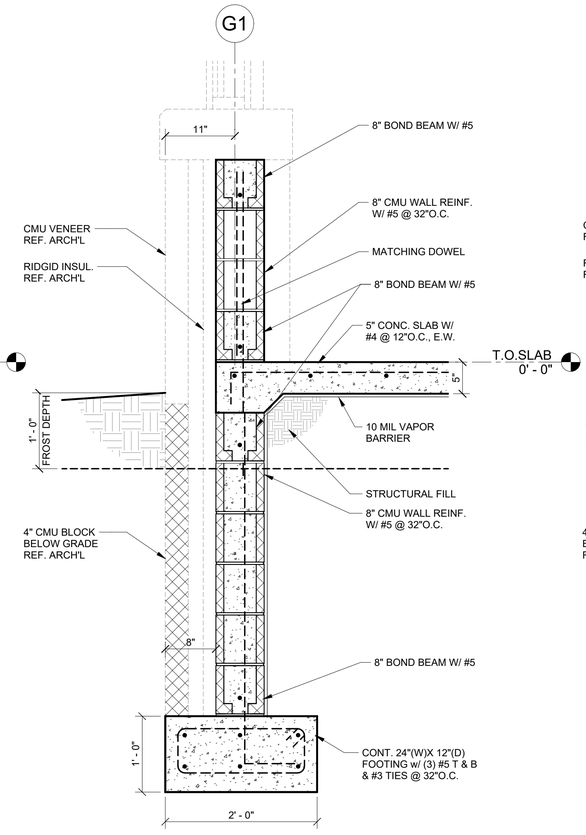
4 TYPICAL INTERIOR SECTION

1" = 1'-0"



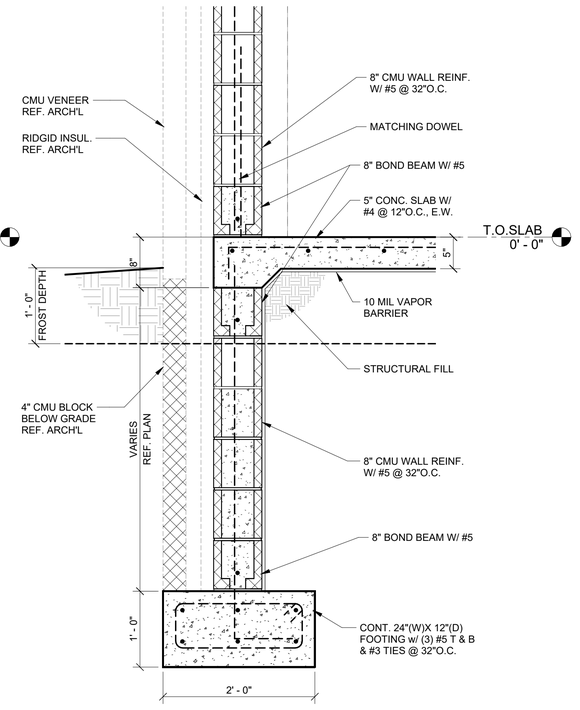
3 COLUMN AT CMU LUG SECTION

1" = 1'-0"



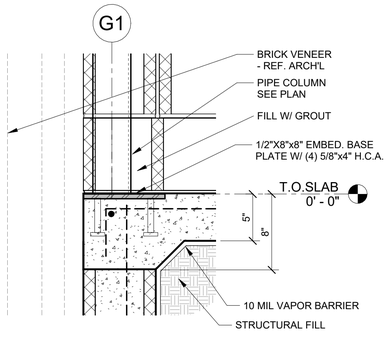
2 TYPICAL CMU WINDOW SECTION

1" = 1'-0"



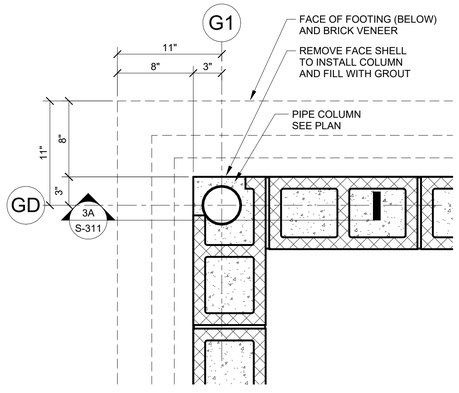
1 TYPICAL EXTERIOR SECTION

1" = 1'-0"



3A CORNER CMU COLUMN SECTION

1 1/2" = 1'-0"



3B CORNER CMU COLUMN DETAIL

1 1/2" = 1'-0"

US Army Corps of Engineers ®

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DESIGNED BY: DRW / KS
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ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D6035

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HANA-KENALL 8A JV
2500 CITYWEST BLVD
SUITE 700
HOUSTON, TX 77042

ACCESS CONTROL POINT- PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

FOUNDATION SECTIONS + DETAILS

SHEET ID
G-HOUSE
S-311

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

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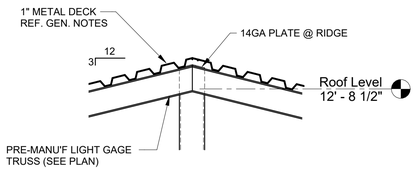
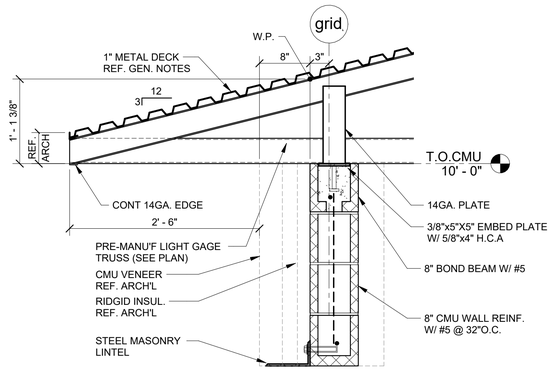
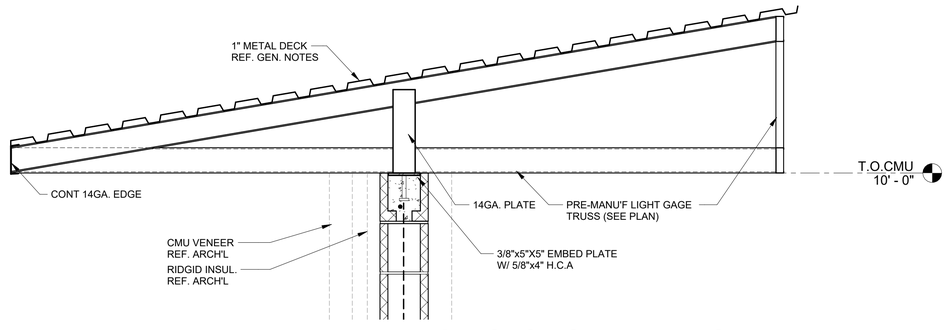


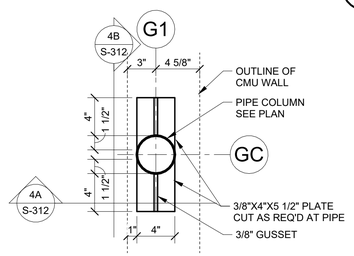
2 SECTION - RIDGE
1" = 1'-0"



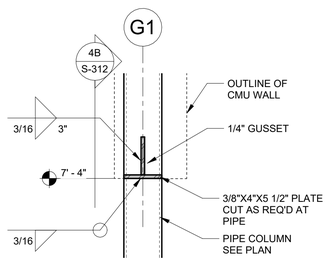
1 SECTION - OVERHANG
1" = 1'-0"



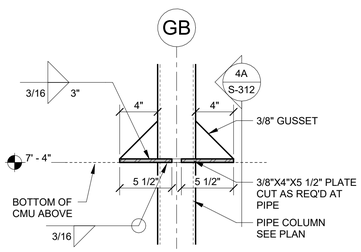
3 SECTION - HIP JACK
1" = 1'-0"



4 DETAIL-PIPE CAP PLAN
1 1/2" = 1'-0"



4A DETAIL-PIPE CAP SECTION
1 1/2" = 1'-0"



4B DETAIL-PIPE CAP FRONT
1 1/2" = 1'-0"

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: DRW / KS
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CHECKED BY: DRW
SUBMITTED BY: DRW
SIZE: ANSI D

ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D6035

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HANA-KENALL 8A JV
2500 CITYWEST BLVD
SUITE 700
HOUSTON, TX 77042

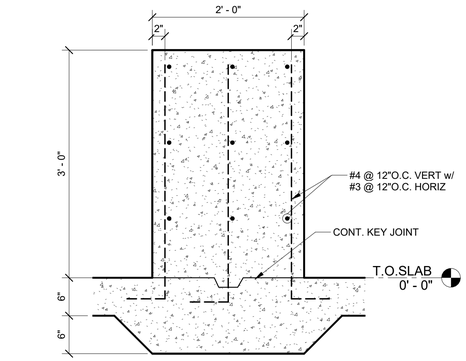
ACCESS CONTROL POINT, PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

ROOF FRAMING SECTIONS + DETAILS

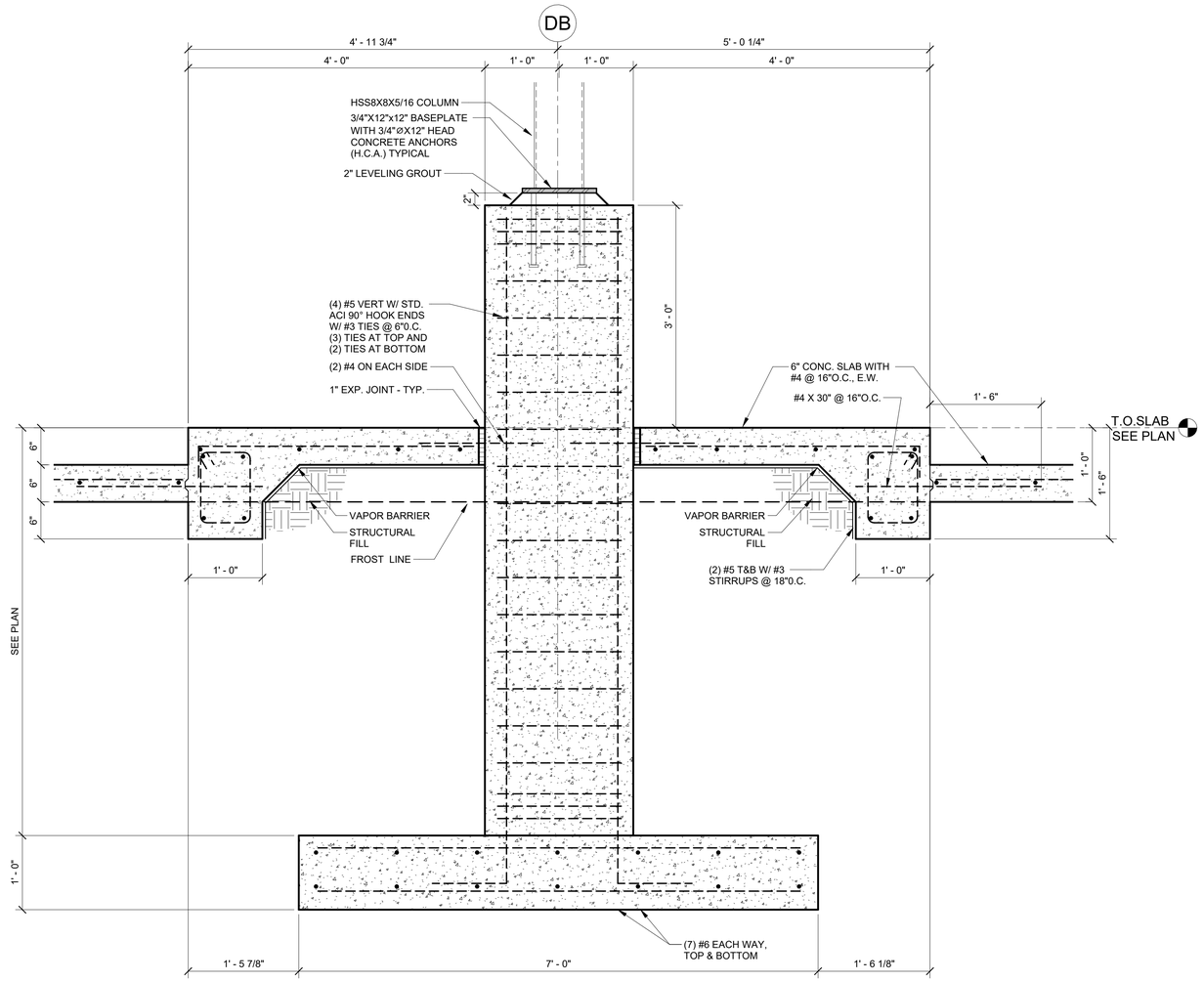
SHEET ID
G-HOUSE
S-312

File Path: Autodesk Docs://RVT 23/Gatehouse.rvt
Plot Date: 4/14/2026 12:11:32 PM

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



2 SECTION @ "BOLLARD" WALL
1" = 1'-0"



1 TYPICAL COLUMN @ FOOTING SECTION
1" = 1'-0"

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

File Path: Autodesk Docs://RVT 23/ID-CHECK.rvt

Plot Date: 4/14/2026 12:18:04 PM

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SEC	
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SUBMITTED BY:	
DRW	
SIZE:	
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ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D6035

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

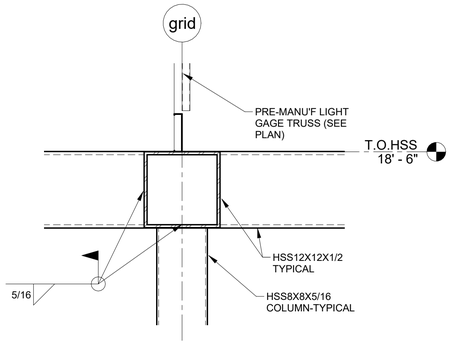
HANA-KENALL 8A JV
2500 CITYWEST BLVD
SUITE 700
HOUSTON, TX 77042

ACCESS CONTROL POINT: PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

FOUNDATION SECTIONS + DETAILS

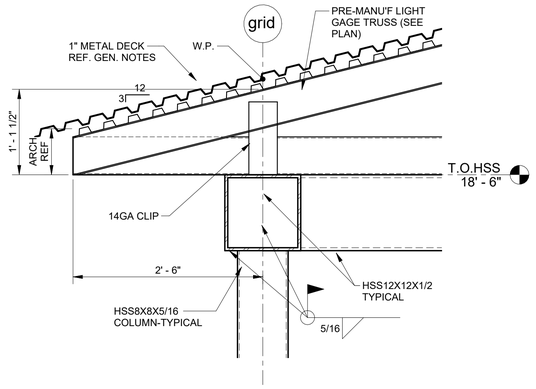
SHEET ID
ID-CHECK
S-321

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



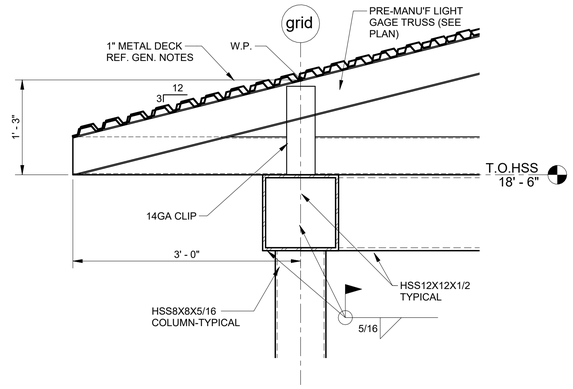
2 SECTION AT TRUSS MIDDLE

1" = 1'-0"



1a SECTION AT TRUSS END 30" OVERHANG

1" = 1'-0"



1 SECTION AT TRUSS END 36" OVERHANG

1" = 1'-0"

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

File Path: Autodesk Docs://RVT 23/3D-CHECK.rvt

Plot Date: 4/14/2026 12:18:04 PM

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SEC	W9127S24F6002
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DRW	W9127S23D6035
SUBMITTED BY:	
DRW	
SIZE:	
ANSI D	

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

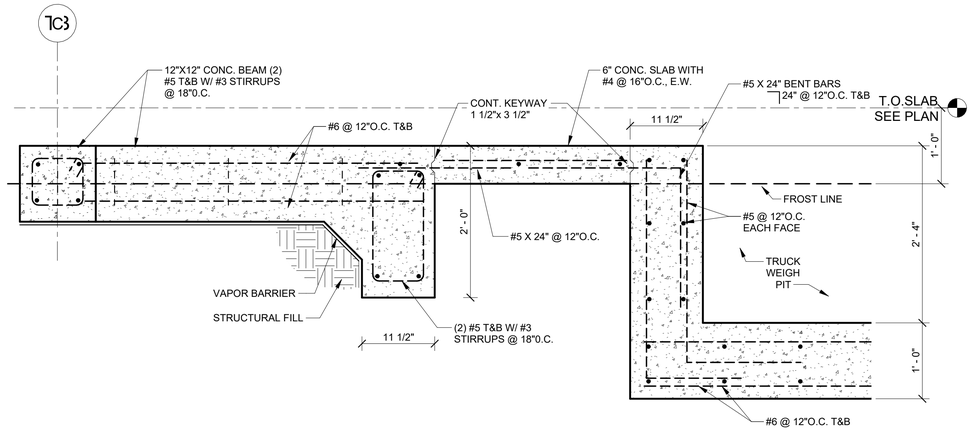
HANA-KENALL 8A JV
2500 CITYWEST BLVD
SUITE 700
HOUSTON, TX 77042

ACCESS CONTROL POINT- PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

ROOF FRAMING SECTIONS + DETAILS

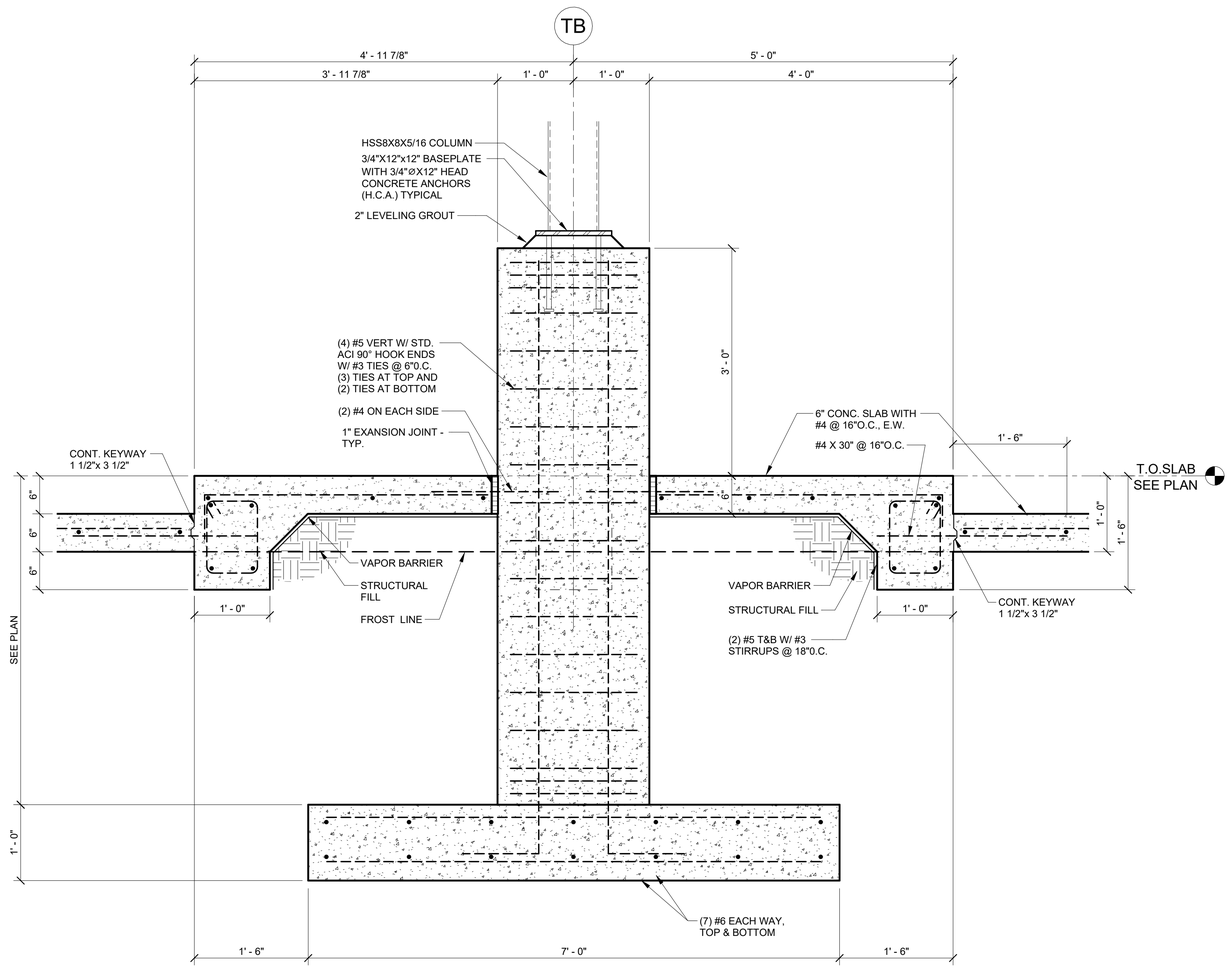
SHEET ID
ID-CHECK
S-322

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



2 TYPICAL DROP @ SCALE PIT SECTION

1" = 1'-0"



1 TYPICAL COLUMN @ FOOTING SECTION

1" = 1'-0"

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY:	DRW / KS
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CHECKED BY:	DRW
SUBMITTED BY:	DRW
SIZE:	ANSI D
ISSUE DATE:	17 APRIL 2026
SOLICITATION NO.:	W9127S24F6002
CONTRACT NO.:	W9127S23D6035

Plot Date: 4/14/2026 12:21:13 PM File Path: Autodesk Docs://RVT 23/T-SEARCH AREA.rvt

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

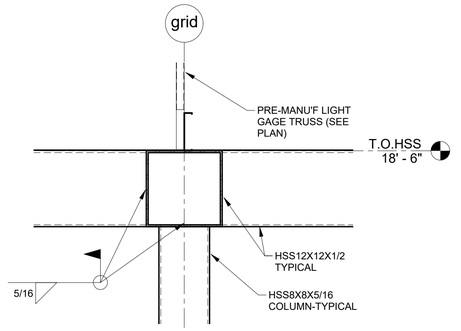
HANA-KENALL 8A JV
2500 CITYWEST BLVD
SUITE 700
HOUSTON, TX 77042

ACCESS CONTROL POINT- PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

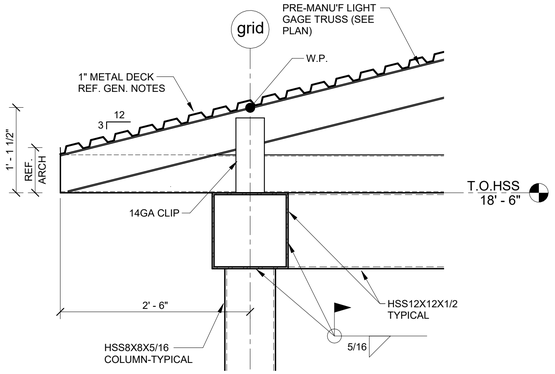
FOUNDATION SECTIONS + DETAILS

SHEET ID
T-SEARCH
S-331

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



2 SECTION AT TRUSS MIDDLE
1" = 1'-0"



1 SECTION AT TRUSS END
1" = 1'-0"

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: DRW / KS	ISSUE DATE: 17 APRIL 2026
DRAWN BY: SEC	SOLICITATION NO.: W9127S24F6002
CHECKED BY: DRW	CONTRACT NO.: W9127S23D6035
SUBMITTED BY: DRW	
SIZE: ANSI D	

Plot Date: 4/14/2026 12:21:13 PM File Path: Autodesk Docs://RVT 23/T-SEARCH AREA.rvt

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

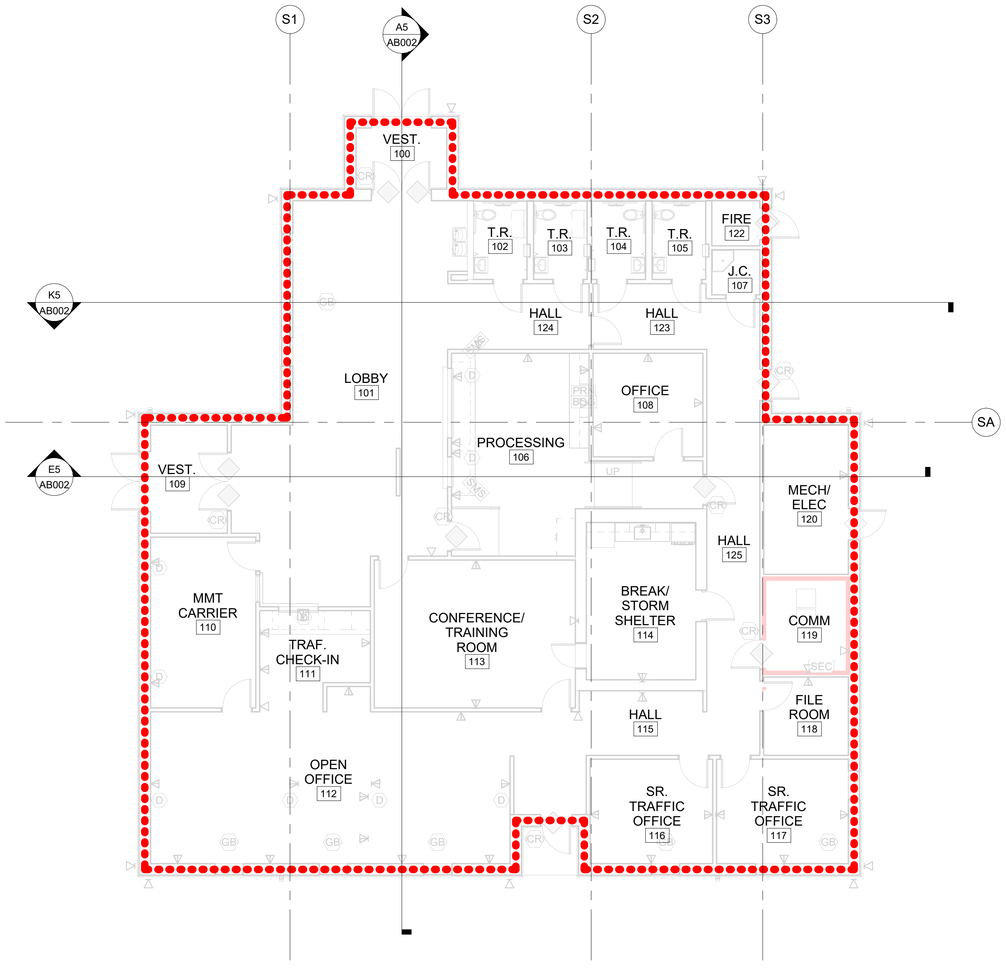
HANA-KENALL 8A JV
2500 CITYWEST BLVD
SUITE 700
HOUSTON, TX 77042

ACCESS CONTROL POINT- PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

ROOF FRAMING SECTIONS + DETAILS

SHEET ID
T-SEARCH
S-332

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



1 VCC - AIRBARRIER FLOOR PLAN

1/8" = 1'-0"

PLAN NORTH

0 4' 8' 16'

GENERAL NOTES

1. SEE SPECIFICATION 07 27 10.00 10 BUILDING AIR BARRIER SYSTEM REQUIREMENTS.
2. REFERENCE DETAIL SHEETS FOR CONTINUOUS AIR BARRIER.
3. FIELD VERIFY AIR BARRIER AREA.
4. SEAL PENETRATIONS FOR AIR TIGHTNESS.
5. BUILDING SERVICE ELEMENTS AT AIR BARRIER ZONE BOUNDARY MUST BE SEALED FOR AIR TIGHTNESS.
6. PROVIDE CONTINUOUS BUILDING ENVELOPE INCLUDING THERMAL, MOISTURE, AND AIR BARRIERS AROUND FACILITY.

CONTINUOUS AIR BARRIER DEFINITION

AIR BARRIER SYSTEMS ON WALLS ARE FROM FLOOR TO BOTTOM OF ROOF DECK. AIR BARRIER SYSTEM COMPONENTS CONSIST OF THE FOLLOWING:

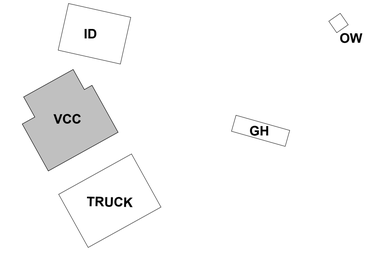
1. FLUID-APPLIED AIR BARRIER ON VERTICAL CMU WALL
2. UNDERLAYMENT BENEATH METAL ROOF PANELS TO SERVE AS AIR BARRIER
3. CONCRETE FLOOR SLAB SERVES AS AIR BARRIER
4. AIR BARRIER COMPLIANT POLYURETHANE SPRAY FOAM FILL BETWEEN VERTICAL AND HORIZONTAL SYSTEM TRANSITIONS WHERE SELF-ADHERED AIR BARRIER MEMBRANE IS NOT POSSIBLE

SHEET KEYNOTES

SHEET LEGEND

CONTINUOUS AIR BARRIER

KEY PLAN



US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

File Path: Autodesk Docs://Pinebluff Arsenal ACP/AFBA_VCC_Central.rvt

Plot Date: 4/14/2026 2:56:19 PM

DESIGNED BY: SG
DRAWN BY: AG
CHECKED BY: SG
SUBMITTED BY:
ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W912ZS24F6002
CONTRACT NO.: W912ZS23D6035
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HANA-KENALL 8A JV
2500 CITYWEST BLVD
SUITE 700
HOUSTON, TX 77042

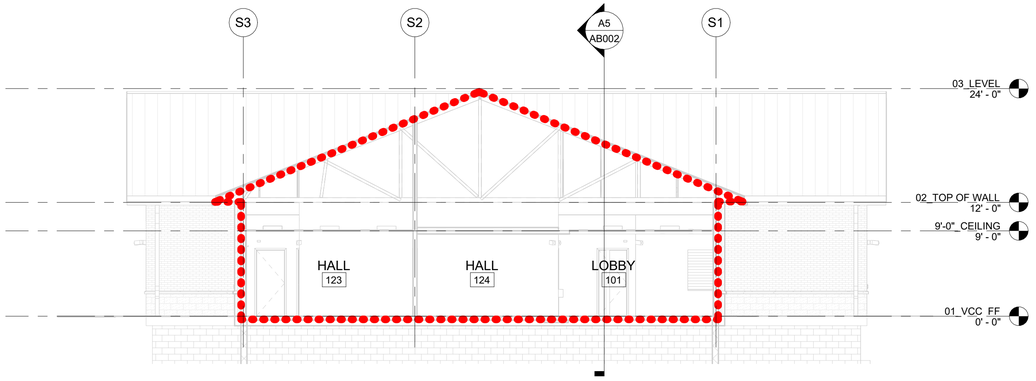
ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

VCC - AIR BARRIER FLOOR PLAN

SHEET ID

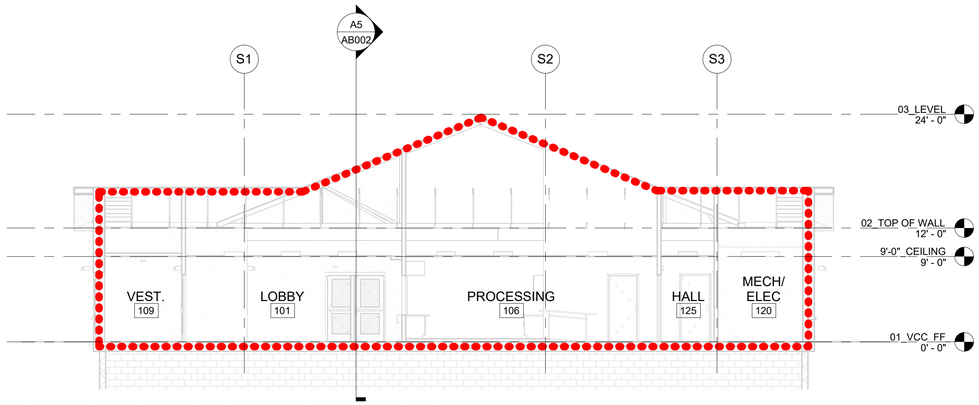
AB001

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



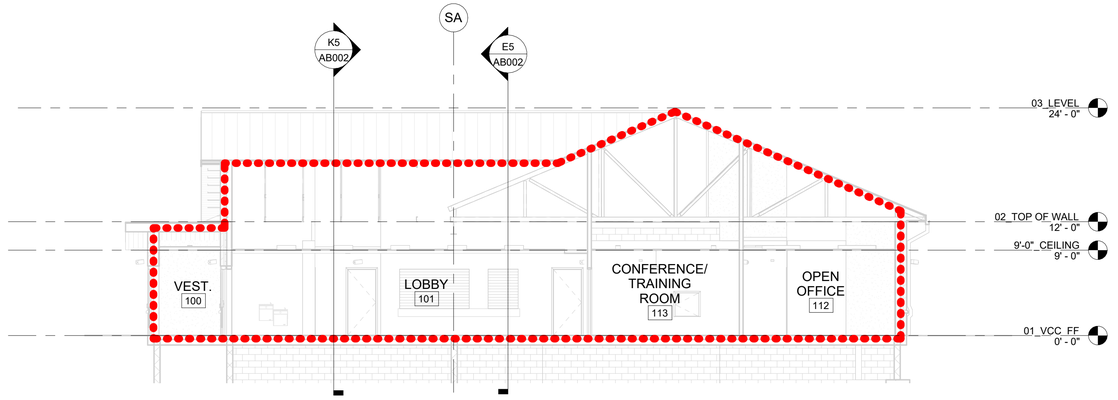
K5 AIR BARRIER - EAST-WEST BUILDING SECTION 2

1/8" = 1'-0"



E5 AIR BARRIER - EAST-WEST BUILDING SECTION

1/8" = 1'-0"



A5 AIR BARRIER - NORTH-SOUTH BUILDING SECTION

1/8" = 1'-0"

GENERAL NOTES

1. SEE SPECIFICATION 07 27 10.00 10 BUILDING AIR BARRIER SYSTEM REQUIREMENTS.
2. REFERENCE DETAIL SHEETS FOR CONTINUOUS AIR BARRIER.
3. FIELD VERIFY AIR BARRIER AREA.
4. SEAL PENETRATIONS FOR AIR TIGHTNESS.
5. BUILDING SERVICE ELEMENTS AT AIR BARRIER ZONE BOUNDARY MUST BE SEALED FOR AIR TIGHTNESS.
6. PROVIDE CONTINUOUS BUILDING ENVELOPE INCLUDING THERMAL, MOISTURE, AND AIR BARRIERS AROUND FACILITY.

CONTINUOUS AIR BARRIER DEFINITION

AIR BARRIER SYSTEMS ON WALLS ARE FROM FLOOR TO BOTTOM OF ROOF DECK. AIR BARRIER SYSTEM COMPONENTS CONSIST OF THE FOLLOWING:

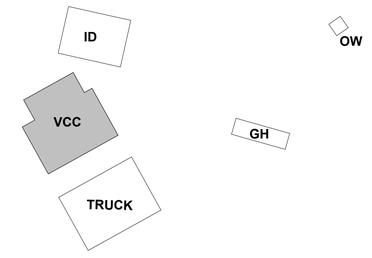
1. FLUID-APPLIED AIR BARRIER ON VERTICAL CMU WALL
2. UNDERLAYMENT BENEATH METAL ROOF PANELS TO SERVE AS AIR BARRIER
3. CONCRETE FLOOR SLAB SERVES AS AIR BARRIER
4. AIR BARRIER COMPLIANT POLYURETHANE SPRAY FOAM FILL BETWEEN VERTICAL AND HORIZONTAL SYSTEM TRANSITIONS WHERE SELF-ADHERED AIR BARRIER MEMBRANE IS NOT POSSIBLE

SHEET KEYNOTES

SHEET LEGEND

CONTINUOUS AIR BARRIER

KEY PLAN



US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: SG
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SUBMITTED BY:
SIZE: ANSI D

ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W912TS24F6002
CONTRACT NO.: W912TS23D0035

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HANA-KENALL 8A JV
2500 CITYWEST BLVD
SUITE 700
HOUSTON, TX 77042

ACCESS CONTROL POINT- PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

VCC - AIR BARRIER BUILDING SECTIONS

SHEET ID
AB002

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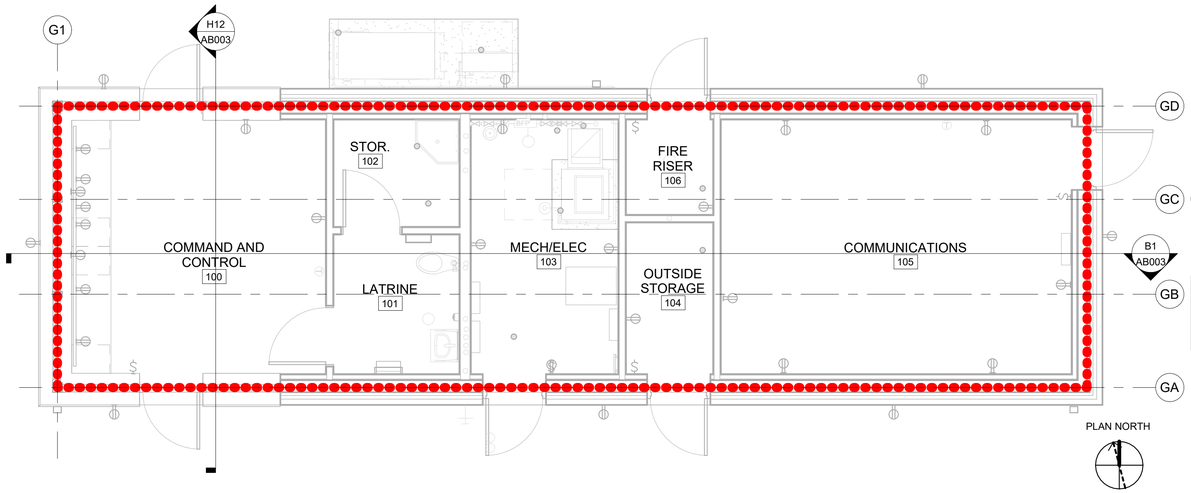
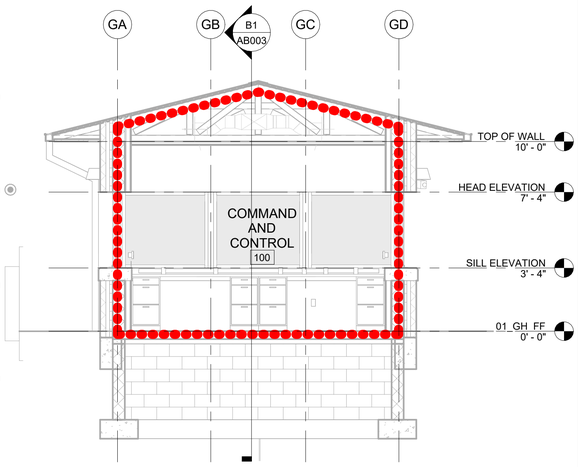


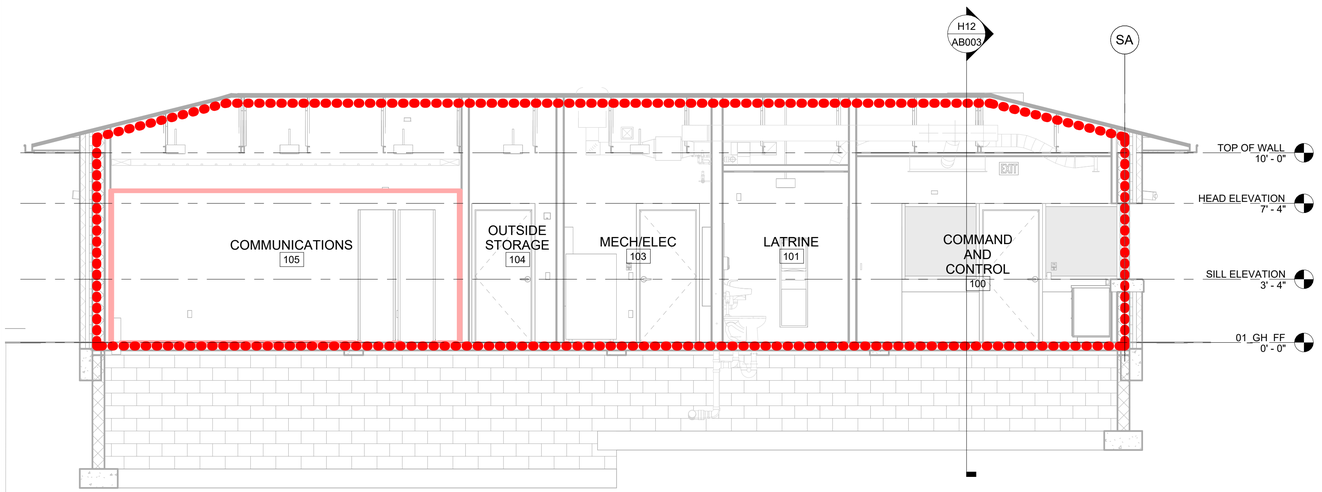
H1 AIR BARRIER - FLOOR PLAN

1/4" = 1'-0"



H12 AIR BARRIER - CROSS SECTION

1/4" = 1'-0"



B1 AIR BARRIER - LONGITUDINAL SECTION

1/4" = 1'-0"

GENERAL NOTES

1. SEE SPECIFICATION 07 27 10.00 10 BUILDING AIR BARRIER SYSTEM REQUIREMENTS.
2. REFERENCE DETAIL SHEETS FOR CONTINUOUS AIR BARRIER.
3. FIELD VERIFY AIR BARRIER AREA.
4. SEAL PENETRATIONS FOR AIR TIGHTNESS.
5. BUILDING SERVICE ELEMENTS AT AIR BARRIER ZONE BOUNDARY MUST BE SEALED FOR AIR TIGHTNESS.
6. PROVIDE CONTINUOUS BUILDING ENVELOPE INCLUDING THERMAL, MOISTURE, AND AIR BARRIERS AROUND FACILITY.

CONTINUOUS AIR BARRIER DEFINITION

AIR BARRIER SYSTEMS ON WALLS ARE FROM FLOOR TO BOTTOM OF ROOF DECK. AIR BARRIER SYSTEM COMPONENTS CONSIST OF THE FOLLOWING:

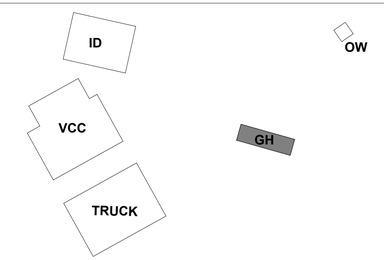
1. FLUID-APPLIED AIR BARRIER ON VERTICAL CMU WALL
2. UNDERLAYMENT BENEATH METAL ROOF PANELS TO SERVE AS AIR BARRIER
3. CONCRETE FLOOR SLAB SERVES AS AIR BARRIER
4. AIR BARRIER COMPLIANT POLYURETHANE SPRAY FOAM FILL BETWEEN VERTICAL AND HORIZONTAL SYSTEM TRANSITIONS WHERE SELF-ADHERED AIR BARRIER MEMBRANE IS NOT POSSIBLE

SHEET KEYNOTES

SHEET LEGEND

CONTINUOUS AIR BARRIER

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:	17 APRIL 2026
SOLICITATION NO.:	W9127S24F6002
CONTRACT NO.:	W9127S23D6035

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HANA-KENALL 8A JV
2500 CITYWEST BLVD
SUITE 700
HOUSTON, TX 77042

ACCESS CONTROL POINT- PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

GATEHOUSE - AIR BARRIER FLOOR PLAN AND SECTIONS

SHEET ID

AB003

File Path: Autodesk Docs://Pinebluff Arsenal ACP/A_PBA_Gatehouse.rvt

Plot Date: 4/14/2026 4:47:35 PM

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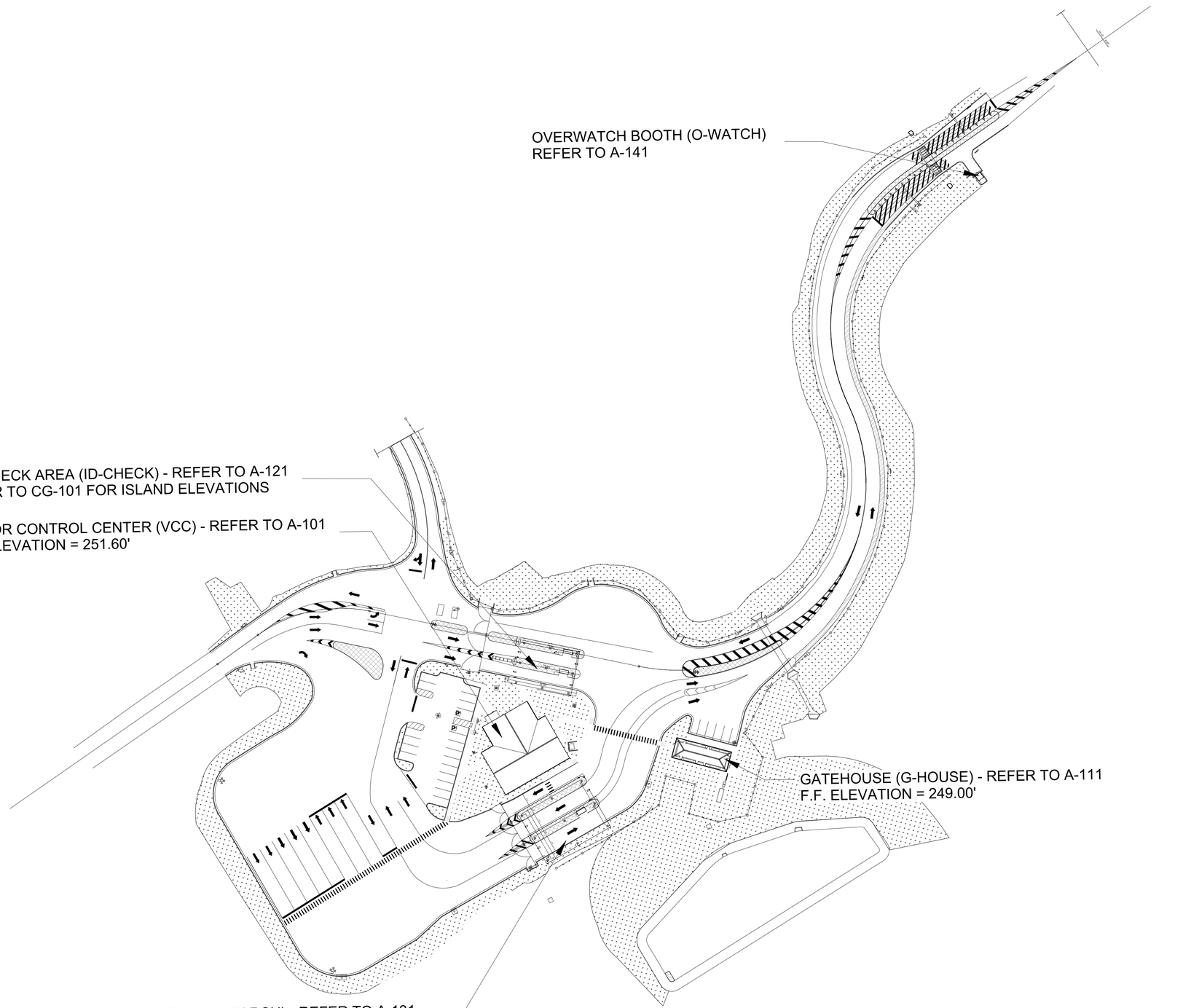


A2 SITE PLAN
1" = 60'-0"

PLAN NORTH

0 4' 8' 16'

GENERAL NOTES

A. REFERENCE CIVIL DRAWINGS FOR ALL WORK ASSOCIATED WITH THE SITE, INCLUDING FLATWORK AND BUILDING PLACEMENT.

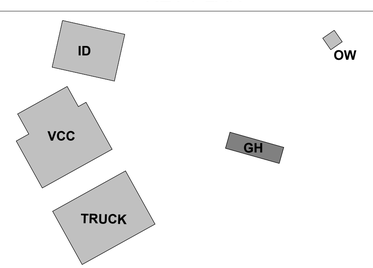
B. REFER TO L-101 FOR LANDSCAPING.

SHEET KEYNOTES

SHEET LEGEND

KEY PLAN

N
N.T.S



US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: SG
DRAWN BY: AG
CHECKED BY: SG
SUBMITTED BY:
SIZE: ANSI D

ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S25D6035

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HANA-KENALL 8A JV
2500 CITYWEST BLVD
SUITE 700
HOUSTON, TX 77042

ACCESS CONTROL POINT- PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

SITE PLAN

SHEET ID
A-001

File Path: Autodesk Docs://Pinebluff Arsenal ACP/A/PBA_VCC_Central.rvt

Plot Date: 4/15/2026 2:08:25 PM

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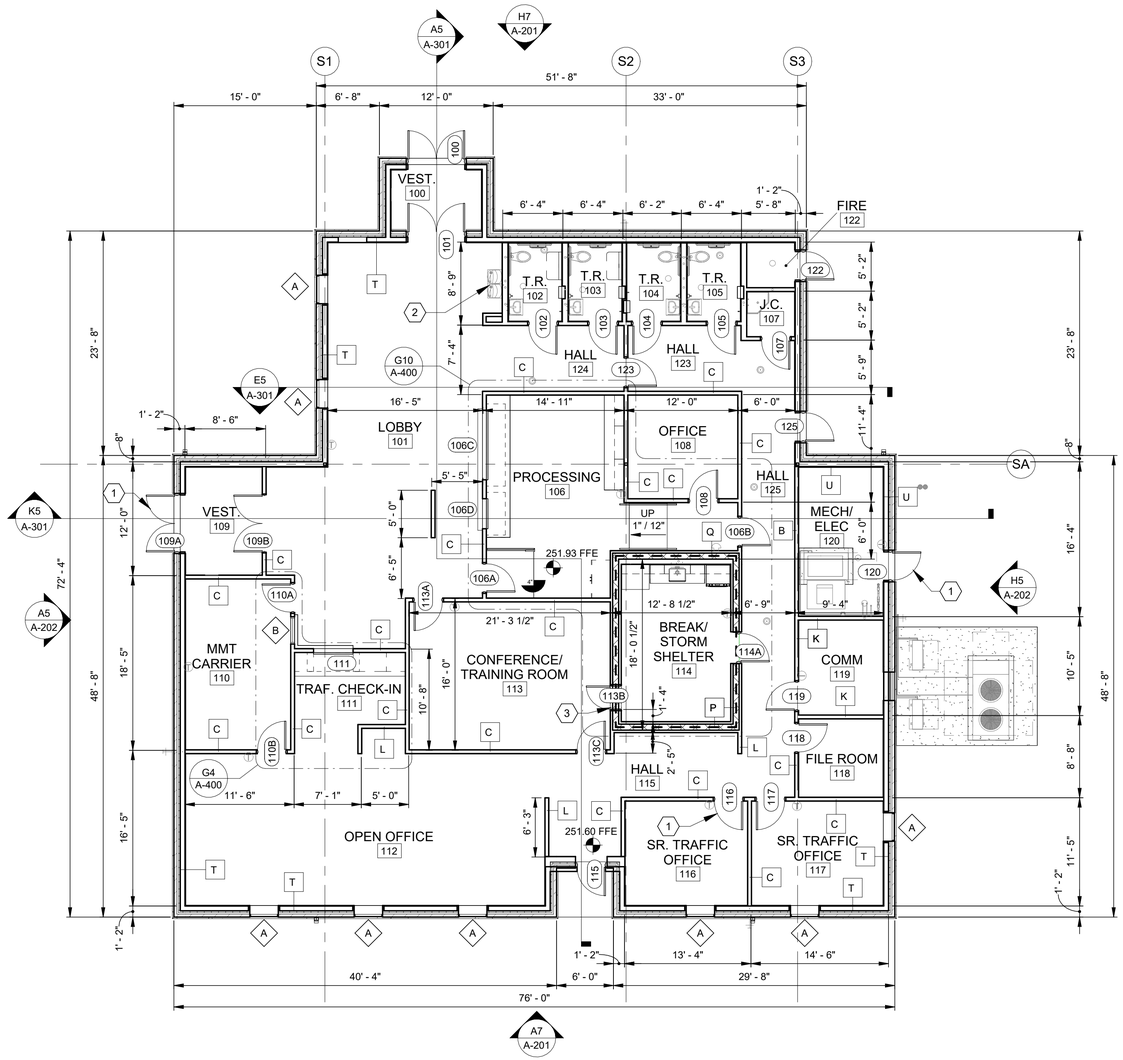


PLAN NORTH

0 4' 8' 16'

A1 VCC - FLOOR PLAN

1/8" = 1'-0"

GENERAL NOTES

A. REFER TO GENERAL SHEETS G-003 AND G-004 FOR GENERAL PROJECT NOTES.

B. REFER TO A-104 FOR VCC ROOF PLAN.

C. REFER TO A-105 FOR VCC REFLECTED CEILING PLAN AND CEILING HEIGHTS.

D. REFER TO A-400 FOR ENLARGED PLANS.

E. REFER TO A-402 FOR INTERIOR ELEVATIONS.

F. REFER TO A-530 & A-531 SERIES FOR PARTITION TYPES.

G. REFER TO A-603 FOR VCC DOOR SCHEDULE.

SQUARE FOOTAGE TABULATION

1.	VCC / PROCESSING AREA	=	1,636 SF
2.	MMT / TRAFFIC / QSAS AREA	=	3,021 SF
3.	MECH. / ELEC. / COMM.	=	327 SF
4.	COVERED PORCH (32 SF x 0.5)	=	16 SF
	TOTAL	=	5,000 SF

SHEET KEYNOTES

KEYNOTES

1 DOOR AS SCHEDULED - TYPICAL - SEE DOOR SCHEDULE

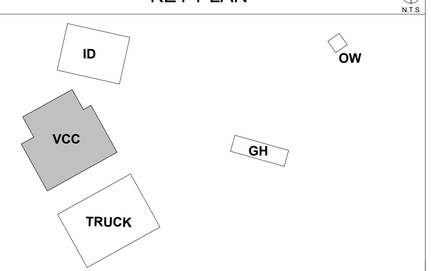
2 DRINKING FOUNTAIN

3 PROVIDE EMERGENCY ESCAPE OPENING

SHEET LEGEND

2 HOUR FIRE WALL - UL U905

KEY PLAN



US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

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Plot Date: 4/14/2026 3:06:51 PM

DESIGNED BY:	ISSUE DATE:
SG	17 APRIL 2026
DRAWN BY:	SOLICITATION NO.:
AG	W912TS24F6002
CHECKED BY:	CONTRACT NO.:
SG	W912TS23D0035
SUBMITTED BY:	
	SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HANA-KENALL 8A JV
2500 CITYWEST BLVD
SUITE 700
HOUSTON, TX 77042

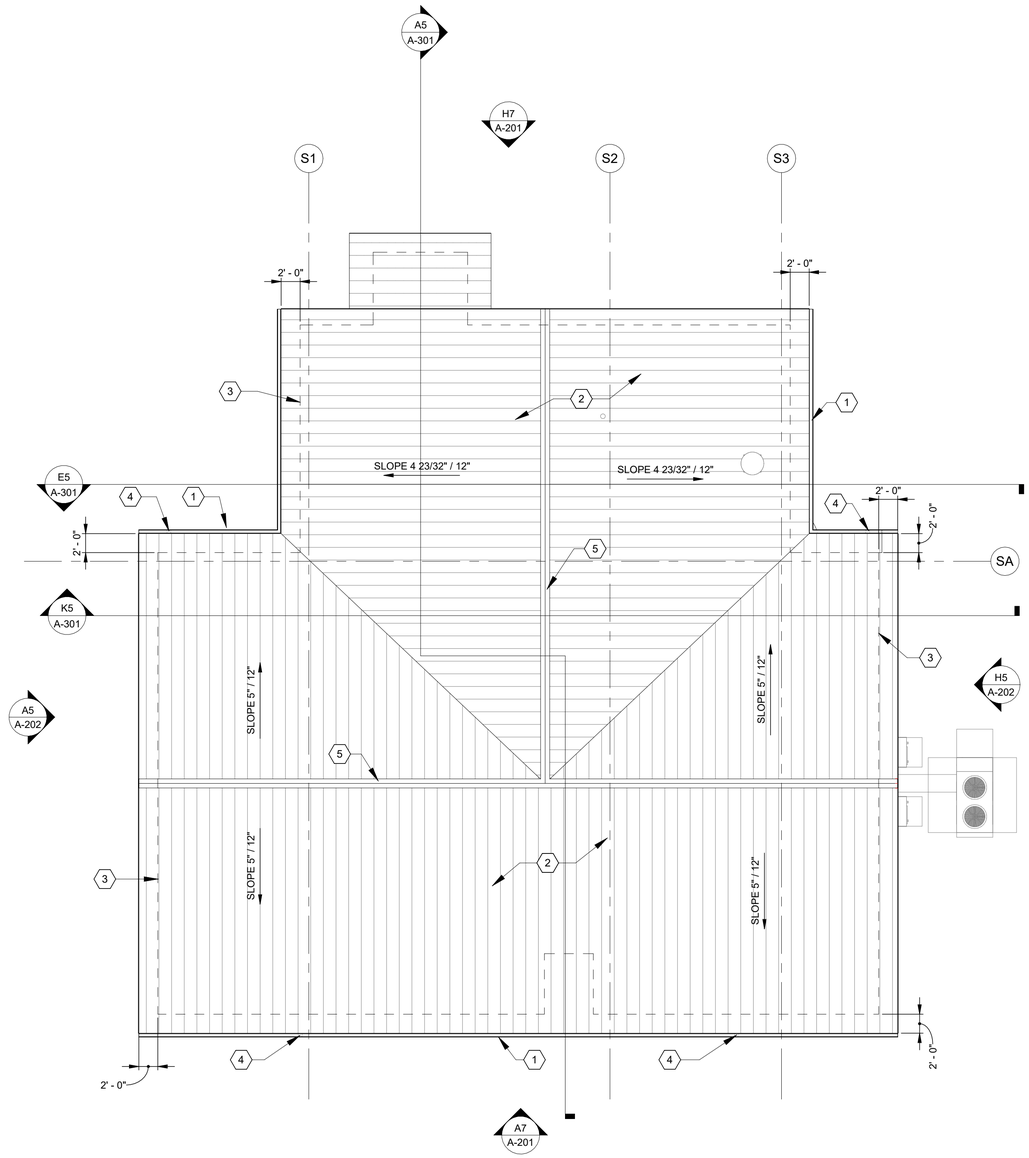
ACCESS CONTROL POINT: PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

VCC - FLOOR PLAN

SHEET ID

A-101

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



PLAN NORTH

0 4' 8' 16'

A1 VCC - ROOF PLAN

1/8" = 1'-0"

GENERAL NOTES

A. REFER TO GENERAL SHEETS G-003 AND G-004 FOR GENERAL PROJECT NOTES.

B. REFER TO A-105 FOR VCC REFLECTED CEILING PLAN AND CEILING HEIGHTS.

C. REFER TO A-400 FOR ENLARGED PLANS.

D. REFER TO I-101 FOR INTERIOR ELEVATIONS.

E. REFER TO A-530 & A-531 SERIES FOR PARTITION TYPES.

F. REFER TO A-600 FOR DOOR SCHEDULE.

SHEET KEYNOTES

KEYNOTES

1 PRE-FINISHED METAL GUTTER

2 PRE-FINISHED STANDING SEAM METAL ROOF (SSMR) AS SPECIFIED

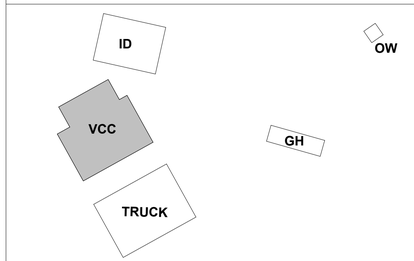
3 OUTLINE OF EXTERIOR WALLS BELOW-TYPICAL

4 4"x 4" PRE-FINISHED METAL DOWNSPOUT

5 PRE-FINISHED RIDGE CAP

SHEET LEGEND

KEY PLAN



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DESIGNED BY: SG
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CHECKED BY: SG
SUBMITTED BY:
ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S25D6035
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HANA+KENALL 8A JV
2500 CITYWEST BLVD
SUITE 700
HOUSTON, TX 77042

ACCESS CONTROL POINT - PLAINVIEW GATE
FINE BLUFF ARSENAL, ARKANSAS

VCC - ROOF PLAN

SHEET ID

A-104

File Path: Autodesk Docs://Pinebluff Arsenal ACP/AFBA_VCC_Central.rvt

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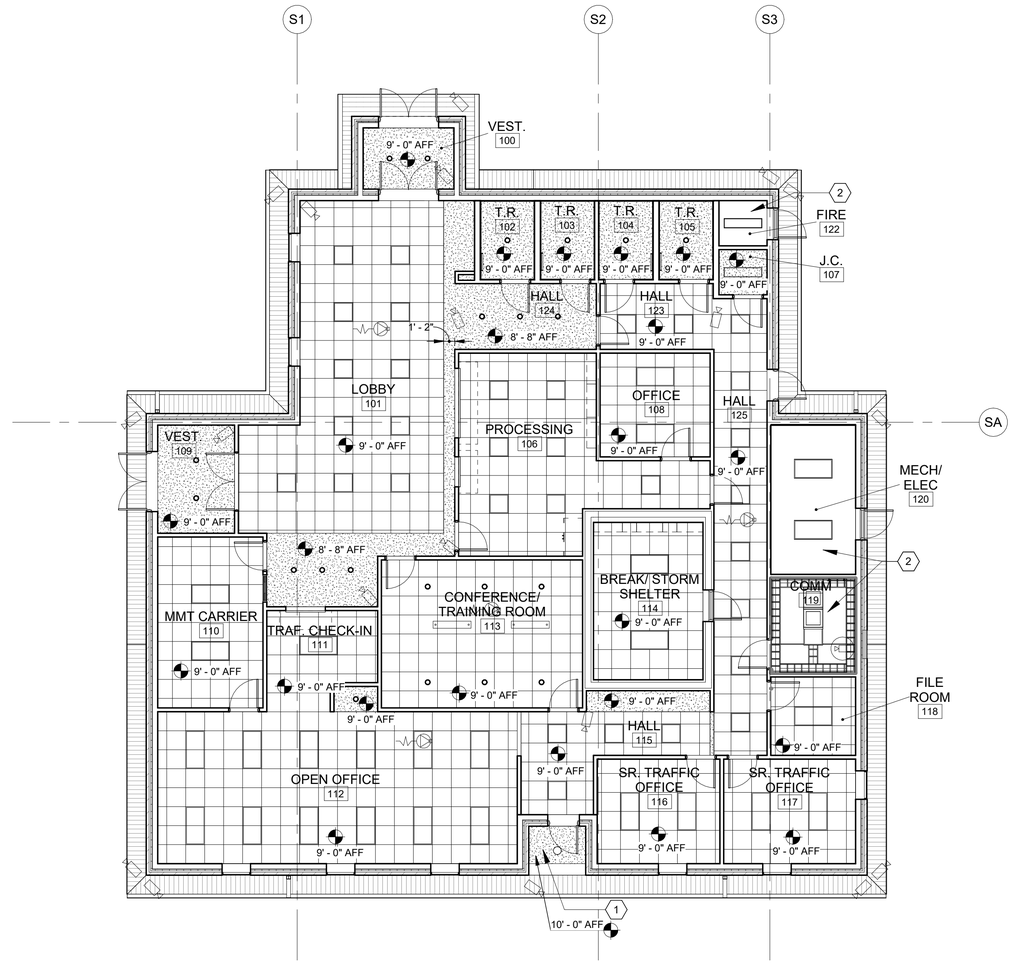


GENERAL NOTES

A. ALL CEILING HEIGHTS TO BE 9'-0" A.F.F. UNLESS NOTED OTHERWISE

B. REFER TO GENERAL SHEETS G-003 AND G-004 FOR GENERAL PROJECT NOTES.

C. REFER TO I-101 FOR INTERIOR ELEVATIONS.

D. REFER TO A-530 & A-531 SERIES FOR PARTITION TYPES.

E. REFER TO A-600 FOR DOOR SCHEDULE.

SHEET KEYNOTES

KEYNOTES

1 PAINTED STUCCO CEILING SOFFIT

2 OPEN TO STRUCTURE ABOVE

SHEET LEGEND

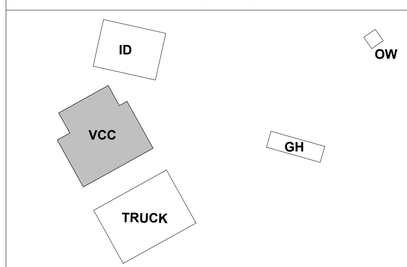
2X2 ACOUSTIC LAY-IN CEILING

6" METAL SOFFIT

5/8" GYPSUM BOARD-PAINT

KEY PLAN

N
NTS



PLAN NORTH

0 4' 8' 16'

A3 VCC - REFLECTED CEILING PLAN

1/8" = 1'-0"

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

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CONTRACT NO.: W9127S23D6035

DESIGNED BY: SG
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SUBMITTED BY:
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HANA-KENALL 8A JV
2500 CITYWEST BLVD
SUITE 700
HOUSTON, TX 77042

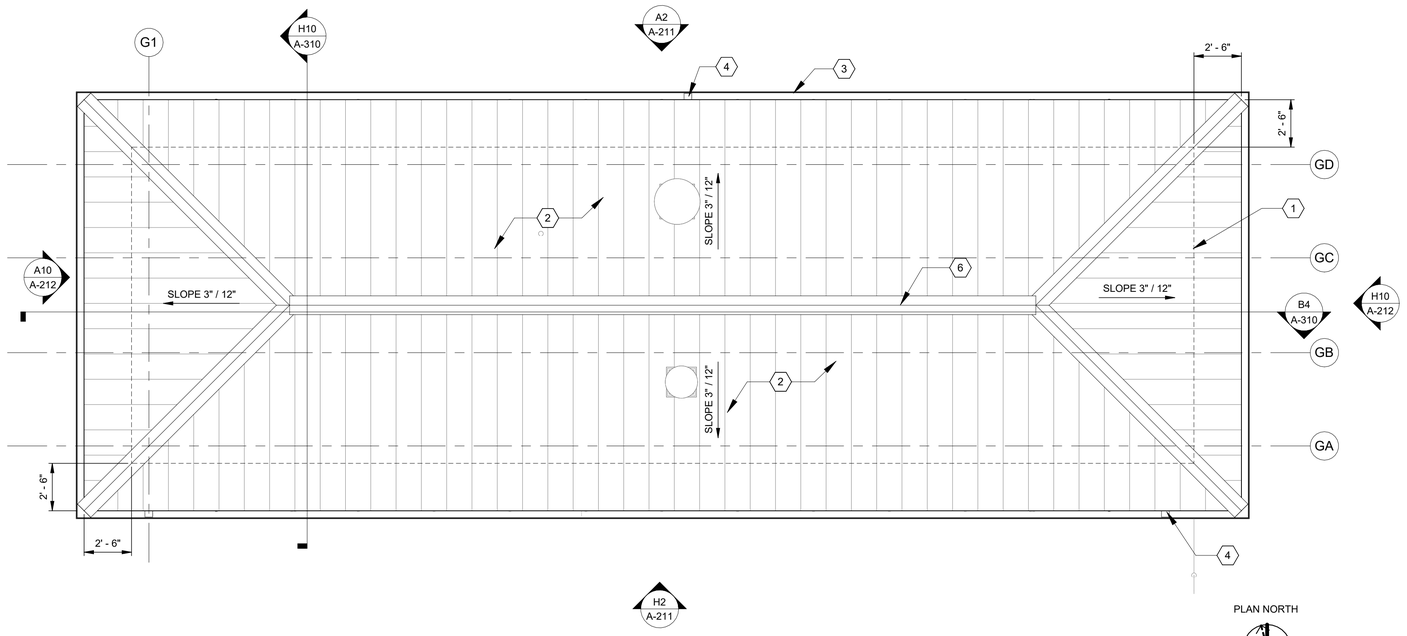
ACCESS CONTROL POINT- PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

VCC - REFLECTED CEILING PLAN

SHEET ID

A-105

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

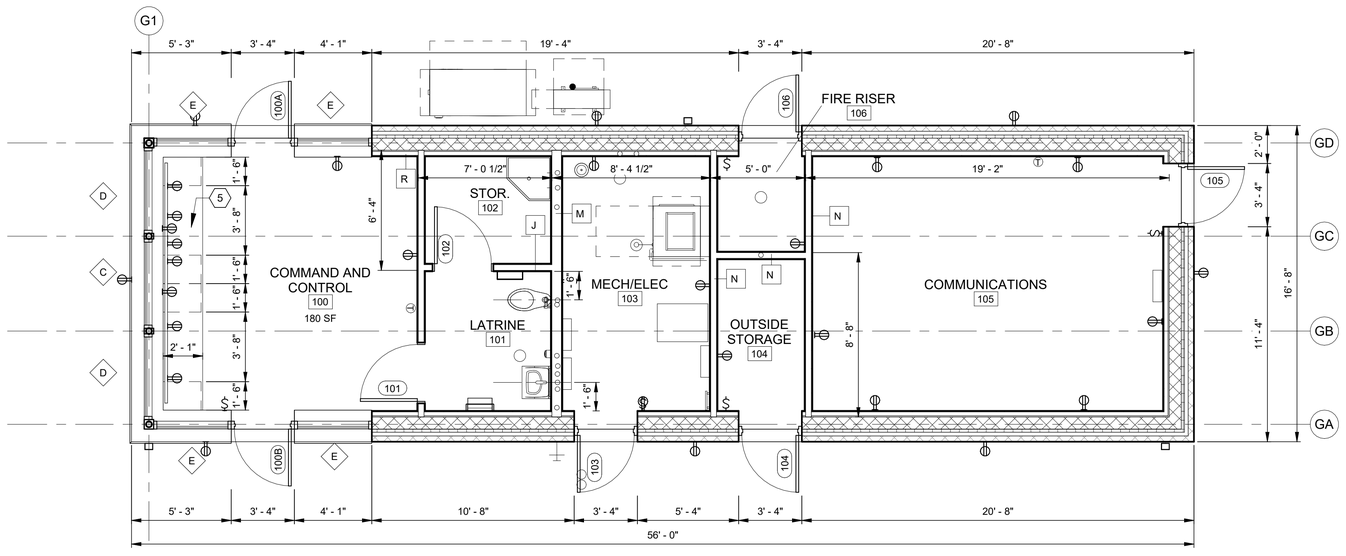


H3 GATEHOUSE - ROOF PLAN

1/4" = 1'-0"

PLAN NORTH

0 4' 8' 16'



PLAN NORTH

0 4' 8' 16'

A3 GATEHOUSE - FLOOR PLAN

1/4" = 1'-0"

GENERAL NOTES

A. REFER TO GENERAL SHEETS G-003 AND G-004 FOR GENERAL PROJECT NOTES.
B. REFER TO A-104 FOR VCC ROOF PLAN.
C. REFER TO A-105 FOR VCC REFLECTED CEILING PLAN AND CEILING HEIGHTS.
D. REFER TO A-400 FOR ENLARGED PLANS.
E. REFER TO A-402 FOR INTERIOR ELEVATIONS.
F. REFER TO A-530 & A-531 SERIES FOR PARTITION TYPES.
G. REFER TO A-603 FOR VCC DOOR SCHEDULE.

SQUARE FOOTAGE TABULATION

1.	CONDITIONED AREA	=	423 SF
2.	MECH. / ELEC. / COMM. AREA	=	511 SF
	TOTAL	=	934 SF

SHEET KEYNOTES

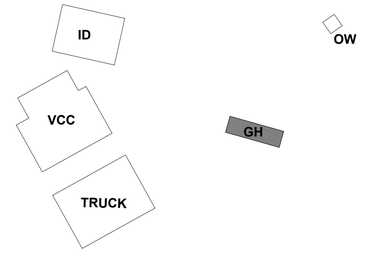
KEYNOTES

1 OUTLINE OF EXTERIOR WALLS BELOW-TYPICAL
2 PRE-FINISHED STANDING SEAM METAL ROOF (SSMR) AS SPECIFIED
3 PRE-FINISHED METAL GUTTER
4 4"x 4" PRE-FINISHED METAL DOWNSPOUT
5 BUILT-IN COUNTER
6 PRE-FINISHED RIDGE CAP

SHEET LEGEND

KEY PLAN

N
N T S



US Army Corps of Engineers ®

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DESIGNED BY: SG
DRAWN BY: AG
CHECKED BY: SG
SUBMITTED BY:
ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D6035
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HANA-KENALL 8A JV
2500 CITYWEST BLVD
SUITE 700
HOUSTON, TX 77042

ACCESS CONTROL POINT- PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

GATEHOUSE - FLOOR PLAN/ ROOF PLAN

SHEET ID
A-111

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

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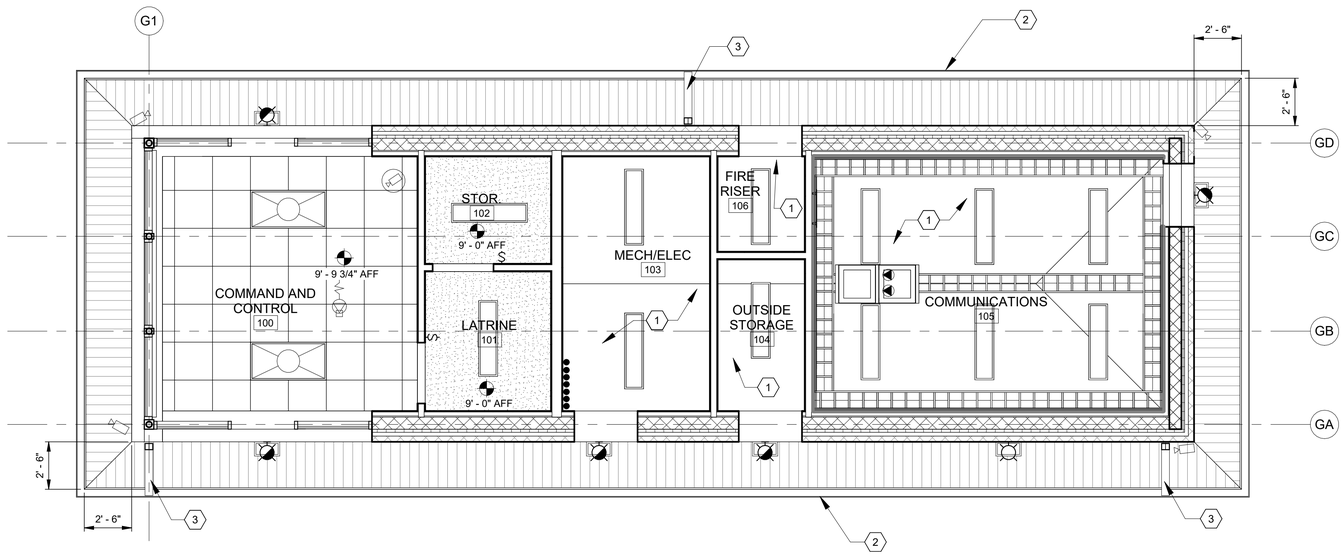


A3 GATEHOUSE - REFLECTED CEILING PLAN

1/4" = 1'-0"

PLAN NORTH

0 4' 8' 16'

GENERAL NOTES

SHEET KEYNOTES

KEYNOTES

1 OPEN TO STRUCTURE ABOVE

2 PRE-FINISHED METAL GUTTER

3 4"x 4" PRE-FINISHED METAL DOWNSPOUT

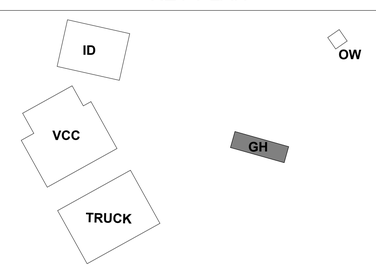
SHEET LEGEND

2X2 ACOUSTIC LAY-IN CEILING

5/8" GYPSUM BOARD-PAINT

KEY PLAN

N
N.T.S



US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: SG
DRAWN BY: AG
CHECKED BY: SG
SUBMITTED BY:
SIZE: ANSI D

ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W912TS24F6002
CONTRACT NO.: W912TS25D0035

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HANA-KENALL 8A JV
2500 CITYWEST BLVD
SUITE 700
HOUSTON, TX 77042

ACCESS CONTROL POINT- PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

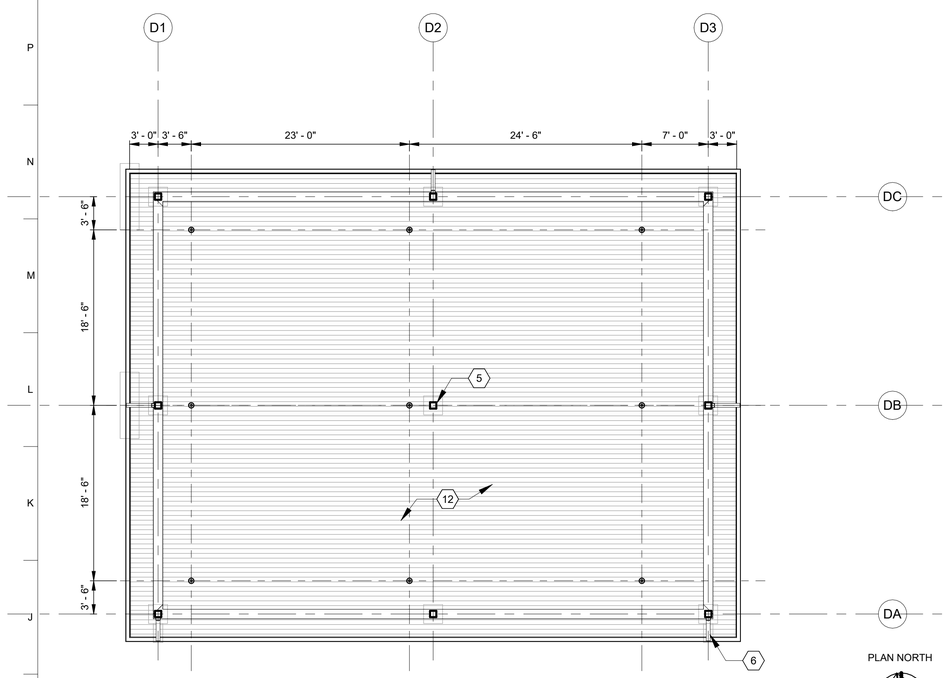
GATEHOUSE - REFLECTED CEILING PLAN

SHEET ID
A-115

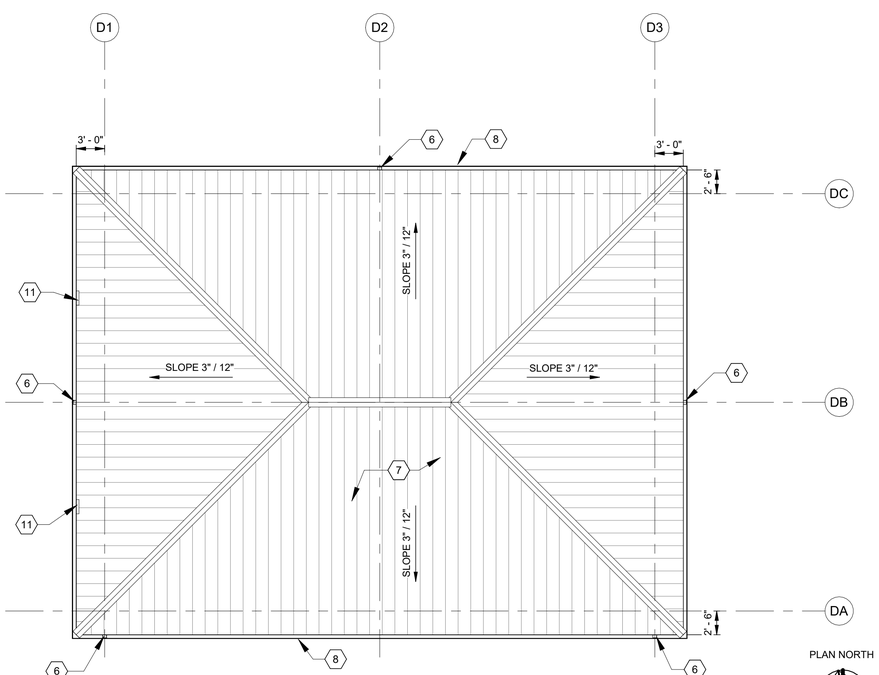
File Path: Autodesk Docs://Pinebluff Arsenal ACP/A_PBA_Gatehouse.rvt

Plot Date: 4/15/2026 12:26:33 PM

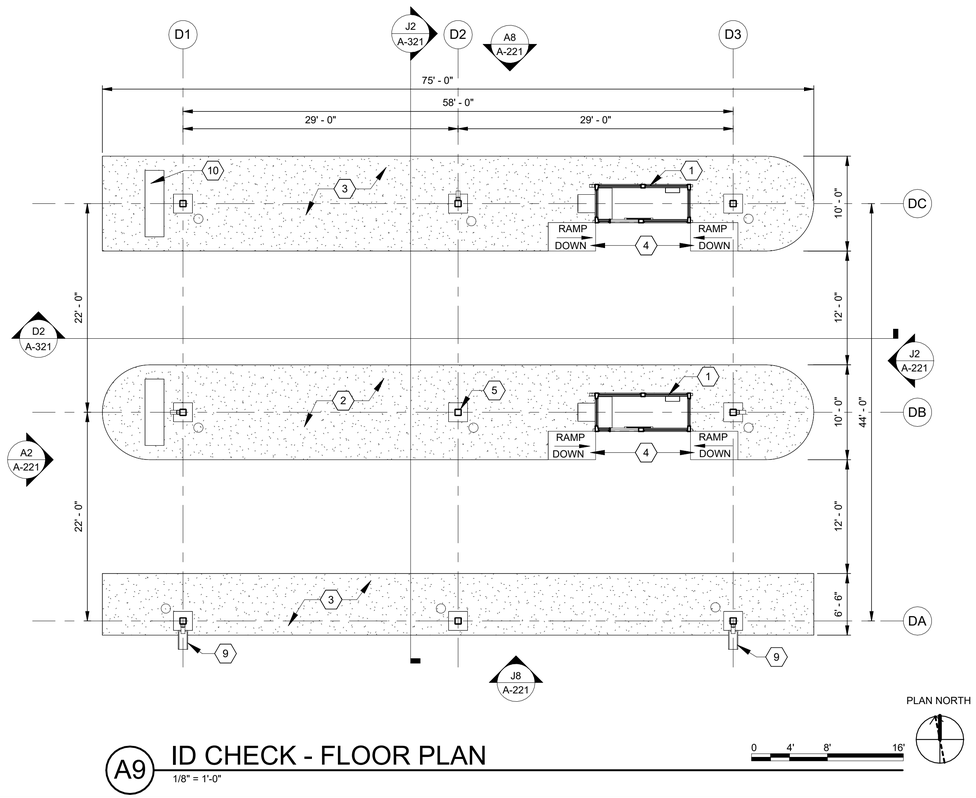
CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



H1 ID CHECK - REFLECTED CEILING PLAN
1/8" = 1'-0"



H9 ID CHECK - ROOF PLAN
1/8" = 1'-0"



A9 ID CHECK - FLOOR PLAN
1/8" = 1'-0"

GENERAL NOTES

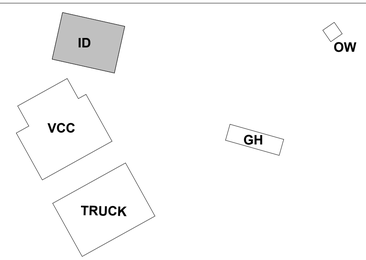
SHEET KEYNOTES

KEYNOTES

1 4x10 GUARD BOOTH AS SPECIFIED
2 CONCRETE ISLAND - REFERENCE STRUCTURE
3 CONCRETE SIDEWALK - REFERENCE CIVIL
4 RAMP
5 STRUCTURAL COLUMN. SEE STRUCTURAL DRAWINGS
6 PRE-FINISHED DOWNSPOUT, TYPICAL
7 PRE-FINISHED STANDING SEAM METAL ROOF (SSMR)
8 PRE-FINISHED METAL GUTTER
9 CONCRETE SPLASHBLOCK
10 VEHICLE BARRIERS
11 LANE INDICATORS
12 SOFFIT

SHEET LEGEND

KEY PLAN



US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: SG
DRAWN BY: AG
CHECKED BY: SG
SUBMITTED BY:
SIZE: ANSI D
ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D6035

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HANA-KENALL 8A JV
2500 CITYWEST BLVD
SUITE 700
HOUSTON, TX 77042

ACCESS CONTROL POINT- PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

ID CHECK AREA - PLANS

SHEET ID
A-121

File Path: Autodesk Docs://Pinebluff Arsenal ACP/A_PBA_ID Check.rvt
Plot Date: 4/14/2026 5:30:11 PM

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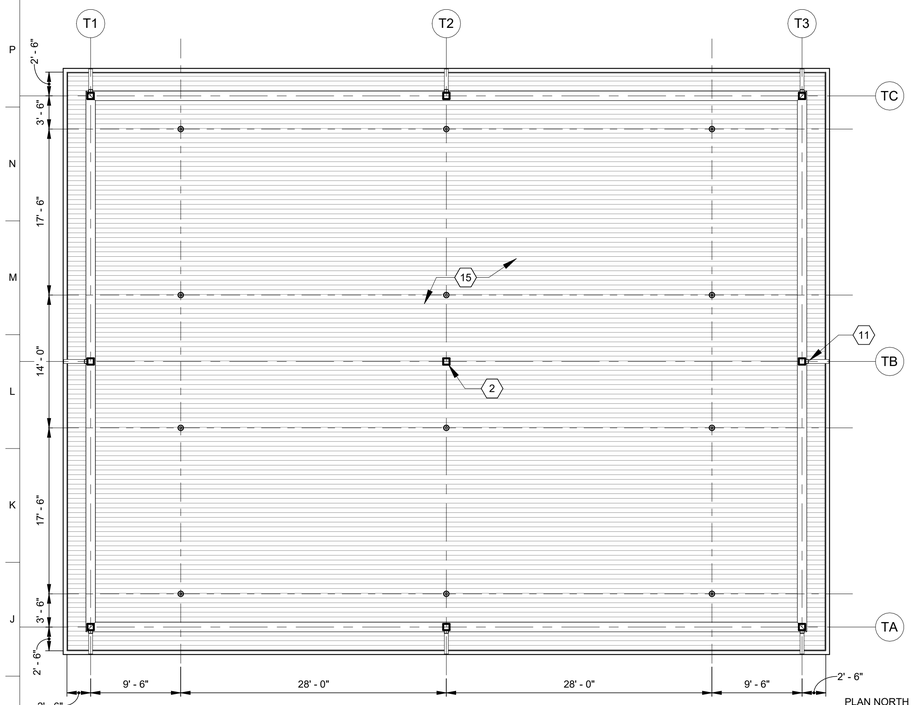
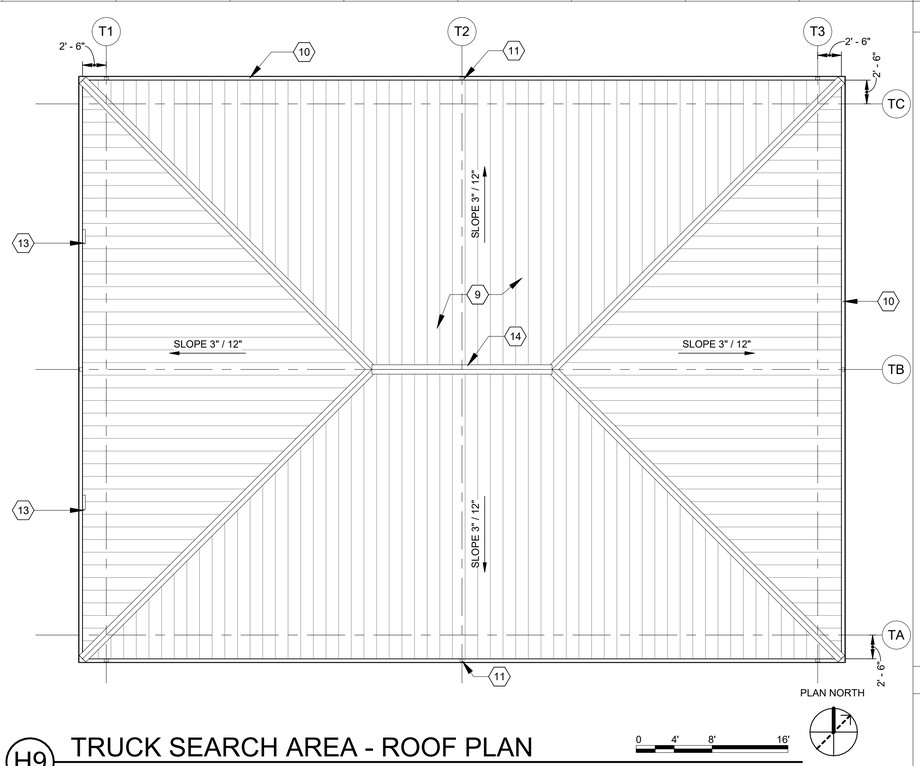


H1 TRUCK SEARCH AREA - REF. CEILING PLAN

1/8" = 1'-0"

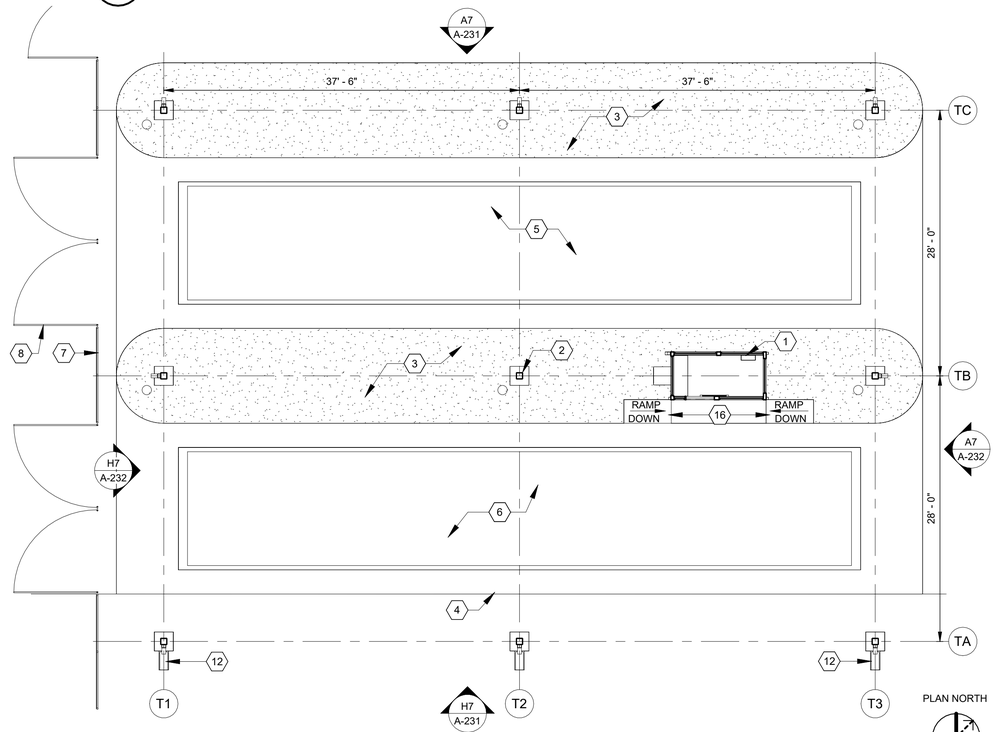
0 4' 8' 16'



H9 TRUCK SEARCH AREA - ROOF PLAN

1/8" = 1'-0"

0 4' 8' 16'



A9 TRUCK SEARCH AREA - FLOOR PLAN

1/8" = 1'-0"

0 4' 8' 16'

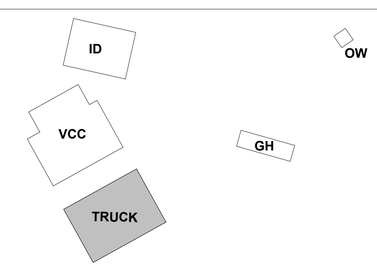
GENERAL NOTES

SHEET KEYNOTES

1 5x10 GUARD BOOTH AS SPECIFIED
2 STRUCTURAL COLUMN: SEE STRUCTURAL DRAWINGS
3 CONCRETE ISLAND - REFERENCE STRUCTURE
4 EDGE OF CURB - REFERENCE CIVIL
5 OUTBOUND COMMERCIAL VEHICLE INSPECTION LANE AND TRUCK SCALE
6 INBOUND COMMERCIAL VEHICLE INSPECTION LANE AND TRUCK SCALE
7 CHAIN-LINKED FENCE
8 CHAIN-LINKED GATE
9 PRE-FINISHED STANDING SEAM METAL ROOF (SSMR)
10 PRE-FINISHED METAL GUTTER
11 PRE-FINISHED DOWNSPOUT, TYPICAL
12 CONCRETE SPLASHBLOCK
13 LANE INDICATORS
14 PRE-FINISHED RIDGE CAP
15 SOFFIT
16 RAMP

SHEET LEGEND

KEY PLAN



US Army Corps of Engineers ®

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DRAWN BY: AG	SOLICITATION NO.: W912TS24F6002
CHECKED BY: SG	CONTRACT NO.: W912TS25D0035
SUBMITTED BY:	SIZE: ANSI D

File Path: Autodesk Docs://Pinebluff Arsenal ACP/A_PBA_Truck Search Area.rvt

Plot Date: 4/14/2026 5:23:45 PM

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HANA-KENALL 8A JV
2500 CITYWEST BLVD
SUITE 700
HOUSTON, TX 77042

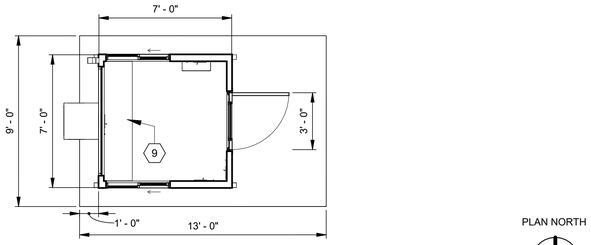
ACCESS CONTROL POINT- PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

TRUCK SEARCH AREA - PLANS

SHEET ID

A-131

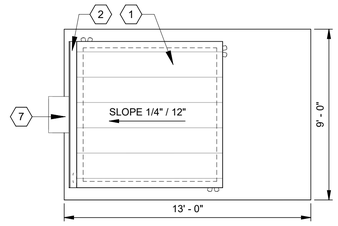
CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



PLAN NORTH

K1 O - WATCH - FLOOR PLAN
1/4" = 1'-0"

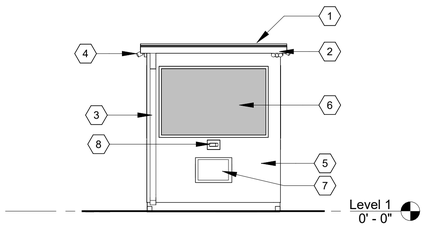
0 4' 8' 16'



PLAN NORTH

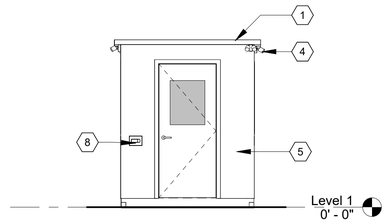
K8 O - WATCH - ROOF PLAN
1/4" = 1'-0"

0 4' 8' 16'



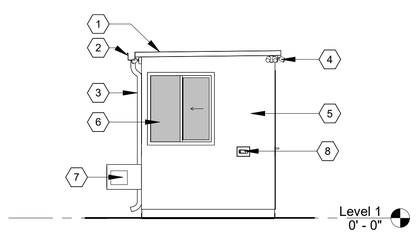
F1 O-WATCH - NORTH ELEVATION
1/4" = 1'-0"

0 4' 8' 16'



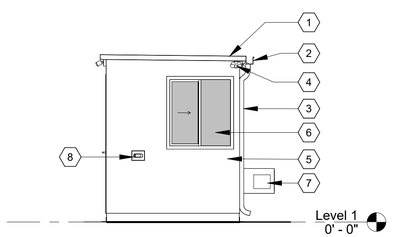
F8 O-WATCH - SOUTH ELEVATION
1/4" = 1'-0"

0 4' 8' 16'



A1 O-WATCH - WEST ELEVATION
1/4" = 1'-0"

0 4' 8' 16'



A8 O-WATCH - EAST ELEVATION
1/4" = 1'-0"

0 4' 8' 16'

GENERAL NOTES

SHEET KEYNOTES

KEYNOTES

1 PRE-FINISHED STANDING SEAM METAL ROOF (SSMR)

2 GUTTER

3 DOWNSPOUT

4 LIGHT FIXTURE. SEE ELECTRICAL DRAWINGS

5 PRE-FINISHED STEEL WALL PANEL - BALLISTIC RATED

6 BALLISTIC RATED TINTED GLAZING

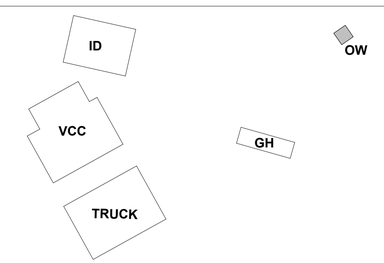
7 HVAC UNIT

8 GUN PORT

9 COUNTER

SHEET LEGEND

KEY PLAN



US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: SG
DRAWN BY: AG
CHECKED BY: SG
SUBMITTED BY:
SIZE: ANSI D
ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D6035

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HANA-KENALL 8A JV
2500 CITYWEST BLVD
SUITE 700
HOUSTON, TX 77042

ACCESS CONTROL POINT- PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

OVERWATCH BOOTH - PLANS AND ELEVATIONS

SHEET ID
A-141

File Path: Autodesk Docs://Pinebluff Arsenal ACP/A/PBA_VCC_Central.rvt

Plot Date: 4/14/2026 3:59:47 PM

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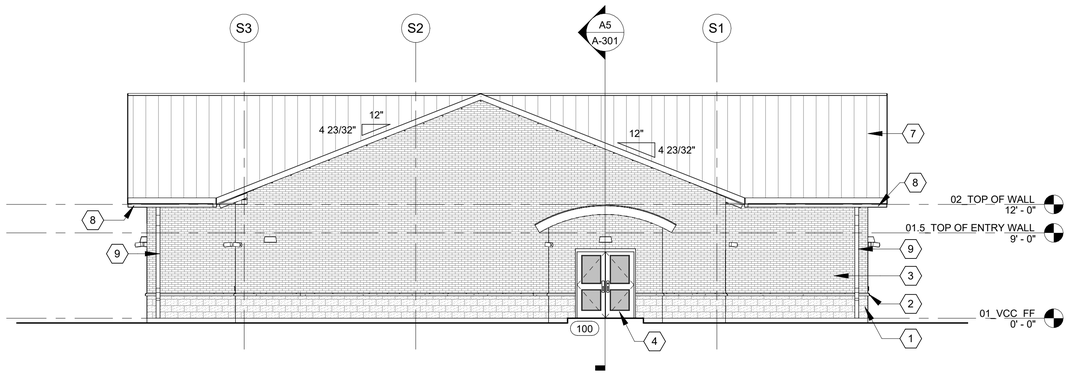
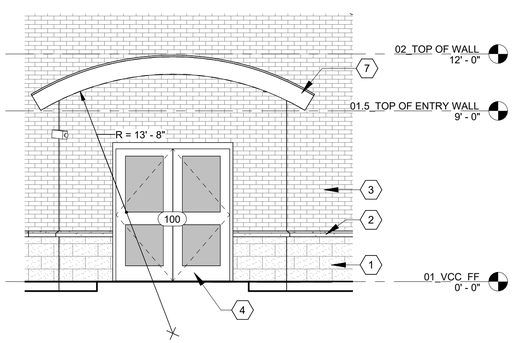


H7 VCC - NORTH ELEVATION

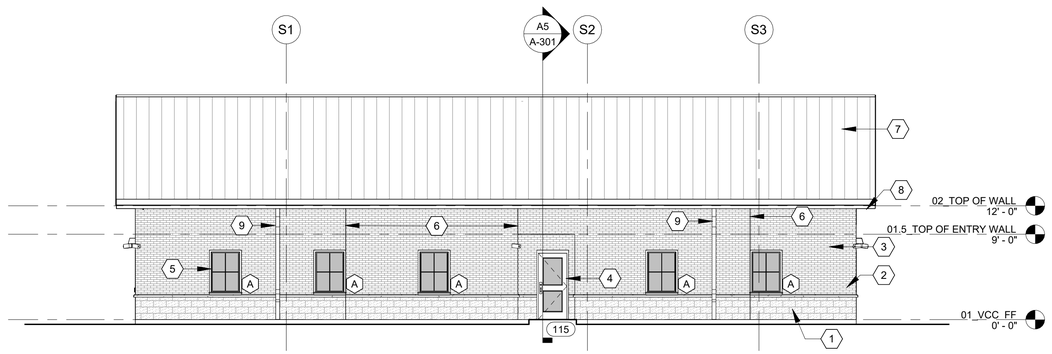
1/8" = 1'-0"

0 4' 8' 16'



A1 ENLARGED NORTH ELEVATION

1/4" = 1'-0"



A7 VCC - SOUTH ELEVATION

1/8" = 1'-0"

0 4' 8' 16'

GENERAL NOTES

A. REFER TO GENERAL SHEETS G-003 AND G-004 FOR GENERAL PROJECT NOTES.

B. REFER TO A-101 FOR VCC FLOOR PLAN.

B. REFER TO A-104 FOR VCC ROOF PLAN.

C. REFER TO A-105 FOR VCC REFLECTED CEILING PLAN AND CEILING HEIGHTS.

D. REFER TO A-400 FOR ENLARGED PLANS.

E. REFER TO I-101 FOR INTERIOR ELEVATIONS.

F. REFER TO A-530 & A-531 SERIES FOR PARTITION TYPES.

G. REFER TO A-600 FOR DOOR SCHEDULE.

SHEET KEYNOTES

KEYNOTES

1 SPLIT FACE CMU VENEER

2 CAST STONE BAND

3 BRICK VENEER

4 DOOR AS SCHEDULED - TYPICAL - SEE DOOR SCHEDULE

5 WINDOW AS SCHEDULED

6 EXPANSION JOINT

7 PRE-FINISHED STANDING SEAM METAL ROOF (SSMR) AS SPECIFIED

8 PRE-FINISHED METAL GUTTER

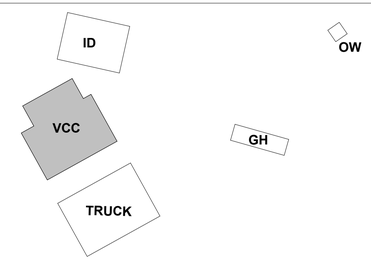
9 4"x 4" PRE-FINISHED METAL DOWNSPOUT

SHEET LEGEND

KEY PLAN

N

N.T.S



US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

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DRAWN BY: AG
CHECKED BY: SG
SUBMITTED BY:
SIZE: ANSI D

ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S25D6035

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HANA-KENALL 8A JV
2500 CITYWEST BLVD
SUITE 700
HOUSTON, TX 77042

ACCESS CONTROL POINT- PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

VCC - NORTH AND SOUTH ELEVATIONS

SHEET ID

A-201

File Path: Autodesk Docs://Pinebluff Arsenal ACP/A-PBA_VCC_Central.rvt

Plot Date: 4/16/2026 3:24:56 PM

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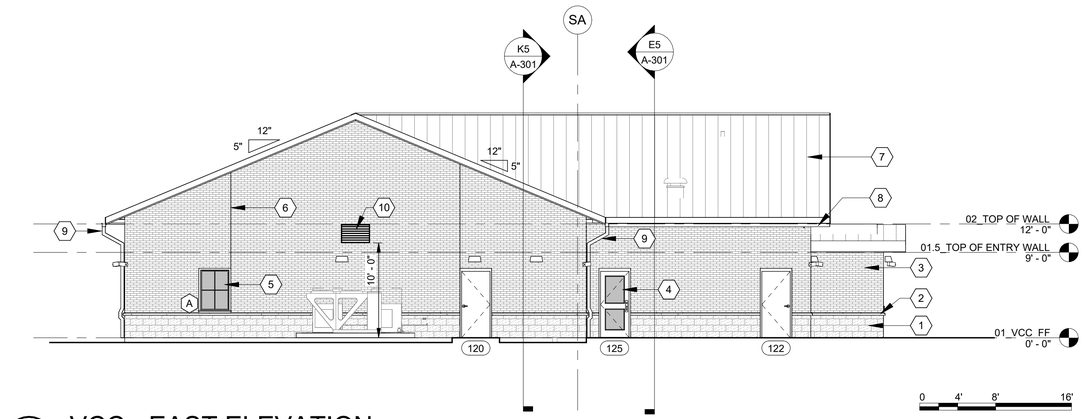
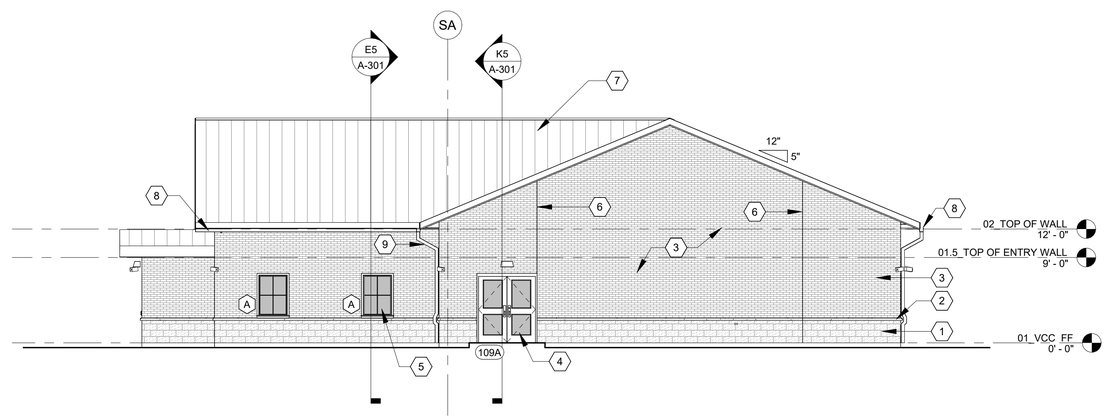


H5 VCC - EAST ELEVATION

1/8" = 1'-0"



A5 VCC - WEST ELEVATION

1/8" = 1'-0"

GENERAL NOTES

A. REFER TO GENERAL SHEETS G-003 AND G-004 FOR GENERAL PROJECT NOTES.

B. REFER TO A-101 FOR VCC FLOOR PLAN.

B. REFER TO A-104 FOR VCC ROOF PLAN.

C. REFER TO A-105 FOR VCC REFLECTED CEILING PLAN AND CEILING HEIGHTS.

D. REFER TO A-400 FOR ENLARGED PLANS.

E. REFER TO I-101 FOR INTERIOR ELEVATIONS.

F. REFER TO A-530 & A-531 SERIES FOR PARTITION TYPES.

G. REFER TO A-600 FOR DOOR SCHEDULE.

SHEET KEYNOTES

KEYNOTES

1 SPLIT FACE CMU VENEER

2 CAST STONE BAND

3 BRICK VENEER

4 DOOR AS SCHEDULED - TYPICAL - SEE DOOR SCHEDULE

5 WINDOW AS SCHEDULED

6 EXPANSION JOINT

7 PRE-FINISHED STANDING SEAM METAL ROOF (SSMR) AS SPECIFIED

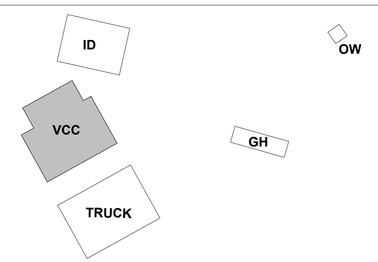
8 PRE-FINISHED METAL GUTTER

9 4"x 4" PRE-FINISHED METAL DOWNSPOUT

10 36"W x 24"H WALL LOUVER

SHEET LEGEND

KEY PLAN



US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

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DRAWN BY: AG
CHECKED BY: SG
SUBMITTED BY:
SIZE: ANSI D

ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S25D6035

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HANA-KENALL 8A JV
2500 CITYWEST BLVD
SUITE 700
HOUSTON, TX 77042

ACCESS CONTROL POINT: PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

VCC - EAST AND WEST ELEVATIONS

SHEET ID

A-202

Plot Date: 4/15/2026 2:07:33 PM File Path: Autodesk Docs://Pinebluff Arsenal ACP/A/PBA_VCC_Central.rvt

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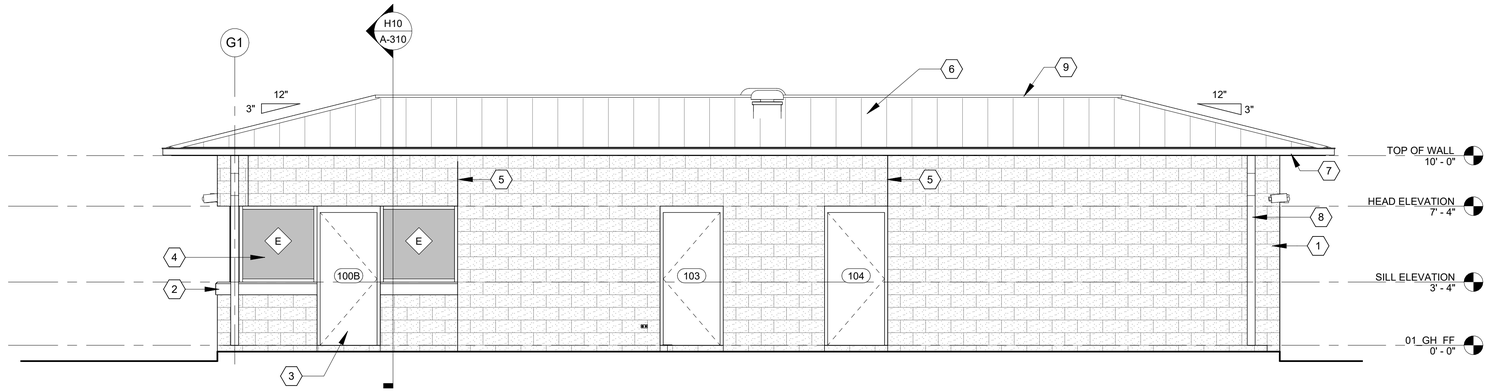
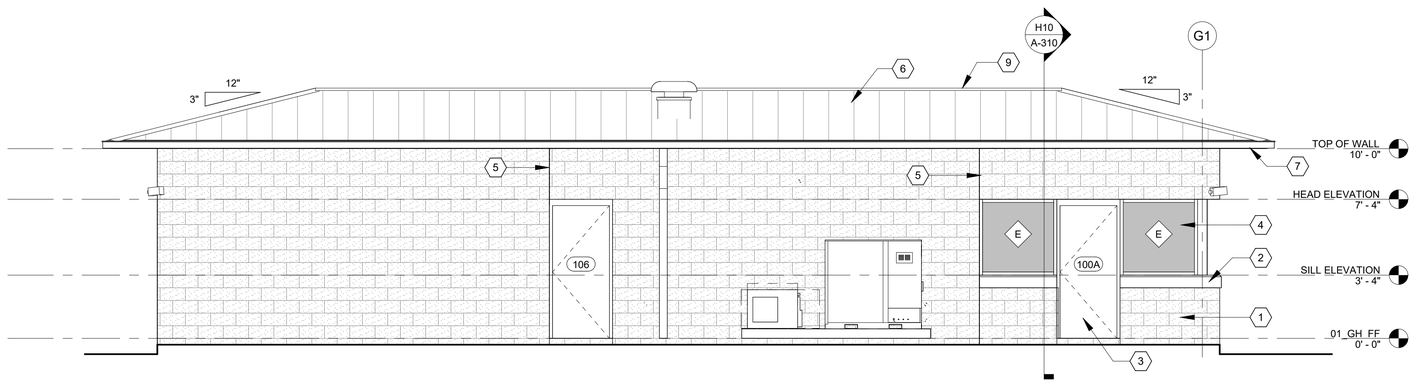


H2 SOUTH ELEVATION

1/4" = 1'-0"

0 4' 8' 16'



A2 NORTH ELEVATION

1/4" = 1'-0"

0 4' 8' 16'

GENERAL NOTES

SHEET KEYNOTES

KEYNOTES

1 SPLIT FACE CMU VENEER

2 PRECAST CONCRETE SILL

3 BALLISTIC DOOR AS SCHEDULED

4 BALLISTIC WINDOW

5 EXPANSION JOINT

6 PRE-FINISHED STANDING SEAM METAL ROOF (SSMR)

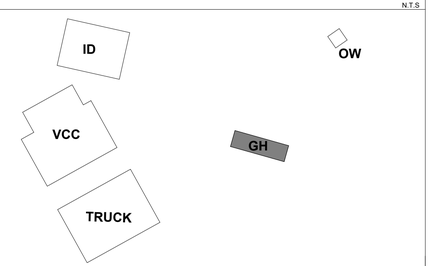
7 PRE-FINISHED METAL GUTTER

8 PRE-FINISHED DOWNSPOUT, TYPICAL

9 PRE-FINISHED RIDGE CAP

SHEET LEGEND

KEY PLAN



US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: SG	ISSUE DATE: 17 APRIL 2026
DRAWN BY: AG	SOLICITATION NO.: W9127S24F6002
CHECKED BY: SG	CONTRACT NO.: W9127S23D6035
	SUBMITTED BY:
	SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HANA-KENALL 8A JV
2500 CITYWEST BLVD
SUITE 700
HOUSTON, TX 77042

ACCESS CONTROL POINT- PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

GATEHOUSE - NORTH AND SOUTH ELEVATIONS

SHEET ID

A-211

Plot Date: 4/14/2026 5:10:42 PM File Path: Autodesk Docs://Pinebluff Arsenal ACP/A_PBA_Gatehouses.rvt

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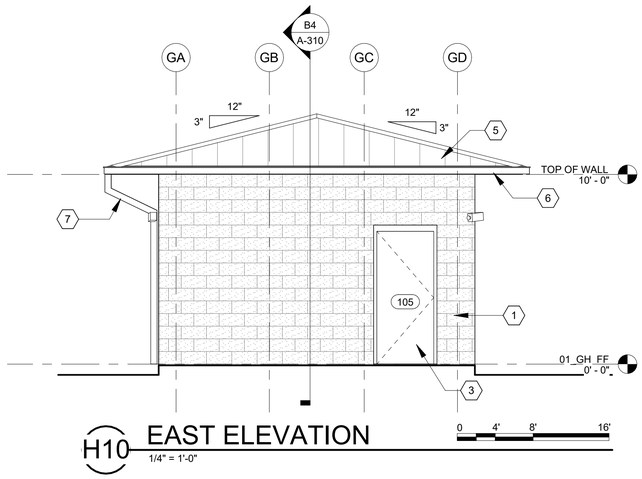
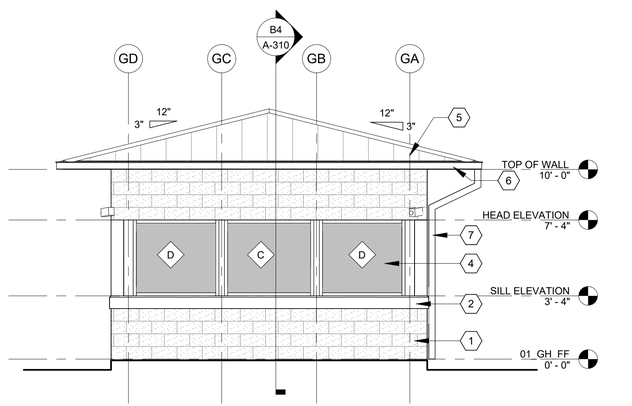


H10 EAST ELEVATION

1/4" = 1'-0"



A10 WEST ELEVATION

1/4" = 1'-0"

GENERAL NOTES

SHEET KEYNOTES

KEYNOTES

1 SPLIT FACE CMU VENEER

2 PRECAST CONCRETE SILL

3 BALLISTIC DOOR AS SCHEDULED

4 BALLISTIC WINDOW

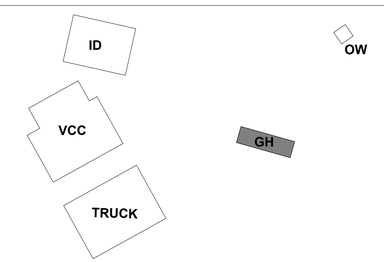
5 PRE-FINISHED STANDING SEAM METAL ROOF (SSMR)

6 PRE-FINISHED METAL GUTTER

7 PRE-FINISHED DOWNSPOUT, TYPICAL

SHEET LEGEND

KEY PLAN



US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

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DRAWN BY:	AG
CHECKED BY:	SG
SUBMITTED BY:	
SIZE:	ANSI D
ISSUE DATE:	17 APRIL 2026
SOLICITATION NO.:	W9127S24F6002
CONTRACT NO.:	W9127S23D6035

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HANA-KENALL 8A JV
2500 CITYWEST BLVD
SUITE 700
HOUSTON, TX 77042

ACCESS CONTROL POINT- PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

GATEHOUSE - EAST AND WEST ELEVATIONS

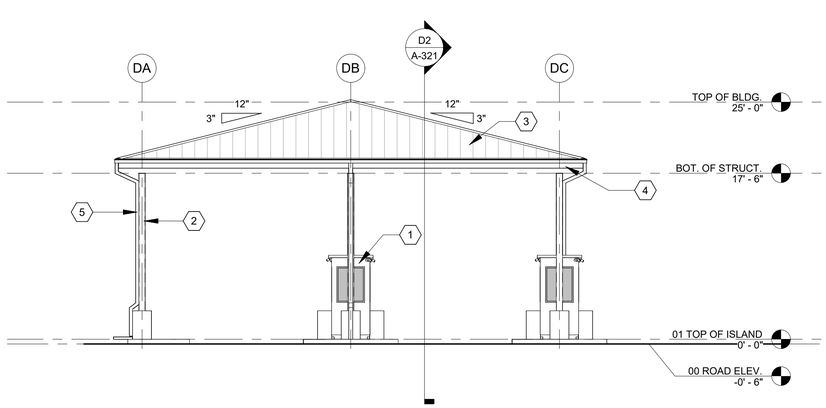
SHEET ID

A-212

File Path: Autodesk Docs://Pinebluff Arsenal ACP/A_PBA_Gatehouse.rvt

Plot Date: 4/14/2026 5:11:19 PM

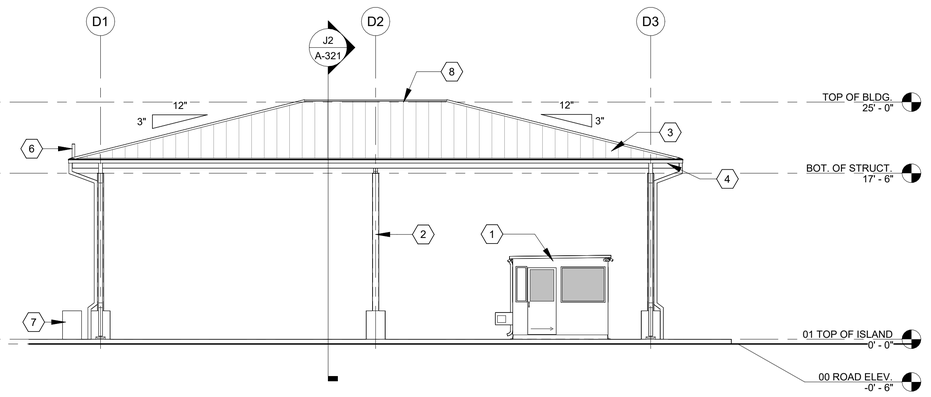
CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



J2 EAST ELEVATION

1/8" = 1'-0"

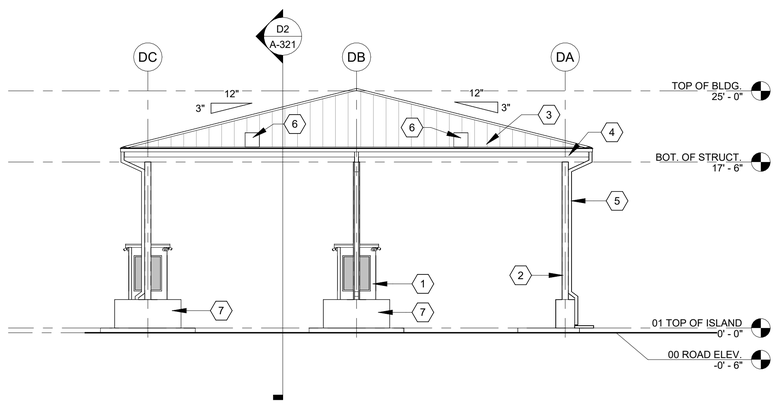
0 4' 8' 16'



J8 SOUTH ELEVATION

1/8" = 1'-0"

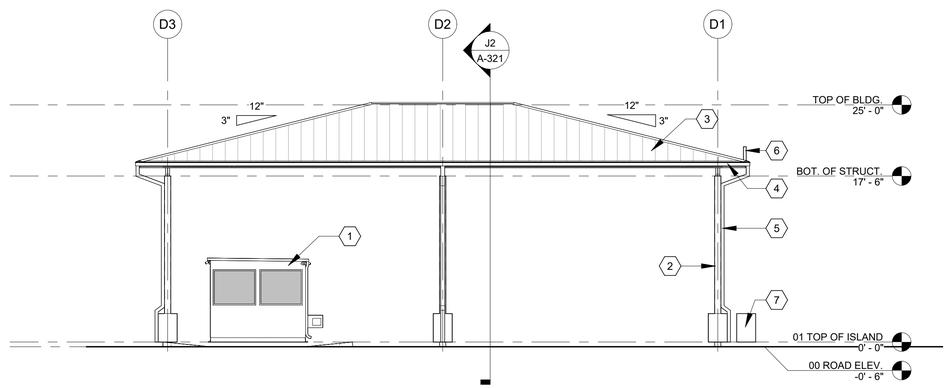
0 4' 8' 16'



A2 WEST ELEVATION

1/8" = 1'-0"

0 4' 8' 16'



A8 NORTH ELEVATION

1/8" = 1'-0"

0 4' 8' 16'

GENERAL NOTES

SHEET KEYNOTES

KEYNOTES

1 4x10 GUARD BOOTH AS SPECIFIED

2 STRUCTURAL COLUMN. SEE STRUCTURAL DRAWINGS

3 PRE-FINISHED STANDING SEAM METAL ROOF (SSMR)

4 PRE-FINISHED METAL GUTTER

5 PRE-FINISHED DOWNSPOUT, TYPICAL

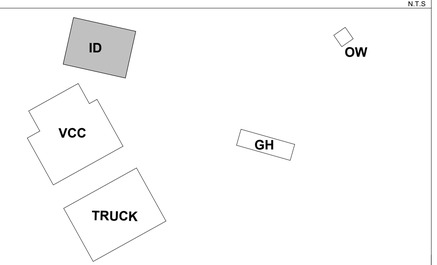
6 LANE INDICATORS

7 VEHICLE BARRIERS

8 PRE-FINISHED RIDGE CAP

SHEET LEGEND

KEY PLAN



US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: SG	ISSUE DATE: 17 APRIL 2026
DRAWN BY: AG	SOLICITATION NO.: W9127S24F6002
CHECKED BY: SG	CONTRACT NO.: W9127S25D6035
SUBMITTED BY:	SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HANA-KENALL 8A JV
2500 CITYWEST BLVD
SUITE 700
HOUSTON, TX 77042

ACCESS CONTROL POINT: PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

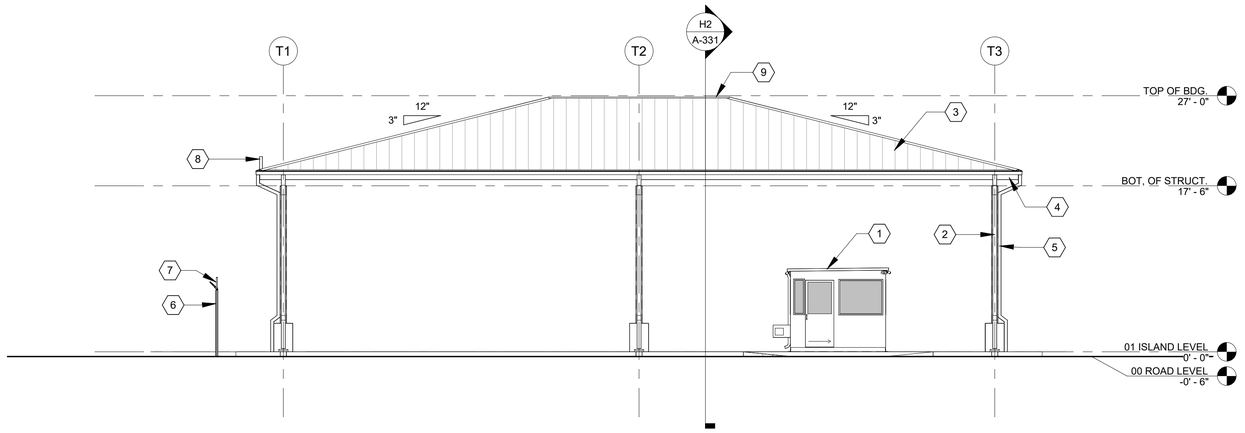
ID CHECK AREA - ELEVATIONS

SHEET ID

A-221

Plot Date: 4/14/2026 5:30:41 PM File Path: Autodesk Docs://Pinebluff Arsenal ACP/A_PBA_ID Check.rvt

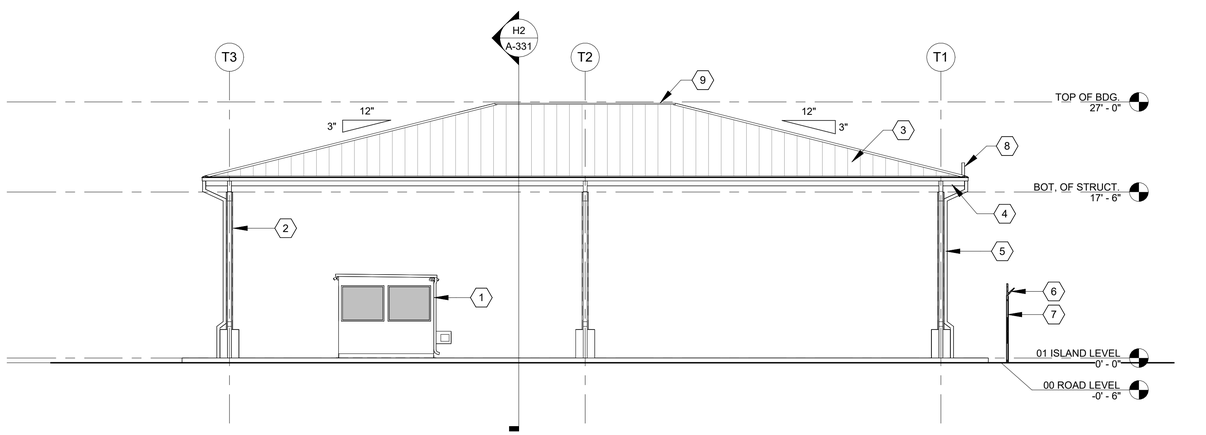
CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



H7 SOUTH ELEVATION

1/8" = 1'-0"

0 4' 8' 16'



A7 NORTH ELEVATION

1/8" = 1'-0"

0 4' 8' 16'

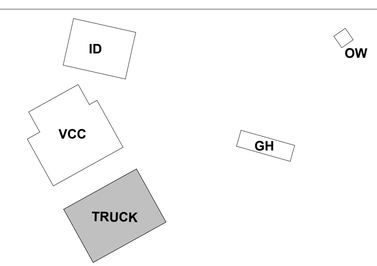
GENERAL NOTES

SHEET KEYNOTES

1 5x10 GUARD BOOTH AS SPECIFIED
2 STRUCTURAL COLUMN. SEE STRUCTURAL DRAWINGS
3 PRE-FINISHED STANDING SEAM METAL ROOF (SSMR)
4 PRE-FINISHED METAL GUTTER
5 PRE-FINISHED DOWNSPOUT, TYPICAL
6 CHAIN-LINKED FENCE
7 CHAIN-LINKED GATE
8 LANE INDICATORS
9 PRE-FINISHED RIDGE CAP

SHEET LEGEND

KEY PLAN



US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: SG	ISSUE DATE: 17 APRIL 2026
DRAWN BY: AG	SOLICITATION NO.: W9127S24F6002
CHECKED BY: SG	CONTRACT NO.: W9127S23D6035
	SUBMITTED BY:
	SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HANA-KENALL 8A JV
2500 CITYWEST BLVD
SUITE 700
HOUSTON, TX 77042

ACCESS CONTROL POINT- PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

TRUCK SEARCH AREA - NORTH AND SOUTH ELEVATIONS

SHEET ID

A-231

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

File Path: Autodesk Docs://Pinebluff Arsenal ACP/A_PBA_Truck Search Area.rvt

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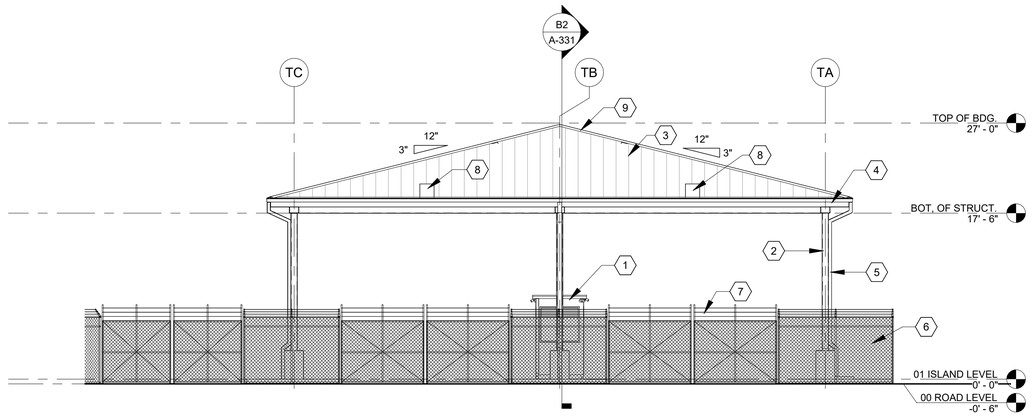
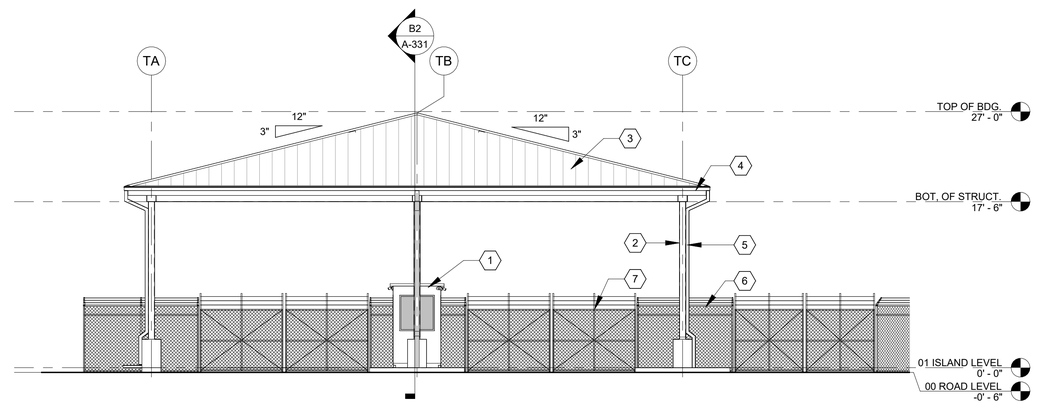


H7 WEST ELEVATION

1/8" = 1'-0"

0 4' 8' 16'



A7 EAST ELEVATION

1/8" = 1'-0"

0 4' 8' 16'

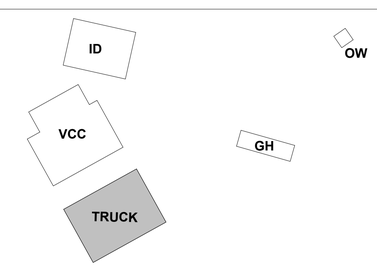
GENERAL NOTES

SHEET KEYNOTES

1 5x10 GUARD BOOTH AS SPECIFIED
2 STRUCTURAL COLUMN. SEE STRUCTURAL DRAWINGS
3 PRE-FINISHED STANDING SEAM METAL ROOF (SSMR)
4 PRE-FINISHED METAL GUTTER
5 PRE-FINISHED DOWNSPOUT, TYPICAL
6 CHAIN-LINKED FENCE
7 CHAIN-LINKED GATE
8 LANE INDICATORS
9 PRE-FINISHED RIDGE CAP

SHEET LEGEND

KEY PLAN



US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

File Path: Autodesk Docs://Pinebluff Arsenal ACP/A_PBA_Truck Search Area.rvt

Plot Date: 4/14/2026 5:25:23 PM

DESIGNED BY: SG	ISSUE DATE: 17 APRIL 2026
DRAWN BY: AG	SOLICITATION NO.: W9127S24F6002
CHECKED BY: SG	CONTRACT NO.: W9127S23D6035
SUBMITTED BY:	SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HANA-KENALL 8A JV
2500 CITYWEST BLVD
SUITE 700
HOUSTON, TX 77042

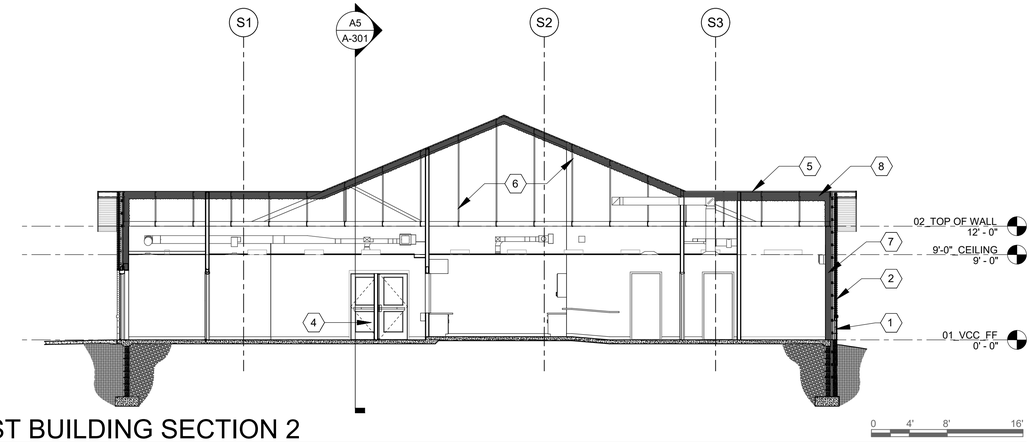
ACCESS CONTROL POINT- PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

TRUCK SEARCH AREA - EAST AND WEST ELEVATIONS

SHEET ID

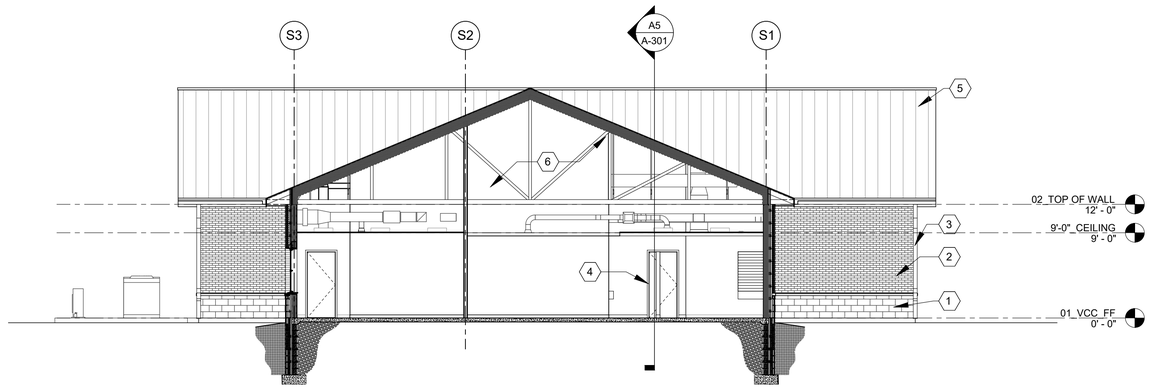
A-232

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



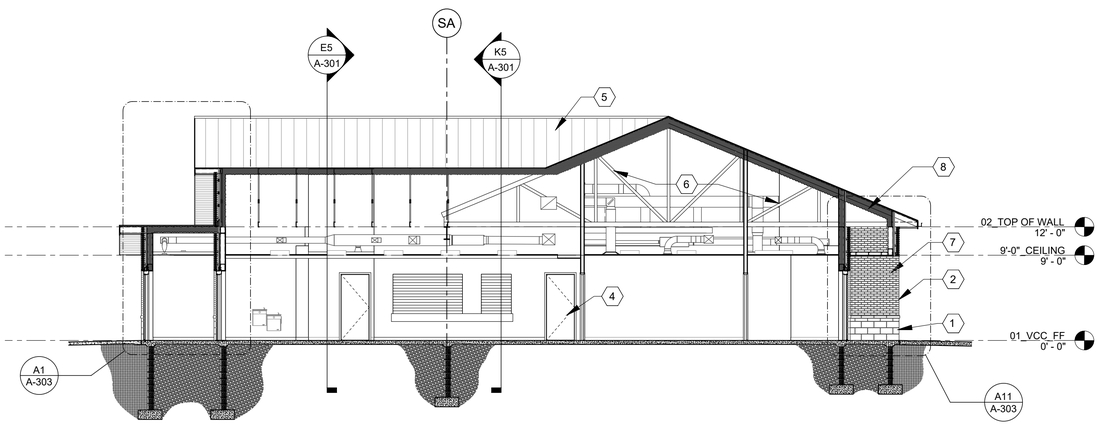
K5 EAST-WEST BUILDING SECTION 2

1/8" = 1'-0"



E5 EAST-WEST BUILDING SECTION

1/8" = 1'-0"



A5 NORTH-SOUTH BUILDING SECTION

1/8" = 1'-0"

GENERAL NOTES

SHEET KEYNOTES

KEYNOTES

1 SPLIT FACE CMU VENEER

2 BRICK VENEER

3 4" x 4" PREFINISHED METAL DOWNSPOUTS

4 DOOR AS SCHEDULED - TYPICAL - SEE DOOR SCHEDULE

5 PREFINISHED STANDING SEAM METAL ROOF (SSMR)

6 STEEL TRUSSES - REFERENCE STRUCTURAL

7 6" METAL STUDS

8 SPRAY FOAM INSULATION - PROVIDE R-31 AT ROOF AND R-21 AT WALLS

SHEET LEGEND

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W9127S24R6002
CONTRACT NO.: W9127S26B0035

DESIGNED BY: D. AYERS
DRAWN BY: D. AYERS
CHECKED BY: S. CHAMBERLAIN
SUBMITTED BY:
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

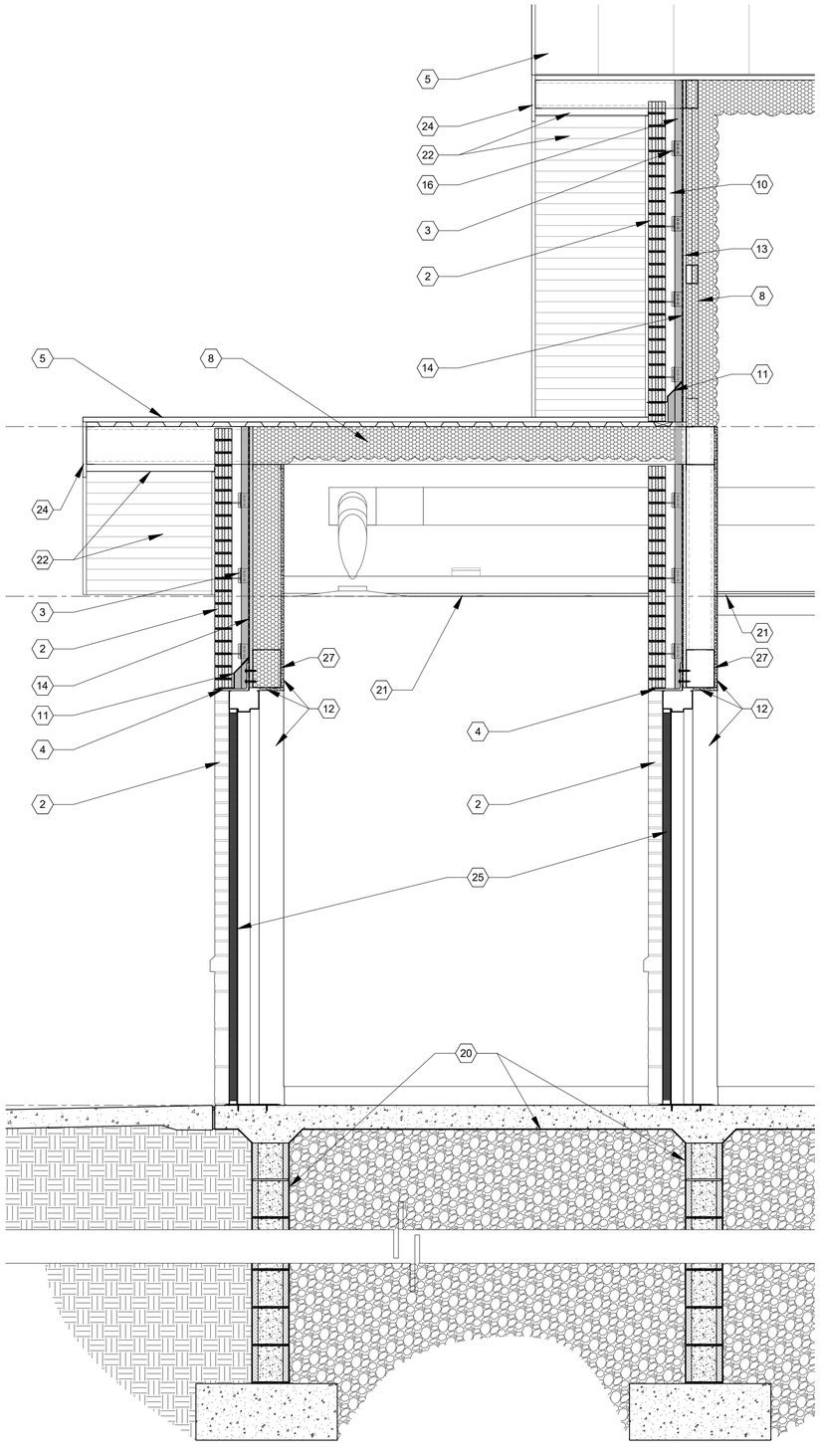
HANA-KENALL 8A JV
2500 CITYWEST BLVD
SUITE 700
HOUSTON, TX 77042

ACCESS CONTROL POINT, PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

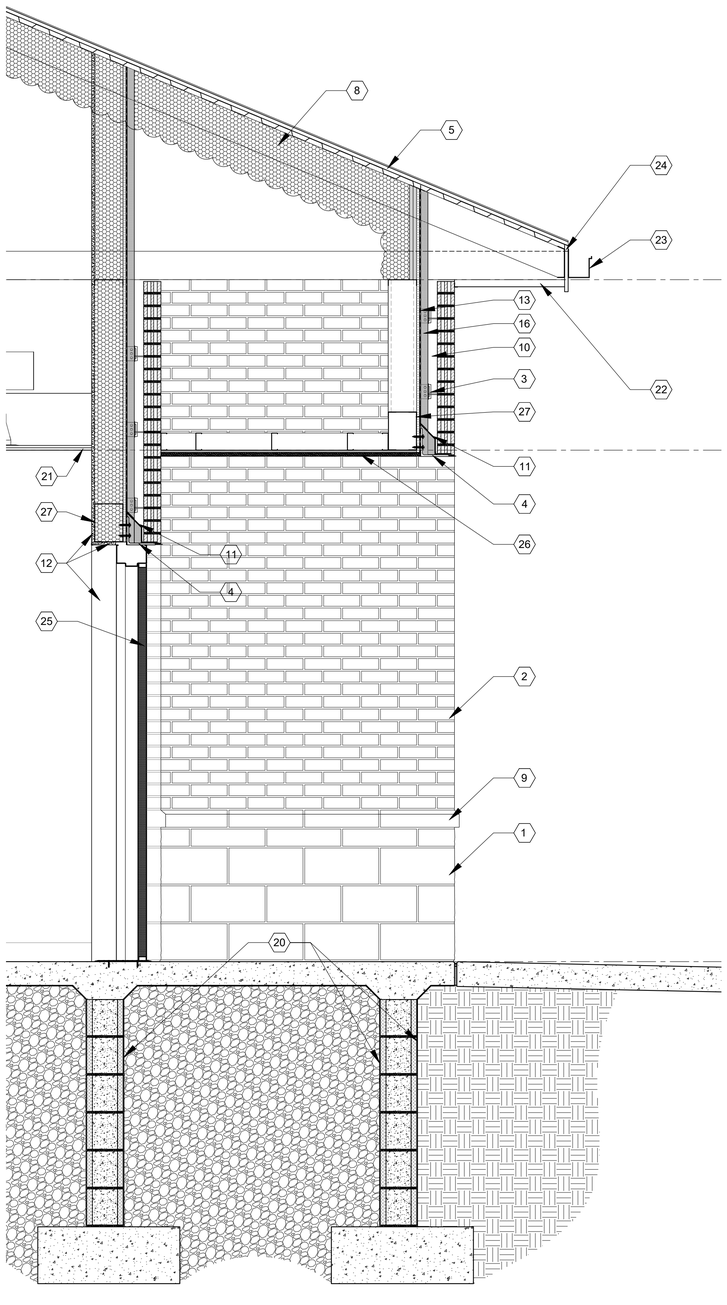
VCC BUILDING SECTIONS

SHEET ID
VCC
A-301

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



A1 WALL SECTION 2
3/4" = 1'-0"



A11 WALL SECTION 1
3/4" = 1'-0"

GENERAL NOTES

SHEET KEYNOTES

KEYNOTES

1 4" SPLIT FACE CMU VENEER
2 BRICK VENEER
3 STAINLESS STEEL THERMALLY BROKEN MASONRY TIE @ 16" O.C.
4 STEEL MASONRY LINTEL ATTACHED TO DOOR HEADER - REFERENCE STRUC.
5 PREFINISHED STANDING SEAM METAL ROOF (SSMR)
6 STEEL TRUSSES - REFERENCE STRUCTURAL
7 6" METAL STUDS
8 SPRAY FOAM INSULATION - PROVIDE R-31 @ ROOF AND R-21 @ WALLS
9 CAST STONE SILL
10 2" AIR SPACE
11 STAINLESS STEEL CONT. THRU-WALL FLASHING
12 5/8" GYPSUM BOARD - PAINT
13 5/8" GYPSUM SHEATHING
14 FLUID APPLIED MEMBRANE AIR BARRIER
15 GROUT CAVITY
16 1-3/4" POLYISOCYANURATE RIGID INSULATION - EXTEND TO TOP OF FOOTING
17 EXTEND FLUID APPLIED MEMBRANE BARRIER TO BOTTOM OF FOOTING
18 4" SMOOTH CMU VENEER BELOW GRADE - FULLY GROUTED
19 1/4" CEMENT BOARD
20 VAPOR BARRIER - REFERENCE STRUCTURE
21 CEILING AS SCHEDULED
22 PREFINISHED METAL SOFFIT AS SPECIFIED
23 4" x 4" PREFINISHED METAL GUTTER
24 1X FASCIA - PAINT
25 DOOR AS SCHEDULED
26 3/4" 3 COAT STUCCO OVER 1/2" PLYWOOD SUBSTRATE AND S.S. METAL LATH
27 LIGHT GAUGE METAL HEADER - REFERENCE S-102

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: D. AYERS
DRAWN BY: D. AYERS
CHECKED BY: C. GUAMARDIEMA
SUBMITTED BY:
ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W9127S24R6002
CONTRACT NO.: W9127S26B0035
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

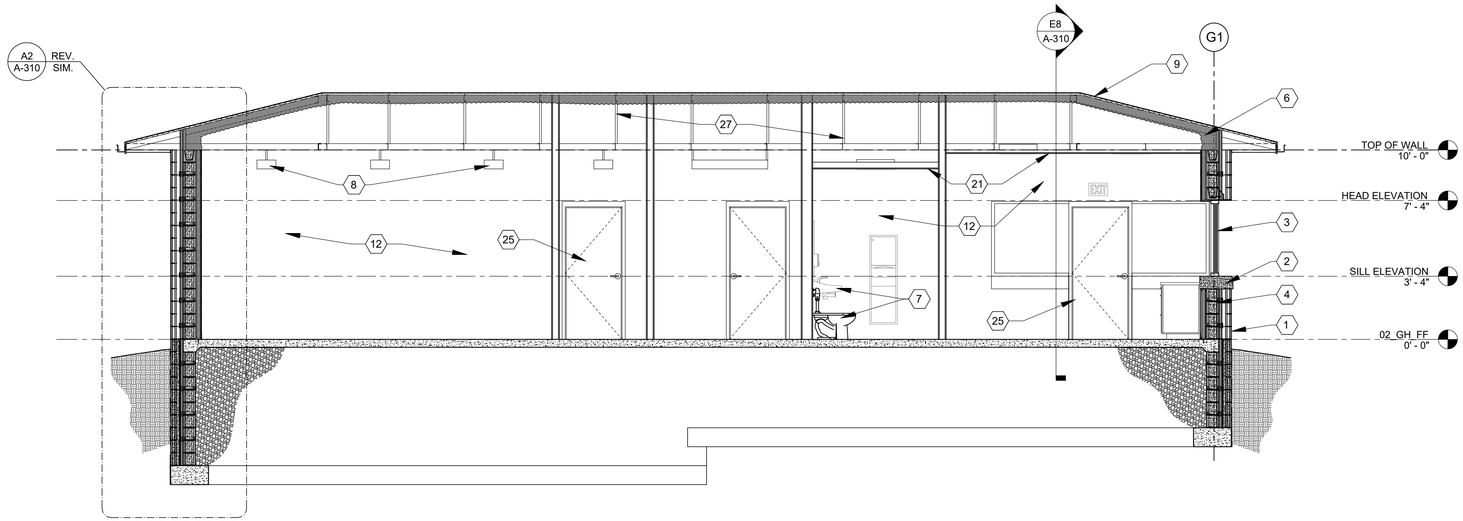
HANA-KENALL 8A JV
2500 CITYWEST BLVD
SUITE 700
HOUSTON, TX 77042

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

VCC WALL SECTIONS

SHEET ID
VCC
A-303

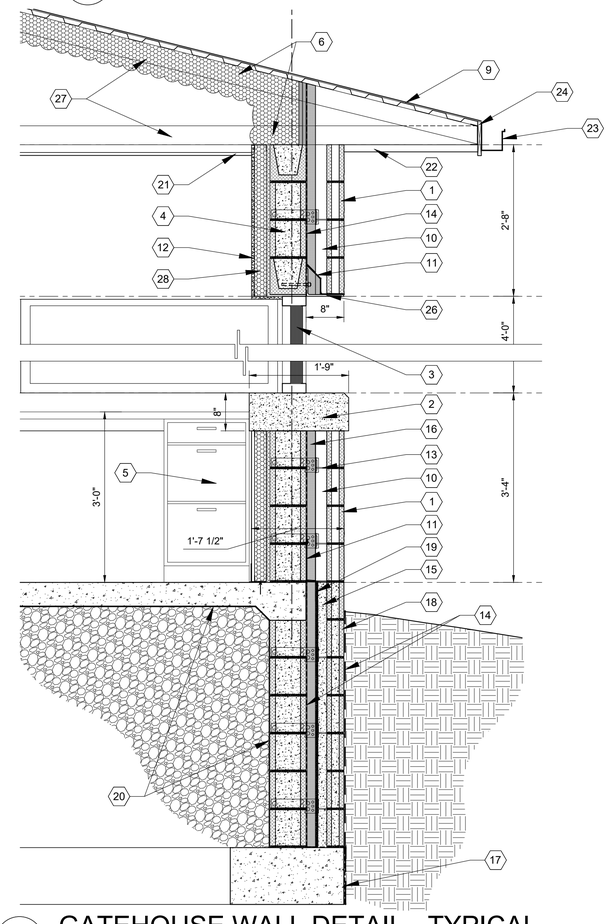
CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



J2 LONGITUDINAL SECTION

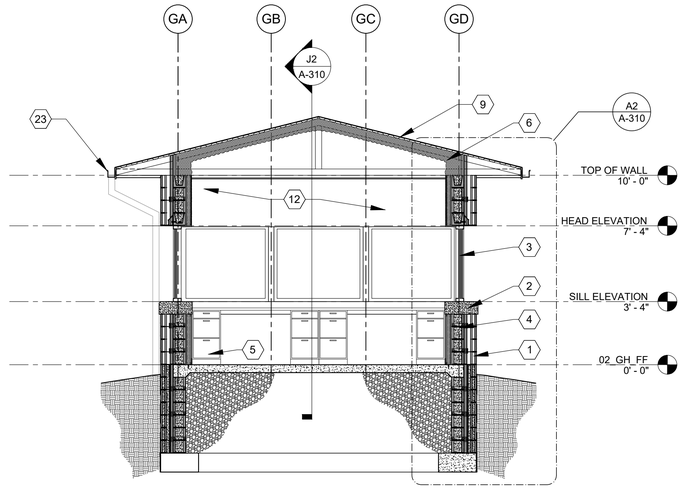
1/4" = 1'-0"

0 4' 8' 16'



A2 GATEHOUSE WALL DETAIL - TYPICAL

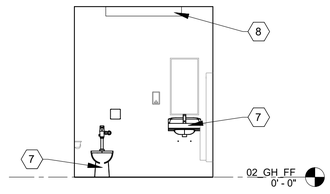
3/4" = 1'-0"



E8 CROSS SECTION

1/4" = 1'-0"

0 4' 8' 16'



A7 INTERIOR ELEV @ LATRINE-101

1/4" = 1'-0"

GENERAL NOTES

SHEET KEYNOTES

KEYNOTES

1 4" SPLIT FACE CMU VENEER
2 CAST STONE SILL
3 BALLISTIC RATED WINDOW ASSEMBLY - TYPICAL
4 8" CMU - FULLY GROUTED
5 MILLWORK - REFERENCE INTERIORS
6 SPRAY FOAM INSULATION - PROVIDE R-31 @ ROOF AND R-21 @ WALLS
7 PLUMBING FIXTURES AS SCHEDULED
8 LIGHT FIXTURE
9 PREFINISHED STANDING SEAM METAL ROOF (SSMR)
10 2" AIR SPACE
11 STAINLESS STEEL CONT. THRU-WALL FLASHING
12 5/8" GYPSUM BOARD - PAINT
13 STAINLESS STEEL THERMALLY BROKEN MASONRY TIE @ 16" O.C.
14 FLUID APPLIED MEMBRANE AIR BARRIER
15 GROUT CAVITY
16 1-3/4" POLYISOCYANURATE RIGID INSULATION - EXTEND TO TOP OF FOOTING
17 EXTEND FLUID APPLIED MEMBRANE BARRIER TO BOTTOM OF FOOTING
18 4" SMOOTH CMU VENEER BELOW GRADE - FULLY GROUTED
19 1/4" CEMENT BOARD
20 VAPOR BARRIER - REFERENCE STRUCTURE
21 CEILING AS SCHEDULED
22 PREFINISHED METAL SOFFIT AS SPECIFIED
23 4" x 4" PREFINISHED METAL GUTTER
24 1X FASCIA - PAINT
25 DOOR AS SCHEDULED
26 STEEL MASONRY LINTEL ATTACHED TO CMU LINTEL - REFERENCE STRUC.
27 STEEL TRUSSES - REFERENCE STRUCTURAL
28 2-1/2" METAL STUDS

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: D. AYERS
DRAWN BY: D. AYERS
CHECKED BY: C. HAWKINS
ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W9127S24R6002
CONTRACT NO.: W9127S26B0035
SUBMITTED BY:
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

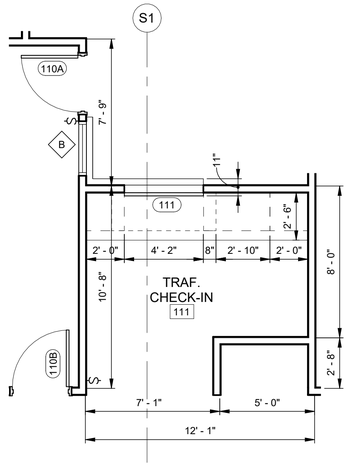
HANA-KENALL 8A JV
2600 CITYWEST BLVD
SUITE 700
HOUSTON, TX 77042

ACCESS CONTROL POINT, PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

GATEHOUSE BUILDING SECTIONS

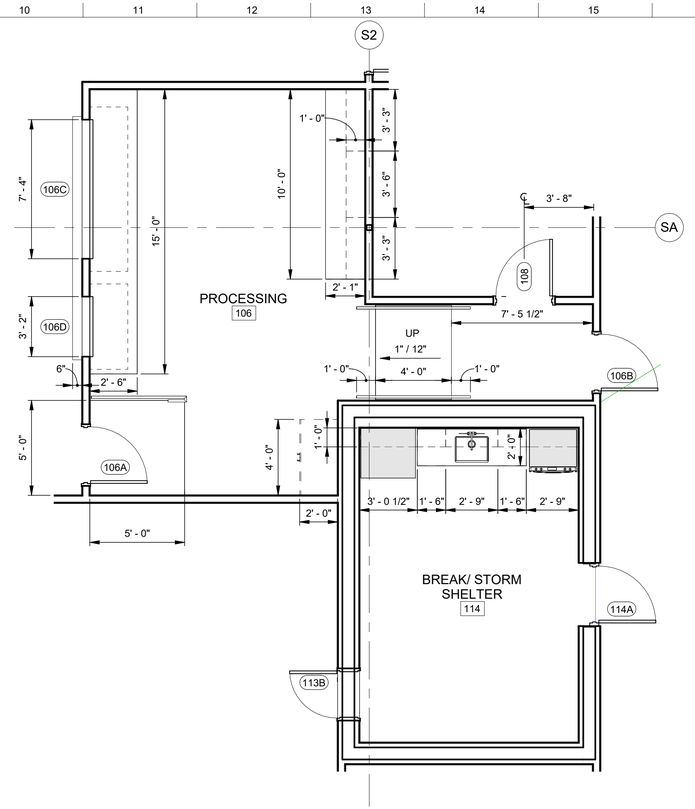
SHEET ID
G-HOUSE
A-310

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



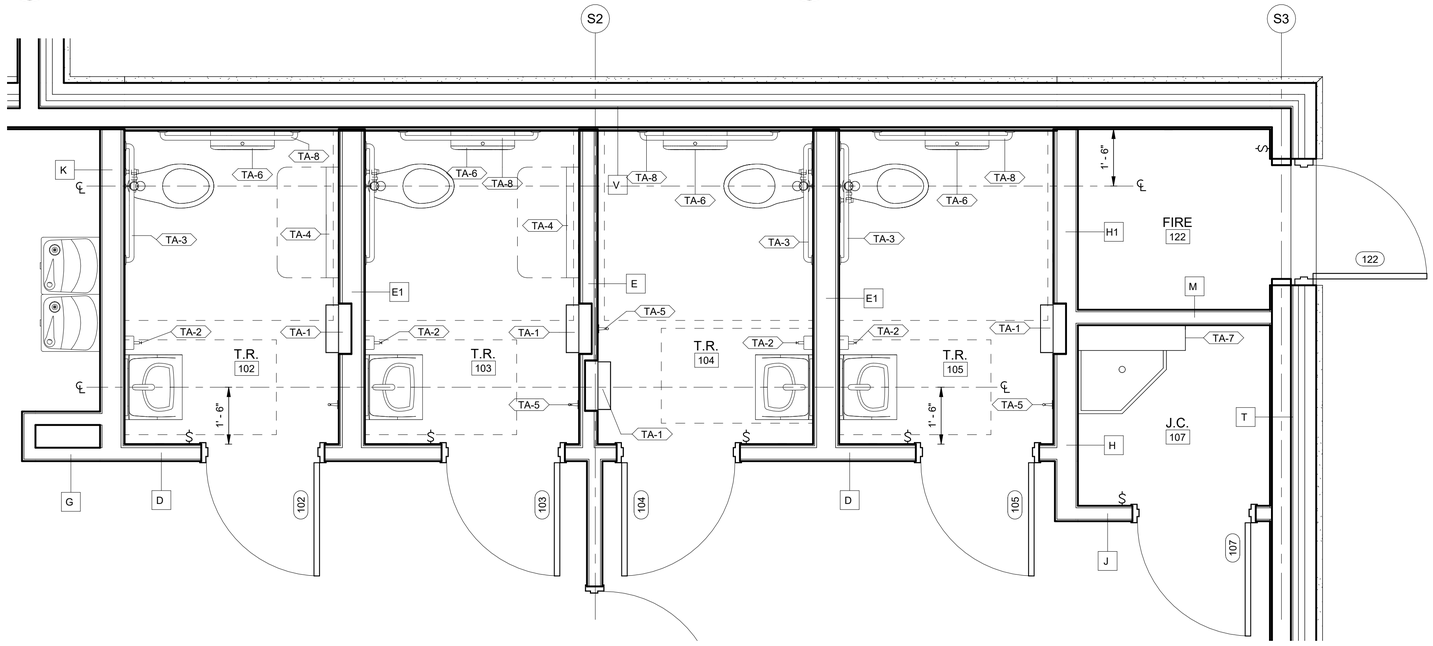
G4 ENLARGED PLAN AT DESK/COUNTER

1/4" = 1'-0"



G10 ENLARGED PLAN AT PROCESSING 106

1/4" = 1'-0"



A4 ENLARGED PLAN AT TOILET ROOMS

1/2" = 1'-0"

GENERAL NOTES

NOTE: PER ABA/ADA GUIDELINES [CHAPTER 6], DIAPER CHANGING STATIONS CANNOT PROTRUDE MORE THAN 4" INTO CIRCULATION PATHS AND MAY NOT OVERLAP FIXTURE CLEARANCES WHEN CLOSED. WHEN OPEN, THE CLEAR SPACE REQUIRED FOR A FORWARD APPROACH TO CHANGING TABLES CAN OVERLAP FIXTURE CLEARANCES.

NOTE: SEE A-402 FOR INTERIOR ELEVATIONS

SHEET KEYNOTES

TOILET ACCESSORIES

TA-1	PAPER TOWEL DISPENSER/ DISPOSAL (BOBRICK_B-3944 SEMI REC)
TA-2	SOAP DISPENSER- WALL MOUNTED (BOBRICK_B-2111)
TA-3	GRABBAR (BOBRICK_B-6806 X 36)
TA-4	CHANGING STATION (KOALA KARE_KB310-SSWM)
TA-5	CLOTHES HOOK (BOBRICK_B-212)
TA-6	TOILET-TISSUE-DISPENSER (BOBRICK_B-2892)
TA-7	MOP-BROOM HOLDER (BOBRICK_B-239)
TA-8	GRABBAR (BOBRICK_B-6806 X 42)
TA-9	MIRROR

NOTE: MODELS LISTED ARE FOR BASIS OF DESIGN PURPOSES.

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

File Path: Autodesk Docs://Pinebluff Arsenal ACP/AAFBA_VCC_Central.rvt

Plot Date: 4/14/2026 3:48:28 PM

DESIGNED BY: SG
DRAWN BY: AG
CHECKED BY: SG
ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W912TS24F6002
CONTRACT NO.: W912TS23D0035
SUBMITTED BY:
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HANA-KENALL 8A JV
2500 CITYWEST BLVD
SUITE 700
HOUSTON, TX 77042

ACCESS CONTROL POINT- PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

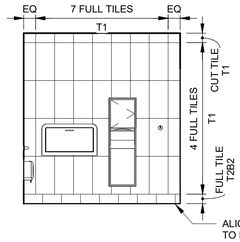
VCC - ENLARGED CORE PLANS

SHEET ID

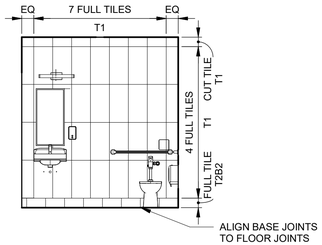
A-400

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

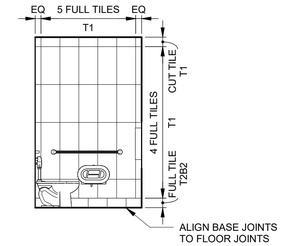
M1 T.R. 102/103 ENLARGED FLOOR PLAN
1/4" = 1'-0"



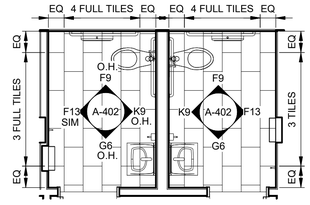
M6 ELEV. - TYP. T.R. - E
1/4" = 1'-0"



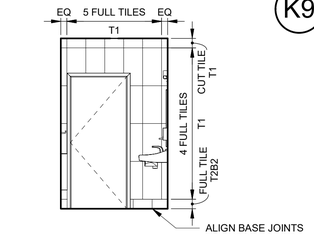
M9 ELEV. - TYP. T.R. - W
1/4" = 1'-0"



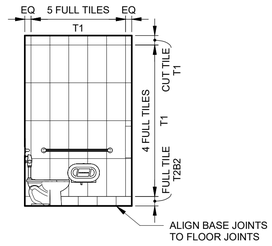
M13 ELEV. - TYP. T.R. - N
1/4" = 1'-0"



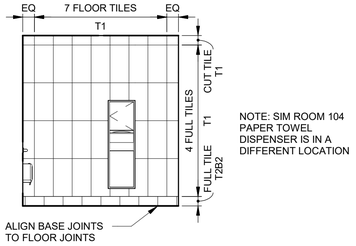
G1 T.R. 104/105 ENLARGED FLOOR PLAN
1/4" = 1'-0"



G6 TYP. T.R. 105 - S
1/4" = 1'-0"

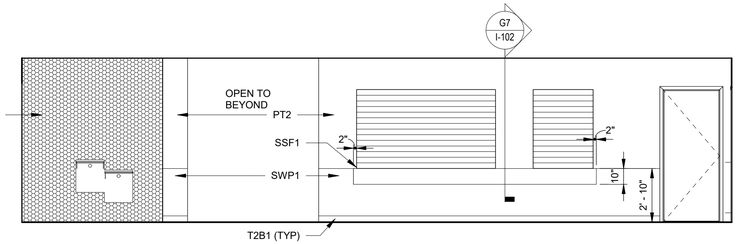


K9 TYP. T.R. 105 - W
1/4" = 1'-0"

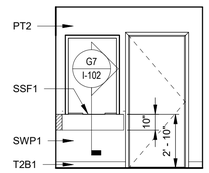


NOTE: SIM ROOM 104
PAPER TOWEL
DISPENSER IS IN A
DIFFERENT LOCATION

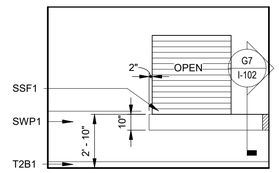
K13 ELEV. - TYP. T.R. - S
1/4" = 1'-0"



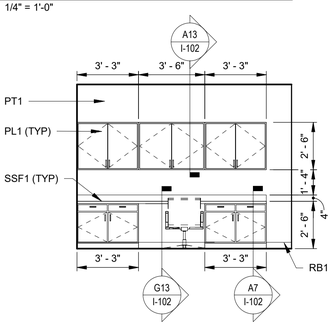
D1 ELEV. - LOBBY - E
1/4" = 1'-0"



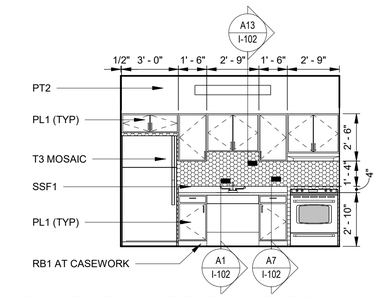
F9 TYP. T.R. 105 - N
1/4" = 1'-0"



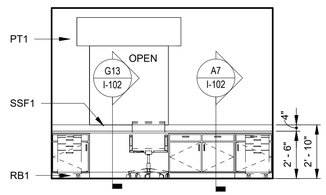
F13 TYP.T.R. 105 - E
1/4" = 1'-0"



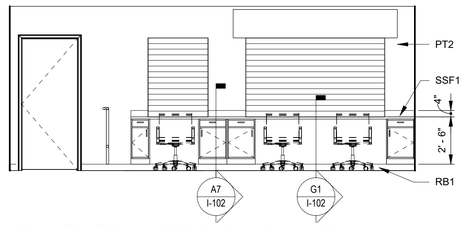
D9 ELEV. - LOBBY - W
1/4" = 1'-0"



D13 ELEV. - LOBBY - S
1/4" = 1'-0"



A1 ELEV. - TRAF. CHECK-IN 111 - N
1/4" = 1'-0"



A5 ELEV. - PROC 106 - W
1/4" = 1'-0"

A10 ELEV. - PROC 106 - E
1/4" = 1'-0"

A13 ELEV. - BREAK ROOM 114 - N
1/4" = 1'-0"

GENERAL NOTES

1. ALL VERTICAL SURFACES AND SHELVING TO BE PLASTIC LAMINATE (PL).
2. ALL HORIZONTAL COUNTER TOPS AND WORK SURFACES AND TRANSACTION SHELVES TO BE SOLID SURFACE (SSF).

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

File Path: C:\vt\2025\104\0078-FPBA_VCC_Pedro.Velazquez\Rooftopact.rvt

Plot Date: 4/16/2026 4:13:41 PM

DESIGNED BY: Designer
DRAWN BY: Author
CHECKED BY: Checker
SUBMITTED BY:
ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D003
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

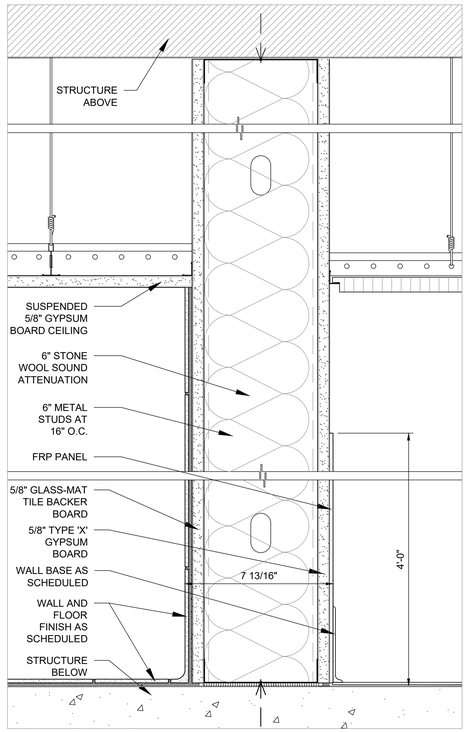
HDR ENGINEERING, INC
613 NW LOOP 410, STE 700
SAN ANTONIO, TX 78216
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

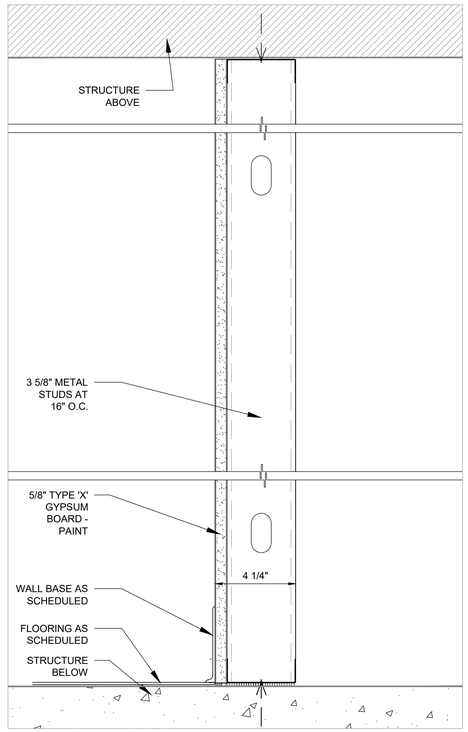
INTERIOR ELEVATIONS

SHEET ID
A-402

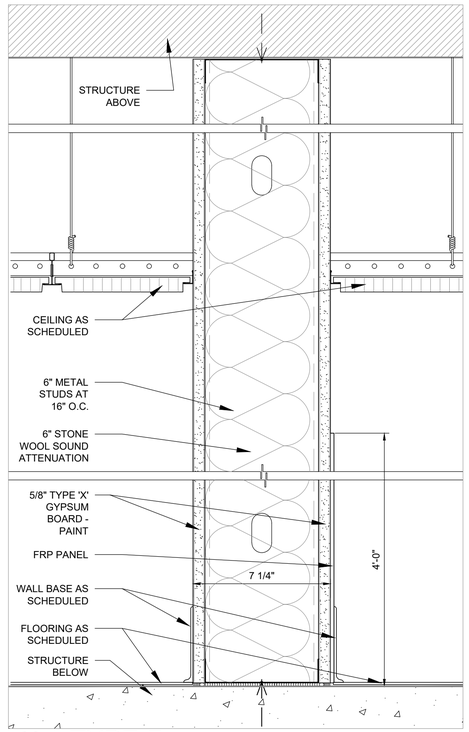
CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



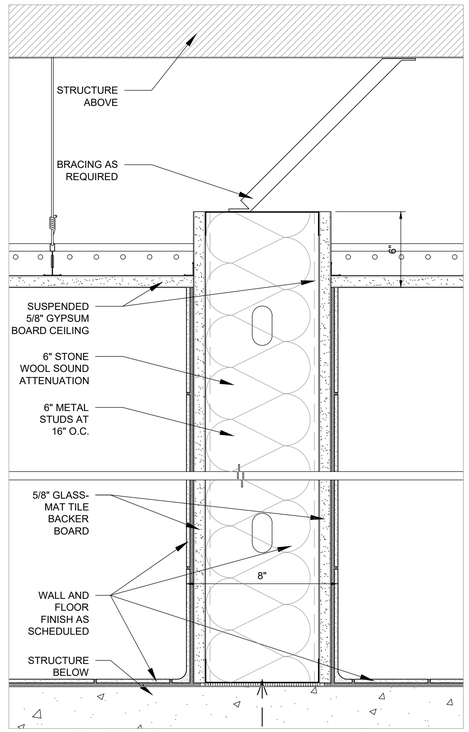
H2 TYPE H
3" = 1'-0"



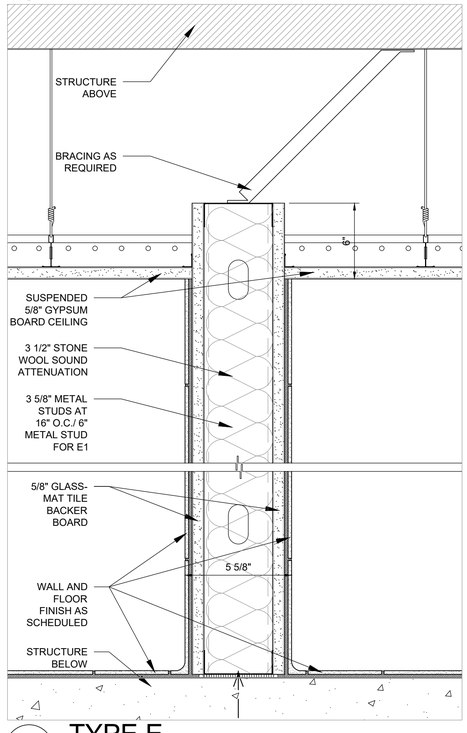
H6 TYPE G
3" = 1'-0"



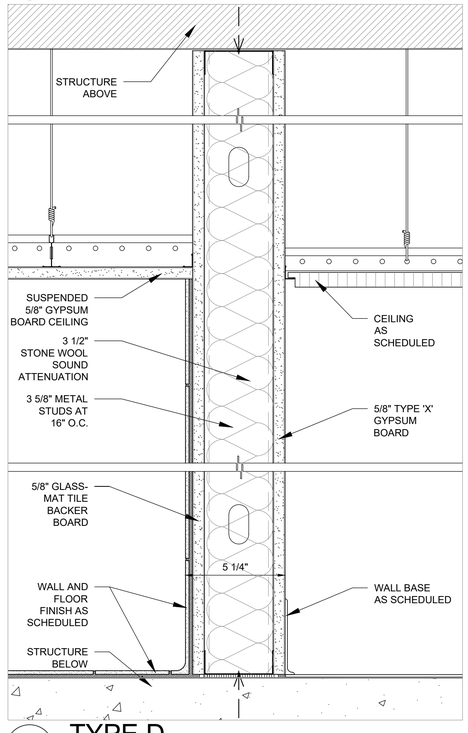
H11 TYPE F
3" = 1'-0"



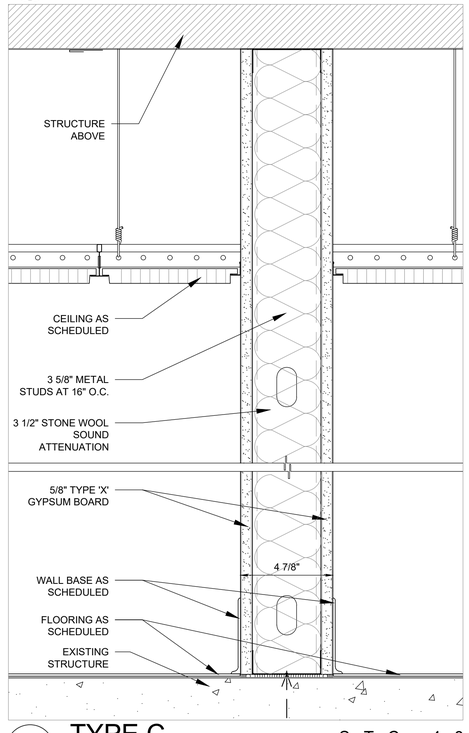
H15 TYPE E1
3" = 1'-0"



A2 TYPE E
3" = 1'-0"

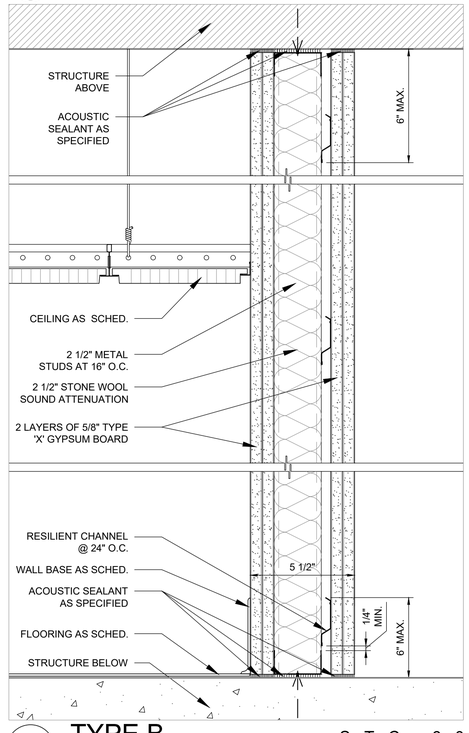


A6 TYPE D
3" = 1'-0"



A11 TYPE C
3" = 1'-0"

S T C 4 8



A15 TYPE B
3" = 1'-0"

S T C 6 0

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: D. AYERS
DRAWN BY: D. AYERS
CHECKED BY: CHAD ARGENA
SUBMITTED BY:

ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S25D6035
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

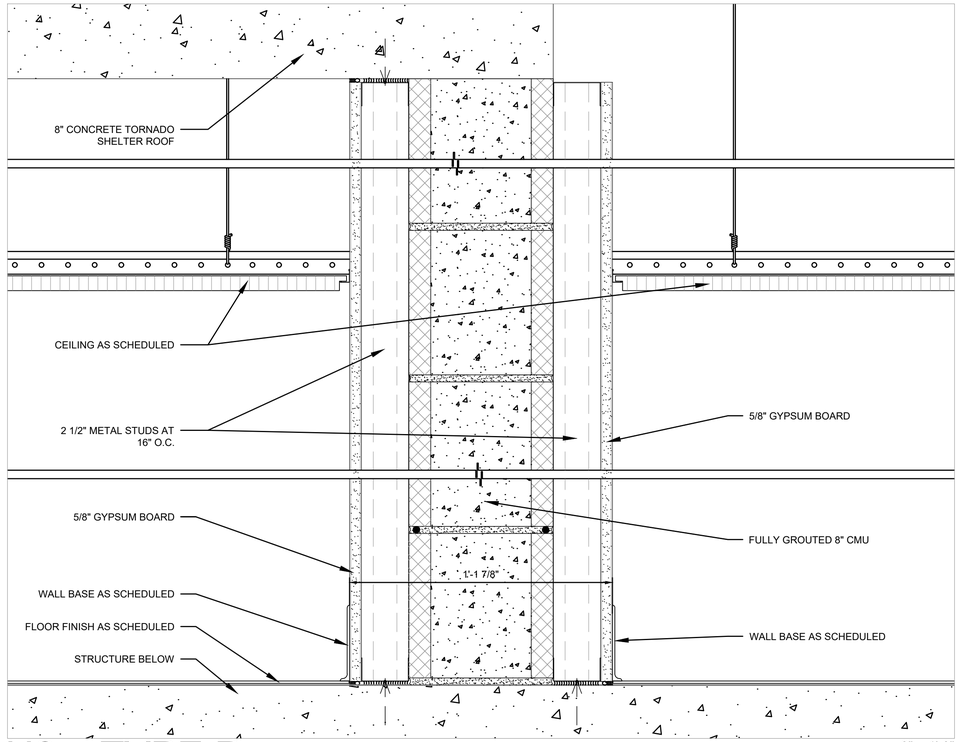
HANA-KENALL 8A JV
2500 CITYWEST BLVD
SUITE 700
HOUSTON, TX 77042

ACCESS CONTROL POINT, PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

PARTITION TYPES

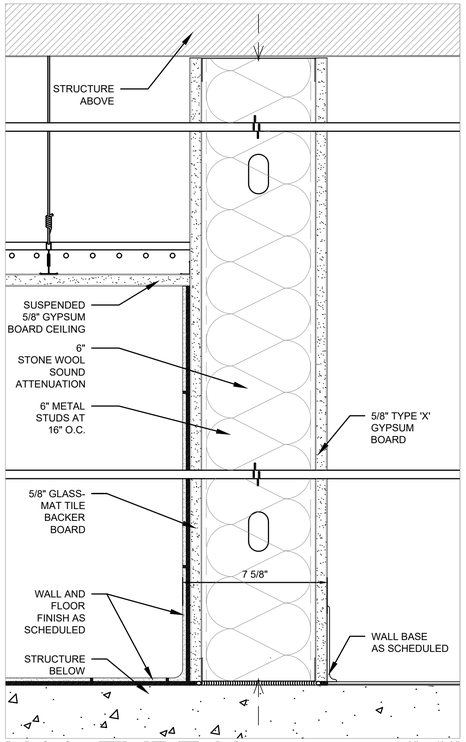
SHEET ID
A-530

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



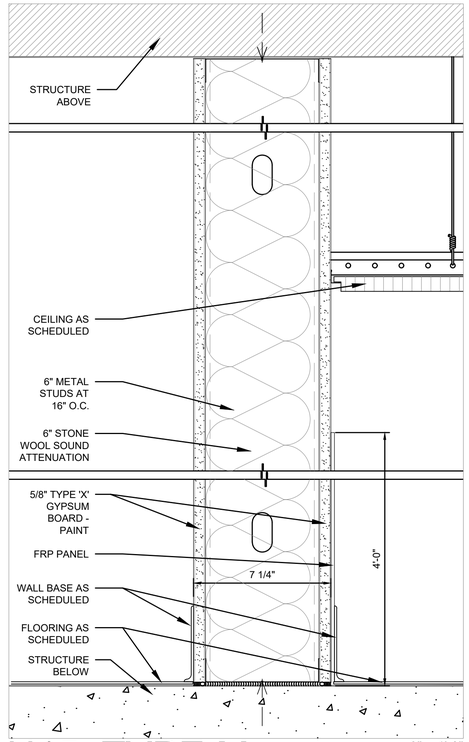
H2 TYPE P UL 905 2 HOUR WALL

3" = 1'-0"



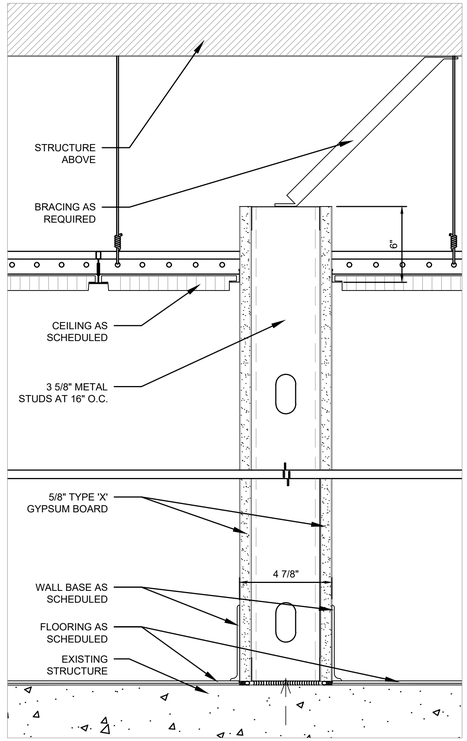
H11 TYPE N

3" = 1'-0"



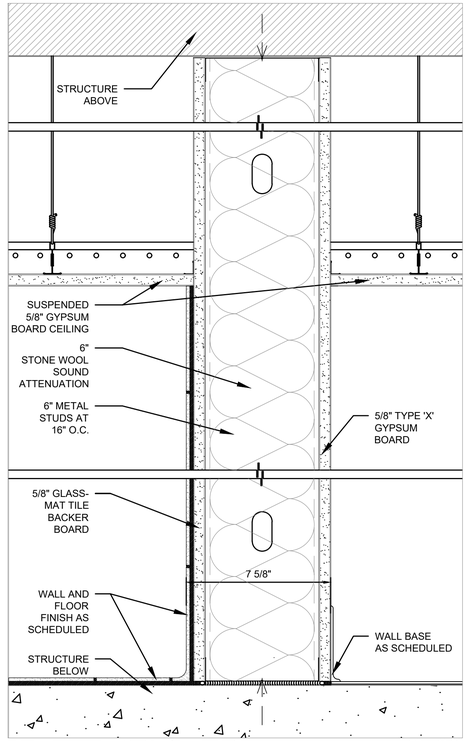
H15 TYPE M

3" = 1'-0"



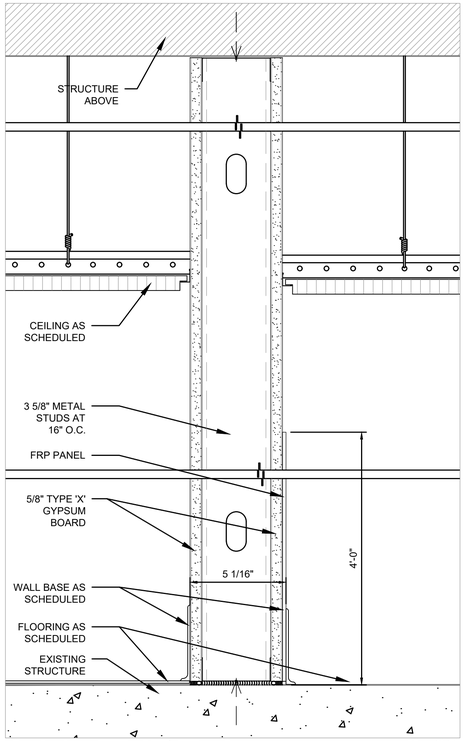
A2 TYPE L

3" = 1'-0"



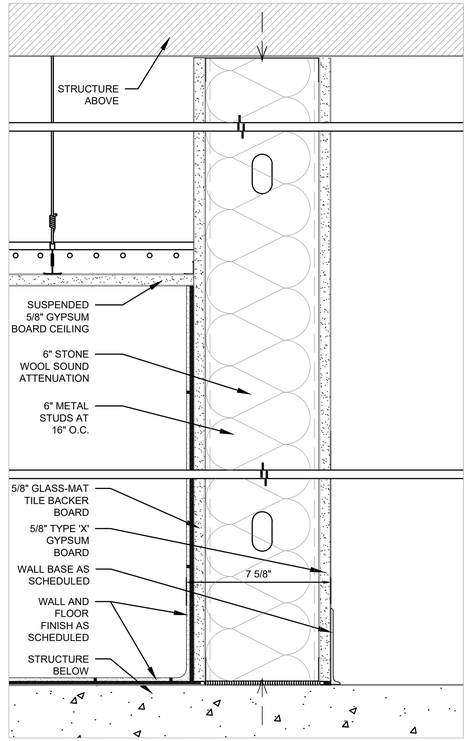
A7 TYPE K

3" = 1'-0"



A11 TYPE J

3" = 1'-0"



A15 TYPE H1

3" = 1'-0"

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: D. AYERS
DRAWN BY: D. AYERS
CHECKED BY: C. GUILLARDENA
SUBMITTED BY:

ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W912QZ24F6002
CONTRACT NO.: W912QZ25D0035

SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HANA-KENALL 8A JV
2500 CITYWEST BLVD
SUITE 700
HOUSTON, TX 77042

ACCESS CONTROL POINT, PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

PARTITION TYPES

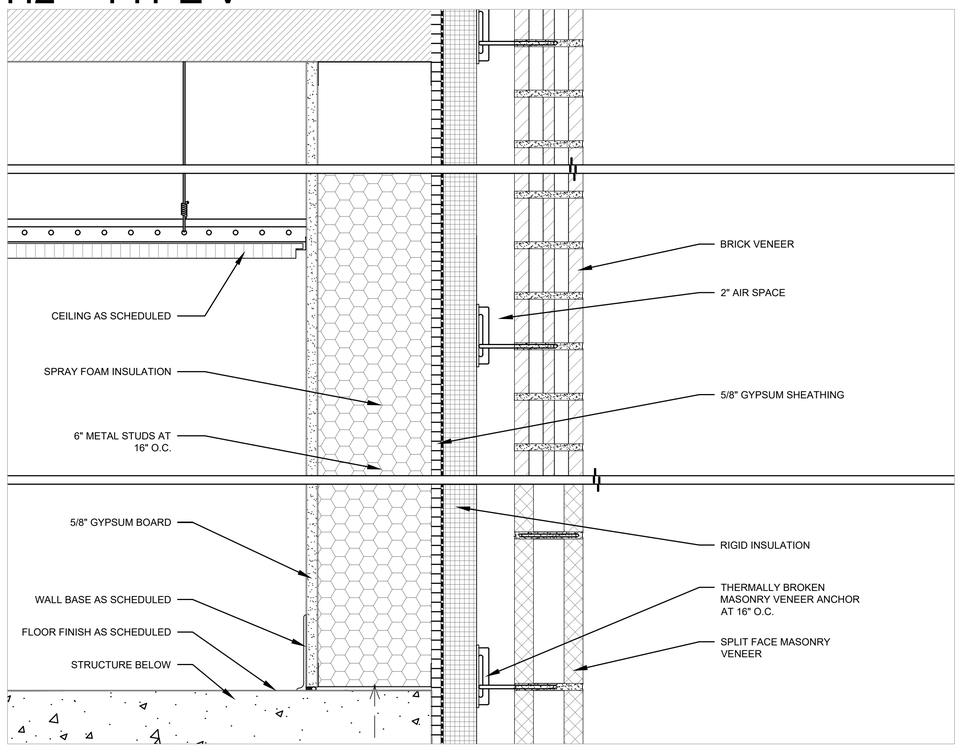
SHEET ID

A-531

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

H2 TYPE V

3" = 1'-0"

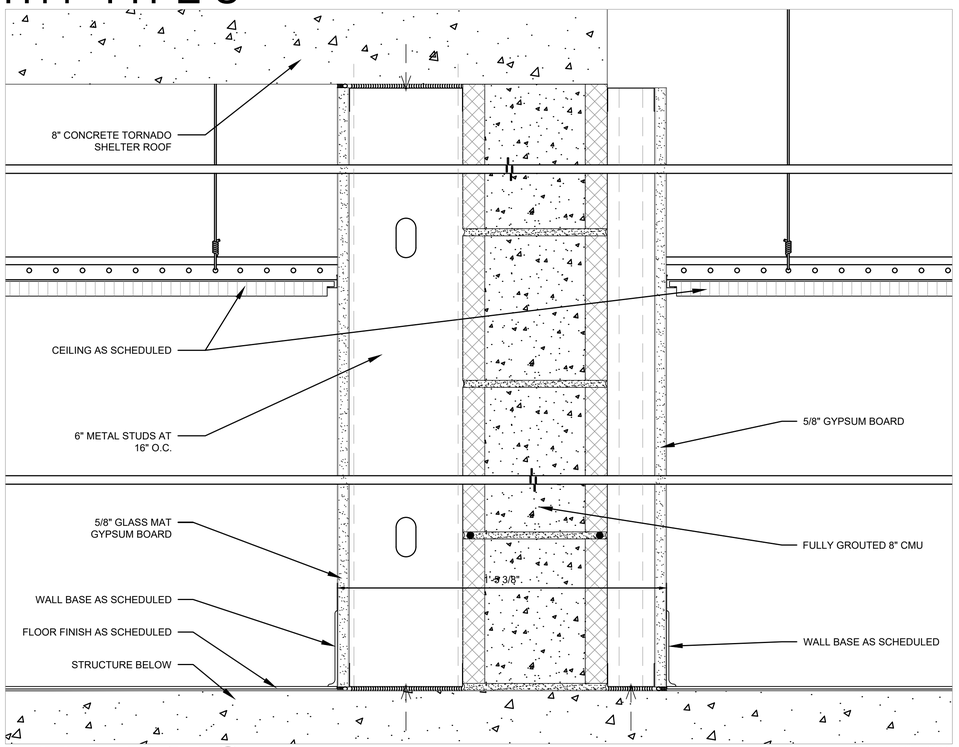


A2 TYPE T

3" = 1'-0"

H11 TYPE U

3" = 1'-0"



A11 TYPE Q UL 905 2 HOUR WALL

3" = 1'-0"

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: D. AYERS
DRAWN BY: D. AYERS
CHECKED BY: S. CHAMBERLAIN-ARDENA
SUBMITTED BY:
ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S25D0035
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

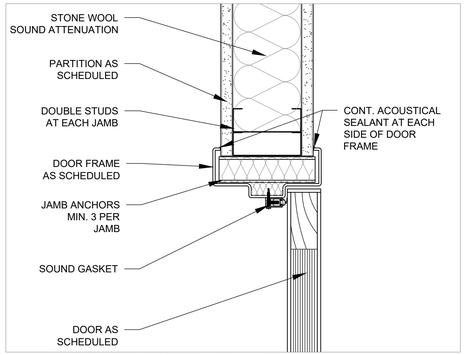
HANA-KENALL 8A JV
2500 CITYWEST BLVD
SUITE 700
HOUSTON, TX 77042

ACCESS CONTROL POINT, PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

PARTITION TYPES

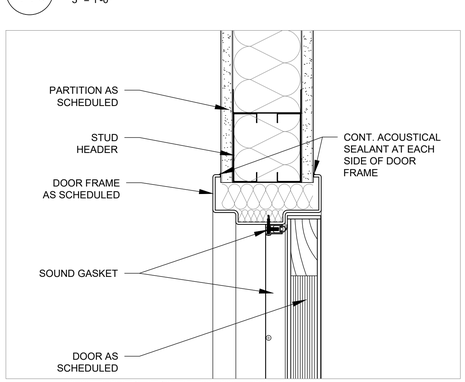
SHEET ID
A-532

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



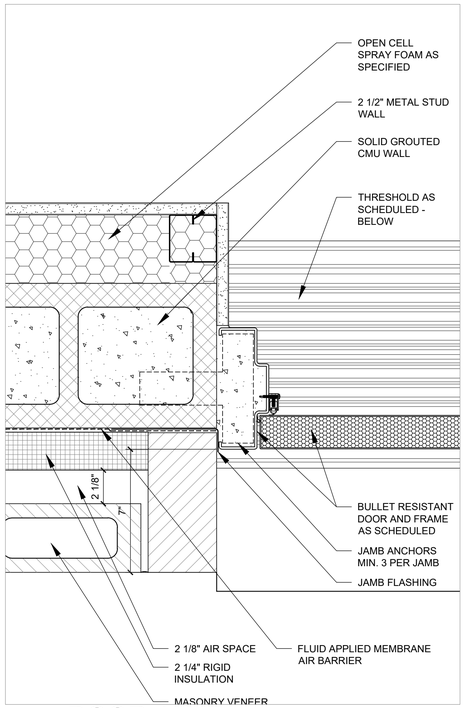
H15 JAMB DETAIL AT TYPICAL STC 48 DOOR

3" = 1'-0"



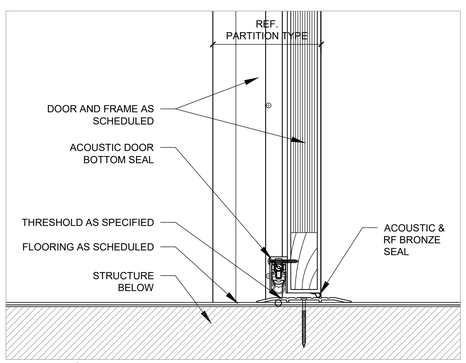
D15 HEAD DETAIL AT TYPICAL STC 48 DOOR

3" = 1'-0"



A11 DOOR JAMB DETAIL AT GATEHOUSE

3" = 1'-0"



A15 SILL DETAIL AT TYPICAL STC 48 DOOR

3" = 1'-0"

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S25D6035

DESIGNED BY: D. AYERS
DRAWN BY: D. AYERS
CHECKED BY: S. CHAWARDENA
SUBMITTED BY:
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HANA-KENALL 8A JV
2500 CITYWEST BLVD
SUITE 700
HOUSTON, TX 77042

ACCESS CONTROL POINT- PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

DOOR DETAILS

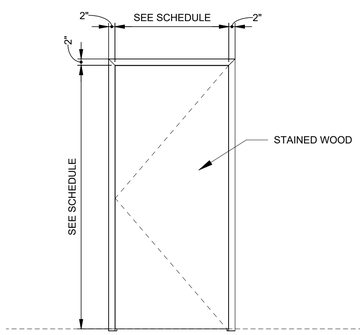
SHEET ID

A-541

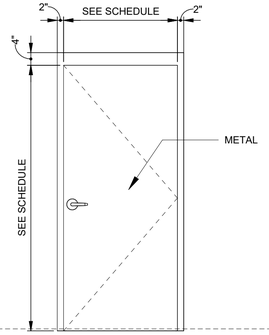
CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

DOOR SCHEDULE

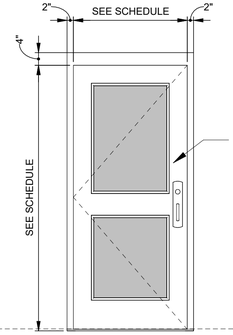
DOOR NO.	TYPE	DOOR SIZE WIDTH	DOOR SIZE HEIGHT	DOOR SIZE THICKNESS	DOOR MATERIAL	DOOR FINISH	FIRE RATING	FRAME TYPE	FRAME MATERIAL	FRAME DETAILS HEAD	FRAME DETAILS JAMB	FRAME DETAILS SILL	HARDWARE	COMMENTS:
100	D	PR 3' - 0"	7' - 0"	0' - 1 3/4"	HOLLOW METAL	PAINT	---		HOLLOW METAL				9	ATFP COMPLIANT DOOR AND GLAZING
101	D	PR 3' - 0"	7' - 0"	0' - 1 3/4"	HOLLOW METAL	PAINT	---		HOLLOW METAL				11	
102	A	3' - 0"	7' - 0"	0' - 1 3/4"	HOLLOW METAL	STAIN	---		HOLLOW METAL				2	
103	A	3' - 0"	7' - 0"	0' - 1 3/4"	HOLLOW METAL	STAIN	---		HOLLOW METAL				2	
104	A	3' - 0"	7' - 0"	0' - 1 3/4"	HOLLOW METAL	STAIN	---		HOLLOW METAL				2	
105	A	3' - 0"	7' - 0"	0' - 1 3/4"	HOLLOW METAL	STAIN	---		HOLLOW METAL				2	
106A	A	3' - 0"	7' - 0"	0' - 1 3/4"	HOLLOW METAL	STAIN	---		HOLLOW METAL				6	
106B	A	3' - 0"	7' - 0"	0' - 1 3/4"	HOLLOW METAL	STAIN	---		HOLLOW METAL				6	
106C	G	7' - 4"	4' - 2"	0' - 2"	ALUMINUM	ANODIZED	---		ALUMINUM				---	
106D	E	3' - 2"	4' - 2"	0' - 2"	ALUMINUM	ANODIZED	---		ALUMINUM				---	
107	A	3' - 0"	7' - 0"	0' - 1 3/4"	HOLLOW METAL	STAIN	---		HOLLOW METAL				4	
108	A	3' - 0"	7' - 0"	0' - 1 3/4"	HOLLOW METAL	STAIN	---		HOLLOW METAL				1	
109A	D	PR 3' - 0"	7' - 0"	0' - 1 3/4"	HOLLOW METAL	PAINT	---		HOLLOW METAL				9	ATFP COMPLIANT DOOR AND GLAZING
109B	D	PR 3' - 0"	7' - 0"	0' - 1 3/4"	HOLLOW METAL	PAINT	---		HOLLOW METAL				11	
110A	A	3' - 0"	7' - 0"	0' - 1 3/4"	HOLLOW METAL	STAIN	---		HOLLOW METAL				1	
110B	A	3' - 0"	7' - 0"	0' - 1 3/4"	HOLLOW METAL	STAIN	---		HOLLOW METAL				1	
111	F	4' - 2"	4' - 2"	0' - 2"	ALUMINUM	ANODIZED	---		ALUMINUM				---	
113A	A	3' - 0"	7' - 0"	0' - 1 3/4"	HOLLOW METAL	STAIN	---		HOLLOW METAL				1	
113B	H	2' - 6"	2' - 6"	0' - 1 3/4"	HOLLOW METAL	PAINT	---		HOLLOW METAL					EMERGENCY ESCAPE OPENING
113C	A	3' - 0"	7' - 0"	0' - 1 3/4"	HOLLOW METAL	STAIN	---		HOLLOW METAL				6	
114A	B	3' - 0"	7' - 0"	0' - 1 3/4"	HOLLOW METAL	PAINT	---		HOLLOW METAL				5	ICC 500 COMPLIANT TORNADO DOOR ASSEMBLY
115	C	3' - 0"	7' - 0"	0' - 1 3/4"	HOLLOW METAL	PAINT	---		HOLLOW METAL				8	ATFP COMPLIANT DOOR AND GLAZING
116	A	3' - 0"	7' - 0"	0' - 1 3/4"	HOLLOW METAL	STAIN	---		HOLLOW METAL				1	
117	A	3' - 0"	7' - 0"	0' - 1 3/4"	HOLLOW METAL	STAIN	---		HOLLOW METAL				1	
118	A	3' - 0"	7' - 0"	0' - 1 3/4"	HOLLOW METAL	STAIN	---		HOLLOW METAL				1	
119	A	3' - 0"	7' - 0"	0' - 1 3/4"	HOLLOW METAL	STAIN	---		HOLLOW METAL				6	
120	B	3' - 0"	7' - 0"	0' - 1 3/4"	HOLLOW METAL	PAINT	---		HOLLOW METAL				7	ATFP COMPLIANT DOOR
122	B	3' - 0"	7' - 0"	0' - 1 3/4"	HOLLOW METAL	PAINT	---		HOLLOW METAL				7	
123	A	3' - 0"	7' - 0"	0' - 1 3/4"	HOLLOW METAL	STAIN	---		HOLLOW METAL				3	
125	C	3' - 0"	7' - 0"	0' - 1 3/4"	HOLLOW METAL	PAINT	---		HOLLOW METAL				8	ATFP COMPLIANT DOOR AND GLAZING



TYPE A
SOLID CORE WOOD DOOR



TYPE B
SOLID CORE METAL



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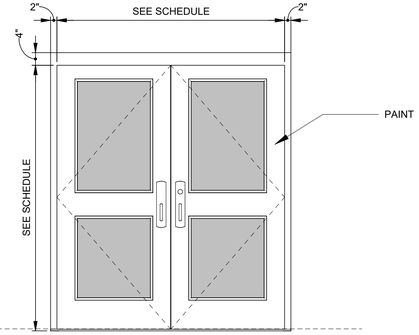
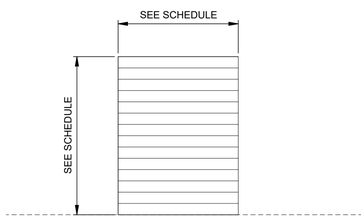
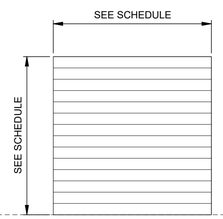
SOLID CORE METAL
ATFP COMPLIANT DOOR AND
GLAZING



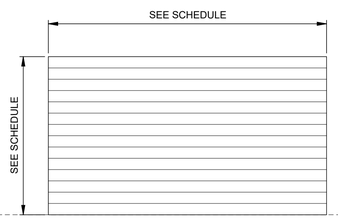
TYPE D
SOLID CORE METAL
ATFP COMPLIANT DOOR AND
GLAZING



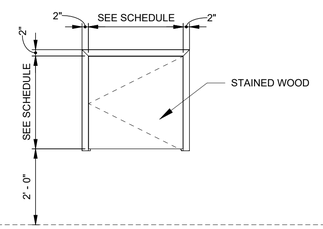
TYPE E
OVERHEAD COILING DOOR



TYPE F
OVERHEAD COILING DOOR



TYPE G
OVERHEAD COILING DOOR



TYPE H
SOLID CORE WOOD DOOR

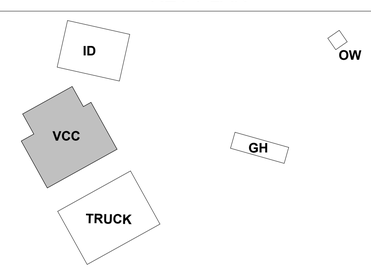
A1 DOOR TYPES
1/2" = 1'-0"

GENERAL NOTES

SHEET KEYNOTES

SHEET LEGEND

KEY PLAN



US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

File Path: Autodesk Docs://Redstuff Arsenal ACP/ALPBA_VCC_Central.rvt

ISSUE DATE:	17 APRIL 2026
SOLICITATION NO.:	W9127S24F6002
CONTRACT NO.:	W9127S23D6035
DESIGNED BY:	SG
DRAWN BY:	AG
CHECKED BY:	SG
SUBMITTED BY:	
SIZE:	ANSI D

Plot Date: 4/14/2026 3:49:54 PM

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HANA-KENALL 8A JV
2500 CITYWEST BLVD
SUITE 700
HOUSTON, TX 77042

ACCESS CONTROL POINT- PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

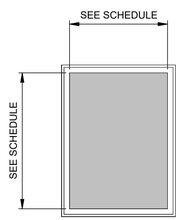
VCC - DOOR SCHEDULE AND TYPES

SHEET ID
A-603

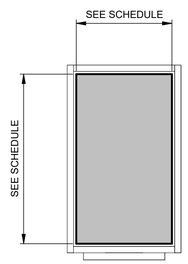
CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

WINDOW SCHEDULE

MARK	R.O. WIDTH	R.O. HEIGHT	TYPE	FRAME FINISH	FRAME MATERIAL	GLAZING TYPE	GLAZING THICKNESS	DETAILS HEAD	DETAILS JAMB	DETAILS SILL	HEAD HEIGHT	REMARKS (SEE NOTES BELOW)
A	3' - 0"	4' - 3"	WINDOW FIXED	POWDER COATED	ALUMINUM	LAMINATED	1" INSULATED				7' - 1 3/4"	ATFP STANDARD 10 COMPLIANT WINDOW
B	2' - 10"	4' - 3 1/2"	WINDOW TRANSACTION	CLR. ANOD.	ALUMINUM	LAMINATED	1/4"				7' - 0"	



TYPE A
ATFP COMPLIANT FIXED
ALUMINUM UNIT



TYPE B
ALUMINUM SPEAK AROUND
UNIT

A8 WINDOW TYPES

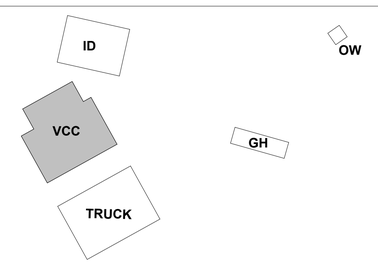
1/2" = 1'-0"

GENERAL NOTES

SHEET KEYNOTES

SHEET LEGEND

KEY PLAN



US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: SG
DRAWN BY: AG
CHECKED BY: SG
SUBMITTED BY:
SIZE: ANSI D

ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S25D6035

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HANA-KENALL 8A JV
2500 CITYWEST BLVD
SUITE 700
HOUSTON, TX 77042

ACCESS CONTROL POINT- PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

VCC - WINDOW TYPES

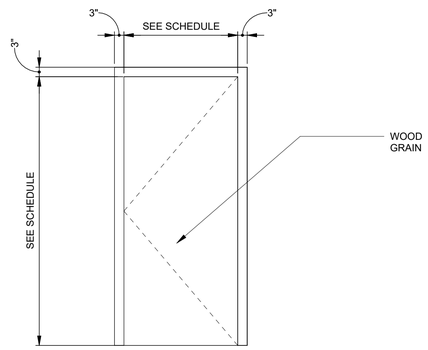
SHEET ID
A-605

Plot Date: 4/14/2026 3:50:50 PM File Path: Autodesk Docs://Pinebluff Arsenal ACP/A/PBA_VCC_Central.rvt

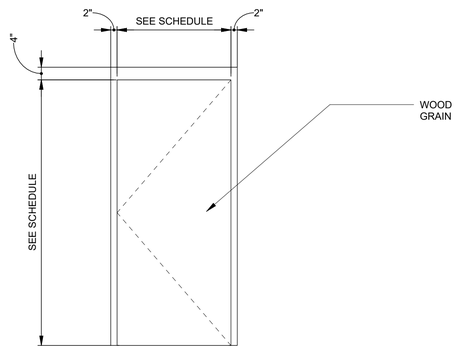
CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

GATEHOUSE - DOOR SCHEDULE

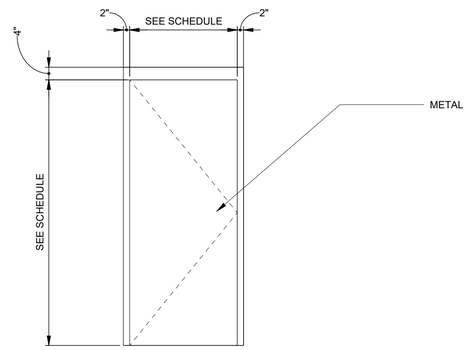
DOOR NO.	TYPE	DOOR SIZE WIDTH	DOOR SIZE HEIGHT	DOOR SIZE THICKNESS	DOOR FINISH	FIRE RATING	FRAME TYPE	FRAME MATERIAL	FRAME DETAILS HEAD	FRAME DETAILS JAMB	FRAME DETAILS SILL	HARDWARE	COMMENTS:
100A	A	3' - 0"	7' - 0"	0' - 1 3/4"	PAINT	---		HOLLOW METAL				10	BALLISTIC RATED
100B	A	3' - 0"	7' - 0"	0' - 1 3/4"	PAINT	---		HOLLOW METAL				10	BALLISTIC RATED
101	B	3' - 0"	7' - 0"	0' - 1 3/4"	STAIN	---		HOLLOW METAL				2	
102	B	3' - 0"	7' - 0"	0' - 1 3/4"	STAIN	---		HOLLOW METAL				2	
103	C	3' - 0"	7' - 0"	0' - 1 3/4"	PAINT	---		HOLLOW METAL				12	BALLISTIC RATED
104	C	3' - 0"	7' - 0"	0' - 1 3/4"	PAINT	---		HOLLOW METAL				12	BALLISTIC RATED
105	C	3' - 0"	7' - 0"	0' - 1 3/4"	PAINT	---		HOLLOW METAL				12	BALLISTIC RATED
106	C	3' - 0"	7' - 0"	0' - 1 3/4"	PAINT	---		HOLLOW METAL				12	BALLISTIC RATED



TYPE A
SOLID CORE METAL
BALLISTIC RATED



TYPE B
SOLID CORE FLUSH DOOR

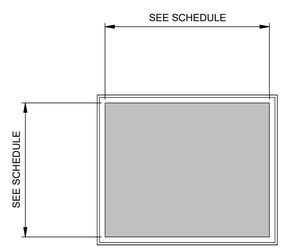


TYPE C
SOLID CORE METAL
BALLISTIC RATED

F3 GATEHOUSE - DOOR TYPES
1/2" = 1'-0"

GATEHOUSE - WINDOW SCHEDULE

COUNT	MARK	R.O. WIDTH	R.O. HEIGHT	TYPE	FRAME FINISH	FRAME MATERIAL	GLAZING TYPE	GLAZING THICKNESS	DETAILS HEAD	DETAILS JAMB	DETAILS FUNCTION	REMARKS (SEE NOTES BELOW)
1	C	4' - 8 1/2"	4' - 0"	ALUMINUM	CLR. ANOD.			2.275"				BALLISTIC RATED ASSEMBLY
2	D	4' - 6 1/4"	4' - 0"	ALUMINUM	CLR. ANOD.			2.275"				BALLISTIC RATED ASSEMBLY
4	E	4' - 1"	4' - 0"	ALUMINUM	CLR. ANOD.			2.275"				BALLISTIC RATED ASSEMBLY



TYPE C, D AND E
BALLISTIC RATED
FIXED ALUMINUM
WINDOW

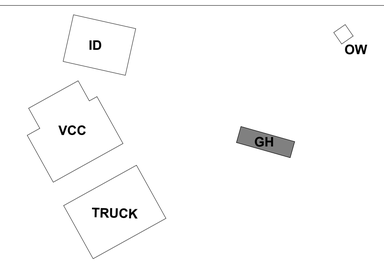
A9 GATEHOUSE - WINDOW TYPES
1/2" = 1'-0"

GENERAL NOTES

SHEET KEYNOTES

SHEET LEGEND

KEY PLAN



US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

File Path: Autodesk Docs://Pinebluff Arsenal ACP/A_PBA_Gatehouse.rvt

Plot Date: 4/14/2026 5:14:32 PM

DESIGNED BY: Designer
DRAWN BY: Author
CHECKED BY: Checker
SUBMITTED BY:
ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W912TS24F6002
CONTRACT NO.: W912TS23D0035
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HANA-KENALL 8A JV
2500 CITYWEST BLVD
SUITE 700
HOUSTON, TX 77042

ACCESS CONTROL POINT- PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

GATEHOUSE - DOOR SCHEDULE, DOOR TYPES, WINDOW SCHEDULE AND WINDOW TYPES

SHEET ID
A-613

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

I-001s - INTERIOR FINISH LEGEND

CODE	BASIS OF DESIGN MANUFACTURER	SERIES/STYLE	COLOR	SIZE	COMMENTS
06 41 16.00 10 PLASTIC-LAMINATE-CLAD ARCHITECTURAL CABINETS					
PL1	WILSONART	HIGH PRESSURE PLASTIC LAMINATE / TIMBERGRAIN FINISH 05	CHERRY PB TOASTED 8274K-05	--	--
06 61 16 SOLID SURFACING FABRICATIONS					
SSF1	CORIAN	SOLID SURFACE FABRICATION	WEATHERED AGGREGATE	1/2" THICK	COUNTER TOPS
SSF2	CORIAN	SOLID SURFACE FABRICATION	RICE PAPER	1/2" THICK	WINDOW SILLS
09 30 10 CERAMIC, QUARRY, AND GLASS TILING					
T1	FLORIDA TILE	PORCELAIN TILE / SERENDIPITY	FORTUNE WHITE SDP10	12" X 24"	FULL HEIGHT TILE AT TOILET ROOM WALLS / VERTICAL STACKING BOND
T2	CROSSVILLE	TRAJECTORY / UPS UNPOLISHED	FLIGHT TRY03	12" X 24"	FLOOR TILE / ASHLAR
T2B1	CROSSVILLE	TRAJECTORY / UPS UNPOLISHED / BULLNOSE TRIM	FLIGHT TRY03	4" H X 24" W	BULLNOSE TRIM
T2B2	CROSSVILLE	TRAJECTORY / UPS UNPOLISHED / COVE BASE TRIM	FLIGHT TRY03	6" H X 12" W	COVE BASE TRIM
T3	CROSSVILLE	TRAJECTORY / UPS UNPOLISHED / CIRCLE MOSAIC	FLIGHT TRY03	2.5" DIA (14" X 14" SHEET)	ACCENT
T4	CROSSVILLE	TRAJECTORY / UPS UNPOLISHED / STACKED MOSAIC	FLIGHT TRY03	2" X 4" (12" X 12" SHEET)	ACCENT / VERTICAL STACKING BOND
09 51 00 ACOUSTICAL CEILINGS					
ACT1	CERTAINTEED	SYMPHONY M HIGH CAC 1222-80-1	WHITE	24" X 24" X 7/8"	--
09 65 00 RESILIENT FLOORING					
RB1	ROPPE	PINNACLE RUBBER WALL BASE	114 LUNAR DUST	4" H COVE TOE	--
RFT1	ROPPE	RUBBER FLOOR TILE / SYMMETRY / SMOOTH	R123 CHARCOAL	50CM X 50CM X 1/8" THICK	--
RT1	SHAW	RESILIENT TILE / TERRAIN II 30MIL	ECHO 00775	6" X 48" / 3 MM THICK	--
09 90 00 PAINTS AND COATINGS					
CFS	LATICRETE INTERNATIONAL	L&M DRESS AND SEAL WB30	--	--	--
CFS-SC	ELECTRA SEAL	HYGROSCOPIC ESD CONTROL CONCRETE SEALER	--	--	--
PT1	SHERWIN WILLIAMS	PAINT / LATEX / EGGSHELL	SW7009 PEARLY WHITE	--	--
PT2	SHERWIN WILLIAMS	PAINT / LATEX / EGGSHELL	SW9128 GREEN ONYX	--	--
PT3	SHERWIN WILLIAMS	PAINT / LATEX / EGGSHELL	SW9171 FELTED WOOL	--	--
PTE1	SHERWIN WILLIAMS	PAINT / EPOXY / EGGSHELL	SW7009 PEARLY WHITE	--	--
PTE2	SHERWIN WILLIAMS	PAINT / EPOXY / EGGSHELL	SW9128 GREEN ONYX	--	--
PTM1	SHERWIN WILLIAMS	PAINT FOR METAL / EGGSHELL	SW9171 FELTED WOOL	--	--
10 26 00 WALL AND DOOR PROTECTION					
CG1	INPRO	150 HIGH IMPACT CORNER GUARD	0258 CHINO	3" WINGS X 4'-0" H	ALIGN BOTTOM OF CG TO TOP OF BASE. TOP AT 4'-4"
CG1E	INPRO	150D HIGH IMPACT END WALL PROTECTOR	0258 CHINO	3" WINGS X 4'-0" H	ALIGN BOTTOM OF CG TO TOP OF BASE. TOP AT 4'-4"
CHR1	INPRO	PALLADIUM 3D HORIZONTAL BOARD	0559 BEECHWOOD	4" H	MOUNT TOP AT 36" H
FRP1	VALTO ENGINEERED MATERIALS	FIBERGLASS REINFORCED PANEL / GLASBORD FSI	WHITE	48" H	ASTM E84 CLASS A FIRE RATED
SWP1	INPRO	PALLADIUM RIGID RESILIENT SHEET WALL PROTECTION W/ MATCHING TRIM TOP CAP	0258 CHINO	48" H / 0.060 THICK	ASTM E84 CLASS A FIRE RATED
12 21 00 WINDOW BLINDS					
WB1	HUNTER DOUGLAS	CE80 1" ALUMINUM HORIZONTAL BLINDS	001 GLACIER WHITE	1"	--
12 48 13 ENTRANCE FLOOR MATS AND FRAMES					
EM1	CONSTRUCTION SPECIALTIES	ENTRANCE MAT SYSTEM - RECESSED / PEDITRED G3	7325 WROUGHT IRON	1/2" THICK	--

ROOM FINISH SCHEDULE

Number	Name	Floor Finish	Base Finish	Wall Finish	Ceiling Finish
100	VEST.	EM1	RB1	PT	ACT
101	LOBBY	T2	T2B1	PT1	ACT
102	T.R.	T2	T2B2	T1	
103	T.R.	T2	T2B2	T1	
104	T.R.	T2	T2B2	T1	ACT
105	T.R.	T2	T2B2	T1	--
106	PROCESSING	RT1	RB1	PT1	ACT
107	J.C.	RFT1	RB1	PTE1	
108	OFFICE	RT1	RB1	PT1	ACT
109	VEST.	EM1	RB1	PTE2	ACT
110	MMT CARRIER	RT1	RB1	PT1	PTE
111	TRAF. CHECK-IN	RT1	RB1	PT1	PTE
112	OPEN OFFICE	RT1	RB1	PT1	ACT
113	CONFERENCE/ TRAINING ROOM	RT1	RB1	PT1	ACT
114	BREAK ROOM	T2	T2B1	PT1	ACT
115	HALL	RT1	RB1	PT1	ACT
116	SR. TRAFFIC OFFICE	RT1	RB1	PT1	ACT
117	SR. TRAFFIC OFFICE	RT1	RB1	PT1	ACT
118	FILE ROOM	SFT1	RB1	PT1	ACT
119	COMM	CFS-SC	RB1	PT1	ACT
120	MECH/ELEC ROOM	CFS	RB1	PTE1	ACT
122	FIRE	CFS	RB1	PTE1	PTD
123	HALL	RT1	RB1	PT1	ACT
124	HALL	T2	T2B1	PT1	ACT
125	HALL	RT1	RB1	PT1	

GENERAL NOTES

1. REFER TO ASSOCIATED SPECIFICATION SECTION FOR DETAILED INFORMATION.
2. IF FINISH CODE IS NOT SPECIFIED (--), NO FIELD FINISH IS APPLIED. REFER TO CORRESPONDING SPECIFICATION SECTION. IF MANUFACTURER FINISH IS SPECIFIED (MFR), REFER TO CORRESPONDING SPECIFICATION SECTION.
3. ANY COLOR SUBSTITUTE SHALL BE REQUESTED TO THE ARCHITECT.
4. CONSISTENT MATERIAL COLORS AND PATTERNS SHALL BE PROVIDED. PROVIDE MATERIALS FROM SAME PRODUCT RUN.
5. WHERE ITEMS OR SURFACES ARE NOT SPECIFICALLY MENTIONED, PAINT THE SAME AS SIMILAR ADJACENT MATERIALS OR AREA. IF COLOR OF FINISH IS NOT DESIGNATED, ARCHITECT WILL SELECT FROM STANDARD COLORS OR FINISHES AVAILABLE.
6. UNLESS OTHERWISE INDICATED, DO NOT PAINT FACTORY-FINISHED OR INSTALLER-FINISHED ITEMS. DO NOT PAINT UL LABELS.
7. GRILLES, DIFFUSERS, ELECTRICAL PANELS, ACCESS PANELS, ETC... WHICH ARE EXPOSED IN FINISHED SPACES SHALL BE PAINTED TO MATCH THE SURFACE ON WHICH THEY OCCUR.
8. PAINT INTERIOR SURFACES OF DUCTS LOW VOC BLACK WHERE SURFACES ARE VISIBLE THROUGH GRILLES AND DIFFUSERS.
9. COORDINATE WITH CONCRETE CURING METHOD AND PROVIDE WATER VAPOR EMISSION CONTROL SYSTEM FOR CONCRETE WITH APPLIED FLOORING.
10. ALL INTERIOR FINISHES SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. INSTALLER SHALL BE QUALIFIED TO INSTALL SPECIFIC FINISH MATERIAL AND HAVE EXPERIENCE WITH PROJECTS OF SIMILAR SIZE AND COMPLEXITY.
11. ALL HOLLOW METAL DOORS AND DOOR FRAMES SHALL BE PAINTED PTM1. ALL WOOD-LOOK LAMINATE DOORS TO BE PL1.
12. ALL FLOORING TYPE TRANSITIONS AT DOORS SHALL OCCUR ON THE CENTERLINE OF THE DOOR LEAF. TRANSITION TO BE SMOOTH AND EVEN. MAXIMUM VERTICAL CHANGE IN ELEVATION SHALL BE 1/4 IN. REFER TO SPECIFICATIONS FOR REQUIRED FLOOR TRANSITION TRIMS.
13. EXTEND FLOORING UNDER BASE CABINETS AND OPEN KNEE SPACE.
14. CASEWORK TOE-KICK HEIGHT TO MATCH BASE HEIGHT IN ROOM.
15. ALL WOOD-LOOK PLASTIC LAMINATE ON DOORS AND CASEWORK SHALL RUN VERTICALLY.
16. WALL PROTECTION: PROVIDE CORNER GUARD (CG) AT ALL OUTSIDE CORNERS OF GYPSUM WALLS. PROVIDE SWP WAINSCOT WALL PROTECTION AS IDENTIFIED IN PLAN.
17. PROVIDE WB1 WINDOW BLINDS AT ALL EXTERIOR WINDOWS.
18. WINDOW SILLS: SOLID SURFACE, SSF2.

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

File Path: C:\vcl\2025\104000\I-s-FBA_VCC_Pedro.Velazquez\Rod\qaact.rvt

Plot Date: 4/16/2026 4:13:28 PM

DESIGNED BY: Designer
DRAWN BY: Author
CHECKED BY: Checker
SUBMITTED BY:
ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S25D0035
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

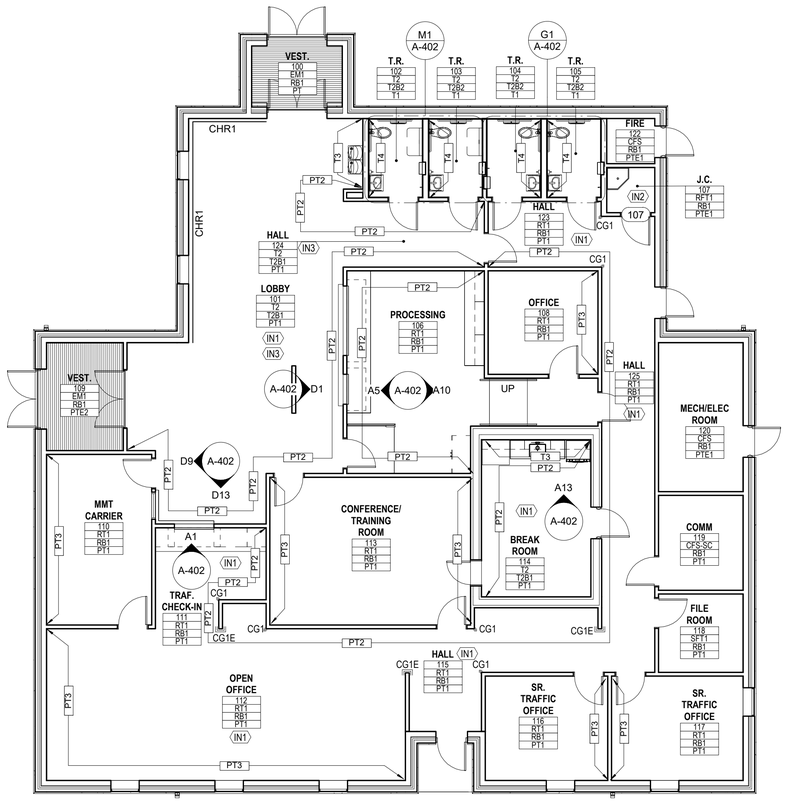
HDR ENGINEERING, INC.
613 NW LOOP 410, STE 700
SAN ANTONIO, TX 78216
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

INTERIOR NOTES AND FINISH LEGEND

SHEET ID
VCC
I-001

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



PLAN NORTH

0 4' 8' 16'

A1 INTERIOR FINISH FLOOR PLAN

1/8" = 1'-0"

GENERAL NOTES

INTERIOR FLOOR FINISH PLAN LEGEND

NOTE:
REFER TO INTERIOR FINISH LEGEND SHEET
I-001 FOR FINISH CODES AND DESCRIPTION OF MATERIALS.

ROOM NAME
101
FLOOR
BASE
WALL

ROOM NUMBER
FLOOR FINISH
BASE FINISH
WALL FINISH

FIELD FLOOR FINISH - REFER TO ROOM FINISH TAG

EM - ENTRANCE MAT

WALL ACCENT

SHEET KEYNOTES (IN#)

IN1 - SWP SHEET WALL PROTECTION WAINSCOT WITH PAINT ABOVE ON ALL GYP WALLS IN THIS ROOM.

IN2 - FRP1 WAINSCOT WITH EPOXY PAINTED GYP ABOVE ON ALL WALLS IN THIS ROOM.

IN3 - GYP CEILINGS AND SOFFITS IN THIS ROOM MATCH THE PT2 WALL PAINT ACCENT.

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: Designer
DRAWN BY: Author
CHECKED BY: Checker
SUBMITTED BY:
ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D035
SIZE: ANSI D

Plot Date: 4/16/2026 4:13:29 PM
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US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

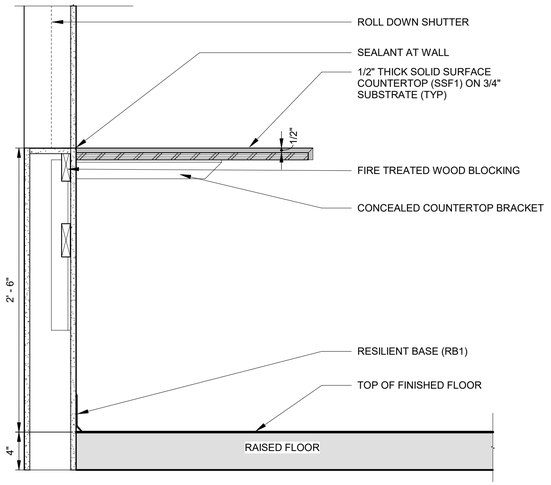
HDR ENGINEERING, INC
613 NW LOOP 410, STE 700
SAN ANTONIO, TX 78216
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

INTERIOR FINISH PLAN

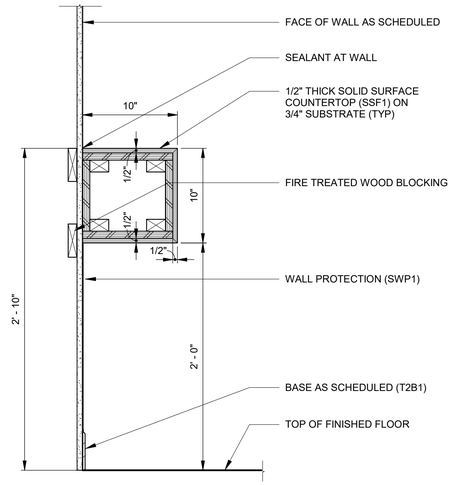
SHEET ID
VCC
I-101

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



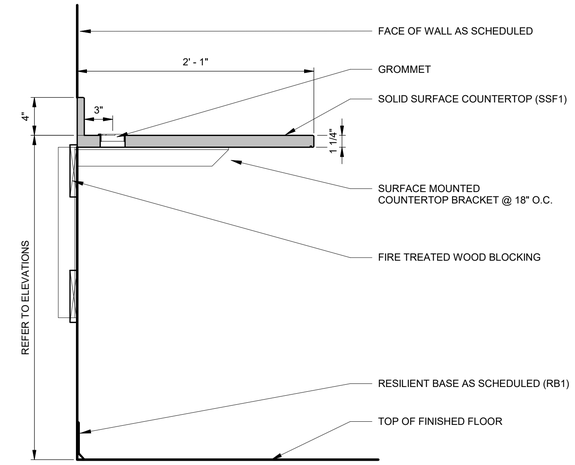
G1 SEC. DETAIL @ COUNTERTOP - PROC 106

1 1/2" = 1'-0"



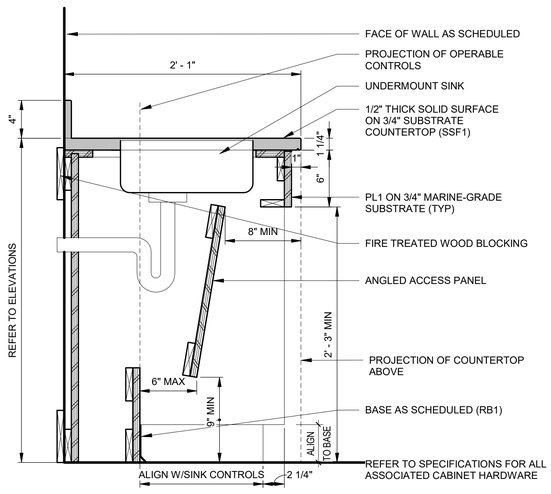
G7 SEC. DETAIL @ COUNTERTOP - LOBBY

1 1/2" = 1'-0"



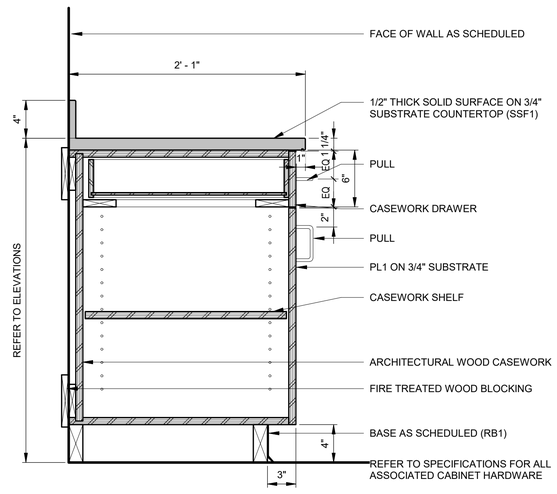
G13 SECTION DETAIL @ COUNTERTOP WITH SURFACE BRACKET

1 1/2" = 1'-0"



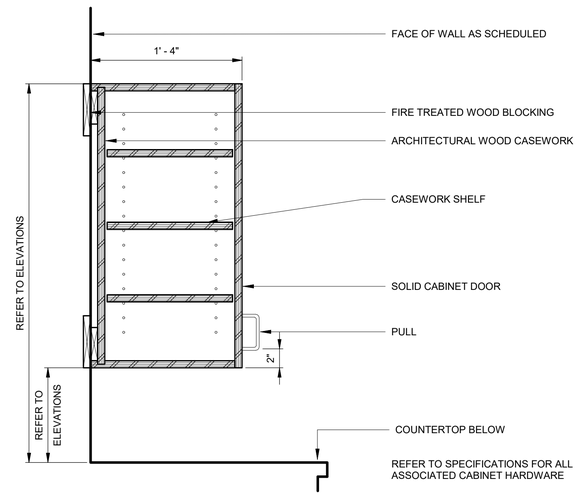
A1 SECTION DETAIL @ ADA SINK BASE

1 1/2" = 1'-0"



A7 SECTION DETAIL @ BASE CABINET W/DRAWER

1 1/2" = 1'-0"



A13 SECTION DETAIL @ UPPER CABINET W/ SOLID DOOR

1 1/2" = 1'-0"

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MARK	DESCRIPTION	DATE

DESIGNED BY: Designer
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ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W912T524F6002
CONTRACT NO.: W912T523D0035
SUBMITTED BY:
SIZE: ANSI D

Plot Date: 4/16/2026 4:13:30 PM
File Path: C:\vcl2025\104000\19-HPBA_VCC_Pedro.Velazquez\Roof\plan2.rvt

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

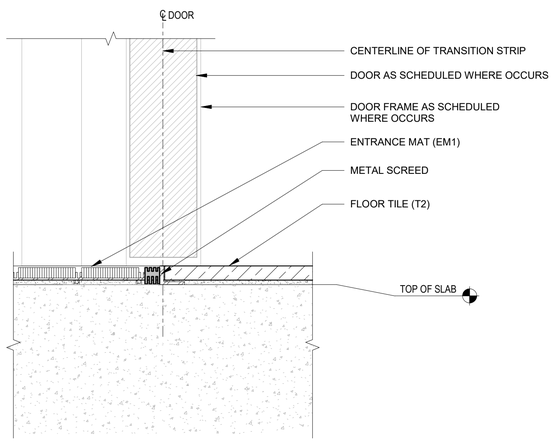
HDR ENGINEERING, INC
613 NW LOOP 410, STE 700
SAN ANTONIO, TX 78216
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

INTERIOR CASEWORK DETAILS

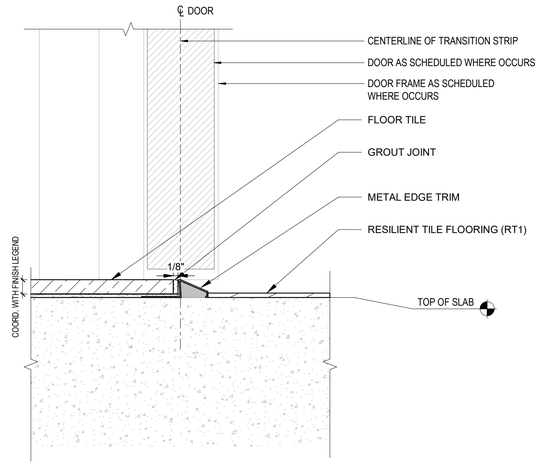
SHEET ID
VCC
I-102

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



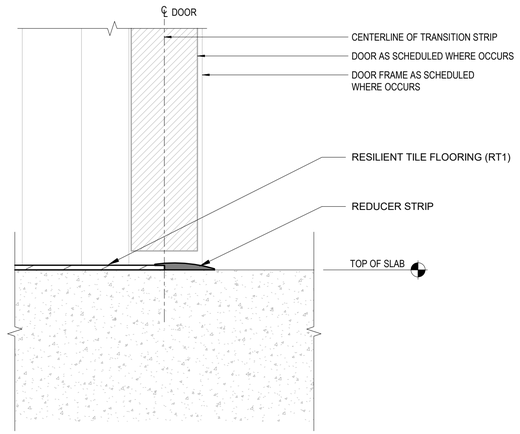
A1 FLUSH TRANSITION DETAIL @ EM1 TO TILE

6" = 1'-0"



A6 FLASHED TRANSITION DETAIL @ TILE TO RESILIENT

6" = 1'-0"



A13 DIFFERENTIAL HEIGHT TRANSITION DETAIL @ RESILIENT TO CONCRETE

6" = 1'-0"

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: Designer
DRAWN BY: Author
CHECKED BY: Checker
SUBMITTED BY:
ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S25D0035
SIZE: ANSI D

Plot Date: 4/16/2026 4:13:31 PM File Path: C:\vol2025\104400\19-I-PBA_VCC_Pedro.Velazquez\Roof\Input.rvt

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

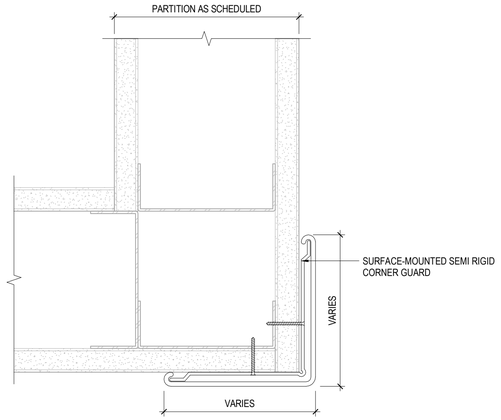
HDR ENGINEERING, INC
613 NW LOOP 410, STE 700
SAN ANTONIO, TX 78216
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

FLOOR TRANSITION DETAILS

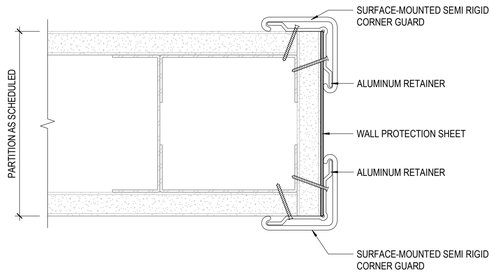
SHEET ID
VCC
I-103

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



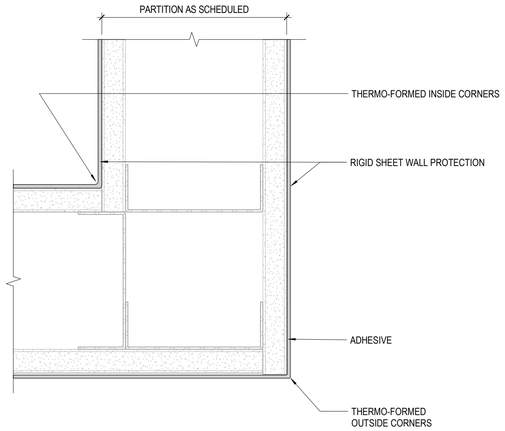
J1 TYP CORNER GUARD DETAIL

6" = 1'-0"



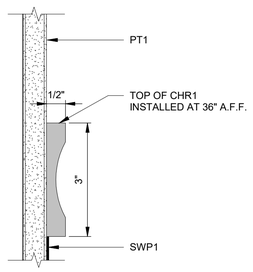
J6 TYP END WALL CORNER GUARD DETAIL

6" = 1'-0"



C1 TYP INSIDE & OUTSIDE CORNER RIGID SHEET WALL PROTECTION

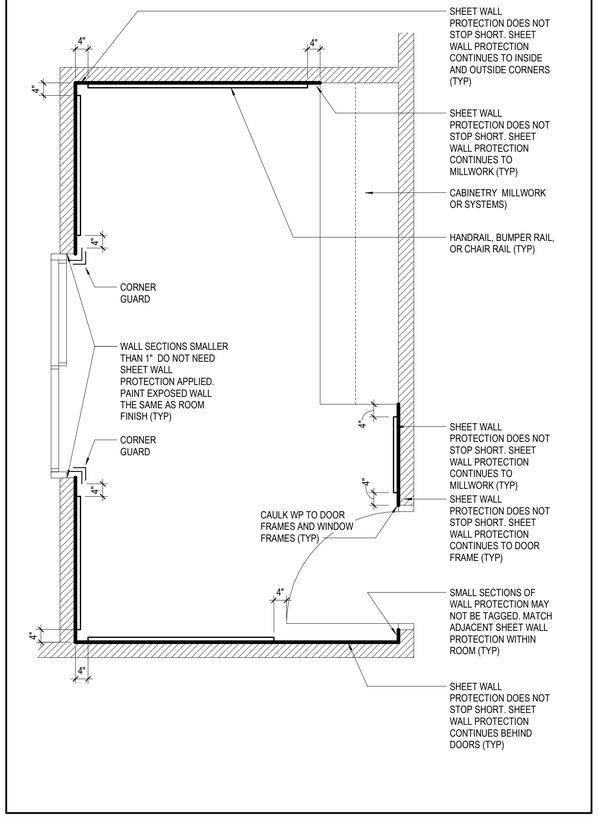
6" = 1'-0"



C6 TYP CHAIR RAIL DETAIL

6" = 1'-0"

SHEET WALL PROTECTION @ TYPICAL CONDITIONS



US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

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Plot Date: 4/16/2026 4:13:32 PM

DESIGNED BY: Designer
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CHECKED BY: Checker
ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S26B003
SUBMITTED BY:
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HDR ENGINEERING, INC
613 NW LOOP 410, STE 700
SAN ANTONIO, TX 78216
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

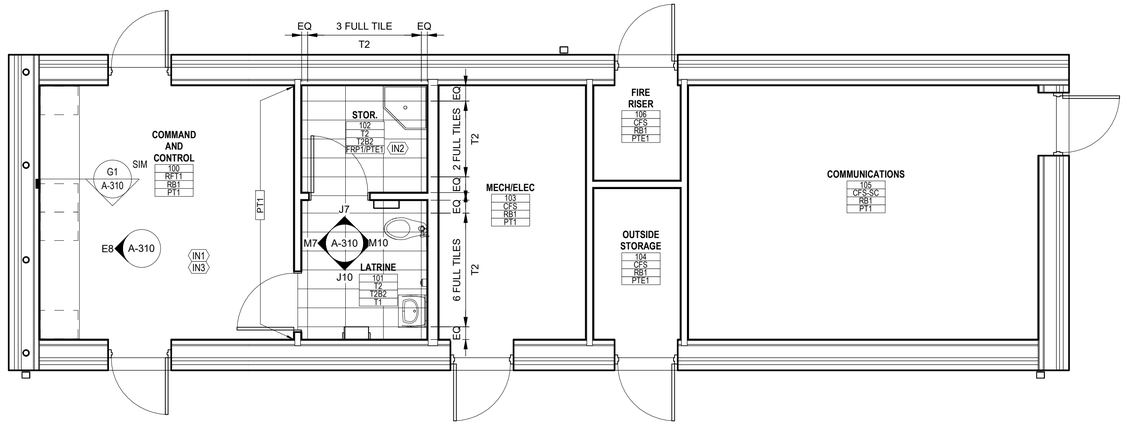
WALL PROTECTION DETAILS

SHEET ID

I-104

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

ROOM FINISH SCHEDULE - GATE HOUSE					
Number	Name	Floor Finish	Base Finish	Wall Finish	Ceiling Finish
100	COMMAND AND CONTROL	RFT1	RB1	PT1	ACT
101	LATRINE	T2	T2B2	T1	ACT
102	STOR.	T2	T2B2	FRP1/PTE1	
103	MECH/ELEC	CFS	RB1	PTE1	ACT
104	OUTSIDE STORAGE	CFS	RB1	PTE1	ACT
105	COMMUNICATIONS	CFS-SC	RB1	PT1	PTD
106	FIRE RISER	CFS	RB1	PTE1	



PLAN NORTH

0 4' 8' 16'

A4 INTERIOR FINISH FLOOR PLAN

1/4" = 1'-0"

GENERAL NOTES

INTERIOR FLOOR FINISH PLAN LEGEND

NOTE:
REFER TO INTERIOR FINISH LEGEND SHEET
I-001 FOR FINISH CODES AND DESCRIPTION OF MATERIALS.

ROOM NAME
101
FLOOR
BASE
WALL

ROOM NUMBER
FLOOR FINISH
BASE FINISH
WALL FINISH

FIELD FLOOR FINISH - REFER TO ROOM FINISH TAG

EM - ENTRANCE MAT

??? WALL ACCENT

SHEET KEYNOTES IN#

IN1 - SWP SHEET WALL PROTECTION WAINSCOT WITH PAINT ABOVE ON ALL GYP WALLS IN THIS ROOM.

IN2 - FRP1 WAINSCOT WITH EPOXY PAINTED GYP ABOVE ON ALL WALLS IN THIS ROOM.

IN3 - PROVIDE CHR1 CHAIR RAIL AT ALL WALLS WIDER THAN 12" IN THIS ROOM.

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

File Path: C:\Vol2025\104000\I\I-PBA_GATEHOUSE_Pedro.Velazquez#ce#gaez.rvt

Plot Date: 4/16/2026 4:16:13 PM

DESIGNED BY: Designer
DRAWN BY: Author
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SIZE: ANSI D

ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W912TS24F6002
CONTRACT NO.: W912TS25D0035

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

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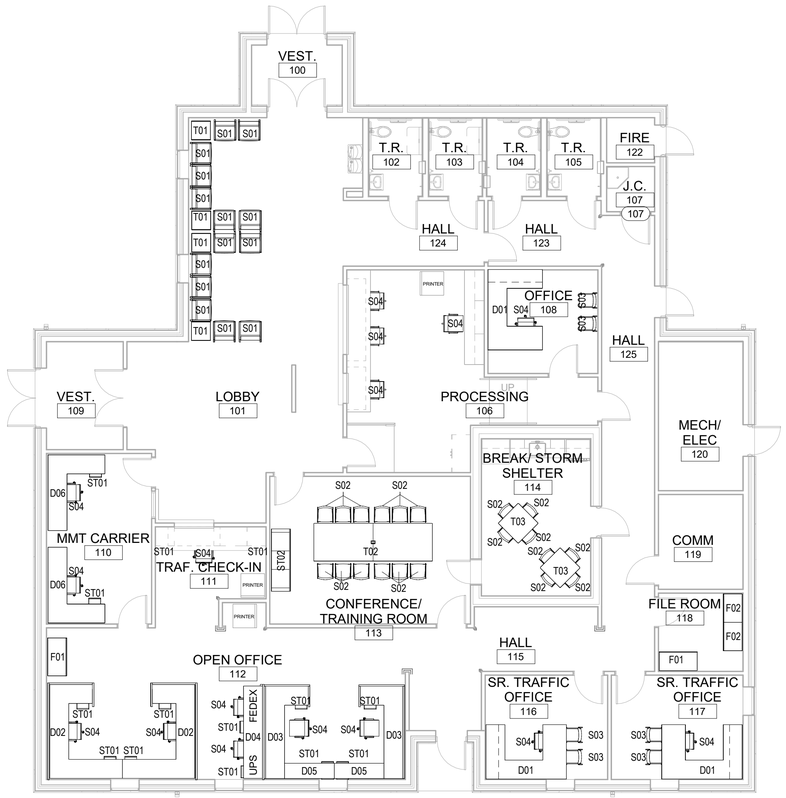
613 NW LOOP 410, STE 700
SAN ANTONIO, TX 78216
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

INTERIOR FINISH PLAN

SHEET ID
G-HOUSE
I-111

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



Furniture Schedule		
Type Mark	Description	Count
D01	OFFICE DESK-U-SHAPED-BACK STORAGE	3
D02	U-SHAPED WORKSTATION - 120"W x 96"D	2
D03	L-SHAPED WORKSTATION - 120"W x 96"D	2
D04	STRAIGHT WORKSTATION - 120"W x 96"D	1
D05	STRAIGHT WORKSTATION - 120"W x 96"D	2
D06	L-SHAPED WORKSTATION - 96"W x 72"D	2
F01	4-DRAWERS LATERAL FILES - 42"W x 18"D x 52"H	2
F02	4-DRAWERS LATERAL FILES - 36"W x 24"D x 52"H	2
S01	WAITING CHAIR, METAL FRAME, ARMLESS	14
S02	PLASTIC GUEST CHAIR SLED BASE, ARMLESS	20
S03	GUEST CHAIR W/ ARM	6
S04	MID BACK TASK CHAIR STAR BASE, 24/7	16
ST01	MOBILE PEDESTAL	14
ST02	CREDENZA	1
T01	OCCASIONAL TABLE	4
T02	CONFERENCE TABLE - RECTANGULAR TOP - 30"H x 120"W x 48"D	1
T03	SQUARE TABLE X-BASE - 30"H x 36"W	2

PLAN NORTH

0 4' 8' 16'

A1 FURNITURE PLAN

1/8" = 1'-0"

GENERAL NOTES

1. FURNITURE SHOWN IN BLACK LINES.
2. ALL POWER AND DATA SHALL BE COORDINATED WITH DESK LOCATIONS SHOWN.
3. ALL FURNITURE IS GFGI, GOVERNMENT FURNISHED / GOVERNMENT INSTALLED.

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

File Path: C:\vid2025\104000\fb-FBA_VCC__jamie.mangmak.rvt

Plot Date: 5/12/2026 2:01:10 PM

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

ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W912ES24F6002
CONTRACT NO.: W912ES25D0035

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HDR ENGINEERING, INC
613 NW LOOP 410, STE 700
SAN ANTONIO, TX 78216
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

FURNITURE PLAN

SHEET ID
VCC
IF101

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

GENERAL NOTES

1. FURNITURE SHOWN IN BLACK LINES.
2. ALL POWER DATA SHALL BE COORDINATED WITH DESK LOCATIONS SHOWN.
3. ALL FURNITURE IS GFGI, GOVERNMENT FURNISHED / GOVERNMENT INSTALLED.

SHEET KEYNOTES

SHEET LEGEND

Furniture Schedule		
Type Mark	Description	Count
S05	MID BACK TASK CHAIR STAR BASE, 24/7, ARMLESS	2

PLAN NORTH

0 4' 8' 16'

A1 FURNITURE PLAN

1/4" = 1'-0"

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

Plot Date: 5/12/2026 2:18:52 PM File Path: C:\Hd2025\104000\R-FPBA_GATEHOUSE_jamie.mierzejak.rvt

DESIGNED BY: Designer
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CHECKED BY: Checker
SUBMITTED BY:
ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W912725R6002
CONTRACT NO.: W912725D0035
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

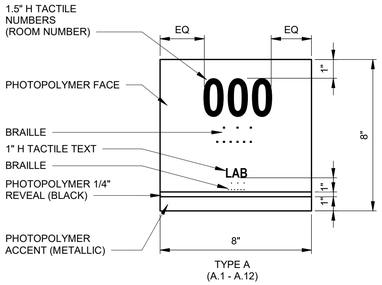
HDR ENGINEERING, INC
613 NW LOOP 410, STE 700
SAN ANTONIO, TX 78216
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

FURNITURE PLAN

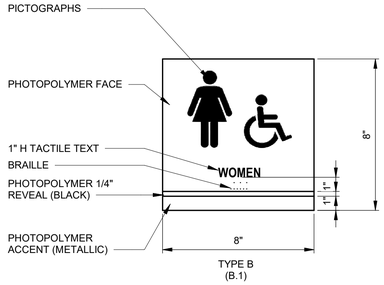
SHEET ID
G-HOUSE
IF111

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



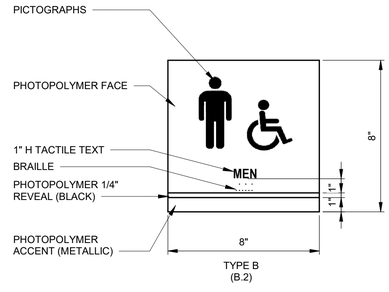
K1 SIGNAGE TYPES - TYPE A

3" = 1'-0"



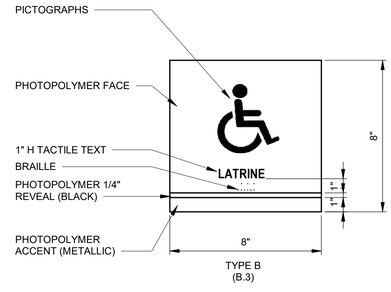
K5 SIGNAGE TYPES - TYPE B.1

3" = 1'-0"



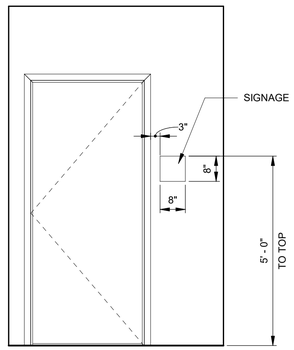
K9 SIGNAGE TYPES - TYPE B.2

3" = 1'-0"



K13 SIGNAGE TYPES - TYPE B.3

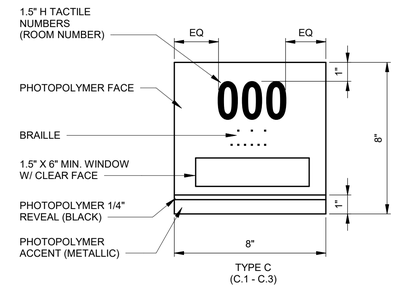
3" = 1'-0"



NOTE: BRAILLE AND TACTILE LETTERS TO BE 60" MAX AND 48" MIN AFF

G1 TYPICAL SIGNAGE PLACEMENT

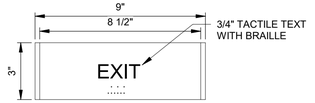
1/2" = 1'-0"



C.3 - "CONDUCTIVE FOOTWEAR REQUIRED" SHALL BE INCLUDED IN THE INSERT TEXT

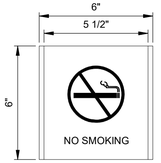
G13 SIGNAGE TYPES - TYPE C

3" = 1'-0"



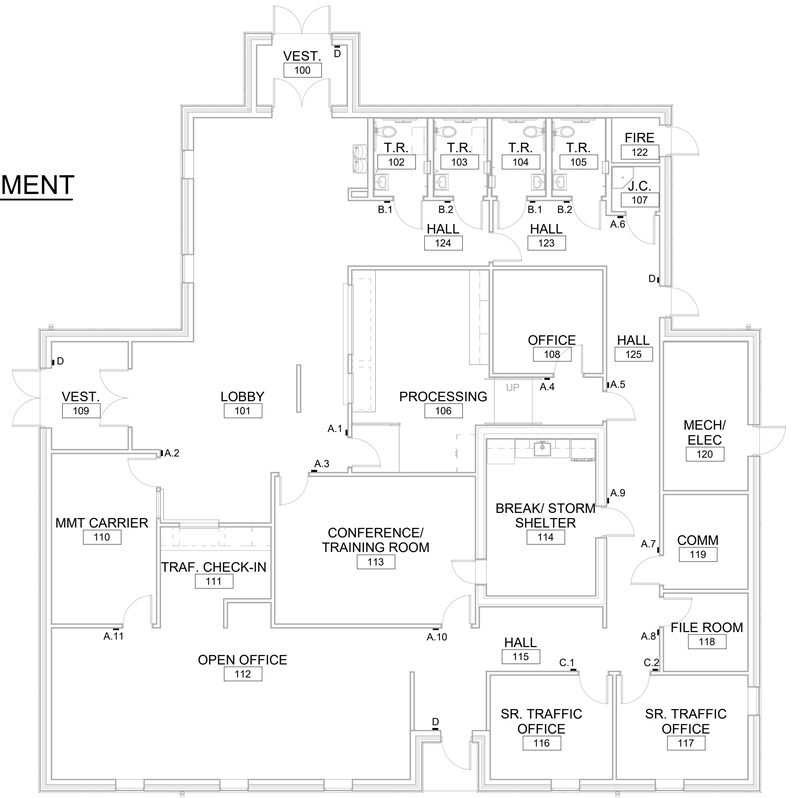
E13 SIGNAGE TYPES - TYPE D

3" = 1'-0"



C13 SIGNAGE TYPES - TYPE E

3" = 1'-0"



PLAN NORTH

0 4' 8' 16'

A1 INTERIOR WAYFINDING PLAN

1/8" = 1'-0"

GENERAL NOTES

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

File Path: C:\vc\2025\104000\fb-FRA_VCC_jamie.mangmak.rvt

ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W912TS24F6002
CONTRACT NO.: W912TS25D0035

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

Plot Date: 5/14/2026 6:36:35 PM

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

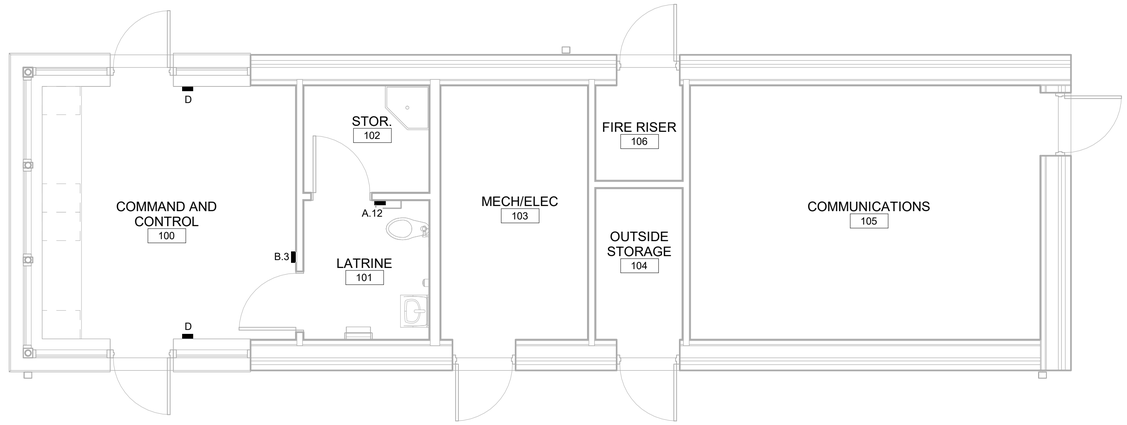
HDR ENGINEERING, INC
613 NW LOOP 410, STE 700
SAN ANTONIO, TX 78216
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

INTERIOR WAYFINDING PLAN

SHEET ID
VCC
IW101

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



PLAN NORTH

0 4' 8' 16'

A1 INTERIOR WAYFINDING PLAN

1/4" = 1'-0"

GENERAL NOTES

1. REFER TO IW-101 FOR SIGNAGE TYPES.
2. ALL WALL MOUNTED ITEMS SHALL BE COORDINATED WITH SIGNAGE LOCATIONS.

SHEET KEYNOTES

SHEET LEGEND

X.X WALL MOUNTED SIGNAGE

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: Designer
DRAWN BY: Author
CHECKED BY: Checker
SUBMITTED BY:
ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S25D0035
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HDR ENGINEERING, INC
613 NW LOOP 410, STE 700
SAN ANTONIO, TX 78216
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

INTERIOR WAYFINDING PLAN

SHEET ID
G-HOUSE
IW111

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

Plot Date: 4/16/2026 4:16:14 PM File Path: C:\Vol2025\104000764-PBA_GATEHOUSE_Pods\Velazquez\Rod\Iplan2.rvt

FIRE ALARM/MASS NOTIFICATION GENERAL NOTES:

1. THE PROJECT SCOPE IS INSTALLATION OF NEW FIRE ALARM AND MASS NOTIFICATION SYSTEM AS INDICATED ON THE CONTRACT DOCUMENTS, AS EVIDENTLY INTENDED AND IN ACCORDANCE WITH NFPA 70, NFPA 72, NFPA 90A, UFC 3-600-01, UFC 4-021-01, USACE ECB 2018-17 AND JBSA STANDARDS. THE DRAWINGS ARE DIAGRAMMATIC IN NATURE AND INDICATE GENERAL ARRANGEMENTS OF SYSTEMS AND WORK, BUT DO NOT INCLUDE INTERCONNECTIONS BETWEEN OTHER SYSTEMS. THE CONTRACTOR SHALL PROVIDE CONDUIT, BACK BOXES, RACEWAY AND WIRING AS REQUIRED TO ACCOMPLISH THE FUNCTIONS INTENDED AND REQUIRED BY CODE.

2. COORDINATE WORK WITH THAT OF OTHER TRADES SO AS TO AVOID CONFLICTS. RESOLVE CONFLICTS THROUGH THE A/E PRIOR TO ROUGH-IN. FAILURE TO PROVIDE SUCH COORDINATION PRIOR TO WORK BEING INSTALLED SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION TO THE CONTRACTOR, AND MAY RESULT IN REJECTION OF THE WORK.

3. PROVIDE NEW MATERIALS, BEARING LABELS OR MARKING INDICATING THIRD PARTY TESTING AND APPROVAL, SUITABLE FOR THE APPLICATION INTENDED.

4. INSTALL FIRE ALARM AND MASS NOTIFICATION CABLE IN METAL RACEWAY. FREE-RUN CABLE IS NOT PERMITTED. INSTALL RACEWAY PERPENDICULAR OR PARALLEL TO THE BUILDING'S STRUCTURAL COMPONENTS.

5. PROVIDE PULL AND JUNCTION BOXES AS REQUIRED TO MEET CODE AND INSTALLATION REQUIREMENTS. PULL AND JUNCTION BOXES SHALL BE CONCEALED IN FINISHED SPACES. COORDINATE WITH OTHER TRADES SO AS TO AVOID CONFLICTS.

6. SUPPORT CONDUIT AND BACK BOXES BY MEANS OF ANCHORS, RODS, HANGERS, ETC., TO MAINTAIN ALIGNMENT AND PREVENT MOVEMENT. SUPPORT CEILING MOUNTED BACK BOXES WITH "T" HANGERS OR EQUAL METHOD OF SUPPORT. BACK BOXES SHALL NOT BE SUPPORTED SOLELY BY CONDUIT.

7. IDENTIFY CONDUCTORS AT EACH JUNCTION BOX, OUTLET BOX, CABINET, PULL BOX, ETC., WITH VINYL HEAT SHRINK TAGS INDICATING PANEL AND CIRCUIT NUMBER, CONTROL WIRE IDENTIFICATION NUMBER, OR OTHER APPROPRIATE INFORMATION.

8. SEAL PENETRATIONS AT FIRE OR SMOKE RATED CONSTRUCTION WITH FIRESTOPPING MATERIALS APPROVED AND LISTED FOR THE RATING OF THE CONSTRUCTION TO BE PENETRATED. PROVIDE DOCUMENTATION FOR EACH PENETRATION SEALING SYSTEMS FOR VERIFICATION OF PROPER INSTALLATION.

9. PERFORM WORK ON DE-ENERGIZED SYSTEMS ONLY TO PREVENT PERSONNEL INJURY AND POTENTIAL SYSTEM FAILURE. WHERE WORK ON EXISTING SYSTEMS SHALL REQUIRE INTERRUPTION OF ELECTRICAL SERVICE, TEMPORARY PROVISIONS ACCEPTABLE TO THE OWNER SHALL BE REQUIRED.

10. THE BUILDING WILL NOT BE OCCUPIED DURING CONSTRUCTION. THE CONTRACTOR SHALL COORDINATE WORK SCHEDULE WITH GOVERNMENT PRIOR TO COMMENCING WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR WORKING MAINTAIN MINIMUM IMPACT DUE TO CONSTRUCTION.

11. SHOP DRAWINGS AND CALCULATIONS SHALL BE PREPARED BY AN INDIVIDUAL CERTIFIED AT A MINIMUM OF NICET LEVEL III IN FIRE ALARM SYSTEMS.

12. SHOP DRAWINGS, CALCULATIONS, AND MATERIAL SUBMITTAL SHALL BE REVIEWED AND BEAR THE ARMY PROJECT - PE STAMP OF A QUALIFIED FIRE PROTECTION ENGINEER AS PER UFC 3-600-01.

13. SUBMIT SHOP DRAWINGS AND CALCULATIONS TO ENGINEER FOR REVIEW, IN A MANNER AS REQUIRED PER NFPA 72 AND UFC 3-600-01. SUBMIT EQUIPMENT DATA SHEETS FOR A COMPLETE INSTALLATION OF THE FIRE ALARM AND MASS NOTIFICATION SYSTEM. APPROVED SHOP DRAWINGS, DATA SHEETS, AND CALCULATIONS ARE REQUIRED PRIOR TO COMMENCEMENT OF WORK.

14. THE BASE DISPATCHER WILL PROVIDE INFORMATION FOR THE FIRE ALARM TECHNICIANS TO PROGRAM THE BT-XM ONLY.

15. TYPICAL ALL FIRE ALARM PLANS: THE FLOOR PLAN LAYOUT AND DESIGN ARE BASED ON THE CONCEPTUAL PLANS PROVIDED BY THE GOVERNMENT IN THE RFP. THE LAYOUT (INCLUSION OF DOOR OPENINGS, WALL TYPES AND CONSTRUCTION, FLOOR TYPES AND CONSTRUCTION, ETC.) IS SUBJECT TO CHANGE BASED ON THE COMPLETION OF THE STRUCTURAL ANALYSIS OF THE BUILDING AND A SITE SURVEY BY THE DESIGN TEAM AFTER COMPLETION OF ABATEMENT AND DEMOLITION.

FIRE PROTECTION GENERAL NOTES:

1. INSTALL NEW SPRINKLER, DROP PIPING AND SPRINKLER HEADS AS INDICATED ON THE CONTRACT DOCUMENTS, AS EVIDENTLY INTENDED AND IN ACCORDANCE WITH NFPA 13, AND UFC 3-600-01. THE CONTRACTOR SHALL PROVIDE SPRINKLER HEADS, ESCUTCHEONS, PIPE, FITTINGS, AND HANGERS AS REQUIRED TO ACCOMPLISH THE FUNCTIONS INTENDED AND REQUIRED BY CODE.

2. COORDINATE WORK WITH THAT OF OTHER TRADES SO AS TO AVOID CONFLICTS. RESOLVE CONFLICTS THROUGH THE A/E PRIOR TO ROUGH-IN. FAILURE TO PROVIDE SUCH COORDINATION PRIOR TO WORK BEING INSTALLED SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION TO THE CONTRACTOR, AND MAY RESULT IN REJECTION OF THE WORK.

3. PROVIDE NEW MATERIALS, BEARING LABELS OR MARKING INDICATING THIRD PARTY TESTING AND APPROVAL, SUITABLE FOR THE APPLICATION INTENDED.

4. PROVIDE SPRINKLERS IN CONCEALED COMBUSTIBLE SPACES AND DRY SPRINKLERS IN THE ATTIC, IN ACCORDANCE WITH NFPA 13, AND UFC 3-600-01.

5. SUPPORT SPRINKLER PIPING BY MEANS OF ANCHORS, RODS, AND HANGERS, ETC., TO MAINTAIN ALIGNMENT AND PREVENT MOVEMENT.

6. SEAL PENETRATIONS AT FIRE OR SMOKE RATED CONSTRUCTION WITH FIRESTOPPING MATERIALS APPROVED AND LISTED FOR THE RATING OF THE CONSTRUCTION TO BE PENETRATED. PROVIDE DOCUMENTATION FOR EACH PENETRATION SEALING SYSTEMS FOR VERIFICATION OF PROPER INSTALLATION.

7. COORDINATE WORK WITH ARCHITECTURAL, STRUCTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL TRADES. PROVIDE ALL OFFSETS TO AVOID INTERFERENCE WITH EQUIPMENT, PIPING, DUCTWORK, LIGHTS, CONDUIT, OR STRUCTURAL MEMBERS. ENSURE THAT PIPING IS NOT INSTALLED DIRECTLY ABOVE ELECTRICAL PANELS AND OTHER EQUIPMENT IN ACCORDANCE WITH NEC.

8. SHOP DRAWINGS AND CALCULATIONS SHALL BE PREPARED BY AN INDIVIDUAL WHO IS A MINIMUM OF A NICET LEVEL IV IN FIRE PROTECTION DESIGN.

9. SUBMIT SHOP DRAWINGS AND HYDRAULIC CALCULATIONS TO ENGINEER FOR REVIEW, IN A MANNER AS REQUIRED PER NFPA 13 AND UFC 3-600-01. SUBMIT EQUIPMENT DATA SHEETS FOR A COMPLETE INSTALLATION OF THE SPRINKLER SYSTEM. APPROVED SHOP DRAWINGS, DATA SHEETS, AND HYDRAULIC CALCULATIONS ARE REQUIRED PRIOR TO COMMENCEMENT OF WORK.

10. A FIRE PUMP IS REQUIRED, CURRENTLY PROPOSED IS 1,000 GPM @ 70-PSI WITH 75 HP.

11. TYPICAL ALL FIRE SPRINKLER PLANS: THE FLOOR PLAN LAYOUT AND DESIGN (INCLUSIVE OF PRELIMINARY CALCULATIONS) ARE BASED ON THE CONCEPTUAL PLANS PROVIDED BY THE GOVERNMENT IN THE RFP. THE LAYOUT (INCLUSION OF DOOR OPENINGS, WALL TYPES AND CONSTRUCTION, FLOOR TYPES AND CONSTRUCTION, ETC.) IS SUBJECT TO CHANGE BASED ON THE COMPLETION OF THE STRUCTURAL ANALYSIS OF THE BUILDING AND A SITE SURVEY BY THE DESIGN TEAM AFTER COMPLETION OF ABATEMENT AND DEMOLITION.

SPRINKLER SYSTEM SCHEDULE*

AREA	HAZARD CLASS	SYSTEM TYPE	MIN. DENSITY (GPM/ SQ.-FT.)	HYDRAULIC DESIGN AREA (SQ.-FT.)	HOSE * (GPM)	MIN. K-FACTOR	DURATION (MINUTES)
	LIGHT	WET	0.10	1500	250	5.6	60
	ORDINARY	WET	0.20	2500	250	8.0	60

* HOSE STREAM DEMAND TO BE INCLUDED IN HYDRAULIC CALCULATIONS IN ACCORDANCE WITH NFPA 13

NOTE:

THE FIRE SPRINKLER CONTRACTOR SHALL BE RESPONSIBLE FOR DESIGNING A SPRINKLER SYSTEM THAT MINIMIZES FRICTION LOSSES AND PRESSURE DEMAND ON THE SYSTEM SUCH THAT THE NEW FIRE PUMP AND WATER SUPPLY IS CAPABLE OF MEETING SYSTEM DEMAND AND DURATION.

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: W. BURRUS
DRAWN BY: J. MARTINEZ
CHECKED BY: D. EGANUS
SUBMITTED BY:
ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S25B005
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HDR ENGINEERING, INC
613 NW LOOP 410, STE 700
SAN ANTONIO, TX 78216
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

VCC - FIRE PROTECTION GENERAL NOTES AND LEGEND

SHEET ID
VCC
F-001

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

FIRE ALARM/MASS NOTIFICATION GENERAL NOTES:

1. THE PROJECT SCOPE IS INSTALLATION OF NEW FIRE ALARM AND MASS NOTIFICATION SYSTEM AS INDICATED ON THE CONTRACT DOCUMENTS, AS EVIDENTLY INTENDED AND IN ACCORDANCE WITH NFPA 70, NFPA 72, NFPA 90A, UFC 3-600-01, UFC 4-021-01, USACE ECB 2018-17 AND JBSA STANDARDS. THE DRAWINGS ARE DIAGRAMMATIC IN NATURE AND INDICATE GENERAL ARRANGEMENTS OF SYSTEMS AND WORK, BUT DO NOT INCLUDE INTERCONNECTIONS BETWEEN OTHER SYSTEMS. THE CONTRACTOR SHALL PROVIDE CONDUIT, BACK BOXES, RACEWAY AND WIRING AS REQUIRED TO ACCOMPLISH THE FUNCTIONS INTENDED AND REQUIRED BY CODE.

2. COORDINATE WORK WITH THAT OF OTHER TRADES SO AS TO AVOID CONFLICTS. RESOLVE CONFLICTS THROUGH THE A/E PRIOR TO ROUGH-IN. FAILURE TO PROVIDE SUCH COORDINATION PRIOR TO WORK BEING INSTALLED SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION TO THE CONTRACTOR, AND MAY RESULT IN REJECTION OF THE WORK.

3. PROVIDE NEW MATERIALS, BEARING LABELS OR MARKING INDICATING THIRD PARTY TESTING AND APPROVAL, SUITABLE FOR THE APPLICATION INTENDED.

4. INSTALL FIRE ALARM AND MASS NOTIFICATION CABLE IN METAL RACEWAY. FREE-RUN CABLE IS NOT PERMITTED. INSTALL RACEWAY PERPENDICULAR OR PARALLEL TO THE BUILDING'S STRUCTURAL COMPONENTS.

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SPRINKLER SYSTEM SCHEDULE*

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NOTE:

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US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: Designer
DRAWN BY: Author
CHECKED BY: Checker
SUBMITTED BY:
ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S25D0035
SIZE: ANSI D

Plot Date: 4/17/2026 11:14:11 AM File Path: C:\Vol2025\104000\R-F-PBA_CATEK\DJSE_jorge.martinez\PW3M.rvt

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

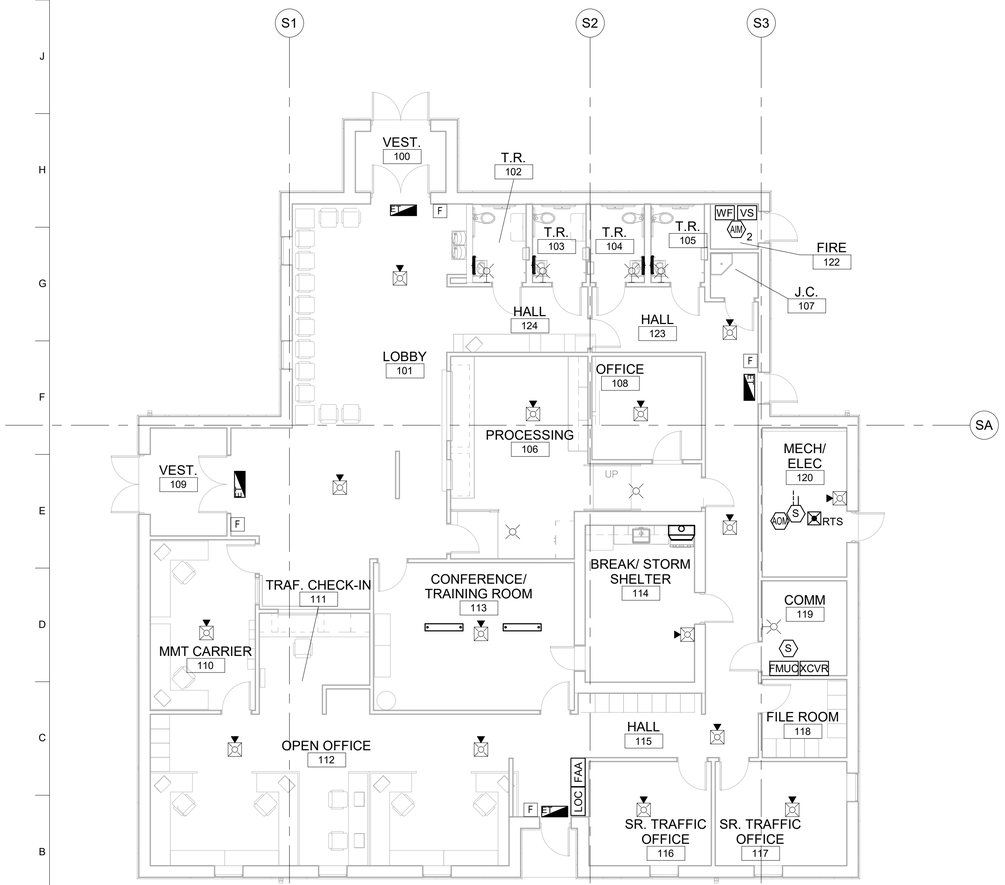
HDR
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

FIRE PROTECTION GENERAL NOTES AND LEGEND

SHEET ID
G-HOUSE
F-011

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



A1 FIRE ALARM AND MASS NOTIFICATION PLAN - VCC

1/8" = 1'-0"

FIRE ALARM/MASS NOTIFICATION DEVICE LEGEND

FMCU	FIRE ALARM/MASS NOTIFICATION CONTROL UNIT
XCVR	MONACO TRANSCEIVER
LOC	LOCAL OPERATING CONSOLE
FAA	FIRE ALARM ANNUNCIATOR
F	FIRE ALARM MANUAL PULL STATION
WF	FLOW DETECTOR (FLOW SWITCH)
VS	VALVE SUPERVISORY (TAMPER SWITCH)
S	SMOKE DETECTOR (P) DESIGNATES PHOTOELECTRIC
S	DUCT SMOKE DETECTOR
AOM	ADDRESSABLE OUTPUT CONTROL MODULE
AIM	ADDRESSABLE INPUT MONITOR MODULE
RTS	REMOTE TEST SWTICH
	STROBE (WALL MOUNTED STROBE ALERT LABEL) (WP) DESIGNATES WEATHERPROOF
	STROBE (CEILING MOUNTED STROBE ALERT LABEL) (WP) DESIGNATES WEATHERPROOF
S	COMBINATION SPEAKER STROBE (FIRE ALARM AND MASS NOTIFICATION SPEAKER WITH CLEAR STROBE LABELED "ALERT") (WP) DESIGNATES WEATHERPROOF (C) DESIGNATES CEILING MOUNTED
	COMBINATION HORN STROBE (FIRE ALARM AND MASS NOTIFICATION SPEAKER WITH CLEAR STROBE LABELED "ALERT") (WP) DESIGNATES WEATHERPROOF
S	FIRE ALARM AND MASS NOTIFICATION SPEAKER (WP) DESIGNATES WEATHERPROOF (C) DESIGNATES CEILING MOUNTED
	EMERGENCY TEXTUAL VISIBLE APPLIANCE

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S25B005

DESIGNED BY: W. BURRUS
DRAWN BY: J. MARTINEZ
CHECKED BY: D. EMMUS
SUBMITTED BY:
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HDR ENGINEERING, INC
613 NW LOOP 410, STE 700
SAN ANTONIO, TX 78216
Texas P.E. Firm Registration No. F-754

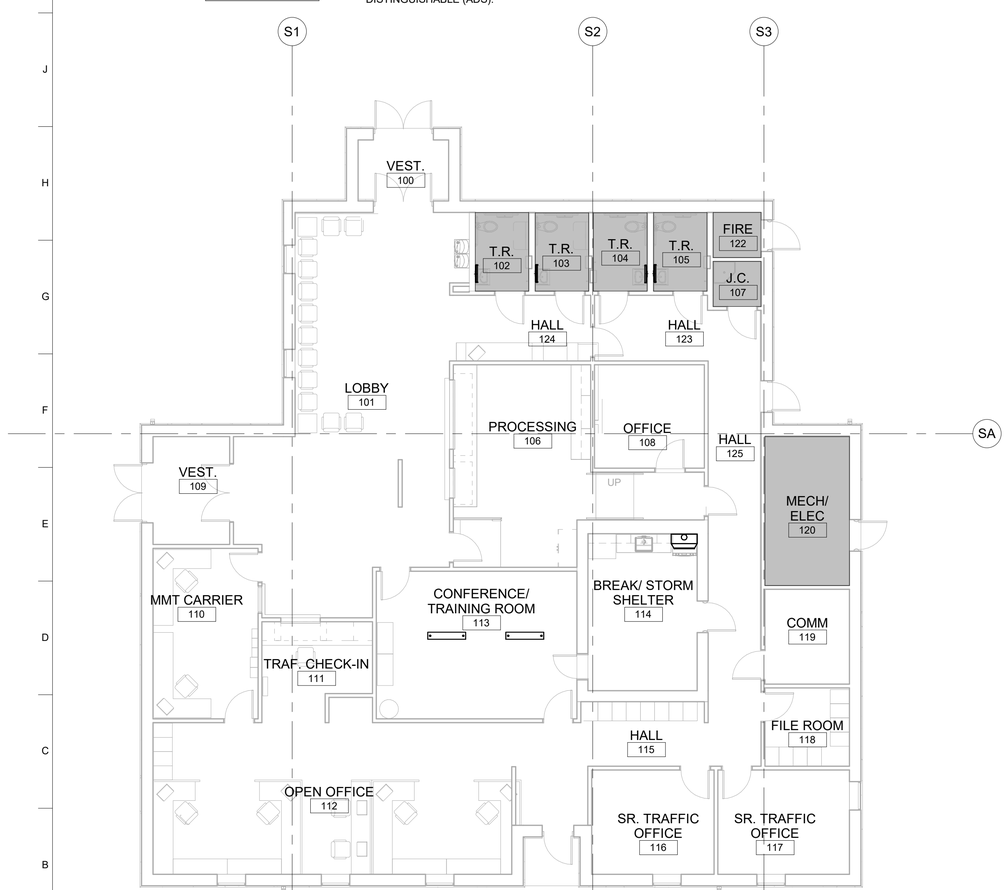
ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

VCC - FIRE ALARM AND MASS NOTIFICATION PLAN

SHEET ID
VCC
FA101

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

NON-ACOUSTICALLY DISTINGUISHABLE SPACE (NON-ADS). ALL OTHER SPACES ARE TO BE CONSIDERED ACOUSTICALLY DISTINGUISHABLE (ADS).



ACOUSTICALLY DISTINGUISHABLE SPACE (ADS) PLAN

1 — 1/8" = 1'-0"

SHEET NOTES

INTELLIGIBILITY REQUIREMENTS PER UFC 4-021-01 § 5-7.1.2.

- VERIFY INTELLIGIBILITY BY MEASUREMENT AFTER INSTALLATION.
- ENSURE THAT A CIS VALUE GREATER THAN THE REQUIRED MINIMUM VALUE IS PROVIDED IN EACH AREA WHERE BUILDING OCCUPANTS TYPICALLY COULD BE FOUND. THE MINIMUM REQUIRED VALUE FOR ARMY IS 0.8 CIS, ALTHOUGH ROUNDING IS PERMITTED SUCH THAT A VALUE OF 0.75 MAY BE ROUNDED TO 0.8.
- AREAS OF THE BUILDING PROVIDED WITH HARD WALL AND CEILING SURFACES (SUCH AS METAL OR CONCRETE) THAT ARE FOUND TO CAUSE EXCESSIVE SOUND REFLECTIONS MAY BE PERMITTED TO HAVE A CIS SCORE LESS THAN THE MINIMUM REQUIRED VALUE IF APPROVED BY THE DOD INSTALLATION, AND IF BUILDING OCCUPANTS IN THESE AREAS CAN DETERMINE THAT A VOICE SIGNAL IS BEING BROADCAST AND THEY MUST WALK NO MORE THAN 10 M (33 FT) TO FIND A LOCATION WITH AT LEAST THE MINIMUM REQUIRED CIS VALUE WITHIN THE SAME AREA.
- AREAS OF THE BUILDING WHERE OCCUPANTS ARE NOT EXPECTED TO BE NORMALLY PRESENT ARE PERMITTED TO HAVE A CIS SCORE LESS THAN THE MINIMUM REQUIRED VALUE IF PERSONNEL CAN DETERMINE THAT A VOICE SIGNAL IS BEING BROADCAST AND THEY MUST WALK NO MORE THAN 15 M (50 FT) TO A LOCATION WITH AT LEAST THE MINIMUM REQUIRED CIS VALUE WITHIN THE SAME AREA.
- MEASUREMENTS SHOULD BE TAKEN NEAR THE HEAD LEVEL APPLICABLE FOR MOST PERSONNEL IN THE SPACE UNDER NORMAL CONDITIONS (E.G., STANDING, SITTING, SLEEPING, AS APPROPRIATE).
- THE DISTANCE THE OCCUPANT MUST WALK TO THE LOCATION MEETING THE MINIMUM REQUIRED CIS VALUE SHALL BE MEASURED ON THE FLOOR OR OTHER WALKING SURFACE AS FOLLOWS:
  - ALONG THE CENTERLINE OF THE NATURAL PATH OF TRAVEL, STARTING FROM ANY POINT SUBJECT TO OCCUPANCY WITH LESS THAN THE MINIMUM REQUIRED CIS VALUE.
  - CURVING AROUND ANY CORNERS OR OBSTRUCTIONS, WITH A 300-MM (12 IN.) CLEARANCE THEREFROM.
  - TERMINATING DIRECTLY BELOW THE LOCATION WHERE THE MINIMUM REQUIRED CIS VALUE HAS BEEN OBTAINED.
- COMMERCIALLY AVAILABLE TEST INSTRUMENTATION SHALL BE USED TO MEASURE INTELLIGIBILITY AS SPECIFIED BY IEC 60849 AND IEC 60268-16. THE MEAN VALUE OF AT LEAST THREE READINGS SHALL BE USED TO COMPUTE THE INTELLIGIBILITY SCORE AT EACH TEST LOCATION.
- OCCASIONALLY, LARGE DOD BUILDINGS ARE DESIGNED TO PROVIDE CAVERNOUS-TYPE OPEN AREAS TO MEET UNIQUE OPERATIONAL REQUIREMENTS. SUCH AREAS ARE TYPICALLY DESIGNED WITH HARD WALL AND CEILING SURFACES (SUCH AS METAL OR CONCRETE) WITHOUT ACOUSTICAL TREATMENTS, AND THIS HAS BEEN FOUND TO CAUSE EXCESSIVE SOUND REFLECTIONS THAT PREVENT OBTAINING THE NORMAL, MINIMUM REQUIRED CIS VALUE. IN SUCH FACILITIES, THE CAVERNOUS-TYPE OPEN AREA IN PERMITTED TO HAVE LOCATIONS WITH A CIS VALUE LOWER THAN THE NORMAL, MINIMUM REQUIRED CIS VALUE WHEN THE FOLLOWING CONDITIONS ARE MET:
  - THE REQUIREMENT FOR A DEVIATION FROM THE NORMAL, MINIMUM CIS CRITERIA IS IDENTIFIED IN THE DESIGN PHASE.
  - JUSTIFICATION FOR THE DEVIATION FROM THE NORMAL, MINIMUM CIS CRITERIA IS PROVIDED TO THE APPROVING AUTHORITY (I.E., THE DOD INSTALLATION IN CONJUNCTION WITH THE CONTRACTING OFFICER FOR THE ARMY). THE JUSTIFICATION SHALL ADDRESS ALL FACTORS RELEVANT TO THE REQUEST FOR DEVIATION FROM NORMAL, MINIMUM CIS CRITERIA, INCLUDING, BUT NOT LIMITED TO: THE OPERATIONAL REQUIREMENTS THAT RESTRICT THE INSTALLATION OF ACOUSTICAL WALL AND CEILING TREATMENTS; THE POTENTIAL USE OF SPECIAL SPEAKER TECHNOLOGIES SUCH AS DIRECTIONAL SPEAKERS OR STACKED SPEAKER SYSTEMS; AND THE AVAILABILITY OF PHYSICALLY LARGER OR HIGHER-FIDELITY SPEAKERS EVEN THOUGH SUCH SPEAKERS MIGHT NOT BE LISTED FOR FIRE ALARM USE.

NOTE: DEVIATION FROM NORMAL, MINIMUM CIS CRITERIA SHOULD NOT BE REQUESTED FOR THE DESIGN OF NORMAL, LARGE, OPEN AREAS THAT ARE TYPICALLY FOUND IN PERMANENT DOD BUILDINGS, SUCH AS DINING HALLS, THEATERS, AND GYMNASIUMS. THE POTENTIAL FOR DEVIATION FROM NORMAL CRITERIA IS INTENDED TO ADDRESS THE RARE EXCEPTION TO NORMAL CRITERIA THAT IS SOMETIMES NEEDED FOR DOD BUILDINGS WITH UNIQUE OPERATIONAL REQUIREMENTS.

- BUILDING OCCUPANTS LOCATED IN THE LARGE, CAVERNOUS AREA CAN ADEQUATELY UNDERSTAND THE MESSAGE CONTENT IN THE VOICE SIGNAL BEING BROADCAST. WHETHER THE VOICE MESSAGE IS ADEQUATELY UNDERSTOOD SHALL BE DETERMINED BY THE APPROVING AUTHORITY (I.E., THE DOD INSTALLATION IN CONJUNCTION WITH THE CONTRACTING OFFICER FOR THE ARMY).
- THE CIS VALUE IS NOT LESS THAN 0.6 AT ANY LOCATION WITHIN THE LARGE, CAVERNOUS AREA.
- THE BUILDING OCCUPANTS IN THE LARGE, CAVERNOUS AREA MUST WALK NO MORE THAN 30 M (98 FT) TO FIND ANOTHER LOCATION WITHIN THE LARGE, CAVERNOUS AREA HAVING AT LEAST THE NORMAL, MINIMUM REQUIRED CIS VALUE.

NOTE: AN STI SCORE OF 0.5 IS CONSIDERED EQUIVALENT TO A CIS SCORE OF 0.7. AN STI VALUE OF 0.7 IS CONSIDERED EQUIVALENT TO A CIS VALUE OF 0.8.

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W912T524F6002
CONTRACT NO.: W912T523D0035

DESIGNED BY: W. BURRUS
DRAWN BY: J. MARTINEZ
CHECKED BY: D. EMANUS
SUBMITTED BY:
SIZE: ANSI D

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ACCESS CONTROL POINT - PLANVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

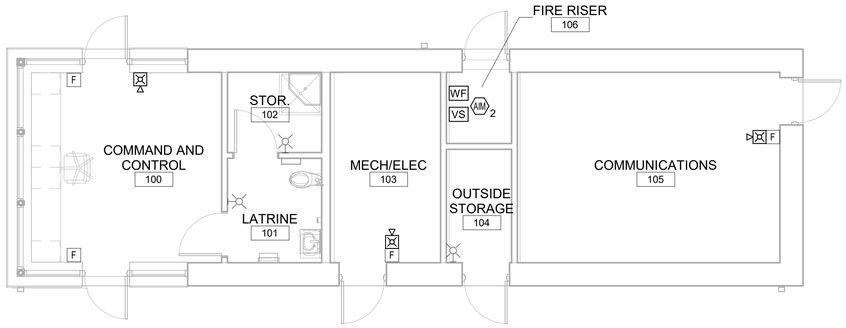
VCC - ACOUSTICALLY DISTINGUISHABLE SPACE (ADS) PLAN

SHEET ID
VCC
FA102

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

FIRE ALARM/MASS NOTIFICATION DEVICE LEGEND

FMCU	FIRE ALARM/MASS NOTIFICATION CONTROL UNIT
XCVR	MONACO TRANSCEIVER
LOC	LOCAL OPERATING CONSOLE
FAA	FIRE ALARM ANNUNCIATOR
F	FIRE ALARM MANUAL PULL STATION
WF	FLOW DETECTOR (FLOW SWITCH)
VS	VALVE SUPERVISORY (TAMPER SWITCH)
S	SMOKE DETECTOR (P) DESIGNATES PHOTOELECTRIC
S	DUCT SMOKE DETECTOR
AOM	ADDRESSABLE OUTPUT CONTROL MODULE
AIM	ADDRESSABLE INPUT MONITOR MODULE
RTS	REMOTE TEST SWTICH
	STROBE (WALL MOUNTED STROBE ALERT LABEL) (WP) DESIGNATES WEATHERPROOF
	STROBE (CEILING MOUNTED STROBE ALERT LABEL) (WP) DESIGNATES WEATHERPROOF
	COMBINATION SPEAKER STROBE (FIRE ALARM AND MASS NOTIFICATION SPEAKER WITH CLEAR STROBE LABELED "ALERT") (WP) DESIGNATES WEATHERPROOF (C) DESIGNATES CEILING MOUNTED
	COMBINATION HORN STROBE (FIRE ALARM AND MASS NOTIFICATION SPEAKER WITH CLEAR STROBE LABELED "ALERT") (WP) DESIGNATES WEATHERPROOF
S	FIRE ALARM AND MASS NOTIFICATION SPEAKER (WP) DESIGNATES WEATHERPROOF (C) DESIGNATES CEILING MOUNTED
	EMERGENCY TEXTUAL VISIBLE APPLIANCE



PLAN NORTH

A1 FIRE ALARM PLAN - GATEHOUSE

3/16" = 1'-0"

0 2' 4' 8' 12'

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: Designer
DRAWN BY: Author
CHECKED BY: Checker
SUBMITTED BY:
SIZE: ANSI D
ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S25D005

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HDR
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

GATEHOUSE - FIRE ALARM PLAN

SHEET ID
G-HOUSE
FA111

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

Plot Date: 4/17/2026 11:14:11 AM File Path: C:\vt\2025\104000\R-F-PBA_GATEHOUSE_jorge.martinez\PW3M.rvt

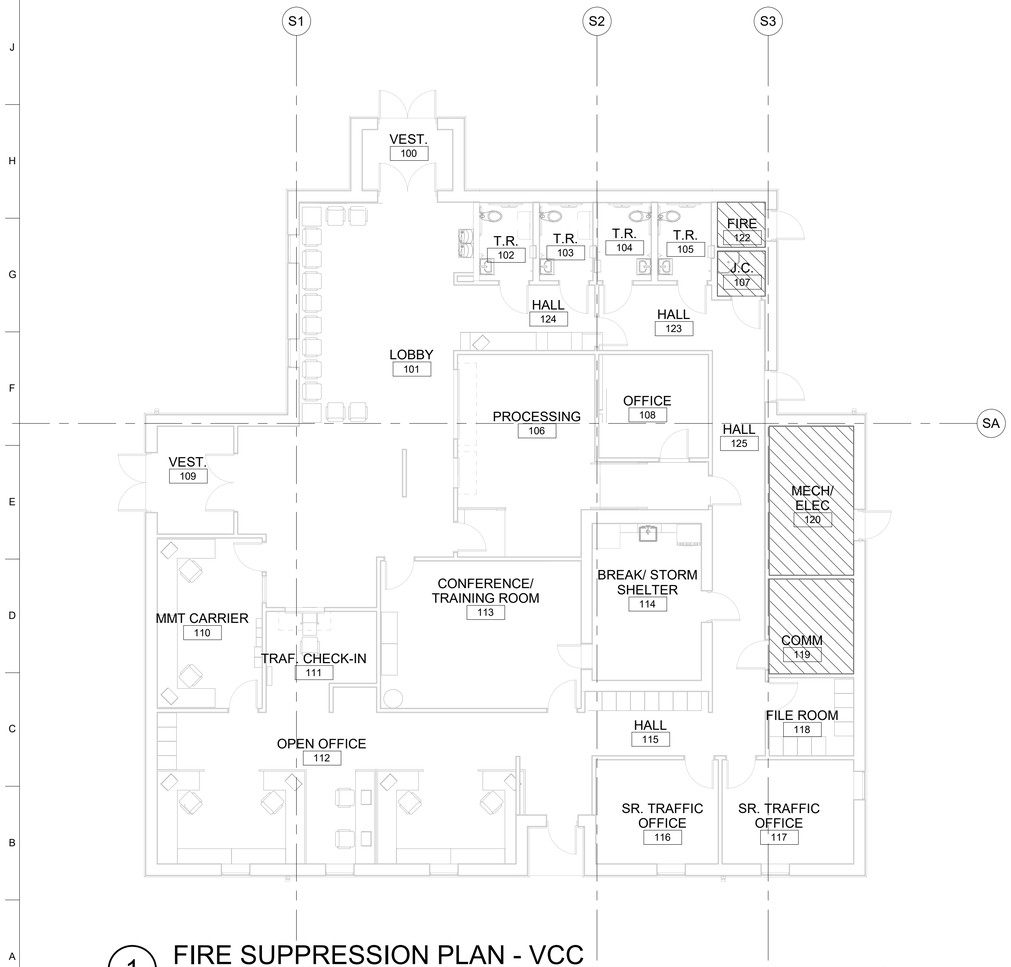
SPRINKLER SYSTEM SCHEDULE*

AREA	HAZARD CLASS	SYSTEM TYPE	MIN. DENSITY (GPM/ SQ.-FT.)	HYDRAULIC DESIGN AREA (SQ.-FT.)	HOSE * (GPM)	MIN. K-FACTOR	DURATION (MINUTES)
	LIGHT	WET	0.10	1500	250	5.6	60
	ORDINARY	WET	0.20	2500	250	8.0	60

* HOSE STREAM DEMAND TO BE INCLUDED IN HYDRAULIC CALCULATIONS IN ACCORDANCE WITH NFPA 13

NOTE:

THE FIRE SPRINKLER CONTRACTOR SHALL BE RESPONSIBLE FOR DESIGNING A SPRINKLER SYSTEM THAT MINIMIZES FRICTION LOSSES AND PRESSURE DEMAND ON THE SYSTEM SUCH THAT THE NEW FIRE PUMP AND WATER SUPPLY IS CAPABLE OF MEETING SYSTEM DEMAND AND DURATION.



1 FIRE SUPPRESSION PLAN - VCC

1/8" = 1'-0"

PLAN NORTH

0 4' 8' 16'

GENERAL NOTES

SHEET KEYNOTES

SHEET LEGEND

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

ISSUE DATE:	17 APRIL 2026
SOLICITATION NO.:	W912T524F6002
CONTRACT NO.:	W912T523D0035
DESIGNED BY:	W. BURRUS
DRAWN BY:	J. MARTINEZ
CHECKED BY:	C. EMMONS
SUBMITTED BY:	
SIZE:	ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HDR ENGINEERING, INC
613 NW LOOP 410, STE 700
SAN ANTONIO, TX 78216
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLANVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

VCC - FIRE SUPPRESSION PLAN

SHEET ID
VCC
FX101

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

SPRINKLER SYSTEM SCHEDULE*

AREA	HAZARD CLASS	SYSTEM TYPE	MIN. DENSITY (GPM/ SQ.-FT.)	HYDRAULIC DESIGN AREA (SQ.-FT.)	HOSE * (GPM)	MIN. K-FACTOR	DURATION (MINUTES)
	LIGHT	WET	0.10	1500	250	5.6	60
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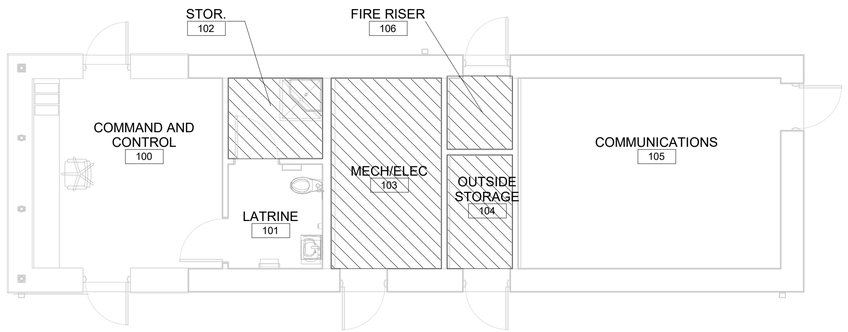

A1 FIRE SUPPRESSION PLAN - GATEHOUSE

3/16" = 1'-0"

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

Plot Date: 4/17/2026 11:14:11 AM File Path: C:\vt\2025\104000\9-F-PBA_GATEHOUSE_jorge.martinez\PW3M.rvt

DESIGNED BY: Designer
DRAWN BY: Author
CHECKED BY: Checker
SUBMITTED BY:
ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S25B0035
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HDR
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

GATEHOUSE - FIRE SUPPRESSION PLAN

SHEET ID
G-HOUSE
FX111

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

PIPING SYSTEMS

- COLD WATER, POTABLE (CW)
- HOT WATER, POTABLE (HW)
- HOT WATER RECIRCULATING, POTABLE (HWC)
- NPW — NON POTABLE COLD WATER
- 140 — HOT WATER - TEMPERATURE, POTABLE
- TW — TEPID WATER, POTABLE
- TWR — TEPID WATER RETURN, POTABLE
- SAN — SANITARY SEWER BELOW GRADE
- SAN — SANITARY SEWER ABOVE GRADE
- V — SANITARY VENT
- AW — ACID WASTE
- AV — ACID VENT
- CWV — COMBINATION WASTE AND VENT
- PD — PRESSURE DRAINAGE
- SD — STORM DRAIN ABOVE GRADE
- SD — STORM DRAIN BELOW GRADE
- OD — STORM DRAIN OVERFLOW
- NG — NATURAL GAS
- LP — LIQUEFIED PROPANE
- CA — COMPRESSED AIR
- CD — CONDENSATE DRAIN
- CPD — CONDENSATE PUMP DISCHARGE
- STM -15 — STEAM SUPPLY - PSI
- BBD — BOILER BLOW DOWN
- BF — BOILER FEED
- SV — STEAM VENT
- MU — MAKE-UP WATER

PIPING SYMBOLOGY

- PIPE ANCHOR
- PIPE GUIDE
- EXPANSION JOINT
- PT — PRESSURE/ TEMPERATURE PORT
- THERMOMETER
- THERMOWELL
- PRESSURE GAUGE
- T — TEMPERATURE GAUGE
- FLEXIBLE PIPING CONNECTION
- WYE STRAINER
- MANUAL AIR VENT
- A — AUTOMATIC AIR VENT
- M — METER (WATER, GAS, OTHER)
- FCO — FLOOR CLEANOUT
- CO — CLEANOUT
- WCO — WALL CLEANOUT
- GCO — DOUBLE GRADE CLEANOUT
- WATER HAMMER ARRESTOR
- EARTHQUAKE VALVE
- CONCENTRIC REDUCER
- ECCENTRIC REDUCER, FLAT ON BOTTOM
- ECCENTRIC REDUCER, FLAT ON TOP
- ELBOW, 90° TURN DOWN
- ELBOW, 90° TURN UP
- TEE, OUTLET UP
- TEE, OUTLET DOWN
- TEE, OUTLET UP W/ 90° TURN
- TEE, OUTLET DOWN W/ 90° TURN
- PIPE BREAK
- PIPE CAP
- BLIND FLANGE
- UNION
- FLOW ARROW
- SHUTOFF VALVE (NORMALLY OPEN)
- SHUTOFF VALVE (NORMALLY CLOSED)
- DRAIN VALVE
- CHECK VALVE
- VB — VACUUM BREAKER
- AUTOMATIC FLOW CONTROL VALVE
- CALIBRATED MANUAL BALANCING VALVE
- OR — PRESSURE-RELIEF VALVE
- PRESSURE-REDUCING VALVE (PRV)
- AUTOMATIC CONTROL VALVE, 2-WAY
- AUTOMATIC CONTROL VALVE, 3-WAY
- BFP — BACKFLOW PREVENTER
- XX-1 — PLUMBING FIXTURE

GENERAL NOTES

GENERAL NOTES

1. THESE NOTES ARE NOT ALL INCLUSIVE. REFER TO DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
2. THIS IS A STANDARD PLUMBING SYMBOLOGY AND ABBREVIATIONS SHEET. LISTING OF SYMBOLS AND ABBREVIATIONS DOES NOT IMPLY ALL SYMBOLS AND ABBREVIATIONS HAVE BEEN USED ON THIS PROJECT.
3. PROVIDE ALL MATERIALS, LABOR, AND EQUIPMENT FOR COMPLETE AND OPERABLE SYSTEMS AS INDICATED ON THE DRAWINGS AS SPECIFIED, OR AS REQUIRED BY CODE.
4. PLUMBING INSTALLATION SHALL COMPLY WITH THE ADA/ABA ACCESSIBILITY GUIDELINES.
5. DETAILS APPLY TO THE ENTIRE PROJECT AND ARE ONLY REFERENCED TO PROVIDE CLARITY IF THERE ARE MULTIPLE DETAILS THAT COULD APPLY TO A PARTICULAR PROJECT CONDITION.
6. COORDINATE LOCATION OF ALL PLUMBING EQUIPMENT AND PIPING WITH OTHER TRADES BEFORE PROCEEDING WITH WORK. DO NOT INSTALL PLUMBING EQUIPMENT OR PIPING ABOVE ELECTRICAL EQUIPMENT WHERE PROHIBITED BY ELECTRICAL CODES (SWITCHBOARDS, PANELS, ETC.).
7. LIGHT LINE WEIGHT INDICATES EXISTING PIPING AND/OR EQUIPMENT TO REMAIN. BOLD LINE WEIGHT INDICATES NEW WORK TO BE INSTALLED AS WORK OF THIS CONTRACT.
8. MAINTAIN THE CLEARANCE SPACES AROUND, OVER, AND UNDER EQUIPMENT, SYSTEMS, AND SYSTEM COMPONENTS IN CEILING CAVITIES CONVENIENT OBSERVATIONS, NECESSARY FOR OPERATION, AND MAINTENANCE.
9. ALL WORK IN FINISHED SPACES SHALL BE LOCATED ABOVE CEILINGS, IN CHASES OR OTHER CONCEALED ACCESSIBLE LOCATIONS UNLESS NOTED OTHERWISE. LOCATE AND ARRANGE VALVES, DRAIN FITTINGS, ETC. TO BE ACCESSIBLE THROUGH LAY-IN CEILINGS, ACCESS PANELS OR ACCESS DOORS. PROVIDE AN ACCESS PANEL OR DOOR FOR ALL NON-ACCESSIBLE INSTALLATIONS. COORDINATE LOCATION OF ACCESS PANELS OR DOORS WITH THE ARCHITECT/ENGINEER AND OTHER TRADES.
10. ALL MATERIALS LOCATED IN PLENUM SHALL BE RATED FOR PLENUM INSTALLATION.
11. ALL PIPING, AND EQUIPMENT SUPPORTED FROM STRUCTURAL STEEL SHALL BE COORDINATED WITH ALL TRADES. ALL ATTACHMENTS TO STEEL BAR JOISTS, TRUSSES, OR JOIST GIRDERS SHALL BE AT PANEL POINTS OR AS SHOWN ON THE PLUMBING OR STRUCTURAL DRAWINGS. WELDING TO STRUCTURAL MEMBERS SHALL NOT BE PERMITTED.
12. ALL MISCELLANEOUS METALS AND MATERIALS REQUIRED TO ENSURE PROPER INSTALLATION AND AS SHOWN IN DETAILS FOR PIPING AND EQUIPMENT (UNLESS OTHERWISE NOTED) SHALL BE PROVIDED BY THE INSTALLING CONTRACTOR.
13. PROVIDE DIELECTRIC UNIONS AT ALL CONNECTIONS OF DISSIMILAR METALS (SUCH AS COPPER TO GALVANIZED STEEL).
14. PROVIDE ISOLATION VALVES AT EACH PIECE OF EQUIPMENT. ALSO PROVIDE ISOLATION VALVES ON EACH BRANCH AND/OR RISER SERVING MULTIPLE PIECES OF EQUIPMENT OR FIXTURES AND ELSEWHERE AS INDICATED. INSTALL VALVES AS CLOSE TO MAIN AS POSSIBLE.
15. EQUIPMENT SIZES AND SERVICE CLEARANCE REQUIREMENTS VARY AMONG DIFFERENT MANUFACTURERS. CONSULT APPROVED SHOP DRAWINGS FOR EQUIPMENT SIZES AND REQUIRED SERVICE CLEARANCES. COORDINATE WITH LAYOUT OF EQUIPMENT PADS, PIPING, ETC.
16. PROVIDE ACCESS PANELS FOR INSTALLATION IN WALLS AND CEILINGS TO SERVICE CONTROL DEVICES, VALVES, AND OTHER CONCEALED PLUMBING EQUIPMENT. ACCESS PANEL COORDINATED WITH INSTALLATION SHALL BE ARCHITECTURAL WORK TO MATCH MATERIALS AND FINISHES. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
17. DRAWINGS SHOWING LOCATIONS OF EQUIPMENT, PIPING, ETC. ARE DIAGRAMMATIC AND MAY NOT ALWAYS REFLECT EXACT INSTALLATION CONDITIONS. DRAWINGS SHOW THE GENERAL ARRANGEMENT OF PIPING, EQUIPMENT, ETC., AND MAY NOT INCLUDE ALL OFFSETS AND FITTINGS REQUIRED FOR COMPLETE INSTALLATION. THE DRAWINGS SHALL BE FOLLOWED AS CLOSELY AS ACTUAL BUILDING CONSTRUCTION AND THE WORK OF OTHERS WILL PERMIT.
18. PROVIDE DRY WELLS FOR ALL PRE-FABRICATED GUARD BOOTH HVAC SYSTEM. COORDINATE LOCATION FOR DRY WELLS WITH BOOTH MANUFACTURER AND OTHER DISCIPLINES.

GENERAL PLUMBING NOTES

1. SANITARY SEWER PIPING SMALLER THAN 3" SHALL BE SLOPED AT 1/4" PER FOOT, 3" AND LARGER SHALL BE SLOPED AT 1/8" PER FOOT.
2. ALL CONDENSATE DRAIN PIPING SHALL BE SLOPED AT 1/8" PER FOOT, MINIMUM.
3. INSTALL PLUMBING VENTS NO CLOSER THAN 25 FEET FROM ANY OUTSIDE AIR INTAKE.

ABBREVIATIONS

AD	ACCESS DOOR
AFR	ABOVE FINISHED ROOF
AHU	AIR HANDLING UNIT
APD	AIR PRESSURE DROP
ARF	ABOVE RAISED FLOOR
AV	AIR VALVE
BAS	BUILDING AUTOMATION SYSTEM
BDD	BACK DRAFT DAMPER
BHP	BRAKE HORSE POWER
BOE	BOTTOM OF EQUIPMENT
BTUH	BRITISH THERMAL UNITS PER HOUR
CAV	CONSTANT AIR VOLUME
CFH	CUBIC FEET PER HOUR
CFM	CUBIC FEET PER MINUTE
COP	COEFFICIENT OF PERFORMANCE
COR	CONTRACTING OFFICER'S REPRESENTATIVE
CRAC	COMPUTER ROOM AIR CONDITIONER
CU	CONDENSING UNIT
DB	DRY BULB
DDC	DIRECT DIGITAL CONTROL
DH	DEHUMIDIFIER
DSSC	DUCTLES SPLIT SYSTEM CONDENSER
DSSE	DUCTLESS SPLIT SYSTEM EVAPORATOR
DX	DIRECT EXPANSION
EAT	ENTERING AIR TEMPERATURE
EDH	ELECTRIC DUCT HEATER
EER	ENERGY EFFICIENCY RATIO
EF	EXHAUST FAN
EMCS	ENERGY MANAGEMENT CONTROL SYSTEM
ERU	ENERGY RECOVERY UNIT
ESP	EXTERNAL STATIC PRESSURE
ESS	EMERGENCY SHUTOFF SWITCH
EWT	ENTERING WATER TEMPERATURE
F	FUTURE
FA	FREE AREA
FCP	FAN CONTROL PANEL
FCU	FAN COIL UNIT
FDBK	FEEDBACK
FLA	FULL LOAD AMPS
FLT	FILTER
FPB	FAN POWERED BOX
FPM	FEET PER MINUTE
FT	FINTUBE RADIATION
GC	GENERAL CONTRACTOR
GE	GRAVITY EXHAUST
GI	GRAVITY INTAKE
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
HUM	HUMIDIFIER
I/O	INPUT/OUTPUT
I/P	CURRENT TO PNEUMATIC
IAQ	INDOOR AIR QUALITY
IPLV	INTEGRATED PART LOAD VALUE
LAT	LEAVING AIR TEMPERATURE
LVR	LOUVER
LWT	LEAVING WATER TEMPERATURE
MAU	MAKE-UP AIR UNIT
MBH	THOUSAND BTUH
MCC	MOTOR CONTROL CENTER
NC	NOISE CRITERIA
NO	NUMBER
NRC	NOISE REDUCTION COEFFICIENT
OS&Y	OUTSIDE SCREW AND YOKE
PD	PRESSURE DROP
PPH	POUNDS PER HOUR
RH	RELATIVE HUMIDITY
RTU	ROOFTOP UNIT
RVH	RELIEF VENT HOOD
S	SIGNAL PORT
SCFM	STANDARD CUBIC FEET PER MINUTE
SEER	SEASONAL ENERGY EFFICIENCY RATIO
SP	STATIC PRESSURE
TC	TECHNOLOGY CONTRACTOR
TCP	TEMPERATURE CONTROL PANEL
TD	TEMPERATURE DIFFERENTIAL
TES	THERMAL ENERGY STORAGE
TSP	TOTAL STATIC PRESSURE
UH	UNIT HEATER
V&C	VALVE AND CAP
VAV	VARIABLE AIR VOLUME
VRF	VARIABLE REFRIGERANT FLOW
VTR	VENT THROUGH ROOF
WB	WET BULB
WC	WATER COLUMN
WPD	WATER PRESSURE DROP

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

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Plot Date: 4/16/2026 3:52:28 PM

DESIGNED BY: B. PERLBERG
DRAWN BY: A. GONZALEZ
CHECKED BY: A. ORTEGA
SUBMITTED BY:
ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S26D005
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

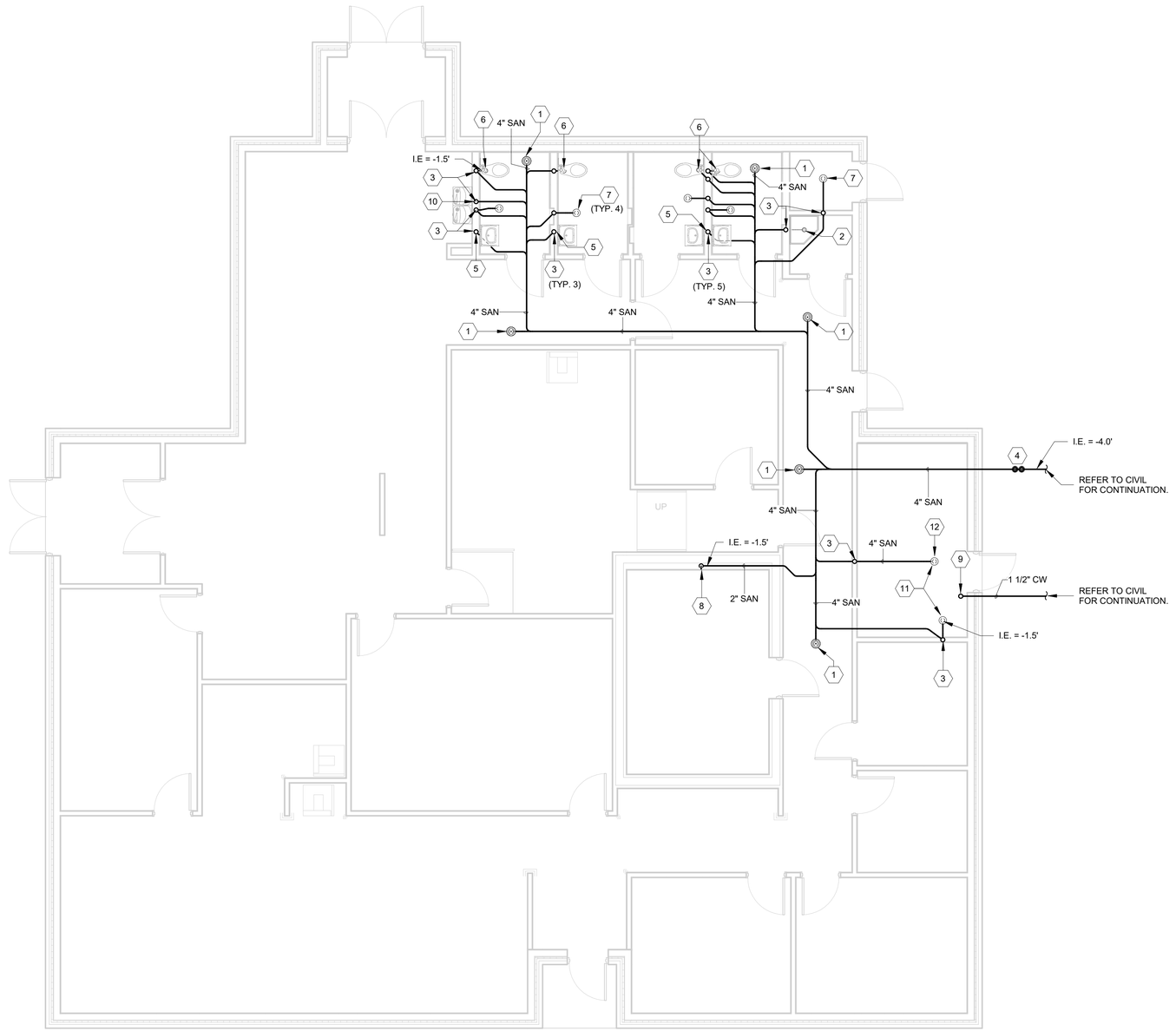
HDR
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

PLUMBING GENERAL NOTES & ABBREVIATIONS

SHEET ID
P-001

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



PLAN NORTH

0 2' 4' 8' 12'

A1 PLUMBING UNDER FLOOR PLAN

3/16" = 1'-0"

GENERAL NOTES

1. REFERENCE SHEET P-001 FOR ADDITIONAL PLUMBING NOTES.
2. REFERENCE SHEET P-501 AND P-502 FOR PLUMBING DETAILS.
3. FINISHED FLOOR ELEVATION = 0.00'. INVERT ELEVATIONS SHOWN ARE FOR THE PLUMBING CONTRACTOR'S CONVENIENCE. PLUMBING CONTRACTOR SHALL COORDINATE EXACT INVERT ELEVATIONS WITH ALL OTHER CONTRACTORS TO ENSURE ALL UNDERFLOOR/GRADE ITEMS ARE COORDINATED.

SHEET KEYNOTES

KEYNOTES

1 4" SAN UP TO FCO-1 ABOVE.
2 3" SAN UP TO MB-1 ABOVE.
3 2" V UP TO FLOOR ABOVE.
4 4" SAN UP TO YCO-1 ABOVE.
5 2" SAN UP TO L-1.
6 3" SAN UP TO WC-1 ABOVE.
7 3" SAN UP TO FD-1 ABOVE.
8 2" SAN UP TO SK-1.
9 CW WATER SERVICE ENTRANCE TO BUILDING.
10 2" SAN UP TO EWC-1 ABOVE.
11 4" SAN UP TO FS-1 ABOVE.
12 COORDINATE EXACT LOCATION WITH AHU CONDENSATE DRAIN SO CONDENSATE CAN BE ROUTED TO FLOOR DRAIN WITH MINIMAL PIPING.

SHEET LEGEND

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: B. PERLBERG
DRAWN BY: A. GONZALEZ
A. CHECKED BY:
A. CRITCHLOW
SUBMITTED BY:

ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W912T524F6002
CONTRACT NO.: W912T523C0035

SIZE: ANSI D

Plot Date: 4/16/2026 3:52:29 PM File Path: C:\vc\2025\104000\16-All-PBA_VCE_Arlena.Gonzalez\DKA\CW.rvt

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HDR
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

PLUMBING UNDER FLOOR PLAN

SHEET ID
VCC
P-101

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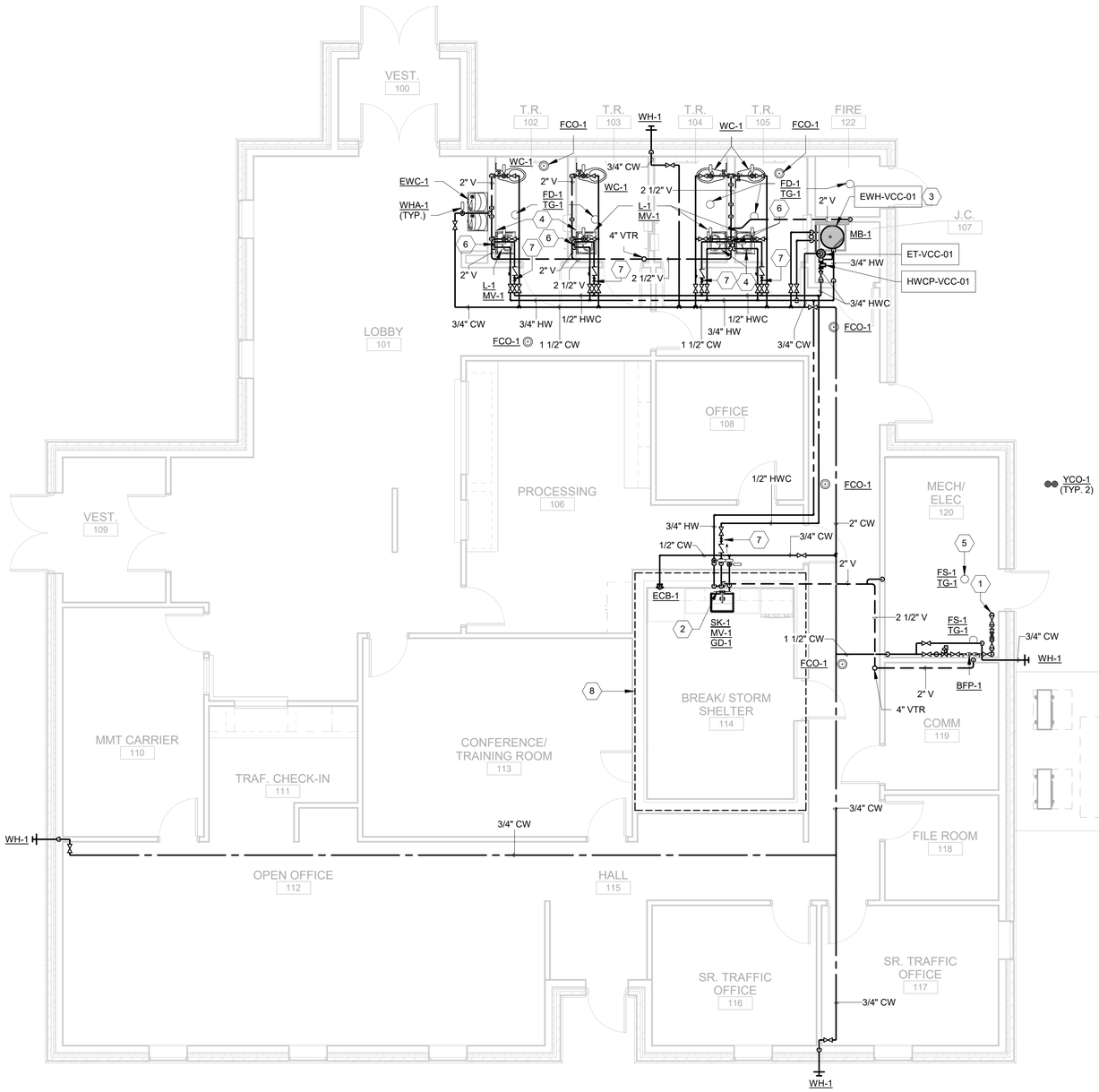

PLAN NORTH

0 2' 4' 8' 12'

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3/16" = 1'-0"

GENERAL NOTES

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2. REFERENCE SHEET P-501 AND P-502 FOR PLUMBING DETAILS.
3. ALL BRANCH PIPING SHALL BE 3/4" UNLESS OTHERWISE NOTED.

SHEET KEYNOTES

KEYNOTES

1 CW UP FROM BELOW FOR WATER SERVICE INTO THE BUILDING.
2 PROVIDE REVERSE OSMOSIS SYSTEM UNDER WITH DECK MOUNTED FAUCET AT SINK.
3 WATER HEATER TO BE INSTALLED ON SUSPENDED PLATFORM 72" AFF. ROUTE 3/4" DRAIN LINE FROM PLATFORM DOWN TO MOP SINK. REFER TO P501/A13 FOR WATER HEATER ABOVE MOP SINK DETAIL.
4 PROVIDE HB-1 IN ACCESSIBLE LOCATION UNDER L-1.
5 COORDINATE EXACT LOCATION WITH AHU CONDENSATE DRAIN SO CONDENSATE CAN BE ROUTED TO FLOOR DRAIN WITH MINIMAL PIPING.
6 TIE 1/2" HWC INTO 3/4" HW SERVING L-1 IN WALL.
7 BALANCE TO 0.5 GPM.
8 ALL DUCTWORK, PIPING, CONDUIT, EQUIPMENT, ETC. LOCATED ABOVE BREAK ROOM 114'S HARD LID, ONLY DUCTWORK, PIPING, CONDUIT, ETC. SERVING BREAK ROOM 114 SHALL PENETRATE THE HARD LID.

SHEET LEGEND

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

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ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S25B005

DESIGNED BY: B. PERLBERG
DRAWN BY: A. GONZALEZ
CHECKED BY: A. CORTON
SUBMITTED BY:
SIZE: ANSI D

Plot Date: 4/16/2026 3:52:31 PM

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

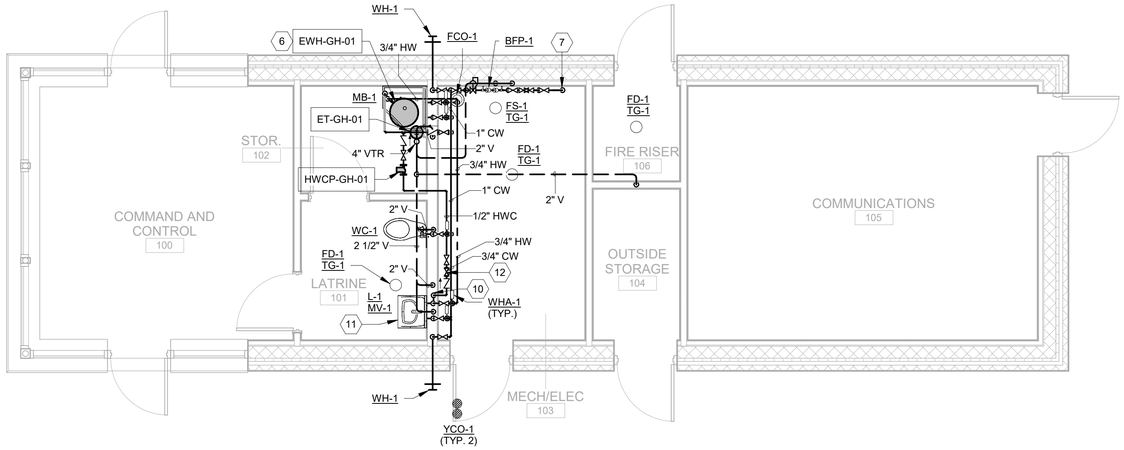
HDR
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

PLUMBING FLOOR PLAN

SHEET ID
VCC
P-102

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

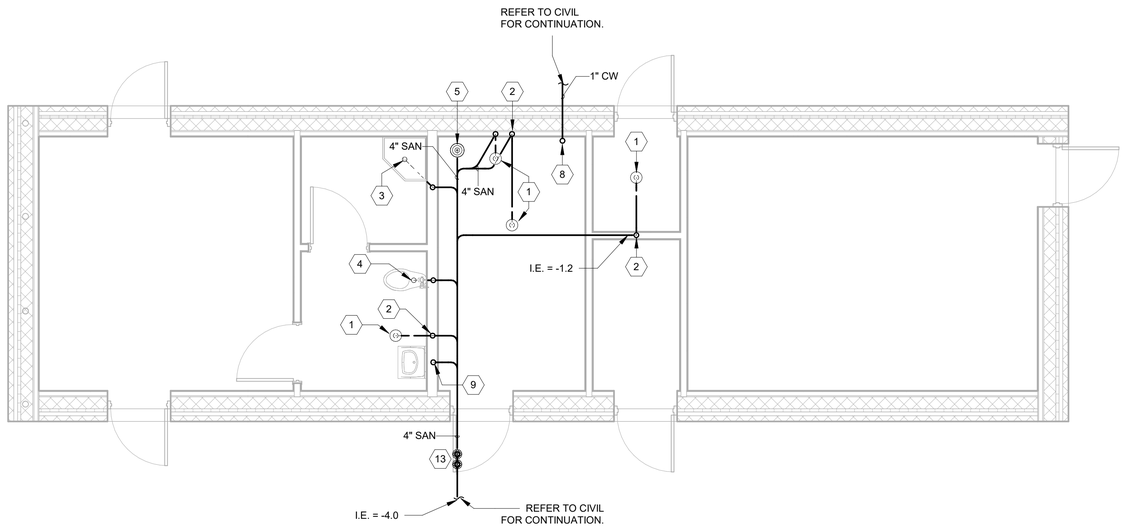


PLAN NORTH

0 4' 8' 16'

H1 PLUMBING FLOOR PLAN

1/4" = 1'-0"



PLAN NORTH

0 4' 8' 16'

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1/4" = 1'-0"

GENERAL NOTES

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2. REFERENCE SHEET P-501 AND P-502 FOR PLUMBING DETAILS.
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4. ALL BRANCH PIPING SHALL BE 3/4" UNLESS OTHERWISE NOTED.

SHEET KEYNOTES

KEYNOTES

1 3" SAN PIPING UP TO FD-1/FS-1 ABOVE.
2 RISE 2" V UP TO FLOOR ABOVE.
3 3" SAN UP TO MB-1 ABOVE.
4 3" SAN UP TO WC-1 ABOVE.
5 4" SAN UP TO FCO-1 ABOVE.
6 WATER HEATER TO BE INSTALLED ON SUSPENDED PLATFORM 72" AFF. ROUTE 3/4" DRAIN LINE FROM PLATFORM DOWN TO MOP SINK. REFER TO P501/A13 FOR WATER HEATER ABOVE MOP SINK DETAIL.
7 CW UP FROM BELOW FOR WATER SERVICE INTO THE BUILDING.
8 CW WATER SERVICE ENTRANCE TO BUILDING.
9 2" SAN UP TO L-1.
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11 PROVIDE HB-1 IN ACCESSIBLE LOCATION UNDER L-1.
12 BALANCE TO 0.5 GPM.
13 4" SAN UP TO YCO-1 ABOVE.

SHEET LEGEND

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

File Path: C:\vt\2025\104000\18-All-PBA_DATEHOUSE_Ariana.Gonzalez2KKCW.vrt

Plot Date: 4/16/2026 4:02:36 PM

DESIGNED BY: B. PERLBERG
DRAWN BY: A. GONZALEZ
A. HECKEL
A. ORTEGA
SUBMITTED BY:

ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S25D0035

SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK, AR
LITTLE ROCK DISTRICK

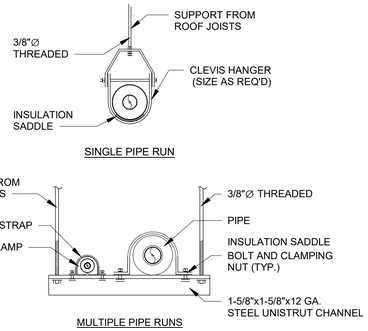
HDR
Teresa P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

PLUMBING FLOOR PLANS

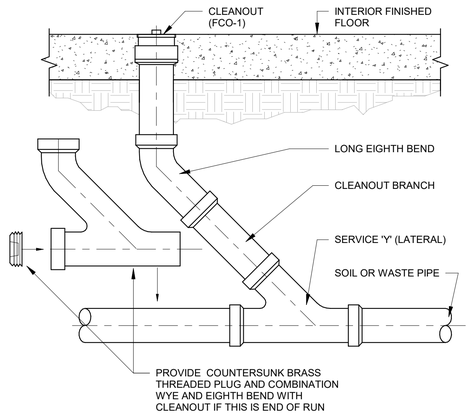
SHEET ID
G-HOUSE
P-111

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



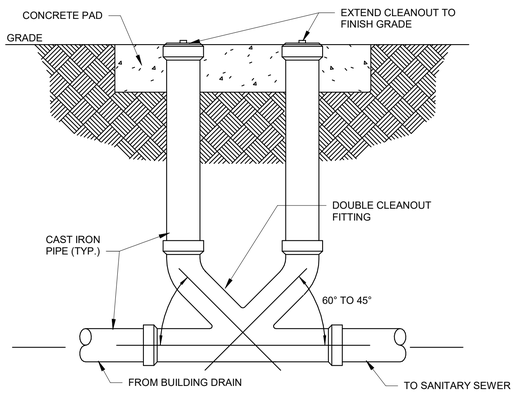
NOTES:
1. INSULATION ABOVE SADDLES SHALL BE FOAM GLASS OF SAME THICKNESS AS PIPE INSULATION AND SHALL HAVE A COMPRESSIVE STRENGTH OF NOT LESS THAN 3,300 PSI.
2. HANGER RODS SHALL BE OF REQUIRED SIZE, BUT NO SMALLER THAN 1/2" DIA.
3. HANGERS WITHOUT PIPE SADDLES SHALL BE TYPICAL FOR UNINSULATED PIPING.

K1 PIPE HANGER INSTALLATION DETAIL
NTS

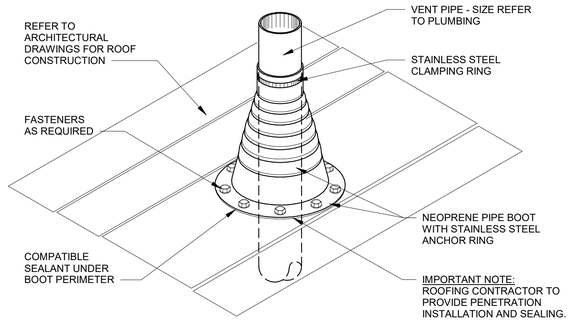


NOTES:
1. PLUG END OF LINE WITH MECHANICAL PIPE PLUG AS SHOWN ABOVE.

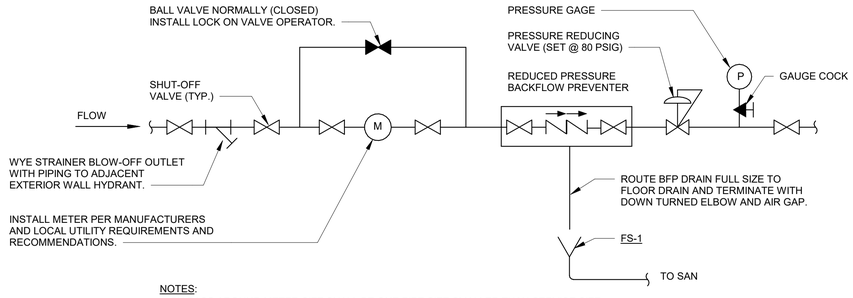
E1 FLOOR CLEANOUT INSTALLATION DETAIL
NTS



A1 DOUBLE GRADE CLEANOUT DETAIL
NTS

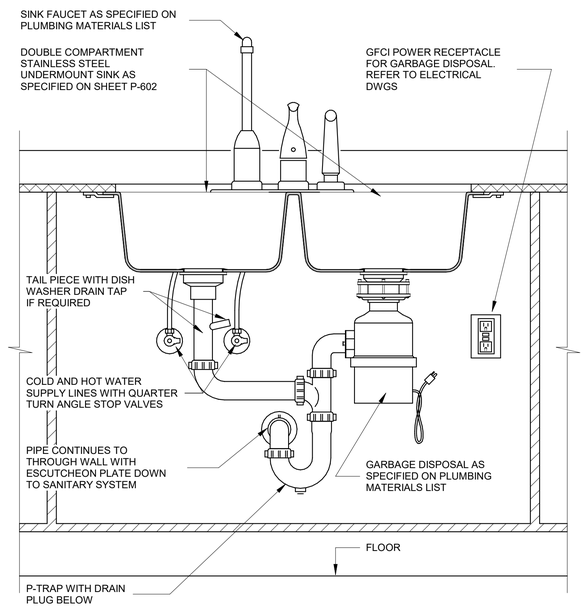


L7 VENT THRU ROOF DETAIL
NTS

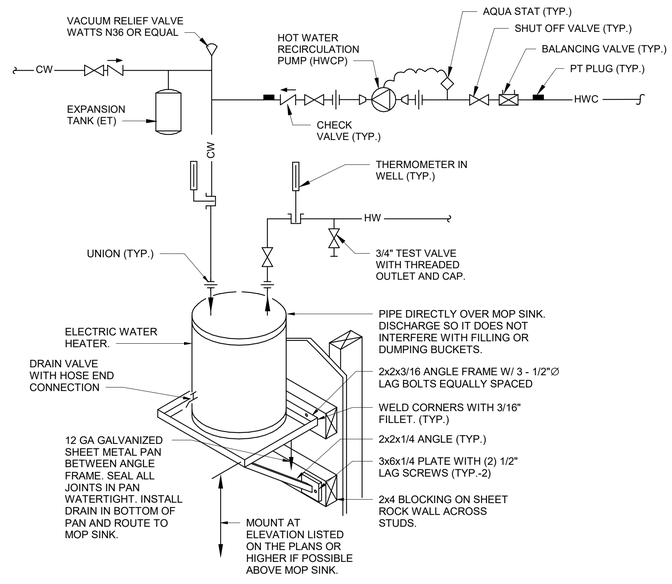


NOTES:
1. BY-PASS AROUND METER SIZE SHALL BE ONE PIPE SIZE SMALLER THAN SERVICE SIZE.
2. BY-PASS MUST BE INSTALLED TO ALLOW MIN. 18" CLEAR SPACING AROUND METER.
3. COORDINATE WATER SERVICE TIE-IN POINT WITH LOCAL MUNICIPALITY TO ADJACENT FIRE RISER WITH FPC.

G7 WATER SERVICE ENTRANCE DETAIL
NTS



A7 GARBAGE DISPOSAL DETAIL
NTS



A13 WATER HEATER ABOVE MOP SINK DETAIL
NTS

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

File Path: C:\vh\23251\040000\16-All-PBA_VDC_Arlana.Gonzalez\DKXCW.rvt

Plot Date: 4/16/2026 3:52:32 PM

DESIGNED BY: B. PERLBERG
DRAWN BY: A. GONZALEZ
CHECKED BY: A. ORTON
SUBMITTED BY:
SIZE: ANSI D
ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W912TS24F6002
CONTRACT NO.: W912TS23D0035

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HDR
Texas P.E. Firm Registration No. F-754

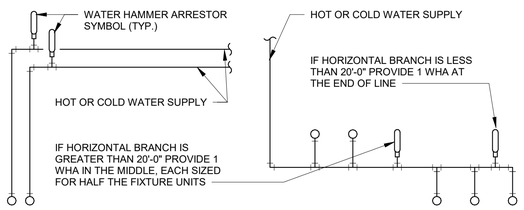
ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

PLUMBING DETAILS

SHEET ID
P-501

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

INSTALL PER PDI STANDARDS (PLUMBING & DRAINAGE INSTITUTE) AND MANUFACTURER'S INSTRUCTIONS. PROVIDE A WATER HAMMER ARRESTOR (WHA) AT ALL QUICK CLOSING VALVES



SINGLE / DOUBLE FIXTURE

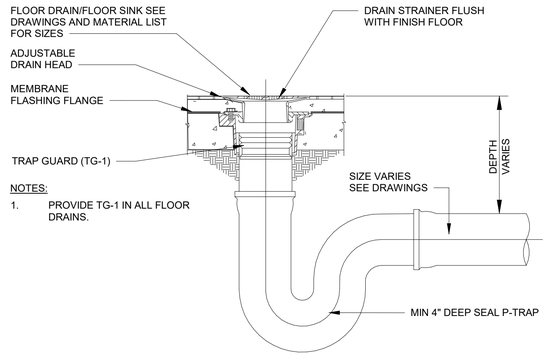
MULTIPLE FIXTURE

PDI SIZE	PIPE SIZE	FIXTURE UNIT LOAD
A	1/2"	1-11
B	3/4"	12-32
C	1"	33-60
D	1 1/4"	61-113
E	1 1/2"	114-154
F	2"	154-330

FIXTURE UNIT TABULATION		
FIXTURE	COLD	HOT
WATER CLOSET (F.V.)	10	-
WATER CLOSET (TANK)	5	-
URINAL	5	-
LAVATORY / SINK	1.5	1.5
JANITOR'S SINK	3	3
SHOWER / BATHTUB	2	2

FOR BATTERIES OF FIXTURES, PROVIDE WATER HAMMER ARRESTORS BY SIOUX CHIEF, PRECISION PLUMBING PRODUCTS, WATTS OR APPROVED EQUIVALENT WITH PISTON & O-RING CONSTRUCTION, HAVING PDI #WH-201, ASSE #1010 & ANSI #A112.26.1M CERTIFICATION. INSTALL IN HORIZONTAL OR VERTICAL POSITION, BUT NEVER UPSIDE DOWN. INSTALL IN LINE WITH WATER FLOW DIRECTION IF POSSIBLE. SIZE THE UNIT AS SHOWN PER THE TABLES SHOWN ABOVE. PROVIDE ACCESSIBILITY TO "WHA" WITH ACCESS PANEL.

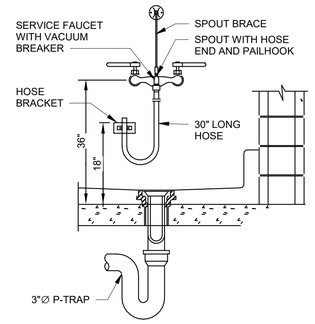
H1 WATER HAMMER ARRESTOR
NTS



NOTES:

1. PROVIDE TG-1 IN ALL FLOOR DRAINS.

K7 FLOOR DRAIN/FLOOR SINK INSTALLATION DETAIL
NTS



K13 MOP SINK DETAIL
NTS

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

File Path: C:\vt\2025\104000\18-A\PBA_VOL_Arlena.Gonzalez\DKADW.rvt

Plot Date: 4/16/2026 3:52:32 PM

DESIGNED BY: B. PERLBERG	ISSUE DATE: 17 APRIL 2026
DRAWN BY: A. GONZALEZ	SOLICITATION NO.: W9127S24F6002
CHECKED BY: A. ORTIZ	CONTRACT NO.: W9127S25B0035
SUBMITTED BY:	SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HDR
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

PLUMBING DETAILS

SHEET ID

P-502

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

ELECTRIC HOT WATER HEATER SCHEDULE

SYMBOL	LOCATION	STORAGE CAPACITY (GAL)	RECOVERY AT 90 DEGREE RISE (GPH)	STORAGE TEMPERATURE (F)	HEATER				ELECTRICAL (NOTE 1)		BASIS OF DESIGN		NOTES
					TOTAL WATTS	NUM. OF ELEMENTS	WATTS PER ELEMENT	OPERATION	VOLTAGE/PHASE	DISCONNECT BY	MANUFACTURER	MODEL	
EWH-VCC-01	107 J.C.	30	20	140	4,500	2	4,500	NON-SIMULATANEOUS	208/3	EC	A.O. SMITH	DEL	2,3
EWH-GH-01	102 STOR.	10	7	140	1,500	1	1,500	N/A	120/1	EC	A.O. SMITH	DEL	2,3

NOTES:

1. REFER TO ELECTRICAL PLANS FOR ADDITIONAL INFORMATION.
2. PROVIDE WALL MOUNTED PLATFORM EQUIVALENT TO HOLDRITE QUICKSTAND MODEL #30-SHWP-WM.
3. MAXIMUM HEIGHT OF 36". UL LISTED, MEET STANDBY LOSS REQUIREMENTS OF US DEPT OF ENERGY AND 2019 ASHRAE/IES 90.1. 150 PSI WORKING PRESSURE. HIGH DENSITY ANODE RODS. ALL INTERNAL SURFACES EXPOSED TO WATER SHALL BE GLASS LINED WITH AN ALKALINE BOROSILICATE COMPOSITION. ELECTRIC HEATING ELEMENTS SHALL BE MEDIUM WATT DENSITY WITH ZINC PLATED COPPER SHEATH. EACH ELEMENT SHALL BE CONTROLLED BY AN INDIVIDUALLY MOUNTED THERMOSTAT AND HIGH TEMPERATURE CUTOFF SWITCH. OUTER JACKET SHALL BE BACKED ENAMEL FINISH ENCLOSING THE TANK WITH FOAM INSULATION. ELECTRICAL JUNCTION BOX WITH HEAVY DUTY TERMINAL BLOCK (30 GALLON ONLY). DRAIN VALVES SHALL BE LOCATED IN FRONT FOR EASE OF SERVING.

DOMESTIC HOT WATER RECIRCULATION PUMP SCHEDULE

SYMBOL	LOCATION	SERVICE	FLOW RATE (GPM)	TDH (FT)	MOTOR RPM	ELECTRICAL (NOTE 2)				CONTROL	BASIS OF DESIGN		NOTES
						MHP	VOLT-PHASE	DISCONNECT BY	CONTROLLER/STARTER BY		MANUFACTURER	MODEL	
HWCP-VCC-01	107 J.C.	DOMESTIC HOT WATER RECIRCULATION	2.0	14	3,250	1/40	115/1	EC	MFR	NOTE 1	TACO	008B-IFC	
HWCP-GH-01	102 STOR.	DOMESTIC HOT WATER RECIRCULATION	0.5	14	3,250	1/40	115/1	EC	MFR	NOTE 1	TACO	008B-IFC	

NOTES:

1. PUMP TO OPERATE DURING OCCUPIED HOURS WHEN REMOTE SENSOR BULB TEMPERATURE IS AT OR BELOW 125°F (ADJ.) AND RUN UNTIL IT REACHES 130°F (ADJ.).
2. REFER TO THE ELECTRICAL PLANS FOR ADDITIONAL INFORMATION.

EXPANSION TANK SCHEDULE

SYMBOL	SERVICE	MAX. WORKING PRESSURE (PSI)	MAX. WORKING TEMPERATURE (DEG F)	MIN. TANK VOLUME (GAL)	MIN. ACCEPTANCE VOLUME (GAL)	PRE-CHARGE PRESSURE (PSIG)	WEIGHT (LBS)	BASIS OF DESIGN		NOTES
								MAKE	MODEL	
ET-VCC-01	EWH-VCC-01	150	200	2.0	0.9	NOTE 2	5	BELL & GOSSETT	PT	1
ET-GH-01	EWH-GH-01	150	200	2.0	1.0	NOTE 2	5	BELL & GOSSETT	PT	1

NOTES:

1. WELDED BLACK STEEL CONSTRUCTION, ASME STAMPED, GUARANTEED AIRTIGHT AND LEAKPROOF, STAINLESS STEEL SYSTEM CONNECTION, HEAVY DUTY BUTYL DIAPHRAGM AND RIGID POLYPROPYLENE LINER MECHANICALLY BONDED TO TANK TO PROVIDE A 100% NON-CORROSIVE WATER RESERVOIR, DIAPHRAGM AND LINER SHALL BE APPROVED FOR USE IN POTABLE WATER SYSTEMS, ALL WETTED SCHRADER AIR VALVE FOR FIELD CHARGING. COMPONENTS OF FDA APPROVED MATERIALS.
2. FACTORY PRE-CHARGED TO 35 PSIG. PLUMBING CONTRACTOR SHALL DETERMINE EXACT INCOMING WATER PRESSURE AND UPDATE PRE-CHARGE PRESSURE TO MATCH IN THE FIELD.

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

File Path: C:\n\23251040001\8-M-PBA_VCC_Ariana.Gonzalez\DKXCW.rvt

Plot Date: 4/16/2026 3:52:32 PM

DESIGNED BY: B. PERLBERG	ISSUE DATE: 17 APRIL 2026
DRAWN BY: A. GONZALEZ	SOLICITATION NO.: W912T5-24-F-6002
CHECKED BY: A. ORTEGA	CONTRACT NO.: W912T5-23-D-0035
SUBMITTED BY:	
SIZE: ANSI D	

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HDR Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

PLUMBING SCHEDULES

SHEET ID

P-601

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

PLUMBING MATERIAL LIST & CONNECTION SCHEDULE

THE INFORMATION BELOW IS FOR THE CONVENIENCE OF THE CONTRACTOR. THE CONTRACTOR MUST VERIFY EXACT QUANTITIES AND FURNISH ALL MATERIALS REQUIRED FOR A FULLY OPERATIONAL SYSTEM.
CATALOG NUMBERS MUST NOT BE CONSIDERED COMPLETE. THESE ARE GIVEN AS AN AID TO THE CONTRACTOR AND TO INDICATE THE QUALITY REQUIRED. CONTRACTOR IS RESPONSIBLE FOR THE COMPLETE DESCRIPTION OF MATERIAL ON THESE PLANS AND IN THE SPECIFICATIONS BEFORE ORDERING. THE MATERIAL DESCRIPTION TAKES PRECENDENCE OVER THE CATALOG NUMBER.
CONTRACTOR MUST VERIFY THAT FIXTURES SUPPLIED ARE APPROVED WITH ALL APPLICABLE STATE, LOCAL, AND GOVERNING AUTHORITIES. ANY COMPONENTS HANDLING POTABLE WATER MUST BE LEAD-FREE.

MARK	DESCRIPTION	PICTURE	BASIS OF DESIGN		CONNECTION SCHEDULE				
			MANUFACTU...	MODEL	CW	HW	TW	SS	V
BFP-1	BACK FLOW PREVENTER - REDUCED PRESSURE ZONE, BRONZE OR FDA APPROVED EPOXY COATED CAST IRON CONSTRUCTION, SIZE SAME AS PIPE, NON-CORROSIVE INTERNAL PARTS, STAINLESS STEEL SPRINGS, DIFFERENTIAL PRESSURE RELIEF VALVE BETWEEN SPRING-LOADED CHECK VALVES, SHUT-OFF VALVES ON INLET AND OUTLET OF UNIT, AIR GAP DRAIN FITTING, TEST PORTS WITH SHUT-OFF VALVES, FACTORY TESTED, RATED FOR 175 PSI AT 33°F TO 180°F, 15 PSI (MAXIMUM) PRESSURE DROP AT 10 FPS, ALL PARTS TO BE SERVICEABLE WITHOUT REMOVING UNIT FROM LINE, APPROVED BY USC FCCC & HR, AWWA C511-92, ASSE 1013, IAPMO AND SBCCI LISTED. MOUNT AT 60" (MAXIMUM) ABOVE FINISHED FLOOR. PROVIDE AND INSTALL BRONZE OR EPOXY COATED STRAINER UPSTREAM OF EACH UNIT. INSTALL ADDITIONAL VALVE UPSTREAM FROM EACH STRAINER FOR SERVICING STRAINER. FLOW PRESSURE DROP CURVES SHALL BE SUBMITTED.		WATTS	LF009	LINE SIZE	-	-	-	-
ECB-1	EQUIPMENT CONNECTION BOX - PLATED, 1/4-TURN VALVE WITH 1/4" COMPRESSION OUTLET, FORGED BRASS VALVE BODY, BRASS OR CPVC VAVLE SHANK WITH 304SS GRIP RING, BRASS NUT, AND SILICONE SEAL, ABS BOX AND FRAME, ARRESTER BODY MADE OF 304SS WITH BRASS BODY, ARRESTER PISTON MADE OF POLYPROPYLENE WITH EPDM O-RINGS, MAX WORKING TEMPERATURE OF 200°F AND MAX WORKING PRESSURE OF 150 PSIG, COMPLIANT WITH NSF-372, IAPMO LISTED BOX AND VALVES, ARRESTERS MEET ASSE 1010, AND VALVES MEET ASME A112.18.1.		SIOUX CHIEF	696	1/2"	-	-	-	-
EWC-1	ELECTRIC WATER COOLER - WALL HUNG, BI-LEVEL UNITS, ELECTRONIC BOTTLE FILLER SENSOR, 18 GAUGE STAINLESS STEEL CABINETS AND NON-SPLASH BASINS, STREAM PROJECTORS WITH PROTECTIVE HOODS, PUSH BAR OR LEVER OPERATING CONTROLS ON FRONT AND BOTH SIDES, BUILT-IN FLOW REGULATOR, DRAIN & TRAP ASSEMBLY, ADJUSTABLE THERMOSTAT, MOUNTING ACCESSORIES, TANK DRAIN AND ANGLE STOPS, HERMETIC COMPRESSOR TO OPERATE ON R134A REFRIGERANT, ABA COMPLIANT. LAMINAR FLOW BOTTLE FILLER WITH VISUAL FILTER MONITOR, FILTER IS VERTIFIED TO NSF 42 AND 53 FOR LEAD. UNIT SHALL PROVIDE 8.0 GPH OF WATER OF 50°F DRINKING WATER AT 90°F AMBIENT. WATER SYSTEM SHALL BE OF LEAD FREE CONSTRUCTION. TANK SHALL BE TESTED TO 125 PSIG. ORFICE SHALL BE 36" (MAXIMUM) ABOVE FINISHED FLOOR ON LOWER UNIT AND 40" ABOVE FINISHED FLOOR ON UPPER UNIT. BOTTOM OF APRON SHALL BE 27" ABOVE FLOOR ON LOWER UNIT IN COMPLIANCE WITH ABA.		ELKAY	LZSTL8WSLK	1/2"	-	-	2"	2"
FCO-1	FLOOR CLEANOUT - ADJUSTABLE, CAST IRON HOUSING, ANCHOR FLANGE, TAPERED THREAD PLUG, SECURED NICKEL BRONZE TOP. TOP STYLE SHALL MATCH FLOOR FINISH: UNFINISHED FLOOR - ROUND SOLID SCORIATED TOP; TILE OR TERRAZZO - ROUND RECESSED TOP.		ZURN	Z1400	-	-	-	LINE SIZE	-
FD-1	FLOOR DRAIN - CAST IRON BODY, NICKEL BRONZE ADJUSTABLE TOP, 6" ROUND STRAINER, 3" BOTTOM OUTLET, FLASHING COLLAR, SURFACE MEMBRANE CLAMP, DEEP SEAL TRAP.		ZURN	Z415B	-	-	-	3"	2"
FS-1	FLOOR SINK - CAST IRON BODY, NICKEL BRONZE RIM AND GRATE, 12" ROUND, 4" BOTTOM OUTLET, DEEP RECEPTOR WITH ALUMINUM SEDIMENT BUCKET, ACID RESISTANT COATED INTERIOR, SEEPAGE FLANGE WITH CLAMP, DEEP SEAL TRAP.		ZURN	Z1950	-	-	-	4"	2"
HB-1	HOSE BIBB - INDOOR WALL HYDRANT, BRASS CONSTRUCTION, CHROME-PLATED FINISH, VACUUM BREAKER, 3/4" MALE HOSE THREAD, 3/4" FLANGED I.P.S. INLET, REMOVABLE TEE HANDLE. MOUNT AT 18" ABOVE FINISHED FLOOR IN LOCATION INDICATED ON PLANS.		CHICAGO FAUCET	952	3/4"	-	-	-	-
L-1	LAVATORY - ACCESSIBLE, WALL MOUNTED, WHITE VITREOUS CHINA, 20"x18", 4" HIGH CONTOURED BACKSPLASH, FAUCET HOLES ON 4" CENTERS, DRILLED FOR IN-WALL CARRIER. ACCESSORIES - QUARTER-TURN 3/8" CHROME PLATED HEAVY BRASS ANGLE SUPPLY LOOSE KEY STOPS, CHROME PLATED SOFT COPPER SUPPLY LINES, OFFSET DRAIN AND TAILPIECE, 1-1/4" 20 GAUGE CAST BRASS P-TRAP, SUPPORT CARRIER. PRE-MANUFACTURED INSULATION FOR P-TRAP, STOP VALVES, AND SUPPLY LINES. INSULATION KIT BASIS OF DESIGN TRUEBRO LAV-GUARD. MOUNT LAVATORY WITH SUPPORT CARRIER BOLTED SECURELY TO WALL. TOP OF RIM SHALL BE AT 34" ABOVE FLOOR IN COMPLIANCE WITH ABA. PROVIDE 29" MINIMUM CLEARANCE FROM FLOOR TO BOTTOM OF APRON IN COMPLIANCE WITH ABA.		ZURN	Z5364	-	-	-	2"	2"
L-1 TRIM	LAVATORY TRIM - TWO HANDLE MIXING FAUCET, BRASS CONSTRUCTION, CHROME-PLATED FINISH, CONVENTIONAL SPOUT WITH AERATOR, SINGLE WIND HANDLES AT 4" CENTERS, PERFORATED DRAIN GRATE. MAXIMUM FLOW TO 0.35 GPM IN COMPLIANCE WITH ASME/ANSI STANDARD A112.18.1M. PROVIDE RESTRICITVE DEVICE AS REQUIRED. PROVIDE WITH MV-1.		ZURN	Z81103	1/2"	1/2"	-	-	-
MB-1	MOP BASIN - NEO-ANGLE CORNER STYLE, PRECAST TERRAZZO, 24"x24"x12", 6" DEEP FRONT, STAINLESS STEEL INTEGRAL DRAIN WITH REMOVABLE STRAINER, 3" OUTLET, STAINLESS STEEL THRESHOLD. ACCESSORIES - MOP HANGER, HOSE AND HOSE BRACKET, DEEP SEAL TRAP. CAULK BETWEEN MOP BASIN AND WALL WITH SILICONE BASED CAULK.		FIAT	TSBC-1610	-	-	-	3"	2"
MB-1 TRIM	MOP BASIN TRIM - EXPOSED TWO HANDLE MIXING FAUCET, BRASS CONSTRUCTION, CHROME-PLATED FINISH, SINGLE WING HANDLES, 3/4" HOSE THREAD SPOUT WITH INTEGRAL VACUUM BREAKER, WALL BRACE, PAIL HOOK, CHECK STOPS. MOUNT AT 30" ABOVE FLOOR.		CHICAGO FAUCET	897	1/2"	1/2"	-	-	-
MV-1	MIXING VALVE - REMOTE ANTI-SCALD THERMOSTATIC MIXING VALVE FOR TEMPERED WATER CONTROL, ALL BRONZE/BRASS CONSTRUCTION, ROUGH FINISH, THREADED INLETS, TEMPER RESISTANT SETPOINT. 0.25 - 2.5 GPM OUTPUT BASED ON ASSOCIATED FIXTURE. UNIT TO MIX 140°F HOT WATER SUPPLY AND 40°F COLD WATER SUPPLY FOR 110°F OUTLET. UNIT SHALL CONFORM TO THE REQUIREMENTS OF ASSE 1070 AND BE ASSE 1070 APPROVED AND LISTED. PROVIDE AT ALL SINKS AND LAVATORIES.		WATTS	LFUSG-B	1/2"	1/2"	-	-	-
SK-1	SINK - SELF-RIMMING DOUBLE COMPARTMENT WITH FAUCET DECK, 18 GAUGE STAINLESS STEEL, COMPLETELY UNDERCOATED, 29" (SIDE-TO-SIDE) x 22" (FRONT-TO-BACK) OVERALL SIZE, EACH COMPARTMENT 16" x 11-1/2" x 6" DEEP, REAR CENTER 3-1/2" DIAMETER DRAIN OUTLET, REMOVABLE STAINLESS STEEL BASKET STRAINERS WITH NEOPRENE STOPPERS. ACCESSORIES - QUARTER-TURN 3/8" CHROME PLATED HEAVY BRASS ANGLE SUPPLY LOOSE KEY STOPS, CHROME PLATED SOFT COPPER SUPPLY LINES, OFFSET DRAIN AND TAILPIECE, 1-1/4" 20 GAUGE CAST BRASS P-TRAP. PRE-MANUFACTURED INSULATION FOR P-TRAP, STOP VALVES, AND SUPPLY LINES. INSULATION KIT BASIS OF DESIGN TRUEBRO LAV-GUARD.		ELKAY	LR4322	-	-	-	2"	2"
SK-1 TRIM	SINK TRIM - TWO HANDLE MIXING FAUCET, BRASS CONSTRUCTION, DECK MOUNT, CHROME-PLATED FINISH, SWIVEL GOOSENECK SPOUT, AERATOR, 4" WRIST BLADE HANDLES AT 8" CENTERS, 1/4-TURN OPERATION WITH CERAMIC DISC VALVES. MAXIMUM FLOW TO BE 1.5 GPM IN COMPLIANCE WITH ASME/ANSI STANDARD A112.18.1M. PROVIDE RESTRICTIVE DEVICE AND ESCUTCHEON PLATES AS REQUIRED. WATERSENSE LABELED. PROVIDE WITH MV-1.		ELKAY	LKD232	1/2"	1/2"	-	-	-
GD-1	GARBAGE DISPOSER - CONTINUOUS FEED, 1-STAGE GRIND, SERVICE WRENCH, STAINLESS STEEL GRINDING ELEMENTS, STAINLESS STEEL 360° SWIVEL LUGS, MANUALLY RESET OVERLOAD PROTECTION, FULL 4 YEAR WARRANTY. ELECTRICAL REQUIREMENTS - WALL SWITCH CONTROLLED UNDER SINK RECEPTACLE, 115V/1-PH, CORD PLUG, 3/4 HP MOTOR, 9.5 AMPS.		IN-SINK-ERATOR	BADGER 5XP	-	-	-	1-1/2"	-
TG-1	TRAP GUARD - ABS HOUSING WITH SILICONE FLAPPER SKIRT. INSTALLED INTO THE FLOOR DRAIN BODY AND ALLOWS WASTEWATER TO OPEN AND ADEQUATELY DISCHARGE THROUGH ITS INTERIOR, CLOSES AFTER WASTEWATER DISCHARGE IS COMPLETE TO ELIMINATE INSECTS, ODORS, OR GASES FROM ENTERING THE SPACE. COMPLIANCE WITH ASME A112.6.3, NSF/ANSI 14, AND CSA B79. INSTALL IN ALL FLOOR DRAINS CONNECTED DIRECTLY TO SANITARY SYSTEMS AND WHEREVER INDICATED.		JOSAM	TSI	-	-	-	FD SIZE	-
WC-1	WATER CLOSET - ACCESSIBLE, FLOOR MOUNTED, BOTTOM OUTLET, TANK TYPE, WHITE VITREOUS CHINA, CLOSE COUPLED, SIPHON JET, ELONGATED BOWL, BOLT CAPS, 12" ROUGH-IN, FLOAT VALVE WITH VACUUM BREAKER, CHROME-PLATED TRIP LEVER, INSULATED TANK LINER, 1.28 GALLONS PER FLUSH. SEAT - WHITE, EXTRA HEAVY, OPEN FRONT, INJECTION MOLDED SOLID PLASTIC, HINGE, STAINLESS STEEL OR PLATED STEEL POSTS AND NUTS. ACCESSORIES - QUARTER-TURN 3/8" CHROME-PLATED HEAVY BRASS ANGLE SUPPLY WITH STOP, CHROME-PLATED SOFT COPPER SUPPLY LINE. TOP OF SEAT SHALL BE 17"-19" ABOVE FINISHED FLOOR. FLUSH HANDLE SHALL BE LOCATED ON THE WIDE SIDE OF THE TOILET STALL AND OPERATE WITH NO GREATER THAN 5 LB FORCE IN COMPLIANCE WITH Aba. VERIFY EQUIPMENT REQUIREMENTS AND ROUGH-IN DIMENSIONS.		ZURN	Z5555-K	3/4"	-	-	3"	2"
WH-1	WALL HYDRANT - FREEZELESS WALL HYDRANT, CONCEALED BOX TYPE, BRASS VALVE BODY AND SEAT, STANDARD FINISH, NON-FERROUS METAL STEM, AUTOMATIC DRAINING, VACUUM BREAKER, 3/4" MALE HOSE THREAD, WALL CLAMP, KEY OPERATED, ASSE 1019 APPROVED AND LISTED. VERIFY NUMBER OF KEY OPERATORS TO BE PROVIDED WITH OWNER. MOUNT AT 18" ABOVE GRAE UNLESS NOTED OTHERWISE ON DRAWINGS.		WOODFORD	B67	3/4"	-	-	-	-
WHA-1	WATER HAMMER ARRESTER - BELLOWS TYPE, PRE-CHARGED, ALL STAINLESS STEEL CONSTRUCTION, ASSE 1010 APPROVED, PDI CERTIFIED. REF P-501 WATER HAMMER ARRESTER DETAIL FOR SIZING.		ZURN	Z1700	PER DETAIL	-	-	-	-
YCO-1	YARD CLEANOUT - ROUND, DURA-COATED CAST IRON, SIZE AS LISTED ON DRAWINGS, DOUBLE FLANGED HOUSING, HEAVY DUTY SECURED SCORIATED DURA-COATED CAST IRON COVER, LIFTING DEVICE, BRONZE CLEANOUT PLUG WITH GAS/WATER-TIGHT SEAL.		ZURN	Z1474	-	-	-	4"	-

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W912T524F6002
CONTRACT NO.: W912T525D0035

DESIGNED BY: B. PERLBERG
DRAWN BY: A. GONZALEZ
CHECKED BY: A. CRITCH
SUBMITTED BY:

SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HDR
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

PLUMBING MATERIAL LIST

SHEET ID
P-602

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

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SANITARY AND VENT ISOMETRIC DIAGRAM

B5

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MARK	DESCRIPTION	DATE

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DRAWN BY: A. GONZALEZ	SOLICITATION NO.: W9127S24F6002
CHECKED BY: A. ORTEGA	CONTRACT NO.: W9127S25D0035
SUBMITTED BY:	SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HDR
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

PLUMBING ISOMETRIC DIAGRAMS

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VCC
P-901

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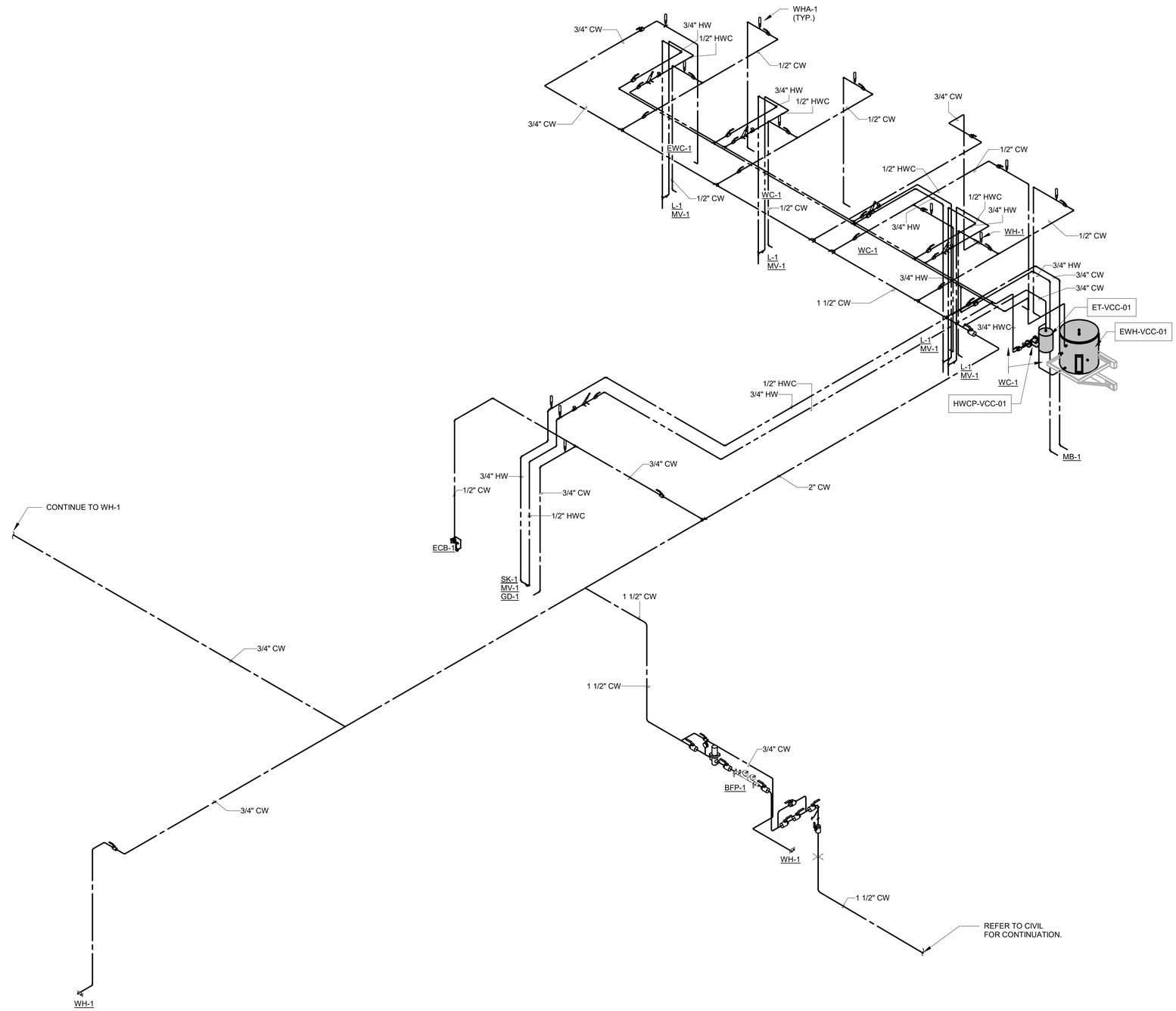

A4 WATER ISOMETRIC DIAGRAM

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: B. PERLBERG
DRAWN BY: A. GONZALEZ
A. GONZALEZ
CHECKED BY: A. ORTON
SUBMITTED BY:

ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W912T524F6002
CONTRACT NO.: W912T523D0035

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LITTLE ROCK DISTRICT
LITTLE ROCK, AR

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PLUMBING ISOMETRIC DIAGRAMS

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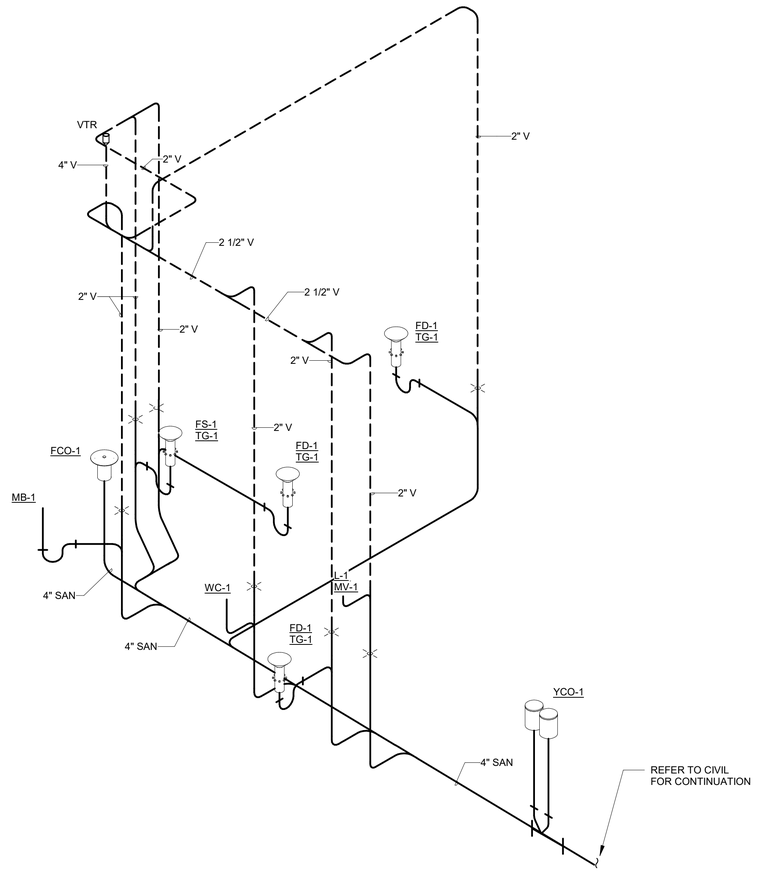
P-902

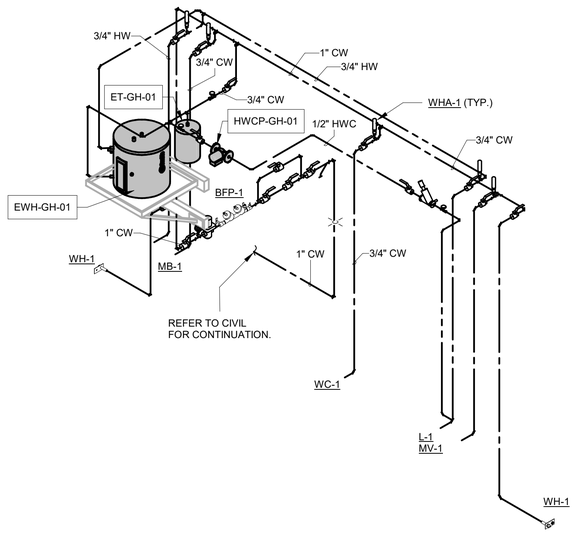
CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



SANITARY AND VENT ISOMETRIC DIAGRAM

A2

NTS



WATER ISOMETRIC DIAGRAM

A12

NTS

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SUBMITTED BY:
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SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S25D0035
SIZE: ANSI D

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LITTLE ROCK, AR
LITTLE ROCK DISTRICK

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ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

PLUMBING ISOMETRIC DIAGRAMS

SHEET ID
G-HOUSE
P-911

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

PIPING SYSTEMS

- COLD WATER, POTABLE (CW)
- HOT WATER, POTABLE (HW)
- HOT WATER RECIRCULATING, POTABLE (HWC)
- NPW — NON POTABLE COLD WATER
- 140 — HOT WATER - TEMPERATURE, POTABLE
- TW — TEPID WATER, POTABLE
- TWR — TEPID WATER RETURN, POTABLE
- SAN — SANITARY SEWER BELOW GRADE
- SAN — SANITARY SEWER ABOVE GRADE
- V — SANITARY VENT
- AW — ACID WASTE
- AV — ACID VENT
- CWV — COMBINATION WASTE AND VENT
- PD — PRESSURE DRAINAGE
- SD — STORM DRAIN ABOVE GRADE
- SD — STORM DRAIN BELOW GRADE
- OD — STORM DRAIN OVERFLOW
- NG — NATURAL GAS
- LP — LIQUEFIED PROPANE
- CA — COMPRESSED AIR
- HWS — HEATING HOT WATER SUPPLY
- HWR — HEATING HOT WATER RETURN
- GHWS — GLYCOL HEATING HOT WATER SUPPLY
- GHWR — GLYCOL HEATING HOT WATER RETURN
- CHWS — CHILLED WATER SUPPLY
- CHWR — CHILLED WATER RETURN
- GCWS — GLYCOL CHILLED WATER SUPPLY
- GCWR — GLYCOL CHILLED WATER RETURN
- CWS — CONDENSER WATER SUPPLY
- CWR — CONDENSER WATER RETURN
- RL — REFRIGERANT LIQUID
- RS — REFRIGERANT SUCTION
- CD — CONDENSATE DRAIN
- CPD — CONDENSATE PUMP DISCHARGE
- STM -15 — STEAM SUPPLY - PSI
- BBD — BOILER BLOW DOWN
- BF — BOILER FEED
- SV — STEAM VENT
- MU — MAKE-UP WATER

PIPING SYMBOLOGY

- PIPE ANCHOR
- PIPE GUIDE
- EXPANSION JOINT
- PT — PRESSURE/ TEMPERATURE PORT
- THERMOMETER
- THERMOWELL
- PRESSURE GAUGE
- TEMPERATURE GAUGE
- FLEXIBLE PIPING CONNECTION
- WYE STRAINER
- MANUAL AIR VENT
- A — AUTOMATIC AIR VENT
- M — METER (WATER, GAS, OTHER)
- FCO — FLOOR CLEANOUT
- CO — CLEANOUT
- WCO — WALL CLEANOUT
- GCO — DOUBLE GRADE CLEANOUT
- WATER HAMMER ARRESTOR
- E — EARTHQUAKE VALVE
- CONCENTRIC REDUCER
- ECCENTRIC REDUCER, FLAT ON BOTTOM
- ECCENTRIC REDUCER, FLAT ON TOP
- ELBOW, 90° TURN DOWN
- ELBOW, 90° TURN UP
- TEE, OUTLET UP
- TEE, OUTLET DOWN
- TEE, OUTLET UP W/ 90° TURN
- TEE, OUTLET DOWN W/ 90° TURN
- PIPE BREAK
- PIPE CAP
- BLIND FLANGE
- UNION
- FLOW ARROW
- SHUTOFF VALVE (NORMALLY OPEN)
- SHUTOFF VALVE (NORMALLY CLOSED)
- DRAIN VALVE
- CHECK VALVE
- VB — VACUUM BREAKER
- AUTOMATIC FLOW CONTROL VALVE
- CALIBRATED MANUAL BALANCING VALVE
- OR — PRESSURE-RELIEF VALVE
- PRESSURE-REDUCING VALVE (PRV)
- AUTOMATIC CONTROL VALVE, 2-WAY
- AUTOMATIC CONTROL VALVE, 3-WAY
- BFP — BACKFLOW PREVENTER
- XX-1 — PLUMBING FIXTURE

HVAC SYMBOLOGY

- 24x18 — SUPPLY AIR OR OUTSIDE AIR DUCT UP (SECTION CUT, FIRST DIMENSION DUCT WIDTH)
- SUPPLY AIR OR OUTSIDE AIR DUCT DOWN (NO SECTION CUT)
- RETURN AIR DUCT UP (SECTION CUT)
- RETURN AIR DUCT DOWN (NO SECTION CUT)
- EXHAUST AIR DUCT UP (NO SECTION CUT)
- EXHAUST AIR DUCT DOWN (NO SECTION CUT)
- ROUND ELBOW UP
- ROUND ELBOW DOWN
- TRANSITION - RECTANGULAR TO ROUND DUCT
- STANDARD BRANCH
- ELBOW - W/TURNING VANE (RECTANGULAR)
- ELBOW - (RECTANGULAR), SMOOTH RADIUS
- 18x24 — RECTANGULAR DUCT OR OPENING SIZE FIRST NUMBER INDICATES SIZE OF SIDE SHOWN
- 18 ⌀ — ROUND DUCT SIZE
- R OR D — RECTANGULAR DUCT INCLINE - RISE OR DROP IN RESPECT TO THE AIR FLOW
- R OR D — ROUND DUCT INCLINE - RISE OR DROP IN RESPECT TO THE AIR FLOW
- 18x24 — HIDDEN DUCT
- T 9'-10" / B 9'-0" / 18x10 — DUCT/PIPE ELEVATION TAG ABOVE FINISH FLOOR
- VOLUME DAMPER
- M — MOTOR OPERATED DAMPER
- FIRE DAMPER
- S — SMOKE DAMPER
- S — SMOKE AND FIRE DAMPER
- FLEXIBLE CONNECTION
- FLEXIBLE DUCT - TWO LINE
- FLEXIBLE DUCT - ONE LINE
- ACOUSTICAL LINING - DUCT DIMENSIONS FOR NET FREE AREA
- UC — UNDERCUT DOOR
- NEW TO EXISTING CONNECTION
- REMOVE EXISTING UP TO THIS POINT
- HVAC EMERGENCY SHUTDOWN SWITCH

- TAG-SIZE / CFM — SUPPLY AIR REGISTER
- TAG-SIZE / CFM — EXHAUST AIR OR RETURN AIR GRILLE
- TAG / CFM — EXHAUST AIR OR RETURN AIR GRILLE
- TAG / CFM — SUPPLY AIR ASSEMBLY SQUARE DIFFUSER
- TAG / CFM — SUPPLY AIR ASSEMBLY ROUND DIFFUSER

TEMPERATURE CONTROL DIAGRAM SYMBOLOGY

- DUCT MOUNTED SMOKE DETECTOR
- TEMPERATURE AVERAGING SENSOR
- MOTOR OPERATED DAMPER
- MOTOR OPERATED SINGLE BLADE DAMPER
- BACKDRAFT DAMPER
- HUMIDIFIER
- AFS — AIRFLOW MEASURING STATION
- INTAKE/ EXHAUST LOUVER
- FILTER
- FRZ — FREEZE STAT
- SEE CONTROL ABBREVIATIONS (TYP)
- XX / M — FAN
- XX / EC — FAN WITH EC MOTOR
- PUMP
- EC — PUMP WITH EC MOTOR

MISCELLANEOUS DEVICE IDENTIFIER

CO	SPACE CARBON MONOXIDE SENSOR
CO2	SPACE CARBON DIOXIDE SENSOR
H	SPACE HUMIDITY SENSOR
NO2	SPACE NITROGEN DIOXIDE SENSOR
S	SPACE TEMPERATURE SENSOR
T	THERMOSTAT

CONTROL DEVICE IDENTIFIER

AFS	AIRFLOW MEASURING STATION
AM	AIRFLOW MEASURING SENSOR
CO	CARBON MONOXIDE SENSOR
CO2	CARBON DIOXIDE SENSOR
F	FLOW SWITCH
FRZ	FREEZE STAT
H	HUMIDITY SENSOR
HS	HIGH STATIC SWITCH
LS	LOW STATIC SWITCH
NO2	NITROGEN DIOXIDE SENSOR
P	PRESSURE SENSOR
S	SPACE TEMPERATURE SENSOR
SD	SMOKE DETECTOR
T	TEMPERATURE SENSOR
TS	TEMPERATURE SWITCH
ΔP	DIFFERENTIAL PRESSURE SENSOR

CONTROL INPUT/OUTPUT IDENTIFIER

AI	ANALOG INPUT
AO	ANALOG OUTPUT
DI	DIGITAL INPUT
DO	DIGITAL OUTPUT

COIL IDENTIFIERS

CC	CHILLED WATER COOLING COIL
DG	DIRECT FIRED GAS BURNER
DX	DIRECT EXPANSION COOLING COIL
EH	ELECTRIC HEATING COIL
ER	DIRECT EVAPORATIVE COIL
FC	FACE AND BYPASS COOLING COIL
FH	FACE AND BYPASS HEATING COIL
HC	HEATING HOT WATER HEATING COIL
IG	INDIRECT FIRED GAS BURNER
ST	STEAM HEATING COIL

CONTROL ABBREVIATIONS

BTU	BTU METER
COMM	COMMUNICATION
CT	CURRENT TRANSMITTER
EC	ELECTRONICALLY COMMUTATED
EF	EXHAUST FAN
FM	FLOW METER
M	MOTOR ACTUATOR
MA	MIXED AIR
NC	NORMALLY CLOSED
NO	NORMALLY OPEN
OA	OUTDOOR AIR
RA	RETURN AIR
RF	RETURN FAN
RL	RELIEF FAN
SA	SUPPLY AIR
SF	SUPPLY FAN
TCC	TEMPERATURE CONTROL CONTRACTOR
VFD	VARIABLE FREQUENCY DRIVE

GENERAL NOTES

GENERAL HVAC NOTES

1. DUCTWORK DIMENSIONS: FIRST NUMBER INDICATES SIDE OF DUCTWORK SHOWN. ALL DIMENSIONS ARE IN INCHES AND ARE INSIDE CLEAR DIMENSIONS.
2. VOLUME DAMPERS ABOVE PLASTER OR GYPBOARD CEILINGS SHALL HAVE EXTENSION RODS AND CHROME-PLATED ESCUTCHEON PLATES.
3. COORDINATE ALL GRILLE, REGISTER AND DIFFUSER LOCATIONS WITH REFLECTED CEILING PLAN, LIGHTING, AND ALL OTHER CEILING MOUNTED DEVICES.
4. PROVIDE FLEXIBLE CONNECTIONS IN ALL DUCTWORK AND PIPING SYSTEMS CONNECTED TO FANS, PUMPS AND OTHER EQUIPMENT WHICH REQUIRE VIBRATION ISOLATION.
5. PROVIDE ACCESSIBLE VOLUME DAMPERS OR OTHER MEANS OF AIRFLOW ADJUSTMENT AT ALL DUCT RUN-OUTS TO DIFFUSERS AND GRILLES.
6. COORDINATE INSTALLATION OF OUTSIDE AIR INTAKE WITH INSTALLATION OF PLUMBING VENTS, FLUES AND EXHAUST/RELIEF OUTLETS TO MAINTAIN 10' SEPARATION.
7. ALL DUCT RUN-OUTS TO DIFFUSERS AND GRILLES SHALL BE THE SAME AS THE DIFFUSER OR GRILLE NECK SIZE UNLESS NOTED OTHERWISE.

GENERAL NOTES

1. THESE NOTES ARE NOT ALL INCLUSIVE. REFER TO DRAWINGS AND SPECIFICATION FOR ADDITIONAL REQUIREMENTS.
2. THIS IS A STANDARD MECHANICAL SYMBOLOGY AND ABBREVIATIONS SHEET. LISTING OF SYMBOLS AND ABBREVIATIONS DOES NOT IMPLY ALL SYMBOLS AND ABBREVIATIONS HAVE BEEN USED ON THIS PROJECT.
3. PROVIDE ALL MATERIALS, LABOR, AND EQUIPMENT FOR COMPLETE AND OPERABLE SYSTEMS AS INDICATED ON THE DRAWINGS AS SPECIFIED, OR AS REQUIRED BY CODE.
4. MECHANICAL INSTALLATION SHALL COMPLY WITH THE ADA/ABA ACCESSIBILITY GUIDELINES.
5. DETAILS APPLY TO THE ENTIRE PROJECT AND ARE ONLY REFERENCED TO PROVIDE CLARITY IF THERE ARE MULTIPLE DETAILS THAT COULD APPLY TO A PARTICULAR PROJECT CONDITION.
6. COORDINATE LOCATION OF ALL MECHANICAL EQUIPMENT, DUCTWORK, AND PIPING WITH OTHER TRADES BEFORE PROCEEDING WITH WORK. DO NOT INSTALL MECHANICAL EQUIPMENT, DUCTWORK, OR PIPING ABOVE ELECTRICAL EQUIPMENT WHERE PROHIBITED BY ELECTRICAL CODES (SWITCHBOARDS, PANELS, ETC.).
7. LIGHT LINE WEIGHT INDICATES EXISTING PIPING, DUCTWORK, AND/OR EQUIPMENT TO REMAIN. BOLD LINE WEIGHT INDICATES NEW WORK TO BE INSTALLED AS WORK OF THIS CONTRACT.
8. MAINTAIN THE CLEARANCE SPACES AROUND, OVER, AND UNDER EQUIPMENT, SYSTEMS, AND SYSTEM COMPONENTS IN CEILING CAVITIES CONVENIENT OBSERVATIONS, NECESSARY FOR OPERATION, AND MAINTENANCE.
9. ALL WORK IN FINISHED SPACES SHALL BE LOCATED ABOVE CEILINGS, IN CHASES OR OTHER CONCEALED ACCESSIBLE LOCATIONS UNLESS NOTED OTHERWISE. LOCATE AND ARRANGE VALVES, DRAIN FITTINGS, ETC. TO BE ACCESSIBLE THROUGH LAY-IN CEILINGS, ACCESS PANELS OR ACCESS DOORS. PROVIDE AN ACCESS PANEL OR DOOR FOR ALL NON-ACCESSIBLE INSTALLATIONS. COORDINATE LOCATION OF ACCESS PANELS OR DOORS WITH THE ARCHITECT/ENGINEER AND OTHER TRADES.
10. ALL MATERIALS LOCATED IN PLENUM SHALL BE RATED FOR PLENUM INSTALLATION.
11. ALL DUCTWORK, PIPING, AND EQUIPMENT SUPPORTED FROM STRUCTURAL STEEL SHALL BE COORDINATED WITH ALL TRADES. ALL ATTACHMENTS TO STEEL BAR JOISTS, TRUSSES, OR JOIST GIRDERS SHALL BE AT PANEL POINTS OR AS SHOWN ON THE MECHANICAL OR STRUCTURAL DRAWINGS. WELDING TO STRUCTURAL MEMBERS SHALL NOT BE PERMITTED.
12. ALL MISCELLANEOUS METALS AND MATERIALS REQUIRED TO ENSURE PROPER INSTALLATION AND AS SHOWN IN DETAILS FOR PIPING, DUCTWORK, AND EQUIPMENT (UNLESS OTHERWISE NOTED) SHALL BE PROVIDED BY THE INSTALLING CONTRACTOR.
13. PROVIDE DIELECTRIC UNIONS AT ALL CONNECTIONS OF DISSIMILAR METALS (SUCH AS COPPER TO GALVANIZED STEEL).
14. PROVIDE ISOLATION VALVES AT EACH PIECE OF EQUIPMENT. ALSO PROVIDE ISOLATION VALVES ON EACH BRANCH AND/OR RISER SERVING MULTIPLE PIECES OF EQUIPMENT OR FIXTURES AND ELSEWHERE AS INDICATED. INSTALL VALVES AS CLOSE TO MAIN AS POSSIBLE.
15. EQUIPMENT SIZES AND SERVICE CLEARANCE REQUIREMENTS VARY AMONG DIFFERENT MANUFACTURERS. CONSULT APPROVED SHOP DRAWINGS FOR EQUIPMENT SIZES AND REQUIRED SERVICE CLEARANCES. COORDINATE WITH LAYOUT OF EQUIPMENT PADS, PIPING, DUCTWORK, ETC.
16. PROVIDE ACCESS PANELS FOR INSTALLATION IN WALLS AND CEILINGS TO SERVICE CONTROL DEVICES, VALVES, AND OTHER CONCEALED PLUMBING EQUIPMENT. ACCESS PANEL COORDINATED WITH INSTALLATION SHALL BE ARCHITECTURAL WORK TO MATCH MATERIALS AND FINISHES. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
17. DRAWINGS SHOWING LOCATIONS OF EQUIPMENT, PIPING, ETC. ARE DIAGRAMMATIC AND MAY NOT ALWAYS REFLECT EXACT INSTALLATION CONDITIONS. DRAWINGS SHOW THE GENERAL ARRANGEMENT OF PIPING, EQUIPMENT, ETC., AND MAY NOT INCLUDE ALL OFFSETS AND FITTINGS REQUIRED FOR COMPLETE INSTALLATION. THE DRAWINGS SHALL BE FOLLOWED AS CLOSELY AS ACTUAL BUILDING CONSTRUCTION AND THE WORK OF OTHERS WILL PERMIT.
18. PROVIDE DRY WELLS FOR ALL PRE-FABRICATED GUARD BOOTH HVAC SYSTEM. COORDINATE LOCATION FOR DRY WELLS BOOTH MANUFACTURER AND OTHER DISCIPLINES.

ABBREVIATIONS

AD	ACCESS DOOR
AFR	ABOVE FINISHED ROOF
AHU	AIR HANDLING UNIT
APD	AIR PRESSURE DROP
ARF	ABOVE RAISED FLOOR
AV	AIR VALVE
BAS	BUILDING AUTOMATION SYSTEM
BDD	BACK DRAFT DAMPER
BHP	BRAKE HORSE POWER
BOE	BOTTOM OF EQUIPMENT
BTUH	BRITISH THERMAL UNITS PER HOUR
CAV	CONSTANT AIR VOLUME
CFH	CUBIC FEET PER HOUR
CFM	CUBIC FEET PER MINUTE
COP	COEFFICIENT OF PERFORMANCE
COR	CONTRACTING OFFICER'S REPRESENTATIVE
CRAC	COMPUTER ROOM AIR CONDITIONER
CU	CONDENSING UNIT
DB	DRY BULB
DDC	DIRECT DIGITAL CONTROL
DH	DEHUMIDIFIER
DSSC	DUCTLES SPLIT SYSTEM CONDENSER
DSSE	DUCTLESS SPLIT SYSTEM EVAPORATOR
DX	DIRECT EXPANSION
EAT	ENTERING AIR TEMPERATURE
EDH	ELECTRIC DUCT HEATER
EER	ENERGY EFFICIENCY RATIO
EF	EXHAUST FAN
EMCS	ENERGY MANAGEMENT CONTROL SYSTEM
ERU	ENERGY RECOVERY UNIT
ESP	EXTERNAL STATIC PRESSURE
ESS	EMERGENCY SHUTOFF SWITCH
EWT	ENTERING WATER TEMPERATURE
F	FUTURE
FA	FREE AREA
FCP	FAN CONTROL PANEL
FCU	FAN COIL UNIT
FDBK	FEEDBACK
FLA	FULL LOAD AMPS
FLT	FILTER
FPB	FAN POWERED BOX
FPM	FEET PER MINUTE
FT	FINTUBE RADIATION
GC	GENERAL CONTRACTOR
GE	GRAVITY EXHAUST
GI	GRAVITY INTAKE
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
HUM	HUMIDIFIER
I/O	INPUT/OUTPUT
I/P	CURRENT TO PNEUMATIC
IAQ	INDOOR AIR QUALITY
IPLV	INTEGRATED PART LOAD VALUE
LAT	LEAVING AIR TEMPERATURE
LVR	LOUVER
LWT	LEAVING WATER TEMPERATURE
MAU	MAKE-UP AIR UNIT
MBH	THOUSAND BTUH
MCC	MOTOR CONTROL CENTER
NC	NOISE CRITERIA
NO	NUMBER
NRC	NOISE REDUCTION COEFFICIENT
OS&Y	OUTSIDE SCREW AND YOKE
PD	PRESSURE DROP
PPH	POUNDS PER HOUR
RH	RELATIVE HUMIDITY
RTU	ROOFTOP UNIT
RVH	RELIEF VENT HOOD
S	SIGNAL PORT
SCFM	STANDARD CUBIC FEET PER MINUTE
SEER	SEASONAL ENERGY EFFICIENCY RATIO
SP	STATIC PRESSURE
TC	TECHNOLOGY CONTRACTOR
TCP	TEMPERATURE CONTROL PANEL
TD	TEMPERATURE DIFFERENTIAL
TES	THERMAL ENERGY STORAGE
TSP	TOTAL STATIC PRESSURE
UH	UNIT HEATER
V&C	VALVE AND CAP
VAV	VARIABLE AIR VOLUME
VRF	VARIABLE REFRIGERANT FLOW
VTR	VENT THROUGH ROOF
WB	WET BULB
WC	WATER COLUMN
WPD	WATER PRESSURE DROP

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

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DRAWN BY: B. REID
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US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

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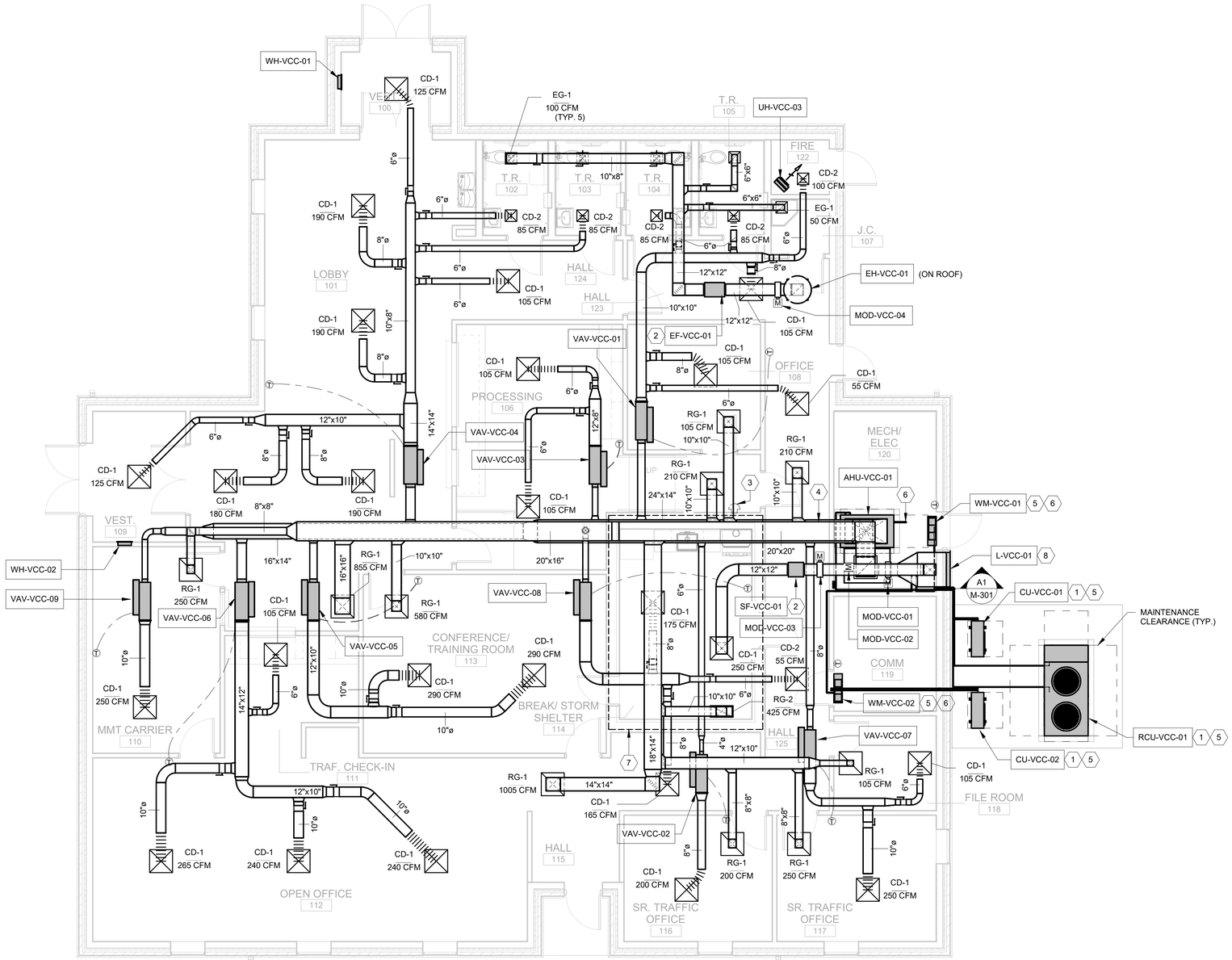
MECHANICAL GENERAL NOTES & ABBREVIATIONS

SHEET ID
M-001

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



A1 MECHANICAL FLOOR PLAN

3/16" = 1'-0"

GENERAL NOTES

1. REFERENCE SHEET M-001 FOR ADDITIONAL MECHANICAL NOTES.
2. REFERENCE SHEETS M-501, 502, AND 503 FOR MECHANICAL DETAILS.
3. REFERENCE SHEET M-601 FOR INLET SIZES TO VAVS.

SHEET KEYNOTES

KEYNOTES

1 PROVIDE 6" TALL CONCRETE PAD FOR EQUIPMENT. PAD TO EXTEND 6" PAST EQUIPMENT FOOTPRINT ON ALL SIDES.

2 SUSPEND FAN FROM STRUCTURE WITH MANUFACTURER'S VIBRATION ISOLATORS.

3 EMERGENCY AIR DISTRIBUTION SHUTOFF BUTTON.

4 ROUTE RETURN AIR DUCTWORK ABOVE SUPPLY.

5 ROUTE REFRIGERANT PIPING TO INDOOR UNIT. EXACT SIZE AND QUANTITY OF REFRIGERANT PIPING AND ACCESSORIES SHALL BE PER MANUFACTURER'S RECOMMENDATIONS.

6 ROUTE CONDENSATE TO NEAREST FLOOR DRAIN. CONDENSATE SHALL BE SAME SIZE AS EQUIPMENT CONNECTION SIZE UNLESS NOTED OTHERWISE.

7 ALL DUCTWORK, PIPING, CONDUIT, EQUIPMENT, ETC. LOCATED ABOVE BREAK ROOM 114'S HARD LID. ONLY DUCTWORK, PIPING, CONDUIT, ETC. SERVING BREAK ROOM 114 SHALL PENETRATE THE HARD LID.

8 BOTTOM OF LOUVER SHALL BE A MINIMUM OF 10 FT. ABOVE FINISHED GRADE.

SHEET LEGEND

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

File Path: C:\vt\2025\104000\16-A\PBA_VCC_Ariana.Gonzalez@DKKCW.rvt

Plot Date: 4/16/2026 3:52:16 PM

ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W912T524F6002
CONTRACT NO.: W912T523D0035

DESIGNED BY: B. PERLBERG
DRAWN BY: A. GONZALEZ
CHECKED BY: A. PERLBERG
SUBMITTED BY:
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

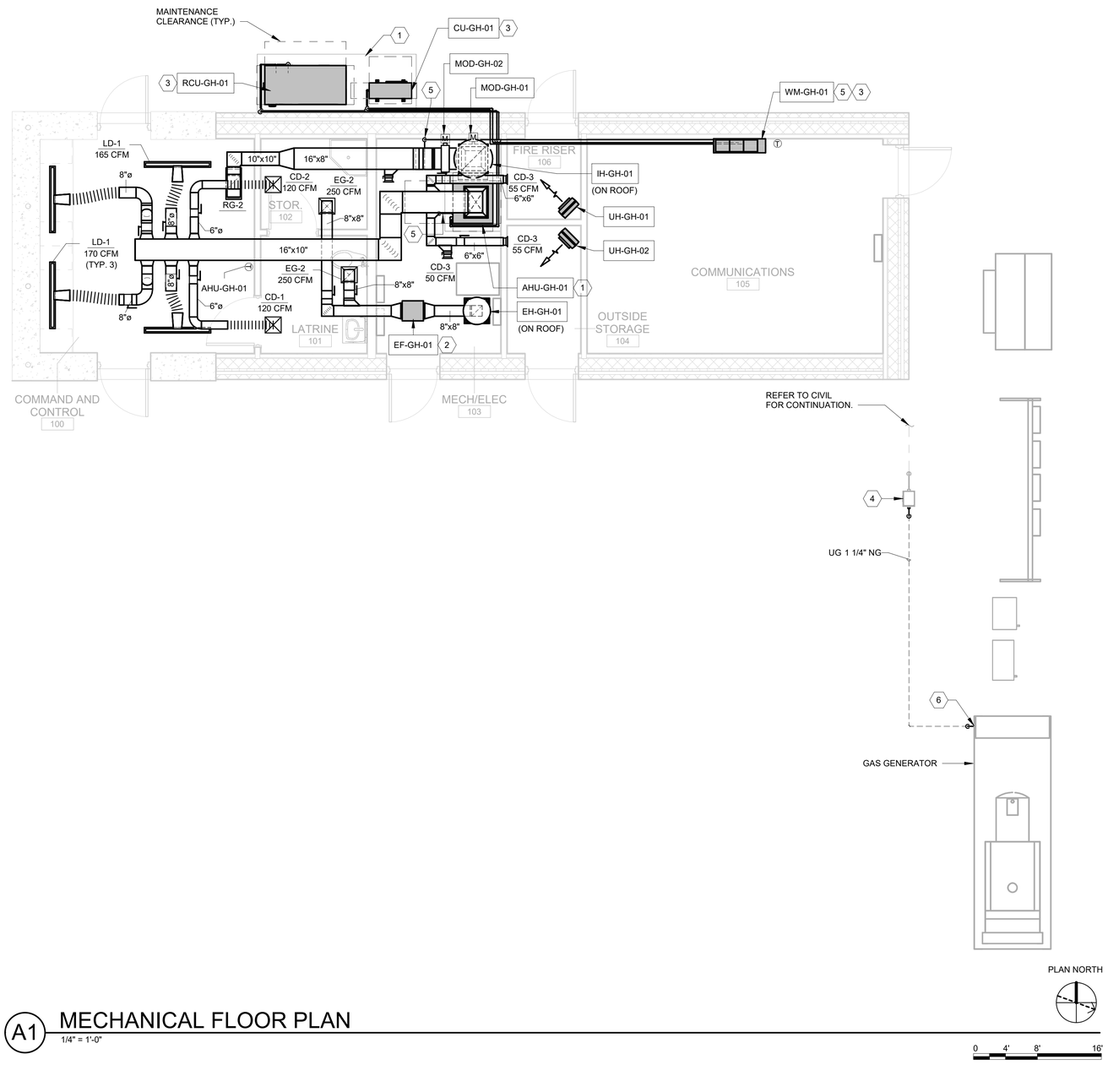
HDR
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

MECHANICAL FLOOR PLAN

SHEET ID
VCC
M-101

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



A1 MECHANICAL FLOOR PLAN

1/4" = 1'-0"

GENERAL NOTES

1. REFERENCE SHEET M-001 FOR ADDITIONAL MECHANICAL NOTES.
2. REFERENCE SHEETS M-501, 502, AND 503 FOR MECHANICAL DETAILS.

SHEET KEYNOTES

KEYNOTES

1 PROVIDE 6" TALL CONCRETE PAD FOR EQUIPMENT. PAD TO EXTEND 6" PAST EQUIPMENT FOOTPRINT ON ALL SIDES.

2 SUSPEND FAN FROM STRUCTURE WITH MANUFACTURER'S VIBRATION ISOLATORS.

3 ROUTE REFRIGERANT PIPING TO INDOOR UNIT. EXACT SIZE AND QUANTITY OF REFRIGERANT PIPING AND ACCESSORIES SHALL BE PER MANUFACTURER'S RECOMMENDATIONS.

4 REF: G14/M-502 FOR GAS METER SERVICE ENTRY DETAIL. FIELD COORDINATE LOCATION OF METER WITH UTILITY PROVIDER AND FINAL LOCATION OF GENERATOR.

5 ROUTE CONDENSATE TO NEAREST FLOOR DRAIN. CONDENSATE SHALL BE SAME SIZE AS EQUIPMENT CONNECTION SIZE UNLESS NOTED OTHERWISE.

6 NATURAL GAS TO GENERATOR, REFER TO ELECTRICAL. PROVIDE WITH SHUTOFF VALVE, REGULATOR, AND UL536 FLEXIBLE CONNECTOR. REF: B14/M-502 FOR GAS FIRED EQUIPMENT CONNECTION DETAIL.

SHEET LEGEND

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

File Path: C:\vt\2025\104\0018-M-PBA_DATEHOUSE_Ariana.Gonzalez\DWG\W.vrt

Plot Date: 4/16/2026 4:02:35 PM

DESIGNED BY: B. PERLBERG
DRAWN BY: A. GONZALEZ
CHECKED BY: A. CRITON
SUBMITTED BY:
SIZE: ANSI D

ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W912T524F6002
CONTRACT NO.: W912T525D0035

US ARMY CORPS OF ENGINEERS
LITTLE ROCK, AR
LITTLE ROCK DISTRICK

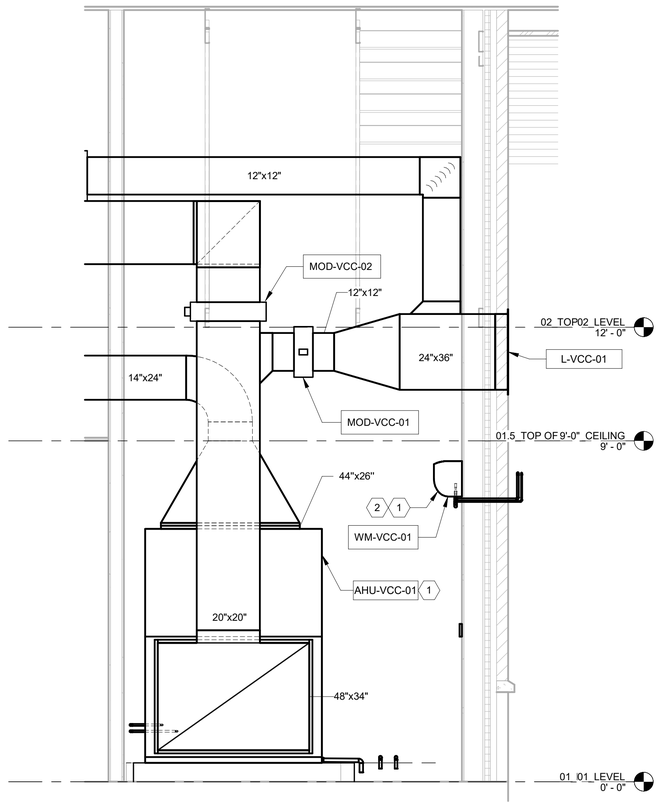
HDR
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

MECHANICAL FLOOR PLAN

SHEET ID
G-HOUSE
M-111

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



A1 MECHANICAL ROOM SECTION

1/2" = 1'-0"

0 2' 4' 8' 12'

GENERAL NOTES

1. REFERENCE SHEET M-001 FOR ADDITIONAL MECHANICAL NOTES.
2. REFERENCE SHEETS M-501, 502, AND 503 FOR MECHANICAL DETAILS.
3. REFERENCE SHEET M-601 FOR INLET SIZES TO VAVS.

SHEET KEYNOTES

KEYNOTES

1 ROUTE REFRIGERANT PIPING TO INDOOR UNIT. EXACT SIZE AND QUANTITY OF REFRIGERANT PIPING AND ACCESSORIES SHALL BE PER MANUFACTURER'S RECOMMENDATIONS.

2 ROUTE CONDENSATE TO NEAREST FLOOR DRAIN. CONDENSATE SHALL BE SAME SIZE AS EQUIPMENT CONNECTION SIZE UNLESS NOTED OTHERWISE.

SHEET LEGEND

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

File Path: C:\vt\2025\104000\16-All-PBA_VCC_Ariana.Gonzalez\DKADCW.rvt

Plot Date: 4/16/2026 3:52:17 PM

DESIGNED BY: B. PERLBERG
DRAWN BY: A. GONZALEZ
CHECKED BY: A. ORTON
SUBMITTED BY:
SIZE: ANSI D
ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W912S24F6002
CONTRACT NO.: W912S25D0035

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

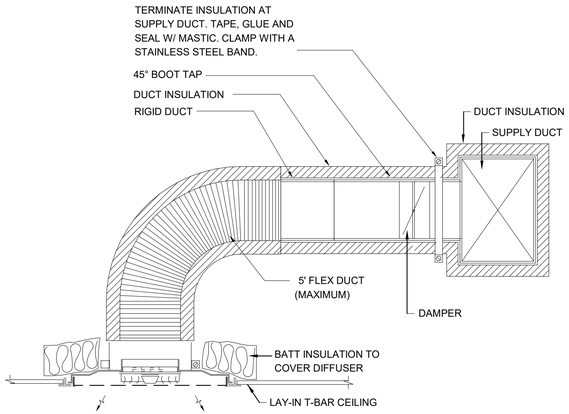
HDR
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

MECHANICAL SECTIONS

SHEET ID
VCC
M-301

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

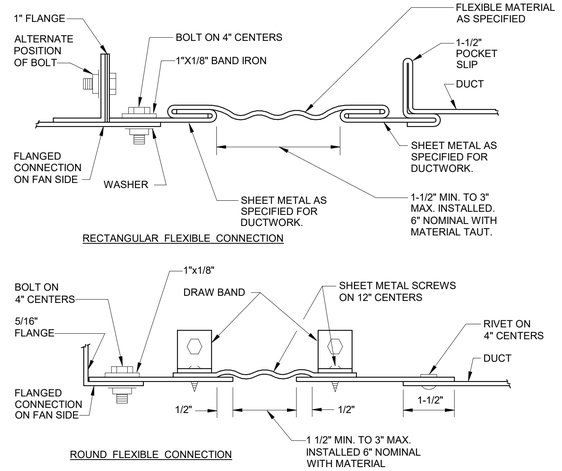


NOTES:

1. REFER TO SPECIFICATIONS FOR MATERIAL REQUIREMENTS.

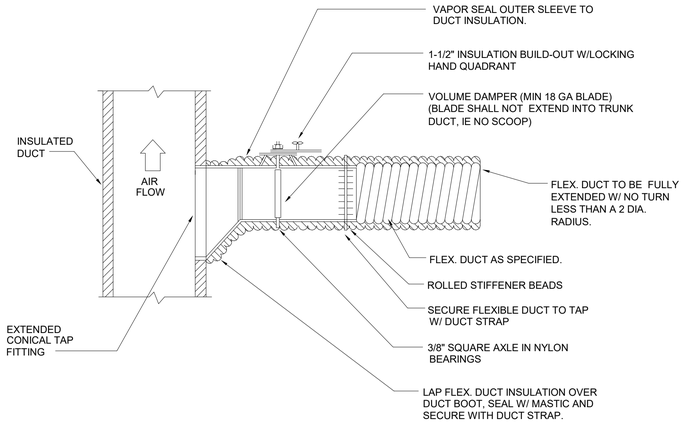
J1 FLEXIBLE DUCT AND CEILING DIFFUSER DETAIL

NTS



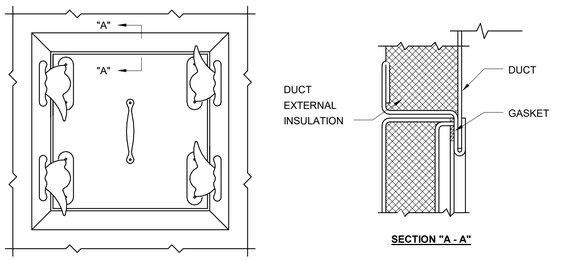
J7 FLEXIBLE DUCT CONNECTION DETAIL

NTS



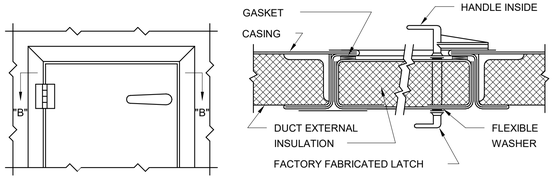
J13 BOOT TAP DETAIL

NTS



SECTION "A - A"

ACCESS PANEL



SECTION "B - B"

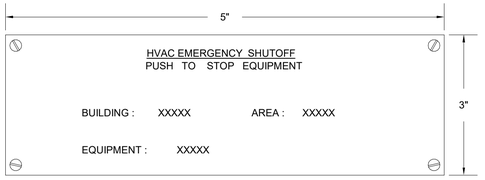
ACCESS DOOR

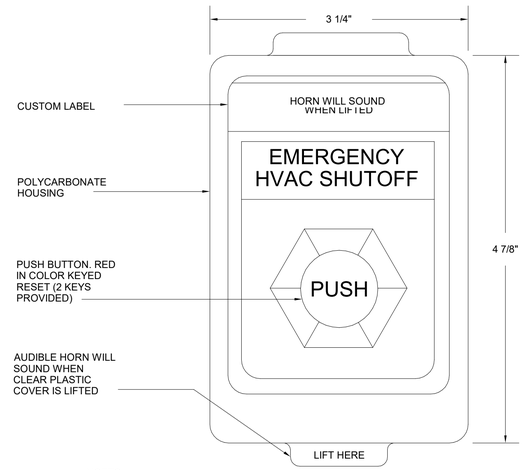
NOTES:

1. LATCHES SHALL BE OF THE WEDGE TYPE TO CLOSE DOORS TIGHTLY.
2. HINGES ON THE ACCESS DOORS SHALL HAVE NON-CORROSIVE PINS.
3. ACCESS DOOR SHALL NOT PROTRUDE INTO AIRSTREAM.

C1 TYPICAL DUCT ACCESS DOOR DETAIL

NTS





NOTES:

1. ENGRAVED PLASTIC SIGN, GREEN WITH WHITE LETTERING, INSTALLED 1" ABOVE SHUTOFF BUTTON. 3" TALL x 5" WIDE "EMERGENCY HVAC SHUTOFF" LETTERING 1/2" TALL, OTHER LETTERING 3/16" TALL.
2. SIGH STATES BUILDING NUMBER, AREA AFFECTED, OR "ENTIRE BUILDING" IF BUTTON AFFECTS ENTIRE BUILDING.
3. SIGN LISTS EQUIPMENT TAG NAMES OF ALL HVAC EQUIPMENT AFFECTED BY SHUTDOWN SYSTEM.
4. EMERGENCY SHUTOFF SWITCH TO BE MOUNTED TO NEW OR EXISTING SINGLE GANG BOX.
5. WHEN USED WITH MULTIPLE HVAC UNITS, INTERFACE D.D.C. PANEL. WHEN USED WITH SINGLE HVAC UNIT, UTILIZE DIRECT RELAY.

A7 EMERGENCY SHUT-OFF DEVICE DETAIL

NTS

SQUARE 90°

TYP VANE RAIL TRACK

TURNING VANE DETAIL

NOTES:

1. SHALL ONLY BE USED FOR 90 FOR ANGLES OTHER THAN 90°USE RADIUS ELBOW CONSTRUCTION.
2. PARTIAL ELBOWS, ALL SIZES SHALL BE CONSTRUCTED AS RADIUS ELBOWS.

E13 SQUARE OR RECTANGULAR ELBOW TURNING VANE DETAIL

NTS

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

File Path: C:\vr\2025\104000\18-M-PBA_VOL_2\Arlena.Gonzalez\DKXCW.rvt

Plot Date: 4/16/2026 3:52:18 PM

ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S25B0035

DESIGNED BY: B. PERLBERG
DRAWN BY: A. GONZALEZ
CHECKED BY: A. GORTON
SUBMITTED BY:
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

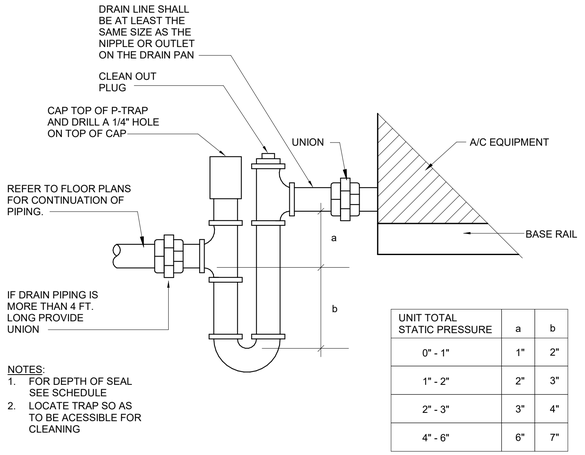
HDR
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

MECHANICAL DETAILS

SHEET ID
M-501

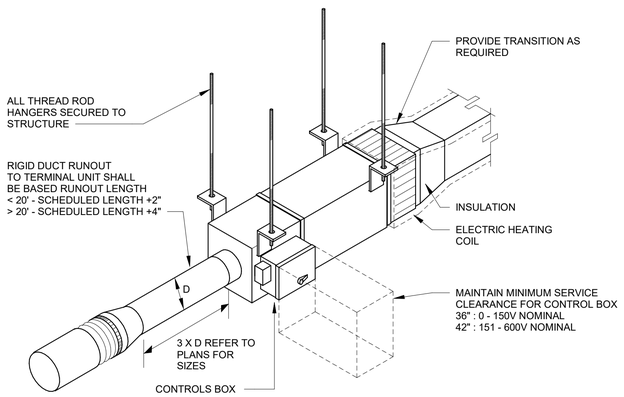
CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



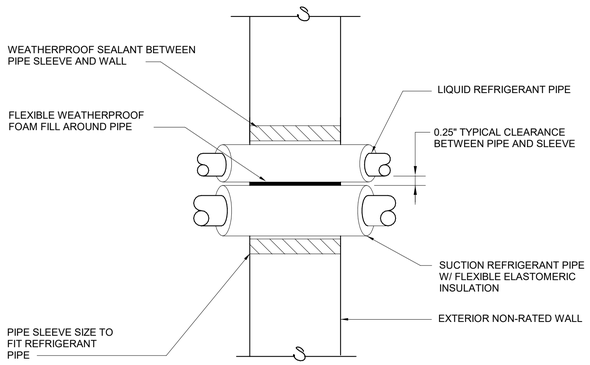
UNIT TOTAL STATIC PRESSURE	a	b
0" - 1"	1"	2"
1" - 2"	2"	3"
2" - 3"	3"	4"
4" - 6"	6"	7"

NOTES:
1. FOR DEPTH OF SEAL SEE SCHEDULE
2. LOCATE TRAP SO AS TO BE ACESSIBLE FOR CLEANING

K1 CONDENSATE DRAIN TRAP DETAIL
NTS



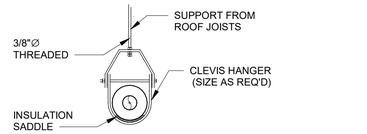
F1 SINGLE DUCT VAV TERMINAL UNIT DETAIL
NTS



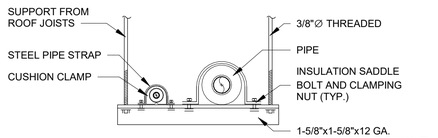
ABOVE GROUND WALL PENETRATION ONLY

PVC PIPE SLEEVE SIZE NOT TO EXCEED 6" SCH 40

A1 REFRIGERANT PIPE SLEEVE THROUGH NON-RATED WALL
NTS



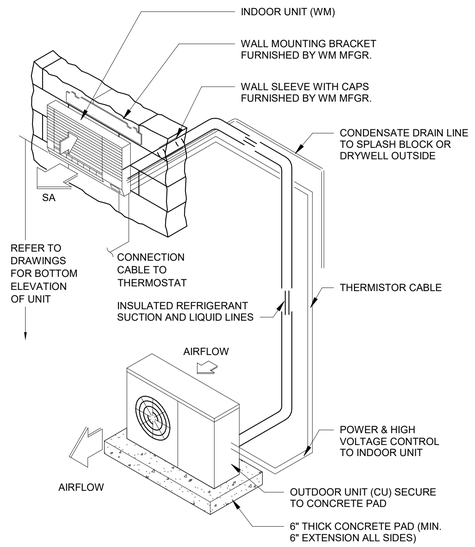
SINGLE PIPE RUN



MULTIPLE PIPE RUNS

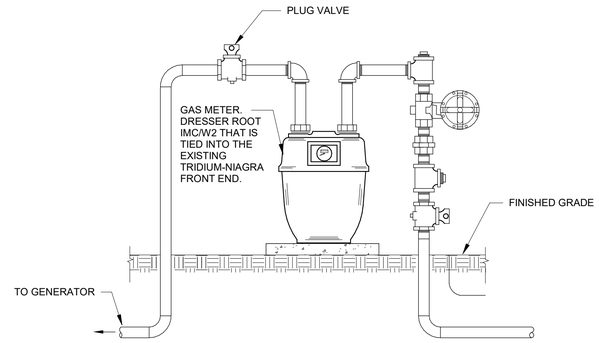
NOTES:
1. INSULATION ABOVE SADDLES SHALL BE FOAM GLASS OF SAME THICKNESS AS PIPE INSULATION AND SHALL HAVE A COMPRESSIVE STRENGTH OF NOT LESS THAN 3,300 PSI.
2. HANGER RODS SHALL BE OF REQUIRED SIZE, BUT NO SMALLER THAN 1/2" DIA.
3. HANGERS WITHOUT PIPE SADDLES SHALL BE TYPICAL FOR UNINSULATED PIPING.

G8 REFRIGERANT PIPING HANGER INSTALLATION DETAIL
NTS

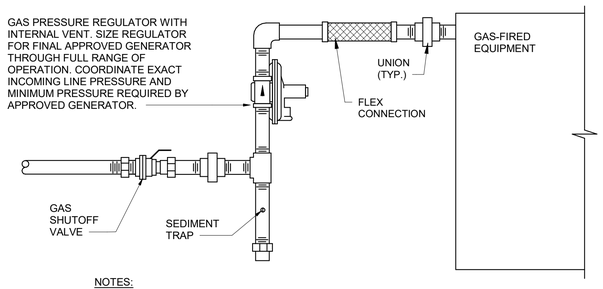


NOTES:
1. INSTALL WALL UNIT AND CONDENSATE PUMP (IF SPECIFIED) PER MANUFACTURER'S RECOMMENDATIONS.

A8 DUCTLESS SPLIT SYSTEM DETAIL
NTS



G14 GAS METER SERVICE ENTRY DETAIL
NTS



NOTES:
1. SUPPORT GAS PIPING FROM STRUCTURE AS REQUIRED. ALL PIPE HANGERS SHALL BE ATTACHED TO STRUCTURAL STEEL ONLY.
2. WHERE REQUIRED, ROUTE VENT TO ATMOSPHERE IN COMPLIANCE WITH LOCAL CODES. LOCATE VENTS MINIMUM 10 FEET AWAY FROM NEARBY OUTSIDE AIR INTAKES.
3. ADJUST PRESSURE REGULATOR TO SUPPLY GAS AT THE APPLIANCES MINIMUM GAS SUPPLY PRESSURE RATING.

B14 GAS FIRED EQUIPMENT CONNECTION DETAIL
NTS

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

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Plot Date: 4/16/2026 3:52:19 PM

DESIGNED BY: B. PERLBERG
DRAWN BY: A. GONZALEZ
CHECKED BY: A. ORTON
SUBMITTED BY:
ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S25B0035
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

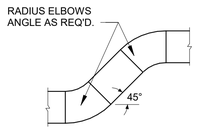
HDR
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

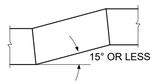
MECHANICAL DETAILS

SHEET ID
M-502

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



RADIUS OFFSET ANGLE
GREATER THAN 15°



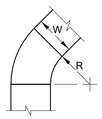
MITRE OFFSET ANGLE
NOT GREATER THAN 15°

RECT. OFFSETS 90°

NOTES:

1. ALL ELBOWS WITH W < 12" SHALL BE RADIUS ELBOWS.
2. W < 32 INCHES R=W
   W > 32 INCHES R = 1/2W

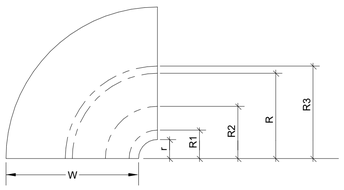
RECT. RADIUS ELBOW 90°



NOTES:

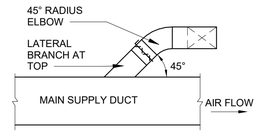
1. PARTIAL ELBOWS, ALL SIZES SHALL BE CONSTRUCTED AS RADIUS ELBOWS.
2. W < 32 INCHES R=W
   W > 32 INCHES R = 1/2W

RECT. RADIUS ELBOWS
30/45/60°

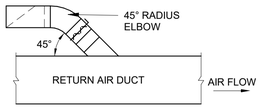


RECTANGULAR RADIUS ELBOW
WITH VANES TYPE RE3

REFER TO SMACNA HVAC SYSTEMS DUCT DESIGN MANUAL, FOURTH EDITION, SECTION 5.15 "SPLITTER VANES" AND SMACNA HVAC DUCT CONSTRUCTION STANDARDS, THIRD EDITION, FIGURES 4.2 AND 4.9 AND CHARTS 4-1 AND 4-1M. ELBOW SHALL HAVE THREE SPLITTER VANES AND r/W = 0.10 (R/W = 0.60) UNLESS NOTED OTHERWISE.

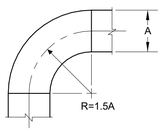


ELEVATION SUPPLY AIR

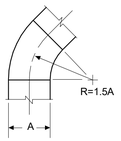


EXHAUST AIR SIMILAR

NOTES:
1. RECTANGULAR SHOWN, CIRCULAR SIMILAR.

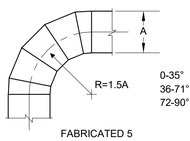


DIE STAMPED
90° ELBOW



DIE STAMPED
45° ELBOW

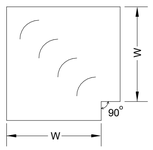
RADIUS ELBOWS UP TO 8"



0-35°	2 PIECES
36-71°	3 PIECES
72-90°	5 PIECES

FABRICATED 5
GORE 90° ELBOW

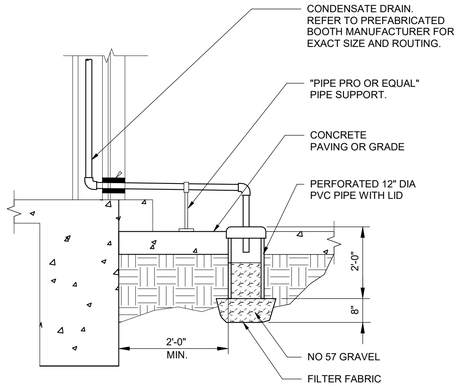
RADIUS ELBOWS OVER 8"



RECTANGULAR MITERED ELBOW
WITH VANES TYPE RE2

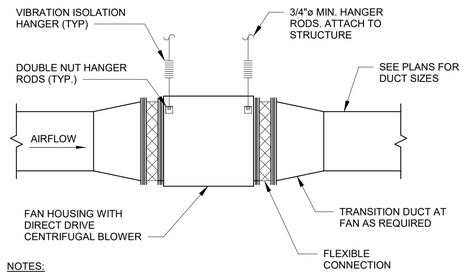
A1 DUCTS AND ELBOWS CONSTRUCTION DETAILS

NTS



J7 CONDENSATE DRYWELL DETAIL

NTS

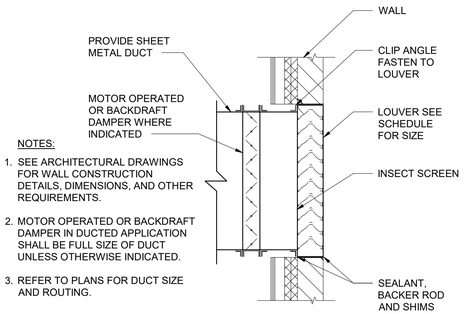


NOTES:

1. SEE DRAWINGS FOR SUCTION AND DISCHARGE DUCT SIZES.
2. SEE SCHEDULES AND SPECIFICATIONS FOR FAN REQUIREMENTS.
3. TRANSITIONS SHOWN ARE CONCENTRIC. TRANSITIONS MAY ALSO BE FLAT ON TOP OR FLAT ON BOTTOM. SEE DRAWINGS FOR TRANSITION TYPE.

F7 HORIZONTAL INLINE FAN DETAIL

NTS

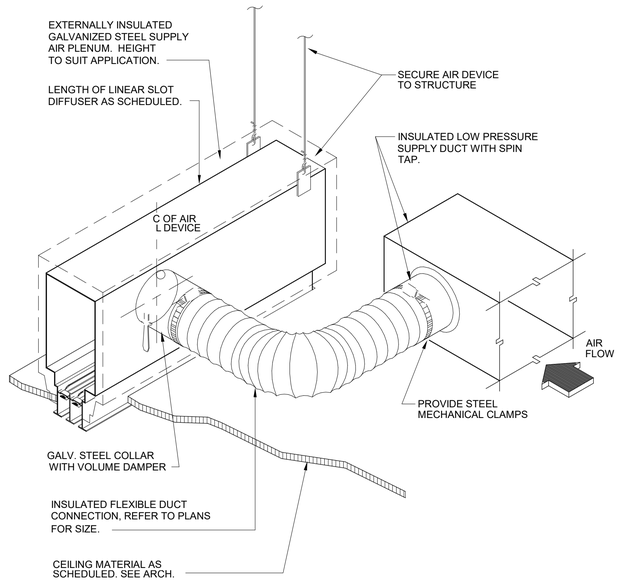


NOTES:

1. SEE ARCHITECTURAL DRAWINGS FOR WALL CONSTRUCTION DETAILS, DIMENSIONS, AND OTHER REQUIREMENTS.
2. MOTOR OPERATED OR BACKDRAFT DAMPER IN DUCTED APPLICATION SHALL BE FULL SIZE OF DUCT UNLESS OTHERWISE INDICATED.
3. REFER TO PLANS FOR DUCT SIZE AND ROUTING.

A7 DUCTED LOUVER IN WALL DETAIL

NTS



A13 LINEAR SLOT CONNECTION DETAIL

12" = 1'-0"

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

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Plot Date: 4/16/2026 3:52:21 PM

DESIGNED BY:	ISSUE DATE:
B. PERLBERG	17 APRIL 2026
DRAWN BY:	SOLICITATION NO.:
A. GONZALEZ	W5127S24F6002
CHECKED BY:	CONTRACT NO.:
A. ORTON	W912DS25D0035
SUBMITTED BY:	
SIZE: ANSI D	

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HDR
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

MECHANICAL DETAILS

SHEET ID

M-503

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

SPLIT-SYSTEM SCHEDULE

SYMBOL	SERVICE	OPERATION	REFRIGERANT	COMPRESSOR TYPE	INDOOR UNIT										OUTDOOR UNIT						CONTROL TYPE (NOTE 6)	BASIS OF DESIGN		INDOOR/ OUTDOOR UNIT WEIGHTS (LBS)	NOTES
					UNIT PERFORMANCE							ELECTRICAL					ELECTRICAL					MANUFACTURER: DAIKIN			
					TYPE	TOTAL COOLING (MBH)	SENSIBLE COOLING (MBH)	COOLING EAT °F (DB/WB)	SENSIBLE HEATING (MBH)	HEATING EAT °F (DB/WB)	CFM (HIGH)	MCA (A)	MOCP (A)	VOLTS/PH	SEER2	HSPF2	MCA (A)	MOCP (A)	VOLTS/PH	DISCONNECT BY		INDOOR	OUTDOOR		
WM-VCC-01/CU-VCC-01	120 MECH/ELEC	HEAT PUMP	R-32	INVERTER SCROLL	WALL MOUNT	9,000	8,250	80/67	10,900	70/60	380	POWERED BY OUTDOOR UNIT			21.0	10.2	11.6	15	208/1	EC	SS-A	FTX	RX	50/100	1,2,3,4,5
WM-VCC-02/CU-VCC-02	119 COMM	HEAT PUMP	R-32	INVERTER SCROLL	WALL MOUNT	12,000	9,880	80/67	13,500	70/60	395	POWERED BY OUTDOOR UNIT			21.0	10.2	14.6	15	208/1	EC	SS-A	FTK	RX	50/100	1,2,3,4,5
WM-GH-01/CU-GH-01	105 COMM	HEAT PUMP	R-32	INVERTER SCROLL	WALL MOUNT	18,000	14,590	80/67	21,600	70/60	565	POWERED BY OUTDOOR UNIT			21.0	9.6	21.4	25	208/1	EC	SS-A	FTK	RX	50/115	1,2,3,4,5

NOTES:
1. SIZE REFRIGERANT PIPING PER MANUFACTURERS RECOMMENDATIONS.
2. PROVIDE OUTDOOR CONDENSING UNIT WITH HAIL GUARDS.
3. MANUFACTURER MUST PROVIDE SUBMITTAL DATA THAT ACCOUNTS FOR REFRIGERANT LINE LENGTHS AND AMBIENT CONDITIONS (95 DEG F DB/75 DEG F WB COOLING AND 47 DEG F DB/43 DEG F WB HEATING). PROVIDE WITH ACCESSORIES TO ALLOW UNIT TO OPERATE UP TO...
4. PROVIDE INDOOR UNIT WITH WIRED LOCAL CONTROLLER.
5. PROVIDE EXTERNAL CONDENSATE PUMP WITH OVERFLOW SAFETY SWITCH INTERLOCKED TO SHUTOFF UNIT WHERE A GRAVITY DRAIN CANNOT BE PROVIDED. PUMP TO BE POWERED FROM INDOOR UNIT.
6. REFER TO M-700 SERIES FOR CONTROL SEQUENCE OF OPERATION AND POINTS LIST.

DX AIR HANDLING UNIT SCHEDULE

SYMBOL	LOCATION	TYPE	SUPPLY FAN								ELECTRICAL (NOTE 5)				DX COOLING						HEAT PUMP HEATING				FILTERS		CONTROL TYPE (NOTE 8)	BASIS OF DESIGN		WEIGHT (LBS)	NOTES
			CFM			ESP (IN WC) (NOTE 3)	TYPE	DRIVE	RPM (NOTE 1)	HP (NOTE 2)	CONTROLLER/ STARTER	VOLT/PH	MCA (A)	MOCP (A)	DISCONNECT BY	MAX FACE VELOCITY (FPM)	CFM	EAT, °F (DB/WB) (NOTE 4)	LAT, °F (DB/WB) (NOTE 4)	CAPACITY		CFM	EAT, °F (DB) (NOTE 4)	LAT, °F (DB) (NOTE 4)	CAPACITY	PRE	FINAL		MAKE	MODEL		
			MAX	MIN	OA														TOTAL (BTUH)	SENSIBLE (BTUH)				SENSIBLE (BTUH)							
AHU-VCC-01	120 MECH/ELEC ROOM	VERTICAL	3,800	1,130	750	2.50	PLENUM	DIRECT	3,250	2	VFD	208/3	10	15	MFR	500	3,800	78.5/65.5	51.0/50.4	163,500	112,400	1,200	30	55	32,400	2" MERV-8	2" MERV-13	AHU-A	AAON	V3-DRB	500	6
AHU-GH-01	103 MECH/ELEC ROOM	VERTICAL	1,020	NOTE 7	250	1.00	PLENUM	DIRECT	2,500	1	VFD	208/3	3	15	MFR	500	810	80.5/67.0	48.0/57.9	43,500	28,200	810	50	90	35,000	2" MERV-8	2" MERV-13	AHU-B	AAON	V3-BRB	250	6

NOTES:
1. FAN RPM SHALL NOT EXCEED 110% OF SCHEDULED VALUE WITH THE SCHEDULED WHEEL TYPE.
2. NO EQUIPMENT SHALL BE SELECTED ABOVE 90% OF MOTOR NAME PLATE RATING.
3. EXTERNAL STATIC PRESSURE INCLUDES SYSTEM LOSSES AND FILTER LOADING AS LISTED IN THIS SCHEDULE ONLY.
   IT EXCLUDES LOSSES DUE TO ITEMS IN THE AHU ITSELF SUCH AS COILS, DAMPERS, CLEAN AIR FILTERS, ETC.
4. LAT LISTED IS IMMEDIATELY DOWNSTREAM OF COIL.
5. PROVIDE SINGLE POINT CONNECTION.
6. PROVIDE UNIT WITH HOT-GAS REHEAT COIL FOR DEHUMIDIFICATION CONTROL.
7. COORDINATE EXACT MINIMUM FLOW RATE WITH FINAL APPROVED AHU/RCU MFR.
8. REFER TO M-700 SERIES FOR CONTROL SEQUENCE OF OPERATION AND POINTS LIST.

AHU REMOTE CONDENSING UNIT SCHEDULE

SYMBOL	SERVICE	TYPE	NOMINAL CAPACITY (TONS)	CAPACITY (NOTE 2)		COOLING IEER AT AHRI	HEATING COP, 47°F AT AHRI	COOLING SEER2 AT AHRI	HEATING HSPF2 AT AHRI	DX STAGES	COMPRESSOR TYPE	AMBIENT		REFRIGERANT	ELECTRICAL (NOTE 1)				CONTROL TYPE (NOTE 6)	BASIS OF DESIGN		WEIGHT (LBS)	NOTES
				COOLING (BTUH)	HEATING (BTUH)							SUMMER, °F (DB)	WINTER, °F (DB)		VOLT/PH	MCA (A)	MOCP (A)	DISCONNECT BY		MAKE	MODEL		
RCU-VCC-01	AHU-VCC-01	HEAT PUMP	15	163,500	112,400	13.3	3.3	-	-	2	INVERTER SCROLL	100	20	R-454B	208/3	74	100	MFR	AHU-A	AAON	CFA-015	500	3,4,5
RCU-GH-01	AHU-GH-01	HEAT PUMP	4	43,500	28,200	-	-	14.3	7.5	1	INVERTER SCROLL	100	20	R-454B	208/3	24	40	MFR	AHU-B	AAON	CFA-004	250	3,4,5

NOTES:
1. PROVIDE SINGLE POINT CONNECTION.
2. REFER TO THE ASSOCIATED AIR HANDLING UNIT SCHEDULE FOR REQUIRED COOLING AND HEATING CAPACITY.
3. CAPACITY SHALL BE DERATED BASED ON THE SCHEDULED AMBIENT CONDITIONS.
4. HEAT PUMP SHALL BE CAPABLE OF OPERATING AT LOW AMBIENT DOWN TO 0°F.
5. PROVIDE CONDENSER COILS WITH MANUFACTURER'S HAIL GUARD.
6. REFER TO M-700 SERIES FOR SEQUENCE OF OPERATION AND POINTS LIST.

SITE CRITERIA

WEATHER DATA LOCATION	GRIDER FIELD, AR
ASHRAE CLIMATE ZONE	3A
ELEVATION	207 FT
LATITUDE	34.180 N
LONGITUDE	91.934 W

OUTDOOR DESIGN CONDITIONS

COOLING (1% DB/WB)	94.9°F / 77.3°F
DEHUMIDIFICATION (1% DP/MCDB)*	76.6°F / 84.7°F
HEATING (99% DB)	25.2°F
CONDENSING UNIT AMBIENT	100°F

* PER ASHRAE 2021 FUNDAMENTALS.

INDOOR DESIGN CONDITIONS

ROOM TYPE	TEMPERATURE		HUMIDITY	
	MAX (DEG. F)	MIN (DEG. F)	MAX (%RH)	MIN (%RH)
STORAGE	78	68	50	N/A
ELEC/MECH ROOMS	80	40	N/A	N/A
COMM ROOMS	78	65	50	N/A
ALL OTHER **	74	68	50	N/A

** PER USER REQUEST

GRILLES, REGISTERS, AND DIFFUSERS SCHEDULE

SYMBOL	MATERIAL	TYPE	MARGIN	INLET SIZE (IN)	FACE SIZE (IN)	FINISH	MANUFACTURER	MODEL	NOTES
CD-1	ALUMINUM	LOUVERED FACE	NOTE 1	SEE DRAWINGS	24x24	WHTE	TITUS	TDC	3
CD-2	ALUMINUM	LOUVERED FACE	NOTE 1	SEE DRAWINGS	12x12	WHTE	TITUS	TDC	3
CD-3	ALUMINUM	SIDEWALL	NOTE 1	SEE DRAWINGS	6x6	WHTE	TITUS	300RS	3
LD-1	ALUMINUM	LINEAR SLOT	NOTE 1	8"	60x12	WHTE	TITUS	FL-10	3
RG-1	ALUMINUM	EGG CRATE - SIGHT PROOF	NOTE 1	22x22	24x24	WHTE	TITUS	45F	2
RG-2	ALUMINUM	EGG CRATE - SIGHT PROOF	NOTE 1	22x10	24x12	WHTE	TITUS	45F	2
RG-3	ALUMINUM	EGG CRATE - SIGHT PROOF	NOTE 1	8x8	12x12	WHTE	TITUS	45F	2
EG-1	ALUMINUM	EGG CRATE - SIGHT PROOF	NOTE 1	22x22	24x24	WHTE	TITUS	45F	2
EG-3	ALUMINUM	EGG CRATE - SIGHT PROOF	NOTE 1	8x8	12x12	WHTE	TITUS	45F	2

NOTES:
1. CONTRACTOR SHALL COORDINATE PROPER MARGIN STYLE TO MATCH CEILING CONSTRUCTION.
2. PROVIDE FULL SIZE CORE AREA AS SPECIFIED. PROVIDE TRANSITION TO INDICATED INLET SIZE AS REQUIRED.
3. ALL SUPPLY DIFFUSERS SHALL HAVE 4-WAY THROW UNLESS OTHERWISE INDICATED ON PLANS.

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

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Plot Date: 4/16/2026 3:52:22 PM

DESIGNED BY: B. PERLBERG
DRAWN BY: A. GONZALEZ
CHECKED BY: A. CROCKETT
SUBMITTED BY:
SIZE: ANSI D
ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S26D003

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HDR
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

MECHANICAL SCHEDULES

SHEET ID
M-601

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

FAN SCHEDULE

SYMBOL	SERVICE	TYPE	CFM	ESP (IN WC)	DRIVE	SONES (INLET/OUTLET)	RPM (NOTE 1)	BHP (NOTE 2)	HP (NOTE 2)	ELECTRICAL			CONTROL TYPE (NOTE 5)	BASIS OF DESIGN		WEIGHT (LBS)	NOTES
										VOLT/PH	DISCONNECT BY	CONTROLLER BY/TYPE		MAKE	MODEL		
EF-VCC-01	GENERAL EXHAUST	INLINE	500	0.50	DIRECT	9.7/9.3	1,355	0.13	0.25	120/1	MFR	NOTE 3	EF-A	GREENHECK	SQ	50	4
SF-VCC-01	STORM SHELTER VENTILATION	INLINE	250	0.50	DIRECT	8.6/8.3	1,249	0.08	0.25	120/1	MFR	NOTE 3	SF-A	GREENHECK	SQ	50	4
EF-GH-01	GENERAL EXHAUST	INLINE	150	0.50	DIRECT	10.2/9.6	1,399	0.09	0.25	120/1	MFR	NOTE 3	EF-A	GREENHECK	SQ	50	4

NOTES:
1. FAN RPM SHALL NOT EXCEED 110% OF SCHEDULED VALUE WITH THE SCHEDULED WHEEL TYPE.
2. NO EQUIPMENT SHALL BE SELECTED ABOVE 90% OF MOTOR NAME PLATE RATING.
3. PROVIDE WITH EC MOTOR AND SPEED CONTROLLER. MOUNT SPEED CONTROLLER IN ACCESSIBLE LOCATION ON MOTOR.
4. PROVIDE WITH MANUFACTURE RECOMMENDED VIBRATION ISOLATORS.
5. REFER TO M-700 SERIES FOR CONTROL SEQUENCE OF OPERATION AND POINTS LIST.

VARIABLE AIR VOLUME BOX SCHEDULE (ELECTRIC)

SYMBOL	THERMOSTAT LOCATION	MIN. INLET SIZE (IN)	CFM			ELECTRIC HEATING COIL				ELECTRICAL	CONTROL TYPE (NOTE 5)	BASIS OF DESIGN		NOTES
			COOLING MAX.	MIN	HEATING MAX.	kW	EAT °F	LAT °F	STAGES	VOLT/PH		MANUFACTURER	MODEL	
VAV-VCC-01	121 HALLWAY	8	465	365	465	4.5	50.0	80.0	SCR	208/3	VAV-A	TITUS	DESV	1,2,3,4
VAV-VCC-02	116 SR. TRAFFIC OFFICER	4	200	110	200	2.0	50.0	80.0	SCR	208/3	VAV-A	TITUS	DESV	1,2,3,4
VAV-VCC-03	106 VCC OFFICE	6	210	110	210	2.0	50.0	80.0	SCR	208/3	VAV-A	TITUS	DESV	1,2,3,4
VAV-VCC-04	101 LOBBY	10	1,275	835	1,275	12.5	50.0	80.0	SCR	208/3	VAV-A	TITUS	DESV	1,2,3,4
VAV-VCC-05	113 CONFERENCE/TRAINING ROOM	8	585	585	585	6.0	50.0	80.0	SCR	208/3	VAV-B	TITUS	DESV	1,2,3,4
VAV-VCC-06	112 OPEN OFFICE	10	905	355	905	9.0	50.0	80.0	SCR	208/3	VAV-A	TITUS	DESV	1,2,3,4
VAV-VCC-07	117 SR. TRAFFIC OFFICE	6	355	210	355	3.5	50.0	80.0	SCR	208/3	VAV-A	TITUS	DESV	1,2,3,4
VAV-VCC-08	BREAK ROOM 114	6	335	260	335	3.5	50.0	80.0	SCR	208/3	VAV-A	TITUS	DESV	1,2,3,4
VAV-VCC-09	110 MMT CARRIER	6	255	105	255	2.5	50.0	80.0	SCR	208/3	VAV-A	TITUS	DESV	1,2,3,4

NOTES:
1. TOTAL AIR PRESSURE DROP OF VAV TERMINAL BOX AND REHEAT COIL SHALL NOT EXCEED 0.50" W.C.
2. PROVIDE SINGLE-POINT POWER CONNECTION WITH INTEGRAL DISCONNECT AND CONTROL POWER TRANSFORMER.
3. CONTRACTOR TO CONFIRM HAND FOR CONTROL BOX CONNECTIONS PRIOR TO ORDERING.
4. NEITHER RADIATED NOR DISCHARGE SOUND LEVELS SHALL EXCEED NC 25 AT 1.0" INLET STATIC PRESSURE WHEN TESTED PER ARI STANDARD 885-98 USING 5/8" 20-LB DENSITY MINERAL FIBER CEILING TILE.
5. REFER TO M-700 SERIES FOR CONTROL SEQUENCE OF OPERATION AND POINTS LIST.

ELECTRIC HEATER SCHEDULE

SYMBOL	TYPE	SERVICE	AIR FLOW (CFM)	HEATING CAPACITY (KW)...	ELECTRICAL		CONTROL TYPE	WEIGHT (LBS.)	BASIS OF DESIGN		NOTES
					VOLTAGE/PHASE	DISCONNECT BY			MANUFACTURER	MODEL	
WH-VCC-01	WALL HEATER	100 VESTIBULE	175	1	120/1	MFR	NOTE 1	30	MARKEL	3320	2
WH-VCC-02	WALL HEATER	109 VESTIBULE	175	1	120/1	MFR	NOTE 1	30	MARKEL	3320	2
UH-VCC-01	UNIT HEATER	122 FIRE RISER	400	3.3	208/3	MFR	NOTE 1	25	MARKEL	5100	3
UH-GH-01	UNIT HEATER	106 FIRE RISER	400	3.3	208/3	MFR	NOTE 1	25	MARKEL	5100	3
UH-GH-02	UNIT HEATER	104 OUTSIDE STORAGE	400	3.3	208/3	MFR	NOTE 1	25	MARKEL	5100	3

NOTES:
1. PROVIDE WITH INTEGRAL THERMOSTAT.
2. WALL HEATER TO BE SURFACE MOUNTED.
3. MOUNT BOTTOM 9FT ABOVE FINISHED FLOOR.

HOOD SCHEDULE

SYMBOL	SERVICE	AIRFLOW (CFM)	HOOD SIZE DIAMETER (IN)	THROAT SIZE DIAMETER (IN)	THROAT AREA (SQ. FT.)	MAX. PRESSURE...	MAX. HEIGHT (IN.) TOP OF CURB TO TOP OF EQUIP.	WEIGHT (LBS.)	BASIS OF DESIGN		NOTES
									MAKE	MODEL	
EH-VCC-01	EF-VCC-01 EXHAUST	500	29	12.25	0.82	0.06	12	25	GREENHECK	GRSR	1,2,3
IH-GH-01	AHU-GH-01 OA INTAKE	250	29	12.25	0.82	0.04	12	25	GREENHECK	GRSI	1,2,3
EH-GH-01	EF-GH-01 EXHAUST	150	20.5	8.25	0.37	0.04	9	25	GREENHECK	GRSR	1,2,3

NOTES:
1. COORDINATE EXACT COLOR WITH GOVERNMENT.
2. PROVIDE WITH ALLUMINUM INSECT SCREEN.
3. PROVIDE WITH 18" TALL INSULATED ALUMINUM ROOF CURB. COORDINATE EXACT ROOF SLOPE WITH ARCHITECTURAL PLANS PRIOR TO ORDERING.

LOUVER SCHEDULE

SYMBOL	SERVICE	AIRFLOW (CFM)	SIZE WxH (IN)	MAX. FREE AREA VELOCITY(FPM)	MIN. FREE AREA (SQ. FT.)	MAX. PRESSURE LOSS (IN. WC.)	FINISH	BASIS OF DESIGN		NOTES
								MAKE	MODEL	
L-VCC-01	AHU-VCC-01 OA INTAKE	1,000	36x24	500	2.0	0.1	PVDF	GREENHECK	AFL-601	1,2,3

NOTES:
1. REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATION. EXACT COLOR TO BE DETERMINED BY GOVERNMENT/ARCHITECT.
2. LOUVER SHALL BE UL CLASSIFIED WIND-STORM RATED ASSEMBLY IN ACCORDANCE WITH FEMA P-320 AND P-361.
3. PROVIDE WITH ALUMINUM INSECT SCREEN.

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

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Plot Date: 4/16/2026 3:52:23 PM

DESIGNED BY: B. PERLBERG
DRAWN BY: A. GONZALEZ
CHECKED BY: A. OKTEN
SUBMITTED BY:
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US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

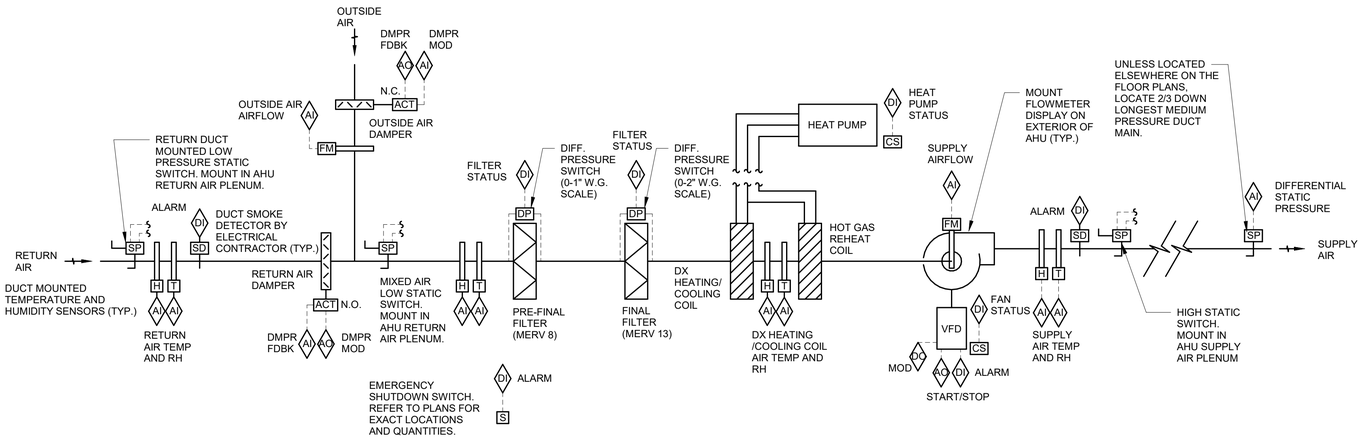
HDR
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

MECHANICAL SCHEDULES

SHEET ID
M-602

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



SEQUENCE OF OPERATION:
REFER TO M-706 FOR AIR HANDLING UNIT CONTROL: AHU-A POINTS LIST FOR ADDITIONAL INFORMATION.

WHEN AHU IS INDEXED TO RUN, THE FOLLOWING SHALL OCCUR:
- ASSOCIATED OUTSIDE AIR DAMPER SHALL OPEN AND ASSOCIATED RETURN AIR DAMPER SHALL MODULATE IN OPPOSITION TO MAINTAIN THE SCHEDULED OUTSIDE AIRFLOW.
- WHEN THE SUPPLY FAN HAS STARTED THE INTERLOCKED EXHAUST FAN (EF-VCC-01) SHALL START.

SUPPLY FAN OPERATION:
UMCS SHALL MODULATE SIGNAL TO SUPPLY FAN VFD AS REQUIRED TO MAINTAIN DUCT STATIC PRESSURE AS MEASURED BY STATIC PRESSURE TRANSMITTER. UMCS SHALL RESET SUPPLY DUCT STATIC PRESSURE SETPOINT AS REQUIRED TO MAINTAIN AT LEAST ONE SUPPLY TAB DAMPER 95% (ADJ.) OPEN. UMCS SHALL UTILIZE COMMAND TO ALL SUPPLY TERMINAL AIR BOX POSITIONS TO RESET THE SUPPLY DUCT DIFFERENTIAL STATIC PRESSURE.

DISCHARGE AIR TEMPERATURE SET POINT:
DISCHARGE AIR SETPOINT SHALL BE 55F (ADJ.)

DISCHARGE AIR TEMPERATURE RESET:
RESET DISCHARGE AIR TEMPERATURE BASED ON THE ZONE WITH THE GREATEST CALL FOR COOLING. RESET THE TEMPERATURE AS FOLLOWS:
- WHEN WORST CASE TAB IS OPEN BELOW 80% (ADJ.) FOR TEN MINUTES (ADJ.) THEN THE DISCHARGE AIR TEMPERATURE SHALL RAISE BY 1F (ADJ.). THIS SHALL CONTINUE UNTIL AHU MAXIMUM DISCHARGE AIR TEMPERATURE OF 60F (ADJ.) IS ACHIEVED.
- WHEN WORST CASE TAB IS OPEN ABOVE 90% (ADJ.) FOR TEN MINUTES (ADJ.) THEN THE DISCHARGE AIR TEMPERATURE SHALL DROP BY 1F (ADJ.). THIS SHALL CONTINUE UNTIL AHU MINIMUM DISCHARGE AIR TEMPERATURE OF 55F (ADJ.) IS ACHIEVED.
- THE MAXIMUM RETURN AIR HUMIDITY SETPOINT SHALL BE 60% (ADJ.) IF RETURN AIR HUMIDITY IS GREATER THAN SETPOINT, RESET DISCHARGE AIR TEMPERATURE TO 55F UNTIL RETURN AIR HUMIDITY IS 5% LESS THAN MAXIMUM SETPOINT.

USER TOGGLE - STATIC PRESSURE AND DISCHARGE AIR TEMPERATURE RESETS:
PROVIDE USER WITH OPTION TO USE EITHER STATIC PRESSURE RESET OT DISCHARGE AIR TEMPERATURE RESET. ONLY ONE CONTROL OPTION SHALL BE USED AT A TIME. GRAPHIC ON AHU SCREEN SHALL ALLOW USER TO TOGGLE FROM EITHER TEMPERATURE OR STATIC PRESSURE RESET.

VENTILATION AIR CONTROL:
WHENEVER THE AIR HANDLING UNIT IS IN OCCUPIED MODE, THE OUTSIDE AIR DAMPER SHALL BE FULLY OPEN TO THE AIRFLOW LISTED IN THE AHU SCHEDULE. THE RETURN AIR DAMPER SHALL MODULATE IN OPPOSITION TO MAINTAIN THE OUTSIDE AIR FLOW RATE.

COOLING AND HEATING COIL OPERATION:
WHEN IN OCCUPIED MODE, HEAT PUMP SHALL MODULATE AS REQUIRED TO MAINTAIN DISCHARGE AIR TEMPERATURE SET POINT.

DEHUMIDIFICATION OPERATION:
IF RETURN AIR RELATIVE HUMIDITY IS AT OR ABOVE 55% (ADJ.) FOR 15 MINUTES (ADJ.), THEN HEAT PUMP SHALL MODULATE TO PROVIDE 55F (ADJ.) OFF THE COOLING COIL AND HOT GAS REHEAT COIL SHALL MODULATE AS NEEDED TO PROVIDE A DISCHARGE AIR TEMPERATURE OF 55F (ADJ.) OFF THE AHU. THIS SHALL CONTINUE UNTIL RETURN AIR RELATIVE HUMIDITY DROPS BELOW 55% (ADJ.) FOR 15 MINUTES (ADJ.).

EMERGENCY SHUTDOWN OPERATION:
WHEN AN EMERGENCY SHUTDOWN SWITCH IS TURNED TO THE ON POSITION, ALL ASSOCIATED OUTSIDE AIR AND EXHAUST AIR MOTORIZED DAMPERS SHALL CLOSE. EF SHALL TURN OFF. AHU RETURN AIR DAMPER SHALL FULLY OPEN AND AHU SHALL CONTINUE TO OPERATE. THE EMERGENCY SHUTDOWN SWITCH SHALL HAVE AN ENGRAVED SIGN ABOVE IT STATING "EMERGENCY CLOSING OF OUTSIDE AND EXHAUST AIR LOUVERS AND TURNING OFF OF EXHAUST FAN.". COORDINATE EXACT WORDING WITH THE COR.

ALARMS, INTERLOCKS, AND SAFETIES:
WHEN FIRE ALARM CONTROL PANEL INDICATES AN ALARM CONDITION, AHU SHALL SHUTDOWN.

THE FOLLOWING CONDITIONS SHALL SHUTDOWN THE AHU AND SHALL INDICATE AN ALARM CONDITION AT THE UMCS WORKSTATION:
- LOW STATIC PRESSURE SWITCH INDICATES RETURN DUCT PRESSURE LESS THAN THE SPECIFIED DUCT PRESSURE CLASS.
- LOW STATIC PRESSURE SWITCH INDICATES MIXED AIR PRESSURE LESS THAN THE SPECIFIED DUCT PRESSURE CLASS OF THE OUTSIDE AIR DUCTWORK.
- HIGH STATIC PRESSURE INDICATES SUPPLY DUCT STATIC PRESSURE GREATER THAN THE SPECIFIED DUCT PRESSURE CLASS.

THE FOLLOWING CONDITIONS SHALL INDICATE AN ALARM AT THE UMCS, HOWEVER AHU SHALL CONTINUE TO OPERATE:
- AN ALARM IS INDICATED AT ANY SUPPLY FAN VFD.
- DIFFERENTIAL PRESSURE SWITCH ACROSS PRE-FILTER (MERV 8) BANK EXCEEDS 0.6 INCHES W.G. (ADJ.)
- DIFFERENTIAL PRESSURE SWITCH ACROSS FINAL FILTER (MERV 13) BANK EXCEEDS 1.0 INCHES W.G. (ADJ.)
- THE TOTAL DIFFERENTIAL PRESSURE ACROSS ALL FILTER BANKS EXCEEDS 2.0 INCHES W.G. (ADJ.)
- SEND AN ALARM TO THE UMCS OPERATOR INTERFACE IF THE DISCHARGE AIR TEMPERATURE IS MORE THAN 5F (ADJ.) ABOVE OR BELOW SETPOINT.

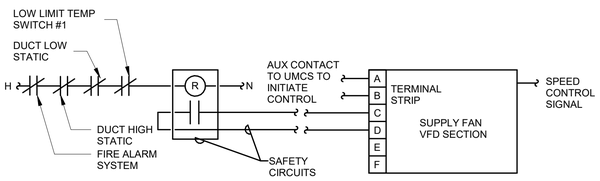
WHENEVER AHU IS SHUTDOWN THE FOLLOWING SHALL OCCUR:
- THE OUTSIDE AIR DAMPER SHALL FULLY CLOSE.
- RETURN AIR DAMPER SHALL FULLY OPEN.
- ALL COMBINATION FIRE/SMOKE DAMPERS AND SMOKE DAMPERS SHALL FULLY CLOSE.
- SUPPLY FAN VFDS SHALL BE DE-ENERGIZED.

UNOCCUPIED MODE:
PROVIDE TIME OF DAY SCHEDULE TO ALLOW AHU TO ENTER UNOCCUPIED MODE PER SCHEDULE. COORDINATE SCHEDULE WITH OWNNER.
- THE SUPPLY FANS SHALL CONTINUE RUNNING.
- THE OUTSIDE AIR DAMPER SHALL CLOSE AND RETURN AIR DAMPER SHALL OPEN.
- THE SPACE TEMPERATURES SHALL BE ALLOWED TO VARY +/- 10F (ADJ.) FROM OCCUPIED SETPOINT.

HEATING OPTIMUM START-UP:
- THIS CYCLE SHALL OVERRIDE THE UNOCCUPIED CYCLE. IF THE SYSTEM WAS OPERATING AS A RESULT OF THE UNOCCUPIED CYCLE, THE SYSTEM, SHALL CONTINUE TO OPERATE. THE DDC SYSTEM SHALL DETERMINE THE MINIMUM RUNTIME TO WARM THE SPACES TO THEIR SETPOINT WHEN THE COMPUTED START TIME IS REACHED. THE AIR HANDLING UNIT DISCHARGE AIR TEMPERATURE SHALL BE MAINTAINED AT A SETPOINT OF 85F (ADJ.). THE SYSTEM SHALL CONTINUE TO OPERATE IN THIS MODE UNTIL ALL TEMPERATURES EXCEED A SETPOINT OF 68F (ADJ.). AT THAT TIME, THE DDC SYSTEM SHALL SWITCH TO OCCUPIED CONTROL.

COOLING OPTIMUM START-UP:
- THIS CYCLE SHALL OVERRIDE THE UNOCCUPIED CYCLE. IF THE SYSTEM WAS OPERATING AS A RESULT OF THE UNOCCUPIED CYCLE, THE SYSTEM, SHALL CONTINUE TO OPERATE. THE DDC SYSTEM SHALL DETERMINE THE MINIMUM RUNTIME TO COOL THE SPACES TO THEIR SETPOINT WHEN THE COMPUTED START TIME IS REACHED. THE AIR HANDLING UNIT DISCHARGE AIR TEMPERATURE SHALL BE MAINTAINED AT A SETPOINT OF 55F (ADJ.). THE SYSTEM SHALL CONTINUE TO OPERATE IN THIS MODE UNTIL ALL TEMPERATURES ARE LESS THAN A SETPOINT OF 74F (ADJ.). AT THAT TIME, THE DDC SYSTEM SHALL SWITCH TO OCCUPIED CONTROL.

1 M-701 AIR HANDLING UNIT CONTROL: AHU-A
NOT TO SCALE



2 M-701 SUPPLY FAN VFD CONTROL
NOT TO SCALE

CONTROL SYMBOLS LIST

SYMBOL:	DESCRIPTION:
	FAN
	PUMP
	OCCUPANCY SENSOR
S	SWITCH IN ENCLOSURE
H	HUMIDISTAT/SENSOR (DUCT MOUNTED)
P	PRESSURE SENSOR (DUCT MOUNTED)
T	TEMPERATURE SENSOR (DUCT MOUNTED)
ACT	ACTUATOR
	CONTROL VALVE (TWO-WAY)
	CONTROL VALVE (THREE-WAY)
	SOLENOID VALVE
	TEMPERATURE SENSOR WITH WELL
	CONDUCTIVITY PROBE
MC	MECHANICAL CONTRACTOR
EC	ELECTRICAL CONTRACTOR
TCC	TEMP. CONTROLS CONTRACTOR
EA	EXHAUST/RELIEF AIR
N.C.	NORMALLY CLOSED
N.O.	NORMALLY OPEN
OA	OUTSIDE AIR
RA	RETURN AIR
SA	SUPPLY AIR
UMCS	UTILITY AND MANAGEMENT CONTROL SYSTEM
AI	ANALOG INPUT
AO	ANALOG OUTPUT
DI	DIGITAL INPUT
DO	DIGITAL OUTPUT
	HEATING/COOLING COIL
	FILTER
	TERMINAL AIR BOX WITH REHEAT COIL
	MOTOR OPERATED DAMPER

GENERAL CONTROL NOTES (APPLY TO ALL CONTROL SHEETS)

1. REFER TO EQUIPMENT SCHEDULES TO CROSS REFERENCE WHICH CONTROL DIAGRAMS APPLY TO WHICH EQUIPMENT. REFER TO VARIABLE AIR VOLUME BOX (VAV) SCHEDULES FOR TEMPERATURE SENSOR REQUIREMENTS FOR EACH VAV.
2. EACH D.I., D.O., AND A.O. POINT SHOWN FOR ALL CONTROL DIAGRAMS SHALL BE DISCRETE FROM ALL OTHER POINTS EXCEPT AS SPECIFICALLY NOTED.
3. ALL WIRING, CONTROL COMPONENTS, DEVICES, AND PROGRAMMING SHOWN ON THESE CONTROL DRAWINGS SHALL BE PROVIDED BY THE TCC UNLESS SPECIFICALLY NOTED OTHERWISE.
4. ALL ACTUATORS SHALL BE OF THE ELECTRICAL TYPE UNLESS AN ACTUATOR IS SPECIFICALLY INDICATED ON THE DRAWINGS OR SPECIFICATIONS TO BE PNEUMATIC.
5. ALL MODULATING DAMPER ACTUATORS SHOWN WITH POSITION FEEDBACK SHALL HAVE THE VALVE POSITION DISPLAYED ON GRAPHICAL SCREEN ADJACENT TO THE DAMPER/VALVE COMMAND SIGNAL. DISPLAYED POSITION SHALL BE FROM THE FEEDBACK DEVICE CIRCUIT (OUTPUT SIGNAL FROM THE UMCS TO THE ACTUATOR IS NOT ACCEPTABLE).
6. MODULATING SIGNALS SHALL BE DISPLAYED AS % OPEN (SIGNALS DISPLAYED ARE % CLOSED ARE NOT ACCEPTABLE).
7. PRESSURE TRANSMITTERS WHOSE SIGNAL IS UTILIZED FOR MAINTAINING DUCT STATIC PRESSURE SHALL BE WIRED DIRECTLY TO THE CONTROLLER WHICH MODULATES FAN SPEED. SIGNAL SHALL BE COMPLETELY INDEPENDENT OF THE UMCS NETWORK.
8. ALL CONTROL COMPONENTS SUCH AS RELAYS, SWITCHES, DDC CONTROLLERS, ETC. SHALL BE MOUNTED IN NEMA 2 ENCLOSURES WITH STEEL MOUNTING BACKPLATES.
9. EACH CONTROL PANEL SHALL HAVE A LAMINATED COPY OF THE APPLICABLE SEQUENCE OF OPERATIONS AND CONTROL DIAGRAMS INDICATING THE POINTS, COMPONENTS, AND OPERATION OF EQUIPMENT ASSOCIATED WITH EACH PANEL.
10. TCC SHALL WIRE THE CONTROL SIGNAL FROM THE ASSOCIATED AIR HANDLING UNIT OT ROOFTOP UNIT CONTROL PANEL TO CONTROL THE OPERATION OF FIRE/SMOKE AND SMOKE DAMPERS IN ACCORFANCE WITH THE APPROPRIATE SEQUENCE OF OPERATION. TCC SHALL PROVIDE ALL CONDUIT, TRANSFORMERS, FUSING, ALL ALL OTHER ELECTRICAL COMPONENTS REQUIRED FOR COMPLETE INSTALLATION.
11. TCC SHALL EXTEND CONTROL SIGNAL FROM ADDRESSABLE RELAY DEVICES SERVING EACH AIR HANDLING UNIT OR ROOFTOP UNIT. REFER TO PLANS FOR LOCATIONS. TCC SHALL EXTEND AND TERMINATE WIRING AS REQUIRED FOR EMERGENCY SHUTDOWN.
12. TCC SHALL EXTEND 120 COLT POWER FROM CONTROL PANEL JUNCTION BOX TO ALL VARIABLE AIR VOLUME CONTROLLERS SHOWN THE MECHANICAL PLANS. TCC SHALL PROVIDE ALL TRANSFORMERS, WIRING, SUPPORTS, FUSING, TOGGLE SWITCHES, AND ALL OTHER ELECTRICAL COMPONENTS REQUIRED FOR COMPLETE INSTALLATION.
13. TCC SHALL PROVIDE CONDUIT RUNS FOR OUTDOOR EQUIPMENT AND FOR EQUIPMENT INSTALLED REMOTELY FROM THE MAIN BUILDING THAT IS BEING MONITORED OR CONTROLLED BY THE UMCS.
14. TCC SHALL PROVIDE THERMOSTATS FOR AUTOMATIC CONTROL OF EQUIPMENT AS SHOWN IN THE CONTROL DIAGRAMS AND FLOOR PLANS. THERMOSTAT CONTACT AMP RATING SHALL BE MINIMUM 125% OF THE MAXIMUM CURRENT DRAW FOR THE EQUIPMENT BEING SERVED. WHERE THERMOSTATS CONTROL THE STARTING OF MOTORS SUCH AS FANS, THERMOSTATS SHALL BE RATED FOR MOTOR STARTING APPLICATIONS.
15. ELEMENT LENGTHS FOR BOTH MIXED AIR TEMPERATURE SENSORS AND LOW LIMIT TEMPERATURE SWITCHES SHALL BE MINIMUM 1 LINEAR FOOT PER SQUARE FOOT OF COIL SURFACE AREA. PROVIDE MULTIPLE SENSORS AND SWITCHES AS NEEDED TO ACHIEVE REQUIRED ELEMENT LENGTHS. LOCATE RESET SWITCHES MAXIMUM 6'-6" ABOVED ADJACENT ATANDING SURFACE (I.E. ROOF, PLATFROM, OR FLOOR) SO THE RESET SWITCH CAN BE CYCLED WITHOUT THE NEED FOR A LADDER.
16. CONTROL DIAGRAMS ARE SCHEMATIC IN NATURE AND DO NOT SHOW ALL REQUIRED CONTROL DEVICES AND COMPONENTS. REFER TO FLOOR PLANS AND DETAILS FOR ADDITIONAL CONTROL DEVICES, COMPONENTS, AND REQUIREMENTS NOT SHOWN ON THE CONTROL DRAWINGS.
17. TCC SHALL PROVIDE ALL CONTROL COMPONENTS AND ACCESSORIES AS REQUIRED FOR THE EQUIPMENT TO BE CONTROLLED AS DESCRIBED IN THE SEQUENCE OF OPERATION REGARDLESS OF WHETHER ALL CONTROL COMPONENTS OR POINTS ARE SHOWN IN THE ASSOCIATED CONTROL DIAGRAM.

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

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Plot Date: 4/16/2026 3:52:23 PM

DESIGNED BY: B. PERLBERG
DRAWN BY: A. GONZALEZ
CHECKED BY: A. CLAYTON
SUBMITTED BY:
ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W912QR24R6002
CONTRACT NO.: W912QR25B0035
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

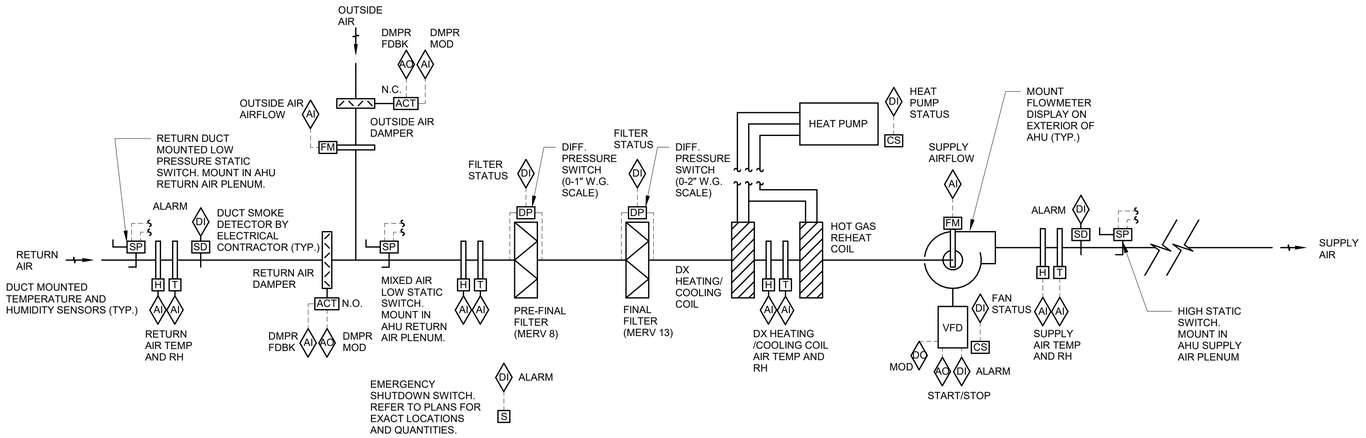
HDR
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

MECHANICAL CONTROLS

SHEET ID
M-701

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



SEQUENCE OF OPERATION:
REFER TO M-707 FOR AIR HANDLING UNIT CONTROL: AHU-B POINTS LIST FOR ADDITIONAL INFORMATION.

WHEN AHU IS INDEXED TO RUN, THE FOLLOWING SHALL OCCUR:
- ASSOCIATED OUTSIDE AIR DAMPER SHALL OPEN AND ASSOCIATED RETURN AIR DAMPER SHALL MODULATE IN OPPOSITION TO MAINTAIN THE SCHEDULED OUTSIDE AIRFLOW.
- WHEN THE SUPPLY FAN HAS STARTED THE INTERLOCKED EXHAUST FAN (EF-GH-01) SHALL START.

SUPPLY FAN OPERATION:
UMCS SHALL MODULATE SIGNAL TO SUPPLY FAN VFD ALONG WITH HEAT PUMP MODULATION TO MAINTAIN SPACE TEMPERATURE SETPOINT.

DISCHARGE AIR TEMPERATURE SET POINT:
DISCHARGE AIR SETPOINT SHALL BE 55F (ADJ.)

VENTILATION AIR CONTROL:
WHENEVER THE AIR HANDLING UNIT IS IN OCCUPIED MODE, THE OUTSIDE AIR DAMPER SHALL BE FULLY OPEN TO THE AIRFLOW LISTED IN THE AHU SCHEDULE. THE RETURN AIR DAMPER SHALL MODULATE IN OPPOSITION TO MAINTAIN THE OUTSIDE AIR FLOW RATE.

COOLING AND HEATING COIL OPERATION:
WHEN IN OCCUPIED MODE, HEAT PUMP SHALL MODULATE AS REQUIRED TO MAINTAIN DISCHARGE AIR TEMPERATURE SET POINT.

DEHUMIDIFICATION OPERATION:
IF RETURN AIR RELATIVE HUMIDITY IS AT OR ABOVE 55% (ADJ.) FOR 15 MINUTES (ADJ.), THEN HEAT PUMP SHALL MODULATE TO PROVIDE 50F (ADJ.) OFF THE COOLING COIL AND HOT GAS REHEAT COIL SHALL MODULATE AS NEEDED TO PROVIDE A DISCHARGE AIR TEMPERATURE OF 55F (ADJ.) OFF THE AHU. THIS SHALL CONTINUE UNTIL RETURN AIR RELATIVE HUMIDITY DROPS BELOW 55% (ADJ.) FOR 15 MINUTES (ADJ.).

EMERGENCY SHUTDOWN OPERATION:
WHEN AN EMERGENCY SHUTDOWN SWITCH IS TURNED TO THE ON POSITION, ALL ASSOCIATED OUTSIDE AIR AND EXHAUST AIR MOTORIZED DAMPERS SHALL CLOSE. EF SHALL TURN OFF. AHU RETURN AIR DAMPER SHALL FULLY OPEN AND AHU SHALL CONTINUE TO OPERATE. THE EMERGENCY SHUTDOWN SWITCH SHALL HAVE AN ENGRAVED SIGN ABOVE IT STATING "EMERGENCY CLOSING OF OUTSIDE AND EXHAUST AIR LOUVERS AND TURNING OFF OF EXHAUST FAN.". COORDINATE EXACT WORDING WITH THE COR.

ALARMS, INTERLOCKS, AND SAFETIES:
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THE FOLLOWING CONDITIONS SHALL SHUTDOWN THE AHU AND SHALL INDICATE AN ALARM CONDITION AT THE UMCS WORKSTATION:
- LOW STATIC PRESSURE SWITCH INDICATES RETURN DUCT PRESSURE LESS THAN THE SPECIFIED DUCT PRESSURE CLASS.
- LOW STATIC PRESSURE SWITCH INDICATES MIXED AIR PRESSURE LESS THAN THE SPECIFIED DUCT PRESSURE CLASS OF THE OUTSIDE AIR DUCTWORK.
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THE FOLLOWING CONDITIONS SHALL INDICATE AN ALARM AT THE UMCS, HOWEVER AHU SHALL CONTINUE TO OPERATE:
- AN ALARM IS INDICATED AT ANY SUPPLY FAN VFD.
- DIFFERENTIAL PRESSURE SWITCH ACROSS PRE-FILTER (MERV 8) BANK EXCEEDS 0.6 INCHES W.G. (ADJ.)
- DIFFERENTIAL PRESSURE SWITCH ACROSS FINAL FILTER (MERV 13) BANK EXCEEDS 1.0 INCHES W.G. (ADJ.)
- THE TOTAL DIFFERENTIAL PRESSURE ACROSS ALL FILTER BANKS EXCEEDS 2.0 INCHES W.G. (ADJ.)
- SEND AN ALARM TO THE UMCS OPERATOR INTERFACE IF THE DISCHARGE AIR TEMPERATURE IS MORE THAN 5F (ADJ.) ABOVE OR BELOW SETPOINT.

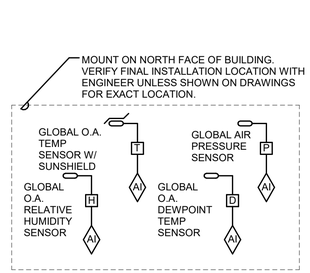
WHENEVER AHU IS SHUTDOWN THE FOLLOWING SHALL OCCUR:
- THE OUTSIDE AIR DAMPER SHALL FULLY CLOSE.
- RETURN AIR DAMPER SHALL FULLY OPEN.
- ALL COMBINATION FIRE/SMOKE DAMPERS AND SMOKE DAMPERS SHALL FULLY CLOSE.
- SUPPLY FAN VFDS SHALL BE DE-ENERGIZED.

UNOCCUPIED MODE:
PROVIDE TIME OF DAY SCHEDULE TO ALLOW AHU TO ENTER UNOCCUPIED MODE PER SCHEDULE. COORDINATE SCHEDULE WITH OWNER.
- THE SUPPLY FANS SHALL CONTINUE RUNNING.
- THE OUTSIDE AIR DAMPER SHALL CLOSE AND RETURN AIR DAMPER SHALL OPEN.
- THE SPACE TEMPERATURES SHALL BE ALLOWED TO VARY +/- 10F (ADJ.) FROM OCCUPIED SETPOINT.

HEATING OPTIMUM START-UP:
- THIS CYCLE SHALL OVERRIDE THE UNOCCUPIED CYCLE. IF THE SYSTEM WAS OPERATING AS A RESULT OF THE UNOCCUPIED CYCLE, THE SYSTEM, SHALL CONTINUE TO OPERATE. THE DDC SYSTEM SHALL DETERMINE THE MINIMUM RUNTIME TO WARM THE SPACES TO THEIR SETPOINT WHEN THE COMPUTED START TIME IS REACHED. THE AIR HANDLING UNIT DISCHARGE AIR TEMPERATURE SHALL BE MAINTAINED AT A SETPOINT OF 85F (ADJ.). THE SYSTEM SHALL CONTINUE TO OPERATE IN THIS MODE UNTIL ALL TEMPERATURES EXCEED A SETPOINT OF 68F (ADJ.). AT THAT TIME, THE DDC SYSTEM SHALL SWITCH TO OCCUPIED CONTROL.

COOLING OPTIMUM START-UP:
- THIS CYCLE SHALL OVERRIDE THE UNOCCUPIED CYCLE. IF THE SYSTEM WAS OPERATING AS A RESULT OF THE UNOCCUPIED CYCLE, THE SYSTEM, SHALL CONTINUE TO OPERATE. THE DDC SYSTEM SHALL DETERMINE THE MINIMUM RUNTIME TO COOL THE SPACES TO THEIR SETPOINT WHEN THE COMPUTED START TIME IS REACHED. THE AIR HANDLING UNIT DISCHARGE AIR TEMPERATURE SHALL BE MAINTAINED AT A SETPOINT OF 55F (ADJ.). THE SYSTEM SHALL CONTINUE TO OPERATE IN THIS MODE UNTIL ALL TEMPERATURES ARE LESS THAN A SETPOINT OF 74F (ADJ.). AT THAT TIME, THE DDC SYSTEM SHALL SWITCH TO OCCUPIED CONTROL.

1 M-702 AIR HANDLING UNIT CONTROL: AHU-B
NOT TO SCALE



SEQUENCE OF OPERATION:
REFER TO M-705 FOR GLOBAL REFERENCE POINTS LIST FOR ADDITIONAL INFORMATION.

PROVIDE GLOBAL O.A. DRY-BULB TEMPERATURE, GLOBAL O.A. DEWPOINT TEMPERATURE, GLOBAL CARBON DIOXIDE, OUTSIDE AIR REFERENCE PRESSURE, AND RELATIVE HUMIDITY TRANSMITTERS.

OUTSIDE AIR PRESSURE SHALL BE INSTALLED ON ALL FOUR SIDES OF THE BUILDING AND PIPED WITH EQUAL LENGTHS OF 1/4" TUBING TO A PIPE MANIFOLD. PIPING BY TCC. LOCATIONS TO BE DETERMINED PER MANUFACTURER'S RECOMMENDATIONS AND ENGINEER'S APPROVAL. TCC SHALL PRIME AND PAINT THE DEVICE ENCLOSURE.

GLOBAL SENSORS SHALL CONTINUOUSLY UPDATE UMCS FOR USE IN CONTROLLING MECHANICAL EQUIPMENT AS REQUIRED IN SEQUENCES OF OPERATION.

2 M-702 GLOBAL REFERENCE POINTS
NOT TO SCALE

AIR HANDLING UNIT REPORT GENERATION:
UMCS SHALL MONITOR THE FOLLOWING POINTS ON 10 MINUTE (ADJ.) INTERVALS WITHIN A SINGLE TREND. THE TREND SHALL RUN FOR A 100-DAY (ADJ.) DURATION AT WHICH POINT THE NEWEST VALUES SHALL AUTOMATICALLY OVERWRITE THE OLDEST VALUES:

- DATE
- TIME
- GLOBAL OUTSIDE AIR TEMP [F]
- GLOBAL OUTSIDE AIR DEWPOINT [F]
- GLOBAL OUTSIDE AIR HUMIDITY [%RH]
- SUPPLY AIRFLOW [CFM]
- SUPPLY AIR TEMP (SAT) [F]
- SUPPLY AIR TEMP SETPOINT [F]
- SUPPLY AIR RELATIVE HUMIDITY [%RH]
- RETURN AIR TEMP (RAT) [F]
- RETURN AIR RELATIVE HUMIDITY [%RH]
- MIXED AIR TEMP [F]
- PRE-FILTER LOADING (MERV 8 FILTER) [INCHES W.G.]
- FINAL FILTER LOADING (MERV 13 FILTER) [INCHES W.G.]
- SUPPLY DUCT STATIC PRESSURE SETPOINT [INCHES W.G.]
- SUPPLY DUCT STATIC PRESSURE [INCHES W.G.]
- SUPPLY FAN VFD OUTPUT [% FULL SPEED]
- OUTSIDE AIRFLOW [CFM]
- OUTSIDE AIR DAMPER POSITION [% OPEN]
- RETURN AIR DAMPER POSITION [%OPEN]

THIS INFORMATION SHALL BE ACCESSIBLE TO VIEW IN GRAPHICAL FORM ON THE UMCS OPERATOR WORKSTATION.

ONCE PER MONTH, THE UMCS SHALL RECORD THE LARGEST AHU AIRFLOW WHICH OCCURED DURING THAT MONTH. THE DATE, TIME, OUTSIDE AIR TEMP (AND ALL OTHER VALUES LISTED ABOVE) THAT COINCIDED WITH THAT EVENT SHALL ALSO BE RECORDED. THIS INFORMATION SHALL BE STORED TO A MEMORY LOCATION ON THE UMCS OPERATOR WORKSTATION THAT IS MAINTAINED (NOT AUTOMATICALLY OVERWRITTEN).

3 M-702 AIR HANDLING UNIT REPORT GENERATION
NOT TO SCALE

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

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DRAWN BY: A. GONZALEZ
CHECKED BY: A. PETERSON
SUBMITTED BY:
ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W912T524F6002
CONTRACT NO.: W912T525C0035
SIZE: ANSI D
Plot Date:

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

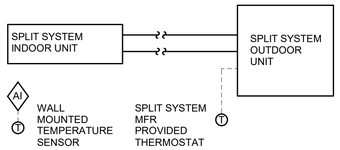
HDR
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

MECHANICAL CONTROLS

SHEET ID
M-702

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



SEQUENCE OF OPERATION:

REFER TO M-705 FOR SPLIT SYSTEM CONTROL: SS-A POINTS LIST FOR ADDITIONAL INFORMATION.

THE SPLIT SYSTEM IS CONTROLLED BY A FACTORY ASSEMBLED AND MOUNTED MICROPROCESSOR BASED CONTROL SYSTEM.

THE SPACE TEMPERATURE SETPOINT SHALL BE BETWEEN 65F AND 78F (ADJ.) FOR HEAT PUMPS AND 40F AND 80F (ADJ.) FOR NON-HEAT PUMPS.

THE MICROPROCESSOR CONTROL SYSTEM SHALL BE PROGRAMMED ON A DAILY BASIS PROGRAM SCHEDULE AND SHALL AUTOMATICALLY RESTART FOLLOWING A POWER FAILURE.

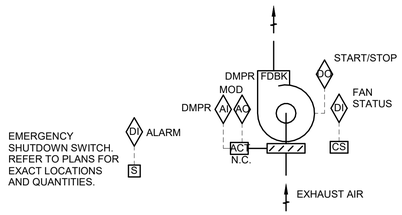
IN ADDITION TO THE SPLIT SYSTEM MANUFACTURER WALL MOUNTED THERMOSTAT, A WALL MOUNTED TEMPERTURE SENSOR SHALL BE PROVIDED.

THE WALL MOUNTED TEMPERATURE SENSOR SHALL BE TIED INTO THE UMCS.

ALARMS, INTERLOCKS AND SAFETIES:

SEND AN ALARM TO THE UMCS OPERATOR WORKSTATION UPON THE SPACE TEMPERATURE RISING 5F (ADJ.) ABOVE THE SPACE SETPOINT.

1 / M-703 SPLIT SYSTEM CONTROL: SS-A
NOT TO SCALE



SEQUENCE OF OPERATION:
REFER TO M-705 FOR EXHAUST FAN CONTROL: EF-A POINTS LIST FOR ADDITIONAL INFORMATION.

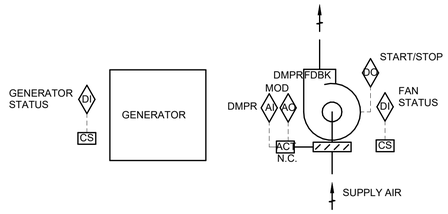
EXHAUST FAN SHALL RUN AND ASSOCIATED DAMPER SHALL OPEN WHEN ASSOCIATED AHU IS OPERATING. EXHAUST FAN SHALL BE OFF AND ASSOCIATED DAMPER CLOSED WHEN ASSOCIATED AHU IS OFF.

EMERGENCY SHUTDOWN OPERATION:
WHEN AN EMERGENCY SHUTDOWN SWITCH IS TURNED TO THE ON POSITION, EXHAUST AIR MOTORIZED DAMPERS SHALL CLOSE AND EF SHALL TURN OFF.

ALARMS, INTERLOCKS AND SAFETIES:
AN ALARM SHALL BE GENERATED AT THE UMCS OPERATOR WORKSTATION IF THE FOLLOWING EVENTS OCCUR:

- THE UMCS COMMANDS THE EXHAUST FAN TO OPERATE AND THE CURRENT SENSING RELAY DETECTS INSUFFICIENT CURRENT DRAW OR COMMANDS THE SUPPLY FAN TO STOP AND THE CURRENT SENSING RELAY SENSES CURRENT DRAW.
- THE UMCS COMMANDS THE EXHAUST AIR DAMPER TO CLOSE OR OPEN AND IT REMAINS IN ITS CURRENT POSITION.

2 / M-703 EXHAUST FAN CONTROL: EF-A
NOT TO SCALE



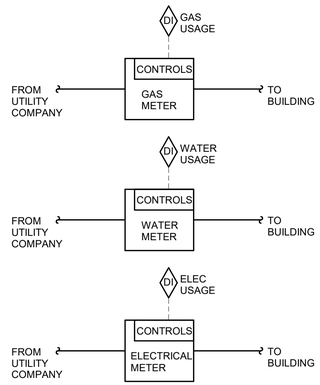
SEQUENCE OF OPERATION:
REFER TO M-705 FOR SUPPLY FAN CONTROL: SF-A POINTS LIST FOR ADDITIONAL INFORMATION.

SUPPLY FAN SHALL RUN WHEN THE BUILDING'S GENERATOR TURNS ON. WHEN THE BUILDING'S GENERATOR IS OFF, THE SUPPLY FAN SHALL BE OFF AND ASSOCIATED DAMPER CLOSED.

ALARMS, INTERLOCKS AND SAFETIES:
AN ALARM SHALL BE GENERATED AT THE UMCS OPERATOR WORKSTATION IF THE FOLLOWING EVENTS OCCUR:

- THE UMCS COMMANDS THE SUPPLY FAN TO OPERATE AND THE CURRENT SENSING RELAY DETECTS INSUFFICIENT CURRENT DRAW OR COMMANDS THE SUPPLY FAN TO STOP AND THE CURRENT SENSING RELAY SENSES CURRENT DRAW.
- THE UMCS COMMANDS THE OUTSIDE AIR DAMPER TO CLOSE OR OPEN AND IT REMAINS IN ITS CURRENT POSITION.

3 / M-703 SUPPLY FAN CONTROL: SF-A
NOT TO SCALE



SEQUENCE OF OPERATION:
REFER TO M-705 FOR UTILITY MONITORING CONTROL POINTS LIST FOR ADDITIONAL INFORMATION.

GAS METERING - CONNECT GAS METER TO UMCS FOR CONSUMPTION INFORMATION.

WATER METERING - CONNECT WATER METER TO UMCS FOR CONSUMPTION INFORMATION.

ELECTRICITY METERING - CONNECT ELECTRICAL METER TO UMCS FOR CONSUMPTION INFORMATION.

4 / M-703 UTILITY MONITORING CONTROL
NOT TO SCALE

UTILITY METERING REPORT GENERATION:

FMCS SHALL MONITOR THE FOLLOWING POINTS ON 5 MINUTE (ADJ.) INTERVALS WITHIN A SINGLE TREND. THE TREND SHALL RUN FOR A 14-DAY (ADJ.) DURATION AT WHICH POINT THE NEWEST VALUES SHALL OVERWRITE THE OLDEST VALUES.

- DATE
- TIME
- GLOBAL AIR TEMP. [F]
- GLOBAL OUTSIDE AIR DEWPOINT TEMP. [F]
- GAS USE [THERMS]
- WATER USE [GALLONS]
- ELECTRICAL USE [KW]

THIS INFORMATION SHALL BE ACCESSIBLE TO VIEW IN EITHER TABULAR OR GRAPHICAL FORM ON THE FMCS OPERATOR INTERFACE.

ONCE PER MONTH, THE FMCS SHALL RECORD THE LARGEST GAS USE (IN KW), WATER USE (IN LITERS), AND ELECTRICAL USE (IN KW) WHICH OCCURED DURING THAT MONTH. THE DATE AND TIME THAT COINCIDED WITH THAT EVENT SHALL ALSO BE RECORDED. THIS INFORMATION SHALL BE STORED TO A MEMORY LOCATION ON THE FMCS OPERATOR INTERFACE THAT IS MAINTAINED (NOT AUTOMATICALLY OVERWRITTEN). THE CHILLED AND HEATING SYSTEM LOADS ARE DESCRIBED UNDER THEIR SPECIFIC REPORT GENERATION DESCRIPTION.

5 / M-703 UTILITY MONITORING REPORT GENERATION
NOT TO SCALE

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

File Path: C:\n\d2025\104000\19-All-PBA_VDC_Arlana.Gonzalez\DKXCW.rvt

Plot Date: 4/16/2026 3:52:25 PM

DESIGNED BY: B. PERLBERG
DRAWN BY: A. GONZALEZ
CHECKED BY: A. ORTEGA
SUBMITTED BY:
ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W912T524F6002
CONTRACT NO.: W912T523C0035
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

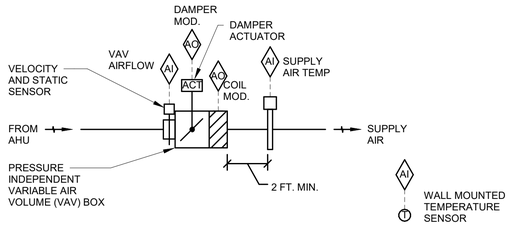
HDR
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

MECHANICAL CONTROLS

SHEET ID
M-703

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

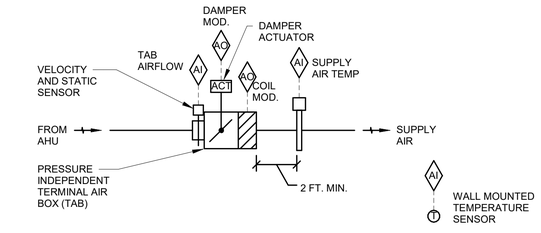


SEQUENCE OF OPERATION:
REFER TO M-706 FOR VARIABLE AIR VOLUME BOX CONTROL: VAV-A POINTS LIST FOR ADDITONAL INFORMATION

- UMCS VAV CONTROLLER SHALL MODULATE THE VAV DAMPER AND VAV REHEAT COIL TO MAINTAIN SPACE TEMPERATURE OF 68 F (ADJ.) WITH 2 F (ADJ.) DEAD BAND BASED ON A SIGNAL FROM A WALL MOUNTED TEMPERATURE SENSOR. SEE DRAWINGS FOR TEMPERATURE SENSOR REQUIREMENTS. SPACES WITH ADJUSTABLE THERMOSTATS WILL ALLOW A +/- 3 F (ADJ.) OFFSET FROM THE DDC SETPOINT.
- AT FULL COOLING, THE VAV SHALL BE OPEN TO MAXIMUM CFM POSITION. THE REHEAT COIL SHALL BE OFF.
- UPON A FALL IN SPACE TEMPERATURE, THE VAV SHALL MODULATE CLOSED UNTIL THE SPACE SETPOINT IS MAINTAINED, OR UNTIL IT REACHES ITS MINIMUM SCHEDULED CFM POSITION PER THE VAV SCHEDULE. THE REHEAT COIL SHALL BE OFF.
- UPON A FURTHER FALL IN SPACE TEMPERATURE, THE REHEAT COIL SHALL MODULATE ON TO MAINTAIN SPACE SETPOINT UNTIL THE SUPPLY AIR TEMPERATURE IS 20 F (ADJ.) ABOVE ROOM TEMPERATURE SETPOINT.
- UPON A FURTHER FALL IN SPACE TEMPERATURE, VAV SHALL OPEN TO MAINTAIN SETPOINT UNTIL VAV AIRFLOW REACHES ITS MAXIMUM HEATING SETTING. THE REHEAT COIL SHALL CONTINUE TO MODULATE ON TO MAINTAIN MAXIMUM DELTA T LISTED ABOVE.
- THE UMCS SHALL UTILIZE OUTPUT FROM ALL VARIABLE AIR VOLUME BOX POSITIONS TO RESET THE SUPPLY DUCT DIFFERENTIAL STATIC PRESSURE SETPOINT.

ALARMS, INTERLOCKS & SAFETIES:
- SEND AN ALARM TO THE UMCS OPERATOR INTERFACE IF THE SPACE TEMPERATURE IS MORE THAN 10 F (ADJ.) ABOVE OR BELOW SETPOINT.

1 M-704 VAV TERMINAL CONTROL WITH ELECTRIC REHEAT: VAV-A
NOT TO SCALE



SEQUENCE OF OPERATION:
REFER TO M-707 FOR CONSTANT VOLUME VAV CONTROL WITH HOT WATER REHEAT: TAB-B POINTS LIST FOR ADDITIONAL INFORMATION

UMCS CONTROLLER SHALL MODULATE THE TAB DAMPER TO MAINTAIN AIRFLOW TO THE ROOM.

UMCS TAB CONTROLLER SHALL MODULATE THE TAB DAMPER AND REHEAT COIL TO MAINTAIN SPACE TEMPERATURE OF 68 F (ADJ.) WINTER AND 74 F (ADJ.) SUMMER WITH 2 F (ADJ.) DEAD BAND BASED ON A SIGNAL FROM A WALL MOUNTED TEMPERATURE SENSOR. SEE SCHEDULES FOR TEMPERATURE SENSOR REQUIREMENTS. SPACES WITH ADJUSTABLE THERMOSTATS WILL ALLOW A +/- 3 F (ADJ.) OFFSET FROM THE DDC SETPOINT

THE UMCS SHALL UTILIZE OUTPUT FROM ALL TERMINAL AIR BOX POSITIONS TO RESET THE SUPPLY DUCT DIFFERENTIAL STATIC PRESSURE.

ALARMS, INTERLOCKS AND SAFETIES:
THE FOLLOWING CONDITIONS SHALL INDICATE AN ALARM CONDITION AT THE UMCS WORKSTATION:
- IF THE SPACE TEMPERATURE IS MORE THAN 10 F (ADJ.) ABOVE OR BELOW SETPOINT.

2 M-704 CONSTANT VOLUME VAV TERMINAL CONTROL WITH ELECTRIC REHEAT: VAV-B
NOT TO SCALE

VARIABLE AIR BOX REPORT & REHEAT COIL REPORT GENERATION:
DDC UMCS SHALL BE PROGRAMMED TO GENERATE THE FOLLOWING REPORT BASED ON A MANUAL COMMAND FROM THE DDC UMCS WORKSTATION BY CLICKING ON A GRAPHICAL BUTTON. UPON INITIATING COMMAND THE DDC SHALL COMPILE A REPORT AS FOLLOWS:

TAB/COIL SYMBOL	AIRFLOW(CFM) MAX/ACTUAL/MIN	DMPR POS (% OPEN)	SUP AIR TEMP (DEG. F)	RM STPT (DEG. F)	RM TEMP (DEG. F)
***	***/***/***	85%	80.2	68	68.8
***	***/***/***	80%	81	68	69.2

WHERE AS THE SAMPLE REPORT ABOVE SHOWS ONLY A COUPLE VAV/COILS. THE FINAL PROGRAMMED REPORT SHALL LIST ALL VAVS/COILS SERVED BY A SINGLE AHU. A SEPERATE REPORT SHALL BE PROGRAMMED FOR EACH AHU AMD FOR EACH FLOOR.

AFTER THE REPORT PRINTS OUT ALL VAV/HEATING COIL DATA, THE DDC UMCS SHALL AUTOMATICALLY TOTAL ALL THE INDIVIDUAL VAV AIRFLOW TO A SINGLE VALUE.

AFTER PRINTING THE SUM OF THE VAV/HEATING COIL AIRFLOW CFM, THE DDC UMCS SHALL THEN AUTOMATICALLY PRINT OUT THE AIR HANDLER REPORT FOR THE AHU WHICH SERVES THE VAVS/HEATING COILS LISTED IN THE REPORT.

DDC UMCS SHALL ALLOW THE UMCS TO ISSUE A SINGLE COMMAND THAT WILL AUTOMATICALLY CHANGE THE LOCAL SETPOINT FOR EACH VAV SERVED BY A AHU TO A SINGLE VALUE (E.G. A SINGLE COMMAND WILL SET ALL VAVS/HEATING COILS SERVED BU AHU-A TO 80 F). A SEPERATE VAV/HEATING COIL SETPOINT OVERRIDE COMMAND SHALL BE PROGRAMMED IN THE UMCS FOR EACH AHU.

3 M-704 VARIABLE AIR VOLUME BOX REPORT GENERATION
NOT TO SCALE

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

File Path: C:\vc\2025\104000\78-A\PBA_VCE_Ariana.Gonzalez\DKXCW.rvt

Plot Date: 4/16/2026 3:52:26 PM

DESIGNED BY: B. PERLBERG
DRAWN BY: A. GONZALEZ
CHECKED BY: A. CRITTEN
SUBMITTED BY:
ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W912TS24F6002
CONTRACT NO.: W912TS23D0035
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HDR
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

MECHANICAL CONTROLS

SHEET ID
M-704

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

EXHAUST FAN CONTROL: EF-A POINTS LIST

POINT DESCRIPTION	INPUT		OUTPUT		SETPOINT ADJUSTMENT	CRITICAL ALARM	HIGH LIMIT	LOW LIMIT	FAILURE	TREND	EVENT HISTORY	ARCHIVE	TOTALIZATION	GRAPHIC	UNITS
	ANALOG	DIGITAL	ANALOG	DIGITAL											
EXHAUST FAN START/STOP				DO											
EXHAUST FAN CURRENT STATUS SWITCH		DI				CA			F		E	A		G	ON/OFF
EXHAUST AIR DAMPER ACTUATOR				DO											
EXHAUST AIR DAMPER POSITION		DI										A		G	OPEN/CLOSED
EMERGENCY SHUTDOWN SWITCH		DI				CA			F		E	A		G	

NOTES:
1. REFER TO EXHAUST FAN CONTROL: EF-A ON M-703 FOR ADDITIONAL INFORMATION.
2. REFER TO PLANS FOR EXACT QUANTITY OF EACH POINT.

UTILITY MONITORING POINTS LIST

POINT DESCRIPTION	INPUT		OUTPUT		SETPOINT ADJUSTMENT	CRITICAL ALARM	HIGH LIMIT	LOW LIMIT	FAILURE	TREND	EVENT HISTORY	ARCHIVE	TOTALIZATION	GRAPHIC	UNITS
	ANALOG	DIGITAL	ANALOG	DIGITAL											
GAS USAGE		DI								T		A	TO	G	THERMS
WATER USAGE		DI								T		A	TO	G	GAL
ELECTRICAL USAGE		DI								T		A	TO	G	KWH

NOTES:
1. REFER TO UTILITY MONITORING CONTROL ON M-703 FOR ADDITIONAL INFORMATION.
2. REFER TO PLANS FOR EXACT QUANTITY OF EACH POINT.

SUPPLY FAN CONTROL: SF-A POINTS LIST

POINT DESCRIPTION	INPUT		OUTPUT		SETPOINT ADJUSTMENT	CRITICAL ALARM	HIGH LIMIT	LOW LIMIT	FAILURE	TREND	EVENT HISTORY	ARCHIVE	TOTALIZATION	GRAPHIC	UNITS
	ANALOG	DIGITAL	ANALOG	DIGITAL											
SUPPLY FAN START/STOP				DO											
SUPPLY FAN CURRENT STATUS SWITCH		DI				CA			F		E	A		G	ON/OFF
SUPPLY AIR DAMPER ACTUATOR				DO											
SUPPLY AIR DAMPER POSITION		DI										A		G	OPEN/CLOSED
GENERATOR CURRENT STATUS SWITCH		DI				CA			F		E	A		G	ON/OFF

NOTES:
1. REFER TO SUPPLY FAN CONTROL: SF-A ON M-703 FOR ADDITIONAL INFORMATION.
2. REFER TO PLANS FOR EXACT QUANTITY OF EACH POINT.

GLOBAL REFERENCE POINTS LIST

POINT DESCRIPTION	INPUT		OUTPUT		SETPOINT ADJUSTMENT	CRITICAL ALARM	HIGH LIMIT	LOW LIMIT	FAILURE	TREND	EVENT	ARCHIVE	TOTALIZATION	GRAPHIC	UNITS
	ANALOG	DIGITAL	ANALOG	DIGITAL											
OUTSIDE AIR REFERENCE TEMPERATURE	AI									T		A		G	DEG. F.
OUTSIDE AIR REFERENCE DEWPOINT TEMPERATURE	AI									T		A		G	DEG. F
OUTSIDE AIR REFERENCE RELATIVE HUMIDITY	AI									T		A		G	%
OUTSIDE AIR REFERENCE PRESSURE	AI									T		A		G	IN. W.C.

NOTES:
1. REFER TO GLOBAL REFERENCE POINTS LIST ON M-702 FOR ADDITIONAL INFORMATION.
2. REFER TO PLANS FOR EXACT QUANTITY OF EACH POINT.

SPLIT SYSTEM CONTROL: SS-A POINTS LIST

POINT DESCRIPTION	INPUT		OUTPUT		SETPOINT ADJUSTMENT	CRITICAL ALARM	HIGH LIMIT	LOW LIMIT	FAILURE	TREND	EVENT HISTORY	ARCHIVE	TOTALIZATION	GRAPHIC	UNITS
	ANALOG	DIGITAL	ANALOG	DIGITAL											
ROOM TEMPERATURE	AI					CA	H			T		A		G	DEG. F.

NOTES:
1. REFER TO SPLIT SYSTEM CONTROL: SS-A ON M-703 FOR ADDITIONAL INFORMATION.
2. REFER TO PLANS FOR EXACT QUANTITY OF EACH POINT.

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

File Path: C:\Vol2025\104000\19-M-PBA_VOL_2\Arlene.Gonzalez\DWG\M-705.rvt

Plot Date: 4/16/2026 3:52:26 PM

DESIGNED BY: B. PERLBERG
DRAWN BY: A. GONZALEZ
CHECKED BY: A. ORTEGA
SUBMITTED BY:
ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W912T524F6002
CONTRACT NO.: W912T523C0035
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HDR
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

MECHANICAL CONTROLS

SHEET ID
M-705

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

VAV TERMINAL CONTROL WITH ELECTRIC REHEAT: VAV-A POINTS LIST

POINT DESCRIPTION	INPUT		OUTPUT		SETPOINT ADJUSTMENT	CRITICAL ALARM	HIGH LIMIT	LOW LIMIT	FAILURE	TREND	EVENT HISTORY	ARCHIVE	TOTALIZATION	GRAPHIC	UNITS
	ANALOG	DIGITAL	ANALOG	DIGITAL											
SUPPLY AIR TEMPERATURE	AI				S		H	L		T		A		G	DEG. F.
SUPPLY AIR FLOW	AI				S					T		A		G	CFM
VAV DAMPER COMMAND			AO												
ELECTRIC HEATER SCR MODULATION			AO									A		G	% OPEN
SPACE TEMPERATURE	AI		AO		S		H	L		T		A		G	DEG. F.

NOTES:
1. REFER TO VAV TERMINAL CONTROL WITH ELECTRIC REHEAT: VAV-A CONTROL ON M-704 FOR ADDITIONAL INFORMATION.
2. REFER TO PLANS FOR EXACT QUANTITY OF EACH POINT.

AIR HANDLING UNIT CONTROL: AHU-A POINTS LIST

POINT DESCRIPTION	INPUT		OUTPUT		SETPOINT ADJUSTMENT	CRITICAL ALARM	HIGH LIMIT	LOW LIMIT	FAILURE	TREND	EVENT HISTORY	ARCHIVE	TOTALIZATION	GRAPHIC	UNITS
	ANALOG	DIGITAL	ANALOG	DIGITAL											
SUPPLY FAN START/STOP				DO											
SUPPLY FAN FAULT STATUS		DI				CA			F		E	A			
SUPPLY FAN CURRENT STATUS SWITCH		DI				CA			F		E	A		G	ON/OFF
SUPPLY FAN SPEED CONTROL			AO		S					T		A		G	% SPEED
SUPPLY FAN AIRFLOW VOLUME	AI									T		A		G	CFM
SUPPLY AIR DIFFERENTIAL STATIC PRESSURE	AI				S					T		A		G	IN. W.C.
SUPPLY AIR PLENUM HIGH STATIC PRESSURE SWITCH		DI			S	CA	H		F		E	A		G	IN. W.C.
RETURN AIR PLENUM LOW STATIC PRESSURE SWITCH		DI			S	CA		L	F		E	A		G	IN. W.C.
MIXED AIR PLENUM LOW STATIC PRESSURE SWITCH		DI			S	CA		L	F		E	A		G	IN. W.C.
OUTSIDE AIRFLOW	AI									T		A		G	CFM
PRE-FILTER (MERV 8) ALARM STATUS		DI			S	CA	H				E	A		G	IN. W.C.
FINAL FILTER (MERV 13) ALARM STATUS		DI			S	CA	H				E	A		G	IN. W.C.
SUPPLY AIR TEMPERATURE	AI				S	CA	H	L		T		A		G	DEG. F.
SUPPLY AIR RELATIVE HUMIDITY	AI				S					T		A		G	DEG. F.
RETURN AIR TEMPERATURE	AI				S					T		A		G	DEG. F.
RETURN AIR RELATIVE HUMIDITY	AI				S	CA	H			T		A		G	DEG. F.
MIXED AIR TEMPERATURE	AI				S					T		A		G	DEG. F.
MIXED AIR RELATIVE HUMIDITY	AI				S	CA	H			T		A		G	DEG. F.
DX HEATING/COOLING COIL AIR TEMPERATURE	AI									T		A		G	DEG. F.
DX HEATING/COOLING COIL COIL RELATIVE HUMDIITY	AI				S	CA	H			T		A		G	DEG. F.
OUTSIDE AIR DAMPER ACTUATOR			AO												
OUTSIDE AIR DAMPER POSITION	AI									T		A		G	% OPEN
RETURN AIR DAMPER ACTUATOR			AO												
RETURN AIR DAMPER POSITION	AI									T		A		G	% OPEN
HEAT PUMP CURRENT STATUS SWITCH		DI				CA			F		E	A		G	ON/OFF
FIRE ALARM STATUS (SUPPLY AIR)		DI				CA			F		E	A			ON/OFF
FIRE ALARM STATUS (RETURN AIR)		DI				CA			F		E	A			ON/OFF
EMERGENCY SHUTDOWN SWITCH		DI				CA			F		E	A		G	

NOTES:
1. REFER TO PLANS FOR EXACT QUANTITY OF EACH POINT.
2. REFER TO AIR HANDLING UNIT CONTROL: AHU-A ON M-701 FOR ADDITIONAL INFORMATION.

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

File Path: C:\n\2025\104000\16-AI-PBA_VDC_Arlena.Gonzalez\DKADW.rvt

Plot Date: 4/16/2026 3:52:26 PM

DESIGNED BY: B. PERLBERG
DRAWN BY: A. GONZALEZ
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SUBMITTED BY:
ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S25B035
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HDR
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

MECHANICAL CONTROLS

SHEET ID
M-706

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

CONSTANT VOLUME VAV TERMINAL CONTROL WITH ELECTRIC REHEAT: VAV-B POINTS LIST

POINT DESCRIPTION	INPUT		OUTPUT		SETPOINT ADJUSTMENT	CRITICAL ALARM	HIGH LIMIT	LOW LIMIT	FAILURE	TREND	EVENT HISTORY	ARCHIVE	TOTALIZATION	GRAPHIC	UNITS
	ANALOG	DIGITAL	ANALOG	DIGITAL											
SUPPLY AIR TEMPERATURE	AI				S		H	L		T		A		G	DEG. F.
SUPPLY AIR FLOW	AI				S					T		A		G	CFM
VAV DAMPER COMMAND			AO												
ELECTRIC HEATER SCR MODULATION			AO									A		G	% OPEN
SPACE TEMPERATURE	AI		AO		S		H	L		T		A		G	DEG. F.

NOTES:
1. REFER TO CONSTANT VOLUME VAV TERMINAL CONTROL WITH ELECTRIC REHEAT: VAV-B CONTROL ON M-704 FOR ADDITIONAL INFORMATION.
2. REFER TO PLANS FOR EXACT QUANTITY OF EACH POINT.

AIR HANDLING UNIT CONTROL: AHU-B POINTS LIST

POINT DESCRIPTION	INPUT		OUTPUT		SETPOINT ADJUSTMENT	CRITICAL ALARM	HIGH LIMIT	LOW LIMIT	FAILURE	TREND	EVENT HISTORY	ARCHIVE	TOTALIZATION	GRAPHIC	UNITS
	ANALOG	DIGITAL	ANALOG	DIGITAL											
SUPPLY FAN START/STOP				DO											
SUPPLY FAN FAULT STATUS		DI				CA			F		E	A			
SUPPLY FAN CURRENT STATUS SWITCH		DI				CA			F		E	A		G	ON/OFF
SUPPLY FAN SPEED CONTROL			AO		S					T		A		G	% SPEED
SUPPLY FAN AIRFLOW VOLUME	AI									T		A		G	CFM
SUPPLY AIR PLENUM HIGH STATIC PRESSURE SWITCH		DI			S	CA	H		F		E	A		G	IN. W.C.
RETURN AIR PLENUM LOW STATIC PRESSURE SWITCH		DI			S	CA		L	F		E	A		G	IN. W.C.
MIXED AIR PLENUM LOW STATIC PRESSURE SWITCH		DI			S	CA		L	F		E	A		G	IN. W.C.
OUTSIDE AIRFLOW	AI									T		A		G	CFM
PRE-FILTER (MERV 8) ALARM STATUS		DI			S	CA	H				E	A		G	IN. W.C.
FINAL FILTER (MERV 13) ALARM STATUS		DI			S	CA	H				E	A		G	IN. W.C.
SUPPLY AIR TEMPERATURE	AI				S	CA	H	L		T		A		G	DEG. F.
SUPPLY AIR RELATIVE HUMIDITY	AI				S					T		A		G	DEG. F.
RETURN AIR TEMPERATURE	AI				S					T		A		G	DEG. F.
RETURN AIR RELATIVE HUMIDITY	AI				S	CA	H			T		A		G	DEG. F.
MIXED AIR TEMPERATURE	AI				S					T		A		G	DEG. F.
MIXED AIR RELATIVE HUMIDITY	AI				S	CA	H			T		A		G	DEG. F.
DX HEATING/COOLING COIL AIR TEMPERATURE	AI									T		A		G	DEG. F.
DX HEATING/COOLING COIL COIL RELATIVE HUMDIITY	AI				S	CA	H			T		A		G	DEG. F.
OUTSIDE AIR DAMPER ACTUATOR			AO												
OUTSIDE AIR DAMPER POSITION	AI									T		A		G	% OPEN
RETURN AIR DAMPER ACTUATOR			AO												
RETURN AIR DAMPER POSITION	AI									T		A		G	% OPEN
HEAT PUMP CURRENT STATUS SWITCH		DI				CA			F		E	A		G	ON/OFF
FIRE ALARM STATUS (SUPPLY AIR)		DI				CA			F		E	A			ON/OFF
FIRE ALARM STATUS (RETURN AIR)		DI				CA			F		E	A			ON/OFF
EMERGENCY SHUTDOWN SWITCH		DI				CA			F		E	A		G	

NOTES:
1. REFER TO PLANS FOR EXACT QUANTITY OF EACH POINT.
2. REFER TO AIR HANDLING UNIT CONTROL: AHU-B ON M-702 FOR ADDITIONAL INFORMATION.

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

File Path: C:\n\2025\104000\16-AI-PBA_VDC_Arlena.Gonzalez\DKADW.rvt

Plot Date: 4/16/2026 3:52:27 PM

DESIGNED BY: B. PERLBERG
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SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HDR
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

MECHANICAL CONTROLS

SHEET ID
M-707

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

X 20A 3P OR x 100AF 80AT 3P — LOW - VOLTAGE CIRCUIT BREAKER (CB). RATINGS AND NO. OF POLES AS SHOWN. WHEN SPECIFIC TYPE IS REQUIRED, X INDICATES TYPE.

TYPES:
MCCB - MOLDED CASE
ICCB - INSULATED CASE
LVP - LOW - VOLTAGE POWER
MCP - MOTOR CIRCUIT PROTECTOR (RATING PER CONNECTED LOAD)

CB — SEPARATELY MOUNTED CIRCUIT BREAKER; SEE ELECTRICAL ONE - LINE DIAGRAM OR SCHEDULE FOR DESCRIPTION

GFP — GROUND FAULT PROTECTION

FUSE, SIZE, AND NUMBER OF FUSES AS NOTED

FUSED CUTOUT, CURRENT RATING, FUSE SIZE, AND NUMBER OF POLES AS NOTED

FUSIBLE SWITCH, CURRENT RATING, FUSE SIZE, AND QUANTITY AS NOTED

NON-FUSED SWITCH, CURRENT RATING, AND NUMBER OF POLES AS NOTED

THERMAL OVERLOAD ELEMENT

OL — THERMAL OVERLOAD RELAY CONTACT

OR — DISCONNECTOR OR SAFETY SWITCH, 30A, 3P, NON-FUSED UNLESS OTHERWISE NOTED

DISCONNECTOR OR SAFETY SWITCH WITH AUXILIARY CONTACTS, 30A, 3P, NON-FUSED UNLESS OTHERWISE NOTED

7 1/2 OR HP — MOTOR WITH DESIGN HORSEPOWER (WHEN INDICATED)

MOTOR

GENERATOR

ATS — TRANSFER SWITCH, CURRENT RATING, AND NUMBER OF POLES AS NOTED

ATS - AUTOMATIC
MTS - MANUAL

TRANSFORMER

△ 3-PHASE, 3-WIRE DELTA CONNECTION

3-PHASE, 4-WIRE GROUNDED WYE CONNECTION

LP100 208/120V 3Ø,4W — SWITCHBOARD OR PANELBOARD; NAME, VOLTAGE, PHASE, NUMBER OF WIRES WHEN INDICATED

100 KVA — NON-MOTOR LOAD WITH DESIGN KVA, KW, OR AMP

CPT — CONTROL POWER TRANSFORMER (CPT)

VOLTAGE TRANSFORMER (VT OR PT)

CURRENT TRANSFORMER (CT)

WH — UTILITY WATT-HOUR METER PER UTILITY REQUIREMENTS

DMP — DIGITAL METERING PACKAGE

DPM — DIGITAL POWER METER

GROUND

LIGHTNING ARRESTER

SPD — LOW VOLTAGE SURGE PROTECTIVE DEVICE

ELECTRICAL CONNECTION

OR — NO ELECTRICAL CONNECTION

T — TRANSFORMER

PUSHBUTTON

CONTROL PANEL INTEGRAL OR PROVIDED WITH ASSOCIATED EQUIPMENT

CONTROL PANEL WITH DISCONNECT SWITCH INTEGRAL OR PROVIDED WITH ASSOCIATED EQUIPMENT

J — JUNCTION OR PULL BOX

ELECTRICAL EQUIPMENT ENCLOSURE: PANELBOARD, SWITCHBOARD, MOTOR CONTROL CENTER, CONTROL PANEL, OR OTHER EQUIPMENT AS INDICATED

480/277V PANELBOARD

208/120V PANELBOARD

PC — PHOTOCELL

OS — OCCUPANCY SENSOR - CEILING MOUNTED

OS — OCCUPANCY SENSOR - WALL MOUNTED

X Y z — WALL MOUNTED LUMINAIRE - COMPACT FLUORESCENT OR LED

X Y z — WALL MOUNTED LUMINAIRE - COMPACT FLUORESCENT OR LED (NORMAL/EMERGENCY)

X Y z — CEILING/PENDANT MOUNTED LUMINAIRE - FLUORESCENT OR LED

X Y z — CEILING/PENDANT MOUNTED LUMINAIRE - FLUORESCENT OR LED (NORMAL/EMERGENCY)

X Y z — WALL/SURFACE MOUNTED LUMINAIRE - FLUORESCENT OR LED (NORMAL/EMERGENCY)

Z X Y — CEILING/PENDANT/BOLLARD MOUNTED LUMINAIRE, LAMP TYPE AS SPECIFIED

Z X Y — CEILING/PENDANT/BOLLARD MOUNTED LUMINAIRE, LAMP TYPE AS SPECIFIED, EMERGENCY (INTERNAL OR EXTERNAL POWER SOURCE AS INDICATED)

X Z Y — WALL MOUNTED LUMINAIRE, LAMP TYPE AS SPECIFIED

X Z Y — WALL MOUNTED LUMINAIRE, LAMP TYPE AS SPECIFIED, EMERGENCY (INTERNAL OR EXTERNAL POWER SOURCE AS INDICATED)

X Z Y — WALL MOUNTED FLOOD LUMINAIRE, LAMP TYPE AS SPECIFIED

X Z Y — POLE/STANCHION MOUNTED LUMINAIRE, LAMP TYPE AS SPECIFIED

X Z Y — POLE/STANCHION MOUNTED LUMINAIRE, LAMP TYPE AS SPECIFIED, EMERGENCY (INTERNAL OR EXTERNAL POWER SOURCE AS INDICATED

Z X Y — CEILING/PENDANT MOUNTED LUMINAIRE, LAMP TYPE AS SPECIFIED

Z X Y — WALL MOUNTED LUMINAIRE, LAMP TYPE AS SPECIFIED

Z X Y — CEILING/PENDANT MOUNTED LUMINAIRE, LAMP TYPE AS SPECIFIED, ALL OR PARTIAL EMERGENCY (INTERNAL OR EXTERNAL POWER SOURCE AS INDICATED

X Y — EMERGENCY LIGHT, NUMBER OF ATTACHED HEADS AS SHOWN

X Y — EMERGENCY LIGHT, REMOTE MOUNTED HEAD

X Y X Y — DOUBLE-FACED CEILING OR WALL MOUNTED EXIT LIGHT; DIRECTIONAL ARROWS (IF REQUIRED) AS INDICATED ON PLANS

X Y X Y — SINGLE-FACED CEILING OR WALL MOUNTED EXIT LIGHT; DIRECTIONAL ARROWS (IF REQUIRED) AS INDICATED ON PLANS

LIGHTING FIXTURE SUBSCRIPTS:

X - INDICATES FIXTURE TYPE PER LIGHTING FIXTURE SCHEDULE
Y - INDICATES CIRCUIT NUMBER FROM PANELBOARD
Z - INDICATES CONTROLLING SWITCH (IF REQUIRED)
NL- NIGHT LIGHT UNSWITCHED

Y X — TOGGLE SWITCH

SUBSCRIPTS:

X - INDICATES TYPE
NONE - SINGLE POLE
M - TOGGLE SWITCH, HORSEPOWER/MOTOR RATED
K - KEY SWITCH
P - PILOT LIGHT
L - LIGHTED HANDLE
Y - INDICATES CONTROLLING SWITCH (IF REQUIRED)
WP - WEATHER PROOF
DM - 0-10V DIMMING
OS - DUAL TECH OCCUPANCY SENSOR
LV - LOW VOLTAGE
OV - OVERRIDE

X Y — QUAD-DUPLEX RECEPTACLE, TWO NEMA 5-20R UNDER COMMON COVER PLATE

X Y — DUPLEX RECEPTACLE, NEMA 5-20R

SUBSCRIPTS:

X - INDICATES TYPE
GFCI - GROUND FAULT CIRCUIT INTERRUPTER
WP - WEATHER PROOF
C - CONTROLLED RECEPTACLE, MARKING PER NEC 406.3(E), GREEN
Y - INDICATES CIRCUIT NUMBER FROM PANELBOARD

SPECIAL-PURPOSE RECEPTACLE AS DEFINED ON PLANS

SPECIAL DEVICE AND/OR CONNECTION AS NOTED

CONDUIT TURNING UP

CONDUIT TURNING DOWN

HOME RUN TO PANEL, 2 #12, 1 #12G IN 3/4"C UNLESS OTHERWISE NOTED

CIRCUIT RUN BETWEEN DEVICES EXPOSED IN NON-ARCHITECTURALLY FINISHED AREAS; CONCEALED IN ARCHITECTURALLY FINISHED AREAS. CONDUIT AND CONDUCTOR SIZES MUST BE THE SAME AS THE HOMERUN FOR THE CIRCUIT.

CONDUIT RUN BETWEEN DEVICES CONCEALED IN NON-ARCHITECTURALLY FINISHED AREAS OR UNDER FLOOR SLAB. CONDUIT AND CONDUCTOR SIZES MUST BE THE SAME AS THE HOMERUN FOR THE CIRCUIT.

UNDERGROUND CONDUIT

CIRCUIT CONTINUATION

CONDUIT STUBBED OUT AND CAPPED

XX-XXXX — CONDUIT TAG OR CIRCUIT NUMBER - WIRE AND CONDUIT SIZE AS SPECIFIED IN CIRCUIT SCHEDULE ON THE SHEETS

G — GROUNDING CONDUCTOR

E — UNDERGROUND ELECTRICAL DUCT BANK

C — UNDERGROUND COMMUNICATIONS CONCRETE ENCASED DUCT BANK

OHE — OVERHEAD SECONDARY CIRCUIT AND CONDUCTORS

EE — DIRECT BURIED CONDUIT

LP — LIGHTNING PROTECTION CONDUCTOR

GROUND ROD

GROUND TEST WELL

XX — HH: HANDHOLE
MH: MANHOLE

AIR TERMINAL

GROUND CONNECTION

GENERAL NOTES:

1. THIS IS A STANDARD ELECTRICAL SYMBOLOGY SHEET. NOT ALL SYMBOLS MAY BE USED ON THIS PROJECT.

2. SCREENING OR SHADING OF WORK IS USED TO INDICATE EXISTING COMPONENTS OR TO DE-EMPHASIZE PROPOSED IMPROVEMENTS TO HIGHLIGHT SELECTED TRADE WORK. REFER TO CONTEXT OF EACH SHEET FOR USAGE.

3. PROJECT DESIGN AND EXECUTION MUST CONFORM TO THE LATEST VERSIONS OF:
(A) NFPA 70 (NATIONAL ELECTRICAL CODE)
(B) NESC (NATIONAL ELECTRICAL SAFETY CODE)
(C) NFPA 101 (LIFE SAFETY CODE)
(D) NFPA 780 (STANDARD FOR INSTALLATION OF LIGHTNING PROTECTION SYSTEMS)
(E) NAVSEA OP 5 (AMMUNITION AND EXPLOSIVES SAFETY ASHORE)
(F) APPLICABLE LOCAL, STATE AND FEDERAL CODES.

4. CONTRACTOR MUST COORDINATE FINAL LOCATION OF ELECTRICAL EQUIPMENT AND COMPONENTS WITH ALL OTHER TRADES PRIOR TO INSTALLATION. THE CONTRACTOR MUST BE RESPONSIBLE FOR SECURING SPACE REQUIREMENTS FOR ELECTRICAL EQUIPMENT CLEARANCE AND CORRECT ROUGH-IN LOCATIONS OF ELECTRICAL CONNECTIONS.

5. DRAWINGS ARE IN GENERAL DIAGRAMMATIC IN NATURE. FIELD ADJUST CONDUIT AND TRAY ROUTING BASED ON COORDINATION WITH OTHER NEW UTILITIES, STRUCTURES AND EQUIPMENT. NOT ALL COMPONENTS, CONDUITS, AND EQUIPMENT ARE SHOWN IN ALL VIEWS. THE CONTRACTOR MUST MAKE USE OF THE ENTIRE SET OF DRAWINGS, REQUIREMENTS, AND SPECIFICATIONS IN ORDER TO INCLUDE ALL COMPONENTS NECESSARY TO CONSTRUCT A FULLY OPERATIONAL SYSTEM.

6. ALL EQUIPMENT MUST BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S APPROVED, PUBLISHED LITERATURE.

7. ALL UTILITY SERVICES SUCH AS ELECTRIC, TELECOM, SECURITY, INTRUSION DETECTION SYSTEM, FIRE ALARM SYSTEM MUST BE ROUTED UNDERGROUND AT MINIMUM OF 50-FEET AWAY FROM BUILDING FOR SERVICE CONNECTION.

8. ALL CONDUITS MUST BE A RIGID GALVANIZED STEEL CONDUIT (RGS) OR LIQUID-TIGHT, METAL FLEXIBLE CONDUIT. CONDUIT PENETRATIONS THROUGH CONCRETE MUST BE PVC-COATED RIGID GALVANIZED STEEL CONDUIT (PVC-RGS) THROUGH THE LENGTH OF THE PENETRATION, WITH 3" TO 6" AT BOTH PENETRATION ENDS FOR CLEARANCE. CONDUITS PENETRATING UNDERNEATH FOUNDATION IS PROHIBITED. CONDUIT ELBOW PLACEMENT MUST CONSIDER THIS CLEARANCE DURING DESIGN AND INSTALLATION.

9. PROVIDE AND INSTALL THW OR THWN INSULATED CONDUCTORS WITH MINIMUM OF #12 AWG, STRANDED COPPER.

10. ALL NEMA ENCLOSURE RATINGS INDICATED ON DOCUMENTS MAY BE REVISED AS REQUIRED BY THE ENVIRONMENTAL CONDITIONS DURING SITE ADAPTATION PROJECTS.

ELECTRICAL ABBREVIATIONS

A	AMPERES OR TRIP AMPERES
AC	ALTERNATING CURRENT
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AIC	SYMMETRICAL AMPS INTERRUPTING CAPACITY
AWG	AMERICAN WIRE GAUGE
A/R	AS REQUIRED
ARR.	ARRESTOR
BLDG	BUILDING
BRKT	BRACKET
C	CONDUIT
CB	CIRCUIT BREAKER
CKT	CIRCUIT
CL	CURRENT LIMITING
CO	CONDUIT ONLY
CTL	CONTROL
DC	DIRECT CURRENT
D.T.C.	DATA TERMINAL CABINET
EMCS	ENERGY MONITORING AND CONTROL SYSTEM
FACP	FIRE ALARM CONTROL PANEL
FT	FOOT, FEET
GFCI	GROUND FAULT CIRCUIT INTERRUPTER, 5MA PERSONNEL PROTECTION UNLESS OTHERWISE NOTED.
GND	GROUND
HZ	HERTZ
IAW	IN ACCORDANCE WITH
IG	ISOLATED GROUND
IN	INCH, INCHES
IR	INFRARED
KV	KILOVOLTS
KVA	KILOVOLT AMPERES
KVAR	KILOVOLT AMPS REACTIVE
KWH	KILOWATT HOURS
L-L	LINE TO LINE
L-N	LINE TO NEUTRAL
MFR	MANUFACTURER
MH	MANHOLE
MIN	MINIMUM
MTD	MOUNTED
MTG	MOUNTING
NAFSEA	NAVAL SEA SYSTEMS COMMAND
N.C.	NORMALLY CLOSED
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NEUT	NEUTRAL
NOSSA	NAVAL ORDNANCE SAFETY & SECURITY ACTIVITY

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

File Path: C:\vc\2025\104000\E-E-PBA_VCC_plese.drawing.rvt

ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S25D0053

DESIGNED BY: J. SHOWERS
DRAWN BY: F. OLIVAREZ
CHECKED BY: G. JAGLOWSKI
SUBMITTED BY:
SIZE: ANSI D

Plot Date: 4/16/2026 3:59:44 PM

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

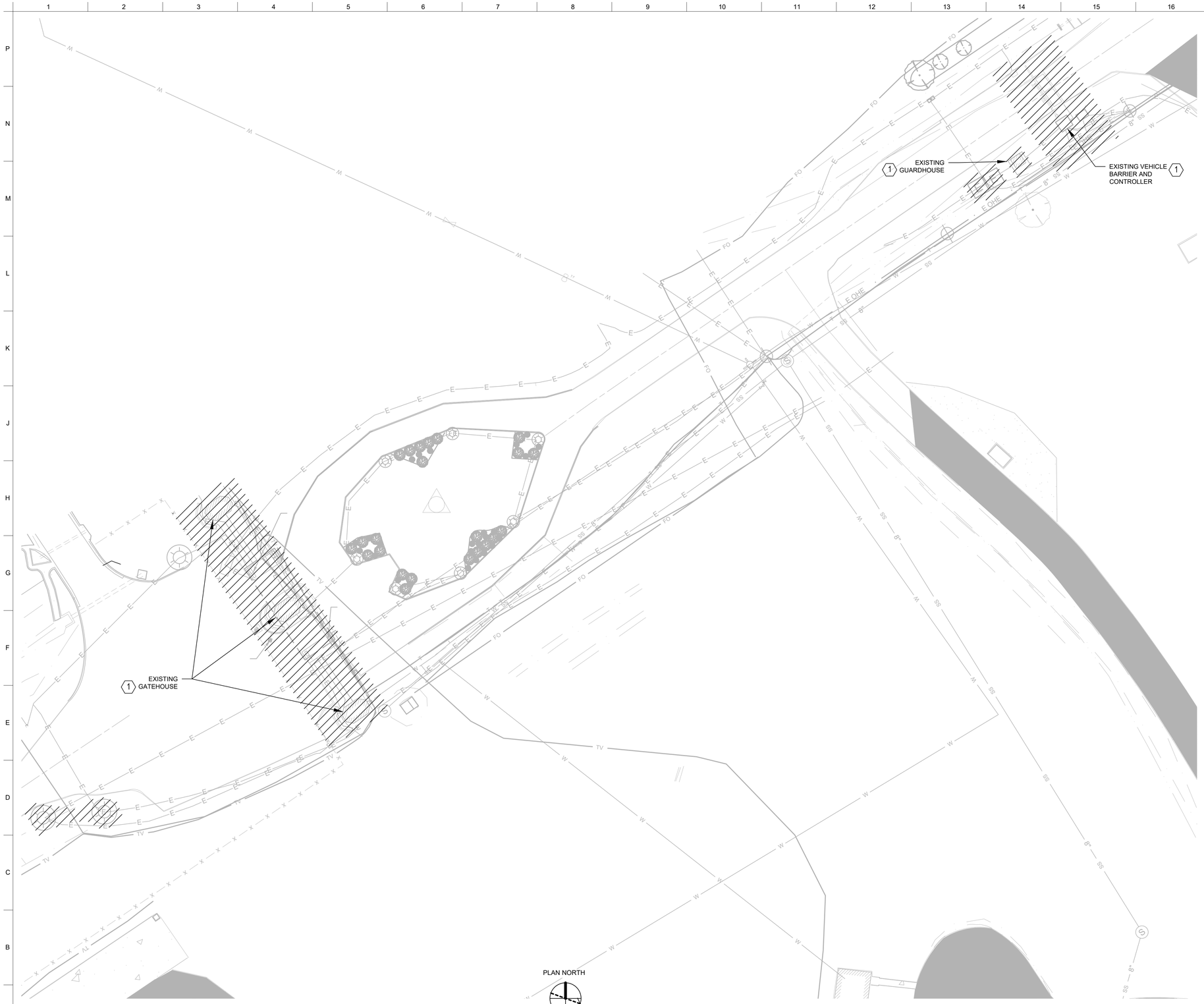
HDR ENGINEERING, INC
613 NW LOOP 410, STE 700
SAN ANTONIO, TX 78216
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

ELECTRICAL LEGEND

SHEET ID
VCC
E-001

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



A1 ELECTRICAL SITE PLAN - DEMOLITION

SCALE: 1:30

GENERAL NOTES

1. DRAWING AS-BUILT INFORMATION AS SHOWN IS BASED ON EXISTING AVAILABLE SITE SURVEY AND AS-BUILT CONDITIONS WITH LIMITED ACCESS TO EACH FACILITY. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS AGAINST THE SCOPE OF WORK. ANY DISCREPANCIES MUST BE SUBMITTED AS RFIs PRIOR BIDDING.
2. REFER TO CIVIL DRAWINGS FOR ADDITIONAL INFORMATION OF SITE/UTILITY.
3. COORDINATE WITH UTILITY AND SITE CONTRACTOR FOR ADDITIONAL REQUIREMENT FOR DEMOLITIONS.
4. EXISTING UN-USED UNDERGROUND CONDUIT SHALL BE ABANDONED IN PLACE. EXISTING CONDUCTORS SHALL BE REMOVED.

SHEET KEYNOTES

1. DISCONNECT AND REMOVE ALL ELECTRICAL EQUIPMENT, ASSOCIATED ELECTRICAL COMPONENTS INCLUDING OVERCURRENT PROTECTIVE DEVICES, DISCONNECTING MEANS, CONTROLLERS, CONDUCTORS AND CONDUITS BACK TO THE SOURCE OR TO POINT OF CONNECTION WITHIN THE PROJECT AREA. ALL UN-USED UNDERGROUND CONDUITS SHALL BE ABANDONED IN PLACE.

SHEET LEGEND

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S26D6035

DESIGNED BY: J. SHOWERS
DRAWN BY: F. OLIVAREZ
CHECKED BY: A. GRIGOWSKI
SUBMITTED BY:
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT

HDR ENGINEERING, INC.
8121 LOCKHILL ESE 700
SAN ANTONIO, TX 78216
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

ELECTRICAL SITE PLAN
DEMOLITION

SHEET ID
ED101

File Path:

Plot Date:

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

MATCHLINE - FOR CONTINUATION SEE ES102

ID CHECK CANOPY
RE: E-401/E-402, A1/ES103

CONDUIT STUB-UP INSIDE ID CHECK BOOTH (TYP) 2

CONDUIT STUB-UP TO PANEL DP-VCC

MECH RM 120

VISITOR CONTROL CENTER

CONDUIT STUB-UP AT PANEL 'DP-GH'

MECH/ELEC 103

GATE HOUSE

REFER TO SHEETS EG103, E-104, E-105, E-106 FOR GATEHOUSE BUILDING

1 EXISTING POWER POLE

REFER TO SHEETS EG102, E-101, E-102, E-103 FOR VCC BUILDING

2 PEDESTRIAN SEARCH SHELTER

SEARCH AREA CANOPY
RE: E-401/E-402, H1/ES103

REFER TO SHEETS E-105 FOR GATEHOUSE BUILDING

PLAN NORTH

A1 ELECTRICAL SITE PLAN

SCALE: 1:30

0 15' 30' 60'

GENERAL NOTES

1. COORDINATE FINAL LOCATION OF PROPOSED ELECTRICAL EQUIPMENT AND COMPONENTS WITH OTHER TRADES PRIOR TO ROUGH-IN.
2. REFER TO RISER ONE-LINE DIAGRAMS FOR ADDITIONAL INFORMATION.
3. VERIFY THE EXACT LOCATION OF EXISTING AND PROPOSED UNDERGROUND UTILITIES, SIDEWALKS, LANDSCAPING, AND BARRIER WALLS PRIOR TO CONSTRUCTION TO AVOID CONFLICT OR DAMAGE TO THE UTILITIES, SIDEWALKS, LANDSCAPING, AND BARRIER WALLS. CONTRACTOR TO SEEK APPROVAL OF THE ENGINEER/ OWNER PRIOR TO ADJUSTING THE FINAL LOCATION OF ANY ELECTRICAL EQUIPMENT OR COMPONENTS.
4. REFER TO CIVIL DRAWINGS FOR ADDITIONAL INFORMATION OF SITE/UTILITY AND SECURITY DRAWINGS FOR ADDITIONAL REQUIREMENTS.
5. ALL UNDERGROUND ELECTRICAL, COMMUNICATIONS, AND SECURITY CONDUITS SHALL BE INSTALLED IN CONCRETE ENCASED WITHIN 8' OF THE ROADWAY IAW UFC 4-022-01, 5.8.8.
6. CONTRACTOR MUST VERIFY THE LIGHTING LEVEL REQUIREMENT FOR LIGHTING LEVEL AS DESIGN AND MUST OBTAIN THE SHOP DRAWING OF PHOTOMETRIC ANALYSIS INCLUDING THE FIXTURE MOUNTING HEIGHT, TASK LIGHTING LEVEL, CALCULATION PERFORMANCE POINT TO POINT AND LIGHTING FIXTURE SCHEDULE.

SHEET KEYNOTES

1. COORDINATE WITH BASE UTILITY FOR POINT OF CONNECTION AND ADDITIONAL REQUIREMENTS FOR FINAL CONNECTION.
2. PRE-FABRICATED AND PROVIDED BY OTHERS. PROVIDE CONDUIT STUB-UP TO POINT OF CONNECTION AS SHOWN.

SHEET LEGEND

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: J. SHOWERS
DRAWN BY: F. OLIVAREZ
CHECKED BY: J. MCCONNELL
SUBMITTED BY:

ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W912TS24F8002
CONTRACT NO.: W912TS26D0035

SIZE: ANSI D

File Path:

Plot Date:

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT

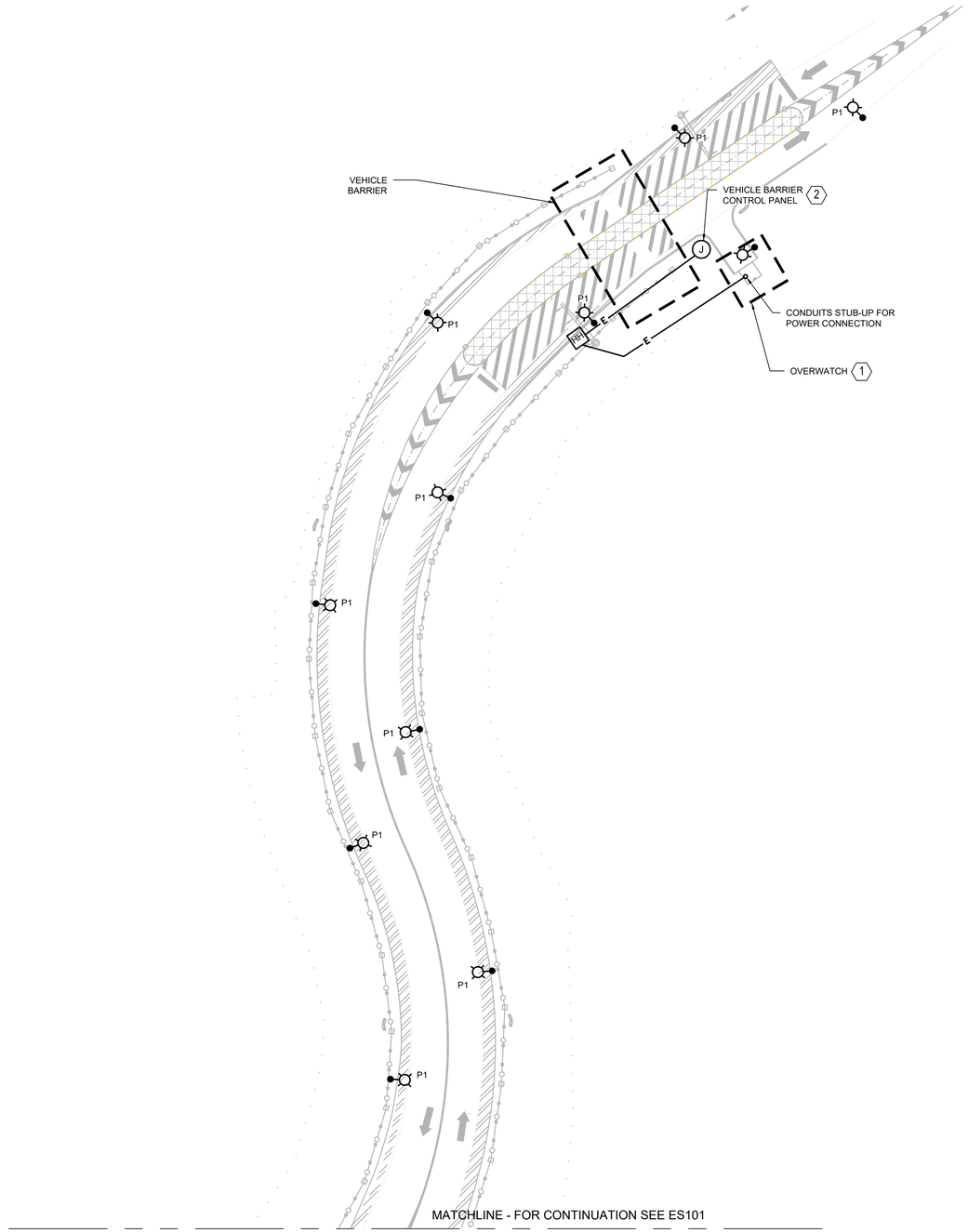
HDR ENGINEERING, INC
6311 WEST LOOP 1604 N, SUITE 200
SAN ANTONIO, TX 78216
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

ELECTRICAL SITE PLAN

SHEET ID
ES101

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



PLAN NORTH

0 15' 30' 60'

A1 ELECTRICAL SITE PLAN

SCALE: 1:30

GENERAL NOTES

1. COORDINATE FINAL LOCATION OF PROPOSED ELECTRICAL EQUIPMENT AND COMPONENTS WITH OTHER TRADES PRIOR TO ROUGH-IN.
2. REFER TO RISER ONE-LINE DIAGRAMS FOR ADDITIONAL INFORMATION.
3. VERIFY THE EXACT LOCATION OF EXISTING AND PROPOSED UNDERGROUND UTILITIES, SIDEWALKS, LANDSCAPING, AND BARRIER WALLS PRIOR TO CONSTRUCTION TO AVOID CONFLICT OR DAMAGE TO THE UTILITIES, SIDEWALKS, LANDSCAPING, AND BARRIER WALLS. CONTRACTOR TO SEEK APPROVAL OF THE ENGINEER/ OWNER PRIOR TO ADJUSTING THE FINAL LOCATION OF ANY ELECTRICAL EQUIPMENT OR COMPONENTS.
4. REFER TO CIVIL DRAWINGS FOR ADDITIONAL INFORMATION OF SITE/UTILITY AND SECURITY DRAWINGS FOR ADDITIONAL REQUIREMENTS.
5. ALL UNDERGROUND ELECTRICAL, COMMUNICATIONS, AND SECURITY CONDUITS SHALL BE INSTALLED IN CONCRETE ENCASED WITHIN 8' OF THE ROADWAY IAW UFC 4-022-01, 5.8.8.
6. CONTRACTOR MUST VERIFY THE LIGHTING LEVEL REQUIREMENT FOR LIGHTING LEVEL AS DESIGN AND MUST OBTAIN THE SHOP DRAWING OF PHOTOMETRIC ANALYSIS INCLUDING THE FIXTURE MOUNTING HEIGHT, TASK LIGHTING LEVEL, CALCULATION PERFORMANCE POINT TO POINT AND LIGHTING FIXTURE SCHEDULE.

SHEET KEYNOTES

1. PRE-FABRICATED AND PROVIDED BY OTHERS. PROVIDE CONDUIT STUB-UP FOR POWER CONNECTION AS SHOWN.
2. COORDINATE FINAL POWER CONNECTION WITH MANUFACTURER PRIOR COMMENCING WORK. REFER TO CIVIL AND SECURITY DRAWINGS FOR LOCATION.

SHEET LEGEND

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: J. SHOWERS
DRAWN BY: F. OLIVAREZ
CHECKED BY: J. MCFLOWSKI
SUBMITTED BY:
ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W9127S24F8002
CONTRACT NO.: W9127S25B0035
SIZE: ANSI D

File Path:
Plot Date:

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT

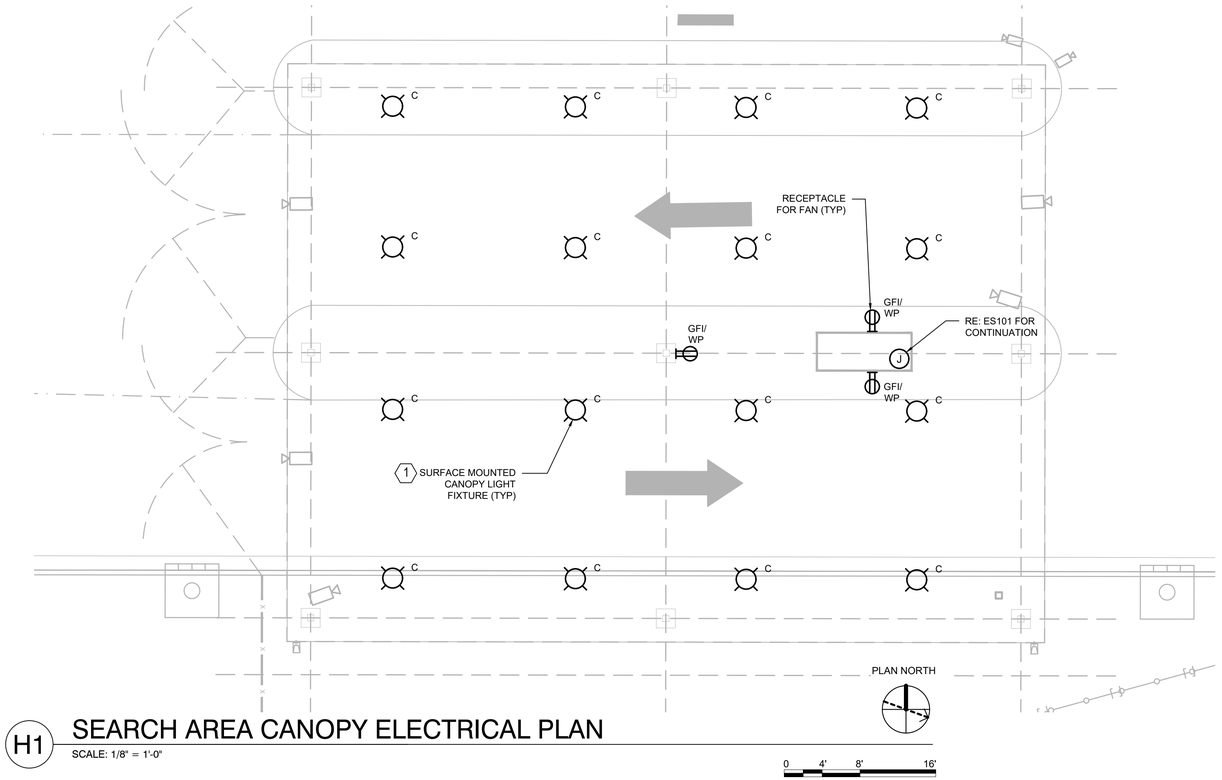
HDR ENGINEERING, INC
8918 WEST 21ST STREET, SUITE 700
SAN ANTONIO, TX 78216
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

ELECTRICAL SITE PLAN

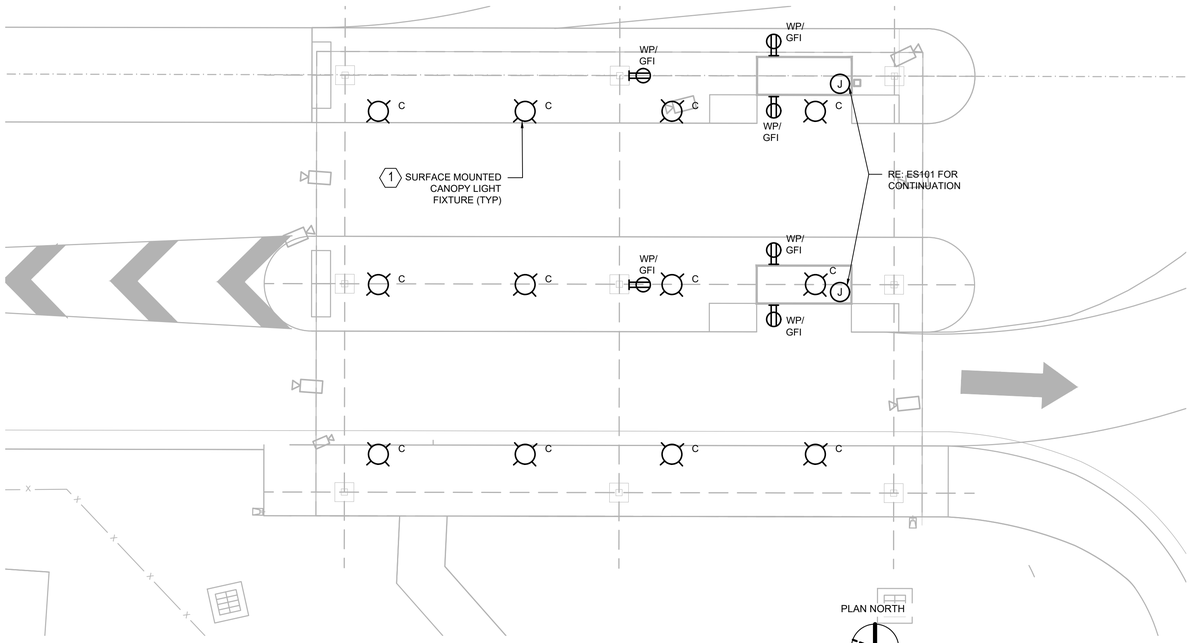
SHEET ID
ES102

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



H1 SEARCH AREA CANOPY ELECTRICAL PLAN

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



A1 ID CHECK CANOPY ELECTRICAL PLAN

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

GENERAL NOTES

1. COORDINATE FINAL LOCATION OF PROPOSED ELECTRICAL EQUIPMENT AND COMPONENTS WITH OTHER TRADES PRIOR TO ROUGH-IN.

SHEET KEYNOTES

1. ROUTE LIGHTING CIRCUIT VIA SITE LIGHTING CONTROL PANEL. REFER TO SITE PLAN ES101 AND ELECTRICAL ONE-LINE E-601 FOR ADDITIONAL INFORMATION.

SHEET LEGEND

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: J. SHOWERS
DRAWN BY: F. OLIVAREZ
CHECKED BY: J. KOLODZIEJ
SUBMITTED BY:

ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S25D6035

SIZE: ANSI D

File Path:

Plot Date:

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT

HDR ENGINEERING, INC
8endash;1 MILITARY PLAZA, STE 700
SAN ANTONIO, TX 78216
Texas P.E. Firm Registration No. F-754

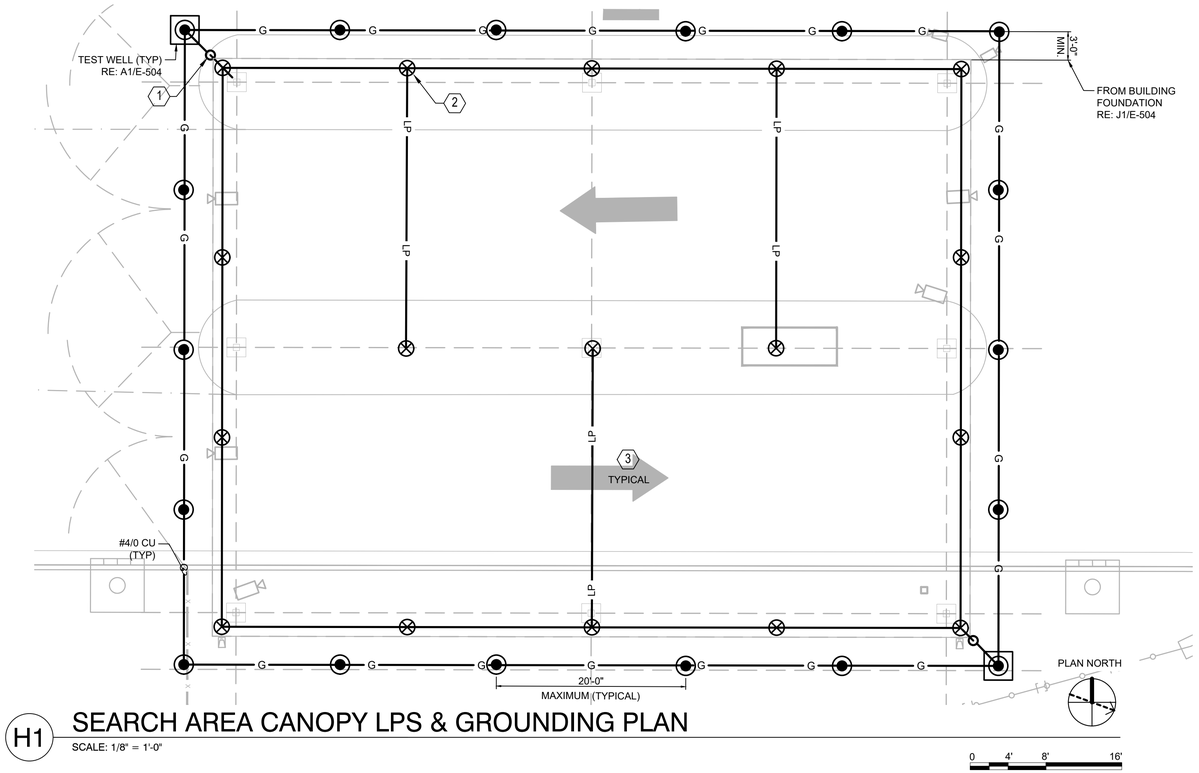
ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

ELECTRICAL FLOOR PLAN

SHEET ID

ES103

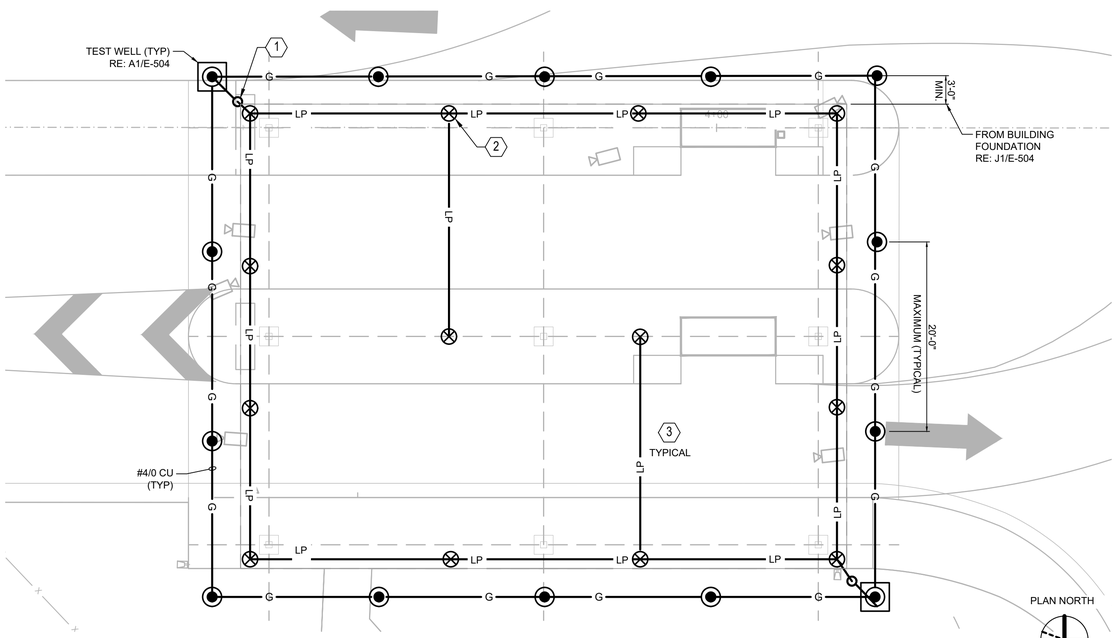
CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



H1 SEARCH AREA CANOPY LPS & GROUNDING PLAN

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

0 4' 8' 16'



A1 ID CHECK CANOPY LPS & GROUNDING PLAN

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

0 4' 8' 16'

GENERAL NOTES

1. THE TERM 'LIGHTNING PROTECTION SYSTEM' SHALL BE REFERRED TO AS 'LPS' HENCEFORTH.
2. LPS INSTALLATIONS SHALL BE IN COMPLIANCE WITH NFPA 780 CRITERIA, AND MANUFACTURED IN ACCORDANCE WITH 96, ACCORDING TO UFC 3-575-01.
3. CONTRACTOR SHALL PROVIDE AN UNDERWRITER'S LABORATORY (UL) LIGHTNING PROTECTION INSPECTION CERTIFICATE FOR ANY FACILITY HAVING A LPS INSTALLATION.
4. COMPONENTS INDICATED THIS SHEET ARE SCHEMATIC AND PROVIDE GENERAL DIRECTION FOR THE LPS COMPONENTS. CONTRACTOR SHALL PROVIDE NECESSARY COMPONENTS FOR A COMPLETE LPS.
5. REFER TO LIGHTNING PROTECTION SYSTEM DETAILS ON SHEET E-504 FOR ADDITIONAL INFORMATION.
6. PROVIDE PVC COATED RGS SLEEVE FOR DOWN CONDUCTOR ROUTED THROUGH BUILDING FOUNDATION.

SHEET KEYNOTES

1. PROVIDE #2/0 AWG COPPER DOWN CONDUCTOR FROM ROOF AIR TERMINAL BONDING CONDUCTOR TO GROUND ROD IN 1" PVC CONDUIT PER NEC. REFER TO DETAIL A14/E-504.
2. PROVIDE LIGHTNING PROTECTION AIR TERMINAL LOCATED WITHIN 2'-0" OF ROOF PERIMETER OR RIDGE END. PROVIDE AIR TERMINAL WITH FLAT ROOF MOUNTING HARDWARE BASE AND SWIVEL ADAPTER AS REQUIRED. REFER TO DETAIL J14/E-504.
3. PROVIDE #2/0 AWG BARE COPPER CONDUCTOR FOR ROOF AIR TERMINAL BONDING CONDUCTORS ON ROOF EXTERIOR. SUPPORT AT 3'-0" ALONG CONDUCTOR.

SHEET LEGEND

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: J. SHOWERS
DRAWN BY: F. OLIVAREZ
CHECKED BY: J. MCFARLAND
SUBMITTED BY:
ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W9127S24F8002
CONTRACT NO.: W9127S25D8035
SIZE: ANSI D

File Path:

Plot Date:

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT

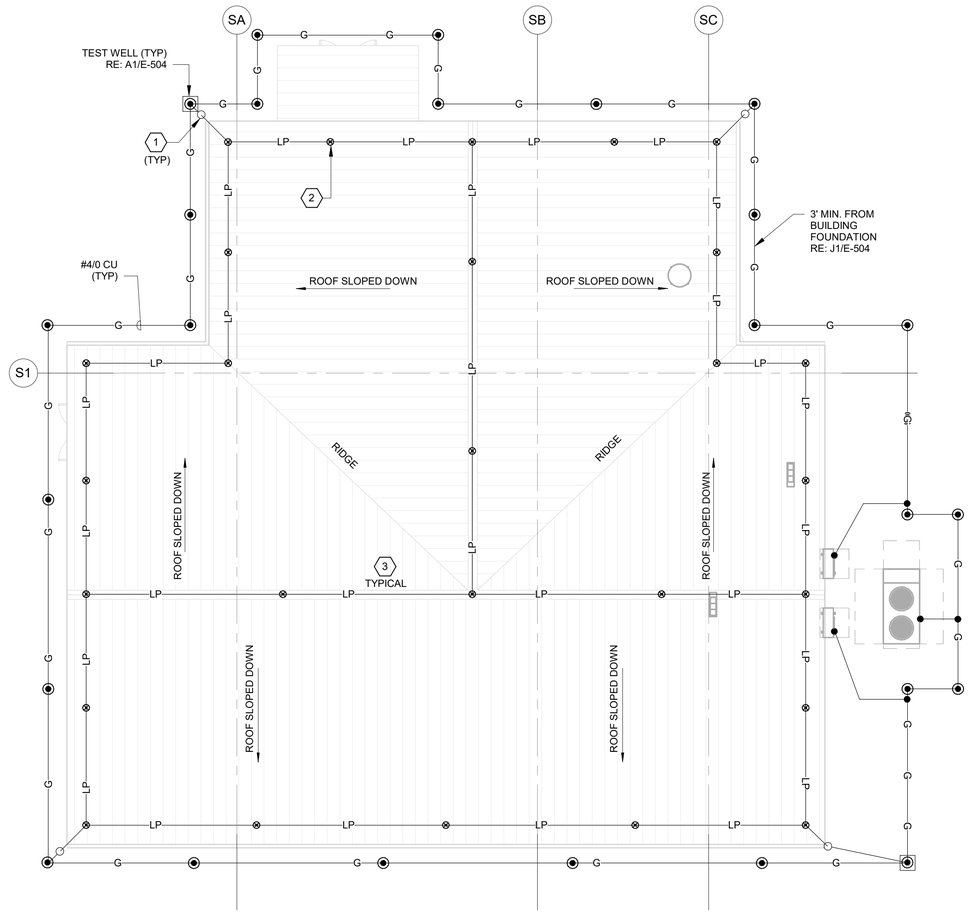
HDR ENGINEERING, INC
8121 WEST DODGE ROAD, SUITE 200
SAN ANTONIO, TX 78216
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

ELECTRICAL GROUNDING
FLOOR PLAN

SHEET ID
EG101

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



A1 VCC ELECTRICAL LPS & GROUNDING PLAN

1/8" = 1'-0"

GENERAL NOTES

1. THE TERM 'LIGHTNING PROTECTION SYSTEM' SHALL BE REFERRED TO AS 'LPS' HENCEFORTH.
2. LPS INSTALLATIONS SHALL BE IN COMPLIANCE WITH NFPA 780 CRITERIA, AND MANUFACTURED IN ACCORDANCE WITH 96, ACCORDING TO UFC 3-575-01.
3. CONTRACTOR SHALL PROVIDE AN UNDERWRITER'S LABORATORY (UL) LIGHTNING PROTECTION INSPECTION CERTIFICATE FOR ANY FACILITY HAVING A LPS INSTALLATION.
4. COMPONENTS INDICATED THIS SHEET ARE SCHEMATIC AND PROVIDE GENERAL DIRECTION FOR THE LPS COMPONENTS. CONTRACTOR SHALL PROVIDE NECESSARY COMPONENTS FOR A COMPLETE LPS.
5. REFER TO LIGHTNING PROTECTION SYSTEM DETAILS ON SHEET E-504 FOR ADDITIONAL INFORMATION.
6. PROVIDE PVC COATED RGS SLEEVE FOR DOWN CONDUCTOR ROUTED THROUGH BUILDING FOUNDATION.

SHEET KEYNOTES

1. PROVIDE #2/0 AWG COPPER DOWN CONDUCTOR FROM ROOF AIR TERMINAL BONDING CONDUCTOR TO GROUND ROD IN 1" PVC CONDUIT PER NEC. REFER TO DETAIL A14/E-504.
2. PROVIDE LIGHTNING PROTECTION AIR TERMINAL LOCATED WITHIN 2'-0" OF ROOF PERIMETER, OR RIDGE END. PROVIDE AIR TERMINAL WITH FLAT ROOF MOUNTING HARDWARE BASE AND SWIVEL ADAPTER AS REQUIRED. REFER TO DETAIL J14/E-504.
3. PROVIDE #2/0 AWG BARE COPPER CONDUCTOR FOR ROOF AIR TERMINAL BONDING CONDUCTORS ON ROOF EXTERIOR. SUPPORT AT 3'-0" ALONG CONDUCTOR.

SHEET LEGEND

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: J. SHOWERS
DRAWN BY: F. OLIVAREZ
CHECKED BY: G. JAGLOWSKI
SUBMITTED BY:
ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W912T524F6002
CONTRACT NO.: W912T523D0035
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HDR ENGINEERING, INC
613 NW LOOP 410, STE 700
SAN ANTONIO, TX 78216
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

GROUNDING PLAN

SHEET ID
VCC
EG102

Plot Date: 4/16/2026 3:59:44 PM
File Path: C:\Vcl2025\104000\19-E-PBA_VCC_plaue.olivarez.rvt

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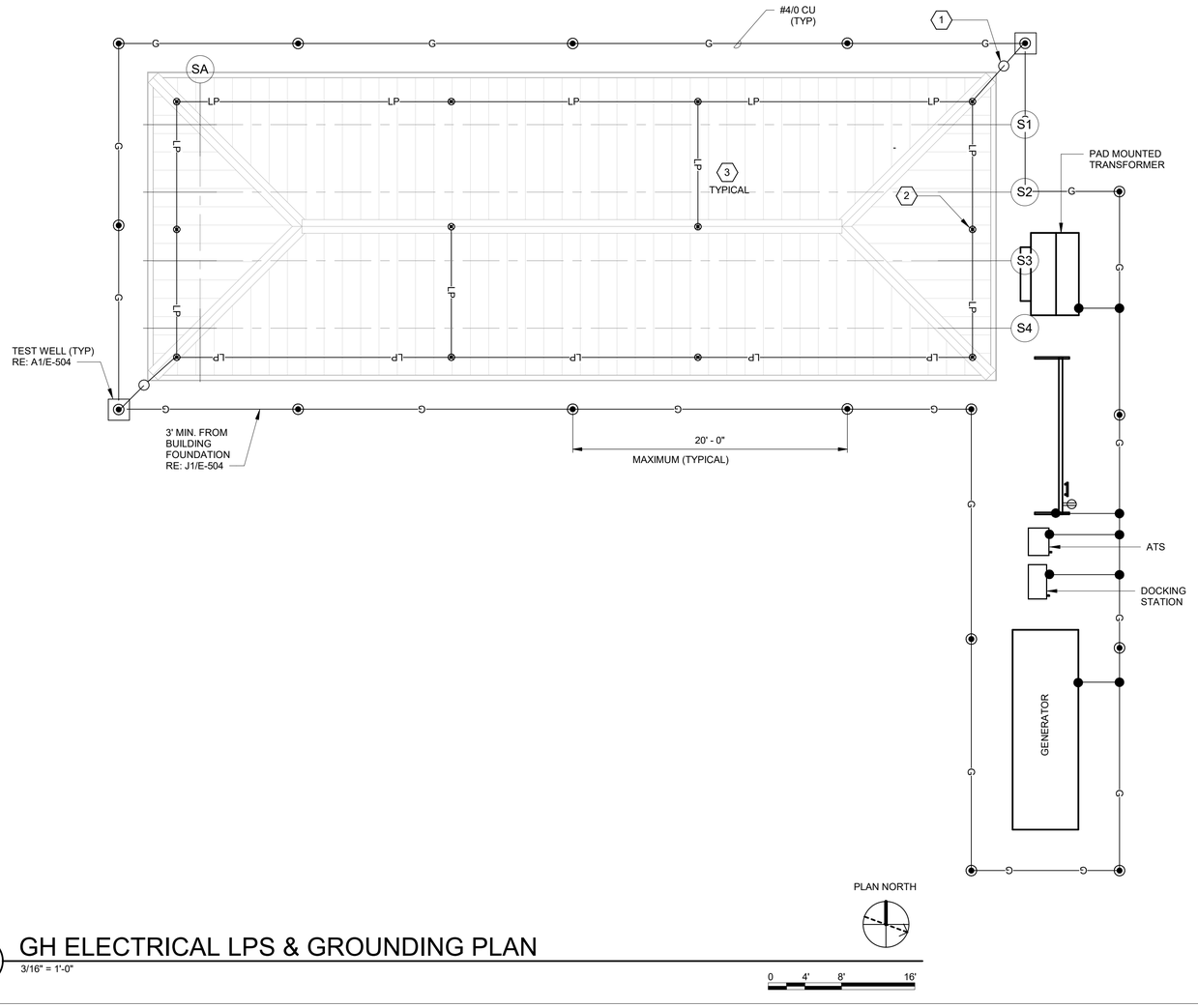

A1 GH ELECTRICAL LPS & GROUNDING PLAN

3/16" = 1'-0"

GENERAL NOTES

1. THE TERM 'LIGHTNING PROTECTION SYSTEM' SHALL BE REFERRED TO AS 'LPS' HENCEFORTH.
2. LPS INSTALLATIONS SHALL BE IN COMPLIANCE WITH NFPA 780 CRITERIA, AND MANUFACTURED IN ACCORDANCE WITH 96, ACCORDING TO UFC 3-575-01.
3. CONTRACTOR SHALL PROVIDE AN UNDERWRITER'S LABORATORY (UL) LIGHTNING PROTECTION INSPECTION CERTIFICATE FOR ANY FACILITY HAVING A LPS INSTALLATION.
4. COMPONENTS INDICATED THIS SHEET ARE SCHEMATIC AND PROVIDE GENERAL DIRECTION FOR THE LPS COMPONENTS. CONTRACTOR SHALL PROVIDE NECESSARY COMPONENTS FOR A COMPLETE LPS.
5. REFER TO LIGHTNING PROTECTION SYSTEM DETAILS ON SHEET E-504 FOR ADDITIONAL INFORMATION.
6. PROVIDE PVC COATED RGS SLEEVE FOR DOWN CONDUCTOR ROUTED THROUGH BUILDING FOUNDATION.

SHEET KEYNOTES

1. PROVIDE #2/0 AWG COPPER DOWN CONDUCTOR FROM ROOF AIR TERMINAL BONDING CONDUCTOR TO GROUND ROD IN 1" PVC CONDUIT PER NEC. REFER TO DETAIL A14/E-504.
2. PROVIDE LIGHTNING PROTECTION AIR TERMINAL LOCATED WITHIN 2'-0" OF ROOF PERIMETER, OR RIDGE END. PROVIDE AIR TERMINAL WITH FLAT ROOF MOUNTING HARDWARE BASE AND SWIVEL ADAPTER AS REQUIRED. REFER TO DETAIL J14/E-504.
3. PROVIDE #2/0 AWG BARE COPPER CONDUCTOR FOR ROOF AIR TERMINAL BONDING CONDUCTORS ON ROOF EXTERIOR. SUPPORT AT 3'-0" ALONG CONDUCTOR.

SHEET LEGEND

US Army Corps of Engineers ®

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SUBMITTED BY:
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SOLICITATION NO.: W9127S24FE002
CONTRACT NO.: W9127S25D0035
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LITTLE ROCK DISTRICT
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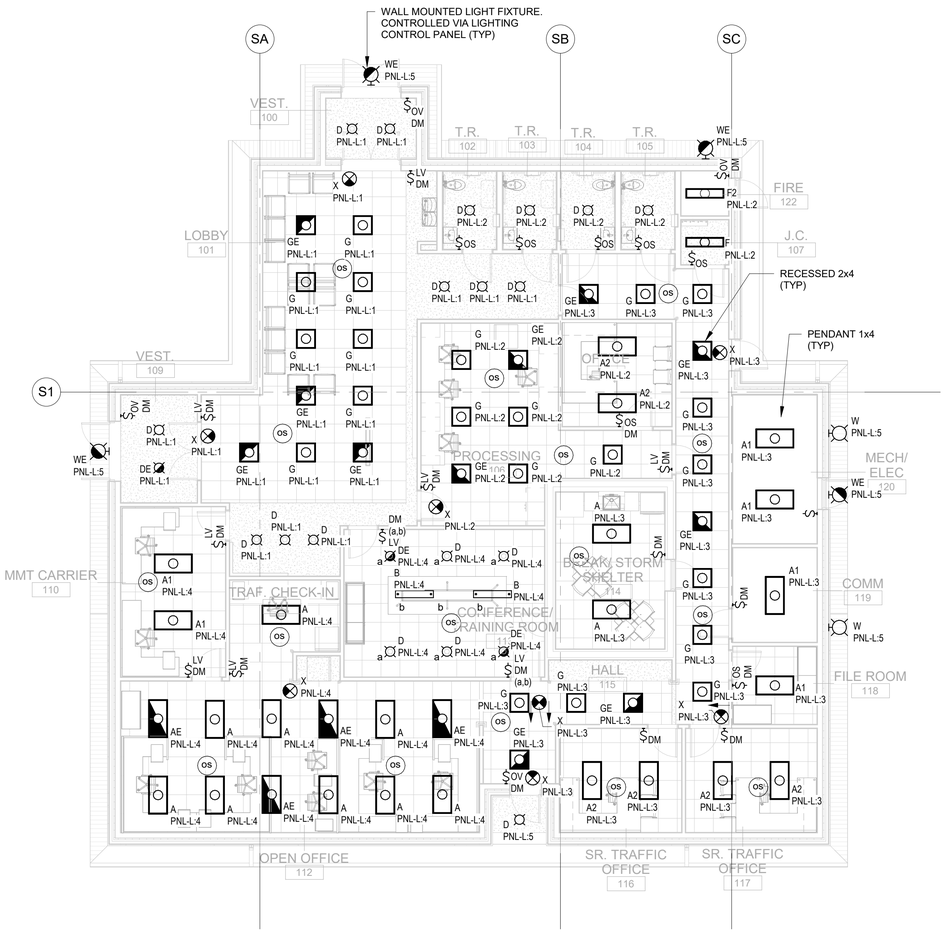
SAN ANTONIO, TX 78216
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

GROUNDING PLAN

SHEET ID
G-HOUSE
EG103

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



PLAN NORTH

A1 LIGHTING PLAN

1/8" = 1'-0"

0 4' 8' 16'

GENERAL NOTES

1. COORDINATE FINAL LOCATION OF CEILING MOUNTED, SUSPENDED/PENDANT, WALL MOUNTED LIGHT FIXTURES, EXIT SIGNS, LIGHTING CONTROL COMPONENTS WITH OTHER TRADES PRIOR TO ROUGH-IN.
2. REFER TO THE LIGHTING CONTROL DETAILS SHEET E-501 FOR ADDITIONAL INFORMATION.
3. PROVIDE ADDITIONAL OCCUPANCY/VACANCY SENSORS FOR FULL COVERAGE. FINAL PLACEMENT OF OCCUPANCY/VACANCY SENSORS TO COMPLY WITH MANUFACTURER'S REQUIREMENTS IN ORDER TO MAINTAIN PROPER FUNCTIONALITY.
4. EXIT SIGNS MUST BE UN-SWITCHED.
5. PROVIDE UN-SWITCHED HOT LEG TO EMERGENCY FIXTURES.

SHEET KEYNOTES

SHEET LEGEND

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

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DRAWN BY: F. OLIVAREZ
CHECKED BY: G. JAGLOWSKI
SUBMITTED BY:
SIZE: ANSI D

ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W912S24F6002
CONTRACT NO.: W912S25D0035

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

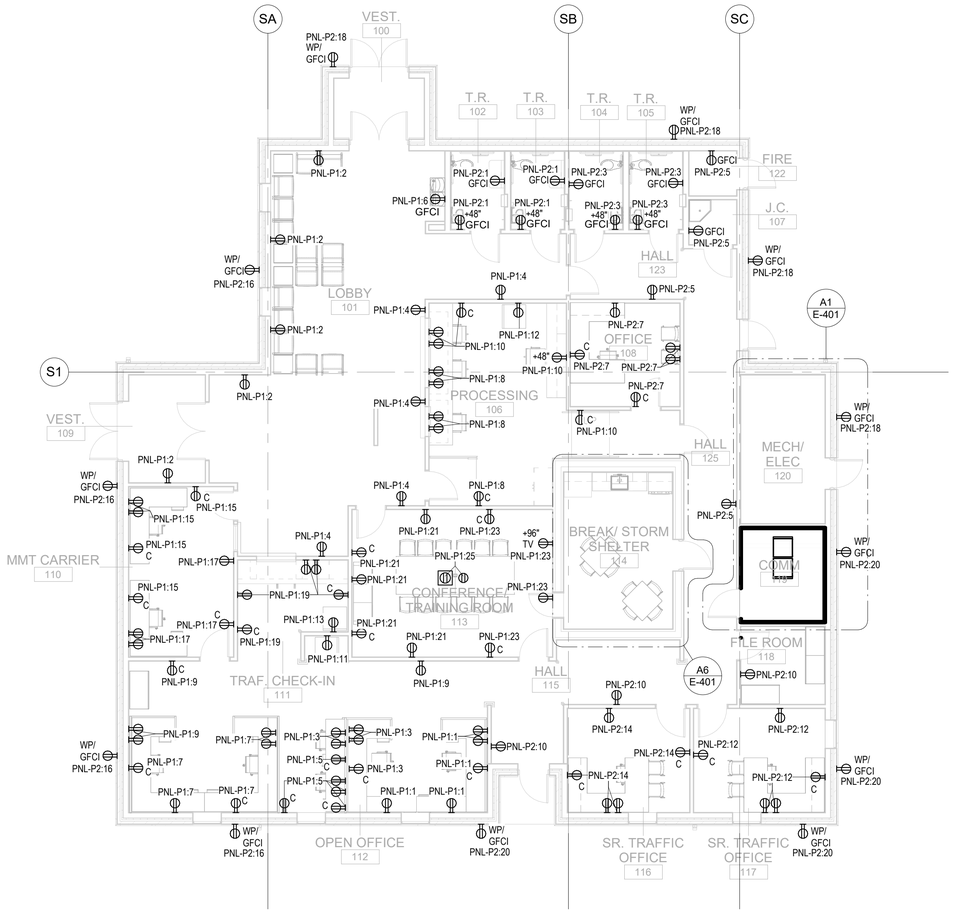
HDR ENGINEERING, INC
613 NW LOOP 410, STE 700
SAN ANTONIO, TX 78216
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

LIGHTING PLAN

SHEET ID
VCC
E-101

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



PLAN NORTH

0 4' 8' 16'

A1 POWER PLAN

1/8" = 1'-0"

GENERAL NOTES

1. COORDINATE FINAL LOCATION OF ELECTRICAL EQUIPMENT AND COMPONENTS WITH OTHER TRADES PRIOR TO ROUGH-IN.
2. COORDINATE RECEPTACLE LOCATIONS WITH MILLWORK AND COUNTERS. DO NOT LOCATE RECEPTACLES BEHIND DRAWERS OR HIDDEN IN MILLWORK UNLESS SPECIFICALLY DIRECTED BY CONTRACTING OFFICER. REVIEW ARCHITECTURAL ELEVATIONS PRIOR TO ROUGH-INS. SEE ARCHITECTURAL ELEVATIONS IN BREAKROOMS FOR APPLIANCES AND RECEPTACLE MOUNTING LOCATIONS.
3. PROVIDE GFI CIRCUIT BREAKERS FOR APPLIANCE POWER CONNECTIONS AS LISTED PER NEC ARTICLE 422.5. APPLIANCES MUST INCLUDE VENDING MACHINES, WATER COOLERS, FRIDGES, DISHWASHERS, AND GARBAGE DISPOSALS. GFI PROTECTION AS INDICATED ON DEVICES MUST BE ACCESSIBLE FOR MAINTENANCE. COORDINATE FINAL FURNITURE LAYOUT PRIOR TO ROUGH-IN.
4. COORDINATE POWER CONNECTION REQUIREMENTS OF SERVER RACKS SUCH AS RECEPTACLE NEMA CONFIGURATION, RATING, DEDICATED CIRCUITS AND QUANTITY PRIOR TO PROCUREMENT AND INSTALLATION.
5. COORDINATE THE LOCATIONS OF DATA/TV/CAMERA ROUGH-IN WITH THE RECEPTACLES. MOUNT ADJACENT TO EACH OTHER.

SHEET KEYNOTES

SHEET LEGEND

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: J. SHOWERS
DRAWN BY: F. OLIVAREZ
CHECKED BY: C. JAGELOWSKI
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SUBMITTED BY:
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HDR ENGINEERING, INC
613 NW LOOP 410, STE 700
SAN ANTONIO, TX 78216
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

POWER PLAN

SHEET ID
VCC
E-102

Plot Date: 4/16/2026 3:59:48 PM
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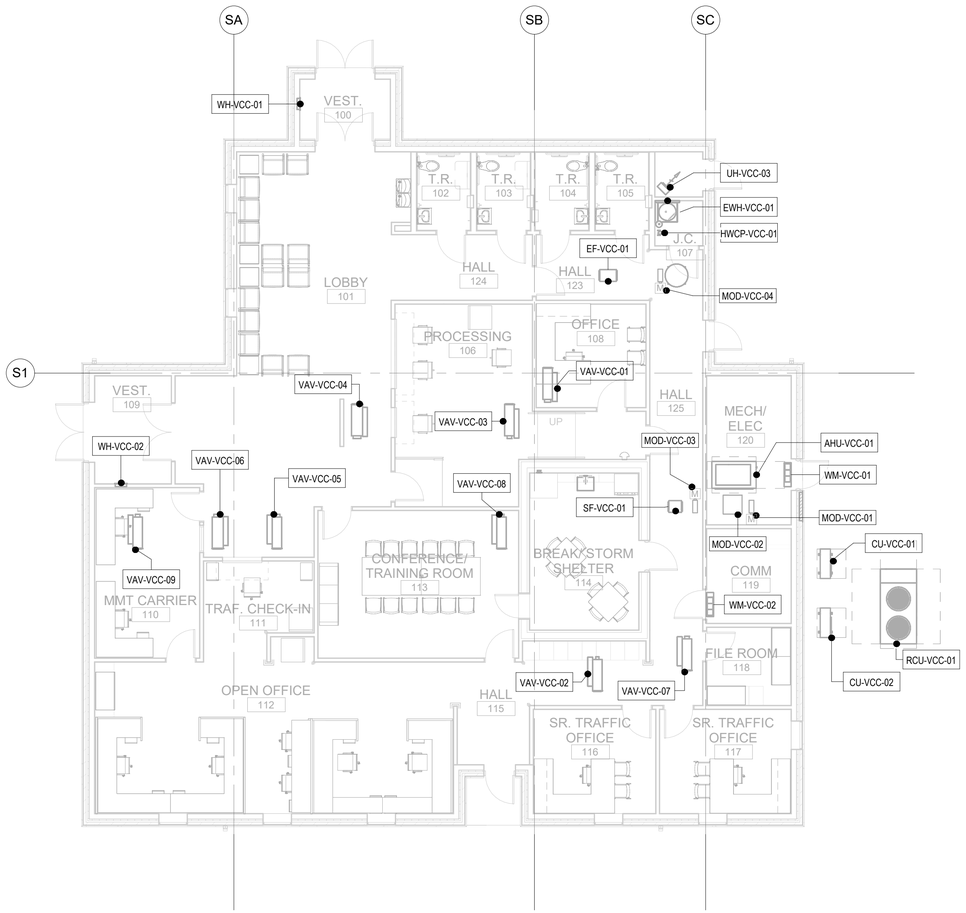

PLAN NORTH

A1 HVAC POWER PLAN

1/8" = 1'-0"

0 4' 8' 16'

GENERAL NOTES

1. REFER TO MECHANICAL PLANS FOR EXACT LOCATIONS OF MECHANICAL EQUIPMENT.
2. REFER TO MECHANICAL EQUIPMENT CONNECTION SCHEDULE E-602 FOR POWER CONNECTION REQUIREMENTS.
3. COORDINATE WITH THE MECHANICAL CONTRACTOR AND GENERAL CONTRACTOR FOR FINAL ELECTRICAL EQUIPMENT LOCATION.
4. CONTRACTOR MUST VERIFY THE POWER/CONTROL CONNECTION REQUIREMENTS. PROVIDE CONNECTIONS FOR ASSOCIATED ANCILLARY DEVICES/CONTROL SYSTEM PER MANUFACTURER RECOMMENDATIONS FOR EQUIPMENT. IF EQUIPMENT IS SUBSTITUTED AND ELECTRICAL MODIFICATIONS ARE REQUIRED, SUBMIT TO ENGINEER FOR REVIEW AND APPROVAL. COORDINATE WITH MANUFACTURER FOR POWER CONNECTION REQUIREMENTS PRIOR TO PROCUREMENT AND INSTALLATION.

SHEET KEYNOTES

SHEET LEGEND

US Army Corps of Engineers ®

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SOLICITATION NO.: W912T524F6002
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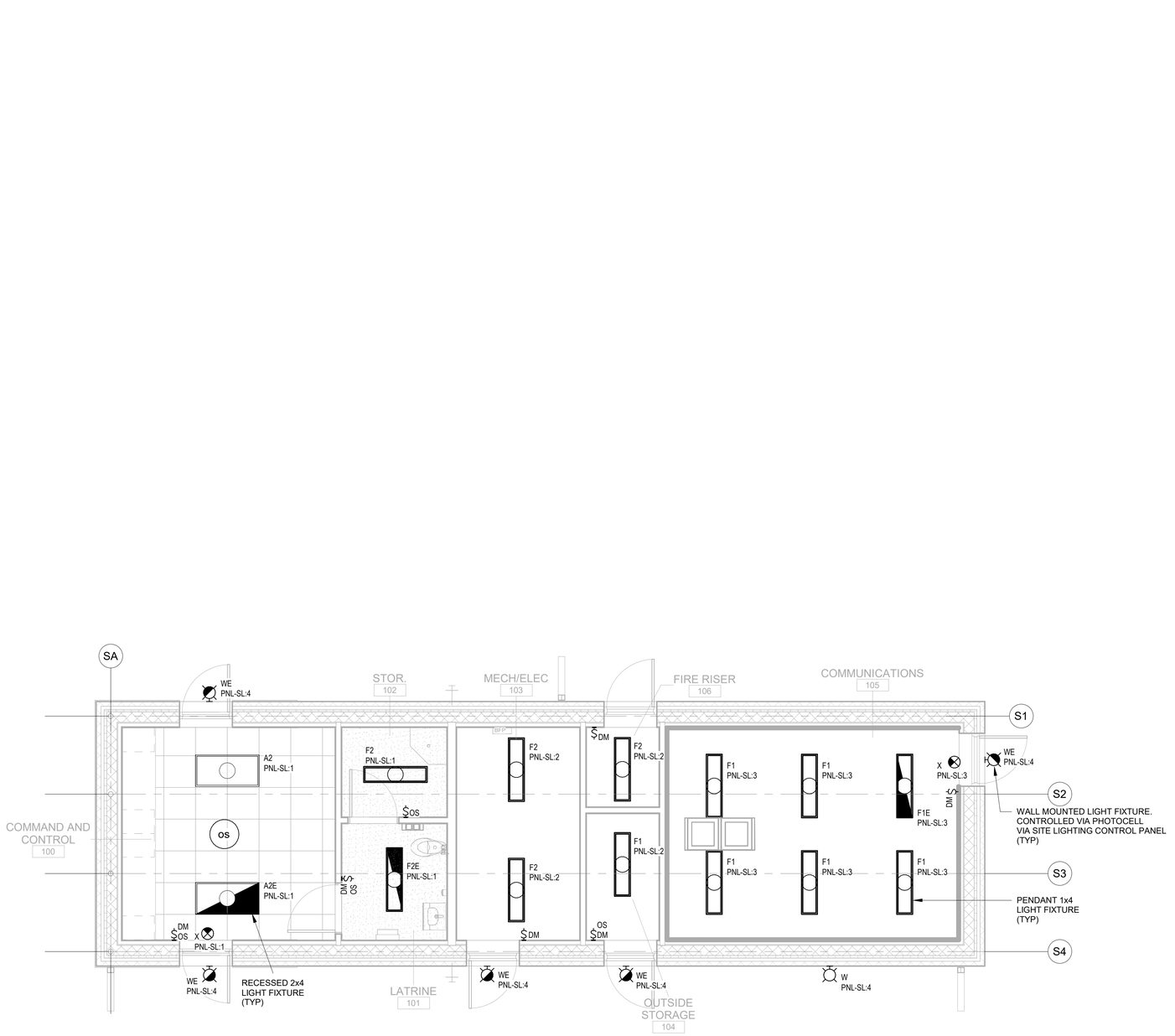
SAN ANTONIO, TX 78216
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

HVAC POWER PLAN

SHEET ID
VCC
E-103

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



PLAN NORTH

0 2' 4' 8'

A1 LIGHTING PLAN

1/4" = 1'-0"

GENERAL NOTES

1. COORDINATE FINAL LOCATION OF CEILING MOUNTED, SUSPENDED/PENDANT, WALL MOUNTED LIGHT FIXTURES, EXIT SIGNS, LIGHTING CONTROL COMPONENTS WITH OTHER TRADES PRIOR TO ROUGH-IN.
2. REFER TO LIGHTING CONTROL DETAILS SHEET E-501 FOR ADDITIONAL INFORMATION.
3. PROVIDE ADDITIONAL OCCUPANCY/VACANCY SENSORS FOR FULL COVERAGE. FINAL PLACEMENT OF OCCUPANCY/VACANCY SENSORS TO COMPLY WITH MANUFACTURER'S REQUIREMENTS IN ORDER TO MAINTAIN PROPER FUNCTIONALITY.
4. EXIT SIGNS MUST BE UN-SWITCHED.
5. PROVIDE UN-SWITCHED HOT LEG TO EMERGENCY FIXTURES.

SHEET KEYNOTES

SHEET LEGEND

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SUBMITTED BY:
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SOLICITATION NO.: W912S24F6002
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LITTLE ROCK, AR

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613 NW LOOP 410, STE 700
SAN ANTONIO, TX 78216
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

LIGHTING PLAN

SHEET ID
G-HOUSE
E-104

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

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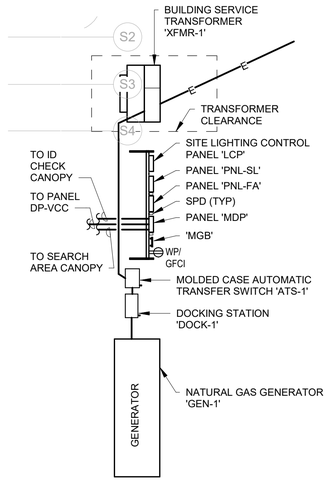
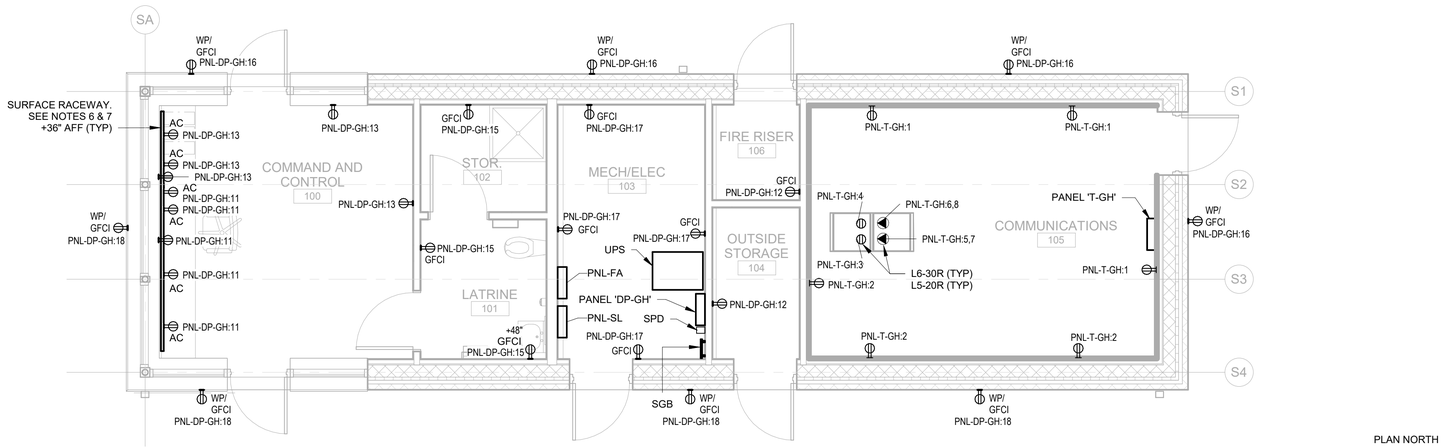


F1 POWER PLAN - GENERATOR AREA

1/8" = 1'-0"



A1 POWER PLAN

1/4" = 1'-0"

PLAN NORTH

0 4' 8' 16'

GENERAL NOTES

1. COORDINATE FINAL LOCATION OF ELECTRICAL EQUIPMENT AND COMPONENTS WITH OTHER TRADES PRIOR TO ROUGH-IN.
2. COORDINATE RECEPTACLE LOCATIONS WITH MILLWORK AND COUNTERS. DO NOT LOCATE RECEPTACLES BEHIND DRAWERS OR HIDDEN IN MILLWORK UNLESS SPECIFICALLY DIRECTED BY CONTRACTING OFFICER. REVIEW ARCHITECTURAL ELEVATIONS PRIOR TO ROUGH-INS. SEE ARCHITECTURAL ELEVATIONS IN BREAKROOMS FOR APPLIANCES AND RECEPTACLE MOUNTING LOCATIONS.
3. PROVIDE GFI CIRCUIT BREAKERS FOR APPLIANCE POWER CONNECTIONS AS LISTED PER NEC ARTICLE 422.6. APPLIANCES MUST INCLUDE VENDING MACHINES, WATER COOLERS, FRIDGES, DISHWASHERS, AND GARBAGE DISPOSALS. GFI PROTECTION AS INDICATED ON DEVICES MUST BE ACCESSIBLE FOR MAINTENANCE. COORDINATE FINAL FURNITURE LAYOUT PRIOR TO ROUGH-IN.
4. COORDINATE POWER CONNECTION REQUIREMENTS OF SERVER RACKS SUCH AS RECEPTACLE NEMA CONFIGURATION, RATING, DEDICATED CIRCUITS AND QUANTITY PRIOR TO PROCUREMENT AND INSTALLATION.
5. COORDINATE THE LOCATIONS OF DATA/TV/CAMERA ROUGH-IN WITH THE RECEPTACLES. MOUNT ADJACENT TO EACH OTHER.
6. ALL WIRING DEVICES ROUGH-INS WILL BE IN A SURFACE MOUNTED WIREMOLD AS INDICATED. PROVIDE SHOP DRAWING WITH PRODUCT SUBMITTAL PRIOR TO ROUGH-IN.
7. STAND-ALONE DEVICES, SUCH AS LIGHT SWITCHES, THERMOSTAT, CARD READERS, AND REQUEST TO EXIT DEVICES, WILL BE MOUNTED IN WIREMOLD WITH SURFACE MOUNTED BOXES.

SHEET KEYNOTES

SHEET LEGEND

US Army Corps of Engineers ®

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SUBMITTED BY:
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SOLICITATION NO.: W9127S24FE002
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SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HDR ENGINEERING, INC
613 NW LOOP 410, STE 700
SAN ANTONIO, TX 78216
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ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

POWER PLAN

SHEET ID
G-HOUSE
E-105

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

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PLAN NORTH

0 4' 8' 16'

A1 HVAC POWER PLAN

1/4" = 1'-0"

GENERAL NOTES

1. REFER TO MECHANICAL PLANS FOR EXACT LOCATIONS OF MECHANICAL EQUIPMENT.
2. REFER TO MECHANICAL EQUIPMENT CONNECTION SCHEDULE E-602 FOR POWER CONNECTION REQUIREMENTS.
3. COORDINATE WITH THE MECHANICAL CONTRACTOR AND GENERAL CONTRACTOR FOR FINAL ELECTRICAL EQUIPMENT LOCATION.
4. CONTRACTOR MUST VERIFY THE POWER/CONTROL CONNECTION REQUIREMENTS. PROVIDE CONNECTIONS FOR ASSOCIATED ANCILLARY DEVICES/CONTROL SYSTEM PER MANUFACTURER RECOMMENDATIONS FOR EQUIPMENT. IF EQUIPMENT IS SUBSTITUTED AND ELECTRICAL MODIFICATIONS ARE REQUIRED, SUBMIT TO ENGINEER FOR REVIEW AND APPROVAL. COORDINATE WITH MANUFACTURER FOR POWER CONNECTION REQUIREMENTS PRIOR TO PROCUREMENT AND INSTALLATION.

SHEET KEYNOTES

SHEET LEGEND

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

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SUBMITTED BY:
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SAN ANTONIO, TX 78216
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

HVAC POWER PLAN

SHEET ID
G-HOUSE
E-106

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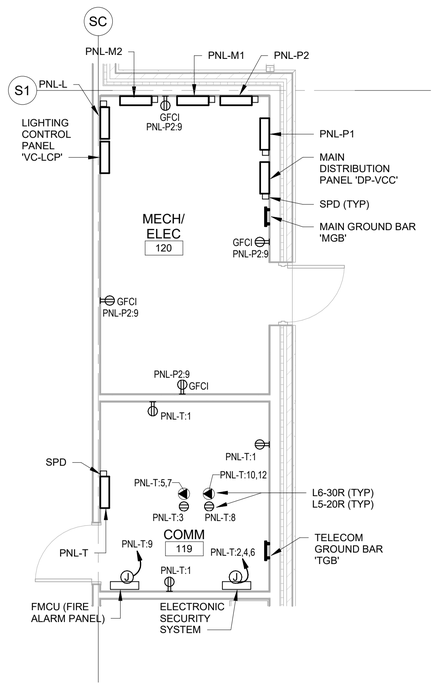
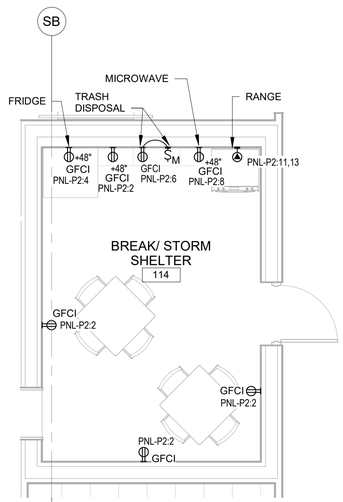


A1 ENLARGED MECH/ELEC AND COMM

1/4" = 1'-0"



A6 ENLARGED BREAK ROOM

1/4" = 1'-0"

GENERAL NOTES

SHEET KEYNOTES

SHEET LEGEND

US Army Corps of Engineers ®

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Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

ENLARGED PLANS

SHEET ID
VCC
E-401

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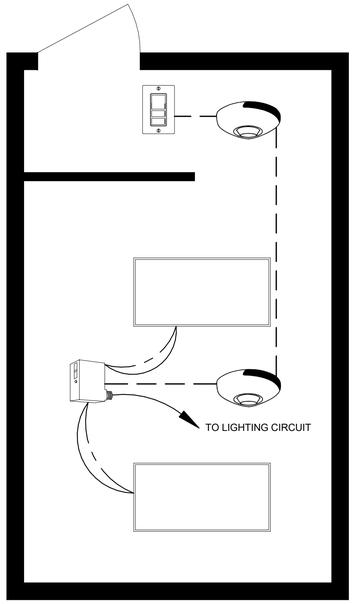


SEQUENCE OF OPERATION:

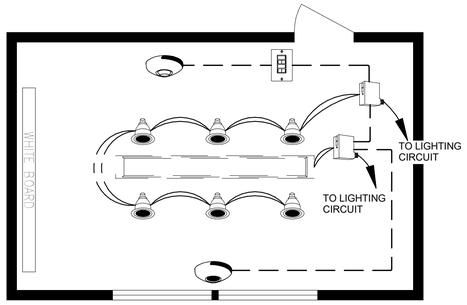
LIGHTS
- FIXTURES ARE CONTROLLED TOGETHER (PER ROOM)

OCCUPANCY
- LIGHTS AUTOMATICALLY TURN ON WHEN OCCUPANT ENTERS
- LIGHTS AUTOMATICALLY TURN OFF WHEN ROOM BECOMES VACANT

MANUAL
- MASTER ON/OFF CONTROL OF LIGHTS

LIGHTING CONTROL DETAIL (TYP. FOR RESTROOMS)

G1 SCALE: NOT TO SCALE



SEQUENCE OF OPERATION:

LIGHTS
- ALL LIGHTS ARE DIMMABLE
- MAXIMUM LEVEL CAN BE LIMITED TO 80%

OCCUPANCY
- LIGHTS MUST BE TURNED ON MANUALLY (OR OPTIONALLY CAN BE CONFIGURED TO COME ON AUTOMATICALLY TO 50%)
- PLUG LOAD TURNS ON AUTOMATICALLY
- LIGHTS AUTOMATICALLY TURN OFF WHEN ROOM BECOMES VACANT

MANUAL
- ON/OFF & RAISE/LOWER CONTROL OF TWO ZONES
- OPTIONAL 4 SCENE CONTROL

LIGHTING CONTROL DETAIL (TYP. FOR CONFERENCE ROOM)

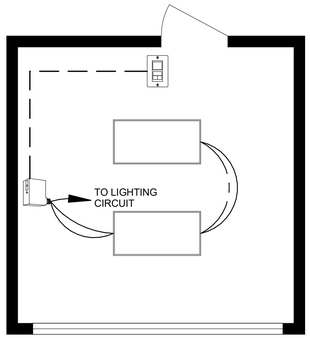
L5 SCALE: NOT TO SCALE

LINEWORK LEGEND
CAT5e CABLE
LINE VOLTAGE WIRES
0-10VDC WIRES
LINE FEED

SYMBOL LEGEND	
SYMBOL	DESCRIPTION
	RELAY MODULE WITH 0-10V DIMMING OUTPUT
	DUAL ON/OFF AND RAISE/LOWER WALL POD
	DUAL TECHNOLOGY OCCUPANCY SENSOR

GENERAL ELECTRICAL SHEET NOTES

1. LIGHTING CONTROL SCHEMATICS ARE BASED OFF OF ASHRAE 90.1 - 2019.
2. REFER TO LIGHTING PLAN FOR NUMBER OF LIGHT FIXTURES.
3. LIGHTING CONTROLS BASIS OF DESIGN: ACUITY CONTROLS. ALTERNATE MANUFACTURERS ARE ACCEPTABLE AS LONG AS PERFORMANCE REQUIREMENTS ARE MET. MANUFACTURERS MUST PROVIDE SHOP DRAWINGS INDICATING FINAL LAYOUT AND COMPONENTS REQUIRED FOR A COMPLETE SYSTEM. SYSTEM COMPONENTS AND WIRING MAY VARY BY MANUFACTURER.
4. CONTRACTOR MUST PROVIDE POWER/RELAY PACKS, LINE AND LOW VOLTAGE WIRING PER MANUFACTURER.
5. CONTRACTOR MUST COORDINATE CONTROL SWITCH TYPES WITH COMPATIBLE LIGHTING FIXTURE DIMMING DRIVERS.



SEQUENCE OF OPERATION:

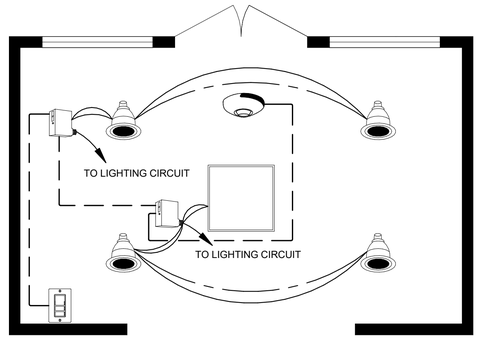
LIGHTS
- LIGHTS ARE DIMMABLE
- FIXTURES ARE CONTROLLED TOGETHER
- MAXIMUM LEVEL CAN BE LIMITED TO 80%

OCCUPANCY
- LIGHTS MUST BE TURNED ON MANUALLY (OR OPTIONALLY CAN BE CONFIGURED TO COME ON AUTOMATICALLY TO 50%)
- LIGHTS AUTOMATICALLY TURN OFF WHEN ROOM BECOMES VACANT

MANUAL
- ON/OFF & RAISE/LOWER CONTROL OF LIGHTS

LIGHTING CONTROL DETAIL (TYP. FOR PRIVATE OFFICE & PRIVATE RESTROOM)

G5 SCALE: NOT TO SCALE



SEQUENCE OF OPERATION:

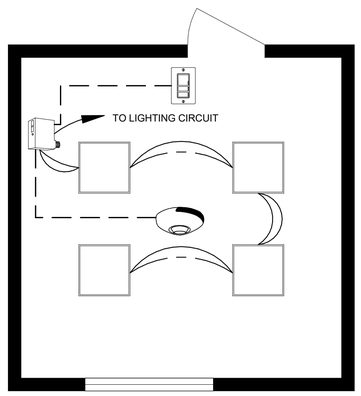
LIGHT FIXTURES:
- FIXTURES ARE DIMMABLE
- MAXIMUM LEVEL CAN BE TASK TUNED TO PERCENTAGE VIA PROGRAMMING

OCCUPANCY CONTROL:
- FIXTURES AUTOMATICALLY GO TO FULL BRIGHT WHEN OCCUPIED
- FIXTURES AUTOMATICALLY TURN OFF WHEN ROOM BECOMES VACANT

MANUAL CONTROL:
- ON/OFF & RAISE/LOWER CONTROL OF FIXTURES

LIGHTING CONTROL DETAIL (TYP. FOR LOBBY)

G13 SCALE: NOT TO SCALE



SEQUENCE OF OPERATION:

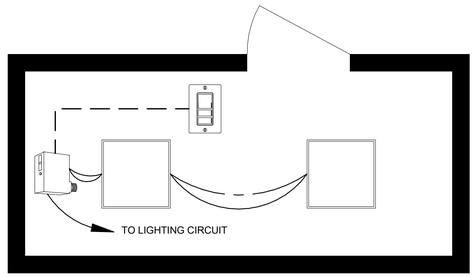
LIGHTS
- LIGHTS ARE DIMMABLE
- FIXTURES ARE CONTROLLED TOGETHER
- MAXIMUM LEVEL CAN BE LIMITED TO 80%

OCCUPANCY
- LIGHTS AUTOMATIC ON TO A MAXIMUM OF 50% OF FULL LIGHTING POWER
- LIGHTS AUTOMATIC FULL OFF AFTER 20 MINUTES OF VACANCY

MANUAL
- ON/OFF & RAISE/LOWER CONTROL OF LIGHTS

LIGHTING CONTROL DETAIL (TYP. FOR OPEN OFFICES, LOUNGE)

A1 SCALE: NOT TO SCALE



SEQUENCE OF OPERATION:

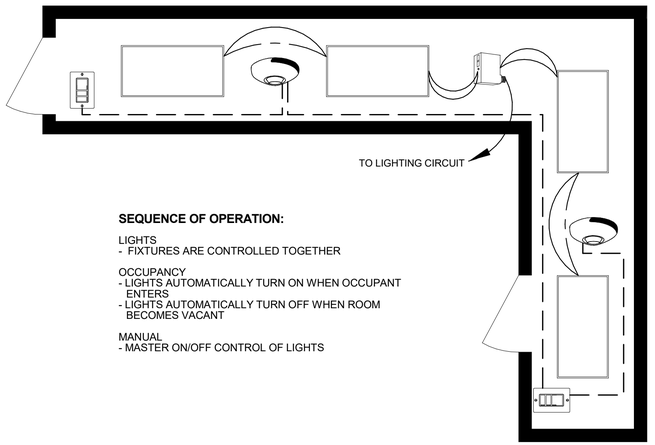
LIGHTS
- FIXTURES ARE CONTROLLED TOGETHER

OCCUPANCY
- LIGHTS AUTOMATICALLY TURN ON WHEN OCCUPANT ENTERS
- LIGHTS AUTOMATICALLY TURN OFF WHEN ROOM BECOMES VACANT

MANUAL
- MASTER ON/OFF CONTROL OF LIGHTS

LIGHTING CONTROL DETAIL (TYP. FOR STORAGE ROOMS & JANITOR CLOSETS)

A7 SCALE: NOT TO SCALE



SEQUENCE OF OPERATION:

LIGHTS
- FIXTURES ARE CONTROLLED TOGETHER

OCCUPANCY
- LIGHTS AUTOMATICALLY TURN ON WHEN OCCUPANT ENTERS
- LIGHTS AUTOMATICALLY TURN OFF WHEN ROOM BECOMES VACANT

MANUAL
- MASTER ON/OFF CONTROL OF LIGHTS

LIGHTING CONTROL DETAIL (TYP. FOR CORRIDORS)

A15 SCALE: NOT TO SCALE

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

File Path: C:\vf\2025\104000\TO\E-PBA_VCC_plaw.dwg

Plot Date: 4/16/2026 3:59:50 PM

DESIGNED BY: J. SHOWERS
DRAWN BY: F. OLIVAREZ
CHECKED BY: C. JAGLOWSKI
SUBMITTED BY:
ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W912T5-24-R-0002
CONTRACT NO.: W912T5-26-D-8005
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

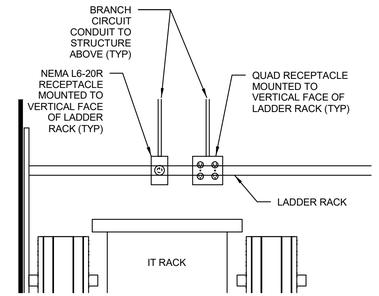
HDR ENGINEERING, INC
613 NW LOOP 410, STE 700
SAN ANTONIO, TX 78216
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

ELECTRICAL DETAILS

SHEET ID
VCC
E-501

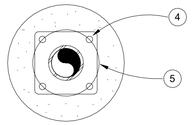
CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



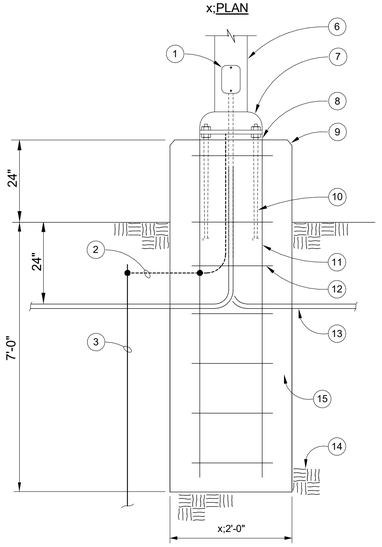
LADDER RACK RECEPTACLES DETAIL

K1

SCALE: NOT TO SCALE



x;PLAN



x;ELEVATION

KEYED NOTES:

1. HAND HOLE
2. #6 AWG GROUND TO POLE
3. GROUND ROD
4. 4 HOLES FOR ANCHOR BOLTS AS REQUIRED BY POLE MANUFACTURER
5. BOLT CIRCLE AS PER MANUFACTURERS RECOMMENDATIONS
6. LIGHT POLE
7. COVER PLATE
8. NON-SHRINK GROUT
9. 1" CHAMFER
10. ANCHOR BOLTS (4 MIN) WITH LEVELING NUTS AS REQUIRED BY POLE MANUFACTURER
11. 6#5 VERTICAL REINFORCING
12. #4 HOOPS @ 6"
13. CONDUIT, SEE ELEC DRAWINGS
14. COMPACTED SUB BASE AS SPECIFIED
15. CONCRETE FOUNDATION 4000 PSI COMPRESSION STRENGTH

NOTES:

A. USE STAINLESS STEEL NUTS AND LOCK WASHERS.
B. INSTALL 2 CONDUITS (MINIMUM PER POLE).
C. CONDUITS SHALL BE STUBBED UP TO WITHIN 6" OF THE POLE HAND HOLE.
D. COORDINATE WITH SITE PLANS FOR PROPER ORIENTATION OF THE POLE.
E. INSTALL CONCRETE POLE BASE A MINIMUM OF 3'-0" FROM CURB FACE TO FACE OF CONCRETE BASE, UON. FOR LOCATIONS, SEE PLANS.

LIGHTING POLE BASE DETAIL

G6

SCALE: NOT TO SCALE

NOTES:

1. PROVIDE SELF-ADHESIVE VINYL LABEL TO AFFIX TO ELECTRICAL EQUIPMENT TO WARN OF ARC FLASH HAZARDS.
2. THIS LABEL SPECIFIES A SITE-SPECIFIC LEVEL OF PERSONAL PROTECTIVE EQUIPMENT. THE LABEL FORMAT AND TEXT CAN BE MODIFIED PROVIDED THAT THE INFORMATION REQUIRED BY UFC 3-501-01 IS INCLUDED.
3. THE LABEL MUST BE LOCATED ON THE EQUIPMENT MUST BE CLEARLY VISIBLE TO TRAINED PERSONS BEFORE EXAMINATION, ADJUSTMENT, SERVICING, OR MAINTENANCE OF THE EQUIPMENT.
4. THE SIZE OF THE LABEL MUST BE MINIMUM:

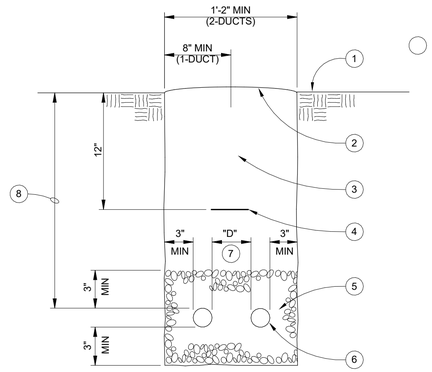
EQUIPMENT TYPE	HEIGHT	WIDTH
INDOOR	2"	3"
OUTDOOR	3"	4.5"

5. A DOWNLOADABLE WINDOWS METAFILE IS AVAILABLE FROM LINK BELOW. TYPE IN THE FOLLOWING ADDRESS IN INTERNET EXPLORER: http://www.wbdg.org/ccb/NAVGRAPH/arc_flash_warning_labels.zip
6. THE CONTRACTOR MUST UNDERTAKE FAULT CURRENT CALCULATIONS (PREPARED BY A PROFESSIONAL ENGINEER) USING "EASY POWER" SOFTWARE AND THE ANALYSIS MUST BE SUBMITTED FOR REVIEW AND APPROVAL PRIOR TO EQUIPMENT SELECTION. PROVIDE ARC-FLASH LABEL AS SHOWN PER UFC 3-560-01, FIGURE 1-10.

ELECTRICAL ARC FLASH LABELING DETAIL

A1

SCALE: NOT TO SCALE



SHEET KEYNOTES

1. FINISH GRADE, SEE CIVIL PLANS
2. SEE TRENCH TOPPING PER SITE PLAN
3. COMPACTED EARTH BACKFILL
4. PLASTIC, MAGNETIC 3" WIDE DETECTABLE TAPE
5. COMPACTED BEDDING AND PIPE ZONE MATERIAL
6. SCHEDULE 80 PVC CONDUIT, NUMBER OF CONDUITS VARY, SEE UTILITY PLANS.
7. D = 3" MIN FOR 2" AND LARGER CONDUIT. D = 2" MIN FOR 1 1/2" AND SMALLER CONDUIT
8. 2'-6" MINIMUM, SEE NOTE A

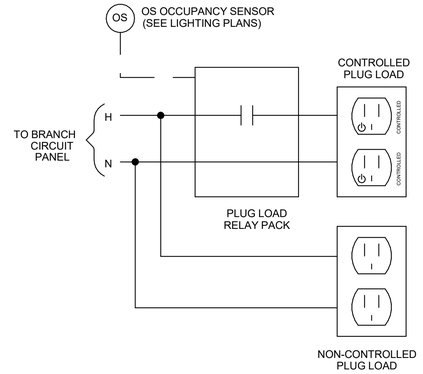
NOTES:

A. INSTALLATION OF DIRECT BURIED DUCT BANK MUST BE SCHEDULE 80 PVC CONDUIT AT 2'-6" MINIMUM BELOW GRADE. BRANCH CIRCUITS SUPPLYING INDIVIDUAL EXTERIOR LIGHTING OR POWER RECEPTACLES MUST BE SCHEDULE 40 PVC CONDUIT AT 2'-0" MINIMUM BELOW GRADE.

UNDERGROUND DIRECT BURY DUCT BANK DETAIL

A6

SCALE: NOT TO SCALE



CONTROLLED RECEPTACLE DIAGRAM

A13

SCALE: NOT TO SCALE

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

File Path: C:\vc\2025\104000\E-E-PBA_VCC_plaue.drawing.rvt

Plot Date: 4/16/2026 3:59:50 PM

DESIGNED BY: J. SHOWERS
DRAWN BY: F. OLIVAREZ
CHECKED BY: G. JAGLOWSKI
SUBMITTED BY:
ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W912T524F6002
CONTRACT NO.: W912T523D0035
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

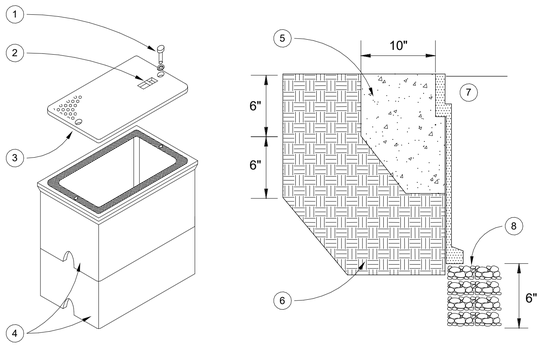
HDR ENGINEERING, INC
613 NW LOOP 410, STE 700
SAN ANTONIO, TX 78216
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

ELECTRICAL DETAILS

SHEET ID
VCC
E-502

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

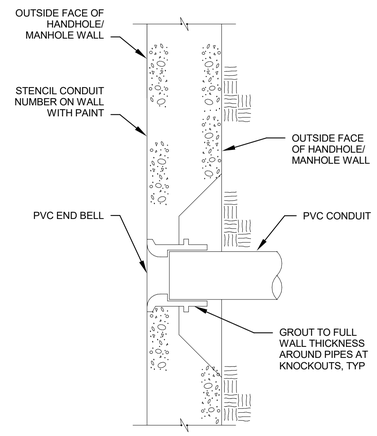


NOTES:

A. HOUSING SHALL BE A POLYMER CONCRETE REINFORCED WITH A HEAVY WEAVE.
B. FIBERGLASS REINFORCING WITH COMPRESSIVE STRENGTH OF NO LESS THAN 10,000 psi.
C. COVER AND BOX SHALL WITHSTAND A SERVICE LOAD OF NO LESS THAN 15,000 LBS.
D. OVER A 10" x 10" AREA. HAND HOLES IN ROADWAYS SHALL BE DESIGNED TO WITHSTAND H-20 LOADING.
E. PROVIDE STAINLESS STEEL BOLTS AND INSERTS.
F. PROVIDE WITH (2) 2 1/2" MOUSEHOLES.
G. PROVIDE LABEL "ELECTRICAL" ON COVER.
H. SIZE AS REQUIRED BY NEC. PROVIDE ADDITIONAL SPACE TO PROVIDE SEPARATION BETWEEN POWER AND COMMUNICATION WIRING.

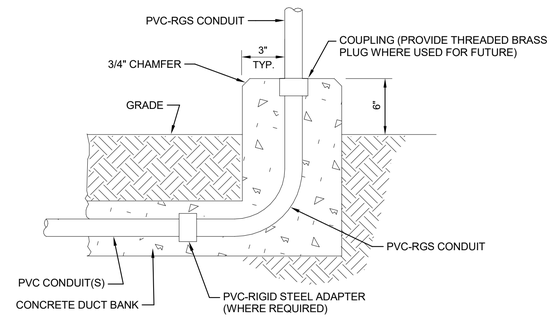
H1 HANDHOLE DETAIL

SCALE: NOT TO SCALE



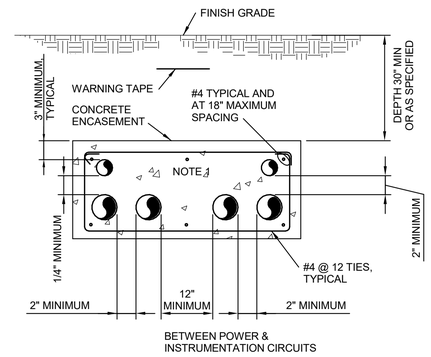
H8 CONDUIT HANDHOLE/ MANHOLE ENTRANCE DETAIL

SCALE: NOT TO SCALE



H13 CONDUIT STUB-UP CURB (EXTERIOR AREA)

SCALE: NOT TO SCALE

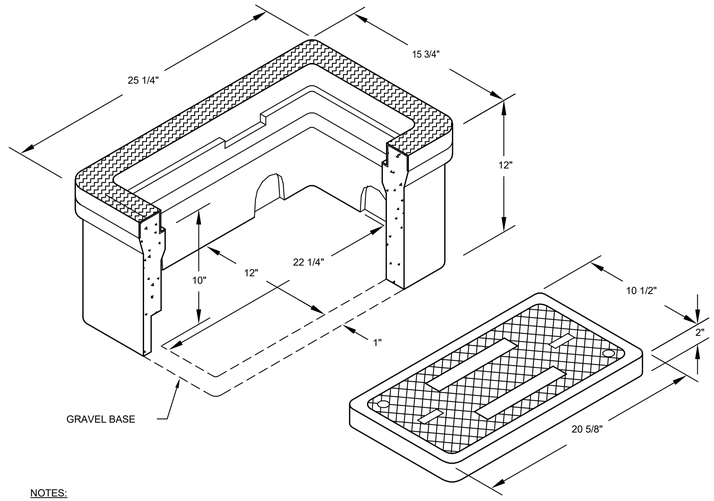


NOTES:

1. NUMBER OF CONDUITS AS REQUIRED FOR THE APPLICATION.
2. SCHEDULE 40 PVC CONDUIT
3. DUCTBANKS SHALL BE REINFORCED UNDER STRUCTURES, TRAFFIC AREAS, AND FOR A DISTANCE OF 10FT ON EITHER SIDE OF TRAFFIC AREA.

A1 REINFORCED CONCRETE ENCASED DUCT BANK DETAIL

SCALE: NOT TO SCALE

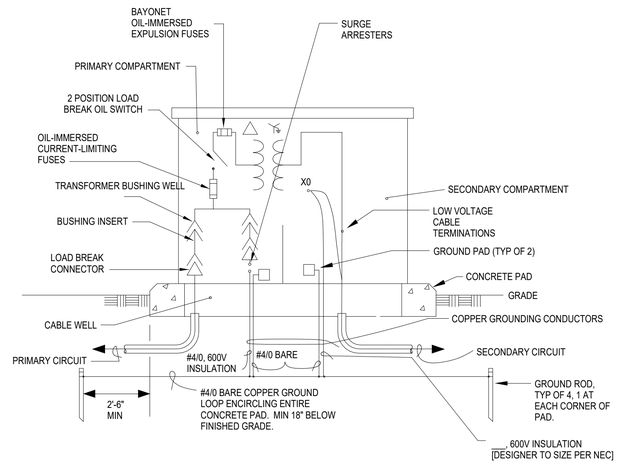


NOTES:

1. A HIGH DENSITY REINFORCED CONCRETE PULL AND JUNCTION BOX WITH SIDE KNOCKOUTS. USE TAMPER RESISTIVE HARDWARE ON COVER.
2. DIMENSIONS SHOWN ARE MINIMUM. SIZE ACCORDING TO CONDUIT SIZES AND QUANTITIES.
3. HANDHOLE, LID AND COMPONENTS IN ROADWAYS OR WITHIN 10 FEET OF ROADWAYS SHALL BE DESIGNED TO WITHSTAND H-20 LOADING.

A7 SECURITY HANDHOLE DETAIL

SCALE: NOT TO SCALE



[UNGROUNDED OR SINGLE GROUNDED PRIMARY SYSTEM - WITH SURGE ARRESTERS]

A14 PAD-MOUNTED TRANSFORMER DETAIL

SCALE: NOT TO SCALE

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: J. SHOWERS	ISSUE DATE: 17 APRIL 2026
DRAWN BY: F. OLIVAREZ	SOLICITATION NO.: W912T5-24-R-0002
CHECKED BY: C. JACKOWSKI	CONTRACT NO.: W912T5-26-D-0035
SUBMITTED BY:	
SIZE: ANSI D	

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HDR ENGINEERING, INC
613 NW LOOP 410, STE 700
SAN ANTONIO, TX 78216
Texas P.E. Firm Registration No. F-754

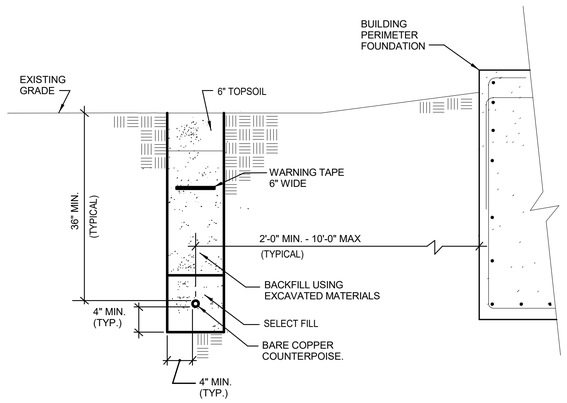
ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

ELECTRICAL DETAILS

SHEET ID
VCC
E-503

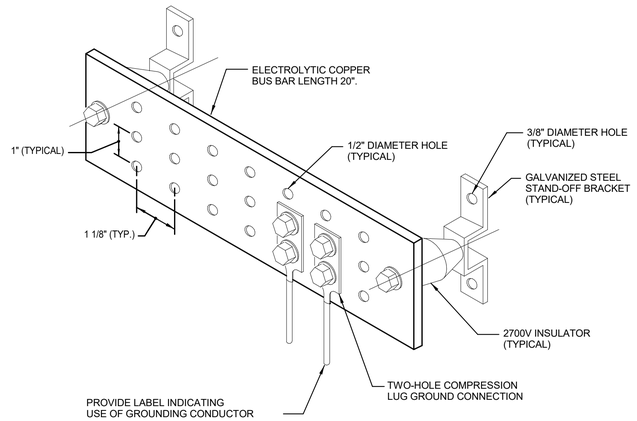
CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

Plot Date: 4/16/2026 3:59:50 PM File Path: C:\vc\2025\104000\19-E-PBA_VCC_plaza.dwg\e2-h1



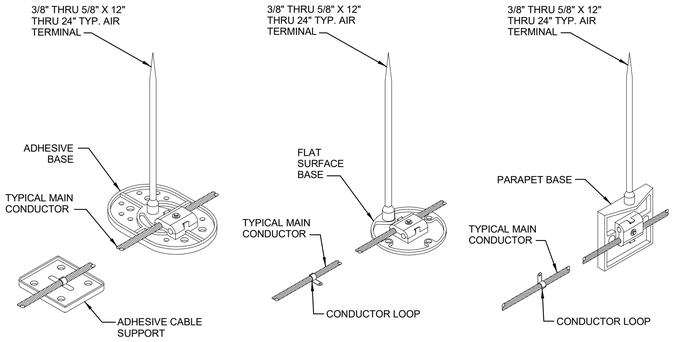
J1 TYPICAL GROUND RING INSTALLATION DETAIL

SCALE: NOT TO SCALE



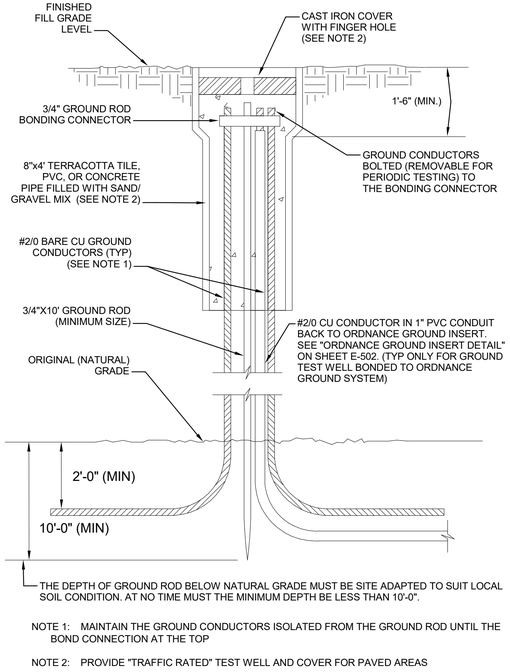
J8 TYPICAL GROUNDING BUS BAR DETAIL

SCALE: NOT TO SCALE



J14 TYPICAL ROOF MOUNTED AIR TERMINAL DETAIL

SCALE: NOT TO SCALE

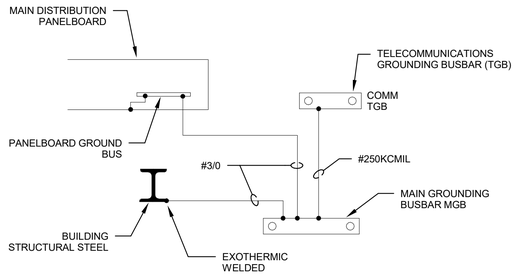


NOTE 1: MAINTAIN THE GROUND CONDUCTORS ISOLATED FROM THE GROUND ROD UNTIL THE BOND CONNECTION AT THE TOP

NOTE 2: PROVIDE "TRAFFIC RATED" TEST WELL AND COVER FOR PAVED AREAS

A1 GROUND TEST WELL INSTALLATION IN EARTH FILL

SCALE: NOT TO SCALE

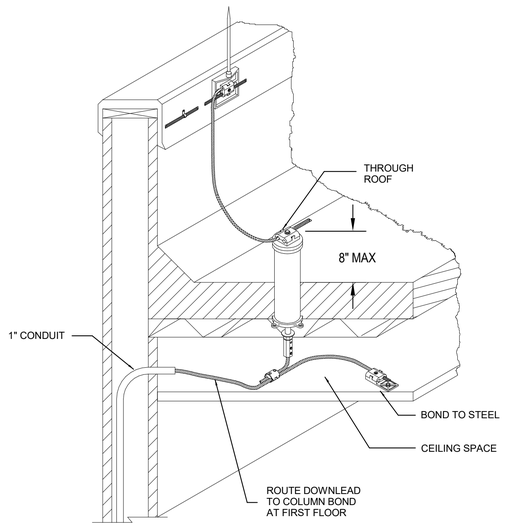


NOTES:

1. PROVIDE AND INSTALL THE TELECOM BONDING BACKBOND IN ACCORDANCE WITH TIA-607-B.

A7 GROUNDING RISER DETAIL

SCALE: NOT TO SCALE



A14 TYPICAL LIGHTNING PROTECTION ROOF DETAIL

SCALE: NOT TO SCALE

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

File Path: C:\vc\2025\104000\19-E-PBA_VCC_...plate.dwg

Plot Date: 4/16/2026 3:59:50 PM

DESIGNED BY:	ISSUE DATE:
J. SHOWERS	17 APRIL 2026
DRAWN BY:	SOLICITATION NO.:
F. OLIVAREZ	W9127S24F6002
CHECKED BY:	CONTRACT NO.:
G. JAGLOWSKI	W9127S23B003
SUBMITTED BY:	
	SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HDR ENGINEERING, INC
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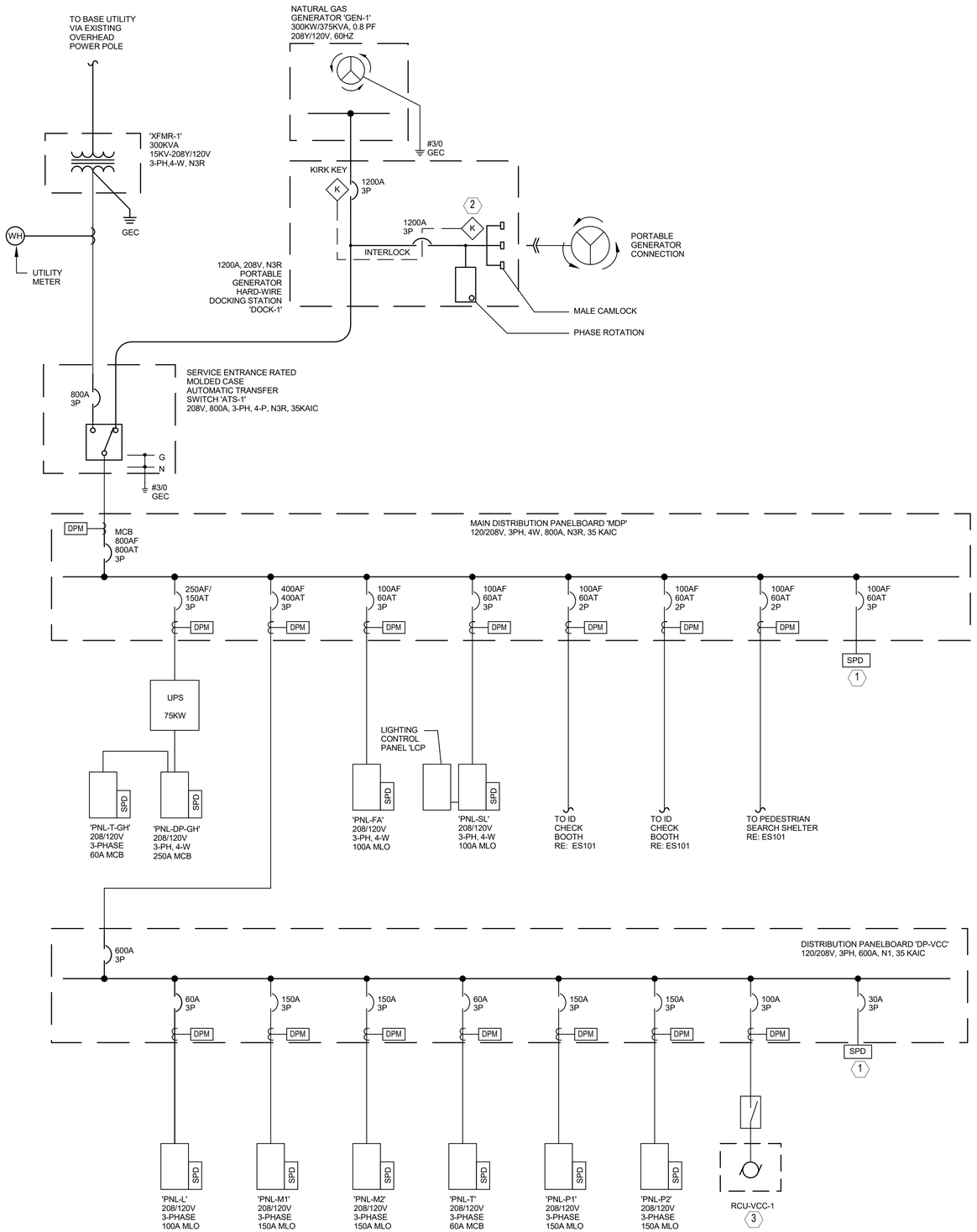
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

ELECTRICAL DETAILS

SHEET ID
VCC
E-504

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



A1 ELECTRICAL ONE-LINE DIAGRAM

NTS

GENERAL NOTES

1. COORDINATE WITH BASE FACILITY PERSONEL FOR MAXIMUM AVAILABLE SHORT FAULT AT THE BUILDING TRANSFORMER AND VERIFY UPSTREAM OVERCURRENT PROTECTION DEVICES AND SETTINGS FOR SHORT FAULT CURRENT CALCULATION AND ARC FLASH LABELING. PROVIDE ARC-FLASH LABELING PER ANALYSIS.
2. PROVIDE FIELD LABEL AND AFFIX TO PANELBOARD ENCLOSURE THE AVAILABLE FAULT CURRENT / DATE OF THE CALCULATION IN ACCORDANCE WITH NEC 2023, ARTICLE 408.
3. REFER TO FLOOR PLANS E-105, E-401 AND PANEL SCHEDULES E-604 - E-607 FOR ADDITIONAL INFORMATION.

SHEET KEYNOTES

1. SPD MUST BE EXTERNALLY MOUNTED. MOUNT EQUIPMENT AS CLOSE AS POSSIBLE TO PANELBOARD OR AS RECOMMENDED PER PANELBOARD MANUFACTURER. PROVIDE 3#10, 1#10G IN 3/4"C.
2. ACCESS TO CAM LOCK PANEL MOUNTS PREVENTED UNTIL CIRCUIT BREAKER IS OPENED AND KIRK KEY IS REMOVED.
3. REFER TO MECHANICAL EQUIPMENT CONNECTION SCHEDULE E-601 FOR ADDITIONAL INFORMATION.

SHEET LEGEND

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

File Path: C:\vc\2025\104000\E-E-PBA_VCC_plaua.dwg

Plot Date: 4/16/2026 3:59:50 PM

DESIGNED BY: J. SHOWERS
DRAWN BY: F. OLIVAREZ
CHECKED BY: C. JACKOWSKI
SUBMITTED BY:
ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W912T524F6002
CONTRACT NO.: W912T523D0035
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HDR ENGINEERING, INC
613 NW LOOP 410, STE 700
SAN ANTONIO, TX 78216
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

ONE-LINE DIAGRAM

SHEET ID
VCC
E-601

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

LIGHTING FIXTURE SCHEDULE

MARK	MANUFACTURER & CATALOG NUMBER	MOUNTING	HEIGHT	LAMPS						INPUT VA (MAX)	GENERIC DESCRIPTION	NOTES	PHOTO
				VA	LUMENS	TYPE	TEMP	CRI	VOLTS				
A	LITHONIA #2VTL4 30L ADP EZ1 LP830	RECESSED	ACT GRID CEILING	39	2923	LED	4000K	80+	MVOLT	39	2'x4' 0-10V DIMMING DOWN TO 1% STANDARD, DURABLE COLD ROLLED STEEL HOUSING, ULTRA-THIN LUMINAIRE HEIGHT AND LIGHTWEIGHT DESIGN, PRE-PAINTED FOR ENHANCED SMOOTH FINISH, OPTIMIZED SMOOTH LENS TO ELIMINATE PIXELATION AND DELIVERS LOW-GLARE AND DIFFUSED LIGHT DISTRIBUTION.	1	
AE	LITHONIA #2VTL4 30L ADP EZ1 LP830 EL14LSD	RECESSED	ACT GRID CEILING	39	2923	LED	4000K	80+	MVOLT	39	2'x4' 0-10V DIMMING DOWN TO 1% STANDARD, DURABLE COLD ROLLED STEEL HOUSING, ULTRA-THIN LUMINAIRE HEIGHT AND LIGHTWEIGHT DESIGN, PRE-PAINTED FOR ENHANCED SMOOTH FINISH, OPTIMIZED SMOOTH LENS, TO ELIMINATE PIXELATION AND DELIVERS LOW-GLARE AND DIFFUSED LIGHT DISTRIBUTION. EMERGENCY BATTERY BACKUP.	1	
A1	LITHONIA #2GTL4 30L FW A19 EZ1 LP840 N100 MOUNTING ACCESSORY #DGA24	RECESSED (TO BOTTOM OF FIXTURE)	GWB HARD CEILING	23.3	3102	LED	4000K	80+	MVOLT	23.3	2'x4' 0-10V DIMMING DOWN TO 1% STANDARD, DURABLE COLD ROLLED STEEL HOUSING, ULTRA-THIN LUMINAIRE HEIGHT AND LIGHTWEIGHT DESIGN, PRE-PAINTED FOR ENHANCED SMOOTH FINISH, OPTIMIZED SMOOTH LENS, TO ELIMINATE PIXELATION AND DELIVERS LOW-GLARE AND DIFFUSED LIGHT DISTRIBUTION.	1	
A1E	LITHONIA #2GTL4 30L FW A19 EZ1 LP840 N100 E10W MOUNTING ACCESSORY #DGA25	RECESSED (TO BOTTOM OF FIXTURE)	GWB HARD CEILING	23.3	3102	LED	4000K	80+	MVOLT	23.3	2'x4' 0-10V DIMMING DOWN TO 1% STANDARD, DURABLE COLD ROLLED STEEL HOUSING, ULTRA-THIN LUMINAIRE HEIGHT AND LIGHTWEIGHT DESIGN, PRE-PAINTED FOR ENHANCED SMOOTH FINISH, OPTIMIZED SMOOTH LENS, TO ELIMINATE PIXELATION AND DELIVERS LOW-GLARE AND DIFFUSED LIGHT DISTRIBUTION. EMERGENCY BATTERY BACKUP.	1	
A2	LITHONIA #2GTL4 40L FW A19 EZ1 LP830 N100 MOUNTING ACCESSORY #DGA24	RECESSED (TO BOTTOM OF FIXTURE)	GWB HARD CEILING	23.3	3102	LED	4000K	80+	MVOLT	23.3	2'x4' 0-10V DIMMING DOWN TO 1% STANDARD, DURABLE COLD ROLLED STEEL HOUSING, ULTRA-THIN LUMINAIRE HEIGHT AND LIGHTWEIGHT DESIGN, PRE-PAINTED FOR ENHANCED SMOOTH FINISH, OPTIMIZED SMOOTH LENS, TO ELIMINATE PIXELATION AND DELIVERS LOW-GLARE AND DIFFUSED LIGHT DISTRIBUTION.	1	
A2E	LITHONIA #2GTL4 40L FW A19 EZ1 LP830 N100 MOUNTING ACCESSORY #DGA24	RECESSED (TO BOTTOM OF FIXTURE)	GWB HARD CEILING	23.3	3102	LED	4000K	80+	MVOLT	23.3	2'x4' 0-10V DIMMING DOWN TO 1% STANDARD, DURABLE COLD ROLLED STEEL HOUSING, ULTRA-THIN LUMINAIRE HEIGHT AND LIGHTWEIGHT DESIGN, PRE-PAINTED FOR ENHANCED SMOOTH FINISH, OPTIMIZED SMOOTH LENS, TO ELIMINATE PIXELATION AND DELIVERS LOW-GLARE AND DIFFUSED LIGHT DISTRIBUTION.	1	
B	LITHONIA #GRD LLP 4FT MSL4 80CRI 30K ID1000LMF 20/80 MIN1 ZT 120 SCT F1/12F C110	PENDANT (TO BOTTOM OF FIXTURE)	8'-0"	32	4220	LED	4000K	80+	MVOLT	32	0-10V DIMMING TO 1%, 4 FEET SUSPENDED AMBIENT LUMINAIRE, ACTIVE COLOR MANAGEMENT, ROOM-SIDE HEAT SINK, EQUIPPED WITH THERMAL MANAGEMENT SYSTEM DEISGNED TO MAXIMIZE COOLING EFFECTIVENESS HIGH STRENGTH, LIGHTWEIGHT POLYMER FORMS THE REFLECTOR AND DRIVER HOUSING, HIGH-EFFICIENCY REFLECTOR, INTEGRAL HIGH-EFFICIENCY DRIVER AND POWER SUPPLY.	1	
BE	LITHONIA #GRD LLP 4FT MSL4 80CRI 30K ID1000LMF 20/80 MIN1 ZT 120 SCT E10WLCP F1/12F C110	PENDANT (TO BOTTOM OF FIXTURE)	8'-0"	32	4220	LED	4000K	80+	MVOLT	32	0-10V DIMMING TO 1%, 4 FEET SUSPENDED AMBIENT LUMINAIRE, ACTIVE COLOR MANAGEMENT, ROOM-SIDE HEAT SINK, EQUIPPED WITH THERMAL MANAGEMENT SYSTEM DEISGNED TO MAXIMIZE COOLING EFFECTIVENESS HIGH STRENGTH, LIGHTWEIGHT POLYMER FORMS THE REFLECTOR AND DRIVER HOUSING, HIGH-EFFICIENCY REFLECTOR, INTEGRAL HIGH-EFFICIENCY DRIVER AND POWER SUPPLY. EMERGENCY BATTERY PACK	1	
C	LITHONIA LIGHTING #CNY LED ALO SWW2 UVOLT PE PIR DDB 40K 5000L	SURFACE (TO BOTTOM OF FIXTURE)	SURFACE TO THE BOTTOM OF CANOPY STRUCTURE	34	4794	LED	4000K	80	MVOLT	34	SINGLE LOW PROFILE CANOPY LED LUMINAIRE WITH HEAVY-DUTY CAST ALUMINUM HOUSING, INTEGRAL HEAT SINKS, HIGH-EFFICIENCY DRIVER, INTERGRAL SURGE PROTECTION, HIGH OUTPUT LEDS, WIDE DISTRIBUTION FLAT LENS OPTICS, IP65 RATED, DARK BRONZE POWDER COAT FINISH.	1	
D	LITHONIA #LDN6 40/15 LO6 AR LD	RECESSED	ACT GRID CEILING	17.5	1514	LED	4000K	80+	MVOLT	17.5	6" DOWNLIGHT LUMINAIRE WITH RUGGED/ GALVANIZED STEEL MOUNTING FRAME, TORSION SPRING BRACKET, VERTICAL ADJUSTABLE MOUNTING BRACKETS, FLAT BAR HANGERS, 1/2" CONDUIT OR C CHANNEL T-BAR FASTENERS, ONE-PIECE DIE-CAST TRIM, ELLIPTICAL UPPER REFLECTOR, MICRO-PRISM LENS, INTEGRAL DIMMING TO DARK CONTROLS, INTEGRAL DRIVER DISCONNECT, INTEGRAL SURGE PROTECTION, MATTE WHITE FINISH, WET LOCATION RATED.	1	
DE	LITHONIA #LDN6 40/15 LO6 AR LD	RECESSED	ACT GRID CEILING	17.5	1514	LED	4000K	80+	MVOLT	17.5	6" DOWNLIGHT LUMINAIRE WITH RUGGED/ GALVANIZED STEEL MOUNTING FRAME, TORSION SPRING BRACKET, VERTICAL ADJUSTABLE MOUNTING BRACKETS, FLAT BAR HANGERS, 1/2" CONDUIT OR C CHANNEL T-BAR FASTENERS, ONE-PIECE DIE-CAST TRIM, ELLIPTICAL UPPER REFLECTOR, MICRO-PRISM LENS, INTEGRAL DIMMING TO DARK CONTROLS, INTEGRAL DRIVER DISCONNECT, INTEGRAL SURGE PROTECTION, MATTE WHITE FINISH, WET LOCATION RATED.	1	

NOTE:
1) LUMINAIRE SELECTION WAS USED AS A BASIS OF DESIGN. ALTERNATE LUMINAIRE SELECTIONS WITHIN THE INDICATED CRITERIA ARE ACCEPTABLE.

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

File Path: C:\vc\2025\104000\E-E-PBA_VCC_plase.dwarez.rvt

Plot Date: 4/16/2026 3:59:50 PM

DESIGNED BY: J. SHOWERS
DRAWN BY: F. OLIVAREZ
CHECKED BY: G. JAGLOWSKI
SUBMITTED BY:
SIZE: ANSI D

ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W912S724F6002
CONTRACT NO.: W912S725D0035

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HDR ENGINEERING, INC
613 NW LOOP 410, STE 700
SAN ANTONIO, TX 78216
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

ELECTRICAL SCHEDULES

SHEET ID
VCC
E-602

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

LIGHTING FIXTURE SCHEDULE

MARK	MANUFACTURER & CATALOG NUMBER	MOUNTING	HEIGHT	LAMPS						INPUT VA (MAX)	GENERIC DESCRIPTION	NOTES	PHOTO
				VA	LUMENS	TYPE	TEMP	CRI	VOLTS				
F	LITHONIA LIGHTING #FEM L48 4000LM LPPFL WD MVOLT GZ10 40K 80CRI	RECESSED	GWB HARD CEILING	34.1	4031.04	LED	4000K	80+	MVOLT	34.1	1'x4' 0-10V DIMMING DOWN TO 1% STANDARD, DURABLE COLD ROLLED STEEL HOUSING, ULTRA-THIN LUMINAIRE HEIGHT AND LIGHTWEIGHT DESIGN, PRE-PAINTED FOR ENHANCED SMOOTH FINISH, OPTIMIZED SMOOTH LENS, TO ELIMINATE PIXELATION AND DELIVERS LOW-GLARE AND DIFFUSED LIGHT DISTRIBUTION.	1	
F1	LITHONIA LIGHTING #FEM L48 4000LM LPPFL WD MVOLT GZ10 40K 80CRI #MHCH 36	PENDANT (TO BOTTOM OF FIXTURE)	8'-0"	23.8	3595	LED	4000K	80+	MVOLT	23.8	0-10V DIMMING DOWN TO 1% STANDARD, ONE-PIECE FIBERGLASS HOUSING, INTEGRAL PERIMETER CHANNEL WITH POURED IN PLACE NEMA 4X GASKET, INJECTION MOLDED WIDE DISTRIBUTION ACRYLIC LENS, LOW PROFILE FROSTED LENS, INTEGRAL 6KV SURGE PROTECTION, WET LOCATION RATED.	1	
F1E	LITHONIA LIGHTING #FEM L48 4000LM LPPFL WD MVOLT GZ10 40K 80CRI #MHCH 36	PENDANT (TO BOTTOM OF FIXTURE)	8'-0"	23.8	3595	LED	4000K	80+	MVOLT	23.8	0-10V DIMMING DOWN TO 1% STANDARD, ONE-PIECE FIBERGLASS HOUSING, INTEGRAL PERIMETER CHANNEL WITH POURED IN PLACE NEMA 4X GASKET, INJECTION MOLDED WIDE DISTRIBUTION ACRYLIC LENS, LOW PROFILE FROSTED LENS, INTEGRAL 6KV SURGE PROTECTION, WET LOCATION RATED.	1	
F2	LITHONIA LIGHTING #FEM L48 3000LM LPPFL WD MVOLT GZ10 30K 80CRI #MHCH 36	PENDANT (TO BOTTOM OF FIXTURE)	8'-0"	23.8	3595	LED	4000K	80+	MVOLT	23.8	0-10V DIMMING DOWN TO 1% STANDARD, ONE-PIECE FIBERGLASS HOUSING, INTEGRAL PERIMETER CHANNEL WITH POURED IN PLACE NEMA 4X GASKET, INJECTION MOLDED WIDE DISTRIBUTION ACRYLIC LENS, LOW PROFILE FROSTED LENS, INTEGRAL 6KV SURGE PROTECTION, WET LOCATION RATED.	1	
F2E	LITHONIA LIGHTING #FEM L48 3000LM LPPFL WD MVOLT GZ10 30K 80CRI #MHCH 36	PENDANT (TO BOTTOM OF FIXTURE)	8'-0"	23.8	3595	LED	4000K	80+	MVOLT	23.8	0-10V DIMMING DOWN TO 1% STANDARD, ONE-PIECE FIBERGLASS HOUSING, INTEGRAL PERIMETER CHANNEL WITH POURED IN PLACE NEMA 4X GASKET, INJECTION MOLDED WIDE DISTRIBUTION ACRYLIC LENS, LOW PROFILE FROSTED LENS, INTEGRAL 6KV SURGE PROTECTION, WET LOCATION RATED.	1	
G	LITHONIA LIGHTING #2GTL2 20L A19 LP830	RECESSED	ACT GRID CEILING	18.4	2203	LED	4000K	80+	MVOLT	18.4	2'x2' 0-10V DIMMING DOWN TO 1% STANDARD, DURABLE COLD ROLLED STEEL HOUSING, ULTRA-THIN LUMINAIRE HEIGHT AND LIGHTWEIGHT DESIGN, PRE-PAINTED FOR ENHANCED SMOOTH FINISH, OPTIMIZED SMOOTH LENS, TO ELIMINATE PIXELATION AND DELIVERS LOW-GLARE AND DIFFUSED LIGHT DISTRIBUTION.	1	
GE	LITHONIA LIGHTING #2GTL2 20L A19 LP830	RECESSED	ACT GRID CEILING	18.4	2203	LED	4000K	80+	MVOLT	18.4	2'x2' 0-10V DIMMING DOWN TO 1% STANDARD, DURABLE COLD ROLLED STEEL HOUSING, ULTRA-THIN LUMINAIRE HEIGHT AND LIGHTWEIGHT DESIGN, PRE-PAINTED FOR ENHANCED SMOOTH FINISH, OPTIMIZED SMOOTH LENS, TO ELIMINATE PIXELATION AND DELIVERS LOW-GLARE AND DIFFUSED LIGHT DISTRIBUTION.	1	
P1	LITHONIA #DSX1 LED P1 40K T4M 120 SPA PIR DDBXD G1 ACCESSORY PUMBA DDBXD U G1	POLE MOUNTED	25'-0"	102	6764	LED	3000K	70+	MVOLT	102	ROADWAY LUMINAIRE WITH HEAVY-DUTY SINGLE-PIECE DIE-CAST ALUMINUM HOUSING, TGCI DARK BRONZE POWDER COAT FINISH, PRECISION-MOLDED ACRYLIC LENS, INTEGRAL HOUSING HEAT SINKS, TYPE IV MEDIUM LIGHT DISTRIBUTION, INTEGRAL ROUND POLE MOUNTING ADAPTOR, WET LOCATED RATED.	1	
PF	LITHONIA #RSXF2 LED P3 30K AWFD 120 SPA PIR DDBXD G1 ACCESSORY PUMBA DDBXD U G2	POLE MOUNTED	50'-0"	149.98	19007	LED	3000K	70+	MVOLT	149.98	RUGGED DIE-CAST ALUMINUM HOUSING, TGCI DARK BRONZE POWDER COAT FINISH, PRECISION-MOLDED ACRYLIC LENS, INTEGRAL HOUSING HEAT SINKS, AREA WIDE FORWARD LIGHT DISTRIBUTION, INTEGRAL ROUND POLE MOUNTING ADAPTOR, WET LOCATED RATED.	1	
W	LITHONIA #ARC1 LED P2 40K MVOLT PE DDBXD	SURFACE / WALL MOUNTED	ABOVE DOOR	17	4000	LED	4000K	80+	MVOLT	17	SMALL EXTERIOR WALL PACK LUMINAIRE WITH TWO-PIECE DIE-CAST ALUMINUM HOUSING, INTEGRAL HEAT SINKS FINS, ONE-PIECE SOILD SILICONE GASKET, DARK BRONZE ZINC-INFUSED TGIC THERMOSET POWDER COAT FINISH, FULL "CUT-OFF" (NIGHTTIME FRIENDLY) VISUAL COMFORT DISTRIBUTION OPTICS, INTEGRAL RECESSED PRECISION-MOLDED ACRYLIC LENSES, INTEGRAL DRIVER DISCONNECT, INTEGRAL 6KV SURGE PROTECTION, INTERGRAL PHOTOCELL FOR DUSK-TO-DAWN OPERATION, HIGH OUTPUT LONG-LIFE LEDs, HIGH EFFICIENCY DRIVER, WET LOCATION RATED, INTEGRAL EMERGENCY BATTERY PACK CAPABILTY.	1	
WE	LITHONIA #ARC1 LED P2 40K MVOLT PE DDBXD	SURFACE / WALL MOUNTED	ABOVE DOOR	17	4000	LED	4000K	80+	MVOLT	17	SMALL EXTERIOR WALL PACK LUMINAIRE WITH TWO-PIECE DIE-CAST ALUMINUM HOUSING, INTEGRAL HEAT SINKS FINS, ONE-PIECE SOILD SILICONE GASKET, DARK BRONZE ZINC-INFUSED TGIC THERMOSET POWDER COAT FINISH, FULL "CUT-OFF" (NIGHTTIME FRIENDLY) VISUAL COMFORT DISTRIBUTION OPTICS, INTEGRAL RECESSED PRECISION-MOLDED ACRYLIC LENSES, INTEGRAL DRIVER DISCONNECT, INTEGRAL 6KV SURGE PROTECTION, INTERGRAL PHOTOCELL FOR DUSK-TO-DAWN OPERATION, HIGH OUTPUT LONG-LIFE LEDs, HIGH EFFICIENCY DRIVER, WET LOCATION RATED, INTEGRAL EMERGENCY BATTERY PACK CAPABILTY.	1	
X	LITHONIA LIGHTING #EDGR 1 R EL SD	WALL MOUNTED	ABOVE DOOR	3.8	-	LED	-	-	MVOLT	3.8	LED EXIT SIGN. SUITABLE FOR ILLUMINATING THE PATH OF EGRESS AND FOR MARKING THE MEANS OF EGRESS IN ACCORDACE WITH NFPA 101, INJECTION-MOLDED, FLAME-RETARDANT, HIGH-IMPACT, THERMOPLASTIC HOUSING WITH SNAP-FIT DESIGN COMPONENTS.	1	

NOTE:
1) LUMINAIRE SELECTION WAS USED AS A BASIS OF DESIGN. ALTERNATE LUMINAIRE SELECTIONS WITHIN THE INDICATED CRITERIA ARE ACCEPTABLE.

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

File Path: C:\vc\2025\104000\E-E-PBA_VCC_plese.drawrev1.rvt

Plot Date: 4/16/2026 3:59:51 PM

DESIGNED BY: J. SHOWERS
DRAWN BY: F. OLIVARES
CHECKED BY: G. JAGLOWSKI
SUBMITTED BY:
SIZE: ANSI D

ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W912T524F6002
CONTRACT NO.: W912T523D0035

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HDR ENGINEERING, INC
613 NW LOOP 410, STE 700
SAN ANTONIO, TX 78216
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

ELECTRICAL SCHEDULES

SHEET ID
VCC
E-603

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

MECHANICAL EQUIPMENT CONNECTION SCHEDULE

TAG	DESCRIPTION	VOLTAGE	PHASE	kW/hp/MCA/FLA	LOAD (A)	LOAD (kVA)	LOCAL DISCONNECT	CONTROLLER BY/VFD	CIRCUIT BREAKER
AHU-VCC-01	AIR HANDLING UNIT (HEATER)	208	3	10 MCA	10	3.60	NOTE 2	VFD/NOTE 2	15A/3P
RCU-VCC-01	AHU REMOTE CONDENSING UNIT	208	3	74 MCA	74	26.66	NOTE 2	NOTE 2	100A/3P
AHU-GH-01	AIR HANDLING UNIT	208	3	3 MCA	3	1.08	NOTE 2	VFD/NOTE 2	15A/3P
RCU-GH-01	AHU REMOTE CONDENSING UNIT	208	3	24 MCA	24	8.65	NOTE 2	NOTE 2	40A/3P
EF-VCC-01	EXHAUST FAN	120	1	1/4 hp	3.8	0.46	NOTE 2	NOTE 2	15A/1P
SF-VCC-01	EXHAUST FAN	120	1	1/6 hp	2.8	0.34	NOTE 2	NOTE 2	15A/1P
EF-GH-01	EXHAUST FAN	120	1	1/6 hp	2.8	0.34	NOTE 2	NOTE 2	15A/1P
WM-VCC-01/CU-VCC-01	MINI-SPLIT AIR CONDITIONING UNIT (NOTE 1)	208	1	12.35 MCA	12.35	2.57	20A MOTOR RATED SWITCH W/ WP COVER	NOTE 2	15AP/2P
WM-VCC-02/CU-VCC-02	MINI-SPLIT AIR CONDITIONING UNIT (NOTE 1)	208	1	12.35 MCA	12.35	2.57	20A MOTOR RATED SWITCH W/ WP COVER	NOTE 2	15AP/2P
WM-GH-01/CU-GH-01	MINI-SPLIT AIR CONDITIONING UNIT (NOTE 1)	208	1	13.55 MCA	13.55	2.82	20A MOTOR RATED SWITCH W/ WP COVER	NOTE 2	20AP/2P
VAV-VCC-01	VARIABLE AIR VOLUME BOX	208	3	4.5 kW	20.82	7.50	NOTE 2	-	30A/3P
VAV-VCC-02	VARIABLE AIR VOLUME BOX	208	3	2 kW	13.88	5.00	NOTE 2	-	20A/3P
VAV-VCC-03	VARIABLE AIR VOLUME BOX	208	3	2 kW	6.94	2.50	NOTE 2	-	20A/3P
VAV-VCC-04	VARIABLE AIR VOLUME BOX	208	3	12.5 kW	22.21	8.00	NOTE 2	-	30A/3P
VAV-VCC-05	VARIABLE AIR VOLUME BOX	208	3	6 kW	8.33	3.00	NOTE 2	-	20A/3P
VAV-VCC-06	VARIABLE AIR VOLUME BOX	208	3	9 kW	29.15	10.50	NOTE 2	-	40A/3P
VAV-VCC-07	VARIABLE AIR VOLUME BOX	208	3	3.5kW	9.72	3.50	NOTE 2	-	20A/3P
VAV-VCC-08	VARIABLE AIR VOLUME BOX	208	3	3.5 Kw	9.72	3.50	NOTE 2	-	20A/3P
VAV-VCC-09	VARIABLE AIR VOLUME BOX	208	3	2.5 Kw	9.72	3.50	NOTE 2	-	20A/3P
HWCP-VCC-01	DOMESTIC HOT WATER RECIRCULATION	120	1	1/4 HP	5.8	0.70	20A MOTOR RATED SWITCH	NOTE 2	20A/1P
HWCP-GH-01	DOMESTIC HOT WATER RECIRCULATION	120	1	1/4 HP	5.8	0.70	20A MOTOR RATED SWITCH	NOTE 2	20A/1P
WH-VCC-01	ELECTRIC HEATER	120	1	1 KW	8.33	1.00	NOTE 2	-	20A/1P
WH-VCC-02	ELECTRIC HEATER	120	1	1 KW	8.33	1.00	NOTE 2	-	20A/1P
WH-GH-01	ELECTRIC HEATER	120	1	1 KW	8.33	1.00	NOTE 2	-	20A/1P
EWH-VCC-01	INSTANTANEOUS WATER HEATER	208	3	12.5 FLA	12.49	4.50	30A/208V/3P/NF/N1	-	20A/3P
EWH-GH-01	INSTANTANEOUS WATER HEATER	120	1	12.5 FLA	12.50	1.50	20A MOTOR RATED SWITCH	-	20A/1P
MOD-VCC-01	MOTORIZED DAMPER	120	1	2	2.00	0.24	20A MOTOR RATED SWITCH	-	20A/1P
MOD-VCC-02	MOTORIZED DAMPER	120	1	2	2.00	0.24	20A MOTOR RATED SWITCH	-	20A/1P
MOD-VCC-03	MOTORIZED DAMPER	120	1	2	2.00	0.24	20A MOTOR RATED SWITCH	-	20A/1P
MOD-VCC-04	MOTORIZED DAMPER	120	1	2	2.00	0.24	20A MOTOR RATED SWITCH	-	20A/1P
MOD-GH-01	MOTORIZED DAMPER	120	1	2	2.00	0.24	20A MOTOR RATED SWITCH	-	20A/1P
MOD-GH-02	MOTORIZED DAMPER	120	1	2	2.00	0.24	20A MOTOR RATED SWITCH	-	20A/1P
MOD-GH-03	MOTORIZED DAMPER	120	1	2	2.00	0.24	20A MOTOR RATED SWITCH	-	20A/1P
UH-GH-01	UNIT HEATER	208	3	9.2 A	9.20	3.31	20A MOTOR RATED SWITCH	-	20A/3P
UH-GH-02	UNIT HEATER	208	3	9.2 A	9.20	3.31	20A MOTOR RATED SWITCH	-	20A/3P
UH-VCC-03	UNIT HEATER	208	3	9.2 A	9.20	3.31	20A MOTOR RATED SWITCH	-	20A/3P

GENERAL NOTES:

A. REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR LOCATIONS AND POWER CONNECTION REQUIREMENTS.

B. IF EQUIPMENT IS SUBSTITUTED AND ELECTRICAL MODIFICATIONS ARE REQUIRED, THE ELECTRICAL CONTRACTORS SHALL COORDINATE WITH MANUFACTURER AND DIVISION 22 & 23 CONTRACTORS FOR ALL NEW POWER CONNECTION REQUIREMENTS PRIOR TO PROCUREMENT AND INSTALLATION.

NOTES:

1) INDOOR UNIT POWER IS FED FROM OUTDOOR UNIT. PROVIDE 3/4" CONDUIT WITH PULLSTRING.

2) PROVIDED WITH MECHANICAL EQUIPMENT OR BY MECHANICAL CONTRACTOR. PROVIDE CONNECTION AS REQUIRED. REFER TO MECHANICAL SCHEDULE FOR ADDITIONAL INFORMATION.

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

File Path: C:\vt\2025\104000\19-E-PBA_VCC_plaw.dwg

Plot Date: 4/16/2026 3:59:51 PM

DESIGNED BY: J. SHOWERS
DRAWN BY: F. OLIVAREZ
CHECKED BY: C. JAGLOWSKI
SUBMITTED BY:

ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S25B0035

SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HDR ENGINEERING, INC.
613 NW LOOP 410, STE 700
SAN ANTONIO, TX 78216
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

ELECTRICAL SCHEDULES

SHEET ID
VCC
E-604

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

Branch Panel: PNL-P1

Location: MECH/ ELEC 120
Supply From: DP-VCC
Mounting: Surface
Enclosure: Type 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating:
Mains Type: MLO
Mains Rating: 150 A

Notes:

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	REC - OPEN OFFICE 112	20 A	1	900 VA	900 VA					1	20 A	REC - LOBBY 101	2
3	REC - OPEN OFFICE 112	20 A	1			900 VA	900 VA			1	20 A	REC - LOBBY 101	4
5	REC - OPEN OFFICE 112	20 A	1					900 VA	500 VA	1	20 A	(*) EQUIPMENT - LOBBY EWC	6
7	REC - OPEN OFFICE 112	20 A	1	900 VA	900 VA					1	20 A	REC - PROCESSING 106	8
9	REC - OPEN OFFICE 112	20 A	1			720 VA	900 VA			1	20 A	REC - PROCESSING 106	10
11	EQUIPMENT - PRINTER 112	20 A	1					500 VA	500 VA	1	20 A	Equipment - PRINTER 106	12
13	EQUIPMENT - PRINTER 111	20 A	1	500 VA									14
15	REC - MMT CARRIER 110	20 A	1			900 VA							16
17	REC - MMT CARRIER 110	20 A	1					720 VA					18
19	REC - TRAF CHECK-IN 111	20 A	1	900 VA									20
21	REC - CONF/TRAIN RM 113	20 A	1			900 VA							22
23	REC - CONF/TRAIN RM 113	20 A	1					720 VA					24
25	REC - CONF/TRAIN RM 113	20 A	1	360 VA									26
27	Spare	20 A	1			0 VA							28
29	Spare	20 A	1					0 VA	0 VA	1	20 A	Spare	30
31	Spare	20 A	1	0 VA	0 VA					1	20 A	Spare	32
33	Spare	20 A	1			0 VA	0 VA			1	20 A	Spare	34
35	Spare	20 A	1					0 VA	0 VA	1	20 A	Spare	36
37	Spare	20 A	1	0 VA	0 VA					3	30 A	SPD	38
39	Spare	20 A	1			0 VA	0 VA			--	--	--	40
41	Spare	20 A	1					0 VA	0 VA	--	--	--	42
			Total Load:	5360 VA		5220 VA		3840 VA					
			Total Amps:	46 A		45 A		32 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Equipment	2000 VA	100.00%	2000 VA		
REC	12420 VA	90.26%	11210 VA	**Total Conn. Load:**	14420 VA
				Total Est. Demand:	13210 VA
				Total Conn.:	40 A
				Total Est. Demand:	37 A

Notes:
(*) PROVIDE GFCI CIRCUIT BREAKER

Branch Panel: PNL-M1

Location: MECH/ ELEC 120
Supply From: DP-VCC
Mounting: Surface
Enclosure: Type 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating:
Mains Type:
Mains Rating: 150 A

Notes:

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	HVAC - AHU-VCC-01	15 A	3	1200 VA	8887 VA					3	100 A	HVAC - RCU-VCC-01	2
3	--	--	--			1200 VA	8887 VA			--	--	--	4
5	--	--	--					1200 VA	8887 VA	--	--	--	6
7	HVAC - EF-VCC-01	15 A	1	460 VA									8
9	HVAC - WM-VCC-01 / CU-VCC-01	15 A	2			1285 VA	1285 VA			2	15 A	HVAC - WM-VCC-02 / CU-VCC-02	10
11	--	--	--					1285 VA	1285 VA	--	--	--	12
13													14
15													16
17													18
19	HVAC - VAV-VCC-03	20 A	3	833 VA	2667 VA					3	30 A	HVAC - VAV-VCC-04	20
21	--	--	--			833 VA	2667 VA			--	--	--	22
23	--	--	--					833 VA	2667 VA	--	--	--	24
25													26
27													28
29													30
31	HVAC - HWCP-VCC-01	20 A	1	700 VA									32
33													34
35													36
37					0 VA					3	20 A	SPD	38
39							0 VA			--	--	--	40
41									0 VA	--	--	--	42
			Total Load:	14747 VA		16157 VA		16157 VA					
			Total Amps:	123 A		136 A		136 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	47060 VA	100.00%	47060 VA		
				Total Conn. Load:	47060 VA
				Total Est. Demand:	47060 VA
				Total Conn.:	131 A
				Total Est. Demand:	131 A

Notes:

Branch Panel: PNL-P2

Location: MECH/ ELEC 120
Supply From: DP-VCC
Mounting: Surface
Enclosure: Type 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating:
Mains Type: MLO
Mains Rating: 150 A

Notes:

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	REC - TR 102, 103	20 A	1	720 VA	720 VA					1	20 A	REC - BREAK ROOM 114	2
3	REC - TR 104, 105	20 A	1			720 VA	1000 VA			1	20 A	Equipment - REFRIGERATOR 114	4
5	REC - RM 122, J.C. 107, HALL 123, 125	20 A	1					720 VA	180 VA	1	20 A	REC - TRASH DISPOSAL 114	6
7	REC - OFFICE 108	20 A	1	900 VA	1000 VA					1	20 A	Equipment - MICROWAVE 114	8
9	REC - MECH/ELEC RM 120	20 A	1			720 VA	540 VA			1	20 A	REC - FIRE ROOM 118, HALL 115	10
11	Other - BREAK ROOM RANGE	40 A	2					600 VA	900 VA	1	20 A	REC - SR. TRAFFIC OFFICE 117	12
13	--	--	--	600 VA	900 VA					1	20 A	REC - SR. TRAFFIC OFFICE 116	14
15	Spare	20 A	1			0 VA	720 VA			1	20 A	REC - EXTERIOR RECEPTACLES	16
17	Spare	20 A	1					0 VA	720 VA	1	20 A	REC - EXTERIOR RECEPTACLES	18
19	Spare	20 A	1	0 VA	720 VA					1	20 A	REC - EXTERIOR RECEPTACLES	20
21	Spare	20 A	1			0 VA							22
23	Spare	20 A	1					0 VA					24
25	Spare	20 A	1	0 VA									26
27	Spare	20 A	1			0 VA							28
29	Spare	20 A	1					0 VA	0 VA	1	20 A	Spare	30
31	Spare	20 A	1	0 VA	0 VA					1	20 A	Spare	32
33	Spare	20 A	1			0 VA	0 VA			1	20 A	Spare	34
35	Spare	20 A	1					0 VA	0 VA	1	20 A	Spare	36
37	Spare	20 A	1	0 VA	0 VA					3	20 A	Spare	38
39	Spare	20 A	1			0 VA	0 VA			--	--	--	40
41	Spare	20 A	1					0 VA	0 VA	--	--	--	42
			Total Load:	5560 VA		3700 VA		3120 VA					
			Total Amps:	47 A		32 A		26 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Equipment	2000 VA	100.00%	2000 VA		
Other	1200 VA	100.00%	1200 VA	**Total Conn. Load:**	12380 VA
REC	9180 VA	100.00%	9180 VA	**Total Est. Demand:**	12380 VA
				Total Conn.:	34 A
				Total Est. Demand:	34 A

Notes:

Branch Panel: PNL-M2

Location: MECH/ ELEC 120
Supply From: DP-VCC
Mounting: Surface
Enclosure: Type 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating:
Mains Type:
Mains Rating: 150 A

Notes:

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	HVAC - WH-VCC-01	20 A	1	1000 VA	1000 VA					1	20 A	HVAC - WH-VCC-02	2
3	HVAC - EWH-VCC-01	20 A	3			1500 VA	1167 VA			3	20 A	HVAC - VAV-VCC-09	4
5	--	--	--					1500 VA	1167 VA	--	--	--	6
7	--	--	--	1500 VA	1167 VA					--	--	--	8
9	HVAC - VAV-VCC-06	40 A	3			3500 VA	1000 VA			3	20 A	HVAC - VAV-VCC-05	10
11	--	--	--					3500 VA	1000 VA	--	--	--	12
13	--	--	--	3500 VA	1000 VA					--	--	--	14
15	HVAC - VAV-VCC-02	20 A	3			1667 VA	1167 VA			3	20 A	HVAC - WM-VCC-07	16
17	--	--	--					1667 VA	1167 VA	--	--	--	18
19	--	--	--	1667 VA	1167 VA					--	--	--	20
21	HVAC - VAV-VCC-08	20 A	3			1167 VA	340 VA			1	15 A	HVAC - SF-VCC-01	22
23	--	--	--					1167 VA	2500 VA	3	30 A	HVAC - VAV-VCC-01	24
25	--	--	--	1167 VA	2500 VA					--	--	--	26
27	HVAC - UH-VCC-03	20 A	3			1105 VA	2500 VA			--	--	--	28
29	--	--	--					1105 VA	2 VA	1	20 A	HVAC	30
31	--	--	--	1105 VA									32
33													34
35													36
37					0 VA					3	20 A	SPD	38
39							0 VA			--	--	--	40
41									0 VA	--	--	--	42
			Total Load:	16773 VA		15113 VA		14775 VA					
			Total Amps:	140 A		126 A		123 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	46662 VA	100.00%	46662 VA		
				Total Conn. Load:	46662 VA
				Total Est. Demand:	46662 VA
				Total Conn.:	130 A
				Total Est. Demand:	130 A

Notes:

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

File Path: C:\vt\2025\104000\E-E-PBA_VCC_...plesk.drawing.vt

Plot Date: 4/16/2026 3:59:52 PM

DESIGNED BY: J. SHOWERS
DRAWN BY: F. OLIVAREZ
CHECKED BY: G. JAGLOWSKI
SUBMITTED BY:
ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W912T524F6002
CONTRACT NO.: W912T523D0035
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HDR ENGINEERING, INC
613 NW LOOP 410, STE 700
SAN ANTONIO, TX 78216
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

ELECTRICAL PANEL SCHEDULES

SHEET ID
VCC
E-605

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

Branch Panel: PNL-T

Location: COMM 119
Supply From:
Mounting: Surface
Enclosure: Type 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating:
Mains Type: MCB
Mains Rating: 60 A
MCB Rating: 60 A

Notes:

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	REC - COMM RM	20 A	1	540 VA	233 VA					3	60 A	EQUIPMENT - SECURITY PANEL	2
3	EQUIPMENT - TELECOM RACK	20 A	1			180 VA	233 VA			--	--	--	4
5	REC - TELECOM SERVER RACK	30 A	2					2000 VA	233 VA	--	--	--	6
7	--	--	--	2000 VA	180 VA					1	20 A	EQUIPMENT - TELECOM RACK	8
9	EQUIPMENT - FMCU (FIRE ALARM PANEL)	20 A	1			700 VA	90 VA			2	30 A	REC - TELECOM SERVER RACK	10
11									90 VA	--	--	--	12
13													14
15													16
17													18
19													20
21													22
23													24
25													26
27													28
29													30
31													32
33													34
35													36
37					0 VA					3	30 A	SPD	38
39							0 VA			--	--	--	40
41									0 VA	--	--	--	42
		Total Load:		2953 VA		1203 VA		2323 VA					
		Total Amps:		26 A		10 A		21 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Equipment	1760 VA	100.00%	1760 VA		
REC	4720 VA	100.00%	4720 VA	**Total Conn. Load:**	6480 VA
				Total Est. Demand:	6480 VA
				Total Conn.:	18 A
				Total Est. Demand:	18 A

Notes:

Branch Panel: PNL-L

Location: MECH/ ELEC 120
Supply From: DP-VCC
Mounting: Surface
Enclosure: Type 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating:
Mains Type:
Mains Rating: 100 A
MCB Rating: 100 A

Notes:

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	LTS - VEST 100, LOBBY 101, VEST 109	20 A	1	377 VA	303 VA					1	20 A	LTS - T.T 102-105, PROC 106, OFF 108, FIRE 122	2
3	LTS - ELEC 120, BR 114, OFF 116-117, COM 119	20 A	1			522 VA	720 VA			1	20 A	LTS - MMT 110, OPEN OFF 112, CONF 113	4
5	LTS	20 A	1					120 VA					6
7													8
9													10
11													12
13													14
15													16
17													18
19													20
21													22
23													24
25													26
27													28
29													30
31													32
33													34
35													36
37					0 VA					3	30 A	SPD	38
39							0 VA			--	--	--	40
41									0 VA	--	--	--	42
		Total Load:		681 VA		1242 VA		120 VA					
		Total Amps:		6 A		11 A		1 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Lighting - Dwelling Unit	64 VA	100.00%	64 VA		
LTS	1981 VA	125.00%	2476 VA	**Total Conn. Load:**	2042 VA
				Total Est. Demand:	2537 VA
				Total Conn.:	6 A
				Total Est. Demand:	7 A

Notes:

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

File Path: C:\vt\2025\104000\E-E-PBA_VCC_...plese.dwg.rev1.vt

Plot Date: 4/16/2026 3:59:52 PM

DESIGNED BY: J. SHOWERS
DRAWN BY: F. OLIVAREZ
CHECKED BY: C. JACOLOWSKI
SUBMITTED BY:

ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W912T524F6002
CONTRACT NO.: W912T523D0035

SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HDR ENGINEERING, INC
613 NW LOOP 410, STE 700
SAN ANTONIO, TX 78216
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

ELECTRICAL PANEL SCHEDULES

SHEET ID
VCC
E-606

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

Branch Panel: PNL-DP-GH

Location: MECH/ELEC 103
Supply From:
Mounting: Surface
Enclosure: Type 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating:
Mains Type:
Mains Rating: 150 A
MCB Rating: 150 A

Notes:

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	HVAC - RCU-GH-01	40 A	3	2883...	360 VA					3	15 A	HVAC - AHU-GH-01	2
3	--	--	--			2883...	360 VA			--	--	--	4
5	--	--	--					2883...	360 VA	--	--	--	6
7	HVAC - EF-GH-01	15 A	1	340 VA	1410...					2	20 A	HVAC - WM-GH-01 / CU-GH-01	8
9	HVAC - EWH-GH-01	20 A	1			1500...	1410...			--	--	--	10
11	REC - COMMAND AND CONTROL 100	20 A	1					900 VA	360 VA	1	20 A	REC - OUTSIDE STOR. 104, FIRE 106, COMM...	12
13	REC - COMMAND AND CONTROL 100	20 A	1	900 VA									14
15	REC - LATRINE 101, STORAGE 102	20 A	1			540 VA	720 VA			1	20 A	REC - EXTERIOR RECEPTACLES	16
17	REC - MECH/ELEC 103	20 A	1					720 VA	720 VA	1	20 A	REC - EXTERIOR RECEPTACLES	18
19	HVAC - UH-GH-01	20 A	3	1105...	1105...					3	20 A	HVAC - UH-GH-01	20
21	--	--	--			1105...	1105...			--	--	--	22
23	--	--	--					1105...	1105...	--	--	--	24
25													26
27													28
29													30
31													32
33													34
35													36
37					0 VA					3	20 A	SPD	38
39							0 VA			--	--	--	40
41									0 VA	--	--	--	42
		Total Load:		8103 VA		9623 VA		8153 VA					
		Total Amps:		68 A		80 A		68 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	21019 VA	100.00%	21019 VA		
REC	4860 VA	100.00%	4860 VA	**Total Conn. Load:**	25879 VA
				Total Est. Demand:	25879 VA
				Total Conn.:	72 A
				Total Est. Demand:	72 A

Notes:

Branch Panel: PNL-T-GH

Location: COMMUNICATIONS 105
Supply From:
Mounting: Surface
Enclosure: Type 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating:
Mains Type:
Mains Rating: 100 A
MCB Rating: 100 A

Notes:

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	REC - COMM 105	20 A	1	540 VA	540 VA					1	20 A	REC	2
3	REC - TELECOM RACK	20 A	1			180 VA	180 VA			1	20 A	REC - TELECOM RACK	4
5	REC - TELECOM SERVER RACK	20 A	2					2000...	2000...	2	20 A	REC - TELECOM SERVER RACK	6
7	--	--	--	2000...	2000...					--	--	--	8
9													10
11													12
13													14
15													16
17													18
19													20
21													22
23													24
25													26
27													28
29													30
31													32
33													34
35													36
37													38
39													40
41													42
		Total Load:		5080 VA		360 VA		4000 VA					
		Total Amps:		47 A		3 A		38 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
REC	9440 VA	100.00%	9440 VA		
				Total Conn. Load:	9440 VA
				Total Est. Demand:	9440 VA
				Total Conn.:	26 A
				Total Est. Demand:	26 A

Notes:

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

File Path: C:\vr\2025\104000\E-E-PWA_CATEKH.50E_plate.dwt#ez2.rvt

Plot Date: 4/16/2026 3:54:43 PM

DESIGNED BY: J. SHOWERS	ISSUE DATE: 17 APRIL 2026
DRAWN BY: F. OLIVAREZ	SOLICITATION NO.: W9127S24F6002
CHECKED BY: G. JAGLOWSKI	CONTRACT NO.: W9127S25B0035
SUBMITTED BY:	SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HDR ENGINEERING, INC
613 NW LOOP 410, STE 700
SAN ANTONIO, TX 78216
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

ELECTRICAL PANEL SCHEDULES

SHEET ID
G-HOUSE
E-607

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

TELECOMMUNICATIONS WIRED INFRASTRUCTURE

PATHWAYS AND CABLE

TYPICAL OUTLET SYMBOL NOTES

"+" -MOUNTED 4" ABOVE COUNTER, CASEWORK, BACKSLASH OR 48" IF NOTHING BELOW. COORDINATE WITH ARCHITECTURAL ELEVATIONS/DETAILS AND CASEWORK CONTRACTOR.

"+xx" -INDICATES MOUNTING HEIGHT ABOVE FINISHED FLOOR (AFF).

NOTES

1. OUTLETS LOCATED AT COUNTERS SHALL BE LOCATED 18" AFF IF KNEE SPACE IS PROVIDED OR 4" ABOVE COUNTER OR BACK SPLASH AS APPLICABLE IF NO KNEE SPACE IS PROVIDED - U.O.N.
2. # = SUBSCRIPT TO INDICATE VARIOUS OUTLET TYPES. REFER TO DESIGNATIONS LISTED BELOW OR PROJECT DETAILS FOR OUTLET FACEPLATE CONFIGURATION(S).
3. ALL TELECOM DEVICE OUTLETS SHALL BE MOUNTED 18" AFF - U.O.N.
4. ALL CAT-6 CABLING SHALL HAVE BLUE JACKETING.
5. ALL FIBER OPTIC CABLING SHALL HAVE YELLOW JACKET.
6. ROUTE 1" CONDUIT FROM WALL OUTLET BACK BOX AND 1" CONDUIT FROM FLOOR BOX TO CLOSEST CABLE TRAY. PROVISION FOR CONDUIT TO ENTER CABLE TRAY PER MANUFACTURER'S RECOMMENDED INSTALLATION.
7. ALL TELECOM DEVICE BACKBOXES SHALL BE 2-GANG WITH SINGLE GANG MUD RING.

VOICE/DATA OUTLET - ROUTE (2) CAT- 6 CABLE TO DESIGNATED AREA COMMUNICATIONS ROOM. INSTALLED AT 18" A.F.F.

W — WALL PHONE OUTLET - ROUTE (1) CAT- 6 CABLE TO DESIGNATED AREA COMMUNICATIONS ROOM. INSTALLED AT 48" A.F.F.

BMS — BMS OUTLET - ROUTE (2) CAT- 6 CABLE TO DESIGNATED AREA COMMUNICATIONS ROOM. COORDINATE LOCATION AND TERMINATION TYPE WITH MECHANICAL.

TV — CATV OUTLET-ROUTE (1) CAT- 6 CABLE TO AREA COMMUNICATIONS ROOM. INSTALLED AT 60" A.F.F. U.O.N.

SEC — DATA CABLE FOR SECURITY DEVICE. ROUTE CATAGORY 6 CABLE TO DESIGNATED AREA COMMUNICATIONS ROOM. COORDINATE WITH SECURITY CONTRACTOR FOR EXACT TERMINATION REQUIREMENTS.

WIRELESS ACCESS POINT - ROUTE (2) CAT- 6 CABLES TO DESIGNATED AREA COMMUNICATIONS ROOM. BISCUIT BOX MOUNTED ABOVE FINISHED CEILING W/ 20 FT. SLACK CABLE COILED AT LOCATION SHOWN.

FLOOR VOICE/DATA OUTLET - ROUTE (2) CAT- 6 CABLE TO DESIGNATED AREA COMMUNICATIONS ROOM. PATHWAY PROVIDED BY ELECTRICAL CONTRACTOR. REFER TO ELECTRICAL DRAWINGS AND SCHEDULE FOR REQUIREMENTS.

4"x4" CABLE TRAY HORIZONTAL DISTRIBUTION SYSTEM

LADDER RACK IDF CABLE ROUTING SYSTEM

8"x36"x4" PULLBOX TYP.

NOTE:
SYMBOLS SHOWN ARE FOR REFERENCE ONLY AND DO NOT CONSTITUTE A CHECK LIST OF DEVICES REQUIRED BY THE CONTRACT

ABBREVIATIONS

A, AMP	AMPERES
ACP	XXX
AF	AMP FUSE OR AMP FRAME
AFC	AVAILABLE FAULT CURRENT (SYMMETRICAL)
AFF	ABOVE FINISHED FLOOR
AIC	AMPERE INTERRUPTING CAPACITY
AM	AMMETER
AS	AMP SWITCH OR AMMETER SWITCH
ASYM	ASYMMETRICAL
AT	AMP TRIP
ATS	AUTOMATIC TRANSFER SWITCH
AWG	AMERICAN WIRE GAUGE
BMS	BALANCED MAGNETIC SWITCH
BOF	BOTTOM OF FIXTURE
B.S.C	BARE STRANDED COPPER CONDUCTOR
C	CONDUIT
CAP	CAPACITY OR CAPACITOR
CATV	COMMUNITY ANTENNA TELEVISION
CAVSS	CENTRALIZED AREA VIDEO SURVEILLANCE SYSTEM
CB	CIRCUIT BREAKER
CCTV	CLOSED CIRCUIT TELEVISION
CKT.,CCT	CIRCUIT
CL	CURRENT LIMITING
C.O.	CONDUIT ONLY
CONN	CONNECT OR CONNECTION
CU	COPPER
DA	DURESS ALARM
DB	DOOR BELL
DISC	DISCONNECT
DPS	DOOR POSITION SWITCH
DPST	DOUBLE POLE SINGLE THROW
EC	ELECTRICAL CONTRACTOR
EWC	ELECTRIC WATER COOLER
ELEC	ELECTRIC OR ELECTRICAL
ELEV	ELEVATION OR ELEVATOR
EMERG, EM	EMERGENCY
EPO	EMERGENCY POWER OFF
EMT	ELECTRICAL METAL TUBING
EG	ENGINE GENERATOR
FDR	FEEDER
FIXT	FIXTURE
FLA	FULL LOAD AMPERES
FLUOR	FLUORESCENT
GRC,GCR	GALVANIZED RIGID CONDUIT
GEC	GROUNDING ELECTRODE CONDUCTOR
GEN	GENERATOR
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GFI,GF	GROUND FAULT INTERRUPTER
GRD,GND,G	GROUND
HID	HIGH INTENSITY DISCHARGE
HOA	HAND-OFF-AUTO
HP	HORSEPOWER
HPS	HIGH PRESSURE SODIUM
HZ	HERTZ
IMC	INTERMEDIATE METAL CONDUIT
IG	ISOLATED GROUND
INCAND	INCANDESCENT
JB	JUNCTION BOX
KAIC	THOUSAND AMPERE INTERRUPTING CAPACITY
KS	KEY SWITCH
KVA	KILOVOLT AMPERES
KW	KILOWATT
KWH	KILOWATT HOUR
LMR	LAND MOBILE RADIO
LTG	LIGHTING
LV	LOW VOLTAGE
MATV	MASTER ANTENNA TELEVISION
MCA	MINIMUM CIRCUIT AMPS
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MH	MANHOLE, METAL HALIDE OR MOUNTING HEIGHT
MLO	MAIN LUGS ONLY
N.C.	NORMALLY CLOSED
NEC	NATIONAL ELECTRICAL CODE
NIC	NOT IN CONTRACT
NF	NON FUSIBLE
NL	NIGHT LIGHT
N.O.	NORMALLY OPEN
NTS	NOT TO SCALE
OCP	OVER CURRENT PROTECTION
OL	OVERLOADS
P	POLE
PB	PULLBOX
PH OR Ø	PHASE
PNL	PANEL
POC	POINT OF CONNECTION
PR	PAIR
PVC	POLYVINYL CHLORIDE
PWR	POWER
REC	RECEPTACLE
RGS	RIGID GALVANIZED STEEL
RX	REQUEST TO EXIT
SMF	SINGLE MODE FIBER
SOL	SOLENOID
SPTD	SINGLE POLE DOUBLE THROW
SPKR	SPEAKER
SPST	SINGLE POLE SINGLE THROW
STR	STRAND
SW	SWITCH
SWBD	SWITCHBOARD
SYM	SYMMETRICAL
TEL	TELEPHONE
TGB	TELECOMMUNICATIONS GROUNDING BUSBAR
TRANSF	TRANSFORMER
TTB	TELEPHONE TERMINAL BACKBOARD
TV	TELEVISION
TYP	TYPICAL
UG	UNDERGROUND
U.O.N.	UNLESS OTHERWISE NOTED
V	VOLT
VA	VOLT AMPERES
VD	VOLTAGE DROP
VM	VOLT METER
VS	VOLT METER SWITCH
W	WATTS OR WIRE
W/	WITH
W/O	WITHOUT
WP	WEATHERPROOF
XFORM	TRANSFORMER
XP	EXPLOSION PROOF

GENERAL NOTES

1. FIRE SEAL ALL CONDUIT PENETRATIONS THROUGH FIRE RATED WALLS & SLABS. SEAL FIRE RATING SHALL BE EQUAL TO OR GREATER THAN THE FIRE RATING OF THE WALL OR SLAB THROUGH WHICH THE CONDUIT PASSES.
2. COORDINATE CEILING MOUNTED DEVICES WITH CEILING CONTRACTOR AND INSTALL AS SHOWN ON THE REFLECTED CEILING PLANS.
3. COORDINATE THE LOCATION AND MOUNTING HEIGHTS OF ALL WALL MOUNTED DEVICES WITH ARCHITECTURAL FLOOR PLANS AND ELEVATION DRAWINGS..
4. CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING EXISTING CONDITIONS PRIOR TO BIDDING AND INSTALLATION.
5. CONTRACTOR SHALL PROVIDE ALL REQUIRED EXPANSION/DEFLECTION FITTINGS AT EACH CONDUIT / RACEWAY LOCATION THAT PASSES THRU ANY BUILDING EXPANSION JOINT.

GENERAL LOW VOLTAGE NOTES

1. DRAWINGS FOR THIS WORK ARE DIAGRAMMATIC ONLY, INTENDED TO CONVEY THE EXTENT, GENERAL ARRANGEMENT AND LOCATIONS OF THE WORK. BECAUSE OF THE SCALE OF THE DRAWINGS, CERTAIN BASIC ITEMS SUCH AS CONDUIT FITTINGS, ACCESS PANELS, CABINET SIZES, SLEEVES, PULL BOXES, BACKBOXES, AND JUNCTION BOXES MAY NOT BE SHOWN. INCLUDE ALL ITEMS WHERE REQUIRED BY CODE, OTHER SECTIONS, AND FOR PROPER INSTALLATION OF THE WORK.
2. DO NOT SCALE ANY DRAWINGS. DIMENSIONS TAKEN FROM CENTERLINE OF DEVICE OR GANG BOX SHALL BE FOLLOWED. SECURITY DEVICES ARE SHOWN FOR GENERAL LOCATION AND TYPE ONLY.
3. INCLUDE SUCH ITEMS AS REQUIRED FOR A COMPLETELY OPERATIONAL AND FUNCTIONAL SYSTEM, WHETHER OR NOT SPECIFICALLY INDICATED.
4. INSTALL CABLING IN ACCORDANCE WITH THE N.E.C., N.F.P.A. AND DIVISIONS 27 & 28 OF THE SPECIFICATIONS.
5. ALL REQUIRED CONDUIT / RACEWAY AND CABLE DISTRIBUTION SYSTEMS SHALL BE FURNISHED AND INSTALLED BY DIVISION 26 CONTRACTOR.
6. CONDUIT SIZES INDICATED ON DRAWINGS ARE MINIMUM ACCEPTABLE. ALL CONDUIT SHALL BE SIZED TO NOT EXCEED MAX FILL IN ACCORDANCE WITH THE N.E.C.
7. ALL CONDUIT BENDS SHALL BE LONG AND SWEEPING WITH A MINIMUM RADIUS OF 6 TIMES THE DIAMETER FOR CONDUITS UP TO 2" OR 10 TIMES FOR LARGER CONDUITS.
8. COORDINATE ELECTRICAL ROUGH-IN REQUIREMENTS WITH THE ELECTRICAL CONTRACTOR / TRADES AT ALL LOCATIONS OF 120 VOLT POWERED EQUIPMENT.
9. DIV. 27 CONTRACTOR SHALL COORDINATE WITH DIV. 26 CONTRACTOR TO INSURE EACH DATA OUTLET IS LOCATED WITHIN 6" OF ADJACENT POWER OUTLETS.
10. FIRE SEAL AND LABEL ALL PENETRATIONS OF FIRE RATED ASSEMBLIES TO MAINTAIN FIRE RATING AND U.L. RATING.
11. EACH SYSTEMS GROUNDING BUSBAR SHALL BE INSULATED FROM ITS SUPPORT. A MINIMUM OF 2" SEPARATION FROM THE WALL WILL BE MAINTAINED FOR ACCESS TO THE REAR OF THE BUSBAR.
12. ALL CONNECTIONS OF CONDUCTORS FOR BONDING EQUIPMENT SHALL UTILIZE LISTED COMPRESSION LUGS, OR OTHER IRREVERSIBLE COMPRESSION TYPE CONNECTIONS. TWO-HOLE LUGS ARE PREFERRED.
13. ALL METALLIC PATHWAYS FOR SYSTEMS CABLING LOCATED WITHIN THE SAME ROOM OR SPACE AS THE TGB SHALL BE BONDED TO THE TGB. HOWEVER, FOR METALLIC PATHWAYS CONTAINING GROUNDING CONDUCTORS WHERE THE PATHWAY IS BONDED TO THE GROUNDING CONDUCTOR, NO ADDITIONAL BOND IS REQUIRED.
14. THE TGB SHALL BE LOCATED AS SHOWN ON DRAWINGS, AND SUCH THAT IT IS ACCESSIBLE TO FACILITY PERSONNEL. THE MOUNTING HEIGHT OF THE TGB SHOULD BE ADJUSTED TO ACCOMMODATE FOR OVERHEAD CABLE ROUTING.
15. AT NO TIME SHALL A CONDUIT RUN EXCEED (2) 90° BENDS, OR 100' IN LENGTH, WITHOUT THE INSERTION OF A PULL BOX.
16. ALL CONDUIT RUNS EXCEEDING 15' SHALL BE EQUIPPED WITH A PULL-STRING WITH MINIMUM TEST RATING OF 200LB.
17. COORDINATE EXACT LOCATIONS OF ALL DESKTOP/COUNTER MOUNTED DEVICES WITH MILLWORK/CASEWORK AND FURNITURE PLANS PRIOR TO INSTALLATION.
18. ALL FLOOR AND WALL CONDUIT PENETRATIONS OF FIRE/SMOKE RATED ASSEMBLIES SHALL BE SLEEVED AND SEALED WITH AN INTUMESCENT FIRE RESISTIVE SYSTEM IN ACCORDANCE WITH N.E.C., N.F.P.A. AND OF THE SPECIFICATION SECTION 07 84 00. PROVIDE 2 HOUR FIRE RATING UNLESS OTHERWISE NOTED.
19. ALL INTERIOR CONDUIT SHALL BE A MINIMUM OF 1" AND EXTERIOR CONDUIT SHALL BE A MINIMUM OF 1" UNLESS OTHERWISE NOTED. CONDUIT SIZES INDICATED SHALL BE THE MINIMUM SIZES UTILIZED.
20. ALL CONDUIT/RACEWAY SYSTEMS SHALL BE CONCEALED UNLESS OTHERWISE NOTED ON THE DRAWINGS AND/OR LOCATED IN ELECTRICAL, MECHANICAL OR STORAGE ROOMS OR SIMILAR UNFINISHED SPACES.
21. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATIONS OF PARTITIONS AND AVOIDING CONFLICTS WITH LIGHTS, DIFFUSERS, GRILLES, DUCTWORK AND OTHER OBSTRUCTIONS.
22. CONDUIT RUNS INDICATED REFLECT DESIGN INTENT ONLY. ALL PULL BOXES AND JUNCTION BOXES SHALL BE SIZED IN ACCORDANCE WITH THE N.E.C. CONTRACTOR SHALL VERIFY QUANTITY AND LOCATION OF PULL BOXES AND JUNCTION BOXES IN ACCORDANCE WITH CABLE MANUFACTURERS RECOMMENDATIONS.
23. CONTRACTOR SHALL HAVE THE OPTION TO COMBINE HOMERUN CONDUCTORS OF REMOTE DEVICES OF SAME SYSTEM TYPE AND VOLTAGE CLASS AS PER THE N.E.C. SIZE CONDUIT AND INSTALL CONDUCTORS IN ACCORDANCE WITH THE N.E.C., N.F.P.A. AND DIVISIONS 26/27/28 OF THE SPECIFICATIONS.
24. COORDINATE EXACT LOCATION(S) OF CEILING MOUNTED EQUIPMENT / DEVICES WITH ARCHITECTURAL PLANS, REFLECTED CEILING PLANS, STRUCTURAL PLANS, AND ALL AFFECTED TRADES PRIOR TO CONSTRUCTION AND INSTALLATION.
25. WHERE DEVICES ARE INSTALLED IN FIRE RATED PARTITIONS, REVIEW SURFACE AND RECESS MOUNTING OPTIONS WITH THE ARCHITECT TO PRESERVE THE FIRE RATING.
26. ALL SECURITY DEVICES AT EXTERIOR LOCATIONS ARE TO BE WEATHERPROOF RATED.
27. ALL SECURITY DEVICE CABLING MUST BE ROUTED IN CONDUIT AND INACCESSIBLE TO PHYSICAL TAMPERING. AT LOCATIONS WHERE JUNCTION BOXES OR ELECTRICAL FITTINGS WOULD PROVIDE ACCESS, COVERS MUST BE SECURED WITH TORX W/ PEG TAMPER RESISTIVE HARDWARE TIGHTENED TO MANUFACTURER'S SPECIFICATIONS.
28. ROUTE ALL HOMERUN'S FROM EACH SECURITY DEVICE TO DESIGNATED SECURITY EQUIPMENT CABINETS LOCATED WITHIN TELECOM ROOMS AS INDICATED ON PLANS.
29. PROVIDE CATEGORY 6 CABLE IN ACCORDANCE WITH TIA/EIA 568-B FOR ALL INTERIOR CAMERAS OR EXTERIOR CAMERAS MOUNTED TO BUILDING. ALL SITE CAMERAS SHALL BE PROVIDED WITH FIBER OPTIC CABLING.
30. ALL CAMERAS MUST BE FROM THE LATEST CAVSS APPROVED IP DEVICES LIST.

TELECOMMUNICATIONS INDEX LIST

SHEET NUMBER	SHEET NAME	35%	65%	95%
T- 001	TELECOMMUNICATIONS SYSTEMS LEGEND	●	●	●
T- 100	TELECOMMUNICATIONS SITE PLAN	●	●	●
T- 101	TELECOMMUNICATIONS SYSTEMS PLAN - VISITOR CONTROL CENTER	●	●	●
T- 111	TELECOMMUNICATIONS SYSTEMS PLAN -GATEHOUSE	●	●	●
T- 121	TELECOMMUNICATIONS SYSTEMS PLAN - OVERWATCH	●	●	●
T- 121	ID-CHECK - TELECOMMUNICATIONS SYSTEMS PLAN - ID CHECK AREA	●	●	●
T- 131	T-SEARCH TELECOMMUNICATIONS SYSTEMS PLAN - TRUCK SEARCH AREA	●	●	●
T- 411.1	TELECOMMUNICATIONS ENLARGED COMM ROOM -119			
T- 411.2	TELECOMMUNICATIONS ENLARGED COMM ROOM -105	●	●	●
T- 501	TELECOMMUNICATIONS SYSTEM DETAILS	●	●	●
T- 502	TELECOMMUNICATIONS SYSTEM DETAILS	●	●	●
T- 503	TELECOMMUNICATIONS SYSTEM DETAILS	●	●	●
T- 504	TELECOMMUNICATIONS SYSTEM DETAILS	●	●	●
T- 601	TELECOMMUNICATIONS SYSTEM RISERS	●	●	●

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

File Path: C:\ve2023\0400076\1-PBA_VCC_LFERNANDEZ.rvt

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DESIGNED BY: T. NICHOLS
DRAWN BY: N. NICHOLS
CHECKED BY: Checker
SUBMITTED BY:
ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D6035
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

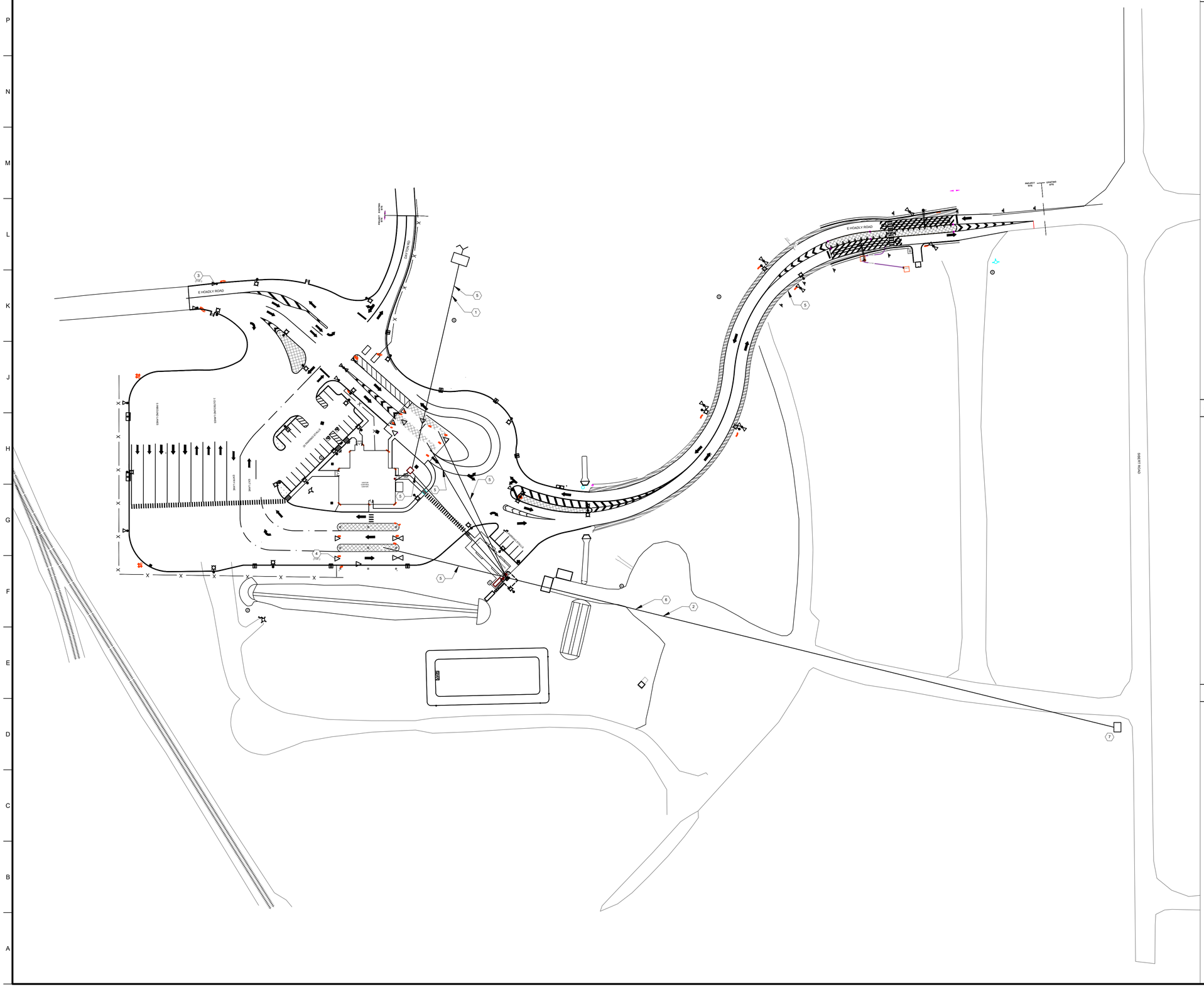
HDR ENGINEERING, INC
613 NW LOOP 410, STE 700
SAN ANTONIO, TX 78216
Texas P.E. Firm Registration No. F-7754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

TELECOMMUNICATIONS SYSTEMS LEGEND

SHEET ID
VCC
T-001

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION


E HOADLY ROAD
PROJECT SITE
EXISTING SITE
SIEBERT ROAD
EXISTING FENCE
EXISTING GATE
EXISTING BUILDING 17-120
EXISTING BUILDING 17-1
EXISTING BUILDING 17-2
EXISTING BUILDING 17-3
EXISTING BUILDING 17-4
EXISTING BUILDING 17-5
EXISTING BUILDING 17-6
EXISTING BUILDING 17-7
EXISTING BUILDING 17-8
EXISTING BUILDING 17-9
EXISTING BUILDING 17-10
EXISTING BUILDING 17-11
EXISTING BUILDING 17-12
EXISTING BUILDING 17-13
EXISTING BUILDING

A1 FLOOR TELECOM PLAN - VISITOR CONTROL CENTER

1/8" = 1'-0"

PLAN NORTH

0 4' 8' 16'

GENERAL NOTES

A. DESIGN WILL CONFORM TO BASELINE REQUIREMENTS OF UFC 3-580-01 (TELECOMMUNICATIONS INTERIOR INFRASTRUCTURE PLANNING AND DESIGN, W/ CHANGE1), APPLICABLE TIA STANDARDS, & UFC 4-022-01 (ENTRY CONTROL FACILITIES ACCESS CONTROL POINTS) AS IT PERTAINS TO TELECOMMUNICATIONS.

B. ONLY NIPR COMMUNICATIONS WILL SERVICE THE ACP.

C. REFER TO CIVIL SIGNING PLAN FOR WARNING SIGNS AND SIGNALS.

D. REFER TO DRAWING T-001 FOR SYMBOLS ABBREVIATIONS AND GENERAL PROJECT NOTES.

SHEET KEYNOTES

SHEET LEGEND

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

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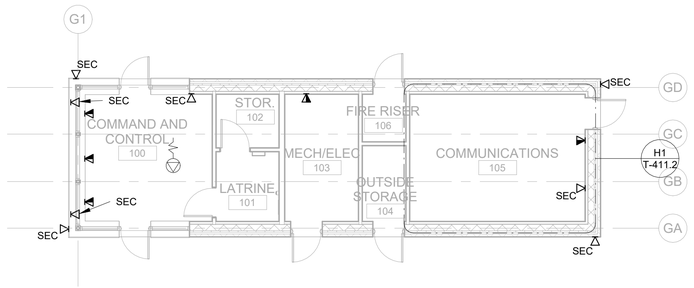
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

TELECOMMUNICATIONS SYSTEMS PLAN - VISITOR CONTROL CENTER

SHEET ID
VCC
T-101

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



A1 FLOOR TELECOM PLAN - GATEHOUSE

1/8" = 1'-0"

PLAN NORTH

0 4' 8' 16'

GENERAL NOTES

A. DESIGN WILL CONFORM TO BASELINE REQUIREMENTS OF UFC 3-580-01 (TELECOMMUNICATIONS INTERIOR INFRASTRUCTURE PLANNING AND DESIGN, W/ CHANGE1), APPLICABLE TIA STANDARDS, & UFC 4-022-01 (ENTRY CONTROL FACILITIES ACCESS CONTROL POINTS) AS IT PERTAINS TO TELECOMMUNICATIONS.

B. ONLY NIPR COMMUNICATIONS WILL SERVICE THE ACP.

C. REFER TO CIVIL SIGNING PLAN FOR WARNING SIGNS AND SIGNALS.

D. REFER TO DRAWING T-001 FOR SYMBOLS ABBREVIATIONS AND GENERAL PROJECT NOTES.

SHEET KEYNOTES

SHEET LEGEND

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

File Path: C:\Hdr\2025\104000776-T-PBA_GATEHOUSE_LFERNANDEZ.rvt

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SOLICITATION NO.: W9127S24F6002
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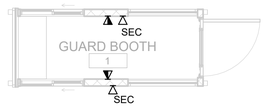
ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

TELECOMMMUNICATIONS SYSTEMS PLAN - GATEHOUSE

SHEET ID
G-HOUSE
T-111

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

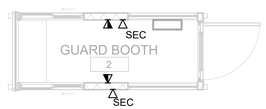


PLAN NORTH

H5 FLOOR TELECOM PLAN - GUARD BOOTH #1

1/4" = 1'-0"

0 2' 4' 8'



PLAN NORTH

A5 FLOOR TELECOM PLAN - GUARD BOOTH #2

1/4" = 1'-0"

0 2' 4' 8'

GENERAL NOTES

A. DESIGN WILL CONFORM TO BASELINE REQUIREMENTS OF UFC 3-580-01 (TELECOMMUNICATIONS INTERIOR INFRASTRUCTURE PLANNING AND DESIGN, W/ CHANGE1), APPLICABLE TIA STANDARDS, & UFC 4-022-01 (ENTRY CONTROL FACILITIES ACCESS CONTROL POINTS) AS IT PERTAINS TO TELECOMMUNICATIONS.

B. ONLY NIPR COMMUNICATIONS WILL SERVICE THE ACP.

C. REFER TO CIVIL SIGNING PLAN FOR WARNING SIGNS AND SIGNALS.

D. REFER TO DRAWING T-001 FOR SYMBOLS ABBREVIATIONS AND GENERAL PROJECT NOTES.

SHEET KEYNOTES

SHEET LEGEND

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MARK	DESCRIPTION	DATE

File Path: C:\vol2023\1004000\76-T-PBA_GUARD_BOOTHS_LFERNANDEZ.rvt

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SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D6035
SIZE: ANSI D

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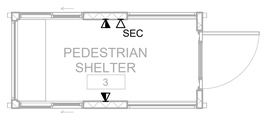
ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

ID-CHECK - TELECOMMUNICATIONS SYSTEM PLAN - ID CHECK AREA

SHEET ID
G-BOOTH
T-121

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



PLAN NORTH

F5 FLOOR TELECOM PLAN - PEDESTRIAN SEARCH SHELTER

1/4" = 1'-0"

0 2' 4' 8'

GENERAL NOTES

A. DESIGN WILL CONFORM TO BASELINE REQUIREMENTS OF UFC 3-580-01 (TELECOMMUNICATIONS INTERIOR INFRASTRUCTURE PLANNING AND DESIGN, W/ CHANGE1), APPLICABLE TIA STANDARDS, & UFC 4-022-01 (ENTRY CONTROL FACILITIES ACCESS CONTROL POINTS) AS IT PERTAINS TO TELECOMMUNICATIONS.

B. ONLY NIPR COMMUNICATIONS WILL SERVICE THE ACP.

C. REFER TO CIVIL SIGNING PLAN FOR WARNING SIGNS AND SIGNALS.

D. REFER TO DRAWING T-001 FOR SYMBOLS ABBREVIATIONS AND GENERAL PROJECT NOTES.

SHEET KEYNOTES

SHEET LEGEND

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MARK	DESCRIPTION	DATE

File Path: C:\Vol2023\1004000\76-T-PBA_GUARD_BOOTHS_LFERNANDEZ.rvt

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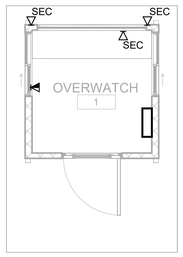
ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

T-SEARCH TELECOMMUNICATIONS SYSTEM PLAN - TRUCK SEARCH AREA

SHEET ID
G-BOOTH
T-131

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



F1 FLOOR TELECOM PLAN - OVERWATCH BOOTH

1/4" = 1'-0"

PLAN NORTH

0 2' 4' 8'

GENERAL NOTES

A. DESIGN WILL CONFORM TO BASELINE REQUIREMENTS OF UFC 3-580-01 (TELECOMMUNICATIONS INTERIOR INFRASTRUCTURE PLANNING AND DESIGN, W/ CHANGE1), APPLICABLE TIA STANDARDS, & UFC 4-022-01 (ENTRY CONTROL FACILITIES ACCESS CONTROL POINTS) AS IT PERTAINS TO TELECOMMUNICATIONS.

B. ONLY NIPR COMMUNICATIONS WILL SERVICE THE ACP.

C. REFER TO CIVIL SIGNING PLAN FOR WARNING SIGNS AND SIGNALS.

D. REFER TO DRAWING T-001 FOR SYMBOLS ABBREVIATIONS AND GENERAL PROJECT NOTES.

SHEET KEYNOTES

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MARK	DESCRIPTION	DATE

File Path: C:\Hdr\2025\304000776-T-PBA_OVERWATCH_LFERNANDEZ.rvt

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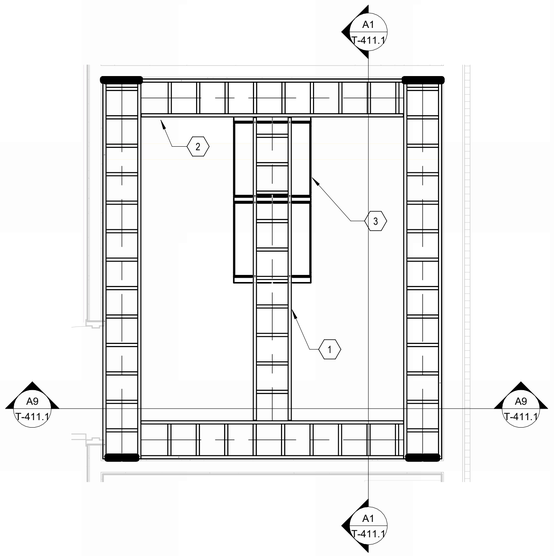
ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

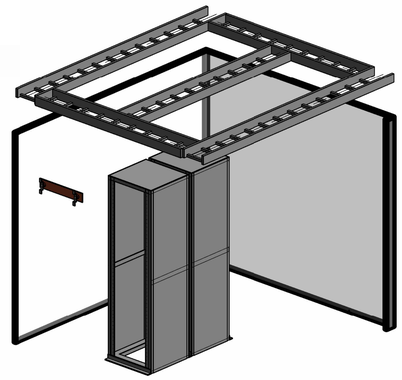
TELECOMMMUNICATION SYSTEMS PLAN - OVERWATCH

SHEET ID
O-WATCH
T-141

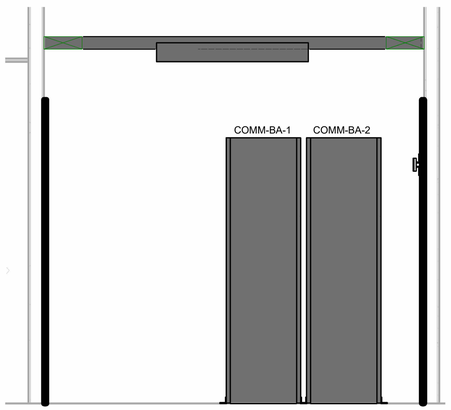
CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



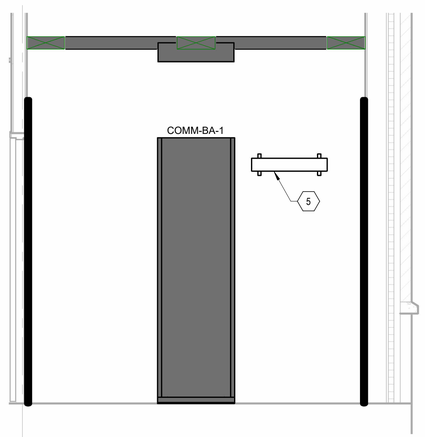
H1 ENLARGED COMM ROOM 119 - LADDER VIEW
NOT TO SCALE



H9 ENLARGED COMM ROOM 119 - 3D VIEW



A1 ENLARGED COMM ROOM 119 - SECTION VIEW
NOT TO SCALE



A9 ENLARGED COMM ROOM 119 - SECTION VIEW 2
NOT TO SCALE

GENERAL NOTES

SHEET KEYNOTES

1. 12" HORIZONTAL CABLE RUNWAY
2. NETWORK RACK
3. FIRE-RATED PLYWOOD
4. TELECOMMUNICATIONS BUS BAR
5. SYSTEMS GROUNDING BAR (FURNISHED AND INSTALLED BY DIVISION 26 AS PART OF THE BUILDING GROUNDING SYSTEM.)

SHEET LEGEND

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

File Path: C:\Hdr\2023\104000767-1-PBA_VCC_LFERNANDEZ.rvt

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SOLICITATION NO.: W9127S24FE002
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US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

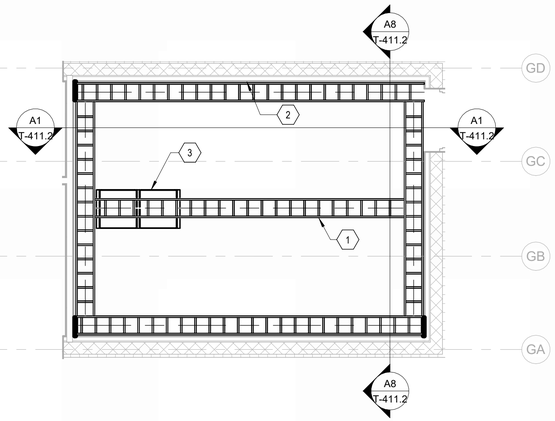
HDR ENGINEERING, INC.
613 NW LOOP 410, STE 700
SAN ANTONIO, TX 78216
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

TELECOMMUNICATIONS ENLARGED COMM ROOM - 119

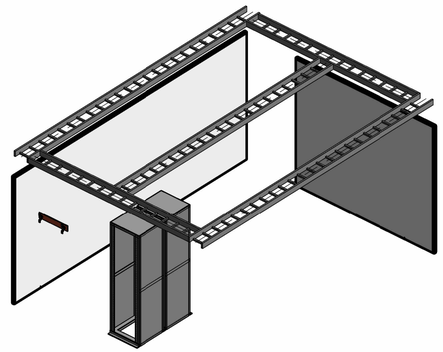
SHEET ID
VCC
T-411.1

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



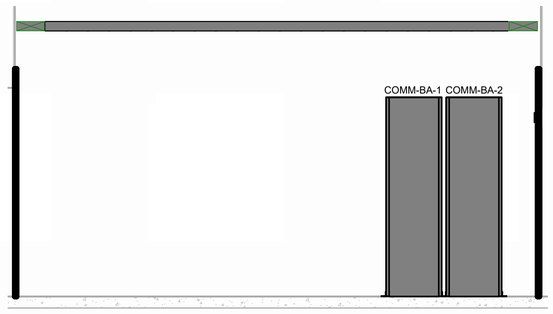
H1 ENLARGED COMM ROOM 105 - LADDER VIEW

NOT TO SCALE



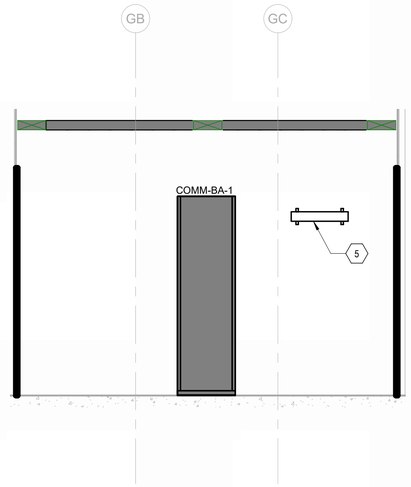
H8 ENLARGED COMM ROOM 105 - 3D VIEW

NOT TO SCALE



A1 ENLARGED COMM ROOM 105 - SECTION VIEW 1

NOT TO SCALE



A8 ENLARGED COMM ROOM 105 - SECTION VIEW 2

NOT TO SCALE

GENERAL NOTES

SHEET KEYNOTES

1. 12" HORIZONTAL CABLE RUNWAY
2. NETWORK RACK
3. FIRE-RATED PLYWOOD
4. TELECOMMUNICATIONS BUS BAR
5. SYSTEMS GROUNDING BAR (FURNISHED AND INSTALLED BY DIVISION 26AS PART OF THE BUILDING GROUNDING SYSTEM.)

SHEET LEGEND

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

File Path: C:\Hdr\2023\10400076\T-PBA_GATEHOUSE_LFERNANDEZ.rvt

Plot Date: 4/17/2026 1:51:54 PM

DESIGNED BY: T. NICHOLS	ISSUE DATE: 17 APRIL 2026
DRAWN BY: T. NICHOLS	SOLICITATION NO.: W9127S24FE602
CHECKED BY: Checker	CONTRACT NO.: W9127S23D6035
SUBMITTED BY:	SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

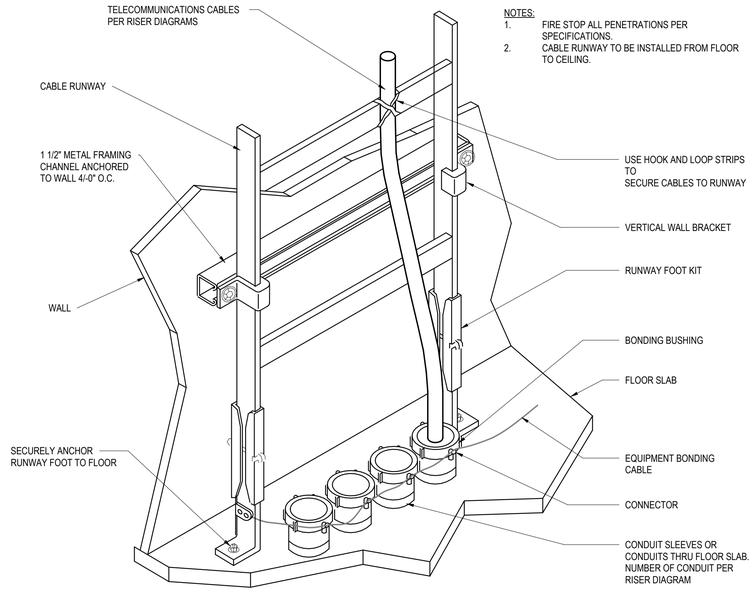
HDR ENGINEERING, INC.
613 NW LOOP 410, STE 700
SAN ANTONIO, TX 78216
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

TELECOMMMUNICATIONS ENLARGED COMM ROOM - 105

SHEET ID
G-HOUSE
T-411.2

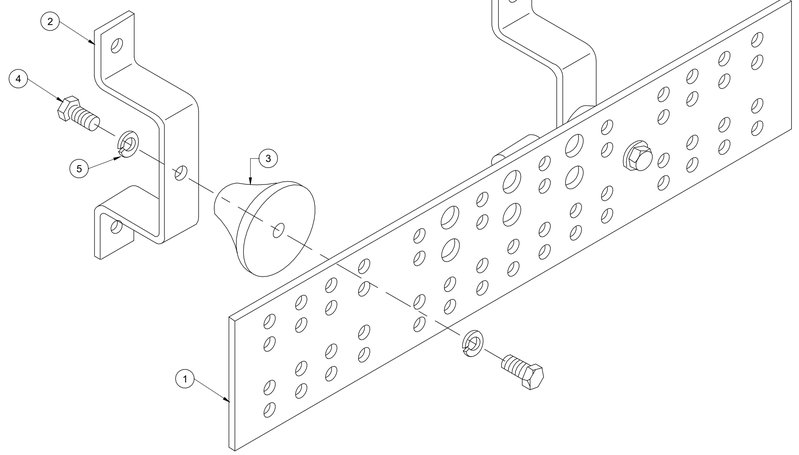
CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



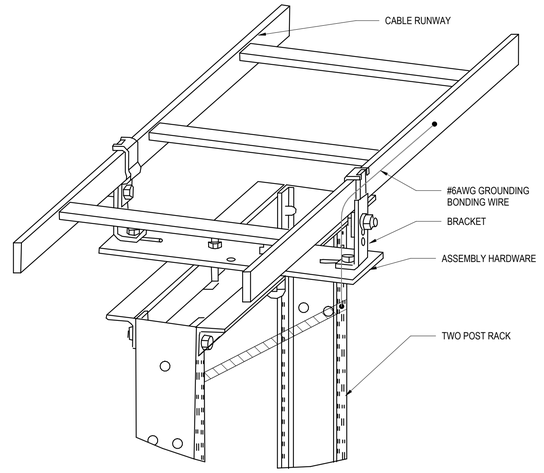
NOTES:
1. FIRE STOP ALL PENETRATIONS PER SPECIFICATIONS.
2. CABLE RUNWAY TO BE INSTALLED FROM FLOOR TO CEILING.

H1 CABLE - VERTICAL RUNWAY MOUNTING
NOT TO SCALE

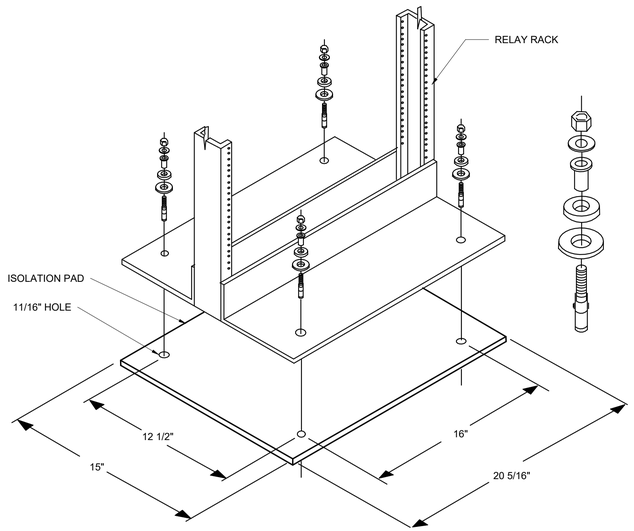
ITEM	QTY.	DESCRIPTION
1	1	GROUND BAR
2	2	WALL MOUNTING BRACKET
3	2	INSULATOR
4	4	5/8-11 x 1" HHCS
5	4	LOCK WASHER



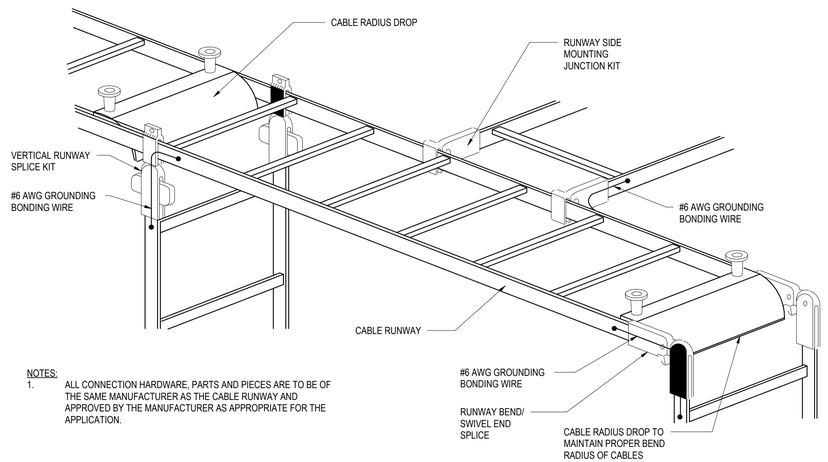
A8 TELECOMMUNICATIONS PRIMARY BONDING BAR (PBB)
NOT TO SCALE



A16 CABLE RUNWAY STAND-OFF KIT
NOT TO SCALE



A1 SELF SUPPORTED EQUIPMENT RACK IOSLATION KIT
NOT TO SCALE



NOTES:
1. ALL CONNECTION HARDWARE, PARTS AND PIECES ARE TO BE OF THE SAME MANUFACTURER AS THE CABLE RUNWAY AND APPROVED BY THE MANUFACTURER AS APPROPRIATE FOR THE APPLICATION.

H8 TYPICAL RUNWAY CONNECTIONS DETAIL
NOT TO SCALE

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

File Path: C:\Hr\2023\104000\76-T-PBA_VOC__LFERNANDEZ.rvt

Plot Date: 4/17/2026 2:03:09 PM

DESIGNED BY: T. NICHOLS	ISSUE DATE: 17 APRIL 2026
DRAWN BY: T. NICHOLS	SOLICITATION NO.: W9127S24F6002
CHECKED BY: Checker	CONTRACT NO.: W9127S23D6035
SUBMITTED BY:	SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HDR ENGINEERING, INC.
613 NW LOOP 410, STE 700
SAN ANTONIO, TX 78216
Texas P.E. Firm Registration No. F-754

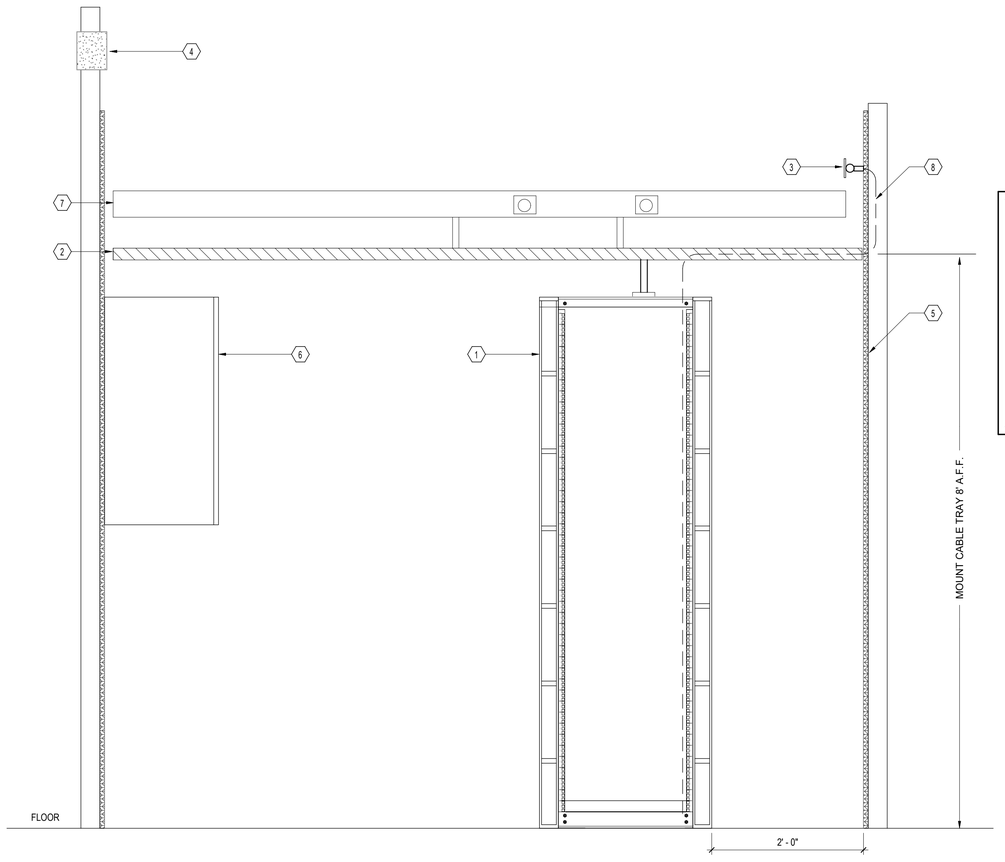
ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

TELECOMMUNICATIONS SYSTEMS DETAILS

SHEET ID

T-501

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

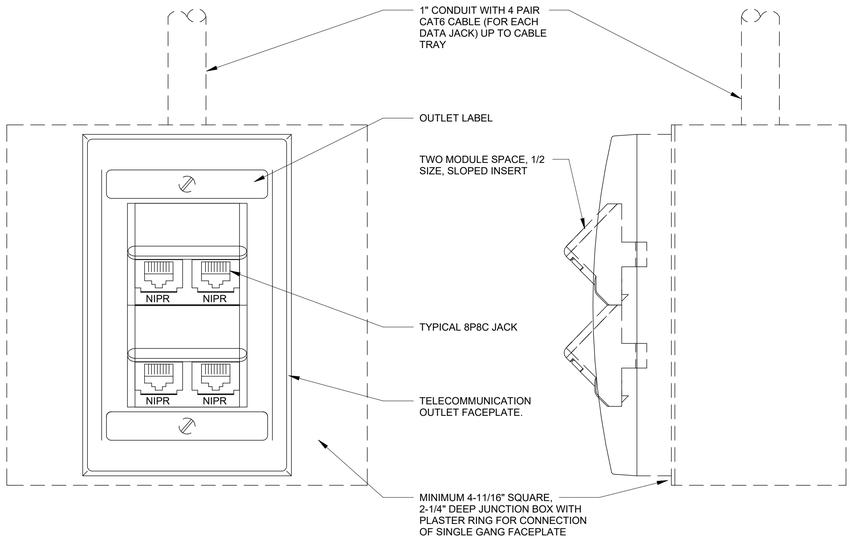


KEY NOTES:

1. (1) 19" X 84" TWO POST RACK WITH 3" VERTICAL WIRE MANAGER ON EACH SIDE.
2. 12" LADDER TRAY MOUNTED AT 8'-0".
3. 20" PRIMARY BONDING BUS-GROUND GRN BAR MOUNTED AT 9'-0" A.F.F.
4. PROVIDE EZ-PATH FIRESTOP ASSEMBLY.
5. 3/4" A/C FIRE RESISTANT PLYWOOD ON ALL WALLS FROM 12" OFF FLOOR TO 9'-0" A.F.F.
6. 36"H X 26"W X 18"D WALL MOUNTED (AT 48" A.F.F.) SECURITY CABINET WITH LOCKABLE SWING DOOR.
7. POWER PROVIDED BY DIVISION 26.
8. PROVIDE #6 GROUND CABLE FROM PBB TO EACH RACK (TYPICAL).

F1 TELECOM - RACK ELEVATION - WITH POWER DISTRIBUTION

NOT TO SCALE



A1 VOIP/DATA OUTLET DETAIL

NOT TO SCALE

SYMBOL:

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

File Path: C:\Hdr\2025\104000\76-1-PBA_VOC__LFERNANDEZ.rvt

Plot Date: 4/17/2026 2:03:10 PM

DESIGNED BY: T. NICHOLS	ISSUE DATE: 17 APRIL 2026
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SUBMITTED BY:	SIZE: ANSI D

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US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

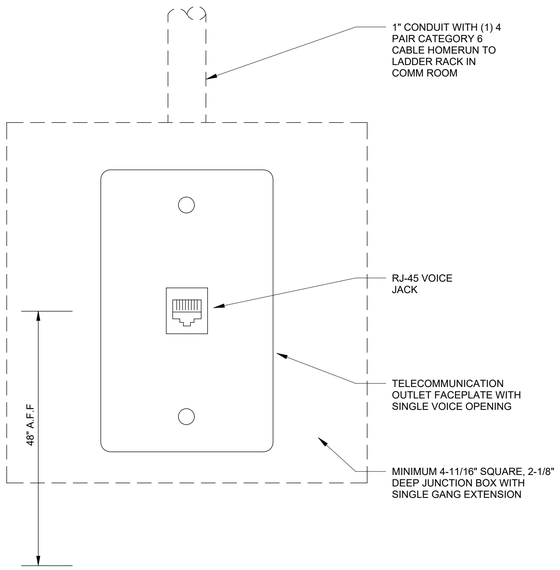
ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

TELECOMMUNICATIONS SYSTEM DETAILS

SHEET ID

T-502

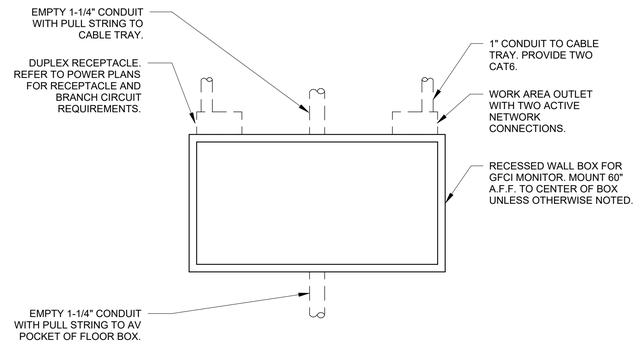
CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



SYMBOL: W

J1 VOICE WALL OUTLET DETAIL

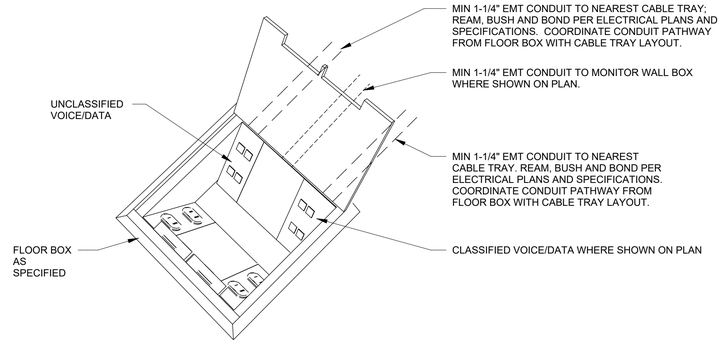
NOT TO SCALE



SYMBOL: TV

J7 RECESSED WALL BOX DETAIL

NOT TO SCALE



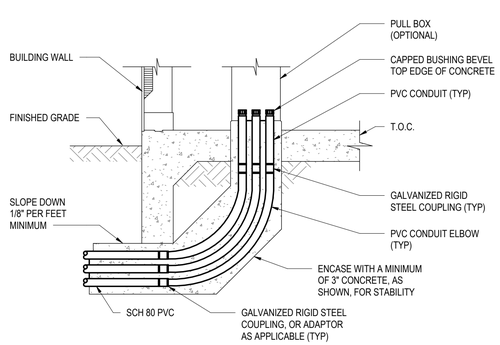
NOTES:

1. SEE FLOOR PLANS FOR FLOOR BOX LOCATIONS.
2. PROVIDE ONE CONDUIT TO EACH COMMUNICATIONS POCKET.
3. DO NOT DAISY CHAIN CONDUIT BETWEEN FLOOR BOXES.
4. REFER TO ELECTRICAL DRAWINGS FOR POWER REQUIREMENTS.
5. LEGRAND EVOLUTION SERIES OR PRE-APPROVED EQUAL.
6. REFER TO NETWORK DIAGRAMS, SHEET T601, FOR CABLE REQUIREMENTS.

SYMBOL: TV

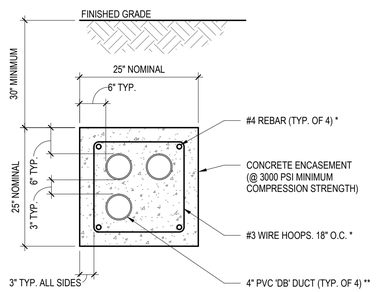
J14 FLOOR BOX DETAIL

NOT TO SCALE



A1 STUBBED DUCT BANK INTO BUILDING

NOT TO SCALE



* REINFORCEMENT MAY BE REQUIRED BASED ON SOIL CONDITIONS. VERIFY REQUIREMENTS WITH STRUCTURAL ENGINEER.

** PLASTIC SPACERS (PER 26 05 43) SHALL BE PROVIDED ON 4'-0" CENTERS TO MAINTAIN CONDUIT SPACING.

A7 3-WAY CONCRETE-ENCASED DUCTBANK SECTION

NO SCALE

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

File Path: C:\Hdr\2025\04\00076\1-PBA_VOC_LFERNANDEZ.rvt

Plot Date: 4/17/2026 2:03:11 PM

DESIGNED BY: T. NICHOLS
DRAWN BY: T. NICHOLS
CHECKED BY: Checker
SUBMITTED BY:
ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D6035
SIZE: ANSI D

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LITTLE ROCK, AR

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SAN ANTONIO, TX 78216
Texas P.E. Firm Registration No. F-754

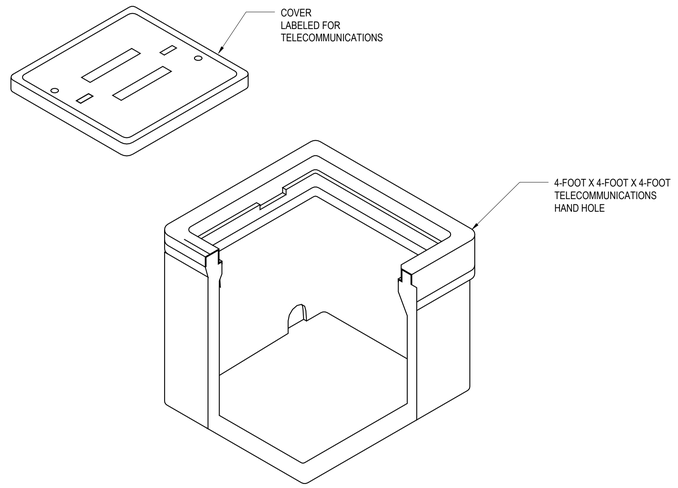
ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

TELECOMMUNICATIONS SYSTEM DETAILS

SHEET ID

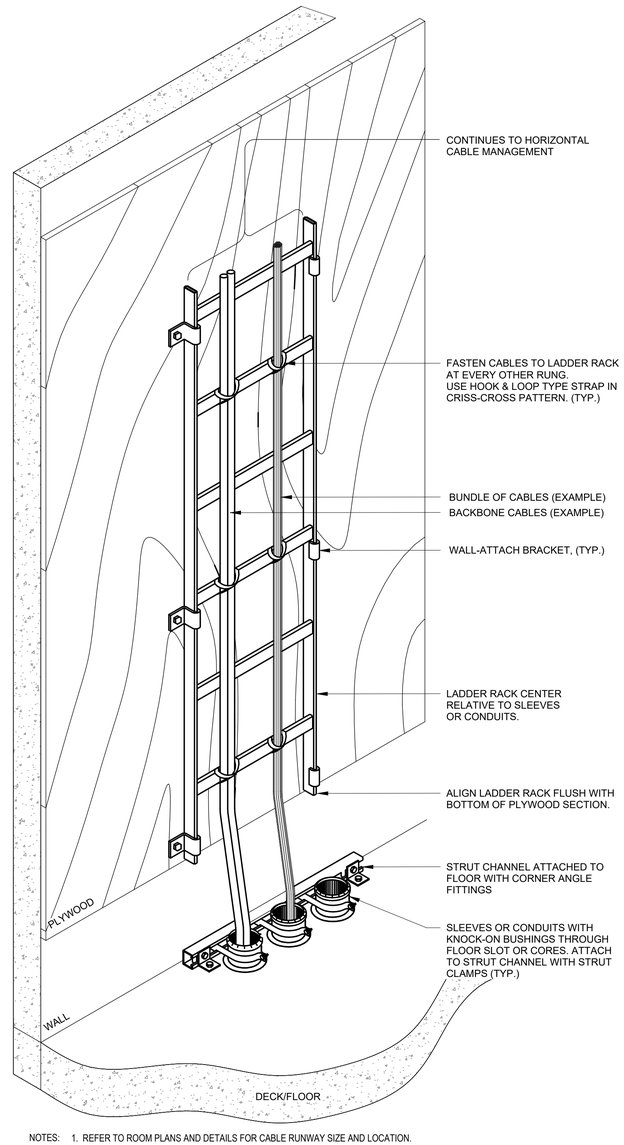
T-503

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



K8 TYPICAL 4-FOOT X 4-FOOT X 4-FOOT TELECOMMUNITCATIONS HAND HOLE

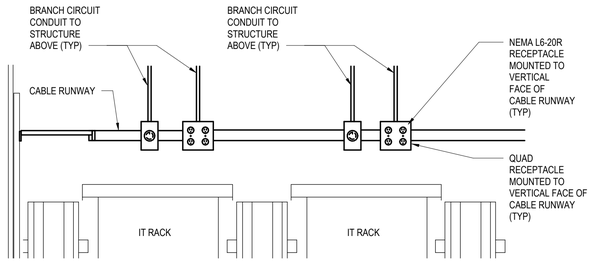
NOT TO SCALE



NOTES:
1. REFER TO ROOM PLANS AND DETAILS FOR CABLE RUNWAY SIZE AND LOCATION.
2. REFER TO ROOM PLANS AND DETAILS FOR SLEEVE/CONDUIT SIZES AND QUANTITIES.
3. REFER TO ARCHITECTURAL DRAWINGS FOR WALL AND DECK TYPE.

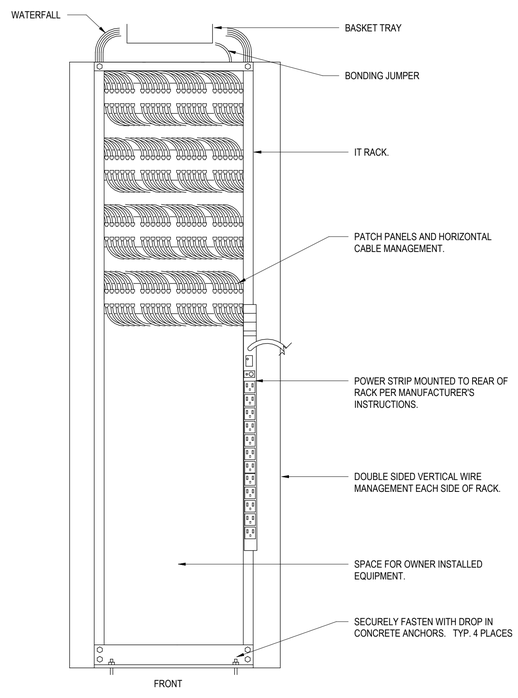
A1 VERTICAL TRANSITION THROUGH FLOOR DETAIL

NOT TO SCALE



A8 NETWORK RACK RECEPTACLES DETAIL

NOT TO SCALE



A14 RACK DETAIL

NOT TO SCALE

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

File Path: C:\vol2023\1004000\76-1-PBA_VOC__LFERNANDEZ.rvt

Plot Date: 4/17/2026 2:03:11 PM

DESIGNED BY:	T. NICHOLS
DRAWN BY:	T. NICHOLS
CHECKED BY:	Checker
SUBMITTED BY:	
SIZE:	ANSI D
ISSUE DATE:	17 APRIL 2026
SOLICITATION NO.:	W9127S24F6002
CONTRACT NO.:	W9127S23D6035

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LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HDR ENGINEERING, INC.
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SAN ANTONIO, TX 78216
Texas P.E. Firm Registration No. F-754

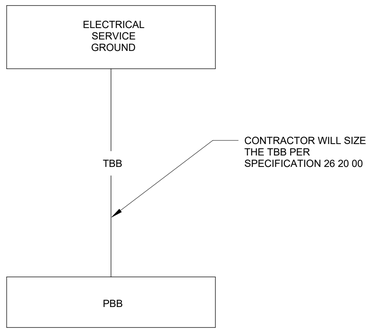
ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

TELECOMMUNICATIONS SYSTEM DETAILS

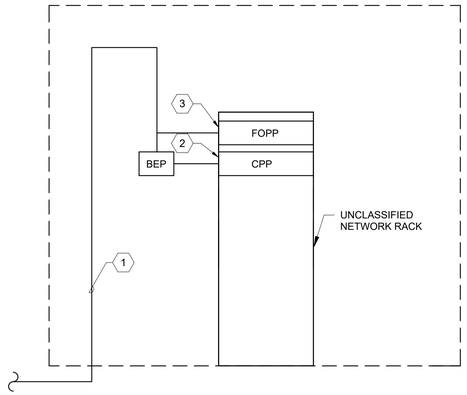
SHEET ID

T-504

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



J1 GROUNDING RISER DIAGRAM
NOT TO SCALE



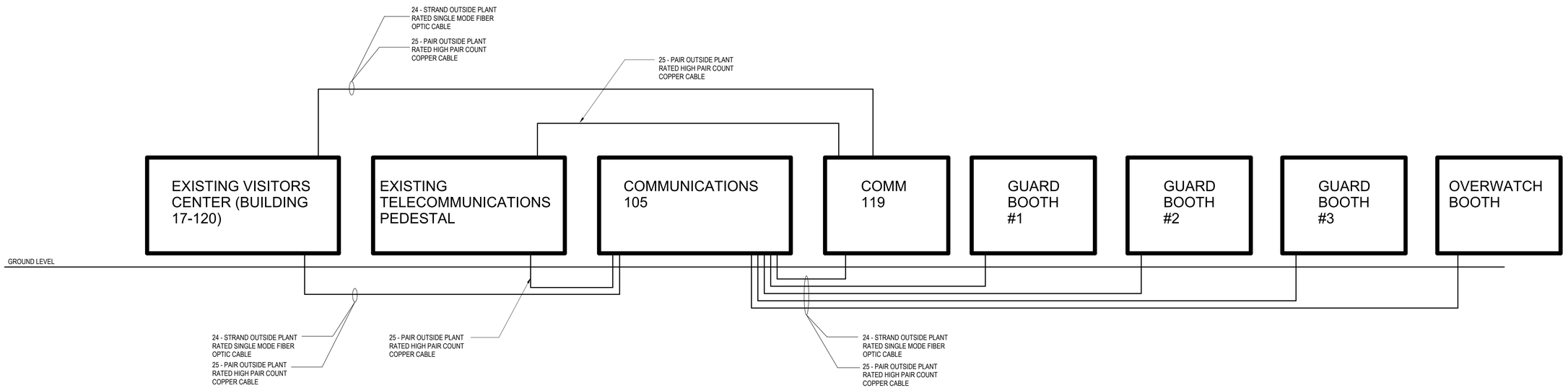
J6 TELECOMM OSP AND BACKBONE RISER DIAGRAM
NOT TO SCALE

LEGEND

FOPP	FIBER OPTIC PATCH PANEL	BEP	BUILDING ENTRANCE PROTECTOR
CPP	COPPER PATCH PANEL		
PBB	PRIMARY BONDING BUSBAR		
TBB	TELECOMMUNICATIONS BONDING BACKBONE		

KEYNOTES

1. 24-STRAND OS2 FIBER AND 25-PAIR COPPER OSP CABLING.
2. FIBER ENCLOSURE FOR TERMINATION OF BACKBONE FIBER. LOCATE AT TOP OF RACK.



A1 OUTSIDE PLANT RISER DIAGRAM
NOT TO SCALE

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

File Path: C:\vol2023\04000767-TPBA_VOC__LFERNANDEZ.rvt

Plot Date: 4/17/2026 2:03:12 PM

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DRAWN BY: T. NICHOLS	SOLICITATION NO.: W9127S24F6002
CHECKED BY: Checker	CONTRACT NO.: W9127S23D6035
SUBMITTED BY:	SIZE: ANSI D

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LITTLE ROCK DISTRICT
LITTLE ROCK, AR

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613 NW LOOP 410, STE 700
SAN ANTONIO, TX 78216
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

TELECOMMMUNICATIONS SYSTEMS RISERS

SHEET ID

T-601

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

SECURITY SYMBOLS LEGEND

- CAMERA MOUNTED ON WALL. ROUGH-IN ONLY
- CAMERA MOUNTED ON SECURITY POLE. ROUGH-IN ONLY
- CAMERA MOUNTED ON ELECTRICAL LIGHT POLE. ROUGH-IN ONLY
- CAMERA MOUNTED ON CEILING. ROUGH-IN ONLY
- CAMERA MOUNTED ON SECURITY POLE WITH 180DEG ANGLE. ROUGH-IN ONLY
- VIDEO SURVEILLANCE WORK STATION ROUGH-IN ONLY
- IC — MASTER INTERCOM STATION, HANDSET. ROUGH-IN ONLY
- AVB — AVB OPERATING PANEL PEDESTAL
- ## SEC — SECURITY EQUIPMENT CABINET WITH INDICATOR NUMBER
- K PCU — PREMISE CONTROL UNIT (PCU) SUBSCRIPT: "K" DENOTES PCU KEYPAD
- RDU — INFANT PROTECTION PATIENT CONTAINMENT REMOTE DISPLAY UNIT
- VMS — VIDEO MANAGEMENT SYSTEM WORKSTATION ROUGH-IN ONLY
- SMS — SECURITY MANAGEMENT SYSTEM WORKSTATION ROUGH-IN ONLY
- BDG — BADGING SYSTEM WORKSTATION
- NVR — STAND ALONE NETWORK VIDEO RECORDER ROUGH-IN ONLY
- ACP — ACCESS CONTROL PANEL ROUGH-IN ONLY
- PRN — SYSTEM PRINTER
- LCP — LOCAL CONTROL PANEL
- LCP (M) — LOCAL CONTROL PANEL MANTANENCE
- MCP — MAIN CONTROL PANEL
- REMOTE PUSH-BUTTON DOOR RELEASE TO ELECTRIC LOCK
- X-10 — CDX-10 OR FFL-2740 APPROVED COMBINATION LOCK - FOR INFORMATION ONLY BY OTHERS
- F/O — FIBER OPTIC TRANSCEIVER
- UPS — UNINTERRUPTIBLE POWER SUPPLY
- DOOR INTERLOCK
- CONNECTION TO MOTORIZED OPERATOR
- TS — TRAFFIC SIGNAL.
- OS — OVERWATCH SWITCH CONNECTION.
- RCP — REMOTE CONTROL PANEL - PORTABLE PLUG IN AT OVERWATCH

SECURITY SYMBOLS LEGEND

- DOOR POSITION SWITCH. ROUGH-IN ONLY
- CONNECTION TO ELECTRIC DOOR HARDWARE, HSS AND REX. SUBSCRIPT "DE" DENOTES DELAYED EGRESS. ROUGH-IN ONLY
- D — WALL MOUNTED DURESS RECEIVER WITH PROTECTIVE COVER. ROUGH-IN ONLY
- GB — CEILING/WALL MOUNTED GLASS BREAK DETECTOR. ROUGH-IN ONLY
- D — UNDER DESK MOUNTED DUREES BUTTON. ROUGH-IN ONLY
- D — DESK/CASEMENT MOUNTED PUSH BUTTON DURESS ALARM WITH PATCH CORD TO WALL JACK. ROUGH-IN ONLY
- EFO — EMERGENCY FAST OPERATION BUTTON WITH PROTECTIVE COVER AT 46" AFF.
- QUADRUPOLE VEHICLE DETECTION LOOP.
- M — MOTION DETECTOR, CEILING MOUNTED ROUGH-IN BY CONTRACTOR. DEVICE IS GFCI.
- M — MOTION DETECTOR, WALL MOUNTED ROUGH-IN BY CONTRACTOR. DEVICE IS GFCI.
- KP — INTRUSION ARM / DISARM KEY PAD. ROUGH-IN ONLY
- CR — CARD READER. ROUGH-IN ONLY

ABBREVIATIONS

A	----------
A	AMPERE
ACS	ACCESS CONTROL SYSTEM
ACP	ACCESS CONTROL PANEL
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AWG	AMERICAN WIRE GAUGE
C	----------
C	CONDUIT
CCTV	CLOSED CIRCUIT TELEVISION
CKT ,CCT	CIRCUIT
D	----------
DPS	DOOR POSITION SWITCH
E	----------
EMT	ELECTRICAL METALLIC TUBING (CONDUIT)
ESS	ELECTRONIC SECURITY SYSTEM
G	----------
GC	GENERAL CONTRACTOR
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
	GOVERNMENT FURNISHED CONTRACTOR INSTALL
GFGI	GOVERNMENT FURNISHED GOVERNMENT INSTALL
GFI, GF	GROUND FAULT INTERRUPTER
GRD,GND,G	GROUND
H	----------
HSS	HIGH SECURITY SWITCH
I	----------
IDS	INTRUSION DETECTION SYSTEM
J	----------
JB	JUNCTION BOX
L	----------
LCP	LOCAL CONTROLLER PANEL
LPR	LICENSE PLATE READER CAMERA
M	----------
MH	MANHOLE, METAL HALIDE OR MOUNTING HEIGHT
MLO	MAIN LUGS ONLY
N	----------
N.C.	NORMALLY CLOSED
NEC	NATIONAL ELECTRICAL CODE
NIC	NOT IN CONTRACT
N.O.	NORMALLY OPEN
NTS	NOT TO SCALE
P	----------
PB	PULLBOX
PBB	TELECOMMUNICATIONS PRIMARY BONDING BUSBAR
PNL	PANEL
POE	POWER OVER ETHERNET
PP	PATCH PANEL
PS	POWER SUPPLY
PVC	POLYVINYL CHLORIDE
PWR	POWER
R	----------
REC	RECEPTACLE
REX	REQUEST TO EXIT
RGS	RIGID GALVANIZED STEEL
RIO	ROUGH IN ONLY
S	----------
SEC	SECURITY EQUIPMENT CABINET
SLAN	SECURITY LOCAL AREA NETWORK
SRV	SERVER SLAN SECURITY LOCAL AREA NETWORK
SSB	TELECOMMUNICATIONS SECONDARY BONDING BUSBAR
T	----------
TEL	TELEPHONE
TTB	TELEPHONE TERMINAL BACKBOARD
TV	TELEVISION
TX	TRANSCEIVER
TYP	TYPICAL
U	----------
UG	UNDERGROUND
UON	UNLESS OTHERWISE NOTED
UPS	UNINTERRUPTIBLE POWER SUPPLY
UTP	UNSHIELD TWISTED PAIR
V	----------
VAC	VOLTAGE ALTERNATING CURRENT
VDC	VOLTAGE DIRECT CURRENT
VLAN	VIRTUAL LOCAL AREA NETWORK
VMS	VIDEO MANAGEMENT SYSTEM
W	----------
W	WATTS OR WIRE
W/	WITH
W/O	WITHOUT
WAN	WIDE AREA NETWORK
WP	WEATHERPROOF
WS	WORKSTATION

SECURITY GENERAL NOTES

1. CONDUIT SIZES INDICATED ON DRAWINGS ARE MINIMUM ACCEPTABLE. ALL NEW CONDUITS SHALL BE SIZED TO PROVIDE SPARE CAPACITY IN ACCORDANCE WITH THE NEC.
2. FIELD VERIFY EXISTING CONDITIONS PRIOR TO BIDDING AND INSTALLATION.
3. THE DRAWINGS ARE DIAGRAMMATIC AND REFLECT DESIGN INTENT ONLY. ALL UNDERGROUND CONDUITS, SLEEVES, FEEDS TO EQUIPMENT INSTALLATION AND PLACEMENT OF THAT EQUIPMENT SHALL BE VERIFIED IN FIELD AND WITH OTHER TRADES PRIOR TO INSTALLATION. SECURITY CONTRACTOR SHALL VISIT SITE PRIOR TO SUBMITTING BID AND NOTE ALL APPARENT FEATURES WHICH MAY AFFECT THE WORK OF THIS CONTRACT. NO SUBSEQUENT ALLOWANCES WILL BE MADE FOR FAILURE TO VISIT SITE PRIOR TO BID OR FOR LACK OF FIELD COORDINATION WITH THE WORK OF THE OTHER TRADES.
4. COORDINATE ELECTRICAL ROUGH-IN REQUIREMENTS WITH THE ELECTRICAL CONTRACTOR/TRADES AT ALL LOCATIONS OF ALL ELECTRICAL POWERED EQUIPMENT.
5. WHERE ROUTING OF RACEWAY/CONDUIT IS SHOWN ON PLANS TO PASS THROUGH WALLS AND PARTITIONS, CORE DRILL PENETRATIONS UNLESS SPECIFICALLY NOTED OTHERWISE. SIMILAR CUTTING AND PATCHING TO MATCH EXISTING SURFACES MAY BE UTILIZED WHERE CONDITIONS PERMIT.
6. ALL INTERIOR CONDUITS SHALL BE A MINIMUM OF 3/4" AND EXTERIOR CONDUIT SHALL BE A MINIMUM OF 1" UNLESS OTHERWISE NOTED. CONDUIT SIZES INDICATED SHALL BE THE MINIMUM SIZES UTILIZED.
7. ALL CONDUIT AND WIRING SHALL BE CONCEALED UNLESS OTHERWISE NOTED ON THE DRAWINGS AND/OR LOCATED IN ELECTRICAL, MECHANICAL OR STORAGE ROOMS OR SIMILAR UNFINISHED SPACES.
8. VERIFY THE LOCATIONS OF PARTITIONS AND AVOID CONFLICTS WITH LIGHTS, DIFFUSERS, GRILLES, DUCTWORK, AND OTHER OBSTRUCTIONS.
9. CONDUIT RUNS INDICATED REFLECT DESIGN INTENT ONLY. ALL PULL BOXES AND JUNCTION BOXES SHALL BE SIZED IN ACCORDANCE WITH THE N.E.C. VERIFY QUANTITY AND LOCATION OF PULL BOXES AND JUNCTION BOXES IN ACCORDANCE WITH CABLE MANUFACTURERS RECOMMENDATIONS.
10. CONTRACTOR SHALL HAVE THE OPTION TO COMBINE HOMERUN CONDUCTORS OF REMOTE DEVICES OF SAME TYPE AND VOLTAGE CLASS AS PER THE N.E.C. SIZE CONDUIT AND INSTALL CONDUCTORS IN ACCORDANCE WITH THE N.E.C., N.F.P.A. AND DIVISION 26 OF THE SPECIFICATIONS.
11. COORDINATE EXACT LOCATION(S) OF CEILING MOUNTED EQUIPMENT/DEVICES WITH ARCHITECTURAL PLANS, REFLECTED CEILING PLANS, STRUCTURAL PLANS, AND ALL AFFECTED TRADES PRIOR TO CONSTRUCTION AND INSTALLATION.
12. ROUTE ALL HOMERUNS FROM ALL SECURITY DEVICES TO SECURITY EQUIPMENT CABINETS AS INDICATED ON PLANS.
13. COORDINATE EXACT LOCATIONS OF ALL DESKTOP/COUNTER MOUNTED SECURITY EQUIPMENT WITH MILLWORK/ CASEWORK AND FURNITURE PLANS PRIOR TO INSTALLATION.
14. WHERE DEVICES ARE INSTALLED IN FIRE RATED PARTITIONS, REVIEW SURFACE AND RECESS MOUNTING OPTIONS WITH THE ARCHITECT TO PRESERVE THE FIRE RATING.
15. ALL SECURITY EQUIPMENT AT EXTERIOR LOCATIONS SHALL BE WEATHERPROOF RATED.
16. ALL CONDUIT BENDS SHALL BE LONG AND SWEEPING WITH A MINIMUM RADIUS OF 6 TIMES THE DIAMETER FOR CONDUITS UP TO 2" OR 10 TIMES FOR LARGER CONDUITS.
17. ALL SECURITY DEVICE WIRING AND INTERCONNECTIONS BETWEEN BUILDINGS MUST BE IN CONDUIT AND INACCESSIBLE TO PHYSICAL TAMPERING. AT LOCATIONS WHERE JUNCTION BOXES OR ELECTRICAL FITTINGS WOULD PROVIDE ACCESS, COVERS MUST BE SECURED WITH TORX W/ PEG TAMPER RESISTIVE HARDWARE TIGHTENED TO MANUFACTURER'S SPECIFICATIONS.
18. ALL SECURITY EQUIPMENT SHALL BE MONITORED FROM THE SECURITY CONTROL CENTER UNLESS OTHERWISE NOTED.
19. LOCATE CARD READER AND DOOR CONTROL EQUIPMENT SUCH THAT ADA (30"X46") CLEAR FLOOR AT EQUIPMENT IS LOCATED OUTSIDE THE ARC OF DOOR SWING.
20. PROVIDE WEATHERPROOF BACKBOXES AND JUNCTION BOXES IN EXTERIOR AND UNCONDITIONED SPACES, AND LOCATIONS EXPOSED TO THE ELEMENTS. PROVIDE EQUIPMENT TO BE USED IN AN EXTERIOR ENVIRONMENT WITH A HOUSING THAT PROVIDES PROTECTION AGAINST WINDBLOWN DUST, RAIN AND SPASHING WATER, AND HOSE DIRECTED WATER. SENSORS ARE NOT TO BE DAMAGED BY THE ICE FORMATION ON THE ENCLOSURE. ENCLOSURES TO HOUSE EQUIPMENT MUST MEET THE REQUIREMENTS OF NEMA 250 TYPE 4.

NOTE:
SYMBOLS SHOWN ARE FOR REFERENCE ONLY AND DO NOT CONSTITUTE A CHECK LIST OF DEVICES REQUIRED BY THE CONTRACT

SECURITY INDEX LIST

SHEET NAME	SHEET NUMBER	35%	65%	95%
TY-001	SECURITY SYSTEMS LEGEND	●	●	●
TY-101	SECURITY SYSTEMS PLAN - VISITOR CONTROL CENTER	●	●	●
TY-111	SECURITY SYSTEMS PLAN - GATEHOUSE	●	●	●
TY-141	SECURITY SYSTEMS - OVERWATCH	●	●	●
TY-121	ID-CHECK - SECURITY SYSTEMS PLAN - ID CHECK	●	●	●
TY-131	T-SEARCH - SECURITY SYSTEMS PLAN - TRUCK SEARCH AREA	●	●	●
TY-501	SECURITY SYSTEM DETAILS	●	●	●
TY-502	SECURITY SYSTEM DETAILS	●	●	●
TY-503	SECURITY SYSTEM DETAILS	●	●	●
TY-504	SECURITY SYSTEM DETAILS	●	●	●
TY-505	SECURITY SYSTEM DETAILS	●	●	●
TY-506	SECURITY SYSTEM DETAILS	●	●	●
TY-507	SECURITY SYSTEM DETAILS	●	●	●
TY-508	SECURITY SYSTEM DETAILS	●	●	●
TY-509	SECURITY SYSTEM DETAILS	●	●	●
TY-510	SECURITY SYSTEM DETAILS	●	●	●

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

File Path: C:\n\2023\10400\76\1-PBA_VOC__LFERNANDEZ.rvt

ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S25B0035

DESIGNED BY: T. NICHOLS
DRAWN BY: T. NICHOLS
CHECKED BY: Checker
SUBMITTED BY:
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HDR ENGINEERING, INC.
613 NW LOOP 410, STE 700
SAN ANTONIO, TX 78216
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

SECURITY SYSTEMS LEGEND

SHEET ID

TY001

Plot Date: 4/17/2026 2:03:13 PM

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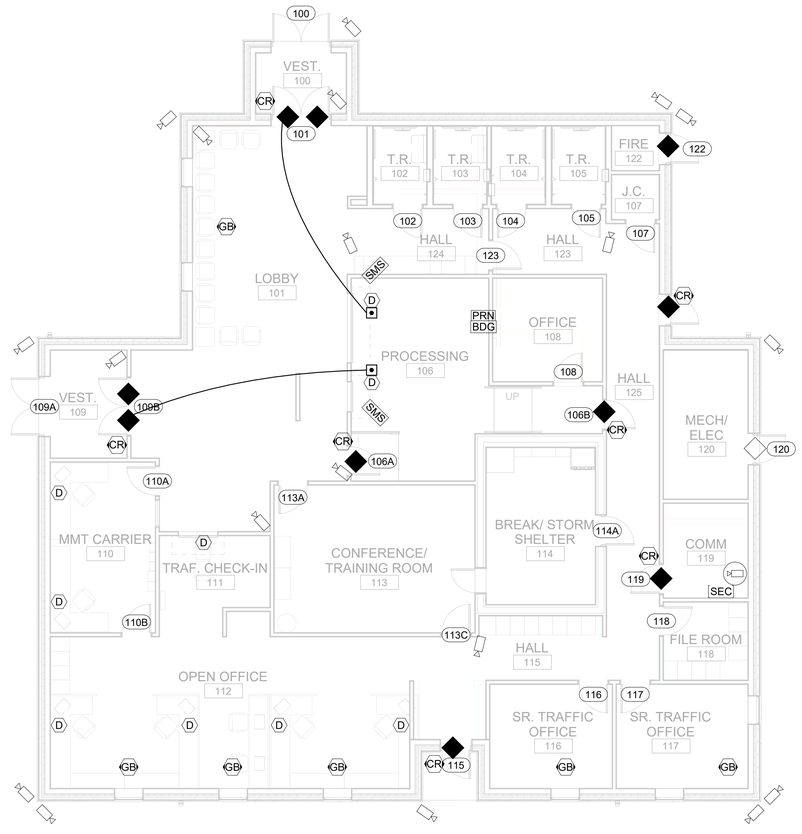

PLAN NORTH

0 4' 8' 16'

A1 FLOOR SECURITY PLAN - VISITOR CONTROL CENTER

1/8" = 1'-0"

GENERAL NOTES

A. DESIGN WILL CONFORM TO BASELINE REQUIREMENTS OF UFC 3-580-01 (SECURITY INTERIOR INFRASTRUCTURE PLANNING AND DESIGN, W/ CHANGE1), APPLICABLE TIA STANDARDS, & UFC 4-022-01 (ENTRY CONTROL FACILITIES ACCESS CONTROL POINTS) AS IT PERTAINS TO SECURITY.

B. ONLY NIPR COMMUNICATIONS WILL SERVICE THE ACP.

C. REFER TO CIVIL SIGNING PLAN FOR WARNING SIGNS AND SIGNALS.

D. REFER TO DRAWING TY001 FOR SYMBOLS ABBREVIATIONS AND GENERAL PROJECT NOTES.

SHEET KEYNOTES

SHEET LEGEND

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

File Path: C:\Hot\20251004000761-1-PBA_VCC_LFERNANDEZ.rvt

Plot Date: 4/17/2026 2:03:13 PM

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DRAWN BY: T. NICHOLS
CHECKED BY: Checker
ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D6035
SUBMITTED BY:
SIZE: ANSI D

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LITTLE ROCK DISTRICT
LITTLE ROCK, AR

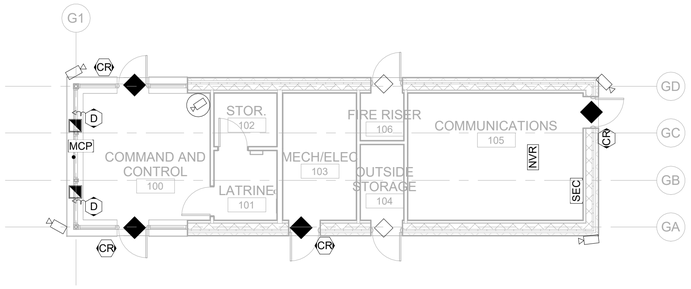
HDR ENGINEERING, INC.
613 NW LOOP 410, STE 700
SAN ANTONIO, TX 78216
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

SECURITY SYSTEMS PLAN - VISITOR CONTROL CENTER

SHEET ID
VCC
TY101

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



A1 FLOOR SECURITY PLAN - GATEHOUSE

1/8" = 1'-0"

PLAN NORTH

0 4' 8' 16'

GENERAL NOTES

A. DESIGN WILL CONFORM TO BASELINE REQUIREMENTS OF UFC 3-580-01 (SECURITY INTERIOR INFRASTRUCTURE PLANNING AND DESIGN, W/ CHANGE1), APPLICABLE TIA STANDARDS, & UFC 4-022-01 (ENTRY CONTROL FACILITIES ACCESS CONTROL POINTS) AS IT PERTAINS TO SECURITY.

B. ONLY NIPR COMMUNICATIONS WILL SERVICE THE ACP.

C. REFER TO CIVIL SIGNING PLAN FOR WARNING SIGNS AND SIGNALS.

D. REFER TO DRAWING TY001 FOR SYMBOLS ABBREVIATIONS AND GENERAL PROJECT NOTES.

SHEET KEYNOTES

SHEET LEGEND

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

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Plot Date: 4/17/2026 1:51:54 PM

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DRAWN BY: T. NICHOLS
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SUBMITTED BY:
ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D6035
SIZE: ANSI D

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LITTLE ROCK DISTRICT
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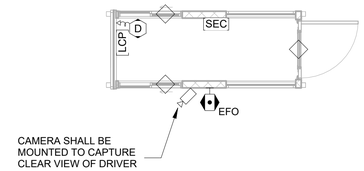
SAN ANTONIO, TX 78216
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

SECURITY SYSTEMS PLAN - GATEHOUSE

SHEET ID
G-HOUSE
TY111

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

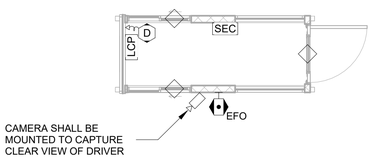


PLAN NORTH

0 2' 4' 8'

H5 FLOOR SECURITY PLAN - GUARD BOOTH #1

1/4" = 1'-0"



PLAN NORTH

0 2' 4' 8'

A5 FLOOR SECURITY PLAN - GUARD BOOTH #2

1/4" = 1'-0"

GENERAL NOTES

A. DESIGN WILL CONFORM TO BASELINE REQUIREMENTS OF UFC 3-580-01 (SECURITY INTERIOR INFRASTRUCTURE PLANNING AND DESIGN, W/ CHANGE), APPLICABLE TIA STANDARDS, & UFC 4-022-01 (ENTRY CONTROL FACILITIES ACCESS CONTROL POINTS) AS IT PERTAINS TO SECURITY.

B. ONLY NIPR COMMUNICATIONS WILL SERVICE THE ACP.

C. REFER TO CIVIL SIGNING PLAN FOR WARNING SIGNS AND SIGNALS.

D. REFER TO DRAWING TY001 FOR SYMBOLS ABBREVIATIONS AND GENERAL PROJECT NOTES.

SHEET KEYNOTES

SHEET LEGEND

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MARK	DESCRIPTION	DATE

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ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S25D6035
SIZE: ANSI D

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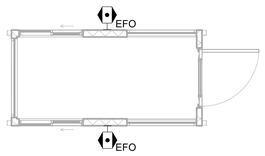
ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

ID-CHECK - SECURITY SYSTEMS PLAN - ID CHECK

SHEET ID
G-BOOTH
TY121

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



F5 FLOOR SECURITY PLAN - PEDESTRIAN SEARCH SHELTER

1/4" = 1'-0"

PLAN NORTH

0 2' 4' 8'

GENERAL NOTES

A. DESIGN WILL CONFORM TO BASELINE REQUIREMENTS OF UFC 3-580-01 (SECURITY INTERIOR INFRASTRUCTURE PLANNING AND DESIGN, W/ CHANGE1), APPLICABLE TIA STANDARDS, & UFC 4-022-01 (ENTRY CONTROL FACILITIES ACCESS CONTROL POINTS) AS IT PERTAINS TO SECURITY.

B. ONLY NIPR COMMUNICATIONS WILL SERVICE THE ACP.

C. REFER TO CIVIL SIGNING PLAN FOR WARNING SIGNS AND SIGNALS.

D. REFER TO DRAWING TY001 FOR SYMBOLS ABBREVIATIONS AND GENERAL PROJECT NOTES.

SHEET KEYNOTES

SHEET LEGEND

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MARK	DESCRIPTION	DATE

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Plot Date: 4/17/2026 1:53:24 PM

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DRAWN BY: T. NICHOLS
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SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S25D6035
SIZE: ANSI D

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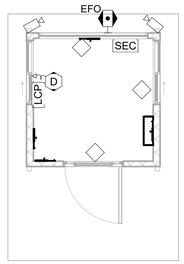
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

T-SEARCH - SECURITY SYSTEMS PLAN - TRUCK SEARCH AREA

SHEET ID
G-BOOTH
TY131

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



PLAN NORTH

0 2' 4' 8'

F1 FLOOR SECURITY PLAN - OVERWATCH BOOTH

1/4" = 1'-0"

GENERAL NOTES

A. DESIGN WILL CONFORM TO BASELINE REQUIREMENTS OF UFC 3-580-01 (SECURITY INTERIOR INFRASTRUCTURE PLANNING AND DESIGN, W/ CHANGE1), APPLICABLE TIA STANDARDS, & UFC 4-022-01 (ENTRY CONTROL FACILITIES ACCESS CONTROL POINTS) AS IT PERTAINS TO SECURITY.

B. ONLY NIPR COMMUNICATIONS WILL SERVICE THE ACP.

C. REFER TO CIVIL SIGNING PLAN FOR WARNING SIGNS AND SIGNALS.

D. REFER TO DRAWING TY001 FOR SYMBOLS ABBREVIATIONS AND GENERAL PROJECT NOTES.

SHEET KEYNOTES

SHEET LEGEND

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MARK	DESCRIPTION	DATE

File Path: C:\Hr\2025\104000767-1-PBA_OVERWATCH_LFERNANDEZ.rvt

Plot Date: 4/17/2026 1:56:38 PM

DESIGNED BY: T. NICHOLS
DRAWN BY: T. NICHOLS
CHECKED BY: Checker
SUBMITTED BY:
ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S25D6035
SIZE: ANSI D

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LITTLE ROCK, AR

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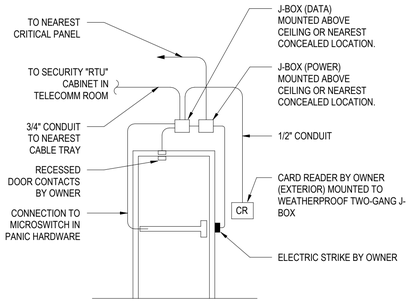
SAN ANTONIO, TX 78216
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

SECURITY SYSTEMS PLAN - OVERWATCH

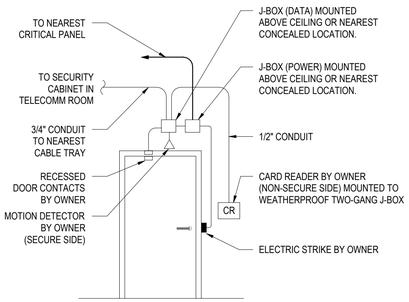
SHEET ID
O-WATCH
TY141

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



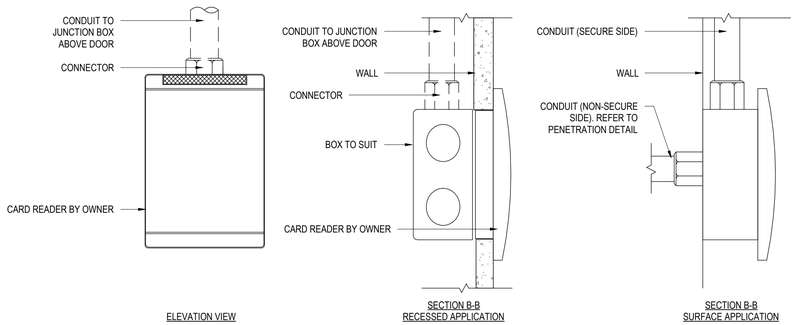
K1 DOOR ACCESS CONTROL DIAGRAM 2

NOT TO SCALE



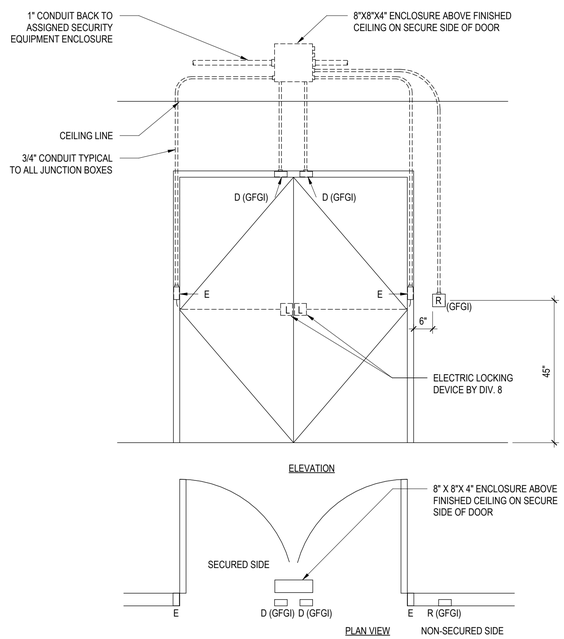
K7 DOOR ACCESS CONTROL DIAGRAM 3

NOT TO SCALE



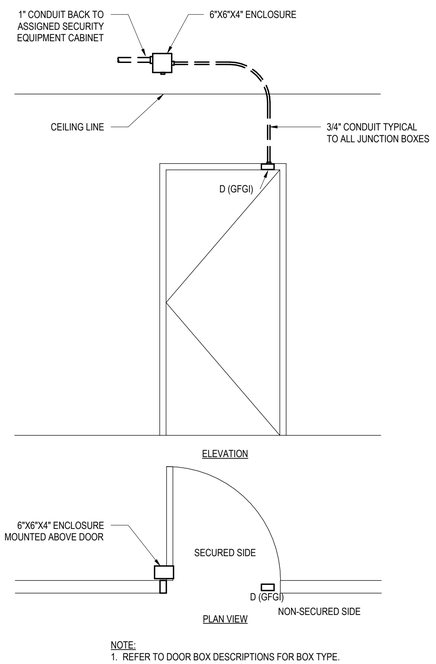
K13 CARD READER EQUIPMENT MOUNTING

NOT TO SCALE



A1 DOUBLE DOOR DETAIL

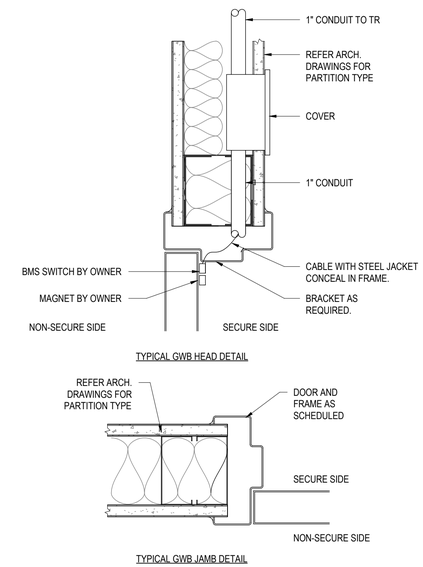
NOT TO SCALE



NOTE:
1. REFER TO DOOR BOX DESCRIPTIONS FOR BOX TYPE.

A7 SINGLE DOOR DETAIL

NOT TO SCALE



A13 TYPICAL BMS ROUGH-IN

NOT TO SCALE

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

File Path: C:\vol2\2021\04\0076\T-PBA_VOC__LFERNANDEZ.rvt

Plot Date: 4/17/2026 2:03:14 PM

DESIGNED BY: T. NICHOLS	ISSUE DATE: 17 APRIL 2026
DRAWN BY: T. NICHOLS	SOLICITATION NO.: W9127S24F6002
CHECKED BY: Checker	CONTRACT NO.: W9127S23D6035
SUBMITTED BY:	SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HDR ENGINEERING, INC.
613 NW LOOP 410, STE 700
SAN ANTONIO, TX 78216
Texas P.E. Firm Registration No. F-754

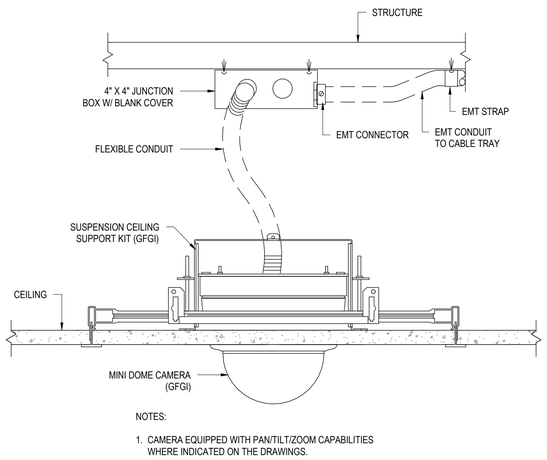
ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

SECURITY SYSTEM DETAILS

SHEET ID

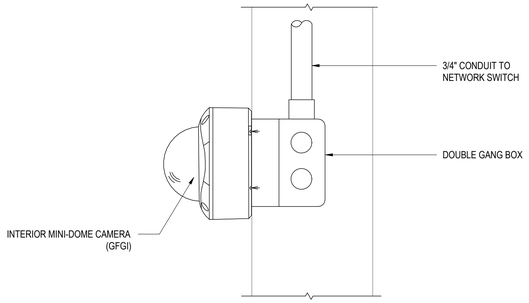
TY501

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



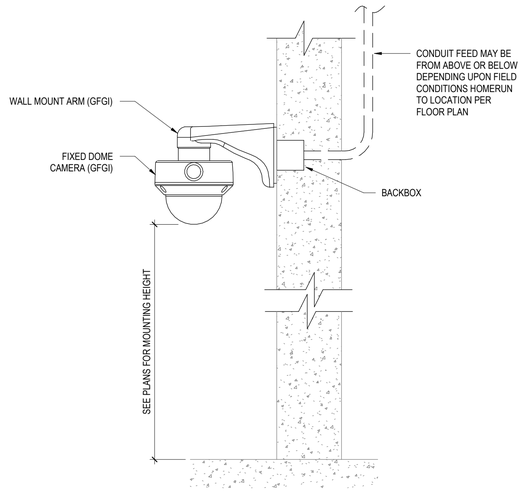
J1 TYPICAL CEILING MOUNT MINI-DOME CAMERA DETAIL

NOT TO SCALE



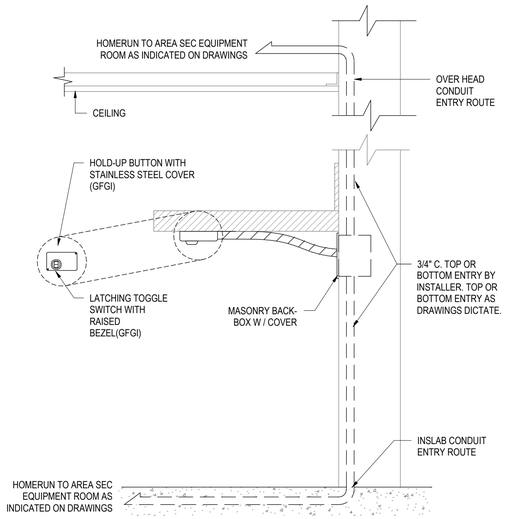
J8 CAMERA-INT WALL DOME FIXED

NOT TO SCALE



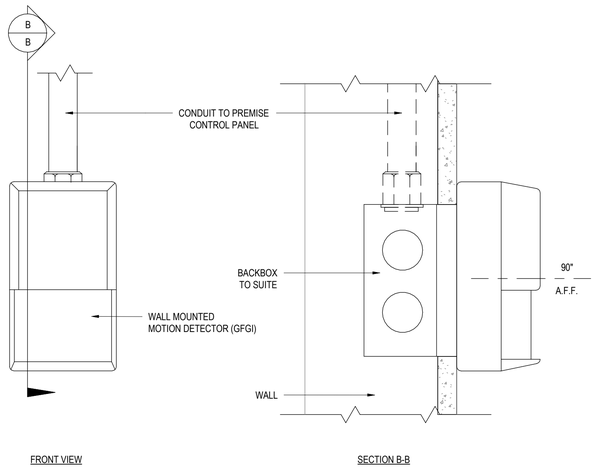
J14 TYPICAL WALL ARM MOUNT CAMERA DETAIL

NOT TO SCALE



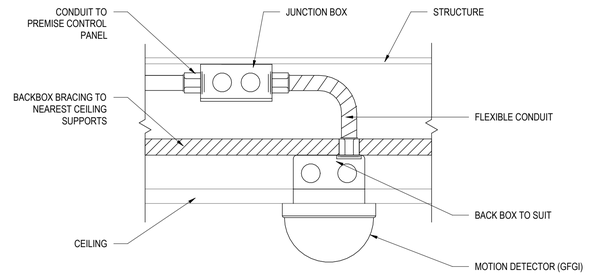
D1 DESK MOUNTED DURESS BUTTON

NOT TO SCALE



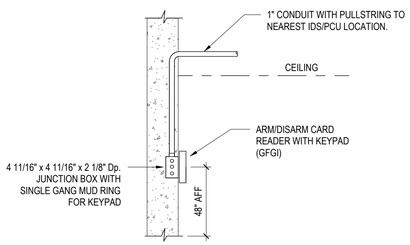
D8 MOTION DETECTOR-WALL MOUNTED

NOT TO SCALE



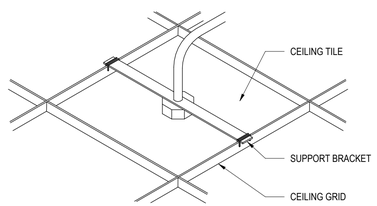
D14 MOTION DETECTOR-CEILING MOUNTED

NOT TO SCALE



A1 KEYPAD ARM/DISARM CONDUIT BOX

NOT TO SCALE



CEILING MOUNT DETAIL-J33

A8 CEILING MOUNT DETAIL

NOT TO SCALE

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

File Path: C:\Hdr\2023\10400076-1-PBA_VDC__LFERNANDEZ.rvt

Plot Date: 4/17/2026 2:03:14 PM

DESIGNED BY:	T. NICHOLS
DRAWN BY:	T. NICHOLS
CHECKED BY:	Checker
SUBMITTED BY:	
SIZE:	ANSI D
ISSUE DATE:	17 APRIL 2026
SOLICITATION NO.:	W9127S24F6002
CONTRACT NO.:	W9127S25D6035

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HDR ENGINEERING, INC.
613 NW LOOP 410, STE 700
SAN ANTONIO, TX 78216
Texas P.E. Firm Registration No. F-754

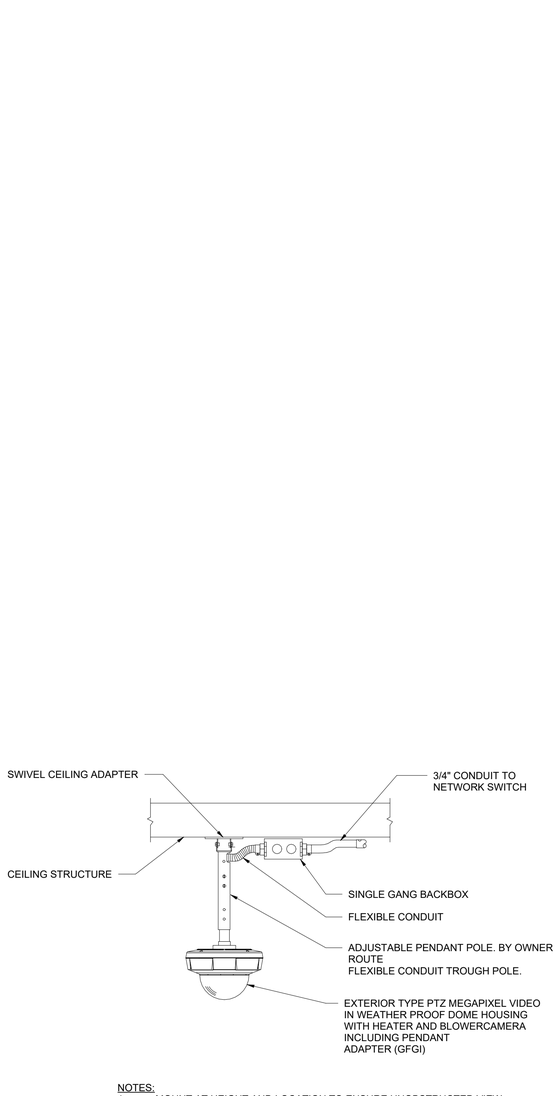
ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

SECURITY SYSTEM DETAILS

SHEET ID

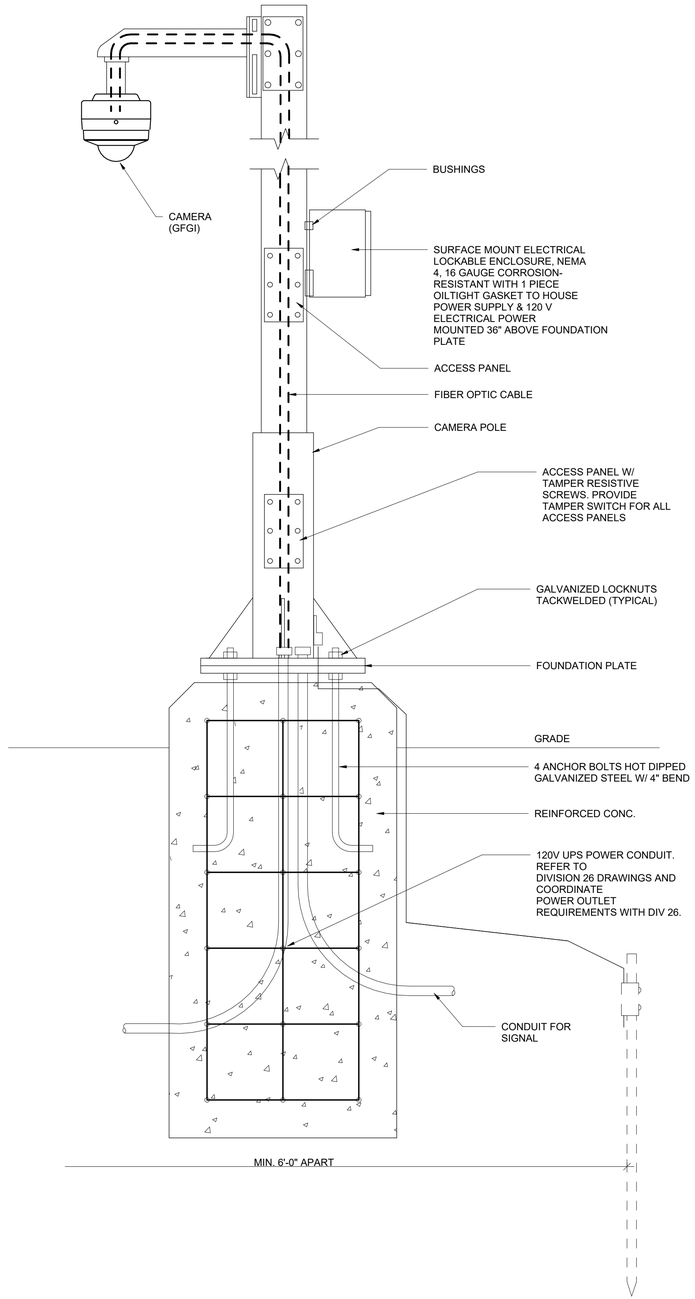
TY502

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

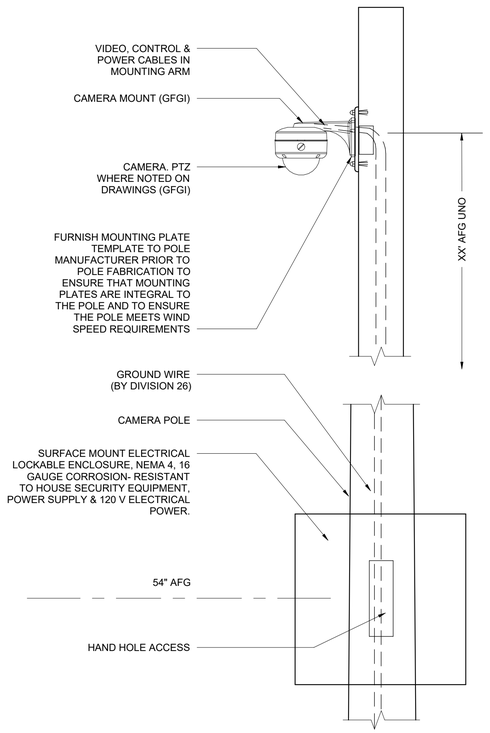


NOTES:
1. MOUNT AT HEIGHT AND LOCATION TO ENSURE UNOBSTRUCTED VIEW.

A1 CAMERA - PENDANT MOUNT EXTERIOR DOME GFGI
NOT TO SCALE



A8 CAMERA-POLE BASE GFGI
NOT TO SCALE



A15 CAMERA - POLE DOME GFGI
NOT TO SCALE

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

File Path: C:\vhd2023\04000767-TPBA_VDC_LFERNANDEZ.rvt

Plot Date: 4/17/2026 2:03:15 PM

DESIGNED BY: T. NICHOLS	ISSUE DATE: 17 APRIL 2026
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SUBMITTED BY:	SIZE: ANSI D

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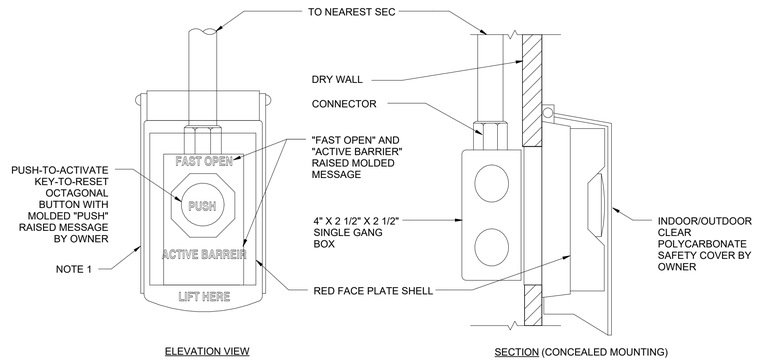
ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

SECURITY SYSTEM DETAILS

SHEET ID

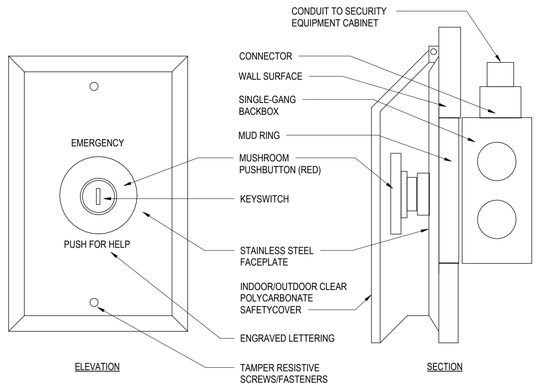
TY503

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



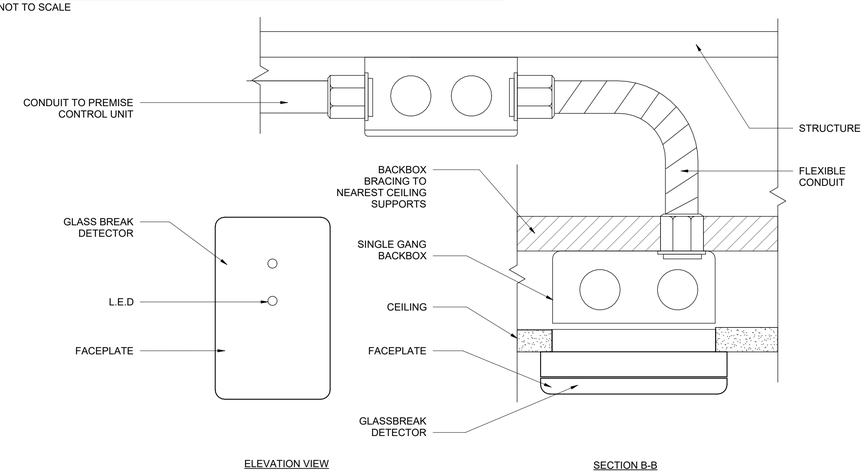
L1 EMERGENCY FAST OPEN (EFO) SWITCH

NOT TO SCALE



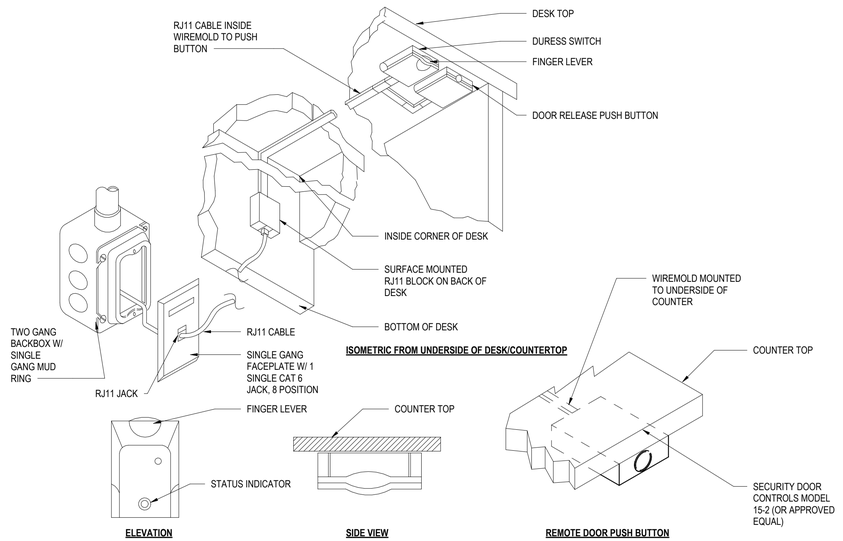
F1 DURESS-DESK MOUNTED BY OWNER

NOT TO SCALE



A1 GLASS BREAK DETECTOR-CEILING MOUNTED GFGI

NOT TO SCALE



NOTES:

1. AT LOCATIONS WHERE DESK IS NOT LOCATED ADJACENT TO A WALL UTILIZE FLOOR BOXES. COORDINATE EXACT LOCATION AND INCORPORATE OUTLETS INTO FLOOR BOX PROVIDE BY DIVISION 26.
2. SPECIALTY OUTLET: RJ-11 JACK FOR DURESS, RJ-45 FOR WORK STATIONS, FACEPLATE AND BACKBOX W/ CONDUIT ROUTED TO LOCAL TC ROOM. MOUNT ADJACENT TO ELECTRICAL AND TELE/DATA OUTLET. COORDINATE EXACT LOCATION W/ CONTRACTING OFFICER.

A9 DURESS-DESK MOUNTED w/DOOR RELEASE BY OWNER

NOT TO SCALE

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

Plot Date: 4/17/2026 2:03:15 PM File Path: C:\Vol2023\1040076\1-PBA_VOC_LFERNANDEZ.rvt

DESIGNED BY: T. NICHOLS	ISSUE DATE: 17 APRIL 2026
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LITTLE ROCK, AR

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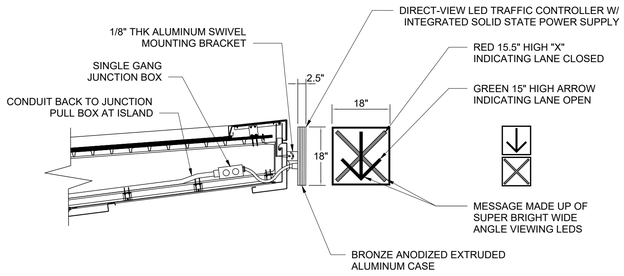
ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

SECURITY SYSTEM DETAILS

SHEET ID

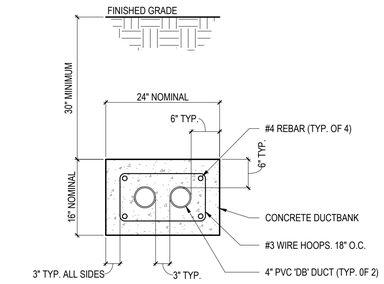
TY504

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



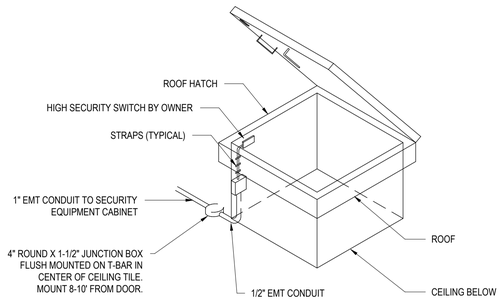
L1 TRAFFIC SIGNAL AT ID CHECK CANOPY

NOT TO SCALE



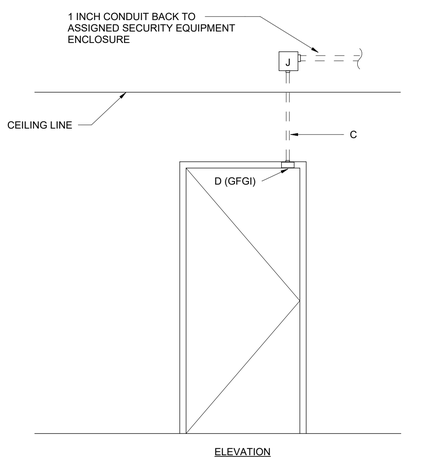
L8 2-WAY CONCRETE - ENCASED DUCTBANK

NO SCALE



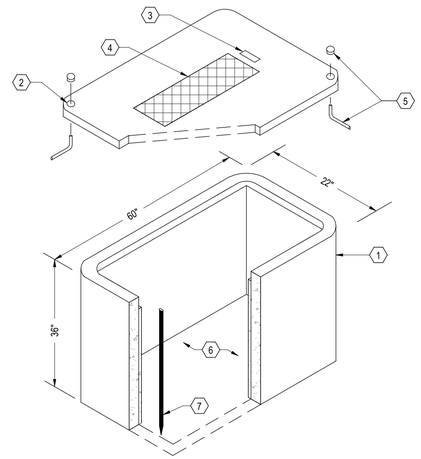
L15 ROOF HATCH DETAIL

NOT TO SCALE



A1 SINGLE DOOR DETAIL WITH HSS AND SOUNDER

NOT TO SCALE



KEY NOTES:

1. PRECAST CONCRETE, BOTTOMLESS PULL BOX REINFORCED FOR H20 BRIDGE LOADING.
2. GALVANIZED STEEL TRAFFIC COVER WITH CHECKERED TOP SURFACE.
3. LIFTING HOLE.
4. UTILITY IDENTIFICATION TO SAY "ELECTRICAL" ON COVER IN 1" LETTERING.
5. STAINLESS STEEL HEAD NUT AND SWING BOLT.
6. PROVIDE MIN. 8" GRAVEL FILL BED UNDER BODY OF BOX FOR DRAINAGE.
7. PROVIDE 3/4" DIA. 10' COPPER GROUNDING ROD.

A8 HAND HOLE

NOT TO SCALE

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

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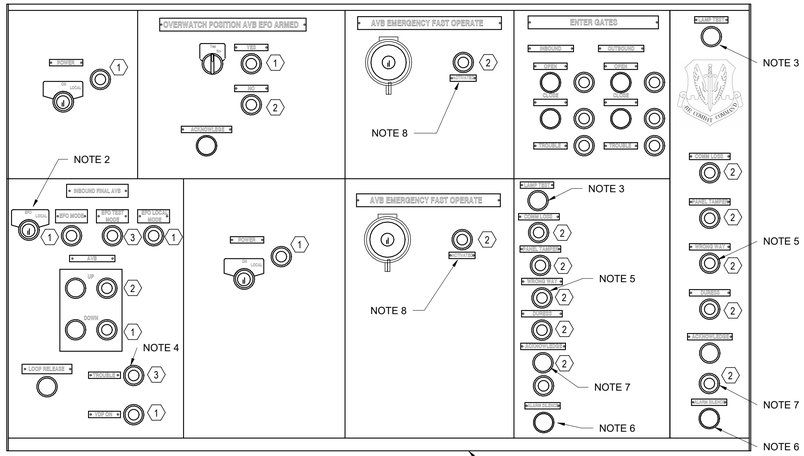
ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

SECURITY SYSTEM DETAILS

SHEET ID

TY505

CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION

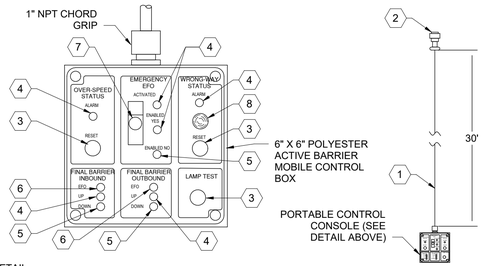


(REFER TO NOTES AT BOTTOM OF SHEET)

1/8" BLACK SILK SCREENED CONSOLE GRAPHIC LINES, TYPICAL

K1 GATEHOUSE GRAPHIC CONTROL PANEL (MCP)

NOT TO SCALE



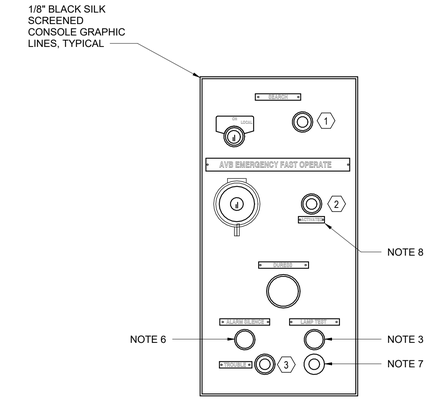
DETAIL
PORTABLE OVERWATCH CONTROL CONSOLE W/ CHORD

KEY NOTES:

1. TYPE SOOW, 24 C 16 GA PORTABLE CABLE. (INCLUDES SPARE CONDUCTORS)
2. 24 C 16 GA CONTACT CIRCULAR CONNECTOR POWER/DATA PLUG.
3. 16MM MOMENTRAY PB RED DPDT SWITCH.
4. RED LED 24VDC PILOT LIGHT.
5. GREEN LED 24VDC PILOT LIGHT.
6. AMBER LED 24VDC PILOT LIGHT.
7. MOMENTARY PB SWITCH SP 15A 28VDC WITH HEAD GUAED.
8. PZO SOUNDER.

K8 OVERWATCH POSITION LOCAL CONTROL PANEL

NOT TO SCALE

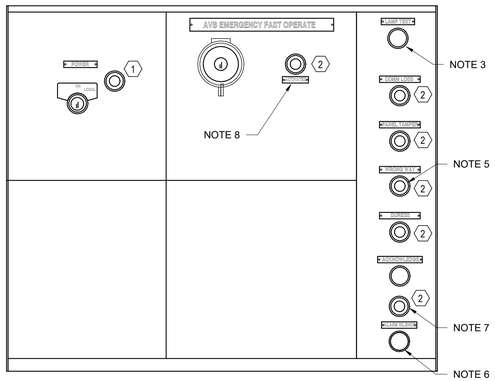


BARRIER MAINTENACE

(REFER TO NOTES AT BOTTOM OF SHEET)

K15 LOCAL CONTROL PANEL - GUARD BOOTH 2

NOT TO SCALE



(REFER TO NOTES AT BOTTOM OF SHEET)

E1 TYPICAL GUARD BOOTH LOCAL CONTROL PANEL - ID CHECK LANES (LCP)

NOT TO SCALE

GENERAL NOTES :

A. THE CONTROL PANEL LAYOUTS DEPICT AN ACP WITH A GATEHOUSE, SEARCH CANOPY. 2 ID CHECK LANES, AN OVERWATCH POSITION, AND ACTIVE VEHICLE BARRIER.
B. SEE UFGS 34 41 26.00 10 "ACCESS CONTROL POINT CONTROL SYSTEM" APPENDIX A "SIGNS AND SIGNALS SAFETY SYSTEM" FOR DESCRIPTIONS OF THE REQUIRED BARRIER AND TRAFFIC CONTROL SEQUENCES.
C. THE BARRIER MODE SELECTOR SWITCHES, BARRIER "DOWN" AND "UP" SWITCHES AND THE EFO RESET SWITCH MAY BE LOCATED ON A SEPARATE PANEL CALLED THE MAINTENANCE PANEL. THE MAINTENANCE PANEL MUST BE LOCATED IN THE GATEHOUSE IN AN AREA OR CABINET THAT IS ONLY ACCESSIBLE TO THE CHIEF OF THE GUARDS.

LEGEND

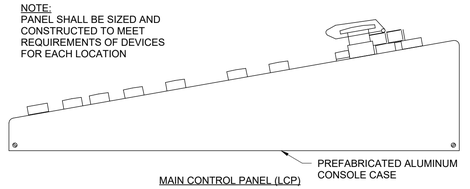
- PUSH BUTTONS WITH HEAD GUARD
- PUSH BUTTONS
- INDICATOR LAMPS (NOTE 2)
- 2 AND 3 WAY SELECTOR SWITCHES
- 2 WAY KEYED SELECTOR SWITCHES
- SWITCH AND LAMP PLASTIC LAMINATE ENGRAVED LABEL PLATES
- LARGE KEY OPERATED PUSH BUTTON SWITCH
- KEY SWITCH

NOTES :

1. PROVIDE A SEPARATE STAND ALONE EFO PUSH BUTTON SWITCH WITH KEYED RESET AND SAFETY COVER MOUNTED ON THE INSIDE OF THE GUARD BOOTH TO THE LEFT OF THE DOOR FRAME FOR EASY ACCESS BY THE GUARD WHO MAY BE STANDING OUTSIDE GUARD BOOTH DURING ID CHECKS.
2. THE BARRIER MODE SELECTOR SWITCHES SHALL BE KEY OPERATED WITH THE KEY REMOVABLE IN ALL MODES. EACH BARRIER SHALL HAVE A UNIQUE KEY.
   a. UNDER NORMAL OPERATIONS, THE BARRIER MODE SELECTOR SWITCHES WILL BE IN THEIR EMERGENCY FAST OPERATE (EFO) POSITIONS WITH KEYS REMOVED AND STORED IN A LOCKED CABINET IN THE GATEHOUSE ACCESSIBLE ONLY BY THE CHIEF OF THE GUARDS.
   b. WHEN PERFORMING BARRIER MAINTENANCE, MAINTENANCE PERSONNEL WILL OBTAIN THE KEY FROM THE CHIEF OF THE GUARDS, PUT THE SWITCH IN THE "LOCAL" POSITION, AND THEN REMOVE AND RETAIN THE KEY. THE MAINTENANCE PERSON WILL THEN PUT THE KEY IN THE MODE SELECTOR SWITCH ON THE BARRIERS LOCAL CONTROL PANEL LOCATED AT THE BARRIER AND TURN THE KEY TO THE "LOCAL" POSITION TO ACTIVATE THE OPEN AND CLOSE SWITCHES ON THE LOCAL CONTROL PANEL. WHEN MAINTENANCE IS COMPLETE, THE MAINTENANCE PERSON WILL PLACE THE MODE SELECTOR SWITCH ON THE LOCAL CONTROL PANEL BACK TO "AUTO" MODE, REMOVE THE KEY, AND RETURN THE KEY TO THE CHIEF OF THE GUARDS. THE CHIEF OF THE GUARDS WILL USE THE KEY TO PLACE THE BARRIER'S MODE SELECTOR SWITCH ON THE MASTER CONTROL PANEL IN THE "EFO" POSITION, AND THEN WILL REMOVE AND LOCKUP THE KEY.
   c. A GUARD MAY TEST OPERATE A BARRIER BY FIRST OBTAINING THE BARRIER'S MODE SWITCH KEY FROM THE CHIEF OF THE GUARDS, PUTTING THE MODE SWITCH IN THE "TEST" POSITION, AND THEN OPENING OR CLOSING THE BARRIER WITH THE PUSHBUTTONS ON THE MASTER CONTROL PANEL. UPON COMPLETION OF THE TEST OPERATIONS, THE GUARD WILL RETURN MODE TO "EFO", REMOVE THE KEY, AND RETURN IT TO THE CHIEF OF THE GUARDS. PROCEDURES MUST BE IN PLACE TO ENSURE ALL OPERABLE BARRIERS' MODE SELECTOR SWITCHES ARE PLACED IN THE EFO POSITIONS FOR THE PROPER RESPONSE TO AN EFO COMMAND.
3. LAMP TEST PUSH BUTTON SHALL TURN ON ALL INDICATING LIGHTS WHILE BUTTON IS PUSHED WITHOUT AFFECTING ANY CONTROLS.
4. THE INDICATING LIGHT LABELED 'TROUBLE' SHALL COME ON FOR ANY PROBLEMS OR ALARM CONDITIONS AT THE BARRIER, e.g. LOW VOLTAGE, ETC. THE INDICATING LIGHT LABELED 'VPD ON' SHALL COME ON WHEN ANY OF THE BARRIER'S VEHICLE PRESENCE DETECTORS (VDL'S) GETS A CALL (VEHICLE DETECTED) FOR MORE THAN 15 SECONDS.
5. WRONG-WAY, AND DURESS ALARMS SHALL INCLUDE BACK LIT WINDOWS AND ADJUSTABLE AUDIBLE ALARMS. DURESS ALARMS SHALL BE ON OVERWATCH POSITION PANEL AND GATEHOUSE PANEL ONLY. DURESS ALARM ACKNOWLEDGEMENT SWITCH SHALL BE ON GATEHOUSE PANEL ONLY.
6. OVERWATCH POSITION PANEL SHALL INCLUDE A DURESS ALARM SILENCE SWITCH TO SILENCE THE AUDIBLE ALARM. ALL WRONG WAY ALARMS SHALL BE SELF CLEARING.
7. VOLUME ADJUST ABLE PEIZO SOUNDER.

LED LAMP COLOR SCHEDULE

- 1 GREEN
- 2 RED
- 3 AMBER



LOCAL CONTROL PANEL (LCP)

MAIN CONTROL PANEL (LCP)

E15 TYPICAL GRAPHIC CONTROL PANEL SIDE VIEW

NOT TO SCALE

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

File Path: C:\ve2023\1004000\76-T-PBA_VOC_LFERNANDEZ.rvt

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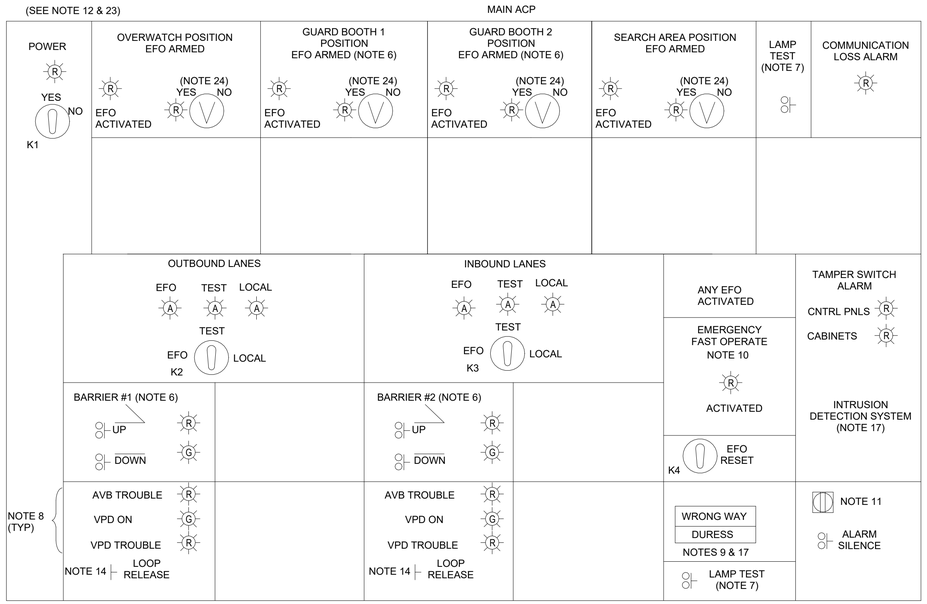
ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

SECURITY SYSTEM DETAILS

SHEET ID

TY506

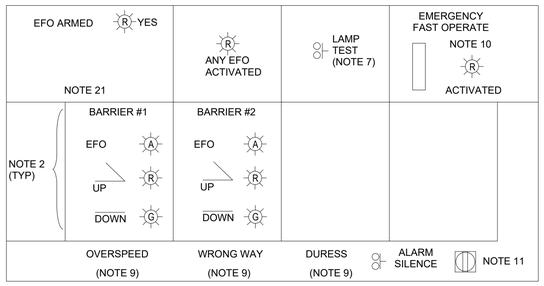
CONCEPTUAL DESIGN - NOT FOR CONSTRUCTION



COMMAND & CONTROL MASTER CONTROL OPERATING PANEL

CONVENTIONAL (SIGNS & SIGNALS)
SAFETY SYSTEM

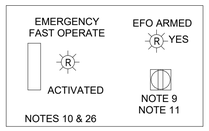
NOT TO SCALE



OVERWATCH POSITION CONTROL OPERATING PANEL

CONVENTIONAL (SIGNS AND SIGNALS)
SAFETY SYSTEM

NOT TO SCALE



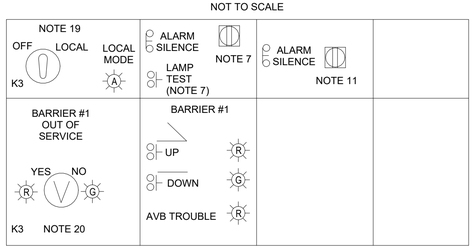
MAIN GUARD BOOTH OPERATING PANEL

NOT TO SCALE

GUARD BOOTH 2 EFO CONTROL BUTTON OPERATING PANEL BY DOOR

NOT TO SCALE

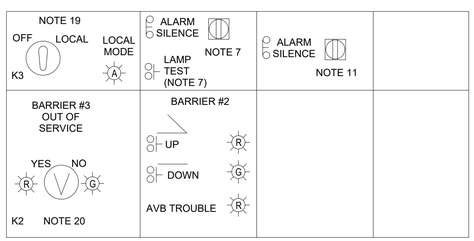
CONVENTIONAL (SIGNS AND SIGNALS)
SAFETY SYSTEM



LOCAL CONTROL PANEL AT INBOUND BARRIER

CONVENTIAL (SIGNS AND SIGNALS) SAFETY SYSTEM

NOT TO SCALE



LOCAL CONTROL PANEL AT OUTBOUND BARRIER

CONVENTIONAL (SIGNS AND SIGNALS) SAFETY SYSTEM

NOT TO SCALE

NOTES:

1. THE CONTROL PANEL LAYOUTS DEPICT AN ACP WITH A GATEHOUSE, (3) GUARD BOOTHS, AN OVER WATCH POSITION, AND 2 ACTIVE VEHICLE BARRIERS. THE BARRIER LAYOUTS ARE NOTIONAL SINCE IT WILL VARY WITH EACH ACP AND AVB SYSTEM.

2. BARRIER MODE AND STATUS INDICATINF LIGHTS ARE OPTIONAL. PROVIDE AT REQUEST OF THE INSTALLATION. IF THE OVERWATCH IS A PARKING POSITION, IT IS RECOMMENDED TO NOT PROVIDED.

3. PROVIDE A SEPARATE STAND ALONE EFO TOGGLE SWITCH OR RED PUSH BUTTON WITH SAFETY COVER MOUNTED ON THE INSIDE OF THE DUARD BOOTH TO THE LEFT OF THE DOOR FRAME FOR EASY ACCESS BY THE GUARD WHO MAY BE STANDING OUTSIDE GUARD BOOTH DURING ID CHECKS.

4. BARRIER MODE SELECTOR SWITCHES SHALL BE KEY OPERATED:

   a. UNDER NORMAL OPERATIONS, THE BARRIER MODE SELECTOR SWITCHES WILL BE IN THEIR EFO POSITIONS WITH KEYS REMOVED AND STORED IN A LOCKED CABINET IN THE GATEHOUSE ACCESSIBLE ONLY BY THE CHIEF OF THE GUARDS.
   b. WHEN PERFORMING BARRIER MAINTENANCE, MAINTENANCE PERSONNEL WILL OBTAIN THE KEY FROM THE CHIEF OF THE GUARDS, PLACE THE SWITCH IN THE "LOCAL" POSITION, AND THEN REMOVED AND RETAIN THE KEY. THE MAINTENANCE PERSON WILL TEN PUT THE KEY IN THE MODE SELECTOR SWITCH ON THE BARRIERS LOCAL CONTROL PANEL LOCATED AT THE BARRIER AND TURN THE KEY TO THE "LOCAL" POSITION TO ACTIVATED THE OPEN AND CLOSE SWITCHES ON THE LOCAL CONTROL PANEL. WHEN MAINTENANCE IS COMPLETE, THE MAINTENANCE PERSON WILL PLACE THE MODE SELECTOR SWITCH ON THE LOCAL CONTROL PANEL BACK TO "OFF" MODE, REMOVE THE KEY, AND RETURN THE KEY TO THE CHIEF OF THE GURADS. THE CHIEF OF THE GUARDS WILL USE THE KEY TO THE PLACE THE BARRIER'S MODE SELECTOR SWITCH ON THE MASTER CONTROL PANEL IN THE "EFO" POSITION, AND THEN WILL REMOVE AND LOCK UP THE KEY.
   c. A GUARD MAY TEST OPERATE A BARRIER BY FIRST OBTAINING THE BARRIER'S MODE SWITCH KEY FROM THE CHIEF OF THE GUARDS, PLACING THE MODE SWITCH IN THE "TEST" POSITION, AND THEN OPENING OR CLOSING THE BARRIER WITH THE PUSHBUTTONS ON THE MASTERCONTROL PANEL. UPON COMPLETION ON THE TEST OPERATIONS , THE GUARD WILL RETURN MODE TO "EFO", REMOVE THE KEY, AND RETURN IT TO THE CHIEF OF THE GUARDS. PROCEDURES MUST BE IN PLACE TO ENSURE ALL OPERABLE BARRIERS' MODE SELECTOR SWITCHES ARE PLACED IN THE EFO POSITIONS FOR THE PROPER RESPONSIBLE TO AN EFO COMMAND.

5. SEE UFGS 34 41 26.00 10 "ACCESS CONTROL POINT CONTROL SYSTEM" APPENDIX A "CONVENTIONAL (SIGNS & SIGNALS) SAFETY SYSTEM" FOR DESCRIPTIONS OF THE REQUIRES BARRIER AND TRAFFIC CONTROL SEQUENCES.

6. LABEL FOR BARRIER AND GUARD BOOTH DESCRIPTION SHALL USE VERBAGE TO HELP DESCRIBE THE LOCATION SUCH AS EAST AND WEST OR INSIDE & OUTSIDE.

7. LAMP TEST PUSH BUTTON SHALL TUEN ON ALL INDUCATING LIGHTS WHILE BUTTON IS PUSHED WITHOUT EFFECTING ANY CONTROLS.

NOTES CONTINUED:

8. THE INDICATING LIGHT LABELED 'AVB TROUBLE' SHALL COME ON FOR ANY PROBLEMS OR ALARM CONDITIONS AT THE BARRIER, e.g. LOW OIL AIR PRESSURE, LOW VOLTAGE, ETC. THE INDICATING LIGHT LABELED "VPD ON' SHALL COME ON WHEN ANY OF THE BARRIER'S VEHICLE PRESENCE DETECTORS (VPD'S) GETS A CALL (VEHICLE DETECTED) FOR MORE THAN 15 SECONDS. THE VPD TROUBLE SHALL COME ON WHEN THERE IS A PROBLEM DETECTED ON THE VEHICLE PRESENCE DETECTORS OR CONTROLLER.

9. WRONG-WAY, AND DURESS ALARMS AND CAN EITHER BE BACK LIT WINDOWS OF RED INDICATING LIGHTSS. PROVIDE AN ADJUSTABLE AUDIBLE ALARM. ALARMS. DURESS ALARMS PANEL ONLY. SILENCE SWITCH CAN BE USED TO SILENCE AUDIBLE ALARMS. ALL OVERSPEED AND WRONG WAY ALARMS SHALL BE SHELF CLEARING. DURESS ALARM DOES NOR NEED TO BE MONITORED AT THE ,ASTER CONTROL PANEL IF DONE BY SOME OTHER PANEL.

10. AREA AROUND EFO SWITCH SHALL BE RED.

11. AUDIBLE ALARM, ALARM SHALL HAVE A MEANS TO ADJUST THE VOLUME.

12. PANEL ORIENTATION AND LABELING SHALL MATCH THE WAY THE GUARD VIEWS THE BARRIERS AND GUARD BOOTHS.

13. CONTROLS SHALL BE MADE SO THAT IF AN ACTIVE VEHICLE BARRIER (AVB) IS IN TEST OR LOCAL MODE AND AN EFO IS PUSHED THEN TURNING THE THREE POSITION SWITCH TO EFO PRIOR TO AN EFO RESET SHALL NOT CAUSE THE AVB TO DEPLOY.

14. LOOP SAFETY. WHEN THE PRESENCE DETECTION LOOPS IN FRONT OF AND BEHING THE BARRIER ARE MORE THAN 10 FEET APART, A SAFETY CIRCUIT MUST BE ADDED TO ENSURE THAT THE BARRIER WILL NOT CLOSE (DEPLOY) ON A VEHICLE THAT IS OVER THE BARRIER BUT BETWEEN WILL NOT CLOSE (DEPLOY) ON A VEHICLE THAT IS OVER THE BARRIER BUT BETWEEN THE LOOPS SO IS NOT DETECTED BY EITHER LOOP. THE FOLLOWING ARE APPROVED CIRCUITS:
   a. LATCHING CIRCUIT. WHEN A VEHICLE IS DETECTED BY LOOP 1, THE CONTROL LOGIC PICKS-UP AND SEALS ITSELF IN. AFTER THE VEHICLE PASSES OVER THE BARRIER IT SHOULD BE DETECTED BY LOOP 2 WHICH WILL DROP OUT RELAY FROM LOOP 1. LOOP RELEASE PUSHBOTTON IS REQUIRED TO DROPOUT RELAY LOOP 1 RELAY IN THE EVENT A VEHICLE IS DETECTED BY LOOP 1 BUT IS NOT DETECTED BY LOOP 2. IF THE VEHICLE PASSES OVER THE BARRIER BUT IS NOT CETECTED BY LOOP 2, THE LOOP 1 RELAY STAYS PICKED-UP EVENT THOUGH THERE IS NO CEHICLE OVER THE BARRIER. AFTER 15 SECONDS AT THIS CONDITION, AND ALARM SOUNDS TO ALERT THE GUARD THAT BARRIER'S LOOP CIRCUITS IS LATCHED. THE GUARD MUST VISUALLY CHECK THE BARRIER AND, IF THERE IS NOT A CEHICLE OVER IT, THE PUSH THE LOOP RELEASE TO FROP OUT THE RELAY AND CLEAR THE LOOP LATCH.

   b. TIME DELAY CIRCUIT. AN ALTERNATIVE TO THE LOOP LATCH CIRCUIT DESCRIBED ABOVE IS A CIRCUIT USING A SHORT (0.5 - 1 SECOND) TIME DELAY. A VEHICLE PASSING OVER LOOP 1 PICKS-UP A TIMER RELAY. AFTER THE VEHICLE CLEARS LOOP 1, THE TIMER EXTENDS THE 'ACTIVATION' OF LOOP 1 FOR THE TIME INDICATED. AFTER THE TIME EXPIRES, THEN LOOP 1 PER THE CONTROL LOGIC
   WILL LOOK LIKE IT IS CLEARED. THE ADDED TIME ALLOWS THE PASSING VEHICLE TO TRAVEL THE DISTANCE BETWEEN LOOPS 1 AND 2 BEFORE THE TIMER RUNS OUT. THE VEHICLE SHOULD BE DETECTED BY LOOP 2, WHICH WILL CONTINUE TO PREVENT BARRIER CLOSURE (DEPLOYMENT) UNTIL THE VEHICLE CLEARS LOOP 2.

15. PUSH BUTTONS WITH A CORRESPONDING INDICATING LIGHT ARE ALLOWED TO BE COMBINED INTO ONE DEVICE.

16. PICTOGRAPHS SHOWING UP/DOWN (CLOSED/OPEN) ARE TO BE PROVIDED BY THE PUSH BUTTONS. CONTROLS PANELS SHOW A 'WEDGE' STYLE IN THIS EXAMPLE. PICTOGRAPH SHALL MATCH THE ACTUAL TYPE OF BARRIER.

17. VPD ON INDICATES ACTIVATION OF SENSOR FOR OVER 15 SECONDS.

18. THE INBOUND AND OUTBOUND LOCAL PANELS CAN BE COMBINED INTO ONE PANEL IF THE LOCATION OF THE POWER UNITS ARE ADJACENT TO EACH OTHER.

19. OUT-OF-SERVICE SWITCH IS OPTIONAL.

20. OPERATING PANEL FOR THE OVERWATCH POSITION PANEL IS TO BE MOUNTED IN A NEMA 4 LOCKABLE PANEL.
SPECIAL ALARMS:

21. IT IS ALLOWED TO USE OPEN/CLOSE INSTEAD OF UP/DOWN.

OUT-OF-SERVICE POSITION LIGHTS	ALTERNATING UP/DOWN

22. PLACE A PLACARD ON THE MASTER CONTROL PANEL WHICH STATES

MASTER EFO MODE LOCAL IN LOCAL MODE	MASTER EFO & LOCAL LIGHTS FLASHING
MASTER TEST MODE LOCAL IN LOCAL MODE	MASTER TEST & LOCAL LIGHTS FLASHING
MASTER PLACED EFO MODE & AVBS INCORRECT	MASTER EFO MODE LIGHT FLASH
OUT OF SURVICE	UP AND DOWN LIGHTS ALTERNATE FLASH

23. ONE INDICATING LIGHT IS ALLOWED INSTEAD OF TWO INDICATING LIGHTS. CONFIGURATIONS WITH ONE LIGHT MUST BE RED AND ILLUMINATE WHEN SWITCH IS IN THE ARMED POSITION.

24. CONTRACTOR IS ALLOWED THE OPTION TO PROVIDE HARD CONTROL OR TOUCHSCREEN CONTROL FOR THE OPERATING PANELS; HOWEVER, EFO IS REQUIRED TO BE A DISCRETE HARD CONTROL SWITCH WITH A COVER IN BOTH CASES.

LEGEND

KX	KEY DESIGNATION WHERE X CORRESPONDS TO A NUMBER
G	GREEN INDICATING LIGHT
R	RED INDICATING LIGHT
A	AMBER INDICATING LIGHT
	CONTROL SWITCHES
	SELECTOR SWITCH
	KEY OPERATED CONTROL SWITCH
	EFO SWITCH OR PUSH BUTTON WITH SAFETY COVER (MOMENTARY ACTION)
	BACK LIT WINDOW OR FLASHING RED INDICATOR

A1 ACP-STDE-101 HYBRID BEACON AVB CONTROL PANELS

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US Army Corps of Engineers ®

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CHECKED BY: Checker
SUBMITTED BY:
ISSUE DATE: 17 APRIL 2026
SOLICITATION NO.: W9127S24F6002
CONTRACT NO.: W9127S23D6035
SIZE: ANSI D

US ARMY CORPS OF ENGINEERS
LITTLE ROCK DISTRICT
LITTLE ROCK, AR

HDR ENGINEERING, INC.
613 NW LOOP 410, STE 700
SAN ANTONIO, TX 78216
Texas P.E. Firm Registration No. F-754

ACCESS CONTROL POINT - PLAINVIEW GATE
PINE BLUFF ARSENAL, ARKANSAS

SECURITY SYSTEM DETAILS

SHEET ID

TY507

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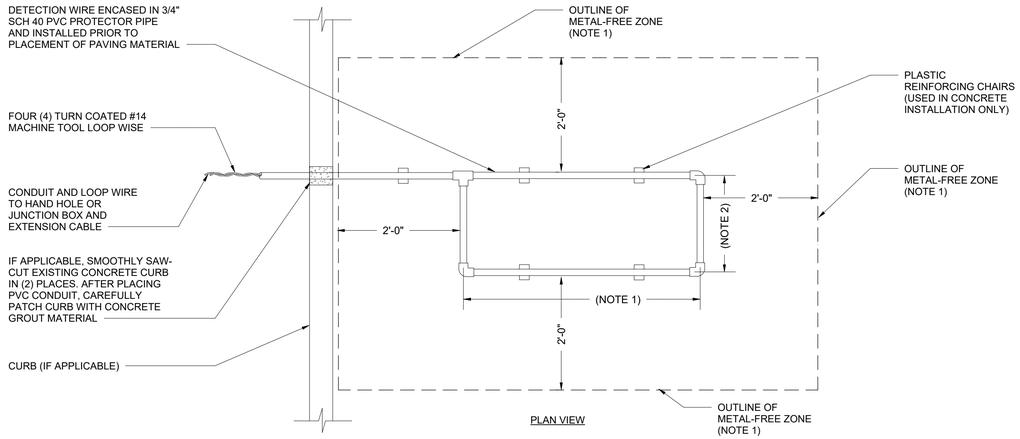
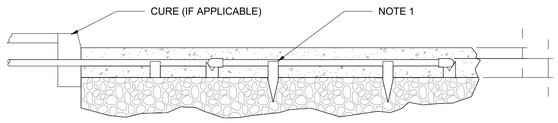


NOTES:
1. NO CONVENTIONAL STEEL REINFORCING STEEL OR ANCILLARY HARDWARE AND EQUIPMENT SHALL BE PLACED WITHIN 2' OF THE LOOP ASSEMBLY IN CONCRETE PAVING APPLICATIONS.
2. FOR LOOP SIZE REFERENCE ENLARGED PLAN VIEWS 1S-400 SERIES.

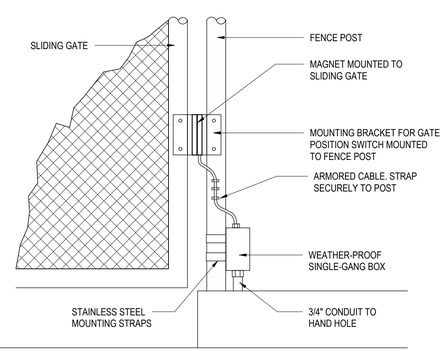


SECTIONAL VIEW - CONCRETE PAVING

NOTES:
1. PLACE PVC LOOP CONDUIT ON PLASTIC REINFORGING CHAIRS.
2. POUR CONCRETE ABOVE AND BELOW LOOP ASSEMBLY TO FINISHED GRADE LEAVING NO VOID.
3. NO FERROUS MATERIAS INCLUDING BUT NOT LIMITED TO REINFORCING BARS, REINFORCING TIES AND SUPPORT CHAIRS SHALL BE PLACED WITHIN A 2' CLEAR ZONE AROUND THE LOOP ASSEMBLY.

F1 VDL INSTALLATION AT NEW PAVING

NOT TO SCALE



A1 SLIDING GATE DPS

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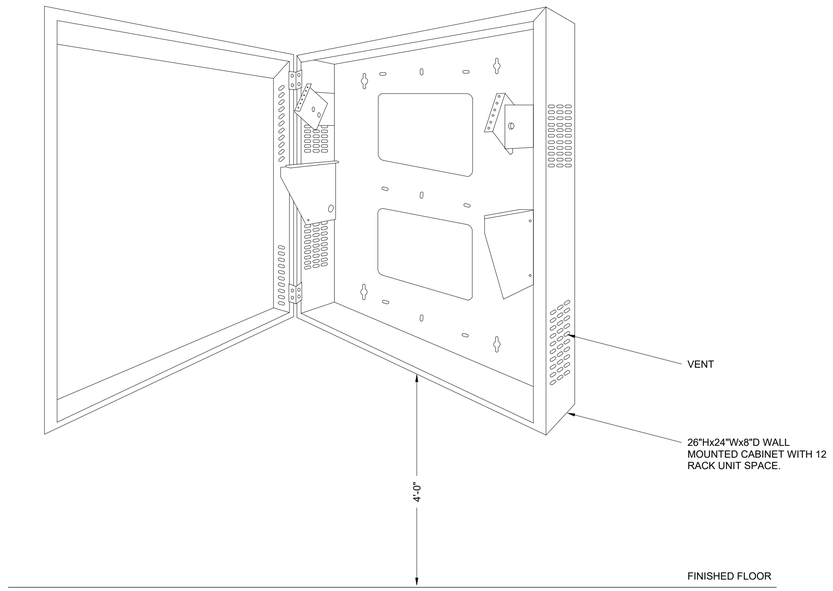

H7 ENCLOSURE-WALL MOUNT EQUIPMENT DETAIL (3D)

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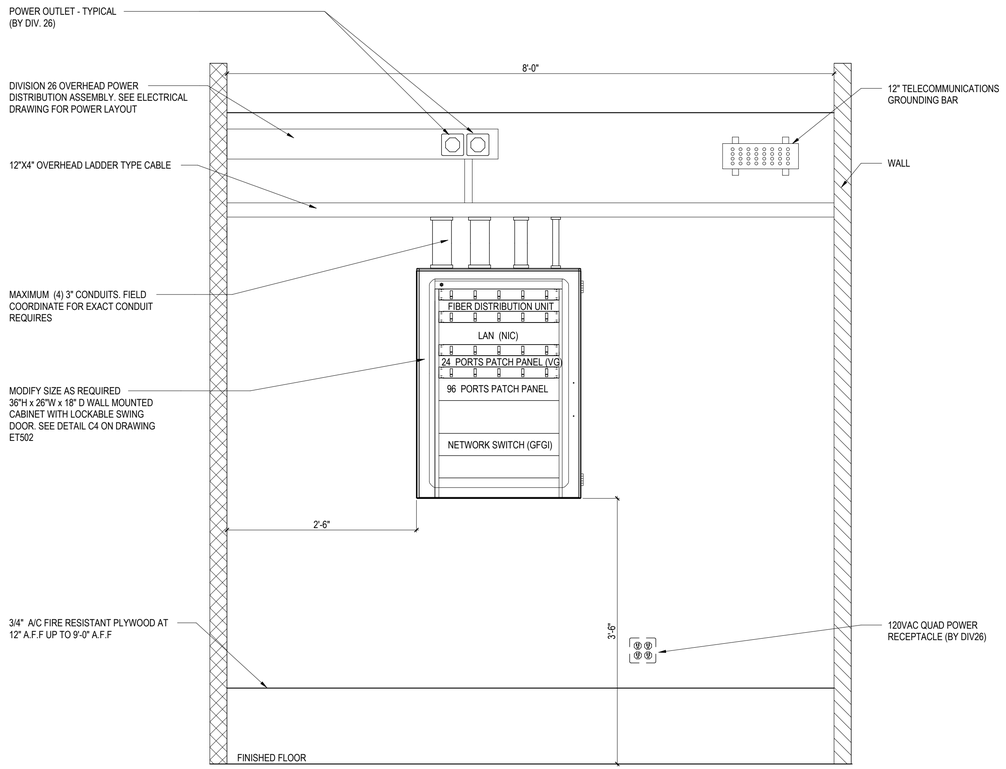

A1 ENCLOSURE-WALL MOUNT EQUIPMENT LAYOUT

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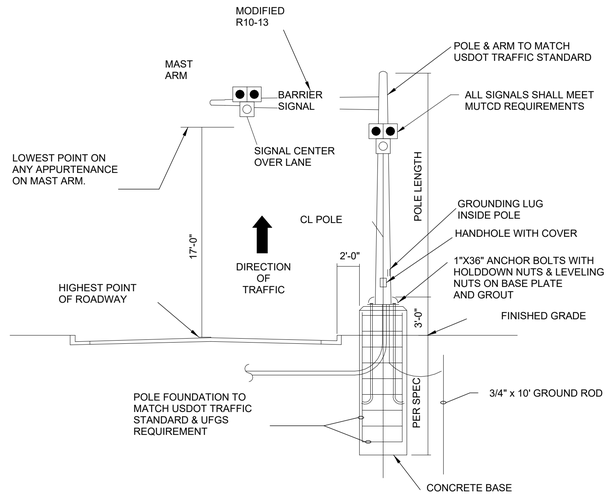

ELEVATION TYPICAL - HYBRID BEACON

WRONG WAY

PROVIDE 3"-4" HIGH RED LED LETTERING IN A WEATHERPROOF ENCLOSURE. THE WORDING 'WRONG WAY' SHALL ILLUMINATE INDEPENDENTLY. PROVIDE AN AUDIBLE DEVICE WITH A MEANS TO ADJUST THE VOLUME. SEE NOTE D.

WRONG WAY WARNING ANNUNCIATOR

HYBRID BEACON - 7 SECOND SAFTEY SCHEME

TRAFFIC CONTROL AND SAFETY AT ACTIVE BARRIERS	OPERATIONAL SEQUENCE PER SECOND (MIN FOR SAFETY - 40 KPH (25 MPH) DESIGN SPEED)											
	TIMELINE (SEC)	--	1	2	3	4	5	6	7	8	9	10
	TRAFFIC CONTROL	NORMAL OPS	GUARD PERCEPTION AND REACTION TIME TO THREAT (BUTTON)			SYSTEM OPERATING AFTER EFO ACTIVATED				THREAT CONTAINED		
HYBRID BEACON SAFETY SCHEME	WARNING SIGN WITH BEACONS	DARK/OFF	DARK/OFF			ALTERNATING FLASHING YELLOW						
	DO NOT ENTER BLANK OUT SIGN	DARK/OFF	DARK/OFF			"DO NOT ENTER" ILLUMINATED						
	HYBRID BEACON	DARK/OFF	DARK/OFF			SOLID YELLOW		ALTERNATING FLASHING RED				
	100 dB HORN (ADJUSTABLE)	SILENT	SILENT			ACTIVATED						
	ACTIVE VEHICLE BARRIER	DOWN/OPEN	DOWN/OPEN			DOWN/OPEN		DEPLOYING		DEPLOYED		
	BARRIER LIGHTS	DARK/OFF	DARK/OFF			ON - FLASHING RED						
	IN-PAVEMENT LIGHTS	DARK/OFF	DARK/OFF			DARK/OFF		ON - STEADY RED				

GENERAL NOTES:

A. AT THE END OF 7 SECONDS (TO INCLUDE 3 SECOND REACTION TIME) ALL BARRIERS ARE TO BE FULLY DEPLOYED.
B. 100 dB HORN SHALL BE ADJUSTABLE. HORN IS TO SOUND FOR 10 SECONDS AFTER THE EFO IS PUSHED AND THEN TURN OFF.
C. IN-PAVEMENT LIGHTS ARE ONLY REQUIRED IF THE ACTIVE VEHICLE BARRIER DOES NOT HAVE BARRIER LIGHTS.
D. PROVIDE AT THE ID CHECK CANOPY. A MINIMUM OFONE PER TWO LANES MOUNTED ON COLUMN NEAR ENTRANCE TO ID CHECK AREA. IT IS OPTIONAL TO HAVE ONE MOUNTED IN THE SEARCH AREA.

A1 ACP-STDE-103 HYBRID BEACON CONTROL SEQUENCE AND DETAILS
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