US Army Corps of Engineers ®

PRIME CONSULTANT

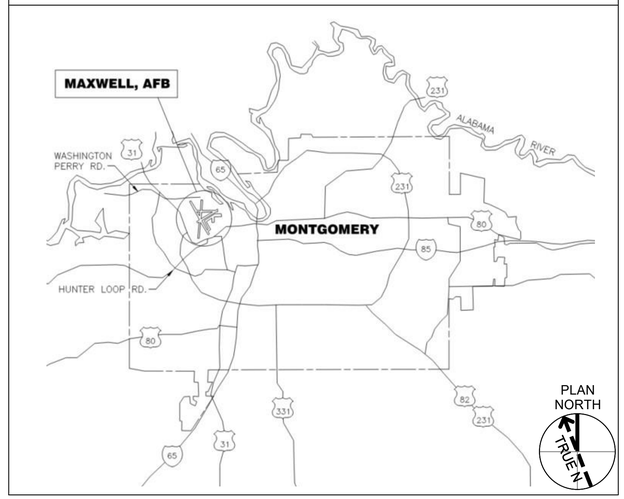
Jacobs

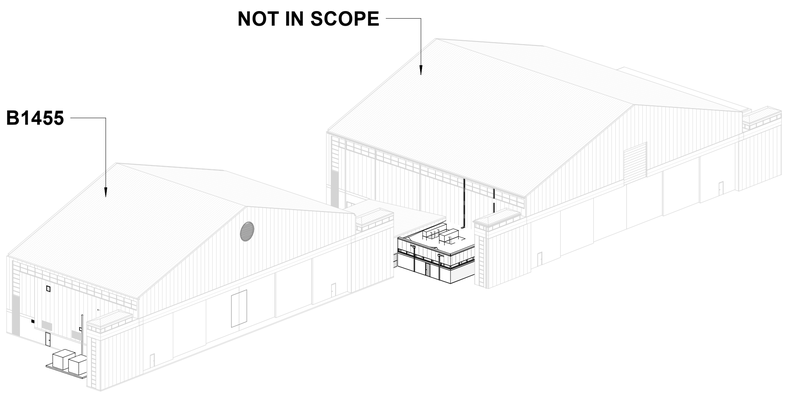
Jacobs Engineering Group Inc.
777 Main Street, Fort Worth, TX 76102 USA

REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139

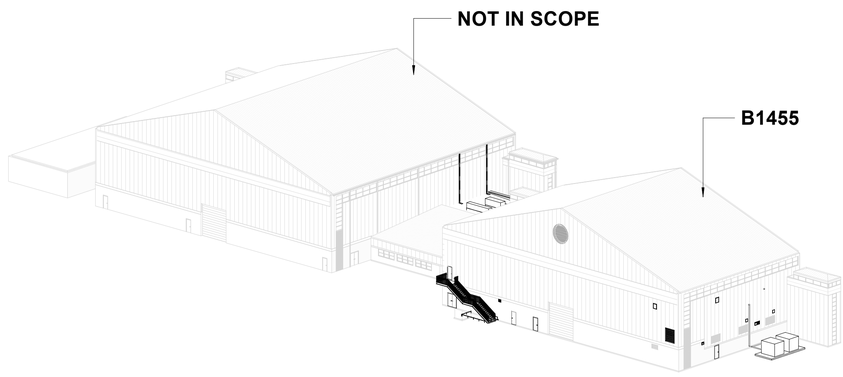
MAXWELL AIR FORCE BASE; MONTGOMERY, ALABAMA
PROJECT NUMBER: PNQS21B1455, P2#: 496395

VICINITY MAP





NORTHWEST AERIAL



NORTHEAST AERIAL

SOLICITATION NO.:
A/E CONTRACT NO.:
ISSUE DATE: 23 NOVEMBER 2022
CERTIFIED FINAL DESIGN

29 December 2022
W912QR23R0003

JEG Proj. No. F8Z95513

US Army Corps of Engineers
Louisville District ®

REGISTERED ARCHITECT
RICHARD G. PERRY
16592
STATE OF TEXAS
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: J. PERRY
DRAWN BY: B. GARCIA
CHECKED BY: M. HOLLEB
SUBMITTED BY: E. OLNESS
QC BY:
ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:.
FILE NAME: SXHT219201G-001

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
ACCESS No. F8Z95513

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
COVER SHEET

SHEET ID
B1455
G-001

W912QR23R0003_Plans-0000

SHEET INDEX

NO	NAME
GENERAL	
G-001	COVER SHEET
G-002	SHEET INDEX
GI002	TYPICAL SYMBOLS AND ABBREVIATIONS
GI003	ABBREVIATIONS CONTINUED
GI004	LOCATION MAP & HAUL ROUTE
GI005	CODE COMPLIANCE PLAN
GI006	AERIAL PLAN
GI010	BUILDING CODE ANALYSIS
GI011	LIFE SAFETY CODE ANALYSIS
GI012	LIFE SAFETY PLAN - OVERALL FACILITY
GI013	LIFE SAFETY PLAN - LEVEL 1
GI014	LIFE SAFETY PLAN - LEVEL 2
SURVEY/MAPPING	
V-101	EXISTING CONDITIONS
V-102	SURVEY CONTROL PLAN
GEOTECHNICAL	
BB101	BORING LOCATION PLAN
BB102	BORING LOGS
CIVIL	
C-001	GENERAL NOTES
CD101	DEMOLITION PLAN
CS101	SITE & PAVING PLAN
CS501	SITE DETAILS
CG101	EROSION CONTROL PLAN
CG102	GRADING, DRAINAGE & UTILITY PLAN
CG201	PROFILES
CG501	EROSION CONTROL DETAILS
CG502	GRADING, DRAINAGE & UTILITY DETAILS
CG503	GRADING, DRAINAGE & UTILITY DETAILS
STRUCTURAL	
S-001	STRUCTURAL NOTES
S-002	STRUCTURAL NOTES
S-003	STRUCTURAL NOTES
SD101	OVERALL DEMOLITION PLAN - LEVEL 1
SD102	PARTIAL DEMOLITION - LEVEL 1 - AREA A
SD103	PARTIAL DEMOLITION - LEVEL 1 - AREA B
SB101	OVERALL FOUNDATION PLAN - LEVEL 1
SB102	PARTIAL FOUNDATION PLAN - AREA A - LEVEL 1
SB103	PARTIAL FOUNDATION PLAN - AREA B - LEVEL 1
SF201	OVERALL FRAMING PLAN - LEVEL 2
SF202	PARTIAL FRAMING PLAN - LEVEL 2 - AREA A
SF203	PARTIAL FRAMING PLAN - LEVEL 2- AREA B
SF204	PARTIAL FRAMING PLAN - LEVEL 2 ROOF - AREA B
S-301	WALL ELEVATIONS
S-302	WALL ELEVATIONS
S-303	WALL ELEVATIONS
S-401	ENLARGED STAIR PLANS AND DETAILS
S-402	STAIR 3 (BID OPTION 1) - PLANS AND DETAILS
S-403	ENLARGED STAIR PLANS AND DETAILS
S-404	WALL ELEVATIONS
S-501	TYPICAL CONCRETE DETAILS
S-502	TYPICAL CONCRETE DETAILS
S-503	TYPICAL CONCRETE DETAILS
S-505	CONCRETE SECTIONS AND DETAILS
S-506	CONCRETE SECTION AND DETAILS
S-507	CONCRETE SECTION AND DETAIL
S-510	TYPICAL STEEL DETAILS
S-511	TYPICAL STEEL DETAILS
S-512	TYPICAL STEEL DETAILS
S-514	TYPICAL STEEL DETAILS
S-515	STEEL SECTIONS AND DETAILS
S-516	STEEL SECTIONS AND DETAILS
S-517	TYPICAL DETAILS
S-518	TYPICAL DETAILS
S-520	MASONRY DETAILS
S-601	SCHEDULES

SHEET INDEX

NO	NAME
ARCHITECTURAL	
A-001	GENERAL NOTES AND SYMBOLS
AD101	OVERALL DEMOLITION FLOOR PLAN - LEVEL 1
AD102	PARTIAL DEMOLITION FLOOR PLAN - LEVEL 1 - AREA A
AD103	PARTIAL DEMOLITION FLOOR PLAN - LEVEL 1 - AREA B
AD111	OVERALL DEMOLITION FLOOR PLAN - LEVEL 2
AD112	PARTIAL DEMOLITION FLOOR PLAN - LEVEL 2 - AREA A
AD113	PARTIAL DEMOLITION FLOOR PLAN - LEVEL 2 - AREA B
AD121	OVERALL DEMOLITION REFLECTED CEILING PLAN - LEVEL 1
AD122	PARTIAL DEMOLITION REFLECTED CEILING PLAN - LEVEL 1 - AREA A
AD123	PARTIAL DEMOLITION REFLECTED CEILING PLAN - LEVEL 1 - AREA B
AE101	OVERALL FLOOR PLAN - LEVEL 1
AE102	PARTIAL FLOOR PLAN - LEVEL 1 - AREA A
AE103	PARTIAL FLOOR PLAN - LEVEL 1 - AREA B
AE111	OVERALL FLOOR PLAN - LEVEL 2
AE112	PARTIAL FLOOR PLAN - LEVEL 2 - AREA A
AE113	PARTIAL FLOOR PLAN - LEVEL 2 - AREA B
AE121	OVERALL REFLECTED CEILING PLAN - LEVEL 1
AE122	PARTIAL REFLECTED CEILING PLAN - LEVEL 1 - AREA A
AE123	PARTIAL REFLECTED CEILING PLAN - LEVEL 1 - AREA B
AE131	OVERALL REFLECTED CEILING PLAN - LEVEL 2
AE132	PARTIAL REFLECTED CEILING PLAN - LEVEL 2 - AREA A
AE133	PARTIAL REFLECTED CEILING PLAN - LEVEL 2 - AREA B
AE141	OVERALL ROOF PLAN
AE142	PARTIAL ROOF PLAN - AREA A
AE143	PARTIAL ROOF PLAN - AREA B
A-201	EXTERIOR ELEVATIONS
A-301	BUILDING SECTIONS
A-302	BUILDING SECTIONS
A-310	WALL SECTIONS
A-311	WALL SECTIONS
A-401	ENLARGED FLOOR PLANS
A-405	ENLARGED CEILING PLANS
A-410	RESTROOM ACCESSORIES
A-420	VERTICAL CIRCULATION - ELEVATOR
A-421	VERTICAL CIRCULATION - ELEVATOR
A-422	VERTICAL CIRCULATION - STAIR 1
A-423	VERTICAL CIRCULATION - STAIR 2
A-424	VERTICAL CIRCULATION - STAIR 3 (BID OPTION 1)
A-501	PLAN DETAILS
A-502	PLAN DETAILS
A-503	PLAN DETAILS
A-504	PLAN DETAILS
A-505	PLAN DETAILS
A-506	PLAN DETAILS
A-510	CEILING DETAILS
A-520	SECTION DETAILS
A-521	SECTION DETAILS
A-525	ROOF DETAILS
A-530	STAIR DETAILS
A-531	RAMP DETAILS
A-532	RAILING DETAILS
A-545	MISCELLANEOUS DETAILS
A-550	PENETRATION DETAILS
A-570	PARTITION TYPES AND DETAILS
A-575	WINDOW TYPES AND DETAILS
A-610	DOOR AND LOUVER SCHEDULE
A-620	DOOR DETAILS
A-621	LOUVER DETAILS
INTERIORS	
I-001	GENERAL
IN101	OVERALL FINISH PLAN - LEVEL 1
IN102	PARTIAL FINISH PLAN - LEVEL 1 - AREA A
IN103	PARTIAL FINISH PLAN - LEVEL 1 - AREA B
IN111	OVERALL FINISH PLAN - LEVEL 2
IN112	PARTIAL FINISH PLAN - LEVEL 2 - AREA B
IN121	OVERALL SIGNAGE PLAN - LEVEL 1
IN122	PARTIAL SIGNAGE PLAN - LEVEL 1 - AREA A
IN123	PARTIAL SIGNAGE PLAN - LEVEL 1 - AREA B
IN131	OVERALL SIGNAGE PLAN - LEVEL 2
IN132	PARTIAL SIGNAGE PLAN - LEVEL 2 - AREA B
IF101	OVERALL FURNITURE, FIXTURE, & EQUIPMENT PLAN - LEVEL 1
IF102	PARTIAL FURNITURE, FIXTURES, & EQUIPMENT PLAN - LEVEL 1 - AREA A
IF103	PARTIAL FURNITURE, FIXTURE, & EQUIPMENT PLAN - LEVEL 1 - AREA B
IF111	OVERALL FURNITURE, FIXTURE, AND EQUIPMENT PLAN - LEVEL 2
IF112	PARTIAL FURNITURE, FIXTURE, AND EQUIPMENT PLAN - LEVEL 2 - AREA B
IF113	FF&E TYPICALS
I-201	INTERIOR ELEVATIONS & ENLARGED PLANS
I-202	INTERIOR ELEVATIONS & ENLARGED PLANS
I-203	INTERIOR ELEVATIONS & ENLARGED PLANS
I-204	INTERIOR ELEVATIONS & ENLARGED PLANS
I-301	MILLWORK SECTIONS AND DETAILS
I-501	INTERIOR DETAILS
I-512	SIGNAGE DETAILS
I-601	FINISH MATERIAL LEGEND & DETAILS
I-602	ROOM FINISH SCHEDULE
I-611	SIGNAGE SCHEDULE

SHEET INDEX

NO	NAME
FIRE PROTECTION	
F-001	GENERAL NOTES AND SYMBOLS
FD101	FIRE PROTECTION OVERALL DEMOLITION FLOOR PLAN - LEVEL 1
FD102	FIRE PROTECTION OVERALL DEMOLITION FLOOR PLAN - LEVEL 2
FD110	FIRE ALARM OVERALL DEMOLITION FLOOR PLAN
FA110	FIRE ALARM OVERALL PLAN - LEVEL 1
FA120	FIRE ALARM OVERALL PLAN - LEVEL 2
FA130	FIRE ALARM PLAN - ISO MAINTENANCE HANGAR
FA501	FIRE ALARM DETAILS
FA502	FIRE ALARM DETAILS
FP101	FIRE PROTECTION OVERALL FLOOR PLAN - LEVEL 1
FP102	FIRE PROTECTION OVERALL FLOOR PLAN - LEVEL 2
FP202	FIRE PROTECTION HANGAR BAY OVERHEAD PLAN
FP301	FIRE PROTECTION BUILDING SECTIONS
FP302	FIRE PROTECTION BUILDING SECTION
FP501	FIRE PROTECTION DETAILS
FP502	FIRE PROTECTION DETAILS
PLUMBING	
P-001	GENERAL NOTES AND SYMBOLS
PD101	OVERALL DEMOLITION FLOOR PLAN - LEVEL 1
PD102	PARTIAL DEMOLITION FLOOR PLAN - LEVEL 1 - AREA A
PD103	PARTIAL DEMOLITION FLOOR PLAN - LEVEL 1 - AREA B
PD111	OVERALL DEMOLITION FLOOR PLAN - LEVEL 2
PD112	PARTIAL DEMOLITION FLOOR PLAN - LEVEL 2 - AREA A
PD113	PARTIAL DEMOLITION FLOOR PLAN - LEVEL 2 - AREA B
P-101	OVERALL UNDERFLOOR PLAN
P-102	PARTIAL UNDERFLOOR PLAN - AREA A
P-103	PARTIAL UNDERFLOOR PLAN - AREA B
P-111	OVERALL FLOOR PLAN - LEVEL 1
P-112	PARTIAL FLOOR PLAN - LEVEL 1 - AREA A
P-113	PARTIAL FLOOR PLAN - LEVEL 1 - AREA B
P-121	OVERALL FLOOR PLAN - LEVEL 2
P-122	PARTIAL FLOOR PLAN - LEVEL 2 - AREA A
P-123	PARTIAL FLOOR PLAN - LEVEL 2 - AREA B
P-141	OVERALL ROOF PLAN
P-142	PARTIAL ROOF PLAN - AREA A
P-143	PARTIAL ROOF PLAN - AREA B
P-401	PLUMBING ENLARGED PLANS
P-402	PLUMBING ENLARGED PLANS
P-501	PLUMBING DETAILS
P-502	PLUMBING DETAILS
P-503	PLUMBING DETAILS
P-601	PLUMBING SCHEDULES
P-701	PLUMBING RISER DIAGRAM
P-702	PLUMBING RISER DIAGRAM
P-703	PLUMBING RISER DIAGRAM
MECHANICAL	
M-001	GENERAL NOTES AND SYMBOLS
MD101	OVERALL HVAC DEMOLITION PLAN
MH101	OVERALL HVAC PLAN - LEVEL 1
MH102	PARTIAL HVAC PLAN - LEVEL 1 - AREA A
MH103	PARTIAL HVAC PLAN - LEVEL 1 - AREA B
MH111	OVERALL HVAC PLAN - LEVEL 2
MH112	PARTIAL HVAC PLAN - LEVEL 2 - AREA A
MH113	PARTIAL HVAC PLAN - LEVEL 2 - AREA B
MP101	OVERALL PIPING PLAN - LEVEL 1
MP102	PARTIAL PIPING PLAN - LEVEL 1 - AREA A
MP103	PARTIAL PIPING PLAN - LEVEL 1 - AREA B
MP111	OVERALL PIPING PLAN - LEVEL 2
MP112	PARTIAL PIPING PLAN - LEVEL 2 - AREA A
MP113	PARTIAL PIPING PLAN - LEVEL 2 - AREA B
M-301	MECHANICAL SECTIONS
M-401	MECHANICAL ENLARGED PLANS
M-501	MECHANICAL DETAILS
M-502	MECHANICAL DETAILS
M-503	MECHANICAL DETAILS
M-504	MECHANICAL DETAILS
M-505	MECHANICAL DETAILS
M-506	MECHANICAL DETAILS
M-601	MECHANICAL SCHEDULES
M-602	MECHANICAL SCHEDULES
M-603	MECHANICAL SCHEDULES
M-701	HVAC DIAGRAMS
M-702	CHILLED WATER FLOW DIAGRAM
M-703	HOT WATER FLOW DIAGRAM
M-801	MECHANICAL CONTROLS
M-802	POINTS LISTS INSTRUCTIONS
M-803	MECHANICAL CONTROLS
M-804	MECHANICAL CONTROLS
M-805	MECHANICAL CONTROLS
M-806	MECHANICAL CONTROLS
M-807	MECHANICAL CONTROLS
M-808	MECHANICAL CONTROLS
M-809	MECHANICAL CONTROLS
M-810	MECHANICAL CONTROLS
M-811	POINTS LISTS
M-812	POINTS LISTS
M-813	POINTS LISTS
M-814	POINTS LISTS

SHEET INDEX

NO	NAME
ELECTRICAL	
E-001	GENERAL NOTES AND SYMBOLS
ED101	OVERALL DEMOLITION POWER & GROUNDING PLAN - LEVEL 1
ED121	OVERALL DEMOLITION LIGHTING PLAN - LEVEL 1
EG143	PARTIAL LIGHTNING & GROUNDING PLAN - AREA B
EL121	OVERALL LIGHTING PLAN - LEVEL 1
EL122	PARTIAL LIGHTING PLAN - LEVEL 1 - AREA A
EL123	PARTIAL LIGHTING PLAN - LEVEL 1 - AREA B
EL131	OVERALL LIGHTING PLAN - LEVEL 2
EL132	PARTIAL LIGHTING PLAN - LEVEL 2 - AREA A
EL133	PARTIAL LIGHTING PLAN - LEVEL 2 - AREA B
EP101	OVERALL POWER PLAN - LEVEL 1
EP102	PARTIAL POWER PLAN - LEVEL 1 - AREA A
EP103	PARTIAL POWER PLAN - LEVEL 1 - AREA B
EP111	OVERALL POWER PLAN - LEVEL 2
EP112	PARTIAL POWER PLAN - LEVEL 2 - AREA A
EP113	PARTIAL POWER PLAN - LEVEL 2 - AREA B
E-401	ENLARGED PLAN
E-501	DETAILS
E-502	DETAILS
E-601	LUMINAIRE SCHEDULE
E-602	EQUIPMENT SCHEDULE
E-603	PANEL SCHEDULES
E-604	PANEL SCHEDULES
E-605	PANEL SCHEDULES
E-701	ONE-LINE DIAGRAM (1 OF 2)
E-702	ONE-LINE DIAGRAM (2 OF 2)
TELECOM	
T-001	GENERAL NOTES AND SYMBOLS
TS101	SITE PLAN
TS102	SITE PLAN
TD101	OVERALL DEMOLITION FLOOR PLAN - LEVEL 1
TD111	OVERALL DEMOLITION FLOOR PLAN - LEVEL 2
T-101	OVERALL FLOOR PLAN - LEVEL 1
T-102	PARTIAL FLOOR PLAN - LEVEL 1 - AREA A
T-103	PARTIAL FLOOR PLAN - LEVEL 1 - AREA B
T-111	OVERALL FLOOR PLAN - LEVEL 2
T-112	PARTIAL FLOOR PLAN - LEVEL 2 - AREA A
T-113	PARTIAL FLOOR PLAN - LEVEL 2 - AREA B
T-121	OVERALL REFLECTED CEILING PLAN - LEVEL 1
T-122	PARTIAL REFLECTED CEILING PLAN - LEVEL 1 - AREA A
T-123	PARTIAL REFLECTED CEILING PLAN - LEVEL 1 - AREA B
T-131	OVERALL REFLECTED CEILING PLAN - LEVEL 2
T-132	PARTIAL REFLECTED CEILING PLAN - LEVEL 2 - AREA A
T-133	PARTIAL REFLECTED CEILING PLAN - LEVEL 2 - AREA B
T-301	SECTIONS AND ELEVATIONS
T-302	SECTIONS AND ELEVATIONS
T-303	SECTIONS AND ELEVATIONS
T-401	ENLARGED PLANS
T-501	DETAILS
T-502	DETAILS
T-503	DETAILS
T-601	ONE-LINE DIAGRAMS
TY101	OVERALL FLOOR PLAN - LEVEL 1
TY102	PARTIAL FLOOR PLAN - LEVEL 1 - AREA A
TY103	PARTIAL FLOOR PLAN - LEVEL 1 - AREA B
TY111	OVERALL FLOOR PLAN - LEVEL 2
TY112	PARTIAL FLOOR PLAN - LEVEL 2 - AREA A
TY113	PARTIAL FLOOR PLAN - LEVEL 2 - AREA B
TY114	PARTIAL FLOOR PLAN - LEVEL 2 - AREA A - BID OPTION 1
TY501	DETAILS
TY502	DETAILS
TY601	ONE-LINE DIAGRAMS

US Army Corps of Engineers
Louisville District ®

REGISTERED ARCHITECT
RICHARD G. PERRY
16592
STATE OF TEXAS
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: J. PERRY
DRAWN BY: B. GARCIA
CHECKED BY: M. HOLLEB
SUBMITTED BY: E. OLNESS
QC BY: J. LEE
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201G-002
ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
REGISTERED FIRM F-2629

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
SHEET INDEX

SHEET ID
B1455
G-002

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN

DRAWING ABBREVIATIONS

"	INCHES
#	NUMBER, POUND
%	PERCENT
&	AND
'	FEET
+	PLUS
-	MINUS
@	AT
Ø	DIAMETER
A	
A	AMPERE
A LABEL	CLASS A DOOR
A/C	AIR CONDITIONING
A/C UNIT	AIR CONDITIONING UNIT
A/E	ARCHITECT/ ENGINEER
AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS
AB	ANCHOR BOLT
ABAAG	ARCHITECTURAL BARRIERS ACT ACCESSIBILITY GUIDELINES
ABV	ABOVE
AC	ALTERNATING CURRENT/ABOVE COUNTER, ASPHALT CONCRETE, ACRES
ACC	ACCESSIBLE
ACI	AMERICAN CONCRETE INSTITUTE
ACS	AUTOMATIC CONTROL SYSTEM
ACS DR	ACCESS DOOR
ACS FLR	ACCESS FLOOR
ACS PNL	ACCESS PANEL
ACST	ACOUSTICAL
ACT	ACOUSTICAL CEILING TILE
AD	AIR DEVICE
ADA	AMERICANS WITH DISABILITIES ACT
ADDL	ADDITIONAL
ADJ	ADJUSTABLE, ADJACENT
ADMIN	ADMINISTRATION
AF	AMPERE FRAME
AFC	ABOVE FINISHED COUNTER, ABOVE FINISHED CEILING
AFCI	ARC FAULT CIRCUIT INTERRUPTER
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AFS	ABOVE FINISHED SLAB
AGGR	AGGREGATE
AHU	AIR HANDLING UNIT
AIB	AIR INFILTRATION BARRIER
AIC	AMPERE INTERRUPTING CAPACITY
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
AL	ACOUSTICAL LINING
ALNMT	ALIGNMENT
ALUM	ALUMINUM
ANOD	ANODIZE
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
ANT	ANTENNA
APC	ACOUSTICAL PANEL CEILING
APPROX	APPROXIMATE (-LY)
ARCH	ARCHITECT (-TURAL)
ARI	AIR CONDITIONING AND REFRIG. INSTITUTE
AS	AIR SEPARATOR
ASC	ABOVE SUSPENDED CEILING
ASCE	AMERICAN SOCIETY OF CIVIL ENGINEERS
ASHRAE	AMERICAN SOCIETY OF HEATING, REFRIG. AND AIR CONDITIONING ENGINEERING
ASME	AMERICAN SOCIETY OF MECHANICAL ENGINEERS
ASPE	AMERICAN SOCIETY OF PLUMBING ENGINEERS
ASPH	ASPHALT
ASSY	ASSEMBLY
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
ASYM	ASYMMETRICAL
AT	AMPERE TRIP
ATS	AUTOMATIC TRANSFER SWITCH
AUTO	AUTOMATIC
AUX	AUXILIARY
AV	AUDIO-VIDEO
AVC	AUDIO-VIDEO CONTRACTOR
AVG	AVERAGE
AWG	AMERICAN WIRE GAUGE
AWI	ARCHITECTURAL WOODWORK INSTITUTE
AWT	ACOUSTICAL WALL TREATMENT
AWWA	AMERICAN WATER WORKS ASSOCIATION
B	
B	BOILER
B LABEL	CLASS B DOOR
B-B, B/B	BACK TO BACK
B/	BOTTOM OF
BALC	BALCONY
BATT	BATTERY
BB	BASEBOARD
BBW	BACK BOTTOM OF WALL
BC	BACK OF CURB, BOTTOM OF CURB, BOOKCASE, BOTTOM CHORD
BCF	BYPASS CHEMICAL FEEDER
BD	BOARD

B	
BDRY	BOUNDARY
BEG	BEGIN
BEV	BEVEL
BF	BACKFILL, BOTH FACES
BFC	BELOW FINISHED CEILING
BFF	BELOW FINISH FLOOR
BFG	BELOW FINISHED GRADE
BFP	BACKFLOW PREVENTER
BHMA	BUILDER'S HARDWARE MANUFACTURER'S ASSOCIATION
BKBD	BACKBOARD
BLDG	BUILDING
BLKG	BLOCKING
BLT IN	BUILT-IN
BLW	BELOW
BM	BALANCED MAGNETIC SWITCH, BEAM, BENCHMARK
BMPS	BEST MANAGEMENT PRACTICES
BMS	BUILDING MANAGEMENT SYSTEM
BN	BULLNOSE
BOD	BOTTOM OF DUCT
BOP	BOTTOM OF PIPE
BOS	BOTTOM OF STEEL, BOTTOM OF STRUCTURE
BOT	BOTTOM
BP	BASE PLATE, BUILDING PAPER
BP	BOOSTER PUMP
BRES	BULLET-RESISTANT
BRG	BEARING
BRKR	BREAKER
BRKT	BRACKET
BRZ	BRONZE
BS	BOTH SIDES
BSMT	BASEMENT
BTU	BRITISH THERMAL UNIT
BTWN	BETWEEN
BUR	BUILT-UP ROOFING
BW	BOTTOM OF WALL
C	
C	CHANNEL, CHANNEL SHAPE, COMPRESSION, CONDUIT, CONDENSATE
C CONT	CAST CONCRETE
C LABEL	CLASS C DOOR
C&G	CURB AND GUTTER
C-C, C/C, C TO C	CENTER TO CENTER
CAB	CABINET
CATV	CABLE TELEVISION
CATW	CATWALK
CAV	CAVITY
CB	CATCH BASIN, CERAMIC BASE, CIRCUIT BREAKER
CBB	CEMENTITIOUS (BACKER) BOARD
CD	CARBON DIOXIDE SENSOR, CONDENSATE DRAIN
CDW	CHILLED DRINKING WATER
CEM	CEMENT
CEM PLAS	CEMENT PLASTER
CEQ	COLLATERAL EQUIPMENT
CER	CERAMIC
CF	CONTRACTING OFFICER, CONTRACTOR FURNISHED
CF/CI	CONTRACTOR FURNISHED/ CONTRACTOR INSTALLED
CF/GI	CONTRACTOR FURNISHED/ GOVERNMENT INSTALLED
CFE	CONTRACTOR FURNISHED EQUIPMENT
CFH	CUBIC FEET PER HOUR
CFLG	COUNTER FLASHING
CFM	CUBIC FEET PER MINUTE
CFMF	COLD-FORMED METAL FRAMING
CFS	CUBIC FEET PER SECOND
CG	CORNER GUARD, CENTER OF GRAVITY
CH	CHILLER
CHFR	CHAMFER
CHR	CHILLED WATER RETURN
CHS	CHILLED WATER SUPPLY
CI	CAST IRON, CURB INLET
CIP	CAST IRON PIPE, CAST-IN-PLACE
CIRC	CIRCULATING
CJ	CONSTRUCTION JOINT, CONTROL JOINT
CKT	CIRCUIT
CL	CENTER LINE, CLASS
CLDG	CLADDING
CLG	CEILING
CLG DIFF	CEILING DIFFUSER
CLG HT	CEILING HEIGHT
CLL	COLUMN LINE
CLO	CLOSET
CLR	CLEAR, (-ANCE), COLOR
CLRM	CLASSROOM
CLWG	CLEAR WIRE GLASS
CM	CENTIMETER
CMPST	COMPOSITE
CMU	CONCRETE MASONRY UNIT
CNDS	CONDENSATE

C	
CNR	CORNER
CO	CLEAN OUT
CO/ NOX	CARBON MONOXIDE / NITROGEN OXIDE
COE	CORPS OF ENGINEER'S (US ARMY)
COL	COLUMN
COMM	COMMUNICATION (-S)
COMPR	COMPRESSOR
CONC	CONCRETE
CONC FLR	CONCRETE FLOOR
CONF	CONFERENCE
CONN	CONNECT (-ION)
CONST	CONSTRUCT (-ION)
CONT	CONTINUED, CONTINUOUS
CONX	CONNECTION
COORD	COORDINATE
COR	CONTRACTING OFFICER'S REPRESENTATIVE
CORR	CORRIDOR
COV	COVER
CP	CIRCULATION PUMP, CONCRETE PIPE
CPT	CARPET
CR	CONTROL ROOM, CONDENSATE RETURN (STEAM)
CRS	COLD ROLLED STEEL
CS	CAST STONE
CSWK	CASEWORK
CT	CERAMIC TILE, CURRENT TRANSFORMER
CTB	CEMENT TREATED BASE, CERAMIC TILE BASE
CTF	CERAMIC TILE FLOOR
CTR	CENTER
CU	CONDENSING UNIT, COPPER
CU FT	CUBIC FEET
CW	CASEMENT WINDOW
CWR	CONDENSER WATER RETURN
CWS	CONDENSER WATER SUPPLY
CY	CUBIC YARDS
D	
D	DEPTH
D LABEL	CLASS D DOOR
D/S	DISCONNECT SWITCH
DA	DRAINAGE AREA
DALI	DIGITAL ADDRESSABLE LIGHTING INTERFACE
DB	DIRECT BURIAL, DRY BULB
DBL	DOUBLE
DBM	DOUBLE BALANCED MAGNETIC SWITCH
DC	DIRECT CURRENT
DCBFP	DOUBLE CHECK BACKFLOW PREVENTER
DCD	DOUBLE CHECK DETECTOR
DCO	DOUBLE CLEANOUT
DCW	DOMESTIC COLD WATER
DEF	DEFLECTION/DEFORM
DEG	DEGREE
DEMO	DEMOLITION
DEPT	DEPARTMENT
DET	DETAIL
DHW	DOMESTIC HOT WATER
DHWR	DOMESTIC HOT WATER RETURN
DI	DUCTILE IRON, DROP INLET
DIA	DIAMETER
DIAG	DIAGONAL
DIM	DIMENSION
DIP	DUCTILE IRON PIPE
DIR	DIRECTION
DISC	DISCONNECT
DIST	DISTANCE
DL	DEAD LOAD
DN	DOWN
DOAU	DEDICATED OUTDOOR AIR UNIT
DOC	DOCUMENT
DR	DOOR, DRAIN, DRIVE
DR FR	DOOR FRAME
DR OPN	DOOR OPENING
DS	DOWNSPOUT
DVR	DIGITIAL VIDEO RECORDER
DW	DISHWASHER, DOMESTIC WATER
DWG(S)	DRAWING(S)
DWL	DOWEL
DX	DIRECT EXPANSION
DX AHU	DIRECTION EXPANSION AIR HANDLING UNIT
DX FCU	DIRECTION EXPANSION FAN COIL UNIT
E	
E	EAST (FOR COORDINATES)
E LABEL	CLASS E DOOR
EA	EACH, EXHAUST AIR
EC	END OF CURVE, EMPTY CONDUIT
ECU	EVAPORATIVE COOLING UNIT
EDP1	EMERGENCY DISTRIBUTION PANELBOARD 1
EEWS	EMERGENCY EYEWASH/SHOWER
EF	EACH FACE
EF, EXH FN	EXHAUST FAN
EGB	ELECTRICAL GROUND BAR
EHD	ELECTRIC HAND DRYER
EIFS	EXTERIOR INSULATION AND FINISH SYSTEM
EJ	EXPANSION JOINT
EL	ELEVATION, EARTHQUAKE LOAD

E	
ELEC	ELECTRIC (-AL)
ELEV	ELEVATOR, ELEVATION
EMCS	ENERGY MANAGEMENT CONTROL SYSTEM
EMER	EMERGENCY
EMT	ELECTRICAL METALLIC TUBING
ENCL	ENCLOSURE
ENGR	ENGINEER
ENTR	ENTRANCE
ENVIR	ENVIRONMENT
EOD	EDGE OF DECK
EOS	EDGE OF SLAB
EP	EDGE OF PAVEMENT, EXPLOSION PROOF
EPS	EXPANDED POLYSTYRENE BOARD (INSULATION)
EQ	EQUAL
EQUIP	EQUIPMENT
ER	EDGE OF ROAD
ERP	ENERGY RECOVER PUMP
ERR	ENERGY RECOVERY WATER RETURN
ERS	ENERGY RECOVERY WATER SUPPLY
ERU	ENERGY RECOVERY UNIT
ES	EACH SIDE, HVAC EMERGNECY SWITCH
ESB	EMERGENCY SWITCHBOARD
ESCAL	ESCALATOR
ESD	ELECTROSTATIC DISSIPATING
ET	EXPANSION TANK
EVC	EDGE OF VERTICAL CURVATURE
EW	EACH WAY
EWC	ELECTRIC WATER COOLER
EWEF	EACH WAY, EACH FACE
EX	EXHAUST
EX, EXIST	EXISTING
EXH	EXHAUST
EXH HD	EXHAUST HOOD
EXHV	EXHAUST VENT
EXP	EXPANSION, EXPOSED
EXT	EXTERIOR, EXTINGUISHER
EXT GR	EXTERIOR GRADE
EXT LT	EXIT LIGHT
F	
F	FEMALE, FIRE WATER
FA	FIRE ALARM, FROM ABOVE
FAAP	FIRE ALARM ANNUNCIATOR PANEL
FAB	FABRICATION
FACIL	FACILITY
FACP	FIRE ALARM CONTROL PANEL
FAS BD	FASCIA BOARD
FB	FACE OF BUILDING, FROM BELOW
FC	FREQUENCY CONVERTER/FOOTCANDLE, FLEXIBLE CONNECTION
FC BRK	FACE BRICK
FC/ DC	FREQUENCY CONVERTER/DC RECTIFIER
FCO	FLOOR CLEANOUT
FCU	FAN COIL UNIT
FD	FIRE DAMPER, FLOOR DRAIN
FDC	FIRE DEPARTMENT CONNECTION
FDN, FDT	FOUNDATION
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET
FED	FEDERAL
FF	FINISH FACE, FINISH FLOOR
FF EL	FINISH FLOOR ELEVATION
FF INSUL	FOIL FACED INSULATION
FF&E	FURNITURE, FIXTURES & EQUIPMENT
FG	FINISHED GRADE
FGL	FIBERGLASS
FH	FIRE HOSE, FIRE HYDRANT
FHP	FULL HEIGHT PARTITION
FIN	FINISH
FIN BS	FINISH BOTH SIDE
FIN GR	FINISH GRADE
FIXT	FIXTURE
FL	FLOW LINE
FLA	FULL LOAD AMPERES
FLDG	FOLDING
FLEX	FLEXIBLE
FLG	FLOORING
FLMT	FLUSH MOUNT
FLOUR	FLOURESCENT
FLR	FLOOR
FM	FACTORY MUTUAL, FORCE MAIN, FREQUENCY MODULATION
FO	FAIL OPEN, FIBER OPTIC, FINISH OPENING
FOC	FACE OF CONCRETE
FOM	FACE OF MASONRY
FOW	FACE OF WALL
FP	FIRE PROTECTION
FPM	FEET PER MINUTE
FR	FIRE RATING, FIRE RESISTANT
FRG	FIBER REINFORCED GYPSUM
FRP	FIBERGLASS REINFORCED PLASTIC
FRTW	FIRE RETARDANT TREATED WOOD
FS	FAR SIDE, FEDERAL SPECIFICATION, FINISHED SURFACE, FLOOR SINK, FLOW SWITCH
FSTNR	FASTENER

F	
FT	FEET
FTG	FOOTING
FU	FUSE
FURG	FURRING
FURN	FURNITURE
FVNR	FULL VOLTAGE, NON-REVERSING
FWC	FABRIC WALL COVERING
FXTR	FIXTURE
G	
G	GROUND/GROUNDING CONDUCTOR, NATURAL GAS
GA	GAGE OR GAUGE
GAL	GALLON
GALV	GALVANIZED
GB	GRAB BAR, GRADE BEAM
GC	GENERAL CONTRACTOR
GDR	GUARDRAIL
GEN	GENERAL, GENERATOR
GF	GLYCOL FEEDER
GF/CI	GOVERNMENT FURNISHED / CONTRACTOR INSTALLED
GF/GI	GOVERNMENT FURNISHED / GOVERNMENT INSTALLED
GFCI, GFI	GROUND FAULT CIRCUIT INTERRUPTER
GFRG	GLASS-FIBER-REINFORCED GYPSUM REINFORCED GYPSUM
GI	GREASE INTERCEPTOR
GLZ	GLAZING
GND/GRD	GROUND/GROUNDING
GPM	GALLONS PER MINUTE
GR	GRADE, GLYCOL RETURN
GR FL	GROUND FLOOR
GRTG	GRATING
GS	GALVANIZED STEEL, GLYCOL SUPPLY
GSB	GYPSUM SHEATHING BOARD
GT	GROUT
GUT	GUTTER
GV	GATE VALVE
GW	GREASE WASTE
GWH	GAS WATER HEATER
GYP BD	GYPSUM BOARD
GYP PLAS	GYPSUM PLASTER
H	
HB	HOSE BIBB
HC	HANDICAP, HEATING COIL
HD	HUB DRAIN
HDPE	HIGH DENSITY POLYETHYLENE
HDW	HARDWARE
HDWD	HARDWOOD
HDWL	HEADWALL
HEF	HIGH EXPANSION FOAM
HEPA	HIGH EFFICIENCY PARTICULATE AIR (FILTER)
HH	HANDHOLE
HID	HIGH INTENSITY DISCHARGE
HM	HOLLOW METAL
HMA	HOT MIX ASPHALT
HMAC	HOT MIX ASPHALT CONCRETE
HMD	HOLLOW METAL DOOR
HMF	HOLLOW METAL FRAME
HNDRL	HANDRAIL
HOA	HAND-OFF-AUTOMATIC
HORIZ	HORIZONTAL
HP	HIGH POINT, HORSEPOWER, HEAT PUMP
HPS	HIGH PRESSURE STEAM
HR	HOUR
HS	HEADED STUD
HSF	HIGH FLOW SILT FENCE
HSS	HOLLOW STRUCTURAL SECTION
HT, H	HEIGHT
HTG	HEATING
HVAC	HEATING VENTILATION & AIR CONDITIONING
HVU	HEAT AND VENT UNIT
HW	HOT WATER
HWR	HOT WATER RETURN
HWS	HOT WATER SUPPLY
HYDR	HYDRAULIC
HZ	HERTZ
I	
IAP	INITIAL ACCUMULATION POINT
IBC	INTERNATIONAL BUILDING CODE
ID	INTERNAL DIAMETER
IDA	INITIAL DECONTAMINATION AREA
IDS	INTRUSION DETECTION SYSTEM
IE	INVERT ELEVATION
IEEE	INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS
IG	ISOLATED GROUND
IHP	INVERTER HEAT PUMP
IN	INCH
IN WC	INCHES OF WATER COLUMN
IN WG	INCHES OF WATER GAUGE
INCL	INCLUDE
INL	INLET
INT	INTERIOR
INV	INVERT

NUMBERING SYSTEM

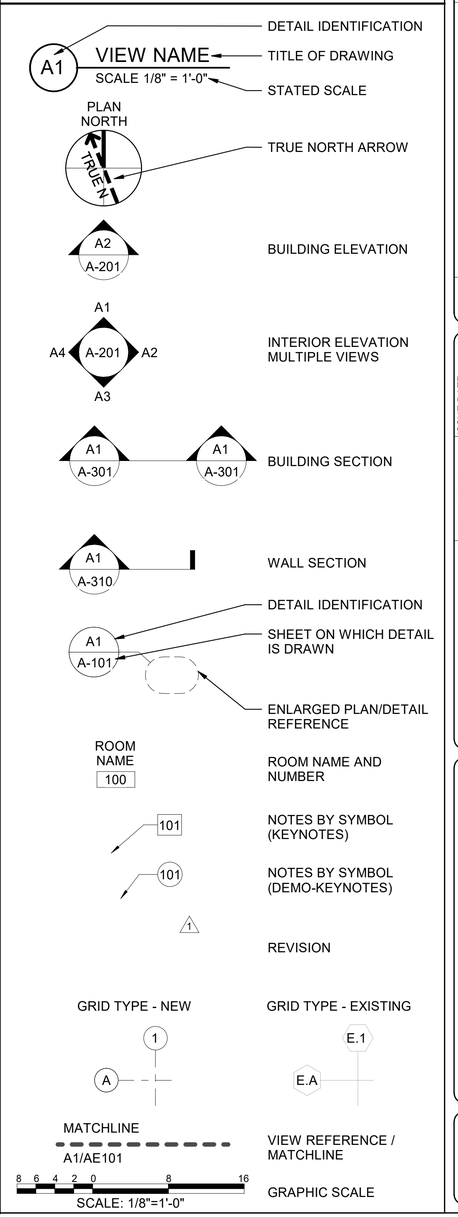
DISCIPLINE:
- G - GENERAL
- V - SURVEY/MAPPING
- B - GEOTECHNICAL
- C - CIVIL
- L - LANDSCAPE
- S - STRUCTURAL
- A - ARCHITECTURE
- I - INTERIORS
- F - FIRE PROTECTION
- P - PLUMBING
- D - PROCESS
- M - MECHANICAL
- E - ELECTRICAL
- T - TELECOMM
- O - OTHER

SERIES NUMBER
- 0 - GENERAL
- 1 - PLANS
- 2 - ELEVATIONS
- 3 - SECTIONS
- 4 - ENLARGED PLANS
- 5 - DETAILS
- 6 - SCHEDULES
- 7 - DIAGRAMS
- 8 - USER DEFINED
- 9 - 3D REPRESENTATIONS

G-010

SHEET NUMBER WITHIN SERIES

DRAWING SYMBOLS



US Army Corps of Engineers
Louisville District ®

REGISTERED ARCHITECT
RICHARD Q. PERRY
16592
STATE OF TEXAS
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY:	N. CARRUTH
DRAWN BY:	B. GARCIA
CHECKED BY:	M. HOLLEB
SUBMITTED BY:	E. OLMESS
ISSUE DATE:	23 NOVEMBER 2022
SOLICITATION NO.:	
CONTRACT NO.:	
DRAWING CODE:	
FILE NAME:	ANSI D 22x34 SXHT21921GI002

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street Fort Worth, TX 76102
TBPE Registration No. F-2966

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
TYPICAL SYMBOLS AND ABBREVIATIONS

SHEET ID
B1455
GI002

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN

DRAWING ABBREVIATIONS CONTINUED

J	
J-BOX	JUNCTION BOX
J-SIIDS	JOINT-SERVICE INTERIOR INTRUSION DETECTION SYSTEM
JAN	JANITOR
JB	JUNCTION BOX
JRCP	JOINT REINFORCED CONCRETE PAVEMENT
JST	JOIST
JT	JOINT

K	
K	KILO, KIPS (1000LBS), CONDUCTIVITY (BT/SF/1" THICKNESS)
KAIC	KILO AMPERE INTERRUPTING CAPACITY
KCMIL	THOUSAND CIRCULAR MILS
KIT	KITCHEN
KPD	KEYPAD
KPL	KICKPLATE
KSI	KIPS PER SQUARE INCH
KV	KILOVOLT
KVA	KILOVOLT-AMPERE
KW	KILOWATT
KWh	KILOWATT HOUR

L	
L	ANGLE SHAPE, LENGTH, LONG, LAVATORY
LAM	LAMINATE
LAT	LATERAL
LAV	LAVATORY
LB, LBS	POUND
LBP	LEAD BASED PAINT
LBR	LUMBER
LC	LENGTH OF CURVE
LCP	LEAD CONTAINING PAINT, LIGHTING CONTROL PANEL
LD	DEVELOPMENT LENGTH
LDG	LANDING
LE/FE	LOW EMITTING AND FUEL EFFICIENT
LED	LIGHT EMITTING DIODE
LF	LINEAR FEET (LONG)
LFMC	LIQUID-TIGHT FLEXIBLE METAL CONDUIT
LG	LONG
LH	LEFT HAND
LIB	LIBRARY
LIN	LINEAR
LKR	LOCKER
LL	LIVE LOAD
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LNDSCP	LANDSCAPE
LOC	LOCATION
LONG	LONGITUDINAL
LP	LOW POINT
LPS	LOW PRESSURE STEAM
LS	LIME-STABILIZED, LUMP SUM
LSH	LONG SIDE HORIZONTAL
LSIG	LONG TIME, SHORT TIME, INSTANTANEOUS, GROUND FAULT
LSV	LONG SIDE VERTICAL
LT	LEFT, LIGHT
LTG	LIGHTING
LV	LOW VOLTAGE
LVDR	LOUVER DOOR
LVR	LOUVER
LYR	LAYER

M	
M	METER
M/S	MOTOR STARTER
MACH RM	MACHINE ROOM
MAINT, MX	MAINTENANCE
MAN	MANUAL
MAS	MASONRY
MATL	MATERIAL
MAU	MAKE-UP AIR UNIT
MAX	MAXIMUM
MB	MOISTURE BARRIER
MC	MISCELLANEOUS CHANNEL SHAPE, MOISTURE CONTENT
MCA	MINIMUM CIRCUIT AMPACITY
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MD	METAL DECK, MOTORIZED DAMPER
MDF	MAIN DISTRIBUTION FRAME
ME	MATCH EXISTING
MECH	MECHANICAL
MECH RM	MECHANICAL ROOM
MEMB	MEMBRANE
MEP	MECHANICAL, ELECTRICAL, PLUMBING
MEZZ	MEZZANINE
MF	MILL FINISH
MFG, MFR	MANUFACTURER
MGB	MAIN GROUNDING BUSBAR
MH	MANHOLE, MAINTENANCE HOLE
MID	MIDDLE
MIL STD	MILITARY STANDARD
MIN	MINIMUM, MINUTE
MIRR	MIRROR
MISC	MISCELLANEOUS

M	
MJ	MECHANICAL JOINT
MLDG	MOLDING (MOULDING)
MLO	MAIN LUGS ONLY
MLWK	MILLWORK
mm	MILLIMETER
MNS	MASS NOTIFICATION SYSTEM
MO	MASONRY OPENING
MOD	MODIFY
MON	MONUMENT
MOP	MAXIMUM OVERCURRENT PROTECTION
MOT	MOTOR
MP	MAIN PANELBOARD
MPS	MEDIUM PRESSURE STEAM
MRT	MARBLE THRESHOLD
MS	MOP SINK
MSB	MOP SERVICE BASIN
MSD	MAIN SERVICE DISCONNECT
MSE	MAIN SERVICE ENTRANCE
MT	STRUCTURAL TEE CUT FROM MISC STEEL
MTD	MOUNTED
MTG	MOUNTING
MTL	METAL
MULL	MULLION
MVBL	MOVABLE
MW	MICROWAVE, MONITORING WELL
MWP	MEMBRANE WATERPROOFING

N	
N	NEUTRAL, NORTH (FOR COORDINATES)
N/A	NOT APPLICABLE
NC	NORMALLY CLOSED, NOISE CRITERIA, NORMALLY CLOSED
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUFACTERERS ASSOCIATION
NF	NEAR FACE, NON-FUSED
NFP	NAVFAC PACIFIC
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NFWH	NON-FREEZE WALL HYDRANT
NGVD	NATIONAL GEODETIC VERTICAL DATUM
NIC	NOT IN CONTRACT
NL	NIGHT LIGHT
NO	NORMALLY OPEN, NUMBER
NOM	NOMINAL
NP	NO PAINT
NRC	NOISE REDUCTION COEFFICIENT
NS	NARROW STILE, NEAR SIDE
NSB	NORMAL SWITCHBOARD
NTS	NOT TO SCALE

O	
OA	OUTDOOR AIR, OVERALL, OUTSIDE AIR
OC	ON CENTER
OCEW	ON CENTER EACH WAY
OD	OUTSIDE DIAMETER
OFD	OVERFLOW DRAIN
OFE	OWNER FURNISHED EQUIPMENT
OFF	OFFICE
OGL	OBSCURE GLASS
OH	OPPOSITE HAND
OH OPT	OPPOSITE HAND OPTIONAL
OHCD	OVERHEAD COILING DOOR
OHE	OVERHEAD ELECTRIC
OHT	OVERHEAD TELEPHONE
OHW	OVERHEAD WIRE
OP	OUTPUT
OPNG	OPENING
OPP	OPPOSITE
OPQ	OPAQUE
OPR	OPERABLE
ORD	OVERFLOW ROOF DRAIN
ORIG	ORIGINAL
OS	OCCUPANCY SENSOR
OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMIN.
OSP	OUTSIDE PLANT
OT	OVERTRAVEL
OVS	OVERSIZE
OWS	OIL/WATER SEPARATOR
OWSJ	OPEN WEB STEEL JOIST

P	
P	PAGE, POLE, PUMP
P/T	POST-TENSION (-ED, -ING)
PA	PUBLIC ADDRESS
PAR	PARAPET
PAT	PATTERN
PB	PULL BOX
PBD	PARTICLE BOARD
PBO	PROVIDED BY OTHERS
PC	POINT OF CURVATURE, PRECAST CONCRETE
PCC	POINT OF COMPOUND CURVATURE, PORTLAND CEMENT CONCRETE
PCF	POUNDS PER CUBIC FOOT
PCT	PERCENT
PD	PRESSURE DROP, PUMP DISCHARGE
PDS	PROTECTED DISTRIBUTION SYSTEM
PE	POLYETHYLENE

P	
PEJ	PREMOLDED EXPANSION JOINT
PERF	PERFORATED
PERIM	PERIMETER
PERP	PERPENDICULAR
PF	POWER FACTOR
PG	PLATE GIRDER
PH	PHASE
PI	POINT OF INTERSECTION
PICV	PRESSURE INDEPENDENT CONTROL VALVE
PIL	PILASTER
PIR	PASSIVE INFRARED
PIV	POST INDICATOR VALVE
PL	PLATE, PROPERTY LINE
PL GL	PLATE GLASS
PLAM	PLASTIC LAMINATED
PLAS	PLASTER
PLBG	PLUMBING
PLG	PILING
PLY WD	PLYWOOD
PNEU	PNEUMATIC
PNL	PANEL, PANELBOARD
POC	POINT ON CURVE
PORT	PORTABLE
POV	PRIVATELY OWNED VEHICLE
PP	POWER POLE
PP PL	PUSH/PULL PLATE
PR	PAIR, PIPE RAIL
PRCST	PRECAST
PREFAB	PREFABRICATED
PREFIN	PREFINISHED
PRELIM	PRELIMINARY
PRI	PRIMARY
PRKG	PARKING
PROJ	PROJECT, PROJECTION
PROP	PROPOSED
PROT	PROTECTION
PROVIDE	FURNISH AND INSTALL
PRV	PRESSURE REDUCING VALVE
PS	PARKING STRUCTURE
PS CONC	PRESTRESSED CONCRETE
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	POINT OF TANGENCY, PORCELAIN TILE, PRESSURE TREATED, POST-TENSION (-ED, -INC)
PTD	PAPER TOWEL DISPENSER
PTDR	PAPER TOWEL DISPENSER AND RECEPTACLE
PTN	PARTITION
PTR	PAPER TOWEL RECEPTACLE
PTZ	PAN/TILT/ZOOM
PVC	POINT OF VERTICAL CURVATURE, POLYVINYL CHLORIDE PIPE, POLYVINYL CHLORIDE
PVI	POINT OF VERTICAL TANGENCY, POINT OF VERTICAL INTERSECTION
PVMT	PAVEMENT
PWR	POWER

Q	
QT	QUARRY TILE
QTY	QUANTITY

R	
R	RADIUS (LENGTH)
RA	RETURN AIR
RAD	RADIUS
RB	RESILIENT BASE
RB HK	ROBE HOOK
RBM	REINFORCED BRICK MASONRY
RBR	RUBBER
RC	REINFORCED CONCRETE
RCP	RECEPTACLE CONTROL PANEL, REFLECTED CEILING PLAN, REINFORCED CONCRETE PIPE
RD	ROAD, ROOF DRAIN
RDC	REDUCER
RDG INS	RIGID INSULATION
RE, REF	REFER, REFERENCE, REFRIGERATOR
REBAR	REINFORCING STEEL BARS
REC	RECEPTACLE, RECESSED
REC RM	RECREATION ROOM
RECD	RECEIVED
RECT	RECTIFIER
RED	REDUCER
REINF	REINFORCING (-ED, -MENT)
REM	REMOVABLE
REP	REPAIR
REPL	REPLACE
REQ	REQUIRE
REQD	REQUIRED
RESIL	RESILIENT
RESIST	RESISTANT
REST	RESTROOM
RET	RETAINING
REV	REVISION
RF	RESILIENT FLOORING
RFG	ROOFING
RGS	RIGID GALVANIZED STEEL

R	
RH	ROOF HATCH, ROOF HOOD, RIGHT HAND, RADIANT HEATER
RHR	RIGHT HAND REVERSE
RL	ROOF LADDER
RL/RS	REFRIGERANT LIQUID/REFRIGERANT SUCTION
RLG	RAILING
RM	ROOM, RADIANT MANIFOLD
RMC	RIGID METAL CONDUIT
RND	ROUND
RO	ROUGH OPENING
ROW	RIGHT OF WAY
RP	RADIUS POINT
RPM	REVOLUTIONS PER MINUTE
RPZ	REDUCED PRESSURE ZONE
RSD	ROLLING STEEL DOOR
RT	RIGHT
RTN	RETURN
RV	ROOF VENT
RVL	REVEAL
RW	RETAINING WALL, RACE WAY
RX	RECEIVE

S	
S	SINK, SOUTH (FOR COORDINATES), STANDARD SHAPE, SLOPE
SA	SUPPLY AIR
SAD	SUPPLY ATTENUATOR DEVICE
SAN	SANITARY
SAT	SUSPENDED ACOUSTICAL TILE
SB	SELECT BACKFILL, SPLASH BLOCK
SC	SEALED CONCRETE, SHEAR CONNECTORS, SLIP CRITICAL
SCD	SEAT COVER DISPENSER
SCHED	SCHEDULE
SCWD	SOLID CORE WOOD DOOR
SD	SMOKE DETECTOR, STORM DRAIN
SDI	STEEL DECK INSTITUTE
SE	SERVICE ENTRANCE
SEC	SECONDARY
SECT	SECTION
SEER	SEASONAL ENERGY EFFICIENT RATIO
SEG	SEGMENT
SEP	SEPARATE
SF	SQUARE FOOT (FEET)
SFTWD	SOFTWOOD
SG	STATIC GROUND
SGL	SINGLE
SH	SHOWER
SHT	SHEET
SHT MTL FLASH	SHEET METAL (FLASHING)
SHTHG	SHEATHING
SHV	SHELVING
SI	SOLID INTERCETPOR
SIM	SIMILAR
SJ	SAW JOINT, SCORED JOINT
SJI	STEEL JOIST INSTITUTE
SKLT	SKYLIGHT
SL	SNOW LOAD
SLNT	SEALANT
SM	SHEET METAL, SNOW MELT MANIFOLD
SMK	SMOKE
SMLS	SEAMLESS
SND	SANITARY NAPKIN DISPENSER
SP	SINGLE POLE, SUMP PIT
SP EL	SPOT ELEVATION
SP, SPA	SPACE(S)
SPD	SURGE PROTECTION DEVICE
SPEC	SPECIFICATION
SQ	SQUARE
SQ IN	SQUARE INCH
SQ YD	SQUARE YARD
SS	STAINLESS STEEL, SANITARY SEWER
ST	SINGLE THROW, STREET, STAIRS, STORAGE TANK, STORM SEWER
STA	STATION
STC	SOUND TRANSMISSION CLASS
STD	STANDARD
STIFF	STIFFENER
STL	STEEL
STL JST	STEEL JOIST
STL RF DK	STEEL ROOF DECK
STND	STANDARD
STOR	STORAGE
STR	STRINGERS
STRB/HRN	STROBE/HORN
STRM	STOREROOM
STRUCT	STRUCTURE (-AL)
SUB FL	SUBFLOOR
SV	SHEET VINYL
SVC	SERVICE
SW	SIDEWALK, SHEAR WALL
SW	SWITCH
SYM	SYMBOL
SYMM	SYMMETRICAL
SYS	SYSTEM

T	
T	TANGENT, TREAD, TENSION
T&B	TOP & BOTTOM
T&G	TONGUE AND GROOVE
T/	TOP OF
T/G	TOP OF GRATE
T/PIPE	TOP OF PIPE
T/S	TUB/SHOWER
TA	TRANSFER AIR
TB	THROUGH BOLT, TOWEL BAR
TBM	TEMPORARY BENCHMARK
TC	TERRA COTTA, TOP OF CURB
TD	TRENCH DRAIN
TEL	TELEPHONE
TEMP	TEMPERATURE, TEMPORARY
TER	TELECOMMUNICATIONS EQUIPMENT ROOM
TERM	TERMINAL
TFF	TOP OF FINISH FLOOR
TGB	TELECOMMUNICATIONS GROUNDING BUSBAR
THK	THICKNESS
THRES	THRESHOLD
TK BD	TACKBOARD
TMGB	TELECOMMUNICATIONS MAIN GROUNDING BUSBAR
TMPD GL	TEMPERED GLASS
TMR	TIMER
TMV	THERMOSTATIC MIXING VALVE
TN	TRUE NORTH
TO	TOP OF
TOC	TABLE OF CONTENT, TOP OF CONCRETE
TOPO	TOPOGRAPHY
TOS	TOP OF SLAB, TOP OF STEEL
TP	TOP OF PAVEMENT, TRAP PRIMER
TPD	TOILET PAPER DISPENSER
TR	TELEPHONE ROOM
TRANS	TRANSOM, TRANSVERSE, TRANSFORMER
TRTD	TREATED
TS	TUBE STEEL
TSTAT	THERMOSTAT
TV	TELEVISION
TW	TILT WALL, TOP OF WALL
TX	TRANSMIT
TYP	TYPICAL

U	
U	URINAL
U/G	UNDERGROUND
UC	UNDERGROUND CONDUIT
UE	UNDERGROUND ELECTRICAL
UF	UNDERFLOOR
UGC	UNDERGROUND CABLE
UGE	UNDERGROUND ELECTRIC
UGT	UNDERGROUND TELEPHONE
UH	UNIT HEATER
UL	UNDERWRITER'S LABORATORIES
UNK	UNKNOWN
UON	UNLESS OTHERWISE NOTED
UPS	UNINTERRUPTED POWER SUPPLY

V	
V	VALVE, VENT, VOLT
V/PH/HZ	VOLT/PHASE/FREQUENCY
VA	VOLT-AMPERE
VAC	VACUMM
VAR	VARIES
VAV	VARIABLE AIR VOLUME
VB	VINYL COMPOSITION TILE
VC	VERTICAL CURVE
VCP	VITRIFIED CLAY PIPE
VD	VOLUME DAMPER
VERT	VERTICAL
VFD	VARIABLE FREQUENCY DRIVE
VFI	VACUUM FAULT INTERRUPTER
VIF	VERIFY IN FIELD
VOL	VOLUME
VP	VACUMM PUMP FOR RADIANT HEATER
VPC	VERTICAL POINT OF CURVATURE
VPI	VERTICAL POINT OF INTERSECTION
VPT	VERTICAL POINT OF TANGENCY
VTR	VENT THROUGH ROOF
VWF	VINYL WALL FABRIC

W	
W	WATER, WATT, WEST (FOR COORDINATES), WIDE, WIDE FLANGE, WIDTH
W/	WITH
W/O	WITHOUT
WAP	WIRELESS ACCESS POINT
WB	WALL BOX, WET BULB
WC	WATER CLOSET
WCO	WALL CLEANOUT
WD	WOOD
WDW	WINDOW
WGL	WIRED GLASS
WH	WALL HUNG, WATER HEATER
WHA	WATER HAMMER ARRESTOR
WHM	KILOWATT-HOUR METER
WL	WATER LINE

W	
WL	WIND LOAD
WP	WEATHERPROOF, WORK POINT
WPJ	WEAKENED PLANE JOINT
WS	WORK SINK
WSCT	WAINSCOT
WT	HECTARE
WT	STRUCTURAL TEE CUT FROM WIDE FLANGE BEAM, WEIGHT
WV	WATER VALVE
WW	WIREWAY
WWF	WELDED WIRE FABRIC

X	
XFMR	TRANSFORMER
XFR	TRANSFER
XPS	EXTRUDED POLYSTYRENE BOARD (INSULATION)

Y	
Y	YARD

Z	
Z	IMPEDANCE
ZSB	ZONE SELECTOR BOX

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN

US Army Corps of Engineers
Louisville District ®

REGISTERED ARCHITECT · RICHARD G. PERRY · 16592 · STATE OF TEXAS · 23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201GI003

DESIGNED BY: N. CARRUTH
DRAWN BY: B. GARCIA
CHECKED BY: M. HOLLEB
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
(817)334-7500 ©2022

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
ABBREVIATIONS CONTINUED

SHEET ID
B1455
GI003

W912QR23R0003_Plans-0000

A1 LOCATION MAP & HAUL ROUTE
SCALE 1" = 500'

GENERAL NOTES

A	MICROSOFT PRODUCT SCREEN SHOT REPRINTED WITH PERMISSION FROM MICROSOFT CORPORATION.
B	EQUIPMENT AND MATERIAL STORAGE AREAS ARE DESIGNATED ON THIS SHEET. SECURE ALL EQUIPMENT AND STORED MATERIALS. NO COVERED STORAGE IS AVAILABLE.
C	REPAIR ANY DAMAGE CAUSED BY CONSTRUCTION ACTIVITY. REFERENCE SPECIFICATION SECTION 02 41 00 FOR REQUIREMENTS.

LEGEND

- ANTICIPATED HAUL ROUTE
- SITE LOCATION
- LAY DOWN AREA
- HAUL DIRECTION

0 250' 500' 1000'
SCALE: 1"=500'

TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
JENNIFER M. HAYNES
90167
LICENSED
PROFESSIONAL ENGINEER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: J. HAYNES
DRAWN BY: D. KING
CHECKED BY: A. MCCOY
SUBMITTED BY: E. OLNESS
DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT210201
ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS No. 17295513

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395

LOCATION MAP & HAUL ROUTE

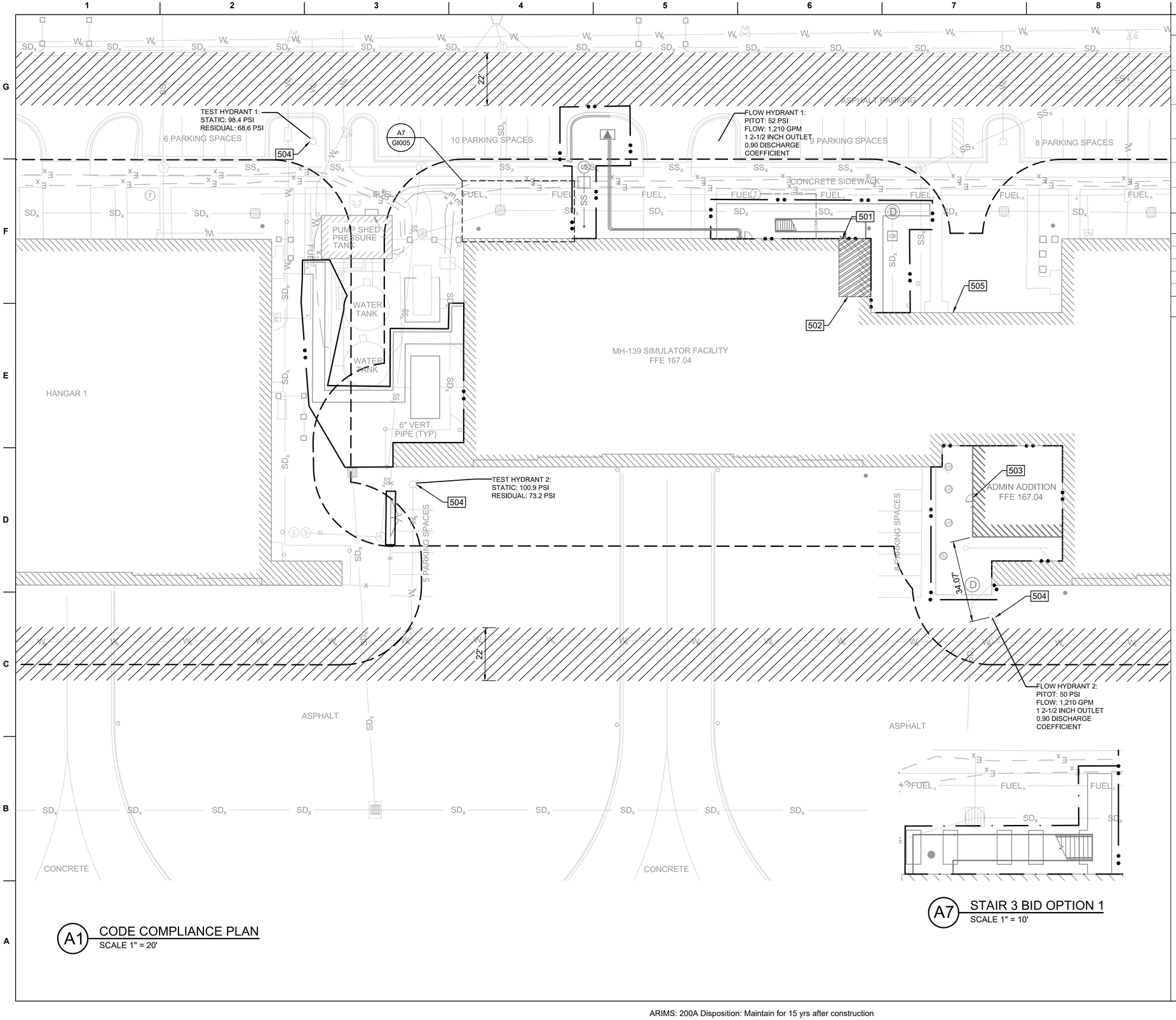
SHEET ID
B1455
GI004

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN

U:\BLD\GIUSACE Louisville District\FBZ95513 - Maxwell AFB B1455 Renovation\700 Working Documents\740 Sheets\740.01 Civil\GI004.dwg, 11/16/2022 2:42 PM, King, David



A1 CODE COMPLIANCE PLAN
SCALE 1" = 20'

A7 STAIR 3 BID OPTION 1
SCALE 1" = 10'

0 10' 20' 40'
SCALE: 1"=20'

GENERAL NOTES

A	ALL AREAS WHERE THE EXISTING FACILITY IS BEING USED TO BE SEPARATED FROM THE CONSTRUCTION AREA BY A MINIMUM 6' HIGH CHAIN LINK FENCE.
B	REFER TO CIVIL DEMOLITION PLANS FOR SELECTIVE REMOVAL OF CULVERTS AND UTILITY RELOCATION, AND CLEARING AND GRUBBING.
C	REFER TO MECHANICAL DEMOLITION PLANS FOR SELECTIVE REMOVAL OF MECHANICAL, PLUMBING, AND ELECTRICAL.
D	REFER TO ARCHITECTURE DEMOLITION PLANS FOR SELECTIVE REMOVAL OF ITEMS IN THE EXISTING SCHOOL.
E	ALL TREES TO REMAIN UNLESS OTHERWISE INDICATED ON THE DEMOLITION PLANS.
F	EXISTING SITE LIGHTING TO REMAIN WHILE EXISTING BUILDING IS IN USE.

KEYNOTES

501	FIRE DEPARTMENT CONNECTION (FDC)
502	FIRE PUMP ROOM
503	ENTRANCE
504	EXISTING FIRE HYDRANT
505	FIRE DEPARTMENT ACCESS (KNOX BOX)

LEGEND

- E_x EXISTING ELECTRIC LINE
- $FUEL_x$ EXISTING FUEL LINE
- W_x EXISTING WATER LINE
- SS_x EXISTING SANITARY SEWER LINE
- SD_x EXISTING STORM DRAIN LINE
- FIRE LANE
- LIMITS OF CONSTRUCTION
- BID OPTION 1 LIMITS OF CONSTRUCTION
- 33' UNOBSTRUCTED SPACE
- (S) SANITARY MANHOLE
- (CO) CLEANOUT
- (D) STORM DRAIN MANHOLE

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
JENNIFER M. HAYNES
90167
LICENSED
PROFESSIONAL ENGINEER
SURVEYED
DRAWN
CHECKED
APPROVED
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT210201

DESIGNED BY: J. HAYNES
DRAWN BY: D. KING
CHECKED BY: A. MCCOY
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street Fort Worth, TX 76102
(817)820-7600 TBPE#F-2966

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395

CODE COMPLIANCE PLAN

SHEET ID
B1455
GI005

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

U:\BLDG\USACE Louisville District\FBZ95513 - Maxwell AFB B1455 Renovation\700 Working Documents\740 Sheets\740.01 Civil\GI005.dwg, 11/16/2022 2:43 PM, King, David

A1 AERIAL PLAN
SCALE 1" = 20'

GENERAL NOTES

A	MICROSOFT PRODUCT SCREEN SHOT REPRINTED WITH PERMISSION FROM MICROSOFT CORPORATION.

LEGEND

LIMITS OF CONSTRUCTION

BID OPTION 1 LIMITS OF CONSTRUCTION

0 10' 20' 40'
SCALE: 1"=20'

TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
JENNIFER M. HAYNES
90167
LICENSED
PROFESSIONAL ENGINEER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS TECHNOLOGY GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS Project No. 435955.13

DESIGNED BY: J. HAYNES
DRAWN BY: D. KING
CHECKED BY: A. MCCOY
SUBMITTED BY: E. OLNESS
DATE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT210201

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395

AERIAL PLAN

SHEET ID
B1455
GI006

W912QR23R0003_Plans-0000

U:\BLDG\USACE Louisville District\FBZ505513 - Maxwell AFB B1455 Renovation\700 Working Documents\740 Sheets\740.01 Civil\GI006.dwg, 11/16/2022 2:43 PM, King, David

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN

B1455 RENOVATION FOR MH-139 SIMULATOR -
FIRE PROTECTION / BUILDING / LIFE SAFETY / ACCESSIBILITY CODE REVIEW

1. PROJECT'S APPLIED CODES & STANDARDS

A. UFC 1-200-01: GENERAL BUILDING REQUIREMENTS, WITH CHANGE 1, 01 OCTOBER 2020
B. UFC 3-101-01: ARCHITECTURE, WITH CHANGE 1, 05 JANUARY 2021
C. UFC 3-600-01: DESIGN: FIRE PROTECTION ENGINEERING FOR FACILITIES, WITH CHANGE 6, 06 MAY 2021
D. UFC 4-010-01: DoD MINIMUM AT STANDARDS FOR BUILDINGS, WITH CHANGE 1, 19 AUGUST 2020
E. UFC 4-021-01: DESIGN AND O&M: MASS NOTIFICATION SYSTEMS, WITH CHANGE 1, JANUARY 2010
F. UFC 4-211-01: AIRFCRAFT MAINTENANCE HANGARS, WITH CHANGE 3, 13 APRIL 2017
G. IBC 2018 INTERNATIONAL BUILDING CODE FOR FIRE RESISTANCE REQUIREMENTS, ALLOWABLE FLOOR AREA, BUILDING HEIGHT LIMITS, AND BUILDING SEPARATION DISTANCE, EXCEPT AS MODIFIED BY UFC 3-600-01
H. IEBC 2018 INTERNATIONAL EXISTING BUILDING CODE
I. NFPA 1, 2021: FIRE CODE, FOR DETERMINING VEHICLE ACCESS REQUIREMENTS
J. NFPA 101, 2021: LIFE SAFETY CODE, FOR BUILDING EGRESS AND LIFE SAFETY EXCEPT AS MODIFIED IN UFC 3-600-01
K. NFPA 10, 2018: STANDARD FOR PORTABLE FIRE EXTINGUISHERS
L. NFPA 13, 2019: STANDARD FOR INSTALLATION OF SPRINKLER SYSTEMS, MINIMUM REQUIREMENTS FOR DESIGN AND INSTALLATION OF AUTOMATIC FIRE SPRINKLER SYSTEMS AND EXPOSURE PROTECTION
M. NFPA 70, 2020: NATIONAL ELECTRICAL CODE (NEC) - ARTICLE 500 HAZARDOUS LOCATIONS & ARTICLE 511 COMMERCIAL GARAGES, REPAIR & STORAGE
N. NFPA 72, 2019: NATIONAL FIRE ALARM AND SIGNALING CODE
O. NFPA 80, 2019: STANDARD FOR FIRE DOORS AND OTHER OPENING PROTECTIVES
P. NFPA 90A, 2021: STANDARD INSTALLATION OF AIR CONDITIONING & VENTILATION SYSTEMS, FOR PROTECTION OF OPENINGS, SHAFTS, FIRE DAMPERS, SMOKE DAMPERS, PENETRATIONS AND FAN CONTROL
Q. NFPA 220, 2018: STANDARD ON TYPES OF BUILDING CONSTRUCTION
R. NFPA 291, 2019: RECOMMENDED PRACTICE FOR FIRE FLOW TESTING AND MARKING OF HYDRANTS
S. NFPA 409, 2016: STANDARD ON AIRCRAFT HANGARS
T. ABA (ARCHITECTURAL BARRIERS ACT) ACCESSIBILITY STANDARDS AS DIRECTED BY DOD POLICY MEMO "ACCESS FOR PEOPLE WITH DISABILITIES" DATED 31 OCT 2008.
U. ECB 2018-17: NEW REQUIREMENTS FOR VISUAL NOTIFICATION FOR MASS NOTIFICATION SYSTEMS
V. TSFPEWG-G-3-600-01.01-18: TRI-SERVICE FIRE PROTECTION ENGINEERING WORKING GROUP (TSFPEWG), AIR FORCE FIRE PROTECTION ENGINEERING CRITERIA AND TECHNICAL GUIDANCE FOR MISSION CONTINUITY OF ELECTRONIC INFORMATION TECHNOLOGY, AND TELECOMMUNICATIONS EQUIPMENT INSTALLATIONS, 26 FEBRUARY 2021

1. BUILDING CODE REQUIREMENTS:

A. OCCUPANCY CLASSIFICATION:
IBC CHAPTER 3
B BUSINESS
S-2 STORAGE

B. CONSTRUCTION TYPE:
IBC CHAPTER 6
TABLE 601
NONCOMBUSTIBLE TYPE IIB PER IBC 602.2

C. MIXED USE & OCCUPANCY SEPARATIONS
UFC 3-600-01: 5-4, 5-5
IBC SECTION 508
BUILDING WILL BE A BUSINESS OCCUPANCY TYPE PER IBC SECTION 508.
NO SEPARATION IS REQUIRED OR PROVIDED BETWEEN PRIMARY AND ACCESSORY OCCUPANCIES.

D. AREA LIMITATIONS / MODIFICATIONS:
UFC 3-600-01: 5-3
IBC SECTION 503, 506, 507
B OCCUPANCY: 92,000 SF PER FLOOR (IBC TABLE 506.2); ACTUAL BUILDING AREA IS 21,678 SF
S-2 OCCUPANCY: 104,000 SF PER FLOOR (IBC TABLE 506.2

E. HEIGHT LIMITATIONS:
IBC SECTION 503
TABLES 504.3 & 504.4
ALLOWABLE: 4 STORIES, 75 FEET (IBC TABLE 504.3)
ACTUAL: 2 STORIES, 71 FEET

F. VERTICAL ENCLOSURES, CONTINUITY, PROTECTION:
UFC 3-600-01: 3-3.1.1
NFPA 101: 7.1.3, 8.6
NFPA 90A: 4.3.1.2, 5.3.4
THE RENOVATION WILL ADD A SECOND STORY WHICH WILL INCLUDE ONE INTERIOR STAIR, ONE EXTERIOR STAIR, AND A PASSENGER ELEVATOR

STAIRS, ELEVATORS, AND SHAFTS ARE IN COMPLIANCE WITH IBC SECTION 708, NFPA 101 AND NFPA 90A

INTERIOR STAIR SERVICES ATRIUM , PER LSC SECTION 8.6 AND DOES NOT REQUIRE RATED ENCLOSURE

G. OPENING PROTECTIVES & THRU-PENETRATIONS
NFPA 101: 8.3 THRU 8.6.9.2
NFPA 90A
NFPA 80
NFPA 13
NFPA 409
TSPFPEWG
OPENINGS IN 1-HOUR BARRIERS REQUIRE 3/4-HR PROTECTION OF OPENINGS AND THRU-PENETRATIONS. OPENINGS IN 2-HOUR BARRIERS REQUIRE 1-1/2-HR PROTECTION OF OPENINGS AND THRU-PENETRATIONS. THERE ARE NO 2-HOUR FIRE BARRIERS, AND THE BUILDING WILL BE FULLY-SPRINKLERED.

H. HORIZONTAL SEPARATIONS:
IBC: TABLE 508.4
THERE ARE NO HORIZONTAL SEPARATION ASSEMBLIES REQUIRED OR PROVIDED PER IBC TABLE 508.4.

I. FIRE RESISTIVE REQUIREMENTS:
IBC: TABLE 601 AND SECTION 602
REQUIREMENTS BASED ON CONSTRUCTION TYPE IIB (TABLE 601):
PRIMARY STRUCTURAL FRAME - 0 HOUR RATING
EXTERIOR BEARING WALLS - 0 HOUR RATING
INTERIOR BEARING WALLS - 0 HOUR RATING
REQUIREMENTS BASED ON CONSTRUCTION TYPE IIB (TABLE 602):
EXTERIOR NONBEARING PARTITIONS - 0 HOUR RATING
INTERIOR NONBEARING PARTITIONS - 0 HOUR RATING
FLOOR CONSTRUCTION & SECONDARY MEMBERS - 0 HOUR RATING
ROOF CONSTRUCTION & SECONDARY MEMBERS - 0 HOUR RATING

ELECTRONIC EQUIPMENT AREAS (EEAS) ARE: CPT ROOM 117, OFT COMPUTER ROOM 126, EDS AND EDS COMPUTER ROOMS 125 / 125A, AND ENTIRE HIGH BAY AREA INCLUDING CIRCULATION 110, IAST 115, AIE-PTT 116, AND CORRIDOR 200 PER TSEFPWG G 3-600-01-01.18 AND REQUIRE 1-HOUR RATED SEPARATION FROM REMAINDER OF BUILDING FROM STRUCTURAL FLOOR TO ROOF.

J. ENCLOSURE PROTECTION:
NFPA 101: SPECIFIC OCCUPANCY CHAPTERS
ASME A17.1
UFC 4-211-01
- MECHANICAL RM REQUIRES 1 HR OR SPRINKLERED - SPRINKLERS PROVIDED FOR MECHANICAL ROOM.
- JANITOR CLOSET REQUIRES 1 HR OR SPRINKLERED - SPRINKLERS ARE PROVIDED.
- SIMULATOR BAYS AND SIMULATOR SUPPORT COMPUTER ROOMS REQUIRE 1 HR - 1 HR PROVIDED (TSFPEWG G-3-600-01.01-18 SECTION 2-2.2.1)
- PER UFC 4-11-01, SECTION 3-3.1.3 THE WALL BETWEEN THE NEW BUILDING ADDITION AND EXISTING HANGAR SHALL BE ONE-HOUR FIRE RATED.
- THE NEW EXTERIOR STAIRS SHALL HAVE A ONE-HOUR SEPARATION FROM THE EXISTING EXTERIOR WALL PER NFPA 101, SECTION 7.2.2.5
- THE ATRIUM IS SEPARATED BY ADJACENT SPACES BY FIRE BARRIERS WITH NOT LESS THAN 1-HOUR FIRE RESISTANCE RATING PER NFPA 101 8.6.7

K. FIRE PROTECTION SYSTEM:
UFC 3-600-01: CHAPTERS 4 & 9
UFC 3-600-01: APPENDIX B
UFC 3-600-01; 9-7, EXCEPT AS MODIFIED IN CHAPTER 4 OF UFC FOR SPECIFIC FACILITY TYPES
- AUTOMATIC SPRINKLERS WILL BE PROVIDED AS REQUIRED BY UFC 3-600-01, SECTION 9-7.2.1.2 FOR MULTI-STORY FACILITIES, REGARDLESS OF FLOOR AREA OR CONSTRUCTION TYPE, AND IN ACCORDANCE WITH SECTION 9-7.1, WHICH DIRECTS DESIGN AND INSTALLATION PER NFPA 13 EXCEPT WHERE SPECIFICALLY MODIFIED BY THE UFC. HAZARD CLASSES ARE AS NOTED ON CONTRACT DRAWINGS AND AS DETAILED BELOW. THERE ARE NO SPECIFIC FACILITY TYPES AS ADDRESSED BY CHAPTER 4.
- IN ACCORDANCE WITH TABLES 9-3 & 9-4, LIGHT HAZARD AREAS WILL BE CALCULATED AT 0.10 GPM/SF OVER THE MOST REMOTE 1,500 SF AREA, WITH A 250 GPM HOSE STREAM ALLOWANCE, 60 MINUTE DURATION. ORDINARY HAZARD AREAS WILL BE CALCULATED AT 0.20 GPM/SF OVER THE MOST REMOTE 2,500 SF AREA, WITH A 250 GPM HOSE STREAM, 60 MINUTE DURATION. OPEN BAY AREA WILL BE CALCULATED BY 12 SPRINKLERS AT 7 PSI, WITH A 500 GPM HOSE STREAM, 60 MINUTE DURATION.

UFC 3-600-01; 1-12.12, 9-7.3.1.1, 4-44
NFPA 13
UFC 3-600-01: CHAPTER 9-7.4
NFPA 13
- THIS SECTION IS NOT APPLICABLE TO THE FACILITY, AS NONE OF THE BUILDING AREAS MEET THE CRITERIA FOR WAREHOUSE OR STORAGE FACILITIES.
- COVERAGE PER SPRINKLER WILL BE IN ACCORDANCE WITH NFPA 13, NOT EXCEEDING 225 SF FOR LIGHT HAZARD OR 130 SF FOR ORDINARY HAZARD. THERE ARE NO BUILDING AREAS REQUIRING EXTRA HAZARD COVERAGE PER SPRINKLER. EXTENDED COVERAGE HEADS ARE NOT PERMITTED.

L. AVAILABLE WATER SUPPLY TESTING
UFC 3-600-01: 1-12.5, 9-6.4
NFPA 291
- A HYDRANT FLOW TEST WAS CONDUCTED ON AUGUST 24, 2021 RECORDING A STATIC PRESSURE OF 98 PSI AND A RESIDUAL PRESSURE OF 69 PSI WHILE FLOWING 1,210 GPM. PRELIMINARY SPRINKLER DEMAND ESTIMATES INDICATE A SPRINKLER DEMAND OF APPROXIMATELY 64 PSI WHILE FLOWING 1,030 GPM. SPRINKLER DEMAND CAN BE MET BY THE EXISTING FIRE PUMP DESCRIBED IN NOTE O. BELOW.

UFC 3-600-01: 9-2.1 AND 9-2.2
NFPA 1: TABLE 18.4.5.2.1
- SECTION 9-2.2 IS NOT APPLICABLE TO THIS PROJECT, AS THE FACILITY WILL BE FULLY-SPRINKLERED. THE HYDRANT FLOW TEST DATA OBTAINED AS DESCRIBED ABOVE PROVIDES CONFIRMATION THAT THE 1,000 GPM @ 20 PSI (MINIMUM) FIRE FLOW REQUIRED PER SECTION 9-2.1 CAN BE SATISFIED FOR TWO HOUR DURATION.

UFC 3-600-01: 1-12.10, 4-38
- THIS SECTION IS NOT APPLICABLE, AS THE FACILITY IS NOT A RANGE OR REMOTE FACILITY.

M. WATER STORAGE TANK REQUIREMENTS
UFC 3-600-01: 1-12.4, CHAPTER 9-4
NFPA 22
- EXISTING WATER STORAGE CONSISTS OF TWO 40,000 GALLON TANKS SUPPLYING THE FIRE PUMPS IN THE PUMP HOUSE SERVING BUILDING 1454 AND 1455.

N. BACKFLOW PREVENTER & TESTING
NFPA 13: 8.16.4.6.1
UFC 3-600-01; 9-6.3.5, 9-6.6
- THE EXISTING WATER STORAGE TANK AND FIRE PUMP CONFIGURATION DOES NOT INCLUDE THE PROVISION OF A BACKFLOW PREVENTER.

O. FIRE PUMP(S)
UFC 3-600-01: CHAPTER 9-5
NFPA 20
- THE TWO EXISTING FIRE PUMPS, ONE MAIN AND ONE REDUNDANT, ARE RATED FOR 2,500 GPM AT 125 PSI AND SERVE BUILDING 1454 AND 1455.

EGRESS WIDTH PER OCCUPANT - STAIRWAYS

FLOOR	LOAD	WIDTH PER OCC	WIDTH REQUIRED	STAIR WIDTH PROVIDED	TOTAL DOOR LOAD CAPACITY	NOTES
LEVEL 1	-	-	-	-	-	1
LEVEL 2	91	0.3"	27.3	(2)60" = 120"	400 PERSONS	2,3

NOTE 1: ALL LEVEL 1 OCCUPANTS EGRESS AT GRADE.
NOTE 2: LEVEL 2 IS SERVED BY ONE EXTERIOR EGRESS STAIR AND ONE INTERIOR EGRESS STAIR.
NOTE 3: MINIMUM WIDTH OF 44 INCHES WILL BE PROVIDED WHERE OCCUPANT LOAD CALCULATION DOES NOT EXCEED 44 INCHES PER NFPA 101 TABLE 7.2.2.2.1.2(B)

EGRESS WIDTH PER OCCUPANT - LEVEL COMPONENTS

FLOOR	LOAD	WIDTH PER OCC	WIDTH REQUIRED	DOOR WIDTH PROVIDED	TOTAL DOOR LOAD CAPACITY	NOTES
LEVEL 1	182	0.2"	36.4	(6)34" = 204"	1,020 PERSONS	1
LEVEL 2	91	0.2"	18.2	(1)34" = 34"	170 PERSONS	2

NOTE 1: LEVEL 1 DOOR WIDTH CALCULATION DOES NOT INCLUDE SINGLE-ROOM DISCHARGES FROM ELECTRICAL AND FIRE ROOMS TO EXTERIOR.
NOTE 2: LEVEL 2 DOOR WIDTH CALCULATION DOES NOT INCLUDE INTERIOR OPEN STAIR EGRESS.

EGRESS WIDTH PER OCCUPANT - LEVEL COMPONENTS
(AREA NOT IN CONTRACT; REFER TO GI012 FOR ADDITIONAL INFORMATION)

FLOOR	LOAD	WIDTH PER OCC	WIDTH REQUIRED	DOOR WIDTH PROVIDED	TOTAL DOOR LOAD CAPACITY	NOTES
LEVEL 1	106	0.2"	21.2	(7)34"+(1)68" = 306"	1,530 PERSONS	1

NOTE 1: LEVEL 1 DOOR WIDTH CALCULATION DOES NOT INCLUDE SINGLE-ROOM DISCHARGES FROM ELECTRICAL AND FIRE ROOMS TO EXTERIOR.

GENERAL NOTES

A	PROJECT MUST COMPLY WITH REQUIREMENTS FOR NEW CONSTRUCTION
B	THIS PROJECT WILL BE DESIGNED AND CONSTRUCTED IN CONFORMANCE WITH UFC 1-200-01 AND UFC 3-600-01. UFC 3-600-01 AND UFC 1-200-01 GENERALLY REFERENCES INTERNATIONAL BUILDING CODE FOR TYPE OF CONSTRUCTION, ALLOWABLE HEIGHT AND AREA LIMITATIONS, AND BUILDING SEPARATION REQUIREMENTS. UFC 3-600-01 GENERALLY REFERENCES NFPA 101, LIFE SAFETY CODE, FOR BUILDING CONSTRUCTION RELATED TO EGRESS AND SAFETY TO LIFE. IN CONFLICTS BETWEEN THE IBC AND NFPA 101 RELATED TO FIRE-RESISTANCE RATINGS, UFC 3-600-01 REQUIRES CONFORMANCE TO NFPA 101 AND APPLICABLE CRITERIA CONTAINED IN THIS UFC.
C	THE IBC FIRE-RESISTANCE REQUIREMENTS FOR PERMANENT PARTITIONS DO NOT APPLY TO NON-BEARING PARTITIONS. FOR FIRE RESISTANCE RATINGS OF NON-BEARING PARTITIONS (OTHER THAN OCCUPANCY SEPARATIONS), THIS PROJECT WILL COMPLY WITH NFPA 101 PER UFC 3-600-01.

US Army Corps of Engineers
Louisville District ®

SEAN BECHTELHEIMER
144133
LICENSED PROFESSIONAL ENGINEER
STATE OF TEXAS
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: J. PERRY
DRAWN BY: J. MCKINNEY
CHECKED BY: B. BUSS
SUBMITTED BY: E. OLMESS
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT21920IG010
ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
Phone: 817.820.2000 Fax: 817.820.2312

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, PZ#: 496395
BUILDING CODE ANALYSIS

SHEET ID
B1455
GI010

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN

B1455 RENOVATION FOR MH-139 SIMULATOR -
FIRE PROTECTION / BUILDING / LIFE SAFETY / ACCESSIBILITY CODE REVIEW

2. LIFE SAFETY REQUIREMENTS:

A. CLASSIFICATION OF OCCUPANCY:
NFPA 101: CH 6

MIXED USE
PRIMARY OCCUPANCY: B- BUSINESS
SECONDARY OCCUPANCIES: S-2 STORAGE

B. OCCUPANT LOAD:
NFPA 101: 7.3.1.2 & CHAPTERS 12-42

BUSINESS USE: 1 OCCUPANT PER 150 GSF
BUSINESS CONCENTRATED USE: 1 OCCUPANT PER 50 GSF
BUSINESS COLLABORATION USE: 1 OCCUPANT PER 15 GSF > 450 SF; 1 OCCUPANT PER 30 GSF < 450 SF
IT/COMM USE: 1 OCCUPANT PER 300 GSF
STORAGE/MECH/ELEC USE: 1 OCCUPANT PER 500 GSF
SPECIAL PURPOSE INDUSTRIAL: 500 GSF
(REFERENCE "OCCUPANT LOADS" TABLE FOR DETAILED CALCULATION)

C. CAPACITY OF MEANS OF EGRESS:
NFPA 101: 7.3.3 & CHAPTERS 12-42

MINIMUM DOOR WIDTH: 32 INCHES CLEAR (NFPA 101, SECTION 7.2.1.2.3.2)
MINIMUM DOOR HEIGHT: 80 INCHES CLEAR (NFPA 101, SECTION 7.2.1.2.1)
MINIMUM STAIR WIDTH: 44 INCHES CLEAR (NFPA 101, SECTION 7.2.2.2.1)
LEVEL COMPONENTS EGRESS WIDTH PER OCCUPANT: 0.20 (NFPA 101, SECTION 7.3.3.1)
STAIRWAY EGRESS WITH PER OCCUPANT: 0.30 (NFPA 101, SECTION 7.3.3.1)
(REFERENCE "EGRESS WIDTH PER OCCUPANT" TABLE ON GI011 FOR DETAILED CALCULATION)

D. NUMBER OF EXITS:
NFPA 101: 7.4 & CHAPTERS 12-42

NOT LESS THAN TWO MEANS OF EGRESS REQUIRED, SIX PROVIDED.
SINGLE MEANS OF EGRESS FROM MECHANICAL MEZZANINE VIA PERMANENT LADDER PERMITTED PER NFPA 101 SECTION 7.2.9.1(3) AND SECTION 40.2.4.1.2.

E. ARRANGEMENT OF MEANS OF EGRESS
NFPA 101: 7.5 & CHAPTERS 12-42

MEANS OF EGRESS ARE ARRANGED IN COMPLIANCE WITH NFPA 101, SECTION 7.5.

F. ACCESSIBLE MEANS OF EGRESS
NFPA 101: 7.5.4

ACCESSIBLE MEANS OF EGRESS PROVIDED IN ACCORDANCE WITH NFPA 101, SECTION 7.5.4.

G. TRAVEL DISTANCE TO EXITS:
NFPA 101: 7.6 & CHAPTERS 12-42

BUSINESS OCCUPANCY:	300 FT (SPRINKLERED, PER TABLE A.7.6)
	100 FT (COMMON PATH, SPRINKLERED, PER TABLE A.7.6)
	50 FT (DEAD ENDS, SPRINKLERED, PER TABLE A.7.6)
STORAGE OCCUPANCY:	400 FT (SPRINKLERED, PER TABLE A.7.6)
	100 FT (COMMON PATH, SPRINKLERED, PER TABLE A.7.6)
	100 FT (DEAD ENDS, SPRINKLERED, PER TABLE A.7.6)
SP INDUSTRIAL OCCUPANCY:	400 FT (SPRINKLERED, PER TABLE 40.2.6.1)
	100 FT (COMMON PATH, SPRINKLERED, PER TABLE 40.2.5.1)
	50 FT (DEAD ENDS, SPRINKLERED, PER TABLE 40.2.5.1)

H. ILLUMINATION OF MEANS OF EGRESS:
NFPA 101: 7.8 & CHAPTERS 12-42

MEANS OF EGRESS ILLUMINATION IS PROVIDED IN ACCORDANCE WITH NFPA 101, SECTION 7.8, USING SELECTED GENERAL LIGHTING FIXTURES.

I. EMERGENCY LIGHTING:
NFPA 101: 7.9 & CHAPTERS 12-42

EMERGENCY LIGHTING WILL PROVIDE AN INITIAL ILLUMINATION THAT IS NOT LESS THAN AN AVERAGE OF 1 FT-CANDLE AND, AT ANY POINT, NOT LESS THAN 0.1 FT-CANDLE, MEASURED ALONG THE MEANS OF EGRESS AT FLOOR LEVEL.

J. MARKING OF MEANS OF EGRESS:
NFPA 101: 7.10 & CHAPTERS 12-42

EXITS WILL BE MARKED BY AN APPROVED EXIT SIGN THAT IS READILY VISIBLE FROM ANY DIRECTION OF EXIT ACCESS, OTHER THAN MAIN EXTERIOR EXIT DOORS THAT ARE CLEARLY IDENTIFIABLE AS EXITS.

K. INTERIOR FINISH CLASSIFICATION LIMITS:
NFPA 101: TABLE A.10.2.2
TSFPEWG G 3-600-01: 2-3.1

REQUIRED AND PROVIDED FINISH RATING FOR EXIT PASSAGEWAYS AND EXIT ACCESS CORRIDORS: A OR B.
REQUIRED AND PROVIDED FINISH RATING OF OTHER SPACES: A, B, OR C.
REQUIRED AND PROVIDED FINISH RATING FOR ELECTRONIC EQUIPMENT AREAS: A OR B.

L. DETECTION, ALARM, & COMMUNICATIONS:
UFC 3-600-01: CHAPTER 9-18
NFPA 101: 9.6 & CHAPTERS 12-42

AN INTELLIGENT, ADDRESSABLE, UL LISTED COMBINATION FIRE ALARM AND MASS NOTIFICATION PANEL WILL BE INSTALLED NEAR THE MAIN ENTRANCE TO MONITOR ADDRESSABLE MANUAL PULL STATIONS AND COMMON AREA SMOKE DETECTORS. OCCUPANT NOTIFICATION UTILIZING A COMBINATION OF STROBES AND SPEAKER/STROBES WITH WHITE FACEPLATES WILL BE PROVIDED THROUGHOUT ALL COMMON AND PUBLIC AREAS OF THE BUILDINGS IN ACCORDANCE WITH NFPA 72, ADA, AND ABA. THE FIRE ALARM SYSTEM WILL SHARE SPEAKERS AND STROBES WITH THE MASS NOTIFICATION SYSTEM AS ALLOWED BY THE PANEL MANUFACTURER(S). FIRE ALARM STROBE LENSES WILL BE CLEAR WITH WHITE FACEPLATES MARKED "ALERT". OCCUPANT NOTIFICATION WILL BE ACTIVATED UPON ANY FIRE ALARM SIGNAL. A CEILING-MOUNTED SMOKE DETECTOR WILL BE LOCATED ABOVE EACH FIRE ALARM PANEL PER NFPA 72 TO PROTECT PANELS. ALARM, TROUBLE, AND SUPERVISORY SIGNALS WILL BE TRANSMITTED TO THE BASE REPORTING SYSTEM BY RADIO FREQUENCY FROM THE FIRE ALARM RADIO TRANSMITTER. PROJECTED BEAM SMOKE DETECTION CAPABILITY WILL BE PROVIDED IN THE OPEN BAY AREA.

M. PORTABLE FIRE EXTINGUISHERS:
UFC 3-600-01, 9-17
NFPA 10

PORTABLE FIRE EXTINGUISHERS WILL BE PROVIDED IN ACCORDANCE WITH UFC 3-600-01 AND NFPA 101 AND TSFPEWG G 3-600-01.01-18 FOR ELECTRONIC EQUIPMENT AREAS.

N. CORRIDORS:
NFPA 101: CHAPTERS 12-42

THERE ARE NO REQUIREMENTS OR PROVISIONS FOR CORRIDOR PROTECTION IN THE BUILDING PER NFPA 101.

O. FIRE DAMPERS:
NFPA 90A: 5.3.1, 5.4.1 & 5.4.2

FIRE RATED DAMPERS MUST BE INSTALLED IN DUCTS PASSING THROUGH PARTITIONS OR WALLS HAVING A FIRE RESISTANCE RATING OF 2 HOURS OR GREATER.
FIRE DAMPERS MUST BE INSTALLED IN AIR TRANSFER OPENINGS IN FIRE RESISTANCE RATED PARTITIONS.

P. SMOKE DAMPERS:
IBC: SECTION 716
NFPA 90A: 4.3.10.2, 5.3.5.1

DUCT SMOKE DETECTORS WILL BE PROVIDED WITHIN 5 FEET OF SMOKE DAMPERS, WHICH OCCUR AT ELECTRONIC EQUIPMENT AREA SUPPLY OPENINGS, AS PART OF THE SMOKE REMOVAL SYSTEMS.

Q. DUCT SMOKE DETECTORS
NFPA 90A: 6.4.2.1

DUCT SMOKE DETECTORS ARE PROVIDED IN THE SUPPLY AIR SYSTEM, OF AHUS HAVING A CAPACITY GREATER THAN 2,000 CFM, AND IN BOTH SUPPLY AND RETURN AIR SYSTEMS OF AHUS HAVING A CAPACITY GREATER THAN 15,000 CFM IN ACCORDANCE WITH NFPA 90A. SEE ITEM "P"ABOVE FOR DETECTION ASSOCIATED WITH SMOKE DAMPERS.

R. ELEVATORS
UFC 3-600-01: 4-12
IBC CHAPTER 30
ASME A17.1
NFPA 13
UFC 3-490-06: 3-3.1

THE MACHINE ROOM-LESS HOLELESS HYDRAULIC ELEVATOR IS PROTECTED IN ACCORDANCE WITH UFC 3-600-01, SECTION 4-16 AND ASME A17.1. ELEVATOR RECALL AND SHUNT TRIP FUNCTIONS ARE PROVIDED, ALONG WITH SMOKE/HEAT DETECTOR AND WET-PIPE SPRINKLER SUPPRESSION IN THE ELEVATOR HOISTWAY AND PIT.

S. ROOF ACCESS:
UFC 3-600-01: 10-4
IBC CHAPTER 1011.12

THERE ARE NO ROOF ACCESS REQUIREMENTS OR PROVISIONS FOR THE BUILDING PER IBC SECTION 1011.12 OR UFC 3-600-01, SECTION 10-4.

T. HAZARDOUS LOCATIONS IN COMMERCIAL GARAGES
NFPA 70: NEC ARTICLES 500 & 511

THIS SECTION IS NOT APPLICABLE TO THIS FACILITY.

U. FIRE DEPT VEHICLE ACCESS
UFC 3-600-01: 9-1
NFPA 1: 18.2.3.4.1

FIRE DEPARTMENT VEHICLE ACCESS IS PROVIDED IN ACCORDANCE WITH UFC 3-600-01, SECTION 9-1.

V. FIRE HYDRANT INSTALLATION
UFC 3-600-01: 9-3.5

EXISTING HYDRANTS ARE SPACED AND LOCATED IN ACCORDANCE WITH UFC 3-600-01, SECTION 9-3.5. A HYDRANT IS WITHIN 150 FT OF THE FIRE DEPARTMENT CONNECTION AND ALL PARTS OF THE BUILDING EXTERIOR ARE WITHIN 350 FT OF A HYDRANT.

W. KITCHEN COOKING EXHAUST EQUIPMENT
NFPA 101: 9.2.3, CHAPTERS 12-42
NFPA 96

THERE IS NO KITCHEN HOOD EQUIPMENT REQUIRING EXHAUST AND PROVISION OF INTEGRAL WET CHEMICAL FIRE SUPPRESSION.

X. SMOKE EXHAUST
TSFPEWG G 3-600-01: 2-13
NFPA 92

AUTOMATIC AND MANUAL SMOKE EXHAUST SYSTEM CAPABILITY PROVIDED IN ACCORDANCE WITH TSFPEWG G 3-600-01.01-18 AND NFPA 92 FOR ELECTRONIC EQUIPMENT AREAS (EEAS): CPT ROOM 117, OFT COMPUTER ROOM 126, EDS & EDS COMPUTER ROOMS 125/125A, HIGH BAY AREA: CIRCULATION 110, IAST 115, AIE PTT 116, AND CORRIDOR 200

3. MASS NOTIFICATION:
UFC 4-021-01
ECB 2018-17

A COMPLETE BUILDING MASS NOTIFICATION SYSTEM WILL BE PROVIDED AS REQUIRED BY UFC 4-010-01, UFC 4-021-01 AND ECB 2018-17, UTILIZING NOTIFICATION APPLIANCES WITH CLEAR LENS STROBES AND SPEAKERS FOR AUDIBLE NOTIFICATION THROUGHOUT THE BUILDING, MARKED "ALERT", AND SHARED WITH THE BUILDING FIRE ALARM SYSTEM WITH WHICH IT WILL BE COMBINED. THE MAIN PANEL (FMCP) WITH ACU WILL BE LOCATED PER BASE FD, WITH LOCS PER TRAVEL DISTANCE LIMITS. UPON ACTIVATION OF THE LOCAL BUILDING MASS NOTIFICATION SYSTEM, FIRE ALARM AUDIBLES WILL BE DEACTIVATED IN ACCORDANCE WITH UFC 4-021-01 DURING EMERGENCY VOICE MESSAGING PER BASE FD.

4. ACCESSIBILITY REQUIREMENTS:
ABA CHAPTERS 1-10

THE BUILDING IS COMPLETELY ACCESSIBLE IN ACCORDANCE WITH ABAAAG.

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
SEAN BECHTELHEIMER
144133
LICENSED
ARCHITECT
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201GI011

DESIGNED BY: R. DIBLE
DRAWN BY: Z. HARRELL
CHECKED BY: H. LEFKOWITZ
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS No. W2R0003

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
LIFE SAFETY CODE ANALYSIS

SHEET ID
B1455
GI011

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN

GENERAL NOTES - LIFE SAFETY PLAN

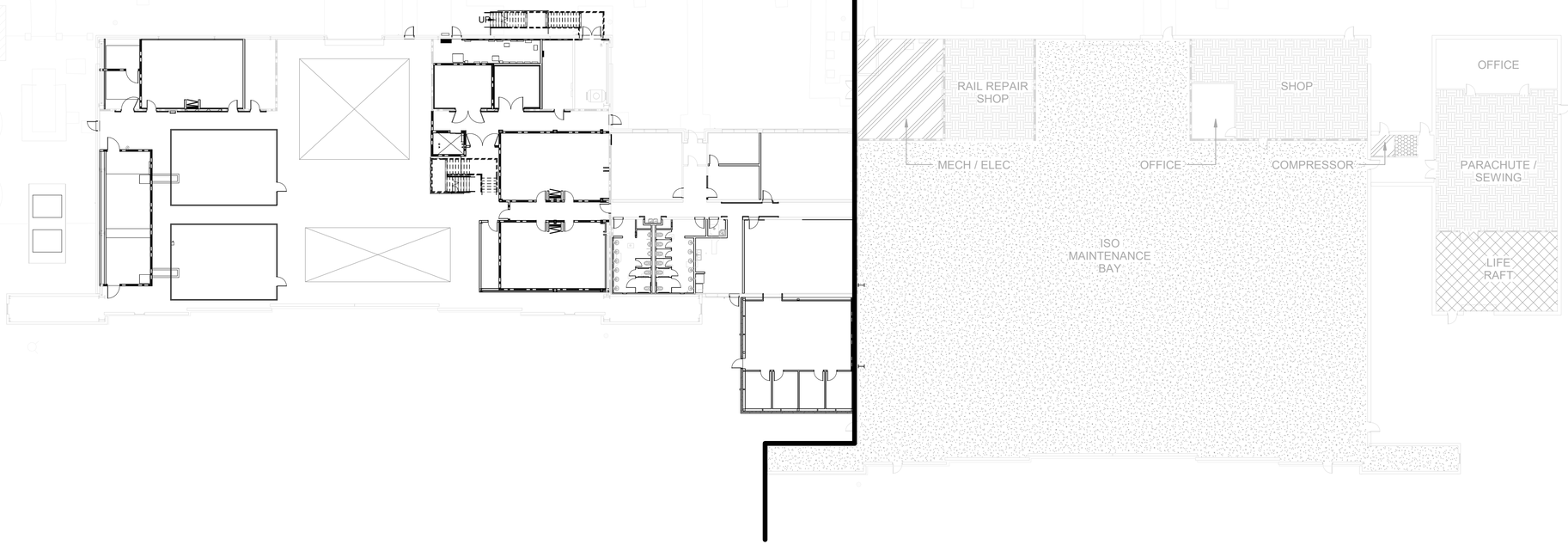
A	SHEET GI012 SHOWS EXTENTS OF OVERALL FACILITY, INCLUDING AREAS NOT IN CONTRACT. SHEETS GI013 AND GI014 INDICATE AREAS WITHIN CONTRACT
B	WHERE A PARTITION IS INDICATED TO BE RATED, PROVIDE A THROUGH PENETRATION FIRE STOPPING SYSTEM CONSTRUCTED IN STRICT COMPLIANCE WITH THE FIRE TEST DESIGN (TESTED AND COMPATIBLE WITH THE LEVEL OF RATING INDICATED AT ALL PENETRATIONS. IF NO TEST IS REFERENCED, PROVIDE AN INDUSTRY RECOGNIZED TEST APPLICABLE TO THE PARTITION TYPE
C	THIS DRAWING IS FOR REFERENCE ONLY, IT IS NOT PART OF THE CONSTRUCTION CONTRACT AND ALL INFORMATION CONTAINED HEREIN IS LOCATED ON THE CONSTRUCTION DOCUMENTS

DESIGN CRITERIA

A	NFPA 2021 LIFE SAFETY CODE 101; EGRESS REQUIREMENTS
B	INTERNATIONAL BUILDING CODE 2018; OCCUPANCY CLASSIFICATION, CONSTRUCTION TYPE AND CONSTRUCTION REQUIREMENTS

B1455 HANGAR TO BE RENOVATED
21,678 SF

ADJACENT HANGAR
(NOT IN CONTRACT)
28,378 SF



A1 LIFE SAFETY PLAN - OVERALL FACILITY
3/64" = 1'-0"

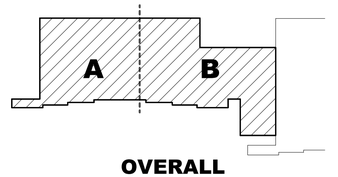
USE & OCCUPANCY LEGEND - UFC 3-600-01 CH 10-3.1 & NFPA 101	
(NO PATTERN)	BUSINESS USE (150) / B 1,140 SF, 9 OCCUPANTS
	INDUSTRIAL USE (100) / F-1 4,392 SF, 45 OCCUPANTS
	AIRCRAFT HANGAR USE (500) / S-1 19,207 SF, 39 OCCUPANTS
	MECHANICAL / ELECTRICAL USE (500) / S-2 1,950 SF, 6 OCCUPANTS
	STORAGE USE (500) / S-2 538 SF, 3 OCCUPANTS
	IT / COMMUNICATION USE (300) / S-2 655 SF, 4 OCCUPANTS

NOTE: USE & OCCUPANCY LEGEND CONTAINS INFORMATION REGARDING THE AREA NOT IN CONTRACT. REFER TO GI013 AND GI014 FOR USE & OCCUPANCY OF AREA IN CONTRACT.

LIFE SAFETY LEGEND

NEW 1 HOUR FIRE RATED PARTITION

EXISTING 1 HOUR FIRE RATED PARTITION



OVERALL KEY PLAN

GRAPHIC SCALE

32 16 0 32

SCALE: 3/64"=1'-0"

PLAN NORTH
TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
SEAN BECHTELHEIMER
144133
LICENSED
PROFESSIONAL ENGINEER
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY:	ISSUE DATE:
J. PERRY	23 NOVEMBER 2022
DRAWN BY:	SOLICITATION NO.:
J. MCKINNEY	
CHECKED BY:	CONTRACT NO.:
B. BUSS	
SUBMITTED BY:	DRAWING CODE.:
E. OLNESS	
SIZE:	FILE NAME:
ANSI D 22x34	S2XHT219201GI012

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS TX REGISTRY #F2966

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNGS21B1455, P2#: 496395
LIFE SAFETY PLAN - OVERALL FACILITY

SHEET ID
B1455
GI012

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN

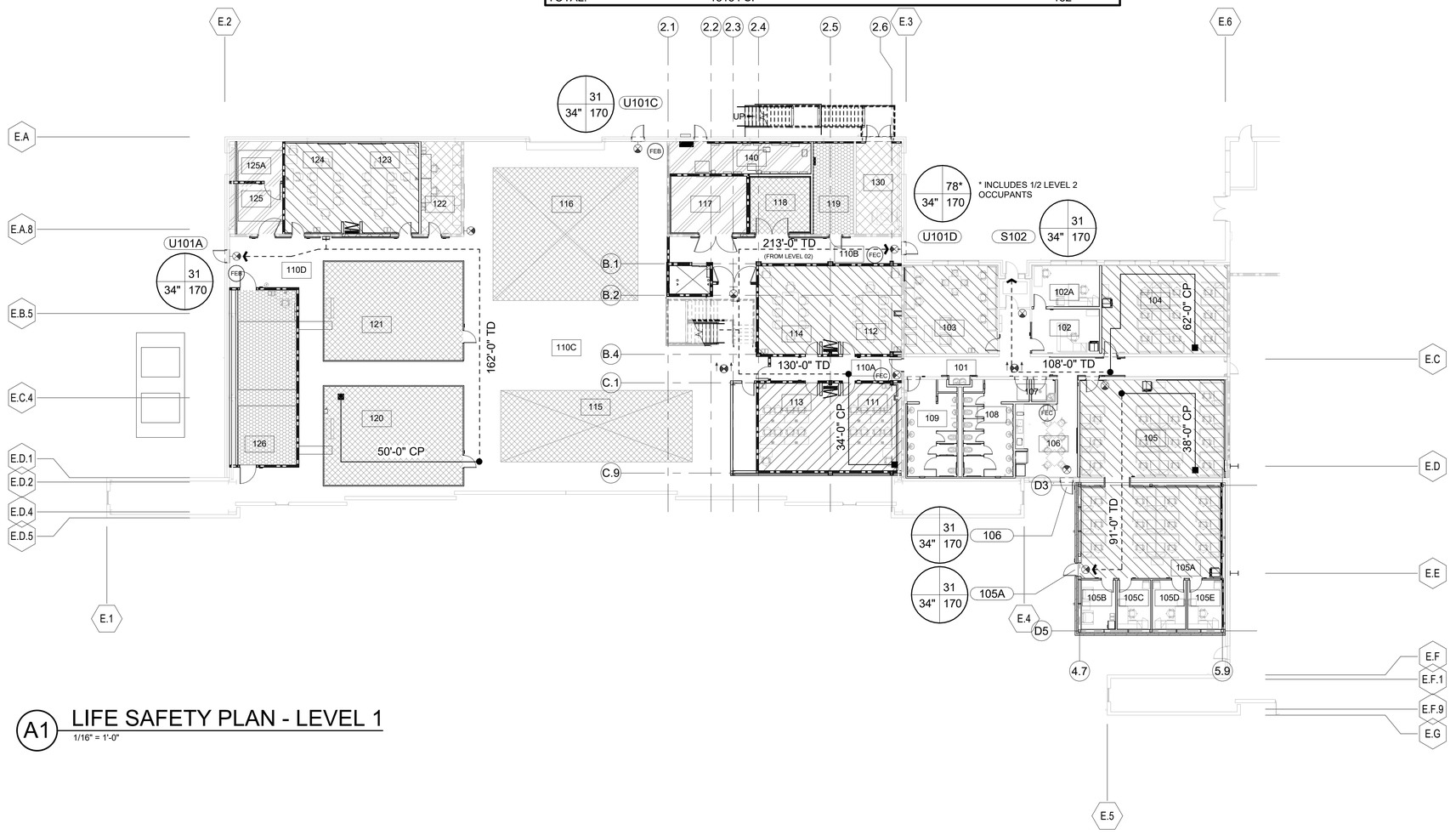
ROOM SCHEDULE LEVEL 1

NAME	NUMBER	AREA	OCCUPANCY	LOAD FACTOR	OCCUPANT LOAD
30 SF					
CLASSROOM	111	347 SF	BUSINESS COLLABORATION	30 SF	12
CLASSROOM	113	377 SF	BUSINESS COLLABORATION	30 SF	13
30 SF: 2		724 SF			25
50 SF					
STUDENT WORK AREA	103	501 SF	BUSINESS CONCENTRATED	50 SF	11
TRS	104	674 SF	BUSINESS CONCENTRATED	50 SF	14
ADMINISTRATION	105	861 SF	BUSINESS CONCENTRATED	50 SF	18
ADMINISTRATION	105A	793 SF	BUSINESS CONCENTRATED	50 SF	16
MULTI-PURPOSE	112	376 SF	BUSINESS CONCENTRATED	50 SF	8
MULTI-PURPOSE	114	380 SF	BUSINESS CONCENTRATED	50 SF	8
MULTI-PURPOSE	123	365 SF	BUSINESS CONCENTRATED	50 SF	8
MULTI-PURPOSE	124	364 SF	BUSINESS CONCENTRATED	50 SF	8
50 SF: 8		4314 SF			91
150 SF					
VESTIBULE	100	55 SF	BUSINESS	150 SF	1
CORRIDOR	101	480 SF	BUSINESS	150 SF	4
REGISTRARS	102	186 SF	BUSINESS	150 SF	2
REGISTRARS OFFICE	102A	169 SF	BUSINESS	150 SF	2
WELLNESS	105B	105 SF	BUSINESS	150 SF	1
OFFICE	105C	102 SF	BUSINESS	150 SF	1
OFFICE	105D	102 SF	BUSINESS	150 SF	1
OFFICE	105E	105 SF	BUSINESS	150 SF	1

ROOM SCHEDULE LEVEL 1

NAME	NUMBER	AREA	OCCUPANCY	LOAD FACTOR	OCCUPANT LOAD
BREAK ROOM	106	311 SF	BUSINESS	150 SF	3
WOMEN'S RR	108	300 SF	BUSINESS	150 SF	3
MEN'S RR	109	280 SF	BUSINESS	150 SF	2
CORRIDOR	110A	194 SF	BUSINESS	150 SF	2
CORRIDOR	110B	424 SF	BUSINESS	150 SF	3
CIRCULATION	110C	631 SF	BUSINESS	150 SF	5
CIRCULATION	110D	1103 SF	BUSINESS	150 SF	8
150 SF: 15		4547 SF			39
300 SF					
TELECOM	119	226 SF	IT/COMMUNICATION	300 SF	1
OFT COMPUTER	126	633 SF	IT/COMMUNICATION	300 SF	3
300 SF: 2		858 SF			4
500 SF					
JANITOR'S	107	32 SF	STORAGE	500 SF	1
IAST	115	2127 SF	BUILDING EQUIPMENT SPACES (S-2)	500 SF	5
STORAGE	115A	126 SF	STORAGE	500 SF	1
AIE PTT	116	2254 SF	BUILDING EQUIPMENT SPACES (S-2)	500 SF	5
CPT	117	266 SF	ELECTRICAL	500 SF	1
WPT	118	204 SF	BUILDING EQUIPMENT SPACES (S-2)	500 SF	1
OFT	120	845 SF	BUILDING EQUIPMENT SPACES (S-2)	500 SF	2
OFT	121	845 SF	BUILDING EQUIPMENT SPACES (S-2)	500 SF	2
TOOL ROOM	122	230 SF	STORAGE	500 SF	1
EDS	125	142 SF	ELECTRICAL	500 SF	1
EDS COMPUTER	125A	111 SF	ELECTRICAL	500 SF	1
FIRE ROOM	130	256 SF	STORAGE	500 SF	1
ELECTRICAL	140	271 SF	ELECTRICAL	500 SF	1
500 SF: 13		7710 SF			23
TOTAL:		18154 SF			182

KEYNOTES



A1 LIFE SAFETY PLAN - LEVEL 1

1/16" = 1'-0"

GENERAL NOTES - LIFE SAFETY PLAN

A	SHEET GI012 SHOWS EXTENTS OF OVERALL FACILITY, INCLUDING AREAS NOT IN CONTRACT. SHEETS GI013 AND GI014 INDICATE AREAS WITHIN CONTRACT
B	WHERE A PARTITION IS INDICATED TO BE RATED, PROVIDE A THROUGH PENETRATION FIRE STOPPING SYSTEM CONSTRUCTED IN STRICT COMPLIANCE WITH THE FIRE TEST DESIGN (TESTED AND COMPATIBLE WITH THE LEVEL OF RATING INDICATED AT ALL PENETRATIONS. IF NO TEST IS REFERENCED, PROVIDE AN INDUSTRY RECOGNIZED TEST APPLICABLE TO THE PARTITION TYPE
C	THIS DRAWING IS FOR REFERENCE ONLY, IT IS NOT PART OF THE CONSTRUCTION CONTRACT AND ALL INFORMATION CONTAINED HEREIN IS LOCATED ON THE CONSTRUCTION DOCUMENTS

DESIGN CRITERIA

A	NFPA 2021 LIFE SAFETY CODE 101; EGRESS REQUIREMENTS
B	INTERNATIONAL BUILDING CODE 2018; OCCUPANCY CLASSIFICATION, CONSTRUCTION TYPE AND CONSTRUCTION REQUIREMENTS

LIFE SAFETY LEGEND

PATH OF EXIT TRAVEL WITH DISTANCES FROM SELECTED REMOTE LOCATIONS TO NEAREST EXIT. INCLUDES; TOTAL TRAVEL DISTANCE (TD) AND COMMON PATH OF TRAVEL(CP).

146 TD 75 CP — INDICATES START OF CP & TD

INDICATES END OF CP

INDICATES POINT OF EXIT

117 — ROOM NUMBER

123B — EXIT LOCATION (DOOR NUMBER)

100 / 34" 100 — REQUIRED DOOR EGRESS CAPACITY; PROVIDED DOOR EGRESS CAPACITY; PROVIDED DOOR WIDTH (INCHES)

EXIT LIGHT FIXTURE, REFER TO ELECTRICAL DRAWINGS

NEW 1 HOUR FIRE RATED PARTITION

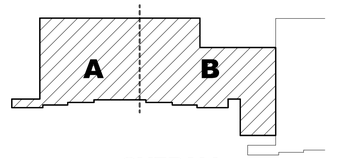
EXISTING 1 HOUR FIRE RATED PARTITION

FEC — SEMI-RECESSED FIRE EXTINGUISHER AND CABINET (FEC) AND FIRE EXTINGUISHER BRACKET MOUNTED (FEB)
NOTE: PROVIDE CLASS C AT SIMULATOR LOCATIONS. PROVIDE CLASS A AT ALL OTHER LOCATIONS.

FEB

USE & OCCUPANCY LEGEND - UFC 3-600-01 CH 10-3.1 & NFPA 101

(NO PATTERN)	BUSINESS USE (150) / B 5,990 SF, 47 OCCUPANTS
	BUSINESS CONCENTRATED (50) / B 6,400 SF, 134 OCCUPANTS
	BUSINESS COLLABORATION USE (<450sf) (30) / B 768 SF, 26 OCCUPANTS
	BUSINESS COLLABORATION USE (>450sf) (15) / B 593 SF, 40 OCCUPANTS
	MECHANICAL / ELECTRICAL USE (500) / S-2 575 SF, 3 OCCUPANTS
	STORAGE USE (500) / S-2 538 SF, 3 OCCUPANTS
	IT / COMMUNICATION USE (300) / S-2 655 SF, 4 OCCUPANTS
	BUILDING EQUIPMENT SPACES (500) / S-2 6,566 SF, 16 OCCUPANTS
	SPECIAL PURPOSE INDUSTRIAL (N/A) / F-1 1,375 SF, 3 OCCUPANTS



OVERALL KEY PLAN

GRAPHIC SCALE

16 12 8 4 0 16 32

SCALE: 1/16"=1'-0"

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
SEAN BECHTELHEIMER
144133
LICENSED
PROFESSIONAL ENGINEER
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: J. PERRY
DRAWN BY: J. MCKINNEY
CHECKED BY: B. BUSS
SUBMITTED BY: E. OLMESS
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: ANSI D 22x34
SWIT21920IGI013

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS Bid Package 2

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
LIFE SAFETY PLAN - LEVEL 1

SHEET ID
B1455
GI013

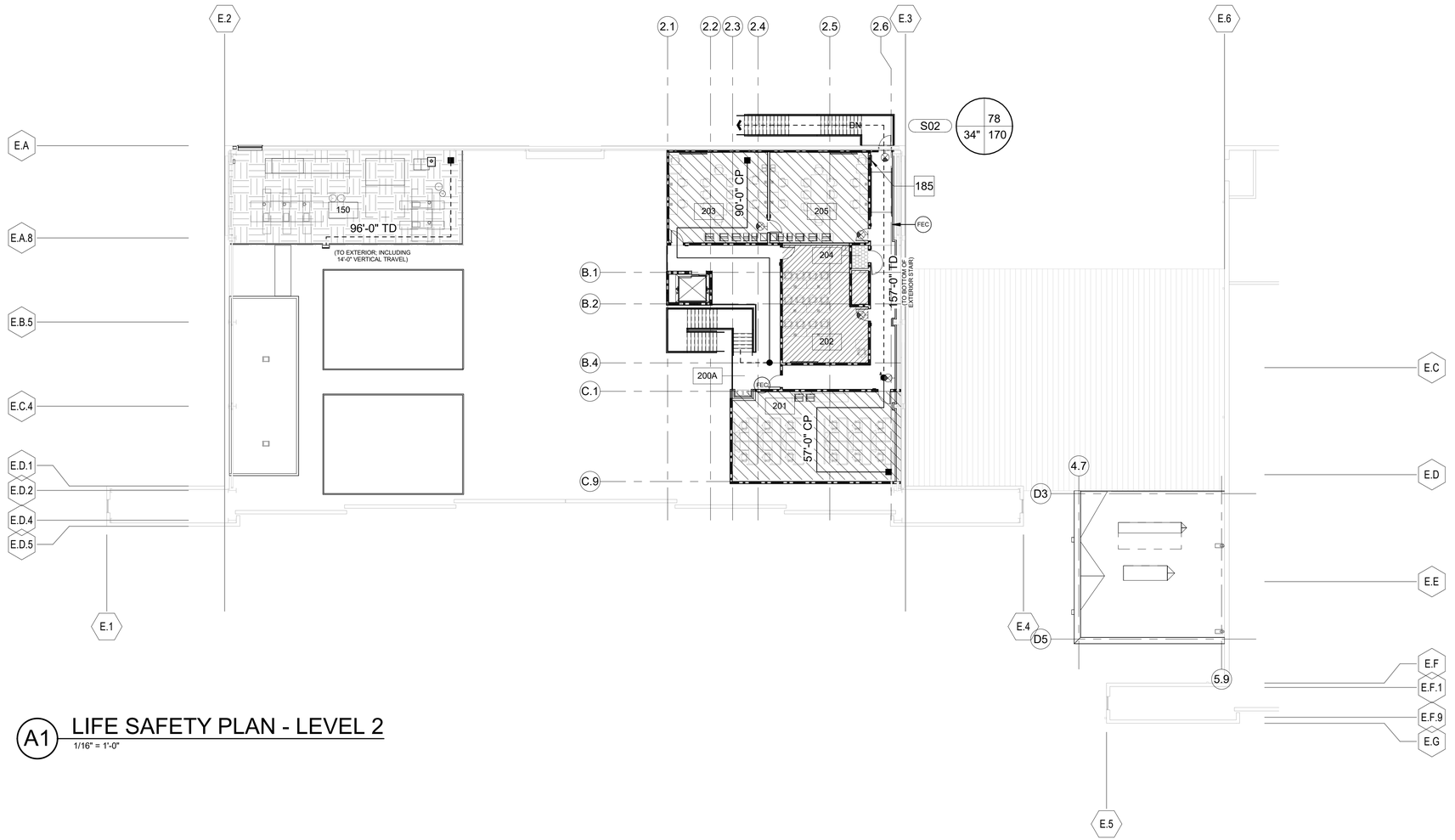
W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN

ROOM SCHEDULE LEVEL 2

NAME	NUMBER	AREA	OCCUPANCY	LOAD FACTOR	OCCUPANT LOAD
OFT	120	845 SF			
OFT	121	845 SF			
: 2		1691 SF			0
15 SF					
CLASS	202	550 SF	BUSINESS COLLABORATION (>450sf)	15 SF	37
15 SF: 1		550 SF			37
50 SF					
TSC	201	888 SF	BUSINESS CONCENTRATED	50 SF	18
MISSION PLANNING	203	553 SF	BUSINESS CONCENTRATED	50 SF	12
MISSION PLANNING	205	553 SF	BUSINESS CONCENTRATED	50 SF	12
50 SF: 3		1994 SF			42
150 SF					
CIRCULATION	200A	511 SF	BUSINESS	150 SF	4
CORRIDOR	200B	475 SF	BUSINESS	150 SF	4
150 SF: 2		986 SF			8
300 SF					
COMM CHASE	204	23 SF	IT/COMMUNICATION	300 SF	1
300 SF: 1		23 SF			1
500 SF					
MECH MEZZ	150	1375 SF	SPECIAL PURPOSE INDUSTRIAL	500 SF	3
500 SF: 1		1375 SF			3
TOTAL:		6619 SF			91



A1 LIFE SAFETY PLAN - LEVEL 2
1/16" = 1'-0"

KEYNOTES

185	FIRE ALARM SYSTEM AND MASS NOTIFICATION SYSTEM CONTROL PANEL; REFER TO FIRE PROTECTION, SHEET FA110

GENERAL NOTES - LIFE SAFETY PLAN

A	SHEET GI012 SHOWS EXTENTS OF OVERALL FACILITY, INCLUDING AREAS NOT IN CONTRACT. SHEETS GI013 AND GI014 INDICATE AREAS WITHIN CONTRACT
B	WHERE A PARTITION IS INDICATED TO BE RATED, PROVIDE A THROUGH PENETRATION FIRE STOPPING SYSTEM CONSTRUCTED IN STRICT COMPLIANCE WITH THE FIRE TEST DESIGN (TESTED AND COMPATIBLE WITH THE LEVEL OF RATING INDICATED AT ALL PENETRATIONS. IF NO TEST IS REFERENCED, PROVIDE AN INDUSTRY RECOGNIZED TEST APPLICABLE TO THE PARTITION TYPE
C	THIS DRAWING IS FOR REFERENCE ONLY, IT IS NOT PART OF THE CONSTRUCTION CONTRACT AND ALL INFORMATION CONTAINED HEREIN IS LOCATED ON THE CONSTRUCTION DOCUMENTS

DESIGN CRITERIA

A	NFPA 2021 LIFE SAFETY CODE 101; EGRESS REQUIREMENTS
B	INTERNATIONAL BUILDING CODE 2018; OCCUPANCY CLASSIFICATION, CONSTRUCTION TYPE AND CONSTRUCTION REQUIREMENTS

LIFE SAFETY LEGEND

PATH OF EXIT TRAVEL WITH DISTANCES FROM SELECTED REMOTE LOCATIONS TO NEAREST EXIT. INCLUDES; TOTAL TRAVEL DISTANCE (TD) AND COMMON PATH OF TRAVEL(CP).

146 TD 75 CP — INDICATES START OF CP & TD

INDICATES END OF CP

INDICATES POINT OF EXIT

117 — ROOM NUMBER

123B — EXIT LOCATION (DOOR NUMBER)

100 / 34" / 100 — REQUIRED DOOR EGRESS CAPACITY; PROVIDED DOOR EGRESS CAPACITY; PROVIDED DOOR WIDTH (INCHES)

EXIT LIGHT FIXTURE, REFER TO ELECTRICAL DRAWINGS

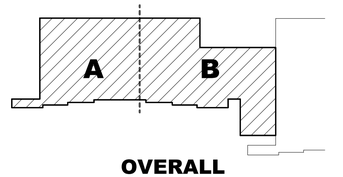
NEW 1 HOUR FIRE RATED PARTITION

EXISTING 1 HOUR FIRE RATED PARTITION

FEC / FEB — SEMI-RECESSED FIRE EXTINGUISHER AND CABINET (FEC) AND FIRE EXTINGUISHER BRACKET MOUNTED (FEB)
NOTE: PROVIDE CLASS C AT SIMULATOR LOCATIONS. PROVIDE CLASS A AT ALL OTHER LOCATIONS.

USE & OCCUPANCY LEGEND - UFC 3-600-01 CH 10-3.1 & NFPA 101

(NO PATTERN)	BUSINESS USE (150) / B 5,990 SF, 47 OCCUPANTS
	BUSINESS CONCENTRATED (50) / B 6,400 SF, 134 OCCUPANTS
	BUSINESS COLLABORATION USE (<450sf) (30) / B 768 SF, 26 OCCUPANTS
	BUSINESS COLLABORATION USE (>450sf) (15) / B 593 SF, 40 OCCUPANTS
	MECHANICAL / ELECTRICAL USE (500) / S-2 575 SF, 3 OCCUPANTS
	STORAGE USE (500) / S-2 538 SF, 3 OCCUPANTS
	IT / COMMUNICATION USE (300) / S-2 655 SF, 4 OCCUPANTS
	BUILDING EQUIPMENT SPACES (500) / S-2 6,566 SF, 16 OCCUPANTS
	SPECIAL PURPOSE INDUSTRIAL (N/A) / F-1 1,375 SF, 3 OCCUPANTS



OVERALL KEY PLAN

GRAPHIC SCALE

16 12 8 4 0 16 32

SCALE: 1/16"=1'-0"

PLAN NORTH — TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS — SEAN BECHTELHEIMER — 144133 — LICENSED PROFESSIONAL ENGINEER — SURVEYED — TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS Project No. W2R023

DESIGNED BY: J. PERRY
DRAWN BY: J. MCKINNEY
CHECKED BY: B. BUSS
SUBMITTED BY: E. OLNESS
ANSI D 22x34

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201GI014

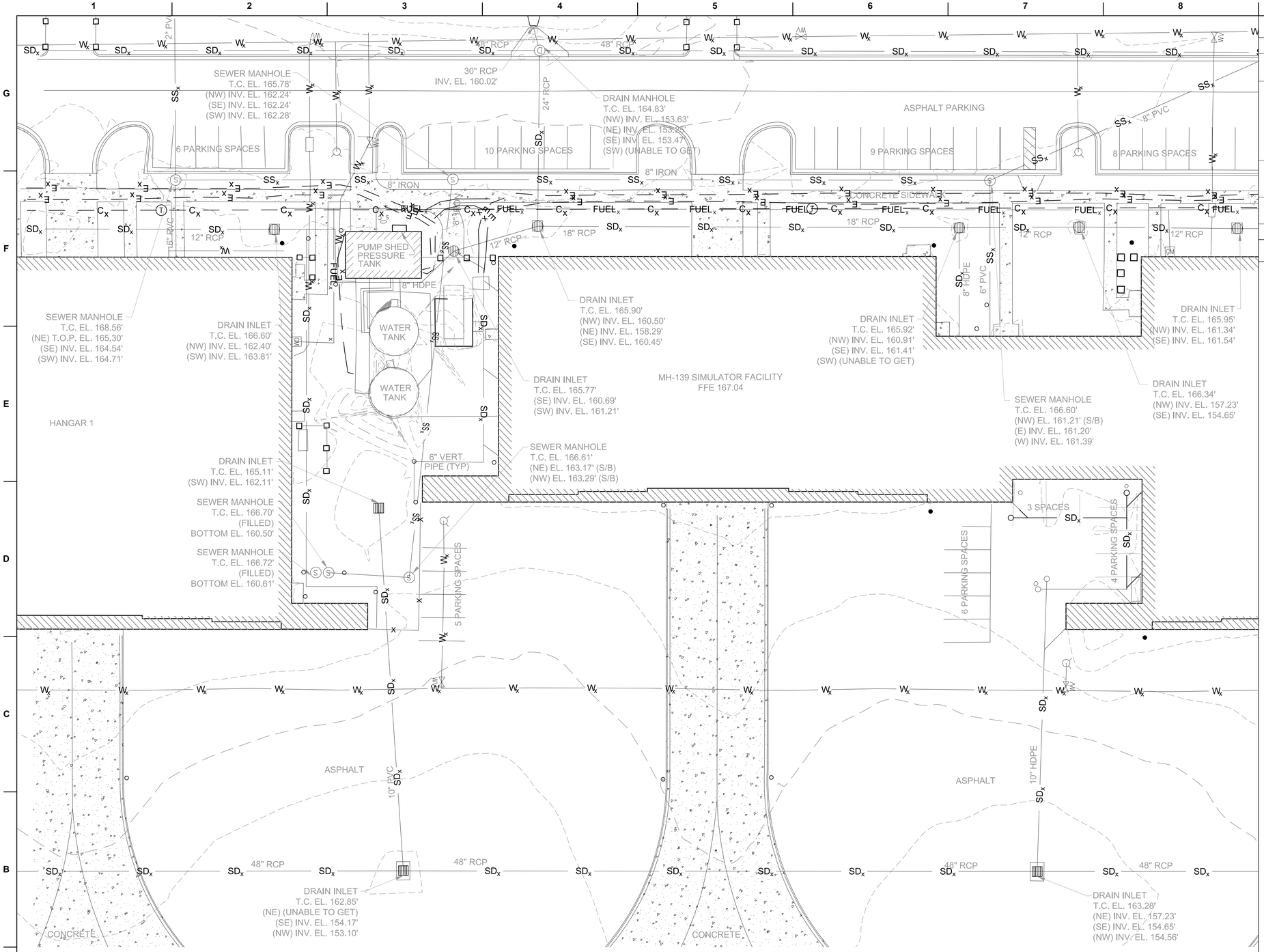
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
LIFE SAFETY PLAN - LEVEL 2

SHEET ID
B1455
GI014

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN



A1 EXISTING CONDITIONS
SCALE 1" = 20'

GENERAL NOTES

A	REFER TO C-001 FOR GENERAL NOTES.
B	TOPOGRAPHIC INFORMATION IS BASED ON THE SURVEY PROVIDED BY MUXLOW SURVEYING IN AUGUST 2021.
C	INVERT ELEVATIONS FOR SANITARY MANHOLES, STORM MANHOLES, AND CATCH BASINS WERE OBTAINED DURING THE SITE SURVEY. FEATURES SUCH AS VALVES AND METERS WERE LOCATED DURING THE SURVEY WHEN FOUND. UNDERGROUND FEATURES SUCH AS WATER, GAS, AND ELECTRIC ARE SHOWN BASED ON GIS DATA AND ARE FOR REFERENCE ONLY.
D	VERIFY ALL UTILITY LOCATIONS, ELEVATIONS AND MANHOLE INLET AND INVERT ELEVATIONS PRIOR TO CONSTRUCTION.
E	ALL UNKNOWN UTILITIES ARE TO BE IDENTIFIED PRIOR TO CONSTRUCTION.
F	SEE SHEET V-102 FOR SURVEY CONTROL.

LEGEND

- E_x — EXISTING UNDERGROUND ELECTRIC LINE
- C_x — EXISTING UNDERGROUND COMM. LINE
- $FUEL_x$ — EXISTING FUEL LINE
- W_x — EXISTING WATER LINE
- SS_x — EXISTING SANITARY SEWER LINE
- SD_x — EXISTING STORM DRAIN LINE
- WV — WATER VALVE
- FIRE HYDRANT
- (S) — SANITARY SEWER MANHOLE
- STORM DRAIN INLET
- STORM DRAIN INLET
- (T) — COMMUNICATION MANHOLE
- (D) — STORM DRAIN MANHOLE
- EXISTING CONCRETE PAVEMENT

0 10' 20' 40'
SCALE: 1"=20'

TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
JENNIFER M. HAYNES
90167
LICENSED
PROFESSIONAL ENGINEER
SIGNED 23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: J. HAYNES
DRAWN BY: D. KING
CHECKED BY: A. MCCOY
SUBMITTED BY: E. OLNESS
SIZE: ANSI D
22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT210201

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS Global Buildings Group Inc.
777 Main Street, Fort Worth, TX 76102
(817)334-7000 Fax: (817)334-7213

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395

EXISTING CONDITIONS

SHEET ID
B1455
V-101

W912QR23R0003_Plans-0000

U:\BLDG\USACE Louisville District\F8295513 - Maxwell AFB B1455 Renovation\700 Working Documents\740 Sheets\740.01 Civil\V-101.dwg, 11/16/2022 2:44 PM, King, David

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN

A1 SURVEY CONTROL PLAN
SCALE 1" = 20'

GENERAL NOTES

A	REFER TO C-001 FOR GENERAL NOTES.
B	REFER TO V-101 FOR EXISTING CONDITIONS
C	TOPOGRAPHIC INFORMATION IS BASED ON THE SURVEY PROVIDED BY MUXLOW SURVEYING IN SEPTEMBER 2021.
D	THE HORIZONTAL & VERTICAL CONTROL WERE BASED ON NAD 83 ALABAMA STATE PLANE COORDINATE SYSTEM (GEIOD 18).

LEGEND

- CONTROL POINT
- LIMITS OF CONSTRUCTION
- BID OPTION 1 LIMITS OF CONSTRUCTION

0 10' 20' 40'
SCALE: 1"=20'

TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
JENNIFER M. HAYNES
90167
LICENSED
PROFESSIONAL ENGINEER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: J. HAYNES
DRAWN BY: D. KING
CHECKED BY: A. MCCOY
SUBMITTED BY: E. OLNESS
DATE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT210201

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS Muckleshoot Group, Inc.
777 Main Street, Fort Worth, TX 76102
JACOBS No. 8720513

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
SURVEY CONTROL PLAN

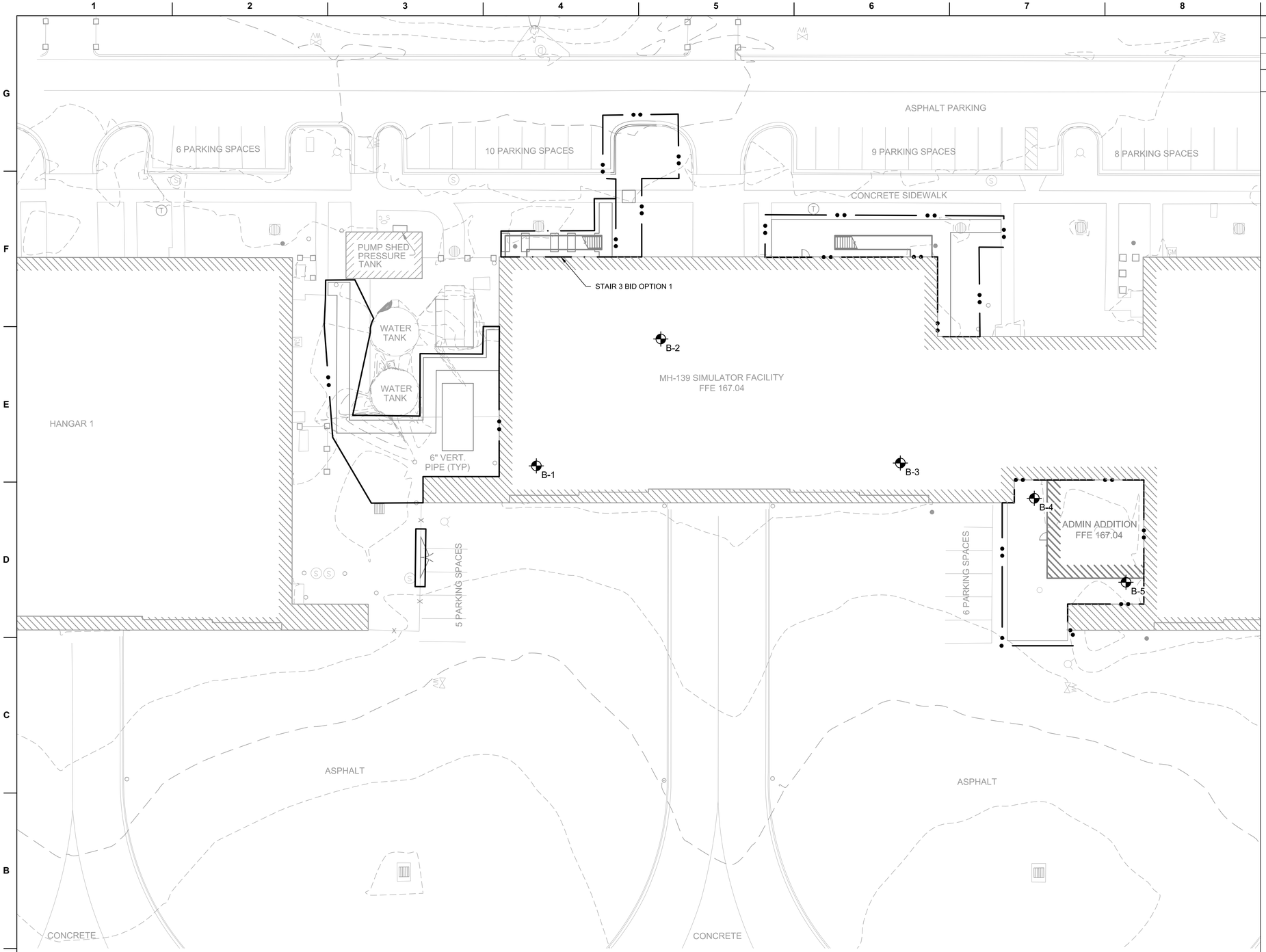
SHEET ID
B1455
V-102

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

U:\BLDG\USACE Louisville District\F8295513 - Maxwell AFB B1455 Renovation\700 Working Documents\740 Sheets\740.01 Civil\V-102.dwg, 11/16/2022 2:45 PM, King, David



A1 BORING LOCATION PLAN
SCALE 1" = 20'

GENERAL NOTES

A	REFER TO BB102 FOR BORING LOGS.
B	GEOTECHNICAL EXPLORATION IS PENDING.

LEGEND

CPT-# BORING

LIMITS OF CONSTRUCTION

BID OPTION 1 LIMITS OF CONSTRUCTION

0 10' 20' 40'
SCALE: 1"=20'

TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
JENNIFER M. HAYNES
90167
LICENSED
PROFESSIONAL ENGINEER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXRT219201

DESIGNED BY: J. HAYNES
DRAWN BY: D. KING
CHECKED BY: A. MCCOY
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS Global Buildings Group, Inc.
777 Main Street, Fort Worth, TX 76102
JACOBS File No. 40256513

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395

BORING LOCATION PLAN

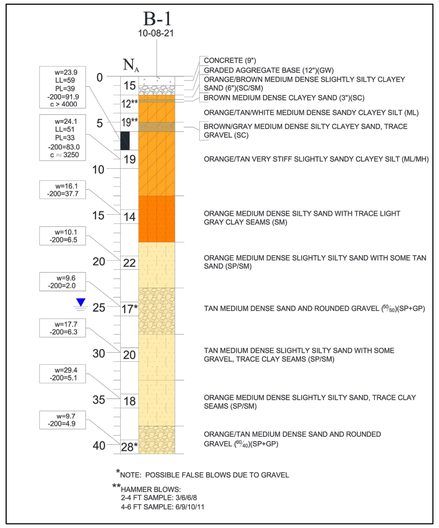
SHEET ID
B1455
BB101

W912QR23R0003_Plans-0000

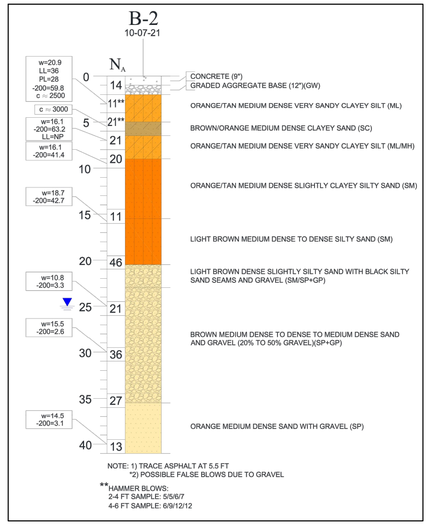
CERTIFIED FINAL DESIGN

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

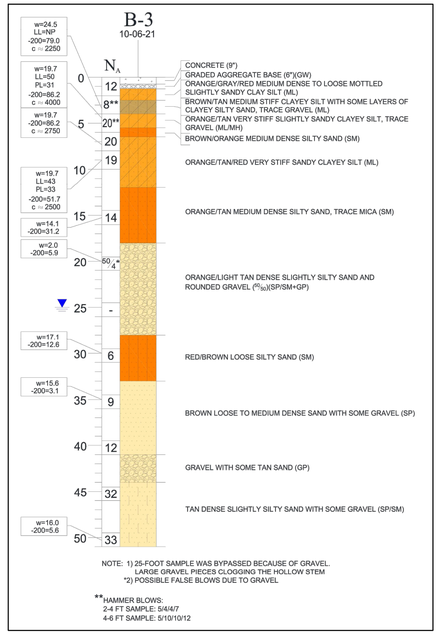
U:\BLDG\USACE Louisville District\F8256513 - Maxwell AFB B1455 Renovation\700 Working Documents\740 Sheets\740.01 Civil\BB101.dwg, 11/16/2022 2:45 PM, King, David



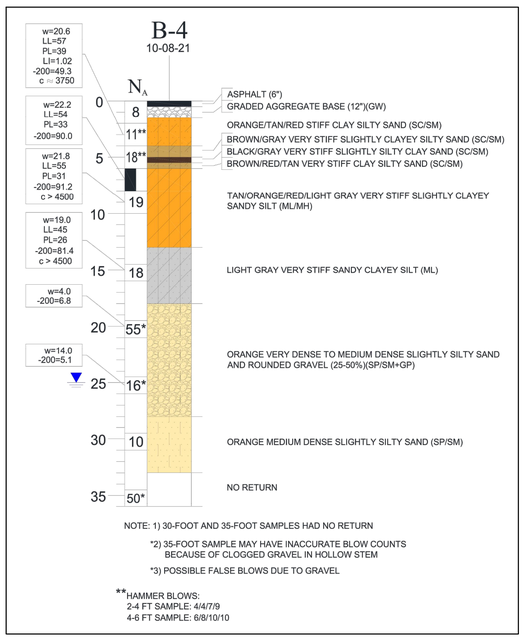
E1 BORING LOG - B-1
SCALE NTS



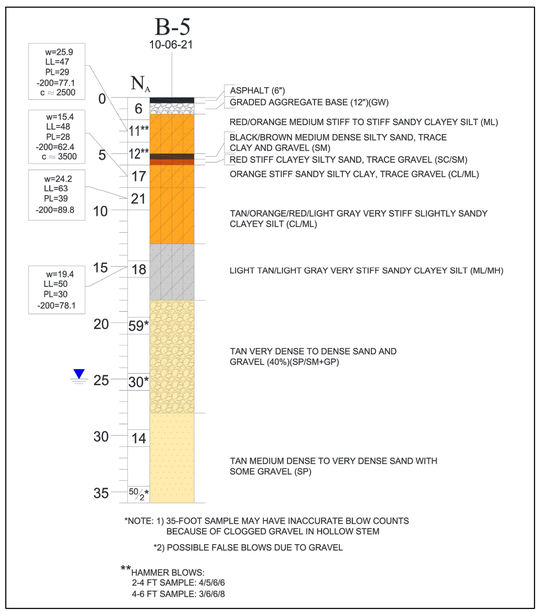
E4 BORING LOG - B-2
SCALE NTS



D7 BORING LOG - B-3
SCALE NTS



A1 BORING LOG - B-4
SCALE NTS



A4 BORING LOG - B-5
SCALE NTS

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
JENNIFER M. HAYNES
90167
LICENSED
PROFESSIONAL ENGINEER
SURVEYED
DATE 23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:.
FILE NAME: SHT12 10201

DESIGNED BY: LI HAYNES
DRAWN BY: D. KING
CHECKED BY: A. MCCOY
SUBMITTED BY: E. OLMESS
ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS No: F2R395.13

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395

BORING LOGS

SHEET ID
B1455
BB102

W912QR23R0003_Plans-0000

U:\BLDG\USACE Louisville District\F8Z395513 - Maxwell AFB B1455 Renovation\700 Working Documents\740 Sheets\740.01 Civil\BB102.dwg, 11/16/2022 2:45 PM, King, David

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN

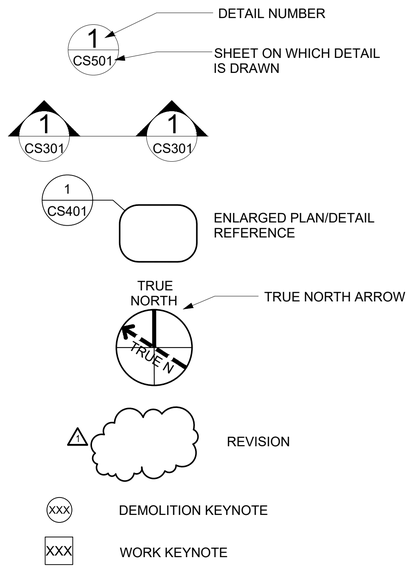
ABBREVIATIONS

&	AND
@	AT
#	NUMBER
Ø	DIAMETER
A	
A/E	ARCHITECT/ENGINEER
ABA	ARCHITECTURAL BARRIERS ACT
ABAN	ABANDON
ACM	ASBESTOS CONTAINING MATERIAL
AD	AREA DRAIN
ADA	AMERICANS WITH DISABILITIES ACT
ALT	ALTERNATE
AOA	AIRFIELD OPERATIONS AREA
APPROX	APPROXIMATE
AR	AS REQUIRED
ARCH	ARCHITECT
ASPH	ASPHALT
ASSY	ASSEMBLY
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
AWWA	AMERICAN WATER WORKS ASSOCIATION
B	
B-B	BACK TO BACK
BC	BACK OF CURB
BEG	BEGIN
BFP	BACKFLOW PREVENTER
BLDG	BUILDING
BM	BENCHMARK
BRG	BEARING
C	
C-C,C/C,CC	CENTER TO CENTER
CB	CURB
CD	CONSTRUCTION DOCUMENTS
C&G	CURB AND GUTTER
CI	CURB INLET
CIP	CAST-IN-PLACE / CAST IRON PIPE
CL	CENTERLINE / CLASS
CLR	CLEAR
CNR	CORNER
CO	CLEANOUT
COL	COLUMN
COMM	COMMUNICATION
COMPR	COMPRESSOR
CONC	CONCRETE
CONN	CONNECT
CONST	CONSTRUCT
CONT	CONTINUE
CONTR	CONTRACTOR
COR	CONTRACTING OFFICER REPRESENTATIVE, CORNER
CSB	CONCRETE SLAB CONCRETE SPLASH BLOCK
CTB	CEMENT TREATED BASE
CTR	CENTER
CTRL	CONTROL
D	
DA	DRAINAGE AREA
DCD	DOUBLE CHECK DETECTOR
DEF	DEFLECTION / DEFORM
DEMO	DEMOLITION
DET	DETAIL
DI	DUCTILE IRON
DIA	DIAMETER
DIM	DIMENSION
DIST	DISTANCE
DR	DRIVE
DS	DOWNSPOUT
DW	DOMESTIC WATER
E	
E EA	EAST (FOR COORDINATES) EACH
EF	EACH FACE
EG	EXISTING GRADE
EJ	EXPANSION JOINT
EL	ELEVATION
ELEC	ELECTRIC
EP	EDGE OF PAVEMENT
EQ	EQUAL
EW	EACH WAY
EWEF	EACH WAY EACH FACE
EX	EXISTING
EXIST	EXISTING
EXP	EXPANSION
F	
F	FIRE WATER
FB	FACE OF BUILDING
FDC	FIRE DEPARTMENT CONNECTION
FNC	FENCE
FND	FOUNDATION
FF	FINISHED FLOOR
FG	FINISHED GRADE
FH	FIRE HYDRANT
FL	FLOW LINE
FLG	FLANGE
FM	FORCE MAIN
FOC	FRONT OF CURB
FP	FIRE PROTECTION
FS	FINISHED SURFACE
FT	FEET
G	
G	GAS
GAL	GALLON
GALV	GALVANIZED
GDR	GUARDRAIL
GEN	GENERAL
GND	GROUND
GR	GRADE
GV	GATE VALVE
H	
HB	HOSE BIBB
HC	HANDICAP
HDPE	HIGH DENSITY POLYETHYLENE PIPE
HDWL	HEADWALL
HMAC	HOT MIX ASPHALT CONCRETE
HORIZ	HORIZONTAL
HR	HANDICAPPED RAMP
HSF	HIGH FLOW SILT FENCE
I	
ID	INTERNAL DIAMETER
INL	INLET
INV	INVERT
J	
JRCP	JOINT REINFORCED CONCRETE PAVEMENT
JT	JOINT
K	
K	THOUSAND
L	
L	LENGTH
LAT	LATERAL
LBP	LEAD BASED PAINT
LCP	LEAD CONTAINING PAINT
LE/FE	LOW EMITTING AND FUEL EFFICIENT
LF	LINEAR FEET
LP	LOW POINT
LS	LIME-STABILIZED, LUMP SUM
LT	LEFT
M	
MAX	MAXIMUM
ME	MATCH EXISTING
MFG	MANUFACTURER
MH	MANHOLE
MIN	MINIMUM
MJ	MECHANICAL JOINT
MISC	MISCELLANEOUS
MW	MONITORING WELL
N	
N	NORTH (FOR COORDINATES)
NA	NOT APPLICABLE
NO	NUMBER
NTS	NOT TO SCALE
O	
OA	OVERALL
OC	ON CENTER
OCEW	ON CENTER EACH WAY
OD	OUTSIDE DIAMETER
OHE	OVERHEAD ELECTRIC
OHT	OVERHEAD TELEPHONE
OHW	OVERHEAD WIRE
OPP	OPPOSITE
ORBK	OFFICIAL RECORD BOOK
P	
P	PAGE
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE, PORTLAND CEMENT CONCRETE
PE	POLYETHYLENE
PEJ	PREMOLDED EXPANSION JOINT
PERIM	PERIMETER
PERP	PERPENDICULAR
PI	POINT OF INTERSECTION
PIV	POST INDICATOR VALVE
PL	PROPERTY LINE
POV	PRIVATELY OWNED VEHICLE
PP	POWER POLE
PR	PIPE RAIL
PRCST	PRECAST
PROJ	PROJECT
PROP	PROPOSED
PSI	POUNDS PER SQ. IN.
PT	POINT OF TANGENCY
PVC	POINT OF VERTICAL CURVATURE, POLYVINYL CHLORIDE PIPE
PVI	POINT OF VERTICAL INTERSECTION
PVMT	PAVEMENT
PVT	POINT OF VERTICAL TANGENCY
R	
R/RAD	RADIUS
RC	REINFORCED CONCRETE
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
RDC	REDUCER
REBAR	REINFORCING STEEL BARS
RE	REFERENCE
RED	REDUCER
REINF	REINFORCE
REM	REMOVABLE
REP	REPAIR
REPL	REPLACE
REQD	REQUIRED
RET	RETAINING
ROW	RIGHT OF WAY
RP	RADIUS POINT
RPZ	REDUCED PRESSURE ZONE
RT	RIGHT
RW	RETAINING WALL
S	
S	SOUTH (FOR COORDINATES)
SAN	SANITARY
SB	SPLASH BLOCK
SCH	SCHEDULE
SD	STORM DRAIN
SEP	SEPARATE
SF	SQUARE FOOT (FEET)
SG	STATIC GROUND
SHT	SHEET
SIM	SIMILAR
SLNT	SEALANT
SP	SPACE(S), SUMP PIT
SPEC	SPECIFICATION
SQ	SQUARE
SS	SANITARY SEWER
ST	STREET
STA	STATION
STND	STANDARD
STL	STEEL
STOR	STORAGE
STRUCT	STRUCTURAL
SUL	SAFE UPLAND LINE
SVC	SERVICE
SW	SIDEWALK
SYM	SYMBOL
T	
T	TANGENT
T/G	TOP OF GRATE
T/PIPE	TOP OF PIPE
TBM	TEMPORARY BENCHMARK
TC	TOP OF CURB
TEL	TELEPHONE
TEMP	TEMPORARY
THK	THICKNESS
TOC	TABLE OF CONTENT
TOW	TOP OF WALL
TP	TOP OF PAVEMENT
TS	TOP OF SIDEWALK
TYP	TYPICAL
U	
UC	UNDERGROUND CONDUIT
UG	UNDERGROUND
UGC	UNDERGROUND CABLE
UGE	UNDERGROUND ELECTRIC
UGT	UNDERGROUND TELEPHONE
UON	UNLESS OTHERWISE NOTED
UPS	UNINTERRUPTIBLE POWER SUPPLY
V	
VAR	VARIES
VC	VERTICAL CURVE
VERT	VERTICAL
VIF	VERIFY IN FIELD
VOL	VOLUME
VRFY	VERIFY
W	
W	WATER, WEST
W/	WITH
W/O	WITHOUT
WL	WATER LINE
WT	WEIGHT
WV	WATER VALVE
WWF	WELDED WIRE FABRIC
X	
XFMR	TRANSFORMER

CIVIL SYMBOLS

NEW		EXISTING
	BUILDING	
REFER TO PLANS	CONCRETE SLAB/PAD	
REFER TO PLANS	ASPHALT CONCRETE	
10	CONTOUR LINE	10
x 164.992	SPOT ELEVATION	x 164.992
	WATER LINE	W_x
	WATER VALVE	WV
	FIRE HYDRANT	
SS	SEWER LINE	SS_x
(S)	SEWER MANHOLE	(S)
(CO)	STORM DRAIN CLEAN OUT	
SD	STORM DRAIN LINE	SD_x
(D)	STORM DRAIN MANHOLE	(D)
	FUEL LINE	$FUEL_x$
	ELECTRIC DUCT	E_x
	COMMUNICATIONS MANHOLE	(T)
	STORM DRAIN INLET	

REFERENCING SYSTEM



GENERAL NOTES

A. FIELD VERIFY ALL EXISTING SITE CONDITIONS PRIOR TO THE COMMENCEMENT OF WORK AND REPORT ANY DISCREPANCIES TO THE CONTRACTING OFFICER. PERFORM A SITE VISIT AND BECOME FAMILIAR WITH THE SITE CONDITIONS PRIOR TO BIDDING.

B. IT IS EXPECTED THAT THE ACTUAL LOCATION OF EXISTING UTILITIES MAY VARY FROM THAT SHOWN ON THE PLANS. POTHOLE AND LOCATE ALL EXISTING UTILITIES. VARIATIONS IN LOCATION AND DEPTH MUST BE BROUGHT TO THE ATTENTION OF THE CONTRACTING OFFICER IMMEDIATELY SO THAT THE LOCATION OF UTILITIES MAY BE CHECKED WITH THE PROPOSED DESIGN. NOTIFY MAXWELL AIR FORCE BASE PRIOR TO ANY WORK COMMENCING FOR ANY EXCAVATION OR POTHOLING.

C. CONFIRM SITE FEATURES TIE INTO EXISTING SITE DEVELOPMENT, THAT PAVEMENT JOINTS MATCH CORRECTLY, AND THAT GENERAL DESIGN ELEVATIONS FOR CONSTRUCTION PROVIDE PROPER PAVEMENT AND DRAINAGE SLOPES FROM EXISTING TIE-IN POINTS. REPORT DISCREPANCIES TO THE CONTRACTING OFFICER PRIOR TO CONSTRUCTION.

D. UPON COMPLETION OF THE CONSTRUCTION PROJECT, THE PROJECT AREA MUST BE FREE OF DEBRIS AND UNUSED MATERIAL. ALL DAMAGE CAUSED BY CONSTRUCTION ACTIVITIES MUST BE RESTORED TO AN "AS GOOD" CONDITION AS DETERMINED BY THE CONTRACTING OFFICER.

E. MAINTAIN TRAFFIC (VEHICULAR AND PEDESTRIAN) ACCESS TO ALL SITE FACILITIES.

F. ALL DIMENSIONS ON PLAN, PROFILE AND DETAIL SHEETS ARE IN FEET UNLESS OTHERWISE NOTED.

GRADING NOTES

A. TOPOGRAPHIC INFORMATION IS BASED ON THE SURVEY PROVIDED BY MUXLOW SURVEYING IN AUGUST 2021.

B. CONSTRUCTION STAKING MUST BE PERFORMED BY A LICENSED SURVEYOR. STAKING MUST BE REVIEWED BY CONTRACTING OFFICER FOR CONFIRMATION OF DESIGN PRIOR TO CONSTRUCTION.

C. ALL GRADES BETWEEN SPOT ELEVATIONS MUST HAVE UNIFORM SLOPE UNLESS OTHERWISE INDICATED. MAINTAIN POSITIVE DRAINAGE AWAY FROM ALL BUILDING WALLS AND DOORS.

D. SAFE CONSTRUCTION PRACTICES MUST BE UTILIZED AT ALL TIMES. ADEQUATE SHORING, BRACING, TIES, AND SUPPORTS MUST BE USED TO PROVIDE PROPER TEMPORARY INTEGRITY DURING ALL PHASES OF CONSTRUCTION.

E. LOCATIONS OF UNDERGROUND UTILITIES ARE FROM RECORD INFORMATION AND AS-BUILT DRAWINGS AND SURVEY. FIELD-VERIFY ALL LOCATIONS PRIOR TO BEGINNING CONSTRUCTION.

F. ALL DITCHES, SWALES, GUTTERS, ETC. SHOULD BE CONSIDERED ACTIVE STORM CONVEYANCES UNLESS OTHERWISE INDICATED. ADDRESS STORM WATER DRAINAGE AND DEWATERING OF WORK AREAS DURING CONSTRUCTION. A DEWATERING PLAN IS REQUIRED FOR THE PROJECT AND A DEWATERING PERMIT IS REQUIRED PRIOR TO CONSTRUCTION.

G. DURING WET WEATHER PERIODS, SEQUENCE CONSTRUCTION IN A MANNER THAT MINIMIZES IMPACT ON OPEN EARTHWORK AND COMPACTION OPERATIONS.

H. REPLACE SOD IN DISTURBED AREAS PER THE SPECIFICATIONS.

UTILITY NOTES

A. LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE PLOTTED FROM RECORD DRAWINGS AND INTERPOLATION OF PHYSICAL EVIDENCE ON THE SITE AND ARE SUBJECT TO FIELD VERIFICATION. SEE GENERAL NOTES A AND B.

B. ALL LOCATIONS FOR WORK MUST BE CHECKED AND COORDINATED WITH EXISTING CONDITIONS IN THE FIELD BEFORE COMMENCING CONSTRUCTION UNDER THIS SECTION OR ANY OTHER SECTION.

C. THE WORKING DRAWINGS ARE GENERALLY DIAGRAMMATIC. THEY DO NOT SHOW EVERY OFFSET, BEND, OR ELBOW REQUIRED FOR INSTALLATION IN THE SPACE PROVIDED. THEY DO NOT SHOW EVERY DIMENSION, COMPONENT PIECE, OR FITTING REQUIRED TO COMPLETE THE PROJECT. PROVIDE A COMPLETE AND WORKING SYSTEM.

D. COORDINATE A UTILITY LOCATE 48 HOURS PRIOR TO BEGINNING ANY UTILITY CONSTRUCTION FOR LOCATION MARK-UP OF ALL EXISTING UTILITIES. ALSO COORDINATE THE UTILITY LOCATE WITH MAXWELL AIR FORCE BASE PERSONNEL FOR ALL UTILITY WORK. INFORM CONTRACTING OFFICER IMMEDIATELY IF LOCATE INDICATES THAT EXISTING TYPE AND LOCATION OF EXISTING UTILITIES ARE DIFFERENT THAN SHOWN ON DRAWINGS.

E. LOCATE, PROTECT, AND AVOID DISRUPTION OF ALL ABOVE AND BELOW GRADE UTILITIES DURING CONSTRUCTION.

F. ALL EXISTING UTILITIES AND TIE-IN POINTS SHOULD BE CONSIDERED ACTIVE UNLESS OTHERWISE NOTED.

G. CENTER FULL PIPE SECTION OF EACH TYPE AT ALL UTILITY CROSSINGS.

PHASING NOTES

A. EMERGENCY VEHICLE ACCESS MUST BE MAINTAINED AT ALL TIMES.

BENCHMARKS

THE HORIZONTAL AND VERTICAL CONTROL IS BASED ON NAD '83 ALABAMA STATE PLANE COORDINATE SYSTEM (GEIOD 18).

CONTROL POINT 4 (PK NAIL IN ASPHALT)
N = 685373.14
E = 493275.51
ELEV = 165.82'

CONTROL POINT 5 (PK NAIL IN ASPHALT)
N = 685530.44
E = 493183.15
ELEV = 165.00'

CONTROL POINT 525 (PK NAIL IN ASPHALT)
N = 685730.51
E = 493337.64
ELEV = 165.01'

CONTROL POINT 526 (PK NAIL IN ASPHALT)
N = 685478.34
E = 493490.05
ELEV = 165.88'

US Army Corps of Engineers
Louisville District ®

JENNIFER M. HAYNES
90167
LICENSED
PROFESSIONAL ENGINEER
STATE OF TEXAS
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: 496395_B1455_C-001.dgn
ANSI D 22x34 SHEET 2 OF 201

DESIGNED BY: L. HAYNES
DRAWN BY: D. KING
CHECKED BY: A. MCCOY
SUBMITTED BY: E. OLMESS
QC BY: J. MCCOY

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
Jacobs Muller Kleinhenz Group Inc.
777 Main Street, Fort Worth, TX 76102
JACOBS No. F2R095213

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395

GENERAL NOTES

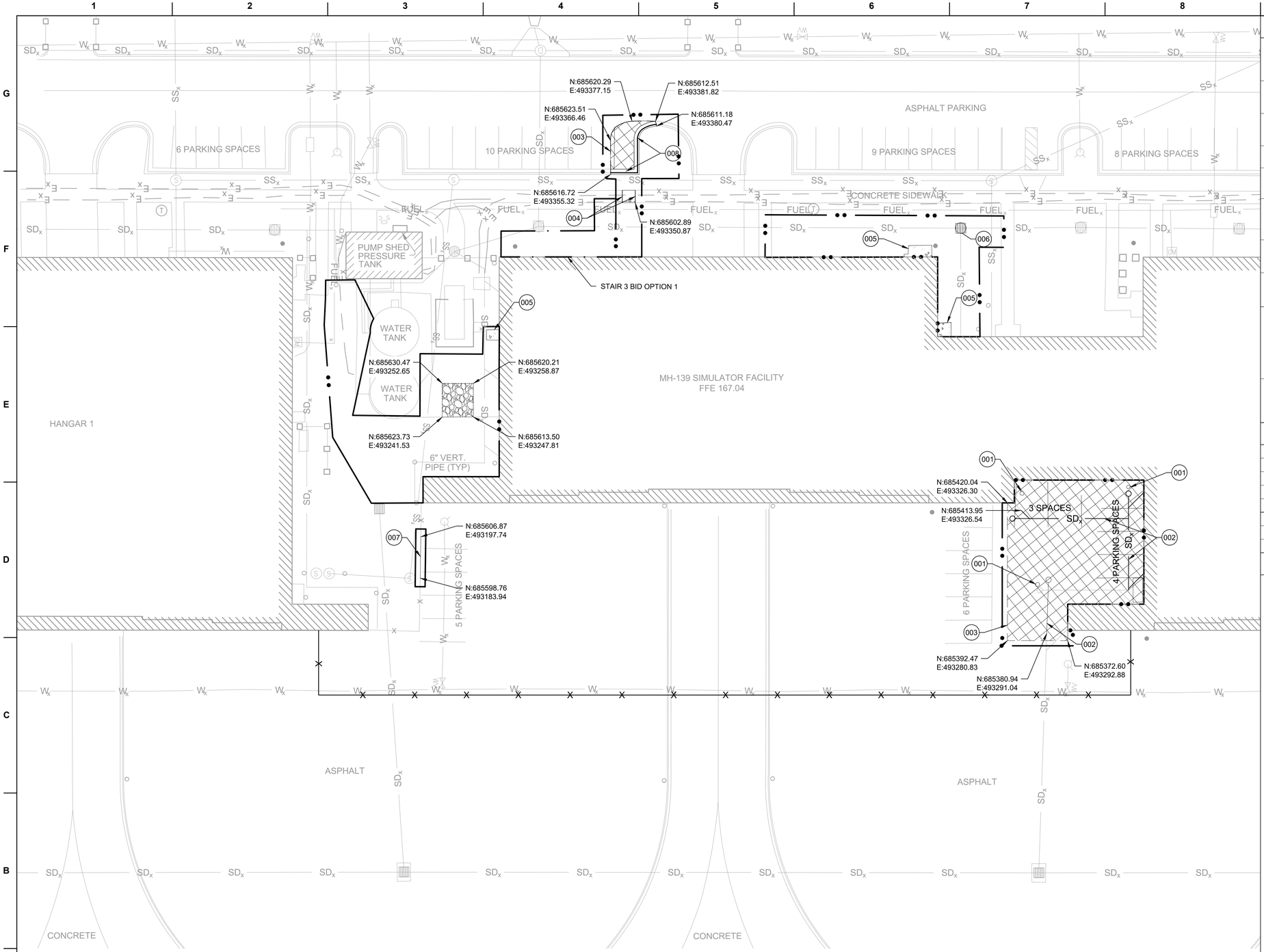
SHEET ID
B1455
C-001

W912QR23R0003_Plans-0000

U:\BLD\GI\SACE Louisville District\FB2\95213 - Maxwell AFB B1455 Renovation\700 Working Documents\740 Sheets\740.01 Civil\C-001.dwg, 11/16/2022 2:46 PM, King, David

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN



A1 DEMOLITION PLAN
SCALE 1" = 20'

GENERAL NOTES

A	ALL ITEMS NOT SHOWN TO BE REMOVED MUST BE PROTECTED FROM DAMAGE DURING DEMOLITION. ITEMS DAMAGED MUST BE RESTORED TO AN "AS GOOD" CONDITION AT THE CONTRACTOR'S EXPENSE.
B	ALL EXISTING STORM PIPE LOCATIONS MUST BE FIELD VERIFIED AND REPORTED TO CONTRACTING OFFICER BEFORE REMOVAL.
C	A CLEAN SAWCUT MUST BE PROVIDED IN AREAS WHERE NEW PAVEMENT, SIDEWALK, OR CURB AND GUTTER MEETS EXISTING.
D	A CLEAN SAWCUT MUST BE PROVIDED IN THE NEAREST JOINT FOR ALL SIDEWALK REMOVAL.
E	PROTECT IN PLACE ALL UTILITIES TO REMAIN IN SERVICE DURING DEMOLITION AND ONGOING CONSTRUCTION OPERATIONS.
F	MAINTAIN ALL EXCAVATIONS, STOCKPILES, ACCESS ROADS, WASTE AREAS, AND ALL OTHER WORK AREAS FREE FROM EXCESS DUST TO SUCH A REASONABLE DEGREE AS TO AVOID CAUSING A HAZARD OR NUISANCE.
G	IF ANY CONFLICT OR DISCREPANCY FROM THE PLANS IS FOUND, NOTIFY THE CONTRACTING OFFICER BEFORE CONTINUING ANY FURTHER WITH CONSTRUCTION.
H	CONTRACTOR IS RESPONSIBLE FOR MAINTAINING POSITIVE DRAINAGE THROUGHOUT THE SITE DURING ALL CONSTRUCTION ACTIVITIES.
J	IF ANY PREVIOUSLY UNIDENTIFIED SUSPECT BUILDING MATERIAL IS DISCOVERED DURING DEMOLITION ACTIVITIES, STOP WORK IMMEDIATELY AND NOTIFY THE CONTRACTOR OFFICE SO THAT THE MATERIAL CAN BE ASSESSED FOR THE PRESENCE OF ASBESTOS. FOR ADDITIONAL INFORMATION ON ASBESTOS REMEDIATION, REFER TO SPECIFICATION 02 82 00.
K	ONCE THE EXISTING CONCRETE OR ASPHALT IS REMOVED THE UNDERLYING SOILS WILL NEED TO BE PROTECTED FROM GETTING WET FROM RAINFALL OR OTHER SOURCES.

KEYNOTES

001	6" VERTICAL PIPE TO BE REMOVED
002	10" STORM DRAIN LINE TO BE REMOVED
003	FULL-DEPTH SAWCUT
004	FULL-DEPTH SAWCUT AT NEAREST JOINT
005	CONCRETE STOOP TO BE REMOVED
006	STORM DRAIN INLET TO BE REMOVED
007	CHAIN LINK FENCE TO BE REMOVED
008	CONCRETE CURB & GUTTER TO BE REMOVED

LEGEND

- LIMITS OF CONSTRUCTION
- BID OPTION 1 LIMITS OF CONSTRUCTION
- FULL-DEPTH SAWCUT
- ASPHALT PAVEMENT TO BE REMOVED
- GRAVEL TO BE REMOVED
- CONCRETE SIDEWALK TO BE REMOVED
- EXISTING CHAIN LINK FENCE
- CONSTRUCTION FENCE
- SD_x STORM DRAIN LINE TO BE REMOVED

0 10' 20' 40'
SCALE: 1"=20'

TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
JENNIFER M. HAYNES
90167
LICENSED
PROFESSIONAL ENGINEER
DATE: 23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT21020I1

DESIGNED BY: J. HAYNES
DRAWN BY: D. KING
CHECKED BY: A. MCCOY
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS Bechtel Ennead Group JHC
777 Main Street, Fort Worth, TX 76102
JACOBS Project No. 320250.13

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395

DEMOLITION PLAN

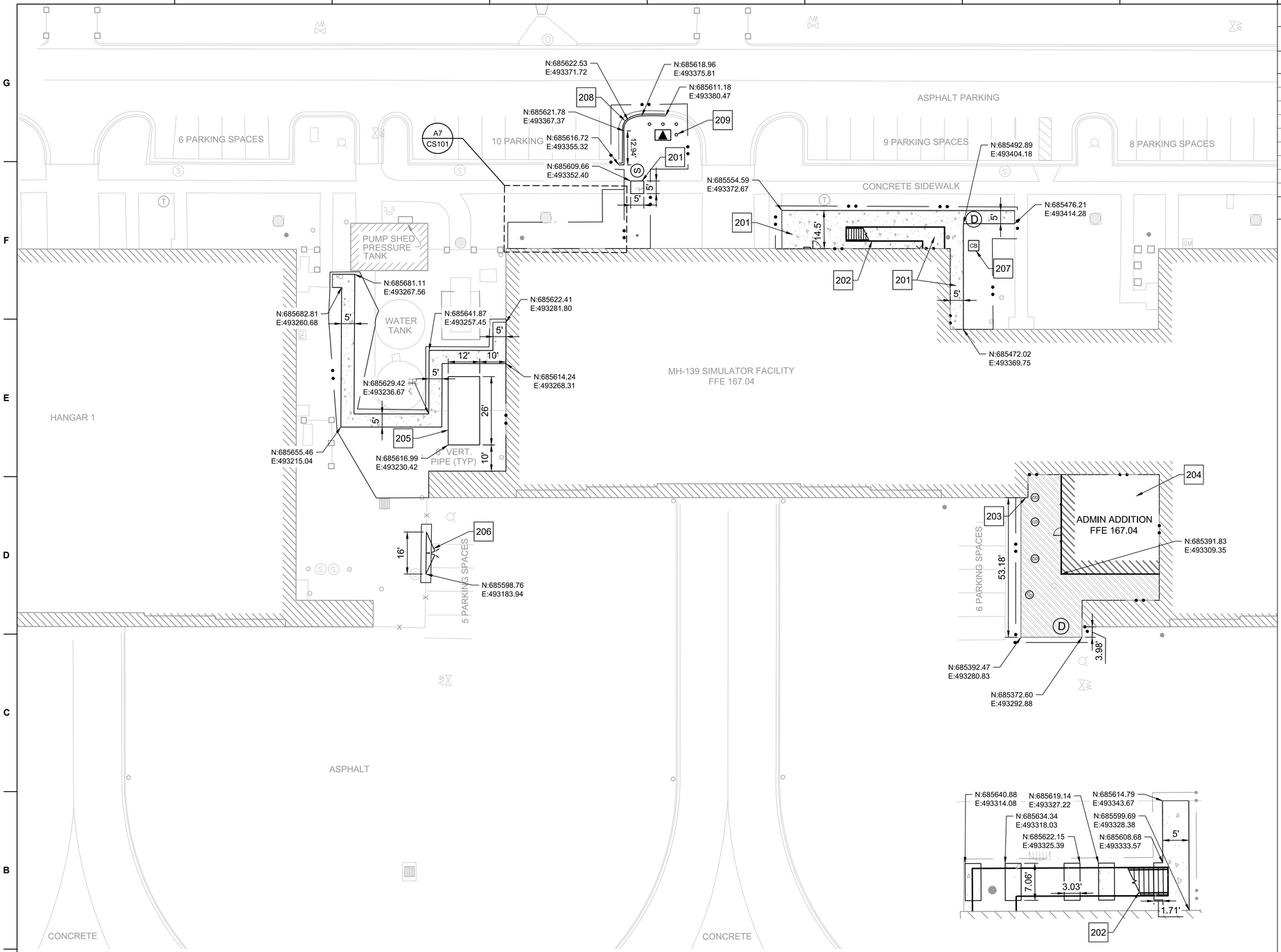
SHEET ID
B1455
CD101

W912QR23R0003_Plans-0000

U:\BLDG\USACE Louisville District\F8295513 - Maxwell AFB B1455 Renovation\700 Working Documents\740 Sheets\740.01 Civil\CD101.dwg, 11/16/2022 2:46 PM, King, David

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN



A1 SITE & PAVING PLAN
SCALE 1" = 20'

A7 STAIR 3 BID OPTION 1
SCALE 1" = 10'

GENERAL NOTES

A	ALL DIMENSIONS ARE TO EDGE OF PAVEMENT UNLESS OTHERWISE NOTED

KEYNOTES

201	CONCRETE SIDEWALK, RE: C8/CS501
202	STAIRWAY ADDITION, RE: A1/AE103
203	ASPHALT PAVEMENT, RE: A7/CS501
204	ADMIN ADDITION, RE: A1/AE103
205	CHILLER PAD, RE: A1/SB102
206	DOUBLE SWING GATE, RE: E6/CS501
207	STORM DRAIN INLET, RE: A7/CG503
208	CONCRETE CURB & GUTTER, RE: C5/CS501
209	BOLLARD, RE: C3/CS501

LEGEND

- BUILDING
- CONCRETE SIDEWALK, RE: C8/CS501
- ASPHALT PAVEMENT, RE: A7/CS501
- EXISTING WATER VALVE
- EXISTING FIRE HYDRANT
- EXISTING SANITARY SEWER MANHOLE
- EXISTING STORM DRAIN INLET
- EXISTING COMMUNICATION MANHOLE
- EXISTING STORM DRAIN MANHOLE
- STORM DRAIN CLEANOUT, RE: E1/CG502
- STORM DRAIN MANHOLE, RE: D7/CG503
- SANITARY SEWER MANHOLE, RE: A8/CG502
- AREA INLET, RE: A7/CG503
- ELECTRIC TRANSFORMER
- EXISTING CHAIN LINK FENCE
- LIMITS OF CONSTRUCTION
- BID OPTION 1 LIMITS OF CONSTRUCTION

0 10' 20' 40'
SCALE: 1"=20'

TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
JENNIFER M. HAYNES
90167
LICENSED
PROFESSIONAL ENGINEER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXKF121001

DESIGNED BY: J. HAYNES
DRAWN BY: D. KING
CHECKED BY: A. MCCOY
SUBMITTED BY: E. OLNESS
DATE: ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS No. 10295513

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395

SITE & PAVING PLAN

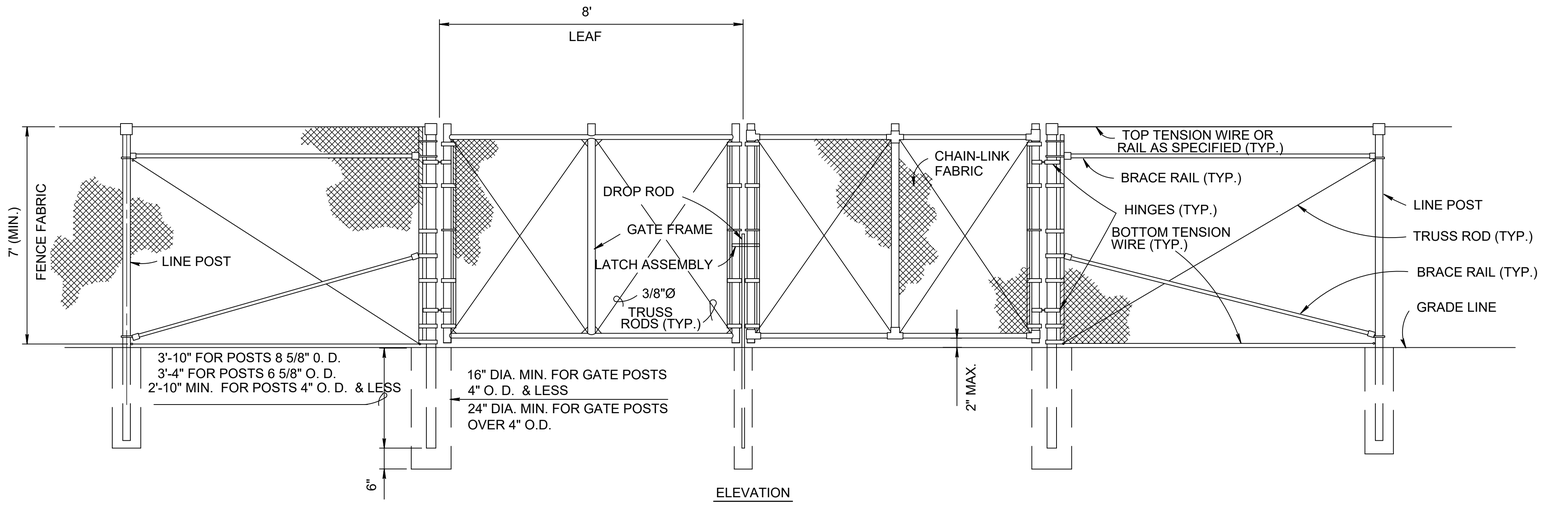
SHEET ID
B1455
CS101

W912QR23R0003_Plans-0000

U:\BLD\GI\SACE Louisville District\F8Z595513 - Maxwell AFB B1455 Renovation\700 Working Documents\740 Sheets\740.01 Civil\CS101.dwg, 11/16/2022 2:47 PM, King, David

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

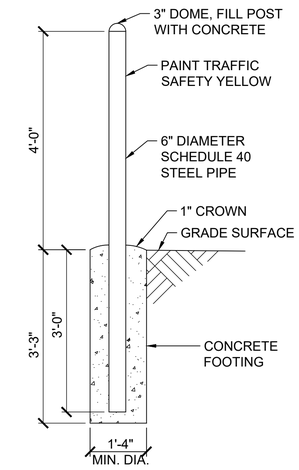
CERTIFIED FINAL DESIGN



ELEVATION

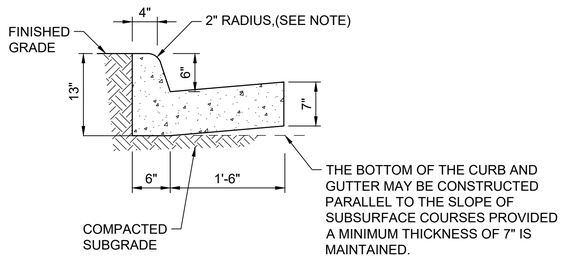
E6 DOUBLE SWING GATE (TYPE FE7 FENCE)

SCALE N.T.S.



C3 BOLLARD DETAIL

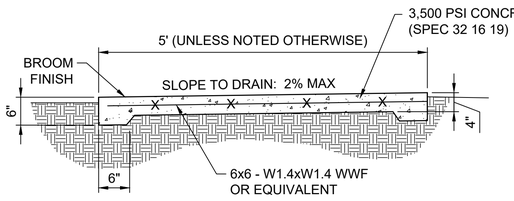
SCALE N.T.S.



NOTE: STANDARD CURB SHAPE OF THE STATE IN WHICH THE PROJECT IS LOCATED MAY BE SUBSTITUTED.

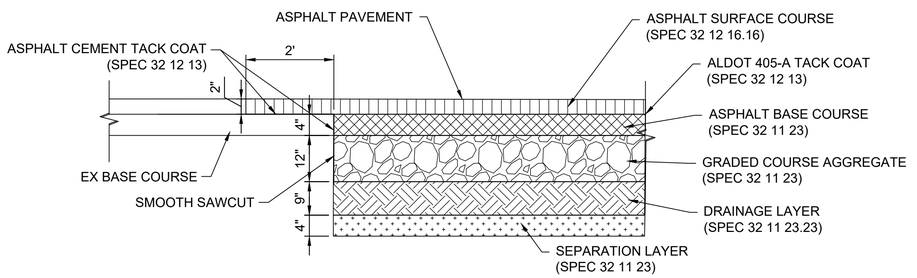
C5 CONCRETE CURB & GUTTER

SCALE N.T.S.



C8 CONCRETE SIDEWALK SECTION

SCALE N.T.S.



A7 ASPHALT PAVEMENT SECTION

SCALE N.T.S.

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
JENNIFER M. HAYNES
90167
LICENSED
PROFESSIONAL ENGINEER
SIGNED 23 NOV 2022
TEXAS REGISTERED
ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY:	J. HAYNES
DRAWN BY:	D. KING
CHECKED BY:	A. MCCOY
SUBMITTED BY:	E. OLNESS
SPEC WRITER:	
ANSI D 22x34	
ISSUE DATE:	23 NOVEMBER 2022
SOLICITATION NO.:	
CONTRACT NO.:	
DRAWING CODE.:	
FILE NAME:	SXHT2119Z01

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS Global Buildings Group Inc.
777 Main Street, Fort Worth, TX 76102
JACOBS Reg. # F2966

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395

SITE DETAILS

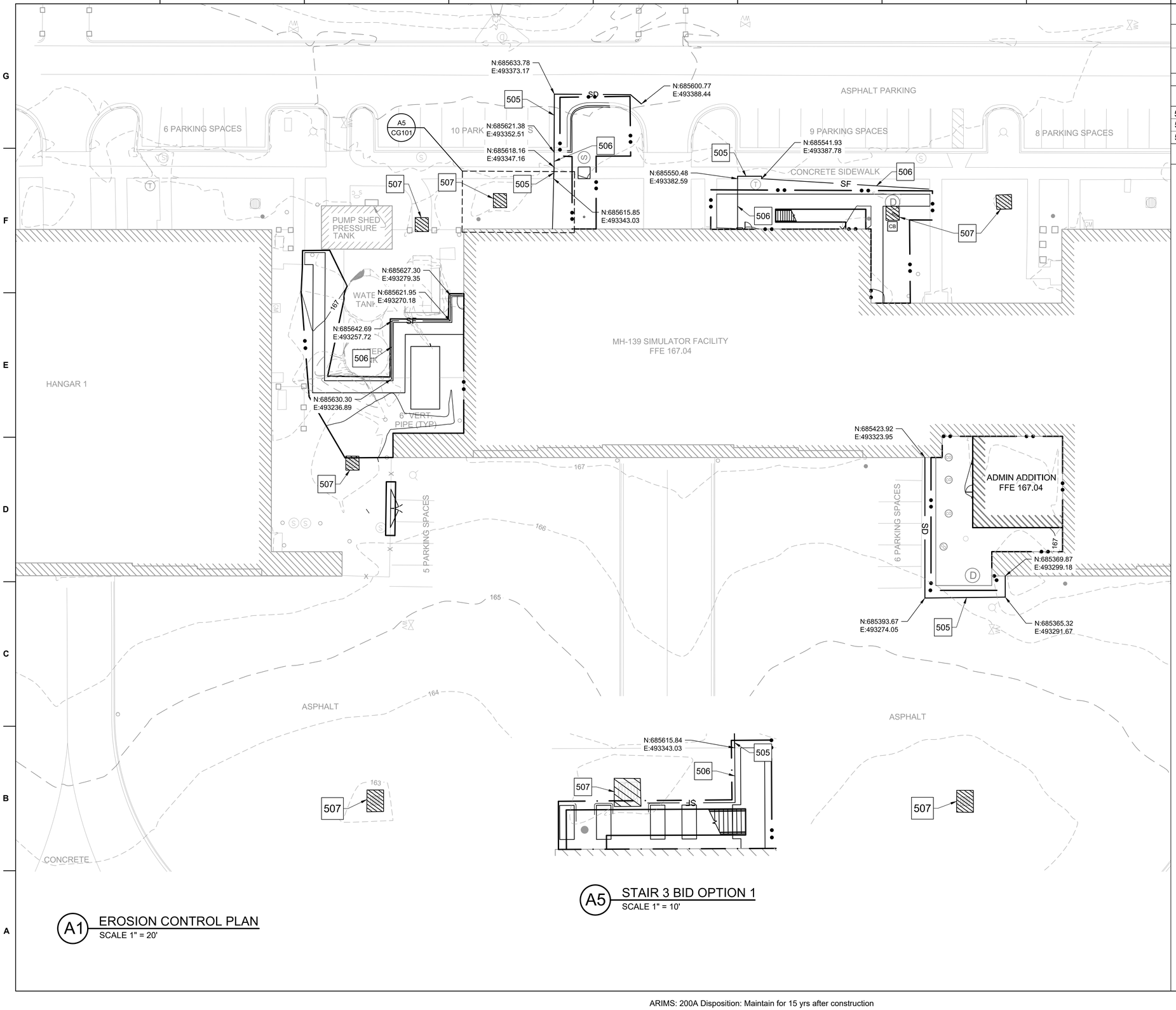
SHEET ID
B1455
CS501

W912QR23R0003_Plans-0000

U:\BLDG\USACE Louisville District\F8295513 - Maxwell AFB B1455 Renovation\700 Working Documents\740 Sheets\740.01 Civil\CS501.dwg, 11/16/2022 2:47 PM, King, David

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN



A1 EROSION CONTROL PLAN
SCALE 1" = 20'

A5 STAIR 3 BID OPTION 1
SCALE 1" = 10'

0 10' 20' 40'
SCALE: 1"=20'

TRUE N

GENERAL NOTES

A	REFER TO SHEET CG102 FOR GRADING, DRAINAGE, AND UTILITY PLAN.
B	REFER TO SHEET CG501 FOR EROSION CONTROL DETAILS.
C	SOD ALL DISTURBED AREAS PER SPECIFICATION 32 92 23

KEYNOTES

505	SILT DIKE, RE: A5/CG501
506	SILT FENCE, RE: D2/CG501
507	INLET PROTECTION, RE: D8/CG501

LEGEND

- LIMITS OF CONSTRUCTION
- BID OPTION 1 LIMITS OF CONSTRUCTION
- 167 MINOR CONTOUR
- 165 EXISTING MAJOR CONTOUR
- 164 EXISTING MINOR CONTOUR
- SF SILT FENCE, RE: D2/CG501
- SD SILT DIKE, RE: A5/CG501
- INLET PROTECTION, RE: D8/CG501

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
JENNIFER M. HAYNES
90167
LICENSED
PROFESSIONAL ENGINEER
SIGNED 23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: J. HAYNES
DRAWN BY: D. KING
CHECKED BY: A. MCCOY
SUBMITTED BY: E. OLMESS
QC BY:
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT210201
ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS Engineering Group Inc.
777 Main Street, Fort Worth, TX 76102
ARCSB No. F2966-03

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395

EROSION CONTROL PLAN

SHEET ID
B1455
CG101

W912QR23R0003_Plans-0000

U:\BLDG\USACE Louisville District\F8Z95513 - Maxwell AFB B1455 Renovation\700 Working Documents\740 Sheets\740.01 Civil\CG101.dwg, 11/16/2022 2:48 PM, King, David

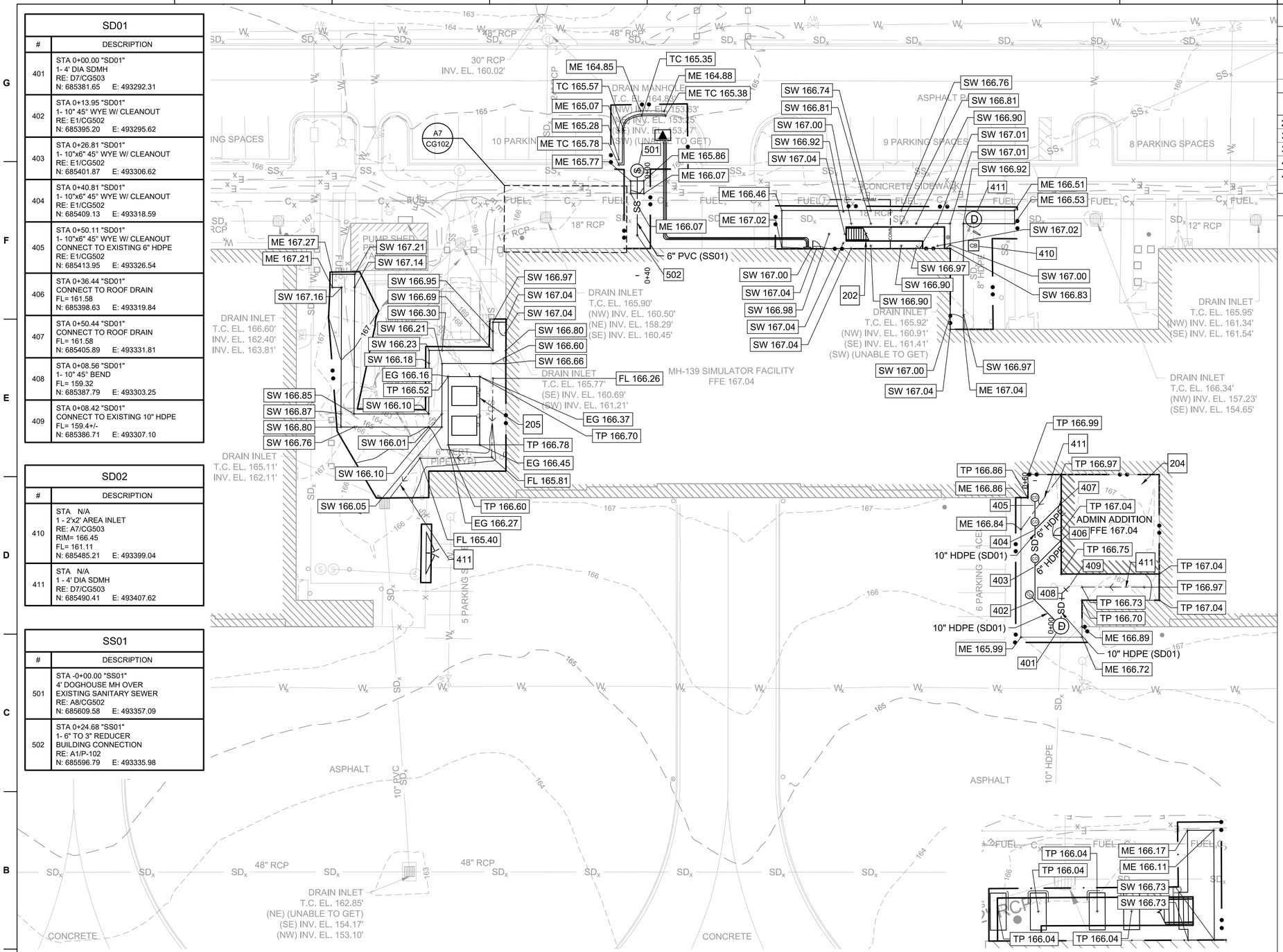
ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN

SD01	
#	DESCRIPTION
401	STA 0+00.00 "SD01" 1- 4' DIA SDMH RE: D7/CG503 N: 685381.65 E: 493292.31
402	STA 0+13.95 "SD01" 1- 10" 45° WYE W/ CLEANOUT RE: E1/CG502 N: 685395.20 E: 493295.62
403	STA 0+26.81 "SD01" 1- 10"x6" 45° WYE W/ CLEANOUT RE: E1/CG502 N: 685401.87 E: 493306.62
404	STA 0+40.81 "SD01" 1- 10"x6" 45° WYE W/ CLEANOUT RE: E1/CG502 N: 685409.13 E: 493318.59
405	STA 0+50.11 "SD01" 1- 10"x6" 45° WYE W/ CLEANOUT CONNECT TO EXISTING 6" HDPE RE: E1/CG502 N: 685413.95 E: 493326.54
406	STA 0+36.44 "SD01" CONNECT TO ROOF DRAIN FL= 161.58 N: 685398.63 E: 493319.84
407	STA 0+50.44 "SD01" CONNECT TO ROOF DRAIN FL= 161.58 N: 685405.89 E: 493331.81
408	STA 0+08.56 "SD01" 1- 10" 45° BEND FL= 159.32 N: 685387.79 E: 493303.25
409	STA 0+08.42 "SD01" CONNECT TO EXISTING 10" HDPE FL= 159.4+/- N: 685386.71 E: 493307.10

SD02	
#	DESCRIPTION
410	STA N/A 1 - 2'x2' AREA INLET RE: A7/CG503 RIM= 166.45 FL= 161.11 N: 685485.21 E: 493399.04
411	STA N/A 1 - 4' DIA SDMH RE: D7/CG503 N: 685490.41 E: 493407.62

SS01	
#	DESCRIPTION
501	STA -0+00.00 "SS01" 4' DOGHOUSE MH OVER EXISTING SANITARY SEWER RE: A8/CG502 N: 685609.58 E: 493357.09
502	STA 0+24.68 "SS01" 1- 6" TO 3" REDUCER BUILDING CONNECTION RE: A1/P-102 N: 685596.79 E: 493335.98



A1 GRADING, DRAINAGE & UTILITY PLAN
SCALE: 1"=20'

A7 STAIR 3 BID OPTION 1
SCALE 1" = 10'

GENERAL NOTES

A	REFER TO SHEET CG201 FOR STORM DRAIN AND SANITARY SEWER PROFILES.
B	REFER TO SHEETS CG502 FOR GRADING, DRAINAGE AND UTILITY DETAILS.
C	REFER TO STRUCTURE TABLES THIS SHEET

KEYNOTES

202	NEW STAIRWAY ADDITION, RE: AE103
204	NEW ADMIN ADDITION, RE: AE103
205	CHILLER PAD, RE: SB102
411	VALLEY
412	ADJUST EXISTING MH COVER TO MATCH SIDEWALK ELEVATION

LEGEND

- LIMITS OF CONSTRUCTION
- BID OPTION 1 LIMITS OF CONSTRUCTION
- MINOR CONTOUR
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- VALLEY
- SD — STORM DRAIN LINE
- SS — SANITARY SEWER LINE
- COMM — UNDERGROUND COMM. LINE
- SD_X — EXISTING STORM DRAIN LINE
- W_X — EXISTING WATER LINE
- SS_X — EXISTING SANITARY SEWER LINE
- $FUEL_X$ — EXISTING FUEL LINE
- E_X — EXISTING UNDERGROUND ELECTRICAL LINE
- C_X — EXISTING UNDERGROUND COMM. LINE
- CO — STORM DRAIN CLEANOUT, RE: E1/CG502
- D — STORM DRAIN MANHOLE, RE: D7/CG503
- CB — AREA INLET, RE: A7/CG503
- S — SANITARY SEWER MANHOLE, RE: A8/CG502
- WV — EXISTING WATER VALVE
- EXISTING FIRE HYDRANT
- S — EXISTING SANITARY SEWER MANHOLE
- EXISTING STORM DRAIN INLET
- T — EXISTING COMMUNICATION MANHOLE
- D — EXISTING STORM DRAIN MANHOLE
- TP — TOP OF PAVEMENT ELEVATION
- SW — TOP OF SIDEWALK ELEVATION
- ME — MATCH EXISTING ELEVATION
- XXX — STRUCTURE ID
- ELECTRIC TRANSFORMER

0 10' 20' 40'
SCALE: 1"=20'

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
JENNIFER M. HAYNES
90167
LICENSED
PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: J. HAYNES
DRAWN BY: D. KING
CHECKED BY: A. MCCOY
SUBMITTED BY: E. OLNESS
DATE: 21 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT210201
ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS Michael Brown Group Inc.
777 Main Street, Fort Worth, TX 76102
Jacobs No. 17295053

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395

GRADING, DRAINAGE & UTILITY PLAN

SHEET ID
B1455
CG102

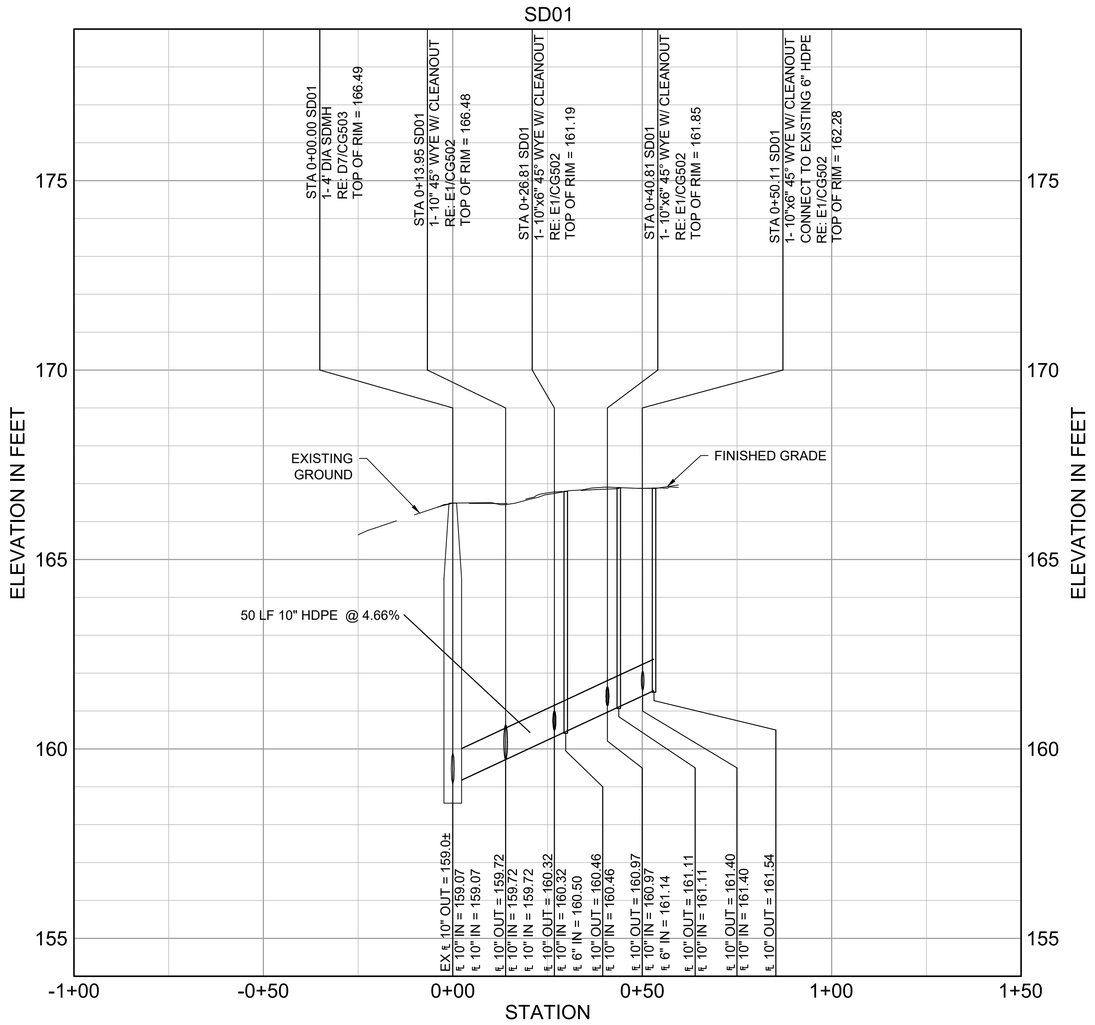
TRUE N

W912QR23R0003_Plans-0000

U:\BLDG\USACE Louisville District\FB2J9513 - Maxwell AFB B1455 Renovation\700 Working Documents\740 Sheets\740.01 Civil\CG102.dwg, 11/16/2022 2:49 PM, King, David

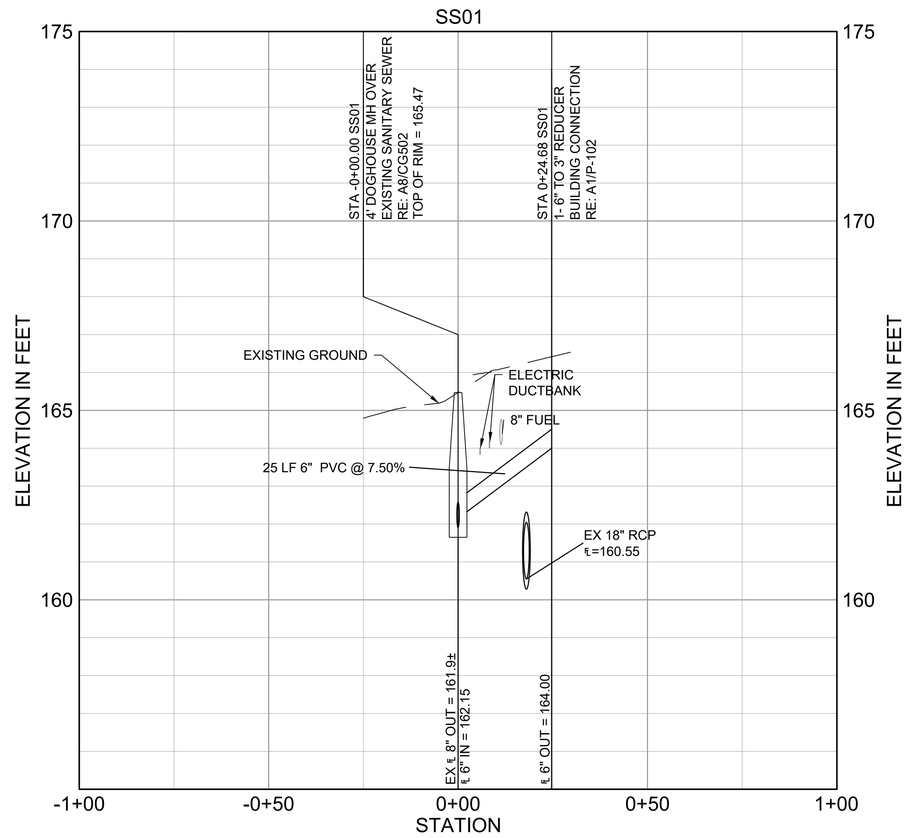
ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN



A1 STORM DRAIN PROFILE - SD01

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



A6 SANITARY SEWER PROFILE - SS01

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

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
JENNIFER M. HAYNES
90167
LICENSED
PROFESSIONAL ENGINEER
SIGNED 25 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: J. HAYNES
DRAWN BY: D. KING
CHECKED BY: A. MCCOY
SUBMITTED BY: E. OLNESS
SIZE: ANSI D
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT21R0201
22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS Global Buildings Group, Inc.
777 Main Street, Fort Worth, TX 76102
(817)339-7600 FAX (817)339-2310

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PROFILES

SHEET ID
B1455
CG201

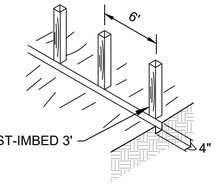
W912QR23R0003_Plans-0000

U:\BLDG\USACE Louisville District\P#2395513 - Maxwell AFB B1455 Renovation\700 Working Documents\740 Sheets\740.01 Civil\CG201.dwg, 11/16/2022 2:49 PM, King, David

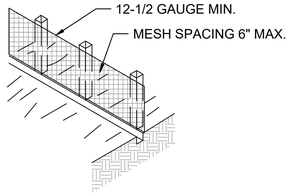
ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN

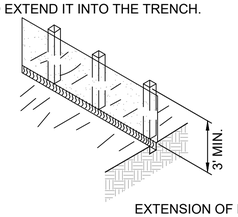
1. SET POSTS AND EXCAVATE A 4" X 4" TRENCH UPSLOPE ALONG THE LINE OF POSTS.



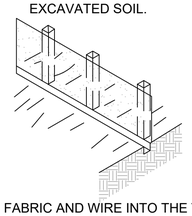
2. STAPLE WIRE FENCING TO THE POSTS.



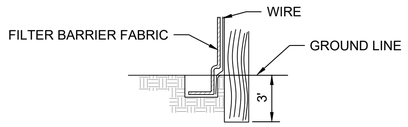
3. ATTACH THE FILTER BARRIER FABRIC TO THE WIRE FENCE AND EXTEND IT INTO THE TRENCH.



4. BACKFILL AND COMPACT THE EXCAVATED SOIL.



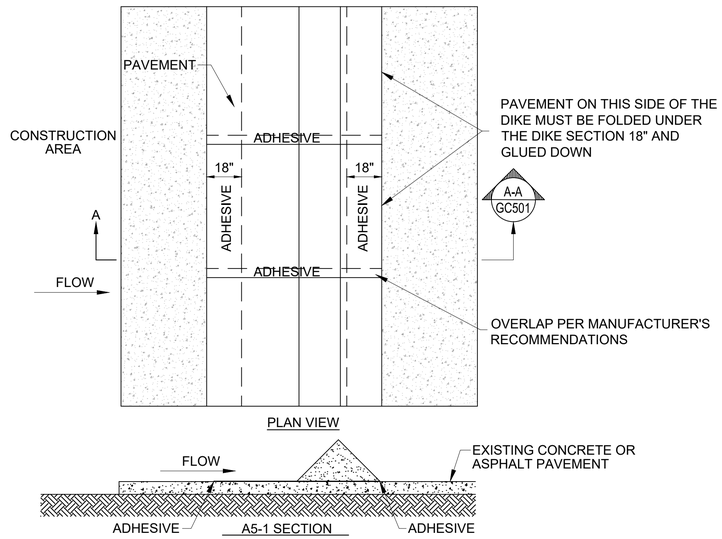
EXTENSION OF FABRIC AND WIRE INTO THE TRENCH.



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, ADN THEN THE DOWNSTREAM SIDE. WHEN INSTALLING PRE-ASSEMBLED SILT FENCE, CARE MUST BE TAKEN TO SUFFICIENTLY COMPACT SOIL ADJACENT TO THE INSTALLED GEOTEXTILE AND POSTS. THE SOIL ADJACENT TO THE BURIED SILT FENCE GEOTEXTILE MUST BE COMPACTED TO ACHIEVE NO LESS THAN 50% OF ITS ORIGINAL IN-SITU DENSITY.

D2 SILT FENCE
SCALE N.T.S.



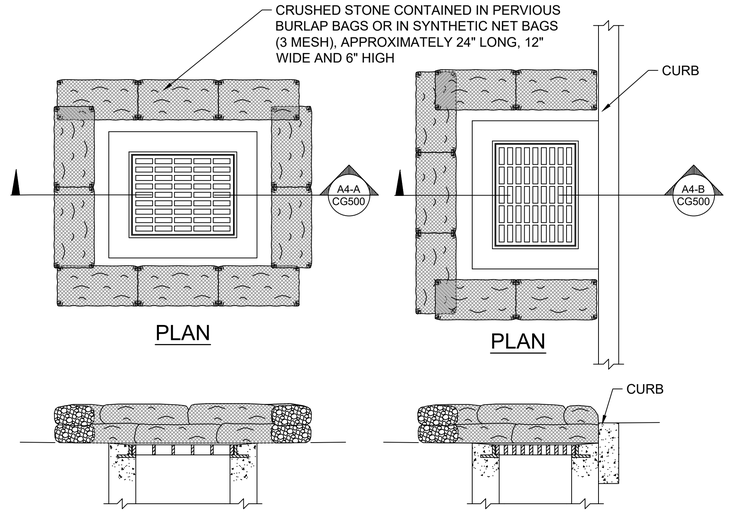
PLAN VIEW

A5-1 SECTION

NOTES:

1. INSTALLED SILT DIKE UNIT MUST HAVE CONTINUOUS AND FIRM CONTACT WITH PAVEMENT.
2. ADHESIVES MUST BE LIQUID NAIL OR APPROVED EQUAL FOR CONCRETE PAVEMENT APPLICATIONS AND EMULSIFIED ASPHALT FOR ASPHALT APPLICATIONS. ADHESIVE MUST BE PLACED WHERE THE UNITS OVERLAP AND A 18" STRIP ALONG BOTH EDGES.

A5 SILT DIKE
SCALE N.T.S.



NOTE:
PLACE BAGS SUCH THAT THERE ARE NO GAPS BETWEEN BAGS. BAGS MAY BE SINGLE OR DOUBLE LAYERS, AS THE SITUATION DICTATES.

D8 AREA INLET PROTECTION
SCALE N.T.S.

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
JENNIFER M. HAYNES
90167
LICENSED
PROFESSIONAL ENGINEER
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: J. HAYNES
DRAWN BY: D. KING
CHECKED BY: A. MCCOY
SUBMITTED BY: E. OLNESS
DATE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT2119201

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS No. 335003

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395

EROSION CONTROL DETAILS

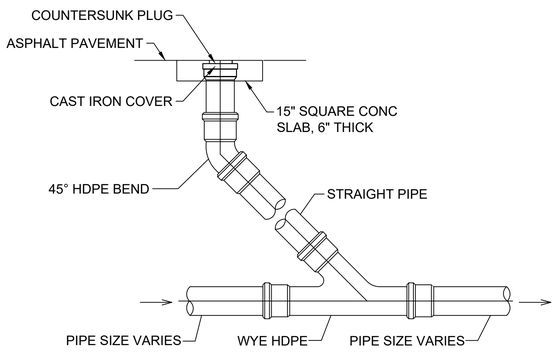
SHEET ID
B1455
CG501

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

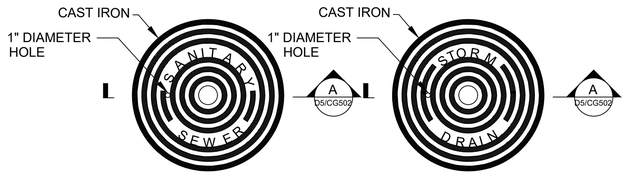
CERTIFIED FINAL DESIGN

U:\BLDG\USACE Louisville District\F8295513 - Maxwell AFB B1455 Renovation\700 Working Documents\740 Sheets\740.01 Civil\CG501.dwg, 11/16/2022 2:50 PM, King, David

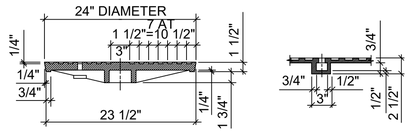


E1 STORM DRAIN CLEANOUT DETAIL
SCALE N.T.S.

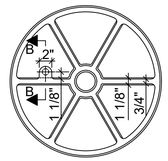
APPROX. WEIGHT 158 POUNDS



PLAN OF SANITARY SEWER MANHOLE PLAN OF STORM DRAIN MANHOLE



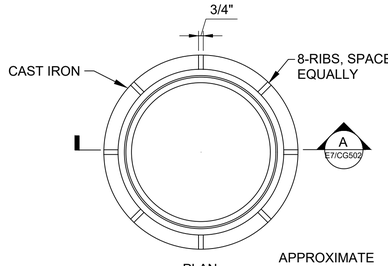
SECTION A SECTION B-B



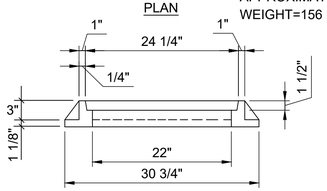
BOTTOM VIEW OF COVER

NOTE:
1. ALL MANHOLES LOCATED IN PAVED AREAS MUST BE TRAFFIC RATED FRAME & COVER.

D4 MANHOLE COVER
SCALE N.T.S.

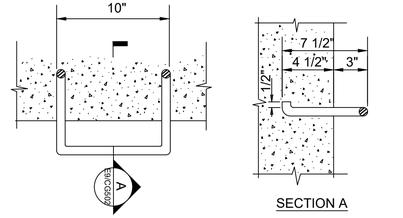


PLAN APPROXIMATE WEIGHT=156 LBS.



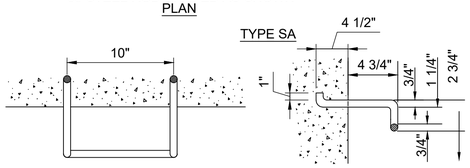
SECTION A

E7 MANHOLE FRAME
SCALE N.T.S.



SECTION A

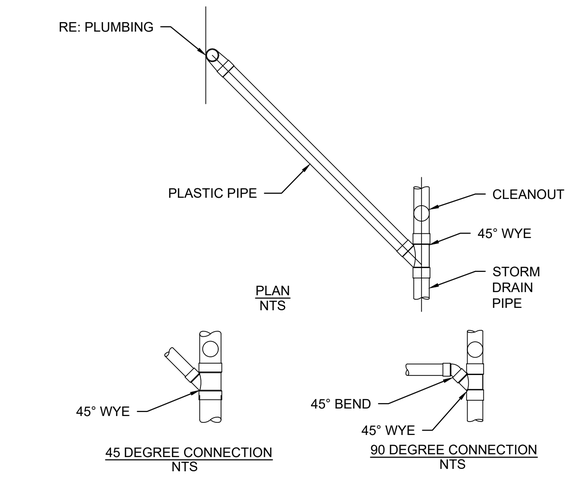
3/4" POLYPROPYLENE COATED
60 STEEL ROD SHAPED AS SHOWN
PLAN



3/4" POLYPROPYLENE COATED
60 STEEL ROD SHAPED AS SHOWN

TYPE SC

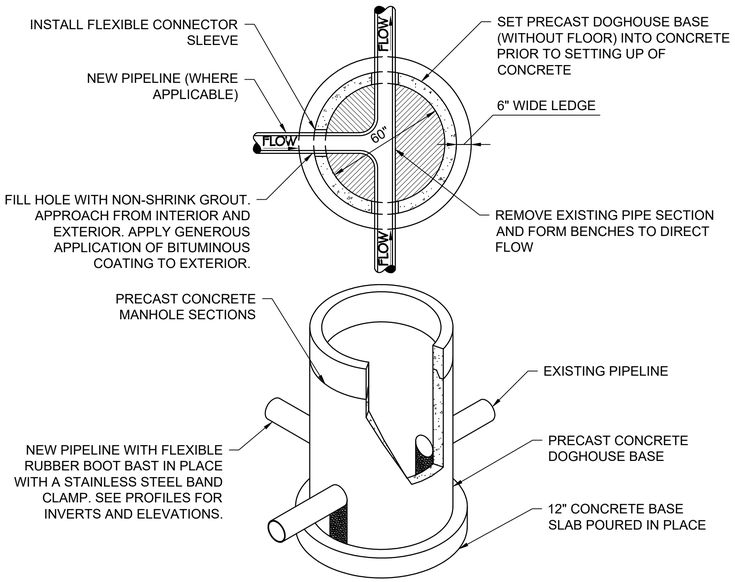
E9 MANHOLE RUNG
SCALE N.T.S.



45 DEGREE CONNECTION NTS
90 DEGREE CONNECTION NTS

NOTE:
1. ALL ROOF DRAIN CONNECTIONS MUST BE MADE USING 45 DEGREE WYE'S.

A5 TYPICAL ROOF DRAIN CONNECTIONS
SCALE N.T.S.



NOTES:
1. ALL STANDARD MANHOLE DETAILS AND SPECIFICATIONS APPLY TO DOGHOUSE MANHOLE CONSTRUCTION.
2. FOR MANHOLES EQUAL TO OR DEEPER THAN 12', LADDER SHOULD BE INSTALLED IN PLACE OF RUNGS.
3. MANHOLES LOCATED IN PAVED AREAS MUST HAVE H-20 RATED FRAME AND COVER.

A8 DOGHOUSE MANHOLE
SCALE N.T.S.

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
JENNIFER M. HAYNES
90167
LICENSED
PROFESSIONAL ENGINEER
SIGNED 23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SWITZ19201

DESIGNED BY: J. HAYNES
DRAWN BY: D. KING
CHECKED BY: A. MCCOY
SUBMITTED BY: E. OLNESS
DATE: ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
(405)553-7500 / 7500553

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395

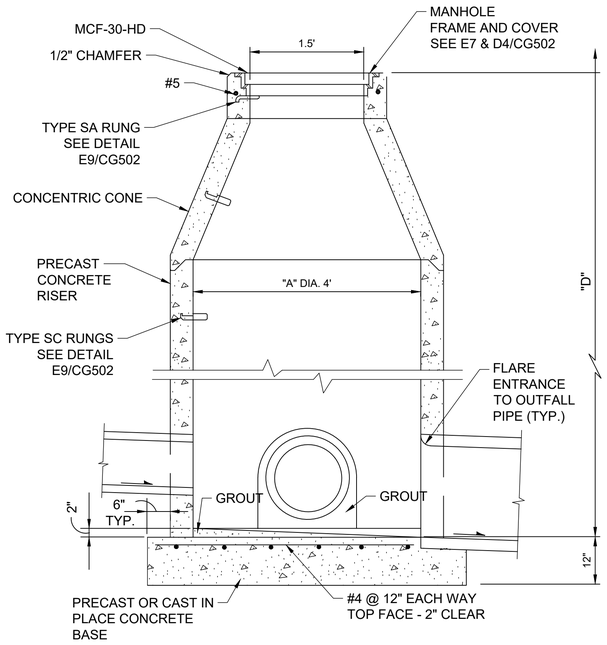
GRADING, DRAINAGE & UTILITY DETAILS

SHEET ID
B1455
CG502

W912QR23R0003_Plans-0000

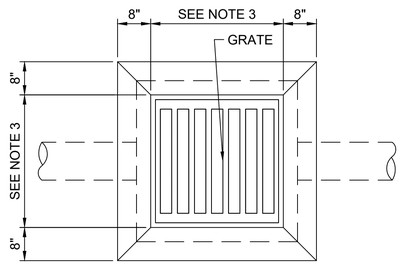
U:\BLDG\USACE Louisville District\FB29513 - Maxwell AFB B1455 Renovation\700 Working Documents\740 Sheets\740.01 Civil\CG502.dwg, 11/16/2022 2:50 PM, King, David

CERTIFIED FINAL DESIGN

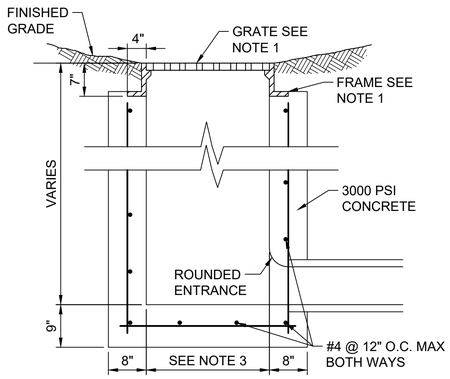


NOTES:
1. RUNGS MUST BE SPACED 12" TO 16" O.C.

D7 STORM DRAIN MANHOLE DETAIL
SCALE N.T.S.



PLAN



UNPAVED AREAS

NOTES:
1. FRAME AND GRATE SHALL BE IN ACCORDANCE WITH FEDERAL SPECIFICATION RR-F-621. FRAME SHALL BE TYPE VI, SIZE 22B, AND GRATE SHALL BE TYPE G, SIZE 22B.
2. TRAFFIC LOADING H20-44.
3. REFER TO PLAN FOR DIMENSION OF INLET STRUCTURE.

A7 AREA INLET DETAIL
SCALE N.T.S.

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
JENNIFER M. HAYNES
90167
LICENSED
PROFESSIONAL ENGINEER
22 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: J. HAYNES
DRAWN BY: D. KING
CHECKED BY: A. MCCOY
SUBMITTED BY: E. OLNESS
DATE: ANSI D 22x34
ISSUE DATE: 22 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT21001

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS Market Street Group Inc.
777 Main Street, Fort Worth, TX 76102
ph(817)820-2000 fx(817)820-2013

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395

GRADING, DRAINAGE & UTILITY DETAILS

SHEET ID
B1455
CG503

W912QR23R0003_Plans-0000

U:\BLDG\USACE Louisville District\FB295613 - Maxwell AFB B1455 Renovation\700 Working Documents\740 Sheets\740.01 Civil\CG503.dwg, 11/16/2022 2:50 PM, King, David

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN

STRUCTURAL SYMBOLS

SURFACE - STEPPED

SURFACE - SLOPE UP

SURFACE - SLOPE DOWN

SURFACE - SLOPE (2) WAYS

T/WALL — ELEVATION POINT (TOP OF ELEMENT INDICATED)

100'-0" — TOP OF CONCRETE ELEV

112'-0" — TOP OF MEMBER ELEV

WP — WORKPOINT

SLOPE INDICATOR

STRUCTURAL ARROW (DIRECTION OF SPAN)

COLUMN PASSING THRU THIS LEVEL

(+3") — TOP OF STEEL ± DEVIATION FROM TYPICAL

(X) — NUMBER OF EVENLY SPACED SHEAR STUDS

[Y,Z] — SPECIAL STUD SPACING

C 7/8" — THE AMOUNT OF MID-SPAN DEAD LOAD CAMBER

MOMENT CONNECTION

MATERIAL GRAPHIC SYMBOLS

THE FOLLOWING SYMBOLS ARE USED TO REPRESENT THE MATERIALS SHOWN ON THE STRUCTURAL DRAWINGS. REFER TO SPECIFICATIONS AND GENERAL NOTES FOR MATERIAL QUALITIES REQUIRED

EARTH

ROCK

CAST-IN-PLACE CONCRETE

PRECAST CONCRETE

NON-SHRINK GROUT

CMU

EXISTING CONCRETE

STRUCTURAL STEEL IN CROSS SECTION

SHEET SYMBOLS

ENLARGED PLAN/ DETAIL REFERENCE — A1 / S-505

SECTION CUTS — A1 / S-505

ELEVATION OF WALL OR FRAME — A1 / S-505

DRAWING/DETAIL REFERENCE KEY

REFER TO DRAWING/DETAIL NUMBER

RE: 1/SF301

DRAWING/DETAIL REFERENCED TO

NEW GRID LINES

EXISTING GRID LINES

GENERAL NOTES

A. BUILDING AND DESIGN CODES:

1. UNIFIED FACILITIES CRITERIA UFC 1-200-01 DoD BUILDING CODE (GENERAL BUILDING REQUIREMENTS), 1 OCTOBER 2020.

2. UNIFIED FACILITIES CRITERIA UFC 3-301-01 STRUCTURAL ENGINEERING, 1 OCTOBER 2019.

3. UNIFIED FACILITIES CRITERIA UFC 4-010-01 DoD MINIMUM ANTITERRORISM STANDARDS FOR BUILDINGS, 19 AUGUST 2020.

4. THE INTERNATIONAL BUILDING CODE 2018.

5. ASCE 7-16 MINIMUM DESIGN LOADS AND ASSOCIATED CRITERIA FOR BUILDINGS AND OTHER STRUCTURES.

6. AISC MANUAL OF STEEL CONSTRUCTION, 15TH EDITION.

7. AMERICAN INSTITUTE OF STEEL CONSTRUCTION, ANSI/AISC 360-16 SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS.

8. ACI 318-14 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE.

9. CONCRETE REINFORCING STEEL INSTITUTE, CRSI MANUAL OF STANDARD PRACTICE, THE LATEST EDITION ADOPTED BY GOVERNING CODES.

10.STEEL DECK INSTITUTE, ANSI/SDI RD-2017 STANDARD FOR STEEL ROOF DECK.

11.STEEL DECK INSTITUTE, ANSI/SDI C-2017 STANDARD FOR COMPOSITE STEEL FLOOR DECK - SLABS

12.STEEL JOIST INSTITUTE, SJI 100-2015 STANDARD SPECIFICATIONS AND LOAD TABLES FOR STEEL JOISTS AND JOIST GIRDERS.

13.AMERICAN WELDING SOCIETY, AWS D1.1:2017, STRUCTURAL WELDING CODE.

14.AMERICAN IRON & STEEL INSTITUTE, AISI S100-16, NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS, 2016.

15.THE MASONRY SOCIETY, TMS 402/602-16, BUILDING CODE REQUIREMENTS AND SPECIFICATION FOR MASONRY STRUCTURES.

B. DESIGN LOADS:

	UNIFORM LOAD	CONCENTRATED LOAD
1. LIVE LOADS:		
a. ROOF LIVE LOAD (REDUCIBLE)	20 PSF	300 LBS
b. FLOOR LIVE LOAD - OFFICES	50 PSF	2,000 LBS
c. CORRIDORS ABOVE FIRST FLOOR	80 PSF	2,000 LBS
d. CLASSROOMS	40 PSF	1,000 LBS
e. SLAB ON GRADE LIVE LOAD	150 PSF	
f. STAIRS & EXITS	100 PSF	300 LBS
g. STORAGE - LIGHT TOOLS	150 PSF	
h. PARTITION LOAD (WHERE LIVE LOAD IS LESS THAN 100 PSF)	15 PSF	

2. DEAD LOADS: (SUPERIMPOSED)

a. ROOF/CEILING COLLATERAL LOAD	10 PSF
b. FLOOR COLLATERAL LOAD	20 PSF
c. ELECTRICAL EQUIPMENT:	

EQUIPMENT	FOOTPRINT (IN x IN)	WEIGHT (#)	WEIGHT (PSF)
UPS CABINET	33 x 42	4900	480

d. MECHANICAL EQUIPMENT:

EQUIPMENT	FOOTPRINT (IN x IN)	WEIGHT (#)	WEIGHT (PSF)
AHU-2	131 x 44	1666	42
DOAS-2	187 x 32	1678	41

3. WIND LOADS:
a. BASIC WIND SPEED (3 SECOND GUST, VULT) - 112 MPH, VASD = 87 MPH
b. RISK CATEGORY - II
c. EXPOSURE - C
d. INTERNAL PRESSURE COEFFICIENT GCpi = +/-0.55 INSIDE HANGAR BAY, 0.18 AT BUILDING ADDTION
e. COMPONENT & CLADDING DESIGN PRESSURE - REFER TO DIAGRAM ON S-xxx

4. SNOW LOADS:
a. GROUND SNOW LOAD - Pg = 5 PSF
b. RISK CATEGORY - II
c. FLAT ROOF SNOW LOAD - Pf = 5 PSF
d. IMPORTANCE FACTOR - Is = 1.0
e. EXPOSURE - Ce = 1.0
f. THERMAL FACTOR - Ct = 1.0
g. FROST PENETRATION DEPTH = 4 INCHES

5. SEISMIC LOADS:
a. RISK CATEGORY - II
b. SEISMIC IMPORTANCE FACTOR - Ie = 1.0
c. MAPPED SPECTRAL RESPONSE ACCELERATIONS - Ss = 0.138g, S1 = 0.076g
d. SITE CLASS - E
e. SPECTRAL RESPONSE COEFFICIENT - Sds = 0.221, Sd1= 0.213
f. SEISMIC DESIGN CATEGORY D

GENERAL NOTES CONT

g. BASIC FORCE RESISTING SYSTEM:
i. HANGAR MEZZANINE FIRST FLOOR: INTERMEDIATE MOMENT FRAMES
RESPONSE MODIFICATION FACTOR, R = 4.5
OVERSTRENGTH FACTOR, OMEGA = 3
DEFLECTION AMPLIFICATION FACTOR, Cd = 4
DESIGN BASE SHEAR, V = 0.049 x W = 11.0 k
ii. ADMINISTRATION BUILDING ADDITION: ORDINARY MOMENT FRAMES
RESPONSE MODIFICATION FACTOR, R = 3.5
OVERSTRENGTH FACTOR, OMEGA = 3
DEFLECTION AMPLIFICATION FACTOR, Cd = 3
DESIGN BASE SHEAR, V = 0.063 x W = 1.0 k
iii. COLDFORM FRAMED ROOMS: COLDFORM WALL SYSTEMS USING FLAT STRAP BRACING
RESPONSE MODIFICATION FACTOR, R = 4
OVERSTRENGTH FACTOR, OMEGA = 2
DEFLECTION AMPLIFICATION FACTOR, Cd = 3.5
DESIGN BASE SHEAR, V = 0.049 x W = [VARIES PER ROOM SIZE]

C. GENERAL REQUIREMENTS:

1. SPECIFICATIONS ARE PART OF THE CONSTRUCTION DOCUMENTS AND MUST BE USED IN CONJUNCTION WITH THE DRAWINGS.

2. VERIFY EXISTING CONDITIONS AND DIMENSIONS PRIOR TO BEGINNING WORK OR FABRICATING MATERIALS. NOTIFY CONTRACTING OFFICER OF DISCREPANCIES BEFORE PROCEEDING WITH ANY PHASE OF WORK.

3. VERIFY THE LOCATION OF CHASES, INSERTS, OPENINGS, SLEEVES, FINISHES, DEPRESSIONS, PADS, AND WALL OPENINGS.

4. DO NOT SCALE DRAWINGS FOR THE PURPOSE OF ESTABLISHING DIMENSIONS.

5. DETAILS LABELED "TYPICAL DETAILS" ON DRAWINGS APPLY TO SITUATIONS OCCURRING ON THE PROJECT THAT ARE THE SAME OR SIMILAR TO THOSE SPECIFICALLY DETAILED. SUCH DETAILS APPLY WHETHER OR NOT DETAILS ARE REFERENCED AT EACH LOCATION. NOTIFY CONTRACTING OFFICER OF CONFLICTS REGARDING APPLICABILITY OF "TYPICAL DETAILS".

6. DO NOT LOAD THE SLAB ON GRADE OR SUPPORTED SLAB WITH ERECTION CRANES OR ERECTION EQUIPMENT. THE SLABS HAVE NOT BEEN DESIGNED FOR CRANE LOADS AND WILL REQUIRE AN INCREASE IN THICKNESS AND/OR REINFORCEMENT. OBTAIN CONTRACTING OFFICER APPROVAL ON PROPOSED CRANE SUPPORT PLAN FOR SLABS PRIOR TO COMMENCING WORK.

7. DO NOT STORE OR STACK CONSTRUCTION MATERIALS ON POURED OR ERECTED FLOORS/ROOFS IN EXCESS OF 80 PERCENT OF LIVE LOAD. GENERAL CONTRACTOR WILL ENSURE THAT ALL SUB-CONTRACTORS ARE INFORMED OF LOADING RESTRICTIONS. AVOID IMPACT WHEN PLACING MATERIALS ON POURED OR ERECTED FLOORS OR ROOF.

8. THE CONTRACT STRUCTURAL DOCUMENTS REPRESENT THE FINISHED STRUCTURE. THE CONTRACTOR IS RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION. PROVIDE ALL MEASURES REQUIRED TO PROTECT THE STRUCTURE, WORKMEN, AND OTHER PERSONS DURING CONSTRUCTION; INCLUDING BRACING, SHORING FOR CONSTRUCTION EQUIPMENT, SHORING FOR THE BUILDING, FORMS AND SCAFFOLDING, SHORING OF RETAINING WALLS AND OTHER TEMPORARY SUPPORTS AS REQUIRED.

9. PRINCIPAL OPENINGS THROUGH THE FRAMING ARE SHOWN ON DRAWINGS. EXAMINE THE ARCHITECTURAL AND MECHANICAL DRAWINGS FOR THE REQUIRED OPENINGS AND PROVIDE FOR REQUIRED OPENINGS WHETHER SHOWN ON THE STRUCTURAL DRAWINGS OR NOT. VERIFY SIZE AND LOCATION OF OPENINGS WITH THE MECHANICAL CONTRACTOR. DEVIATIONS FROM THE OPENINGS SHOWN ON THE STRUCTURAL DRAWINGS MUST BE APPROVED PRIOR TO IMPLEMENTING THE CHANGES.

10.DO NOT CUT OR DRILL THROUGH EXISTING REINFORCING OR CABLE TENDONS. X-RAY TO LOCATE REINFORCING OR CABLE TENDONS AT LOCATIONS REQUIRING CUTTING OR CORING PRIOR TO START OF CONSTRUCTION. SUBMIT REINFORCEMENT LOCATION IN CONFLICT WITH DRAWINGS FOR CONTRACTING OFFICER REVIEW.

FOUNDATION NOTES

A. FOUNDATION DESIGN IS BASED UPON THE SOILS EXPLORATION AND REPORT BY LARRY M. JACOBS & ASSOCIATES INC, REPORT ENTITLED "MAXWELL AFB AIRCRAFT HANGAR ADDITIONS", DATED 24 NOV, 2021 FILE NUMBER 21 -303 E.

B. FOUNDATIONS ARE DESIGNED FOR AN ALLOWABLE NET BEARING PRESSURE OF 2,500 PSF, FOR FOOTINGS FOUNDED A MINIMUM OF 18 INCHES BELOW EXISTING GRADE.

C. PROTECT PIPES AND CONDUITS RUNNING THROUGH WALLS AND SLABS WITH 1/2 INCH EXPANSION MATERIAL. LOWER CONTINUOUS FOOTINGS AND GRADE BEAMS PERPENDICULAR TO PIPE RUNS TO ALLOW PIPES TO PASS ABOVE THE FOOTINGS OR THROUGH THE GRADE BEAMS. ALTERNATIVELY, PROVIDE A CONCRETE JACKET IF PIPES ARE LOW ENOUGH TO BE PLACED BELOW THE FOOTINGS AND GRADE BEAMS. LOWER FOOTINGS AND GRADE BEAMS PARALLEL TO PIPE RUNS TO AVOID SURCHARGE ONTO ADJACENT TRENCH EXCAVATIONS.

D. MAINTAIN SUBGRADE AND FILL MOISTURE CONTENT UNTIL FOUNDATIONS ARE PLACED.

E. ARRANGE FOR OWNER'S INDEPENDENT TESTING AGENCY TO MONITOR CUT AND FILL OPERATIONS AND PERFORM FIELD DENSITY AND MOISTURE CONTENT TESTS TO VERIFY COMPACTION AND APPROVE FOOTING SUBGRADES PRIOR TO PLACING CONCRETE.

F. DO NOT PLACE FOOTINGS OR SLABS AGAINST SUBGRADE CONTAINING FREE WATER, FROST, OR ICE.

G. MAINTAIN PROPER SITE DRAINAGE DURING CONSTRUCTION TO ENSURE SURFACE RUNOFF AWAY FROM STRUCTURES AND TO PREVENT PONDING OF SURFACE RUNOFF NEAR THE STRUCTURES.

H. KEEP OPEN EXCAVATIONS AROUND BUILDING PERIMETER DRY. BACKFILL AGAINST FOUNDATIONS AND GRADE BEAMS AS SOON AS PRACTICAL. PUMP WATER OUT OF OPEN EXCAVATIONS IF FLOODED PRIOR TO BACKFILLING.

J. DO NOT BACKFILL AGAINST WALLS, WHEREVER FEASIBLE, UNTIL BASEMENT AND GROUND FLOOR SLABS HAVE ATTAINED 75 PERCENT OF THE SPECIFIED 28-DAY COMPRESSIVE STRENGTH. IF THE WALLS ARE BACKFILLED PRIOR TO COMPLETION OF GROUND AND BASEMENT FLOORS BEFORE THE SPECIFIED PERCENT STRENGTH CAN BE ATTAINED, BRACE THE WALLS FOR THE SPECIFIED DESIGN PRESSURE. OBTAIN THE APPROVAL OF THE ENGINEER FOR THE ADEQUACY OF SUCH BRACE.

K. PLACE CONCRETE USING A HOPPER AND CHUTE PIPE. PROVIDE CONCRETE FREE FALL OF LESS THAN 10 FEET.

L. ARRANGE FOR OWNER'S INDEPENDENT TESTING AGENCY TO INSPECT PIER HOLES PRIOR TO PLACING CONCRETE AND VERIFY PIER SIZE, REINFORCING, DEPTH, BEARING STRATA, EMBEDMENT DEPTH AND REMOVAL OF CUT MATERIAL.

M. FORM SIDES OF BEAMS STRAIGHT AND TO SPECIFIED DIMENSIONS. EARTH FORMS WILL NOT BE PERMITTED.

N. REFER TO CIVIL DRAWINGS FOR LIMITS OF EXCAVATIONS.

O. WHERE SHOWN ON DRAWINGS, CONSTRUCT BEAMS OVER A MINIMUM VOID SPACE OF 12 INCHES. USE SOIL RETAINERS TO MINIMIZE THE POTENTIAL FOR INFILLING OF THE VOID SPACE OVER TIME.

P. RE: CIVIL DRAWINGS FOR BUILDING PERIMETER FRENCH DRAIN.

Q. EARTHWORK: ALL DEBRIS, VEGETATION AND TOPSOIL CONTAINING ORGANIC MATERIALS SHALL BE CLEARED AND GRUBBED FROM THE BUILDING SITE. AFTER REMOVAL OF VEGETATION AND EXCAVATION, THE EXPOSED SURFACE SHALL BE PROOF ROLLED AND ANY SORT OF COMPRESSIBLE MATERIAL SHALL BE REMOVED OR IMPROVED BY DENSIFICATION AS RECOMMENDED FOR COMPACTED FILL BELOW FOUNDATIONS. AFTER COMPLETION OF PROOF ROLLING THE SURFACE SHALL BE SCARIFIED FOR A MINIMUM DEPTH OF SIX (6) INCHES AND RECOMPACTED AS PER COMPACTION NOTE.

R. SELECT FILL: SELECT FILL SHALL BE USED TO OBTAIN ROUGH GRADE OF GRADE SLAB. SELECT FILL MATERIALS SHOULD BE A SILTY, CLAYEY SAND TO A VERY SANDY CLAY WITH A MAXIMUM LIQUID LIMIT (LL) OF THIRTY (30) AND A PLASTICITY INDEX (PI) BETWEEN FOUR (4)AND FIFTEEN (15). ALL FILL SHALL BE FREE OF ORGANIC MATTER AND DEBRIS.

S. COMPACTION: SELECT FILL REQUIRED BENEATH THE GRADE SLAB SHALL BE PLACED IN SIX (6) INCH TO EIGHT (8) INCH THICK LOOSE LIFTS AND COMPACTED TO A MINIMUM OF 95 PERCENT OF MAXIMUM DRY DENSITY AT OR SIGHTLY ABOVE ITS OPTIMUM MOISTURE CONTENT AS DETERMINED BY THE STANDARD PROCTOR METHOD, ASTM SPECIFICATION D698.

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
ALEX BANNEROT
91686
LICENSED PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
DESIGNED BY: A. BANNEROT
DRAWN BY: D. ORTON
CHECKED BY: A. SAVOIE
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
FILE NAME: SXHT21920ls-001

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
Phone: (817) 334-7000

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, PZ#: 496395
STRUCTURAL NOTES

SHEET ID
B1455
S-001

W912QR23R0003_Plans-0000

CONCRETE NOTES

A. PROVIDE CONCRETE AS SHOWN BELOW. PROVIDE BATCH MIXING, TRANSPORTATION, PLACING AND CURING OF CONCRETE IN ACCORDANCE WITH RECOMMENDATIONS OF ACI 301, ACI 318 AND ASTM C94. USE TYPE I OR II PORTLAND CEMENT UNLESS OTHERWISE NOTED. PROVIDE ADMIXTURES AND SPECIAL REQUIREMENTS AS SPECIFIED.

1. NORMAL WEIGHT(150 PCF), F'c = 4,500 PSI CONCRETE AT 28 DAYS, MAXIMUM w/cm RATIO 0.45
a. ALL EXTERIOR CONCRETE GRADE SUPPORTED SLABS AND GRADE BEAMS
b. FOOTINGS
c. ALL CONCRETE NOT SPECIFICALLY COVERED

2. NORMAL WEIGHT (150 PCF), F'c = 4,000 PSI CONCRETE AT 28 DAYS
a. ALL CONCRETE FOR SUSPENDED BEAMS, JOISTS, AND SLABS
b. INTERIOR CONCRETE SLABS
c. COLUMNS AND WALLS

B. UNLESS SPECIFIED BELOW, CONCRETE MUST REACH THE FOLLOWING PERCENTAGES OF ITS 28 DAY COMPRESSIVE STRENGTH (F'c) BEFORE FORMS MAY BE REMOVED:

1. WALLS, COLUMNS AND BEAM SIDES - 40 PERCENT

2. SHORING FOR FLOOR SYSTEM - 85 PERCENT

C. PROVIDE CONCRETE MIXES DESIGNED BY A QUALIFIED TESTING LABORATORY FOR REVIEW AND APPROVAL BY THE STRUCTURAL ENGINEER.

D. PROVIDE CONSTRUCTION AND CONTROL JOINTS AS INDICATED ON DRAWINGS. HORIZONTAL CONSTRUCTION JOINTS ARE NOT ALLOWED UNLESS SPECIFICALLY NOTED OR APPROVED BY STRUCTURAL ENGINEER. NOTIFY STRUCTURAL ENGINEER OF PROPOSED CONSTRUCTION JOINT OR CONTROL JOINT LOCATIONS WHICH ARE DIFFERENT OR IN ADDITION TO JOINTS INDICATED ON DRAWINGS. PROVIDE 10,000-SQUARE FOOT MAXIMUM AREA OF CONCRETE PLACEMENT IN THE SLAB BETWEEN CONSTRUCTION JOINTS. PROVIDE 75-FOOT MAXIMUM SPACING OF CONSTRUCTION JOINTS IN GRADE BEAMS. PROVIDE GRADE BEAM CONSTRUCTION JOINTS IN MIDDLE 1/3 OF THE SPAN. WHEN A BEAM INTERSECTS A GIRDER WITHIN THE MIDDLE 1/3 OF THE GIRDER'S SPAN, OFFSET THE JOINT IN THE GIRDER A DISTANCE EQUAL TO TWICE THE WIDTH OF THE BEAM.

E. PROVIDE CONSTRUCTION JOINTS IN WALLS, ELEVATED SLABS, AND ELEVATED BEAMS SPACED LESS THAN 60 FEET APART IN ANY DIRECTION.

F. CHAMFER EXPOSED EDGES 3/4 INCH UNLESS OTHERWISE NOTED.

G. WIRE BRUSH AND CLEAN CONSTRUCTION JOINTS PRIOR TO POURING NEW CONCRETE.

H. REFERENCE THE APPROPRIATE DISCIPLINE'S DRAWINGS FOR SUBSLAB PIPING, FLOOR DRAINS, AND SLAB AND WALL PENETRATIONS.

J. PROVIDE ADEQUATE STRUCTURAL FRAMING AS APPROVED BY STRUCTURAL ENGINEER FOR MECHANICAL OPENINGS THROUGH THE SLABS, WALLS, AND FLOOR DECK. OPENINGS WILL NOT BE PERMITTED THROUGH BEAMS UNLESS SPECIFICALLY DETAILED.

K. FOR PIPE INSTALLED HORIZONTALLY WITHIN SLAB, PROVIDE MAXIMUM OUTSIDE DIAMETER OF 30 PERCENT OF THE SLAB THICKNESS. PLACE CONDUIT OR PIPE BETWEEN THE TOP AND BOTTOM LAYERS OF REINFORCEMENT WITHIN THE CENTER THIRD OF THE SLAB. DO NOT SPACE CONDUITS OR PIPES CLOSER THAN THREE DIAMETERS OR WIDTHS ON CENTER.

REINFORCING STEEL NOTES

A. PROVIDE DETAILING, FABRICATION, AND INSTALLATION OF REINFORCING AND ACCESSORIES IN ACCORDANCE WITH ACI 315 AND ACI 318.

B. PROVIDE NEW STEEL REINFORCING BARS IN ACCORDANCE WITH ASTM A 615, GRADE 60.

C. PROVIDE ANCHOR RODS CONFORMING TO THE STANDARDS OF ASTM F1554 GRADE 55 (WELDABLE) UNLESS OTHERWISE NOTED.

D. COORDINATE PLACEMENT OF CAST-IN-PLACE EMBEDS AND ANCHOR RODS. SET ANCHOR RODS WITH A TEMPLATE. SECURELY ATTACH EMBED ITEMS TO FORMWORK OR REINFORCING.

E. PROVIDE CLASS "B" REINFORCEMENT SPLICES FOR CONTINUOUS REINFORCEMENT. PROVIDE STANDARD 90-DEGREE HOOKS IN ACCORDANCE WITH ACI 318, UNLESS OTHERWISE NOTED. STAGGER SPLICES UNLESS SPECIFICALLY NOTED.

F. MAINTAIN THE FOLLOWING CONCRETE COVERAGE FOR REINFORCING STEEL UNLESS OTHERWISE NOTED:

1. CONCRETE CAST AGAINST EARTH - 3 INCHES

2. CONCRETE EXPOSED TO WEATHER
a. ALL BAR SIZES - 2 INCHES

3. CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH THE GROUND:
a. SLABS AND WALLS
· NO. 14 AND NO. 18 - 1-1/2 INCHES
· NO. 11 AND SMALLER - 3/4 INCH

G. DO NOT WELD OR BEND REINFORCEMENT IN THE FIELD UNLESS SPECIFICALLY SHOWN OR APPROVED BY CONTRACTING OFFICER.

H. WHEN SPECIFICALLY APPROVED, PROVIDE WELDED REINFORCEMENT IN ACCORDANCE WITH ASTM A 706. USE LOW HYDROGEN ELECTRODES FOR WELDING OF REINFORCEMENT IN CONFORMANCE WITH "WELDING REINFORCEMENT STEEL, METAL INSERTS AND CONNECTIONS IN REINFORCED CONCRETE CONSTRUCTION," AMERICAN WELDING SOCIETY, AWS D1.4.

J. WHERE REQUIRED, PROVIDE DOWELS TO MATCH SIZE AND SPACING OF MAIN REINFORCING.

K. UNLESS OTHERWISE NOTED ON THE DRAWINGS OR COLUMN SCHEDULE, SPLICE VERTICAL REINFORCEMENT IN COLUMNS A MINIMUM OF 48 BAR DIAMETERS.

L. PROVIDE CONTINUOUS HORIZONTAL WALL REINFORCEMENT WITH 90-DEGREE BENDS AND EXTENSIONS AT CORNERS AND INTERSECTIONS AS SHOWN ON TYPICAL BAR PLACING DETAILS.

M. PROVIDE BAR SUPPORT ACCESSORIES IN ACCORDANCE WITH THE LATEST ACI MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES. SUPPORT BEAM REINFORCING ON BEAM BOLSTERS SPACED NOT MORE THAN 4 FEET ON CENTER.

N. PROVIDE BAR SUPPORTS WITH PLASTIC COATED LEGS OR HOT DIP GALVANIZING AFTER FABRICATION FOR CONCRETE EXPOSED TO VIEW. PROVIDE STAINLESS STEEL BAR SUPPORTS FOR CONCRETE TO RECEIVE A SANDBLAST FINISH.

P. REINFORCE CONCRETE IN STAIR TREAD PANS AND LANDINGS WITH 6x6-W2.9xW2.9 WWF

STRUCTURAL STEEL NOTES

A. PROVIDE STRUCTURAL STEEL OF THE FOLLOWING ASTM DESIGNATIONS UNLESS OTHERWISE NOTED:

1. STRUCTURAL STEEL WIDE FLANGE AND WT SHAPES - ASTM A 992

2. STRUCTURAL STEEL STANDARD SHAPES, CHANNELS AND ANGLES - ASTM A 36

3. EDGE ANGLES, BENT PLATES, HANGER AND BRACES - ASTM A 36

4. STRUCTURAL PIPE - ASTM A 53, GRADE B

5. STRUCTURAL TUBING (SQUARE OR RECTANGULAR) - ASTM A 500, GRADE C

6. BASE PLATES AND MISCELLANEOUS STEEL PLATES - ASTM A 572, GRADE 50

7. CONNECTION MATERIALS:

a. BEAM AND COLUMN STIFFENER PLATES AND DOUBLER PLATES TO MATCH THE GRADE STEEL OF STRUCTURAL ELEMENT
b. ALL CONNECTION MATERIALS, EXCEPT AS OTHERWISE NOTED HEREIN OR IN THE DRAWINGS, INCLUDING BEARING PLATES, GUSSET PLATES, STIFFENER PLATES, ANGLES, ETC. - ASTM A 36

8. HIGH STRENGTH BOLTS (SLIP CRITICAL JOINTS FOR ALL BRACES AND WHERE SPECIFIED) - ASTM F3125 WITH GRADE AS INDICATED ON DRAWINGS OR AS REQUIRED FOR DESIGN.

9. HARDENED STEEL WASHERS - ASTM F 436

10.HEAVY HEX NUTS - ASTM A 563

B. WELD MINIMUM SIZE AND STRENGTH

1. PROVIDE MINIMUM SIZE OF FILLET WELDS AS SPECIFIED IN TABLE J2.4 OF THE AISC MANUAL.

2. PROVIDE MINIMUM EFFECTIVE THROAT THICKNESS OF PARTIAL PENETRATION GROOVE WELDS AS SPECIFIED IN TABLE J2.3 OF THE AISC MANUAL.

3. DEVELOP THE FULL TENSILE STRENGTH OF THE MEMBER ELEMENT JOINED ON ALL SHOP AND FIELD WELDS UNLESS OTHERWISE NOTED ON THE DRAWINGS.

4. WHERE CONNECTIONS ARE NOTED ON DRAWINGS AS MOMENT CONNECTIONS, PROVIDE WELDS TO DEVELOP FULL FLEXURAL CAPACITY OF THE LESSER MEMBER.

5. PROVIDE ELECTRODES FOR FIELD OR SHOP WELDING THAT CONFORM TO AWS D1.1 CLASS E70XX.

C. PROVIDE MINIMUM OF TWO BOLTS PER CONNECTION. MINIMUM BOLT DIAMETER TO BE 3/4 INCH.

D. PROVIDE BOLTS, NUTS AND WASHERS THAT ARE HOT DIP GALVANIZED ACCORDING TO ASTM A 153, CLASS C WHEN USED TO CONNECT STEEL ELEMENTS THAT ARE HOT DIP GALVANIZED AFTER FABRICATION.

E. PROVIDE SIMPLE SHEAR CONNECTIONS FOR STEEL CONNECTIONS NOT OTHERWISE SPECIFIED UTILIZING HIGH STRENGTH BEARING BOLTS IN SINGLE OR DOUBLE SHEAR. PROVIDE DOUBLE ANGLE OR SINGLE PLATE SHEAR TAB BOLTED CONNECTIONS.

1. UNLESS LARGER REACTION IS SHOWN ON DRAWINGS, PROVIDE MINIMUM DESIGN FORCES AS FOLLOWS:

a. NONCOMPOSITE BEAMS: BEAM-TO-BEAM OR BEAM-TO-COLUMN CONNECTION TO DEVELOP THE REACTION OF CONNECTED BEAM. OBTAIN END REACTION FROM UNIFORM LOAD TABLES OF THE AISC MANUAL OF STEEL CONSTRUCTION. PROVIDE MINIMUM SHEAR CAPACITY OF 12,000 POUNDS FOR BEAMS 8 INCHES AND 10 INCHES DEEP. PROVIDE MINIMUM SHEAR CAPACITY OF 8,000 POUNDS FOR BEAMS LESS THAN 8 INCHES DEEP.
b. COMPOSITE BEAMS: BEAM-TO-BEAM AND BEAM-TO-COLUMN CONNECTION TO DEVELOP REACTION OF CONNECTED BEAM. OBTAIN END REACTION FROM UNIFORM LOAD TABLES OF AISC MANUAL OF STEEL CONSTRUCTION. PROVIDE MINIMUM SHEAR CAPACITY OF 12,000 POUNDS FOR BEAMS 8 INCHES TO 10 INCHES DEEP. PROVIDE MINIMUM SHEAR CAPACITY OF 8,000 POUNDS FOR BEAMS LESS THAN 8 INCHES DEEP. OBTAIN END REACTION FOR COMPOSITE BEAMS, FROM AISC MANUAL PART 2, MULTIPLIED BY THE FOLLOWING FACTORS:

BEAM	SIZE FACTOR	BEAM	SIZE FACTOR
W8	3.30	W21	2.10
W10	3.10	W24	2.10
W12	2.80	W27	1.90
W14	2.40	W30	1.80
W16	2.30	W33	1.80
W18	2.20	W36	1.70

2. ADD TO REACTIONS LISTED ABOVE LOADS OR REACTIONS OF MEMBERS SUPPORTED BY BEAM WITHIN THREE FEET OF BEAM END AND VERTICAL COMPONENTS OF FORCES IN BRACE MEMBERS FRAMING INTO BEAM.

F. STEEL FABRICATION

1. FABRICATE AND ASSEMBLE STRUCTURAL MEMBERS/ASSEMBLIES IN SHOP TO GREATEST EXTENT POSSIBLE.

2. CAMBER OF STRUCTURAL STEEL MEMBERS IS INDICATED ON THE DRAWINGS. WHERE POSSIBLE, CAMBER OF BEAMS TO BE APPLIED BY COLD BEND PROCESS. CAMBER INDICATED ON DRAWINGS ARE INTENDED TO BE FINAL CAMBER AT TIME OF ERECTION, AND WITHIN A TOLERANCE OF MINUS ZERO TO PLUS 1/8 INCH FOR EACH TEN FEET OF MEMBER LENGTH.

3. SPLICING OF STRUCTURAL STEEL MEMBERS IS PROHIBITED WITHOUT PRIOR

STRUCTURAL STEEL NOTES CONT

APPROVAL BY THE CONTRACTING OFFICER.

4. BE RESPONSIBLE FOR ALL ERRORS OF DETAILING ON THE SHOP DRAWINGS, ERRORS IN FABRICATION, AND THE CORRECT FITTING OF STRUCTURAL STEEL MEMBERS.

G. CONFORM TO THE AISC CODE OF STANDARD PRACTICE, FOR ERECTION TOLERANCES. FIELD MODIFICATION TO STRUCTURAL STEEL IS PROHIBITED WITHOUT PRIOR APPROVAL BY THE CONTRACTING OFFICER.

H. CLEAN STEEL OF RUST, LOOSE MILL SCALE AND OTHER FOREIGN MATERIALS WHERE REQUIRED FOR FABRICATION, FITTING UP, OR WELDING.

J. DO NOT CUT STRUCTURAL STEEL MEMBERS FOR THE WORK OF OTHER TRADES WITHOUT PRIOR REVIEW AND APPROVAL OF THE CONTRACTING OFFICER.

K. AFTER FABRICATION, HOT DIP GALVANIZE STRUCTURAL STEEL AND THEIR CONNECTIONS PERMANENTLY EXPOSED TO THE OUTSIDE. SUCH ITEMS INCLUDE BUT ARE NOT LIMITED TO:

1. SHELF ANGLES

2. PARAPET WALL SUPPORTING MEMBERS

3. SCREEN WALL SUPPORTING MEMBERS

4. EMBEDDED PLATES IN CONCRETE

5. BUILDING CLADDING SUPPORT STEEL

L. EXAMINE THE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR OTHER ITEMS THAT REQUIRE HOT DIPPED GALVANIZATION.

M. PROVIDE NON-SHRINK/NON-METALLIC GROUT FOR BASE PLATES WITH MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 6000 PSI. COMPLETE GROUT WORK BEFORE ROOF CONCRETE POURING OF A SINGLE STORY BUILDING OR SECOND FLOOR CONCRETE POURING OF A MULTIPLE STORY BUILDING.

N. SUBMIT STEEL SHOP DRAWINGS FOR ARCHITECT'S AND STRUCTURAL ENGINEER'S REVIEW PRIOR TO FABRICATION. INCLUDE WELDING PROCEDURES, TESTING PROGRAMS FOR WELDING AND HIGH STRENGTH BOLTING, COATING MATERIAL, AND ERECTION SEQUENCE ON SHOP DRAWINGS.

P. MILL STEEL COLUMN ENDS TO FIT FLUSH WITH BASE PLATE, CAP PLATE, AND END PLATES. FIELD ASSEMBLY OF THESE STEEL ELEMENTS TO THE COLUMNS IS PROHIBITED.

Q. HEADED STUDS (SHEAR AND ANCHOR) AND DEFORMED ANCHORS.

1. PROVIDE HEADED STUDS (SHEAR AND ANCHOR) MADE OF MATERIAL CONFORMING TO ASTM A 108.

2. PROVIDE DEFORMED ANCHORS MADE OF MATERIAL CONFORMING TO ASTM A 496.

3. WELD STUDS ACCORDING TO MANUFACTURER'S RECOMMENDATIONS. MANUAL ARC (STICK)WELDING OF HEADED STUDS AND/OR DEFORMED ANCHORS IS NOT ALLOWED.

R. PRIOR TO DECK PLACEMENT, VERIFY THAT STEEL BEAMS BEARING ON MASONRY HAVE 6 INCH MINIMUM BEARING AND ARE ANCHORED AS SHOWN ON DRAWINGS.

S. PROVIDE TEMPORARY SHORING OR BRACING DURING CONSTRUCTION PHASE PRIOR TO COMPLETING CONNECTIONS AND POURING OF FLOOR SLAB.

T. GENERAL SEISMIC NOTES
1. INSPECTIONS AND NONDESTRUCTIVE TESTING OF THE SEISMIC FORCE RESISTING SYSTEM SHALL BE PERFORMED AS REQUIRED BY THE QUALITY ASSURANCE PLAN IN AISC 341-16 WITH THE EXCEPTION THAT A REDUCTION IN THE PERCENTAGE OF ULTRASONIC TESTING OR MAGNETIC PARTICLE TESTING OF WELDS WILL NOT BE PERMITTED.

2. THE SEISMIC FORCE RESISTING SYSTEM CONSISTS OF THE FOLLOWING ELEMENTS:
INTERMEDIATE MOMENT FRAME ELEMENTS, INCLUDING BEAMS, COLUMNS, AND CONNECTION PLATES, BASE PLATES, AND ALL OTHER CONNECTION MATERIALS. INTERMEDIATE FRAMES ARE LOCATED AS SHOWN ON THE DRAWINGS.

3. PROTECTED ZONES OF SPECIAL CONCENTRIC BRACED FRAMES SHALL BE KEPT FREE OF DISCONTINUITIES RESULTING FROM FABRICATION AND ERECTION PROCEDURES AND FROM OTHER ATTACHMENTS. REFER TO A1/S-518 AND AISC 341 FOR DEFINITION OF PROTECTED ZONES.

4.AT THE 2ND FLOOR ADDITION INTERMEDIATE MOMENT FRAMES, THE FOLLOWING ARE DEMAND CRITICAL WELDS THAT SHALL SATISFY THE REQUIREMENTS OF SECTIONS A 3.4b AND I 2.3 OF AISC 341:
a. GROOVE WELDS AT COLUMN SPLICES.
b. WELDS AT COLUMN TO BASE PLATE CONNECTIONS.
c. WELDS AT BEAM TO COLUMN CONNECTIONS

5. MEMBERS USED IN INTERMEDIATE MOMENT AND SEISMIC FORCE RESISTING SYSTEMS (SFRS) WITH FLANGES 1½ INCH THICK AND THICKER (TESTED AT LOCAITONS PER ASTM A6 S30), AND PLATES THAT ARE 2 INCH THICK OR THICKER (MEASURED AT LOCATIONS PER ASTM A673) SHALL HAVE A MINIMUM CHARPY V-NOTCH TOUGHNESS OF 20 FT-LB AT 70°F.

6. ALL WELDS THAT ARE USED IN MEMBERS & CONNECTIONS IN INTERMEDIATE MOMENT FRAMES, AND ALL WELDS DESIGNATED AST "DEMAND CRITICAL"SHALL BE MADE WITH FILLER METALS MEETING THE REQUIREMENTS SPECIFIED IN AWS D1.8 CLAUSE 6.3.

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
ALEX BANNEROT
91686
LICENSED PROFESSIONAL ENGINEER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219Z01S-002

DESIGNED BY: A. BANNEROT
DRAWN BY: D. ORTON
CHECKED BY: A. SAVOIE
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
(817)334-7500 TBPE FIRM #237

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
STRUCTURAL NOTES

SHEET ID
B1455
S-002

W912QR23R0003_Plans-0000

METAL DECK NOTES

A. PROVIDE DESIGN, FABRICATION, AND ERECTION OF METAL DECK CONFORMING TO THE STEEL DECK INSTITUTE'S "CODE OF RECOMMENDED STANDARD PRACTICE AND BASIC DESIGN SPECIFICATIONS".

B. FORM ROOF AND FLOOR DECK FROM STEEL SHEETS CONFORMING A 653 OR HIGHER SPECIFICATIONS WITH A MINIMUM YIELD STRENGTH OF 33 KSI.

C. ATTACH SHEETS TO STEEL SUPPORT MEMBERS AS INDICATED AND IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION. WHEN DECK IS SCHEDULED TO BE EXPOSED, DE-SLAG, CLEAN AND TOUCH UP WELDS WITH A ZINC-RICH PRIMER.

D. LAP ROOF AND FLOOR DECK ENDS MINIMUM OF 2 INCHES. WHEN FASTENING DECK TO SUPPORT MEMBERS, PROVIDE WELDING MATERIALS INSTALLATION PROCEDURES TO PREVENT BURNING OF HOLES IN DECK.

E. PROVIDE 6 INCH CLOSURE STRIP WHERE CHANGES IN DECK DIRECTION OCCUR. CLOSURE TO BE SAME GAGE AS DECK.

F. AT ENDS OF DECKS OR WHERE CHANGES OF DECK DIRECTION OCCUR, FASTEN TO SUPPORTS AT EACH FLUTE. PROVIDE ADEQUATE CLOSURES AND FASTENERS TO SIDES AT 18 INCHES ON CENTER.

G. WHERE PARTIAL PANELS MAY BE REQUIRED TO COMPLETE DECK INSTALLATION AT PERIMETER OF STRUCTURE, PROVIDE WELDS IN EACH FLUTE TO STRUCTURAL MEMBERS. INSTALL DECK IN THREE SPAN LENGTHS WHEREVER POSSIBLE.

H. METAL ROOF DECK:

1. PROVIDE 1-1/2 INCH DEEP, 50 KSI, 20 GAGE, WIDE RIB TYPE B GALVANIZED METAL DECK, OR APPROVED EQUAL, WITH THE FOLLOWING MINIMUM PROPERTIES PER ONE FOOT WIDTH:
   a. Ip = 0.201 IN4 ; In = 0.222 IN4
   b. Sp = 0.234 IN3; Sn = 0.247 IN3

2. PROVIDE POSITIVE ATTACHMENT TO FRAMING MEMBERS WITH #12 DRILL SCREWS AT 36/7 FASTENER PATTERN.

3. PROVIDE #12 DRILL SCREW SIDE LAP FASTENERS AT 12 INCH ON CENTER BETWEEN SUPPORTS.

4. AT PERIMETER OF DECK, SECURE DECK TO STRUCTURAL MEMBERS WITH SAME ATTACHMENT AND SPACING AS SIDE LAP CONNECTIONS OR FASTENER PATTERN.

J. COMPOSITE METAL FLOOR DECK:

1. PROVIDE 2 INCH DEEP, 50 KSI, 20 GAGE, COMPOSITE TYPE VLI GALVANIZED METAL DECK, OR APPROVED EQUAL, WITH THE FOLLOWING MINIMUM PROPERTIES PER ONE FOOT WIDTH:
   a. Ip = 0.403 IN4 ; In = 0.403 IN4
   b. Sp = 0.326 IN3; Sn = 0.337 IN3

2. PROVIDE POSITIVE ATTACHMENT TO FRAMING MEMBERS WITH 5/8 INCH DIAMETER PUDDLE WELDS AT 36/4 FASTENER PATTER. SHEAR STUDS WELDED THROUGH DECK MAY REPLACE PUDDLE WELDS.

3. PROVIDE #8 DRILL SCREWS SIDE LAP FASTENERS AT 36 INCH ON CENTER.

4. IF SPANS IN CONJUNCTION WITH LOADS REQUIRE DECK TO BE SHORED, SHORE DECK IN ACCORDANCE WITH STEEL DECK INSTITUTE AND MANUFACTURER'S RECOMMENDATIONS.

5. PROVIDE SHEAR CONNECTORS (INDICATED AS "SC" ON THE DRAWINGS) THAT DEVELOP A DESIGN VALUE OF 17.2 k FOR 3/4 INCH STUDS PER CONNECTOR. SUBSTITUTION OF SHEAR CONNECTORS WITH DESIGN SHEAR CAPACITY OTHER THAN SPECIFIED ABOVE WILL BE ACCEPTABLE PROVIDED TOTAL HORIZONTAL SHEAR CAPACITY IN SPAN OF BEAM OR GIRDER IS UNALTERED. THE ARRANGEMENT AND SPACING OF SHEAR CONNECTORS MUST BE APPROVED BY THE STRUCTURAL ENGINEER.

6. CENTERED OVER GIRDERS AND PERPENDICULAR TO THE DECK FLUTES, AT COMPOSITE SLAB ON METAL DECK. PLACE ADDITIONAL REINFORCEMENT OF NO. 4's, SPACED AT 12 INCHES ON CENTER. EXTEND REINFORCEMENT INTO EACH BEAM SPAN A DISTANCE EQUAL TO 15 PERCENT OF BEAM SPAN LENGTH.

7. MAINTAIN SPECIFIED CONCRETE THICKNESS AT COLUMN LOCATIONS. SLAB THICKNESS ELSEWHERE WILL VARY DUE TO DECK AND BEAM DEFLECTIONS. MAKE ALLOWANCES AND FURNISH MATERIALS TO CREATE SPECIFIED FLOOR ELEVATION, WITHIN SPECIFIED LIMITS.

8. PROVIDE SHEAR STUDS CONFORMING TO THE STANDARDS OF ASTM A 108, GRADES 1015 - 1020, WITH A MINIMUM TENSILE STRENGTH OF 60,000 PSI. AUTOMATICALLY END WELD STUDS IN THE FIELD THOUGH THE DECK IN ACCORDANCE WITH THE SHEAR STUD MANUFACTURER'S INSTRUCTIONS. MANUAL WELDING IS NOT PERMITTED.

STRUCTURAL MASONRY NOTES

A. REINFORCED MASONRY WORK AND MATERIALS TO BE IN ACCORDANCE WITH THE BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES TMS 402.

B. REINFORCED MASONRY TO CONFORM TO THE SPECIFICATIONS FOR MASONRY STRUCTURES TMS 602 (WITH THE EXCEPTIONS NOTED IN JOB SPECIFICATIONS).

C. PROVIDE CONCRETE MASONRY UNITS (CMU) OF NORMAL WEIGHT (125 PCF MINIMUM), CONFORMING TO THE LATEST EDITION OF ASTM C 90, WITH INDIVIDUAL CMU NET AREA MINIMUM COMPRESSIVE STRENGTH OF 3,250 PSI. LAY UNITS IN RUNNING BOND UNLESS OTHERWISE NOTED.

D. PROVIDE MASONRY MORTAR MEETING THE REQUIREMENTS OF TYPE S PER ASTM C 270. PROVIDE AGGREGATES FOR MORTAR CONFORMING TO ASTM C 404. PROVIDE MORTAR WITH A MINIMUM COMPRESSIVE STRENGTH OF 2,500 PSI AT 28 DAYS.

E. PROVIDE MASONRY GROUT WITH MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 2,500 PSI TESTED IN ACCORDANCE WITH ASTM C 1019. GROUT TO MEET THE MINIMUM REQUIREMENTS SPECIFIED IN ASTM C 476.

F. PROVIDE CONCRETE MASONRY UNITS IN ACCORDANCE WITH ASTM C 426 LIMITS FOR DRYING SHRINKAGE OF CONCRETE BLOCKS.

G. PROVIDE VERTICAL REINFORCEMENT IN CMU WALLS AS SHOWN IN DRAWINGS. FILL THE REINFORCED CELLS SOLIDLY WITH GROUT. MAXIMUM HEIGHT OF GROUT POURS TO BE AS PER TMS 402/602.

H. PROVIDE HORIZONTAL JOINT REINFORCING IN WALLS AT 16 INCHES ON CENTER VERTICAL SPACING. JOINT REINFORCING TO BE HOT DIP GALVANIZED NO. 9 GAGE LADDER TYPE WITH CROSS TIES AT 16 INCHES ON CENTER, CONFORMING TO ASTM A 82. SPACE JOINT REINFORCEMENT AT 8 INCHES ON CENTER IN THE PARAPETS. LAP SPLICE ENDS A MINIMUM OF 12 INCHES AT SPLICES.

J. LAY HOLLOW UNITS WITH FULL MORTAR COVERAGE ON HORIZONTAL AND VERTICAL FACE SHELLS. PROVIDE FULL MORTAR COVERAGE FOR WEBS WHEN ADJACENT TO GROUTED CELLS.

K. ALIGN VERTICAL CELLS TO BE FILLED WITH GROUT TO PROVIDE CONTINUOUS UNOBSTRUCTED VERTICAL CELLS. REMOVE OVERHANGING MORTAR OR OTHER OBSTRUCTION AND DEBRIS FROM THE INSIDES OF SUCH CELL WALLS. PROVIDE GROUT WITH 8 INCH SLUMP AND CONSOLIDATE BY MEANS OF HAND TAMPING TO ENSURE COMPLETE FILLING OF CELLS.

L. PROVIDE AN 8 INCH HIGH BOND BEAM (MINIMUM DEPTH UNLESS OTHERWISE NOTED) AT TOP OF ALL CMU WALLS. REINFORCE BOND BEAM PER DETAIL(S). IF BOND BEAMS AT INTERSECTING WALLS MEET AT DIFFERENT ELEVATIONS, EXTEND BOND BEAMS AROUND INTERSECTING CORNER TO FIRST INTERIOR REINFORCED CELL, BUT NOT LESS THAN 4 FEET. CONSTRUCT BOND BEAMS WITH PORTLAND CEMENT GROUT 2,000 PSI MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS AND A MAXIMUM AGGREGATE SIZE OF 3/4 INCH.

M. PROVIDE VERTICAL REINFORCING AT CORNERS OF CMU WALLS, AT ENDS OF WALLS, EACH SIDE OF CONTROL JOINT, AND EACH SIDE OF WALL OPENINGS PER DETAIL(S). PROVIDE MINIMUM 3/8 INCH THROUGH-WALL CONTROL JOINTS AT 40'-0" MAXIMUM SPACING UNLESS OTHERWISE NOTED ON DRAWINGS.

N. INSTALL ANCHORS, ACCESSORIES, AND OTHER ITEMS TO BE BUILT IN AS WORK PROGRESSES.

P. LAP SPLICE VERTICAL REINFORCING MINIMUM OF 48 BAR DIAMETERS OR 24 INCHES, WHICHEVER IS GREATER.

Q. PERFORM CUTTING AND FITTING OF MASONRY WITH MASONRY SAWS PROVIDING CUT FINISHED UNITS.

R. CELLS AT OR BELOW FINISHED GRADE ARE TO BE GROUTED SOLID.

S. WHEN A FOUNDATION DOWEL DOES NOT LINE UP WITH A VERTICAL CORE, DO NOT SLOPE DOWEL MORE THAN ONE HORIZONTAL TO SIX VERTICAL.

T. WHEN VERTICAL DOUBLE REINFORCED CELLS ARE SPECIFIED, PROVIDE 1/4 INCH CLEARANCE FROM INSIDE FACE OF THE BLOCK MASONRY CELL OR MINIMUM OF ONE BAR DIAMETER, WHICHEVER IS GREATER. ENSURE THAT ALL VERTICAL REINFORCING STEEL IS POSITIONED AND HELD IN PLACE BY MEANS OF WIRE SPACERS.

FIELD INSTALLED EXPANSION ANCHOR NOTES

A. INSTALL ANCHORS IN ACCORDANCE WITH CURRENT ICC-ES REPORT FOR THE ANCHOR AND RECOMMENDATIONS OF THE MANUFACTURER.

B. INSTALL ANCHORS PERPENDICULAR TO THE FACE OF CONCRETE. DEVIATION FROM PERPENDICULAR GREATER THAN 10 DEGREES WILL NOT BE ACCEPTABLE.

C. CREATE A TEMPLATE AT EACH ANCHOR CONNECTION LOCATION PRIOR TO FABRICATING HOLES IN CONNECTION PLATES. MAKE TEMPLATE BY LOCATING EXISTING REBAR WITH A PACHOMETER. REPOSITION ANCHORS A MAXIMUM OF 1-1/2 INCHES TO AVOID CONFLICTS WITH EXISTING REINFORCING.

D. DRILL HOLES TO DEPTH AND DIAMETER RECOMMENDED BY MANUFACTURER. DO NOT ENLARGE OR REDIRECT HOLES ALONG LENGTH OF BOLT.

E. DRILL HOLES IN CONTINUOUS OPERATION. BLOW DUST FROM THE HOLE USING COMPRESSED AIR, OR USING THE MANUFACTURER'S APPROVED METHOD OF HOLE CLEANING.

F. FILL ABANDONED HOLES WITH EPOXY GROUT.

G. TIGHTEN NUTS AGAINST SMOOTH WASHERS TO MINIMUM TORQUE RECOMMENDED BY MANUFACTURER.

H. PROVIDE HOLES IN CONNECTION PLATES NO MORE THAN 1/16 INCH LARGER THAN THE ANCHOR DIAMETER. IF LARGER HOLES ARE NEEDED FOR ERECTION PURPOSES, PROVIDE PLATE WASHERS WELDED TO THE CONNECTION PLATE TO TRANSFER THE ANCHOR LOAD.

J. ANCHOR INSTALLERS MUST COMPLETE ANCHOR INSTALLATION TRAINING AS INDICATED BY ANCHOR MANUFACTURER PRIOR TO PERFORMING WORK ON THE PROJECT.

COLD FORM METAL FRAMING NOTES

A. COLD FORMED METAL FRAMING IS A DELEGATED DESIGN ITEM FOR WHICH SHOP DRAWINGS AND CALCULATIONS MUST BE PROVIDED BY THE CONTRACTOR. SHOP DRAWINGS MUST INDICATE THE TYPE, SIZE, GAUGE, AND SPACING FOR ALL COLD FORMED MEMBERS AND ACCESSORIES, INCLUDING THE AREAS INDICATED BELOW:

1. COLD-FORMED METAL FRAMING, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:
   a. INTERIOR LOAD-BEARING 2ND FLOOR WALLS
   b. INTERIOR LOAD-BEARING ROOF JOISTS ABOVE 2ND FLOOR FRAMING
   c. INTERIOR NON LOAD-BEARING PARTITION WALL FRAMING
   d. EXTERIOR NON LOAD-BEARING WALL FRAMING
   e. STRAP BRACING OF WALLS

2. WINDOW AND DOOR FRAMING

3. STAIR ELEMENTS NOT DETAILED IN DRAWINGS

B. DESIGN ALL STRUCTURAL MEMBERS IN ACCORDANCE WITH AMERICAN IRON AND STEEL INSTITUTE (AISI) "SPECIFICATION FOR DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS", LATEST EDITION.

C. ALL COLD-FORMED STUDS, RUNNERS, BLOCKING AND JOISTS DESIGNATIONS MUST BE IN ACCORDANCE WITH THE MANUFACTURING CATALOG, LATEST EDITION.

D. FORM ALL FRAMING MEMBERS FROM CORROSION RESISTANT STEEL CORRESPONDING TO THE REQUIREMENTS OF ASTM A653 WITH A MINIMUM YIELD OF 33KSI.

E. PLACE ALL COLD-FORMED STEEL STUD WALL BRIDGING HORIZONTALLY WITH A MAXIMUM VERTICAL SPACING OF 4 FEET UNLESS OTHERWISE NOTED. AS AN OPTION, CONTINUOUS COLD-FORMED CHANNELS MAY BE POSITIONED THROUGH THE STUD PUNCH OUTS AS BRIDGING PROVIDED THE CHANNELS ARE PROPERLY FASTENED TO EACH STUD.

F. PRIOR TO FABRICATION OF FRAMING, SUBMIT FABRICATION AND ERECTION DRAWINGS TO THE CONTRACTING OFFICER FOR REVIEW.

G. INSTALL AXIALLY-LOADED STUDS IN A MANNER WHICH WILL ASSURE THAT THEIR ENDS ARE POSITIONED AGAINST THE INSIDE OF THE RUNNER WEB PRIOR TO FASTENING.

H. FASTEN COMPONENTS WITH SELF-DRILLING SCREWS OR WELDING. PROVIDE SCREWS OF SUFFICIENT SIZE TO ENSURE THE STRENGTH OF THE CONNECTION. WIRE TYING OF COMPONENTS IS NOT PERMITTED. TOUCH UP ALL WELDS WITH A ZINC-RICH PAINT.

J. WELDING OF COLD-FORMED STUDS AND JOISTS MAY BE PERFORMED USING A MINIMUM 3/16" AWS TYPE 6013 WELDING ROD.

K. SECURELY ANCHOR RUNNERS TO THE SUPPORTING STRUCTURE. PROVIDE COMPLETE, UNIFORM AND LEVEL BEARING SUPPORT FOR THE BOTTOM RUNNER.

L. SECURELY ANCHOR ABUTTING LENGTHS OF RUNNER TO A COMMON STRUCTURAL ELEMENT, BUTT-WELDED OR SPLICED.

COLD FORM METAL FRAMING NOTES

M. PLUMB, ALIGN AND SECURELY ATTACH STUDS TO THE FLANGES OF BOTH UPPER AND LOWER RUNNERS. SPLICES IN STUDS ARE NOT PERMITTED.

N. PROVIDE HEADERS AND SUPPORTING STUDS FOR FRAMING OF WALL OPENINGS.

P. SEE SPECIFICATION SECTION 05 40 00 FOR ADDITIONAL REQUIREMENTS.

Q. PROVIDE HEADERS AND SUPPORTING STUDS FOR FRAMING OF WALL OPENINGS.

SPECIAL INSPECTION NOTES

A. GENERAL:
STRUCTURAL TESTS AND SPECIAL INSPECTIONS SHALL BE PROVIDED IN ACCORDANCE WITH CHAPTER 17 OF THE 2018 INTERNATIONAL BUILDING CODE, IN ACCORDANCE WITH THE SPECIFICATIONS, INCLUDING SECTION 01 45 35 AND SCHEDULE AND STATEMENT OF SPECIAL INSPECTIONS.

DELEGATED DESIGN ITEMS

A. THE CONTRACTOR SHALL EMPLOY OR RETAIN A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF ALABAMA TO DESIGN AND DETAIL DELEGATED DESIGN ITEMS TO MEET THE PERFORMANCE AND DESIGN CRITERIA ESTABLISHED AS PART OF THE BASE BUILDING STRUCTURE INDICATED IN THE CONTRACT DOCUMENTS INCLUDING BUT NOT LIMITED TO:

1. METAL STAIR COMPONENTS AND THEIR CONNECTIONS TO THE BUILDING STRUCTURE NOT INDICATED IN CONTRACT DRAWINGS.

2. COLDFORM FRAMING, INTERNAL CONNECTIONS, AND CONNECTIONS TO STRUCTURE.

3. GRAVITY STEEL CONNECTION DESIGN AND DETAILING NOT OTHERWISE DETAILED IN THE CONTRACT DRAWINGS.

4. CURBS FOR MECH UNITS.

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
ALEX BANNEROT
91686
LICENSED PROFESSIONAL ENGINEER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY:	A. BANNEROT
DRAWN BY:	D. ORTON
CHECKED BY:	A. SAVOIE
SUBMITTED BY:	E. OLMESS
QC BY:	S. TATE
ANSI D 22x34	
ISSUE DATE:	23 NOVEMBER 2022
SOLICITATION NO.:	
CONTRACT NO.:	
DRAWING CODE:	
FILE NAME:	SXHT21920IS-003

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

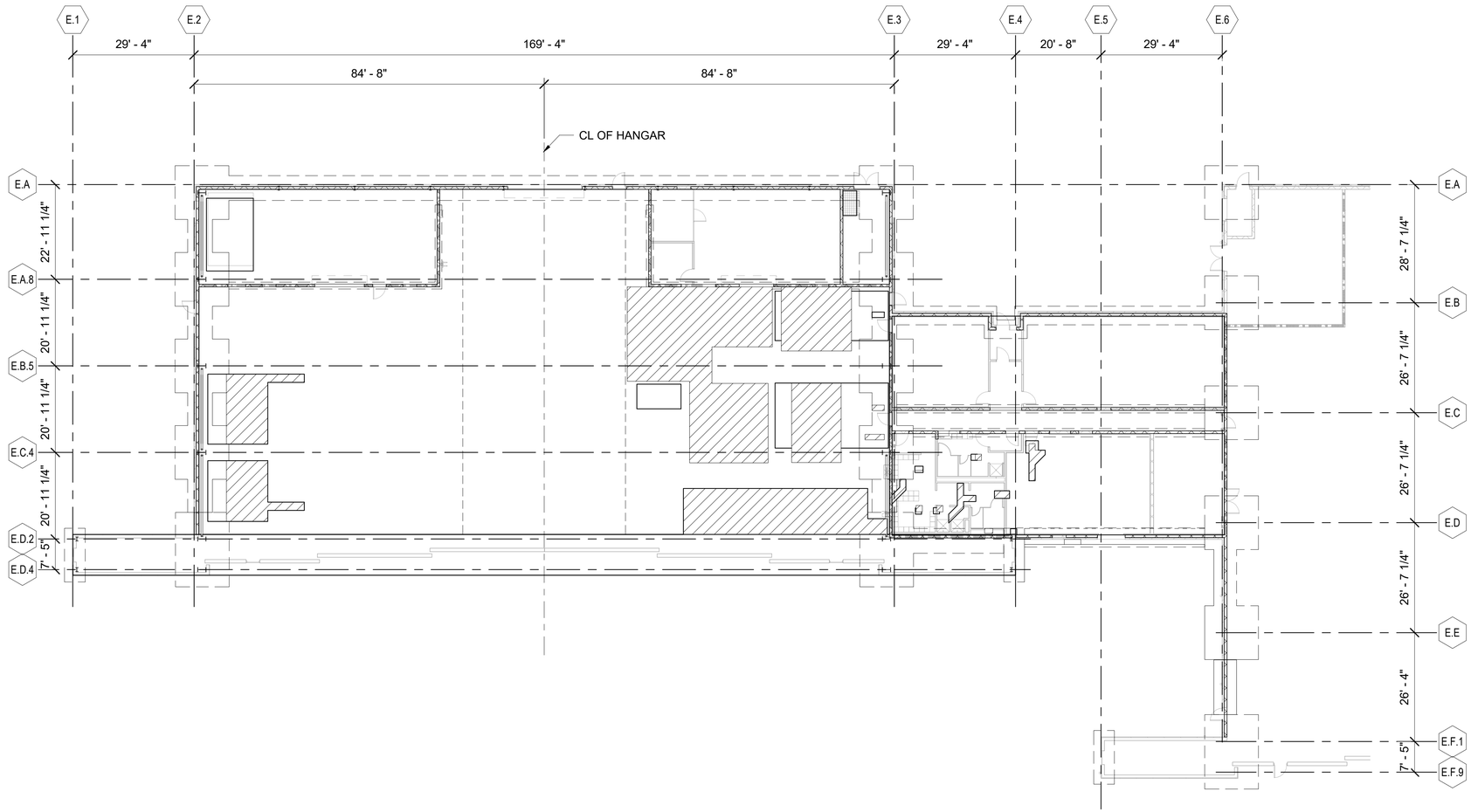
Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
Phone: (817)820-8600 Fax: (817)820-8679

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, PZ#: 496395
STRUCTURAL NOTES

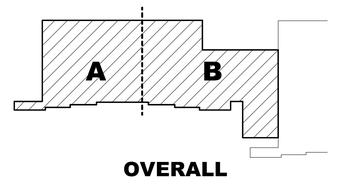
SHEET ID
B1455
S-003

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



A1 OVERALL DEMOLITION PLAN - LEVEL 1
1/16" = 1'-0"



OVERALL KEY PLAN

GRAPHIC SCALE
16 12 8 4 0 16 32
SCALE: 1/16"=1'-0"

PLAN NORTH
TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
ALEX BANNEROT
91686
LICENSED PROFESSIONAL ENGINEER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: A. BANNEROT
DRAWN BY: D. ORTON
CHECKED BY: A. SAVOIE
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT21920 1SD101

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS No. W9128322

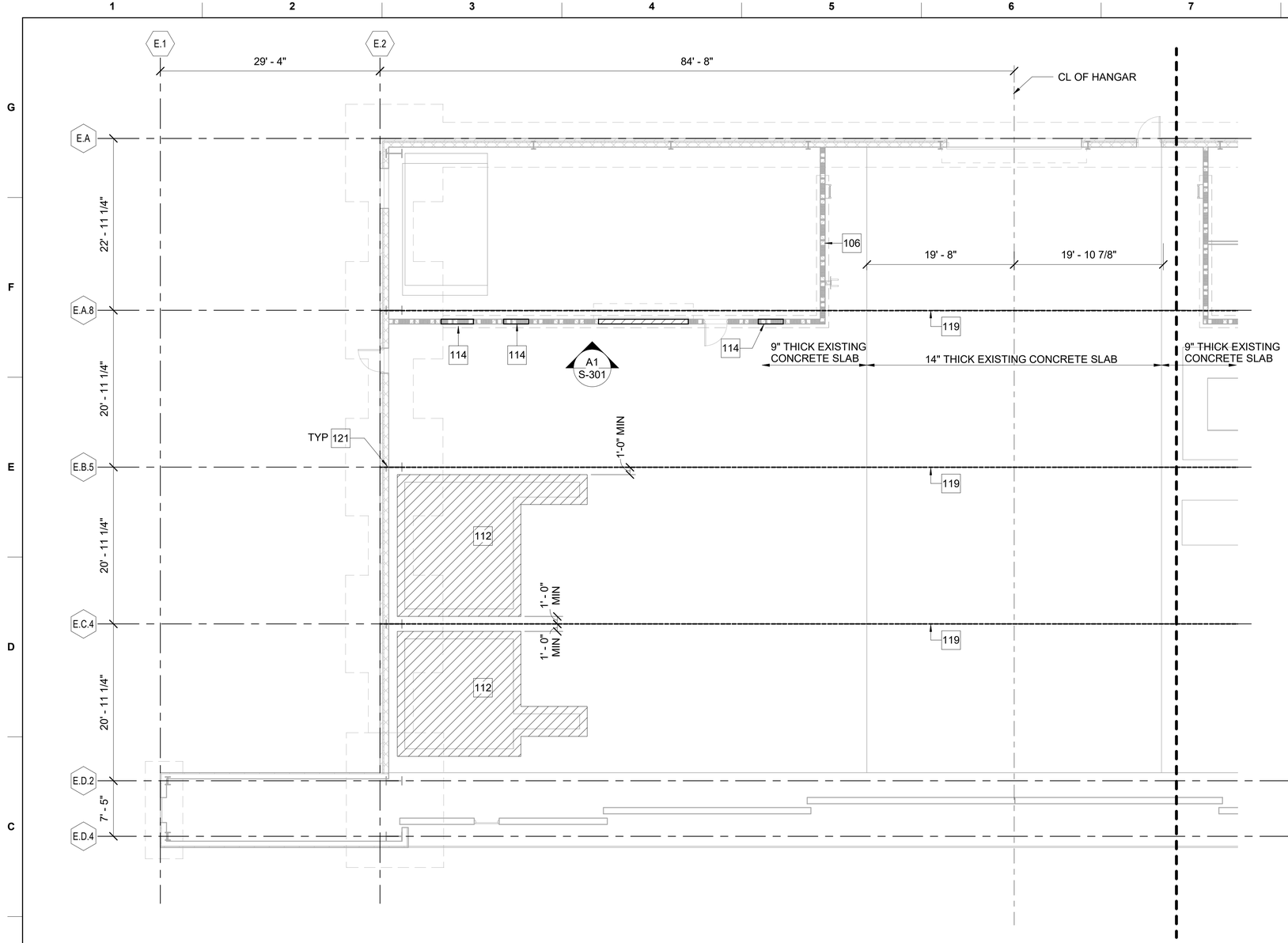
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
OVERALL DEMOLITION PLAN - LEVEL 1

SHEET ID
B1455
SD101

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN



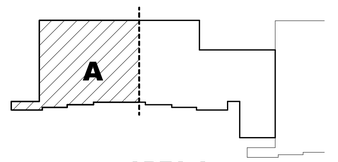
SHEET NOTES - DEMOLITION PLAN

A	FIELD VERIFY EXISTING DIMENSIONS, MEMBER SIZES, ELEVATIONS AND OTHER CONDITIONS. NOTIFY CONTRACTING OFFICER OF ANY DISCREPANCIES TO RECEIVE REVISED RECOMMENDATIONS..
B	VERIFY LOCATIONS OF ALL UNDERGROUND AND ABOVE GROUND UTILITIES PRIOR TO START OF CONSTRUCTION. REPAIR, REROUTE, OR REPLACE UTILITIES AS REQUIRED TO PERFORM NEW CONSTRUCTION.
C	INSTALL REINFORCING CHANNELS AROUND NEW OPENINGS PRIOR TO ENLARGING OPENINGS. RE: WALL ELEVATIONS.

KEYNOTES

106	EXISTING MASONRY WALL
112	SAWCUT AND REMOVE EXISTING SLAB FOR NEW CONCRETE FOOTING
114	NEW OPENING IN EXISTING CMU WALL REFER TO ELEVATION
119	EXISTING TENSION ROD ENCASEMENT. MUST REMAIN UNDISTURBED. PROCEED WITH EXTREME CAUTION WHEN CUTTING EXISTING SLAB NEAR GRID LINES E.A.8, E.B.5 & E.C.4 TO AVOID EXISTING TENSION RODS AND ENCASEMENT. DO NOT CUT WITHIN 12" EITHER SIDE OF THESE GRID LINES.
121	EXISTING STEEL COLUMN

A1 PARTIAL DEMOLITION PLAN - LEVEL 1 - AREA A
1/8" = 1'-0"



AREA A
KEY PLAN

GRAPHIC SCALE
8 6 4 2 0 8 16
SCALE: 1/8"=1'-0"

PLAN NORTH
TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
ALEX BANNEROT
91686
LICENSED PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: A. BANNEROT
DRAWN BY: D. ORTON
CHECKED BY: A. SAVOIE
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:.
FILE NAME: SXHT21920 1SD102

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

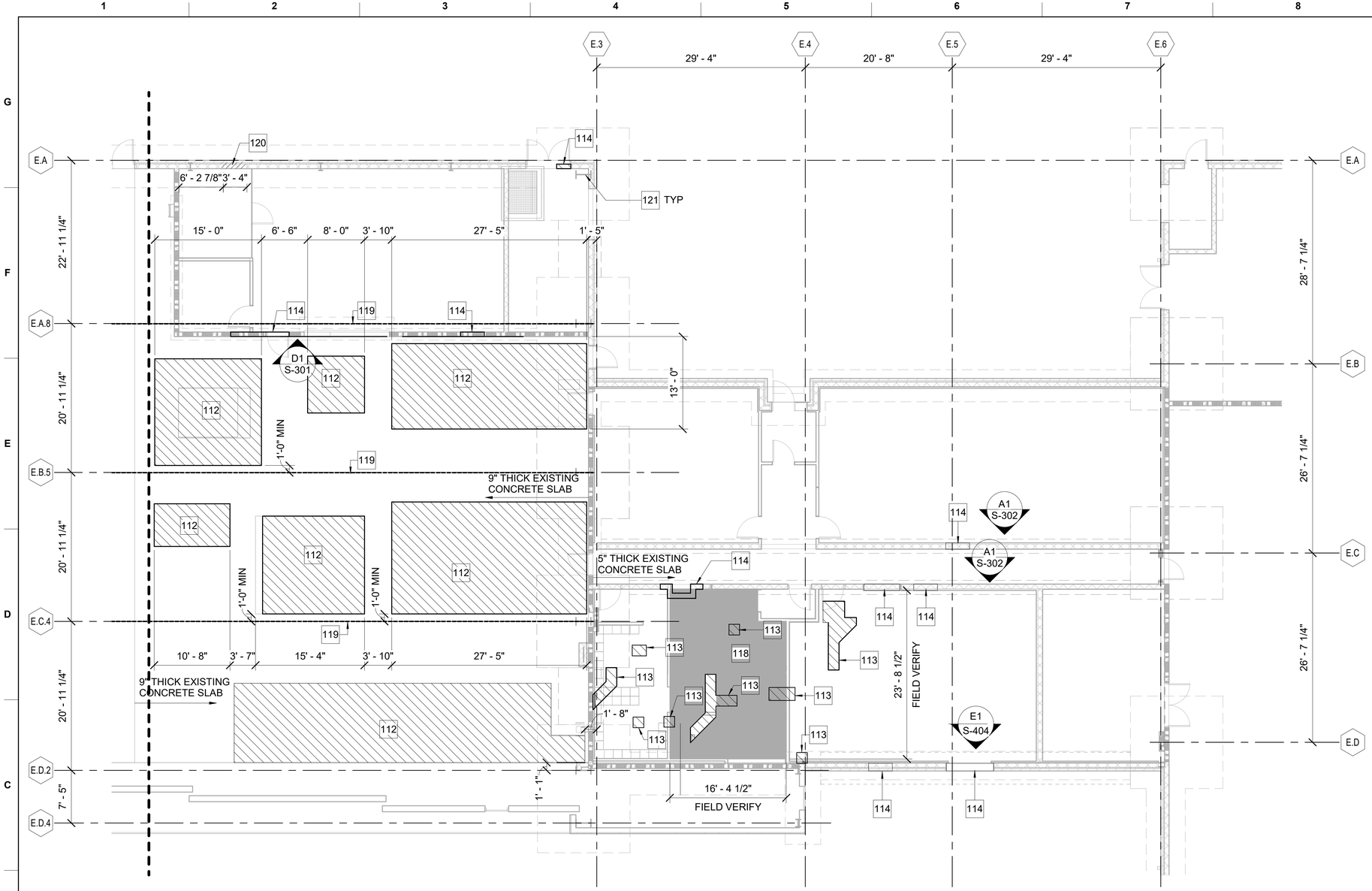
jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS No. W0WQ0_19-00003

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PARTIAL DEMOLITION - LEVEL 1 - AREA A

SHEET ID
B1455
SD102

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



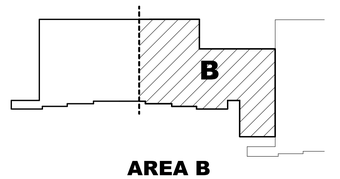
SHEET NOTES - DEMOLITION PLAN

A	FIELD VERIFY EXISTING DIMENSIONS, MEMBER SIZES, ELEVATIONS AND OTHER CONDITIONS. NOTIFY CONTRACTING OFFICER OF ANY DISCREPANCIES TO RECEIVE REVISED RECOMMENDATIONS..
B	VERIFY LOCATIONS OF ALL UNDERGROUND AND ABOVE GROUND UTILITIES PRIOR TO START OF CONSTRUCTION. REPAIR, REROUTE, OR REPLACE UTILITIES AS REQUIRED TO PERFORM NEW CONSTRUCTION.
C	INSTALL REINFORCING CHANNELS AROUND NEW OPENINGS PRIOR TO ENLARGING OPENINGS. RE: WALL ELEVATIONS.

KEYNOTES

112	SAWCUT AND REMOVE EXISTING SLAB FOR NEW CONCRETE FOOTING
113	SAWCUT AND REMOVE EXISTING SLAB FOR NEW PLUMBING LINES
114	NEW OPENING IN EXISTING CMU WALL REFER TO ELEVATION
118	PATCH EXISTING SLAB WHERE SHOWER PANS WERE REMOVED AND PROVIDE TOPPING SLAB IN RESTROOMS
119	EXISTING TENSION ROD ENCASEMENT. MUST REMAIN UNDISTURBED. PROCEED WITH EXTREME CAUTION WHEN CUTTING EXISTING SLAB NEAR GRID LINES E.A.8, E.B.5 & E.C.4 TO AVOID EXISTING TENSION RODS AND ENCASEMENT. DO NOT CUT WITHIN 12" EITHER SIDE OF THESE GRID LINES.
120	SAWCUT AND REMOVE EXISTING BRICK VENEER AND CMU WALL FROM FINISHED FLOOR LEVEL TO 7'-4" ABOVE FINISHED FLOOR ROF NEW DOOR OPENING. RE: D6/S-520 SIM.
121	EXISTING STEEL COLUMN

A1 PARTIAL DEMOLITION PLAN - LEVEL 1 - AREA B
1/8" = 1'-0"



AREA B
KEY PLAN

GRAPHIC SCALE
8 6 4 2 0 8 16
SCALE: 1/8"=1'-0"

PLAN NORTH
TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
ALEX BANNEROT
91686
LICENSED PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: A. BANNEROT
DRAWN BY: D. ORTON
CHECKED BY: A. SAVOIE
SUBMITTED BY: E. OLNESS
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SDXFT21920201SD103
ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS No. 70290213

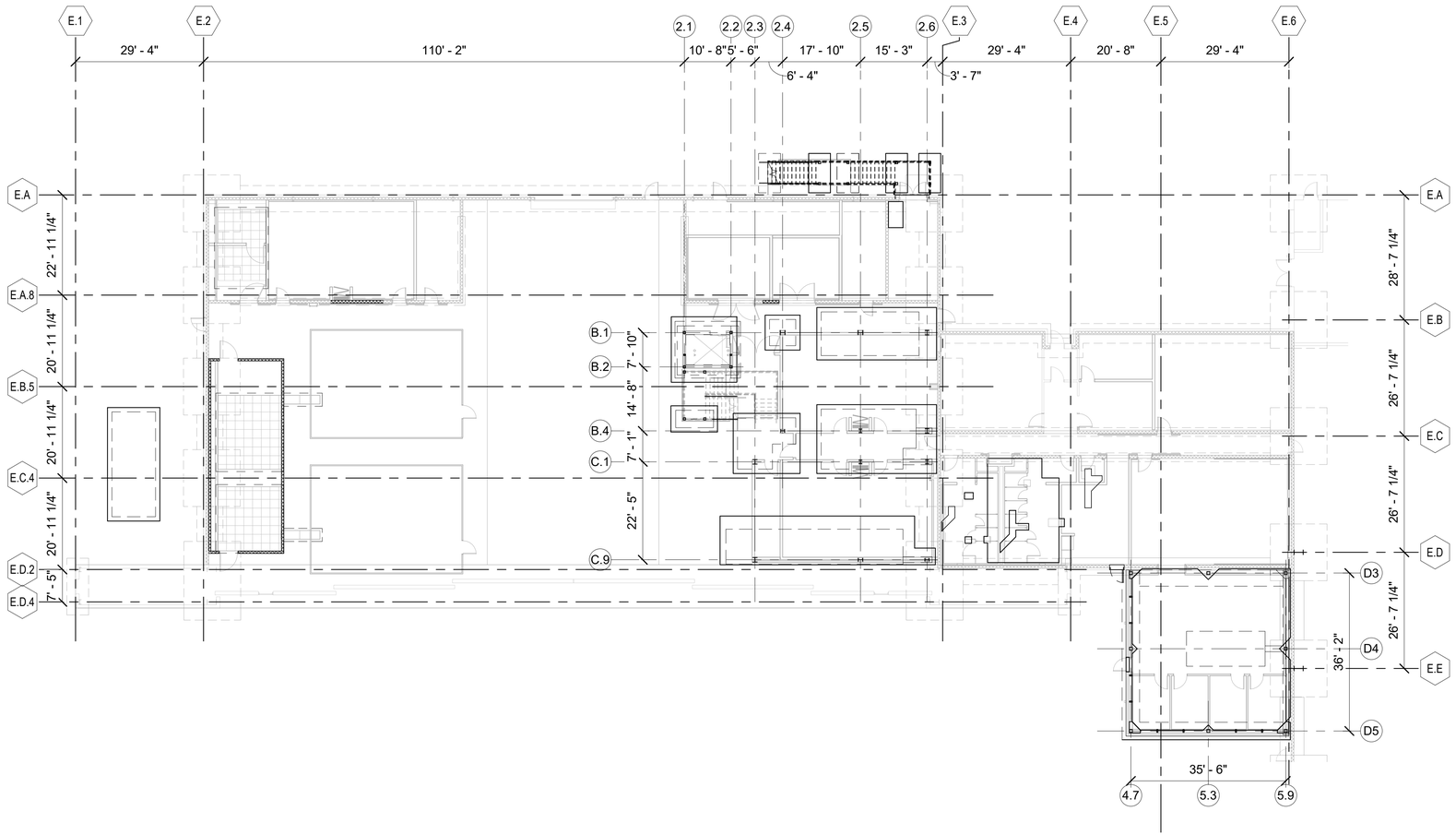
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PARTIAL DEMOLITION - LEVEL 1 - AREA B

SHEET ID
B1455
SD103

W912QR23R0003_Plans-0000

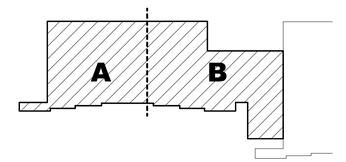
ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN



A1 OVERALL FOUNDATION PLAN - LEVEL 1

1/16" = 1'-0"



OVERALL KEY PLAN

GRAPHIC SCALE

16 12 8 4 0 16 32

SCALE: 1/16"=1'-0"

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
ALEX BANNEROT
91686
LICENSED PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: A. BANNEROT
DRAWN BY: D. ORTON
CHECKED BY: A. SAVOIE
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201SB101

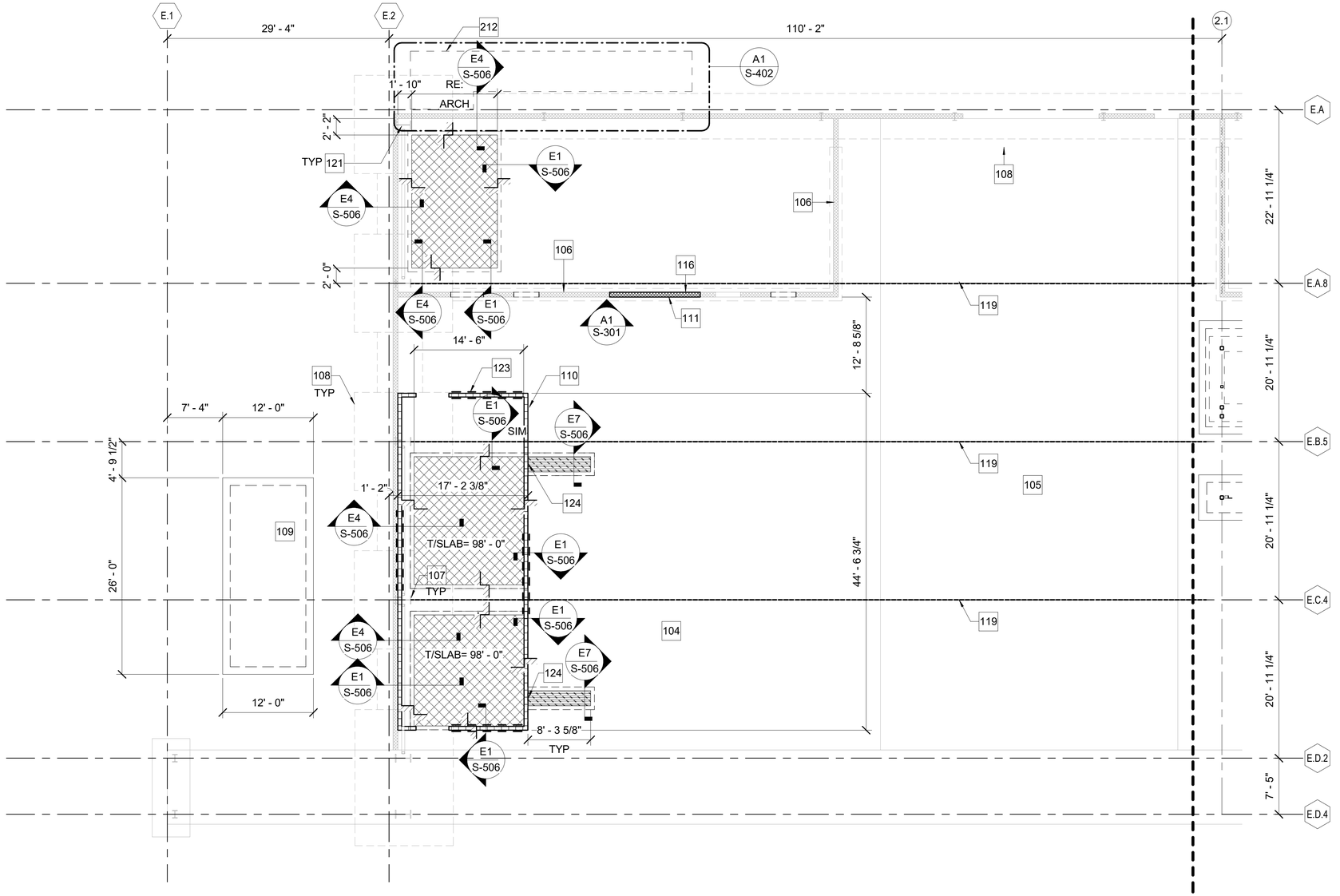
US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS PROJECT NO: [illegible]

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
OVERALL FOUNDATION PLAN - LEVEL 1

SHEET ID
B1455
SB101

W912QR23R0003_Plans-0000



A1 PARTIAL FOUNDATION PLAN - AREA A - LEVEL 1
1/8" = 1'-0"

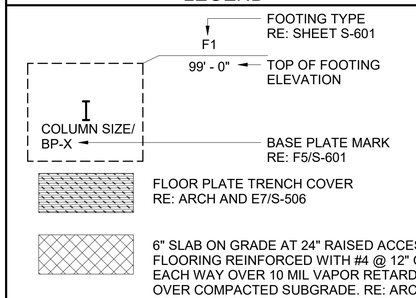
SHEET NOTES - FOUNDATION PLAN

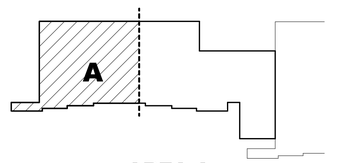
A	REFER TO SHEETS S-001 THROUGH S-003 FOR STRUCTURAL GENERAL NOTES
B	REFER TO SHEETS S-501 THROUGH S-502 FOR TYPICAL CONCRETE DETAILS
C	REFER TO ARCHITECTURE, MECHANICAL, & PLUMBING SHEETS FOR OPENINGS
D	ALL FOOTINGS SHALL BE CENTERED UNDER WALL CENTER LINES UNLESS OTHERWISE NOTED
E	CJ INDICATES CONSTRUCTION JOINT RE: C1/S-502
F	THE GROUND LEVEL REFERENCE DATUM IS 167.04 FEET = 100'-0", FIELD VERIFY THAT ELEVATION100'-0" MATCHES FINISHED FLOOR OF EXISTING BUILDING.
G	FIELD VERIFY EXISTING DIMENSIONS, MEMBER SIZES, ELEVATIONS AND OTHER CONDITIONS. NOTIFY CONTRACTING OFFICER OF ANY DISCREPANCIES TO RECEIVE REVISED RECOMMENDATIONS.
H	VERIFY LOCATIONS OF ALL UNDERGROUND AND ABOVE GROUND UTILITIES PRIOR TO START OF CONSTRUCTION. REPAIR, REROUTE, OR REPLACE UTILITIES AS REQUIRED TO PERFORM NEW CONSTRUCTION.
J	EXERCISE CAUTION DURING EXCAVATION, DEMOLITION AND REMOVAL OF EXISTING SLABS, WALLS, TRENCHES, ETC., TO BE REMOVED TO AVOID DAMAGING/UNDERMINING EXISTING STRUCTURES, UTILITIES, FOUDNATIONS AND STRUCTURES DURING CONSTRUCTION.
K	REFER TO SD102 AND SD103 FOR EXISTING SLAB THICKNESS

KEYNOTES

104	EXISTING 9" CONCRETE SLAB ON PREPARED SUBGRADE VERIFY IN FIELD
105	EXISTING 14" CONCRETE SLAB ON PREPARED SUBGRADE VERIFY IN FIELD
106	EXISTING MASONRY WALL
107	EXISTING W COLUMN
108	EXISTING CONCRETE FOOTING
109	6" CONCRETE SLAB RE: A6/S-506
110	6" LOAD-BEARING, LATERALLY BRACED COLD FORM METAL STUD WALL PROVIDED BY COLDFORM SUPPLIER. TOP OF WALL (ROOF DECK BEARING ELEVATION)=113'-9"
111	CMU WALL INFILL RE: ELEVATION
116	SLAB PATCH WHERE BOLLARDS WERE REMOVED
119	EXISTING TENSION ROD ENCASEMENT. MUST REMAIN UNDISTURBED. PROCEED WITH EXTREME CAUTION WHEN CUTTING EXISTING SLAB NEAR GRID LINES E.A.8, E.B.5 & E.C.4 TO AVOID EXISTING TENSION RODS AND ENCASEMENT. DO NOT CUT WITHIN 12" EITHER SIDE OF THESE GRID LINES.
121	EXISTING STEEL COLUMN
123	POTENTIAL LOCATION FOR COLDFORM WALL STRAP BRACING. COLDFORM WALL DESIGNER TO VERIFY, TYP
124	COLDFORM SUPPLIER TO PROVIDE HEADER AT BASE OF COLDFORM WALL TO SPAN OVER TRENCH
212	NEW STAIRS AND LANDING RE: ARCH

LEGEND





AREA A
KEY PLAN

GRAPHIC SCALE
8 6 4 2 0 8 16
SCALE: 1/8"=1'-0"

PLAN NORTH
TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
ALEX BANNEROT
91686
LICENSED PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201SB102

DESIGNED BY: A. BANNEROT
DRAWN BY: D. ORTON
CHECKED BY: A. SAVOIE
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS ENGINEERING GROUP INC.

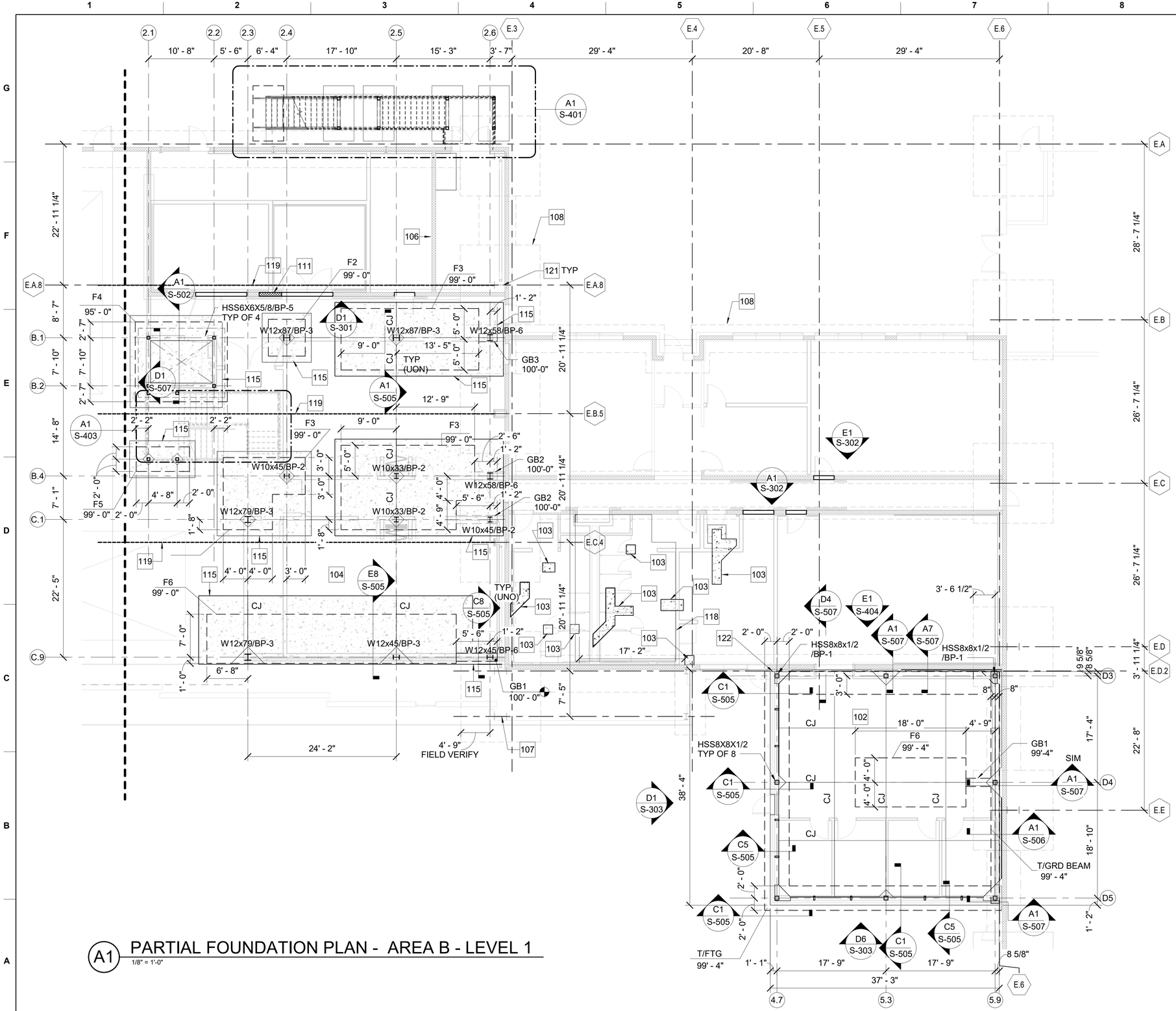
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PARTIAL FOUNDATION PLAN - AREA A - LEVEL 1

SHEET ID
B1455
SB102

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN



A1 PARTIAL FOUNDATION PLAN - AREA B - LEVEL 1

1/8" = 1'-0"

SHEET NOTES - FOUNDATION PLAN

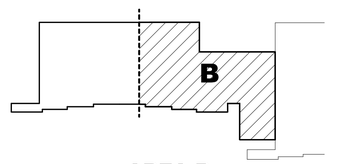
A	REFER TO SHEETS S-001 THROUGH S-003 FOR STRUCTURAL GENERAL NOTES
B	REFER TO SHEETS S-501 THROUGH S-502 FOR TYPICAL CONCRETE DETAILS
C	REFER TO ARCHITECTURE, MECHANICAL, & PLUMBING SHEETS FOR OPENINGS
D	ALL FOOTINGS SHALL BE CENTERED UNDER WALL CENTER LINES UNLESS OTHERWISE NOTED
E	CJ INDICATES CONSTRUCTION JOINT RE: C1/S-502
F	THE GROUND LEVEL REFERENCE DATUM IS 167.04 FEET = 100'-0", FIELD VERIFY THAT ELEVATION100'-0" MATCHES FINISHED FLOOR OF EXISTING BUILDING.
G	FIELD VERIFY EXISTING DIMENSIONS, MEMBER SIZES, ELEVATIONS AND OTHER CONDITIONS. NOTIFY CONTRACTING OFFICER OF ANY DISCREPANCIES TO RECEIVE REVISED RECOMMENDATIONS.
H	VERIFY LOCATIONS OF ALL UNDERGROUND AND ABOVE GROUND UTILITIES PRIOR TO START OF CONSTRUCTION. REPAIR, REROUTE, OR REPLACE UTILITIES AS REQUIRED TO PERFORM NEW CONSTRUCTION.
J	EXERCISE CAUTION DURING EXCAVATION, DEMOLITION AND REMOVAL OF EXISTING SLABS, WALLS, TRENCHES, ETC., TO BE REMOVED TO AVOID DAMAGING/UNDERMINING EXISTING STRUCTURES, UTILITIES, FOUDNATIONS AND STRUCTURES DURING CONSTRUCTION.
K	REFER TO SD102 AND SD103 FOR EXISTING SLAB THICKNESS

KEYNOTES

102	6" SLAB ON PREPARED SUBGRADE REINFORCED W/ #4 @ 12" OC EACH WAY OVER 10 MIL VAPOR RETARDER OVER PREPARED SUBGRADE. TOP OF SLAB TO MATCH TOP OF EXISTING SLAB
103	INSTALL NEW PLUMBING LINES, REPLACE SLAB, RE DETAIL C8/S-502. REFER TO PLUMBING FOR SIZE & LOCATIONS
104	EXISTING 9" CONCRETE SLAB ON PREPARED SUBGRADE VERIFY IN FIELD
106	EXISTING MASONRY WALL
107	EXISTING W COLUMN
108	EXISTING CONCRETE FOOTING
111	CMU WALL INFILL RE: ELEVATION
115	FILL IN WITH CONCRETE FILL IN RE: A4/S-506
118	PATCH EXISTING SLAB WHERE SHOWER PANS WERE REMOVED AND PROVIDE TOPPING SLAB IN RESTROOMS
119	EXISTING TENSION ROD ENCASEMENT. MUST REMAIN UNDISTURBED. PROCEED WITH EXTREME CAUTION WHEN CUTTING EXISTING SLAB NEAR GRID LINES E.A.8, E.B.5 & E.C.4 TO AVOID EXISTING TENSION RODS AND ENCASEMENT. DO NOT CUT WITHIN 12" EITHER SIDE OF THESE GRID LINES.
121	EXISTING STEEL COLUMN
122	CONCRETE PEDESTAL AT INTERIOR COLUMN RE: A4/S-507

LEGEND

- F1 — FOOTING TYPE RE: SHEET S-601
- 99' - 0" — TOP OF FOOTING ELEVATION
- COLUMN SIZE/ BP-X — BASE PLATE MARK RE: F5/S-601
- FLOOR PLATE TRENCH COVER RE: ARCH AND E7/S-506
- 6" SLAB ON GRADE AT 24" RAISED ACCESS FLOORING REINFORCED WITH #4 @ 12" OC EACH WAY OVER 10 MIL VAPOR RETARDER OVER COMPACTED SUBGRADE. RE: ARCH FOR ACCESS FLOORING INFORMATION



AREA B
KEY PLAN

GRAPHIC SCALE

8 6 4 2 0 8 16

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

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
ALEX BANNEROT
91686
LICENSED PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: A. BANNEROT
DRAWN BY: D. ORTON
CHECKED BY: A. SAVOIE
SUBMITTED BY: E. OLNESS
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
SIZE: ANSI D 22x34
FILE NAME: SXHT219201SB103

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS No. 70026202

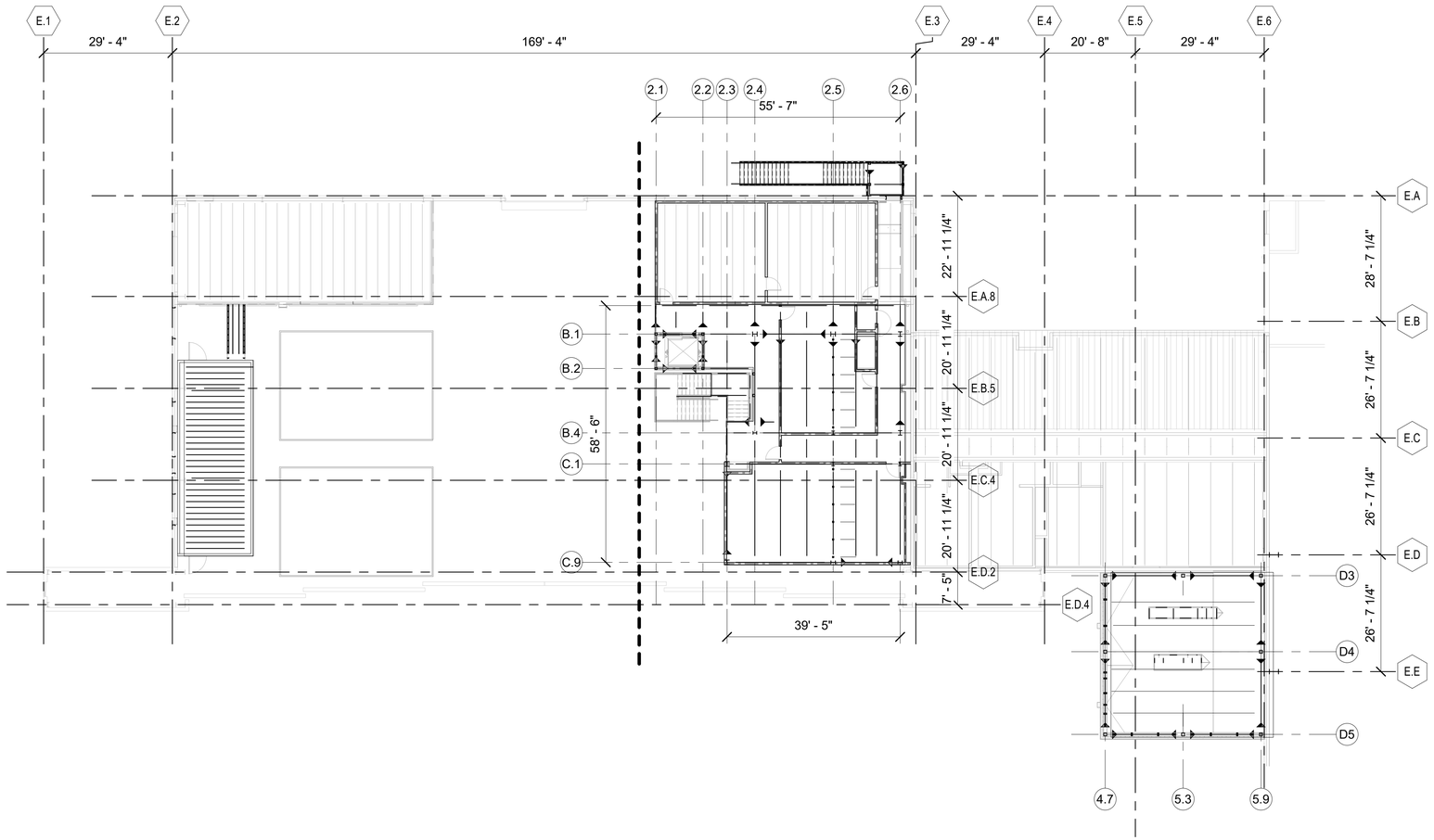
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PARTIAL FOUNDATION PLAN - AREA B - LEVEL 1

SHEET ID
B1455
SB103

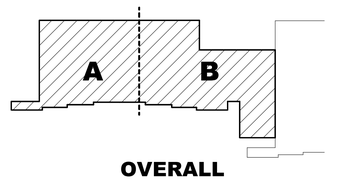
W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN



A1 OVERALL FRAMING PLAN - LEVEL 2
1/16" = 1'-0"



OVERALL KEY PLAN

GRAPHIC SCALE
16 12 8 4 0 16 32
SCALE: 1/16"=1'-0"

PLAN NORTH
TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
ALEX BANNEROT
91686
LICENSED PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: A. BANNEROT
DRAWN BY: D. ORTON
CHECKED BY: A. SAVOIE
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:.
FILE NAME: SXHT219201SF201

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

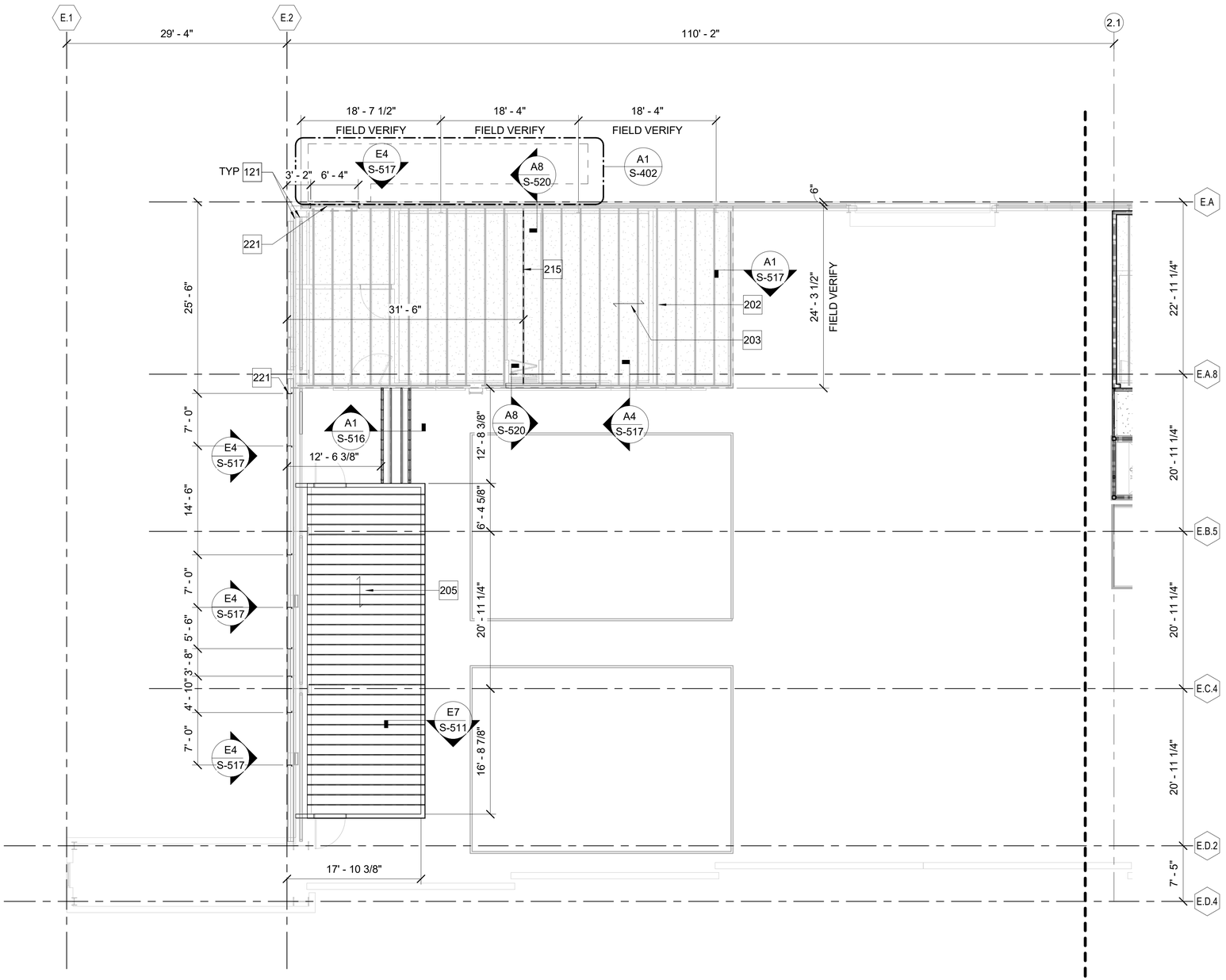
Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
(817) 334-7000 TBPE FIRM F-2966

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
OVERALL FRAMING PLAN - LEVEL 2

SHEET ID
B1455
SF201

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



A1 PARTIAL FRAMING PLAN - LEVEL 2 - AREA A

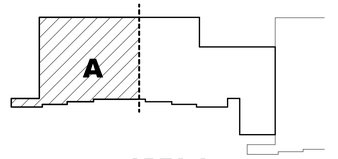
1/8" = 1'-0"

SHEET NOTES - FRAMING PLAN

A		REFER TO SHEETS S-001 THROUGH S-003 FOR STRUCTURAL GENERAL NOTES
B		REFER TO ARCHITECTURAL, MECHANICAL, AND PLUMBING FOR LOCATIONS FOR OPENINGS
C		INDICATES DECK SPAN DIRECTION
D		INDICATES BEAM BOTTOM FLANGE BRACE. RE: D7/S-512
E		INDICATES MOMENT CONNECTION RE: S-510 & S-511 FOR TYPICAL CONNECTION DETAILS
F		FIELD VERIFY EXISTING DIMENSIONS, MEMBER SIZES, ELEVATIONS AND OTHER CONDITIONS. NOTIFY CONTRACTING OFFICER OF ANY DISCREPANCIES TO RECEIVE REVISED RECOMMENDATIONS.
G		VERIFY LOCATIONS OF ALL UNDERGROUND AND ABOVE GROUND UTILITIES PRIOR TO START OF CONSTRUCTION. REPAIR, REROUTE, OR REPLACE UTILITIES AS REQUIRED TO PERFORM NEW CONSTRUCTION.
H		T/STEEL = BOTTOM OF DECK ELEVATION
I	(-X")	INDICATES TOP OF BEAM ELEVATION RELATIVE TO BOTTOM OF DECK ELEVATION

KEYNOTES

121	EXISTING STEEL COLUMN
202	EXISTING 22K4 JOISTS @ 2'-7" +/- ON CENTER TYP
203	EXISTING 1.5" METAL DECK + 2.5" CONCRETE TOPPING SLAB (4" TOTAL THICKNESS). TOP OF CONCRETE = 114' - 0"
205	8" DEEP LIGHT GAUGE FLOOR JOISTS AT 16" OC MAX + 1.5B ROOF DECK T/STEEL = 113'-9"
215	W8x24 BEAM SUPPORTING OPERABLE FOLDING PARTITION BELOW T/STEEL = 110'-6" +/-, COORDINATE TOP OF STEEL ELEVATION WITH PARTITION SUPPLIER AND NEW DUCT WORK RE: A8/S-520.
221	PROVIDE ADDITIONAL FRAMING AT LOUVER OPENING, RE: E4/S-517 & D1 & D5/A-201.



AREA A
KEY PLAN

GRAPHIC SCALE

8 6 4 2 0 8 16

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

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
ALEX BANNEROT
91686
LICENSED PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: A. BANNEROT
DRAWN BY: D. ORTON
CHECKED BY: A. SAVOIE
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201SF202

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

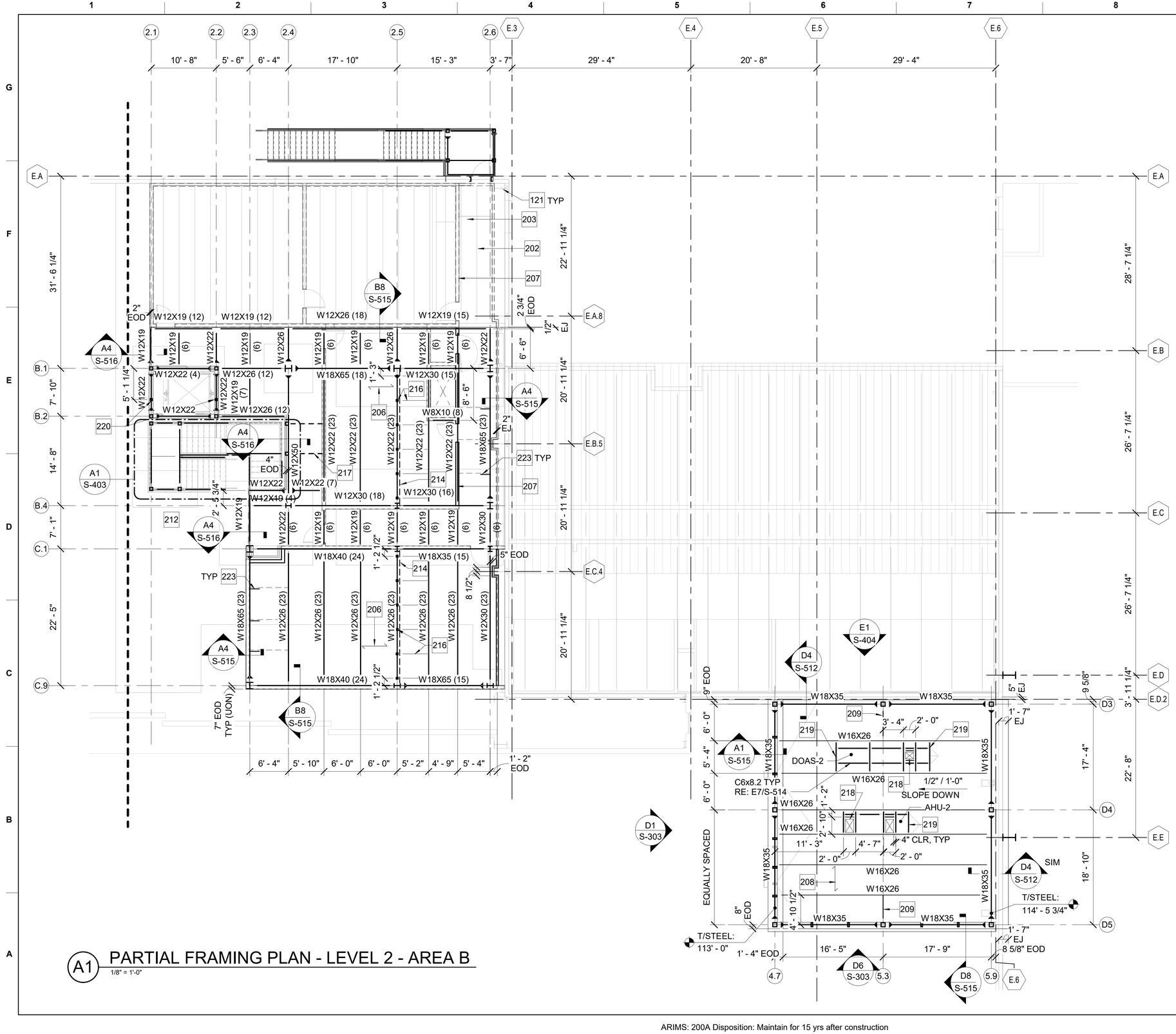
Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS No. 160982

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PARTIAL FRAMING PLAN - LEVEL 2 - AREA A

SHEET ID
B1455
SF202

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



A1 PARTIAL FRAMING PLAN - LEVEL 2 - AREA B

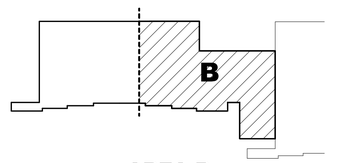
1/8" = 1'-0"

SHEET NOTES - FRAMING PLAN

A		REFER TO SHEETS S-001 THROUGH S-003 FOR STRUCTURAL GENERAL NOTES
B		REFER TO ARCHITECTURAL, MECHANICAL, AND PLUMBING FOR LOCATIONS FOR OPENINGS
C		INDICATES DECK SPAN DIRECTION
D		INDICATES BEAM BOTTOM FLANGE BRACE. RE: D7/S-512
E		INDICATES MOMENT CONNECTION RE: S-510 & S-511 FOR TYPICAL CONNECTION DETAILS
F		FIELD VERIFY EXISTING DIMENSIONS, MEMBER SIZES, ELEVATIONS AND OTHER CONDITIONS. NOTIFY CONTRACTING OFFICER OF ANY DISCREPANCIES TO RECEIVE REVISED RECOMMENDATIONS.
G		VERIFY LOCATIONS OF ALL UNDERGROUND AND ABOVE GROUND UTILITIES PRIOR TO START OF CONSTRUCTION. REPAIR, REROUTE, OR REPLACE UTILITIES AS REQUIRED TO PERFORM NEW CONSTRUCTION.
H		T/STEEL = BOTTOM OF DECK ELEVATION
I	(-X")	INDICATES TOP OF BEAM ELEVATION RELATIVE TO BOTTOM OF DECK ELEVATION

KEYNOTES

121	EXISTING STEEL COLUMN
202	EXISTING 22K4 JOISTS @ 2'-7" +/- ON CENTER TYP
203	EXISTING 1.5" METAL DECK + 2.5" CONCRETE TOPPING SLAB (4" TOTAL THICKNESS). TOP OF CONCRETE = 114' - 0"
206	2" DEEP 20 GAUGE COMPOSITIVE METAL DECK + 3" CONCRETE TOPPING SLAB (5" TOTAL THICKNESS) REINFORCED WITH #4 @ 12" OC EACH WAT. TOP OF CONCRETE = 114' - 0" RE: METAL DECK NOTES ON S-003 FOR ADDITIONAL INFORMATION
207	6" METAL STUD WALL, TYP
208	1.5B20 ROOF DECK, REFER GENERAL NOTES ON S-003
209	WT6x13 STEEL BEAM T/STEEL=113'-8"
214	OPERABLE FOLDING PARTITION BELOW RE: D1/S-515
216	POST AND BRACE FOR FOLDING PARTITION BELOW RE: D1/S-515, TYP
217	BOTTOM FLANGE BRACE RE: F7/S-516
218	RE: E7/S-514 FOR TYPICAL FRAMING AT ROOF OPENING. COORDINATE LOCATION WITH MECH AND EQUIPMENT MANUFACTURER
219	ADDITIONAL SUPPORT FRAMING FOR MECHANICAL EQUIPMENT COORDINATE LOCATION WITH EQUIPMENT MANUFACTURER. RE: E7/S-514
220	HSS4X4X1/4 ELEVATOR RAIL SUPPORT POST. RE: E1/S-517
223	LOW END OF BEAM BOTTOM FLANGE BRACE RE: SHEET NOTE E. PROVIDE BRACES AT 4 EQUAL SPACES ALONG LENGTH OF BEAM.



AREA B
KEY PLAN

GRAPHIC SCALE

8 6 4 2 0 8 16

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

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
ALEX BANNEROT
91686
LICENSED PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: A. BANNEROT
DRAWN BY: D. ORTON
CHECKED BY: A. SAVOIE
SUBMITTED BY: E. OLNESS
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: ANSI D 22x34 SXHT21920I1SF203

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS No. 70006213

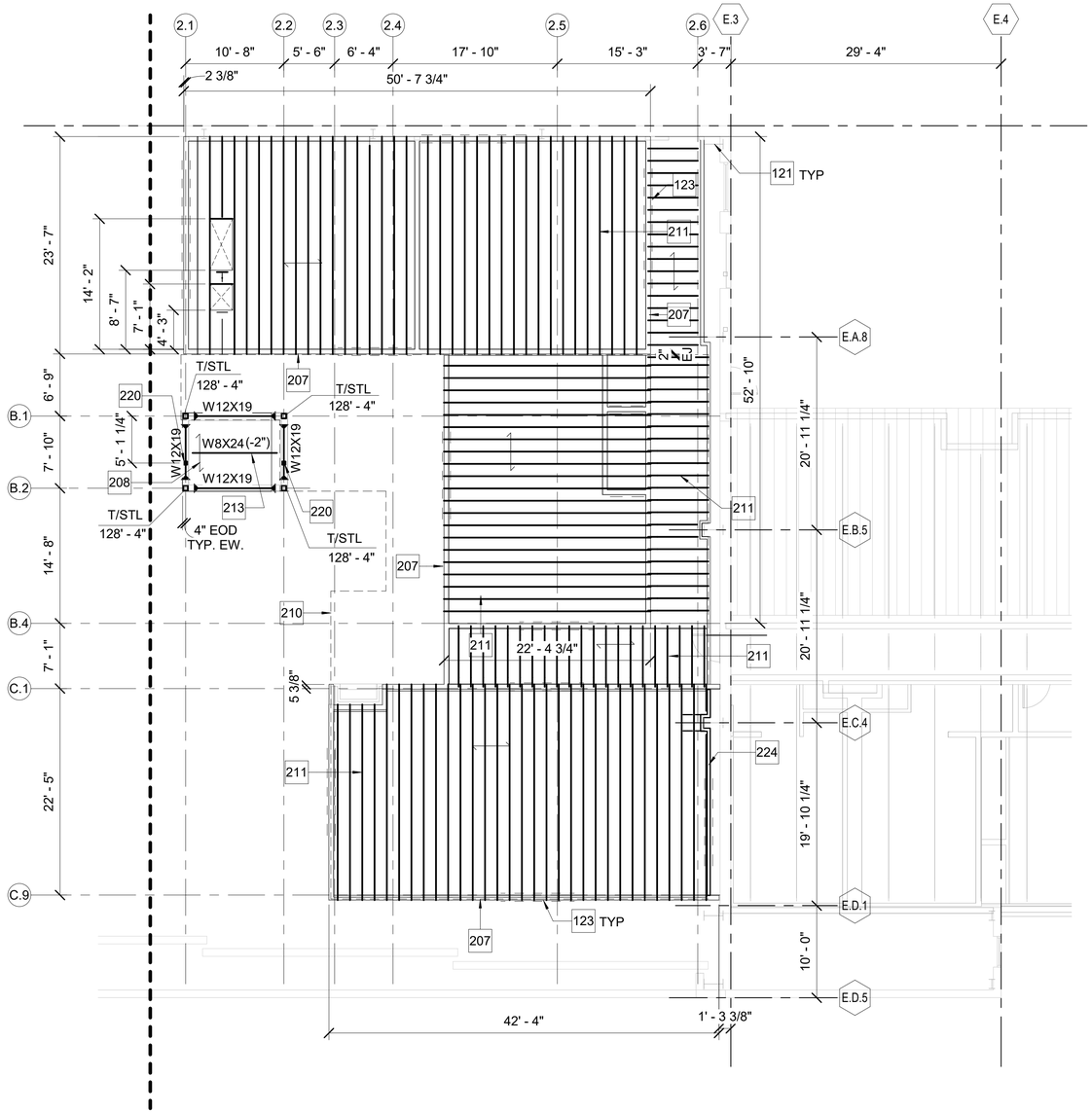
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PARTIAL FRAMING PLAN - LEVEL 2- AREA B

SHEET ID
B1455
SF203

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN



A1 PARTIAL FRAMING PLAN - LEVEL 2 ROOF - AREA B

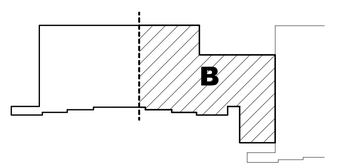
1/8" = 1'-0"

SHEET NOTES - FRAMING PLAN

A		REFER TO SHEETS S-001 THROUGH S-003 FOR STRUCTURAL GENERAL NOTES
B		REFER TO ARCHITECTURAL, MECHANICAL, AND PLUMBING FOR LOCATIONS FOR OPENINGS
C		INDICATES DECK SPAN DIRECTION
D		INDICATES BEAM BOTTOM FLANGE BRACE. RE: D7/S-512
E		INDICATES MOMENT CONNECTION RE: S-510 & S-511 FOR TYPICAL CONNECTION DETAILS
F		FIELD VERIFY EXISTING DIMENSIONS, MEMBER SIZES, ELEVATIONS AND OTHER CONDITIONS. NOTIFY CONTRACTING OFFICER OF ANY DISCREPANCIES TO RECEIVE REVISED RECOMMENDATIONS.
G		VERIFY LOCATIONS OF ALL UNDERGROUND AND ABOVE GROUND UTILITIES PRIOR TO START OF CONSTRUCTION. REPAIR, REROUTE, OR REPLACE UTILITIES AS REQUIRED TO PERFORM NEW CONSTRUCTION.
H		T/STEEL = BOTTOM OF DECK ELEVATION
I	(-X")	INDICATES TOP OF BEAM ELEVATION RELATIVE TO BOTTOM OF DECK ELEVATION

KEYNOTES

121	EXISTING STEEL COLUMN
123	POTENTIAL LOCATION FOR COLDFORM WALL STRAP BRACING. COLDFORM WALL DESIGNER TO VERIFY, TYP
207	6" METAL STUD WALL, TYP
208	1.5B20 ROOF DECK, REFER GENERAL NOTES ON S-003
210	OUTLINE OF LEVEL 2 BELOW
211	1200S250-68 LIGHT GAUGE JOISTS AT 16" ON CENTER MAX + 1.5B ROOF DECK. DECK BEARING ELEVATION = 127'- 10 1/2"
213	COORDINATE LOCATION AND ELEVATION OF W8 HOIST BEAM WITH ELEVATOR SUPPLIER
220	HSS4X4X1/4 ELEVATOR RAIL SUPPORT POST. RE: E1/S-517
224	4" METAL STUD WALL



AREA B
KEY PLAN

GRAPHIC SCALE

8 6 4 2 0 8 16

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

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
ALEX BANNEROT
91686
LICENSED PROFESSIONAL ENGINEER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: A. BANNEROT	ISSUE DATE: 23 NOVEMBER 2022
DRAWN BY: D. ORTON	SOLICITATION NO.:
CHECKED BY: A. SAVOIE	CONTRACT NO.:
SUBMITTED BY: E. OLNESS	DRAWING CODE.:
SCALE: ANSI D 22x34	FILE NAME: SXHT21920 1SF204

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
(817) 820-2000 Fax (817) 820-2112

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, PZ#: 495395
PARTIAL FRAMING PLAN - LEVEL 2 ROOF - AREA B

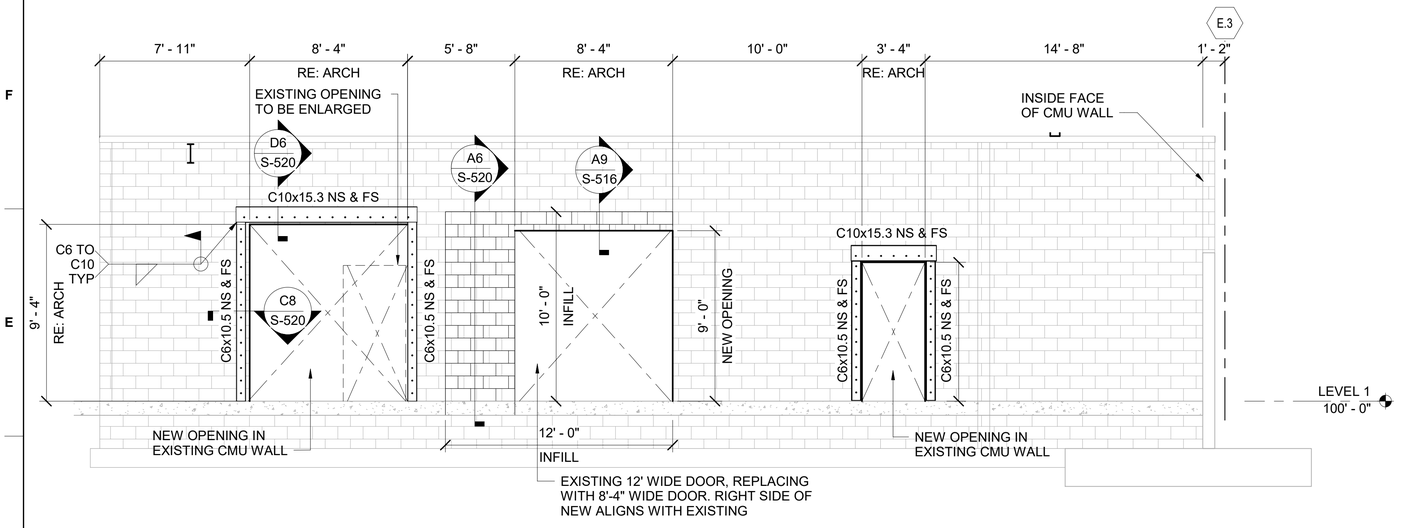
SHEET ID
B1455
SF204

W912QR23R0003_Plans-0000

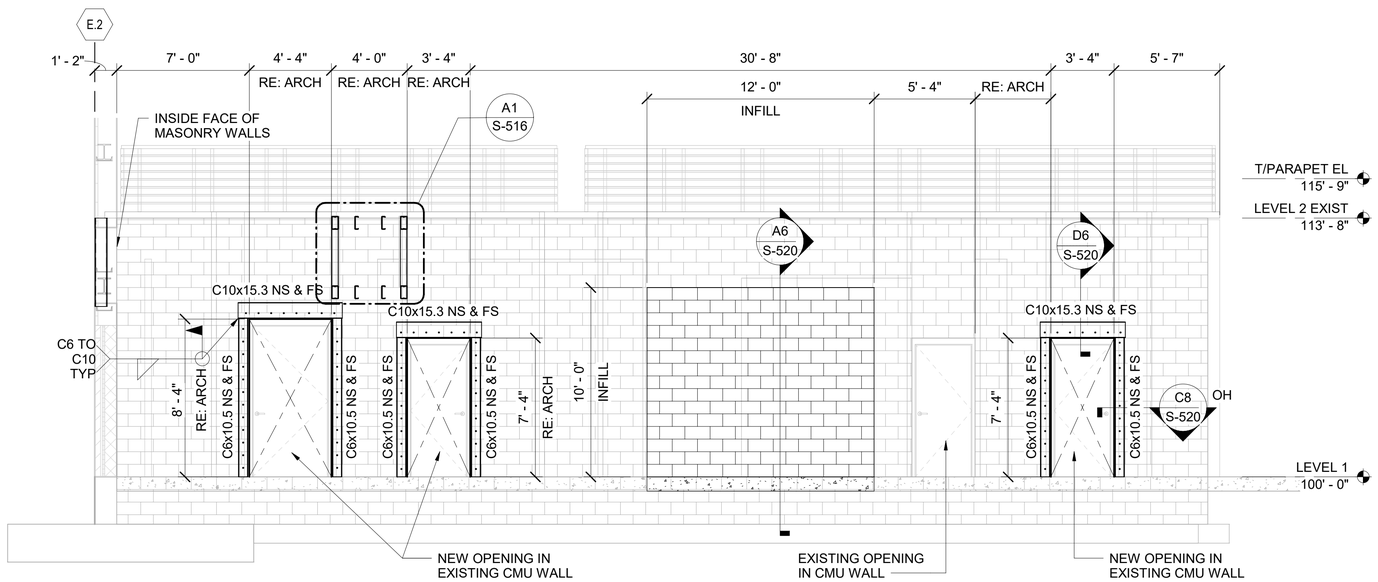
CERTIFIED FINAL DESIGN

SHEET NOTES - WALL ELEVATIONS

A	FIELD VERIFY EXISTING DIMENSIONS, MEMBER SIZES, ELEVATIONS AND OTHER CONDITIONS. NOTIFY CONTRACTING OFFICER OF ANY DISCREPANCIES TO RECEIVE REVISED RECOMMENDATIONS.
B	VERIFY LOCATIONS OF ALL UNDERGROUND AND ABOVE GROUND UTILITIES PRIOR TO START OF CONSTRUCTION. REPAIR, REROUTE, OR REPLACE UTILITIES AS REQUIRED TO PERFORM NEW CONSTRUCTION
C	INSTALL REINFORCING CHANNELS AROUND NEW OPENINGS PRIOR TO ENLARGING OPENINGS.
D	RE: C8/S-517 FOR TYPICAL PENETRATION AT EXISTING CMU WALL DETAIL



D1 CMU WALL ELEVATION
1/4" = 1'-0"



A1 CMU WALL ELEVATION
1/4" = 1'-0"

GRAPHIC SCALE
4 3 2 1 0 4 8
SCALE: 1/4"=1'-0"

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
ALEX BANNEROT
91686
LICENSED PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: A. BANNEROT
DRAWN BY: D. ORTON
CHECKED BY: A. SAVOIE
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201S-301

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
(817)-820-2000 Fax (817)820-2001

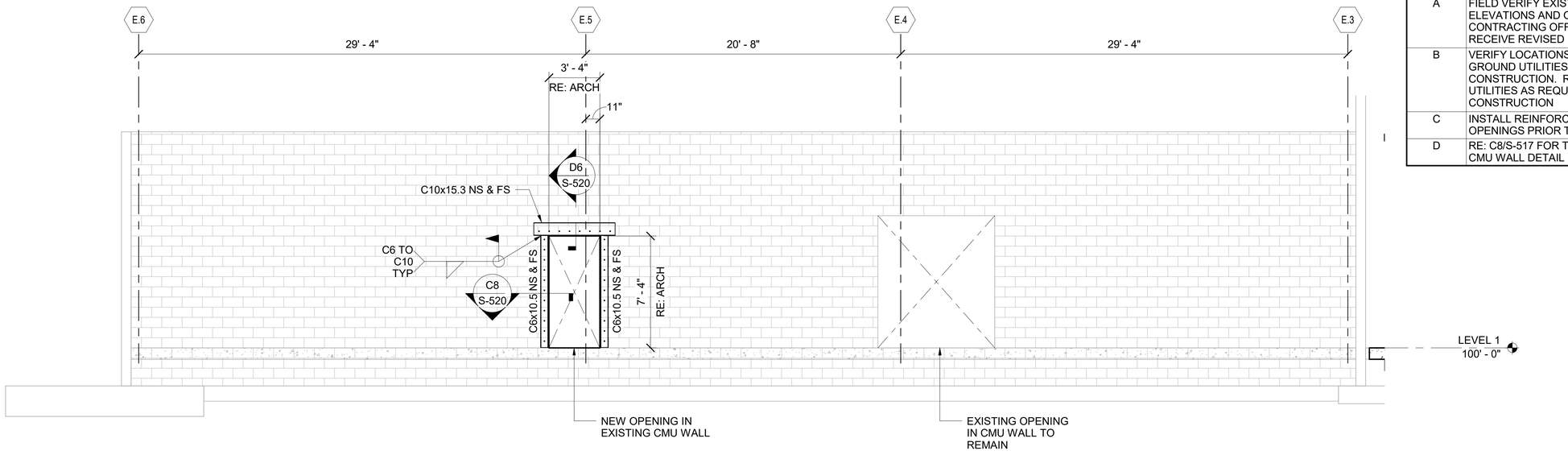
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
WALL ELEVATIONS

SHEET ID
B1455
S-301

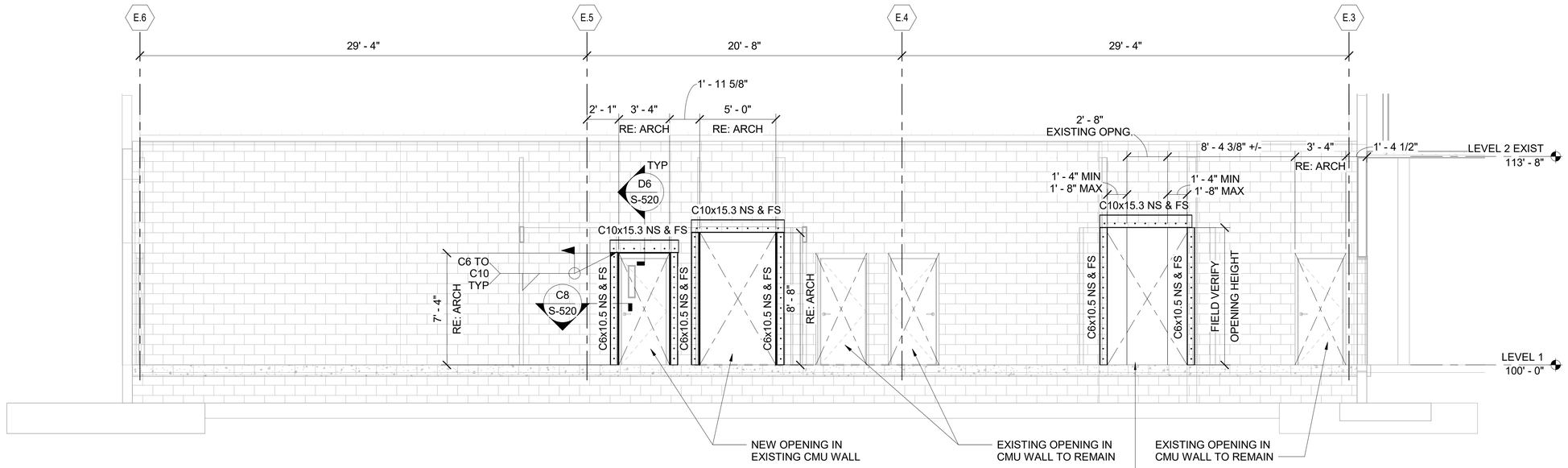
W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN



E1 CMU WALL ELEVATION
1/4" = 1'-0"



A1 CMU WALL ELEVATION
1/4" = 1'-0"

SHEET NOTES - WALL ELEVATIONS

A	FIELD VERIFY EXISTING DIMENSIONS, MEMBER SIZES, ELEVATIONS AND OTHER CONDITIONS. NOTIFY CONTRACTING OFFICER OF ANY DISCREPANCIES TO RECEIVE REVISED RECOMMENDATIONS.
B	VERIFY LOCATIONS OF ALL UNDERGROUND AND ABOVE GROUND UTILITIES PRIOR TO START OF CONSTRUCTION. REPAIR, REROUTE, OR REPLACE UTILITIES AS REQUIRED TO PERFORM NEW CONSTRUCTION
C	INSTALL REINFORCING CHANNELS AROUND NEW OPENINGS PRIOR TO ENLARGING OPENINGS.
D	RE: C8/S-517 FOR TYPICAL PENETRATION AT EXISTING CMU WALL DETAIL

GRAPHIC SCALE
4 3 2 1 0 4 8
SCALE: 1/4"=1'-0"

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
ALEX BANNEROT
91686
LICENSED PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: A. BANNEROT
DRAWN BY: D. ORTON
CHECKED BY: A. SAVOIE
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201S-302

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
(817)334-7100 Texas Reg. F-2966

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
WALL ELEVATIONS

SHEET ID
B1455
S-302

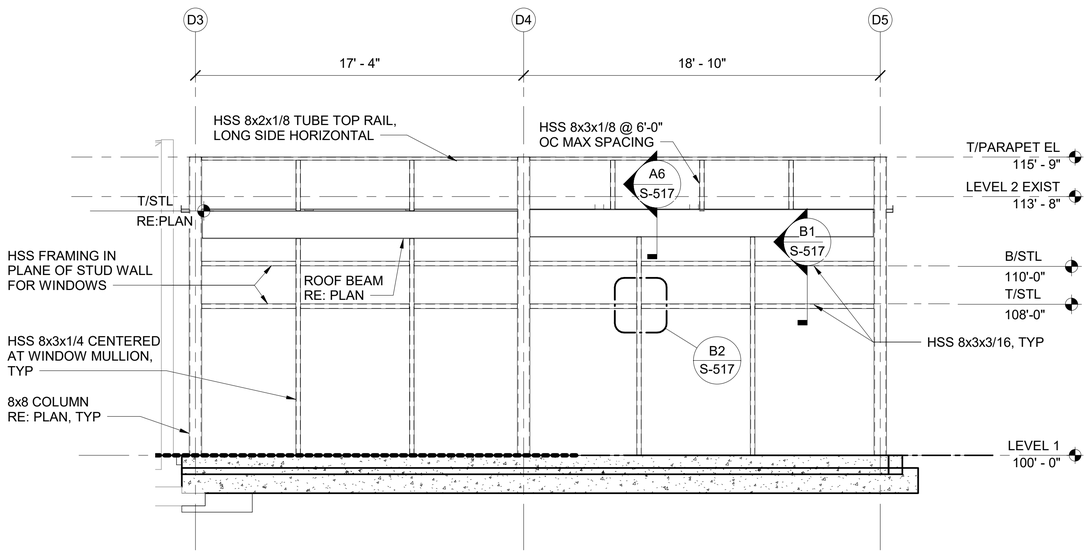
W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

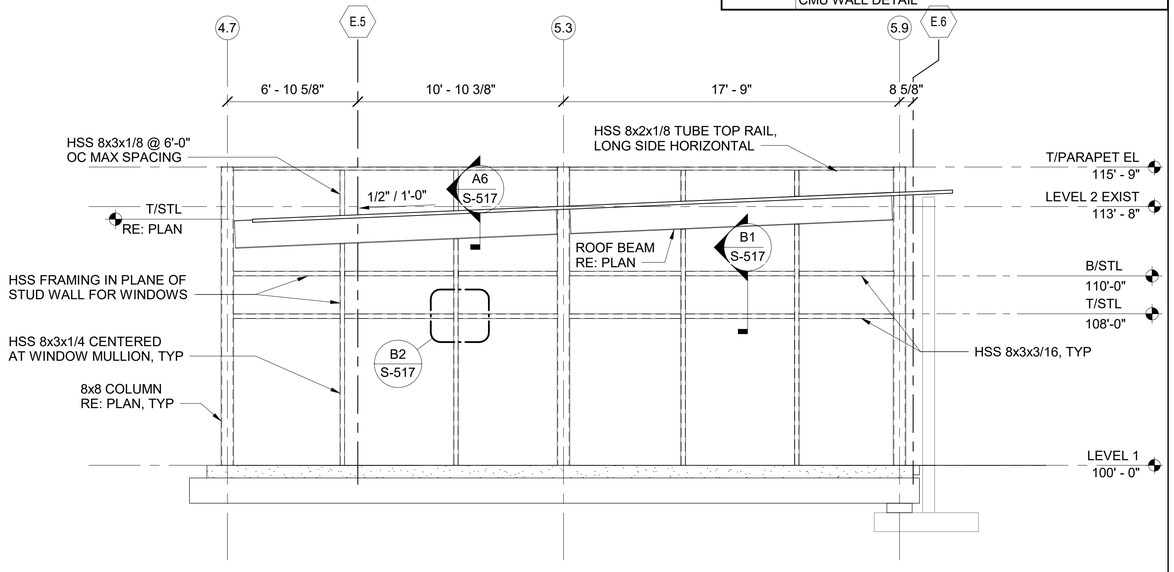
CERTIFIED FINAL DESIGN

SHEET NOTES - WALL ELEVATIONS

A	FIELD VERIFY EXISTING DIMENSIONS, MEMBER SIZES, ELEVATIONS AND OTHER CONDITIONS. NOTIFY CONTRACTING OFFICER OF ANY DISCREPANCIES TO RECEIVE REVISED RECOMMENDATIONS.
B	VERIFY LOCATIONS OF ALL UNDERGROUND AND ABOVE GROUND UTILITIES PRIOR TO START OF CONSTRUCTION. REPAIR, REROUTE, OR REPLACE UTILITIES AS REQUIRED TO PERFORM NEW CONSTRUCTION
C	INSTALL REINFORCING CHANNELS AROUND NEW OPENINGS PRIOR TO ENLARGING OPENINGS.
D	RE: C8/S-517 FOR TYPICAL PENETRATION AT EXISTING CMU WALL DETAIL



D1 ELEVATION
1/4" = 1'-0"



D6 ELEVATION
1/4" = 1'-0"

GRAPHIC SCALE
4 3 2 1 0 4 8
SCALE: 1/4"=1'-0"

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
ALEX BANNEROT
91686
LICENSED PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: A. BANNEROT
DRAWN BY: D. ORTON
CHECKED BY: A. SAVOIE
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201S-303

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS No. F2966

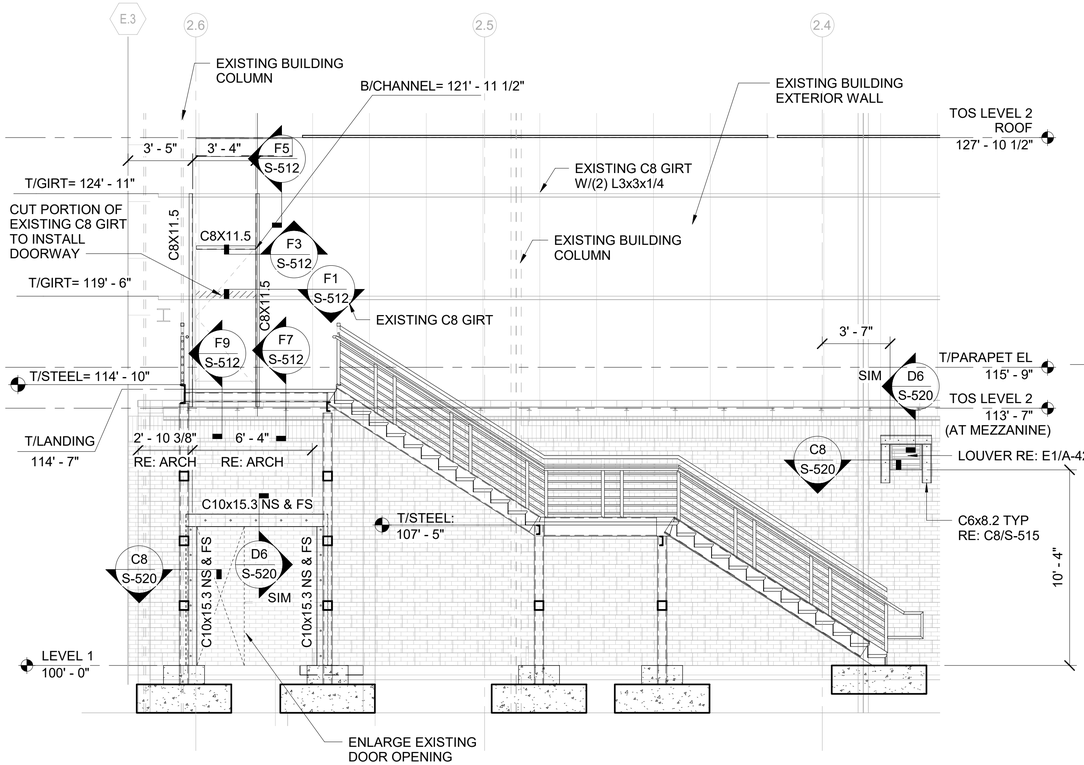
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
WALL ELEVATIONS

SHEET ID
B1455
S-303

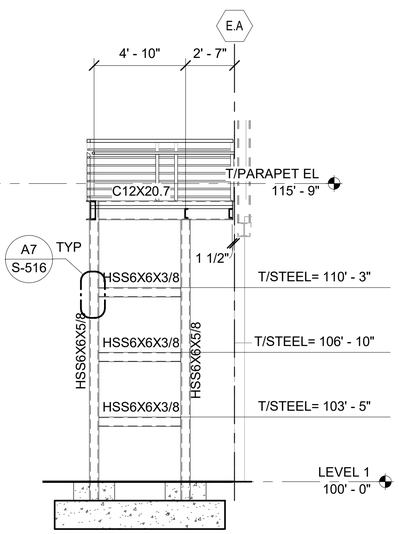
W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

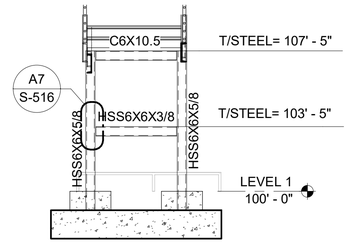
CERTIFIED FINAL DESIGN



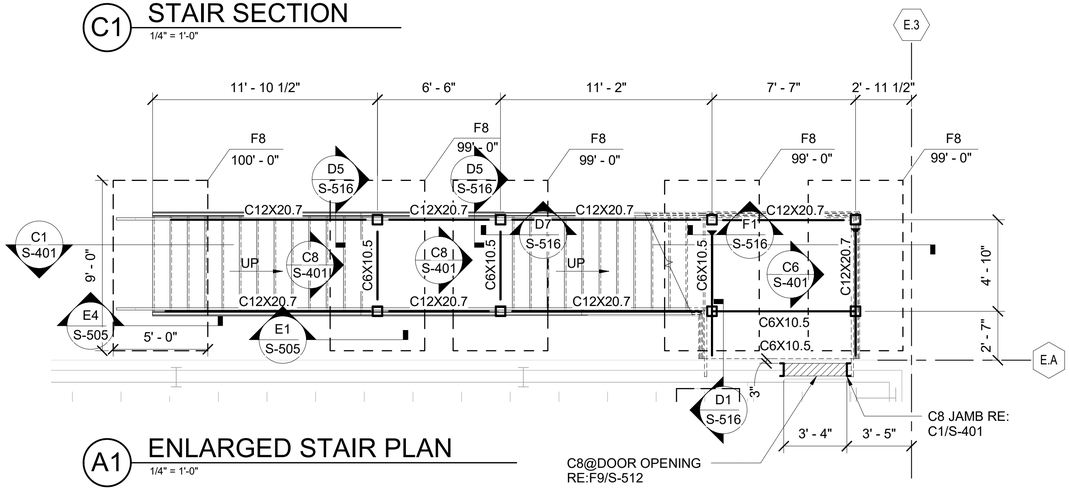
C1 STAIR SECTION
1/4" = 1'-0"



C6 SECTION
1/4" = 1'-0"



C8 SECTION
1/4" = 1'-0"



A1 ENLARGED STAIR PLAN
1/4" = 1'-0"

GRAPHIC SCALE
4 3 2 1 0 4 8
SCALE: 1/4"=1'-0"

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
ALEX BANNEROT
91686
LICENSED PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHTZ19201S-401

DESIGNED BY: A. BANNEROT
DRAWN BY: D. ORTON
CHECKED BY: A. SAVOIE
SUBMITTED BY: EL OLMESS
SIZE: ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
Phone: 817.820.8000

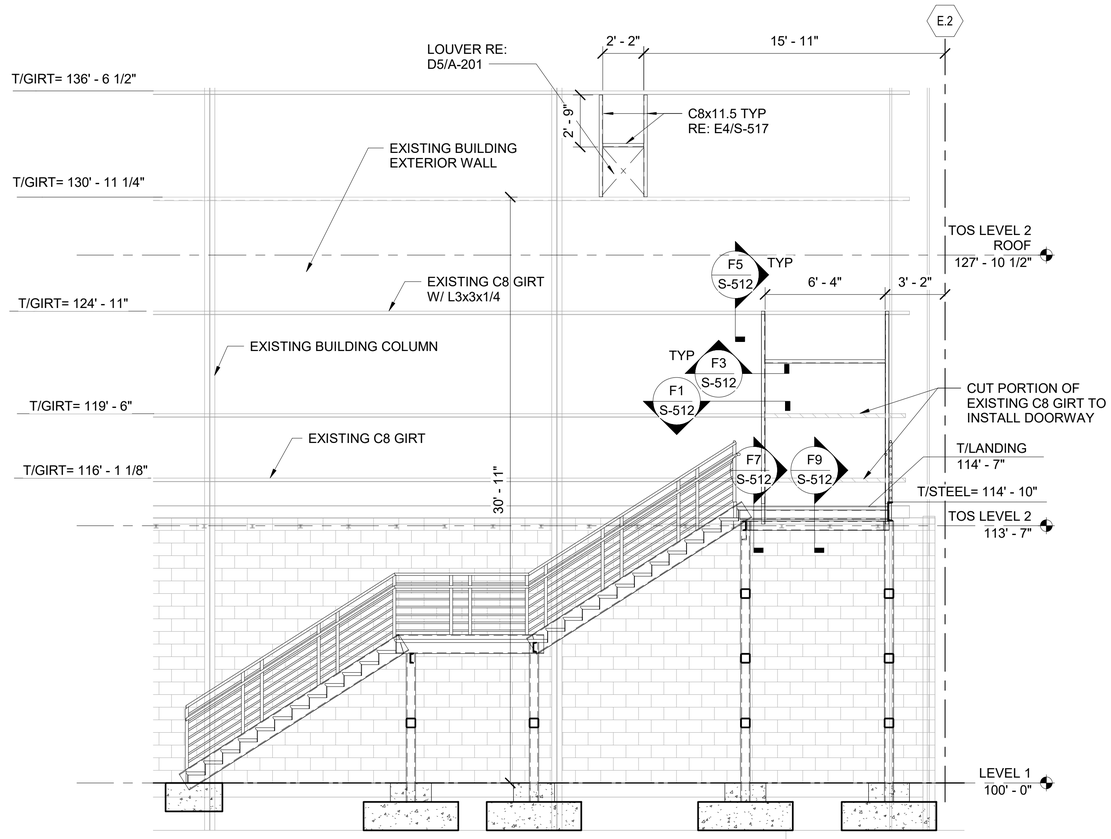
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
ENLARGED STAIR PLANS AND DETAILS

SHEET ID
B1455
S-401

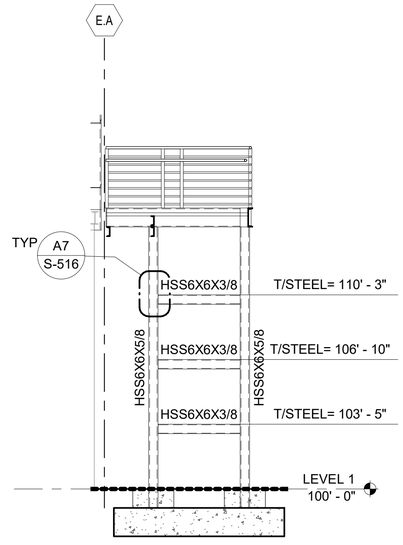
W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

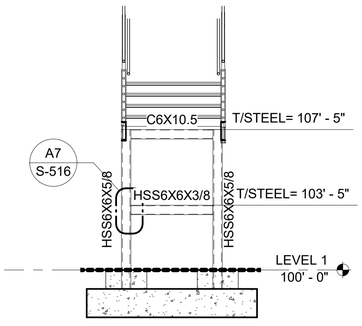
CERTIFIED FINAL DESIGN



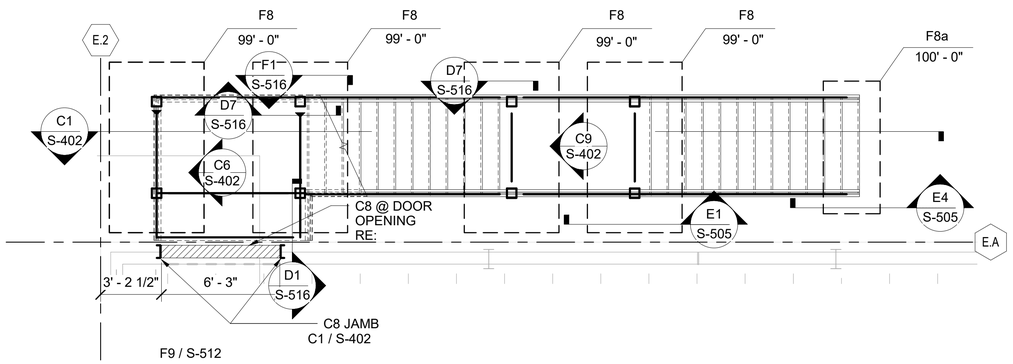
C1 STAIR SECTION
1/4" = 1'-0"



C6 SECTION
1/4" = 1'-0"



C9 SECTION
1/4" = 1'-0"



A1 ENLARGED STAIR PLAN
1/4" = 1'-0"

GRAPHIC SCALE
4 3 2 1 0 4 8
SCALE: 1/4"=1'-0"

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
ALEX BANNEROT
91686
LICENSED PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: A. BANNEROT
DRAWN BY: D. ORTON
CHECKED BY: A. SAVOIE
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201S-402

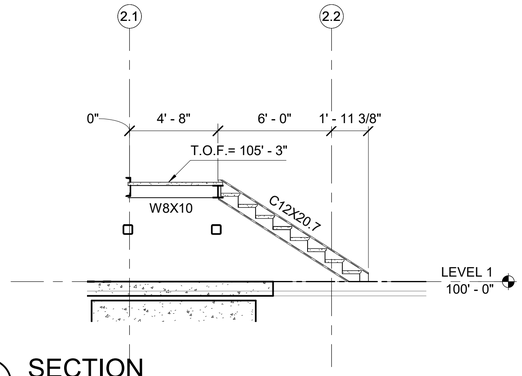
US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
PHONE No. 817.820.2000

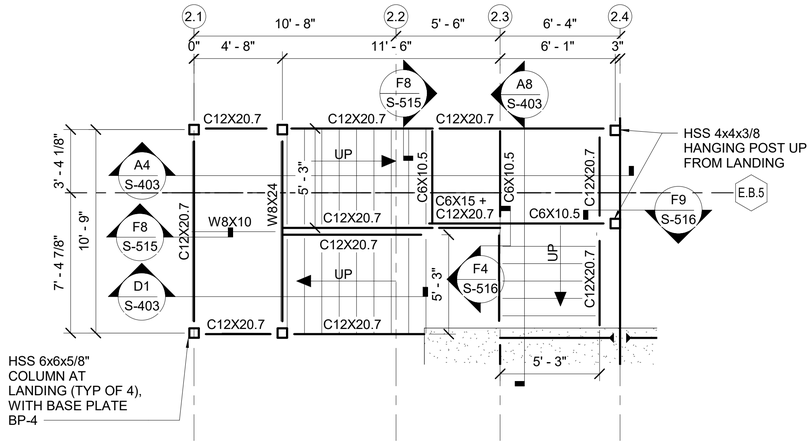
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, PZ#: 495395
STAIR 3 (BID OPTION 1) - PLANS AND DETAILS

SHEET ID
B1455
S-402

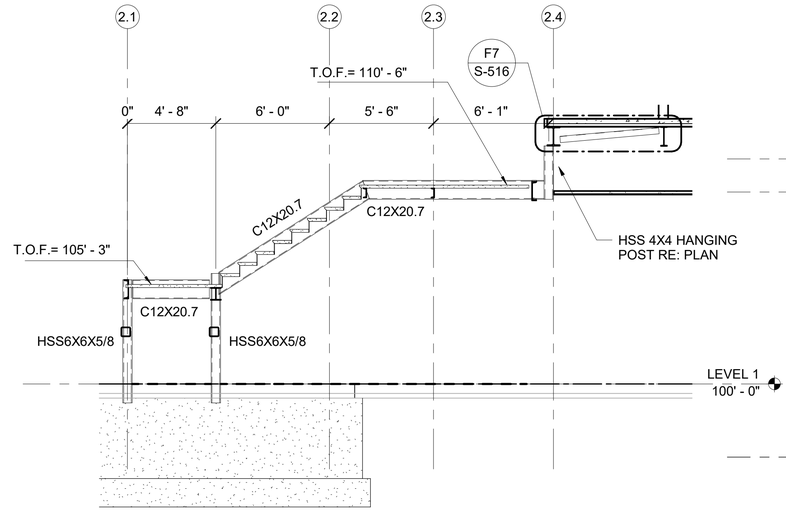
W912QR23R0003_Plans-0000



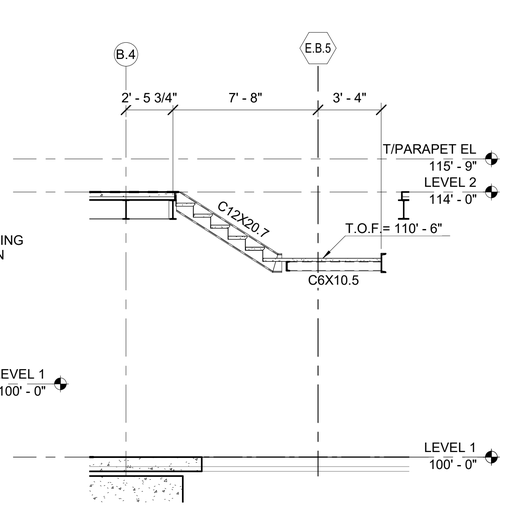
D1 SECTION
1/4" = 1'-0"



A1 ENLARGED STAIR PLAN
1/4" = 1'-0"



A4 SECTION
1/4" = 1'-0"



A8 SECTION
1/4" = 1'-0"

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
ALEX BANNEROT
91686
LICENSED PROFESSIONAL ENGINEER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201S-403

DESIGNED BY: A. BANNEROT
DRAWN BY: D. ORTON
CHECKED BY: A. SAVOIE
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

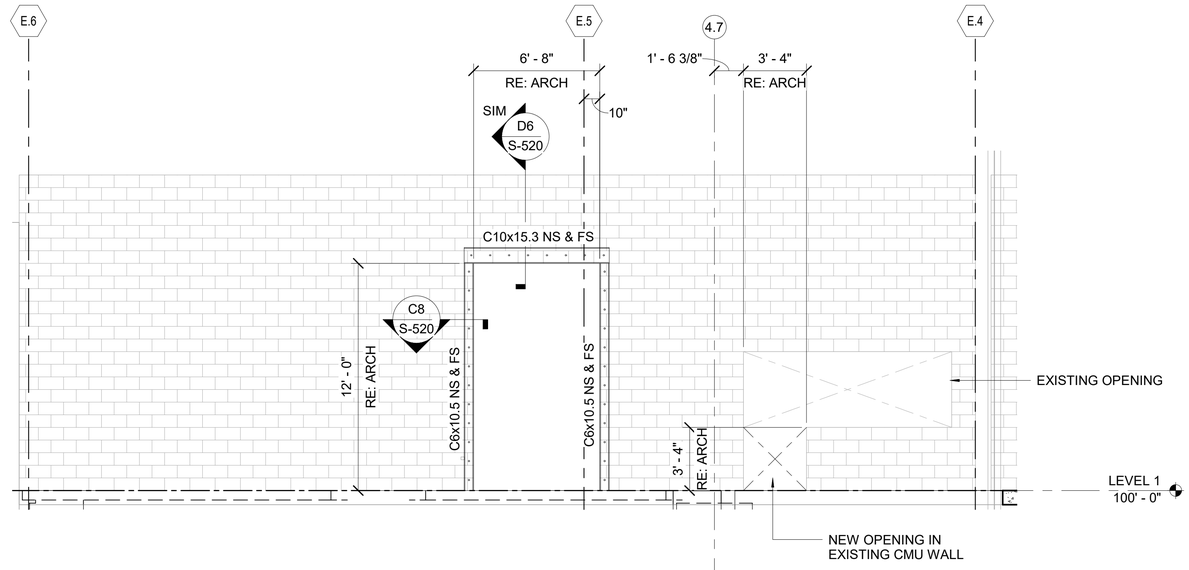
Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
(817) 820-8844 FIRM F2966

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
ENLARGED STAIR PLANS AND DETAILS

SHEET ID
B1455
S-403

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



E1 CMU WALL ELEVATION

1/4" = 1'-0"

SHEET NOTES - WALL ELEVATIONS

A	FIELD VERIFY EXISTING DIMENSIONS, MEMBER SIZES, ELEVATIONS AND OTHER CONDITIONS. NOTIFY CONTRACTING OFFICER OF ANY DISCREPANCIES TO RECEIVE REVISED RECOMMENDATIONS.
B	VERIFY LOCATIONS OF ALL UNDERGROUND AND ABOVE GROUND UTILITIES PRIOR TO START OF CONSTRUCTION. REPAIR, REROUTE, OR REPLACE UTILITIES AS REQUIRED TO PERFORM NEW CONSTRUCTION
C	INSTALL REINFORCING CHANNELS AROUND NEW OPENINGS PRIOR TO ENLARGING OPENINGS.
D	RE: C8/S-517 FOR TYPICAL PENETRATION AT EXISTING CMU WALL DETAIL

GRAPHIC SCALE

4 3 2 1 0 4 8

SCALE: 1/4"=1'-0"

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
ALEX BANNEROT
91686
LICENSED PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: A. BANNEROT
DRAWN BY: D. ORTON
CHECKED BY: A. SAVOIE
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:.
FILE NAME: SXHT219201S-404

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
ACHP00176 TBPE/BPE F-2966

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
WALL ELEVATIONS

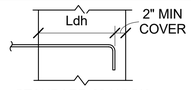
SHEET ID
B1455
S-404

W912QR23R0003_Plans-0000

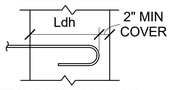
ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN

'Ldh' TENSION DEVELOPMENT (EMBEDMENT) LENGTH FOR STANDARD END HOOKS (GRADE 60 BARS - NORMAL WEIGHT CONCRETE - GENERAL USE)



STANDARD 90 HOOK
SIDE COVER > 2 1/2"



STANDARD 180 HOOK
SIDE COVER > 2 1/2"

BAR SIZE	f'c=3000 psi	f'c=4000 psi	f'c=4500 psi	f'c=5000 psi	f'c=6000 psi
	Ldh	Ldh	Ldh	Ldh	Ldh
# 3	9"	7"	7"	7"	6"
# 4	11"	10"	10"	9"	8"
# 5	1'-2"	1'-0"	1'-0"	11"	10"
# 6	1'-5"	1'-3"	1'-2"	1'-1"	1'-0"
# 7	1'-7"	1'-5"	1'-4"	1'-3"	1'-2"
# 8	1'-10"	1'-7"	1'-6"	1'-5"	1'-4"
# 9	2'-1"	1'-10"	1'-9"	1'-7"	1'-6"
# 10	2'-4"	2'-0"	1'-11"	1'-10"	1'-8"
# 11	2'-6"	2'-2"	2'-1"	2'-0"	1'-10"

'Lc' COMPRESSION DEVELOPMENT LENGTH (GRADE 60 UNCOATED BARS NORMAL WEIGHT CONCRETE GENERAL USE)

BAR SIZE	f'c = 3000 psi	f'c = 4000 psi	f'c = 4500 psi	f'c = 5000 psi	f'c = 6000 psi
# 4	11"	10"	10"	9"	9"
# 5	1'-2"	1'-0"	1'-0"	11"	11"
# 6	1'-5"	1'-2"	1'-2"	1'-2"	1'-2"
# 7	1'-7"	1'-5"	1'-5"	1'-4"	1'-4"
# 8	1'-10"	1'-7"	1'-7"	1'-6"	1'-6"
# 9	2'-1"	1'-10"	1'-9"	1'-8"	1'-8"
# 10	2'-4"	2'-0"	2'-0"	1'-11"	1'-11"
# 11	2'-7"	2'-3"	2'-3"	2'-2"	2'-2"
# 14	3'-1"	2'-8"	2'-8"	2'-7"	2'-7"
# 18	4'-2"	3'-7"	3'-6"	3'-5"	3'-5"

TENSION LAP SPLICES CLASS B FOR TOP & BOTTOM BARS (GRADE 60 UNCOATED BARS NORMAL WEIGHT CONCRETE)

BAR SIZE	f'c=3000 psi		f'c=4000 psi		f'c=4500 psi		f'c=5000 psi		f'c=6000 psi	
	TOP	BOT	TOP	BOT	TOP	BOT	TOP	BOT	TOP	BOT
# 3	2'-4"	1'-9"	2'-0"	1'-6"	1'-11"	1'-6"	1'-10"	1'-5"	1'-8"	1'-4"
# 4	3'-1"	2'-4"	2'-8"	2'-1"	2'-7"	2'-0"	2'-5"	1'-10"	2'-2"	1'-8"
# 5	3'-10"	3'-0"	3'-4"	2'-7"	3'-2"	2'-6"	3'-0"	2'-4"	2'-9"	2'-1"
# 6	4'-8"	3'-7"	4'-0"	3'-1"	3'-11"	2'-11"	3'-7"	2'-9"	3'-3"	2'-6"
# 7	6'-9"	5'-2"	5'-10"	4'-6"	5'-7"	4'-3"	5'-3"	4'-0"	4'-9"	3'-8"
# 8	7'-9"	5'-11"	6'-8"	5'-2"	6'-4"	4'-11"	6'-0"	4'-7"	5'-5"	4'-2"
# 9	8'-8"	6'-8"	7'-6"	5'-9"	7'-2"	5'-6"	6'-9"	5'-2"	6'-2"	4'-9"
# 10	9'-10"	7'-6"	8'-6"	6'-6"	8'-1"	6'-2"	7'-7"	5'-10"	6'-11"	5'-4"
# 11	10'-11"	8'-4"	9'-5"	7'-3"	8'-11"	6'-11"	8'-5"	6'-6"	7'-8"	5'-11"

NOTE:

1. FOR CLASS 'A' SPLICE (PERMITTED ONLY WHEN NOT MORE THAN HALF THE BARS SPLICED AND SPLICES STAGGERED BY THE DISTANCE OF SPLICE LENGTH), USE SAME AS 'ld' = TENSION DEVELOPMENT LENGTH TABLE.

'Ld' TENSION DEVELOPMENT LENGTH FOR BEAM, SLAB, AND WALL REBARS (GRADE 60 UNCOATED BARS - NORMAL WEIGHT CONCRETE)

BAR SIZE	f'c=3000 psi		f'c=4000 psi		f'c=4500 psi		f'c=5000 psi		f'c=6000 psi	
	LdTOP	Ld BOT	LdTOP	Ld BOT	LdTOP	Ld BOT	LdTOP	Ld BOT	LdTOP	Ld BOT
# 3	1'-9"	1'-4"	1'-6"	1'-2"	1'-6"	1'-2"	1'-5"	1'-1"	1'-3"	1'-0"
# 4	2'-4"	1'-10"	2'-1"	1'-7"	2'-0"	1'-6"	1'-10"	1'-5"	1'-8"	1'-3"
# 5	3'-0"	2'-3"	2'-7"	2'-0"	2'-6"	1'-11"	2'-4"	1'-9"	2'-1"	1'-7"
# 6	3'-7"	2'-9"	3'-1"	2'-4"	2'-11"	2'-3"	2'-9"	2'-1"	2'-6"	1'-11"
# 7	5'-2"	4'-0"	4'-6"	3'-6"	4'-3"	3'-4"	4'-0"	3'-1"	3'-8"	2'-10"
# 8	5'-11"	4'-7"	5'-2"	3'-11"	4'-10"	3'-9"	4'-7"	3'-6"	4'-2"	3'-3"
# 9	6'-8"	5'-2"	5'-9"	4'-5"	5'-6"	4'-3"	5'-2"	4'-0"	4'-9"	3'-8"
# 10	7'-6"	5'-10"	6'-6"	5'-0"	6'-2"	4'-9"	5'-10"	4'-6"	5'-4"	4'-1"
# 11	8'-4"	6'-5"	7'-3"	5'-7"	6'-11"	5'-4"	6'-6"	5'-0"	5'-11"	4'-7"

NOTES:

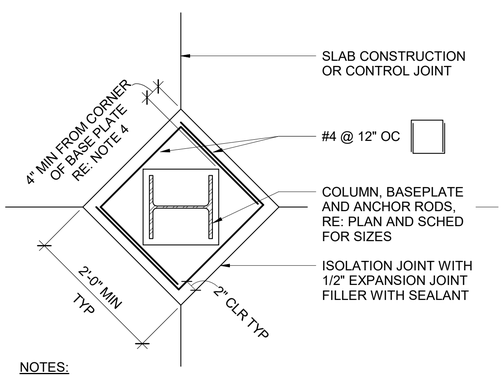
1. 'TOP' BARS ARE HORIZONTAL REBARS WITH MORE THAN 12 IN OF FRESH CONCRETE CAST BELOW THE BARS AT THE DEVELOPMENT LENGTH.
2. 'Ld' FOR #3 AND #4 BARS IN SLAB OR WALL ARE CONSERVATIVE AND MAY BE REDUCED TO 0.75 TIMES.
3. FOR LIGHT-WEIGHT CONCRETE MULTIPLY THE TABULATED VALUES BY 1.3.

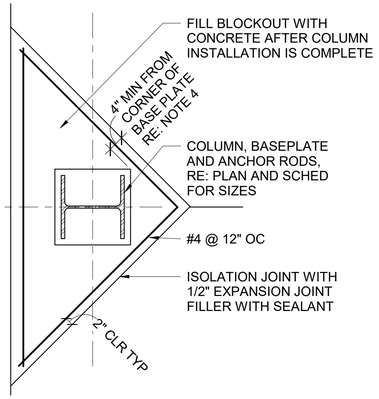
E1 DEVELOPMENT (EMBEDMENT) LENGTH FOR STANDARD END HOOKS

NTS

E3 COMPRESSION DEVELOPMENT LENGTH

NTS



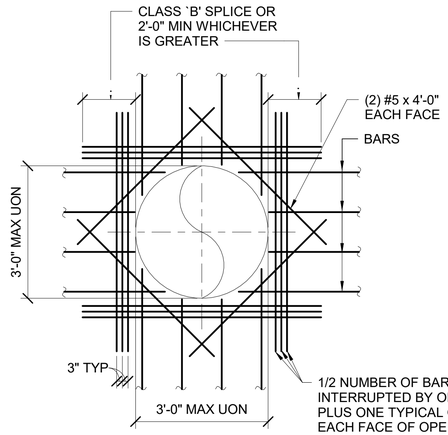


NOTES:

1. APPLY BLOCKOUT THROUGH THE FULL DEPTH OF SLAB CONSTRUCTION.
2. CONTRACTOR SHALL COORDINATE BLOCKOUT SIZE WITH BASEPLATE AND GUSSET DIMENSIONS.
3. EDGE OF BLOCKOUT SHALL BE 3" CLEAR OF EDGE OF COLUMN BASEPLATE.

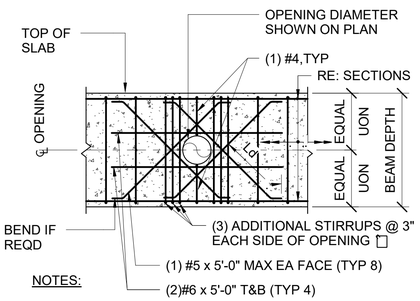
E6 TENSION LAP SPLICES

NTS



E8 TENSION DEVELOPMENT LENGTH

NTS

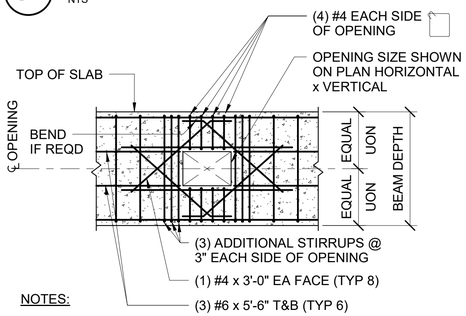


NOTES:

1. THE ADDITIONAL REINF SHOWN ABOVE IS APPLICABLE TO OPENING 12"x12". FOR LARGER OPENINGS, RE: SCHEDULE.
2. LOCATE OPENING AT MID DEPTH OF BEAM UON ON PLAN. IF A (X") DIMENSION IS SHOWN WITH OPENING, THIS DIMENSION IS FROM TOP OF SLAB TO CENTER OF OPENING.

C1 COLUMN BLOCKOUT

NTS

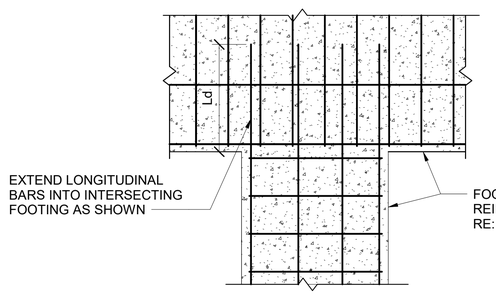


NOTES:

1. THE ADDITIONAL REINF SHOWN ABOVE IS APPLICABLE TO OPENING 12"x12". FOR LARGER OPENINGS, RE: SCHEDULE.
2. LOCATE OPENING AT MID DEPTH OF BEAM UON ON PLAN. IF A (X") DIMENSION IS SHOWN WITH OPENING, THIS DIMENSION IS FROM TOP OF SLAB TO CENTER OF OPENING.

A1 TYPICAL RECTANGULAR OPENING THROUGH CONCRETE BEAM

NTS

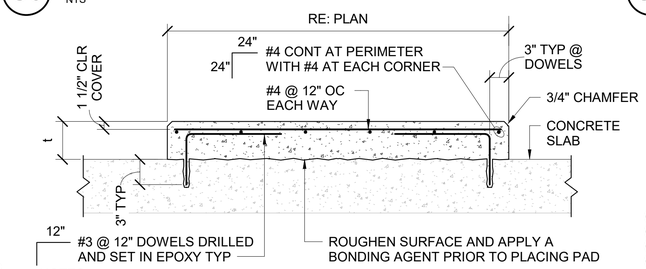


A3 FOOTING INTERSECTION DETAIL (TYP)

1" = 1'-0"

C6 TYPICAL ADDITIONAL BAR PLACING DETAIL FOR WALL OR SLAB OPENINGS

NTS



NOTES:

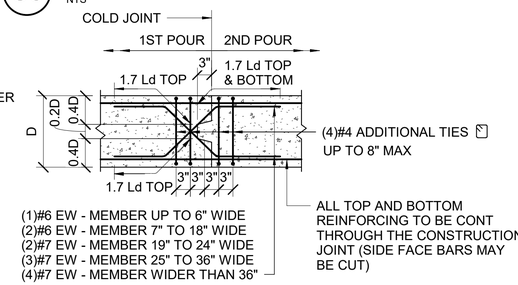
1. CONFIRM REQUIRED SIZE AND LOCATION OF ALL HOUSEKEEPING PADS WITH EQUIPMENT MANUFACTURER'S PRIOR TO PLACEMENT OF CONCRETE. PROVIDE PADS AS REQUIRED, WHETHER SHOWN ON STRUCTURAL DRAWINGS OR NOT.
2. WHERE REQUIRED, COORDINATE HOUSEKEEPING PAD WITH ARCH AND MECHANICAL SO PENETRATIONS ARE PLACED BEFORE CONCRETE IS POURED.

A6 SECTION AT MECHANICAL EQUIPMENT HOUSEKEEPING PAD

NTS

C8 TYPICAL CIRCULAR OPENING THROUGH CONCRETE BEAM

NTS



(1)#6 EW - MEMBER UP TO 6" WIDE
(2)#6 EW - MEMBER 7" TO 18" WIDE
(2)#7 EW - MEMBER 19" TO 24" WIDE
(3)#7 EW - MEMBER 25" TO 36" WIDE
(4)#7 EW - MEMBER WIDER THAN 36"

NOTE: SCHEDULED REINFORCING NOT SHOWN FOR CLARITY.

A8 TYPICAL GRADE BEAM DETAIL AT CONSTRUCTION JOINT

NTS

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
ALEX BANNEROT
91686
LICENSED PROFESSIONAL ENGINEER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: A. BANNEROT
DRAWN BY: D. ORTON
CHECKED BY: A. SAVOIE
SUBMITTED BY: E. OLNESS
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: ANSI D 22x34 SXHT21920151-501

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS PROJECT NO: D2S923

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
TYPICAL CONCRETE DETAILS

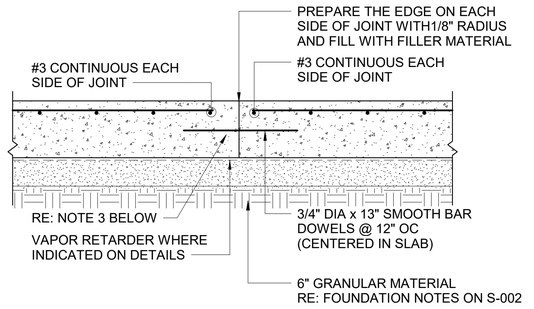
SHEET ID
B1455
S-501

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN

CONSTRUCTION JOINT



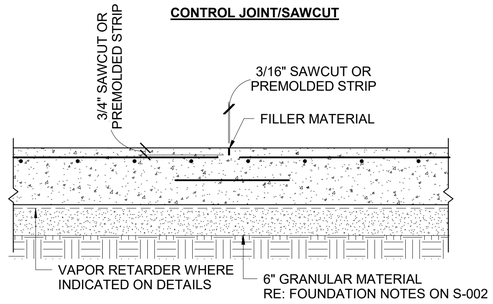
CONSTRUCTION JOINT NOTES:

1. REFER TO PLAN FOR SLAB THICKNESS (T) AND REINFORCEMENT.
2. SLAB REINFORCEMENT SHALL BE CHAIRED BY SOIL SUPPORT SLAB BOLSTERS.
3. BREAK BOND BETWEEN NEW AND PREVIOUSLY PLACED SLAB BY SPRAYING OR PAINTING THE EXPOSED SIDE OF AND DOWEL WITH CURING COMPOUND, ASPHALTIC EMULSION OR FORM OIL.
4. REFER TO GENERAL NOTES, GENERAL SPECIFICATIONS, AND DRAWINGS FOR SUB-FLOOR DRAINAGE SYSTEM, SUBGRADE PREPARATION AND/OR MUD SLAB AND VAPOR RETARDER REQUIREMENTS.
5. SUBGRADE SHALL BE FREE OF STANDING WATER AT THE TIME OF CONCRETE PLACEMENT.

JOINT SPACING NOTE:

1. PROVIDE CONTROL AND/OR CONSTRUCTION JOINTS AT EVERY COLUMN LINE AND IN BETWEEN THE COLUMN LINES SUCH THAT THE JOINT SPACING DOES NOT EXCEED 20 FEET, UNLESS OTHERWISE NOTED. SUBMIT JOINT PLAN FOR ENGINEER'S APPROVAL.

CONTROL JOINT/SAWCUT



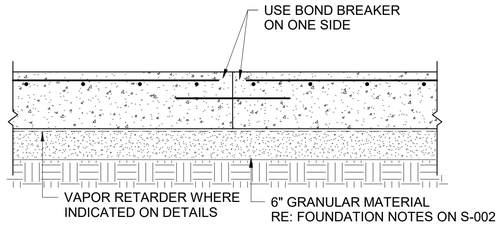
RE: CONSTRUCTION JOINT DETAIL FOR DOWEL REINFORCEMENT, BOND BREAKER, JOINT EDGING AND FILLER MATERIAL.

SAW CONTROL NOTES:

1. MAKE SAWCUT AS SOON AS SLAB IS ABLE TO SUPPORT THE WEIGHT OF WORKERS AND SAWING EQUIPMENT WITHOUT DAMAGE TO FINISH SURFACE OF SLAB.
2. CLEAN JOINT PRIOR TO FILLING JOINT.
3. ALL BARS SHOULD DISCONTINUE AT SAWCUT JOINTS. DO NOT STOP EVERY OTHER ONE. USE SMOOTH DOWELS SIMILAR TO CONSTRUCTION JOINT IF LOAD TRANSFER ACROSS THE JOINT IS REQUIRED.

OPTIONAL CONTROL JOINT

NOTE: CONCRETE POURED BOTH SIDES IN SAME POUR.



RE: CONSTRUCTION JOINT DETAIL FOR DOWEL REINFORCEMENT, BOND BREAKER, JOINT EDGING AND FILLER MATERIAL.

FORMED CONTROL JOINT NOTES:

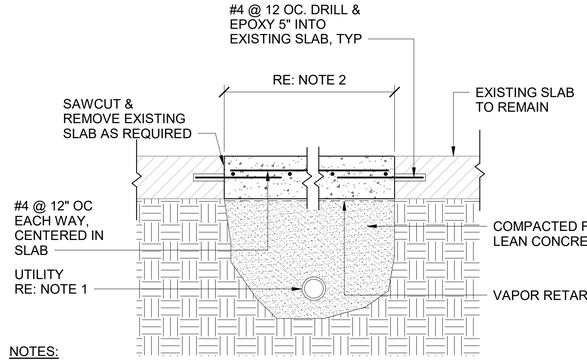
1. FORM CONTROL JOINTS BY INSERTING PRE-MOLDED STRIP INTO FRESH CONCRETE UNTIL TOP SURFACE OF STRIP IS FLUSH WITH SLAB SURFACE.
2. TOOL SLAB EDGES ROUND ON EACH SIDE OF INSERT.
3. AFTER CONCRETE HAS CURED, REMOVE INSERTS AND CLEAN GROOVE OF LOOSE DEBRIS.

DOWEL NOTES:

1. ALL DOWELS SHALL CONFORM TO ASTM A615.
2. DOWELS SHALL BE CAREFULLY ALIGNED AND SUPPORTED DURING CONCRETING OPERATIONS.

JOINT FILLER MATERIAL NOTES:

1. FILLER MATERIAL SHALL HAVE A MINIMUM SHORE HARDNESS OF 35, AND SHALL CONFORM TO ASTM D2240. JOINT FILLER SHALL BE APPROVED BY ENGINEER PRIOR TO APPLICATION.
2. WHERE POSSIBLE, FILLER MATERIAL SHALL BE APPLIED WHEN BUILDING IS UNDER PERMANENT TEMPERATURE CONTROL. THIS SHALL BE EITHER AT THE END OF CONSTRUCTION OF THE COMPLETE BUILDING SHELL, OR A MINIMUM OF 90 DAYS AFTER SLAB CONSTRUCTION.
3. FOLLOW STRICTLY THE MANUFACTURER'S RECOMMENDED PROCEDURES FOR APPLYING THE JOINT FILLER.

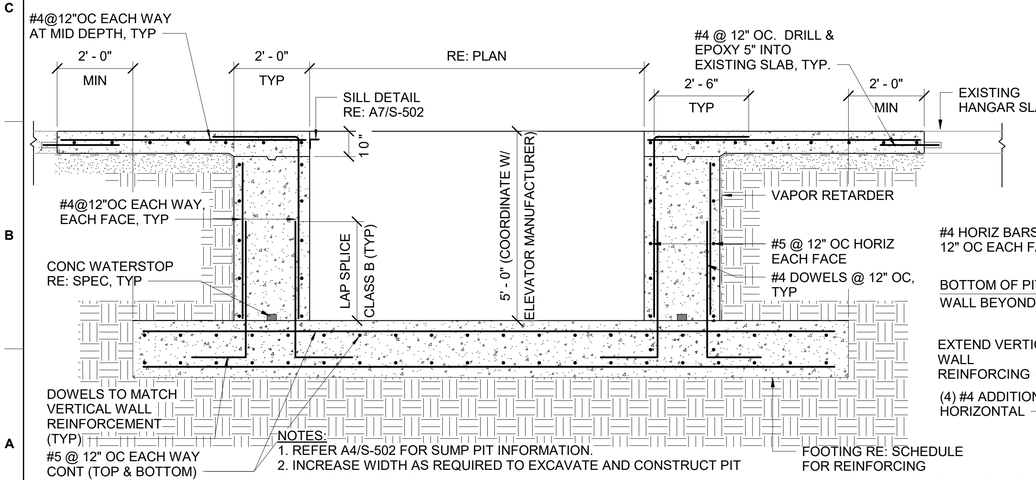


NOTES:

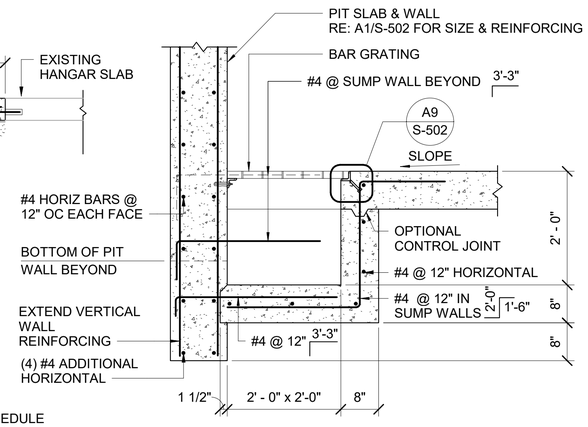
1. REMOVE AND REPLACE SLAB AS REQUIRED TO INSTALL OR MODIFY UTILITY LINES. REFER TO DISCIPLINE DRAWINGS (PLUMBING, ELECTRICAL, ETC.) FOR LOCATIONS OF UTILITY INSTALLATION/MODIFICATION.
2. PROVIDE MINIMUM DIMENSION AS REQUIRED FOR INSTALLATION/MODIFICATION OF UTILITY.
3. LAP VAPOR RETARDER WITH EXISTING RETARDER AND TAPE OR SEAL PER MANUFACTURE'S INSTRUCTIONS

C1 TYPICAL CONSTRUCTION/CONTROL JOINT SLAB-ON-GRADE
NTS

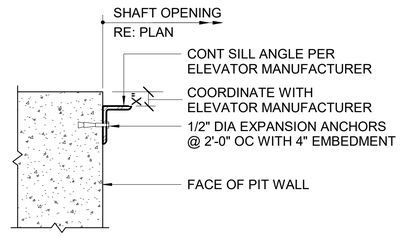
C8 TYPICAL SLAB REMOVAL & REPLACEMENT
3/4" = 1'-0"



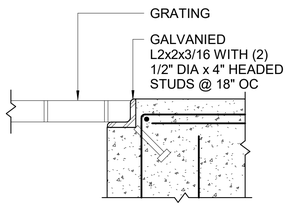
A1 ELEVATOR PIT SECTION
NTS



A4 TYPICAL SUMP PIT DETAIL
NTS



A7 TYPICAL SECTION AT ELEVATOR DOOR SILL
NTS



A9 TYPICAL DETAIL AT SUMP PIT
NTS

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
ALEX BANNEROT
91686
LICENSED PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: A. BANNEROT
DRAWN BY: D. ORTON
CHECKED BY: A. SAVOIE
SUBMITTED BY: E. OLMESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT21920151-502

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
817.334.4000 | fax 817.334.4099

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
TYPICAL CONCRETE DETAILS

SHEET ID
B1455
S-502

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN

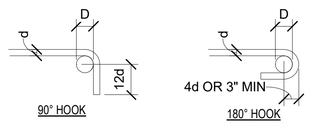
SINGLE LAYER

NOTE: CORNER BAR SIZE, SPACING AND LOCATION SAME AS HORZ WALL REINF. SEE GENERAL NOTES FOR SPLICE LENGTH.

DOUBLE LAYER

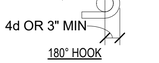
A1 CORNER BAR PLACEMENT DETAIL

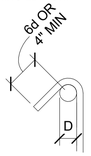
12" = 1'-0"



NOTE:

FOR 'D' ETC SEE CRSI HANDBOOK GOVERNING EDITION.

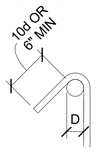




TIE OR STIRRUP

PRINCIPAL REINFORCING

BAR DIA	MIN "D"
#3	1 1/2"
#4	2"
#5	2 1/2"
#6	3"
#7	3 1/2"
#8	4"
#9	4 1/2"
#10	5"
#11	5 1/2"



SEISMIC STIRRUP/TIE

DETAIL NOTES:
1. BENDS SHALL BE MADE COLD.
2. #14 AND #18 BARS SHALL BE BEND-TESTED AND APPROVED PRIOR TO BENDING.

A6 BAR BENDS DETAIL

1" = 1'-0"

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
ALEX BANNEROT
91686
LICENSED PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: A. BANNEROT
DRAWN BY: D. ORTON
CHECKED BY: A. SAVOIE
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201S-503

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

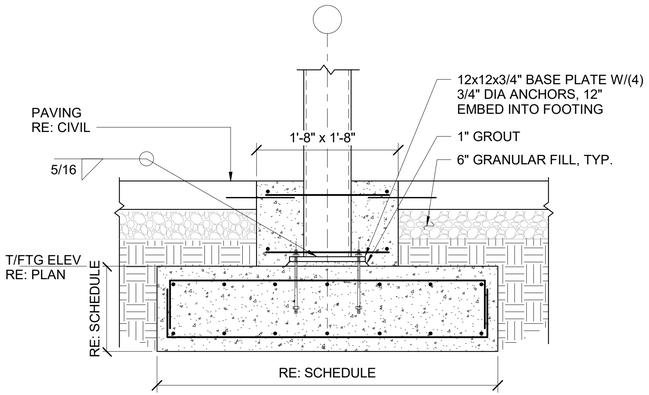
jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
ACHIEVE Your POTENTIAL

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, PZ#: 496395
TYPICAL CONCRETE DETAILS

SHEET ID
B1455
S-503

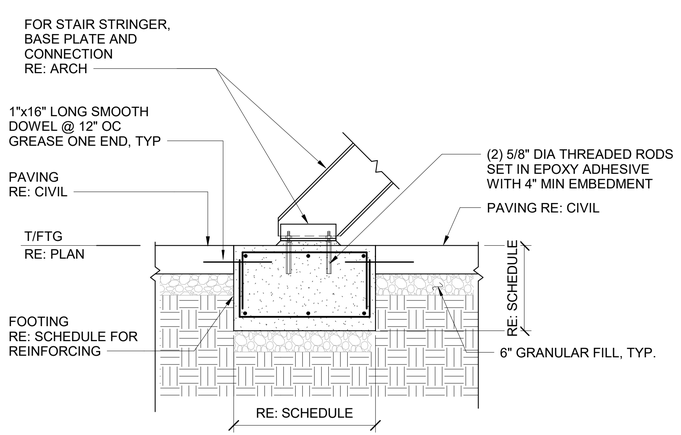
W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN

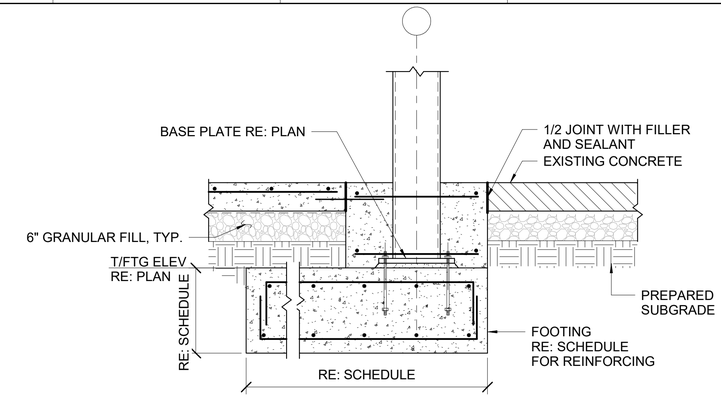


NOTE:
1. RE: A1/S-505 FOR ADDITIONAL INFORMATION

E1 SECTION
NTS

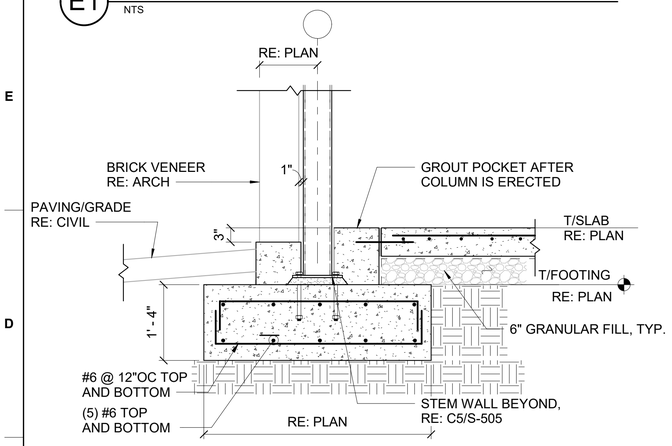


E4 SECTION
NTS



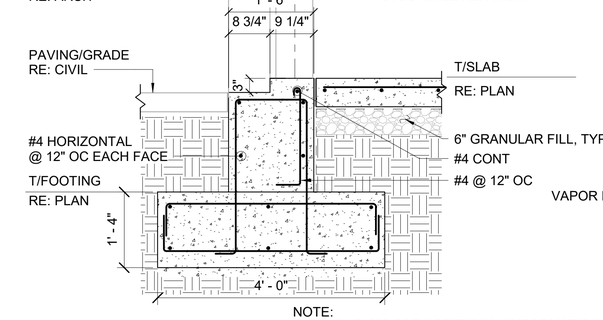
NOTE:
1. RE: A1 / S-505 FOR ADDITIONAL INFORMATION

E8 SECTION
NTS



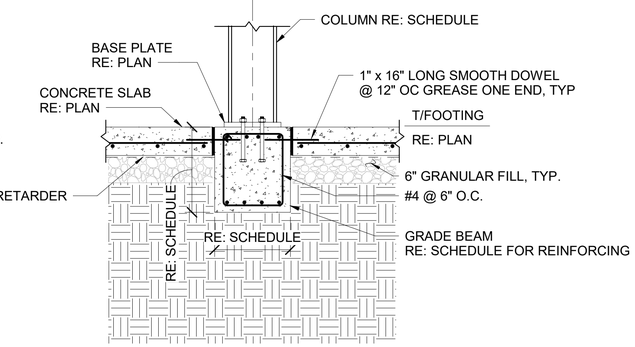
NOTE:
1. RE: A1/S-505 FOR ADDITIONAL INFORMATION.
2. PROVIDE STANDARD ACI HOOKS AT TOP AND BOTTOM FOR VERTICAL PILASTER REINFORCEMENT

C1 SECTION
3/4" = 1'-0"

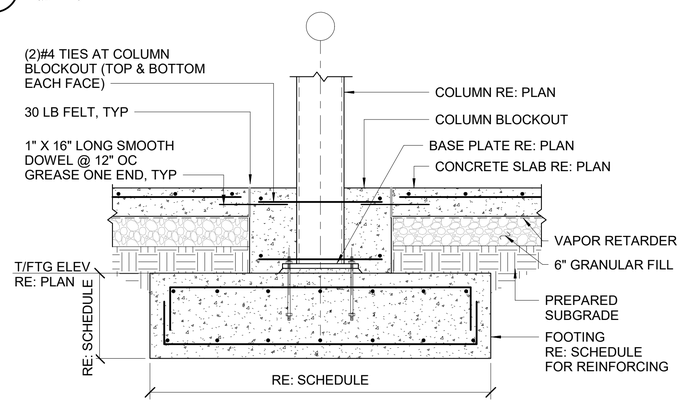


NOTE:
1. RE: C1/S-505 FOR ADDITIONAL INFORMATION

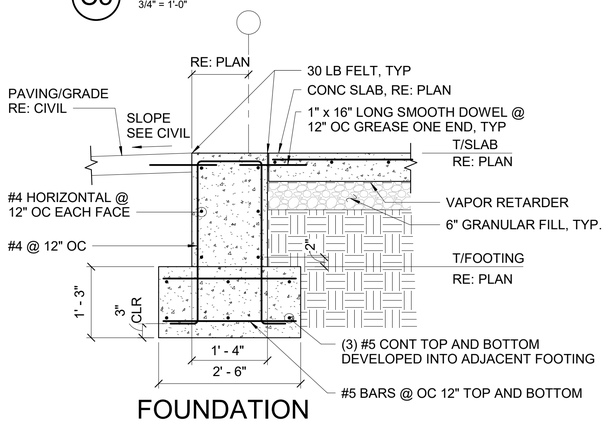
C5 PERIMETER FOUNDATION SECTION
3/4" = 1'-0"



C8 SECTION
3/4" = 1'-0"



A1 SECTION AT INTERIOR FOOTING
NTS



A5 FOUNDATION SECTION AT DOOR
3/4" = 1'-0"

GRAPHIC SCALE

1 1/2 0 1 2
SCALE: 1"=1'-0"
2 1 0 2
SCALE: 3/4"=1'-0"

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
ALEX BANNEROT
91686
LICENSED PROFESSIONAL ENGINEER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201S-505

DESIGNED BY: A. BANNEROT
DRAWN BY: D. ORTON
CHECKED BY: A. SAVOIE
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
Phone: 817.820.8000 Fax: 817.820.8010

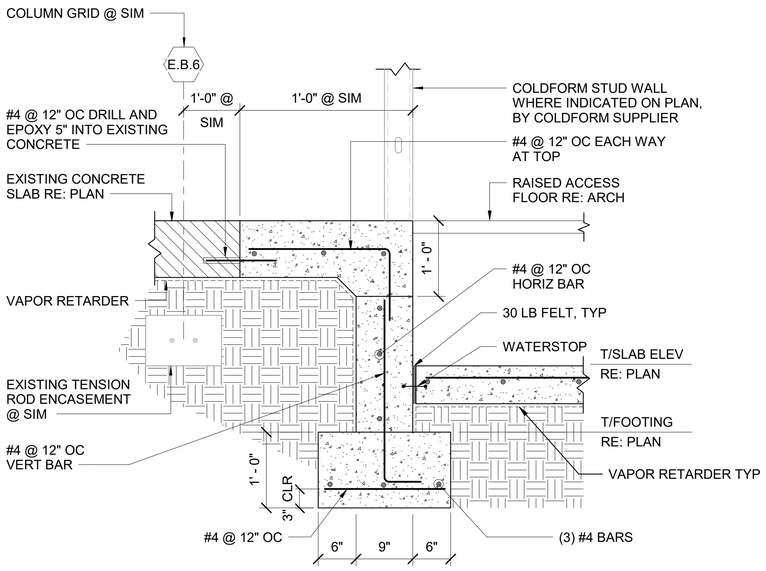
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
CONCRETE SECTIONS AND DETAILS

SHEET ID
B1455
S-505

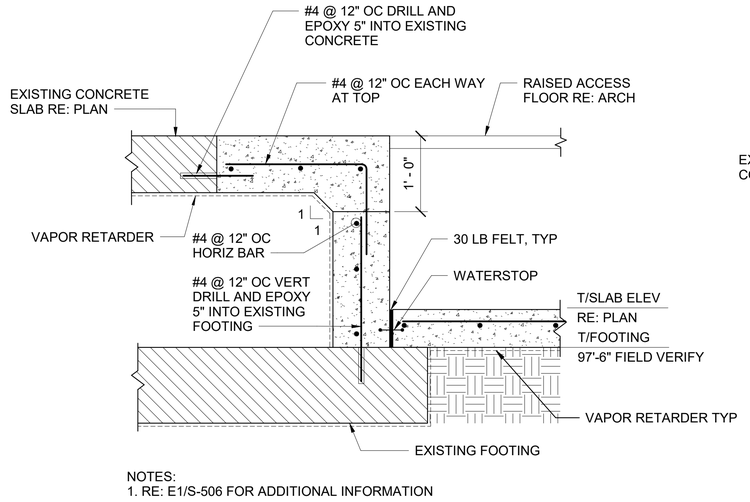
W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN

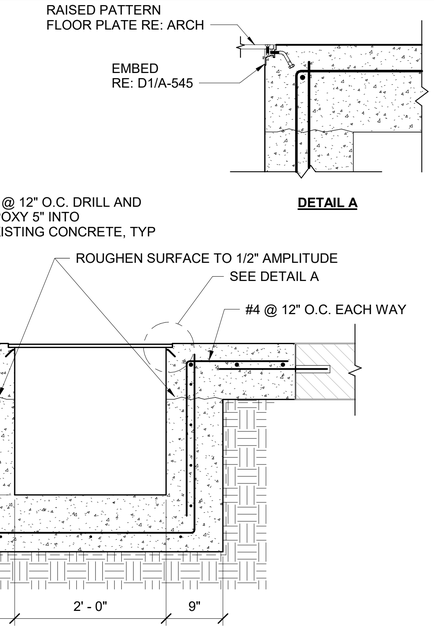


E1 SECTION
1" = 1'-0"

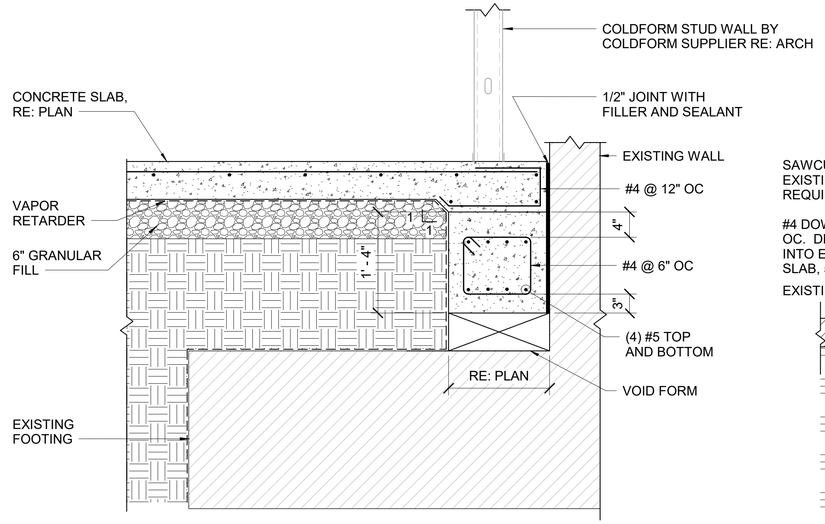


NOTES:
1. RE: E1/S-506 FOR ADDITIONAL INFORMATION

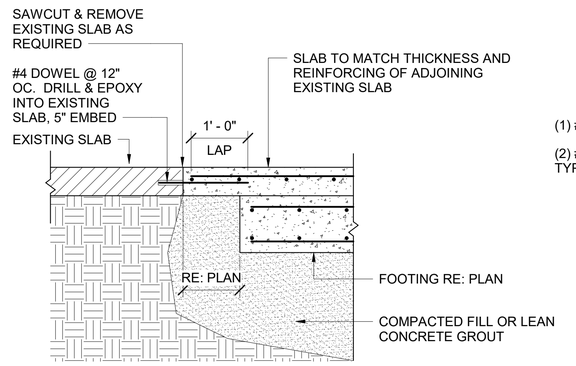
E4 SECTION
1" = 1'-0"



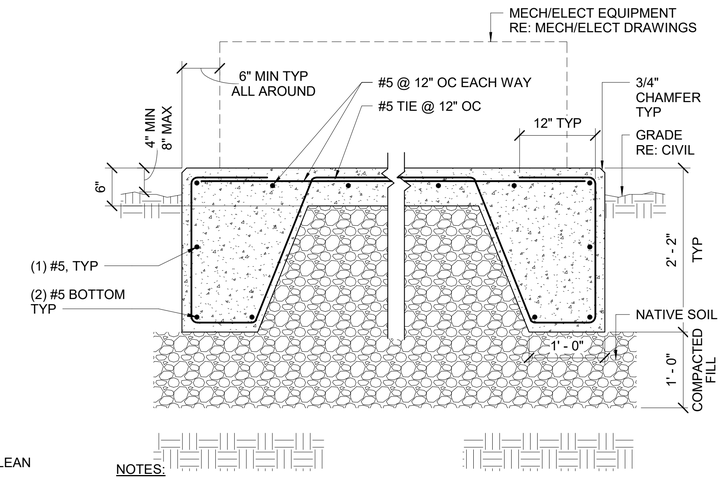
E7 SECTION
1" = 1'-0"



A1 SECTION
1" = 1'-0"



A4 SLAB INFILL DETAIL
3/4" = 1'-0"



NOTES:

1. COORDINATE WITH MECHANICAL & ELECTRICAL FOR FINAL SIZES AND LOCATIONS.
2. RE: FOUNDATION NOTES FOR INFORMATION ON COMPACTED FILL.

A6 EXTERIOR EQUIPMENT PAD
1" = 1'-0"

GRAPHIC SCALE

2 1 0 2
SCALE: 3/4"=1'-0"

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
ALEX BANNEROT
91686
LICENSED PROFESSIONAL ENGINEER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY:	ISSUE DATE:
A. BANNEROT	23 NOVEMBER 2022
DRAWN BY:	SOLICITATION NO.:
D. ORTON	
CHECKED BY:	CONTRACT NO.:
A. SAVOIE	DRAWING CODE::
SUBMITTED BY:	
E. OLNESS	FILE NAME:
SIZE:	SXHT219201S-506
ANSI D 22x34	

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
ACHP Re: W912QR19D0023

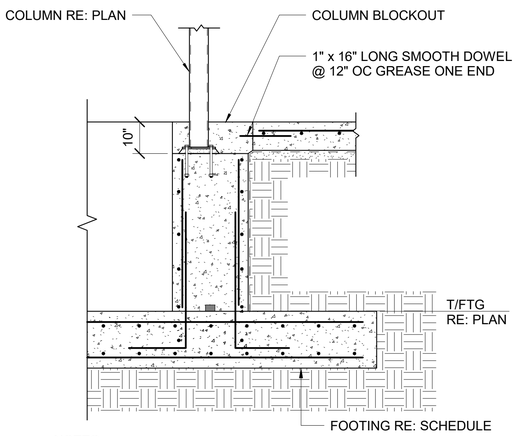
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
CONCRETE SECTION AND DETAILS

SHEET ID
B1455
S-506

W912QR23R0003_Plans-0000

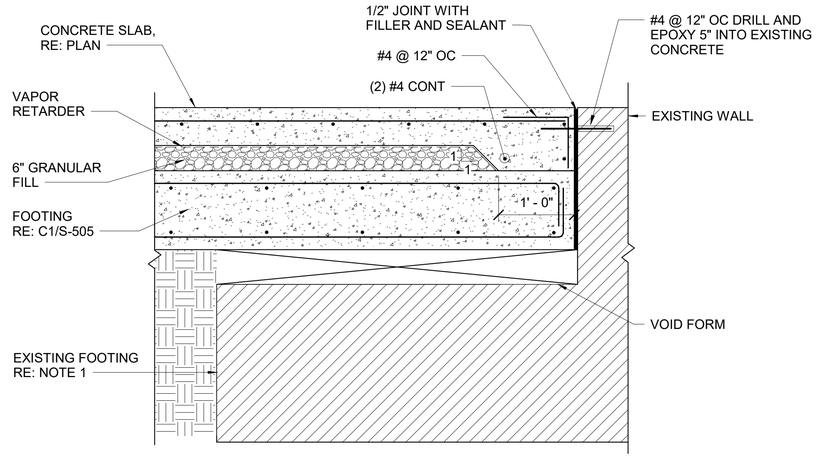
ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN



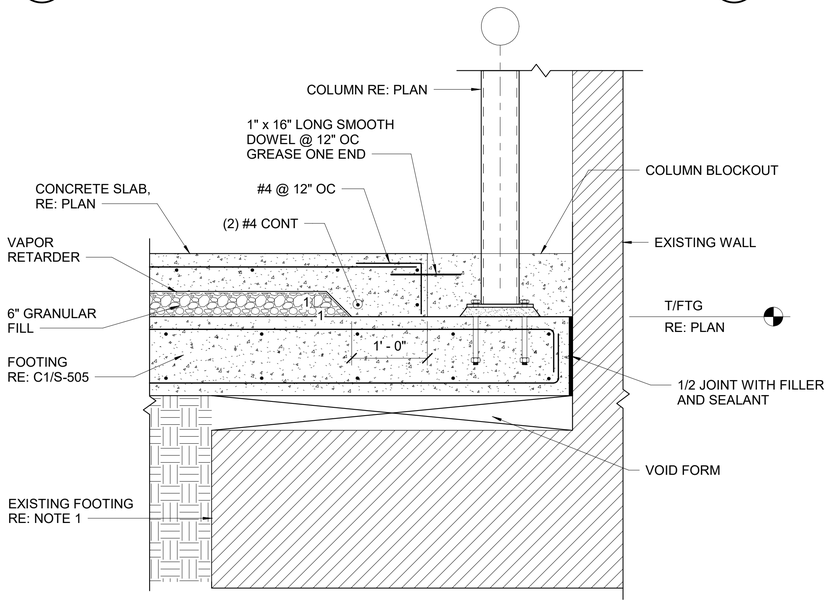
NOTES:
1. REFER A1/S-502 FOR ADDITIONAL INFORMATION.

D1 SECTION
NTS



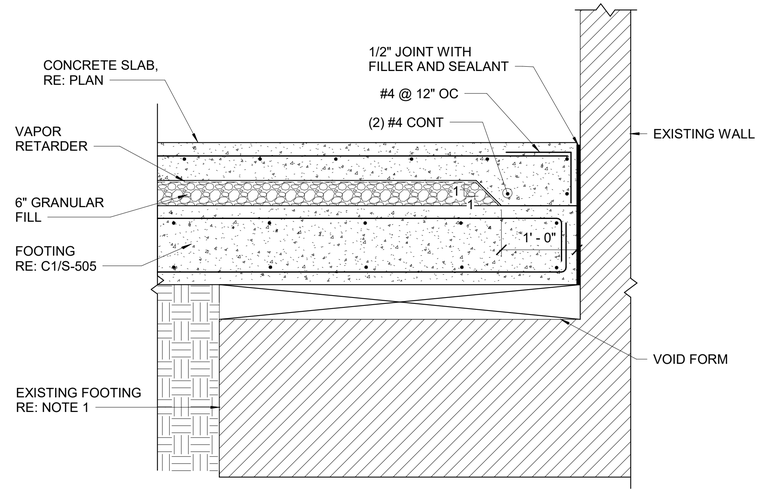
NOTE:
1. FIELD VERIFY TOP OF EXISTING FOOTING ELEVATION
2. RE: A1/S-507 FOR ADDITIONAL INFORMATION

D4 SECTION
NTS



NOTE:
1. FIELD VERIFY TOP OF EXISTING FOOTING ELEVATION
2. GRADE BEAM INSTEAD OF FOOTING AT SIM

A1 SECTION
NTS



NOTE:
1. FIELD VERIFY TOP OF EXISTING FOOTING ELEVATION
2. RE: A1/S-507 FOR ADDITIONAL INFORMATION

A7 SECTION
NTS

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
ALEX BANNEROT
91686
LICENSED PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: A. BANNEROT
DRAWN BY: D. ORTON
CHECKED BY: A. SAVOIE
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:.
FILE NAME: SXHT219201S-507

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

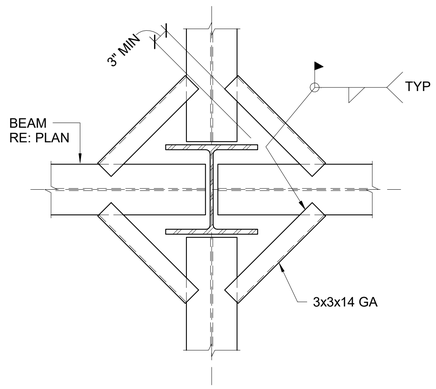
jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS No. 19220023

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
CONCRETE SECTION AND DETAIL

SHEET ID
B1455
S-507

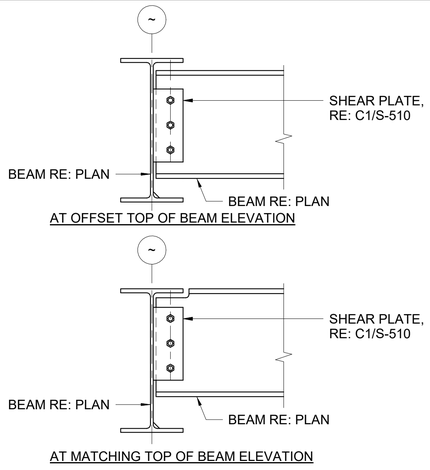
W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



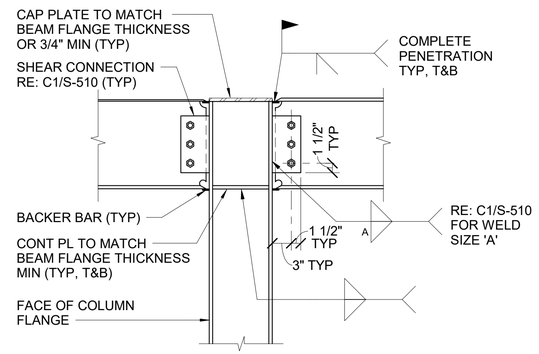
TYPICAL PLAN FOR SUPPORT OF METAL DECK AT COLUMN

E1 NTS



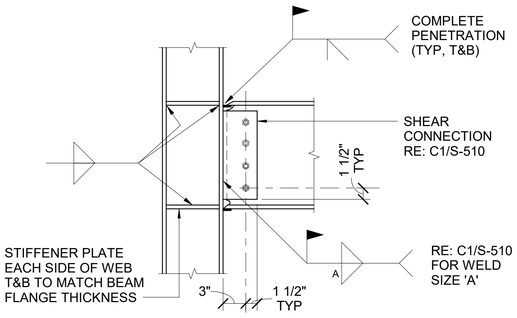
TYPICAL BEAM TO BEAM CONNECTION

E3 NTS



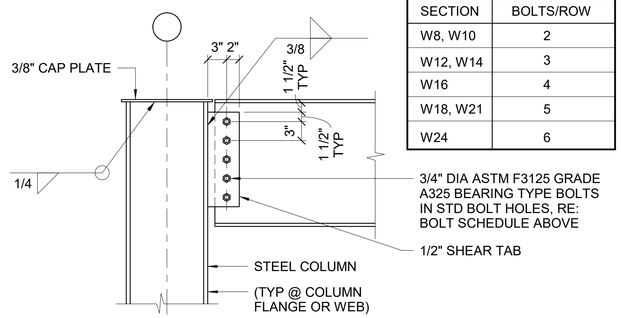
TYPICAL RIGID FRAME CONNECTION

E6 NTS



TYPICAL BEAM TO COLUMN MOMENT CONNECTION

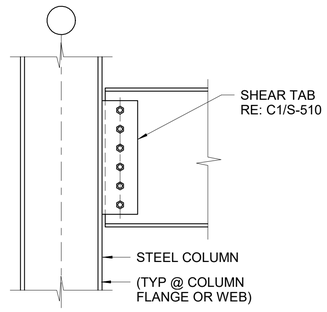
E8 NTS



BOLT SCHEDULE	
SECTION	BOLTS/ROW
W8, W10	2
W12, W14	3
W16	4
W18, W21	5
W24	6

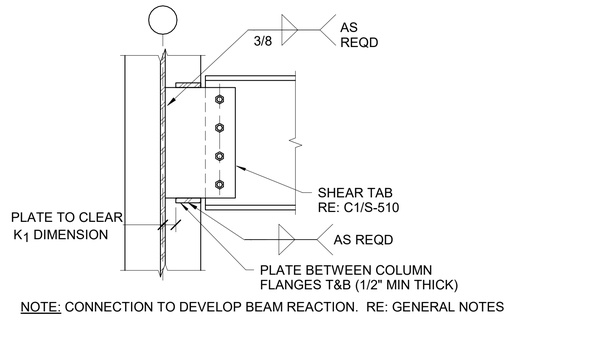
TYPICAL BEAM TO TOP OF COLUMN SHEAR CONNECTION

C1 NTS



TYPICAL BEAM TO COLUMN SHEAR CONNECTION

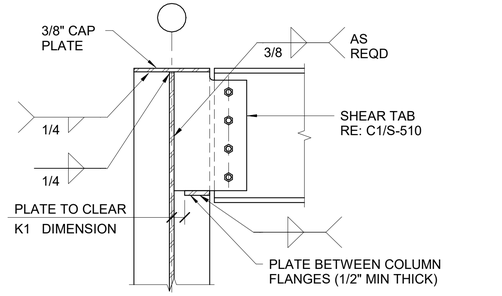
C3 NTS



NOTE: CONNECTION TO DEVELOP BEAM REACTION. RE: GENERAL NOTES

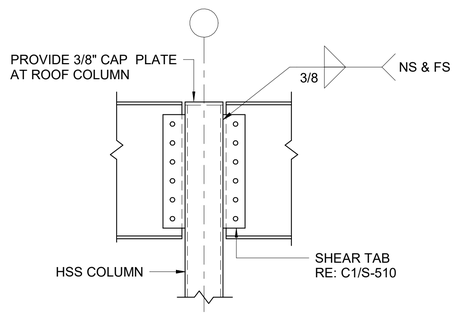
TYPICAL BEAM TO COLUMN WEB SHEAR TAB CONNECTION

C6 NTS



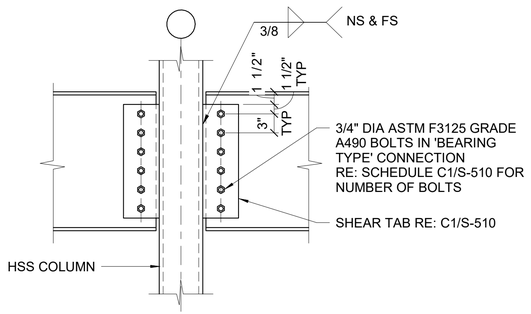
TYPICAL BEAM TO COLUMN WEB SHEAR TAB CONNECTION

C8 NTS



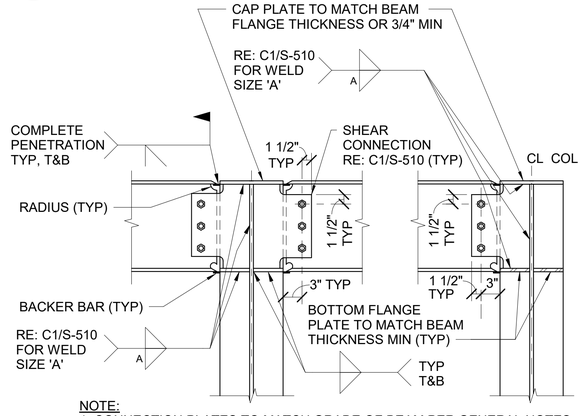
TYPICAL BEAM TO HSS COLUMN CONNECTION

A1 NTS



TYPICAL BEAM TO COLUMN SHEAR CONNECTION (HSS COLUMN)

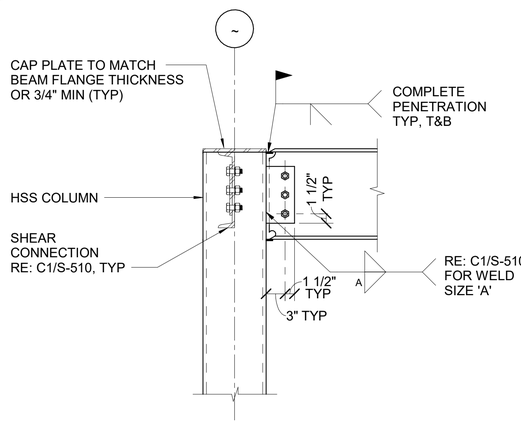
A3 NTS



NOTE:
1. CONNECTION PLATES TO MATCH GRADE OF BEAM PER GENERAL NOTES.
2. SKEW BOTTOM PLATE AT UNEQUAL BEAM DEPTHS.

TYPICAL RIGID FRAME CONNECTION BEAM TO COLUMN WEB DETAIL

A6 NTS



TYPICAL BEAM TO COLUMN MOMENT FRAME CONNECTION (HSS COLUMN)

A8 NTS

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
ALEX BANNEROT
91686
LICENSED PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201S-510

DESIGNED BY: A. BANNEROT
DRAWN BY: D. ORTON
CHECKED BY: A. SAVOIE
SUBMITTED BY: E. COLNESS
ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

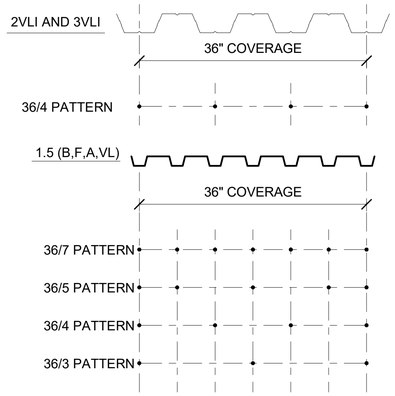
Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
(817)820-8700 TBPE FIRM NO. F-2561

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
TYPICAL STEEL DETAILS

SHEET ID
B1455
S-510

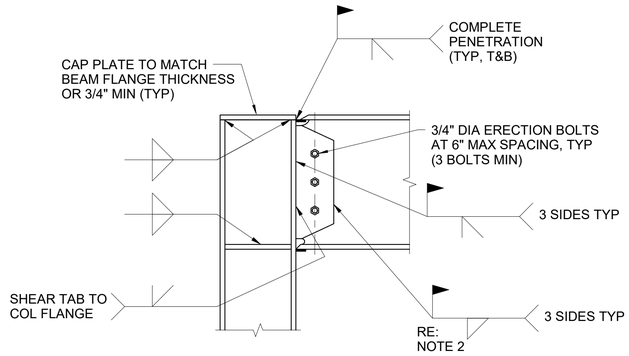
W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



E1 TYPICAL DECK FASTENER LAYOUT

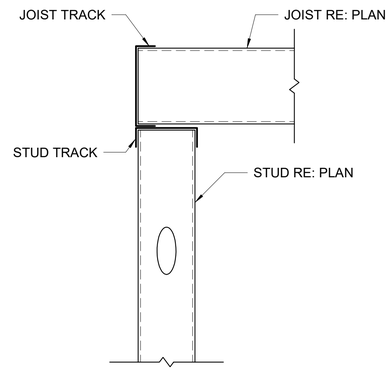
NTS



NOTES:
1. CONNECTIONS TO MEET DETAILING REQUIREMENTS OF AISC 358 FOR WUF-W TYPE MOMENT CONNECTION.
2. INDICATED WELD SIZE SHEAR TAB THICKNESS - 1/16"
3. MINIMUM SHEAR TAB THICKNESS = BEAM WEB THICKNESS

E3 TYPICAL MOMENT CONNECTION AT GRIDS 2.3, 2.6, B.1, AND C.9

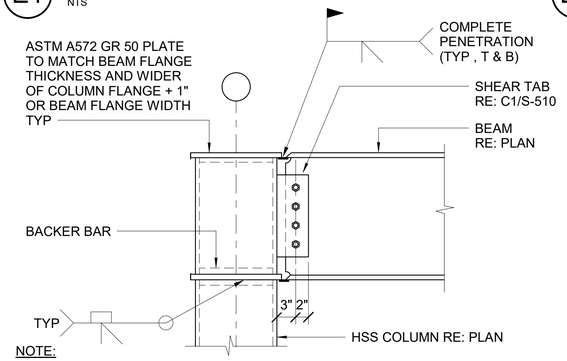
1 1/2" = 1'-0"



NOTE:
1. FINAL DESIGN TO BE PROVIDED BY COLDFROM STEEL SUPPLIER.

E7 TYPICAL COLDFORM STEEL FRAMING

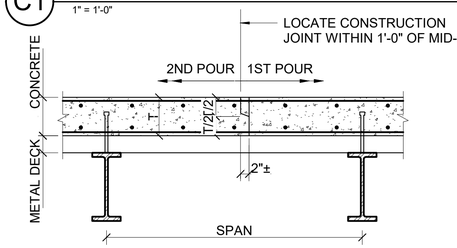
NTS



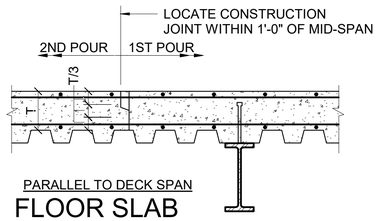
NOTE:
1. COLUMN IS CONTINUOUS TO STRUCTURE ABOVE AT SIM.

C1 TYP BEAM TO COLUMN MOMENT CONNECTION

1" = 1'-0"



PERPENDICULAR TO DECK SPAN

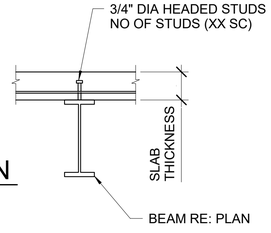


PARALLEL TO DECK SPAN

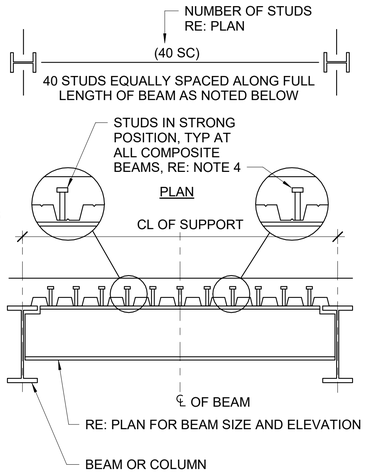
A1 FLOOR SLAB CONSTRUCTION JOINT SECTIONS

1" = 1'-0"

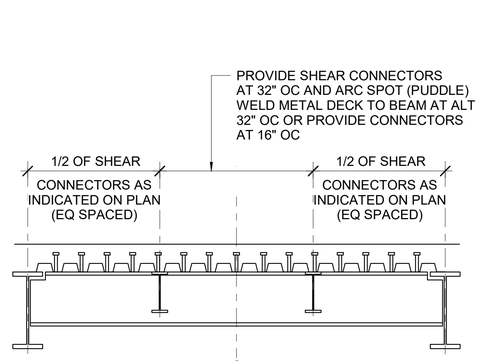
FIN STUD LENGTH	SLAB THK "t"
8"	t >10"
5 1/2"	8 1/2" < t ≤ 10"
5"	6" < t ≤ 8 1/2"
4"	5" < t ≤ 6"
3 1/2"	4 1/2" < t ≤ 5"



SECTION

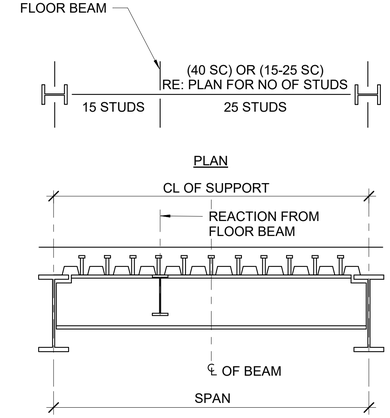


ELEVATION

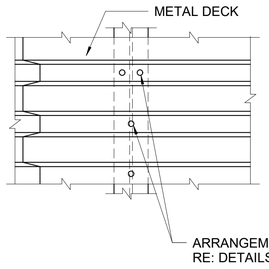


SPECIAL PLACEMENT OF SHEAR CONNECTORS

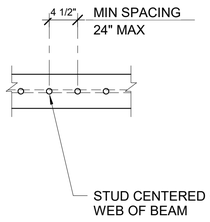
ABOVE PLACEMENT OF SHEAR CONNECTORS IS APPLICABLE WHERE ASTERISK (*) IS SHOWN ON PLAN WITH SHEAR CONNECTOR QUANTITIES.



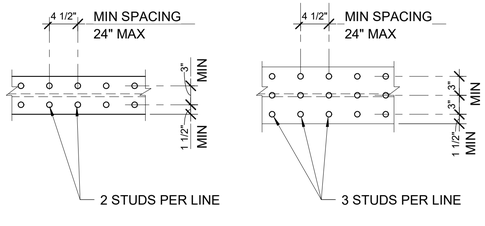
ELEVATION



PLAN



SINGLE LINE OF STUDS



MULTIPLE LINES OF STUDS

WELDED SHER STUD NOTES:

1. ALL SHEAR STUDS SHALL BE 3/4" DIA HEADED STUDS WITH HEIGHT OF STUDS AS SHOWN ABOVE.
2. ONE STUD PER TROUGH SHALL BE PLACED STARTING FROM BOTH ENDS OF BEAM. WHEN STUDS FILL EVERY TROUGH OF METAL DECK REMAINING STUDS SHALL BE PLACED IN TWO OR MORE ROWS PER TROUGH STARTING FROM EACH END OF BEAM OR GIRDER.
3. ALL BEAMS AND GIRDERS, NOT PART OF LATERAL LOAD RESISTING SYSTEM, SUPPORTING METAL DECK WITH ALL CONCRETE FILL SHALL HAVE THE STUDS AT MAX 24" OC ALL BEAMS PART OF LATERAL LOAD RESISTANCE SYSTEM, EITHER WIND GIRDER OR HORIZONTAL BRACING BEAM, SHALL HAVE STUDS 30" OC IN NON-SEISMIC AREA AND 18" OC IN SEISMIC AREA.
4. WHERE DECK PROFILE PREVENTS INSTALLATION OF STUD IN CENTER OF DECK RIB VALLEY, INSTALL STUDS ON COMPOSITE BEAMS IN STRONG POSITION OF DECK RIB. THE STRONG POSISION IS DEFINED AS THE SIDE OF THE DECK RIB AWAY FROM THE CENTERLINE OF THE BEAM SPAN. AT CANTILEVERED ENDS OF BEAMS, THE STRONG POSITION IS THE SIDE OF THE DECK RIB AWAY FROM THE FREE END OF THE BEAM. A STUD THAT IS AT THE CENTER OF A BEAM SPAN CAN BE INSTALLED ON EITHER SIDE OF THE DECK RIB.

A3 TYPICAL SHEAR CONNECTION

1" = 1'-0"

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
ALEX BANNEROT
91686
LICENSED PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201S-511

DESIGNED BY: A. BANNEROT
DRAWN BY: D. ORTON
CHECKED BY: A. SAVOIE
SUBMITTED BY: E. OLNESS

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
Phone: 817.820.8700 Fax: 817.820.8799

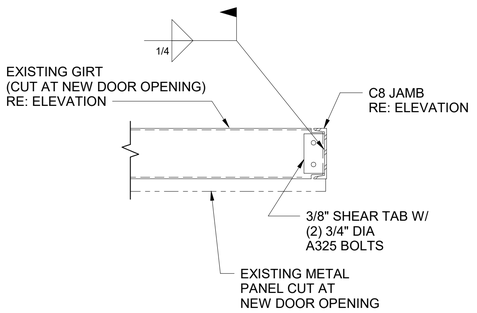
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395

TYPICAL STEEL DETAILS

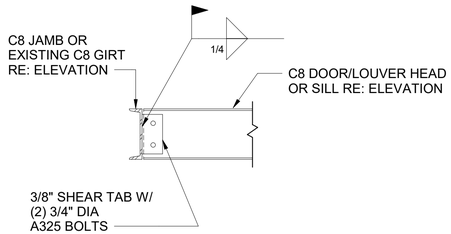
SHEET ID
B1455
S-511

W912QR23R0003_Plans-0000

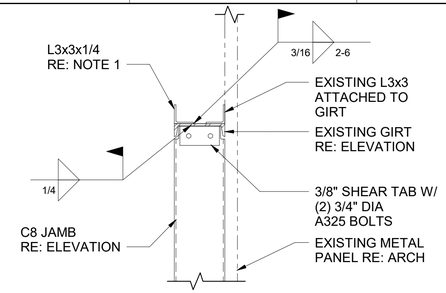
CERTIFIED FINAL DESIGN



F1 SECTION
1" = 1'-0"

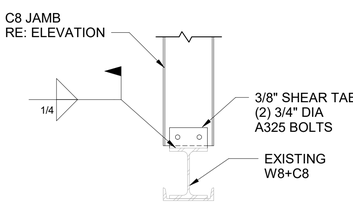


F3 SECTION
1" = 1'-0"

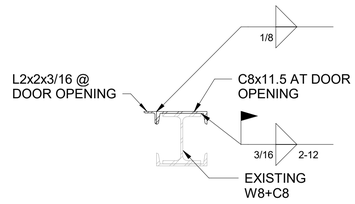


NOTES:
1. NOTCH HORIZONTAL ANGLE LEG THE MINIMUM AMOUNT REQUIRED TO FIT AROUND EXISTING HANGER RODS. DO NOT CUT OR NOTCH ANGLE VERTICAL LEG.

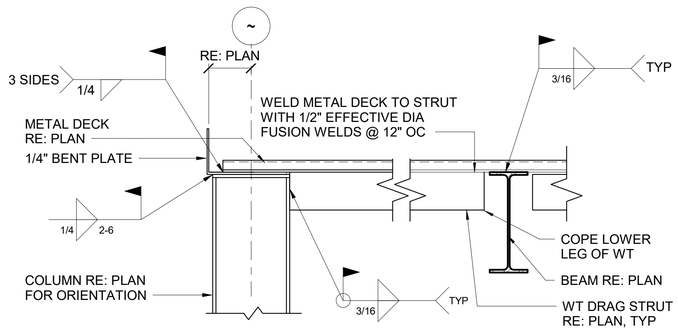
F5 SECTION
1" = 1'-0"



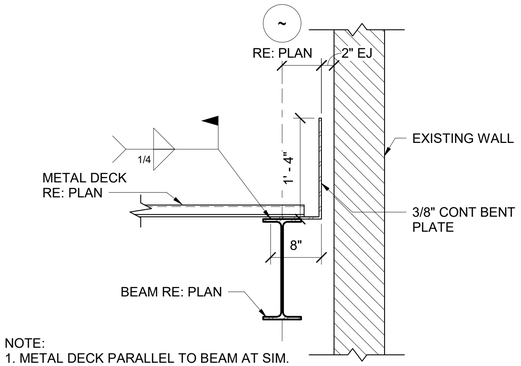
F7 SECTION
1" = 1'-0"



F9 SECTION
1" = 1'-0"

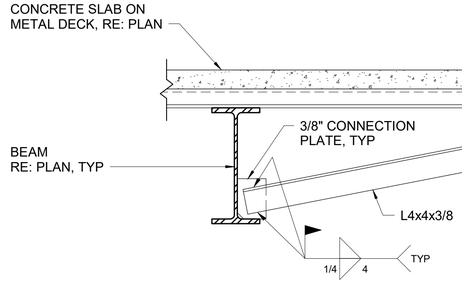


D1 TYPICAL DRAG STRUT DETAIL
NTS

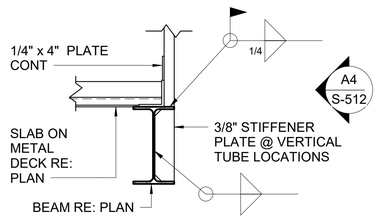


NOTE:
1. METAL DECK PARALLEL TO BEAM AT SIM.

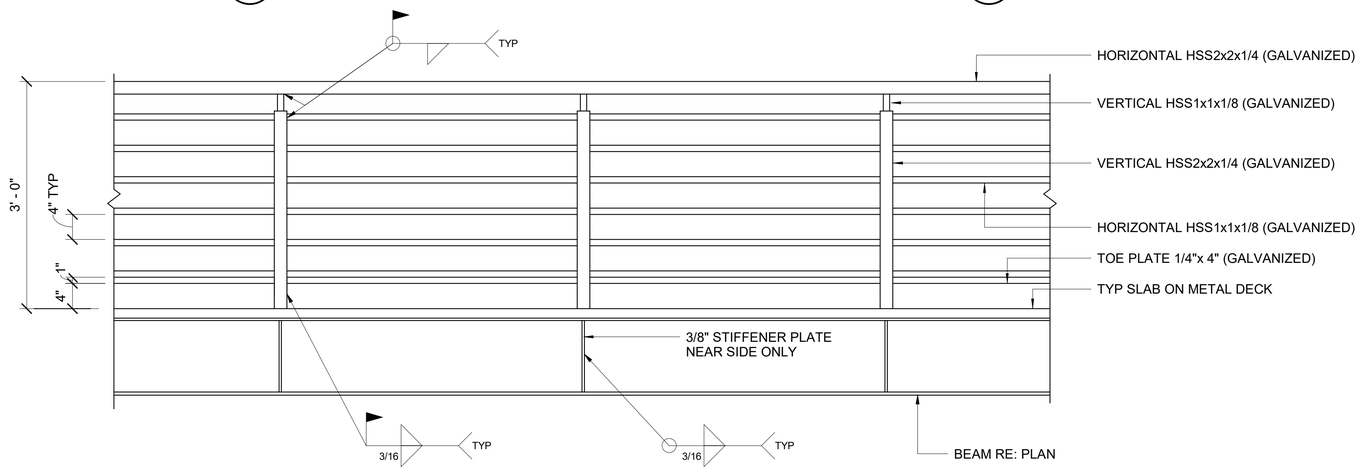
D4 SECTION
1" = 1'-0"



D7 BEAM BOTTOM FLANGE BRACING
1" = 1'-0"



A1 SECTION AT GUARDRAIL
1" = 1'-0"



NOTE: REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL GUARDRAIL INFORMATION

A4 ELEVATION AT GUARDRAIL
1" = 1'-0"

GRAPHIC SCALE

1 1/2 0 1 2
SCALE: 1"=1'-0"
2 1 0 2
SCALE: 3/4"=1'-0"

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
ALEX BANNEROT
91686
LICENSED
PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED
ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: A. BANNEROT
DRAWN BY: D. ORTON
CHECKED BY: A. SAVOIE
SUBMITTED BY: E. OLNESS
SIZE: ANSI D
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: 22x34_SXHT21920151-512

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
(817)334-7000 TBPE#F3093

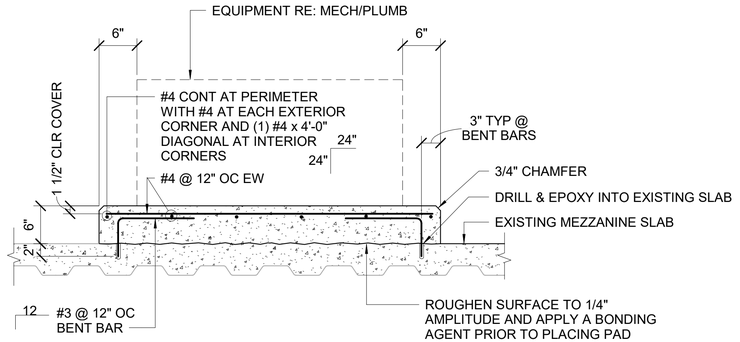
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
TYPICAL STEEL DETAILS

SHEET ID
B1455
S-512

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN

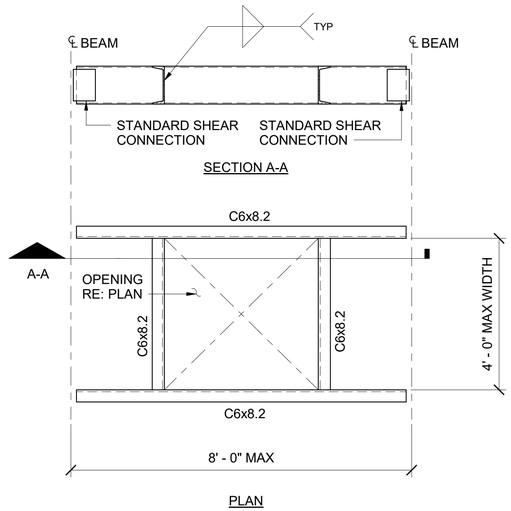


NOTES:

1. CONFIRM REQUIRED SIZE AND LOCATION OF ALL HOUSEKEEPING PADS WITH EQUIPMENT MANUFACTURER PRIOR TO PLACEMENT OF CONCRETE. PROVIDE PADS AS REQUIRED, WHETHER SHOWN ON STRUCTURAL DRAWINGS OR NOT.
2. WHERE REQUIRED, COORDINATE HOUSEKEEPING PAD WITH WORK OF OTHER TRADES SO PENETRATIONS ARE PLACED BEFORE CONCRETE IS POURED.

E1 CONCRETE HOUSEKEEPING PAD OVER STRUCTURAL SLAB

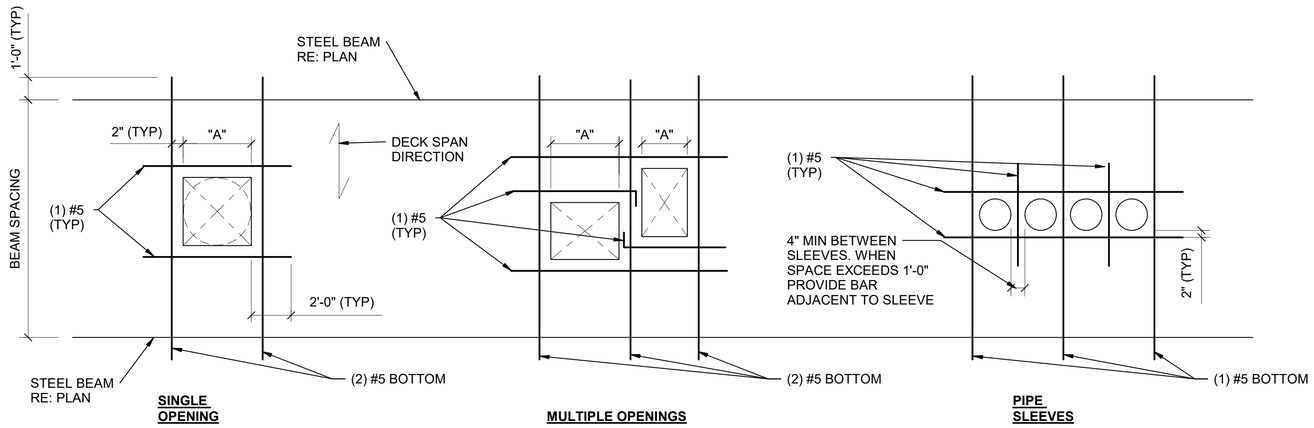
NTS



PLAN

E7 TYPICAL OPENING IN METAL DECK

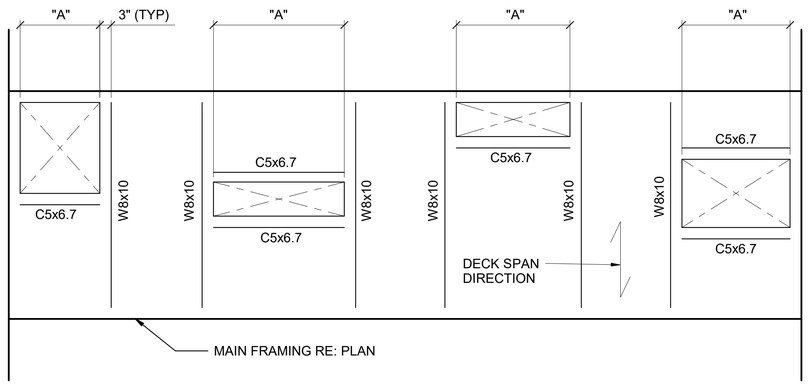
1" = 1'-0"



NOTES:
1. COORDINATE OPEING SIZE AND LOCATION WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.
2. MAXIMUM DIMENSION 'A' SHALL BE 4'-0". REFER TO PLAN OR DETAIL ON DAWINGS FOR FRAMING OF OPENINGS GREATER THAN 4'-0".
3. TERMINATE SLAB REINFORCING TO WITHIN 2" OF THE OPENING ON ALL SIDES.
4. OPENING 10" AND SMALLER DO NOT REQUIRE ADDITIONAL SLAB REINFORCEMENT.
5. FIELD CUT OPENINGS IN DECK AFER CONCRETE HAS BEEN POURED AND HAS ATTAINED MINIMUM 75% OF ITS SPECIFIED 28 DAY COMPRESSION STRENGTH.
6. REINFORCEMENT PERPENDICULAR TO DECK SPAN SHALL BE PLACED ON TOP OF DECK FLUTES.
7. REINFORCEMENT PARALLEL TO DECK SPAN SHALL BE PLACED IN THE LOWER FLUTE AND SHALL BE CHAIRED TO PROVIDE 3/4" COVER.
8. THIS DETAIL SHOWS TYPICAL CONDITIONS. VERIFY REINFORCING STEEL PLACEMENT WITH ENGINEER FOR SPECIAL CASES.
9. 'A' = OPENING DIMENSION IN THE DIRECTION PERPENDICULAR TO DECK SPAN. USE THIS DETAIL FOR 'A' < 4'-0" WHEN SPACING BETWEEN MULTIPLE OPENINGS
IS < 2'-0" REINFORCEMENT SHOULD BE PLACED AS SHOWN IN SIGNLE OPENING CONDITION.

A1 TYPICAL UNFRAMED OPENINGS IN COMPOSITE METAL DECK SLAB

1 1/2" = 1'-0"



NOTES:
1. COORDINATE OPENING SIZE AND LOCATION WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.
2. THIS DETAIL SHOWS TYPICAL OPENING CONFIGURATIONS. VERIFY FRAMING WITH ENGINEER FOR
SPECIAL CASES.
3. REFER TO ENGINEER IF FRAMING DIMENSION "A" EXCEEDS 8'-0".
4. DECK MANUFACTURER TO PROVIDE 14 GAGE METAL DECK EDGE CLOSURE AROUND EACH OPENING
UNLESS DETAILED OTHERWISE.
5. "A" = OPENING DIMENSION IN THE DIRECTION PERPENDICULAR TO DECK SPAN. USE THIS DETAIL FOR
"A" GREATER THAN OR EQUAL TO 4'-0" AND LESS THAN OR EQUAL TO 8'-0".

A7 TYPICAL FRAMED OPENINGS IN COMPOSITE METAL DECK SLAB

1 1/2" = 1'-0"

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
ALEX BANNEROT
91686
LICENSED PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: A. BANNEROT	ISSUE DATE: 23 NOVEMBER 2022
DRAWN BY: D. ORTON	SOLICITATION NO.:
CHECKED BY: A. SAVOIE	CONTRACT NO.:
SUBMITTED BY: E. OLNESS	DRAWING CODE.:
SPECIFICATION: ANSI D 22x34	FILE NAME: SXHT219201S-514

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
+1(817)334-7000 | FAX +1(817)334-7001

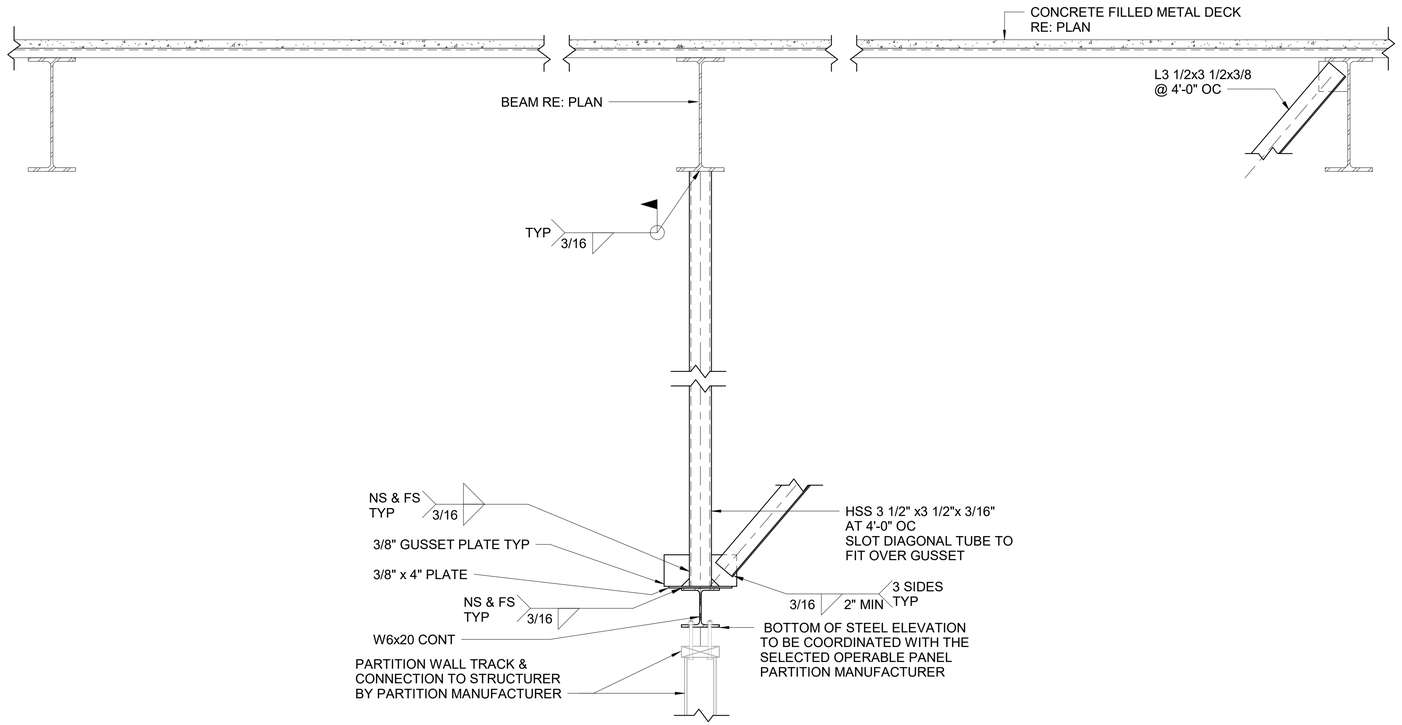
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395

TYPICAL STEEL DETAILS

SHEET ID
B1455
S-514

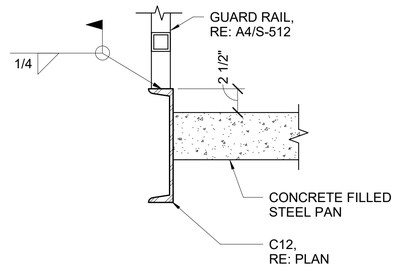
W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



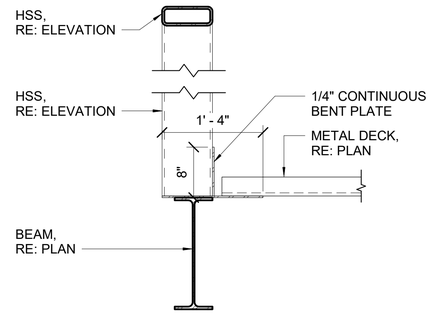
D1 SECTION AT OPERABLE PARTITION

1" = 1'-0"



F8 SECTION

1 1/2" = 1'-0"

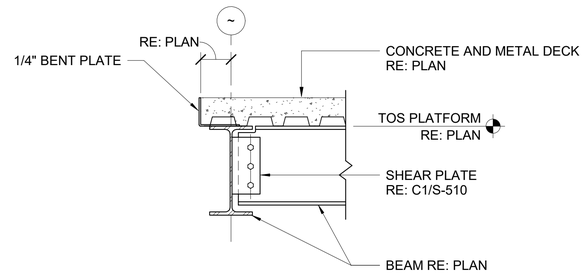


NOTE:

1. RE: A1/S-515 FOR ADDITIONAL INFORMATION

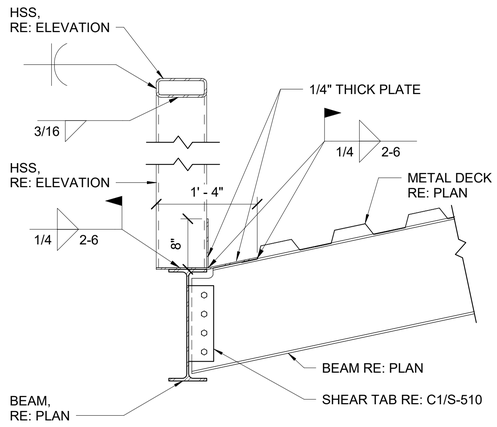
D8 SECTION

1" = 1'-0"



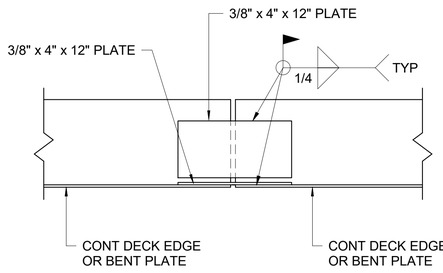
B8 SECTION

1" = 1'-0"



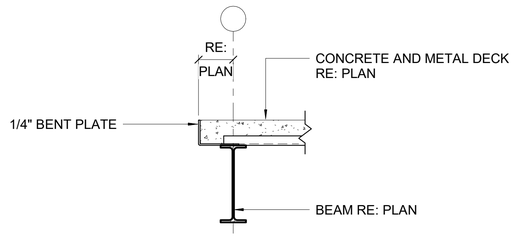
A1 TYPICAL JOIST AT BEAM

1" = 1'-0"



B4 TYPICAL DECK EDGE SPLICE DETAIL

1 1/2" = 1'-0"



A4 SECTION

1" = 1'-0"

GRAPHIC SCALE

1 1/2 0 1 2

SCALE: 1"=1'-0"

1 0 1

SCALE: 1 1/2"=1'-0"

MARK	DESCRIPTION	DATE

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
ALEX BANNEROT
91686
LICENSED PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

ISSUE DATE:	23 NOVEMBER 2022
SOLICITATION NO.:	
CONTRACT NO.:	
DRAWING CODE.:	
FILE NAME:	SXHT219201S-515
DESIGNED BY:	A. BANNEROT
DRAWN BY:	D. ORTON
CHECKED BY:	A. SAVOIE
SUBMITTED BY:	E. OLNESS
SIZE:	ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
NORTH AMERICA / EMEA

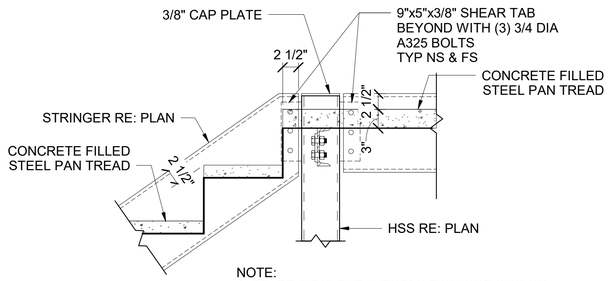
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395

STEEL SECTIONS AND DETAILS

SHEET ID
B1455
S-515

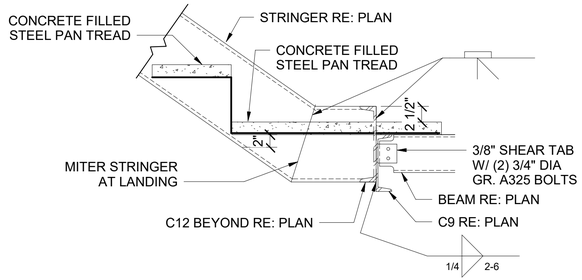
W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN

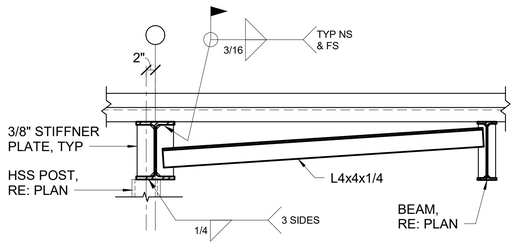


NOTE:
1. RE: D7/S-516 FOR INFORMATION NOT SHOWN

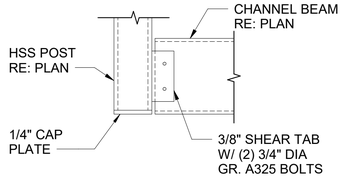
F1 SECTION
1" = 1'-0"



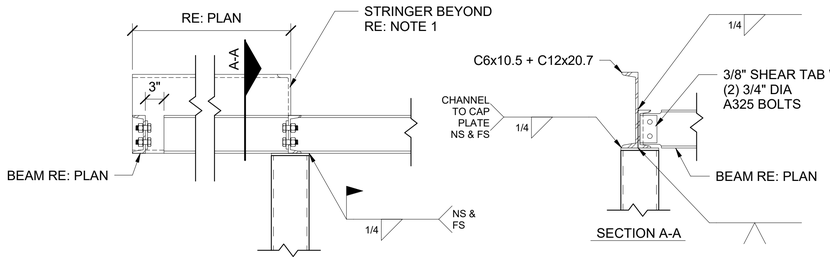
F4 SECTION
1" = 1'-0"



F7 SECTION
3/4" = 1'-0"

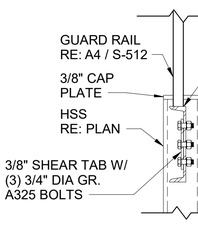


F9 SECTION
1" = 1'-0"

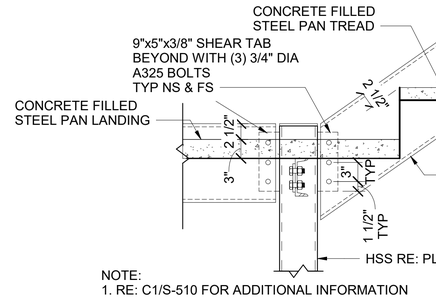


NOTE:
1. MITER STRINGER AND C12 PORTION OF BEAM TOGETHER AT STAIR LANDING

D1 SECTION
1" = 1'-0"

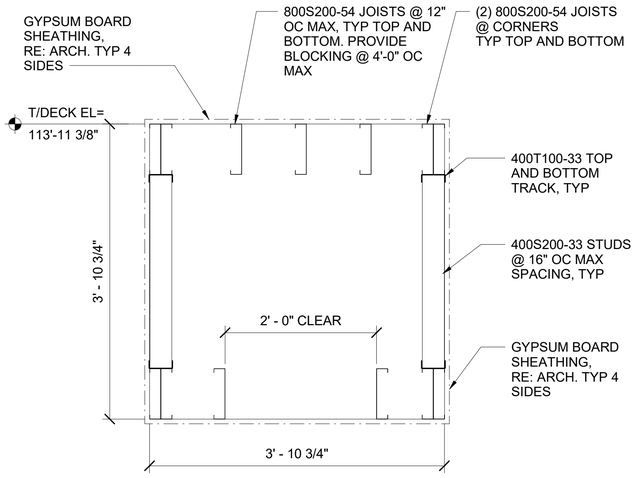


D5 SECTION
1" = 1'-0"

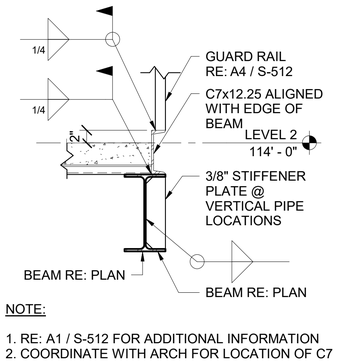


NOTE:
1. RE: C1/S-510 FOR ADDITIONAL INFORMATION

D7 SECTION
1" = 1'-0"



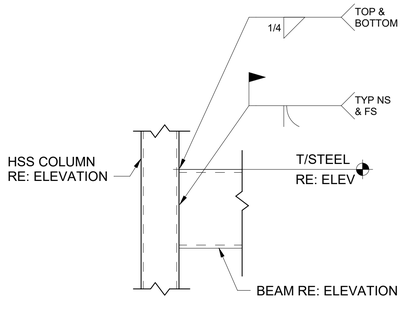
A1 BULKHEAD SECTION
1" = 1'-0"



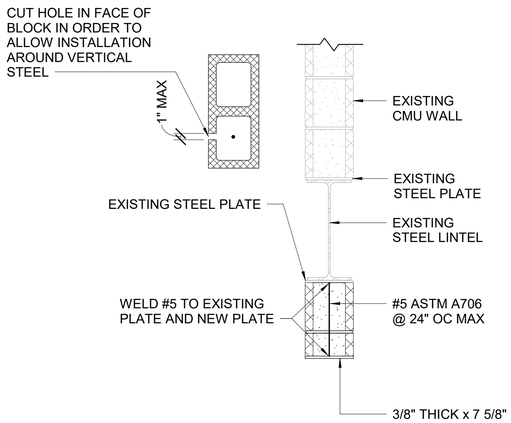
NOTE:

1. RE: A1 / S-512 FOR ADDITIONAL INFORMATION
2. COORDINATE WITH ARCH FOR LOCATION OF C7

A4 SECTION AT GUARDRAIL
1" = 1'-0"



A7 SECTION
1" = 1'-0"



A9 LINTEL SECTION
1" = 1'-0"

GRAPHIC SCALE

1 1/2 0 1 2

SCALE: 1"=1'-0"

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
ALEX BANNEROT
91686
LICENSED
PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED
ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
DESIGNED BY: A. BANNEROT
DRAWN BY: D. ORTON
CHECKED BY: A. SAVOIE
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
FILE NAME: SXHT219201S-516

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
7777 Main Street, Fort Worth, TX 76102
(817) 250-6000 Texas Reg. No. F-2966

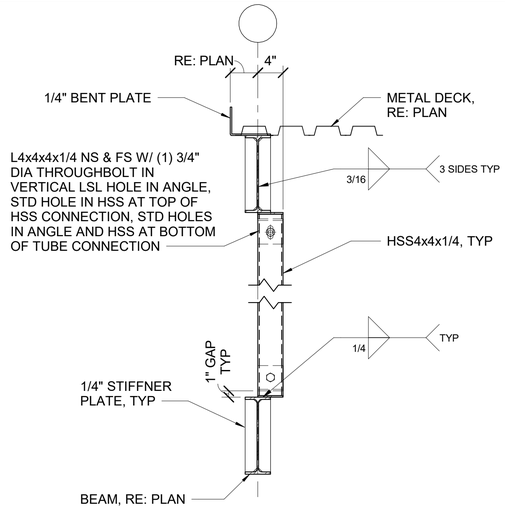
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
STEEL SECTIONS AND DETAILS

SHEET ID
B1455
S-516

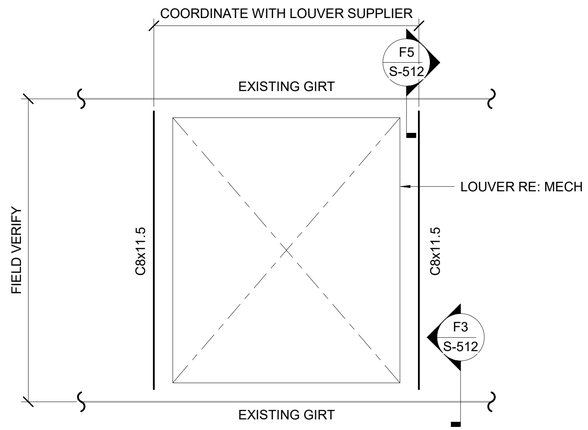
W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

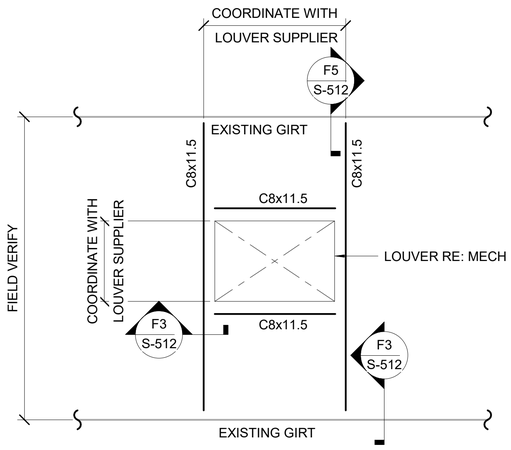
CERTIFIED FINAL DESIGN



E1 ELEVATOR RAIL SUPPORT POST DETAIL
1" = 1'-0"

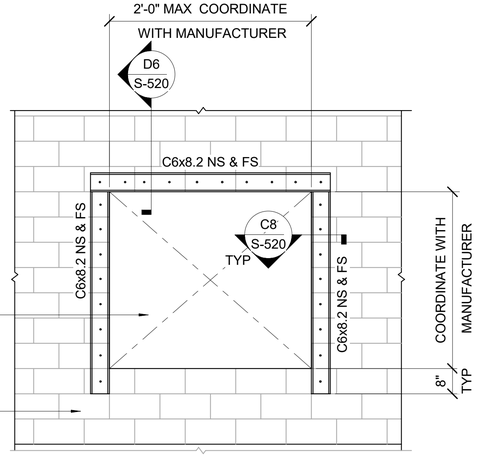


TYPE 1 - LOUVER HEIGHT MATCHES GIRT SPACING

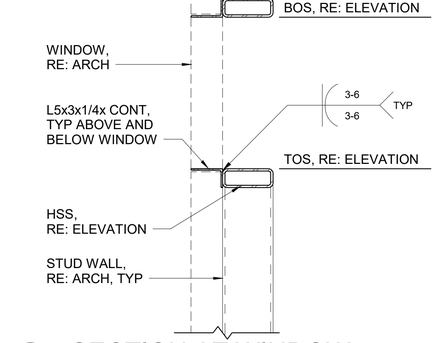


TYPE 2 - LOUVER HEIGHT LESS THAN GIRT SPACING

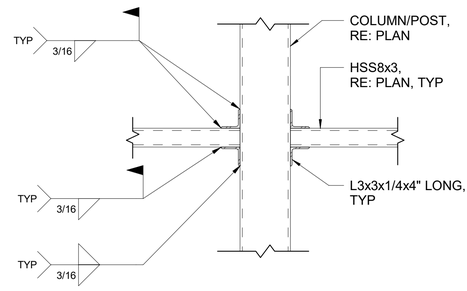
E4 TYPICAL LOUVER FRAMING DETAIL
1" = 1'-0"



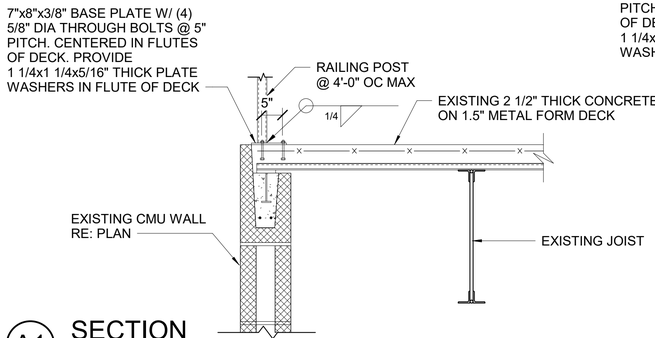
C8 TYPICAL PENETRATION THROUGH EXISTING CMU WALL
1/2" = 1'-0"



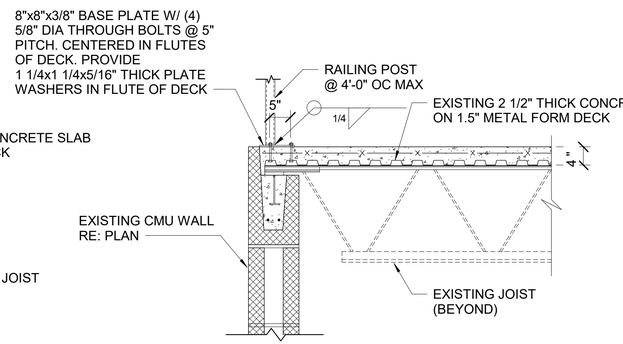
B1 SECTION AT WINDOW
1" = 1'-0"



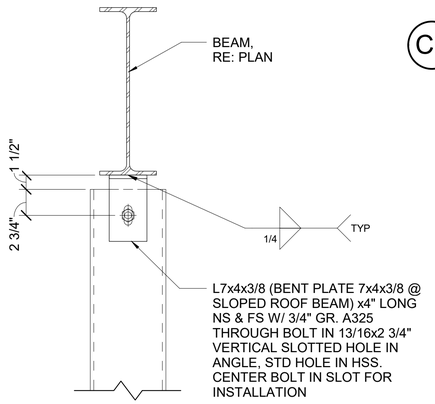
B2 FRAMING CONNECTION
1" = 1'-0"



A1 SECTION
1" = 1'-0"



A4 SECTION
1" = 1'-0"



A6 FRAMING CONNECTION
1 1/2" = 1'-0"

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
ALEX BANNEROT
91686
LICENSED PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY:	A. BANNEROT
DRAWN BY:	D. ORTON
CHECKED BY:	A. SAVOIE
SUBMITTED BY:	E. OLNESS
SIZE:	ANSI D 22x34
ISSUE DATE:	23 NOVEMBER 2022
SOLICITATION NO.:	
CONTRACT NO.:	
DRAWING CODE.:	
FILE NAME:	SXHT21920I1S-517

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
817.334.4000 www.jacobs.com

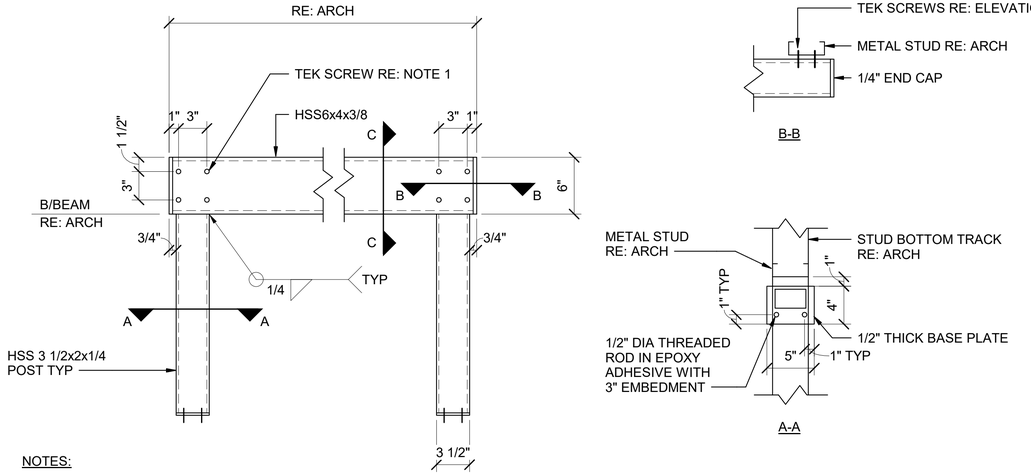
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395

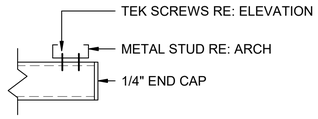
TYPICAL DETAILS

SHEET ID
B1455
S-517

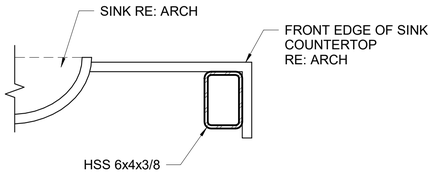
W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN





B-B



C-C

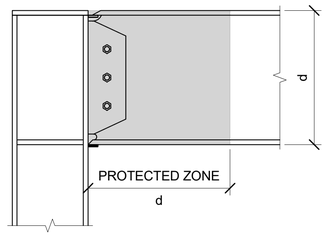
A-A

NOTES:

1. FASTEN HSS BEAM TO METAL STUDS WITH (4) #12 TEK SCREWS
2. RE: ARCH FOR (4) LOCATIONS IN BATHROOMS
3. ALL STEEL TO BE GALVANIZED.

E1 TYPICAL SINK SUPPORT FRAMING ELEVATION

1 1/2" = 1'-0"



NOTES:

1. PROTECTED ZONE FOR INTERMEDIATE MOMENT FRAMES (IMF) SHALL BE AS SHOWN IN ABOVE DETAIL, WHICH DEPICTS THE REQUIREMENTS DEFINED BY AISC 341. THE PROTECTED ZONE INCLUDES THE CONNECTION PLATE.
2. WITHIN THE PROTECTED ZONE, DO NOT CREATE DISCONTINUITIES DURING FABRICATION OR ERECTION OPERATIONS, SUCH AS TACK WELDS, ERECTION AIDS, AIR-ARC GOUGING AND THERMAL CUTTING. WHERE SUCH DISCONTINUITIES ARE UNAVOIDABLE, CONTACT THE CONTRACTING OFFICER AND REPAIR AS REQUIRED BY THE ENGINEER OF RECORD.
3. WELDED, BOLTED, SCREWED OR SHOT-IN ATTACHMENTS FOR PERIMETER EDGE ANGLES, EXTERIOR FACADES, PARTITIONS, DUCT WORK, PIPING OR OTHER CONSTRUCTION SHALL NOT BE PLACED WITHIN THE PROTECTED ZONE.
4. ARC SPOT WELDS AS REQUIRED TO ATTACH DECKING ARE PERMITTED WITHIN THE PROTECTED ZONE. DECKING ATTACHMENTS THAT PENETRATE THE BEAM FLANGE SHALL NOT BE PLACED ON BEAM FLANGES WITHIN THE PROTECTED ZONE, EXCEPT POWER-ACTUATED FASTENERS UP TO 0.18" IN DIAMETER ARE PERMITTED.

A1 INTERMEDIATE MOMENT FRAME PROTECTED ZONE

1 1/2" = 1'-0"

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
ALEX BANNEROT
91686
LICENSED PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY:	ISSUE DATE:
A. BANNEROT	23 NOVEMBER 2022
DRAWN BY:	SOLICITATION NO.:
D. ORTON	
CHECKED BY:	CONTRACT NO.:
A. SAVOIE	DRAWING CODE::
SUBMITTED BY:	
E. OLNESS	FILE NAME:
SIZE	W912QR21920215-518
ANSI D 22x34	

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

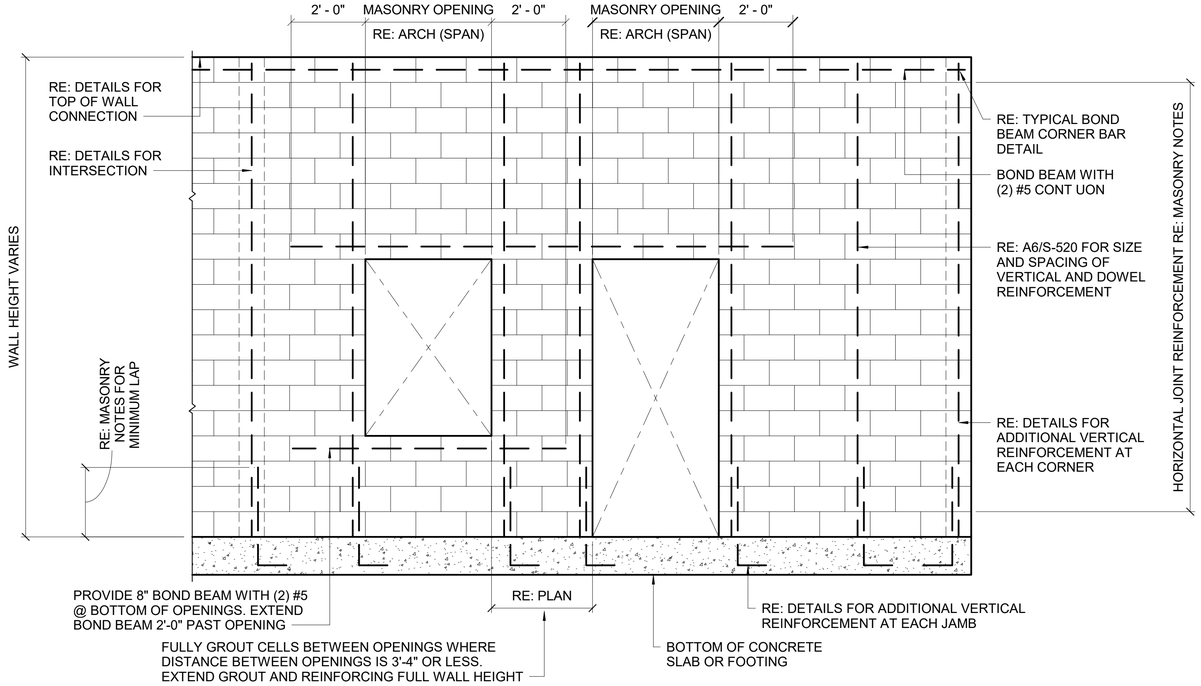
Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
(817)339-7600 Fax (817)339-7601

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395

TYPICAL DETAILS

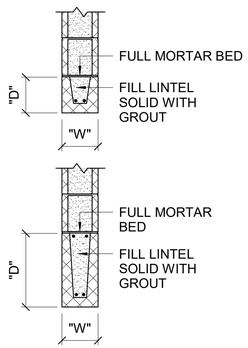
SHEET ID
B1455
S-518

W912QR23R0003_Plans-0000



D1 TYPICAL CMU WALL ELEVATION
NTS

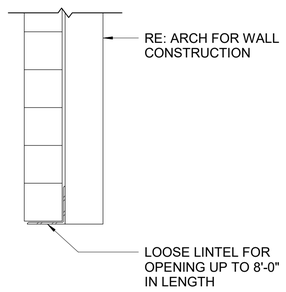
LINTEL SCHEDULE		
SIZE "W" x "D"	MAXIMUM SPAN	REINFORCEMENT
12" x 8"	3'-4"	(2) #5 CONTINUOUS
12" x 16"	6'-4"	(4) #8 CONTINUOUS
12" x 32"	20'-0"	(4) #7 CONTINUOUS



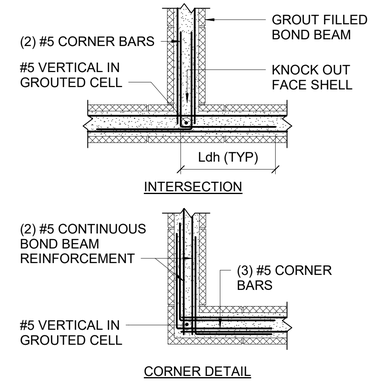
NOTES:
1. PROVIDE CMU LINTELS ABOVE ALL WALL OPENINGS.
2. EXTEND LINTELS MIN OF 24" PAST OPENING.
3. SPAN IS DEFINED BY ROUGH MASONRY OPENING, RE: ARCH
4. REFER TO ARCH FOR SIZE AND LOCATION OF OPENINGS.

A1 CMU LINTEL DETAIL
NTS

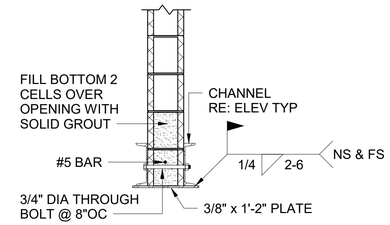
LOOSE LINTEL SCHEDULE FOR MASONRY VENEER	
MAXIMUM SPAN	REINFORCEMENT
6'-0"	L4X4X1/4
8'-0"	L4X4X5/16



A4 LOOSE ANGLE LINTEL DETAIL
NTS

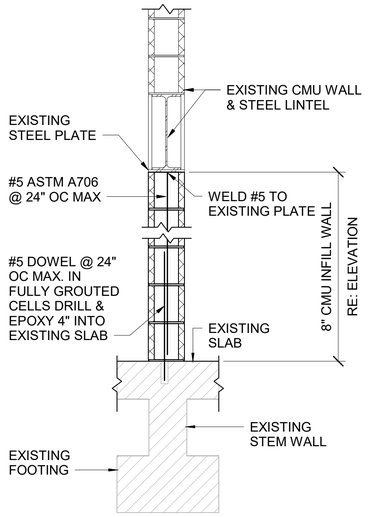


F6 TYPICAL CMU BOND BEAM REINFORCEMENT
NTS

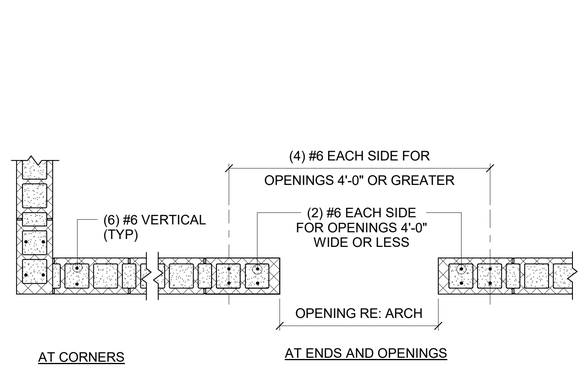


NOTE:
1. EXTEND PLATE 4 INCHES TOWARD EXTERIOR OF BUILDING TO SUPPORT BRICK VENEER AT SIM

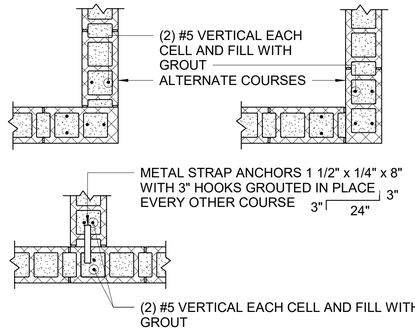
D6 SECTION
NTS



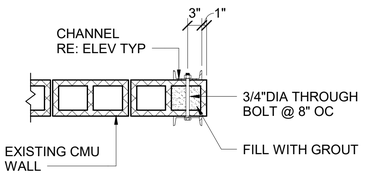
A6 SECTION
NTS



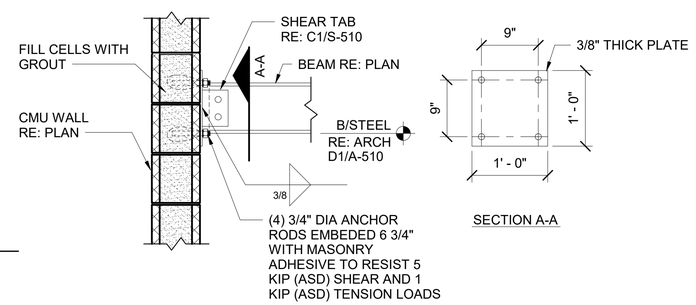
F8 TYPICAL REINFORCEMENT AT CMU WALLS
NTS



D8 TYPICAL CMU INTERSECTION PLAN
NTS



C8 SECTION
NTS



A8 PARTITION BEAM TO WALL SECTION
1" = 1'-0"

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
ALEX BANNEROT
91686
LICENSED PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: A. BANNEROT
DRAWN BY: D. ORTON
CHECKED BY: A. SAVOIE
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:.
FILE NAME: SXHT21920I1S-520

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS No. 160903

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
MASONRY DETAILS

SHEET ID
B1455
S-520

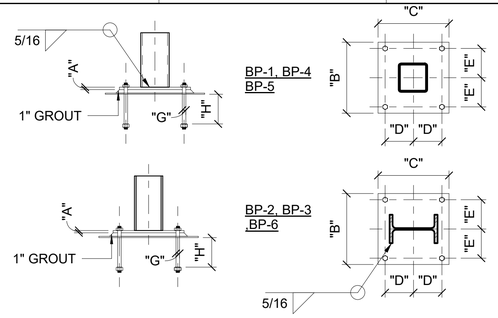
W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN

FOOTING SCHEDULE					
TYPE	WIDTH	LENGTH	THICKNE...	LONGITUDINAL	TRANVERSE
F1	RE: PLAN	RE: PLAN	2' - 0"	#7 @ 12" OC TOP & BOTTOM	#7 @ 12" OC TOP & BOTTOM
F2	6' - 0"	6' - 0"	1' - 6"	#6 @ 12" OC TOP & BOTTOM	#6 @ 12" OC TOP & BOTTOM
F3	RE: PLAN	RE: PLAN	2' - 0"	#6 @ 12" OC TOP & BOTTOM	#6 @ 12" OC TOP & BOTTOM
F4	RE: PLAN	RE: PLAN	1' - 6"	#6 @ 12" OC TOP & BOTTOM	#6 @ 12" OC TOP & BOTTOM
F5	RE: PLAN	RE: PLAN	1' - 6"	#5 @ 12" OC TOP & BOTTOM	#5 @ 12" OC TOP & BOTTOM
F6	RE: PLAN	RE: PLAN	2'-0"	#6 @ 10" OC TOP AND BOTTOM	#6 @ 10" OC TOP AND BOTTOM
F8	3' - 0"	7' - 0"	1' - 6"	#6 @ 12" OC TOP & BOTTOM	#6 @ 12" OC TOP & BOTTOM
GB1	1' - 4"	RE: PLAN	1' - 7"	(4) #8 TOP & BOTTOM	-
GB2	1' - 6"	RE: PLAN	1' - 10"	(4) #8 TOP & BOTTOM	-
GB3	1' - 6"	RE: PLAN	2' - 0"	(4) #8 TOP & BOTTOM	-

BASE PLATE/ANCHOR ROD SCHEDULE							
MARK	BASE PLATE					ANCHOR RODS	
	A	B	C	D	E	G	H
BP-1	3/4"	13"	13"	5"	5"	3/4"	9"
BP-2	3/4"	12"	12"	2"	3"	3/4"	9"
BP-3	3/4"	16"	16"	3"	5"	3/4"	8"
BP-4	3/4"	13"	13"	4 3/4"	4 3/4"	3/4"	8"
BP-5	3/4"	12"	8"	2 1/2"	4 1/2"	3/4"	8"
BP-6	3/4"	12"	14"	3"	3"	3/4"	8"

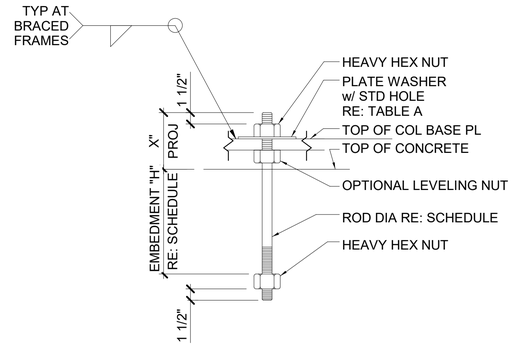
NOTES:
1. RE: PLAN FOR ORIENTATION



F5 BASE PLATE DETAILS

3/4" = 1'-0"

TABLE A		
ANCHOR ROD DIA, IN	BASE PLATE HOLE DIA, IN	MIN WASHER SIZE, IN
3/4	1 5/16	PL 3/8x2x2
1	1 13/16	PL 1/2x3x3
1 1/4	2 1/16	PL 5/8x3x3
1 1/2	2 5/16	PL 3/4x3 1/2x3 1/2
1 3/4	2 3/4	PL 7/8x4x4
2	3 1/4	PL 1x5x5



C8 TYPICAL ANCHOR ROD DETAIL

NTS

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
ALEX BANNEROT
91686
LICENSED PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201S-601

DESIGNED BY: A. BANNEROT
DRAWN BY: D. ORTON
CHECKED BY: A. SAVOIE
SUBMITTED BY:
E. OLNESS
SIZE: ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS No. 190903

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
SCHEDULES

SHEET ID
B1455
S-601

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN

DRAWING SYMBOLS

DOOR AND
DOOR NUMBER

LOUVER NUMBER

PARTITION TYPE

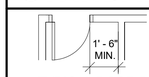
GENERAL NOTES

A	DO NOT SCALE THE DRAWINGS FOR CONSTRUCTION PURPOSES.
B	THE CONTRACTOR WILL CERTIFY THAT NO ASBESTOS CONTAINING MATERIALS WILL BE INCLUDED WITH NEW CONSTRUCTION OR RENOVATION.
C	VERIFY AND DOCUMENT CONDITIONS AND DIMENSIONS PRIOR TO STARTING CONSTRUCTION.
D	VERIFY SIZE AND LOCATION OF ALL OPENINGS FOR EQUIPMENT AND RELATED WORK.
E	VERIFY SIZE, LOCATIONS, AND CHARACTERISTICS OF ALL EQUIPMENT TO BE FURNISHED WITH THE MANUFACTURERS OR SUPPLIERS BEFORE BEGINNING CONSTRUCTION
F	ALL PLAN DIMENSIONS ARE TO FACE OF GYPSUM BOARD, FACE OF CONCRETE MASONRY UNITS, FACE OF CONCRETE, OR CENTERLINE OF COLUMNS UNLESS OTHERWISE NOTED.
G	PROVIDE FIRE RETARDANT BLOCKING WITHIN WALLS FOR THE SECURE ATTACHMENT OF ALL WALL MOUNTED ITEMS, INCLUDING BUT NOT LIMITED TO: TOILET ACCESSORIES, GRAB BARS, FLAT PANEL DISPLAYS, VISUAL DISPLAYS / MARKER BOARDS, HANDRAILING, SHELVING, AND SUPPORTS AS REQUIRED.
H	REFER TO MECHANICAL, PLUMBING, ELECTRICAL, AND FIRE PROTECTION DRAWINGS FOR ADDITIONAL LOCATIONS OF PENETRATIONS OCCURING WITHIN FLOOR, WALL, CEILING, AND ROOF SYSTEMS.
I	REFER TO MECHANICAL, PLUMBING, ELECTRICAL, AND FIRE PROTECTION FOR LOCATIONS OF EQUIPMENT NOT SHOWN ON ARCHITECTURAL DRAWINGS.

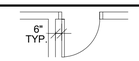
MATERIALS LEGEND

- CONCRETE/ PRECAST CONCRETE
- SOIL
- SAND, EIFS, OR CEMENT PLASTER
- BRICK
- CMU
- POLYISOCYANURATE RIGID INSULATION
- GYPSUM BOARD / EXTERIOR SHEATHING
- PLYWOOD
- PROTECTION BOARD
- FIBERGLASS BATT INSULATION

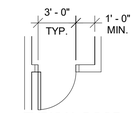
STANDARD DOOR LOCATION



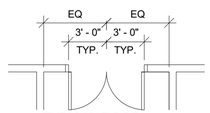
TYPICAL DOOR PLACEMENT PULL SIDE (UON)



TYPICAL DOOR PLACEMENT (UON)

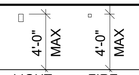


TYPICAL DOOR PLACEMENT PUSH SIDE (UON)



TYPICAL DOOR PLACEMENT(UON)

MOUNTING HEIGHTS



LIGHT SWITCH

FIRE PULL

US Army Corps of Engineers
Louisville District ®

REGISTERED ARCHITECT
RICHARD G. PERRY
18592
STATE OF TEXAS
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: J. PERRY	ISSUE DATE: 23 NOVEMBER 2022
DRAWN BY: J. MCKINNEY	SOLICITATION NO.:
CHECKED BY: M. HOLLEB	CONTRACT NO.:
SUBMITTED BY: E. OLNESS	DRAWING CODE::
CSI: ANSI D 22x34	FILE NAME: SXHT219201A-001

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
T 817.334.7000 www.jacobs.com

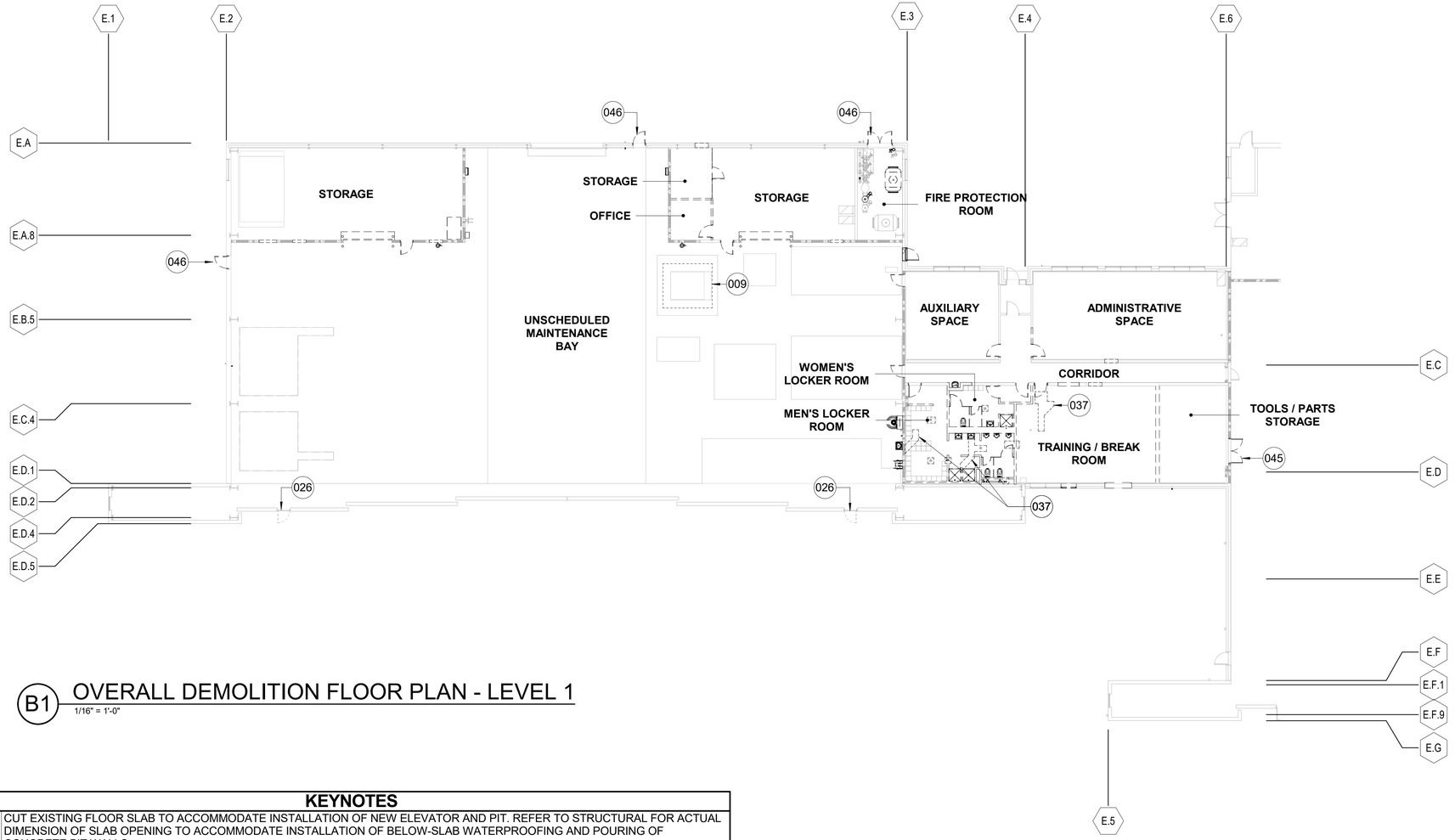
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
GENERAL NOTES AND SYMBOLS

SHEET ID
B1455
A-001

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN



B1 OVERALL DEMOLITION FLOOR PLAN - LEVEL 1

1/16" = 1'-0"

KEYNOTES

009	CUT EXISTING FLOOR SLAB TO ACCOMMODATE INSTALLATION OF NEW ELEVATOR AND PIT. REFER TO STRUCTURAL FOR ACTUAL DIMENSION OF SLAB OPENING TO ACCOMMODATE INSTALLATION OF BELOW-SLAB WATERPROOFING AND POURING OF CONCRETE PIT WALLS.
026	TACK WELD EXISTING DOOR SHUT; REPAINT DOOR FRAME AS REQUIRED TO CONCEAL WELD MARKS
037	EXTENT OF SAW CUT IN EXISTING SLAB TO ACCOMMODATE NEW PLUMBING LINES. REFER TO STRUCTURAL AND PLUMBING FOR ADDITIONAL INFORMATION.
045	REMOVE EXISTING DOOR AND FRAME AND REPLACE WITH NEW WALL INFILL TO MATCH EXISTING WALL ASSEMBLY
046	REMOVE EXISTING DOOR AND REPLACE WITH NEW DOOR AND HARDWARE; REFER TO AE103 AND A-610 FOR ADDITIONAL INFORMATION

GENERAL NOTES - DEMOLITION

A SCOPE OF DEMOLITION: REMOVE ALL EXISTING FLOOR AND APPLIED WALL FINISHES, VINYL, AND WALL BASES, DESIGNATED PORTIONS OF WALLS, CEILING SYSTEMS, UTILITY SUPPORTS, EQUIPMENT, AND OTHER MISCELLANEOUS CONSTRUCTION IN THE DESIGNATED AREA UNLESS OTHERWISE NOTED. REMOVE ALL EXISTING HARDWARE ON WALLS, FLOORS, ETC WHERE NO LONGER SERVING A FUNCTIONAL PURPOSE; PATCH ALL HOLES LEFT BY REMOVED HARDWARE TO MATCH ADJACENT FINISHES. PROVIDE A CLEAN SURFACE TO INITIATE NEW CONSTRUCTION

B EXISTING CONSTRUCTION SHOWN BASED UPON OWNER FURNISHED PLANS AND ONSITE OBSERVATIONS. ANY DISCREPANCIES BETWEEN DRAWINGS AND ACTUAL FIELD CONDITIONS SHALL BE REPORTED TO THE A/E PRIOR TO PROCEEDING WITH WORK.

C REPAIR AND REFINISH EXISTING FLOOR AND ROOF PENETRATIONS WHERE DUCTWORK, PIPING, PLUMBING FIXTURES AND DRAINS WERE REMOVED. MATCH ADJACENT FINISHES.

D CONTRACTOR TO EXERCISE CARE DURING DEMOLITION OF AREAS LIKELY TO CONTAIN HIDDEN OR OBSCURED SYSTEMS BELOW FINISHED SURFACES

E THE CONTRACTOR SHALL VERIFY CONSTRUCTION LAYOUT PRIOR TO COMMENCEMENT OF CONSTRUCTION

F IT IS THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS TO CALL FOR A DEMOLITION THAT IS COMPLETE. IT IS NOT THE INTENT TO GIVE EVERY DETAIL ON THE DRAWINGS AND IN THE SPECIFICATIONS. IF ANY ITEM OF WORK IS INDICATED IN THE DRAWINGS, IT IS CONSIDERED SUFFICIENT FOR INCLUSION IN THE CONTRACT.

G COORDINATE WITH CONTRACTING OFFICER FOR DEMOLITION STAGING/SCHEDULE BEFORE DEMOLITION BEGINS.

H REPAIR AND FINISH ALL HOLES IN WALLS, CONCRETE COLUMNS, AND FLOORS LEFT FROM REMOVAL (HARDWARE, FASTENERS, DUCTS, PIPES, CONDUIT, ETC) AND RESTORE WALLS TO ORIGINAL INTEGRITY; RE:STRUC, MECH, PLUMB, ELEC

I REFER TO STRUCTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS FOR ADDITIONAL LOCATIONS OF PENETRATIONS OCCURRING WITHIN FLOOR, WALL, CEILING, AND ROOF SYSTEMS.

J COORDINATE ALL NEW M.E.P OPENINGS REQUIRED IN THE HORIZONTAL ASSEMBLIES.

K ALL SIGNAGE TO BE REMOVED

L CONTRACTOR SHOULD REPAIR ANY DAMAGE TO WALLS AND FLOORS DURING CONSTRUCTION TO ITS ORIGINAL CONDITION

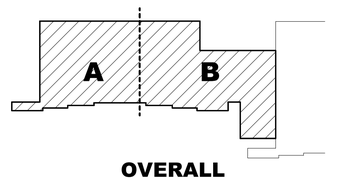
M REMOVE ALL INTERIOR FINISHES WHERE NOTED. REFER TO INTERIORS AND A-570 PARTITION TYPES SCHEDULE.

N REFER TO C8/S-520 FOR TYPICAL REINFORCEMENT OF EXISTING CMU WALL AT NEW WALL OPENINGS. REFER TO S-301 AND S-302 FOR CHANNEL SIZES.

DEMOLITION LEGEND

BLACK DASHED LINE INDICATES EXISTING COMPONENT TO BE REMOVED (WALL OPENINGS DIMENSIONED, KEYNOTED, AND SHOWN AS DASHED)

HALFTONE LINE INDICATES EXISTING COMPONENT TO REMAIN



OVERALL KEY PLAN

GRAPHIC SCALE

16 12 8 4 0 16 32

SCALE: 1/16"=1'-0"

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

REGISTERED ARCHITECT
RICHARD G. PERRY
16592
STATE OF TEXAS
23 NOV 2022

TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201AD101

DESIGNED BY: J. PERRY
DRAWN BY: J. MCKINNEY
CHECKED BY: M. HOLLEB
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS Tel: 972.803.1100

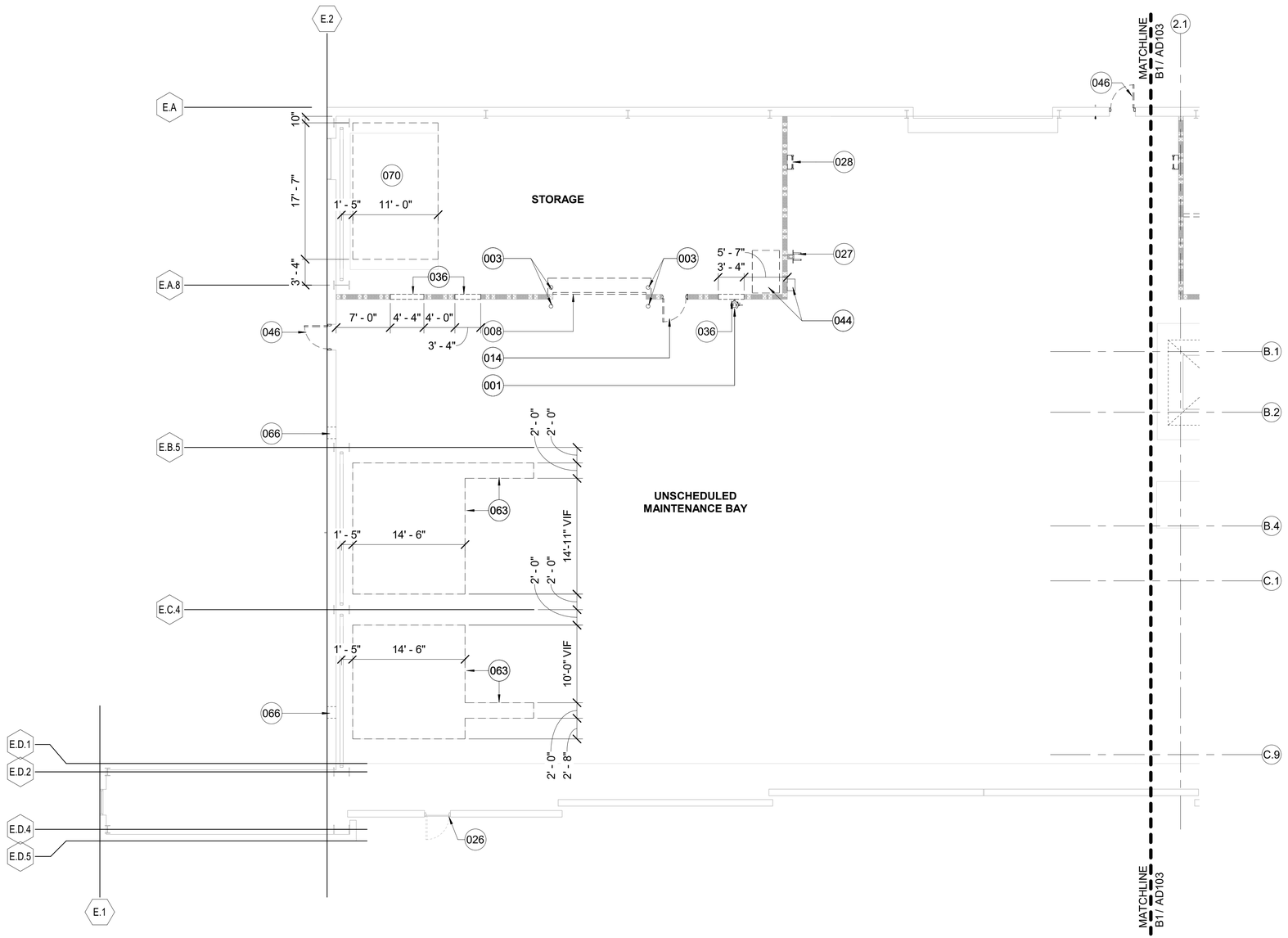
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395

OVERALL DEMOLITION FLOOR PLAN - LEVEL 1

SHEET ID
B1455
AD101

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



B1 PARTIAL DEMOLITION FLOOR PLAN - LEVEL 1 - AREA A

1/8" = 1'-0"

KEYNOTES

001	REMOVE EXISTING EMERGENCY EYEWASH STATION; CAP EXISTING LINES. REFER TO PLUMBING.
003	REMOVE EXISTING INTERIOR BOLLARD, FLUSH WITH FLOOR; REPAIR AND FINISH FLOOR AS REQUIRED
008	REMOVE EXISTING OVERHEAD DOOR
014	REMOVE EXISTING DOOR AND FRAME
026	TACK WELD EXISTING DOOR SHUT; REPAINT DOOR FRAME AS REQUIRED TO CONCEAL WELD MARKS
027	REMOVE EXISTING HOSE RACK/REEL; REPAIR DAMAGE TO PARTITION AS REQUIRED TO MATCH EXISTING CONDITIONS; RE: INTERIORS FOR FINISHES
028	EXISTING ACCESS LADDER; CAREFULLY REMOVE AND REINSTALL WHERE INDICATED; PAINT TO MATCH NEW GUARDRAIL SYSTEM
036	REMOVE AREA OF EXISTION PARTITION FOR NEW DOOR OR OPENING AS INDICATED. PATCH AND REPAIR ADJACENT WALLS AS REQUIRED
044	REMOVE EXISTING GENERATORS; COORDINATE WITH ELECTRICAL

KEYNOTES

046	REMOVE EXISTING DOOR AND REPLACE WITH NEW DOOR AND HARDWARE; REFER TO AE103 AND A-610 FOR ADDITIONAL INFORMATION
063	AREA OF EXISTING CONCRETE SLAB TO BE REMOVED FOR RECESSED FLOOR AND TRENCH; EXISTING TENSION RODS MUST REMAIN ENCASED IN CONCRETE AND UNDISTURBED; RE: STRUCTURAL AND COORDINATE FINAL ROUTING OF TRENCH AND ACCESS TO EQUIPMENT WITH USACE/GOVERNMENT REPRESENTATIVE PRIOR TO BEGINNING CONSTRUCTION OF TRENCHES, INCLUDING THE PURCHASING OF MATERIALS, AS REQUIREMENTS MAY HAVE CHANGED
066	NEW PENETRATION IN EXTERIOR WALL FOR EXHAUST FAN; REFER TO EXTERIOR ELEVATIONS AND MECHANICAL FOR ADDITIONAL INFORMATION
070	AREA OF EXISTING CONCRETE SLAB TO BE REMOVED FOR RECESSED FLOOR; EXISTING TENSION ROD AT COLUMN GRID E.A.8 MUST REMAIN UNDISTURBED; RE: STRUCTURAL

GENERAL NOTES - DEMOLITION

A SCOPE OF DEMOLITION: REMOVE ALL EXISTING FLOOR AND APPLIED WALL FINISHES, VINYL, AND WALL BASES, DESIGNATED PORTIONS OF WALLS, CEILING SYSTEMS, UTILITY SUPPORTS, EQUIPMENT, AND OTHER MISCELLANEOUS CONSTRUCTION IN THE DESIGNATED AREA UNLESS OTHERWISE NOTED. REMOVE ALL EXISTING HARDWARE ON WALLS, FLOORS, ETC WHERE NO LONGER SERVING A FUNCTIONAL PURPOSE; PATCH ALL HOLES LEFT BY REMOVED HARDWARE TO MATCH ADJACENT FINISHES. PROVIDE A CLEAN SURFACE TO INITIATE NEW CONSTRUCTION

B EXISTING CONSTRUCTION SHOWN BASED UPON OWNER FURNISHED PLANS AND ONSITE OBSERVATIONS. ANY DISCREPANCIES BETWEEN DRAWINGS AND ACTUAL FIELD CONDITIONS SHALL BE REPORTED TO THE A/E PRIOR TO PROCEEDING WITH WORK.

C REPAIR AND REFINISH EXISTING FLOOR AND ROOF PENETRATIONS WHERE DUCTWORK, PIPING, PLUMBING FIXTURES AND DRAINS WERE REMOVED. MATCH ADJACENT FINISHES.

D CONTRACTOR TO EXERCISE CARE DURING DEMOLITION OF AREAS LIKELY TO CONTAIN HIDDEN OR OBSCURED SYSTEMS BELOW FINISHED SURFACES

E THE CONTRACTOR SHALL VERIFY CONSTRUCTION LAYOUT PRIOR TO COMMENCEMENT OF CONSTRUCTION

F IT IS THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS TO CALL FOR A DEMOLITION THAT IS COMPLETE. IT IS NOT THE INTENT TO GIVE EVERY DETAIL ON THE DRAWINGS AND IN THE SPECIFICATIONS. IF ANY ITEM OF WORK IS INDICATED IN THE DRAWINGS, IT IS CONSIDERED SUFFICIENT FOR INCLUSION IN THE CONTRACT.

G COORDINATE WITH CONTRACTING OFFICER FOR DEMOLITION STAGING/SCHEDULE BEFORE DEMOLITION BEGINS.

H REPAIR AND FINISH ALL HOLES IN WALLS, CONCRETE COLUMNS, AND FLOORS LEFT FROM REMOVAL (HARDWARE, FASTENERS, DUCTS, PIPES, CONDUIT, ETC) AND RESTORE WALLS TO ORIGINAL INTEGRITY; RE:STRUC, MECH, PLUMB, ELEC

I REFER TO STRUCTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS FOR ADDITIONAL LOCATIONS OF PENETRATIONS OCCURRING WITHIN FLOOR, WALL, CEILING, AND ROOF SYSTEMS.

J COORDINATE ALL NEW M.E.P OPENINGS REQUIRED IN THE HORIZONTAL ASSEMBLIES.

K ALL SIGNAGE TO BE REMOVED

L CONTRACTOR SHOULD REPAIR ANY DAMAGE TO WALLS AND FLOORS DURING CONSTRUCTION TO ITS ORIGINAL CONDITION

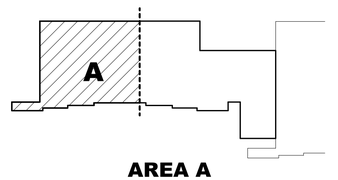
M REMOVE ALL INTERIOR FINISHES WHERE NOTED. REFER TO INTERIORS AND A-570 PARTITION TYPES SCHEDULE.

N REFER TO C8/S-520 FOR TYPICAL REINFORCEMENT OF EXISTING CMU WALL AT NEW WALL OPENINGS. REFER TO S-301 AND S-302 FOR CHANNEL SIZES.

DEMOLITION LEGEND

BLACK DASHED LINE INDICATES EXISTING COMPONENT TO BE REMOVED (WALL OPENINGS DIMENSIONED, KEYNOTED, AND SHOWN AS DASHED)

HALFTONE LINE INDICATES EXISTING COMPONENT TO REMAIN



AREA A
KEY PLAN

GRAPHIC SCALE

8 6 4 2 0 8 16

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

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

REGISTERED ARCHITECT RICHARD G. PERRY 16592 STATE OF TEXAS 23 NOV 2022

TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201AD102

DESIGNED BY: J. PERRY
DRAWN BY: J. MCKINNEY
CHECKED BY: M. HOLLEB
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS Tel: 972.683.3100

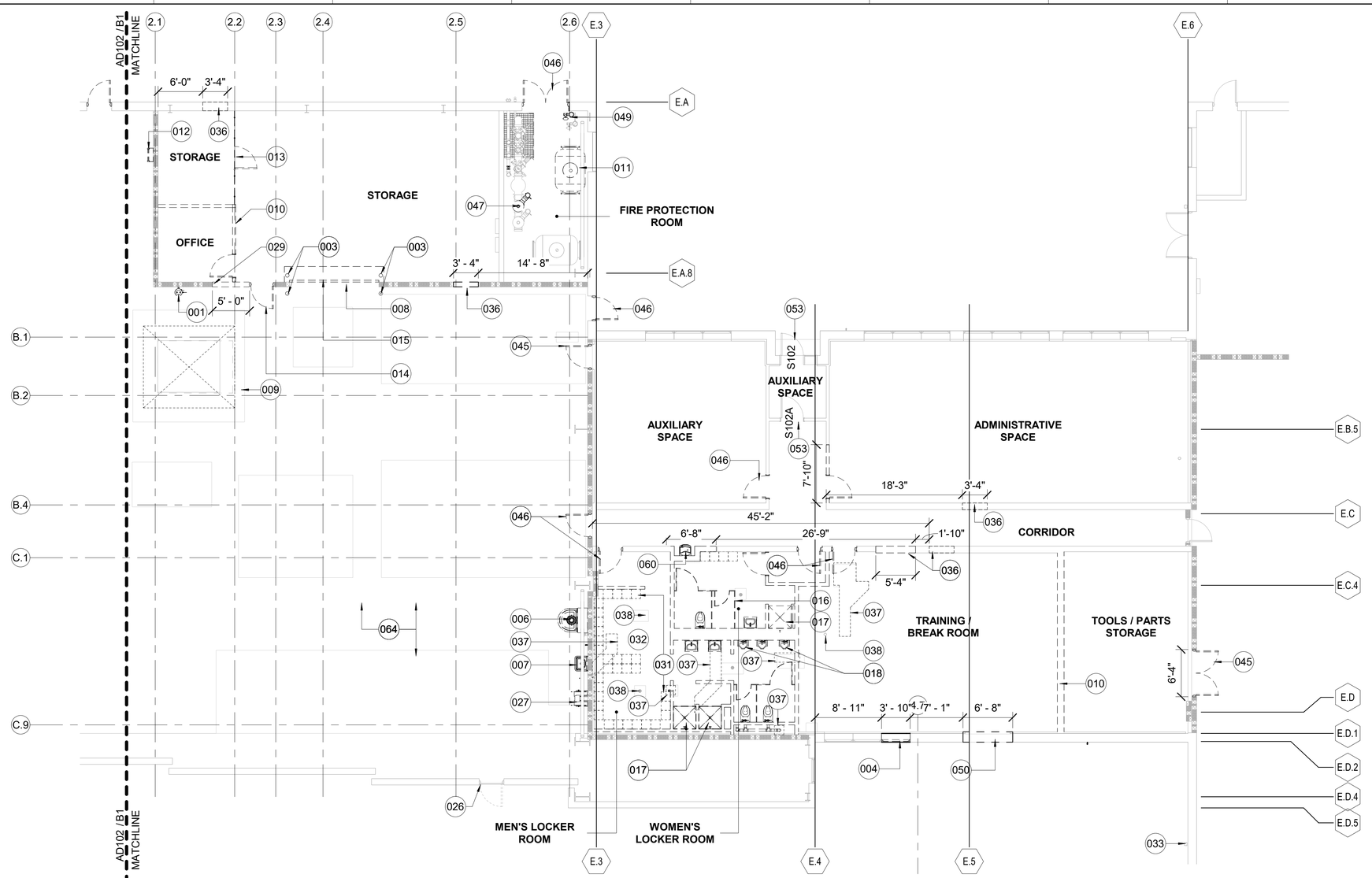
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395

PARTIAL DEMOLITION FLOOR PLAN - LEVEL 1 - AREA A

SHEET ID
B1455
AD102

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



B1 PARTIAL DEMOLITION FLOOR PLAN - LEVEL 1 - AREA B

1/8" = 1'-0"

KEYNOTES

001	REMOVE EXISTING EMERGENCY EYEWASH STATION; CAP EXISTING LINES. REFER TO PLUMBING.
003	REMOVE EXISTING INTERIOR BOLLARD, FLUSH WITH FLOOR; REPAIR AND FINISH FLOOR AS REQUIRED
004	REMOVE EXISTING PARTIAL HEIGHT WINDOW AND PORTION OF EXISTING EXTERIOR WALL AND REPLACE WITH NEW DOOR. REFER TO AE-103 AND A-610 FOR ADDITIONAL INFORMATION.
006	REMOVE EXISTING HANDWASHING SINK; CAP EXISTING LINES. REFER TO PLUMBING.
007	REMOVE EXISTING SERVICE SINK; CAP EXISTING LINES. REFER TO PLUMBING.
008	REMOVE EXISTING OVERHEAD DOOR
009	CUT EXISTING FLOOR SLAB TO ACCOMMODATE INSTALLATION OF NEW ELEVATOR AND PIT. REFER TO STRUCTURAL FOR ACTUAL DIMENSION OF SLAB OPENING TO ACCOMMODATE INSTALLATION OF BELOW-SLAB WATERPROOFING AND POURING OF CONCRETE PIT WALLS.
010	REMOVE EXISTING WALL; PATCH EXISTING WALLS TO REMAIN AS REQUIRED
011	DEMOLISH FOAM BLADDER TANK; REFER TO FIRE PROTECTION
012	REMOVE EXISTING ACCESS LADDER; RETURN LADDER TO OWNER; REPAIR DAMAGE TO WALL AS REQUIRED TO MATCH EXISTING CONDITION; RE: INTERIORS FOR FINISHES
013	REMOVE EXISTING CHAIN LINK FENCE AND GATE
014	REMOVE EXISTING DOOR AND FRAME
015	PREP FOR INSTALLATION OF NEW DOOR IN EXISTING OPENING AS SCHEDULED
016	REMOVE EXISTING TOILET PARTITIONS, TISSUE DISPENSERS, GRAB BARS, & ALL OTHER WALL MOUNTED RESTROOM EQUIPMENT
017	REMOVE EXISTING SHOWER BASE, SHOWER HEAD. REFER TO PLUMBING. INFILL CONCRETE SLAB AT EXISTING SHOWER BASE; REFER TO STRUCTURAL.
018	REMOVE EXISTING URINALS; COORDINATE WITH PLUMBING

KEYNOTES

026	TACK WELD EXISTING DOOR SHUT; REPAINT DOOR FRAME AS REQUIRED TO CONCEAL WELD MARKS
027	REMOVE EXISTING HOSE RACK/REEL; REPAIR DAMAGE TO PARTITION AS REQUIRED TO MATCH EXISTING CONDITIONS; RE: INTERIORS FOR FINISHES
029	ENLARGE EXISTING DOOR OPENING TO ACCOMMODATE NEW DOOR AS SCHEDULED
031	REMOVE EXISTING LOCKERS AS INDICATED; RETURN TO OWNER
032	REMOVE EXISTING FLOOR TILE & PREP RECESSED SLAB FOR NEW CONCRETE TOPPING SLAB. COORDINATE WITH STRUCTURAL
033	MODIFY EXISTING DOWNSPOUT AS REQUIRED TO DRAIN ONTO ROOF OF NEW ADDITION AS INDICATED
036	REMOVE AREA OF EXISTION PARTITION FOR NEW DOOR OR OPENING AS INDICATED. PATCH AND REPAIR ADJACENT WALLS AS REQUIRED
037	EXTENT OF SAW CUT IN EXISTING SLAB TO ACCOMMODATE NEW PLUMBING LINES. REFER TO STRUCTURAL AND PLUMBING FOR ADDITIONAL INFORMATION.
038	EXISTING FLOOR DRAIN/CLEANOUT TO REMAIN; REFER TO PLUMBING
045	REMOVE EXISTING DOOR AND FRAME AND REPLACE WITH NEW WALL INFILL TO MATCH EXISTING WALL ASSEMBLY
046	REMOVE EXISTING DOOR AND REPLACE WITH NEW DOOR AND HARDWARE; REFER TO AE103 AND A-610 FOR ADDITIONAL INFORMATION
047	DEMOLISH AND REPLACE FOAM RISER; REFER TO FIRE PROTECTION
049	DEMOLISH FOAM TEST HEADER; REFER TO FIRE PROTECTION
050	NEW WALL OPENING IN EXTERIOR WALL TO CONNECT AREA OF ADDITION
053	REMOVE AND REPLACE DOOR HARDWARE. REFER TO DOOR SCHEDULE FOR ADDITIONAL INFORMATION.
060	REMOVE EXISTING DRINKING FOUNTAIN, TO BE REPLACED WITH NEW DRINKING FOUNTAIN; REFER TO SHEET A-401 FOR ADDITIONAL INFORMATION
064	REFER TO STRUCTURAL DRAWINGS FOR AREAS OF EXISTING SLAB REMOVAL AS REQUIRED FOR NEW FOUNDATION

GENERAL NOTES - DEMOLITION

A SCOPE OF DEMOLITION: REMOVE ALL EXISTING FLOOR AND APPLIED WALL FINISHES, VINYL, AND WALL BASES, DESIGNATED PORTIONS OF WALLS, CEILING SYSTEMS, UTILITY SUPPORTS, EQUIPMENT, AND OTHER MISCELLANEOUS CONSTRUCTION IN THE DESIGNATED AREA UNLESS OTHERWISE NOTED. REMOVE ALL EXISTING HARDWARE ON WALLS, FLOORS, ETC WHERE NO LONGER SERVING A FUNCTIONAL PURPOSE; PATCH ALL HOLES LEFT BY REMOVED HARDWARE TO MATCH ADJACENT FINISHES. PROVIDE A CLEAN SURFACE TO INITIATE NEW CONSTRUCTION

B EXISTING CONSTRUCTION SHOWN BASED UPON OWNER FURNISHED PLANS AND ONSITE OBSERVATIONS. ANY DISCREPANCIES BETWEEN DRAWINGS AND ACTUAL FIELD CONDITIONS SHALL BE REPORTED TO THE A/E PRIOR TO PROCEEDING WITH WORK.

C REPAIR AND REFINISH EXISTING FLOOR AND ROOF PENETRATIONS WHERE DUCTWORK, PIPING, PLUMBING FIXTURES AND DRAINS WERE REMOVED. MATCH ADJACENT FINISHES.

D CONTRACTOR TO EXERCISE CARE DURING DEMOLITION OF AREAS LIKELY TO CONTAIN HIDDEN OR OBSCURED SYSTEMS BELOW FINISHED SURFACES

E THE CONTRACTOR SHALL VERIFY CONSTRUCTION LAYOUT PRIOR TO COMMENCEMENT OF CONSTRUCTION

F IT IS THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS TO CALL FOR A DEMOLITION THAT IS COMPLETE. IT IS NOT THE INTENT TO GIVE EVERY DETAIL ON THE DRAWINGS AND IN THE SPECIFICATIONS. IF ANY ITEM OF WORK IS INDICATED IN THE DRAWINGS, IT IS CONSIDERED SUFFICIENT FOR INCLUSION IN THE CONTRACT.

G COORDINATE WITH CONTRACTING OFFICER FOR DEMOLITION STAGING/SCHEDULE BEFORE DEMOLITION BEGINS.

H REPAIR AND FINISH ALL HOLES IN WALLS, CONCRETE COLUMNS, AND FLOORS LEFT FROM REMOVAL (HARDWARE, FASTENERS, DUCTS, PIPES, CONDUIT, ETC) AND RESTORE WALLS TO ORIGINAL INTEGRITY; RE:STRUC, MECH, PLUMB, ELEC

I REFER TO STRUCTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS FOR ADDITIONAL LOCATIONS OF PENETRATIONS OCCURRING WITHIN FLOOR, WALL, CEILING, AND ROOF SYSTEMS.

J COORDINATE ALL NEW M.E.P OPENINGS REQUIRED IN THE HORIZONTAL ASSEMBLIES.

K ALL SIGNAGE TO BE REMOVED

L CONTRACTOR SHOULD REPAIR ANY DAMAGE TO WALLS AND FLOORS DURING CONSTRUCTION TO ITS ORIGINAL CONDITION

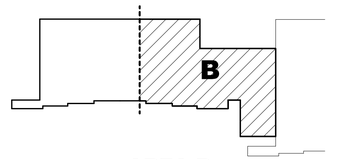
M REMOVE ALL INTERIOR FINISHES WHERE NOTED. REFER TO INTERIORS AND A-570 PARTITION TYPES SCHEDULE.

N REFER TO C8/S-520 FOR TYPICAL REINFORCEMENT OF EXISTING CMU WALL AT NEW WALL OPENINGS. REFER TO S-301 AND S-302 FOR CHANNEL SIZES.

DEMOLITION LEGEND

BLACK DASHED LINE INDICATES EXISTING COMPONENT TO BE REMOVED (WALL OPENINGS DIMENSIONED, KEYNOTED, AND SHOWN AS DASHED)

HALFTONE LINE INDICATES EXISTING COMPONENT TO REMAIN



AREA B
KEY PLAN

GRAPHIC SCALE

8 6 4 2 0 8 16

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

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

REGISTERED ARCHITECT
RICHARD G. PERRY
16592
STATE OF TEXAS
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SWHT21920IAD103

DESIGNED BY: J. PERRY
DRAWN BY: J. MCKINNEY
CHECKED BY: M. HOLLEB
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

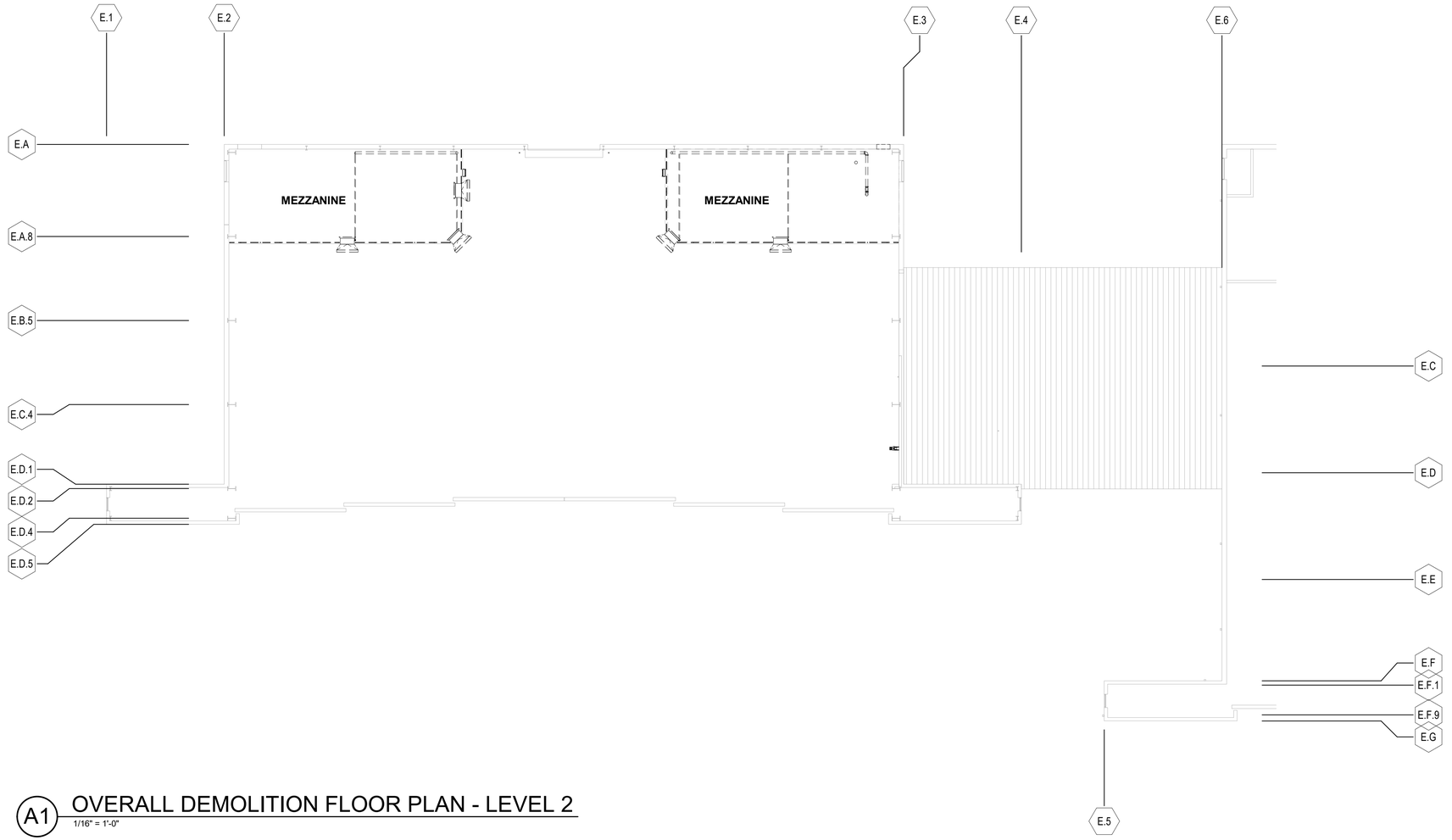
Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
ARCHITECTURE #F2972

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PARTIAL DEMOLITION FLOOR PLAN - LEVEL 1 - AREA B

SHEET ID
B1455
AD103

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



A1 OVERALL DEMOLITION FLOOR PLAN - LEVEL 2

1/16" = 1'-0"

GENERAL NOTES - DEMOLITION

A SCOPE OF DEMOLITION: REMOVE ALL EXISTING FLOOR AND APPLIED WALL FINISHES, VINYL, AND WALL BASES, DESIGNATED PORTIONS OF WALLS, CEILING SYSTEMS, UTILITY SUPPORTS, EQUIPMENT, AND OTHER MISCELLANEOUS CONSTRUCTION IN THE DESIGNATED AREA UNLESS OTHERWISE NOTED. REMOVE ALL EXISTING HARDWARE ON WALLS, FLOORS, ETC WHERE NO LONGER SERVING A FUNCTIONAL PURPOSE; PATCH ALL HOLES LEFT BY REMOVED HARDWARE TO MATCH ADJACENT FINISHES. PROVIDE A CLEAN SURFACE TO INITIATE NEW CONSTRUCTION

B EXISTING CONSTRUCTION SHOWN BASED UPON OWNER FURNISHED PLANS AND ONSITE OBSERVATIONS. ANY DISCREPANCIES BETWEEN DRAWINGS AND ACTUAL FIELD CONDITIONS SHALL BE REPORTED TO THE A/E PRIOR TO PROCEEDING WITH WORK.

C REPAIR AND REFINISH EXISTING FLOOR AND ROOF PENETRATIONS WHERE DUCTWORK, PIPING, PLUMBING FIXTURES AND DRAINS WERE REMOVED. MATCH ADJACENT FINISHES.

D CONTRACTOR TO EXERCISE CARE DURING DEMOLITION OF AREAS LIKELY TO CONTAIN HIDDEN OR OBSCURED SYSTEMS BELOW FINISHED SURFACES

E THE CONTRACTOR SHALL VERIFY CONSTRUCTION LAYOUT PRIOR TO COMMENCEMENT OF CONSTRUCTION

F IT IS THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS TO CALL FOR A DEMOLITION THAT IS COMPLETE. IT IS NOT THE INTENT TO GIVE EVERY DETAIL ON THE DRAWINGS AND IN THE SPECIFICATIONS. IF ANY ITEM OF WORK IS INDICATED IN THE DRAWINGS, IT IS CONSIDERED SUFFICIENT FOR INCLUSION IN THE CONTRACT.

G COORDINATE WITH CONTRACTING OFFICER FOR DEMOLITION STAGING/SCHEDULE BEFORE DEMOLITION BEGINS.

H REPAIR AND FINISH ALL HOLES IN WALLS, CONCRETE COLUMNS, AND FLOORS LEFT FROM REMOVAL (HARDWARE, FASTENERS, DUCTS, PIPES, CONDUIT, ETC) AND RESTORE WALLS TO ORIGINAL INTEGRITY; RE:STRUC, MECH, PLUMB, ELEC

I REFER TO STRUCTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS FOR ADDITIONAL LOCATIONS OF PENETRATIONS OCCURRING WITHIN FLOOR, WALL, CEILING, AND ROOF SYSTEMS.

J COORDINATE ALL NEW M.E.P OPENINGS REQUIRED IN THE HORIZONTAL ASSEMBLIES.

K ALL SIGNAGE TO BE REMOVED

L CONTRACTOR SHOULD REPAIR ANY DAMAGE TO WALLS AND FLOORS DURING CONSTRUCTION TO ITS ORIGINAL CONDITION

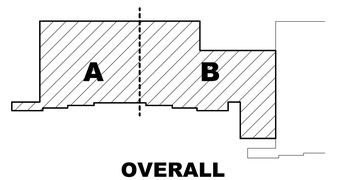
M REMOVE ALL INTERIOR FINISHES WHERE NOTED. REFER TO INTERIORS AND A-570 PARTITION TYPES SCHEDULE.

N REFER TO C8/S-520 FOR TYPICAL REINFORCEMENT OF EXISTING CMU WALL AT NEW WALL OPENINGS. REFER TO S-301 AND S-302 FOR CHANNEL SIZES.

DEMOLITION LEGEND

BLACK DASHED LINE INDICATES EXISTING COMPONENT TO BE REMOVED (WALL OPENINGS DIMENSIONED, KEYNOTED, AND SHOWN AS DASHED)

HALFTONE LINE INDICATES EXISTING COMPONENT TO REMAIN



OVERALL KEY PLAN

GRAPHIC SCALE

16 12 8 4 0 16 32

SCALE: 1/16"=1'-0"

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

REGISTERED ARCHITECT
RICHARD G. PERRY
16592
STATE OF TEXAS
23 NOV 2022

TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201AD111

DESIGNED BY: J. PERRY
DRAWN BY: J. MCKINNEY
CHECKED BY: M. HOLLEB
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS No. 175263

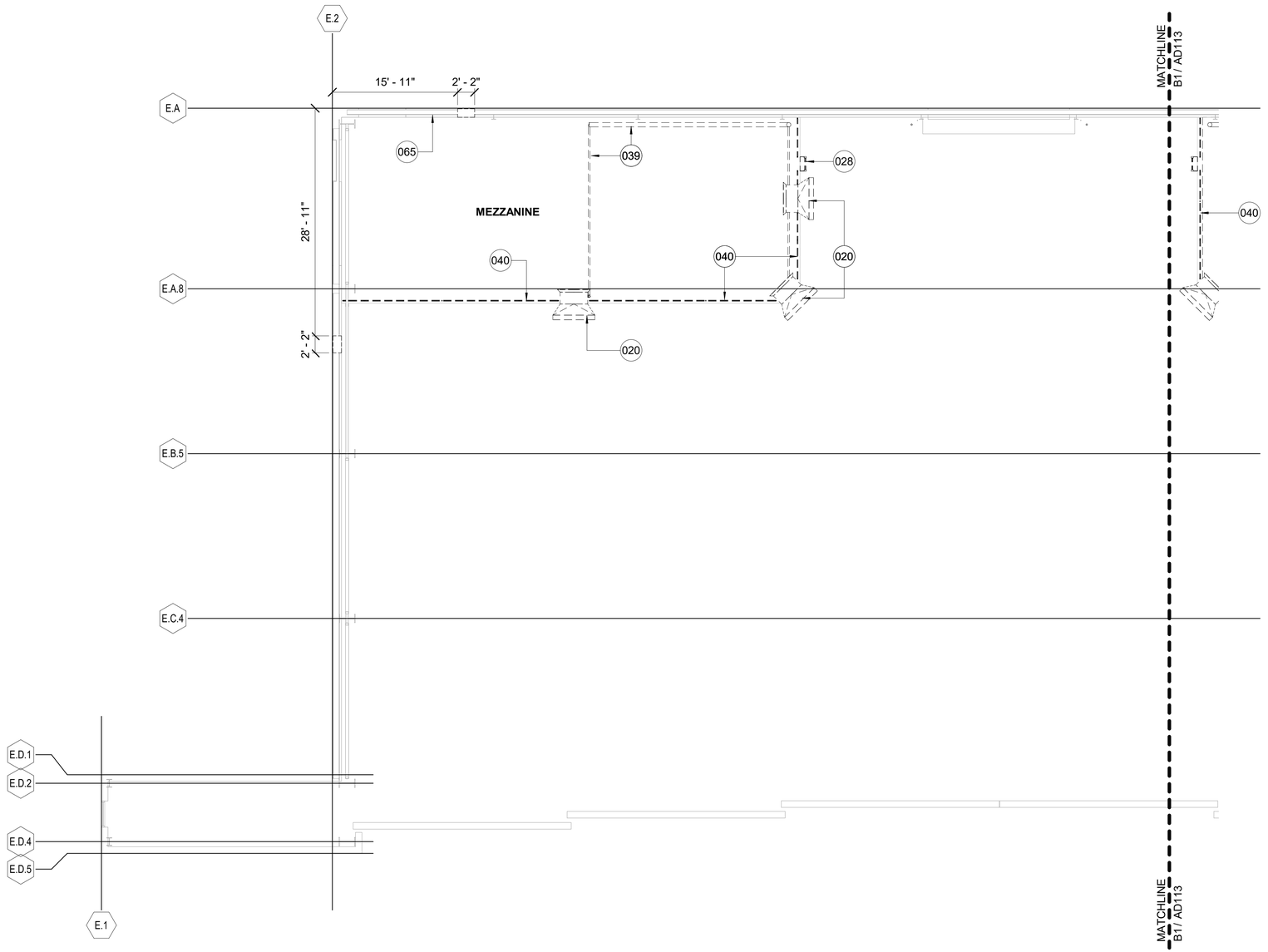
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395

OVERALL DEMOLITION FLOOR PLAN - LEVEL 2

SHEET ID
B1455
AD111

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



B1 PARTIAL DEMOLITION FLOOR PLAN - LEVEL 2 - AREA A

1/8" = 1'-0"

KEYNOTES	
020	REMOVE EXISTING FIRE SUPPRESSION FOAM GENERATOR AND ASSOCIATED PIPING. PATCH AND REPAIR CONCRETE SLAB AS NEEDED.
028	EXISTING ACCESS LADDER; CAREFULLY REMOVE AND REINSTALL WHERE INDICATED; PAINT TO MATCH NEW GUARDRAIL SYSTEM
039	DEMOLISH EXISTING SUPPRESSION SYSTEM BRANCHLINES; REFER TO FIRE PROTECTION
040	REMOVE EXISTING GUARDRAIL
065	CUT OPENINGS FOR PIPE PENETRATIONS; REFER TO MECHANICAL AND PLUMBING FOR LOCATIONS AND F8/A-550 FOR FLASHING DETAIL

GENERAL NOTES - DEMOLITION

A SCOPE OF DEMOLITION: REMOVE ALL EXISTING FLOOR AND APPLIED WALL FINISHES, VINYL, AND WALL BASES, DESIGNATED PORTIONS OF WALLS, CEILING SYSTEMS, UTILITY SUPPORTS, EQUIPMENT, AND OTHER MISCELLANEOUS CONSTRUCTION IN THE DESIGNATED AREA UNLESS OTHERWISE NOTED. REMOVE ALL EXISTING HARDWARE ON WALLS, FLOORS, ETC WHERE NO LONGER SERVING A FUNCTIONAL PURPOSE; PATCH ALL HOLES LEFT BY REMOVED HARDWARE TO MATCH ADJACENT FINISHES. PROVIDE A CLEAN SURFACE TO INITIATE NEW CONSTRUCTION

B EXISTING CONSTRUCTION SHOWN BASED UPON OWNER FURNISHED PLANS AND ONSITE OBSERVATIONS. ANY DISCREPANCIES BETWEEN DRAWINGS AND ACTUAL FIELD CONDITIONS SHALL BE REPORTED TO THE A/E PRIOR TO PROCEEDING WITH WORK.

C REPAIR AND REFINISH EXISTING FLOOR AND ROOF PENETRATIONS WHERE DUCTWORK, PIPING, PLUMBING FIXTURES AND DRAINS WERE REMOVED. MATCH ADJACENT FINISHES.

D CONTRACTOR TO EXERCISE CARE DURING DEMOLITION OF AREAS LIKELY TO CONTAIN HIDDEN OR OBSCURED SYSTEMS BELOW FINISHED SURFACES

E THE CONTRACTOR SHALL VERIFY CONSTRUCTION LAYOUT PRIOR TO COMMENCEMENT OF CONSTRUCTION

F IT IS THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS TO CALL FOR A DEMOLITION THAT IS COMPLETE. IT IS NOT THE INTENT TO GIVE EVERY DETAIL ON THE DRAWINGS AND IN THE SPECIFICATIONS. IF ANY ITEM OF WORK IS INDICATED IN THE DRAWINGS, IT IS CONSIDERED SUFFICIENT FOR INCLUSION IN THE CONTRACT.

G COORDINATE WITH CONTRACTING OFFICER FOR DEMOLITION STAGING/SCHEDULE BEFORE DEMOLITION BEGINS.

H REPAIR AND FINISH ALL HOLES IN WALLS, CONCRETE COLUMNS, AND FLOORS LEFT FROM REMOVAL (HARDWARE, FASTENERS, DUCTS, PIPES, CONDUIT, ETC) AND RESTORE WALLS TO ORIGINAL INTEGRITY; RE:STRUC, MECH, PLUMB, ELEC

I REFER TO STRUCTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS FOR ADDITIONAL LOCATIONS OF PENETRATIONS OCCURRING WITHIN FLOOR, WALL, CEILING, AND ROOF SYSTEMS.

J COORDINATE ALL NEW M.E.P OPENINGS REQUIRED IN THE HORIZONTAL ASSEMBLIES.

K ALL SIGNAGE TO BE REMOVED

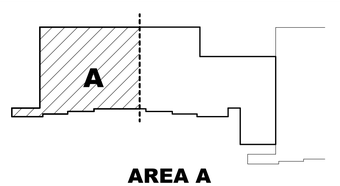
L CONTRACTOR SHOULD REPAIR ANY DAMAGE TO WALLS AND FLOORS DURING CONSTRUCTION TO ITS ORIGINAL CONDITION

M REMOVE ALL INTERIOR FINISHES WHERE NOTED. REFER TO INTERIORS AND A-570 PARTITION TYPES SCHEDULE.

N REFER TO C8/S-520 FOR TYPICAL REINFORCEMENT OF EXISTING CMU WALL AT NEW WALL OPENINGS. REFER TO S-301 AND S-302 FOR CHANNEL SIZES.

DEMOLITION LEGEND

- BLACK DASHED LINE INDICATES EXISTING COMPONENT TO BE REMOVED (WALL OPENINGS DIMENSIONED, KEYNOTED, AND SHOWN AS DASHED)
- HALFTONE LINE INDICATES EXISTING COMPONENT TO REMAIN



AREA A KEY PLAN

GRAPHIC SCALE

8 6 4 2 0 8 16

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

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

REGISTERED ARCHITECT
RICHARD G. PERRY
16592
STATE OF TEXAS
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: J. PERRY
DRAWN BY: J. MCKINNEY
CHECKED BY: M. HOLLEB
SUBMITTED BY: E. OLMESS
DATE:
ANSI D 22x34

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201AD112

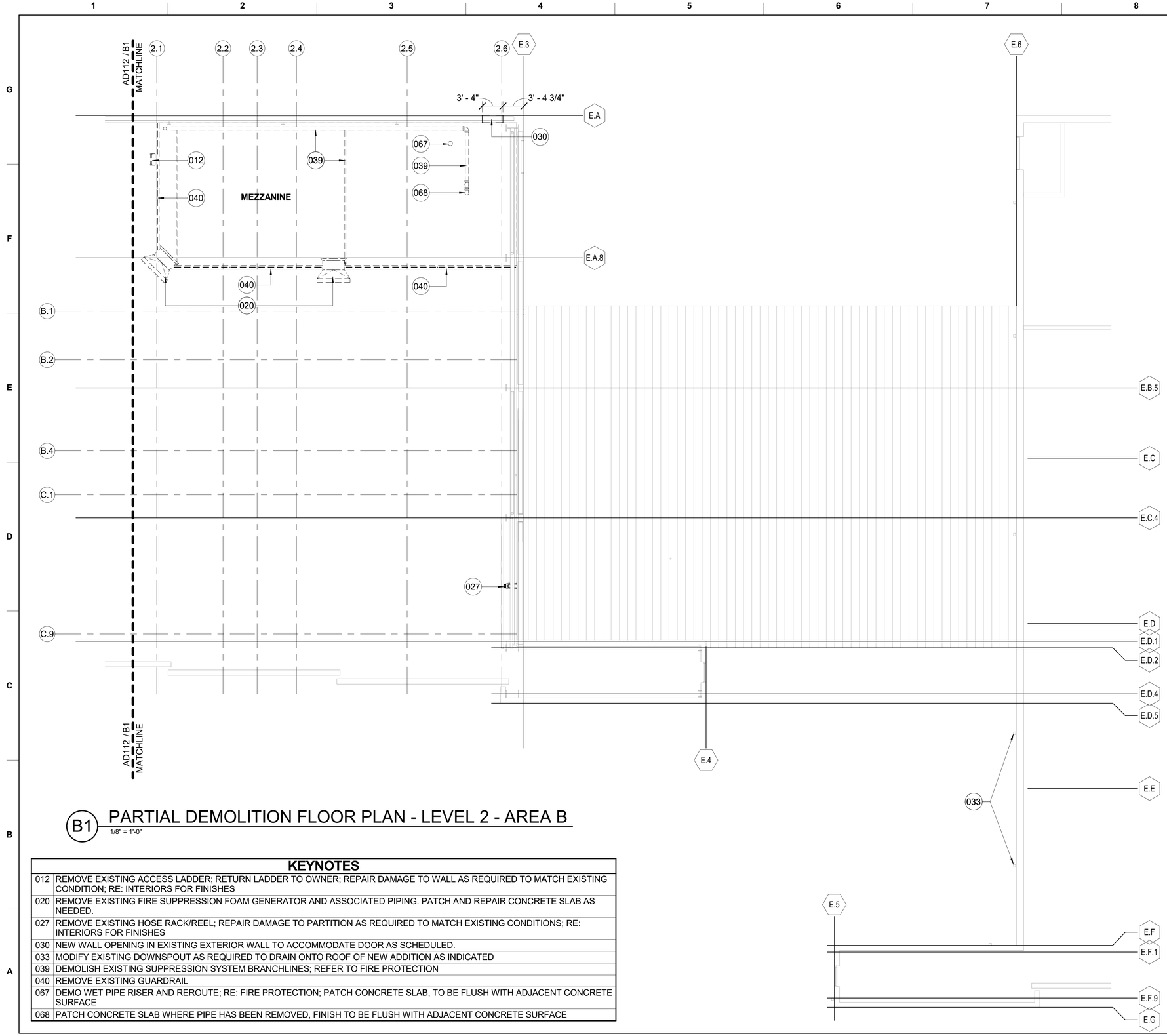
US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
817.420.2355 fax 817.820.6023

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PARTIAL DEMOLITION FLOOR PLAN - LEVEL 2 - AREA A

SHEET ID
B1455
AD112

W912QR23R0003_Plans-0000



B1 PARTIAL DEMOLITION FLOOR PLAN - LEVEL 2 - AREA B

1/8" = 1'-0"

KEYNOTES	
012	REMOVE EXISTING ACCESS LADDER; RETURN LADDER TO OWNER; REPAIR DAMAGE TO WALL AS REQUIRED TO MATCH EXISTING CONDITION; RE: INTERIORS FOR FINISHES
020	REMOVE EXISTING FIRE SUPPRESSION FOAM GENERATOR AND ASSOCIATED PIPING. PATCH AND REPAIR CONCRETE SLAB AS NEEDED.
027	REMOVE EXISTING HOSE RACK/REEL; REPAIR DAMAGE TO PARTITION AS REQUIRED TO MATCH EXISTING CONDITIONS; RE: INTERIORS FOR FINISHES
030	NEW WALL OPENING IN EXISTING EXTERIOR WALL TO ACCOMMODATE DOOR AS SCHEDULED.
033	MODIFY EXISTING DOWNSPOUT AS REQUIRED TO DRAIN ONTO ROOF OF NEW ADDITION AS INDICATED
039	DEMOLISH EXISTING SUPPRESSION SYSTEM BRANCHLINES; REFER TO FIRE PROTECTION
040	REMOVE EXISTING GUARDRAIL
067	DEMO WET PIPE RISER AND REROUTE; RE: FIRE PROTECTION; PATCH CONCRETE SLAB, TO BE FLUSH WITH ADJACENT CONCRETE SURFACE
068	PATCH CONCRETE SLAB WHERE PIPE HAS BEEN REMOVED, FINISH TO BE FLUSH WITH ADJACENT CONCRETE SURFACE

GENERAL NOTES - DEMOLITION

A SCOPE OF DEMOLITION: REMOVE ALL EXISTING FLOOR AND APPLIED WALL FINISHES, VINYL, AND WALL BASES, DESIGNATED PORTIONS OF WALLS, CEILING SYSTEMS, UTILITY SUPPORTS, EQUIPMENT, AND OTHER MISCELLANEOUS CONSTRUCTION IN THE DESIGNATED AREA UNLESS OTHERWISE NOTED. REMOVE ALL EXISTING HARDWARE ON WALLS, FLOORS, ETC WHERE NO LONGER SERVING A FUNCTIONAL PURPOSE; PATCH ALL HOLES LEFT BY REMOVED HARDWARE TO MATCH ADJACENT FINISHES. PROVIDE A CLEAN SURFACE TO INITIATE NEW CONSTRUCTION

B EXISTING CONSTRUCTION SHOWN BASED UPON OWNER FURNISHED PLANS AND ONSITE OBSERVATIONS. ANY DISCREPANCIES BETWEEN DRAWINGS AND ACTUAL FIELD CONDITIONS SHALL BE REPORTED TO THE A/E PRIOR TO PROCEEDING WITH WORK.

C REPAIR AND REFINISH EXISTING FLOOR AND ROOF PENETRATIONS WHERE DUCTWORK, PIPING, PLUMBING FIXTURES AND DRAINS WERE REMOVED. MATCH ADJACENT FINISHES.

D CONTRACTOR TO EXERCISE CARE DURING DEMOLITION OF AREAS LIKELY TO CONTAIN HIDDEN OR OBSCURED SYSTEMS BELOW FINISHED SURFACES

E THE CONTRACTOR SHALL VERIFY CONSTRUCTION LAYOUT PRIOR TO COMMENCEMENT OF CONSTRUCTION

F IT IS THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS TO CALL FOR A DEMOLITION THAT IS COMPLETE. IT IS NOT THE INTENT TO GIVE EVERY DETAIL ON THE DRAWINGS AND IN THE SPECIFICATIONS. IF ANY ITEM OF WORK IS INDICATED IN THE DRAWINGS, IT IS CONSIDERED SUFFICIENT FOR INCLUSION IN THE CONTRACT.

G COORDINATE WITH CONTRACTING OFFICER FOR DEMOLITION STAGING/SCHEDULE BEFORE DEMOLITION BEGINS.

H REPAIR AND FINISH ALL HOLES IN WALLS, CONCRETE COLUMNS, AND FLOORS LEFT FROM REMOVAL (HARDWARE, FASTENERS, DUCTS, PIPES, CONDUIT, ETC) AND RESTORE WALLS TO ORIGINAL INTEGRITY; RE:STRUC, MECH, PLUMB, ELEC

I REFER TO STRUCTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS FOR ADDITIONAL LOCATIONS OF PENETRATIONS OCCURRING WITHIN FLOOR, WALL, CEILING, AND ROOF SYSTEMS.

J COORDINATE ALL NEW M.E.P OPENINGS REQUIRED IN THE HORIZONTAL ASSEMBLIES.

K ALL SIGNAGE TO BE REMOVED

L CONTRACTOR SHOULD REPAIR ANY DAMAGE TO WALLS AND FLOORS DURING CONSTRUCTION TO ITS ORIGINAL CONDITION

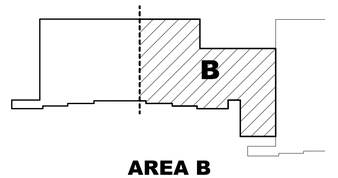
M REMOVE ALL INTERIOR FINISHES WHERE NOTED. REFER TO INTERIORS AND A-570 PARTITION TYPES SCHEDULE.

N REFER TO C8/S-520 FOR TYPICAL REINFORCEMENT OF EXISTING CMU WALL AT NEW WALL OPENINGS. REFER TO S-301 AND S-302 FOR CHANNEL SIZES.

DEMOLITION LEGEND

BLACK DASHED LINE INDICATES EXISTING COMPONENT TO BE REMOVED (WALL OPENINGS DIMENSIONED, KEYNOTED, AND SHOWN AS DASHED)

HALFTONE LINE INDICATES EXISTING COMPONENT TO REMAIN



AREA B KEY PLAN

GRAPHIC SCALE

8 6 4 2 0 8 16

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

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

REGISTERED ARCHITECT
RICHARD G. PERRY
16592
STATE OF TEXAS
23NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: J. PERRY
DRAWN BY: J. MCKINNEY
CHECKED BY: M. HOLLEB
SUBMITTED BY: E. OLMESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201AD113

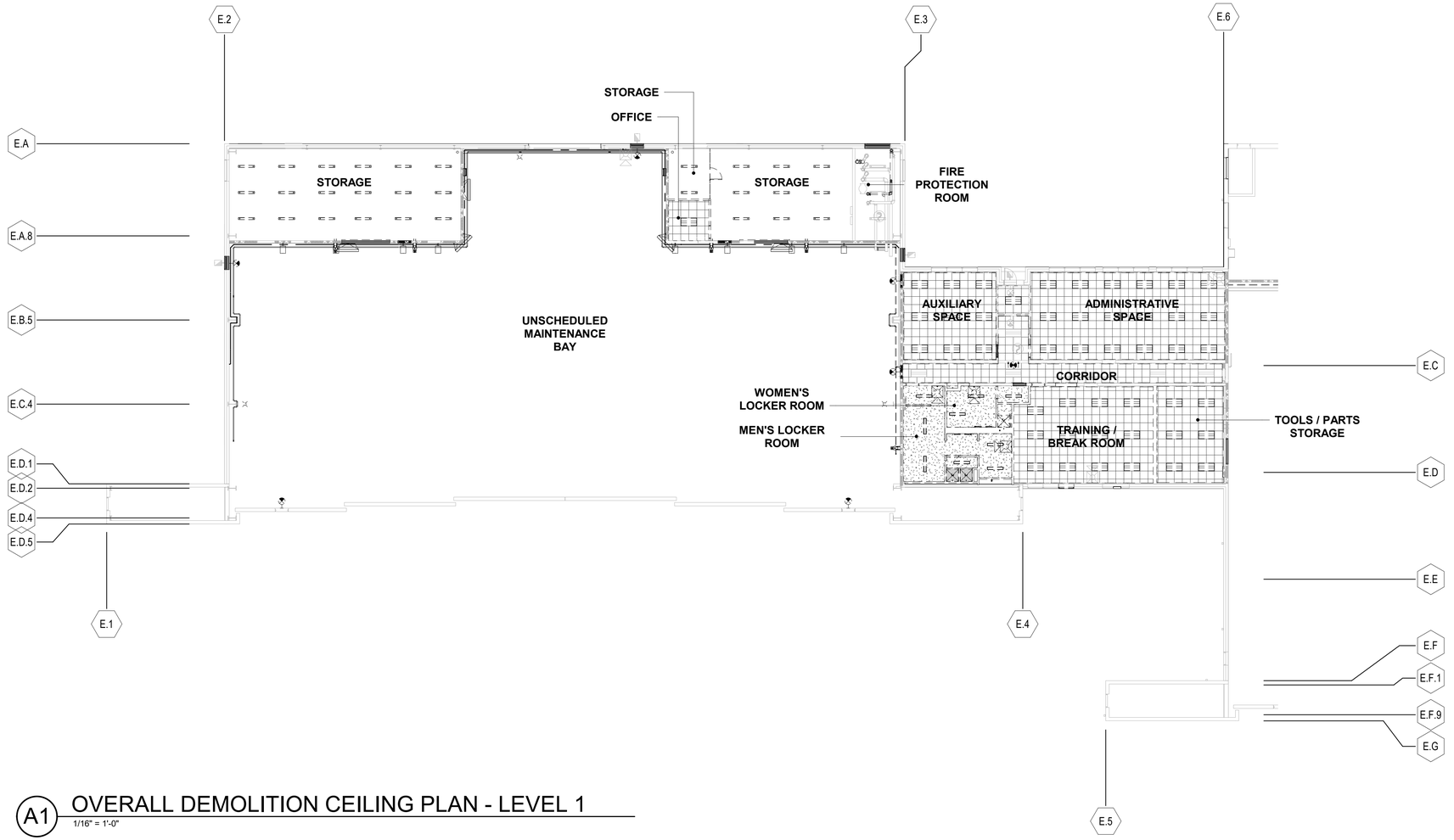
US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
www.jacobs.com (817)820-4000

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, PZ#: 496395
PARTIAL DEMOLITION FLOOR PLAN - LEVEL 2 - AREA B

SHEET ID
B1455
AD113

W912QR23R0003_Plans-0000



A1 OVERALL DEMOLITION CEILING PLAN - LEVEL 1
1/16" = 1'-0"

GENERAL DEMOLITION NOTES - RCP

A DEMOLITION SCOPE: REMOVE ALL CEILINGS AND SUPPORT SYSTEMS UNLESS OTHERWISE NOTED. REMOVE ALL ABANDONED CEILING SYSTEMS AND THEIR SUPPORTS INCLUDING, BUT NOT LIMITED TO; HARDWARE, GLUE, WOOD, AND FINISHES. PROVIDE A CLEAN SPACE TO INITIATE NEW CONSTRUCTIONS.

B REPAIR AND FINISH ALL HOLES LEFT FROM REMOVAL OF HARDWARE, FASTENERS, DUCTS, PIPES, CONDUIT, AND OTHER EQUIPMENT, AND RESTORE WALLS TO ORIGINAL INTEGRITY

C REFER TO MECHANICAL, ELECTRICAL, PLUMBING, & FIRE PROTECTION FOR REMOVAL OF SYSTEMS.

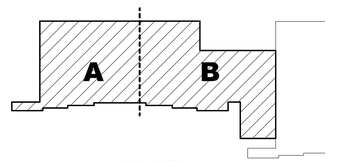
D ALL SIGNAGE TO BE REMOVED.

DEMOLITION RCP LEGEND

- 2'x2' ACOUSTICAL CEILING TILE AS SCHEDULED CENTERED IN SPACE AS INDICATED
- LINEAR SLOT DIFFUSERS
- SPRINKLERS, SMOKE DETECTORS, AND SPEAKER STROBES TO BE REMOVED; REFER TO FIRE PROTECTION DRAWINGS.
- LIGHT FIXTURES TO BE REMOVED; REFER TO ELECTRICAL DRAWINGS.
- EXIT LIGHT FIXTURE TO BE REMOVED; REFER TO ELECTRICAL DRAWINGS.
- SUPPLY AIR DIFFUSERS TO BE REMOVED; REFER TO MECHANICAL DRAWINGS.
- RETURN AIR GRILLE TO BE REMOVED; REFER TO MECHANICAL DRAWINGS.
- SPEAKER TO BE REMOVED; REFER TO TELECOMMUNICATION DRAWINGS

DEMOLITION LEGEND

- BLACK DASHED LINE INDICATES EXISTING COMPONENT TO BE REMOVED (WALL OPENINGS DIMENSIONED, KEYNOTED, AND SHOWN AS DASHED)
- HALFTONE LINE INDICATES EXISTING COMPONENT TO REMAIN



OVERALL KEY PLAN

GRAPHIC SCALE
16 12 8 4 0 16 32
SCALE: 1/16"=1'-0"

PLAN NORTH
TRUE N

US Army Corps of Engineers
Louisville District ®

REGISTERED ARCHITECT RICHARD G. PERRY 16592 STATE OF TEXAS
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201AD121

DESIGNED BY: J. PERRY
DRAWN BY: J. MCKINNEY
CHECKED BY: M. HOLLEB
SUBMITTED BY: E. OLNESS
DATE:
ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
Phone: 817.820.8000 Fax: 817.820.8010

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395

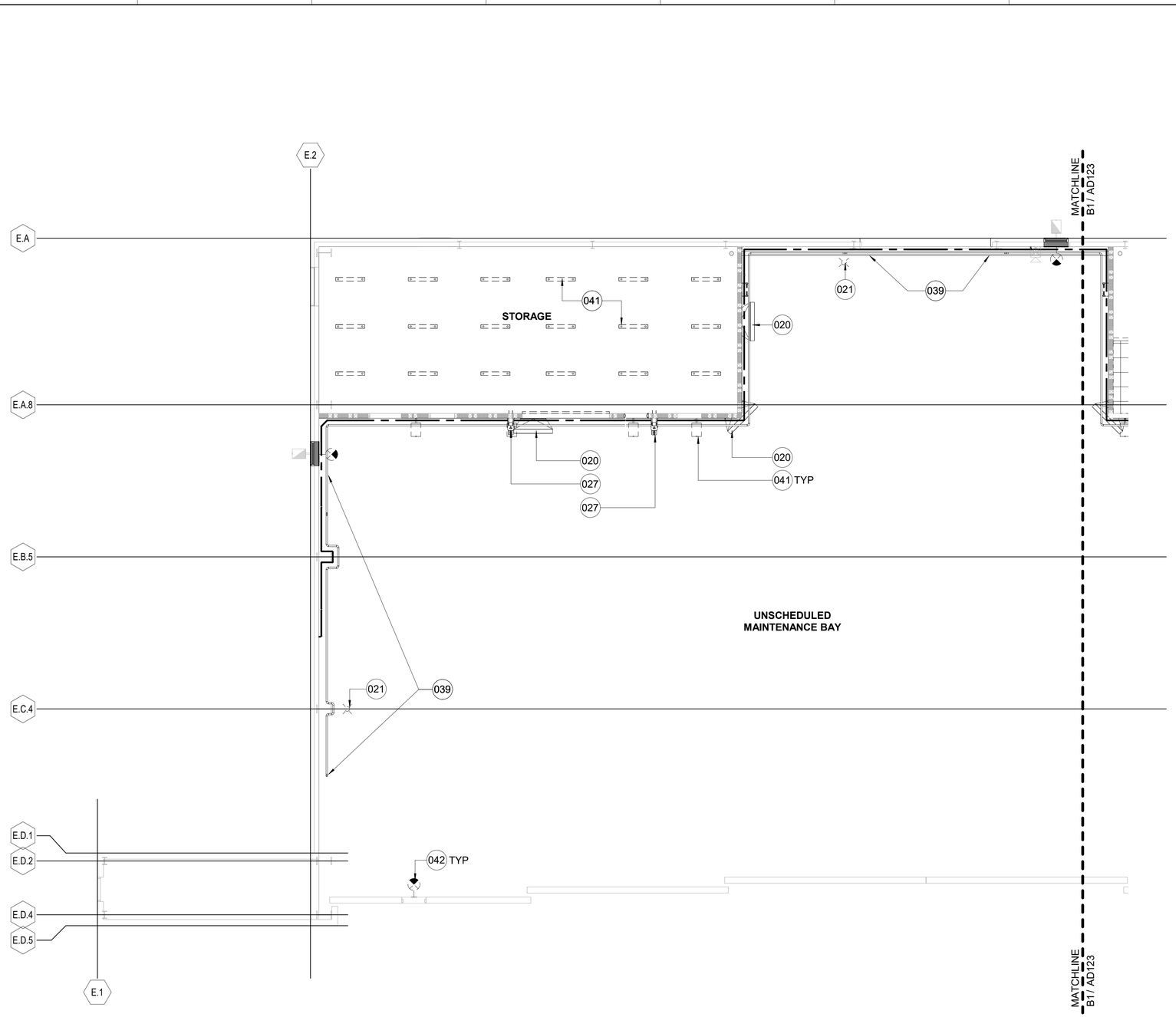
OVERALL DEMOLITION REFLECTED CEILING PLAN - LEVEL 1

SHEET ID
B1455
AD121

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN



A1 PARTIAL DEMOLITION CEILING PLAN - LEVEL 1 - AREA A

1/8" = 1'-0"

GENERAL DEMOLITION NOTES - RCP

A DEMOLITION SCOPE: REMOVE ALL CEILINGS AND SUPPORT SYSTEMS UNLESS OTHERWISE NOTED. REMOVE ALL ABANDONED CEILING SYSTEMS AND THEIR SUPPORTS INCLUDING, BUT NOT LIMITED TO; HARDWARE, GLUE, WOOD, AND FINISHES. PROVIDE A CLEAN SPACE TO INITIATE NEW CONSTRUCTIONS.

B REPAIR AND FINISH ALL HOLES LEFT FROM REMOVAL OF HARDWARE, FASTENERS, DUCTS, PIPES, CONDUIT, AND OTHER EQUIPMENT, AND RESTORE WALLS TO ORIGINAL INTEGRITY

C REFER TO MECHANICAL, ELECTRICAL, PLUMBING, & FIRE PROTECTION FOR REMOVAL OF SYSTEMS.

D ALL SIGNAGE TO BE REMOVED.

KEYNOTES

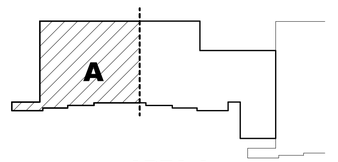
020	REMOVE EXISTING FIRE SUPPRESSION FOAM GENERATOR AND ASSOCIATED PIPING. PATCH AND REPAIR CONCRETE SLAB AS NEEDED.
021	REMOVE EXISTING FIRE ALARM DEVICE; REFER TO FIRE PROTECTION
027	REMOVE EXISTING HOSE RACK/REEL; REPAIR DAMAGE TO PARTITION AS REQUIRED TO MATCH EXISTING CONDITIONS; RE: INTERIORS FOR FINISHES
039	DEMOLISH EXISTING SUPPRESSION SYSTEM BRANCHLINES; REFER TO FIRE PROTECTION
041	REMOVE EXISTING LIGHT FIXTURES; REFER TO ELECTRICAL
042	REMOVE EXISTING EXIT SIGN & EXIT LIGHTING (DOOR TO BE TACK WELDED CLOSED); REFER TO ELECTRICAL

DEMOLITION RCP LEGEND

- 2'x2' ACOUSTICAL CEILING TILE AS SCHEDULED CENTERED IN SPACE AS INDICATED
- LINEAR SLOT DIFFUSERS
- SPRINKLERS, SMOKE DETECTORS, AND SPEAKER STROBES TO BE REMOVED; REFER TO FIRE PROTECTION DRAWINGS.
- LIGHT FIXTURES TO BE REMOVED; REFER TO ELECTRICAL DRAWINGS.
- EXIT LIGHT FIXTURE TO BE REMOVED; REFER TO ELECTRICAL DRAWINGS.
- SUPPLY AIR DIFFUSERS TO BE REMOVED; REFER TO MECHANICAL DRAWINGS.
- RETURN AIR GRILLE TO BE REMOVED; REFER TO MECHANICAL DRAWINGS.
- SPEAKER TO BE REMOVED; REFER TO TELECOMMUNICATION DRAWINGS

DEMOLITION LEGEND

- BLACK DASHED LINE INDICATES EXISTING COMPONENT TO BE REMOVED (WALL OPENINGS DIMENSIONED, KEYNOTED, AND SHOWN AS DASHED)
- HALFTONE LINE INDICATES EXISTING COMPONENT TO REMAIN



AREA A
KEY PLAN

GRAPHIC SCALE

8 6 4 2 0 8 16

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

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

REGISTERED ARCHITECT
RICHARD G. PERRY
16592
STATE OF TEXAS
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: J. PERRY
DRAWN BY: J. MCKINNEY
CHECKED BY: M. HOLLEB
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201AD122

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street Fort Worth, TX 76102
TBPE/TBPELS No. F2966

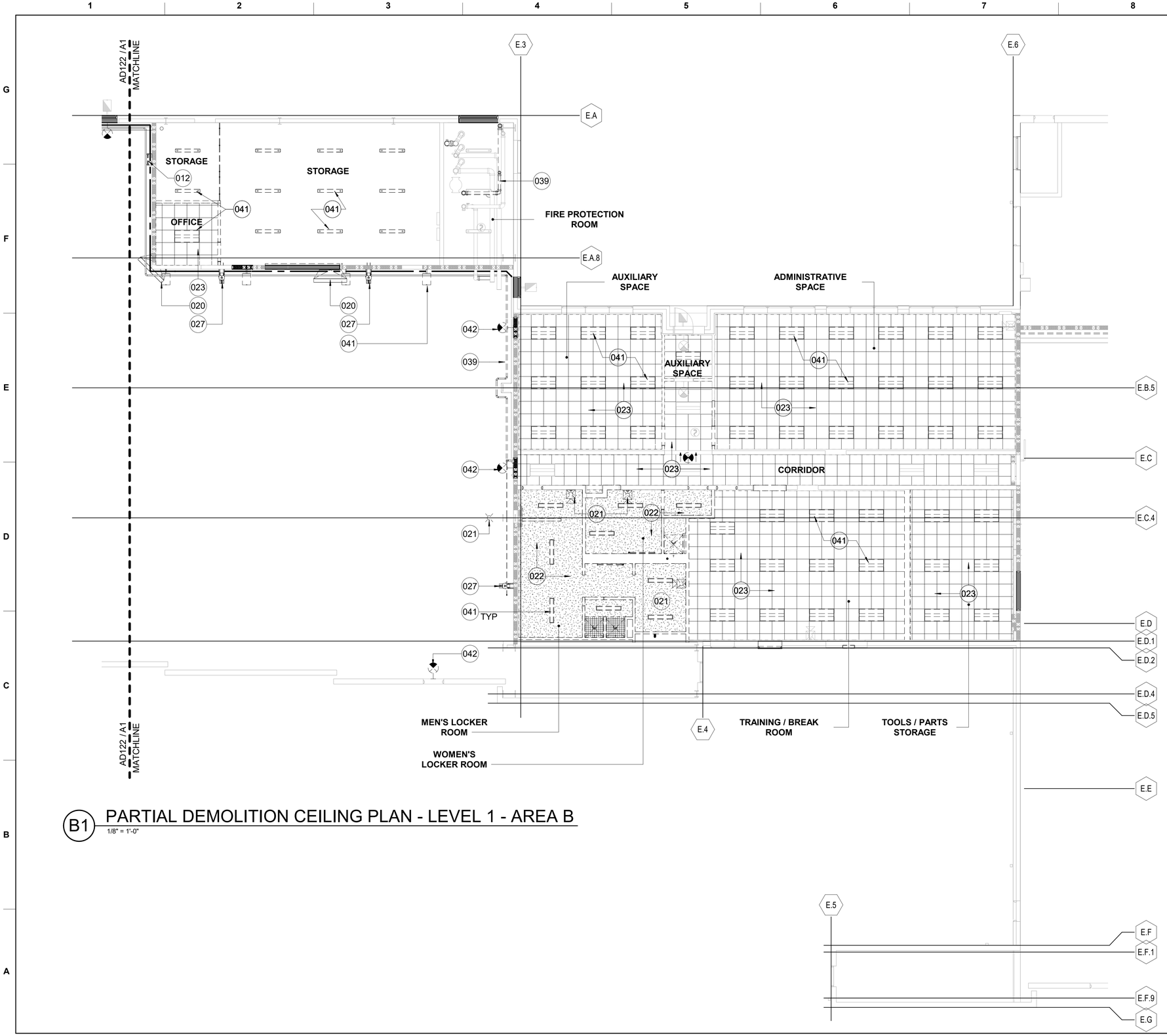
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395

PARTIAL DEMOLITION REFLECTED CEILING PLAN - LEVEL 1 - AREA A

SHEET ID
B1455
AD122

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



B1 PARTIAL DEMOLITION CEILING PLAN - LEVEL 1 - AREA B

1/8" = 1'-0"

GENERAL DEMOLITION NOTES - RCP

A DEMOLITION SCOPE: REMOVE ALL CEILINGS AND SUPPORT SYSTEMS UNLESS OTHERWISE NOTED. REMOVE ALL ABANDONED CEILING SYSTEMS AND THEIR SUPPORTS INCLUDING, BUT NOT LIMITED TO; HARDWARE, GLUE, WOOD, AND FINISHES. PROVIDE A CLEAN SPACE TO INITIATE NEW CONSTRUCTIONS.

B REPAIR AND FINISH ALL HOLES LEFT FROM REMOVAL OF HARDWARE, FASTENERS, DUCTS, PIPES, CONDUIT, AND OTHER EQUIPMENT, AND RESTORE WALLS TO ORIGINAL INTEGRITY

C REFER TO MECHANICAL, ELECTRICAL, PLUMBING, & FIRE PROTECTION FOR REMOVAL OF SYSTEMS.

D ALL SIGNAGE TO BE REMOVED.

KEYNOTES

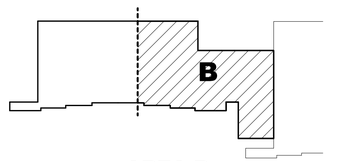
012	REMOVE EXISTING ACCESS LADDER; RETURN LADDER TO OWNER; REPAIR DAMAGE TO WALL AS REQUIRED TO MATCH EXISTING CONDITION; RE: INTERIORS FOR FINISHES
020	REMOVE EXISTING FIRE SUPPRESSION FOAM GENERATOR AND ASSOCIATED PIPING. PATCH AND REPAIR CONCRETE SLAB AS NEEDED.
021	REMOVE EXISTING FIRE ALARM DEVICE; REFER TO FIRE PROTECTION
022	REMOVE EXISTING GYPSUM WALL BOARD CEILING & SUPPORT SYSTEM
023	REMOVE EXISTING ACT CEILING & SUPPORT SYSTEM
027	REMOVE EXISTING HOSE RACK/REEL; REPAIR DAMAGE TO PARTITION AS REQUIRED TO MATCH EXISTING CONDITIONS; RE: INTERIORS FOR FINISHES
039	DEMOLISH EXISTING SUPPRESSION SYSTEM BRANCHLINES; REFER TO FIRE PROTECTION
041	REMOVE EXISTING LIGHT FIXTURES; REFER TO ELECTRICAL
042	REMOVE EXISTING EXIT SIGN & EXIT LIGHTING (DOOR TO BE TACK WELDED CLOSED); REFER TO ELECTRICAL

DEMOLITION RCP LEGEND

- 2'x2' ACOUSTICAL CEILING TILE AS SCHEDULED CENTERED IN SPACE AS INDICATED
- LINEAR SLOT DIFFUSERS
- SPRINKLERS, SMOKE DETECTORS, AND SPEAKER STROBES TO BE REMOVED; REFER TO FIRE PROTECTION DRAWINGS.
- LIGHT FIXTURES TO BE REMOVED; REFER TO ELECTRICAL DRAWINGS.
- EXIT LIGHT FIXTURE TO BE REMOVED; REFER TO ELECTRICAL DRAWINGS.
- SUPPLY AIR DIFFUSERS TO BE REMOVED; REFER TO MECHANICAL DRAWINGS.
- RETURN AIR GRILLE TO BE REMOVED; REFER TO MECHANICAL DRAWINGS.
- SPEAKER TO BE REMOVED; REFER TO TELECOMMUNICATION DRAWINGS

DEMOLITION LEGEND

- BLACK DASHED LINE INDICATES EXISTING COMPONENT TO BE REMOVED (WALL OPENINGS DIMENSIONED, KEYNOTED, AND SHOWN AS DASHED)
- HALFTONE LINE INDICATES EXISTING COMPONENT TO REMAIN



AREA B
KEY PLAN

GRAPHIC SCALE

8 6 4 2 0 8 16

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

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

REGISTERED ARCHITECT RICHARD G. PERRY 16592 STATE OF TEXAS 23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201AD123

DESIGNED BY: J. PERRY
DRAWN BY: J. MCKINNEY
CHECKED BY: M. HOLLEB
SUBMITTED BY: E. OLNESS
SCALE: ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS Project No. 320013

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PARTIAL DEMOLITION REFLECTED CEILING PLAN - LEVEL 1 - AREA B

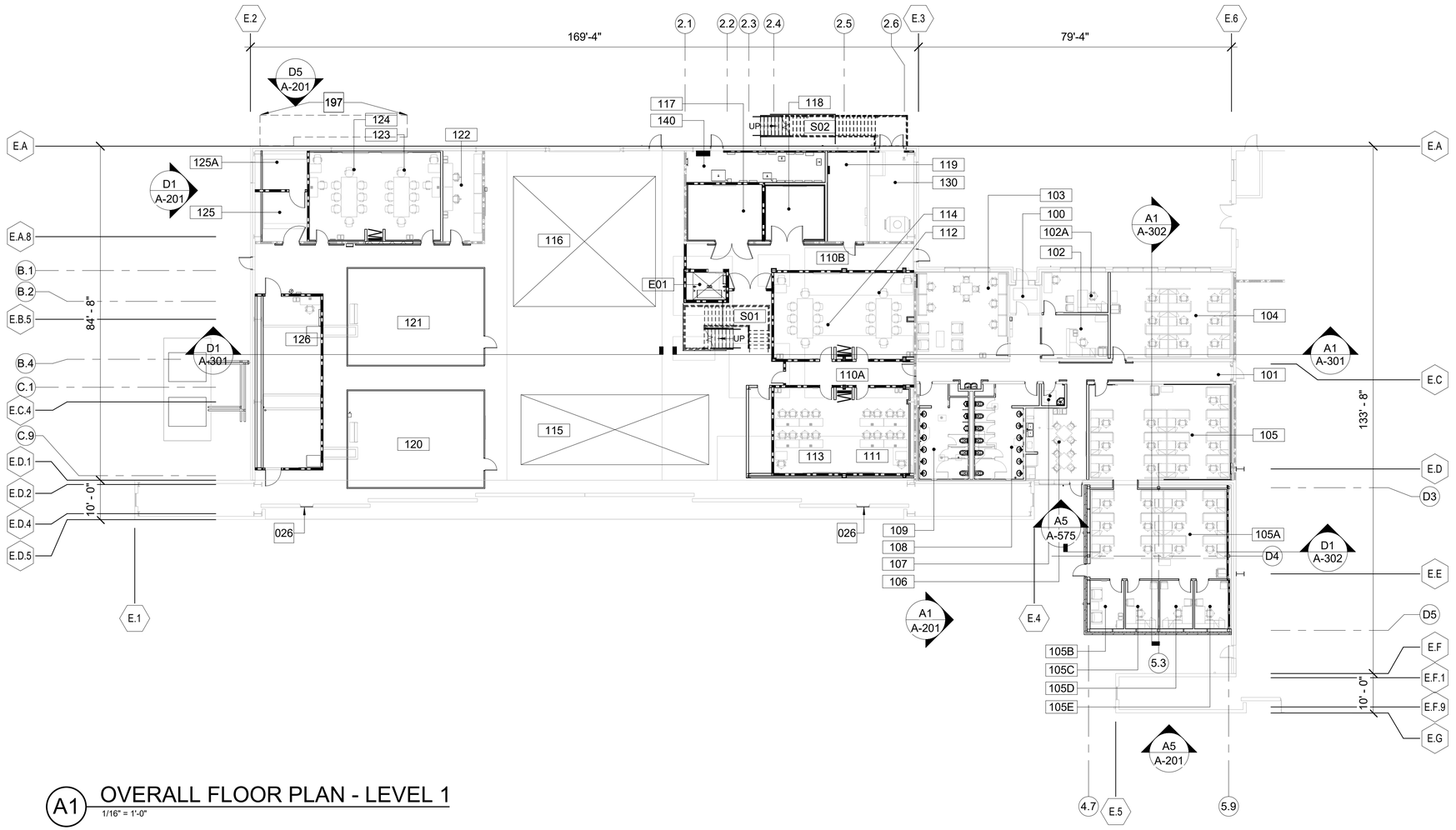
SHEET ID
B1455
AD123

W912QR23R0003_Plans-0000

NAME	NUMBER
VESTIBULE	100
CORRIDOR	101
REGISTRARS	102
REGISTRARS OFFICE	102A
STUDENT WORK AREA	103
TRS	104
ADMINISTRATION	105
ADMINISTRATION	105A
WELLNESS	105B
OFFICE	105C
OFFICE	105D
OFFICE	105E
BREAK ROOM	106
JANITOR'S	107

NAME	NUMBER
WOMEN'S RR	108
MEN'S RR	109
CORRIDOR	110A
CORRIDOR	110B
CIRCULATION	110C
CIRCULATION	110D
CLASSROOM	111
MULTI-PURPOSE	112
CLASSROOM	113
MULTI-PURPOSE	114
IAST	115
STORAGE	115A
AIE PTT	116
CPT	117
WPT	118

NAME	NUMBER
TELECOM	119
OFT	120
OFT	121
TOOL ROOM	122
MULTI-PURPOSE	123
MULTI-PURPOSE	124
EDS	125
EDS COMPUTER	125A
OFT COMPUTER	126
FIRE ROOM	130
ELECTRICAL	140
ELEVATOR	E01
STAIR 1	S01
STAIR 2	S02
TOTAL:	



A1 OVERALL FLOOR PLAN - LEVEL 1

1/16" = 1'-0"

GENERAL NOTES

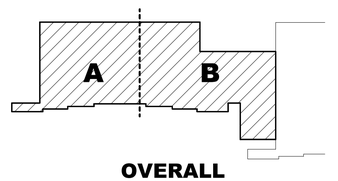
A	REFER TO ELEVATIONS (A-201), WALL SECTIONS (A-310 & A-311), & DETAILS FOR BUILDING ADDITION.
B	REFER TO INTERIORS FOR FINISH INFORMATION (SHEETS IN101 THROUGH IN112, I-201, I-202, I-601, & I-602)
C	EXTERIOR FINISHES AT AREAS OF NEW CONSTRUCTION ARE TO MATCH THE EXISTING FINISHES; CONTACT 42 CES FOR ADDITIONAL INFORMATION
D	ALL OF THE METAL DECK AND STEEL STRUCTURE ON THE EAST SIDE OF THE EXISTING HANGAR AREA THAT SUPPORT THE NEW LEVEL 2 FLOOR SLAB ARE TO BE FIRE RATED. WITHIN THIS AREA, ALL CONCEALED STRUCTURAL BEAM AND METAL DECKING ARE TO HAVE SPRAY APPLIED CEMENTITIOUS FIREPROOFING AND ALL EXPOSED STRUCTURAL STEEL BEAM AND METAL DECKING ARE TO HAVE INTUMESCENT EPOXY FIRE PROTECTIVE COATING.
E	ALL OF THE METAL DECKING AND STEEL STRUCTURE SUPPORTING THE MECHANICAL MEZZANINE IS TO HAVE SPRAY APPLIED CEMENTITIOUS FIREPROOFING
F	FIRE RATING OF THE LEVEL 2 FLOOR SLAB AND LEVEL 2 CEILINGS ARE TO MATCH THE FIRE RATING OF THE WALLS PER NFPA 101 AND TSFPEWG
G	PROVIDE FIRE RETARDANT BLOCKING WITHIN WALLS FOR THE SECURE ATTACHMENT OF ALL WALL MOUNTED ITEMS, INCLUDING BUT NOT LIMITED TO: TOILET ACCESSORIES, GRAB BARS, FLAT PANEL DISPLAYS, VISUAL DISPLAYS / MARKER BOARDS, HANDRAILING, SHELVING, AND SUPPORTS AS REQUIRED.

KEYNOTES

026	TACK WELD EXISTING DOOR SHUT; REPAINT DOOR FRAME AS REQUIRED TO CONCEAL WELD MARKS
197	BID OPTION 1: EXTERIOR STAIR FOR ACCESS TO MECHANICAL MEZZANINE; REFER TO SHEET A-424 FOR ADDITIONAL INFORMATION

LEGEND

- NEW 1 HOUR FIRE RATED PARTITION
- EXISTING 1 HOUR FIRE RATED PARTITION
- E1 — GLAZING TYPE; RE: A-575
- A6-A — PARTITION TYPE; RE: A-570



OVERALL KEY PLAN

GRAPHIC SCALE

16 12 8 4 0 16 32

SCALE: 1/16"=1'-0"

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

REGISTERED ARCHITECT
RICHARD G. PERRY
16592
STATE OF TEXAS
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: J. PERRY
DRAWN BY: J. MCKINNEY
CHECKED BY: M. HOLLEB
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201AE101

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

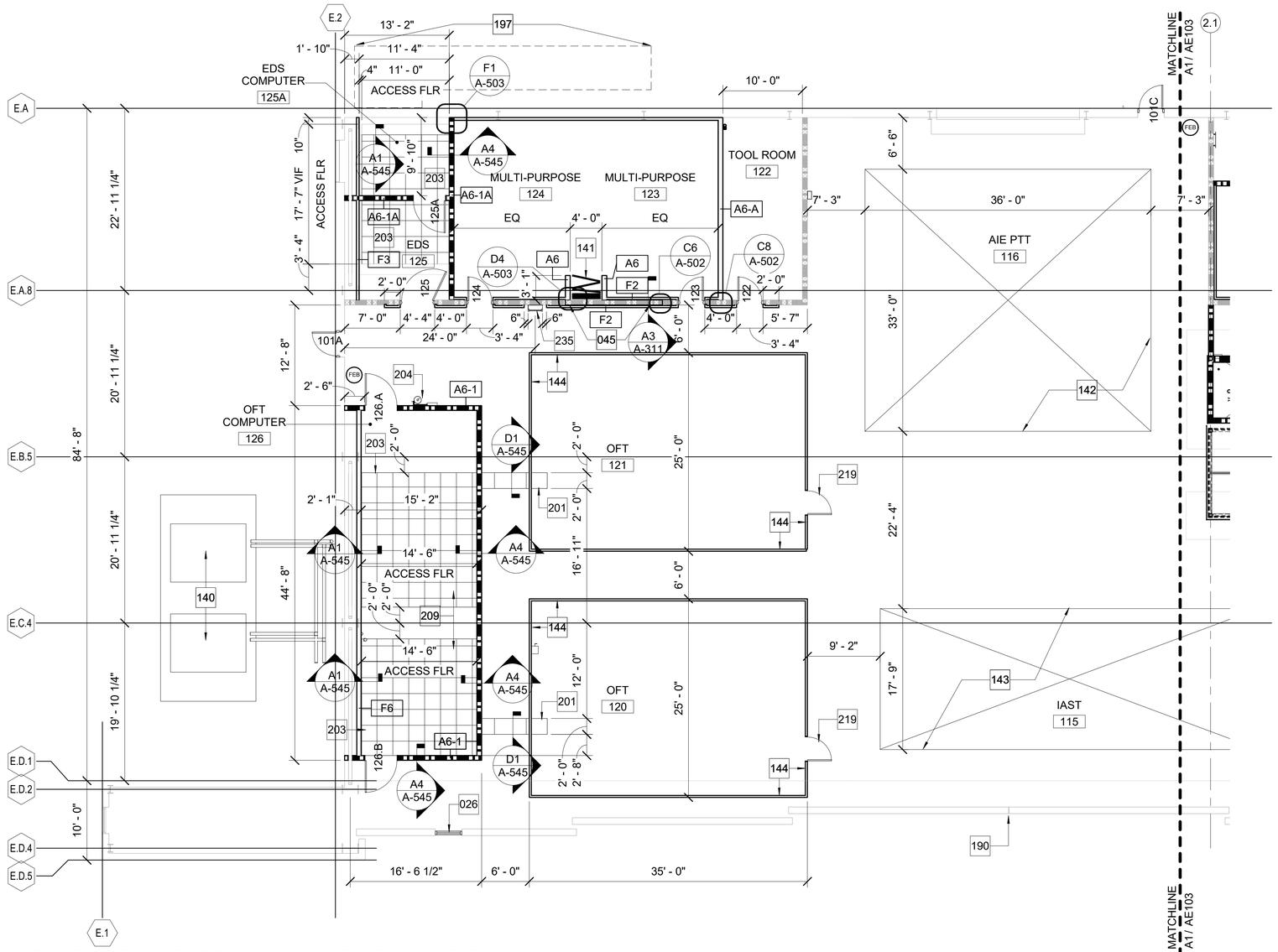
jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS PE NUMBER: F-2966

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNGS21B1455, P2#: 496395
OVERALL FLOOR PLAN - LEVEL 1

SHEET ID
B1455
AE101

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



A1 PARTIAL FLOOR PLAN - LEVEL 1 - AREA A

1/8" = 1'-0"

KEYNOTES

026	TACK WELD EXISTING DOOR SHUT; REPAINT DOOR FRAME AS REQUIRED TO CONCEAL WELD MARKS
045	REMOVE EXISTING DOOR AND FRAME AND REPLACE WITH NEW WALL INFILL TO MATCH EXISTING WALL ASSEMBLY
140	CHILLER; REFER TO MECHANICAL
141	MANUAL OPERABLE FOLDING PANEL PARTITION; RE: D1/A-510 FOR TRACK DETAIL
142	LINEWORK INDICATES APPROXIMATE BOUNDARY OF ALTERNATE INSERTION EXTRACTION PART TASK TRAINER (AIE-PTT); COORDINATE FINAL LOCATION WITH USACE/GOVERNMENT REPRESENTATIVE
143	LINEWORK INDICATES APPROXIMATE BOUNDARY OF INTEGRATED AIRCREW SYSTEM TRAINER (IAST); COORDINATE FINAL LOCATION WITH USACE/GOVERNMENT REPRESENTATIVE
144	PRE-MANUFACTURED LIGHT-TIGHT ENCLOSURE
190	REPLACE EXISTING HANGAR DOOR GASKETING TO PROVIDE WEATHER TIGHT SEAL

KEYNOTES

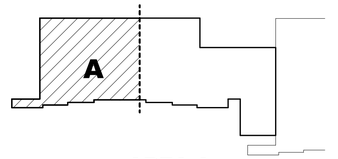
197	BID OPTION 1: EXTERIOR STAIR FOR ACCESS TO MECHANICAL MEZZANINE; REFER TO SHEET A-424 FOR ADDITIONAL INFORMATION
201	CONCRETE UTILITY TRENCH WITH REMOVABLE STEEL COVER; COORDINATE FINAL ROUTING OF TRENCH AND ACCESS TO EQUIPMENT WITH USACE/GOVERNMENT REPRESENTATIVE PRIOR TO BEGINNING CONSTRUCTION OF TRENCHES, INCLUDING THE PURCHASING OF MATERIALS, AS REQUIREMENTS MAY HAVE CHANGED
203	24"x24" RAISED ACCESS FLOORING SYSTEM
204	EMERGENCY EYE WASH; RE: PLUMBING
209	REFER TO TELECOM FOR LAYOUT OF DATA CABINETS
219	DOOR INCLUDED WITH OFT LIGHT TIGHT ENCLOSURE ASSEMBLY
235	RELOCATED MEZZANINE ACCESS LADDER; FASTEN TO CMU WALL SIMILAR TO EXISTING INSTALLATION; PAINT TO MATCH NEW GUARDRAIL SYSTEM

GENERAL NOTES

A	PARTITIONS TO BE "A6-A" UNLESS OTHERWISE NOTED. "A6-A" WALL TYPE TO INCLUDE 6" METAL STUD, SOUND ATTENUATION INSULATION (STC 45) AND 1 LAYER OF 5/8" GYPSUM BOARD ON EACH SIDE.
B	DOOR FRAMES ARE LOCATED 6" FROM FACE OF FINISH ON ADJACENT PERPENDICULAR WALL U.O.N.; EXCEPT IN THE CASE OF CORRIDORS WHERE THE DOOR IS CENTERED WITHIN THE END WALL OF CORRIDOR OR VESTIBULE
C	PROVIDE STUD INFILL AND PAINTED GYPSUM BOARD FINISH AT ALL EXTERIOR WALLS IN ADMINISTRATION AREAS
D	EXTERIOR FINISHES AT AREAS OF NEW CONSTRUCTION ARE TO MATCH THE EXISTING FINISHES; CONTACT 42 CES FOR ADDITIONAL INFORMATION
E	ALL OF THE METAL DECK AND STEEL STRUCTURE ON THE EAST SIDE OF THE EXISTING HANGAR AREA THAT SUPPORT THE NEW LEVEL 2 FLOOR SLAB ARE TO BE FIRE RATED. WITHIN THIS AREA, ALL CONCEALED STRUCTURAL BEAM AND METAL DECKING ARE TO HAVE SPRAY APPLIED CEMENTITIOUS FIREPROOFING AND ALL EXPOSED STRUCTURAL STEEL BEAM AND METAL DECKING ARE TO HAVE INTUMESCENT EPOXY FIRE PROTECTIVE COATING.
F	ALL OF THE METAL DECKING AND STEEL STRUCTURE SUPPORTING THE MECHANICAL MEZZANINE IS TO HAVE SPRAY APPLIED CEMENTITIOUS FIREPROOFING
G	FIRE RATING OF THE LEVEL 2 FLOOR STRUCTURE AS NOTED IN GENERAL NOTES E AND F ARE TO HAVE A TESTED AND APPROVED RATING THAT MATCHES THE FIRE RATING OF THE WALLS ENCLOSING THIS AREA PER NFPA 101 AND TSFPEWG
H	PROVIDE FIRE RETARDANT BLOCKING WITHIN WALLS FOR THE SECURE ATTACHMENT OF ALL WALL MOUNTED ITEMS, INCLUDING BUT NOT LIMITED TO: TOILET ACCESSORIES, GRAB BARS, FLAT PANEL DISPLAYS, VISUAL DISPLAYS / MARKER BOARDS, HANDRAILING, SHELVING, AND SUPPORTS AS REQUIRED.

LEGEND

- NEW 1 HOUR FIRE RATED PARTITION
- EXISTING 1 HOUR FIRE RATED PARTITION
- E1 — GLAZING TYPE; RE: A-575
- A6-A — PARTITION TYPE; RE: A-570



AREA A KEY PLAN

GRAPHIC SCALE

8 6 4 2 0 8 16

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

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

REGISTERED ARCHITECT RICHARD G. PERRY 16592 STATE OF TEXAS 23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: J. PERRY	ISSUE DATE: 23 NOVEMBER 2022
DRAWN BY: J. MCKINNEY	SOLICITATION NO.:
CHECKED BY: M. HOLLEB	CONTRACT NO.:
SUBMITTED BY: E. OLNESS	DRAWING CODE:
QC:	FILE NAME: ANSI D 22x34 - SXHT2192010AE102

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

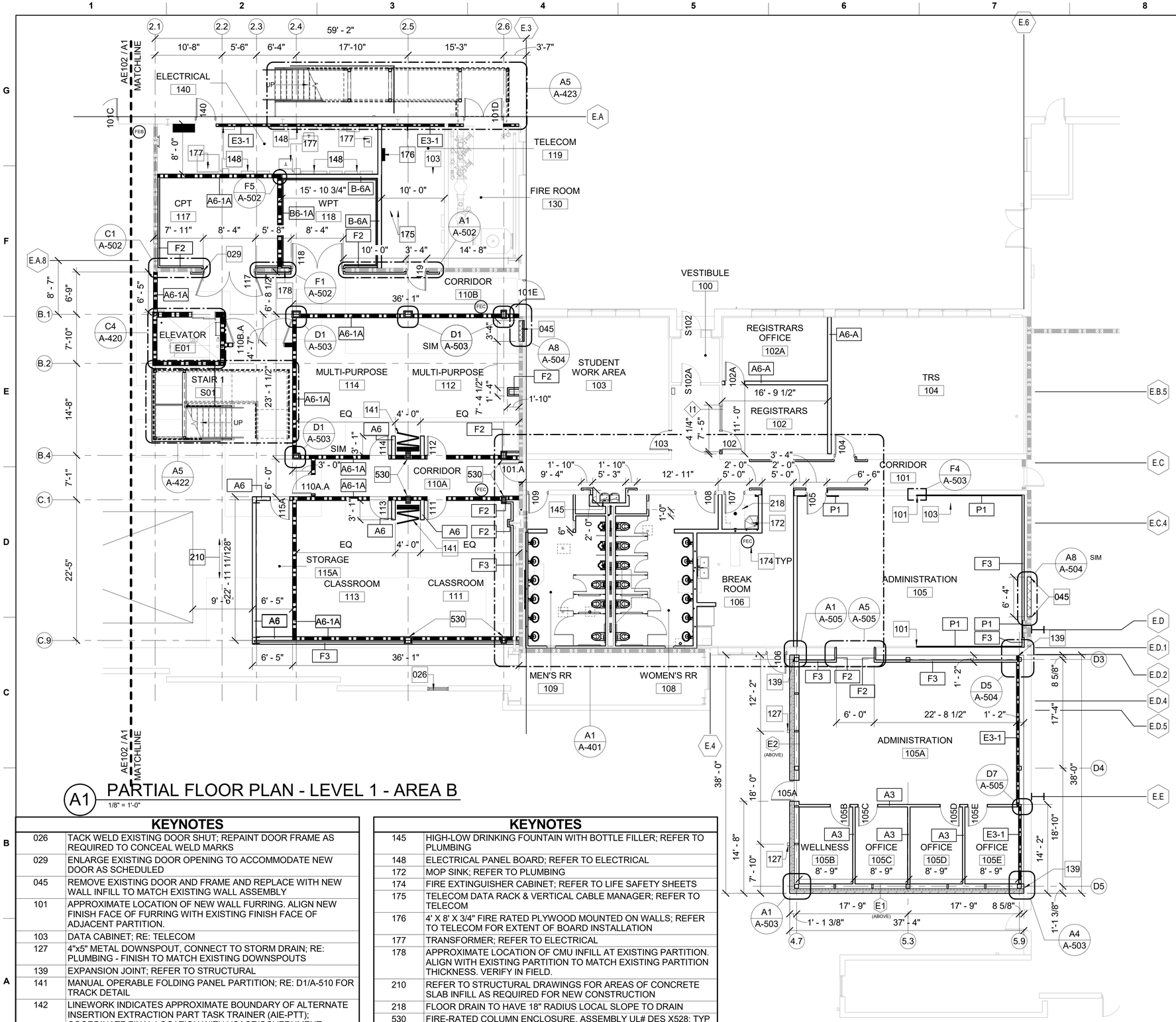
jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
Tel: 817.820.8000 | TBPE/BES Firm No. 2966

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PARTIAL FLOOR PLAN - LEVEL 1 - AREA A

SHEET ID
B1455
AE102

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



A1 PARTIAL FLOOR PLAN - LEVEL 1 - AREA B

1/8" = 1'-0"

KEYNOTES

026	TACK WELD EXISTING DOOR SHUT; REPAINT DOOR FRAME AS REQUIRED TO CONCEAL WELD MARKS
029	ENLARGE EXISTING DOOR OPENING TO ACCOMMODATE NEW DOOR AS SCHEDULED
045	REMOVE EXISTING DOOR AND FRAME AND REPLACE WITH NEW WALL INFILL TO MATCH EXISTING WALL ASSEMBLY
101	APPROXIMATE LOCATION OF NEW WALL FURRING. ALIGN NEW FINISH FACE OF FURRING WITH EXISTING FINISH FACE OF ADJACENT PARTITION.
103	DATA CABINET; RE: TELECOM
127	4"x5" METAL DOWNSPOUT, CONNECT TO STORM DRAIN; RE: PLUMBING - FINISH TO MATCH EXISTING DOWNSPOUTS
139	EXPANSION JOINT; REFER TO STRUCTURAL
141	MANUAL OPERABLE FOLDING PANEL PARTITION; RE: D1/A-510 FOR TRACK DETAIL
142	LINEWORK INDICATES APPROXIMATE BOUNDARY OF ALTERNATE INSERTION EXTRACTION PART TASK TRAINER (AIE-PTT); COORDINATE FINAL LOCATION WITH USACE/GOVERNMENT REPRESENTATIVE

KEYNOTES

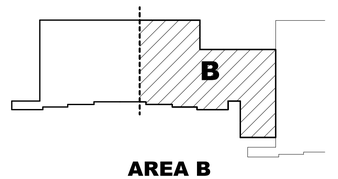
145	HIGH-LOW DRINKING FOUNTAIN WITH BOTTLE FILLER; REFER TO PLUMBING
148	ELECTRICAL PANEL BOARD; REFER TO ELECTRICAL
172	MOP SINK; REFER TO PLUMBING
174	FIRE EXTINGUISHER CABINET; REFER TO LIFE SAFETY SHEETS
175	TELECOM DATA RACK & VERTICAL CABLE MANAGER; REFER TO TELECOM
176	4' X 8' X 3/4" FIRE RATED PLYWOOD MOUNTED ON WALLS; REFER TO TELECOM FOR EXTENT OF BOARD INSTALLATION
177	TRANSFORMER; REFER TO ELECTRICAL
178	APPROXIMATE LOCATION OF CMU INFILL AT EXISTING PARTITION. ALIGN WITH EXISTING PARTITION TO MATCH EXISTING PARTITION THICKNESS. VERIFY IN FIELD.
210	REFER TO STRUCTURAL DRAWINGS FOR AREAS OF CONCRETE SLAB INFILL AS REQUIRED FOR NEW CONSTRUCTION
218	FLOOR DRAIN TO HAVE 18" RADIUS LOCAL SLOPE TO DRAIN
530	FIRE-RATED COLUMN ENCLOSURE, ASSEMBLY UL# DES X528; TYP

GENERAL NOTES

A	PARTITIONS TO BE "A6-A" UNLESS OTHERWISE NOTED. "A6-A" WALL TYPE TO INCLUDE 6" METAL STUD, SOUND ATTENUATION INSULATION (STC 45) AND 1 LAYER OF 5/8" GYPSUM BOARD ON EACH SIDE.
B	DOOR FRAMES ARE LOCATED 6" FROM FACE OF FINISH ON ADJACENT PERPENDICULAR WALL U.O.N.; EXCEPT IN THE CASE OF CORRIDORS WHERE THE DOOR IS CENTERED WITHIN THE END WALL OF CORRIDOR OR VESTIBULE
C	PROVIDE STUD INFILL AND PAINTED GYPSUM BOARD FINISH AT ALL EXTERIOR WALLS IN ADMINISTRATION AREAS
D	EXTERIOR FINISHES AT AREAS OF NEW CONSTRUCTION ARE TO MATCH THE EXISTING FINISHES; CONTACT 42 CES FOR ADDITIONAL INFORMATION
E	ALL OF THE METAL DECK AND STEEL STRUCTURE ON THE EAST SIDE OF THE EXISTING HANGAR AREA THAT SUPPORT THE NEW LEVEL 2 FLOOR SLAB ARE TO BE FIRE RATED. WITHIN THIS AREA, ALL CONCEALED STRUCTURAL BEAM AND METAL DECKING ARE TO HAVE SPRAY APPLIED CEMENTITIOUS FIREPROOFING AND ALL EXPOSED STRUCTURAL STEEL BEAM AND METAL DECKING ARE TO HAVE INTUMESCENT EPOXY FIRE PROTECTIVE COATING.
F	ALL OF THE METAL DECKING AND STEEL STRUCTURE SUPPORTING THE MECHANICAL MEZZANINE IS TO HAVE SPRAY APPLIED CEMENTITIOUS FIREPROOFING
G	FIRE RATING OF THE LEVEL 2 FLOOR STRUCTURE AS NOTED IN GENERAL NOTES E AND F ARE TO HAVE A TESTED AND APPROVED RATING THAT MATCHES THE FIRE RATING OF THE WALLS ENCLOSING THIS AREA PER NFPA 101 AND TSFPEWG
H	PROVIDE FIRE RETARDANT BLOCKING WITHIN WALLS FOR THE SECURE ATTACHMENT OF ALL WALL MOUNTED ITEMS, INCLUDING BUT NOT LIMITED TO: TOILET ACCESSORIES, GRAB BARS, FLAT PANEL DISPLAYS, VISUAL DISPLAYS / MARKER BOARDS, HANDRAILING, SHELVING, AND SUPPORTS AS REQUIRED.

LEGEND

- NEW 1 HOUR FIRE RATED PARTITION
- EXISTING 1 HOUR FIRE RATED PARTITION
- E1 — GLAZING TYPE; RE: A-575
- A6-A — PARTITION TYPE; RE: A-570



AREA B
KEY PLAN

GRAPHIC SCALE

8 6 4 2 0 8 16

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

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

REGISTERED ARCHITECT RICHARD G. PERRY 16592 STATE OF TEXAS 23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: J. PERRY
DRAWN BY: J. MCKINNEY
CHECKED BY: M. HOLLEB
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201AE103

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS Tel 972/503-3000

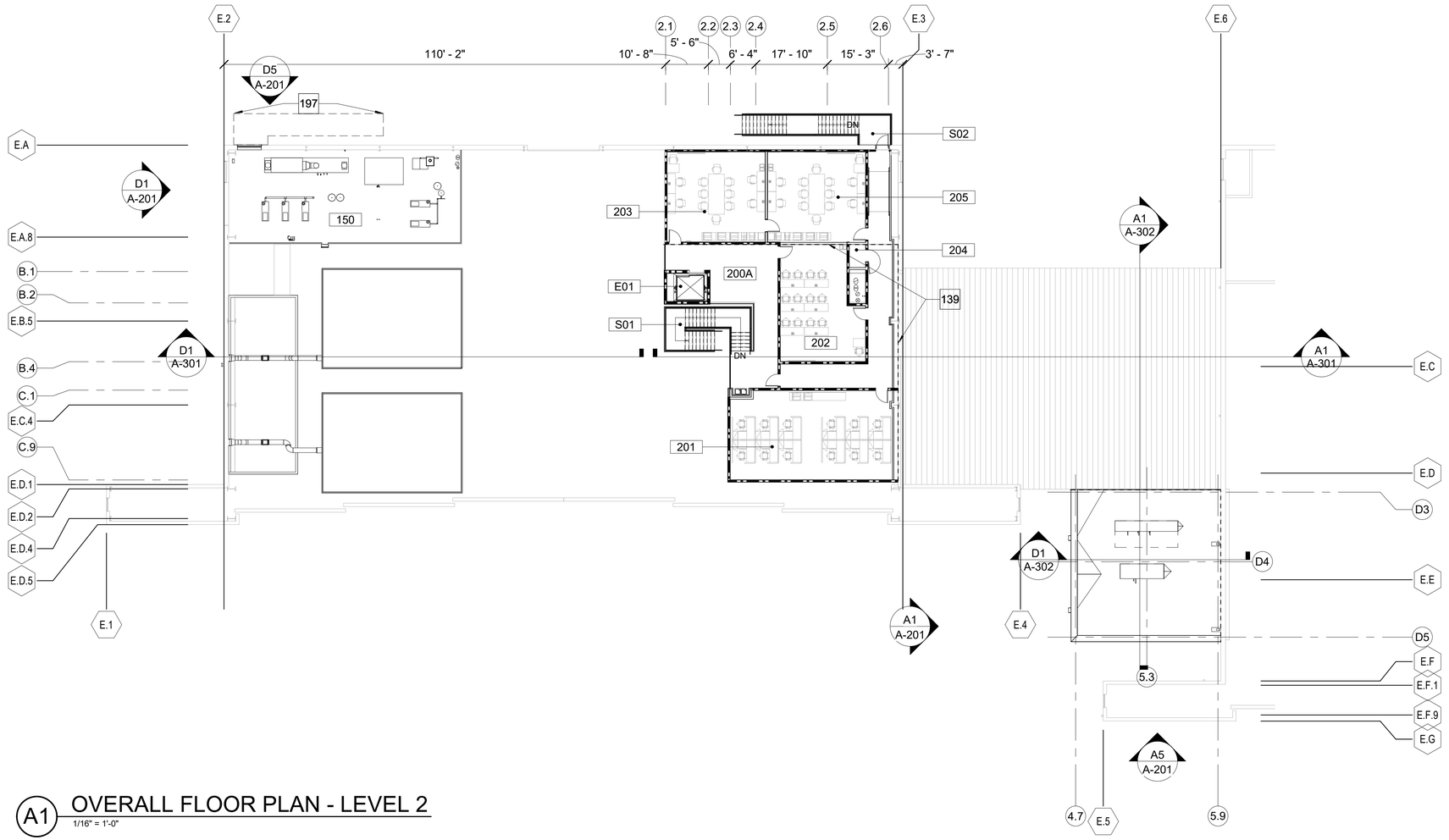
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PARTIAL FLOOR PLAN - LEVEL 1 - AREA B

SHEET ID
B1455
AE103

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN

NAME	NUMBER
OFT	120
OFT	121
MECH MEZZ	150
CIRCULATION	200A
CORRIDOR	200B
TSC	201
CLASS	202
MISSION PLANNING	203
COMM CHASE	204
MISSION PLANNING	205
TOTAL:	



A1 OVERALL FLOOR PLAN - LEVEL 2
1/16" = 1'-0"

GENERAL NOTES

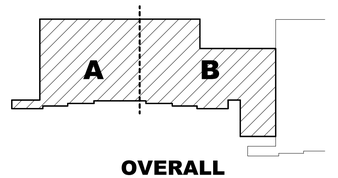
A	REFER TO ELEVATIONS (A-201), WALL SECTIONS (A-310 & A-311), & DETAILS FOR BUILDING ADDITION.
B	REFER TO INTERIORS FOR FINISH INFORMATION (SHEETS IN101 THROUGH IN112, I-201, I-202, I-601, & I-602)
C	EXTERIOR FINISHES AT AREAS OF NEW CONSTRUCTION ARE TO MATCH THE EXISTING FINISHES; CONTACT 42 CES FOR ADDITIONAL INFORMATION
D	ALL OF THE METAL DECK AND STEEL STRUCTURE ON THE EAST SIDE OF THE EXISTING HANGAR AREA THAT SUPPORT THE NEW LEVEL 2 FLOOR SLAB ARE TO BE FIRE RATED. WITHIN THIS AREA, ALL CONCEALED STRUCTURAL BEAM AND METAL DECKING ARE TO HAVE SPRAY APPLIED CEMENTITIOUS FIREPROOFING AND ALL EXPOSED STRUCTURAL STEEL BEAM AND METAL DECKING ARE TO HAVE INTUMESCENT EPOXY FIRE PROTECTIVE COATING.
E	ALL OF THE METAL DECKING AND STEEL STRUCTURE SUPPORTING THE MECHANICAL MEZZANINE IS TO HAVE SPRAY APPLIED CEMENTITIOUS FIREPROOFING
F	FIRE RATING OF THE LEVEL 2 FLOOR SLAB AND LEVEL 2 CEILINGS ARE TO MATCH THE FIRE RATING OF THE WALLS PER NFPA 101 AND TSFPEWG
G	PROVIDE FIRE RETARDANT BLOCKING WITHIN WALLS FOR THE SECURE ATTACHMENT OF ALL WALL MOUNTED ITEMS, INCLUDING BUT NOT LIMITED TO: TOILET ACCESSORIES, GRAB BARS, FLAT PANEL DISPLAYS, VISUAL DISPLAYS / MARKER BOARDS, HANDRAILING, SHELVING, AND SUPPORTS AS REQUIRED.

KEYNOTES

139	EXPANSION JOINT; REFER TO STRUCTURAL
197	BID OPTION 1: EXTERIOR STAIR FOR ACCESS TO MECHANICAL MEZZANINE; REFER TO SHEET A-424 FOR ADDITIONAL INFORMATION

LEGEND

- NEW 1 HOUR FIRE RATED PARTITION
- EXISTING 1 HOUR FIRE RATED PARTITION
- E1 — GLAZING TYPE; RE: A-575
- A6-A — PARTITION TYPE; RE: A-570



OVERALL KEY PLAN

GRAPHIC SCALE

16 12 8 4 0 16 32

SCALE: 1/16"=1'-0"

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

REGISTERED ARCHITECT
RICHARD G. PERRY
16592
STATE OF TEXAS
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201AE111

DESIGNED BY: J. PERRY
DRAWN BY: J. MCKINNEY
CHECKED BY: M. HOLLEB
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS TX REG#: F-2966

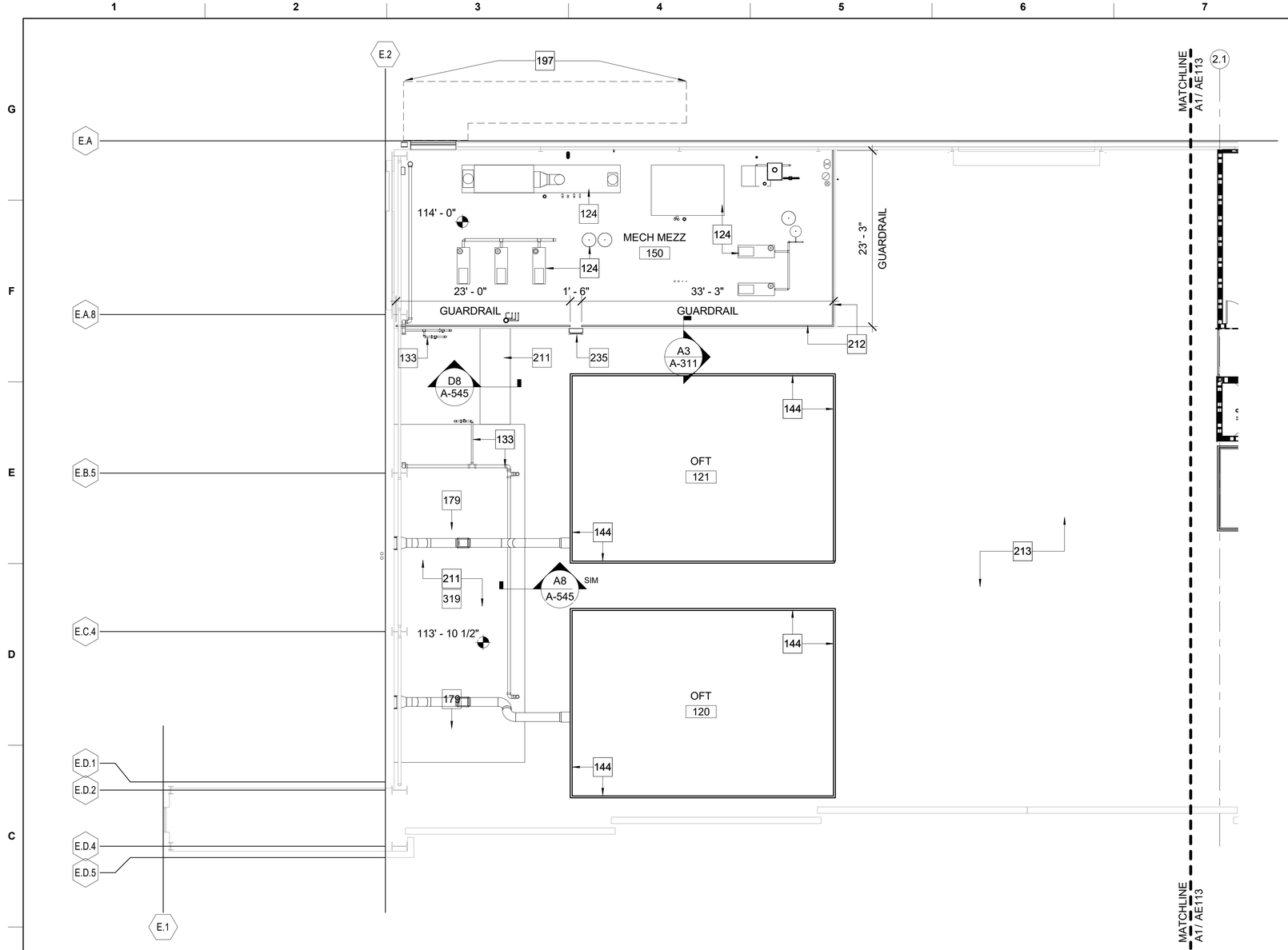
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
OVERALL FLOOR PLAN - LEVEL 2

SHEET ID
B1455
AE111

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN



A1 PARTIAL FLOOR PLAN - LEVEL 2 - AREA A

1/8" = 1'-0"

GENERAL NOTES

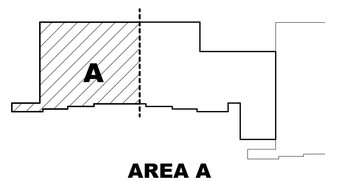
A	PARTITIONS TO BE "A6-A" UNLESS OTHERWISE NOTED. "A6-A" WALL TYPE TO INCLUDE 6" METAL STUD, SOUND ATTENUATION INSULATION (STC 45) AND 1 LAYER OF 5/8" GYPSUM BOARD ON EACH SIDE.
B	DOOR FRAMES ARE LOCATED 6" FROM FACE OF FINISH ON ADJACENT PERPENDICULAR WALL U.O.N.; EXCEPT IN THE CASE OF CORRIDORS WHERE THE DOOR IS CENTERED WITHIN THE END WALL OF CORRIDOR OR VESTIBULE
C	PROVIDE STUD INFILL AND PAINTED GYPSUM BOARD FINISH AT ALL EXTERIOR WALLS IN ADMINISTRATION AREAS
D	EXTERIOR FINISHES AT AREAS OF NEW CONSTRUCTION ARE TO MATCH THE EXISTING FINISHES; CONTACT 42 CES FOR ADDITIONAL INFORMATION
E	ALL OF THE METAL DECK AND STEEL STRUCTURE ON THE EAST SIDE OF THE EXISTING HANGAR AREA THAT SUPPORT THE NEW LEVEL 2 FLOOR SLAB ARE TO BE FIRE RATED. WITHIN THIS AREA, ALL CONCEALED STRUCTURAL BEAM AND METAL DECKING ARE TO HAVE SPRAY APPLIED CEMENTITIOUS FIREPROOFING AND ALL EXPOSED STRUCTURAL STEEL BEAM AND METAL DECKING ARE TO HAVE INTUMESCENT EPOXY FIRE PROTECTIVE COATING.
F	ALL OF THE METAL DECKING AND STEEL STRUCTURE SUPPORTING THE MECHANICAL MEZZANINE IS TO HAVE SPRAY APPLIED CEMENTITIOUS FIREPROOFING
G	FIRE RATING OF THE LEVEL 2 FLOOR STRUCTURE AS NOTED IN GENERAL NOTES E AND F ARE TO HAVE A TESTED AND APPROVED RATING THAT MATCHES THE FIRE RATING OF THE WALLS ENCLOSING THIS AREA PER NFPA 101 AND TSFPEWG
H	PROVIDE FIRE RETARDANT BLOCKING WITHIN WALLS FOR THE SECURE ATTACHMENT OF ALL WALL MOUNTED ITEMS, INCLUDING BUT NOT LIMITED TO: TOILET ACCESSORIES, GRAB BARS, FLAT PANEL DISPLAYS, VISUAL DISPLAYS / MARKER BOARDS, HANDRAILING, SHELVING, AND SUPPORTS AS REQUIRED.

KEYNOTES

124	MECHANICAL EQUIPMENT; REFER TO MECHANICAL
133	SPRINKLER WET PIPE, BRACE AS REQUIRED; REFER TO FIRE PROTECTION
144	PRE-MANUFACTURED LIGHT-TIGHT ENCLOSURE
179	EXPOSED UNFINISHED SPIRAL DUCT WITH INTERIOR LINER, PAINT SUPPORT HANGERS WHITE; REFER TO MECHANICAL
197	BID OPTION 1: EXTERIOR STAIR FOR ACCESS TO MECHANICAL MEZZANINE; REFER TO SHEET A-424 FOR ADDITIONAL INFORMATION
211	1 1/2" METAL DECK ON 8" JOIST; RE: STRUCTURAL
212	PAINTED STEEL GUARDRAIL; RE: A4/A-521 FOR DETAIL
213	OPEN TO BELOW
235	RELOCATED MEZZANINE ACCESS LADDER; FASTEN TO CMU WALL SIMILAR TO EXISTING INSTALLATION; PAINT TO MATCH NEW GUARDRAIL SYSTEM
319	SPRAY APPLIED CEMENTITIOUS FIREPROOFING ON METAL DECK

LEGEND

- NEW 1 HOUR FIRE RATED PARTITION
- EXISTING 1 HOUR FIRE RATED PARTITION
- E1 — GLAZING TYPE; RE: A-575
- A6-A — PARTITION TYPE; RE: A-570



AREA A
KEY PLAN

GRAPHIC SCALE

8 6 4 2 0 8 16

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

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

REGISTERED ARCHITECT
RICHARD G. PERRY
16592
STATE OF TEXAS
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: 34_SXHT219201AE112

DESIGNED BY: J. PERRY
DRAWN BY: J. MCKINNEY
CHECKED BY: M. HOLLEB
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS Ref. No. W2R0003

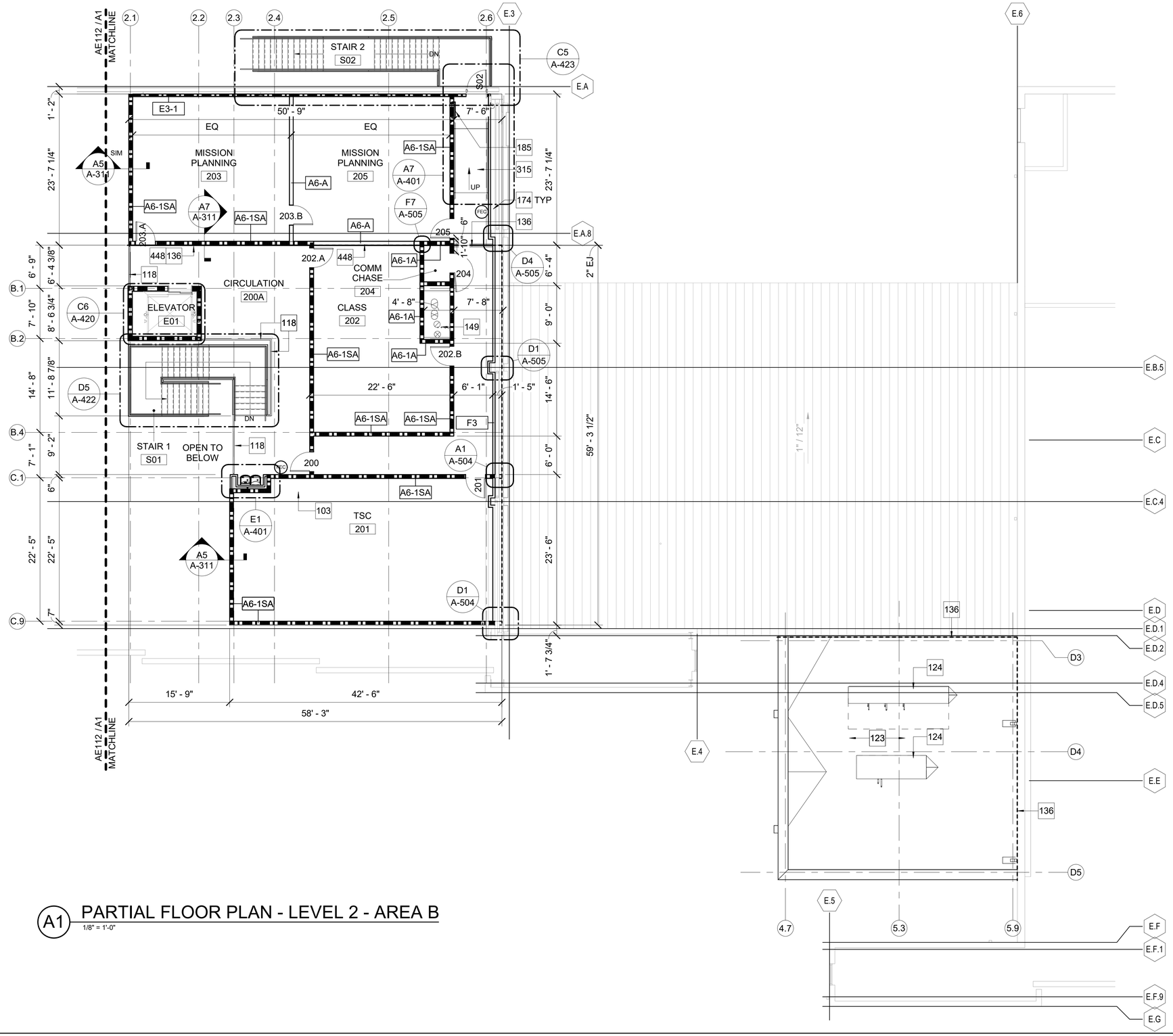
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PARTIAL FLOOR PLAN - LEVEL 2 - AREA A

SHEET ID
B1455
AE112

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN



A1 PARTIAL FLOOR PLAN - LEVEL 2 - AREA B

1/8" = 1'-0"

GENERAL NOTES

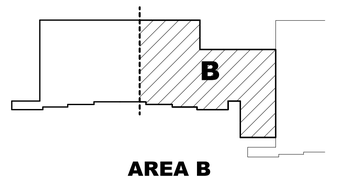
A	PARTITIONS TO BE "A6-A" UNLESS OTHERWISE NOTED. "A6-A" WALL TYPE TO INCLUDE 6" METAL STUD, SOUND ATTENUATION INSULATION (STC 45) AND 1 LAYER OF 5/8" GYPSUM BOARD ON EACH SIDE.
B	DOOR FRAMES ARE LOCATED 6" FROM FACE OF FINISH ON ADJACENT PERPENDICULAR WALL U.O.N.; EXCEPT IN THE CASE OF CORRIDORS WHERE THE DOOR IS CENTERED WITHIN THE END WALL OF CORRIDOR OR VESTIBULE
C	PROVIDE STUD INFILL AND PAINTED GYPSUM BOARD FINISH AT ALL EXTERIOR WALLS IN ADMINISTRATION AREAS
D	EXTERIOR FINISHES AT AREAS OF NEW CONSTRUCTION ARE TO MATCH THE EXISTING FINISHES; CONTACT 42 CES FOR ADDITIONAL INFORMATION
E	ALL OF THE METAL DECK AND STEEL STRUCTURE ON THE EAST SIDE OF THE EXISTING HANGAR AREA THAT SUPPORT THE NEW LEVEL 2 FLOOR SLAB ARE TO BE FIRE RATED. WITHIN THIS AREA, ALL CONCEALED STRUCTURAL BEAM AND METAL DECKING ARE TO HAVE SPRAY APPLIED CEMENTITIOUS FIREPROOFING AND ALL EXPOSED STRUCTURAL STEEL BEAM AND METAL DECKING ARE TO HAVE INTUMESCENT EPOXY FIRE PROTECTIVE COATING.
F	ALL OF THE METAL DECKING AND STEEL STRUCTURE SUPPORTING THE MECHANICAL MEZZANINE IS TO HAVE SPRAY APPLIED CEMENTITIOUS FIREPROOFING
G	FIRE RATING OF THE LEVEL 2 FLOOR STRUCTURE AS NOTED IN GENERAL NOTES E AND F ARE TO HAVE A TESTED AND APPROVED RATING THAT MATCHES THE FIRE RATING OF THE WALLS ENCLOSING THIS AREA PER NFPA 101 AND TSFPEWG
H	PROVIDE FIRE RETARDANT BLOCKING WITHIN WALLS FOR THE SECURE ATTACHMENT OF ALL WALL MOUNTED ITEMS, INCLUDING BUT NOT LIMITED TO: TOILET ACCESSORIES, GRAB BARS, FLAT PANEL DISPLAYS, VISUAL DISPLAYS / MARKER BOARDS, HANDRAILING, SHELVING, AND SUPPORTS AS REQUIRED.

KEYNOTES

103	DATA CABINET; RE: TELECOM
118	1 1/2" DIA. PAINTED STEEL GUARDRAIL; RE: A4/A-530 FOR DETAIL
123	NEW ROOFING SYSTEM: SINGLE PLY TPO MEMBRANE ON 1/2" PROTECTION BOARD OVER TWO LAYERS OF 3" RIGID INSULATION (R-25 MIN); SLOPE TO ROOF SCUPPERS, REFER F1/A-525
124	MECHANICAL EQUIPMENT; REFER TO MECHANICAL
136	2" EXPANSION JOINT; REFER TO STRUCTURAL
149	MECHANICAL CHASE
174	FIRE EXTINGUISHER CABINET; REFER TO LIFE SAFETY SHEETS
185	FIRE ALARM SYSTEM AND MASS NOTIFICATION SYSTEM CONTROL PANEL; REFER TO FIRE PROTECTION, SHEET FA110
315	ADA CODE COMPLIANT MODULAR ACCESS RAMP
448	ALUMINUM WALL TO FLOOR EXPANSION JOINT COVER, CONCEAL VERTICAL LEG BEHIND GYPSUM WALLBOARD; RE: INTERIORS FOR FLOOR FINISH

LEGEND

- NEW 1 HOUR FIRE RATED PARTITION
- EXISTING 1 HOUR FIRE RATED PARTITION
- E1 — GLAZING TYPE; RE: A-575
- A6-A — PARTITION TYPE; RE: A-570



AREA B
KEY PLAN

GRAPHIC SCALE

8 6 4 2 0 8 16

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

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

REGISTERED ARCHITECT
RICHARD G. PERRY
18592
STATE OF TEXAS
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: J. PERRY
DRAWN BY: J. MCKINNEY
CHECKED BY: M. HOLLEB
SUBMITTED BY: E. OLNESS
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201AE113
ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
ADDRESS No. 0000219

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PARTIAL FLOOR PLAN - LEVEL 2 - AREA B

SHEET ID
B1455
AE113

W912QR23R0003_Plans-0000

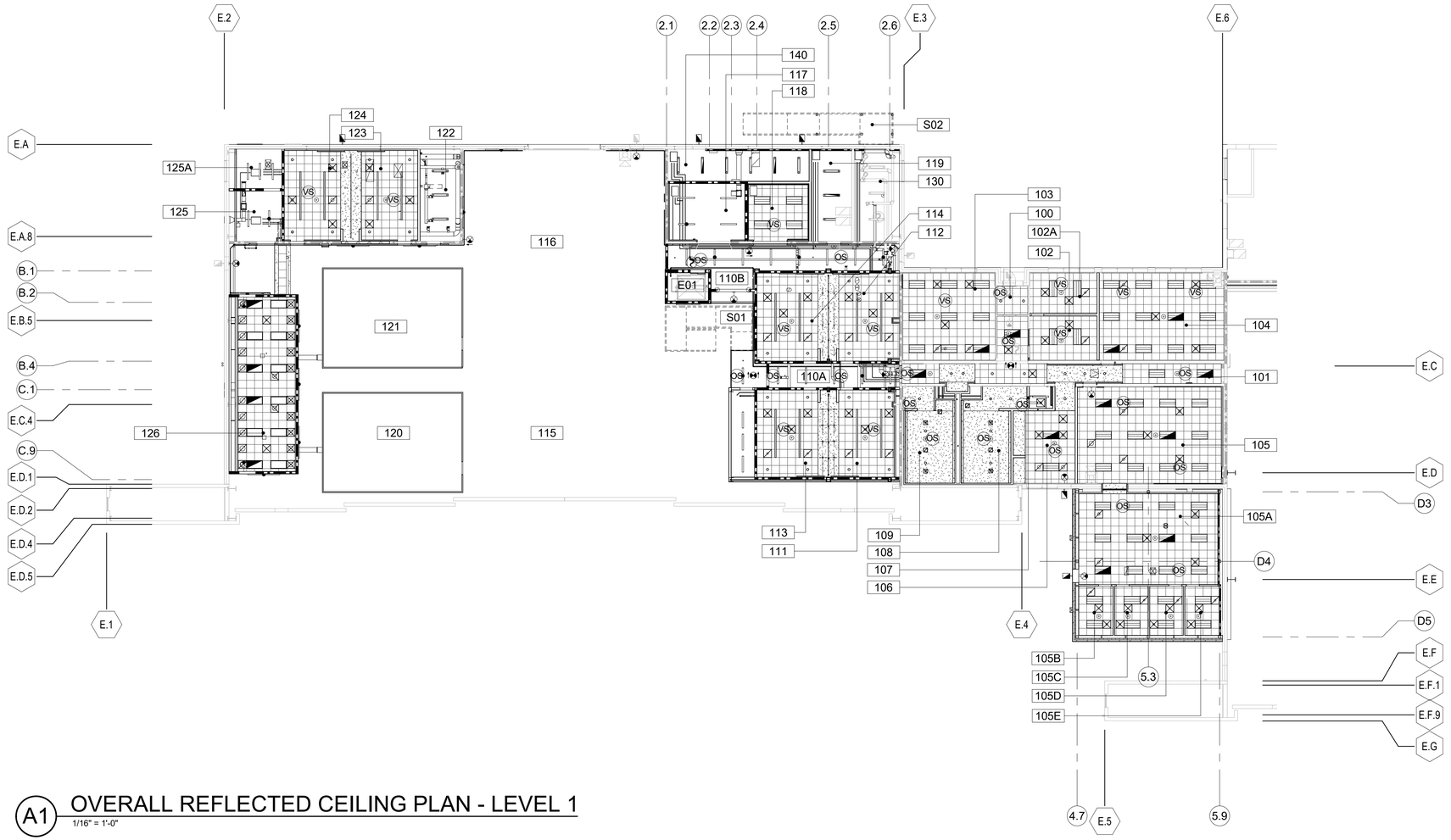
ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN

NAME	NUMBER
VESTIBULE	100
CORRIDOR	101
REGISTRARS	102
REGISTRARS OFFICE	102A
STUDENT WORK AREA	103
TRS	104
ADMINISTRATION	105
ADMINISTRATION	105A
WELLNESS	105B
OFFICE	105C
OFFICE	105D
OFFICE	105E
BREAK ROOM	106
JANITOR'S	107

NAME	NUMBER
WOMEN'S RR	108
MEN'S RR	109
CORRIDOR	110A
CORRIDOR	110B
CIRCULATION	110C
CIRCULATION	110D
CLASSROOM	111
MULTI-PURPOSE	112
CLASSROOM	113
MULTI-PURPOSE	114
IAST	115
STORAGE	115A
AIE PTT	116
CPT	117
WPT	118

NAME	NUMBER
TELECOM	119
OFT	120
OFT	121
TOOL ROOM	122
MULTI-PURPOSE	123
MULTI-PURPOSE	124
EDS	125
EDS COMPUTER	125A
OFT COMPUTER	126
FIRE ROOM	130
ELECTRICAL	140
ELEVATOR	E01
STAIR 1	S01
STAIR 2	S02
TOTAL:	



A1 OVERALL REFLECTED CEILING PLAN - LEVEL 1

1/16" = 1'-0"

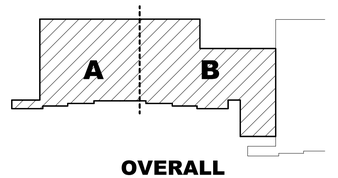
GENERAL NOTES

A	REFER TO AE101 THRU AE113 FOR FLOOR PLANS
B	REFER TO A-570 FOR PARTITION TYPES AND DETAILS
C	REFER TO IN101 THRU IN112 FOR FINISH PLANS. REFER TO I-602 FOR FINISH SCHEDULE
D	ALL GYPSUM BOARD AND ACOUSTICAL CEILINGS TO BE 9'-0" ABOVE FINISH FLOOR UNLESS OTHERWISE NOTED
E	PROVIDE HOLD-DOWN CLIPS AT ALL ACOUSTICAL CEILING TILE WITHIN 10'-0" OF AN EXTERIOR DOOR
F	AT CONDITIONS WHERE LIGHTS, SPRINKLERS, OR OTHER DEVICES ARE COINCIDENT ON PLAN, FIXTURES ARE AT DIFFERENT LOCATIONS. REFER TO ELECTRICAL AND FIRE PROTECTION FOR FIXTURE MOUNTING HEIGHTS
G	EXTERIOR FINISHES AT AREAS OF NEW CONSTRUCTION ARE TO MATCH THE EXISTING FINISHES; CONTACT 42 CES FOR ADDITIONAL INFORMATION
H	FIRE RATING OF THE LEVEL 2 FLOOR SLAB AND LEVEL 2 CEILINGS ARE TO MATCH THE FIRE RATING OF THE WALLS PER NFPA 101 AND TSFPEWG

KEYNOTES

REFLECTED CEILING PLAN LEGEND

- GYPSUM BOARD CEILING AS SCHEDULED; CONTROL JOINT
- 2'x2' ACOUSTICAL CEILING TILE AS SCHEDULED CENTERED IN SPACE AS INDICATED
- LINEAR SLOT DIFFUSERS
- SPRINKLERS, SMOKE DETECTORS, AND SPEAKER STROBES; REFER TO FIRE PROTECTION DRAWINGS.
- LIGHT FIXTURE; REFER TO ELECTRICAL DRAWINGS.
- OCCUPANCY/VACANCY SENSOR; REFER TO ELECTRICAL DRAWINGS.
- EXIT LIGHT FIXTURE; REFER TO ELECTRICAL DRAWINGS.
- SUPPLY AIR DIFFUSERS; REFER TO MECHANICAL DRAWINGS.
- RETURN AIR GRILLE; REFER TO MECHANICAL DRAWINGS.
- SPEAKER; REFER TO TELECOMMUNICATION DRAWINGS
- WAP — WIRELESS ACCESS POINT; REFER TO TELECOMMUNICATION DRAWINGS
- LADDER CABLE TRAY; REFER TO TELECOMMUNICATION DRAWINGS
- FIXED POSITION SECURITY CAMERA; REFER TO TELECOMMUNICATION DRAWINGS
- CEILING ACCESS PANEL



OVERALL KEY PLAN

GRAPHIC SCALE

16 12 8 4 0 16 32

SCALE: 1/16"=1'-0"

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

REGISTERED ARCHITECT RICHARD G. PERRY 16592 STATE OF TEXAS 23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE: AE
FILE NAME: SXHT219201AE121

DESIGNED BY: J. PERRY
DRAWN BY: J. MCKINNEY
CHECKED BY: M. HOLLEB
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

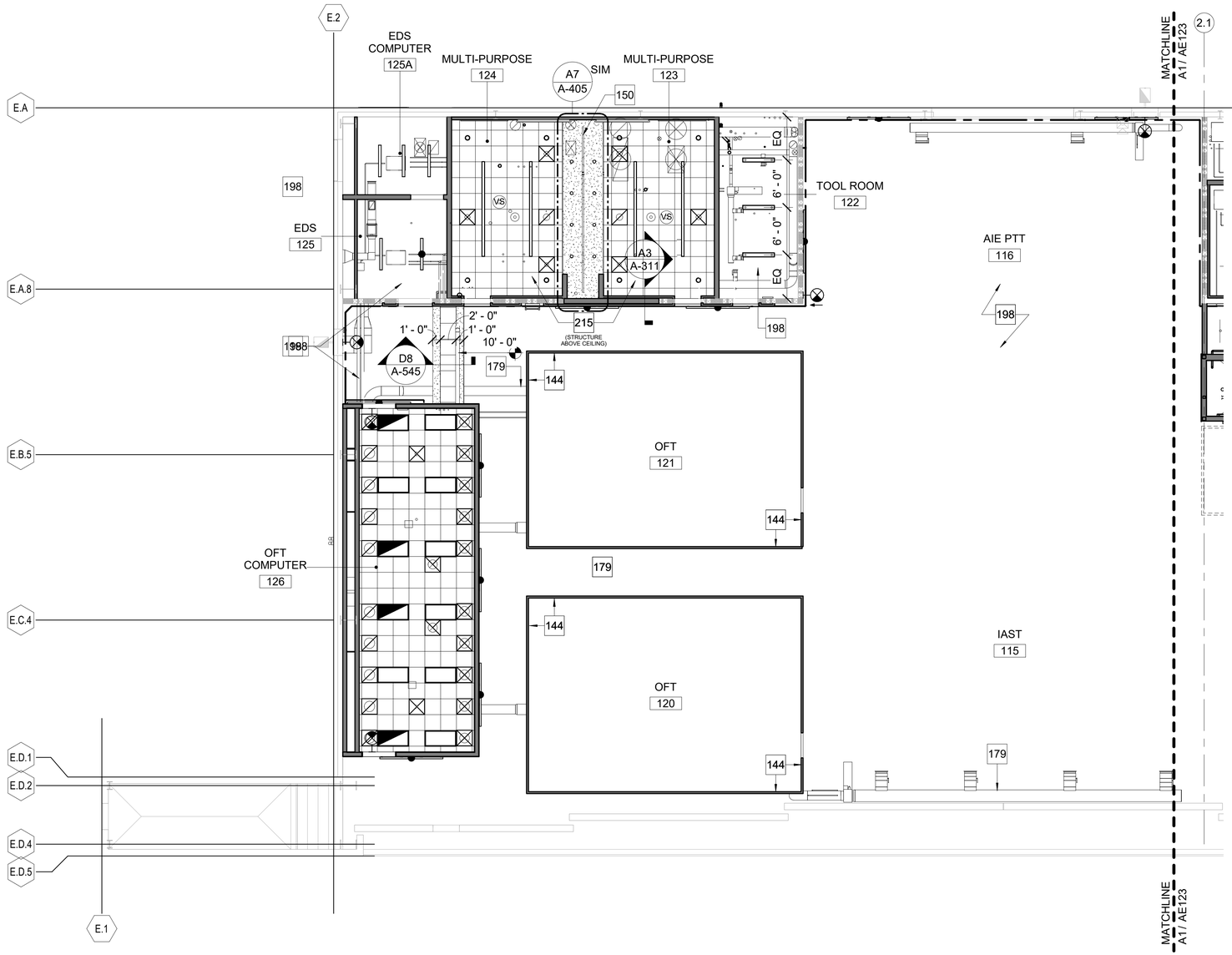
Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS TX REGISTRY #: F-2966

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
OVERALL REFLECTED CEILING PLAN - LEVEL 1

SHEET ID
B1455
AE121

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



A1 PARTIAL REFLECTED CEILING PLAN - LEVEL 1 - AREA A

1/8" = 1'-0"

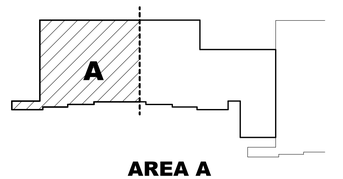
KEYNOTES	
144	PRE-MANUFACTURED LIGHT-TIGHT ENCLOSURE
150	CEILING TRACK FOR OPERABLE PARTITION; REFER TO D1/A-510 FOR TRACK DETAIL AND STRUCTURAL DETAILS FOR PARTITION SUPPORT
179	EXPOSED UNFINISHED SPIRAL DUCT WITH INTERIOR LINER, PAINT SUPPORT HANGERS WHITE; REFER TO MECHANICAL
198	OPEN TO STRUCTURE
215	CONCEALED STRUCTURAL BEAM AND METAL DECKING WITH SPRAY APPLIED CEMENTITIOUS FIREPROOFING

GENERAL NOTES

A	REFER TO AE101 THRU AE113 FOR FLOOR PLANS
B	REFER TO A-570 FOR PARTITION TYPES AND DETAILS
C	REFER TO IN101 THRU IN112 FOR FINISH PLANS. REFER TO I-602 FOR FINISH SCHEDULE
D	ALL GYPSUM BOARD AND ACOUSTICAL CEILINGS TO BE 9'-0" ABOVE FINISH FLOOR UNLESS OTHERWISE NOTED
E	PROVIDE HOLD-DOWN CLIPS AT ALL ACOUSTICAL CEILING TILE WITHIN 10'-0" OF AN EXTERIOR DOOR
F	AT CONDITIONS WHERE LIGHTS, SPRINKLERS, OR OTHER DEVICES ARE COINCIDENT ON PLAN, FIXTURES ARE AT DIFFERENT LOCATIONS. REFER TO ELECTRICAL AND FIRE PROTECTION FOR FIXTURE MOUNTING HEIGHTS
G	EXTERIOR FINISHES AT AREAS OF NEW CONSTRUCTION ARE TO MATCH THE EXISTING FINISHES; CONTACT 42 CES FOR ADDITIONAL INFORMATION
H	FIRE RATING OF THE LEVEL 2 FLOOR SLAB AND LEVEL 2 CEILINGS ARE TO MATCH THE FIRE RATING OF THE WALLS PER NFPA 101 AND TSFPEWG

REFLECTED CEILING PLAN LEGEND

- GYPSUM BOARD CEILING AS SCHEDULED; CONTROL JOINT
- 2'x2' ACOUSTICAL CEILING TILE AS SCHEDULED CENTERED IN SPACE AS INDICATED
- LINEAR SLOT DIFFUSERS
- SPRINKLERS, SMOKE DETECTORS, AND SPEAKER STROBES; REFER TO FIRE PROTECTION DRAWINGS.
- LIGHT FIXTURE; REFER TO ELECTRICAL DRAWINGS.
- OS W VS OS N — OCCUPANCY/VACANCY SENSOR; REFER TO ELECTRICAL DRAWINGS.
- EXIT LIGHT FIXTURE; REFER TO ELECTRICAL DRAWINGS.
- SUPPLY AIR DIFFUSERS; REFER TO MECHANICAL DRAWINGS.
- RETURN AIR GRILLE; REFER TO MECHANICAL DRAWINGS.
- SPEAKER; REFER TO TELECOMMUNICATION DRAWINGS
- WAP — WIRELESS ACCESS POINT; REFER TO TELECOMMUNICATION DRAWINGS
- LADDER CABLE TRAY; REFER TO TELECOMMUNICATION DRAWINGS
- FIXED POSITION SECURITY CAMERA; REFER TO TELECOMMUNICATION DRAWINGS
- CEILING ACCESS PANEL



AREA A KEY PLAN

GRAPHIC SCALE

8 6 4 2 0 8 16

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

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

REGISTERED ARCHITECT RICHARD G. PERRY 18592 STATE OF TEXAS 23 NOV 2022

TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: J. PERRY
DRAWN BY: J. MCKINNEY
CHECKED BY: M. HOLLEB
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201AE122

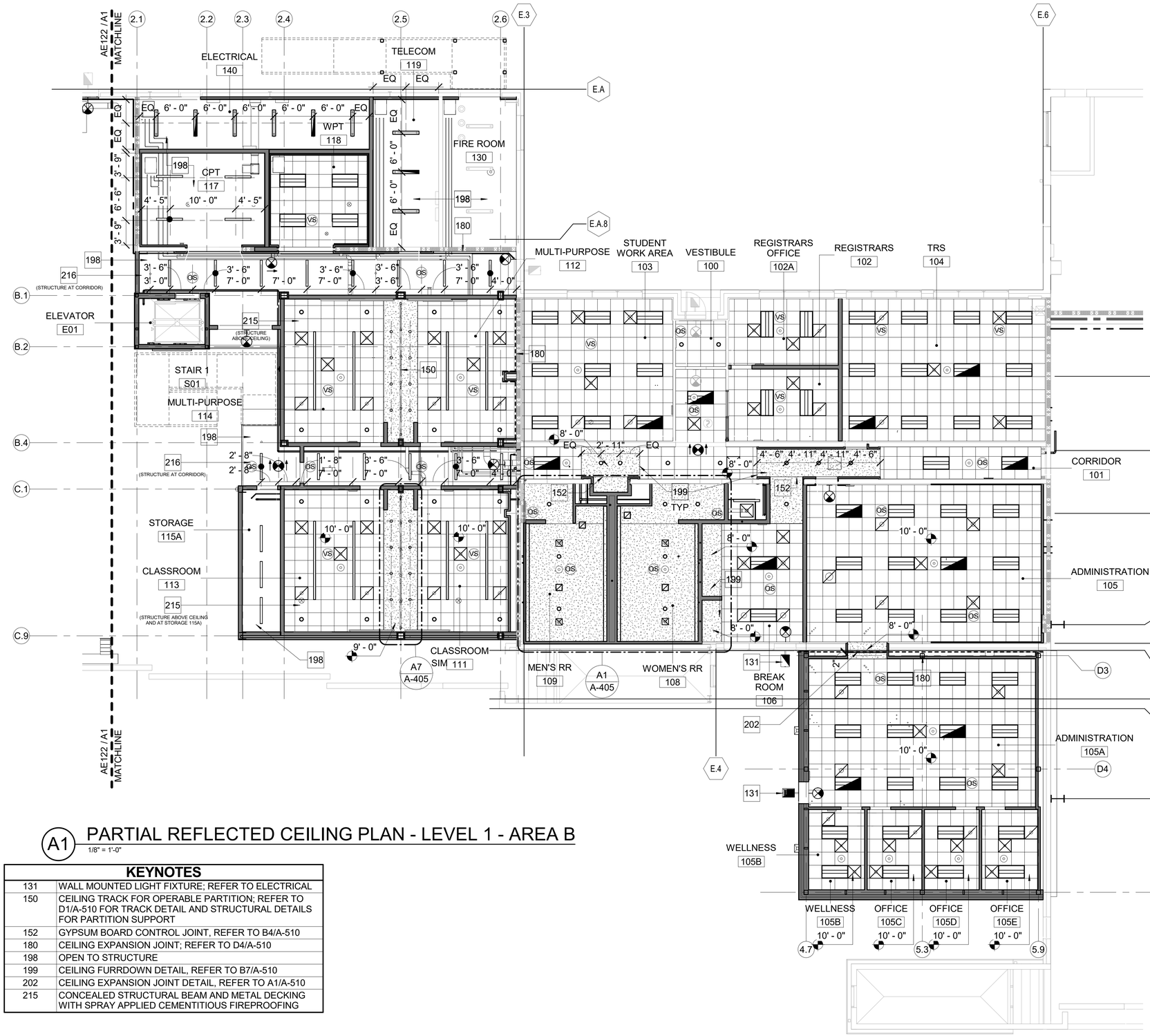
US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS Tel 817.820.8000

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, PZ#: 496395
PARTIAL REFLECTED CEILING PLAN - LEVEL 1 - AREA A

SHEET ID
B1455
AE122

W912QR23R0003_Plans-0000



A1 PARTIAL REFLECTED CEILING PLAN - LEVEL 1 - AREA B

1/8" = 1'-0"

KEYNOTES

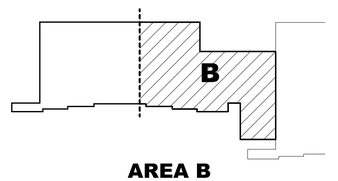
131	WALL MOUNTED LIGHT FIXTURE; REFER TO ELECTRICAL
150	CEILING TRACK FOR OPERABLE PARTITION; REFER TO D1/A-510 FOR TRACK DETAIL AND STRUCTURAL DETAILS FOR PARTITION SUPPORT
152	GYPSUM BOARD CONTROL JOINT, REFER TO B4/A-510
180	CEILING EXPANSION JOINT; REFER TO D4/A-510
198	OPEN TO STRUCTURE
199	CEILING FURRDOWN DETAIL, REFER TO B7/A-510
202	CEILING EXPANSION JOINT DETAIL, REFER TO A1/A-510
215	CONCEALED STRUCTURAL BEAM AND METAL DECKING WITH SPRAY APPLIED CEMENTITIOUS FIREPROOFING

GENERAL NOTES

A	REFER TO AE101 THRU AE113 FOR FLOOR PLANS
B	REFER TO A-570 FOR PARTITION TYPES AND DETAILS
C	REFER TO IN101 THRU IN112 FOR FINISH PLANS. REFER TO I-602 FOR FINISH SCHEDULE
D	ALL GYPSUM BOARD AND ACOUSTICAL CEILINGS TO BE 9'-0" ABOVE FINISH FLOOR UNLESS OTHERWISE NOTED
E	PROVIDE HOLD-DOWN CLIPS AT ALL ACOUSTICAL CEILING TILE WITHIN 10'-0" OF AN EXTERIOR DOOR
F	AT CONDITIONS WHERE LIGHTS, SPRINKLERS, OR OTHER DEVICES ARE COINCIDENT ON PLAN, FIXTURES ARE AT DIFFERENT LOCATIONS. REFER TO ELECTRICAL AND FIRE PROTECTION FOR FIXTURE MOUNTING HEIGHTS
G	EXTERIOR FINISHES AT AREAS OF NEW CONSTRUCTION ARE TO MATCH THE EXISTING FINISHES; CONTACT 42 CES FOR ADDITIONAL INFORMATION
H	FIRE RATING OF THE LEVEL 2 FLOOR SLAB AND LEVEL 2 CEILINGS ARE TO MATCH THE FIRE RATING OF THE WALLS PER NFPA 101 AND TSFPEWG

REFLECTED CEILING PLAN LEGEND

- GYPSUM BOARD CEILING AS SCHEDULED; CONTROL JOINT
- 2'x2' ACOUSTICAL CEILING TILE AS SCHEDULED CENTERED IN SPACE AS INDICATED
- LINEAR SLOT DIFFUSERS
- SPRINKLERS, SMOKE DETECTORS, AND SPEAKER STROBES; REFER TO FIRE PROTECTION DRAWINGS.
- LIGHT FIXTURE; REFER TO ELECTRICAL DRAWINGS.
- OCCUPANCY/VACANCY SENSOR; REFER TO ELECTRICAL DRAWINGS.
- EXIT LIGHT FIXTURE; REFER TO ELECTRICAL DRAWINGS.
- SUPPLY AIR DIFFUSERS; REFER TO MECHANICAL DRAWINGS.
- RETURN AIR GRILLE; REFER TO MECHANICAL DRAWINGS.
- SPEAKER; REFER TO TELECOMMUNICATION DRAWINGS
- WAP — WIRELESS ACCESS POINT; REFER TO TELECOMMUNICATION DRAWINGS
- LADDER CABLE TRAY; REFER TO TELECOMMUNICATION DRAWINGS
- FIXED POSITION SECURITY CAMERA; REFER TO TELECOMMUNICATION DRAWINGS
- CEILING ACCESS PANEL



AREA B
KEY PLAN

GRAPHIC SCALE

8 6 4 2 0 8 16

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

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

REGISTERED ARCHITECT RICHARD G. PERRY 18592 STATE OF TEXAS
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201AE123

DESIGNED BY: J. PERRY
DRAWN BY: J. MCKINNEY
CHECKED BY: M. HOLLEB
SUBMITTED BY: E. OLNESS
DATE: ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

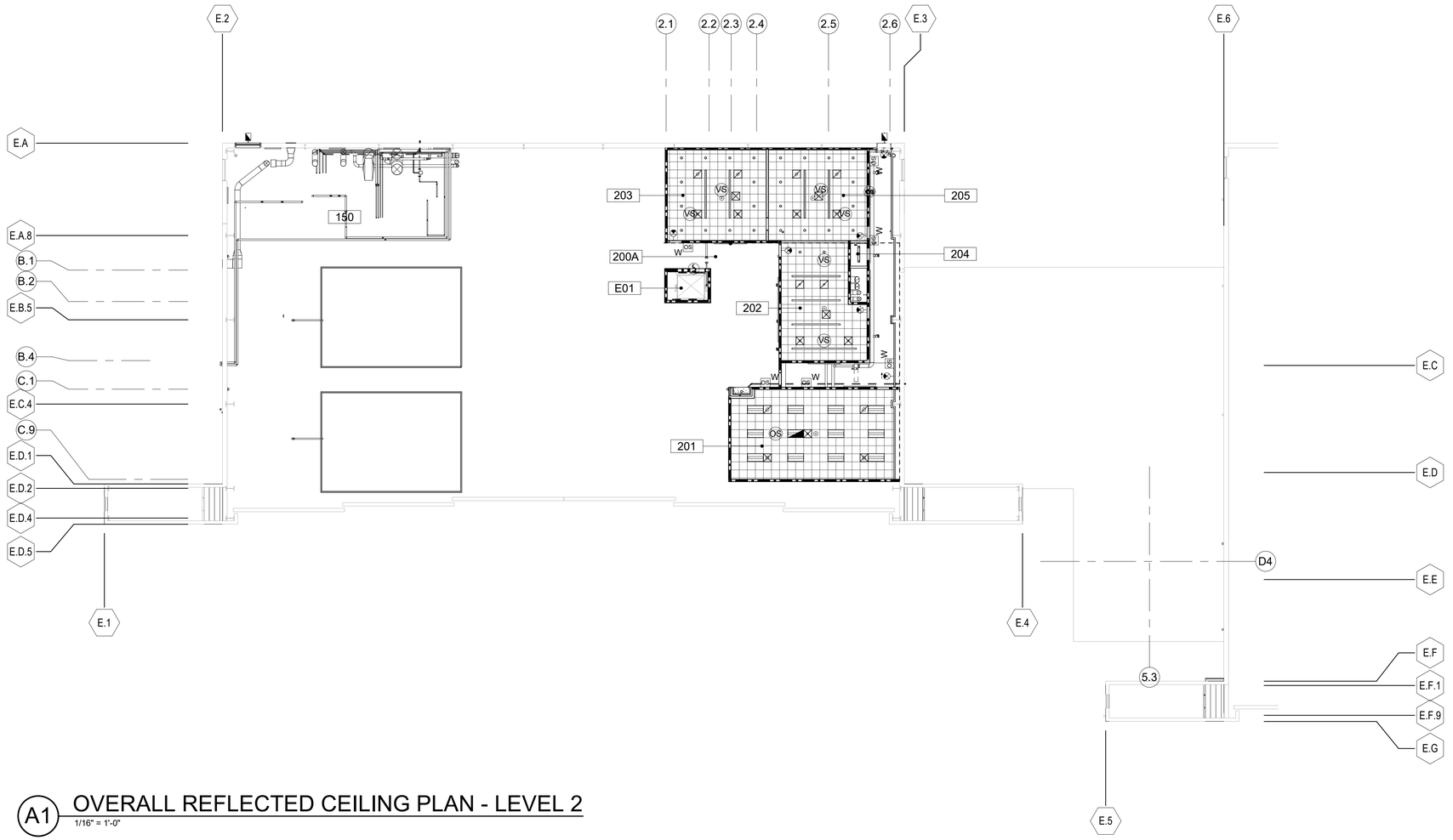
Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS PROJECT NUMBER

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PARTIAL REFLECTED CEILING PLAN - LEVEL 1 - AREA B

SHEET ID
B1455
AE123

W912QR23R0003_Plans-0000

NAME	NUMBER
OFT	120
OFT	121
MECH MEZZ	150
CIRCULATION	200A
CORRIDOR	200B
TSC	201
CLASS	202
MISSION PLANNING	203
COMM CHASE	204
MISSION PLANNING	205
TOTAL:	



A1 OVERALL REFLECTED CEILING PLAN - LEVEL 2

1/16" = 1'-0"

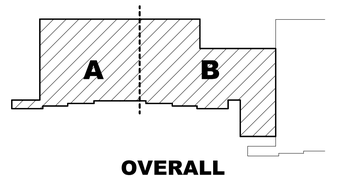
GENERAL NOTES

A	REFER TO AE101 THRU AE113 FOR FLOOR PLANS
B	REFER TO A-570 FOR PARTITION TYPES AND DETAILS
C	REFER TO IN101 THRU IN112 FOR FINISH PLANS. REFER TO I-602 FOR FINISH SCHEDULE
D	ALL GYPSUM BOARD AND ACOUSTICAL CEILINGS TO BE 9'-0" ABOVE FINISH FLOOR UNLESS OTHERWISE NOTED
E	PROVIDE HOLD-DOWN CLIPS AT ALL ACOUSTICAL CEILING TILE WITHIN 10'-0" OF AN EXTERIOR DOOR
F	AT CONDITIONS WHERE LIGHTS, SPRINKLERS, OR OTHER DEVICES ARE COINCIDENT ON PLAN, FIXTURES ARE AT DIFFERENT LOCATIONS. REFER TO ELECTRICAL AND FIRE PROTECTION FOR FIXTURE MOUNTING HEIGHTS
G	EXTERIOR FINISHES AT AREAS OF NEW CONSTRUCTION ARE TO MATCH THE EXISTING FINISHES; CONTACT 42 CES FOR ADDITIONAL INFORMATION
H	FIRE RATING OF THE LEVEL 2 FLOOR SLAB AND LEVEL 2 CEILINGS ARE TO MATCH THE FIRE RATING OF THE WALLS PER NFPA 101 AND TSFPEWG

KEYNOTES

REFLECTED CEILING PLAN LEGEND

- GYPSUM BOARD CEILING AS SCHEDULED; CONTROL JOINT
- 2'x2' ACOUSTICAL CEILING TILE AS SCHEDULED CENTERED IN SPACE AS INDICATED
- LINEAR SLOT DIFFUSERS
- SPRINKLERS, SMOKE DETECTORS, AND SPEAKER STROBES; REFER TO FIRE PROTECTION DRAWINGS.
- LIGHT FIXTURE; REFER TO ELECTRICAL DRAWINGS.
- OCCUPANCY/VACANCY SENSOR; REFER TO ELECTRICAL DRAWINGS.
- EXIT LIGHT FIXTURE; REFER TO ELECTRICAL DRAWINGS.
- SUPPLY AIR DIFFUSERS; REFER TO MECHANICAL DRAWINGS.
- RETURN AIR GRILLE; REFER TO MECHANICAL DRAWINGS.
- SPEAKER; REFER TO TELECOMMUNICATION DRAWINGS
- WAP — WIRELESS ACCESS POINT; REFER TO TELECOMMUNICATION DRAWINGS
- LADDER CABLE TRAY; REFER TO TELECOMMUNICATION DRAWINGS
- FIXED POSITION SECURITY CAMERA; REFER TO TELECOMMUNICATION DRAWINGS
- CEILING ACCESS PANEL



OVERALL KEY PLAN

GRAPHIC SCALE

16 12 8 4 0 16 32

SCALE: 1/16"=1'-0"

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

REGISTERED ARCHITECT RICHARD G. PERRY 16592 STATE OF TEXAS 23 NOV 2022

TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: J. PERRY
DRAWN BY: J. MCKINNEY
CHECKED BY: M. HOLLEB
SUBMITTED BY: E. OLMESS
DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201AE131
ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
Phone: 817.820.8000 Fax: 817.820.8001

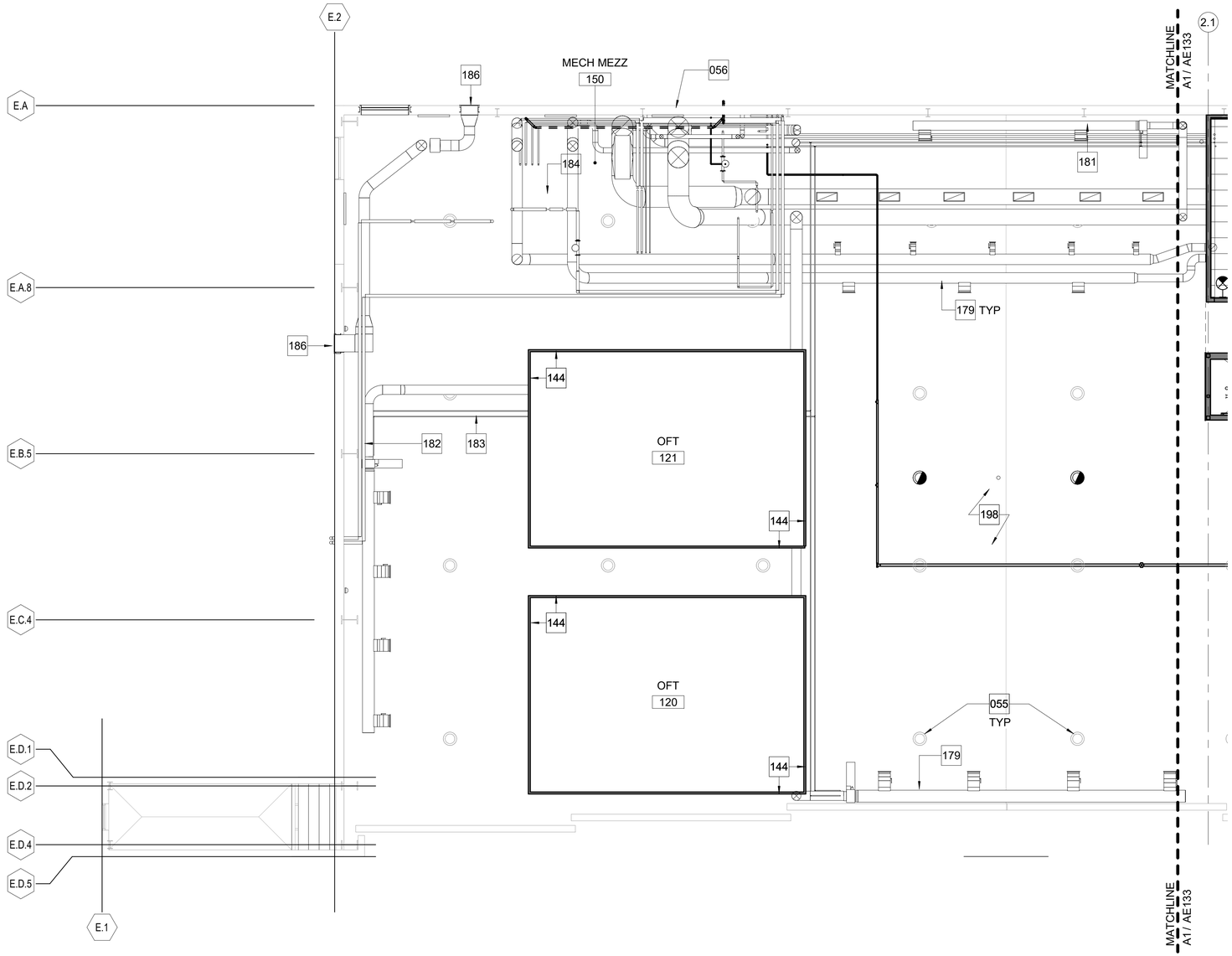
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
OVERALL REFLECTED CEILING PLAN - LEVEL 2

SHEET ID
B1455
AE131

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN



A1 PARTIAL REFLECTED CEILING PLAN - LEVEL 2 - AREA A

1/8" = 1'-0"

KEYNOTES

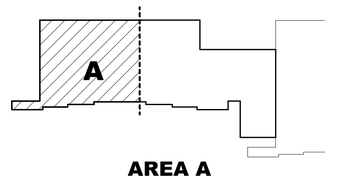
056	EXISTING STRUCTURE BEYOND; REFER TO STRUCTURAL
144	PRE-MANUFACTURED LIGHT-TIGHT ENCLOSURE
181	CABLE TRAY; REFER TO TELECOM
182	CHILLED WATER PIPE; REFER TO MECHANICAL
183	HOT WATER PIPE; REFER TO MECHANICAL
184	EXISTING NATURAL GAS PIPE; REFER TO PLUMBING
186	NEW WALL LOUVER; REFER TO A-610 LOUVER SCHEDULE AND MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION
198	OPEN TO STRUCTURE

GENERAL NOTES

A	REFER TO AE101 THRU AE113 FOR FLOOR PLANS
B	REFER TO A-570 FOR PARTITION TYPES AND DETAILS
C	REFER TO IN101 THRU IN112 FOR FINISH PLANS. REFER TO I-602 FOR FINISH SCHEDULE
D	ALL GYPSUM BOARD AND ACOUSTICAL CEILINGS TO BE 9'-0" ABOVE FINISH FLOOR UNLESS OTHERWISE NOTED
E	PROVIDE HOLD-DOWN CLIPS AT ALL ACOUSTICAL CEILING TILE WITHIN 10'-0" OF AN EXTERIOR DOOR
F	AT CONDITIONS WHERE LIGHTS, SPRINKLERS, OR OTHER DEVICES ARE COINCIDENT ON PLAN, FIXTURES ARE AT DIFFERENT LOCATIONS. REFER TO ELECTRICAL AND FIRE PROTECTION FOR FIXTURE MOUNTING HEIGHTS
G	EXTERIOR FINISHES AT AREAS OF NEW CONSTRUCTION ARE TO MATCH THE EXISTING FINISHES; CONTACT 42 CES FOR ADDITIONAL INFORMATION
H	FIRE RATING OF THE LEVEL 2 FLOOR SLAB AND LEVEL 2 CEILINGS ARE TO MATCH THE FIRE RATING OF THE WALLS PER NFPA 101 AND TSFPEWG

REFLECTED CEILING PLAN LEGEND

- GYPSUM BOARD CEILING AS SCHEDULED; CONTROL JOINT
- 2'x2' ACOUSTICAL CEILING TILE AS SCHEDULED CENTERED IN SPACE AS INDICATED
- LINEAR SLOT DIFFUSERS
- SPRINKLERS, SMOKE DETECTORS, AND SPEAKER STROBES; REFER TO FIRE PROTECTION DRAWINGS.
- LIGHT FIXTURE; REFER TO ELECTRICAL DRAWINGS.
- OS W VS OS N — OCCUPANCY/VACANCY SENSOR; REFER TO ELECTRICAL DRAWINGS.
- EXIT LIGHT FIXTURE; REFER TO ELECTRICAL DRAWINGS.
- SUPPLY AIR DIFFUSERS; REFER TO MECHANICAL DRAWINGS.
- RETURN AIR GRILLE; REFER TO MECHANICAL DRAWINGS.
- SPEAKER; REFER TO TELECOMMUNICATION DRAWINGS
- WAP — WIRELESS ACCESS POINT; REFER TO TELECOMMUNICATION DRAWINGS
- LADDER CABLE TRAY; REFER TO TELECOMMUNICATION DRAWINGS
- FIXED POSITION SECURITY CAMERA; REFER TO TELECOMMUNICATION DRAWINGS
- CEILING ACCESS PANEL



AREA A
KEY PLAN

GRAPHIC SCALE

8 6 4 2 0 8 16

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

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

REGISTERED ARCHITECT RICHARD G. PERRY 18592 STATE OF TEXAS 23 NOV 2022

TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: J. PERRY
DRAWN BY: J. MCKINNEY
CHECKED BY: M. HOLLEB
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201AE132

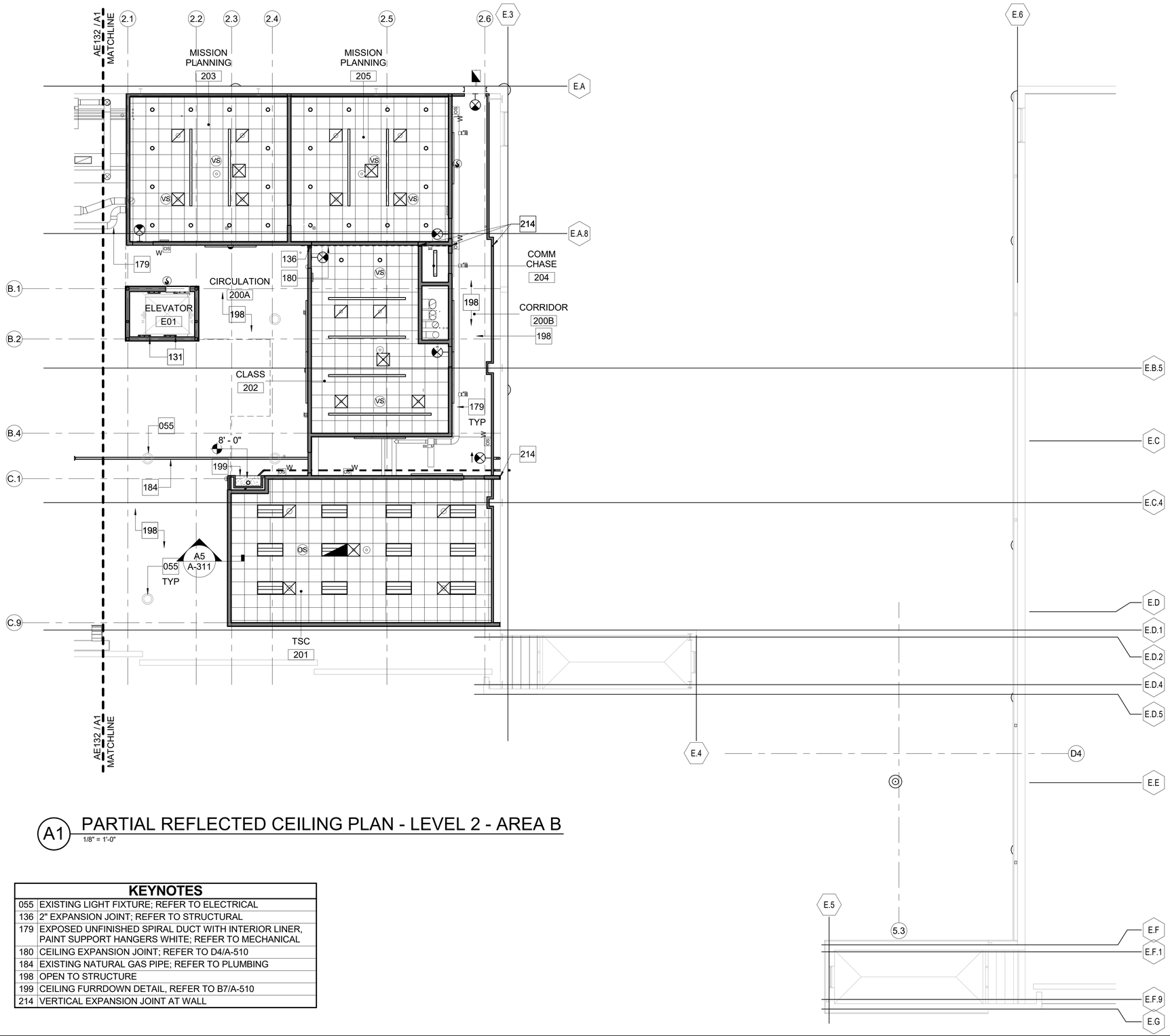
US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS Tel 972/503-3000

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PARTIAL REFLECTED CEILING PLAN - LEVEL 2 - AREA A

SHEET ID
B1455
AE132

W912QR23R0003_Plans-0000



A1 PARTIAL REFLECTED CEILING PLAN - LEVEL 2 - AREA B

1/8" = 1'-0"

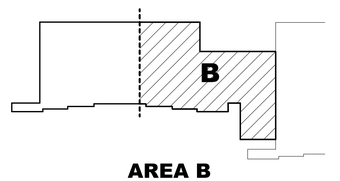
KEYNOTES	
055	EXISTING LIGHT FIXTURE; REFER TO ELECTRICAL
136	2" EXPANSION JOINT; REFER TO STRUCTURAL
179	EXPOSED UNFINISHED SPIRAL DUCT WITH INTERIOR LINER, PAINT SUPPORT HANGERS WHITE; REFER TO MECHANICAL
180	CEILING EXPANSION JOINT; REFER TO D4/A-510
184	EXISTING NATURAL GAS PIPE; REFER TO PLUMBING
198	OPEN TO STRUCTURE
199	CEILING FURRDOWN DETAIL, REFER TO B7/A-510
214	VERTICAL EXPANSION JOINT AT WALL

GENERAL NOTES

A	REFER TO AE101 THRU AE113 FOR FLOOR PLANS
B	REFER TO A-570 FOR PARTITION TYPES AND DETAILS
C	REFER TO IN101 THRU IN112 FOR FINISH PLANS. REFER TO I-602 FOR FINISH SCHEDULE
D	ALL GYPSUM BOARD AND ACOUSTICAL CEILINGS TO BE 9'-0" ABOVE FINISH FLOOR UNLESS OTHERWISE NOTED
E	PROVIDE HOLD-DOWN CLIPS AT ALL ACOUSTICAL CEILING TILE WITHIN 10'-0" OF AN EXTERIOR DOOR
F	AT CONDITIONS WHERE LIGHTS, SPRINKLERS, OR OTHER DEVICES ARE COINCIDENT ON PLAN, FIXTURES ARE AT DIFFERENT LOCATIONS. REFER TO ELECTRICAL AND FIRE PROTECTION FOR FIXTURE MOUNTING HEIGHTS
G	EXTERIOR FINISHES AT AREAS OF NEW CONSTRUCTION ARE TO MATCH THE EXISTING FINISHES; CONTACT 42 CES FOR ADDITIONAL INFORMATION
H	FIRE RATING OF THE LEVEL 2 FLOOR SLAB AND LEVEL 2 CEILINGS ARE TO MATCH THE FIRE RATING OF THE WALLS PER NFPA 101 AND TSFPEWG

REFLECTED CEILING PLAN LEGEND

- GYPSUM BOARD CEILING AS SCHEDULED; CONTROL JOINT
- 2'x2' ACOUSTICAL CEILING TILE AS SCHEDULED CENTERED IN SPACE AS INDICATED
- LINEAR SLOT DIFFUSERS
- SPRINKLERS, SMOKE DETECTORS, AND SPEAKER STROBES; REFER TO FIRE PROTECTION DRAWINGS.
- LIGHT FIXTURE; REFER TO ELECTRICAL DRAWINGS.
- OS W VS OS N — OCCUPANCY/VACANCY SENSOR; REFER TO ELECTRICAL DRAWINGS.
- EXIT LIGHT FIXTURE; REFER TO ELECTRICAL DRAWINGS.
- SUPPLY AIR DIFFUSERS; REFER TO MECHANICAL DRAWINGS.
- RETURN AIR GRILLE; REFER TO MECHANICAL DRAWINGS.
- SPEAKER; REFER TO TELECOMMUNICATION DRAWINGS
- WAP — WIRELESS ACCESS POINT; REFER TO TELECOMMUNICATION DRAWINGS
- LADDER CABLE TRAY; REFER TO TELECOMMUNICATION DRAWINGS
- FIXED POSITION SECURITY CAMERA; REFER TO TELECOMMUNICATION DRAWINGS
- CEILING ACCESS PANEL



AREA B
KEY PLAN

GRAPHIC SCALE

8 6 4 2 0 8 16

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

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

REGISTERED ARCHITECT RICHARD G. PERRY 16592 STATE OF TEXAS 23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201AE133
DESIGNED BY: J. PERRY
DRAWN BY: J. MCKINNEY
CHECKED BY: M. HOLLEB
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS TBPE/TBPELS F-2966

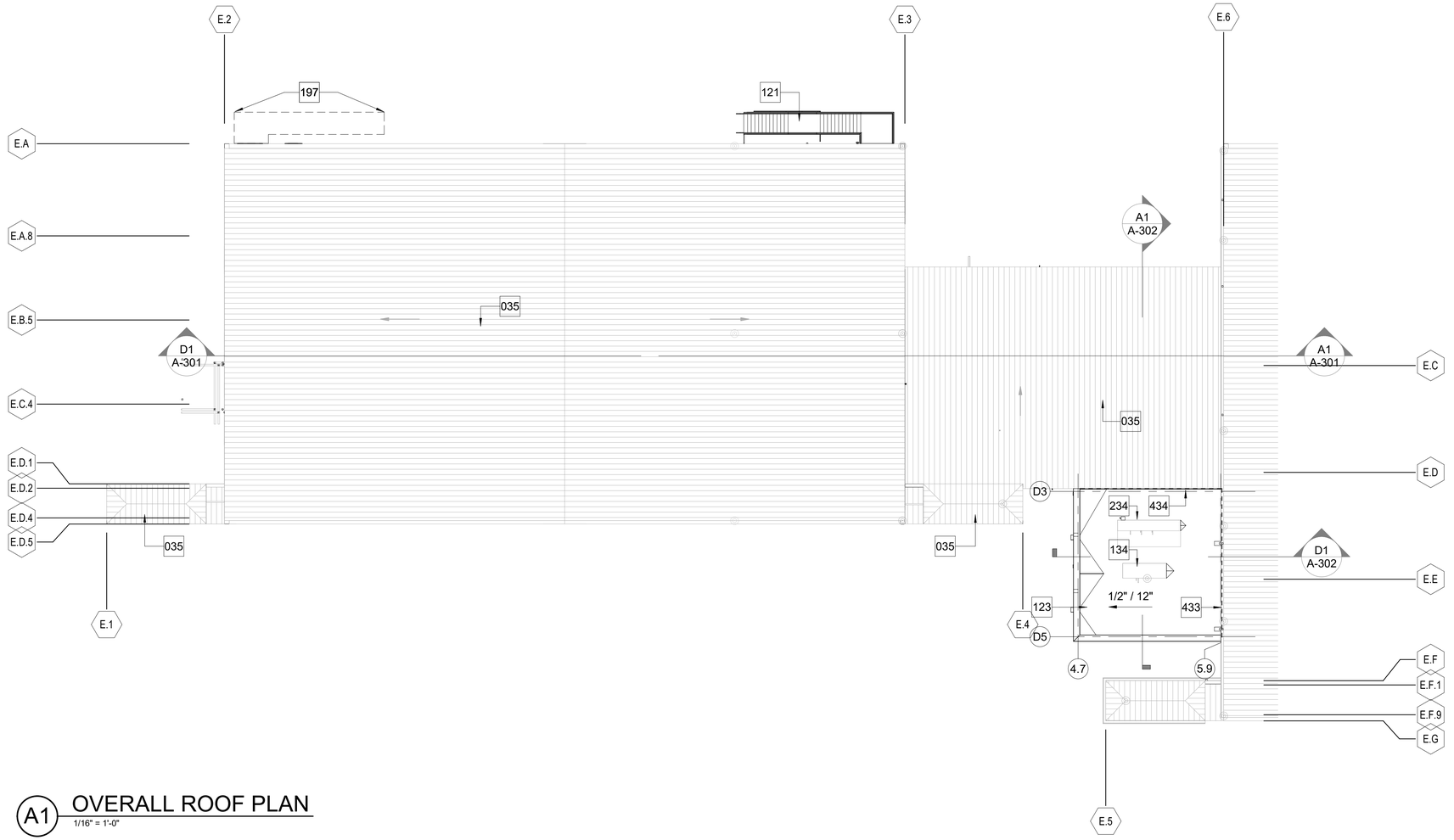
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PARTIAL REFLECTED CEILING PLAN - LEVEL 2 - AREA B

SHEET ID
B1455
AE133

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN



A1 OVERALL ROOF PLAN
1/16" = 1'-0"

GENERAL NOTES - ROOF PLANS

A	COORDINATE AND VERIFY ALL DIMENSIONS OF ROOF CURBS WITH MECHANICAL EQUIPMENT AND CERTIFIED SHOP DRAWINGS OF PURCHASED EQUIPMENT
B	ALL PREFABRICATED INSULATED ROOF CURBS SHALL BE FABRICATED WITH SLOPING BOTTOM TO MATCH ROOF SLOPE, PROVIDING A LEVEL TOP TO FACILITATE INSTALLATION OF MECHANICAL EQUIPMENT AND/OR FLASHING REQUIREMENTS
C	TOP OF ROOF CURBS TO BE A MINIMUM OF 24 INCHES ABOVE THE ROOF PLANE SLOPE AT HIGH POINT
D	REFER ELECTRICAL DRAWINGS FOR LIGHTNING PROTECTION PLAN AND DETAILS
E	ROOF CRICKETS TO SLOPE AT 1/2":12"

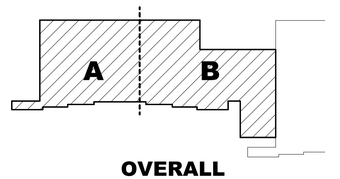
KEYNOTES

035	EXISTING ROOF, GUTTER, AND DOWNSPOUT TO REMAIN
197	BID OPTION 1: EXTERIOR STAIR FOR ACCESS TO MECHANICAL MEZZANINE; REFER TO SHEET A-424 FOR ADDITIONAL INFORMATION
433	EXPANSION JOINT AT EAST WALL OF ADDITION; REFER TO A4/A-310

ROOF PLAN LEGEND

LIGHTNING ROD; REFER TO ELECTRICAL FOR ADDITIONAL INFORMATION

DIRECTION OF ROOF SLOPE ON EXISTING ROOF



OVERALL KEY PLAN

GRAPHIC SCALE

16 12 8 4 0 16 32

SCALE: 1/16"=1'-0"

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

REGISTERED ARCHITECT
RICHARD G. PERRY
18592
STATE OF TEXAS
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: J. PERRY
DRAWN BY: J. MCKINNEY
CHECKED BY: M. HOLLEB
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201AE141

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

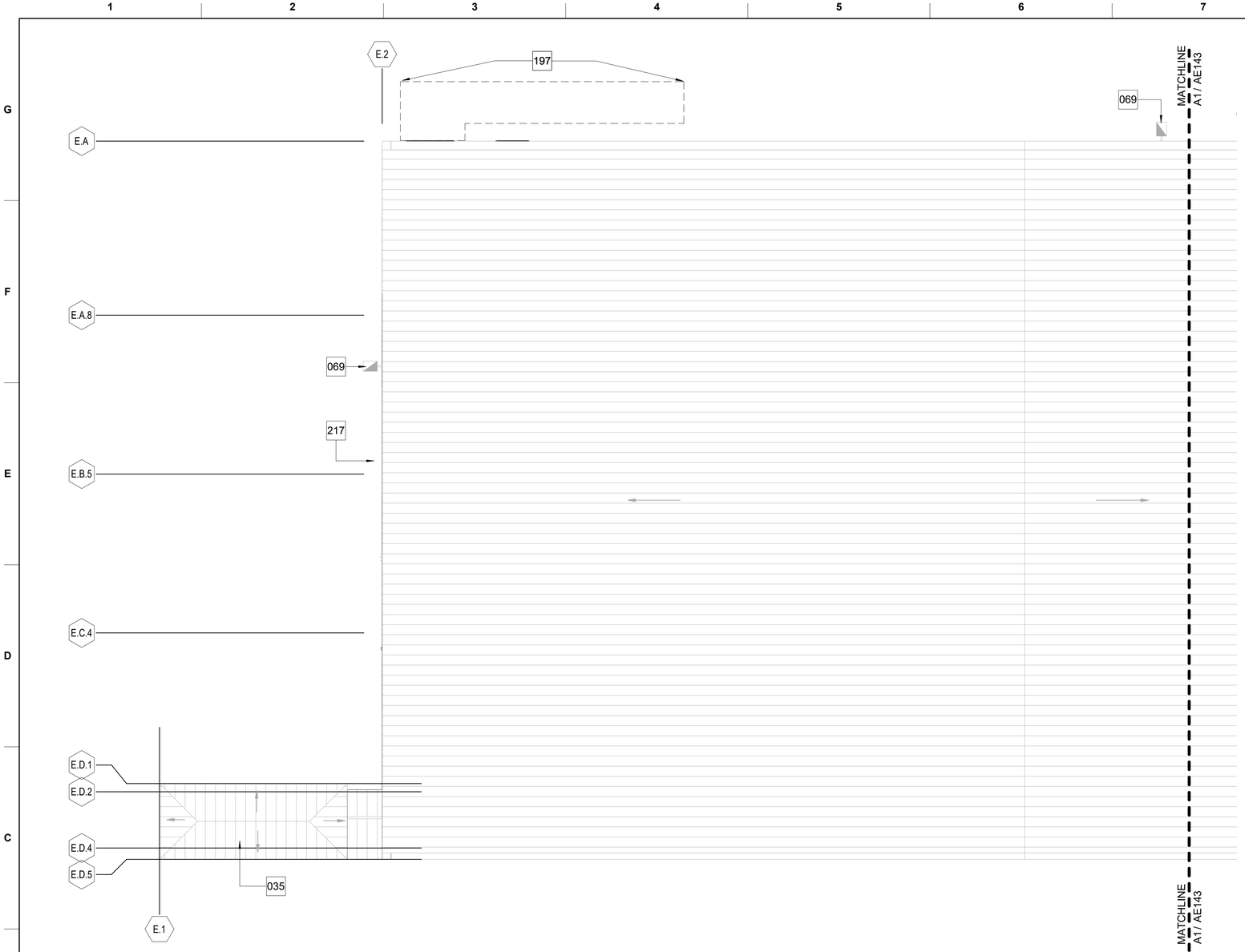
jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS No. W2R003

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
OVERALL ROOF PLAN

SHEET ID
B1455
AE141

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



A1 PARTIAL ROOF PLAN - AREA A
1/8" = 1'-0"

GENERAL NOTES - ROOF PLANS

A	COORDINATE AND VERIFY ALL DIMENSIONS OF ROOF CURBS WITH MECHANICAL EQUIPMENT AND CERTIFIED SHOP DRAWINGS OF PURCHASED EQUIPMENT
B	ALL PREFABRICATED INSULATED ROOF CURBS SHALL BE FABRICATED WITH SLOPING BOTTOM TO MATCH ROOF SLOPE, PROVIDING A LEVEL TOP TO FACILITATE INSTALLATION OF MECHANICAL EQUIPMENT AND/OR FLASHING REQUIREMENTS
C	TOP OF ROOF CURBS TO BE A MINIMUM OF 24 INCHES ABOVE THE ROOF PLANE SLOPE AT HIGH POINT
D	REFER ELECTRICAL DRAWINGS FOR LIGHTNING PROTECTION PLAN AND DETAILS
E	ROOF CRICKETS TO SLOPE AT 1/2":12"

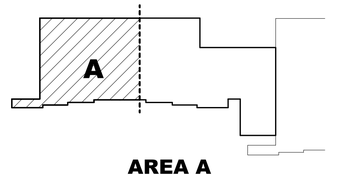
KEYNOTES

069	EXISTING WALL MOUNTED LIGHT FIXTURE
197	BID OPTION 1: EXTERIOR STAIR FOR ACCESS TO MECHANICAL MEZZANINE; REFER TO SHEET A-424 FOR ADDITIONAL INFORMATION
217	WALL MOUNTED EXHAUST FAN; RE: MECHANICAL

ROOF PLAN LEGEND

LIGHTNING ROD; REFER TO ELECTRICAL FOR ADDITIONAL INFORMATION

DIRECTION OF ROOF SLOPE ON EXISTING ROOF



AREA A
KEY PLAN

GRAPHIC SCALE
8 6 4 2 0 8 16
SCALE: 1/8"=1'-0"

PLAN NORTH
TRUE N

US Army Corps of Engineers
Louisville District ®

REGISTERED ARCHITECT
RICHARD G. PERRY
16592
STATE OF TEXAS
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: J. PERRY
DRAWN BY: J. MCKINNEY
CHECKED BY: M. HOLLEB
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201AE142

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

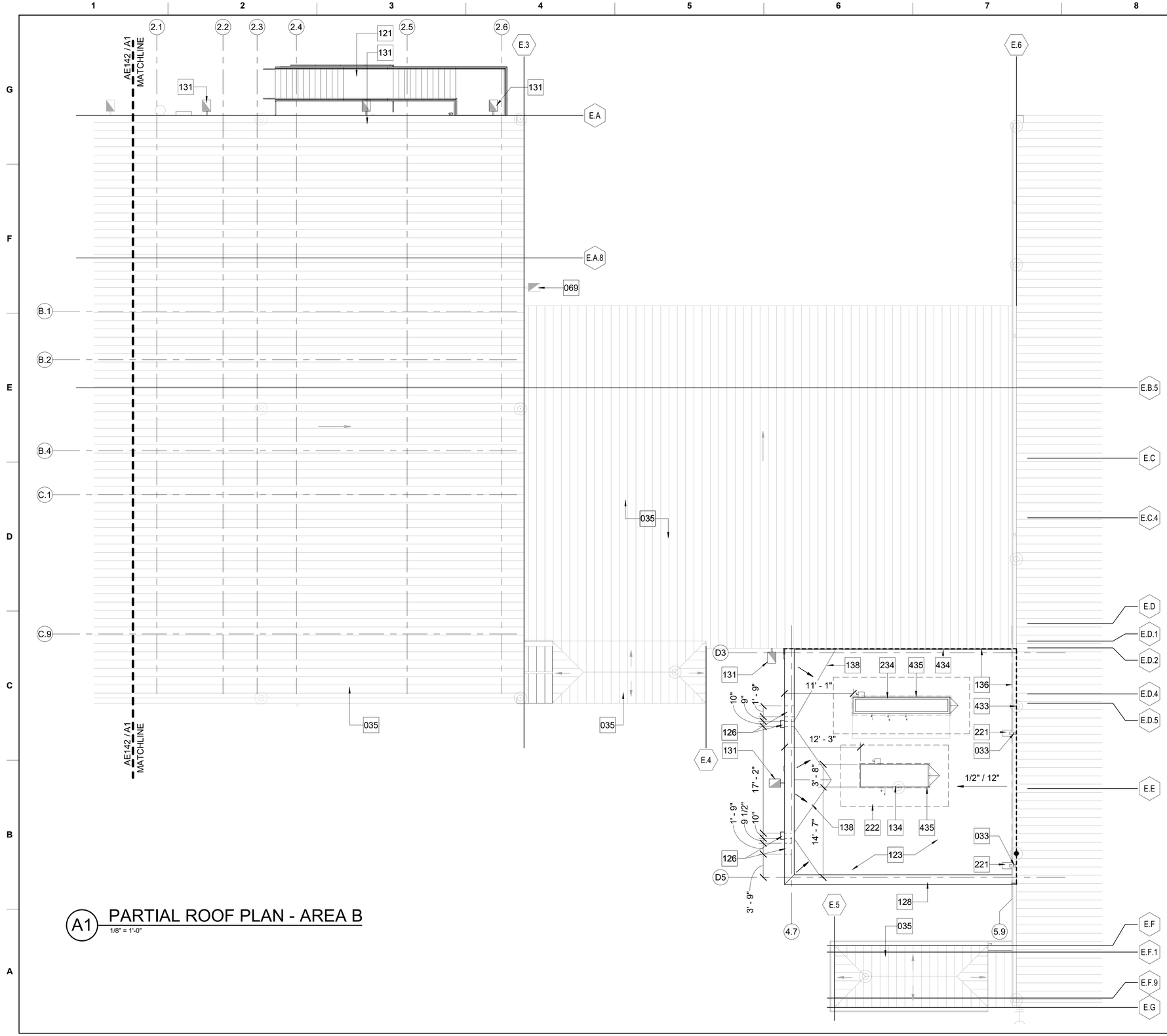
jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS No. 175260

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PARTIAL ROOF PLAN - AREA A

SHEET ID
B1455
AE142

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



A1 PARTIAL ROOF PLAN - AREA B
1/8" = 1'-0"

GENERAL NOTES - ROOF PLANS

A	COORDINATE AND VERIFY ALL DIMENSIONS OF ROOF CURBS WITH MECHANICAL EQUIPMENT AND CERTIFIED SHOP DRAWINGS OF PURCHASED EQUIPMENT
B	ALL PREFABRICATED INSULATED ROOF CURBS SHALL BE FABRICATED WITH SLOPING BOTTOM TO MATCH ROOF SLOPE, PROVIDING A LEVEL TOP TO FACILITATE INSTALLATION OF MECHANICAL EQUIPMENT AND/OR FLASHING REQUIREMENTS
C	TOP OF ROOF CURBS TO BE A MINIMUM OF 24 INCHES ABOVE THE ROOF PLANE SLOPE AT HIGH POINT
D	REFER ELECTRICAL DRAWINGS FOR LIGHTNING PROTECTION PLAN AND DETAILS
E	ROOF CRICKETS TO SLOPE AT 1/2":12"

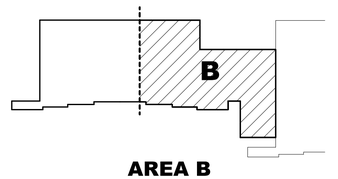
KEYNOTES

033	MODIFY EXISTING DOWNSPOUT AS REQUIRED TO DRAIN ONTO ROOF OF NEW ADDITION AS INDICATED
035	EXISTING ROOF, GUTTER, AND DOWNSPOUT TO REMAIN
069	EXISTING WALL MOUNTED LIGHT FIXTURE
131	WALL MOUNTED LIGHT FIXTURE; REFER TO ELECTRICAL
433	EXPANSION JOINT AT EAST WALL OF ADDITION; REFER TO A4/A-310

ROOF PLAN LEGEND

LIGHTNING ROD; REFER TO ELECTRICAL FOR ADDITIONAL INFORMATION

DIRECTION OF ROOF SLOPE ON EXISTING ROOF



AREA B
KEY PLAN

GRAPHIC SCALE
8 6 4 2 0 8 16
SCALE: 1/8"=1'-0"

PLAN NORTH
TRUE N

US Army Corps of Engineers
Louisville District ®

REGISTERED ARCHITECT
RICHARD G. PERRY
16592
STATE OF TEXAS
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: J. PERRY
DRAWN BY: J. MCKINNEY
CHECKED BY: M. HOLLEB
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201AE143

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

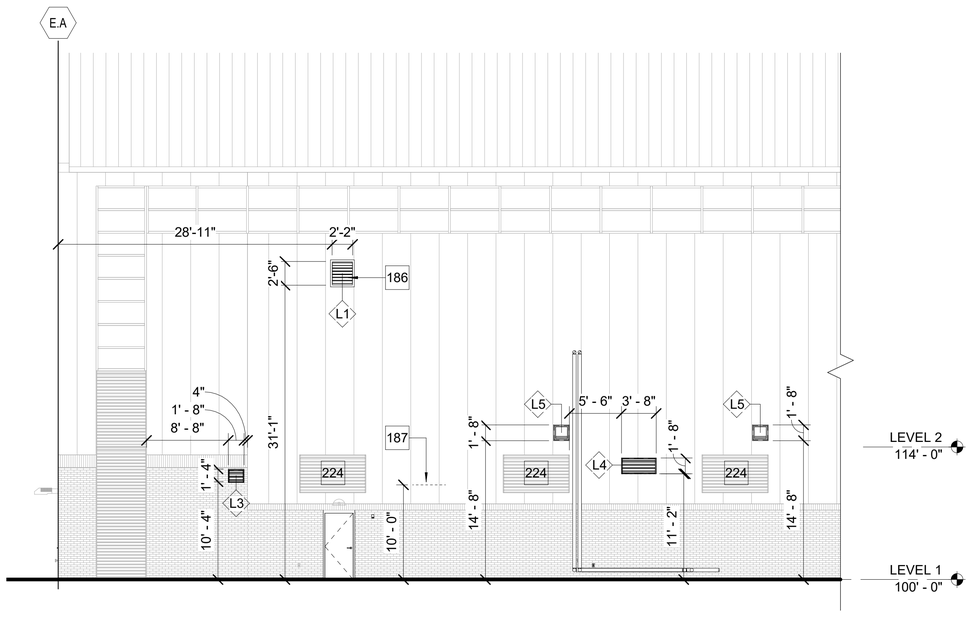
jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS No. 157260

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PARTIAL ROOF PLAN - AREA B

SHEET ID
B1455
AE143

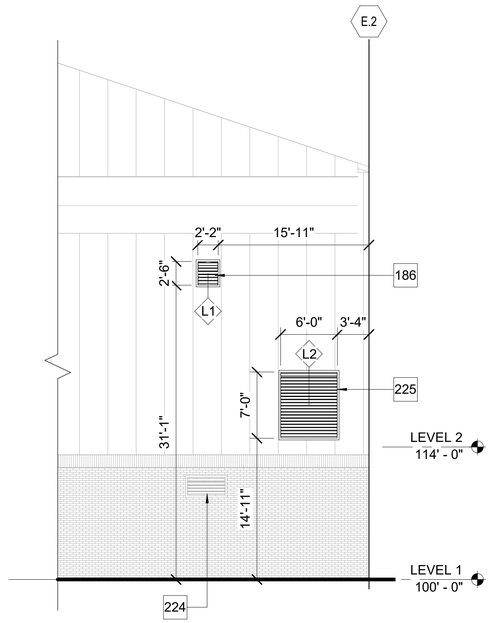
W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



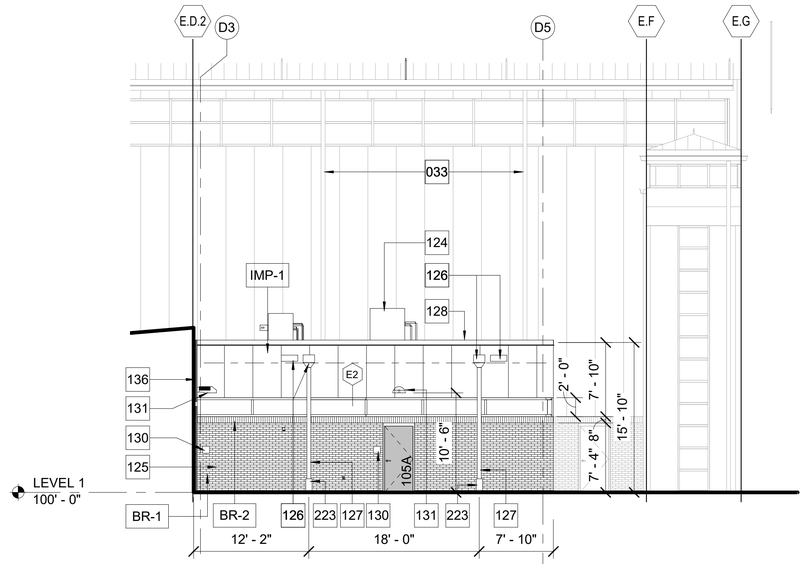
D1 BUILDING ELEVATION - HANGAR WEST WALL

1/8" = 1'-0"



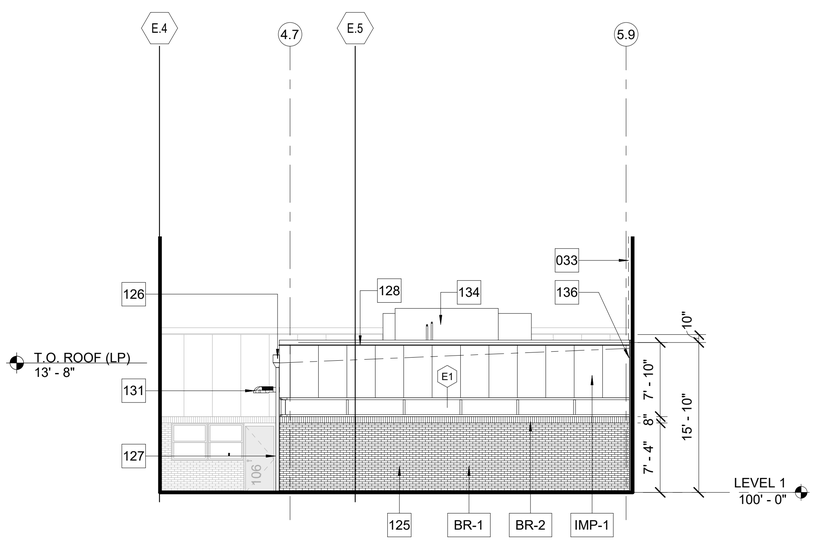
D5 BUILDING ELEVATION - HANGAR NORTHWEST

1/8" = 1'-0"



A1 ADMIN BUILDING ADDTION - WEST ELEVATION

1/8" = 1'-0"



A5 ADMIN BUILDING ADDITION - SOUTH ELEVATION

1/8" = 1'-0"

GENERAL NOTES - ELEVATIONS

A	ALL NEW EXTERIOR DOORS TO BE INSULATED
B	MANUFACTURER PRODUCT INDICATED ESTABLISHES A MINIMUM LEVEL OF ACCEPTABLE QUALITY, IT IS NOT INTENDED TO LIMIT THE SELECTION OF APPROVED EQUIPMENT PRODUCTS
C	EXTERIOR FINISHES AT AREAS OF NEW CONSTRUCTION ARE TO MATCH THE EXISTING FINISHES; CONTACT 42 CES FOR ADDITIONAL INFORMATION

KEYNOTES

033	MODIFY EXISTING DOWNSPOUT AS REQUIRED TO DRAIN ONTO ROOF OF NEW ADDITION AS INDICATED
124	MECHANICAL EQUIPMENT; REFER TO MECHANICAL
125	NEW WALL CONSTRUCTION TO MATCH EXISTING (BRICK TO 88", BRICK SOLDIER COURSE, AND VERTICAL METAL PANEL); REFER TO WALL SECTIONS
126	SCUPPER AND OVERFLOW; RE: A-525 FOR DETAILS
127	4"x5" METAL DOWNSPOUT, CONNECT TO STORM DRAIN; RE: PLUMBING - FINISH TO MATCH EXISTING DOWNSPOUTS
128	PRE-FINISHED METAL COPING; COLOR TO MATCH EXISTING FACILITY
130	BUILDING SIGNAGE; RE: INTERIORS
131	WALL MOUNTED LIGHT FIXTURE; REFER TO ELECTRICAL
134	AIR HANDLING UNIT; REFER TO MECHANICAL
136	2" EXPANSION JOINT; REFER TO STRUCTURAL
186	NEW WALL LOUVER; REFER TO A-610 LOUVER SCHEDULE AND MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION
187	SECURITY CAMERA; REFER TO TELECOM
223	CAST IRON BOOT WITH CLEANOUT; RE: PLUMBING
224	EXISTING LOUVER TO BE CAPPED AND SEALED
225	NEW REMOVABLE WALL LOUVER WITH BLANK-OFF PANEL, FOR FUTURE MEZZANINE ACCESS; REFER TO A-610 LOUVER SCHEDULE FOR ADDITIONAL INFORMATION
BR-1	PRIMARY BRICK, RUNNING BOND PATTERN; MATCH BRICK AND MORTAR COLOR OF EXISTING HANGAR
BR-2	SOLDIER COURSE BRICK; MATCH BRICK AND MORTAR COLOR OF EXISTING HANGAR
IMP-1	2" INSULATED METAL PANEL; MATCH SIZE, FINISH, AND COLOR OF EXISTING HANGAR

LEGEND

E1 GLAZING TYPE; RE: A-575

GRAPHIC SCALE

8 6 4 2 0 8 16

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

US Army Corps of Engineers
Louisville District ®

REGISTERED ARCHITECT RICHARD G. PERRY 16592 STATE OF TEXAS 23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: J. PERRY
DRAWN BY: J. MCKINNEY
CHECKED BY: M. HOLLEB
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201A-201

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS Project No. 219201

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395

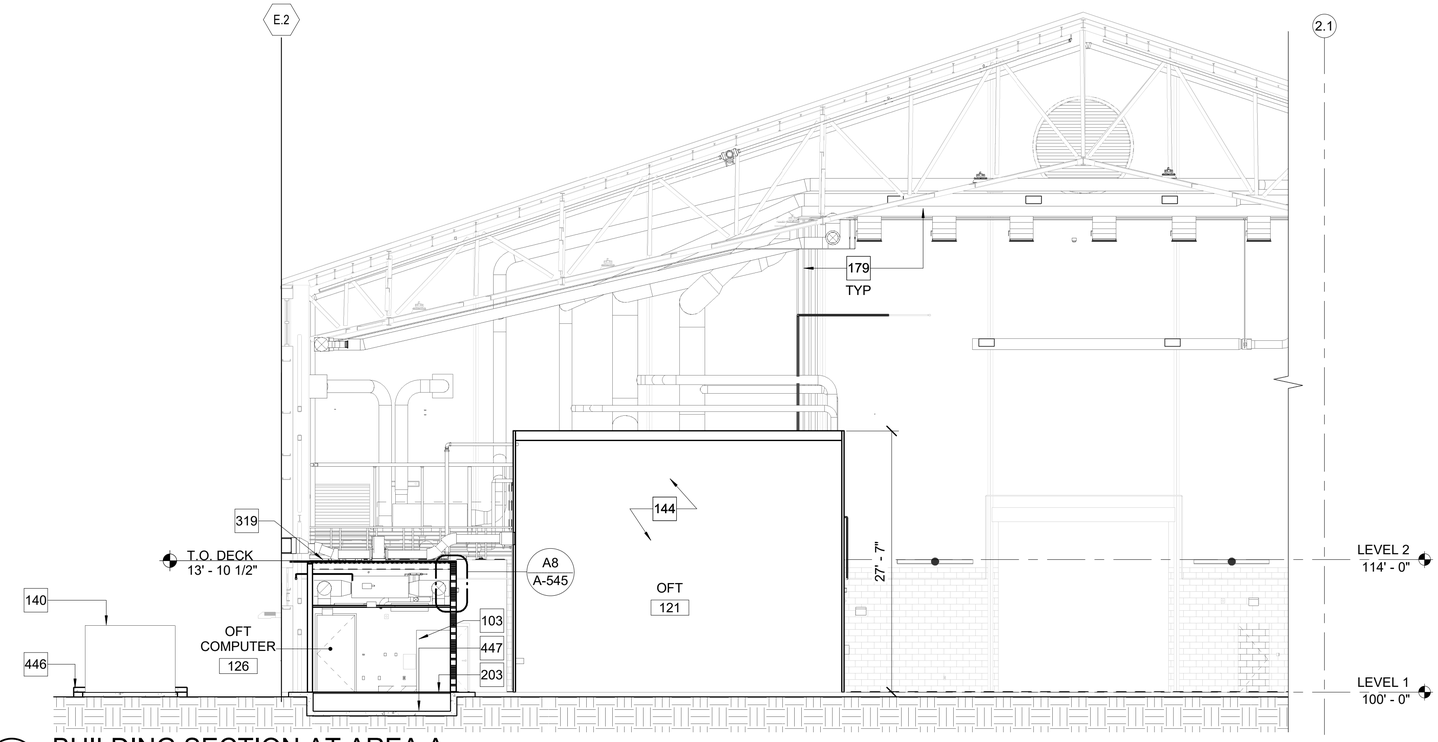
EXTERIOR ELEVATIONS

SHEET ID
B1455
A-201

W912QR23R0003_Plans-0000

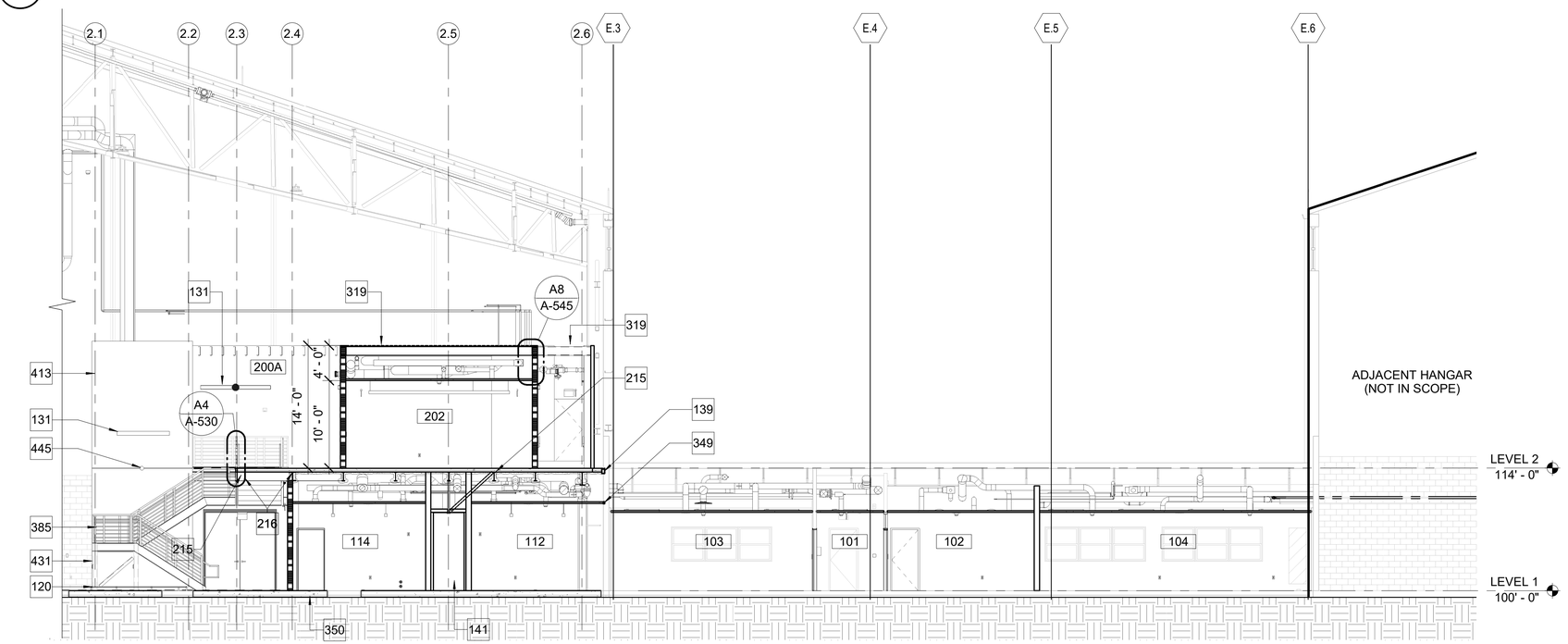
ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN



D1 BUILDING SECTION AT AREA A

1/8" = 1'-0"

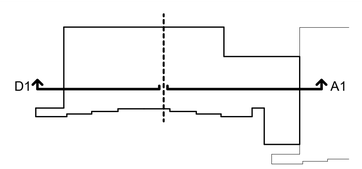


A1 BUILDING SECTION AT AREA B

1/8" = 1'-0"

KEYNOTES

103	DATA CABINET; RE: TELECOM
120	CANE DETECTION RAIL BELOW STAIRCASE LANDING
131	WALL MOUNTED LIGHT FIXTURE; REFER TO ELECTRICAL
139	EXPANSION JOINT; REFER TO STRUCTURAL
140	CHILLER; REFER TO MECHANICAL
141	MANUAL OPERABLE FOLDING PANEL PARTITION; RE: D1/A-510 FOR TRACK DETAIL
144	PRE-MANUFACTURED LIGHT-TIGHT ENCLOSURE
179	EXPOSED UNFINISHED SPIRAL DUCT WITH INTERIOR LINER, PAINT SUPPORT HANGERS WHITE; REFER TO MECHANICAL
203	24"x24" RAISED ACCESS FLOORING SYSTEM
215	CONCEALED STRUCTURAL BEAM AND METAL DECKING WITH SPRAY APPLIED CEMENTITIOUS FIREPROOFING
216	EXPOSED STRUCTURAL STEEL BEAM AND METAL DECKING WITH INTUMESCENT EPOXY FIRE PROTECTIVE COATING
319	SPRAY APPLIED CEMENTITIOUS FIREPROOFING ON METAL DECK
349	EXPANSION JOINT AT WALL TO CEILING; RE: D4/A-510
350	AREA OF CONCRETE SLAB REMOVAL AND INFILL OF EXISTING FLOORING AS REQUIRED FOR THE INSTALLATION OF NEW FOOTINGS; RE: STRUCTURAL
385	METAL STAIR; REFER TO SHEET A-422 FOR DETAILS
413	ELEVATOR SHAFT
431	STEEL TUBE COLUMN FOR STAIR SUPPORT; RE: STRUCTURAL
445	WALL MOUNTED OCCUPANCY SENSOR; RE: ELECTRICAL
446	CONCRETE PAD; RE: STRUCTURAL
447	RECESSED CONCRETE SLAB; RE: STRUCTURAL



KEY PLAN

GRAPHIC SCALE

8 6 4 2 0 8 16

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

US Army Corps of Engineers
Louisville District ®

REGISTERED ARCHITECT
RICHARD G. PERRY
18592
STATE OF TEXAS
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: J. PERRY
DRAWN BY: J. MCKINNEY
CHECKED BY: M. HOLLEB
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201A-301

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS No. 175903

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395

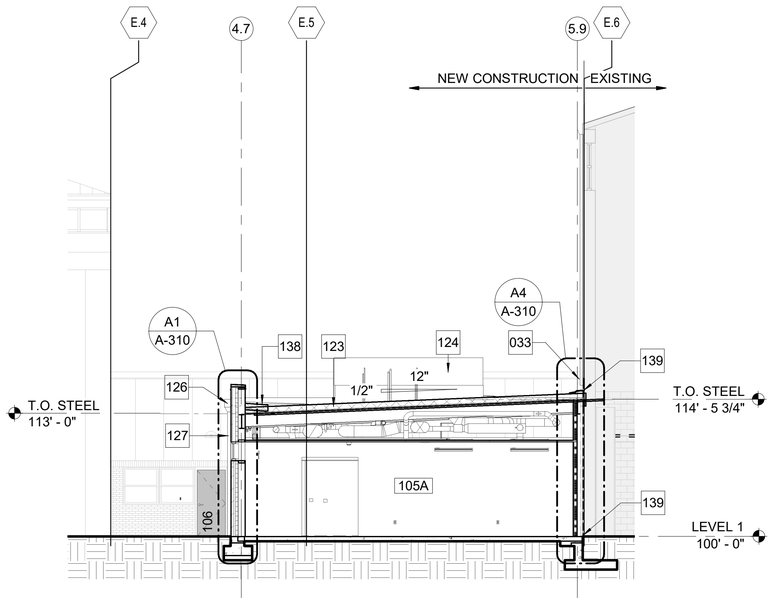
BUILDING SECTIONS

SHEET ID
B1455
A-301

W912QR23R0003_Plans-0000

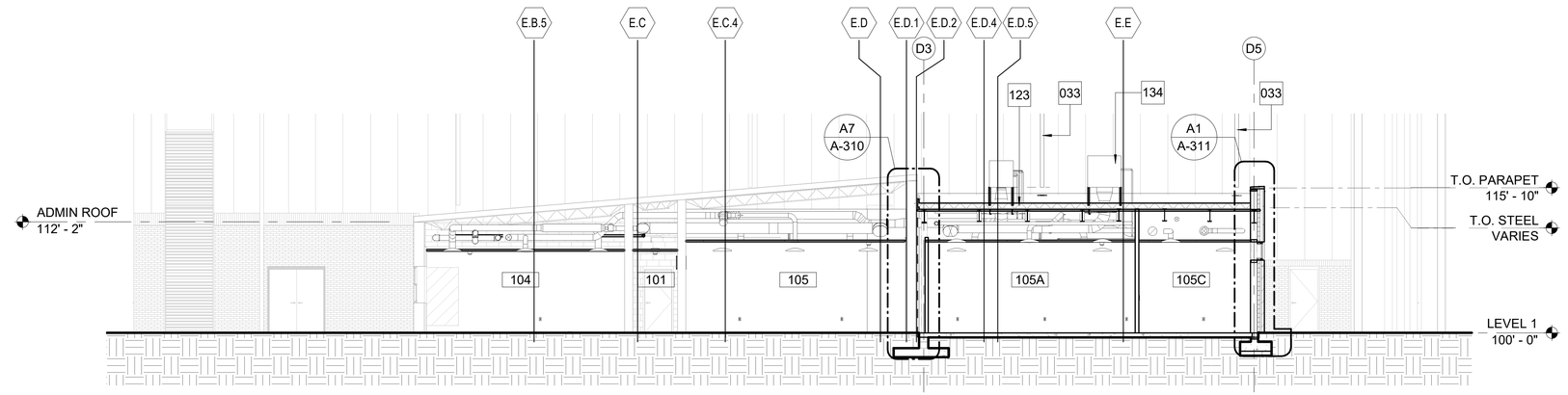
ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN



D1 BUILDING SECTION AT ADMIN ADDITION

1/8" = 1'-0"

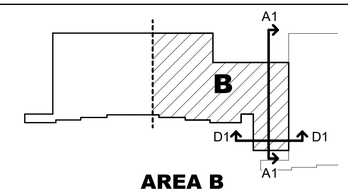


A1 BUILDING SECTION AT ADMIN AREA

1/8" = 1'-0"

KEYNOTES

033	MODIFY EXISTING DOWNSPOUT AS REQUIRED TO DRAIN ONTO ROOF OF NEW ADDITION AS INDICATED
123	NEW ROOFING SYSTEM: SINGLE PLY TPO MEMBRANE ON 1/2" PROTECTION BOARD OVER TWO LAYERS OF 3" RIGID INSULATION (R-25 MIN); SLOPE TO ROOF SCUPPERS, REFER F1/A-525
124	MECHANICAL EQUIPMENT; REFER TO MECHANICAL
126	SCUPPER AND OVERFLOW; RE: A-525 FOR DETAILS
127	4"x5" METAL DOWNSPOUT, CONNECT TO STORM DRAIN; RE: PLUMBING - FINISH TO MATCH EXISTING DOWNSPOUTS
134	AIR HANDLING UNIT; REFER TO MECHANICAL
138	ROOF CRICKET AS REQUIRED
139	EXPANSION JOINT; REFER TO STRUCTURAL



AREA B
KEY PLAN

GRAPHIC SCALE

8 6 4 2 0 8 16

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

US Army Corps of Engineers
Louisville District ®

REGISTERED ARCHITECT
RICHARD G. PERRY
18592
STATE OF TEXAS
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: J. PERRY
DRAWN BY: J. MCKINNEY
CHECKED BY: M. HOLLEB
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201A-302

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

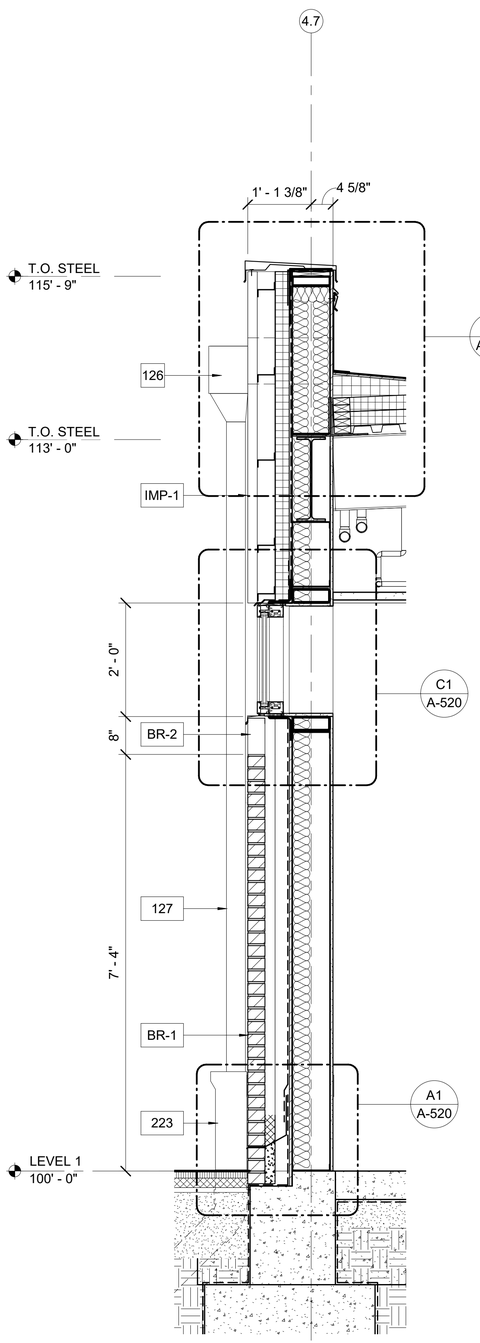
jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS Project No. 219201A

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395

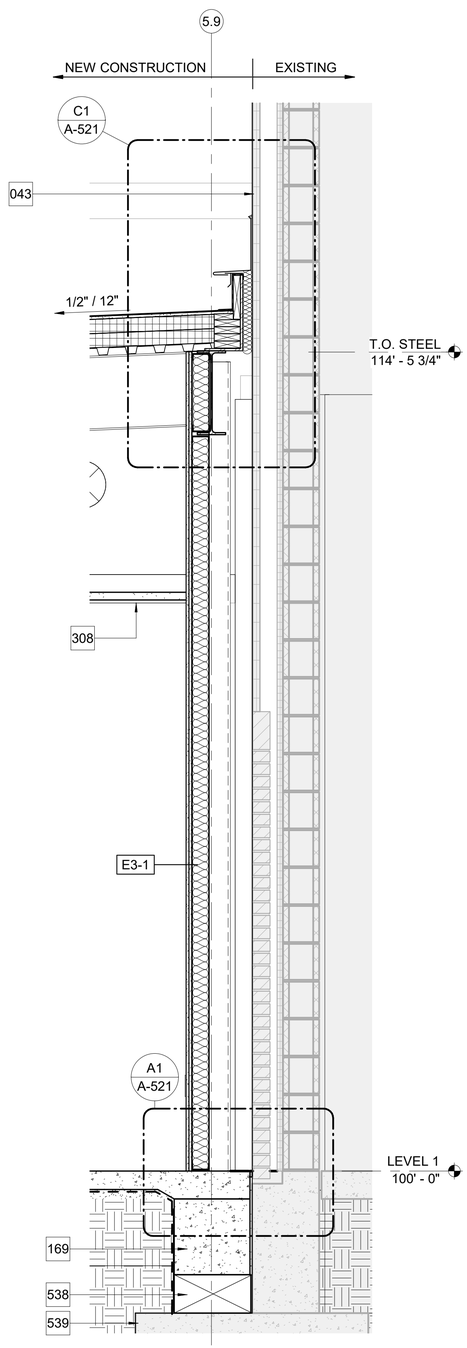
BUILDING SECTIONS

SHEET ID
B1455
A-302

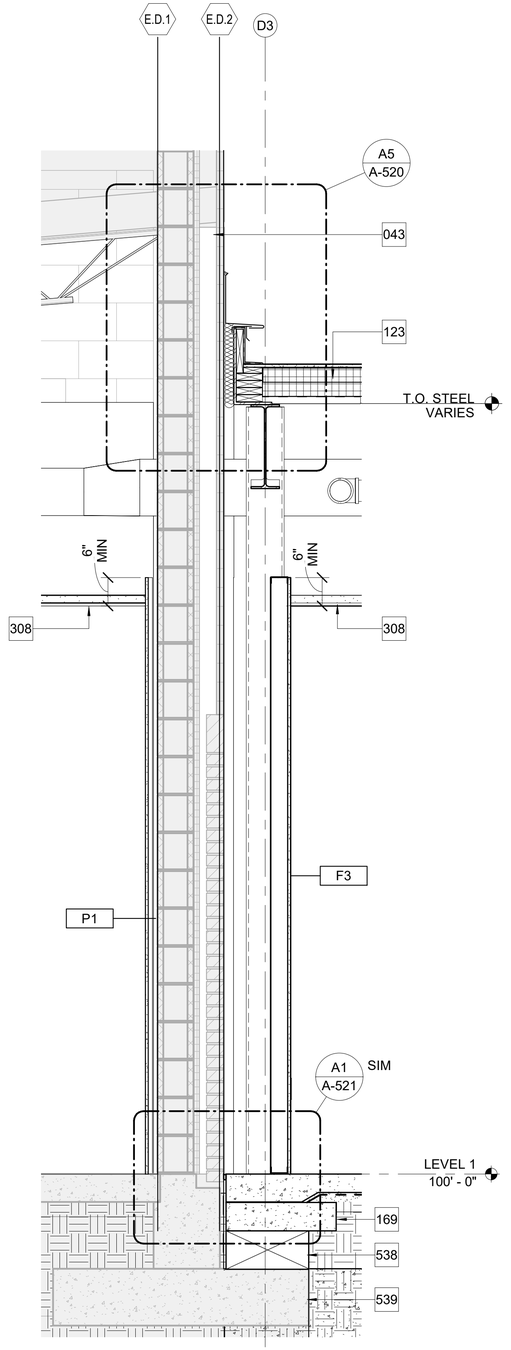
W912QR23R0003_Plans-0000



A1 WALL SECTION - ADDITION (WEST)
3/4" = 1'-0"



A4 WALL SECTION - ADDITION (EAST)
3/4" = 1'-0"



A7 WALL SECTION - ADDITION (NORTH)
3/4" = 1'-0"

GENERAL NOTES - WALL SECTIONS

A	EXTERIOR FINISHES AT AREAS OF NEW CONSTRUCTION ARE TO MATCH THE EXISTING FINISHES; CONTACT 42 CES FOR ADDITIONAL INFORMATION

KEYNOTES

043	EXISTING EXTERIOR WALL ASSEMBLY
123	NEW ROOFING SYSTEM: SINGLE PLY TPO MEMBRANE ON 1/2" PROTECTION BOARD OVER TWO LAYERS OF 3" RIGID INSULATION (R-25 MIN); SLOPE TO ROOF SCUPPERS, REFER F1/A-525
126	SCUPPER AND OVERFLOW; RE: A-525 FOR DETAILS
127	4"x5" METAL DOWNSPOUT, CONNECT TO STORM DRAIN; RE: PLUMBING - FINISH TO MATCH EXISTING DOWNSPOUTS
169	PERIMETER FOUNDATION AND FOOTING; REFER TO STRUCTURAL FOUNDATION PLAN AND DETAILS
223	CAST IRON BOOT WITH CLEANOUT; RE: PLUMBING
308	CEILING FINISH AS INDICATED
538	VOID FORM; RE: STRUCTURAL
539	EXISTING FOOTING; RE: STRUCTURAL
BR-1	PRIMARY BRICK, RUNNING BOND PATTERN; MATCH BRICK AND MORTAR COLOR OF EXISTING HANGAR
BR-2	SOLDIER COURSE BRICK; MATCH BRICK AND MORTAR COLOR OF EXISTING HANGAR
IMP-1	2" INSULATED METAL PANEL; MATCH SIZE, FINISH, AND COLOR OF EXISTING HANGAR

GRAPHIC SCALE

2 1 0 2
SCALE: 3/4"=1'-0"

US Army Corps of Engineers
Louisville District ®

REGISTERED ARCHITECT
RICHARD G. PERRY
16592
STATE OF TEXAS
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: J. PERRY
DRAWN BY: J. MCKINNEY
CHECKED BY: M. HOLLEB
SUBMITTED BY: E. OLNESS
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201A-310
ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

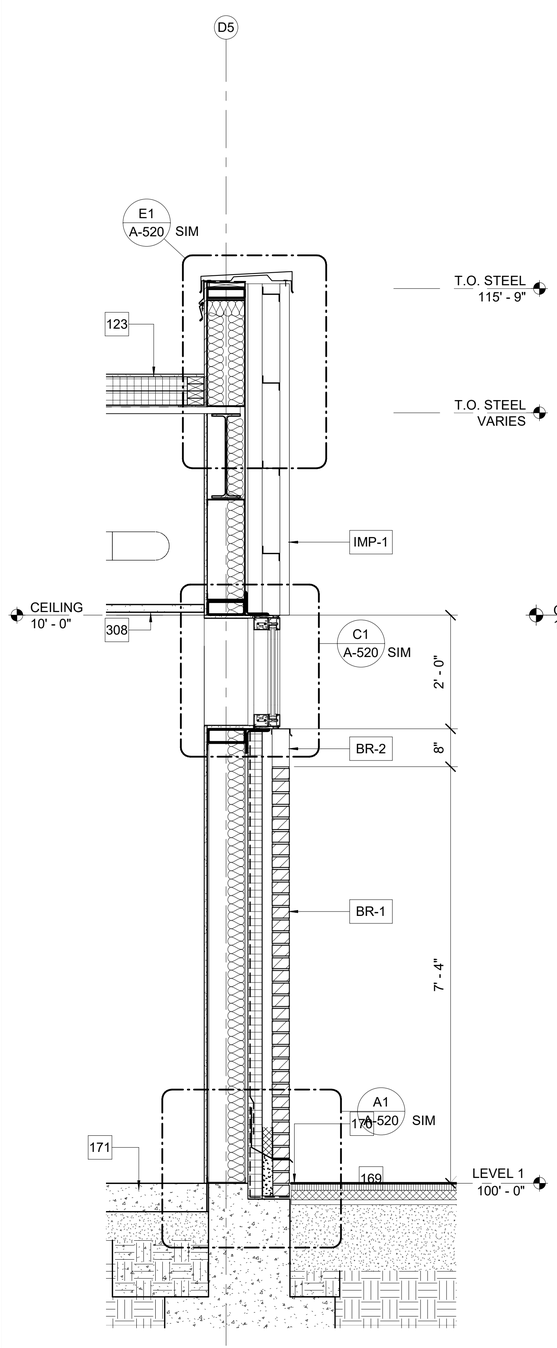
Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
TBPE Registration No. F-2600

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
WALL SECTIONS

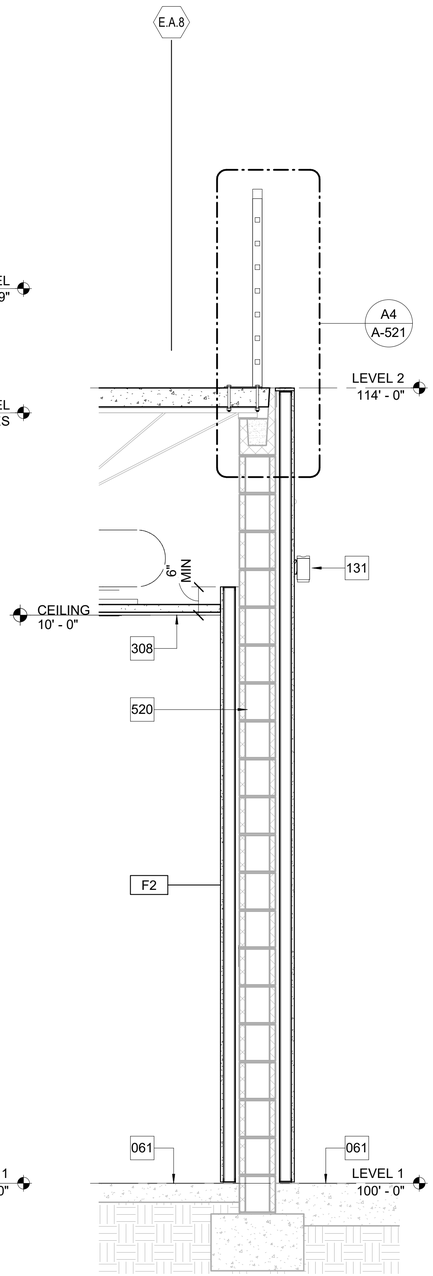
SHEET ID
B1455
A-310

W912QR23R0003_Plans-0000

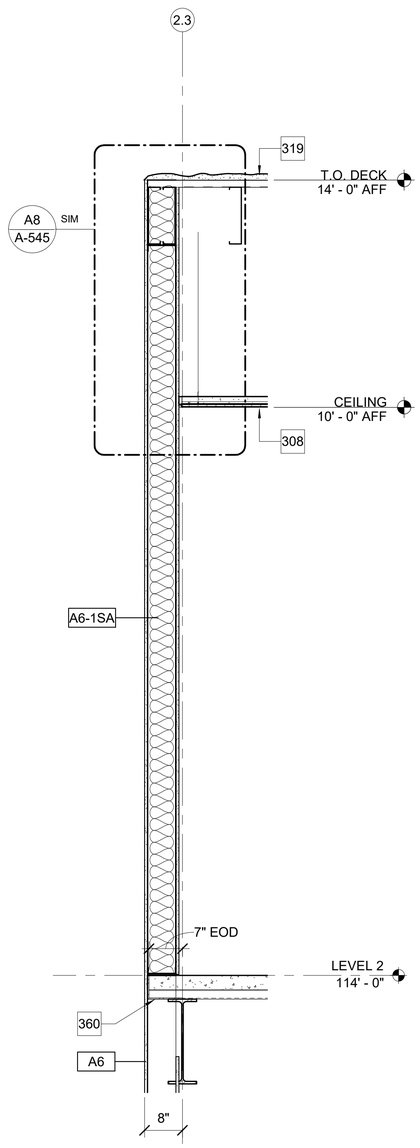
CERTIFIED FINAL DESIGN



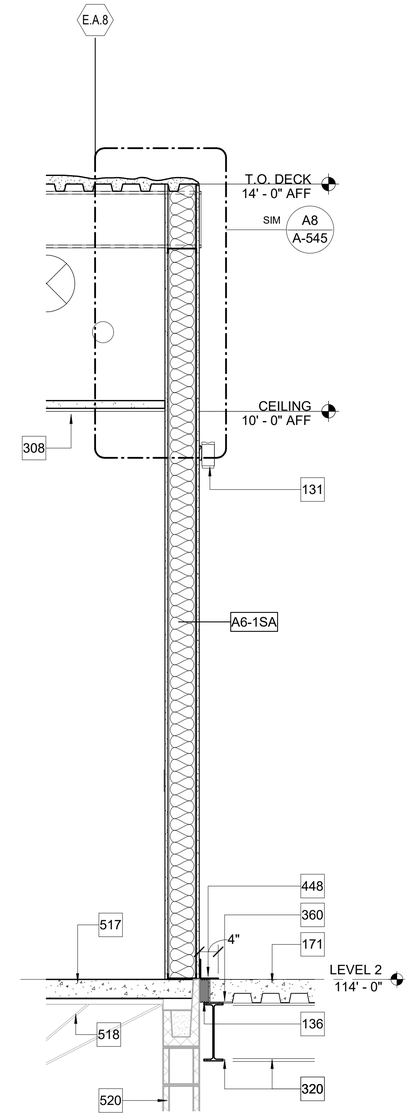
A1 WALL SECTION
3/4" = 1'-0"



A3 WALL SECTION
3/4" = 1'-0"



A5 WALL SECTION
3/4" = 1'-0"



A7 WALL SECTION
3/4" = 1'-0"

GENERAL NOTES - WALL SECTIONS

A	EXTERIOR FINISHES AT AREAS OF NEW CONSTRUCTION ARE TO MATCH THE EXISTING FINISHES; CONTACT 42 CES FOR ADDITIONAL INFORMATION

KEYNOTES

061	EXISTING CONCRETE SLAB ON GRADE
123	NEW ROOFING SYSTEM: SINGLE PLY TPO MEMBRANE ON 1/2" PROTECTION BOARD OVER TWO LAYERS OF 3" RIGID INSULATION (R-25 MIN); SLOPE TO ROOF SCUPPERS, REFER F1/A-525
131	WALL MOUNTED LIGHT FIXTURE; REFER TO ELECTRICAL
136	2" EXPANSION JOINT; REFER TO STRUCTURAL
170	ADJACENT PAVING/GRADE; REFER TO CIVIL
171	CONCRETE SLAB; REFER TO STRUCTURAL
308	CEILING FINISH AS INDICATED
319	SPRAY APPLIED CEMENTITIOUS FIREPROOFING ON METAL DECK
320	STEEL STRUCTURE; REFER STRUCTURAL
360	STEEL BENT PLATE; REFER TO STRUCTURAL
448	ALUMINUM WALL TO FLOOR EXPANSION JOINT COVER, CONCEAL VERTICAL LEG BEHIND GYPSUM WALLBOARD; RE: INTERIORS FOR FLOOR FINISH
517	EXISTING CONCRETE SLAB ON METAL DECK
518	EXISTING STEEL STRUCTURE
520	LOAD-BEARING CONCRETE MASONRY UNIT WALL; REFER TO STRUCTURAL FOR EXTENT OF EXISTING AND NEW UNITS
BR-1	PRIMARY BRICK, RUNNING BOND PATTERN; MATCH BRICK AND MORTAR COLOR OF EXISTING HANGAR
BR-2	SOLDIER COURSE BRICK; MATCH BRICK AND MORTAR COLOR OF EXISTING HANGAR
IMP-1	2" INSULATED METAL PANEL; MATCH SIZE, FINISH, AND COLOR OF EXISTING HANGAR

GRAPHIC SCALE

2 1 0 2
SCALE: 3/4"=1'-0"

US Army Corps of Engineers
Louisville District ®

REGISTERED ARCHITECT
RICHARD G. PERRY
16592
STATE OF TEXAS
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: J. PERRY
DRAWN BY: J. MCKINNEY
CHECKED BY: M. HOLLEB
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201A-311

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

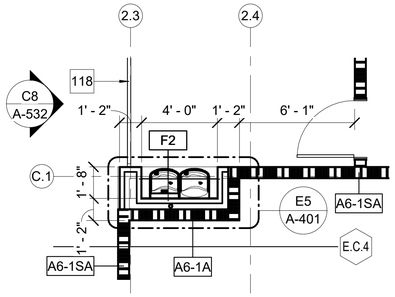
Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
817 Main Access No. 1 (Area 12)

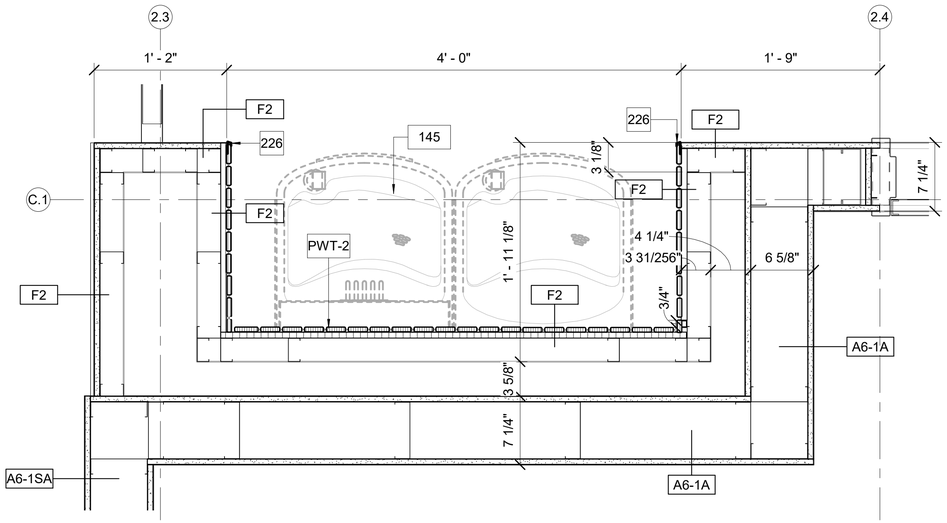
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
WALL SECTIONS

SHEET ID
B1455
A-311

W912QR23R0003_Plans-0000

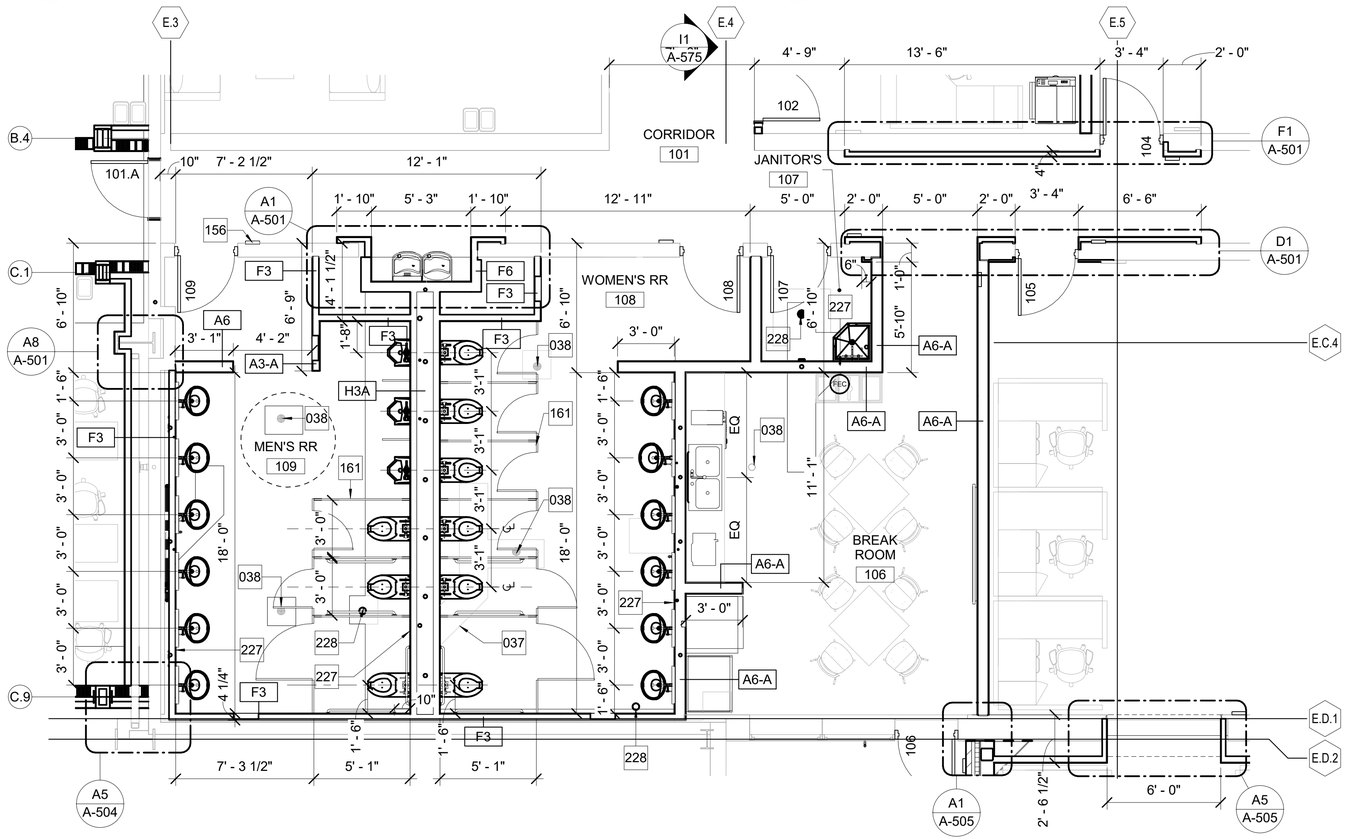
CERTIFIED FINAL DESIGN

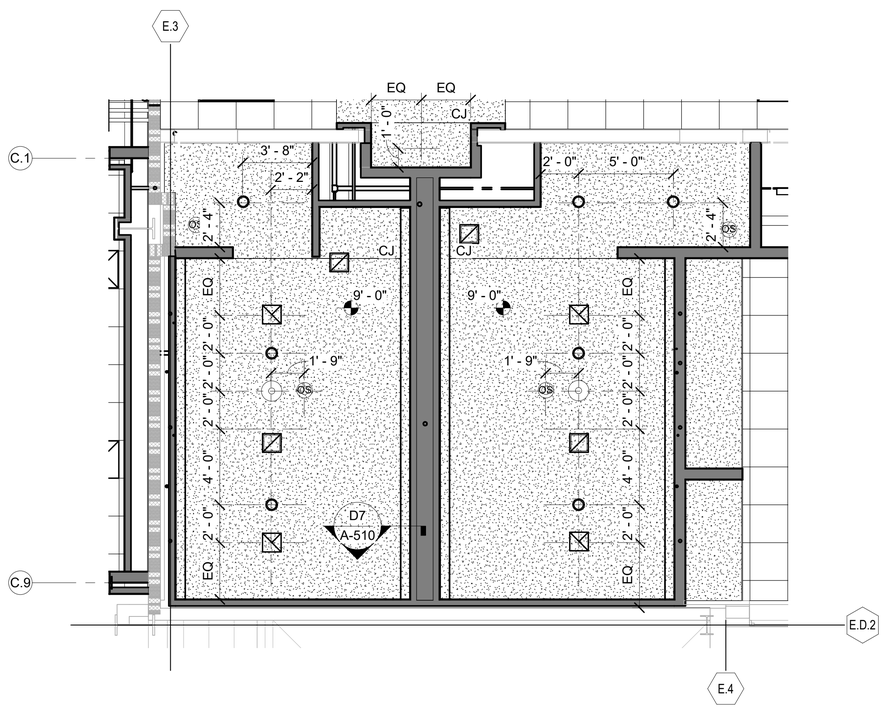




E1 ENLARGED PLAN - LEVEL 2 DRINKING FOUNTAIN

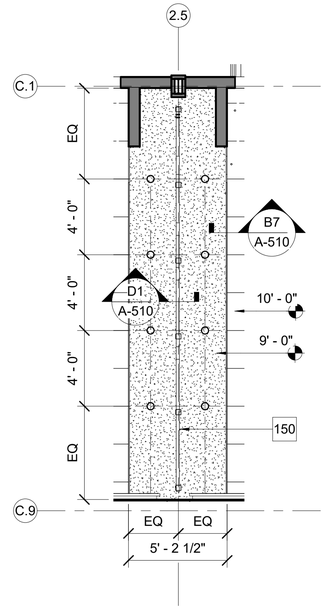
1/4" = 1'-0"


E.3
E.4
I1
A-575
B.4
CORRIDOR
101
101.A
10"
7' - 2 1/2"
12' - 1"
A1
A-501
1' - 10"
5' - 3"
1' - 10"
12' - 11"
156
C.1
F3
F6
F3
WOMEN'S RR
108
109
6' - 10"
6' - 9"
A6
3' - 1"
4' - 2"
A3-A
1'-8"
F3
F3
038
A8
A-501
1' - 6"
3' - 0"
H3A
038
MEN'S RR
109
161
161
F3
3' - 0"
3' - 0"
3' - 0"



A1 ENLARGED CEILING PLAN - RESTROOMS

1/4" = 1'-0"



A7 ENLARGED CEILING PLAN - TYP BULKHEAD

1/4" = 1'-0"

GENERAL NOTES

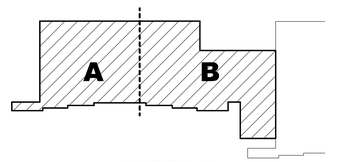
A	REFER TO AE101 THRU AE113 FOR FLOOR PLANS
B	REFER TO A-570 FOR PARTITION TYPES AND DETAILS
C	REFER TO IN101 THRU IN112 FOR FINISH PLANS. REFER TO I-602 FOR FINISH SCHEDULE
D	ALL GYPSUM BOARD AND ACOUSTICAL CEILINGS TO BE 9'-0" ABOVE FINISH FLOOR UNLESS OTHERWISE NOTED
E	PROVIDE HOLD-DOWN CLIPS AT ALL ACOUSTICAL CEILING TILE WITHIN 10'-0" OF AN EXTERIOR DOOR
F	AT CONDITIONS WHERE LIGHTS, SPRINKLERS, OR OTHER DEVICES ARE COINCIDENT ON PLAN, FIXTURES ARE AT DIFFERENT LOCATIONS. REFER TO ELECTRICAL AND FIRE PROTECTION FOR FIXTURE MOUNTING HEIGHTS
G	EXTERIOR FINISHES AT AREAS OF NEW CONSTRUCTION ARE TO MATCH THE EXISTING FINISHES; CONTACT 42 CES FOR ADDITIONAL INFORMATION
H	FIRE RATING OF THE LEVEL 2 FLOOR SLAB AND LEVEL 2 CEILINGS ARE TO MATCH THE FIRE RATING OF THE WALLS PER NFPA 101 AND TSFPEWG

KEYNOTES

150	CEILING TRACK FOR OPERABLE PARTITION; REFER TO D1/A-510 FOR TRACK DETAIL AND STRUCTURAL DETAILS FOR PARTITION SUPPORT

REFLECTED CEILING PLAN LEGEND

- GYPSUM BOARD CEILING AS SCHEDULED
  CONTROL JOINT
- 2'x2' ACOUSTICAL CEILING TILE AS SCHEDULED CENTERED IN SPACE AS INDICATED
- LINEAR SLOT DIFFUSERS
- SPRINKLERS, SMOKE DETECTORS, AND SPEAKER STROBES; REFER TO FIRE PROTECTION DRAWINGS.
- LIGHT FIXTURE; REFER TO ELECTRICAL DRAWINGS.
- OS W VS OS N — OCCUPANCY/VACANCY SENSOR; REFER TO ELECTRICAL DRAWINGS.
- EXIT LIGHT FIXTURE; REFER TO ELECTRICAL DRAWINGS.
- SUPPLY AIR DIFFUSERS; REFER TO MECHANICAL DRAWINGS.
- RETURN AIR GRILLE; REFER TO MECHANICAL DRAWINGS.
- SPEAKER; REFER TO TELECOMMUNICATION DRAWINGS
- WAP — WIRELESS ACCESS POINT; REFER TO TELECOMMUNICATION DRAWINGS
- LADDER CABLE TRAY; REFER TO TELECOMMUNICATION DRAWINGS
- FIXED POSITION SECURITY CAMERA; REFER TO TELECOMMUNICATION DRAWINGS
- CEILING ACCESS PANEL



OVERALL KEY PLAN

GRAPHIC SCALE

4 3 2 1 0 4 8

SCALE: 1/4"=1'-0"

US Army Corps of Engineers
Louisville District ®

REGISTERED ARCHITECT
RICHARD G. PERRY
16592
STATE OF TEXAS
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201A-405

DESIGNED BY: J. PERRY
DRAWN BY: J. MCKINNEY
CHECKED BY: M. HOLLEB
SUBMITTED BY: E. OLNESS
SCALE: ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

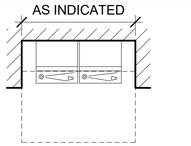
Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
ACCESS No. F2966219

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
ENLARGED CEILING PLANS

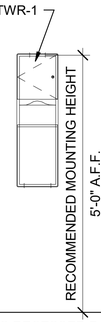
SHEET ID
B1455
A-405

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN

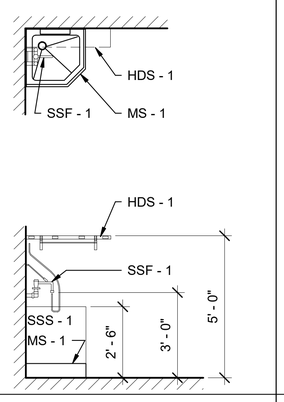


C1 ACCESSIBLE HIGH-LOW ELECTRIC WATER COOLER



PTWR - 1 SERIES RECESSED PAPER TOWEL DISPENSER AND WASTE RECEPTACLE

P1 MISCELLANEOUS TOILET ROOM MOUNTING HEIGHTS



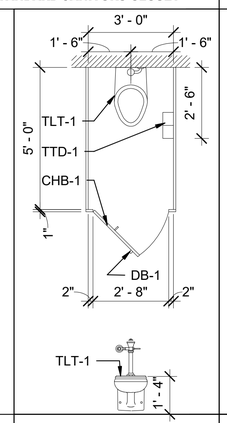
HDS - 1 HEAVY DUTY SHELF WITH MOP HOLDERS AND RAG HOOKS 8" x 36"

MS - 1 FLOOR MOUNTED UTILITY SINK WITH TERRAZO FINISH 2' - 8"x 2' - 8"

SSF - 1 FAUCET WITH BUCKET HOOK, TOP BRACE, VACUUM BREAKER, HOSE THREADS, HOSE AND HOSE HOOK

SSS - 1 20 GAUGE STAINLESS STEEL SHEET METAL SHIELD ABOVE FLOOR SINK AT BOTH WALLS

J1 STANDARD JANITORS CLOSET



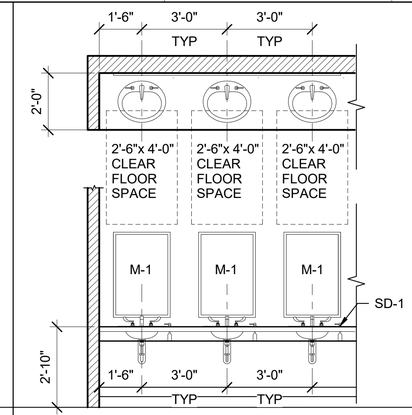
CHB-1 COAT HOOK; STAINLESS STEEL

DB-1 SURFACE MOUNTED DOOR BUMPER, CENTER ON DOOR

TLT-1 STANDARD TOILET

TTD-1 SURFACE MOUNTED TOILET PAPER DISPENSER

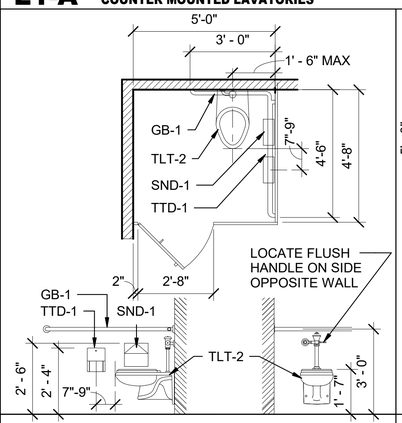
S1 STANDARD STALL



M - 1 MIRROR WITH STAINLESS STEEL FRAME; RE: INTERIORS

SD - 1 LAVATORY-MOUNTED SOAP DISPENSER

L1-A ACCESSIBLE MULTIPLE COUNTER MOUNTED LAVATORIES



CHB-1 COAT HOOK; STAINLESS STEEL

DB-1 SURFACE MOUNTED DOOR BUMPER, CENTER ON DOOR,

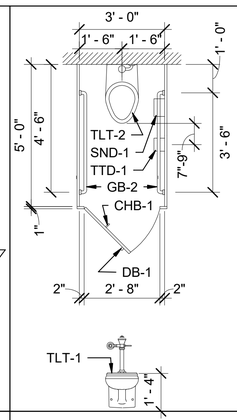
GB-1 GRAB BAR L-SHAPE

SND-1 SANITARY NAPKIN DISPOSER

TLT-2 ACCESSIBLE TOILET

TTD-1 SURFACE MOUNTED TOILET PAPER DISPENSER

S2 END OF ROW ACCESSIBLE STALL



CHB-1 COAT HOOK; STAINLESS STEEL

DB-1 SURFACE MOUNTED DOOR BUMPER, CENTER ON DOOR

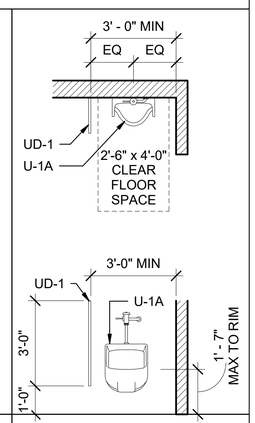
TLT-2 ACCESSIBLE TOILET

TTD-1 SURFACE MOUNTED TOILET PAPER DISPENSER

GB-2 GRAB BAR

SND-1 SANITARY NAPKIN DISPOSER

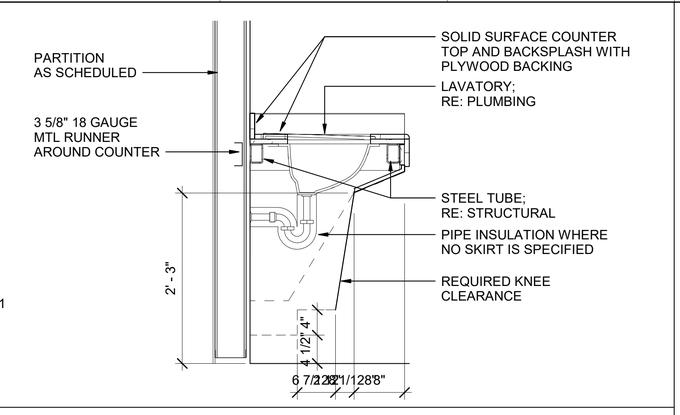
S3 AMBULATORY STALL



U-1A ACCESSIBLE URINAL

UD-1 URINAL DIVIDER

U1A ACCESSIBLE URINAL



NOTE: REFER TO INTERIORS I-301 FOR FOR MILLWORK SECTION AT RESTROOM SINK AND FINISH MATERIALS. REFER TO STRUCTURAL FOR COUNTERTOP SUPPORT STRUCTURE.

GENERAL NOTES - RESTROOM PLANS

A	PROVIDE 5/8" CEMENT BOARD AT ALL TILED WET WALL LOCATIONS IN RESTROOMS AND LOCKER ROOMS. PROVIDE 5/8" WATER RESISTANT GYP. BOARD AT ALL PAINTED WALL AND CEILING LOCATIONS IN RESTROOMS, LOCKER ROOMS, AND JANITOR'S CLOSETS, AND WITHIN 4'-0" OF WATER FOUNTAIN LOCATIONS.REFER TO FINISH SCHEDULE SHEET I-601 FOR TILE WALL LOCATIONS.
B	MANUFACTURER PRODUCTS INDICATED ESTABLISHES A MINIMUM LEVEL OF ACCEPTABLE QUALITY. IT IS NOT INTENDED TO LIMIT THE SELECTION OF APPROVED EQUIVALENT PRODUCTS.
C	PROVIDE CONCEALED WOOD BLOCKING BETWEEN STEEL STUDS AT ALL WALL MOUNTED EQUIPMENT AND TOILET PARTITION BRACKET LOCATIONS. VERIFY LOCATIONS WITH SHOP DRAWINGS.
D	REFER TO PLAN FOR QUANTITIES AND ORIENTATION OF TOILET PARTITIONS AND ACCESSORIES.
E	ALL CEILING ARE AT 9'-0" A.F.F. UNLESS OTHERWISE NOTED
F	REFER TO A-402 FOR RESTROOM ACCESSORIES, MOUNTING HEIGHTS, AND CODE REFERENCES. REFER TO INTERIORS FOR ALL INTERIOR FINISHES.

PLUMBING SYSTEMS
(TABLE 2902.1 - IBC AS MODIFIED BY UFC 3 - 420 - 01)

276 OCCUPANTS WITH 50/50 SPLIT; 138 MALES, 138 FEMALES

B OCCUPANCY

FIXTURES	MINIMUM NUMBER REQUIRED		NUMBER PROVIDED	
	MALE	FEMALE	MALE	FEMALE
WATER CLOSETS (1 PER 20, UP TO 100; THEN 1 PER 40)	6	6	3	6
LAVATORIES (1 PER 20, UP TO 100; THEN 1 PER 45)	6	6	6	6
SHOWERS	-	-	-	-
URINALS	-	-	3	-
DRINKING FOUNTAINS (1 PER 75)	4		4	
SERVICE SINK (1 PER FLOOR)	2		1	

US Army Corps of Engineers
Louisville District ®

REGISTERED ARCHITECT RICHARD G. PERRY 16592 STATE OF TEXAS 23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: J. PERRY
DRAWN BY: J. MCKINNEY
CHECKED BY: M. HOLLEB
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201A-410

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

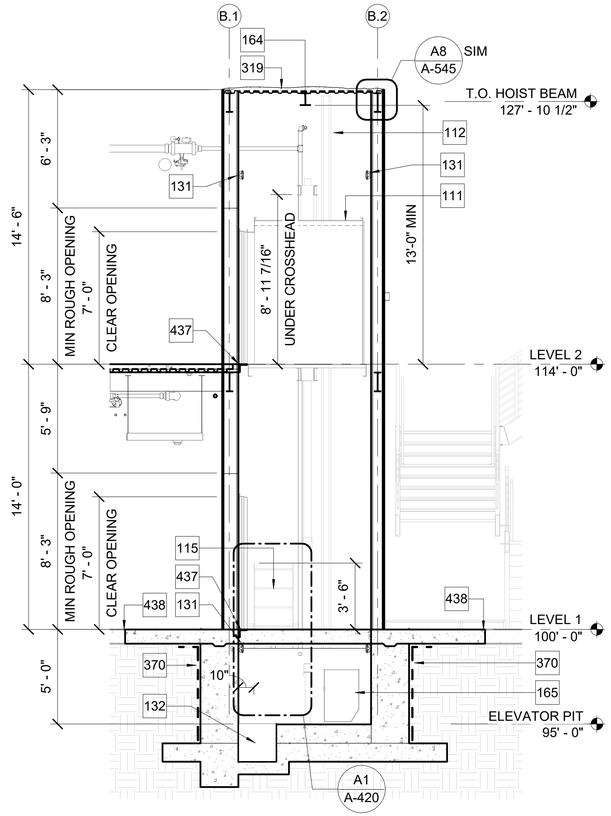
jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS Tel 972.983.2600

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
RESTROOM ACCESSORIES

SHEET ID
B1455
A-410

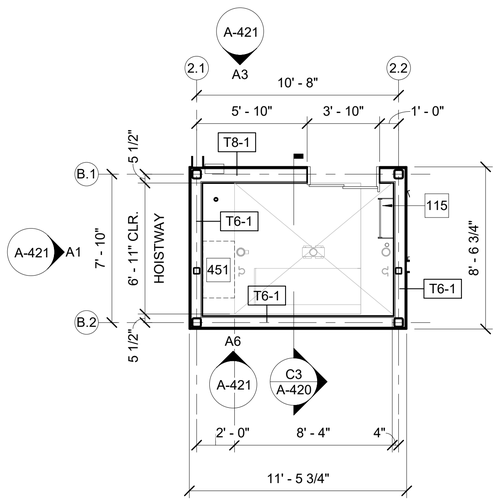
W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



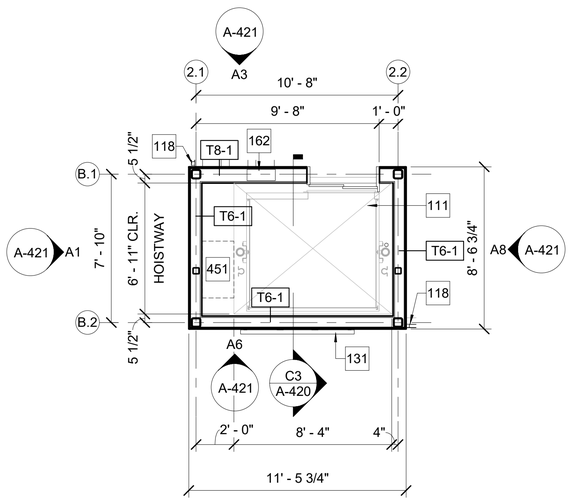
C3 ELEVATOR E01 - SECTION

1/4" = 1'-0"



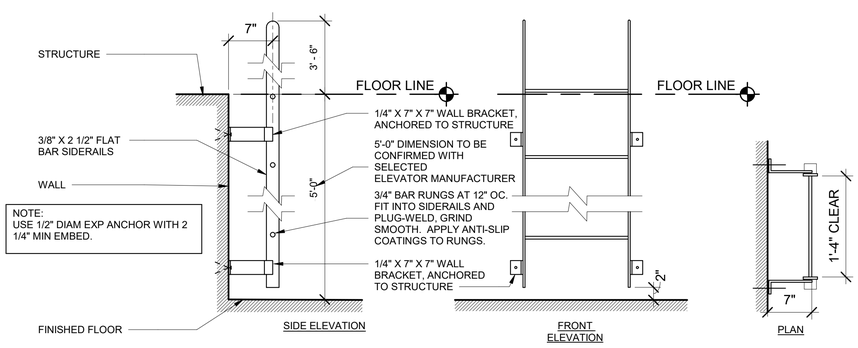
C4 ELEVATOR E01 - LEVEL 1 PLAN

1/4" = 1'-0"



C6 ELEVATOR E01 - LEVEL 2 PLAN

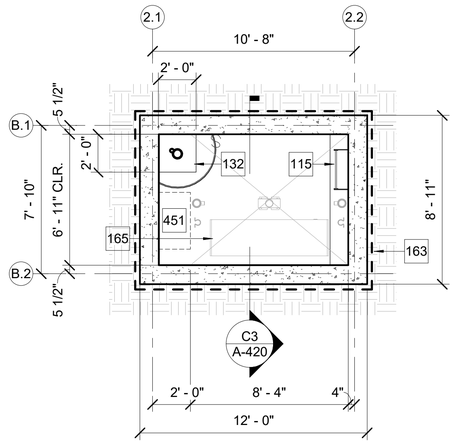
1/4" = 1'-0"



FINISH AFTER FABRICATION: SHOP PRIMER PAINT

A1 PIT LADDER

1" = 1'-0"



A6 ELEVATOR E01 - PIT PLAN

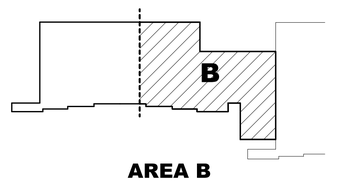
1/4" = 1'-0"

GENERAL NOTES - ELEVATOR

A	A PLUMB, PROPERLY VENTILATED HOISTWAY IS REQUIRED
B	COORDINATE WITH STRUCTURAL TO PROVIDE ADEQUATE SUPPORT FOR JACK, GUIDE RAIL BRACKETS, AND BUFFERS AS REQUIRED
C	EXTENTS OF SLAB SAWCUTS OF LEVEL 1 SLAB ARE INDICATED ON DEMO DRAWINGS. REFER TO STRUCTURAL FOR ADDITIONAL INFORMATION.

KEYNOTES

111	3,500 POUND CAPACITY HYDRAULIC ELEVATOR
112	ELEVATOR GUIDE RAIL BRACKETS BY ELEVATOR MANUFACTURER
115	PIT LADDER; REFER TO A1/A-420
118	1 1/2" DIA. PAINTED STEEL GUARDRAIL; RE: A4/A-530 FOR DETAIL
131	WALL MOUNTED LIGHT FIXTURE; REFER TO ELECTRICAL
132	2' x 2' x 2' SUMP PIT; REFER TO PLUMBING, ELECTRICAL, & STRUCTURAL
162	JAMB-MOUNTED ELEVATOR CONTROLLER LOCATED AT TOP LANDING; COORDINATE PLACEMENT WITH SELECTED ELEVATOR MANUFACTURER
163	BLIND SIDE WATERPROOFING
164	HOIST BEAM; REFER TO STRUCTURAL
165	EM POWER UNIT BY ELEVATOR MANUFACTURER
319	SPRAY APPLIED CEMENTITIOUS FIREPROOFING ON METAL DECK
370	AIR/VAPOR BARRIER
437	ELEVATOR DOOR SILL ANGLE; RE: STRUCTURAL
438	EXTENT OF SLAB REMOVAL AND REPLACEMENT; RE: STRUCTURAL
451	REQUIRED HOISTWAY PIT ENTRAPMENT PROTECTION AREA, PER UFC 3-490-06



AREA B
KEY PLAN

GRAPHIC SCALE

4 3 2 1 0 4 8
SCALE: 1/4"=1'-0"
1 1/2 0 1 2
SCALE: 1"=1'-0"

PLAN NORTH
TRUE N

US Army Corps of Engineers
Louisville District ®

REGISTERED ARCHITECT
RICHARD G. PERRY
16592
STATE OF TEXAS
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: J. PERRY
DRAWN BY: J. MCKINNEY
CHECKED BY: M. HOLLEB
SUBMITTED BY: E. OLNESS
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201A-420
ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS FIN: 70250-03

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNGS21B1455, P2#: 496395
VERTICAL CIRCULATION - ELEVATOR

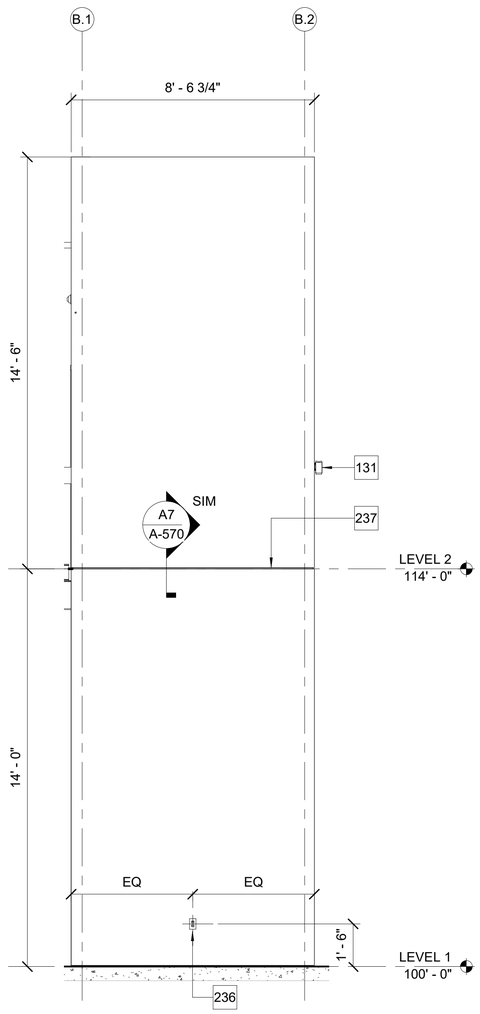
SHEET ID
B1455
A-420

W912QR23R0003_Plans-0000

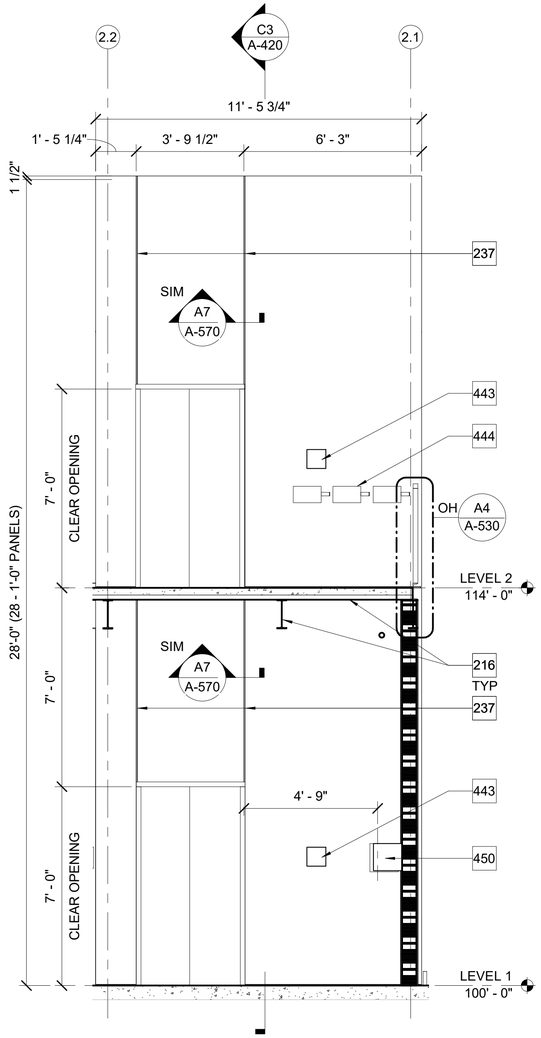
CERTIFIED FINAL DESIGN

KEYNOTES

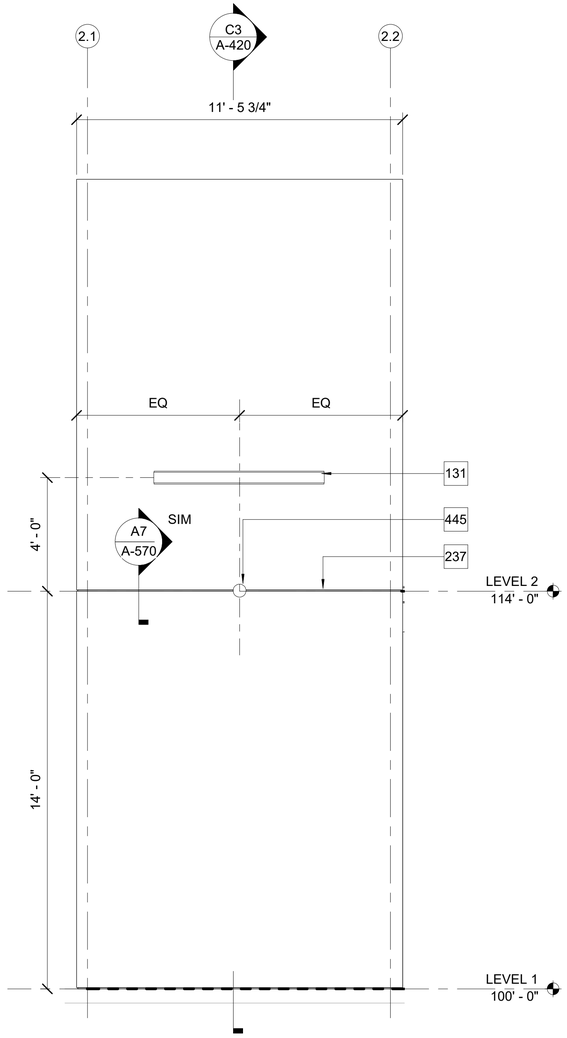
131	WALL MOUNTED LIGHT FIXTURE; REFER TO ELECTRICAL
216	EXPOSED STRUCTURAL STEEL BEAM AND METAL DECKING WITH INTUMESCENT EPOXY FIRE PROTECTIVE COATING
236	RECEPTACLE; RE: ELECTRICAL
237	CONTROL JOINT
443	ELEVATOR SIGNAGE; RE: INTERIORS
444	ELECTRICAL EQUIPMENT; RE: ELECTRICAL
445	WALL MOUNTED OCCUPANCY SENSOR; RE: ELECTRICAL
450	ELEVATOR PUMP CONTROL PANEL



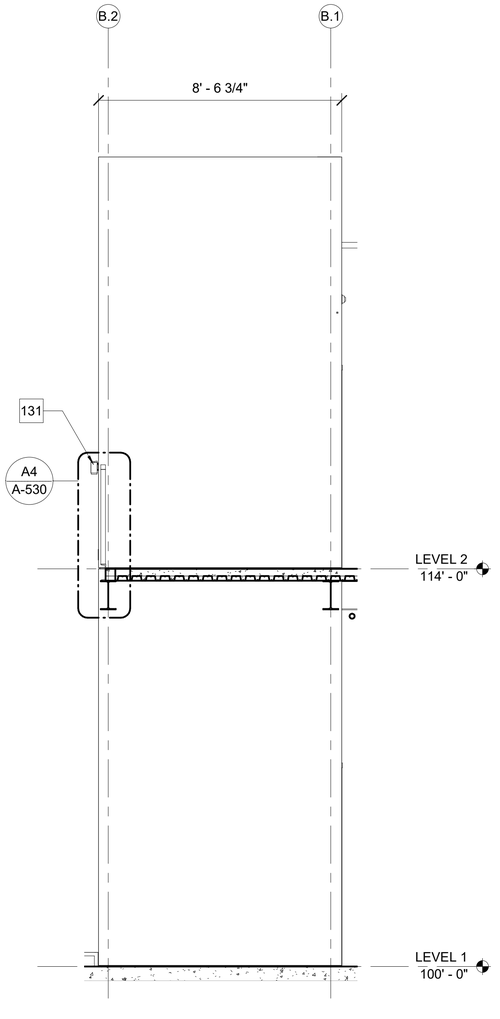
A1 ELEVATOR WEST ELEVATION
3/8" = 1'-0"



A3 ELEVATOR NORTH ELEVATION
3/8" = 1'-0"



A6 ELEVATOR SOUTH ELEVATION
3/8" = 1'-0"



A8 ELEVATOR EAST ELEVATION
3/8" = 1'-0"

US Army Corps of Engineers
Louisville District ®

REGISTERED ARCHITECT
RICHARD G. PERRY
16592
STATE OF TEXAS
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: J. PERRY
DRAWN BY: J. MCKINNEY
CHECKED BY: M. HOLLEB
SUBMITTED BY: E. OLNESS
QA/QC BY:
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201A-421
ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
ADDRESS No. F2966-13

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
VERTICAL CIRCULATION - ELEVATOR

SHEET ID
B1455
A-421

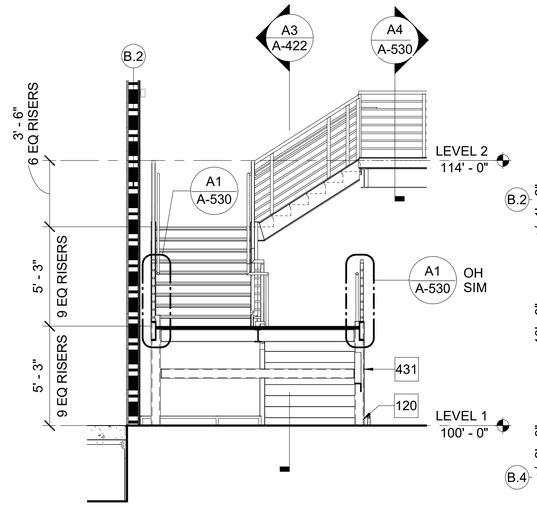
W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

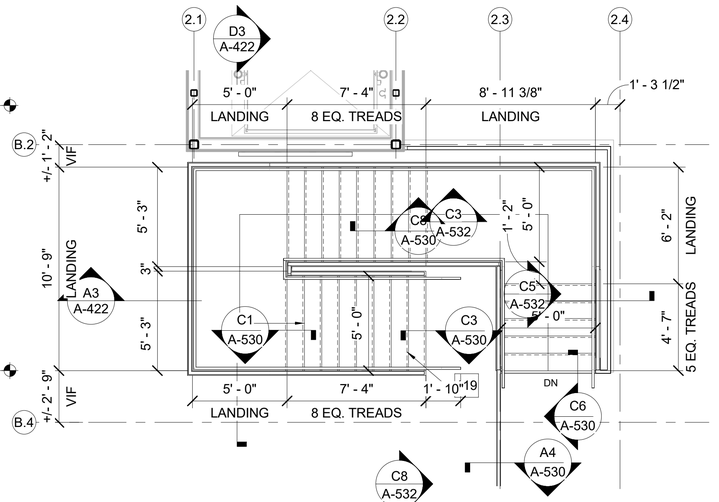
CERTIFIED FINAL DESIGN

KEYNOTES

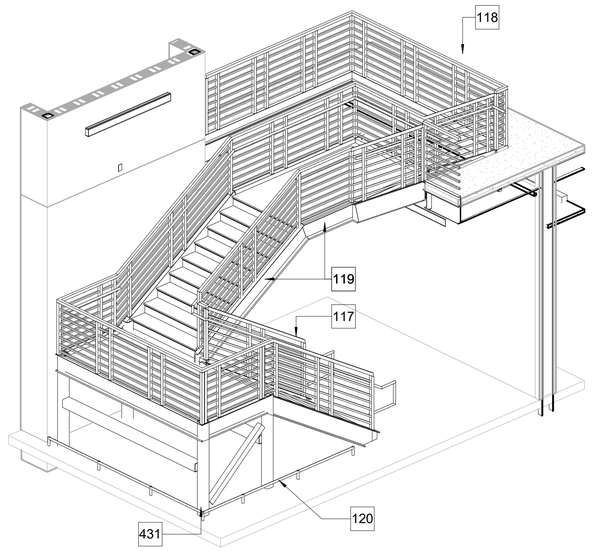
116	EXTENDED METAL STAIR STRINGER; REFER TO STRUCTURAL
117	1 1/2" DIA. PAINTED STEEL GUARDRAIL WITH HANDRAIL
118	1 1/2" DIA. PAINTED STEEL GUARDRAIL; RE: A4/A-530 FOR DETAIL
119	CONCRETE FILLED METAL PAN STAIRS AND LANDING; REFER TO INTERIORS FOR FINISHES, REFER TO STRUCTURAL FOR STAIR SUPPORTS
120	CANE DETECTION RAIL BELOW STAIRCASE LANDING
431	STEEL TUBE COLUMN FOR STAIR SUPPORT; RE: STRUCTURAL



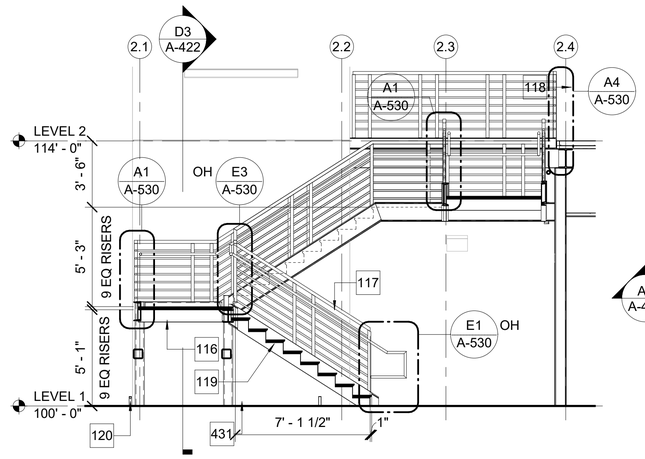
D3 STAIR S01 - TRANSVERSE SECTION
1/4" = 1'-0"



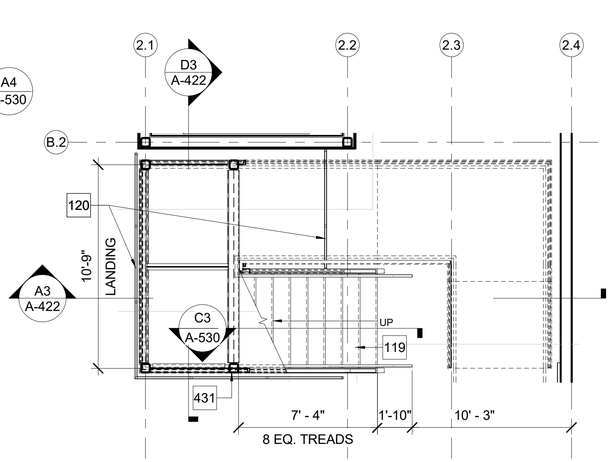
D5 STAIR S01 - LEVEL 2 PLAN
1/4" = 1'-0"



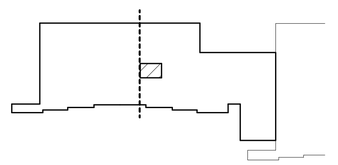
A1 STAIR S01 - PERSPECTIVE



A3 STAIR S01 - LONGITUDINAL SECTION
1/4" = 1'-0"



A5 STAIR S01 - LEVEL 1 PLAN
1/4" = 1'-0"



KEY PLAN

GRAPHIC SCALE
0 20 40 80
SCALE: 1"=40'-0"

PLAN NORTH
TRUE N

US Army Corps of Engineers
Louisville District ®

REGISTERED ARCHITECT
RICHARD G. PERRY
16592
STATE OF TEXAS
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: J. PERRY
DRAWN BY: J. MCKINNEY
CHECKED BY: M. HOLLEB
SUBMITTED BY: E. OLNESS
DATE:
ANSI D 22x34

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201A-422

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

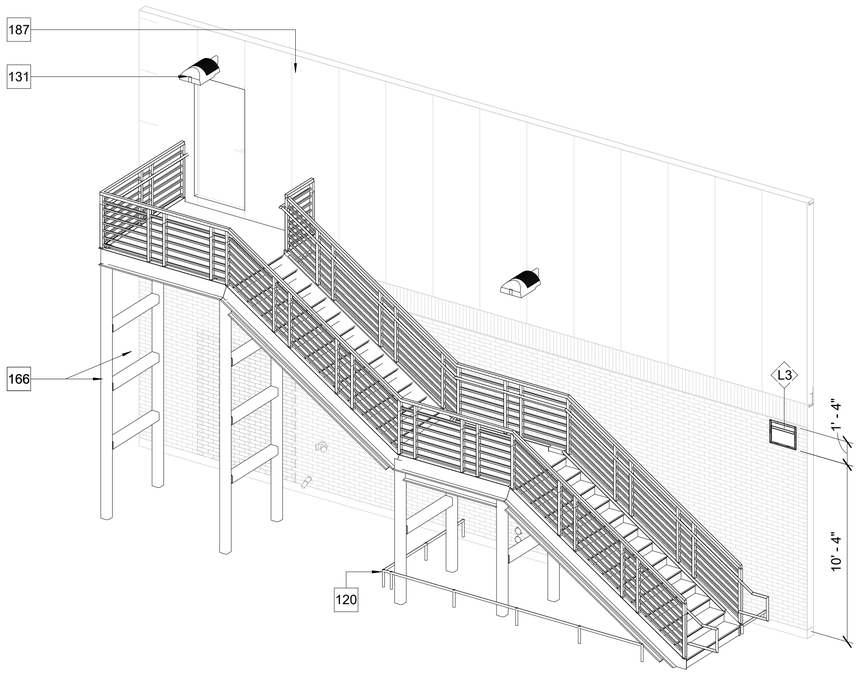
Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS TBPE FIRM #2913

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
VERTICAL CIRCULATION - STAIR 1

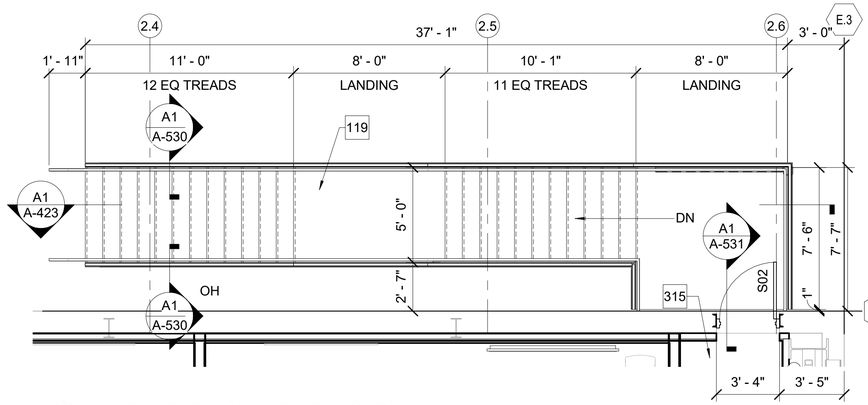
SHEET ID
B1455
A-422

W912QR23R0003_Plans-0000

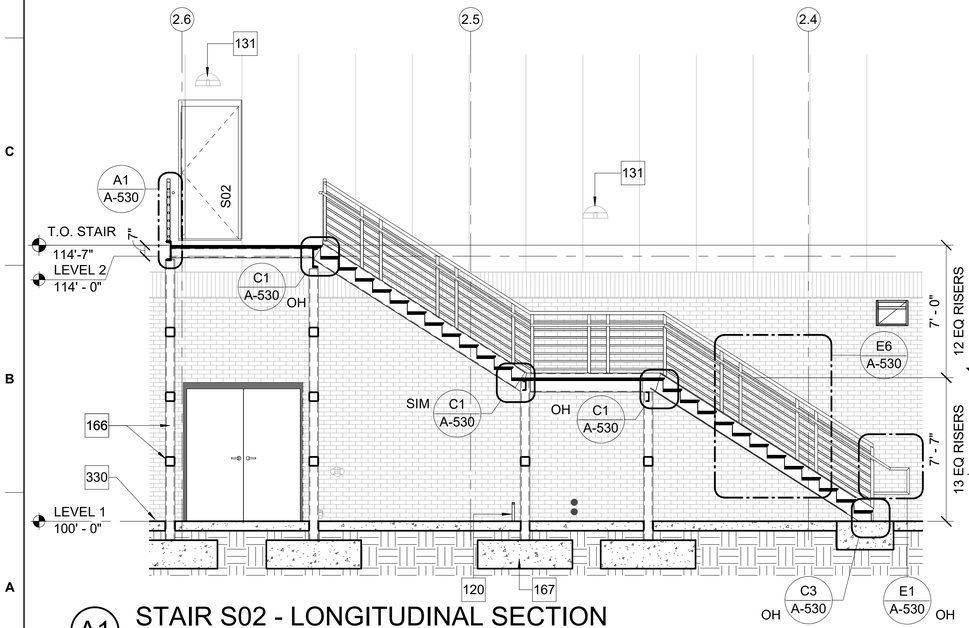
CERTIFIED FINAL DESIGN



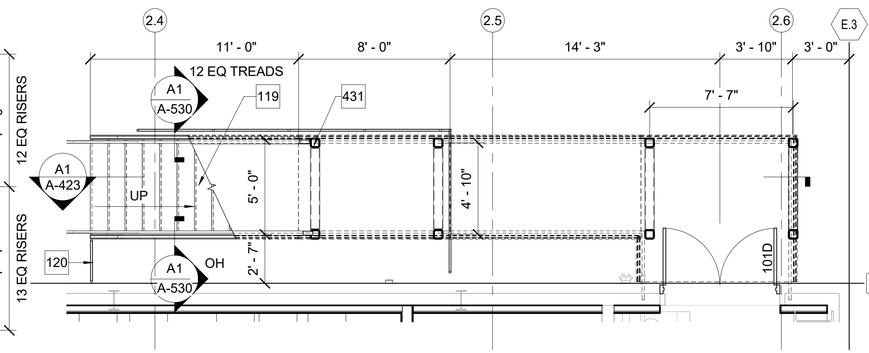
E1 STAIR S02 - PERSPECTIVE



C5 STAIR S02 - LEVEL 2 PLAN
1/4" = 1'-0"



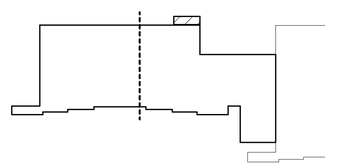
A1 STAIR S02 - LONGITUDINAL SECTION
1/4" = 1'-0"



A5 STAIR S02 - LEVEL 1 PLAN
1/4" = 1'-0"

KEYNOTES

119	CONCRETE FILLED METAL PAN STAIRS AND LANDING; REFER TO INTERIORS FOR FINISHES, REFER TO STRUCTURAL FOR STAIR SUPPORTS
120	CANE DETECTION RAIL BELOW STAIRCASE LANDING
130	BUILDING SIGNAGE; RE: INTERIORS
131	WALL MOUNTED LIGHT FIXTURE; REFER TO ELECTRICAL
166	HSS COLUMNS AND CROSS-BRACING; REFER TO STRUCTURAL
167	NEW STRUCTURAL FOUNDATION; REFER TO STRUCTURAL
168	PULL BOX; REFER TO TELECOM
187	SECURITY CAMERA; REFER TO TELECOM
315	ADA CODE COMPLIANT MODULAR ACCESS RAMP
330	FINISH GRADE; REFER CIVIL
431	STEEL TUBE COLUMN FOR STAIR SUPPORT; RE: STRUCTURAL



KEY PLAN

GRAPHIC SCALE
4 3 2 1 0 4 8
SCALE: 1/4"=1'-0"

PLAN NORTH
TRUE N

US Army Corps of Engineers
Louisville District ®

REGISTERED ARCHITECT
RICHARD G. PERRY
16592
STATE OF TEXAS
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201A-423

DESIGNED BY: J. PERRY
DRAWN BY: J. MCKINNEY
CHECKED BY: M. HOLLEB
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34

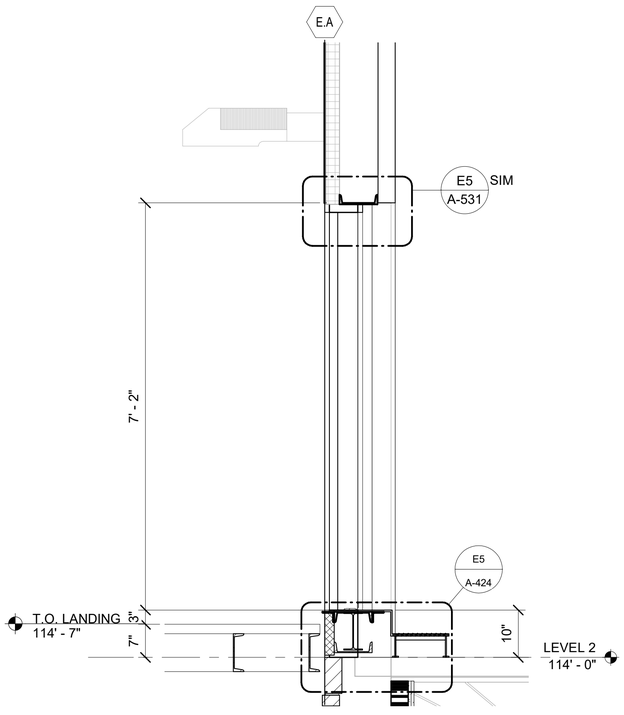
US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS Reg. FIRM-2966-13

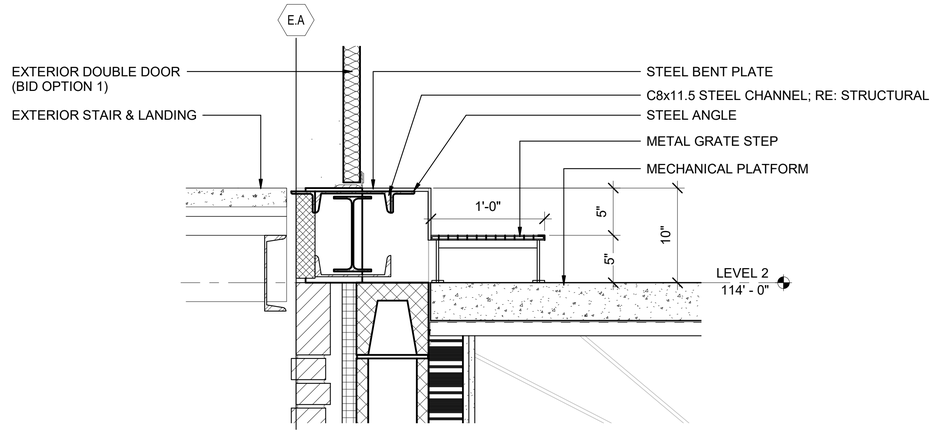
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, PZ#: 496395
VERTICAL CIRCULATION - STAIR 2

SHEET ID
B1455
A-423

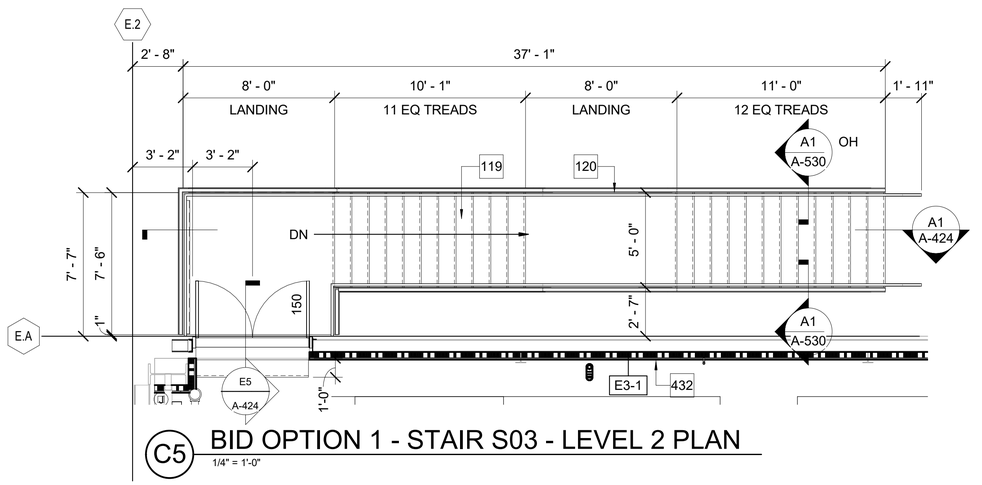
W912QR23R0003_Plans-0000



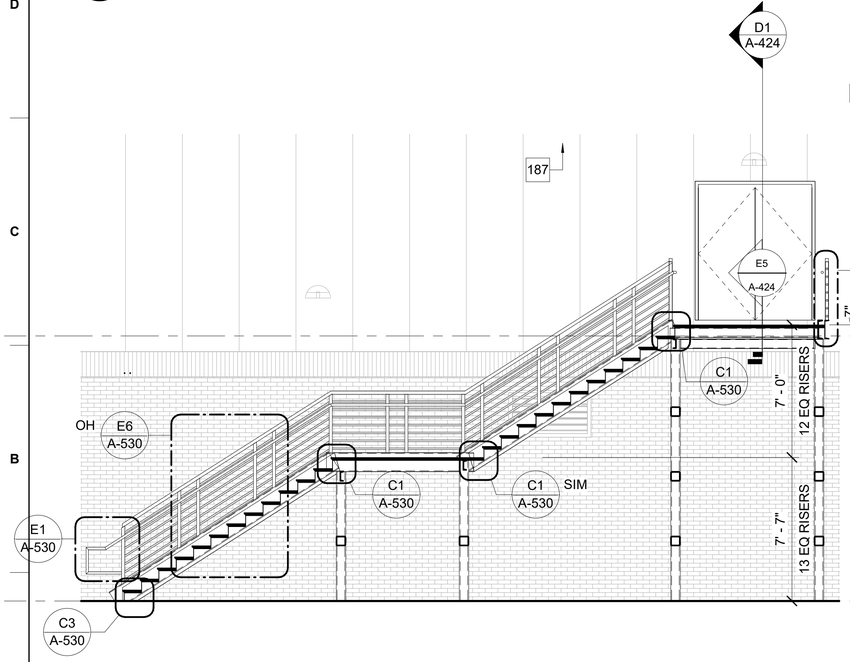
D1 BID OPTION 1 - SECTION AT PERSONNEL DOOR
3/4" = 1'-0"



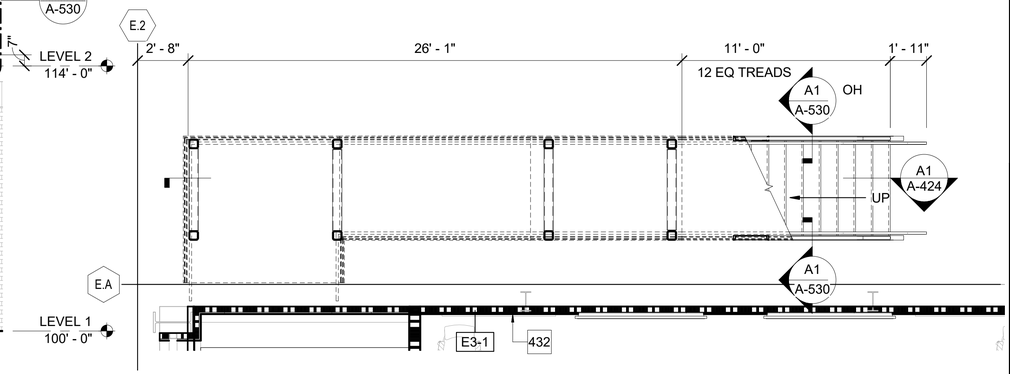
E5 SECTION DETAIL - SILL AT BID OPTION DOOR
1 1/2" = 1'-0"



C5 BID OPTION 1 - STAIR S03 - LEVEL 2 PLAN
1/4" = 1'-0"



A1 BID OPTION 1 - STAIR S03 - LONGITUDINAL SECTION
1/4" = 1'-0"



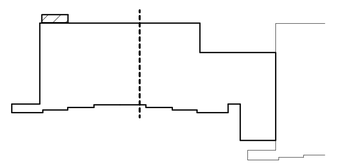
A5 BID OPTION 1 - STAIR S03 - LEVEL 1 PLAN
1/4" = 1'-0"

GENERAL NOTES - STAIRS

A	BID OPTION 1 SCOPE: CONSTRUCTION OF STAIR 03 FOR ACCESS TO THE MECHANICAL MEZZANINE. SCOPE INCLUDES NEW PATHWAY TO THE STAIR (RE: CIVIL), STAIR AND STAIR SUPPORT (RE: STRUCTURAL), NEW DOUBLE DOOR FOR ACCESS (IN PLACE OF THE LOUVER IDENTIFIED IN THE BASE BID), INTERIOR STEP, EXTERIOR LIGHTING (RE: ELECTRICAL), AND SURVEILLANCE (RE: TELECOM)

KEYNOTES

119	CONCRETE FILLED METAL PAN STAIRS AND LANDING; REFER TO INTERIORS FOR FINISHES, REFER TO STRUCTURAL FOR STAIR SUPPORTS
120	CANE DETECTION RAIL BELOW STAIRCASE LANDING
187	SECURITY CAMERA; REFER TO TELECOM
432	AS PART OF BID OPTION 1, TO MEET FIRE RATED SEPARATION REQUIREMENTS, INSTALL WALL TYPE E3-1 FURRING ALONG INSIDE FACE OF EXTERIOR WALL AT EDS COMPUTER (125A), MULTI-PURPOSE (123 AND 124) FROM FINISH FLOOR TO BOTTOM OF THE LEVEL 2 METAL DECK. INSTALL WALL TYPE E3-1 FURRING AT LEVEL 2 MECHANICAL MEZZANINE FROM FLOOR SLAB TO 10'-0" AFF.



KEY PLAN

GRAPHIC SCALE
4 3 2 1 0 4 8
SCALE: 1/4"=1'-0"

PLAN NORTH
TRUE N

US Army Corps of Engineers
Louisville District ®

REGISTERED ARCHITECT
RICHARD G. PERRY
16592
STATE OF TEXAS
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201A-424

DESIGNED BY: J. PERRY
DRAWN BY: J. MCKINNEY
CHECKED BY: M. HOLLEB
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
ARCHITECTURAL FIRM F-2913

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
VERTICAL CIRCULATION - STAIR 3 (BID OPTION 1)

SHEET ID
B1455
A-424

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

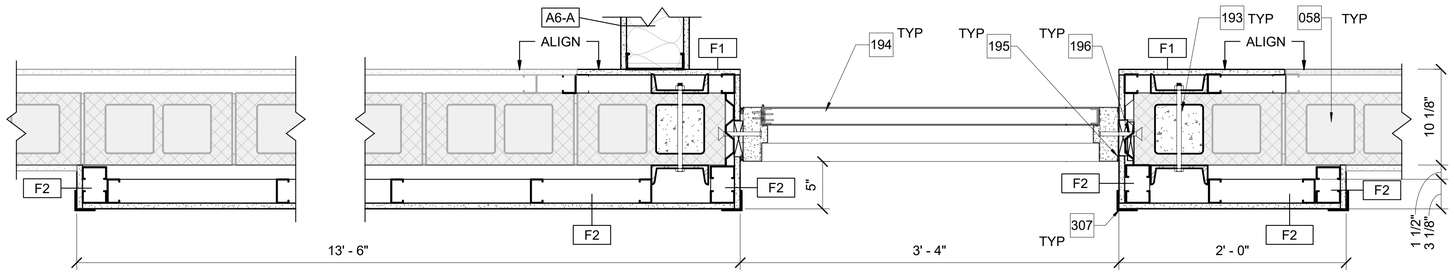
CERTIFIED FINAL DESIGN

GENERAL NOTES - DETAILS

1	REFER TO A-570 PARTITION TYPES AND DETAILS FOR ALL PARTITION ASSEMBLIES AND REQUIREMENTS; REFER TO GENERAL NOTES ON A-570 FOR ADDITIONAL INFORMATION.
2	REFER TO INTERIOR FINISH SCHEDULE ON I-601 FOR ALL INTERIOR FINISHES
3	REFER TO A-610 DOOR AND LOUVER SCHEDULE FOR ADDITIONAL INFORMATION
4	REFER TO F1/A-525 FOR TYPICAL ROOF ASSEMBLY AT BUILDING ADDITION
5	EXTERIOR FINISHES AT AREAS OF NEW CONSTRUCTION ARE TO MATCH THE EXISTING FINISHES; CONTACT 42 CES FOR ADDITIONAL INFORMATION

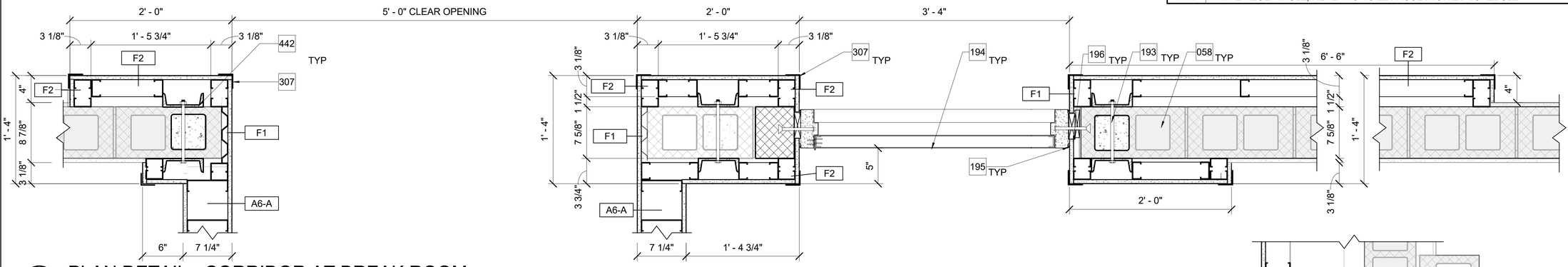
KEYNOTES

058	EXISTING LOAD-BEARING CONCRETE MASONRY UNIT WALL
059	EXISTING STEEL COLUMN AND CROSS BRACING
145	HIGH-LOW DRINKING FOUNTAIN WITH BOTTLE FILLER; REFER TO PLUMBING
193	STEEL CHANNEL WITH THROUGH BOLT IN EXISTING LOAD-BEARING CMU WALL. REFER TO STRUCTURAL FOR SIZING.
194	DOOR AND FRAME AS SCHEDULED
195	BACKER ROD & SEALANT EACH SIDE
196	WOOD BLOCKING AS REQUIRED
226	ANODIZED ALUMINUM EDGE TRIM AT OUTSIDE TILE CORNER; REFER TO B1/I-601
307	CORNER GUARD CG-1 AS SPECIFIED; REFER TO FINISH LEGEND, IN102, & IN103 FOR ADDITIONAL INFORMATION
348	BACKER ROD & SEALANT
442	CHANNEL FRAMING TO EXTEND OVER HEAD OF OPENING AND JAMB DETAIL
PWT-2	PORCELAIN WALL TILE 2; REFER TO INTERIOR FINISH LEGEND ON SHEET I-601
WR	WASTE RECEPTACLE; REFER TO TOILET ACCESSORIES SCHEDULE



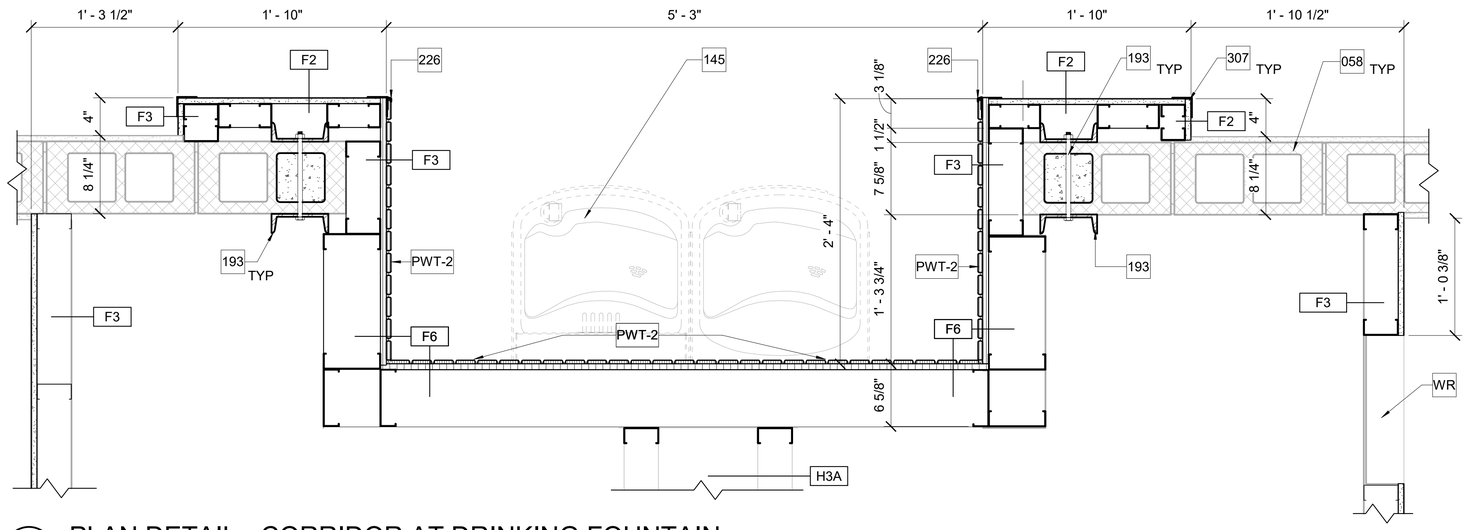
F1 PLAN DETAIL - FURRING AT CORRIDOR

1 1/2" = 1'-0"



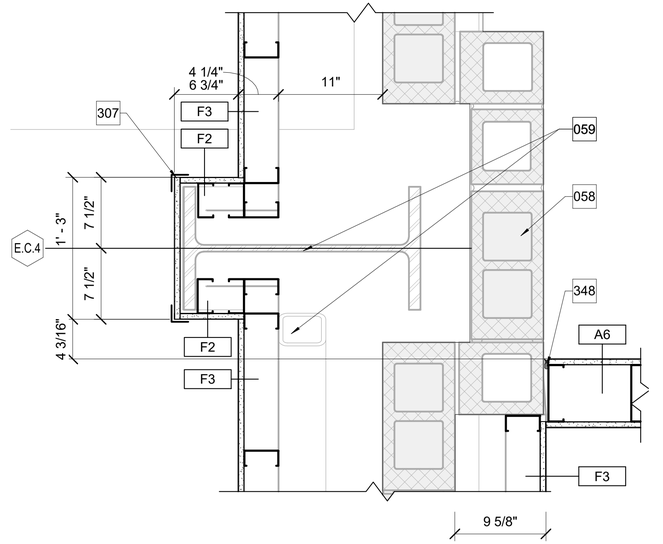
D1 PLAN DETAIL - CORRIDOR AT BREAK ROOM

1 1/2" = 1'-0"



A1 PLAN DETAIL - CORRIDOR AT DRINKING FOUNTAIN

1 1/2" = 1'-0"



A8 PLAN DETAIL - FURRING AT COLUMN AND MEN'S RR

1 1/2" = 1'-0"

GRAPHIC SCALE

0 6 1 2

SCALE: 1 1/2"=1'-0"

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

REGISTERED ARCHITECT RICHARD G. PERRY 16592 STATE OF TEXAS 23 NOV 2022

TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: J. PERRY
DRAWN BY: J. MCKINNEY
CHECKED BY: M. HOLLEB
SUBMITTED BY: E. OLNESS
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201A-501
ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

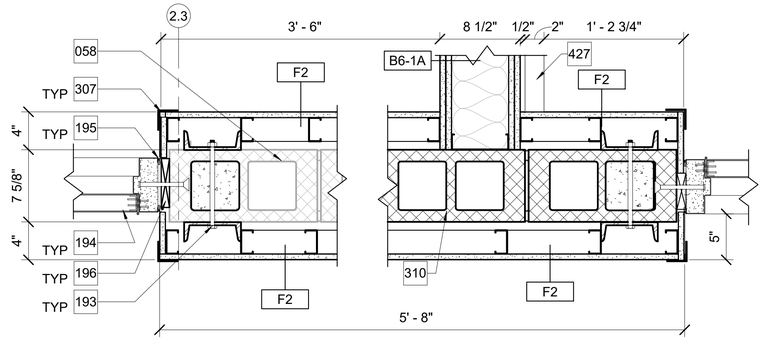
Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
Phone: 817.820.8000 Fax: 817.820.8100

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PLAN DETAILS

SHEET ID
B1455
A-501

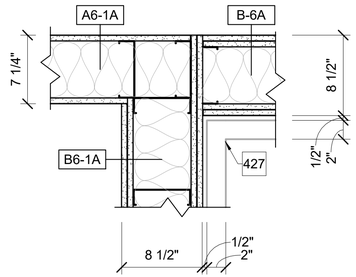
W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



F1 PLAN DETAIL AT CPT 117 & WPT 118

1 1/2" = 1'-0"



F5 PLAN DETAIL - RATED ACOUSTICAL PARTITION

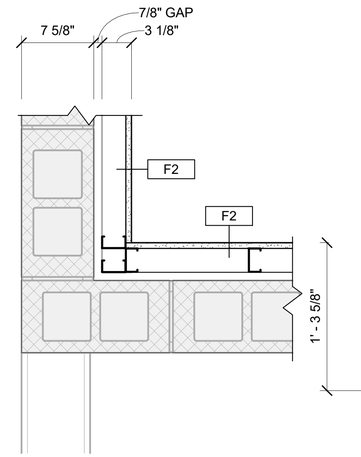
1 1/2" = 1'-0"

GENERAL NOTES - DETAILS

1	REFER TO A-570 PARTITION TYPES AND DETAILS FOR ALL PARTITION ASSEMBLIES AND REQUIREMENTS; REFER TO GENERAL NOTES ON A-570 FOR ADDITIONAL INFORMATION.
2	REFER TO INTERIOR FINISH SCHEDULE ON I-601 FOR ALL INTERIOR FINISHES
3	REFER TO A-610 DOOR AND LOUVER SCHEDULE FOR ADDITIONAL INFORMATION
4	REFER TO F1/A-525 FOR TYPICAL ROOF ASSEMBLY AT BUILDING ADDITION
5	EXTERIOR FINISHES AT AREAS OF NEW CONSTRUCTION ARE TO MATCH THE EXISTING FINISHES; CONTACT 42 CES FOR ADDITIONAL INFORMATION

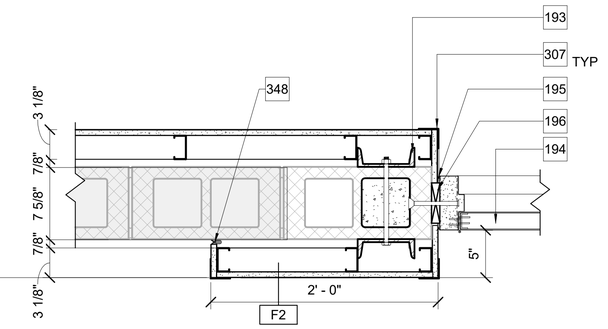
KEYNOTES

058	EXISTING LOAD-BEARING CONCRETE MASONRY UNIT WALL
193	STEEL CHANNEL WITH THROUGH BOLT IN EXISTING LOAD-BEARING CMU WALL. REFER TO STRUCTURAL FOR SIZING.
194	DOOR AND FRAME AS SCHEDULED
195	BACKER ROD & SEALANT EACH SIDE
196	WOOD BLOCKING AS REQUIRED
307	CORNER GUARD CG-1 AS SPECIFIED; REFER TO FINISH LEGEND, IN102, & IN103 FOR ADDITIONAL INFORMATION
310	LOAD BEARING CONCRETE MASONRY UNIT WALL; REFER STRUCTURAL
348	BACKER ROD & SEALANT
427	ACOUSTIC WALL PANEL, REFER INTERIORS



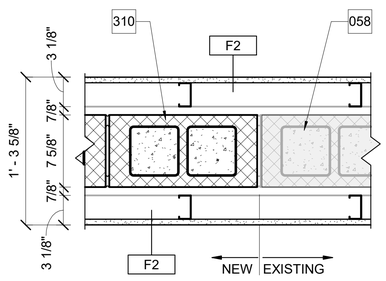
C1 PLAN DETAIL AT CPT 117

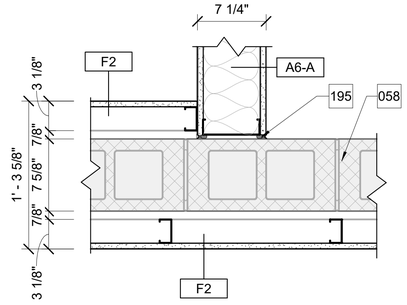
1 1/2" = 1'-0"



C6 PLAN DETAIL AT CMU INFILL

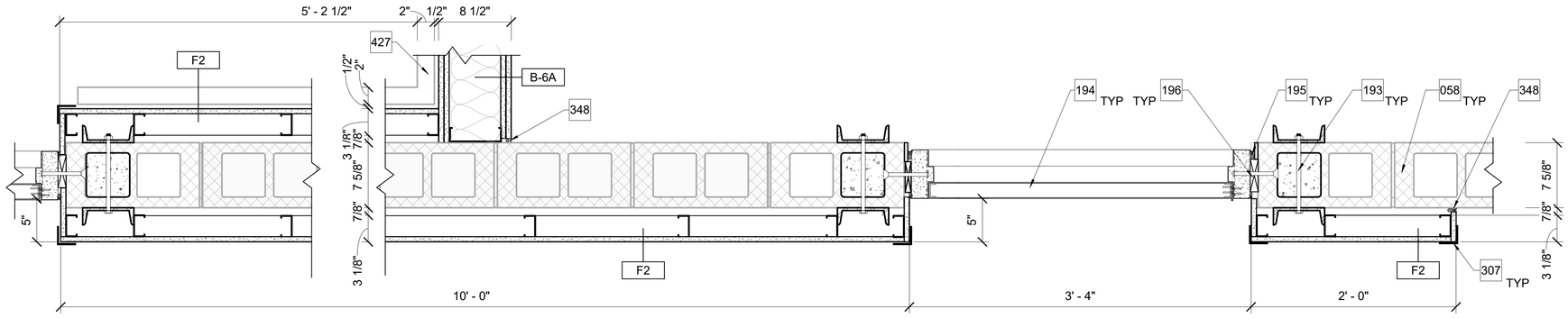
1 1/2" = 1'-0"





C8 PLAN DETAIL - NEW GWB AT EXISTING CMU

1 1/2" = 1'-0"



A1 PLAN DETAIL AT WPT 118 & TELECOM 119

1 1/2" = 1'-0"

GRAPHIC SCALE

0 6 1 2

SCALE: 1 1/2"=1'-0"

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

REGISTERED ARCHITECT
RICHARD G. PERRY
16592
STATE OF TEXAS
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201A-502

DESIGNED BY: J. PERRY
DRAWN BY: J. MCKINNEY
CHECKED BY: M. HOLLEB
SUBMITTED BY: E. OLNESS
SCALE: ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

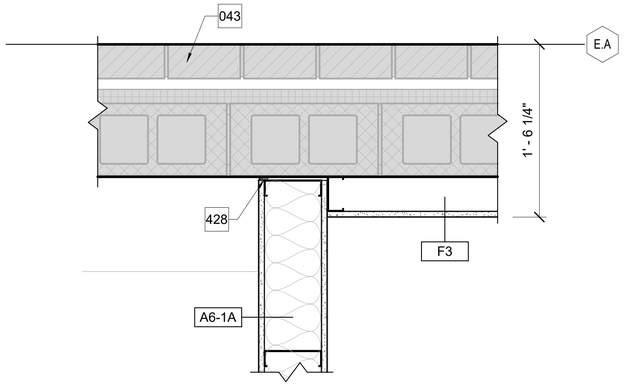
jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
(682)554-7400 TBPE F-2018

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395

PLAN DETAILS

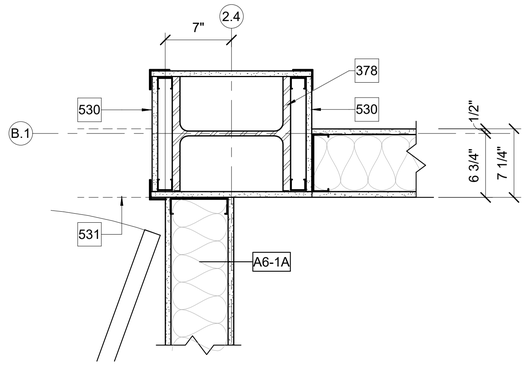
SHEET ID
B1455
A-502

W912QR23R0003_Plans-0000



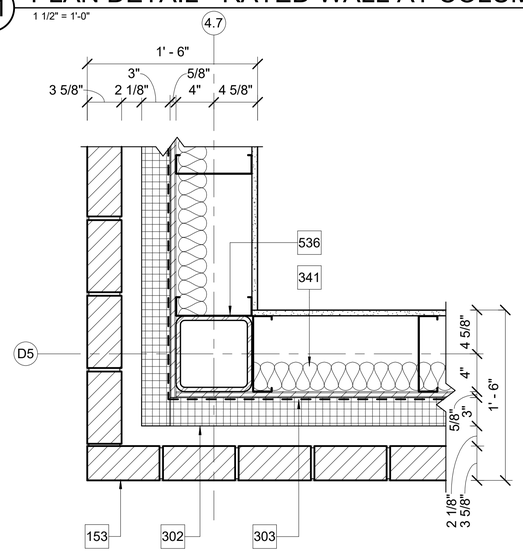
F1 PLAN DETAIL - RATED WALL AT FURRING

1 1/2" = 1'-0"



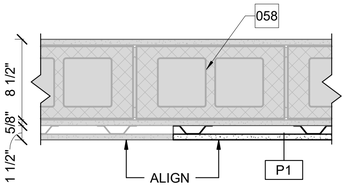
D1 PLAN DETAIL - RATED WALL AT COLUMN

1 1/2" = 1'-0"



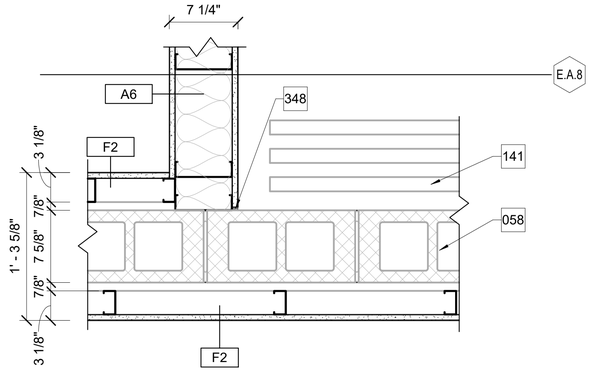
A1 PLAN DETAIL - OUTSIDE CORNER

1 1/2" = 1'-0"



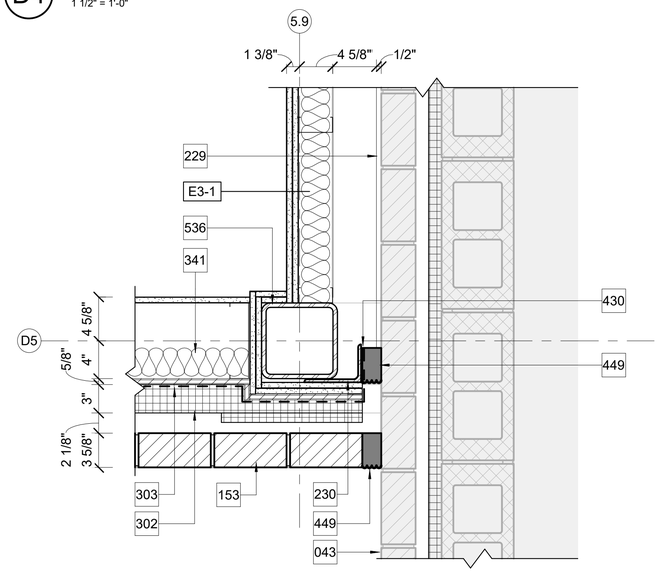
F4 PLAN DETAIL - FURRING AT EXISTING

1 1/2" = 1'-0"



D4 PLAN DETAIL - CMU AT OPERABLE PARTITION

1 1/2" = 1'-0"



A4 PLAN DETAIL - EXTERIOR WALL AT LEVEL 1 E.J.

1 1/2" = 1'-0"

GENERAL NOTES - DETAILS

1	REFER TO A-570 PARTITION TYPES AND DETAILS FOR ALL PARTITION ASSEMBLIES AND REQUIREMENTS; REFER TO GENERAL NOTES ON A-570 FOR ADDITIONAL INFORMATION.
2	REFER TO INTERIOR FINISH SCHEDULE ON I-601 FOR ALL INTERIOR FINISHES
3	REFER TO A-610 DOOR AND LOUVER SCHEDULE FOR ADDITIONAL INFORMATION
4	REFER TO F1/A-525 FOR TYPICAL ROOF ASSEMBLY AT BUILDING ADDITION
5	EXTERIOR FINISHES AT AREAS OF NEW CONSTRUCTION ARE TO MATCH THE EXISTING FINISHES; CONTACT 42 CES FOR ADDITIONAL INFORMATION

KEYNOTES

043	EXISTING EXTERIOR WALL ASSEMBLY
058	EXISTING LOAD-BEARING CONCRETE MASONRY UNIT WALL
141	MANUAL OPERABLE FOLDING PANEL PARTITION; RE: D1/A-510 FOR TRACK DETAIL
153	BRICK CAVITY WALL; MATCH EXISTING BRICK
229	SLAB EDGE; REFER TO STRUCTURAL
230	6"x4"x5/16" STEEL ANGLE; REFER TO STRUCTURAL
302	3" RIGID INSULATION (R-15 MIN)
303	AIR/VAPOR BARRIER ON 5/8" SHEATHING
341	BATT INSULATION (R-7.5 MIN)
348	BACKER ROD & SEALANT
378	STRUCTURAL STEEL COLUMN, REFER STRUCTURAL
428	FIRE RATED WALL JOINT TO MATCH WALL RATING
430	EXTEND BARRIER INTO EJ OPENING
449	FIRE RETARDANT IMPREGNATED FOAM EXPANSION JOINT WITH SILICONE FACED BELLOWS
530	FIRE-RATED COLUMN ENCLOSURE, ASSEMBLY UL# DES X528; TYP
531	WALL AT SIM LOCATIONS WHERE INDICATED ON FLOOR PLANS
536	STEEL TUBE COLUMN; RE: STRUCTURAL

US Army Corps of Engineers
Louisville District ®

REGISTERED ARCHITECT RICHARD G. PERRY 18592 STATE OF TEXAS 23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: J. PERRY
DRAWN BY: J. MCKINNEY
CHECKED BY: M. HOLLEB
SUBMITTED BY: E. OLNESS
ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201A-503

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
Phone: 817.820.8700 Fax: 817.820.8799

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PLAN DETAILS

SHEET ID
B1455
A-503

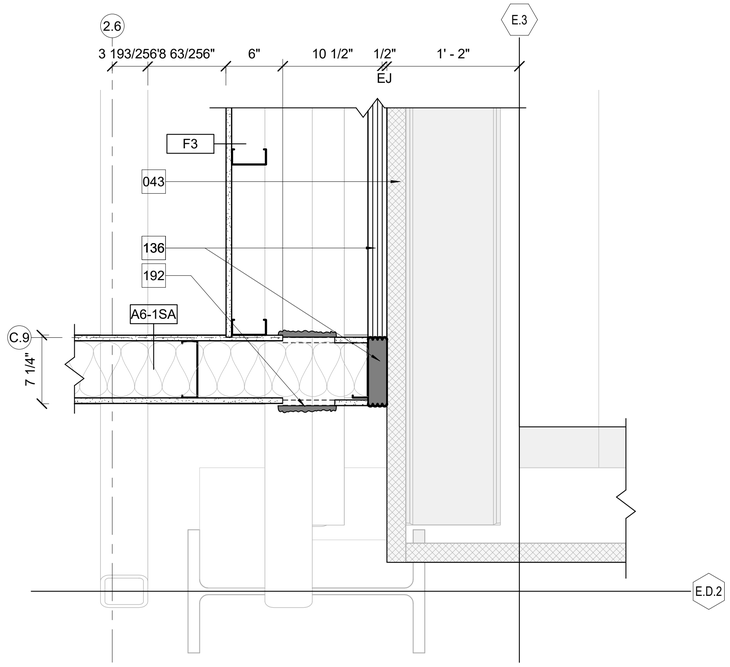
GRAPHIC SCALE
0 6 1 2
SCALE: 1 1/2"=1'-0"

PLAN NORTH
TRUE N

W912QR23R0003_Plans-0000

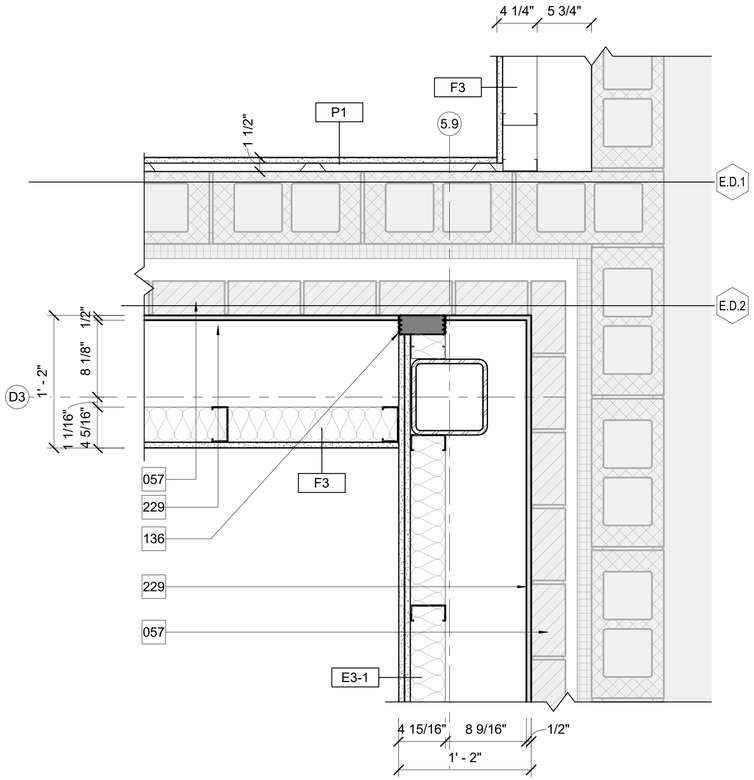
ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN



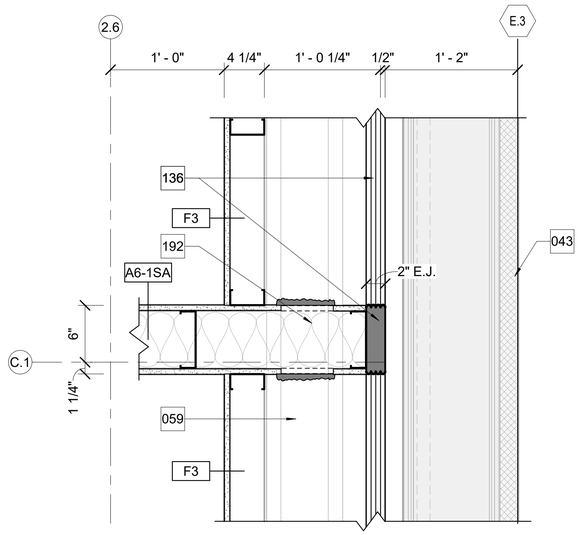
D1 PLAN DETAIL - LEVEL 2 E.J. AT RATED PARTITION

1 1/2" = 1'-0"



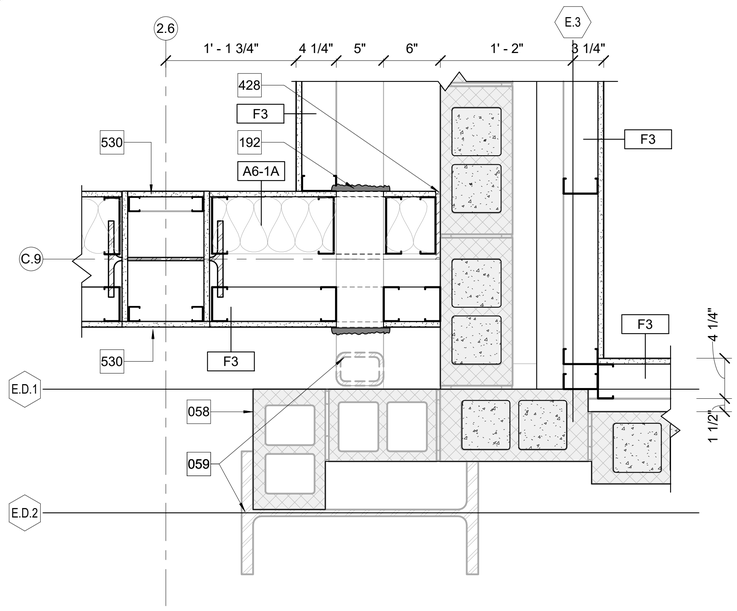
D5 PLAN DETAIL - LEVEL 1 E.J. INSIDE CORNER

1 1/2" = 1'-0"



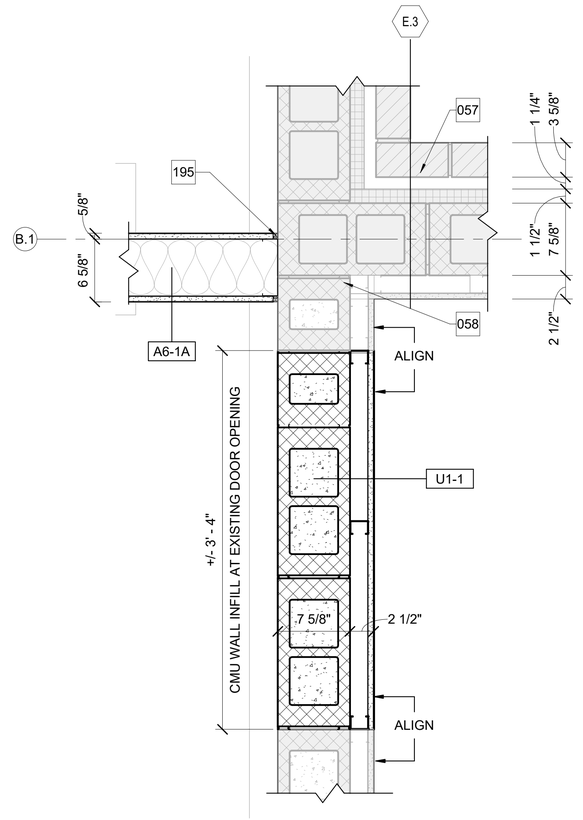
A1 PLAN DETAIL - LEVEL 2 E.J. AT RATED PARTITION

1 1/2" = 1'-0"



A5 PLAN DETAIL - RATED WALL AT EXISTING FRAMING

1 1/2" = 1'-0"



A8 PLAN DETAIL - CMU WALL INFILL

1 1/2" = 1'-0"

GENERAL NOTES - DETAILS

1	REFER TO A-570 PARTITION TYPES AND DETAILS FOR ALL PARTITION ASSEMBLIES AND REQUIREMENTS; REFER TO GENERAL NOTES ON A-570 FOR ADDITIONAL INFORMATION.
2	REFER TO INTERIOR FINISH SCHEDULE ON I-601 FOR ALL INTERIOR FINISHES
3	REFER TO A-610 DOOR AND LOUVER SCHEDULE FOR ADDITIONAL INFORMATION
4	REFER TO F1/A-525 FOR TYPICAL ROOF ASSEMBLY AT BUILDING ADDITION
5	EXTERIOR FINISHES AT AREAS OF NEW CONSTRUCTION ARE TO MATCH THE EXISTING FINISHES; CONTACT 42 CES FOR ADDITIONAL INFORMATION

KEYNOTES

043	EXISTING EXTERIOR WALL ASSEMBLY
057	EXISTING BRICK CAVITY WALL ON LOAD-BEARING CONCRETE MASONRY
058	EXISTING LOAD-BEARING CONCRETE MASONRY UNIT WALL
059	EXISTING STEEL COLUMN AND CROSS BRACING
136	2" EXPANSION JOINT; REFER TO STRUCTURAL
192	INTUMESCENT SEALANT EACH SIDE OF PENETRATION OF RATED WALL BY EXISTING STRUCTURAL FRAMING
195	BACKER ROD & SEALANT EACH SIDE
229	SLAB EDGE; REFER TO STRUCTURAL
428	FIRE RATED WALL JOINT TO MATCH WALL RATING
530	FIRE-RATED COLUMN ENCLOSURE, ASSEMBLY UL# DES X528; TYP

US Army Corps of Engineers
Louisville District ®

REGISTERED ARCHITECT RICHARD G. PERRY 16592 STATE OF TEXAS 23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: J. PERRY
DRAWN BY: J. MCKINNEY
CHECKED BY: M. HOLLEB
SUBMITTED BY: E. OLNESS
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201A-504
ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
Phone: 817.820.8282 Fax: 817.820.8283

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PLAN DETAILS

GRAPHIC SCALE
0 6 1 2
SCALE: 1 1/2"=1'-0"

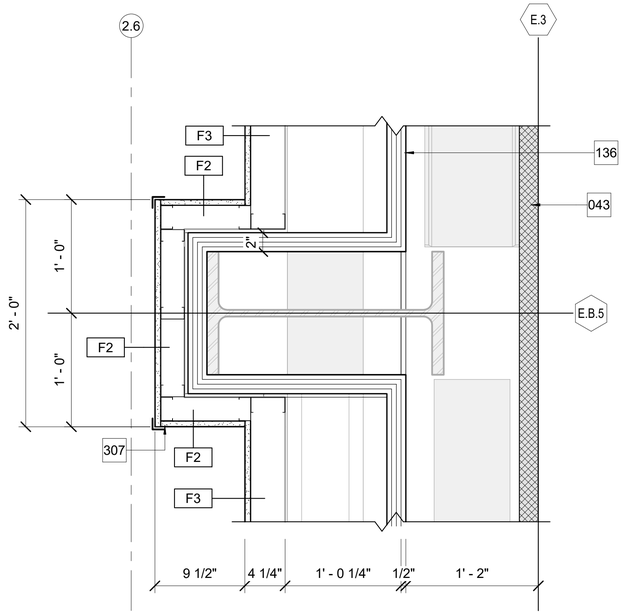
PLAN NORTH
TRUE N

SHEET ID
B1455
A-504

W912QR23R0003_Plans-0000

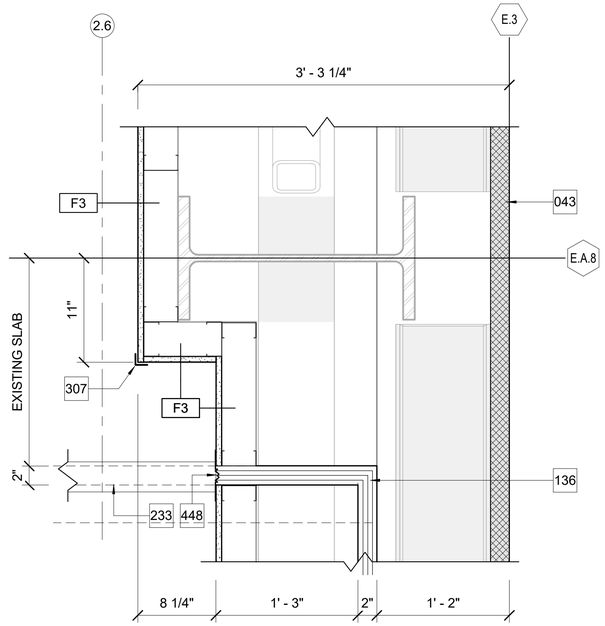
ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN



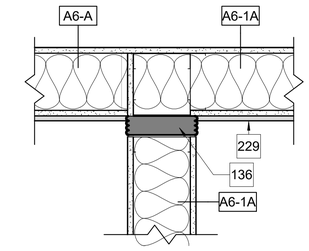
D1 PLAN DETAIL - LEVEL 2 E.J.

1 1/2" = 1'-0"



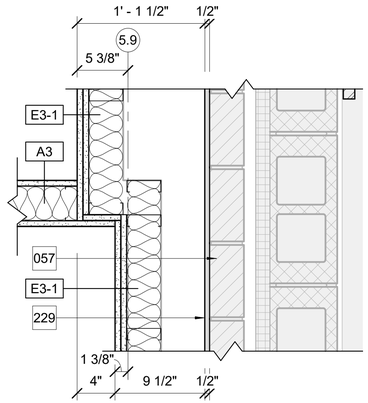
D4 PLAN DETAIL - LEVEL 2 E.J.

1 1/2" = 1'-0"



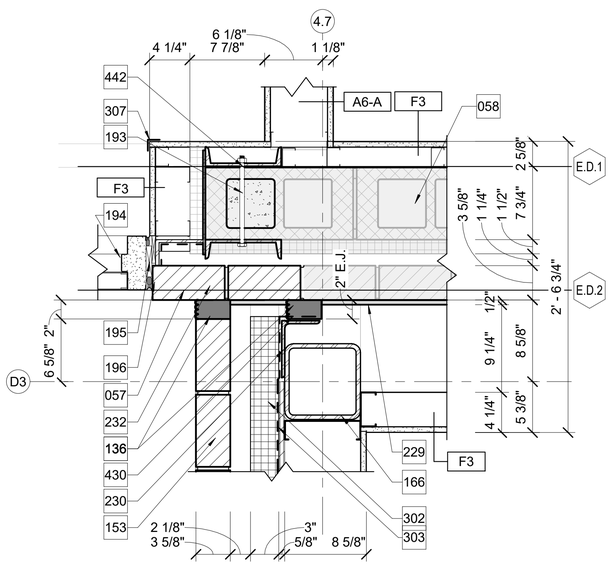
F7 PLAN DETAIL - LEVEL 2 E.J.

1 1/2" = 1'-0"



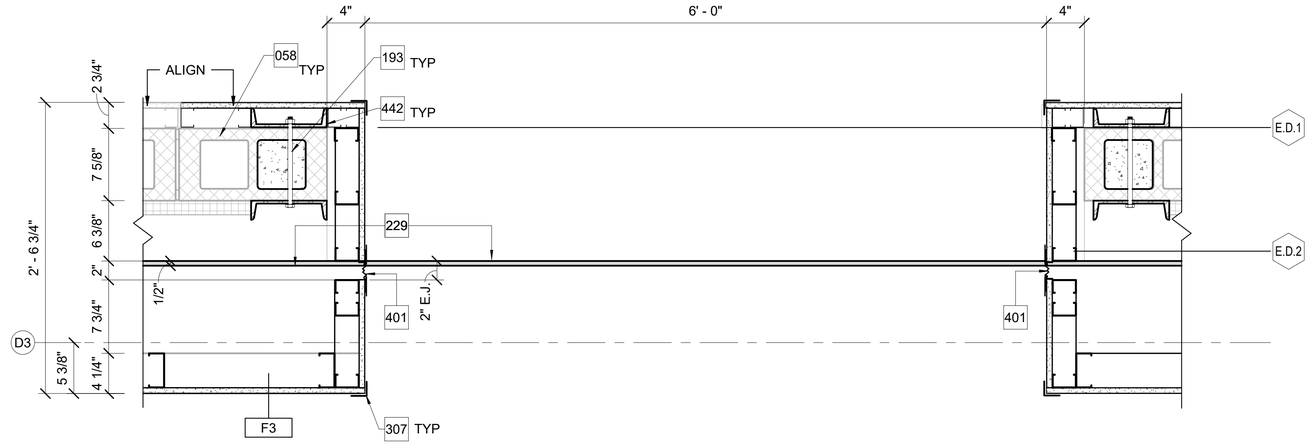
D7 PLAN DETAIL

1 1/2" = 1'-0"



A1 PLAN DETAIL - TERMINATION OF LEVEL 1 E.J.

1 1/2" = 1'-0"



A5 PLAN DETAIL - CMU WALL OPENING AT E.J.

1 1/2" = 1'-0"

GENERAL NOTES - DETAILS

1	REFER TO A-570 PARTITION TYPES AND DETAILS FOR ALL PARTITION ASSEMBLIES AND REQUIREMENTS; REFER TO GENERAL NOTES ON A-570 FOR ADDITIONAL INFORMATION.
2	REFER TO INTERIOR FINISH SCHEDULE ON I-601 FOR ALL INTERIOR FINISHES
3	REFER TO A-610 DOOR AND LOUVER SCHEDULE FOR ADDITIONAL INFORMATION
4	REFER TO F1/A-525 FOR TYPICAL ROOF ASSEMBLY AT BUILDING ADDITION
5	EXTERIOR FINISHES AT AREAS OF NEW CONSTRUCTION ARE TO MATCH THE EXISTING FINISHES; CONTACT 42 CES FOR ADDITIONAL INFORMATION

KEYNOTES

043	EXISTING EXTERIOR WALL ASSEMBLY
057	EXISTING BRICK CAVITY WALL ON LOAD-BEARING CONCRETE MASONRY
058	EXISTING LOAD-BEARING CONCRETE MASONRY UNIT WALL
136	2" EXPANSION JOINT; REFER TO STRUCTURAL
153	BRICK CAVITY WALL; MATCH EXISTING BRICK
166	HSS COLUMNS AND CROSS-BRACING; REFER TO STRUCTURAL
193	STEEL CHANNEL WITH THROUGH BOLT IN EXISTING LOAD-BEARING CMU WALL. REFER TO STRUCTURAL FOR SIZING.
194	DOOR AND FRAME AS SCHEDULED
195	BACKER ROD & SEALANT EACH SIDE
196	WOOD BLOCKING AS REQUIRED
229	SLAB EDGE; REFER TO STRUCTURAL
230	6"x4"x5/16" STEEL ANGLE; REFER TO STRUCTURAL
232	REMOVE AND REPLACE EXISTING BRICK IN THIS LOCATION TO INSTALL THROUGH-BOLT AND CHANNEL
233	FLOOR EXPANSION JOINT COVER (2" EXPANSION JOINT SHOWN AS DASHED LINES BELOW)
302	3" RIGID INSULATION (R-15 MIN)
303	AIR/VAPOR BARRIER ON 5/8" SHEATHING
307	CORNER GUARD CG-1 AS SPECIFIED; REFER TO FINISH LEGEND, IN102, & IN103 FOR ADDITIONAL INFORMATION
401	INTERIOR EXPANSION JOINT COVER, FINISH TO MATCH ADJACENT WALL
430	EXTEND BARRIER INTO EJ OPENING
442	CHANNEL FRAMING TO EXTEND OVER HEAD OF OPENING AND JAMB DETAIL
448	ALUMINUM WALL TO FLOOR EXPANSION JOINT COVER, CONCEAL VERTICAL LEG BEHIND GYPSUM WALLBOARD; RE: INTERIORS FOR FLOOR FINISH

GRAPHIC SCALE

0 6 1 2

SCALE: 1 1/2"=1'-0"

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

REGISTERED ARCHITECT
RICHARD G. PERRY
16592
STATE OF TEXAS
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: J. PERRY
DRAWN BY: J. MCKINNEY
CHECKED BY: M. HOLLEB
SUBMITTED BY: E. OLNESS
DATE: ANSI D
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: 22x34 SXHT219201A-505

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS No. D2R0013

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PLAN DETAILS

SHEET ID
B1455
A-505

W912QR23R0003_Plans-0000

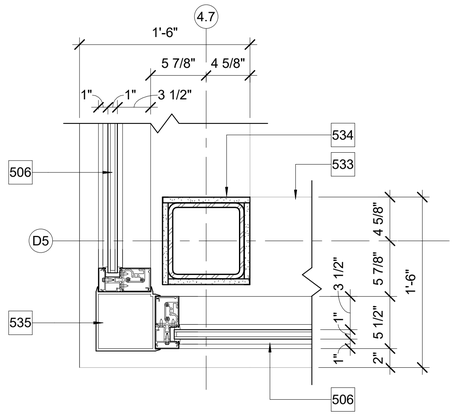
CERTIFIED FINAL DESIGN

GENERAL NOTES - DETAILS

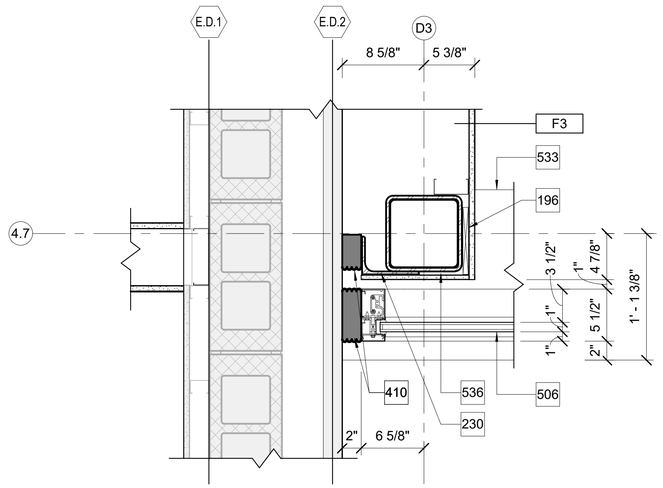
1	REFER TO A-570 PARTITION TYPES AND DETAILS FOR ALL PARTITION ASSEMBLIES AND REQUIREMENTS; REFER TO GENERAL NOTES ON A-570 FOR ADDITIONAL INFORMATION.
2	REFER TO INTERIOR FINISH SCHEDULE ON I-601 FOR ALL INTERIOR FINISHES
3	REFER TO A-610 DOOR AND LOUVER SCHEDULE FOR ADDITIONAL INFORMATION
4	REFER TO F1/A-525 FOR TYPICAL ROOF ASSEMBLY AT BUILDING ADDITION
5	EXTERIOR FINISHES AT AREAS OF NEW CONSTRUCTION ARE TO MATCH THE EXISTING FINISHES; CONTACT 42 CES FOR ADDITIONAL INFORMATION

KEYNOTES

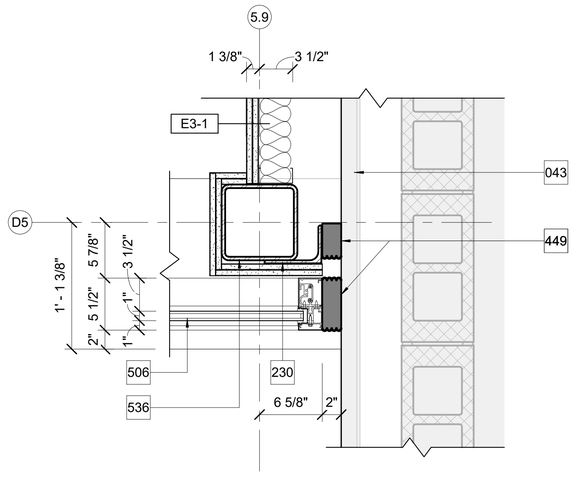
043	EXISTING EXTERIOR WALL ASSEMBLY
196	WOOD BLOCKING AS REQUIRED
230	6"x4"x5/16" STEEL ANGLE; REFER TO STRUCTURAL
410	IMPREGNATED FOAM EXPANSION JOINT WITH SILICONE FACED BELLOWS
449	FIRE RETARDANT IMPREGNATED FOAM EXPANSION JOINT WITH SILICONE FACED BELLOWS
506	GLAZING SYSTEM TO MATCH EXISTING GLAZING SYSTEM; CONTACT 42 CES FOR ADDITIONAL INFORMATION
533	EDGE OF WINDOW SILL BELOW; RE: INTERIORS
534	5/8" GYPSUM BOARD WRAP ON ALL SIDES OF COLUMN, TYP; RE: STRUCTURAL
535	6"x6" ALUMINUM CORNER MULLION, COLOR TO MATCH EXISTING GLAZING SYSTEM
536	STEEL TUBE COLUMN; RE: STRUCTURAL



D1 PLAN DETAIL - WINDOW CORNER MULLION
1 1/2" = 1'-0"



A1 PLAN DETAIL - GLAZING WEST WALL JAMB
1 1/2" = 1'-0"



A5 PLAN DETAIL - GLAZING SOUTH WALL JAMB
1 1/2" = 1'-0"

US Army Corps of Engineers
Louisville District ®

REGISTERED ARCHITECT
RICHARD G. PERRY
18592
STATE OF TEXAS
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: J. PERRY
DRAWN BY: J. MCKINNEY
CHECKED BY: M. HOLLEB
SUBMITTED BY: E. OLNESS
DATE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201A-506

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

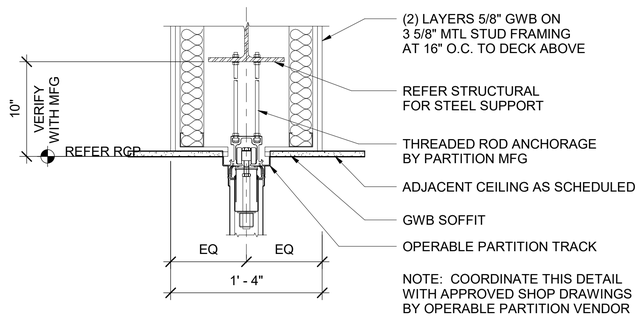
jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street Fort Worth, TX 76102
Phone: 817.820.6000 Fax: 817.820.6312

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PLAN DETAILS

SHEET ID
B1455
A-506

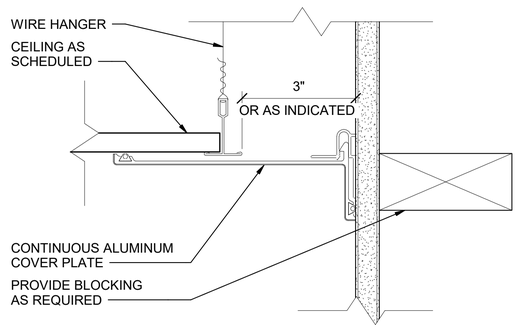
W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



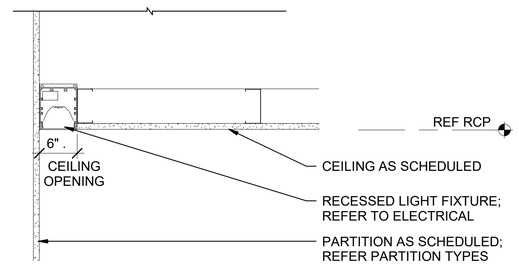
D1 CEILING DETAIL - OPERABLE PARTITION TRACK

1 1/2" = 1'-0"



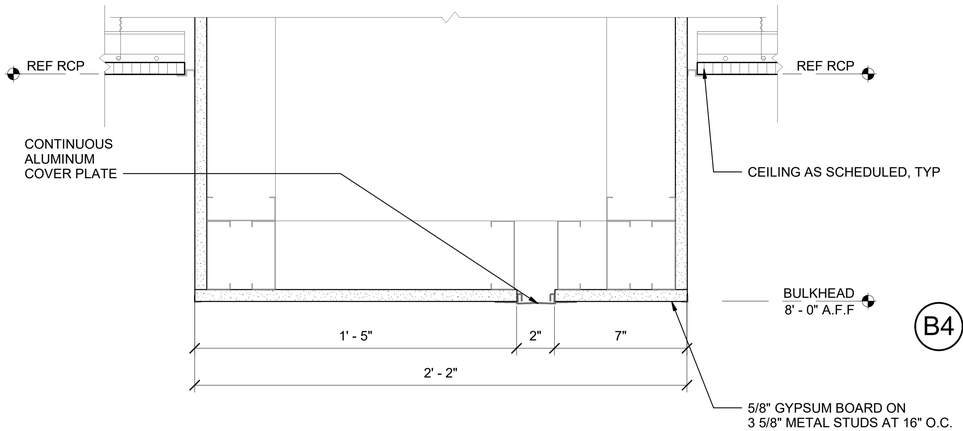
D4 EXPANSION JOINT AT WALL TO CEILING

6" = 1'-0"



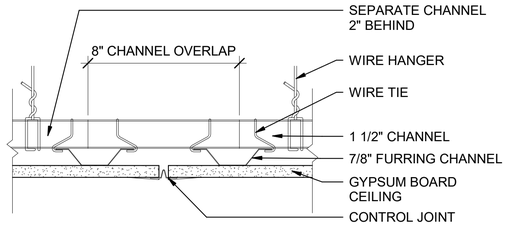
D7 CEILING DETAIL

1 1/2" = 1'-0"



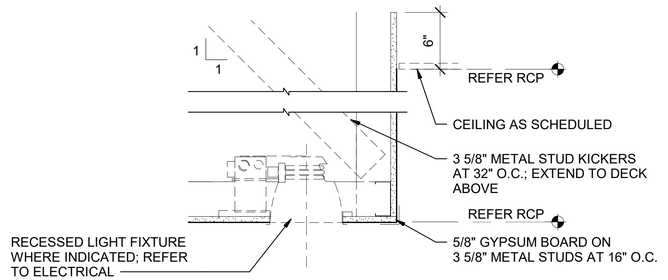
A1 CEILING DETAIL - BULKHEAD AT E.J.

3" = 1'-0"



B4 TYP CONTROL JOINT AT GYP BD CEILING

3" = 1'-0"



B7 CEILING DETAIL

1 1/2" = 1'-0"

GRAPHIC SCALE

2 1 0 2 4
SCALE: 1/2"=1'-0"
6 4 2 0 6
SCALE: 3"=1'-0"
3 2 1 0 3
SCALE: 6"=1'-0"

US Army Corps of Engineers
Louisville District ®

REGISTERED ARCHITECT
RICHARD G. PERRY
18592
STATE OF TEXAS
23 NOV 2022
TEXAS REGISTERED
ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: J. PERRY
DRAWN BY: J. MCKINNEY
CHECKED BY: M. HOLLEB
SUBMITTED BY: E. OLNESS
SIZE: ANSI D
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201A-510

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

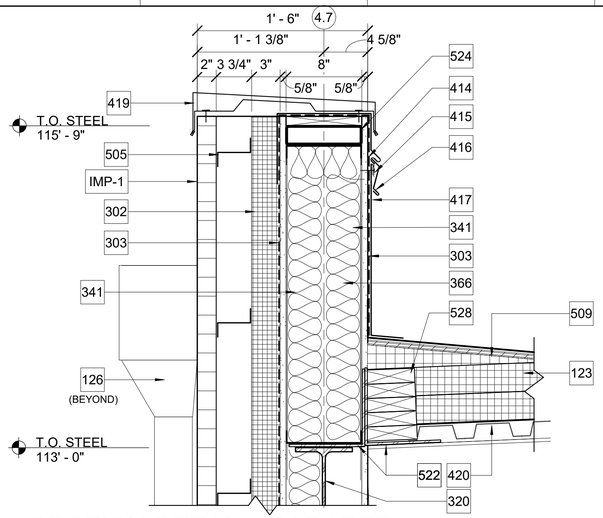
jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS Tel: 972.661.8100

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
CEILING DETAILS

SHEET ID
B1455
A-510

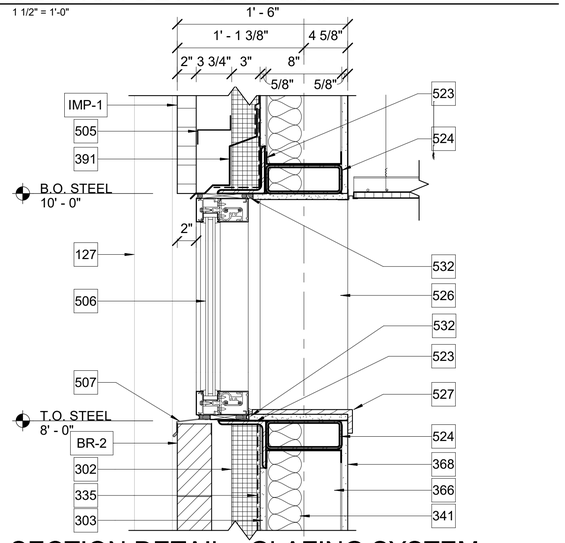
W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



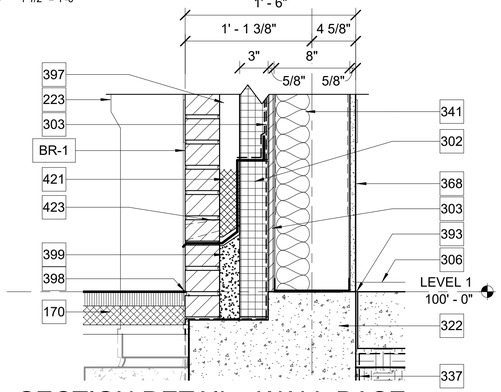
E1 SECTION DETAIL - PARAPET

1 1/2" = 1'-0"



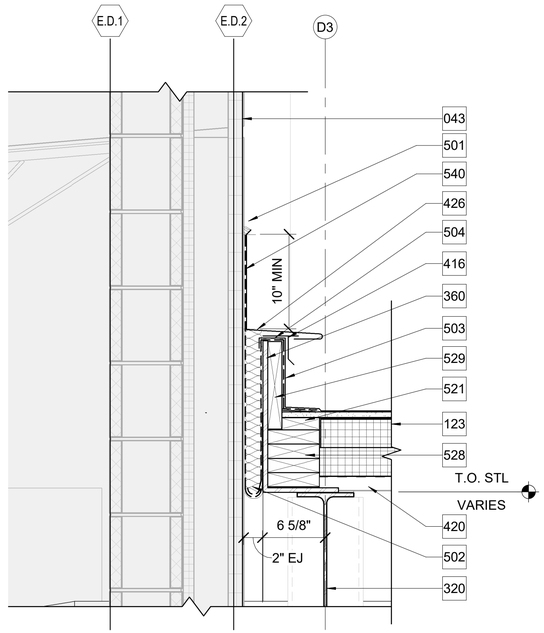
C1 SECTION DETAIL - GLAZING SYSTEM

1 1/2" = 1'-0"



A1 SECTION DETAIL - WALL BASE

1 1/2" = 1'-0"



A5 SECTION DETAIL - ROOF AT E.J. (NORTH WALL)

1 1/2" = 1'-0"

KEYNOTES

043	EXISTING EXTERIOR WALL ASSEMBLY
123	NEW ROOFING SYSTEM: SINGLE PLY TPO MEMBRANE ON 1/2" PROTECTION BOARD OVER TWO LAYERS OF 3" RIGID INSULATION (R-25 MIN); SLOPE TO ROOF SCUPPERS, REFER F1/A-525
126	SCUPPER AND OVERFLOW; RE: A-525 FOR DETAILS
127	4"x5" METAL DOWNSPOUT, CONNECT TO STORM DRAIN; RE: PLUMBING - FINISH TO MATCH EXISTING DOWNSPOUTS
170	ADJACENT PAVING/GRADE; REFER TO CIVIL
223	CAST IRON BOOT WITH CLEANOUT; RE: PLUMBING
302	3" RIGID INSULATION (R-15 MIN)
303	AIR/VAPOR BARRIER ON 5/8" SHEATHING
306	FLOOR FINISH AS SCHEDULED
308	CEILING FINISH AS INDICATED
320	STEEL STRUCTURE; REFER STRUCTURAL
322	CONCRETE FOUNDATION; REFER STRUCTURAL
335	WATERPROOFING MEMBRANE
337	UNDERSLAB VAPOR RETARDER
341	BATT INSULATION (R-7.5 MIN)
360	STEEL BENT PLATE; REFER TO STRUCTURAL
366	8" METAL STUD INFILL SPACED 16" O.C.
368	5/8" GYPSUM BOARD
391	PREFINISHED METAL FLASHING WITH DRIP EDGE, LAP WITH AIR BARRIER
393	JOINT WITH FILLER AND SEALANT
397	AIR CAVITY; KEEP CLEAR OF ALL DEBRIS, TYP
398	SAWED BITUMNOUS JOINT
399	GROUT FILLED BASE
414	LAP AND SEAL AIR/VAPOR BARRIER UNDER TERM. BAR
415	STAINLESS STEEL TERM BAR; 8" MIN ABOVE ROOF
416	FLASHING AND COUNTER FLASHING
417	SINGLE PLY TPO ROOFING; FASTEN AT TOP EDGE AT 6" O.C.
419	PREFINISHED METAL COPING FINISH TO MATCH METAL PANEL
420	METAL DECKING; REF STRUCTURAL
421	MORTAR NET
423	WEEP/CAVITY VENT AT 24" O.C.

KEYNOTES

426	PREFINISHED METAL EXPANSION JOINT COVER
501	CONTINUOUS SEALANT
502	COMPRESSIBLE BATT INSULATION IN FLEXIBLE GASKET
503	TPO MEMBRANE FLASHING
504	LAP TPO MEMBRANE OVER BLOCKING
505	Z-CHANNEL FURRING, REFER TO STRUCTURAL
506	GLAZING SYSTEM TO MATCH EXISTING GLAZING SYSTEM; CONTACT 42 CES FOR ADDITIONAL INFORMATION
507	PREFINISHED ALUMINUM FLASHING, COLOR TO MATCH BR-2
509	TAPERED ROOF INSULATION
521	CONTINUOUS 2X4 WOOD LUMBER NAILER (TYP), ANCHORED TO BENT STEEL PLATE; COURSES CUT AND STACKED TO MATCH STEEL PLATE PROFILE
522	8"x8"x1/4" STEEL BENT PLATE WELDED TO ROOF JOIST; RE: STRUCTURAL
523	5"x5" STEEL ANGLE FOR STOREFRONT SYSTEM SUPPORT; RE: STRUCTURAL
524	HSS STEEL TUBE; RE: STRUCTURAL
526	HSS STEEL TUBE COLUMN BEYOND WITH 5/8" GYPSUM BOARD WRAP ON ALL SIDES OF COLUMN, TYP; RE: STRUCTURAL
527	SOLID SURFACE FINISH AT WINDOW SILL, TYP; RE: INTERIORS
528	CONTINUOUS 2X6 WOOD LUMBER NAILER (TYP), ANCHORED TO BENT STEEL PLATE; COURSES CUT AND STACKED TO MATCH STEEL PLATE PROFILE
529	CONTINUOUS 2X10 WOOD LUMBER NAILER (TYP), ANCHORED TO BENT STEEL PLATE; COURSES CUT AND STACKED TO MATCH STEEL PLATE PROFILE
532	SHIM, BACKER ROD, AND SEALANT ON ALL SIDES
540	AIR/VAPOR BARRIER; ADHERE TO ADJACENT STRUCTURE, LOOSE LAY AND OVERALAP AT EXPANSION JOINT, EXTEND OVER WOOD BLOCKING AND TERMINATE AT ROOF PLANE
BR-1	PRIMARY BRICK, RUNNING BOND PATTERN; MATCH BRICK AND MORTAR COLOR OF EXISTING HANGAR
BR-2	SOLDIER COURSE BRICK; MATCH BRICK AND MORTAR COLOR OF EXISTING HANGAR
IMP-1	2" INSULATED METAL PANEL; MATCH SIZE, FINISH, AND COLOR OF EXISTING HANGAR

GENERAL NOTES - DETAILS

1	REFER TO A-570 PARTITION TYPES AND DETAILS FOR ALL PARTITION ASSEMBLIES AND REQUIREMENTS; REFER TO GENERAL NOTES ON A-570 FOR ADDITIONAL INFORMATION.
2	REFER TO INTERIOR FINISH SCHEDULE ON I-601 FOR ALL INTERIOR FINISHES
3	REFER TO A-610 DOOR AND LOUVER SCHEDULE FOR ADDITIONAL INFORMATION
4	REFER TO F1/A-525 FOR TYPICAL ROOF ASSEMBLY AT BUILDING ADDITION
5	EXTERIOR FINISHES AT AREAS OF NEW CONSTRUCTION ARE TO MATCH THE EXISTING FINISHES; CONTACT 42 CES FOR ADDITIONAL INFORMATION

GRAPHIC SCALE

0 6 1 2

SCALE: 1 1/2"=1'-0"

US Army Corps of Engineers
Louisville District ®

REGISTERED ARCHITECT
RICHARD G. PERRY
18592
STATE OF TEXAS
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: J. PERRY
DRAWN BY: J. MCKINNEY
CHECKED BY: M. HOLLEB
SUBMITTED BY: E. OLNESS
SIZE: ANSI D
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: 22x34 SXHT219201A-520

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

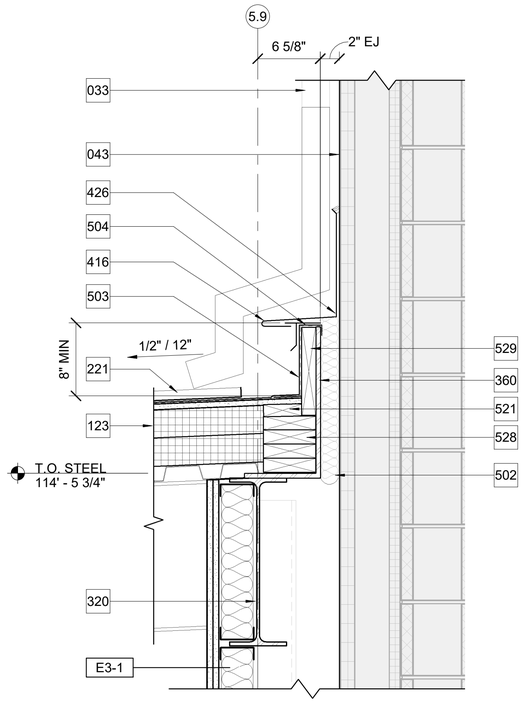
jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS TBPE FIRM NO. F2966

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
SECTION DETAILS

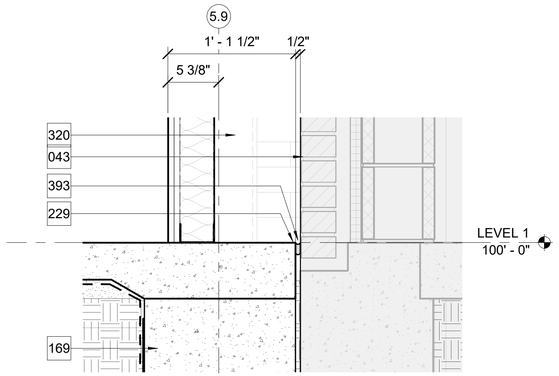
SHEET ID
B1455
A-520

W912QR23R0003_Plans-0000

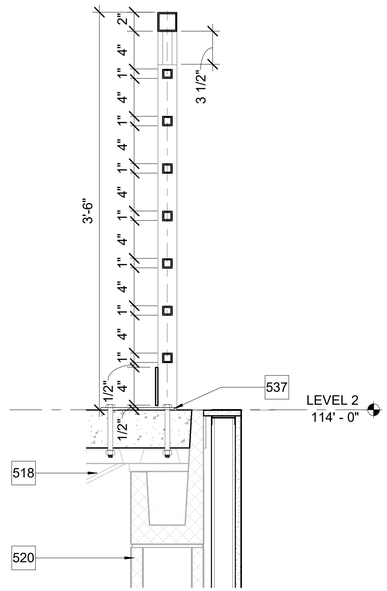
CERTIFIED FINAL DESIGN



C1 SECTION DETAIL - ROOF AT E.J.
1 1/2" = 1'-0"



A1 SECTION DETAIL - WALL BASE
1 1/2" = 1'-0"



A4 SECTION DETAIL - MECH MEZZANINE GUARDRAIL
1 1/2" = 1'-0"

GENERAL NOTES - DETAILS

1	REFER TO A-570 PARTITION TYPES AND DETAILS FOR ALL PARTITION ASSEMBLIES AND REQUIREMENTS; REFER TO GENERAL NOTES ON A-570 FOR ADDITIONAL INFORMATION.
2	REFER TO INTERIOR FINISH SCHEDULE ON I-601 FOR ALL INTERIOR FINISHES
3	REFER TO A-610 DOOR AND LOUVER SCHEDULE FOR ADDITIONAL INFORMATION
4	REFER TO F1/A-525 FOR TYPICAL ROOF ASSEMBLY AT BUILDING ADDITION
5	EXTERIOR FINISHES AT AREAS OF NEW CONSTRUCTION ARE TO MATCH THE EXISTING FINISHES; CONTACT 42 CES FOR ADDITIONAL INFORMATION

KEYNOTES

033	MODIFY EXISTING DOWNSPOUT AS REQUIRED TO DRAIN ONTO ROOF OF NEW ADDITION AS INDICATED
043	EXISTING EXTERIOR WALL ASSEMBLY
123	NEW ROOFING SYSTEM: SINGLE PLY TPO MEMBRANE ON 1/2" PROTECTION BOARD OVER TWO LAYERS OF 3" RIGID INSULATION (R-25 MIN); SLOPE TO ROOF SCUPPERS, REFER F1/A-525
169	PERIMETER FOUNDATION AND FOOTING; REFER TO STRUCTURAL FOUNDATION PLAN AND DETAILS
221	DOWNSPOUT METAL SPLASH PAN AT NEW ROOF AS SPECIFIED
229	SLAB EDGE; REFER TO STRUCTURAL
320	STEEL STRUCTURE; REFER STRUCTURAL
360	STEEL BENT PLATE; REFER TO STRUCTURAL
393	JOINT WITH FILLER AND SEALANT
416	FLASHING AND COUNTER FLASHING
426	PREFINISHED METAL EXPANSION JOINT COVER
502	COMPRESSIBLE BATT INSULATION IN FLEXIBLE GASKET
503	TPO MEMBRANE FLASHING
504	LAP TPO MEMBRANE OVER BLOCKING
518	EXISTING STEEL STRUCTURE
520	LOAD-BEARING CONCRETE MASONRY UNIT WALL; REFER TO STRUCTURAL FOR EXTENT OF EXISTING AND NEW UNITS
521	CONTINUOUS 2X4 WOOD LUMBER NAILER (TYP), ANCHORED TO BENT STEEL PLATE; COURSES CUT AND STACKED TO MATCH STEEL PLATE PROFILE
528	CONTINUOUS 2X6 WOOD LUMBER NAILER (TYP), ANCHORED TO BENT STEEL PLATE; COURSES CUT AND STACKED TO MATCH STEEL PLATE PROFILE
529	CONTINUOUS 2X10 WOOD LUMBER NAILER (TYP), ANCHORED TO BENT STEEL PLATE; COURSES CUT AND STACKED TO MATCH STEEL PLATE PROFILE
537	BOLTED BASE PLATE; RE: STRUCTURAL

GRAPHIC SCALE

0 6 1 2

SCALE: 1 1/2"=1'-0"

US Army Corps of Engineers
Louisville District ®

REGISTERED ARCHITECT
RICHARD G. PERRY
18592
STATE OF TEXAS
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: J. PERRY
DRAWN BY: J. MCKINNEY
CHECKED BY: M. HOLLEB
SUBMITTED BY: E. OLNESS
SIZE: ANSI D
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE: 22x34
FILE NAME: SXHT219201A-521

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

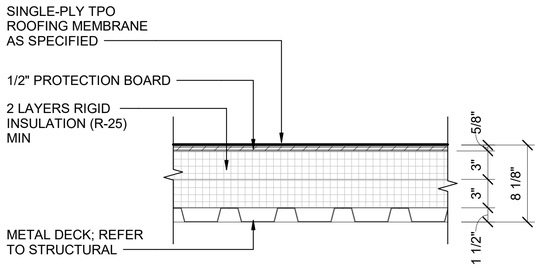
jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS No. 19219201

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
SECTION DETAILS

SHEET ID
B1455
A-521

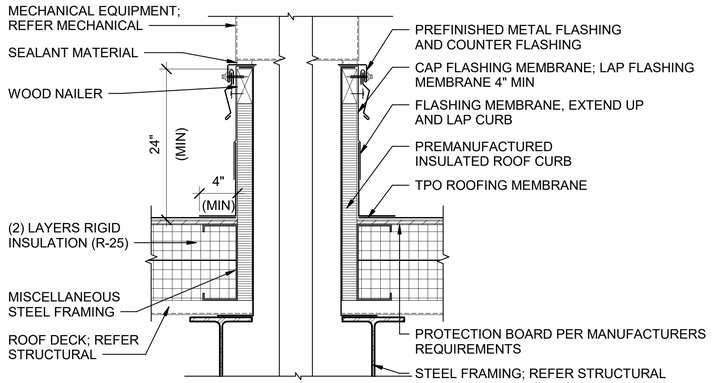
W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



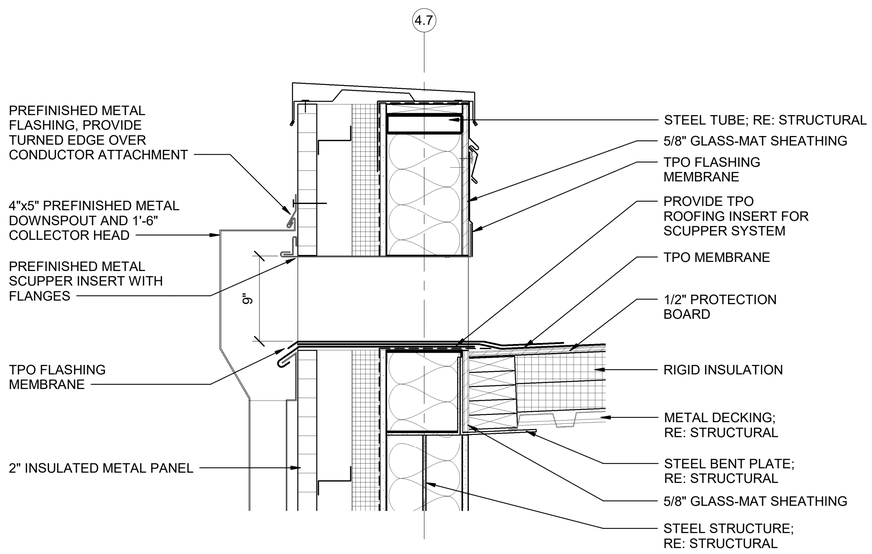
F1 TYPICAL ROOF SECTION - TPO

N.T.S.



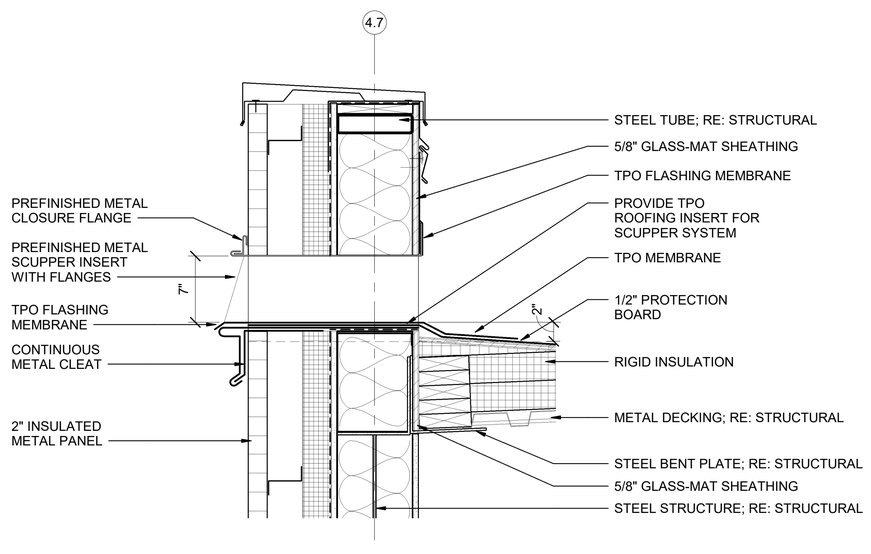
C1 ROOF EQUIPMENT CURB

N.T.S.



A1 SCUPPER DETAIL

1 1/2" = 1'-0"



A5 OVERFLOW DETAIL

1 1/2" = 1'-0"

US Army Corps of Engineers
Louisville District ®

REGISTERED ARCHITECT
RICHARD G. PERRY
18592
STATE OF TEXAS
23 NOV 2022
TEXAS REGISTERED
ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: J. PERRY
DRAWN BY: J. MCKINNEY
CHECKED BY: M. HOLLEB
SUBMITTED BY: E. OLNESS
SIZE: ANSI D
22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201A-525

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

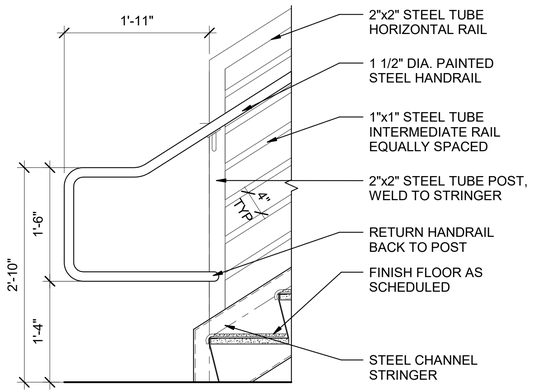
Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS Project No.: 320219

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
ROOF DETAILS

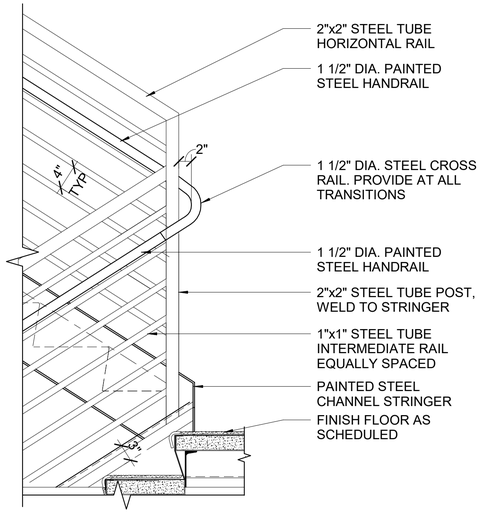
SHEET ID
B1455
A-525

W912QR23R0003_Plans-0000

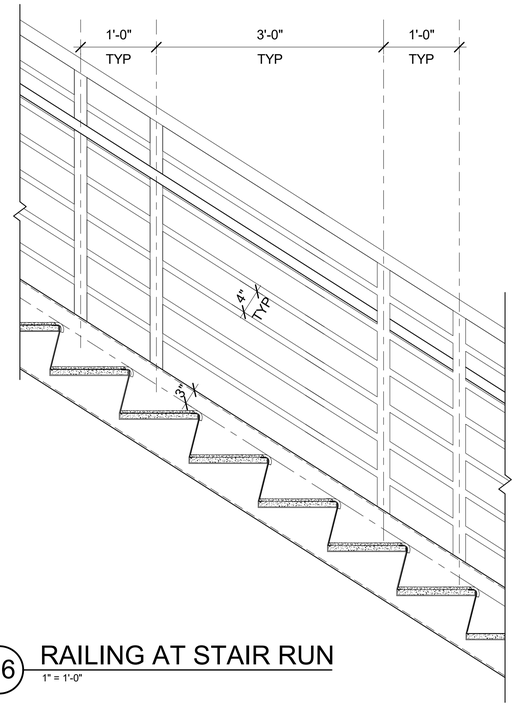
CERTIFIED FINAL DESIGN



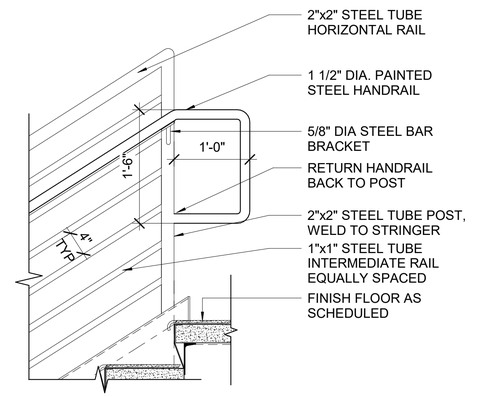
E1 RAILING AT STAIR BOTTOM
1" = 1'-0"



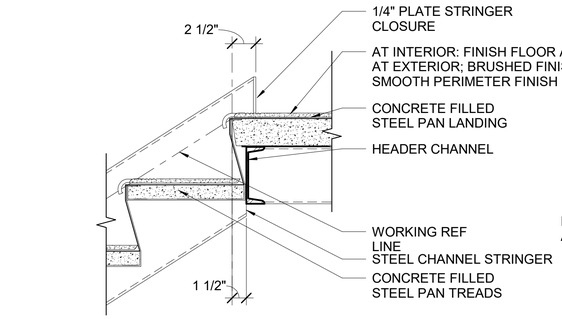
E3 RAILING TRANSITION BETWEEN STAIR RUNS
1" = 1'-0"



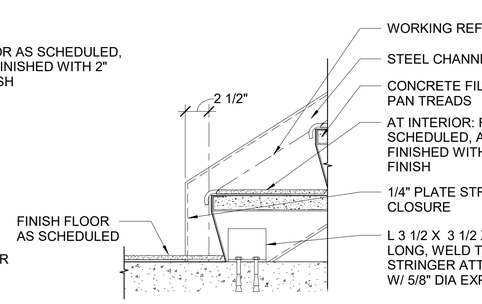
E6 RAILING AT STAIR RUN
1" = 1'-0"



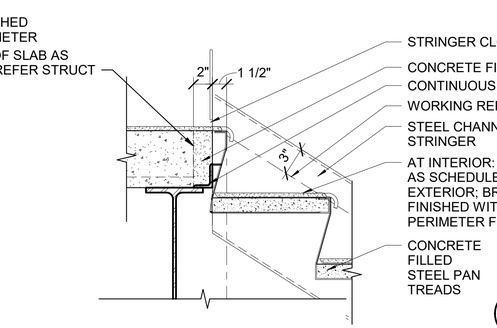
E8 TYP RLG AT TOP OF STAIR RUN
1" = 1'-0"



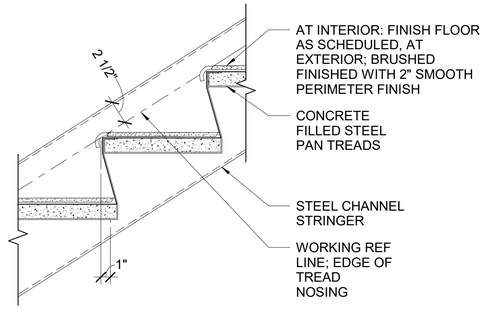
C1 LANDING TO STAIR CONNECTION
1 1/2" = 1'-0"



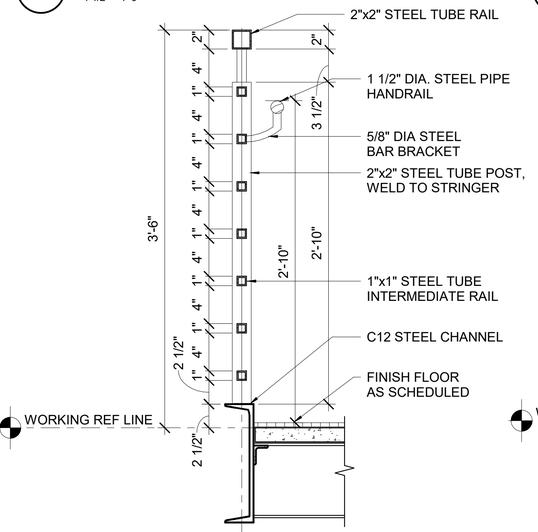
C3 STAIR TO CONCRETE SLAB CONNECTION
1 1/2" = 1'-0"



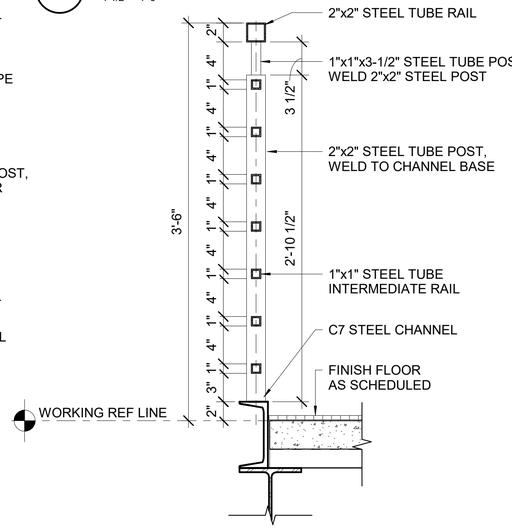
C6 FLOOR TO STAIR CONNECTION
1 1/2" = 1'-0"



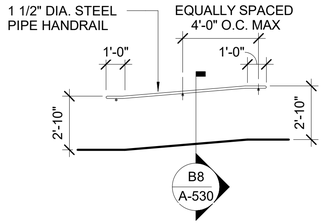
C8 CONCRETE FILLED STEEL PAN TREAD
1 1/2" = 1'-0"



A1 TYP RAILING SECTION
1 1/2" = 1'-0"

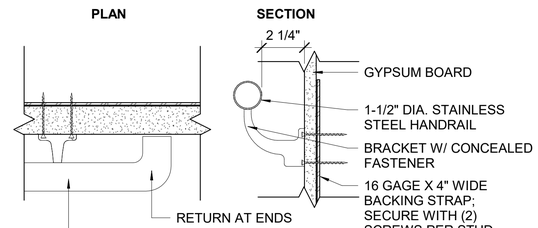


A4 TYP GUARDRAIL SECTION
1 1/2" = 1'-0"



SURFACE MOUNTED HANDRAIL ELEVATION

A5 HANDRAIL DETAILS
1/4" = 1'-0"



B8 HANDRAIL DETAILS
3" = 1'-0"

SCALE: 1 1/2"=1'-0"

SCALE: 1"=1'-0"

SCALE: 3"=1'-0"

US Army Corps of Engineers
Louisville District ®

REGISTERED ARCHITECT
RICHARD G. PERRY
16592
STATE OF TEXAS
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: J. PERRY
DRAWN BY: J. MCKINNEY
CHECKED BY: M. HOLLEB
SUBMITTED BY: E. OLMESS
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: ANSI D 22x34 SXHT219201A-530

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
TBPE Registration No. F-2663

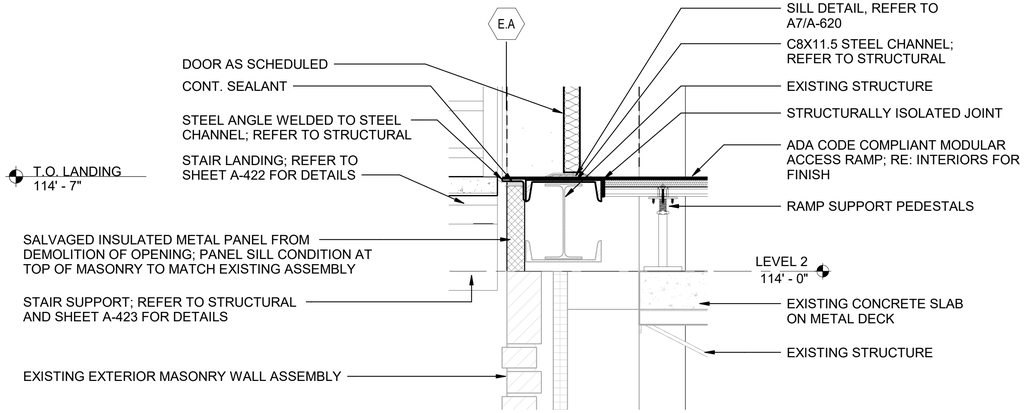
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
STAIR DETAILS

SHEET ID
B1455
A-530

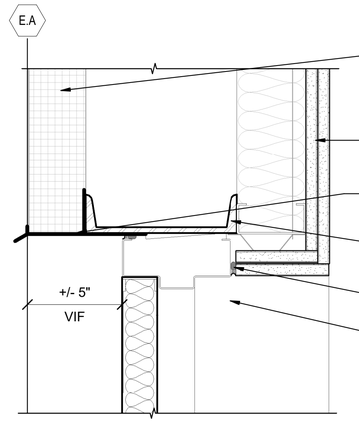
W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

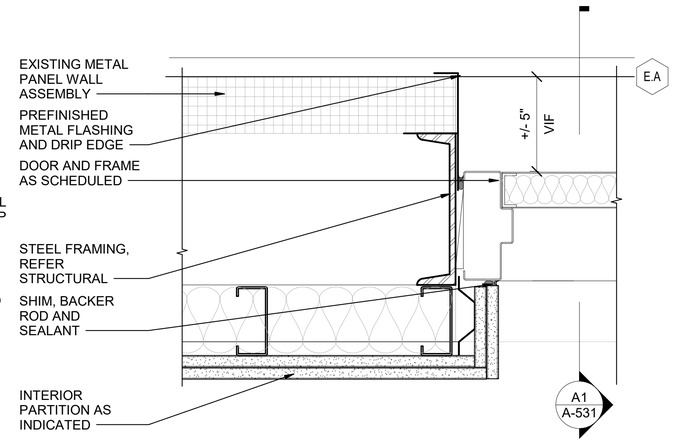
CERTIFIED FINAL DESIGN



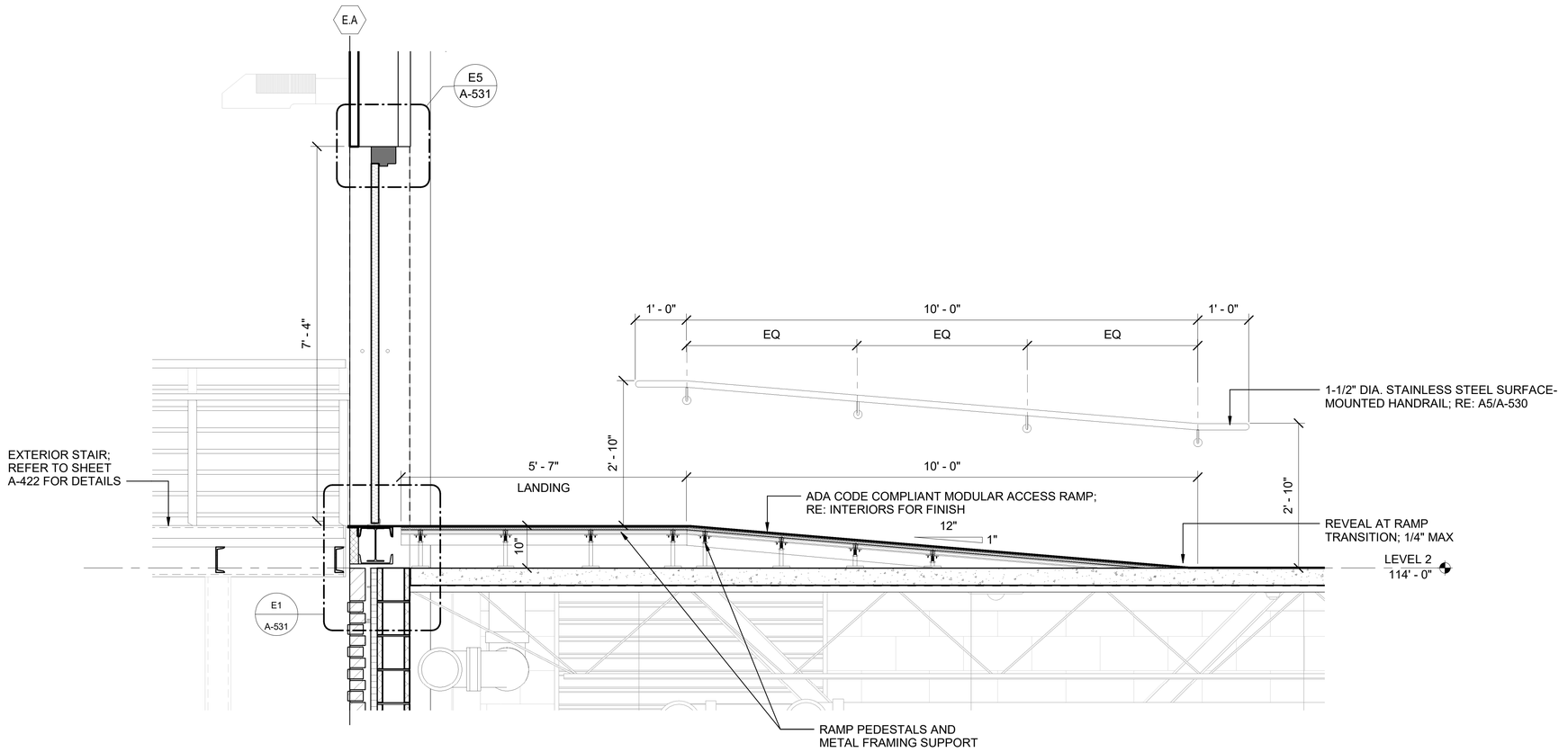
E1 SECTION DETAIL AT RAMP
1 1/2" = 1'-0"



E5 HEAD DETAIL
3" = 1'-0"



E8 JAMB DETAIL
3" = 1'-0"



A1 SECTION AT RAMP
3/4" = 1'-0"

GRAPHIC SCALE

6" 4 2 0 6"
SCALE: 3"=1'-0"
2 1 0 2
SCALE: 3/4"=1'-0"

US Army Corps of Engineers
Louisville District ®

REGISTERED ARCHITECT
RICHARD G. PERRY
16592
STATE OF TEXAS
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: J. PERRY
DRAWN BY: J. MCKINNEY
CHECKED BY: M. HOLLEB
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201A-531

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

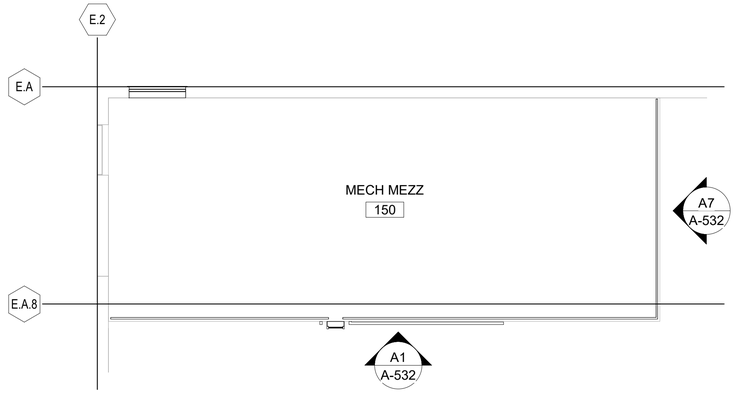
jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS No. 70128263

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
RAMP DETAILS

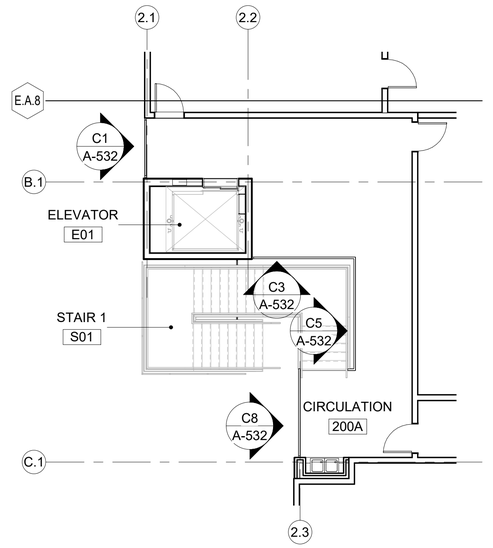
SHEET ID
B1455
A-531

W912QR23R0003_Plans-0000

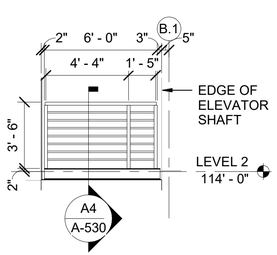
CERTIFIED FINAL DESIGN



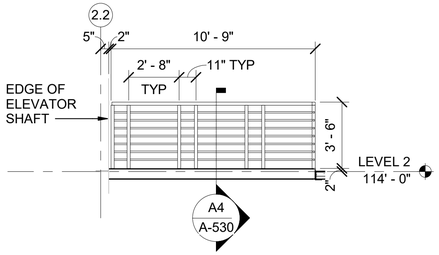
E1 RAILING PLAN VIEW
1/8" = 1'-0"



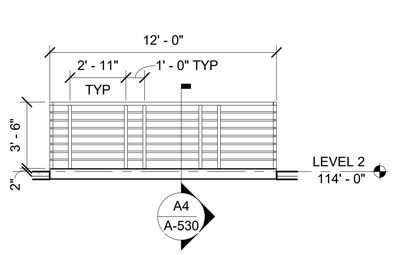
D8 RAILING PLAN VIEW
1/8" = 1'-0"



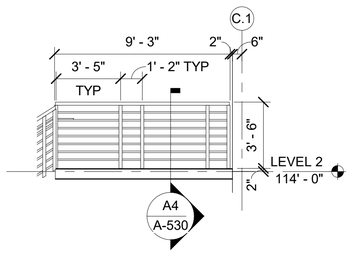
C1 RAILING ELEVATION
1/4" = 1'-0"



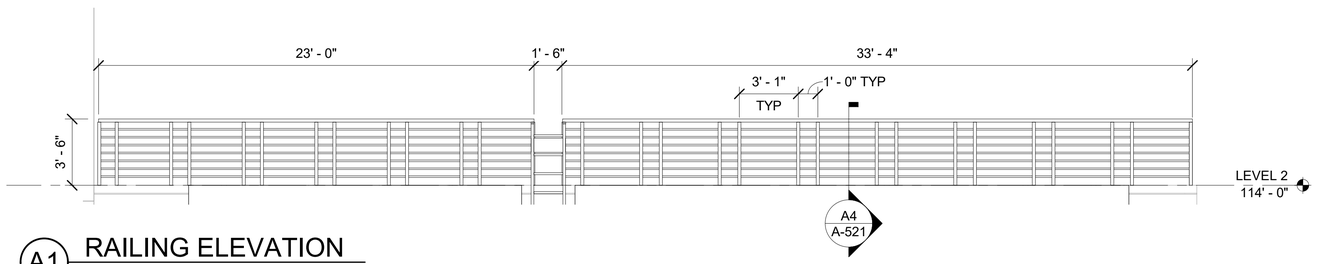
C3 RAILING ELEVATION
1/4" = 1'-0"



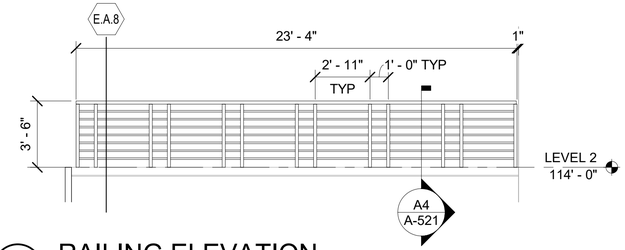
C5 RAILING ELEVATION
1/4" = 1'-0"



C8 RAILING ELEVATION
1/4" = 1'-0"



A1 RAILING ELEVATION
1/4" = 1'-0"



A7 RAILING ELEVATION
1/4" = 1'-0"

US Army Corps of Engineers
Louisville District ®

REGISTERED ARCHITECT
RICHARD G. PERRY
16592
STATE OF TEXAS
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.: A-532
FILE NAME: SXHT219201A-532

DESIGNED BY: J. PERRY
DRAWN BY: J. MCKINNEY
CHECKED BY: M. HOLLEB
SUBMITTED BY: E. OLNESS
DATE: ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
ADDRESS Rev 09/2021.13

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395

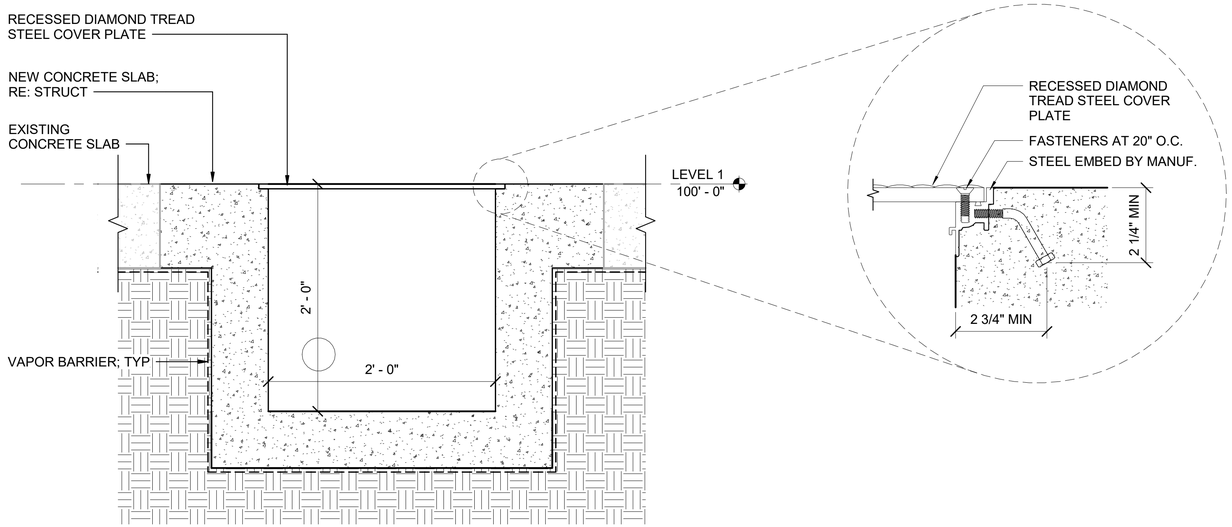
RAILING DETAILS

SHEET ID
B1455
A-532

W912QR23R0003_Plans-0000

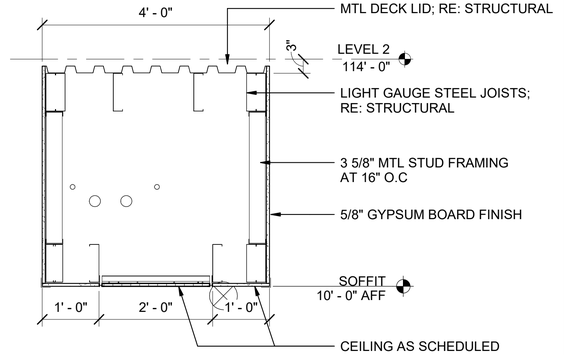
ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN



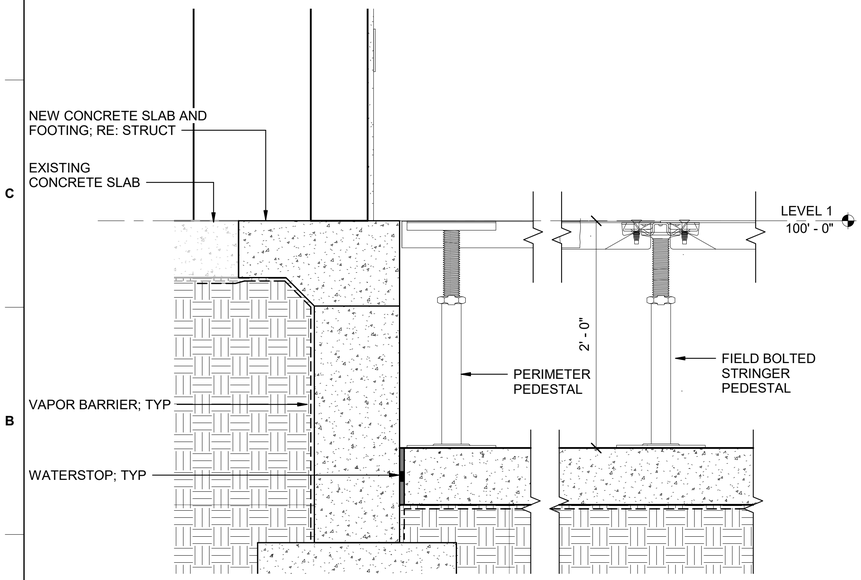
D1 TYPICAL TRENCH DETAIL

1 1/2" = 1'-0"



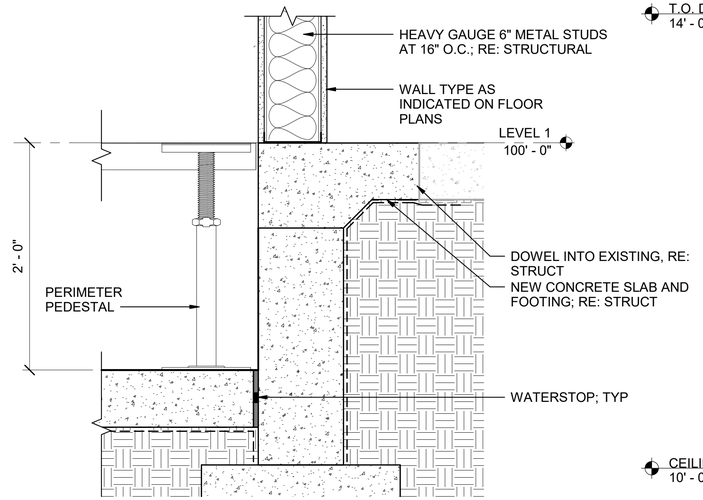
D8 SECTION AT BULKHEAD

3/4" = 1'-0"



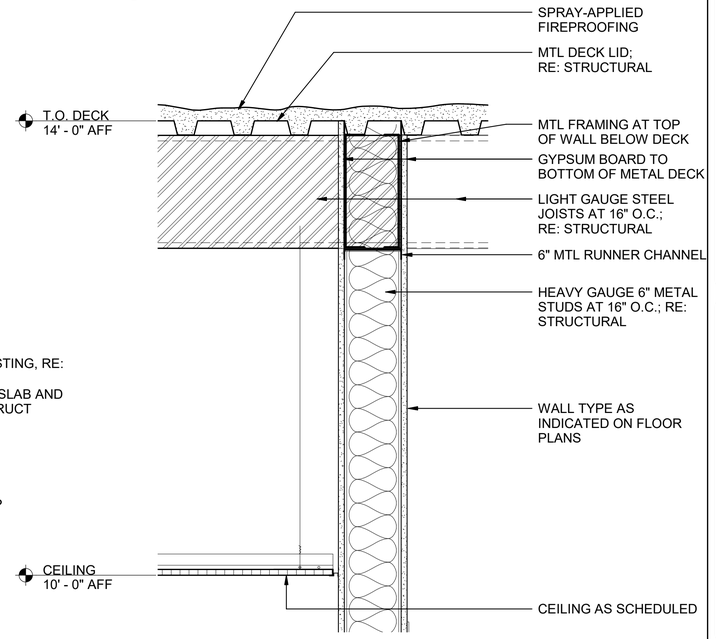
A1 SECTION DETAIL - RAISED ACCESS FLOOR

1 1/2" = 1'-0"



A4 SECTION DETAIL - RAISED ACCESS FLOOR

1 1/2" = 1'-0"



A8 TOP OF WALL DETAIL

1 1/2" = 1'-0"

US Army Corps of Engineers
Louisville District ®

REGISTERED ARCHITECT
RICHARD G. PERRY
18592
STATE OF TEXAS
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: J. PERRY
DRAWN BY: J. MCKINNEY
CHECKED BY: M. HOLLEB
SUBMITTED BY: E. OLNESS
SPEC WRITER
ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201A-545

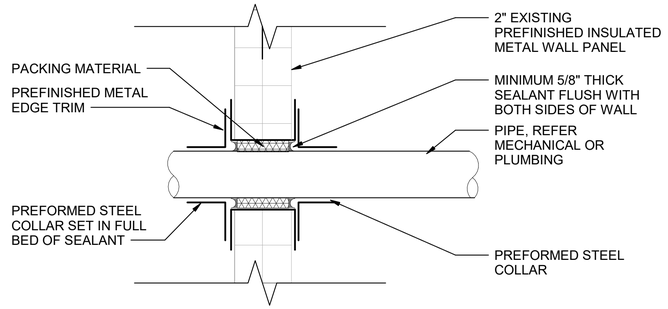
US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
ACCESS No. 0000021

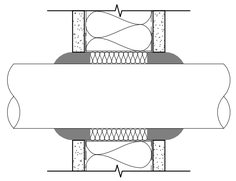
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
MISCELLANEOUS DETAILS

SHEET ID
B1455
A-545

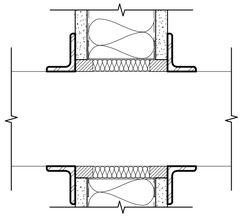
W912QR23R0003_Plans-0000



F8 PENETRATION AT METAL PANEL
3" = 1'-0"

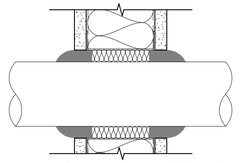


D8 ACOUSTICAL PENETRATION AT WALL
N.T.S.



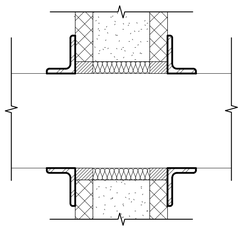
U.L. SYSTEM NO. W-L-7025 1 HR

B5 PENETRATION AT DUCT
N.T.S.



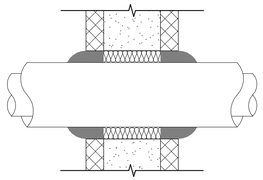
U.L. SYSTEM NO. W-L-1068 1 HR

B8 PENETRATION AT WALL
N.T.S.



U.L. SYSTEM NO. W-J-7025 1 HR

A5 PENETRATION AT DUCT - CMU
N.T.S.



U.L. SYSTEM NO. W-J-5013 1 HR

A8 PENETRATION AT WALL - CMU
N.T.S.

US Army Corps of Engineers
Louisville District ®

REGISTERED ARCHITECT RICHARD G. PERRY 16592 STATE OF TEXAS
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: J. PERRY
DRAWN BY: J. MCKINNEY
CHECKED BY: M. HOLLEB
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201A-550

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS No. 175263

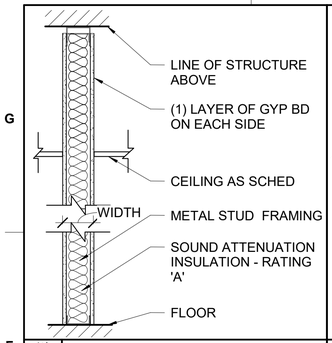
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PENETRATION DETAILS

SHEET ID
B1455
A-550

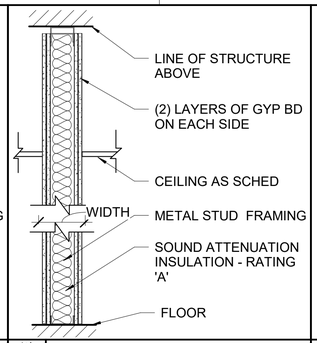
W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

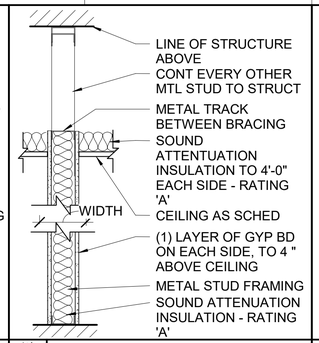
CERTIFIED FINAL DESIGN



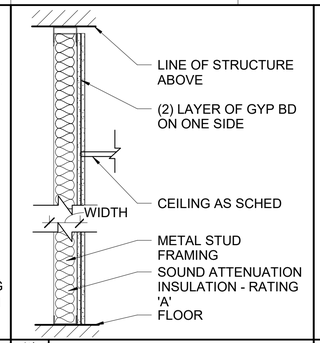
TYPE	A		
SIZE INDICATOR	IND	STUD SIZE	TOTAL WIDTH
	2	2 1/2"	3 3/4"
	3	3 5/8"	4 7/8"
	4	4"	5 1/4"
	6	6"	7 1/4"
	8	8"	9 1/4"
RATING		NO RATING - NO INSULATION	
	1	1 HR FIRE RATED - UL# U419	
	S	STRUCT STUD; RE: STRUCT	
	A	ACOUSTICAL - STC 45	



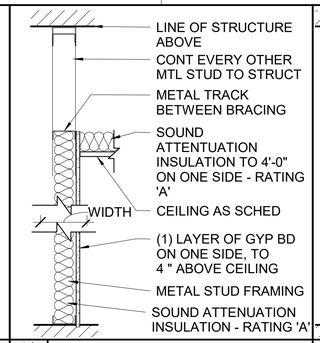
TYPE	B		
SIZE INDICATOR	IND	STUD SIZE	TOTAL WIDTH
	3	3 5/8"	6 1/8"
	6	6"	8 1/2"
	8	8"	10 1/2"
		NO RATING - NO INSULATION	
RATING	1	1 HR FIRE RATED - UL# U419	
	A	ACOUSTICAL - STC 60; SOUND TEST NGC 2017172	



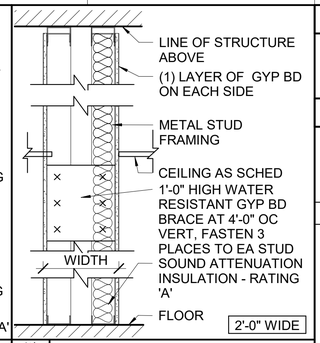
TYPE	D		
SIZE INDICATOR	IND	STUD SIZE	TOTAL WIDTH
	2	2 1/2"	3 3/4"
	3	3 5/8"	4 7/8"
	4	4"	5 1/4"
	6	6"	7 1/4"
	8	8"	9 1/4"
RATING		NO RATING - NO INSULATION	
	A	ACOUSTICAL	



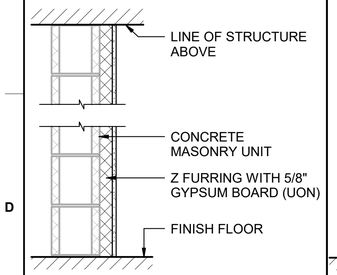
TYPE	E		
SIZE INDICATOR	IND	STUD SIZE	TOTAL WIDTH
	1	7/8"	1 1/2"
	2	2 1/2"	3 3/4"
	3	3 5/8"	4 7/8"
	4	4"	5 1/4"
	6	6"	7 1/4"
RATING		NO RATING - NO INSULATION	
	1	1 HR FIRE RATED - UL# V497	
	A	ACOUSTICAL	



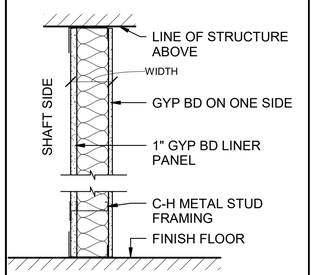
TYPE	F		
SIZE INDICATOR	IND	STUD SIZE	TOTAL WIDTH
	1	7/8"	1 1/2"
	2	2 1/2"	3 1/8"
	3	3 5/8"	4 1/4"
	4	4"	4 5/8"
	6	6"	6 5/8"
RATING		NO RATING - NO INSULATION	
	A	ACOUSTICAL	



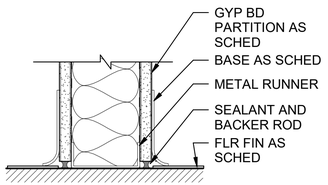
TYPE	H		
SIZE INDICATOR	IND	STUD SIZE	TOTAL WIDTH
	3	3 5/8"	1'-7"
RATING		NO RATING - NO INSULATION	
	A	ACOUSTICAL	



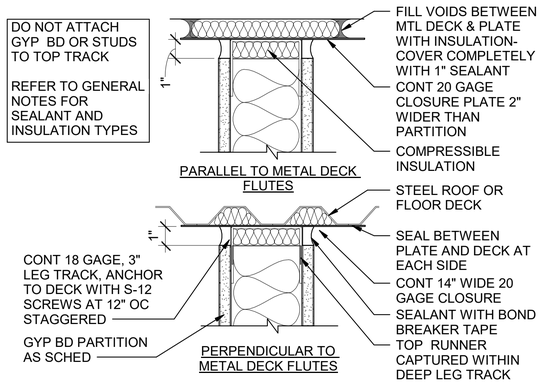
TYPE	P		
SIZE INDICATOR	IND	FURR SIZE	TOTAL WIDTH
	1	*	7/8"
	2	2"	2 5/8"
	3	3"	3 5/8"
	-	-	-
	-	-	-
RATING	-	-	-
	*	P1 TO ADHERED TO CMU BACKUP	



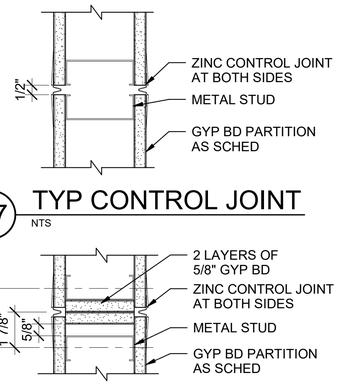
TYPE	T		
SIZE INDICATOR	IND	STUD SIZE	TOTAL WIDTH
	2	2 1/2"	3 1/8"
	6	6"	6 5/8"
	8	8"	8 5/8"
RATING	1	1 HR FIRE U415 SYSTEM A	



A1 TYP BOTTOM OF WALL CONNECTION
NTS



A4 TYP TOP OF GYP BD WALL CONX
NTS



B7 TYP CONTROL JOINT
NTS

A7 TYP 1 HR RATED CNTRL JT
NTS

PARTITION TYPES

FIRST DIGIT IS THE PARTITION 'TYPE' — A3-2 — SECOND DIGIT IS THE 'SIZE INDICATOR' — THIRD DIGIT IS THE PARTITION 'RATING'

GENERAL SHEET NOTES

A. "LINE OF STRUCTURE" INDICATED FOR EACH PARTITION IS DIAGRAMMATIC ONLY AND DOES NOT INDICATE EXACT CONSTRUCTION CONDITIONS OR GEOMETRY. REFER TO FOR DETAILS ON THIS SHEET FOR TYPICAL CONNECTION DETAILS.

B. DO NOT ATTACH METAL STUD TO THE TOP SLIP TRACK.

C. GYPSUM BOARD:
1. FIRE RESISTANT RATED PARTITIONS MUST USE TYPE "X" FIRE RATED GYPSUM BOARD.
2. PARTITIONS IN HIGH MOISTURE AREAS MUST USE MOISTURE RESISTANT GYPSUM BOARD WHICH INCLUDE TOILET ROOM(S), JANITOR CLOSET(S) AND WITHIN 4'-0" OF WATER FOUNTAINS.
3. PARTITIONS BEHIND TOILETS AND FIXTURES MUST USE CEMENT BOARD WITH A MOISTURE BARRIER.
4. DO NOT ATTACH GYPSUM BOARD TO THE TOP SLIP TRACK.
5. USE SOUND-RATED GYPSUM BOARD WHERE REQUIRED IN ORDER TO ACHIEVE STC LEVELS NOTED AND 1-HOUR FIRE RATING WHERE REQUIRED BASED ON MANUFACTURER'S UL TESTING.
6. ALL GYPSUM BOARD LOCATED IN CORRIDORS, SIMULATOR TRAINER ROOMS, BREAK ROOMS, STORAGE ROOMS, AND SUPPLY ROOMS MUST BE ABUSE RESISTANT TO 8'-0" A.F.F.
7. ALL CEILINGS LOCATED IN RESTROOMS MUST USE MOISTURE RESISTANT GYPSUM BOARD.

D. SEALANT:
1. FIRE RESISTANT RATED PARTITIONS MUST USE FIRE STOP SEALANT SYSTEM.
2. NON - RATED PARTITIONS AND SMOKE RATED PARTITIONS MUST USE ACOUSTICAL SEALANT. FIRE RESISTANT RATED PARTITIONS MUST NOT USE ACOUSTICAL SEALANT.

E. INSULATION - HEAD CONDITION AT STRUCTURE ABOVE:
1. FIRE RATED RESISTANT PARTITIONS MUST USE FIRE SAFING INSULATION.
2. NON - RATED PARTITIONS MUST USE SOUND ATTENUATION BLANKET.

F. FIRE AND / OR SMOKE RESISTANT PRODUCTS (E.G. INTUMESCENT SEALANT) ARE TO SURROUND ALL OPENINGS IN RATED PARTITIONS.

G. FIRE AND / OR SMOKE RESISTANT PARTITIONS MUST EXTEND TO INSIDE FACE OF EXTERIOR SHEATHING,INCLUDING EXTENSIONS THROUGH SOFFITS.

H. EACH PARTITION INDICATED TO BE FIRE AND/OR SMOKE RESISTANT MUST BE IDENTIFIED AS SUCH WITH A LABEL ABOVE THE CEILING ON EACH SEGMENT OF WALL AT 8'-0" ON CENTER. INCLUDE LETTERING NOT LESS THAN 3 INCHES IN HEIGHT WITH A MINIMUM 3/8 INCH STROKE IN A CONTRASTING COLOR INCORPORATING THE SUGGESTED WORDING, "FIRE AND/OR SMOKE BARRIER - PROTECT ALL OPENINGS"

J. STC RATING IS BASED ON A MIN METAL STUD SIZE OF 3 5/8".

K. INSTALL HORIZONTAL STUD FRAMING BRACING AT 4'- 0" ON CENTER AT FURRING AND NON-RATED CHASE WALLS

L. ALL STUDS ARE 16" ON CENTER UNLESS OTHERWISE NOTED.

M. ALL STUDS ARE MINIMUM 30 MIL THICKNESS.

N. REFER TO FLOOR PLANS FOR LOCATION OF PARTITION TYPE TAGS.

P. PROVIDE WOOD BLOCKING AT PROPER LOCATIONS FOR THE INSTALLATION OF ELECTRICAL AND TELECOM PANELS, SWITCHBOARDS, MILLWORK, AND OTHER WALL-MOUNTED ELEMENTS AND EQUIPMENT.

US Army Corps of Engineers
Louisville District ®

REGISTERED ARCHITECT — RICHARD G. PERRY — 16592 — STATE OF TEXAS — 23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: J. PERRY	ISSUE DATE: 23 NOVEMBER 2022
DRAWN BY: J. MCKINNEY	SOLICITATION NO.:
CHECKED BY: M. HOLLEB	CONTRACT NO.:
SUBMITTED BY: E. HOLMESS	DRAWING CODE: A-570
SIZE: ANSI D 22x34	FILE NAME: SXHTZ19201A-570

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS Project No. D2R003

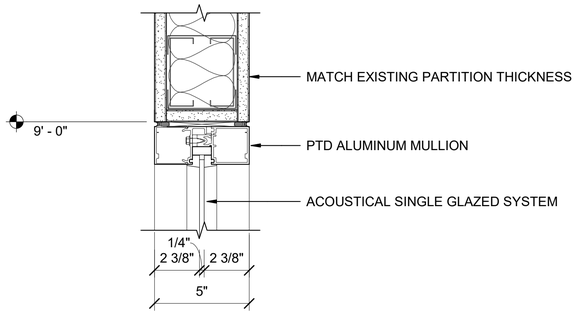
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, PZ#: 496395
PARTITION TYPES AND DETAILS

SHEET ID
B1455
A-570

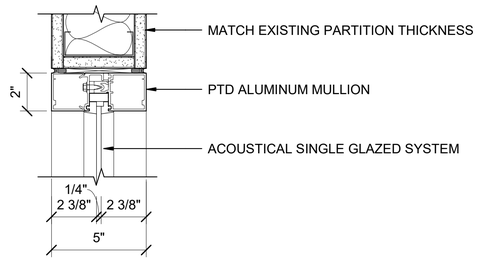
W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN

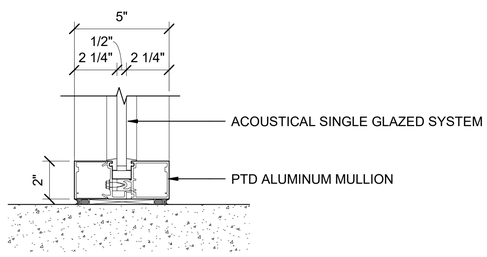
GLAZING SCHEDULE								
ABBREVIATION	**MATERIAL**	**SPEC.**	**LOCATION**	**FINISH**	**SOURCE (BOD)**	**COLOR**	**CAT. NO.**	**REMARKS**
INTERIOR GLAZING								
GL-1	ACOUSTIC SINGLE GLAZED SYSTEM	08 41 13	REGISTRARS (102) OFFICE	PTD ALUMINUM FRAME TO MATCH DOOR FRAME	-	CLEAR	-	1/4" CLEAR GLASS WITH ALUMINUM FRAME; TEMPERED WHERE REQUIRED
EXTERIOR GLAZING								
GL-2	INSULATED GLASS	08 41 13	BUILDING ADDITION SOUTH AND WEST WALLS	-	-	-	-	1" INSULATED GLASS, APPEARANCE TO MATCH GLAZING ON EXISTING FACILITY



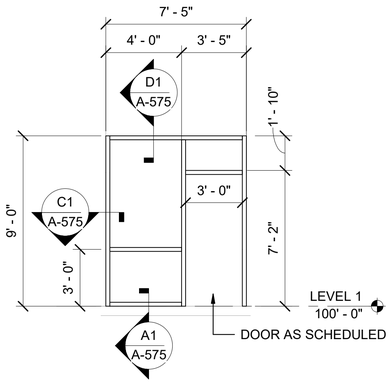
D1 HEAD DETAIL
3" = 1'-0"



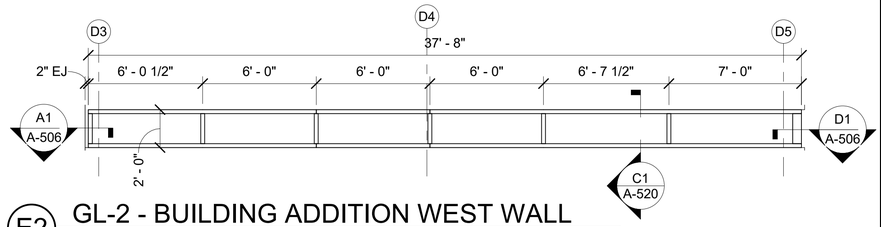
C1 JAMB DETAIL
3" = 1'-0"



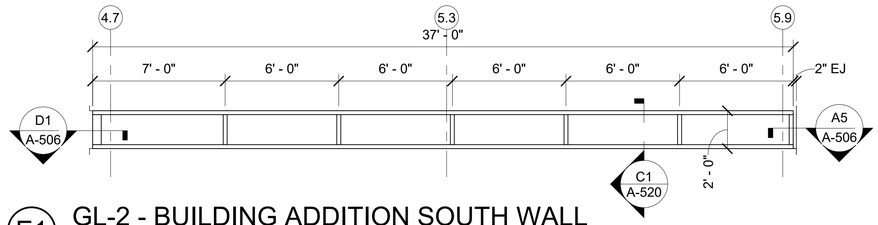
A1 SILL DETAIL
3" = 1'-0"



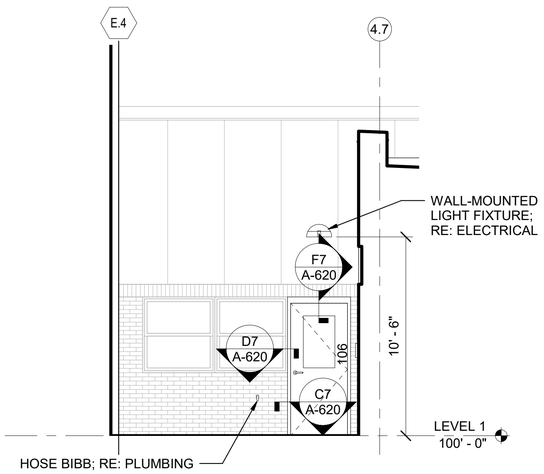
I1 GL-1
1/4" = 1'-0"



E2 GL-2 - BUILDING ADDITION WEST WALL
1/4" = 1'-0"



E1 GL-2 - BUILDING ADDITION SOUTH WALL
1/4" = 1'-0"



A5 ELEVATION - BREAK ROOM EXTERIOR
1/4" = 1'-0"

US Army Corps of Engineers
Louisville District ®

REGISTERED ARCHITECT
RICHARD G. PERRY
16592
STATE OF TEXAS
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: J. PERRY
DRAWN BY: J. MCKINNEY
CHECKED BY: M. HOLLEB
SUBMITTED BY: E. OLNESS
SIZE: ANSI D
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: 22x34_SHEET219201A-575

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS Project No. D2R0003

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
WINDOW TYPES AND DETAILS

SHEET ID
B1455
A-575

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN

DOOR SCHEDULE

NO	DOOR SIZE WT	DOOR SIZE HT	DOOR SIZE THK	DOOR TYPE	DOOR MATL	DOOR FIN	DOOR GLZ	FRAME TYPE	FRAME MATL	FRAME FIN	DETAILS HEAD	DETAILS JAMB	DETAILS SILL	ASSEMBLY STC	ASSEMBLY FIRE RATING	ASSEMBLY HDWR	REMARKS
101.A	3' - 0"	7' - 0"	1 3/4"	F	WD	ST	-	A	HM	PTD	F3/A-620	D3/A-620	-	45	45 MIN	5.0	1,3
101A	3' - 0"	7' - 0"	1 3/4"	F	HM	PTD	-	A	HM	PTD	C6/A-620	A6/A-620	A7/A-620	-	-	4.0	3,4,5
101C	3' - 0"	7' - 0"	1 3/4"	F	HM	PTD	-	A	HM	PTD	C6/A-620	A6/A-620	A7/A-620	-	-	4.0	3,4,5
101D	6' - 0"	7' - 0"	1 3/4"	F	HM	PTD	-	A	HM	PTD	C6/A-620	A6/A-620	A7/A-620	-	45 MIN	3.0	3,4,5
101E	3' - 0"	7' - 0"	1 3/4"	F	HM	PTD	-	A	HM	PTD	C6/A-620	A6/A-620	A7/A-620	-	-	4.0	3,4,5
102	3' - 0"	7' - 0"	1 3/4"	F	WD	ST	-	A	HM	PTD	C1/A-620	A1/A-620	-	45	-	12.0	
102A	3' - 0"	7' - 0"	1 3/4"	F	WD	ST	-	A	HM	PTD	C1/A-620	A1/A-620	-	45	-	15.0	
103	3' - 0"	7' - 0"	1 3/4"	F	WD	ST	GL-1	A	HM	PTD	C1/A-620	A1/A-620	-	45	-	12.0	9
104	3' - 0"	7' - 0"	1 3/4"	FV	WD	ST	GL-1	A	HM	PTD	F3/A-620	D3/A-620	-	-	-	12.0	3
105	3' - 0"	7' - 0"	1 3/4"	FV	WD	ST	GL-1	A	HM	PTD	F3/A-620	D3/A-620		-	-	12.0	3
105A	3' - 0"	7' - 0"	1 3/4"	FV	HM	PTD	GL-2	A	HM	PTD	F6/A-620	D6/A-620	A7/A-620		-	2.0	3,4,5
105B	3' - 0"	7' - 0"	1 3/4"	F	WD	ST	GL-1	A	HM	PTD	C1/A-620	A1/A-620	-	-	-	11.0	
105C	3' - 0"	7' - 0"	1 3/4"	F	WD	ST	GL-1	A	HM	PTD	C1/A-620	A1/A-620	-	-	-	11.0	
105D	3' - 0"	7' - 0"	1 3/4"	F	WD	ST	GL-1	A	HM	PTD	C1/A-620	A1/A-620	-	-	-	11.0	
105E	3' - 0"	7' - 0"	1 3/4"	F	WD	ST	GL-1	A	HM	PTD	C1/A-620	A1/A-620	-	-	-	11.0	
106	3' - 0"	7' - 0"	1 3/4"	FV	AL	PTD	GL-2	A	AL	AN	F7/A-620	C7/A-620; D7/A-620	A7/A-620		-	2.0	3,4,5
107	3' - 0"	7' - 0"	1 3/4"	F	WD	ST	-	A	HM	PTD	F3/A-620	D3/A-620	-	-	-	9.0	3
108	3' - 0"	7' - 0"	1 3/4"	L	WD	ST	-	A	HM	PTD	F3/A-620	D3/A-620	-	-	-	16.0	3
109	3' - 0"	7' - 0"	1 3/4"	L	WD	ST	-	A	HM	PTD	F3/A-620	D3/A-620	-	-	-	16.0	3
110A.A	3' - 0"	7' - 0"	1 3/4"	F	WD	ST	-	A	HM	PTD	C1/A-620	A1/A620	-	45	45 MIN	13.0	
110B.A	8' - 0"	9' - 0"	1 3/4"	G	WD	ST	-	B	HM	PTD	C1/A-620	A1/A620	-	-	45 MIN	20.0	6,7,8
111	3' - 0"	7' - 0"	1 3/4"	F	WD	ST	-	A	HM	PTD	C1/A-620	A1/A620	-	48	45 MIN	13.0	6
112	3' - 0"	7' - 0"	1 3/4"	F	WD	ST	-	A	HM	PTD	C1/A-620	A1/A620	-	48	45 MIN	13.0	6
113	3' - 0"	7' - 0"	1 3/4"	F	WD	ST	-	A	HM	PTD	C1/A-620	A1/A620	-	48	45 MIN	13.0	6
114	3' - 0"	7' - 0"	1 3/4"	F	WD	ST	-	A	HM	PTD	C1/A-620	A1/A620	-	48	45 MIN	13.0	6
115A	3' - 0"	7' - 0"	1 3/4"	F	WD	ST	-	A	HM	PTD	C1/A-620	A1/A-620	-	-	-	9.0	
117	8' - 0"	9' - 0"	1 3/4"	G	WD	ST	-	B	HM	PTD	F3/A-620	D3/A-620	-	-	45 MIN	7.0	3,6,7
118	8' - 0"	9' - 0"	1 3/4"	G	WD	ST	-	B	HM	PTD	F3/A-620	D3/A-620	-	-	45 MIN	7.0	3,6
119	3' - 0"	7' - 0"	1 3/4"	F	WD	ST	-	A	HM	PTD	F3/A-620	D3/A-620	-	-	45 MIN	6.0	3,6
122	3' - 0"	7' - 0"	1 3/4"	F	WD	ST	-	A	HM	PTD	F3/A-620	D3/A-620	-	-	45 MIN	10.0	3,6
123	3' - 0"	7' - 0"	1 3/4"	F	WD	ST	-	A	HM	PTD	F3/A-620	D3/A-620	-	48	45 MIN	13.0	3,6
124	3' - 0"	7' - 0"	1 3/4"	F	WD	ST	-	A	HM	PTD	F3/A-620	D3/A-620	-	48	45 MIN	13.0	3,6
125	4' - 0"	8' - 0"	1 3/4"	F	WD	ST	-	A	HM	PTD	F3/A-620	D3/A-620	-	-	45 MIN	10.0	3,6,7
125A	4' - 0"	8' - 0"	1 3/4"	F	WD	ST	-	A	HM	PTD	C1/A-620	A1/A-620	-	-	45 MIN	10.0	6
126.A	4' - 0"	8' - 2"	1 3/4"	F	WD	ST	-	A	HM	PTD	C1/A-620	A1/A-620	-	-	45 MIN	14.0	6
126.B	4' - 0"	8' - 2"	1 3/4"	F	WD	ST	-	A	HM	PTD	C1/A-620	A1/A-620	-	-	45 MIN	14.0	6
140	3' - 0"	7' - 0"	1 3/4"	F	HM	PTD	-	A	HM	PTD	C3/A-620	A3/A-620	A7/A-620	-	-	3.0	3,4,5
200	3' - 0"	7' - 0"	1 3/4"	F	WD	ST	-	A	HM	PTD	C1/A-620	A1/A-620	-	-	45 MIN	15.0	6
201	3' - 0"	7' - 0"	1 3/4"	F	WD	ST	-	A	HM	PTD	C1/A-620	A1/A-620	-	48	45 MIN	13.0	6
202.A	3' - 0"	7' - 0"	1 3/4"	F	WD	ST	-	A	HM	PTD	C1/A-620	A1/A-620	-	48	45 MIN	13.0	6
202.B	3' - 0"	7' - 0"	1 3/4"	F	WD	ST	-	A	HM	PTD	C1/A-620	A1/A-620	-	48	45 MIN	13.0	6
203.A	3' - 0"	7' - 0"	1 3/4"	F	WD	ST	-	A	HM	PTD	C1/A-620	A1/A-620		48	45 MIN	13.0	2,6
203.B	3' - 0"	7' - 0"	1 3/4"	F	WD	ST	-	A	HM	PTD	C1/A-620	A1/A-620	-	48	-	15.0	
204	3' - 0"	7' - 0"	1 3/4"	F	WD	ST	-	A	HM	PTD	C1/A-620	A1/A-620	-		45 MIN	10.0	6
205	3' - 0"	7' - 0"	1 3/4"	F	WD	ST	-	A	HM	PTD	C1/A-620	A1/A-620	-	48	45 MIN	13.0	6
S02	3' - 0"	7' - 0"	1 3/4"	F	HM	PTD	-	A	HM	PTD	E5/A-531	E8/A-531	E1/A-531	-	45 MIN	1.0	

LOUVER SCHEDULE

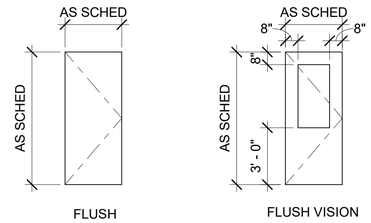
NO	TYPE	WIDTH	HEIGHT	AREA	SILL HEIGHT
L1		2' - 2"	2' - 6"	5.4 SF	31' - 1"
L2		6' - 0"	7' - 0"	42.0 SF	14' - 11"
L3		1' - 8"	1' - 4"	2.2 SF	10' - 4"
L4		3' - 8"	1' - 8"	6.1 SF	11' - 2"
L5		1' - 8"	1' - 8"	2.8 SF	2' - 6"
L6*		10'-0" DIA.	10'-0" DIA.	78.54 SF	52'-8"

* EXISTING LOUVER AT ROOF ON PLAN NORTH AND SOUTH SIDES OF THE EXISTING HANGAR STRUCTURE. REMOVE CAP AND PROVIDE MOTORIZED DAMPER ON INTERIOR SIDE. CONNECT TO FIRE ALARM SYSTEM

LOUVER SCHEDULE REMARKS

1	ALL LOUVERS TO BE STORM PROOF AND TO HAVE A MINIMUM FREE AREA OF 50%, REFER MECH SPEC FOR REQUIRED FREE AREA
2	LOUVER FINISH TO MATCH ADJACENT WALL PANEL
3	REFER TO EXTERIOR ELEVATIONS FOR LOUVER LOCATIONS
4	REFER SHEET A-621 FOR TYPICAL LOUVER DETAILS

DOOR TYPES



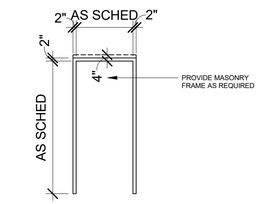
FLUSH
F

FLUSH VISION
FV

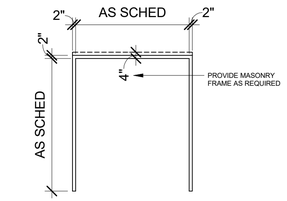
PAIR FLUSH
PF

LOUVER
L

FRAME TYPES



STD HM FRAME
A



STD DOUBLE HM FRAME
B

GENERAL NOTES - DOOR SCHEDULE

A	REFER AE101 THRU AE113 FOR PARTITION LAYOUT AND DIMENSIONS. REFER A-570 FOR PARTITION TYPES AND DETAILS
B	REFER AD101 THRU AD113 FOR DEMOLITION DRAWINGS
C	REFER SHEET I-601 FOR SIGNAGE TYPES AND DETAILS
D	REFER INTERIORS FOR FLOORING/MATERIAL TRANSITIONS
E	PROVIDE FSC CERTIFIED SOLID CORE WOOD DOORS

DOOR SCHEDULE ABBREVIATIONS

AL	ALUMINUM
AN	ANODIZED
FIN	FINISH
GALV	GALVANIZED
GLZ	GLAZING
HDWR	HARDWARE
HM	HOLLOW METAL
HT	HEIGHT
MATL	MATERIAL
MIN	MINUTE
NO	DOOR NUMBER
PTD	PAINTED
ST	STAINED
STC	SOUND TRANSMISSION CLASS RATING
THK	THICKNESS
WD	FSC CERTIFIED WOOD
WT	WIDTH

DOOR SCHEDULE REMARKS

1	CARD READER
2	PROVIDE EXPANSION JOINT COVER AT DOOR SILL
3	PROVIDE MASONRY FRAME AT DOOR HEAD
4	PROVIDE THRESHOLD, WEATHER STRIPPING AND RAIN DRIP AT HEAD OF DOOR
5	PROVIDE A MINIMUM OF 18-GAUGE HOLLOW METAL CONSTRUCTION FOR DOOR FRAME AND 20-GAUGE HOLLOW METAL CONSTRUCTION FOR DOOR WITH REINFORCED VERTICAL STIFFENERS AT 6" O.C.
6	PROVIDE SMOKE SEALS FOR DOOR OPENINGS
7	PROVIDE 105 DEGREE DOOR SWING
8	PROVIDE ELECTRO-MAGNETIC HOLD-OPEN
9	PROVIDE 1-INCH UNDERCUT AT DOOR

US Army Corps of Engineers
Louisville District ®

REGISTERED ARCHITECT · RICHARD G. PERRY · 16592 · STATE OF TEXAS · 23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201A-610

DESIGNED BY: J. PERRY
DRAWN BY: J. MCKINNEY
CHECKED BY: M. HOLLEB
SUBMITTED BY: E. OLMESS
QA/QC BY: ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street Fort Worth, TX 76102
Phone: 817.820.8000 Fax: 817.820.8019

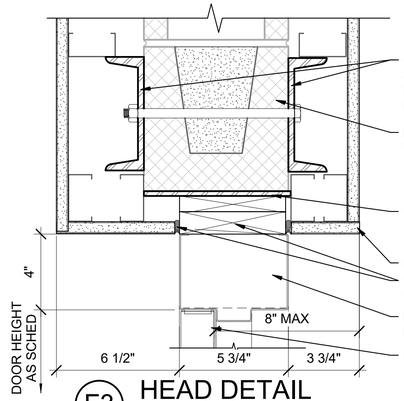
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
DOOR AND LOUVER SCHEDULE

SHEET ID
B1455
A-610

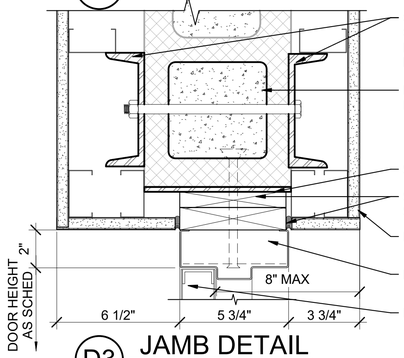
W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

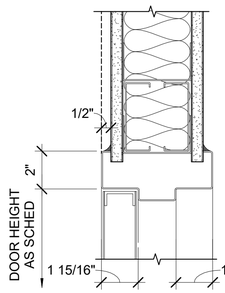
CERTIFIED FINAL DESIGN



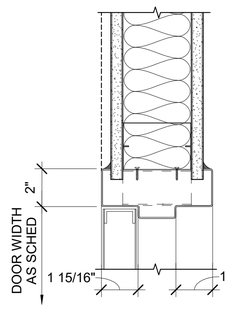
F3 HEAD DETAIL
3" = 1'-0"



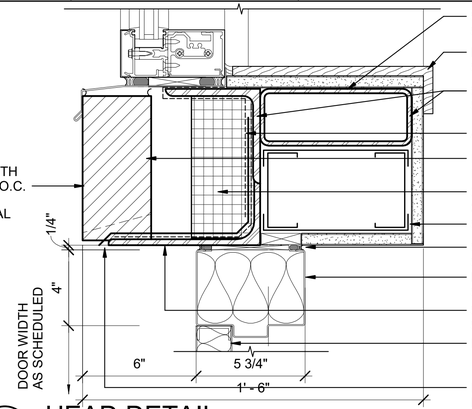
D3 JAMB DETAIL
3" = 1'-0"



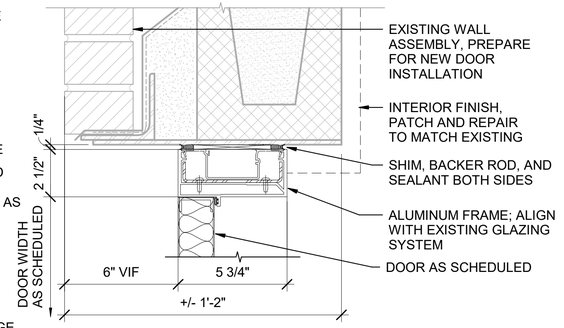
C1 HEAD DETAIL
3" = 1'-0"



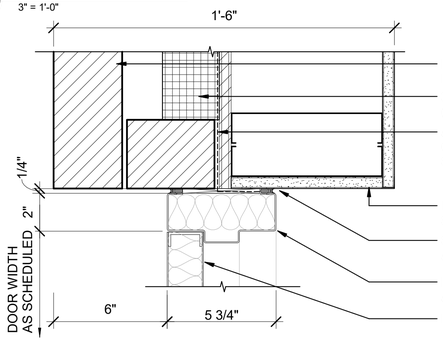
A1 JAMB DETAIL
3" = 1'-0"



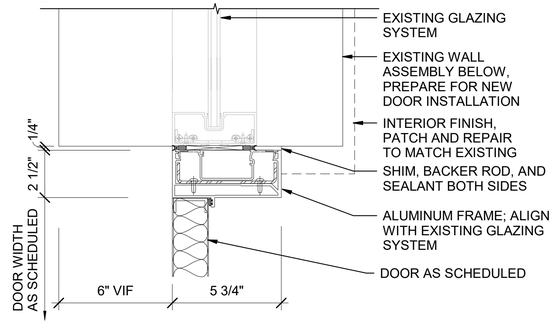
F6 HEAD DETAIL
3" = 1'-0"



F7 HEAD DETAIL
3" = 1'-0"



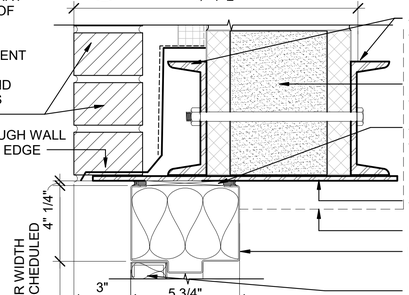
D6 JAMB DETAIL
3" = 1'-0"



D7 JAMB DETAIL
3" = 1'-0"

REMOVE AND SUPPORT BRICKS AS NECESSARY FOR INSTALLATION OF NEW DOOR, ACCESSORIES, AND BRICKS . REPLACEMENT BRICKS TO MATCH EXISTING. CLEAN AND REPLACE WEEPS AS NECESSARY

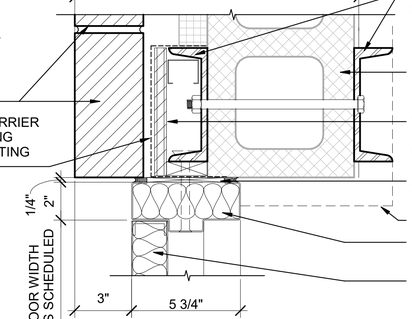
PREFINISHED THROUGH WALL FLASHING AND DRIP EDGE



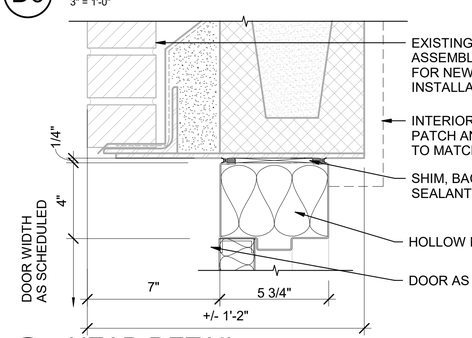
C3 HEAD DETAIL
3" = 1'-0"

REMOVE AND SUPPORT BRICKS AS NECESSARY FOR INSTALLATION OF NEW DOOR, ACCESSORIES, AND BRICKS . REPLACEMENT BRICKS TO MATCH EXISTING. CLEAN AND REPLACE WEEPS AS NECESSARY

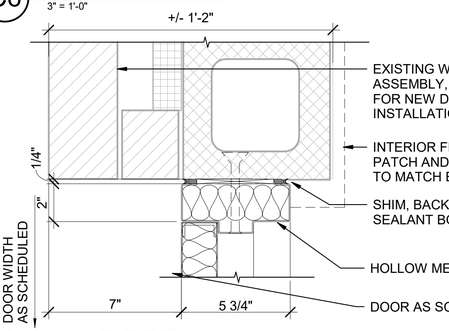
PROVIDE AIR/VAPOR BARRIER ON EXTERIOR SHEATHING COMPATIBLE WITH EXISTING BARRIER SYSTEM.



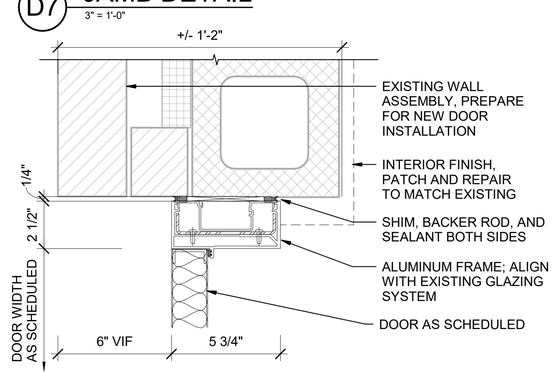
A3 JAMB DETAIL
3" = 1'-0"



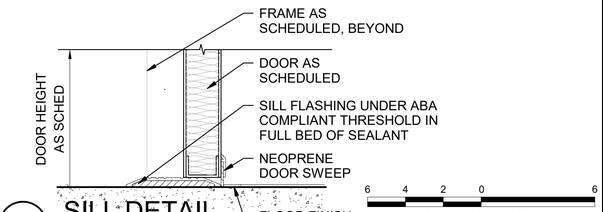
C6 HEAD DETAIL
3" = 1'-0"



A6 JAMB DETAIL
3" = 1'-0"



C7 JAMB DETAIL
3" = 1'-0"



A7 SILL DETAIL
3" = 1'-0"

US Army Corps of Engineers
Louisville District ®

REGISTERED ARCHITECT RICHARD G. PERRY 18592 STATE OF TEXAS 23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: J. PERRY
DRAWN BY: J. MCKINNEY
CHECKED BY: M. HOLLEB
SUBMITTED BY: E. OLNESS
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201A-620
ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS Tel: 972.683.3100

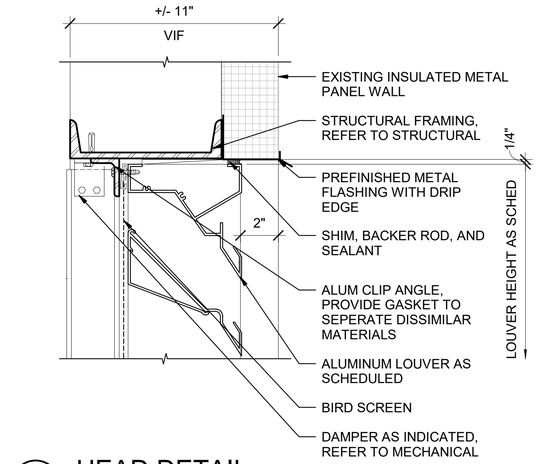
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395

DOOR DETAILS

SHEET ID
B1455
A-620

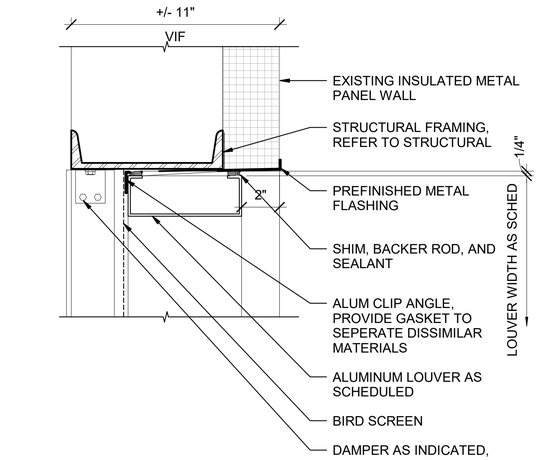
W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



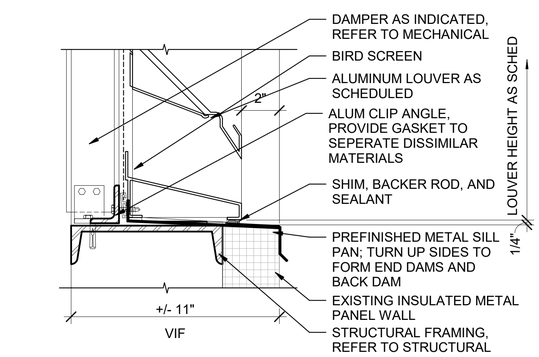
E8 HEAD DETAIL

3" = 1'-0"



C8 JAMB DETAIL

3" = 1'-0"



A8 SILL DETAIL

3" = 1'-0"

US Army Corps of Engineers
Louisville District ®

REGISTERED ARCHITECT
RICHARD G. PERRY
16592
STATE OF TEXAS
23 NOV 2022

TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: J. PERRY
DRAWN BY: J. MCKINNEY
CHECKED BY: M. HOLLEB
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201A-621

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS No. 157260

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395

LOUVER DETAILS

SHEET ID
B1455
A-621

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN

ABBREVIATIONS

A

A/C	AIR CONDITION
A/E	ARCHITECT/ENGINEER
AB	ANCHOR BOLT
ABAN	ABANDON
ACC	ACCESSIBLE
ACS FLR	ACCESS FLOOR
ACST	ACOUSTIC
ACT	ACOUSTICAL CEILING TILE
AD	AREA DRAIN
ABA	ARCHITECTURAL BARRIERS ACT
ADA	AMERICANS WITH DISABILITIES ACT
ADJ	ADJUSTABLE
AFF	ABOVE FINISH FLOOR
AHU	AIR HANDLING UNIT
ALNMT	ALIGNMENT
ALT	ALTERNATE
ALUM	ALUMINUM
ANOD	ANODIZE
APPROX	APPROXIMATE
AR	AS REQUIRED
ARCH	ARCHITECT
ASKLR	AUTOMATIC SPRINKLER
ASR	AUTOMATIC SPRINKLER RISER
ASSY	ASSEMBLY
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
ASYM	ASYMMETRICAL
AUTO	AUTOMATIC
AUX	AUXILIARY

B

B/B	BACK TO BACK
BAT	BATTEN
BC	BACK OF CURB
BD	BOARD
BEV	BEVEL
BF	BOTH FACES
BFF	BELOW FINISH FLOOR
BKBD	BACKBOARD
BL	BUILDING LINE
BLD	BUILD
BLDG	BUILDING
BLKT	BLANKET
BLST	BALLAST
BLW	BELOW
BM	BEAM
BN	BULLNOSE
BOS	BOTTOM OF STEEL
BOT	BOTTOM
BP	BUILDING PAPER
BRES	BULLET-RESISTANT
BRDG	BRIDGING
BRD	BEARING
BRKT	BRACKET
BRZ	BRONZE
BS	BOTH SIDES
BSMT	BASEMENT
BUR	BUILT-UP ROOFING

C

C	CHANNEL
C TO C	CENTER TO CENTER
CAB	CABINET
CB	CERAMIC BASE
CBB	CEMENTITIOUS BACKER BOARD
CD	CONSTRUCTION DOCUMENTS
CEM	CEMENT
CER	CERAMIC
CEQ	COLLATERAL EQUIPMENT
CFCI	CONTRACTOR FURNISHED CONTRACTOR INSTALLED
CFGI	CONTRACTOR FURNISHED GOVERNMENT INSTALLED
CFLG	COUNTERFLASHING
CG	CORNER GUARD
CHFR	CHAMFER
CI	CAST IRON
CIP	CAST IN PLACE
CIP	CAST IRON PIPE
CJ	CONTROL JOINT
CL	CENTER LINE
CLDG	CLADDING
CLG	CEILING
CLL	COLUMN LINE
CLO	CLOSET
CLR	CLEAR
CLT	CLEAT
CLWG	CLEAR WIRE GLASS
CM	CENTIMETER
CMPST	COMPOSITE
CMU	CONCRETEMASONRY UNIT
CNR	CORNER
CNTOR	CONTRACTOR
CNTR	COUNTER
COL	COLUMN
COMM	COMMUNICATION
COMPR	COMPRESSOR
CONN	CONNECT

C CONT

CONT	CONTINUE
CORR	CORRIDOR
COV	COVER
CPRS	COMPRESSIBLE
CPT	CARPET
CRS	COLD ROLLED STEEL
CSB	CONCRETE SPLASH BLOCK
CSWK	CASEWORK
CT	CERMIC TILE
CTR	CENTER
CTRL	CONTROL
CU	COPPER
CU	CUBIC

D

D	DEPTH
DBL	DOUBLE
DEG	DEGREE
DEMO	DEMOLITION
DIM	DIMENSION
DIST	DISTANCE
DMPF	DAMPPROOFING
DR	DOOR
DR FR	DOOR FRAME
DR OPN	DOOR OPENING
DS	DOWNSPOUT
DW	DISHWASHER
DW	DOMESTIC WATER
DWH	DOMESTIC WATER HEATER
DX OUT	DUPLEX OUTLET

E

EA	EACH
EF	EACH FACE
EGSB	EXTERIOR GYPSUM SHEATHING BOARD
EHD	ELECTRIC HAND DRYER
EIFS	EXTERIOR INSULATION AND FINISH SYSTEM
EJ	EXPANSION JOINT
EL	ELEVATION
ELEC	ELECTRIC
ELEV	ELEVATOR
EM	EXPANDED METAL
EMER	EMERGENCY
ENAM	ENAMEL
ENCL	ENCLOSURE
ENGR	ENGINEER
ENTR	ENTRANCE
ENVIR	ENVIRONMENT
EPRF	EXPLOSION PROOF
EQ	EQUAL
EQUIP	EQUIPMENT
ESCAL	ESCALATOR
EW	EACH WAY
EWC	ELECTRIC WATER COOLER
EXH FN	EXHAUST FAN
EXH HD	EXHAUST HOOD
EXHV	EXHAUST VENT
EXIST	EXISTING
EXP	EXPOSED
EXP	EXPANSION
EXT	EXTINGUISHER
EXT LT	EXIT LIGHT

F

F	FEMALE
FACIL	FACILITY
FAS	FIRE ALARM STATION
FB	FIRE BLANKET
FC BRK	FIRE BRICK
FD	FLOOR DRAIN
FDTN	FOUNDATION
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET
FF&E	FURNITURE, FIXTURES & EQUIPMENT
FF EL	FINISH FLOOR ELEVATION
FHC	FIRE HOSE CABINET
FIN	FINISH
FIN FL	FINISH FLOOR
FIN GR	FINISH GRADE
FIXT	FIXTURE
FLASH	FLASHING
FLR	FLOOR
FLUOR	FLUORESCENT
FM	FACTORY MUTUAL
FO	FINISHED OPENING
FOM	FACE OF MASONRY
FOW	FACE OF WALL
FP	FIRE PROTECTION
FPM	FEET PER MINUTE
FR	FIRE RATING
FSTNR	FASTENER
FT	FEET
FURG	FURRING
FURN	FURNITURE
FW	FIRE WALL
FWC	FABRIC WALL COVERING

G

GA	GAGE
GAL	GALLON
GALV	GALVANIZED
GB	GRAB BAR
GDR	GUARDRAIL
GEN	GENERAL
GFCI	GOVERNMENT FURNISHED CONTRACTOR INSTALLED
GFGI	GOVERNMENT FURNISHED GOVERNMENT INSTALLED
GLZ	GLAZING
GRTG	GRATING
GSB	GYPSUM SHEATHING BOARD
GT	GROUT
GUT	GUTTER
GYP BD	GYPSUM BOARD

H

HB	HOSE BIBB
HC	HANDICAP
HDW	HARDWARE
HID	HIGH INTENSITY DISCHARGE
HM	HOLLOW METAL
HMD	HOLLOW METAL FRAME
HNDRL	HANDRAIL
HORIZ	HORIZONTAL
HPLAM	HIGH PRESSURE PLASTIC LAMINATE
HST	HOIST
HT	HEIGHT
HVAC	HEATING, VENTILATION, AND AIR CONDITIONING
HW	HOT WATER

I

ID	IDENTIFICATION
INSUL	INSULATION
INT	INTERIOR
IP	IRON PIPE
IS	INSECT SCREEN

J

JAN	JANITOR
J-BOX	JUNCTION BOX

K

K	THOUSAND
KOP	KNOCK OUT PANEL

L

L	ANGLE
LAB	LABORATORY
LAD	LADDER
LAM	LAMINATE
LAM GL	LAMINATED GLASS
LAV	LAVATORY
LB	POUND
LBR	LUMBER
LDG	LANDING
LH	LEFT HAND
LHR	LEFT HAND REVERSE
LKR	LOCKER
LNDSCP	LANDSCAPE
LVR	LOUVER
LWC	LIGHTWEIGHT CONCRETE
LYR	LAYER

M

M	METER
MACH	MACHINE ROOM
MAINT	MAINTENANCE
MAX	MAXIMUM
MECH	MECHANICAL
MEMB	MEMBRANE
MFD	MANUFACTURED
MID	MIDDLE
MIN	MINIMUM
MIRR	MIRROR
MISC	MISCELLANEOUS
MLWK	MILLWORK
MM	MILLIMETER
MO	MASONRY OPENING
MOT	MOTOR
MRT	MARBLE THRESHOLD
MS	MOP SINK
MSB	MOP SERVICE BASIN
MTD	MOUNTED
MTL	METAL
MULL	MULLION
MVBL	MOVABLE
MW	MICROWAVE
MWP	MEMBRANE WATERPROOFING

N

N	NORTH
NIC	NOT IN CONTRACT
NO	NUMBER
NOM	NOMINAL
NS	NARROW STILE
NTS	NOT TO SCALE

O

OCC	OCCUPY
OFF	OFFICE
OHCD	OVERHEAD COILING DOOR
OPH	OPPOSITE HAND
OPNG	OPENING
OPP	OPPOSITE
OPR	OPERABLE

P

PBD	PARTICLE BOARD
PCC	PRECAST CONCRETE
PEJ	PREMOLDED EXPANSION JOINT
PERIM	PERIMETER
PERP	PERPENDICULAR
PIL	PILASTER
PL	PLATE
PL	PROPERTY LINE
PLAM	PLASTIC LAMINATE
PLB	PLUMB
PLYWD	PLYWOOD
PNEU	PNEUMATIC
PNL	PANEL
PORT	PORTABLE
PR	PAIR
PR	PIPE RAIL
PRCST	PRECAST
PREFAB	PREFABICATED
PREFIN	PREFINISHED
PROJ	PROJECT
PT	PORCELAIN TILE
PTD	PAPER TOWEL DISPENSER
PTDR	PAPER TOWEL DISPENSER AND RECEPTACLE
PTN	PARTITION
PTR	PAPER TOWEL RECEPTACLE
PUR	PURLINS
PVG	PAVING

R

R	RADIUS
R	THERMAL RESISTANCE
RB	RESILIENT BASE
RB HK	ROBE HOOK
RBR	RUBBER
RC	REINFORCED CONCRETE
RCP	REFLECTED CEILING PLAN
RCVR	RECEIVER
RD	ROOF DRAIN
RDC	REDUCER
REBAR	REINFORCING STEEL BARS
REC	RECESSED
RECD	RECEIVED
RE:	REFERENCED
REF	REFRIGERATOR
REG	REGULATION
REINF	REINFORCE
REM	REMOVABLE
REP	REPAIR
REPL	REPLACE
REQD	REQUIRED
RESIL	RESILIENT
REST	RESTROOM
RF	RESILIENT FLOORING
RH	RIGHT HAND
RHR	RIGHT HAND REVERSE
RLG	RAILING
RM	ROOM
RND	ROUND
RO	ROUGH OPENING
ROW	RIGHT OF WAY
RT	RIGHT
RVL	REVEAL

S

S	SOUTH
SAN	SANITARY
SAT	SUSPENDED ACOUSTICAL TILE
SB	SPLASH BLOCK
SC	SEALED CONCRETE
SCD	SEAT COVER DISPENSER
SCHED	SCHEDULE
SCP	SCUPPER
SCWD	SOLID CORE WOOD DOOR
SDL	SADDLE
SEG	SEGMENT
SEP	SEPERATE
SF	SQUARE FOOT
SHFT	SHAFT (ELEVATOR)
SHT	SHEET

S CONT

SHTHG	SHEATHING
SIM	SIMILAR
SLNT	SEALANT
SM	SHEET METAL
SND	SANITARY NAPKIN DISPENSER
SND INS	SOUND INSULATION
SP	SUMP PIT
SQ	SQUARE
SS	STAINLESS STEEL
ST	STAIRS
STC	SOUND TRANSMISSION CLASS
STD	STANDARD
STL	STEEL
STL JST	STEEL JOIST
STL PL	STEEL PLATE
STL RF	STEEL ROOF DECK
STL TR	STEEL TRUSS
STOR	STORAGE
STR	STRINGER
STRM	STOREROOM
STRUCT	STRUCTURAL
SUSP	SUSPENDED
SW	SIDEWALK
SYM	SYMBOL
SYMM	SYMMETRICAL
SYS	SYSTEM

T

T	TREAD
TB	THROUGH BOLT
TB	TOWEL BAR
TEL	TELEPHONE
TEMP	TEMPORARY
TER	TERRAZZO
THERM	THERMAL
THK	THICK
THRES	THRESHOLD
TOC	TABLE OF CONTENT
TOM	TOP OF MASONRY
TOS	TOP OF STEEL
TOW	TOP OF WALL
TPD	TOILET PAPER DISPENSER
TRANS	TRANSPARENT
TS	TUBE STEEL
TSTAT	THERMOSTAT
TYP	TYPICAL

U

UON	UNLESS OTHERWISE NOTED
UPS	UNINTERUPTIBLE POWER SUPPLY
UR	URINAL

V

VAC	VACUUM
VB	VINYL BASE
VCT	VINYL COMPOSITION TILE
VERT	VERTICAL
VIF	VERIFY IN FIELD
VNR	VENEER
VOL	VOLUME
VR	VAPOR RETARDER
VRFY	VERIFY
VWF	VINYL WALL FABRIC

W

W	WIDE
W CAB	WALL CABINETS
W/O	WITHOUT
WBL	WOOD BLOCKING
WC	WATER CLOSET
WD	WOOD
WDW	WINDOW
WF	WIDE FLANGE
WF BM	BEAM, WIDE FLANGE
WGL	WIRED GLASS
WH	WALL HUNG
WPM	WATERPROOF MEMBRANE
WSCT	WAINSCOT
WT	WEIGHT
WWF	WELDED WIRE FABRIC

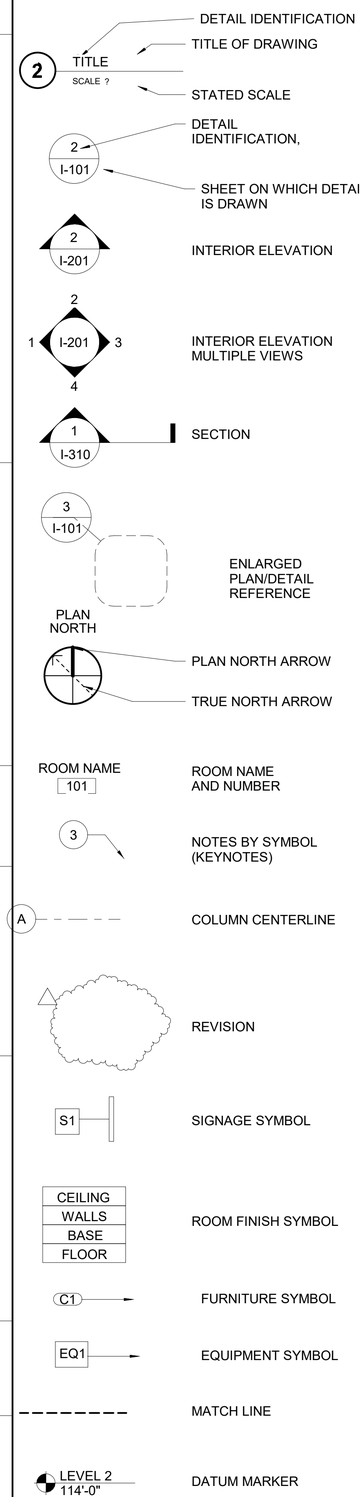
X

X BRACE	STRUCTURAL LATERAL BRACE
XFMR	TRANSFORMER

Y

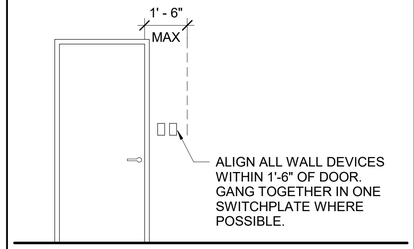
Y	YARD

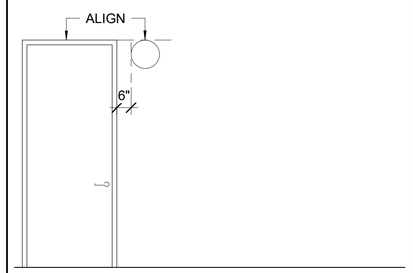
ARCHITECTURAL SYMBOLS



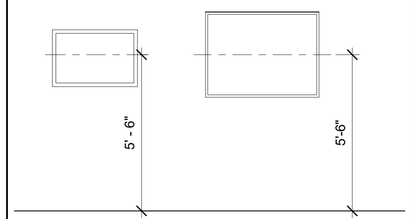
GENERAL NOTES

A. VERIFY AND DOCUMENT CONDITIONS AND DIMENSIONS ON THE JOB SITE BEFORE BEGINNING CONSTRUCTION.
B. DO NOT SCALE THE DRAWINGS FOR CONSTRUCTION PURPOSES.
C. VERIFY SIZE, LOCATIONS AND CHARACTERISTICS OF ALL EQUIPMENT TO BE FURNISHED WITH MANUFACTURERS OR SUPPLIERS BEFORE BEGINNING CONSTRUCTION.
D. VERIFY SIZE AND LOCATION OF ALL OPENINGS FOR EQUIPMENT AND RELATED WORK.
E. ALL PLAN DIMENSIONS ARE TO FACE OF GYPSUM BOARD, FACE OF BRICK, FACE OF CONCRETE MASONRY UNITS OR CENTERLINE OF COLUMNS, UNLESS OTHERWISE NOTED.
F. REFER TO ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION AND COORDINATION.





STANDARD WALL CLOCK (AT DOOR)



PROVIDE WALL BLOCKING FOR MONITOR AND MARKER BOARD AS REQUIRED.

B9 MOUNTING HEIGHTS UON
NTS

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
MACHELL LARAE ABOVE
10047
REGISTERED
INTERIOR DESIGNER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOV 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201I-001

DESIGNED BY: M. ABOVE
DRAWN BY: H. WILSON
CHECKED BY: S. LEBEAU
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

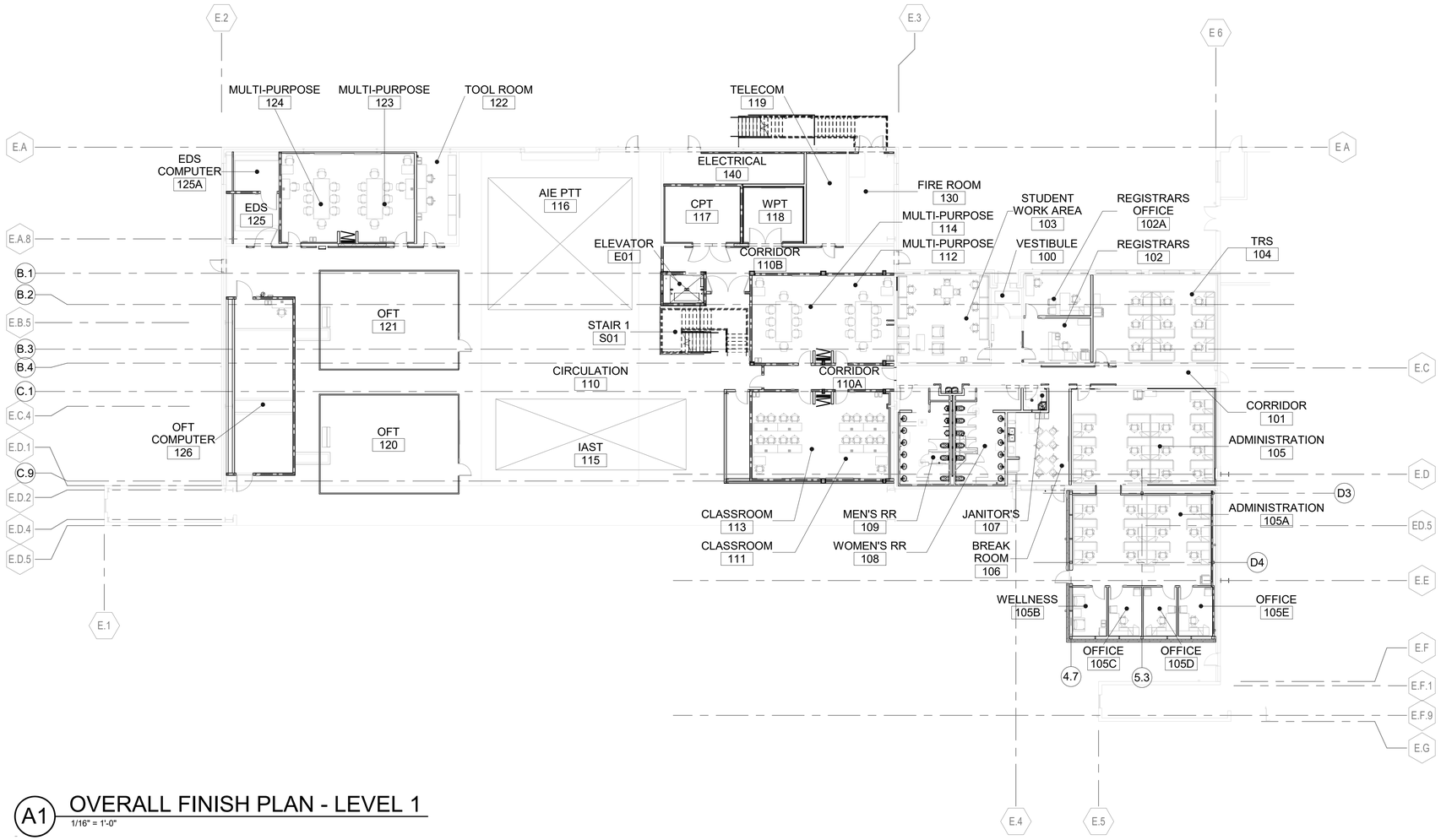
Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
ADDRESS No. 1000013

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
GENERAL

SHEET ID
B1455
I-001

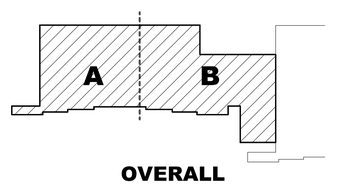
W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



A1 OVERALL FINISH PLAN - LEVEL 1

1/16" = 1'-0"



OVERALL KEY PLAN

GRAPHIC SCALE

16 12 8 4 0 16 32

SCALE: 1/16"=1'-0"

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
MACHELL LARAE ABOVE
10047
REGISTERED
INTERIOR DESIGNER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: M. ABOVE
DRAWN BY: H. WILSON
CHECKED BY: S. LEBEAU
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34

ISSUE DATE: 23 NOV 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT2192011N101

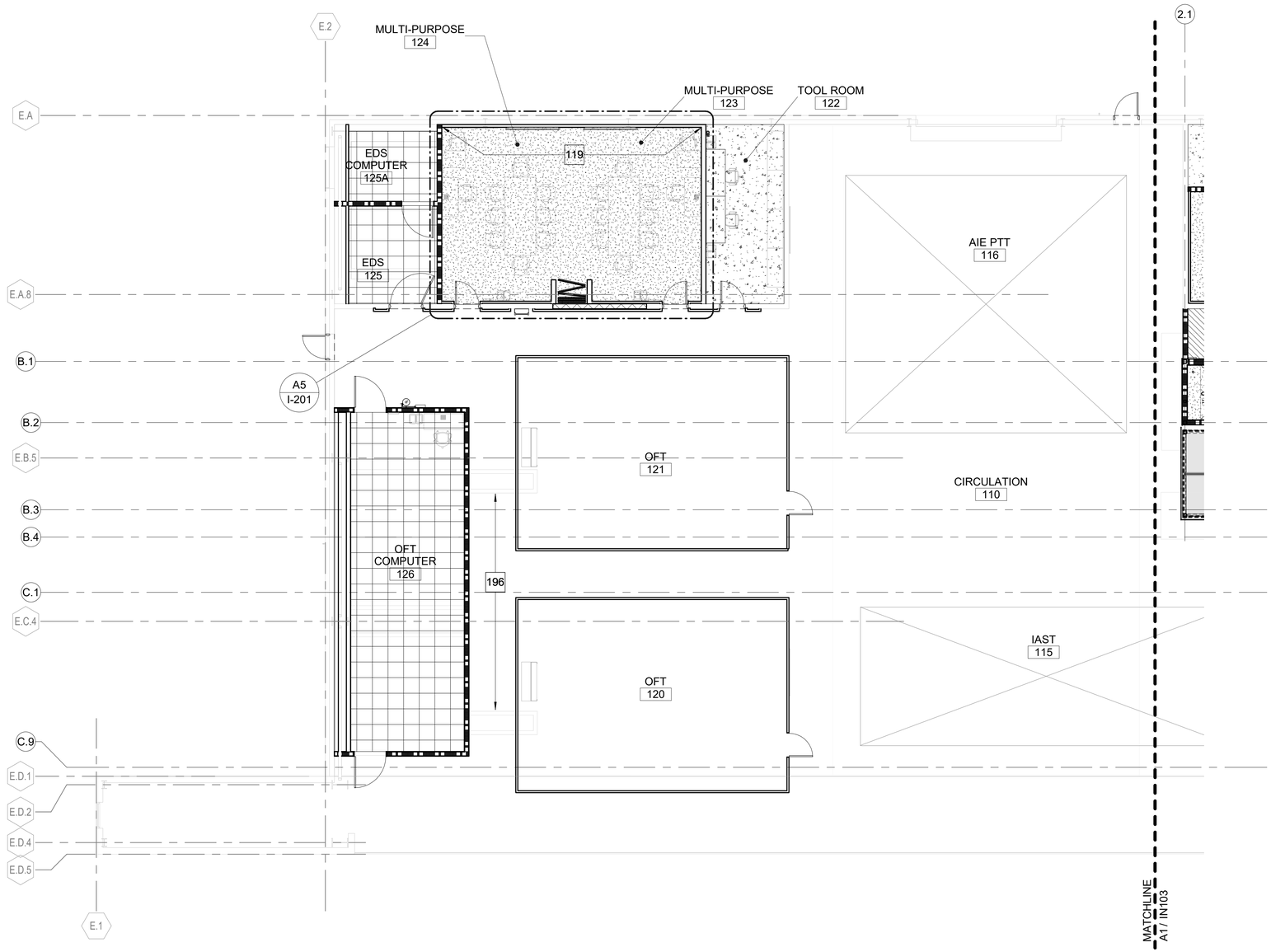
US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS PROJECT NO: D2XR0003

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
OVERALL FINISH PLAN - LEVEL 1

SHEET ID
B1455
IN101

W912QR23R0003_Plans-0000



GENERAL NOTES - FINISH PLANS

A	FIELD VERIFY ALL DIMENSIONS PRIOR TO ORDERING MATERIALS/FINISHES.
B	REFER TO I-601 FOR FINISH LEGEND AND I-602 FOR ROOM FINISH SCHEDULE.
C	ALL TRANSITIONS ARE TO OCCUR AT THE CENTERLINE OF THE DOOR, DOORWAY OR CEILING LINE, UNLESS OTHERWISE NOTED.
D	REFER TO REFLECTED CEILING PLANS ON AE121 TO AE133 FOR ADDITIONAL INFORMATION.
E	APPLY BASE AS SPECIFIED ON ALL WALL TYPES.
F	CORNER GUARDS ARE REQUIRED ON ALL OUTSIDE CORNERS
G	PAINT EXISTING HANGAR WALLS PT-3

KEYNOTES

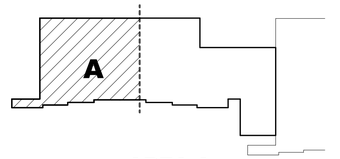
119	PAINT PT-2.
196	TRENCH - STEEL COVER PLATE

FLOOR FINISH LEGEND

- CPT-1
- CPT-2
- EXC-1
- LVT-1
- PFT-1
- SC-1
- SDT-1
- RAF-1
- RF-1

A1 PARTIAL FINISH PLAN - LEVEL 1 - AREA A

1/8" = 1'-0"



AREA A
KEY PLAN

GRAPHIC SCALE

8 6 4 2 0 8 16

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

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
MACHELL LARAE ABOVE
10047
REGISTERED
INTERIOR DESIGNER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: M. ABOVE	ISSUE DATE: 23 NOV 2022		
DRAWN BY: H. WILSON	SOLICITATION NO.:		
CHECKED BY: S. LEBEAU	CONTRACT NO.:	DRAWING CODE:	
SUBMITTED BY: E. OLMESS		FILE NAME:	
ANSI D 22x34		S3KIT219201IN102	

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS Proj. No. W2R003

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PARTIAL FINISH PLAN - LEVEL 1 - AREA A

SHEET ID
B1455
IN102

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN

GENERAL NOTES - FINISH PLANS

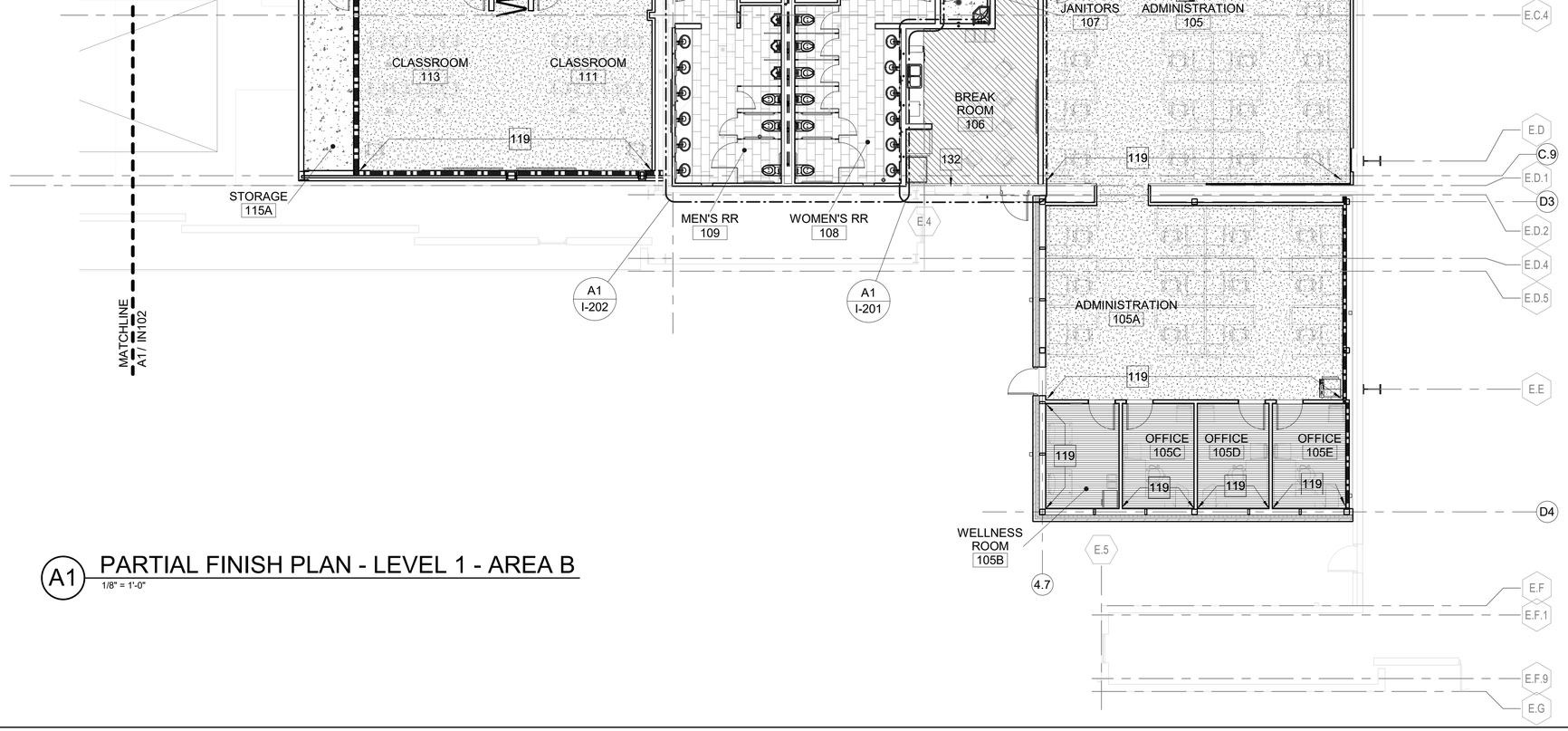
A	FIELD VERIFY ALL DIMENSIONS PRIOR TO ORDERING MATERIALS/FINISHES.
B	REFER TO I-601 FOR FINISH LEGEND AND I-602 FOR ROOM FINISH SCHEDULE.
C	ALL TRANSITIONS ARE TO OCCUR AT THE CENTERLINE OF THE DOOR, DOORWAY OR CEILING LINE, UNLESS OTHERWISE NOTED.
D	REFER TO REFLECTED CEILING PLANS ON AE121 TO AE133 FOR ADDITIONAL INFORMATION.
E	APPLY BASE AS SPECIFIED ON ALL WALL TYPES.
F	CORNER GUARDS ARE REQUIRED ON ALL OUTSIDE CORNERS
G	PAINT EXISTING HANGAR WALLS PT-3

KEYNOTES

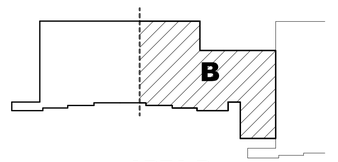
119	PAINT PT-2.
132	INSTALL WS-1 WINDOW SHADE AT EXTERIOR WINDOWS, UON.
134	STAIR TREADS/ RISERS RF-1. PAINT HANDRAILS PT-4.
196	TRENCH - STEEL COVER PLATE

FLOOR FINISH LEGEND

- CPT-1
- CPT-2
- EXC-1
- LVT-1
- PFT-1
- SC-1
- SDT-1
- RAF-1
- RF-1



A1 PARTIAL FINISH PLAN - LEVEL 1 - AREA B
1/8" = 1'-0"



AREA B
KEY PLAN

GRAPHIC SCALE
8 6 4 2 0 8 16
SCALE: 1/8"=1'-0"

PLAN NORTH
TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
MACHELL LARAE ABOVE
10047
REGISTERED INTERIOR DESIGNER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: M. ABOVE
DRAWN BY: H. WILSON
CHECKED BY: S. LEBEAU
SUBMITTED BY: E. OLMESS
ISSUE DATE: 23 NOV 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201IN103
ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street Fort Worth, TX 76102
Texas Registered Engineering Firm F-2018

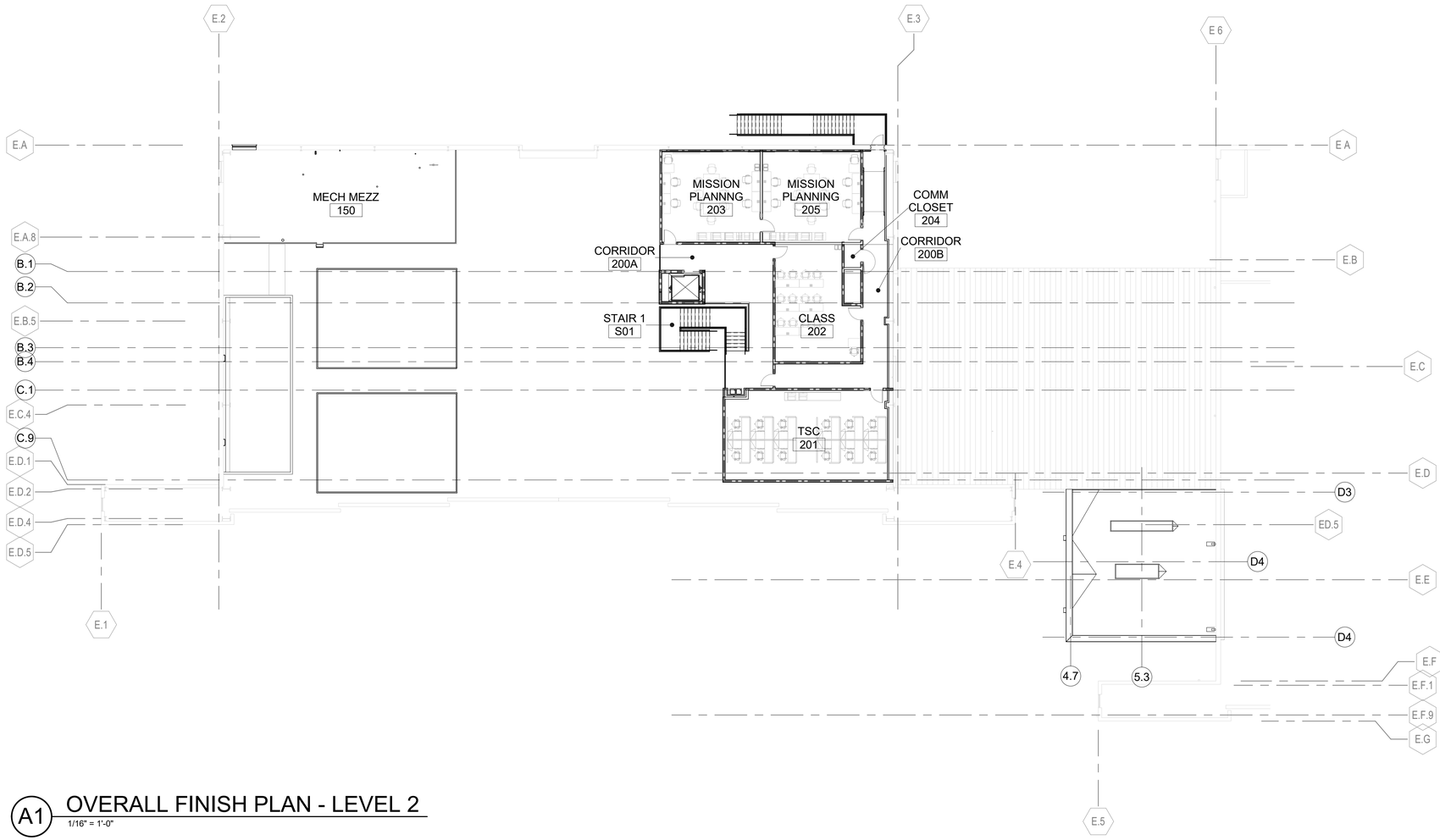
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, PZ#: 496395
PARTIAL FINISH PLAN - LEVEL 1 - AREA B

SHEET ID
B1455
IN103

W912QR23R0003_Plans-0000

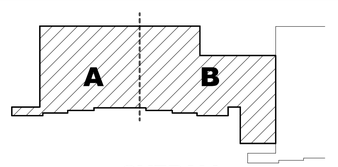
ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN



A1 OVERALL FINISH PLAN - LEVEL 2

1/16" = 1'-0"



OVERALL KEY PLAN

GRAPHIC SCALE

16 12 8 4 0 16 32

SCALE: 1/16"=1'-0"

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
MACHELL LARAE ABOVE
10047
REGISTERED
INTERIOR DESIGNER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: M. ABOVE
DRAWN BY: H. WILSON
CHECKED BY: S. LEBEAU
SUBMITTED BY: E. OLNESS
QC BY:
ISSUE DATE: 23 NOV 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201IN111
ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
(817)334-7500 TBPE F-2966

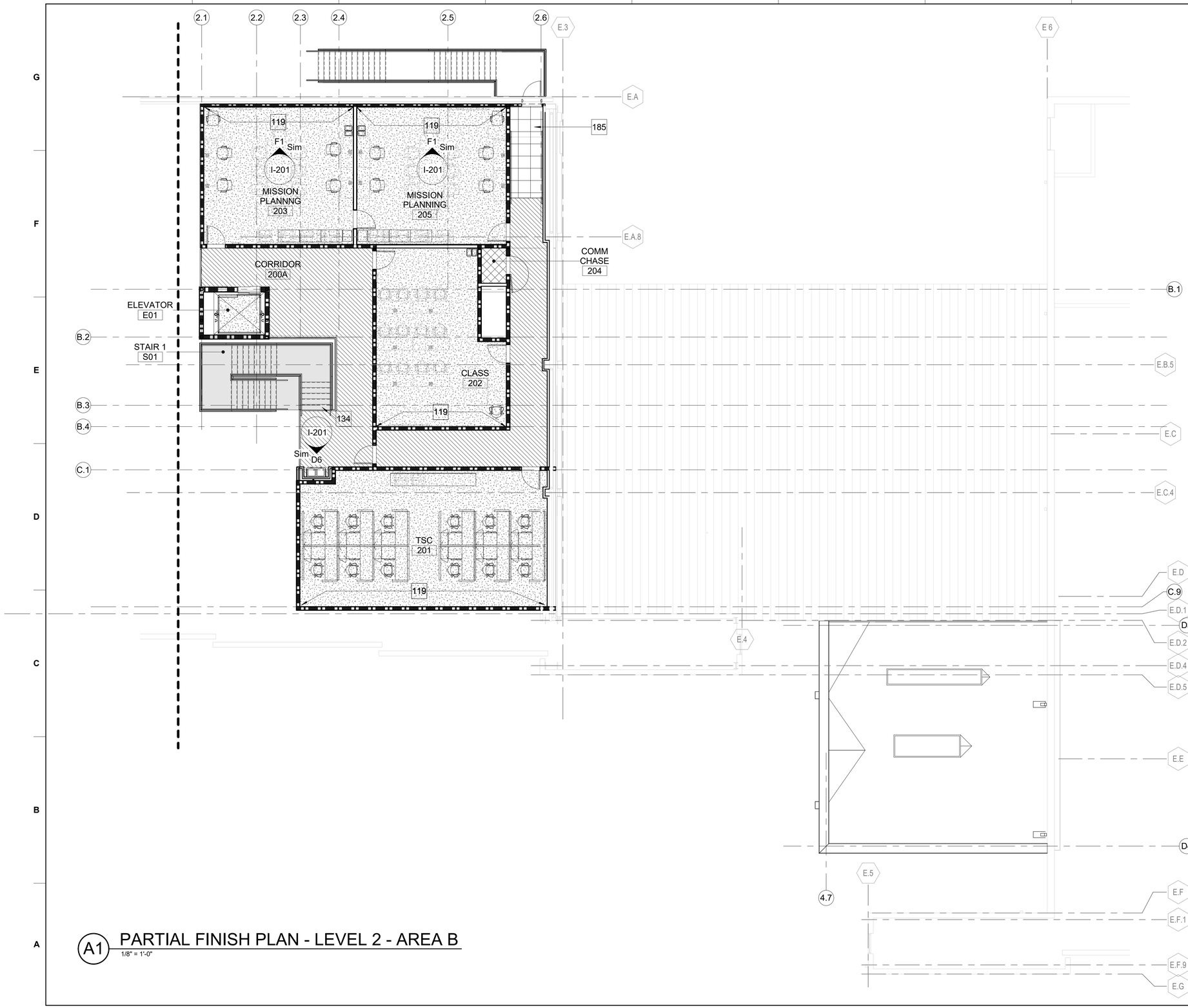
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
OVERALL FINISH PLAN - LEVEL 2

SHEET ID
B1455
IN111

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN



A1 PARTIAL FINISH PLAN - LEVEL 2 - AREA B

1/8" = 1'-0"

GENERAL NOTES - FINISH PLANS

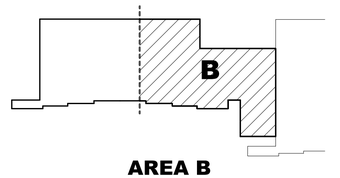
A	FIELD VERIFY ALL DIMENSIONS PRIOR TO ORDERING MATERIALS/FINISHES.
B	REFER TO I-601 FOR FINISH LEGEND AND I-602 FOR ROOM FINISH SCHEDULE.
C	ALL TRANSITIONS ARE TO OCCUR AT THE CENTERLINE OF THE DOOR, DOORWAY OR CEILING LINE, UNLESS OTHERWISE NOTED.
D	REFER TO REFLECTED CEILING PLANS ON AE121 TO AE133 FOR ADDITIONAL INFORMATION.
E	APPLY BASE AS SPECIFIED ON ALL WALL TYPES.
F	CORNER GUARDS ARE REQUIRED ON ALL OUTSIDE CORNERS
G	PAINT EXISTING HANGAR WALLS PT-3

KEYNOTES

119	PAINT PT-2.
134	STAIR TREADS/ RISERS RF-1. PAINT HANDRAILS PT-4.
185	RAF-1 FLOORING AT RAMP AND LANDING.

FLOOR FINISH LEGEND

- CPT-1
- CPT-2
- EXC-1
- LVT-1
- PFT-1
- SC-1
- SDT-1
- RAF-1
- RF-1



AREA B
KEY PLAN

GRAPHIC SCALE

8 6 4 2 0 8 16

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

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
MACHELL LARAE ABOVE
10047
REGISTERED
INTERIOR DESIGNER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: M. ABOVE
DRAWN BY: H. WILSON
CHECKED BY: S. LEBEAU
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOV 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201IN112

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS Tel 972.983.2600

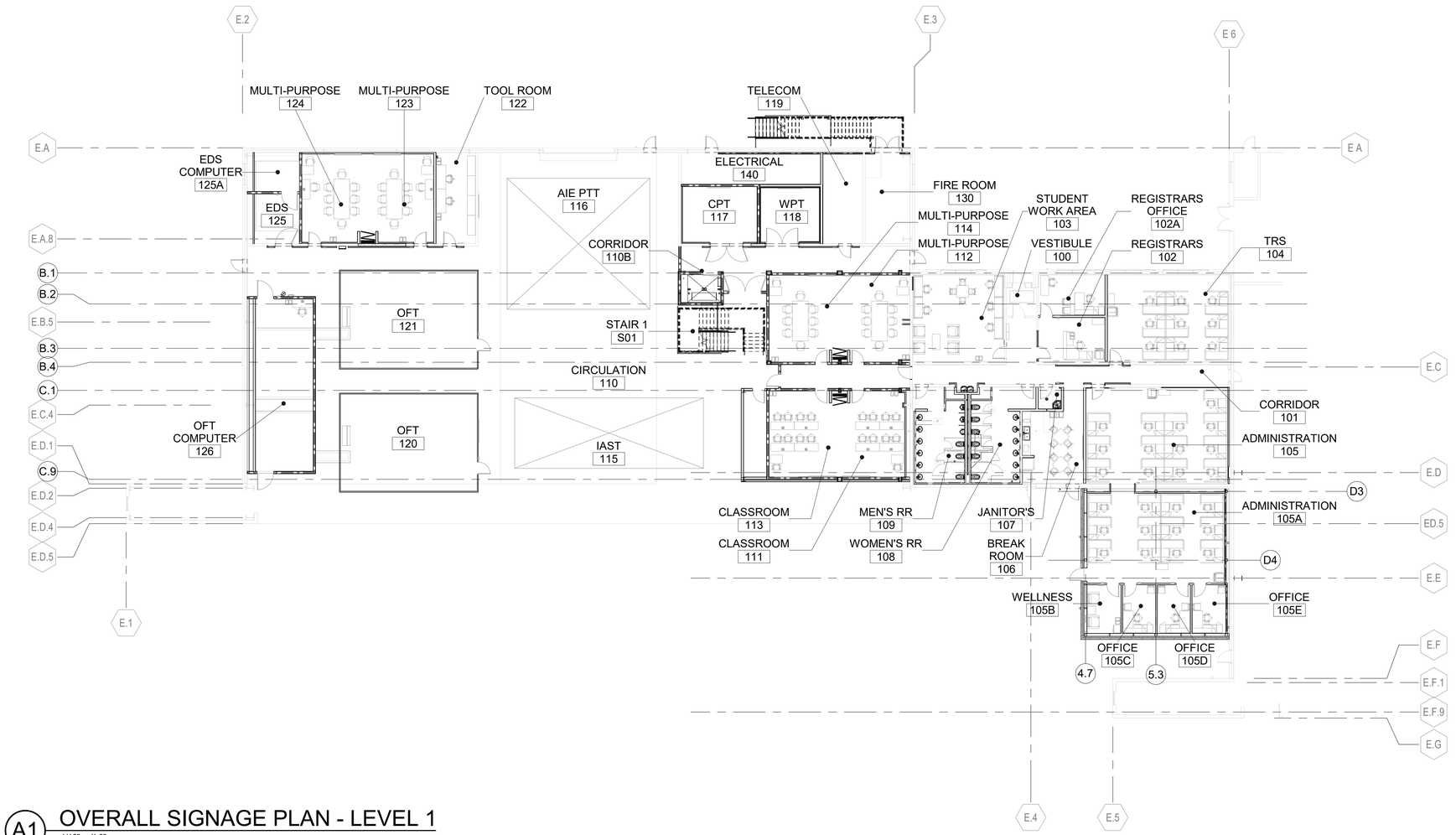
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PARTIAL FINISH PLAN - LEVEL 2 - AREA B

SHEET ID
B1455
IN112

W912QR23R0003_Plans-0000

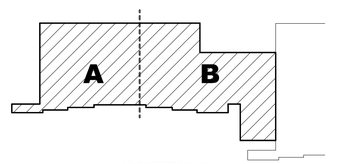
ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN



A1 OVERALL SIGNAGE PLAN - LEVEL 1

1/16" = 1'-0"



OVERALL KEY PLAN

GRAPHIC SCALE

8 6 4 2 0 8 16

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

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
MACHELL LARAE ABOVE
10047
REGISTERED
INTERIOR DESIGNER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: M. ABOVE
DRAWN BY: H. WILSON
CHECKED BY: S. LEBEAU
SUBMITTED BY: E. OLNESS
SCALE: ANSI D 22x34

ISSUE DATE: 23 NOV 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT21920IN121

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

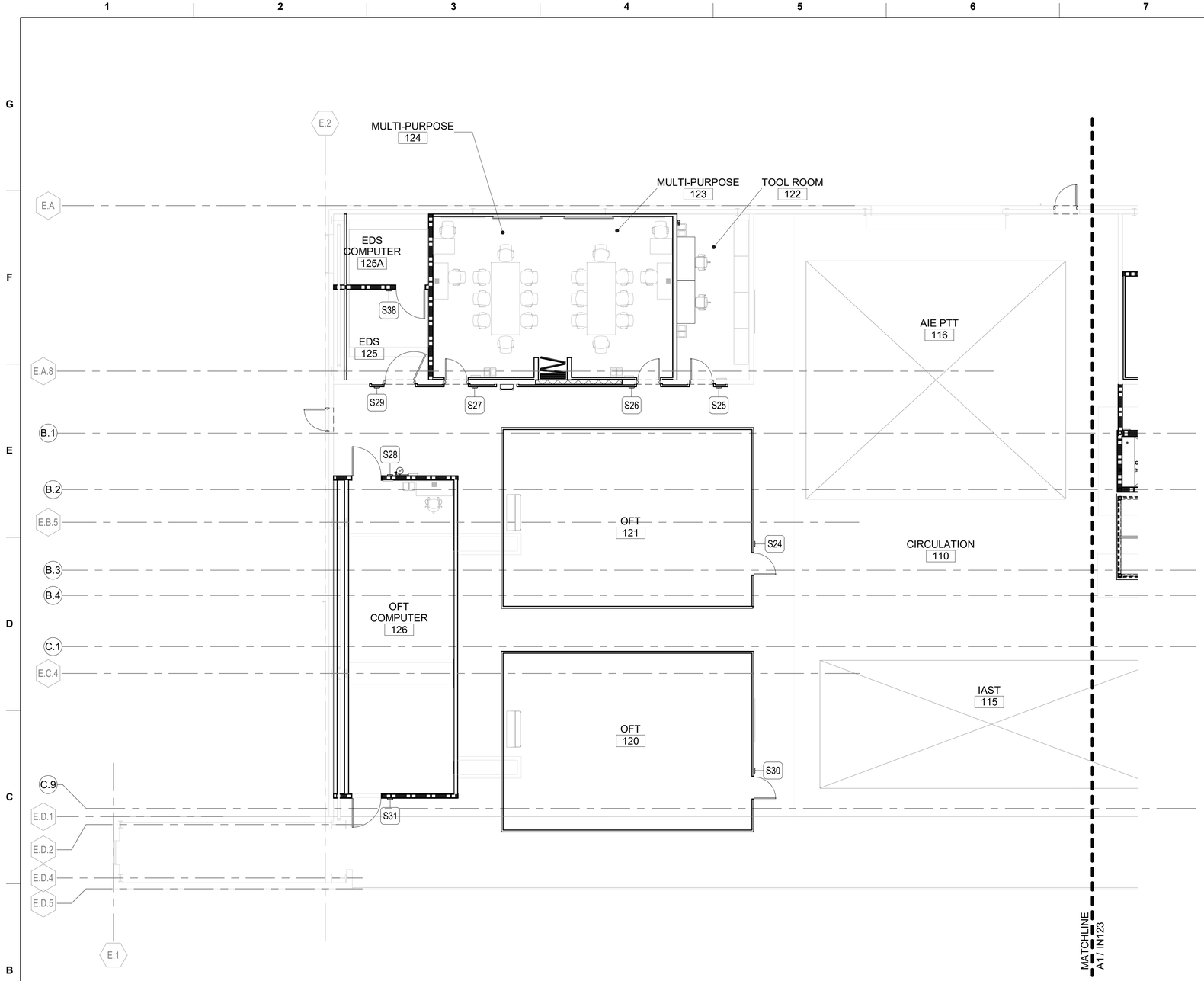
jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS Reg. # F-2966

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
OVERALL SIGNAGE PLAN - LEVEL 1

SHEET ID
B1455
IN121

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



A1 PARTIAL SIGNAGE PLAN - LEVEL 1 - AREA A

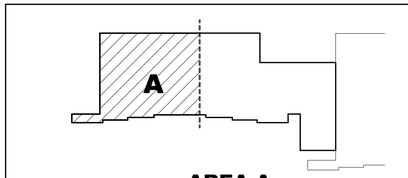
1/8" = 1'-0"

GENERAL NOTES - SIGNAGE

A	SIGNAGE LOCATION/PLACEMENT MUST MEET ABAAS REQUIREMENTS.
B	ALL SIGNAGE MUST COMPLY WITH UFC 3-120-01 STANDARDS.
C	ROOM NUMBERS SHOWN ON PLANS ARE FOR CONSTRUCTION PURPOSES, NOT NECESSARILY THE USER'S PREFERRED NUMBERING SYSTEM. COORDINATE ALL ROOM NUMBERS AND VERBIAGE FOR SIGNS WITH CONTRACTING OFFICER PRIOR TO FABRICATION.
D	ENSURE THAT ALL SIGN INSERTS CAN BE EASILY REMOVED/ REPLACED. CONSIDER INSTALLATION OF SIGNS IN TIGHT CORNERS AND ALCOVES/ SIDELIGHTS TO ENSURE THAT SIGN INSERT IS ACCESSIBLE.
E	MOUNT ALL LIKE-SIGNS AT SAME HEIGHT.
F	SIGNAGE IS INTENDED TO MATCH EXISTING. VERIFY EXISTING SIGNAGE TYPE AND BACKGROUND COLOR PRIOR TO ORDERING.

SIGNAGE KEY

S1 — INDICATES SIGN MOUNTED ON WALL. REFER TO SCHEDULE ON 1-611



AREA A
KEY PLAN

GRAPHIC SCALE

8 6 4 2 0 8 16

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

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
MACHELL LARAE ABOVE
10047
REGISTERED
INTERIOR DESIGNER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: M. ABOVE
DRAWN BY: H. WILSON
CHECKED BY: S. LEBEAU
SUBMITTED BY: E. OLNESS
ISSUE DATE: 23 NOV 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201IN122
ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS No. W2R0003

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PARTIAL SIGNAGE PLAN - LEVEL 1 - AREA A

SHEET ID
B1455
IN122

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN

GENERAL NOTES - SIGNAGE

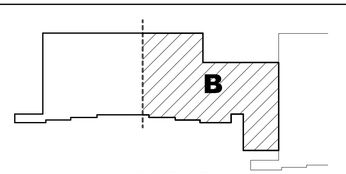
A	SIGNAGE LOCATION/PLACEMENT MUST MEET ABAAS REQUIREMENTS.
B	ALL SIGNAGE MUST COMPLY WITH UFC 3-120-01 STANDARDS.
C	ROOM NUMBERS SHOWN ON PLANS ARE FOR CONSTRUCTION PURPOSES, NOT NECESSARILY THE USER'S PREFERRED NUMBERING SYSTEM. COORDINATE ALL ROOM NUMBERS AND VERBIAGE FOR SIGNS WITH CONTRACTING OFFICER PRIOR TO FABRICATION.
D	ENSURE THAT ALL SIGN INSERTS CAN BE EASILY REMOVED/ REPLACED. CONSIDER INSTALLATION OF SIGNS IN TIGHT CORNERS AND ALCOVES/ SIDELIGHTS TO ENSURE THAT SIGN INSERT IS ACCESSIBLE.
E	MOUNT ALL LIKE-SIGNS AT SAME HEIGHT.
F	SIGNAGE IS INTENDED TO MATCH EXISTING. VERIFY EXISTING SIGNAGE TYPE AND BACKGROUND COLOR PRIOR TO ORDERING.

SIGNAGE KEY

S1 — INDICATES SIGN MOUNTED ON WALL. REFER TO SCHEDULE ON 1-611

ELECTRICAL 140
TELECOM 119
FIRE ROOM 130
CPT 117
WPT 118
ELEVATOR E01
S21 S22 S23 S45
STAIR 1 S01
MULTI-PURPOSE 114
MULTI-PURPOSE 112
S40 S41
S20 S19 S18 S17
CLASSROOM 113
CLASSROOM 111
STORAGE 115A
MATCHLINE A1/ IN122
STUDENT WORK AREA 103
VESTIBULE 100
REGISTRARS OFFICE 102A
CORRIDOR 101
S4 S2 S3
REGISTRARS 102
TRS 104
S16 S15 S14 S13 S6 S5
WOMEN'S RR 108
MEN'S RR 109
BREAK ROOM 106
JANITORS 107
ADMINISTRATION 105
S39 S12
ADMINISTRATION 105A
S7 S8 S9 S10 S11
OFFICE 105C
OFFICE 105D
OFFICE 105E
WELLNESS ROOM 105B
E.A E.A.8 B.1 B.2 B.3 B.4 C.1 E.3 E6 E.B.5 E.C E.C.4 E.D C.9 E.D.1 D3 E.D.2 E.D.4 E.D.5 E.E D4 E.F E.F.1 E.F.9 E.G E.4 E.5 4.7

A1 PARTIAL SIGNAGE PLAN - LEVEL 1 - AREA B
1/8" = 1'-0"



AREA B
KEY PLAN

GRAPHIC SCALE
8 6 4 2 0 8 16
SCALE: 1/8"=1'-0"

PLAN NORTH
TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
MACHELL LARAE ABOVE
10047
REGISTERED
INTERIOR DESIGNER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: M. ABOVE
DRAWN BY: H. WILSON
CHECKED BY: S. LEBEAU
SUBMITTED BY: E. OLMESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOV 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT21920I1N123

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
TEXAS REGISTERED ENGINEERING FIRM F-2966

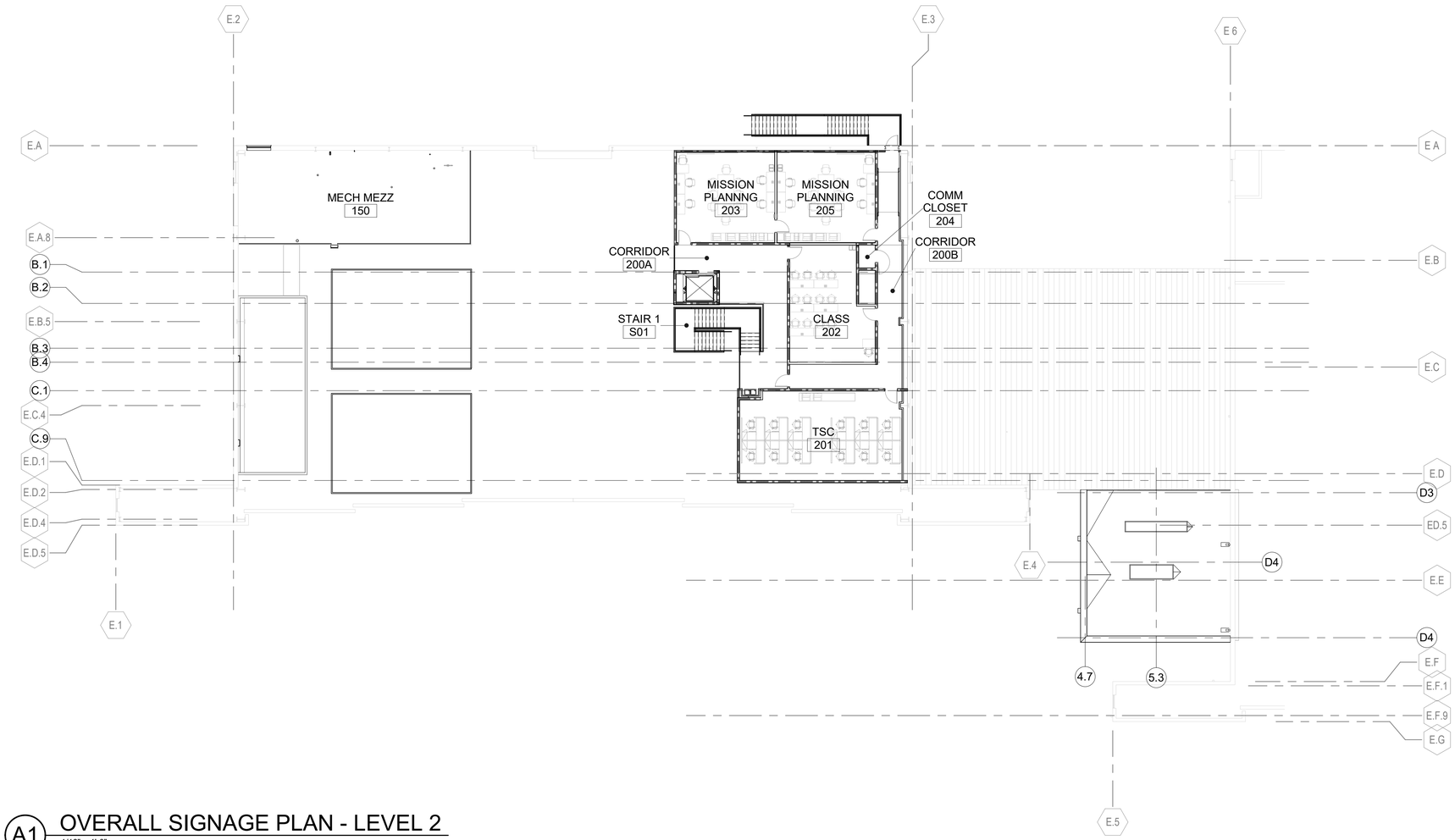
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PARTIAL SIGNAGE PLAN - LEVEL 1 - AREA B

SHEET ID
B1455
IN123

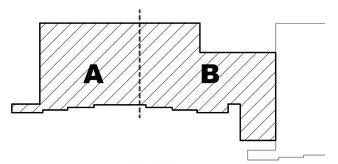
W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN



A1 OVERALL SIGNAGE PLAN - LEVEL 2
1/16" = 1'-0"



OVERALL KEY PLAN

GRAPHIC SCALE

16 12 8 4 0 16 32
SCALE: 1/16"=1'-0"

PLAN NORTH
TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
MACHELL LARAE ABOVE
10047
REGISTERED INTERIOR DESIGNER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: M. ABOVE
DRAWN BY: H. WILSON
CHECKED BY: S. LEBEAU
SUBMITTED BY: E. OLNESS
DATE: 23 NOV 2022
ANSI D 22x34
ISSUE DATE: 23 NOV 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201IN131

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS PROJECT NO. 250013

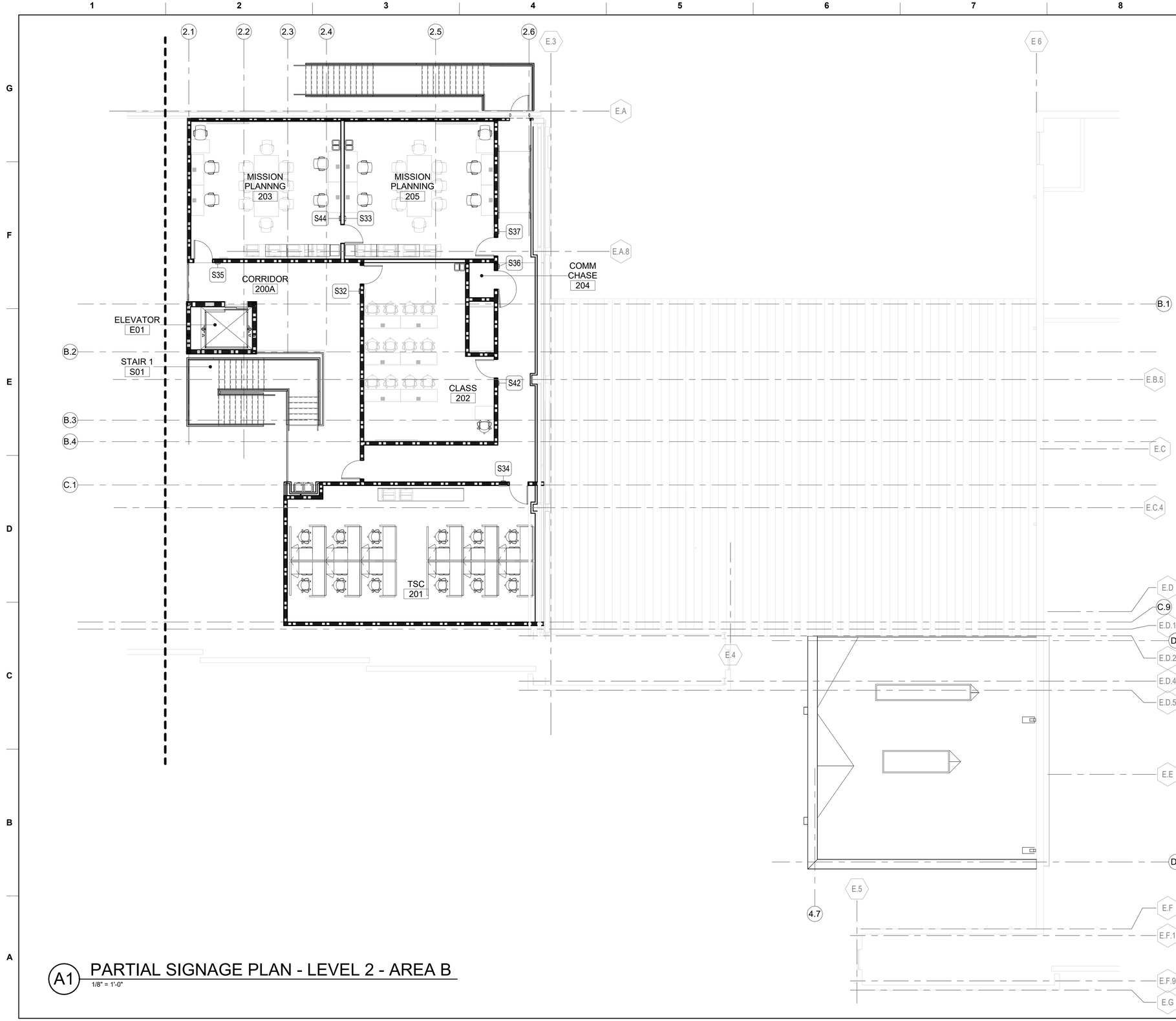
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
OVERALL SIGNAGE PLAN - LEVEL 2

SHEET ID
B1455
IN131

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN

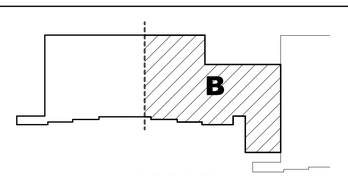


GENERAL NOTES - SIGNAGE

A	SIGNAGE LOCATION/PLACEMENT MUST MEET ABAAS REQUIREMENTS.
B	ALL SIGNAGE MUST COMPLY WITH UFC 3-120-01 STANDARDS.
C	ROOM NUMBERS SHOWN ON PLANS ARE FOR CONSTRUCTION PURPOSES, NOT NECESSARILY THE USER'S PREFERRED NUMBERING SYSTEM. COORDINATE ALL ROOM NUMBERS AND VERBIAGE FOR SIGNS WITH CONTRACTING OFFICER PRIOR TO FABRICATION.
D	ENSURE THAT ALL SIGN INSERTS CAN BE EASILY REMOVED/ REPLACED. CONSIDER INSTALLATION OF SIGNS IN TIGHT CORNERS AND ALCOVES/ SIDELIGHTS TO ENSURE THAT SIGN INSERT IS ACCESSIBLE.
E	MOUNT ALL LIKE-SIGNS AT SAME HEIGHT.
F	SIGNAGE IS INTENDED TO MATCH EXISTING. VERIFY EXISTING SIGNAGE TYPE AND BACKGROUND COLOR PRIOR TO ORDERING.

SIGNAGE KEY

S1 — INDICATES SIGN MOUNTED ON WALL. REFER TO SCHEDULE ON 1-611



AREA B
KEY PLAN

GRAPHIC SCALE

8 6 4 2 0 8 16

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

PLAN NORTH

TRUE N

A1 PARTIAL SIGNAGE PLAN - LEVEL 2 - AREA B
1/8" = 1'-0"

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
MACHELL LARAE ABOVE
10047
REGISTERED
INTERIOR DESIGNER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: M. ABOVE
DRAWN BY: H. WILSON
CHECKED BY: S. LEBEAU
SUBMITTED BY: E. OLNESS
DATE: ANSI D 22x34
ISSUE DATE: 23 NOV 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201IN132

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
ACCESS No. F2966-13

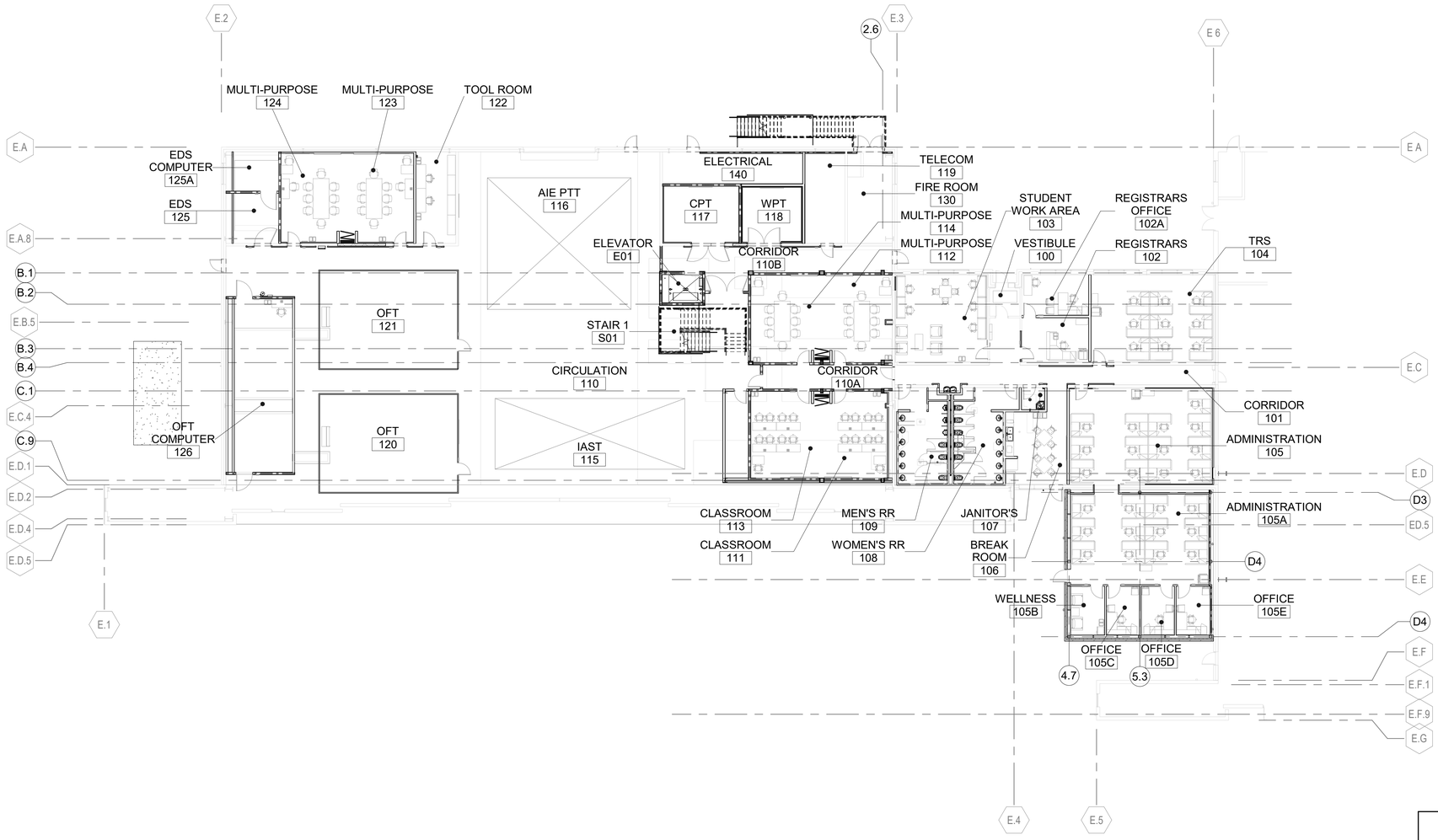
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PARTIAL SIGNAGE PLAN - LEVEL 2 - AREA B

SHEET ID
B1455
IN132

W912QR23R0003_Plans-0000

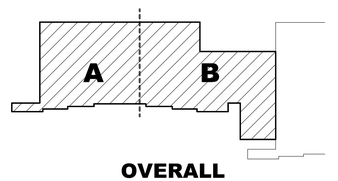
ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN



A1 OVERALL FURNITURE, FIXTURE & EQUIPMENT PLAN - LEVEL 1

1/16" = 1'-0"



OVERALL KEY PLAN

GRAPHIC SCALE

16 12 8 4 0 16 32

SCALE: 1/16"=1'-0"

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
MACHELL LARAE ABOVE
10047
REGISTERED
INTERIOR DESIGNER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: M. ABOVE
DRAWN BY: H. WILSON
CHECKED BY: S. LEBEAU
SUBMITTED BY: E. OLNESS
QC BY: ANSI D 22x34

ISSUE DATE: 23 NOV 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXKF219201IF101

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

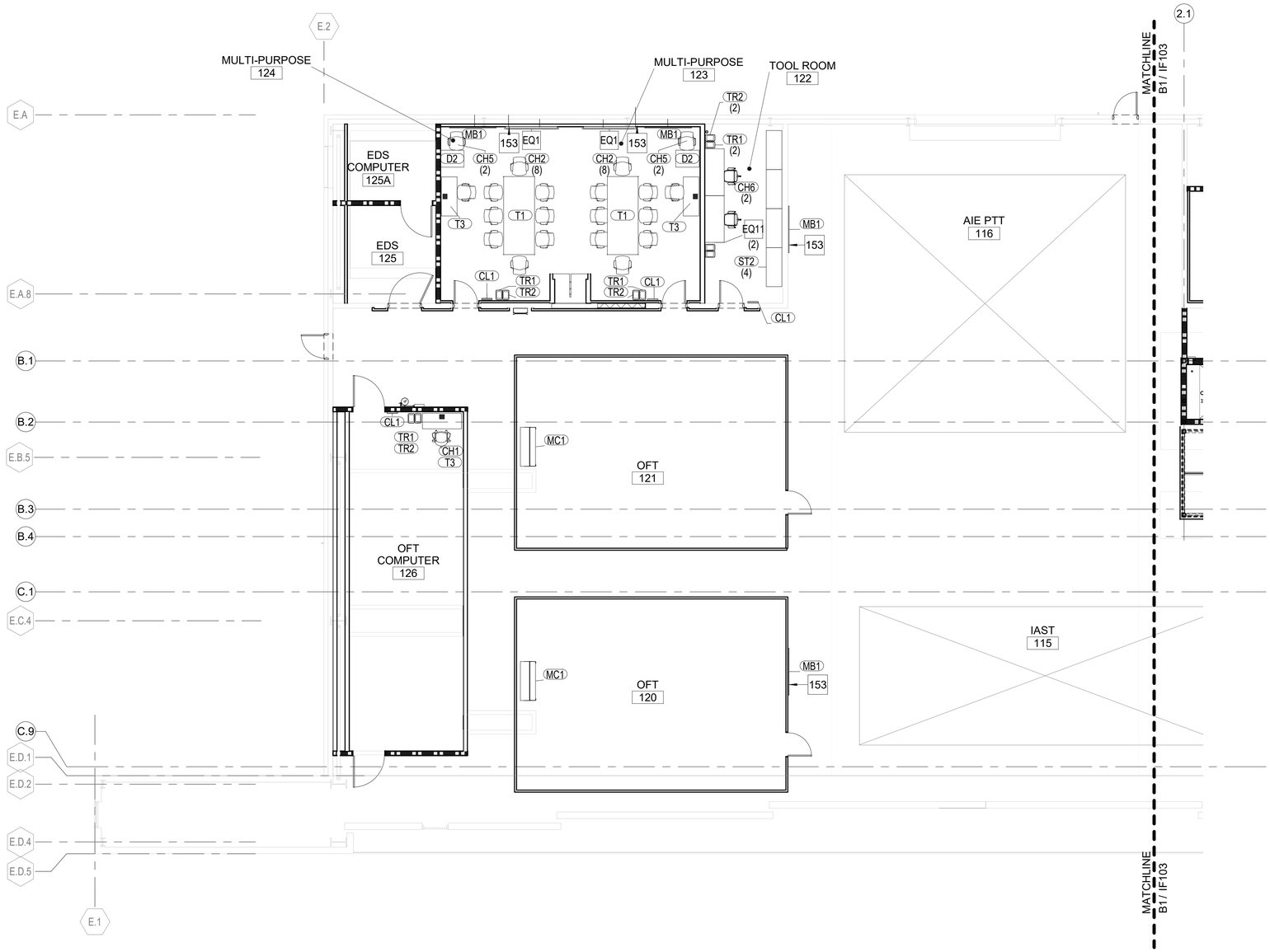
jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS Project No. D7R0003

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
OVERALL FURNITURE, FIXTURE, & EQUIPMENT PLAN - LEVEL 1

SHEET ID
B1455
IF101

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



B1 PARTIAL FURNITURE, FIXTURES & EQUIPMENT PLAN - LEVEL 1 - AREA A

1/8" = 1'-0"

EQUIPMENT (GFGI)

MARK	DESCRIPTION
EQ1	96" MONITOR W/ BRACKETS
EQ2	COPIER
EQ3	PRINTER, DESKTOP LARGE
EQ4	PRINTER, DESKTOP SMALL
EQ5	CD/DATA SHREDDER
EQ6	SMALL REFRIGERATOR
EQ7	VENDING MACHINE
EQ8	REFRIGERATOR
EQ9	MICROWAVE
EQ10	COFFEE POT
EQ11	WORKBENCH, 72" x30"
EQ12	65" MONITOR W/ BRACKETS

GENERAL NOTES - FF&E PLANS

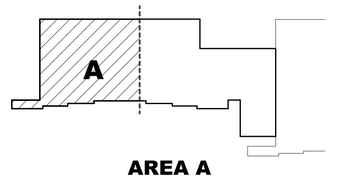
A	ALL FF&E ITEMS MUST BE INCLUDED IN ITEM NO. 0004 "OPTION - FF&E"
B	FURNITURE, FIXTURES & EQUIPMENT (FF&E) IS SHOWN FOR COORDINATION ONLY.
C	COORDINATE WITH FURNITURE DEALER TO ALLOW BUILDING ACCESS FOR FIELD CONDITION VERIFICATION.
D	FURNITURE VENDOR IS RESPONSIBLE FOR PROVIDING J BOXES AND WHIPS TO THE SUPPORT FF&E. FINAL CONNECTIONS OF SYSTEMS FURNITURE TO THE BUILDING ARE PROVIDED BY THE GENERAL CONTRACTOR.
E	VERIFY FIELD CONDITIONS PRIOR TO ORDERING FF&E TO ENSURE PROPER FIT OF ALL ITEMS.
F	INFORMATION TECHNOLOGY (IT) (PHONE/ LAN ETC.) WIRING SHALL BE PROVIDED BY OTHERS AFTER INSTALLATION: COORDINATE WITH CONTRACTING OFFICER.

KEYNOTES

153	PROVIDE WALL BLOCKING FOR MONITOR AND MARKER BOARD AS REQUIRED.

FF&E

MARK	DESCRIPTION
CH1	CHAIR, TASK / TRAINING
CH2	CHAIR, CONFERENCE
CH3	CHAIR, GUEST
CH4	CHAIR, BREAKROOM
CH5	CHAIR, MIDBACK CONFERENCE
CH6	TASK STOOL
CH8	LOUNGE CHAIR
CL1	WALL CLOCK
D1	DESK, L-SHAPED
D2	FACILITATOR'S STAND W/ CASTER KIT
D3	DESK, 5'-0"
D4	DESK, RECEPTION
EM1	MAT, ENTRANCE
MB1	MARKERBOARD
MC1	MOBILE CHATBOARD
ST1	STORAGE, CABINET
ST2	STORAGE, HEAVY-DUTY SHELVING
ST3	STORAGE, LATERAL FILE 2H
T1	TABLE, CONFERENCE 10'-0"
T2	TABLE, TRAINING 6'-0"
T3	TABLE, TRAINING 5'-0"
T4	TABLE, DINING
T5	TABLE, OCCASIONAL - SQUARE
T6	TABLE, OCCASIONAL - RECTANGLE
T7	TABLE, WORK AREA
TR1	TRASH RECEPTACLE
TR2	RECYCLE RECEPTACLE
TR3	3-COMPARTMENT TRASH & RECYCLING
WS1	WORKSTATION, L- SHAPED
WS2	WORKSTATION, BENCHING



AREA A
KEY PLAN

GRAPHIC SCALE

8 6 4 2 0 8 16

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

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
MACHELL LARAE ABOVE
10047
REGISTERED
INTERIOR DESIGNER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: M. ABOVE
DRAWN BY: H. WILSON
CHECKED BY: S. LEBEAU
SUBMITTED BY: E. OLNESS
ISSUE DATE: 23 NOV 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT21920:1IF102
STATE: ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
Tel: 817.820.2000 Fax: 817.820.2001

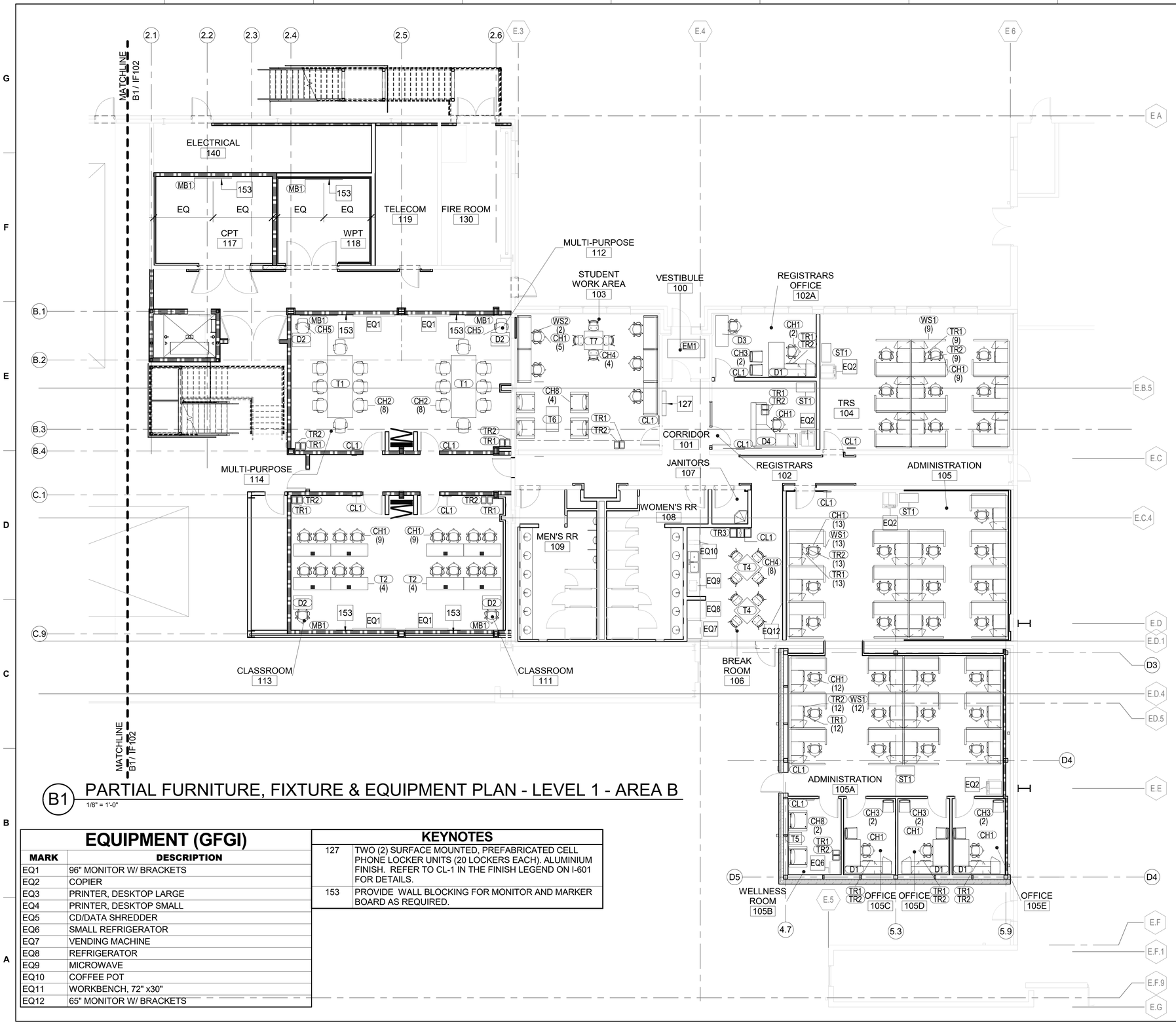
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395

PARTIAL FURNITURE, FIXTURES, & EQUIPMENT PLAN - LEVEL 1 - AREA A

SHEET ID
B1455
IF102

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



B1 PARTIAL FURNITURE, FIXTURE & EQUIPMENT PLAN - LEVEL 1 - AREA B

1/8" = 1'-0"

EQUIPMENT (GFGI)

MARK	DESCRIPTION
EQ1	96" MONITOR W/ BRACKETS
EQ2	COPIER
EQ3	PRINTER, DESKTOP LARGE
EQ4	PRINTER, DESKTOP SMALL
EQ5	CD/DATA SHREDDER
EQ6	SMALL REFRIGERATOR
EQ7	VENDING MACHINE
EQ8	REFRIGERATOR
EQ9	MICROWAVE
EQ10	COFFEE POT
EQ11	WORKBENCH, 72" x30"
EQ12	65" MONITOR W/ BRACKETS

KEYNOTES

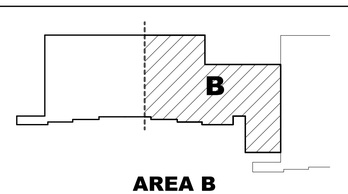
127	TWO (2) SURFACE MOUNTED, PREFABRICATED CELL PHONE LOCKER UNITS (20 LOCKERS EACH). ALUMINIUM FINISH. REFER TO CL-1 IN THE FINISH LEGEND ON I-601 FOR DETAILS.
153	PROVIDE WALL BLOCKING FOR MONITOR AND MARKER BOARD AS REQUIRED.

GENERAL NOTES - FF&E PLANS

A	ALL FF&E ITEMS MUST BE INCLUDED IN ITEM NO. 0004 "OPTION - FF&E"
B	FURNITURE, FIXTURES & EQUIPMENT (FF&E) IS SHOWN FOR COORDINATION ONLY.
C	COORDINATE WITH FURNITURE DEALER TO ALLOW BUILDING ACCESS FOR FIELD CONDITION VERIFICATION.
D	FURNITURE VENDOR IS RESPONSIBLE FOR PROVIDING J BOXES AND WHIPS TO THE SUPPORT FF&E. FINAL CONNECTIONS OF SYSTEMS FURNITURE TO THE BUILDING ARE PROVIDED BY THE GENERAL CONTRACTOR.
E	VERIFY FIELD CONDITIONS PRIOR TO ORDERING FF&E TO ENSURE PROPER FIT OF ALL ITEMS.
F	INFORMATION TECHNOLOGY (IT) (PHONE/ LAN ETC.) WIRING SHALL BE PROVIDED BY OTHERS AFTER INSTALLATION: COORDINATE WITH CONTRACTING OFFICER.

FF&E

MARK	DESCRIPTION
CH1	CHAIR, TASK / TRAINING
CH2	CHAIR, CONFERENCE
CH3	CHAIR, GUEST
CH4	CHAIR, BREAKROOM
CH5	CHAIR, MIDBACK CONFERENCE
CH6	TASK STOOL
CH8	LOUNGE CHAIR
CL1	WALL CLOCK
D1	DESK, L-SHAPED
D2	FACILITATOR'S STAND W/ CASTER KIT
D3	DESK, 5'-0"
D4	DESK, RECEPTION
EM1	MAT, ENTRANCE
MB1	MARKERBOARD
MC1	MOBILE CHATBOARD
ST1	STORAGE, CABINET
ST2	STORAGE, HEAVY-DUTY SHELVING
ST3	STORAGE, LATERAL FILE 2H
T1	TABLE, CONFERENCE 10'-0"
T2	TABLE, TRAINING 6'-0"
T3	TABLE, TRAINING 5'-0"
T4	TABLE, DINING
T5	TABLE, OCCASIONAL - SQUARE
T6	TABLE, OCCASIONAL - RECTANGLE
T7	TABLE, WORK AREA
TR1	TRASH RECEPTACLE
TR2	RECYCLE RECEPTACLE
TR3	3-COMPARTMENT TRASH & RECYCLING
WS1	WORKSTATION, L- SHAPED
WS2	WORKSTATION, BENCHING



AREA B
KEY PLAN

GRAPHIC SCALE
8 6 4 2 0 8 16
SCALE: 1/8"=1'-0"

PLAN NORTH
TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
MACHELL LARAE ABOVE
10047
REGISTERED
INTERIOR DESIGNER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: M. ABOVE
DRAWN BY: H. WILSON
CHECKED BY: S. LEBEAU
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOV 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201IF103

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

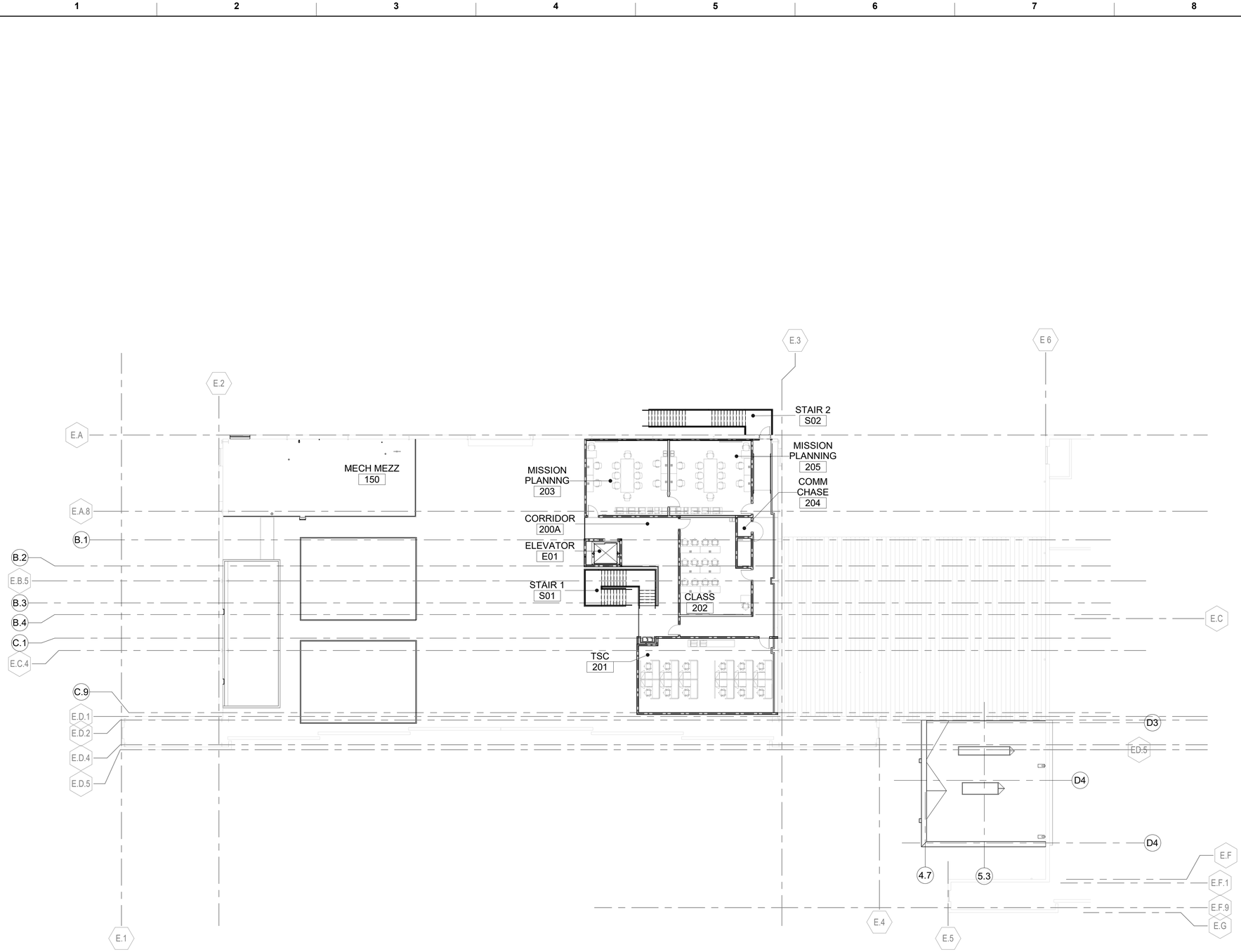
Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS PROJECT NO: D2S0015

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PARTIAL FURNITURE, FIXTURE, & EQUIPMENT PLAN - LEVEL 1 - AREA B

SHEET ID
B1455
IF103

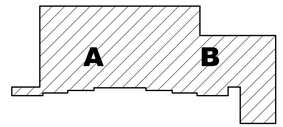
W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



A1 OVERALL FURNITURE, FIXTURE & EQUIPMENT PLAN - LEVEL 2

1/16" = 1'-0"



OVERALL

GRAPHIC SCALE

16 12 8 4 0 16 32

SCALE: 1/16"=1'-0"

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
MACHELL LARAE ABOVE
10047
REGISTERED
INTERIOR DESIGNER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: M. ABOVE
DRAWN BY: H. WILSON
CHECKED BY: S. LEBEAU
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34

ISSUE DATE: 23 NOV 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201IF111

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS PROJECT NO: D2XS0015

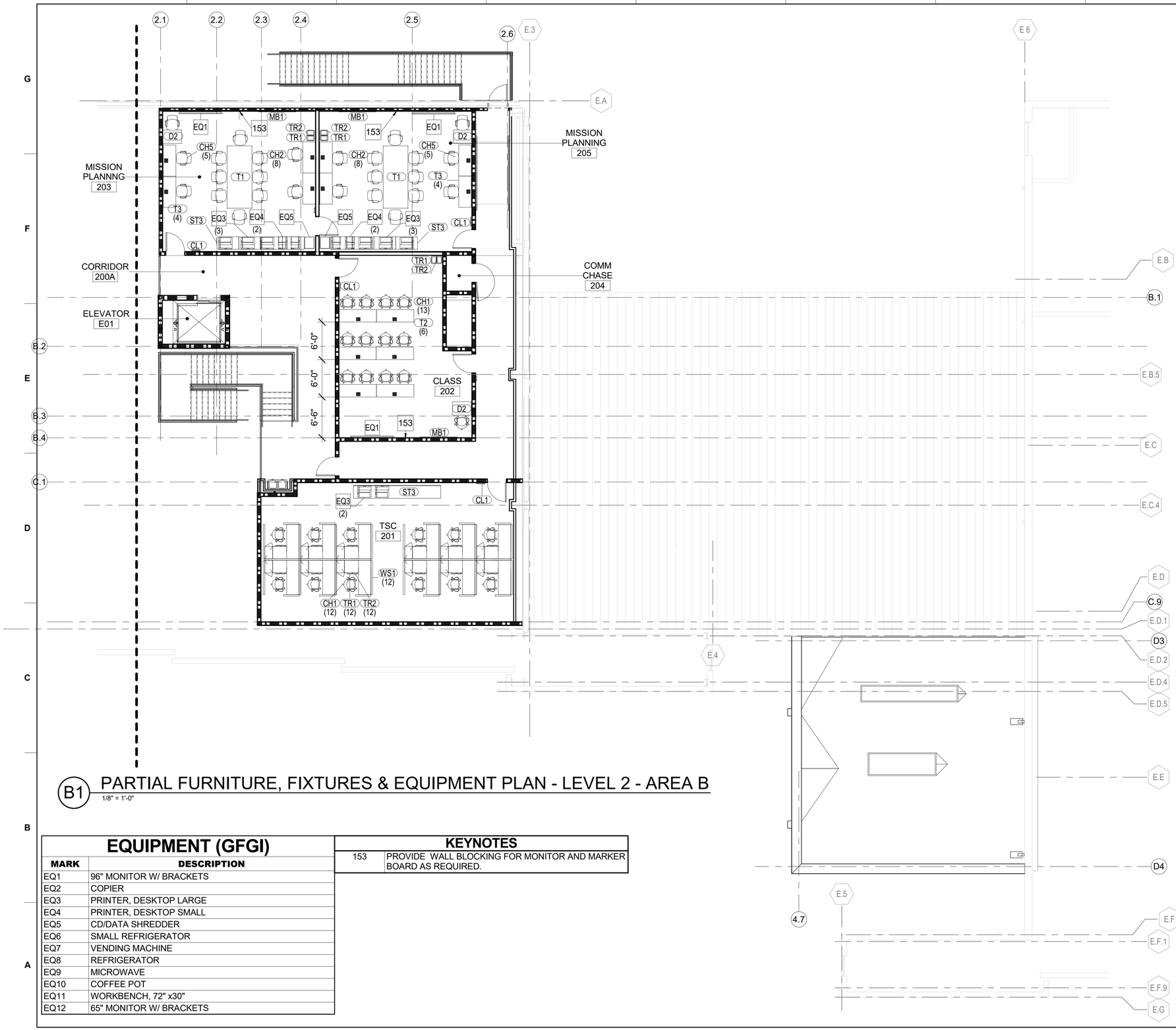
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
OVERALL FURNITURE, FIXTURE, AND EQUIPMENT PLAN - LEVEL 2

SHEET ID
B1455
IF111

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN



B1 PARTIAL FURNITURE, FIXTURES & EQUIPMENT PLAN - LEVEL 2 - AREA B

1/8" = 1'-0"

EQUIPMENT (GFGI)

MARK	DESCRIPTION
EQ1	96" MONITOR W/ BRACKETS
EQ2	COPIER
EQ3	PRINTER, DESKTOP LARGE
EQ4	PRINTER, DESKTOP SMALL
EQ5	CD/DATA SHREDDER
EQ6	SMALL REFRIGERATOR
EQ7	VENDING MACHINE
EQ8	REFRIGERATOR
EQ9	MICROWAVE
EQ10	COFFEE POT
EQ11	WORKBENCH, 72" x30"
EQ12	65" MONITOR W/ BRACKETS

KEYNOTES

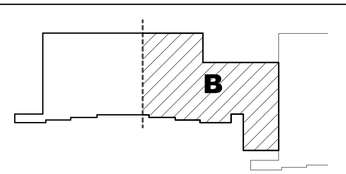
153	PROVIDE WALL BLOCKING FOR MONITOR AND MARKER BOARD AS REQUIRED.

GENERAL NOTES - FF&E PLANS

A	ALL FF&E ITEMS MUST BE INCLUDED IN ITEM NO. 0004 "OPTION - FF&E"
B	FURNITURE, FIXTURES & EQUIPMENT (FF&E) IS SHOWN FOR COORDINATION ONLY.
C	COORDINATE WITH FURNITURE DEALER TO ALLOW BUILDING ACCESS FOR FIELD CONDITION VERIFICATION.
D	FURNITURE VENDOR IS RESPONSIBLE FOR PROVIDING J BOXES AND WHIPS TO THE SUPPORT FF&E. FINAL CONNECTIONS OF SYSTEMS FURNITURE TO THE BUILDING ARE PROVIDED BY THE GENERAL CONTRACTOR.
E	VERIFY FIELD CONDITIONS PRIOR TO ORDERING FF&E TO ENSURE PROPER FIT OF ALL ITEMS.
F	INFORMATION TECHNOLOGY (IT) (PHONE/ LAN ETC.) WIRING SHALL BE PROVIDED BY OTHERS AFTER INSTALLATION: COORDINATE WITH CONTRACTING OFFICER.

FF&E

MARK	DESCRIPTION
CH1	CHAIR, TASK / TRAINING
CH2	CHAIR, CONFERENCE
CH3	CHAIR, GUEST
CH4	CHAIR, BREAKROOM
CH5	CHAIR, MIDBACK CONFERENCE
CH6	TASK STOOL
CH8	LOUNGE CHAIR
CL1	WALL CLOCK
D1	DESK, L-SHAPED
D2	FACILITATOR'S STAND W/ CASTER KIT
D3	DESK, 5'-0"
D4	DESK, RECEPTION
EM1	MAT, ENTRANCE
MB1	MARKERBOARD
MC1	MOBILE CHATBOARD
ST1	STORAGE, CABINET
ST2	STORAGE, HEAVY-DUTY SHELVING
ST3	STORAGE, LATERAL FILE 2H
T1	TABLE, CONFERENCE 10'-0"
T2	TABLE, TRAINING 6'-0"
T3	TABLE, TRAINING 5'-0"
T4	TABLE, DINING
T5	TABLE, OCCASIONAL - SQUARE
T6	TABLE, OCCASIONAL - RECTANGLE
T7	TABLE, WORK AREA
TR1	TRASH RECEPTACLE
TR2	RECYCLE RECEPTACLE
TR3	3-COMPARTMENT TRASH & RECYCLING
WS1	WORKSTATION, L- SHAPED
WS2	WORKSTATION, BENCHING



AREA B
KEY PLAN

GRAPHIC SCALE

8 6 4 2 0 8 16

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

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
MACHELL LARAE ABOVE
10047
REGISTERED
INTERIOR DESIGNER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: M. ABOVE
DRAWN BY: H. WILSON
CHECKED BY: S. LEBEAU
SUBMITTED BY: E. OLNESS
DATE: ANSI D 22x34
ISSUE DATE: 23 NOV 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201IF112

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
Phone: 817.820.8000 Fax: 817.820.8010

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, PZ#: 496395
PARTIAL FURNITURE, FIXTURE, AND EQUIPMENT PLAN - LEVEL 2 - AREA B

SHEET ID
B1455
IF112

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

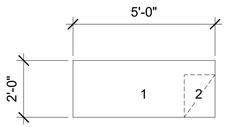
CERTIFIED FINAL DESIGN

GENERAL NOTES - FF&E PLANS

A	ALL FF&E ITEMS MUST BE INCLUDED IN ITEM NO. 0004 "OPTION - FF&E"
B	FURNITURE, FIXTURES & EQUIPMENT (FF&E) IS SHOWN FOR COORDINATION ONLY.
C	COORDINATE WITH FURNITURE DEALER TO ALLOW BUILDING ACCESS FOR FIELD CONDITION VERIFICATION.
D	FURNITURE VENDOR IS RESPONSIBLE FOR PROVIDING J BOXES AND WHIPS TO THE SUPPORT FF&E. FINAL CONNECTIONS OF SYSTEMS FURNITURE TO THE BUILDING ARE PROVIDED BY THE GENERAL CONTRACTOR.
E	VERIFY FIELD CONDITIONS PRIOR TO ORDERING FF&E TO ENSURE PROPER FIT OF ALL ITEMS.
F	INFORMATION TECHNOLOGY (IT) (PHONE/ LAN ETC.) WIRING SHALL BE PROVIDED BY OTHERS AFTER INSTALLATION: COORDINATE WITH CONTRACTING OFFICER.

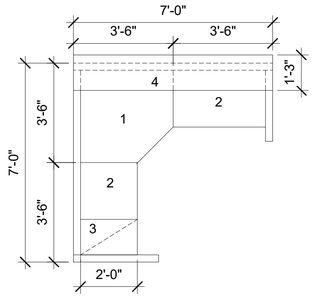
1. DESK WITH OPEN END SUPPORT: 66"W x 30"D
2. RETURN: 42"W x 24"D
3. FILE/FILE PEDESTAL
4. STORAGE CABINET: 18"W x 80"H
5. OVERHEAD STORAGE WITH FULL HEIGHT/WIDTH TACKBOARD AND LED TASK LIGHTS: 72"W. ALIGN TOP OF OVERHEAD STORAGE WITH TOP OF STORAGE CABINET.

C1 TYPICAL - DESK D1
3/8" = 1'-0"



1. DESK: 60"W x 24"D
2. BOX/BOX/FILE PEDESTAL

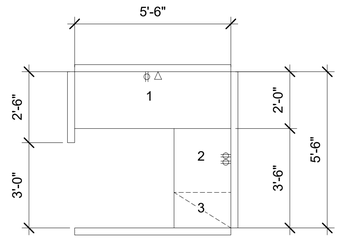
C4 TYPICAL - DESK D3
3/8" = 1'-0"



1. CORNER UNIT: 42"W x 42"D
2. RETURN: 42"W x 24"D
3. BOX/BOX/FILE PEDESTAL
4. TRANSACTION SURFACE: 84"W x 15"D

ALL PANELS ARE 43"H.

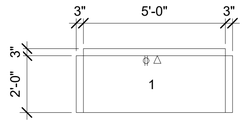
C7 TYPICAL - DESK D4
3/8" = 1'-0"



1. WORKSURFACE: 66"W x 24"D
2. RETURN: 27"W x 24"D
3. BOX/BOX/FILE

ALL PANELS ARE 42"H TACKABLE FABRIC WITH BASE RACEWAY.

A1 TYPICAL - WORKSTATION WS1
3/8" = 1'-0"



1. WORKSURFACE: 60"W x 24"D

ALL PANELS ARE 42"H TACKABLE FABRIC WITH BASE RACEWAY.

A4 TYPICAL - WORKSTATION WS2
3/8" = 1'-0"

4 2 0 4
SCALE: 3/8"=1'-0"

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
MACHELL LARAE ABOVE
10047
REGISTERED
INTERIOR DESIGNER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: M. ABOVE	ISSUE DATE: 23 NOV 2022
DRAWN BY: H. WILSON	SOLICITATION NO.:
CHECKED BY: S. LEBEAU	CONTRACT NO.:
SUBMITTED BY: E. OLNESS	DRAWING CODE: F113
ANSI D 22x34	FILE NAME: SXHT2-19201IF113

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

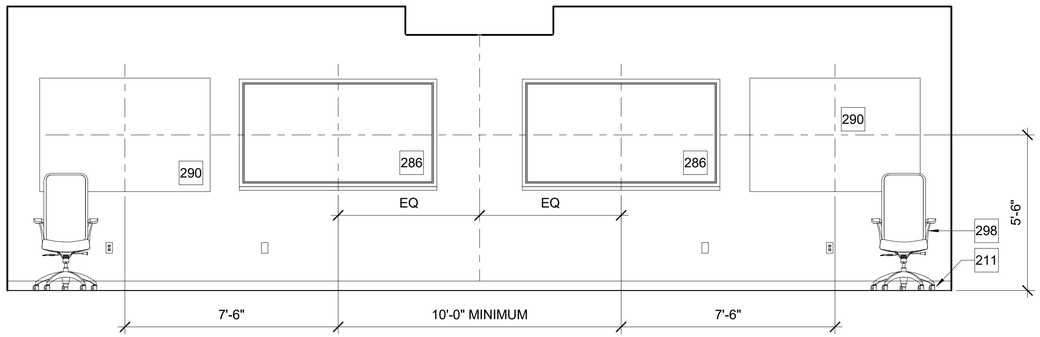
jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS Project No. W2R023

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
FF&E TYPICALS

SHEET ID
B1455
IF113

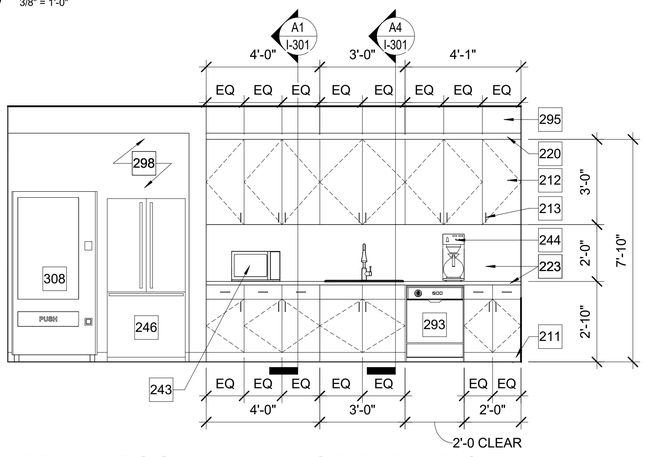
W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



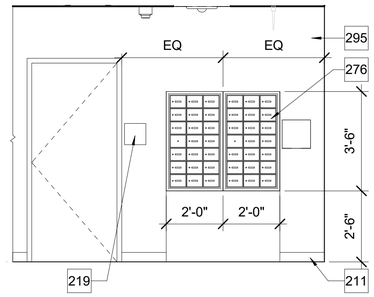
F1 TYPICAL PRESENTATION WALL ELEVATION

3/8" = 1'-0"



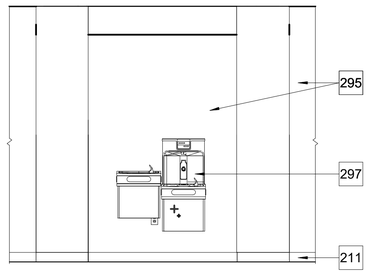
D1 BREAK ROOM 106 - WEST ELEVATION

3/8" = 1'-0"



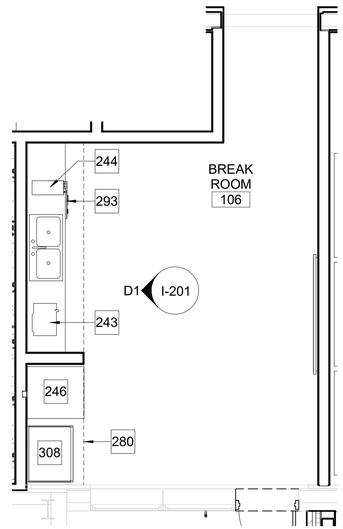
D4 CORRIOR 101 - WEST ELEVATION

3/8" = 1'-0"



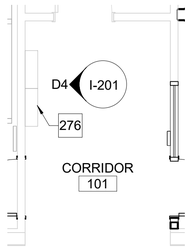
D6 TYPICAL EWC ELEVATION

3/8" = 1'-0"



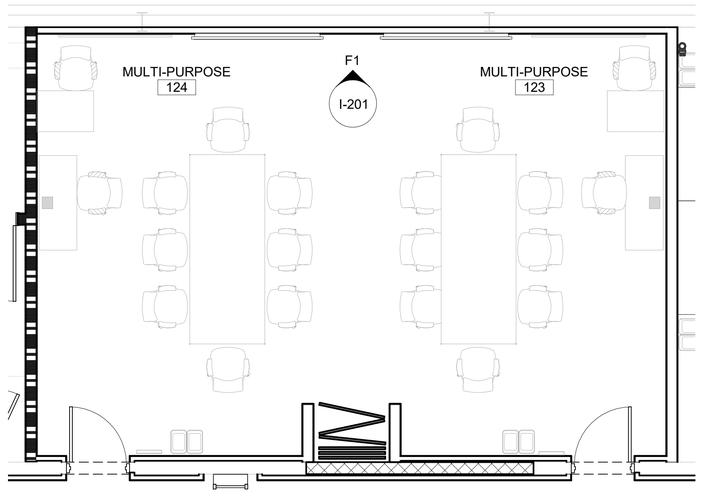
A1 ENLARGED PLAN - BREAK 106

1/4" = 1'-0"



A3 ENLARGED PLAN - CORRIDOR 101

1/4" = 1'-0"



A5 ENLARGED PLAN - MULTI-PURPOSE 123/124

1/4" = 1'-0"

4 2 0 4
SCALE: 3/8"=1'-0"

4 3 2 1 0 4 8
SCALE: 1/4"=1'-0"

GENERAL NOTES - ELEVATIONS

A	REFER TO I-601 FOR FINISH LEGEND.
B	ELEVATIONS ARE SHOWN TO INDICATE FINISHES ONLY REFER TO P-401 FOR TYPE, LOCATION AND PLACEMENT OF PLUMBING FIXTURES.
C	REFER TO A-410 FOR TYPE, LOCATION, AND PLACEMENT OF TOILET ACCESSORIES, GRAB BARS ETC.
D	REFER TO REFLECTED CEILING PLANS ON AE121 TO AE133 FOR CEILING HEIGHTS AND ADDITIONAL INFORMATION.
E	FIELD VERIFY ALL DIMENSIONS PRIOR TO ORDERING MATERIALS AND FINISHES.
F	AT TILED WALLS, INSTALL FULL HEIGHT ANODIZED ALUMINUM TRIM PIECE AT ALL OUTSIDE CORNERS. REFER TO B1/I-601 FOR DETAILS.

KEYNOTES

211	BASE AS SCHEDULED
212	PLASTIC LAMINATE, PL-1.
213	4" WIRE PULLS - BRUSHED STAINLESS FINISH. TYP.
219	INTERIOR SIGNAGE; REFER TO SIGNAGE SCHEDULE AND DETAILS.
220	FILLER STRIP AS REQUIRED; PLASTIC LAMINATE PL-1.
223	SOLID SURFACE COUNTERTOP WITH ROUNDOVER EDGE WITH FULL HEIGHT SOLID SURFACE BACKSPLASH. SS-1
243	EQ9 - MICROWAVE.
244	EQ10 - COFFEE MAKER.
246	EQ8 - REFRIGERATOR.
276	TWO (2) PREFABRICATED CELL PHONE LOCKER UNITS (20 LOCKERS EACH) WITHIN A FREESTANDING METAL ENCLOSURE. REFER TO CL-1 IN THE FINISH LEGEND ON I-601 FOR DETAILS.
280	FURR DOWN ABOVE.
286	96" TV MONITOR & BRACKET EQ1.
290	MARKERBOARD MB1.
293	EQ11 - DISHWASHER.
295	PAINT, PT1.
297	EWC AS SCHEDULED: REFER TO ARCHITECTURE AND PLUMBING FOR DETAILS
298	PAINT, PT2.
308	EQ7 VENDING MACHINE.

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
MACHELL LARAE ABOVE
10047
REGISTERED
INTERIOR DESIGNER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: M. ABOVE
DRAWN BY: H. WILSON
CHECKED BY: S. LEBEAU
SUBMITTED BY: E. OLNESS
DATE: ANSI D
ISSUE DATE: 23 NOV 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: 22x34 SXHT219201I1-201

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS TBPE FIRM F-2966

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
INTERIOR ELEVATIONS & ENLARGED PLANS

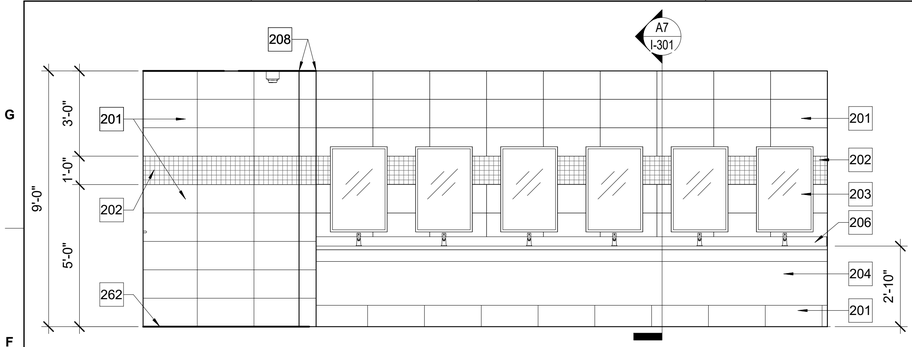
PLAN NORTH
TRUE N

SHEET ID
B1455
I-201

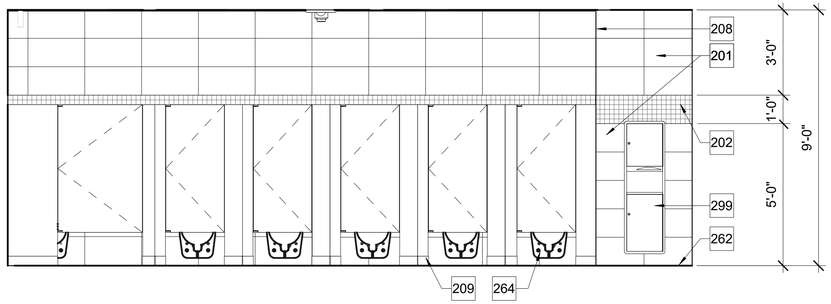
W912QP23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

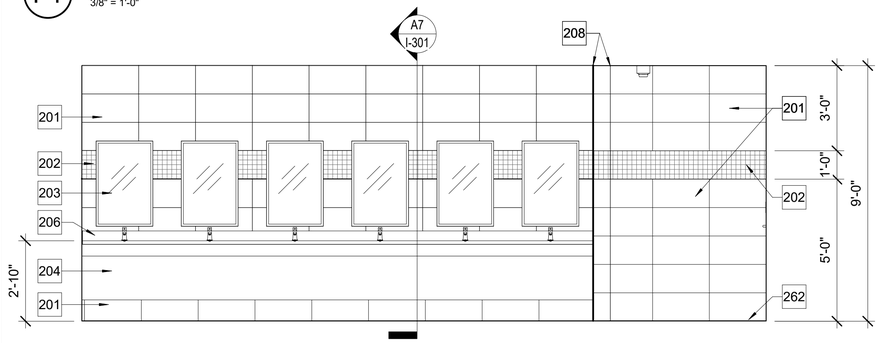
CERTIFIED FINAL DESIGN



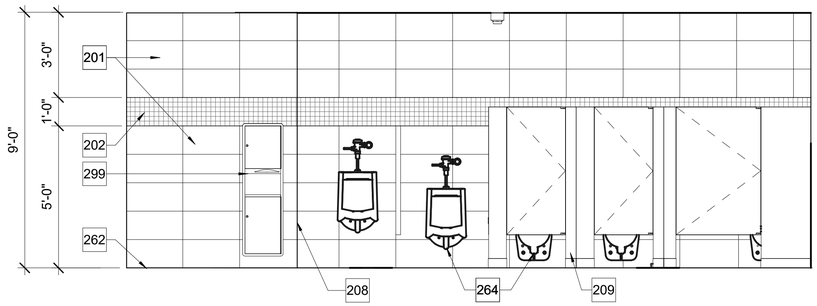
F1 WOMEN'S RESTROOM 108 - EAST ELEVATION
3/8" = 1'-0"



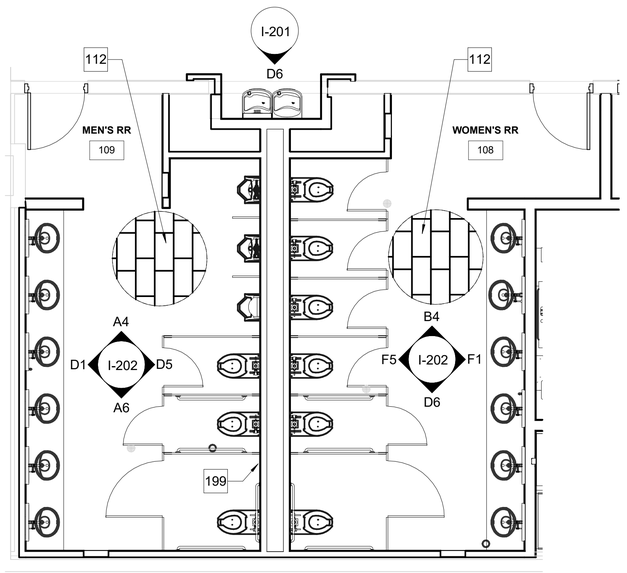
F5 WOMEN'S RESTROOM 108 - WEST ELEVATION
3/8" = 1'-0"



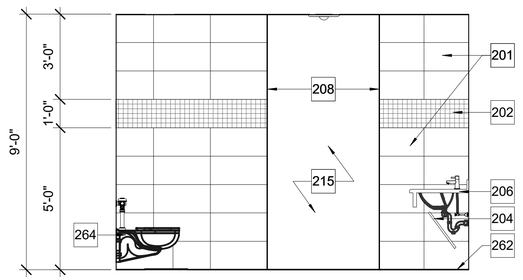
D1 MEN'S RESTROOM 109 - WEST ELEVATION
3/8" = 1'-0"



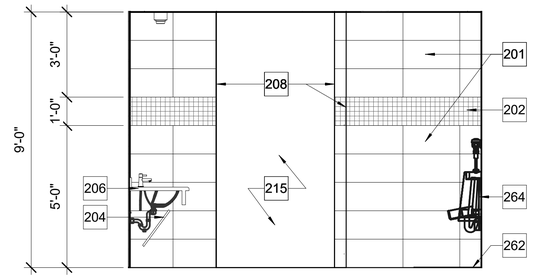
D5 MEN'S RESTROOM 109 - EAST ELEVATION
3/8" = 1'-0"



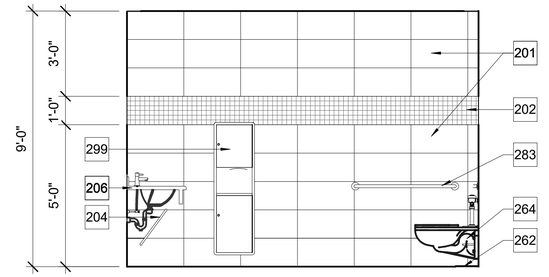
A1 ENLARGED PLAN - MEN'S RR 109 & WOMEN'S RR 108
1/4" = 1'-0"



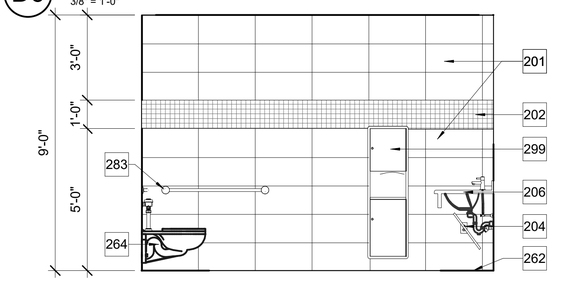
B4 WOMEN'S RR 108 - NORTH ELEVATION
3/8" = 1'-0"



A4 MEN'S RR 109 - NORTH ELEVATION
3/8" = 1'-0"



D6 WOMEN'S RR 108 - SOUTH ELEVATION
3/8" = 1'-0"



A6 MEN'S RR 109 - SOUTH ELEVATION
3/8" = 1'-0"

SCALE: 3/8"=1'-0"

SCALE: 1/4"=1'-0"

GENERAL NOTES - ELEVATIONS

A	REFER TO I-601 FOR FINISH LEGEND.
B	ELEVATIONS ARE SHOWN TO INDICATE FINISHES ONLY REFER TO P-401 FOR TYPE, LOCATION AND PLACEMENT OF PLUMBING FIXTURES.
C	REFER TO A-410 FOR TYPE, LOCATION, AND PLACEMENT OF TOILET ACCESSORIES, GRAB BARS ETC.
D	REFER TO REFLECTED CEILING PLANS ON AE121 TO AE133 FOR CEILING HEIGHTS AND ADDITIONAL INFORMATION.
E	FIELD VERIFY ALL DIMENSIONS PRIOR TO ORDERING MATERIALS AND FINISHES.
F	AT TILED WALLS, INSTALL FULL HEIGHT ANODIZED ALUMINUM TRIM PIECE AT ALL OUTSIDE CORNERS. REFER TO B1/I-601 FOR DETAILS.

KEYNOTES

112	DIRECTION OF FLOOR TILE.
199	
201	PORCELAIN WALL TILE - PWT-1.
202	PORCELAIN WALL TILE - PWT-2.
203	WALL-MOUNTED MIRROR WITH 1" BRUSHED STAINLESS FRAME, 24" X 36". CENTER MIRROR OVER SINK WITH BOTTOM OF REFLECTIVE SURFACE AT 40" AFF MAXIMUM, TYP.
204	REMOVEABLE ADA SINK APRON; PLASTIC LAMINATE PL-1.
206	SOLID SURFACE COUNTERTOP SS-1 WITH 4" HIGH BACKSPLASH.
208	INSTALL EDGE TRIM AT ALL OUTSIDE TILE CORNERS.
209	TOILET PARTITION, TP-1.
215	OPEN TO BEYOND.
262	METAL COVE TRANSITION CB-1.
264	REFER TO P-401 FOR TYPE AND LOCATION OF PLUMBING FIXTURES. TYP.
283	ADA GRAB BARS: REFER TO A-410 FOR DETAILS.
299	RESTROOM ACCESSORIES: REFER TO A-410 FOR DETAILS.

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
MACHELL LARAE ABOVE
10047
REGISTERED
INTERIOR DESIGNER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: M. ABOVE
DRAWN BY: H. WILSON
CHECKED BY: S. LEBEAU
SUBMITTED BY: E. OLNESS
DATE: ISSUE DATE: 23 NOV 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201I1-202
ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

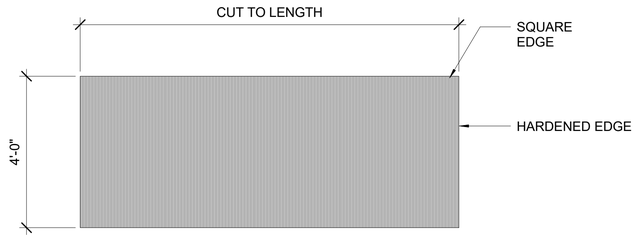
Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS Project No. D2R0013

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
INTERIOR ELEVATIONS & ENLARGED PLANS

SHEET ID
B1455
I-202

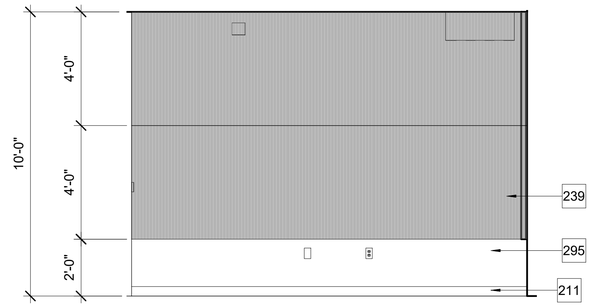
W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



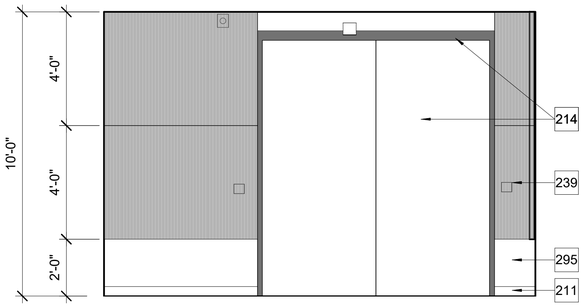
A6 AWP-1 IMPACT PERFORMANCE ACOUSTICAL WALL PANEL

1/2" = 1'-0"



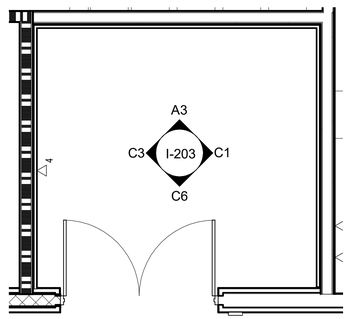
C3 WPT 118 - WEST ELEVATION

3/8" = 1'-0"



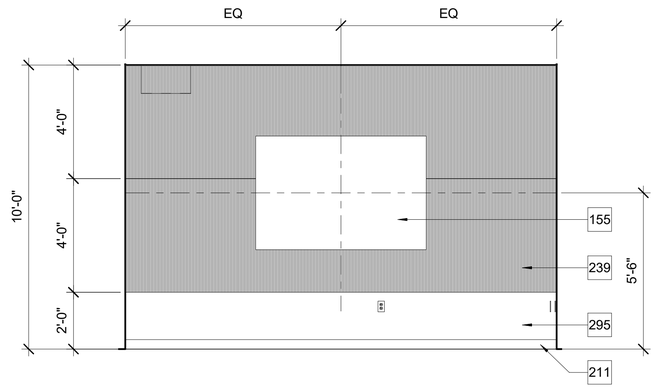
C6 WPT 118 - SOUTH ELEVATION

3/8" = 1'-0"



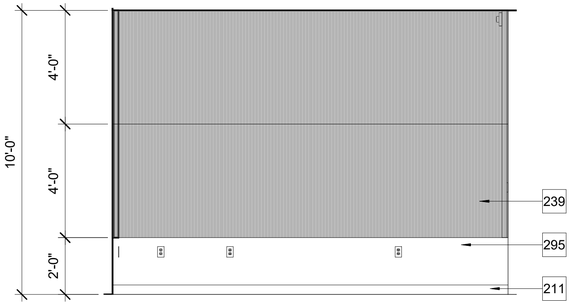
A1 ENLARGED PLAN - WPT 118

1/4" = 1'-0"



A3 WPT 118 - NORTH ELEVATION

3/8" = 1'-0"



C1 WPT 118 - EAST ELEVATION

3/8" = 1'-0"

4 2 0 4
SCALE: 3/8"=1'-0"

4 3 2 1 0 4 8
SCALE: 1/4"=1'-0"

GENERAL NOTES - ELEVATIONS

A	ELEVATIONS ARE SHOWN TO INDICATE FINISHES ONLY, REFER TO I-601 FOR FINISH LEGEND
B	REFERENCE REFLECTED CEILING PLANS AE121 THRU AE133 FOR CEILING HEIGHTS AND MATERIALS
C	FIELD VERIFY ALL DIMENSIONS PRIOR TO ORDERING MATERIALS AND FINISHES

KEYNOTES

155	MB1, MARKER BOARD
211	BASE AS SCHEDULED
214	PAINT METAL DOORS AND FRAMES, PT-4.
239	ACOUSTICAL WALL PANEL, AWP-1.
295	PAINT, PT1.

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
MACHELL LARAE ABOVE
10047
REGISTERED
INTERIOR DESIGNER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: G. MOLLICA
DRAWN BY: G. MOLLICA
CHECKED BY: H. WILSON
SUBMITTED BY: E. HOLMES
SIZE: ANSI D 22x34
ISSUE DATE: 10 SEPTEMBER 2021
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.: BID
FILE NAME: SXHT219201I1-203

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
PATRICK SPACE FORCE BASE

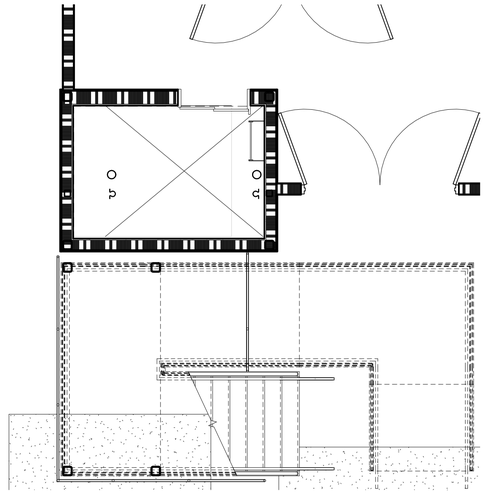
jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS Reg. No. F2966

PATRICK SPACE FORCE BASE, FLORIDA
FY 22 PERSONNEL RECOVERY FLIGHT SIMULATOR
PROJECT NUMBER: SXHT219201, P2#: 496413
INTERIOR ELEVATIONS & ENLARGED PLANS

SHEET ID
B1455
I-203

W912QR23R0003_Plans-0000

CERTIFIED FINAL SUBMITTAL



E1 ENLARGED PLAN - ELEVATOR E01
1/4" = 1'-0"

KEYNOTES

GENERAL NOTES - ELEVATIONS

A	REFER TO I-601 FOR FINISH LEGEND.
B	ELEVATIONS ARE SHOWN TO INDICATE FINISHES ONLY REFER TO P-401 FOR TYPE, LOCATION AND PLACEMENT OF PLUMBING FIXTURES.
C	REFER TO A-410 FOR TYPE, LOCATION, AND PLACEMENT OF TOILET ACCESSORIES, GRAB BARS ETC.
D	REFER TO REFLECTED CEILING PLANS ON AE121 TO AE133 FOR CEILING HEIGHTS AND ADDITIONAL INFORMATION.
E	FIELD VERIFY ALL DIMENSIONS PRIOR TO ORDERING MATERIALS AND FINISHES.
F	AT TILED WALLS, INSTALL FULL HEIGHT ANODIZED ALUMINUM TRIM PIECE AT ALL OUTSIDE CORNERS. REFER TO B1/I-601 FOR DETAILS.

4 2 0 4
SCALE: 3/8"=1'-0"

4 3 2 1 0 4 8
SCALE: 1/4"=1'-0"

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
MACHELL LARAE ABOVE
10047
REGISTERED
INTERIOR DESIGNER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: M. ABOVE
DRAWN BY: H. WILSON
CHECKED BY: S. LEBEAU
SUBMITTED BY: E. OLNESS
QTE
ANSI D 22x34

ISSUE DATE: 23 NOV 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201I-204

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

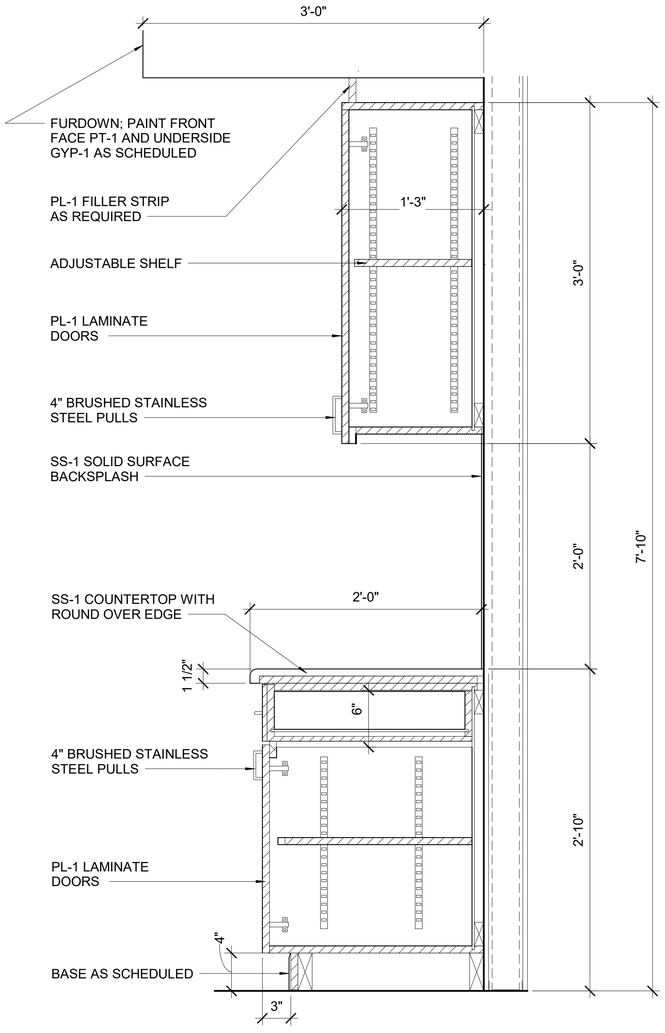
Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street Fort Worth, TX 76102
Phone: (817)820-2000 TBPE F-2966

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
INTERIOR ELEVATIONS & ENLARGED PLANS

SHEET ID
B1455
I-204

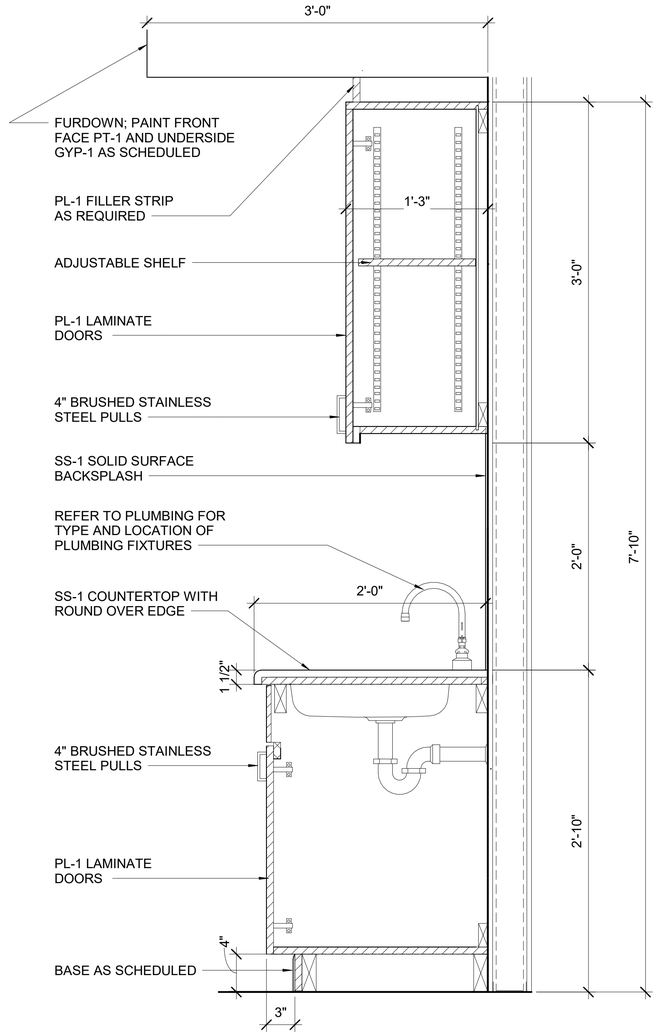
W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



A1 MILLWORK SECTION - UPPER & LOWER CABINET

1 1/2" = 1'-0"



A4 MILLWORK SECTION - CABINET AT SINK

1 1/2" = 1'-0"

A7 MILLWORK SECTION - RESTROOM SINK

1 1/2" = 1'-0"

0 6 1 2

SCALE: 1 1/2"=1'-0"

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
MACHELL LARAE ABOVE
10047
REGISTERED INTERIOR DESIGNER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: M. ABOVE
DRAWN BY: H. WILSON
CHECKED BY: S. LEBEAU
SUBMITTED BY: E. OLNESS
PROJECT ANSI D 22x34
ISSUE DATE: 23 NOV 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201I-301

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

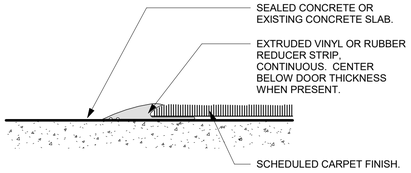
jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS Tel 817.820.8000

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
MILLWORK SECTIONS AND DETAILS

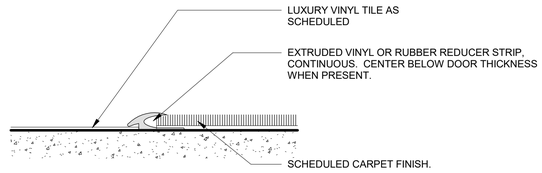
SHEET ID
B1455
I-301

W912QR23R0003_Plans-0000

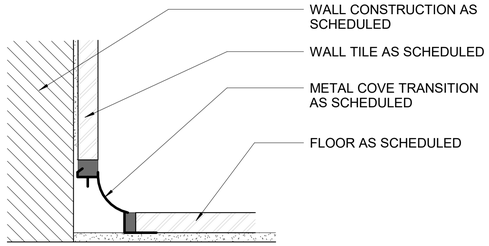
CERTIFIED FINAL DESIGN



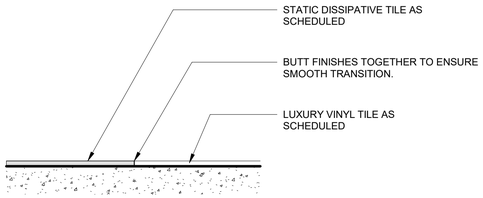
F1 CONCRETE TO CARPET
6" = 1'-0"



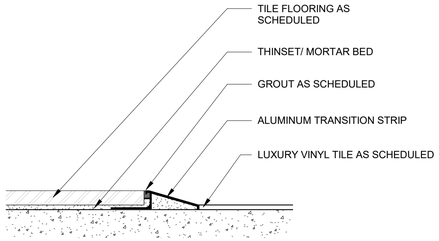
F4 LUXURY VINYL TILE TO CARPET
6" = 1'-0"



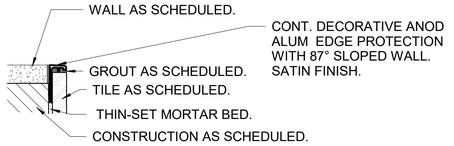
F7 METAL TRIM AT FLOOR TO WALL TILE
NTS



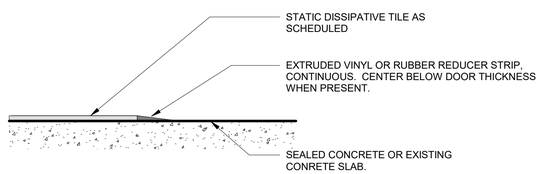
E1 STATIC DISSIPATIVE TILE TO LVT
6" = 1'-0"



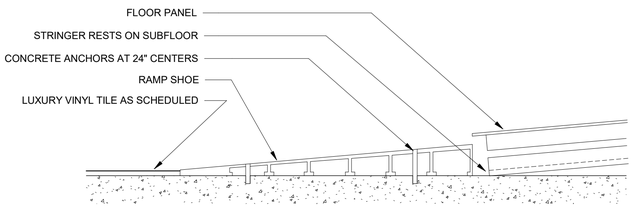
E4 LUXURY VINYL TILE TO TILE
6" = 1'-0"



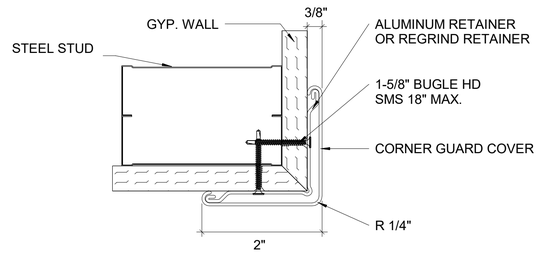
E7 METAL TRIM AT OUTSIDE TILE CORNER
NTS



C1 STATIC DISSIPATIVE TILE TO CONCRETE
6" = 1'-0"



C4 RAISED ACCESS RAMP TO LVT
6" = 1'-0"



C7 CORNER GUARD - SURFACE MOUNT
N.T.S.

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
MACHELL LARAE ABOVE
10047
REGISTERED
INTERIOR DESIGNER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: M. ABOVE	ISSUE DATE: 23 NOV 2022		
DRAWN BY: H. WILSON	SOLICITATION NO.:		
CHECKED BY: S. LEBEAU	CONTRACT NO.:	DRAWING CODE:	
SUBMITTED BY: E. OLMESS	FILE NAME: 22-24 ANSI D	22x34	SXHT219201I-501

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS Project No. W2R003

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
INTERIOR DETAILS

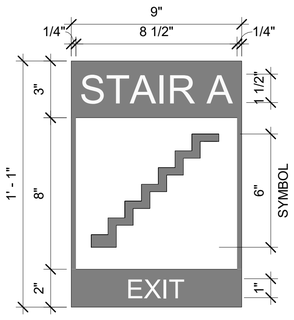
SHEET ID
B1455
I-501

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN

GENERAL NOTES - SIGNAGE

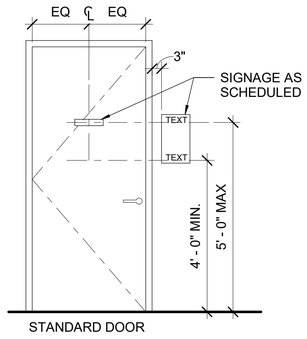
A	SIGNAGE LOCATION/PLACEMENT MUST MEET ABAAS REQUIREMENTS.
B	ALL SIGNAGE MUST COMPLY WITH UFC 3-120-01 STANDARDS.
C	ROOM NUMBERS SHOWN ON PLANS ARE FOR CONSTRUCTION PURPOSES, NOT NECESSARILY THE USER'S PREFERRED NUMBERING SYSTEM. COORDINATE ALL ROOM NUMBERS AND VERBIAGE FOR SIGNS WITH CONTRACTING OFFICER PRIOR TO FABRICATION.
D	ENSURE THAT ALL SIGN INSERTS CAN BE EASILY REMOVED/ REPLACED. CONSIDER INSTALLATION OF SIGNS IN TIGHT CORNERS AND ALCOVES/ SIDELIGHTS TO ENSURE THAT SIGN INSERT IS ACCESSIBLE.
E	MOUNT ALL LIKE-SIGNS AT SAME HEIGHT.
F	SIGNAGE IS INTENDED TO MATCH EXISTING. VERIFY EXISTING SIGNAGE TYPE AND BACKGROUND COLOR PRIOR TO ORDERING.



STAIR DESIGNATION: UPPER CASE HELVETICA NEUE 55 ROMAN, 1-1/2" CAPITAL LETTER HEIGHT, CENTERED, ACCOMPANIED BY GRADE TWO BRAILLE.

TEXT: UPPER CASE HELVETICA NEUE 55 ROMAN, 1" CAPITAL LETTER HEIGHT, CENTERED, ACCOMPANIED BY GRADE TWO BRAILLE.

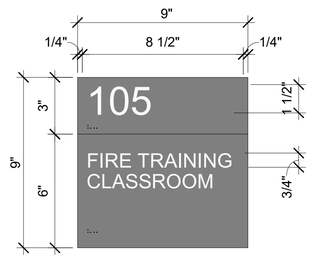
D8 STAIR IDENTIFICATION SIGN SS1A
3" = 1'-0"



STANDARD DOOR

MOUNTING HEIGHT RANGE FOR TACTILE CHARACTERS.
DOOR MOUNTED SIGNS TO BE CENTERED ON DOOR WHERE APPLICABLE.
ALL SIMILAR SIGN TYPES TO BE MOUNTED UNIFORMLY THROUGHOUT BUILDING.

D1 TYP SIGNAGE MOUNTING DIAGRAM
1/2" = 1'-0"

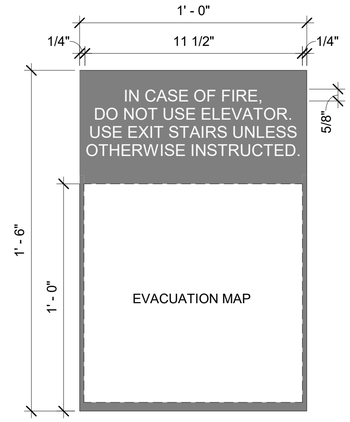


ROOM NUMBER: HELVETICA NEUE 55 ROMAN, 1-1/2" CAPITAL LETTER HEIGHT, FLUSH LEFT, TACTILE ROOM NUMBER ACCOMPANIED BY GRADE TWO BRAILLE

ROOM NAME: HELVETICA NEUE 55 ROMAN, 3/4" CAPITAL LETTER HEIGHT, FLUSH LEFT. TACTILE ROOM NAME WITH GRADE TWO BRAILLE.

SIGN SHALL HAVE WHITE LETTERS ON COLORED BACKGROUND.

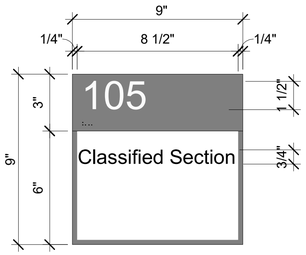
A1 PERMANENT ROOM IDENTIFICATION SIGN BB2A
3" = 1'-0"



TEXT: HELVETICA NEUE 55 ROMAN, 5/8" CAPITAL LETTER HEIGHT, CENTERED

INSERT: REPLACABLE EVACUATION MAP

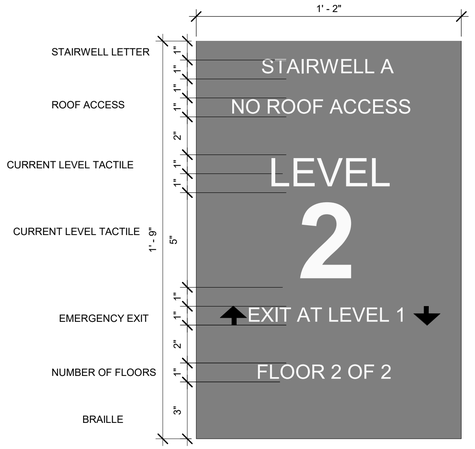
D3 ELEVATOR EGRESS SIGN DD2
3" = 1'-0"



ROOM NUMBER: HELVETICA NEUE 55 ROMAN, 1 1/2" CAPITAL LETTER HEIGHT, FLUSH LEFT, TACTILE ROOM NUMBER ACCOMPANIED BY GRADE TWO BRAILLE

ROOM NAME: PRINTED PAPER INSERT WITH ROOM DESCRIPTION. UPPER AND LOWER CASE HELVETICA NEUE 55 ROMAN, 3/4" CAPITAL LETTER HEIGHT, FLUSH LEFT.

A5 ROOM IDENTIFICATION SIGN BB2B
3" = 1'-0"



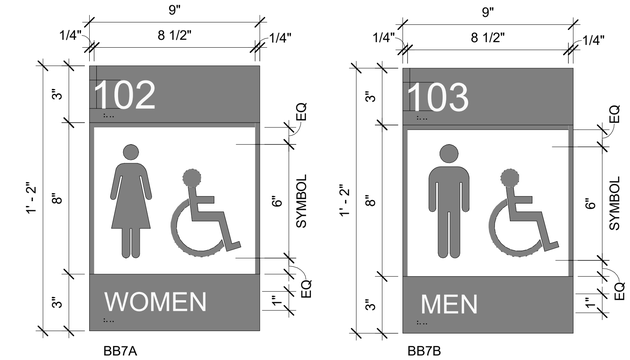
STAIR & FLOOR NUMBER: HELVETICA MEDIUM, 38 (1 1/2") CAPITAL LETTER HEIGHT, FLUSH LEFT. ACCOMPANIED BY GRADE TWO BRAILLE.

BODY TEXT: UPPER AND LOWER CASE HELVETICA MEDIUM, 12 (1/2") CAPITAL LETTER HEIGHT, FLUSH LEFT.

WHITE LETTERS ON COLORED BACKGROUND.

SIGN VERBIAGE TO INDICATE FLOOR AND ROOF ACCESS PER PLAN.

D6 STAIRWELL SIGN BB4
3" = 1'-0"



ROOM NUMBER: HELVETICA NEUE 55 ROMAN, 1-1/2" TACTILE ROOM NUMBER WITH GRADE TWO BRAILLE.

ROOM NAME: UPPER CASE HELVETICA NEUE 55 ROMAN, 1" CAPITAL LETTER HEIGHT, FLUSH LEFT, ACCOMPANIED BY GRADE TWO BRAILLE.

ROOM NAME TO BE WHITE TEXT ON A COLORED BACKGROUND AND SYMBOLS TO BE COLORED ON A WHITE BACKGROUND.

A7 RESTROOM IDENTIFICATION SIGN BB7
3" = 1'-0"

GRAPHIC SCALE

6" 4 2 0 6"

SCALE: 3"=1'-0"

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
MACHELL LARAE ABOVE
10047
REGISTERED
INTERIOR DESIGNER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: M. ABOVE
DRAWN BY: H. WILSON
CHECKED BY: S. LEBEAU
SUBMITTED BY: E. OLNESS
DATE: ANSI D 22x34
ISSUE DATE: 23 NOV 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201I-512

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
TBPE Registration No. F-2600

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
SIGNAGE DETAILS

SHEET ID
B1455
I-512

W912QR23R0003_Plans-0000

FINISH LEGEND

ITEM CODE	DESCRIPTION	MANUFACTURER	MODEL	COLOR	SIZE	NOTES
FLOORING						
CPT-1	CARPET TILE	MILLIKEN	MAJOR FREQUENCY ONE - DISTORTION	PERCEIVE DTN218-106	9.85" X 39.4"	ASHLAR INSTALLATION
CPT-2	CARPET TILE	MILLIKEN	MAJOR FREQENCY ONE - VIBRATION	PERCEIVE VBN218-106	9.85" X 39.4"	ASHLAR INSTALLATION
EXC-1	EPOXY COATING	TENNANT	ECO-MPE MULTI PURPOSE EPOXY	BATTLESHIP GRAY	---	INSTALL WHERE NOTED
LVT-1	LUXURY VINYL TILE	MILLIKEN	FORTIFIED FOUNDATIONS 2.5MM	CHARLOTTE CHT120	18" X 18"	INSTALL WHERE NOTED
PFT-1	PORCELAIN FLOOR TILE	STONEPEAK	SIMPLY MODERN	SIMPLY GREY	12" X 24"	1/3 OFFSET INSTALLATION.
RAF-1	RAISED ACCESS FLOORING	COMX	CONCRETE FILLED STEEL ACCESS FLOOR SYSTEM	GRAY STARLINE ST6001	24" X 24"	OFT COMPUTER ROOM AND CORRIDOR RAMP/LANDING AS NOTED
RF-1	RUBBER TREADS AND RISERS	TARKETT	STAIRWELL MANAGEMENT	BURNT UMBER 63	---	INTERIOR STAIRS, RISERS AND LANDING.
SC-1	SEALED CONCRETE	SURECRETE	COLORTEC 400WB	DOVE GRAY 12	---	INSTALL WHERE NOTED
SDT-1	STATIC DISSIPATIVE TILE	JOHNSONITE	IQ GRANIT SD TILE	SIDEWALK 0726	24" X 24"	INSTALL WHERE NOTED
BASE						
CB-1	METAL COVE TRANSITION	SCHLUTER	DILEX AHK	SATIN ANODIZED ALUMINUM AE	---	INSTALL IN RESTROOMS
RB-1	RESILIENT BASE	TARKETT	TRADITIONAL WALL BASE	BURNT UMBER 63	4" H	GENERAL USE (COVE AT RESILIENT FLOORING / STRAIGHT AT CARPET)
WALLS						
AWP-1	ACOUSTICAL WALL PANEL	CF STINSON	NIKKO	SHARK	---	REFER TO I-203 FOR ELEVATION DETAILS
EW-1	ELEVATOR WALL	TK ELEVATOR	---	BRUSHED STAINLESS STEEL	---	
FRP-1	FIBER REINFORCED PANEL	MARLITE	SYMMETRIX FRP	WHITE C 100-G44	---	JANITOR WALLS.
PT-1	PAINT	BENJAMIN MOORE	EGGSHELL FINISH	NATURAL CREAM OC-14	---	GENERAL USE UON
PT-2	PAINT	BENJAMIN MOORE	EGGSHELL FINISH (WALLS) / SEMI-GLOSS FINISH (DOORS & TRIM)	BRIARWOOD HC-175	---	ACCENT WALLS; SIGNAGE BACKGROUND
PT-3	PAINT	BENJAMIN MOORE	EGGSHELL FINISH	ICE MIST OC-67	---	HANGAR WALL INTERIOR
PT-4	PAINT	BENJAMIN MOORE	SEMI-GLOSS FINISH	JET BLACK 2120-10	---	DOORS & DOOR TRIM; STAIR ASSEMBLY
PWT-1	PORCELAIN WALL TILE	STONEPEAK	SIMPLY MODERN	SIMPLY CREME	12" X 24"	RESTROOM WALLS
PWT-2	PORCELAIN WALL TILE	STONEPEAK	SIMPLY MODERN	SIMPLY GREY	2" X 2" MOSAIC ON A 12" SHEET	RESTROOM WALL ACCENT
CEILINGS						
ACT-1	ACCOUSTICAL CEILING TILE	ARMSTRONG CEILINGS	OPTIMA TEGULAR	WHITE TILE W/ WITH BLIZZARD WHITE GRID	24" X 24" X 1", 15/16" TEGULAR	INSTALL IN ALL AREAS U.O.N.
EC-1	ELEVATOR CEILING	TK ELEVATOR	...	BRUSHED STAINLESS STEEL	...	
GYP-1	GYPSUM BOARD CEILING	BENJAMIN MOORE	FLAT FINISH	ICE MIST OC-67	---	PAINTED GYPSUM BOARD CEILINGS
OTS-1	OPEN TO STRUCTURE	BENJAMIN MOORE	FLAT FINISH	ICE MIST OC-67	---	PAINTED EXPOSED CEILINGS INCLUDING MEP WHERE ALLOWED BY CODE
MISCELLANEOUS						
CG-1	CORNER GUARD	CS ACROVYN	SSM-20AN SURFACE MOUNTED	PEARL 934	2" LEGS	INSTALL ON ALL OUTSIDE CORNERS
CL-1	CELL PHONE LOCKERS	SALSBURY INDUSTRIES	SERIES 19158-25	ALUMINUM	7 LOCKERS HIGH x 3 LOCKERS WIDE	REFER TO I-201 FOR DETAILS
FPF-1	FOLDING PARTITION FABRIC	MODERNFOLD	LINEAGE	PEDIGREE	---	MOVABLE PARTITION PANEL FINISH
GR-1	GROUT	LATICRETE	PERMACOLOR SELECT	34 SANDSTONE	---	USED WITH PFT-1
GR-2	GROUT	LATICRETE	PERMACOLOR SELECT	89 SMOKE GREY	---	USED WITH PWT-1 & PWT-2
PL-1	PLASTIC LAMINATE	FORMICA	---	SILVER RIFTWOOD 6413-NG	---	BREAKROOM CABINETS; ELEVATOR INTERIOR PANELS
SS-1	SOLID SURFACE	WILSONART	---	MORNING ICE 9204CE	---	RESTROOM, BREAK ROOM COUNTERTOP AND BACKSPLASH
SS-2	SOLID SURFACE	CORIAN	---	CANVAS	---	WINDOW SILLS
TP-1	TOILET PARTITIONS	ASI GLOBAL PARTITIONS	SOLID PHENOLIC CORE	FOG 3450C	---	RESTROOM TOILET PARTITIONS
WS-1	WINDOW SHADE	MECHOSHADE	ECOVEIL SCREEN - 5% OPEN	EGGSHELL 1366	---	5% OPENESS, MANUAL ROLLERSHADE. INSTALL AT ALL WINDOWS, U.N.O.
WST-1	WOOD STAIN, INTERIOR WOOD DOORS	SHERWIN WILLIAMS	MINWAX TINTABLE STAINS	CLASSIC GRAY MW271	---	APPLY ON ALL WOOD DOORS.

GENERAL NOTES-FINISH LEGEND

A	MANUFACTURERS AND COLORS LISTED ARE INTENDED TO ESTABLISH LEVEL OF QUALITY, COLOR & FINISH, AND ARE NOT INTENDED TO LIMIT THE SELECTION OF OTHER MANUFACTURERS FOR EQUAL PRODUCTS. AFRC HQ INTERIOR DESIGNER MUST BE COPIED ON ALL SUBSTITUTIONS FOR APPROVAL.
B	ALL FINISHES ARE TO BE INSTALLED/ APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS.
C	FIELD VERIFY ALL DIMENSIONS PRIOR TO ORDERING FINISH MATERIALS.
D	ALL FLOORING TRANSITIONS ARE TO OCCUR AT THE CENTERLINE OF THE DOOR, DOORWAY, OR CEILING UON.
E	PAINTED GYPSUM BOARD WALLS MUST HAVE AN EGGSHELL FINISH UON.
F	PAINTED GYPSUM BOARD CEILINGS MUST HAVE A FLAT FINISH UON.
G	METAL DOORS AND FRAMES SCHEDULED TO BE PAINTED MUST HAVE A SEMI GLOSS FINISH UON, PAINT PT-4. WOOD DOORS MUST BE STAINED AS SPECIFIED
H	REFER TO REFLECTED CEILING PLANS ON AE121 TO AE133 FOR ADDITIONAL INFORMATION.
J	REFER TO FINISH PLANS SHEETS IN101 TO IN112 AND ROOM FINISH SCHEDULE I-602 FOR FINISHES BY ROOM.
K	REFER TO A-201 FOR INFORMATION REGARDING EXTERIOR FINISHES.
L	INSTALL METAL COVE TRIM AT ALL TILE INSIDE CORNER AND FLOOR TO WALL TRANSITIONS IN RESTROOMS 108 AND 109. REFER TO F7/I-501 AND E7/I-501
M	ALL OUTSIDE CORNERS ARE TO RECEIVE CORNER GUARDS TO MATCH ADJACENT WALL FINISH, REFER TO C7/I-501

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
MACHELL LARAE ABOVE
10047
REGISTERED
INTERIOR DESIGNER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: M. ABOVE
DRAWN BY: H. WILSON
CHECKED BY: S. LEBEAU
SUBMITTED BY: E. OLNESS
SCALE: ANSI D 22x34
ISSUE DATE: 23 NOV 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201I-601

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS No. 192201

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
FINISH MATERIAL LEGEND & DETAILS

SHEET ID
B1455
I-601

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN

ROOM FINISH SCHEDULE

ROOM	NAME	FLOOR FINISH	BASE FINISH	WALL FINISH				CEILING FINISH
				NORTH	EAST	SOUTH	WEST	
100	VESTIBULE	LVT-1	RB-1	PT-1	PT-1	PT-1	PT-1	ACT-1
101	CORRIDOR	LVT-1	RB-1	PT-1	PT-1	PT-1	PT-1	ETR/GYP-1
102	REGISTRARS	CPT-2	RB-1	PT-1	PT-1	PT-1	PT-1	ACT-1
102A	REGISTRARS OFFICE	CPT-2	RB-1	PT-1	PT-1	PT-1	PT-1	ACT-1
103	STUDENT WORK AREA	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-2	ACT-1
104	TRS	CPT-1	RB-1	PT-2	PT-1	PT-1	PT-1	ACT-1
105	ADMINISTRATION	CPT-1	RB-1	PT-1	PT-1	PT-2	PT-1	ACT-1
105A	ADMINISTRATION	CPT-1	RB-1	PT-1	PT-1	PT-2	PT-1	ACT-1
105B	WELLNESS ROOM	CPT-2	RB-1	PT-1	PT-1	PT-1	PT-2	ACT-1
105C	OFFICE	CPT-2	RB-1	PT-1	PT-1	PT-2	PT-1	ACT-1
105D	OFFICE	CPT-2	RB-1	PT-1	PT-1	PT-2	PT-1	ACT-1
105E	OFFICE	CPT-2	RB-1	PT-1	PT-1	PT-2	PT-1	ACT-1
106	BREAK ROOM	LVT-1	RB-1	PT-1	PT-1	PT-1	PT-1 / SS-1	ACT-1/GYP-1
107	JANITORS	SC-1	RB-1	PT-1 / FRP-1	PT-1 / FRP-1	PT-1 / FRP-1	PT-1 / FRP-1	OTS-1
108	WOMEN'S RR	PFT-1	CB-1	PWT-1,2	PWT-1,2	PWT-1,2	PWT-1,2	GYP-1
109	MEN'S RR	PFT-1	CB-1	PWT-1,2	PWT-1,2	PWT-1,2	PWT-1,2	GYP-1
110	CIRCULATION	EXC-1	RB-1	PT-1	PT-1	PT-1	PT-1	...
110A	CORRIDOR	LVT-1	RB-1	PT-1	PT-1	PT-1	PT-1	OTS-1
110B	CORRIDOR	LVT-1	RB-1	PT-1	PT-1	PT-1	PT-1	OTS-1
111	CLASSROOM	CPT-1	RB-1	PT-1	PT-1	PT-2	PT-1	ACT-1/GYP-1
112	MULTI-PURPOSE	CPT-1	RB-1	PT-2	PT-1	PT-1	PT-1	ACT-1/GYP-1
113	CLASSROOM	CPT-1	RB-1	PT-1	PT-1	PT-2	PT-1	ACT-1/GYP-1
114	MULTI-PURPOSE	CPT-1	RB-1	PT-2	PT-1	PT-1	PT-1	ACT-1/GYP-1
115	IAST	EXC-1	RB-1	PT-1	PT-1	PT-1	PT-1	OTS-1
116	AIE PTT	EXC-1	RB-1	PT-1	PT-1	PT-1	PT-1	OTS-1
117	CPT	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	OTS-1
118	WPT	CPT-1	RB-1	PT-1 / AWP-1	PT-1 / AWP-1	PT-1 / AWP-1	PT-1 / AWP-1	OTS-1
119	TELECOM	SDT-1	RB-1	PT-1	PT-1	PT-1	PT-1	OTS-1
120	OFT	EXC-1	RB-1	PT-1	PT-1	PT-1	PT-1	OTS-1
121	OFT	EXC-1	RB-1	PT-1	PT-1	PT-1	PT-1	OTS-1
122	TOOL ROOM	SC-1	RB-1	PT-1	PT-1	PT-1	PT-1	OTS-1
123	MULTI-PURPOSE	CPT-1	RB-1	PT-2	PT-1	PT-1	PT-1	ACT-1/GYP-1
124	MULTI-PURPOSE	CPT-1	RB-1	PT-2	PT-1	PT-1	PT-1	ACT-1/GYP-1
125	EDS	RAF-1	RB-1	PT-1	PT-1	PT-1	PT-1	OTS-1
125A	EDS COMPUTER	RAF-1	RB-1	PT-1	PT-1	PT-1	PT-1	OTS-1
126	OFT COMPUTER	RAF-1	RB-1	PT-1	PT-1	PT-1	PT-1	OTS-1
130	FIRE ROOM	SC-1	RB-1	PT-1	PT-1	PT-1	PT-1	OTS-1
140	ELECTRICAL	SC-1	RB-1	PT-1	PT-1	PT-1	PT-1	OTS-1
150	MECH MEZZ	SC-1	RB-1	PT-1	PT-1	PT-1	PT-1	OTS-1
200A	CORRIDOR	LVT-1	RB-1	PT-1	PT-1	PT-1	PT-1	OTS-1
200B	CORRIDOR	LVT-1 / RAF -1	RB-1	PT-1	PT-1	PT-1	PT-1	OTS-1
201	TSC	CPT-1	RB-1	PT-1	PT-1	PT-2	PT-1	ACT-1
202	CLASS	CPT-1	RB-1	PT-1	PT-1	PT-2	PT-1	ACT-1
203	MISSION PLANNNG	CPT-1	RB-1	PT-2	PT-1	PT-1	PT-1	ACT-1
204	COMM CLOSET	SDT-1	RB-1	PT-1	PT-1	PT-1	PT-1	OTS-1
205	MISSION PLANNING	CPT-1	RB-1	PT-2	PT-1	PT-1	PT-1	ACT-1
E01	ELEVATOR	CPT-1	...	EW-1	EW-1	EW-1	EW-1	EC-1
S01	STAIR 1	RF-1	RB-1	N/A	N/A	N/A	N/A	OTS-1

GENERAL NOTES-FINISH LEGEND

A	MANUFACTURERS AND COLORS LISTED ARE INTENDED TO ESTABLISH LEVEL OF QUALITY, COLOR & FINISH, AND ARE NOT INTENDED TO LIMIT THE SELECTION OF OTHER MANUFACTURERS FOR EQUAL PRODUCTS. AFRC HQ INTERIOR DESIGNER MUST BE COPIED ON ALL SUBSTITUTIONS FOR APPROVAL.
B	ALL FINISHES ARE TO BE INSTALLED/ APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS.
C	FIELD VERIFY ALL DIMENSIONS PRIOR TO ORDERING FINISH MATERIALS.
D	ALL FLOORING TRANSITIONS ARE TO OCCUR AT THE CENTERLINE OF THE DOOR, DOORWAY, OR CEILING UON.
E	PAINTED GYPSUM BOARD WALLS MUST HAVE AN EGGSHELL FINISH UON.
F	PAINTED GYPSUM BOARD CEILINGS MUST HAVE A FLAT FINISH UON.
G	METAL DOORS AND FRAMES SCHEDULED TO BE PAINTED MUST HAVE A SEMI GLOSS FINISH UON, PAINT PT-4. WOOD DOORS MUST BE STAINED AS SPECIFIED
H	REFER TO REFLECTED CEILING PLANS ON AE121 TO AE133 FOR ADDITIONAL INFORMATION.
J	REFER TO FINISH PLANS SHEETS IN101 TO IN112 AND ROOM FINISH SCHEDULE I-602 FOR FINISHES BY ROOM.
K	REFER TO A-201 FOR INFORMATION REGARDING EXTERIOR FINISHES.
L	INSTALL METAL COVE TRIM AT ALL TILE INSIDE CORNER AND FLOOR TO WALL TRANSITIONS IN RESTROOMS 108 AND 109. REFER TO F7/I-501 AND E7/I-501
M	ALL OUTSIDE CORNERS ARE TO RECEIVE CORNER GUARDS TO MATCH ADJACENT WALL FINISH, REFER TO C7/I-501

FINISH KEY LEGEND

CEILING FINISHES

ACT	ACOUSTICAL CEILING TILE
EC-1	ELEVATOR CEILING
GYP	PAINTED GYPSUM BOARD
OTS	OPEN TO STRUCTURE

WALL FINISHES

AWP	ACOUSTIC WALL PANELING
EW-1	ELEVATOR WALL
FRP-1	FIBER REINFORCED PLASTIC
PT	PAINT
PWT	PORCELAIN WALL TILE

BASE FINISHES

RB	RESILIENT BASE
CB	METAL COVE TRANSITION

FLOOR FINISHES

CPT	CARPET TILE
EXC	EPOXY
LVT	LUXURY VINYL TILE
PFT	PORCELAIN FLOOR TILE
SC	SEALED CONCRETE
SDT	STATIC DISSIPATIVE TILE
RF	STAIR TREAD & RISERS
RAF	RAISED ACCESS FLOORING

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
MACHELL LARAE ABOVE
10047
REGISTERED
INTERIOR DESIGNER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOV 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201I-602

DESIGNED BY: M. ABOVE
DRAWN BY: H. WILSON
CHECKED BY: S. LEBEAU
SUBMITTED BY: E. OLMESS
DATE: ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street Fort Worth, TX 76102
Phone: (682)605-1700

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
ROOM FINISH SCHEDULE

SHEET ID
B1455
I-602

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN

SIGNAGE SCHEDULE

SIGN	ROOM NAME	ROOM NUMBER	VERBIAGE	SIGN TYPE	DETAIL NO.
S2	REGISTRARS	102	REGISTRAR	BB2B	A5/I-512
S3	REGISTRARS OFFICE	102A	REGISTRARS OFFICE	BB2B	A5/I-512
S4	STUDENT WORK AREA	103	STUDENT WORK AREA	BB2B	A5/I-512
S5	TRS	104	TRS	BB2B	A1/I-512
S6	ADMINISTRATION	105	ADMINISTRATION	BB2B	A5/I-512
S7	ADMINISTRATION	105A	ADMINISTRATION	BB2B	A5/I-512
S8	WELLNESS ROOM	105B	WELLNESS ROOM	BB2B	A5/I-512
S9	OFFICE	105C	OFFICE	BB2B	A5/I-512
S10	OFFICE	105D	OFFICE	BB2B	A5/I-512
S11	OFFICE	105E	OFFICE	BB2B	A5/I-512
S12	EXTERIOR	---	BREAK ROOM	BB2A	A1/I-512
S13	BREAK ROOM	106	BREAK ROOM	BB2A	A1/I-512
S14	JANITORS	107	JANITORS	BB2A	A1/I-512
S15	WOMEN'S RR	108	WOMEN"S RESTROOM	BB7A	A7/I-512
S16	MEN'S RR	109	MEN'S RESTROOM	BB7B	A7/I-512
S17	CLASSROOM	111	CLASSROOM	BB2B	A5/I-512
S18	MULTI-PURPOSE	112	MULTI-PURPOSE	BB2B	A5/I-512
S19	CLASSROOM	113	CLASSROOM	BB2B	A5/I-512
S20	MULTI-PURPOSE	114	MULTI-PURPOSE	BB2B	A5/I-512
S21	CPT	117	CPT	BB2A	A1/I-512
S22	WPT	118	WPT	BB2A	A1/I-512
S23	TELECOM	119	TELECOM	BB2A	A1/I-512
S24	OFT	121	OFT COMPUTER	BB2A	A1/I-512
S25	TOOL ROOM	122	TOOL ROOM	BB2A	A1/I-512
S26	MULTI-PURPOSE	123	MULTI-PURPOSE	BB2B	A5/I-512
S27	MULTI-PURPOSE	124	MULTI-PURPOSE	BB2B	A5/I-512
S28	OFT COMPUTER	126	OFT COMPUTER	BB2A	A1/I-512
S29	EDS	125	EDS	BB2A	A1/I-512
S30	OFT	120	OFT	BB2A	A1/I-512
S31	OFT COMPUTER	126	OFT	BB2A	A1/I-512
S32	CLASS	202	CLASSROOM	BB2B	A5/I-512
S33	MISSION PLANNNG	203	CORRIDOR	BB2A	A1/I-512
S34	TSC	201	TSC	BB2A	A1/I-512
S35	MISSION PLANNNG	203	MISSION PLANNING	BB2B	A5/I-512
S36	COMM CLOSET	204	COMM CLOSET	BB2A	A1/I-512
S37	MISSION PLANNING	205	MISSION PLANNING	BB2B	A5/I-512
S38	EDS COMPUTER	125A	EDS COMPUTER	BB2A	A1/I-512
S39	ADMINISTRATION	105A	ADMINISTRATION	BB2B	A5/I-512
S40	STAIR 1	S01	STAIRWELL	BB4	D6/I-512
S41	CIRCULATION	110	STAIR 1	SS1A	D8/I-512
S42	CLASS	202	MISSION PLANNING	BB2B	A5/I-512
S44	MISSION PLANNING	205	CORRIDOR	BB2A	A1/I-512
S45	CIRCULATION	110	STAIRWELL	BB4	D6/I-512

GENERAL NOTES - SIGNAGE

A	SIGNAGE LOCATION/PLACEMENT MUST MEET ABAAS REQUIREMENTS.
B	ALL SIGNAGE MUST COMPLY WITH UFC 3-120-01 STANDARDS.
C	ROOM NUMBERS SHOWN ON PLANS ARE FOR CONSTRUCTION PURPOSES, NOT NECESSARILY THE USER'S PREFERRED NUMBERING SYSTEM. COORDINATE ALL ROOM NUMBERS AND VERBIAGE FOR SIGNS WITH CONTRACTING OFFICER PRIOR TO FABRICATION.
D	ENSURE THAT ALL SIGN INSERTS CAN BE EASILY REMOVED/ REPLACED. CONSIDER INSTALLATION OF SIGNS IN TIGHT CORNERS AND ALCOVES/ SIDELIGHTS TO ENSURE THAT SIGN INSERT IS ACCESSIBLE.
E	MOUNT ALL LIKE-SIGNS AT SAME HEIGHT.
F	SIGNAGE IS INTENDED TO MATCH EXISTING. VERIFY EXISTING SIGNAGE TYPE AND BACKGROUND COLOR PRIOR TO ORDERING.

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
MACHELL LARAE ABOVE
10047
REGISTERED
INTERIOR DESIGNER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: M. ABOVE
DRAWN BY: H. WILSON
CHECKED BY: S. LEBEAU
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOV 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201I-611

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS No. W2R0003

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
SIGNAGE SCHEDULE

SHEET ID
B1455
I-611

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN

FIRE ALARM/MASS NOTIFICATION SYMBOLS

- FMCP — COMBINATION ADDRESSABLE FIRE ALARM AND MASS NOTIFICATION CONTROL PANEL WITH MICROPHONE AND AUTONOMOUS CONTROL UNIT COMPATIBLE WITH EXISTING BASE MASS NOTIFICATION SYSTEM
- FACP — FIRE ALARM CONTROL PANEL
- FSCP — FIRE SUPPRESSION CONTROL PANEL
- LOC — MASS NOTIFICATION SYSTEM LOCAL OPERATING CONSOLE WITH MICROPHONE AND HVAC SHUTDOWN SWITCH
- RPS — FIRE ALARM REMOTE POWER SUPPLY
- TEXT — MASS NOTIFICATION SYSTEM TEXTUAL DISPLAY
- ANN — LCD REMOTE ANNUNCIATOR PANEL
- FRT — FIRE ALARM RADIO TRANSCEIVER
- SPD — SURGE PROTECTION/LIGHTING PROTECTION
- R — CONTROL RELAY MODULE
- M — ADDRESSABLE MONITOR MODULE
- C — ADDRESSABLE CONTROL MODULE
- WALL-MOUNTED FIRE ALARM/ MASS NOTIFICATION STROBE WITH CLEAR LENS AND WHITE FACEPLATE MARKED "ALERT"
- WALL-MOUNTED FIRE ALARM/ MASS NOTIFICATION SPEAKER/ STROBE WITH CLEAR LENS AND WHITE FACEPLATE MARKED "ALERT"
- WALL-MOUNTED FIRE ALARM/ MASS NOTIFICATION SPEAKER
- CEILING-MOUNTED FIRE ALARM/ MASS NOTIFICATION SPEAKER
- CEILING-MOUNTED FIRE ALARM/ MASS NOTIFICATION SPEAKER / STROBE WITH CLEAR LENS AND WHITE FACEPLATE MARKED "ALERT"
- WP M — EXTERIOR WEATHERPROOF MASS NOTIFICATION SYSTEM LOUD SPEAKER
- WF — WATERFLOW SWITCH - VANE TYPE
- TS — SUPERVISORY VALVE TAMPER SWITCH
- ? R/S — ADDRESSABLE AIR DUCT SMOKE DETECTOR (SUPPLIED BY FIRE ALARM CONTRACTOR; INSTALLED BY MECHANICAL CONTRACTOR; R = RETURN, S = SUPPLY)
- ? P — ADDRESSABLE PHOTOELECTRIC SMOKE DETECTOR
- CO — CARBON MONOXIDE DETECTOR
- OMNI-DIRECTIONAL FIRE ALARM ANTENNA
- F — ADDRESSABLE SINGLE ACTION-TYPE MANUAL FIRE ALARM PULL STATION
- SE — MANUAL SMOKE EXHAUST SYSTEM ACTIVATION STATION
- F — MANUAL FOAM START PULL STATION
- BLUE BEACON VISUAL ALARM
- FO — FOAM DISCHARGE STROBE
- WP — DESIGNATES WEATHERPROOF DEVICE AND BACKBOX
- SC — MANUAL HAND SWITCH TO OPEN VENTILATION LOUVERS
- FIRE/SMOKE DAMPER (PROVIDE DUCT DETECTOR WITHIN 5 FEET)
- KBX — FIRE DEPARTMENT RAPID ENTRY SYSTEM - KNOX BOX
- D — PROJECTED BEAM TYPE SMOKE DETECTOR
- R — PROJECTED BEAM REFLECTOR

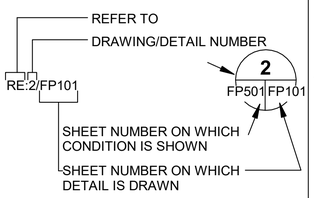
PIPING SYMBOLS

- ELBOW UP
- ELBOW DOWN
- VALVE IN DROP
- VALVE IN CENTER DROP
- VALVE IN RISE
- DIRECTION OF FLOW
- DIRECTION OF SLOPE DOWN
- CONCENTRIC REDUCER
- ECCENTRIC REDUCER
- TEE OUTLET UP
- TEE OUTLET DOWN
- UNION
- STRAINER WITH BLOWDOWN VALVE
- GATE VALVE
- CHECK VALVE
- PRESSURE CONTROL VALVE
- RELIEF VALVE
- PRESSURE GAUGE WITH GAUGE COCK
- TEST PORT

MISCELLANEOUS

- POINT OF NEW CONNECTION TO EXISTING PIPING
- CALCULATION NODE POINT (2 NODES)
- CALCULATION NODE POINT (1 NODE)
- 101 — NOTE BY SYMBOL (KEYNOTES)
- 101 — NOTE BY SYMBOL (DEMO-KEYNOTES)
- 101 — ROOM TAG

DRAWING REFERENCE KEY



FIRE SPRINKLER SYMBOLS

- WET PIPE SPRINKLER SYSTEM RISER
- 4 IN X 2 -1/2 IN X 2-1/2 IN WALL MOUNTED FIRE DEPARTMENT CONNECTION

FIRE ALARM/MNS GENERAL NOTES

A. PROVIDE A COMPLETE COMBINATION FIRE ALARM AND MASS NOTIFICATION SYSTEM (FA/MNS) FOR AIRCRAFT MAINTENANCE HANGAR, DESIGNED AND INSTALLED IN ACCORDANCE WITH NFPA 72, UFC 3-600-01, UFC 4-021-01, ADA/ABA AND SPECIFICATION 28 31 76. MASS NOTIFICATION SYSTEM ZONING BETWEEN THE REHABILITATED AREA AND EXISTING ISO-MAINTENANCE HANGAR WILL HAVE SEPARATE MASS NOTIFICATION SYSTEM ANNUNCIATION PER BUILDING. REHABILITATED MASS NOTIFICATION SYSTEM ANNUNCIATION WILL BE FOR BOTH SECURE AND NON-SECURE AREAS AT THE DISCRETION OF FIRST RESPONDERS.

B. FIRE ALARM SYSTEM TO BE MONACO ADDRESSABLE FIRE ALARM CONTROL PANEL WITH POINT REPORTING, MASS NOTIFICATION AND INTEGRATED RADIO TRANSCEIVER, MAAP-X OR EQUAL.

C. ALL FIRE ALARM CONDUIT, JUNCTION/BACK BOXES, COVERS AND COUPLINGS LOCATED IN UNFINISHED AREAS, SUCH AS ABOVE CEILINGS AND IN MECHANICAL ROOMS, MUST BE FACTORY PAINTED RED. FIRE ALARM CONDUIT, JUNCTION/BACK BOXES, COVERS AND COUPLINGS LOCATED IN FINISHED AREAS MUST BE PAINTED TO MATCH THE ROOM FINISH. THE INSIDE COVER OF JUNCTION BOXES MUST BE IDENTIFIED AS "FIRE ALARM" AND THE CONDUIT MUST HAVE PAINTED RED BANDS 3/4 INCH WIDE AT 20 FOOT INTERVALS AND ON BOTH SIDES OF ALL FLOOR, WALL, AND CEILING PENETRATIONS.

D. RUN ALL WIRING IN MINIMUM 3/4 INCH CONDUIT. EXCEPTION: 1/2 INCH CONDUIT MAY BE USED FOR 120 VAC POWER FROM A CIRCUIT BREAKER PANEL TO THE FIRE ALARM/MASS NOTIFICATION SYSTEM.

E. MOUNT ALL WALL-MOUNTED NOTIFICATION APPLIANCES WITH THE BOTTOM OF THE STROBE LENS AT 80 INCHES AFF, OR 6 INCHES BELOW THE CEILING, WHICHEVER IS LOWER.

F. MOUNT THE OPERABLE PART OF MANUAL PULL STATIONS AT 48 INCHES AFF.

G. PROVIDE POWER LIMITED CIRCUITS.

H. DO NOT LOCATE DETECTORS CLOSER THAN 36 INCHES FROM AN AIR SUPPLY OR RETURN DIFFUSER. INCREASE SEPARATION DISTANCE WHEN ALONG DIRECT PATH OF AIR FLOW OR WHEN AIR VELOCITY IS HIGHER THAN NORMAL.

I. PROVIDE 18 AWG MINIMUM SIGNALING LINE CIRCUITS.

J. PROVIDE 16 AWG MINIMUM INITIATING DEVICE AND NOTIFICATION APPLIANCE CIRCUITS.

K. PROVIDE CLASS B SIGNALING LINE, INITIATING DEVICE, AND NOTIFICATION APPLIANCE CIRCUITS FOR THE FIRE ALARM AND MASS NOTIFICATION SYSTEMS.

L. PROVIDE NOTIFICATION APPLIANCES WITH WHITE FACEPLATES THROUGHOUT FINISHED AREAS OF THE BUILDING. FIRE ALARM AND MASS NOTIFICATION SYSTEMS TO SHARE NOTIFICATION DEVICES AND BE MARKED WITH "ALERT". PROVIDE ADDITIONAL FIRE ALARM AND MASS NOTIFICATION APPLIANCES AS NECESSARY TO MEET THE AUDIBILITY AND INTELLIGIBILITY REQUIREMENTS OF NFPA 72 SECTION 18.4 AND REQUIREMENTS OF UFC 4-021-01 WITH A MINIMUM CIS SCORE OF 0.8 IN ALL NORMALLY OCCUPIED AREAS OF THE BUILDING. ALL STROBES WITHIN THE BUILDING MUST BE SYNCHRONIZED.

M. PROVIDE DUCT SMOKE DETECTORS ON THE SUPPLY SIDE OF AIR HANDLING UNITS OVER 2000 CFM AND THE RETURN SIDE OF AIR HANDLING UNITS OVER 15,000 CFM IN ACCORDANCE WITH UFC 3-600-01 AND NFPA 90A. DUCT SMOKE DETECTORS ARE NOT REQUIRED WHERE THE SPACE SERVED BY AN AHU IS PROTECTED WITH FULL/COMPLETE SMOKE DETECTION.

N. FIRE ALARM INITIATING DEVICES AND NOTIFICATION APPLIANCES ARE SHOWN IN SUGGESTED LOCATIONS. FINAL QUANTITY AND LAYOUT MUST BE IN ACCORDANCE WITH ALL APPLICABLE CODES, MANUFACTURER'S RECOMMENDATIONS, SPECIFICATION SECTION 28 31 76, AND EQUIPMENT LISTINGS. COORDINATE LOCATIONS WITH LIGHTING AND AIR HANDLING SYSTEMS.

O. THE BASE FIRE DEPARTMENT WILL PROVIDE THE PRE-RECORDED TEXT-TO-SPEECH MESSAGES TO THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR HAVING THE PRE-RECORDED MESSAGES AND REQUIRED ALERT TONES PROGRAMMED INTO THE UNIT AT THE FACTORY. MESSAGES MUST BE REPEATED UNTIL THEY ARE TERMINATED BY THE CENTRAL CONTROL OR IN-BUILDING CONTROL UNIT, OR THE USER-DEFINED TIMEOUT PERIOD IS REACHED.

P. THE CONTRACTOR'S QFPE MUST DETERMINE THE NUMBER OF LOCS REQUIRED AND THEIR LOCATION BASED ON THE REQUIREMENTS OF UFC 4-021-01 FOR APPROVAL FROM BASE FIRE DEPARTMENT.

Q. PROVIDE A DETAILED TRANSMITTER ZONE SCHEDULE. A MINIMUM OF 16 ZONES SHALL BE SUPPLIED WITH THE CAPABILITY TO EXPAND TO 32 OR 64 DEPENDING ON THE SIZE OF THE FACILITY.

R. THE EXISTING FOAM SUPPRESSION CONTROL PANEL (FSCP) ASSOCIATED WITH THE FOAM SUPPRESSION SYSTEM SERVING THE UNAFFECTED ISO-MAINTENANCE HANGAR INCLUDING NOTIFICATION APPLIANCES, CIRCUITS, AND ALL OTHER RELATED DEVICES AND EQUIPMENT ARE TO REMAIN IN SERVICE. THE ONLY MODIFICATION WILL INVOLVE CONNECTION OF THE EXISTING FSCP TO COMMUNICATE WITH THE NEW FMCP IN THE REHABILIITATED PORTION OF THE BUILDING.

S. PER TSFPWG G 3-600-01.01-18 SECTION 2-11, ALL EXPOSED ELECTRICAL CABLING ROUTED BELOW RAISED FLOOR AREAS IS REQUIRED TO BE ENCLOSED WITHIN NONCOMBUSTIBLE CONDUIT IN ACCORDANCE WITH NFPA 70 ARTICLE 645. ELECTRICAL CONTRACTOR TO COORDINATE AND CONFIRM SPECIFIC CONDUIT LOCATION, SIZE, AND PLACEMENT WITH GOVERNMENT AND BOEING PRIOR TO PROCUREMENT AND INSTALLATION.

T. PER TSFPWG G 3-600-01.01-18 SECTION 2-11, ALL EXPOSED ELECTRICAL CABLING THAT IS NOT UL-LISTED PLENUM-RATED IN ACCORDANCE WITH NFPA 262 AND UL 910 ROUTED WITHIN THE FLOOR TRENCHES EXTENDING FROM THE OFT COMPUTER ROOM SUB-FLOOR AREA TO CABLE TERMINATION POINTS WITHIN THE OFT SIMULATORS IS REQUIRED TO ENCLOSED WITHIN NONCOMBUSTIBLE CONDUIT IN ACCORDANCE WITH NFPA 70 ARTICLE 645. ONLY POWER SUPPLY CABLES ARE EXPECTED TO BE NON-PLENUM-RATED, HOWEVER ELECTRICAL CONTRACTOR TO COORDINATE AND CONFIRM: 1) WHICH CABLES ARE NOT PLENUM-RATED AND MUST BE ROUTED IN CONDUIT; AND 2) SPECIFIC CONDUIT LOCATION, SIZE, AND PLACEMENT WITH GOVERNMENT AND BOEING PRIOR TO PROCUREMENT AND INSTALLATION.

U. PROVIDE BEAM DETECTION IN THE HIGH BAY AREA IN COMPLIANCE WITH NFPA 72 AND MANUFACTURER'S INSTALLATION GUIDELINES. BEAM DETECTORS MUST BE COMPATIBLE WITH THE FIRE ALARM MASS NOTIFICATION CONTROL PANEL AND SEND ALARM AND INTIATION SIGNALS FOR SMOKE CONTROL SEQUENCE.

V. THESE DOCUMENTS DEPICT A PERFORMANCE LEVEL ENGINEERING DESIGN LAYOUT TO BE UTILIZED AS GUIDANCE FOR THE PLANNING OF THE FIRE ALARM/ MASS NOTIFICATION. PROVIDE COMPLETE DOCUMENTS FOR REVIEW AND APPROVAL FROM THE ENGINEER AND THE AUTHORITY HAVING JURISDICTION PRIOR TO INSTALLATION. INCLUDE IN SHOP DRAWINGS AND CALCULATIONS ANY ADDITIONAL EQUIPMENT NECESSARY, INCLUDING INITIATING DEVICES AND NOTIFICATION APPLIANCES, TO PROVIDE A COMPLETE INSTALLATION AND COMPLY WITH BASE STANDARDS. ALL SYSTEMS WHICH REQUIRE COORDINATION BETWEEN TRADES MUST BE TO THE SATISFACTION OF THE AHJ. ANY DEFICIENCIES, INCONSISTENCIES, AND POORLY COORDINATED INSTALLATIONS MUST BE CORRECTED BY THE CONTRACTOR.

FIRE SPRINKLER GENERAL NOTES

A. PROVIDE AUTOMATIC WET-PIPE SPRINKLER SYSTEMS THROUGHOUT THE ENTIRE BUILDING, DESIGNED AND INSTALLED IN ACCORDANCE WITH UFC 3-600-01, NFPA 13, AND SPECIFICATION 21 13 13. CONTRACTOR IS RESPONSIBLE FOR PROVIDING A COMPLETE CODE COMPLIANT AND OPERABLE FIRE SPRINKLER SYSTEM IN ACCORDANCE WITH NFPA 13 AND CONTRACT DOCUMENTS.

B. DENSITY AND SPACING REQUIREMENTS ARE LISTED IN THE SPRINKLER DESIGN CRITERIA TABLE ON FP101. FIELD VERIFY SYSTEM DESIGN AND LAYOUT PRIOR TO FABRICATION OR INSTALLATION.

C. PROVIDE COMPLETE FIRE SPRINKLER SYSTEM HYDRAULIC CALCULATIONS WITH SHOP DRAWINGS.

D. THE EXISTING FIRE SUPPRESSION SYSTEMS ARE SUPPLIED BY TWO FIRE PUMPS, PRIMARY AND REDUDANT, LOCATED IN THE ADJACENT PUMP BUILDING. FIRE PUMPS ARE RATED FOR 2,500 GPM AT 125 PSI AND ARE SUPPLIED BY TWO 40,000 GALLON WATER STORAGE TANKS. THE TOTAL CALCULATED WATER DEMAND IS EQUAL TO THE FIRE SPRINKLER SYSTEM DEMAND. OUTSIDE HOSE STREAM ALLOWANCE IS SUPPLIED BY BASE DOMESTIC WATER SYSTEM.

E. PROVIDE SPRINKLERS IN THE ENTIRE BUILDING. PROVIDE ORDINARY TEMPERATURE RATED, QUICK-RESPONSE, RECESSED SPRINKLERS WITH CHROME ESCUTCHEONS IN AREAS WITH FINISHED CEILING. PROVIDE ORDINARY TEMPERATURE RATED, QUICK-RESPONSE, UPRIGHT SPRINKLERS WITH BRASS OR CHROME FINISH IN AREAS EXPOSED TO STRUCTURE.

F. PROVIDE PIPE HANGERS ON FIRE SPRINKLER SYSTEM PIPING AND EQUIPMENT IN ACCORDANCE WITH NFPA 13.

G. SEE ARCHITECTURAL DRAWINGS FOR ROOM FINISH SCHEDULE AND ROOM USE. FIELD VERIFY AND COORDINATE THE LOCATIONS OF ALL SYSTEM COMPONENTS INCLUDING PIPING, ALARMS, DRAINS, TEST CONNECTIONS, ETC. WITH ARCHITECTURAL, STRUCTURAL, MECHANICAL, AND ELECTRICAL EQUIPMENT WITHIN THE BUILDING. COORDINATE THE LOCATION OF RISERS, DRAINS, TEST CONNECTIONS, AND OTHER SPRINKLER SYSTEM COMPONENTS WITH ARCHITECTURAL, STRUCTURAL, MECHANICAL, AND ELECTRICAL PORTIONS OF THE BUILDING.

H. PROVIDE SLEEVES AND WALL PLATES FOR ALL PENETRATIONS THROUGH WALLS OR FLOORS. FIELD VERIFY APPROXIMATE WALL AND FLOOR PENETRATIONS SHOWN ON THE PLANS. SEAL PENETRATIONS IN RATED SEPARATIONS TO MEET THE MINIMUM FIRE RATING OF THE WALL OR FLOOR SPECIFIED. SLEEVES MUST BE SIZED AND INSTALLED IN ACCORDANCE WITH EARTHQUAKE PROTECTION REQUIREMENTS.

I. PROVIDE AUXILIARY DRAINAGE IN ACCORDANCE WITH NFPA 13 SECTION 8.16.2.5. PROVIDE AUTOMATIC AIR VENTS AT ALL HIGH POINTS IN EACH WET PIPE SPRINKLER SYSTEM. LOCATE AIR VENTS IN AN ACCESSIBLE LOCATION THAT IS NOT SUSCEPTIBLE TO WATER DAMAGE.

J. PROVIDE SIGNAGE WHERE ACCESS IS REQUIRED TO CONCEALED SPRINKLER EQUIPMENT, VALVES, AND CONTROLS LOCATED IN WALLS OR ABOVE CEILINGS.

K. PROVIDE SCHEDULE 40 BLACK STEEL PIPE FOR ALL WET PIPE SPRINKLER PIPING. PAINT ALL EXPOSED INTERIOR FIRE SPRINKLER PIPING WITH EPOXY TYPE RED PAINT FOR CORROSION PROTECTION. MARK ALL INTERIOR PIPING, EXCEPT BRANCHLINES AND MAINS LESS THAN 2-1/2 INCHES WITH PLASTIC WRAP AROUND-TYPE LABELS CONFORMING WITH ASME/ANSI A13.1. INDICATE THE PIPE FUNCTION AND DIRECTION OF FLOW. STICK-ON, STRAPS, OR ADHESIVE TAPE LABELS ARE NOT PERMITTED. ALL FIRE SUPPRESSION SYSTEM VALVES MUST BE MARKED WITH PERMANENT TAGS INDICATING NORMALLY OPENED OR NORMALLY CLOSED AS WELL AS SYSTEM THEY SERVE.

L. OVERHEAD PIPING SHALL BE PROPERLY SUPPORTED FROM WALL STRUCTURE TO PREVENT MOMENT, SWAY, OR DRIFT. SEISMIC DESIGN CATEGORY D SHALL BE PROVIDED PER NFPA 13.

M. WITHIN 6 MONTHS PRIOR TO SHOP DRAWING SUBMITTAL, CONTRACTOR MUST PERFORM A NEW FIRE HYDRANT FLOW TEST OR OBTAIN CURRENT ANNUAL FIRE PUMP TEST DATA AND CONFIRM FIRE PUMP SIZING FOR PREPARING HYDRAULIC CALCULATIONS. FLOW TEST DATA PROVIDED WAS USED BY JACOBS TO VERIFY ADEQUACY OF THE EXISTING WATER SUPPLY FOR PREPARATION OF THE CONTRACT DOCUMENTS.

N. THESE DOCUMENTS DEPICT PERFORMANCE LEVEL ENGINEERING DESIGN CRITERIA TO BE UTILIZED AS GUIDANCE FOR COMPLETE DESIGN LAYOUT AND CALCULATION OF THE FIRE SPRINKLER SYSTEM BY THE CONTRACTOR. PROVIDE COMPLETE DOCUMENTS FOR REVIEW AND APPROVAL FROM THE ENGINEER AND AUTHORITY HAVING JURISDICTION PRIOR TO INSTALLATION. INCLUDE IN SHOP DRAWINGS AND CALCULATIONS ANY ADDITIONAL EQUIPMENT NECESSARY TO PROVIDE A COMPLETE INSTALLATION AND COMPLY WITH BASE STANDARDS.

O. PROVIDE SLEEVES AND WALL PLATES FOR ALL PENETRATIONS THROUGH WALLS OR FLOORS. FIELD VERIFY APPROXIMATE WALL AND FLOOR PENETRATIONS SHOWN ON THE PLANS. SEAL PENETRATIONS IN RATED SEPARATIONS TO MEET THE MINIMUM FIRE RATING OF THE WALL OR FLOOR SPECIFIED. SLEEVES MUST BE SIZED AND INSTALLED IN ACCORDANCE WITH EARTHQUAKE PROTECTION REQUIREMENTS. WHERE A PARTITION IS INDICATED TO BE RATED, PROVIDE A THROUGH PENETRATION FIRE STOPPING SYSTEM CONSTRUCTED IN STRICT COMPLIANCE WITH THE FIRE TEST DESIGN TESTED AND COMPATIBLE WITH THE LEVEL OF RATING INDICATED AT ALL PENETRATIONS. PROVIDE AN INDUSTRY RECOGNIZED TEST APPLICABLE TO THE PARTITION TYPE. METHODS AND MATERIALS FOR SEALING PENETRATIONS THROUGH WALLS OR FLOORS MUST BE UL APPROVED WHILE SATISFYING APPROVED TESTING MEASURES.

A. THE FOLLOWING AREAS MUST BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH CHAPTER 2 OF TSFPEWG G 3-600-01.01-18 FOR INDIVIDUAL MAC III ELECTRONIC EQUIPEMENT AREAS (EEAS):
CPT ROOM 117, OFT COMPUTER ROOM 126, EDS & EDS COMPUTER ROOMS 125/125A, HIGH BAY AREA: CIRCULATION 110, IAST 115, AIE PTT 116, AND CORRIDOR 200.

B. UNIQUE AND SPECIFIC REQUIREMENTS OF TSFPEWG G 3-600-01.01-18 SECTIONS 2-4 AND 2-5 WHICH EXCEED THOSE SPECIFIED BY UFC 3-600-01 AND APPLICABLE NFPA 13 AND 72 CODES CONSIST OF THOSE LISTED UNDER ITEMS C AND D. CONTRACTOR RESPONSIBLE FOR COMPLIANCE WITH ALL APPLICABLE TSFPEWG G 3-600-01.01-18 SECTION 2-4 AND 2-5 REQUIREMENTS.

C. ACTIVATION OF THE AUTOMATIC SPRINKLER SYSTEM WITHIN ANY EEA ROOM AUTOMATICALLY DISCONNECTS POWER TO THE APPLIACABLE AREA. ONLY ACTIVATION OF THE AUTOMATIC SPRINKLER IS ALLOWED TO AUTOMATICALLY DISCONNECT POWER TO THE ELECTRONIC EQUIPMENT. SPRINKLER SYSTEM ACTIVATION WITHIN EEA WILL NOT SHUT DOWN EQUIPMENT COOLING SYSTEMS IN THE AFFECTED EEA.

D. ACTIVATION OF A SINGLE SMOKE DETECTOR WITHIN EEAS WILL NOT INITIATE A GENERAL BUILDING FIRE EVACUATION ALARM (RE:A1/FP502).

WATERFLOW TEST/ FIRE PUMP DATA

TEST DATE: 08-24-2021

LOCATION: BLDG 1455 MAXWELL, AFB

PERFORMED BY: JACOBS ENGINEERING

OUTLET DIAMETER: 2-1/2 INCH

OUTLETS FLOWING: 1

OUTLET COEFFICIENT: .90

STATIC PRESSURE: 98.4 PSI

RESIDUAL PRESSURE: 68.6 PSI

PITOT PRESSURE: 52 PSI

DISCHARGE FLOW: 1,210 GPM

FLOW AVAILABLE AT 20 PSI: 2,040 GPM

EXISTING PUMP RATED FLOW: 2500 GPM

EXISTING PUMP RATED PRESSURE: 125 PSI

US Army Corps of Engineers
Louisville District ®

SEAN BECHTELHEIMER
144133
LICENSED PROFESSIONAL ENGINEER
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: R. DIBLE
DRAWN BY: Z. HARRELL
CHECKED BY: H. LEFKOWITZ
SUBMITTED BY: E. OLMESS
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201F-001
SIZE: ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street Fort Worth, TX 76102
Texas Registered Firm F-2966

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
GENERAL NOTES AND SYMBOLS

SHEET ID
B1455
F-001

W912QR23R0003_Plans-0000

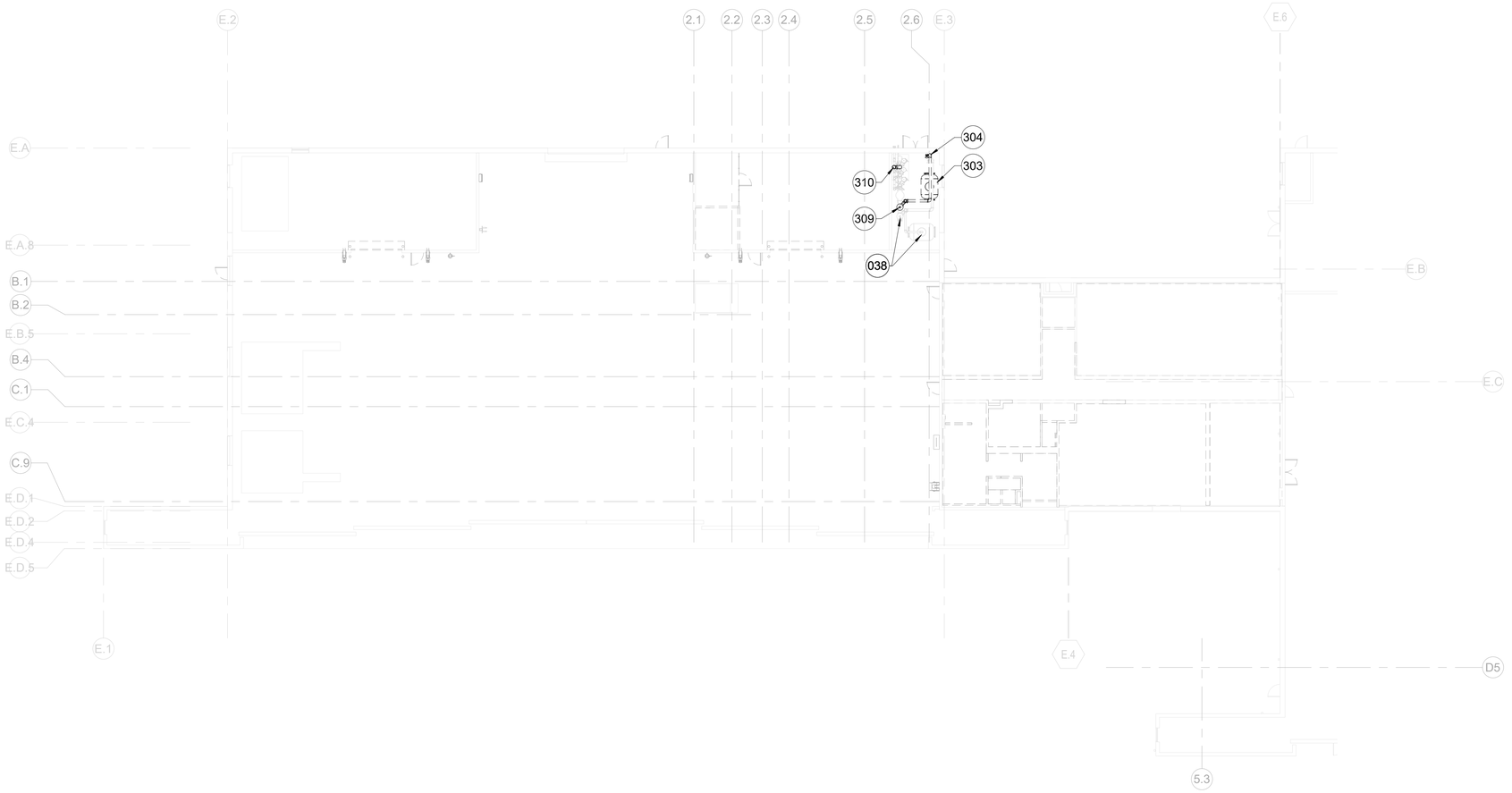
CERTIFIED FINAL DESIGN

FIRE PROTECTION GENERAL NOTES

A.	REFER TO SHEET F-001 FOR ABBREVIATIONS, SYMBOLS, AND GENERAL NOTES.
B.	REFER TO SHEET FP501 AND FP502 FOR FIRE SPRINKLER DETAILS.
C.	REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR COORDINATION WITH LIGHTS, MECHANICAL DIFFUSERS, AND CEILING GRID.
D.	HALFTONED EQUIPMENT INDICATES EXISTING TO REMAIN, DASHED EQUIPMENT INDICATES TO BE DEMOLISHED, AND FULL TONE EQUIPMENT INDICATE NEW INSTALLATION.

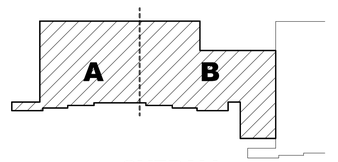
KEYNOTES

038	OTHER FOAM SYSTEM AND RELATED EQUIPMENT WILL BE REMOVED AT A FUTURE DATE BY OTHERS ACCORDING TO AFCEC DIRECTION.
303	DEMOLISH FOAM BLADDER TANK SERVING PRE-EXISTING HANGAR BAY.
304	DEMOLISH FOAM TEST HEADER SERVING PRE-EXISTING HANGAR BAY.
309	DEMOLISH AND REPLACE FOAM RISER SERVING PRE-EXISTING HANGAR BAY WITH A BLIND FLANGE.
310	DEMOLISH AND REROUTE WET-PIPE RISER MAIN. REFER TO FP101 AND FP301 FOR RE-ROUTING.



A1 FIRE PROTECTION OVERALL DEMOLITION FLOOR PLAN - LEVEL 1

1/16" = 1'-0"



OVERALL
KEY PLAN

GRAPHIC SCALE

16 12 8 4 0 16 32

SCALE: 1/16"=1'-0"

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
SEAN BECHTELHEIMER
144133
LICENSED
PROFESSIONAL ENGINEER
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: R. DIBLE
DRAWN BY: Z. HARRELL
CHECKED BY: H. LEFKOWITZ
SUBMITTED BY: E. OLMESS
ANSI D 22x34

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT21920\FD101

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street Fort Worth, TX 76102
Phone: (817)820-4000 TBPE No. F-2966

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, PZ#: 496395
FIRE PROTECTION OVERALL DEMOLITION FLOOR PLAN - LEVEL 1

SHEET ID
B1455
FD101

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

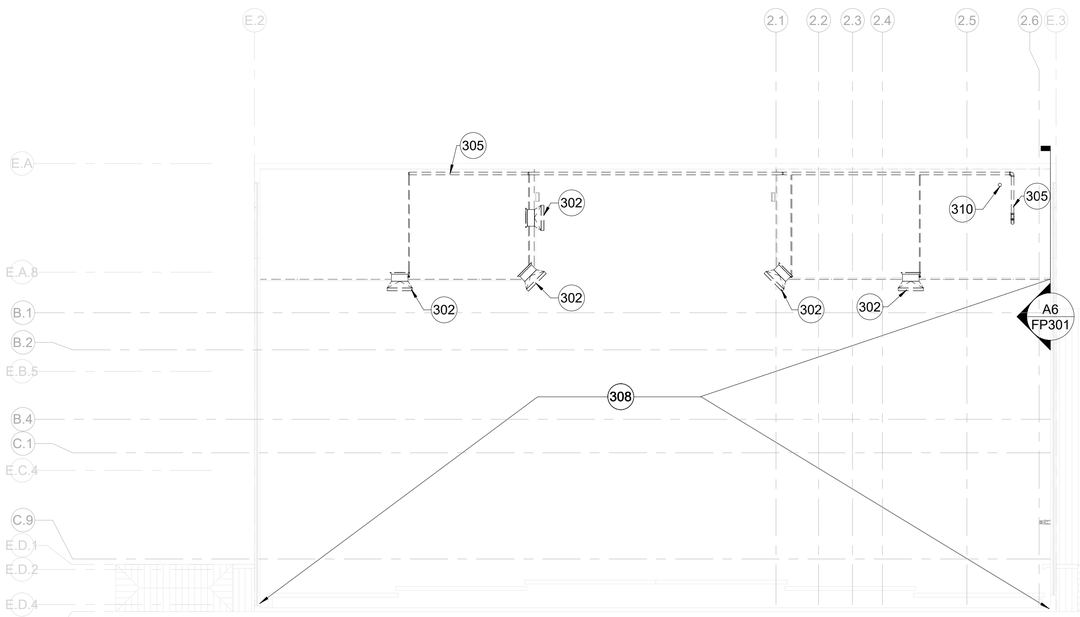
CERTIFIED FINAL DESIGN

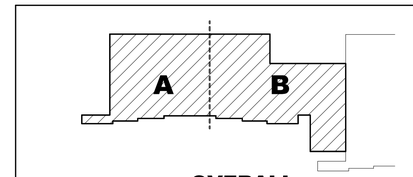
FIRE PROTECTION GENERAL NOTES

A.	REFER TO SHEET F-001 FOR ABBREVIATIONS, SYMBOLS, AND GENERAL NOTES.
B.	REFER TO SHEET FP501 AND FP502 FOR FIRE SPRINKLER DETAILS.
C.	REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR COORDINATION WITH LIGHTS, MECHANICAL DIFFUSERS, AND CEILING GRID.
D.	HALFTONED EQUIPMENT INDICATES EXISTING TO REMAIN, DASHED EQUIPMENT INDICATES TO BE DEMOLISHED, AND FULL TONE EQUIPMENT INDICATE NEW INSTALLATION.

KEYNOTES

302	DEMOLISH FOAM GENERATOR.
305	DEMOLISH FOAM SUPPLY PIPING ON MEZZANINE.
308	DEMOLISH OVERHEAD WET-PIPE SPRINKLER BRANCHLINES IN PRE-EXISTING HANGAR BAY.
310	DEMOLISH AND REROUTE WET-PIPE RISER MAIN. REFER TO FP101 AND FP301 FOR RE-ROUTING.





OVERALL KEY PLAN

GRAPHIC SCALE

16 12 8 4 0 16 32

SCALE: 1/16"=1'-0"

PLAN NORTH

TRUE N

A1 FIRE PROTECTION OVERALL DEMOLITION FLOOR PLAN - LEVEL 2

1/16" = 1'-0"

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
SEAN BECHTELHEIMER
144133
LICENSED
PROFESSIONAL ENGINEER
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: R. DIBLE
DRAWN BY: Z. HARRELL
CHECKED BY: H. LEFKOWITZ
SUBMITTED BY: E. OLNESS
QC BY: ANSI D 22x34

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201FD102

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
ACCESS No. 1000013

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
FIRE PROTECTION OVERALL DEMOLITION FLOOR PLAN - LEVEL 2

SHEET ID
B1455
FD102

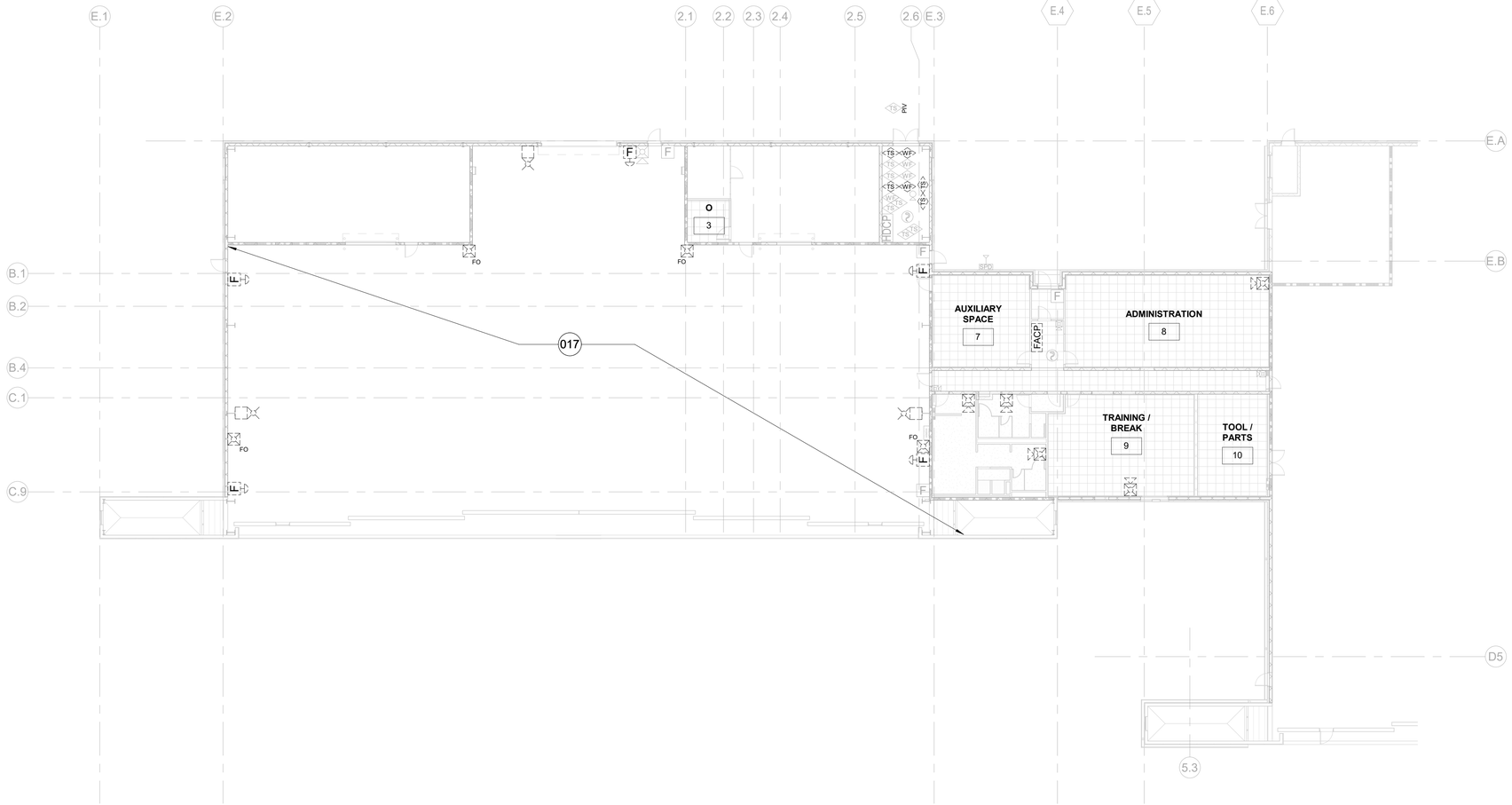
W912QR23R0003_Plans-0000

FIRE ALARM GENERAL NOTES

A.	REFER TO SHEET F-001 FOR ABBREVIATIONS, SYMBOLS, AND GENERAL NOTES
B.	REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR COORDINATION WITH LIGHTS, MECHANICAL DIFFUSERS, AND CEILING GRID.
C.	HALF TONED DEVICES INDICATES EXISTING TO REMAIN, DASHED DEVICES INDICATES TO BE DEMOLISHED, AND FULL TONE DEVICES INDICATES NEW INSTALLATION.

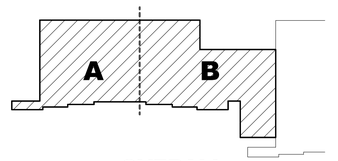
KEYNOTES

017	DEMOLISH ALL FOAM RELATED FIRE ALARM NOTIFICATION AND INITIATION DEVICES.



A1 FIRE ALARM DEMOLITION OVERALL PLAN

1/16" = 1'-0"



OVERALL
KEY PLAN

GRAPHIC SCALE

16 12 8 4 0 16 32

SCALE: 1/16"=1'-0"

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
SEAN BECHTELHEIMER
144133
LICENSED
PROFESSIONAL ENGINEER
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY:	ISSUE DATE:
H. LEFKOWITZ	23 NOVEMBER 2022
DRAWN BY:	SOLICITATION NO.:
Z. HARRELL	CONTRACT NO.:
CHECKED BY:	DRAWING CODE::
H. LEFKOWITZ	
SUBMITTED BY:	FILE NAME:
E. OLMESS	SXHT21920\FD110
ANSI D 22x34	

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

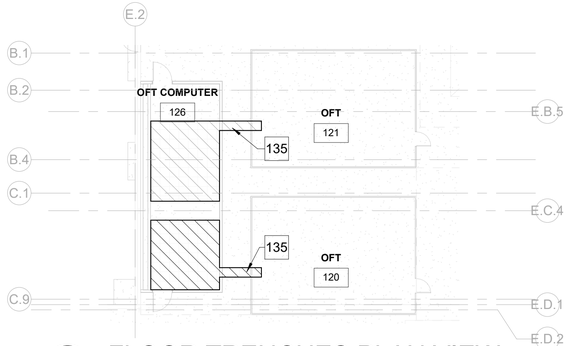
Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street Fort Worth, TX 76102
ADDRESS No. 100403-12

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
FIRE ALARM OVERALL DEMOLITION FLOOR PLAN

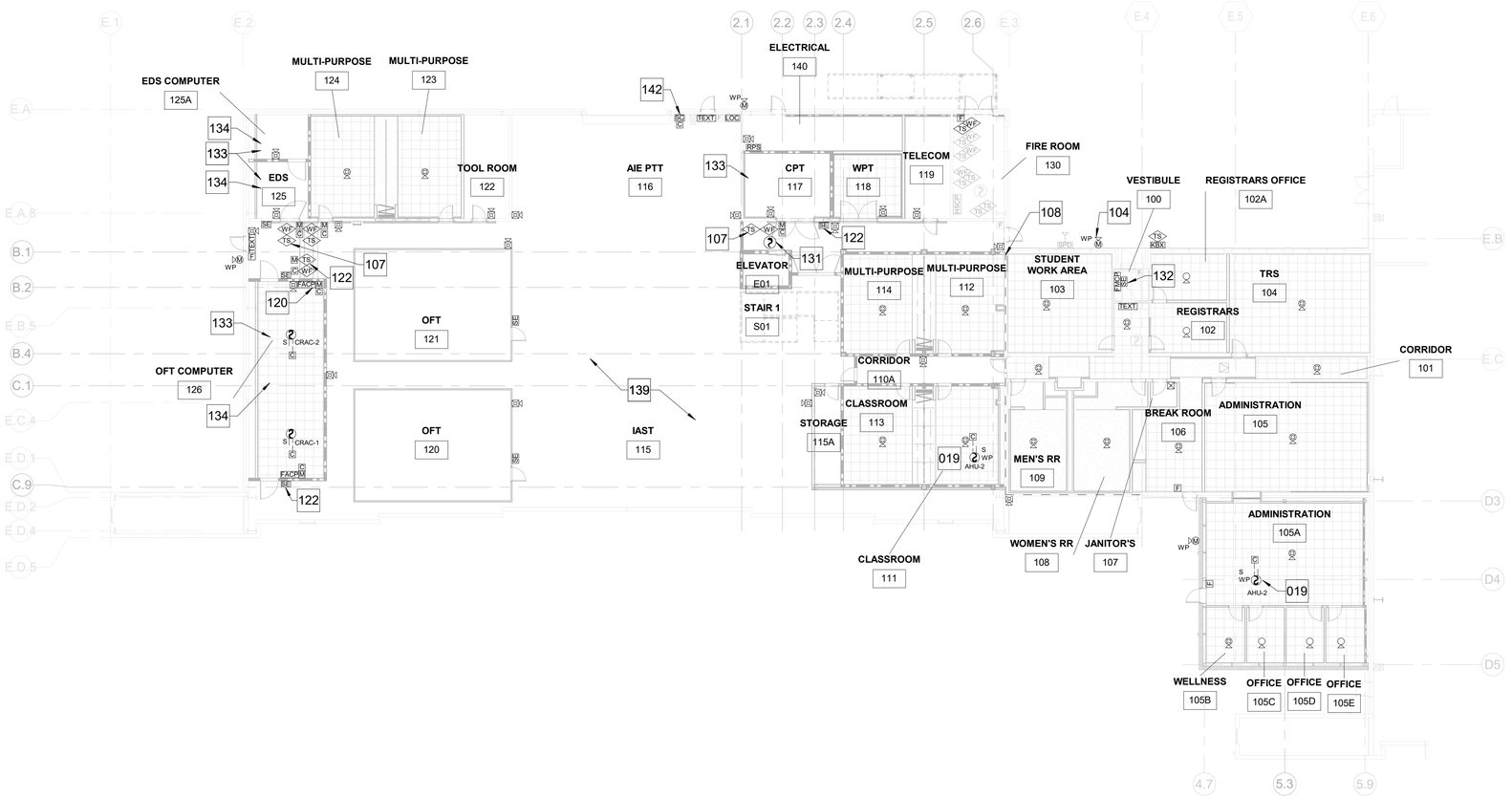
SHEET ID
B1455
FD110

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



F2 FLOOR TRENCHES PLAN VIEW
1/16" = 1'-0"



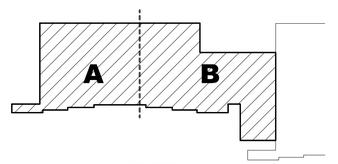
A1 FIRE ALARM OVERALL PLAN - LEVEL 1
1/16" = 1'-0"

FIRE ALARM GENERAL NOTES

A.	REFER TO SHEET F-001 FOR ABBREVIATIONS, SYMBOLS, AND GENERAL NOTES
B.	REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR COORDINATION WITH LIGHTS, MECHANICAL DIFFUSERS, AND CEILING GRID.
C.	HALF TONED DEVICES INDICATES EXISTING TO REMAIN, DASHED DEVICES INDICATES TO BE DEMOLISHED, AND FULL TONE DEVICES INDICATES NEW INSTALLATION.

KEYNOTES

019	MONITOR DUCT SMOKE DETECTOR UPON ACTIVATION AND SHUT DOWN AIR HANDLING UNIT.
104	WEATHERPROOF EXIT MNS LOUDSPEAKERS ADJACENT TO BUILDING EXITS TO PROVIDE MINIMUM CIS SCORE OF 0.70.
107	PROVIDE WATERFLOW SWITCH AND ADDRESSABLE CONTROL MODULE FOR EQUIPMENT POWER SUPPLY SHUNT TRIP FOR SPRINKLER SUPPLY PIPING SERVING ELECTRONIC EQUIPMENT AREA.
108	PROVIDE SECURE PENETRATIONS ALONG DASHED LINE. RE: F1/FA501 FOR DETAIL.
120	PROVIDE MONITOR MODULES FOR INTEGRATION OF VENDOR SUPPLIED FIRE ALARM SYSTEM WITHIN OFT ENCLOSURES. VENDOR SUPPLIED FIRE ALARM SYSTEM TO INCLUDE FIRE ALARM CONTROL PANEL IN OFT COMPUTER ROOM, SMOKE DETECTION WITHIN OFT ENCLOSURE, AND NOTIFICATION WITHIN OFT ENCLOSURE.
122	TAMPER COVERED MANUAL SMOKE EXHAUST SYSTEM ACTIVATION STATION WITH KEY-OPERATED DEACTIVATION SWITCH AT EEA ROOM EXIT.
131	PROVIDE SMOKE DETECTOR IN ELEVATOR LOBBY FOR ELEVATOR RECALL.
132	TAMPER COVERED MANUAL SMOKE EXHAUST SYSTEM ACTIVATION STATION WITH KEY-OPERATED DEACTIVATION SWITCH FOR OPEN BAY EEA.
133	PROVIDE SPOT TYPE SMOKE DETECTION IN ACCORDANCE WITH NFPA 72 IN EACH ELECTRONIC EQUIPMENT AREA. ACTIVATION OF A SINGLE DETECTOR INITIATES AUDIBLE/VISIBLE NOTIFICATION WITH AREA. ACTIVATION OF A SECOND DETECTOR INITIATES GENERAL BUILDING FIRE ALARM.
134	PER TSFPWG G 3-600-01.01-18 SECTION 2-11, ALL EXPOSED ELECTRICAL CABLING ROUTED BELOW RAISED FLOOR AREAS IS REQUIRED TO BE ENCLOSED WITHIN NONCOMBUSTIBLE CONDUIT IN ACCORDANCE WITH NFPA 70 ARTICLE 645. ELECTRICAL CONTRACTOR TO COORDINATE AND CONFIRM SPECIFIC CONDUIT LOCATION, SIZE, AND PLACEMENT WITH GOVERNMENT AND BOEING PRIOR TO PROCUREMENT AND INSTALLATION.
135	PER TSFPWG G 3-600-01.01-18 SECTION 2-11, ALL EXPOSED ELECTRICAL CABLING THAT IS NOT UL-LISTED PLENUM-RATED IN ACCORDANCE WITH NFPA 262 AND UL 910 ROUTED WITHIN THE FLOOR TRENCHES EXTENDING FROM THE OFT COMPUTER ROOM SUB-FLOOR AREA TO CABLE TERMINATION POINTS WITHIN THE OFT SIMULATORS IS REQUIRED TO ENCLOSED WITHIN NONCOMBUSTIBLE CONDUIT IN ACCORDANCE WITH NFPA 70 ARTICLE 645. ONLY POWER SUPPLY CABLES ARE EXPECTED TO BE NON-PLENUM-RATED, HOWEVER ELECTRICAL CONTRACTOR TO COORDINATE AND CONFIRM: 1) WHICH CABLES ARE NOT PLENUM-RATED AND MUST BE ROUTED IN CONDUIT; AND 2) SPECIFIC CONDUIT LOCATION, SIZE, AND PLACEMENT WITH GOVERNMENT AND BOEING PRIOR TO PROCUREMENT AND INSTALLATION.
139	PROVIDE PROJECTED BEAM TYPE SMOKE DETECTION IN THE OPEN BAY AREA IN ACCORDANCE WITH NFPA 72 AND MANUFACTURER'S GUIDELINES. REFER TO SHEET FA120 FOR SUGGESTED DEVICE LOCATIONS AND FA502 FOR OPERATIONAL CONTROL FUNCTIONS.
142	MANUAL HAND SWITCH TO OPEN ROOF VENTILATION LOUVERS. REFER TO MECHANICAL DRAWINGS.



OVERALL
KEY PLAN

GRAPHIC SCALE
16 12 8 4 0 16 32
SCALE: 1/16"=1'-0"

PLAN NORTH
TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
SEAN BECHTELHEIMER
144133
LICENSED
PROFESSIONAL ENGINEER
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: R. DIBLE
DRAWN BY: Z. HARRELL
CHECKED BY: H. LEFKOWITZ
SUBMITTED BY: E. OLNESS
QC BY: E. OLNESS
AMSI ID: 22x34

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT21920.1FA110

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS ENGINEERING F-2966

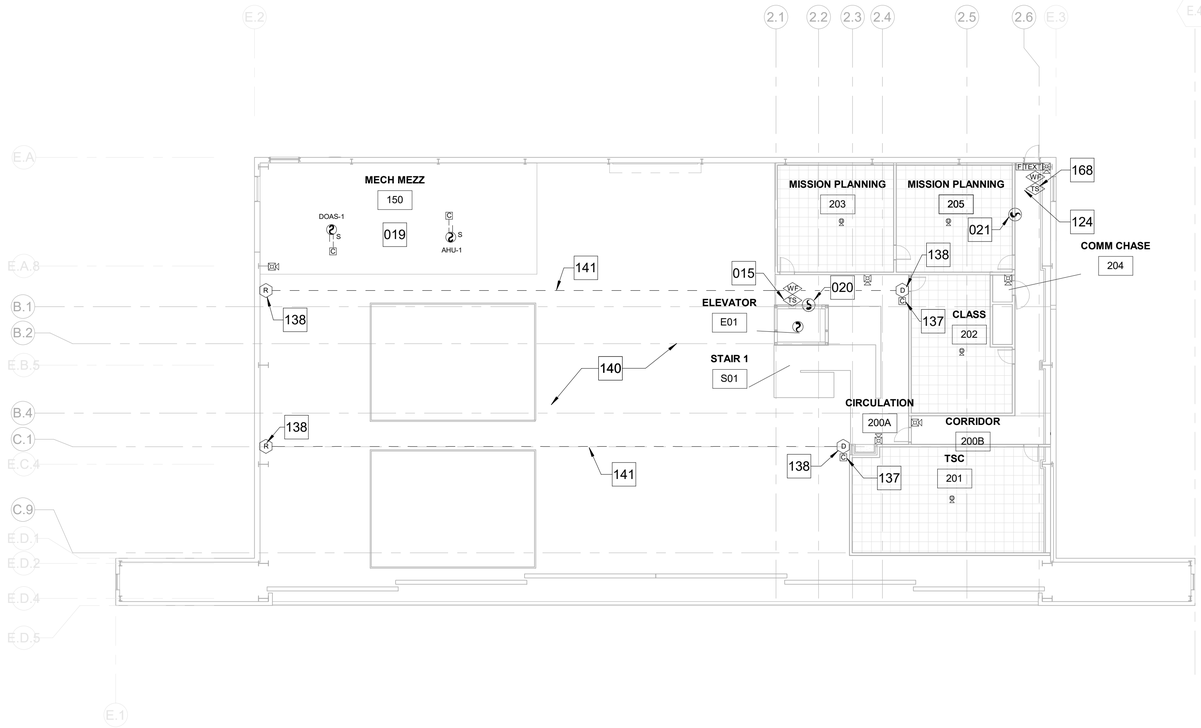
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
FIRE ALARM OVERALL PLAN - LEVEL 1

SHEET ID
B1455
FA110

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN



A1 FIRE ALARM OVERALL PLAN - LEVEL 2

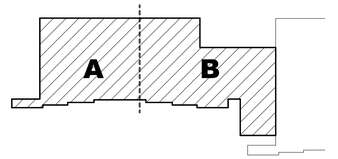
1/16" = 1'-0"

FIRE ALARM GENERAL NOTES

A.	REFER TO SHEET F-001 FOR ABBREVIATIONS, SYMBOLS, AND GENERAL NOTES
B.	REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR COORDINATION WITH LIGHTS, MECHANICAL DIFFUSERS, AND CEILING GRID.
C.	HALF TONED DEVICES INDICATES EXISTING TO REMAIN, DASHED DEVICES INDICATES TO BE DEMOLISHED, AND FULL TONE DEVICES INDICATES NEW INSTALLATION.

KEYNOTES

015	MONITOR SUPERVISED SHUT-OFF VALVE AND WATERFLOW SWITCH IN PIPING TO ELEVATOR HOISTWAY. ACTUATION OF WATERFLOW SWITCH TO SHUNT TRIP BREAKER. WATERFLOW SWITCH MUST HAVE NO TIME DELAY CAPABILITY COORDINATE LOCATION OF VALVE FOR ACCESSIBILITY.
019	MONITOR DUCT SMOKE DETECTOR UPON ACTIVATION AND SHUT DOWN AIR HANDLING UNIT.
020	MOUNT SMOKE DETECTOR FOR ELEVATOR RECALL ON THE WALL ABOVE AND WITHIN 60 INCHES FROM THE TOP OF THE ELEVATOR DOOR PER NFPA 72.
021	WALL MOUNT SMOKE DETECTORS ABOVE FIRE ALARM PANELS PER NFPA 72.
124	RECESS MOUNTED LOCAL OPERATING CONSOLE WITH MICROPHONE AND HVAC SHUTOFF SWITCH. PROVIDE CONTROL MODULE TO SHUT OFF SPEAKERS IN THE VICINITY OF THE LOC WHEN MICROPHONE IS IN USE TO PREVENT FEEDBACK.
137	PROVIDE CONTROL MODULE FOR ACTUATION OF ROOF VENTILATION LOUVERS AT NORTH AND SOUTH END OF BUILDING TO OPEN POSITION UPON BEAM DETECTION ACTIVATION SIGNAL.
138	PROVIDE BEAM DETECTION IN OPEN BAY AREA IN ACCORDANCE WITH NFPA 72 AND MANUFACTURER'S INSTALLATION GUIDELINES. BEAM DETECTORS TO BE MOUNTED BETWEEN 8-10 FT ABOVE SECOND LEVEL FINISHED FLOOR. BEAM REFLECTORS TO BE MOUNTED AT THE SAME ELEVATION AS BEAM DETECTORS.
140	PER NFPA 72 SECTION 17.7.3.7.5 A PROJECTED BEAM-TYPE SMOKE DETECTOR SHALL BE CONSIDERED EQUIVALENT TO A ROW OF SPOT DETECTORS FOR LEVEL AND SLOPING CEILING APPLICATIONS.
141	SCHEMATIC REPRESENTATION OF PROJECTED BEAM FROM DETECTOR TO REFLECTIVE MIRROR. DISTANCE OF BEAM SHALL NOT EXCEED MANUFACTURER'S LISTING.
168	FLOOR CONTROL VALVE ASSEMBLY SERVING SECOND FLOOR ADMIN AREA.



OVERALL
KEY PLAN

GRAPHIC SCALE

16 12 8 4 0 16 32

SCALE: 1/16"=1'-0"

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
SEAN BECHTELHEIMER
144133
LICENSED
PROFESSIONAL ENGINEER
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: R. DIBLE
DRAWN BY: Z. HARRELL
CHECKED BY: H. LEFKOWITZ
SUBMITTED BY: E. OLNESS
QA/QC BY:
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT21920.1FA120
ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
TBPE Firm Registration Number: F-2

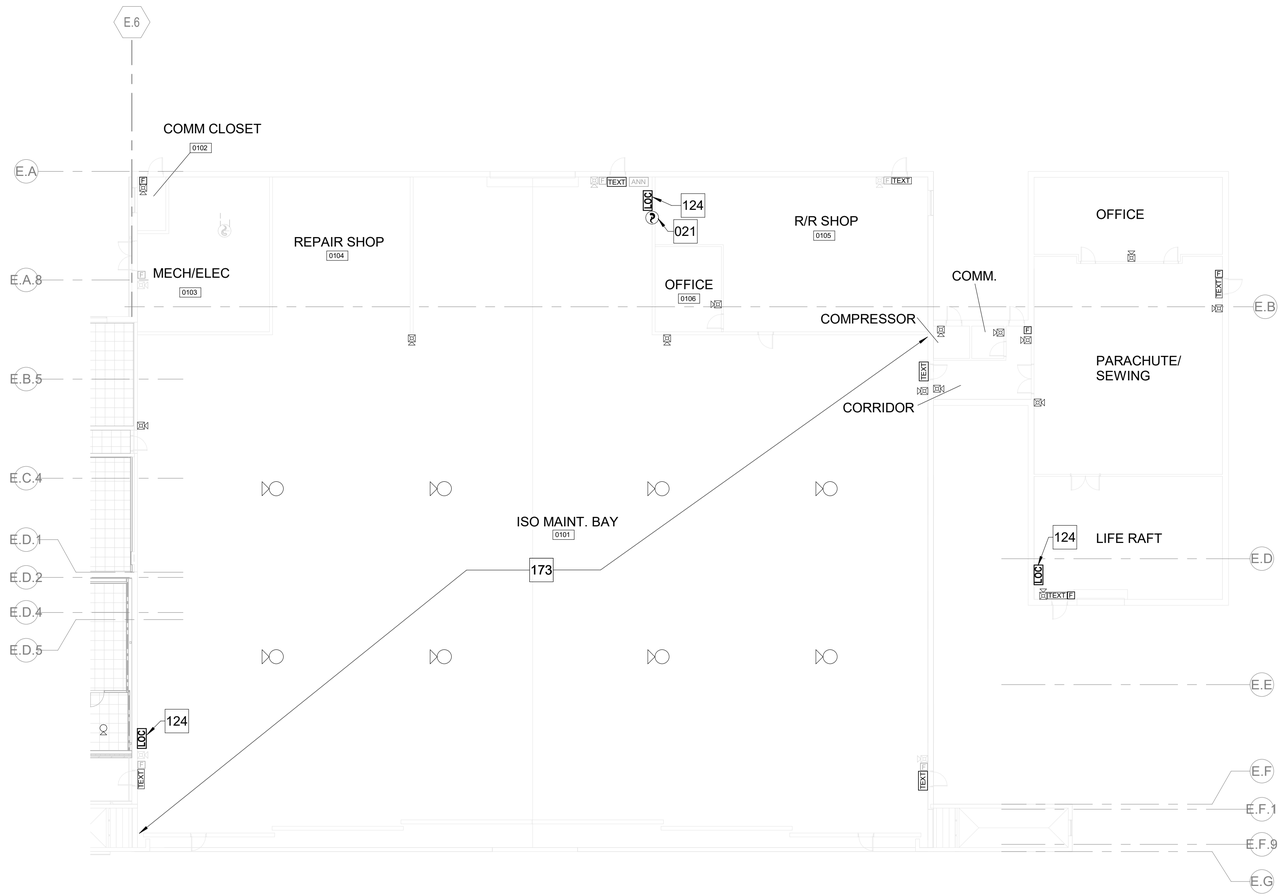
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
FIRE ALARM OVERALL PLAN - LEVEL 2

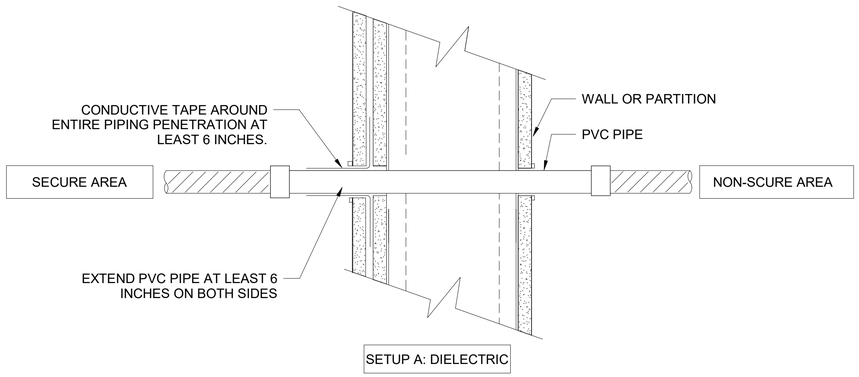
SHEET ID
B1455
FA120

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

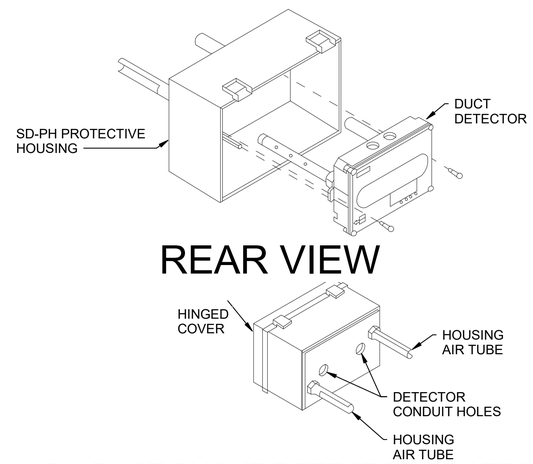
CERTIFIED FINAL DESIGN


E.6
COMM CLOSET
0102
E.A
E.A.8
MECH/ELEC
0103
REPAIR SHOP
0104
OFFICE
0106
R/R SHOP
0105
OFFICE
COMM.
COMPRESSOR
PARACHUTE/
SEWING
CORRIDOR
ISO MAINT. BAY
0101
173
124
021
124
LIFE RAFT
E.B
E.B.5
E.C.4
E.D.1
E.D.2
E.D.4
E.D.5
E.D
E.E
E.F
E.F.1
E.F.9
E.G
TEXT
TEXT
TEXT



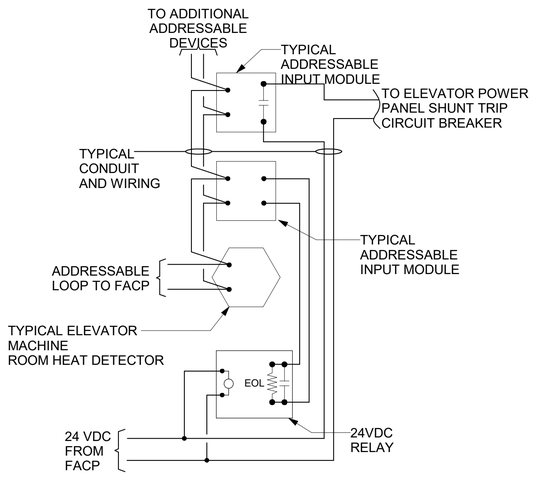
F1 SECURE AREA PENETRATION DETAIL

N.T.S.



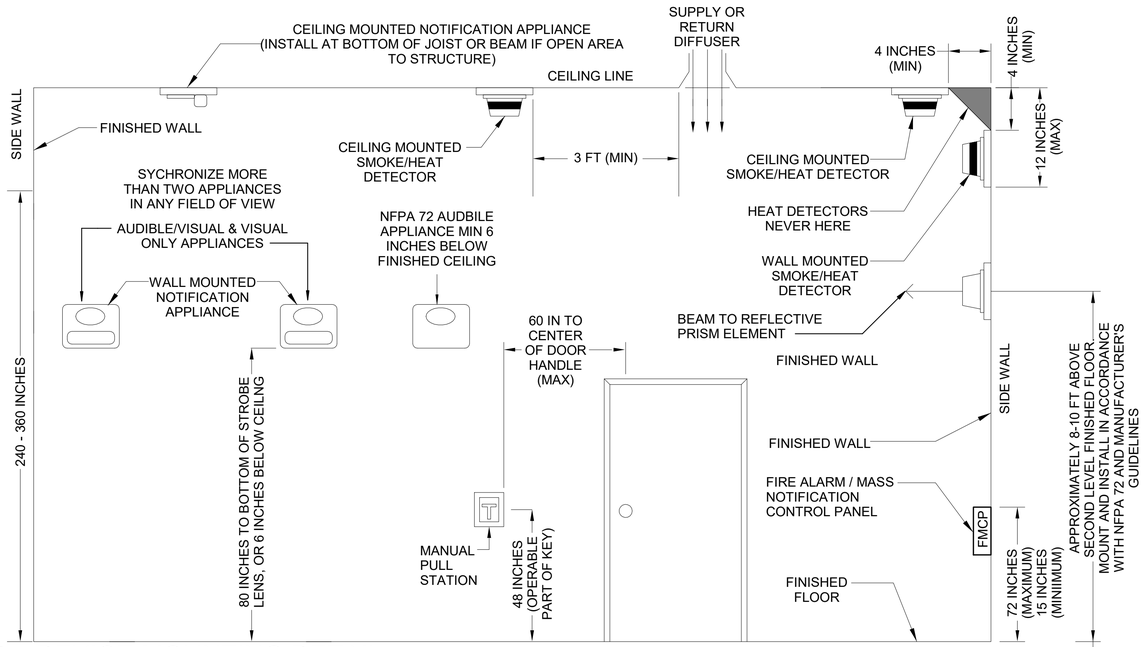
C1 DUCT SMOKE DETECTOR PROTECTIVE HOUSING DETAIL

N.T.S.



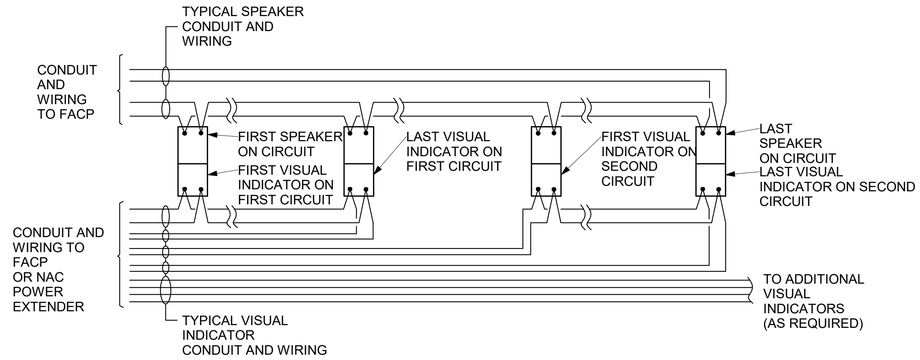
A1 TYPICAL ELEVATOR POWER SHUTDOWN / FIRE ALARM WIRING DETAIL

NONE



C6 DEVICE MOUNTING DETAIL

N.T.S.



A6 TYPICAL AUDIBLE & VISUAL DEVICE WIRING DETAIL WITH SPEAKERS

NONE

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
SEAN BECHTELHEIMER
144133
LICENSED
PROFESSIONAL ENGINEER
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY:	R. DIBLE
DRAWN BY:	Z. HARRELL
CHECKED BY:	H. LEFKOWITZ
SUBMITTED BY:	E. OLNESS
SIZE:	ANSI D 22x34
ISSUE DATE:	23 NOVEMBER 2022
SOLICITATION NO.:	
CONTRACT NO.:	
DRAWING CODE:	
FILE NAME:	SXHTZ-19201FA501

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS Reg. No. F2966

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
FIRE ALARM DETAILS

SHEET ID
B1455
FA501

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN

SYSTEM OUTPUTS

| CONTROL UNIT ANNUNCIATION | NOTIFICATION | | | | | | | | | | | | | | | | | | | | | | CONTROL FUNCTIONS | | | | | | | | | | | | | | | | | | |

FIRE SUPPRESSION DESIGN CRITERIA

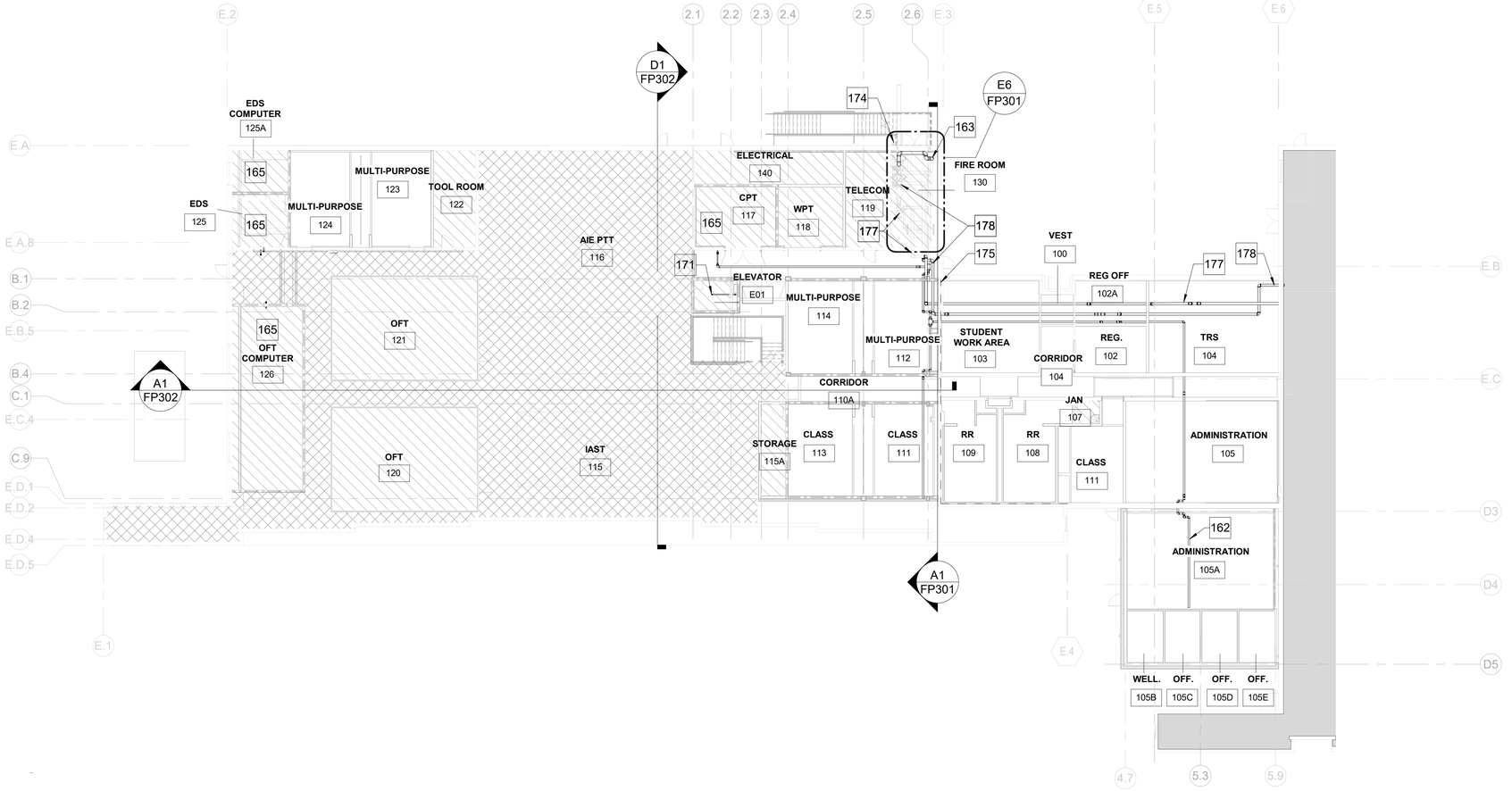
HATCH PATTERN	ROOM/AREA	OCCUPANCY CLASS	DESIGN REQUIREMENTS	DURATION OF SUPPLY	MAXIMUM SPRINKLER SPACING	REQUIRED SPRINKLER
	OUTSIDE LIMITS OF THIS PHASE OF CONSTRUCTION. EXISTING SPRINKLER PROTECTION TO REMAIN.					
(NO HATCH)	OFFICES, CORRIDORS, RESTROOMS, BREAKROOMS	LIGHT HAZARD	.10 GPM/SF OVER MOST REMOTE 1,500 SQ.FT. PLUS 250 GPM HOSE STREAM	60 MIN	225 SF	ORDINARY, QUICK RESPONSE K= 5.6
	SIMULATOR BAYS, ATD. AREA, MECH/ ELEC, STORAGE, EEA'S	ORDINARY HAZARD	.20 GPM/SF OVER MOST REMOTE 2,500 SQ.FT. PLUS 250 GPM HOSE STREAM	60 MIN	130 SF	INTERMEDIATE, QUICK RESPONSE K=8.0 CEILING HEIGHT < 30 FEET K= 11.2 CEILING HEIGHT > 30 FEET
	OPEN AREA	ORDINARY HAZARD	12 HEADS AT 7 PSI PLUS 500 GPM HOSE STREAM	60 MIN	100 SF	INTERMEDIATE, STANDARD RESPONSE CMSA K= 25.2 CEILING HEIGHT > 60 FEET

FIRE PROTECTION GENERAL NOTES

A.	REFER TO SHEET F-001 FOR ABBREVIATIONS, SYMBOLS, AND GENERAL NOTES.
B.	REFER TO SHEET FP501 AND FP502 FOR FIRE SPRINKLER DETAILS.
C.	REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR COORDINATION WITH LIGHTS, MECHANICAL DIFFUSERS, AND CEILING GRID.
D.	HALFTONED EQUIPMENT INDICATES EXISTING TO REMAIN, DASHED EQUIPMENT INDICATES TO BE DEMOLISHED, AND FULL TONE EQUIPMENT INDICATE NEW INSTALLATION.

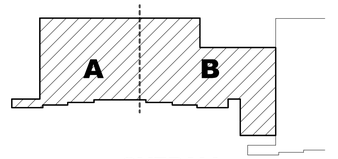
KEYNOTES

162	EXTEND EXISTING WET-PIPE SPRINKLER OFFICE ZONE TO PROTECT NEW BUILDING ADDITION.
163	UP TO SECOND LEVEL.
165	PROVIDE SEPARATE ISOLATION CONTROL VALVES AND WATERFLOW SWITCHES FOR SPRINKLER PROTECTION IN ELECTRONIC EQUIPMENT ROOMS PER TSFPEWG.
171	PROVIDE SPRINKLERS WITH UL LISTED GUARDS IN ELEVATOR PITS, MECHANICAL, EES, AND ELECTRICAL ROOMS WITH UNIMPROVED CEILINGS.
174	FIRE DEPARTMENT CONNECTION.
175	PROVIDE SECURE PENETRATIONS ALONG DASHED LINE. RE: E7/FP501 FOR DETAIL.
177	FOAM RISER SERVING ISO MAINTENANCE HANGAR BAY. RE-ROUTE MAIN TO AVOID OBSTRUCTIONS WITH OTHER DISCIPLINES.
178	WET-PIPE RISER SERVING ISO MAINTENACE HANGAR BAY. RE-ROUTE MAIN TO AVOID OBSTRUCTIONS WITH OTHER DISCIPLINES.



A1 FIRE PROTECTION OVERALL FLOOR PLAN - LEVEL 1

1/16" = 1'-0"



OVERALL KEY PLAN

GRAPHIC SCALE

16 12 8 4 0 16 32

SCALE: 1/16"=1'-0"

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
SEAN BECHTELHEIMER
144133
LICENSED
PROFESSIONAL ENGINEER
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: R. DIBLE
DRAWN BY: Z. HARRELL
CHECKED BY: H. LEFKOWITZ
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT21920 FP101

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS No. W2R023

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
FIRE PROTECTION OVERALL FLOOR PLAN - LEVEL 1

SHEET ID
B1455
FP101

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN

FIRE SUPPRESSION DESIGN CRITERIA

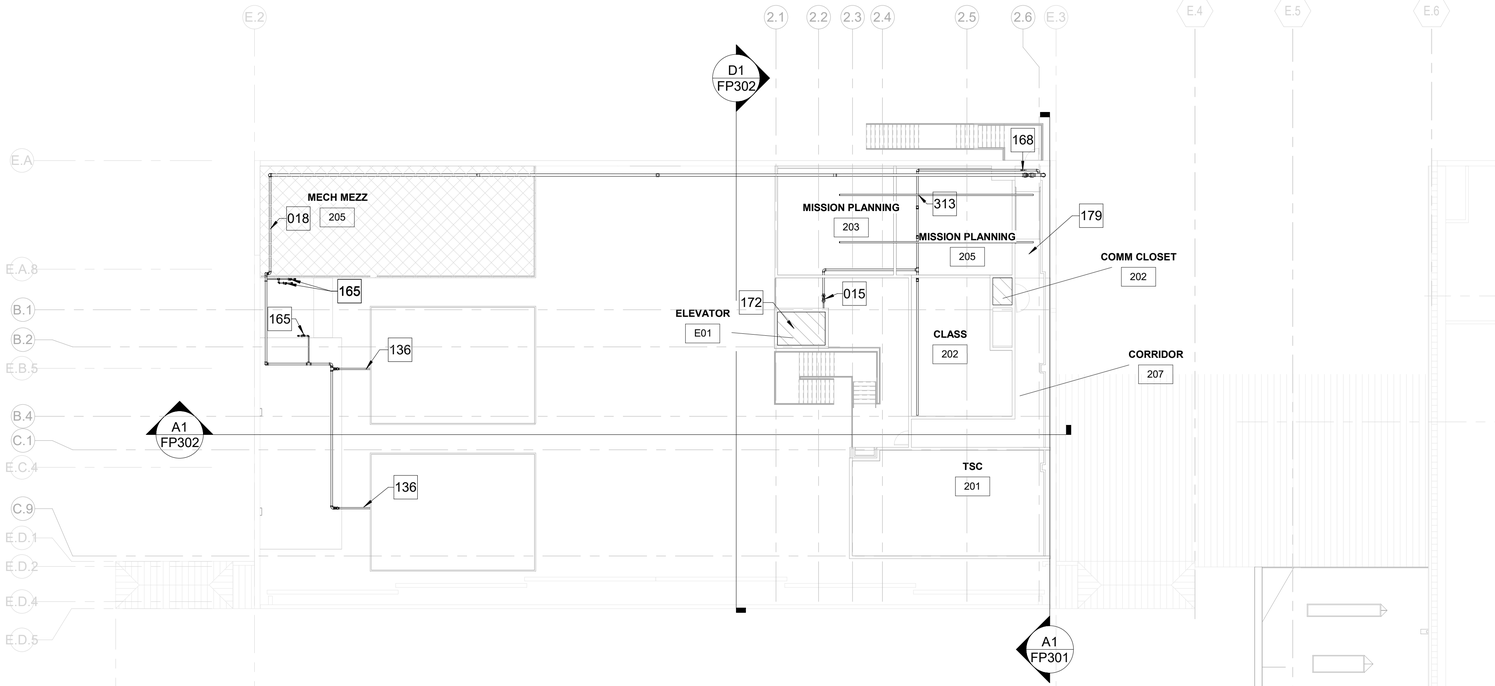
HATCH PATTERN	ROOM/AREA	OCCUPANCY CLASS	DESIGN REQUIREMENTS	DURATION OF SUPPLY	MAXIMUM SPRINKLER SPACING	REQUIRED SPRINKLER
	OUTSIDE LIMITS OF THIS PHASE OF CONSTRUCTION. EXISTING SPRINKLER PROTECTION TO REMAIN.					
(NO HATCH)	OFFICES, CORRIDORS, RESTROOMS, BREAKROOMS	LIGHT HAZARD	.10 GPM/SF OVER MOST REMOTE 1,500 SQ.FT. PLUS 250 GPM HOSE STREAM	60 MIN	225 SF	ORDINARY, QUICK RESPONSE K= 5.6
	SIMULATOR BAYS, ATD AREA, MECH/ ELEC, STORAGE, EEA'S	ORDINARY HAZARD	.20 GPM/SF OVER MOST REMOTE 2,500 SQ.FT. PLUS 250 GPM HOSE STREAM	60 MIN	130 SF	INTERMEDIATE, QUICK RESPONSE K=8.0 CEILING HEIGHT < 30 FEET K= 11.2 CEILING HEIGHT > 30 FEET
	OPEN AREA	ORDINARY HAZARD	12 HEADS AT 7 PSI PLUS 500 GPM HOSE STREAM	60 MIN	100 SF	INTERMEDIATE, STANDARD RESPONSE CMSA K = 25.2 CEILING HEIGHT > 60 FT.

FIRE PROTECTION GENERAL NOTES

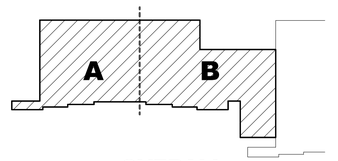
A.	REFER TO SHEET F-001 FOR ABBREVIATIONS, SYMBOLS, AND GENERAL NOTES.
B.	REFER TO SHEET FP501 AND FP502 FOR FIRE SPRINKLER DETAILS.
C.	REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR COORDINATION WITH LIGHTS, MECHANICAL DIFFUSERS, AND CEILING GRID.
D.	HALFTONED EQUIPMENT INDICATES EXISTING TO REMAIN, DASHED EQUIPMENT INDICATES TO BE DEMOLISHED, AND FULL TONE EQUIPMENT INDICATE NEW INSTALLATION.

KEYNOTES

015	MONITOR SUPERVISED SHUT-OFF VALVE AND WATERFLOW SWITCH IN PIPING TO ELEVATOR HOISTWAY. ACTUATION OF WATERFLOW SWITCH TO SHUNT TRIP BREAKER. WATERFLOW SWITCH MUST HAVE NO TIME DELAY CAPABILITY COORDINATE LOCATION OF VALVE FOR ACCESSIBILITY.
018	BRACE PIPING ON TOP OF MEZZANINE GROUND FLOOR.
136	BRACE SPRINKLER PIPING UNDER BULK HEAD.
165	PROVIDE SEPARATE ISOLATION CONTROL VALVES AND WATERFLOW SWITCHES FOR SPRINKLER PROTECTION IN ELECTRONIC EQUIPMENT ROOMS PER TSFPEWG.
168	FLOOR CONTROL VALVE ASSEMBLY SERVING SECOND FLOOR ADMIN AREA.
172	PROVIDE SPRINKLERS WITH UL LISTED GUARDS IN ELEVATOR HOISTWAY.
179	SPRINKLER PROTECTION REQUIRED BELOW CORRIDOR CEILING LID.
313	SEISMICALLY BRACE PIPING UNDERSIDE OF LIGHT GAUGE JOIST.



A1 OVERALL FLOOR PLAN - LEVEL 2
1/16" = 1'-0"



OVERALL
KEY PLAN

GRAPHIC SCALE
16 12 8 4 0 16 32
SCALE: 1/16"=1'-0"

PLAN NORTH
TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
SEAN BECHTELHEIMER
144133
LICENSED
PROFESSIONAL ENGINEER
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: R. DIBLE
DRAWN BY: Z. HARRELL
CHECKED BY: H. LEFKOWITZ
SUBMITTED BY: E. OLMESS
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201FP102
ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street Fort Worth, TX 76102
Phone: (817)339-2000

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
FIRE PROTECTION OVERALL FLOOR PLAN - LEVEL 2

SHEET ID
B1455
FP102

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN

FIRE SUPPRESSION DESIGN CRITERIA

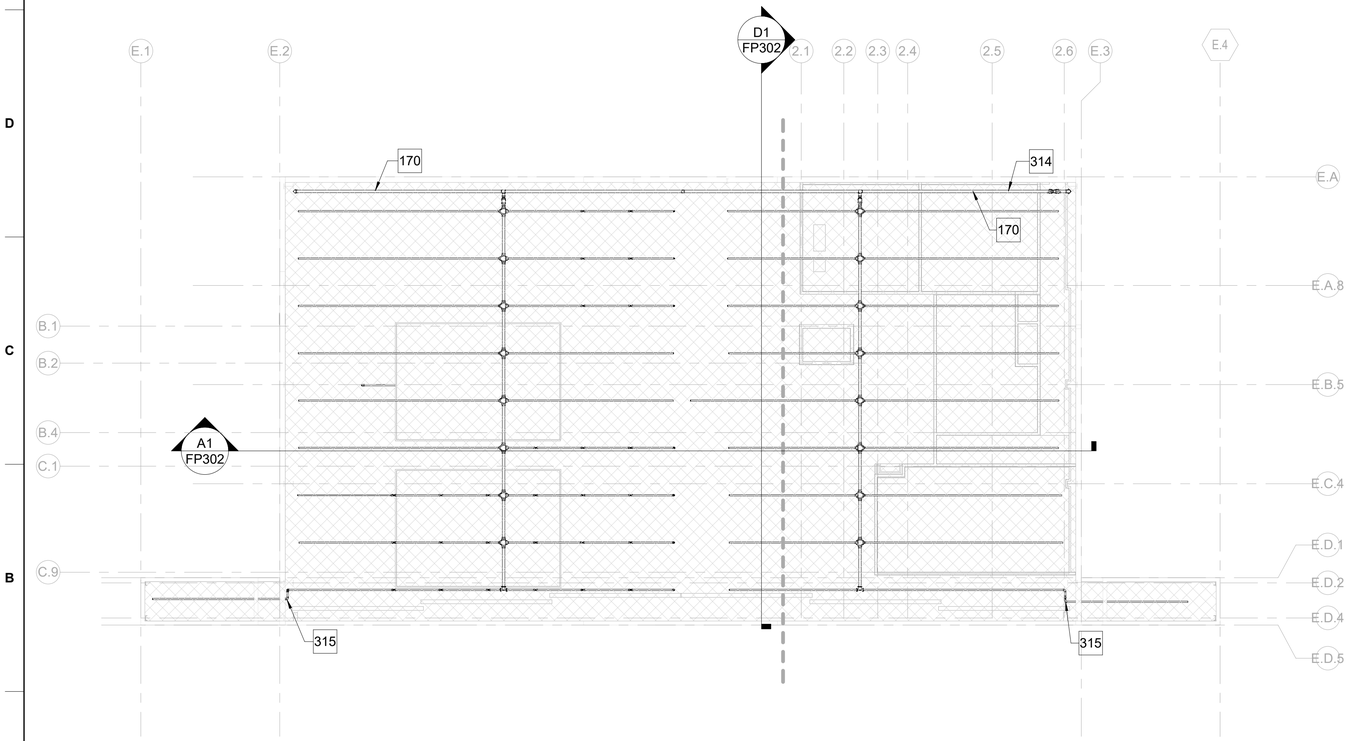
HATCH PATTERN	ROOM/AREA	OCCUPANCY CLASS	DESIGN REQUIREMENTS	DURATION OF SUPPLY	MAXIMUM SPRINKLER SPACING	REQUIRED SPRINKLER
	OUTSIDE LIMITS OF THIS PHASE OF CONSTRUCTION. EXISTING SPRINKLER PROTECTION TO REMAIN.					
(NO HATCH)	OFFICES, CORRIDORS, RESTROOMS, BREAKROOMS	LIGHT HAZARD	.10 GPM/SF OVER MOST REMOTE 1,500 SQ.FT. PLUS 250 GPM HOSE STREAM	60 MIN	225 SF	ORDINARY, QUICK RESPONSE K= 5.6
	SIMULATOR BAYS, ATD AREA, MECH/ ELEC, STORAGE, EEA'S	ORDINARY HAZARD	.20 GPM/SF OVER MOST REMOTE 2,500 SQ.FT. PLUS 250 GPM HOSE STREAM	60 MIN	130 SF	INTERMEDIATE, QUICK RESPONSE K=8.0 CEILING HEIGHT < 30 FEET K= 11.2 CEILING HEIGHT > 30 FEET
	OPEN AREA	ORDINARY HAZARD	12 HEADS AT 7 PSI PLUS 500 GPM HOSE STREAM	60 MIN	100 SF	INTERMEDIATE, STANDARD RESPONSE CMSA K = 25.2 CEILING HEIGHT > 60 FT.

FIRE PROTECTION GENERAL NOTES

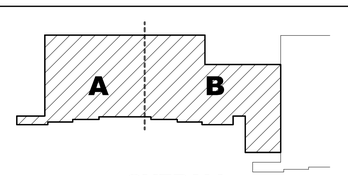
A.	REFER TO SHEET F-001 FOR ABBREVIATIONS, SYMBOLS, AND GENERAL NOTES.
B.	REFER TO SHEET FP501 AND FP502 FOR FIRE SPRINKLER DETAILS.
C.	REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR COORDINATION WITH LIGHTS, MECHANICAL DIFFUSERS, AND CEILING GRID.
D.	HALFTONED EQUIPMENT INDICATES EXISTING TO REMAIN, DASHED EQUIPMENT INDICATES TO BE DEMOLISHED, AND FULL TONE EQUIPMENT INDICATE NEW INSTALLATION.

KEYNOTES

170	UP TO PEAKED ROOF AND BRACED ON UNDERSIDE OF STEEL TO PROVIDE OVERHEAD SPRINKLER PROTECTION.
314	OVERHEAD SPRINKLER PIPING SERVING BAY OPEN AREAS.
315	PROVIDE SPRINKLER PROTECTION WITHIN PRE-EXISTING HANGAR BAY DOOR POCKETS.



A1 OVERALL OVERHEAD BAY FIRE PROTECTION
1/16" = 1'-0"



OVERALL
KEY PLAN

GRAPHIC SCALE
16 12 8 4 0 16 32
SCALE: 1/16"=1'-0"

PLAN NORTH
TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
SEAN BECHTELHEIMER
144133
LICENSED
PROFESSIONAL ENGINEER
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: R. DIBLE
DRAWN BY: Z. HARRELL
CHECKED BY: H. LEFKOWITZ
SUBMITTED BY: E. OLMESS
ANSI D 22x34

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201:FP202

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

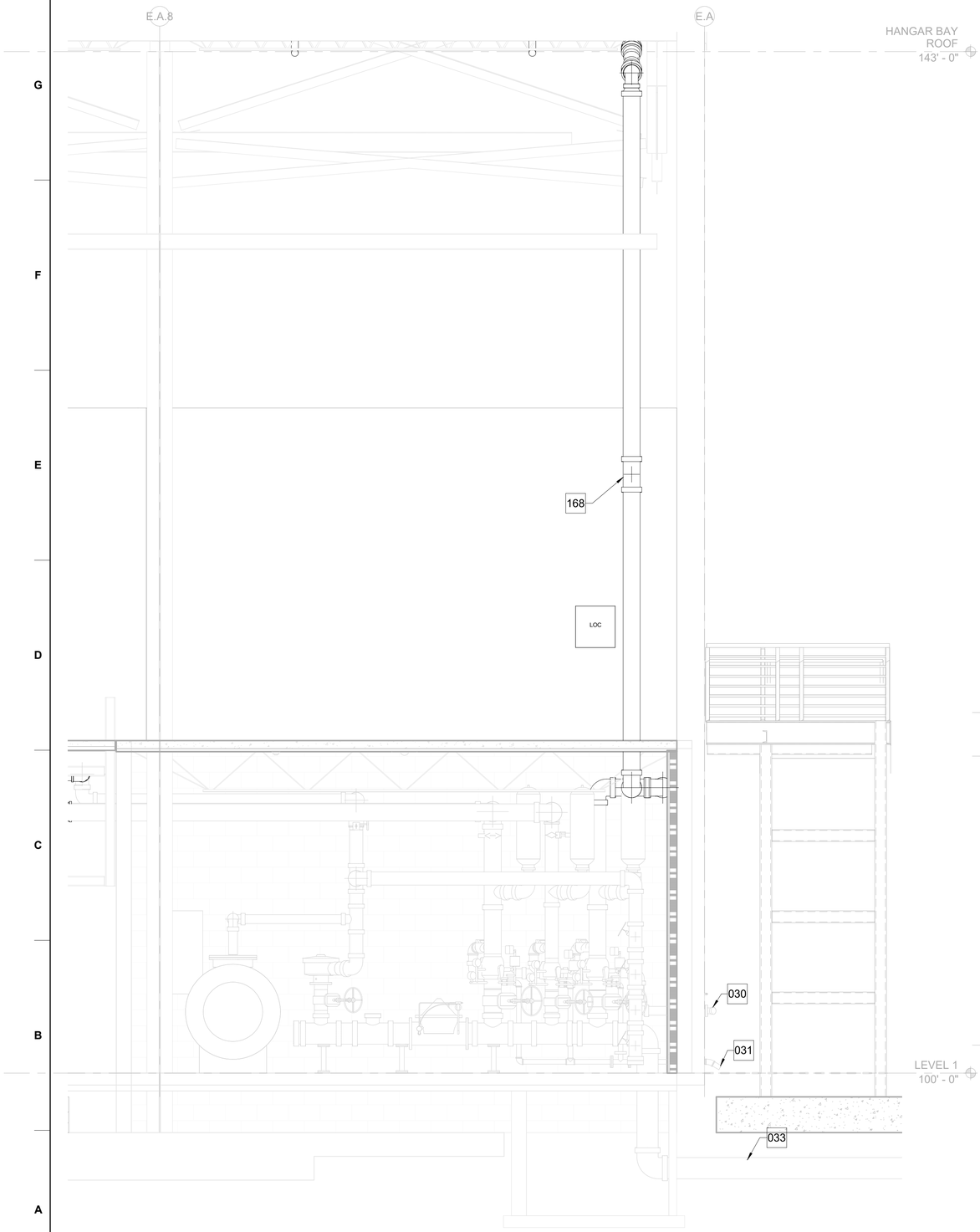
Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street Fort Worth, TX 76102
Phone: (817)820-4000 Fax: (817)820-4012

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
FIRE PROTECTION HANGAR BAY OVERHEAD PLAN

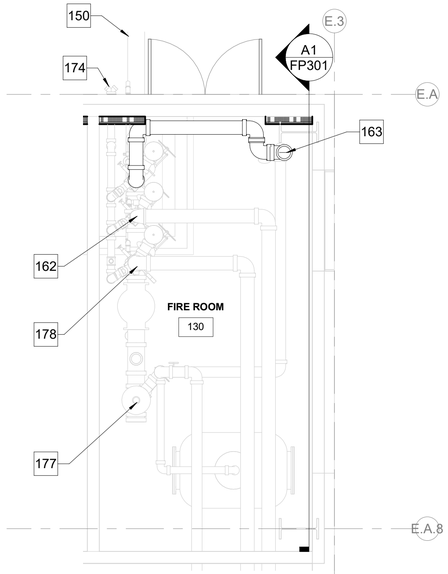
SHEET ID
B1455
FP202

W912QR23R0003_Plans-0000

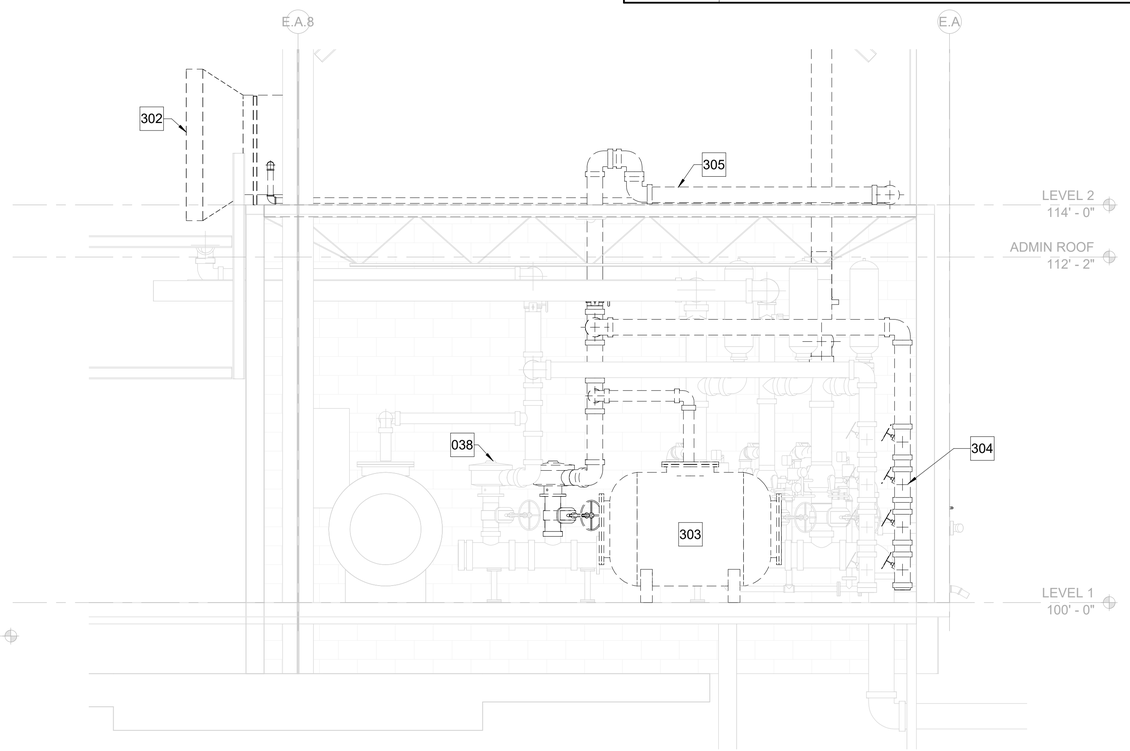
CERTIFIED FINAL DESIGN



A1 FIRE RISER MANIFOLD
3/8" = 1'-0"



E6 ENLARGED FIRE RISER ROOM PLAN
1/4" = 1'-0"



A6 FIRE RISER MANIFOLD DEMO
3/8" = 1'-0"

FIRE PROTECTION GENERAL NOTES

A.	REFER TO SHEET F-001 FOR ABBREVIATIONS, SYMBOLS, AND GENERAL NOTES.
B.	REFER TO SHEET FP501 AND FP502 FOR FIRE SPRINKLER DETAILS.
C.	REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR COORDINATION WITH LIGHTS, MECHANICAL DIFFUSERS, AND CEILING GRID.
D.	HALFTONED EQUIPMENT INDICATES EXISTING TO REMAIN, DASHED EQUIPMENT INDICATES TO BE DEMOLISHED, AND FULL TONE EQUIPMENT INDICATE NEW INSTALLATION.

KEYNOTES

030	FIRE DEPARTMENT CONNECTION WITH BALL DRIP CONNECTED TO DRAIN LINE.
031	MAIN DRAIN TO EXTERIOR.
033	10 INCH UNDERGROUND FIRE MAIN. REFER TO CU101 FOR CONTINUATION.
038	OTHER FOAM SYSTEM AND RELATED EQUIPMENT WILL BE REMOVED AT A FUTURE DATE BY OTHERS ACCORDING TO AFCEC DIRECTION.
150	RE: CIVIL DRAWING CU100 FOR 6 INCH UNDERGROUND FIRE WATER MAIN CONNECTION.
162	EXTEND EXISTING WET-PIPE SPRINKLER OFFICE ZONE TO PROTECT NEW BUILDING ADDITION.
163	UP TO SECOND LEVEL.
168	FLOOR CONTROL VALVE ASSEMBLY SERVING SECOND FLOOR ADMIN AREA.
174	FIRE DEPARTMENT CONNECTION.
177	FOAM RISER SERVING ISO MAINTENANCE HANGAR BAY. RE-ROUTE MAIN TO AVOID OBSTRUCTIONS WITH OTHER DISCIPLINES.
178	WET-PIPE RISER SERVING ISO MAINTENACE HANGAR BAY. RE-ROUTE MAIN TO AVOID OBSTRUCTIONS WITH OTHER DISCIPLINES.
302	DEMOLISH FOAM GENERATOR.
303	DEMOLISH FOAM BLADDER TANK SERVING PRE-EXISTING HANGAR BAY.
304	DEMOLISH FOAM TEST HEADER SERVING PRE-EXISTING HANGAR BAY.
305	DEMOLISH FOAM SUPPLY PIPING ON MEZZANINE.

GRAPHIC SCALE
16 8 0 16
SCALE: 3/32"=1'-0"

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
SEAN BECHTELHEIMER
144133
LICENSED
PROFESSIONAL ENGINEER
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: R. DIBLE
DRAWN BY: Z. HARRELL
CHECKED BY: H. LEFKOWITZ
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT21920.FP301

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

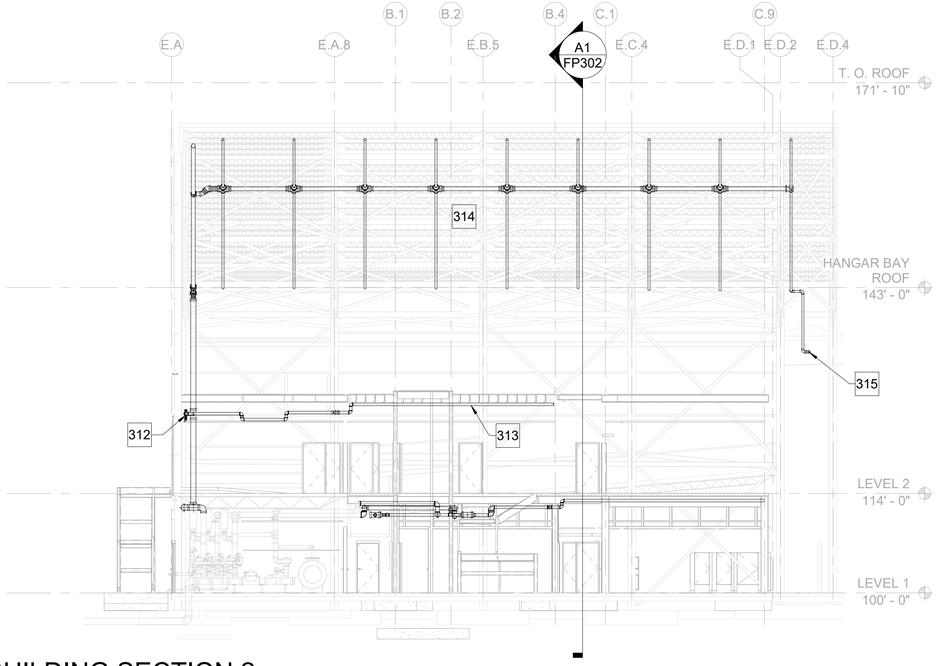
jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS TBPE/TBPELS F-2966

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
FIRE PROTECTION BUILDING SECTIONS

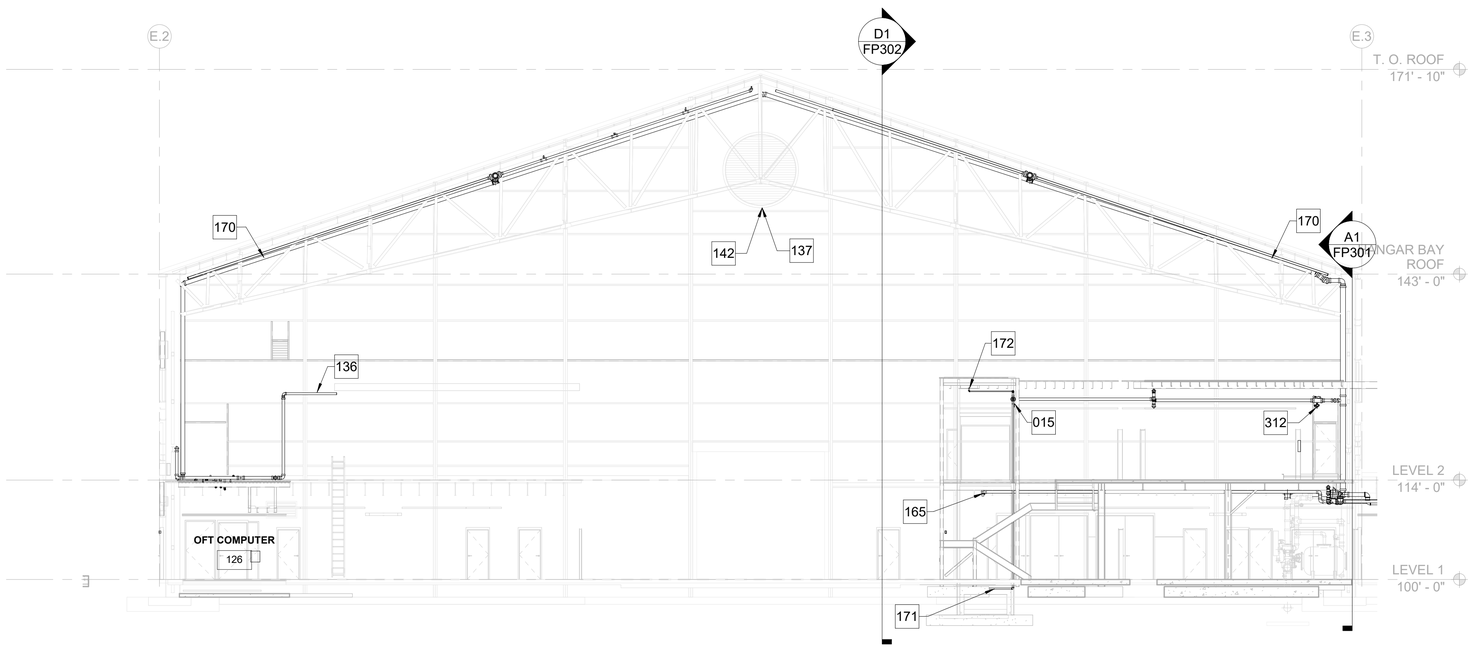
SHEET ID
B1455
FP301

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



D1 BUILDING SECTION 2
3/32" = 1'-0"



A1 BUILDING SECTION 1
3/32" = 1'-0"

FIRE PROTECTION GENERAL NOTES

A.	REFER TO SHEET F-001 FOR ABBREVIATIONS, SYMBOLS, AND GENERAL NOTES.
B.	REFER TO SHEET FP501 AND FP502 FOR FIRE SPRINKLER DETAILS.
C.	REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR COORDINATION WITH LIGHTS, MECHANICAL DIFFUSERS, AND CEILING GRID.
D.	HALFTONED EQUIPMENT INDICATES EXISTING TO REMAIN, DASHED EQUIPMENT INDICATES TO BE DEMOLISHED, AND FULL TONE EQUIPMENT INDICATE NEW INSTALLATION.

KEYNOTES

015	MONITOR SUPERVISED SHUT-OFF VALVE AND WATERFLOW SWITCH IN PIPING TO ELEVATOR HOISTWAY. ACTUATION OF WATERFLOW SWITCH TO SHUNT TRIP BREAKER. WATERFLOW SWITCH MUST HAVE NO TIME DELAY CAPABILITY COORDINATE LOCATION OF VALVE FOR ACCESSIBILITY.
136	BRACE SPRINKLER PIPING UNDER BULK HEAD.
137	PROVIDE CONTROL MODULE FOR ACTUATION OF ROOF VENTILATION LOUVERS AT NORTH AND SOUTH END OF BUILDING TO OPEN POSITION UPON BEAM DETECTION ACTIVATION SIGNAL.
142	MANUAL HAND SWITCH TO OPEN ROOF VENTILATION LOUVERS. REFER TO MECHANICAL DRAWINGS.
165	PROVIDE SEPARATE ISOLATION CONTROL VALVES AND WATERFLOW SWITCHES FOR SPRINKLER PROTECTION IN ELECTRONIC EQUIPMENT ROOMS PER TSFPEWG.
170	UP TO PEAKED ROOF AND BRACED ON UNDERSIDE OF STEEL TO PROVIDE OVERHEAD SPRINKLER PROTECTION.
171	PROVIDE SPRINKLERS WITH UL LISTED GUARDS IN ELEVATOR PITS, MECHANICAL, EES, AND ELECTRICAL ROOMS WITH UNIMPROVED CEILINGS.
172	PROVIDE SPRINKLERS WITH UL LISTED GUARDS IN ELEVATOR HOISTWAY.
312	FLOOR CONTROL VALVE ASSEMBLY SERVING SECOND LEVEL.
313	SEISMICALLY BRACE PIPING UNDERSIDE OF LIGHT GAUGE JOIST.
314	OVERHEAD SPRINKLER PIPING SERVING BAY OPEN AREAS.
315	PROVIDE SPRINKLER PROTECTION WITHIN PRE-EXISTING HANGAR BAY DOOR POCKETS.

GRAPHIC SCALE
16 8 0 16
SCALE: 3/32"=1'-0"

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
SEAN BECHTELHEIMER
144133
LICENSED
PROFESSIONAL ENGINEER
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: R. DIBLE
DRAWN BY: Z. HARRELL
CHECKED BY: H. LEFKOWITZ
SUBMITTED BY: E. OLNESS
DATE:
ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT21920:FP302

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

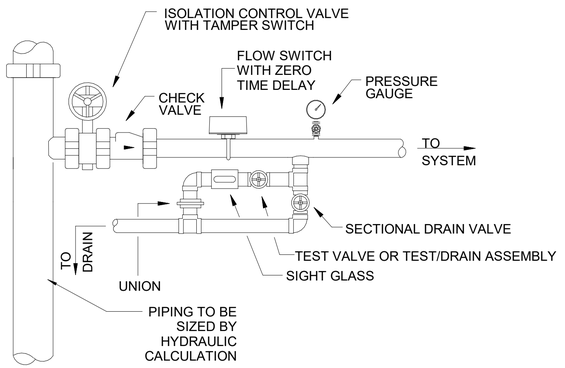
jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street Fort Worth, TX 76102
817 ***** Access No. 1000572

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
FIRE PROTECTION BUILDING SECTION

SHEET ID
B1455
FP302

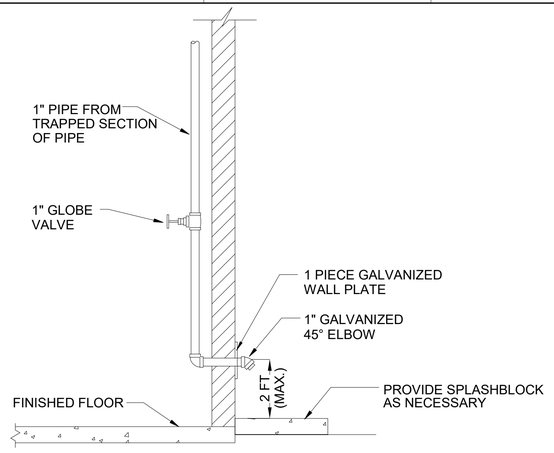
W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



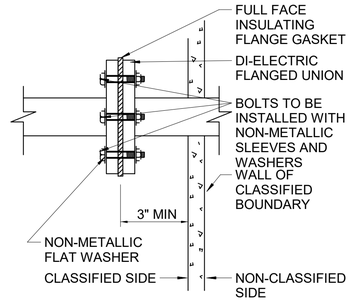
E1 ISOLATION CONTROL VALVE ASSEMBLY

SCALE NTS



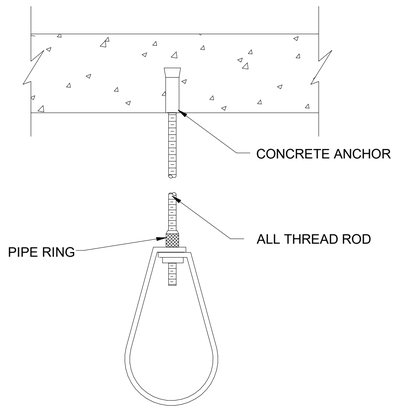
E4 AUXILIARY DRAIN DETAIL

SCALE NTS



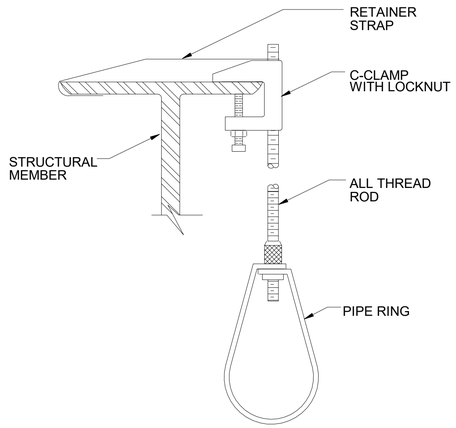
E7 SECURE AREA PENETRATIONS DETAIL

N.T.S.



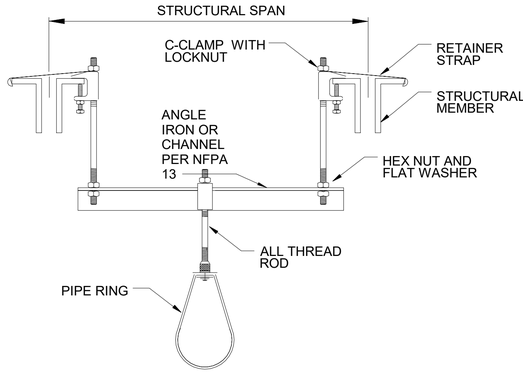
C2 CONCRETE HANGER DETAIL

SCALE NTS



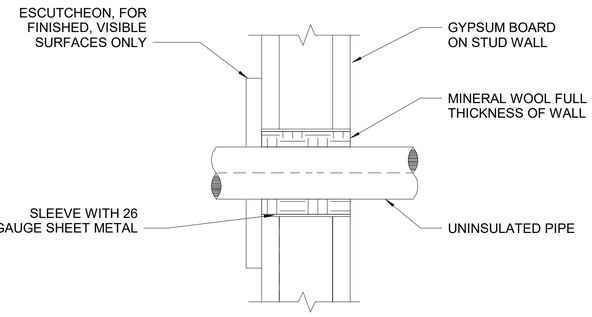
C4 BEAM CLAMP HANGER DETAIL

SCALE NTS

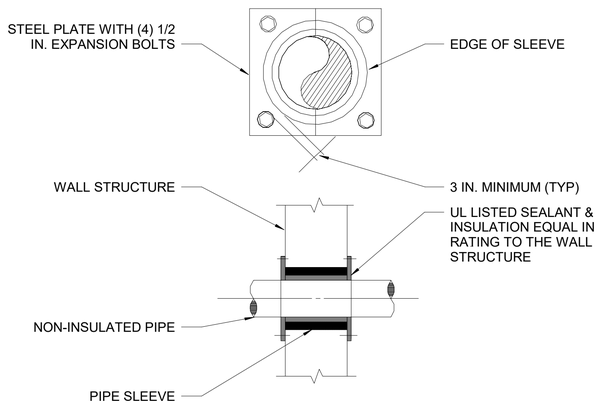


C6 BEAM TRAPEZE HANGER

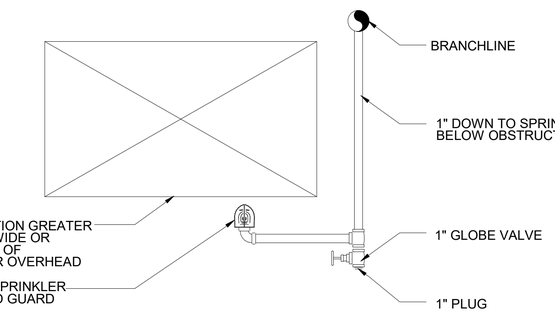
SCALE NTS



NON-RATED WALL ASSEMBLY

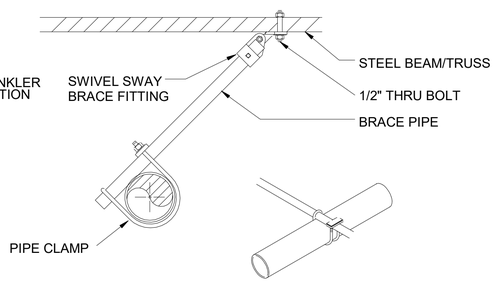


RATED WALL ASSEMBLY



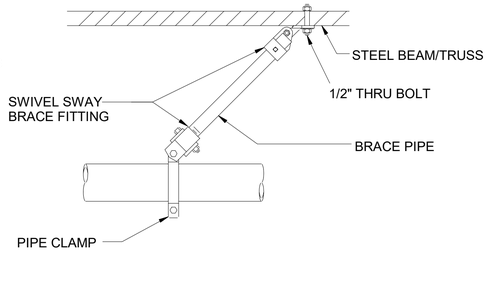
A1 SPRINKLERS BELOW OBSTRCTIONS

SCALE NTS



A4 LATERAL SWAY BRACE

SCALE NTS



A6 LONGITUDINAL SWAY BRACE

SCALE NTS

A9 FIRE PROTECTION PIPING PENETRATIONS

N.T.S.

US Army Corps of Engineers
Louisville District ®

SEAN BECHTELHEIMER
144133
LICENSED
PROFESSIONAL ENGINEER
STATE OF TEXAS
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: R. DIBLE
DRAWN BY: Z. HARRELL
CHECKED BY: H. LEFKOWITZ
SUBMITTED BY: E. OLNESS
DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201FP501
ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
ACCESS No. 0000219

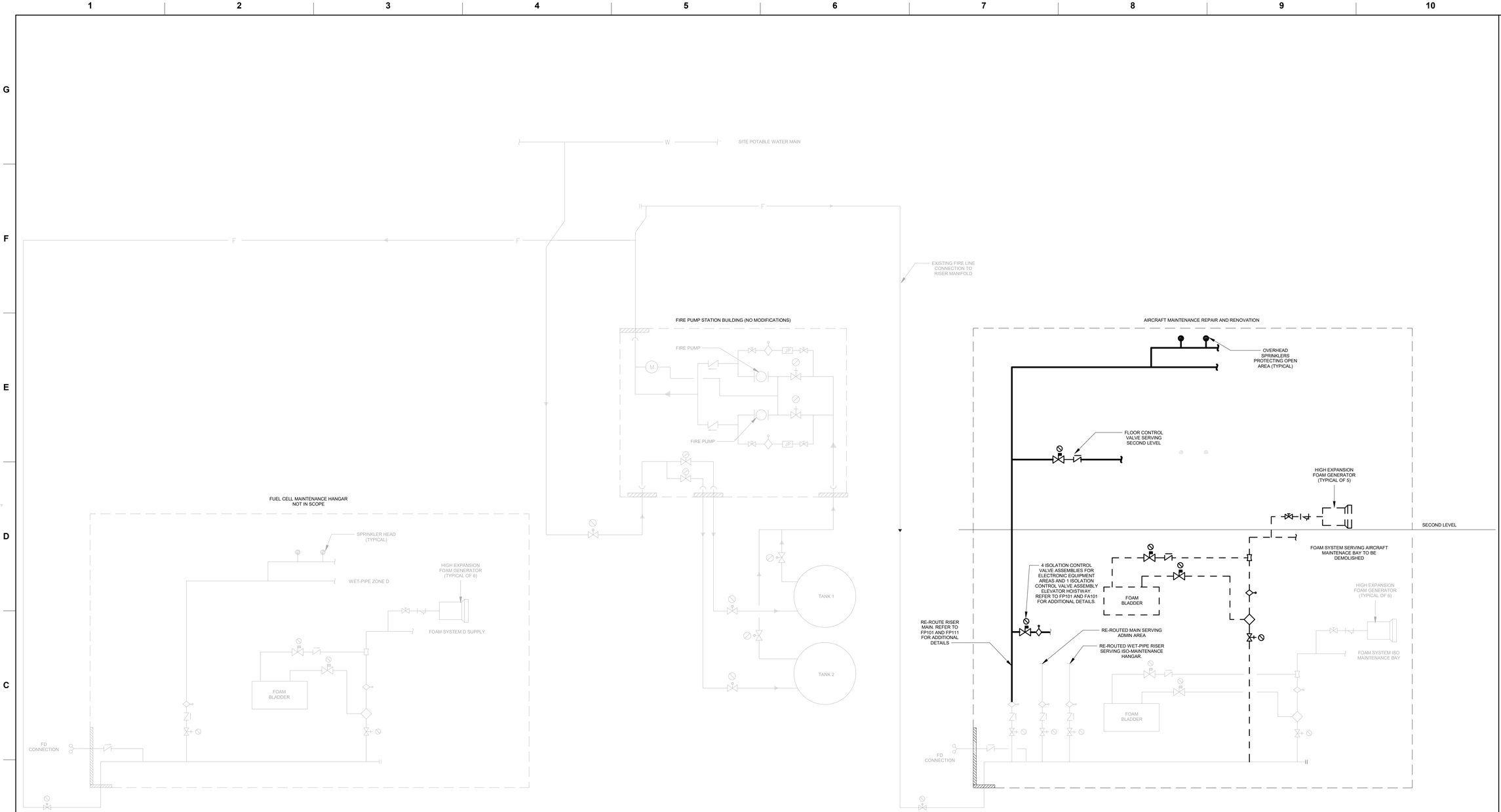
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, PZ#: 496395
FIRE PROTECTION DETAILS

SHEET ID
B1455
FP501

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN



B1 FIRE SUPPRESSION SINGLE LINE DIAGRAM

N.T.S.

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
SEAN BECHTELHEIMER
144133
LICENSED
PROFESSIONAL ENGINEER
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: R. DIBLE
DRAWN BY: Z. HARRELL
CHECKED BY: H. LEFKOWITZ
SUBMITTED BY: E. OLNESS
DATE: ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201FP502
ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
ACCESS No. 1000013

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
FIRE PROTECTION DETAILS

SHEET ID
B1455
FP502

W912QR23R0003_Plans-0000

DRAWING ABBREVIATIONS

LEGEND

PIPING SYMBOLS

- PITCH DOWN IN DIRECTION OF ARROW
- DIRECTION OF FLOW
- PIPE ANCHOR
- PIPE GUIDE
- CONCENTRIC REDUCER
- BRANCH - SIDE CONNECTION
- BRANCH - TOP CONNECTION
- BRANCH - BOTTOM CONNECTION
- RISE OR DROP IN PIPE
- RISER DOWN (ELBOW)
- RISER UP (ELBOW)
- CAPPED PIPE
- BLIND FLANGE
- UNION (SCREWED)
- ORIFICE UNION
- FLANGED CONNECTION
- FLANGED ORIFICE
- TEMPERATURE & PRESSURE PORT
- STRAINER WITH BLOWDOWN VALVE
- FLEX PIPE
- FLEX CONNECTION
- PUMP
- LINE/WALL CLEANOUT
- CLEANOUT
- HOSE BIBB, WALL HYDRANT
- FLOOR DRAIN, FLOOR SINK
- P-TRAP
- PLUMBING FIXTURES AND EQUIPMENT
- METER
- X=W FOR WATER, X=G FOR GAS
- BACKFLOW PREVENTER
- RISER DESIGNATION DENOTING ASSOCIATED SANITARY OR DOMESTIC WATER RISER DIAGRAM
- PROCESS VACUUM CONNECTION
- BREATHING AIR CONNECTION
- PROCESS COMPRESSED AIR CONNECTION
- DEBRIS VACUUM CONNECTION
- AIR OUTLET VALVE
- KEYNOTE REFERENCE
- POINT OF CONNECTION TO EXISTING
- POINT OF DISCONNECTION FROM EXISTING
- WATER HAMMER ARRESTOR
- FS — FLOW SWITCH
- PS — PRESSURE SWITCH
- THERMOMETER
- PRESSURE GAGE WITH COCK

VALVE SYMBOLS

- GATE VALVE
- GLOBE VALVE
- CHECK VALVE (NON SLAM)
- REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTER (RPZ)
- PLUG VALVE
- PRESSURE REDUCING VALVE (PRV)
- BUTTERFLY VALVE
- BALL VALVE
- NEEDLE VALVE
- VENTURI FLOW METER
- VALVE IN DROP
- VALVE IN CENTER DROP
- VALVE IN RISE
- GATE VALVE W/ 3/4" HOSE THREAD ADAPTER
- SOLENOID VALVE
- TWO-WAY CONTROL VALVE
- THREE-WAY CONTROL VALVE
- SAFETY VALVE OR PRESSURE RELIEF VALVE
- MANUAL BALANCING VALVE
- AUTOMATIC BALANCING VALVE
- TEMPERATURE WELL
- FLANGED VALVE (GATE VALVE SHOWN)

PIPING TYPES

SS	SANITARY SEWER
SV	COMBINATION WASTE/VENT
	SANITARY VENT (V)
	DOMESTIC COLD WATER (DCW)
TW	TEPID HOT WATER (85°F) (TW)
	DOMESTIC HOT WATER RETURN (DHWR)
TWR	TEPID WATER RETURN (TWR)
140°	DOMESTIC HOT WATER (140°F)
NPW	NON POTABLE WATER
TP	TRAP PRIMER
G	NATURAL GAS
CD	CONDENSATE DRAIN
A	COMPRESSED AIR
DV	DEBRIS VACUUM (CLEANING)
VAC	VACUUM
BA	BREATHING AIR
OD	OVERFLOW DRAIN
SD	STORM DRAIN

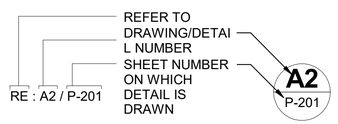
PIPING NOTATIONS:
DN - DOWN
FA - FROM ABOVE
FB - FROM BELOW

EX: 2" DCW DN FA = 2" DOMESTIC COLD WATER DOWN FROM ABOVE

EQUIPMENT SYMBOLS

- NEW EQUIPMENT
- EXISTING TO BE REMOVED
- EQUIPMENT CLEARANCE

DRAWING/DETAIL REFERENCE KEY



DESIGN CRITERIA

WATER SERVICE FLOW TEST DATA
WATER PRESSURE ESTIMATE IS BASED ON A FLOW TEST REPORT OF 68 PSI STATIC AND 62 PSI RESIDUAL AT A FLOW RATE OF 1061 GPM.

STORM DRAINAGE DATA
THE PRIMARY STORM DRAINAGE SYSTEM IS DESIGNED FOR A 4.5 INCHES PER HOUR RAINFALL RATE.

NATURAL GAS DATA
NATURAL GAS IS SUPPLIED TO THE SITE AT 25 PSIG. GAS PIPE SIZES ARE BASED ON A PRESSURE OF 14" W.C. AFTER THE METER WHERE THE MAIN ENTERS THE BUIDING AND A MAXIMUM PRESSURE DROP OF 0.5" W.C.

ENERGY CODE COMPLIANCE
THE PLUMBING EQUIPMENT ARE IN COMPLIANCE WITH ASHRAE 90.1-2016, ASHRAE 189.1-2014 AND UFC 1-200-02 HIGH PERFORMANCE AND SUSTAINABLE BUILDING REQUIREMENTS.

PLUMBING CODE COMPLIANCE
THE PLUMBING SYSTEMS ARE DESIGNED IN COMPLIANCE WITH 2018 INTERNATIONAL PLUMBING CODE AS MODIFIED BY UFC 3-420-01 PLUMBING SYSTEMS.

GENERAL NOTES

A. REFER TO SPECIFICATIONS FOR MATERIALS AND METHODS FOR CONSTRUCTION.

B. COORDINATE THE EXACT LOCATION OF FLOOR DRAINS (INCLUDING FLOOR SINKS) WITH THE ARCHITECTURAL DRAWINGS AND MECHANICAL EQUIPMENT LOCATIONS PRIOR TO INSTALLATION OF DRAINS. PROVIDE A RADIUS AROUND THE FLOOR DRAIN THAT SLOPES TOWARD THE FLOOR DRAIN FROM THE FINISHED FLOOR ELEVATION TO A TOP OF DRAIN ELEVATION BETWEEN 1/2" AND 3/4" BELOW FINISHED FLOOR, UNLESS OTHERWISE NOTED ON THE DRAWINGS. THE RADIUS AND RATE OF SLOPE IS TO BE FIELD COORDINATED, BUT NOT LESS THAN 18".

C. COORDINATE INSTALLATION OF ACCESS DOORS IN WALLS AND CEILINGS WHERE ACCESS IS REQUIRED TO CONCEALED PLUMBING EQUIPMENT, VALVES, CONTROLS, AND OTHER DEVICES.

D. PERFORM WORK IN ACCORDANCE WITH THE LATEST EDITIONS, REVISIONS, AMENDMENTS OR SUPPLEMENTS OF APPLICABLE STATUTES, ORDINANCES, CODES, OR REGULATIONS OF FEDERAL, STATE AND LOCAL AUTHORITIES HAVING JURISDICTION IN EFFECT ON THE DATE BIDS ARE RECEIVED.

E. WHERE APPROVAL CODES HAVE BEEN ESTABLISHED BY OSHA, UNDERWRITERS LABORATORY, AMERICAN CODES, ANSI, ASME, ASPE, ASA, ASHRAE, ASTM, ARI, NEC, NFPA, SMACNA, OR THE STATE FIRE INSURANCE REGULATORY BODY, FOLLOW THESE STANDARDS WHETHER OR NOT INDICATED ON THE DRAWINGS.

F. COORDINATE WORK WITH ARCHITECTURAL FEATURES AND COORDINATE WORK SUCH THAT INTERFERENCES BETWEEN PIPING, DUCTWORK, EQUIPMENT, PLUMBING WORK, FIRE PROTECTION WORK, ELECTRICAL WORK, AND BUILDING STRUCTURE WILL BE AVOIDED.

G. PROVIDE THE ENTIRE SYSTEM AND ITS COMPONENT ITEMS OF EQUIPMENT IN OPERATING CONDITION WITHOUT OBJECTIONABLE VIBRATION OR NOISE. PROVIDE WATER HAMMER ARRESTORS AT RESTROOM PLUMBING CHASES. NOISE LEVELS IN OFFICES MUST BE MAINTAINED AT OR BELOW NC35.

H. PROVIDE ALL WIRING AND ELECTRICAL CONTROLS IN ACCORDANCE WITH NFPA 70 (NEC).

J. VERIFY AND DOCUMENT EXISTING CONDITIONS AND DIMENSIONS ON THE JOB SITE PRIOR TO STARTING ANY WORK.

K. DO NOT SCALE THESE DRAWINGS FOR CONSTRUCTION PURPOSES.

L. INSTALL PIPING TO PROVIDE THE MAXIMUM POSSIBLE CLEAR HEIGHT UNDERNEATH. MAINTAIN A MINIMUM OF 6 INCHES ABOVE FINISHED CEILING TO PROVIDE CLEARANCE FOR LIGHTING FIXTURES.

M. PROVIDE ALL FINAL CONNECTIONS TO EQUIPMENT.

N. EXTEND VENT TERMINALS A MINIMUM OF 10" ABOVE THE FINISHED ROOF AND LOCATE A MINIMUM OF 10 FEET HORIZONTALLY FROM ANY DOOR, OPERABLE WINDOW, OR OTHER AIR INTAKE OF THE BUILDING OR ADJACENT BUILDING UNLESS THE VENT TERMINAL IS AT LEAST 2 FEET ABOVE THE TOP OF SUCH OPENING.

P. EXTEND ALL VENT LINES VERTICALLY (45 DEG. ANGLE OR GREATER FROM HORIZONTAL) TO MINIMUM OF 6" ABOVE THE HIGHEST FLOOD LEVEL RIM OF THE HIGHEST FIXTURE SERVED BY VENT.

Q. SEAL ALL FIRE RATED AND SMOKE PARTITIONS USING UL APPROVED CONFIGURATIONS AND MATERIALS.

S. THE DRAWINGS AND SPECIFICATIONS ARE PRESENTED TO DEFINE SPECIFIC SYSTEM REQUIREMENTS AND SERVE TO EXPAND ON THE PRIMARY CONTRACT REQUIREMENT OF PROVIDING A COMPLETE PLUMBING SYSTEM. DRAWINGS ARE GENERALLY DIAGRAMMATIC AND ARE INTENDED TO ENCOMPASS SYSTEMS THAT WILL NOT INTERFERE WITH THE STRUCTURAL, MECHANICAL, ELECTRICAL AND ARCHITECTURAL DESIGN OF THE BUILDING. COORDINATE WORK TO AVOID INTERFERENCES BETWEEN PIPING, EQUIPMENT, MECHANICAL PIPING AND DUCTWORK, ELECTRICAL, FIRE PROTECTION, ARCHITECTURAL, AND STRUCTURAL WORK.

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: D. KEMP
DRAWN BY: D. KEMP
CHECKED BY: M. PHILLIPS
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201P-001

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
ARCHITECTURE/ENGINEERING

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
GENERAL NOTES AND SYMBOLS

SHEET ID
B1455
P-001

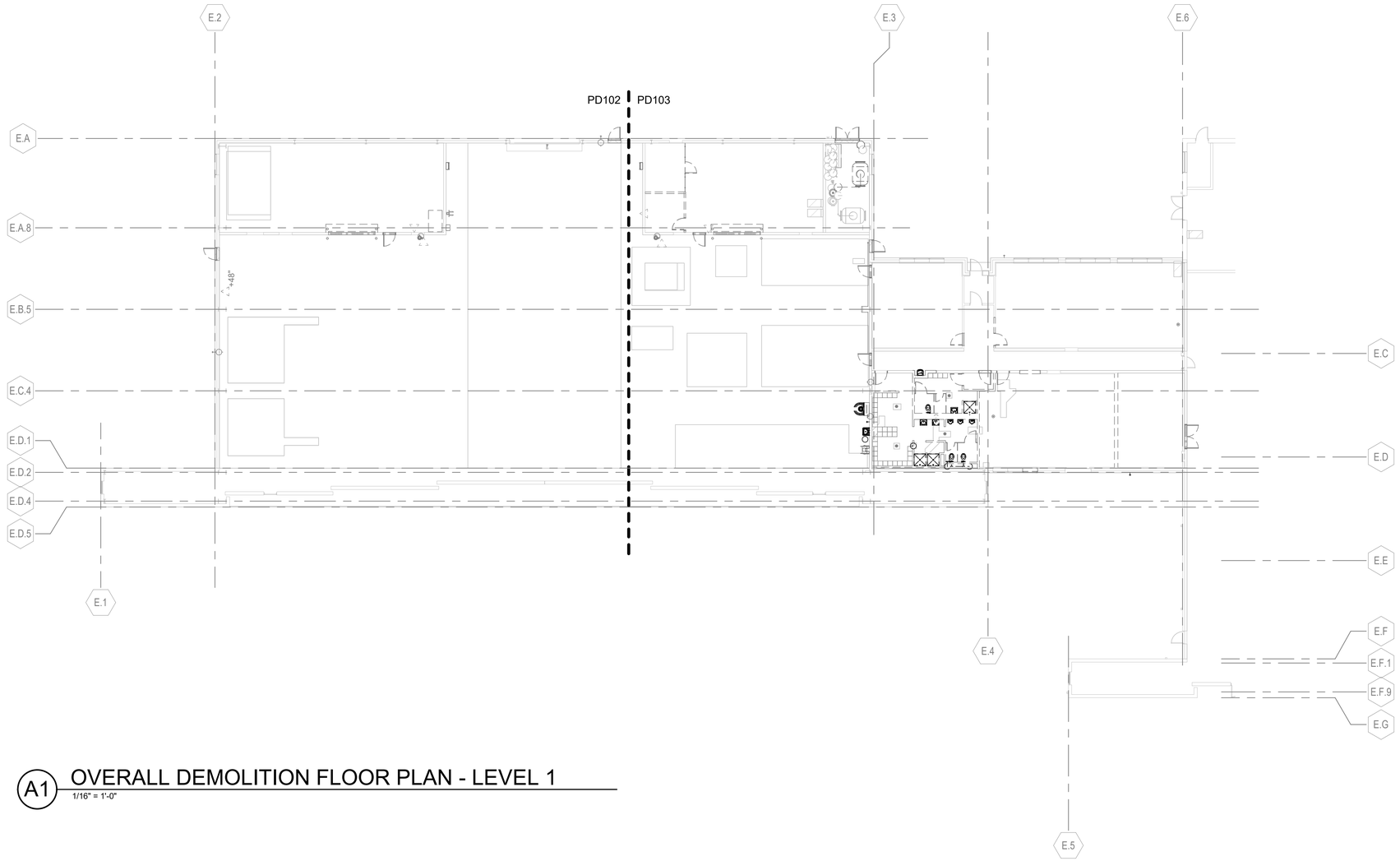
W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

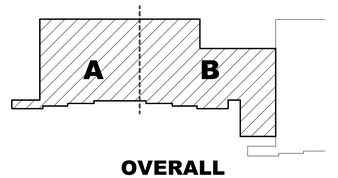
CERTIFIED FINAL DESIGN

GENERAL NOTES - DEMOLITION

A	REFER TO ARCHITECTURE FOR REPAIR OF EXISTING FLOOR AND ROOF.
B	DRAWINGS ARE BASED ON THE BEST INFORMATION AVAILABLE, INCLUDING AS BUILT DRAWINGS. CONTRACTOR TO VERIFY EXISTING CONDITIONS.
C	PIPING NOTED (E) ARE EXISTING TO REMAIN.
D	REMOVE ALL PIPING SERVING DEMOLISHED FIXTURES SUCH THAT ANY THAT REMAINS WILL BE CONCEALED BEHIND FINISHED SURFACE (DOES NOT APPLY TO FIXTURES SUPPLIED BY EXPOSED PIPING). REPAIR ALL CUTS DONE TO FLOOR AND EXSTING WALLS. REFER TO STRUCTURAL FOR INSTRUCTIONS ON CUTTING AND PATCHING.



A1 OVERALL DEMOLITION FLOOR PLAN - LEVEL 1
1/16" = 1'-0"



OVERALL KEY PLAN

GRAPHIC SCALE

16 12 8 4 0 16 32

SCALE: 1/16"=1'-0"

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
21NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: D. KEMP
DRAWN BY: D. KEMP
CHECKED BY: M. PHILLIPS
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:.
FILE NAME: SXHT21920 PD101

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS No. 175905

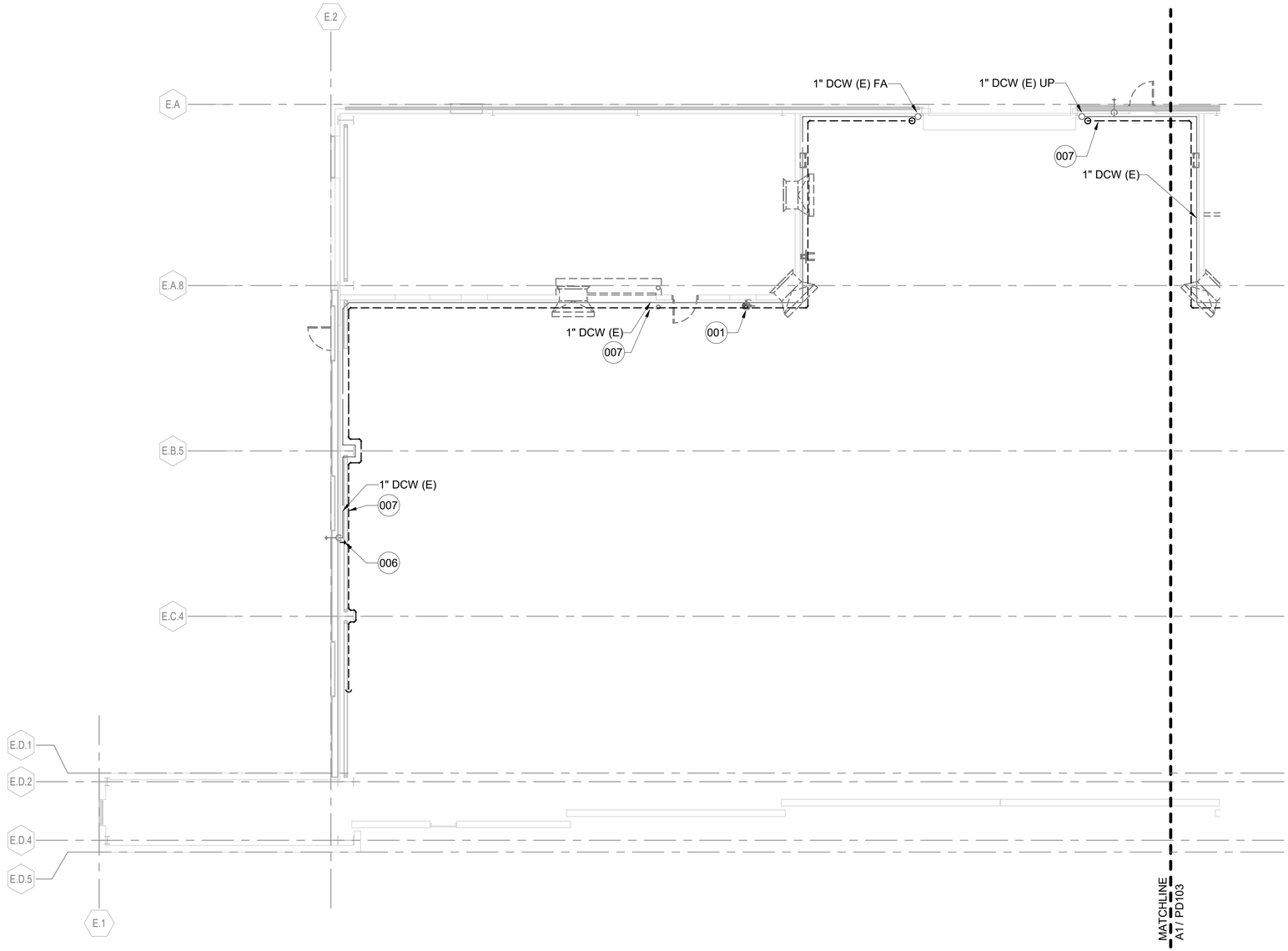
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395

OVERALL DEMOLITION FLOOR PLAN - LEVEL 1

SHEET ID
B1455
PD101

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



GENERAL NOTES - DEMOLITION

A	REFER TO ARCHITECTURE FOR REPAIR OF EXISTING FLOOR AND ROOF.
B	DRAWINGS ARE BASED ON THE BEST INFORMATION AVAILABLE, INCLUDING AS BUILT DRAWINGS. CONTRACTOR TO VERIFY EXISTING CONDITIONS.
C	PIPING NOTED (E) ARE EXISTING TO REMAIN.
D	REMOVE ALL PIPING SERVING DEMOLISHED FIXTURES SUCH THAT ANY THAT REMAINS WILL BE CONCEALED BEHIND FINISHED SURFACE (DOES NOT APPLY TO FIXTURES SUPPLIED BY EXPOSED PIPING). REPAIR ALL CUTS DONE TO FLOOR AND EXSTING WALLS. REFER TO STRUCTURAL FOR INSTRUCTIONS ON CUTTING AND PATCHING.

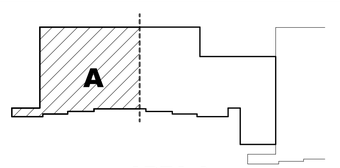
KEYNOTES

001	REMOVE EXISTING EMERGENCY EYEWASH STATION. REMOVE EXISTING BRANCH PIPING BACK TO MAIN AND CAP AT MAIN.
006	REMOVE EXISTING INTERIOR HOSE BIBB AND CAP AT BRANCH.
007	REMOVE EXISTING COMPRESSED AIR PIPING AND DROPS.

PIPING LEGEND

EXISTING PIPING TO REMAIN

EXISTING PIPING TO BE DEMOLISHED - - - - - -



AREA A
KEY PLAN

GRAPHIC SCALE

8 6 4 2 0 8 16

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

PLAN NORTH

TRUE N

A1 PARTIAL DEMOLITION FLOOR PLAN - LEVEL 1 - AREA A

1/8" = 1'-0"

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
21NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: D. KEMP
DRAWN BY: D. KEMP
CHECKED BY: M. PHILLIPS
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:.
FILE NAME: SXHT21920PD102

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

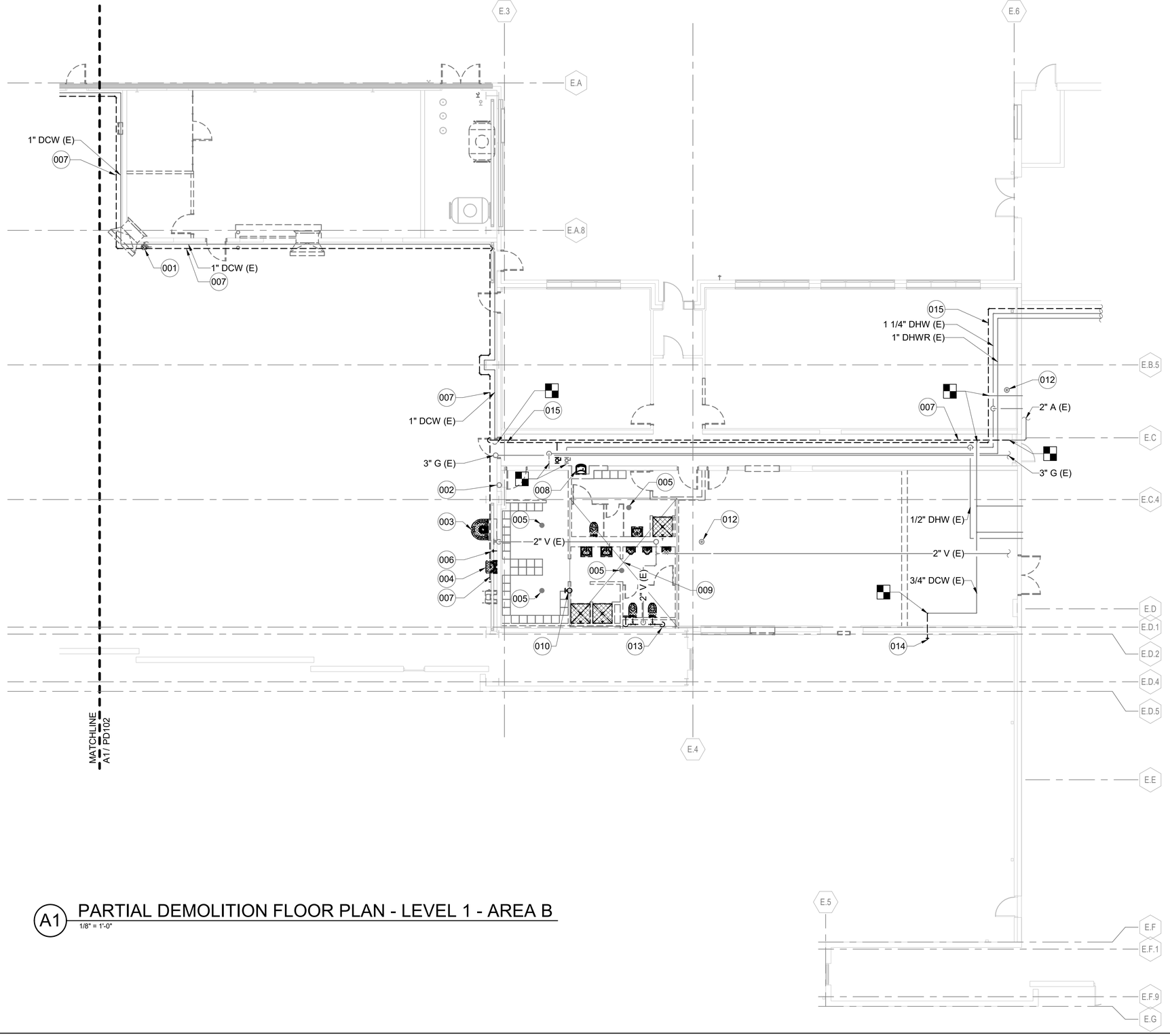
jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
TBPE/TBPELS No. F2966

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PARTIAL DEMOLITION FLOOR PLAN - LEVEL 1 - AREA A

SHEET ID
B1455
PD102

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



A1 PARTIAL DEMOLITION FLOOR PLAN - LEVEL 1 - AREA B

1/8" = 1'-0"

GENERAL NOTES - DEMOLITION

A	REFER TO ARCHITECTURE FOR REPAIR OF EXISTING FLOOR AND ROOF.
B	DRAWINGS ARE BASED ON THE BEST INFORMATION AVAILABLE, INCLUDING AS BUILT DRAWINGS. CONTRACTOR TO VERIFY EXISTING CONDITIONS.
C	PIPING NOTED (E) ARE EXISTING TO REMAIN.
D	REMOVE ALL PIPING SERVING DEMOLISHED FIXTURES SUCH THAT ANY THAT REMAINS WILL BE CONCEALED BEHIND FINISHED SURFACE (DOES NOT APPLY TO FIXTURES SUPPLIED BY EXPOSED PIPING). REPAIR ALL CUTS DONE TO FLOOR AND EXSTING WALLS. REFER TO STRUCTURAL FOR INSTRUCTIONS ON CUTTING AND PATCHING.

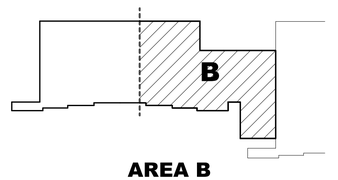
KEYNOTES

001	REMOVE EXISTING EMERGENCY EYEWASH STATION. REMOVE EXISTING BRANCH PIPING BACK TO MAIN AND CAP AT MAIN.
002	REMOVE REMAINING WATER COOLER PIPING BACK TO WALL. REPLACE SANITARY DRAIN WITH WALL CLEANOUT. REMOVE ABOVE CEILING VENT AND WATER PIPING BACK TO MAIN AND CAP AT MAIN. COMPLETELY DRAIN REMAINING IN-WALL WATER SUPPLY PIPING AND ABANDON IN PLACE. CAP EXISTING VENT RISER ABOVE CEILING FOR CONNECTION TO NEW DRAIN FROM SECOND FLOOR WATER COOLER.
003	REMOVE EXISTING HANDWASHING STATION. REMOVE EXISTING WATER PIPING BACK TO WALL. COMPLETELY DRAIN REMAINING IN-WALL WATER SUPPLY PIPING AND ABANDON IN PLACE. REMOVE ABOVE CEILING VENT AND WATER PIPING BACK TO MAIN AND CAP AT MAIN. ABANDON REMAINING IN-WALL VENT RISER IN PLACE. REMOVE DRAIN PIPING AND CAP BELOW FLOOR.
004	REMOVE EXISTING SERVICE SINK. REMOVE ABOVE CEILING WATER AND VENT PIPING BACK TO MAIN AND CAP AT MAIN. REMOVE DRAIN PIPING BACK TO WALL AND CAP IN WALL. REMOVE WATER SUPPLIES BACK TO WALL. FULLY DRAIN REMAINING IN-WALL WATER PIPING AND ABANDON IN PLACE. ABANDON REMAINING IN-WALL VENT RISER IN PLACE.
005	EXISTING FLOOR DRAIN TO REMAIN.
006	REMOVE EXISTING INTERIOR HOSE BIBB AND CAP AT BRANCH.
007	REMOVE EXISTING COMPRESSED AIR PIPING AND DROPS.
008	REMOVE EXISTING WATER COOLER. CAP SUPPLY AND DRAIN PIPING FOR CONNECTION TO NEW WATER FOUNTAIN.
009	REMOVE EXISTING RESTROOM PLUMBING FIXTURES UNLESS OTHERWISE NOTED. REMOVE ABOVE FLOOR DRAIN PIPING AND CAP BELOW FLOOR. REMOVE SHOWER DRAINS AND CAP BELOW FLOOR. REMOVE UNUSED VENT PIPING BACK TO MAIN AND CAP AT MAIN. REMOVE DOMESTIC WATER PIPING BACK TO POINTS OF DISCONNECTION.
010	REMOVE EXISTING ELECTRONIC TRAP PRIMER. REMOVE EXISTING WALL CLEANOUT. REMOVE DRAIN PIPING AND PROVIDE TEMPORARY COVER UNTIL INSTALLATION OF NEW FLOOR CLEANOUT. REMOVE VENT PIPING BACK TO MAIN AND CAP AT MAIN.
012	EXISTING FLOOR CLEANOUT TO REMAIN.
013	PROVIDE TEMPORARY COVER UNTIL INSTALLATION OF NEW FLOOR CLEANOUT.
014	RELOCATE EXISTING HOSE BIB. RE: A1/P-401
015	REMOVE EXISTING 2" DOMESTIC WATER LINE.

PIPING LEGEND

EXISTING PIPING TO REMAIN

EXISTING PIPING TO BE DEMOLISHED - - - - - -



AREA B
KEY PLAN

GRAPHIC SCALE

8 6 4 2 0 8 16

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

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
21NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: D. KEMP
DRAWN BY: D. KEMP
CHECKED BY: M. PHILLIPS
SUBMITTED BY: E. OLMESS
DATE: ANSI D 22-34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201PD103

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street Fort Worth, TX 76102
Texas Registration No. F2966

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PARTIAL DEMOLITION FLOOR PLAN - LEVEL 1 - AREA B

SHEET ID
B1455
PD103

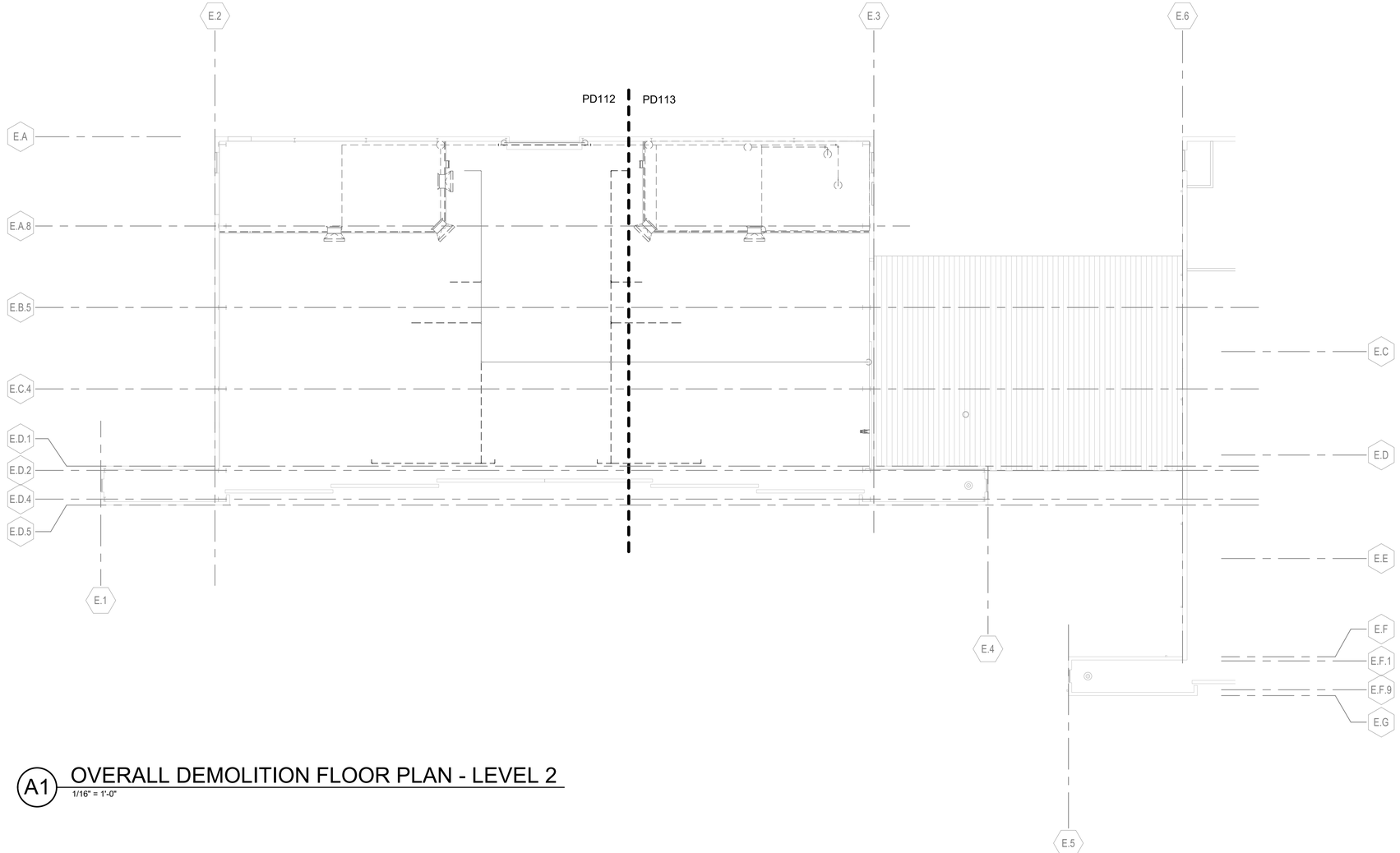
W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

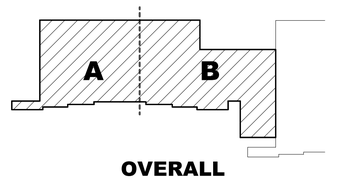
CERTIFIED FINAL DESIGN

GENERAL NOTES - DEMOLITION

A	REFER TO ARCHITECTURE FOR REPAIR OF EXISTING FLOOR AND ROOF.
B	DRAWINGS ARE BASED ON THE BEST INFORMATION AVAILABLE, INCLUDING AS BUILT DRAWINGS. CONTRACTOR TO VERIFY EXISTING CONDITIONS.
C	PIPING NOTED (E) ARE EXISTING TO REMAIN.
D	REMOVE ALL PIPING SERVING DEMOLISHED FIXTURES SUCH THAT ANY THAT REMAINS WILL BE CONCEALED BEHIND FINISHED SURFACE (DOES NOT APPLY TO FIXTURES SUPPLIED BY EXPOSED PIPING). REPAIR ALL CUTS DONE TO FLOOR AND EXSTING WALLS. REFER TO STRUCTURAL FOR INSTRUCTIONS ON CUTTING AND PATCHING.



A1 OVERALL DEMOLITION FLOOR PLAN - LEVEL 2
1/16" = 1'-0"



OVERALL KEY PLAN

GRAPHIC SCALE

16 12 8 4 0 16 32

SCALE: 1/16"=1'-0"

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
21NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: D. KEMP
DRAWN BY: D. KEMP
CHECKED BY: M. PHILLIPS
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT21920 PD111

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS No. 70128403

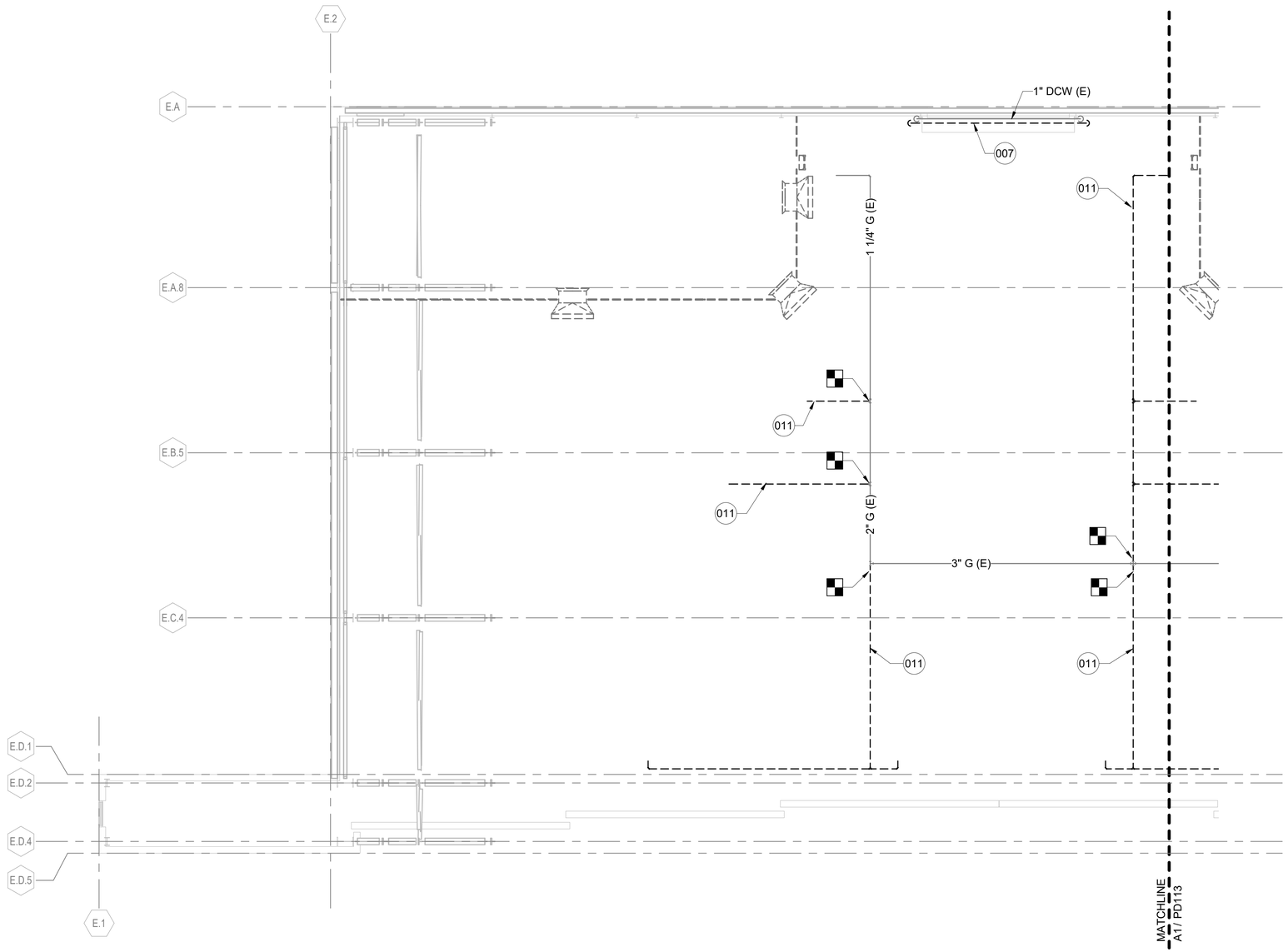
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
OVERALL DEMOLITION FLOOR PLAN - LEVEL 2

SHEET ID
B1455
PD111

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN



GENERAL NOTES - DEMOLITION

A	REFER TO ARCHITECTURE FOR REPAIR OF EXISTING FLOOR AND ROOF.
B	DRAWINGS ARE BASED ON THE BEST INFORMATION AVAILABLE, INCLUDING AS BUILT DRAWINGS. CONTRACTOR TO VERIFY EXISTING CONDITIONS.
C	PIPING NOTED (E) ARE EXISTING TO REMAIN.
D	REMOVE ALL PIPING SERVING DEMOLISHED FIXTURES SUCH THAT ANY THAT REMAINS WILL BE CONCEALED BEHIND FINISHED SURFACE (DOES NOT APPLY TO FIXTURES SUPPLIED BY EXPOSED PIPING). REPAIR ALL CUTS DONE TO FLOOR AND EXSTING WALLS. REFER TO STRUCTURAL FOR INSTRUCTIONS ON CUTTING AND PATCHING.

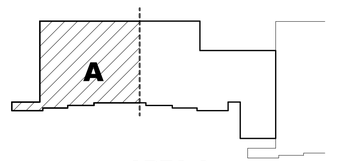
KEYNOTES

007	REMOVE EXISTING COMPRESSED AIR PIPING AND DROPS.
011	REMOVE EXISTING NATURAL GAS BRANCH PIPING BACK TO MAIN AND CAP AT MAIN.

PIPING LEGEND

EXISTING PIPING TO REMAIN

EXISTING PIPING TO BE DEMOLISHED



AREA A
KEY PLAN

GRAPHIC SCALE

8 6 4 2 0 8 16

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

PLAN NORTH

TRUE N

A1 PARTIAL DEMOLITION FLOOR PLAN - LEVEL 2 - AREA A

1/8" = 1'-0"

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
21NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: D. KEMP
DRAWN BY: D. KEMP
CHECKED BY: M. PHILLIPS
SUBMITTED BY: E. OLNESS
CITE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT21920 1PD112

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

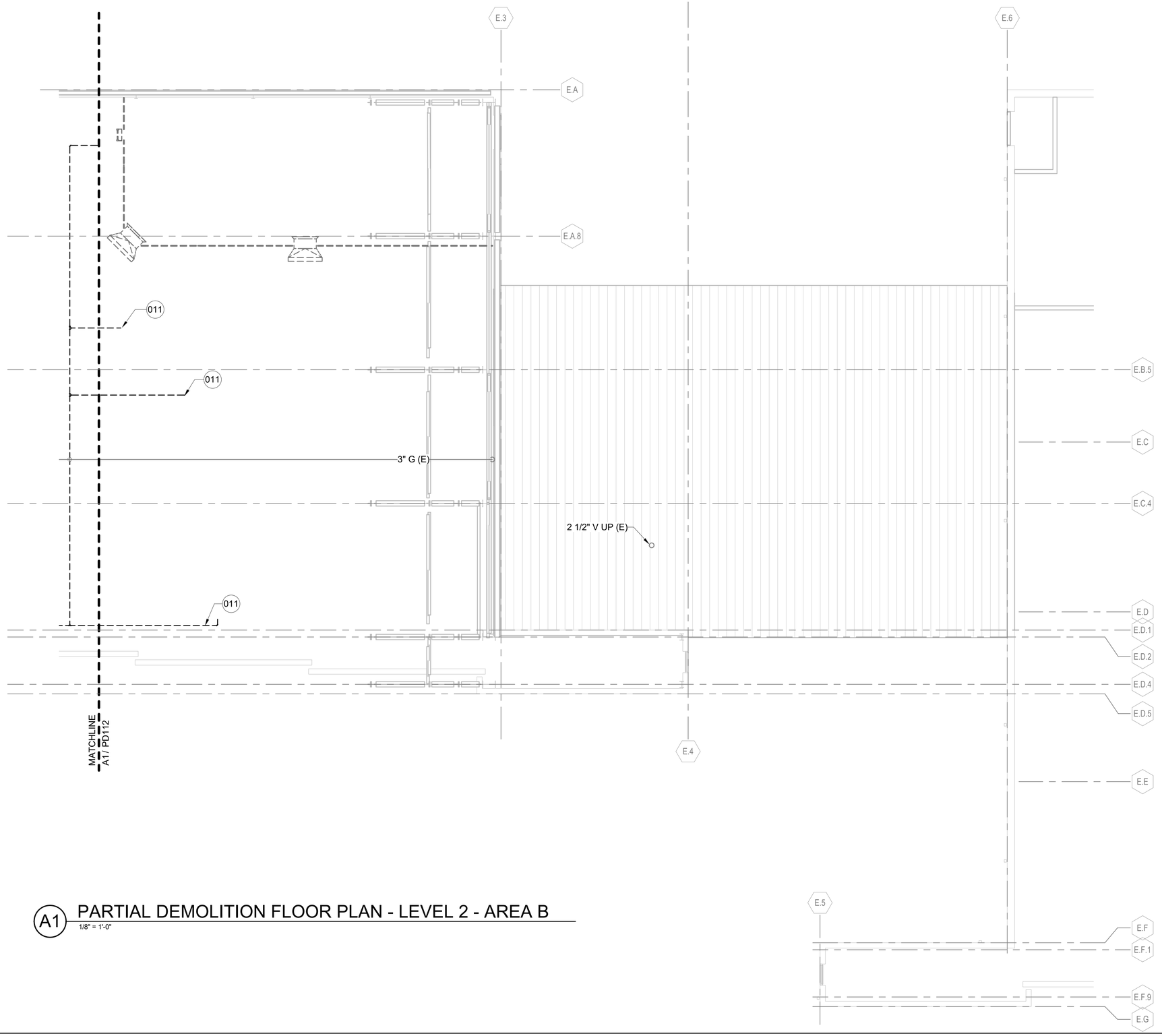
Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
Phone: 817.820.8000 | TBPE F-2966

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PARTIAL DEMOLITION FLOOR PLAN - LEVEL 2 - AREA A

SHEET ID
B1455
PD112

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



GENERAL NOTES - DEMOLITION

A	REFER TO ARCHITECTURE FOR REPAIR OF EXISTING FLOOR AND ROOF.
B	DRAWINGS ARE BASED ON THE BEST INFORMATION AVAILABLE, INCLUDING AS BUILT DRAWINGS. CONTRACTOR TO VERIFY EXISTING CONDITIONS.
C	PIPING NOTED (E) ARE EXISTING TO REMAIN.
D	REMOVE ALL PIPING SERVING DEMOLISHED FIXTURES SUCH THAT ANY THAT REMAINS WILL BE CONCEALED BEHIND FINISHED SURFACE (DOES NOT APPLY TO FIXTURES SUPPLIED BY EXPOSED PIPING). REPAIR ALL CUTS DONE TO FLOOR AND EXSTING WALLS. REFER TO STRUCTURAL FOR INSTRUCTIONS ON CUTTING AND PATCHING.

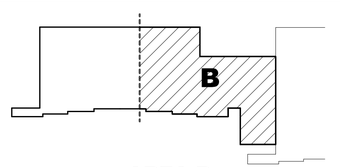
KEYNOTES

011	REMOVE EXISTING NATURAL GAS BRANCH PIPING BACK TO MAIN AND CAP AT MAIN.

PIPING LEGEND

EXISTING PIPING TO REMAIN

EXISTING PIPING TO BE DEMOLISHED



AREA B
KEY PLAN

A1 PARTIAL DEMOLITION FLOOR PLAN - LEVEL 2 - AREA B

1/8" = 1'-0"

GRAPHIC SCALE

8 6 4 2 0 8 16

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

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
23NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: D. KEMP	ISSUE DATE: 23 NOVEMBER 2022
DRAWN BY: D. KEMP	SOLICITATION NO.:
CHECKED BY: M. PHILLIPS	CONTRACT NO.:
SUBMITTED BY: E. OLNESS	DRAWING CODE.:
DATE:	FILE NAME: SXHT21920
ANSI D 22x34	

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
FIRM REGISTRATION NO. F-2966

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PARTIAL DEMOLITION FLOOR PLAN - LEVEL 2 - AREA B

SHEET ID
B1455
PD113

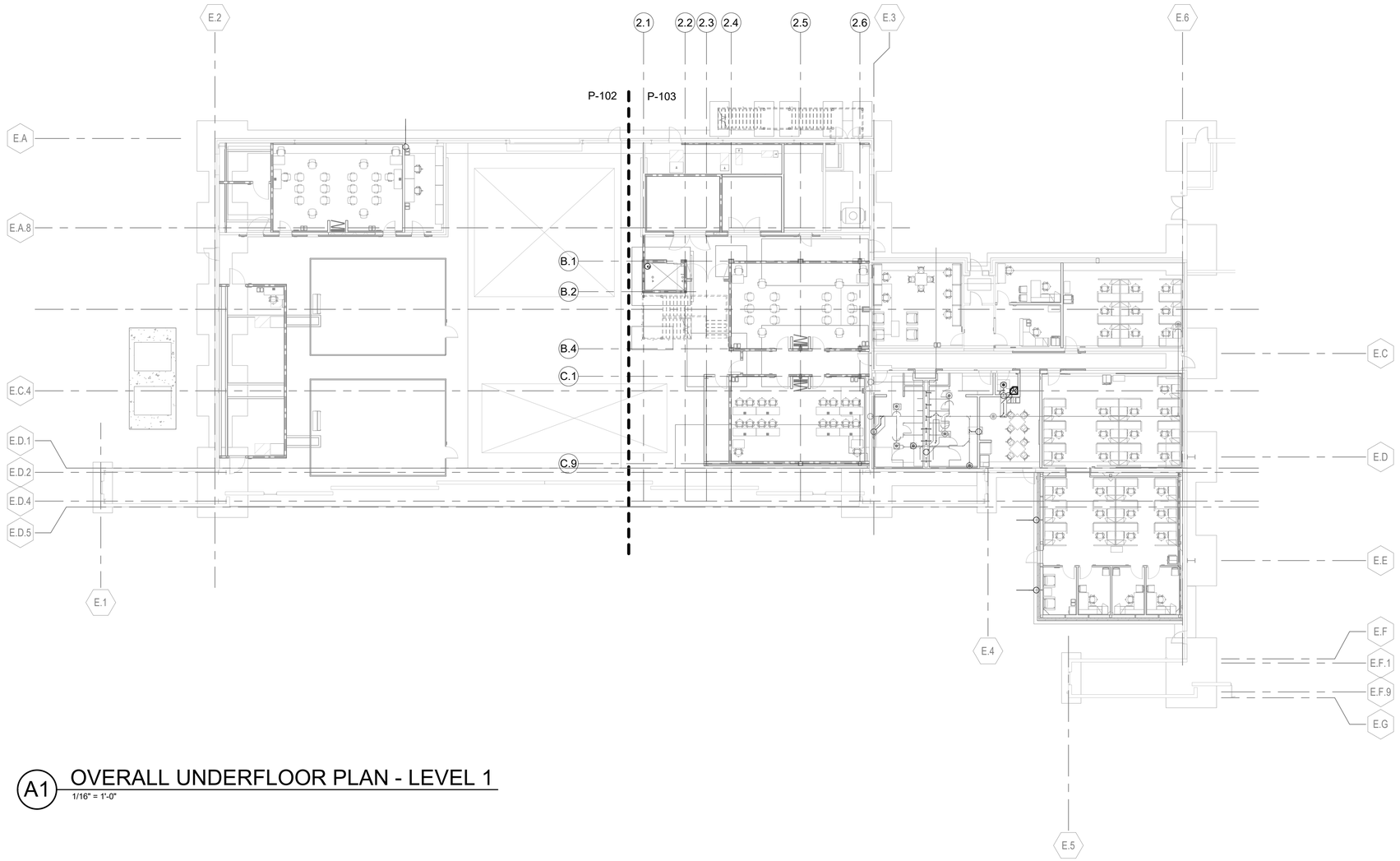
W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

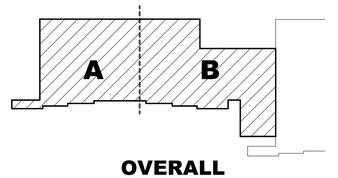
CERTIFIED FINAL DESIGN

GENERAL NOTES - UNDERFLOOR PLAN

A	INVERT ELEVATIONS ARE DIMENSIONED WITH RESPECT TO THE FINISHED FLOOR ELEVATION AT LEVEL 1.
B	REFER TO SHEETS P-501 AND P-502 FOR PLUMBING DETAILS.
C	REFER TO SHEET P-601 FOR PLUMBING SCHEDULES.



A1 OVERALL UNDERFLOOR PLAN - LEVEL 1
1/16" = 1'-0"



OVERALL KEY PLAN

GRAPHIC SCALE

16 12 8 4 0 16 32

SCALE: 1/16"=1'-0"

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: D. KEMP	ISSUE DATE: 23 NOVEMBER 2022
DRAWN BY: D. KEMP	SOLICITATION NO.:
CHECKED BY: M. PHILLIPS	CONTRACT NO.:
SUBMITTED BY: E. OLNESS	DRAWING CODE:
ANSI D 22x34	FILE NAME: SXHT219201P-101

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS No. 19219203

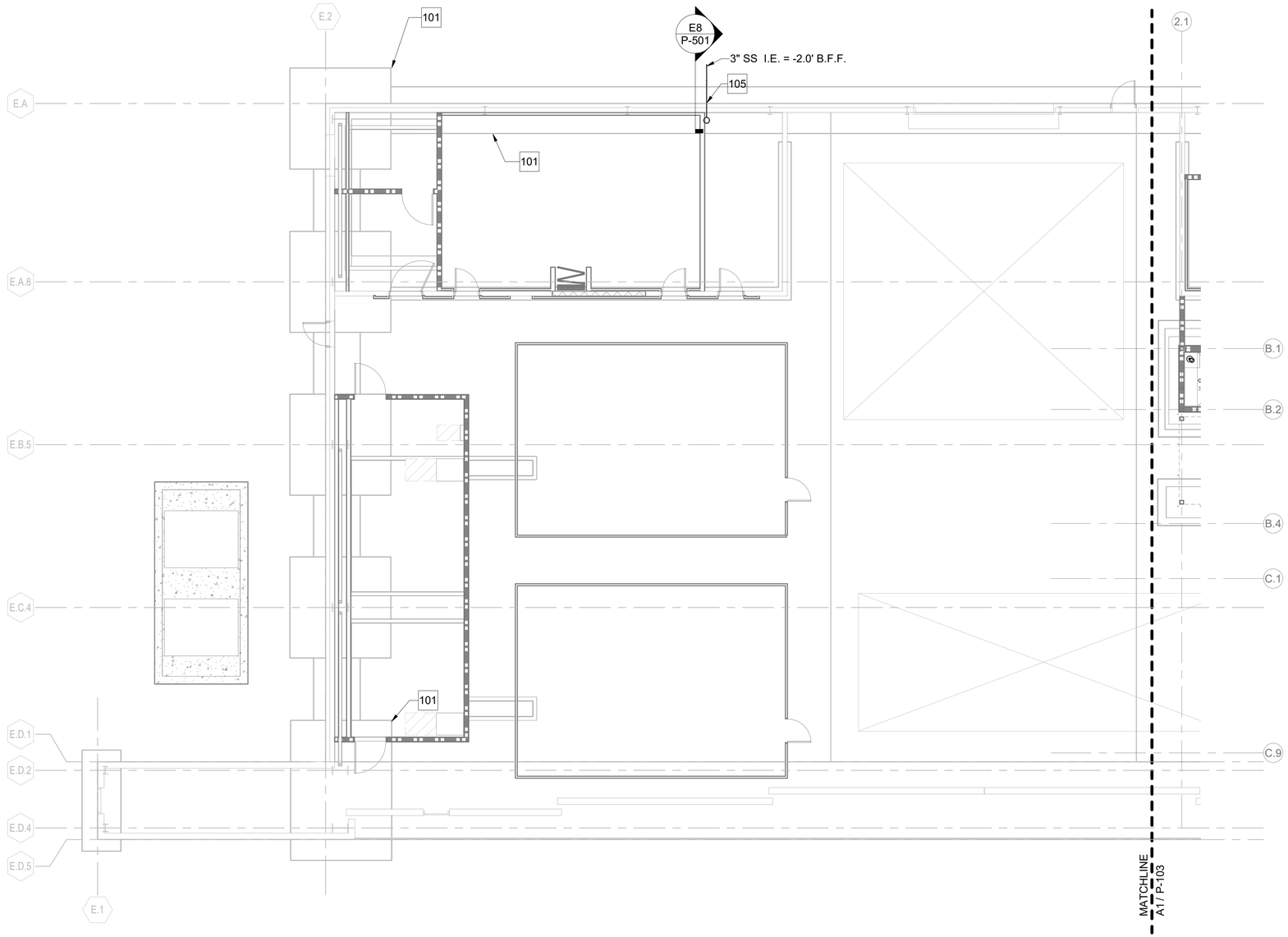
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
OVERALL UNDERFLOOR PLAN

SHEET ID
B1455
P-101

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN



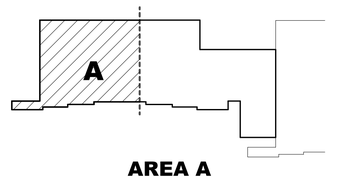
GENERAL NOTES - UNDERFLOOR PLAN

A	INVERT ELEVATIONS ARE DIMENSIONED WITH RESPECT TO THE FINISHED FLOOR ELEVATION AT LEVEL 1.
B	REFER TO SHEETS P-501 AND P-502 FOR PLUMBING DETAILS.
C	REFER TO SHEET P-601 FOR PLUMBING SCHEDULES.

KEYNOTES

101	STRUCTURAL FOOTING.
105	SLEEVE THROUGH EXTERIOR CONCRETE SKIRT WALL ABOVE FOOTING. ANGLE DOWN AT 45 DEGREES TO MEET CIVIL INVERT ELEVATION. REFER TO A1/CG102 FOR CONTINUATION.

A1 PARTIAL UNDERFLOOR PLAN - AREA A
1/8" = 1'-0"



AREA A
KEY PLAN

GRAPHIC SCALE
8 6 4 2 0 8 16
SCALE: 1/8"=1'-0"

PLAN NORTH
TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: D. KEMP
DRAWN BY: D. KEMP
CHECKED BY: M. PHILLIPS
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT21920-P-102

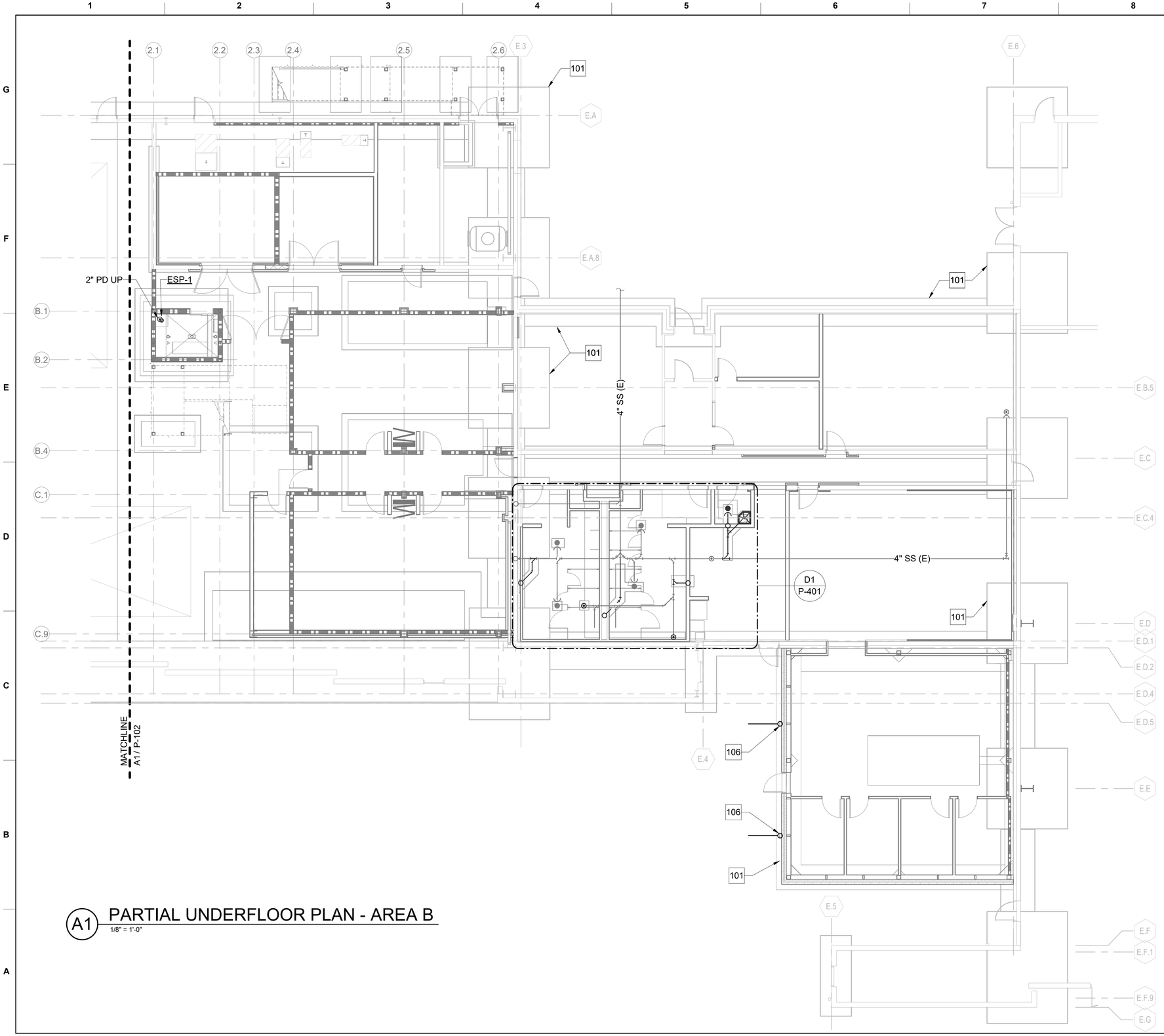
US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE
Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS No. 170260

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PARTIAL UNDERFLOOR PLAN - AREA A

SHEET ID
B1455
P-102

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



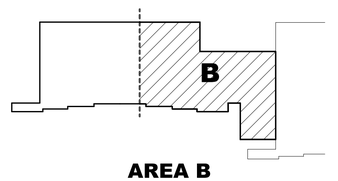
GENERAL NOTES - UNDERFLOOR PLAN

A	INVERT ELEVATIONS ARE DIMENSIONED WITH RESPECT TO THE FINISHED FLOOR ELEVATION AT LEVEL 1.
B	REFER TO SHEETS P-501 AND P-502 FOR PLUMBING DETAILS.
C	REFER TO SHEET P-601 FOR PLUMBING SCHEDULES.

KEYNOTES

101	STRUCTURAL FOOTING.
106	6" SD FROM STORM DRAIN BOOT. RE: A1/P-502.

A1 PARTIAL UNDERFLOOR PLAN - AREA B
1/8" = 1'-0"



AREA B
KEY PLAN

GRAPHIC SCALE
8 6 4 2 0 8 16
SCALE: 1/8"=1'-0"

PLAN NORTH
TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: D. KEMP	ISSUE DATE: 23 NOVEMBER 2022
DRAWN BY: D. KEMP	SOLICITATION NO.:
CHECKED BY: M. PHILLIPS	CONTRACT NO.:
SUBMITTED BY: E. OLNESS	DRAWING CODE:
SIZE: ANSI D 22x34	FILE NAME: SXHT219201P-103

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS Proj No. 19219203

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNGS21B1455, P2#: 496395
PARTIAL UNDERFLOOR PLAN - AREA B

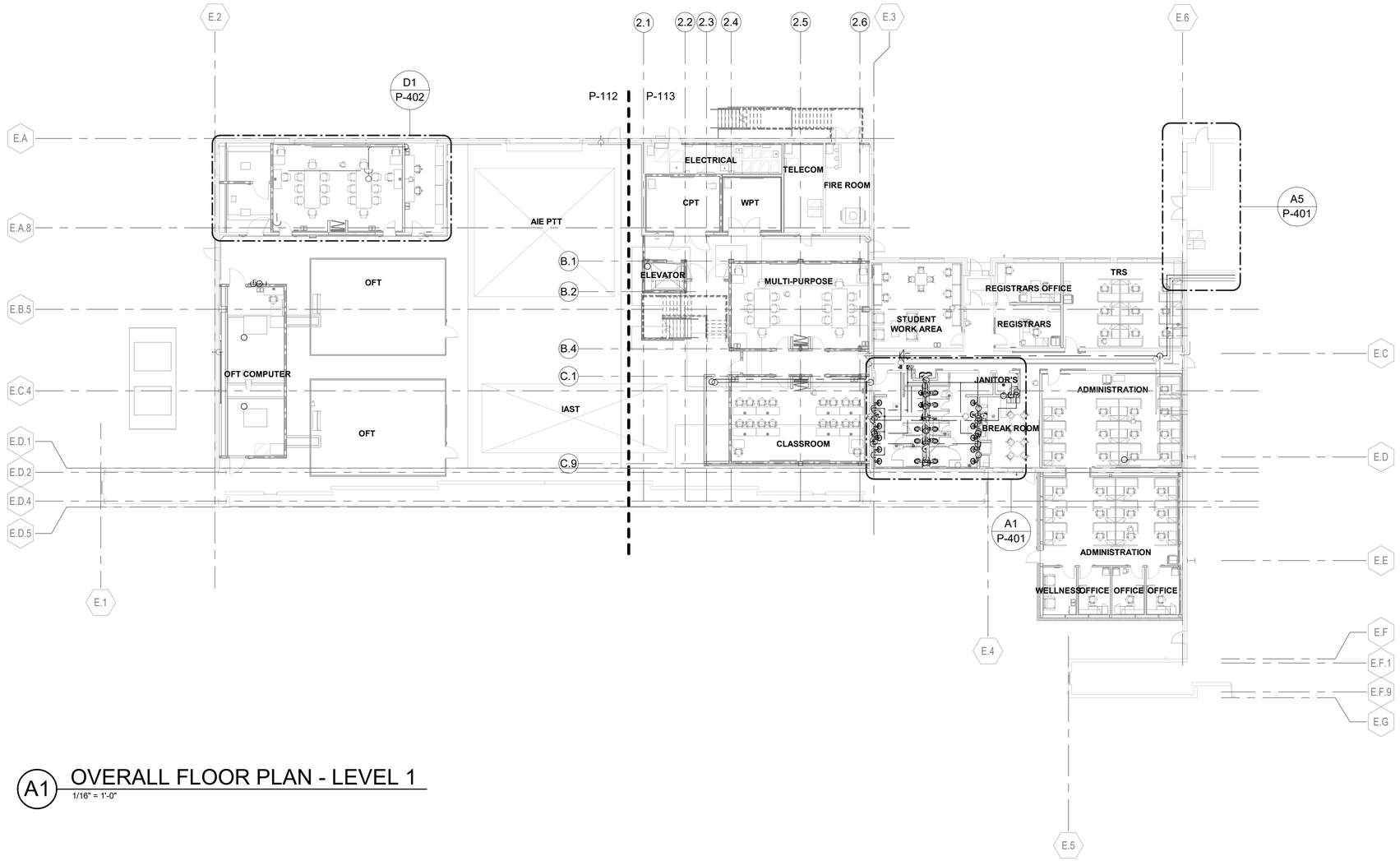
SHEET ID
B1455
P-103

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN

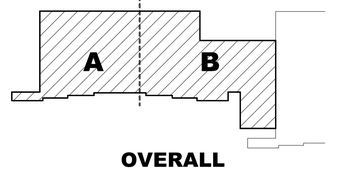
GENERAL NOTES - FLOOR PLANS

A	REFER TO ARCHITECTURE FOR INSTRUCTIONS ON SEALING PENETRATIONS THROUGH THE BUILDING ENVELOPE.
B	SLOPE CONDENSATE PIPING DOWNWARD AT A RATE OF 1/4" PER FOOT IN THE DIRECTION OF FLOW.
C	REFER TO SHEETS P-501 AND P-502 FOR PLUMBING DETAILS.
D	REFER TO SHEET P-601 FOR PLUMBING SCHEDULES.



A1 OVERALL FLOOR PLAN - LEVEL 1

1/16" = 1'-0"



OVERALL KEY PLAN

GRAPHIC SCALE

16 12 8 4 0 16 32

SCALE: 1/16"=1'-0"

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201P-111

DESIGNED BY: D. KEMP
DRAWN BY: D. KEMP
CHECKED BY: M. PHILLIPS
SUBMITTED BY: E. OLNESS
ANSI D 22x34

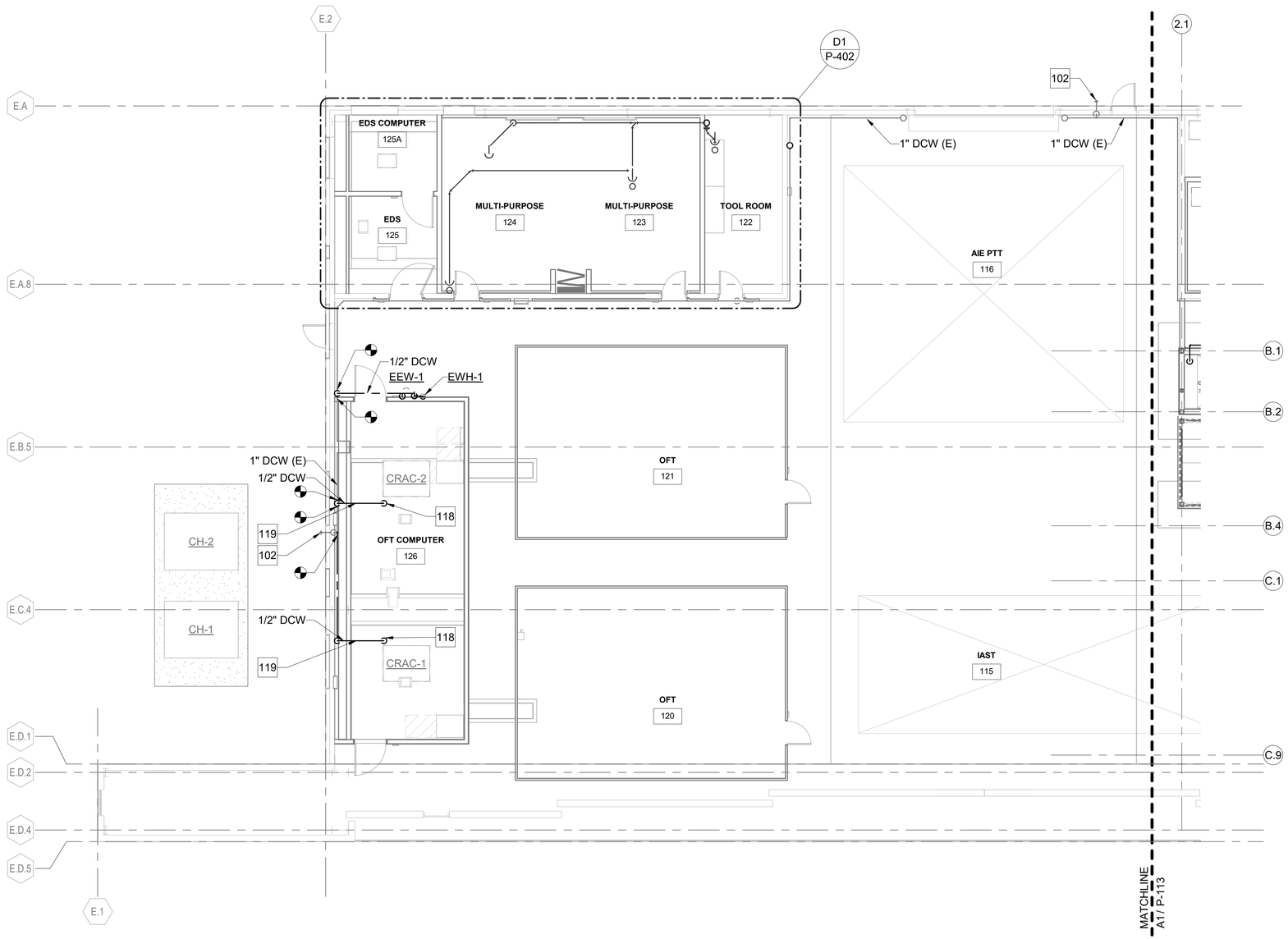
US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS No. W2R003

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
OVERALL FLOOR PLAN - LEVEL 1

SHEET ID
B1455
P-111

W912QR23R0003_Plans-0000



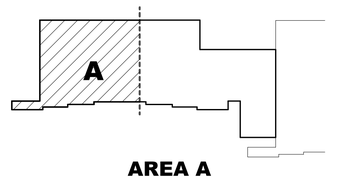
GENERAL NOTES - FLOOR PLANS

A	REFER TO ARCHITECTURE FOR INSTRUCTIONS ON SEALING PENETRATIONS THROUGH THE BUILDING ENVELOPE.
B	SLOPE CONDENSATE PIPING DOWNWARD AT A RATE OF 1/4" PER FOOT IN THE DIRECTION OF FLOW.
C	REFER TO SHEETS P-501 AND P-502 FOR PLUMBING DETAILS.
D	REFER TO SHEET P-601 FOR PLUMBING SCHEDULES.

KEYNOTES

102	EXISTING EXTERIOR WALL HYDRANT TO REMAIN.
118	1/2" DCW TO CRAC UNIT HUMIDIFIER. PROVIDE ASSE 1013 REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTER IF SIMILAR OR BETTER BACKFLOW PREVENTION (I.E. AIR GAP) NOT PROVIDED BY CRAC UNIT MANUFACTURER.
119	ROUTE PIPE ABOVE OFT COMPUTER ROOM CEILING. PROVIDE DRIP PAN WITH DRAIN BELOW PIPE SLOPED TOWARD CRAC UNIT DRAIN PAN. PIPE DRAIN TO CRAC UNIT DRIP PAN.

A1 PARTIAL FLOOR PLAN - LEVEL 1 - AREA A
1/8" = 1'-0"



AREA A
KEY PLAN

GRAPHIC SCALE
8 6 4 2 0 8 16
SCALE: 1/8"=1'-0"

PLAN NORTH
TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: D. KEMP
DRAWN BY: D. KEMP
CHECKED BY: M. PHILLIPS
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201P-112

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS No. 70128403

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PARTIAL FLOOR PLAN - LEVEL 1 - AREA A

SHEET ID
B1455
P-112

W912QR23R0003_Plans-0000

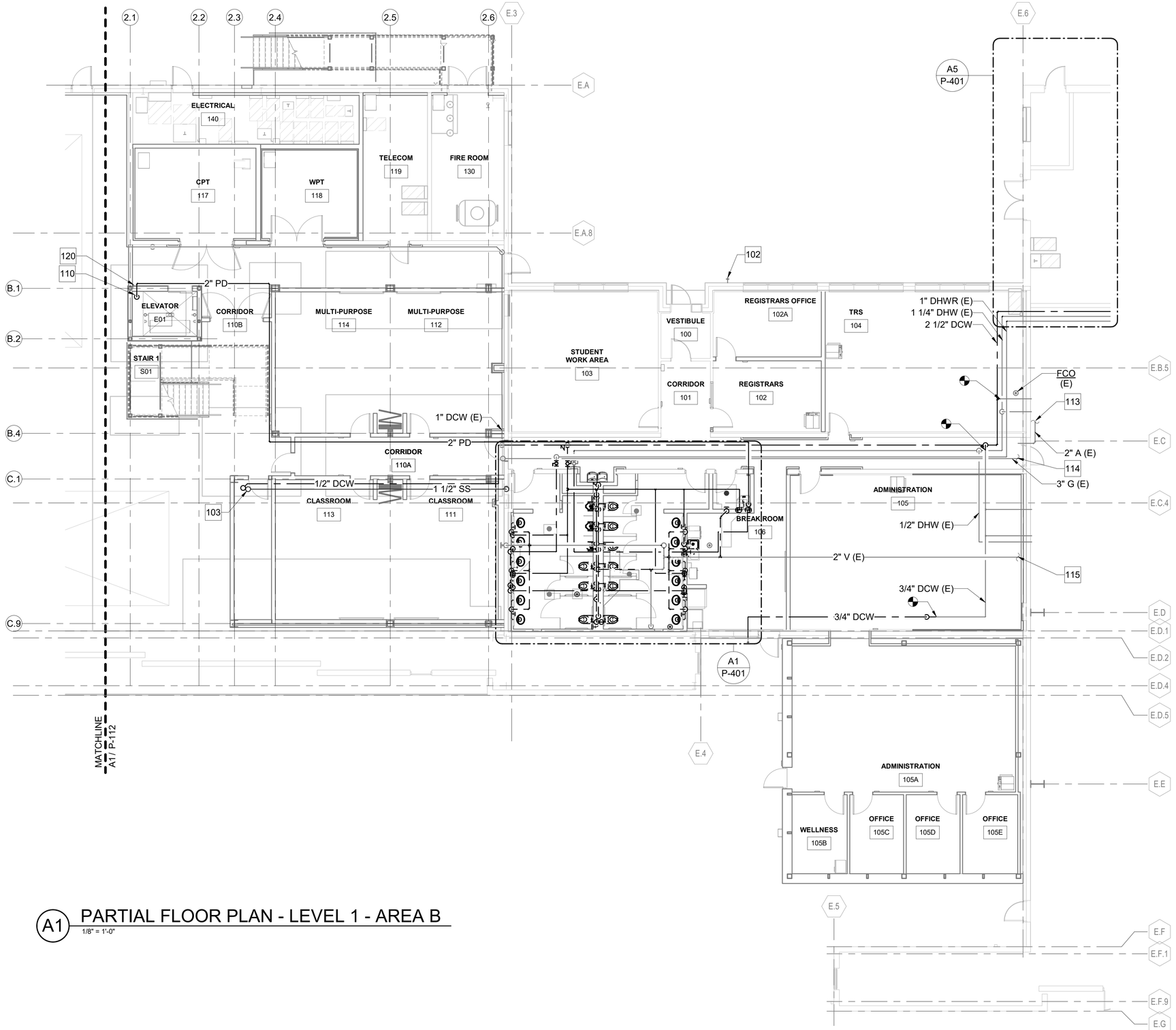
CERTIFIED FINAL DESIGN

GENERAL NOTES - FLOOR PLANS

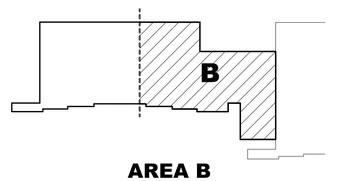
A	REFER TO ARCHITECTURE FOR INSTRUCTIONS ON SEALING PENETRATIONS THROUGH THE BUILDING ENVELOPE.
B	SLOPE CONDENSATE PIPING DOWNWARD AT A RATE OF 1/4" PER FOOT IN THE DIRECTION OF FLOW.
C	REFER TO SHEETS P-501 AND P-502 FOR PLUMBING DETAILS.
D	REFER TO SHEET P-601 FOR PLUMBING SCHEDULES.

KEYNOTES

102	EXISTING EXTERIOR WALL HYDRANT TO REMAIN.
103	1-1/2" SS AND 1/2" DCW SERVING 2ND FLOOR WATER COOLER.
110	2" PD UP FROM ESP-1.
113	EXISTING COMPRESSED AIR PIPING FROM MECHANICAL ROOM.
114	EXISTING NATURAL GAS PIPING FROM MECHANICAL ROOM TO SUPPLY NEW 375 MBH BOILER ON MECHANICAL MEZZANINE.
115	EXISTING VENT PIPING FROM MAINTENANCE HANGAR.
120	ELEVATOR SUMP PUMP CONTROL PANEL. REFER TO D7/P-502 FOR DETAIL.



A1 PARTIAL FLOOR PLAN - LEVEL 1 - AREA B
1/8" = 1'-0"



AREA B
KEY PLAN

GRAPHIC SCALE
8 6 4 2 0 8 16
SCALE: 1/8"=1'-0"

PLAN NORTH
TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS Project No. W7R0003

DESIGNED BY: D. KEMP
DRAWN BY: D. KEMP
CHECKED BY: M. PHILLIPS
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT21920IP-113

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNGS21B1455, P2#: 496395
PARTIAL FLOOR PLAN - LEVEL 1 - AREA B

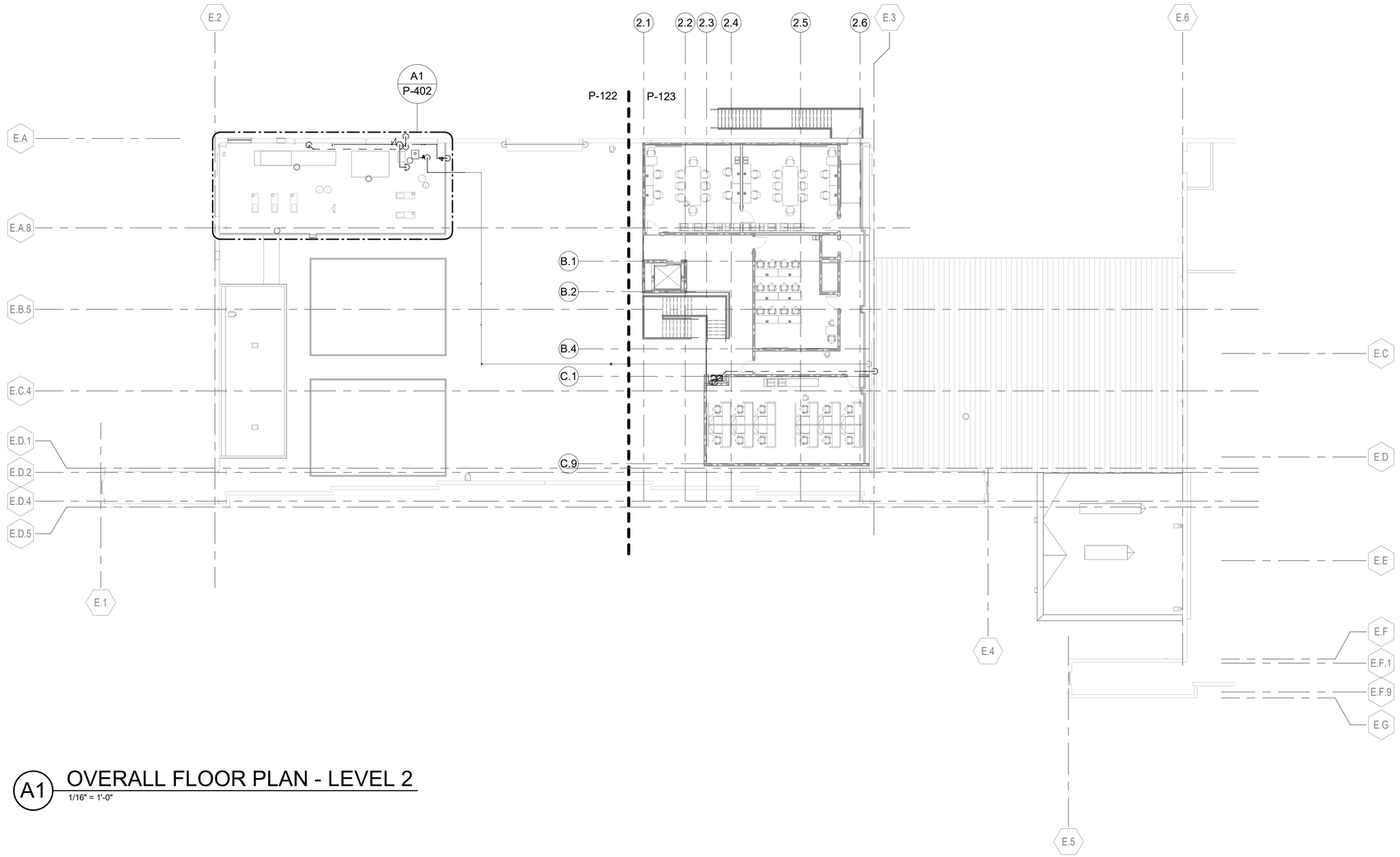
SHEET ID
B1455
P-113

W912QR23R0003_Plans-0000

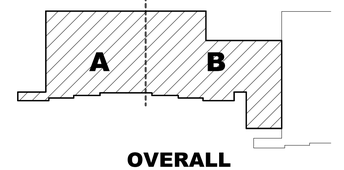
CERTIFIED FINAL DESIGN

GENERAL NOTES - FLOOR PLANS

A	REFER TO ARCHITECTURE FOR INSTRUCTIONS ON SEALING PENETRATIONS THROUGH THE BUILDING ENVELOPE.
B	SLOPE CONDENSATE PIPING DOWNWARD AT A RATE OF 1/4" PER FOOT IN THE DIRECTION OF FLOW.
C	REFER TO SHEETS P-501 AND P-502 FOR PLUMBING DETAILS.
D	REFER TO SHEET P-601 FOR PLUMBING SCHEDULES.



A1 OVERALL FLOOR PLAN - LEVEL 2
1/16" = 1'-0"



OVERALL KEY PLAN

GRAPHIC SCALE

16 12 8 4 0 16 32

SCALE: 1/16"=1'-0"

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.: P-121
FILE NAME: SXHT219201IP-121

DESIGNED BY: D. KEMP
DRAWN BY: D. KEMP
CHECKED BY: M. PHILLIPS
SUBMITTED BY: E. OLNESS
ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

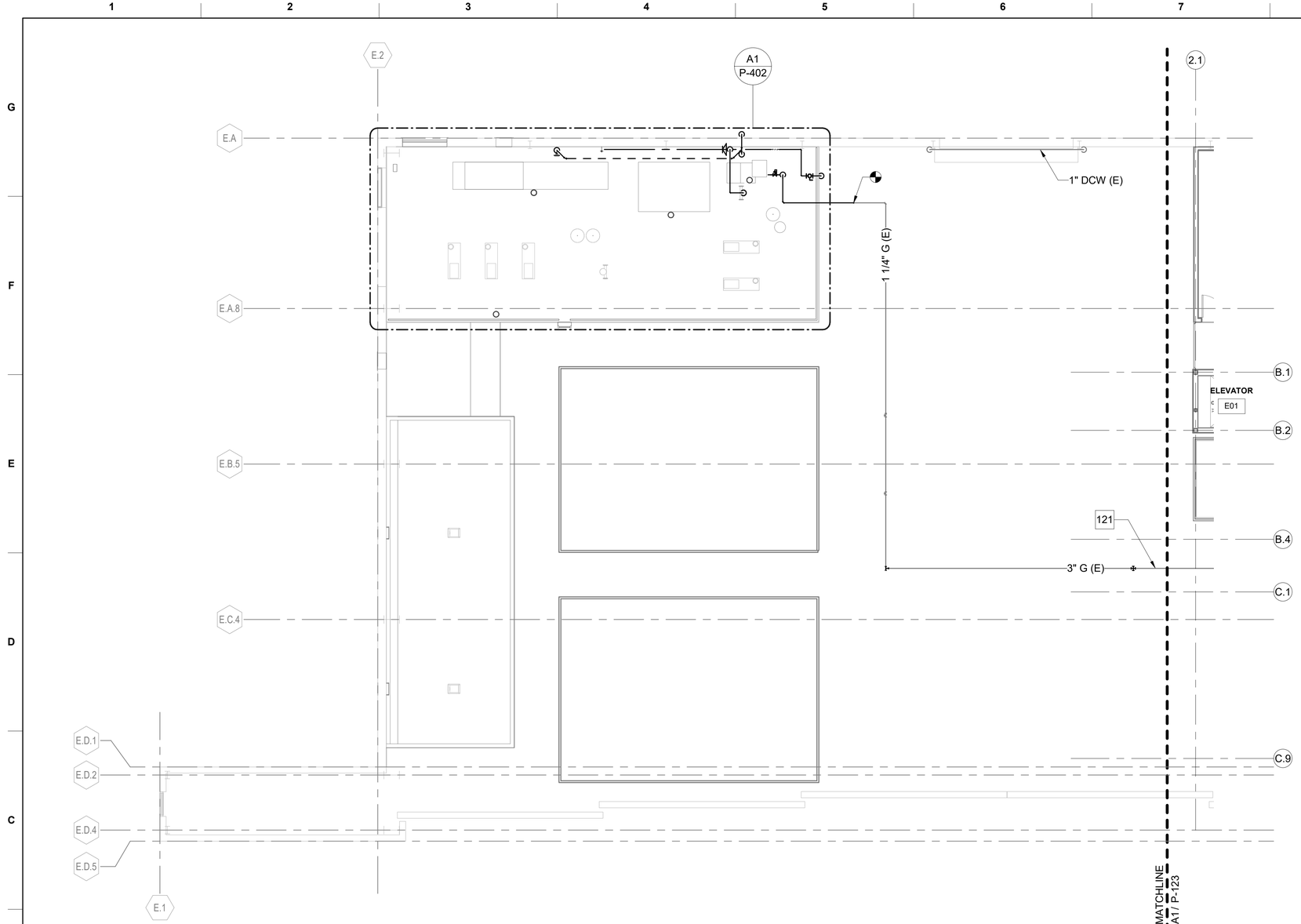
jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS No. W2R003

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
OVERALL FLOOR PLAN - LEVEL 2

SHEET ID
B1455
P-121

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



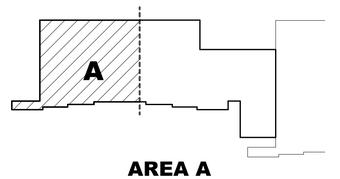
GENERAL NOTES - FLOOR PLANS

A	REFER TO ARCHITECTURE FOR INSTRUCTIONS ON SEALING PENETRATIONS THROUGH THE BUILDING ENVELOPE.
B	SLOPE CONDENSATE PIPING DOWNWARD AT A RATE OF 1/4" PER FOOT IN THE DIRECTION OF FLOW.
C	REFER TO SHEETS P-501 AND P-502 FOR PLUMBING DETAILS.
D	REFER TO SHEET P-601 FOR PLUMBING SCHEDULES.

KEYNOTES

121	EXISTING 3" G CONTINUED FROM P-123 TO SUPPLY NEW 375 MBH BOILER ON MECHANICAL MEZZANINE.

A1 PARTIAL FLOOR PLAN - LEVEL 2 - AREA A
1/8" = 1'-0"



AREA A
KEY PLAN

GRAPHIC SCALE
8 6 4 2 0 8 16
SCALE: 1/8"=1'-0"

PLAN NORTH
TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: D. KEMP
DRAWN BY: D. KEMP
CHECKED BY: M. PHILLIPS
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201P-122

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS No. D2R0003

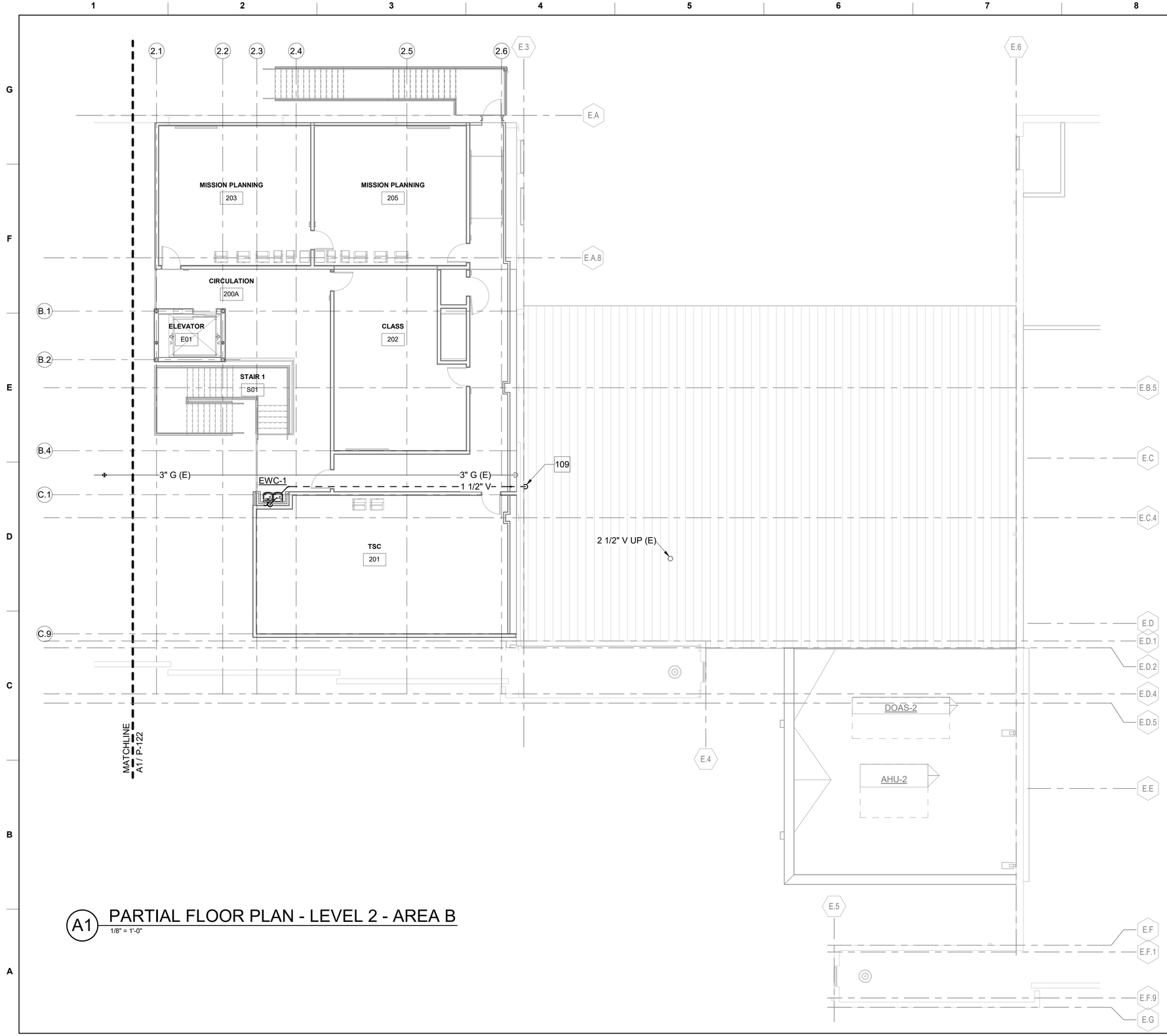
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PARTIAL FLOOR PLAN - LEVEL 2 - AREA A

SHEET ID
B1455
P-122

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN



A1 PARTIAL FLOOR PLAN - LEVEL 2 - AREA B

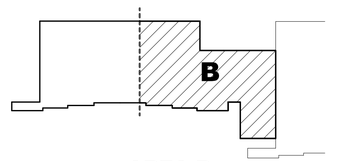
1/8" = 1'-0"

GENERAL NOTES - FLOOR PLANS

A	REFER TO ARCHITECTURE FOR INSTRUCTIONS ON SEALING PENETRATIONS THROUGH THE BUILDING ENVELOPE.
B	SLOPE CONDENSATE PIPING DOWNWARD AT A RATE OF 1/4" PER FOOT IN THE DIRECTION OF FLOW.
C	REFER TO SHEETS P-501 AND P-502 FOR PLUMBING DETAILS.
D	REFER TO SHEET P-601 FOR PLUMBING SCHEDULES.

KEYNOTES

109	2" VENT THROUGH WALL. RE: D4/P-502 FOR DETAIL.



AREA B
KEY PLAN

GRAPHIC SCALE

8 6 4 2 0 8 16

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

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
23NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: D. KEMP
DRAWN BY: D. KEMP
CHECKED BY: M. PHILLIPS
SUBMITTED BY: E. OLNESS
DATE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022 SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201P-123

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
ACCESS No. 1000013

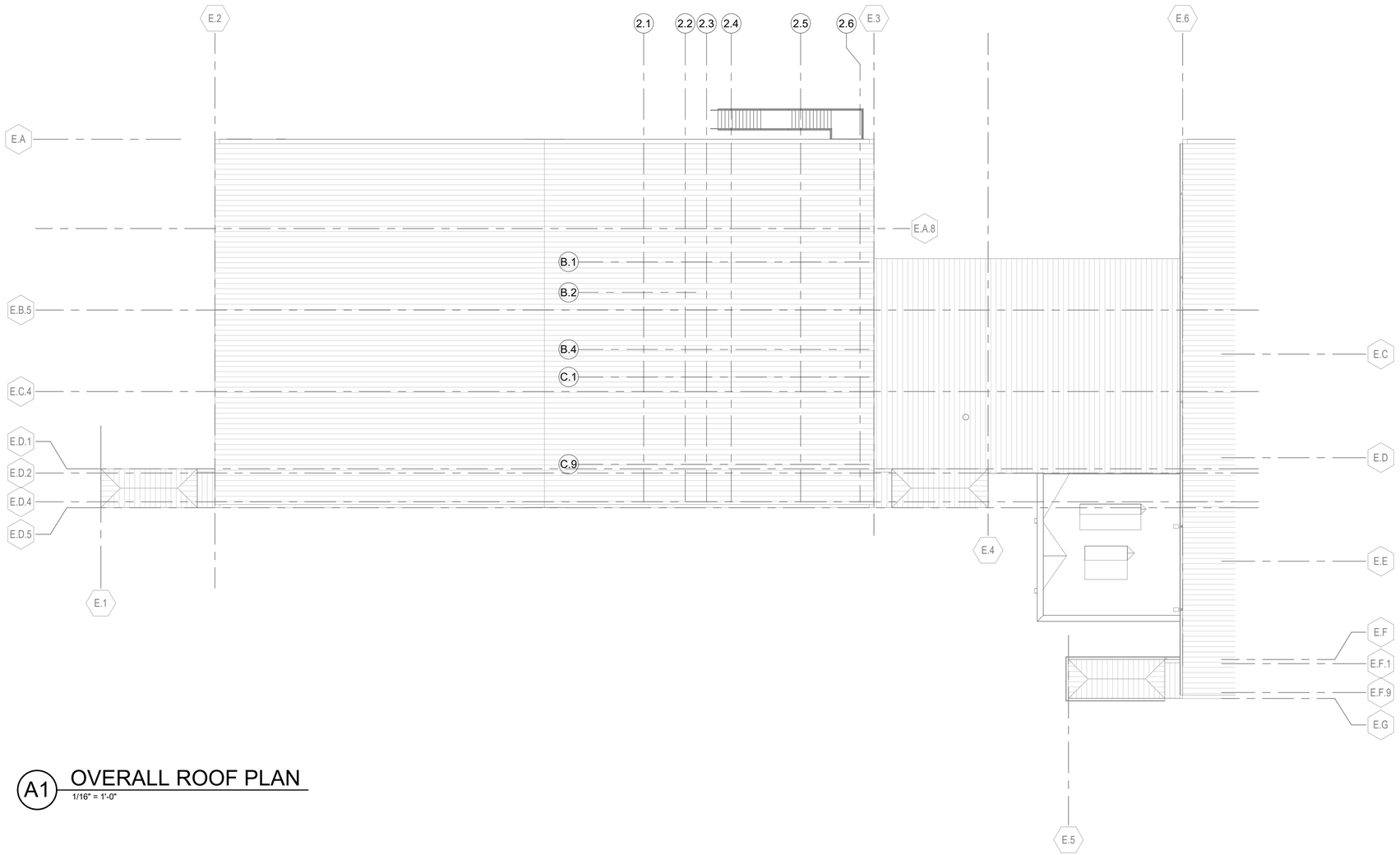
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PARTIAL FLOOR PLAN - LEVEL 2 - AREA B

SHEET ID
B1455
P-123

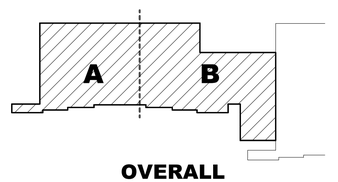
W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN



A1 OVERALL ROOF PLAN
1/16" = 1'-0"



OVERALL KEY PLAN

GRAPHIC SCALE

16 12 8 4 0 16 32

SCALE: 1/16"=1'-0"

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: D. KEMP
DRAWN BY: D. KEMP
CHECKED BY: M. PHILLIPS
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201P-141

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS Project No. 190903

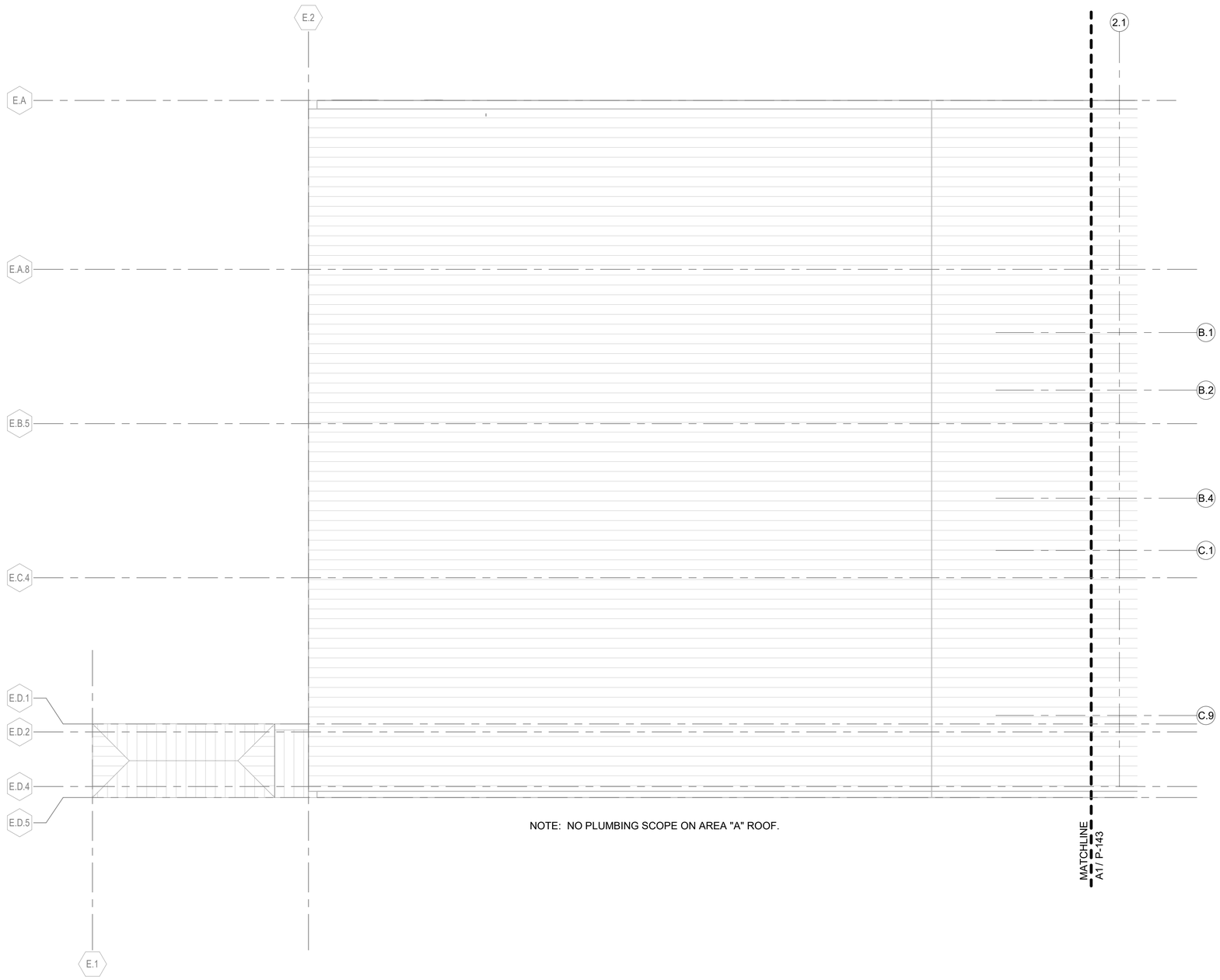
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
OVERALL ROOF PLAN

SHEET ID
B1455
P-141

W912QR23R0003_Plans-0000

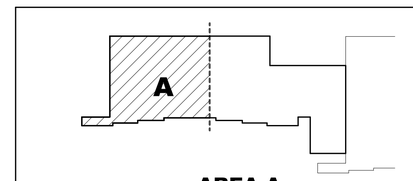
ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN



NOTE: NO PLUMBING SCOPE ON AREA "A" ROOF.

A1 PARTIAL ROOF PLAN - AREA A
1/8" = 1'-0"



AREA A
KEY PLAN

GRAPHIC SCALE
8 6 4 2 0 8 16
SCALE: 1/8"=1'-0"

PLAN NORTH
TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: D. KEMP
DRAWN BY: D. KEMP
CHECKED BY: M. PHILLIPS
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201P-142

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS No. W2R0003

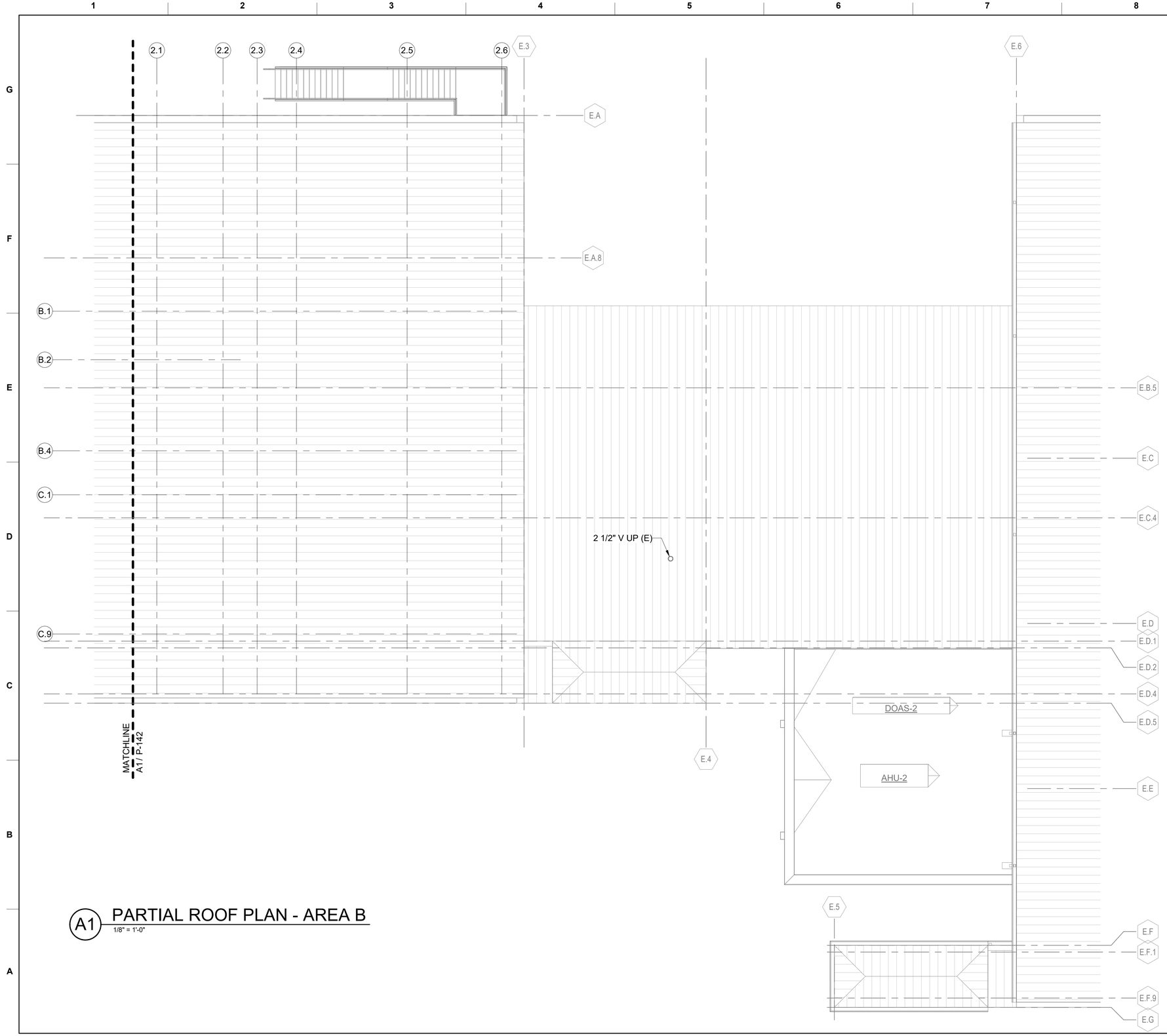
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PARTIAL ROOF PLAN - AREA A

SHEET ID
B1455
P-142

W912QR23R0003_Plans-0000

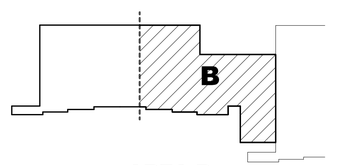
ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN



A1 PARTIAL ROOF PLAN - AREA B

1/8" = 1'-0"



AREA B
KEY PLAN

GRAPHIC SCALE

8 6 4 2 0 8 16

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

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: D. KEMP
DRAWN BY: D. KEMP
CHECKED BY: M. PHILLIPS
SUBMITTED BY: E. OLNESS
DATE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201P-143

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
ACCESS No. 1000021513

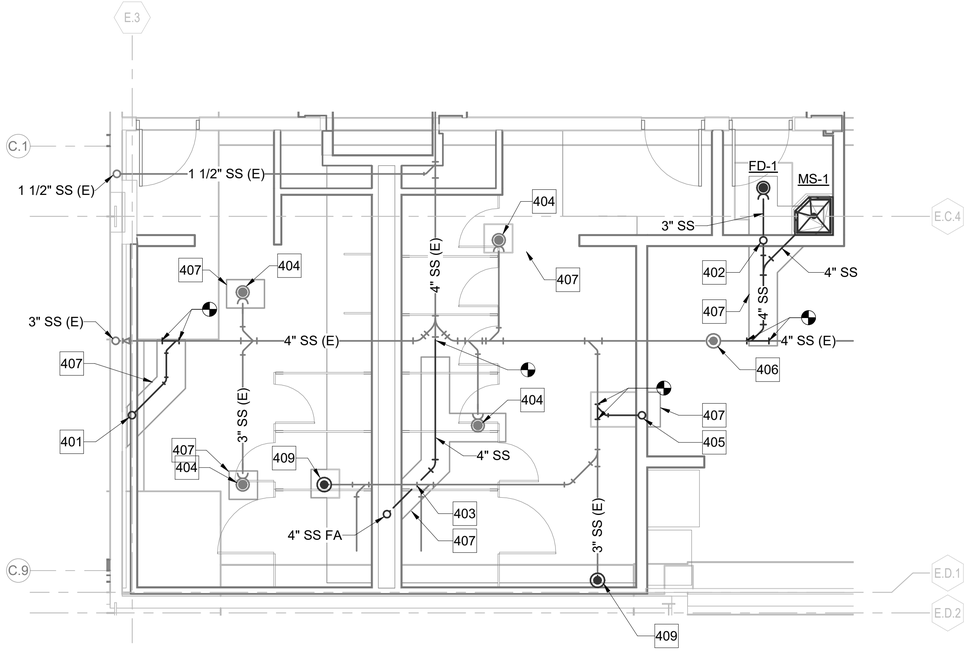
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PARTIAL ROOF PLAN - AREA B

SHEET ID
B1455
P-143

W912QR23R0003_Plans-0000

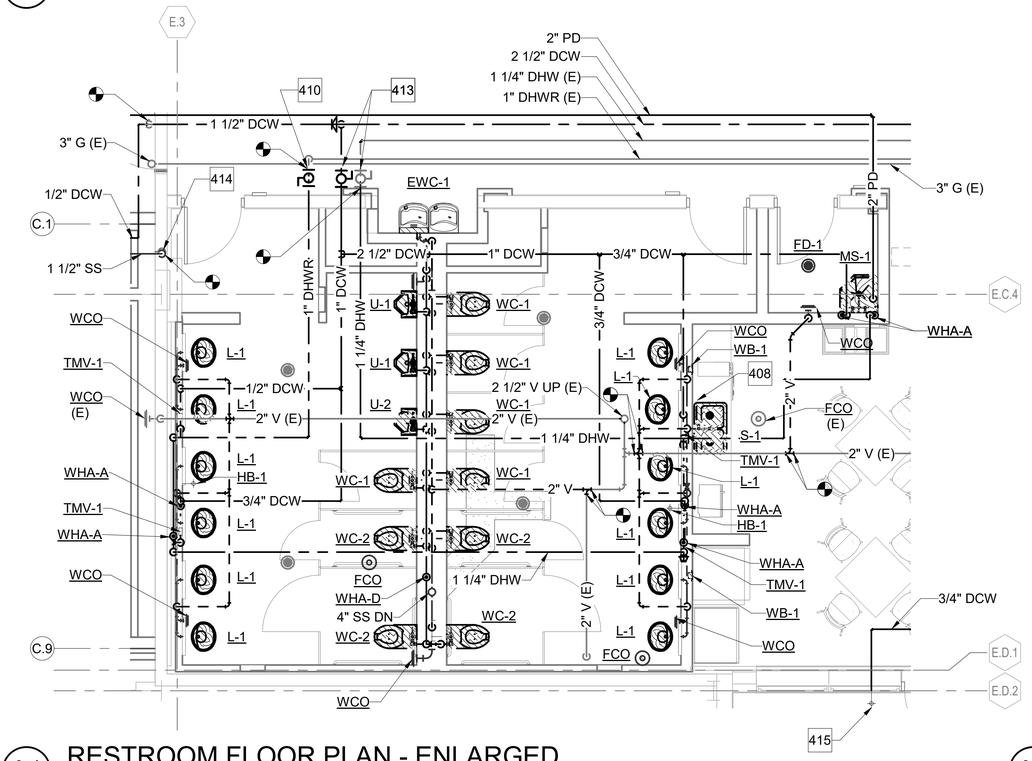
ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN



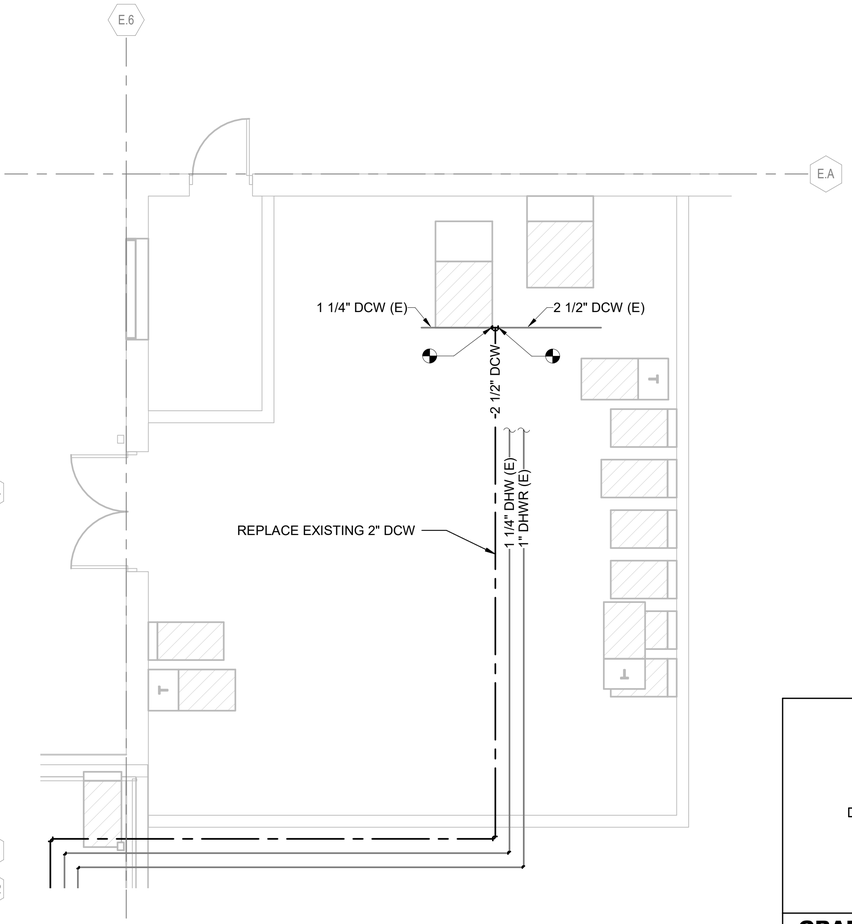
D1 RESTROOM UNDERFLOOR PLAN - ENLARGED

1/4" = 1'-0"



A1 RESTROOM FLOOR PLAN - ENLARGED

1/4" = 1'-0"

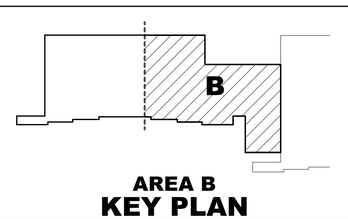


A5 EXISTING MECHANICAL RM PLAN - ENLARGED

1/4" = 1'-0"

KEYNOTES

401	2" SS UP TO LAVATORIES.
402	3" SS UP TO WALL CLEANOUT.
403	REMOVE EXISTING SANITARY PIPING AS REQUIRED TO FACILITATE INSTALLATION OF NEW PIPING.
404	EXISTING FLOOR DRAIN. RAISE ELEVATION TO BE FLUSH WITH TOP OF NEW FLOOR; FLOOR WILL NOT SLOPE TO DRAIN. DISCONNECT EXISTING TRAP PRIMER PIPING AND PLUG TRAP PRIMER CONNECTION. PROVIDE NEW ASSE 1072 BARRIER TYPE TRAP SEAL.
405	2" SS UP TO LAVATORIES AND BREAKROOM SINK.
406	EXISTING FLOOR CLEANOUT (TO REMAIN).
407	SAWCUT FLOOR AS REQUIRED TO PROVIDE NEW SANITARY PIPING AND CONNECT TO EXISTING. REFER TO STRUCTURAL FOR INSTRUCTIONS ON CUTTING AND PATCHING.
408	CONNECT COFFEE BREWER AND AND UNDERCOUNTER DISHWASHER TO COLD WATER SUPPLY BELOW COUNTER. RE: E1/P-501. PROVIDE HIGH LOOP IN DISHWASHER DRAIN LINE AND CONNECT TO SINK TAIL PIECE BEFORE P-TRAP.
409	PROVIDE NEW FLOOR CLEANOUT AND CONNECT TO EXISTING SANITARY PIPING.
410	PROVIDE BALL VALVE IN DOMESTIC HOT WATER RETURN.
413	COORDINATE LOCATION OF PIPING WITH NEW GYPSUM BOARD CEILING. RELOCATE EXISTING VALVES AND PIPING AS NEEDED TO MAINTAIN ACCESSIBILITY.
414	CONNECT TO EXISTING 1-1/2" SANITARY PIPE IN WALL.
415	RELOCATE EXISTING HOSE BIB. RE: A1/PD103



AREA B
KEY PLAN

GRAPHIC SCALE

4 3 2 1 0 4 8

SCALE: 1/4"=1'-0"

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
21NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: D. KEMP
DRAWN BY: D. KEMP
CHECKED BY: M. PHILLIPS
SUBMITTED BY: E. OLMESS
QC'D:
ANSI D 22x34

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:.
FILE NAME: SXHT21920P-401

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

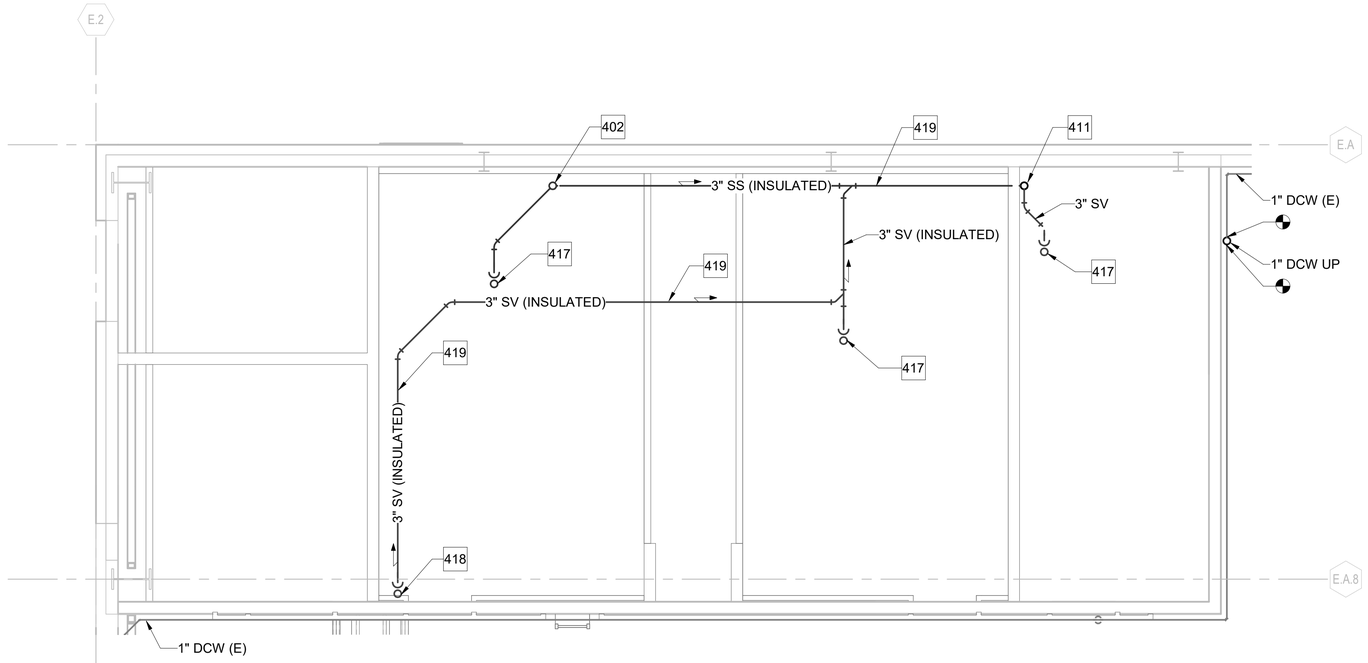
Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
Phone: (817)820-8000 Fax: (817)820-8019

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PLUMBING ENLARGED PLANS

SHEET ID
B1455
P-401

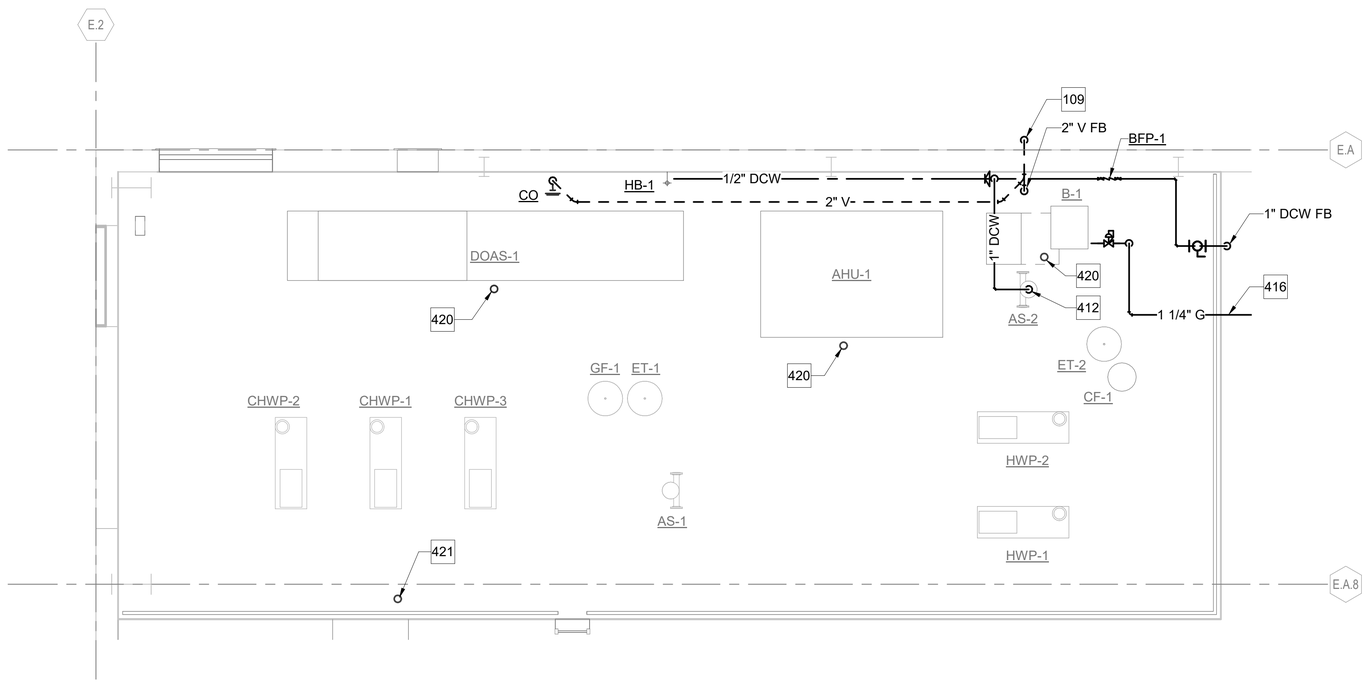
W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



D1 MEZZANINE UNDERFLOOR PLAN - ENLARGED

1/4" = 1'-0"

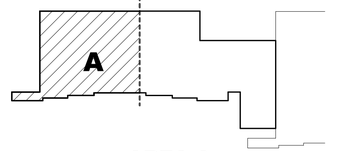


A1 MEZZANINE FLOOR PLAN - ENLARGED

1/4" = 1'-0"

KEYNOTES

109	2" VENT THROUGH WALL. RE: D4/P-502 FOR DETAIL.
402	3" SS UP TO WALL CLEANOUT.
411	3" SS DOWN, 2" VENT UP.
412	REFER TO D4/M-504 FOR MAKE-UP WATER TO MECHANICAL SYSTEMS.
416	NEW 1-1/4" G TO SUPPLY NEW 375 MBH BOILER.
417	4" PIPE UP THROUGH FLOOR TO RECEIVE CONDENSATE. REFER TO A1/P-503 FOR DETAIL. COORDINATE FINAL LOCATION WITH MECHANICAL TRADE.
418	3" PIPE UP THROUGH FLOOR TO 6" SIGHT DRAIN TO RECEIVE CONDENSATE. REFER TO A4/P-503 FOR DETAIL.
419	INSULATE DRAIN PIPING BACK TO RISER TO PREVENT CONDENSATION.
420	4" CONDENSATE RECEPTACLE. REFER TO A1/P-503 FOR DETAIL.
421	6" SIGHT DRAIN. REFER TO A4/P-503 FOR DETAIL.



AREA A
KEY PLAN

GRAPHIC SCALE

4 3 2 1 0 4 8

SCALE: 1/4"=1'-0"

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: D. KEMP
DRAWN BY: D. KEMP
CHECKED BY: M. PHILLIPS
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT21920-P402

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

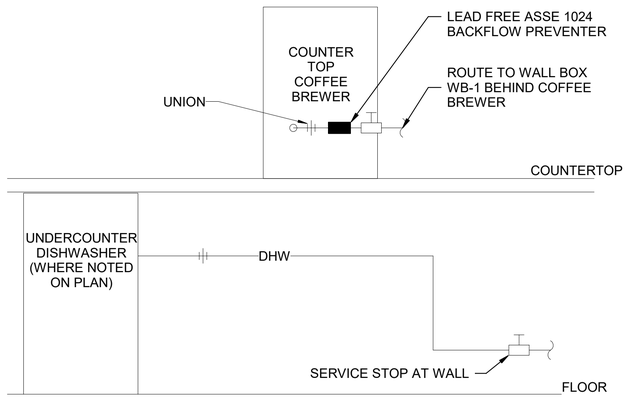
Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
PROJECT No. 240001.12

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PLUMBING ENLARGED PLANS

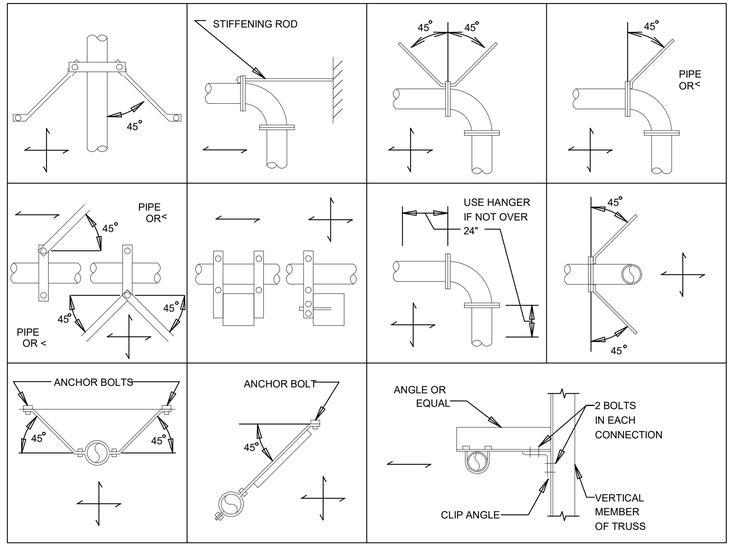
SHEET ID
B1455
P-402

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN

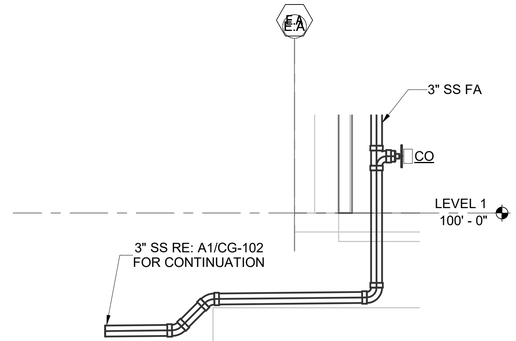


E1 COFFEE MAKER/DISHWASHER DETAIL
NTS

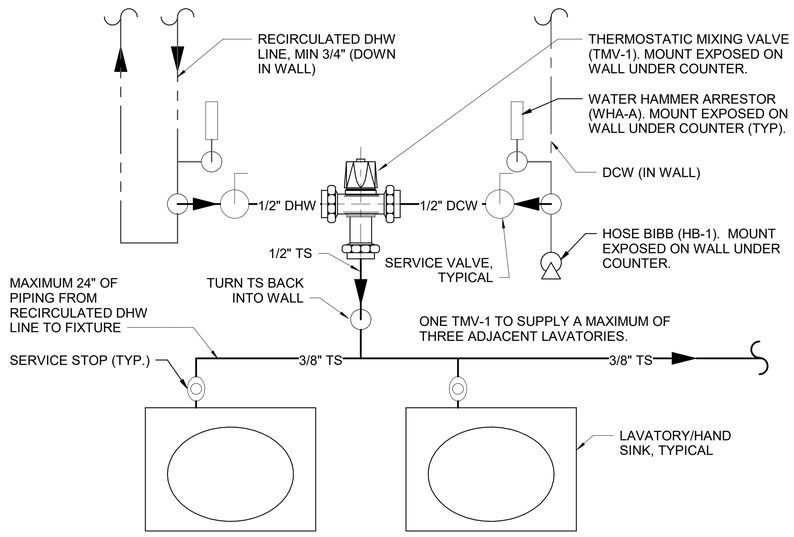


NOTES:
1. SEE SMACNA SEISMIC RESTRAINT MANUAL CHAPTER 3 FOR GENERAL REQUIREMENTS
2. SEE SMACNA SEISMIC RESTRAINT MANUAL TABLE 8.1 FOR CONNECTION TYPE TO STRUCTURAL SUPPORTING MEMBERS
3. PLACE STANDARD FLAT WASHERS BETWEEN SHEET METAL ANGLES AND NUT.
4. REFER TO TI 809-04, CHAPTER 10 FOR FURTHER REQUIREMENTS

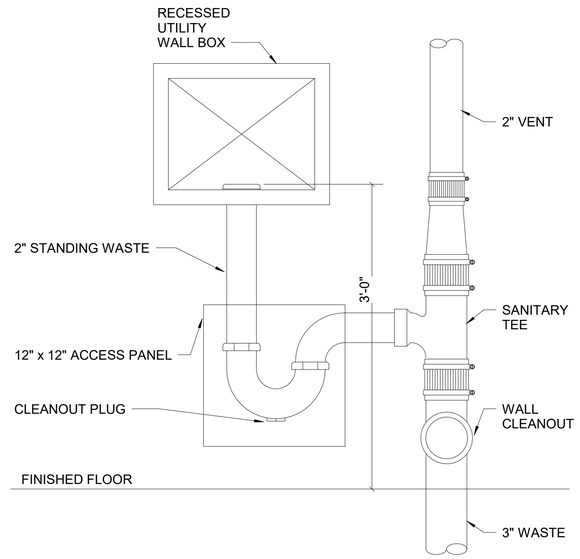
D4 SEISMIC DETAILS FOR SWAY BRACING
NTS



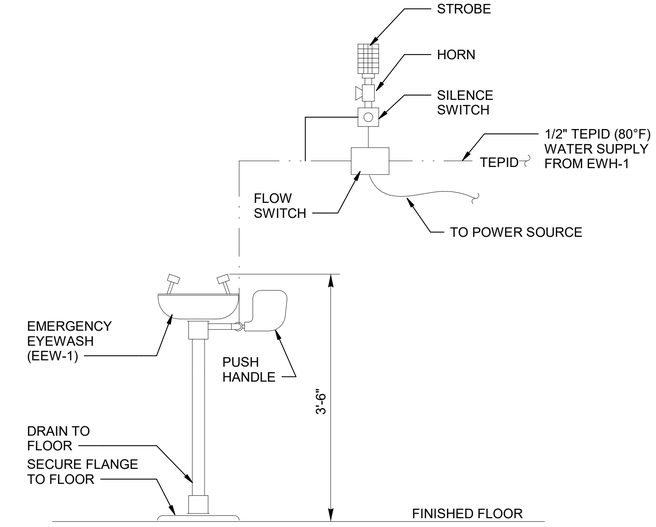
E8 MEZZANINE SANITARY OUTLET
1/2" = 1'-0"



A1 LAVATORY PIPING DETAIL
NTS



A5 WALL BOX DETAIL
NTS



NOTE:
1. PROVIDE FLOW SWITCH, HORN AND STOBE PER REQUIREMENTS OF UFC 3-420-01 APPENDIX D. ALARM DOES NOT NEED TO ALARM BACK TO A LOCATION THAT IS MONITORED 24/7.
2. UPON ACTIVATION OF EEW-1, EWH-1 SHALL ENERGIZE TO PROVIDE THE REQUIRED TEMPERATURE TO EEW-1.

A8 EMERGENCY EYEWASH DETAIL
NTS

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
21NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: D. KEMP
DRAWN BY: D. KEMP
CHECKED BY: M. PHILLIPS
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT21920-P-501

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

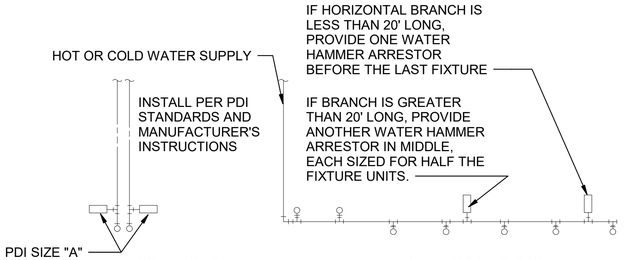
Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
TBPE Registration No. F-2600

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PLUMBING DETAILS

SHEET ID
B1455
P-501

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN

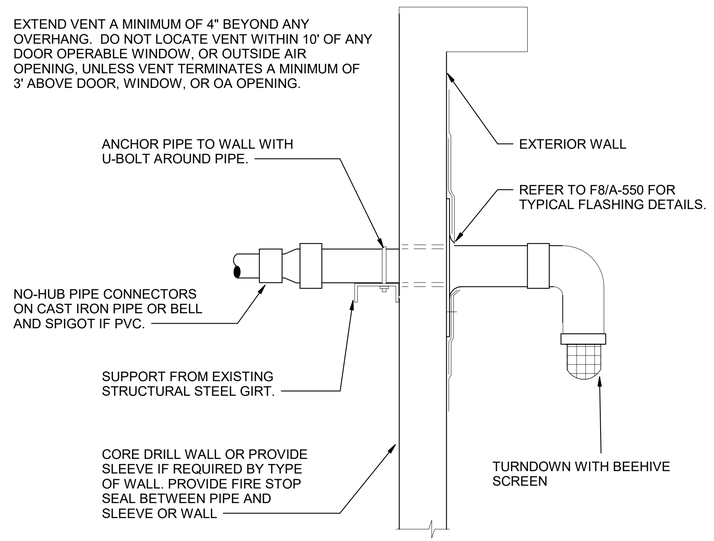


PDI SIZE	PIPE SIZE	FIXTURE UNIT LOAD
A	1/2"	1-11
B	3/4"	12-32
C	1"	33-60
D	1 1/4"	61-113
E	1-1/2"	114-154
F	2"	155-330

FIXTURE UNIT TABULATION		
FIXTURE	COLD	HOT
FLUSH VALVE WATER CLOSET	10	--
URINAL	5	--
COUNTER SINK	1.5	1.5
LAVATORY	1.5	1.5
MOP BASIN	2.25	2.25
WATER COOLER	.25	--
SHOWER	3	3

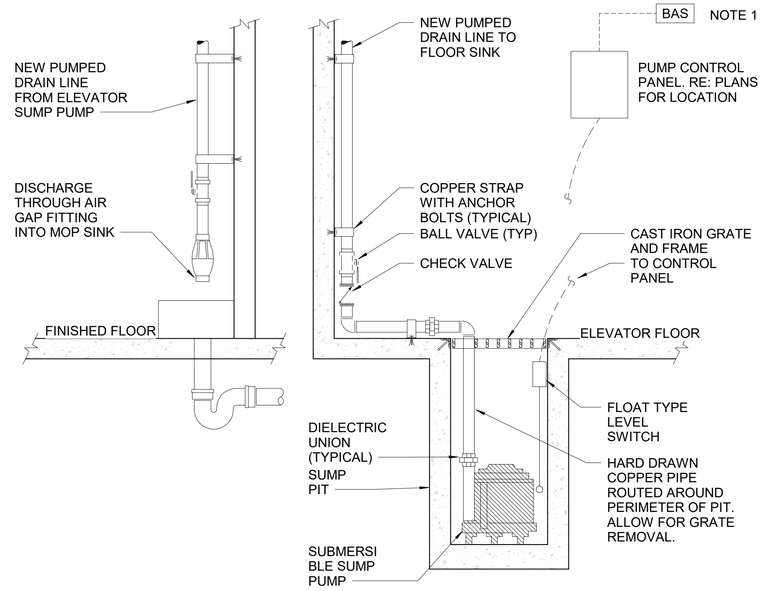
PROVIDE WATER HAMMER ARRESTERS WITH PISTON AND 0-RING CONSTRUCTION, HAVING PDI #WH-201, ASSE #1010 AND ANSI #A112.26.1M CERTIFICATION. INSTALL IN HORIZONTAL OR VERTICAL POSITION, BUT NEVER UPSIDE DOWN. INSTALL INLINE WITH WATER FLOW DIRECTION IF POSSIBLE. SIZE UNITS PER TABLES ABOVE. PROVIDE ACCESS PANEL FOR MAINTENANCE.

D1 WATER HAMMER ARRESTOR DETAIL
NTS



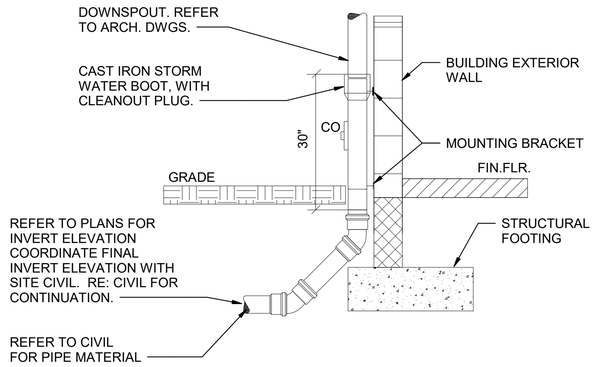
REFER TO PLANS FOR VENT SIZES AND LOCATIONS. LOCATE MINIMUM 10 FEET FROM PROPERTY LINE AND 10 FEET ABOVE AVERAGE GROUND LEVEL.

D4 VENT THROUGH WALL DETAIL
NTS

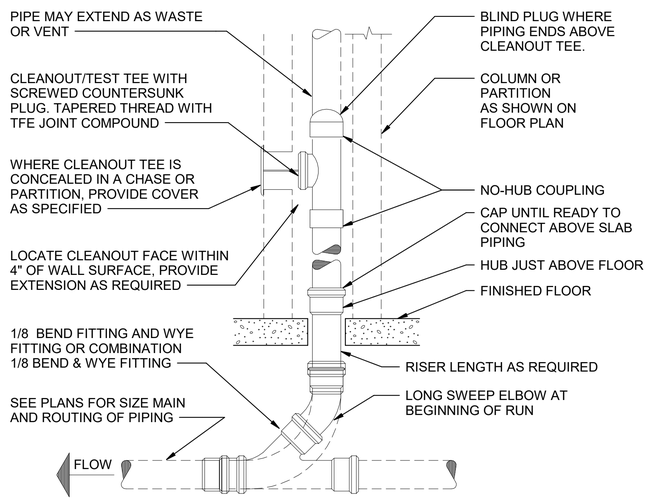


NOTES:
1. CONNECT ELEVATOR SUMP OIL ALARM TO BAS.

D7 ELEVATOR SUMP PUMP DETAIL
NTS

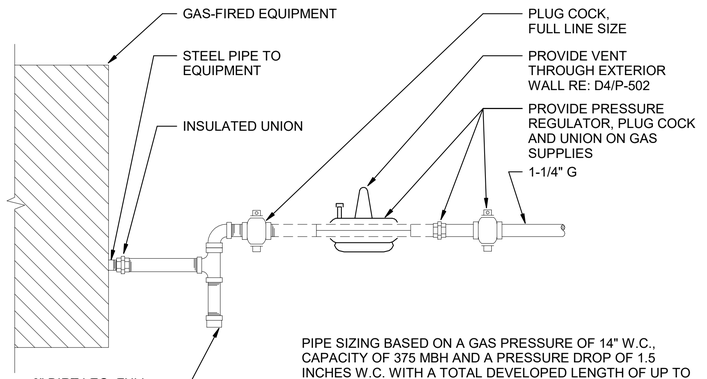


A1 STORM DRAINAGE BOOT DETAIL
NTS



NOTES:
1. PROVIDE WCO ON SANITARY WASTE BRANCHES NOT SERVED WITH FLOOR CLEANOUT. MAXIMUM HEIGHT ABOVE FINISHED FLOOR 4'-0".
2. PIPE EXPOSED PIPE CLEANOUTS (CO) WITHOUT FINISHED COVER AS NOTED ABOVE.

A4 WALL CLEANOUT DETAIL (WCO)
NTS



PIPE SIZING BASED ON A GAS PRESSURE OF 14" W.C., CAPACITY OF 375 MBH AND A PRESSURE DROP OF 1.5 INCHES W.C. WITH A TOTAL DEVELOPED LENGTH OF UP TO 150' FROM THE 3" GAS MAIN IN THE HANGAR.

A7 EQUIPMENT GAS CONNECTION
NTS

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
21NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: D. KEMP
DRAWN BY: D. KEMP
CHECKED BY: M. PHILLIPS
SUBMITTED BY: E. OLNESS
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:.
FILE NAME: SXHT219201P-502
ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

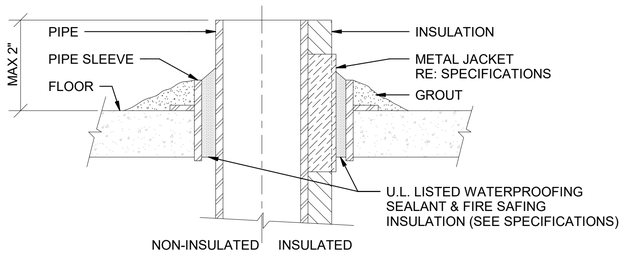
Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
ACCESS No. 1000572

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PLUMBING DETAILS

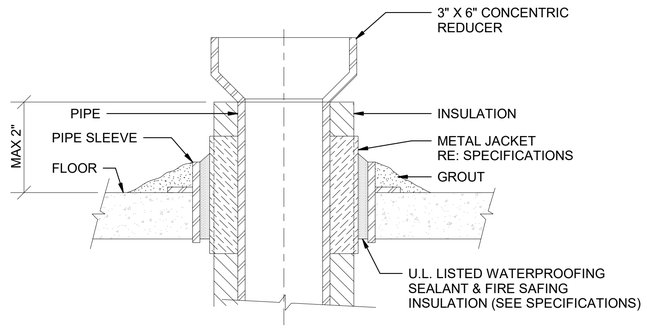
SHEET ID
B1455
P-502

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



A1 EXISTING FLOOR PIPE PENETRATION DETAIL
NTS



A4 EXISTING FLOOR STANDPIPE PENETRATION DETAIL
NTS

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
21NOV 2022
TEXAS REGISTERED
ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: D. KEMP
DRAWN BY: D. KEMP
CHECKED BY: M. PHILLIPS
SUBMITTED BY: E. OLMESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT21920-P-503

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
Phone: (817)820-4000 Fax: (817)820-8213

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PLUMBING DETAILS

SHEET ID
B1455
P-503

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN

THERMOSTATIC MIXING VALVE SCHEDULE

MARK	DESCRIPTION	ASSE	LOCATION	MINIMUM DRAW-OFF	MAXIMUM FLOW	LEAVING TEMPERATURE
TMV-1	THERMOSTATIC MIXING VALVE, INTEGRAL INLET CHECK VALVES AND FILTERS.	1070	RESTROOM	0.5 GPM	1.5 GPM	110 °F

EACH TMV-1 SERVES UP TO THREE ADJACENT LAVATORIES.

PLUMBING PUMP SCHEDULE

MARK	SERVICE	DESCRIPTION	FLOW RATE (GPM)	PUMP HEAD (FT)	HORSEPOWER	RPM	VOLTAGE/ PHASE
ESP-1	ELEVATOR SUMP PUMP	SUBMERSIBLE PUMP WITH OIL DETECTOR CONTROLS.	50	25	3/4	3450	115/1/60

CONNECT OIL ALARM TO BAS

BACKFLOW PREVENTER SCHEDULE

MARK	SERVICE	ASSE	MAXIMUM WORKING PRESSURE (PSI)	MAXIMUM WORKING TEMPERATURE (°F)	NOMINAL DIAMETER	PRESSURE DROP (PSI)	DESIGN FLOW (GPM)
BFP-1	MECHANICAL MAKEUP	1013	175	180	1"	13	10

PRESSURE REDUCING VALVE SCHEDULE

MARK	SERVICE	DESCRIPTION	MAXIMUM INLET PRESSURE (PSIG)	MINIMUM INLET PRESSURE (PSIG)	MAXIMUM WORKING TEMPERATURE (°F)	NOMINAL DIAMETER	SET PRESSURE	DESIGN FLOW (SCFH)
PRV-1	BOILER	SELF-CONTAINED, VENTED	2	0.5	205	1 1/4"	10" W.C.	347

WATER HEATER SCHEDULE

MARK	TYPE	DESCRIPTION	kW	ELECTRICAL	NOTES
EWH-1	TANKLESS POINT OF USE	DESIGNED FOR USE WITH EMERGENCY EYEWASH. FACTORY SET AT 80°F LEAVING WATER TEMPERATURE. PROVIDE WITH BYPASS VALVE AND OUTLET TEMPERATURE GAUGE.	20	480/3/60	

PLUMBING FIXTURE SCHEDULE

MARK	FIXTURE	ROUGH-IN CONNECTION SIZE				DESCRIPTION	ELECTRICAL
		DCW	DHW	WASTE	VENT		
EEW-1	EMERGENCY EYE WASHER	-	1/2" (NOTE 1)	-	-	WALL MOUNT, STAINLESS STEEL BOWL WITH DUST COVER. ACCESSORIES: ALARM HORN AND STROBE RE: A8/P-501	115/1/60
EWC-1	ELECTRIC WATER COOLER	1/2"	-	1-1/2"	1-1/2"	FIXTURE: ELECTRIC, REFRIGERATED, WALL-HUNG, BI-LEVEL, 8 GPH, WATER COOLER WITH BOTTLE FILLER, STAINLESS STEEL BODY, & INTEGRAL WATER FILTER. ACCESSORIES: ASME WALL CARRIER.	115/1/60
FD-1	FLOOR DRAIN	-	-	3"	2"	GALVANIZED CAST-IRON BODY WITH ADJUSTABLE 5" ROUND HEEL PROOF STRAINER. PROVIDE WITH ASSE 1072 BARRIER TYPE TRAP GUARD.	-
HB-1	HOSE BIBB	1/2"	-	-	-	CHROME PLATED BRASS BODY WITH ASSE 1011 VACUUM BREAKER AND 3/4" THREADED HOSE CONNECTION. PROVIDE WITH PLASTIC WHEEL HANDLE.	-
L-1	LAVATORY - ABA	1/2"	3/8"	2"	2"	BOWL: WHITE, VITREOUS CHINA, UNDERMOUNT, 19-1/4" X 16-1/4" OVAL OVERALL, 17" X 14" X 4" DEEP BOWL WITH FRONT OVERFLOW FAUCET: CHROME-PLATED, SOLID BRONZE, SINGLE LEVER, SINGLE SOURCE, 0.5 GPM AERATOR. STRAINER: CHROME-PLATED BRONZE OR STAINLESS STEEL PERFORATED OUTLET STRAINER WITH OFFSET TAILPIECE. ACCESSORIES: ASSE 1070 THERMOSTATIC MIXING VALVE SET FOR 105 F. TMV MAY SERVE UP TO THREE ADJACENT FAUCETS.	-
MS-1	MOP SINK	1/2"	1/2"	3"	2"	SINK: PRECAST TERRAZZO, 24" X 24" X 10" DEEP, FLOOR MOUNTED, CORNER STYLE WITH STAINLESS STEEL EDGE CAPS AND 6" DROPPED FRONT ON 45 DEGREE ANGLE. FAUCET: CHROME PLATED, WALL HUNG, 8" CENTER SET, SOLID BRASS BODY, 8" SPOUT WITH ASSE 1001 VACUUM BREAKER, 3/4" THREADED HOSE OUTLET, PAIL HOOK, AND SUPPORT BRACKET. ACCESSORIES: 36" LONG HOSE WITH CHROME COUPLING, STAINLESS STEEL WALL BRACKET, 20 GAUGE STAINLESS STEEL BACK SPLASH PANELS.	-
S-1	DOUBLE SINK	1/2"	1/2"	2"	2"	BOWL: 20 GA. STAINLESS STEEL, UNDERMOUNT, DOUBLE BOWL, 30-3/4" X18-1/2" OVERALL, 13-1/2" X 16" X 5-3/8" DEEP COMPARTMENTS, CENTER REAR 3-1/2" OUTLETS WITH REMOVEABLE STAINLESS STEEL CRUMB STRAINERS, ADA COMPLIANT. FAUCET: 4-1/2" SINGLE LEVER, 10" X 4-1/2" AIR BREAK, ARCHED SWIVEL SPOUT WITH PULL-OUT SPRAY, 1.5 GPM.	-
U-1	URINAL	1"	-	2"	2"	BOWL: WHITE, TOP-SPUD, WALL HUNG, VITREOUS CHINA, WASHDOWN ACTION, SUITABLE FOR 1/8 GPF. FLUSH VALVE: CHROME PLATED, EXPOSED HEAD, MANUAL, 1/8 GPF. ACCESSORIES: ASME WALL CARRIER WITH HIGH AND LOW BRACKETS.	-
U-2	URINAL - ABA	1"	-	2"	2"	SAME AS U-1 EXCEPT ABA HEIGHT.	-
WB-1	WALL BOX	1/2"	-	-	-	WALL BOX WITH QUARTER TURN FAUCET AND INTEGRAL WATER HAMMER ARRESTOR.	-
WC-1	WATER CLOSET	1-1/4"	-	4"	2"	BOWL: WHITE, TOP-SPUD, FLOOR MOUNTED, VITREOUS CHINA, SIPHON-JET, ELONGATED BOWL, 1.28 GPF. FLUSH VALVE: CHROME PLATED, EXPOSED HEAD, MANUAL, 1.28 GPF. SEAT: SOLID WHITE PLASTIC, ELONGATED, OPEN FRONT.	-
WC-2	WATER CLOSET - ABA	1-1/4"	-	4"	2"	SAME AS WC-1 EXCEPT ABA HEIGHT.	-

NOTE 1: CONNECT TO TEPID WATER SUPPLY FROM EWH-1

US Army Corps of Engineers
Louisville District ®

BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
21NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: D. KEMP
DRAWN BY: D. KEMP
CHECKED BY: M. PHILLIPS
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT21920P-601

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS PROJECT NUMBER

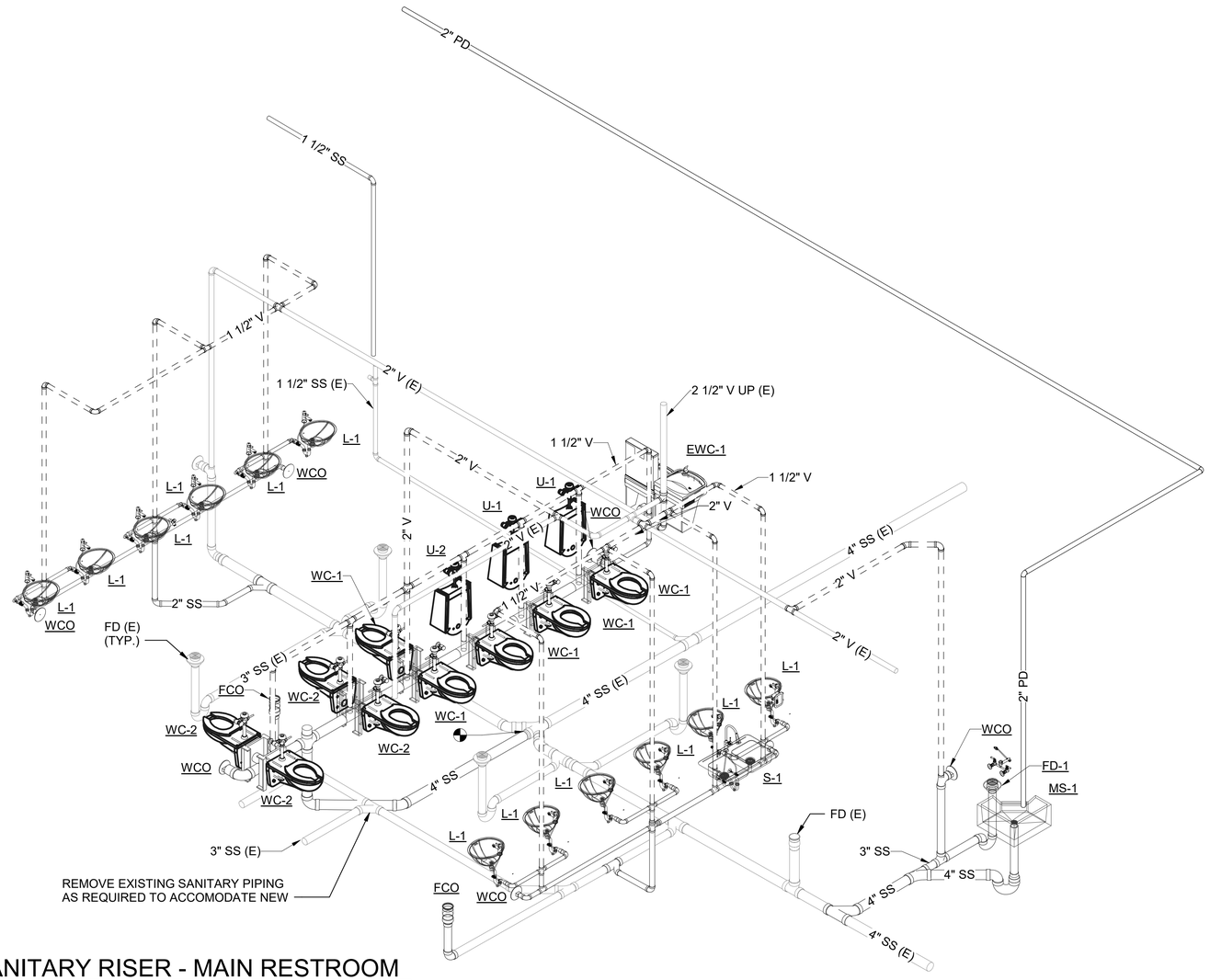
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PLUMBING SCHEDULES

SHEET ID
B1455
P-601

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN



A1 SANITARY RISER - MAIN RESTROOM

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
21NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: D. KEMP
DRAWN BY: D. KEMP
CHECKED BY: M. PHILLIPS
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201P-701

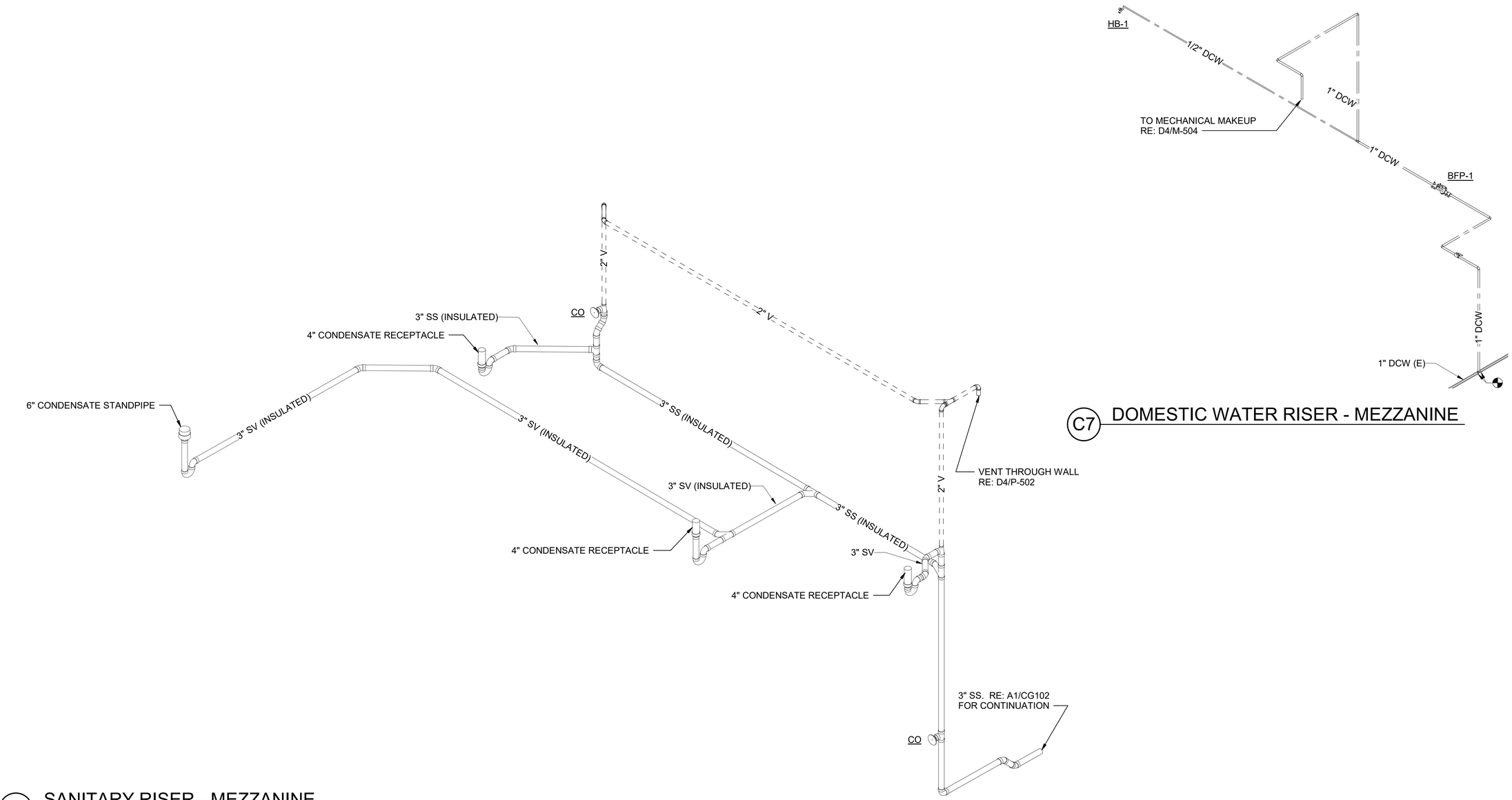
US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS Tel: 682.682.6100

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PLUMBING RISER DIAGRAM

SHEET ID
B1455
P-701

W912QR23R0003_Plans-0000



C7 DOMESTIC WATER RISER - MEZZANINE

A1 SANITARY RISER - MEZZANINE

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
21NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: D. KEMP
DRAWN BY: D. KEMP
CHECKED BY: M. PHILLIPS
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201P-702

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
NORTH AMERICA'S TOP 500 2019

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PLUMBING RISER DIAGRAM

SHEET ID
B1455
P-702

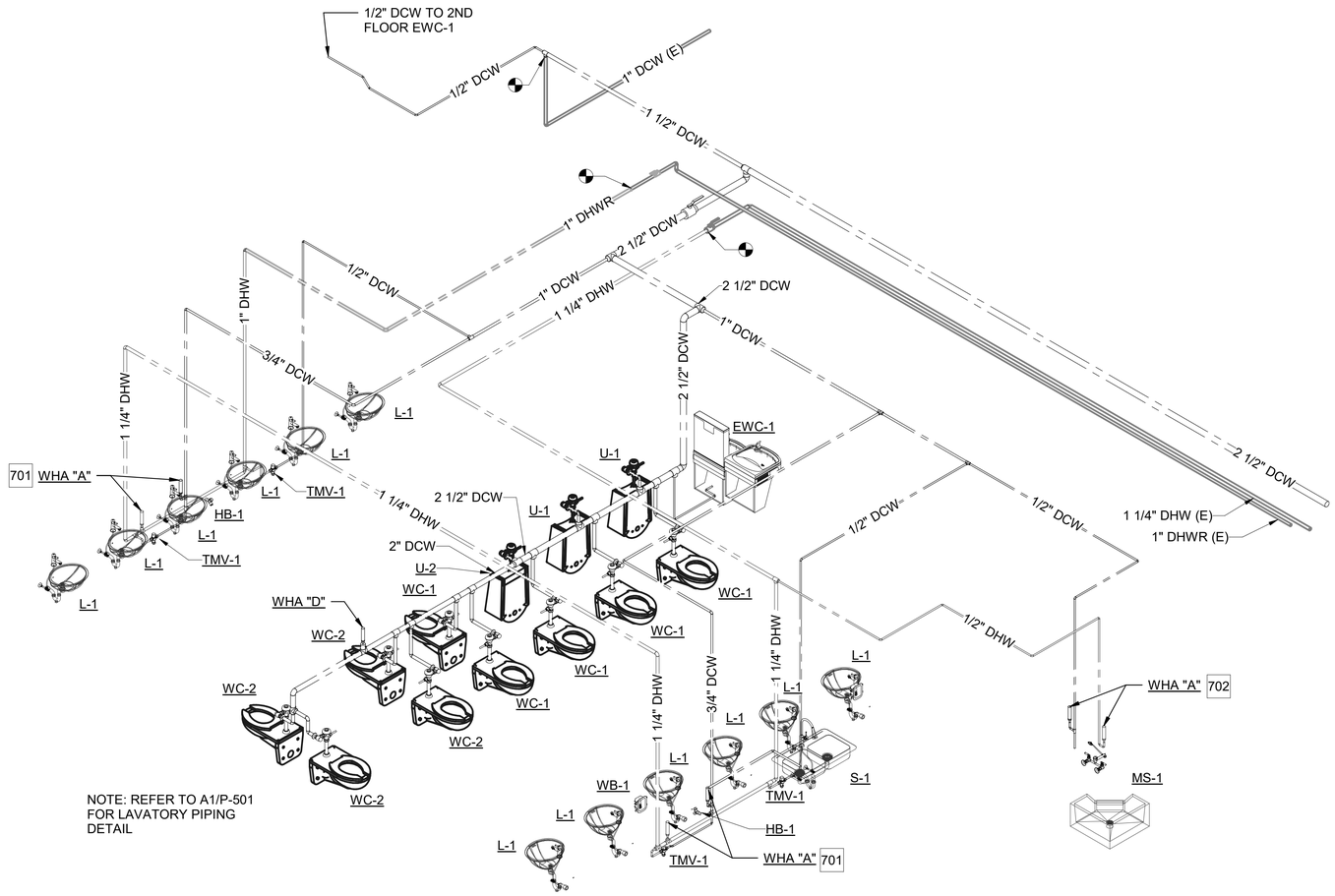
W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN

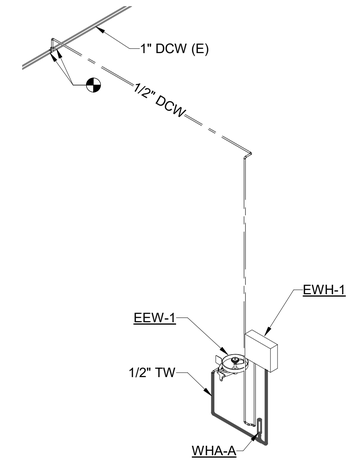
KEYNOTES

701	MOUNT LAVATORY WATER HAMMER ARRESTORS EXPOSED ON WALL UNDER COUNTER BEHIND ADA SINK APRON. RE: A1/P-501
702	SERVICED BY 12" X 12" ACCESS PANEL TO BE INSTALLED ABOVE SINK.



NOTE: REFER TO A1/P-501 FOR LAVATORY PIPING DETAIL

A1 DOMESTIC WATER RISER - MAIN RESTROOM



A8 DOMESTIC WATER RISER - EEW-1

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: D. KEMP
DRAWN BY: D. KEMP
CHECKED BY: M. PHILLIPS
SUBMITTED BY: E. OLNESS
QC BY:
ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:.
FILE NAME: SXHT219201P-703

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
ADDRESS No. 1000213

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PLUMBING RISER DIAGRAM

SHEET ID
B1455
P-703

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN

LEGEND

DUCTWORK SYMBOLS

- XX/XX — DUCT WITH ACOUSTICAL LINING
- MANUAL VOLUME DAMPER (SEE BELOW FOR OTHER TYPES)
- DAMPER TYPE: FD - FIRE DAMPER; SD - SMOKE DAMPER; FSD - COMBINATION FIRE/SMOKE DAMPER; BD - GRAVITY BACKDRAFT DAMPER; CD - CONTROL DAMPER; *NO MARK INDICATES MANUAL VOLUME DAMPER
- VERTICAL DAMPER IN DUCT (OR OPENING) AT FIRE-RATED PARTITION
- HORIZONTAL FIRE DAMPER AT FLOOR PENETRATION
- CONNECT NEW DUCT TO EXISTING
- VANED ELBOW (PROVIDE VANES IN ALL SQUARE OR RECTANGULAR ELBOWS, UNLESS NOTED OTHERWISE)
- FAN POWERED TERMINAL UNIT
- TYPICAL SUPPLY AIR TEE WITH SPLITTER DAMPER
- STANDARD ROUND BRANCH DUCT (SPIN-IN)
- STANDARD ROUND BRANCH DUCT (CONICAL)
- STANDARD RECTANGULAR BRANCH DUCT (45° TAKE-OFF)
- STANDARD CONCENTRIC DUCT TRANSITION
- STANDARD ECCENTRIC DUCT TRANSITION
- RECTANGULAR-TO-ROUND DUCT TRANSITION
- SECTION THROUGH ROUND DUCT, SUPPLY OR EXHAUST AS NOTED
- DUCT TO BE DEMOLISHED AS NOTED
- SECTION THROUGH RECTANGULAR SUPPLY DUCT
- SECTION THROUGH RECTANGULAR RETURN DUCT
- SECTION THROUGH RECTANGULAR EXHAUST DUCT
- A.D. — ACCESS DOOR IN CEILING
- A.D. — DUCT ACCESS DOOR
- CEILING SUPPLY AIR DIFFUSER, ARROWS INDICATE PATTERN. NO PATTERN SHOWN EQUALS 4-WAY
- CEILING RETURN AIR GRILLE OR RETURN REGISTER
- CEILING EXHAUST AIR GRILLE OR EXHAUST REGISTER
- SIDEWALL SUPPLY OR RETURN REGISTER OR GRILLE
- SUPPLY OR OUTSIDE AIR DUCT UP
- SUPPLY OR OUTSIDE AIR DUCT DOWN
- RETURN AIR DUCT UP
- RETURN AIR DUCT DOWN
- RELIEF OR EXHAUST AIR DUCT UP
- RELIEF OR EXHAUST AIR DUCT DOWN
- IN-LINE 90 DEGREE DROP (RISE) IN DUCT
- UP — INCLINE RISE IN DUCT
- DOWN — INCLINE DROP IN DUCT
- VAV TERMINAL UNIT
- FLEXIBLE DUCT, SIZE AS SHOWN
- CEILING SUPPLY AIR DIFFUSER AND RETURN AIR GRILLE TO BE DEMOLISHED AS NOTED
- POINT OF DISCONNECT FROM EXISTING DUCT

EQUIPMENT SYMBOLS

- NEW EQUIPMENT
- EQUIPMENT CLEARANCE

MISCELLANEOUS

- 001 — KEYNOTE
- POINT OF CONNECTION - NEW TO EXISTING
- FTR - A - B; A = SCHEDULE TYPE; B = FEET OF ACTIVE LENGTH

CONTROLS SYMBOLS

- T — ROOM THERMOSTAT
- H — ROOM HUMIDISTAT
- T — TEMPERATURE SENSOR/TRANSMITTER
- H — HUMIDITY SENSOR/TRANSMITTER
- S — DUCT SMOKE DETECTOR
- R — RELAY
- ST — SLAB SENSOR
- VIBRATION SWITCH
- HT — DUCT HUMIDITY SENSOR/TRANSMITTER
- PT — PRESSURE TRANSMITTER
- MOTOR STARTER (LOCAL OR MCC)
- SP — STATIC PRESSURE SENSOR/TRANSMITTER
- DT — DIFFERENTIAL PRESSURE SENSOR/TRANSMITTER
- DP — DIFFERENTIAL PRESSURE SWITCH (DIGITAL)
- T — DUCT AVERAGING TEMPERATURE ELEMENT
- F — FLOW SENSOR
- FR — FREEZESTAT
- FS — FLOW SWITCH
- M — ELECTRIC MOTOR

NORMAL OPEN	NORMAL CLOSED	
		GATE VALVE
		VALVE W/ REDUCERS (GATE VALVE SHOWN)
		GLOBE VALVE
		BUTTERFLY VALVE
		NEEDLE VALVE/ INSTRUMENT VALVE
		3-WAY VALVE
		BALL VALVE
		PLUG VALVE
		ANGLE VALVE

- RS — REFRIGERANT SENSOR
- LIQUID FLOW METER
- RECEIVER PRESSURE GAUGE (PANEL MTD.)
- CT — CURRENT SENSING RELAY
- DA — ELECTRIC DAMPER ACTUATOR
- CD — CARBON DIOXIDE (CO2) SENSOR
- CM — CARBON MONOXIDE (CO) SENSOR
- F — FIRESTAT
- HS — MANUALLY ACTIVATED SWITCH (PULL STAT., PUSH STAT., ETC)
- AQ — AQUASTAT
- LWCO — LOW WATER CUTOFF

CONTROL VALVE SYMBOLS:

- M — ELECTRIC ACTUATOR
- S — SOLENOID ACTUATOR

CONTROL DEFINITIONS:

NORMAL POSITION: INDICATES DEVICE POSITION WHEN THE SYSTEM IS DISABLED OR NOT ENERGIZED

FAIL POSITION: INDICATES DEVICE POSITION WHEN THE CONTROL SIGNAL IS LOST OR UPON A LOSS OF POWER.

NO - NORMALLY OPEN
NC - NORMALLY CLOSED
FO - FAIL OPEN
FC - FAIL CLOSED

EQUIPMENT TAG SYMBOLS

AIR DEVICE TAG

AD - X | 380 — TAG; MAXIMUM AIRFLOW (CFM)

- 24/12 — INDICATES A 24"x12" RECTANGULAR DUCT (NET FREE AREA)
- 20"ø — INDICATES A 20" ROUND DUCT (NET FREE AREA)

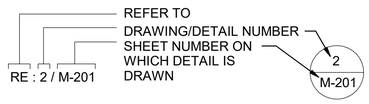
PIPING SYMBOLS

- PITCH DOWN IN DIRECTION OF ARROW
- DIRECTION OF FLOW
- PIPE ANCHOR
- PIPE GUIDE
- CONCENTRIC REDUCER
- ECCENTRIC REDUCER
- STRAINER WITH BLOWDOWN VALVE
- BRANCH - SIDE CONNECTION
- BRANCH - TOP CONNECTION
- BRANCH - BOTTOM CONNECTION
- RISE OR DROP IN PIPE
- RISER DOWN (ELBOW)
- RISER UP (ELBOW)
- CAPPED PIPE
- BLIND FLANGE
- UNION (SCREWED)
- PUMP
- FLANGED CONNECTION
- TEMPERATURE & PRESSURE PORT
- FLEX PIPE
- FLEX CONNECTION
- BELLOWS CONNECTION (DOUBLE SPHERE NEOPRENE TYPE)
- THERMOMETER
- PRESSURE GAGE WITH COCK
- PS — PRESSURE SWITCH
- FS — FLOW SWITCH
- MANUAL AIR VENT
- AUTOMATIC AIR VENT
- PIPING TO BE DEMOLISHED AS NOTED
- WELDED CONNECTION
- FLANGED CONNECTION
- SOLDERED CONNECTION
- THREADED OR "PRESS" CONNECTION
- BELL & SPIGOT CONNECTION
- SOLVENT CONNECTION

VALVE SYMBOLS

- GATE VALVE
- GLOBE VALVE
- CHECK VALVE (NON SLAM)
- PLUG VALVE
- PRESSURE REDUCING VALVE (PRV)
- BUTTERFLY VALVE
- BALL VALVE
- NEEDLE VALVE
- VENTURI FLOW METER
- VALVE IN DROP
- VALVE IN CENTER DROP
- VALVE IN RISE
- S — SOLENOID VALVE
- GATE VALVE W/ 3/4" HOSE THREAD ADAPTER
- TWO-WAY CONTROL VALVE
- THREE-WAY CONTROL VALVE
- SAFETY VALVE OR PRESSURE RELIEF VALVE
- MANUAL BALANCING VALVE
- AUTOMATIC BALANCING VALVE
- TEMPERATURE WELL
- FLANGED VALVE (GATE VALVE SHOWN)
- P — PRESSURE INDEP. CONTROL VALVE (PICV)

DRAWING/DETAIL REFERENCE KEY



PIPING LABELS

- CHS — CHILLED WATER SUPPLY
- CHR — CHILLED WATER RETURN
- CWS — CONDENSER WATER SUPPLY
- CWR — CONDENSER WATER RETURN
- HWS — HEATING WATER SUPPLY
- HWR — HEATING WATER RETURN
- CD — CONDENSATE DRAIN
- D — DRAIN
- GS — GLYCOL SUPPLY
- GR — GLYCOL RETURN
- MU — MAKE-UP WATER
- RL — REFRIGERANT LIQUID
- RS — REFRIGERANT SUCTION
- RFR — RADIANT FLOOR HEATING WATER RETURN
- RFS — RADIANT FLOOR HEATING WATER SUPPLY
- SMR — SNOW MELT HEATING WATER RETURN
- SMS — SNOW MELT HEATING WATER SUPPLY
- ~~xx-AAA-xx~~ — PIPE TO BE REMOVED, "AAA" DENOTES TYPE
- AAA — EXISTING PIPE, "AAA" DENOTES TYPE
- AAA — UNDERGROUND PIPE, "AAA" DENOTES TYPE

HVAC DESIGN CRITERIA

PROJECT: MAXWELL AFB B1455 RENOVATION

DESIGN CONDITIONS PER UFC 3-420-01, 3-410-01

WEATHER STATION - MAXWELL AFB, ALABAMA
STATION #: 8768721
ELEVATION: 6 FEET; LATITUDE: 28.25°N; LONGITUDE: 80.62°W
ASHRAE CLIMATE ZONE 3A

WINTER: 30.2°F DB (99%)

SUMMER:	DRY BULB CONDITIONS:	WET BULB CONDITIONS:	HUMIDITY RATIO:
	95.4°F DB (1.0%)	76.6°F WB (1.0%)	84.2°F DB (1.0%) 141.7 gr/lb

INDOOR DESIGN CONDITIONS

WINTER:
70°F & 40-60% RH (CPT, OFT, OFT COMPUTER ROOMS)
68°F & 40-60% RH (IAST. AEI PTT, EDS, EDS COMPUTER ROOM)
68°F & 40-60% RH (OFFICE SPACES, CONFERENCE ROOMS, TRAINING ROOMS)
68°F MAINTAINED & 40-60% RH (TELECOM ROOMS)
55°F & <60% RH (UNOCCUPIED AREAS)
BY TRANSFER AIR ONLY (TOILETS, JANITORIAL AREAS)

SUMMER:
70°F & 40-60% RH (CPT, OFT, OFT COMPUTER ROOMS)
78°F & 40-60% RH (IAST. AEI PTT, EDS, EDS COMPUTER ROOM)
78°F & 40-60% RH (OFFICE SPACES, CONFERENCE ROOMS, TRAINING ROOMS)
72°F MAINTAINED & 40-60% RH (TELECOM ROOMS)
85°F & <60% RH (UNOCCUPIED AREAS)
BY TRANSFER AIR ONLY (TOILETS, JANITORIAL AREAS)

ENERGY CODE COMPLIANCE
THE MECHANICAL AND PLUMBING EQUIPMENT IN THESE DRAWINGS ARE IN COMPLIANCE WITH ASHRAE 189.1-2014. THE HVAC LOADS WERE PERFORMED IN ACCORDANCE WITH ASHRAE FUNDAMENTALS. ENERGY CALCULATIONS WERE PERFORMED IN ACCORDANCE WITH ASHRAE 90.1-2013.

GENERAL NOTES

A. REFER TO SHEET GI002 AND GI003 FOR LIST OF ABBREVIATIONS USED IN DRAWINGS.
B. REFER TO SPECIFICATIONS FOR MATERIALS AND METHODS FOR CONSTRUCTION.
C. COORDINATE LOCATION OF ALL PENETRATIONS WITH THE BUILDING STRUCTURE.
D. COORDINATE ALL SLAB PENETRATIONS AND SLEEVES PRIOR TO EACH CONCRETE POUR.
E. COORDINATE UNDERGROUND SITE PIPING AND TRENCH WITH SITE CIVIL INCLUDING FOUNDATIONS, SWALES, RETAINING WALLS, AND ANY OTHER POTENTIAL OBSTRUCTION.
F. PERFORM WORK IN ACCORDANCE WITH THE LATEST EDITIONS, REVISIONS, AMENDMENTS OR SUPPLEMENTS OF APPLICABLE STATUTES, ORDINANCES, CODES, OR REGULATIONS OF FEDERAL, STATE AND LOCAL AUTHORITIES HAVING JURISDICTION IN EFFECT ON THE DATE BIDS ARE RECEIVED.
G. WHERE APPROVAL CODES HAVE BEEN ESTABLISHED BY OSHA, UNDERWRITERS LABORATORY, AMERICAN CODES, ANSI, ASME, ABAAG, ASHRAE, ASTM, ARI, NEC, NFPA SMACNA, OR THE STATE FIRE INSURANCE REGULATORY BODY, FOLLOW THESE STANDARDS WHETHER OR NOT INDICATED ON THE DRAWINGS.
H. COORDINATE WORK WITH ARCHITECTURAL FEATURES AND COORDINATE WORK SUCH THAT INTERFERENCES BETWEEN PIPING, DUCTWORK, EQUIPMENT, PLUMBING WORK, ELECTRICAL WORK, AND BUILDING STRUCTURE WILL BE AVOIDED.
I. PROVIDE THE ENTIRE SYSTEM AND ITS COMPONENT ITEMS OF EQUIPMENT IN OPERATING CONDITION WITHOUT OBJECTIONABLE VIBRATION OR NOISE IN ACCORDANCE WITH UFC-3-450-01 AND ASHRAE APPLICATIONS HANDBOOK .
J. PROVIDE ALL WIRING AND ELECTRICAL CONTROLS IN ACCORDANCE WITH NFPA 70 (NEC).
K. DO NOT SCALE THESE DRAWINGS FOR CONSTRUCTION PURPOSES.
L. REFER TO ARCHITECTURE SHEET A-550 FOR FRAMING REQUIRED AROUND PIPES PENETRATING WALLS AND FLOORS.
M. ALL DUCTWORK SIZES ARE FREE AIR DIMENSIONS.
N. PAINT ANY ABOVE CEILING ITEMS, WHICH CAN BE SEEN THROUGH AIR SLOTS OR GRILLES, FLAT BLACK.
P. PROVIDE PLENUM RATED CABLE, DEVICES, PIPING, ETC. IN PLENUM SPACE.
R. PROVIDE TEMPORARY 30% EFFICIENT, 2" THICK FILTERS OVER RETURN AIR OPENINGS OF ANY AHU'S WHICH ARE PLACED IN SERVICE PRIOR TO COMPLETION OF CONSTRUCTION. REMOVE FILTERS FOR TEST & BALANCE.
S. PROVIDE ACCESS PANELS FOR ALL DAMPER ACTUATORS AND MOTORS LOCATED INSIDE DUCT OR FAN HOUSING.
T. COORDINATE LOCATION OF THERMOSTATS AND HUMIDITY SENSORS WITH FURNITURE, FIXTURES, AND EQUIPMENT PLANS.

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS — BRANDEN M. SCHNEIDER — 129852 — LICENSED PROFESSIONAL ENGINEER — 21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201M-001

DESIGNED BY: B. SCHNEIDER
DRAWN BY: C. BROWN
CHECKED BY: M. WALLACE
SUBMITTED BY: E. OLMESS

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
Texas Registered Firm F-2966

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395

GENERAL NOTES AND SYMBOLS

SHEET ID
B1455
M-001

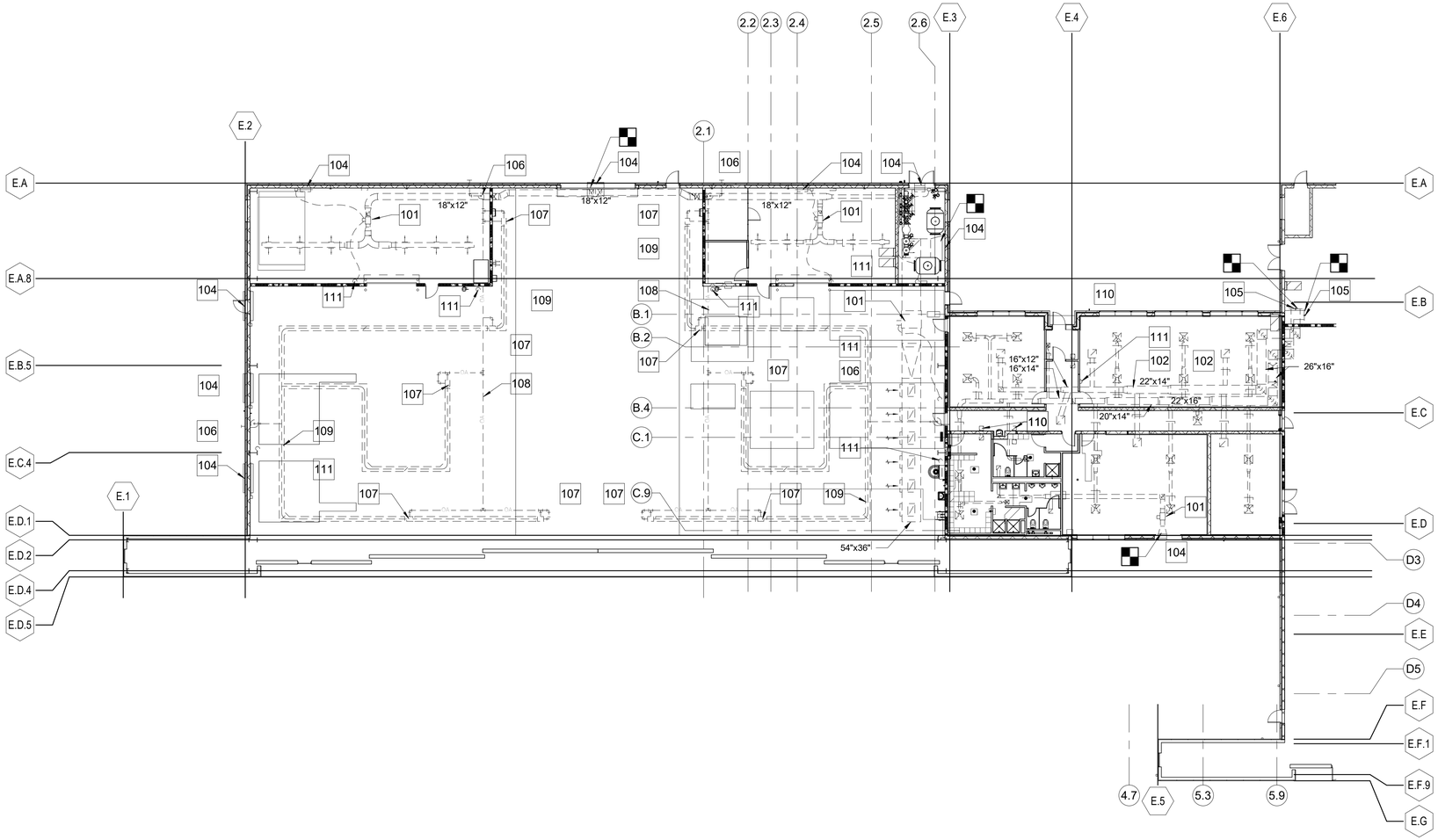
W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

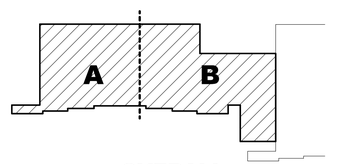
CERTIFIED FINAL DESIGN

KEYNOTES

101	REMOVE EXISITNG FAN AND ALL ASSOCIATED DUCTWORK, AIR DEVICES AND CONTROLS.
102	REMOVE EXISITING DUCTOWORK, AIR DEVICES AND CONTROLS.
104	CAP AND SEAL EXISITING LOUVER.
105	CAP EXISTING DUCTWORK FROM MECHANICAL ROOM.
106	REMOVE EXISITING PUMP AND ASSOCIATED PIPE.
107	REMOVE EXISITNG BURNER.
108	REMOVE EXISITING OA PIPE.
109	REMOVE EXISITNG RADIANT PIPE.
110	REMOVE EXISTING TRANSFER GRILLE.
111	REMOVE EXISITNG THERMOSTAT.



A1 OVERALL DEMOLITION FLOOR PLAN - LEVEL 1
SCALE = 1/16" = 1'-0"



OVERALL
KEY PLAN

GRAPHIC SCALE
16 12 8 4 0 16 32
SCALE: 1/16"=1'-0"

PLAN NORTH
TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: S:\KHT\219201\MD101

DESIGNED BY: B. SCHNEIDER
DRAWN BY: C. BROWN
CHECKED BY: M. WALLACE
SUBMITTED BY: E. OLNESS
ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS Project No. W2R003

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
OVERALL HVAC DEMOLITION PLAN

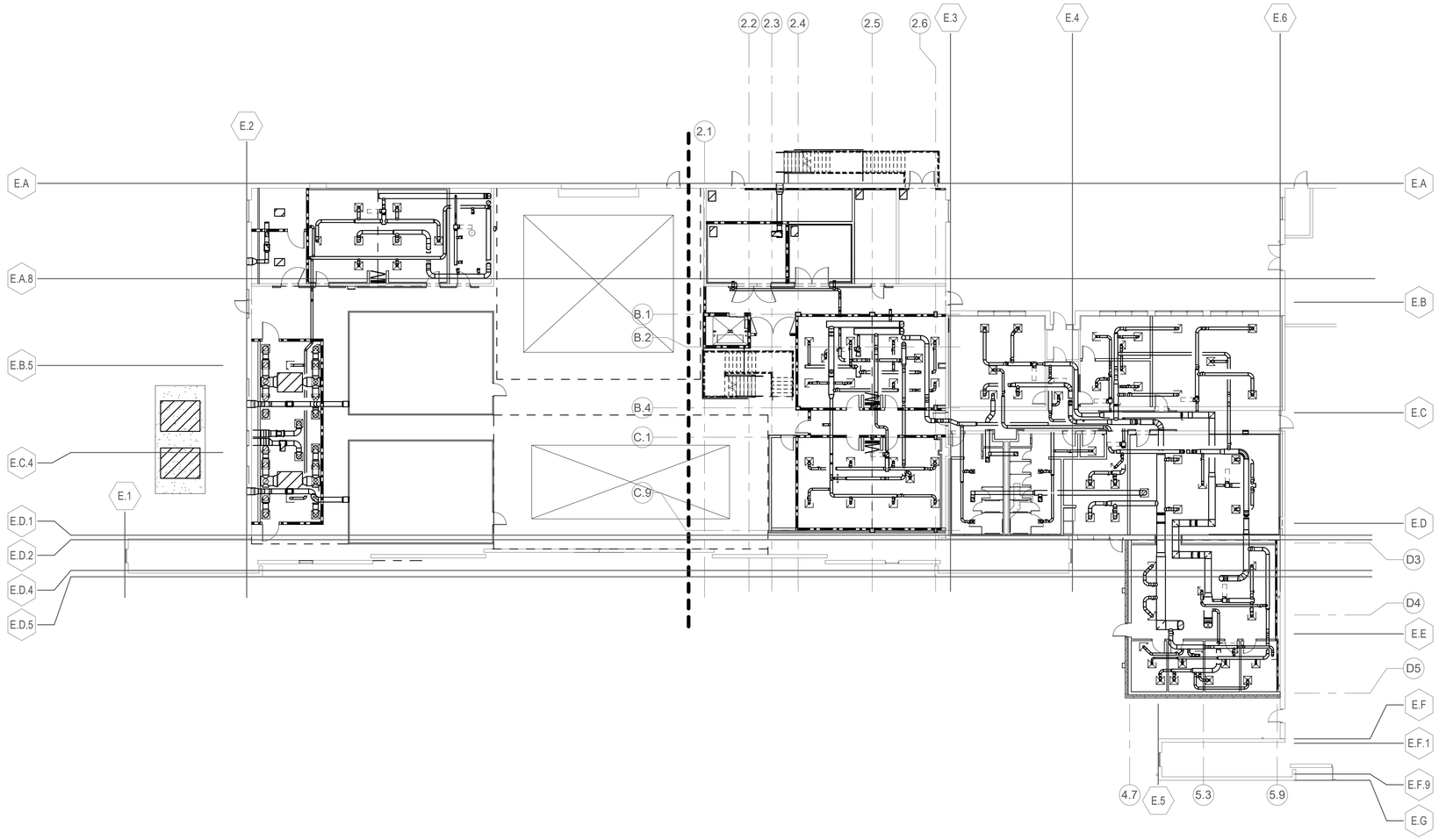
SHEET ID
B1455
MD101

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN

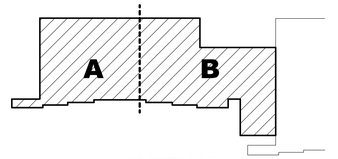
GENERAL NOTES - OVERALL PLANS

A	REFER TO SHEET GI002 AND GI003 FOR LIST OF ABBREVIATIONS USED IN DRAWINGS. REFER TO SHEET GI012 FOR ROOM SCHEDULE.
B	OVERALL PLANS FOR REFERENCE ONLY. REFER TO PARTIAL PLANS FOR DETAILED SYSTEMS.
C	ALL VAV BOXES AND FAN COIL UNITS TO HAVE ASSOCIATED THERMOSTAT.
D	ALIGN THERMOSTATS WITH OTHER WALL DEVICES WITHIN 1'-6" OF DOOR (LATCH SIDE), WHERE APPLICABLE. REFER TO F.F.&E. PLANS AND COORDINATE ALL WALL DEVICE LOCATIONS TO AVOID CONFLICT WITH FURNITURE AND EQUIPMENT.



A1 OVERALL FLOOR PLAN - LEVEL 1

SCALE = 1/16" = 1'-0"



OVERALL KEY PLAN

GRAPHIC SCALE

16 12 8 4 0 16 32

SCALE: 1/16"=1'-0"

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE:	23 NOVEMBER 2022
SOLICITATION NO.:	
CONTRACT NO.:	
DRAWING CODE:	
FILE NAME:	SXHT219201MH101

DESIGNED BY:	B. SCHNEIDER
DRAWN BY:	C. BROWN
CHECKED BY:	M. WALLACE
SUBMITTED BY:	
E. OLNESS	
ANSI D 22x34	

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

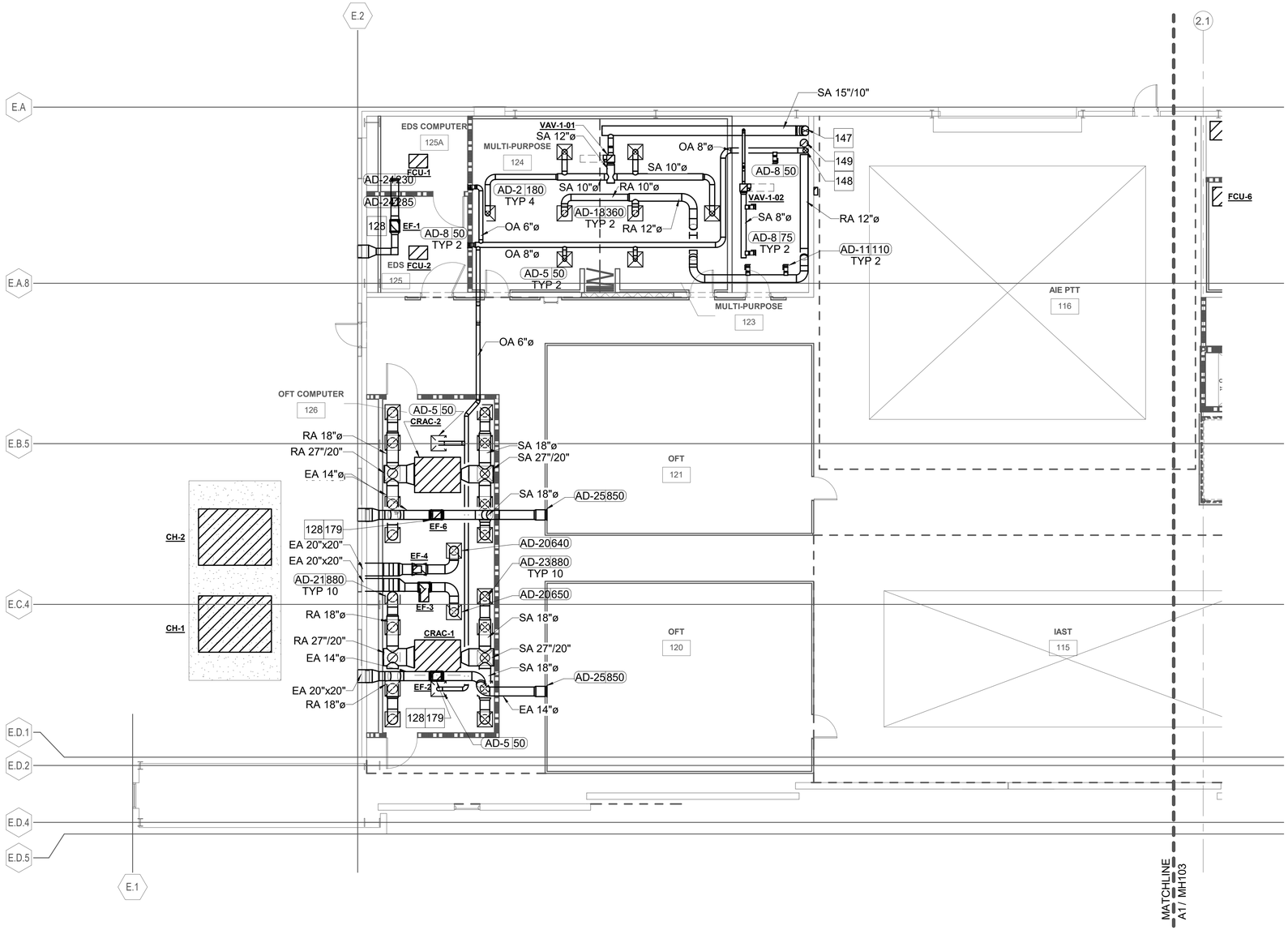
Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
ACCSS Reg. #2966-2

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
OVERALL HVAC PLAN - LEVEL 1

SHEET ID
B1455
MH101

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



A1 PARTIAL FLOOR PLAN - LEVEL 1 - AREA A

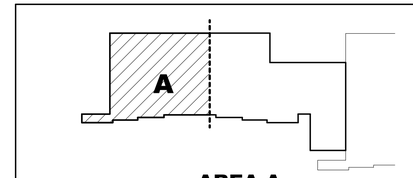
SCALE = 1/8" = 1'-0"

GENERAL NOTES - HVAC PLANS

A	REFER TO SHEET GI002 AND GI003 FOR LIST OF ABBREVIATIONS USED IN DRAWINGS. REFER TO SHEET GI012 FOR ROOM SCHEDULE.
B	MAINTAIN MANUFACTURER'S RECOMMENDED CLEARANCES ON ALL EQUIPMENT.
C	PROVIDE CLEARANCES FOR ALL ELECTRICAL AND CONTROL PANELS PER NEC.
D	PROVIDE BRACING FOR EQUIPMENT WEIGHING MORE THAN 31 LBS PER UFC 4-010-01.
E	ALIGN THERMOSTATS WITH OTHER WALL DEVICES WITHIN 1'-6" OF DOOR (LATCH SIDE), WHERE APPLICABLE. REFER TO F.F.&E. PLANS DETAIL E9/I-001 AND COORDINATE ALL WALL DEVICE LOCATIONS TO AVOID CONFLICT WITH FURNITURE AND EQUIPMENT. WHITE DEVICE COVERS, UNLESS OTHERWISE NOTED.
F	PROVIDE REMOTE DAMPER ACTUATORS OR ACCESS PANEL FOR ALL DAMPERS LOCATED ABOVE HARD CEILINGS.
G	REFER TO PIPING PLAN FOR THERMOSTAT ASSIGNMENT.
H	PROVIDE TURNING VANES IN ALL MITERED ELBOWS EXCEPT TRANSFER AIR BOOTS.

KEYNOTES

128	EMERGENCY SMOKE EXHAUST FAN TO BE DUCTED TO WALL LOUVER AND DISCHARGED TO THE EXTERIOR OF THE BUILDING. REFER TO DETAIL D1/M-503. LOUVERS ARE SCHEDULED ON A-610
147	SA DUCT DOWN FROM MEZZANINE. RE: A1/MH112
148	OA DUCT DOWN FROM MEZZANINE. RE: A1/MH112
149	RA DUCT UP TO MEZZANINE. RE: A1/MH112
179	EF LOCATED ON TOP OF ROOM CAP.



AREA A
KEY PLAN

GRAPHIC SCALE
8 6 4 2 0 8 16
SCALE: 1/8"=1'-0"

PLAN NORTH
TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201MH102

DESIGNED BY: B. SCHNEIDER
DRAWN BY: C. BROWN
CHECKED BY: M. WALLACE
SUBMITTED BY: E. OLNESS
QA/QC: ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS Project No. D2R0013

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PARTIAL HVAC PLAN - LEVEL 1 - AREA A

SHEET ID
B1455
MH102

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN

GENERAL NOTES - HVAC PLANS

A	REFER TO SHEET GI002 AND GI003 FOR LIST OF ABBREVIATIONS USED IN DRAWINGS. REFER TO SHEET GI012 FOR ROOM SCHEDULE.
B	MAINTAIN MANUFACTURER'S RECOMMENDED CLEARANCES ON ALL EQUIPMENT.
C	PROVIDE CLEARANCES FOR ALL ELECTRICAL AND CONTROL PANELS PER NEC.
D	PROVIDE BRACING FOR EQUIPMENT WEIGHING MORE THAN 31 LBS PER UFC 4-010-01.
E	ALIGN THERMOSTATS WITH OTHER WALL DEVICES WITHIN 1'-6" OF DOOR (LATCH SIDE), WHERE APPLICABLE. REFER TO F.F.&E. PLANS DETAIL E9/I-001 AND COORDINATE ALL WALL DEVICE LOCATIONS TO AVOID CONFLICT WITH FURNITURE AND EQUIPMENT. WHITE DEVICE COVERS, UNLESS OTHERWISE NOTED.
F	PROVIDE REMOTE DAMPER ACTUATORS OR ACCESS PANEL FOR ALL DAMPERS LOCATED ABOVE HARD CEILINGS.
G	REFER TO PIPING PLAN FOR THERMOSTAT ASSIGNMENT.
H	PROVIDE TURNING VANES IN ALL MITERED ELBOWS EXCEPT TRANSFER AIR BOOTS.

KEYNOTES

153	SA DUCT DOWN FROM LEVEL 2. RE: A1/MH113
154	OA DUCT DOWN FROM LEVEL 2. RE: A1/MH113
155	RA DUCT UP TO LEVEL 2. RE: A1/MH113
156	EA DUCT UP TO LEVEL 2. RE: A1/MH113
161	SA DUCT DOWN FROM AHU-2. RE: A1/MH113
162	RA DUCT UP TO AHU-2. RE: A1/MH113
177	RE: DETAIL F1/M-505 FOR DUCT EXPANSION JOINT DETAIL.
180	OA DUCT DOWN FROM DOAS-2. RE: A1/MH113
182	EXHAUST AIR MAKEUP AIR PATH PROVIDED BY LOUVERS IN DOORS AND GAPS AT FLOORS (PROVIDED BY OTHERS).
183	PROVIDE DOAS-2 AIR MEASURING STATION. CONTRACTOR TO ADJUST LOCATION OF FIRST BRANCH LINE BASED ON THE MINIMUM LENGTH OF STRAIGHT RUN REQUIRED BY FLOW MEASUREMENT STATION.
185	PIPE SIZES TO ROOFTOP EQUIPMENT INDICATED ON MP113. PIPES TO BE ROUTED THROUGH ROOFTOP EQUIPMENT INTEGRAL PIPE CHASE. ROOF PENENETRATIONS TO BE COORDINATED WITH PURCHASED EQUIPMENT AND LAYOUT.

A1 PARTIAL FLOOR PLAN - LEVEL 1 - AREA B

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

MATCHLINE A1/ MH102

AREA B KEY PLAN

GRAPHIC SCALE

8 6 4 2 0 8 16

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

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
21NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: B. SCHNEIDER
DRAWN BY: C. BROWN
CHECKED BY: M. WALLACE
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT21920I1MH103

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS No. 175250

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PARTIAL HVAC PLAN - LEVEL 1 - AREA B

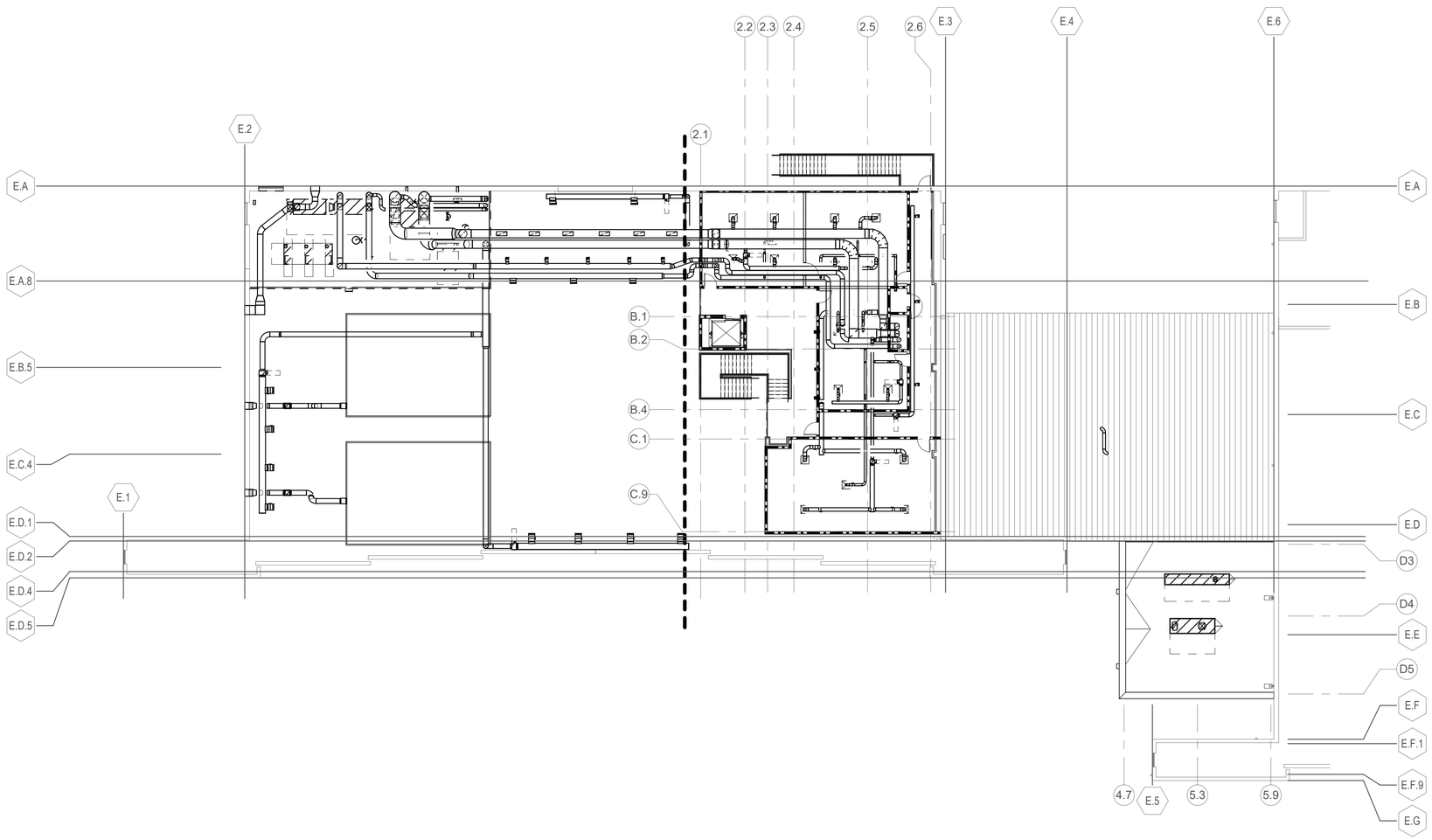
SHEET ID
B1455
MH103

W912QR23R0003_Plans-0000

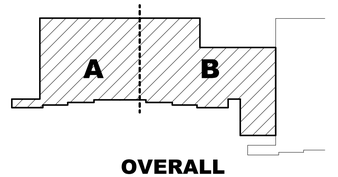
CERTIFIED FINAL DESIGN

GENERAL NOTES - OVERALL PLANS

A	REFER TO SHEET GI002 AND GI003 FOR LIST OF ABBREVIATIONS USED IN DRAWINGS. REFER TO SHEET GI012 FOR ROOM SCHEDULE.
B	OVERALL PLANS FOR REFERENCE ONLY. REFER TO PARTIAL PLANS FOR DETAILED SYSTEMS.
C	ALL VAV BOXES AND FAN COIL UNITS TO HAVE ASSOCIATED THERMOSTAT.
D	ALIGN THERMOSTATS WITH OTHER WALL DEVICES WITHIN 1'-6" OF DOOR (LATCH SIDE), WHERE APPLICABLE. REFER TO F.F.&E. PLANS AND COORDINATE ALL WALL DEVICE LOCATIONS TO AVOID CONFLICT WITH FURNITURE AND EQUIPMENT.



A1 OVERALL FLOOR PLAN - LEVEL 2
SCALE = 1/16" = 1'-0"



OVERALL KEY PLAN

GRAPHIC SCALE

16 12 8 4 0 16 32

SCALE: 1/16"=1'-0"

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: B. SCHNEIDER	ISSUE DATE: 23 NOVEMBER 2022
DRAWN BY: C. BROWN	SOLICITATION NO.:
CHECKED BY: M. WALLACE	CONTRACT NO.:
SUBMITTED BY: E. OLNESS	DRAWING CODE.:
SIZE: ANSI D 22x34	FILE NAME: SXHT219201MH111

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

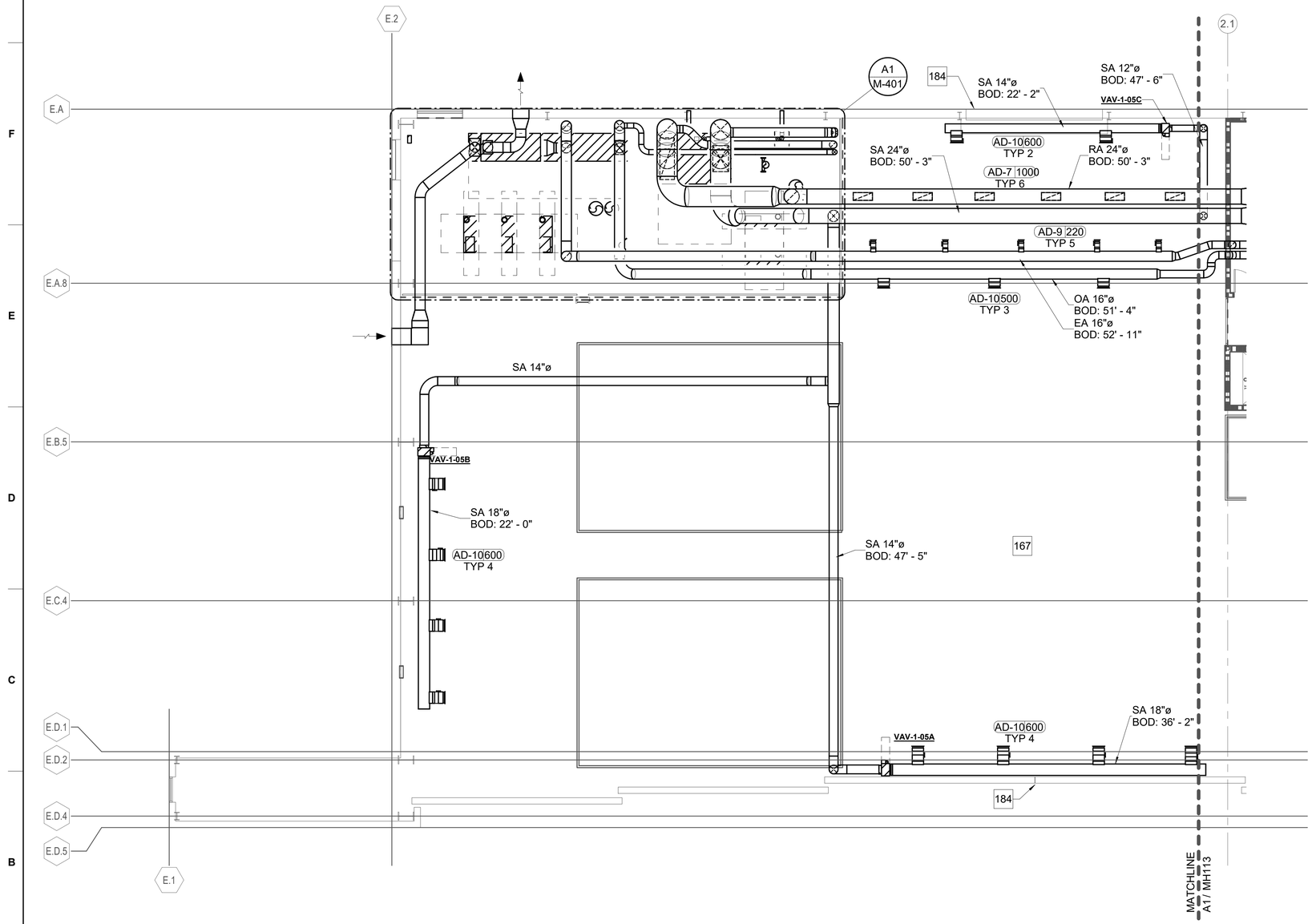
Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS PROJECT NO: 320016

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
OVERALL HVAC PLAN - LEVEL 2

SHEET ID
B1455
MH111

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



A1 PARTIAL FLOOR PLAN - LEVEL 2 - AREA A

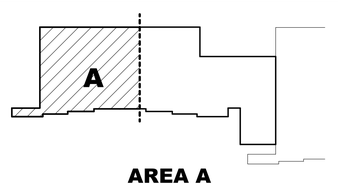
SCALE = 1/8" = 1'-0"

GENERAL NOTES - HVAC PLANS

A	REFER TO SHEET GI002 AND GI003 FOR LIST OF ABBREVIATIONS USED IN DRAWINGS. REFER TO SHEET GI012 FOR ROOM SCHEDULE.
B	MAINTAIN MANUFACTURER'S RECOMMENDED CLEARANCES ON ALL EQUIPMENT.
C	PROVIDE CLEARANCES FOR ALL ELECTRICAL AND CONTROL PANELS PER NEC.
D	PROVIDE BRACING FOR EQUIPMENT WEIGHING MORE THAN 31 LBS PER UFC 4-010-01.
E	ALIGN THERMOSTATS WITH OTHER WALL DEVICES WITHIN 1'-6" OF DOOR (LATCH SIDE), WHERE APPLICABLE. REFER TO F.F.&E. PLANS DETAIL E9/I-001 AND COORDINATE ALL WALL DEVICE LOCATIONS TO AVOID CONFLICT WITH FURNITURE AND EQUIPMENT. WHITE DEVICE COVERS, UNLESS OTHERWISE NOTED.
F	PROVIDE REMOTE DAMPER ACTUATORS OR ACCESS PANEL FOR ALL DAMPERS LOCATED ABOVE HARD CEILINGS.
G	REFER TO PIPING PLAN FOR THERMOSTAT ASSIGNMENT.
H	PROVIDE TURNING VANES IN ALL MITERED ELBOWS EXCEPT TRANSFER AIR BOOTS.

KEYNOTES

167	DEDICATED SMOKE EXHAUST SYSTEM NOT REQUIRED IN CIRCULATION SPACE DUE TO HIGH CEILING HEIGHT.
184	AS DETERMINED BY FIRE PROTECTION ENGINEERING ANALYSIS, EACH OF THE TWO (2) NEW OR MODIFIED EXISTING ROOF VENTILATION EXHAUST VENTS REQUIRE A MINIMUM FREE AREA OF 33 SQ FT OF MOTORIZED LOUVERED AREA TO OPERATE ON A SIGNAL FROM THE FIRE ALARM SYSTEM. LOUVER WILL ALSO BE ACTIVATED WITH MANUAL HANDSWITCH IN CASE FIRE ALARM SYSTEM IS OUT OF SERVICE. HANDSWITCH TO BE LOCATED NEAR NORTH EXIT OF HANGAR BAY. MECHANICAL CONTRACTOR TO PROVIDE AND INSTALL MOTORIZED DAMPERS TO MEET STATED REQUIREMENT AND SEAL LOUVER AS NECESSARY. REFER TO DRAWINGS F-001 AND FA502 FOR FIRE ALARM SYSTEM INTERFACES



AREA A
KEY PLAN

GRAPHIC SCALE

8 6 4 2 0 8 16

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

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: B. SCHNEIDER
DRAWN BY: C. BROWN
CHECKED BY: M. WALLACE
SUBMITTED BY: E. OLNESS
DATE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201MH112

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
ACCESS No. 0000013

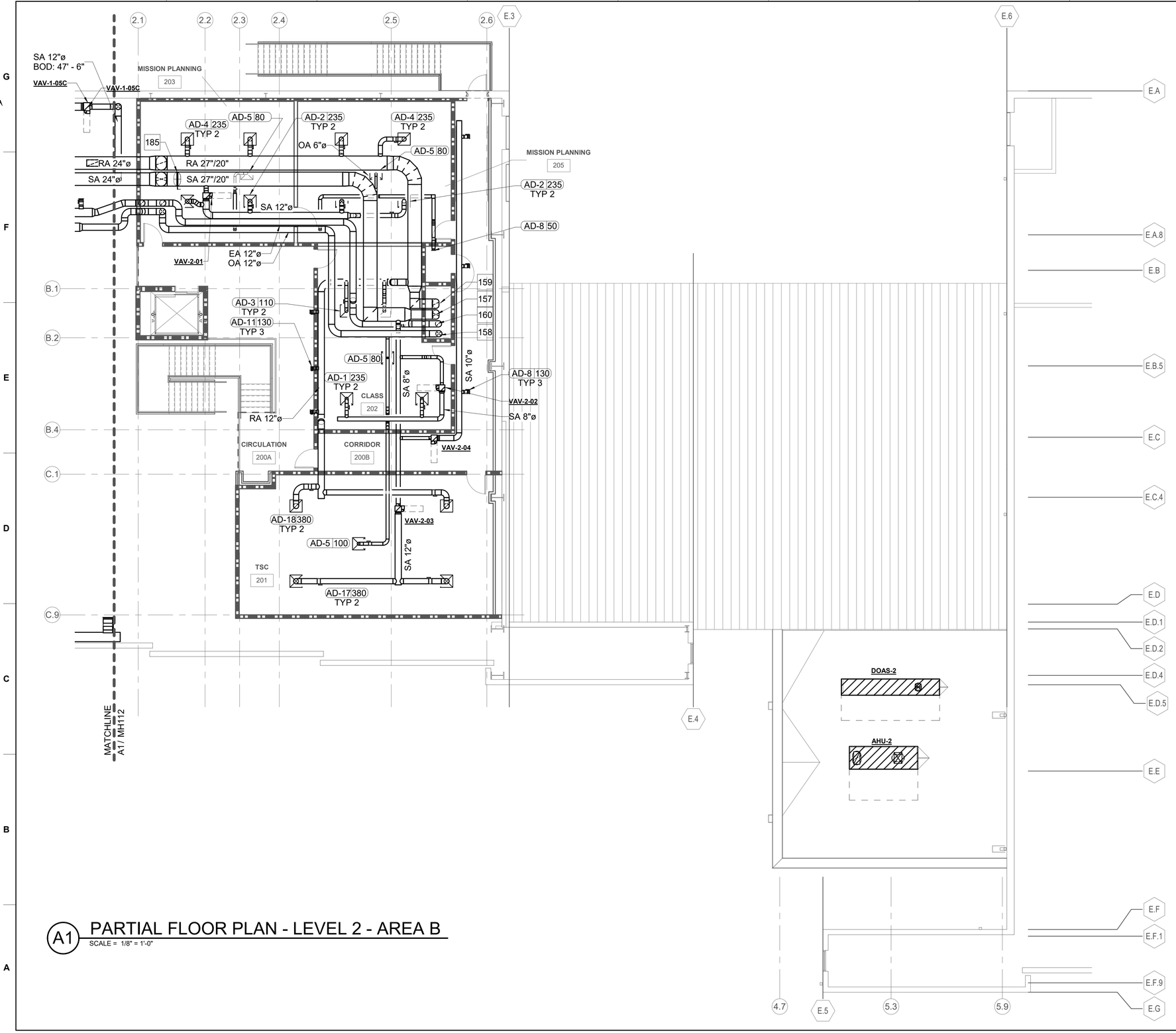
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PARTIAL HVAC PLAN - LEVEL 2 - AREA A

SHEET ID
B1455
MH112

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN



A1 PARTIAL FLOOR PLAN - LEVEL 2 - AREA B

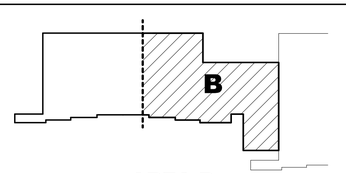
SCALE = 1/8" = 1'-0"

GENERAL NOTES - HVAC PLANS

A	REFER TO SHEET GI002 AND GI003 FOR LIST OF ABBREVIATIONS USED IN DRAWINGS. REFER TO SHEET GI012 FOR ROOM SCHEDULE.
B	MAINTAIN MANUFACTURER'S RECOMMENDED CLEARANCES ON ALL EQUIPMENT.
C	PROVIDE CLEARANCES FOR ALL ELECTRICAL AND CONTROL PANELS PER NEC.
D	PROVIDE BRACING FOR EQUIPMENT WEIGHING MORE THAN 31 LBS PER UFC 4-010-01.
E	ALIGN THERMOSTATS WITH OTHER WALL DEVICES WITHIN 1'-6" OF DOOR (LATCH SIDE), WHERE APPLICABLE. REFER TO F.F.&E. PLANS DETAIL E9/I-001 AND COORDINATE ALL WALL DEVICE LOCATIONS TO AVOID CONFLICT WITH FURNITURE AND EQUIPMENT. WHITE DEVICE COVERS, UNLESS OTHERWISE NOTED.
F	PROVIDE REMOTE DAMPER ACTUATORS OR ACCESS PANEL FOR ALL DAMPERS LOCATED ABOVE HARD CEILINGS.
G	REFER TO PIPING PLAN FOR THERMOSTAT ASSIGNMENT.
H	PROVIDE TURNING VANES IN ALL MITERED ELBOWS EXCEPT TRANSFER AIR BOOTS.

KEYNOTES

157	SA DUCT DOWN TO LEVEL 1. RE: A1/MH103
158	OA DUCT DOWN TO LEVEL 1. RE: A1/MH103
159	RA DUCT UP FROM LEVEL 1. RE: A1/MH103
160	EA DUCT UP FROM LEVEL 1. RE: A1/MH103
167	DEDICATED SMOKE EXHAUST SYSTEM NOT REQUIRED IN CIRCULATION SPACE DUE TO HIGH CEILING HEIGHT.
184	AS DETERMINED BY FIRE PROTECTION ENGINEERING ANALYSIS, EACH OF THE TWO (2) NEW OR MODIFIED EXISTING ROOF VENTILATION EXHAUST VENTS REQUIRE A MINIMUM FREE AREA OF 33 SQ FT OF MOTORIZED LOUVERED AREA TO OPERATE ON A SIGNAL FROM THE FIRE ALARM SYSTEM. LOUVER WILL ALSO BE ACTIVATED WITH MANUAL HANDSWITCH IN CASE FIRE ALARM SYSTEM IS OUT OF SERVICE. HANDSWITCH TO BE LOCATED NEAR NORTH EXIT OF HANGAR BAY. MECHANICAL CONTRACTOR TO PROVIDE AND INSTALL MOTORIZED DAMPERS TO MEET STATED REQUIREMENT AND SEAL LOUVER AS NECESSARY. REFER TO DRAWINGS F-001 AND FA502 FOR FIRE ALARM SYSTEM INTERFACES
185	PIPE SIZES TO ROOFTOP EQUIPMENT INDICATED ON MP113. PIPES TO BE ROUTED THROUGH ROOFTOP EQUIPMENT INTEGRAL PIPE CHASE. ROOF PENENETRATIONS TO BE COORDINATED WITH PURCHASED EQUIPMENT AND LAYOUT.



AREA B
KEY PLAN

GRAPHIC SCALE
8 6 4 2 0 8 16
SCALE: 1/8"=1'-0"

PLAN NORTH
TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201MH113
DESIGNED BY: B. SCHNEIDER
DRAWN BY: C. BROWN
CHECKED BY: M. WALLACE
SUBMITTED BY: E. OLNESS
SIZE: ANSI D
22-34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
(817)334-7540 TBPE F-2966

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PARTIAL HVAC PLAN - LEVEL 2 - AREA B

SHEET ID
B1455
MH113

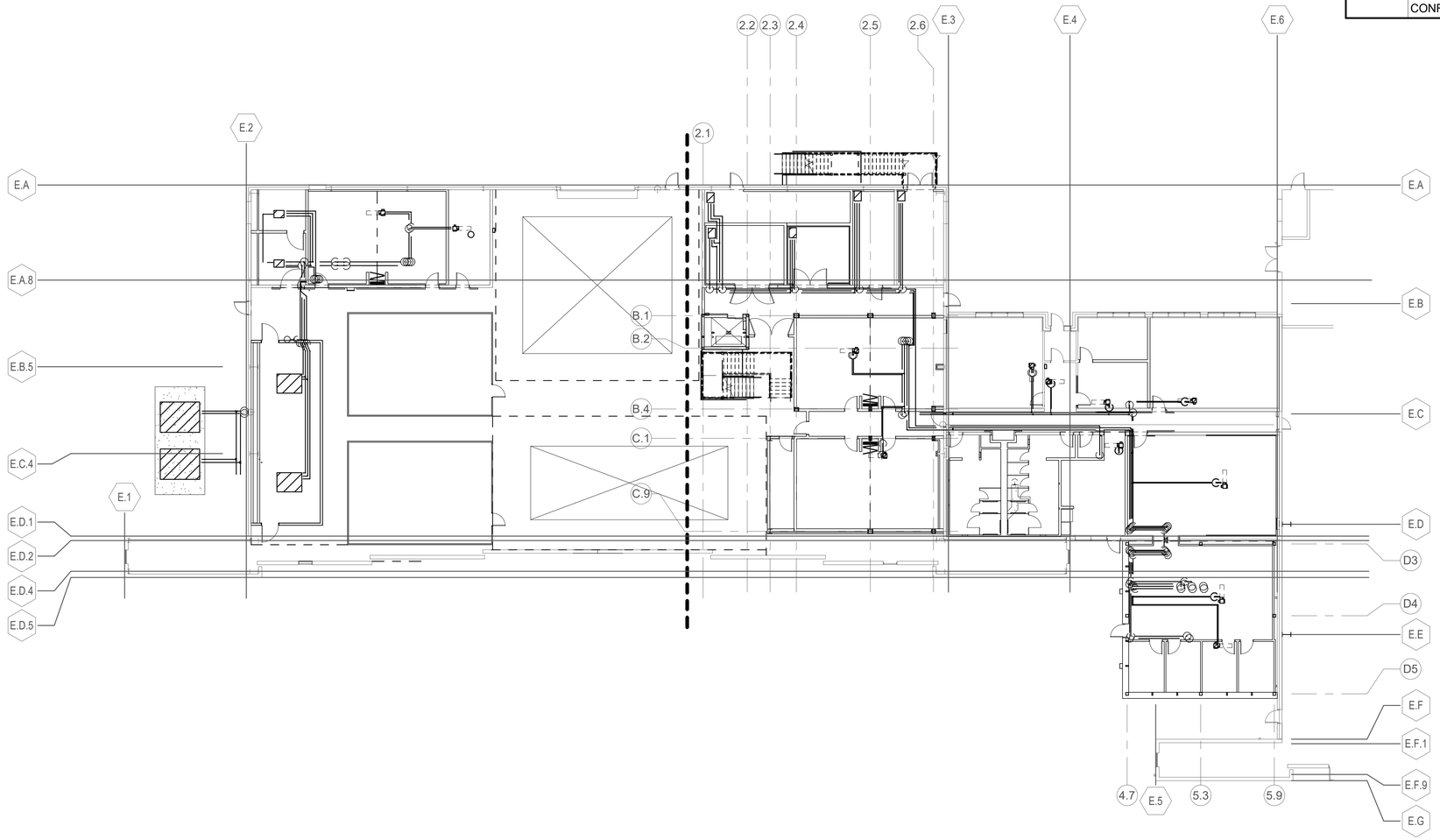
W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

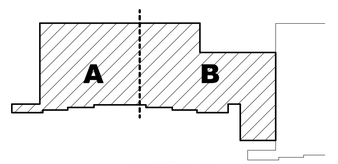
CERTIFIED FINAL DESIGN

GENERAL NOTES - OVERALL PLANS

A	REFER TO SHEET GI002 AND GI003 FOR LIST OF ABBREVIATIONS USED IN DRAWINGS. REFER TO SHEET GI012 FOR ROOM SCHEDULE.
B	OVERALL PLANS FOR REFERENCE ONLY. REFER TO PARTIAL PLANS FOR DETAILED SYSTEMS.
C	ALL VAV BOXES AND FAN COIL UNITS TO HAVE ASSOCIATED THERMOSTAT.
D	ALIGN THERMOSTATS WITH OTHER WALL DEVICES WITHIN 1'-6" OF DOOR (LATCH SIDE), WHERE APPLICABLE. REFER TO F.F.&E. PLANS AND COORDINATE ALL WALL DEVICE LOCATIONS TO AVOID CONFLICT WITH FURNITURE AND EQUIPMENT.



A1 OVERALL PIPING PLAN - LEVEL 1
SCALE = 1/16" = 1'-0"



OVERALL KEY PLAN

GRAPHIC SCALE

16 12 8 4 0 16 32
SCALE: 1/16"=1'-0"

PLAN NORTH
TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: B. SCHNEIDER
DRAWN BY: C. BROWN
CHECKED BY: M. WALLACE
SUBMITTED BY: E. OLNESS
DATE: 23 NOVEMBER 2022
ANSI D 22x34
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201MP101

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS PROJECT NO. 320073

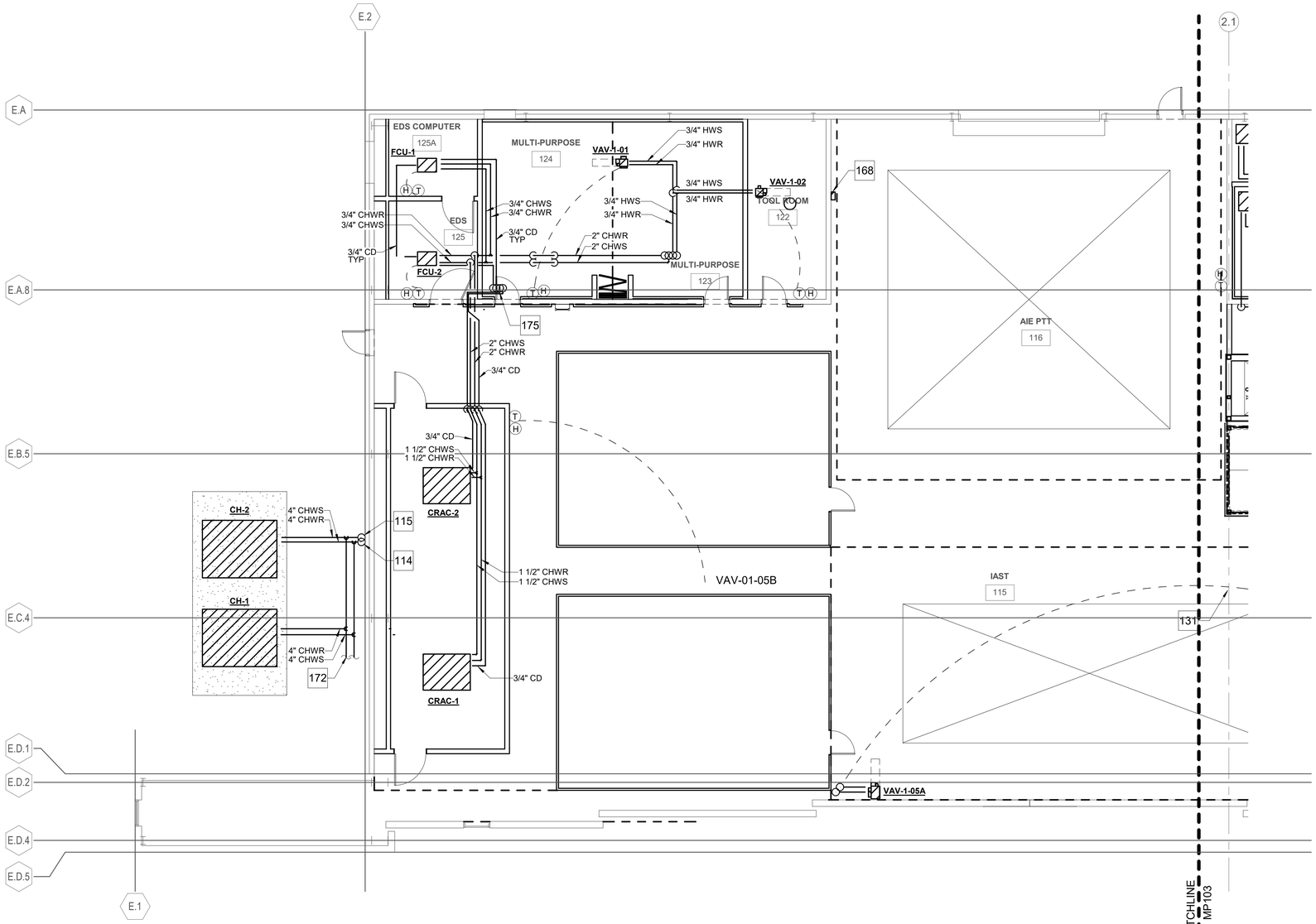
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
OVERALL PIPING PLAN - LEVEL 1

SHEET ID
B1455
MP101

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN



A1 PARTIAL PIPING PLAN - LEVEL 1 - AREA A

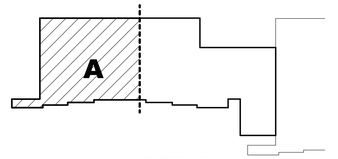
SCALE = 1/8" = 1'-0"

GENERAL NOTES - PIPING PLANS

A	REFER TO SHEET GI002 AND GI003 FOR LIST OF ABBREVIATIONS USED IN DRAWINGS. REFER TO SHEET GI012 FOR ROOM SCHEDULE.
B	MAINTAIN MANUFACTURER'S RECOMMENED CLEARANCES ON ALL EQUIPMENT.
C	PROVIDE CLEARANCES FOR ALL ELECTRICAL AND CONTROL PANELS PER NEC.
D	PROVIDE BRACING FOR EQUIPMENT WEIGHING MORE THAN 31 LBS PER UFC 4-010-01.
E	BRANCH PIPING TO VAV UNIT SHALL BE MINIMUM 3/4" HWS/R. REFER TO HYDRONIC PIPE RUNOUT SIZING SCHEDULE, SHEET M-602.
F	ALIGN THERMOSTATS WITH OTHER WALL DEVICES WITHIN 1'-6" OF DOOR (LATCH SIDE), WHERE APPLICABLE. REFER TO F.F.&E. PLANS AND COORDINATE ALL WALL DEVICE LOCATIONS TO AVOID CONFLICT WITH FURNITURE AND EQUIPMENT.
G	CONDENSATE MAIN LINES SHALL BE SLOPED DOWN 1/8" PER FOOT.

KEYNOTES

114	4" CHWS UP TO LEVEL 2. RE: A1/MP112
115	4" CHWR UP TO LEVEL 2. RE: A1/MP112
131	VAV-1-05A WIRE CONNECTION TO TEMPERATURE SENSOR CONTINUATION RE: A1/MP103
168	LOCATE HVAC EMERGENCY SHUTDOWN SWITCH.
172	PROVIDE FLANGE WITH CAPS FOR TEMPORARY CHILLER CONNECTION.
175	PUMP CONDENSATE LINES TO MEZZANINE LEVEL FOR DRAINING. RE: D1/M-401 FOR CONTINUATION.



AREA A
KEY PLAN

GRAPHIC SCALE

8 6 4 2 0 8 16

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

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201MP102

DESIGNED BY: B. SCHNEIDER
DRAWN BY: C. BROWN
CHECKED BY: M. WALLACE
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34

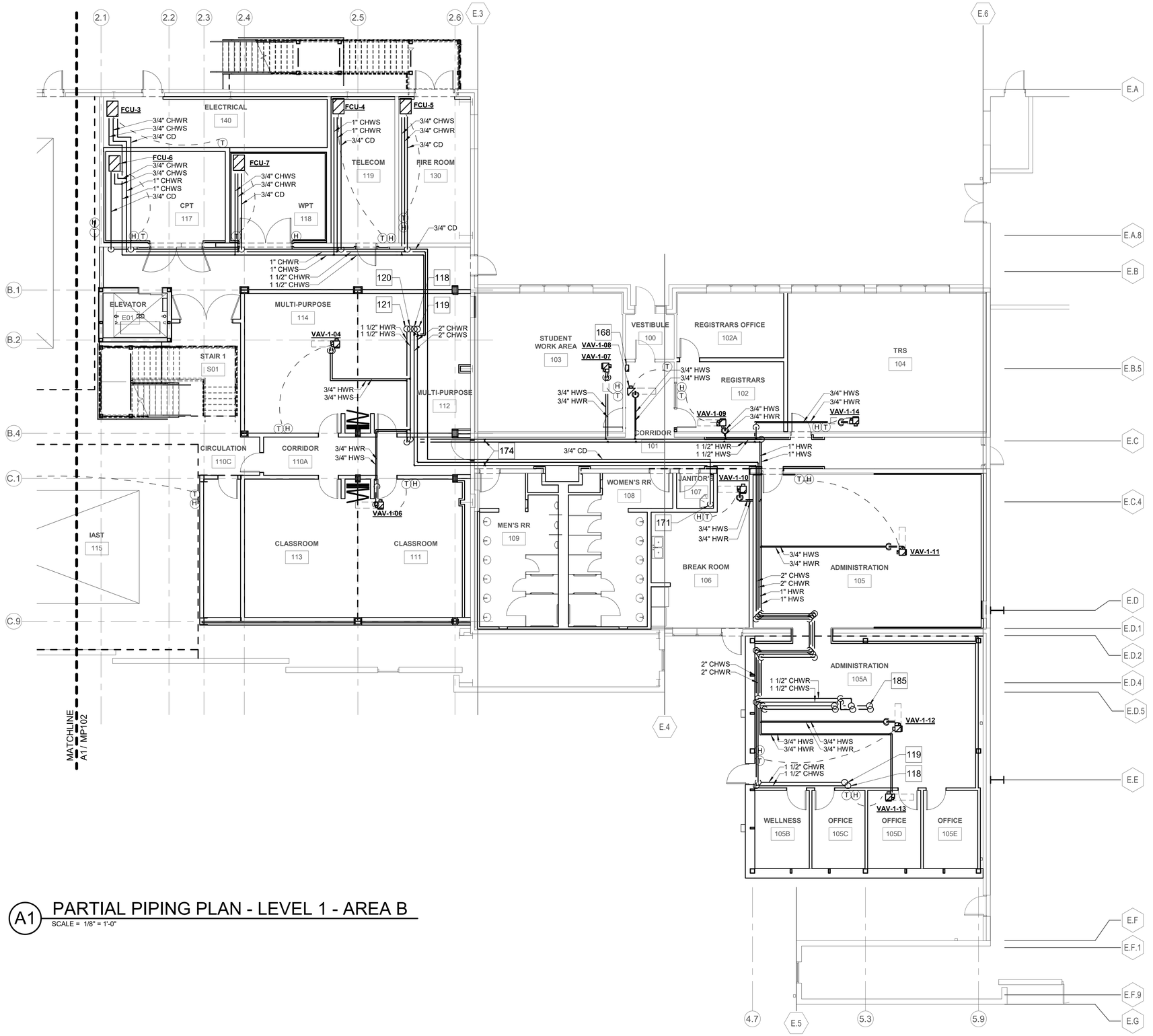
US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS PROJECT NO: D2R0015

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PARTIAL PIPING PLAN - LEVEL 1 - AREA A

SHEET ID
B1455
MP102

W912QR23R0003_Plans-0000



A1 PARTIAL PIPING PLAN - LEVEL 1 - AREA B

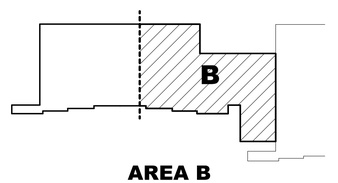
SCALE = 1/8" = 1'-0"

GENERAL NOTES - PIPING PLANS

A	REFER TO SHEET GI002 AND GI003 FOR LIST OF ABBREVIATIONS USED IN DRAWINGS. REFER TO SHEET GI012 FOR ROOM SCHEDULE.
B	MAINTAIN MANUFACTURER'S RECOMMENED CLEARANCES ON ALL EQUIPMENT.
C	PROVIDE CLEARANCES FOR ALL ELECTRICAL AND CONTROL PANELS PER NEC.
D	PROVIDE BRACING FOR EQUIPMENT WEIGHING MORE THAN 31 LBS PER UFC 4-010-01.
E	BRANCH PIPING TO VAV UNIT SHALL BE MINIMUM 3/4" HWS/R. REFER TO HYDRONIC PIPE RUNOUT SIZING SCHEDULE, SHEET M-602.
F	ALIGN THERMOSTATS WITH OTHER WALL DEVICES WITHIN 1'-6" OF DOOR (LATCH SIDE), WHERE APPLICABLE. REFER TO F.F.&E. PLANS AND COORDINATE ALL WALL DEVICE LOCATIONS TO AVOID CONFLICT WITH FURNITURE AND EQUIPMENT.
G	CONDENSATE MAIN LINES SHALL BE SLOPED DOWN 1/8" PER FOOT.

KEYNOTES

118	2 1/2" CHWS UP TO LEVEL 2. RE: A1/MP113
119	2 1/2" CHWR UP TO LEVEL 2. RE: A1/MP113
120	1 1/2" HWS UP TO LEVEL 2. RE: A1/MP113
121	1 1/2" HWR UP TO LEVEL 2. RE: A1/MP113
168	LOCATE HVAC EMERGENCY SHUTDOWN SWITCH.
171	DRAIN CONDENSATE TO MOP SINK.
174	LOCATE MINIMUM FLOW BYPASS. REFERENCE HYDRONIC DIAGRAMS FOR FURTHER INFORMATION.
185	PIPE SIZES TO ROOFTOP EQUIPMENT INDICATED ON MP113. PIPES TO BE ROUTED THROUGH ROOFTOP EQUIPMENT INTEGRAL PIPE CHASE. ROOF PENENETRATIONS TO BE COORDINATED WITH PURCHASED EQUIPMENT AND LAYOUT.



AREA B
KEY PLAN

GRAPHIC SCALE

8 6 4 2 0 8 16

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

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: B. SCHNEIDER
DRAWN BY: C. BROWN
CHECKED BY: M. WALLACE
SUBMITTED BY: E. OLNESS
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: ANSI D 22x34 - SXHT219201MP103

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS PROJECT NUMBER: D3

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PARTIAL PIPING PLAN - LEVEL 1 - AREA B

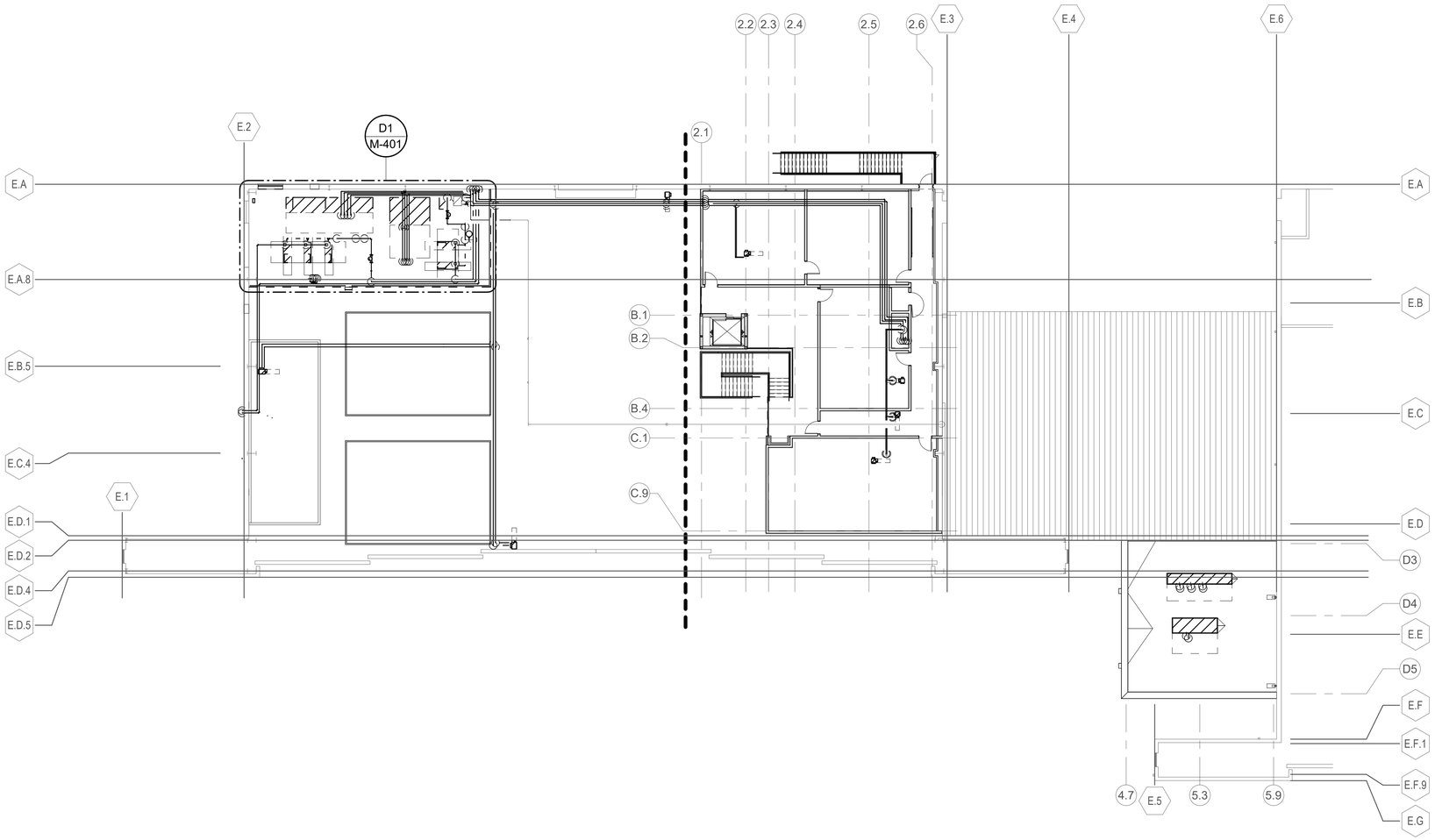
SHEET ID
B1455
MP103

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN

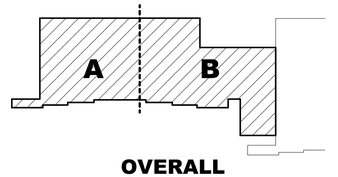
GENERAL NOTES - OVERALL PLANS

A	REFER TO SHEET GI002 AND GI003 FOR LIST OF ABBREVIATIONS USED IN DRAWINGS. REFER TO SHEET GI012 FOR ROOM SCHEDULE.
B	OVERALL PLANS FOR REFERENCE ONLY. REFER TO PARTIAL PLANS FOR DETAILED SYSTEMS.
C	ALL VAV BOXES AND FAN COIL UNITS TO HAVE ASSOCIATED THERMOSTAT.
D	ALIGN THERMOSTATS WITH OTHER WALL DEVICES WITHIN 1'-6" OF DOOR (LATCH SIDE), WHERE APPLICABLE. REFER TO F.F.&E. PLANS AND COORDINATE ALL WALL DEVICE LOCATIONS TO AVOID CONFLICT WITH FURNITURE AND EQUIPMENT.



A1 OVERALL PIPING PLAN - LEVEL 2

SCALE = 1/16" = 1'-0"



OVERALL KEY PLAN

GRAPHIC SCALE

16 12 8 4 0 16 32

SCALE: 1/16"=1'-0"

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE:	23 NOVEMBER 2022
SOLICITATION NO.:	
CONTRACT NO.:	
DRAWING CODE.:	
FILE NAME:	SXHT219201MP111

DESIGNED BY:	B. SCHNEIDER
DRAWN BY:	C. BROWN
CHECKED BY:	M. WALLACE
SUBMITTED BY:	E. OLNESS
SIZE:	ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

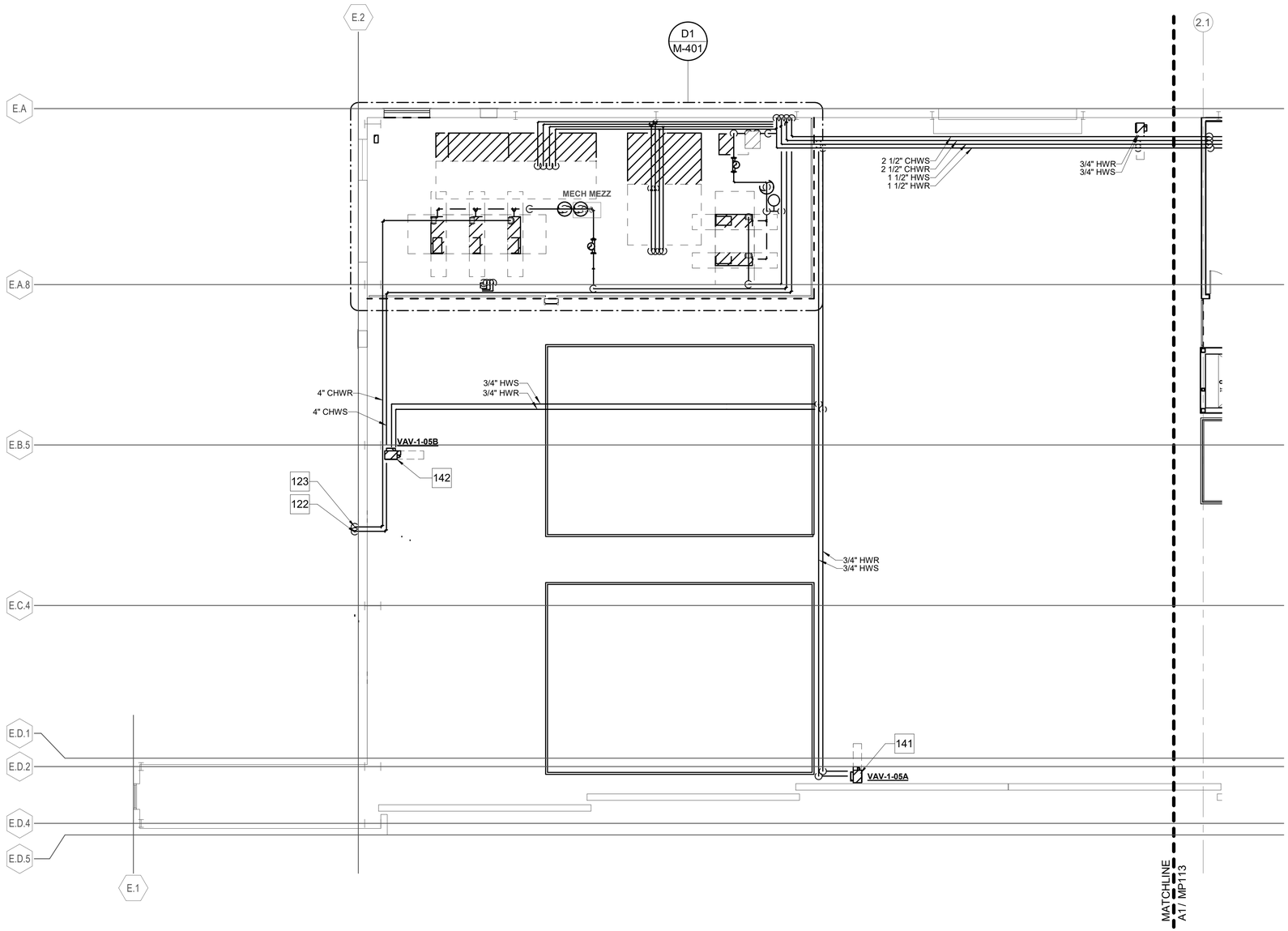
Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS PROJECT NO: D2R0003

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
OVERALL PIPING PLAN - LEVEL 2

SHEET ID
B1455
MP111

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



A1 PARTIAL PIPING PLAN - LEVEL 2 - AREA A

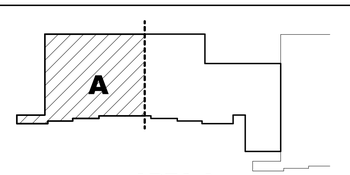
SCALE = 1/8" = 1'-0"

GENERAL NOTES - PIPING PLANS

A	REFER TO SHEET GI002 AND GI003 FOR LIST OF ABBREVIATIONS USED IN DRAWINGS. REFER TO SHEET GI012 FOR ROOM SCHEDULE.
B	MAINTAIN MANUFACTURER'S RECOMMENED CLEARANCES ON ALL EQUIPMENT.
C	PROVIDE CLEARANCES FOR ALL ELECTRICAL AND CONTROL PANELS PER NEC.
D	PROVIDE BRACING FOR EQUIPMENT WEIGHING MORE THAN 31 LBS PER UFC 4-010-01.
E	BRANCH PIPING TO VAV UNIT SHALL BE MINIMUM 3/4" HWS/R. REFER TO HYDRONIC PIPE RUNOUT SIZING SCHEDULE, SHEET M-602.
F	ALIGN THERMOSTATS WITH OTHER WALL DEVICES WITHIN 1'-6" OF DOOR (LATCH SIDE), WHERE APPLICABLE. REFER TO F.F.&E. PLANS AND COORDINATE ALL WALL DEVICE LOCATIONS TO AVOID CONFLICT WITH FURNITURE AND EQUIPMENT.
G	CONDENSATE MAIN LINES SHALL BE SLOPED DOWN 1/8" PER FOOT.

KEYNOTES

122	4" CHWS DOWN TO LEVEL 1. RE: A1/MP102
123	4" CHWR DOWN TO LEVEL 1. RE: A1/MP102
141	VAV-1-05A TEMPERATURE SENSOR WIRE CONNECTION TO VAV BOX RE: A1/MP 102
142	VAV-1-05B TEMPERATURE SENSOR WIRE CONNECTION TO VAV BOX RE: A1/MP 102



AREA A
KEY PLAN

GRAPHIC SCALE

8 6 4 2 0 8 16

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

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: B. SCHNEIDER
DRAWN BY: C. BROWN
CHECKED BY: M. WALLACE
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201MP112

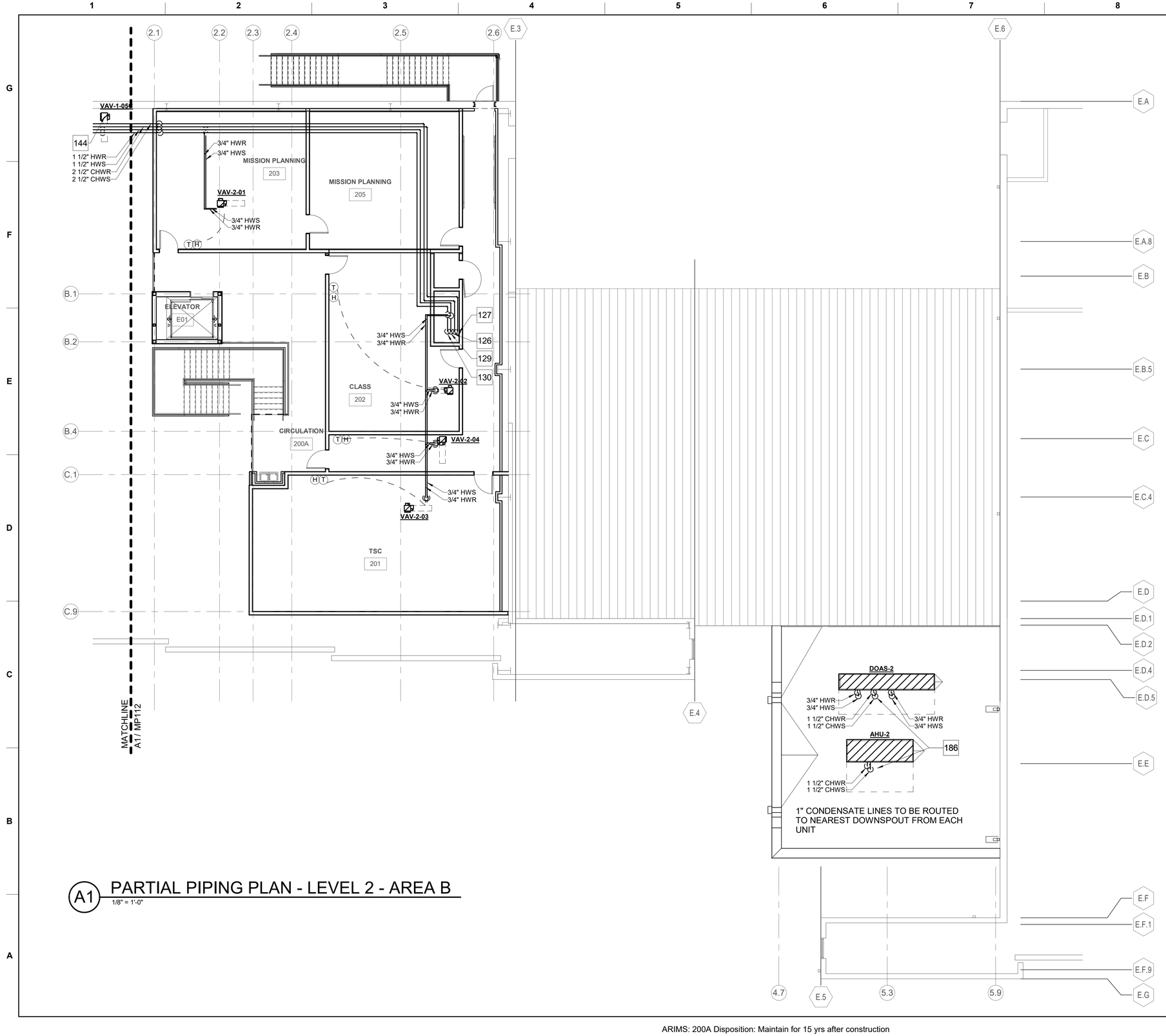
US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS PROJECT NO. D2R0013

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PARTIAL PIPING PLAN - LEVEL 2 - AREA A

SHEET ID
B1455
MP112

W912QR23R0003_Plans-0000



A1 PARTIAL PIPING PLAN - LEVEL 2 - AREA B

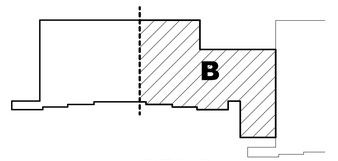
1/8" = 1'-0"

GENERAL NOTES - PIPING PLANS

A	REFER TO SHEET GI002 AND GI003 FOR LIST OF ABBREVIATIONS USED IN DRAWINGS. REFER TO SHEET GI012 FOR ROOM SCHEDULE.
B	MAINTAIN MANUFACTURER'S RECOMMENED CLEARANCES ON ALL EQUIPMENT.
C	PROVIDE CLEARANCES FOR ALL ELECTRICAL AND CONTROL PANELS PER NEC.
D	PROVIDE BRACING FOR EQUIPMENT WEIGHING MORE THAN 31 LBS PER UFC 4-010-01.
E	BRANCH PIPING TO VAV UNIT SHALL BE MINIMUM 3/4" HWS/R. REFER TO HYDRONIC PIPE RUNOUT SIZING SCHEDULE, SHEET M-602.
F	ALIGN THERMOSTATS WITH OTHER WALL DEVICES WITHIN 1'-6" OF DOOR (LATCH SIDE), WHERE APPLICABLE. REFER TO F.F.&E. PLANS AND COORDINATE ALL WALL DEVICE LOCATIONS TO AVOID CONFLICT WITH FURNITURE AND EQUIPMENT.
G	CONDENSATE MAIN LINES SHALL BE SLOPED DOWN 1/8" PER FOOT.

KEYNOTES

126	2 1/2" CHWS DOWN TO LEVEL 1. RE: A1/MP103
127	2 1/2" CHWR DOWN TO LEVEL 1. RE: A1/MP103
129	1 1/2" HWS DOWN TO LEVEL 1. RE: A1/MP103
130	1 1/2" HWR DOWN TO LEVEL 1. RE: A1/MP103
144	VAV-1-05C TEMPERATURE SENSOR WIRE CONNECTION TO VAV BOX RE: A1/MP 103
186	ROOFTOP EQUIPMENT TO BE PROVIDED WITH INTEGRAL PIPE CHASES. PIPE TO BE ROUTED INTO CHASES FROM BELOW. FINAL ROOF PENETRATION LOCATION TO BE COORDINATED WITH PURCHASED EQUIPMENT AND LAYOUT.



AREA B
KEY PLAN

GRAPHIC SCALE

16 12 8 4 0 16 32

SCALE: 1/16"=1'-0"

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
21NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: B. SCHNEIDER
DRAWN BY: C. BROWN
CHECKED BY: M. WALLACE
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201MP113

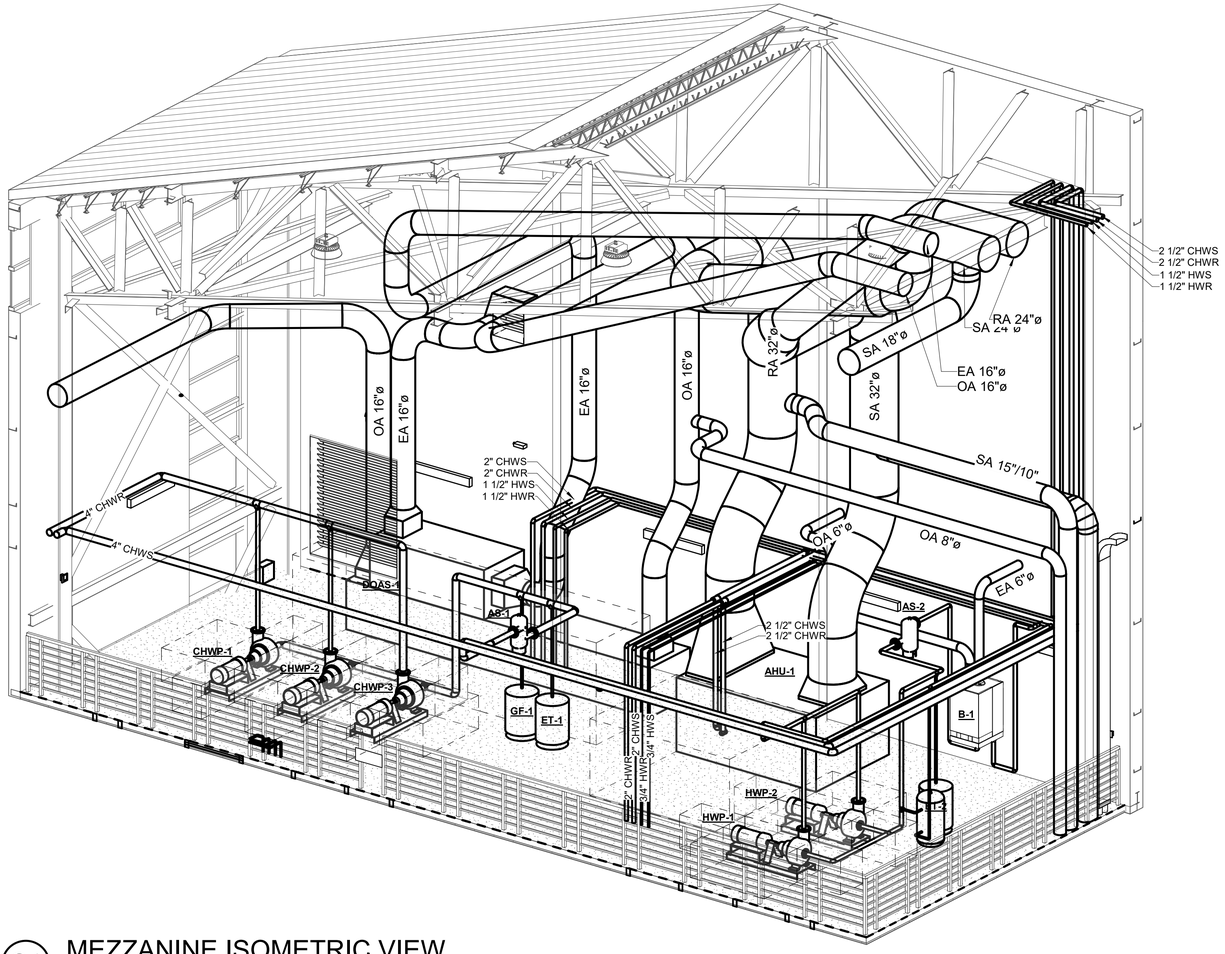
US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS No. 70128253

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PARTIAL PIPING PLAN - LEVEL 2 - AREA B

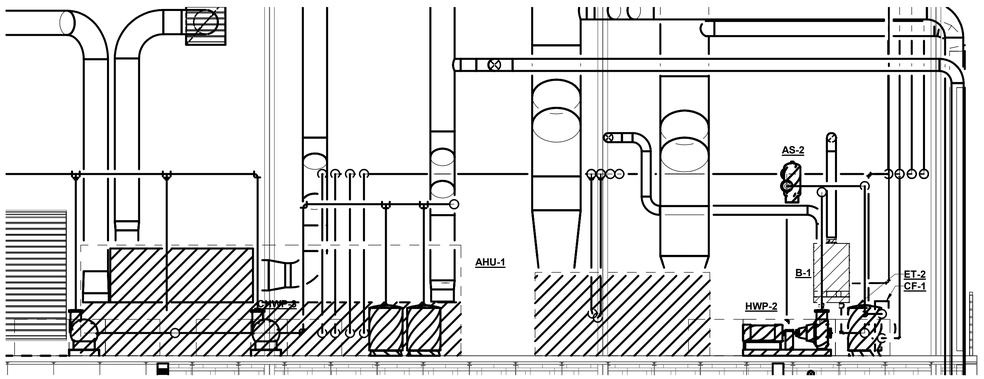
SHEET ID
B1455
MP113

W912QR23R0003_Plans-0000



C1 MEZZANINE ISOMETRIC VIEW

SCALE =



A5 MEZZANINE SECTION VIEW - AHU-1

SCALE = 1 : 50

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: B. SCHNEIDER
DRAWN BY: C. BROWN
CHECKED BY: M. WALLACE
SUBMITTED BY: E. OLNESS
QC BY:
ANSI D 22x34

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201M-301

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
ACCESS No. 1000013

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395

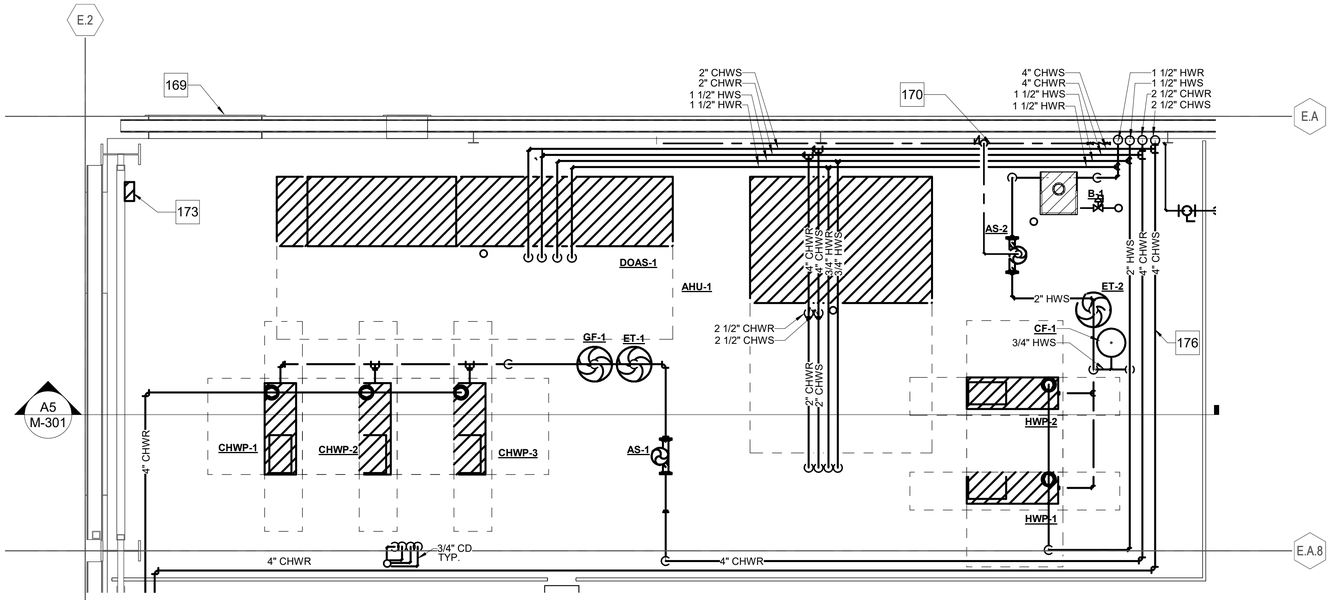
MECHANICAL SECTIONS

SHEET ID
B1455
M-301

W912QR23R0003_Plans-0000

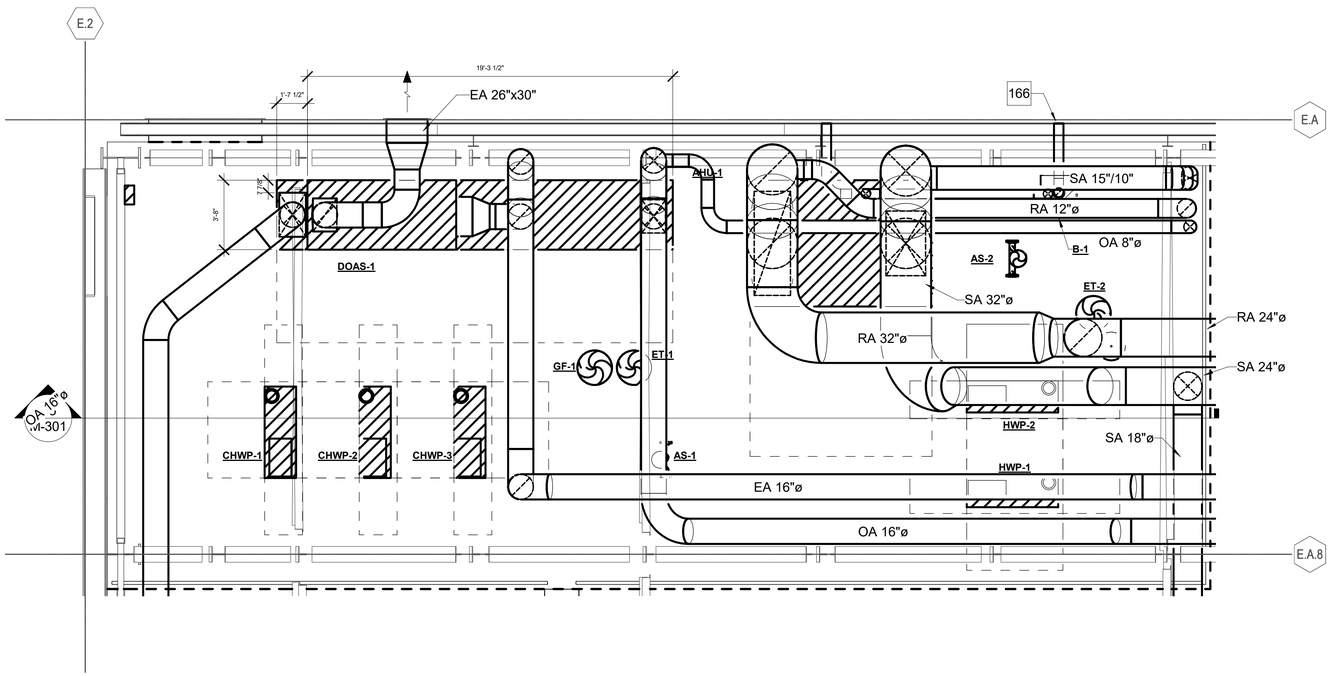
CERTIFIED FINAL DESIGN

KEYNOTES	
166	RE: D4/P-502 FOR BOILER FLUE VENT DETAIL.
169	SEALED LOUVER OR DOOR. REFERENCE ARCHITECTURE FOR BID OPTION.
170	DCW MAKEUP FOR HYDRONIC HOT WATER SYSTEM. REFERENCE PLUMBING FOR FURTHER INFORMATION.
173	LOCATE BAS INTERFACE.
176	RE: DETAIL A1/M-504 FOR FLOOR MOUNTED PIPE SUPPORT DETAIL.



D1 ENLARGED MEZZANINE PIPING PLAN

SCALE = 1/4" = 1'-0"



A1 ENLARGED MEZZANINE HVAC PLAN

SCALE = 1/4" = 1'-0"

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: B. SCHNEIDER
DRAWN BY: C. BROWN
CHECKED BY: M. WALLACE
SUBMITTED BY: E. OLMESS
ANSI D 22x34

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:.
FILE NAME: SXHT219201M-401

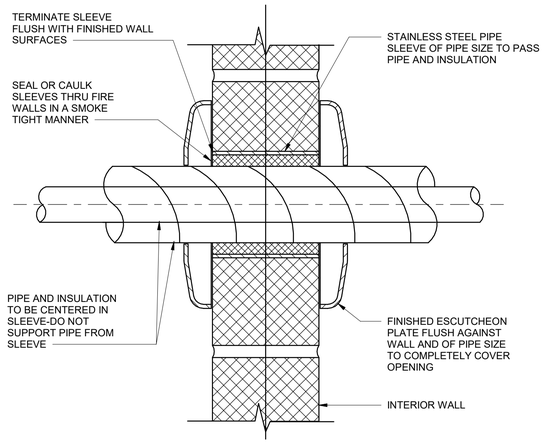
US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
Phone: (817)820-2000 TBPE#: F-2

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
MECHANICAL ENLARGED PLANS

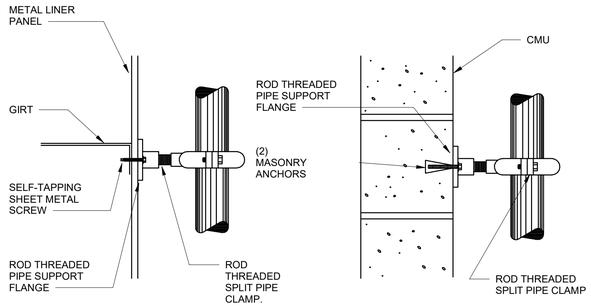
SHEET ID
B1455
M-401

W912QR23R0003_Plans-0000



E1 PIPE SLEEVE THRU INTERIOR WALL

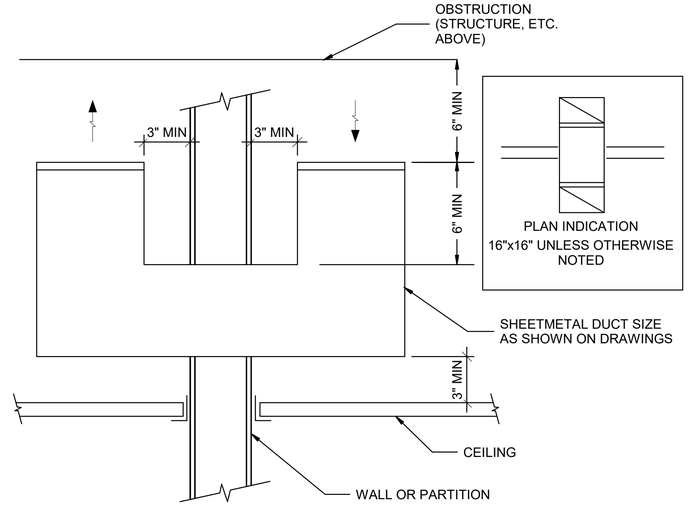
SCALE = NTS



NOTE:
MASONRY ANCHOR SHALL BE EPOXY ADHESIVE TYPE WITH A MINIMUM CAPACITY OF 150 LBf AND SHEAR CAPACITY OF 300 LBf. SUBMIT MANUFACTURER'S DATA FOR APPROVAL

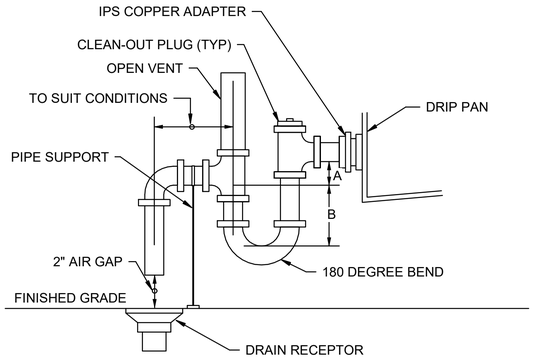
E4 TYPICAL WALL PIPE SUPPORT DETAIL

SCALE = NTS



E7 RETURN AIR SOUND BOOT DETAIL

SCALE = NTS



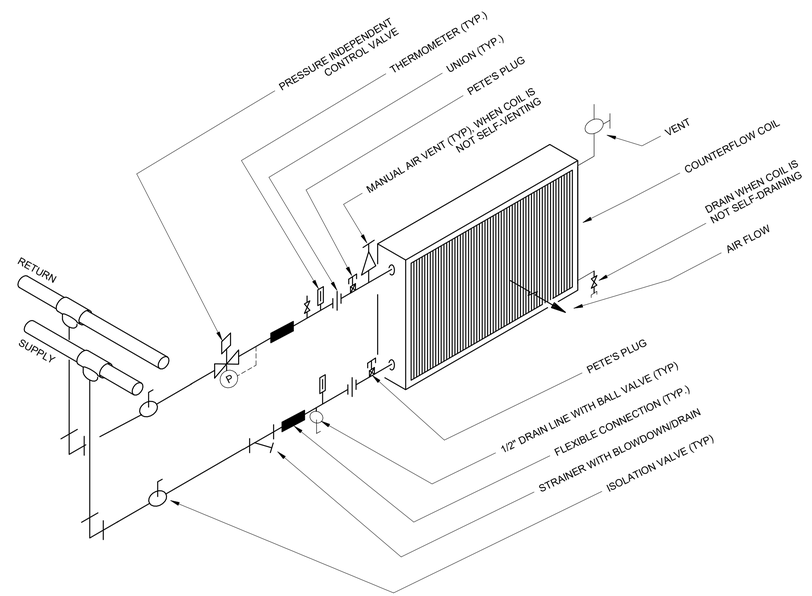
PIPE SUPPORT: SPLIT PIPE CLAMP, 3/8" THREADED ROD

UNIT TYPE	A	B
DRAW THRU	2" PLUS X	X
BLOW THRU	2" MINIMUM	2X

WHERE X = STATIC PRESSURE (AHU TOTAL STATIC PRESSURE) IN DRAIN PAN

A1 AHU CONDENSATE DRAIN DETAIL

SCALE = NTS



NOTES:
1. WHEN COIL IS INCLUDED IN CASING MOUNTED ON VIBRATION ISOLATORS THE FIRST TWO (2) HANGERS FOR EACH PIPE SHALL BE SPRING AND NEOPRENE TYPE.
2. COILS SHALL BE INSTALLED WITH REMOVABLE SPOOLS AT EQUIPMENT AND SHALL NOT BLOCK ACCESS DOORS, PANELS, OR SERVICE AREA FOR FILTERS, VALVES, OR EQUIPMENT.
3. PROVIDE DI-ELECTRIC WATERWAYS WHERE DISSIMILAR PIPES JOIN, PER SPECIFICATIONS.
4. LOCATE ISOLATION VALVES IN SUCH A MANNER THAT THEY WILL NOT BLOCK FUTURE REMOVAL OF THE ENTIRE UNIT.
5. USE BALL VALVE FOR LINES 2" AND SMALLER. USE BUTTERFLY VALVES FOR LINES OVER 2".
6. CONTROL VALVE NOT REQUIRED FOR UNIT HEATERS.

A6 UNIVERSAL WATER COIL PIPING DETAIL

SCALE = NTS

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED
PROFESSIONAL ENGINEER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201M-501

DESIGNED BY: B. SCHNEIDER
DRAWN BY: C. BROWN
CHECKED BY: M. WALLACE
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34

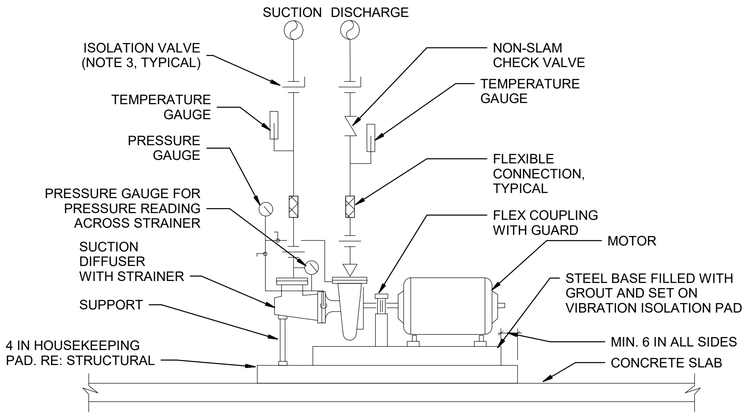
US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
(817)334-7000 TBPE F-2629

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
MECHANICAL DETAILS

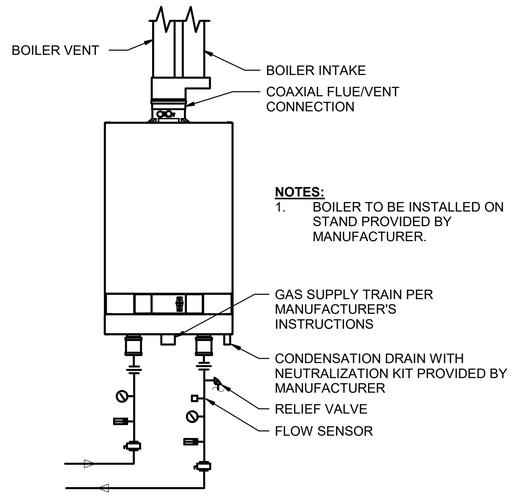
SHEET ID
B1455
M-501

W912QR23R0003_Plans-0000



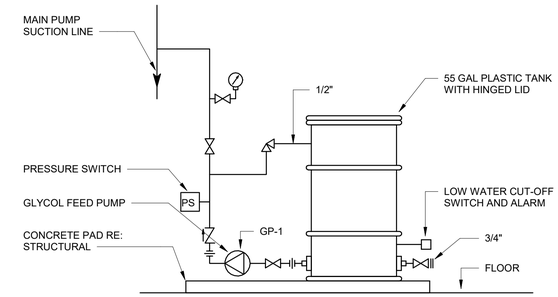
NOTES:
1. ALLOW CLEARANCE FOR REMOVAL OF STRAINER.
2. PROVIDE SPOOL BETWEEN BUTTERFLY VALVE AND ADJACENT FLANGES.
3. FOR LINE SIZES 2 IN AND SMALLER USE BALL VALVES.
4. PROVIDE REDUCER AT SUCTION DIFFUSER AND PUMP DISCHARGE REQUIRED.
5. CONSTRUCTION STRAINER SHALL BE REPLACED WITH NEW STRAINER AFTER SYSTEM FLUSH.

E1 BASE MOUNTED PUMP PIPING DETAIL
SCALE = NTS

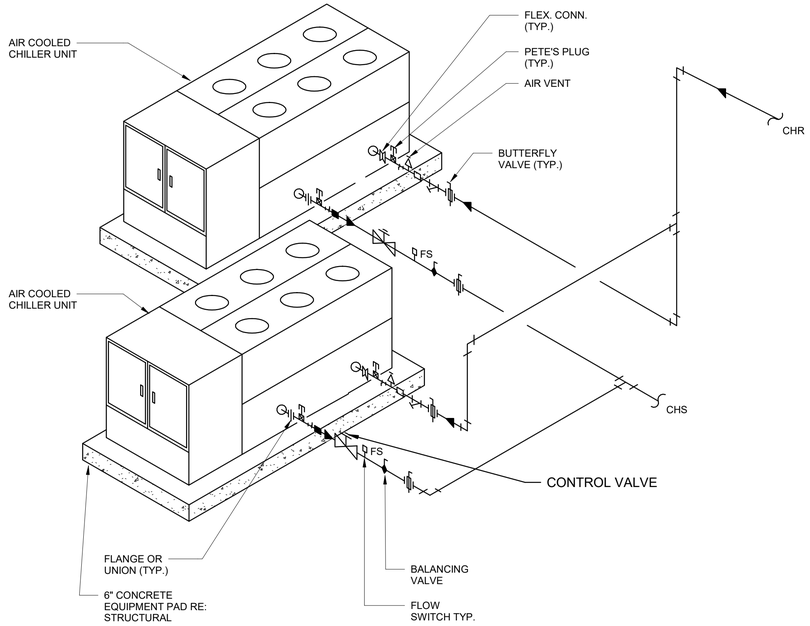


NOTES:
1. BOILER TO BE INSTALLED ON STAND PROVIDED BY MANUFACTURER.

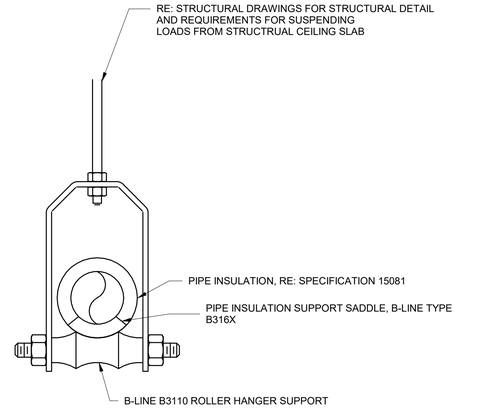
E4 BOILER PIPING DETAIL
SCALE = NTS



E8 GLYCOL FEEDER ASSEMBLY DETAIL
SCALE = NTS

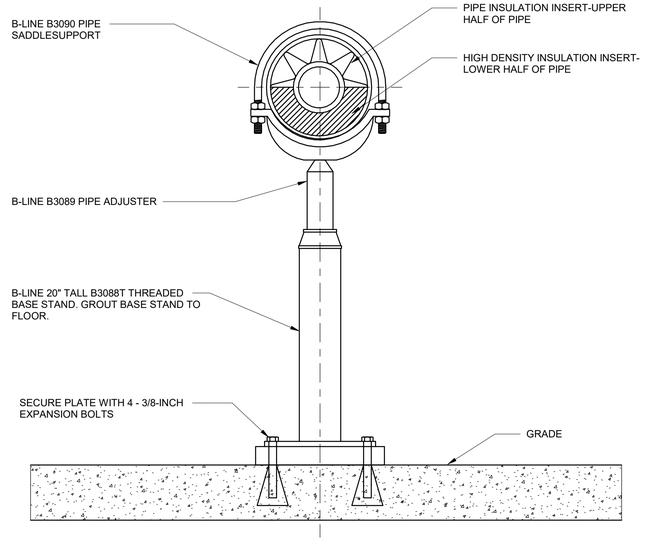


A1 PACKAGED AIR-COOLED CHILLER PIPING DETAIL
SCALE = NTS



NOTES:
1. PROVIDE MASON INDUSTRIES TYPE DNHS SPRING ISOLATION HANGER AT FIRST THREE CONNECTION POINTS NEAREST TO VIBRATING EQUIPMENT.
2. PROVIDE TYPICAL HANGER ASSEMBLY AS SHOWN ABOVE FOR ALL SUSPENDED HOT WATER, CHILLED WATER AND CONDENSER WATER PIPING IN FIRST FLOOR MECHANICAL ROOM.
3. REFER TO SPECIFICATIONS FOR PIPE SPACING AND HANGER ROD SIZE REQUIREMENTS.

A4 MECHANICAL ROOM PIPE SUPPORT
SCALE = NTS



A7 TYPICAL MECHANICAL YARD PIPE SUPPORT DETAIL
SCALE = NTS

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE:	23 NOVEMBER 2022
SOLICITATION NO.:	
CONTRACT NO.:	
DRAWING CODE.:	
FILE NAME:	SXHT219201M-502

DESIGNED BY: B. SCHNEIDER
DRAWN BY: C. BROWN
CHECKED BY: M. WALLACE
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
ACCESS No. 0000013

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395

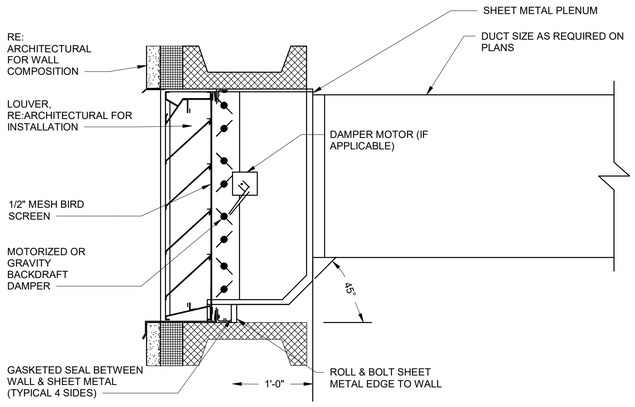
MECHANICAL DETAILS

SHEET ID
B1455
M-502

W912QR23R0003_Plans-0000

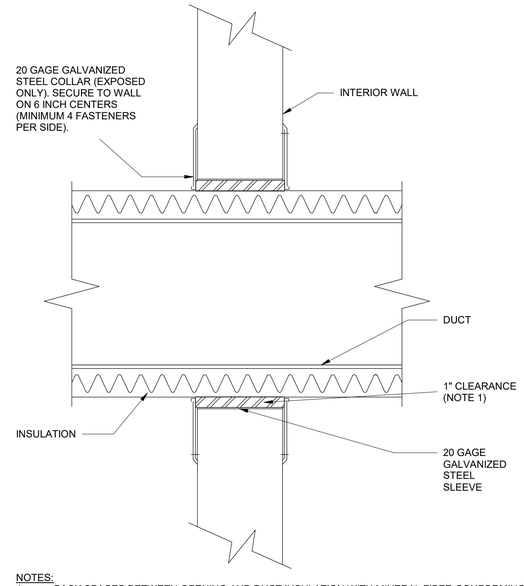
ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN



D1 INTAKE/DISCHARGE LOUVER DETAIL

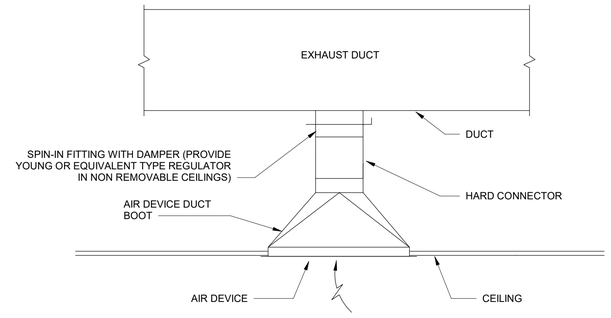
SCALE = NTS



NOTES:
1. PACK SPACES BETWEEN OPENING AND DUCT INSULATION WITH MINERAL FIBER CONFORMING WITH ASTM C 553
2. WALL IS INTERIOR AND NOT FIRE RATED

D4 TYPICAL DUCTWORK INTERIOR WALL PENETRATION

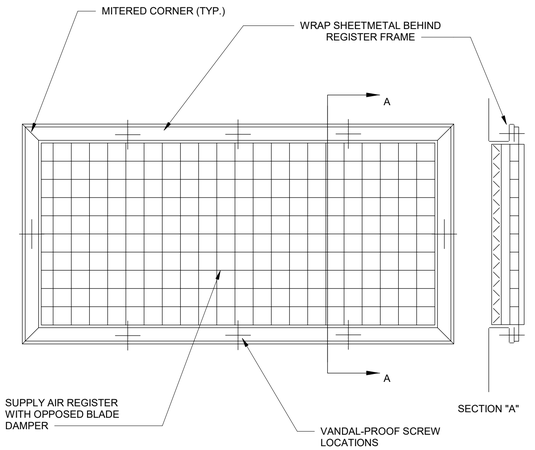
SCALE = NTS



NECK SIZE	CFM RANGE
6" ø	0-75
8" ø	76-175
10" ø	176-300
12" ø	301-500

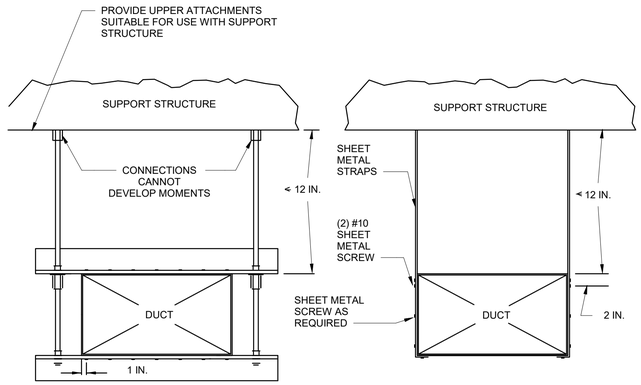
D7 EXHAUST AIR DEVICE CONNECTION DETAIL

SCALE = NTS



A1 TYPICAL SUPPLY/RETURN AIR REGISTER DETAIL

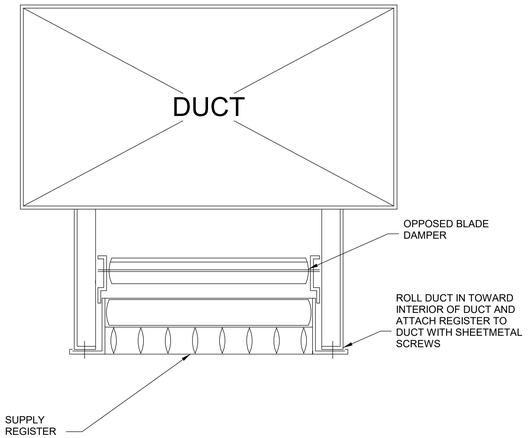
SCALE = NTS



NOTES:
1. PROVIDE UPPER ATTACHMENTS, SUPPORTS, AND SMACNA REQUIREMENTS.
2. MAINTAIN HANGER LENGTH OF LESS THAN 12" WHERE POSSIBLE.

A4 TYPICAL DUCT SUPPORT DETAILS

SCALE = NTS



A7 TYPICAL DUCT MOUNTED REGISTER DETAIL

SCALE = NTS

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
21NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: B. SCHNEIDER
DRAWN BY: C. BROWN
CHECKED BY: M. WALLACE
SUBMITTED BY: E. OLNESS
QC BY:
ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:.
FILE NAME: SXHT219201M-503

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street Fort Worth, TX 76102
Phone: (817)820-4000 TBPE#2

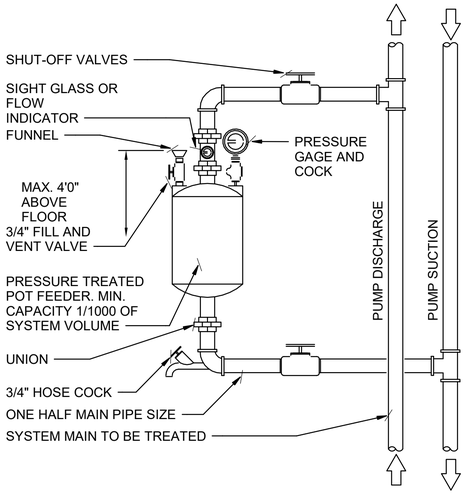
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
MECHANICAL DETAILS

SHEET ID
B1455
M-503

W912QR23R0003_Plans-0000

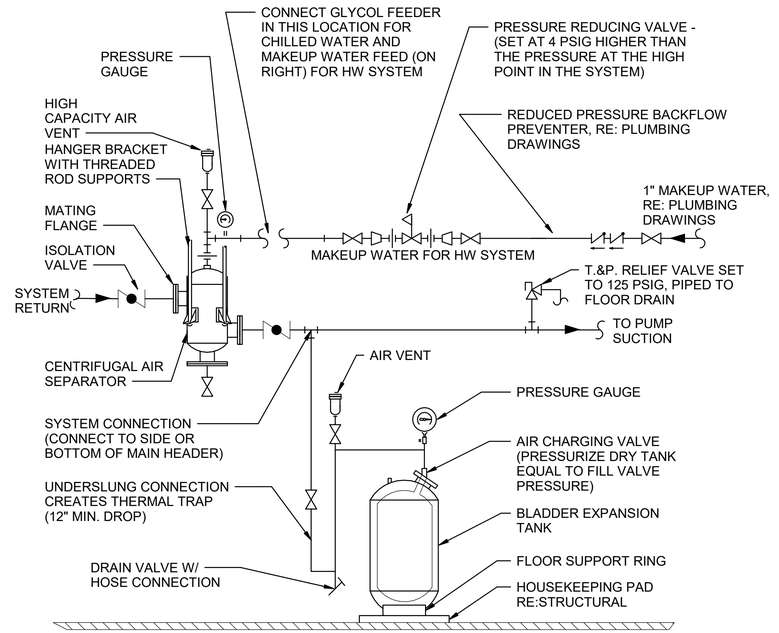
ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN



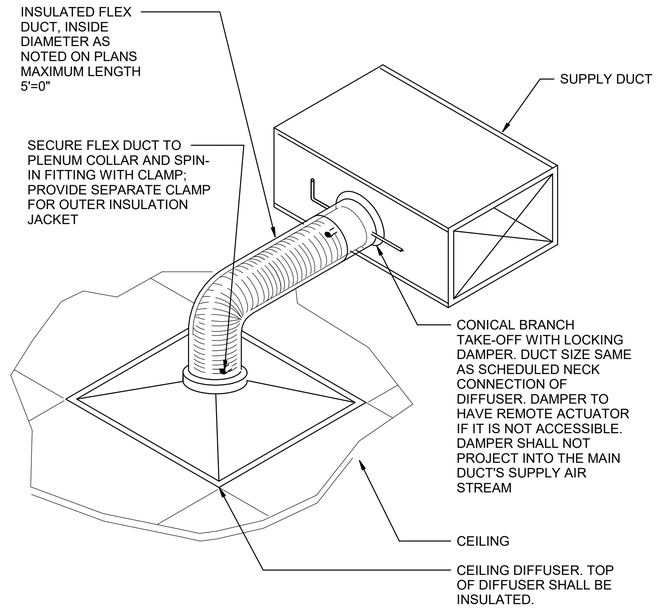
D1 CHEMICAL POT DETAIL

SCALE = NTS



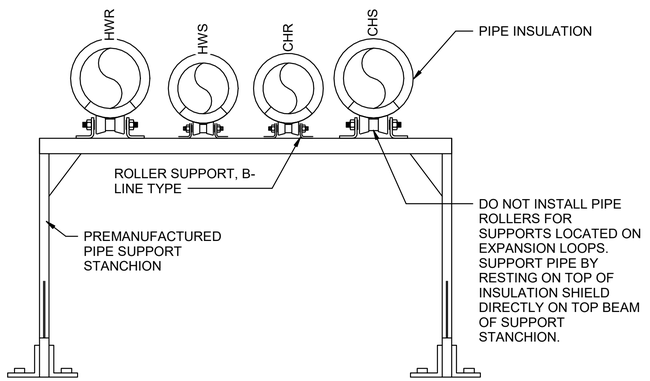
D4 AIR SEPARATOR AND EXPANSION TANK PIPING DETAIL

SCALE = NTS



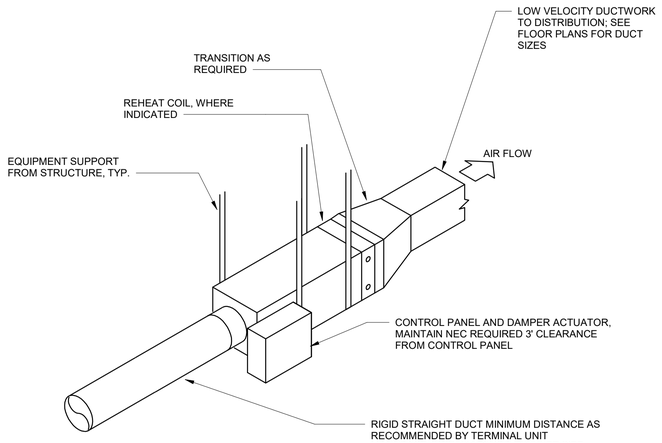
D7 CEILING DIFFUSER DETAIL

SCALE = NTS



A1 FLOOR MOUNTED PIPE SUPPORT DETAIL

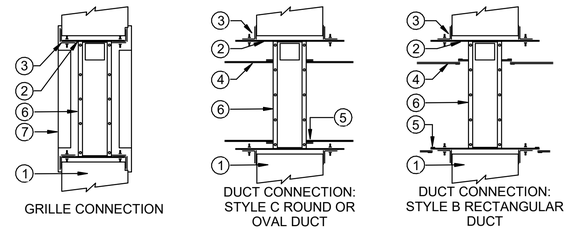
SCALE = NTS



NOTES:
1. DO NOT SUPPORT UNIT WITH DUCTWORK (SUPPORT SEPARATELY).

A4 TYPICAL SINGLE DUCT TERMINAL UNIT W/ REHEAT COIL DETAIL

SCALE = NTS



NOTES BY SYMBOL " O "

1. FIRE SEPARATION
2. SLEEVE
3. MOUNTING ANGLE
4. DUCT
5. DUCT CONNECTION
6. FIRE DAMPER
7. SIDEWALL GRILLE

FIRE DAMPER INSTALLATION NOTES:

1. INSTALL ALL FIRE DAMPERS IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS, AND IN COMPLETE COMPLIANCE WITH UL 555 FIRE DAMPERS, NFPA 90A & 90B.
2. PROVIDE DUCT ACCESS DOORS AT ALL FIRE DAMPER LOCATIONS OF SUFFICIENT SIZE TO ALLOW INSPECTION AND TO RESET LINKAGE.
3. PROVIDE ACCESS DOORS IN ALL FIXED CEILINGS FOR ACCESS TO DUCT DOORS.

A7 FIRE DAMPER DETAILS

SCALE = NTS

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: B. SCHNEIDER
DRAWN BY: C. BROWN
CHECKED BY: M. WALLACE
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201M-504

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
Phone: 817.820.8000 Fax: 817.820.8012

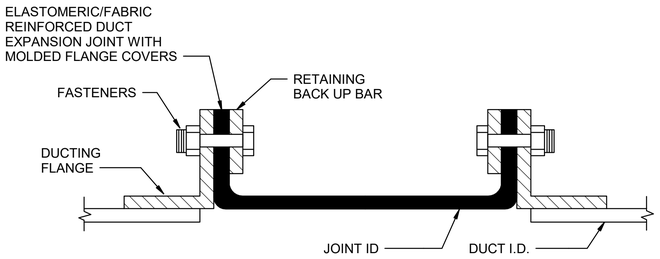
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395

MECHANICAL DETAILS

SHEET ID
B1455
M-504

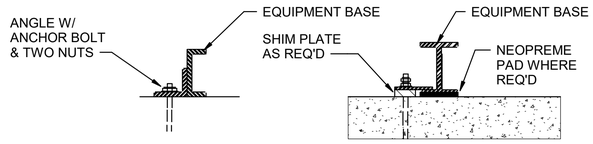
W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



F1 DUCT EXPANSION JOINT DETAIL

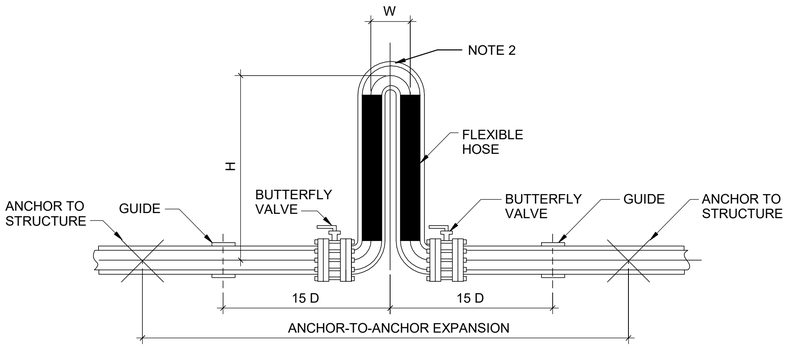
SCALE = 12" = 1'-0"



RESTRAINTS OF RIGIDLY MOUNTED MECHANICAL EQUIPMENT

D1 SEISMIC RESTRAINTS AND SUPPORTS FOR FLOOR MOUNTED EQUIPMENT

SCALE = NTS



THERMAL EXPANSION OF METAL PIPE		
SYSTEM	TEMPERATURE (°F)	LINEAR THERMAL EXPANSION (IN/100 FT)
		CARBON STEEL
HEATING WATER	140	0.72
CHILLED WATER	60	0.15

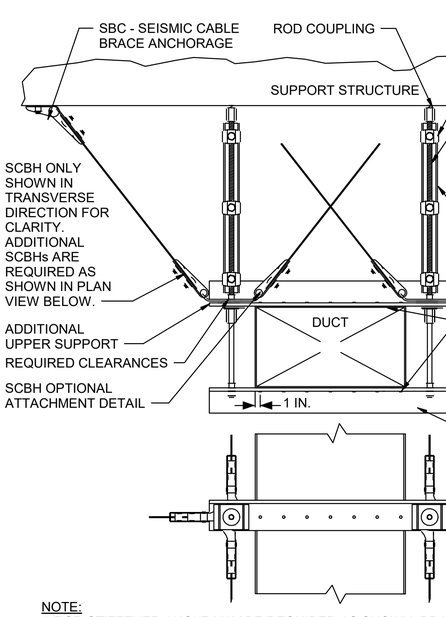
SOURCE: 2016 ASHRAE HANDBOOK - HVAC SYSTEMS AND EQUIPMENT PAGE 46.10 TABLE 10.

ANCHOR-TO-ANCHOR EXPANSION (IN)		
PIPE SIZE, D (IN)	1.5	
	W (IN)	H (IN)
1.5	9	14.75
2	12	17.375
2.5	15	21
3	18	23.375
4	24	28
6	36	36.75
8	48	44.5
10	60	53.25

NOTES:
1. EXPANSION IS BASED ON FILL TEMPERATURE OF 45 DEGREES F.
2. IF ORIENTED VERTICALLY, LOCATE AUTOMATIC AIR VENT AT LOCAL HIGH POINT.

D6 FLEXIBLE HOSE EXPANSION LOOPS

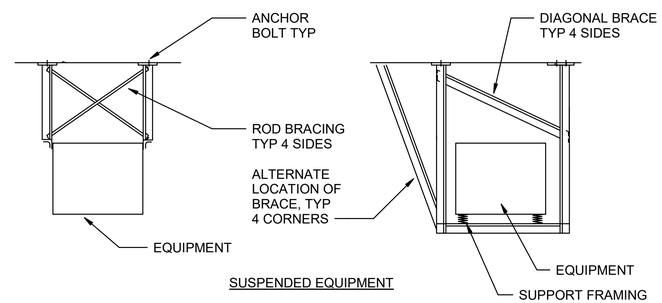
SCALE = NTS



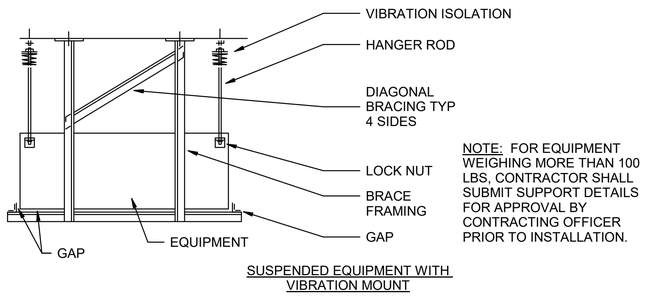
NOTE:
A ROD STIFFENER ANGLE MAY BE REQUIRED AS SHOWN. BRACE ANGLE RATIO MAY BE INCREASED TO 2(VERT.) : 1(HORIZ.).

A1 SEISMIC DETAILS FOR RECTANGULAR DUCTWORK

SCALE = NTS



SUSPENDED EQUIPMENT

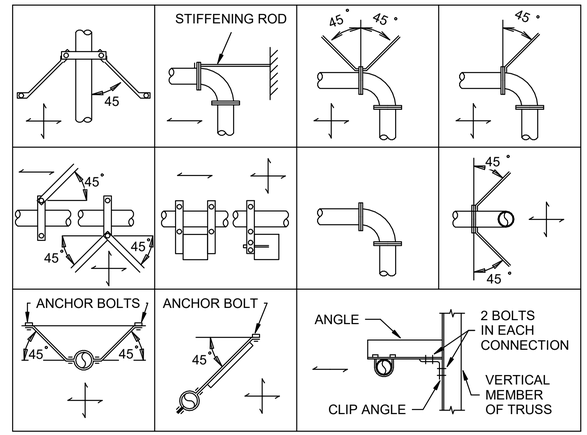


NOTE: FOR EQUIPMENT WEIGHING MORE THAN 100 LBS, CONTRACTOR SHALL SUBMIT SUPPORT DETAILS FOR APPROVAL BY CONTRACTING OFFICER PRIOR TO INSTALLATION.

SUSPENDED EQUIPMENT WITH VIBRATION MOUNT

A4 TYPICAL SEISMIC RESTRAINTS AND SUPPORTS FOR SUSPENDED EQUIPMENT

SCALE = NTS



A8 SEISMIC DETAILS FOR SWAY BRACING

SCALE = NTS

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: B. SCHNEIDER
DRAWN BY: C. BROWN
CHECKED BY: M. WALLACE
SUBMITTED BY: E. OLNESS
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201M-505
ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
TBPE Firm Registration No. F-2910

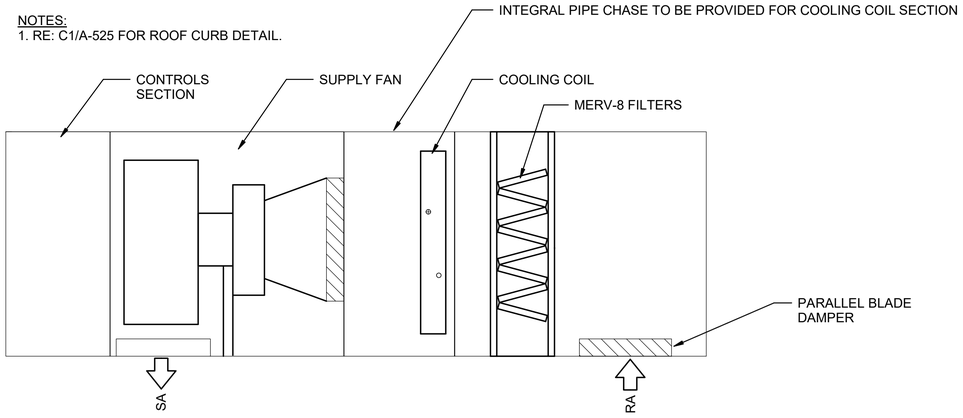
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395

MECHANICAL DETAILS

SHEET ID
B1455
M-505

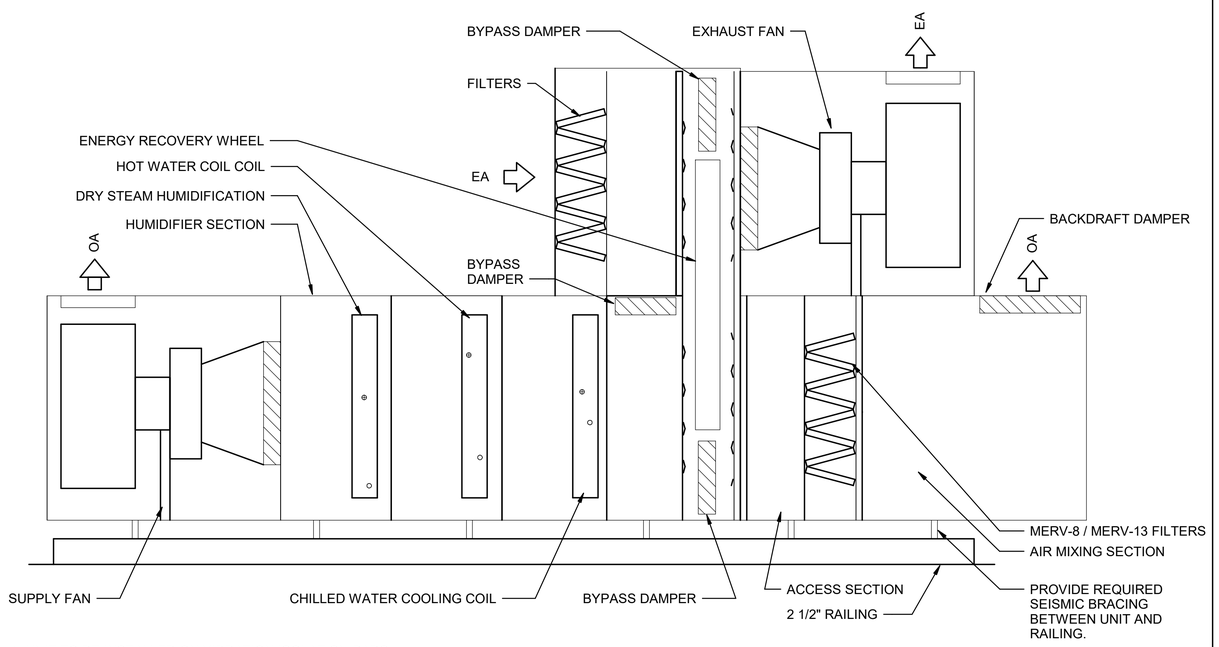
W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



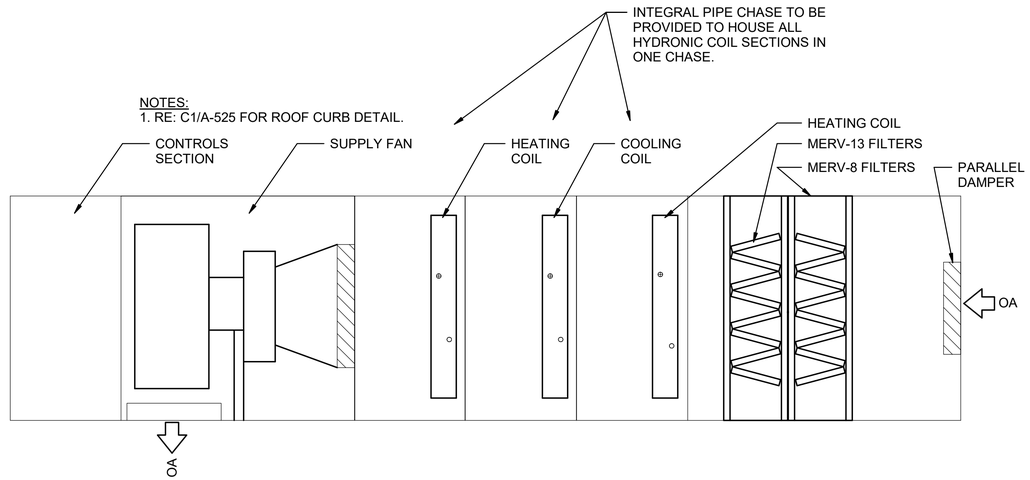
1. MECHANICAL CONTRACTOR TO PROVIDE ROOF CURB AND COORDINATE WITH OTHER DISCIPLINES.
2. AHU-2 TO BE PROVIDED WITH SINGLE PIPE CHASE TO PREVENT PIPES BEING EXPOSED TO ELEMENTS.
3. ROOF CURB TO HAVE INTEGRAL PIPE CHASE SECTION.

C1 AHU-2 CONFIGURATION DIAGRAM
SCALE = NTS



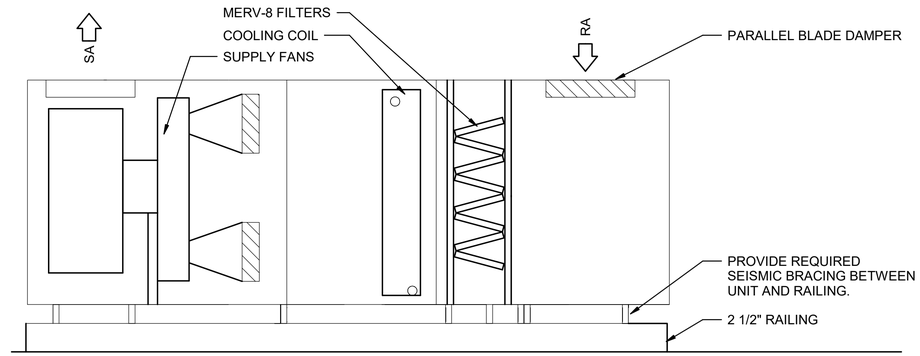
1. UNIT TO BE INSTALLED ON VIBRATION ISOLATION PADS.

E6 DOAS-1 CONFIGURATION DIAGRAM
SCALE = NTS



1. MECHANICAL CONTRACTOR TO PROVIDE ROOF CURB AND COORDINATE WITH OTHER DISCIPLINES.
2. DOAS UNITS TO BE PROVIDED WITH SINGLE PIPE CHASE TO PREVENT PIPES BEING EXPOSED TO ELEMENTS.
3. ROOF CURB TO HAVE INTEGRAL PIPE CHASE SECTION.

A1 DOAS-2 CONFIGURATION DIAGRAM
SCALE = NTS



1. UNIT TO BE INSTALLED ON VIBRATION ISOLATION PADS.

A5 AHU-1 CONFIGURATION DIAGRAM
SCALE = NTS

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: B. SCHNEIDER
DRAWN BY: C. BROWN
CHECKED BY: M. WALLACE
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201M-506

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street Fort Worth, TX 76102
ACCESS No. 1000512

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
MECHANICAL DETAILS

SHEET ID
B1455
M-506

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN

CHILLER SCHEDULE

MARK	LOCATION	MIN CAPACITY (TONS)	REFRIGERANT	EER	NPLV.IP	WATER FLOW (GPM)	PD (FT HG)	MIN WATER FLOW (GPM)	EWT °F	LWT °F	GLYCOL %	COMPRESSOR QUANTITY	COMPRESSOR TYPE	AMBIENT TEMP °F	UNIT DIMENSIONS			ELECTRICAL				WEIGHT
															LENGTH	WIDTH	HEIGHT	VOLT	PH	MCA	MOCP	
CH-1	MECH YARD	36	R410A	10.18	14.05	85	17	58.8	54	44	10	4	POS DISPLACEMENT	95.4	114 IN	88 IN	85 IN	460	3	106 A	125 A	4322 lb
CH-2	MECH YARD	36	R410A	10.18	14.05	85	17	58.8	54	44	10	4	POS DISPLACEMENT	95.4	114 IN	88 IN	85 IN	460	3	106 A	125 A	4322 lb

NOTES:
1. PROVIDE UNIT WITH SINGLE POINT ELECTRICAL CONNECTION COMPLETE WITH UNIT MOUNTED LOCKABLE DISCONNECT, MOTOR STARTER AND LONWORKS CONTROLS
2. PROVIDE UNIT WITH CONVENIENCE OUTLET AND CONTROL TRANSFORMER
3. COIL SIZING INCLUDES A 0.0001 HR-SQ-FT-DEG F/BTU FOULING FACTOR
4. MODEL SHALL BE TRANE CGAM 40T-XE
5. PROVIDE HAIL GUARDS WITH 10 YEAR WARRANTY.
6. MINIMUM FLOW INDICATED IS PER CHILLER.

CONDENSING BOILER SCHEDULE

MARK	LOCATION	TYPE	FUEL	INPUT CAPACITY (MBH)	OUTPUT CAPACITY (MBH)	MIN EFFICIENCY	EWT °F	LWT °F	GPM	HEAD LOSS (FT WC)	COMBUSTION AIR INLET (IN)	FLUE CONNECTION (IN)	OVERALL UNIT DIMENSIONS			ELECTRICAL		
													LENGTH (IN)	WIDTH (IN)	HEIGHT (IN)	VOLT	PHASE	FLA
B-1	MEZZANINE	FIRE TUBE	NATURAL GAS	379.9	353.3	93 %	120	140	35.3	4	6	4 3/8	27	24	45	120	1	12 A

NOTES:
1. PROVIDE BOILER CONDENSATE NEUTRALIZATION KIT, TANK TO BE INSTALLED BY PLUMBING CONTRACTOR.
2. MANUFACTURER TO PROVIDE ASME RELIEF VALVE RATED FOR 55 PSIG
3. BOILER MUST HAVE MAXIUMUM NOx EMISSION LEVEL OF 20 PPM
4. MANUFACTURER TO PROVIDE BOILER PRESSURE REGULATING VALVE FOR GAS SUPPLY

AIR HANDLING UNIT SCHEDULE

MARK	LOCATION	SUPPLY FAN						SUPPLY FAN ELECTRICAL				CHILLED WATER COOLING COIL										WEIGHT (LBS)
		CFM	MINIMUM OA	TSP (IN WG)	ESP (IN WG)	FAN HP	FAN RPM	VOLT	PH	MCA	FLA	TOTAL CAPACITY (MBH)	SENSIBLE CAPACITY (MBH)	GPM	GLYCOL %	EWT °F	LWT °F	EAT °F (DB/WB)	LAT °F (DB/WB)	MAX COIL PD (FT WG)	FACE VEL MAX (FPM)	MAX AIR PD (IN WG)	
AHU-1	MECH MEZZANINE	9500	-	3.8	2.00	5	1800	460	3	18.15	14	304.0	240.0	62	10	44	54	78/65	55.0/54.6	5.9	476	0.593	2265
AHU-2	ROOF	2750	-	3.5	2.00	3	2330	460	3	6.65	5.45	108.1	76	21.5	10	44	54	80/67	54.2/53.8	3.86	450	0.552	1666

NOTES:
1. FOR ALL AHU PROVIDE FACTORY MOUNTED VARIABLE FREQUENCY DRIVE WITH INTEGRAL DISCONNECT FOR EACH FAN. VFD'S TO INCLUDE LOCKABLE DISCONNECT.
2. COIL SIZING INCLUDES A 0.0001 HR-SQ-FT-DEG F/BTU FOULING FACTOR.
3. PROVIDE RAILS FOR AHU-1 TO ELEVATE OVER MEZZANINE FOR CONDENSATE PIPING.
4. AHU-2 ROOF CURB TO BE PROVIDED BY MECHANICAL CONTRACTOR AND COORDINATED WITH OTHER DISCIPLINES.

AIR HANDLING UNIT SCHEDULE CONT.

MARK	FILTER		UNIT DIMENSIONS		
	PRE-FILTER TYPE	FINAL FILTER TYPE	LENGTH (IN)	WIDTH (IN)	HEIGHT (IN)
AHU-1	-	MERV-13	115.4	80	52.8
AHU-2	MERV-8	MERV-13	130.9	44	41.1

DEDICATED OUTDOOR AIR UNIT SCHEDULE

MARK	LOCATION	SUPPLY FAN								EXHAUST FAN								HOT WATER HEATING COIL								CHILLED WATER COOLING COIL									
		CFM	T.S.P. (IN WG)	E.S.P. (IN WG)	FAN (HP)	FAN RPM	FLA	MCA	MOCP	EA CFM	EA T.S.P. (IN WG)	EA E.S.P. (IN WG)	EA FAN (HP)	EA FAN RPM	FLA	MCA	MOCP	TOTAL CAPACITY (MBH)	AIRFLOW (CFM)	EAT(°F)	LAT(°F)	EWT(°F)	LWT(°F)	FLOW (GPM)	WPD (FT H2O)	TOTAL CAPACITY (MBH)	SENSIBLE CAPACITY (MBH)	FLOW (GPM)	GLYCOL %	EWT (°F)	LWT (°F)	EAT (°F) (DB/WB)	LAT (°F) (DB/WB)	FACE VEL MAX (FPM)	WPD (FT H2O)
DOAS-1	MECH MEZZANINE	2400	4.5	2.00	5	1800	8.85	10.9	15.00	1750	1.66	0.5	1.5	1800	3.4	4.25	15.00	98.5	2400	30	68	140	120	10	2.25	133.8	69.7	27.12	10	44	54	80.51/71.44	55.0/54.8	422	6.11
DOAS-2	ROOF	875	2.41	1.00	1	3260	2.75	3.3	15.00	-	-	-	-	-	-	-	-	16.4	875	55	72.3	140	120	1.64	0.37	75.4	28.6	15.29	10	44	54	84.2/78.8	55.0/54.9	300	6.15

DEDICATED OUTDOOR AIR UNIT SCHEDULE CONTINUED

MARK	HOT WATER PRE-HEAT COIL								ENERGY RECOVERY WHEEL - SUMMER			ENERGY RECOVERY WHEEL - WINTER			ELECTRICAL DATA				MAX UNIT DIMENSIONS (IN)			WEIGHT (LBS)	NOTES
	TOTAL MBH	EAT°F	LAT °F (DB/WB)	GPM	EWT°F	LWT °F	FAC VEL MAX FPM	MAX AIR PD IN WG	EAT °F (DB/WB)	LAT °F (DB/WB)	% EFFECTIVENESS	EAT °F (DB)	LAT °F (DB)	% EFFECTIVENESS	VOLTS	PH	HZ	FLA	LENGTH	WIDTH	HEIGHT		
DOAS-1	-	-	-	-	-	-	-	-	84.2	78.8	74.0	30.2	51.8/43.39	73.1	460	3	60	0.76	251	44	71	2955	1,2,3,4,6
DOAS-2	18.7	30.2	50	1.8	140	120	350	0.04	-	-	-	-	-	-	460	3	60	2.75	188.1	31.5	34.7	1697	1,4,5,6,7

NOTES:
1. PROVIDE FACTORY MOUNTED VARIABLE FREQUENCY DRIVE WITH INTEGRAL DISCONNECT FOR EACH FAN. VFD'S TO INCLUDE LOCKABLE DISCONNECT.
2. PROVIDE RAILS FOR DOAS-1 TO ELEVATE OVER MEZZANINE FOR CONDENSATE PIPING.
3. PROVIDE ENERGY RECOVERY WHEEL WITH BYPASS DAMPERS.
4. PROVIDE MERV 8 PRE-FILTER AND MERV 13 FINAL FILTER.
5. DOAS-2 ROOF CURB TO BE PROVIDED BY MECHANICAL CONTRACTOR AND COORDINATED WITH OTHER DISCIPLINES.
6. DOAS COILS TO BE COATED WITH 500 HR RATED SALT SPRAY FINISH
7. DOAS-2 TO HAVE INTEGRAL PIPE CHASE TO PREVENT ALL HYDRONIC PIPING FROM BEING EXPOSED TO ELEMENTS.

HUMIDIFIER SCHEDULE

MARK	CAPACITY (LB/HR)	OUTLET DIAMETER (IN.)	ELECTRICAL			MAX UNIT SIZE (IN)			MAX UNIT WEIGHT (LBS)
			POWER (kW)	AMPS	VOLTAGE/ PHASE	L	W	H	
H-1	30.3	2	6	7.2	460/3	23	20	14	85

NOTES:
1. HUMIDIFIER TO SERVE DOAS-1
2. DOAS-1 MANUFACTURER TO PROVIDE INTEGRAL STEAM DISPENSER INSIDE OF DOAS-1
3. PROVIDE FLEXIBLE METAL PIPE FOR STEAM CONNECTION TO AHU-2
4. HUMIDIFICATION BASED ON HUMIDIFICATION OF 70 DB /20% RH

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: B. SCHNEIDER
DRAWN BY: C. BROWN
CHECKED BY: M. WALLACE
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201M-601

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street Fort Worth, TX 76102
Phone No. 682-682-2000

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395

MECHANICAL SCHEDULES

SHEET ID
B1455
M-601

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN

COMPUTER ROOM CONDITIONING UNIT SCHEDULE

MARK	LOCATION	SERVICE	TYPE	FAN DATA				CHILLED WATER COOLING COIL									
				AIRFLOW (CFM)	FAN QTY	E.S.P. (IN.W.G.)	FAN MOTOR (HP)	TOTAL (MBH)	SENSIBLE (MBH)	GPM	PD (FT HG)	FACE VELOCITY (FPM)	EAT (DB/WB) °F	% RH	VOLT/ PHASE	FLA	MCA	WEIGHT (LBS)
CRAC-1	OFT COMPUTER 126	COMPUTER ROOM	HORIZONTAL	4400 CFM	1	0.50	3	72.4	72.4	15	3.2	160	70/58.4	40	460/3	15.4	19.3	495
CRAC-2	OFT COMPUTER 126	COMPUTER ROOM	HORIZONTAL	4400 CFM	1	0.50	3	72.4	72.4	15	3.2	160	70/58.4	40	460/3	15.4	19.3	495

NOTES:
1. MANUFACTURER TO PROVIDE A SINGLE POINT OF CONNECTION FOR ELECTRICAL WITH AN INTEGRAL DISCONNECT
2. PROVIDE UNIT WITH LONWORKS CONTROLLER.
3. ALL EQUIPMENT USED FOR CHWS/R SYSTEM SHALL HAVE A 10% PROPYLENE GLYCOL SOLUTION.
4. PROVIDE WITH INTEGRAL ULTRASONIC HUMIDIFIER CAPABLE OF MAINTAINING MINIMUM OF 40% RH.
5. PROVIDE UNIT WITH CONDENSATE PUMP.

PUMP SCHEDULE

MARK	SERVICE	LOCATION	TYPE	FLOW (GPM)	PUMP HEAD (FT)	MIN. IMPELLER DIA. (IN.)	MIN EFFICIENCY (%)	MOTOR SPEED (RPM)	ELECTRICAL			MAX UNIT SIZE (IN)			MAX UNIT WEIGHT (LBS)
									MAX BHP	MAX MOTOR HP	VOLTAGE/ PHASE	L	W	H	
CHWP-1	CHILLED WATER	MEZZANINE	BASE MOUNTED END SUCTION PUMP	87.3	122.3	6	62.7	3600	4.28	7.5	460/3	33	16	15	206
CHWP-2	CHILLED WATER	MEZZANINE	BASE MOUNTED END SUCTION PUMP	87.3	122.3	6	62.7	3600	4.28	7.5	460/3	33	16	15	206
CHWP-3	CHILLED WATER	MEZZANINE	BASE MOUNTED END SUCTION PUMP	87.3	122.3	6	62.7	3600	4.28	7.5	460/3	33	16	15	206
HWP-1	HEATING WATER	MEZZANINE	BASE MOUNTED END SUCTION PUMP	37.4	40.3	6.25	62.2	1800	0.60	1	460/3	29	12	15	154
HWP-2	HEATING WATER	MEZZANINE	BASE MOUNTED END SUCTION PUMP	37.4	40.3	6.25	62.2	1800	0.60	1	460/3	29	12	15	154

NOTES:
1. MANUFACTURER TO PROVIDE VARIABLE FREQUENCY DRIVE WITH LOCKABLE INTEGRAL DISCONNECT SWITCH AND INTEGRAL COOLING FAN
2. PROVIDE INVERTER DUTY MOTORS WITH BEARING GROUNDING AND MIN CLASS F INSULATION
3. ALL EQUIPMENT USED FOR CHWS/R SYSTEM SHALL HAVE A 10% PROPYLENE GLYCOL SOLUTION.

GLYCOL FEEDER SCHEDULE

MARK	LOCATION	SERVICE	TANK VOLUME (GAL)	% PROPYLENE GLYCOL	TYPE	MOUNTING	VOLT/ PHASE
GF-1	MEZZANINE	CHILLED WATER	45	10	SINGLE	FLOOR	120/1

BYPASS CHEMICAL FEEDER SCHEDULE

MARK	LOCATION	SERVICE	TANK VOLUME (GAL)	MAXIMUM WORKING TEMP. (°F)
CF-1	MEZZANINE	HEATING WATER	5	140

AIR SEPARATOR SCHEDULE

MARK	LOCATION	SERVICE	DESIGN FLOW (GPM)	MAX PRESSURE (PSIG)
AS-1	MEZZANINE	CHILLED WATER	175	125
AS-2	MEZZANINE	HEATING WATER	75	125

HYDRONIC PIPE RUNOUT SIZING SCHEDULE

NOMINAL SIZE (IN.)	MAX FLOW (GPM)
3/4	3
1	7
1-1/4	13
1-1/2	20
2	44
2-1/2	80
3	125
4	250

HYDRONIC SYSTEM CHARACTERISTICS SCHEDULE

SYSTEM	% PROPYLENE GLYCOL BY VOLUME	OPERATING TEMPERATURE (°F)	SYSTEM DESIGN PRESSURE (PSI)	SYSTEM RELIEF VALVE PRESSURE (PSI)	MIN SYSTEM FILL PRESSURE (PSI)
CHILLED WATER	10	44-54	125	100	35
HOT WATER	0	120-140	125	100	35

FAN COIL UNIT SCHEDULE

MARK	LOCATION	TYPE	AIRFLOW (CFM)	CAPACITY (MBH)	EWT (°F)	LWT (°F)	FLOW (GPM)	PRESSURE DROP (FT)	NOMINAL MOTOR POWER (HP)	FLA	V/HZ/PH
FCU-1	126 EDS	HORIZONTAL EXPOSED CABINET	600	14.3	44	54	2.9	2.3	200 W	3.4	115/1/60
FCU-2	126 EDS COMP	HORIZONTAL EXPOSED CABINET	600	14.3	44	54	2.9	2.3	200 W	3.4	115/1/60
FCU-3	119 TELECOM	HORIZONTAL EXPOSED CABINET	200	5.5	44	54	1.1	0.9	1/20	0.8	115/1/60
FCU-4	120 ELEC	HORIZONTAL EXPOSED CABINET	1000	24	44	54	4.9	0.9	1/20	0.8	115/1/60
FCU-5	130 FR	HORIZONTAL EXPOSED CABINET	200	5.5	44	54	1.1	6.0	1/20	3.4	115/1/60
FCU-6	117 CPT	HORIZONTAL EXPOSED CABINET	600	14.3	44	54	2.9	2.3	200 W	3.4	115/1/60
FCU-7	118 WPT	HORIZONTAL EXPOSED CABINET	600	14.3	44	54	2.9	2.3	200 W	3.4	115/1/60

NOTES:
1. MANUFACTURER TO PROVIDE DIRECT DRIVE ECM MOTOR WITH VARIABLE VOLTAGE INPUT CONTROLLER.
2. ALL EQUIPMENT USED FOR CHWS/R SYSTEM SHALL HAVE A 10% PROPYLENE GLYCOL SOLUTION.
3. PROVIDE UNIT WITH CONDENSATE PUMP.
4. FCU'S TO BE PROVIDED WITH DISCHARGE PLENUM AND DOUBLE DEFLECTION GRILLES UNLESS DRAWINGS INDICATE DUCTED CONNECTION.

EXPANSION TANK SCHEDULE

MARK	SERVICE	VOLUME (GAL)	MIN. ACCEPTENCE VOLUME (GAL)	MIN. OPERATING TEMP (ºF)	MAX. OPERATING TEMP (°F)	MIN. FILL PRESSURE (PSIG)	RELIEF PRESSURE (PSIG)	MAX. DIMENSIONS - DIA x H (IN)	MAX. OPERATING WEIGHT (LBS)
ET-1	CHILLED WATER	42	9	40	100	35	125	20x30	240
ET-2	HEATING WATER	13	3	40	100	35	125	20x30	159

VARIABLE AIR VOLUME BOX SCHEDULE

MARK	UNIT SIZE	AHU	MAX CLG AIRFLOW (CFM)	MIN CLG AIRFLOW (CFM)	MAX AIR PRESSURE DROP (IN WG)	HEATING COIL						
						AIRFLOW (CFM)	CAPACITY (MBH)	LAT (°F)	EWT (°F)	LWT (°F)	FLOW (GPM)	WATER PD (FT H2O)
VAV-1-01	8"	AHU-01	720	220	0.46	360	12.9	88	140	110.2	0.88	0.18
VAV-1-02	4"	AHU-01	150	45	0.02	75	2.8	88	140	127.4	0.45	0.15
VAV-1-04	6"	AHU-01	435	130	0.27	220	7.9	88	140	107.4	0.49	0.05
VAV-1-05A	14"	AHU-01	2400	720	0.62	1200	42.9	88	140	110.2	2.93	1.09
VAV-1-05B	14"	AHU-01	2400	720	0.62	1200	42.9	88	140	110.2	2.93	1.09
VAV-1-05C	10"	AHU-01	1200	360	0.59	600	21.6	88	140	112.7	1.61	0.68
VAV-1-06	6"	AHU-01	510	155	0.35	255	9.2	88	140	110.0	0.62	0.08
VAV-1-07	6"	AHU-02	350	105	0.11	175	6.4	88	140	133.7	2.06	2.32
VAV-1-08	6"	AHU-02	300	90	0.08	150	5.5	88	140	130.5	1.17	0.85
VAV-1-09	4"	AHU-02	200	60	0.03	100	3.7	88	140	131.8	0.91	0.54
VAV-1-10	6"	AHU-02	350	105	0.11	175	6.4	88	140	133.7	2.06	2.32
VAV-1-11	6"	AHU-02	400	120	0.23	200	7.3	88	140	106.1	0.44	0.04
VAV-1-12	6"	AHU-02	450	135	0.28	225	8.1	88	140	107.7	0.51	0.06
VAV-1-13	6"	AHU-02	400	120	0.23	200	7.3	88	140	106.1	0.44	0.04
VAV-1-14	6"	AHU-02	325	100	0.1	165	6.0	88	140	132.5	1.61	1.50
VAV-2-01	8"	AHU-01	940	285	0.72	470	16.9	88	140	116.7	1.48	0.45
VAV-2-02	6"	AHU-01	470	140	0.3	235	8.5	88	140	108.6	0.55	0.06
VAV-2-03	8"	AHU-01	760	230	0.51	380	13.7	88	140	111.5	0.98	0.22
VAV-2-04	6"	AHU-01	390	120	0.22	195	7.1	88	140	105.6	0.42	0.04

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201M-602

DESIGNED BY: B. SCHNEIDER
DRAWN BY: C. BROWN
CHECKED BY: M. WALLACE
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS Tel 817.820.8100

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
MECHANICAL SCHEDULES

SHEET ID
B1455
M-602

W912QR23R0003_Plans-0000

AIR TERMINAL DEVICE SCHEDULE

MARK	SERVICE	DESCRIPTION	MATERIAL	NECK SIZE	MAX NECK VELOCITY (FPM)	FACE SIZE	MAX VELOCITY PRESSURE (IN W.C.)	MAX TOTAL PRESSURE (IN W.C.)	NEGATIVE STATIC PRESSURE (IN. W.C.)	MAXIMUM THROW (FT)	MAXIMUM FLOW (CFM)	MAXIMUM NOISE CRITERIA	NOTES
AD-1	SUPPLY	CEILING MOUNTED	ALUMINUM	6"	800	24"X24"	0.04	0.06	0.00	7	155	16	
AD-2	SUPPLY	CEILING MOUNTED	ALUMINUM	8"	800	24"X24"	0.04	0.06	0.00	11	350	19	
AD-3	RETURN	CEILING MOUNTED	ALUMINUM	6"	800	24"X24"	0.04	0.00	0.23	-	160	20	
AD-4	RETURN	CEILING MOUNTED	ALUMINUM	8"	800	24"X24"	0.04	0.00	0.23	-	350	24	
AD-5	OUTSIDE	CEILING MOUNTED	ALUMINUM	6"	800	24"X24"	0.04	0.06	0.00	7	200	16	
AD-6	EXHAUST	CEILING MOUNTED	ALUMINUM	6"	800	24"X24"	0.04	0.00	0.23	-	155	20	
AD-7	RETURN	SIDEWALL	ALUMINUM	30"X12"	500	-	0.01	0.00	0.09	-	1000	30	
AD-8	SUPPLY	SIDEWALL	ALUMINUM	6"X6"	800	-	0.04	0.07	0.00	23	160	19	
AD-9	EXHAUST	SIDEWALL	ALUMINUM	8"X8"	500	-	0.02	0.00	0.13	-	130	26	
AD-10	SUPPLY	DRUM LOUVER	ALUMINUM	18"X8"	600	-	0.02	0.14	0.00	47	600	19	
AD-11	RETURN	SIDEWALL	ALUMINUM	6"X6"	600	-	0.02	0.00	0.19	-	125	30	
AD-12	EXHAUST	CEILING MOUNTED	ALUMINUM	6"	800	12'X12"	0.04	0.00	0.23	-	155	21	
AD-13	TRANSFER	SIDEWALL	ALUMINUM	16"X16"	250	-	0.00	0.00	0.03	-	350	16	
AD-17	SUPPLY	CEILING MOUNTED	ALUMINUM	10"	800	24"X24"	0.04	0.06	0.00	14	440	22	
AD-18	RETURN	CEILING MOUNTED	ALUMINUM	10"	800	24"X24"	0.04	0.00	0.23	-	440	35	
AD-20	EXHAUST	CEILING MOUNTED	ALUMINUM	14"	800	24"X24"	0.04	0.00	0.23	-	855	32	
AD-21	RETURN	CEILING MOUNTED	ALUMINUM	12"	800	24"X24"	0.04	0.00	0.23	-	625	29	
AD-23	SUPPLY	CEILING MOUNTED	ALUMINUM	15"	800	24"X24"	0.04	0.07	0.00	18	625	24	
AD-24	EXHAUST	SIDEWALL	ALUMINUM	12"x8"	600	-	0.02	0.00	0.19	-	285	29	
AD-25	EXHAUST	SIDEWALL	ALUMINUM	16"X16"	600	-	0.02	0.00	0.19	-	970	38	
AD-26	TRANSFER	CEILING MOUNTED	ALUMINUM	14"	400	24"X24"	0.01	0.00	0.06	-	350	15	
AD-27	TRANSFER	CEILING MOUNTED	ALUMINUM	8"	400	24"X24"	0.01	0.00	0.06	-	150	15	
AD-28	TRANSFER	CEILING MOUNTED	ALUMINUM	10"X10"	400	12'X12"	0.01	0.00	0.06	-	175	15	

OUTDOOR AIR SCHEDULE

ROOM NAME	OA UNIT	OA AIRFLOW (CFM)	NUMBER OF OCCUPANTS	ASHRAE MINIMUM AIRFLOW (CFM)
101 CORRIDOR / 106 BREAK ROOM	DOAS-2	150	22	150
102 REGISTRARS	DOAS-2	50	2	25
102A REGISTRARS OFFICE	DOAS-2	50	2	25
103 STUDENT WORK AREA	DOAS-2	150	8	75
104 TRS	DOAS-2	75	7	75
105 ADMINISTRATION	DOAS-2	100	9	100
105A ADMINISTRATION	DOAS-2	100	9	100
105B WELLNESS	DOAS-2	50	2	20
105C OFFICE	DOAS-2	50	2	20
105D OFFICE	DOAS-2	50	2	20
105E OFFICE	DOAS-2	50	2	20
110 CIRCULATION	DOAS-1	1500	5	1480
111 CLASS	DOAS-1	65	8	60
112 MULTI PURPOSE	DOAS-1	60	7	60
113 CLASS	DOAS-1	65	8	65
114 MULTI PURPOSE	DOAS-1	60	6	60
117 CPT	DOAS-1	50	2	30
118 WPT	DOAS-1	50	2	25
119 TELECOM	DOAS-1	50	0	0
126 OFT COMP	DOAS-1	100	0	0
122 TOOL ROOM	DOAS-1	50	3	30
123 MULTI PURPOSE	DOAS-1	60	7	60
124 MULTI PURPOSE	DOAS-1	60	7	60
125/125A EDS	DOAS-1	50	4	40
203 MISSION PLANNING	DOAS-1	80	9	80
205 MISSION PLANNING	DOAS-1	80	9	80
202 CLASS	DOAS-1	80	10	80
201 TSC	DOAS-1	120	10	120

NOTES:
1. NUMBER OF OCCUPANTS LISTED FOR INFORMATION PURPOSES ONLY.

EXHAUST FAN SCHEDULE

MARK	SERVICE	FAN DATA					VOLT	PHASE	WEIGHT (LBS)	NOTES
		CFM	SP IN WG	RPM	HP	TYPE				
EF-1	SMOKE EXHAUST	515	0.25	1453	3/4	INLINE	460	3	125	1, 3, 4
EF-2	SMOKE EXHAUST	850	0.25	1850	3/4	INLINE	460	3	125	1, 3, 4
EF-3	SMOKE EXHAUST	650	0.25	1591	3/4	INLINE	460	3	125	1, 3, 4
EF-4	BATTERY EXHAUST	640	0.25	1725	0.15	INLINE	115	1	110	2
EF-5	SMOKE EXHAUST	650	0.25	1453	3/4	INLINE	460	3	125	1, 3, 4
EF-6	SMOKE EXHAUST	515	0.25	1850	3/4	INLINE	460	3	125	1, 3, 4

NOTES:
1. SMOKE EXHAUST FANS SHALL BE ACTIVATED BY THE FIRE ALARM SYSTEM OR A MANUAL SWITCH LOCATED NEARBY. RE:A1/FA110, C6/FA501.
2. BATTERY EXHAUST FANS SHALL BE SPARK A RESISTANT WITH NON-FERROUS METAL CONSTRUCTION AND MOTOR OUT OF AIRSTREAM.

DUCT PRESSURE AND LEAKAGE CLASS SCHEDULE

SYSTEM	DUCT PRESSURE CLASS (IN W.C.)				DUCT LEAKAGE CLASS			DUCT PRESSURE TEST (IN W.C.)
	SUPPLY AIR	RETURN AIR	EXHAUST AIR	OUTSIDE AIR	SUPPLY		RETURN/EXHAUST /OUTSIDE AIR	
					FLAT OVAL	ROUND		
AHU-1	4	-	-	-	6	3	-	4.0
	-	-2	-	-	-	-	24	2.0
AHU-2	4	-	-	-	6	6	-	4.0
	-	-2	-	-	-	-	24	2.0
DOAS-1	4	-	-	-	6	3	-	4.0
	-	-	-	-1	-	-	24	1.0
DOAS-2	4	-	-	-	6	3	-	4.0
EXHAUST FANS	-	-	-1	-	-	-	24	1.0

NOTES:
1. UTILIZE DUCT SEAL CLASS "A" FOR ALL DUCT SYSTEMS.
2. TEST IN ACCORDANCE WITH UFGS 23 05 93.00 06, TESTING ADJUSTING, AND BALANCING FOR HVAC AND PROCEDURES IN SMACNA HVAC AIR DUCT LEAKAGE TEST MANUAL.
3. PROVIDE DUCT LEAKAGE CLASS OF 1/2" FOR DUCTWORK DOWNSTREAM OF VAV BOXES.

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201M-603

DESIGNED BY: B. SCHNEIDER
DRAWN BY: C. BROWN
CHECKED BY: M. WALLACE
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

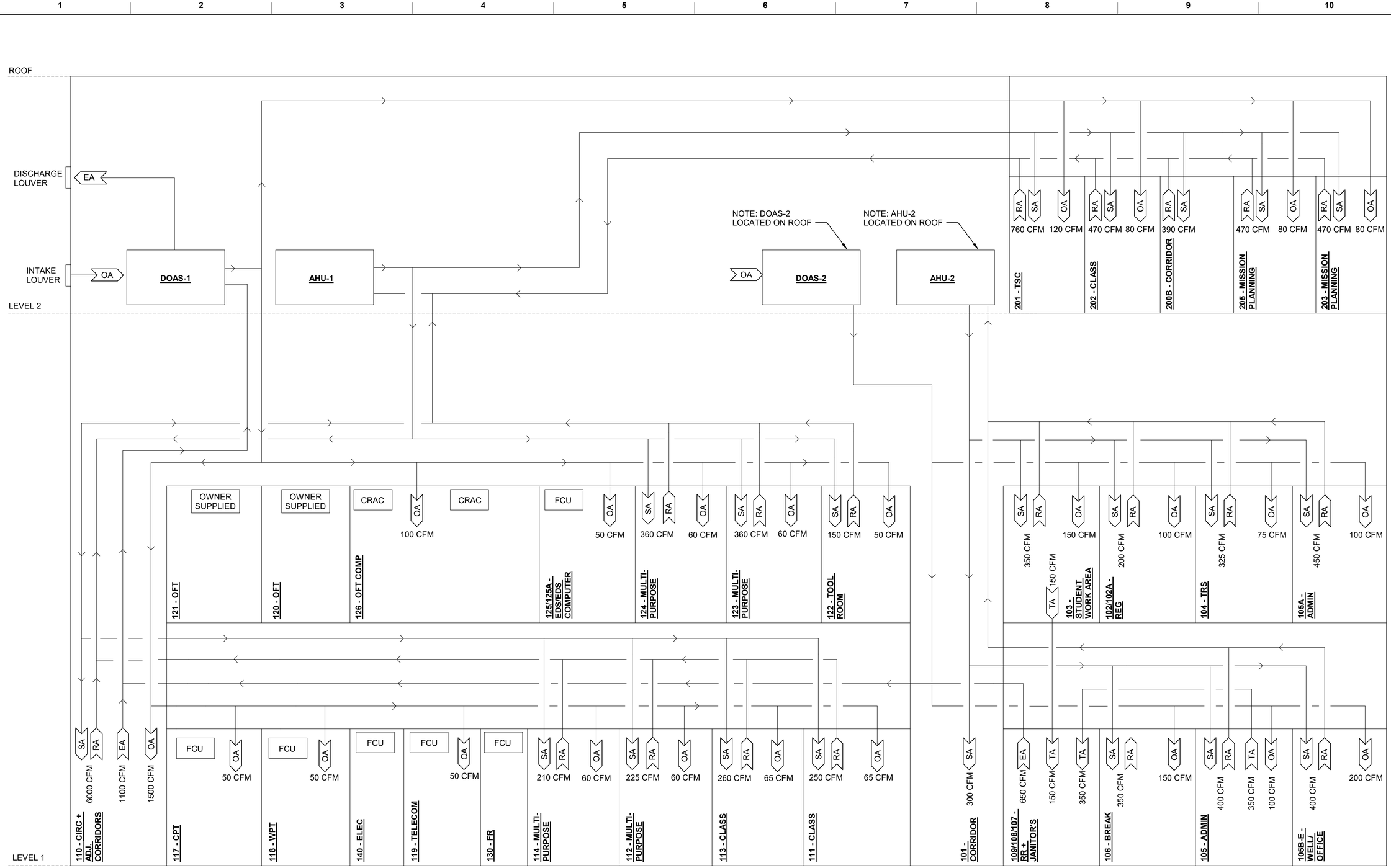
jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS Firm #00019

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
MECHANICAL SCHEDULES

SHEET ID
B1455
M-603

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



A1 AIRFLOW DIAGRAM
SCALE = NTS

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY:	B. SCHNEIDER	ISSUE DATE:	23 NOVEMBER 2022
DRAWN BY:	C. BROWN	SOLICITATION NO.:	
CHECKED BY:	M. WALLACE	CONTRACT NO.:	
SUBMITTED BY:	E. HOLMES	DRAWING CODE:	
SIZE:	ANSI D 22x34	FILE NAME:	SWIT219201M-701

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

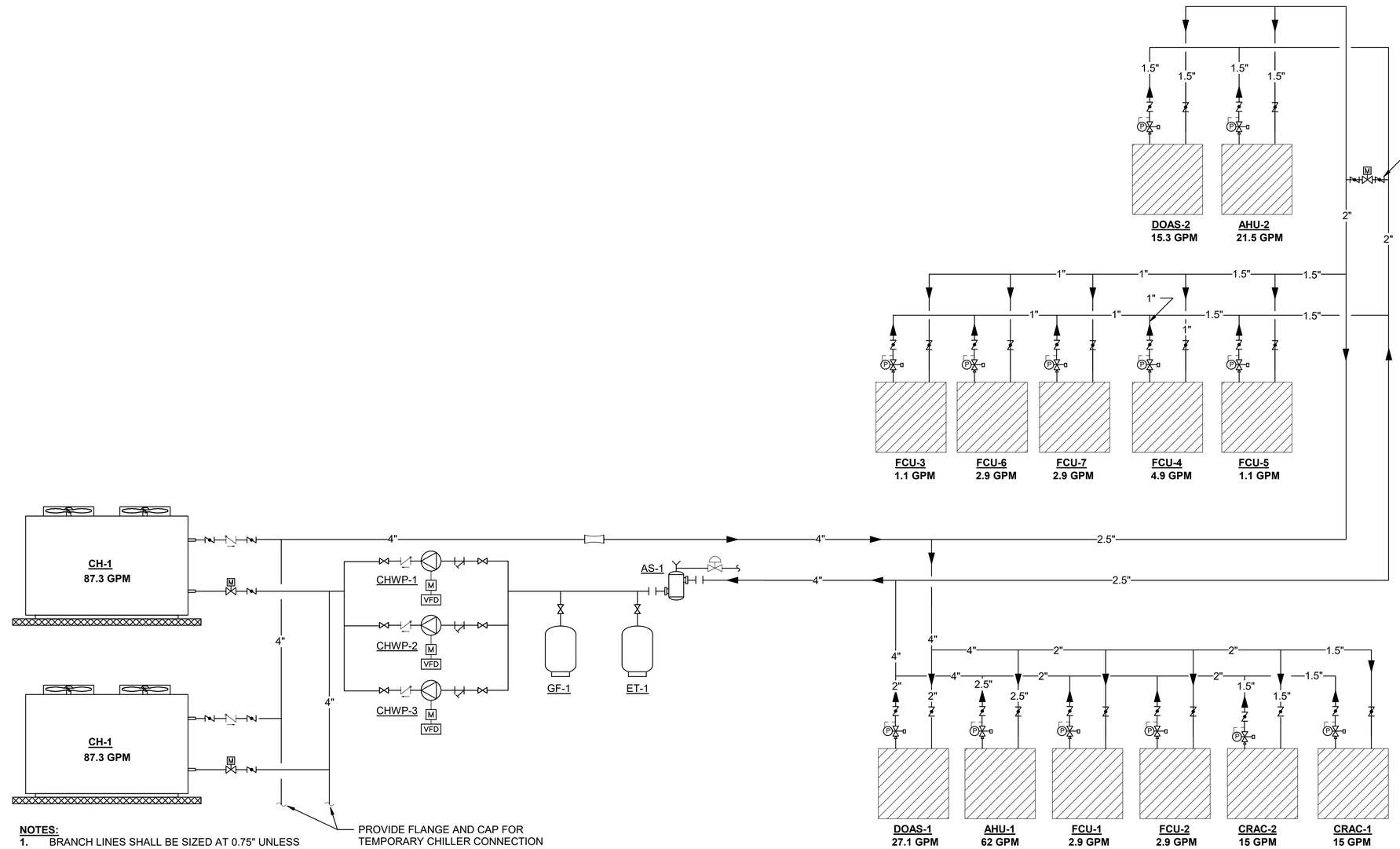
jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
PHONE: 682-682-6000

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
HVAC DIAGRAMS

SHEET ID
B1455
M-701

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



NOTES:

1. BRANCH LINES SHALL BE SIZED AT 0.75" UNLESS OTHERWISE SPECIFIED.
2. CHILLER FLOW RATE SIZED FOR BLOCK LOADS.
3. EQUIPMENT FLOW RATE LISTED AT PEAK LOADS.

A1 CHILLED WATER FLOW DIAGRAM

SCALE = NTS

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: B. SCHNEIDER
DRAWN BY: C. BROWN
CHECKED BY: M. WALLACE
SUBMITTED BY: E. OLNESS
ANSI D 22x34

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201M-702

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

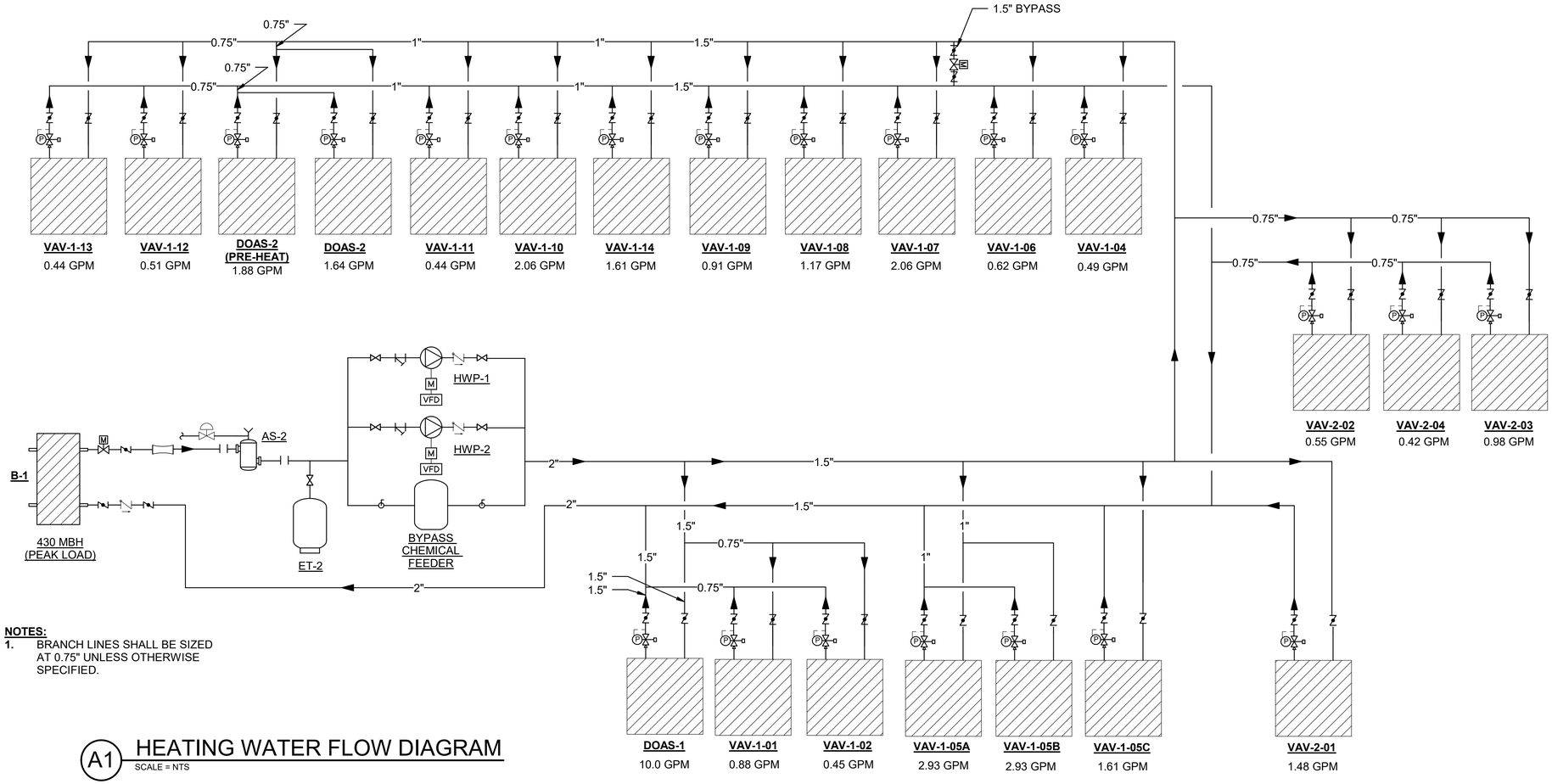
Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
Phone: 817.820.8000 Fax: 817.820.8010

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
CHILLED WATER FLOW DIAGRAM

SHEET ID
B1455
M-702

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



NOTES:

1. BRANCH LINES SHALL BE SIZED AT 0.75" UNLESS OTHERWISE SPECIFIED.

A1 HEATING WATER FLOW DIAGRAM

SCALE = NTS

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: B. SCHNEIDER
DRAWN BY: C. BROWN
CHECKED BY: M. WALLACE
SUBMITTED BY: E. OLMESS
DATE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201M-703

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street Fort Worth, TX 76102
ACCESS No. P0045572

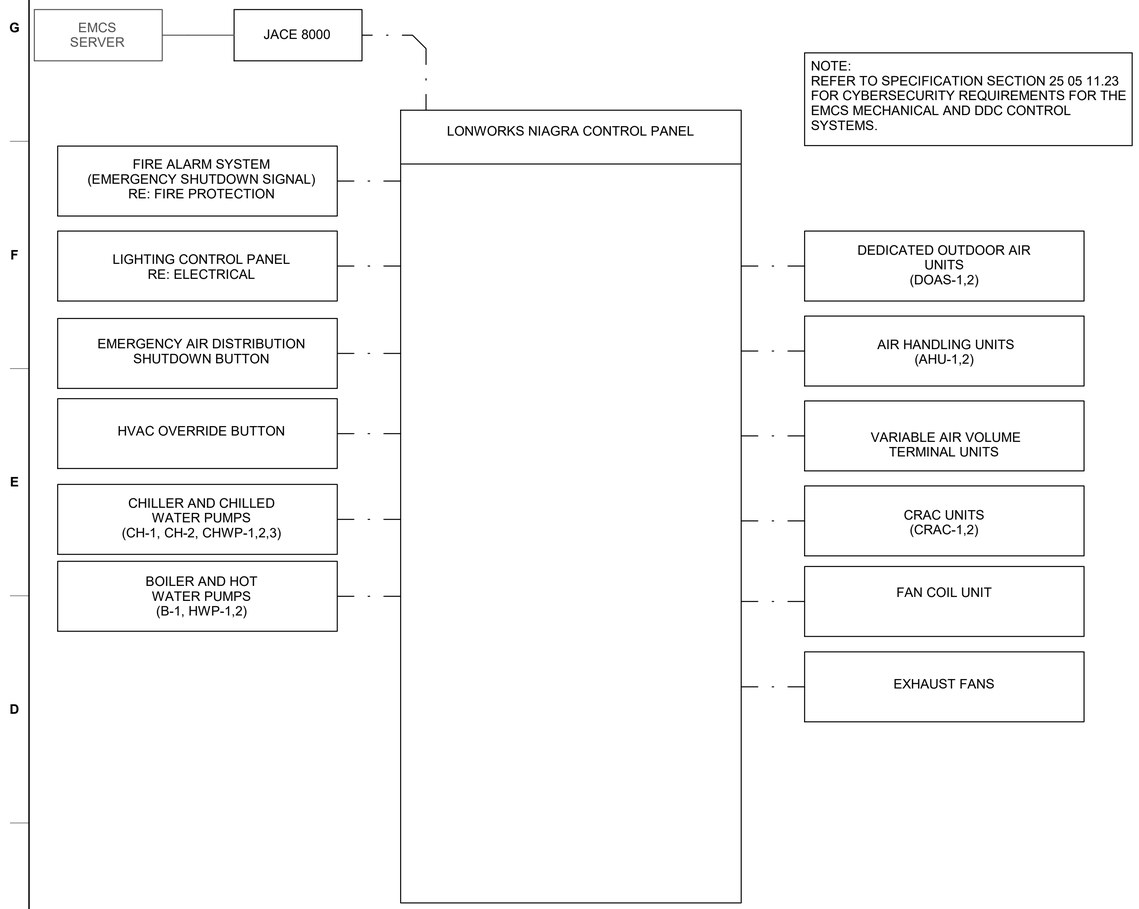
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395

HOT WATER FLOW DIAGRAM

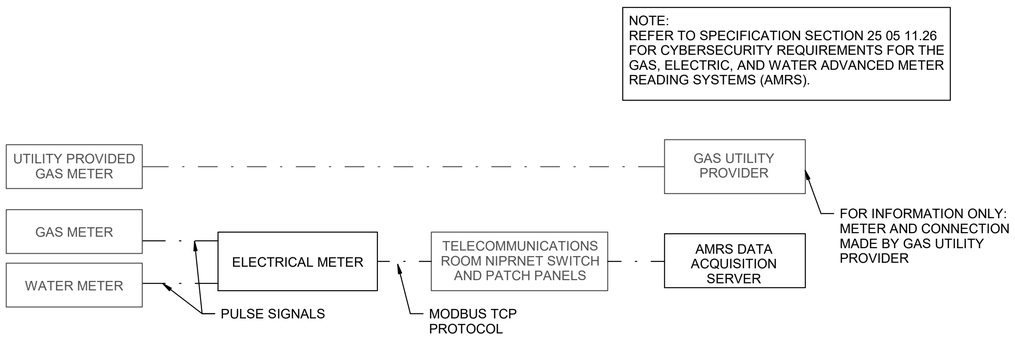
SHEET ID
B1455
M-703

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



C1 EMCS FUNCTIONAL BLOCK DIAGRAM1
SCALE = NTS



A1 UCS FUNCTIONAL BLOCK DIAGRAM
SCALE = NTS

CONTROLS LEGEND

(ALL SYMBOLS SHOWN ARE NOT NECESSARILY USED ON THE DRAWINGS)

CONTROLS SYMBOLS

- CENTRIFUGAL FAN
- PLENUM FAN
- PUMP
- HYDRONIC COIL
- GAS COIL
- DX COIL
- ELECTRIC COIL
- EVAPORATIVE COOLING COIL
- DIFFERENTIAL PRESSURE SWITCH
- DIFFERENTIAL PRESSURE TRANSMITTER
- LOUVER
- DAMPER
- DAMPER OPPOSED BLADE
- FILTER
- WALL THERMOSTAT
- TEMPERATURE SENSOR
- PIPE WELL TEMPERATURE SENSOR
- AIRFLOW SENSOR
- AIRFLOW MEASURING STATION
- SMOKE DETECTOR
- FREEZE STAT
- HUMIDIFIER
- DX WITH CONDENSER REHEAT
- ROOM THERMOSTAT
- ROOM HUMIDISTAT
- TEMPERATURE SENSOR
- HUMIDITY SENSOR
- DUCT SMOKE DETECTOR
- FLOW SENSOR
- FREEZESTAT
- FLOW SWITCH
- RELAY
- ELECTRIC MOTOR
- LEVEL TRANSMITTER
- VIBRATION SWITCH
- DUCT HUMIDITY SENSOR/TRANSMITTER
- PRESSURE TRANSMITTER
- MOTOR STARTER (LOCAL OR MCC)
- STATIC PRESSURE SENSOR/TRANSMITTER
- DIFFERENTIAL PRESSURE SENSOR/TRANSMITTER
- DIFFERENTIAL PRESSURE SWITCH (DIGITAL)
- AQUASTAT
- DUCT AVERAGING TEMPERATURE ELEMENT
- LIQUID FLOW METER
- VENTURI FLOW METER
- RECEIVER PRESSURE GAUGE (PANEL MTD.)
- CURRENT SENSING RELAY
- ELECTRIC DAMPER ACTUATOR
- CARBON DIOXIDE (CO2) SENSOR
- CARBON MONOXIDE (CO) SENSOR
- FIRESTAT
- REFRIGERANT DETECTOR/SENSOR
- MANUALLY ACTIVATED SWITCH (PULL STAT., PUSH STAT., ETC)
- ANALOG ELEMENT
- DIGITAL ELEMENT
- VARIABLE FREQUENCY DRIVE
- SILICON CONTROLLED RECTIFIER HEAT CONTROL

NORMAL OPEN	NORMAL CLOSED	
		GATE VALVE
		VALVE W/ REDUCERS (GATE VALVE SHOWN)
		GLOBE VALVE
		BUTTERFLY VALVE
		NEEDLE VALVE/INSTRUMENT VALVE
		3-WAY VALVE
		BALL VALVE
		PLUG VALVE
		ANGLE VALVE

CONTROL VALVE SYMBOLS:

- ELECTRIC ACTUATOR
- PNEUMATIC ACTUATOR
- SOLENOID ACTUATOR
- FEEDBACK
- CONTROL POINT TYPE
- IDENTIFIER

ABBREVIATIONS

AHU	AIR HANDLING UNIT
AI	ANALOG INPUT
AE	ANALOG ELEMENT
AO	ANALOG OUTPUT
CO2	CARBON DIOXIDE
CHR	CHILLED WATER RETURN
CHS	CHILLED WATER SUPPLY
DDC	DIRECT DIGITAL CONTROL
DA	DAMPER
DE	DIGITAL ELEMENT
DI	DIGITAL INPUT
D0	DIGITAL OUTPUT
EMS	ENERGY MANAGEMENT SYSTEM
ERU	ENERGY RECOVERY UNIT
FACP	FIRE ALARM CONTROL PANEL
FFCP	FIREFIGHTER CONTROL PANEL
GPM	GALLONS PER MINUTE
HX	HEAT EXCHANGER
HWR	HOT WATER RETURN
HWS	HOT WATER SUPPLY
ICI	INDUSTRIAL COMMUNICATION
MCI	MICRO CONTROLLER INTERFACE
MS	MOTOR STARTER
MVD	MANUAL VOLUME DAMPER
NC	NORMALLY CLOSED
NO	NORMALLY OPEN
PCU	PROCESS CONTROL UNIT
R	RELAY
RF	RETURN AIR FAN
RH	RELATIVE HUMIDITY
SF	SUPPLY AIR FAN
SEF	SMOKE EXHAUST FAN
UC	UNIT CONTROLLER

CONTROL DEFINITIONS:

NORMAL POSITION: INDICATES DEVICE POSITION WHEN THE SYSTEM IS DISABLED OR NOT ENERGIZED

FAIL POSITION: INDICATES DEVICE POSITION WHEN THE CONTROL SIGNAL IS LOST OR UPON A LOSS OF POWER.

CONTROLS GENERAL NOTES:

1. GENERAL NOTES SHALL BE APPLIED FOR ALL HVAC CONTROLS SHEETS.
2. CONTRACTOR SHALL AFFIX PERMANENT TAGS/LABELS TO ALL DEVICES AS SPECIFIED.
3. CONTRACTOR SHALL LABEL ALL DDC I/O SIGNAL LINES: 4-20 mA, VDC, OR SNVT.
4. CONTRACTOR SHALL SHOW A UNIQUE IDENTIFIER FOR EACH DEVICE. WHERE MULTIPLE IDENTICAL DEVICES ARE SHOWN (FOR EXAMPLE: DDC CONTROLLER, OA SENSOR, OR EP TRANSDUCER) EACH SHALL BE SEQUENTIALLY NUMBERED. WHERE SEPERATE DDC CONTROLLER BUBBLES ARE USED THE SAME IDENTIFIER AND NUMBER, DEVICE AND SIGNAL IDENTIFIERS SHALL BE CONSISTENT BETWEEN DRAWINGS.
5. CONTRACTOR SHALL UNIQUELY NUMBER ALL ANSI 709.1 DEVICES. THIS NUMBERING SHALL BE CONSISTENT BETWEEN ALL DRAWINGS.

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: B. SCHNEIDER
DRAWN BY: C. BROWN
CHECKED BY: M. WALLACE
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201M-801

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
TBPE Registration No. F-2600

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
MECHANICAL CONTROLS

SHEET ID
B1455
M-801

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN

POINT SCHEDULE INSTRUCTIONS FOR UFGS-23 09 23 CONTRACTOR

GENERAL:

1. THE CONTRACT DRAWING POINTS SCHEDULES ASSUME THAT THE ENTIRE SEQUENCE OF OPERATION IS PERFORMED IN A SINGLE PIECE OF DDC HARDWARE. IN CASES WHERE MULTIPLE PIECES OF DDC HARDWARE ARE USED (INCLUDING CEA-709.1 NETWORKED SENSORS AND ACTUATORS), SEPARATE THE POINTS SCHEDULE INTO SEPARATE TABLES EACH WITH ITS OWN HEADER INFORMATION (SEE BELOW) SO THAT EACH PIECE OF DDC HARDWARE HAS A TABLE DEDICATED TO IT. ALL TABLES FOR A SINGLE SEQUENCE OF OPERATION SHALL BE ON A SINGLE DRAWING WHICH MAY SPAN MULTIPLE SHEETS. SHOW COMMUNICATION BETWEEN MULTIPLE PIECES OF DDC HARDWARE PERFORMING A COMMON SEQUENCE THROUGH THE USE OF NVI AND NVO ENTRIES IN THE I/O COLUMN (SEE I/O COLUMN INSTRUCTIONS BELOW), ADDING ROWS TO THE TABLE(S) AS NEEDED.

2. ENTRIES SHOWN BRACKETED AS: < ___ > ARE REQUIRED ENTRIES UNDER UFGS-23 09 23. SOME ENTRIES WITHOUT BRACKETS MAY BE REQUIRED IN SOME INSTANCES AS DESCRIBED IN THESE INSTRUCTIONS.

   SPACES WHERE NO ENTRY IS ORDINARILY REQUIRED CONTAINS A TILDE: " ~ " (EQUIVALENT TO AN "N/A" OR NULL VALUE)

   WHEN AN ENTRY APPEARS INSIDE OF BRACKETS, IT IS A RECOMMENDED ENTRY THAT MUST BE VERIFIED OR CHANGED BY THE APPROPRIATE PARTY (AS INDICATED BY THE BRACKET TYPE). WHEN EDITING THE POINT SCHEDULES, DELETE THE BRACKETS AFTER VERIFYING/PROVIDING THE ENTRY. DO NOT LEAVE CELLS BLANK, INSTEAD SHOW THE TILDE ("~") TO INDICATE A NULL VALUE OR THAT NO FURTHER ENTRY IS REQUIRED.

HEADER INFORMATION INSTRUCTIONS:

1. DDC HARDWARE IDENTIFIER: SHOW THE IDENTIFIER FOR EACH PIECE OF DDC HARDWARE. MAINTAIN CONSISTENCY AND UNIQUENESS OF DDC HARDWARE IDENTIFIERS BETWEEN ALL DRAWINGS.

2. DDC HARDWARE LOCATION: SHOW THE PHYSICAL LOCATION OF THE DEVICE. LOCATION SHALL INCLUDE THE BUILDING AND ROOM NUMBER AND MAY ALSO INCLUDE FURTHER INFORMATION SUCH AS ENCLOSURE/PANEL IDENTIFICATION.

3. NODE ADDRESS: SHOW THE DOMAIN, SUBNET AND NODE ADDRESSES FOR ALL DEVICES ON THE NETWORK.

4. NODE ID: SHOW THE MANUFACTURER SUPPLIED NODE ID (ALSO CALLED THE NEURONID) FOR EACH DEVICE.

"GENERAL" COLUMNS:

1. NAME COLUMN: SHOW POINT NAMES AS NEEDED AND AS INDICATED BY BRACKETS (<___>). THE NAME SHALL BE CONSISTENT WITH POINT NAMES SHOWN ON ALL OTHER DRAWINGS AND SHALL USE THE ESTABLISHED POINT ABBREVIATIONS.

2. SETTING COLUMN: CONFIGURE DEVICES TO USE THE SETPOINTS AND SETTINGS SHOWN. WHEN A SETPOINT OR SETTING IS NOT SHOWN, USE VALUES IN ACCORDANCE WITH THE SPECIFICATION AND SHOW THE SETPOINT OR SETTING USED. INCLUDE THE APPROPRIATE ENGINEERING UNITS FOR ENTRIES IN THIS COLUMN.

3. RANGE COLUMN: CONFIGURE DEVICES TO USE THE RANGES SHOWN. WHEN A RANGE IS NOT SHOWN, USE VALUES IN ACCORDANCE WITH THE SPECIFICATION AND SHOW THE RANGE USED. FOR SENSORS SHOW THE ACTUAL SENSOR RANGE (THIS RANGE MUST AT LEAST ENCOMPASS THE RANGE SPECIFIED IN SECTION 23 09 23). FOR DAMPER ACTUATORS SHOW THE ACTUAL RANGE OVER WHICH THE VALVE OR DAMPER IS ACTUATED. INCLUDE THE APPROPRIATE ENGINEERING UNITS FOR ENTRIES IN THIS COLUMN.

4. NCI/CP NAME COLUMN: ENTRIES IN THIS COLUMN ARE ONLY REQUIRED FOR GENERAL PURPOSE PROGRAMMABLE CONTROLLERS (GPPC) OR APPROVED APPLICATION SPECIFIC CONTROLLERS (ASC) LACKING LONWORKS NETWORK SERVICES (LNS) PLUG-INS. SHOW ALL NETWORK CONFIGURATION INPUTS (NCI) OR CONFIGURATION PROPERTIES (CP) THAT RELATE TO THE POINT. FOR CPS OF A USER-DEFINED NETWORK CONFIGURATION PARAMETER TYPE (UCPT), PROVIDE EITHER THE STANDARD NETWORK VARIABLE TYPE (SNVT) THAT RELATES TO THE CP, OR (FOR UCPTS NOT BASED ON A SNVT) PROVIDE DETAILED DESCRIPTIONS OF THE FIELDS AND UNITS OF EACH CP. EXPAND ROWS AND USE ADDITIONAL SHEETS AS REQUIRED TO PROVIDE CONFIGURATION PROPERTY DESCRIPTIONS.

5. I/O TYPE COLUMN: SHOW THE I/O TYPE FOR EACH POINT AS ONE (OR MORE) OF THE FOLLOWING:
   - AI FOR ANALOG INPUTS
   - AO FOR ANALOG OUTPUTS
   - BI FOR BINARY INPUTS
   - BO FOR BINARY OUTPUTS
   - NVO FOR NETWORK VARIABLE OUTPUTS (BOUND TO ANOTHER PIECE OF DDC HARDWARE)
   - NVI FOR NETWORK VARIABLE INPUTS (BOUND FROM ANOTHER PIECE OF DDC HARDWARE)
   - PULSE FOR PULSE ACCUMULATOR INPUTS

   IF MORE THAN ONE PIECE OF DDC HARDWARE IS USED TO IMPLEMENT A SEQUENCE AND THE VALUE OF A PHYSICAL INPUT TO ONE IS NEEDED BY THE OTHER, SHOW THE POINT AS BOTH A HARDWARE INPUT (AI OR BI) AND A NETWORK VARIABLE OUTPUT (NVO) ON THE FIRST AND AS A NETWORK VARIABLE INPUT (NVI) TO THE OTHER DDC HARDWARE. SIMILARLY FOR OUTPUTS SHOW A NETWORK VARIABLE OUTPUT (NVO) ON ONE CONTROLLER, AND A NETWORK VARIABLE INPUT (NVI) AND HARDWARE OUTPUT (AO OR BO) ON THE OTHER.

   AN ENTRY OF NVO IS ONLY REQUIRED FOR OUTPUTS THAT ARE USED BY ANOTHER PIECE OF DDC HARDWARE; POINTS THAT HAVE SNVT OUTPUTS ONLY FOR DISPLAY OR TRENDING AT AN LDP OR BY THE M&C SOFTWARE ARE ASSUMED TO BE NVOS AND DO NOT NEED AN NVO ENTRY IN THE I/O COLUMN.

   FOR EVERY ENTRY OF NVO OR NVI SHOW THE SNVT NAME AND TYPE IN THE SNVT NAME AND SNVT TYPE COLUMNS UNDER LDP AND M & C DISPLAY. SEE "SNVT TYPE COLUMN" INSTRUCTIONS BELOW.

6. HOA REQ'D COLUMN: FOR EACH OUTPUT WITH AN "Y" IN THIS COLUMN PROVIDE A HARDWARE MANUAL OVERRIDE FOR THAT OUTPUT:
   A. THE MANUAL OVERRIDE SWITCH FOR BINARY OUTPUTS SHALL PROVIDE FOR OVERRIDING THE OUTPUT OPEN OR CLOSED
   B. THE MANUAL OVERRIDE SWITCH FOR ANALOG OUTPUTS SHALL EITHER:
      - PROVIDE FOR OVERRIDING THE OUTPUT TO 0% OR 100%
      - PROVIDE FOR OVERRIDING THROUGH THE RANGE OF 0% TO 100%.
   C. THE MANUAL OVERRIDE SHALL BE INTEGRATED WITH THE CONTROLLER HARDWARE OR AN EXTERNAL OVERRIDE CO-LOCATED WITH (IN THE SAME ENCLOSURE AS) THE CONTROLLER.

LDP AND M & C DISPLAY & OVERRIDE COLUMNS:

1. LDP VIEW & OVRD COLUMN: PROVIDE AN LDP AND CONFIGURE THE BUILDING CONTROL NETWORK AND THE LDP TO DISPLAY POINTS MARKED WITH A "V". SHOW THE SNVT NAME AND SNVT TYPE FOR EACH POINT SHOWN. (SEE INSTRUCTIONS FOR THE "SNVT TYPE" COLUMN). FOR EACH POINT WITH AN "O" IN THIS COLUMN, PROVIDE A SNVT INPUT FOR THE POINT BY WHICH THE VALUE OF THE POINT CAN BE OVERRIDDEN AND PROVIDE AN LDP (IF NOT ALREADY PROVIDED) AND CONFIGURE THE BUILDING CONTROL NETWORK AND THE LDP TO ALLOW AN OPERATOR TO OVERRIDE (WRITE TO) THE POINT FROM THE LDP. SHOW THE OVERRIDE INPUT SNVT NAME AND TYPE FOR EACH POINT REQUIRING AN OVERRIDE. IF THE OVERRIDE IS RELEASED BY A MEANS OTHER THAN WRITING THE "NULL VALUE" FOR THE SNVT TYPE (AS DEFINED IN THE LONMARK MASTER SNVT LIST), PROVIDE A DESCRIPTION OF HOW THE OVERRIDE IS USED AND RELEASED.

2. M & C VIEW & OVRD COLUMN: A "V" IN THIS COLUMN INDICATES THAT A SNVT FOR THIS POINT MUST BE AVAILABLE FROM THE DDC HARDWARE PERFORMING THE SEQUENCE FOR THIS SYSTEM. PROVIDE A SNVT OUTPUT FOR THESE POINTS AND SHOW THE SNVT NAME AND SNVT TYPE. (SEE INSTRUCTIONS FOR THE "SNVT TYPE" COLUMN). FOR EACH POINT WITH AN "X" IN THIS COLUMN, PROVIDE A SNVT INPUT FOR THE POINT BY WHICH THE VALUE OF THE POINT CAN BE OVERRIDDEN AND SHOW THE SNVT NAME AND TYPE FOR EACH.

3. M & C TREND REQ'D COLUMN: FOR ALL POINTS WITH AN X IN THIS COLUMN A SNVT FOR THIS POINT SHALL BE AVAILABLE. PROVIDE A SNVT OUTPUT FOR THESE POINTS AND SHOW THE SNVT NAME AND SNVT TYPE. (SEE INSTRUCTIONS FOR THE "SNVT TYPE" COLUMN).

4. SNVT TYPE COLUMNS: WHEN A SNVT TYPE IS SHOWN ON THE POINT SCHEDULE CONTRACT DRAWING, USE THE SHOWN SNVT TYPE FOR THE PROVIDED SNVT. IF NECESSARY, A SNVT TYPE TRANSLATOR MAY BE USED TO CONVERT TO THIS SNVT TYPE. IF THE USE OF A TYPE TRANSLATOR RESULTS IN THE SHARING OF A SNVT BETWEEN DDC HARDWARE, DOCUMENT IT ON THE POINTS SCHEDULE AS DESCRIBED IN THE "GENERAL" PORTION OF THESE INSTRUCTIONS. WHERE NO SNVT TYPE IS SHOWN, SHOW THE SNVT TYPE USED.

ALARMS COLUMNS:

1. ALARM CONDITION COLUMN: FOR EACH POINT WITH AN ENTRY IN THIS COLUMN PROVIDE A SNVT OUTPUT FOR THE POINT AND SHOW THE SNVT NAME AND SNVT TYPE IN THE SNVT NAME AND SNVT TYPE COLUMNS UNDER LDP AND M & C DISPLAY. SEE "SNVT TYPE COLUMN" INSTRUCTIONS ABOVE.

OTHER:

1. SYSTEM RESET BUTTON (RST-BUT): IF THE "I/O TYPE" COLUMN CONTAINS "BI", THE SYSTEM SHALL BE CAPABLE OF BEING RESET VIA A LOCAL HARDWARE PUSH-BUTTON.

   IF THERE IS AN "O" IN THE LDP OVRD REQ'D OR M & C OVRD REQ'D COLUMN, THE SYSTEM SHALL ALSO BE CAPABLE OF BEING RESET VIA SNVT INPUT (SEE INSTRUCTIONS FOR M & C OVRD REQ'D AND LDP OVRD REQ'D COLUMNS).

2. SYSTEM OCCUPANCY (SYS-OCC): SHOW OCC, UNOCC, WUCD (WARM-UP/COOL-DOWN) IN THE RANGE COLUMN BASED ON THE SYSTEM-SPECIFIC SEQUENCE OF OPERATIONS AND OCCUPANCY SCHEDULE.

3. MINIMUM OUTSIDE AIR (MINOA) FLOW: FOR SYSTEMS CONTROLLING TO A MINOA SETPOINT, USE THE MINOA-F-SP SHOWN WHEN CONFIGURING THE DDC HARDWARE PERFORMING THE SEQUENCE OF OPERATION. FOR OTHER SYSTEMS SET THE MINIMUM OUTSIDE AIR FLOW TO THE MINIMUM OUTSIDE AIR FLOW SETTING SHOWN AS SPECIFIED.

4. PID LOOP SETTINGS: SHOW ALL PID LOOP SETTINGS IN THE SETTINGS COLUMN, INCLUDING ENGINEERING UNITS FOR EACH SETTING. ADJUST ROW HEIGHT AS NEEDED TO SHOW ALL PID SETTINGS.

5. FILTERS: WHEN FILTER PRESSURES ARE SHOWN, INSTALL FILTER PRESSURE SWITCHES. SHOW LOADED FILTER (HIGH-LIMIT) SETPOINT FOR EACH FILTER.

6. OTHER POINTS: INSTALL SENSORS FOR MONITORING PURPOSES ONLY.

POINT SCHEDULE INSTRUCTIONS FOR UFGS-25 10 10 CONTRACTOR

1. SPACES WHERE NO ENTRY IS ORDINARILY REQUIRED CONTAINS A TILDE: " ~ " (EQUIVALENT TO AN "N/A" OR NULL VALUE).

2. NAME COLUMN: USE THE POINT NAMES SHOWN ON THE POINTS SCHEDULE FOR ALL GRAPHIC DISPLAYS.

3. M & C DISP&OVRD: FOR EACH "V" IN THIS COLUMN CONFIGURE THE GRAPHICAL DISPLAY FOR THIS SYSTEM TO DISPLAY THE VALUE OF THE POINT. UNLESS OTHERWISE SPECIFIED OR APPROVED, USE THE POINT NAME, AS SHOWN IN THE "NAME" COLUMN, TO LABEL THE GRAPHICAL DISPLAY. FOR ALL POINTS WITH AN "O" IN THIS COLUMN USE THE SNVT NAME AND TYPE SHOWN TO PROVIDE OVERRIDE CAPABILITY. CONFIGURE THE M & C SYSTEM DISPLAYS TO ALLOW AN OPERATOR TO OVERRIDE (AND RELEASE THE OVERRIDE) THESE POINTS AS SPECIFIED.

4. M & C TREND REQ'D COLUMN: FOR ALL POINTS WITH AN "Y" IN THIS COLUMN, SET UP A TREND AT THE M & C SOFTWARE AS SPECIFIED.

5. ALARM CONDITION COLUMN: FOR EACH POINT WITH AN ENTRY IN THIS COLUMN USE THE ALARM LIMITS SHOWN TO CONFIGURE ALARM GENERATION FOR THE POINT AT THE M&C SOFTWARE.

6. ALARM PRIORITY COLUMN: WHEN CONFIGURING THE ALARM HANDLING AT THE M&C SOFTWARE, USE THE ALARM PRIORITY SHOWN TO DETERMINE IF THE ALARM IS CRITICAL (CRIT) OR INFORMATIONAL (INFO).

7. M&C ROUTING NAME COLUMN: CONFIGURE ALARM HANDLING AT THE M&C SERVER ACCORDING TO THE ALARM ROUTING SHOWN ON THE POINTS SCHEDULE, THE ALARM ROUTING SCHEDULES AND AS SPECIFIED.

8. SYSTEM RESET BUTTON (RST-BUT): IF THERE IS AN "O" IN M & C VIEW & OVRD OVRD COLUMN, CONFIGURE M & C SOFTWARE GRAPHIC DISPLAYS TO PROVIDE SYSTEM RESET CAPABILITY.

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
Branden Schneider
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: B. SCHNEIDER
DRAWN BY: C. BROWN
CHECKED BY: M. WALLACE
SUBMITTED BY: E. OLNESS
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201M-802
ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street Fort Worth, TX 76102
TBPE Registration No. F-2966

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
POINTS LISTS INSTRUCTIONS

SHEET ID
B1455
M-802

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN

HEATING WATER SYSTEM SEQUENCE OF OPERATION

GENERAL:
THE HEATING WATER SYSTEM SHALL PROVIDE HOT WATER TO THE HYDRONIC HEATING COILS. THE SYSTEM CONSISTS OF 1 CONDENSING BOILER (B-1). THE SYSTEM EMPLOYS A VARIABLE PRIMARY PUMPING SCHEME WITH TWO PUMPS IN LEAD/STANDBY CONFIGURATION.

SHARED POINTS:
1. OUTSIDE AIR TEMPERATURE FROM THE WEATHER STATION.
2. HOT WATER TEMPERATURE CONTROL VALVE POSITION FROM THE HYDRONIC HEATING COIL.
3. REFRIGERANT CONCENTRATION ALARMS FROM REFRIGERANT MONITOR CONTROL PANEL.

RUN CONDITIONS:
THE HEATING WATER SYSTEM SHALL BE ENABLED TO RUN WHEN ONE OF THE FOLLOWING CONDITIONS ARE MET:
1. AHU OR DOAU CONTROLLER CALLS FOR HEATING AND ITS RESPECTIVE CONTROL VALVE IS GREATER THAN 20% (ADJUSTABLE) OPEN FOR GREATER THAN 3 MINUTES (ADJUSTABLE).
2. ANY 3 (ADJUSTABLE) VALVES FOR FAN COIL UNITS OR TERMINAL UNITS, CALL FOR HEATING AND ITS RESPECTIVE CONTROL VALVE IS GREATER THAN 20% (ADJUSTABLE) OPEN FOR GREATER THAN 3 MINUTES (ADJUSTABLE).
3. ACTIVATED BY DDC SYSTEM SCHEDULING.
4. INITIATION OF BOILER START SEQUENCE AT THE BAS WORKSTATION OR THE NETWORK CONTROLLER OR THE LOCAL BOILER CONTROL PANEL.

THE HEATING WATER SYSTEM SHALL BE DISABLED BY THE DDC SYSTEM WHEN ONE OF THE FOLLOWING CONDITIONS ARE MET:
1. NO HOT WATER CONTROLLERS ARE CALLING FOR HEATING.
2. DEACTIVATED BY DDC SYSTEM SCHEDULING.
3. MANUALLY COMMANDED BY THE OPERATOR.
4. UPON ACTIVATION OF THE BOILER EMERGENCY SHUTDOWN SWITCH.
5. REFRIGERANT CONCENTRATION ALARM FROM REFRIGERANT MONITOR CONTROL PANEL.

TO PREVENT SHORT CYCLING, THE BUILDING HEATING WATER SYSTEM SHALL RUN FOR AND BE OFF FOR A MINIMUM TIME OF 30 MINUTES (ADJUSTABLE) UNLESS SHUT DOWN ON SAFETIES. THE BUILDING HEATING WATER SYSTEM SHALL BE AUTOMATICALLY ACTIVATED FOR FREEZE PROTECTION WHENEVER THE OUTSIDE AIR TEMPERATURE IS LESS THAN 35°F (ADJUSTABLE).

BOILER OPERATION:
WHEN THE HEATING WATER SYSTEM IS ENABLED TO OPERATE, THE BOILER SHALL BE COMMANDED TO START AND SHALL ACTIVATE USING ITS OWN INTERNAL STARTUP CONTROL SEQUENCE. AS PART OF THE STARTUP SEQUENCE, FLOW THROUGH THE BOILER MUST BE CONFIRMED TO BE ABOVE THE BOILER'S MINIMUM FLOW ACCORDING TO THE BOILER'S FLOW SWITCH (AS PROVIDED BY THE UNIT MANUFACTURER).

THE BOILER SHALL RUN SUBJECT TO ITS OWN INTERNAL SAFETIES AND CONTROLS. THE BOILER SHALL VARY ITS LEVEL OF FIRE AS REQUIRED TO MAINTAIN THE LEAVING WATER TEMPERATURE AS INDICATED IN THE BOILER SUPPLY WATER TEMPERATURE (RESETABLE AS NOTED BELOW).

THE MANUFACTURER SUPPLIED BOILER CONTROLLER SHALL ENABLE, MODULATE, AND DISABLE THE BOILER TO OPERATE BY THE MOST EFFICIENT MEANS POSSIBLE BY MONITORING BOILER FIRE RATE, SYSTEM FLOW RATE, SUPPLY WATER TEMPERATURE, AND RETURN WATER TEMPERATURE.

THE BAS SHALL ENABLE/DISABLE THE BOILER AND MONITOR AVAILABLE BOILER CONTROL POINTS THROUGH A BAS INTERFACE CARD FURNISHED BY THE BOILER MANUFACTURER.

WHEN THE HEATING WATER SYSTEM IS DISABLED, BOILER SHALL BE COMMANDED TO STOP IN SEQUENCE AND SHALL DEACTIVATE USING ITS OWN INTERNAL SHUTDOWN CONTROL SEQUENCE.

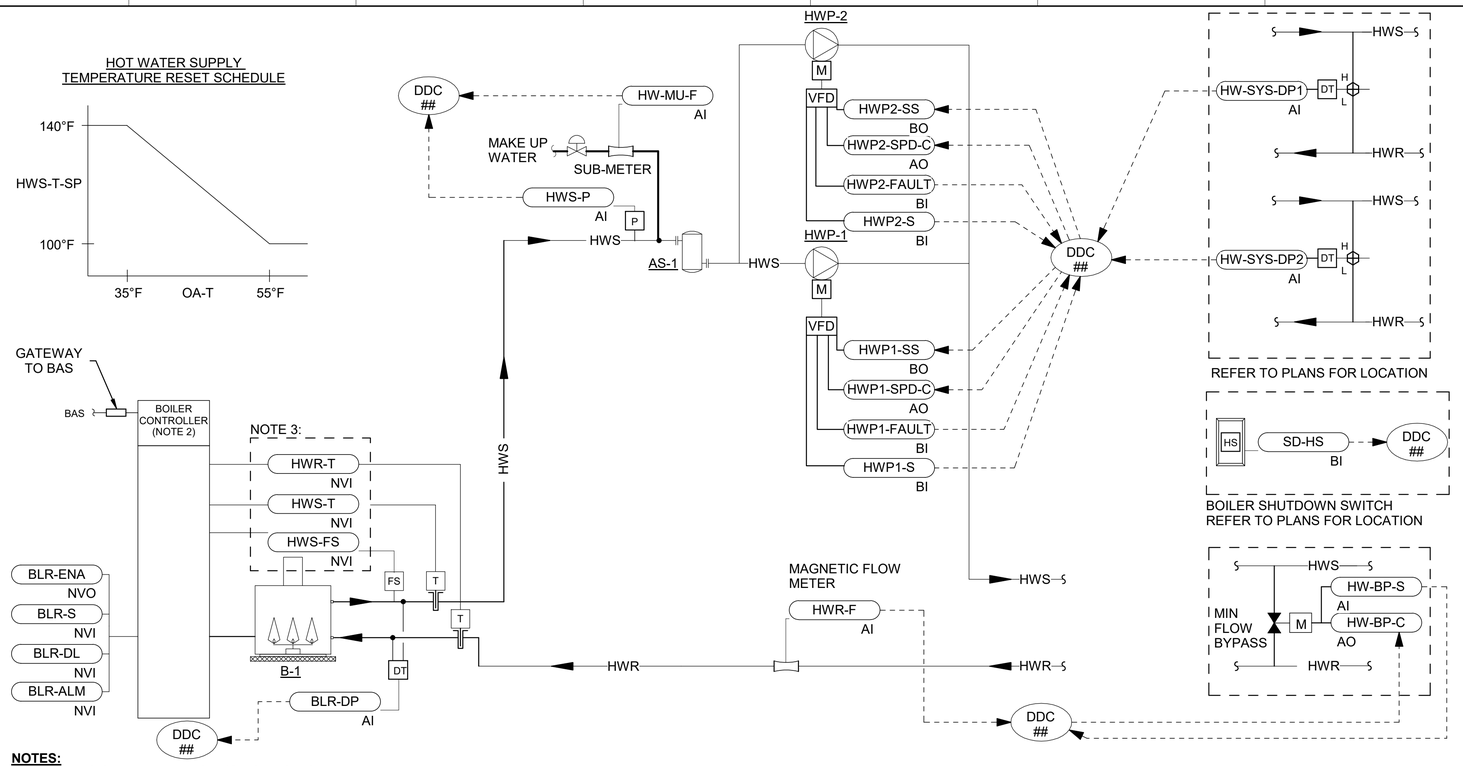
BOILER SAFETIES:
THE FOLLOWING SAFETIES SHALL BE MONITORED THROUGH THE BAS AND ALARMS SHALL BE PROVIDED TO THE BAS OPERATOR INTERFACE AS FOLLOWS:
1. BOILER ALARM.
2. LOW FLOW ALARM.
3. HIGH DIFFERENTIAL PRESSURE ACROSS BOILER.

BUILDING HEATING WATER TEMPERATURE CONTROL:
THE BUILDING HEATING WATER TEMPERATURE SHALL BE MAINTAINED BY THE BOILER'S OWN INTERNAL CONTROLS, TO MAINTAIN THE LEAVING WATER TEMPERATURE SETPOINT.

ALARMS SHALL BE PROVIDED AS FOLLOWS:
1. BUILDING HIGH HEATING WATER SUPPLY TEMP: IF GREATER THAN 5°F (ADJUSTABLE) ABOVE SETPOINT.
2. BUILDING LOW HEATING WATER SUPPLY TEMP: IF GREATER THAN 10°F (ADJUSTABLE) BELOW SETPOINT.
3. BUILDING HIGH HEATING WATER RETURN TEMP: IF EQUAL TO OR GREATER (ADJUSTABLE) THAN THE SUPPLY SETPOINT.
4. BUILDING LOW HEATING WATER RETURN TEMP: IF GREATER THAN 30°F (ADJUSTABLE) BELOW THE SUPPLY SETPOINT.

BOILER SUPPLY WATER TEMPERATURE RESET:
BOILER LEAVING WATER TEMPERATURE SHALL BE RESET BASED ON OUTDOOR TEMPERATURE. LEAVING WATER TEMPERATURE SETPOINT SHALL BE LINEARLY DERIVED BETWEEN THE FOLLOWING LIMITS:
1. AT AN OUTSIDE TEMPERATURE OF 35ºF OR BELOW (ADJUSTABLE), LEAVING WATER TEMPERATURE SHALL BE 140ºF (ADJUSTABLE).
2. AT AN OUTSIDE TEMPERATURE OF 55ºF OR ABOVE (ADJUSTABLE), LEAVING WATER TEMPERATURE SHALL BE 100ºF (ADJUSTABLE).

HOT WATER SUPPLY
TEMPERATURE RESET SCHEDULE



NOTES:
1. REFER TO SHEET M-811 FOR I/O POINTS LIST.
2. PROVIDE COMMUNICATION WIRING AND CONNECT TO BAS NETWORK. PROVIDE MONITORING AND CONTROL POINTS AS INDICATED TO THE BAS THROUGH THE COMMUNICATION INTERFACE.
3. SUPPLY & RETURN TEMPERATURE SENSORS AND FLOW SWITCH ARE PROVIDED BY THE BOILER MANUFACTURER FOR INSTALLATION IN THE FIELD. INSTALL AND CONNECT SENSORS IN ACCORDANCE WITH REQUIREMENTS AND INSTRUCTIONS PROVIDED BY BOILER MANUFACTER.

HOT WATER PUMP OPERATION:
THE HOT WATER PUMPS SHALL OPERATE IN A LEAD/STANDBY FASHION. ONE PUMP SHALL BE DESIGNATED AS THE LEAD UNIT. THE BAS SHALL HAVE THE CAPABILITY TO DESIGNATE ANY PUMP AS LEAD OR STANDBY AS DESIRED AND TO ROTATE THE SEQUENCE AUTOMATICALLY BASED ON THE FOLLOWING:
1. MANUALLY THROUGH A SOFTWARE SWITCH.
2. PUMP RUNTIME.
3. SCHEDULING, SUCH AS ROTATING THE SEQUENCE ONCE PER DAY, WEEK, MONTH, SEASON, ETC.

WHEN THE HYDRONIC HEATING SYSTEM IS ENABLED, THE LEAD PUMP SHALL BE STARTED IMMEDIATELY. WHEN THE HEATING WATER SYSTEM IS DEACTIVATED, THE PUMP SHALL BE STOPPED AFTER A SUITABLE TIME DELAY (INITIAL SETTING: 5 MINUTES, ADJUSTABLE). UPON FAILURE OF THE LEAD PUMP THE STANDBY PUMP SHALL BE STARTED AND THE LEAD PUMP SHALL BE COMMANDED OFF. PUMP FAILURE SHALL BE DETERMINED BY THAT DESCRIBED IN THE PUMP FAILURE ALARM SECTION.

WHEN A PUMP IS COMMANDED TO START IT SHALL BE ENERGIZED AT MINIMUM VFD SPEED THEN RAMP AS REQUIRED BY THE DIFFERENTIAL PRESSURE CONTROL SYSTEM. WHEN A PUMP IS COMMANDED TO STOP IT SHALL FIRST CONTINUE TO RUN FOR A SUITABLE TIME DELAY PERIOD (INITIAL SETTING: 5 MINUTES, ADJUSTABLE), THEN SHALL RAMP TO MINIMUM VFD SPEED THEN BE DEENERGIZED.

THE CONTROLLER SHALL MONITOR THE SYSTEM DIFFERENTIAL PRESSURE SENSORS AND VARY THE PUMP'S VFD SPEED TO MAINTAIN THE DIFFERENTIAL PRESSURE SETPOINTS AT EACH SENSOR (INITIAL SETPOINTS OF 10 FT W.C. (ADJUSTABLE), FINAL SETPOINTS TO BE DETERMINED DURING TEST AND BALANCE. ON A DROP IN SYSTEM DIFFERENTIAL PRESSURE, THE PUMP SPEED SHALL BE APPROPRIATELY INCREASED. ON A RISE IN SYSTEM DIFFERENTIAL PRESSURE, THE PUMP SPEED SHALL BE APPROPRIATELY DECREASED. THE PUMP VFD WILL BE CONTROLLED BETWEEN MINIMUM VFD SPEED SETTING PLUS 2 HZ AND MAXIMUM SPEED SETTING.

FAILURE ALARMS: PUMP SHALL BE COMMANDED OFF. AN ALARM SHALL BE PROVIDED TO THE BAS OPERATOR INTERFACE AS FOLLOWS:
1. SYSTEM FAILURE: IF BOTH PUMPS FAIL TO START, THE BAS SHALL REMOVE THE HYDRONIC HEATING SYSTEM START COMMAND.
2. FAILURE: COMMANDED ON, BUT THE STATUS IS OFF.
3. RUNNING IN HAND: COMMANDED OFF, BUT THE STATUS IS ON.
4. VFD FAULT.

NON-FAILURE ALARMS: PUMP SHALL NOT BE COMMANDED OFF. AN ALARM SHALL BE PROVIDED TO THE BAS OPERATOR INTERFACE AS FOLLOWS:
1. RUNTIME EXCEEDED: STATUS RUNTIME EXCEEDS A USER DEFINABLE LIMIT.

MINIMUM FLOW BYPASS:
THE MINIMUM FLOW BYPASS CONTROL VALVE SHALL MODULATE OPEN UPON A DROP IN FLOW THROUGH THE HOT WATER RETURN FLOW SENSOR BELOW THE MINIMUM FLOW OF THE BOILER. THE MINIMUM FLOW BYPASS CONTROL VALVE SHALL REMAIN CLOSED WHEN THE FLOW IS ABOVE THE BOILER'S MINIMUM FLOW.

THE DESIGNED MINIMUM FLOW FOR THE BOILER IS SCHEDULED (FINAL VALUE TO BE VERIFIED WITH BOILER MANUFACTURER).

DIFFERENTIAL PRESSURE RESET:
THE DIFFERENTIAL PRESSURE SETPOINTS SHALL BE RESET DOWN TO MAINTAIN A MAXIMUM OF 1 (ADJUSTABLE) HOT WATER TEMPERATURE CONTROL VALVE FROM ANY COIL AT A MAXIMUM OF 90% (ADJUSTABLE) OPEN. AS MORE CONTROL VALVES OPEN THE DIFFERENTIAL PRESSURE SETPOINTS SHALL RESET UP TO THE PRESSURE SETPOINTS ESTABLISHED DURING BALANCING.

MAKE UP WATER:
THE BAS SHALL MONITOR THE MAKE UP WATER FLOW THROUGH THE WATER SUB-METER. AN ALARM SHALL BE PROVIDED WHEN 5% (ADJUSTABLE) OR MORE OF THE TOTAL SYSTEM VOLUME HAS BEEN MADE UP.

SYSTEM SHUT DOWN:
WHEN THE SYSTEM IS COMMANDED TO SHUTDOWN, EQUIPMENT SHALL BE ALIGNED AS FOLLOWS: BOILERS - DISABLED, HEATING WATER PUMPS - OFF, MINIMUM FLOW BYPASS - OPEN.

A1 HEATING WATER SYSTEM CONTROL DIAGRAM & SEQUENCE
SCALE = NTS

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: B. SCHNEIDER
DRAWN BY: C. BROWN
CHECKED BY: M. WALLACE
SUBMITTED BY: E. OLNESS
DATE: ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201M-803
ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

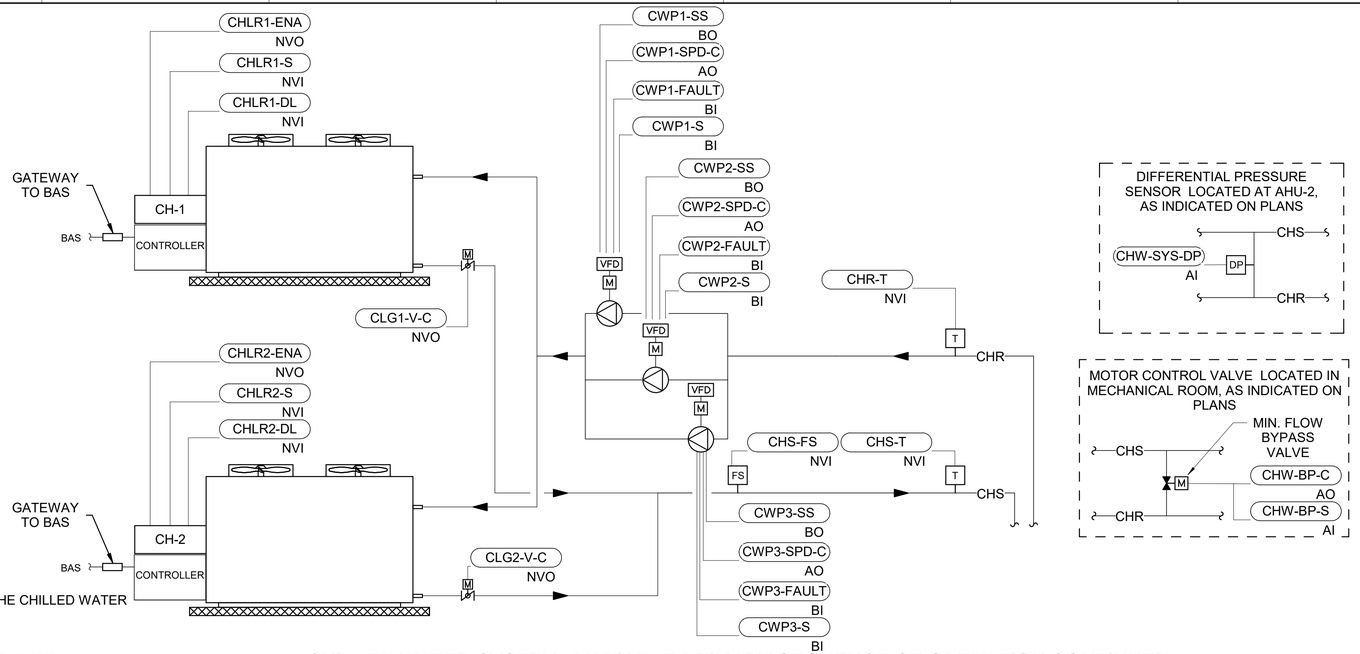
Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
ACCESS No. 00000219

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
MECHANICAL CONTROLS

SHEET ID
B1455
M-803

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



CHILLED WATER SYSTEM - VARIABLE PRIMARY SEQUENCE OF OPERATION

CHILLED WATER SYSTEM:
THE CHILLED WATER SYSTEM CONSISTS OF TWO AIR COOLED CHILLER AND SIZED TO MEET THE BUILDING COOLING LOAD. THE CHILLED WATER SYSTEM'S PUMPING SCHEME IS CONFIGURED WITH A VARIABLE PRIMARY PUMPING SCHEME.

CHILLED WATER SYSTEM RUN CONDITIONS:
THE CHILLED WATER SYSTEM SHALL BE ENABLED TO RUN WHEN ANY OF THE COOLING COIL CONTROL VALVES IS GREATER THAN 20% (ADJUSTABLE) OPEN FOR GREATER THAN 2 MINUTES (ADJUSTABLE) OR BY INITIATION OF CHILLER START SEQUENCE AT EITHER THE NETWORK CONTROLLER OR THE LOCAL CHILLER CONTROL PANEL. THE BUILDING CHILLED WATER SYSTEM SHALL BE DISABLED BY SYSTEM SCHEDULING, OR BY NO AIR HANDLER RUNNING, OR MANUALLY COMMANDED OFF BY THE OPERATOR. TO PREVENT SHORT CYCLING, THE BUILDING CHILLED WATER SYSTEM SHALL RUN FOR AND BE OFF FOR A MINIMUM OF 30 MINUTES (ADJUSTABLE) UNLESS SHUT DOWN ON SAFETIES.

CHILLER OPERATION:
WHEN THE CHILLED WATER SYSTEM IS ENABLED TO OPERATE, THE PUMPS WILL START AND FLOW WILL BE VERIFIED THEN CHILLERS SHALL BE COMMANDED TO START AND SHALL ACTIVATE USING THEIR OWN INTERNAL STARTUP CONTROL SEQUENCE. WHEN THE CHILLED WATER SYSTEM IS DISABLED, THE CHILLERS SHALL BE COMMANDED TO STOP AND SHALL DEACTIVATE USING THEIR OWN INTERNAL SHUTDOWN CONTROL SEQUENCE.

WHEN COOLING LOAD ONLY REQUIRES SINGLE CHILLER TO OPERATE, ROTATE THE DESIGNATION AUTOMATICALLY BASED ON THE FOLLOWING:
1. MANUALLY THROUGH A SOFTWARE SWITCH.
2. CHILLER RUNTIME.
3. SCHEDULING, SUCH AS ROTATING THE SEQUENCE ONCE PER DAY, WEEK, MONTH, SEASON, ETC

WHEN THE CHILLED WATER SYSTEM IS ENABLED TO OPERATE, THE LEAD CHILLER SHALL BE COMMANDED TO START AND SHALL ACTIVATE USING ITS OWN INTERNAL STARTUP CONTROL SEQUENCE. AS PART OF THE STARTUP SEQUENCE, FLOW THROUGH THE UNIT SHALL BE CONFIRMED ABOVE THE UNIT'S MINIMUM FLOW ACCORDING TO THE UNIT'S FLOW SWITCH (FS-01). (MINIMUM FLOW RATE IS PROVIDED BY THE UNIT MANUFACTURER).

THE CHILLER SHALL RUN SUBJECT TO ITS OWN INTERNAL SAFETIES AND CONTROLS. THE CHILLER SHALL LOAD AND UNLOAD AND STAGE COMPRESSORS AS REQUIRED TO MAINTAIN A LEAVING WATER TEMPERATURE OF 44°F (ADJUSTABLE).

PRIOR TO STARTUP, FLOW THROUGH CHILLER SHALL BE VERIFIED (DETECTED AT THE FLOW SENSOR AT THE CHILLER, FS-CHW-01) TO BE ABOVE THE MINIMUM CHILLER FLOW REQUIREMENT.

IN THE CASE OF A SINGLE CHILLER FAILURE, BAS TO COMMAND AHU-1 VALVES TO CLOSE. REMAINING CHILLER TO PRIORITIZE PROVIDING CHILLED WATER TO CRAC UNITS AND CSAC UNITS AND AHU-2 TO ALLOW FOR UNINTERUPTED OPERATION OF SIMULATOR EQUIPMENT.
CHILLER SAFETIES:
THE FOLLOWING SAFETIES SHALL BE MONITORED THROUGH THE BAS:
1. CHILLER ALARM.
2. LOW CHILLER EVAPORATOR FLOW.

ALARMS SHALL BE PROVIDED TO THE BAS OPERATOR INTERFACE AS FOLLOWS:
1. CHILLER FAILURE: COMMANDED ON, BUT THE STATUS IS OFF.
2. CHILLER RUNNING IN HAND: COMMANDED OFF, BUT THE STATUS IS ON.
3. CHILLER ALARM.
4. NO FLOW SIGNAL (FS-CHW-01).
5. LOW EVAPORATOR TEMPERATURE
6. HIGH CONDENSER PRESSURE

CHILLED WATER SYSTEM - PRIMARY PUMP CONTROL:
THE CHILLED WATER PUMPS SHALL BE CONTROLLED VIA A VARIABLE-VOLUME PRIMARY PUMPING SCHEME. THE PUMPS SHALL RUN IN A LEAD/STANDBY CONFIGURATION.

WHEN THE CHILLED WATER SYSTEM IS ENABLED TO OPERATE, THE DESIGNATED CHILLED WATER PUMP SHALL IMMEDIATELY BE STARTED. WHEN THE CHILLED WATER SYSTEM IS DISABLED, THE PUMP SHALL BE STOPPED AFTER A SUITABLE TIME DELAY (INITIAL SETTING: 5 MINUTES, ADJUSTABLE, OR BASED ON A SIGNAL FROM THE CHILLER CONTROL PANEL).

WHEN A PUMP IS COMMANDED TO START IT SHALL BE ENERGIZED AT MINIMUM VFD SPEED THEN RAMP AS REQUIRED BY THE DIFFERENTIAL PRESSURE CONTROL SYSTEM. WHEN A PUMP IS COMMANDED TO STOP IT SHALL FIRST CONTINUE TO RUN FOR A SUITABLE TIME DELAY PERIOD (INITIAL SETTING: 5 MINUTES, ADJUSTABLE), THEN SHALL RAMP TO MINIMUM VFD SPEED THEN BE DEENERGIZED.

CHILLED WATER SYSTEM - VARIABLE PRIMARY SEQUENCE OF OPERATION CONTINUED

THE BAS SHALL HAVE THE CAPABILITY TO DESIGNATE ANY PUMP AS LEAD OR LAG AS DESIRED AND TO ROTATE THE SEQUENCE AUTOMATICALLY BASED ON THE FOLLOWINGS:
1. MANUALLY THROUGH A SOFTWARE SWITCH.
2. PUMP RUNTIME.
3. SCHEDULING, SUCH AS ROTATING THE SEQUENCE ONCE PER DAY, WEEK, MONTH, SEASON, ETC.

THE CONTROLLER SHALL MONITOR THE BUILDING DIFFERENTIAL PRESSURES AT REMOTE SENSORS (DP-03) AND VARY THE PUMP'S VFD SPEED TO MAINTAIN THE DIFFERENTIAL PRESSURE SETPOINT OF EACH SENSOR TO A MINIMUM OF 5 PSIG (ADJUSTABLE, FOR EACH SENSOR) (THE FINAL SET POINT TO BE DETERMINED DURING TEST AND BALANCE). ON A DROP IN DIFFERENTIAL PRESSURE, THE PUMP SPEED SHALL BE APPROPRIATELY INCREASED. ON A RISE IN SYSTEM DIFFERENTIAL PRESSURE, THE PUMP SPEED SHALL BE APPROPRIATELY DECREASED. THE PUMP VFD SHALL BE DECREASED TO THE MINIMUM AS INDICATED BY THE PUMP AND VFD MANUFACTURER.

IF THE PUMP FAILS FOR ANY REASON IT SHALL BE STOPPED. PUMP FAILURE SHALL BE DETERMINED BY AT LEAST ANY ONE OF THE FOLLOWING:
1. PUMP COMMANDED ON BUT STATUS IS OFF
2. LOSS OF SYSTEM FLOW (DETECTED AT FLOW SENSOR, FS-CHW-01).

ALARMS SHALL BE PROVIDED AS FOLLOWS:
1. CHILLED WATER PUMP FAILURE: COMMANDED ON, BUT THE STATUS IS OFF.
2. CHILLED WATER PUMP RUNNING IN HAND: COMMANDED OFF, BUT THE STATUS IS ON.
3. CHILLED WATER PUMP RUNTIME EXCEEDED: STATUS RUNTIME EXCEEDS A USER DEFINABLE LIMIT.

MINIMUM FLOW BYPASS:
FLOW SHALL BE MEASURED THROUGH THE CHILLERS AND AS THE CHILLED WATER FLOW DROPS BELOW SETPOINT, MINIMUM FLOW BYPASS VALVE (FCV-01) TO MODULATE OPEN TO MAINTAIN MINUMUM FLOW THROUGH CHILLERS.

ALARMS SHALL BE PROVIDED AS FOLLOWS
1. FLOW THROUGH CHILLER IS 25% (ADJ) LESS THAN SETPOINT

CHILLER STAGING
IF SINGLE CHILLER IS ACTIVATE AND THE FOLLOWING OCCURS
1. LEADER CHILLER IS 60% LOADED (PERCENTAGE BASED ON MOST EFFICIENT POINT ON CHILLER EFFICIENCY CURVE)

SECOND CHILLER SHALL BE ACTIVATED. LEAD CHILLER TO REMAIN LOADED AT 60% UNTIL SECOND CHILLER REACHES 60% LOAD, AT WHICH BOTH CHILLERS SHALL RUN AT BALANCED LOAD. ALL RUNNING CHILLERS TO BE LOADED AND UNLOADED AS NECESSARY TO MAINTAIN CHW TEMPERATURES.

BUILDING CHILLED WATER TEMPERATURE CONTROL:
THE BUILDING CHILLED WATER TEMPERATURE SETPOINT SHALL BE MAINTAINED BY THE CHILLER'S OWN INTERNAL CONTROLS.

THE FOLLOWING TEMPERATURES SHALL BE MONITORED:
1. CHILLED WATER SUPPLY (T-01).
2. CHILLED WATER RETURN (T-02).

ALARMS SHALL BE PROVIDED AS FOLLOWS:
1. BUILDING HIGH CHILLED WATER SUPPLY TEMP: IF GREATER THAN 42°F (ADJUSTABLE).
2. BUILDING LOW CHILLED WATER SUPPLY TEMP: IF LESS THAN 40°F (ADJUSTABLE).

CHILLER FREEZE PROTECTION:
WHEN THE OUTSIDE AIR TEMPERATURE IS BELOW 40°F (ADJUSTABLE), THE CHILLER'S CONTROLLER SHALL ENABLE THE EVAPORATOR BARREL FREEZE PROTECTION.

SHUTDOWN:
WHEN THE SYSTEM IS COMMANDED TO SHUT DOWN, THE EQUIPMENT SHALL BE ALIGNED AS FOLLOWS:
CHILLER - DISABLED, CHILLED WATER PUMPS - OFF, MINIMUM FLOW BYPASS - OPEN.

A1 CHILLED WATER SYSTEM - VARIABLE PRIMARY CONTROL DIAGRAM & SEQUENCE
SCALE = NTS

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
21NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201M-804

DESIGNED BY: B. SCHNEIDER
DRAWN BY: C. BROWN
CHECKED BY: M. WALLACE
SUBMITTED BY: E. OLMESS
ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street Fort Worth, TX 76102
Phone: 682-682-6600 | Fax: 682-682-6639

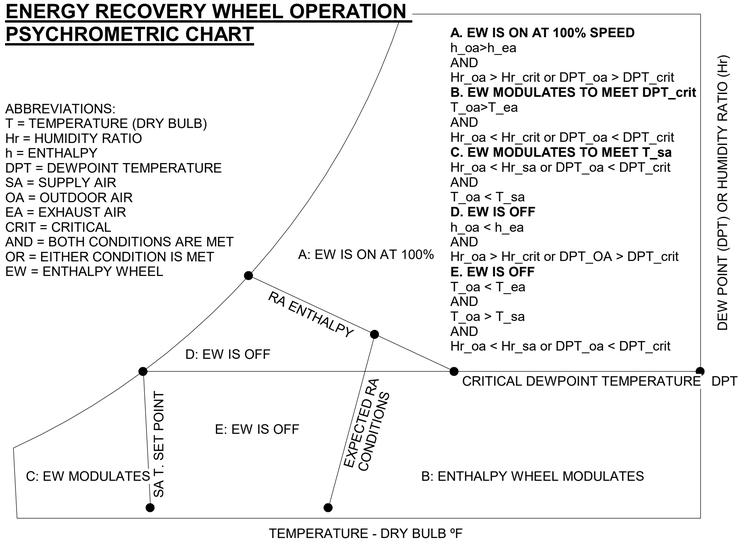
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
MECHANICAL CONTROLS

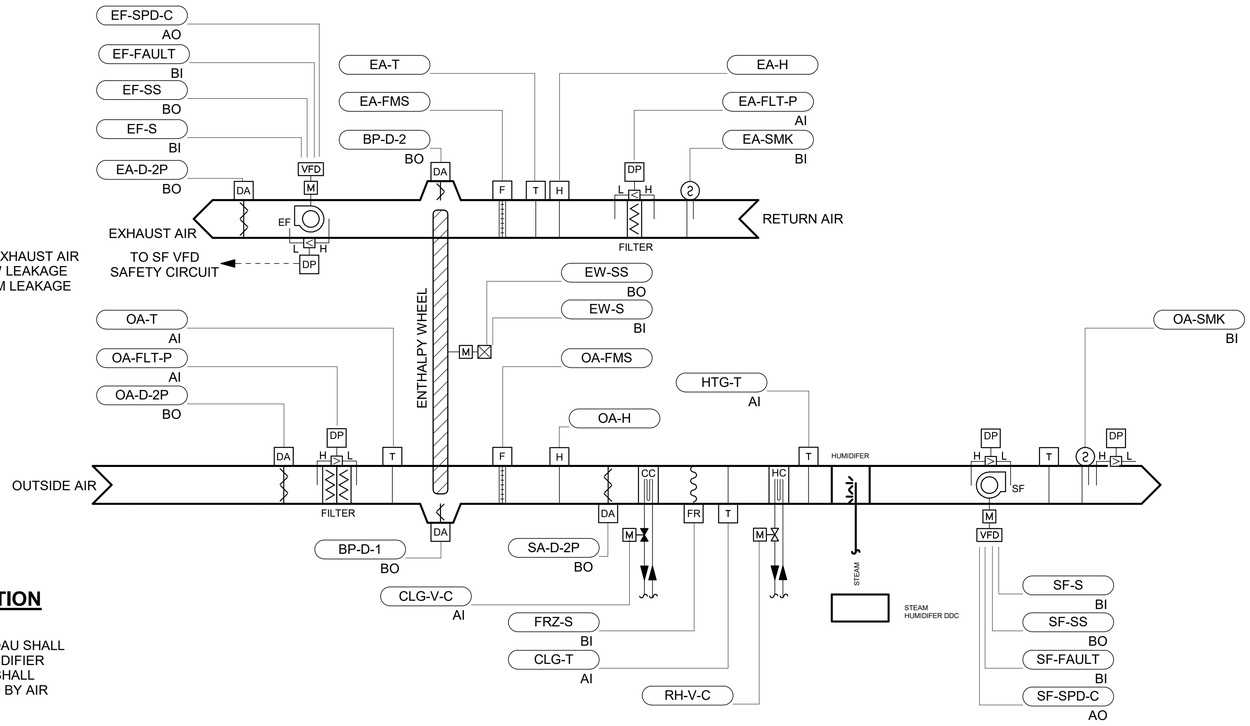
SHEET ID
B1455
M-804

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN

ENERGY RECOVERY WHEEL OPERATION PSYCHROMETRIC CHART





NOTE:
ALL OUTDOOR AIR AND EXHAUST AIR DAMPERS SHALL BE LOW LEAKAGE DAMPERS WITH MAXIMUM LEAKAGE OF 3 CFM/SF AT 1 IN W.C.

CHW/HW DEDICATED OUTDOOR UNIT (DOAS-1) W/ ENERGY RECOVERY SEQUENCE OF OPERATION

DEDICATED OUTSIDE AIR UNIT:
THE VENTILATION AIR SYSTEM SHALL BE A CONSTANT VOLUME SYSTEM TO PROVIDE BUILDING VENTILATION AND PRESSURIZATION. THE DOAU SHALL BE CONSTANT VOLUME TYPE WITH A SUPPLY FAN, EXHAUST FAN, ENTHALPY WHEEL, HOT WATER COIL, AND CHILLED WATER COIL AND HUMIDIFIER SECTION. TEMPERED VENTILATION AIR SHALL BE DISTRIBUTED TO EACH ROOM DIRECTLY. A CENTRAL DUCTWORK DISTRIBUTION SYSTEM SHALL TRANSPORT VENTILATION AIR AND EXHAUST AIR. HEATING AND COOLING IS SUPPORTED BY HEATED WATER AND CHILLED WATER SUPPLIED BY AIR COOLED CHILLERS AND HOT WATER BOILER.

RUN CONDITIONS:
EACH UNIT FAN SHALL RUN AS DEFINED BY THE BAS OPERATOR FOR OCCUPIED OR UNOCCUPIED HOURS CONSISTENT WITH THE BUILDING'S OPERATING SCHEDULE. THE SUPPLY AND EXHAUST FAN SHALL RUN ANYTIME THE UNIT IS COMMANDED TO RUN, UNLESS SHUTDOWN ON SAFETIES. TO PREVENT SHORT CYCLING, THE FANS SHALL HAVE A USER DEFINABLE MINIMUM RUNTIME OF 30 MINUTES (ADJUSTABLE). THE BAS SHALL ALLOW THE AIR HANDLING UNIT TO BE PROGRAMMED FOR START AND STOP BASED ON A USER DEFINABLE SCHEDULE UNIQUE TO EACH DAY OF THE WEEK (SUNDAY THROUGH SATURDAY PLUS HOLIDAYS). UPON RECEIVING A START COMMAND, THE MOTORIZED CONTROL DAMPERS AT THE INTAKE AND EXHAUST AIR LOUVERS SHALL OPEN AND THE STATUS SHALL BE CONFIRMED. IF DAMPER STATUS IS NOT CONFIRMED OPEN AFTER 1 MINUTE (ADJUSTABLE) AN ALARM SHALL BE GENERATED AT THE BAS.

ENERGY RECOVERY WHEEL:
THE CONTROLLER SHALL RUN THE ENTHALPY WHEEL FOR ENERGY RECOVERY AS FOLLOWS:

A. COOLING RECOVERY MODE (HOT HUMID DAYS):
THE ENTHALPY WHEEL SHALL RUN FOR FULL COOL RECOVERY WHENEVER:
1. THE OUTSIDE AIR ENTHALPY IS GREATER THAN THE EXHAUST AIR ENTHALPY (ADJUSTABLE).
2. AND THE OUTSIDE AIR DEWPOINT TEMPERATURE IS 55°F ADJUSTABLE; OR GREATER.
3. AND THE SUPPLY AND EXHAUST FANS ARE ON.

A2. PARTIAL COOL RECOVERY (HOT DRY DAYS):
THE ENTHALPY WHEEL SHALL RUN FOR PARTIAL COOL RECOVERY WHENEVER:
1. THE OUTSIDE AIR DEWPOINT IS LESS THAN 55°F (ADJUSTABLE).
2. AND THE OUTSIDE AIR TEMPERATURE IS GREATER THAN THE EXHAUST AIR TEMPERATURE.
3. AND THE SUPPLY AND EXHAUST FANS ARE ON.

THE CONTROLLER SHALL CALCULATE THE UNIT ENTHALPY WHEEL DISCHARGE SUPPLY AIR DEWPOINT TEMPERATURE FROM THE UNIT DISCHARGE TEMPERATURE AND HUMIDITY SENSORS, T-02 AND H-02, RESPECTIVELY AND VARY THE WHEEL EFFECTIVENESS BY MODULATING THE SUPPLY (OUTSIDE) AIR & RETURN (EXHAUST) AIR BYPASS DAMPERS AS REQUIRED TO MAINTAIN A MAXIMUM DISCHARGE AIR DEWPOINT TEMPERATURE OF 55°F (ADJUSTABLE). ON A RISE IN THE DISCHARGE AIR TEMPERATURE THE BYPASS DAMPERS ARE TO MODULATED CLOSED.

B. HEATING RECOVERY MODE (COLD DAYS):
1. THE ENTHALPY WHEEL SHALL RUN FOR PARTIAL HEAT RECOVERY WHENEVER:
a. THE OUTSIDE AIR DEWPOINT IS LESS THAN 55°F (ADJUSTABLE)
b. AND THE OUTSIDE AIR TEMPERATURE IS LESS THAN THE SUPPLY AIR TEMPERATURE SETPOINT (ADJUSTABLE).
c. AND THE SUPPLY AND EXHAUST FANS ARE ON.

THE CONTROLLER SHALL MONITOR THE UNIT ENTHALPY WHEEL DISCHARGE SUPPLY AIR DEW POINT AND DRY BULB TEMPERATURE FROM THE WHEEL DISCHARGE HUMIDITY SENSOR (H-02) AND TEMPERATURE SENSOR, (T-02). THE CONTROLLER SHALL VARY WHEEL EFFECTIVENESS BY MODULATING SUPPLY (OUTSIDE) AIR & RETURN (EXHAUST) AIR BYPASS DAMPERS AS REQUIRED TO MAINTAIN A MAXIMUM DISCHARGE AIR DEW POINT TEMPERATURE OF 55°F (ADJUSTABLE) & MAXIMUM DISCHARGE AIR TEMPERATURE OF 55°F (ADJUSTABLE). ON A RISE IN THE DISCHARGE AIR TEMPERATURE ABOVE THIS POINT THE BYPASS DAMPERS ARE TO MODULATE OPEN.

C. THE ENTHALPY WHEEL SHALL BE OFF (DISABLED) AND OA AND EA BYPASS DAMPERS SHALL OPEN WHENEVER:
1. THE OUTSIDE AIR DEWPOINT TEMPERATURE IS GREATER THAN 55°F (ADJUSTABLE; CALCULATED FROM THE OUTSIDE AIR WEATHER STATION)
2. AND THE OUTSIDE AIR ENTHALPY IS LESS THAN THE EXHAUST AIR ENTHALPY.

D. THE ENTHALPY WHEEL SHALL BE OFF (DISABLED) WHENEVER:
1. THE OUTSIDE DEWPOINT IS LESS THAN 55°F
2. AND THE OUTSIDE AIR TEMPERATURE IS GREATER THAN THE SUPPLY AIR TEMPERATURE (48° TO 60°F ADJUSTABLE).
3. AND THE OUTSIDE AIR TEMPERATURE IS LESS THAN THE EXHAUST AIR TEMPERATURE.

CHW/HW DOAS-1 W/ ENERGY RECOVERY SEQUENCE OF OPERATION CONTINUED

ENERGY RECOVERY WHEEL PERIODIC SELF-CLEANING:
THE ENTHALPY WHEEL SHALL RUN AND THE OA BYPASS SHALL OPEN AND THE EA BYPASS SHALL CLOSE FOR 60 SECONDS (ADJUSTABLE) EVERY 60 MINUTES (ADJUSTABLE) THE UNIT RUNS.

ENERGY RECOVERY WHEEL FROST PROTECTION:
THE OUTSIDE AIR BYPASS DAMPER (DA-02) SHALL OPEN AND THE EXHAUST AIR DAMPER SHALL CLOSE FOR 30 SECONDS (ADJUSTABLE) EVERY 600 SECONDS (ADJUSTABLE) WHENEVER:
1. OUTSIDE AIR TEMPERATURE DROPS BELOW 15°F (ADJUSTABLE).
2. OR WHENEVER EXHAUST AIR TEMPERATURE DROPS BELOW 20°F (ADJUSTABLE).
THE BYPASS DAMPERS SHALL OPEN WHENEVER THE ENTHALPY WHEEL IS DISABLED.

ENERGY RECOVERY WHEEL ALARMS SHALL BE PROVIDED AS FOLLOWS:
1. ENTHALPY WHEEL ROTATION FAILURE: COMMANDED ON, BUT THE STATUS IS OFF.
2. ENTHALPY WHEEL IN HAND: COMMANDED OFF, BUT THE STATUS IS ON.
3. ENTHALPY WHEEL RUNTIME EXCEEDED: STATUS RUNTIME EXCEEDS A USER DEFINABLE LIMIT (ADJUSTABLE).

CHILLED WATER COIL:
THE CHILLED WATER COIL SHALL OPERATE UNDER MANUFACTURER SUPPLIED SAFETIES AND CONTROLS TO MAINTAIN THE FOLLOWING CONDITIONS. IN DEHUMIDIFICATION COOLING MODE, IF THE OUTSIDE AIR DEWPOINT IS ABOVE 55ºF (ADJUSTABLE), THE CHILLED WATER COOLING COIL SHALL DEHUMIDFY SUPPLY AIR DOWN TO 55°F DEW POINT (ADJUSTABLE) BY MODULATING THE CHILLED WATER CONTROL VALVE. IN CHILLED WATER SENSIBLE COOLING ONLY OPERATION (ENTERING COIL TEMPERATURE IS GREATER THAN 60°F (ADJUSTABLE) AND ENTERING COIL DEWPOINT IS LESS THAN 55°F (ADJUSTABLE): THE COOLING COIL SHALL COOL THE AIR TO 60°F (ADJUSTABLE; T-04). AN ALARM SHALL BE PROVIDED FOR HIGH SUPPLY AIR IF THE SUPPLY AIR TEMPERATURE IS 5ºF (ADJUSTABLE) GREATER THAN THE COIL DISCHARGE SETPOINT.

HEATING WATER COIL:
HEATING MODE CONTROL SHALL BE ENABLED WHENEVER: HEAT RECOVERY SUPPLY AIR TEMPERATURE (T-02) IS LESS THAN 50°F (ADJUSTABLE); AND THE SUPPLY FAN STATUS IS ON; AND THE PREHEAT CONTROL VALVE IS CLOSED. THE BAS SHALL OPEN THE TWO-POSITION HEATING HOT WATER COIL CONTROL VALVE (TCV-01) AND MODULATE THE FACE-AND-BYPASS DAMPER (DA-07) TO MAINTAIN A HEATING COIL LEAVING AIR TEMPERATURE (T-03) SETPOINT OF 55ºF (ADJUSTABLE). THE HOT WATER COIL VALVE SHALL OPEN FULLY FOR FREEZE PROTECTION IF THE ENERGY RECOVERY SUPPLY AIR TEMPERATURE (T-02) DROPS BELOW 35ºF (ADJUSTABLE) OR THE FREEZE STAT IS ON. AN ALARM SHALL BE PROVIDED FOR LOW SUPPLY AIR IF THE COIL SUPPLY AIR TEMPERATURE IS 5°F (ADJUSTABLE) LESS THAN THE COIL DISCHARGE SETPOINT.

HUMIDIFICATION:
THE CONTROLLER SHALL MEASURE IN THE RETURN AIR STREAM AND MODULATE THE HUMIDIFIER TO MAINTAIN A SETPOINT OF 30% (ADJ) RELATIVE HUMIDITY. HUMIDIFIER TO BE DISABLED WHEN COOLING COIL IS ACTIVE.STEAM HUMIDIFER TO OPERATE UNDER ITS OWN MANUFACTURER SAFETIES.

REFER TO THE FOLLOWING PAGE FOR CONTINUATION OF THE SEQUENCE OF OPERATION.

A1 DOAS CONTROL DIAGRAM AND SEQUENCE
SCALE = NTS

US Army Corps of Engineers
Louisville District ®

BRANDEN M. SCHNEIDER
LICENSED PROFESSIONAL ENGINEER
129852
21NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201M-805

DESIGNED BY: B. SCHNEIDER
DRAWN BY: C. BROWN
CHECKED BY: M. WALLACE
SUBMITTED BY: E. OLNESS
STATUS: ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS Tel: 817.820.8100

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
MECHANICAL CONTROLS

SHEET ID
B1455
M-805

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN

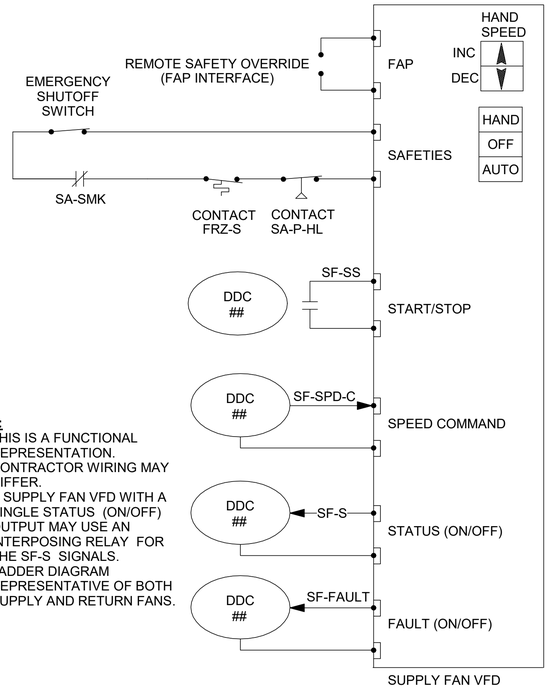
DOAS UNIT SEQUENCE OF OPERATION CONT.

OUTSIDE AIR MONITORING:
THE BAS SHALL MEASURE OUTSIDE AIR VOLUME THROUGH THE OUTSIDE AIR FLOW STATION (F-01) TO ENSURE ADEQUATE VENTILATION SUPPLY. ALARMS SHALL BE PROVIDED PER THE FOLLOWING:
1. HIGH OUTSIDE AIR: OUTSIDE AIR VOLUME IS 15% (ADJUSTABLE) GREATER THAN THE SETPOINT.
2. LOW OUTSIDE AIR: OUTSIDE AIR VOLUME IS 15% (ADJUSTABLE) LESS THAN THE SETPOINT.

FILTER DIFFERENTIAL PRESSURE MONITOR:
THE BAS SHALL MONITOR THE DIFFERENTIAL PRESSURE ACROSS THE FILTER BANK. ALARMS SHALL BE PROVIDED FOR FILTER CHANGE REQUIRED: FILTER DIFFERENTIAL PRESSURE EXCEEDS A USER DEFINABLE LIMIT (ADJUSTABLE).

UNIT SHUTDOWN:
THE UNIT SHALL SHUT DOWN AND GENERATE AN ALARM AT THE BAS IF ONE OF THE FOLLOWING CONDITIONS OCCURS:
1. SUPPLY AIR SMOKE DETECTION: SA DUCT DETECTORS SHALL BE HARD WIRED TO SHUT DOWN THE SUPPLY FAN. SA SMOKE ALARM UPON DETECTION OF SMOKE IN THE SUPPLY AIR DISCHARGE. THE SA SMOKE DETECTOR SHALL ALSO ADDRESS THE FIRE ALARM CONTROL PANEL, RE: FIRE PROTECTION.
2. EXHAUST AIR SMOKE DETECTION: EXHAUST FAN CONTINUES TO RUN. WHEEL STOPS. EXHAUST BYPASS DAMPER OPENS. SUPPLY AIR FAN STOPS.
3. SUPPLY FAN: SUPPLY FAN FAILURE ALARM PER THE FOLLOWING:
   a. SUPPLY FAN FAILURE: COMMANDED ON, BUT STATUS IS OFF.
   b. SUPPLY FAN IN HAND: COMMANDED OFF, BUT STATUS IS ON.
   c. SUPPLY FAN RUNTIME EXCEED:STATUS RUNTIME EXCEEDS DEFINED LIMIT.
4. EXHAUST FAN: SUPPLY FAN FAILURE ALARM PER THE FOLLOWING:
   a. EXHAUST FAN FAILURE: COMMANDED ON, BUT STATUS IS OFF.
   b. EXHAUST FAN IN HAND: COMMANDED OFF, BUT STATUS IS ON.
   c. EXHAUST FAN RUNTIME EXCEEDED: STATUS RUNTIME EXCEEDS DEFINED LIMIT.
5. AN EMERGENCY SHUTDOWN SIGNAL FROM A CENTRAL SWITCH (PER UFC 4-010-01) WHEN A CHEMICAL OR BIOLOGICAL THREAT IS IMMINENT.
6. UNIT SHUTDOWN SHALL ALIGN THE UNIT COMPONENTS TO THE FOLLOWING: SUPPLY AND EXHAUST FANS OFF ENTHALPY WHEEL OFF, ENTHALPY WHEEL BYPASS DAMPERS OPENED AND OUTSIDE AIR AND EXHAUST DAMPERS CLOSED. UPON SHUTDOWN ON ONE OF THE ABOVE FAULT CONDITIONS, THE BAS SHALL GENERATE AN ALARM AT THE USER INTERFACE.
7. COMMANDED OFF BY BAS.

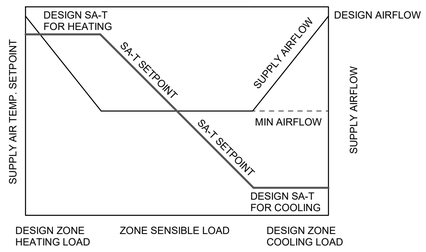
E1 DOAS UNIT SEQUENCE CONT.
SCALE = NTS



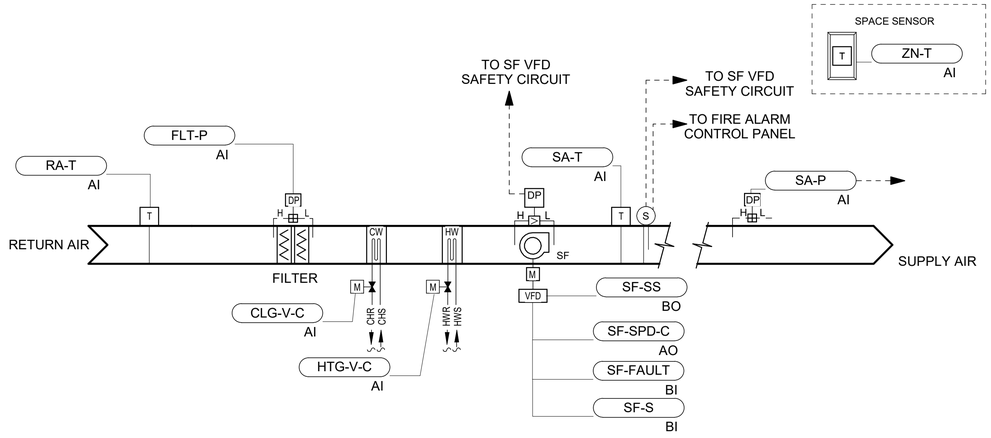
NOTES:
1. THIS IS A FUNCTIONAL REPRESENTATION. CONTRACTOR WIRING MAY DIFFER.
2. A SUPPLY FAN VFD WITH A SINGLE STATUS (ON/OFF) OUTPUT MAY USE AN INTERPOSING RELAY FOR THE SF-S SIGNALS.
3. LADDER DIAGRAM REPRESENTATIVE OF BOTH SUPPLY AND RETURN FANS.

A1 DOAS-1,2 LADDER DIAGRAM
SCALE = NTS

AHU-1 CONTROL ONLY



NOTES:
1. A COMMON DDC CONTROLLER (DDC ##) SHALL BE UTILIZED FOR ALL POINTS IDENTIFIED ON THIS DIAGRAM.
2. RE: M-813 FOR I/O POINTS LIST



AIR HANDLING UNIT CONTROL SEQUENCE

RUN CONDITIONS - SCHEDULED:
EACH UNIT FAN SHALL RUN AS DEFINED BY THE BAS OPERATOR FOR OCCUPIED OR UNOCCUPIED HOURS CONSISTENT WITH THE BUILDING'S OPERATING SCHEDULE. THE SUPPLY FAN SHALL RUN ANYTIME THE UNIT IS COMMANDED TO RUN, UNLESS SHUTDOWN ON SAFETIES. TO PREVENT SHORT CYCLING, THE SUPPLY FAN SHALL HAVE A USER DEFINABLE MINIMUM RUNTIME OF 30 MINUTES (ADJUSTABLE). THE BAS SHALL ALLOW THE UNIT TO BE PROGRAMMED FOR START AND STOP BASED ON A USER DEFINABLE SCHEDULE UNIQUE TO EACH DAY OF THE WEEK (SUNDAY THROUGH SATURDAY).

THE BAS SHALL ALSO MONITOR THE SYSTEM COMPONENTS AND AUTOMATICALLY START IF EITHER OF THE FOLLOWING OCCURS:
1. MORE THAN THREE (ADJUSTABLE) ZONES (VAV TERMINAL UNITS) ON THE AIR HANDLING UNIT SYSTEM CALL FOR COOLING;
2. MORE THAN THREE (ADJUSTABLE) ZONES (VAV TERMINAL UNITS) ON THE AIR HANDLING UNIT SYSTEM CALL FOR HEATING

OCCUPIED MODE MAY BE ACTIVATED THROUGH THE HVAC OVERRIDE PUSH BUTTON (RE: E1/M-809). WHEN THE HVAC OVERRIDE PUSH BUTTON IS ACTIVATED, THE ASSOCIATED AHU SHALL OPERATE IN OCCUPIED MODE FOR 2 HOURS (ADJUSTABLE). AFTERWARDS, THE UNIT SHALL RETURN TO NORMAL SCHEDULING.

UNIT START:
THE UNIT SHALL EMPLOY AN OPTIMAL START STRATEGY AND SHALL START PRIOR TO SCHEDULED OCCUPANCY BASED ON THE TIME NECESSARY FOR THE ZONES TO REACH THEIR OCCUPIED SETPOINTS. THE START TIME SHALL AUTOMATICALLY ADJUST BASED ON CHANGES IN OUTSIDE AIR TEMPERATURE AND ZONE TEMPERATURES. WHEN THE BAS CALLS FOR THE UNIT TO START, THE FOLLOWING SEQUENCES SHALL BE ACTIVATED:
1. SUPPLY FAN COMMANDED ON.
2. HOT WATER CONTROL VALVE (HTG-V-C) MODULATED AS REQUIRED TO MAINTAIN TEMPERATURE SETPOINTS.
3. CHILLED WATER CONTROL VALVE (CLG-V-C) MODULATED AS REQUIRED TO MAINTAIN TEMPERATURE SETPOINTS.

SUPPLY AIR TEMPERATURE SETPOINT CONTROL:
THE BAS SHALL MONITOR THE UNIT DISCHARGE AIR TEMPERATURE (SA-T) AND MAINTAIN A FIXED SUPPLY AIR TEMPERATURE SETPOINT OF 55°F (ADJUSTABLE).

SUPPLY AIR DUCT STATIC PRESSURE CONTROL:
THE BAS SHALL MEASURE SUPPLY DUCT STATIC PRESSURE AT A DUCT MOUNTED STATIC PRESSURE SENSOR (SA-P) AND MODULATE THE SUPPLY FAN VFD SPEED TO MINIMIZE THE DUCT STATIC PRESSURE SETPOINT NECESSARY TO MAINTAIN ONE VAV TERMINAL UNIT INLET CONTROL DAMPER AT THE FULL OPEN (MAXIMUM COOLING DEMAND) WITH A TIME-OUT FEATURE (CRITICAL ZONE RESET STRATEGY). THE BAS SHALL ALSO HAVE THE CAPABILITY OF MANUAL STATIC PRESSURE SETPOINT ADJUSTMENT AS A USER OVERRIDE FUNCTION. STATIC PRESSURE CONTROL ALARMS SHALL BE PROVIDED AS FOLLOWS:
1. HIGH SUPPLY AIR STATIC PRESSURE: IF THE SUPPLY AIR STATIC PRESSURE IS 25% (ADJUSTABLE) GREATER THAN THE SETPOINT.
2. LOW SUPPLY AIR STATIC PRESSURE: IF THE SUPPLY AIR STATIC PRESSURE IS 25% (ADJUSTABLE) LESS THAN THE SETPOINT.
3. SUPPLY FAN VFD SIGNAL FAULT.

SPACE TEMPERATURE CONTROL:
EACH UNIT SHALL OPERATE AS DEFINED BY THE BUILDING AUTOMATION SYSTEM (BAS) OPERATOR FOR OCCUPIED OR UNOCCUPIED HOURS CONSISTENT WITH THE BUILDING'S OPERATING SCHEDULE.

1. OCCUPIED MODE (AS DETERMINED BY BAS SCHEDULE OR OCCUPANCY/VACANCY SENSORS):
   A. THE UNITS SHALL MAINTAIN ZONE COOLING AND HEATING SETPOINTS AS DEFINED ON M-001.
2. UNOCCUPIED MODE (NIGHT SETBACK): THE UNIT SHALL MAINTAIN:
   A. 5°F (ADJUSTABLE) ABOVE THE ZONE'S COOLING SETPOINT.
   B. 5°F (ADJUSTABLE) BELOW THE ZONE'S HEATING SETPOINT.

WHEN THE ZONE TEMPERATURE IS GREATER THAN ITS COOLING SETPOINT:

STAGE 1 COOLING: THE COOLING COIL CONTROL VALVE SHOULD MODULATE TO MAINTAIN THE ZONE TEMPERATURE SETPOINT WHILE MAINTAINING THE AHU MINIMUM AIRFLOW. WHEN THE LEAVING AIR TEMPERATURE REACHES DESIGN COOLING SA-T SETPOINT (SCHEDULED), THE AIR HANDLING UNIT SHALL ENTER STAGE 2 COOLING.

STAGE 2 COOLING: THE SUPPLY FAN VFD SPEED SHALL MODULATE FROM MINIMUM SETTING TO MAXIMUM SETTING TO MAINTAIN THE ZONE TEMPERATURE SETPOINT. THE COOLING COIL SHALL CONTINUE TO MODULATE TO MAINTAIN DESIGN COOLING SA-T SETPOINT (SCHEDULED).

WHEN THE ZONE TEMPERATURE IS BETWEEN THE HEATING AND COOLING SETPOINTS (DEADBAND) THE COOLING COIL CONTROL VALVE AND HEATING COIL CONTROL VALVE SHALL REMAIN CLOSED AND THE FAN SHALL MAINTAIN MINIMUM AIRFLOW.

WHEN THE ZONE TEMPERATURE IS LESS THAN ITS HEATING SETPOINT:

STAGE 1 HEATING: THE HEATING COIL CONTROL VALVE SHOULD MODULATE TO MAINTAIN THE ZONE TEMPERATURE SETPOINT WHILE MAINTAINING THE AHU MINIMUM AIRFLOW. WHEN THE LEAVING AIR TEMPERATURE REACHES DESIGN HEATING SA-T SETPOINT (SCHEDULED), THE AIR HANDLING UNIT SHALL ENTER STAGE 2 HEATING.

STAGE 2 HEATING: THE SUPPLY FAN VFD SPEED SHALL MODULATE FROM MINIMUM SETTING TO MAXIMUM SETTING TO MAINTAIN THE ZONE TEMPERATURE SETPOINT. THE HEATING COIL SHALL CONTINUE TO MODULATE TO MAINTAIN DESIGN HEATING SA-T SETPOINT (SCHEDULED).

UNOCCUPIED MODE:

COOLING:
THE COOLING CONTROL MODE SHALL BE ENABLED WHENEVER:
1. THE SUPPLY FAN STATUS IS ON;
2. AND THE HEATING CONTROL VALVE IS CLOSED.
THE BAS SHALL MONITOR THE SUPPLY AIR TEMPERATURE (SA-T) AND MODULATE THE COOLING COIL VALVE (CLG-V-C) OPEN TO MAINTAIN THE DEFINED COOLING SETPOINT. THE COOLING COIL VALVE (CLG-V-C) SHALL OPEN TO 50% (ADJUSTABLE) WHENEVER THE FREEZESTAT IS ON. AN ALARM SHALL BE PROVIDED FOR HIGH SUPPLY AIR TEMPERATURE IF THE SUPPLY AIR TEMPERATURE IS 5°F (ADJUSTABLE) GREATER THAN THE DISCHARGE SETPOINT.

HEATING:
THE HEATING CONTROL MODE SHALL BE ENABLED WHENEVER:
1. THE SUPPLY FAN STATUS IS ON;
2. AND THE HEATING CONTROL VALVE IS OPEN.
THE BAS SHALL MONITOR THE SUPPLY AIR TEMPERATURE (SA-T) AND MODULATE THE HEATING COIL VALVE (HTG-V-C) OPEN TO MAINTAIN THE DEFINED HEATING SETPOINT. THE HOT WATER VALVE SHALL OPEN FULLY FOR FREEZE PROTECTION IF THE SUPPLY AIR TEMPERATURE (SA-T) DROPS BELOW 35°F (ADJUSTABLE) OR THE FREEZE STAT IS ON. AN ALARM SHALL BE PROVIDED FOR LOW SUPPLY AIR TEMPERATURE IF THE SUPPLY AIR TEMPERATURE IS 5°F (ADJUSTABLE) LOWER THAN THE DISCHARGE SETPOINT.

FILTER DIFFERENTIAL PRESSURE MONITOR:
THE BAS SHALL MONITOR THE DIFFERENTIAL PRESSURE ACROSS THE FILTER BANK. ALARM SHALL BE PROVIDED WHEN FILTER DIFFERENTIAL PRESSURE EXCEEDS SETPOINT DETERMINED BY THE FILTER MANUFACTURER (ADJUSTABLE).

UNIT SHUTDOWN:
THE UNIT SHALL SHUT DOWN IF ONE OF THE FOLLOWING CONDITIONS OCCURS:
1. FREEZESTAT: FREEZESTAT ACTIVATION WHEN COOLING COIL ENTERING AIR TEMPERATURE DROPS BELOW 35°F (ADJUSTABLE).
2. SUPPLY AIR SMOKE DETECTION: SA SMOKE ALARM UPON DETECTION OF SMOKE IN THE SUPPLY AIR DISCHARGE. THE SA SMOKE DETECTOR SHALL ALSO ADDRESS THE FIRE ALARM CONTROL PANEL, RE: FIRE PROTECTION.
3. SUPPLY FAN: SUPPLY FAN FAILURE ALARM PER THE FOLLOWING:
   a. SUPPLY FAN FAILURE: COMMANDED ON, BUT STATUS IS OFF.
   b. SUPPLY FAN IN HAND: COMMANDED OFF, BUT STATUS IS ON.
   c. VFD FAULT.

UNIT SHUTDOWN SHALL ALIGN THE UNIT COMPONENTS TO THE FOLLOWING (REFER TO CONTROL DIAGRAM FOR ABBREVIATIONS): SUPPLY FAN (SF) OFF, CHILLED WATER VALVE (CLG-V-C) CLOSED, AHU-2,3: HOT WATER VALVE (HTG-V-C) CLOSED. UPON SHUTDOWN ON ONE OF THE ABOVE FAULT CONDITIONS, THE BAS SHALL GENERATE AN ALARM AT THE USER INTERFACE.

A4 AIR HANDLING UNIT (AHU-1, AHU-2) CONTROL DIAGRAM & SEQUENCE
SCALE = NTS

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
LICENSED PROFESSIONAL ENGINEER
129852
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: 1 SXHT219201M-806

DESIGNED BY: B. SCHNEIDER
DRAWN BY: C. BROWN
CHECKED BY: M. WALLACE
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

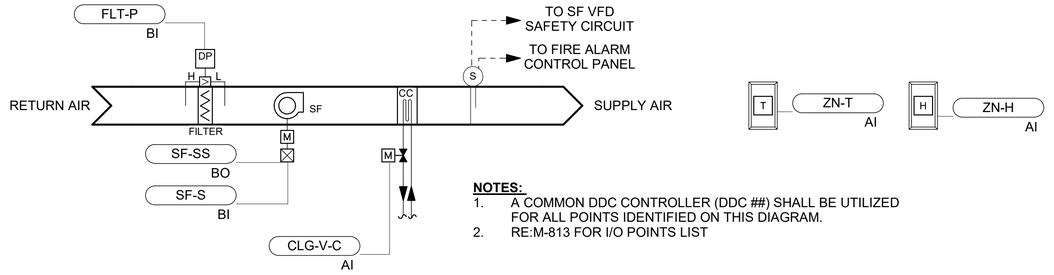
Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
ACCESS No. 1000001619

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
MECHANICAL CONTROLS

SHEET ID
B1455
M-806

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



NOTES:
1. A COMMON DDC CONTROLLER (DDC ##) SHALL BE UTILIZED FOR ALL POINTS IDENTIFIED ON THIS DIAGRAM.
2. RE:M-813 FOR I/O POINTS LIST

COMPUTER ROOM AIR CONDITIONER (CRAC) SEQUENCE OF OPERATION

RUN CONDITIONS - SCHEDULED:
CRAC UNITS ARE SET UP FOR REDUNDANCY: ONE UNIT RUNS, THE OTHER UNIT IS OFF ON STANDBY. THE LEAD COMPUTER ROOM AIR CONDITIONER UNIT SHALL RUN CONTINUOUSLY OR AS DEFINED BY THE BAS OPERATOR TO MAINTAIN USER DEFINED SETPOINT CONDITIONS. THE SUPPLY FAN SHALL RUN ANY TIME THE UNIT IS COMMANDED TO RUN. EACH CRAC UNIT SHALL RUN ACCORDING TO USER DEFINABLE SETPOINTS (ADJUSTABLE) INDICATED ON M-001.

BAS MONITOR:
THE CRAC UNITS SHALL BE MONITORED BY THE BAS.

ALARMS SHALL BE PROVIDED AS FOLLOWS:
1. HIGH ZONE TEMPERATURE: IF THE ZONE TEMPERATURE IS GREATER THAN THE COOLING SETPOINT BY 5°F (ADJUSTABLE).
2. HIGH ZONE HUMIDITY: IF THE ZONE RELATIVE HUMIDITY IS GREATER THAN THE HUMIDITY SETPOINT (60%, ADJUSTABLE).
3. HIGH FILTER STATIC: IF THE PRESSURE ACROSS THE FILTER EXCEEDS THE SET POINT.

COOLING COIL CONTROL:
THE COOLING CONTROL MODE SHALL BE ENABLED WHENEVER:
1. THE SUPPLY FAN STATUS IS ON

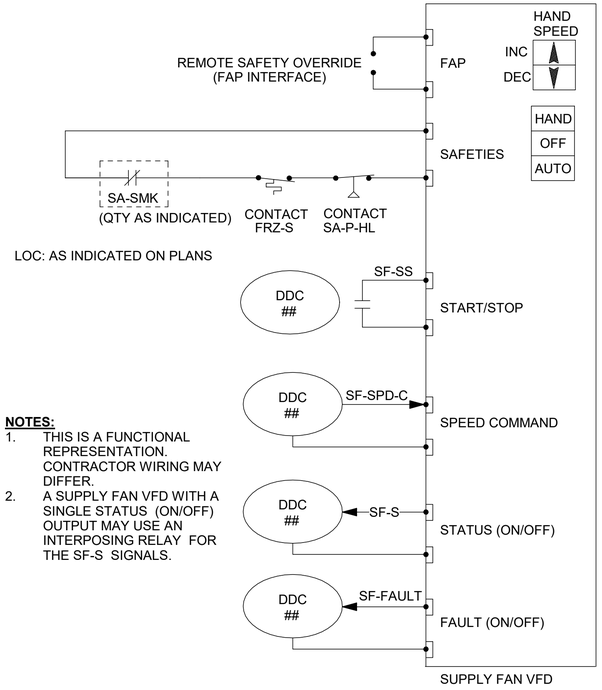
THE UNIT'S SELF-CONTAINED CONTROLS SHALL MONITOR THE ROOM TEMPERATURE (ZN-T) AND ON INCREASE IN ROOM TEMPERATURE, OPEN THE COOLING COIL CHILLED WATER VALVE (CLG-V-C) TO MAINTAIN THE DEFINED ROOM COOLING SETPOINT OF 72ºF (ADJUSTABLE).

UNIT SHUTDOWN:
THE UNIT SHALL SHUT DOWN AND GENERATE AN ALARM AT THE BAS IF ONE OF THE FOLLOWING CONDITIONS OCCURS:
1. SUPPLY AIR SMOKE DETECTION: SA SMOKE ALARM UPON DETECTION OF SMOKE IN THE SUPPLY AIR DISCHARGE. THE SA SMOKE DETECTOR SHALL ALSO ADDRESS THE FIRE ALARM CONTROL PANEL, RE: FIRE PROTECTION.
2. LOW TEMPERATURE IN SPACE (ZONE TEMPERATURE 5°F OR MORE BELOW TEMPERATURE SETPOINT).
3. SMOKE PURGE ACTIVATION (RE: A5/M-809)
4. COMMANDED OFF BY BAS (NO ALARM).

LEAD UNIT ROTATION:
THE UNITS SHALL SWITCH LEAD-TO-STANDBY ON A WEEKLY BASIS.

D5 COMPUTER ROOM AIR CONDITIONER (CRAC) UNIT CONTROL DIAGRAM & SEQUENCE

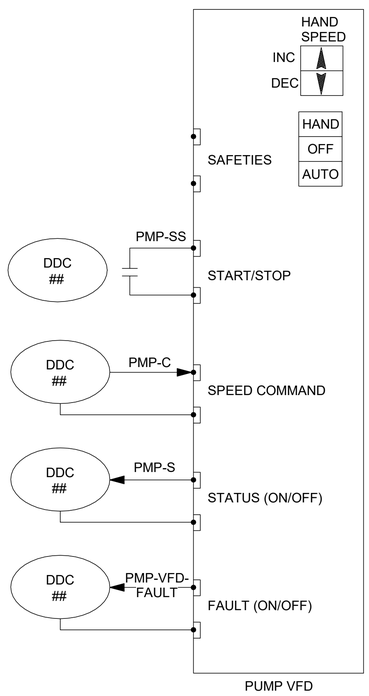
SCALE = NTS



NOTES:
1. THIS IS A FUNCTIONAL REPRESENTATION. CONTRACTOR WIRING MAY DIFFER.
2. A SUPPLY FAN VFD WITH A SINGLE STATUS (ON/OFF) OUTPUT MAY USE AN INTERPOSING RELAY FOR THE SF-S SIGNALS.

A1 AHU-1,2 LADDER DIAGRAM

SCALE = NTS



NOTES:
1. THIS IS A FUNCTIONAL REPRESENTATION. CONTRACTOR WIRING MAY DIFFER.

A5 CHW AND HW PUMP LADDER DIAGRAM

SCALE = NTS

US Army Corps of Engineers
Louisville District ®

BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: B. SCHNEIDER
DRAWN BY: C. BROWN
CHECKED BY: M. WALLACE
SUBMITTED BY: E. OLMESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201M-807

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

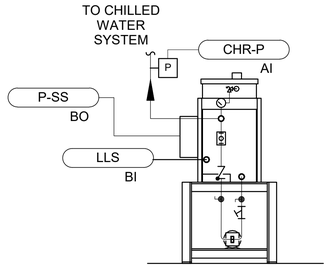
Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
TBPE Registration No. F-2966

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
MECHANICAL CONTROLS

SHEET ID
B1455
M-807

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



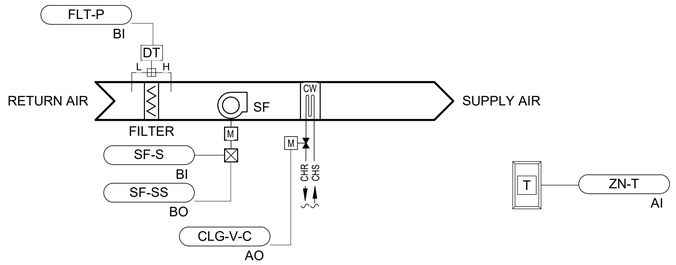
ALL MODES - THE UNIT MUST OPERATE ACCORDING TO ITS UNIT MOUNTED CONTROLLER THAT IS CONNECTED TO THE BAS. A LOW LEVEL SWITCH WILL BE PROVED AND GENERATE AN ALARM WHEN THE GLYCOL TANK LEVEL IS AT THE MINIMUM ALARM LEVEL SET BY THE MANUFACTURER.

PUMP MUST ACTIVATE WHEN PRESSURE SWITCH IN CHILLED WATER SYSTEM REGISTERS 32 PSIG (ADJUSTABLE). PUMP MUST OPERATE UNTIL PRESSURE IN CHILLED WATER SYSTEM REACHES 35 PSIG (ADJUSTABLE), AT WHICH POINT IT MUST SHUT DOWN.

NOTES:
1. A COMMON DDC CONTROLLER (DDC ##) MUST BE UTILIZED FOR ALL POINTS IDENTIFIED ON THIS DIAGRAM.

E1 GLYCOL FEEDER (GF-1) CONTROL DIAGRAM1

SCALE = NTS



NOTES:
1. A COMMON DDC CONTROLLER (DDC ##) SHALL BE UTILIZED FOR ALL POINTS IDENTIFIED ON THIS DIAGRAM.

FAN COIL UNIT CONTROL SEQUENCE

RUN CONDITIONS - SCHEDULED:
EACH FAN COIL UNIT WILL RUN CONTINUOUSLY OR AS COMMANDED BY THE BAS OPERATOR. THE SUPPLY FAN WILL RUN ANY TIME THE UNIT IS COMMANDED TO RUN. EACH FAN COIL UNIT SHALL RUN CONTINUOUSLY AND MAINTAIN THE SPACE TEMPERATURE SET POINTS INDICATED ON M-001.

ALARMS SHALL BE PROVIDED AS FOLLOWS:
1. HIGH ZONE TEMPERATURE: IF THE ZONE TEMPERATURE IS GREATER THAN THE COOLING SETPOINT BY 5ºF (ADJUSTABLE).
2. LOW ZONE TEMPERATURE: IF THE ZONE TEMPERATURE IS LESS THAN THE HEATING SETPOINT BY 5°F (ADJUSTABLE).
3. IF THE DIFFERENTIAL PRESSURE ACROSS THE FILTER BANK EXCEEDS SETPOINT (ADJUSTABLE). INITIAL PRESSURE SWITCH SETTING SHALL BE IN ACCORDANCE WITH FILTER MANUFACTURER RECOMMENDATION.

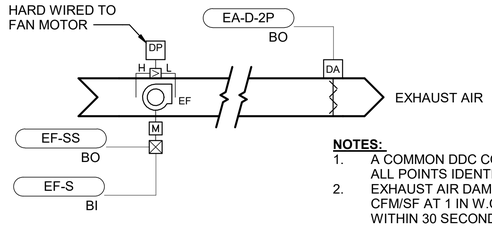
COOLING COIL CONTROL:
THE COOLING CONTROL MODE SHALL BE ENABLED WHENEVER:
1. THE SUPPLY FAN STATUS IS ON
2. THE HEATING COIL CONTROL VALVE IS CLOSED.

THE BAS WILL MONITOR THE ROOM TEMPERATURE AND ON INCREASE IN ROOM TEMPERATURE, OPEN THE COOLING COIL CHILLED WATER VALVE TO MAINTAIN THE DEFINED SETPOINT.

UNIT SHUTDOWN:
THE UNIT WILL SHUT DOWN IF COMMANDED BY THE BAS. UNIT SHUTDOWN SHALL ALIGN THE FOLLOWING COMPONENTS: SUPPLY FAN OFF, HEATING COIL CONTROL VALVE CLOSED, COOLING COIL CONTROL VALVE CLOSED.

A1 FAN COIL UNIT W/ CC CONTROL DIAGRAM & SEQUENCE

SCALE = NTS



NOTES:
1. A COMMON DDC CONTROLLER (DDC ##) SHALL BE UTILIZED FOR ALL POINTS IDENTIFIED ON THIS DIAGRAM.
2. EXHAUST AIR DAMPERS SHALL HAVE A MAXIMUM LEAKAGE OF 3 CFM/SF AT 1 IN W.C. AND ACTUATORS MUST CLOSE DAMPER WITHIN 30 SECONDS OF COMMAND TO CLOSE.

EXHAUST FAN (EF-1 THRU 6) SEQUENCE OF OPERATION

EXHAUST FAN:
EXHAUST FANS SERVE AS EMERGENCY SMOKE EXHAUST.

RUN CONDITIONS - CONTINUOUS:
EXHAUST FAN SHALL RUN WHEN MANUALLY ACTIVATED BY PANEL LOCATED NEXT TO FIRE ALARM PANEL.

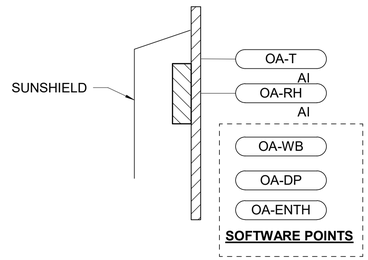
FAN:
THE FAN SHALL HAVE A USER DEFINABLE MINIMUM RUNTIME OF 30 MINUTES (ADJUSTABLE).

FAN STATUS:
THE BAS SHALL MONITOR THE FAN STATUS, AND PROVIDE AN ALARM TO THE USER INTERFACE PANEL FOR THE FOLLOWING:
1. FAN FAILURE: COMMANDED ON, BUT FAN STATUS IS OFF.
2. FAN IN HAND: COMMANDED OFF, BUT FAN STATUS IS ON.
3. FAN RUNTIME EXCEEDED: FAN STATUS RUNTIME EXCEEDS A USER DEFINABLE LIMIT (ADJUSTABLE).

UNIT SHUTDOWN:
THE UNIT SHALL SHUT DOWN IF ONE OF THE FOLLOWING CONDITIONS OCCURS. UNIT SHUTDOWN SHALL ALIGN THE UNIT COMPONENTS TO THE FOLLOWING: EXHAUST FAN OFF, DAMPER CLOSED. UPON SHUTDOWN ON ONE OF THE FOLLOWING FAULT CONDITIONS, THE BAS SHALL GENERATE AN ALARM AT THE USER INTERFACE.
1. EMERGENCY SHUTDOWN: AN EMERGENCY SHUTDOWN SIGNAL FROM A CENTRAL PUSH BUTTON SWITCH WHEN A CHEMICAL OR BIOLOGICAL THREAT IS IMMINENT (RE: A1/M-808).
2. FAN: FAN FAILURE ALARM PER THE FOLLOWING:
   a. EXHAUST FAN FAILURE: COMMANDED ON, BUT STATUS IS OFF.
   b. EXHAUST FAN IN HAND: COMMANDED OFF, BUT STATUS IS ON.

D5 EXHAUST FAN CONTROL DIAGRAM & SEQUENCE

SCALE = NTS



NOTES:
1. REFER TO M-814 FOR I/O POINTS LIST.
2. SOFTWARE POINTS MUST BE CALCULATED FROM OA-T & OA-RH.

OUTSIDE AIR WEATHER STATION SEQUENCE OF OPERATION

UNIT CONFIGURATION:
THE UNIT SHALL MONITOR THE OUTSIDE AIR WEATHER CONDITIONS. THE UNIT CONSISTS OF SUN SHADE AND SHALL BE MOUNTED ON BUILDING EXTERIOR WALL.

UNIT SHARED POINTS:
THE UNIT'S POINTS SHALL BE MADE AVAILABLE THROUGH THE BAS TO REQUIRED UNIT/SYSTEM. REFER TO EACH UNIT/SYSTEM SEQUENCE OF OPERATION FOR REQUIRED POINTS.

OUTSIDE AIR CONDITIONS:
THE CONTROLLER SHALL MONITOR THE OUTSIDE AIR DRY BULB AND RELATIVE HUMIDITY AND CALCULATE THE OUTSIDE AIR ENTHALPY, OUTSIDE AIR WETBULB TEMPERATURE, AND THE OUTSIDE DEWPOINT ON A CONTINUAL BASIS. THESE VALUES SHALL BE MADE AVAILABLE TO THE SYSTEM AT ALL TIMES.

ALARM SHALL BE GENERATED AS FOLLOWS:
SENSOR FAILURE: SENSOR READING INDICATES SHORTED OR DISCONNECTED SENSOR. IN THE EVENT OF A SENSOR FAILURE, AN ALTERNATE OUTSIDE AIR CONDITIONS SENSOR SHALL BE MADE AVAILABLE TO THE SYSTEM WITHOUT INTERRUPTION IN SENSOR READINGS.

OUTSIDE AIR TEMPERATURE HISTORY:
THE CONTROLLER SHALL MONITOR AND RECORD THE HIGH AND LOW TEMPERATURE AND HUMIDITY READINGS FOR THE OUTSIDE AIR ON A ONCE PER HOUR (DATA POINT ONLY) BASIS. THESE READINGS SHALL BE RECORDED ON A DAILY, MONTH-TO-DATE, AND YEAR-TO-DATE BASIS.

A5 OUTSIDE AIR WEATHER STATION CONTROL DIAGRAM & SEQUENCE

SCALE = NTS

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: B. SCHNEIDER
DRAWN BY: C. BROWN
CHECKED BY: M. WALLACE
SUBMITTED BY: E. OLNESS
QC BY:
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201M-808
ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

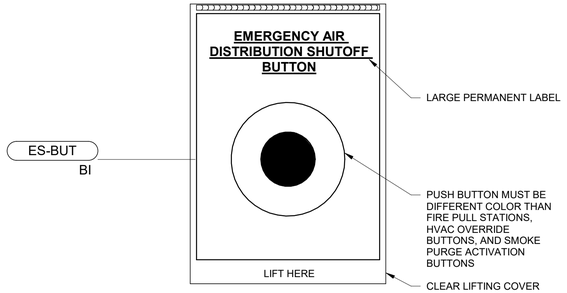
Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
Phone: 817.820.8000 Fax: 817.820.8010

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
MECHANICAL CONTROLS

SHEET ID
B1455
M-808

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



EMERGENCY AIR DISTRIBUTION SHUTOFF BUTTON CONTROL SEQUENCE

EMERGENCY AIR DISTRIBUTION SHUTOFF SHALL BE PROVIDED IN ACCORDANCE WITH UFC 4-010-01 SECTION 3-19.

BUTTON REQUIREMENTS:
EMERGENCY AIR DISTRIBUTION SHUTOFF PUSH BUTTONS MUST BE PROVIDED IN THE LOCATIONS INDICATED ON THE DRAWINGS. PUSH BUTTONS ARE LOCATED SUCH THAT THEY ARE EASILY ACCESSIBLE AND THE TRAVEL DISTANCE TO THE NEAREST SHUTOFF BUTTON DOES NOT EXCEED 200 FT FROM ANY OCCUPIED SPACE.

PROVIDE PUSH BUTTON TYPE SWITCH WITH CLEAR LIFTING COVER. MOUNT AT 48" ABOVE FINISHED FLOOR. ENSURE THAT SHUTOFF BUTTONS ARE WELL LABELED WITH A PERMANANT LABEL AND ARE OF A DIFFERENT COLOR THAN THE FIRE ALARM PULL STATIONS, HVAC OVERRIDE BUTTONS, AND SMOKE PURGE ACTIVATION BUTTONS.

EMERGENCY SHUTDOWN PUSH BUTTON MUST HAVE MEANS OF MANUAL RESET.

RUN CONDITIONS - NON-SCHEDULED:
OPERATION MODE: UPON ACTION OF THE EMERGENCY AIR DISTRIBUTION SHUTOFF BUTTON, AN ALARM SHALL BE SENT TO THE BUILDING AUTOMATION SYSTEM (BAS). THE ALARM SHALL SHUT DOWN ALL EQUIPMENT THAT INTRODUCES OUTSIDE AIR INTO THE SPACE (DEDICATED OUTSIDE AIR UNIT, RESTROOM/GENERAL EXHAUST FANS) AND CLOSE ALL OUTSIDE AIR INTAKE AND EXHAUST DAMPERS.

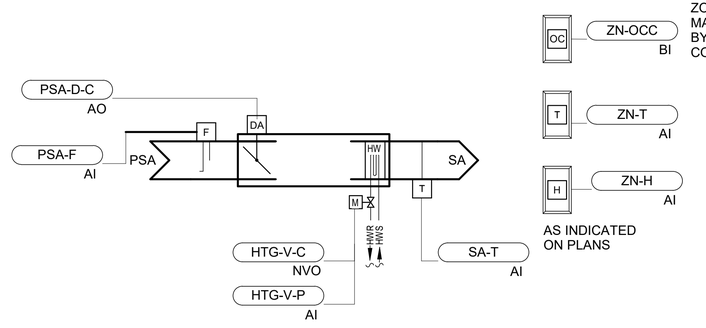
THE PUSH BUTTON MUST BE ABLE TO SHUT DOWN THE DEDICATED OUTSIDE AIR UNIT (DOAU-1) AND RESTROOM/GENERAL EXHAUST FANS (EF-1, EF-2) WHEN THEY ARE IN HAND MODE.

THE ASSOCIATED MOTORIZED DAMPERS SHALL BE LOW LEAKAGE DAMPERS WITH A MAXIMUM AIR LEAKAGE OF 3 CFM/SQFT AT 1" W.C. AND SHALL CLOSE WITHIN 30 SECONDS OF PUSH BUTTON ACTIVATION.

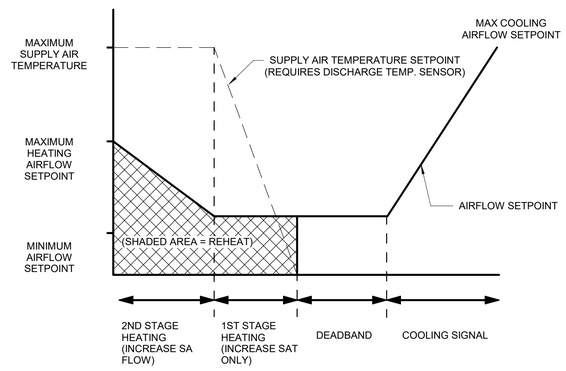
AIR DISTRIBUTION RESET
WHEN THE EMERGENCY CONDITION HAS BEEN CLEARED, AND THE MANUAL SWITCH HAS BEEN RESET, THE MECHANICAL EQUIPMENT MUST BE RETURNED TO NORMAL OPERATION.

A1 EMERGENCY AIR DISTRIBUTION SHUTOFF SEQUENCE OF OPERATION
SCALE = NTS

SPACE SENSORS



VAV BOX CONTROL: DUAL MAXIMUM



NOTES:
1. A COMMON DDC CONTROLLER (DDC ##) SHALL BE UTILIZED FOR ALL POINTS IDENTIFIED ON THIS DIAGRAM.
2. REFER TO M-811 FOR I/O POINTS LIST.

RUN CONDITIONS - SCHEDULED:
EACH UNIT SHALL OPERATE AS DEFINED BY THE BUILDING AUTOMATION SYSTEM (BAS) OPERATOR FOR OCCUPIED OR UNOCCUPIED HOURS CONSISTENT WITH THE BUILDING'S OPERATING SCHEDULE.

DURING SCHEDULED UNOCCUPIED PERIODS, OCCUPIED MODE MAY BE INITIATED BY ZONE OCCUPANCY/VACANCY SENSORS (ADJUSTABLE) IF A ZONE IS OCCUPIED FOR MORE THAN 15 MINUTES (ADJUSTABLE). THE UNIT SHALL RETURN TO UNOCCUPIED MODE AFTER 30 MINUTES (ADJUSTABLE) OF VACANCY.

1. OCCUPIED MODE (AS DETERMINED BY BAS SCHEDULE OR OCCUPANCY/VACANCY SENSORS):
   A. THE UNITS SHALL MAINTAIN ZONE COOLING AND HEATING SETPOINTS AS DEFINED ON M-001.
2. UNOCCUPIED MODE (NIGHT SETBACK): THE UNIT SHALL MAINTAIN:
   A. 5°F (ADJUSTABLE) ABOVE THE ZONE'S COOLING SETPOINT.
   B. 5°F (ADJUSTABLE) BELOW THE ZONE'S HEATING SETPOINT.

ZONE OPTIMAL START:
THE VAV TERMINAL UNIT SHALL USE AN OPTIMAL START ALGORITHM FOR MORNING START-UP. THIS ALGORITHM SHALL MINIMIZE THE UNOCCUPIED WARM-UP OR COOL-DOWN PERIOD WHILE STILL ACHIEVING COMFORT CONDITIONS BY THE START OF SCHEDULED OCCUPIED PERIOD.

SPACE TEMPERATURE CONTROL:
THE VAV TERMINAL UNITS SHALL MODULATE AIRFLOW FOR COMFORT COOLING AND HEATING TO MEET THE SCHEDULED OCCUPIED & UNOCCUPIED SET POINTS BY THE FOLLOWING:
1. WHEN THE ZONE TEMPERATURE IS GREATER THAN ITS COOLING SETPOINT, THE ZONE DAMPER SHALL MODULATE BETWEEN THE SCHEDULED MINIMUM AIRFLOW (ADJUSTABLE) AND SCHEDULED MAXIMUM AIRFLOW (ADJUSTABLE) UNTIL THE ZONE IS SATISFIED.
2. WHEN THE ZONE TEMPERATURE IS BETWEEN THE COOLING SETPOINT AND THE HEATING SETPOINT, THE DAMPER SHALL BE AT ITS MINIMUM POSITION.
3. WHEN THE ZONE TEMPERATURE IS LESS THAN ITS HEATING SETPOINT:
   3.1 AT THE 1ST STAGE OF HEATING, THE CONTROLLER SHALL MODULATE THE ZONE HEATING CONTROL VALVE TO MAINTAIN THE ZONE TEMPERATURE SETPOINT WHILE MAINTAINING THE ZONE MINIMUM AIRFLOW.
   3.2 AT THE 2ND STAGE OF HEATING, WHEN THE VAV BOX'S LEAVING AIR TEMPERATURE REACHES 15°F (ADJUSTABLE) ABOVE ROOM SETPOINT, THE CONTROLLER SHALL MODULATE THE ZONE DAMPER BETWEEN THE MINIMUM AIR FLOW AND THE HEATING AIRFLOW SETPOINTS WHILE MAINTAINING A CONSTANT LEAVING AIR TEMPERATURE OF 15°F ABOVE ROOM SETPOINT (ADJUSTABLE).

REHEAT COIL VALVE:
THE CONTROLLER SHALL MODULATE THE REHEAT COIL VALVE TO MAINTAIN TEMPERATURES AS DESCRIBED ABOVE.

DISCHARGE AIR TEMPERATURE:
THE BAS SHALL MONITOR THE DISCHARGE AIR TEMPERATURE FROM THE VAV CONTROLLER. ALARMS SHALL BE PROVIDED AS FOLLOWS:
1. HIGH DISCHARGE AIR TEMPERATURE: IF THE DISCHARGE AIR TEMPERATURE IS GREATER THAN 88°F (ADJUSTABLE).
2. LOW DISCHARGE AIR TEMPERATURE: IF THE DISCHARGE AIR TEMPERATURE IS LESS THAN 50°F (ADJUSTABLE).

ALARMS SHALL BE PROVIDED AS FOLLOWS:
1. HIGH ZONE TEMPERATURE: IF THE ZONE TEMPERATURE IS GREATER THAN THE COOLING SETPOINT BY 5°F (ADJUSTABLE).
2. LOW ZONE TEMPERATURE: IF THE ZONE TEMPERATURE IS LESS THAN THE HEATING SETPOINT BY 5°F (ADJUSTABLE).
3. HIGH ZONE CO2 LEVELS: 700 PPM (ADJUSTABLE) ABOVE SET POINT OF 500 PPM (ADJUSTABLE). THE BAS SHALL BE ALARMED WHENEVER THE CO2 LEVELS EXCEED ALARM SET POINT FOR MORE THAN 10 MINUTES (ADJUSTABLE).

ZONE THERMOSTATS WITH OVERRIDE SWITCH:
THERMOSTATS SHALL BE PROVIDED WITH MOMENTARY OVERRIDE SWITCH MOUNTED INTEGRAL TO THE ROOM ZONE TEMPERATURE SENSORS TO PERMIT NON STANDARD SCHEDULE OPERATION DURING UNNOCUPIED MODES.

A4 TERMINAL UNIT - VAV W/ HYDRONIC REHEAT CONTROL DIAGRAM & SEQUENCE
SCALE = NTS

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
21NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201M-809

DESIGNED BY: B. SCHNEIDER
DRAWN BY: C. BROWN
CHECKED BY: M. WALLACE
SUBMITTED BY: E. OLMESS
CITE: ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

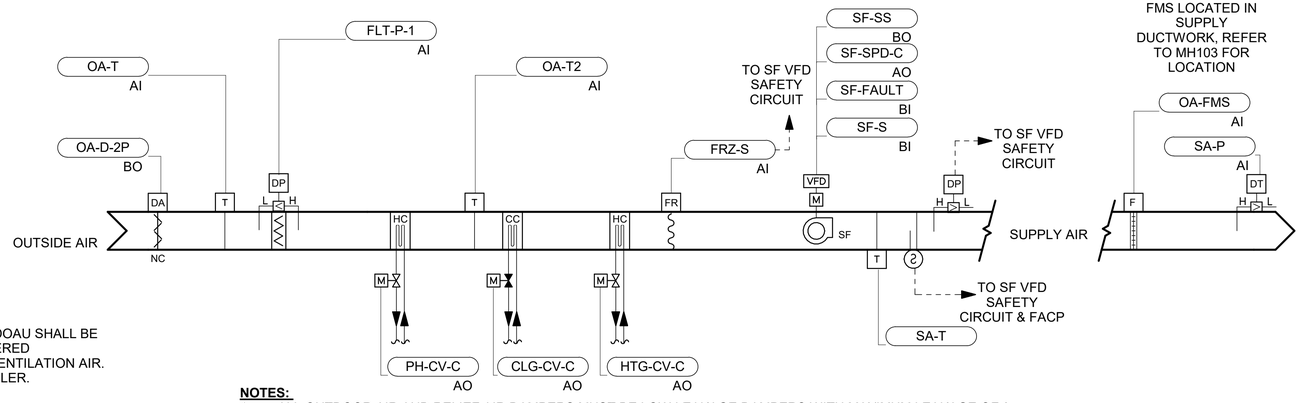
Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
Texas Registration No. F-2966

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
MECHANICAL CONTROLS

SHEET ID
B1455
M-809

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



CHW/HW DEDICATED OUTDOOR UNIT (DOAS-2) SEQUENCE OF OPERATION

DEDICATED OUTSIDE AIR UNIT:
THE VENTILATION AIR SYSTEM SHALL BE A CONSTANT VOLUME SYSTEM TO PROVIDE BUILDING VENTILATION AND PRESSURIZATION. THE DOAU SHALL BE CONSTANT VOLUME TYPE WITH A SUPPLY FAN, HOT WATER COIL, PRE-HEAT HOT WATER COIL AND CHILLED WATER COIL SECTION. TEMPERED VENTILATION AIR SHALL BE DISTRIBUTED TO EACH ROOM DIRECTLY. A CENTRAL DUCTWORK DISTRIBUTION SYSTEM SHALL TRANSPORT VENTILATION AIR. HEATING AND COOLING IS SUPPORTED BY HEATED WATER AND CHILLED WATER SUPPLIED BY AIR COOLED CHILLERS AND HOT WATER BOILER.

UNIT START:
THE UNIT MUST EMPLOY A NIGHT SETBACK AND OPTIMAL START STRATEGY AND MUST START PRIOR TO SCHEDULED OCCUPANCY BASED ON THE TIME NECESSARY FOR THE ZONES TO REACH THEIR OCCUPIED SETPOINTS. THE START TIME MUST AUTOMATICALLY ADJUST BASED ON CHANGES IN OUTSIDE AIR TEMPERATURE AND ZONE TEMPERATURES. WHEN THE BAS CALLS FOR THE UNIT TO START, THE FOLLOWING SEQUENCES MUST BE ACTIVATED:
1. SUPPLY FAN COMMANDED ON.
2. OUTSIDE AIR DAMPER (OA-D) OPEN TO MINIMUM POSITION.

SUPPLY AIR TEMPERATURE SETPOINT CONTROL:
THE BAS MUST MONITOR THE UNIT DISCHARGE AIR TEMPERATURE (SA-T) AND MAINTAIN A FIXED SUPPLY AIR TEMPERATURE SETPOINT OF 73°F DURING COOLING SEASON AND 68°F DURING WINTER (ADJUSTABLE). COOLING COIL LEAVING AIR TEMPERATURE TO BE RESET TO 73°F WHEN DEW POINT OF OUTDOOR AIR IS AT OR BELOW 57.9 °F.

CHILLED WATER COIL:
THE CHILLED WATER COIL MUST OPERATE UNDER MANUFACTURER SUPPLIED SAFETIES AND CONTROLS TO MAINTAIN THE FOLLOWING CONDITIONS. IN DEHUMIDIFICATION COOLING MODE, IF THE OUTSIDE AIR DEWPOINT IS ABOVE 55ºF (ADJUSTABLE), THE CHILLED WATER COOLING COIL MUST DEHUMIDFY SUPPLY AIR DOWN TO 55°F DEW POINT (ADJUSTABLE) BY MODULATING THE CHILLED WATER CONTROL VALVE. IF OUTSIDE AIR DEWPOINT IS BELOW 57.9° F, COOLING COIL TEMPERATURE TO RESET TO 73°F. IN CHILLED WATER SENSIBLE COOLING ONLY OPERATION (ENTERING COIL TEMPERATURE IS GREATER THAN 60°F (ADJUSTABLE) AND ENTERING COIL DEWPOINT IS LESS THAN 55°F (ADJUSTABLE): THE COOLING COIL MUST COOL THE AIR TO 60°F (ADJUSTABLE; SA-T). AN ALARM MUST BE PROVIDED FOR HIGH SUPPLY AIR IF THE SUPPLY AIR TEMPERATURE IS 5ºF (ADJUSTABLE) GREATER THAN THE COIL DISCHARGE SETPOINT.

PRE-HEAT WATER COIL:
HEATING MODE CONTROL MUST BE ENABLED WHENEVER: OUTSIDE AIR TEMPERATURE (OA-T) IS LESS THAN 50°F (ADJUSTABLE); AND THE SUPPLY FAN STATUS IS ON. THE BAS MUST OPEN THE HEATING HOT WATER COIL CONTROL VALVE (HTG-CV-C) AND MODULATE THE VALVE TO MAINTAIN A SUPPLY AIR TEMPERATURE (OA-T2) SETPOINT OF 55ºF (ADJUSTABLE). THE HOT WATER COIL VALVE MUST OPEN FULLY FOR FREEZE PROTECTION IF THE OUTSIDE AIR TEMPERATURE (OA-T) DROPS BELOW 40ºF (ADJUSTABLE) OR THE FREEZE STAT IS ON. AN ALARM MUST BE PROVIDED FOR LOW SUPPLY AIR IF THE COIL SUPPLY AIR TEMPERATURE IS 5°F (ADJUSTABLE) LESS THAN THE COIL DISCHARGE SETPOINT.

HEATING WATER COIL:
HEATING MODE CONTROL MUST BE ENABLED WHENEVER: SUPPLY AIR TEMPERATURE (SA-T) IS LESS THAN 68°F (ADJUSTABLE); AND THE SUPPLY FAN STATUS IS ON. HEATING WATER COIL TO BE DE-ENERGIZED WHEN DEW POINT OF OUTDOOR AIR IS AT OR BELOW 57.9°F. THE BAS MUST OPEN THE HEATING HOT WATER COIL CONTROL VALVE (HTG-CV-C) AND MODULATE THE VALVE TO MAINTAIN A SUPPLY AIR TEMPERATURE (SA-T) SETPOINT OF 70ºF (ADJUSTABLE). THE HOT WATER COIL VALVE MUST OPEN FULLY FOR FREEZE PROTECTION IF THE OUTSIDE AIR TEMPERATURE (OA-T) DROPS BELOW 40ºF (ADJUSTABLE) OR THE FREEZE STAT IS ON. AN ALARM MUST BE PROVIDED FOR LOW SUPPLY AIR IF THE COIL SUPPLY AIR TEMPERATURE IS 5°F (ADJUSTABLE) LESS THAN THE COIL DISCHARGE SETPOINT.

OUTSIDE AIRFLOW:
THE BAS SHALL MONITOR THE OUTSIDE AIR VOLUME THROUGH THE AIRFLOW MEASURING STATION (OA-FMS) TO ENSURE ADEQUATE VENTILATION SUPPLY AIRFLOW. ALARMS SHALL BE PROVIDED PER THE FOLLOWING:
1. HIGH OUTSIDE AIRFLOW: OUTISDE AIR VOLUME IS 15% (ADJUSTABLE) GREATER THAN THE MAXIMUM DESIGN AIR FLOW SETPOINT.
2. LOW OUTSIDE AIRFLOW: OUTSIDE AIR VOLUME IS 15% (ADJUSTABLE) LESS THAN THE MINIMUM DESIGN AIRFLOW SETPOINT.

FILTER DIFFERENTIAL PRESSURE MONITOR:
THE BAS MUST MONITOR THE DIFFERENTIAL PRESSURE ACROSS THE FILTER BANK. ALARM MUST BE PROVIDED WHEN FILTER DIFFERENTIAL PRESSURE EXCEEDS SETPOINT (ADJUSTABLE).

NOTES:
1. ALL OUTDOOR AIR AND RELIEF AIR DAMPERS MUST BE LOW LEAKAGE DAMPERS WITH MAXIMUM LEAKAGE OF 3 CFM/SF AT 1 IN W.C.
2. REFER TO M-812 FOR I/O POINTS LIST.
3. CONNECT SF VFD BACNET COMMUNICATION INTERFACE TO BAS NETWORK. PROVIDE VFD MONITORING POINTS INDICATED IN THE POINTS LIST TO THE BAS THROUGH THE COMMUNICATION INTERFACE.

UNIT SHUTDOWN:
THE UNIT MUST SHUT DOWN IF ONE OF THE FOLLOWING CONDITIONS OCCURS:
1. FREEZESTAT: FREEZESTAT ACTIVATION WHEN COOLING COIL ENTERING AIR TEMPERATURE DROPS BELOW 40°F (ADJUSTABLE).
2. SUPPLY AIR SMOKE DETECTION: SA SMOKE ALARM UPON DETECTION OF SMOKE IN THE AIR DISCHARGE. THE SA SMOKE DETECTOR MUST ALSO ADDRESS THE FIRE ALARM CONTROL PANEL, RE: FIRE PROTECTION.
3. AT/FP EMERGENCY SHUTDOWN: AN EMERGENCY SHUTDOWN SIGNAL FROM A CENTRAL PUSH BUTTON SWITCH WHEN A CHEMICAL OR BIOLOGICAL THREAT IS IMMINENT.
4. SUPPLY FAN: SUPPLY FAN FAILURE ALARM PER THE FOLLOWING:
   a. SUPPLY FAN FAILURE: COMMANDED ON, BUT STATUS IS OFF.
   b. SUPPLY FAN IN HAND: COMMANDED OFF, BUT STATUS IS ON.
   c. VFD FAULT.

UNIT SHUTDOWN MUST ALIGN THE UNIT COMPONENTS TO THE FOLLOWING (REFER TO CONTROL DIAGRAM FOR ABBREVIATIONS): SUPPLY FAN (SF) OFF, CHILLED COIL DEENERGIZED, PREHEAT COIL DEENERGIZED, AND OUTSIDE AIR DAMPER (OA-D) CLOSED. UPON SHUTDOWN ON ONE OF THE ABOVE FAULT CONDITIONS, THE BAS MUST GENERATE AN ALARM AT THE USER INTERFACE.

A1 DOAS-2 CONTROL DIAGRAM & SEQUENCE
SCALE = NTS

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: B. SCHNEIDER
DRAWN BY: C. BROWN
CHECKED BY: M. WALLACE
SUBMITTED BY: E. OLNESS
QC BY: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201M-810

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS Project #D2021219

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
MECHANICAL CONTROLS

SHEET ID
B1455
M-810

W912QR23R0003_Plans-0000

HEATING WATER SYSTEM
NODE: <DDC##>
NODE LOCATION: <___>
NODE ADDRESS DOMAIN = <___>, SUBNET = <___>, NODE = <___>
NODE ID: <___>

FUNCTION	POINT ID	DESCRIPTION	DDC HARDWARE ID	SETTING (WITH UNITS)	RANGE (WITH UNITS)	IO TYPE	HOA REQ'D	CONFIG. TYPE	M&C VIEW AND OVRD	LDP VIEW AND OVRD	TREND REQ'D	ALARMING			PRIMARY POINT INFORMATION		OVERRIDES		CONFIGURATION INFORMATION
												ALARM CONDITION (SEE NOTES)	ALARM PRIORITY	M&C ROUTING	SNVT NAME	SNVT TYPE	SNVT NAME	SNVT TYPE	
PROOFS & SAFETIES	BLR-S	B-1 BOILER STATUS	<___>	~	ON/OFF	NVI	~	~	V	V	Y	RUNTIME <30 MINUTES (ADJUSTABLE)	INFO	<___>	<___>	<___>	<___>	<___>	<___>
	BLR-DP	B-1 DIFF. PRESSURE SENSOR	<___>	~	<0-20> FT W.C.	AI	~	~	V	V	Y	PD > 10 FT W.C.	INFO	<___>	<___>	<___>	<___>	<___>	<___>
	BLR-ALM	B-1 BOILER MANUF. CONTROLS ALARM	<___>	~	ALM/NORMAL	NVI	~	~	V	V	~	ALM	INFO	<___>	<___>	<___>	<___>	<___>	<___>
	HWP1-S	HWP-1 STATUS	<___>	~	ON/OFF	BI	~	~	V	V	Y	RE: A1/M-803	INFO	<___>	<___>	<___>	<___>	<___>	<___>
	HWP1-FAULT	HWP-1 FAULT	<___>	~	ALM/NORMAL	BI	~	~	V	V	Y	ALM	INFO	<___>	<___>	<___>	<___>	<___>	<___>
	HWP2-S	HWP-2 STATUS	<___>	~	ON/OFF	BI	~	~	V	V	Y	RE: A1/M-803	INFO	<___>	<___>	<___>	<___>	<___>	<___>
	HWP2-FAULT	HWP-2 FAULT	<___>	~	ALM/NORMAL	BI	~	~	V	V	Y	ALM	INFO	<___>	<___>	<___>	<___>	<___>	<___>
	HW-BP-C	MIN. FLOW BYPASS VALVE COMMAND	<___>	~	0-100%	AO	~	~	VO	V	Y	~	~	~	<___>	<___>	<___>	<___>	<___>
	HW-BP-S	MIN. FLOW BYPASS VALVE STATUS	<___>	~	0-100%	AI	~	~	V	V	~	MISMATCH COMMAND VS POSITION	CRIT	<___>	<___>	<___>	<___>	<___>	<___>
	HWS-FS	B-1 FLOW SWITCH	<___>	BY MANUFACTURER	ALM/NORMAL	NVI	~	H	V	V	Y	FLOW < MIN. FLOW	CRIT	<___>	<___>	<___>	<___>	<___>	<___>
	SD-HS	BOILER SHUTDOWN SWITCH (RE: PLANS)	<___>	~	ALM/NORMAL	BI	~	~	V	V	Y	ALM	INFO	<___>	<___>	<___>	<___>	<___>	<___>
START/STOP	HWP1-SS	HWP-1 START/STOP	<___>	~	ON/OFF	BO	~	~	VO	V	Y	~	~	~	<___>	<___>	<___>	<___>	<___>
	HWP2-SS	HWP-2 START/STOP	<___>	~	ON/OFF	BO	~	~	VO	V	Y	~	~	~	<___>	<___>	<___>	<___>	<___>
	BLR-ENA	B-1 BOILER ENABLE	<___>	~	ON/OFF	NVO	~	~	VO	V	Y	~	~	~	<___>	<___>	<___>	<___>	<___>
HW TEMPERATURE CONTROL	HWR-T	HW RETURN TEMPERATURE	<___>	~	<35-150>°F	NVI	~	~	V	V	Y	RE: A1/M-803	INFO	<___>	<___>	<___>	<___>	<___>	<___>
	HWS-T	HW SUPPLY TEMPERATURE	<___>	~	<35-150>°F	NVI	~	~	V	V	Y	RE: A1/M-803	INFO	<___>	<___>	<___>	<___>	<___>	<___>
PUMP CONTROL	HWP1-SPD-C	HWP-1 SPEED COMMAND	<___>	~	0-100%	AO	Y	~	VO	V	Y	~	~	~	<___>	<___>	<___>	<___>	<___>
	HWP2-SPD-C	HWP-2 SPEED COMMAND	<___>	~	0-100%	AO	Y	~	VO	V	Y	~	~	~	<___>	<___>	<___>	<___>	<___>
	HW-SYS-DP1	SYS. DIFF. PRESSURE SENSOR	<___>	~	<0-20> FT W.C.	AI	~	~	V	V	Y	~	~	~	<___>	<___>	<___>	<___>	<___>
	HW-SYS-DP2	SYS. DIFF. PRESSURE SENSOR	<___>	~	<0-20> FT W.C.	AI	~	~	V	V	Y	~	~	~	<___>	<___>	<___>	<___>	<___>
OTHER POINTS	BLR-DL	B-1 BOILER MANUF. CONTROLS LINK	<___>	~	~	NVI	~	~	V	~	~	~	~	~	<___>	<___>	<___>	<___>	<___>
	HWS-P	HOT WATER SUPPLY PRESSURE	<___>	~	<12-85> PSIG	AI	~	~	V	V	Y	PRESSURE > 80 PSIG (ADJ.)	INFO	<___>	<___>	<___>	<___>	<___>	<___>
	HWR-F	HOT WATER RETURN FLOW METER	<___>	~	<0-50> GPM	AI	~	~	V	V	Y	~	~	~	<___>	<___>	<___>	<___>	<___>
	HW-MU-F	MAKEUP WATER FLOW METER	<___>	~	<___> GAL	AI	~	~	V	V	Y	> 5% SYSTEM VOLUME MADE UP	INFO	<___>	<___>	<___>	<___>	<___>	<___>

NOTES:
1. THE CONTRACTOR SHALL COMPLETE THE POINTS SCHEDULE AS INDICATED IN THE SPECIFICATION AND IN ACCORDANCE WITH THE POINTS SCHEDULE INSTRUCTIONS DRAWING.
2. UNIT MANUFACTURERS PROOFS AND SAFETIES: THE CONTRACTOR SHALL SHOW EACH PROOF AND SAFETY AS A SEPARATE ROW.
3. UNIT STATUS: SERVES AS A MONITORED POINT AT THE M&C SOFTWARE (FRONT-END) AND AS A HEATING/COOLING REQUEST TO THE BOILER, HEAT EXCHANGER, AND/OR CHILLER SERVING THIS SYSTEM (IF APPLICABLE)
4. DDC HW IF FOR DEVICE CONTAINING SIMPLE SCHEDULER OBJECT (OR SYSTEM SCHEDULER SEQUENCE OF OPERATIONS) FOR THIS SYSTEM: <___>

VAV WITH HYDRONIC REHEAT
NODE: <DDC##>
NODE LOCATION: <___>
NODE ADDRESS DOMAIN = <___>, SUBNET = <___>, NODE = <___>
NODE ID: <___>

FUNCTION	POINT ID	DESCRIPTION	DDC HARDWARE ID	SETTING (WITH UNITS)	RANGE (WITH UNITS)	IO TYPE	HOA REQ'D	CONFIG. TYPE	M&C VIEW AND OVRD	LDP VIEW AND OVRD	TREND REQ'D	ALARMING			PRIMARY POINT INFORMATION		OVERRIDES		CONFIGURATION INFORMATION
												ALARM CONDITION (SEE NOTES)	ALARM PRIORITY	M&C ROUTING	SNVT NAME	SNVT TYPE	SNVT NAME	SNVT TYPE	
PROOFS & SAFETIES	ZN-CD-S	SPACE CARBON DIOXIDE SENSOR	<___>	~	ALM/NORMAL	BI	~	~	V	V	Y	CO2 > 1200 PPM FOR 10 MINUTES	CRIT	<___>	<___>	<___>	<___>	<___>	<___>
	HTG-V-P	HW REHEAT CONTROL VALVE POSITION	<___>	~	0-100%	AI	~	~	V	~	Y	MISMATCH COMMAND VS POSTION	INFO	<___>	<___>	<___>	<___>	<___>	<___>
SCHEDULING	ZN-OCC	ZONE OCCUPANCY SENSOR	<___>	~	OCC./UNOCC.	BI	~	~	VO	V	Y	~	~	~	<___>	<___>	<___>	<___>	<___>
HW TEMPERATURE CONTROL	ZN-T	ZONE TEMPERATURE SENSOR	<___>	~	<50-85>°F	AI	~	~	V	V	Y	RE: A5/M-805	INFO	<___>	<___>	<___>	<___>	<___>	<___>
	ZN-CLG-SP	ZONE COOLING SETPOINT	~	~	~	AO	~	OC	VO	VO	~	~	~	~	<___>	<___>	<___>	<___>	<___>
	ZN-HTG-SP	ZONE HEATING SETPOINT	~	~	~	AO	~	OC	VO	VO	~	~	~	~	<___>	<___>	<___>	<___>	<___>
	PSA-D-C	PRIMARY SUPPLY AIR DAMPER COMMAND	<___>	~	0-100%	AO	~	~	VO	~	Y	~	~	~	<___>	<___>	<___>	<___>	<___>
	HTG-V-C	HW REHEAT CONTROL VALVE COMMAND	~	~	0-100%	AO	~	~	VO	~	Y	~	~	~	<___>	<___>	<___>	<___>	<___>
OTHER POINTS	SA-T	VAV SUPPLY AIR TEMPERATURE SENSOR	<___>	~	<50-90>°F	AI	~	~	V	~	Y	~	~	~	<___>	<___>	<___>	<___>	<___>
	ZN-H	ZONE HUMIDITY SENSOR	<___>	~	<0-100>% RH	AI	~	~	V	~	Y	RH % > 70%	INFO	<___>	<___>	<___>	<___>	<___>	<___>
	PSA-F	PRIMARY SUPPLY AIRFLOW SENSOR	<___>	~	RE: SCHED. M-603	AI	~	~	V	~	Y	~	~	~	<___>	<___>	<___>	<___>	<___>

NOTES:
1. THE CONTRACTOR SHALL COMPLETE THE POINTS SCHEDULE AS INDICATED IN THE SPECIFICATION AND IN ACCORDANCE WITH THE POINTS SCHEDULE INSTRUCTIONS DRAWING.
2. UNIT MANUFACTURERS PROOFS AND SAFETIES: THE CONTRACTOR SHALL SHOW EACH PROOF AND SAFETY AS A SEPARATE ROW.
3. UNIT STATUS: SERVES AS A MONITORED POINT AT THE M&C SOFTWARE (FRONT-END) AND AS A HEATING/COOLING REQUEST TO THE BOILER, HEAT EXCHANGER, AND/OR CHILLER SERVING THIS SYSTEM (IF APPLICABLE)
4. DDC HW IF FOR DEVICE CONTAINING SIMPLE SCHEDULER OBJECT (OR SYSTEM SCHEDULER SEQUENCE OF OPERATIONS) FOR THIS SYSTEM: <___>

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201M-811

DESIGNED BY: B. SCHNEIDER
DRAWN BY: C. BROWN
CHECKED BY: M. WALLACE
SUBMITTED BY: E. OLNESS
ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS Project No. 192201

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
POINTS LISTS

SHEET ID
B1455
M-811

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN

CHILLED WATER SYSTEM - WATER COOLED
NODE: <DDC##>
NODE LOCATION: <____>
NODE ADDRESS DOMAIN = <____>, SUBNET = <____>, NODE = <____>
NODE ID: <____>

FUNCTION	POINT ID	DESCRIPTION	DDC HARDWARE ID	SETTING (WITH UNITS)	RANGE (WITH UNITS)	IO TYPE	HOA REQ'D	CONFIG. TYPE	M&C VIEW AND OVRD	LDP VIEW AND OVRD	TREND REQ'D	ALARMING			PRIMARY POINT INFORMATION		OVERRIDES		CONFIGURATION INFORMATION
												ALARM CONDITION (SEE NOTES)	ALARM PRIORITY	M&C ROUTING	SNVT NAME	SNVT TYPE	SNVT NAME	SNVT TYPE	
PROOFS & SAFETIES	CHLR1-S	CH-1 STATUS	<____>	~	ON/OFF	NVI	~	~	V	V	Y	RE: A1/M-804	INFO	<____>	<____>	<____>	<____>	<____>	<____>
	CHLR2-S	CH-2 STATUS	<____>	~	ON/OFF	NVI	~	~	V	V	Y	RE: A1/M-804	INFO	<____>	<____>	<____>	<____>	<____>	<____>
	CHW-SYS-DP	CHW DP SENSOR	<____>	~	PER MANUFACTURER	AI	~	~	V	V	Y	HIGH CHW DIFF. PRESSURE	INFO	<____>	<____>	<____>	<____>	<____>	<____>
	CHS-FS	MINIMUM CHW FLOW SWITCH	<____>	BY MANUFACTURER	ALM/NORMAL	NVI	~	H	V	V	Y	LOW CHW FLOW	CRIT	<____>	<____>	<____>	<____>	<____>	<____>
	CWP1-S	CHWP-1 STATUS	<____>	~	ON/OFF	BI	~	~	V	V	Y	RE: A1/M-804	INFO	<____>	<____>	<____>	<____>	<____>	<____>
	CWP1-FAULT	CHWP-1 FAULT	<____>	~	ALM/NORMAL	BI	~	~	V	V	~	CHWP-1 FAULT	INFO	<____>	<____>	<____>	<____>	<____>	<____>
	CWP2-S	CHWP-2 STATUS	<____>	~	ON/OFF	BI	~	~	V	V	Y	RE: A1/M-804	INFO	<____>	<____>	<____>	<____>	<____>	<____>
	CWP2-FAULT	CHWP-2 FAULT	<____>	~	ALM/NORMAL	BI	~	~	V	V	~	CHWP-2 FAULT	INFO	<____>	<____>	<____>	<____>	<____>	<____>
	CWP3-S	CHWP-3 STATUS	<____>	~	ON/OFF	BI	~	~	V	V	Y	RE: A1/M-804	INFO	<____>	<____>	<____>	<____>	<____>	<____>
	CWP3-FAULT	CHWP-3 FAULT	<____>	~	ALM/NORMAL	BI	~	~	V	V	~	CHWP-2 FAULT	INFO	<____>	<____>	<____>	<____>	<____>	<____>
	CHW-BP-S	CHW BYPASS CONTROL VALVE STATUS	<____>	~	0-100%	AI	~	~	V	V	Y	MISMATCH COMMAND VS POSTION	CRIT	<____>	<____>	<____>	<____>	<____>	<____>
START/STOP	CHLR1-ENA	CH-1 ENABLE	<____>	~	ON/OFF	NVO	~	~	VO	V	Y	~	~	~	<____>	<____>	<____>	<____>	<____>
	CHLR2-ENA	CH-2 ENABLE	<____>	~	ON/OFF	NVO	~	~	VO	V	Y	~	~	~	<____>	<____>	<____>	<____>	<____>
	CHWP1-SS	CHWP-1 START/STOP	<____>	~	ON/OFF	BO	~	~	VO	V	~	~	~	~	<____>	<____>	<____>	<____>	<____>
	CHWP2-SS	CHWP-2 START/STOP	<____>	~	ON/OFF	BO	~	~	VO	V	~	~	~	~	<____>	<____>	<____>	<____>	<____>
	CHWP3-SS	CHWP-3 START/STOP	<____>	~	ON/OFF	BO	~	~	VO	V	~	~	~	~	<____>	<____>	<____>	<____>	<____>
CHW TEMPERATURE CONTROL	CHWS-T	CHWS TEMP. SENSOR	<____>	~	<35-90>°F	NVI	~	~	V	V	Y	RE: A1/M-804	INFO	<____>	<____>	<____>	<____>	<____>	<____>
	CHWS-T-SP	CHWS TEMP. SETPOINT	~	~	<40-50>°F	NVO	~	C	VO	V	~	~	~	~	<____>	<____>	<____>	<____>	<____>
	CHWR-T	CHW MIXED RETURN TEMP. SENSOR	<____>	~	<35-90>°F	NVI	~	~	V	V	Y	~	~	~	<____>	<____>	<____>	<____>	<____>
PUMP CONTROL	CHWP1-SPD	CHWP-1 SPEED COMMAND	<____>	~	0-100%	AO	Y	~	VO	V	Y	~	~	~	<____>	<____>	<____>	<____>	<____>
	CHWP2-SPD	CHWP-2 SPEED COMMAND	<____>	~	0-100%	AO	Y	~	VO	V	Y	~	~	~	<____>	<____>	<____>	<____>	<____>
	CHWP3-SPD	CHWP-3 SPEED COMMAND	<____>	~	0-100%	AO	Y	~	VO	V	Y	~	~	~	<____>	<____>	<____>	<____>	<____>
VALVE CONTROL	CHW-BP-C	CHW BYPASS CONTROL VALVE COMMAND	<____>	~	0-100%	AO	~	~	VO	V	Y	~	~	~	<____>	<____>	<____>	<____>	<____>
OTHER POINTS	CHWS-F	CHWS FLOW METER	<____>	~	<____> GAL	AI	~	~	V	V	Y	~	~	<____>	<____>	<____>	<____>	<____>	<____>
	CHLR1-DL	CH-1 DATA LINK	<____>	~	~	NVI	~	~	V	~	~	~	~	~	<____>	<____>	<____>	<____>	<____>
	CHLR2-DL	CH-2 DATA LINK	<____>	~	~	NVI	~	~	V	~	~	~	~	~	<____>	<____>	<____>	<____>	<____>

NOTES:
1. THE CONTRACTOR SHALL COMPLETE THE POINTS SCHEDULE AS INDICATED IN THE SPECIFICATION AND IN ACCORDANCE WITH THE POINTS SCHEDULE INSTRUCTIONS DRAWING.
2. UNIT MANUFACTURERS PROOFS AND SAFETIES: THE CONTRACTOR SHALL SHOW EACH PROOF AND SAFETY AS A SEPARATE ROW.
3. UNIT STATUS: SERVES AS A MONITORED POINT AT THE M&C SOFTWARE (FRONT-END) AND AS A HEATING/COOLING REQUEST TO THE BOILER, HEAT EXCHANGER, AND/OR CHILLER SERVING THIS SYSTEM (IF APPLICABLE)
4. DDC HW IF FOR DEVICE CONTAINING SIMPLE SCHEDULER OBJECT (OR SYSTEM SCHEDULER SEQUENCE OF OPERATIONS) FOR THIS SYSTEM: <___>

DEDICATED OUTSIDE AIR UNIT (DOAS-2)
NODE: <DDC##>
NODE LOCATION: <____>
NODE ADDRESS DOMAIN = <____>, SUBNET = <____>, NODE = <____>
NODE ID: <____>

FUNCTION	POINT ID	DESCRIPTION	DDC HARDWARE ID	SETTING (WITH UNITS)	RANGE (WITH UNITS)	IO TYPE	HOA REQ'D	CONFIG. TYPE	M&C VIEW AND OVRD	LDP VIEW AND OVRD	TREND REQ'D	ALARMING			PRIMARY POINT INFORMATION		OVERRIDES		CONFIGURATION INFORMATION
												ALARM CONDITION (SEE NOTES)	ALARM PRIORITY	M&C ROUTING	SNVT NAME	SNVT TYPE	SNVT NAME	SNVT TYPE	
PROOFS & SAFETIES	FLT-P-1	FILTER STATUS	<____>	~	<0-1> IN W.C.	AI	~	H	V	V	Y	DIRTY FILTER	INFO	<____>	<____>	<____>	<____>	<____>	<____>
	FRZ-S	FREEZE STATUS	<____>	~	ALM/NORMAL	BI	~	~	V	V	Y	FRZ ALARM	INFO	<____>	<____>	<____>	<____>	<____>	<____>
	SF-FAULT	SF FAULT	<____>	~	ALM/NORMAL	BI	~	~	V	V	Y	SF VFD FAULT	INFO	<____>	<____>	<____>	<____>	<____>	<____>
	SF-S	SF VFD STATUS	<____>	~	ON/OFF	BI	~	~	V	V	Y	MISMATCH COMMAND VS STATUS	INFO	<____>	<____>	<____>	<____>	<____>	<____>
START/STOP	SF-SS	SF START/STOP	<____>	~	ON/OFF	BO	~	~	VO	V	~	~	~	~	<____>	<____>	<____>	<____>	<____>
FAN CONTROL	SA-P	DUCT PRESSURE SENSOR	<____>	~	RE: A4/M-806	AI	~	~	V	V	Y	HIGH/LOW SP	INFO	<____>	<____>	<____>	<____>	<____>	<____>
	SF-SPD-C	SF SPEED	<____>	~	0-100%	AO	Y	~	VO	V	Y	~	~	~	<____>	<____>	<____>	<____>	<____>
TEMPERATURE CONTROL	SA-T	SA TEMPERATURE SENSOR	<____>	~	<50-85>°F	AI	~	~	V	V	Y	HIGH/LOW SA TEMP	INFO	<____>	<____>	<____>	<____>	<____>	<____>
	OA-T	OA TEMPERATURE SENSOR	<____>	~	<50-85>°F	AI	~	~	V	V	Y	HIGH/LOW SA TEMP	INFO	<____>	<____>	<____>	<____>	<____>	<____>
	OA-T2	OA TEMPERATURE SENSOR	<____>	~	<50-85>°F	AI	~	~	V	V	Y	HIGH/LOW SA TEMP	INFO	<____>	<____>	<____>	<____>	<____>	<____>
	PH-CV-C	HW CONTROL VALVE	<____>	~	0-100%	AI	~	~	V	V	Y	~	~	~	<____>	<____>	<____>	<____>	<____>
	HTG-CV-C	HW CONTROL VALVE	<____>	~	0-100%	AI	~	~	V	V	Y	~	~	~	<____>	<____>	<____>	<____>	<____>
	CLG-CV-C	CHW CONTROL VALVE	<____>	~	0-100%	AI	~	~	V	V	Y	~	~	~	<____>	<____>	<____>	<____>	<____>
OTHER POINTS	OA-D-2P	OUTSIDE AIR DAMPER COMMAND	<____>	~	OPEN/CLOSE	BO	~	~	V	V	~	~	~	~	<____>	<____>	<____>	<____>	<____>
	OA-FMS	OA FLOW MEASURING STATION	<____>	~	<0-2500> CFM	AI	~	~	V	V	Y	±15% FROM OA SCHEDULED VALUE	INFO	<____>	<____>	<____>	<____>	<____>	<____>

NOTES:
1. THE CONTRACTOR SHALL COMPLETE THE POINTS SCHEDULE AS INDICATED IN THE SPECIFICATION AND IN ACCORDANCE WITH THE POINTS SCHEDULE INSTRUCTIONS DRAWING.
2. UNIT MANUFACTURERS PROOFS AND SAFETIES: THE CONTRACTOR SHALL SHOW EACH PROOF AND SAFETY AS A SEPARATE ROW.
3. UNIT STATUS: SERVES AS A MONITORED POINT AT THE M&C SOFTWARE (FRONT-END) AND AS A HEATING/COOLING REQUEST TO THE BOILER, HEAT EXCHANGER, AND/OR CHILLER SERVING THIS SYSTEM (IF APPLICABLE)
4. DDC HW IF FOR DEVICE CONTAINING SIMPLE SCHEDULER OBJECT (OR SYSTEM SCHEDULER SEQUENCE OF OPERATIONS) FOR THIS SYSTEM: <___>

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: 22T2-19201M-812

DESIGNED BY: B. SCHNEIDER
DRAWN BY: C. BROWN
CHECKED BY: M. WALLACE
SUBMITTED BY: E. OLNESS
ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
817.820.8300 TBPE#2913

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
POINTS LISTS

SHEET ID
B1455
M-812

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN

AIR HANDLING UNIT (AHU-1 & AHU-2)
NODE: <DDC##>
NODE LOCATION: <___>
NODE ADDRESS DOMAIN = <___>, SUBNET = <___>, NODE = <___>
NODE ID: <___>

FUNCTION	POINT ID	DESCRIPTION	DDC HARDWARE ID	SETTING (WITH UNITS)	RANGE (WITH UNITS)	IO TYPE	HOA REQ'D	CONFIG. TYPE	M&C VIEW AND OVRD	LDP VIEW AND OVRD	TREND REQ'D	ALARMING			PRIMARY POINT INFORMATION		OVERRIDES		CONFIGURATION INFORMATION
												ALARM CONDITION (SEE NOTES)	ALARM PRIORITY	M&C ROUTING	SNVT NAME	SNVT TYPE	SNVT NAME	SNVT TYPE	
PROOFS & SAFETIES	FLT-P	FILTER STATUS	<___>	~	<0-1> IN W.C.	AI	~	H	V	V	Y	DIRTY FILTER	INFO	<___>	<___>	<___>	<___>	<___>	<___>
	SF-FAULT	SF FAULT	<___>	~	ALM/NORMAL	BI	~	~	V	V	Y	SF VFD FAULT	INFO	<___>	<___>	<___>	<___>	<___>	<___>
	SF-S	SF VFD STATUS	<___>	~	ON/OFF	BI	~	~	V	V	Y	MISMATCH COMMAND VS STATUS	INFO	<___>	<___>	<___>	<___>	<___>	<___>
START/STOP	SF-SS	SF START/STOP	<___>	~	ON/OFF	BO	~	~	VO	V	~	~	~	~	<___>	<___>	<___>	<___>	<___>
FAN CONTROL	SA-P	DUCT PRESSURE SENSOR (AHU-1 ONLY)	<___>	~	RE: A4/M-806	AI	~	~	V	V	Y	HIGH/LOW SP	INFO	<___>	<___>	<___>	<___>	<___>	<___>
	SF-SPD-C	SF SPEED	<___>	~	0-100%	AO	Y	~	VO	V	Y	~	~	~	<___>	<___>	<___>	<___>	<___>
TEMPERATURE CONTROL	SA-T	SA TEMPERATURE SENSOR	<___>	~	<50-85>°F	AI	~	~	V	V	Y	HIGH/LOW SA TEMP	INFO	<___>	<___>	<___>	<___>	<___>	<___>
	ZN-T	ZONE TEMP. SENSOR (AHU-2,3 ONLY)	<___>	~	<50-85>°F	AI	~	~	V	V	Y	HIGH/LOW ZONE TEMP	INFO	<___>	<___>	<___>	<___>	<___>	<___>
	HTG-V-C	HW CONTROL VALVE	<___>	~	0-100%	AI	~	~	V	V	Y	~	~	~	<___>	<___>	<___>	<___>	<___>
	CLG-V-C	CHW CONTROL VALVE	<___>	~	0-100%	AI	~	~	V	V	Y	~	~	~	<___>	<___>	<___>	<___>	<___>
OTHER POINTS	RA-T	RA TEMPERATURE SENSOR	<___>	~	<50-85>°F	AI	~	~	V	V	Y	~	~	~	<___>	<___>	<___>	<___>	<___>

NOTES:
1. THE CONTRACTOR SHALL COMPLETE THE POINTS SCHEDULE AS INDICATED IN THE SPECIFICATION AND IN ACCORDANCE WITH THE POINTS SCHEDULE INSTRUCTIONS DRAWING.
2. UNIT MANUFACTURERS PROOFS AND SAFETIES: THE CONTRACTOR SHALL SHOW EACH PROOF AND SAFETY AS A SEPARATE ROW.
3. UNIT STATUS: SERVES AS A MONITORED POINT AT THE M&C SOFTWARE (FRONT-END) AND AS A HEATING/COOLING REQUEST TO THE BOILER, HEAT EXCHANGER, AND/OR CHILLER SERVING THIS SYSTEM (IF APPLICABLE)
4. DDC HW IF FOR DEVICE CONTAINING SIMPLE SCHEDULER OBJECT (OR SYSTEM SCHEDULER SEQUENCE OF OPERATIONS) FOR THIS SYSTEM: <___>

DEDICATED OUTSIDE AIR UNIT (DOAS-1)
NODE: <DDC##>
NODE LOCATION: <___>
NODE ADDRESS DOMAIN = <___>, SUBNET = <___>, NODE = <___>
NODE ID: <___>

FUNCTION	POINT ID	DESCRIPTION	DDC HARDWARE ID	SETTING (WITH UNITS)	RANGE (WITH UNITS)	IO TYPE	HOA REQ'D	CONFIG. TYPE	M&C VIEW AND OVRD	LDP VIEW AND OVRD	TREND REQ'D	ALARMING			PRIMARY POINT INFORMATION		OVERRIDES		CONFIGURATION INFORMATION
												ALARM CONDITION (SEE NOTES)	ALARM PRIORITY	M&C ROUTING	SNVT NAME	SNVT TYPE	SNVT NAME	SNVT TYPE	
PROOFS & SAFETIES	OA-FLT-P	OA FILTER STATUS	<___>	~	<0-1> IN W.C.	AI	~	H	V	V	Y	DIRTY FILTER	INFO	<___>	<___>	<___>	<___>	<___>	<___>
	EA-FLT-P	EA FILTER STATUS	<___>	~	<0-1> IN W.C.	AI	~	H	V	V	Y	DIRTY FILTER	INFO	<___>	<___>	<___>	<___>	<___>	<___>
	FRZ-S	FREEZE STATUS	<___>	~	ALM/NORMAL	BI	~	~	V	V	Y	FRZ ALARM	INFO	<___>	<___>	<___>	<___>	<___>	<___>
	EA-SMK	EA SMOKE ALARM	<___>	~	ALM/NORMAL	BI	~	~	V	V	Y	SMK ALARM	INFO	<___>	<___>	<___>	<___>	<___>	<___>
	OA-SMK	OA SMOKE ALARM	<___>	~	ALM/NORMAL	BI	~	~	V	V	Y	SMK ALARM	INFO	<___>	<___>	<___>	<___>	<___>	<___>
	EF-FAULT	EF FAULT	<___>	~	ALM/NORMAL	BI	~	~	V	V	Y	SF VFD FAULT	INFO	<___>	<___>	<___>	<___>	<___>	<___>
	EF-S	EF VFD STATUS	<___>	~	ON/OFF	BI	~	~	V	V	Y	MISMATCH COMMAND VS STATUS	INFO	<___>	<___>	<___>	<___>	<___>	<___>
	SF-FAULT	SF FAULT	<___>	~	ALM/NORMAL	BI	~	~	V	V	Y	SF VFD FAULT	INFO	<___>	<___>	<___>	<___>	<___>	<___>
	EW-S	ENTHALPY WHEEL STATUS	<___>	~	ON/OFF	BI	~	~	V	V	Y	MISMATCH COMMAND VS STATUS	INFO	<___>	<___>	<___>	<___>	<___>	<___>
	SF-S	SF VFD STATUS	<___>	~	ON/OFF	BI	~	~	V	V	Y	MISMATCH COMMAND VS STATUS	INFO	<___>	<___>	<___>	<___>	<___>	<___>
START/STOP	SF-SS	SF START/STOP	<___>	~	ON/OFF	BO	~	~	VO	V	~	~	~	~	<___>	<___>	<___>	<___>	<___>
	EW-SS	ENTHALPY WHEEL START/STOP	<___>	~	ON/OFF	BO	~	~	VO	V	~	~	~	~	<___>	<___>	<___>	<___>	<___>
	EF-SS	EF START/STOP	<___>	~	ON/OFF	BO	~	~	VO	V	~	~	~	~	<___>	<___>	<___>	<___>	<___>
FAN CONTROL	SF-SPD-C	SF SPEED COMMAND	<___>	~	0-100%	AO	Y	~	VO	V	Y	~	~	~	<___>	<___>	<___>	<___>	<___>
	EF-SPD-C	EF SPEED COMMAND	<___>	~	0-100%	AO	Y	~	VO	V	Y	~	~	~	<___>	<___>	<___>	<___>	<___>
TEMPERATURE CONTROL	OA-T	OA TEMPERATURE SENSOR	<___>	~	<50-85>°F	AI	~	~	V	V	Y	HIGH/LOW SA TEMP	INFO	<___>	<___>	<___>	<___>	<___>	<___>
	EA-T	EA TEMPERATURE SENSOR	<___>	~	<50-85>°F	AI	~	~	V	V	Y	HIGH/LOW SA TEMP	INFO	<___>	<___>	<___>	<___>	<___>	<___>
	CLG-T	COOLING COIL LEAVING AIR TEMP.	<___>	~	<50-85>°F	AI	~	~	V	V	Y	>5°F OVER DEHUMID. SETPOINT	INFO	<___>	<___>	<___>	<___>	<___>	<___>
	HTG-T	HEATING COIL LEAVING AIR TEMP.	<___>	~	<50-85>°F	AI	~	~	V	V	Y	>5°F OVER DEHUMID. SETPOINT	INFO	<___>	<___>	<___>	<___>	<___>	<___>
	OA-H	OA HUMIDITY SENSOR	<___>	~	0-100%	AI	~	~	V	V	Y	~	INFO	<___>	<___>	<___>	<___>	<___>	<___>
	EA-H	EA HUMIDITY SENSOR	<___>	~	0-100%	AI	~	~	V	V	Y	~	INFO	<___>	<___>	<___>	<___>	<___>	<___>
	RH-V-C	REHEAT CONTROL VALVE	<___>	~	0-100%	AI	~	~	V	V	Y	~	~	~	<___>	<___>	<___>	<___>	<___>
	CLG-V-C	CHW CONTROL VALVE	<___>	~	0-100%	AI	~	~	V	V	Y	~	~	~	<___>	<___>	<___>	<___>	<___>
OTHER POINTS	OA-D-2P	OUTSIDE AIR DAMPER COMMAND	<___>	~	OPEN/CLOSE	BO	~	~	V	V	~	~	~	~	<___>	<___>	<___>	<___>	<___>
	EA-D-2P	EXHAUST AIR DAMPER COMMAND	<___>	~	OPEN/CLOSE	BO	~	~	V	V	~	~	~	~	<___>	<___>	<___>	<___>	<___>
	SA-D-2P	SUPPLY AIR DAMPER COMMAND	<___>	~	OPEN/CLOSE	BO	~	~	V	V	~	~	~	~	<___>	<___>	<___>	<___>	<___>
	BP-D-1	BYPASS AIR DAMPER COMMAND	<___>	~	OPEN/CLOSE	BO	~	~	V	V	~	~	~	~	<___>	<___>	<___>	<___>	<___>
	BP-D-2	BYPASS AIR DAMPER COMMAND	<___>	~	OPEN/CLOSE	BO	~	~	V	V	~	~	~	~	<___>	<___>	<___>	<___>	<___>
	EA-FMS	EA FLOW MEASURING STATION	<___>	~	<0-2500> CFM	AI	~	~	V	V	Y	±15% FROM OA SCHEDULED VALUE	INFO	<___>	<___>	<___>	<___>	<___>	<___>
	OA-FMS	OA FLOW MEASURING STATION	<___>	~	<0-2500> CFM	AI	~	~	V	V	Y	±15% FROM OA SCHEDULED VALUE	INFO	<___>	<___>	<___>	<___>	<___>	<___>

NOTES:
1. THE CONTRACTOR SHALL COMPLETE THE POINTS SCHEDULE AS INDICATED IN THE SPECIFICATION AND IN ACCORDANCE WITH THE POINTS SCHEDULE INSTRUCTIONS DRAWING.
2. UNIT MANUFACTURERS PROOFS AND SAFETIES: THE CONTRACTOR SHALL SHOW EACH PROOF AND SAFETY AS A SEPARATE ROW.
3. UNIT STATUS: SERVES AS A MONITORED POINT AT THE M&C SOFTWARE (FRONT-END) AND AS A HEATING/COOLING REQUEST TO THE BOILER, HEAT EXCHANGER, AND/OR CHILLER SERVING THIS SYSTEM (IF APPLICABLE)
4. DDC HW IF FOR DEVICE CONTAINING SIMPLE SCHEDULER OBJECT (OR SYSTEM SCHEDULER SEQUENCE OF OPERATIONS) FOR THIS SYSTEM: <___>

COMPUTER ROOM AIR CONDITIONER (CRAC) UNIT
NODE: <DDC##>
NODE LOCATION: <___>
NODE ADDRESS DOMAIN = <___>, SUBNET = <___>, NODE = <___>
NODE ID: <___>

FUNCTION	POINT ID	DESCRIPTION	DDC HARDWARE ID	SETTING (WITH UNITS)	RANGE (WITH UNITS)	IO TYPE	HOA REQ'D	CONFIG. TYPE	M&C VIEW AND OVRD	LDP VIEW AND OVRD	TREND REQ'D	ALARMING			PRIMARY POINT INFORMATION		OVERRIDES		CONFIGURATION INFORMATION
												ALARM CONDITION (SEE NOTES)	ALARM PRIORITY	M&C ROUTING	SNVT NAME	SNVT TYPE	SNVT NAME	SNVT TYPE	
PROOFS & SAFETIES	FLT-P	FILTER PRESSURE SWITCH	<___>	~	ALM/NORMAL	BI	~	H	V	V	Y	DIRTY FILTER	INFO	<___>	<___>	<___>	<___>	<___>	<___>
	SF-S	SF STATUS	<___>	~	ON/OFF	BI	~	~	V	V	Y	MISMATCH COMMAND VS STATUS	INFO	<___>	<___>	<___>	<___>	<___>	<___>
START/STOP	SF-SS	SF START/STOP	<___>	~	ON/OFF	BO	~	~	VO	V	Y	~	~	~	<___>	<___>	<___>	<___>	<___>
TEMPERATURE CONTROL	ZN-T	ZONE TEMPERATURE SENSOR	<___>	~	<50-85>°F	AI	~	~	V	V	Y	HIGH/LOW ZONE TEMP.	INFO	<___>	<___>	<___>	<___>	<___>	<___>
	CLG-V-C	CHW CONTROL VALVE	<___>	~	0-100%	AI	~	~	V	V	Y	~	~	~	<___>	<___>	<___>	<___>	<___>
OTHER POINTS	ZN-H	ZONE HUMIDITY SENSOR	<___>	~	<20-80>% RH	AI	~	~	V	V	Y	>60% ZONE HUMIDITY	INFO	<___>	<___>	<___>	<___>	<___>	<___>

NOTES:
1. THE CONTRACTOR SHALL COMPLETE THE POINTS SCHEDULE AS INDICATED IN THE SPECIFICATION AND IN ACCORDANCE WITH THE POINTS SCHEDULE INSTRUCTIONS DRAWING.
2. UNIT MANUFACTURERS PROOFS AND SAFETIES: THE CONTRACTOR SHALL SHOW EACH PROOF AND SAFETY AS A SEPARATE ROW.
3. UNIT STATUS: SERVES AS A MONITORED POINT AT THE M&C SOFTWARE (FRONT-END) AND AS A HEATING/COOLING REQUEST TO THE BOILER, HEAT EXCHANGER, AND/OR CHILLER SERVING THIS SYSTEM (IF APPLICABLE)
4. DDC HW IF FOR DEVICE CONTAINING SIMPLE SCHEDULER OBJECT (OR SYSTEM SCHEDULER SEQUENCE OF OPERATIONS) FOR THIS SYSTEM: <___>

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: B. SCHNEIDER
DRAWN BY: C. BROWN
CHECKED BY: M. WALLACE
SUBMITTED BY: E. OLNESS
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201M-813
SIZE: ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
ADDRESS Reg. No. F2966

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
POINTS LISTS

SHEET ID
B1455
M-813

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN

FAN COIL UNIT WITH HC & CC
NODE: <DDC##>
NODE LOCATION: <____>
NODE ADDRESS DOMAIN = <____>, SUBNET = <____>, NODE = <____>
NODE ID: <____>

FUNCTION	POINT ID	DESCRIPTION	DDC HARDWARE ID	SETTING (WITH UNITS)	RANGE (WITH UNITS)	IO TYPE	HOA REQ'D	CONFIG. TYPE	M&C VIEW AND OVRD	LDP VIEW AND OVRD	TREND REQ'D	ALARMING			PRIMARY POINT INFORMATION		OVERRIDES		CONFIGURATION INFORMATION
												ALARM CONDITION (SEE NOTES)	ALARM PRIORITY	M&C ROUTING	SNVT NAME	SNVT TYPE	SNVT NAME	SNVT TYPE	
PROOFS & SAFETIES	FLT-P	FILTER PRESSURE SWITCH	<___>	~	ALM/NORMAL	BI	~	H	V	V	Y	DIRTY FILTER	INFO	<___>	<___>	<___>	<___>	<___>	<___>
	SF-S	SF STATUS	<___>	~	ON/OFF	BI	~	~	V	V	Y	MISMATCH COMMAND VS STATUS	INFO	<___>	<___>	<___>	<___>	<___>	<___>
START/STOP	SF-SS	SF START/STOP	<___>	~	ON/OFF	BO	~	~	VO	V	~	~	~	~	<___>	<___>	<___>	<___>	<___>
TEMPERATURE CONTROL	ZN-T	ZONE TEMPERATURE SENSOR	<___>	~	<35-100>°F	AI	~	~	V	V	Y	HIGH/LOW ZONE TEMP.	INFO	<___>	<___>	<___>	<___>	<___>	<___>
	CLG-V-C	CHW CONTROL VALVE COMMAND	<___>	~	0-100%	AI	~	~	VO	V	Y	~	~	~	<___>	<___>	<___>	<___>	<___>

NOTES:
1. THE CONTRACTOR SHALL COMPLETE THE POINTS SCHEDULE AS INDICATED IN THE SPECIFICATION AND IN ACCORDANCE WITH THE POINTS SCHEDULE INSTRUCTIONS DRAWING.
2. UNIT MANUFACTURERS PROOFS AND SAFETIES: THE CONTRACTOR SHALL SHOW EACH PROOF AND SAFETY AS A SEPARATE ROW.
3. UNIT STATUS: SERVES AS A MONITORED POINT AT THE M&C SOFTWARE (FRONT-END) AND AS A HEATING/COOLING REQUEST TO THE BOILER, HEAT EXCHANGER, AND/OR CHILLER SERVING THIS SYSTEM (IF APPLICABLE)
4. DDC HW IF FOR DEVICE CONTAINING SIMPLE SCHEDULER OBJECT (OR SYSTEM SCHEDULER SEQUENCE OF OPERATIONS) FOR THIS SYSTEM: <___>

OUTSIDE AIR WEATHER STATION
NODE: <DDC##>
NODE LOCATION: <____>
NODE ADDRESS DOMAIN = <____>, SUBNET = <____>, NODE = <____>
NODE ID: <____>

FUNCTION	POINT ID	DESCRIPTION	DDC HARDWARE ID	SETTING (WITH UNITS)	RANGE (WITH UNITS)	IO TYPE	HOA REQ'D	CONFIG. TYPE	M&C VIEW AND OVRD	LDP VIEW AND OVRD	TREND REQ'D	ALARMING			PRIMARY POINT INFORMATION		OVERRIDES		CONFIGURATION INFORMATION
												ALARM CONDITION (SEE NOTES)	ALARM PRIORITY	M&C ROUTING	SNVT NAME	SNVT TYPE	SNVT NAME	SNVT TYPE	
OUTSIDE AIR SENSORS	OA-T	OUTSIDE AIR DRY BULB TEMP.	<___>	~	<20-110>°F	AI	~	~	V	V	Y	SENSOR FAILURE	INFO	<___>	<___>	<___>	<___>	<___>	<___>
	OA-RH	OUTSIDE AIR RELATIVE HUMIDITY	<___>	~	<0-100>% RH	AI	~	~	V	V	Y	SENSOR FAILURE	INFO	<___>	<___>	<___>	<___>	<___>	<___>
CALCULATED VALUES	OA-WB	OUTSIDE AIR WET BULB TEMP.	~	~	~	AI	~	~	V	V	Y	~	~	~	<___>	<___>	<___>	<___>	<___>
	OA-DP	OUTSIDE AIR DEW POINT	~	~	~	AI	~	~	V	V	Y	~	~	~	<___>	<___>	<___>	<___>	<___>
	OA-ENTH	OUTSIDE AIR ENTHALPY	~	~	~	AI	~	~	V	V	Y	~	~	~	<___>	<___>	<___>	<___>	<___>

NOTES:
1. THE CONTRACTOR SHALL COMPLETE THE POINTS SCHEDULE AS INDICATED IN THE SPECIFICATION AND IN ACCORDANCE WITH THE POINTS SCHEDULE INSTRUCTIONS DRAWING.
2. UNIT MANUFACTURERS PROOFS AND SAFETIES: THE CONTRACTOR SHALL SHOW EACH PROOF AND SAFETY AS A SEPARATE ROW.
3. UNIT STATUS: SERVES AS A MONITORED POINT AT THE M&C SOFTWARE (FRONT-END) AND AS A HEATING/COOLING REQUEST TO THE BOILER, HEAT EXCHANGER, AND/OR CHILLER SERVING THIS SYSTEM (IF APPLICABLE)
4. DDC HW IF FOR DEVICE CONTAINING SIMPLE SCHEDULER OBJECT (OR SYSTEM SCHEDULER SEQUENCE OF OPERATIONS) FOR THIS SYSTEM: <___>

GENERAL EXHAUST FANS
NODE: <DDC##>
NODE LOCATION: <____>
NODE ADDRESS DOMAIN = <____>, SUBNET = <____>, NODE = <____>
NODE ID: <____>

FUNCTION	POINT ID	DESCRIPTION	DDC HARDWARE ID	SETTING (WITH UNITS)	RANGE (WITH UNITS)	IO TYPE	HOA REQ'D	CONFIG. TYPE	M&C VIEW AND OVRD	LDP VIEW AND OVRD	TREND REQ'D	ALARMING			PRIMARY POINT INFORMATION		OVERRIDES		CONFIGURATION INFORMATION
												ALARM CONDITION (SEE NOTES)	ALARM PRIORITY	M&C ROUTING	SNVT NAME	SNVT TYPE	SNVT NAME	SNVT TYPE	
PROOFS & SAFETIES	EF-S	EF STATUS	<___>	~	ON/OFF	BI	~	~	V	V	Y	MISMATCH COMMAND VS STATUS	INFO	<___>	<___>	<___>	<___>	<___>	<___>
START/STOP	SF-SS	SF START/STOP	<___>	~	ON/OFF	BO	~	~	VO	V	~	~	~	~	<___>	<___>	<___>	<___>	<___>
OTHER POINTS	EA-D-2P	EXHAUST AIR DAMPER COMMAND	<___>	~	OPEN/CLOSE	BO	~	~	VO	V	Y	~	~	~	<___>	<___>	<___>	<___>	<___>

NOTES:
1. THE CONTRACTOR SHALL COMPLETE THE POINTS SCHEDULE AS INDICATED IN THE SPECIFICATION AND IN ACCORDANCE WITH THE POINTS SCHEDULE INSTRUCTIONS DRAWING.
2. UNIT MANUFACTURERS PROOFS AND SAFETIES: THE CONTRACTOR SHALL SHOW EACH PROOF AND SAFETY AS A SEPARATE ROW.
3. UNIT STATUS: SERVES AS A MONITORED POINT AT THE M&C SOFTWARE (FRONT-END) AND AS A HEATING/COOLING REQUEST TO THE BOILER, HEAT EXCHANGER, AND/OR CHILLER SERVING THIS SYSTEM (IF APPLICABLE)
4. DDC HW IF FOR DEVICE CONTAINING SIMPLE SCHEDULER OBJECT (OR SYSTEM SCHEDULER SEQUENCE OF OPERATIONS) FOR THIS SYSTEM: <___>

EMERGENCY AIR DISTRIBUTION SHUTOFF BUTTON
NODE: <DDC##>
NODE LOCATION: <____>
NODE ADDRESS DOMAIN = <____>, SUBNET = <____>, NODE = <____>
NODE ID: <____>

FUNCTION	POINT ID	DESCRIPTION	DDC HARDWARE ID	SETTING (WITH UNITS)	RANGE (WITH UNITS)	IO TYPE	HOA REQ'D	CONFIG. TYPE	M&C VIEW AND OVRD	LDP VIEW AND OVRD	TREND REQ'D	ALARMING			PRIMARY POINT INFORMATION		OVERRIDES		CONFIGURATION INFORMATION
												ALARM CONDITION (SEE NOTES)	ALARM PRIORITY	M&C ROUTING	SNVT NAME	SNVT TYPE	SNVT NAME	SNVT TYPE	
PROOFS & SAFETIES	ES-BUT	EMERGENCY AIR DISTRIBUTION SHUTOFF	<___>	~	ALM/NORMAL	NVI	~	~	V	~	Y	EMERGENCY AIR DISTRIBUTION SHUTOFF BUTTON ACTIVATED	CRIT	<___>	<___>	<___>	<___>	<___>	<___>

NOTES:
1. THE CONTRACTOR SHALL COMPLETE THE POINTS SCHEDULE AS INDICATED IN THE SPECIFICATION AND IN ACCORDANCE WITH THE POINTS SCHEDULE INSTRUCTIONS DRAWING.
2. UNIT MANUFACTURERS PROOFS AND SAFETIES: THE CONTRACTOR SHALL SHOW EACH PROOF AND SAFETY AS A SEPARATE ROW.
3. UNIT STATUS: SERVES AS A MONITORED POINT AT THE M&C SOFTWARE (FRONT-END) AND AS A HEATING/COOLING REQUEST TO THE BOILER, HEAT EXCHANGER, AND/OR CHILLER SERVING THIS SYSTEM (IF APPLICABLE)
4. DDC HW IF FOR DEVICE CONTAINING SIMPLE SCHEDULER OBJECT (OR SYSTEM SCHEDULER SEQUENCE OF OPERATIONS) FOR THIS SYSTEM: <___>

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
BRANDEN M. SCHNEIDER
129852
LICENSED PROFESSIONAL ENGINEER
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:.
FILE NAME: 1 SXHT219201M-814

DESIGNED BY: B. SCHNEIDER
DRAWN BY: C. BROWN
CHECKED BY: M. WALLACE
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
ACCESS No. 1000013

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
POINTS LISTS

SHEET ID
B1455
M-814

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN

ONE-LINE DIAGRAM

- THERMAL MAGNETIC CIRCUIT BREAKER
- [LSIG] SOLID STATE CIRCUIT BREAKER
- DISCONNECT SWITCH
- SWITCH
- FUSED SWITCH
- UTILITY SOURCE
- G GENERATOR
- TRANSFORMER, DELTA-WYE
- M METER
- EPM ELECTRONIC POWER METER
- CURRENT TRANSFORMER
- POTENTIAL TRANSFORMER
- SPD SURGE PROTECTION DEVICE / TVSS
- SURGE ARRESTER
- EARTH GROUND
- G GROUND
- N NEUTRAL
- PANEL NAME RM XXX — PANELBOARD WITH LOCATION [MAIN LUGS ONLY (MLO) OR MAIN CIRCUIT BREAKER (MCB)]
- PANEL NAME RM XXX — INTEGRATED POWER CENTER WITH INTEGRAL MAIN CIRCUIT BREAKER
- AUTOMATIC TRANSFER SWITCH
- A 1 L-O / A 1 L-O — KIRK-KEY INTERLOCK DEVICES
  L-O = LOCKED OPEN (WITH KEY REMOVED)
  L-C = LOCKED CLOSED (WITH KEY REMOVED)
  = KEY IN INTERLOCK DEVICE
- B 1 L-C / B 1 L-C

WIRING

- A-12 CONDUCTORS IN CONDUIT, UNLESS NOTED OTHERWISE ON PLAN. ARROW INDICATES HOMERUN TO PANEL "A", CIRCUIT 12.
- FLEXIBLE CONDUIT CONNECTION

1#12 PHASE CONDUCTOR, 1#12 NEUTRAL CONDUCTOR AND 1 #12 GREEN EQUIPMENT GROUND IN 3/4" CONDUIT UNLESS OTHERWISE NOTED.

GROUNDING

- AIR TERMINAL
- 3/4" Ø x 10' L COPPER GROUNDING ROD
- GROUND ROD TEST WELL
- STATIC GROUNDING RECEPTACLE
- EXOTHERMIC WELD
- BUILDING STEEL USED AS DOWN CONDUCTOR FOR LIGHTNING PROTECTION
- LIGHTNING PROTECTION ROOF CONDUCTOR/GROUNDING CONDUCTOR
- ELECTRICAL GROUND BAR

POWER

- T DRY TYPE TRANSFORMER
- CEILING MOUNTED NEMA 5-20 DUPLEX RECEPTACLE
- WALL MOUNTED NEMA 5-20 DUPLEX RECEPTACLE
  * = MOUNTED 3' 6" AFF OR 6" ABOVE BACKLASH
  ** = MOUNTED 6' AFF UON
  GFI = GROUND FAULT CIRCUIT INTERRUPTING
  WP = WEATHERPROOF (WITH "IN-USE" COVER)
  EP = EXPLOSION PROOF
  U = DUPLEX RECEPTACLE WITH DUPLEX USB
  COLORED TOP = TOP CONTROLLED.
  COLORED CENTER = BOTH CONTROLLED.
- NEMA 5-20 QUADRUPLEX RECEPTACLE
  * = MOUNTED 3' 6" AFF
  ** = MOUNTED 6' AFF UON
  GFI = GROUND FAULT CIRCUIT INTERRUPTING
  WP = WEATHERPROOF (WITH "IN-USE" COVER)
  U = QUAD RECEPTACLE WITH QUAD USB
  COLORED TOP = ONE DUPLEX CONTROLLED.
  COLORED CENTER = ALL CONTROLLED.
- SPECIAL RECEPTACLE. PROPERTIES AS NOTED. LOCKING RECEPTACLE.
- RAISED-FLOOR BOXES WITH RECEPTACLES AS DESIGNATED
- SPECIAL RECEPTACLE. PROPERTIES AS NOTED.
- J JUNCTION BOX
- S_M MOTOR RATED SWITCH. SIZING AS INDICATED BY SCHEDULE.
- DISCONNECT SWITCH IN NEMA-RATED ENCLOSURE AS INDICATED. MOUNTED 5' AFF UON. NON-FUSED UON. AAA/B/CCC INDICATES RATINGS FOR "VOLTAGE" / "POLES" / "AMPERAGE". PROVIDE 240/3/30 UON. 600/3/100
- PANELBOARD OR SWITCHBOARD AS INDICATED
- ATS AUTOMATIC TRANSFER SWITCH
- APPROXIMATE WORKING CLEARANCE. CONFORM TO NEC REQUIREMENTS. AREAS SHOWN FOR PLANNING PURPOSES ONLY.
- SECURE AREA. MINIMIZE CONDUIT PENETRATIONS AND COLOCATE WITH OTHER UTILITY ENTRANCES.
- CORD REEL
- VFD VARIABLE FREQUENCY DRIVE

EXTERIOR POWER

- PAD MOUNT TRANSFORMER
- G GROUNDING CONDUCTOR

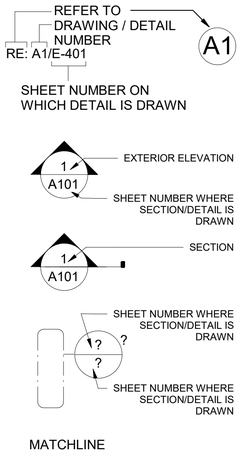
LIGHTING

- AE SHADING, DOT, AND/OR TYPE MARK "E" INDICATE A FIXTURE WITH AN EMERGENCY SOURCE THROUGH THE MEANS OF AN INTEGRATED 90-MINUTE BATTERY BACK-UP (TYPICAL ALL FIXTURES).
- A / AE 2' X 4' LENSED FIXTURE. LETTER INDICATES TYPE PER FIXTURE SCHEDULE.
- A / AE LINEAR FIXTURE. UP/DOWN OR DOWN LIGHTING. LETTER INDICATES TYPE PER THE FIXTURE SCHEDULE.
- A / AE LENSED STRIP FIXTURE. LETTER INDICATES TYPE PER THE FIXTURE SCHEDULE.
- A / AE WALL MOUNTED FIXTURE. LETTER INDICATES TYPE PER FIXTURE SCHEDULE.
- A / AE ROUND FIXTURE, LETTER INDICATES TYPE PER FIXTURE SCHEDULE.
- X / X EXIT SIGN, CEILING MOUNTING, DIRECTIONAL ARROWS AS INDICATED.
- X / X EXIT SIGN, WALL MOUNTING, DIRECTIONAL ARROWS AS INDICATED
- S^D S^3 S^{LV} $S^{2Z\text{-}S\text{-}K}$ S^{OV} LIGHTING SWITCH MOUNTED 4' AFF.
  3 = 3 WAY SWITCHING FUNCTIONALITY
  4 = 4 WAY SWITCHING FUNCTIONALITY
  D = WITH DIMMING CAPABILITIES
  LV = LOW VOLTAGE DIGITAL CONTROL
  VS = VACANCY SENSOR SWITCH
  OV = OVERRIDE SINGLE BUTTON "ON" SWITCH
  #Z = ZONE CONTROL, # OF ZONES
  S = SCENE CONTROL
  K = KEYPAD
- OS / OS^N CEILING/WALL MOUNTED DUAL TECH OCCUPANCY/VACANCY SENSOR. "N" REPRESENTS NETWORKED OCCUPANCY SENSOR. "B" REPRESENTS HIGH BAY TYPE. "W" REPRESENTS WALL MOUNTED TYPE
- VS / VS^N
- OS_W
- DS / DS DAYLIGHT SENSOR.

PATTERNS

- DEMOLITION AREA
- LIGHTING CIRCUIT
- IN-FLOOR RACEWAY TO FLOOR BOXES

REFERENCE KEY



GENERAL NOTES - ELECTRICAL

A	PERFORM ELECTRICAL WORK IN ACCORDANCE WITH APPLICABLE UFC AND 2020 NFPA 70. IN THE EVENT OF CONFLICT, THE ORDER OF PRECEDENCE IS APPLICABLE UFC AND THEN 2020 NFPA 70.
B	EXISTING SITE CONDITIONS SHOWN ARE BASED ON A SITE SURVEY AND REFERENCING AS-BUILT DRAWINGS. STUDY AVAILABLE REFERENCE DRAWINGS AND VERIFY EXISTING CONDITIONS. ADJUST ARRANGEMENT AND LOCATION OF NEW ELECTRICAL WORK SHOWN TO AVOID CONFLICT WITH EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION. WHERE EXISTING UTILITIES CANNOT BE AVOIDED, COORDINATE WITH THE CONTRACTING OFFICER TO INCLUDE ALL WORK FOR REMOVAL AND RELOCATION OF EXISTING UTILITES AND ADDITIONAL WORK NECESSARY TO ACCOMMODATE UPDATE/REPAIR.
C	ELECTRICAL DRAWINGS ARE DIAGRAMMATIC AND MAY NOT SHOW ALL DETAILS AND COMPONENTS. INCLUDE IN BID ALL ELECTRICAL WORK INCLUDING ALL COMPONENTS, MATERIALS, AND EQUIPMENT IN COORDINATION WITH ALL TRADES FOR A COMPLETE AND OPERABLE SYSTEM WITHIN THE INTENT INDICATED.
D	RESTORE ALL DAMAGED AREAS (TO MATCH SURROUNDINGS) INCLUDING LANDSCAPING AND GRASS, UTILITIES, AND STRUCTURES AFTER COMPLETION OF WORK.
E	WORKING SPACES ABOUT ELECTRICAL EQUIPMENT MUST BE IN COMPLIANCE WITH NEC 110.26.
F	FLUSH MOUNT ALL SWITCHES AND RECEPTACLES IN FINISHED AREA. SWITCHES AND RECEPTACLES MUST BE SURFACE MOUNTED ON EXISTING CMU WALLS. UNLESS OTHERWISE NOTED, CONCEAL ALL CONDUIT IN WALLS, ABOVE ACCESSIBLE CEILING, OR IN FLOOR SLAB. CONDUIT IN ROOMS WITH NO CEILING THAT ARE EXPOSED TO STRUCTURE MAY BE EXPOSED,
G	PROVIDE ALL SUPPLEMENTAL SUPPORTING DEVICES REQUIRED FOR ELECTRICAL EQUIPMENT WHERE THE BUILDING STRUCTURE IS NOT SUITABLE FOR DIRECT MOUNTING.
H	UNLESS OTHERWISE NOTED, ALL CONDUCTORS ARE SIZED FOR COPPER TYPE THWN, THHN, AND RATED FOR 75 DEGREE C (MINIMUM).
J	UNLESS OTHERWISE NOTED, PROVIDE A DEDICATED EQUIPMENT GROUNDING CONDUCTOR, SIZED PER THE NEC, WITH EACH BRANCH CIRCUIT.
K	UNLESS OTHERWISE NOTED, CIRCUITS ARE SIZED ASSUMING NO MORE THAN THREE CURRENT CARRYING CONDUCTORS IN A SINGLE CONDUIT. NO MORE THAN THREE CURRENT CARRYING CONDUCTORS MAY BE INSTALLED IN A SINGLE CONDUIT UNLESS CONDUCTORS ARE UPSIZED WITH CONSIDERATION TOWARDS THE ADJUSTMENT FACTORS IN TABLE 310.15(C)(1) OF NFPA 70
L	INSTALL ALL WIRING IN RACEWAYS.
M	SEAL ALL CONDUIT PENETRATIONS USING A LISTED SEALANT (INCLUDING FIRESTOPPING) FOR THE APPROPRIATE APPLICATION ON WALLS, PARTITIONS, FLOORS, ROOF, ETCPROVIDE UL APPROVED PENETRATIONS AND MATERIALS THROUGH FIRE RATED AND SMOKE PARTITIONS..
N	UTILIZE COMPRESSION FITTINGS FOR CONDUIT CONNECTIONS. SET SCREW FITTINGS ARE NOT ACCEPTABLE.
P	THROUGH WALL BOXES ARE NOT ACCEPTABLE; BOXES THAT ARE LOCATED ON OPPOSITE SIDES OF FIRE RATED OR HIGH SOUND TRANSMISSION CLASS WALLS MUST HAVE A MINIMUM HORIZONTAL SEPARATION OF 6". PROVIDE MEMBRANE PROTECTION OF OUTLETS IN FIRE RATED PARTITIONS.
Q	ALL WIRING AND EQUIPMENT MUST BE UL LISTED & LABELED, NEW, AND INSTALLED IN CONFORMANCE WITH THE UFC AND NFPA 70.
R	UNLESS OTHERWISE INDICATED, ALL WIRING MUST BE IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS. CONDUIT MUST BE 3/4" MINIMUM.
S	PROVIDE EACH 120V, 20A BRANCH CIRCUIT FROM APPLIANCE TO PANELBOARDS WITH A SEPARATE NEUTRAL FOR EACH PHASE CONDUCTOR. NO SHARED NEUTRALS ARE PERMITTED UNLESS OTHERWISE INDICATED.
T	PROVIDE NO. 12 AWG PHASE, NEUTRAL AND GROUND CONDUCTOR FOR 120V, 20A BRANCH CIRCUITS NOT EXCEEDING 100 FEET. PROVIDE 10 AWG PHASE, NEUTRAL, AND GROUND CONDUCTORS FOR 120V, 20A BRANCH CIRCUIT EXCEEDING 100 FEET AND FOR 277V, 20A CIRCUITS EXCEED 200 FEET.
U	PROVIDE A CONCRETE HOUSEKEEPING PAD FOR ALL FLOOR MOUNTED ELECTRICAL EQUIPMENT
V	PROVIDE LOCKABLE BREAKERS FOR ALL FIRE PROTECTION/ALARM DEVICES. PAINT ENCLOSURES, BREAKERS, AND PAD-LOCKING MECHANISMS RED. AT THE DISTRIBUTION EQUIPMENT, IN ADDITION TO THE PANEL NAMEPLATE, PROVIDE A LABEL INSCRIBED "FIRE PROTECTION/LIFE SAFETY EQUIPMENT." LABEL SHALL BE RED LAMINATED PLASTIC WITH WHITE CORE.
W	EXISTING FEEDERS AND EXISTING ELECTRICAL EQUIPMENT ARE SHOWN AS HALF-TONED.
X	NEW SERVICE CONDUCTORS, FEEDER CONDUCTORS, ELECTRICAL EQUIPMENT, AND CIRCUIT BREAKERS ARE SHOWN AS SHOWN AS BOLDED.

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS — AARON McWHORTER — 100310 — LICENSED PROFESSIONAL ENGINEER — 21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: A. MCWHORTER
DRAWN BY: A. FORMAN
CHECKED BY: K.HOGAN
SUBMITTED BY: E. OLMESS
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: 34_SXHT219201E-001
ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
T 817.336.6161 F 817.339.2310

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395

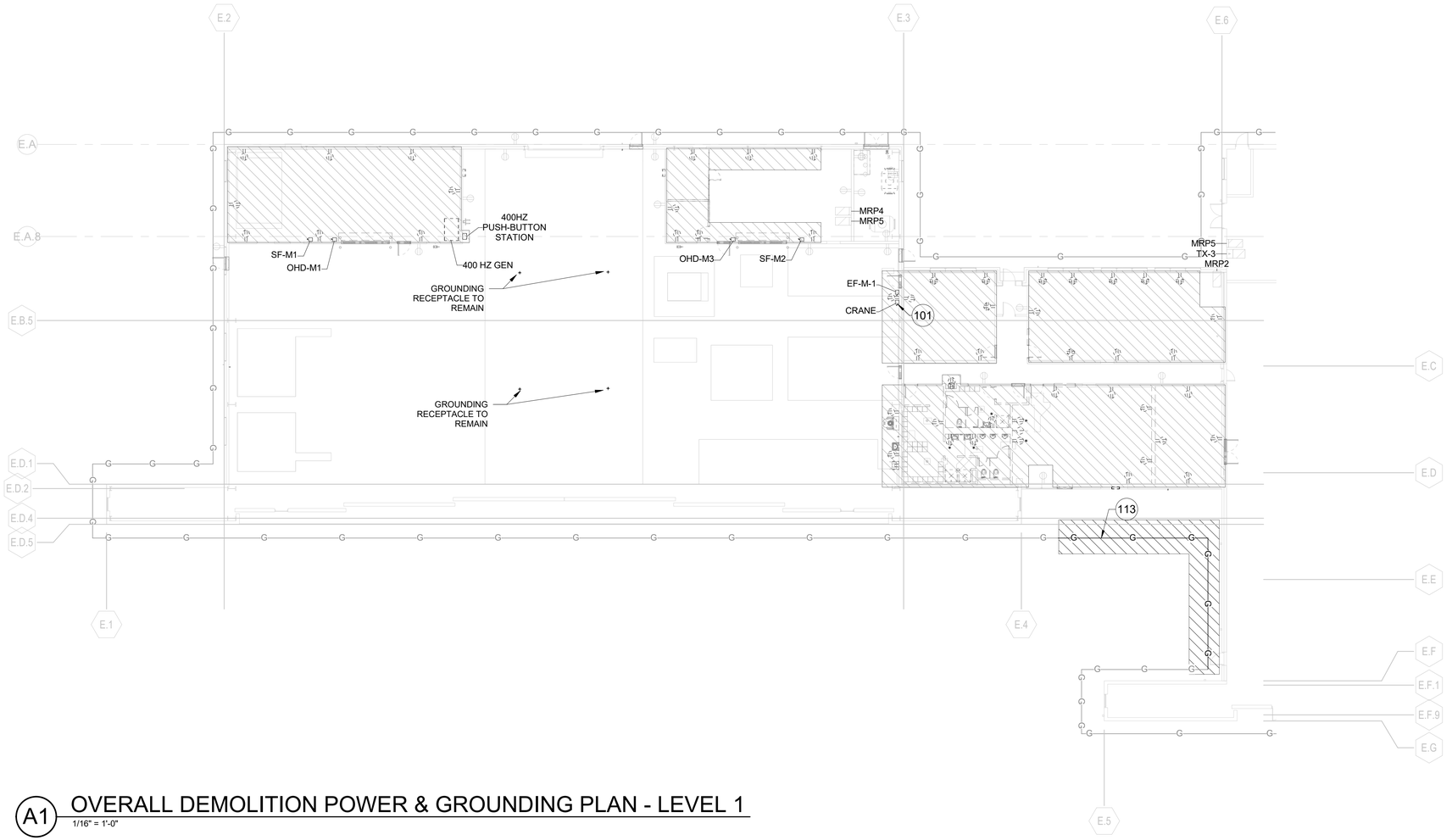
GENERAL NOTES AND SYMBOLS

SHEET ID
B1455
E-001

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN



A1 OVERALL DEMOLITION POWER & GROUNDING PLAN - LEVEL 1

1/16" = 1'-0"

GENERAL NOTES - DEMO - POWER

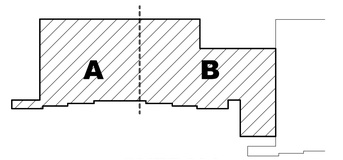
A	EXISTING ELECTRICAL OUTLETS, EQUIPMENT, AND RECEPTACLES SHOWN ARE BASED ON THE RECORD DRAWINGS AND ARE SHOWN FOR REFERENCE ONLY.
B	EXISTING ELECTRICAL OUTLETS, EQUIPMENT, AND RECEPTACLES TO REMAIN UNLESS OTHERWISE NOTED. REMOVE ELECTRICAL OUTLETS, EQUIPMENT, AND RECEPTACLES IN THE AREAS SHOWN TO BE DEMOLISHED, INCLUDING THE ASSOCIATED CONDUCTORS AND CONDUITS BACK TO THEIR SOURCES. FIELD VERIFY FOR EXACT QUANTITY AND LOCATIONS OF DEVICES. NOTIFY ENGINEER OF RECORD FOR ANY DISCREPANCIES.
C	WHERE EXISTING OUTLETS AND RECEPTACLES ARE TO BE REMOVED, PATCH THE RESULTING OPENINGS TO MATCH SURROUNDING MATERIALS AND SURFACES OF THE WALLS AND FLOORS.
D	EXISTING ELECTRICAL EQUIPMENT NOT ASSOCIATED WITH NEW WORK IS TO REMAIN ENERGIZED. COORDINATE WITH OWNER A MINIMUM OF 48 HOURS PRIOR TO ANY POWER OUTAGES.
E	LABEL CIRCUIT BREAKER AS SPARE IF ALL LOADS HAVE BEEN REMOVED.
F	REMOVE DISCONNECTS AND CIRCUITS AND CONDUIT FOR FANS SF-M-1, SF-M-2, AND EF-M-1. NOT ALL DISCONNECT SWITCHES AND EQUIPMENT FOR MECHANICAL EQUIPMENT ARE SHOWN. REFER TO MECH SHEET FOR DEMOLITION WORK OF MECH EQUIPMENT. REMOVE ANY UNUSED ASSOCIATED DISCONNECT SWITCHES, CONDUCTORS AND CONDUITS BACK TO THEIR SOURCES.

KEYNOTES

101	REMOVE EXISTING CRANE DISCONNECT AND PROVIDE NEW DISCONNECT IN NEW LOCATION. EXTEND CONDUIT AND CONDUCTORS TO NEW LOCATION. PROVIDE CRANE DISCONNECT RELOCATION MEETING WITH CONTRACTING OFFICER AND USERS TO DETERMINE IDEAL LOCATION FOR THE CRANE DISCONNECT SWITCH. REMOVE EXISTING CRANE DISCONNECT AND PROVIDE NEW DISCONNECT SWITCH IN LOCATION PER THE RELOCATION MEETING. PROVIDE TESTING AND COMMISSIONING OF CRANE PRIOR TO START OF CONSTRUCTION. CRANE IS TO REMAIN OPERATIONAL AFTER CONSTRUCTION COMPLETION. TEST AND COMMISSION CRANE AFTER RELOCATION OF CRANE DISCONNECT AND CONTROLS. PROVIDE NEW DISCONNECT AND CIRCUIT TO MATCH EXISTING.
113	DEMOLISH A PORTION OF THE EXISTING GROUND RING WHERE THE NEW BUILDING ADDITION WILL BE LOCATED. RE:EG143 FOR NEW WORK WHERE THE EXISTING GROUND RING WILL BE INTERCEPTED.

HATCH LEGEND

PROVIDE DEMOLITION OF ELECTRICAL EQUIPMENT LOCATED WITHIN THE HATCHED AREA UNLESS OTHERWISE NOTED.



OVERALL KEY PLAN

GRAPHIC SCALE

16 12 8 4 0 16 32

SCALE: 1/16"=1'-0"

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
AARON McWHORTER
100310
LICENSED
PROFESSIONAL ENGINEER
20 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: A. MCWHORTER
DRAWN BY: A. FORMAN
CHECKED BY: K.HOGAN
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT21920 1ED101

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

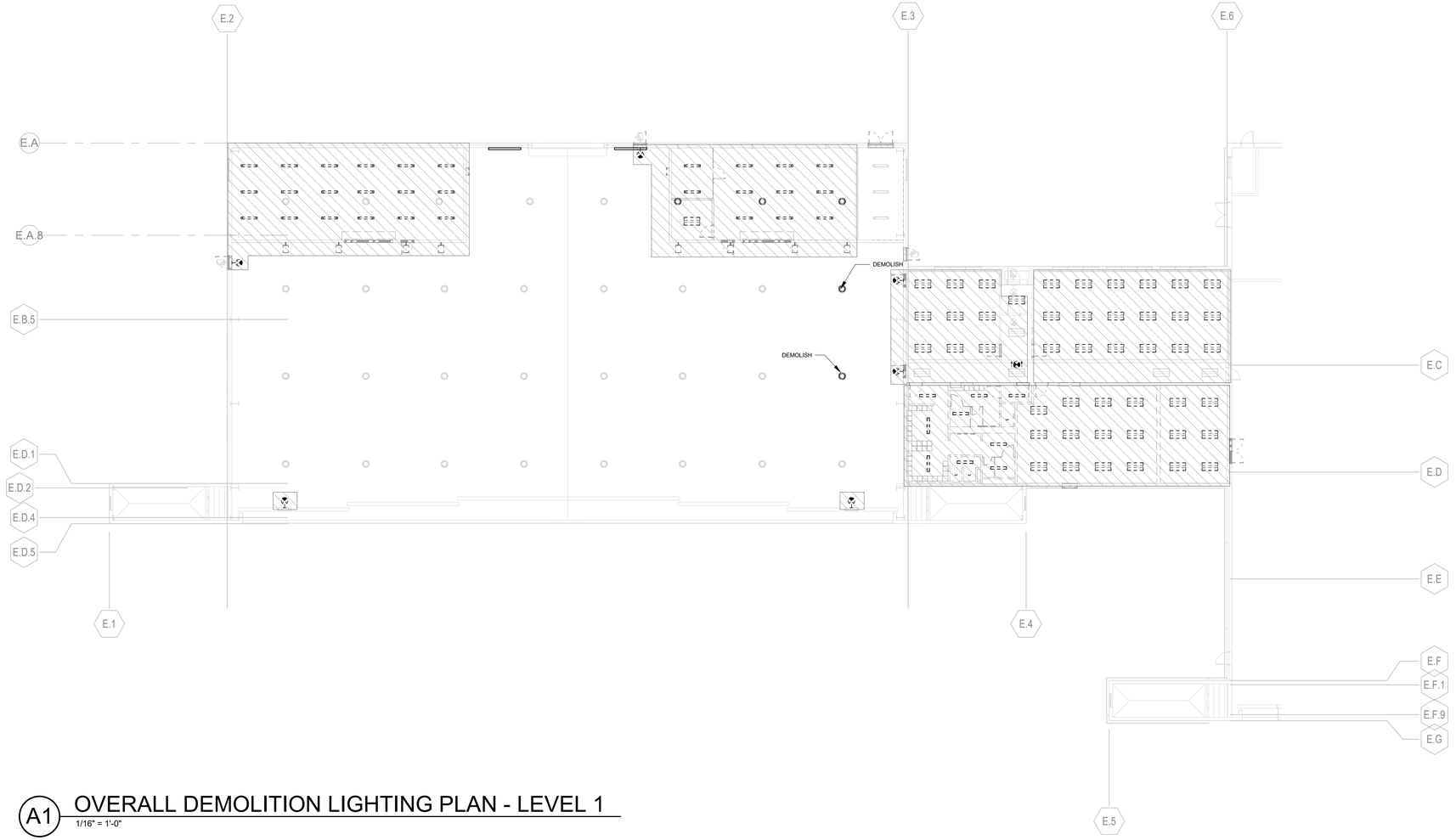
jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS No. 175265

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
OVERALL DEMOLITION POWER & GROUNDING PLAN - LEVEL 1

SHEET ID
B1455
ED101

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



A1 OVERALL DEMOLITION LIGHTING PLAN - LEVEL 1

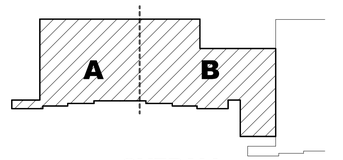
1/16" = 1'-0"

GENERAL NOTES - DEMO - LIGHTING

A	EXISTING LIGHTING LUMINAIRES SHOWN ARE BASED ON RECORD DRAWINGS AND ARE SHOWN FOR REFERENCE ONLY.
B	REMOVE LIGHTING LUMINAIRES AND THEIR ASSOCIATED LIGHTING SWITCHES IN THE AREAS SHOWN TO BE DEMOLISHED, INCLUDING THE ASSOCIATED CONDUCTORS AND CONDUITS BACK TO SOURCE PANELBOARD.
C	EXISTING LIGHTING LUMINAIRES NOT ASSOCIATED WITH NEW WORK ARE TO REMAIN ENERGIZED. COORDINATE WITH OWNER A MINIMUM OF 48 HOURS PRIOR TO ANY POWER OUTAGES.
D	LABEL CIRCUIT BREAKER AS SPARE IF ALL LOADS HAVE BEEN REMOVED.

HATCH LEGEND

PROVIDE DEMOLITION OF ELECTRICAL EQUIPMENT LOCATED WITHIN THE HATCHED AREA UNLESS OTHERWISE NOTED.



OVERALL KEY PLAN

GRAPHIC SCALE

16 12 8 4 0 16 32

SCALE: 1/16"=1'-0"

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
AARON McWHORTER
100310
LICENSED
PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: A. McWHORTER
DRAWN BY: A. FORMAN
CHECKED BY: K.HOGAN
SUBMITTED BY: E. OLMESS
QC BY:
ANSI D 22x34

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT21920!ED121

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street Fort Worth, TX 76102
Phone: 817.820.8700

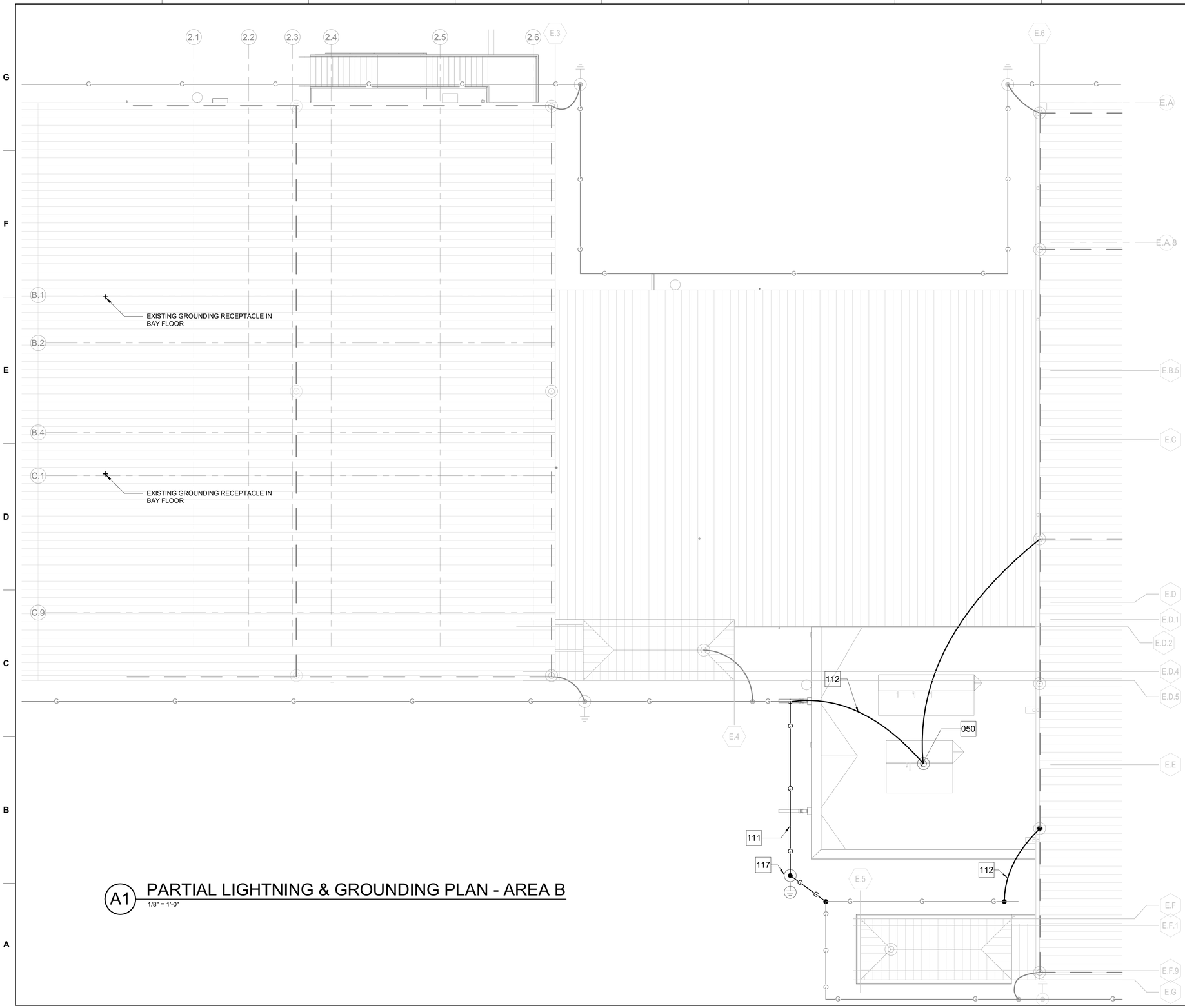
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
OVERALL DEMOLITION LIGHTING PLAN - LEVEL 1

SHEET ID
B1455
ED121

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN

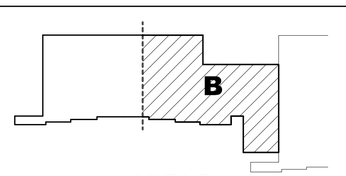


A1 PARTIAL LIGHTNING & GROUNDING PLAN - AREA B

1/8" = 1'-0"

KEYNOTES

050	PROVIDE AN AIR TERMINAL ON TOP OF AIR HANDLER UNIT AND CONNECT TO EXISTING LIGHTNING PROTECTION SYSTEM.
111	EXTEND THE EXISTING GROUND RING AROUND THE NEW BUILDING ADDITION WITH 4/0 BARE COPPER CONDUCTOR.
112	EXTEND THE EXISTING DOWN CONDUCTOR TO THE GROUND RING WITH A #1/0.
117	PROVIDE GROUND ROD TEST WELL. RE:A4/E-502 FOR DETAIL.



AREA B
KEY PLAN

GRAPHIC SCALE

8 6 4 2 0 8 16

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

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
AARON McWHORTER
100310
LICENSED PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: A. McWHORTER
DRAWN BY: A. FORMAN
CHECKED BY: K.HOGAN
SUBMITTED BY: E. OLMESS
DATE: ANSI D 22x34

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT21920 1EG143

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street Fort Worth, TX 76102
Phone: (817)820-8700 TBPE F-2966

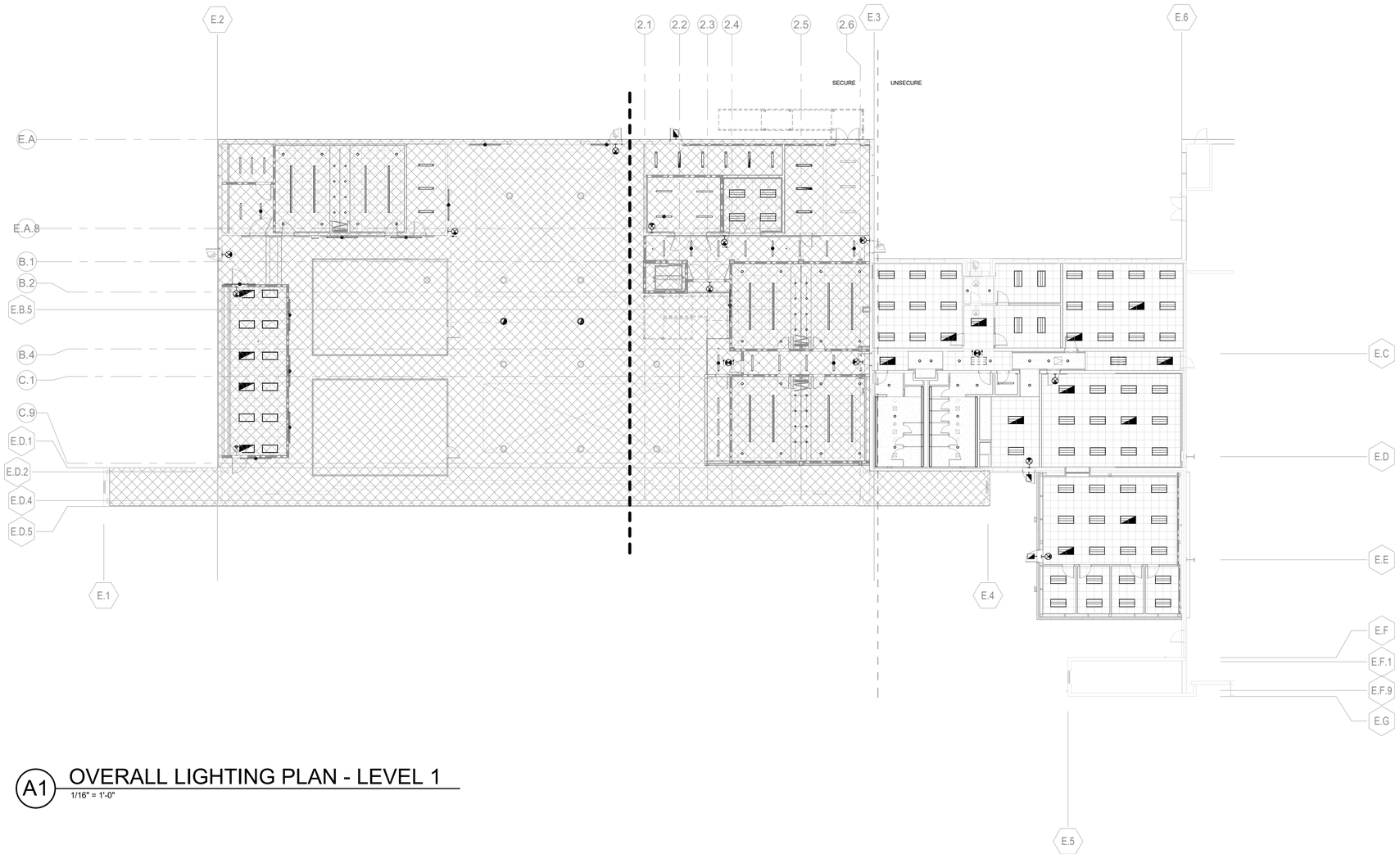
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PARTIAL LIGHTNING & GROUNDING PLAN - AREA B

SHEET ID
B1455
EG143

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN



A1 OVERALL LIGHTING PLAN - LEVEL 1

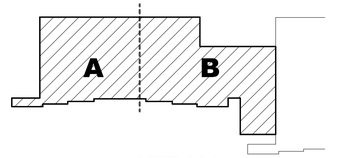
1/16" = 1'-0"

GENERAL NOTES - LIGHTING

A	OCCUPANCY/VACANY SENSORS ARE SHOWN FOR REFERENCE ONLY. COORDINATE WITH MANUFACTURER ON SENSOR QUANTITY AND MOUNTING LOCATION FOR PROPER OPERATION.
B	CIRCUIT ALL EXIT SIGNS TO THE UNSWITCHED LEG OF THE NEAREST LIGHTING CIRCUIT.
C	SEE PATTERN/FILLED REGION SYMBOLS ON GENERAL SHEET FOR MARKING OF THE LIGHTING CIRCUIT ZONES WITH CIRCUITING AS INDICATED.
D	MOUNT OCCUPANCY SENSORS AND TYPE 'S1' FIXTURES SUSPENDED TO SAME HEIGHT AS TYPE D1 FIXTURE IN AREAS WITHOUT CEILING.

HATCH LEGEND

THE CROSS HATCH PATTERN REPRESNTS THE SECURE AREA OF THE FACILITY. PROVIDE DIELECTRIC BREAKS FOR CONDUIT PENETRATIONS THROUGH THE SECURE PERIMETER WALL. COORDINATE WITH ARCHITECTURE, TELECOM, AND FIRE PROTECTION



OVERALL KEY PLAN

GRAPHIC SCALE

16 12 8 4 0 16 32

SCALE: 1/16"=1'-0"

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
AARON McWHORTER
100310
LICENSED
PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
ADDRESS No. 0000013

DESIGNED BY: A. MCWHORTER	ISSUE DATE: 23 NOVEMBER 2022
DRAWN BY: A. FORMAN	SOLICITATION NO.:
CHECKED BY: K.HOGAN	CONTRACT NO.:
SUBMITTED BY: E. OLNESS	DRAWING CODE.:
SIZE: ANSI D 22x34	FILE NAME: SXHT21920!EL121

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
OVERALL LIGHTING PLAN - LEVEL 1

SHEET ID
B1455
EL121

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN

GENERAL NOTES - LIGHTING

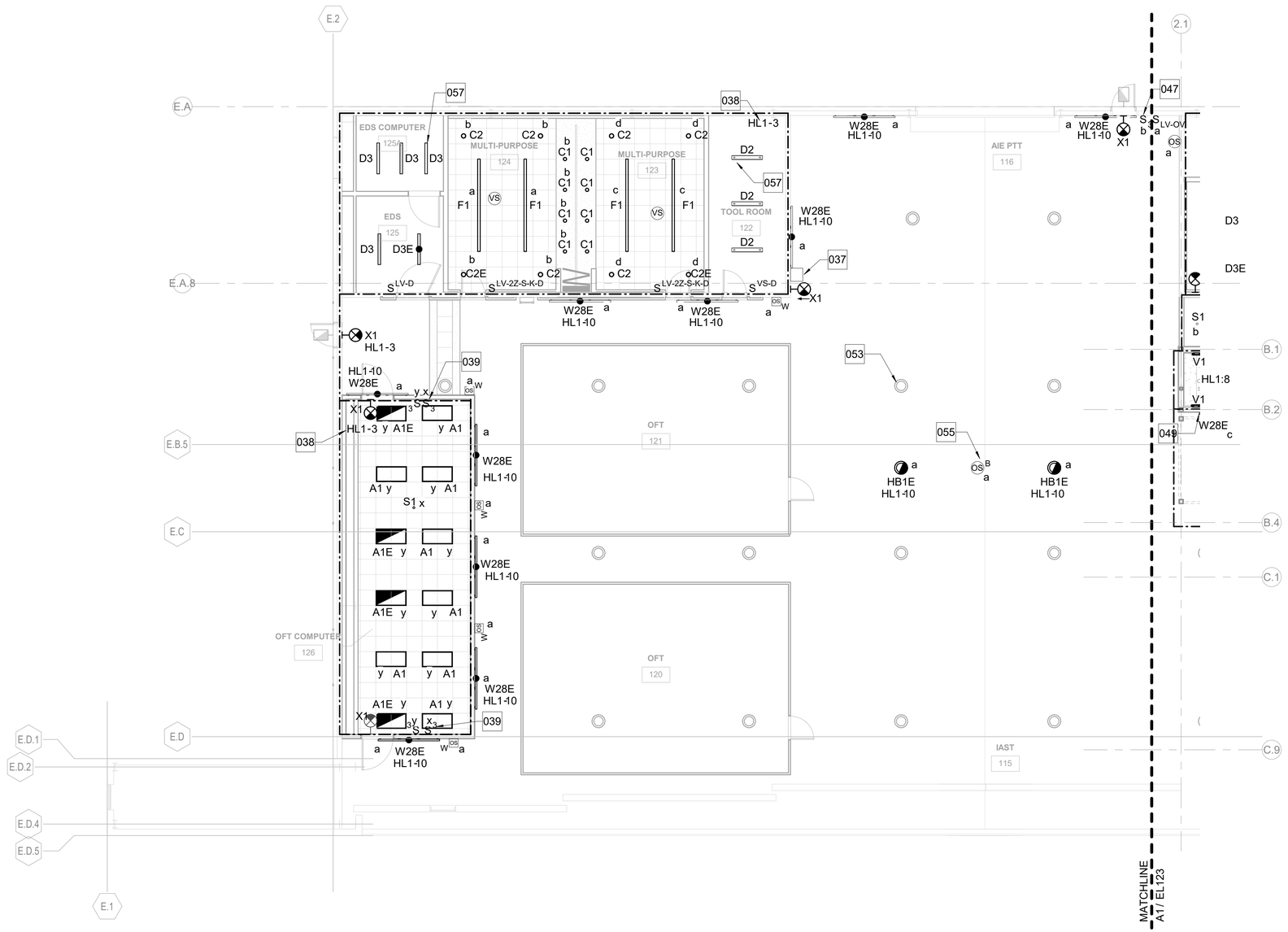
A	OCCUPANCY/VACANY SENSORS ARE SHOWN FOR REFERENCE ONLY. COORDINATE WITH MANUFACTURER ON SENSOR QUANTITY AND MOUNTING LOCATION FOR PROPER OPERATION.
B	CIRCUIT ALL EXIT SIGNS TO THE UNSWITCHED LEG OF THE NEAREST LIGHTING CIRCUIT.
C	SEE PATTERN/FILLED REGION SYMBOLS ON GENERAL SHEET FOR MARKING OF THE LIGHTING CIRCUIT ZONES WITH CIRCUITING AS INDICATED.
D	MOUNT OCCUPANCY SENSORS AND TYPE 'S1' FIXTURES SUSPENDED TO SAME HEIGHT AS TYPE D1 FIXTURE IN AREAS WITHOUT CEILING.

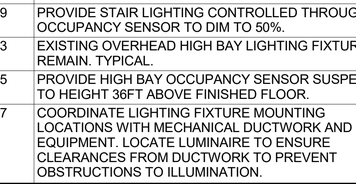
KEYNOTES

037	PROVIDE WALL MOUNTED EMERGENCY LIGHTING INVERTER 400 VA TO SERVE THE NEW HIGH BAY LIGHTING TYPE 'HB1E'.
038	PROVIDE CIRCUIT CONNECTION TO THE LIGHTING FIXTURES WITHIN DASHED LINE.
039	PROVIDE RED SWITCH AND LABEL SECURITY UNCLEARED PERSONNEL.
047	PROVIDE CONTROLS TO TURN "ON" AND "OFF" THE RED BEACON LIGHTS. PROVIDE LABEL "SECURITY UNCLEARED PERSONNEL."
049	PROVIDE STAIR LIGHTING CONTROLLED THROUGH OCCUPANCY SENSOR TO DIM TO 50%.
053	EXISTING OVERHEAD HIGH BAY LIGHTING FIXTURES TO REMAIN. TYPICAL.
055	PROVIDE HIGH BAY OCCUPANCY SENSOR SUSPENDED TO HEIGHT 36FT ABOVE FINISHED FLOOR.
057	COORDINATE LIGHTING FIXTURE MOUNTING LOCATIONS WITH MECHANICAL DUCTWORK AND EQUIPMENT. LOCATE LUMINAIRE TO ENSURE CLEARANCES FROM DUCTWORK TO PREVENT OBSTRUCTIONS TO ILLUMINATION.

A1 PARTIAL LIGHTING PLAN - LEVEL 1 - AREA A

1/8" = 1'-0"





AREA A
KEY PLAN

GRAPHIC SCALE

8 6 4 2 0 8 16

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

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

AARON McWHORTER
100310
LICENSED PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: A. MCWHORTER
DRAWN BY: A. FORMAN
CHECKED BY: K.HOGAN
SUBMITTED BY: E. OLMESS
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT21920IEL122
ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street Fort Worth, TX 76102
TBPE Registration No. F-2600

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, PZ#: 496395
PARTIAL LIGHTING PLAN - LEVEL 1 - AREA A

SHEET ID
B1455
EL122

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN

GENERAL NOTES - LIGHTING

A	OCCUPANCY/VACANY SENSORS ARE SHOWN FOR REFERENCE ONLY. COORDINATE WITH MANUFACTURER ON SENSOR QUANTITY AND MOUNTING LOCATION FOR PROPER OPERATION.
B	CIRCUIT ALL EXIT SIGNS TO THE UNSWITCHED LEG OF THE NEAREST LIGHTING CIRCUIT.
C	SEE PATTERN/FILLED REGION SYMBOLS ON GENERAL SHEET FOR MARKING OF THE LIGHTING CIRCUIT ZONES WITH CIRCUITING AS INDICATED.
D	MOUNT OCCUPANCY SENSORS AND TYPE 'S1' FIXTURES SUSPENDED TO SAME HEIGHT AS TYPE D1 FIXTURE IN AREAS WITHOUT CEILING.

KEYNOTES

043	MOUNT LIGHTING FIXTURES AND SWITCH IN ELEVATOR PIT. THREE-WAY SWITCH CONNECTED TO SWITCH AT TOP OF HOISTWAY.
047	PROVIDE CONTROLS TO TURN "ON" AND "OFF" THE RED BEACON LIGHTS. PROVIDE LABEL "SECURITY UNCLEARED PERSONNEL."
048	PROVIDE CIRCUIT THROUGH LIGHTING CONTROLLER RELAY PANEL WITH TIME CLOCK AND PHOTOCELL CONTROL FOR EXTERIOR LIGHTING. ONBOARD MOTION SENSOR DIMS FIXTURE TO 50%.
049	PROVIDE STAIR LIGHTING CONTROLLED THROUGH OCCUPANCY SENSOR TO DIM TO 50%.

A1 PARTIAL LIGHTING PLAN - LEVEL 1 - AREA B

1/8" = 1'-0"

AREA B
KEY PLAN

GRAPHIC SCALE

8 6 4 2 0 8 16

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

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
AARON McWHORTER
100310
LICENSED PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT21920IEL123

DESIGNED BY: A. MCWHORTER
DRAWN BY: A. FORMAN
CHECKED BY: K.HOGAN
SUBMITTED BY: E. OLNESS
DATE:
ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS Reg. # F2966

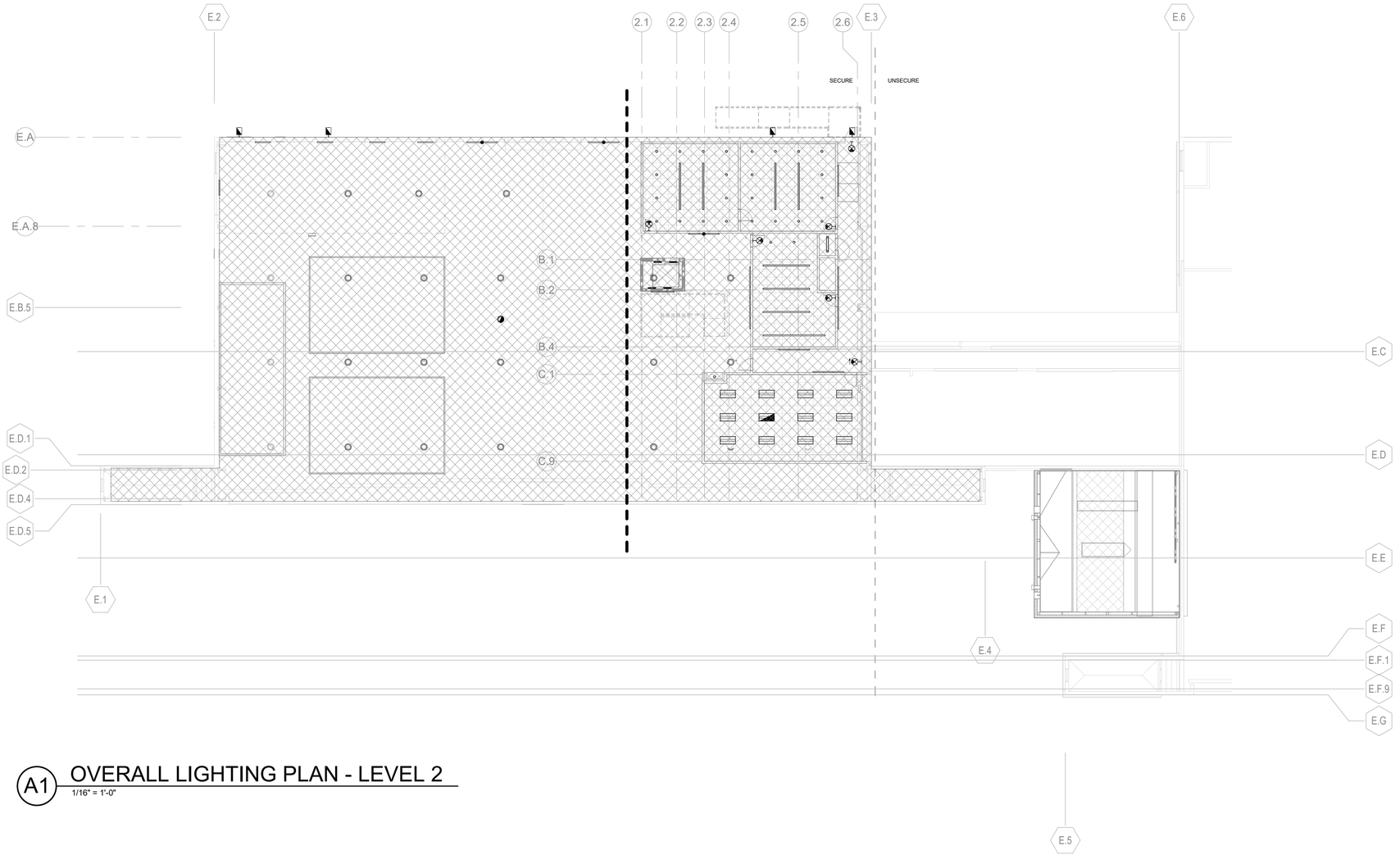
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PARTIAL LIGHTING PLAN - LEVEL 1 - AREA B

SHEET ID
B1455
EL123

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN



A1 OVERALL LIGHTING PLAN - LEVEL 2

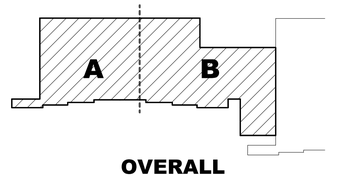
1/16" = 1'-0"

GENERAL NOTES - LIGHTING

A	OCCUPANCY/VACANY SENSORS ARE SHOWN FOR REFERENCE ONLY. COORDINATE WITH MANUFACTURER ON SENSOR QUANTITY AND MOUNTING LOCATION FOR PROPER OPERATION.
B	CIRCUIT ALL EXIT SIGNS TO THE UNSWITCHED LEG OF THE NEAREST LIGHTING CIRCUIT.
C	SEE PATTERN/FILLED REGION SYMBOLS ON GENERAL SHEET FOR MARKING OF THE LIGHTING CIRCUIT ZONES WITH CIRCUITING AS INDICATED.
D	MOUNT OCCUPANCY SENSORS AND TYPE 'S1' FIXTURES SUSPENDED TO SAME HEIGHT AS TYPE D1 FIXTURE IN AREAS WITHOUT CEILING.

HATCH LEGEND

THE CROSS HATCH PATTERN REPRESNTS THE SECURE AREA OF THE FACILITY. PROVIDE DIELECTRIC BREAKS FOR CONDUIT PENETRATIONS THROUGH THE SECURE PERIMETER WALL. COORDINATE WITH ARCHITECTURE, TELECOM, AND FIRE PROTECTION



OVERALL KEY PLAN

GRAPHIC SCALE

16 12 8 4 0 16 32

SCALE: 1/16"=1'-0"

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
AARON McWHORTER
100310
LICENSED
PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY:	A. MCWHORTER
DRAWN BY:	A. FORMAN
CHECKED BY:	K.HOGAN
SUBMITTED BY:	E. OLNESS
SIZE:	ANSI D 22x34
ISSUE DATE:	23 NOVEMBER 2022
SOLICITATION NO.:	
CONTRACT NO.:	
DRAWING CODE:	
FILE NAME:	SXHT219201EL131

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS PROJECT NO: 320015

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395

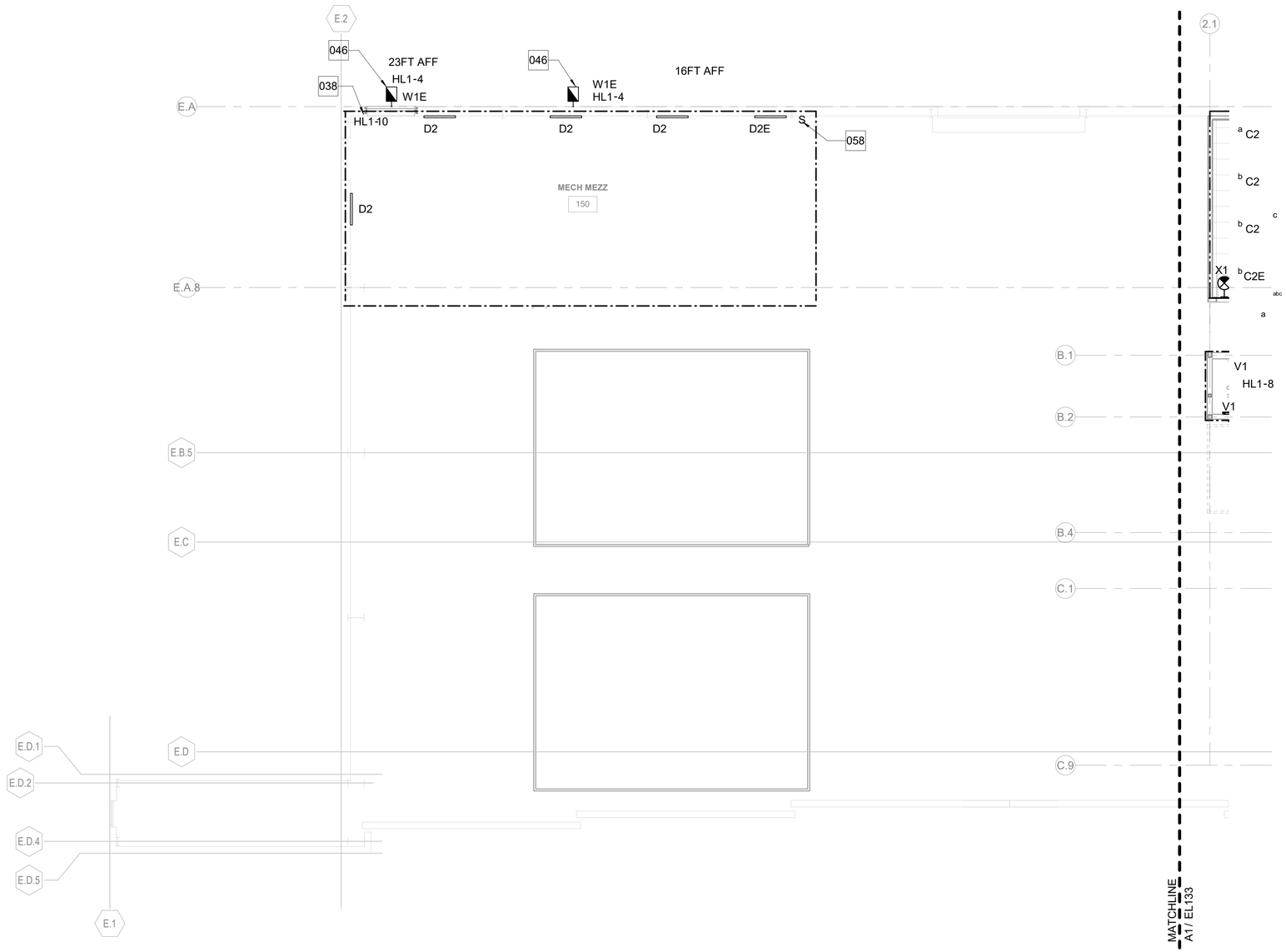
OVERALL LIGHTING PLAN - LEVEL 2

SHEET ID
B1455
EL131

W912QR23R0003_Plans-0000

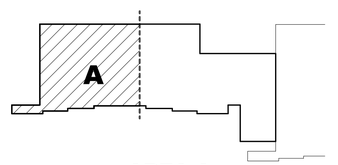
CERTIFIED FINAL DESIGN

KEYNOTES	
038	PROVIDE CIRCUIT CONNECTION TO THE LIGHTING FIXTURES WITHIN DASHED LINE.
046	BID OPTION: PROVIDE EXTERIOR STAIR LIGHTING.
058	PROVIDE SWITCH AT THE TOP OF STAIR IN MEZZANINE TO CONTROL THE MEZZANINE LIGHTING.



A1 PARTIAL LIGHTING PLAN - LEVEL 2 - AREA A

1/8" = 1'-0"



AREA A
KEY PLAN

GRAPHIC SCALE

8 6 4 2 0 8 16

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

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
AARON McWHORTER
100310
LICENSED
PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: A. McWHORTER
DRAWN BY: A. FORMAN
CHECKED BY: K.HOGAN
SUBMITTED BY: E. OLNESS
QC'D BY:
ANSI D 22x34

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201EL132

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
ACCESS No. 1000013

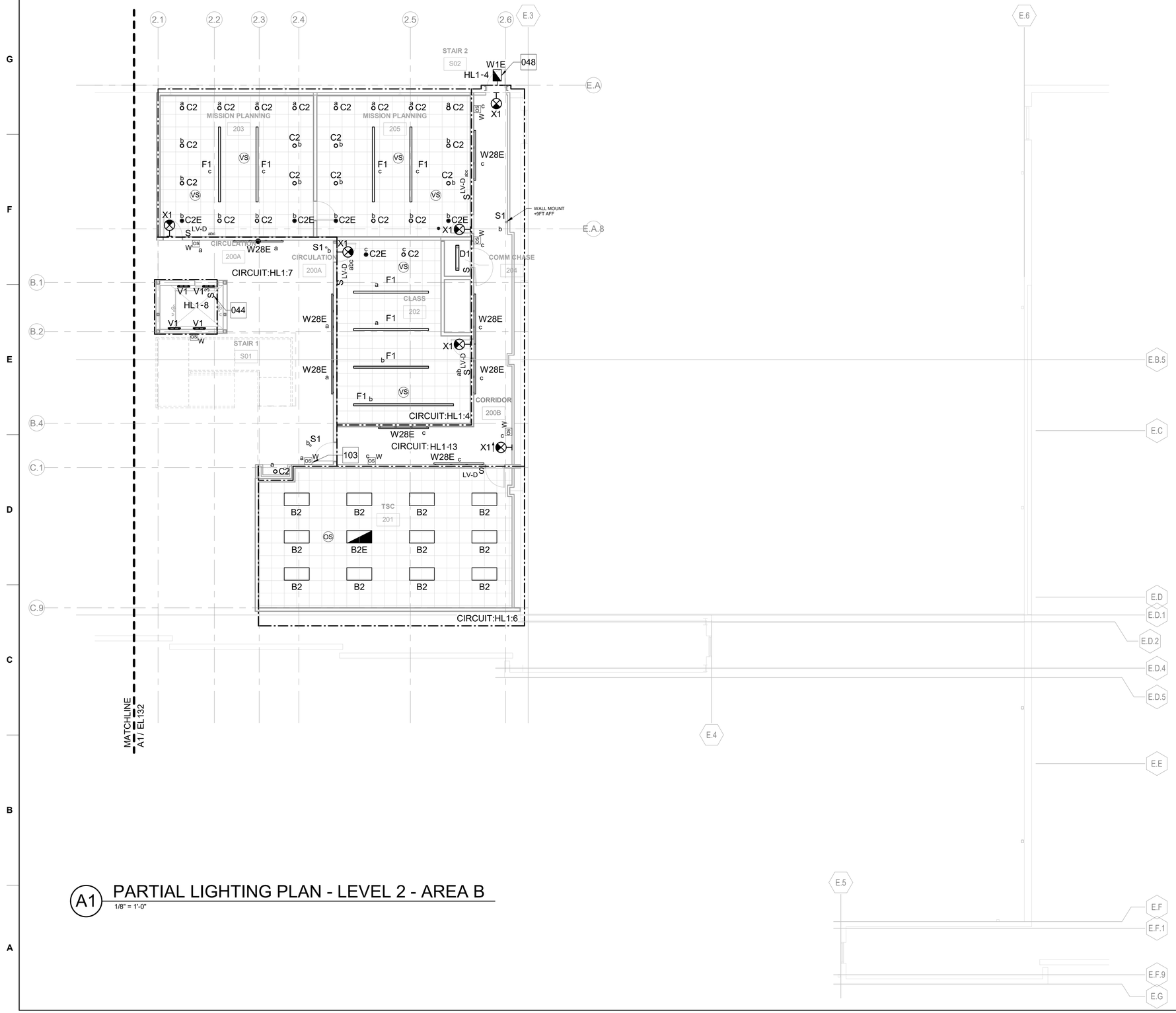
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PARTIAL LIGHTING PLAN - LEVEL 2 - AREA A

SHEET ID
B1455
EL132

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN



GENERAL NOTES - LIGHTING

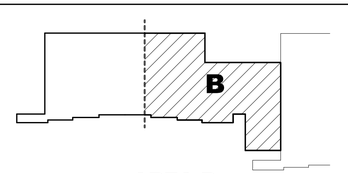
A	OCCUPANCY/VACANY SENSORS ARE SHOWN FOR REFERENCE ONLY. COORDINATE WITH MANUFACTURER ON SENSOR QUANTITY AND MOUNTING LOCATION FOR PROPER OPERATION.
B	CIRCUIT ALL EXIT SIGNS TO THE UNSWITCHED LEG OF THE NEAREST LIGHTING CIRCUIT.
C	SEE PATTERN/FILLED REGION SYMBOLS ON GENERAL SHEET FOR MARKING OF THE LIGHTING CIRCUIT ZONES WITH CIRCUITING AS INDICATED.
D	MOUNT OCCUPANCY SENSORS AND TYPE 'S1' FIXTURES SUSPENDED TO SAME HEIGHT AS TYPE D1 FIXTURE IN AREAS WITHOUT CEILING.

KEYNOTES

044	MOUNT DEVICES IN ELEVATOR SHAFT ACCORDING TO ELEVATOR CODE REQUIREMENTS. THREE-WAY LIGHT SWITCH AT TOP OF SHAFT AND WITHIN PIT.
048	PROVIDE CIRCUIT THROUGH LIGHTING CONTROLLER RELAY PANEL WITH TIME CLOCK AND PHOTOCELL CONTROL FOR EXTERIOR LIGHTING. ONBOARD MOTION SENSOR DIMS FIXTURE TO 50%.
103	WALL-MOUNT OCCUPANCY SENSORS IN THE CORRIDOR ON THE 2ND FLOOR.

A1 PARTIAL LIGHTING PLAN - LEVEL 2 - AREA B

1/8" = 1'-0"



AREA B
KEY PLAN

GRAPHIC SCALE

8 6 4 2 0 8 16

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

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
AARON McWHORTER
100310
LICENSED PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: A. MCWHORTER
DRAWN BY: A. FORMAN
CHECKED BY: K.HOGAN
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT21920IEL133

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS No. 157263

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PARTIAL LIGHTING PLAN - LEVEL 2 - AREA B

SHEET ID
B1455
EL133

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

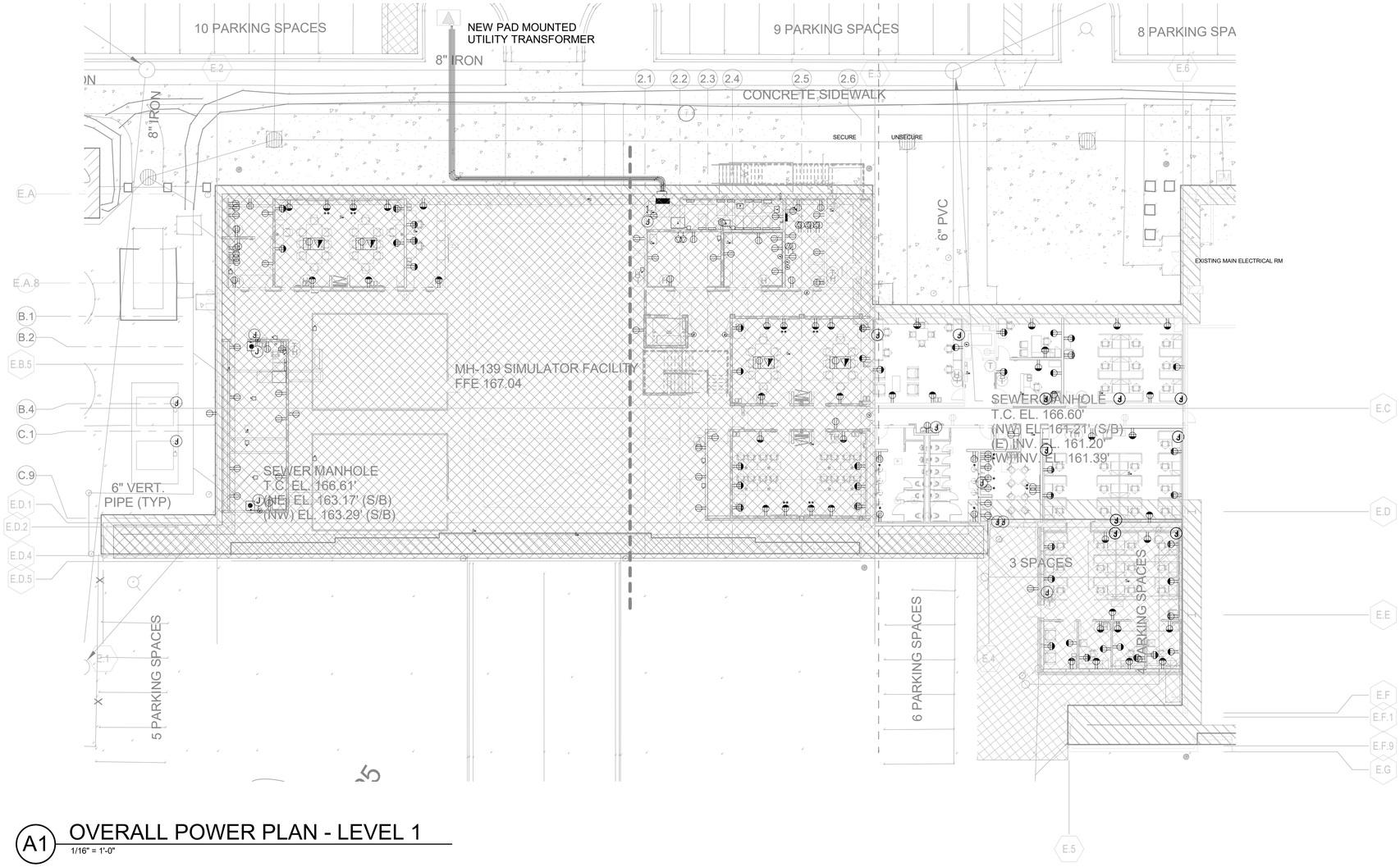
CERTIFIED FINAL DESIGN

GENERAL NOTES - SECURE

A	PROVIDE DIELECTRIC BREAK IN CONDUITS ROUTING ACROSS THE SECURE TO UNSECURE BOUNDARY TRANSITIONING FROM METALLIC CONDUIT TO NONMETALLIC PVC CONDUIT AND BACK TO METALLIC CONDUIT. REFER TO TELECOM PLANS TY101 AND A1/T-503

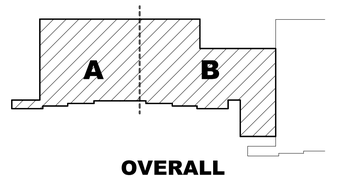
HATCH LEGEND

THE CROSS HATCH PATTERN REPRESNTS THE SECURE AREA OF THE FACILITY. PROVIDE DIELECTRIC BREAKS FOR CONDUIT PENETRATIONS THROUGH THE SECURE PERIMETER WALL. COORDINATE WITH ARCHITECTURE, TELECOM, AND FIRE PROTECTION



A1 OVERALL POWER PLAN - LEVEL 1

1/16" = 1'-0"



OVERALL KEY PLAN

GRAPHIC SCALE

16 12 8 4 0 16 32

SCALE: 1/16"=1'-0"

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

AARON McWHORTER
100310
REGISTERED PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: A.MCWHORTER	ISSUE DATE: 23 NOVEMBER 2022
DRAWN BY: A. FORMAN	SOLICITATION NO.:
CHECKED BY: K.HOGAN	CONTRACT NO.:
SUBMITTED BY: E. OLNESS	DRAWING CODE:
ANSI D 22x34	FILE NAME: SXHT219201EP101

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS No. 175290

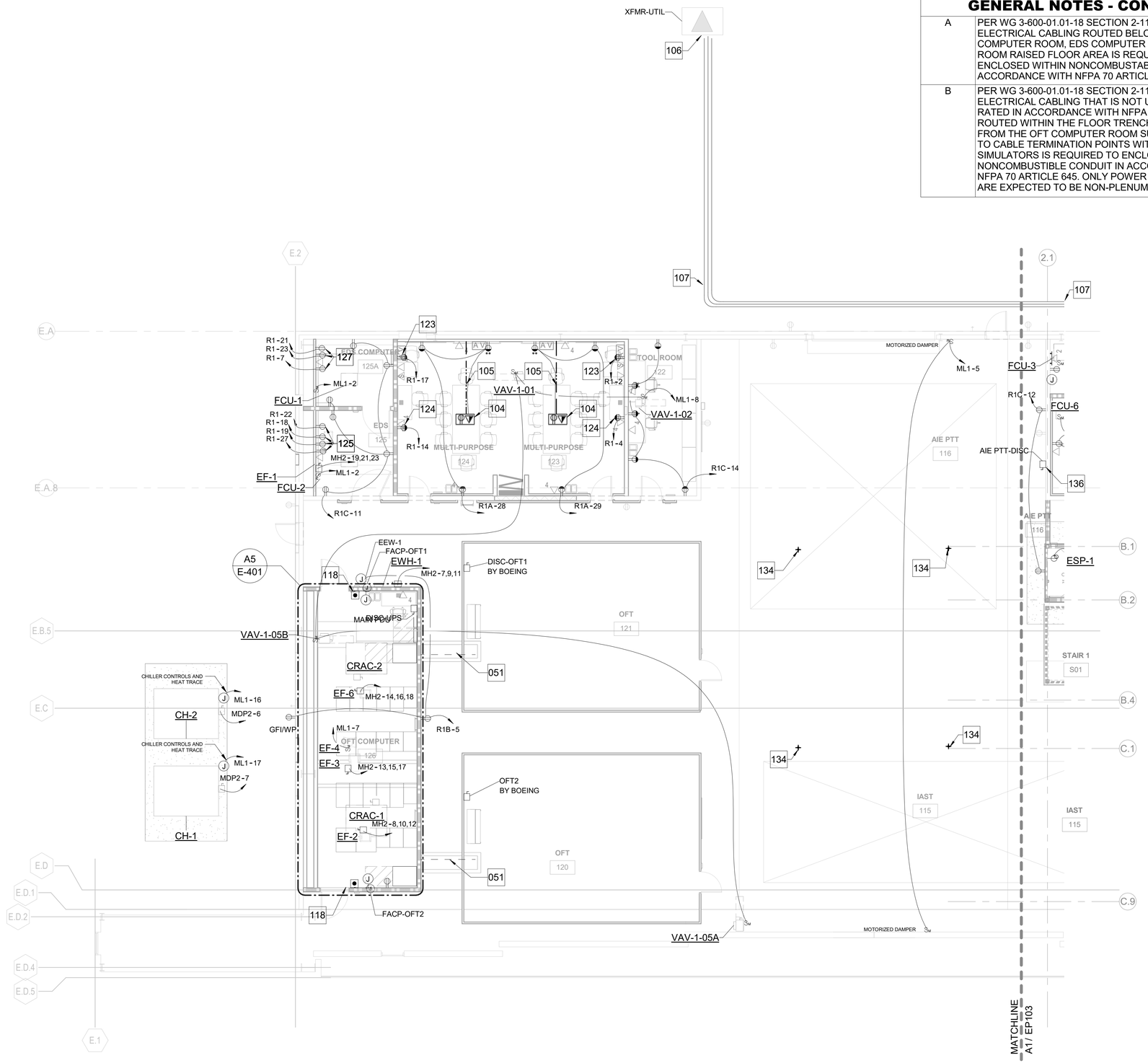
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
OVERALL POWER PLAN - LEVEL 1

SHEET ID
B1455
EP101

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN



GENERAL NOTES - CONDUIT

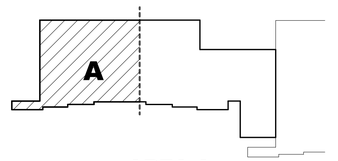
A	PER WG 3-600-01.01-18 SECTION 2-11, ALL EXPOSED ELECTRICAL CABLING ROUTED BELOW THE OFT COMPUTER ROOM, EDS COMPUTER ROOM, AND EDS ROOM RAISED FLOOR AREA IS REQUIRED TO BE ENCLOSED WITHIN NONCOMBUSTABLE CONDUIT IN ACCORDANCE WITH NFPA 70 ARTICLE 645.
B	PER WG 3-600-01.01-18 SECTION 2-11 ALL EXPOSED ELECTRICAL CABLING THAT IS NOT UL-LISTED PLENUM RATED IN ACCORDANCE WITH NFPA 262 AND UL 910 ROUTED WITHIN THE FLOOR TRENCHES EXTENDING FROM THE OFT COMPUTER ROOM SUB-FLOOR AREA TO CABLE TERMINATION POINTS WITHIN THE OFT SIMULATORS IS REQUIRED TO ENCLOSED WITHIN NONCOMBUSTIBLE CONDUIT IN ACCORDANCE WITH NFPA 70 ARTICLE 645. ONLY POWER SUPPLY CABLES ARE EXPECTED TO BE NON-PLENUM RATED.

GENERAL NOTES - POWER

A	REFER TO A2/E-501 FOR CONTROLLED RECEPTACLES WIRING DIAGRAM.
B	REFER TO E-602 FOR ADDITIONAL EQUIPMENT CONNECTION INFORMATION. FOR INTEGRAL DISCONNECTS, REFER TO EQUIPMENT SCHEDULES AND MECHANICAL SHEETS. INTEGRAL DISCONNECTS ARE SHOWN AS HALF-TONED.
C	CONDUIT RUNS AS SHOWN ON THE PLANS ARE DIAGRAMMATIC ONLY. EXACT LOCATION AND METHOD OF SUPPORT MUST BE DETERMINED IN THE FIELD.
E	PROVIDE SOURCE (PANEL & CIRCUIT #) LABEL ON ALL NEW RECEPTACLE COVERS.

KEYNOTES

051	PROVIDE 3-3" AND 3-2" CONDUITS WITH PULL STRING WITHIN TRENCH FROM OFT COMPUTER ROOM TO OFT ENCLOSURE FOR SIMULATOR MANUFACTURER PROVIDED CABLING. COORDINATE WITH SIMULATOR MANUFACTURER AND THE CONTRACTING OFFICER TO ENSURE THE SIMULATOR MANUFACTURER REQUIREMENTS ARE MET.
104	PROVIDE SURFACE-TYPE FLOOR BOX WITH COMBINATION POWER AND DATA. PROVIDE DUPLEX 5-20R RECEPTACLE AND SPACE FOR DATA. REFER TO TELECOM PLANS. COORDINATE WITH ARCHITECTURAL AND INTERIORS FOR DIMENSIONS TO LOCATE BELOW TABLES.
105	PROVIDE IN-CARPET EXPOSED RACEWAY SYSTEM FROM THE WALL TO THE FLOOR BOX.
106	COORDINATE WITH THE LOCAL ELECTRICAL UTILITY COMPANY (CAEC) FOR INSTALLATION OF THE NEW SERVICE TRANSFORMER, PAD, GROUNDING AND SECONDARY CONDUCTORS TO MEET THE CAEC REQUIREMENTS. INCORPORATE UTILITY COSTS FROM CAEC FOR SERVICE REQUIREMENTS.
107	PROVIDE UNDERGROUND CONDUITS FROM TRANSFORMER TO EXTERIOR JUNCTION BOX FOR SERVICE CONDUCTORS TO MDP2. COORDINATE WITH THE LOCAL ELECTRICAL UTILITY COMPANY (CAEC) TO INSTALL THE CONDUITS INTO THE SECONDARY SECTION OF THE TRANSFORMER.
118	PROVIDE AN EMERGENCY POWER OFF (EPO) SWITCH TO SHUT OFF ROOM PANELBOARD AND UPS. LABEL EPO WITH LOCATION AND NAME OF SHUNT TRIP ENCLOSED CIRCUIT CIRCUIT BREAKER. RE:E-702 FOR UPSTREAM CKT-BKR-BOEING PDU ENCLOSED CIRCUIT BREAKER WITH A SHUNT-TRIP.
123	PROVIDE A DEDICATED QUAD OUTLET FOR THE INSTRUCTOR OPERATOR STATION (IOS).
124	PROVIDE A DEDICATED QUAD OUTLET FOR THE AFTER ACTION REVIEW STATION (AARS).
125	PROVIDE FOUR DEDICATED DUPLEX OUTLETS FOR THE ENGINEERING DEVELOPMENT STATION (ED) EQUIPMENT.
127	PROVIDE THREE DEDICATED DUPLEX OUTLETS FOR THE EDS COMPUTER EQUIPMENT.
134	EXISTING AIRCRAFT STATIC-GROUND RECEPTACLES TO BE USED FOR THE IAST AND AIE PTT.
136	PROVIDE A DISCONNECT FOR THE ALTERNATE INSERTION EXTRACTION PART-TASK TRAINER (AIE PTT) AT THE BOTTOM OF THE SCAFFOLD SYSTEM.



AREA A
KEY PLAN

GRAPHIC SCALE

8 6 4 2 0 8 16

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

PLAN NORTH

TRUE N

A1 PARTIAL POWER PLAN - LEVEL 1 - AREA A

1/8" = 1'-0"

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN

US Army Corps of Engineers
Louisville District ®

AARON McWHORTER
100310
REGISTERED
PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201EP102

DESIGNED BY: A. McWHORTER
DRAWN BY: A. FORMAN
CHECKED BY: K.HOGAN
SUBMITTED BY: E. OLMESS
CITE: ANSI D 22x34

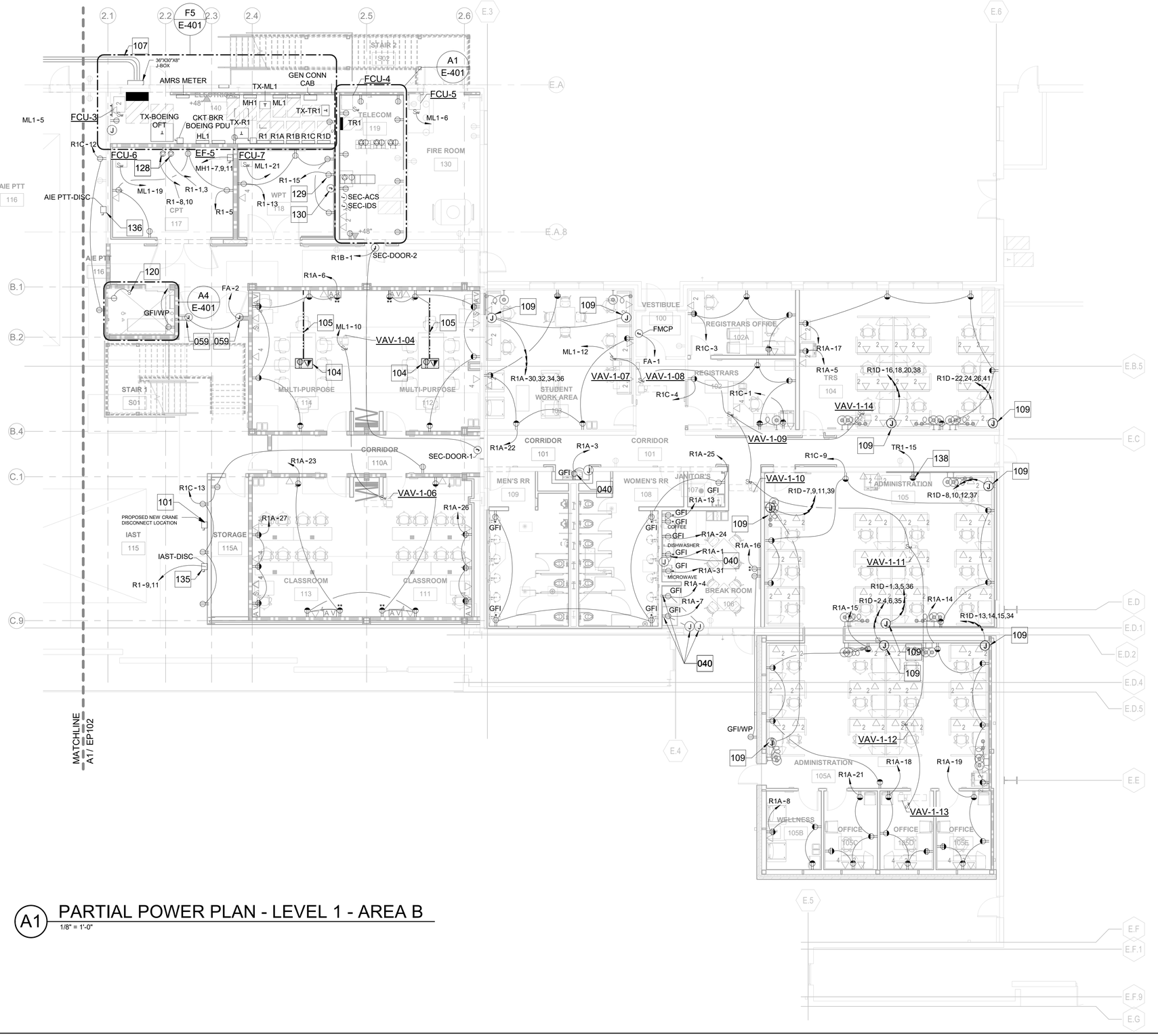
US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
TBPE Registration No. F-2966

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PARTIAL POWER PLAN - LEVEL 1 - AREA A

SHEET ID
B1455
EP102

W912QR23R0003_Plans-0000



A1 PARTIAL POWER PLAN - LEVEL 1 - AREA B

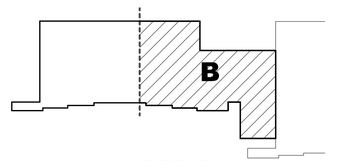
1/8" = 1'-0"

GENERAL NOTES - POWER

A	REFER TO A2/E-501 FOR CONTROLLED RECEPTACLES WIRING DIAGRAM.
B	REFER TO E-602 FOR ADDITIONAL EQUIPMENT CONNECTION INFORMATION. FOR INTEGRAL DISCONNECTS, REFER TO EQUIPMENT SCHEDULES AND MECHANICAL SHEETS. INTEGRAL DISCONNECTS ARE SHOWN AS HALF-TONED.
C	CONDUIT RUNS AS SHOWN ON THE PLANS ARE DIAGRAMMATIC ONLY. EXACT LOCATION AND METHOD OF SUPPORT MUST BE DETERMINED IN THE FIELD.
E	PROVIDE SOURCE (PANEL & CIRCUIT #) LABEL ON ALL NEW RECEPTACLE COVERS.

KEYNOTES

040	PROVIDE REMOTE INDICATOR AND RESET GFCI IN AN ACCESSIBLE LOCATION. PROVIDE LABEL IDENTIFYING THE APPLIANCE SERVED.
059	PROVIDE POWER CONNECTION TO DOOR HOLD OPEN. COORDINATE REQUIREMENTS WITH MANUFACTURER AND FIRE PROTECTION.
101	REMOVE EXISTING CRANE DISCONNECT AND PROVIDE NEW DISCONNECT IN NEW LOCATION. EXTEND CONDUIT AND CONDUCTORS TO NEW LOCATION. PROVIDE CRANE DISCONNECT RELOCATION MEETING WITH CONTRACTING OFFICER AND USERS TO DETERMINE IDEAL LOCATION FOR THE CRANE DISCONNECT SWITCH. REMOVE EXISTING CRANE DISCONNECT AND PROVIDE NEW DISCONNECT SWITCH IN LOCATION PER THE RELOCATION MEETING. PROVIDE TESTING AND COMMISSIONING OF CRANE PRIOR TO START OF CONSTRUCTION. CRANE IS TO REMAIN OPERATIONAL AFTER CONSTRUCTION COMPLETION. TEST AND COMMISSION CRANE AFTER RELOCATION OF CRANE DISCONNECT AND CONTROLS. PROVIDE NEW DISCONNECT AND CIRCUIT TO MATCH EXISTING.
104	PROVIDE SURFACE-TYPE FLOOR BOX WITH COMBINATION POWER AND DATA. PROVIDE DUPLEX 5-20R RECEPTACLE AND SPACE FOR DATA. REFER TO TELECOM PLANS. COORDINATE WITH ARCHITECTURAL AND INTERIORS FOR DIMENSIONS TO LOCATE BELOW TABLES.
105	PROVIDE IN-CARPET EXPOSED RACEWAY SYSTEM FROM THE WALL TO THE FLOOR BOX.
107	PROVIDE UNDERGROUND CONDUITS FROM TRANSFORMER TO EXTERIOR JUNCTION BOX FOR SERVICE CONDUCTORS TO MDP2. COORDINATE WITH THE LOCAL ELECTRICAL UTILITY COMPANY (CAEC) TO INSTALL THE CONDUITS INTO THE SECONDARY SECTION OF THE TRANSFORMER.
109	PROVIDE A 10-WIRE (4-4-2), 2+2 CIRCUIT CONFIGURATION TO THE WORKSTATIONS. PROVIDE 8#10, 2#10 GROUND IN 1-1/4" CONDUIT AND MAKE WHIP CONNECTION TO FURNITURE ACCORDING TO FURNITURE MANUFACUTURER REQUIREMENTS. ONE DUPLEX OUTLET SHALL HAVE CONTROLLED RECEPTACLES AND THE THREE OTHER DUPLEX OUTLET WILL HAVE NON-SWITCHED RECEPTACLES. LABEL CONTROLLED RECEPTACLES ACCORDINGLY. COORDINATE WITH FURNITURE MANUFACTURER TO PROVIDE ELECTRICAL CONNECTIONS AND TESTING OF FURNITURE RECEPTACLES.
120	MOUNT THE SWITCH IN ELEVATORT PIT AT REACHING HEIGHT NEAR ELEVATOR OPENING.
128	PROVIDE TWO 2-POLE 3-WIRE 208 VAC OUTLET FOR THE COCKPIT PROCEDURAL TRAINER (CPT).
129	PROVIDE A DEDICATED DUPLEX OUTLET FOR THE WEAPONS PROCEDURAL TRAINER (WPT).
130	PROVIDE A L5-20P PLUG FOR THE WEAPONS PROCEDURAL TRAINER (WPT).
135	PROVIDE A DISCONNECT FOR THE IAST TOWARDS THE REAR OF THE TRAINER.
136	PROVIDE A DISCONNECT FOR THE ALTERNATE INSERTION EXTRACTION PART-TASK TRAINER (AIE PTT) AT THE BOTTOM OF THE SCAFFOLD SYSTEM.
138	PROVIDE RECEPTACLES FOR TELECOMMUNICATIONS RACK. COORDINATE MOUNTING LOCATIONS WITH TELECOM DRAWINGS.



AREA B
KEY PLAN

GRAPHIC SCALE

8 6 4 2 0 8 16

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

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

QUY N. TRAN
TX134836
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: A. MCWHORTER
DRAWN BY: A. FORMAN
CHECKED BY: K.HOGAN
SUBMITTED BY: E. OLMESS
ANSI D 22x34

ISSUE DATE: 12 AUG 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201EP103

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street Fort Worth, TX 76102
TBPE/TBPELS No. F2966 / 10

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, PZ#: 496395
PARTIAL POWER PLAN - LEVEL 1 - AREA B

SHEET ID
B1455
EP103

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

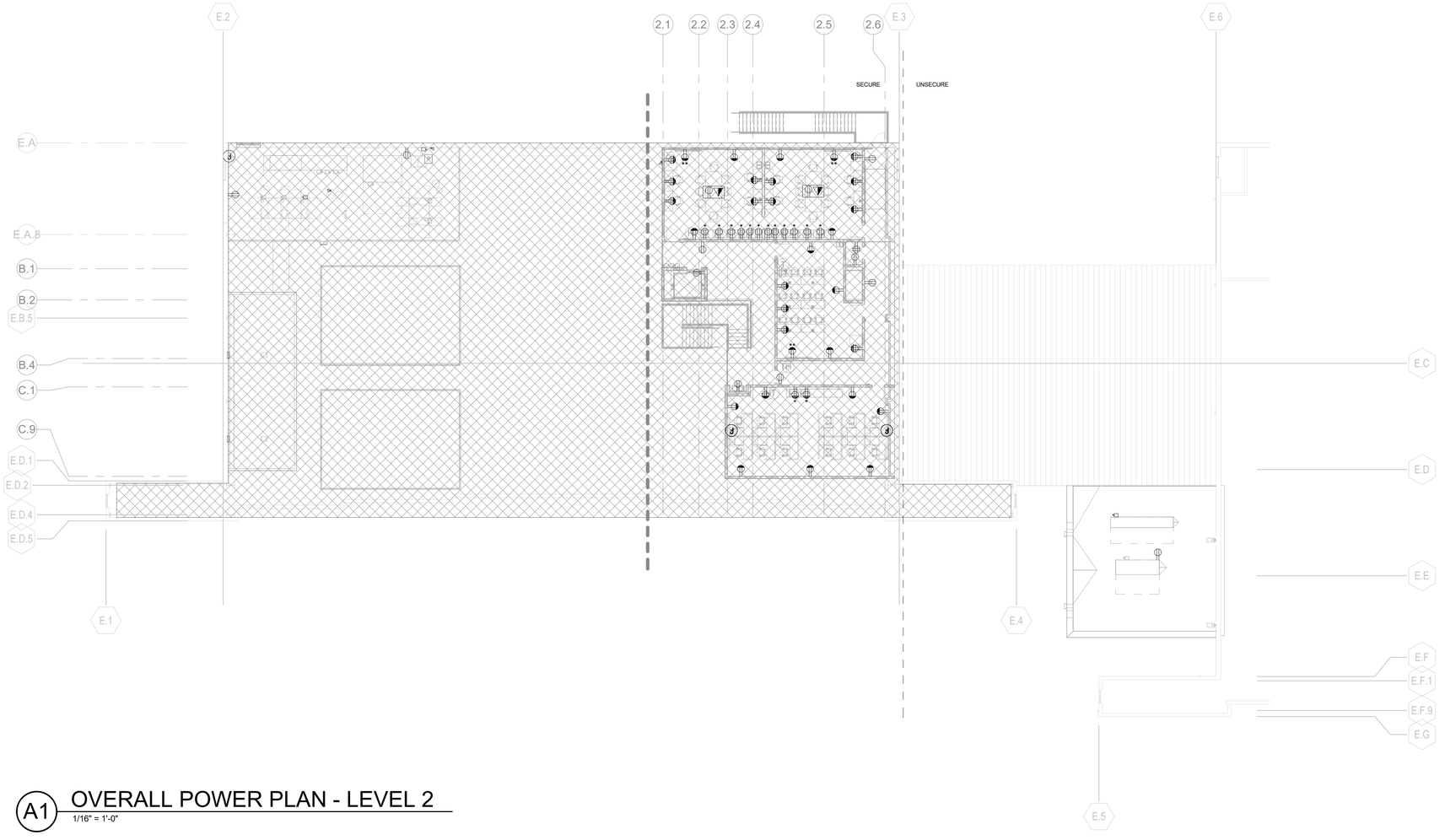
CERTIFIED FINAL DESIGN

GENERAL NOTES - SECURE

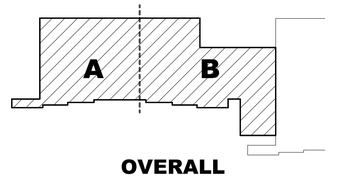
A	PROVIDE DIELECTRIC BREAK IN CONDUITS ROUTING ACROSS THE SECURE TO UNSECURE BOUNDARY TRANSITIONING FROM METALLIC CONDUIT TO NONMETALLIC PVC CONDUIT AND BACK TO METALLIC CONDUIT. REFER TO TELECOM PLANS TY101 AND A1/T-503

HATCH LEGEND

THE CROSS HATCH PATTERN REPRESNTS THE SECURE AREA OF THE FACILITY. PROVIDE DIELECTRIC BREAKS FOR CONDUIT PENETRATIONS THROUGH THE SECURE PERIMETER WALL. COORDINATE WITH ARCHITECTURE, TELECOM, AND FIRE PROTECTION



A1 OVERALL POWER PLAN - LEVEL 2
1/16" = 1'-0"



OVERALL KEY PLAN

GRAPHIC SCALE

16 12 8 4 0 16 32

SCALE: 1/16"=1'-0"

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
AARON McWHORTER
100310
LICENSED
PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY:	A. MCWHORTER
DRAWN BY:	A. FORMAN
CHECKED BY:	K.HOGAN
SUBMITTED BY:	E. OLNESS
SIZE:	ANSI D 22x34
ISSUE DATE:	23 NOVEMBER 2022
SOLICITATION NO.:	
CONTRACT NO.:	
DRAWING CODE:	
FILE NAME:	SXHT219201EP111

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS PROJECT NO: 320015

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
OVERALL POWER PLAN - LEVEL 2

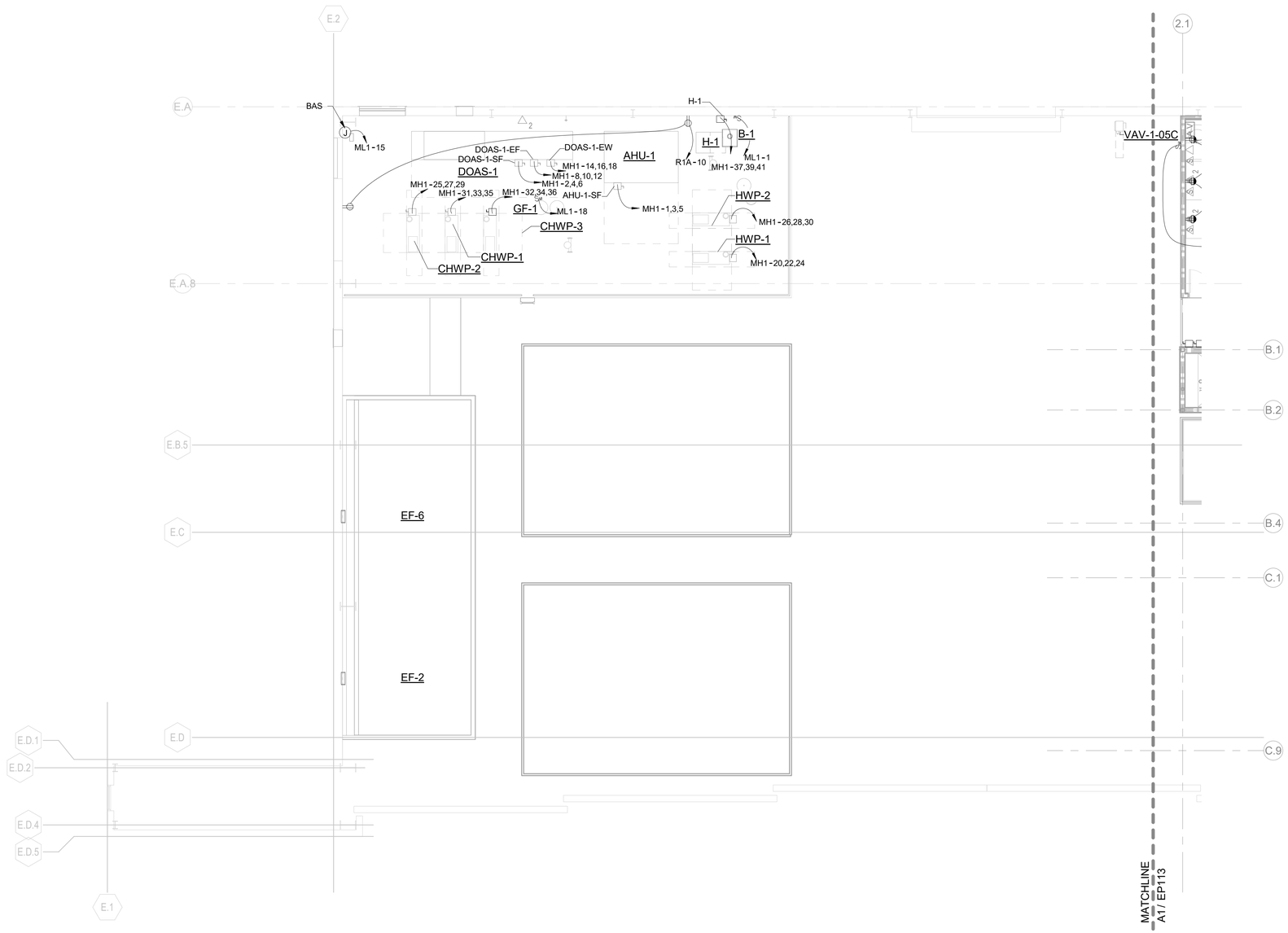
SHEET ID
B1455
EP111

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN

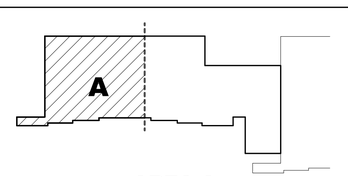
GENERAL NOTES - POWER

A	REFER TO A2/E-501 FOR CONTROLLED RECEPTACLES WIRING DIAGRAM.
B	REFER TO E-602 FOR ADDITIONAL EQUIPMENT CONNECTION INFORMATION. FOR INTEGRAL DISCONNECTS, REFER TO EQUIPMENT SCHEDULES AND MECHANICAL SHEETS. INTEGRAL DISCONNECTS ARE SHOWN AS HALF-TONED.
C	CONDUIT RUNS AS SHOWN ON THE PLANS ARE DIAGRAMMATIC ONLY. EXACT LOCATION AND METHOD OF SUPPORT MUST BE DETERMINED IN THE FIELD.
E	PROVIDE SOURCE (PANEL & CIRCUIT #) LABEL ON ALL NEW RECEPTACLE COVERS.



A1 PARTIAL FLOOR PLAN - LEVEL 2 - AREA A

1/8" = 1'-0"



AREA A
KEY PLAN

GRAPHIC SCALE

8 6 4 2 0 8 16

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

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

AARON McWHORTER 100310 REGISTERED PROFESSIONAL ENGINEER 21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: A. McWHORTER
DRAWN BY: A. FORMAN
CHECKED BY: K.HOGAN
SUBMITTED BY: E. OLMESS
SIZE: ANSI D 22x34

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201EP112

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
Phone: (817)820-7922

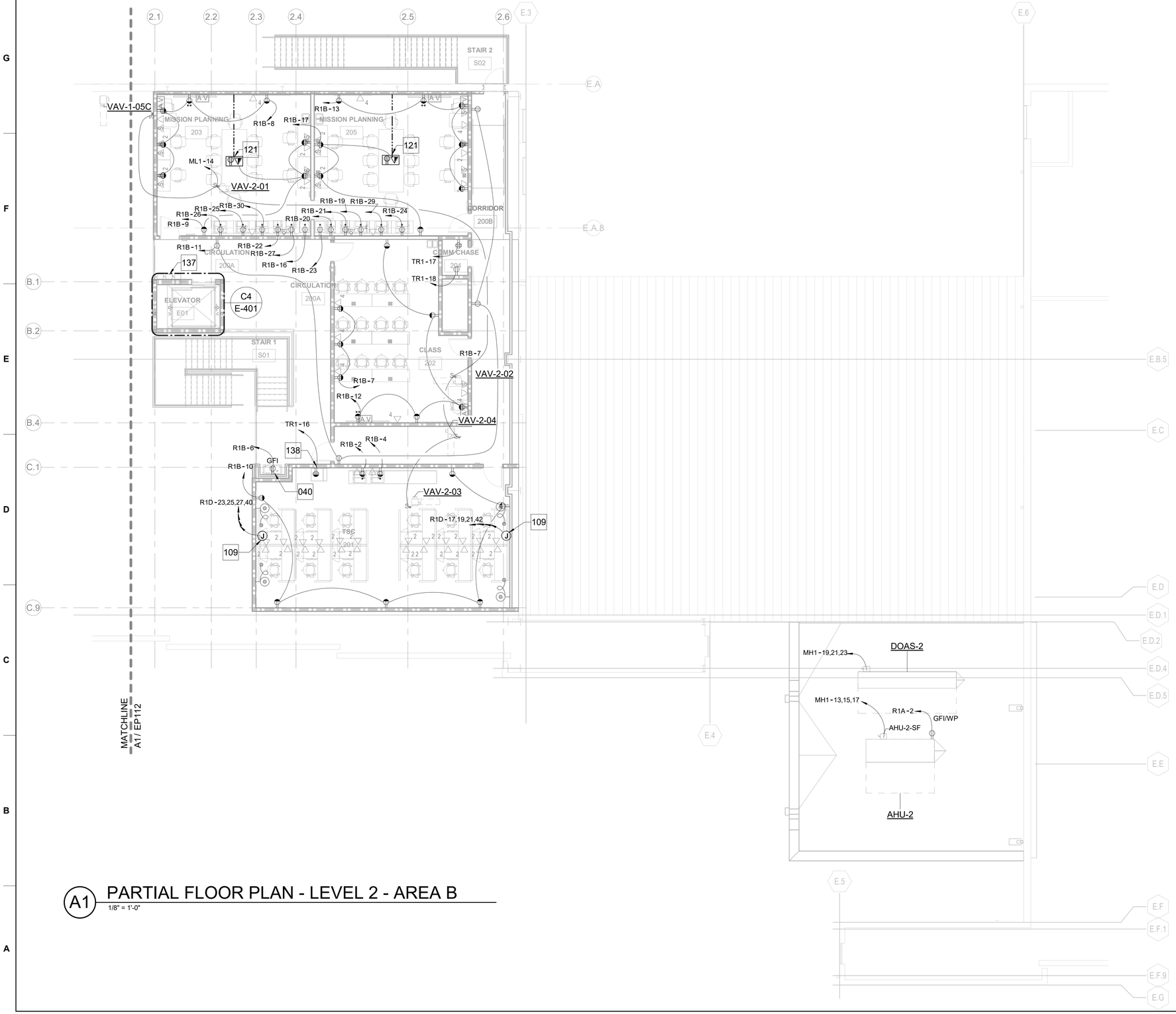
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PARTIAL POWER PLAN - LEVEL 2 - AREA A

SHEET ID
B1455
EP112

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN



A1 PARTIAL FLOOR PLAN - LEVEL 2 - AREA B

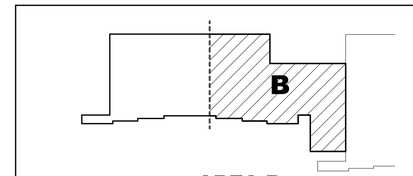
1/8" = 1'-0"

GENERAL NOTES - POWER

A	REFER TO A2/E-501 FOR CONTROLLED RECEPTACLES WIRING DIAGRAM.
B	REFER TO E-602 FOR ADDITIONAL EQUIPMENT CONNECTION INFORMATION. FOR INTEGRAL DISCONNECTS, REFER TO EQUIPMENT SCHEDULES AND MECHANICAL SHEETS. INTEGRAL DISCONNECTS ARE SHOWN AS HALF-TONED.
C	CONDUIT RUNS AS SHOWN ON THE PLANS ARE DIAGRAMMATIC ONLY. EXACT LOCATION AND METHOD OF SUPPORT MUST BE DETERMINED IN THE FIELD.
E	PROVIDE SOURCE (PANEL & CIRCUIT #) LABEL ON ALL NEW RECEPTACLE COVERS.

KEYNOTES

040	PROVIDE REMOTE INDICATOR AND RESET GFCI IN AN ACCESSIBLE LOCATION. PROVIDE LABEL IDENTIFYING THE APPLIANCE SERVED.
109	PROVIDE A 10-WIRE (4-4-2), 2+2 CIRCUIT CONFIGURATION TO THE WORKSTATIONS. PROVIDE 8#10, 2#10 GROUND IN 1-1/4" CONDUIT AND MAKE WHIP CONNECTION TO FURNITURE ACCORDING TO FURNITURE MANUFACUTURER REQUIREMENTS. ONE DUPLEX OUTLET SHALL HAVE CONTROLLED RECEPTACLES AND THE THREE OTHER DUPLEX OUTLET WILL HAVE NON-SWITCHED RECEPTACLES. LABEL CONTROLLED RECEPTACLES ACCORDINGLY. COORDINATE WITH FURNITURE MANUFACTURER TO PROVIDE ELECTRICAL CONNECTIONS AND TESTING OF FURNITURE RECEPTACLES.
121	PROVIDE AN IN-FLOOR RACEWAY SYSTEM FROM THE WALL TO THE FLOOR BOX.
137	PROVIDE ENCLOSED CIRCUIT BREAKERS IN THE ELEVATOR CONTROL JAMB. PROVIDE ONE ENCLOSED CIRCUIT BREAKER WITH SHUNT TRIP FOR THE ELEVATOR POWER. SHUT TRIP IS TO BE TRIGGERED BY THE FIRE SPRINKLER FLOW SWITCH. PROVIDE DEDICATED BRANCH CIRCUIT BREAKERS FOR THE FOLLOWING: 1) ELEVATOR CAB LIGHTING AND RECEPTACLES, 2) ELEVATOR FAN AND HVAC EQUIPMENT, 3) ELEVATOR HOISTWAY PIT SUMP PUMP POWER AND CONTROL SYSTEM, 4) PIT & HOISTWAY LIGHTING, 5) PIT GFCI RECEPTACLES.
138	PROVIDE RECEPTACLES FOR TELECOMMUNICATIONS RACK. COORDINATE MOUNTING LOCATIONS WITH TELECOM DRAWINGS.



AREA B
KEY PLAN

GRAPHIC SCALE

8 6 4 2 0 8 16

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

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

AARON McWHORTER
100310
REGISTERED
PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: A. MCWHORTER
DRAWN BY: A. FORMAN
CHECKED BY: K.HOGAN
SUBMITTED BY: E. OLNESS
DATE: ANSI D 22-34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201EP113

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS Reg. # F-2966

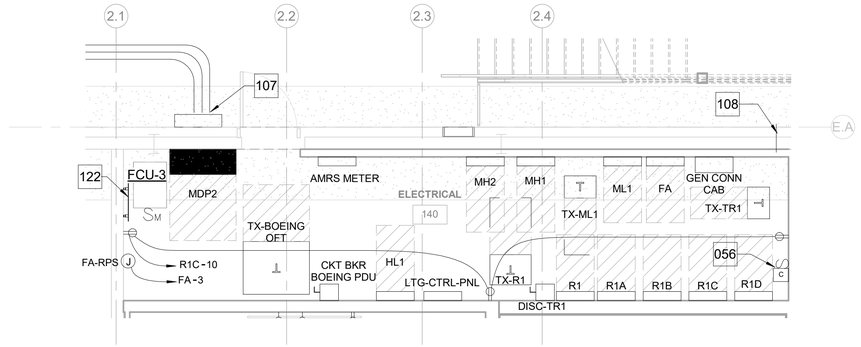
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PARTIAL POWER PLAN - LEVEL 2 - AREA B

SHEET ID
B1455
EP113

W912QR23R0003_Plans-0000

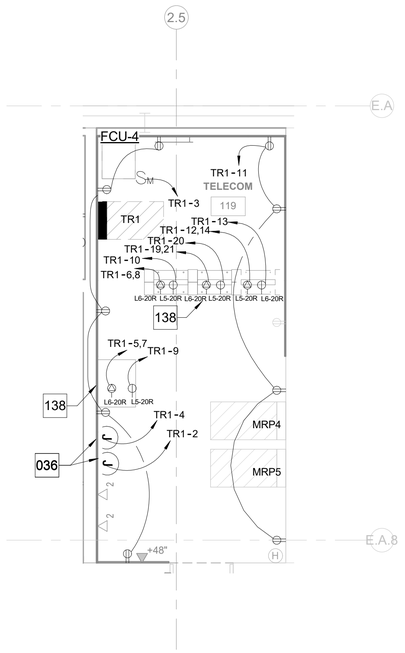
ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN



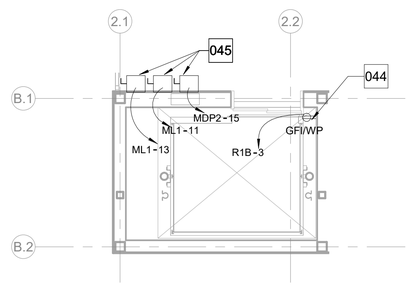
F5 ENLARGED ELECTRICAL - POWER PLAN

1/4" = 1'-0"



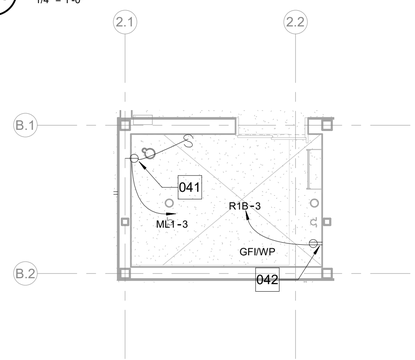
A1 ENLARGED TELECOM - POWER PLAN

1/4" = 1'-0"



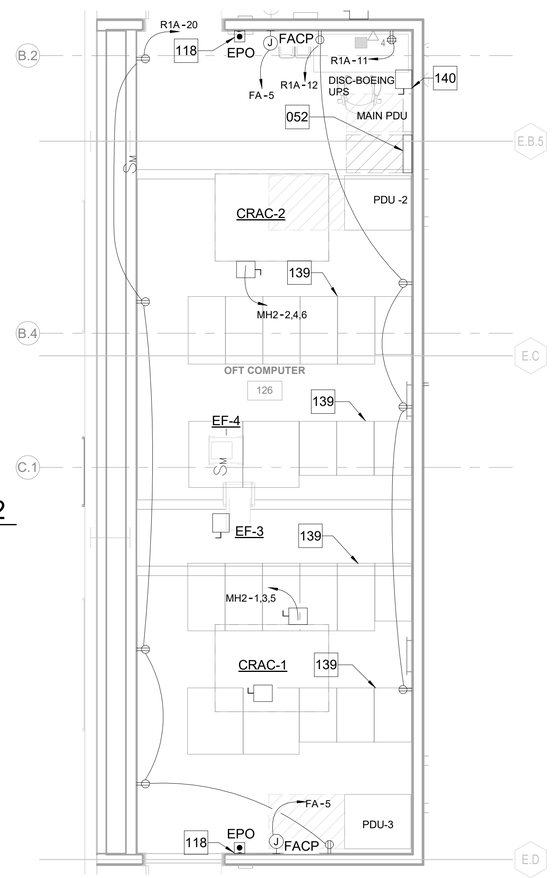
C4 ELEVATOR CONTROLLER - LEVEL 2

1/4" = 1'-0"



A4 ELEVATOR PIT

1/4" = 1'-0"



A5 ENLARGED OFT COMPUTER RM - POWER PLAN

1/4" = 1'-0"

KEYNOTES

036	PROVIDE CIRCUIT CONNECTION TO SECURITY PANEL. COORDINATE LOCATION AND REQUIREMENTS WITH TELECOM PLANS.
041	PROVIDE CIRCUIT CONNECTION TO SUMP PUMP WITH CONTROLS ACCORDING TO MANUFACTURER REQUIREMENTS. COORDINATE INSTALLATION WITH FINAL SUBMITTAL REQUIREMENTS. MOUNT IN ELEVATOR PIT ACCORDING TO ELEVATOR MANUFACTURER REQUIREMENTS. MOUNT SWITCH WITHIN PIT AT REACHING HEIGHT.
042	PROVIDE RECEPTACLE IN ELEVATOR PIT AT LOCATION AND MOUNTED HEIGHT REQUIRED BY ELEVATOR MANUFACTURER.
044	MOUNT DEVICES IN ELEVATOR SHAFT ACCORDING TO ELEVATOR CODE REQUIREMENTS. THREE-WAY LIGHT SWITCH AT TOP OF SHAFT AND WITHIN PIT.
045	PROVIDE CIRCUIT CONNECTION TO ELEVATOR CONTROLLER, ELEVATOR CAB LIGHTING, AND ELEVATOR HVAC ACCORDING TO ELEVATOR MANUFACTURER REQUIREMENTS. PROVIDE CIRCUIT BREAKERS ACCESSIBLE FROM THE CORRIDOR.
052	PROVIDE 2-2" CONDUITS FROM THE PDU TO EACH SERVER CABINET WITHIN OFT COMPUTER ROOM BELOW RAISED FLOOR. WORK CLOSELY WITH CONTRACTING OFFICER TO PROVIDE SIMULATOR MANUFACTURER PROVIDED POWER CABLES AND NONPLENUM RATED CABLES ROUTED BELOW RAISED FLOOR IN CONDUIT TO MEET THE SIMULATOR MANUFACTURERS REQUIREMENTS.
056	PROVIDE WORKSTATION SWITCHED RECEPTACLE ROUTED THROUGH CONTACTOR WITH TIME CLOCK CONTROL AND OVERRIDE SWITCH.
107	PROVIDE UNDERGROUND CONDUITS FROM TRANSFORMER TO EXTERIOR JUNCTION BOX FOR SERVICE CONDUCTORS TO MDP2. COORDINATE WITH THE LOCAL ELECTRICAL UTILITY COMPANY (CAEC) TO INSTALL THE CONDUITS INTO THE SECONDARY SECTION OF THE TRANSFORMER.
108	PROVIDE TWO (2) 4IN RMC NIPPLES THROUGH THE WALL FOR FUTURE TEMP GENERATOR CONDUCTORS ROUTING. PROVIDE LOCKABLE METAL CAPS ON EACH END. PROVIDE TEMPORARY GENERATOR RENTAL FOR TESTING. LOCATE TEMPORARY GENERATOR IN PARKING LOT AND ROUTE CABLES INTO GENERATOR CONNECTION CABINET. PROVIDE COMMISSIONING FOR TEMPORARY GENERATOR CONNECTION AND PROCEDURES.
118	PROVIDE AN EMERGENCY POWER OFF (EPO) SWITCH TO SHUT OFF ROOM PANELBOARD AND UPS. LABEL EPO WITH LOCATION AND NAME OF SHUNT TRIP ENCLOSED CIRCUIT CIRCUIT BREAKER. RE:E-702 FOR UPSTREAM CKT-BKR-BOEING PDU ENCLOSED CIRCUIT BREAKER WITH A SHUNT-TRIP.
122	PROVIDE GROUND BAR. PROVIDE A #1 AWG GREEN INSULATED GROUND CONDUCTOR FROM THE MAIN GROUND BAR (MGB) TO THE PBB IN ROOM TELECOM 119. RE:D5/T-601 FOR TELECOM BONDING AND GROUNDING RISER.
138	PROVIDE RECEPTACLES FOR TELECOMMUNICATIONS RACK. COORDINATE MOUNTING LOCATIONS WITH TELECOM DRAWINGS.
139	PROVIDE CONDUIT FOR BOEING PROVIDED CONDUCTORS TO SERVER CABINETS FROM PDU-2 AND PDU-3 ROUTED UNDER RAISED FLOOR. COORDINATE WITH BOEING FOR CONDUCTOR QUANTITY AND SIZES MINIMUM 2-2" CONDUIT PER CABINET.
140	PROVIDE DISCONNECT SWITCH AND CONNECTION TO BOEING PROVIDE UPS. COORDINATE WITH BOEING TO MAKE CONNECTIONS ACCORDING TO MANUFACTURER'S REQUIREMENTS. PROVIDE CONDUIT OVERHEAD TO PDU-2 AND PDU-3 FOR BOEING PROVIDED CONDUCTORS.

GRAPHIC SCALE

8 6 4 2 0 8 16
SCALE: 1/8"=1'-0"
4 3 2 1 0 4 8
SCALE: 1/4"=1'-0"

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

AARON McWHORTER
100310
TEXAS REGISTERED ENGINEERING FIRM F-2966
21 NOV 2022

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201E-401

DESIGNED BY: A. MCWHORTER
DRAWN BY: A. FORMAN
CHECKED BY: K.HOGAN
SUBMITTED BY: E. OLNESS
SCALE: ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
ACCESS No. 0000219

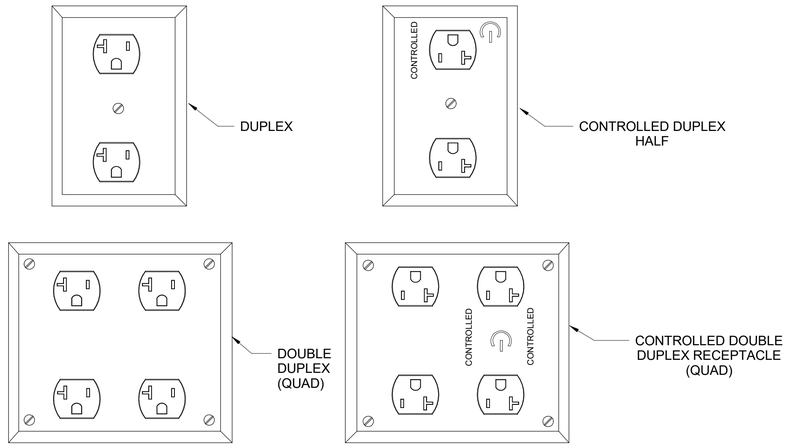
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
ENLARGED PLAN

SHEET ID
B1455
E-401

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN

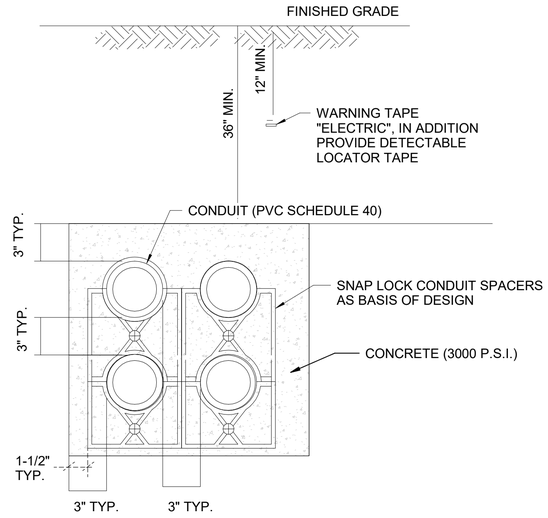


NOTES:

PROVIDE RECEPTACLES LOCATED IN PRIVATE OFFICES, CONFERENCE ROOMS, ROOMS USED FOR PRINTING/COPYING FUNCTIONS, BREAK ROOMS, CLASSROOMS, AND INDIVIDUAL WORKSTATIONS WITH 50% OF THE ASSIGNED RECEPTACLE CONTROLLED AUTOMATICALLY THROUGH OCCUPANCY/VACANCY SENSOR. (PER ASHRAE 90.1 2013 SECTION 8.4.2). PROVIDE SYSTEMS FURNITURE WITH REQUIRED SWITCHED IDENTIFICATION LABELS.

E2 RECEPTACLE DETAIL

NOT TO SCALE

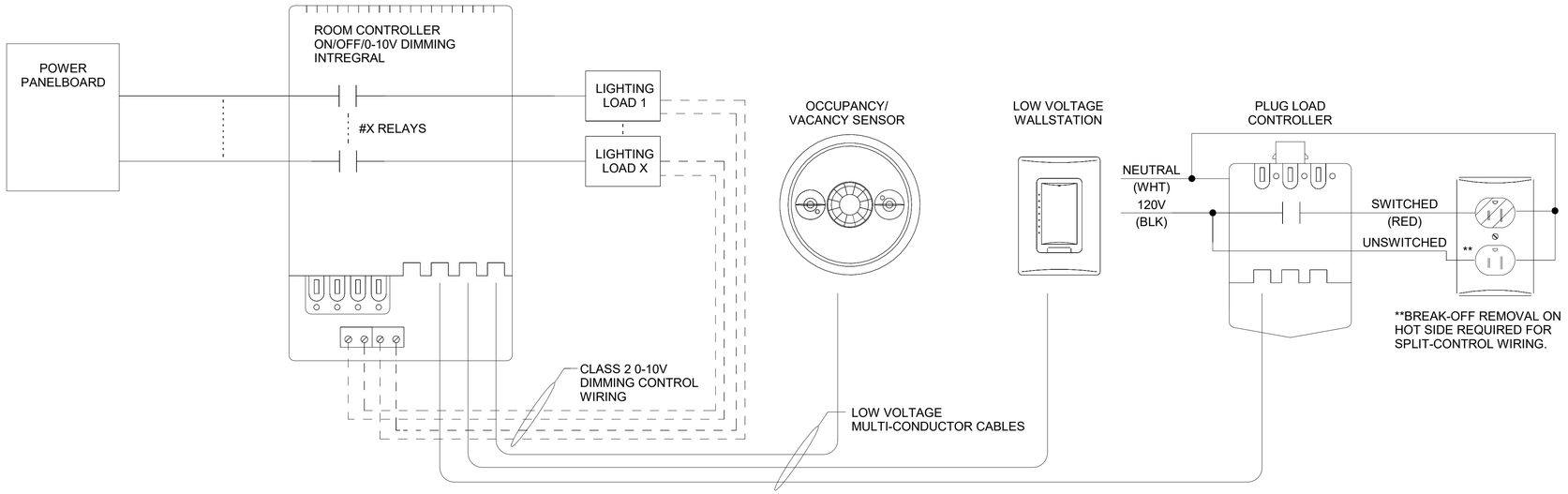


NOTES:

1. DIMENSIONS AND REQUIREMENTS SHOWN ARE TYPICAL FOR OTHER DUCT BANKS UNLESS OTHERWISE NOTED. PROVIDE PULL STRING IN SPARE DUCTS.

E6 DUCTBANK DETAIL 4-WAY

NTS



OCCUPANCY SENSOR SHALL TURN ALL ROOM LIGHTING AND CONTROLLED RECEPTACLES OFF WHEN MOTION IS NOT DETECTED FOR A PERIOD OF TIME. REFER TO E-601 FOR ADDITIONAL CONTROL REQUIREMENTS.

THIS DIAGRAM IS REPRESENTATIVE OF A TYPICAL LIGHTING CONTROL SYSTEM. CONTRACTOR TO FURNISH A COMPLETE SYSTEM THAT PERFORMS AS INDICATED. CONTRACTOR'S SELECTED EQUIPMENT MAY REQUIRE A DIFFERENT TOPOLOGY AT NO ADDITIONAL COST TO THE GOVERNMENT AND WILL REQUIRE AN APPROVED SUBMITTAL SHOWING INTENDED CONTROL DEVICE LAYOUTS BEFORE PRODUCTS ARE PURCHASED.

PROVIDE FIRE ALARM CONTACT CONNECTION TO TURN LIGHTS ON TO 100% IN ALARM CONDITION.

A2 PLUG LOAD CONTROL WIRING DIAGRAM

NTS

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
AARON McWHORTER
100310
LICENSED PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: A. MCWHORTER
DRAWN BY: A. FORMAN
CHECKED BY: K.HOGAN
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201E-501

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

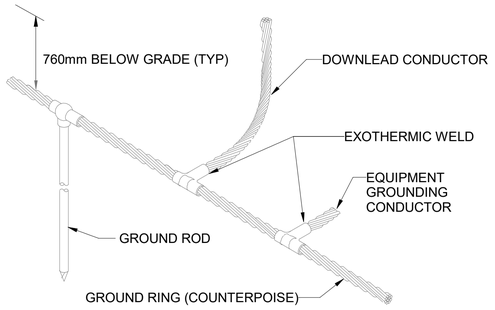
jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS Tel: 972.983.2600

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
DETAILS

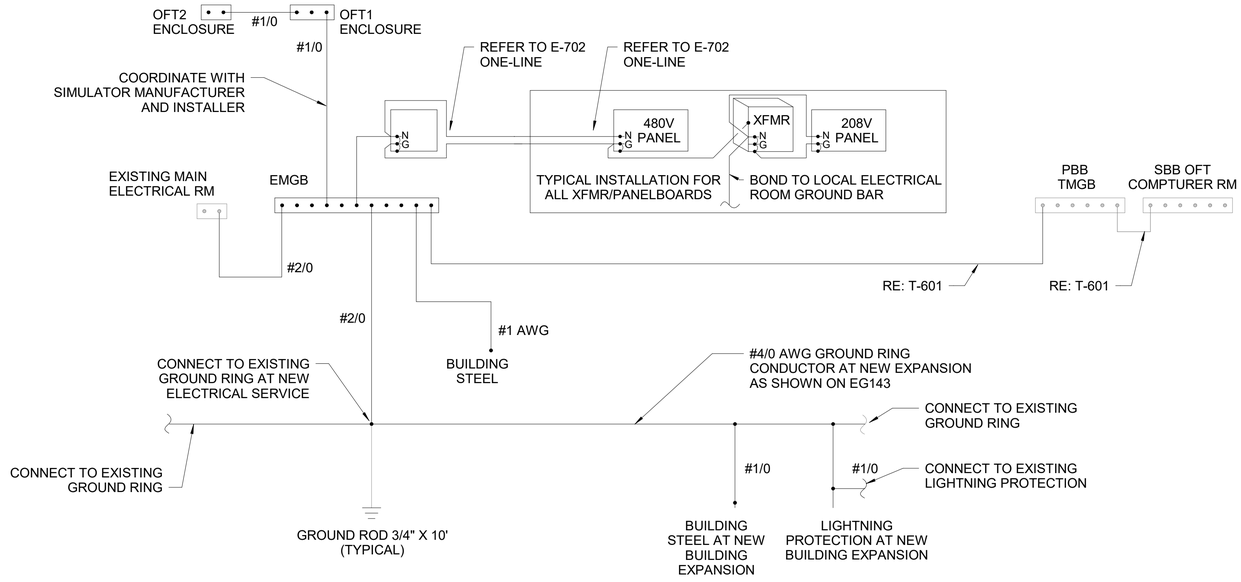
SHEET ID
B1455
E-501

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN

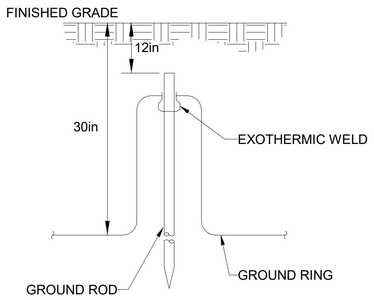


D1 GROUND COUNTERPOISE BONDING
NTS

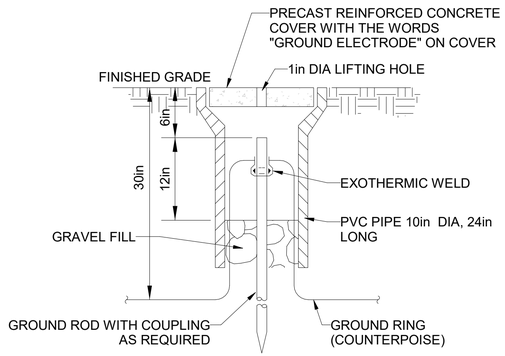


NOTES: MEASURE AND ENSURE THE RESISTANCE IN OHMS IS BELOW 25 OHMS. ADD ADDITIONAL GROUND RODS AS NEEDED TO REDUCE THE OHMS BELOW 25 OHMS WHERE IT DOES NOT MEET THE REQUIREMENT.

D5 GROUNDING - RISER DIAGRAM
NTS



A2 GROUND ROD
NTS



A4 GROUND ROD TEST WELL
NTS

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
AARON McWHORTER
100310
LICENSED PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: A. MCWHORTER
DRAWN BY: A. FORMAN
CHECKED BY: K.HOGAN
SUBMITTED BY: E. OLMESS
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT21920_1E-502
ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
TBPE Registration No. F-2600

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
DETAILS

SHEET ID
B1455
E-502

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN

LIGHTING FIXTURE SCHEDULE

TYPE MARK	DESCRIPTION	DELIVERED LUMENS	LAMP TYPE	COLOR TEMPERATURE	CRI	VOLTAGE	WATTAGE	MOUNTING	MOUNTING HEIGHT
A1	2FT X 4FT EDGE-LIT, FLAT PANEL LED TROFFER, EXTRUDED ALUMINUM FRAME WITH WHITE FINISH, 80+ CRI, 60,000 HOUR LEDs AT L70, DAMP LOCATION LABEL, 0-10V DIMMING DRIVER, GRID OR FLANGE CEILING TYPE (PER PLANS). TYPE A1E INDICATES EMERGENCY LIGHTING FIXTURE WITH 90-MINUTE BATTERY BACKUP.	3299	LED	4000K	80+	277	26	RECESSED	CEILING
B1	2FT X 4FT RECESSED TROFFERS, CURVED SHIELDING, 0-10V DIMMING DRIVER. TYPE B1E INDICATES EMERGENCY LIGHTING FIXTURE WITH 90-MINUTES BATTERY BACKUP.	2458	LED	4000K	90+	277 V	19 W	RECESSED	CEILING
B2	2FT X 4FT RECESSED TROFFERS, CURVED SHIELDING, 0-10V DIMMING DRIVER. TYPE B2E INDICATES EMERGENCY LIGHTING FIXTURE WITH 90-MINUTES BATTERY BACKUP.	3267	LED	4000K	90+	277 V	28 W	RECESSED	CEILING
B3	2FT X 4FT RECESSED TROFFERS, HIGH LUMEN OUTPUT, CURVED BASKET SHIELDING, 0-10V DIMMING DRIVER. TYPE B2E INDICATES EMERGENCY LIGHTING FIXTURE WITH 90-MINUTES BATTERY BACKUP.	5494	LED	4000K		277 V	44	RECESSED	CEILING
C1	4IN DIAMETER RECESSED ROUND DOWNLIGHT, WIDE FLOOD DISTRIBUTION CLEAR DIFFUSE. WHITE FINISH. 0-10V DIMMING DRIVER.	250	LED	4000K	80+	277 V	5 W	RECESSED	CEILING
C2	4IN DIAMETER RECESSED ROUND DOWNLIGHT, WIDE FLOOD DISTRIBUTION. CLEAR DIFFUSE. WHITE FINISH. 0-10V DIMMING DRIVER. TYPE C2E INDICATES EMERGENCY LIGHTING FIXTURE WITH 90-MINUTES BATTERY BACKUP.	500	LED	4000K	80+	277 V	7 W	RECESSED	CEILING
D1	4FT LENSED LED STRIPLIGHT, ACRYLIC LENS, WHITE HOUSING. TYPE D1E INDICATES EMERGENCY LIGHTING FIXTURE WITH 90-MINUTES BATTERY BACKUP.	10400	LED	4000K	80+	277 V	85 W	PENDANT	8' AFF - TELECOM ROOM
D2			LED	4000K	80+	277 V		PENDANT	
D3	4FT LENGTH, 4IN WIDE DIRECT PENDANT, FLUSH LENS DISTRIBUTION, FROSTED ACRYLIC LENS, 0-10V DIMMING DRIVER. WHITE HOUSING. TYPE D3E INDICATES EMERGENCY LIGHTING FIXTURE WITH 90-MINUTES BATTERY BACKUP.	6000	LED	4000K	80+	277 V	61 W	PENDANT	8.5' AFF - TRAINER ROOMS
D4	4FT LENGTH, 2.5IN WIDE DIRECT PENDANT, FLUSH LENS DISTRIBUTION, FROSTED ACRYLIC LENS, 0-10V DIMMING DRIVER. WHITE HOUSING. TYPE D4E INDICATES EMERGENCY LIGHTING FIXTURE WITH 90-MINUTES BATTERY BACKUP.	1500	LED	4000K	80+	277 V	14 W	PENDANT	10'-0" AFF
F1	CONTINUOUS LENGTH AS SHOWN, 4IN WIDE DIRECT / INDIRECT ALUMINUM PENDANT, BATWING OPTICS UPLIGHT DISTRIBUTION, BATWING LENS DOWNLIGHT DISTRIBUTION, FROSTED ACRYLIC LENS, 50% UPLIGHT, 50% DOWNLIGHT, 0-10V DIMMING DRIVER. WHITE HOUSING. TYPE F1E INDICATES EMERGENCY LIGHTING FIXTURE WITH 90-MINUTES BATTERY BACKUP.	500UP / 375D PER FT	LED	4000K	90+	277 V	7 W PER FT	PENDANT	7.5' AFF
G1	LINEAR, LED WALL WASH WITH 6IN SLOT, MATTE SATIN WHITE FINISH, LENGTH AS SHOWN ON PLANS AS REQUIRED TO EXTEND THE LENGTH OF WALL IN TOILET ROOMS. , 0-10V DIMMING DRIVER.	250 PER FT	LED	4000K	80+	277 V	4 W PER FT	-	CEILING ABOVE RR FIXTURES
HB1E	LED HIGH BAY FIXTURE, GLASS REFLECTOR AND REFRACTOR, GLARE REDUCING LENS, ALUMINUM HEAT SINK, 0-10V DIMMING DRIVER.	24000	LED	4000K	80+	277 V	168 W	PENDANT	ALIGNED WITH NEARBY EXISTING HIGH BAY FIXTURES.
S1	RED LED BEACON STROBE WARNING LIGHT	-	LED	-	-	277 V	24 W	CEILING	CEILING
V1	VAPOR TIGHT WALL-MOUNTED LED LINEAR STRIP LIGHT, FIBERGLASS GASKETED CONSTRUCTION, FROSTED LENS, WET LOCATION RATED.	4620	LED	4000K	80	277 V	29 W	WALL	ELEVATOR PIT
W1E	MATCH EXISTING EXTERIOR WALL PACK TYPE ABOVE EXISTING EXIT DOORS.	3647	LED	4000K	70	277 V		WALL	1.5' ABOVE EXTERIOR DOORS REFER TO ARCH ELEVATIONS
W28E	8FT LENGTH, 2.5IN WIDE DIRECT WALL-MOUNTED LINEAR LED WITH ASYMMETRIC LENS, WHITE FINISH, 90-MIN BATTERY BACKUP SOURCE	2000	LED	4000K	80+	277 V	20 W	WALL	REFER TO ARCH ELEVATIONS
X1	MATCH EXISTING EXIT SIGNS TYPE - SINGLE OR DOUBLE FACE EXIT SIGN, ALUMINUM BODY, RED LETTERS.	-	LED	-	-	277 V	2.6 W	WALL/CEILING	

NOTES
1. LIGHTING FIXTURE EFFICACY MUST MEET OR EXCEED THE LUMENS/WATT AS LISTED IN THE LIGHTING FIXTURE SCHEDULE.
2. PROVIDE 0-10V DIMMING DRIVER ON ALL LIGHT FIXTURES THAT REQUIRE DIMMING CONTROLS PER LIGHTING PLANS.
3. PROVIDE 3 STEP MACADAM ELIPSE FOR LUMINAIRES.
4. PROVIDE 10 YEAR WARRANTY FOR FIXTURES AND BALLASTS.

LIGHTING CONTROL MATRIX

ROOM/AREA CONTROLLED	DIMMING	WALLSTATION/ SWITCH	DAYLIGHT/ PHOTO SENSOR	OCC SENSOR	VAC SENSOR	TIMECLOCK	RECEPTACLE CONTROL	CONTROL SEQUENCE
CORRIDORS / VESTIBULES	X	X		X		X		TIME CLOCK "ON" DIM LIGHTS TO 50% WHEN NO OCCUPANT. TIME CLOCK "OFF" AND OCCUPANCY SENSOR TURNS LIGHTS"ON" AND "OFF" AFTER 15 MINUTES OF NO OCCUPANCY. MANUAL SWITCH TO OVERRIDE "ON".
ELECTRICAL, MECHANICAL, FIRE, TELECOMMUNICATIONS ROOMS		X						MANUAL ON/OFF AT SWITCH.
STORAGE		X			X			MANUAL ON/OFF AT WALLSTATION. VACANCY SENSOR TURNS LIGHTS "OFF" AFTER 10 MINUTES OF NO OCCUPANCY.
OPEN OFFICE	X	X		X			X	MANUAL ON/OFF AT WALLSTATION WITH DIMMING.OCCUPANCY SENSOR "ON" TO 50% AND TURNS LIGHTS "OFF" AFTER 15 MINUTES OF NO OCCUPANCY. CONTROLLED RECEPTACLES TO TURN OFF 5 MINUTES AFTER LIGHTS.
PRIVATE OFFICES	X	X			X		X	MANUAL ON/OFF AT WALLSTATION WITH DIMMING. VACANCY SENSOR TURNS LIGHTS "OFF" AFTER 15 MINUTES OF NO OCCUPANCY. CONTROLLED RECEPTACLES TO TURN OFF 5 MINUTES AFTER LIGHTS.
MISSION PLANNING ROOMS, CLASSROOMS, & MULTI-PURPOSE ROOMS	X	X			X		X	MANUAL ON/OFF AT WALLSTATION WITH DIMMING. VACANCY SENSOR TURNS LIGHTS "OFF" AFTER 15 MINUTES OF NO OCCUPANCY. CONTROLLED RECEPTACLES TO TURN OFF 5 MINUTES AFTER LIGHTS WHERE INDICATED. MULTI-ZONE DIMMING SCENE CONTROL. MANUAL ON/OFF AT WALLSTATION WITH KEYPAD SCENE.
BREAK ROOMS	X	X			X		X	MANUAL ON/OFF AT WALLSTATION WITH DIMMING. VACANCY SENSOR TURNS LIGHTS "OFF" AFTER 15 MINUTES OF NO OCCUPANCY. CONTROLLED RECEPTACLES TO TURN OFF 5 MINUTES AFTER LIGHTS.
RESTROOMS		X		X				OCCUPANCY SENSOR "ON" AND TURNS LIGHTS "OFF" AFTER 15 MINUTES OF NO OCCUPANCY. WALL STATION IS "ON" ONLY.
STAIRS				X				OCCUPANCY SENSOR DIMS LIGHTS TO 50% AFTER 15 MINUTES OF NO OCCUPANCY.
EXTERIOR			X	X		X		PHOTOCELL "ON" AND TIME CLOCK "OFF" 7AM. PROVIDE FIXTURE MOUNTED MOTION SENSOR TO DIM FIXTURE TO 50% WHEN NO MOTION DETECTED WITH 15 MINUTE DELAY.

NOTES
1. PROVIDE RELAY PANEL TIME CLOCK FOR EXTERIOR LIGHTING CIRCUIT AND CORRIDOR LIGHTING CIRCUITS. HL1-4; HL-7; HL1-10; HL1-13
2. PROVIDE CONNECTION TO FIRE ALARM CONTACT TO FORCE LIGHTS TO 100% IN ALARM CONDITION.

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
AARON McWHORTER
100310
LICENSED
PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: A. McWHORTER
DRAWN BY: A. FORMAN
CHECKED BY: K.HOGAN
SUBMITTED BY: E. OLMESS
QC BY:
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT21920\1E-601
ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
Phone: 817.820.8700 Fax: 817.820.8710

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
LUMINAIRE SCHEDULE

SHEET ID
B1455
E-601

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN

MECH/PLUMBING EQUIPMENT CONNECTIONS

ID	EQUIPMENT	VOLTS	PHASES	LOAD	MCA	OCPD RATING	DISC RATING	PANEL	CIRCUIT	WIRE/CONDUIT
AHU-1-SF	INTEGRAL VFD DISCONNECT - AHU-1 SUPPLY FAN BY MECHANICAL	480 V	3	9258 VA	18.5 A	30 A	30	MH1	1,3,5	3#10, 1#10G, 3/4"C.
AHU-2-SF	INTEGRALVFD DISCONNECT - AHU-2 SUPPLY FAN BY MECHANICAL	480 V	3	4531 VA	6.7 A	15 A	30	MH1	13,15,17	3#12, 1#12G, 3/4"C.
B-1	MOTOR-RATED SWITCH - DISCONNECTS B-1	120 V	1	1440 VA	15.0 A	20 A	30	ML1	1	2#12, 1#12G, 3/4"C.
CH-1	INTEGRAL VFD /DISCONNECT - CHILLER BY MECHANICAL	480 V	3	67564 VA	106.0 A	125 A	200	MDP2	7	3#1 & 1#6G, 1-1/2"C
CH-2	INTEGRAL VFD/ DISCONNECT - CHILLER BY MECHANICAL	480 V	3	67564 VA	106.0 A	125 A	200	MDP2	6	3#1 & 1#6G, 1-1/2"C
CHWP-1	VFD /DISCONNECT - CHILL WATER PUMP BY MECHANICAL	480 V	3	1673 VA	2.6 A	15 A	30	MH1	31,33,35	3#12, 1#12G, 3/4"C.
CHWP-2	VFD /DISCONNECT - CHILL WATER PUMP BY MECHANICAL	480 V	3	1673 VA	2.6 A	15 A	30	MH1	25,27,29	3#12, 1#12G, 3/4"C.
CHWP-3	VFD /DISCONNECT - CHILL WATER PUMP BY MECHANICAL	480 V	3	1673 VA	2.6 A	15 A	30	MH1	32,34,36	3#12, 1#12G, 3/4"C.
CRAC-1	INTEGRAL DISCONNECT - COMPUTER ROOM AIR CONDITIONING BY MECHANICAL	480 V	3	12803 VA	19.3 A	20 A	60	MH2	1,3,5	3#12, 1#12G, 3/4"C.
CRAC-2	INTEGRAL DISCONNECT - COMPUTER ROOM AIR CONDITIONING BY MECHANICAL	480 V	3	12803 VA	19.3 A	20 A	60	MH2	2,4,6	3#12, 1#12G, 3/4"C.
DOAS-1-EF	INTEGRAL VFD /DISCONNECT - DEDICATED OUTSIDE AIR - EXHAUST FAN BY MECHANICAL	480 V	3	2827 VA	4.3 A	15 A	30	MH1	8,10,12	3#12, 1#12G, 3/4"C.
DOAS-1-EW	INTEGRAL VFD /DISCONNECT - DEDICATED OUTSIDE AIR - ENERGY WHEEL BY MECHANICAL	480 V	3	632 VA	1.0 A	15 A	30	MH1	14,16,18	3#12, 1#12G, 3/4"C.
DOAS-1-SF	INTEGRAL VFD /DISCONNECT - DEDICATED OUTSIDE AIR - SUPPLY FAN BY MECHANICAL	480 V	3	7358 VA	10.9 A	20 A	30	MH1	2,4,6	3#12, 1#12G, 3/4"C.
DOAS-2	INTEGRALVFD DISCONNECT - DOAS-2 EXHAUST FAN BY MECHANICAL	480 V	3	2278 VA	3.3 A	15 A	30	MH1	19,21,23	3#12, 1#12G, 3/4"C.
EF-1	MOTOR-RATED SWITCH - DISCONNECTS EF-3	480 V	3	1330 VA	2.0 A	15 A	30	MH2	19,21,23	3#12, 1#12G, 3/4"C.
EF-2	MOTOR-RATED SWITCH - DISCONNECTS EF-3	480 V	3	1330 VA	2.0 A	15 A	30	MH2	8,10,12	3#12, 1#12G, 3/4"C.
EF-3	MOTOR-RATED SWITCH - DISCONNECTS EF-3	480 V	3	1331 VA	2.0 A	15 A	30	MH2	13,15,17	3#12, 1#12G, 3/4"C.
EF-4	MOTOR-RATED SWITCH - DISCONNECTS EF-4	120 V	1	528 VA	5.5 A	15 A	30	ML1	7	2#12, 1#12G, 3/4"C.
EF-5	DISCONNECT EF-5	480 V	3	1330 VA	2.0 A	15 A	30	MH1	7,9,11	3#12, 1#12G, 3/4"C.
EF-6	MOTOR-RATED SWITCH - DISCONNECTS EF-3	480 V	3	1330 VA	2.0 A	15 A	30	MH2	14,16,18	3#12, 1#12G, 3/4"C.
EWH-1	DISCONNECT - EWH-1	480 V	3	20000 VA	25.0 A	30 A	60	MH2	7,9,11	3#8, 1#8G, 1-1/4"C.
FCU-1	MOTOR-RATED SWITCH - DISCONNECTS FCU-1	120 V	1	96 VA	5.5 A	15 A	30	ML1	2	2#12, 1#12G, 3/4"C.
FCU-2	MOTOR-RATED SWITCH - DISCONNECTS FCU-2	120 V	1	96 VA	5.5 A	15 A	30	ML1	2	2#12, 1#12G, 3/4"C.
FCU-3	MOTOR-RATED SWITCH - DISCONNECTS FCU-3	120 V	1	96 VA	1.0 A	15 A	30	ML1	4	2#12, 1#12G, 3/4"C.
FCU-4	MOTOR-RATED SWITCH - DISCONNECTS FCU-4	120 V	1	96 VA	5.5 A	15 A	30	TR1	3	2#12, 1#12G, 3/4"C.
FCU-5	MOTOR-RATED SWITCH - DISCONNECTS FCU-5	120 V	1	96 VA	5.5 A	15 A	30	ML1	6	2#12, 1#12G, 3/4"C.
FCU-7	MOTOR-RATED SWITCH - DISCONNECTS FCU-4	120 V	1	96 VA	5.5 A	15 A	30	ML1	19	2#12, 1#12G, 3/4"C.
FCU-8	MOTOR-RATED SWITCH - DISCONNECTS FCU-4	120 V	1	96 VA	5.5 A	15 A	30	ML1	21	2#12, 1#12G, 3/4"C.
GF-1	MOTOR-RATED SWITCH - DISCONNECTS GF-1	120 V	1	120 VA	5.5 A	20 A		ML1	18	2#12, 1#12G, 3/4"C.
H-1	DISCONNECT - DEDICATED OUTSIDE AIR - HUMIDIFIER	480 V	3	6000 VA	9.0 A	15 A	30	MH1	37,39,41	3#12, 1#12G, 3/4"C.
HWP-1	DISCONNECT AND VFD - HEAT WATER PUMP PROVIDED BY MECHANICAL	480 V	3	1673 VA	2.6 A	15 A	30	MH1	20,22,24	3#12, 1#12G, 3/4"C.
HWP-2	DISCONNECT AND VFD - HEAT WATER PUMP PROVIDED BY MECHANICAL	480 V	3	1673 VA	2.6 A	15 A	30	MH1	26,28,30	3#12, 1#12G, 3/4"C.
VAV-1-01	MOTOR-RATED SWITCH - DISCONNECTS VAV-1-01	120 V	1	120 VA	1.0 A	20 A		ML1	8	2#12, 1#12G, 3/4"C.
VAV-1-02	MOTOR-RATED SWITCH - DISCONNECTS VAV-1-02	120 V	1	120 VA	1.0 A	20 A		ML1	8	2#12, 1#12G, 3/4"C.
VAV-1-04	MOTOR-RATED SWITCH - DISCONNECTS VAV-1-04	120 V	1	120 VA	1.0 A	20 A		ML1	10	2#12, 1#12G, 3/4"C.
VAV-1-05A	MOTOR-RATED SWITCH - DISCONNECTS VAV-1-05A	120 V	1	120 VA	1.0 A	20 A		ML1	8	2#12, 1#12G, 3/4"C.
VAV-1-05B	MOTOR-RATED SWITCH - DISCONNECTS VAV-1-05B	120 V	1	120 VA	1.0 A	20 A		ML1	8	2#12, 1#12G, 3/4"C.
VAV-1-05C	MOTOR-RATED SWITCH - DISCONNECTS VAV-1-05C	120 V	1	120 VA	1.0 A	20 A		ML1	14	2#12, 1#12G, 3/4"C.
VAV-1-06	MOTOR-RATED SWITCH - DISCONNECTS VAV-1-06	120 V	1	120 VA	1.0 A	20 A		ML1	10	2#12, 1#12G, 3/4"C.
VAV-1-07	MOTOR-RATED SWITCH - DISCONNECTS VAV-1-07	120 V	1	120 VA	1.0 A	20 A		ML1	12	2#12, 1#12G, 3/4"C.
VAV-1-08	MOTOR-RATED SWITCH - DISCONNECTS VAV-1-08	120 V	1	120 VA	1.0 A	20 A		ML1	12	2#12, 1#12G, 3/4"C.
VAV-1-09	MOTOR-RATED SWITCH - DISCONNECTS VAV-1-09	120 V	1	120 VA	1.0 A	20 A		ML1	12	2#12, 1#12G, 3/4"C.
VAV-1-10	MOTOR-RATED SWITCH - DISCONNECTS VAV-10	120 V	1	120 VA	1.0 A	20 A		ML1	12	2#12, 1#12G, 3/4"C.
VAV-1-11	MOTOR-RATED SWITCH - DISCONNECTS VAV-11	120 V	1	120 VA	1.0 A	20 A		ML1	12	2#12, 1#12G, 3/4"C.
VAV-1-12	MOTOR-RATED SWITCH - DISCONNECTS VAV-1-12	120 V	1	120 VA	1.0 A	20 A		ML1	12	2#12, 1#12G, 3/4"C.
VAV-1-13	MOTOR-RATED SWITCH - DISCONNECTS VAV-1-13	120 V	1	120 VA	1.0 A	20 A		ML1	12	2#12, 1#12G, 3/4"C.
VAV-1-14	MOTOR-RATED SWITCH - DISCONNECTS VAV-14	120 V	1	120 VA	1.0 A	20 A		ML1	12	2#12, 1#12G, 3/4"C.
VAV-2-01	MOTOR-RATED SWITCH - DISCONNECTS VAV-2-01	120 V	1	120 VA	1.0 A	20 A		ML1	14	2#12, 1#12G, 3/4"C.
VAV-2-02	MOTOR-RATED SWITCH - DISCONNECTS VAV-2-02	120 V	1	120 VA	1.0 A	20 A		ML1	14	2#12, 1#12G, 3/4"C.
VAV-2-03	MOTOR-RATED SWITCH - DISCONNECTS VAV-2-03	120 V	1	120 VA	1.0 A	20 A		ML1	14	2#12, 1#12G, 3/4"C.
VAV-2-04	MOTOR-RATED SWITCH - DISCONNECTS VAV-2-04	120 V	1	120 VA	1.0 A	20 A		ML1	14	2#12, 1#12G, 3/4"C.

NOTES: PROVIDE EXHAUST FANS WITH STARTER WHERE REQUIRED BY MANUFACTURER.

SECURITY EQUIPMENT CONNECTIONS

ID	EQUIPMENT	VOLTS	PHASES	LOAD	MCA	OCPD RATING	DISC RATING	PANEL	CIRCUIT	WIRE/CONDUIT
SEC-ACS	SECURITY PANEL	120 V	1	600 VA	6.3 A	15 A		TR1	4	2#12, 1#12G, 3/4"C.
SEC-DOOR-1	SECURITY - HSS	120 V	1	10 VA	0.1 A	15 A		R1B	1	2#12, 1#12G, 3/4"C.
SEC-DOOR-2	SECURITY - TELECOM	120 V	1	10 VA	0.1 A	15 A		R1B	1	2#12, 1#12G, 3/4"C.
SEC-IDS	SECURITY PANEL	120 V	1	600 VA	6.3 A	15 A		TR1	2	2#12, 1#12G, 3/4"C.

FIRE ALARM EQUIPMENT CONNECTIONS

ID	EQUIPMENT	VOLTS	PHASES	LOAD	MCA	OCPD RATING	DISC RATING	PANEL	CIRCUIT	WIRE/CONDUIT
FACP-OFT1	FIRE ALARM CONTROL PANEL	120 V	1	600 VA	6.3 A	15 A		FA	5	2#12, 1#12G, 3/4"C.
FACP-OFT2	FIRE ALARM CONTROL PANEL	120 V	1	600 VA	6.3 A	15 A		FA	5	2#12, 1#12G, 3/4"C.
FMCP	FIRE ALARM AND MASS NOTIFICATION CONTROL PANEL	120 V	1	500 VA	5.2 A	15 A		FA	1	2#12, 1#12G, 3/4"C.

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
AARON McWHORTER
100310
LICENSED
PROFESSIONAL
ENGINEER
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: A. McWHORTER
DRAWN BY: A. FORMAN
CHECKED BY: K.HOGAN
SUBMITTED BY: E. OLNESS
DATE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT21920-1E-602

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
TBPE Registration No. F-2600

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
EQUIPMENT SCHEDULE

SHEET ID
B1455
E-602

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN

DISTRIBUTION: MDP2

LOCATION: ELECTRICAL 140
SUPPLY FROM: XFMR-UTIL
MOUNTING: Surface
ENCLOSURE: Type 1

VOLTS: 480Y/277
PHASES: 3
WIRES: 4

A.I.C. RATING: 42K
MAINS TYPE: MCB
MAINS RATING: 800 A
MCB RATING: 800 A

NOTES:

CKT	CIRCUIT DESCRIPTION	# OF POLES	FRAME SIZE	TRIP RATING	A	B	C	REMARKS
1	MH2	3	400 A	150 A	16976 VA	16976 VA	16976 VA	
2	PNL MH1	3	400 A	225 A	18131 VA	18625 VA	16791 VA	
3	HL1	3	400 A	100 A	2095 VA	3858 VA	1726 VA	
4	TX-R1	3	400 A	175 A	0 VA	0 VA	0 VA	
5	TX-TR1	3	400 A	50 A	37370 VA	35676 VA	36450 VA	
6	CH-2	3	400 A	125 A	22521 VA	22521 VA	22521 VA	
7	CH-1	3	400 A	125 A	22521 VA	22521 VA	22521 VA	
8	TX-BOEING OFT	3	400 A	225 A	34247 VA	34247 VA	34247 VA	
9	GEN CONN CAB	3	400 A	800 A	0 VA	0 VA	0 VA	
10	SPACE	3	--	100 A	0 VA	0 VA	0 VA	
11	SPACE	3	--	100 A	0 VA	0 VA	0 VA	
12	SPACE	3	--	100 A	0 VA	0 VA	0 VA	
13	SPACE	3	--	100 A	0 VA	0 VA	0 VA	
14	SPD	3	--	60 A	0 VA	0 VA	0 VA	
15	DISC-ELEV	3	400 A	90 A	10623 VA	10623 VA	10623 VA	
16								
17								
				TOTAL CONN. LOAD:	164485 VA	165048 VA	161855 VA	
				TOTAL AMPS:	595 A	597 A	584 A	

LEGEND:

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
Lighting	7678 VA	100.00%	7678 VA		
Motor	250164 VA	100.00%	250164 VA	**TOTAL CONNECTED:**	491388 VA
Other	20002 VA	100.00%	20002 VA	**TOTAL DEMAND:**	452298 VA
Receptacle	30710 VA	66.28%	20355 VA	**TOTAL CONNECTED:**	591 A
REC	67470 VA	57.41%	38735 VA	**TOTAL DEMAND:**	544 A
TELECOM CABINETS/RACKS	4720 VA	100.00%	4720 VA		
Fire Alarm Control	2 VA	100.00%	2 VA		
OFT	102741 VA	100.00%	102741 VA		
Security	1220 VA	100.00%	1220 VA		
Trainer Equipment	6680 VA	100.00%	6680 VA		

NOTES:

BRANCH PANEL: MH1

Location: ELECTRICAL 140
Supplied From: MDP2
Mounting: Surface
Enclosure: Type 1

Voltages: 480Y/277
Phases: 3
Wires: 4
Frequency: 60 HZ

A.I.C. Rating: 22000
Mains Type: MLO
Mains Rating: 225 A

Notes:

CKT	Circuit Description	TRIP	Poles	A		B		C		Poles	TRIP	Circuit Description	CKT
1				3086 VA	2453 VA								2
3	AHU-1-SF	25 A	3			3086 VA	2453 VA			3	15 A	DOAS-1-SF	4
5								3086 VA	2453 VA				6
7				443 VA	942 VA								8
9	Motor	15 A	3			443 VA	942 VA			3	15 A	DOAS-1-EF	10
11								443 VA	942 VA				12
13				1510 VA	211 VA								14
15	AHU-2-SF	15 A	3			1510 VA	211 VA			3	15 A	DOAS-EW	16
17								1510 VA	211 VA				18
19				759 VA	558 VA								20
21	DOAS-2	15 A	3			759 VA	558 VA			3	15 A	HWP--1	22
23								759 VA	558 VA				24
25				558 VA	558 VA								26
27	CHWP-2	15 A	3			558 VA	558 VA			3	15 A	HWP-2	28
29								558 VA	558 VA				30
31				558 VA	558 VA								32
33	CHWP-1	15 A	3			558 VA	558 VA			3	20 A	CHWP-3	34
35								558 VA	558 VA				36
37				2000 VA	3938 VA								38
39	H-1	15 A	3			2000 VA	4432 VA			3	50 A	TX-ML1	40
41								2000 VA	2598 VA				42
43				0 VA	0 VA								44
45	SPARE	100 A	3			0 VA	0 VA			3	100 A	SPACE	46
47								0 VA	0 VA				48
49				0 VA	0 VA								50
51	SPARE	100 A	3			0 VA	0 VA			3	100 A	SPACE	52
53								0 VA	0 VA				54
		TOTAL LOAD:		18131 VA		18625 VA		16791 VA					
		TOTAL AMPS:		66 A		68 A		61 A					

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Fire Alarm Control	2 VA	100.00%	2 VA		
Motor	51343 VA	100.00%	51343 VA	**Total Conn. Load:**	53547 VA
Other	2 VA	100.00%	2 VA	**Total Est. Demand:**	53547 VA
REC	1500 VA	100.00%	1500 VA	**Total Conn.:**	64 A
Receptacle	700 VA	100.00%	700 VA	**Total Est. Demand:**	64 A

Notes:

BRANCH PANEL: ML1

Locations: ELECTRICAL 140
Supplied From: TX-ML1
Mounting: Surface
Enclosure: Type 1

Voltage: 208Y/120
Phases: 3
Wires: 4
Frequency: 60 HZ

A.I.C. Rating: 18000
Mains Type: MCB
Mains Rating: 100 A
MCB Rating: 100 A

Notes:

CKT	Circuit Description	TRIP	Poles	A		B		C		Poles	TRIP	Circuit Description	CKT
1	B-1	20 A	1	1440 VA	192 VA					1	15 A	FCU-1 & 2	2
3	ELEV-ESP-1	20 A	1			3400 VA	96 VA			1	15 A	FCU-3	4
5	MOTORIZED DAMPER BAY LOUVERS	20 A	1					20 VA	96 VA	1	15 A	FCU-5	6
7	EF-3 & EF-4	15 A	1	528 VA	480 VA					1	15 A	VAV'S RM 121,122,123,124	8
9							240 VA			1	20 A	VAV'S RM 111,112,113,114	10
11	DISC-ELEV-LTG	20 A	1					100 VA	960 VA	1	20 A	VAV'S RM 101,102,103,104,105	12
13	DISC-ELEV-HVAC	20 A	1	100 VA	600 VA					1	15 A	VAV'S RM 200,201,202,203,205	14
15	BAS	20 A	1			400 VA	100 VA			1	20 A	CH-2 CONTROLS	16
17	CH-1 CONTROLS	20 A	1					100 VA	120 VA	1	20 A	GF-1	18
19	FCU-7	20 A	1	96 VA	0 VA					1	20 A	SPARE	20
21	FCU- 8	20 A	1			96 VA	0 VA			1	20 A	SPARE	22
23	SPARE	20 A	1					0 VA	0 VA	1	20 A	SPARE	24
25	SPARE	20 A	1	0 VA	0 VA					1	20 A	SPARE	26
27	SPARE	20 A	1			0 VA	0 VA			1	20 A	SPARE	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				502 VA	0 VA					1	20 A	SPARE	38
39	FA	60 A	3			100 VA	0 VA			1	20 A	SPARE	40
41								1202 VA	0 VA	1	20 A	SPARE	42
		TOTAL LOAD:		3938 VA		4432 VA		2598 VA					
		TOTAL AMPS:		35 A		39 A		22 A					

Load Classfication	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Fire Alarm Control	2 VA	100.00%	2 VA		
Motor	8764 VA	100.00%	8764 VA	**Total Conn. Load:**	10968 VA
Other	2 VA	100.00%	2 VA	**Total Est. Demand**	10968 VA
REC	1500 VA	100.00%	1500 VA	**Total Conn.:**	30 A
Receptacle	700 VA	100.00%	700 VA	**Total Est. Demand:**	30 A

Notes:
PROVIDE LOCKABLE CIRCUIT BREAKER PAINTED RED FOR FIRE ALARM PANEL CIRCUIT BREAKER

BRANCH PANEL: HL1

Location: ELECTRICAL 140
Supplied From: MDP2
Mounting: Surface
Enclosure: Type 1

Voltages: 480Y/277
Phases: 3
Wires: 4
Frequency: 60 HZ

A.I.C. Rating: 14000
Mains Type: MLO
Mains Rating: 100 A

Notes:

CKT	Circuit Description	TRIP	Poles	A		B		C		Poles	TRIP	Circuit Description	CKT
1					948 VA					1	20 A	LTG-105,105A-E	2
3	LTG-122,123,124,126,126A	20 A	1			1221 VA	1131 VA			1	20 A	LTG-200,202,203,204,205	4
5	LTG-117,118,119,120	20 A	1					868 VA	347 VA	1	20 A	LTG-201	6
7	LTG-112,114	20 A	1	428 VA	232 VA					1	20 A	LTG-ELEV PIT	8
9	LTG-111,113	20 A	1			923 VA	583 VA			1	20 A	LTG-High Bay	10
11	LTG-103,104	20 A	1					511 VA	0 VA	1	20 A	LTG-CTRL-PNL	12
13	LTG-106,107,108,109	20 A	1	487 VA	0 VA					--	--	SPACE	14
15	SPACE	--	--			0 VA	0 VA			--	--	SPACE	16
17	SPACE	--	--					0 VA	0 VA	--	--	SPACE	18
19	SPACE	--	--	0 VA	0 VA					--	--	SPACE	20
21	SPACE	--	--			0 VA	0 VA			--	--	SPACE	22
23	SPACE	--	--					0 VA	0 VA	--	--	SPACE	24
25	SPACE	--	--	0 VA	0 VA					--	--	SPACE	26
27	SPACE	--	--			0 VA	0 VA			--	--	SPACE	28
29	SPACE	--	--					0 VA	0 VA	--	--	SPACE	30
31	SPACE	--	--	0 VA	0 VA					--	--	SPACE	32
33	SPACE	--	--			0 VA	0 VA			--	--	SPACE	34
35	SPACE	--	--					0 VA	0 VA	--	--	SPACE	36
37	SPACE	--	--	0 VA	0 VA								38
39	SPACE	--	--			0 VA	0 VA			3	30 A	SPD	40
41	SPACE	--	--					0 VA	0 VA				42
		TOTAL LOAD:		2095 VA		3858 VA		1726 VA					
		TOTAL AMPS:		8 A		14 A		6 A					

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Lighting	7678 VA	100.00%	7678 VA		
Other	0 VA	0.00%	0 VA	**Total Conn. Load:**	7678 VA
				Total Est. Demand:	7678 VA
				Total Conn.:	9 A
				Total Est. Demand:	9 A

Notes:

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
AARON McWHORTER
100310
LICENSED
PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: A. MCWHORTER
DRAWN BY: A. FORMAN
CHECKED BY: K.HOGAN
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT21920-1E-603

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS No. 152905

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNGS21B1455, P2#: 496395
PANEL SCHEDULES

SHEET ID
B1455
E-603

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN

BRANCH PANEL: R1

Locations: ELECTRICAL 140
Supplied From: TX-TR1
Mounting: Surface
Enclosure: Type 1

Voltage: 208Y/120
Phases: 3
Wires: 4
Frequency: 60 HZ

A.I.C. Rating: 18000
Mains Type: MCB
Mains Rating: 400 A
MCB Rating: 400 A

Notes: PROVIDE MAIN CIRCUIT BREAKER 100% RATED WITH LSI FUNCTION

CKT	Circuit Description	TRIP	Poles	A		B		C		Poles	TRIP	Circuit Description	CKT
1	CPT EQUIPMENT - CPT 117	20 A	2	400 VA	200 VA					1	20 A	IOS - MP 123	2
3						400 VA	200 VA			1	20 A	AARS - MP 123	4
5	REC - CPT 118	20 A	1					720 VA	1200 VA	1	20 A	AIE PTT-DISC	6
7	EDS EQUIPMENT - EDS COMP 126A	20 A	1	200 VA	400 VA					2	20 A	CPT EQUIPMENT - CPT 117	8
9	IAST-DISC	20 A	2			500 VA	400 VA						10
11								500 VA	800 VA	1	20 A	WPT EQUIPMENT PLUG - WPT 118	12
13	REC - WPT 118	20 A	1	720 VA	200 VA					1	20 A	AARS - MP 124	14
15	WPT EQUIPMENT - WPT 118	20 A	1			500 VA	0 VA			1	20 A	SPARE	16
17	IOS - MP 123	20 A	1					200 VA	200 VA	1	20 A	EDS EQUIPMENT - EDS 126	18
19	EDS EQUIPMENT - EDS 126	20 A	1	200 VA	0 VA					1	20 A	SPARE	20
21	EDS EQUIPMENT - EDS COMP 126A	20 A	1			200 VA	200 VA			1	20 A	EDS EQUIPMENT - EDS 126	22
23	EDS EQUIPMENT - EDS COMP 126A	20 A	1					200 VA	0 VA	1	20 A	SPARE	24
25	SPARE	20 A	1	0 VA	4020 VA								26
27	EDS EQUIPMENT - EDS 126	20 A	1			200 VA	3240 VA			3	100 A	R1C	28
29	SPARE	20 A	1					0 VA	1800 VA				30
31				8480 VA	9870 VA								32
33	R1B	100 A	3			8380 VA	9880 VA			3	100 A	R1A	34
35								8390 VA	10740 VA				36
37				8820 VA	0 VA								38
39	R1D	100 A	3			8320 VA	0 VA			3	60 A	SPD-R1	40
41								8900 VA	0 VA				42
		TOTAL LOAD:		33510 VA		32420 VA		33650 VA					
		TOTAL AMPS:		281 A		270 A		282 A					

Load Classfication	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Motor	800 VA	100.00%	800 VA		
REC	63150 VA	57.92%	36575 VA	**Total Conn. Load:**	99580 VA
Receptacle	28930 VA	67.28%	19465 VA	**Total Est. Demand**	63540 VA
Security	20 VA	100.00%	20 VA	**Total Conn.:**	276 A
Trainer Equipment	6680 VA	100.00%	6680 VA	**Total Est. Demand:**	176 A

Notes:
PROVIDE FIRE ALARM CIRCUITS WITH RED, LOCKABLE CIRCUIT BREAKERS WITH PERMANENT LABEL NEXT TO CIRCUITS INDICATING FIRE ALARM.

BRANCH PANEL: TR1

Locations: TELECOM 119
Supplied From: TX-TR1
Mounting: Surface
Enclosure: Type 1

Voltage: 208Y/120
Phases: 3
Wires: 4
Frequency: 60 HZ

A.I.C. Rating: 18000
Mains Type: MCB
Mains Rating: 100 A
MCB Rating: 100 A

Notes:

CKT	Circuit Description	TRIP	Poles	A		B		C		Poles	TRIP	Circuit Description	CKT
1	REC - TELECOM 119	20 A	1	900 VA	600 VA					1	15 A	SEC-IDS PANEL	2
3	FCU-4	15 A	1			96 VA	600 VA			1	15 A	SEC-ACS PANEL	4
5	RACK #1 - L6-20R	20 A	2					500 VA	500 VA				6
7				500 VA	500 VA					2	20 A	RACK #2 - L6-20R	8
9	RACK #1 - L5-20R	20 A	1			180 VA	180 VA			1	20 A	RACK #2 - L5-20R	10
11	REC - TELECOM 119	20 A	1					720 VA	500 VA				12
13	TELECOM CABINETS/RACKS	20 A	1	180 VA	500 VA					2	20 A	TELECOM CABINETS/RACKS	14
15	TELECOM RACK ADMIN RM 105	20 A	1			1500 VA	200 VA			1	20 A	TELECOM CABINETS RM 201	16
17	REC - TELECOM 204	20 A	1					400 VA	180 VA	1	20 A	REC - TELECOM 204	18
19	TELECOM CABINETS/RACKS	20 A	2	500 VA	180 VA					1	20 A	TELECOM CABINETS/RACKS	20
21						500 VA	0 VA			1	20 A	SPARE	22
23	SPARE	20 A	1					0 VA	0 VA	1	20 A	SPARE	24
25	SPARE	20 A	1	0 VA	0 VA								26
27	SPARE	20 A	1			0 VA	0 VA			3	30 A	SPD-TR1	28
29	SPARE	20 A	1					0 VA	0 VA				30
		TOTAL LOAD:		3860 VA		3256 VA		2800 VA					
		TOTAL AMPS:		33 A		28 A		23 A					

Load Classfication	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Motor	96 VA	100.00%	96 VA		
REC	2820 VA	100.00%	2820 VA	**Total Conn. Load:**	9916 VA
Receptacle	1080 VA	100.00%	1080 VA	**Total Est. Demand**	9916 VA
TELECOM CABINETS/RACKS	4720 VA	100.00%	4720 VA	**Total Conn.:**	28 A
Security	1200 VA	100.00%	1200 VA	**Total Est. Demand:**	28 A

Notes:

BRANCH PANEL: R1A

Location: ELECTRICAL 140
Supplied From: R1
Mounting: Surface
Enclosure: Type 1

Voltages: 208Y/120
Phases: 3
Wires: 4
Frequency: 60 HZ

A.I.C. Rating: 18000
Mains Type: MLO
Mains Rating: 100 A

Notes:

CKT	Circuit Description	TRIP	Poles	A		B		C		Poles	TRIP	Circuit Description	CKT
1	GARBAGE DISPOSAL - BR 106	20 A	1	180 VA	180 VA					1	20 A	REC - AHU-2	2
3	WATER FOUNTAIN - CORR 101	20 A	1			600 VA	1000 VA			1	20 A	REFRIGERATOR - BR 106	4
5	COPIER - ADMIN 105A	20 A	1					1500 VA	1620 VA	1	20 A	REC - MP 114	6
7	VENDING MACHINE BR 106	20 A	1	1250 VA	1540 VA					1	20 A	REFRIGERATOR - WELLNESS 105B	8
9	REC - MP 112	20 A	1			1620 VA	360 VA			1	20 A	REC - MECH MEZZ	10
11	REC - RM 126	20 A	1					360 VA	720 VA	1	20 A	REC RM 126	12
13	REC - COUNTERTOP BR 106	20 A	1	360 VA	720 VA					1	20 A	RECEPTACLE ADMIN RM 105A	14
15	RECEPTACLE ADMIN RM 105A	20 A	1			1080 VA	180 VA			1	20 A	REC BREAK RM 106, EXTERIOR	16
17	REC - TRS 104	20 A	1					900 VA	900 VA	1	20 A	REC - OFFICE 105D	18
19	REC - OFFICE 105E	20 A	1	900 VA	900 VA					1	20 A	REC - RM 126	20
21	REC - OFFICE 105C	20 A	1			900 VA	1260 VA			1	20 A	REC - SWA 103	22
23	RECEPTACLE CLASS 111,113	20 A	1					1080 VA	1500 VA	1	20 A	DISHWASHER - BR 106	24
25	REC - RR & JANITOR 107, 108, 109	20 A	1	900 VA	1080 VA					1	20 A	REC - CLASSROOM 111	26
27	REC - CLASSROOM 113	20 A	1			1080 VA	1260 VA			1	20 A	REC - MP 124	28
29	REC - MP 123	20 A	1					1260 VA	540 VA	1	20 A	WORKSTATION -103	30
31	MICROWAVE - BR 106	20 A	1	1500 VA	360 VA					1	20 A	WORKSTATION -103	32
33	SPARE	20 A	1			0 VA	540 VA			1	20 A	WORKSTATION -103	34
35	SPARE	20 A	1					0 VA	360 VA	1	20 A	WORKSTATION -103	36
37	SPARE	20 A	1	0 VA	0 VA					1	20 A	SPARE	38
39	SPARE	20 A	1			0 VA	0 VA			1	20 A	SPARE	40
41	SPARE	20 A	1					0 VA	0 VA	1	20 A	SPARE	42
		TOTAL LOAD:		9870 VA		9880 VA		10740 VA					
		TOTAL AMPS:		82 A		82 A		90 A					

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
REC	28690 VA	67.43%	19345 VA		
Receptacle	1800 VA	100.00%	1800 VA	**Total Conn. Load:**	30490 VA
				Total Est. Demand:	21145 VA
				Total Conn.:	85 A
				Total Est. Demand:	59 A

Notes:

BRANCH PANEL: R1B

Location: ELECTRICAL 140
Supplied From: R1
Mounting: Surface
Enclosure: Type 1

Voltages: 208Y/120
Phases: 3
Wires: 4
Frequency: 60 HZ

A.I.C. Rating: 18000
Mains Type: MLO
Mains Rating: 100 A

Notes:

CKT	Circuit Description	TRIP	Poles	A		B		C		Poles	TRIP	Circuit Description	CKT
1	SEC-DOOR-1	15 A	1	20 VA	500 VA					1	20 A	COPIER - TSC 201	2
3	REC-ELEV CONV	20 A	1			360 VA	500 VA			1	20 A	COPIER - TSC 201	4
5	RECEPTACLE EQUIP YARD, EEW-1	20 A	1					370 VA	600 VA	1	20 A	WATER FOUNTAIN - CORR 200	6
7	REC - CLASS 202	20 A	1	1080 VA	1440 VA					1	20 A	REC - MP 203	8
9	REC - MP 203	20 A	1			1620 VA	1900 VA			1	20 A	REC - TSC 201	10
11	REC - CORR 200	20 A	1					720 VA	1080 VA	1	20 A	REC - CLASS 202	12
13	REC - MP 205	20 A	1	1440 VA	0 VA					1	20 A	SPARE	14
15	SPARE	20 A	1			0 VA	1000 VA			1	20 A	SHREDDER - MP 203	16
17	REC - MP 205	20 A	1					1620 VA	0 VA	1	20 A	SPARE	18
19	COPIER - MP 205	20 A	1	1000 VA	1000 VA					1	20 A	COPIER - MP 205	20
21	COPIER - MP 205	20 A	1			1000 VA	1000 VA			1	20 A	COPIER - MP 203	22
23	SHREDDER - MP 205	20 A	1					1000 VA	1000 VA	1	20 A	COPIER - MP 205	24
25	COPIER - MP 203	20 A	1	1000 VA	1000 VA					1	20 A	COPIER - MP 203	26
27	COPIER - MP 203	20 A	1			1000 VA	0 VA			1	20 A	SPARE	28
29	COPIER - MP 205	20 A	1					1000 VA	1000 VA	1	20 A	COPIER - MP 203	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					1	20 A	SPARE	38
39	SPARE	20 A	1			0 VA	0 VA			1	20 A	SPARE	40
41	SPARE	20 A	1					0 VA	0 VA	1	20 A	SPARE	42
		TOTAL LOAD:		8480 VA		8380 VA		8390 VA					
		TOTAL AMPS:		71 A		70 A		70 A					

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
REC	25220 VA	69.83%	17610 VA		
Receptacle	10 VA	100.00%	10 VA	**Total Conn. Load:**	25250 VA
Security	20 VA	100.00%	20 VA	**Total Est. Demand:**	17640 VA
				Total Conn.:	70 A
				Total Est. Demand:	49 A

Notes:

US Army Corps of Engineers
Louisville District ®

AARON McWHORTER
100310
REGISTERED
PROFESSIONAL
ENGINEER
STATE OF TEXAS
21 NOV 2022
TEXAS REGISTERED
ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: A. McWHORTER
DRAWN BY: A. FORMAN
CHECKED BY: K.HOGAN
SUBMITTED BY: E. OLMESS
QC BY:
ANSI D 22x34

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT21920-1E-604

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street Fort Worth, TX 76102
Phone: 817.820.8000 Fax: 817.820.8019

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, PZ#: 496395
PANEL SCHEDULES

SHEET ID
B1455
E-604

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN

BRANCH PANEL: R1C

Location: ELECTRICAL 140
Supplied From: R1
Mounting: Surface
Enclosure: Type 1

Voltages: 208Y/120
Phases: 3
Wires: 4
Frequency: 60 HZ

A.I.C. Rating: 18000
Mains Type: MLO
Mains Rating: 100 A

Notes:

CKT	Circuit Description	TRIP	Poles	A		B		C		Poles	TRIP	Circuit Description	CKT
1	REC - COPIER REG 102	20 A	1	1500 VA									2
3	REC - REG OFFICE 102A	20 A	1			1080 VA	540 VA			1	20 A	REC - REG 102	4
5	WORKSTATION-102A	20 A	1					180 VA	180 VA	1	20 A	WORKSTATION 102A	6
7	WORKSTATION 102A	20 A	1	180 VA	180 VA					1	20 A	WORKSTATION 102A	8
9	RECEPTACLE ADMIN RM 105	20 A	1			1080 VA	540 VA			1	20 A	REC - RM 140	10
11	RECEPTACLE RM 125, 125A	20 A	1					1080 VA	360 VA	1	20 A	RECEPTACLE BAY AIE PTT 116	12
13	RECECTACLE IAST BAY 115	20 A	1	900 VA	1260 VA					1	20 A	RECEPTACLE RM 122	14
15	SPARE	20 A	1			0 VA	0 VA			1	20 A	SPARE	16
17	SPARE	20 A	1					0 VA	0 VA	1	20 A	SPARE	18
19	SPARE	20 A	1	0 VA	0 VA					1	20 A	SPARE	20
21	SPARE	20 A	1			0 VA	0 VA			1	20 A	SPARE	22
23	SPARE	20 A	1					0 VA	0 VA	1	20 A	SPARE	24
25	SPARE	20 A	1	0 VA	0 VA					1	20 A	SPARE	26
27	SPARE	20 A	1			0 VA	0 VA			1	20 A	SPARE	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								38
39	SPARE	20 A	1			0 VA	0 VA			3	30 A	SPD-R1C	40
41	SPARE	20 A	1					0 VA	0 VA				42
		TOTAL LOAD:		4020 VA		3240 VA		1800 VA					
		TOTAL AMPS:		35 A		29 A		15 A					

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
REC	8340 VA	100.00%	8340 VA		
Receptacle	720 VA	100.00%	720 VA	**Total Conn. Load:**	9060 VA
				Total Est. Demand:	9060 VA
				Total Conn.:	25 A
				Total Est. Demand:	25 A

Notes:

BRANCH PANEL: MH2

Location: ELECTRICAL 140
Supplied From: MDP2
Mounting: Surface
Enclosure: Type 1

Voltages: 480Y/277
Phases: 3
Wires: 4
Frequency: 60 HZ

A.I.C. Rating: 22000
Mains Type: MLO
Mains Rating: 100 A

Notes:

CKT	Circuit Description	TRIP	Poles	A		B		C		Poles	TRIP	Circuit Description	CKT
1				4268 VA	4268 VA								2
3	CRAC-1	20 A	3			4268 VA	4268 VA			3	20 A	CRAC-2	4
5								4268 VA	4268 VA				6
7				6667 VA	443 VA								8
9	EWH-1	40 A	3			6667 VA	443 VA			3	15 A	EF-2	10
11								6667 VA	443 VA				12
13				444 VA	443 VA								14
15	Motor	15 A	3			444 VA	443 VA			3	15 A	EF-6	16
17								444 VA	443 VA				18
19				443 VA									20
21	EF-1	15 A	3			443 VA							22
23								443 VA					24
25													26
27													28
29													30
31													32
33													34
35													36
37													38
39													40
41													42
		TOTAL LOAD:		16976 VA		16976 VA		16976 VA					
		TOTAL AMPS:		61 A		61 A		61 A					

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Motor	30928 VA	100.00%	30928 VA		
Other	20000 VA	100.00%	20000 VA	**Total Conn. Load:**	50928 VA
				Total Est. Demand:	50928 VA
				Total Conn.:	61 A
				Total Est. Demand:	61 A

Notes:

BRANCH PANEL: R1D

Location: ELECTRICAL 140
Supplied From: R1
Mounting: Surface
Enclosure: Type 1

Voltages: 208Y/120
Phases: 3
Wires: 4
Frequency: 60 HZ

A.I.C. Rating: 18000
Mains Type: MLO
Mains Rating: 100 A

Notes:

CKT	Circuit Description	TRIP	Poles	A		B		C		Poles	TRIP	Circuit Description	CKT
1	WORKSTATIONS-A-105-CENTER	20 A	1	500 VA	500 VA					1	20 A	WORKSTATIONS-A-105A-CENTER	2
3	WORKSTATIONS-A-105-CENTER	20 A	1			500 VA	500 VA			1	20 A	WORKSTATIONS-105A CENTER	4
5	WORKSTATIONS-A-105-CENTER	20 A	1					500 VA	500 VA	1	20 A	WORKSTATIONS-A-105A-CENTER	6
7	WORKSTATIONS-A-105-WEST-EAST	20 A	1	1580 VA	500 VA					1	20 A	WORKSTATIONS-A-105-EAST	8
9	WORKSTATIONS-A-105-WEST-EAST	20 A	1			1080 VA	500 VA			1	20 A	WORKSTATIONS-A-105-EAST	10
11	WORKSTATIONS-A-105-WEST-EAST	20 A	1					1080 VA	500 VA	1	20 A	WORKSTATIONS-A-105-EAST	12
13	WORKSTATIONS 105A EAST	20 A	1	500 VA	500 VA					1	20 A	WORKSTATIONS-A-105A-WEST-EAST	14
15	WORKSTATIONS-A-105A-WEST-EAST	20 A	1			500 VA	1080 VA			1	20 A	WORKSTATIONS-6-TRS 104	16
17	WORKSTATIONS-A-201-EAST	20 A	1					1080 VA	1080 VA	1	20 A	WORKSTATIONS-6-TRS 104	18
19	WORKSTATIONS-A-201-EAST	20 A	1	1080 VA	1080 VA					1	20 A	WORKSTATIONS-6-TRS 104	20
21	WORKSTATIONS-A-201-EAST	20 A	1			1080 VA	500 VA			1	20 A	WORKSTATIONS-3-TRS 104	22
23	WORKSTATIONS-A-201-WEST	20 A	1					1080 VA	500 VA	1	20 A	WORKSTATIONS-3-TRS 104	24
25	WORKSTATIONS-A-201-WEST	20 A	1	500 VA	500 VA					1	20 A	WORKSTATIONS-3-TRS 104	26
27	WORKSTATIONS-A-201-WEST	20 A	1			500 VA	0 VA			--	--	SPACE	28
29	SPACE	--	--					0 VA	0 VA	--	--	SPACE	30
31	SPACE	--	--	0 VA	0 VA					--	--	SPACE	32
33	SPACE	--	--			0 VA	500 VA			1	20 A	WORKSTATIONS-A-105A-WEST-EAST	34
35	WORKSTATIONS-A-105A-CENTER	20 A	1					500 VA	500 VA	1	20 A	WORKSTATIONS 105 CENTER	36
37	WORKSTATIONS 105 EAST	20 A	1	500 VA	1080 VA					1	20 A	WORKSTATIONS-6-TRS 104	38
39	WORKSTATIONS 105 WEST	20 A	1			1080 VA	500 VA			1	20 A	WORKSTATIONS-A-201-WEST	40
41	WORKSTATIONS-3-TRS 104	20 A	1					500 VA	1080 VA	1	20 A	WORKSTATIONS 201-EAST	42
		TOTAL LOAD:		8820 VA		8320 VA		8900 VA					
		TOTAL AMPS:		74 A		69 A		75 A					

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Receptacle	26040 VA	69.20%	18020 VA		
				Total Conn. Load:	26040 VA
				Total Est. Demand:	18020 VA
				Total Conn.:	72 A
				Total Est. Demand:	50 A

Notes: PROVIDE CONTACTOR WITH TIME CLOCK INPUT TO CONTROL CIRCUITS 33, 34,35,36,37,38,39,41

BRANCH PANEL: FA

Location: ELECTRICAL 140
Supplied From: ML1
Mounting: Surface
Enclosure: Type 1

Voltages: 208Y/120
Phases: 3
Wires: 4
Frequency: 60 HZ

A.I.C. Rating: 10000
Mains Type: MLO
Mains Rating: 100 A

Notes:
PANEL FEEDER 60 AMPS; PROVIDE CIRCUIT BREAKERS LOCKABLE AND PAINTED RED; PROVIDE PANEL IDENTIFICATION LABLE COLOR RED WITH WHITE LETTERING

CKT	Circuit Description	TRIP	Poles	A		B		C		Poles	TRIP	Circuit Description	CKT
1	FMCP	15 A	1	500 VA	2 VA					1	20 A	DOOR HOLD OPEN	2
3	FA - RPS	20 A	1			100 VA	0 VA			--	--	SPACE	4
5	FACP-OFT1	20 A	1					1202 VA	0 VA	--	--	SPACE	6
7	SPACE	--	--	0 VA	0 VA					--	--	SPACE	8
9	SPACE	--	--			0 VA	0 VA			--	--	SPACE	10
11	SPACE	--	--					0 VA	0 VA	--	--	SPACE	12
		TOTAL LOAD:		502 VA		100 VA		1202 VA					
		TOTAL AMPS:		5 A		1 A		11 A					

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Fire Alarm Control	2 VA	100.00%	2 VA		
Motor	1700 VA	100.00%	1700 VA	**Total Conn. Load:**	1804 VA
Other	2 VA	100.00%	2 VA	**Total Est. Demand:**	1804 VA
Receptacle	100 VA	100.00%	100 VA	**Total Conn.:**	5 A
				Total Est. Demand:	5 A

Notes:

US Army Corps of Engineers
Louisville District ®

AARON McWHORTER
100310
STATE OF TEXAS
NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: A. McWHORTER
DRAWN BY: A. FORMAN
CHECKED BY: K.HOGAN
SUBMITTED BY: E. OLNESS
ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT21920-1E-605

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

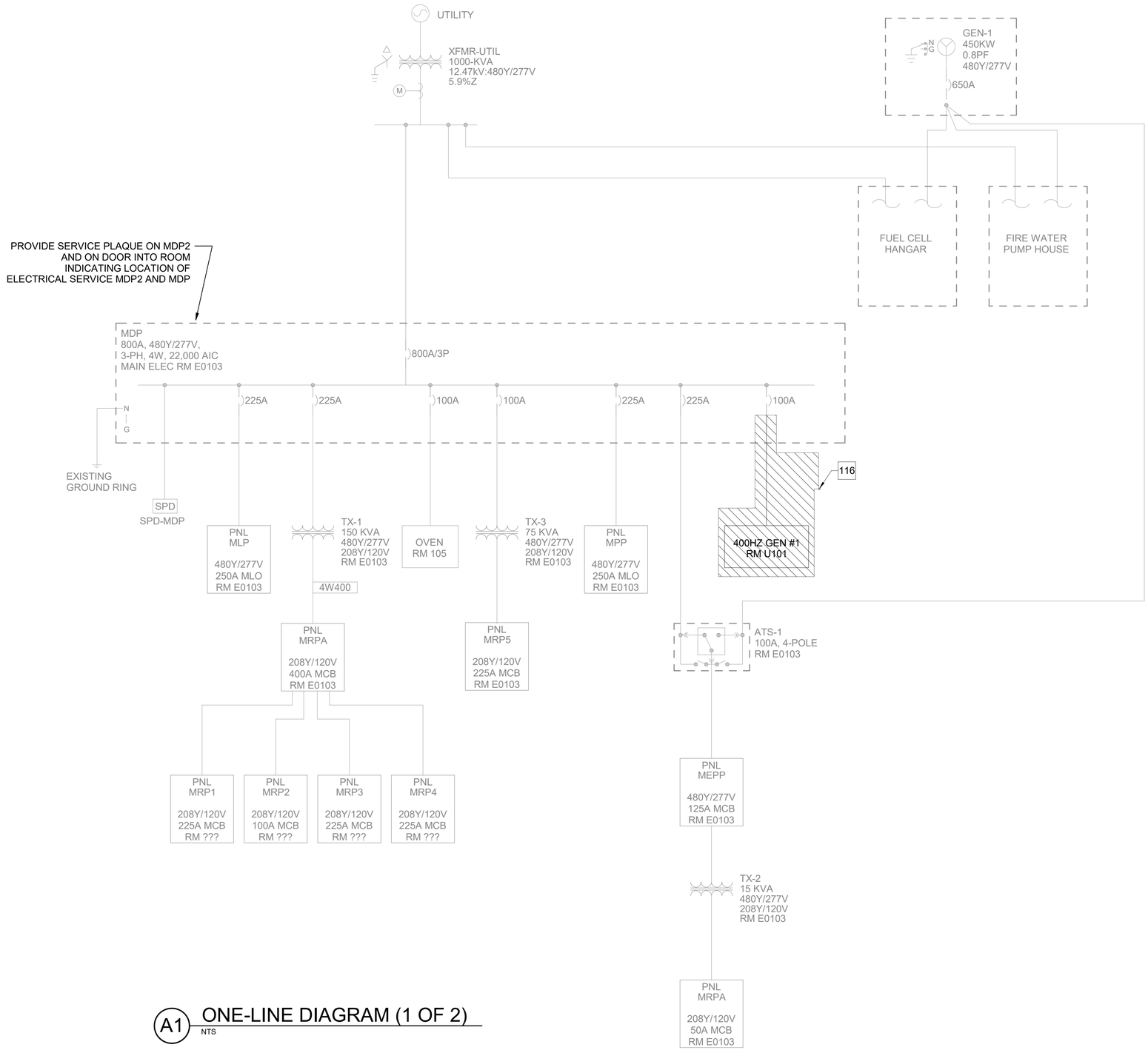
Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
Phone: 817-820-8000 Fax: 817-820-8019

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PANEL SCHEDULES

SHEET ID
B1455
E-605

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



A1 ONE-LINE DIAGRAM (1 OF 2)
NTS

GENERAL NOTES - ONE-LINE DIAGRAM

A	THE EXISTING ONE-LINE DIAGRAM IS BASED ON RECORD DRAWINGS AND IS SHOWN FOR REFERENCE ONLY.
B	QUALITY ASSURANCE: SUBMITTAL AND APPROVAL OF LISTED CALCULATIONS AND COORDINATION STUDY ARE REQUIRED PRIOR TO PROCUREMENT OR SHIPMENT OF SWITCHBOARDS, DISTRIBUTION PANELS, PANELBOARDS, ENCLOSED CIRCUIT BREAKERS, ELEVATORS, CHILLERS, AND OTHER ELECTRICAL GEAR WITH SHORT CIRCUIT OR INTERRUPTING RATINGS. PROVIDE LABELS FOR PANELBOARD AND SWITCHBOARDS ACCORDING TO FINAL SHORT CIRCUIT STUDY AND NOT THE DEFAULT PER THE DRAWINGS.
C	PROVIDE AND INSTALL A PERMANENT PLAQUE OR DIRECTORY AT EACH SERVICE DISCONNECT LOCATION (MDP & MDP2), DENOTING ALL SERVICES SUPPLYING THE FACILITY AND THE AREA SERVED BY EACH.
D	MOUNTED SURGE PROTECTION DEVICE SPD ADJACENT TO THE EQUIPMENT IT SERVES. MAINTAIN A MAXIMUM OF 3FT CONDUCTOR LENGTH.
E	SETUP MEETING TO DISCUSS EQUIPMENT CONNECTIONS AND SIZES FOR THE SIMULATOR COMPUTER ROOMS WITH CONTRACTING OFFICER, UPS MANUFACTURER, AND SIMULATOR SUPPLIER PRIOR TO FINAL SUBMITTAL AND PROCURING CIRCUIT BREAKERS, TRANSFORMERS, PANELBOARDS SERVING EQUIPMENT.
F	PROVIDE TEMPORARY GENERATOR RENTAL AND REQUIRED COMPONENTS AND ACCESSORIES INCLUDING CABLING AND FUEL FOR COMPLETE TESTING AND COMMISIONING OF THE GENERATOR CONNECTION CABINET FUNCTIONS.

KEYNOTES

116	DEMOLISH THE 400HZ GEN #1, INCLUDING THE ASSOCIATED DEVICES, CONDUCTORS, AND CONDUITS BACK TO THEIR SOURCE PANEL.

US Army Corps of Engineers
Louisville District ®

MARK	DESCRIPTION	DATE

DESIGNED BY: A. McWHORTER
DRAWN BY: A. FORMAN
CHECKED BY: K.HOGAN
SUBMITTED BY: E. OLNESS
DATE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT21920IE-701

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
Texas Registered Firm F-2600

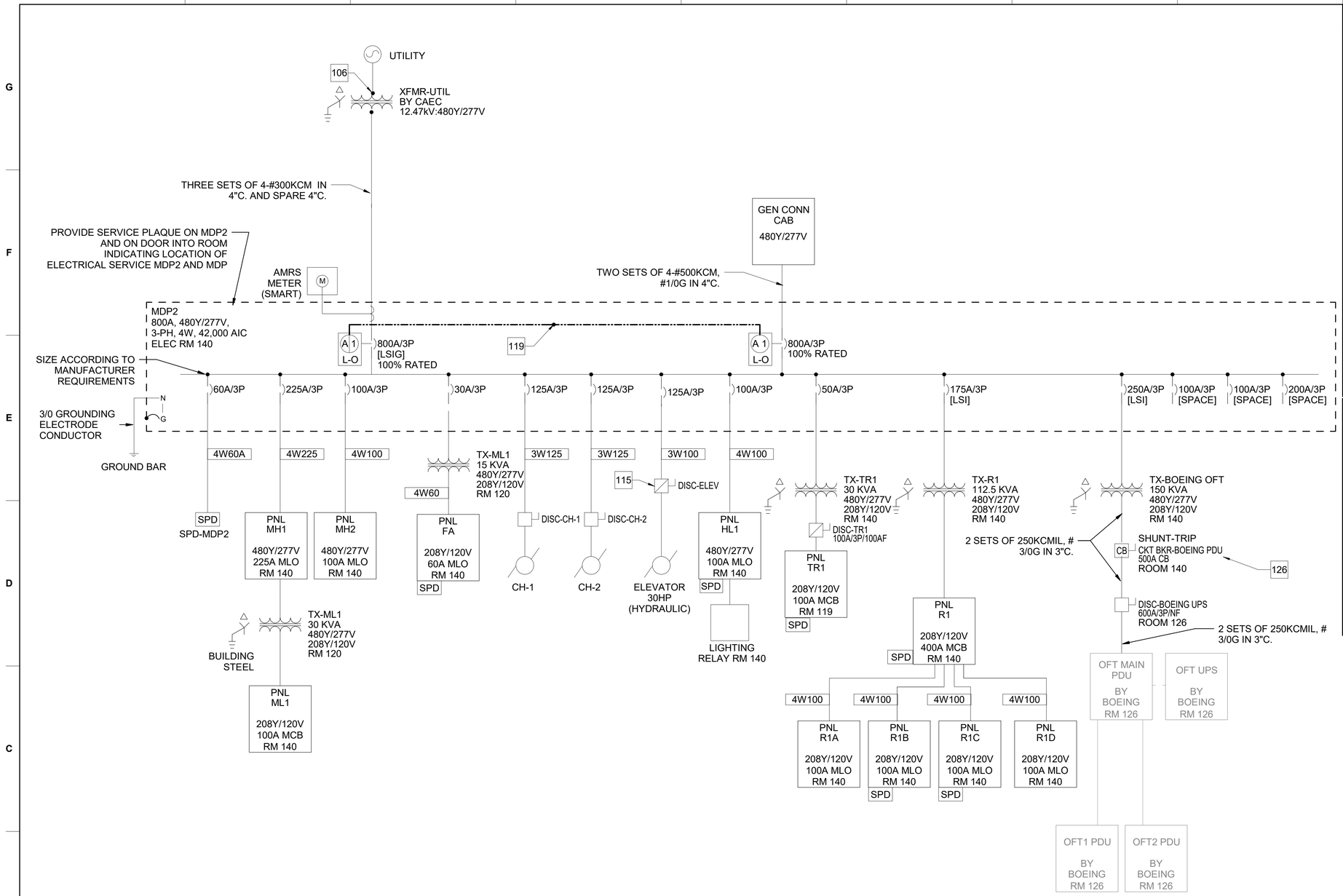
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, PZ#: 496395
ONE-LINE DIAGRAM (1 OF 2)

SHEET ID
B1455
E-701

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN



A1 ONE-LINE DIAGRAM (2 OF 2)
NTS

GENERAL NOTES - ONE-LINE DIAGRAM

A	THE EXISTING ONE-LINE DIAGRAM IS BASED ON RECORD DRAWINGS AND IS SHOWN FOR REFERENCE ONLY.
B	QUALITY ASSURANCE: SUBMITTAL AND APPROVAL OF LISTED CALCULATIONS AND COORDINATION STUDY ARE REQUIRED PRIOR TO PROCUREMENT OR SHIPMENT OF SWITCHBOARDS, DISTRIBUTION PANELS, PANELBOARDS, ENCLOSED CIRCUIT BREAKERS, ELEVATORS, CHILLERS, AND OTHER ELECTRICAL GEAR WITH SHORT CIRCUIT OR INTERRUPTING RATINGS. PROVIDE LABELS FOR PANELBOARD AND SWITCHBOARDS ACCORDING TO FINAL SHORT CIRCUIT STUDY AND NOT THE DEFAULT PER THE DRAWINGS.
C	PROVIDE AND INSTALL A PERMANENT PLAQUE OR DIRECTORY AT EACH SERVICE DISCONNECT LOCATION (MDP & MDP2), DENOTING ALL SERVICES SUPPLYING THE FACILITY AND THE AREA SERVED BY EACH.
D	MOUNTED SURGE PROTECTION DEVICE SPD ADJACENT TO THE EQUIPMENT IT SERVES. MAINTAIN A MAXIMUM OF 3FT CONDUCTOR LENGTH.
E	SETUP MEETING TO DISCUSS EQUIPMENT CONNECTIONS AND SIZES FOR THE SIMULATOR COMPUTER ROOMS WITH CONTRACTING OFFICER, UPS MANUFACTURER, AND SIMULATOR SUPPLIER PRIOR TO FINAL SUBMITTAL AND PROCURING CIRCUIT BREAKERS, TRANSFORMERS, PANELBOARDS SERVING EQUIPMENT.
F	PROVIDE TEMPORARY GENERATOR RENTAL AND REQUIRED COMPONENTS AND ACCESSORIES INCLUDING CABLING AND FUEL FOR COMPLETE TESTING AND COMMISIONING OF THE GENERATOR CONNECTION CABINET FUNCTIONS.

KEYNOTES

106	COORDINATE WITH THE LOCAL ELECTRICAL UTILITY COMPANY (CAEC) FOR INSTALLATION OF THE NEW SERVICE TRANSFORMER, PAD, GROUNDING AND SECONDARY CONDUCTORS TO MEET THE CAEC REQUIREMENTS. INCORPORATE UTILITY COSTS FROM CAEC FOR SERVICE REQUIREMENTS.
115	ELEVATOR CIRCUIT IS BASED ON A PRELIMINARY SIZING. VERIFY FINAL POWER REQUIREMENTS AND CONNECTION REQUIREMENTS WITH FINAL SELECTED EQUIPMENT MANUFACTURER. PROVIDE SHUNT TRIP CIRCUIT BREAKER CONNECTED TO FIRE SPRINKLER/FIRE ALARM.
119	PROVIDE KEYED INTERLOCK SYSTEM CIRCUIT BREAKERS. PROVIDE ONE KEY TO PREVENT CIRCUIT BREAKERS FROM BOTH BREAKERS FROM BEING CLOSED FLOWING ENERGY AT THE SAME TIME.
126	PROVIDE AN EMERGENCY POWER OFF (EPO) SWITCH TO TRIGGER THE SHUNT-TRIP. RE:EP102 FOR PLACEMENT IN THE OFT COMPUTER ROOMS.

ELECTRICAL FEEDER SCHEDULE

3W50	3#8 & 1#10G, 3/4"C
3W100	3#3 & 1#8G, 1 1/4"C
3W125	3 #1 & 1 #6G, 1-1/2"C
3W225	3#4/0 & 1#6G, 2-1/2"C
4W50	4 #8 & 1 #10G, 3/4"C
4W60	4#6 & 1#10G, 1"C
4W60A	4#6 & 1#6G, 1"C
4W100	4#3 & 1#8G, 1 1/4"C
4W225	4#4/0 & 1#4G, 2-1/2"C
4W400	4#500 KCMIL & 1#3G, 3"C.
4W800A	(2) 4#500 KCMIL, (2) 4"C

TRANSFORMER SCHEDULE

	PRIMARY (480V)		SECONDARY (208/120V)		
KVA	CB	FEEDER	CB	FEEDER	GEC
15	30/3	3#10, #10G, 3/4" C	50/3	4#6, #8G, 3/4" C	#8
30	50/3	3#6, #10G, 3/4" C	100/3	4#1, #6G, 1-1/4" C	#6
45	70/3	3#4, #8G, 1" C	150/3	4#1/0, #6G, 2" C	#4
75	125/3	3#1/0, #6G, 1-1/2" C	225/3	4#4/0, #2G, 2-1/2" C	#2
112.5	175/3	3#2/0, #6G, 2" C	400/3	(2) 4#3/0, #2G, 2" C	#2
150	250/3	3-250KCM, #4G, 2-1/2"C.	500/3	(2) SETS OF 4-250KCM, #3/0G, 3"C.	#1/0

US Army Corps of Engineers
Louisville District ®

STATE OF TEXAS
AARON McWHORTER
100310
LICENSED PROFESSIONAL ENGINEER
21 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: A. McWHORTER
DRAWN BY: A. FORMAN
CHECKED BY: K.HOGAN
SUBMITTED BY: E. OLMESS
ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201E-702

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street Fort Worth, TX 76102
TBPE/TBPLS Registration No. F-2600

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, PZ#: 496395
ONE-LINE DIAGRAM (2 OF 2)

SHEET ID
B1455
E-702

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN

TELECOMMUNICATIONS SYMBOLS

- TWO-POST RACK WITH VERTICAL WIRE MANAGERS
- DATA CABINET
- TELEPHONE WALL OUTLET - (1) BLUE CAT. 6 STP CABLE (+48")
- SIPR DATA WALL OUTLET - (1) RED 4-STRAND OM3 MULTIMODE FIBER OPTIC CABLE UON
  X=CABLE QUANTITY M=MODULAR FURNITURE OUTLET
- COMMERCIAL NETWORK OUTLET - (2) BLACK CAT. 6 STP CABLES UON.
  X=CABLE QUANTITY M=MODULAR FURNITURE OUTLET
- NIPR DATA WALL OUTLET - (4) BLUE CAT. 6 STP CABLES UON.
  X=CABLE QUANTITY M=MODULAR FURNITURE OUTLET
- NIPR WIRELESS ACCESS POINT OUTLET - (2) BLUE CAT. 6 STP CABLES (WAP)
- NIPR DATA FLOOR OUTLET - (4) BLUE CAT. 6 STP CABLES
- SIPR DATA FLOOR OUTLET - (2) RED 4-STRAND OM3 FIBER OPTIC CABLES
- POWER/DATA FLOOR OUTLET - (4) BLUE CAT. 6 STP CABLES
  AV=AUDIO/VISUAL - CONDUIT TO WALL MONITOR
- WALL MOUNTED JUNCTION BOX WITH FLEXIBLE WHIP TO FURNITURE CABLE RACEWAY. MOUNT AT 18-INCHES ABOVE FINISHED FLOOR
- PRIMARY BONDING BUSBAR (PBB); SECONDARY BONDING BUSBAR (SBB)
- PET PROTECTED ENTRANCE TERMINAL
- BASKET CABLE TRAY
- LADDER RACK
- A V WALL MOUNTED AUDIO-VISUAL OUTLET
- PB PULL BOX
- C MAINTENANCE HOLE, E=ELEC, C=COMM, P=PULLBOX, H=HANDHOLE
- Cx EXISTING MAINTENANCE HOLE, E=ELEC, C=COMM, P=PULLBOX, H=HANDHOLE
- C TELECOMMUNICATIONS DUCTBANK
- C X EXISTING TELECOMMUNICATIONS DUCTBANK
- TP TELECOM POLE
  N = NIPR S = SIPR
- TV CATV OUTLET
- P POKE THROUGH
  N = NIPR, S = SIPR
- CEILING MOUNTED PUBLIC ADDRESS SPEAKER
- WALL MOUNT PUBLIC ADDRESS SPEAKER
- V PUBLIC ADDRESS VOLUME CONTROL
- PUBLIC ADDRESS HORN

TELECOMMUNICATIONS GENERAL NOTES

1. ALL SYMBOLS, ABBREVIATIONS AND GENERAL NOTES SHOWN ARE NOT NECESSARILY USED ON THIS PROJECT.
2. THESE CONTRACT DOCUMENTS ARE DIAGRAMMATIC AND SHOW THE DESIGN INTENT.
3. ALL WORK SHALL COMPLY WITH ALL APPLICABLE CODES, AMENDMENTS, RULES, REGULATIONS, ORDINANCES, LAWS, ORDERS, APPROVALS, ETC., THAT ARE REQUIRED FOR THIS PROJECT.
4. COORDINATE THE WORK OF YOUR TRADE WITH ALL OTHER TRADES, AS WELL AS PORTABLE MOBILE EQUIPMENT.
5. DIRECT ALL WORK USING BEST PRACTICES. COORDINATE ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES AND COORDINATE ALL PORTIONS OF THIS PROJECT.
6. DATA CABLING MUST BE RUN IN CONDUIT FROM BASKET TRAY TO CABLE OUTLET. CONDUIT MUST BE BONDED TO THE BASKET TRAYS.
7. CONDUIT FILL MUST NOT EXCEED 40%. INSTALLATION OF CONDUIT AND CABLING MUST BE IN COMPLIANCE WITH NFPA 70 (NEC) AND ANSI/TIA-569.
8. MINIMUM CONDUIT SIZE FOR HORIZONTAL CABLING MUST BE 1 INCH.
9. ALL INTERIOR CABLING MUST BE PLENUM RATED.
10. STANDARD HORIZONTAL NIPR DATA CABLING MUST BE (2) GREEN CAT. 6 STP CABLES UON. WALL PHONES MUST BE (1) GREEN CAT. 6 STP CABLE.
11. STANDARD HORIZONTAL SIPR DATA CABLING MUST BE (1) RED 4-STRAND OM3 CABLE.
12. STANDARD HORIZONTAL COMMERCIAL CABLING MUST BE (2) BLACK CAT. 6 STP CABLES.
13. STANDARD CABLING FOR THE TWO AFTER ACTION REVIEW (AAR) DESKS WILL BE PROVIDED BY THE SIMULATOR CONTRACTOR. CONTRACTOR TO PROVIDE (2) 2" CONDUITS FROM THE HH-60W IG ROOM TO EACH OF THE LARGE AV TYPE BOX FLUSH MOUNTED IN THE WALL BELOW THE AAR DESK.
14. STANDARD VOICE/DATA OUTLETS MUST BE 8-POSITION 8-CONNECTOR CATEGORY 6, COLOR-MATCHED TO THE CABLE AND WIRED WITH THE TIA T568B CONFIGURATION.
15. FIBER OPTIC SIPR DATA OUTLETS MUST BE TERMINATED WITH SC CONNECTORS AND COLOR-MATCHED TO THE CABLE.
16. OSP FIBER OPTIC CABLE MUST BE A 24-STRAND OS2 SINGLEMODE FIBER OPTIC CABLE.
17. OSP FIBER OPTIC CONNECTORS MUST BE DUPLEX LC.
18. STANDARD OSP COPPER CABLE MUST BE 100-PAIRS. CONTRACTOR TO PROVIDE PET AT EACH END AND (200) 5-PIN 4B1FS 240V. PROTECTION MODULES.
19. ALL CABINETS, RACKS, VERTICAL AND HORIZONTAL WIRE MANAGERS LOCATED IN THE TELECOM ROOMS MUST BE BLACK IN COLOR.
20. BASKET TRAY RADIUS DROPOUTS (WATERFALLS) ARE REQUIRED WHERE FIBER OPTIC AND COPPER CABLES TRANSITION IN ELEVATION. PROVIDE VELCRO TIES FOR CABLE SUPPORT IN TRANSITIONS.
21. NYLON CABLE TIES MUST NOT BE USED FOR CABLE SUPPORT, BUNDLING, OR FOR ANY OTHER MEANS OF RESTRAINING CABLES.
22. THE CONTRACTOR MUST INSTALL ALL COMPONENTS USING MANUFACTURER'S RECOMMENDED INSTALLATION PROCEDURES. ALL MATERIALS SHALL BE NEW AND UNUSED.
23. WHERE RACEWAYS CROSS STRUCTURAL EXPANSION JOINTS, PROVIDE EXPANSION JOINT FITTINGS.
24. THE CONTRACTOR MUST MAINTAIN ALL CABLE MINIMUM BENDING RADII ACCORDING TO THE CABLE MANUFACTURER.
25. SEISMIC BRACING OF BASKET TRAY, CABINETS, LADDER TRAY, CONDUITS, AND ALL OTHER SUSPENDED APPURTENANCES MUST BE BRACED PER DESIGN CATEGORY 'A' FOR ALL SEISMIC SUPPORT AND BRACING.
26. CONTRACTOR MUST PROVIDE BLUE CAT. 6 STP, RED DUPLEX OM3 WITH SC CONNECTORS AND DUPLEX OS2 SINGLEMODE FIBER OPTIC PATCH CORDS WITH LC CONNECTORS FOR EACH WIRED CONNECTION PORT. CONTRACTOR MUST COORDINATE PATCH CORD LENGTHS WITH THE SYSTEM OWNER.
27. A MINIMUM OF 2" SEPARATION IS REQUIRED BETWEEN NIPR AND SIPR DATA OUTLETS.
28. CONDUITS/PIPES PENETRATING THE WALL BETWEEN THE SECURE AND UNSECURE AREAS MUST HAVE A DIELECTRIC BREAK ON THE SECURE SIDE OF THE WALL. CONDUITS/PIPES MUST BE BONDED TO GROUND ON BOTH SIDES OF THE WALL.
29. THERE IS NO MINIMUM SEPARATION BETWEEN SIPR FIBER AND NIPR STP CABLING. CABLE TRAY WILL BE SHARED BUT A DIVIDER MUST BE PROVIDED. NIPR AND SIPR CABLING MUST NOT BE INSTALLED IN THE SAME CONDUIT OR OUTLET BOX.

SECURITY SYMBOLS

- REX REQUEST TO EXIT SENSOR
- BMS BALANCED MAGNETIC SWITCH HIGH SECURITY
- HSS MAGNASPHERE L2 HIGH SECURITY SWITCH
- DPS DOOR POSITION SWITCH
- EL 24 VAC ELECTRIC LOCK
- ML MAGNETIC DOOR LOCK
- X10 DIAL COMBINATION LOCK
- ACS ACCESS CONTROL SYSTEM PANEL
- CR HID PROXIMITY CARD READER
- PANORAMIC PIR
- ID PASSIVE INFRARED DETECTOR
- PUSH BUTTON DOOR RELEASE
- FIXED POSITION CAMERA - 1 BLUE CAT 6 STP
- PTZ PTZ CAMERA
- IDS INTRUSION DETECTION SYSTEM PANEL
- D DURESS BUTTON
- KP ALARM KEYPAD
- ### DOOR TAG

TELECOMMUNICATIONS GENERAL NOTES (CONTINUED)

30. CONTRACTOR MUST INSTALL 4' X 10' X 3/4" FIRE TREATED PLYWOOD ON ALL FOUR WALLS IN THE TELECOM ROOMS AT 6" ABOVE FINISHED FLOOR. PAINT PLYWOOD WITH TWO COATS OF FIRE RETARDANT PAINT. DO NOT COVER FIRE STAMP.
31. NO PIPING. DUCTS. OR EQUIPMENT FOREIGN TO TELECOMMUNICATIONS ROOMS ARE PERMITTED TO BE LOCATED IN OR ABOVE THE TELECOMMUNICATIONS ROOM.
32. INTRUSION DETECTION CONTROLLER LOCATION IN TR MUST RECEIVE (2) CAT. 6 STP CABLES.
33. ACCESS CONTROL CONTROLLER LOCATION IN TR MUST RECEIVE (2) CAT. 6 CABLES.
34. ALL DATA COMM AND TELEPHONE WORK MUST BE PERFORMED UNDER THE SUPERVISION OF A CERTIFIED BICSI TECHNICIAN AND BY LICENSED WORKMEN IN ACCORDANCE WITH THE STATE AND LOCAL GOVERNING AUTHORITIES.
35. THE MINIMUM BEND RADIUS OF UNDERGROUND 4" CONDUITS MUST BE 40" MINIMUM.
36. NO SIPR CABLING IS TO BE PLACED WITHIN THE ONE STORY ADMIN SECTION OF THE BUILDING.
37. SPLICING IN THE MAINTENANCE HOLES TO BE COMPLETED BY THE COMM SQUADRON.
38. CONTRACTOR TO PROVIDE 8000 GRAMS OF ENCAPSULANT AND ALL OTHER SPLICING MATERIALS TO THE COMM SQUADRON FOR SPLICING, INCLUDING 710 SPLICES, FUSION SPLICING HARDWARE, ETC. CONTACT THE COMM SQUADRON FOR A COMPLETE LIST OF MATERIALS.
39. ALL PENETRATIONS THROUGH FIRE RATED WALLS OR SMOKE CURTAINS MUST BE FIRESTOPPED USING A U.L. LISTED ASSEMBLY.

SECURITY GENERAL NOTES

1. THE CONTRACTOR WILL PROVIDE BOX AND CONDUIT ONLY FOR THE ELECTRONIC SECURITY SYSTEM.
2. MINIMUM CONDUIT SIZE MUST BE 1" WITH THE EXCEPTION OF SECURITY "DROP CONDUITS" AT DOOR LOCATIONS, WHICH MAY USE 1/2". ALL CONDUITS MUST BE EMT: EXCEPTIONS INCLUDE;
   - 2.1 RIGID STEEL FOR EXPOSED AREAS OR AREAS ACCESSIBLE TO UNSCREENED PERSONS.
   - 2.2 PVC FOR BURIED OR CAST-IN-PLACE CONDUITS
   - 2.3 GALVANIZED RIGID STEEL FOR EXTERIOR CONDUITS
   - 2.4 FLEXIBLE CONDUIT FOR CONCEALED DROPS TO DOOR DEVICES.
3. CONDUIT FILL MUST NOT EXCEED 40%. INSTALLATION OF CONDUIT AND WIRING SHALL BE IN COMPLIANCE WITH NATIONAL ELECTRICAL CODE (NEC). ALL WIRING SHALL BE HOMERUN, UNLESS OTHERWISE NOTED. ANY SPLICES MUST BE APPROVED BY THE DESIGNER.
4. CONDUITS PENETRATING FIRE RATED WALLS OR FLOORS MUST USE U.L. APPROVED SYSTEMS AND DEVICES IN ORDER TO MAINTAIN FIRE & ICD -705 RATING OF THE WALL OR FLOOR.
5. ALL WORK MUST COMPLY WITH ALL APPLICABLE CODES, AMENDMENTS, RULES, REGULATIONS, ORDINANCES, LAWS, ORDERS, APPROVALS, ETC. THAT ARE REQUIRED BY PUBLIC AUTHORITIES. IN THE EVENT OF CONFLICT, THE MOST STRINGENT REQUIREMENTS SHALL GOVERN.
6. CONTRACTOR MUST COORDINATE THE WORK WITH THAT OF THE OTHER TRADES ON THE JOB. CONFLICTS WITH OTHER TRADES MUST BE BROUGHT TO THE ATTENTION OF THE OWNER PRIOR TO INSTALLATION. WORK MUST ALSO BE COORDINATED AROUND PORTABLE AND MOBILE EQUIPMENT.
7. CONTRACTOR MUST SUPERVISE AND DIRECT THE WORK USING BEST SKILL AND ATTENTION. THE CONTRACTOR MUST BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
8. CONTRACTOR TO PROVIDE PULL TAPE IN ALL CONDUITS.
9. CONDUITS EXITING SECURE AREAS MUST HAVE DIELECTRIC BREAKS.
10. THE BASE STANDARD FOR INTRUSTION DETECTION SYSTEMS (IDS) AND ACCESS CONTROL SYSTEMS (ACS) IS ADVANTOR. THE ADVANTOR SYSTEM, WIRING AND DEVICES IS GOVERNMENT FURNISHED AND GOVERNMENT INSTALLED.
11. ELECTRONIC ACCESS CONTROL SYSTEMS (ACS), INTRUSION DETECTION SYSTEMS (IDS) AND CCTV SYSTEMS ARE GOVERNMENT FURNISHED AND GOVERNMENT INSTALLED.

MOUNTING HEIGHTS:

UNLESS OTHERWISE INDICATED, OUTLET BOXES IN WALLS MUST BE LOCATED WITH CENTERLINE AT THE FOLLOWING ELEVATIONS ABOVE THE FINISHED FLOOR LINE. VERIFY ALL HEIGHTS PRIOR TO ACTUAL LAYOUT OF WORK WITH THE GENERAL CONSTRUCTION CONTRACTOR.

• WALL PHONES	4 FEET
• DATA, AV OUTLETS (U.O.N.)	1 FOOT-6 INCHES
• AV OUTLETS AT MONITORS	72 INCHES AFF
• DATA OUTLETS MOUNTED, ABOVE CASEWORK/CABINETS	6 INCHES ABOVE BACKSPLASH
• DATA OUTLETS, MECHANICAL ROOMS	COORDINATE WITH MECHANICAL CONTRACTOR
• DATA OUTLETS, ELECTRICAL ROOMS	COORDINATE WITH ELECTRICAL CONTRACTOR
• PUBLIC ADDRESS SPEAKERS, ROUND	FLUSH MOUNTED WITH CEILING, UON.
• PUBLIC ADDRESS SPEAKERS, HORNS	15'-0" AFF, UON
• WIRELESS ACCESS POINT (WAP) DATA OUTLETS	12 INCHES ABOVE CEILING, 15'-0" AFF IN TRAINING BAYS

MOUNTING HEIGHT NOTES:

- THE ABOVE MOUNTING HEIGHTS MUST BE ADHERED TO UNLESS OTHERWISE NOTED.

US Army Corps of Engineers
Louisville District ®

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
BICSI
Stephen A Leffler
BICSI ID # 110560
EXPIRES 12-31-23
RCDD
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: 34_SXHT219201T-001
ANSI D 22x34

DESIGNED BY: S. LEFFLER
DRAWN BY: S. LEFFLER
CHECKED BY: C. MEADE
SUBMITTED BY: E. OLNESS
DATE:

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS Tel 817.820.8233

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
GENERAL NOTES AND SYMBOLS

SHEET ID
B1455
T-001

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN

A1 OSP COPPER RUN
NTS

GENERAL NOTES - SITE	
A	COORDINATE MAINTENANCE HOLE ACCESS WITH THE COMM SQUADRON

KEYNOTES	
129	PROVIDE (2) DIRECT BURIED 4" PVC SCHEDULE 40 CONDUITS AT 3'-0" TO TOP OF DUCT FROM MH-M6 TO PULL BOX ON EXTERIOR WALL OF TR.
130	PROVIDE 30" X 30" X 18" NEMA 4X PULL BOX 2'-0" ABOVE FINISHED GRADE ON EXTERIOR WALL OF TR.

KEYNOTES	
131	EXISTING COMMUNICATIONS DUCTS TO BE USED FOR THIS PROJECT . PROVIDE (3) 3" 3-CELL FABRIC INNERDUCTS BETWEEN TR AND MH-M4WIT
133	PROVIDE 50' OF SLACK IN MH-M8 FOR 100-PAIR COPPER CABLE FOR COMM SQUADRON SPLICING TO EXISTING LARGER PAIR COUNT CABLE. PROVIDE 710 SPLICING MATERIALS TO COMM SQUADRON FOR SPLICING.

CONTINUED ON A1/TS102

IMAGE PROVIDED BY MAXWELL AIR FORCE BASE

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN

US Army Corps of Engineers
Louisville District ®

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
BICSI
Stephen A Leffler
BICSI ID # 110560
EXPIRES 12-31-23
RCDD
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE:	23 NOVEMBER 2022
SOLICITATION NO.:	
CONTRACT NO.:	
DRAWING CODE:	
FILE NAME:	SXHT21920I1TS101

DESIGNED BY:	S. LEFFLER
DRAWN BY:	S. LEFFLER
CHECKED BY:	C. MEADE
SUBMITTED BY:	E. OLNESS
SCALE:	ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS TBPE FIRM F-2966

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
SITE PLAN

SHEET ID
B1455
TS101

W912QR23R0003_Plans-0000

CONTINUED ON AT/TS101

GENERAL NOTES - SITE

A	COORDINATE MAINTENANCE HOLE ACCESS WITH THE COMM SQUADRON

KEYNOTES

131	EXISTING COMMUNICATIONS DUCTS TO BE USED FOR THIS PROJECT . PROVIDE (3) 3" 3-CELL FABRIC INNERDUCTS BETWEEN TR AND MH-M4WIT

KEYNOTES

132	PROVIDE 50' OF SLACK OF 24-STRAND FIBER OPTIC CABLE IN MH-M4 FOR COMM SQUADRON TO FUSION SPLICE 24-STRAND FIBER OPTIC CABLE TO EXISTING LARGER STRAND COUNT FIBER OPTIC CABLE. PROVIDE FUSION SPLICING MATERIALS TO THE COMM SQUADRON AND COORDINATE STYLE NEEDED.

A1 OSP FIBER RUN
NTS

IMAGE PROVIDED BY MAXWELL AIR FORCE BASE

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN

US Army Corps of Engineers
Louisville District ®

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
BICSI
Stephen A Leffler
BICSI ID # 110560
EXPIRES 12-31-23
RCDD
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: S. LEFFLER
DRAWN BY: S. LEFFLER
CHECKED BY: C. MEADE
SUBMITTED BY: E. OLNESS
DATE:
ANSI D 22x34

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT21920ITS102

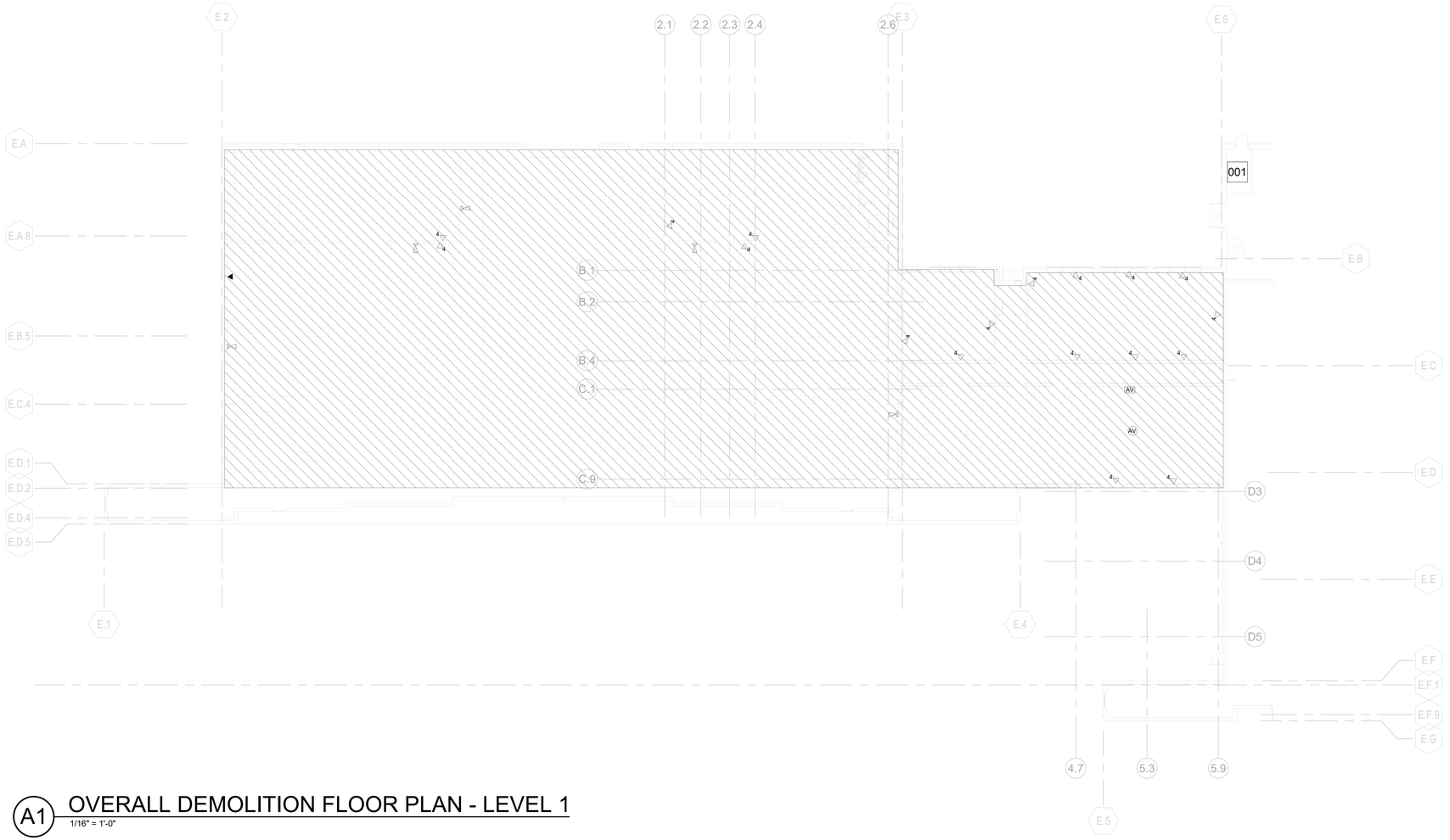
US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS TX REGISTRY #: F-2966

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
SITE PLAN

SHEET ID
B1455
TS102

W912QR23R0003_Plans-0000



A1 OVERALL DEMOLITION FLOOR PLAN - LEVEL 1

1/16" = 1'-0"

GENERAL NOTES - DEMOLITION

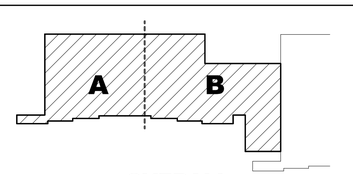
A	DEMOLISH ALL VOICE, DATA, PUBLIC ADDRESS CABLES AND CONDUITS.
B	ALL CABLING ORIGINATES IN THE EXISTING TR.

KEYNOTES

001	EXISTING ACTIVE TR. DEMOLISH ONLY THOSE CABLES THAT GO INTO THE AREA OF DEMOLITION.

LEGEND

AREA OF DEMOLITION



OVERALL KEY PLAN

GRAPHIC SCALE

16 12 8 4 0 16 32

SCALE: 1/16"=1'-0"

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
Bicsi
Stephen A Leffler
BICSI ID # 110560
EXPIRES 12-31-23
RCDD
23 NOV 2022

TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: S. LEFFLER
DRAWN BY: S. LEFFLER
CHECKED BY: C. MEADE
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201TD101

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS No. 70128053

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395

OVERALL DEMOLITION FLOOR PLAN - LEVEL 1

SHEET ID
B1455
TD101

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

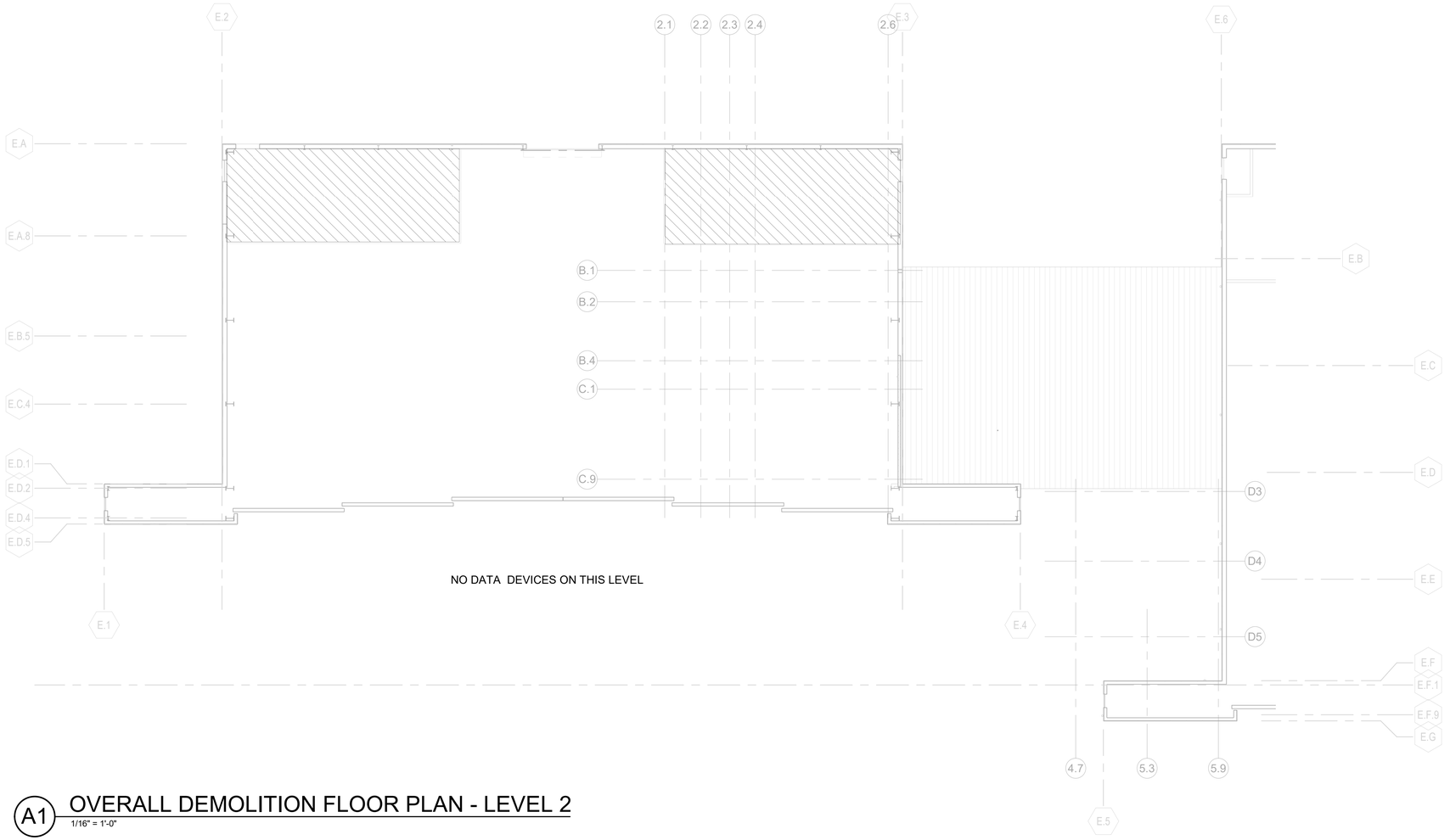
CERTIFIED FINAL DESIGN

GENERAL NOTES - DEMOLITION

A	DEMOLISH ALL VOICE, DATA, PUBLIC ADDRESS CABLES AND CONDUITS.
B	ALL CABLING ORIGINATES IN THE EXISTING TR.

LEGEND

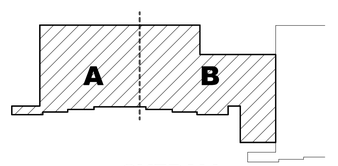
AREA OF DEMOLITION



NO DATA DEVICES ON THIS LEVEL

A1 OVERALL DEMOLITION FLOOR PLAN - LEVEL 2

1/16" = 1'-0"



OVERALL KEY PLAN

GRAPHIC SCALE

16 12 8 4 0 16 32

SCALE: 1/16"=1'-0"

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
Bicsi
Stephen A Leffler
BICSI ID # 110560
EXPIRES 12-31-23
RCDD
23 NOV 2022

TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: S. LEFFLER
DRAWN BY: S. LEFFLER
CHECKED BY: C. MEADE
SUBMITTED BY: E. OLNESS
DATE:
ANSI D 22x34

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201TD111

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
Phone: 817.820.8700

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395

OVERALL DEMOLITION FLOOR PLAN - LEVEL 2

SHEET ID
B1455
TD111

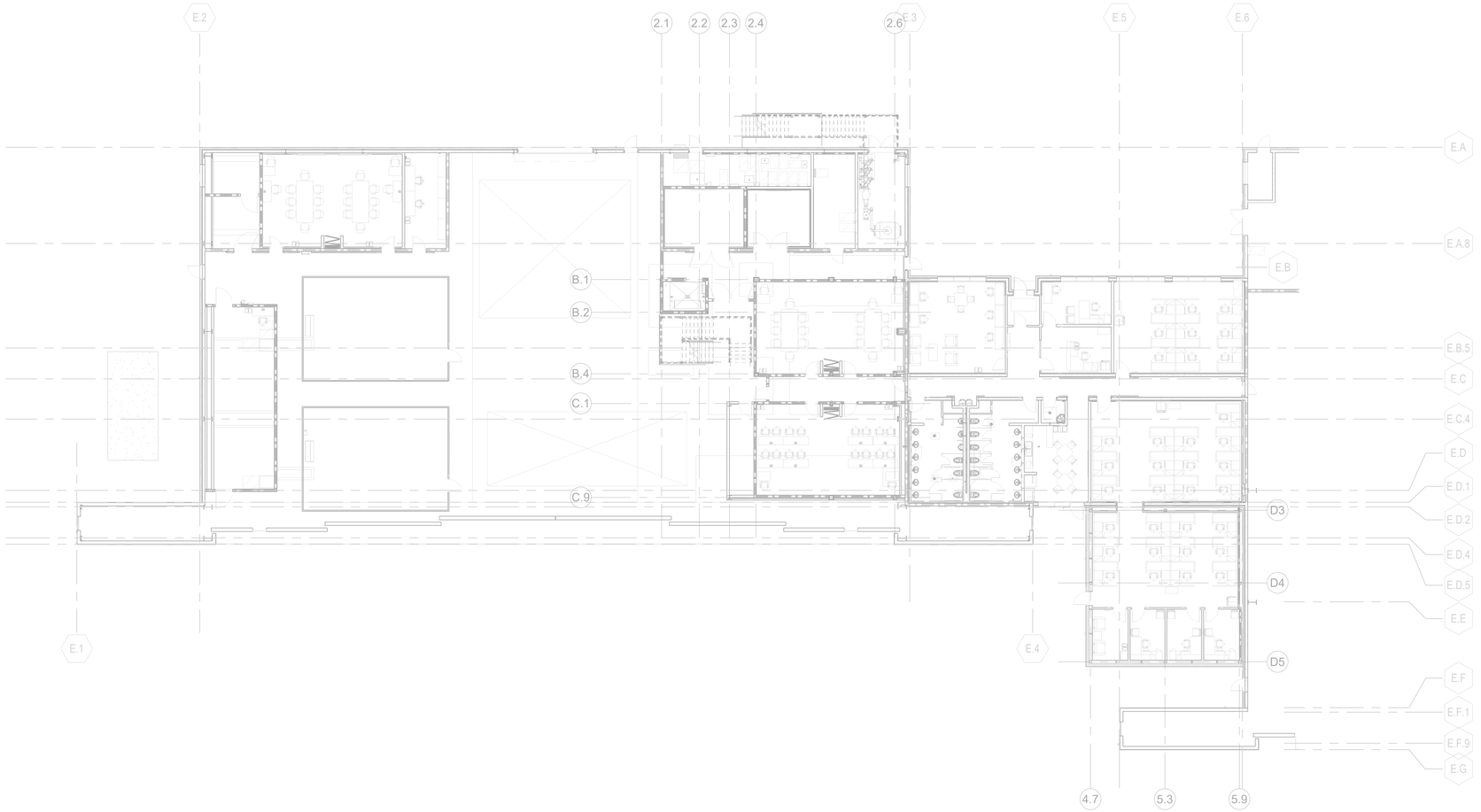
W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

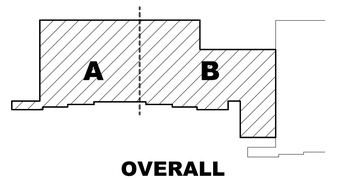
CERTIFIED FINAL DESIGN

GENERAL NOTES - TELECOM

A	SEE SHEET T-001 FOR GENERAL NOTES AND SYMBOLS
B	SEE SHEET G-003 FOR ABBREVIATIONS
C	ALL NIPR AND SIPR CABLING WILL ORIGINATE FROM TR 119. ALL COMMERCIAL CABLING WILL ORIGINATE FROM COMMERCIAL CABINETS IN ROOMS 105 AND 201



A1 OVERALL FLOOR PLAN - LEVEL 1
1/16" = 1'-0"



OVERALL KEY PLAN

GRAPHIC SCALE

16 12 8 4 0 16 32

SCALE: 1/16"=1'-0"

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
Bicsi
Stephen A Leffler
BICSI ID # 110560
EXPIRES 12-31-23
RCDD
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: S. LEFFLER
DRAWN BY: S. LEFFLER
CHECKED BY: C. MEADE
SUBMITTED BY: E. OLNESS
STATE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201T-101

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

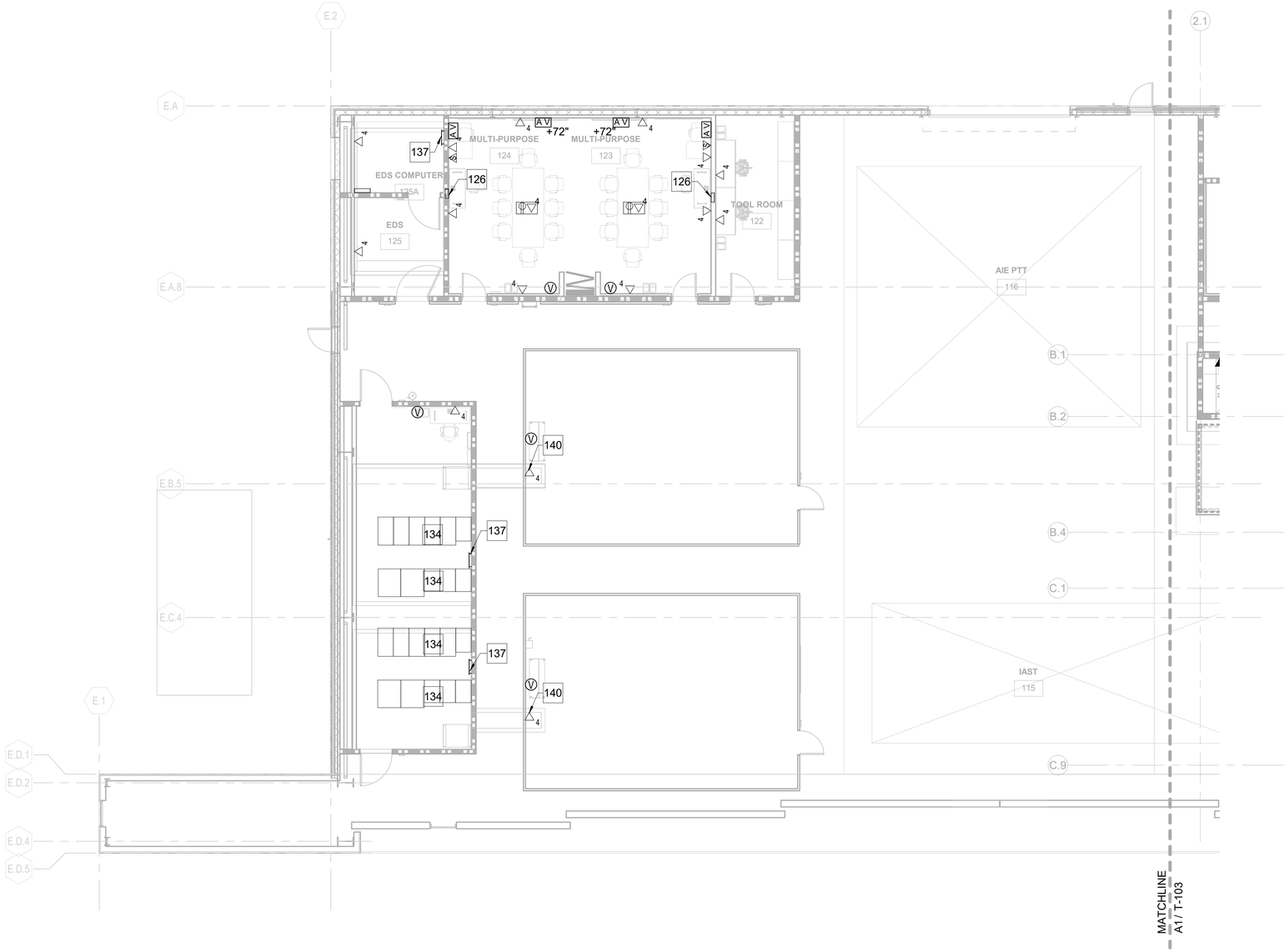
jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS No. 70128403

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
OVERALL FLOOR PLAN - LEVEL 1

SHEET ID
B1455
T-101

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



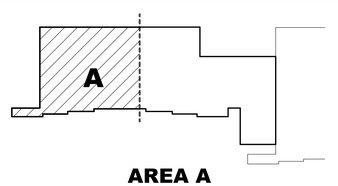
GENERAL NOTES - TELECOM

A	SEE SHEET T-001 FOR GENERAL NOTES AND SYMBOLS
B	SEE SHEET G-003 FOR ABBREVIATIONS
C	ALL NIPR AND SIPR CABLING WILL ORIGINATE FROM TR 119. ALL COMMERCIAL CABLING WILL ORIGINATE FROM COMMERCIAL CABINETS IN ROOMS 105 AND 201

KEYNOTES

126	PROVIDE 14.25" X 14.25" X 3.88" AV BOX WITH COVER MOUNTED AT 18" AFF TO CENTER AND (2) 2" CONDUITS TO OFT COMPUTER ROOM FOR GOVERNMENT PROVIDED CABLES TO AAR DESK.
134	DATA CABINETS PROVIDED BY SIMULATOR CONTRACTOR
137	MOUNT GROUND BAR AT 7'-0" AFF TO BOTTOM. BOND GROUND BAR TO ELECTRIC PANEL IN OFT COMPUTER ROOM WITH #2 AWG. PLACE ADDITIONAL GROUND BAR BELOW THE ACCESS FLOOR. BOND THE PEDESTALS WITH A #2 AWG BARE COPPER WIRE TO THE GROUND BAR BELOW THE ACCESS FLOOR. TIE THE BELOW FLOOR GROUND BAR TO THE ABOVE FLOOR GROUND BAR WITH A #2 AWG.
140	PROVIDE DATA OUTLET AT -6" BELOW FINISHED FLOOR.

A1 PARTIAL FLOOR PLAN - LEVEL 1 - AREA A
1/8" = 1'-0"



AREA A
KEY PLAN

GRAPHIC SCALE
8 6 4 2 0 8 16
SCALE: 1/8"=1'-0"

PLAN NORTH
TRUE N

US Army Corps of Engineers
Louisville District ®

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
BICSI
Stephen A Leffler
BICSI ID # 110560
EXPIRES 12-31-23
RCDD
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: S. LEFFLER
DRAWN BY: S. LEFFLER
CHECKED BY: C. MEADE
SUBMITTED BY: E. OLNESS
DATE:
ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:.
FILE NAME: SXHT219201T-102

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
Phone: 817.820.8000 TX Reg No. F-2966

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PARTIAL FLOOR PLAN - LEVEL 1 - AREA A

SHEET ID
B1455
T-102

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN

GENERAL NOTES - TELECOM

A	SEE SHEET T-001 FOR GENERAL NOTES AND SYMBOLS
B	SEE SHEET G-003 FOR ABBREVIATIONS
C	ALL NIPR AND SIPR CABLING WILL ORIGINATE FROM TR 119. ALL COMMERCIAL CABLING WILL ORIGINATE FROM COMMERCIAL CABINETS IN ROOMS 105 AND 201

KEYNOTES

118	COORDINATE INSTALLATION WITH ELEVATOR CONTRACTOR.
135	EXISTING TR MUST NOT BE USED FOR NEW NIPR CABLING. (TYPICAL FOR UNSECURE AREA).
136	PROVIDE CABLE RACEWAY OUTLET PLATE FOR SYSTEMS FURNITURE. (TYP)
152	DATA OUTLET FOR POWER MONITORING. COORDINATE INSTALLATION AND FINAL LOCATION WITH ELECTRICAL CONTRACTOR.
154	DATA OUTLETS FOR ACCESS CONTROL SYSTEM AND INTRUSION DETECTION SYSTEM. MOUNT AT 6'-0" AFF.

A1 PARTIAL FLOOR PLAN - LEVEL 1 - AREA B
1/8" = 1'-0"

MATCHLINE A1 / T-102

AREA B
KEY PLAN

GRAPHIC SCALE
8 6 4 2 0 8 16
SCALE: 1/8"=1'-0"

PLAN NORTH
TRUE N

US Army Corps of Engineers
Louisville District ®

TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: S. LEFFLER
DRAWN BY: S. LEFFLER
CHECKED BY: C. MEADE
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201T-103

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS Project No. W7RQ83

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PARTIAL FLOOR PLAN - LEVEL 1 - AREA B

SHEET ID
B1455
T-103

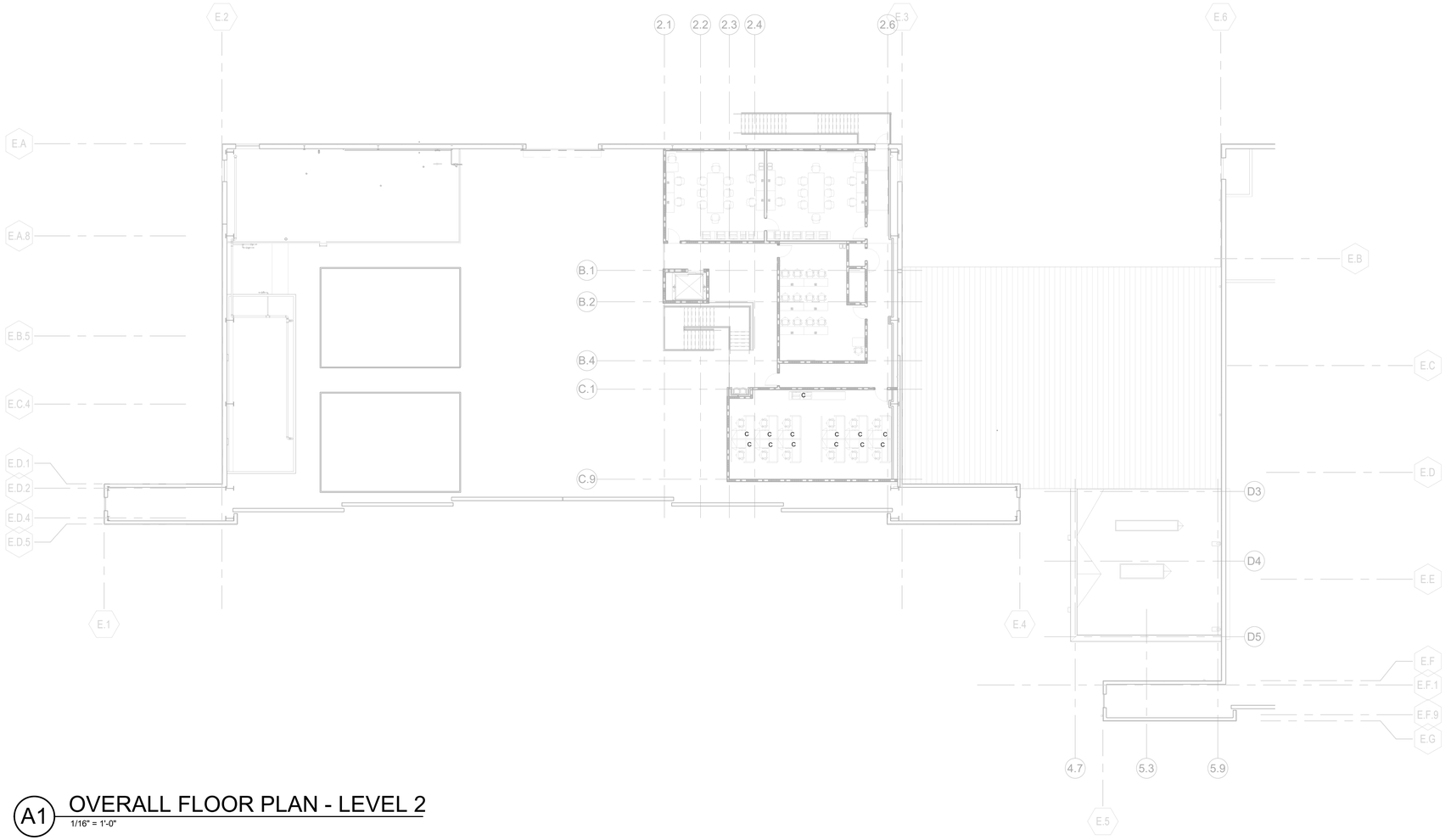
W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

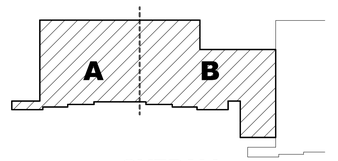
CERTIFIED FINAL DESIGN

GENERAL NOTES - TELECOM

A	SEE SHEET T-001 FOR GENERAL NOTES AND SYMBOLS
B	SEE SHEET G-003 FOR ABBREVIATIONS
C	ALL NIPR AND SIPR CABLING WILL ORIGINATE FROM TR 119. ALL COMMERCIAL CABLING WILL ORIGINATE FROM COMMERCIAL CABINETS IN ROOMS 105 AND 201



A1 OVERALL FLOOR PLAN - LEVEL 2
1/16" = 1'-0"



OVERALL KEY PLAN

GRAPHIC SCALE

16 12 8 4 0 16 32

SCALE: 1/16"=1'-0"

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
BICSI
Stephen A Leffler
BICSI ID # 110560
EXPIRES 12-31-23
RCDD
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: S. LEFFLER
DRAWN BY: S. LEFFLER
CHECKED BY: C. MEADE
SUBMITTED BY: E. OLNESS
QC BY:
ANSI D 22x34

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201T-111

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

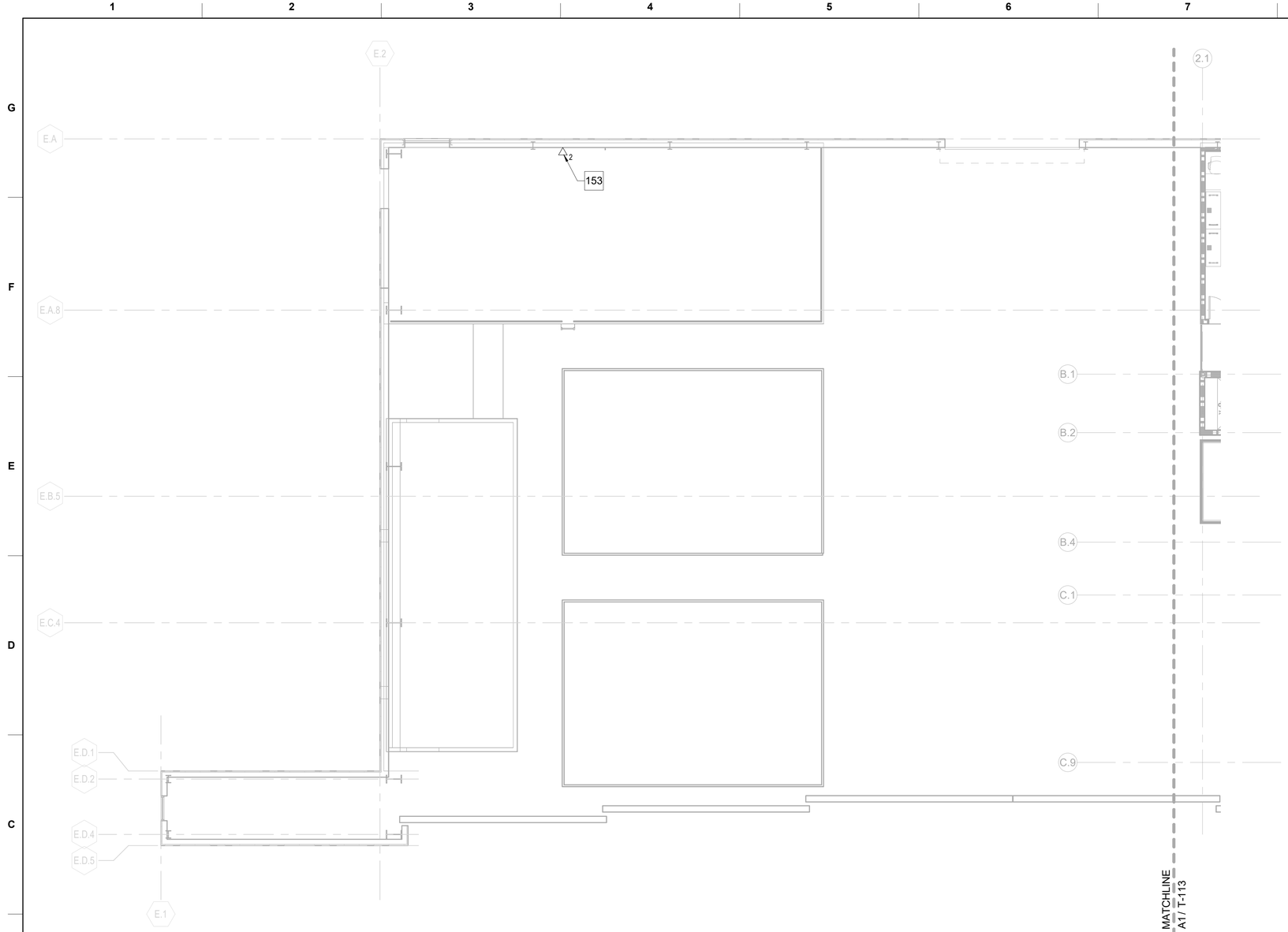
jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
Phone: 817.820.8000 | Fax: 817.820.8010

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
OVERALL FLOOR PLAN - LEVEL 2

SHEET ID
B1455
T-111

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



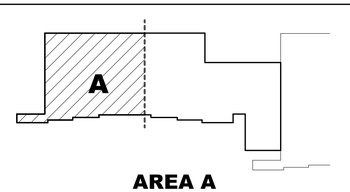
GENERAL NOTES - TELECOM

A	SEE SHEET T-001 FOR GENERAL NOTES AND SYMBOLS
B	SEE SHEET G-003 FOR ABBREVIATIONS
C	ALL NIPR AND SIPR CABLING WILL ORIGINATE FROM TR 119. ALL COMMERCIAL CABLING WILL ORIGINATE FROM COMMERCIAL CABINETS IN ROOMS 105 AND 201

KEYNOTES

153	DATA OUTLET FOR BUILDING AUTOMATION SYSTEM (BAS). COORDINATE INSTALLATION AND FINAL LOCATION WITH MECHANICAL CONTRACTOR.

A1 PARTIAL FLOOR PLAN - LEVEL 2 - AREA A
1/8" = 1'-0"



AREA A
KEY PLAN

GRAPHIC SCALE
8 6 4 2 0 8 16
SCALE: 1/8"=1'-0"

PLAN NORTH
TRUE N

US Army Corps of Engineers
Louisville District ®

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
BICSI
Stephen A Leffler
BICSI ID # 110560
EXPIRES 12-31-23
RCDD
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: S. LEFFLER
DRAWN BY: S. LEFFLER
CHECKED BY: C. MEADE
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201T-112

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS No. 19201T

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PARTIAL FLOOR PLAN - LEVEL 2 - AREA A

SHEET ID
B1455
T-112

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN

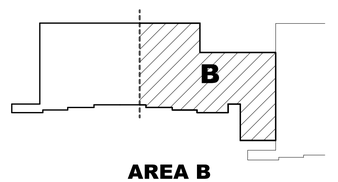
A1 PARTIAL FLOOR PLAN - LEVEL 2 - AREA B
1/8" = 1'-0"

GENERAL NOTES - TELECOM

A	SEE SHEET T-001 FOR GENERAL NOTES AND SYMBOLS
B	SEE SHEET G-003 FOR ABBREVIATIONS
C	ALL NIPR AND SIPR CABLING WILL ORIGINATE FROM TR 119. ALL COMMERCIAL CABLING WILL ORIGINATE FROM COMMERCIAL CABINETS IN ROOMS 105 AND 201

KEYNOTES

136	PROVIDE CABLE RACEWAY OUTLET PLATE FOR SYSTEMS FURNITURE, (TYP)
148	MATCH ELECTRICAL OUTLET HEIGHT FOR ABOVE COUNTER MOUNTING.



AREA B
KEY PLAN

GRAPHIC SCALE
8 6 4 2 0 8 16
SCALE: 1/8"=1'-0"

PLAN NORTH
TRUE N

US Army Corps of Engineers
Louisville District ®

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
BICSI
Stephen A Leffler
BICSI ID # 110560
EXPIRES 12-31-23
RCDD
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: S. LEFFLER
DRAWN BY: S. LEFFLER
CHECKED BY: C. MEADE
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT21920IT-113

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

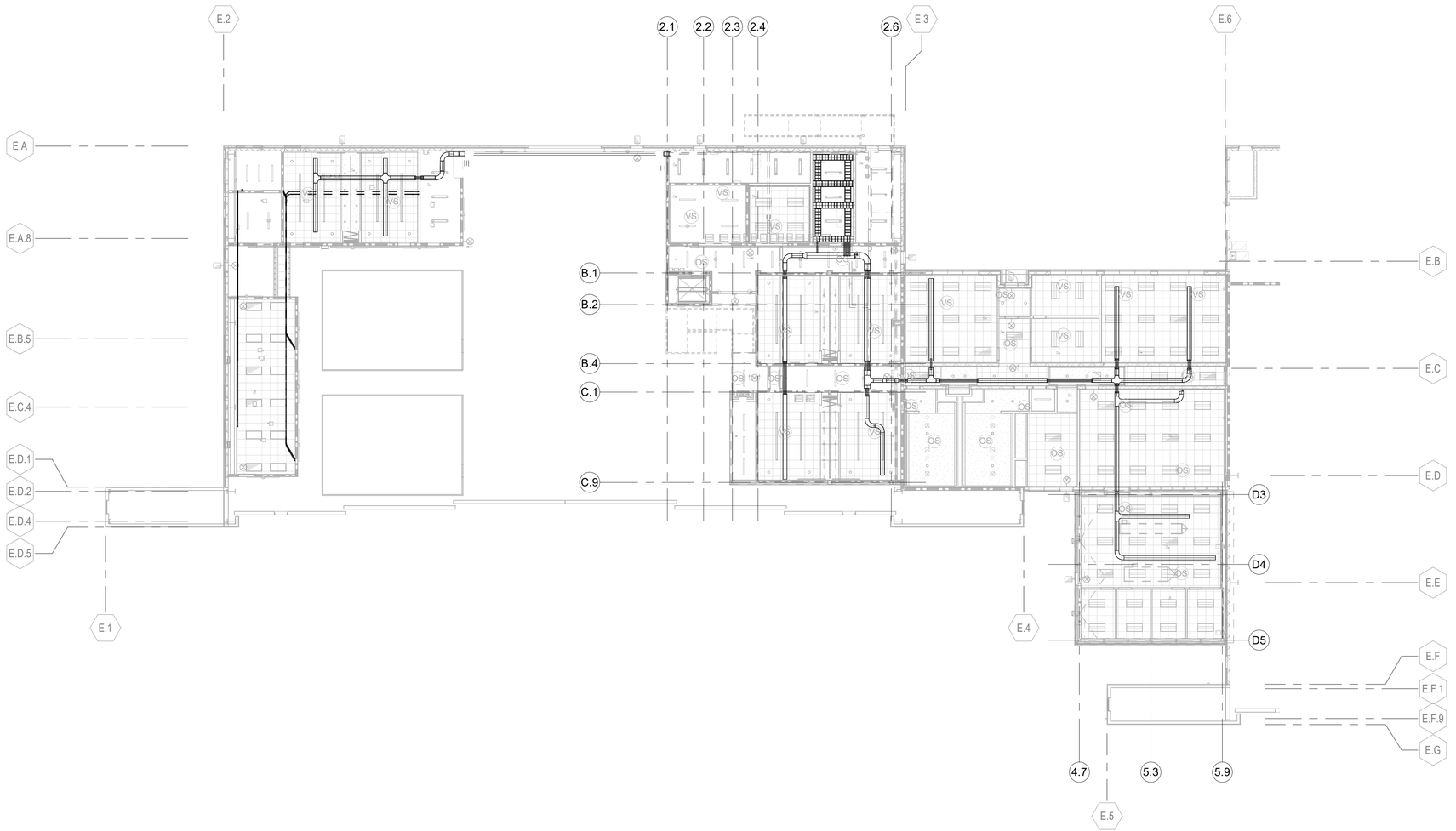
jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS Tel: 972.683.3100

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PARTIAL FLOOR PLAN - LEVEL 2 - AREA B

SHEET ID
B1455
T-113

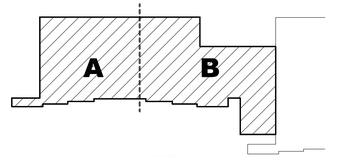
W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



A1 OVERALL REFLECTED CEILING PLAN - LEVEL 1

1/16" = 1'-0"



OVERALL KEY PLAN

GRAPHIC SCALE

16 12 8 4 0 16 32

SCALE: 1/16"=1'-0"

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
BICSI
Stephen A Leffler
BICSI ID # 110560
EXPIRES 12-31-23
RCDD
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
ADDRESS No. 0000013

DESIGNED BY:	S. LEFFLER
DRAWN BY:	S. LEFFLER
CHECKED BY:	C. MEADE
SUBMITTED BY:	E. OLNESS
SIZE:	ANSI D 22x34
ISSUE DATE:	23 NOVEMBER 2022
SOLICITATION NO.:	
CONTRACT NO.:	
DRAWING CODE.:	
FILE NAME:	SXHT219201T-121

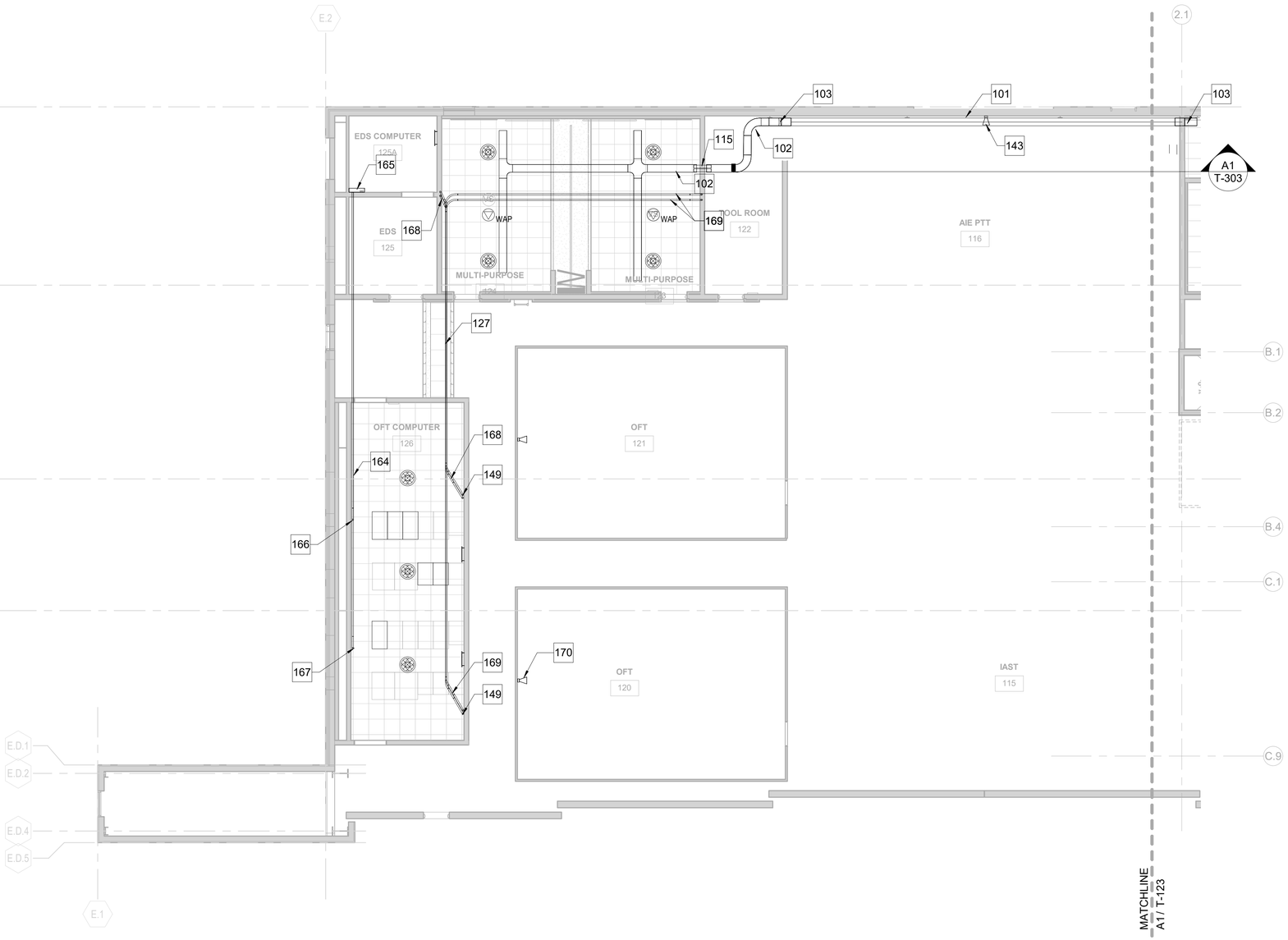
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
OVERALL REFLECTED CEILING PLAN - LEVEL 1

SHEET ID
B1455
T-121

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN



A1 PARTIAL REFLECTED CEILING PLAN - LEVEL 1 - AREA A

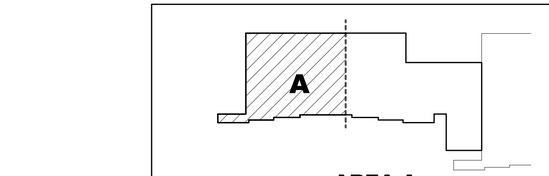
1/8" = 1'-0"

GENERAL NOTES - TELECOM

A	SEE SHEET T-001 FOR GENERAL NOTES AND SYMBOLS
B	SEE SHEET G-003 FOR ABBREVIATIONS
C	ALL NIPR AND SIPR CABLING WILL ORIGINATE FROM TR 119. ALL COMMERCIAL CABLING WILL ORIGINATE FROM COMMERCIAL CABINETS IN ROOMS 105 AND 201

KEYNOTES

101	12"W X 4"D DIVIDED BASKET TRAY AT 30'-0" AFF TO BOTTOM OF BASKET TRAY.
102	12"W X 4"D DIVIDED BASKET TRAY AT 10'-6" AFF TO BOTTOM OF BASKET TRAY.
103	TRANSITION BASKET TRAY FROM 10'-6" AFF TO 30'-0" AFF TO BOTTOM OF BASKET TRAY.
115	(2) 4" SLEEVES AT 10'-6" AFF TO BOTTOM OF SLEEVE. SEAL CONDUITS AFTER CABLE INSTALLATION. USE FIRESTOP WHERE WALLS ARE RATED.
127	(4) 2" CONDUITS. ONE CONDUIT AT 11'-10" AFF TO BOTTOM OF CONDUIT, ONE CONDUIT AT 12'-1" AFF TO BOTTOM, ONE CONDUIT AT 12'-7" AFF TO BOTTOM, ONE CONDUIT AT 12'-10" AFF TO BOTTOM. FROM OFT COMPUTER ROOM TO AV WALL BOX.
143	PROVIDE PA HORN SPEAKER AT 27'-0" AFF.
149	SURFACE MOUNT CONDUITS ON OFT COMPUTER ROOM WALL AND TERMINATE JUST BELOW THE RAISED ACCESS FLOOR. PROVIDE BRUSH CUTOUTS FOR CONDUIT PENETRATION OF RAISED ACCESS FLOOR. (TYP)
164	(1) 2" CONDUIT AT 9'-6" AFF TO BOTTOM AND (1) 2" CONDUIT AT 9'-10" AFF TO BOTTOM. RUN FROM BELOW OFT COMPUTER ROOM FLOOR TO PULL BOX ON WALL IN EDS COMPUTER ROOM.
165	(1) 24" X 24" X 6" PULL BOX MOUNTED AT 8'-4" AFF TO BOTTOM. PROVIDE (2) 2" CONDUITS FROM PULL BOX TO BELOW EDS COMPUTER ROOM FLOOR.
166	TURN DOWN BOTTOM CONDUIT HERE AND EXTEND TO BELOW RAISED ACCESS FLOOR. PROVIDE BRUSH CUTOUTS FOR CONDUIT.
167	TURN DOWN UPPER CONDUIT HERE AND EXTEND TO BELOW RAISED ACCESS FLOOR. PROVIDE BRUSH CUTOUTS FOR CONDUIT.
168	(2) 2" CONDUITS. ONE CONDUIT AT 11'-10" AFF TO BOTTOM OF CONDUIT, ONE CONDUIT AT 12'-1" AFF TO BOTTOM. FROM OFT COMPUTER ROOM TO AV WALL BOX.
169	(2) 2" CONDUITS. ONE CONDUIT AT 12'-7" AFF TO BOTTOM, ONE CONDUIT AT 12'-10" AFF TO BOTTOM. FROM OFT COMPUTER ROOM TO AV WALL BOX.
170	MOUNT PUBLIC ADDRESS SPEAKER IN OFT AT 10'-0" AFF.



AREA A
KEY PLAN

GRAPHIC SCALE

8 6 4 2 0 8 16

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

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
Bicsi
Stephen A Leffler
BICSI ID # 110560
EXPIRES 12-31-23
RCDD
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: S. LEFFLER
DRAWN BY: S. LEFFLER
CHECKED BY: C. MEADE
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201T-122

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street Fort Worth, TX 76102
Phone: 817.820.4000 Fax: 817.820.4112

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PARTIAL REFLECTED CEILING PLAN - LEVEL 1 - AREA A

SHEET ID
B1455
T-122

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN

A1 PARTIAL REFLECTED CEILING PLAN - LEVEL 1 - AREA B

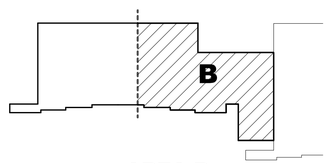
1/8" = 1'-0"

GENERAL NOTES - TELECOM

A	SEE SHEET T-001 FOR GENERAL NOTES AND SYMBOLS
B	SEE SHEET G-003 FOR ABBREVIATIONS
C	ALL NIPR AND SIPR CABLING WILL ORIGINATE FROM TR 119. ALL COMMERCIAL CABLING WILL ORIGINATE FROM COMMERCIAL CABINETS IN ROOMS 105 AND 201

KEYNOTES

102	12"W X 4"D DIVIDED BASKET TRAY AT 10'-6" AFF TO BOTTOM OF BASKET TRAY.
103	TRANSITION BASKET TRAY FROM 10'-6" AFF TO 30'-0" AFF TO BOTTOM OF BASKET TRAY.
104	18"W X 4"D DIVIDED BASKET TRAY AT 10'-6" AFF TO BOTTOM OF BASKET TRAY.
106	(1) 4" CONDUIT UP TO SECOND FLOOR BASKET TRAY FOR SIPR CABLES. FIRESTOP AFTER CABLE INSTALLATION
107	(2) 4" CONDUITS UP TO SECOND FLOOR BASKET TRAY FOR NIPR CABLES. FIRESTOP AFTER CABLE INSTALLATION.
108	12"W X 4"D DIVIDED BASKET TRAY AT 9'-6" AFF TO BOTTOM BASKET TRAY.
110	WAP DATA OUTLET MOUNT AT 12" ABOVE CEILING. (TYP)
111	FLUSH CEILING MOUNTED PUBLIC ADDRESS SPEAKER AND BACKBOX (TYP).
112	WALL MOUNTED PUBLIC ADDRESS SPEAKER AT 9'-0" AFF.
113	TRANSITION BASKET TRAY FROM 10'-6" TO 9'-6" AFF.
116	(1) 4" SLEEVE AT 10'-10" AFF TO BOTTOM OF SLEEVE. SEAL CONDUIT AFTER CABLE INSTALLATION. USE FIRESTOP WHERE WALLS ARE RATED.
128	(4) 4" SLEEVES FOR NIPRNET CABLES AT 10'-10" AFF TO BOTTOM OF SLEEVES. FIRESTOP CONDUITS AFTER CABLE INSTALLATION.
144	MAINTAIN 6" GAP BETWEEN SECTIONS OF BASKET TRAY FOR CROSSING OF EXPANSION JOINT.
147	(2) 4" SLEEVES AT 9'-6" AFF TO BOTTOM FOR NIPR CABLES. FIRESTOP AFTER CABLE INSTALLATION.
150	(2) 4" SLEEVES AT 10'-6" AFF TO BOTTOM.
151	(1) 4" SLEEVE AT 9'-6" AFF TO BOTTOM.
155	(2) 4" CONDUITS ACROSS CORRIDOR AT 10'-6" AFF TO BOTTOM. ONE CONDUIT FOR NIPR AND ONE FOR SIPR. FIRESTOP AFTER CABLE INSTALLATION.
156	(3) 4" SLEEVES AT 10'-6" AFF TO BOTTOM. TWO SLEEVES FOR NIPR AND ONE FOR SIPR. FIRESTOP AFTER CABLE INSTALLATION.
157	(2) 4" SLEEVEST AT 10'-6" AFF TO BOTTOM. ONE SLEEVE FOR NIPR AND ONE SLEEVE FOR SIPR. FIRESTOP AFTER CABLE INSTALLATION.
158	(2) 4" CONDUITS AT 9'-6" AFF TO BOTTOM TO CROSS DRYWALL CEILING.
159	ACCESS HATCH PROVIDED BY OTHERS.
161	(1) 4" CONDUIT UP FROM COMMERCIAL CABINET TO CABLE TRAY.
163	12"W X 4"D BASKET TRAY AT 9'-6" AFF TO BOTTOM.



AREA B
KEY PLAN

GRAPHIC SCALE

8 6 4 2 0 8 16

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

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
BICSI
Stephen A Leffler
BICSI ID # 110560
EXPIRES 12-31-23
RCDD
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: S. LEFFLER
DRAWN BY: S. LEFFLER
CHECKED BY: C. MEADE
SUBMITTED BY: E. OLNESS
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT21920IT-123
ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS No. C2000013

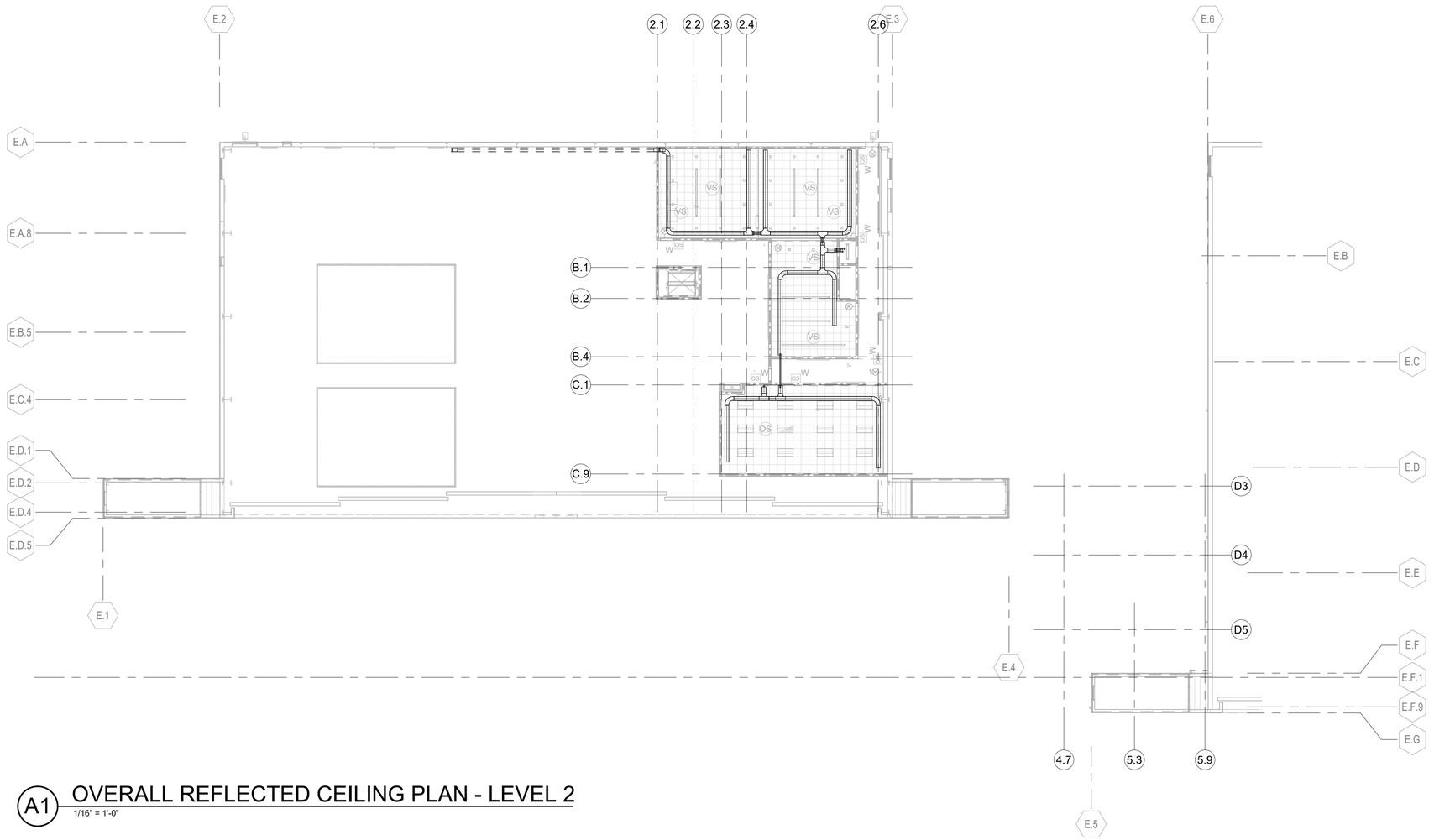
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PARTIAL REFLECTED CEILING PLAN - LEVEL 1 - AREA B

SHEET ID
B1455
T-123

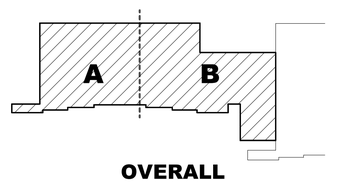
W912QP23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN



A1 OVERALL REFLECTED CEILING PLAN - LEVEL 2
1/16" = 1'-0"



OVERALL
KEY PLAN

GRAPHIC SCALE
16 12 8 4 0 16 32
SCALE: 1/16"=1'-0"

PLAN NORTH
TRUE N

US Army Corps of Engineers
Louisville District ®

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
BICSI
Stephen A Leffler
BICSI ID # 110560
EXPIRES 12-31-23
RCDD
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: S. LEFFLER
DRAWN BY: S. LEFFLER
CHECKED BY: C. MEADE
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201T-131

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS Project No. W7R0003

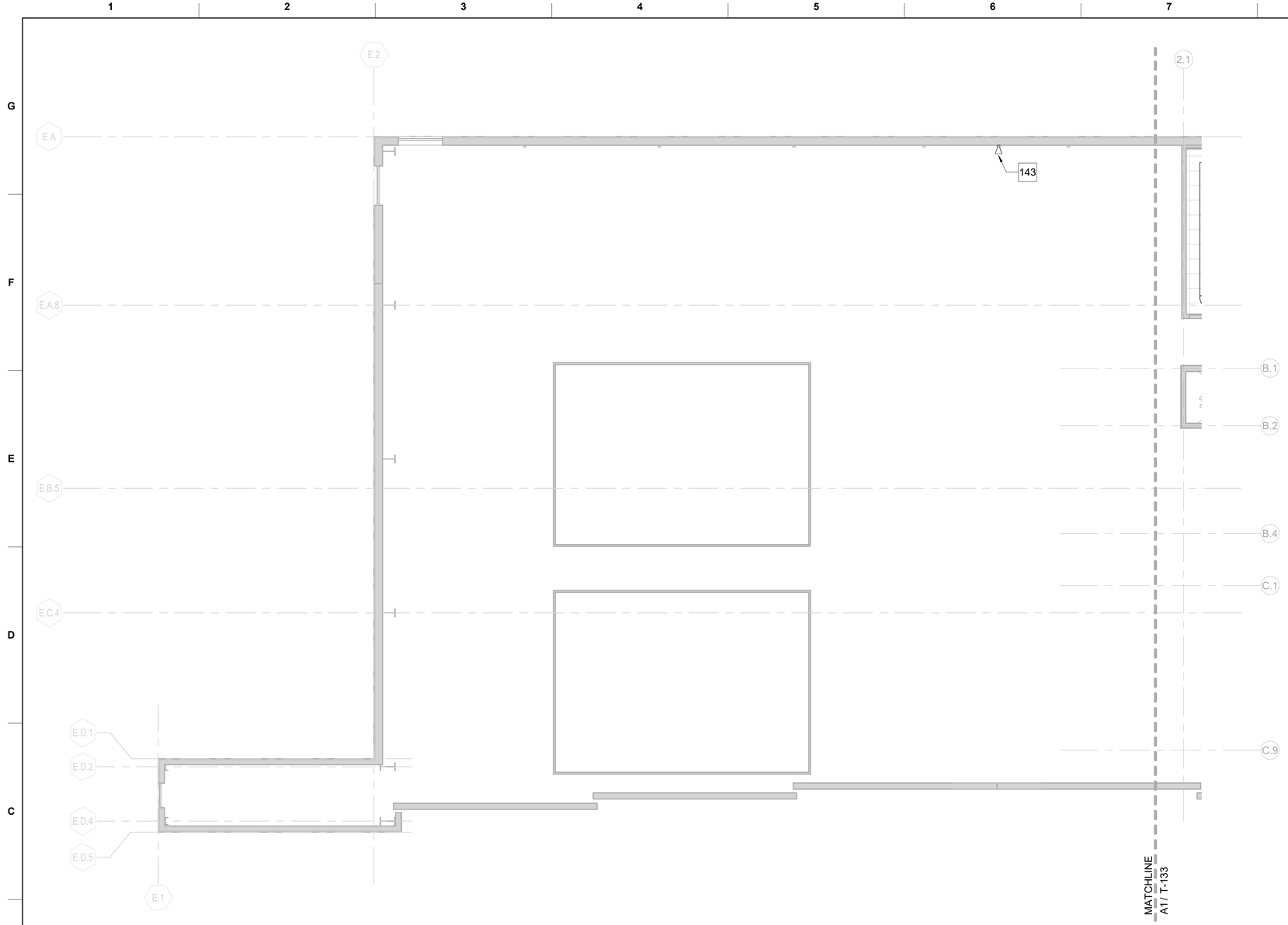
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
OVERALL REFLECTED CEILING PLAN - LEVEL 2

SHEET ID
B1455
T-131

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN



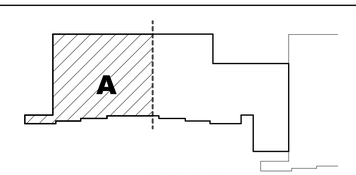
GENERAL NOTES - TELECOM

A	SEE SHEET T-001 FOR GENERAL NOTES AND SYMBOLS
B	SEE SHEET G-003 FOR ABBREVIATIONS
C	ALL NIPR AND SIPR CABLING WILL ORIGINATE FROM TR 119. ALL COMMERCIAL CABLING WILL ORIGINATE FROM COMMERCIAL CABINETS IN ROOMS 105 AND 201

KEYNOTES

143	PROVIDE PA HORN SPEAKER AT 27'-0" AFF.

A1 PARTIAL REFLECTED CEILING PLAN - LEVEL 2 - AREA A
1/8" = 1'-0"



AREA A
KEY PLAN

GRAPHIC SCALE
8 6 4 2 0 8 16
SCALE: 1/8"=1'-0"

PLAN NORTH
TRUE N

US Army Corps of Engineers
Louisville District ®

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
BICSI
Stephen A Leffler
BICSI ID # 110560
EXPIRES 12-31-23
RCDD
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: S. LEFFLER
DRAWN BY: S. LEFFLER
CHECKED BY: C. MEADE
SUBMITTED BY: E. OLNESS
DATE:
ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:.
FILE NAME: SXHT219201T-132

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
ACCESS No. 1000013

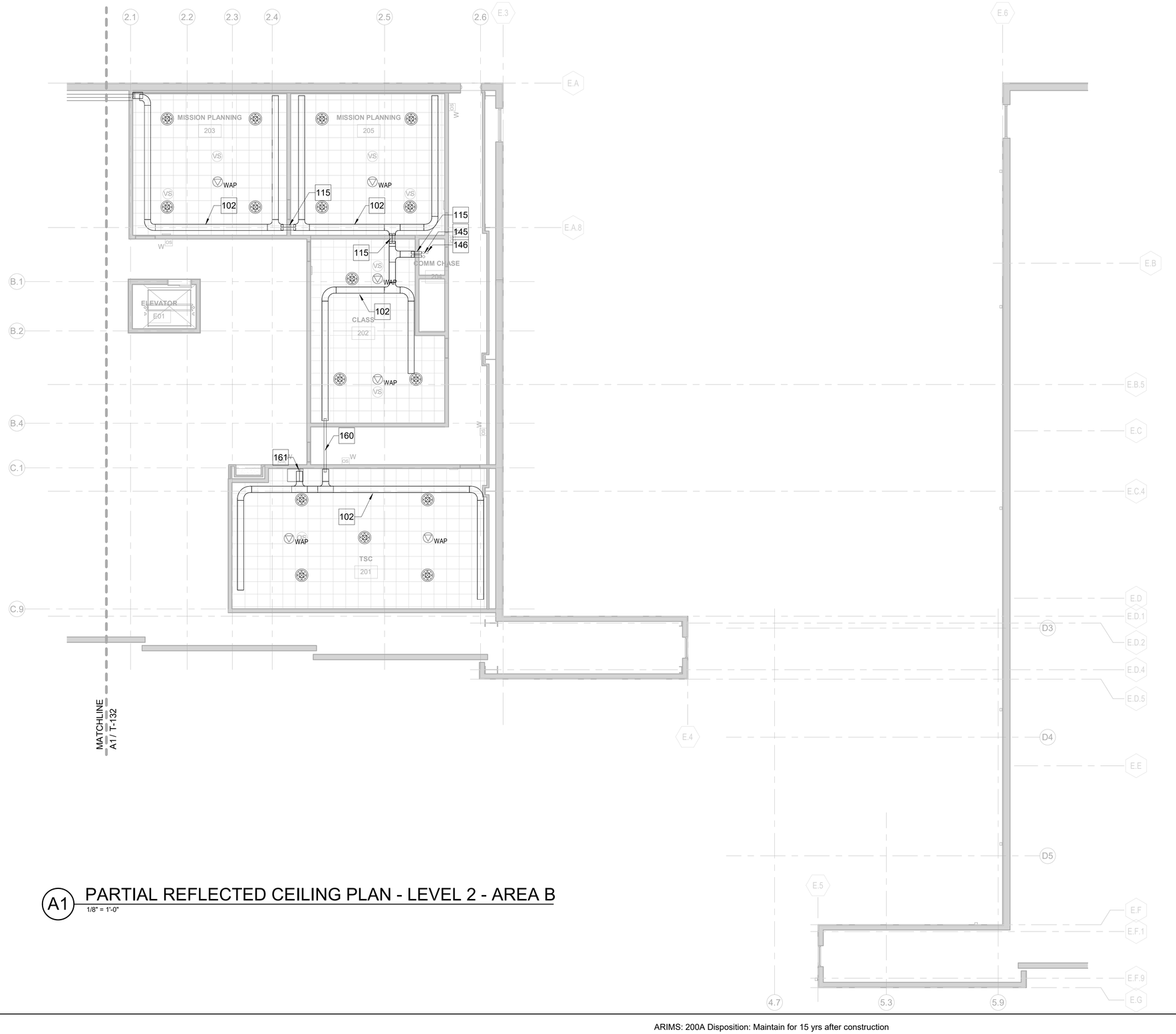
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PARTIAL REFLECTED CEILING PLAN - LEVEL 2 - AREA A

SHEET ID
B1455
T-132

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN



A1 PARTIAL REFLECTED CEILING PLAN - LEVEL 2 - AREA B

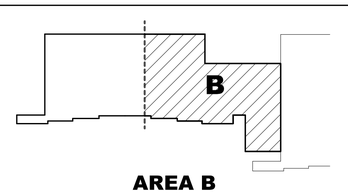
1/8" = 1'-0"

GENERAL NOTES - TELECOM

A	SEE SHEET T-001 FOR GENERAL NOTES AND SYMBOLS
B	SEE SHEET G-003 FOR ABBREVIATIONS
C	ALL NIPR AND SIPR CABLING WILL ORIGINATE FROM TR 119. ALL COMMERCIAL CABLING WILL ORIGINATE FROM COMMERCIAL CABINETS IN ROOMS 105 AND 201

KEYNOTES

102	12"W X 4"D DIVIDED BASKET TRAY AT 10'-6" AFF TO BOTTOM OF BASKET TRAY.
115	(2) 4" SLEEVES AT 10'-6" AFF TO BOTTOM OF SLEEVE. SEAL CONDUITS AFTER CABLE INSTALLATION. USE FIRESTOP WHERE WALLS ARE RATED.
145	(1) 4" CONDUIT DOWN TO FIRST FLOOR CABLE TRAY FOR SIPR CABLES. PROVIDE UNISTRUT SUPPORT. FIRESTOP AFTER CABLE INSTALLATION.
146	(2) 4" CONDUITS DOWN TO FIRST FLOOR CABLE TRAY FOR NIPR CABLES. PROVIDE UNISTRUT SUPPORT. FIRESTOP AFTER CABLE INSTALLATION.
160	(1) 4" CONDUIT ACROSS CORRIDOR FOR NIPR CABLES. FIRESTOP AFTER CABLE INSTALLATION.
161	(1) 4" CONDUIT UP FROM COMMERCIAL CABINET TO CABLE TRAY.



AREA B
KEY PLAN

GRAPHIC SCALE

8 6 4 2 0 8 16

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

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
BICSI
Stephen A Leffler
BICSI ID # 110560
EXPIRES 12-31-23
RCDD
23 NOV 2022

TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: S. LEFFLER
DRAWN BY: S. LEFFLER
CHECKED BY: C. MEADE
SUBMITTED BY: E. OLNESS
DATE:
ANSI D 22x34

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT21920-T-133

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS Reg. No. F2966

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PARTIAL REFLECTED CEILING PLAN - LEVEL 2 - AREA B

SHEET ID
B1455
T-133

W912QR23R0003_Plans-0000

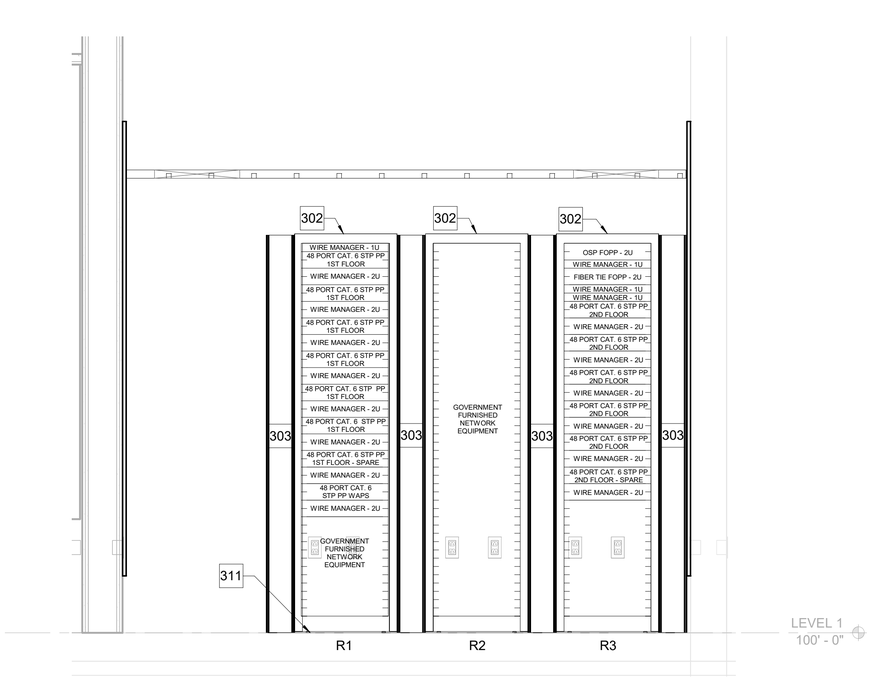
CERTIFIED FINAL DESIGN

GENERAL NOTES - TELECOM

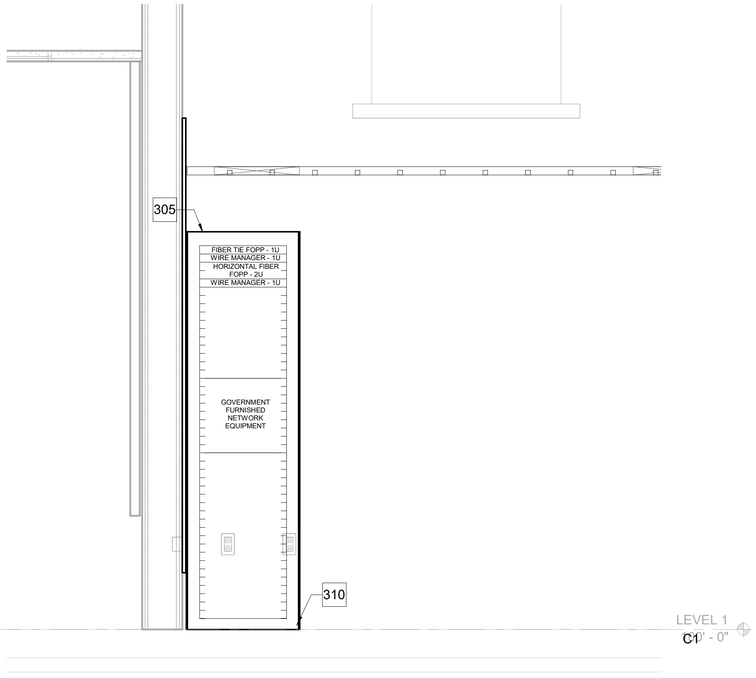
A	SEE SHEET T-001 FOR GENERAL NOTES AND SYMBOLS
B	SEE SHEET G-003 FOR ABBREVIATIONS
C	ALL NIPR AND SIPR CABLING WILL ORIGINATE FROM TR 119. ALL COMMERCIAL CABLING WILL ORIGINATE FROM COMMERCIAL CABINETS IN ROOMS 105 AND 201

KEYNOTES

302	7' X 19" BLACK 2-POST RACK WITH REAR 1U RACK MOUNT BUSBAR, 120V. 20 AMP, 6-OUTLET PDU WITH NO ON-OFF SWITCH.
303	7' x 6" BLACK DOUBLE SIDED VERTICAL WIRE MANAGER WITH FRONT AND REAR DOORS
305	24" X 30" X 7' BLACK CABINET WITH FRONT AND REAR PERFORATED DOORS, REAR RACK MOUNT BUSBAR AND 120V. 20 AMP, 6-OUTLET PDU WITH NO ON-OFF SWITCH
310	ANCHOR CABINET AT ALL FOUR CORNERS. BRACE CABINET TO WALL WITH BLACK 'L' BRACKET.
311	ANCHOR RACKS AT ALL FOUR CORNERS. BRACE TO WALL WITH BLACK 'L' BRACKET. (TYP)
312	EXISTING ELECTRIC PANELS



A1 TR 119 NIPR RACK ELEVATIONS
3/4" = 1'-0"



A5 TR 119 SIPR CABINET ELEVATION
3/4" = 1'-0"

US Army Corps of Engineers
Louisville District ®

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
BICSI
Stephen A Leffler
BICSI ID # 110560
EXPIRES 12-31-23
RCDD
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY:	S. LEFFLER
DRAWN BY:	S. LEFFLER
CHECKED BY:	C. MEADE
SUBMITTED BY:	E. OLNESS
DATE:	
ANSI D 22x34	
ISSUE DATE:	23 NOVEMBER 2022
SOLICITATION NO.:	
CONTRACT NO.:	
DRAWING CODE.:	
FILE NAME:	SXHT219201T-301

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
ADDRESS No. 1909573

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
SECTIONS AND ELEVATIONS

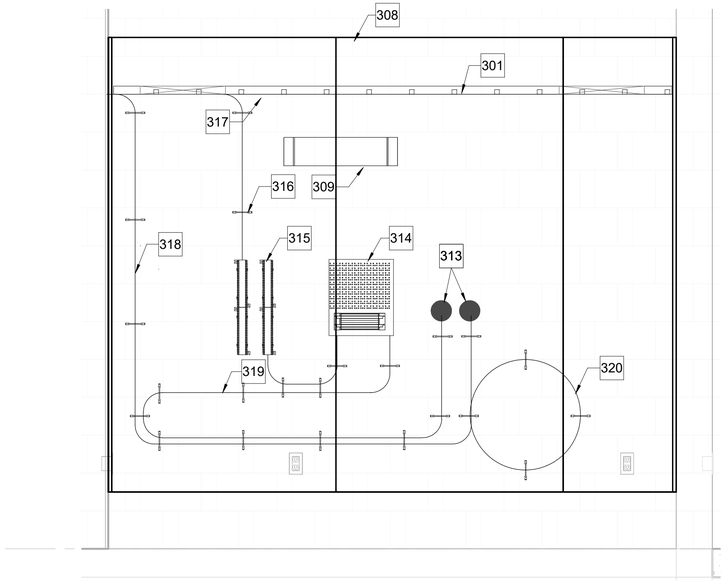
SHEET ID
B1455
T-301

W912QR23R0003_Plans-0000

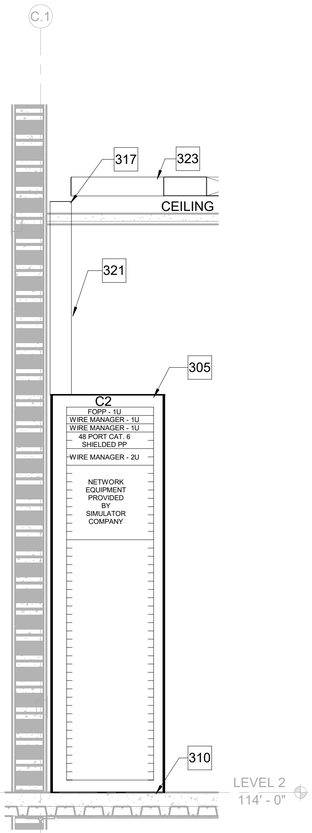
CERTIFIED FINAL DESIGN

KEYNOTES

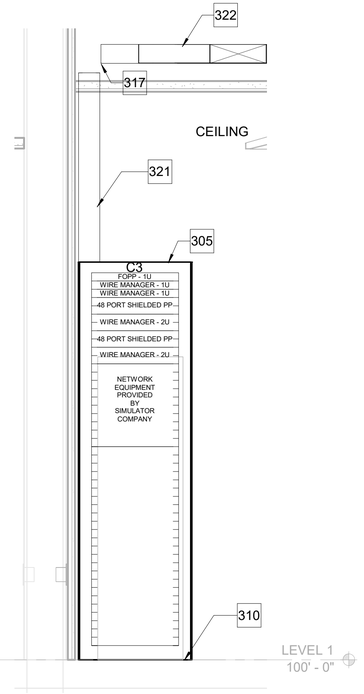
301	18" BLACK LADDER RACK AT 8'-0" AFF
305	24" X 30" X 7' BLACK CABINET WITH FRONT AND REAR PERFORATED DOORS, REAR RACK MOUNT BUSBAR AND 120V. 20 AMP, 6-OUTLET PDU WITH NO ON-OFF SWITCH
308	4' X 8' X 3/4" FIRE RATED PLYWOOD ON ALL 4 WALLS. THE EXCEPTION IS THE AREA OF THE EXISTING ELECTRICAL PANELS.
309	PRIMARY BONDING BUSBAR (PBB) MOUNT AT 7'-0" AFF TO BOTTOM
310	ANCHOR CABINET AT ALL FOUR CORNERS. BRACE CABINET TO WALL WITH BLACK 'L' BRACKET.
313	(2) 4" RIGID GALVANIZED STEEL SLEEVES THROUGH WALL FROM EXTERIOR PULL BOX FOR OSP CABLES. SEAL CONDUITS AFTER CABLE INSTALLATION. PROVIDE BONDING BUSHINGS ON BOTH ENDS AND BOND TO PBB.
314	100-PAIR BUILDING ENTRANCE TERMINAL WITH 110 IN AND OUT AND (100) 3B1EW PROTECTION MODULES.
315	66 M150 (TYP)
316	D-RING (TYP)
317	PROVIDE CABLE DROPOUTS (TYP)
318	24 STRAND OSP SINGLEMODE FIBER OPTIC CABLE
319	100- PAIR OSP CABLE
320	20-FOOT FIBER SLACK LOOP
321	4" CONDUIT UP TO CABLE TRAY FROM CABINET. SUPPORT TO WALL.
322	12" W X 4"D BASKET TRAY AT 10'-0" AFF TO BOTTOM.
323	12"W X 4"D BASKET TRAY AT 10'-6" AFF TO BOTTOM.



A1 TR 119 NORTH WALL BACKBOARD
3/4" = 1'-0"



A5 ROOM 201 TSC COMMERCIAL CABINET ELEVATION
3/4" = 1'-0"



A8 ROOM 105 ADMIN COMMERCIAL DATA CABINET
3/4" = 1'-0"

GRAPHIC SCALE

2 1 0 2

SCALE: 3/4"=1'-0"

US Army Corps of Engineers
Louisville District ®

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
Bicsi
Stephen A Leffler
BICSI ID # 110560
EXPIRES 12-31-23
RCDD
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: S. LEFFLER
DRAWN BY: S. LEFFLER
CHECKED BY: C. MEADE
SUBMITTED BY: E. OLNESS
STD: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201T-302

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS Tel: 972.661.7700

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
SECTIONS AND ELEVATIONS

SHEET ID
B1455
T-302

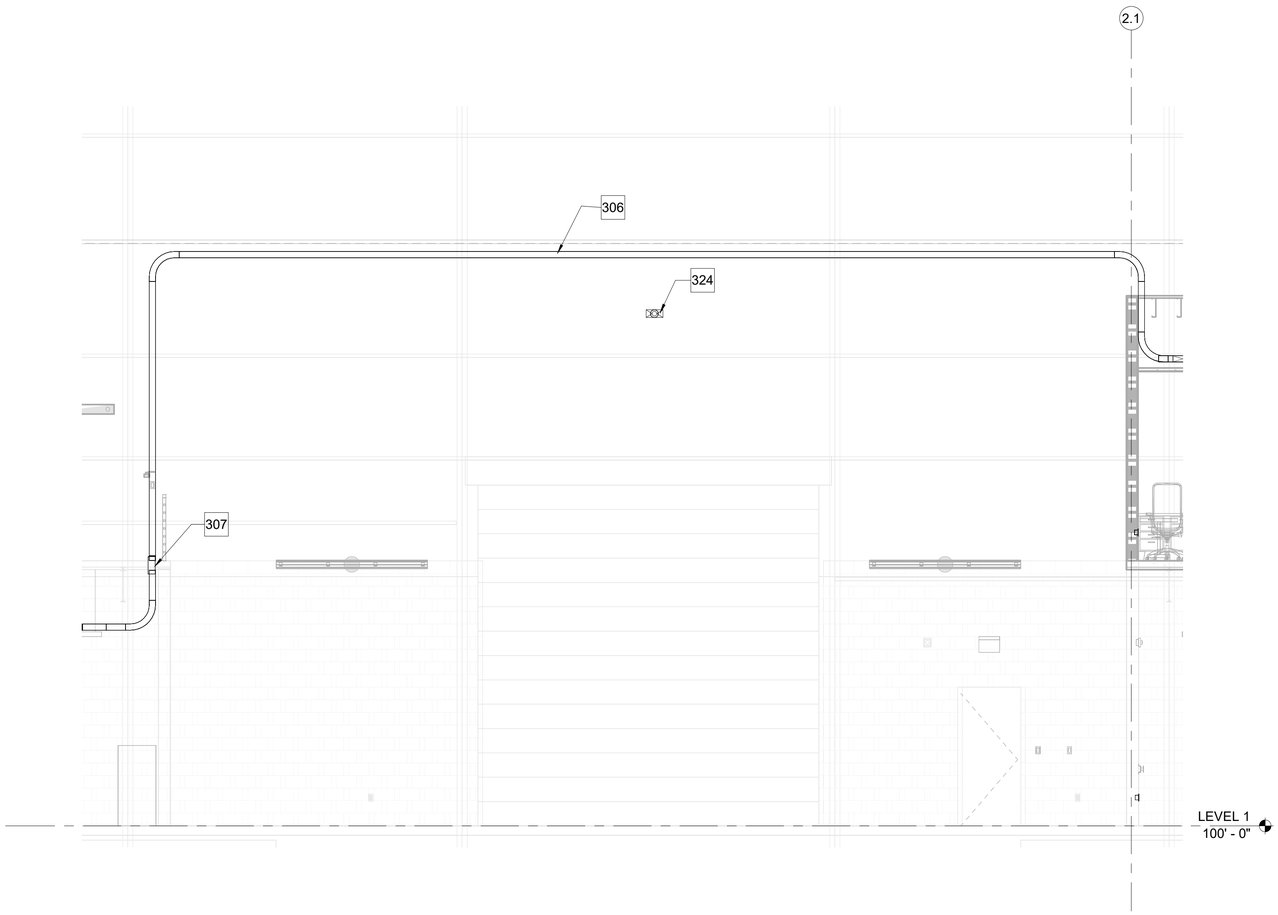
W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN

KEYNOTES

306	12"W X 4"D DIVIDED BASKET TRAY AT 30'-0" AFF.
307	(2) 4" SLEEVES THROUGH CEILING. FIRESTOP AFTER CABLE INSTALLATION.
324	PROVIDE PA HORN SPEAKER AT 27'-0" AFF.



A1 NORTH HANGAR WALL BASKET TRAY
1/4" = 1'-0"

GRAPHIC SCALE
4 3 2 1 0 4 8
SCALE: 1/4"=1'-0"

US Army Corps of Engineers
Louisville District ®

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
Bicsi
Stephen A Leffler
BICSI ID # 110560
EXPIRES 12-31-23
RCDD
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201T-303
DESIGNED BY: S. LEFFLER
DRAWN BY: S. LEFFLER
CHECKED BY: C. MEADE
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS Reg. TBPE F-2966

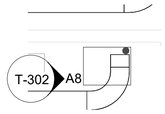
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
SECTIONS AND ELEVATIONS

SHEET ID
B1455
T-303

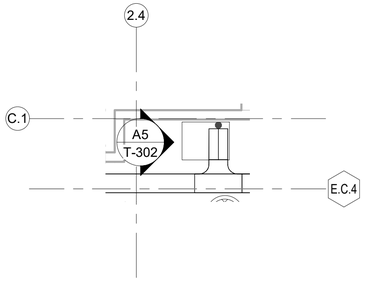
W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

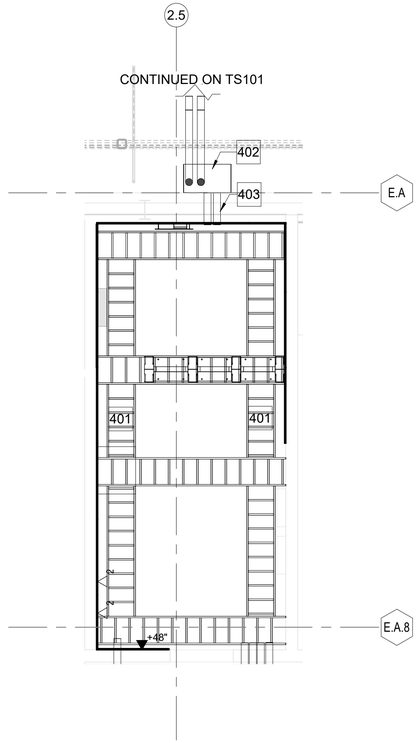
CERTIFIED FINAL DESIGN



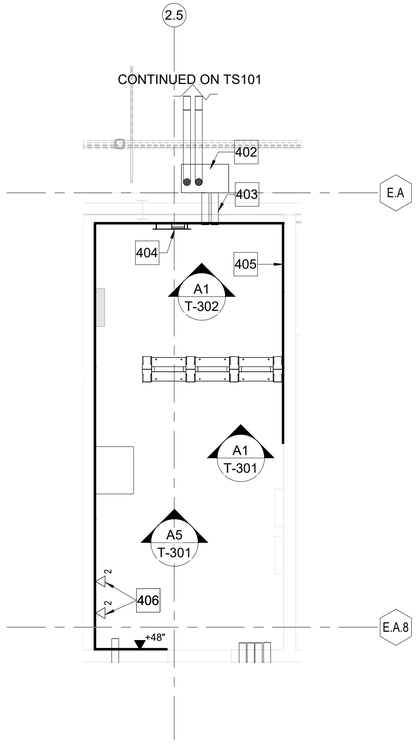
F1 ROOM 105 ADMIN COMMERCIAL DATA CABINET
1/4" = 1'-0"



F4 ROOM 201 TSC COMMERCIAL CABINET
1/4" = 1'-0"



A1 TELECOM ROOM 119
1/4" = 1'-0"



A4 TELECOM ROOM 119 VIEW WITHOUT LADDER RACK
1/4" = 1'-0"

GENERAL NOTES - TELECOM

A	SEE SHEET T-001 FOR GENERAL NOTES AND SYMBOLS
B	SEE SHEET G-003 FOR ABBREVIATIONS
C	ALL NIPR AND SIPR CABLING WILL ORIGINATE FROM TR 119. ALL COMMERCIAL CABLING WILL ORIGINATE FROM COMMERCIAL CABINETS IN ROOMS 105 AND 201

KEYNOTES

401	18" LADDER RACK AT 8'-0" AFF
402	PROVIDE 30" X 30" X 18" NEMA 4X PULL BOX ON EXTERIOR NORTH WALL OF TR AT 2'-0" ABOVE SLAB HEIGHT TO BOTTOM.
403	(2) 4" RIGID GALVANIZED STEEL SLEEVES THROUGH WALL FROM EXTERIOR PULL BOX FOR OSP CABLES. SEAL CONDUITS AFTER CABLE INSTALLATION. PROVIDE BONDING BUSHINGS ON BOTH ENDS AND BOND TO PBB.
404	PRIMARY BONDING BUSBAR. MOUNT AT 7'-0" AFF.
405	MOUNT PA SYSTEM IN THIS AREA.
406	DATA OUTLETS FOR ACCESS CONTROL SYSTEM AND INTRUSION DETECTION SYSTEM. MOUNT AT 6'-0" AFF.

GRAPHIC SCALE
4 3 2 1 0 4 8
SCALE: 1/4"=1'-0"

PLAN NORTH
TRUE N

US Army Corps of Engineers
Louisville District ®

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
Bicsi
Stephen A Leffler
BICSI ID # 110560
EXPIRES 12-31-23
RCDD
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: S. LEFFLER
DRAWN BY: S. LEFFLER
CHECKED BY: C. MEADE
SUBMITTED BY: E. OLNESS
SPEC. ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201T-401

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
ACCESS No. 1000013

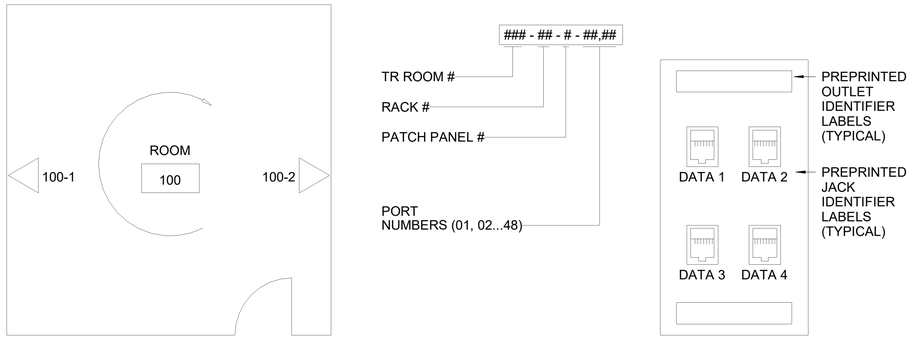
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
ENLARGED PLANS

SHEET ID
B1455
T-401

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN

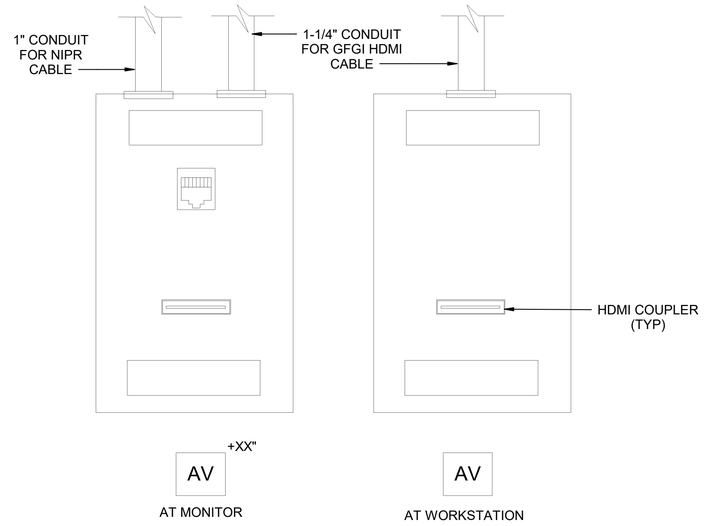


ROOM OUTLET LABELING

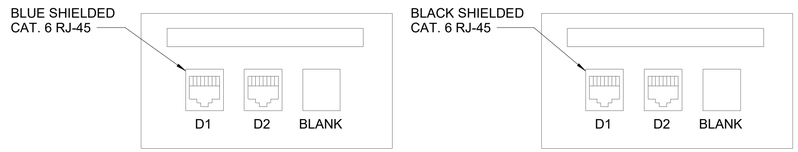
NOTE:
CONFIRM OUTLET LABELING WITH NG IT.

NUMBER OUTLETS CLOCKWISE STARTING AT
DOOR OR AS INDICATED ON DRAWINGS.

E1 VOICE AND DATA OUTLET LABELING
NTS



NOTE: USE OF AV BOXES IS RECOMMENDED
AT THE MONITOR WHERE APPLICABLE.



A1 TELECOMMUNICATIONS OUTLET DETAILS
NTS

US Army Corps of Engineers
Louisville District ®

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
BICSI
Stephen A Leffler
BICSI ID # 110560
EXPIRES 12-31-23
RCDD
23 NOV 2022
TEXAS REGISTERED
ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: S. LEFFLER
DRAWN BY: S. LEFFLER
CHECKED BY: C. MEADE
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201T-501

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS Tel 817.820.8200

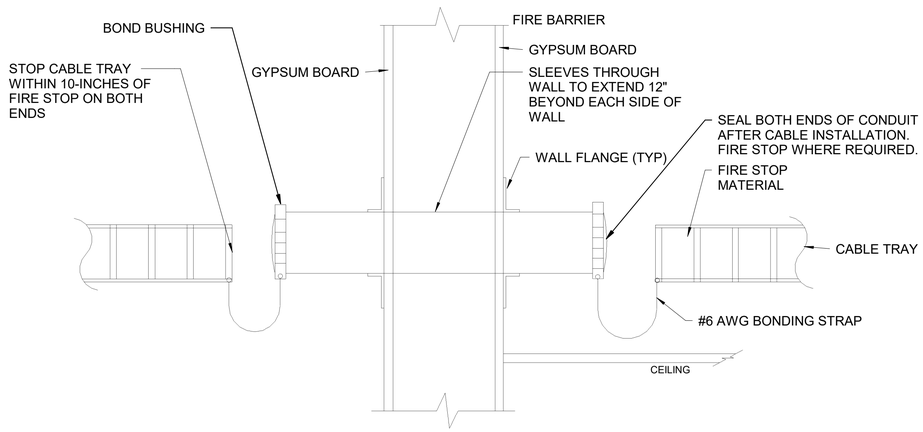
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
DETAILS

SHEET ID
B1455
T-501

W912QR23R0003_Plans-0000

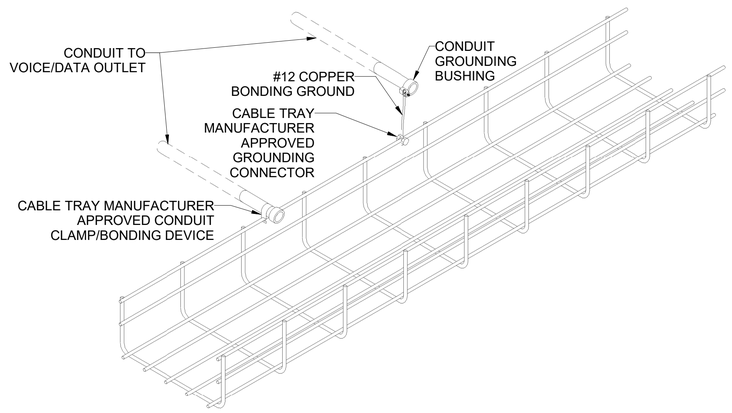
ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN



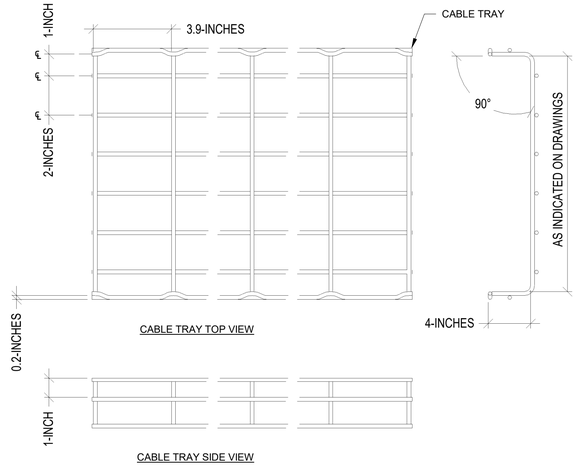
TYPICAL WHERE CABLE TRAY PENETRATES FIRE-RATED PARTITION ABOVE CEILING. BASIS OF DESIGN: SPECIFICATION 26 20 00

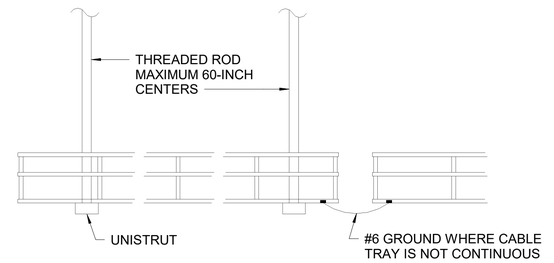
D1 BASKET TRAY WALL PENETRATION DETAIL
NTS



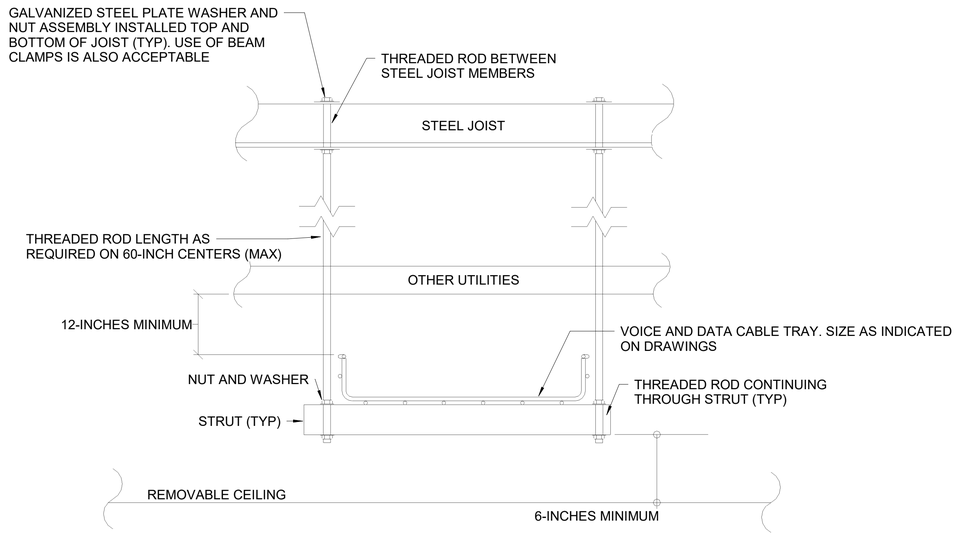
INSTALL WATERFALLS WHERE CABLES LEAVE THE TRAY IN ORDER TO PROVIDE PROPER BEND RADIUS.

A1 CABLE TRAY - BASKET TYPE
NTS





MOUNTING AND BONDING DETAIL



ABOVE CEILING MOUNTED CABLE TRAY

A6 TELECOMMUNICATION TYPICAL CABLE TRAY DETAILS
NTS

US Army Corps of Engineers
Louisville District ®

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
Bicsi
Stephen A Leffler
BICSI ID # 110560
EXPIRES 12-31-23
RCDD
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT21920IT-502

DESIGNED BY: S. LEFFLER
DRAWN BY: S. LEFFLER
CHECKED BY: C. MEADE
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS Reg. F-2966

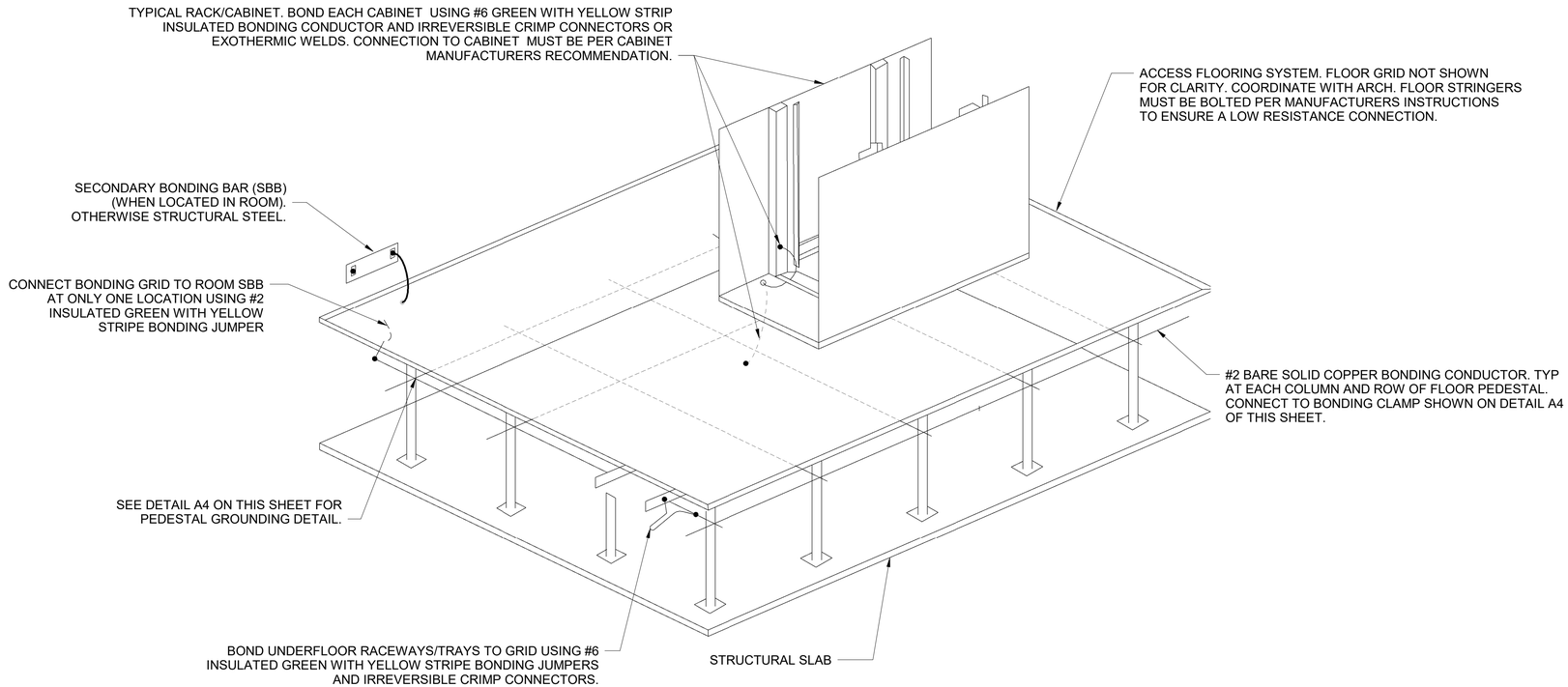
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
DETAILS

SHEET ID
B1455
T-502

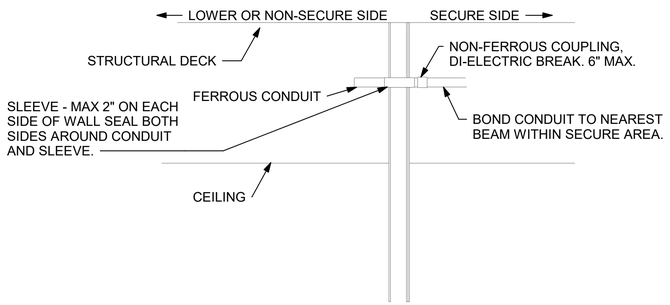
W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

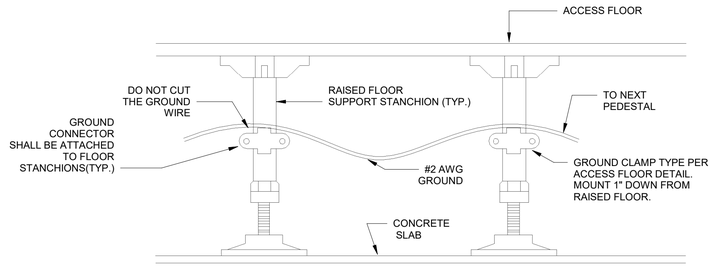
CERTIFIED FINAL DESIGN



D1 RAISED ACCESS FLOOR GROUNDING
NTS



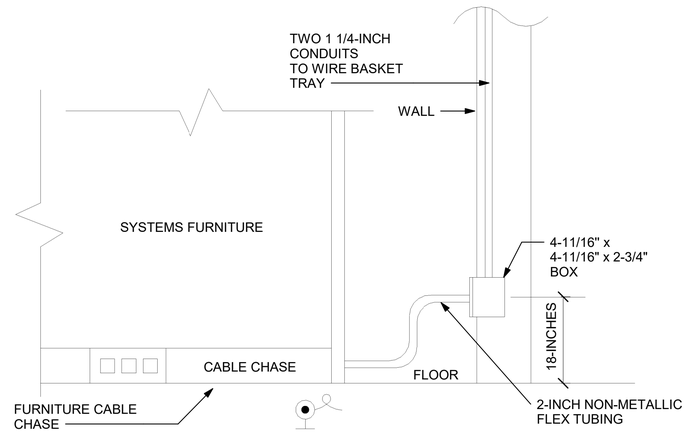
A1 SECURE ROOM CONDUIT PENETRATION
NTS



NOTES:

1. COORDINATE WITH RAISED FLOOR MANUFACTURER FOR EXACT DIAMETER OF FLOOR STANCHION & RECOMMENDED GROUNDING CONNECTOR TYPE.

A4 PEDESTAL GROUND CLAMP DETAIL
NTS



A8 SYSTEMS FURNITURE FEED
NTS

US Army Corps of Engineers
Louisville District ®

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
BICSI
Stephen A Leffler
BICSI ID # 110560
EXPIRES 12-31-23
RCDD
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: S. LEFFLER
DRAWN BY: S. LEFFLER
CHECKED BY: C. MEADE
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201T-503

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

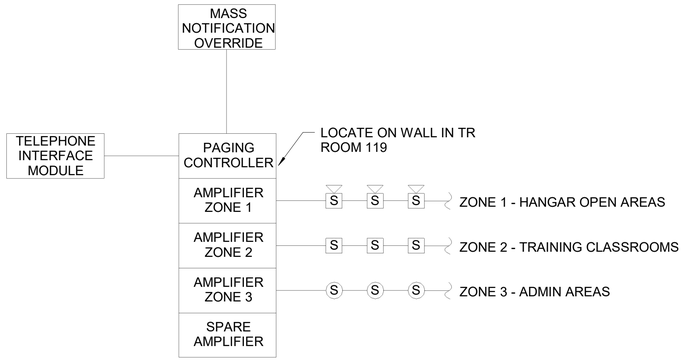
jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS Project No. D5T9015

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
DETAILS

SHEET ID
B1455
T-503

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN

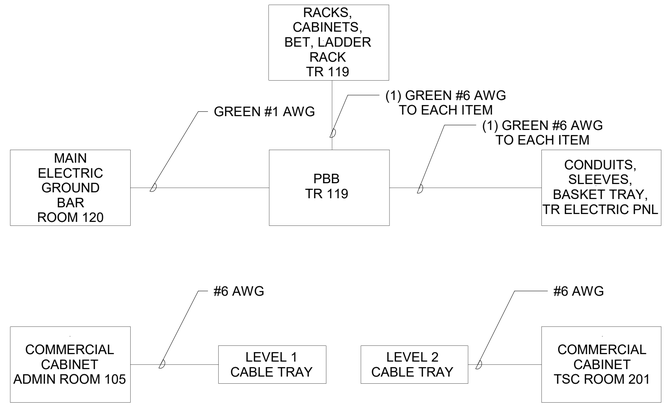


NOTES:

1. PROVIDE ADDITIONAL AMPLIFIERS AS REQUIRED TO SUPPORT HORNS IN HANGAR.
2. PROVIDE ALL EQUIPMENT AND CABLING AS REQUIRED TO PROVIDE A COMPLETE AND OPERATIONAL PUBLIC ADDRESS SYSTEM.

D1 RISER - PUBLIC ADDRESS SYSTEM

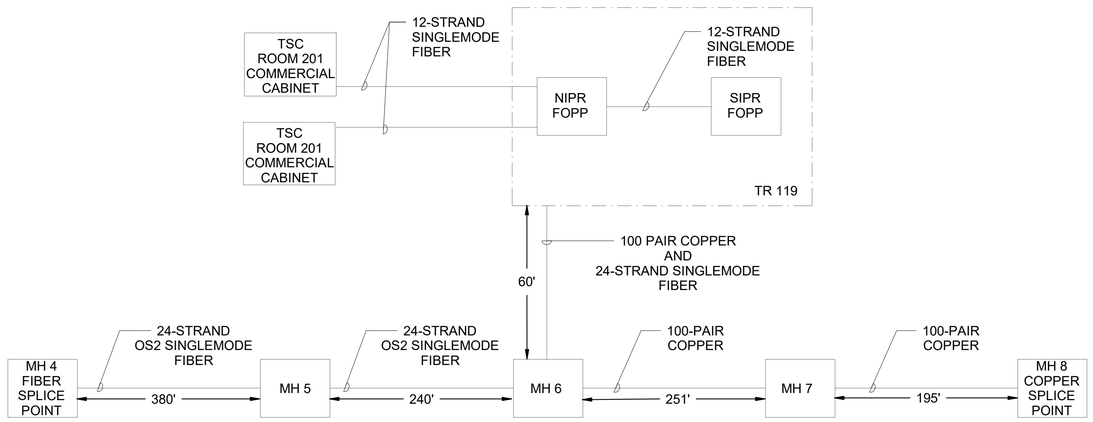
NTS



BONDING MUST BE CONTINUOUS THROUGHOUT THE SYSTEM

D5 TYPICAL BONDING AND GROUNDING RISER

1" = 1'-0"



NOTE: IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY DISTANCES.

A1 COPPER AND FIBER SINGLE LINE

1/2" = 1'-0"

US Army Corps of Engineers
Louisville District ®

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
Bicsi
Stephen A Leffler
BICSI ID # 110560
EXPIRES 12-31-23
RCDD
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201T-601

DESIGNED BY: S. LEFFLER
DRAWN BY: S. LEFFLER
CHECKED BY: C. MEADE
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS PROJECT NUMBER: 245903

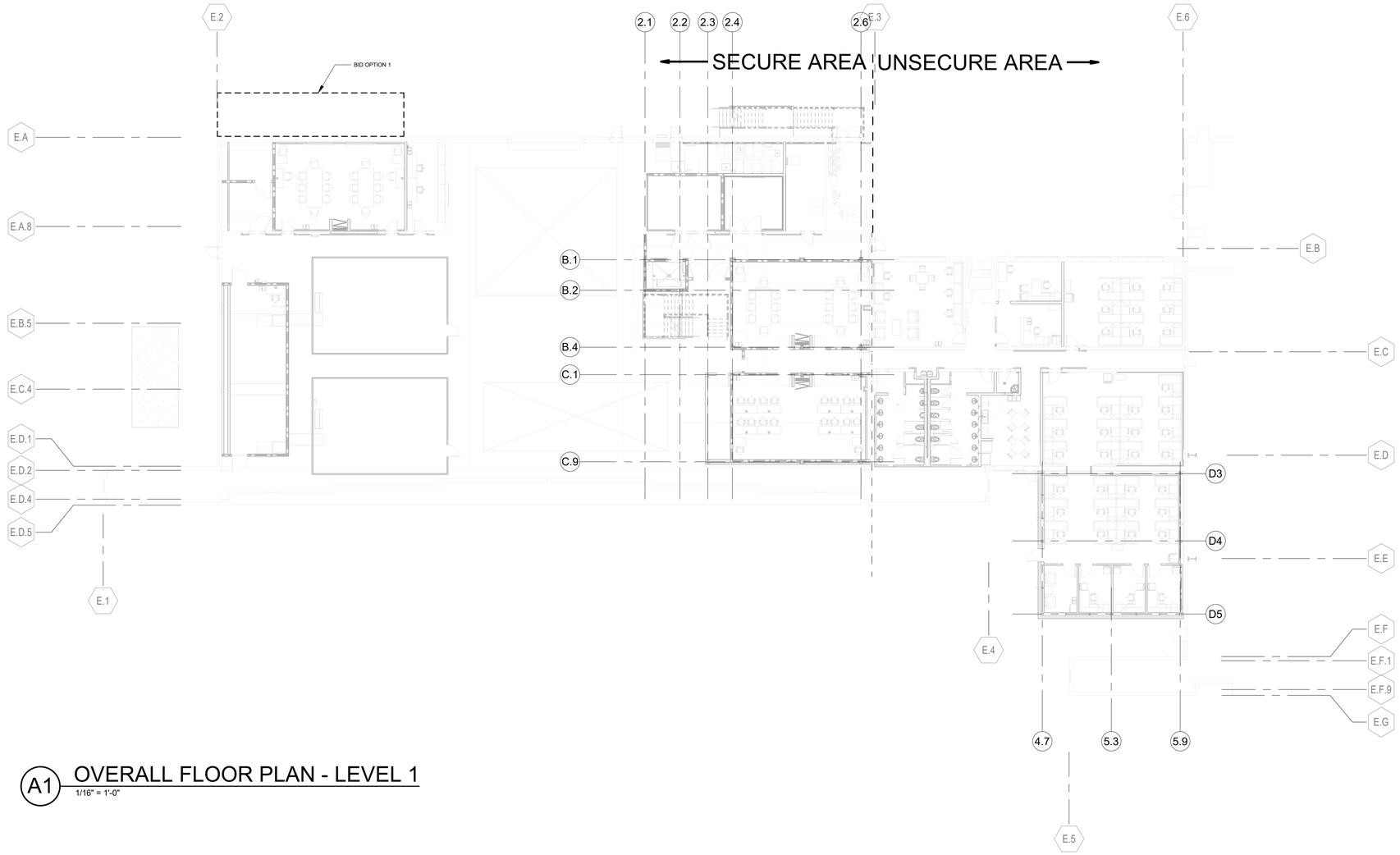
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395

ONE-LINE DIAGRAMS

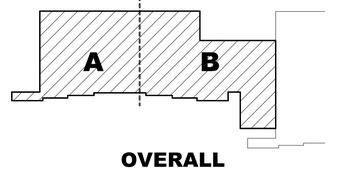
SHEET ID
B1455
T-601

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



A1 OVERALL FLOOR PLAN - LEVEL 1
1/16" = 1'-0"



OVERALL KEY PLAN

GRAPHIC SCALE
16 12 8 4 0 16 32
SCALE: 1/16"=1'-0"

PLAN NORTH
TRUE N

US Army Corps of Engineers
Louisville District ®

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
BICSI
Stephen A Leffler
BICSI ID # 110560
EXPIRES 12-31-23
RCDD
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.: TY101
FILE NAME: SXHT219201TY101

DESIGNED BY: S. LEFFLER
DRAWN BY: S. LEFFLER
CHECKED BY: C. MEADE
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

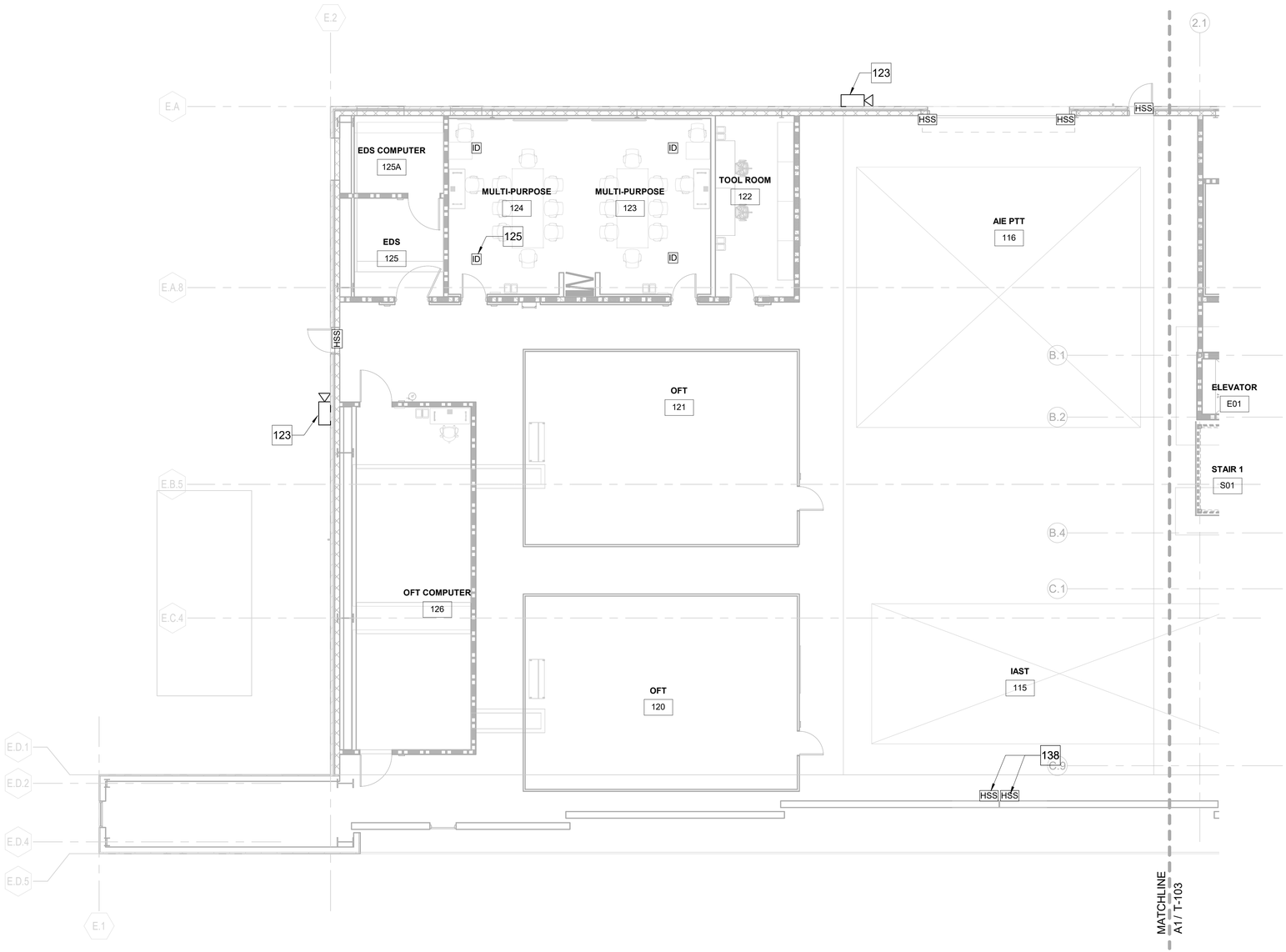
jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS TX REGISTRATION #

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
OVERALL FLOOR PLAN - LEVEL 1

SHEET ID
B1455
TY101

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



A1 PARTIAL FLOOR PLAN - LEVEL 1 - AREA A

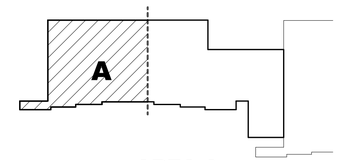
1/8" = 1'-0"

GENERAL NOTES - TELECOM

A	SEE SHEET T-001 FOR GENERAL NOTES AND SYMBOLS
B	SEE SHEET G-003 FOR ABBREVIATIONS
C	ALL NIPR AND SIPR CABLING WILL ORIGINATE FROM TR 119. ALL COMMERCIAL CABLING WILL ORIGINATE FROM COMMERCIAL CABINETS IN ROOMS 105 AND 201

KEYNOTES

123	MOUNT SECURITY CAMERA AT 10'-0" AFF
125	MOUNT PASSIVE INFRARED DETECTORS ABOVE AND BELOW THE CEILING. (TYP)
138	MOUNT BMS AT TOP OF HANGAR DOORS. PLACE 1 ON EACH DOOR. PROVIDE FRAME TO SUPPORT SWITCH.



AREA A
KEY PLAN

GRAPHIC SCALE

8 6 4 2 0 8 16

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

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
Bicsi
Stephen A Leffler
BICSI ID # 110560
EXPIRES 12-31-23
RCDD
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY:	ISSUE DATE:
S. LEFFLER	23 NOVEMBER 2022
DRAWN BY:	SOLICITATION NO.:
S. LEFFLER	
CHECKED BY:	CONTRACT NO.:
C. MEADE	DRAWING CODE.:
SUBMITTED BY:	
E. OLNESS	FILE NAME:
CITE	SXHT21920ITY102
ANSI D 22x34	

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
Phone: 817.820.8100 TBPE F-2966

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395

PARTIAL FLOOR PLAN - LEVEL 1 - AREA A

SHEET ID
B1455
TY102

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN

A1 PARTIAL FLOOR PLAN - LEVEL 1 - AREA B

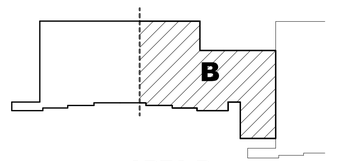
1/8" = 1'-0"

GENERAL NOTES - TELECOM

A	SEE SHEET T-001 FOR GENERAL NOTES AND SYMBOLS
B	SEE SHEET G-003 FOR ABBREVIATIONS
C	ALL NIPR AND SIPR CABLING WILL ORIGINATE FROM TR 119. ALL COMMERCIAL CABLING WILL ORIGINATE FROM COMMERCIAL CABINETS IN ROOMS 105 AND 201

KEYNOTES

123	MOUNT SECURITY CAMERA AT 10'-0" AFF
125	MOUNT PASSIVE INFRARED DETECTORS ABOVE AND BELOW THE CEILING. (TYP)
162	KEYPAD FOR DISARMING IDS.



AREA B
KEY PLAN

GRAPHIC SCALE

8 6 4 2 0 8 16

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

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
Bicsi
Stephen A Leffler
BICSI ID # 110560
EXPIRES 12-31-23
RCDD
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: S. LEFFLER	ISSUE DATE: 23 NOVEMBER 2022
DRAWN BY: S. LEFFLER	SOLICITATION NO.:
CHECKED BY: C. MEADE	CONTRACT NO.:
SUBMITTED BY: E. OLNESS	DRAWING CODE:
ANSI D 22x34	FILE NAME: SXHT21920ITY103

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS Reg. No. F-2966

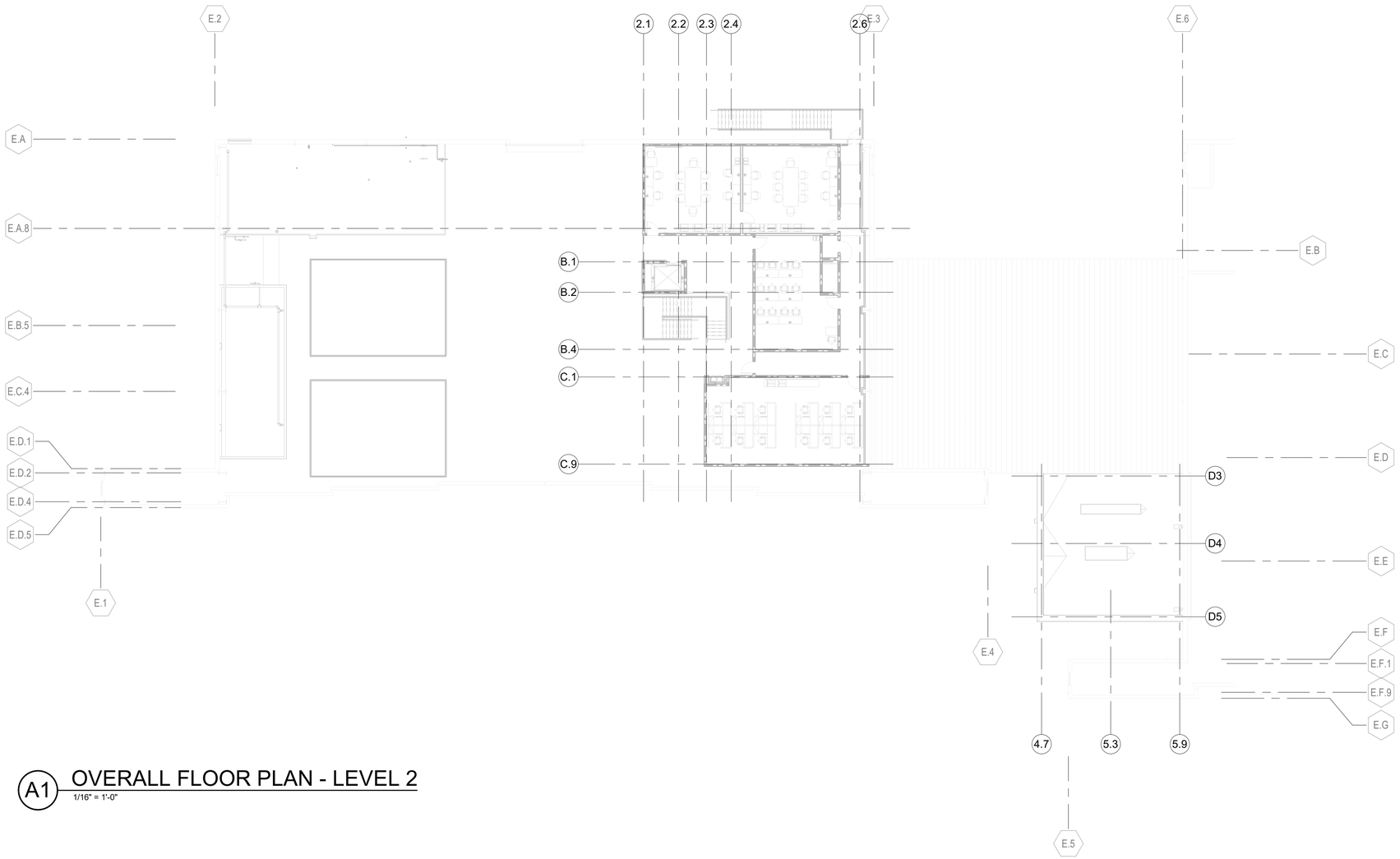
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PARTIAL FLOOR PLAN - LEVEL 1 - AREA B

SHEET ID
B1455
TY103

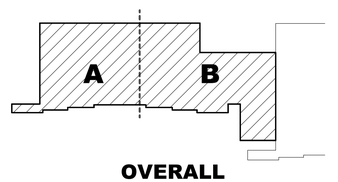
W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN



A1 OVERALL FLOOR PLAN - LEVEL 2
1/16" = 1'-0"



OVERALL KEY PLAN

GRAPHIC SCALE

8 6 4 2 0 8 16
SCALE: 1/8"=1'-0"

PLAN NORTH
TRUE N

US Army Corps of Engineers
Louisville District ®

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
Bicsi
Stephen A Leffler
BICSI ID # 110560
EXPIRES 12-31-23
RCDD
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: S. LEFFLER
DRAWN BY: S. LEFFLER
CHECKED BY: C. MEADE
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201TY111

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS Project No. W912QR23

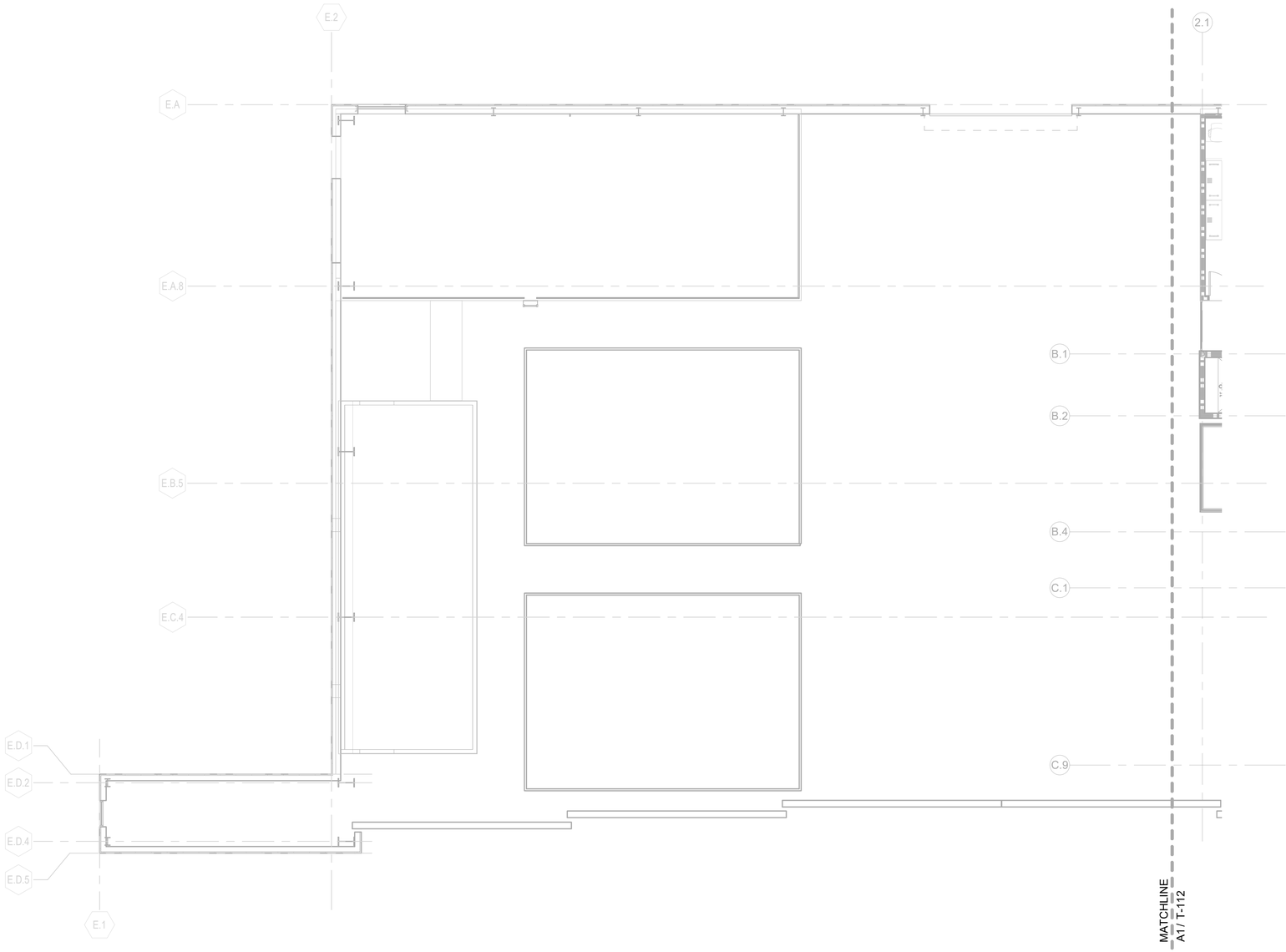
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
OVERALL FLOOR PLAN - LEVEL 2

SHEET ID
B1455
TY111

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

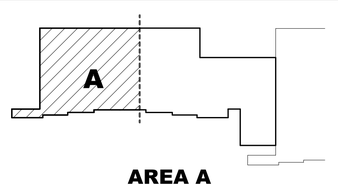
CERTIFIED FINAL DESIGN



GENERAL NOTES - TELECOM

A	SEE SHEET T-001 FOR GENERAL NOTES AND SYMBOLS
B	SEE SHEET G-003 FOR ABBREVIATIONS
C	ALL NIPR AND SIPR CABLING WILL ORIGINATE FROM TR 119. ALL COMMERCIAL CABLING WILL ORIGINATE FROM COMMERCIAL CABINETS IN ROOMS 105 AND 201

A1 PARTIAL FLOOR PLAN - LEVEL 2 - AREA A
1/8" = 1'-0"



AREA A
KEY PLAN

GRAPHIC SCALE
8 6 4 2 0 8 16
SCALE: 1/8"=1'-0"

PLAN NORTH
TRUE N

US Army Corps of Engineers
Louisville District ®

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
BICSI
Stephen A Leffler
BICSI ID # 110560
EXPIRES 12-31-23
RCDD
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: S. LEFFLER
DRAWN BY: S. LEFFLER
CHECKED BY: C. MEADE
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201TY112

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS No. 10258053

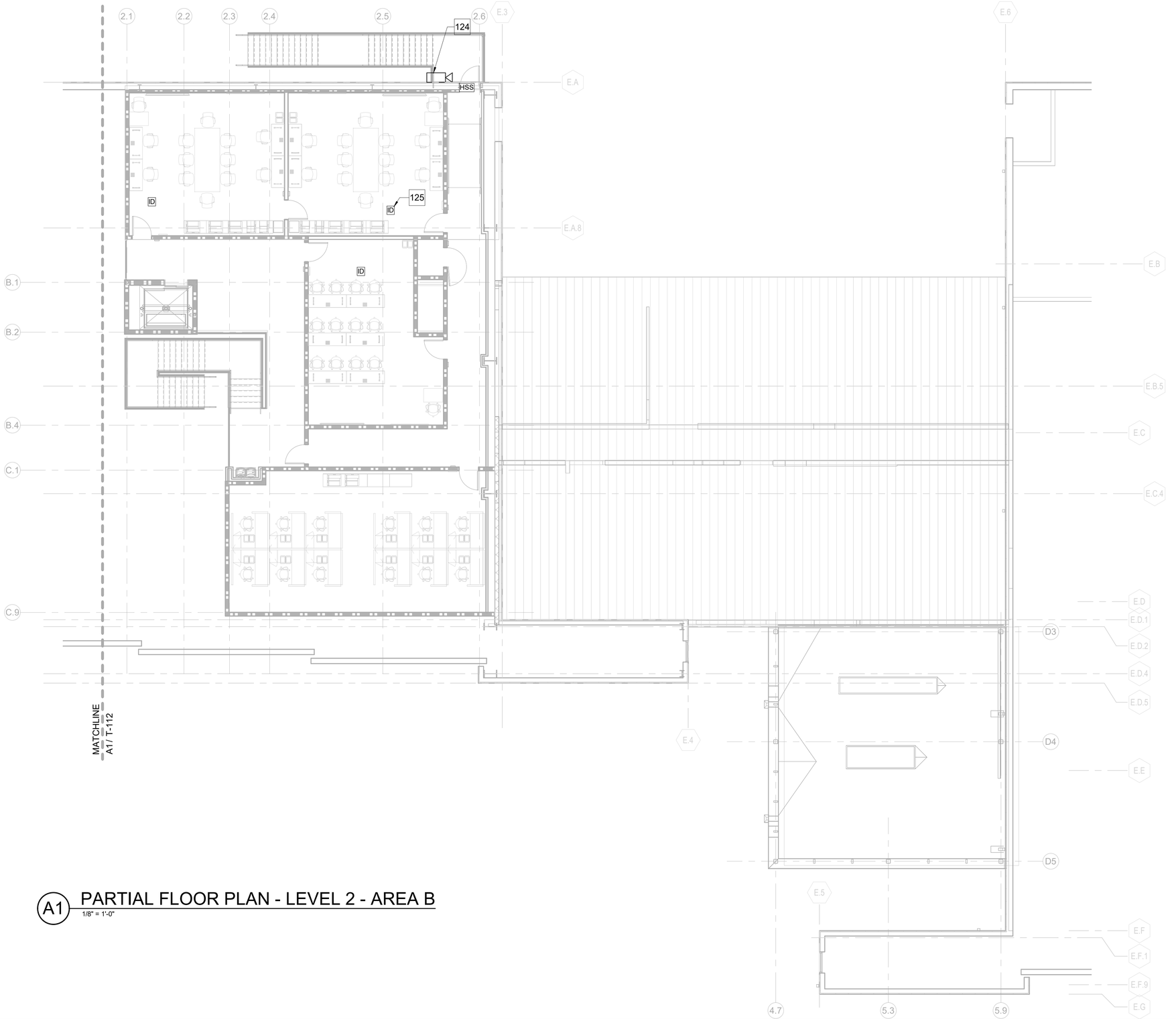
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PARTIAL FLOOR PLAN - LEVEL 2 - AREA A

SHEET ID
B1455
TY112

W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN



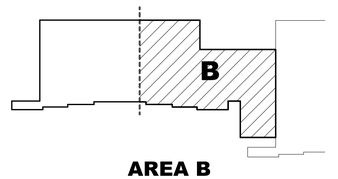
GENERAL NOTES - TELECOM

A	SEE SHEET T-001 FOR GENERAL NOTES AND SYMBOLS
B	SEE SHEET G-003 FOR ABBREVIATIONS
C	ALL NIPR AND SIPR CABLING WILL ORIGINATE FROM TR 119. ALL COMMERCIAL CABLING WILL ORIGINATE FROM COMMERCIAL CABINETS IN ROOMS 105 AND 201

KEYNOTES

124	MOUNT SECURITY CAMERA AT 10'-0" ABOVE SECOND LEVEL
125	MOUNT PASSIVE INFRARED DETECTORS ABOVE AND BELOW THE CEILING. (TYP)

A1 PARTIAL FLOOR PLAN - LEVEL 2 - AREA B
1/8" = 1'-0"



AREA B
KEY PLAN

GRAPHIC SCALE
8 6 4 2 0 8 16
SCALE: 1/8"=1'-0"

PLAN NORTH
TRUE N

US Army Corps of Engineers
Louisville District ®

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
BICSI
Stephen A Leffler
BICSI ID # 110560
EXPIRES 12-31-23
RCDD
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: S. LEFFLER
DRAWN BY: S. LEFFLER
CHECKED BY: C. MEADE
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201TY113

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

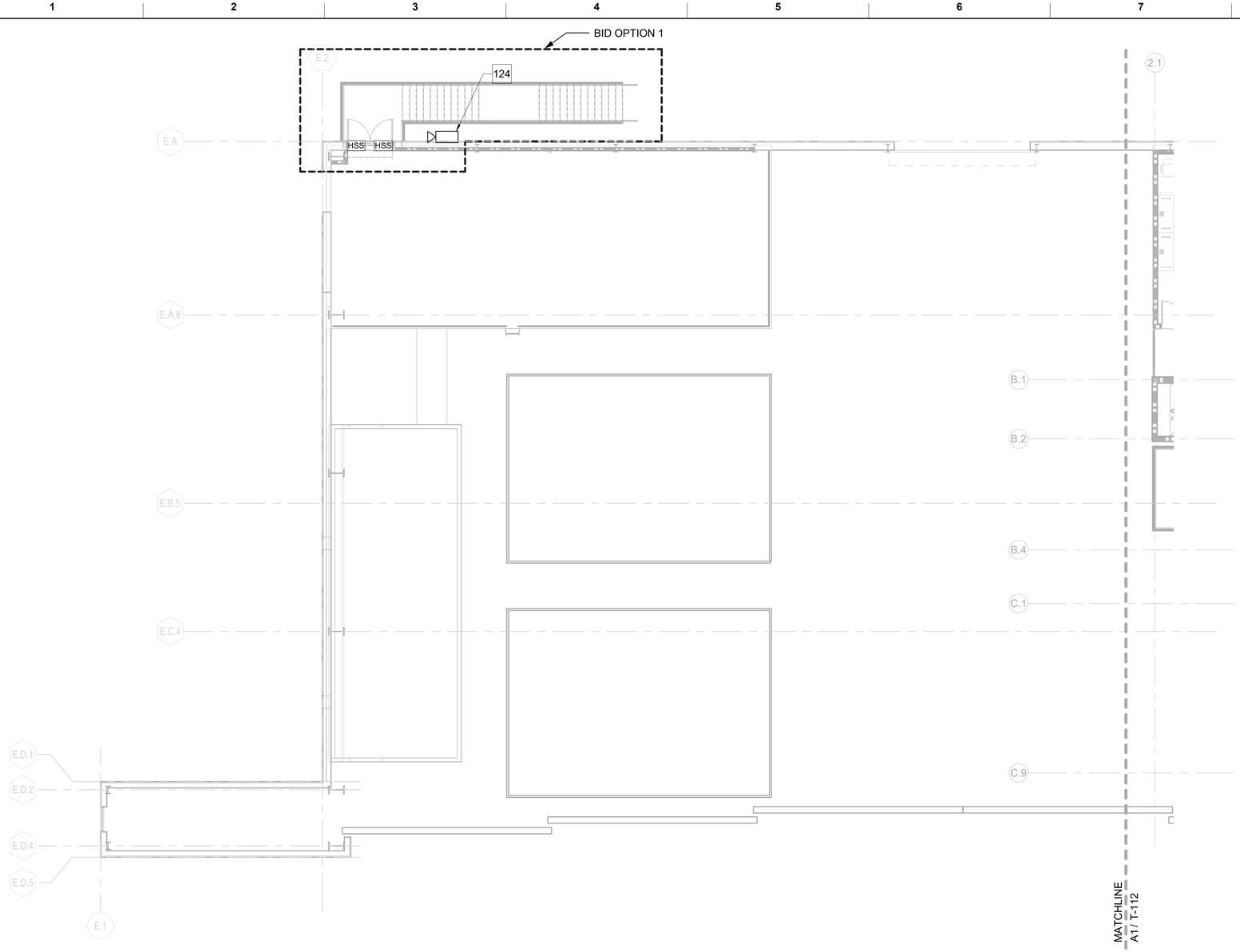
jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS Tel: 972.661.3000

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PARTIAL FLOOR PLAN - LEVEL 2 - AREA B

SHEET ID
B1455
TY113

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



GENERAL NOTES - TELECOM

A	SEE SHEET T-001 FOR GENERAL NOTES AND SYMBOLS
B	SEE SHEET G-003 FOR ABBREVIATIONS
C	ALL NIPR AND SIPR CABLING WILL ORIGINATE FROM TR 119. ALL COMMERCIAL CABLING WILL ORIGINATE FROM COMMERCIAL CABINETS IN ROOMS 105 AND 201

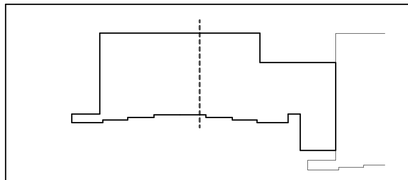
KEYNOTES

124	MOUNT SECURITY CAMERA AT 10'-0" ABOVE SECOND LEVEL

LEGEND

BID OPTION 1

A1 PARTIAL FLOOR PLAN - LEVEL 2 - AREA A - BID OPTION 1
1/8" = 1'-0"



KEY PLAN

GRAPHIC SCALE

8 6 4 2 0 8 16

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

PLAN NORTH

TRUE N

US Army Corps of Engineers
Louisville District ®

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
BICSI
Stephen A Leffler
BICSI ID # 110560
EXPIRES 12-31-23
RCDD
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: S. LEFFLER
DRAWN BY: S. LEFFLER
CHECKED BY: C. MEADE
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201TY114

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS No. W2R0003

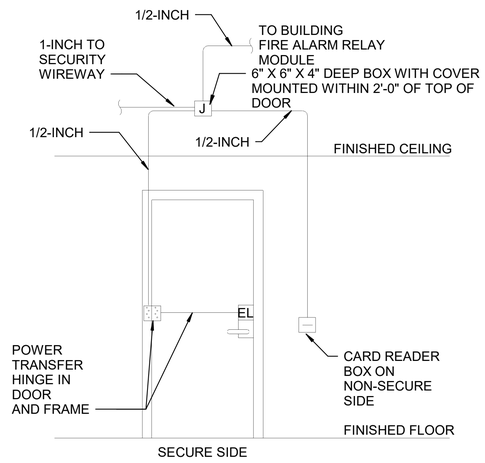
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
PARTIAL FLOOR PLAN - LEVEL 2 - AREA A - BID OPTION 1

SHEET ID
B1455
TY114

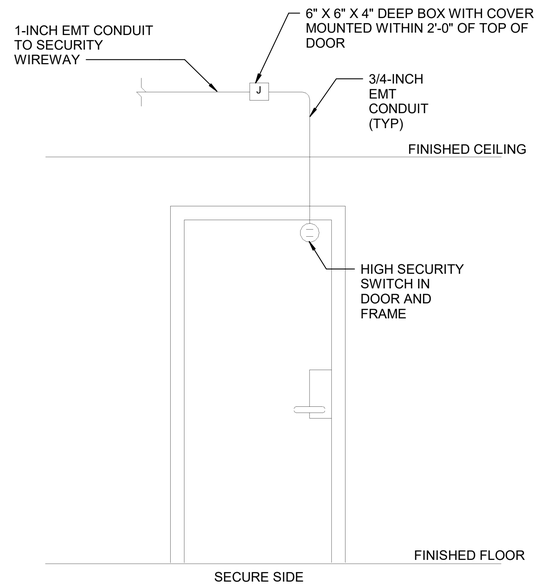
W912QR23R0003_Plans-0000

ARIMS: 200A Disposition: Maintain for 15 yrs after construction

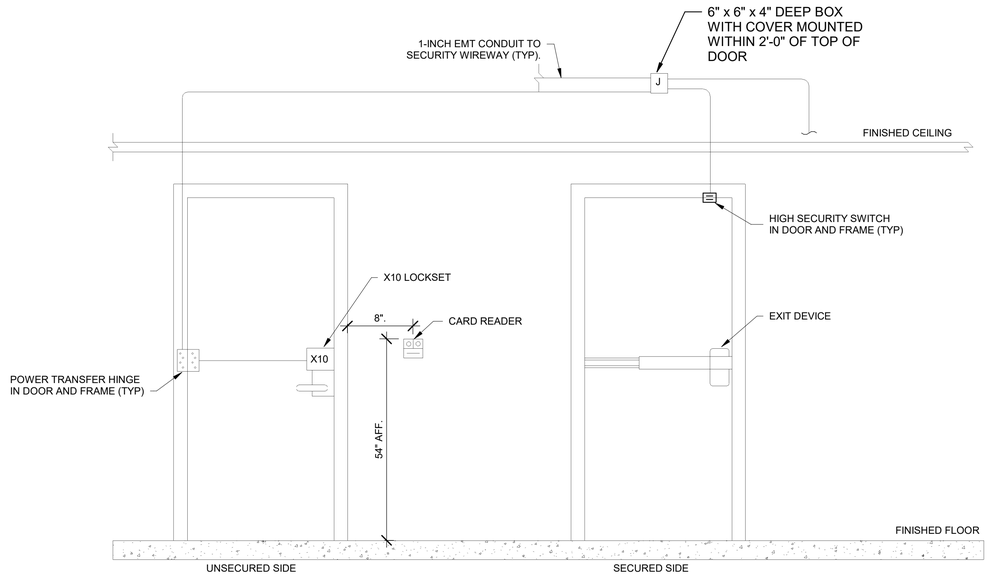
CERTIFIED FINAL DESIGN



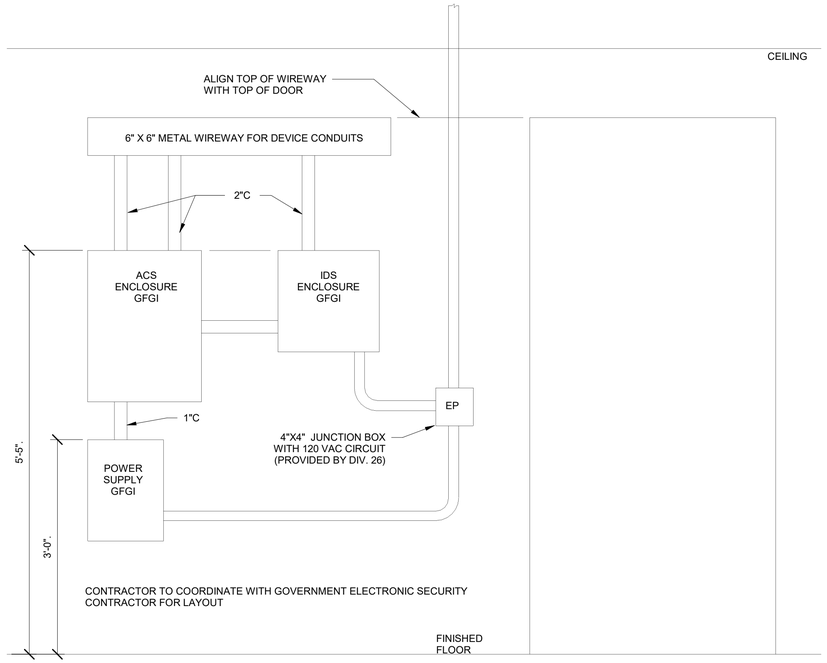
E1 SECURED SINGLE DOOR ELEVATION
NTS



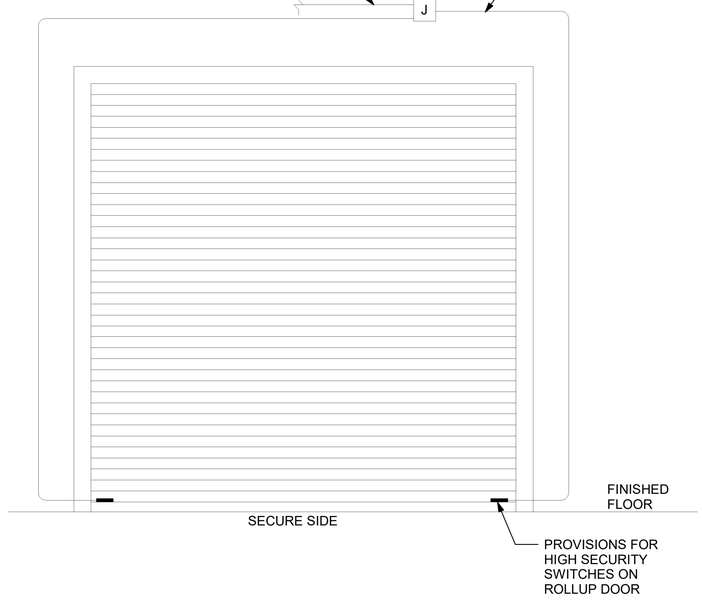
E4 MONITORED SINGLE DOOR (TYP)
NTS



A7 CARD READER W-X10-LOCKSET
NTS



A1 SECURITY PANELS ELEVATION IN TR119
NTS



A5 MONITORED COILING OVERHEAD DOOR (TYP)
NTS

US Army Corps of Engineers
Louisville District ®

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
BICSI
Stephen A Leffler
BICSI ID # 110560
EXPIRES 12-31-23
RCDD
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE.:
FILE NAME: SXHT219201TY501

DESIGNED BY: S. LEFFLER
DRAWN BY: S. LEFFLER
CHECKED BY: C. MEADE
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
JACOBS No. 175263

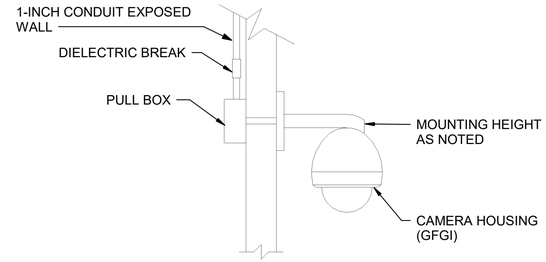
MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
DETAILS

SHEET ID
B1455
TY501

W912QR23R0003_Plans-0000

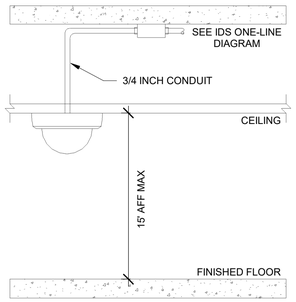
ARIMS: 200A Disposition: Maintain for 15 yrs after construction

CERTIFIED FINAL DESIGN



C1 WALL MOUNTED CAMERA DETAIL

NOT TO SCALE



A1 CEILING MOUNTED CAMERA

NTS

US Army Corps of Engineers
Louisville District ®

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
Bicsi
Stephen A Leffler
BICSI ID # 110560
EXPIRES 12-31-23
RCDD
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: S. LEFFLER
DRAWN BY: S. LEFFLER
CHECKED BY: C. MEADE
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34

ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201TY502

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

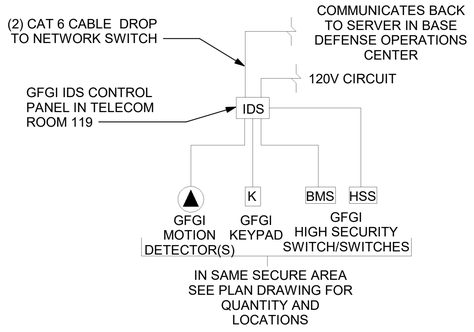
Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
Phone: (817)820-4000 TX FIRM F-2

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
DETAILS

SHEET ID
B1455
TY502

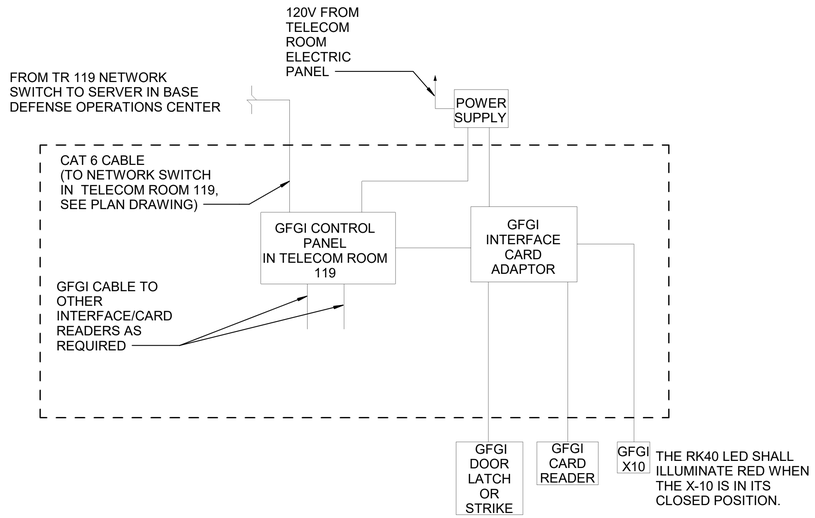
W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN



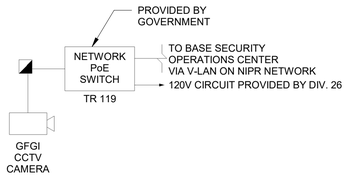
D1 TYPICAL SECURE ROOM IDS DIAGRAM

NOT TO SCALE



A1 TYPICAL SECURE ROOM ACS DIAGRAM

NOT TO SCALE



A6 TYPICAL CCTV CAMERA DIAGRAM

NTS

US Army Corps of Engineers
Louisville District ®

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
Bicsi
Stephen A Leffler
BICSI ID # 110560
EXPIRES 12-31-23
RCDD
23 NOV 2022
TEXAS REGISTERED ENGINEERING FIRM F-2966

MARK	DESCRIPTION	DATE

DESIGNED BY: S. LEFFLER
DRAWN BY: S. LEFFLER
CHECKED BY: C. MEADE
SUBMITTED BY: E. OLNESS
SIZE: ANSI D 22x34
ISSUE DATE: 23 NOVEMBER 2022
SOLICITATION NO.:
CONTRACT NO.:
DRAWING CODE:
FILE NAME: SXHT219201TY601

US ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT
MAXWELL AIR FORCE BASE

Jacobs
JACOBS ENGINEERING GROUP INC.
777 Main Street, Fort Worth, TX 76102
Phone: 817-820-8100 Fax: 817-820-8112

MAXWELL AIR FORCE BASE, ALABAMA
REPAIR AIRCRAFT MAINTENANCE B1455 FOR MH-139
PROJECT NUMBER: PNQS21B1455, P2#: 496395
ONE-LINE DIAGRAMS

SHEET ID
B1455
TY601

W912QR23R0003_Plans-0000

CERTIFIED FINAL DESIGN