AUGUSTA REGIONAL AIRPORT

RUNWAY 17-35 APPROACH IMPROVEMENTS CAT II

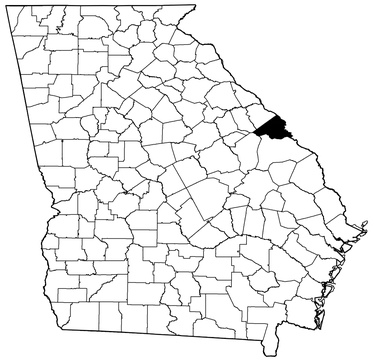
1501 AVIATION WAY

AUGUSTA , GA 30906-9620

0119700-221073.01

AUGUST 16, 2024

ISSUED FOR BID



RICHMOND COUNTY

VICINITY MAP

LOCATION MAP

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SHEET CONTENTS
COVER SHEET

SHEET NO.
G-001

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LEGEND AND ABBREVIATIONS

ABBREVIATIONS:

A	ABANDON
AB	AGGREGATE BASE
A/C	AIRCRAFT
ABAND	ABANDON
AC	ASPHALT CONCRETE
ALCMS	AIRFIELD LIGHTING CONTROL AND MONITORING SYSTEM
ALT	ALTERNATE
AMSL	ABOVE MEAN SEA LEVEL
AOA	AIRCRAFT OPERATIONS AREA
APCH	APPROACH
APPROX	APPROXIMATE
ASB	AGGREGATE SUB-BASE
AR	ACCESS ROAD
ARFF	AIRCRAFT RESCUE AND FIRE FIGHTING
ATCT	AIR TRAFFIC CONTROL TOWER
AWG	AMERICAN WIRE GAUGE
BC	BEGINNING OF CURVE
BIT	BITUMINOUS
BLDG	BUILDING
BM	BENCHMARK
BOT	BOTTOM
BVC	BEGINNING OF VERTICAL CURVE
CA TEAM	CONSTRUCTION ADMINISTRATION TEAM
C-C	CENTER TO CENTER
CB	CATCH BASIN
CIPCP	CAST IN-PLACE CONCRETE PIPE
CJ	CONSTRUCTION JOINT
CFS	CUBIC FEET PER SECOND
CL	CENTERLINE
CLF	CHAINLINK FENCE
CLR	CLEAR
CMP	CORRUGATED METAL PIPE
CO	CLEANOUT
CONC	CONCRETE
CE	CONCRETE ENCASED
CONT	CONTINUOUS
CP	CONTROL POINT
CTB	CEMENT TREATED BASE
CKT	CIRCUIT
CSPP	CONSTRUCTION SAFETY PHASING PLAN
DB	DIRECT BURIAL
DEG	DEGREE
DI	DROP INLET
DEMO	DEMOLISH
DIA	DIAMETER
DIM	DIMENSION
DIP	DUCTILE IRON PIPE
DP	DEPTH
(E)	EXISTING
E	ELECTRICAL LINE
EC	END OF CURVE
EG	EXISTING GRADE
ELEV	ELEVATION
EOP	EDGE OF PAVEMENT
EQ	EQUAL
EVC	END OF VERTICAL CURVE
ETR	EXISTING TO REMAIN
FAA	FEDERAL AVIATION ADMINISTRATION
FBO	FIXED BASE OPERATOR
FES	FLARED END SECTION
FF	FINISHED FLOOR
FG	FINISHED GRADE
FH	FIRE HYDRANT
FL	FLOW LINE
FOD	FOREIGN OBJECT DEBRIS
FPS	FEET PER SECOND
FT	FEET
G	GAS LINE
GAL	GALLON
GALV	GALVANIZED

ABBREVIATIONS:

GA MUTCD	GEORGIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES
GB	GRADE BREAK
GND	GROUND
GPM	GALLONS PER MINUTE
GPSP	GENERAL PERRY SMITH PARKWAY
GS	GLIDE SLOPE
HH	HANDHOLE
H	HEIGHT
HDPE	HIGH DENSITY POLYETHYLENE
HIRL	HIGH INTENSITY RUNWAY LIGHT
HIR;THL	HIGH INTENSITY THRESHOLD LIGHT
HORIZ	HORIZONTAL
HMA	HOT MIX ASPHALT
HP	HIGH POINT
HW	HEADWALL
HWL	HIGH WATER LEVEL
HWY	HIGHWAY
IE	INVERT ELEVATION
IFR	INSTRUMENT FLIGHT RULES
ILS	INSTRUMENT LANDING SYSTEM
IN	INCHES
IP	IN-PAVEMENT
L	LENGTH
LBS	POUNDS
LF	LINEAL FEET
LOC	LOCALIZER
LWL	LOW WATER LEVEL
MH	MANHOLE
MALS	MEDIUM INTENSITY APPROACH LIGHTING SYSTEM
MALSF	MALS W/ SEQUENCED FLASHERS
MALSR	MALS W/ RUNWAY ALIGNMENT INDICATOR LIGHTS
MAX	MAXIMUM
ME	MATCH EXISTING
MID	MID POINT
MIN	MINIMUM
MIRL	MEDIUM INTENSITY RUNWAY LIGHT
MITL	MEDIUM INTENSITY TAXIWAY LIGHT
MPH	MILES PER HOUR
N	NO
(N)	NEW
NIC	NOT IN CONTRACT
NO. OR #	NUMBER
NOTAM	NOTICE TO AIRMAN
NTS	NOT TO SCALE
OFF	OFFSET
OFZ	OBJECT FREE ZONE
O/S	OFFSET
OC	ON CENTER
OH	OVERHEAD
OWS	OIL WATER SEPARATOR
PAPI	PRECISION APPROACH PATH INDICATOR
PR	PAIR
PB	PULL BOX
PC	POINT OF CURVATURE
PCC	PORTLAND CEMENT CONCRETE
PCF	POUNDS PER CUBIC FOOT
PERF	PERFORATED
PI	POINT OF INTERSECTION
POB	POINT OF BEGINNING
POC	POINT OF CURVE
POE	POINT OF ENDING
PSI	POUNDS PER SQUARE INCH
PSF	POUNDS PER SQUARE FOOT
PT	POINT OF TANGENCY
PVC	POINT OF VERTICAL CURVE
PVC	POLYVINYL CHLORIDE
PVI	POINT OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENCY
Q	RATE OF FLOW
QTY	QUANTITY

ABBREVIATIONS:

R	RADIUS
(R)	REMOVE
R&R	REMOVE AND REPLACE
RC	RELATIVE COMPACTION
REL	RELOCATE EXISTING
RCP	REINFORCED CONCRETE PIPE
REQ	REQUIRED
ROFA	RUNWAY OBJECT FREE AREA
ROW	RIGHT OF WAY
RPZ	RUNWAY PROTECTION ZONE
RGL	RUNWAY GUARD LIGHT
RSA	RUNWAY SAFETY AREA
RWA	RUNWAY WORK RESTRICTED AREA
RWAPP	RUNWAY APPROACH LIGHT
RWY OR RW	RUNWAY
S	SANITARY LINE
SF	SQUARE FOOT
SG	STRAIGHT GRADE
SH	SHOULDER
SIDA	SECURITY IDENTIFICATION DISPLAY AREA
SMGS	SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM
SPCD	SAFETY PLAN COMPLIANCE DOCUMENT
SS	STAINLESS STEEL
ST	STORM LINE
STA	STATION
STD	STANDARD
STL	STEEL
T	TELEPHONE LINE
TC	TOP OF CURB
TG	TOP OF GRATE
T/L	TAXILINE
TOE	TOE OF BANK
TOP	TOP OF BANK
TDZ	TOUCHDOWN ZONE
TWY	TAXIWAY
TOFA	TAXIWAY OBJECT FREE AREA
TSA	TAXIWAY SAFETY AREA
TYP	TYPICAL
UD	UNDERDRAIN
OFA	OBJECT FREE AREA
UFN	UNTIL FURTHER NOTICE
UG	UNDERGROUND
UON	UNLESS OTHERWISE NOTED
V	VELOCITY
VC	VERTICAL CURVE
VERT	VERTICAL
VFR	VISUAL FLIGHT RULES
VG	VALLEY GUTTER
VIF	VERIFY IN FIELD
VASI	VISUAL APPROACH SLOPE INDICATOR
W	WATER LINE
WA	WORK AREA
W/	WITH
W/O	WITHOUT
WSE	WATER SURFACE ELEVATION
WSP	WELDED STEEL PIPE
WV	WATER VALVE
WWM	WELDED WIRE MESH

LEGEND:

ANTENNA	TELEPHONE
BENCHMARK	TV CABLE
BOLLARD	WATER
CONTROL POINT	WETLAND BOUNDARY
CHISELED X	WETLAND
CLEANOUT, SANITARY OR STORM	EXISTING RUNWAY EDGE LIGHT
ELECTRICAL METER	ABANDONED RUNWAY EDGE LIGHT CAN WITH BLANK PLATE
ELECTRICAL / COMMUNICATIONS PEDESTAL	EXISTING JUNCTION CAN
ELECTRICAL TRANSFORMER BOX	EXISTING GUIDANCE SIGN
ELECTRICAL SERVICE PANEL	EXISTING WIRE AND CONDUIT TO REMAIN
ELECTRICAL HANDHOLE/PULLBOX	EXISTING DUCT BANK
FIRE HYDRANT	EXISTING TAXIWAY EDGE LIGHT
GAS METER	DIRECT-BURIED CABLE TO BE ABANDONED IN-PLACE
GAS VALVE	FAA CABLE
GATE	GAS
HANDHOLE, GENERIC	ELECTRIC, OVERHEAD
INLET, CURB	ELECTRIC, UNDERGROUND
INLET, ROUND	EXISTING CONTOUR LINES
INLET, SQUARE	FENCE
IRON PIN	FIBER OPTIC CABLE
LIGHT POLE (SINGLE)	PROPERTY LINE
LIGHT POLE (DOUBLE)	SANITARY SEWER
MANHOLE, ELECTRIC	STONE RETAINING WALL
MANHOLE, FIBER OPTIC	STORM SEWER / CULVERT
MANHOLE, SANITARY SEWER	SWALE
MANHOLE, STORM SEWER	
MANHOLE, TELECOMMUNICATIONS	
MANHOLE, VALVE	
MARKER, CABLE	
MARKER, DUCT	
PK or MAG NAIL	
POWER POLE	
POWER POLE, DOUBLE	
POWER POLE WITH LIGHT	
PVC PIPE	
REBAR	
SANITARY VALVE	
SEPTIC TANK VENT	
SIGN (SINGLE POST)	
SIGN (DOUBLE POST)	
SOIL BORING	
STORM FLARED END SECTION	
CTV PEDESTAL BOX	
WATER VALVE	
WATER SHUT OFF	
WATER METER	
WATER SURFACE	

LINETYPE LEGEND

	EXISTING	PROPOSED
EDGE OF PAVEMENT		
RUNWAY SAFETY AREA	RSA	RSA
RUNWAY OBJECT FREE AREA	ROFA	ROFA
TAXIWAY SAFETY AREA	TSA	TSA
TAXIWAY OBJECT FREE AREA	TOFA	TOFA
MAJOR CONTOUR	100	100
MINOR CONTOUR	101	101
DITCH		

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SHEET CONTENTS
LEGEND & ABBREVIATIONS

SHEET NO.
G-002

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LEGEND:

- BENCHMARK
- IRON PIN
- PK or MAG NAIL
- REBAR
- SECTION
- SECTION QUARTER CORNER
- SECTION CORNER HALF

SURVEY DATA:

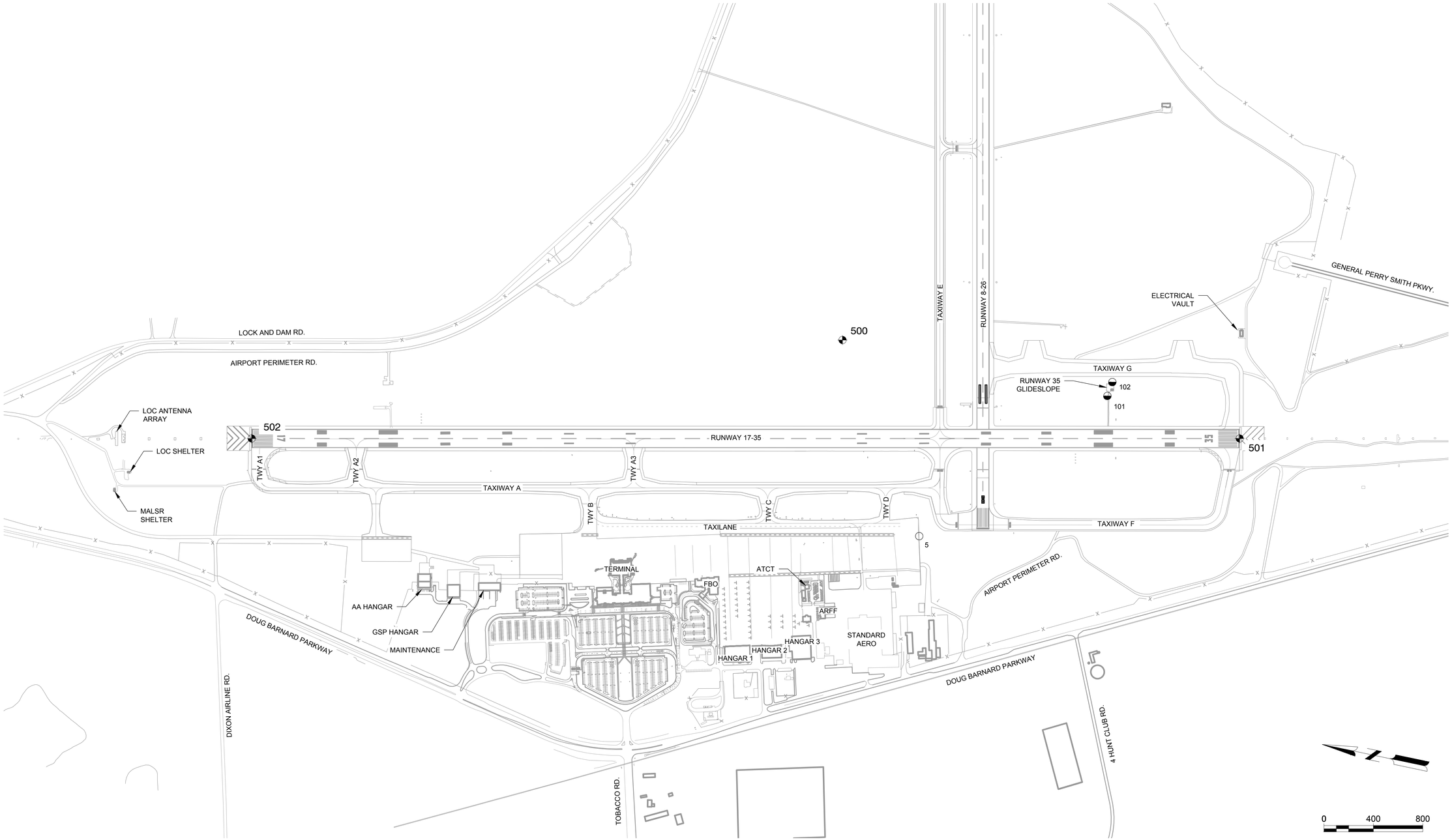
SURVEY DATE(S)	9/18/2023
COORDINATE SYSTEM	USGS NAD 83
VERTICAL DATUM	USGS NAVD 88
CONTROL SOURCE	SEE TABLE
SURVEY UNITS	US SURVEY FOOT

PRIMARY SURVEY CONTROL TABLE

LOCAL PROJECTION			NAVD88 ELEVATION	DESCRIPTION
POINT	NORTHING	EASTING		
5	1224939.4200	716282.6200	133.170	CP REBAR
101	1223683.4400	717708.0349	132.730	CP PK
102	1223667.0660	717825.9478	132.850	CP NAIL
500	1225860.2100	717712.1000	134.352	SACS (FAA AGS ARP 2)
501	1222563.6266	717591.4629	134.256	RUNWAY 35 END COORDINATE
502	1230392.1048	715942.1833	145.354	RUNWAY 17 END COORDINATE

SITE SURVEY PLAN NOTES:

1. PRIVATE SUBSURFACE UTILITY LOCATIONS SHOWN HEREON ARE BASED UPON GROUND MARKINGS PLACED BY CLIENT REPRESENTATIVE. MARKINGS MAY NOT BE BY BENEFIT OF SUBSURFACE DETECTING INSTRUMENTS AS SOME WERE MARKED PER PERSONNEL BEST RECOLLECTION.
2. PUBLIC SUBSURFACE UTILITY LOCATIONS SHOWN HEREON ARE BASED UPON GROUND MARKINGS PLACED BY GEORGIA 811. GEORGIA 811 DOES NOT GUARANTEE THE PRECISION OF THEIR MARKINGS. IN ACCORDANCE WITH GEORGIA LAW, SUBSURFACE UTILITIES MUST BE EXPOSED VIA HAND DIGGING BEFORE MACHINE DIGGING IS PERMISSABLE. UTILITY LOCATION MARKINGS ARE VALID FOR ONLY 10 DAYS. CONTRACTOR MUST ORDER NEW UTILITY LOCATE PRIOR TO ANY EXCAVATION.
3. SANITARY SEWER AND STORM SEWER LOCATIONS HAVE BEEN DETERMINED BY OBSERVABLE SURFACE STRUCTURES AND RESPECTIVE FEATURES. INTERMEDIATE PIPE LOCATIONS ARE APPROXIMATE AS ACCURATE LOCATIONS WERE NOT AVAILABLE AT TIME OF SURVEY.
4. CONTROL POINTS AND BENCHMARKS SHOWN HEREON ARE FOR REFERENCE PURPOSES ONLY. PRIOR TO STAKING, THE CONTROL MUST BE INDEPENDENTLY VERIFIED AS UNDISTURBED. NO WARRANTY IS MADE WITH RESPECT TO THE ACCURACY OF CONTROL SHOWN HEREON AS THEY ARE SUBJECT TO POTENTIAL DISTURBANCE.



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SHEET CONTENTS
SURVEY CONTROL PLAN

SHEET NO.
G-041

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COORDINATION

1. PRECONSTRUCTION CONFERENCE.
   A. A PRECONSTRUCTION CONFERENCE WILL BE CONVENED AND CONDUCTED BY THE AIRPORT AUTHORITY AND CONSTRUCTION ADMINISTRATION TEAM (CA TEAM). THIS CONFERENCE WILL BE USED TO DISCUSS OPERATIONAL SAFETY, TESTING, QUALITY CONTROL, QUALITY ACCEPTANCE, SECURITY, SAFETY, LABOR REQUIREMENTS, ENVIRONMENTAL FACTORS, AND OTHER FACTORS THAT WILL PERTAIN TO THIS CONSTRUCTION PROJECT.
   B. THE PRECONSTRUCTION CONFERENCE WILL BE CONDUCTED AS SOON AS PRACTICABLE AFTER THE CONTRACT HAS BEEN AWARDED AND HELD BEFORE THE NOTICE TO PROCEED IS GIVEN TO THE CONTRACTOR.
   C. PARTICIPANTS IN THE PRECONSTRUCTION CONFERENCE SHALL INCLUDE: AIRPORT STAFF, AIRPORT OPERATIONS, DESIGN TEAM, CONSTRUCTION ADMINISTRATION TEAM, FAA AIR TRAFFIC CONTROL, CONTRACTOR, AND SUBCONTRACTORS.
   D. THE INFORMATION COVERED IN THIS MEETING WILL FOLLOW THE GUIDELINES OUTLINED IN AC 150/5300-9B, “PREDESIGN, PREBID, AND PRECONSTRUCTION CONFERENCES FOR AIRPORT GRANT PROJECTS.”
2. CONTRACTOR PROGRESS MEETINGS
   A. DURING THE DURATION OF THE PROJECT, WEEKLY CONTRACTOR PROGRESS MEETINGS WILL BE HELD AND CONDUCTED BY THE CONSTRUCTION ADMINISTRATION TEAM.
   B. THE PROGRESS MEETINGS WILL COVER PROJECT SCHEDULE, CONSTRUCTION SAFETY, ISSUES, ETC.
3. FAA AIR TRAFFIC CONTROL ORGANIZATION COORDINATION
   A. COMMUNICATION WITH THE FAA AIR TRAFFIC CONTROL TOWER WILL BE COORDINATED BY THE AIRPORT STAFF, CONSTRUCTION ADMINISTRATION TEAM AND/OR THE AIRPORT OPERATIONS DIVISION.
   B. THE FAA AIR TRAFFIC CONTROL TOWER PERSONNEL WILL BE INVITED TO ATTEND THE PRECONSTRUCTION CONFERENCE AT WHICH TIME THE OVERALL CONSTRUCTION SCHEDULE WILL BE PRESENTED.
   C. A MEETING WILL BE SCHEDULED WITH THE FAA AIR TRAFFIC CONTROL PERSONNEL PRIOR TO THE START OF EACH MAJOR CONSTRUCTION PHASE WHICH SIGNIFICANTLY IMPACTS/MODIFIES AIRFIELD CLOSURES THROUGHOUT THE DURATION OF THE CONSTRUCTION PROJECT. PARTICIPANTS IN THESE MEETINGS SHALL INCLUDE: AIRPORT STAFF, AIRPORT OPERATIONS, DESIGN TEAM, CONSTRUCTION ADMINISTRATION TEAM, FAA AIR TRAFFIC CONTROL, CONTRACTOR, AND SUBCONTRACTORS.

ARFF VEHICLE ACCESS ROUTE

1. CROSS AIRPORT ACCESS FOR ARFF VEHICLES SHALL NOT BE IMPACTED DURING THIS PROJECT.

PROTECTION OF NAVIGATION AIDS (NAVAIDS)

1. THERE ARE VARIOUS FAA AND AIRPORT OWNED NAVIGATIONAL AIDS LOCATED WITHIN OR NEAR THE PROJECT LIMITS. CONTRACTOR WILL TAKE ALL PRECAUTIONS NECESSARY TO PROTECT EQUIPMENT, INCLUDING, BUT NOT LIMITED TO; COORDINATION WITH FAA TECH OPS PERSONNEL TO IDENTIFY ABOVE GROUND EQUIPMENT AND BELOW GROUND CABLING, AND BARRICADING AROUND EQUIPMENT AS NECESSARY TO MAINTAIN SEPARATION BETWEEN CONTRACTORS' EQUIPMENT AND NAVAID EQUIPMENT. ANY DAMAGE TO NAVAIDS WILL BE REPAIRED OR REPLACED AT CONTRACTORS' EXPENSE TO THE SATISFACTION OF THE OWNER. A NOTAM WILL BE ISSUED TO CLOSE RUNWAYS AFFECTED BY UNANTICIPATED POWER OUTAGES OR DAMAGING OF NAVAIDS, WITH THE CONTRACTOR IMMEDIATELY RESTORING POWER THROUGH COORDINATION OF THE OWNER.

CONTRACTOR ACCESS

CONSTRUCTION SITE ACCESS AND HAUL ROAD

1. HAUL ROADS TO BE USED ON THIS PROJECT ARE INDICATED ON THE DRAWINGS OR OTHERWISE SPECIFICALLY AUTHORIZED BY THE CA TEAM. THE CONTRACTOR SHALL CONFINE ALL VEHICLES AND EQUIPMENT TO THE DESIGNATED CONSTRUCTION AREAS, STAGING AREAS AND HAUL ROUTES.
2. ACCESS POINTS TO THE PROJECT SITE ARE SHOWN ON THE DRAWINGS. THE SPECIFIED GATES SHALL BE MONITORED BY A CONTRACTOR SUPPLIED GUARD DURING ALL CONTRACTOR OPERATIONS WHILE THE GATE IS OPEN OR UNLOCKED.
3. THE CONTRACTOR SHALL RESTORE ALL TURFED AND PAVED AREAS USED FOR HAUL ROADS TO THEIR ORIGINAL CONDITION, INCLUDING ESTABLISHMENT OF NEW TURF. ALL COSTS FOR CONSTRUCTING, REMOVING, AND RESTORING OF HAUL ROADS REQUIRED FOR THE COMPLETION OF THE WORK SHALL BE BY THE CONTRACTOR UNDER MOBILIZATION.THE EXISTING CONDITION OF ALL ANTICIPATED HAUL ROUTES SHALL BE DOCUMENTED BY THE CONTRACTOR PRIOR TO HAULING.
4. THE CONTRACTOR SHALL NOT PERMIT ANY UNAUTHORIZED CONSTRUCTION PERSONNEL OR TRAFFIC ON THE PROJECT SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TRAFFIC CONTROL TO AND FROM THE PROJECT SITE. CONTRACTOR PROVIDED DIRECTIONAL SIGNAGE AT THE ACCESS GATES AND ALONG THE DELIVERY ROUTE TO THE STAGING AREA AND PROJECT SITE SHALL BE SUBMITTED AND REVIEWED BY THE DESIGNER AND AIRPORT OPERATIONS PRIOR TO INSTALLATION.
5. ALL CONTRACTOR MATERIAL ORDERS FOR DELIVERY TO THE SITE SHALL BE DIRECTED TO THE ACCESS POINT IDENTIFIED OR CONTRACTOR STAGING AREA.
6. THE CONTRACTOR, THROUGH AIRPORT OPERATIONS/SECURITY, SHALL ESTABLISH AND MAINTAIN A LIST OF CONTRACTOR AND SUB-CONTRACTOR VEHICLES AUTHORIZED TO OPERATE ON THE PROJECT SITE. VEHICLE USE PERMITS SHALL BE OBTAINED BY THE CONTRACTOR IN ACCORDANCE WITH AIRPORT PROCEDURES.
7. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE THE USE OF OFF-SITE ROUTES (STATE HIGHWAYS, COUNTY ROADS OR CITY STREETS) WITH THE APPROPRIATE OWNER WHO HAS JURISDICTION OVER THE AFFECTED ROUTE.
8. ALL VEHICLES USING HAUL ROUTES INCLUDING OFF-SITE ROUTES, SHALL BE COVERED TO PREVENT BLOWING AWAY OR SPILLAGE OF LOOSE MATERIAL. ALL SPILLAGES ON PUBLIC ROADWAYS AND SITE ROADS SHALL BE PROMPTLY CLEANED UP AND LEGALLY DISPOSED OF AT NO ADDITIONAL COST TO THE SPONSOR.
9. THE CONTRACTOR WILL NOT BE PERMITTED TO USE ANY ACCESS OR HAUL ROADS OTHER THAN THOSE DESIGNATED ON THE CONTRACT DRAWINGS. EMERGENCY ACCESS BY AIRCRAFT RESCUE AND FIRE FIGHTING (ARFF) RIGHT-OF-WAY ON ACCESS ROADS, HAUL ROADS, TAXIWAYS, AND RUNWAYS SHALL NOT BE IMPEDED AT ANY TIME.

CONTRACTOR STAGING AREA

1. THE LIMITS OF CONSTRUCTION, CONTRACTOR'S STAGING AREA AND STOCKPILING AREAS REQUIRED FOR THE CONTRACTOR'S EXCLUSIVE USE DURING CONSTRUCTION ARE SHOWN ON THE PLANS. ADDITIONAL AREAS MAY BE REQUESTED BY THE CONTRACTOR AND APPROVED BY THE DESIGNER AND OWNER. THE CONTRACTOR SHALL PROVIDE DEVICES VISIBLE FOR BOTH DAY AND NIGHT USE TO DELINEATE THE PERIMETER OF ALL SUCH AREAS.
2. CONTRACTOR SHALL INSTALL A MINIMUM 3” THICK GRADED AND COMPACTED GRAVEL BED OR RECYCLED ASPHALT PAVEMENT TO THE LIMITS OF THE CONTRACTOR STAGING AREA THAT IS NOT IMPERVIOUS. THE CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES AND DRAINAGE STRUCTURES FROM ANY DAMAGE CAUSED WHILE THE AREA IS BEING USED AS A CONSTRUCTION STAGING AREA. ALL DAMAGE SHALL BE REPAIRED TO THE SATISFACTION OF THE AIRPORT AUTHORITY AND AT NO ADDITIONAL COST TO THE AIRPORT AUTHORITY. A STAGING AREA LAYOUT PLAN SHALL BE SUBMITTED TO AIRPORT AND THE DESIGNER FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.
3. THE CONTRACTOR SHALL NOT PARK EQUIPMENT OR STORE MATERIALS WITHIN 10 FEET OF AOA FENCE AND/OR PERIMETER FENCE.
4. THE CONTRACTOR SHALL MAINTAIN EXISTING DRAINAGE PATTERNS AT THE STAGING AND STOCKPILE AREAS AND PROVIDE TEMPORARY ROUTING OF STORMWATER AROUND THE AREAS.
5. CONTRACTOR SHALL INFORM THE CA TEAM ON A DAILY BASIS OF THE DAILY CONSTRUCTION ACTIVITIES, AS WELL AS, UPCOMING ACTIVITIES WITH THE INTENT TO LIMIT AIRPORT OPERATION CONFLICTS.
6. ALL STAGING AREAS SHALL BE INSPECTED AND APPROVED BY AIRPORT FIRE MARSHALL. THE CONTRACTOR SHALL SUPPLY ANY AND ALL FIRE FIGHTING EQUIPMENT, PROTECTION AND SAFETY EQUIPMENT/SUPPLIES AS REQUESTED BY THE AIRPORT AUTHORITY'S FIRE MARSHALL WITHIN 24 HOURS AFTER REQUESTED.
   - ARFF CHIEF: MAIN LINE: (706) 798-3236 DIRECT: (706) 798-2696 CELL: (762) 994-6416

9\. CONTRACTOR SHALL SUPPLY COVERED TRASH AND RUBBISH DUMPSTERS AND ALL OTHER CONTAINERS FOR REMOVAL OF TRASH, RUBBISH, AND DEBRIS RESULTING FROM THE WORK OF THE CONTRACT. THE CONTRACTOR SHALL NOT ALLOW DUMPSTERS TO OVERFLOW.

10\. THE CONTRACTOR SHALL COMPLETELY CLEAN UP AND RESTORE THE ENTIRE STAGING AND STORAGE AREAS, AS APPROVED BY THE DESIGNER PRIOR TO FINAL COMPLETION. ALL UNUSED MATERIALS SHALL BE REMOVED FROM THE PROJECT SITE AT THE CONTRACTORS EXPENSE, UNLESS PRIOR APPROVAL HAS BEEN GIVEN FROM THE AIRPORT AND THE STAGING AREA GRADED SMOOTH, SLOPED TO DRAIN AND SEEDED. INCIDENTAL TO C-105 MOBILIZATION , CLEANUP, AND DEMOBILIZATION.

CONTRACTOR EMPLOYEE AND EQUIPMENT PARKING

1. ALL VEHICLES SHALL BE PARKED AND SERVICED IN THE DESIGNATED STAGING AND EMPLOYEE PARKING AREAS SHOWN ON THE PLANS. THE CONTRACTOR IS RESPONSIBLE FOR TRANSPORTING EMPLOYEES FROM THESE AREAS TO THE JOBSITE. ALL SERVICING SHALL BE IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS.
2. ALL MATERIALS AND EQUIPMENT WHEN NOT IN USE SHALL BE PLACED IN APPROVED AREAS WHERE THEY WILL NOT CONSTITUTE A HAZARD TO AIRCRAFT OPERATIONS AND NOT PENETRATE CLEARANCE HEIGHT RESTRICTIONS AS SHOWN ON THE CONSTRUCTION PLAN. ALL EQUIPMENT SHALL BE PARKED IN THE APPROPRIATE AREA WHEN NOT IN USE.

VEHICLE CONDITION

1. VEHICLES AND EQUIPMENT THAT ARE DEEMED A POTENTIAL HAZARD BY THE CA TEAM OR AIRPORT SHALL BE REMOVED FROM THE JOB SITE AND STAGED PROPERLY AT THE REQUEST OF THE CA TEAM. VEHICLES AND EQUIPMENT THAT LEAK ANY AUTOMOTIVE FLUID INCLUDING, BUT NOT LIMITED TO, OIL, HYDRAULIC FLUID, TRANSMISSION FLUID, GEAR OIL, GASOLINE, AND DIESEL WILL BE REMOVED TO THE STAGING AREA AND NOT ALLOWED TO OPERATE ON ANY PAVED SURFACE. IF THE VEHICLE CANNOT BE REPAIRED WITHIN A FEW DAYS THE VEHICLE SHALL BE REMOVED FROM THE AIRPORT. LEAKING FLUIDS ON PAVEMENTS DAMAGE THE PAVEMENT.
2. THE CONTRACTOR SHALL CLEANUP, AT CONTRACTOR'S EXPENSE, ANY AND ALL LEAKS OR SPILLS. LEAKS ON PAVED SURFACES SHALL BE CLEANED UP IMMEDIATELY. SIGNIFICANT LEAK SPOTS ON PAVEMENT, AS DETERMINED BY THE CA TEAM, SHALL BE REPLACED WITH NEW PAVEMENT. ASPHALT WILL REQUIRE MILLING AND PLACEMENT OF NEW BITUMINOUS MATERIAL; PCC WILL REQUIRE SAW, REMOVAL AND REPAIR AS DIRECTED BY THE CA TEAM. DIRT OR GRAVEL AREAS WILL REQUIRE REMOVAL, LEGAL DISPOSAL AND REPLACEMENT OF THE AREA WITH SIMILAR APPROVED MATERIALS.

LOCATION OF STOCKPILED MATERIALS

1. THERE SHALL NOT BE ANY STOCKPILED MATERIALS IN THE ACTIVE RUNWAY OFA, TAXIWAY OFA, OR NAVAID CRITICAL AREAS. STOCKPILED MATERIAL OR EQUIPMENT SHALL NOT BE STORED NEAR AIRCRAFT TURNING AREAS OR OPERATIONAL MOVEMENT AREAS, APRONS, OR EXCAVATIONS AND TRENCHES. STOCKPILED MATERIALS SHALL NOT BE STORED NEAR NAVAIDS, VISUAL OR APPROACH AIDS, NOR SHALL THEY OBSTRUCT THE ATCT'S LINE OF SIGHT TO ANY RUNWAY OR TAXIWAY. THE CONTRACTOR SHALL ENSURE THAT STOCKPILED MATERIALS DO NOT CAUSE DEGRADED OR HAZARDOUS CONDITIONS TO AIRPORT OPERATIONS SAFETY. THIS INCLUDES DETERMINING AND VERIFYING THAT STOCKPILED MATERIALS ARE STORED AT AN APPROVED LOCATION, THAT THEY ARE PROPERLY STOWED TO PREVENT FOREIGN OBJECT DEBRIS (FOD), ATTRACTION BY WILDLIFE, OR OBSTRUCTION OF AIR OPERATIONS EITHER BY THEIR PROXIMITY TO NAVAIDS OR TO AIRCRAFT MOVEMENT AREAS.
2. ALL STOCKPILED MATERIAL(S)/SUPPLIES SHALL BE CONSTRAINED IN A MANNER TO PREVENT MOVEMENT RESULTING FROM AIRCRAFT BLAST OR WIND CONDITIONS. MATERIAL(S)/SUPPLIES SHALL NOT BE STORED WITHIN 500 FEET OF AIRCRAFT TURNING AREAS OR MOVEMENT AREAS. STOCKPILED MATERIAL(S)/SUPPLIES SHALL NOT EXCEED 15 FEET IN HEIGHT UNLESS THE CONTRACTOR HAS COMPLIED WITH ALL REQUIREMENTS FOR AIRSPACING AND SECURED APPROVAL FROM AIRPORT OPERATIONS. ALL MATERIAL(S)/SUPPLIES SHALL BE POSITIONED SO IT WILL NOT OBSTRUCT THE LINE OF SIGHT FROM THE CONTROL TOWER TO THE MOVEMENT AREA. MARKING AND LIGHTING SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS CONTAINED IN THESE CONSTRUCTION PLANS. LOOSE MATERIALS, SUCH AS STRAW, SHALL BE COVERED AS DIRECTED BY CA TEAM.

VEHICLE AND PEDESTRIAN OPERATIONS

1. VEHICLE AND ACCESS ROUTES FOR AIRPORT CONSTRUCTION SHALL BE CONTROLLED AS NECESSARY TO PREVENT INADVERTENT OR UNAUTHORIZED ENTRY OF PERSONS, VEHICLES OR ANIMALS ONTO AIR OPERATION AREAS. NO VEHICLE SHALL ENTER THE AIR OPERATIONS AREA EXCEPT AT PREDETERMINED LOCATIONS. THE AMOUNT OF CONSTRUCTION TRAFFIC WILL REQUIRE THE CONTRACTOR TO USE A GUARD AT ACCESS GATES AND A FLAG PERSON TO CONTROL TRAFFIC CROSSING TAXIWAYS AND OTHER AIRCRAFT MOVEMENT AREAS. CONTRACTOR PERSONNEL WHO OPERATE VEHICLES IN THE AOA SHALL COMPLY WITH AC 150/5210-5 (LATEST VERSION), PAINTING, MARKING AND LIGHTING OF VEHICLES USED ON AN AIRPORT.
2. ALL CONSTRUCTION VEHICLES/MECHANIZED EQUIPMENT SHALL HAVE A VEHICLE PASS AS DETERMINED BY AIRPORT OPERATIONS DISPLAYED.
3. ALL CONSTRUCTION VEHICLES/MECHANIZED EQUIPMENT AUTHORIZED WITHIN THE MOVEMENT AREA OR RELATED SAFETY AREAS SHALL BE MARKED WITH A CLEAN 3' X 3' ORANGE AND WHITE CHECKERED FLAG WITH EACH BOX BEING 1' SQUARE, LOCATED ON THE UPPERMOST PORTION OF THE VEHICLE/MOTORIZED EQUIPMENT, OR BE ESCORTED BY A VEHICLE SO EQUIPPED.
4. DURING NIGHTTIME HOURS, ALL EQUIPMENT OPERATING ON THE AIRPORT EXCEEDING 15 FEET IN HEIGHT SHALL BE LIT WITH A RED OBSTRUCTION LIGHT LOCATED ON THE UPPERMOST PORTION OF THE EQUIPMENT.
5. VEHICLES/MECHANIZED EQUIPMENT AUTHORIZED ON THE MOVEMENT AREA (RUNWAYS, TAXIWAYS, AND RAMPS) AND/OR ASSOCIATED SAFETY AREAS SHALL BE EQUIPPED WITH AN ELECTRICALLY POWERED, AMBER COLOR, 360-DEGREE OMNI-DIRECTION LIGHT, MOUNTED ON THE VEHICLE SUCH THAT IT IS CONSPICUOUS FROM ANY DIRECTION.

REQUIRED ESCORTS

1. THE CONTRACTOR MUST PROVIDE AN ADEQUATE NUMBER OF ESCORTS FOR MATERIAL DELIVERIES ALONG HAUL ROUTES AND THE MOVEMENTS OF THE CONTRACTOR'S VEHICLES/MECHANIZED EQUIPMENT AND PERSONNEL WITHIN THE MOVEMENT AREA AND NON-MOVEMENT AREAS AS AUTHORIZED BY THE AIRPORT OPERATIONS. EACH ESCORT MAY ACCOMPANY A MAXIMUM OF 5 VEHICLES AT A TIME ACROSS MOVEMENT AREAS AND MUST MAINTAIN VISUAL ACCESS AT ALL TIMES.
2. DURING ANY ABSENCE OF THE APPROVED ESCORT(S) OR FOR PERIODS THAT THEY ARE UNABLE TO PERFORM THEIR SPECIFIED DUTIES, ALL WORK WITHIN THE MOVEMENT AREA AND ASSOCIATED SAFETY AREAS FOR PROJECTS SHALL STOP. ADDITIONALLY, ALL PERSONNEL AND EQUIPMENT SHALL BE ESCORTED TO APPROVED LOCATIONS OUTSIDE THE MOVEMENT AREA AND RELATED SAFETY AREAS. NO CONTRACT TIME EXTENSION WILL BE GRANTED FOR TIME LOST DUE TO THE ABSENCE OF ESCORT(S). WORK SHALL RESUME ONLY WITH THE RETURN OF THE APPROVED ESCORT(S).
3. THE ESCORT SHALL ASSURE THAT ALL EQUIPMENT MAINTAINS PROPER CLEARANCES FROM MOVING AIRCRAFT.

TRAINING REQUIREMENTS FOR VEHICLE DRIVERS

1. CONTRACTOR EMPLOYEES DESIGNATED AS ESCORTS, ARE REQUIRED TO BE BADGED BY AUGUSTA REGIONAL AIRPORT OPERATIONS / SECURITY, GO THROUGH SECURITY/DRIVER'S SAFETY TRAINING PROGRAM, AND PASS THE ASSOCIATED TEST. TRAINING IS BY APPOINTMENT ONLY. FURTHER ADDITIONAL AIRFIELD AND SITE TRAINING WILL BE PROVIDED WITH BADGED INDIVIDUALS UPON SUCCESSFUL COMPLETION OF CLASSROOM TRAINING AND BEFORE THE START OF CONSTRUCTION. ALL COSTS ASSOCIATED WITH BADGING SHALL BE AT THE CONTRACTOR'S EXPENSE.
2. MOVEMENT AREA ESCORT EMPLOYEES ARE REQUIRED TO COMPLETE AND PASS AN ADDITIONAL CLASS ON GROUND VEHICLE OPERATIONS.
   - OPERATIONS MANAGER : MAIN LINE: (706) 798-3236 DIRECT: (706) 796-4004

TWO-WAY RADIO COMMUNICATIONS PROCEDURES

1. THE ONSITE PROJECT SUPERINTENDENT AND ANY FLAGMEN ASSIGNED TO THE PROJECT WILL BE REQUIRED TO MONITOR AIRPORT TWO-WAY RADIO COMMUNICATIONS BETWEEN THE AIR TRAFFIC CONTROL TOWER AND PILOTS. THE CONTRACTOR WILL NOT CONTACT THE TOWER OR PILOTS, BUT USE RADIO MONITORING TO STAY INFORMED ABOUT ONGOING AIRPORT OPERATIONS AND AIRCRAFT MOVEMENTS. AUTHORIZED MOVEMENT AREA ROUTES WILL BE DETERMINED BY THE CA TEAM AND AIRPORT OPERATIONS. THE CONTRACTOR SHALL NOT ENTER OR CROSS ANY OPEN RUNWAY OR TAXIWAY WITHOUT AN AUTHORIZED ESCORT FROM THE CA TEAM OR AIRPORT OPERATIONS. NON-COMPLIANCE WILL RESULT IN REMOVAL OF THE VIOLATOR FROM THE JOB SITE AND THE VIOLATOR'S AIRPORT IDENTIFICATION BADGE WILL BE CONFISCATED. IN ADDITION, CONTRACTOR SHALL BE RESPONSIBLE FOR PAYING ALL FINES ASSOCIATED WITH THE VIOLATION. THE FAA FINE IS TYPICALLY $11,000 MINIMUM PER OCCURRENCE. EMERGENCIES AND OPERATING CONDITIONS MAY NECESSITATE SUDDEN CHANGES, BOTH IN AIRPORT OPERATIONS AND IN THE OPERATIONS OF THE CONTRACTOR. AIRCRAFT OPERATIONS SHALL ALWAYS HAVE PRIORITY OVER ANY AND ALL OF THE CONTRACTOR'S OPERATIONS. SHOULD RUNWAYS OR TAXIWAYS BE REQUIRED FOR THE USE OF AIRCRAFT AND SHOULD AIRPORT OPERATIONS, THE CONTROL TOWER, OR THE CA TEAM DEEM THE CONTRACTOR TO BE TOO CLOSE TO ACTIVE RUNWAYS OR TAXIWAYS THE CONTRACTOR SHALL SUSPEND HIS OPERATIONS, REMOVE HIS PERSONNEL, PLANT, EQUIPMENT, AND MATERIALS TO A SAFE DISTANCE AND STAND BY UNTIL THE RUNWAYS AND TAXIWAYS ARE NO LONGER REQUIRED FOR USE BY AIRCRAFT. THERE WILL BE NO COMPENSATION FOR DELAYS OR INEFFICIENCIES DUE TO THESE CHANGES.
2. FOR SCHEDULING CONTACT AIRFIELD OPERATIONS TRAINING AT (706) 796-4004.
3. CONTRACTOR SHALL PROVIDE RADIOS CAPABLE OF MONITORING AIRPORT FREQUENCY 121.90 MHz.

MAINTENANCE OF THE SECURED AREA OF THE AIRPORT

1. SPECIAL ACCESS REQUIREMENTS AND OPERATING LIMITATIONS ARE REQUIRED INSIDE THE SECURITY FENCE. THE CONTRACTOR SHALL DELINEATE WORK LIMITS WITHIN THESE AREAS AS PER THE PHASING PLAN. CONFINE MEN, EQUIPMENT AND MATERIALS OUTSIDE OF THE RUNWAY OBJECT FREE AREA (ROFA) WHEN RUNWAY IS ACTIVE. CONFINE MEN, EQUIPMENT AND MATERIALS OUTSIDE OF THE TAXIWAY TOFA WHEN THE TAXIWAY IS ACTIVE. WORK SITE WILL GENERALLY BE ENCLOSED WITH CONSTRUCTION AREA MARKERS AS SHOWN ON THE SAFETY/PHASING PLAN. SEE THE SPECIFICATIONS FOR SPECIAL CONDITIONS AND FOR OTHER CONDITIONS RELATING TO SAFETY.
2. THE CONTRACTOR SHALL HAVE ACCESS TO THE AIRPORT ONLY AT THOSE LOCATIONS DESIGNATED ON THE PLANS. ALL OTHER ACCESS SHALL BE BY SPECIAL REQUEST AND SUBJECT TO APPROVAL BY AIRPORT OPERATIONS. THE CONTRACTOR WILL PROVIDE SECURITY PERSONNEL TO CONTROL MOVEMENTS THROUGH THE CONTRACTOR'S ACCESS GATE UNLESS THE GATE REMAINS LOCKED. THE CONTRACTOR SHALL REFER TO SPECIAL PROVISIONS SECTION OF THE SPECIFICATIONS FOR THE REQUIREMENTS OF THE SECURITY PERSONNEL.

WILDLIFE MANAGEMENT

1. CONTRACTOR SHALL INSTRUCT EMPLOYEES NOT TO DISCARD FOOD OR OTHER TRASH ON OR AROUND WORK SITES THAT COULD ATTRACT WILDLIFE. CONTRACTOR EMPLOYEES SHALL NOT INTENTIONALLY FEED ANY WILDLIFE WHILE WORKING AT THE AIRPORT.
2. CONTRACTOR SHALL PROPERLY SEAL ALL TRASH CONTAINERS AT WORK SITES SUCH THAT WILDLIFE CANNOT GAIN ACCESS TO CONTAINERS DURING NON-CONSTRUCTION PERIODS.
3. CONTRACTOR SHALL NOTIFY AIRPORT OPERATIONS STAFF IF LARGE NUMBERS OF BIRDS ARE OBSERVED AT WORK SITES. CONTRACTOR SHALL IMMEDIATELY NOTIFY OPERATIONS STAFF IF DEER ARE SIGHTED WITHIN THE AIRFIELD FENCE.

FOREIGN OBJECT DEBRIS (FOD) MANAGEMENT

1. THE CONTRACTOR SHALL HAVE AVAILABLE AT ALL TIMES A VACUUM TYPE MECHANICAL SWEEPER AND WATER TRUCK TO CLEAN ALL TAXIWAY AND APRON PAVEMENT OF DIRT, STONES, AND LOOSE DEBRIS WHERE CONSTRUCTION TRAFFIC CROSSES AT ALL ACTIVE AIRPORT PAVED SURFACES. PAYMENT FOR VACUUM AND WATER TRUCKS OR FOR PAVEMENT CLEANING SHALL BE INCIDENTAL TO PAY ITEM C-105 AIRFIELD SAFETY AND TRAFFIC CONTROL.
2. NO DEBRIS SHALL BE ALLOWED TO REMAIN ON THE ROADWAYS OR AIRPORT PAVED SURFACES. ACTIVE TAXIWAYS AND APRONS SHALL BE KEPT FREE OF DEBRIS AT ALL TIMES. USING POWER VACUUM SWEEPERS TO KEEP ALL ACCESS AND CONSTRUCTION AREAS CLEAR OF SOILS, CLODS, OR OTHER DEBRIS. PAYMENT FOR VACUUM SWEEPING AND CLEANING OF RUNWAY, TAXIWAYS AND/OR APRONS IS INCIDENTAL TO ITEM C-105 AIRFIELD SAFETY AND TRAFFIC CONTROL.
3. THE CONTRACTOR SHALL HAVE AVAILABLE ON-SITE AT ALL TIMES A METHOD OF PERIODIC SPRAYING OF ANY STOCKPILE, HAUL ROADS, OR EXPOSED AREAS TO LIMIT DUST.

NOTIFICATION OF CONSTRUCTION ACTIVITIES

1. PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITY, THE CONTRACTOR SHALL NOTIFY IN WRITING, AT LEAST 5 DAYS IN ADVANCE, AIRPORT STAFF AND THE CA TEAM OF ITS INTENTIONS TO BEGIN CONSTRUCTION, STATING THE PROPOSED TIME, DATE, AND AREA OF WHICH CONSTRUCTION IS TO OCCUR IN ORDER FOR THE APPROPRIATE NOTICE-TO-AIRMEN (NOTAM) TO BE ISSUED. DURING THE PERFORMANCE OF THIS CONTRACT, THE AIRPORT FACILITY SHALL REMAIN IN USE TO THE MAXIMUM EXTENT POSSIBLE. THE CONTRACTOR SHALL NOT ALLOW EMPLOYEES, SUBCONTRACTORS, SUPPLIERS, OR ANY OTHER UNAUTHORIZED PERSONS TO ENTER IN ANY AIRPORT AREA WHICH MAY BE OPEN FOR AIRCRAFT USE, EXCEPT AS NOTED ON THE CONSTRUCTION SAFETY PHASING PLAN.
2. CONTRACTOR SHALL INFORM THE CA TEAM ON A DAILY BASIS OF THE DAILY CONSTRUCTION ACTIVITIES.
3. NOTAMS
   A. IN ORDER FOR THE CONTRACTOR TO OPERATE WITHIN AIRPORT PROPERTY, APPROPRIATE NOTICES TO AIRMEN (NOTAM) MUST BE ISSUED BY THE AIRPORT THROUGH THE FAA FLIGHT SERVICE STATION. THESE NOTICES PROVIDE INFORMATION ON CLOSED, LIMITED, OR HAZARDOUS CONDITIONS TO AIRMEN AND USERS OF THE AIRPORT. A 72 HOUR NOTICE IS REQUIRED FOR ISSUANCE OF THE PROPER NOTAM, ALL CONSTRUCTION OPERATIONS MUST BE CLOSELY COORDINATED WITH THE DESIGNER FOR NOTAM ISSUANCE.
4. EMERGENCY NOTIFICATION PROCEDURES
   A. THE CONTRACTOR SHALL IMMEDIATELY CALL 911 IF AN ACCIDENT OCCURS WITH INJURIES ON AIRPORT PROPERTY ADVISING THE LOCATION IS ON AUGUSTA REGIONAL AIRPORT FOR THEM TO COORDINATE WITH THE AIRPORT AUTHORITY.
   B. THE CONTRACTOR SHALL ALSO IMMEDIATELY NOTIFY AIRPORT OPERATIONS TO COORDINATE ALL EMERGENCY EFFORTS, (706) 799-5372.
   C. WITHIN 24 HOURS, THE CONTRACTOR SHALL PROVIDE A WRITTEN REPORT OF ALL ACCIDENTS TO AIRPORT OPERATIONS AND CA TEAM.
5. COORDINATION WITH ARFF
   A. IF A FIRE OCCURS ON AIRPORT PROPERTY THE CONTRACTOR SHALL NOT ATTEMPT TO FIGHT THE FIRE BEYOND WHAT MAY BE DOUSED BY USE OF A FIRE EXTINGUISHER. THE CONTRACTOR SHALL IMMEDIATELY CALL 911 ADVISING THE LOCATION IS ON AUGUSTA REGIONAL AIRPORT FOR THEM TO COORDINATE WITH THE AIRPORT AUTHORITY.
   B. NON-EMERGENCY COMMUNICATION WITH AIRPORT ARFF WILL BE COORDINATED BY THE CA TEAM.
   C. AN AIRPORT ARFF REPRESENTATIVE WILL BE INVITED TO ATTEND THE PRECONSTRUCTION CONFERENCE AT WHICH TIME THE OVERALL CONSTRUCTION SCHEDULE WILL BE PRESENTED.
   D. A MEETING WILL BE SCHEDULED WITH THE AIRPORT ARFF REPRESENTATIVE PRIOR TO THE START OF EACH MAJOR CONSTRUCTION PHASE WHICH SIGNIFICANTLY IMPACTS/MODIFIES AIRFIELD CLOSURES THROUGHOUT THE DURATION OF THE CONSTRUCTION PROJECT. PARTICIPANTS IN THESE MEETINGS SHALL INCLUDE: AIRPORT STAFF, AIRPORT OPERATIONS, DESIGN TEAM, CONSTRUCTION ADMINISTRATION TEAM, CONTRACTOR, AND SUBCONTRACTORS.
6. NOTIFICATION TO THE FAA
   A. THE CONTRACTOR'S USE OF CRANES, BOOM TRUCKS, CONCRETE PUMP TRUCKS, DRILL RIGS AND OTHER TALL OBJECTS WILL REQUIRE SUBMITTAL AND APPROVAL BY THE AIRPORT AND DESIGNER. IF ON AIRPORT PROPERTY, THE EQUIPMENT SHALL REQUIRE FAA AIRSPACE REVIEW AS SUBMITTAL ON FAA FORM 7460-1 NOTICE OF CONSTRUCTION.

      IF CONTRACTOR REQUIRES EQUIPMENT IN EXCESS OF MAXIMUM ALLOWABLE HEIGHT, THEN SUBMIT A 7460-1 45 DAYS IN ADVANCE OF CRANE ERECTION. ALL CONSTRUCTION INVOLVING CRANES SHALL FURTHER BE COORDINATED AT LEAST 5 DAYS IN ADVANCE, EXCLUDING WEEKENDS, WITH THE AIRPORT OPERATIONS. THIS DOES NOT INCLUDE THE TIME REQUIRED FOR AIRSPACE REVIEW. THE FOLLOWING INFORMATION AND ACTIONS ARE REQUIRED:LOCATION OF THE CRANE.

      - MAXIMUM EXTENDABLE HEIGHT.
      - THE TOP OF EACH CRANE BOOM SHALL BE MARKED BY A 3' X 3' ORANGE AND WHITE CHECKERED FLAG -- EACH BOX BEING 1' SQUARE.
      - EACH CRANE SHALL BE LOWERED AT NIGHT AND DURING PERIODS OF POOR VISIBILITY AS DIRECTED BY AIRPORT OPERATION. IN THE EVENT THE CRANE IS APPROVED TO REMAIN EXTENDED DURING THE HOURS FROM SUNSET TO SUNRISE, THE HIGHEST POINT OF THE CRANE BOOM WILL BE LIT WITH A RED OBSTRUCTION LIGHT IN ACCORDANCE WITH AC 70/7460-1.
      - SET CRANE LIMITERS DURING ALL CONSTRUCTION.

Mead & Hunt

Mead and Hunt, Inc.
5955 Core Road, Suite 515
North Charleston, SC 29406
phone: 843-486-8330
meadhunt.com

AGS
AUGUSTA
REGIONAL AIRPORT

AUGUSTA REGIONAL AIRPORT
RUNWAY 17-35 APPROACH
IMPROVEMENTS CAT II
1501 AVIATION WAY
AUGUSTA , GA 30906-9620

ISSUED
ISSUED FOR BID

NOT FOR CONSTRUCTION

M&H NO.: 0119700-221073.01
DATE: AUGUST 16, 2024
DESIGNED BY: NJH
DRAWN BY: NJH
CHECKED BY: EJS
DO NOT SCALE DRAWINGS

SHEET CONTENTS
CONSTRUCTION SAFETY PHAING PLAN NOTES

SHEET NO.
G-071

INSPECTION REQUIREMENTS

1. CONSTRUCTION EQUIPMENT: THE CONTRACTOR SHALL INSPECT ALL CONSTRUCTION EQUIPMENT ON A DAILY BASIS TO ENSURE THAT THE EQUIPMENT IS IN GOOD WORKING ORDER AND THAT ORANGE AND WHITE CONSTRUCTION FLAGS AND BEACONS ARE PRESENT, CLEAN, AND IN GOOD CONDITION.
2. CONSTRUCTION BARRICADES: THE CONTRACTOR SHALL INSPECT ALL CONSTRUCTION BARRICADES ON A DAILY BASIS TO ENSURE THAT BARRICADES ARE IN GOOD CONDITION AND THAT FLASHING BEACONS ARE IN WORKING ORDER. IF BARRICADES ARE DAMAGED THEY SHALL BE REMOVED FROM THE CONSTRUCTION SITE AND REPLACED IMMEDIATELY. ANY INOPERABLE FLASHING LIGHTS SHALL BE REMOVED AND REPLACED AT THE END OF EVERY DAY.
3. CONSTRUCTION EQUIPMENT FUELING AREA: THE CONTRACTOR SHALL INSPECT THE CONSTRUCTION EQUIPMENT FUELING AREA DAILY. ANY FUEL SPILLS WILL BE REPORTED TO AIRPORT OPERATIONS AS SOON AS SPILL HAS BEEN IDENTIFIED. IF TEMPORARY FUEL TANKS ARE SUPPLIED BY THE CONTRACTOR THEY MUST BE SURROUNDED BY CONCRETE JERSEY BARRIERS. ALSO, TANKS MUST BE MARKED FLAMMABLE ON ALL SIDES AND LABELED WITH THE TYPE OF FUEL THEY CONTAIN. THE CONTRACTOR IS RESPONSIBLE FOR PREPARING AN SPCC FOR THE FUEL TANKS, IF REQUIRED, IN ACCORDANCE WITH FEDERAL REGULATIONS.
4. ACTIVE AIRPORT PAVEMENTS: THE CONTRACTOR SHALL INSPECT ALL ACTIVE AIRPORT PAVEMENTS CONTINUOUSLY DURING CONSTRUCTION ACTIVITIES. MATERIALS TRACKED ONTO ACTIVE AIRPORT PAVEMENTS MUST BE CONTINUOUSLY REMOVED DURING THE PROJECT. PRIOR TO LEAVING THE CONSTRUCTION SITE AT THE END OF EACH DAY, THE CONTRACTOR MUST CONTACT AIRPORT OPERATIONS FOR AN INSPECTION OF THE CLEANLINESS OF AIRPORT PAVEMENTS.
5. A FINAL SAFETY INSPECTION MAY BE REQUIRED PRIOR TO ALLOWING AIR CARRIER SERVICE. COORDINATION WITH THE FAA AIRPORT CERTIFICATION SAFETY INSPECTOR WILL DETERMINE IF A FINAL INSPECTION WILL BE NECESSARY.

UNDERGROUND UTILITIES

1. THE CONTRACTOR SHALL IDENTIFY ANY KNOWN UNDERGROUND INTERFERENCES OR DISCREPANCIES ON ALL AVAILABLE DRAWINGS THAT CAN BE PROVIDED BY CONTACTING THE DESIGNER AND THE CA TEAM AT:

   MEAD & HUNT, INC.
   5955 CORE ROAD, SUITE 515
   NORTH CHARLESTON, SC 29046
   PHONE: (803) 520-2986

2. PRIOR TO COMMENCING ANY EXCAVATION (ON OR OFF AOA), DRILLING (ON OR OFF THE AOA), DRIVING FENCE POSTS (ALONG THE AOA), TRENCHING (ON OR OFF THE AOA), SAW CUTTING (AOA ONLY), THE CONTRACTOR SHALL PERFORM GPR ACROSS THE ENTIRE SITE TO BE DISTURBED AND SHALL REVIEW DRAWINGS WITH AIRPORT TO INSURE THAT ALL UNDERGROUND OBSTRUCTIONS AND UTILITIES ARE IDENTIFIED. IN ADDITION THE CONTRACTOR SHALL CONTACT GEORGIA 811, AND FAA AND COORDINATE WITH THE AIRPORT PROJECT SUPERVISOR TO ASSIGN THE VERIFICATION OF UTILITIES BY AIRPORT MAINTENANCE. GEORGIA 811 FAA, MAINTENANCE, AND THE CONTRACTOR SHALL ATTEMPT TO LOCATE UTILITIES. THE CONTRACTOR WILL BE COMPLETELY RESPONSIBLE FOR ALL DAMAGE TO UNDERGROUND UTILITIES. THE CONTRACTOR SHALL COORDINATE REQUEST FOR SWEEPS OF UTILITIES BY COMPLETING THE CONTRACTOR REQUEST FOR SWEEP FORM AT LEAST 72 HOURS PRIOR TO ANY EXCAVATIONS. AIRPORT AUTHORITY WILL NOTIFY THE CONTRACTOR A MINIMUM WITH 24 HOURS AFTER RECEIVING NOTICE. AT THAT TIME THE AIRPORT AUTHORITY WILL INDICATE IF IT CAN COMPLETE THE SWEEP. IF IT CAN'T, THE CONTRACTOR WILL BE RESPONSIBLE TO COMPLETE THE SWEEP AND/OR USE GEORGIA 811.
3. EACH UTILITY SHALL BE SWEPT IN THE FOLLOWING MANNER: FLAGS CAN BE USED BUT SHALL BE COLOR COORDINATED AS SUGGESTED BELOW. IN ADDITION THE “ACRONYM” FOR THAT UTILITY SHALL BE WRITTEN ON ONE SIDE OF THE FLAG WITH A PERMANENT MARKER.
4. STAKES CAN BE USED. THE TOP TWO INCHES OF THE STAKE SHALL BE PAINTED IN COLOR AS SUGGESTED BELOW. IN ADDITION THE “ACRONYM” FOR THAT UTILITY SHALL BE WRITTEN ON ONE SIDE OF THE STAKE WITH A PERMANENT MARKER. STAKES SHOULD NOT BE USED IN RSA OR TSA IF THEY CAN BE AVOIDED.
5. PAINTING IS ONLY AUTHORIZED ON ASPHALT, CONCRETE, AND METAL SURFACES. MARKINGS SHALL BE COLOR COORDINATED AS SUGGESTED BELOW. THE ACRONYM FOR THE UTILITY SHALL BE USED FOR EACH UTILITY. A LINE THAT SHOWS THE DIRECTION OF THE UTILITY SHALL EMANATE FROM THE ACRONYM IN EACH DIRECTION.
6. ALL MARKING OF UTILITIES SHALL BE EVERY 50 FEET.

	ACRONYM	COLOR
ELECTRICAL LOOPS (NON AOA)	USE “ELEC”	RED
AIRFIELD ELECTRICAL	USE “ELEC”	RED
NATURAL GAS	USE “NAT GAS”	YELLOW
SANITARY	USE “SANIT”	BROWN
STORM	USE “STORM”	BROWN
WATER (POTABLE AND FIRE)	USE “WATER”	BLUE
FAA COPPER	USE “FAA COP”	RED
FAA FIBER	USE “FAA FIB”	ORANGE
FIBER	USE “FIBER”	ORANGE
TELEPHONE	USE “TELE”	ORANGE

7. IF UNDERGROUND UTILITY IS ABANDONED, CONTRACTOR SHALL STILL STAKE, MARK, OR FLAG BUT WRITE DOWN “ABAND” BEFORE THE ABBREVIATED PREFIX INDICATED ABOVE.
8. THE INDIVIDUAL MARKING, STAKING, OR FLAGGING SHALL MARK THE UTILITIES IN A WAY THAT COINCIDES WITH THE DRAWINGS THAT ARE REFERENCED ON THE REQUEST FOR SWEEP FORM.
9. IF A UTILITY OR ANY UNDERGROUND OBSTRUCTION IS FOUND IT SHALL BE REPORTED IMMEDIATELY TO THE DESIGNER OR THE AIRPORT PROJECT SUPERVISOR.
10. CONTRACTOR EMPLOYEES IN AN EXCAVATION SHALL BE PROTECTED FROM CAVE-INS BY AN ADEQUATE PROTECTIVE SYSTEM UNLESS THE EXCAVATION IS:
    A. MADE ENTIRELY OF STABLE ROCK, OR
    B. LESS THAN 5 FEET DEEP AND DETERMINATION HAS BEEN MADE THAT THERE IS NO POTENTIAL FOR A CAVE-IN.
11. EXCAVATION SHALL BE PROTECTED USING PROPER BARRICADING MATERIALS WHICH SHALL BE INSTALLED A MINIMUM OF 6 FEET BACK FROM EXCAVATION (UNLESS IN CONFLICT WITH AIRFIELD REQUIREMENTS). BARRICADE MATERIAL CAN BE WOOD, STEEL CABLES, OR CHAIN SUPPORTED AT INTERVALS SO THAT THE BARRICADE DOES NOT SAG OR DROOP BELOW THE REQUIRED HEIGHT. CAUTION TAPE IS NOT AN APPROVED BARRICADE MATERIAL. GUARDRAIL/JERSEY BARRIERS MAY BE REQUIRED AND SHALL PROVIDE A TOP RAIL, MID RAIL, AND TOE BOARD AT PROPER ELEVATIONS AND BE ABLE TO WITHSTAND A MINIMUM 200 POUND FORCE WITHOUT COLLAPSING. THE CONTRACTOR IS RESPONSIBLE FOR PREPARING ANY TRENCHING PLANS IN ACCORDANCE WITH OSHA REGULATIONS.
12. THE CONTRACTOR IS RESPONSIBLE FOR DOCUMENTING UTILITY INFORMATION FOR USE DURING CONSTRUCTION AND PREPARATION OF AS-BUILTS.

PENALTIES

1. ENTERING THE MOVEMENT AREA (I.E. RUNWAYS, TAXIWAYS, ETC.) WITHOUT AUTHORIZATION FROM THE FAA AIR TRAFFIC CONTROL TOWER AND THE AIRPORT OPERATIONS WILL RESULT IN THE SUSPENSION OF AN ASSIGNED ID BADGE AND/OR RAMP DRIVING PRIVILEGES AND COULD SUBJECT THE CONTRACTOR'S KEY PERSONNEL TO PERMANENT REVOCATION OF THEIR AIRFIELD DRIVING PRIVILEGES. FURTHERMORE, RUNWAY INCURSIONS MAY RESULT IN FINES AND/OR TERMINATION OF THIS CONTRACT. CONTRACTOR IS SOLELY RESPONSIBLE FOR THESE FINES FOR THEIR FORCES AS WELL AS ANY SUBCONTRACTORS, SUPPLIERS, OR ANY OTHERS EMPLOYED BY THE CONTRACTOR ON THIS PROJECT.

RUNWAY AND TAXIWAY VISUAL AIDS

1. TAXIWAY VISUAL AIDS, INCLUDING ANY TEMPORARY TAXIWAY PAVEMENT MARKING WILL BE AS SHOWN ON THE PLANS AND PROVIDED BY THE CONTRACTOR. MARKINGS SHALL BE IN COMPLIANCE WITH AC 150/5340-1, STANDARDS FOR AIRPORT MARKINGS. LIGHTING SHALL CONFORM TO AC150/5340-30, DESIGN AND INSTALLATION DETAILS FOR AIRPORT VISUAL AIDS, AC 150/5345-50, SPECIFICATIONS FOR PORTABLE RUNWAY TAXIWAY LIGHTS, AND AC 150/5345-53 AIRPORT LIGHTING CERTIFICATION PROGRAM. SIGNS SHALL CONFORM TO AC 150/5345-44, SPECIFICATION FOR RUNWAY AND TAXIWAY SIGNS, AC 150/5340-18, STANDARDS FOR AIRPORT SIGN SYSTEMS, AND AC 150/5345-53, AIRPORT LIGHTING CERTIFICATION PROGRAM.
2. IF AIRCRAFT OPERATION AREAS MUST BE CLOSED, THE CONTRACTOR SHALL FURNISH AND PLACE PORTABLE BARRICADES ACROSS TAXIWAYS TO KEEP VEHICLES FROM ENTERING ACTIVE OPERATION AREAS AND TO KEEP AIRCRAFT FROM TAXIING INTO CONSTRUCTION AREAS. EXCAVATION AND OPEN TRENCHES MAY BE PERMITTED UP TO THE EDGE OF AN APRON PROVIDED THE DROP OFF IS APPROPRIATELY MARKED AND LIGHTED. BARRICADES SHALL BE MARKED WITH DIAGONAL, ALTERNATING ORANGE AND WHITE STRIPES AND SUPPLEMENTED WITH EITHER FLASHING LIGHTS DURING HOURS OF RESTRICTED VISIBILITY OR DARKNESS. LIGHTS SHALL BE BARRICADE TYPE TYPICAL FOR CONSTRUCTION ZONES, AND RED IN COLOR. ALL LIGHTS MUST BE CHECKED NIGHTLY TO ENSURE THAT THEY ARE OPERATING. ANY LIGHTS NOT FUNCTIONING SHALL BE IMMEDIATELY REPLACED.
3. BARRICADES LOCATED WITHIN AIRCRAFT OPERATION AREAS SHALL BE LOW LEVEL AVIATION BARRICADES SPECIFICALLY MANUFACTURED AND DESIGNED FOR SUCH PURPOSE. THEY SHALL BE ALTERNATING ORANGE AND WHITE IN COLOR 10" HIGH AND 96" LONG, MADE OF UV-RESISTANT POLYETHYLENE AS MANUFACTURED BY MULTI-BARRIER (MODEL AR 10X96 HDPE) OR APPROVED EQUAL.

MARKING AND SIGNS FOR ACCESS ROUTES

1. MARKINGS AND SIGNS USED ON ACCESS ROUTES SHALL CONFORM TO AC 150/5340-18 AND, TO THE EXTENT PRACTICABLE, WITH THE MOST CURRENT VERSION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).

HAZARD MARKING AND LIGHTING

HAZARD MARKING

1. HAZARD-MARKING BARRICADES, TRAFFIC CONES, FLASHERS, ETC. SHOULD BE USED: TO IDENTIFY AND DEFINE THE LIMITS OF CONSTRUCTION MAKING THEM VISIBLE TO AIRCRAFT, PERSONNEL, OR VEHICLES; TO IDENTIFY HAZARDS SUCH AS OPEN MANHOLES, SMALL AREAS UNDER REPAIR, STOCKPILED MATERIAL, WASTE AREAS, ETC.; TO PREVENT AIRCRAFT FROM TAXIING ONTO A CLOSED TAXIWAY; AND TO IDENTIFY FAA, AIRPORT, AND NATIONAL WEATHER SERVICE FACILITIES, CABLES, POWER LINES, INSTRUMENT LANDING SYSTEM (ILS) CRITICAL AREAS, AND OTHER SENSITIVE AREAS TO PREVENT DAMAGE, INTERFERENCE, AND FACILITY SHUTDOWN. HAZARDOUS AREAS, IN WHICH NO PART OF AN AIRCRAFT MAY ENTER, SHOULD BE INDICATED BY THE USE OF BARRICADES MARKED WITH DIAGONAL, ALTERNATING ORANGE AND WHITE STRIPES. THE BARRICADES SHOULD BE SUPPLEMENTED WITH ALTERNATING ORANGE AND WHITE FLAGS, AND INSTALLED SO THAT THEY ARE ALWAYS IN THE EXTENDED POSITION AND PROPERLY ORIENTED. DURING REDUCED VISIBILITY OR NIGHT HOURS, THE BARRICADES SHOULD BE SUPPLEMENTED WITH FLASHING RED LIGHTS. THE INTENSITY OF THE LIGHTS AND SPACING FOR BARRICADES, FLAGS, AND LIGHTS SHOULD BE ADEQUATE TO DELINEATE THE HAZARDOUS AREA WITHOUT AMBIGUITY. THE CONTRACTOR SHALL HAVE A DESIGNATED PERSON ON CALL 24-HOURS A DAY FOR EMERGENCY MAINTENANCE OF AIRPORT HAZARD LIGHTING AND BARRICADES.

MARKING AND LIGHTING

1. LOW PROFILE LIGHTS, RETROREFLECTIVE TAXIWAY EDGE MARKERS, AND LOW LEVEL BARRICADES SHALL BE PROVIDED AND ERECTED BY THE CONTRACTOR AS SHOWN ON THE PLANS OR AS DIRECTED BY THE CA TEAM. ALL CONSTRUCTION AREAS, INCLUDING CLOSED TAXIWAYS, SHOULD BE CLEARLY AND VISIBLY SEPARATED FROM ACTIVE AIR OPERATION AREAS. HAZARD AREAS, FACILITIES, CABLES, AND POWER LINES SHOULD ALSO BE CLEARLY IDENTIFIED BY THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE CONDITION AND VISIBILITY OF ALL MARKERS IDENTIFYING ABOVE-MENTIONED AREAS AND THAT MARKING AND LIGHTING AIDS REMAIN IN PLACE. ALTERNATING ORANGE AND WHITE FLAGLINES, TRAFFIC CONES, OMNIDIRECTIONAL YELLOW FLASHERS, AND/OR SIGNS SHOULD BE USED AS NECESSARY TO CLEARLY SEPARATE ALL CONSTRUCTION/MAINTENANCE AREAS FROM OTHER PARTS OF THE AOA. ALL BARRICADES, TEMPORARY MARKERS, FLAGLINES SUPPORTS, AND OTHER OBJECTS PLACED AND LEFT IN SAFETY AREAS ON ANY OPEN TAXIWAY, OR TAXILANE SHOULD BE AS LOW AS POSSIBLE TO THE GROUND; OF LOW MASS; EASILY COLLAPSIBLE UPON CONTACT WITH AN AIRCRAFT OR ANY OF ITS COMPONENTS; WEIGHTED DOWN OR STURDILY ATTACHED TO THE SURFACE TO PREVENT DISPLACEMENT FROM PROPWASH, JET BLAST, WING VORTEX, OR OTHER SURFACE WIND CURRENTS; AND IF AFFIXED TO THE SURFACE, FRANGIBLE AT GROUND LEVEL.

EQUIPMENT

LOW PROFILE BARRICADES

1. THE CONTRACTOR SHALL PROVIDE LOW PROFILE BARRICADES AS DESCRIBED IN THE PLANS ALONG RUNWAY OR TAXIWAY EDGES WHEREVER OPEN EXCAVATIONS OR IRREGULAR GRADES ARE LEFT WITHIN THE SAFETY AREA OF AN ACTIVE RUNWAY OR TAXIWAY OR WHERE TEMPORARY PAVEMENT CLOSURES OR AIRCRAFT LIMITATIONS ARE REQUIRED. BARRICADES ALONG ACTIVE APRON OR TAXIWAY PAVEMENT SHALL BE PLACED APPROXIMATELY 10 FEET FROM THE EDGE OF THE FULL STRENGTH PAVEMENT, WHERE POSSIBLE, OR AS SHOWN ON THE OPERATIONAL AND PHASING PLANS OR AS DETERMINED BY THE DESIGNER AND AIRPORT OPERATIONS TO DELINEATE THE CONTRACTORS WORK AREAS. GAP BETWEEN BARRICADES SHALL BE NO MORE THAN 5 FEET END TO END. NO GAPS ARE ALLOWED BETWEEN BARRICADES LOCATED ADJACENT TO RUNWAY SAFETY AREAS.
2. THE CONTRACTOR SHALL MAINTAIN THE LIGHTS AND BARRICADES IN AN OPERABLE CONDITION FOR THE DURATION OF THE PROJECT.
3. ALL BARRICADES SHALL BE CHECKED VISUALLY FOR SIGNS OF WEAR AND TEAR ON A WEEKLY BASIS AND SHALL BE REPAINTED AND/OR REPLACED WHEN DEEMED APPROPRIATE BY THE CA TEAM. THE CONDITION OF LIGHTING UNITS SHALL BE CHECKED DAILY. ALL LIGHT FIXTURES SHALL BE VERIFIED OPERATING BY THE CONTRACTOR ON A DAILY BASIS BEFORE THE CONTRACTOR CEASES OPERATION FOR THE DAY. THE AREAS AROUND ALL BARRICADES SHALL BE CLEANED AT LEAST ONCE EACH WEEK AND THE CONTRACTOR SHALL SWEEP UP ACCUMULATED DEBRIS AND REMOVE IT FROM THE SITE. ALL ACTIVITIES CONDUCTED ADJACENT TO ACTIVE RUNWAYS OR TAXIWAYS SHALL BE COORDINATED WITH THE CA TEAM.
4. BARRICADES SHALL BE AS SHOWN IN DETAILS ON G-082. ALL INCIDENTAL CONNECTORS, SPACERS, SPLICE PLATES, ETC., SHALL BE PAINTED WHITE.
5. ALTERNATE FORMS OF BARRICADES MAY BE PROPOSED BY THE CONTRACTOR WHICH MEET THESE FUNCTIONAL REQUIREMENTS. APPROVALS OF ANY SUCH SUBSTITUTION (IF GRANTED) SHALL BE BY THE AIRPORT OPERATIONS AND THE CA TEAM.
6. THE FINAL LOCATION FOR THE BARRICADES SHALL BE ESTABLISHED IN THE FIELD WITH CONCURRENCE FROM THE CA TEAM AND AIRPORT OPERATIONS.
7. THE CONTRACTOR SHALL HAVE REPLACEMENT BARRICADES, LIGHTS AND BATTERIES ON SITE AND SHALL REPLACE BARRICADES, LIGHTS AND/OR BATTERIES WITHIN ONE HOUR OF NOTIFICATION BY THE CA TEAM OR AIRPORT PERSONNEL. CONTRACTOR SHALL PROVIDE THE NAME AND TELEPHONE NUMBER FOR AN ON-CALL REPRESENTATIVE 24 HOURS PER DAY, SEVEN DAYS PER WEEK TO REPLACE BARRICADES, BATTERIES AND INOPERATIVE LIGHTS.
8. RED STEADY BURN LIGHTS SHALL BE PLACED AT THE ENDS AND AT CORNERS OF EACH LINE OF BARRICADES; ALL OTHER LIGHTS ON BARRICADES SHALL BE RED FLASHING..
9. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING PROPER POSITIONING OF ALL BARRICADES.
10. SANDBAGS, WATER AND/OR ANCHORS MAY BE REQUIRED TO HOLD THE BARRICADES IN PLACE WHERE EXPOSED TO JET BLAST.
11. ALL COSTS ASSOCIATED WITH FURNISHING, PLACEMENT, MAINTENANCE AND SUBSEQUENT RELOCATION OF THE LOW PROFILE BARRICADES ARE INCIDENTAL TO ITEM C-105 AIRFIELD SAFETY AND TRAFFIC CONTROL.

DELINEATING WORK AREAS

1. SAFETY BARRICADES SHALL BE FURNISHED AND INSTALLED AT THE LOCATIONS AS INDICATED ON THE CONTRACT DOCUMENTS AND/OR DIRECTED BY THE CA TEAM. GENERALLY, SAFETY FENCE WILL BE USED FOR DELINEATING CONTRACTOR STAGING/STORAGE AREAS, PHASE LIMITS AND EXCAVATIONS, TRENCHES, DROPOFFS, ETC. THAT MAY POSE A HAZARD TO ONSITE SAFETY. IN NO INSTANCE SHALL THE USE OF SAFETY FENCE BE ALLOWED WITHIN AN ACTIVE TAXIWAY OBJECT FREE AREA OR WITHIN AN ACTIVE RUNWAYS SAFETY AREA.
2. SAFETY BARRICADES SHALL BE AS SPECIFIED IN SECTION 70-08 OF THE GENERAL PROVISIONS.

TAXIWAY ENDING MARKER

1. TAXIWAY ENDING MARKER SHALL BE FURNISHED AND INSTALLED AT THE LOCATIONS AS INDICATED ON THE CONTRACT DOCUMENTS AND/OR DIRECTED BY THE CA TEAM. TAXIWAY ENDING MARKER SHALL MEET THE REQUIREMENTS OF FAA ADVISORY CIRCULAR 150/5345-44J, TYPE L-858C, OR CURRENT EDITION AS OF BID DATE.
2. TAXIWAY ENDING MARKER SHALL BE PLACED AT THE ENTRANCE OF EACH TAXIWAY THAT IS CLOSED TO AIRCRAFT OPERATIONS.

PROTECTION

1. AT NO TIME SHALL PERSONNEL, VEHICLES OR EQUIPMENT BE LOCATED OR ENTER ANY OF THE FOLLOWING AREAS UNLESS AUTHORIZED BY AIRPORT OPERATION OR CA TEAM.
   A. WITHIN 250 FEET PARALLEL TO AN ACTIVE RUNWAY CENTERLINE (TO BE INDICATED ON THE CSPP AND/OR SPCD).
   B. NO STOCKPILES WILL BE PLACED WITHIN 400 FEET PARALLEL TO AN ACTIVE RUNWAY CENTERLINE NOR WILL EQUIPMENT BE LEFT UNATTENDED.
   C. WITHIN 1,000 FEET OF THE END OF ACTIVE RUNWAYS (EACH END TO BE INDICATED IN THE CSPP AND/OR SPCD)
   D. WITHIN 93 FEET PARALLEL TO AN ACTIVE TAXIWAY CENTERLINE OPERATING WITH AIRCRAFT WITH OUT PROPER APPROVAL.
   E. ACTIVE NAVAID CRITICAL AREAS.
   F. ON THE MOVEMENT AREA AND/OR ASSOCIATED SAFETY AREAS DURING TIMES OF INCLEMENT WEATHER OR UNUSUAL EVENTS AS DETERMINED BY THE AIRPORT OPERATION. DURING SUCH TIMES ALL WORK IS TO BE SUSPENDED. ALL EQUIPMENT SHALL BE REMOVED TO APPROVED STAGING AREAS.
2. TRENCHES AND/OR EXCAVATIONS SHALL NOT BE ALLOWED IN THE FOLLOWING AREAS WITHOUT CLOSURE OR RESTRICTION OF THE ADJACENT MOVEMENT AREA:
   A. WITHIN 250 FEET PARALLEL TO A RUNWAY CENTERLINE.
   B. WITHIN 93 FEET PARALLEL TO A TAXIWAY CENTERLINE OPERATING WITH AIRCRAFT
   C. WITHIN 1,000 FEET OF THE END OF A RUNWAY.
   D. ACTIVE NAVAID CRITICAL AREAS.
3. EQUIPMENT WITHIN 400 FEET OF AN ACTIVE RUNWAY SHALL BE REMOVED WHEN NOT IN USE.
4. SOIL EROSION MUST BE CONTROLLED TO MAINTAIN RSA/TSA STANDARDS. ANY HOLES OR MOUNDS, BUMPS, OR OTHER FEATURES WITH A GRADE CHANGE GREATER THAN 3 INCHES WITHIN THE RSA OR TSA SHALL BE REPAIRED PRIOR TO RUNWAY OR TAXIWAY OPENING.

OTHER LIMITATIONS ON CONSTRUCTION

1. PROHIBITIONS
   A. OPEN FLAME WELDING OR TORCH CUTTING OPERATIONS ARE PROHIBITED UNLESS ADEQUATE FIRE AND SAFETY PRECAUTIONS ARE PROVIDED AND HAVE BEEN APPROVED FOR USE BY THE CA TEAM AND A BURN PERMIT HAS BEEN OBTAINED FROM THE ARFF. FLARE POTS SHALL NOT BE USED NEAR AIRCRAFT TURNING AREAS. ELECTRICAL BLASTING CAPS SHALL NOT BE USED WITHIN 1,000 FT OF THE AIRPORT PROPERTY.

PROJECT SURVEY AND LAYOUT

1. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR PROVIDING THEIR OWN PROJECT SURVEY AND CONSTRUCTION LAYOUT IN ACCORDANCE WITH SPECIFICATION GP-50-07.

CONTRACTOR RESPONSIBILITIES

1. THE CONTRACTOR SHALL SUBMIT A SAFETY PLAN COMPLIANCE DOCUMENT (SPCD) TO THE AIRPORT OPERATOR DESCRIBING HOW IT WILL COMPLY WITH THE REQUIREMENTS OF THE CSPP. THE SPCD MUST INCLUDE A CERTIFICATION STATEMENT BY THE CONTRACTOR THAT INDICATES IT UNDERSTANDS THE OPERATIONAL SAFETY REQUIREMENTS OF THE CSPP AND THEY WILL NOT DEVIATE FROM THE APPROVED CSPP AND SPCD UNLESS WRITTEN APPROVAL IS GRANTED BY THE AIRPORT. ANY CONSTRUCTION PRACTICE PROPOSED BY THE CONTRACTOR THAT DOES NOT CONFORM TO THE CSPP AND SPCD MAY IMPACT THE AIRPORT'S OPERATIONAL SAFETY AND WILL REQUIRE A REVISION TO THE CSPP AND SPCD AND RE-COORDINATION WITH THE AIRPORT OPERATOR AND THE FAA IN ADVANCE.
2. THE CONTRACTOR SHALL HAVE AVAILABLE AT ALL TIMES COPIES OF THE CSPP AND SPCD FOR REFERENCE BY THE AIRPORT OPERATOR AND ITS REPRESENTATIVES, AND BY SUBCONTRACTORS AND CONTRACTOR EMPLOYEES.
3. THE CONTRACTOR SHALL ENSURE THAT CONSTRUCTION PERSONNEL ARE FAMILIAR WITH SAFETY PROCEDURES AND REGULATIONS ON THE THE AIRPORT. PROVIDE A POINT OF CONTACT WHO WILL COORDINATE AN IMMEDIATE RESPONSE TO CORRECT ANY CONSTRUCTION-RELATED ACTIVITY THAT MAY ADVERSELY AFFECT THE OPERATIONAL SAFETY OF THE AIRPORT.
4. THE CONTRACTOR SHALL IDENTIFY IN THE SPCD THE CONTRACTOR'S ON-SITE EMPLOYEES RESPONSIBLE FOR MONITORING COMPLIANCE WITH THE CSPP AND SPCD DURING CONSTRUCTION.
5. THE CONTRACTOR SHALL CONDUCT INSPECTIONS TO ENSURE CONSTRUCTION PERSONNEL COMPLY WITH THE CSPP AND SPCD AND THAT THERE ARE NO ALTERED CONSTRUCTION ACTIVITIES THAT COULD CREATE POTENTIAL SAFETY HAZARDS.
6. THE CONTRACTOR SHALL SUBMIT APPLICABLE 7460-1 FORMS.

THE CONTRACTOR'S SAFETY PLAN COMPLIANCE DOCUMENT (SPCD) SHALL INCLUDE:

A STATEMENT BY THE CONSTRUCTION CONTRACTOR THAT HE/SHE HAS READ AND WILL ABIDE BY THE CSPP. IN ADDITION, THE SPCD MUST INCLUDE ALL SUPPLEMENTAL INFORMATION THAT COULD NOT BE INCLUDED IN THE CSPP PRIOR TO THE CONTRACT AWARD. THE CONTRACTOR STATEMENT SHOULD INCLUDE THE NAME OF THE CONTRACTOR, THE TITLE OF THE PROJECT CSPP, THE APPROVAL DATE OF THE CSPP, AND A REFERENCE TO ANY SUPPLEMENTAL INFORMATION (THAT IS, "I, NAME OF CONTRACTOR, HAVE READ THE TITLE OF PROJECT CSPP, APPROVED ON DATE, AND WILL ABIDE BY IT AS WRITTEN AND WITH THE FOLLOWING ADDITIONS AS NOTE:"). THE SUPPLEMENTAL INFORMATION IN THE SPCD SHOULD BE WRITTEN TO MATCH THE FORMAT OF THE CSPP INDICATING EACH SUBJECT BY SUPPLEMENTAL INFORMATION IS NECESSARY FOR ANY SPECIFIC SUBJECT, THE STATEMENT, "NO SUPPLEMENTAL INFORMATION," SHOULD BE WRITTEN AFTER THE CORRESPONDING SUBJECT TITLE. THE SPCD SHOULD NOT DUPLICATE INFORMATION IN THE CSPP.

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AGS AUGUSTA REGIONAL AIRPORT

AUGUSTA REGIONAL AIRPORT
RUNWAY 17-35 APPROACH
IMPROVEMENTS CAT II
1501 AVIATION WAY
AUGUSTA , GA 30906-9620

ISSUED
ISSUED FOR BID

NOT FOR CONSTRUCTION

M&H NO.: 0119700-221073.01
DATE: AUGUST 16, 2024
DESIGNED BY: NJH
DRAWN BY: NJH
CHECKED BY: EJS
DO NOT SCALE DRAWINGS

SHEET CONTENTS
CONSTRUCTION SAFETY PHAING PLAN NOTES

SHEET NO.
G-072

LEGEND

RSA	RUNWAY SAFETY AREA
ROFA	RUNWAY OBJECT FREE AREA
TSA	TAXIWAY SAFETY AREA
TOFA	TAXIWAY OBJECT FREE AREA
	32" WATER FILLED BARRICADE
	ORANGE PAINTED LATHE
	CONTRACTOR STAGING AREA
	NON-CURRENT WORKING AREA
	RADIO PERSONNEL/FLAGGER
	TEMPORARY HAUL ROUTE
	LOW-PROFILE BARRICADES
	RUNWAY CLOSURE CROSS

WORK SCHEDULE PHASING

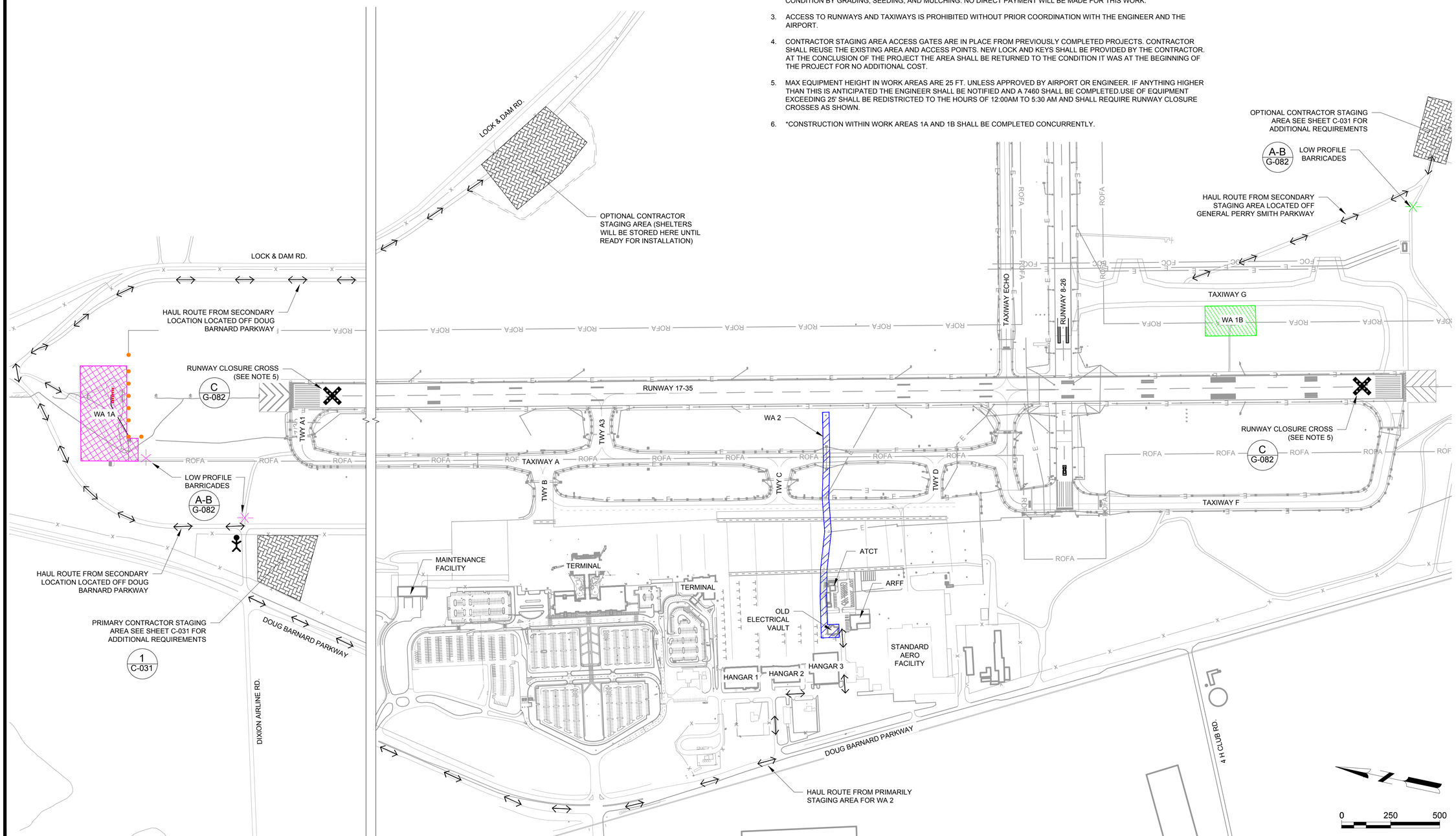
MOBILIZATION PHASE: 60 CALENDAR DAYS

WA 1A	WORK AREA 1A (34 CALENDAR DAYS)*
WA 1B	WORK AREA 1B (34 CALENDAR DAYS)*
WA 2	WORK AREA 2 (1 CALENDAR DAYS)

RUNWAY 17-35		RUNWAY 8-26	
AIRPLANE DESIGN GROUP (ADG)	ADG D-III	AIRPLANE DESIGN GROUP (ADG)	ADG B-II
CRITICAL AIRCRAFT	BOEING 717-200	CRITICAL AIRCRAFT	CESSNA CITATION C56X
RUNWAY 17 END COORDINATES	LAT 33° 22' 56.6025" N LONG 81° 58' 15.018" W	RUNWAY 8 END COORDINATES	LAT 33° 21' 57.7319" N LONG 81° 58' 09.2491" W
RUNWAY 35 END COORDINATES	LAT 33° 21' 39.1144" N LONG 81° 57' 55.7463" W	RUNWAY 26 END COORDINATES	LAT 33° 22' 9.867" N LONG 81° 56' 59.981" W

NOTES:

1. CONTRACTOR SHALL FOLLOW PHASING PLAN PROVIDED IN CONSTRUCTION CSPP. CONTRACTOR SHALL ADD PROJECT SPECIFIC DETAILS SUCH AS DATES, ANTICIPATED NUMBER OF CALENDAR DAYS USED, AND ANY OTHER ADDITIONS/MODIFICATION FOR APPROVAL BY THE AIRPORT PRIOR TO MOBILIZATION.
2. CONTRACTOR SHALL CONSTRUCT AND MAINTAIN TEMPORARY HAUL ROUTES NEEDED FOR EXECUTION OF THE WORK. UPON COMPLETION, CONTRACTOR SHALL REMOVE TEMPORARY HAUL ROUTES AND RESTORE GROUND TO ORIGINAL CONDITION BY GRADING, SEEDING, AND MULCHING. NO DIRECT PAYMENT WILL BE MADE FOR THIS WORK.
3. ACCESS TO RUNWAYS AND TAXIWAYS IS PROHIBITED WITHOUT PRIOR COORDINATION WITH THE ENGINEER AND THE AIRPORT.
4. CONTRACTOR STAGING AREA ACCESS GATES ARE IN PLACE FROM PREVIOUSLY COMPLETED PROJECTS. CONTRACTOR SHALL REUSE THE EXISTING AREA AND ACCESS POINTS. NEW LOCK AND KEYS SHALL BE PROVIDED BY THE CONTRACTOR. AT THE CONCLUSION OF THE PROJECT THE AREA SHALL BE RETURNED TO THE CONDITION IT WAS AT THE BEGINNING OF THE PROJECT FOR NO ADDITIONAL COST.
5. MAX EQUIPMENT HEIGHT IN WORK AREAS ARE 25 FT. UNLESS APPROVED BY AIRPORT OR ENGINEER. IF ANYTHING HIGHER THAN THIS IS ANTICIPATED THE ENGINEER SHALL BE NOTIFIED AND A 7460 SHALL BE COMPLETED.USE OF EQUIPMENT EXCEEDING 25' SHALL BE REDISTRICTED TO THE HOURS OF 12:00AM TO 5:30 AM AND SHALL REQUIRE RUNWAY CLOSURE CROSSES AS SHOWN.
6. *CONSTRUCTION WITHIN WORK AREAS 1A AND 1B SHALL BE COMPLETED CONCURRENTLY.



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AUGUSTA REGIONAL AIRPORT

AUGUSTA REGIONAL AIRPORT RUNWAY 17-35 APPROACH IMPROVEMENTS CAT II

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SHEET CONTENTS
CONSTRUCTION SAFETY PHASING PLAN

SHEET NO.
G-081

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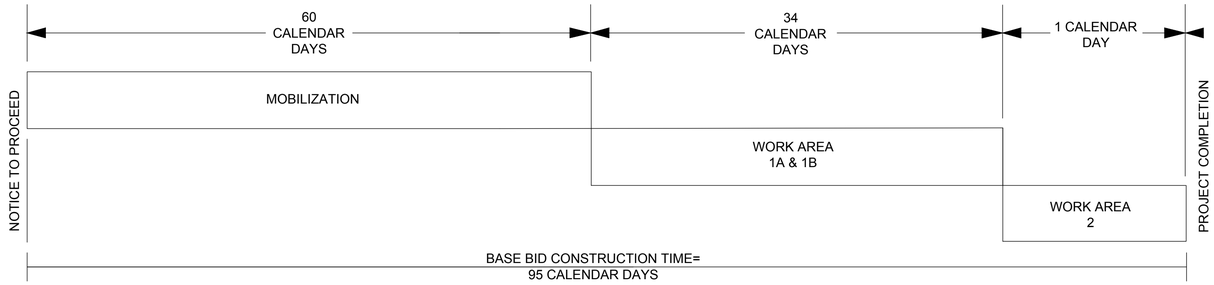


CONSTRUCTION PHASING DIAGRAM
N.T.S.

CONTRACTOR NOTES:

1. THE CONTRACTOR SHALL DESIGNATE A PERSON ON CALL 24 HOURS A DAY, 7 DAYS A WEEK, FOR EMERGENCY MAINTENANCE OF AIRPORT HAZARD LIGHTING AND BARRICADES. THIS CONTACT INFORMATION MUST BE ON FILE WITH THE AIRPORT OPERATOR.
2. ALL HAZARD LIGHTING, BARRICADES AND EQUIPMENT SHALL BE CHECKED A MINIMUM OF ONCE PER DAY TO ENSURE PROPER OPERATION, PREFERABLY AT DUSK.

MOBILIZATION PHASE (60 CALENDAR DAYS)

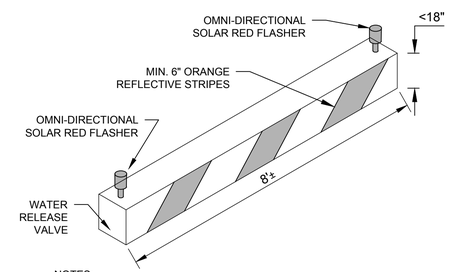
THE MOBILIZATION PHASE SHALL BEGIN IMMEDIATELY AFTER THE MOBILIZATION NOTICE TO PROCEED IS ISSUED BY THE AIRPORT. DURING THIS PHASE OF THE PROJECT, NO WORK SHALL BE CONDUCTED THAT RESTRICTS AIRPORT OPERATIONS UNLESS AUTHORIZED BY THE AIRPORT. NOTICE TO PROCEED WITH SUBSEQUENT SCHEDULES MAY BE GIVEN DURING MOBILIZATION AT THE AIRPORTS DISCRETION.

MOBILIZATION WORK SHALL INCLUDE, BUT IS NOT LIMITED TO THE FOLLOWING:

1. SUBMITTALS.
   A. PROCESSING OF REQUIRED MATERIALS/EQUIPMENT SUBMITTALS AND THE CONTRACTOR'S PROPOSED WORK SCHEDULE, INCLUDING REQUESTED PAVEMENT CLOSURE DATES.
   B. ALL PRE-QUALIFICATION TESTING, REVIEW, AND APPROVALS.
   C. MATERIAL DELIVERY SCHEDULE, INCLUDING MATERIAL DELIVERY DATE TO JOB SITE OR TO THE CONTRACTOR'S YARD.
2. DURING MOBILIZATION, THE CONTRACTOR SHALL BE ALLOWED TO PERFORM LAYOUT, STAKING, AND OTHER PREP WORK AS APPROVED BY THE AIRPORT.
3. IT IS THE AIRPORT'S INTENT THAT ALL PRELIMINARY WORK BE COMPLETED DURING THE MOBILIZATION PHASE TO ENSURE CONSTRUCTION CAN BE PURSUED DILIGENTLY AND WITHOUT UNNECESSARY DELAY. (THE AIRPORT RESERVES THE RIGHT TO WAIVE CERTAIN ELEMENTS OF MOBILIZATION AND ISSUE A NOTICE TO PROCEED WITH CONSTRUCTION AT ITS DISCRETION OR UPON THE CONTRACTOR'S REQUEST.) SCHEDULE DATE SHALL NOT BE CHANGED, ONCE ESTABLISHED, UNLESS COORDINATION WITH THE CA TEAM AND FINAL APPROVAL OF THE AIRPORT.

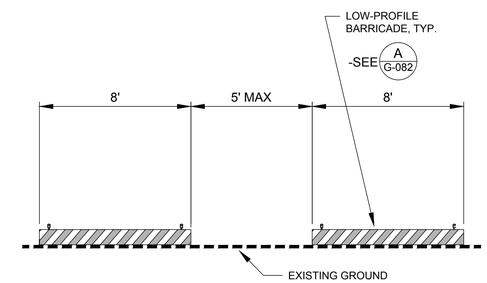
AUGUSTA RICHMOND COUNTY GENERAL NOTES:

1. ALL DRAINAGE EASEMENTS AND DISTURBED AREAS MUST BE GRASSED AND/OR RIP-RAPPED AS REQUIRED TO CONTROL EROSION.
2. ALL CONSTRUCTION WITHIN AUGUSTA RIGHTS-OF WAY SHALL CONFORM TO AUGUSTA, GEORGIA STANDARDS AND SPECIFICATIONS.
3. ALL SILT BARRIERS MUST BE PLACED IMMEDIATELY FOLLOWING CLEARING. NO GRADING SHALL BE DONE UNTIL SILT BARRIER INSTALLATION IS COMPLETED.
4. CONTRACTOR SHALL CONTACT THE INSPECTION DIVISION OF THE PUBLIC WORKS DEPARTMENT AT LEAST 48 HOURS PRIOR TO STARTING WORK ON THE PROJECT. THE PHONE NUMBER FOR THIS OFFICE IS (706) 821-1706.
5. THE COST OF INSPECTION BY THE CITY OF AUGUSTA-RICHMOND COUNTY'S DEPARTMENT OF PUBLIC WORKS AND ENGINEERING, BEFORE OR AFTER REGULAR WORKING HOURS, ON SATURDAYS, SUNDAYS, OR LEGAL HOLIDAYS, SHALL BE PAID FOR BY THE INDIVIDUAL REQUESTING THE INSPECTION AT A RATE OF 1 ½ TIMES THE REGULAR SALARY PER HOUR OF THE INSPECTOR PLUS 7.65% FROM THE EMPLOYER'S FICA/MEDICARE MATCH. APPROVAL FOR THE INSPECTION OUTSIDE OF NORMAL WORKING HOURS SHALL BE OBTAINED FROM THE CITY ENGINEER 48-HOURS IN ADVANCE. PRIOR TO THE COMMENCEMENT OF WORK REQUIRING INSPECTION OUTSIDE OF NORMAL WORKING HOURS, THE INDIVIDUAL REQUESTING THE INSPECTION SHALL SIGN A FORM WHICH IS FURNISHED BY THE DEPARTMENT OF PUBLIC WORK AND ENGINEERING AGREEING TO PAY THE OVERTIME. THE INDIVIDUAL REQUESTING THE INSPECTION SHALL SIGN A FORM WHICH IS FURNISHED BY THE DEPARTMENT OF PUBLIC WORK AND ENGINEERING AGREEING TO PAY THE OVERTIME. THE INDIVIDUAL REQUESTING THE INSPECTION WILL BE BILLED BY THE DEPARTMENT OF PUBLIC WORKS AND ENGINEERING FOR PAYMENT.
6. A PRECONSTRUCTION CONFERENCE SHALL BE HELD WITH THE CITY ENGINEER OR HIS DESIGNATED REPRESENTATIVE PRIOR TO BEGINNING CONSTRUCTION. THIS MEETING SHALL BE SCHEDULED WITH THE DEPARTMENT OF PUBLIC WORKS AT THE TIME THE NOTIFICATION OF WORK COMMENCEMENT IS GIVEN.



NOTES:
1. MAINTENANCE OF LOW-PROFILE BARRICADES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR FOR THE DURATION OF THE PROJECT.
2. GAPS IN BARRICADES SHALL NOT EXCEED 5-FEET.

LOW-PROFILE
BARRICADE DETAIL (A / G-082)
SCALE: NTS



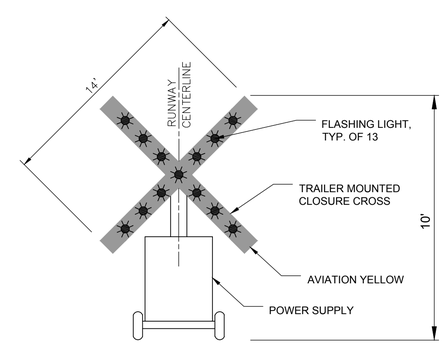
LOW-PROFILE
BARRICADE LAYOUT DETAIL (B / G-082)
SCALE: NTS

GENERAL NOTES:

1. NIGHT WORK IS GENERALLY DEFINED AS WORK DONE FROM 12:00 AM TO 5:30 AM. IN WORK AREAS SUBJECTED TO COMMERCIAL FLIGHT RESTRICTIONS, NIGHT WORK MUST BE COMPLETED THIRTY (30) MINUTES PRIOR TO THE FIRST DEPARTING COMMERCIAL FLIGHT.
2. HOURS OF AIR TRAFFIC CONTROL TOWER OPERATIONS ARE FROM 6:45AM TO 11:00PM LOCAL TIME.
3. SEE SPECIAL PROVISIONS FOR DETAILS ON CONSTRUCTION LIMITATIONS. CLOSURE OF EXISTING AIRFIELD PAVEMENTS WILL BE ALLOWED ONLY ONCE THE FOLLOWING CONDITIONS ARE MET:
   A. 48-HOUR ADVANCE NOTIFICATION, VERIFYING THAT A PREVIOUSLY APPROVED CLOSURE PERIOD WILL BE AS SCHEDULED.
   B. A CLOSURE SCHEDULE FOR EACH AREA OF CONSTRUCTION HAS BEEN SUBMITTED TO THE ENGINEER FOR REVIEW AND HAS BEEN APPROVED. THESE SCHEDULES SHALL DETAIL TEMPORARY ACCESS ROUTES (IF APPLICABLE), SAFETY MEASURES, AND TIME LIMITS OF CLOSURE FOR EACH AREA. FAILURE TO OPEN AIRFIELD PAVEMENTS WITHIN THE APPROVED TIME LIMITS MAY RESULT IN LIQUIDATED DAMAGES.
4. THE AUGUSTA AIRPORT EXPERIENCES HIGH TRAFFIC VOLUMES DURING THE MASTERS WEEK THAT OCCURS THE FIRST OR SECOND WEEK OF APRIL EVERY YEAR. THE BIDDER IS ADVISED THAT A TEMPORARY SUSPENSION OF WORK WILL OCCUR DURING THIS PERIOD OF TIME. (APRIL 4TH THROUGH APRIL 15TH, 2025)
6. ANY ADDITIONAL LOW-PROFILE BARRICADES (INCLUDING SUPPLEMENTARY LIGHTS) NEEDED FOR PROPER EXECUTION OF THE WORK SHALL BE PROVIDED BY THE CONTRACTOR.
7. CONTRACTOR SHALL MAINTAIN ALL LIGHTS IN WORKING ORDER FOR THE DURATION OF THE PROJECT.

REQUIREMENTS FOR AIRPORT SECURITY, SAFETY AND CONTRACTOR OPERATIONS:

1. ALL CONSTRUCTION SHALL BE IN COMPLIANCE WITH THE SPECIFICATION GENERAL PROVISIONS, SAFETY, AIRPORT SECURITY, AND OPERATING REGULATIONS AND THE CONSTRUCTION SAFETY AND PHASING PLAN (CSPP).
2. RUNWAY 17-35 AND RUNWAY 8-26, ASSOCIATED TAXIWAYS, AND THEIR SAFETY AREAS SHALL REMAIN OPERATIONAL AT ALL TIMES UNLESS APPROVED BY THE AIRPORT.
3. CONTRACTOR SHALL NOT ENTER ANY ACTIVE SAFETY AREAS OR OBJECT FREE AREAS WITHOUT AUTHORIZATION FROM THE AIRPORT.
4. A RUNWAY SAFETY AREA (RSA) AND OBSTACLE FREE ZONE (OFZ) EXISTS AROUND EACH RUNWAY WHICH LIMITS CONSTRUCTION ACTIVITIES ADJACENT TO OPERATIONAL RUNWAYS. CONSTRUCTION PERSONNEL AND EQUIPMENT SHALL NOT CROSS RSAs OR OFZs WITHOUT AIRPORT AUTHORIZATION.
5. THE RUNWAY 17-35 SAFETY AREA (RSA) IS 250-FEET EACH SIDE OF THE RUNWAY CENTERLINE AND 1000 FEET BEYOND THE RUNWAY ENDS. THE RUNWAY 8-26 SAFETY AREA (RSA) IS 75-FEET EACH SIDE OF THE RUNWAY CENTERLINE AND 300-FEET BEYOND THE RUNWAY ENDS. IT SHALL REMAIN CLEAR OF PERSONNEL, MATERIAL AND EQUIPMENT AT ALL TIMES.
6. THE RUNWAY 17-35 OBSTACLE FREE ZONE (OFZ) IS 400-FEET EACH SIDE OF CENTERLINE AND 1000-FEET BEYOND THE RUNWAY ENDS. THE RUNWAY 8-26 OBSTACLE FREE ZONE (OFZ) IS 250-FEET EACH SIDE OF CENTERLINE AND 300-FEET BEYOND THE RUNWAY ENDS. IT SHALL REMAIN CLEAR OF PERSONNEL, MATERIALS, AND EQUIPMENT AT ALL TIMES.
7. IN TRANSITIONS FROM PAVED TO UNPAVED AREAS, A TEMPORARY 3 INCH MAXIMUM VERTICAL DROP IS ALLOWED.
8. DAILY SAFETY INSPECTIONS SHALL BE PERFORMED AS REQUIRED IN THE CSPP.



NOTES:
1. TWO (2) LIGHTED, GENERATOR POWERED RUNWAY CLOSURE CROSSES SHALL BE SUPPLIED BY THE CONTRACTOR. THE RUNWAY CLOSURE CROSSES SHALL BE INSTALLED AND REMOVED BY THE CONTRACTOR DURING CONSTRUCTION PER THE SCHEDULE APPROVED BY THE ENGINEER. THE EQUIPMENT SHALL BE FUELED, OILED AND MAINTAINED BY THE CONTRACTOR THROUGHOUT THE PROJECT.

PORTABLE LIGHTED
RUNWAY CLOSURE CROSS (C / G-082)
SCALE: NTS

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AGS AUGUSTA REGIONAL AIRPORT

AUGUSTA REGIONAL AIRPORT
RUNWAY 17-35 APPROACH
IMPROVEMENTS CAT II
1501 AVIATION WAY
AUGUSTA, GA 30906-9620

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ISSUED FOR BID

NOT FOR CONSTRUCTION

M&H NO.: 0119700-221073.01
DATE: AUGUST 16, 2024
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DRAWN BY: NJH
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SHEET CONTENTS
CONSTRUCTION
SAFETY PHASING
PLAN - WA MATRIX

SHEET NO.
G-082

X:\0119700\221073.01\TECH\CAD\DRAWINGS\SHEETS\G-081 CONSTRUCTION SAFETY PHASING PLAN.DWG
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LEGEND

RSA	RUNWAY SAFETY AREA
ROFA	RUNWAY OBJECT FREE AREA
TSA	TAXIWAY SAFETY AREA
TOFA	TAXIWAY OBJECT FREE AREA
	32" WATER FILLED BARRICADE
	ORANGE PAINTED LATHE
	CONTRACTOR STAGING AREA
	NON-CURRENT WORKING AREA
	RADIO PERSONNEL/FLAGGER
	TEMPORARY HAUL ROUTE
	LOW-PROFILE BARRICADES
	RUNWAY CLOSURE CROSS

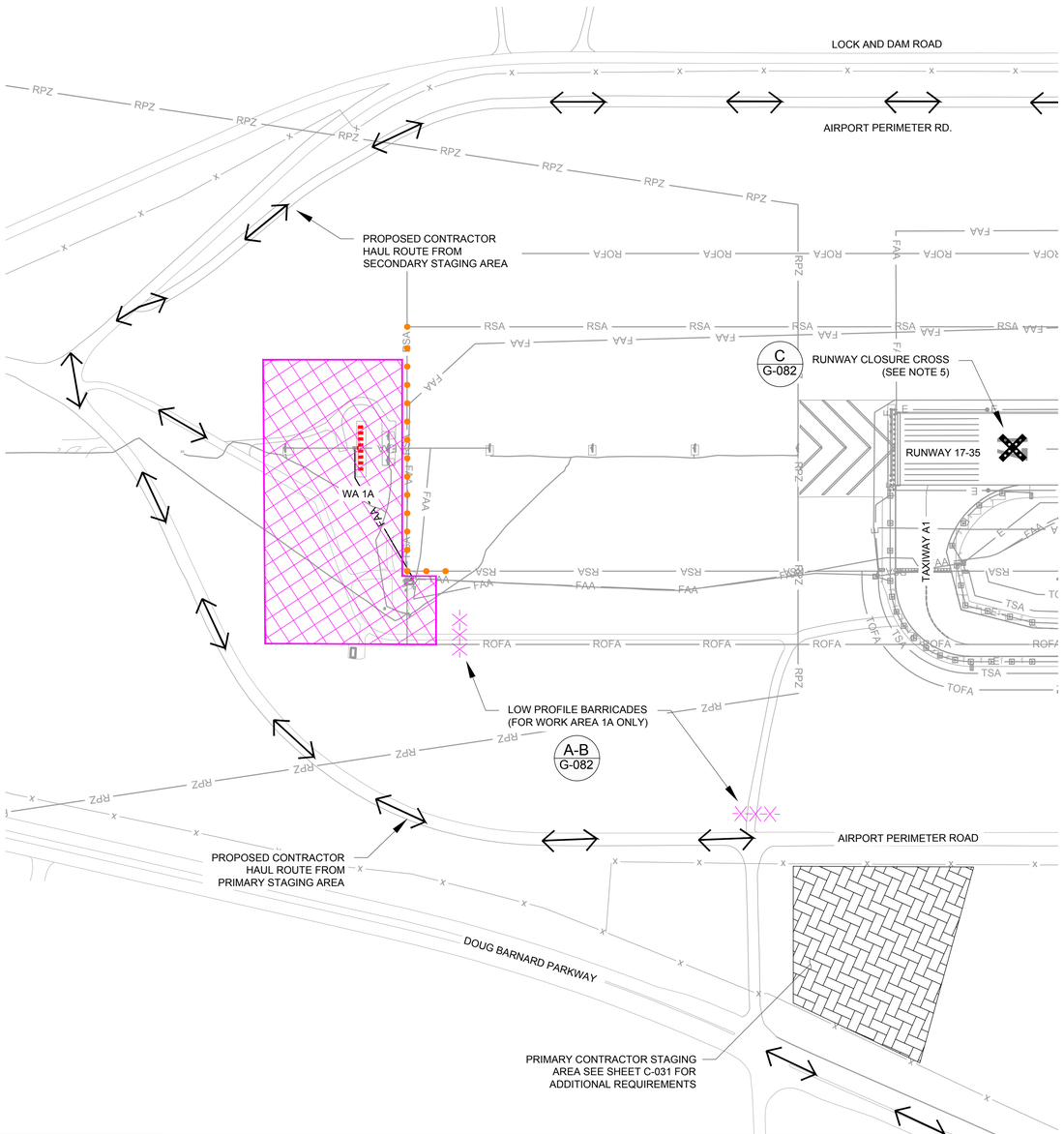
WORK SCHEDULE PHASING

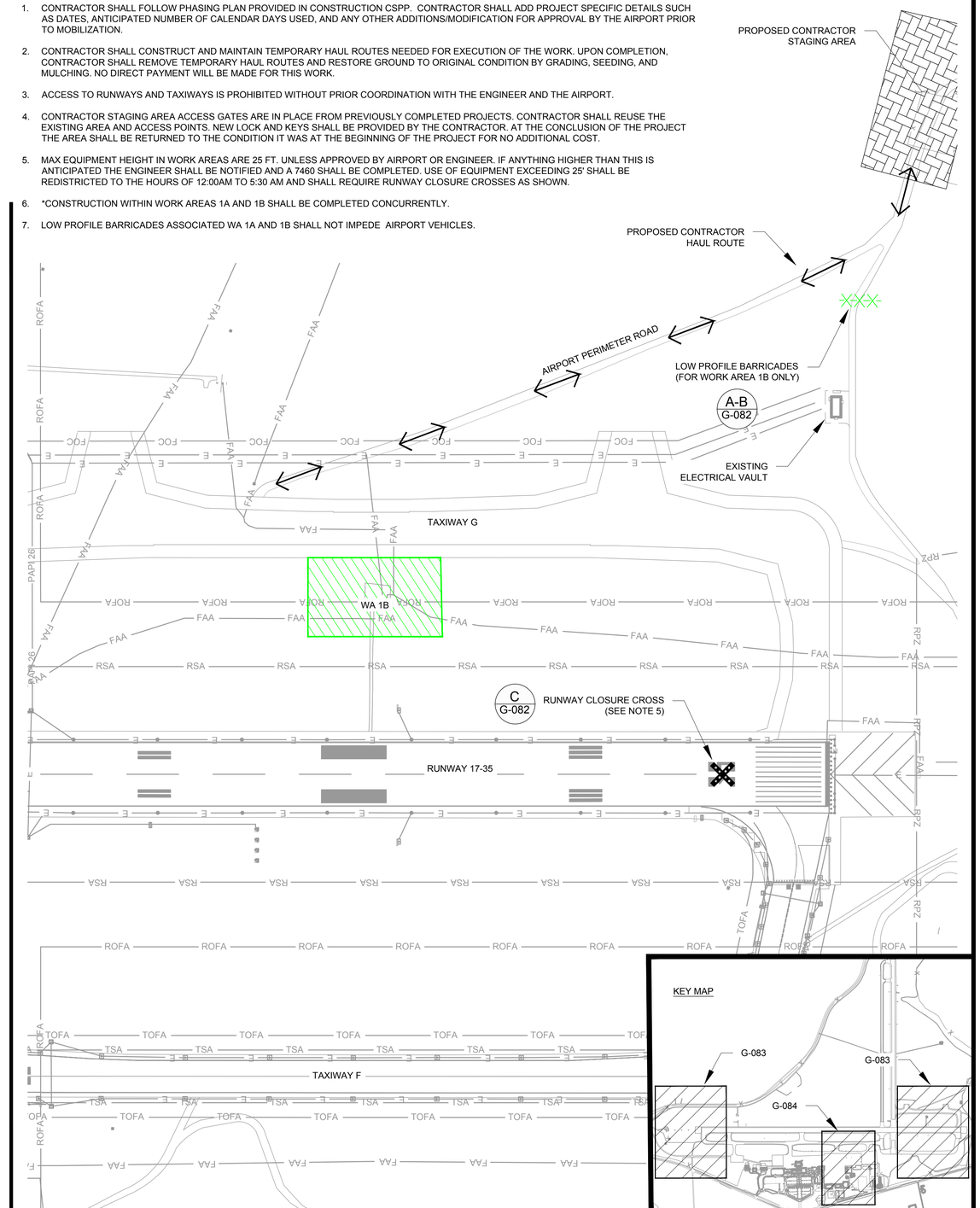
MOBILIZATION PHASE: 60 CALENDAR DAYS

WA 1A	WORK AREA 1A (34 CALENDAR DAYS)*
WA 1B	WORK AREA 1B (34 CALENDAR DAYS)*

NOTES:

1. CONTRACTOR SHALL FOLLOW PHASING PLAN PROVIDED IN CONSTRUCTION CSPP. CONTRACTOR SHALL ADD PROJECT SPECIFIC DETAILS SUCH AS DATES, ANTICIPATED NUMBER OF CALENDAR DAYS USED, AND ANY OTHER ADDITIONS/MODIFICATION FOR APPROVAL BY THE AIRPORT PRIOR TO MOBILIZATION.
2. CONTRACTOR SHALL CONSTRUCT AND MAINTAIN TEMPORARY HAUL ROUTES NEEDED FOR EXECUTION OF THE WORK. UPON COMPLETION, CONTRACTOR SHALL REMOVE TEMPORARY HAUL ROUTES AND RESTORE GROUND TO ORIGINAL CONDITION BY GRADING, SEEDING, AND MULCHING. NO DIRECT PAYMENT WILL BE MADE FOR THIS WORK.
3. ACCESS TO RUNWAYS AND TAXIWAYS IS PROHIBITED WITHOUT PRIOR COORDINATION WITH THE ENGINEER AND THE AIRPORT.
4. CONTRACTOR STAGING AREA ACCESS GATES ARE IN PLACE FROM PREVIOUSLY COMPLETED PROJECTS. CONTRACTOR SHALL REUSE THE EXISTING AREA AND ACCESS POINTS. NEW LOCK AND KEYS SHALL BE PROVIDED BY THE CONTRACTOR. AT THE CONCLUSION OF THE PROJECT THE AREA SHALL BE RETURNED TO THE CONDITION IT WAS AT THE BEGINNING OF THE PROJECT FOR NO ADDITIONAL COST.
5. MAX EQUIPMENT HEIGHT IN WORK AREAS ARE 25 FT. UNLESS APPROVED BY AIRPORT OR ENGINEER. IF ANYTHING HIGHER THAN THIS IS ANTICIPATED THE ENGINEER SHALL BE NOTIFIED AND A 7460 SHALL BE COMPLETED. USE OF EQUIPMENT EXCEEDING 25' SHALL BE REDISTRICTED TO THE HOURS OF 12:00AM TO 5:30 AM AND SHALL REQUIRE RUNWAY CLOSURE CROSSES AS SHOWN.
6. *CONSTRUCTION WITHIN WORK AREAS 1A AND 1B SHALL BE COMPLETED CONCURRENTLY.
7. LOW PROFILE BARRICADES ASSOCIATED WA 1A AND 1B SHALL NOT IMPEDE AIRPORT VEHICLES.





WORK AREA	GENERAL WORK SCOPE	AFFECTED AOA	WORK HOURS	CALENDAR DAYS	SAFETY AND SECURITY
WA 1A	DISCONNECTION, REMOVAL, AND SALVAGE OF EXISTING LOC ANTENNA ARRAY AND ASSOCIATED EQUIPMENT/MATERIALS AS SHOWN ON SHEET E-101 AND INSTALLATION OF NEW LOC ANTENNA ARRAY AND ASSOCIATED MATERIALS/EQUIPMENT ON EXISTING FOUNDATION AS SHOWN ON SHEET E-201	RUNWAY 35 LOCALIZER, RUNWAY 17-35	11:00 PM - 5:30 AM (PREFERRED)	34	1. THE CONTRACTOR SHALL INSTALL LOW-PROFILE BARRICADES AS SHOWN. 2. THE CONTRACTOR SHALL NOTIFY THE AIRPORT AT LEAST 5 DAYS IN ADVANCE OF WORK FOR NOTAM OF CONSTRUCTION ACTIVITY TO BE POSTED. 3. THE CONTRACTOR WILL BE RESPONSIBLE TO PROVIDE ESCORTING OF ALL SUBCONTRACTORS FOR WORK DURING THIS PHASE. ESCORTS MUST PASS THE AIRFIELD DRIVERS TRAINING CLASS AND MUST HAVE AN ACTIVE AIRPORT BADGE WITH ESCORTING PRIVILEGES. 4. CALENDAR DAY COUNT SHOWN SHALL BE TOTAL DAY COUNT TOTAL FOR WORK AREAS 1A & 1B.
WA 1B	DISCONNECTION, REMOVAL, AND SALVAGE OF EXISTING GLIDESLOPE ANTENNA AND ASSOCIATED EQUIPMENT/MATERIALS AS SHOWN ON SHEET E-102 AND INSTALLATION OF NEW GLIDESLOPE ANTENNA AND ASSOCIATED MATERIALS/EQUIPMENT ON EXISTING FOUNDATION AS SHOWN ON SHEET E-202	RUNWAY 35 GLIDESLOPE, RUNWAY 17-35	*WORK MAY BE PERFORMED OUTSIDE THESE HOURS PENDING APPROVAL OF THE AIRLINES, ATCT, & AGS*		

0 150 300

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AUGUSTA REGIONAL AIRPORT

AUGUSTA REGIONAL AIRPORT RUNWAY 17-35 APPROACH IMPROVEMENTS CAT II

1501 AVIATION WAY
AUGUSTA, GA 30906-9620

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SHEET CONTENTS
CONSTRUCTION SAFETY PHASING PLAN - WA 1A & 1B

SHEET NO.
G-083

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LEGEND

RSA	RUNWAY SAFETY AREA
ROFA	RUNWAY OBJECT FREE AREA
TSA	TAXIWAY SAFETY AREA
TOFA	TAXIWAY OBJECT FREE AREA
	32" WATER FILLED BARRICADE
	ORANGE PAINTED LATHE
	CONTRACTOR STAGING AREA
	NON-CURRENT WORKING AREA
	RADIO PERSONNEL/FLAGGER
	TEMPORARY HAUL ROUTE
	LOW-PROFILE BARRICADES

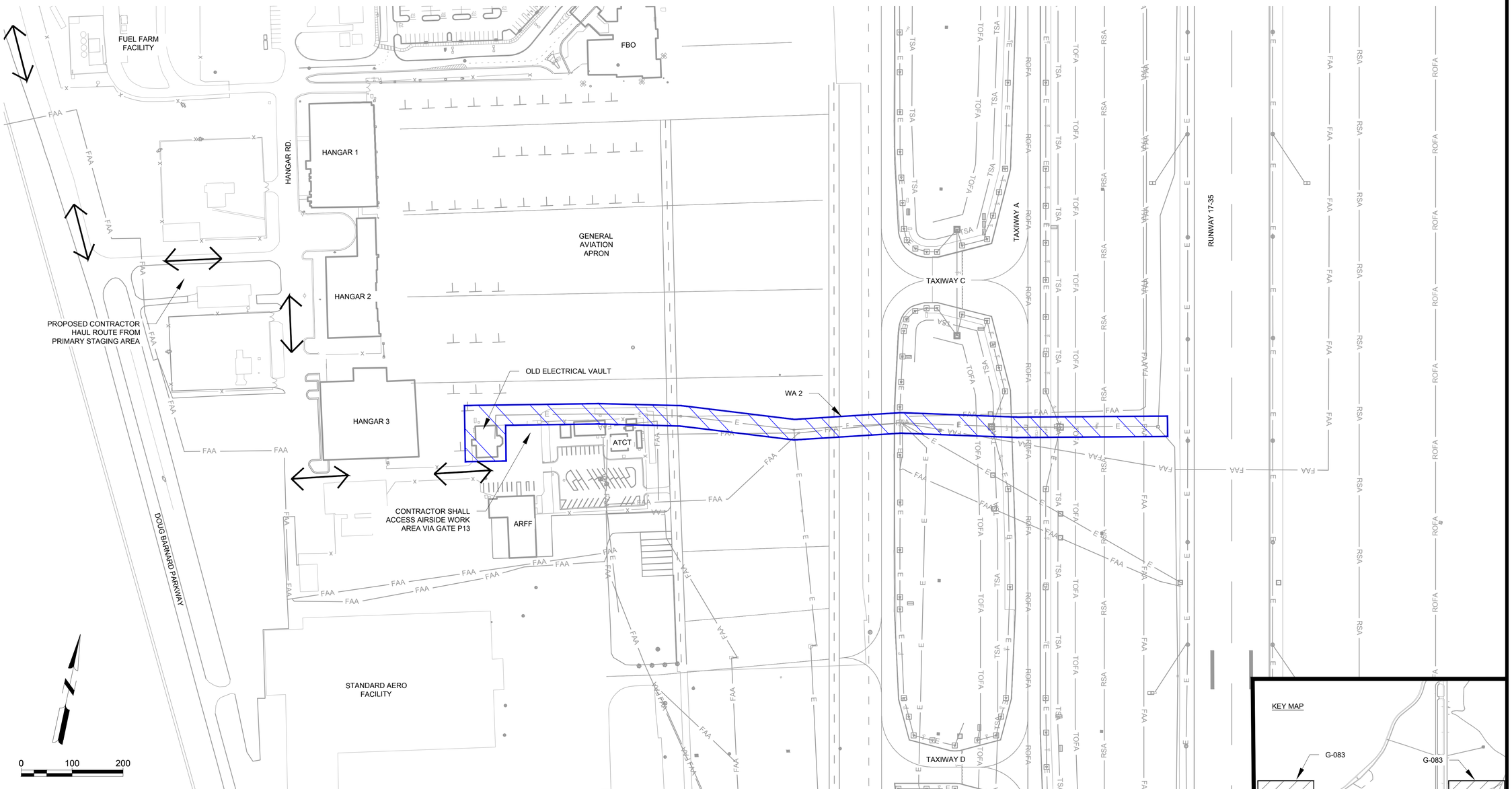
WORK SCHEDULE PHASING

MOBILIZATION PHASE: 60 CALENDAR DAYS

WA 2	WORK AREA 2 (1 CALENDAR DAYS)

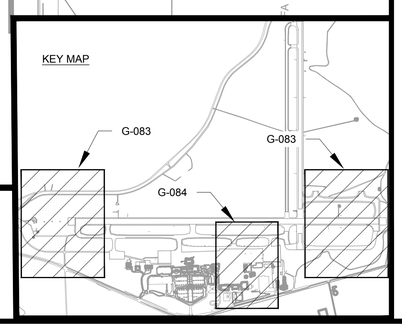
NOTES:

1. CONTRACT SHALL FOLLOW PHASING PLAN PROVIDED IN CONSTRUCTION CSPP. CONTRACTOR SHALL ADD PROJECT SPECIFIC DETAILS SUCH AS DATES, ANTICIPATED NUMBER OF CALENDAR DAYS USED, AND ANY OTHER ADDITIONS/MODIFICATION FOR APPROVAL BY THE AIRPORT PRIOR TO MOBILIZATION.
2. CONTRACTOR SHALL CONSTRUCT AND MAINTAIN TEMPORARY HAUL ROUTES NEEDED FOR EXECUTION OF THE WORK. UPON COMPLETION, CONTRACTOR SHALL REMOVE TEMPORARY HAUL ROUTES AND RESTORE GROUND TO ORIGINAL CONDITION BY GRADING, SEEDING, AND MULCHING. NO DIRECT PAYMENT WILL BE MADE FOR THIS WORK.
3. ACCESS TO RUNWAYS AND TAXIWAYS IS PROHIBITED WITHOUT PRIOR COORDINATION WITH THE ENGINEER AND THE AIRPORT.
4. CONTRACTOR STAGING AREA ACCESS GATES ARE IN PLACE FROM PREVIOUSLY COMPLETED PROJECTS. CONTRACTOR SHALL REUSE THE EXISTING AREA AND ACCESS POINTS. NEW LOCK AND KEYS SHALL BE PROVIDED BY THE CONTRACTOR. AT THE CONCLUSION OF THE PROJECT THE AREA SHALL BE RETURNED TO THE CONDITION IT WAS AT THE BEGINNING OF THE PROJECT FOR NO ADDITIONAL COST.
5. MAX EQUIPMENT HEIGHT IN WORK AREAS ARE 25 FT. UNLESS APPROVED BY AIRPORT OR ENGINEER. IF ANYTHING HIGHER THAN THIS IS ANTICIPATED THE ENGINEER SHALL BE NOTIFIED AND A 7460 SHALL BE COMPLETED.
6. ALL WORK WITHIN THE SAFETY AREAS SHALL BE DONE ON A PULL BACK BASIS. CONTRACTOR SHALL MAINTAIN RADIO COMMUNICATION WITH AIR TRAFFIC CONTROL TOWER AT ALL TIMES.



WORK AREA	GENERAL WORK SCOPE	AFFECTED AOA	WORK HOURS	CALENDAR DAYS	SAFETY AND SECURITY
WA 2	SPLICING OF EXISTING RUNWAY 17-35 SERIES CIRCUIT AND REMOVAL OF EXISTING SERIES CIRCUIT LOOP CONDUCTORS. SEE SHEET E-103 FOR FURTHER DETAILS.	RUNWAY 17-35 RSA, TAXIWAY A, GENERAL AVIATION APRON	WORK SHALL BE COMPLETED WHEN RUNWAY CIRCUIT MAY REMAIN OFF (NIGHTWORK)	1	1. THE CONTRACTOR SHALL INSTALL LOW-PROFILE BARRICADES AS SHOWN. 2. THE CONTRACTOR SHALL NOTIFY THE AIRPORT AT LEAST 5 DAYS IN ADVANCE OF WORK FOR NOTAM OF CONSTRUCTION ACTIVITY TO BE POSTED. 3. THE CONTRACTOR WILL BE RESPONSIBLE TO PROVIDE ESCORTING OF ALL SUBCONTRACTORS FOR WORK DURING THIS PHASE. ESCORTS MUST PASS THE AIRFIELD DRIVERS TRAINING CLASS AND MUST HAVE AN ACTIVE AIRPORT BADGE WITH ESCORTING PRIVILEGES.

KEY MAP



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AGS AUGUSTA REGIONAL AIRPORT

AUGUSTA REGIONAL AIRPORT RUNWAY 17-35 APPROACH IMPROVEMENTS CAT II

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SHEET CONTENTS
CONSTRUCTION SAFETY PHASING PLAN - WA 2

SHEET NO.
G-084

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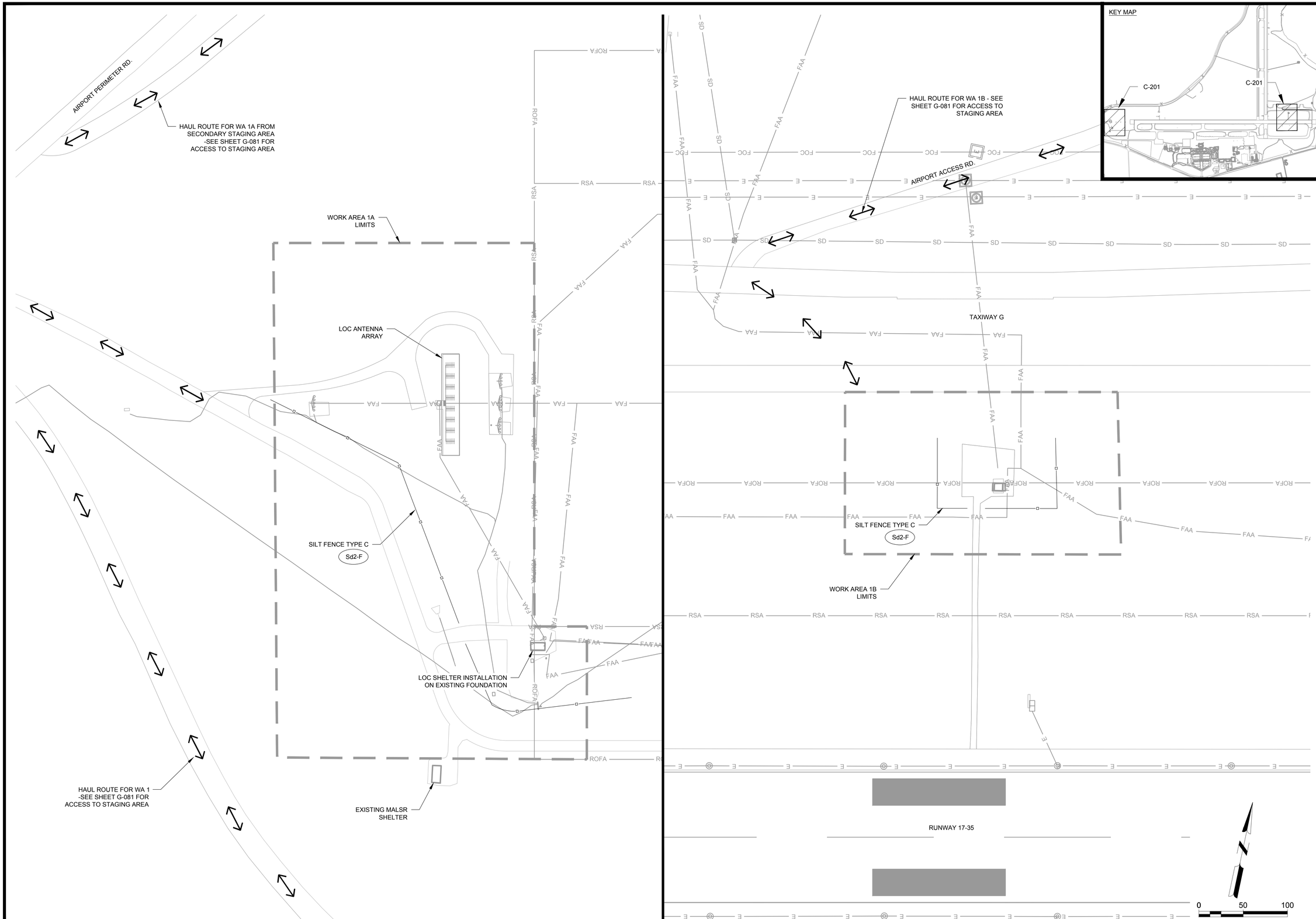

X:\0119700\221073.01\TECH\CAD\DRAWINGS\SHEETS\C-022 EROSION CONTROL PLAN.DWG
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AGS AUGUSTA REGIONAL AIRPORT

AUGUSTA REGIONAL AIRPORT RUNWAY 17-35 APPROACH IMPROVEMENTS CAT II

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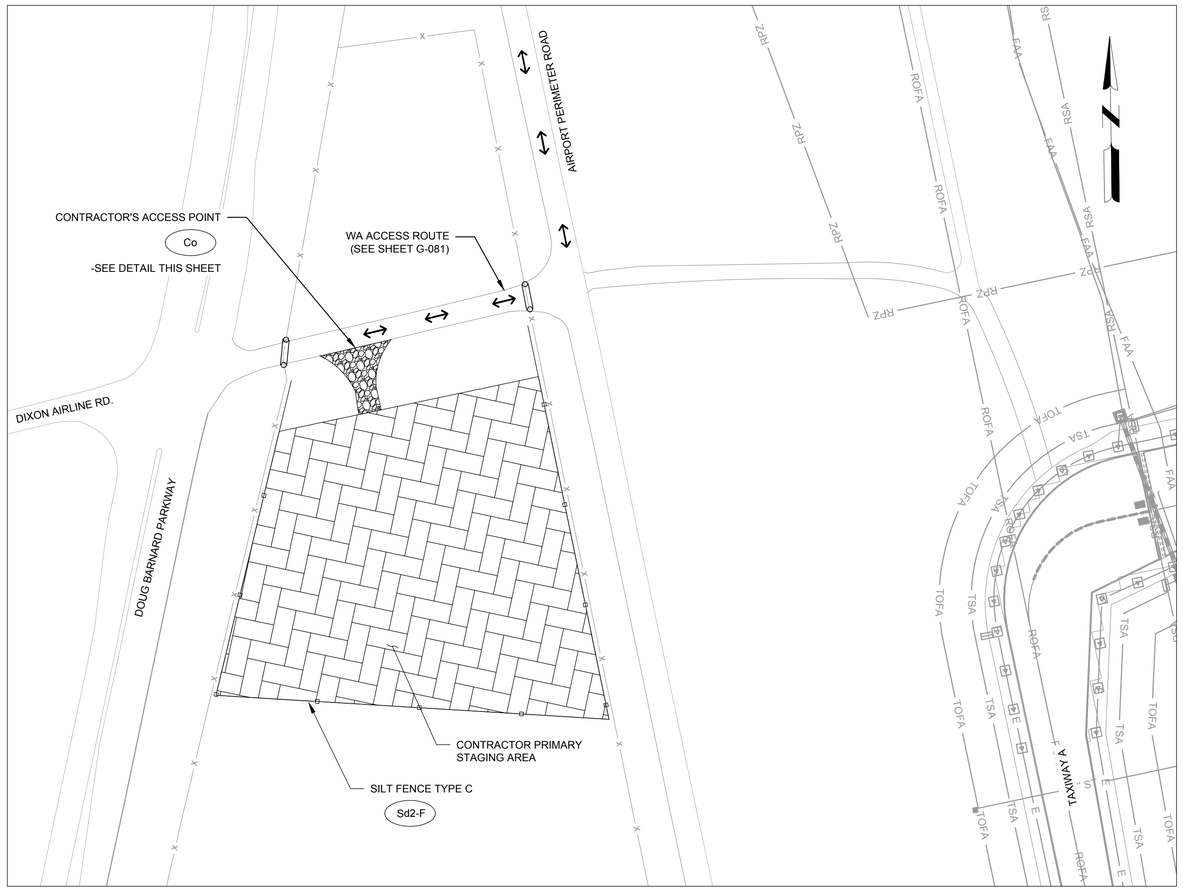
SHEET CONTENTS
EROSION CONTROL PLAN

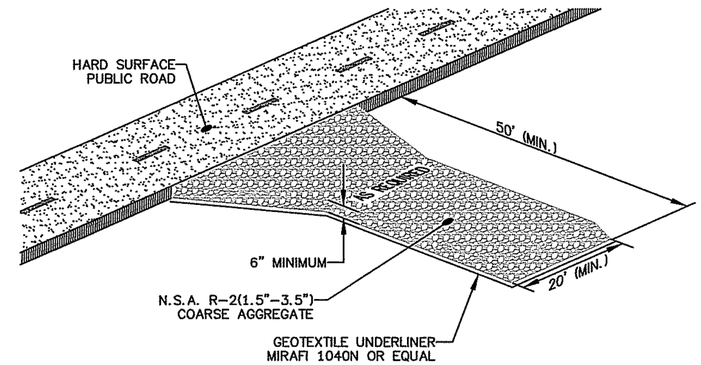
SHEET NO.
C-021



ENLARGED CONTRACTOR STAGING AREA PLAN

SCALE: 1" = 80'

1
C-031

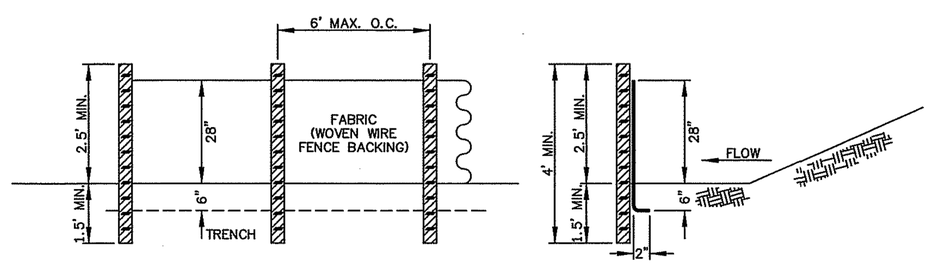


CRUSHED STONE CONSTRUCTION OUTLET

N.T.S.

Co

NOTE:
CONCRETE WASHOUT AREA SHALL BE ESTABLISHED ON CONTRACTOR STAGING AREA. COST OF THE WASHOUT AREA IS INCIDENTAL TO MOBILIZATION.



FRONT VIEW **SIDE VIEW**

NOTES:
1. USE 36" APPROVED FABRIC, WITH OAK OR STEEL POSTS.
2. P-FACTOR MUST BE LESS THAN 0.045 IAW MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA, 6TH EDITION.
3. FOR WOOD POSTS, CONNECT WITH A MINIMUM OF 5 EACH, 7 GAUGE STAPLES ¾" WIDE AND ½" LONG, OR OTHER APPROVED METHOD.
4. AT OVERLAPS, USE 18" MINIMUM OR WRAP ENDS TOGETHER AROUND A SINGLE POST TO FORM A CONTINUOUS BARRIER.

SILT FENCE - TYPE C

N.T.S.

Sd1-NS

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AUGUSTA REGIONAL AIRPORT

AUGUSTA REGIONAL AIRPORT
RUNWAY 17-35 APPROACH
IMPROVEMENTS CAT II
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SHEET CONTENTS
EROSION CONTROL DETAILS

SHEET NO.
C-031

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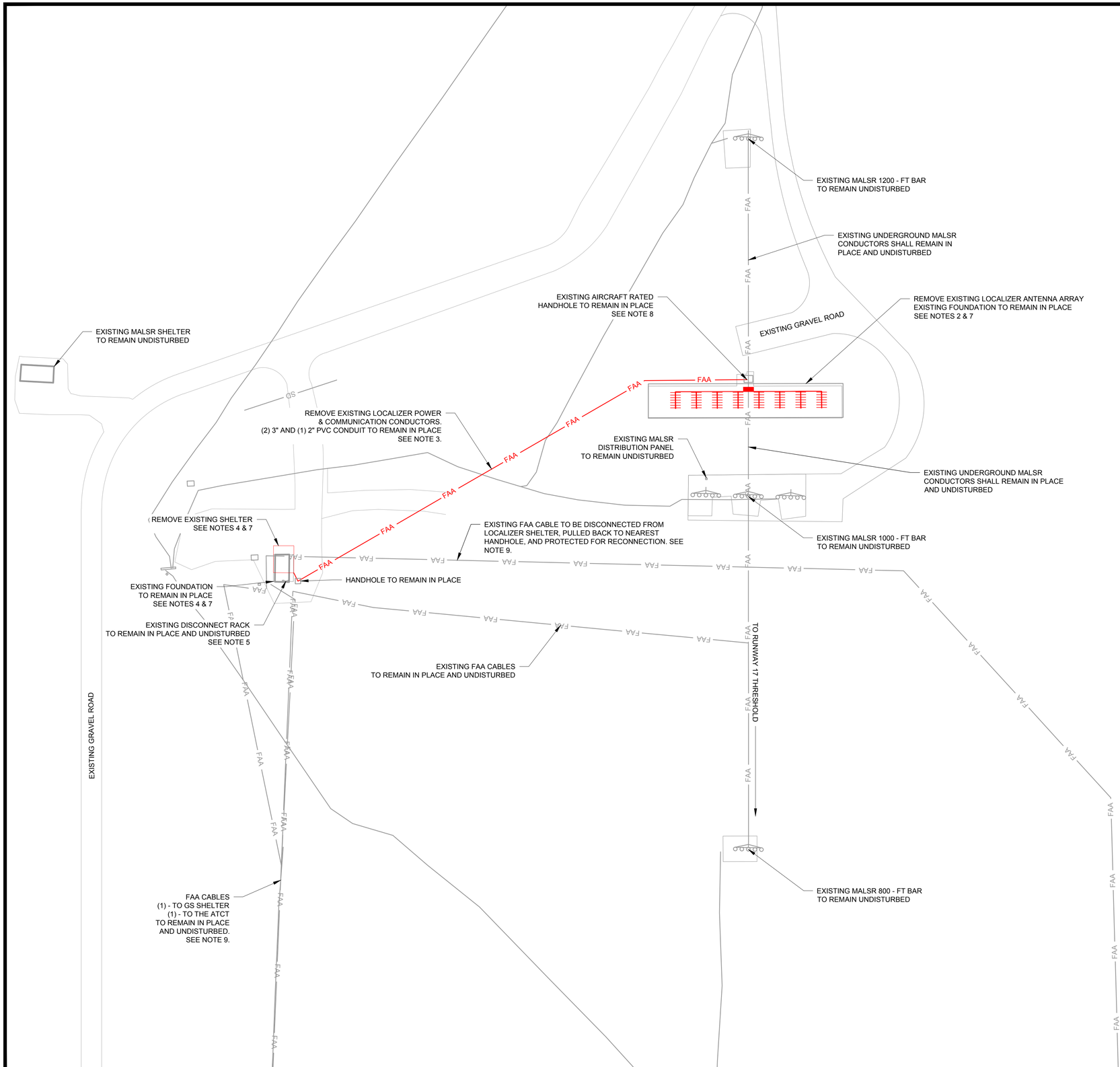

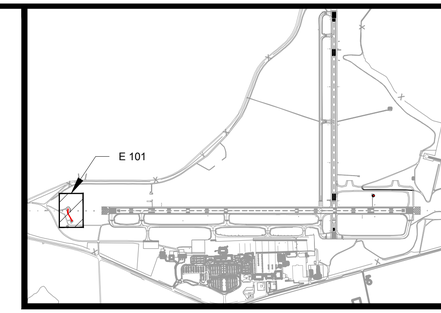

NOTES:

1. CONTRACTOR TO COORDINATE CLOSELY WITH THE FAA RESIDENT ENGINEER (RE) ON THE DISCONNECTING, REMOVING, AND SALVAGING/DISPOSING OF ALL FAA OWNED EQUIPMENT.
2. CONTRACTOR SHALL DISCONNECT, REMOVE, AND SALVAGE EXISTING 14 ELEMENT LOCALIZER ANTENNA ARRAY. CONTRACTOR SHALL UTILIZE EXISTING CRATES FROM NEW LOCALIZER ANTENNA TO PACKAGE UP AND TURN OVER TO THE FAA FOR SHIPMENT. FAA WILL BE RESPONSIBLE FOR SHIPPING OF EXISTING ARRAY. ANY EXISTING MATERIAL DEEMED NOT TO BE SALVAGEABLE BY THE FAA SHALL BE DISPOSED OF OFF-SITE BY THE CONTRACTOR. CONCRETE FOUNDATIONS TO REMAIN IN PLACE FOR RE-INSTALLATION OF NEW LOCALIZER SYSTEM.
3. EXISTING LOCALIZER POWER AND COMMUNICATION CABLES TO BE DISCONNECTED AND REMOVED. EXISTING CONDUIT IS TO REMAIN IN PLACE AND TO BE REUSED FROM LOCALIZER SHELTER TO EXISTING ELECTRICAL HANDHOLE. DURING THE REMOVAL OF EXISTING CONDUCTORS, SECTIONS OF CONDUIT THAT IS DETERMINED TO BE DAMAGED SHALL BE REPORTED TO THE RE.
4. DISCONNECT, REMOVE, AND SALVAGE EXISTING LOCALIZER SHELTER AND COMPONENTS. CONTRACTOR SHALL COORDINATE CLOSELY WITH THE FAA'S RE ON ITEMS TO BE DISCONNECTED AND SALVAGED. ALL SALVAGED ITEMS SHALL BE TURNED OVER TO THE FAA AT A LOCATION DETERMINED BY THE RE. ALL NON-SALVAGED ITEMS SHALL BE DISPOSED OF OFF-SITE BY THE CONTRACTOR. THE SHELTER FOUNDATION IS TO REMAIN IN PLACE FOR INSTALLATION OF NEW LOCALIZER SHELTER. CONTRACTOR SHALL COORDINATE CLOSELY WITH THE FAA RE ON NOT DAMAGING EXISTING MOUNTING PROVISIONS FOR THE NEW SHELTER.
5. COORDINATE WITH LOCAL UTILITY ON DISABLING ELECTRICAL SERVICE TO EXISTING LOCALIZER SHELTER DURING CONSTRUCTION. ELECTRICAL SERVICE SHALL BE ENERGIZED UPON COMPLETION OF CONSTRUCTION. ELECTRICAL SERVICE TO THE EXISTING MALSR SHELTER IS TO REMAIN IN OPERATION AND NOT DISTURBED.
6. CONTRACTOR SHALL LOCATE ALL UNDERGROUND UTILITIES PRIOR TO STARTING CONSTRUCTION AND MAINTAIN LOCATES DURING THE ENTIRE DURATION OF THE PROJECT. CONTRACTOR SHALL COORDINATE CLOSELY WITH THE FAA ON LOCATING ALL FAA'S OWNED UNDERGROUND UTILITIES.
7. ALL UNDERGROUND GROUNDING AND LIGHTNING PROTECTION SHALL REMAIN IN PLACE AND BE UTILIZED FOR RECONNECTION.
8. CONCRETE PANEL SHALL BE REMOVED FROM THE EXISTING HANDHOLE TO THE DISTRIBUTION UNIT BOX (DOGHOUSE) LOCATED ON THE LOCALIZER ARRAY. CONDUITS SHALL BE EXPOSED FOR REALIGNMENT.
9. CONTRACTOR SHALL COORDINATE WITH FAA RE ON DISCONNECTING AND PROTECTING OF EXISTING FAA LINES AS REQUIRED FOR THE REMOVAL OF THE LOCALIZER SHELTER. THE CONTRACTOR SHALL PULL BACK EXISTING CABLES AND PROTECT DURING CONSTRUCTION. UPON INSTALLATION OF THE SHELTER, THE CONTRACTOR PULL CABLES BACK THROUGH EXISTING CONDUIT TO THE INTERIOR OF THE SHELTER. FAA SHALL BE RESPONSIBLE FOR ALL TERMINATIONS. CONTRACTOR SHALL VERIFY NEAREST HANDHOLE FOR PULLING BACK EXISTING LINES.

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AGS AUGUSTA REGIONAL AIRPORT

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SHEET CONTENTS
ELECTRICAL
LOCALIZER
DEMOLITION PLAN

SHEET NO.
E-101

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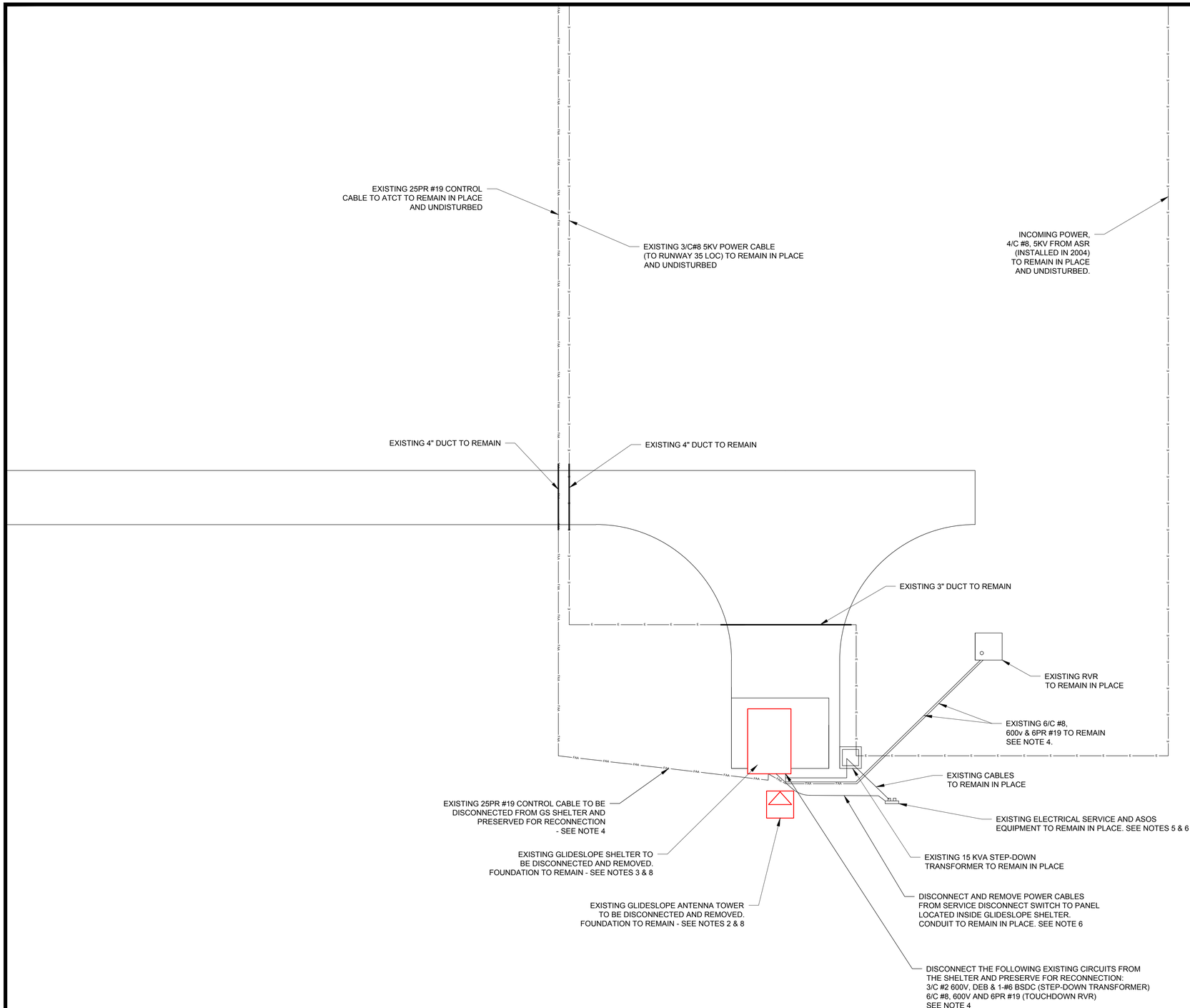
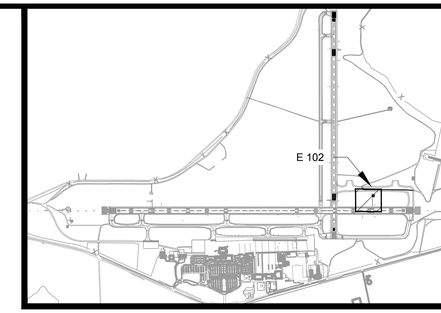
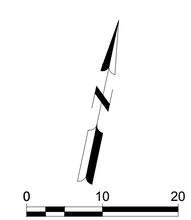




NOTES:

1. CONTRACTOR TO COORDINATE CLOSELY WITH THE FAA RESIDENT ENGINEER (RE) ON THE DISCONNECTING, REMOVING, AND SALVAGING/DISPOSING OF ALL FAA OWNED EQUIPMENT.
2. CONTRACTOR SHALL DISCONNECT, REMOVE, AND SALVAGE EXISTING GLIDESLOPE ANTENNA TOWER. CONTRACTOR SHALL UTILIZE EXISTING CRATES FROM NEW TOWER TO PACAKGE UP AND TURN OVER TO THE FAA FOR SHIPMENT. FAA WILL BE RESPONSIBLE FOR SHIPPING OF EXISTING TOWER. ANY EXISTING MATERIAL DEEMED NOT SALVAGEABLE BY THE FAA SHALL BE DISPOSED OFF OF-SITE BY THE CONTRACTOR. CONCRETE FOUNDATIONS TO REMAIN IN PLACE FOR RE-INSTALLATION OF THE NEW TOWER SYSTEM.
3. DISCONNECT, REMOVE, AND SALVAGE EXISTING GLIDESLOPE SHELTER AND COMPONENTS. CONTRACTOR SHALL COORDINATE CLOSELY WITH THE FAA'S RE ON ITEMS TO BE DISCONNECTED AND SALVAGED. ALL SALVAGED ITEMS SHALL BE TURNED OVER TO THE FAA AT A LOCATION DETERMINED BY THE RE. ALL NON-SALVAGED ITEMS SHALL BE DISPOSED OF OFF-SITE BY THE CONTRACTOR. THE SHELTER FOUNDATION IS TO REMAIN IN PLACE FOR INSTALLATION OF NEW GLIDESLOPE SHELTER. CONTRACTOR SHALL COORDINATE CLOSELY WITH THE FAA RE ON NOT DAMAGING EXISTING MOUNTING PROVISIONS FOR THE NEW SHELTER.
4. EXISTING POWER AND COMMUNICATIONS CABLING TO REMAIN IN PLACE AS SHOWN. CONTRACTOR SHALL COORDINATE WITH FAA RE ON DISCONNECTING AND PROTECTING ANY EXISTING FAA LINES AS REQUIRED BY THE REMOVAL OF THE GLIDESLOPE SHELTER. THE CONTRACTOR SHALL PULL BACK EXISTING CABLES AND PROTECT DURING CONSTRUCTION. UPON INSTALLATION OF SHELTER, THE CONTRACTOR SHALL PULL CABLES BACK THROUGH THE CONDUIT TO THE INTERIOR OF THE SHELTER. FAA SHALL BE RESPONSIBLE FOR ALL TERMINATIONS. CONTRACTOR SHALL VERIFY NEAREST HANDHOLE FOR PULLING BACK EXISTING LINES.
5. COORDINATE WITH LOCAL UTILITY ON DISABLING ELECTRICAL SERVICE TO EXISTING GLIDESLOPE SHELTER DURING CONSTRUCTION. ELECTRICAL SERVICE SHALL BE ENERGIZED UPON COMPLETION OF CONSTRUCTION.
6. EXISTING POWER CONDUCTORS FROM EXISTING GLIDESLOPE DISCONNECT SWITCH TO THE EXISTING SHELTER PANELBOARD SHALL BE DISCONNECTED AND REMOVED BY THE CONTRACTOR. CONTRACTOR SHALL VERIFY ACTUAL ROUTING AND REPORT TO THE RE IF ROUTING AND CONNECTIONS VARY FROM WHAT IS SHOWN. OTHER ELECTRICAL SERVICES AND CONDUCTORS ARE TO REMAIN IN PLACE UNLESS DIRECTED BY THE ENGINEER.
7. CONTRACTOR SHALL LOCATE ALL UNDERGROUND UTILITIES PRIOR TO STARTING CONSTRUCTION AND MAINTAIN LOCATES DURING THE DURATION OF THE PROJECT. CONTRACTOR SHALL COORDINATE CLOSELY WITH THE FAA ON LOCATING ALL FAA'S OWNED UNDERGROUND UTILITIES.
8. ALL UNDERGROUND GROUNDING AND LIGHTNING PROTECTION SHALL BE DISCONNECTED AND REMOVED FOR THE GLIDESLOPE SHELTER AND GLIDESLOPE TOWER. CONTRACTOR TO PROVIDE NEW AS INDICATED IN THE PROPOSED LAYOUT AND DETAILS.



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AGS AUGUSTA REGIONAL AIRPORT

AUGUSTA REGIONAL AIRPORT RUNWAY 17-35 APPROACH IMPROVEMENTS CAT II

1501 AVIATION WAY
AUGUSTA , GA 30906-9620

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M&H NO.: 0119700-221073.01
DATE: AUGUST 16, 2024
DESIGNED BY: CGH
DRAWN BY: CMS
CHECKED BY: CGH
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SHEET CONTENTS
ELECTRICAL
GLIDESLOPE
DEMOLITION PLAN

SHEET NO.
E-102

X:\0119700\221073.01\TECH\CAD\DRAWINGS\SHEETS\E-101 ELECTRICAL DEMO PLAN.DWG
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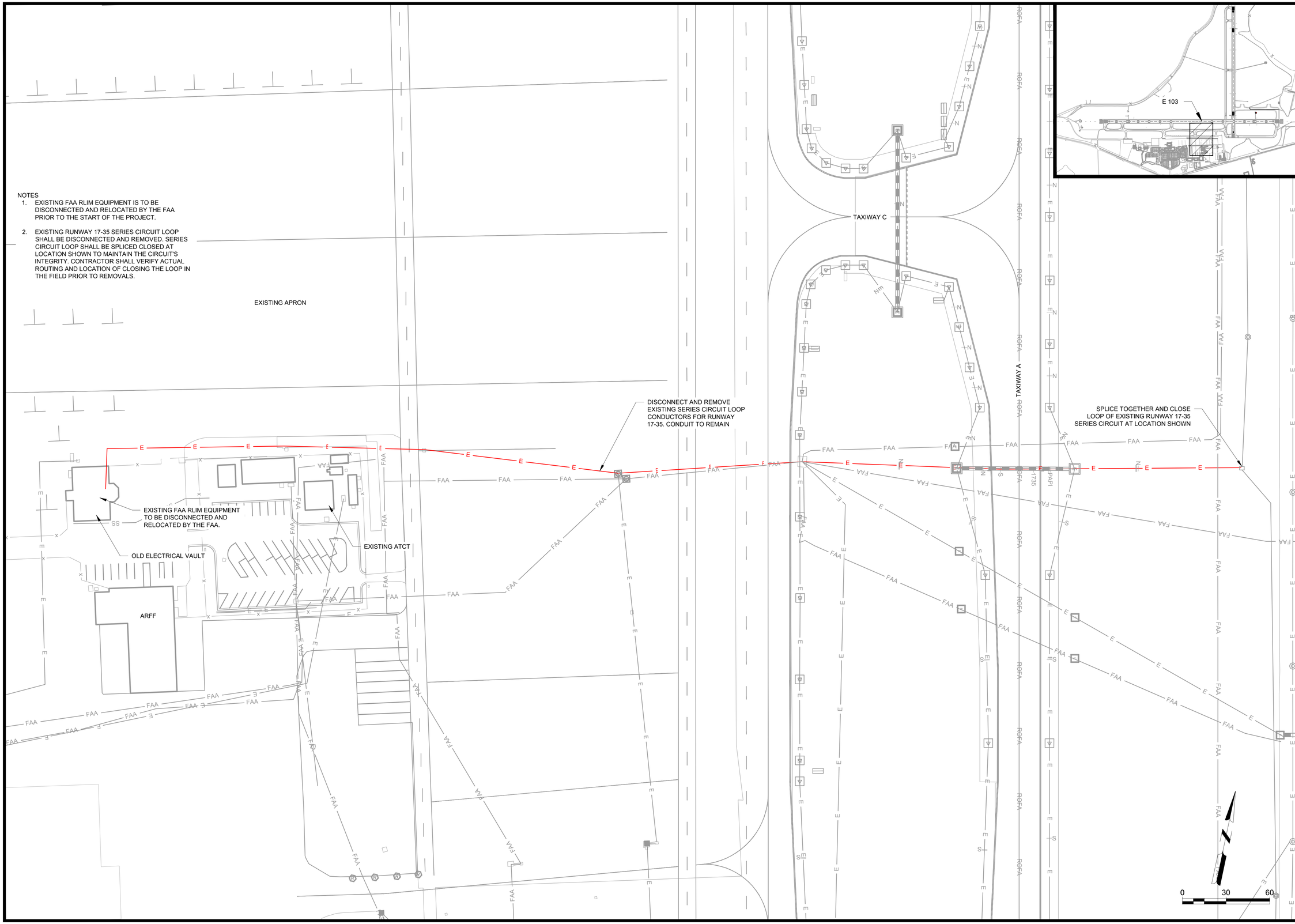
NOTES

1. EXISTING FAA RLIM EQUIPMENT IS TO BE DISCONNECTED AND RELOCATED BY THE FAA PRIOR TO THE START OF THE PROJECT.
2. EXISTING RUNWAY 17-35 SERIES CIRCUIT LOOP SHALL BE DISCONNECTED AND REMOVED. SERIES CIRCUIT LOOP SHALL BE SPLICED CLOSED AT LOCATION SHOWN TO MAINTAIN THE CIRCUIT'S INTEGRITY. CONTRACTOR SHALL VERIFY ACTUAL ROUTING AND LOCATION OF CLOSING THE LOOP IN THE FIELD PRIOR TO REMOVALS.



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AUGUSTA REGIONAL AIRPORT RUNWAY 17-35 APPROACH IMPROVEMENTS CAT II

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SHEET CONTENTS
ELECTRICAL RLIM DEMOLITION PLAN

SHEET NO.
E-103

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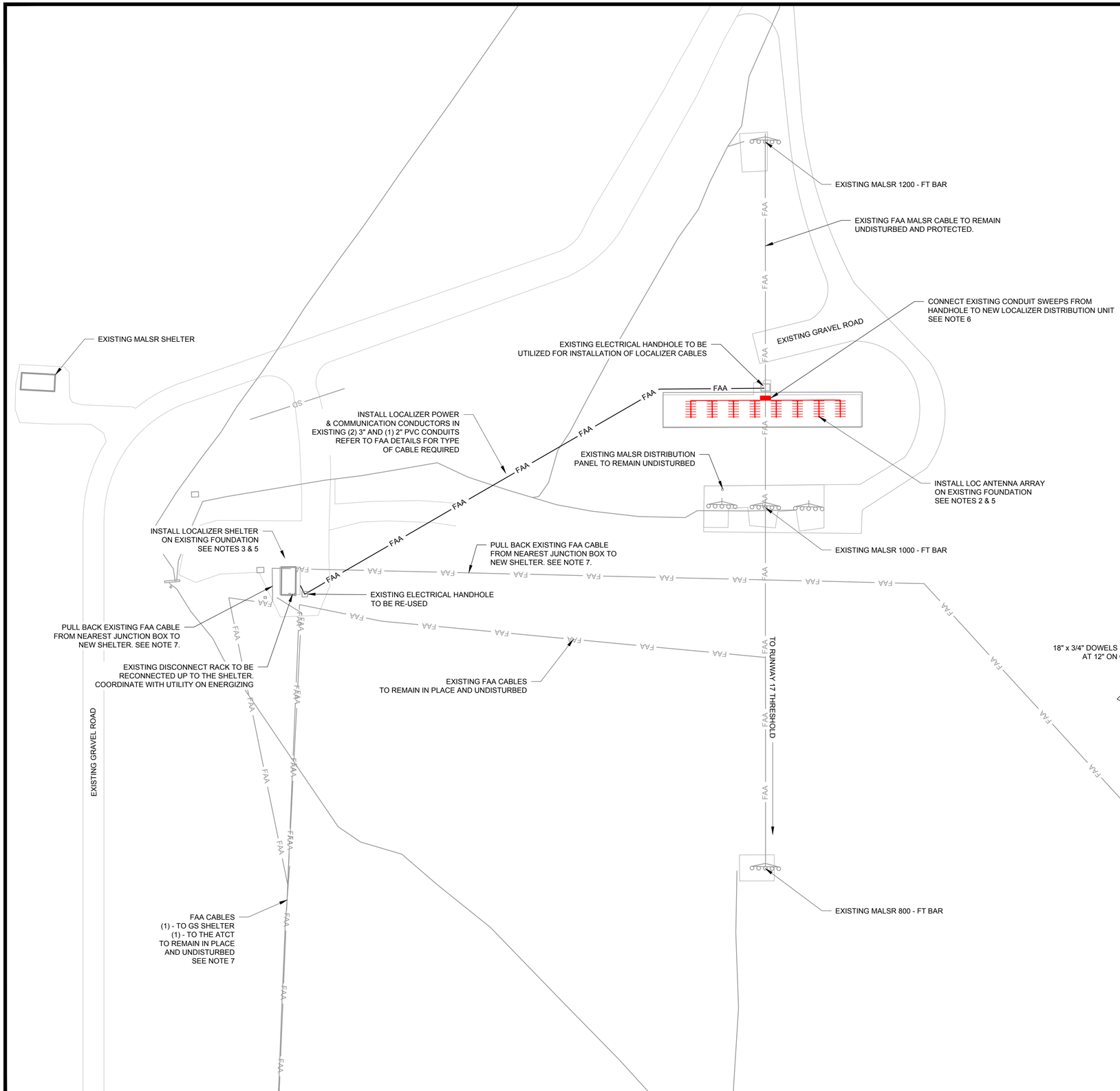
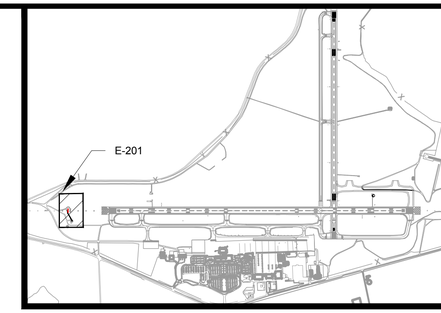
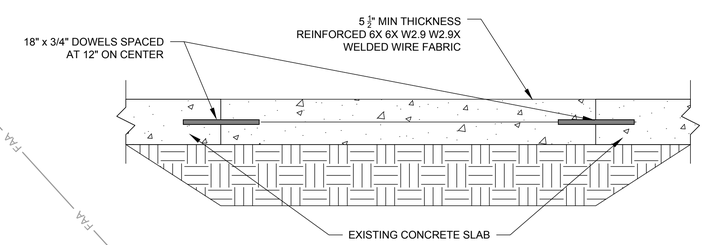




NOTES

1. CONTRACTOR SHALL COORDINATE CLOSELY WITH THE FAA RESIDENT ENGINEER (RE) DURING THE INSTALLATION AND RECONNECTION OF NEW FAA SYSTEM AND EXISTING FAA SYSTEMS.
2. CONTRACTOR TO INSTALL FAA PROVIDED LOCALIZER ANTENNA ARRAY ON EXISTING FOUNDATION. LOCALIZER ANTENNA ARRAY TO BE FULLY ASSEMBLED PER THE DETAIL. CONTRACTOR SHALL PROVIDE AND INSTALL ADDITIONAL COMPONENTS AS SHOWN IN THE DETAIL.
3. CONTRACTOR TO INSTALL FAA PROVIDED LOCALIZER SHELTER ON EXISTING FOUNDATION. CONTRACTOR SHALL PROVIDE AND INSTALL MISCELLANEOUS COMPONENTS AS INDICATED IN THE FAA DETAILS.
4. CONTRACTOR SHALL VERIFY EXACT MOUNTING REQUIREMENTS NEEDED UPON RECEIVING OF THE ANTENNA ARRAY AND SHELTER. ANY DEVIATIONS NEEDED TO COMPLETE THE INSTALL SHALL BE BROUGHT TO THE ATTENTION OF THE FAA'S RE.
5. EXISTING UNDERGROUND GROUNDING AND LIGHTNING PROTECTION TO BE RECONNECTED UP TO THE NEW LOCALIZER ANTENNA ARRAY AND LOCALIZER SHELTER. ALL ABOVE GROUND LIGHTNING PROTECTION IS TO BE PROVIDED BY THE FAA AND INSTALLED BY THE CONTRACTOR PER THE DETAIL. ALL CONNECTIONS ARE TO BE AS REQUIRED BY THE FAA STANDARD DETAILS AND SPECIFICATIONS.
6. CONTRACTOR SHALL UTILIZE EXISTING CONDUIT RUNS. CONDUITS TO BE EXPOSED AND REALIGNED TO FIT NEW DISTRIBUTION UNIT (DOGHOUSE) ENCLOSURE. AREA SHALL BE COMPACTED AND BACKFILLED PER SPECIFICATION. PROVIDE NEW CONCRETE PANEL UPON COMPLETION. REFER TO DETAIL A ON SHEET E-201 FOR ADDITIONAL REQUIREMENTS.
7. CONTRACTOR SHALL PULL BACK EXISTING CABLES THROUGH EXISTING CONDUIT TO WITHIN THE NEW LOCALIZER SHELTER. COORDINATE WITH FAA ON ROUTING WITHIN THE SHELTER. ALL CONNECTIONS/TERMINATIONS ARE TO BE DONE BY THE FAA.
8. CONTRACTOR SHALL LOCATE ALL UNDERGROUND UTILITIES PRIOR TO STARTING CONSTRUCTION AND MAINTAIN LOCATES DURING THE ENTIRE DURATION OF THE PROJECT. CONTRACTOR SHALL COORDINATE CLOSELY WITH THE FAA ON LOCATING ALL FAA'S OWNED UNDERGROUND UTILITIES.



REINFORCED CONCRETE PANEL REPLACEMENT — A / E-201

SCALE: NTS

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AUGUSTA REGIONAL AIRPORT RUNWAY 17-35 APPROACH IMPROVEMENTS CAT II

1501 AVIATION WAY
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SHEET CONTENTS
ELECTRICAL LOCALIZER LAYOUT PLAN

SHEET NO.
E-201

X:\0119700\221073.01\TECH\CAD\DRAWINGS\SHEETS\E-201 ELECTRICAL LAYOUT PLAN.DWG
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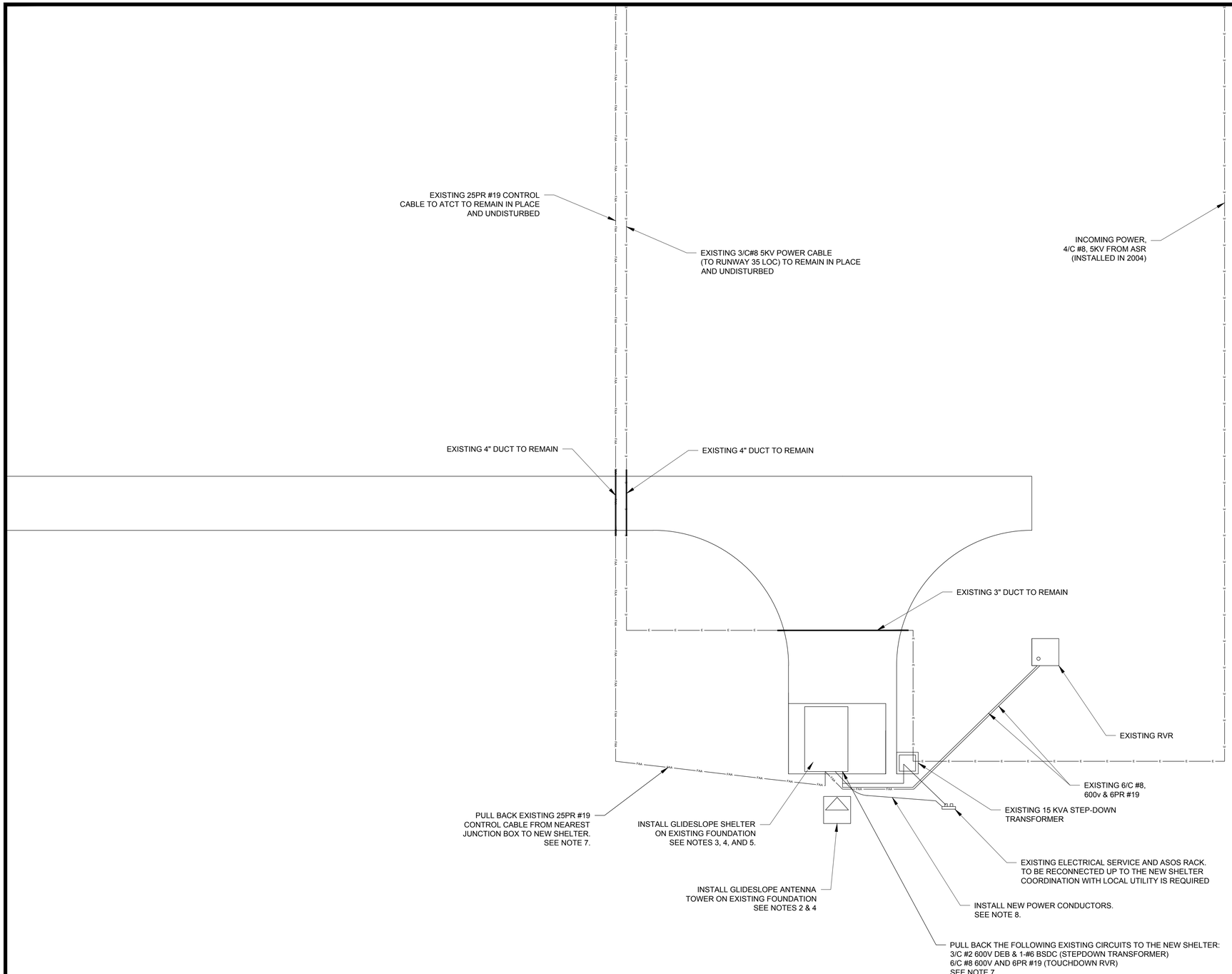
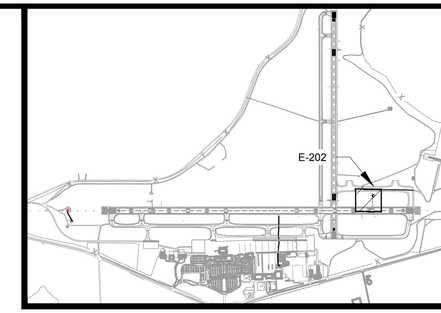
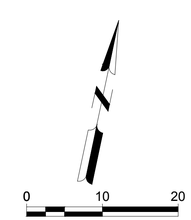




NOTES

1. CONTRACTOR SHALL COORDINATE CLOSELY WITH THE FAA RESIDENT ENGINEER (RE) DURING THE INSTALLATION AND RECONNECTION OF NEW FAA SYSTEM AND EXISTING FAA SYSTEMS.
2. CONTRACTOR TO INSTALL FAA PROVIDED GLIDESLOPE TOWER ON EXISTING FOUNDATION. CONTRACTOR SHALL VERIFY EXACT MOUNTING REQUIREMENTS NEEDED UPON RECEIVING OF THE TOWER. ANY DEVIATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE FAA'S RE. CONTRACTOR SHALL PROVIDE AND INSTALL MISCELLANEOUS COMPONENTS AS INDICATED IN THE FAA DETAILS.
3. CONTRACTOR TO INSTALL FAA PROVIDED GLIDESLOPE SHELTER ON EXISTING FOUNDATION. CONTRACTOR SHALL VERIFY EXACT MOUNTING REQUIREMENTS NEEDED UPON RECEIVING OF THE SHELTER. ANY DEVIATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE FAA'S RE. CONTRACTOR SHALL PROVIDE AND INSTALL MISCELLANEOUS COMPONENTS AS INDICATED IN THE FAA DETAILS.
4. ALL GROUNDING AND LIGHTNING PROTECTION SYSTEM FOR THE GLIDESLOPE SHELTER AND TOWER IS TO BE NEW AND INSTALLED BY THE CONTRACTOR. THE FAA IS TO PROVIDE THE ABOVE GROUND SHELTER LIGHTNING PROTECTION MATERIAL. THE CONTRACTOR SHALL PROVIDE ALL REMAINING MATERIAL AND EQUIPMENT FOR ALL UNDERGROUND LIGHTNING AND GROUNDING SYSTEM ALONG WITH THE GLIDESLOPE TOWER ABOVE GROUND SYSTEM. LIGHTNING AND GROUNDING SYSTEMS TO BE INSTALLED MEETING FAA DETAILS.
5. WHEN INSTALLING NEW SHELTER ON EXISTING FOUNDATION, CONDUITS SHALL BE REALIGNED AND ROUTED INTO THE INTERIOR INTERFACE BOX. EXPOSE EXISTING CONDUIT AS NEEDED TO ACHIEVE THE REALIGNMENT. ANY NEW CONDUIT SECTIONS, ELBOWS, CONNECTORS SHALL BE INCLUDED BY THE CONTRACTOR. COORDINATE WITH THE FAA RE TO DETERMINE WHAT ROUTING AND ALIGNMENT CHANGES THAT ARE NEEDED.
6. CONTRACTOR SHALL LOCATE ALL UNDERGROUND UTILITIES PRIOR TO STARTING CONSTRUCTION AND MAINTAIN LOCATES DURING THE ENTIRE DURATION OF THE PROJECT. CONTRACTOR SHALL COORDINATE CLOSELY WITH THE FAA ON LOCATING ALL FAA'S OWNED UNDERGROUND UTILITIES.
7. CONTRACTOR SHALL PULL BACK EXISTING CABLES THROUGH EXISTING CONDUIT TO WITHIN THE NEW GLIDESLOPE SHELTER. COORDINATE WITH FAA ON ROUTING WITHIN THE SHELTER. ALL CONNECTIONS/TERMINATIONS ARE TO BE DONE BY THE FAA.
8. CONTRACTOR TO PROVIDE AND INSTALL NEW POWER CONDUCTORS FROM EXISTING DISCONNECT SWITCH LOCATED ON SERVICE RACK ADJACENT TO THE GLIDESLOPE SHELTER. CONDUCTORS SHALL CONSIST OF 3-#2 AND 1-#6 GROUND, MEETING FAA AND NEC REQUIREMENTS.



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AUGUSTA REGIONAL AIRPORT RUNWAY 17-35 APPROACH IMPROVEMENTS CAT II

1501 AVIATION WAY
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SHEET CONTENTS
ELECTRICAL GLIDESLOPE LAYOUT PLAN

SHEET NO.
E-202

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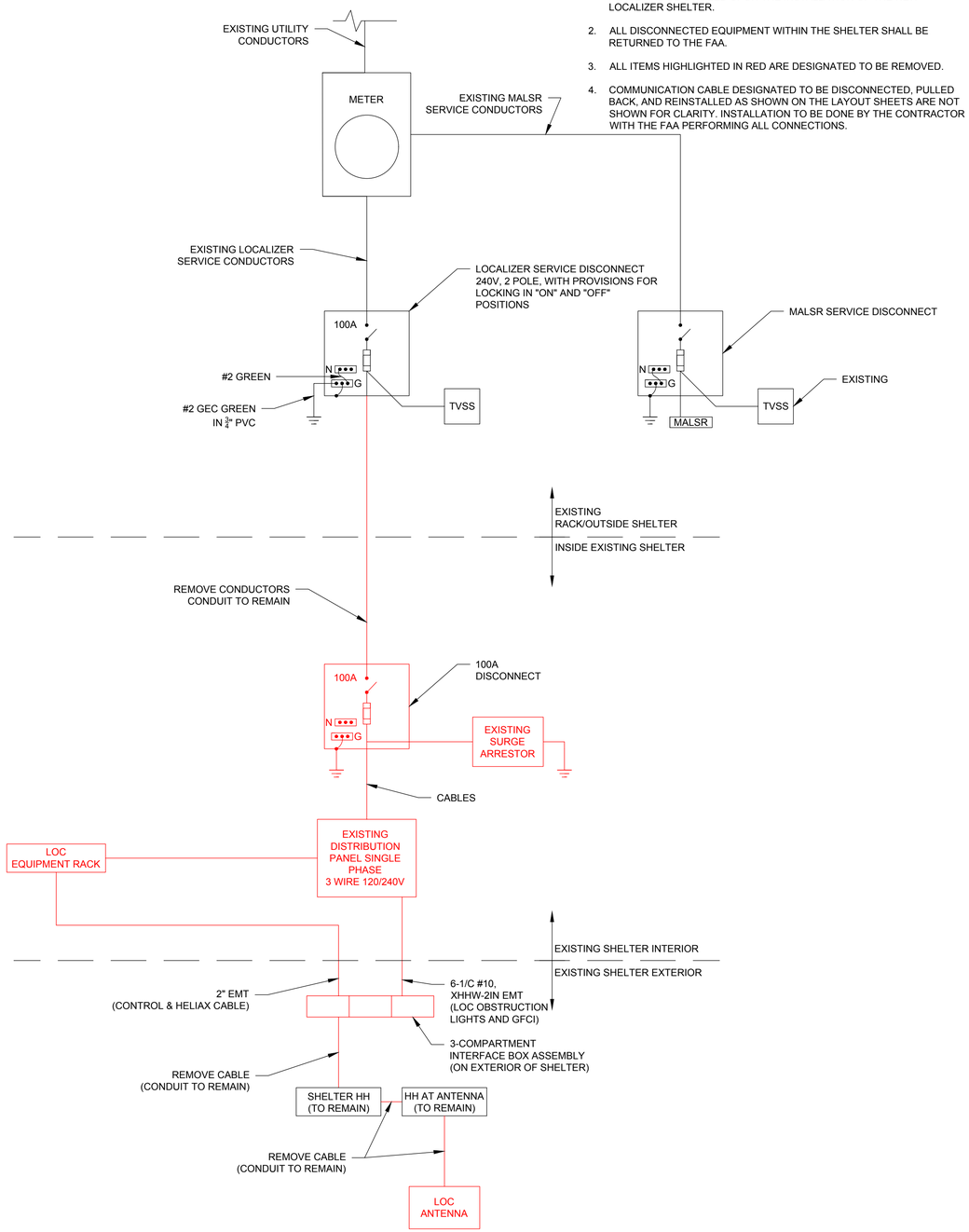
NOTES:

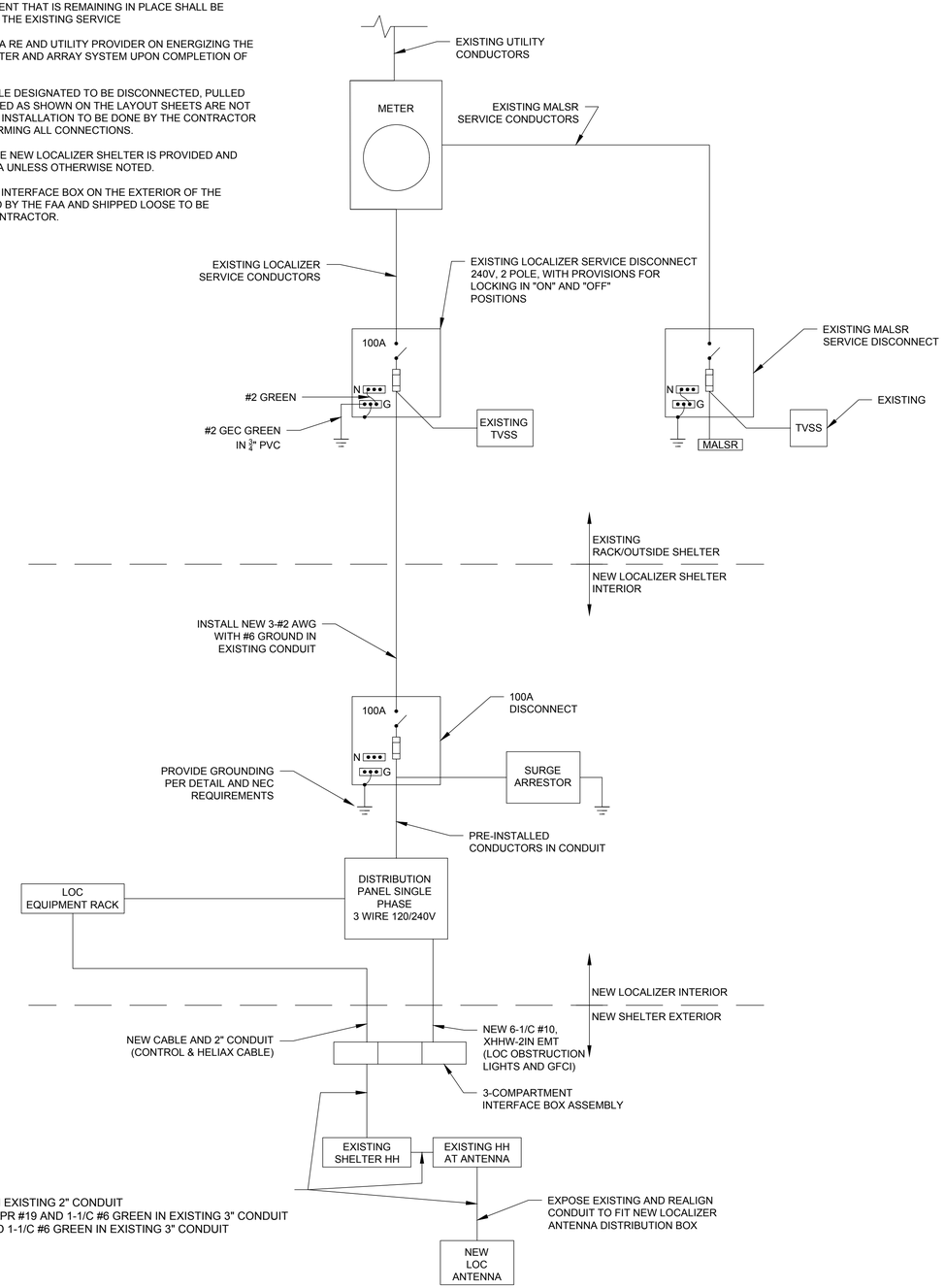
1. ALL EXISTING EQUIPMENT ON THE LOCALIZER RACK SHALL REMAIN IN PLACE AND BE UTILIZED UPON THE INSTALLATION OF THE NEW LOCALIZER SHELTER.
2. ALL DISCONNECTED EQUIPMENT WITHIN THE SHELTER SHALL BE RETURNED TO THE FAA.
3. ALL ITEMS HIGHLIGHTED IN RED ARE DESIGNATED TO BE REMOVED.
4. COMMUNICATION CABLE DESIGNATED TO BE DISCONNECTED, PULLED BACK, AND REINSTALLED AS SHOWN ON THE LAYOUT SHEETS ARE NOT SHOWN FOR CLARITY. INSTALLATION TO BE DONE BY THE CONTRACTOR WITH THE FAA PERFORMING ALL CONNECTIONS.



1 **EXISTING LOCALIZER SINGLE LINE DIAGRAM**
NO SCALE

NOTES:

1. SEE PROPOSED LAYOUT SHEETS AND DETAILS FOR ADDITIONAL INFORMATION
2. ALL EXISTING EQUIPMENT THAT IS REMAINING IN PLACE SHALL BE RECONNECTED UP TO THE EXISTING SERVICE
3. COORDINATE WITH FAA RE AND UTILITY PROVIDER ON ENERGIZING THE NEW LOCALIZER SHELTER AND ARRAY SYSTEM UPON COMPLETION OF CONSTRUCTION.
4. COMMUNICATION CABLE DESIGNATED TO BE DISCONNECTED, PULLED BACK, AND REINSTALLED AS SHOWN ON THE LAYOUT SHEETS ARE NOT SHOWN FOR CLARITY. INSTALLATION TO BE DONE BY THE CONTRACTOR WITH THE FAA PERFORMING ALL CONNECTIONS.
5. EQUIPMENT INSIDE THE NEW LOCALIZER SHELTER IS PROVIDED AND INSTALLED BY THE FAA UNLESS OTHERWISE NOTED.
6. THE 3 COMPARTMENT INTERFACE BOX ON THE EXTERIOR OF THE SHELTER IS PROVIDED BY THE FAA AND SHIPPED LOOSE TO BE INSTALLED BY THE CONTRACTOR.



INSTALL NEW
○6-1/C #10, 600V IN EXISTING 2" CONDUIT
○7-1/4" HELIAX, 1-6PR #19 AND 1-1/C #6 GREEN IN EXISTING 3" CONDUIT
○7-1/2" HELIAX AND 1-1/C #6 GREEN IN EXISTING 3" CONDUIT

1 **PROPOSED LOCALIZER SINGLE LINE DIAGRAM**
NO SCALE

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AUGUSTA REGIONAL AIRPORT

AUGUSTA REGIONAL AIRPORT
RUNWAY 17-35 APPROACH IMPROVEMENTS CAT II
1501 AVIATION WAY
AUGUSTA , GA 30906-9620

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SHEET CONTENTS
ELECTRICAL DETAILS

SHEET NO.
E-601

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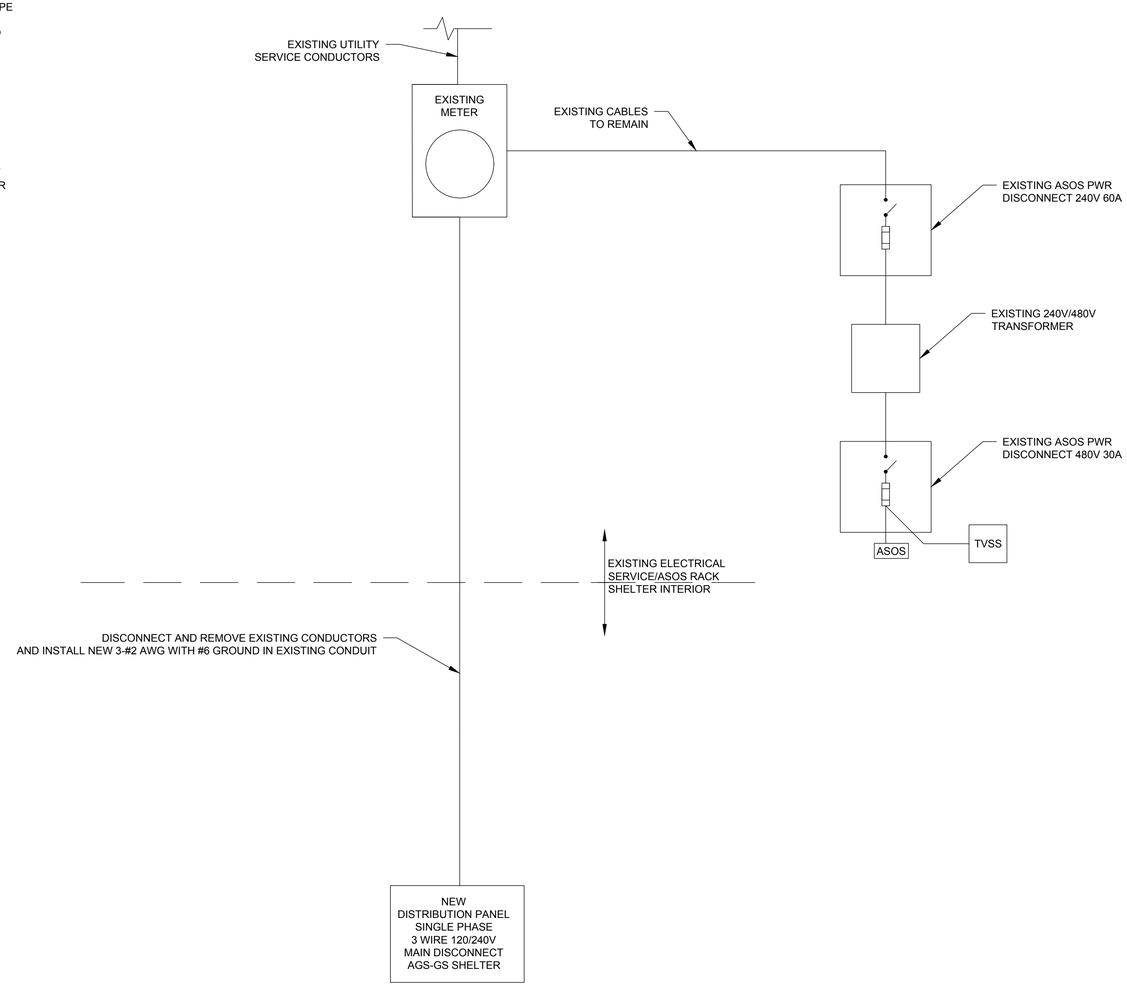
8/16/2024 10:30:02 AM

NOTES:

1. SEE PROPOSED LAYOUT SHEETS AND DETAILS FOR ADDITIONAL INFORMATION
2. ONE-LINE DIAGRAM IS BASED OFF EXISTING RECORD DRAWINGS. CONTRACTOR SHALL VERIFY SERVICE CONNECTION ON THE GLIDESLOPE SHELTER PRIOR TO DISCONNECTING. CONTRACTOR TO COORDINATE WITH THE FAA RE PRIOR TO DISCONNECTING TO MAINTAIN SERVICE TO ANY EQUIPMENT THAT IS REQUIRED TO REMAIN IN OPERATION.
3. ALL EXISTING EQUIPMENT THAT IS REMAINING IN PLACE SHALL BE RECONNECTED UP TO THE EXISTING SERVICE.
4. COORDINATE WITH THE FAA RE AND UTILITY PROVIDER ON DISCONNECTING THE ELECTRICAL SERVICE AND RE-ENERGIZING SERVICE TO THE NEW GLIDESLOPE SHELTER.
5. COMMUNICATION CABLE DESIGNATED TO BE DISCONNECTED, PULLED BACK, AND REINSTALLED AS SHOWN ON THE LAYOUT SHEETS ARE NOT SHOWN FOR CLARITY. INSTALLATION TO BE DONE BY THE CONTRACTOR WITH THE FAA PERFORMING ALL CONNECTIONS.



1 **GLIDESLOPE SINGLE LINE DIAGRAM**
NO SCALE

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SHEET CONTENTS
ELECTRICAL DETAILS

SHEET NO.
E-602

X:\0119700\221073.01\TECH\CAD\DRAWINGS\SHEETS\E-601 ELECTRICAL DETAILS.DWG
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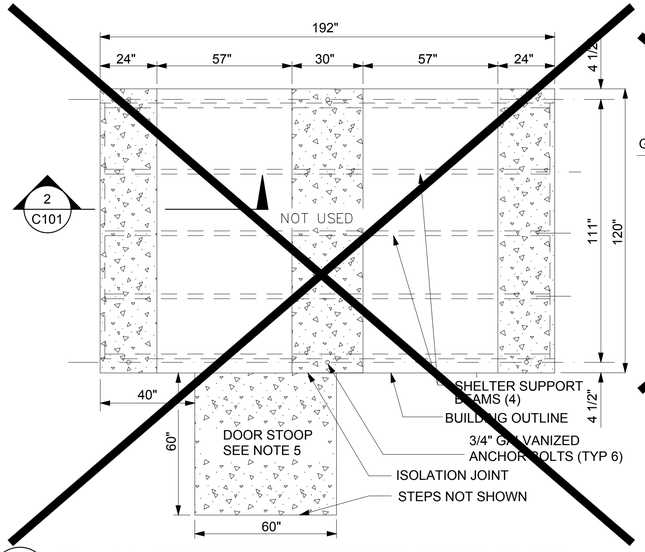
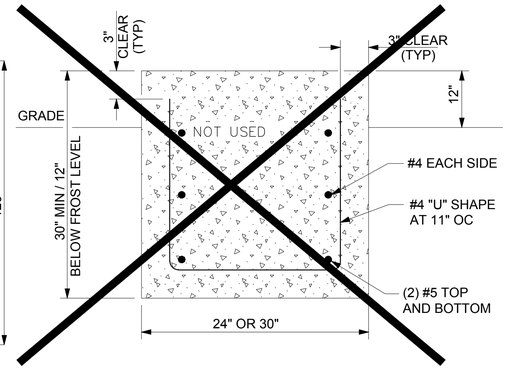
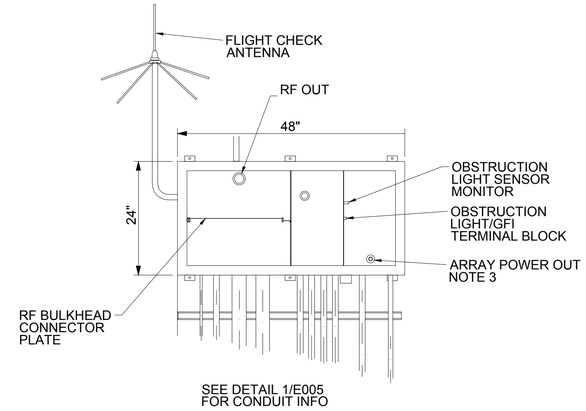


1 C101 **10 x 16 GRADE BEAM FOUNDATION PLAN**
NOT TO SCALE



2 C101 **FOOTING DETAIL**
NOT TO SCALE



A C101 **INTERFACE BOX ASSEMBLY**
NOT TO SCALE

NOTES

1. ~~ALL CONCRETE SHALL DEVELOP 3000 PSI IN TWENTY EIGHT (28) DAYS WITH A MAXIMUM SLUMP OF 3 INCHES. MAXIMUM AGGREGATE SIZE SHALL BE 3/4 INCH. CONCRETE SHALL NOT BE LOADED FOR AT LEAST SEVEN (7) DAYS AFTER CONCRETE PLACEMENT.~~

2. ~~IF FILL OR GRADING IS REQUIRED IT SHALL BE BUILT UP IN LAYERS NOT EXCEEDING 6 INCHES. EACH LAYER SHALL BE THOROUGHLY TAMPED AND COMPACTED TO 95% OF MAXIMUM DENSITY AT OPTIMUM WATER CONTENT. GRADING OF ROCK AND SOIL SHALL BE SO THAT ALL DRAINAGE IS AWAY FROM FOUNDATION. MAINTAIN A DRAINAGE SLOPE OF 1/8" PER FOOT.~~

3. CONTRACTOR TO TERMINATE POWER OF ANTENNA ARRAY ON OBSTRUCTION LIGHT TERMINAL. BLOCK IN THE INTERFACE BOX ASSEMBLY.

4. GRADE BEAM FOUNDATIONS SHALL BE HORIZONTALLY LEVEL WITH EACH OTHER WITHIN 1/4 INCH. INDIVIDUAL GRADE BEAM SURFACES SHALL BE LEVEL WITHIN 1/8 INCH. GRADE BEAM SURFACES SHALL BE TROWEL FINISHED.

5. ~~THE TOP OF THE STOOP OR THE HIGHEST STEP SHALL BE LEVEL WITH THE FINISHED FLOOR INSIDE THE BUILDING. SLOPE THE STOOP 1 PERCENT AWAY FROM THE SHELTER. BROOM FINISH THE STOOP. CONCRETE STEPS 5' LONG BY 9" HIGH BY 11" WIDE SHALL BE INSTALLED WHERE THE TOP OF STOOP IS MORE THAN 11" ABOVE THE EXISTING GRADE.~~

6. THE ANCHOR BOLTS, NUTS AND WASHERS SHALL BE HOT DIPPED GALVANIZED STEEL PER ASTM A153 AND A325. EXPOSED THREADS SHALL BE CLEAN AND LUBRICATED. TIGHTEN THE NUT TO 45 FT-LBS MINIMUM. THE ANCHOR BOLTS, NUTS AND WASHERS SHALL BE CONTRACTOR FURNISHED.

7. THE EQUIPMENT SHELTER AND TIE-DOWN PLATES ARE GOVERNMENT FURNISHED MATERIAL. LIFTING RINGS ARE PROVIDED IN THE SHELTER SKID CHANNELS FOR CRANE LOADING AND OFF-LOADING. SPREADER BARS SHALL BE USED BETWEEN THE LIFTING CABLES. PROVIDE ADEQUATELY SIZED EQUIPMENT TO LIFT AND LOAD, TRANSPORT, AND LIFT AND OFF-LOAD THE SHELTER. THE USE OF A FORKLIFT FOR THIS PURPOSE WILL NOT BE PERMITTED. ALL FEES, PERMITS, RENTALS, ETC, FOR TRANSPORTATION SHALL BE INCLUDED IN THE BID. INSPECT THE SHELTER AND CONTENTS PRIOR TO BEGINNING THE PROCESS OF TRANSPORTING THE SHELTER. NOTIFY THE RE OF ANY DAMAGE TO SHELTER PRIOR TO BEGINNING THE PROCESS OF TRANSPORTING THE SHELTER. CONFIRM THAT ALL SHELTER CONTENTS ARE SECURED PRIOR TO BEGINNING THE PROCESS OF TRANSPORTING. ONCE THE PROCESS OF TRANSPORTING THE SHELTER HAS BEGUN, THE CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR THE SHELTER AND ITS CONTENTS UNTIL FINAL ACCEPTANCE BY THE FAA.

8. AFTER ANCHORING THE SHELTER, CONTRACTOR SHALL INSTALL THE LED LIGHTS AND THE LIGHT FIXTURE COVERS. INSTALL THE AIR CONDITIONER IN THE WALL SLEEVE AND REMOVE THE PLYWOOD FROM THE AIR INTAKE LOUVER.

9. THE SHELTER SHALL BE ANCHORED WITH CONTRACTOR FURNISHED GALVANIZED NUTS AND WITH GOVERNMENT FURNISHED TIE-DOWN PLATES.

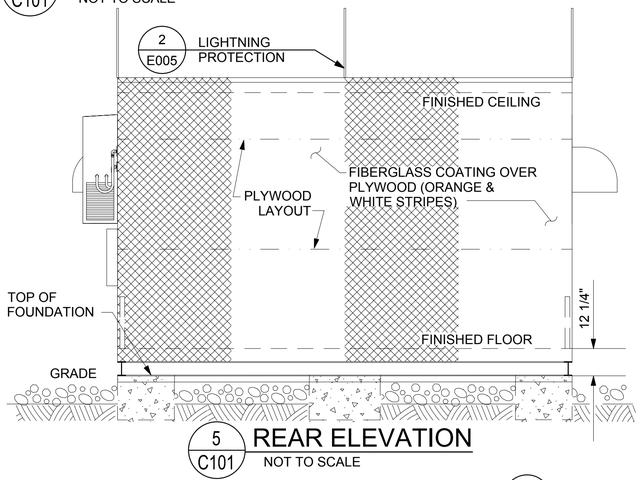
10. CONTRACTOR SHALL THOROUGHLY PRESSURE WASH AND WAX ENTIRE EXTERIOR OF NEW FIBERGLASS SHELTER AFTER INSTALLATION.

11. SHELTER AND INTERFACE BOX IS GFM. A/C IS GFM. SEE ABOVE NOTES FOR SPECIFIC ITEMS INCLUDED WITH SHELTER FOR SETTING SHELTER. ALL OTHER ITEMS INCLUDING CONDUIT IS FURNISHED BY THE CONTRACTOR.

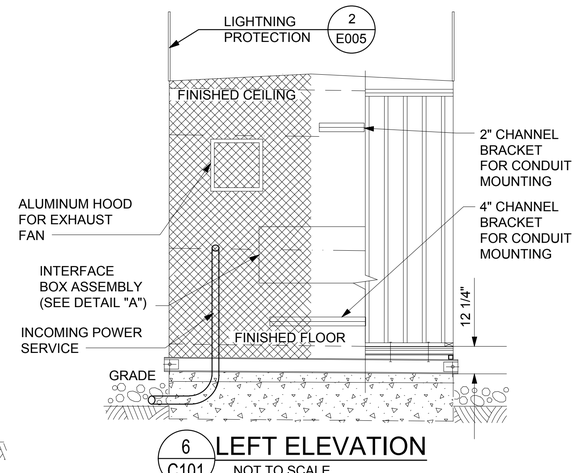
12. CONTRACTOR TO INSTALL LIGHTNING PROTECTION SYSTEM AND CONNECT UP TO EXISTING UNDERGROUND LIGHTNING/GROUNDING SYSTEM. CONTRACTOR TO INSTALL INTERFACE BOX ALONG WITH CONDUIT CONNECTIONS FROM EXISTING CONDUIT INTO THE NEW SHELTER. COORDINATE WITH THE FAA'S RE ON CONDUIT ROUTING AND INSTALLATION OF LOOSE EQUIPMENT ON THE EXTERIOR OF THE SHELTER.

13. REFER TO THE APPENDIX FOR THE LOCALIZER SHELTER SUBMITTAL FOR WHAT WAS ORDERED AND BEING PROVIDED BY THE FAA. THE DRAWINGS IN THE APPENDIX SHOW ADDITIONAL DETAILS IN EQUIPMENT PLACEMENT AND LAYOUT OF THE INTERIOR ALONG WITH THE SHELTER EXTERIOR LAYOUT.

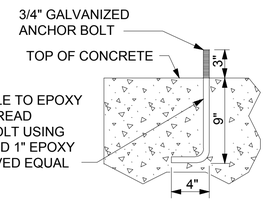
DESIGN LOADS
400 PSF - LIVE FLOOR
70 PSF - LIVE ROOF
150 MPH - WIND
ZONE 4 - SEISMIC



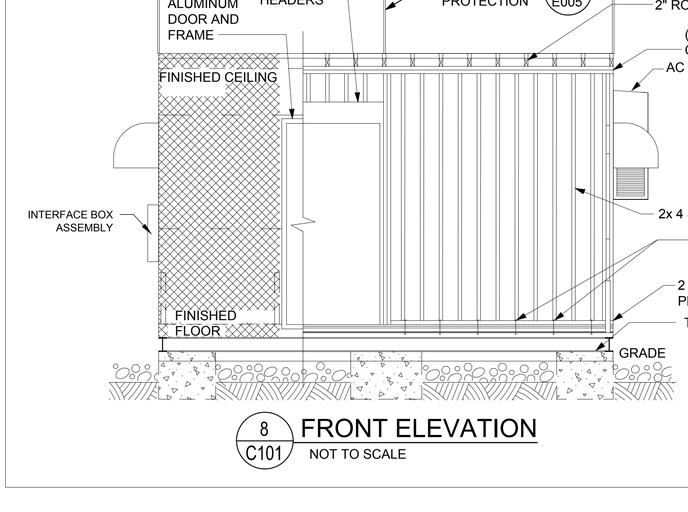
5 C101 **REAR ELEVATION**
NOT TO SCALE



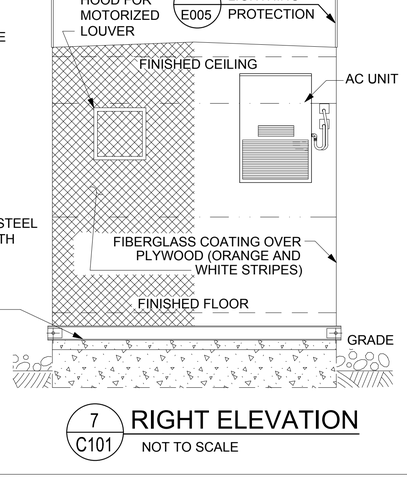
6 C101 **LEFT ELEVATION**
NOT TO SCALE



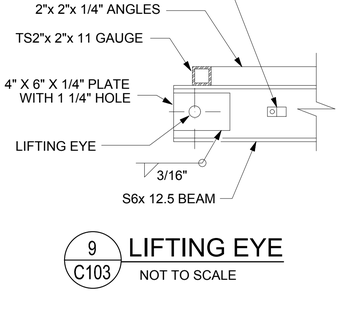
3 C101 **ANCHOR BOLT DETAIL**
NOT TO SCALE



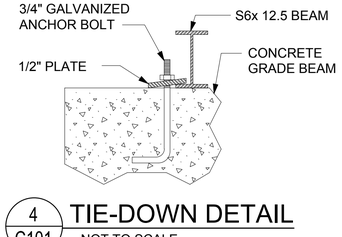
8 C101 **FRONT ELEVATION**
NOT TO SCALE



7 C101 **RIGHT ELEVATION**
NOT TO SCALE



9 C103 **LIFTING EYE**
NOT TO SCALE



4 C101 **TIE-DOWN DETAIL**
NOT TO SCALE

ATO - TECHNICAL OPERATIONS — EASTERN SERVICE AREA

LOC

RUNWAY 35

DUPONT STANDARD SHELTER 10 X 16 (L SIDE)
FOUNDATION DETAILS AND ELEVATIONS

AUGUSTA — AUGUSTA REGIONAL AIRPORT — GA

PROJECT ENGINEER — MGR: ENGINEERING - CENTER A

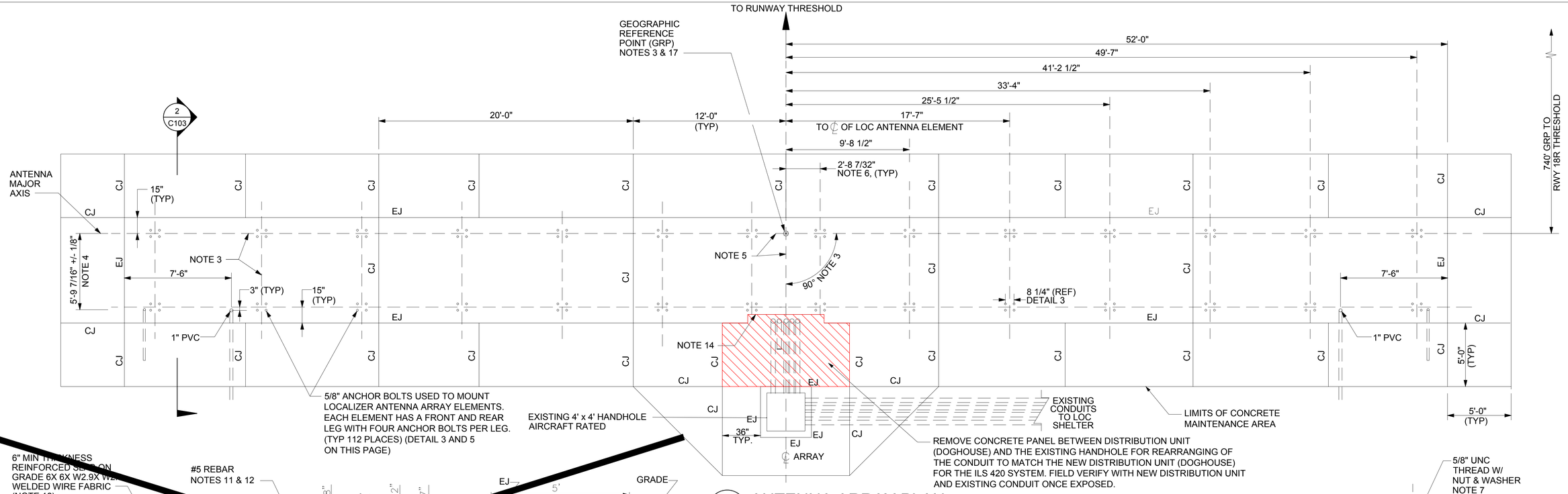
SF
LER
ENGINEERING SERVICES
NAVAIDS

02/19/2022 — 1604662

MCO-1604662-C101

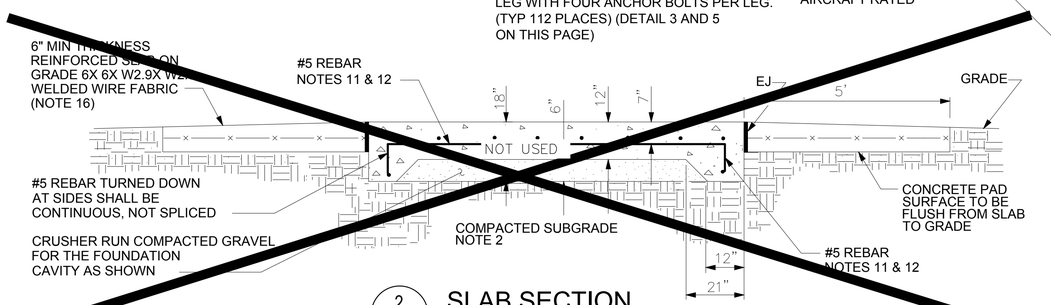
ISSUED FOR: CONSTRUCTION

EDM: mco-1604662-c103.dgn



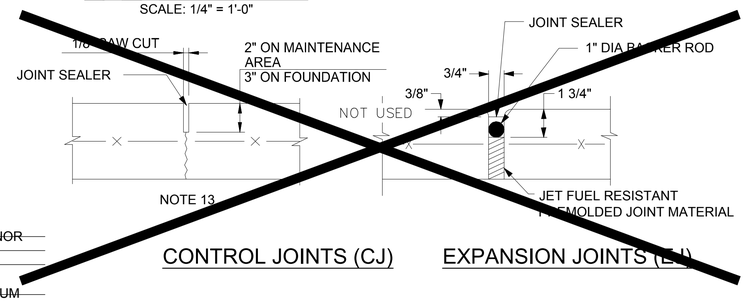
1 C103 ANTENNA ARRAY PLAN

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



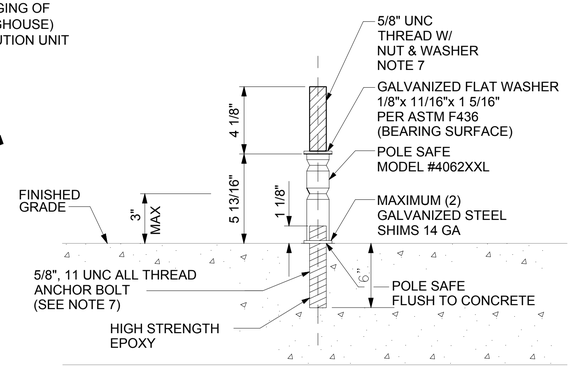
2 C103 SLAB SECTION

NOT TO SCALE



4 C103 JOINT DETAILS

NOT TO SCALE



5 C103 POLE SAFE/ANCHOR BOLT

NOT TO SCALE MODEL #4062XXL

NOTES

1. ~~CONCRETE MUST DEVELOP 3000 PSI IN 28 DAYS, WITH A SLUMP OF 4" +/- 1". MAXIMUM AGGREGATE SIZE SHALL BE 3/4".~~

2. ~~FILL UNDER AND AROUND FOUNDATION SHALL BE BUILT UP IN LAYERS NOT EXCEEDING 6" AND EACH LAYER SHALL BE THOROUGHLY TAMPED AND COMPACTED TO 95% OF MAXIMUM DENSITY AT OPTIMUM WATER CONTENT. GRADING OF SOIL SHOULD BE SUCH THAT ALL DRAINAGE IS AWAY FROM FOUNDATION.~~

3. ALIGN MAJOR AXIS OF ANTENNA ARRAY PERPENDICULAR TO RUNWAY CENTERLINE WITHIN 0.05°. ARRAY CENTER MUST BE WITHIN 3" OF EXTENDED RUNWAY CENTERLINE.

4. TOLERANCES - ALL ANCHOR BOLTS MUST BE LOCATED 1/8" OF DIMENSIONS GIVEN ON DETAIL 3.

5. REFERENCE LINES FOR ARRAY POSITIONING ON SITE PLAN.

6. DIMENSIONS ARE SYMMETRICAL ABOUT ARRAY CENTERLINE.

7. THREADED RODS SHALL BE HOT DIPPED GALVANIZED STEEL PER ASTM-A153 AND ASTM-A325. NUTS, WASHERS SHALL BE HOT DIPPED GALVANIZED AS WELL.

8. ~~ALL ITEMS ON THIS DRAWING ARE CONTRACTOR FURNISHED.~~

9. CONCRETE FOUNDATION BASED ON 3000 PSF VERTICAL SOIL PRESSURE AND 250 PSF LATERAL SOIL PRESSURE PER FOOT BELOW SURFACE. THE DEMENSIONS SHOWN FOR THE DEPTH OF CONCRETE PLACED IN THE GROUND ARE MINIMUM DEPTHS IN ANY CASE THE BOTTOM OF CONCRETE FOUNDATIONS MUST BE AT LEAST 6" BELOW THE FROST LINE. SPECIAL SOILS AND TEMPERATURES MAY REQUIRE A DIFFERENT FOUNDATION DESIGN.

10. ~~CONCRETE FOUNDATION SHALL BE LEVEL WITHIN 1" FROM THE LOWEST TO THE HIGHEST POINT.~~

11. ~~PROVIDE #5 REBAR SPACED 12" O.C. EACH WAY THROUGH SLAB. MINOR ADJUSTMENTS OF REBAR ARE PERMITTED TO ENSURE IT DOES NOT INTERFERE WITH ANCHOR BOLTS.~~

12. ~~ALL SPLICES IN THE LONGITUDINAL DIRECTION SHALL HAVE A MINIMUM OVERLAP DISTANCE OF TWENTY (20) TIMES THE BAR DIAMETER AND SHALL BE TIED IN SUCH A MANNER THAT THE ENDS ACHIEVE FULL CONTACT WITH EACH OTHER. TIES SHALL BE POSITIONED SO THAT ADJACENT SPLICES WILL ALTERNATE TOP AND BOTTOM POSITIONING.~~

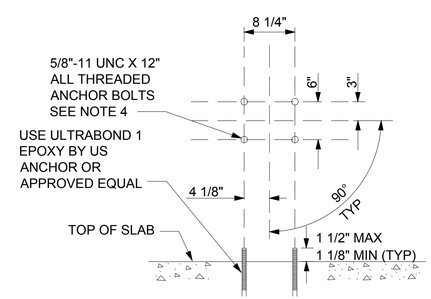
13. ~~CONTROL JOINTS SHALL BE 2" DEEP ON MAINTENANCEAREA AND 3" ON FOUNDATION AT PLACES SHOWN IN PLAN VIEW. SAW JOINTS BEFORE DRYING SHRINKAGE STRESS BECOMES LARGE ENOUGH TO PRODUCE CRACKING (USUALLY 4-12 HOURS AFTER CONCRETE IS POURED). MAKE SURE CONCRETE HARDENS SUFFICIENTLY TO PREVENT AGGREGATES FROM BEING DISLODGED FROM SAW.~~

14. ~~INSTALL A 8"x 72" WIDE NOTCH THROUGH SLAB TO ALLOW INSTALLATION OF CONDUIT.~~

15. ~~THE AREA AROUND CONDUITS TO BE BACK FILLED LOOSELY TO ALLOW FOR ALIGNMENT OF CONDUIT WITH ANTENNA DISTRIBUTION UNIT INSTALLED BY SUBCONTRACTOR. SEE LOCALIZER ANTENNA ARRAY INSTALLATION DRAWING C108 FOR CONDUIT DETAILS AT DISTRIBUTION UNIT.~~

16. AFTER LOCALIZER CONDUITS ARE INSTALLED, BACKFILLED AND COMPACTED, INSTALL CONCRETE PAD WITH 6x 6-W2.9x W2.9 WWF.

17. A PROFESSIONAL SURVEYOR LICENSED IN THE STATE SHALL ACCOMPLISH SURVEY AND LAYOUT USING THE RUNWAY THRESHOLD AND CENTERLINE INTERSECTION AS THE BENCHMARK AND BASELINE FOR LAYOUT OF BOLT PATTERN. SURVEY SHALL PROVIDE AS-BUILT LOCATION DATA FOR THE ANTENNA GEOGRAPHICAL REFERENCE POINT (GRP).



3 C103 ANCHOR BOLT LAYOUT

NOT TO SCALE

REUSE EXISTING ANCHOR BOLTS

ATO - TECHNICAL OPERATIONS EASTERN SERVICE AREA

LOC

RUNWAY 35
ANTENNA ARRAY (14 ELEMENT)
FOUNDATION PLAN AND DETAILS

AUGUSTA AUGSUTA REGIONAL AIRPORT GA

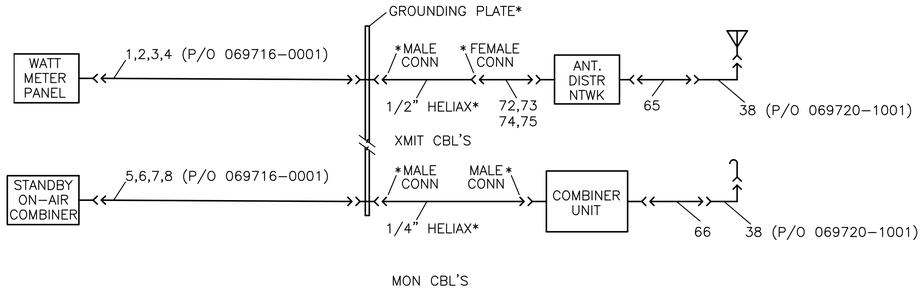
PROJECT ENGINEER MGR: ENGINEERING - CENTER A

SF LER ENGINEERING SERVICES NAVAIDS 02/19/2022 1604662

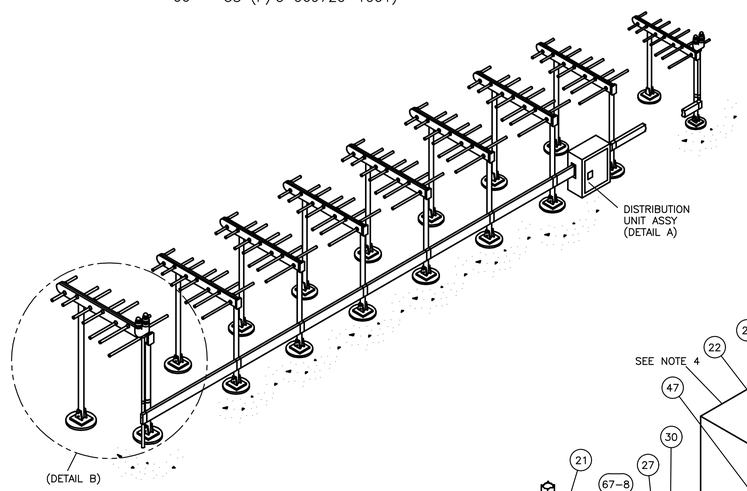
MCO-1604662-C103

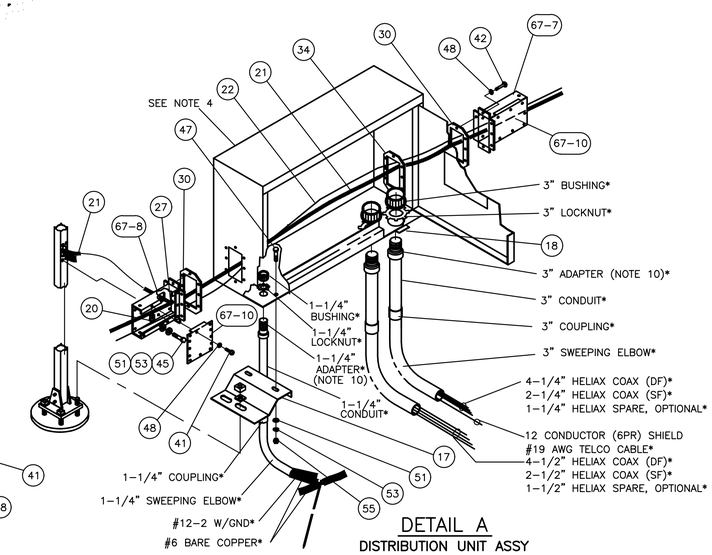
ISSUED FOR: CONSTRUCTION

EDM: mco-1604662-c101.dgn

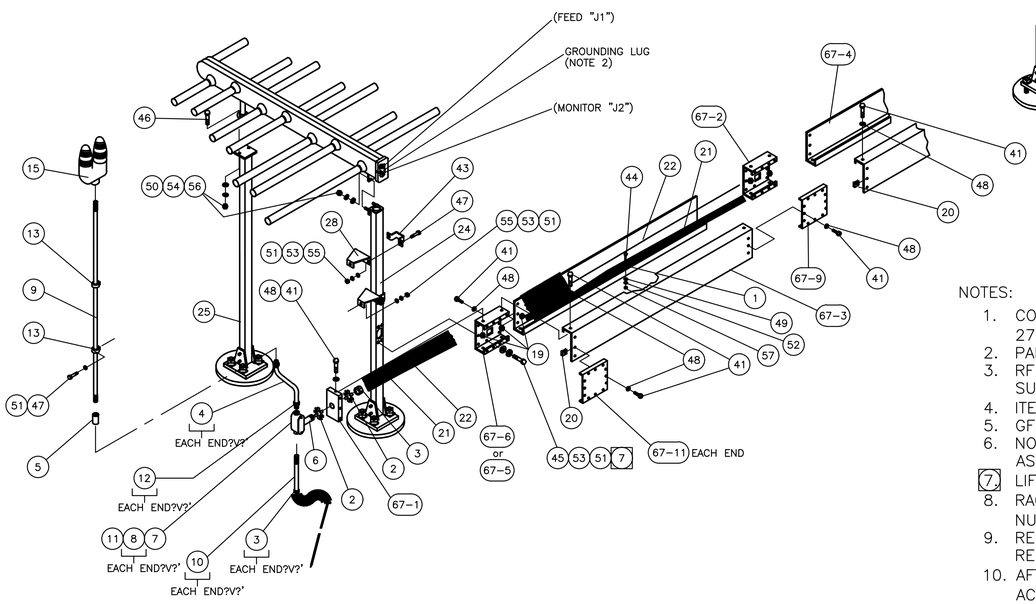


DETAIL D
ANTENNA CABLES





DETAIL A
DISTRIBUTION UNIT ASSY



DETAIL B
ANTENNA ARRAY SUPPORT
& OBSTRUCTION LIGHT DETAIL
TYPICAL EACH END

NOTES:

1. CONNECTION #6 BARE COPPER (ITEM 21) MADE WITH SPLIT BOLT CONNECTOR (ITEM 27) INSIDE CABLE RACEWAY.
2. PART OF LOC. ANT. ELEMENT AND IS FACTORY ASSEMBLED.
3. RF FEED & MONITOR CABLES TO ANT. THRU CABLE RACEWAY & VIA REAR ANT. SUPPORT.
4. ITEMS MARKED WITH AN ASTERISK (*) ARE FURNISHED BY THE CONTRACTOR.
5. GFM-GOVERMENT FURNISHED MATERIAL.
6. NOTED ITEMS ARE TO BE USED AS SPARE HARDWARE FOR THE ANTENNA RADOME ASSEMBLIES.
7. LIFT/SUPPORT RACEWAY BEFORE TIGHTENING THIS HARDWARE..
8. RACEWAY KIT (ITEM 67) ITEMS ARE DENOTED BY BALLOONS WITH 67-x (x=IS FIND NUMBER IN KIT).
9. REFERENCE PL069720-0001 FOR FN 17,18,24,25,28,34,43,65,66,67,68,72,73,74, & 75. REFERENCE PL069720-1001, ELECTRICAL SUPPLY KIT, FOR ALL OTHER FIND NUMBERS.
10. AFTER FINAL ADJUSTMENTS, GLUE CONDUIT ADAPTERS ON CONDUIT USING (LOCALLY ACQUIRED) PVC JOINTING ADHESIVE. SEAL EACH CABLE CONDUIT END WITH (LOCALLY ACQUIRED) EXPANDING FOAM.
11. NEW 14 ELEMENT ANTENNA ARRAY IS TO BE ASSEMBLED AND INSTALLED BY THE CONTRACTOR ON EXISTING CONCRETE FOUNDATION.
12. EXISTING CONDUIT SWEEPS ARE TO BE REUSED CONNECTING INTO THE BOTTOM OF THE DOGHOUSE. CONDUIT IS TO BE REARRANGED TO ALIGN UP TO NEW KNOCKOUTS.

ITEM	QTY	DESCRIPTION	PN
*	A/R	CONN., RF, 1/2" HELIAX, FEMALE	*
*	A/R	CONNECTOR, RF, 1/2" HELIAX, MALE	*
*	A/R	CONNECTOR, RF, 1/4" HELIAX, MALE	*
*	A/R	1/4" HELIAX COAX	*
*	A/R	1/2" HELIAX COAX	*
*	A/R	12 CONDUCTOR (6PR) SHIELD #14 AWG TELCO CABLE	*

PARTS LIST

ITEM	QTY	DESCRIPTION	PN
*	A/R	#12-2 W/ GND	*
*	A/R	#6 BARE COPPER	*
*	1	1/4" SWEEPING ELBOW, CND	*
*	1	1/4" COUPLING, CND	*
*	A/R	CND, 1/4"	*
*	1	1/4" ADAPTER, CND	*
*	1	1/4" LOCKNUT, CND	*
*	1	1/4" BUSHING, CND	*
*	1	3" SWEEPING ELBOW, CND	*
*	1	3" COUPLING, CND	*
*	A/R	CND, 3"	*
*	1	3" ADAPTER, CND	*
*	1	3" LOCKNUT, CND	*
*	1	3" BUSHING, CND	*
75	1	CABLE ASSY, RF	932616-0004
74	1	CABLE ASSY, RF	932616-0003
73	1	CABLE ASSY, RF	932616-0002
72	1	CABLE ASSY, RF	932616-0001
68	1	INSTL DWG, ANT INSTL, 14E, DF LOC	069720-0001-ID
67	1	KIT, RACEWAY 14 ELEMENT	069552-0001
66	1	HELIAX CABLE SET, 14 EL LOC	069589-0101
65	1	HELIAX CABLE SET, 14 EL LOC	069589-0001
57	26	NUT, HEX, #10-32	930001-0304
56	60	NUT, HEX, 5/16"-18	930000-2314
55	18	NUT, HEX, 1/4"-20	930000-2254
54	60	WASHER, SPLIT, 5/16"	926001-0083
53	86	WASHER, SPLIT, 1/4"	926001-0082
52	26	WASHER, SPLIT, #10	926001-0081
51	86	WASHER, FLAT, 1/4", 1/2" OD	925001-0007
50	86	WASHER, FLAT, 5/16"	925000-0812
49	26	WASHER, FLAT, #10	925000-0808
48	350	WASHER, FLAT, #8	925000-0807
47	18	BOLT, HEX, 1/4"-20 X 3/4"	919065-0005
46	30	BOLT, HEX, 5/16"-18 X 1-1/2"	919063-0032
45	60	SCREW, MACH, 1/4"-20 X 1", PHPHMS	915016-0083
44	26	SCREW, MACH, 10-32 X 1/2", PHFHMS	916012-0272
43	4	BRACKET, OBLIGHT, SUPPORT STRAP	290207-0001
42	16	SCREW, MACH, 8-32 X 5/8", PHPHMS	915014-0046
41	334	SCREW, MACH, 8-32 X 1/2", PHPHMS	915014-0045
38	28	CONN, ADPTR, ELEC, N/F TO N/M, 90°	229C07-0012
34	2	NUT, PLATE, RACEWAY ADAPTER	300697-0001
30	2	GASKET, SILICONE RUBBER, 3/32"	265050-0001
28	4	BRACKET, OB LIGHT, SUPPORT	290206-0001
27	17	SPLICE, CNDCT, SPLIT BOLTS	229911-0004
25	14	SUPPORT ASSY, FRONT, LPA	120574-0001
24	14	ASSY, ANTENNA SUPPORT, REAR, LPD	120693-0001
23	1'	INSUL SLVG, ELEC, 0.75" MIN	114C50-0004
22	1	CABLE, ELEC, TYPE UF-B, 250'	111449-0002
21	1	WIRE, ELEC, 200', #6, BARE COPPER	110041-2001
20	238	SPEED NUT, U TYPE, #8-32	100999-0001
19	146	NUT, SELF-LOCKING, HEX, #8-32	100482-0008
18	1	BRACKET, MTG, DU/CU BOX	290217-0002
17	1	BRACKET, MTG, DU/CU BOX	290217-0001
15	2	OBSTRUCTION LIGHT, DUAL, W/ LED LAMPS, 120VAC	035C30-0001
13	4	HANGER-PIPE/CONDUIT, 3/4 SIZE	033786-0002
12	4	BOX, CONN, ELEC, NON-INSUL, 3/4	033661-0003
11	2	GASKET, UNILET, 3/4 SIZE	033728-0003
10	2	CONDUIT, 3/4 SIZE (2.5 FOOT)	033671-0004
9	2	CONDUIT, 3/4 SIZE (4 FOOT)	033671-0001
8	2	COV, CND OUTLET, 3/4" AL UNILET CVR	033590-0001
7	2	CND OUTLET, 3/4", 3-HOLE, CAST AL	033588-0001
6	2	NIPPLE, CONDUIT, 5.00L	033586-0006
5	2	COUPLING, ELEC, CND, 3/4"	033735-0002
4	2	FLEX, ELEC CND, 3/4" FLEX. LIQUID-TIGHT METALLIC, TYPE LA, 3'	033C03-0002
3	4	BUSHING, 3/4"	033516-0000
2	4	LOCK NUT, ELEC CONDUIT, 3/4" DIAM	033514-0000
1	26	TERMINAL, LUG, 4-14 AWG	025986-0001

PARTS LIST

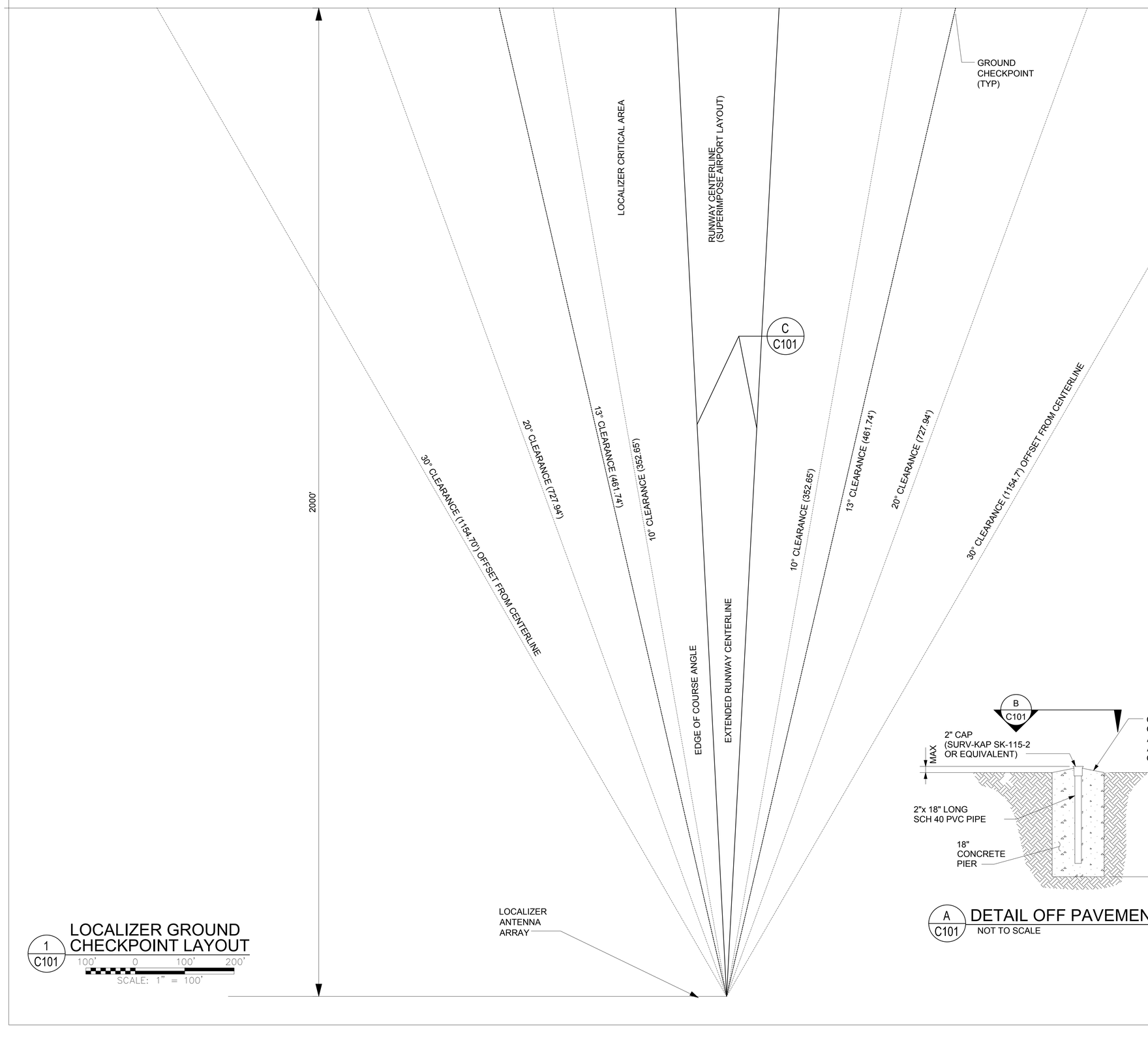
REV. LTR.	DATE	DESCRIPTION	CHECKED	APPROVED

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
WASHINGTON, D.C. 20590

INSTRUMENT LANDING SYSTEM
CAPTURE EFFECT LOCALIZER
14 ELEMENT ANTENNA ARRAY
INSTALLATION DETAILS
TYPE NO. FA-34001

REVIEWED BY	SUBMITTED BY	APPROVED BY

DESIGNED BY	ISSUED BY	DATE- 07/02/2024	REV. LTR.
DRAWN BY ESH	AIRWAY FACILITIES SERVICE	DRAWING NO. 420-6288-18'	
CHECKED BY			



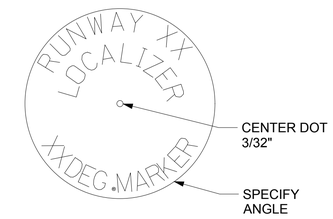
1 C101 LOCALIZER GROUND CHECKPOINT LAYOUT

100' 0 100' 200'

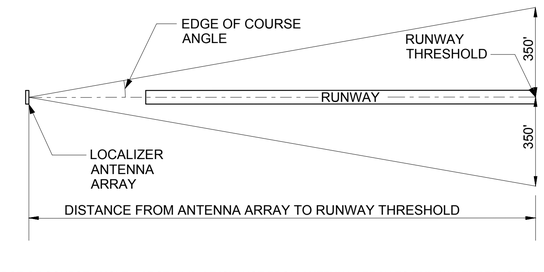
SCALE: 1" = 100'

NOTES

1. GROUND CHECK POINTS LOCATED ON AIRCRAFT WEIGHT RATED PAVEMENT SHALL BE MARKED WITH A 12" DIAMETER CIRCLE PAINTED AVIATION ORANGE WITH COMPATIBLE LATEX PAINT. GROUND CHECK POINTS LOCATED ON NON-AIRCRAFT WEIGHT RATED PAVEMENTS SHALL BE MARKED WITH A SURV-KAP M/M-B2 2" FLAT BRASS MONUMENT DRILLED AND EPOXIED INTO THE PAVEMENT PRE MANUFACTURER'S RECOMMENDATIONS. PAINT AROUND THE MONUMENT AS INDICATED ABOVE.
2. GROUND CHECK MONUMENTS SHALL BE ESTABLISHED PRIOR TO THE CONCLUSION OF THE CONSTRUCTION CONTRACT BY THE CONTRACTOR'S SURVEYOR. COORDINATE WITH LOCAL FAA TECHNICIANS THROUGH RE PRIOR TO PLACING MONUMENTS. PROVIDE AS-BUILT COORDINATES OF MARKERS AND LOCALIZER ANTENNA ARRAY GRP.
3. GROUND CHECK POINTS NOT LOCATED ON PAVEMENT SHALL BE CONSTRUCTED PER DETAIL A. OFF PAVEMENT MARKER CONCRETE SHALL BE 3000 PSI COMPRESSIVE CONCRETE AT 28 DAYS.
4. OFFSET DISTANCES SHOWN ARE BASED ON 2000' DISTANCE FROM LOCALIZER GRP. NOT ALL LOCATIONS MAY BE PRACTICAL AND WILL EITHER BE MOVED TO AN ALTERNATE LOCATION OR NOT INSTALLED, AS DIRECTED BY THE RE.
5. PRIOR TO SETTING GROUND CHECK POINTS, COORDINATE WITH THE FAA SSC THROUGH THE RE. POINTS TO BE SET IN ACCORDANCE WITH FAA ORDER 6750.49A.

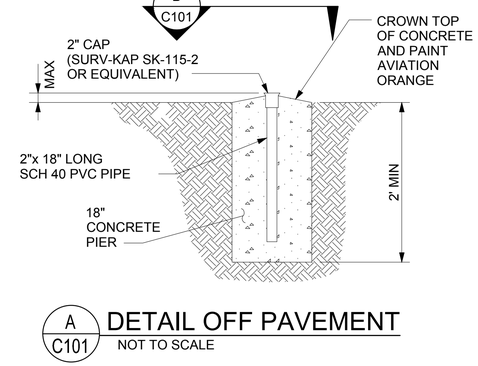


B C101 VIEW
NOT TO SCALE



EDGE OF COURSE ANGLE = ARCTAN (350/DISTANCE FROM ANTENNA ARRAY TO RUNWAY THRESHOLD)
EDGE OF COURSE ANGLE = ARCTAN (350/9603)=2.09°

C C101 EDGE OF COURSE ANGLE
NOT TO SCALE



A C101 DETAIL OFF PAVEMENT
NOT TO SCALE

ATO - TECHNICAL OPERATIONS EASTERN SERVICE AREA

LOC

LOCALIZER GROUND CHECKPOINT LAYOUT

AUGUSTA AUGUSTA REGIONAL AIRPORT GA

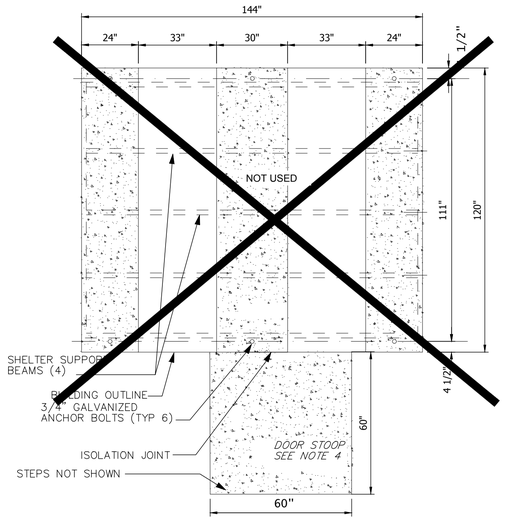
PROJECT ENGINEER MGR: ENGINEERING - CENTER A

SF LER ENGINEERING SERVICES NAVAIDS 02/19/2022 1604662

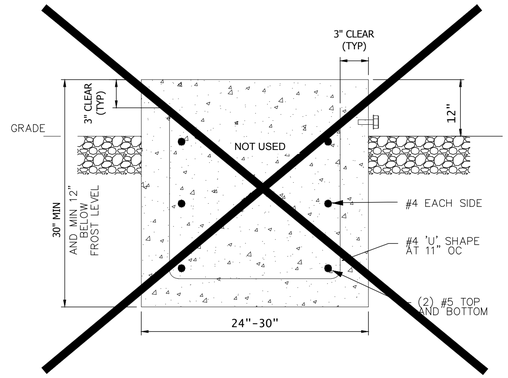
MCO-1604662-C101

ISSUED FOR: CONSTRUCTION

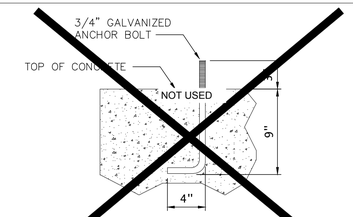
EDM: mco-1604662-c106.dgn



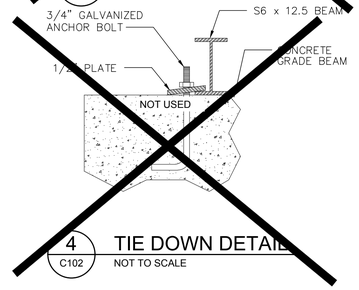
1 C102 10' x 12' GRADE BEAM FOUNDATION PLAN
NOT TO SCALE



2 C102 FOOTING DETAIL
NOT TO SCALE



3 C102 ANCHOR BOLT DETAIL
NOT TO SCALE



4 C102 TIE DOWN DETAIL
NOT TO SCALE

NOTES

1. ~~ALL CONCRETE SHALL DEVELOP 3000 PSI IN TWENTY EIGHT (28) DAYS WITH A MAXIMUM SLUMP OF 4 INCHES. MAXIMUM AGGREGATE SIZE SHALL BE 3/4 INCH. CONCRETE SHALL NOT BE LOADED FOR AT LEAST SEVEN (7) DAYS AFTER CONCRETE PLACEMENT.~~

2. ~~IF FILL OR GRADING IS REQUIRED IT SHALL BE BUILT UP IN LAYERS NOT EXCEEDING 6 INCHES. EACH LAYER SHALL BE THOROUGHLY TAMPED AND COMPACTED TO 95% OF MAXIMUM DENSITY AT OPTIMUM WATER CONTENT. GRADING OF ROCK AND SOIL SHALL BE SO THAT ALL DRAINAGE IS AWAY FROM FOUNDATION. MAINTAIN A DRAINAGE SLOPE OF 1/8" PER FOOT.~~

3. GRADE BEAM FOUNDATIONS SHALL BE HORIZONTALLY LEVEL WITH EACH OTHER WITHIN 1/4 INCH. INDIVIDUAL GRADE BEAM SURFACES SHALL BE LEVEL WITHIN 1/8 INCH. GRADE BEAM SURFACES SHALL BE TROWEL FINISHED WITH TOOLED EDGES.

4. ~~DOOR STOOP TO BE CENTERED BELOW DOOR. THE TOP OF THE CONCRETE STOOP SHALL BE 3 INCHES BELOW THE BOTTOM OF SHELTER DOOR. SLOPE THE STOOP 1 PERCENT AWAY FROM THE SHELTER. BROOM FINISH THE STOOP. THE STEPS SHALL BE INSTALLED WHERE THE TOP OF STOOP IS MORE THAN 11" ABOVE THE EXISTING GRADE. THE TOP OF THE STOOP OR THE HIGHEST STEP SHALL BE LEVEL WITH THE FINISHED FLOOR INSIDE THE BUILDING. CENTER STOOP UNDER DOOR.~~

5. THE ANCHOR BOLTS, NUTS AND WASHERS SHALL BE HOT DIPPED GALVANIZED STEEL PER ASTM A153 AND A325. EXPOSED THREADS SHALL BE CLEAN AND LUBRICATED. TIGHTEN THE NUT TO 45 FT–LBS MINIMUM. THE ANCHOR BOLTS, NUTS AND WASHERS SHALL BE CONTRACTOR FURNISHED.

6. THE EQUIPMENT SHELTER AND TIE–DOWN PLATES ARE GOVERNMENT FURNISHED MATERIAL. LIFTING RINGS ARE PROVIDED IN THE SHELTER SKID CHANNELS FOR CRANE LOADING AND OFF–LOADING. SPREADER BARS SHALL BE USED BETWEEN THE LIFTING CABLES. PROVIDE ADEQUATELY SIZED EQUIPMENT TO LIFT AND LOAD, TRANSPORT, AND LIFT AND OFF–LOAD THE SHELTER. THE USE OF A FORKLIFT FOR THIS PURPOSE WILL NOT BE PERMITTED. ALL FEES, PERMITS, RENTALS, ETC. FOR TRANSPORTATION SHALL BE INCLUDED IN THE BID. INSPECT THE SHELTER AND CONTENTS PRIOR TO TRANSPORTING THE SHELTER. NOTIFY THE COR OF ANY DAMAGE TO SHELTER PRIOR TO BEGINNING TRANSPORTING THE SHELTER. CONFIRM THAT ALL SHELTER CONTENTS ARE SECURED PRIOR TO TRANSPORTING. ONCE THE PROCESS OF TRANSPORTING THE SHELTER HAS BEGUN, THE CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR THE SHELTER AND ITS CONTENTS UNTIL FINAL ACCEPTANCE BY THE FAA.

7. AFTER ANCHORING THE SHELTER, CONTRACTOR TO INSTALL THE LED LIGHTS AND THE LIGHT FIXTURE COVERS. INSTALL THE HVAC UNIT IN THE WALL SLEEVE AND REMOVE THE PLYWOOD FROM THE AIR INTAKE LOUVER.

8. THE SHELTER SHALL BE ANCHORED WITH CONTRACTOR FURNISHED GALVANIZED NUTS AND WITH GOVERNMENT FURNISHED TIE–DOWN PLATES.

9. CONTRACTOR SHALL THOROUGHLY PRESSURE WASH AND WAX ENTIRE EXTERIOR OF NEW FIBERGLASS SHELTER AFTER INSTALLATION.

10. GRAVEL AROUND AND UNDER SHELTERS NOT SHOWN.

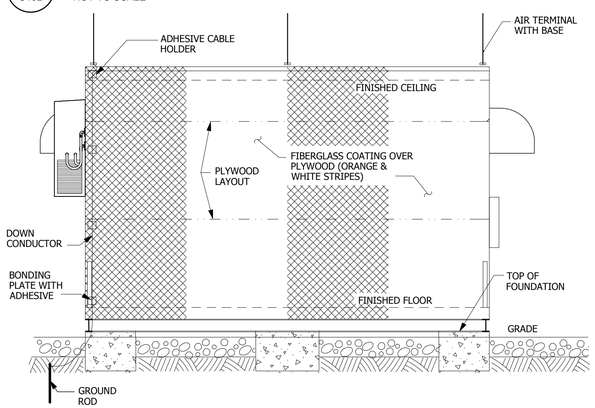
11. SHELTER AND INTERFACE BOX IS GFM. A/C IS GFM. SEE ABOVE NOTES FOR SPECIFIC ITEMS INCLUDED WITH SHELTER FOR SETTING SHELTER. ALL OTHER ITEMS INCLUDING CONDUIT IS BY CONTRACTOR.

12. FIELD LOCATE AND REROUTE EXISTING CONDUITS UP TO NEW INTERFACE BOX. COORDINATE WITH THE RE ON WHICH COMPARTMENT OF THE INTERFACE BOX TO LAND EACH CONDUIT SWEEP. PROVIDE NEW CONDUIT SWEEPS AND VERTICAL RGS CONDUIT AS NEEDED

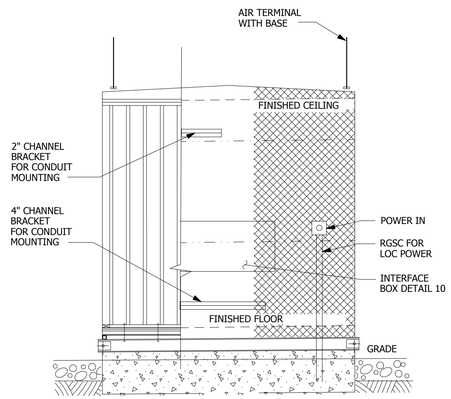
13. CONTRACTOR TO INSTALL LIGHTNING PROTECTION SYSTEM. FAA TO PROVIDE ABOVE GROUND EXTERIOR KIT FOR LIGHTNING PROTECTION. THE CONTRACTOR TO PROVIDE ALL NEW UNDERGROUND LIGHTNING/GROUNDING PROTECTION PER DETAIL. CONTRACTOR TO INSTALL INTERFACE BOX ALONG WITH CONDUIT CONNECTIONS FROM EXISTING CONDUIT INTO THE NEW SHELTER. COORDINATE WITH THE FAA'S RE ON CONDUIT ROUTING AND INSTALLATION OF LOOSE EQUIPMENT ON THE EXTERIOR OF THE SHELTER.

14. REFER TO THE APPENDIX FOR THE LOCALIZER SHELTER SUBMITTAL FOR WHAT WAS ORDERED AND BRING PROVIDED BY THE FAA. THE DRAWINGS IN THE APPENDIX SHOW ADDITIONAL DETAILS IN EQUIPMENT PLACEMENT AND LAYOUT OF THE INTERIOR ALONG WITH THE SHELTER EXTERIOR LAYOUT.

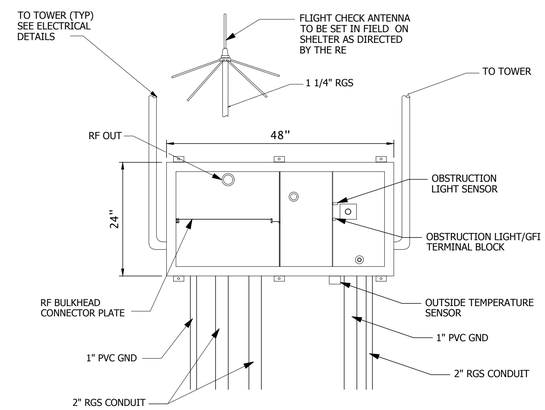
DESIGN LOADS
400 PSF – LIVE FLOOR
70 PSF – LIVE ROOF
150 MPH – WIND
ZONE 4 – SEISMIC



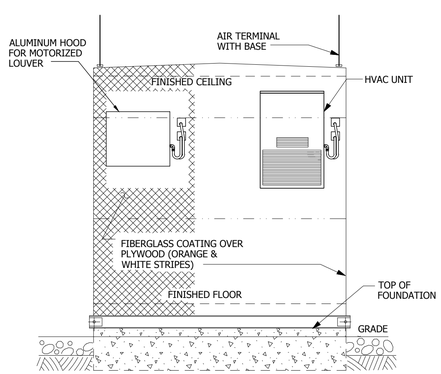
5 C102 REAR ELEVATION
NOT TO SCALE



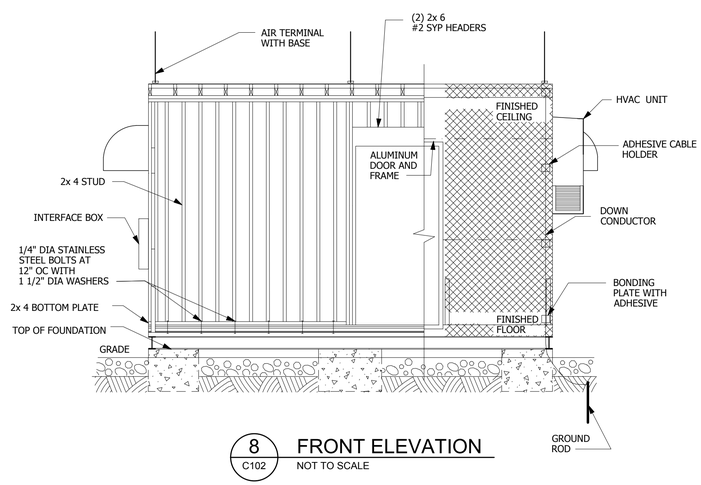
6 C102 LEFT ELEVATION
NOT TO SCALE



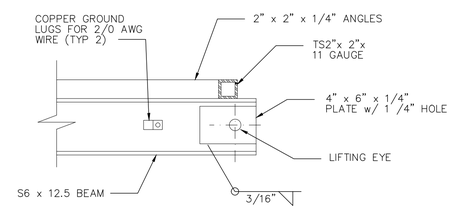
10 C102 INTERFACE BOX
NOT TO SCALE



7 C102 RIGHT ELEVATION
NOT TO SCALE



8 C102 FRONT ELEVATION
NOT TO SCALE



9 C102 LIFTING EYE
NOT TO SCALE

ATO - TECHNICAL OPERATIONS — EASTERN SERVICE AREA

GS

RUNWAY 35 REPLACE GLIDESLOPE
DUPONT STANDARD RIGHT-HANDED SHELTER
10' X 12' FOUNDATION DETAILS AND ELEVATIONS

AUGUSTA — AUGUSTA REGIONAL AIRPORT — GA

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SF — 01/20/2022 — 1604570

TJS — ENGINEERING SERVICES NAVAIDS

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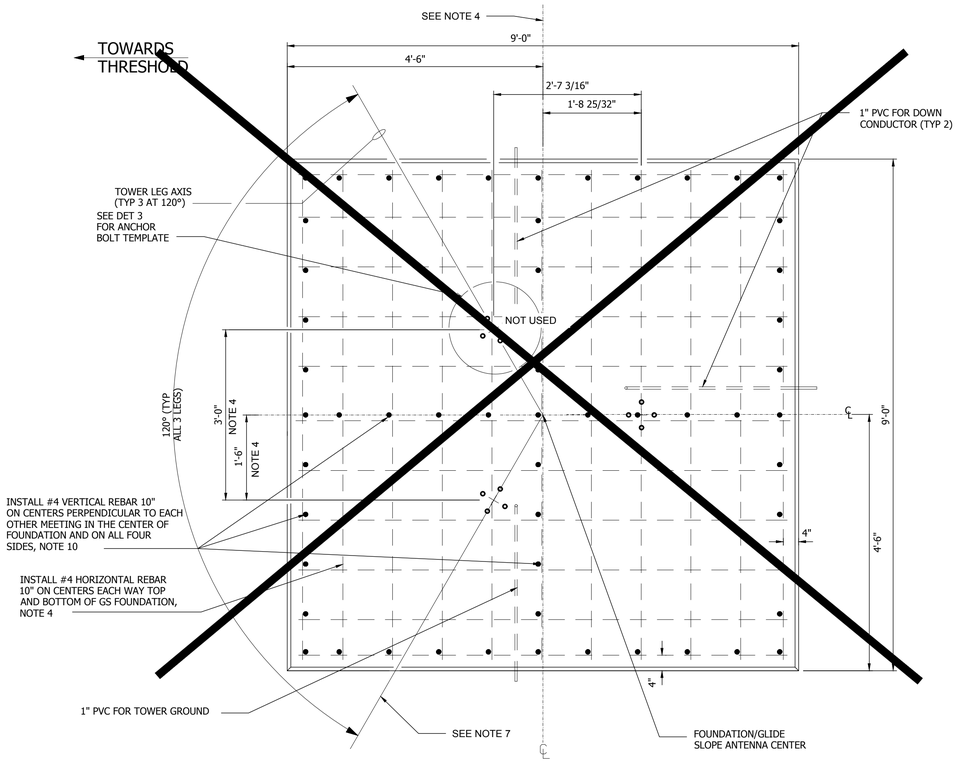
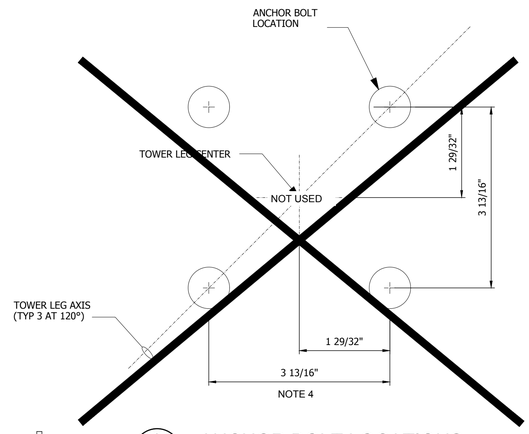
THIS DRAWING PRODUCED ON ASO REGION MICROSTATION SYSTEM



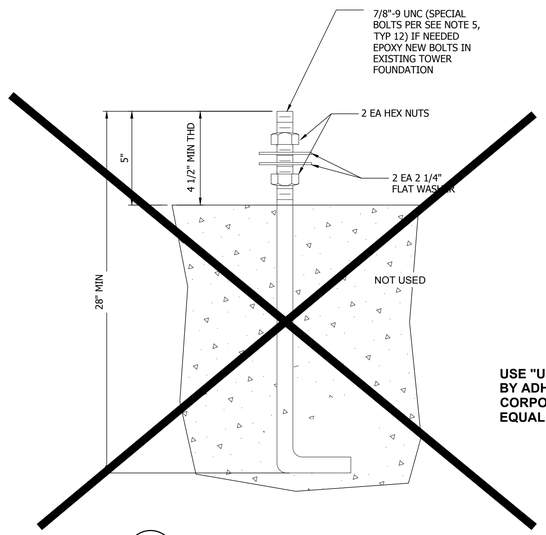
1 C103 GS ANTENNA FOUNDATION - PLAN
NOT TO SCALE



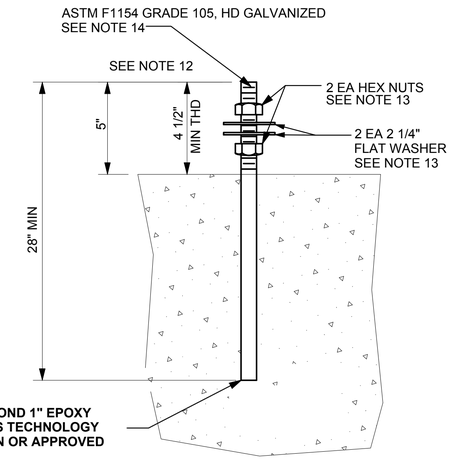
3 C103 ANCHOR BOLT LOCATIONS
NOT TO SCALE

NOTES

1. ~~ALL CONCRETE SHALL DEVELOP 3000 PSI IN 28 DAYS WITH A MAXIMUM SLUMP OF 3". MAXIMUM AGGREGATE SIZE SHALL BE 3/4"~~
2. ~~IF FILL OR GRADING IS REQUIRED IT SHALL BE BUILT UP IN LAYERS NOT EXCEEDING 6". EACH LAYER SHALL BE TAMPED COMPACTED TO 95% MODIFIED PROCTOR DENSITY. GRADING OF SOIL AND ROCK SHOULD BE SUCH THAT ALL DRAINAGE IS AWAY FROM FOUNDATION.~~
3. ~~TOLERANCES FOR GLIDE SLOPE TOWER ANCHOR BOLTS SHALL BE +/-1/16" OF DIMENSIONS GIVEN.~~
4. ~~REFERENCE LINES A & B ON 1/C101 FOR PROPER TOWER POSITION ON FOUNDATION.~~
5. ~~LOCATE REBAR SO THAT IT DOES NOT INTERFERE WITH ANCHOR BOLT LOCATIONS.~~
6. ~~FOUNDATION SURFACE SHALL BE LEVEL +/- 1/8" AND BROOM FINISHED.~~
7. ~~THESE LINES ARE ONE AND THE SAME AND ARE TO BE USED FOR ANCHOR BOLT PATTERN LOCATIONS.~~
8. ~~ANCHOR BOLTS, NUTS, AND WASHERS SHALL BE HOT-DIPPED GALVANIZED STEEL PER ASTM A153 AND A354.~~
9. CONTRACTOR TO INSTALL ANTENNA ELEMENTS AT ELEVATIONS SHOWN IN DETAIL 5/C103. ELEVATIONS WERE INITIALLY DETERMINED BY THE FAA. ALL ADJUSTMENTS AND TUNING IS TO BE DONE BY THE FAA.
10. ~~WHERE VERTICAL AND HORIZONTAL REBAR MET, VERTICAL REBAR SHALL HAVE 180 DEGREE HOOK MIN 4" OVERLAPPING TOP HORIZONTAL MAT.~~
11. EXISTING GLIDESLOPE ANTENNA FOUNDATION IS TO BE REUSED. CONTRACTOR TO VERIFY EXISTING FOUNDATION AND ANCHOR BOLT PATTERN.
12. IF THE EXISTING BOLT PATTERN DOES NOT MATCH THE PATTERN OF THE NEW TOWER OR THE EXISTING BOLTS ARE DAMAGED, THE EXISTING BOLTS SHALL BE CUT FLUSH WITH THE EXISTING FOUNDATION. THE CONTRACTOR SHALL INSTALL NEW ANCHOR BOLTS PER DETAIL 6 ON THIS SHEET.
13. ANCHOR BOLTS, NUTS, AND WASHERS SHALL BE HOT-DIPPED GALVANIZED STEEL PER ASTM A153 AND ASTM A325.
14. ANCHOR BOLTS SHALL BE INSTALLED BY DRILLING HOLES AND USING SIMPSON STRONG-TIE, SET-XP EPOXY. HOLE MUST BE CLEANED OUT USING COMPRESSED AIR. INSTALL EPOXY IN ACCORDANCE WITH MANUFACTURER RECOMMENDATION. VERIFY BOLTS ARE PLUMB.

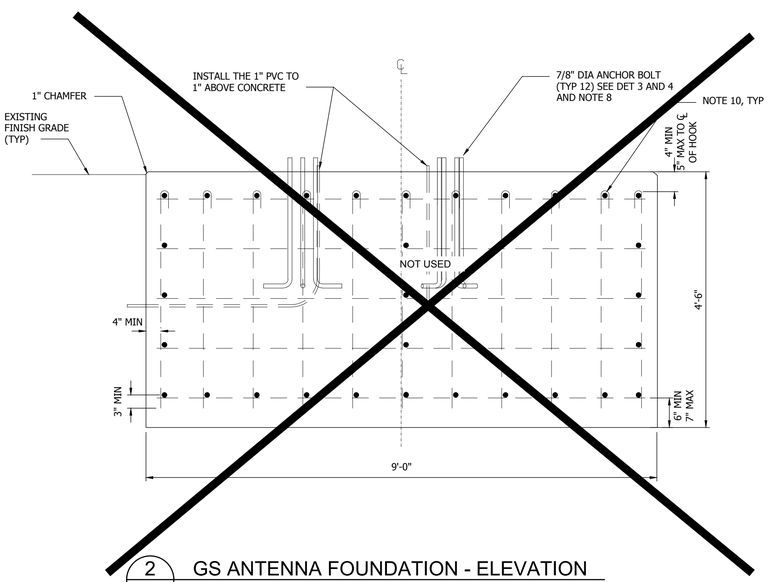


4 C103 ANCHOR BOLT DETAIL
NOT TO SCALE

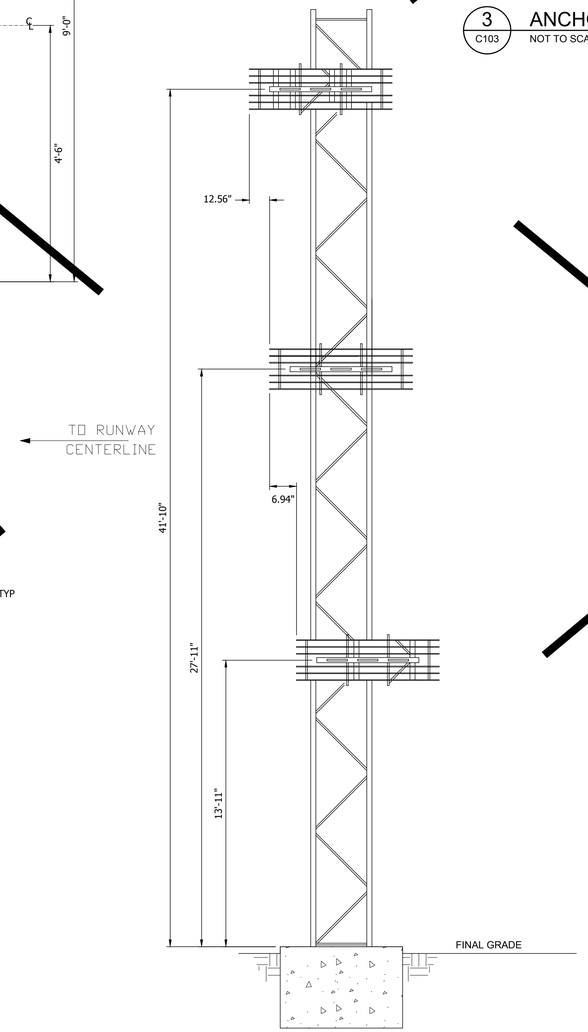


6 C103 ANCHOR BOLT DETAIL
NOT TO SCALE (IF REQUIRED, SEE NOTE 12)

1. ~~ANCHOR BOLT SHALL BE INSTALLED BY DRILLING HOLE AND USING SIMPSON STRONG-TIE, SET-XP EPOXY. HOLE MUST BE CLEANED OUT IN USING COMPRESSED AIR. INSTALL EPOXY IN ACCORDANCE WITH MANUFACTURER RECOMMENDATION. VERIFY BOLTS ARE PLUMB.~~
2. ~~ANCHOR BOLT DETAIL SHALL BE UTILIZED IN THE EVENT THAT THE EXISTING BOLT PATTERN DOES NOT ALIGN UP TO THE NEW TOWER. PROVIDE AND INSTALL ANCHOR BOLTS PER DETAIL.~~



2 C103 GS ANTENNA FOUNDATION - ELEVATION
NOT TO SCALE



5 C103 NEW CAPTURE EFFECT ANTENNA POSITIONING
NOT TO SCALE

SOUTHERN REGION — ATLANTA, GA

GS

RUNWAY 35 REPLACE GLIDESLOPE
GLIDE SLOPE TRANSMITTING TOWER
FOUNDATION DETAILS

AUGUSTA — AUGUSTA REGIONAL AIRPORT — GA

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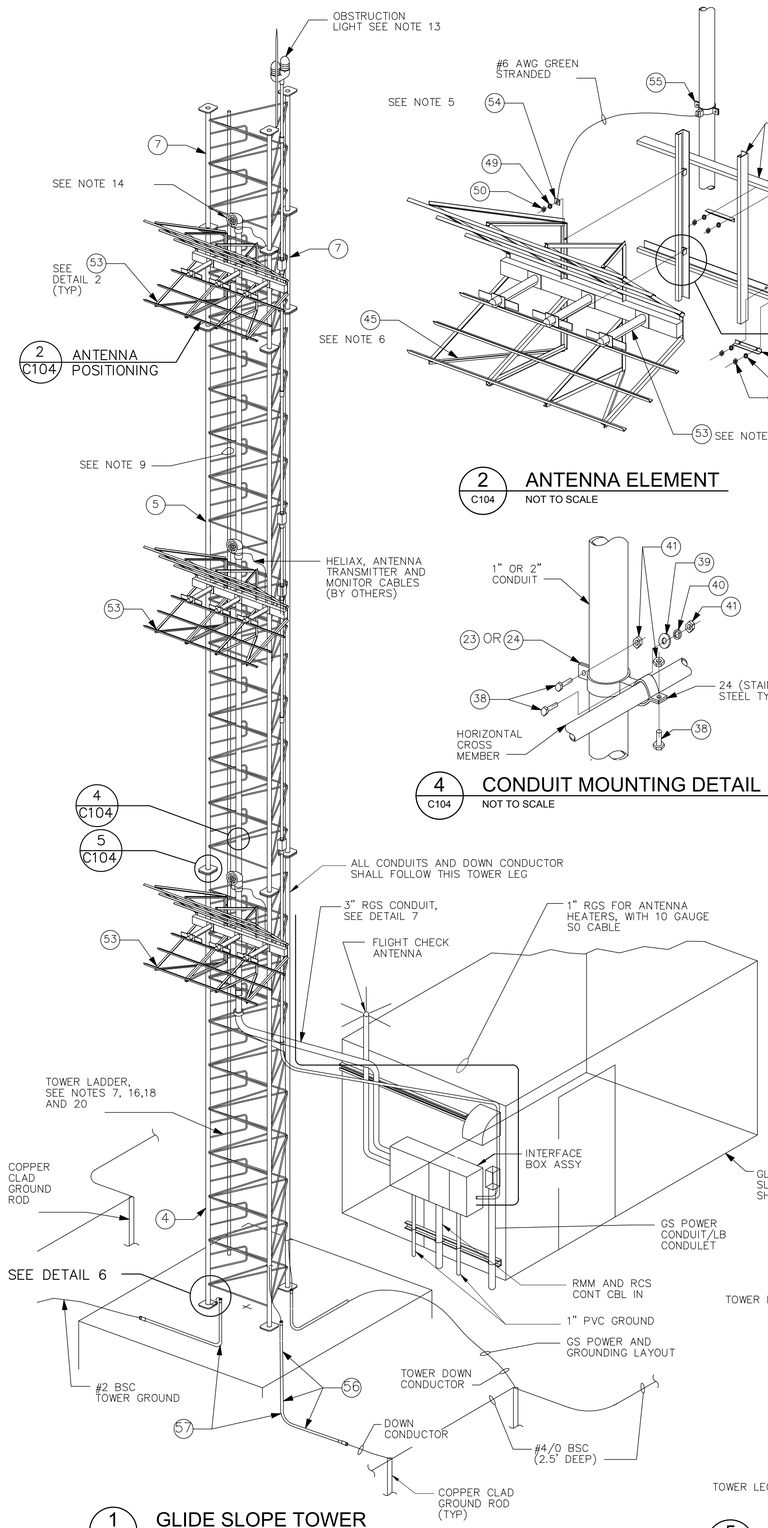
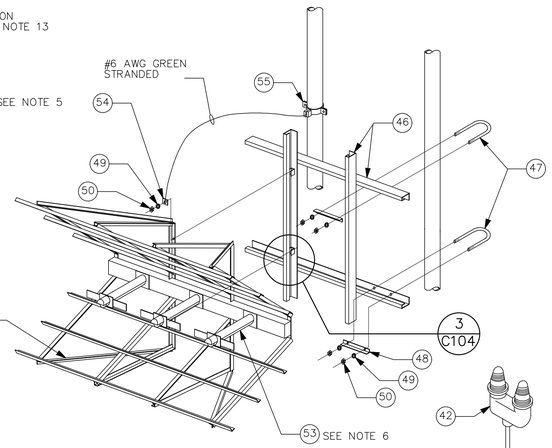
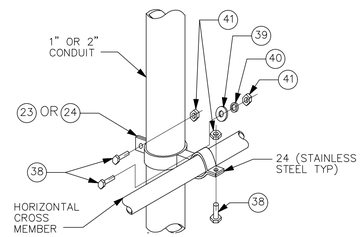


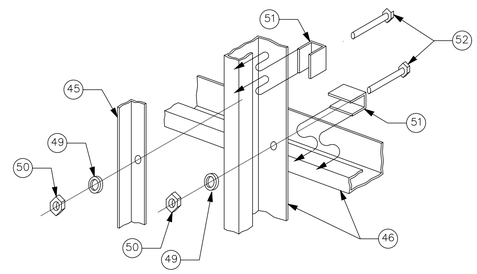
1 C104 GLIDE SLOPE TOWER
NOT TO SCALE



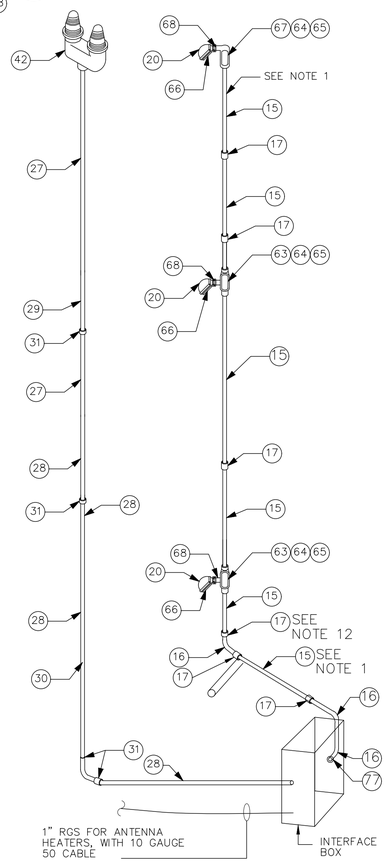
2 C104 ANTENNA ELEMENT
NOT TO SCALE



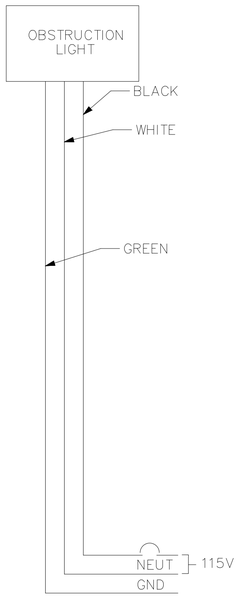
4 C104 CONDUIT MOUNTING DETAIL
NOT TO SCALE



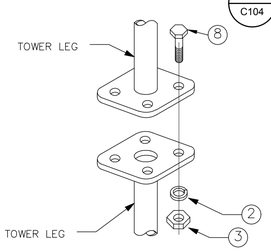
3 C104 ANTENNA MOUNTING DETAIL
NOT TO SCALE



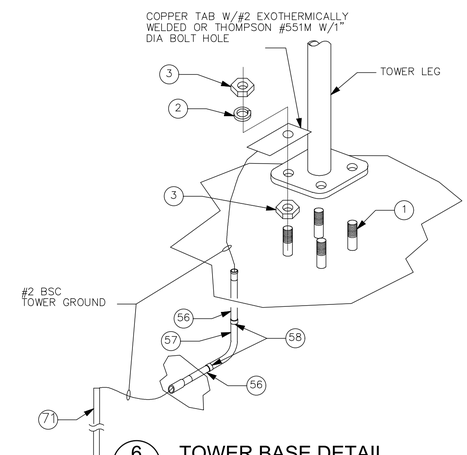
7 C104 TOWER CONDUIT
NOT TO SCALE



8 C104 ANTENNA TOWER WIRING
NOT TO SCALE



5 C104 TOWER JOINT DETAIL
NOT TO SCALE



6 C104 TOWER BASE DETAIL
NOT TO SCALE

NOTES

1. CUT CONDUIT TO REQUIRED LENGTH.
2. ALL ITEMS MARKED WITH (*) SHALL BE FURNISHED BY THE CONTRACTOR, ALL OTHER ITEMS ARE FURNISHED BY OTHERS.
3. ITEMS PART OF GLIDE SLOPE TOWER WPN 447820–0001, NO THALES PART NUMBER AVAILABLE.
4. MANUFACTURER PROVIDES 48 EACH OF ITEMS 2 AND 3 AS PART OF TOWER ASSEMBLY OF TOWER SECTIONS.
5. LUG MOUNTING HOLE FIELD DRILLED TO 3/8" DIA.
6. ITEMS 45 AND 53 ARE FACTORY ASSEMBLED.
7. SEE GLIDE SLOPE LADDER DETAIL DRAWING FOR MORE INFORMATION. LADDER SYSTEM FROM EXISTING TOWER IS TO BE USED AND INSTALLED ON NEW TOWER
8. NOT USED.
9. CONTRACTOR SHALL REUSE EXISTING CLIMBING/FALL PROTECTION DEVICES FROM THE EXISTING TOWER FOR NEW INSTALLATION.
10. REMOVE ALL PAINT BETWEEN TOWER SECTION FLANGES PRIOR TO BOLTING THE SECTIONS TOGETHER. REMOVE ALL PAINT BETWEEN THE COPPER TAB AND THE TOWER BASE.
11. TOWER SECTIONS SHALL BE ARRANGED SO THAT THE BOTTOM IS ORANGE AND AT LEAST THE TOP 10 FT IS ORANGE.
12. BOND END OF RIGID CONDUIT WHERE IT TRANSITIONS TO PVC.
13. THE CONTRACTOR SHALL PROVIDE DUAL LED OBSTRUCTION LIGHT DIALIGHT PART NUMBER RTOCR07002.
14. UPPER ANTENNA WEATHERHEAD SHALL BE MOUNTED MAXIMUM OF 40 FT ABOVE GROUND.
15. ALL UNUSED MAST 5' ABOVE THE TOP ANTENNA SHALL BE REMOVED AFTER FLIGHT CHECK BY CONTRACTOR.
16. LADDER MOUNTS SHALL HAVE THE BOLT HANDS ON THE INSIDE OF THE TOWER.
17. GROUNDING CLAMP "U" BOLTS FACE OUT.
18. LADDER MOUNTS ON FACE OF TOWER FURTHEST AWAY FROM RUNWAY.
19. ALL CONDUITS MOUNT ON LEG OF TOWER FURTHEST AWAY FROM ANTENNAS.
20. LADDER MOUNTS AWAY FROM ANTENNAS.
21. PROVIDE AND INSTALL AN ADDITIONAL 1" RGS FOR ANTENNA HEATER WITH 10 GAUGE SO CORD. PROVIDE(3) 1" WEATHER HEADS STUBED OUT AT EACH ANTENNA.
22. FAA IS TO BE RESPONSIBLE FOR THE TUNING, TERMINATIONS, AND ANY FINAL ADJUSTMENTS OF THE ANTENNA ELEVATIONS.

ITEM	QTY	DESCRIPTION	WPN
77	1	CONNECTOR HUB (WATER TITE) 2"	*
76	50'	CABLE, POWER, #12 THW GREEN	*
75	50'	CABLE, POWER, #12 THW WHITE	*
74	50'	CABLE, POWER, #12 THW RED	*
73	100'	CABLE, POWER, #12 THW BLACK	*
72		N/A	
71	2	COPPER CLAD GROUND ROD (3/4"x10' LONG)	
70		N/A	
69		N/A	
68	3	NIPPLE, 2"x4" MIN, RGS.	488767–0001
67	1	UNILET, CONDUIT "LB".3" GALV. RIGID	*
66		ANTENNA CABLE (BY OTHERS)	
65	3	GASKET, COVER	*
64	3	COVER, UNILET	*
63	2	UNILET, CONDUIT "T", RGS 3"	*
62		N/A	
61	22	TIE WRAP	094675–0001
60	2	CONNECTOR, SPLIT BOLT	229911–0004
59	2	ASSEMBLY, TOWER GROUND	(SEE NOTE 3)
58	4	COUPLING, 1" PVC	*
57	2	ELL, SWEEP 1" PVC	*
56	AR	CONDUIT, 3/4" PVC	*
55	3	CLAMP, GROUND	094686–0003
54	3	FARGO LUG (SEE NOTE 5)	025459–0002
53	3	ELEMENT, ANTENNA	447791–0001
52	24	BOLT, HEX 3/8"–16x1–1/2"	088476–0008
51	24	LOCK, CHANNEL	088476–0009
50	48	NUT, HEX 3/8"–16	088476–0006
49	48	WASHER, LOCK 3/8"	088476–0007
48	12	ANGLE, SUPPORT	088476–0005
47	12	CLAMP, "U" 3" DIA.x3/8"–16	088476–0004
46	12	CHANNEL, MOUNTING	088476–0002
45	3	FRAME, ANTENNA MOUNTING	088476–0001
44	1	COUPLING, REDUCING 3/4" – 1"	035229–0002
43	2	NOT USED	
42	1	SEE NOTE 13	–
41	AR	NUT, HEX 1/4"–20 (NOTE 11)	*
40	AR	WASHER, LOCK 1/4" (NOTE 11)	*
39	AR	WASHER, FLAT 1/4" (NOTE 11)	*
38	AR	SCREW,MACHINE 1/4"–20x1/2" (NOTE 11)	*
37	AR	HANGER, CONDUIT 1" (NOTE 11)	*
36		N/A	
35		N/A	
34		N/A	
33		N/A	
32	1	COUPLING, CONDUIT NO THREAD 1"	033769–0003
31	AR	COUPLING, CONDUIT GALV., RIGID 1"	033755–0003
30	2	ELBOW, 45° GALV. RIGID 1"	*
29	3	CONDUIT, GALV. RIGID 1"	*
28	1	CONDUIT, GALV. RIGID 1"	*
27	2	CONDUIT, GALV. RIGID 1"	*
26		N/A	
25		N/A	
24	AR	HANGER, CONDUIT 1" (NOTE 11 TYP)	*
23	AR	HANGER, CONDUIT 2" (NOTE 11 TYP)	*
22	–	NOT USED	
21	1	CONDUIT, GALV. RIGID 2"	*
20	3	WEATHERHEAD, ENTRANCE 2" RGS	*
19		NOT USED	
18		N/A	
17	AR	COUPLING, CONDUIT 3" RIGID	*
16	3	ELBOW, 45° GALV. RIGID 3"	*
15	AR	CONDUIT, GALV. RIGID 3"	*
14		N/A	
13		N/A	
12		N/A	
11		N/A	
10		N/A	
9		N/A	
8	36	BOLT, HEX 7/8"–9x2–1/2"	(SEE NOTE 3)
7	2	SECTION, TOWER 5'	(SEE NOTE 3)
6		N/A	
5	1	SECTION, TOWER 20'	(SEE NOTE 3)
4	1	SECTION, TOWER 20' (BASE)	(SEE NOTE 3)
3	60	NUT, HEX 7/8"–9	(SEE NOTE 4)
2	48	WASHER, LOCK 7/8"	(SEE NOTE 4)
1	12	BOLT, ANCHOR 7/8"–9x28"	*

PARTS LIST

SOUTHERN REGION — ATLANTA, GA

GS

RUNWAY 35 REPLACE GLIDESLOPE
GLIDE SLOPE ANTENNA TOWER INSTALLATION
DETAILS TYPE FAA-10584-10685

AUGUSTA — AUGUSTA REGIONAL AIRPORT — GA

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MCO-1604570-C104

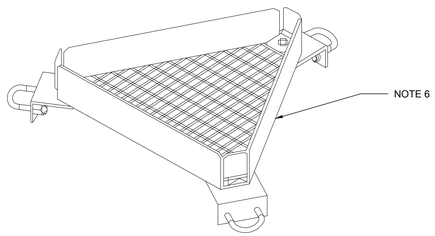
ISSUED FOR: CONSTRUCTION

EDMS: mco-1604570-c102.dwg

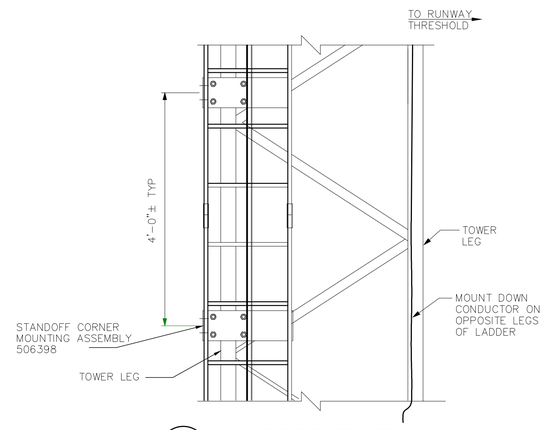
DRAWING PRODUCED ON ASO RO MICROSTATION SYSTEM

NOTES

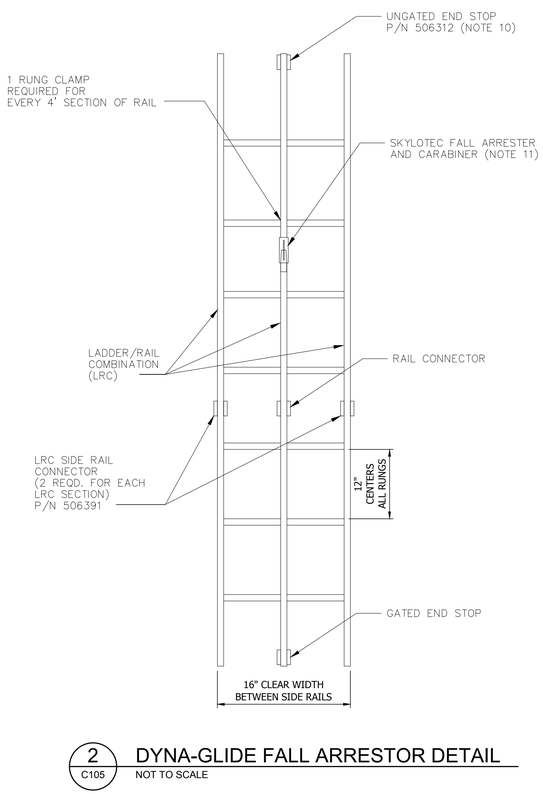
1. ROUND TUBE NOTCHED RAIL SYSTEMS ARE NOT ALLOWED. THE CLIMBING RAIL THAT IS FURNISHED WITH THE GS KIT SHALL BE SCRAPPED.
2. RUNGS MINIMUM 3/4" ROUND BAR.
3. TOWER SHOULD BE ORIENTED SO THAT BOLT ON LADDER COVERS THE INTEGRATED, (BUILT-IN) LADDER ON THE TOWER IF POSSIBLE AND MOUNTED ON THE SIDE FURTHEST FROM RUNWAY CENTERLINE.
4. THE SUPPORTS ARE TO BE PLACED AS CLOSE AS POSSIBLE TO PANEL POINTS AT APPROXIMATELY 4'-0" SPACING.
5. THE OBSTRUCTION LIGHT, HEATER CIRCUIT AND RF CONDUITS ARE TO BE INSTALLED ON OUTSIDE OF TOWER AND FURTHEST AWAY FROM THRESHOLD ON SAME VERTICAL LEG SO THAT THE PLATFORMS CAN BE INSTALLED ON THE INSIDE OF THE TOWER..
6. INSTALL THREE GALVANIZED, INTERNALLY-MOUNTED PLATFORMS ON THE GS TOWER 54" BELOW MID-POINT OF EACH ANTENNA. GLIDE SLOPE PLATFORMS FURNISHED BY FAA.
7. THOMPSON CABLE SHALL NOT BE INSTALLED UNDERGROUND. USE #4/0 TO MAKE CONNECTION TO THE UNDERGROUND EES MIN 18" ABOVE GRADE.
8. ADD IN PLATED BRAIDED GROUND STRAPS BETWEEN LADDER SECTIONS AT BOLTED CONNECTIONS.
9. EXISTING LADDER AND SAFETY CLIMBING SYSTEMS THAT WERE REMOVED FROM EXISTING TOWER IS TO BE REUSED ON THE NEW TOWER INSTALLATION. CONTRACTOR SHALL PROVIDE THE NECESSARY HARDWARE TO MOUNT EQUIPMENT.
10. ALL PART NUMBERS ARE DYNA-GLIDE/MSA ROSE.
11. ~~CONTRACTOR SHALL FURNISH AND INSTALL DYNA-GLIDE/MSA CLIMBING SYSTEM WITH SKYLOTEC RAIL AND TROLLEY.~~



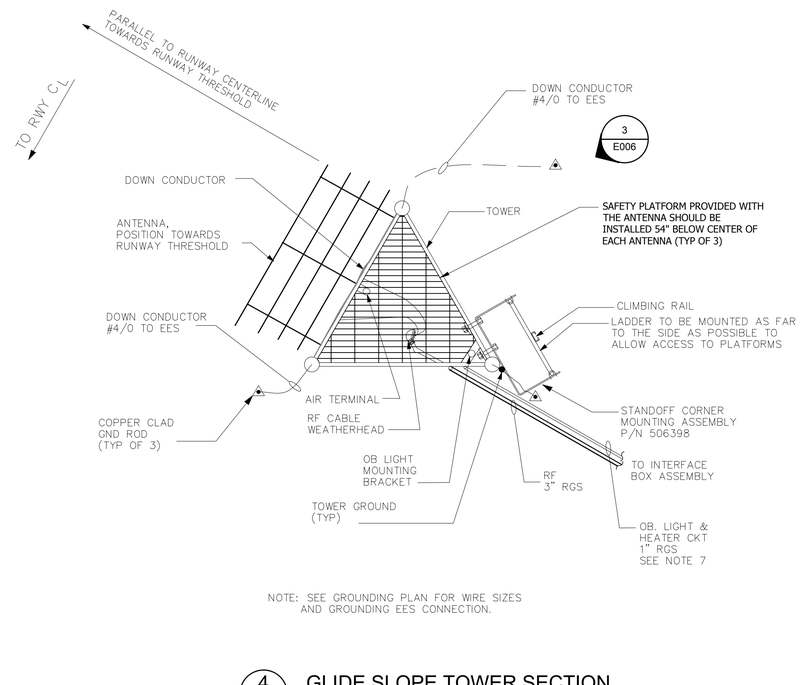
1 C105 GLIDE SLOPE PLATFORM
NOT TO SCALE



3 C105 LADDER ELEVATION
NOT TO SCALE



2 C105 DYNA-GLIDE FALL ARRESTOR DETAIL
NOT TO SCALE



NOTE: SEE GROUNDING PLAN FOR WIRE SIZES AND GROUNDING EES CONNECTION.

4 C105 GLIDE SLOPE TOWER SECTION
NOT TO SCALE

SOUTHERN REGION — ATLANTA, GA

GS

RUNWAY 35
REPLACE GLIDESLOPE
GLIDE SLOPE ANTENNA TOWER LADDER DETAILS

AUGUSTA — AUGUSTA REGIONAL AIRPORT — GA

DO NOT SIGN

SR ENGR, NAVAIDS/LANDING AIDS — MGR: ENGINEERING - CENTER A

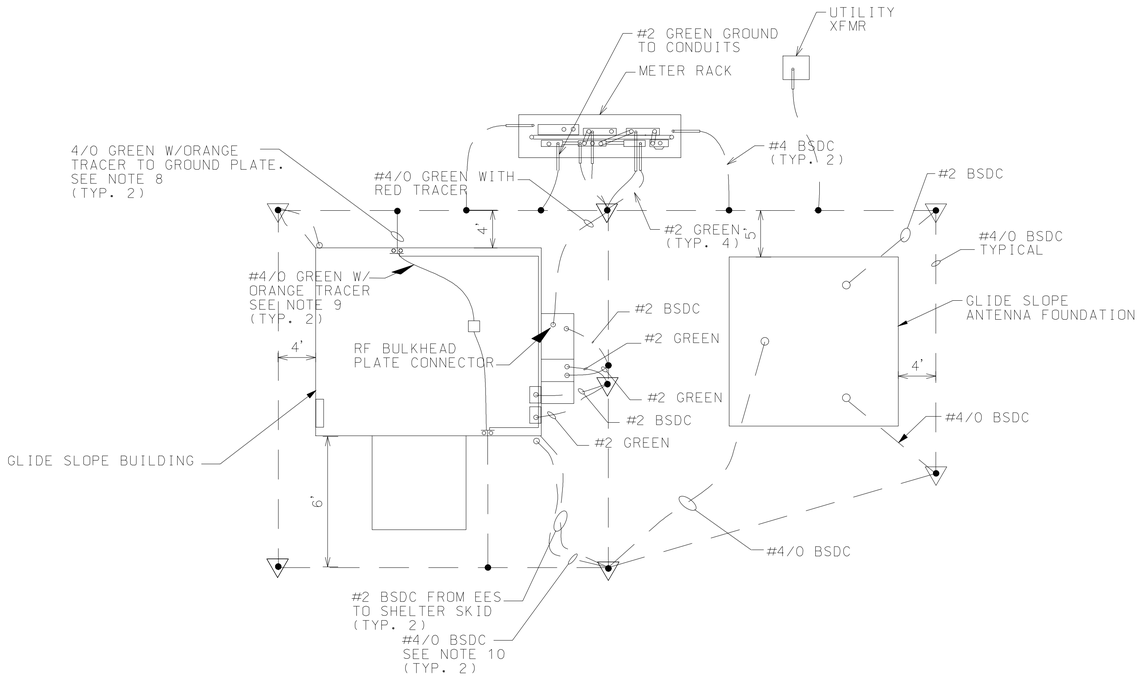
SF — 01/20/2022 — 1604570

TJS — PROGRAM ENGINEERING MAINTENANCE SERVICE — MCO-1604570-C105

ISSUED FOR: CONSTRUCTION

EDM: mcp-1604570-c-C03.dwg

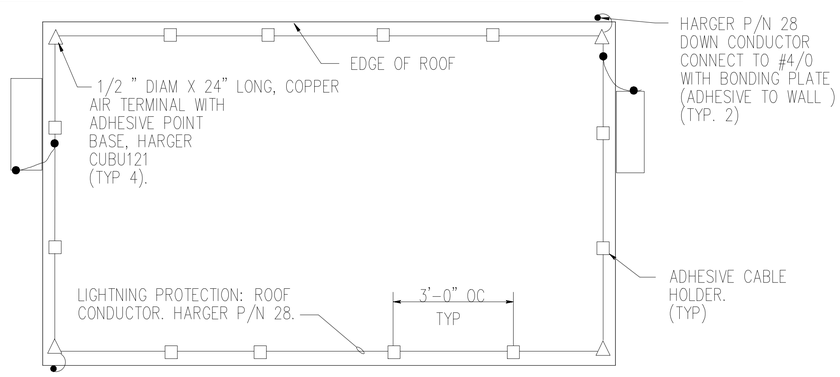
DRAWING PRODUCED ON ASO RO MICROSTATION SYSTEM



1 E005 SHELTER AND ANTENNA EES

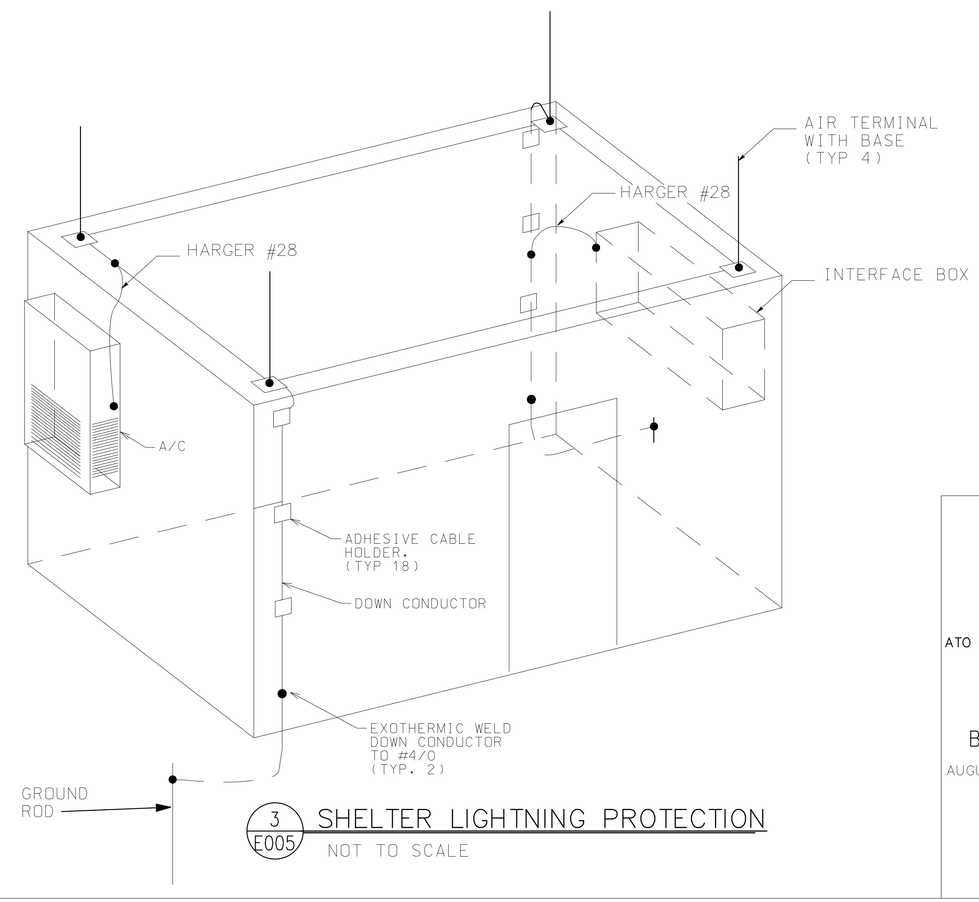
NOT TO SCALE

ITEM NO.	DESCRIPTION	PART NUMBER	
1	AIR TERMINAL	HARGER 3824CUAT	
2	AIR TERMINAL BASE	HARGER CUBU12I	
3	ADHESIVE CABLE HOLDER	HARGER 261	
4	DOWN CONDUCTOR CABLE	HARGER P/N 28	
5	ADHESIVE	HARGER 264	
6	BODING PLATE	HARGER P/N 220	



2 E005 GS LIGHTNING PROTECTION ROOF PLAN

NOT TO SCALE



3 E005 SHELTER LIGHTNING PROTECTION

NOT TO SCALE

NOTES

1. CONTRACTOR IS TO PROVIDE NEW UNDERGROUND EARTH ELECTRODE SYSTEM. PROVIDE NEW GROUND RODS AND #4/0 CABLE AS NEEDED TO COMPLETE INSTALLATION AND MEET THE REQUIREMENTS AS SPECIFIED AND SHOWN.
2. EES SHALL BE 30" BELOW FINISHED GRADE.
3. TOP OF GROUND ROD SHALL BE 18" BELOW FINISHED GRADE.
4. THE CONTRACTOR TO INSTALL LIGHTNING PROTECTION AS SHOWN ON THIS DRAWING. SHELTER COMPONENTS COOME WITH THE SHELTER. THE CONTRACTOR IS RESPONSIBLE FOR THE INVETORY OF THIS MATERIAL.
5. CABLE AMERICAN WIRE GAUGE UNLESS OTHERWISE NOTED.
6. CONNECTION BELOW GRADE SHALL BE EXOTHERMATICALLY WELDED.
7. CONNECTION FROM GROUND PLATE TO GROUND ROD LENGTH SHALL BE AS SHORT AS POSSIBLE BUT IN NO CASE SHALL IT BE GREATER THAN 50'.
8. THE 4/0 GREEN W/ORANGE TRACER IS CONTRACTOR TO PROVIDE. ONE END OF THE CABLE COMES WITH A LUG PRECRIMPED FOR ATTACHMENT TO THE PLATE.
9. CONTRACTOR PROVIDE #4/0 GREEN W/ORANGE TRACER.
10. USE ITEM 6 TO CONNECT DOWN CONDUCTOR TO #4/0 FROM EES GROUND ROD.
11. THE CONTRACTOR SHALL CONNECT ALL EXTERNAL METAL OBJECTS WITHIN 6' TO THE LIGHTNING PROTECTION WITH HARGER #28.

ATO – TECHNICAL OPERATIONS

EASTERN SERVICE AREA

GS

RUNWAY 35
EARTH ELECTRODE SYSTEM PLAN AND
BUILDING LIGHTNING PROTECTION DETAILS

AUGUSTA

AUGUSTA REGIONAL AIRPORT

GA

$WATERMARK$ ORIGINAL SIGNED BY:

PROJECT ENGINEER

MGR: ENGINEERING – ATLANTA

ENGINEERING SERVICES
NAVAIDS

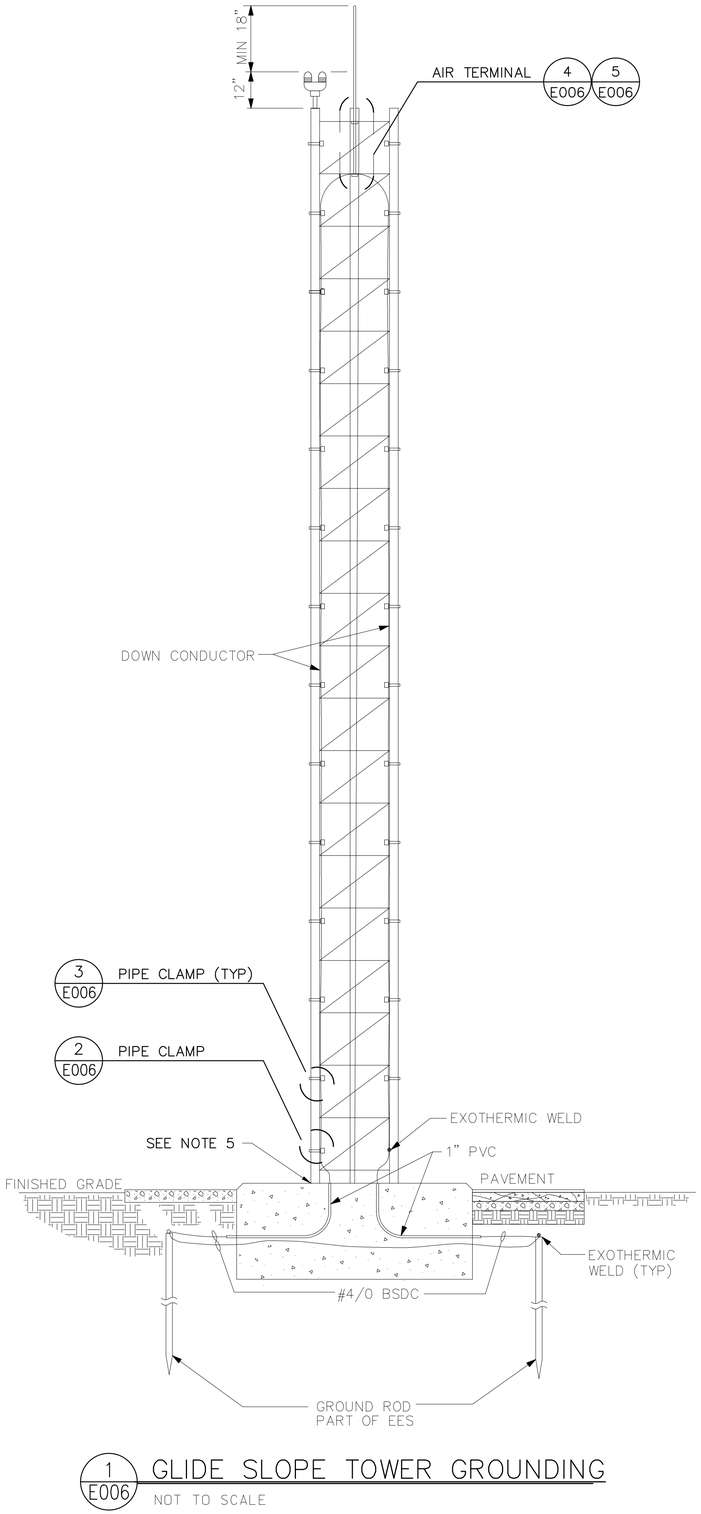
03/02/2022

1604570

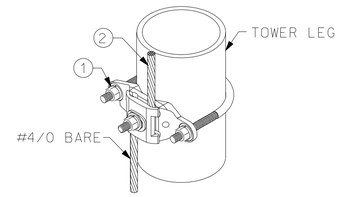
MCO-D-1604570-E005

ISSUED FOR:

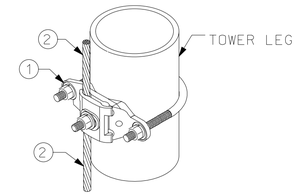
EDM:



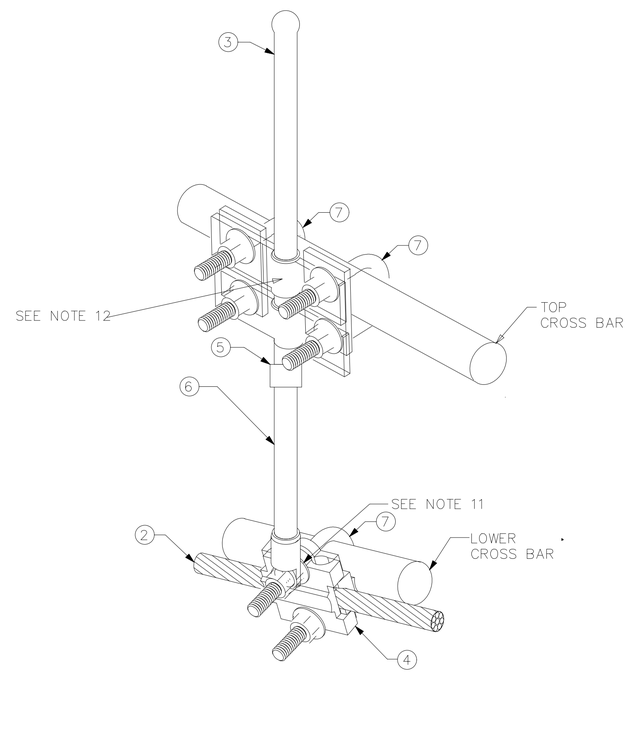
1 E006 GLIDE SLOPE TOWER GROUNDING
NOT TO SCALE



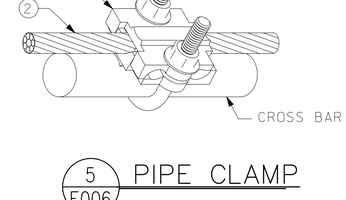
2 E006 PIPE CLAMP
NOT TO SCALE



3 E006 PIPE CLAMP (TYP)
NOT TO SCALE



4 E006 AIR TERMINAL AND BASE
NOT TO SCALE



5 E006 PIPE CLAMP
NOT TO SCALE
TYPICAL 2 PLACES

NOTES

1. DOWN CONDUCTOR BENDS SHALL NOT EXCEED 90 DEGREES.
2. DOWN CONDUCTOR BEND RADIUS SHALL NOT EXCEED 8 IN.
3. CLAMPS SHALL NOT EXCEED 3 FT IN SPACING.
4. AIR TERMINAL SHALL BE LOCATED ON THE SAME SIDE OF THE TOWER AS THE OBSTRUCTION LIGHT.
5. SPLICING OF #4/O AND DOWN CONDUCTOR SHALL BE NO MORE THAN 18 IN.ABOVE GRADE. ONE SPLICE SHALL BE BY EXOTHERMIC WELD. ONE SPLICE SHALL BE DONE BY THE CLAMP.
6. AIR TERMINAL MUST EXCEED THE HEIGHT OF TOWER AND OBSTRUCTION LIGHTBY 18 IN.
7. ALL DOWN CONDUCTORS SHALL BE TERMINATED ON A GROUND ROD.
8. ALL PARTS MUST BE FROM THE SAME MANUFACTURER.
9. ALL PARTS MUST BE USED PER MANUFACTURER INSTRUCTIONS.
10. ANY SUBSTITUTION MUST BE SUBMITTED AND APPROVED BY THE RESIDENT ENGINEER.
11. THE AIR TERMINAL SHALL BE INSTALLED WITH JAMB NUTS TO PREVENT MOVEMENT OF THE AIR TERMINAL. THE AIR TERMINAL SHALL BE VERTICAL.
12. THE CONTRACTOR SHALL PROVIDE TWO (2) STAINLESS STEEL TWOO HOLE CONDUIT STRAP TO FASTEN THE TERMINAL AS SHOWN.
13. GLIDESLOPE TOWER LIGHTNING PROTECTION SYSTEM IS TO BE PROVIDED AND INSTALLED BY THE CONTRACTOR.

PART NO.	DESCRIPTION	PART NUMBER
1	3"–3.5" CLAMP	HARGER P/N CPC 2.5/3
2	DOWN CONDUCTOR	HARGER P/N 28)
3	AIR TERMINAL	HARGER P/N 1224CSTAT
4	AIR TERMINAL BASE	HARGER P/N CPRB2.5/3AT12
5	EXTENSION ROD ADAPTER	HARGER P/N 148
6	AIR TERMINAL EXTENSION	HARGER 145–36
7	1/2"– 3/4" CLAMP	HARGER P/N CPC .5/.75

SOUTHERN REGION ATLANTA, GA

GS

RUNWAY 35
TOWER ANTENNA
LIGHTNING PROTECTION DETAILS

AUGUSTA AUGUSTA REGIONAL AIRPORT GA

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SR ENGR, NAVAIDS/LANDING AIDS MGR: ENGINEERING - CENTER A

SF 01/20/2022 GS

TJS PROGRAM ENGINEERING MAINTENANCE SERVICE MCO-GS-E006

ISSUED FOR: CONSTRUCTION

EDMS MCO-GS-E006.dwg

DRAWING PRODUCED ON ASO RO MICROSTATION SYSTEM