CONSTRUCTION PLANS

REHABILITATE AIRCRAFT HANGAR PAVEMENT AND AUTOMOBILE PARKING LOT

MARSHALL COUNTY

AIRPORT

MARSHALL COUNTY AIRPORT BOARD MARSHALL COUNTY AIRPORT (C75) LACON, MARSHALL COUNTY, ILLINOIS

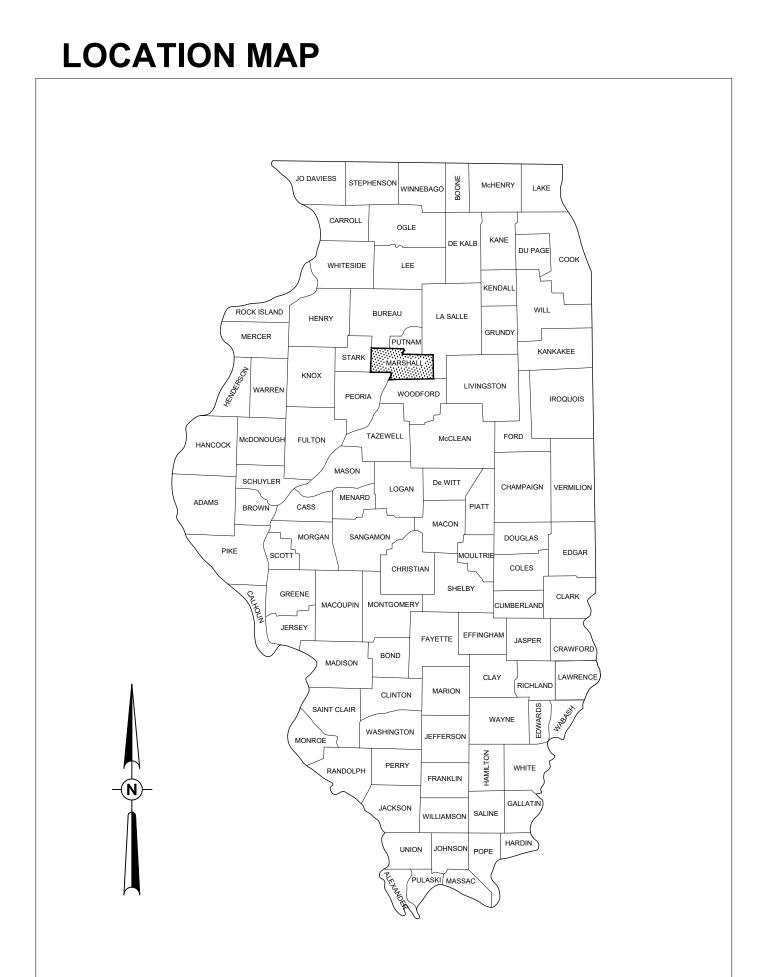
IDA PROJECT NO. C75-5008 SBGP PROJECT NO. N/A REBUILD ILLINOIS

JANUARY 13, 2023 - 100% SUBMITTAL

VICINITY MAP

Lombardville

Lo

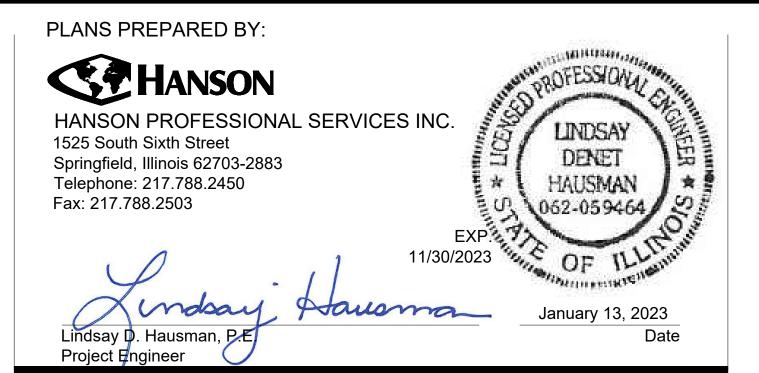


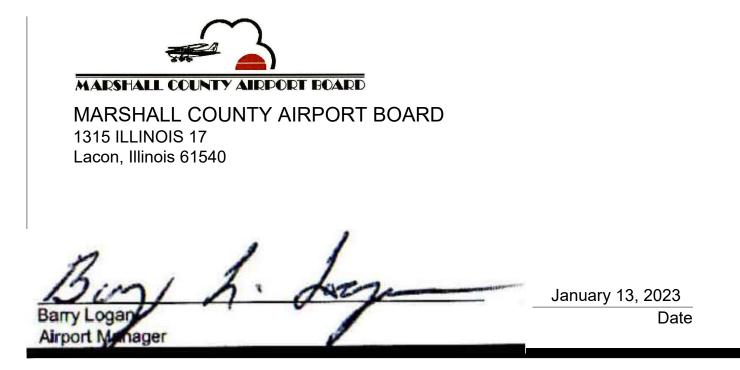
NOTICE TO CONTRACTORS AND BIDDERS

THESE CONSTRUCTION PLANS RELY UPON THE SPECIAL PROVISIONS AND THE SPECIFICATIONS TO PROVIDE FOR A COMPLETE DESCRIPTION OF THE WORK AND CONSTRUCTION REQUIREMENTS. THE PLANS SHALL ONLY BE USED IN COMBINATION WITH ALL CONTRACT DOCUMENTS.









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SUMMARY OF QUANTITIES				
ITEM NO.	DESCRIPTION	UNIT	TOTAL QUANTITY	AS-BUILT QUANTITY
AR150510	ENGINEER'S FIELD OFFICE	L SUM	1.0	
AR150520	MOBILIZATION	L SUM	1.0	
AR150530	TRAFFIC MAINTENANCE	L SUM	1.0	
AR152480	SHOULDER ADJUSTMENT	SQ YD	1,490.0	
AR156510	SILT FENCE	FOOT	175.0	
AR162570	DETECTOR LOOP	L SUM	1.0	
AR201661	CLEAN & SEAL BITUMINOUS CRACKS	FOOT	7,000.0	
AR201670	CRACK CONTROL FABRIC	SQ YD	225.0	
AR209606	CRUSHED AGG. BASE COURSE-6"	SQ YD	233.0	
AR401613	BIT. SURF. CSEMETHOD I, SUPERPAVE	TON	658.0	
AR401650	BITUMINOUS PAVEMENT MILLING	SQ YD	5,448.0	
AR401660	SAW & SEAL BIT. JOINTS	FOOT	378.0	
AR401900	REMOVE BITUMINOUS PAVEMENT	SQ YD	233.0	
AR401916	REM & REP BIT PAVEMENT-TYPE B	SQ YD	150.0	
AR501605	5" PCC SIDEWALK	SQ FT	2,093.0	
AR603510	BITUMINOUS TACK COAT	GALLON	818.0	
AR620520	PAVEMENT MARKING-WATERBORNE	SQ FT	839.0	
AR620525	PAVEMENT MARKING-BLACK BORDER	SQ FT	476.0	
AR800578	CARD READER/KEY PAD PEDESTAL	EACH	1.0	
AR901510	SEEDING	ACRE	0.3	
AR908510	MULCHING	ACRE	0.3	
AR910230	HANDICAP SIGN	EACH	2.0	



Hanson Professional Services Inc. 1525 S. 6th Street Springfield, IL 62703 phone: 217-788-2450 fax: 217-788-2503

Illinois Licensed Professional Service Corporation #184-001084



Marshall County Airport 1315 Illinois 17 Lacon, Illinois 61540 phone: 309-246-2870

REHABILITATE AIRCRAFT HANGAR PAVEMENT AND **AUTOMOBILE PARKING** LOT

IDA No: C75-5008

Contract No. MA033

	NO.	DATE	DES	CRIPT	ION	
	NO.	DATE	DES	DWN	REV	
į	ISSUE:	JANUAF	RY 13,	2023		
Ì	PROJEC	CT NO: 2	2A001	5		
	CAD FILE: G-002-SOQ.DWG					

DRAWN BY: HLE 10/13/2022 REVIEWED BY: LDH 01/09/23

DESIGN BY: LDH 10/13/2022

SHEET TITLE

SHEET INDEX AND SUMMARY OF QUANTITIES

PROJECT DESCRIPTION

THIS PROJECT IS TO REHABILITATE A PORTION OF THE WEST HANGAR PAVEMENTS AS WELL AS THE ADJACENT AUTOMOBILE PARKING LOT PAVEMENT AT MARSHALL COUNTY AIRPORT. SEE CONSTRUCTION SAFETY AND PHASING PLAN FOR ITEMS INCLUDED IN THIS PROJECT, AMONG OTHER INCIDENTAL WORK.

PROTECTION OF EXISTING AIRPORT FACILITIES

THE CONTRACTOR IS TO BE RESPONSIBLE FOR THE PROTECTION OF EXISTING UNDERGROUND AND OVERHEAD UTILITIES AND LIGHTING EQUIPMENT; DRIVEWAY AND ROAD PAVEMENT AND SHOULDERS; RUNWAY, TAXIWAY AND APRON PAVEMENTS AND SHOULDERS; RUNWAY, TAXIWAY AND AIRPORT LIGHTING EQUIPMENT; AND SEEDED AND TURFED AREAS THAT ARE UTILIZED IN OR AFFECTED BY THE CONTRACTOR'S ACTIVITIES. ITEMS DAMAGED BY THE CONTRACTOR ARE TO BE REPAIRED AT CONTRACTOR'S EXPENSE AND TO THE SATISFACTION OF THE AIRPORT MANAGER AND THE OWNER'S REPRESENTATIVE.

IN ADDITION, WHEN CONDITIONS DICTATE OR AS DETERMINED BY THE AIRPORT MANAGER OR THE OWNER'S REPRESENTATIVE, THE CONTRACTOR SHALL BE REQUIRED TO USE A PICK-UP TYPE SWEEPER IN ALL ACTIVE CONSTRUCTION AIRFIELD PAVEMENT AREAS. THE CONTRACTOR WILL BE REQUIRED TO HAVE A SWEEPER AS PRESCRIBED BY THE SPECIAL PROVISIONS. THE COST OF SWEEPING SHALL BE PAID UNDER AR150530.

CONTRACTOR'S ACCESS AND TEMPORARY FACILITIES

CONTRACTOR'S ACCESS TO THE PROJECT WHEN ON AIRPORT PROPERTY IS SHOWN ON THIS SHEET. CONTRACTOR'S ACCESS TO THE AIRPORT ITSELF IS TO BE PROVIDED BY PUBLIC RIGHTS-OF-WAY. THE CONTRACTOR IS TO SECURE ALL NECESSARY PERMITS FOR THE USE OF ANY PUBLIC RIGHTS-OF-WAY AND IS TO MAINTAIN TRAFFIC ON THESE PUBLIC ROADS AT ALL TIMES, WITH THE COSTS OF PERMITTING, CLEANING AND REPAIRING OF PAVEMENT DAMAGED BY CONTRACTOR'S ACTIVITIES INCIDENTAL TO THE CONTRACT. USE OF AND REPAIRS TO ANY PUBLIC FACILITIES ARE TO BE COMPLETED TO THE SATISFACTION OF THE FACILITY'S OWNER.

THE CONTRACTOR IS TO PROVIDE TEMPORARY CONSTRUCTION ROADS WITHIN THE CONSTRUCTION LIMIT LINES AS MAY BE REQUIRED BY HIS ACTIVITIES. HEAVY VEHICLES SHALL NOT CROSS EXISTING PAVEMENT SURFACES EXCEPT AS APPROVED BY THE AIRPORT MANAGER AND THE OWNER'S REPRESENTATIVE. ANY DAMAGE TO PAVEMENTS THAT MAY OCCUR BY THE CONTRACTOR'S ACTIVITIES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE AND TO THE SATISFACTION OF THE AIRPORT MANAGER AND THE OWNER'S REPRESENTATIVE. FOR HAUL ROUTES MADE BY THE CONTRACTOR THROUGH GRASSED AREAS, CONTRACTOR SHALL GRADE, LEVEL, TOPSOIL, SEED AND MULCH AT THE END OF THE PROJECT, COST INCIDENTAL TO THE CONTRACT.

THE CONTRACTOR IS TO PROVIDE AN EQUIPMENT STORAGE AND PARKING AREA AT THE LOCATIONS AS SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE ACCESS ROADS AND THE STORAGE AREA DURING CONSTRUCTION AND TO RESTORE THE AREAS AT PROJECT COMPLETION TO CONDITIONS SUITABLE TO THE AIRPORT MANAGER AND THE OWNER'S REPRESENTATIVE. AT THE AIRPORT MANAGER'S DISCRETION, THE TEMPORARY FACILITIES MAY REMAIN, BUT THEY MUST BE LEFT IN CONDITIONS SUITABLE TO THE AIRPORT MANAGER. THE COST OF PROVIDING, MAINTAINING AND RESTORING THE TEMPORARY FACILITIES IS INCIDENTAL TO THE CONTRACT.

RESPONSIBILITY FOR EXISTING UTILITIES

THE LOCATION, SIZE AND/OR TYPE OF MATERIAL OF EXISTING UNDERGROUND OR OVERHEAD UTILITIES AS MAY BE INDICATED ON THESE CONSTRUCTION PLANS IS NOT REPRESENTED AS BEING ACCURATE, SUFFICIENT OR COMPLETE. NEITHER THE OWNER NOR THE PROJECT ENGINEER HAVE INDEPENDENTLY VERIFIED THIS INFORMATION AND NEITHER ASSUMES ANY RESPONSIBILITY WHATSOEVER IN RESPECT TO THE ACCURACY, SUFFICIENCY OR COMPLETENESS OF THE INFORMATION AND GIVE NO EXPRESSED OR IMPLIED GUARANTEE THAT ANY CONDITIONS INDICATED ARE REPRESENTATIVE OF ACTUAL CONDITIONS TO BE ENCOUNTERED.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ACTUAL LOCATION OF ALL SUCH FACILITIES, INCLUDING SERVICE CONNECTIONS TO UNDERGROUND UTILITIES. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES AND AGENCIES OF HIS CONSTRUCTION PLANS AND SHALL OBTAIN FROM EACH PARTY DETAILED INFORMATION AND ASSISTANCE RELATIVE TO THE LOCATION OF ALL UTILITIES AND THE WORKING SCHEDULE OF ANY REMOVALS OR ADJUSTMENTS REQUIRED OF THE UTILITY. THE CONTRACTOR SHALL CONTACT J.U.L.I.E. (PHONE 800-892-0123) TO ASSIST IN THE ABOVE.

THE CONTRACTOR SHALL PROTECT ANY FACILITIES TO THE SATISFACTION OF THE UTILITY OR OWNING-AGENCY WITH THE COST OF ANY REQUIRED PROTECTION TO BE INCIDENTAL TO THE CONTRACT. IN THE EVENT A UTILITY LINE OR SERVICE IS UNEXPECTEDLY ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER'S REPRESENTATIVE AND THE UTILITY COMPANY OR AGENCY OF JURISDICTION. ANY SUCH UTILITIES DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED TO SERVICE AT ONCE.

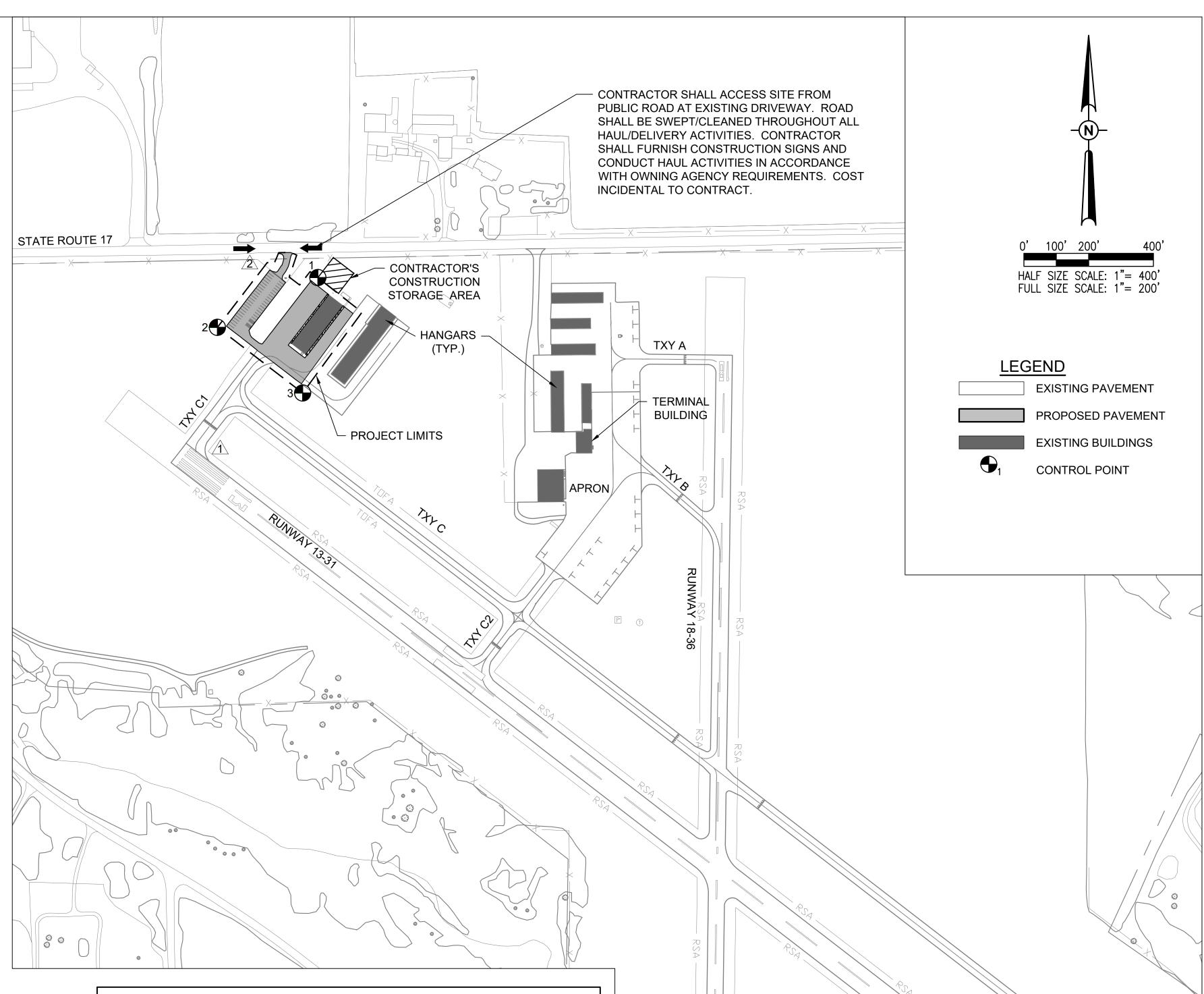
HORIZONTAL AND VERTICAL CONTROL DATA					
NO.	DESCRIPTION	NORTHING	EASTING	ELEV.	
Á	"LACPORT" NGS MONUMENT MF1795	1587067.56	2510579.08	536.53	
<u>^2</u>	REBAR W/ CAP	1587638.93	2510670.20	540.04	

Call Before You Dig LIE ILLINOIS ONE-CALL SYSTEM 800.892.0123

PROJECT IS LOCATED IN NORTHWEST 1/4 OF SECTION 31, HOPEWELL TOWNSHIP, MARSHALL COUNTY

NOTES

- VERTICAL COORDINATES ARE IN NGVD 29.
 HORIZONTAL COORDINATES ARE IN STATE PLANE NAD 83
 ILLINOIS WEST.
- 2. STATIONS, OFFSETS AND ELEVATIONS SHOWN ARE IN FEET.
- 3. THE AIRPORT REFERENCE CODE FOR RUNWAY 13-31 IS B-II RUNWAY 13 HAS A NON-PRECISION APPROACH WITH VISIBILITY MINIMUM OF GREATER THAN 3/4 MILE WHILE RUNWAY 31 HAS A VISUAL APPROACH.



	CONTROL POINTS					
POINT #		DESCRIPTION	GROUND ELEVATION	OBJECT ELEVATION	LATITUDE	LONGITUDE
	1	STAGING AREA	536.34	561.34	041° 01' 23.79"	-089° 23' 24.02"
	2	EQUIPMENT	534.75	559.75	041° 01' 22.30"	-089° 23' 28.09"
	3	EQUIPMENT	535.20	560.20	041° 01' 20.28"	-089° 23' 24.68"

NOTES

- 1. MAXIMUM HEIGHT OF CONTRACTOR'S EQUIPMENT IS 25 FEET FOR ALL WORK, EXCEPT BY PRIOR APPROVAL OF THE ENGINEER (SEE SPECIAL PROVISIONS).
- 2. TRAFFIC TO BE MAINTAINED ON ALL AIRPORT ROADWAYS AT ALL TIMES.
- 3. FOR SAFETY DIMENSIONS, SEE PHASING PLANS.
- 4. FOR STAGING INFORMATION, SEE PHASING PLAN.



Offices Nationwide www.hanson-inc.com

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Illinois Licensed
Professional Service Corporation
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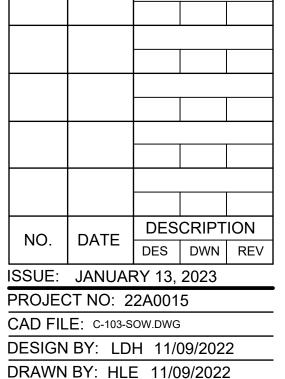


Marshall County Airport 1315 Illinois 17 Lacon, Illinois 61540 phone: 309-246-2870

REHABILITATE
AIRCRAFT HANGAR
PAVEMENT AND
AUTOMOBILE PARKING
LOT

IDA No: C75-5008

Contract No. MA033



SCOPE OF WORK

SHEET TITLE

REVIEWED BY: LDH 01/09/23

CONSTRUCTION OF THE PROJECT SHALL BE PERFORMED BY THE CONTRACTOR IN ACCORDANCE WITH THE GUIDELINES SPECIFIED IN FAA ADVISORY CIRCULAR 150/5370-2 (CURRENT ISSUE) AND THE AIRPORT RULES AND REGULATIONS. BEFORE ANY NOTICE TO PROCEED WILL BE ISSUED, THE CONTRACTOR IS REQUIRED TO SUBMIT A SAFETY PLAN COMPLIANCE DOCUMENT (SPCD) TO THE AIRPORT OPERATOR FOR APPROVAL. ANY CONTRACTOR ACTIVITIES REQUIRED FOR PROJECT SAFETY SHALL BE PROVIDED BY THE CONTRACTOR AND BE INCIDENTAL TO THE CONTRACT.

SEQUENCE OF CONSTRUCTION

TO MINIMIZE DISRUPTIONS OF AIRPORT OPERATIONS, CONSTRUCTION OPERATIONS MUST BE CONTROLLED THROUGHOUT THE PROJECT'S DURATION, AND WORK MUST BE COMPLETED EXPEDITIOUSLY. A CONSTRUCTION PHASING PLAN DETAILING THE SEQUENCING OF THE CONTRACTOR'S WORK THROUGHOUT THE PROJECT IS INCLUDED IN THE PLANS. THE CONTRACTOR SHALL PROVIDE HIS WRITTEN ACCEPTANCE OF THE PROJECT CONSTRUCTION PHASING PLAN AT THE PRE-CONSTRUCTION CONFERENCE. ANY AND ALL CHANGES TO THE CONSTRUCTION PHASING PLAN THAT MAY BE REQUESTED BY THE CONTRACTOR MUST BE SUBMITTED TO AND APPROVED BY THE FAA. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE SUFFICIENT ADVANCE NOTICE OF ANY PROPOSED. PHASING CHANGE TO PERMIT CONSIDERATION AND APPROVAL. THE CONTRACTOR SHALL NOT BE ENTITLED TO ANY EXTRA COMPENSATION, NOR EXTENSION TO THE CONTRACT TIME, BECAUSE OF A PHASING CHANGE REQUEST NOR FOR ANY TIME NECESSARY IN RECEIVING THE REQUIRED APPROVALS. THE CONTRACTOR SHALL EXPEDITE WORK AT THOSE STAGES WHERE ACTIVE TAXIWAYS, HANGAR ACCESS, APRONS, ROADWAYS OR PARKING LOTS MUST BE CLOSED, TO MINIMIZE THE LENGTH OF TIME THAT AIRPORT OPERATIONS ARE RESTRICTED.

AT THE PRE-CONSTRUCTION CONFERENCE, THE CONTRACTOR SHALL PROVIDE A CONTRACTOR COORDINATION PLAN THAT COORDINATES HIS WORK WITH THE WORK OF HIS SUBCONTRACTORS AND THE WORK OF OTHER CONTRACTORS OF OTHER ON-GOING AIRPORT PROJECTS.

RUNWAY CLOSURE

NO RUNWAY CLOSURES WILL BE PERMITTED AS PART OF THIS PROJECT

TEMPORARY BARRICADES

THE CONTRACTOR SHALL FURNISH BARRICADES FOR ANY AIRFIELD OR ROADWAY PAVEMENT TO BE CLOSED BY HIS WORK. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO FURNISH, PLACE AND MAINTAIN BARRICADES AS SHOWN IN DETAIL B, THIS SHEET, AND AS DIRECTED BY THE RESIDENT ENGINEER AND AIRPORT DIRECTOR. THE COST OF THESE ITEMS, AND THEIR MAINTENANCE, IS TO BE PAID FOR UNDER AR150530 TRAFFIC MAINTENANCE. ANY WORK THAT REQUIRES PORTIONS OF AN ACTIVE RUNWAY. TAXIWAY OR APRON TO BE CLOSED MUST BE COMPLETED EXPEDITIOUSLY TO MINIMIZE DISRUPTION TO AIRCRAFT OPERATIONS.

VEHICULAR TRAFFIC CONTROL

THE CONTRACTOR SHALL ERECT AND MAINTAIN, AT NO COST TO THE CONTRACT, DIRECTIONAL AND INFORMATIONAL SIGNS FOR THE CONTRACTOR'S ACCESS ROUTES AT THE EXISTING CONSTRUCTION ENTRANCES AND FOR THE CONTRACTOR'S ROUTE WITHIN THE AIRPORT OPERATIONS AREA, AS NOTED ON THE PLANS OR AS DIRECTED BY THE RESIDENT ENGINEER. WHERE CONTRACTOR EQUIPMENT IS OPERATING WITHIN ACTIVE AIRCRAFT OPERATIONS AREAS. RADIO-EQUIPPED FLAGGERS SHALL BE FURNISHED BY THE CONTRACTOR. CONTINUOUS PAVEMENT SWEEPING SHALL BE FURNISHED TO REMOVE DEBRIS FROM ACTIVE AIRCRAFT MOVEMENT PATHS. THE COST OF TRAFFIC CONTROL/FLAGGERS AND PAVEMENT SWEEPING SHALL BE PAID UNDER AR150530 TRAFFIC MAINTENANCE.

AIRFIELD OPERATIONAL SAFETY DURING CONSTRUCTION

THE CONTRACTOR SHALL NOT HAVE ACCESS TO ANY PART OF THE ACTIVE AIRFIELD (RUNWAYS, TAXIWAYS OR APRONS) FOR ANY EQUIPMENT OR PERSONNEL WITHOUT THE APPROVAL OF THE RESIDENT ENGINEER AND THE AIRPORT OWNER. ACTIVITIES WITHIN THE AIRPORT OPERATIONS AREA (AOA) ARE SUBJECT TO FEDERAL ACCESS CONTROL. BECAUSE OF THE HIGH REQUIREMENTS FOR AIRPORT SECURITY AND SAFETY. THE FOLLOWING REQUIREMENTS MUST BE ADHERED TO:

- ALL EMPLOYEES OF THE CONTRACTOR SHALL PARK THEIR PERSONAL VEHICLES IN THE DESIGNATED EQUIPMENT PARKING AND STORAGE AREA. EACH PERSON OR VEHICLE ENTERING THE CONTRACTOR AREA SHALL DO SO IN ACCORDANCE WITH THE POLICIES AND PROCEDURES OF THE AIRPORT OWNER. THE CONTRACTOR WILL TRANSPORT THE WORKERS FROM THE PARKING AREAS TO THE WORK AREA. ONLY CONTRACTOR VEHICLES WILL BE ALLOWED OUTSIDE OF THE PROPOSED EQUIPMENT STORAGE AND PARKING AREAS.
- SHOULD ANY CONTRACTOR PERSONNEL BE IDENTIFIED AS NONCOMPLIANT WITH ANY VEHICLE DRIVING SAFETY REQUIREMENTS IN THIS PROJECT SAFETY PLAN OR IN THE AIRPORT VEHICLE OPERATIONS REGULATIONS, SUCH DRIVERS SHALL BE PENALIZED BY RESCISSION OF THEIR ON-AIRPORT DRIVING PRIVILEGES. AND THEIR ACCESS TO THE CONSTRUCTION LIMIT AREA WHEN OPERATING VEHICLES SHALL BE REVOKED.
- THE CONTRACTOR WILL BE REQUIRED TO BE IN CONTACT WITH AIRPORT OPERATIONS. THIS WILL KEEP THE CONTRACTOR IN CONTACT WITH AIRPORT PERSONNEL AND ENABLE THE AIRPORT PERSONNEL TO IMMEDIATELY CONTACT THE CONTRACTOR IN CASE OF AN AERONAUTICAL EMERGENCY THAT WOULD REQUIRE ACTION BY THE CONTRACTOR AND/OR HIS PERSONNEL.

THE CONTRACTOR SHALL REMAIN WITHIN THE CONSTRUCTION LIMITS LINE SHOWN IN THE PLANS. WHEN OUTSIDE THESE LIMITS, ALL CONTRACTOR ACTIVITIES SHALL REMAIN MORE THAN 250 FEET FROM THE CENTERLINE AND 300 FEET FROM THE END OF ACTIVE RUNWAY 13-31 AND 125 FEET FROM THE CENTERLINE AND 240 FEET FROM THE END OF RUNWAY 18-36. FOR WORK NEAR TAXIWAYS AND APRONS, THE CONTRACTOR'S PERSONNEL AND EQUIPMENT MUST REMAIN AT LEAST 44.5 FEET FROM CENTERLINE OF ACTIVE CATEGORY I TAXIWAYS, 65.5 FEET FROM ACTIVE CATEGORY II TAXIWAYS, AND TEN (10) FEET FROM ACTIVE APRONS. WHEN CONSTRUCTION OPERATIONS MUST BE CONDUCTED WITHIN THESE SEPARATIONS, THE PAVEMENT MUST BE CLOSED TO AIRCRAFT ACTIVITY BY THE CONTRACTOR BY PROVIDING TEMPORARY BARRICADES AS SHOWN IN THE PLANS, AND IN THE CASE OF RUNWAY PAVEMENTS, CLOSED RUNWAY MARKERS. WHEN HAUL VEHICLES ARE PERMITTED TO CROSS ACTIVE AIRFIELD PAVEMENTS, THE CONTRACTOR WILL PROVIDE POSITIVE CONTROL OF CONSTRUCTION VEHICLES USING RADIO-EQUIPPED FLAGGERS. CONTRACTOR SHALL ESTABLISH AND MAINTAIN RADIO CONTACT WITH TRI-TOWNSHIP AIRPORT CTAF/UNICOM (122.7 MHz). ALL CONTRACTOR'S EQUIPMENT USED IN ACTIVE AIRPORT OPERATIONS AREAS SHALL BE EQUIPPED WITH A FAA-STANDARD FLAG. AS REFERENCED IN FAA AC 150/5370-2. CURRENT ISSUE. AIRCRAFT SHALL HAVE THE RIGHT-OF-WAY, ALL TAXIWAY WITHIN THE PROJECT LIMITS ARE CATEGORY

THE CONTRACTOR SHALL KEEP ALL OF HIS EQUIPMENT AND PERSONNEL AT LEAST 15 FEET FROM THE EDGE OF ANY ACTIVE ROADWAY OR AUTO PARKING PAVEMENT. WHEN HIS ACTIVITIES REQUIRE WORKING WITHIN 15 FEET OF THE ROAD/PAVEMENT EDGE, THE CONTRACTOR SHALL PROVIDE FOR TRAFFIC CONTROL IN ACCORDANCE WITH IDOT SPECIFICATIONS (HIGHWAY STANDARDS)

OPEN TRENCHES, EXCAVATIONS AND STOCKPILED MATERIAL AT THE CONSTRUCTION SITE SHALL BE DELINEATED WITH THE USE OF BARRICADES DURING HOURS OF RESTRICTED VISIBILITY AND/OR DARKNESS. NO OPEN TRENCHES SHALL BE ALLOWED WITHIN THE RUNWAY SAFETY AREA (RSA) OR THE TAXIWAY SAFETY AREA (TSA) WHEN THE RUNWAY OR TAXIWAY IS OPEN TO AIR TRAFFIC (INCLUDING OVERNIGHT). THE RSA IS DEFINED AS 75 FEET FROM THE CENTERLINE AND 300 FEET FROM THE END OF RUNWAY 13-31 AND 60 FEET FROM THE CENTERLINE AND 240 FEET FROM THE END OF RUNWAY 18-36. THE TSA IS MEASURED AT 24.5 FEET FROM THE CATEGORY I TAXIWAY CENTERLINE AND 39.5 FEET FROM THE CATEGORY II TAXIWAY CENTERLINE. NO VERTICAL DROP OF GREATER THAN 3-INCHES IN HEIGHT FROM PAVEMENT EDGE TO EARTH GRADE OR EARTH GRADE TO EARTH GRADE WITHIN THE RSA OR TSA WILL BE PERMITTED WHEN THE RUNWAY OR TAXIWAY IS OPEN TO AIR TRAFFIC. THE CONTRACTOR WILL HAVE STEEL PLATES ON-SITE TO ALLOW FOR THE RAPID COVERING OF TRENCHES OR EARTH DROPS IN THE EVENT OF UNEXPECTED WORK STOPPAGES FOR WEATHER OR AIRPORT EMERGENCIES. ALL TAXIWAYS WITHIN THE PROJECT LIMITS ARE CATEGORY I.

WHEN NOT IN USE AND DURING NONWORKING HOURS, CONTRACTOR'S EQUIPMENT SHALL BE PARKED WITHIN THE CONTRACTOR'S EQUIPMENT STORAGE AND PARKING AREAS. THE EQUIPMENT STORAGE AND PARKING AREAS ARE TO BE LOCATED AS SHOWN ON THE PHASING PLAN. THE CONTRACTOR WILL BE RESPONSIBLE FOR MAINTAINING THE CONSTRUCTION ENTRANCES IN GOOD CONDITION. THE COST OF MAINTAINING THE CONSTRUCTION ENTRANCE AND CONTRACTOR AREAS IS TO BE INCIDENTAL TO THE CONTRACT. THE CONTRACTOR SHALL PROTECT ALL EXISTING PAVEMENT EDGES FROM DAMAGE FROM CONSTRUCTION EQUIPMENT AND HAUL VEHICLES.

AT NO TIME SHALL THE CONTRACTOR CONDUCT ANY ACTIVITIES OR OPERATE OR PARK EQUIPMENT SO AS TO OBSTRUCT ACTIVE PART 77 AIRPORT IMAGINARY SURFACES OR THE RUNWAY PROTECTION ZONES (RPZ) AS DELINEATED IN THE PLANS. CONTRACTOR'S EQUIPMENT SHALL EXTEND NO HIGHER THAN 25 FEET.

CRANES SHALL NOT BE USED DURING INSTRUMENT WEATHER CONDITIONS OR AT NIGHT. CRANES SHALL BE LOWERED WHEN NOT IN USE.

BEFORE REOPENING TEMPORARILY CLOSED PAVEMENTS, THE CONTRACTOR SHALL INSPECT AND CLEAN, AS NECESSARY, THE PAVEMENT TO ASSURE THAT NO MATERIALS OR OBJECTS THAT MAY DAMAGE AIRCRAFT OR VEHICLES REMAIN. ANY REQUIRED CLEANING SHALL BE TO THE SATISFACTION OF THE RESIDENT ENGINEER AND AIRPORT OWNER AND IS INCIDENTAL TO THE CONTRACT.

ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE APPROVED PROJECT SAFETY PLAN, ISSUED BY THE ILLINOIS DIVISION OF AERONAUTICS.

FAILURE TO USE THESE PRESCRIBED PROCEDURES OR ADHERE TO THE SAFETY REQUIREMENTS WILL RESULT IN THE SUSPENSION OF WORK.

NOTIFICATIONS BY CONTRACTOR

THE CONTRACTOR MUST NOTIFY THE RESIDENT ENGINEER AND THE AIRPORT OWNER 3 DAYS IN ADVANCE OF ANY REQUIRED PARTIAL OR COMPLETE CLOSING OF ANY RUNWAY, TAXIWAY OR APRON. THE DATE, TIME AND SCHEDULED DURATION OF THE CLOSING MUST BE APPROVED BY THE RESIDENT ENGINEER AND THE AIRPORT OWNER. THE CONTRACTOR SHALL NOTIFY THE RESIDENT ENGINEER AND AIRPORT OWNER 3 DAYS IN ADVANCE OF THE CONTRACTOR'S CLOSING OF OTHER ACTIVE ROADWAYS, AIRFIELD OR ROADWAY LIGHTING CIRCUITS, OR OTHER AIRPORT FACILITIES.

CONTRACTOR'S USE OF SITE

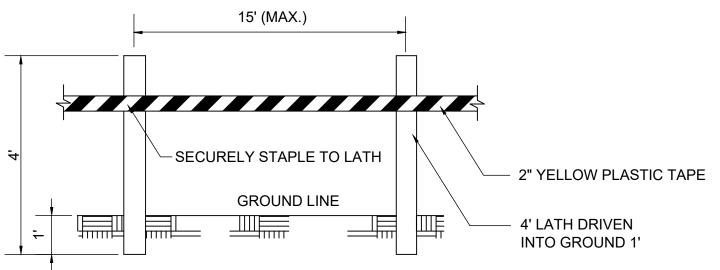
CONTRACTOR'S ACCESS TO THE PROJECT WHEN ON AIRPORT PROPERTY IS SHOWN IN THE PLANS. CONTRACTOR'S ACCESS TO THE AIRPORT ITSELF IS TO BE PROVIDED BY PUBLIC RIGHTS-OF-WAY. THE CONTRACTOR IS TO SECURE ALL NECESSARY PERMITS FOR THE USE OF ANY PUBLIC RIGHTS-OF-WAY AND IS TO MAINTAIN TRAFFIC ON THESE PUBLIC ROADS AT ALL TIMES, WITH THE COSTS OF PERMITTING, CLEANING AND REPAIRING OF PAVEMENT DAMAGED BY CONTRACTOR'S ACTIVITIES INCIDENTAL TO THE CONTRACT. USE OF AND REPAIRS TO ANY PUBLIC FACILITIES ARE TO BE COMPLETED TO THE SATISFACTION OF THE FACILITY'S OWNER.

THE CONTRACTOR IS TO PROVIDE TEMPORARY CONSTRUCTION ROADS WITHIN THE CONSTRUCTION LIMIT LINES AS MAY BE REQUIRED BY HIS ACTIVITIES. HEAVY VEHICLES SHALL NOT CROSS EXISTING PAVEMENT SURFACES EXCEPT AS APPROVED BY THE AIRPORT OWNER AND THE RESIDENT ENGINEER. ANY DAMAGE TO PAVEMENTS THAT MAY OCCUR BY THE CONTRACTOR'S ACTIVITIES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE AND TO THE SATISFACTION OF THE AIRPORT OWNER AND THE RESIDENT ENGINEER. FOR HAUL ROUTES MADE BY CONTRACTOR THROUGH GRASSED AREAS, CONTRACTOR SHALL GRADE, LEVEL, TOPSOIL, SEED AND MULCH AT THE END OF THE PROJECT, COST INCIDENTAL TO THE CONTRACT.

THE CONTRACTOR IS TO PROVIDE AN EQUIPMENT STORAGE AND PARKING AREA AT THE LOCATIONS SHOWN IN THE PLANS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE ACCESS ROADS AND THE STORAGE AREA DURING CONSTRUCTION AND TO RESTORE THE AREAS AT PROJECT COMPLETION TO CONDITIONS SUITABLE TO THE AIRPORT OWNER AND THE RESIDENT ENGINEER. AT THE AIRPORT OWNER'S DISCRETION, THE TEMPORARY FACILITIES MAY REMAIN. BUT THEY MUST BE LEFT IN CONDITIONS SUITABLE TO THE AIRPORT OWNER. THE COST OF PROVIDING, MAINTAINING AND RESTORING THE TEMPORARY FACILITIES IS INCIDENTAL TO THE CONTRACT.

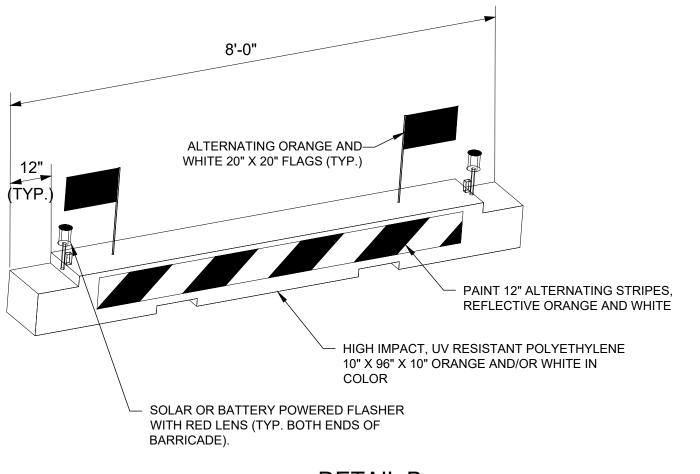
UTILITY OUTAGES AND SHUTDOWNS

THE CONTRACTOR SHALL PROVIDE 3 DAYS PRIOR NOTICE OF ANY OUTAGES OR SHUTDOWNS TO THE OWNER AND THE AGENCY OWNING THE AFFECTED UTILITY. THE CONTRACTOR SHALL PROVIDE ANY TEMPORARY CONNECTIONS OR OTHER MEASURES AS MAY BE REQUIRED TO MAINTAIN SERVICE AS MAY BE REQUIRED BY THE OWNING AGENCY AT NO COST TO THE OWNER



MATERIALS ARE TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION. COST OF MATERIALS, INSTALLATION, RELOCATION AND MAINTENANCE OF LATHING AND WARNING TAPE IS TO BE INCIDENTAL TO THE CONTRACT.

DETAIL A LATHING AND WARNING TAPE



DETAIL B LOW PROFILE AIRCRAFT BARRICADE

BARRICADE NOTES

- 1. ALL CONSTRUCTION SIGNS AND TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES INCLUDING THE ILLINOIS SUPPLEMENT (LATEST EDITION) AND THE FAA ADVISORY CIRCULARS (LATEST EDITION) UNLESS NOTED OTHERWISE. THE FAA OR MORE STRINGENT SPECIFICATIONS SHALL GOVERN.
- 2. BARRICADES SHALL BE INTERLOCKED END TO END OVER THE LENGTH OF THE PAVEMENT WHERE PROTECTING OPEN RUNWAYS, AND SPACED END TO END A MAXIMUM OF 4 FEET IN OTHER ALL OTHER AREAS. BARRICADES ARE TO BE SET BACK FROM THE ACTIVE RUNWAY OR TAXIWAY CENTERLINE THE DISTANCE AS SHOWN ON THE PLANS.
- CONSTRUCTION RED WARNING LIGHT: THESE ARE PORTABLE, LENS DIRECTED, ENCLOSED LIGHTS. THE COLOR OF THE LIGHT EMITTED SHALL BE RED THEY MAY BE USED IN EITHER A STEADY BURN (TYPE C) OR LOW INTENSITY FLASHING MODE (TYPE A) UNLESS NOTED OTHERWISE.
- 4. THE LIGHTING SHALL BE MAINTAINED IN OPERATION DURING THE HOURS OF DARKNESS BETWEEN 1/2 HOUR AFTER SUNSET AND 1/2 HOUR BEFORE SUNRISE AND WHEN CONDITIONS EXIST WHICH TEND TO OBSCURE VISION.
- BARRICADES SHALL BE SECURED TO THE GROUND BY APPROVED METHODS TO PREVENT MOVEMENT BY PROP WASH, JET BLAST OR OTHER WIND CURRENTS.
- 6. THE ONLY COLOR COMBINATION ON BARRICADES IS ORANGE AND WHITE. THE ORANGE STRIPES SHALL BE ENCAPSULATED LENS REFLECTIVE SHEETING. THE WHITE STRIPES SHALL BE EITHER ENCAPSULATED OR ENCLOSED LENS REFLECTIVE SHEETING AND MUST BE IN ACCEPTABLE CONDITION.
- COST FOR PROVIDING, PLACING, MAINTAINING, RELOCATING AND REMOVING BARRICADES SHALL BE INCLUDED AS AN INCIDENTAL COST TO THE CONTRACT, UNLESS OTHERWISE NOTED.

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Illinois Licensed Professional Service Corporation #184-001084



Marshall County Airport 1315 Illinois 17 Lacon, Illinois 61540 phone: 309-246-2870

REHABILITATE AIRCRAFT HANGAR PAVEMENT AND **AUTOMOBILE PARKING** LOT

IDA No: C75-5008

Contract No. MA033

DESCRIPTION NO. DATE DES DWN REV ISSUE: JANUARY 13, 2023

PROJECT NO: 22A0015

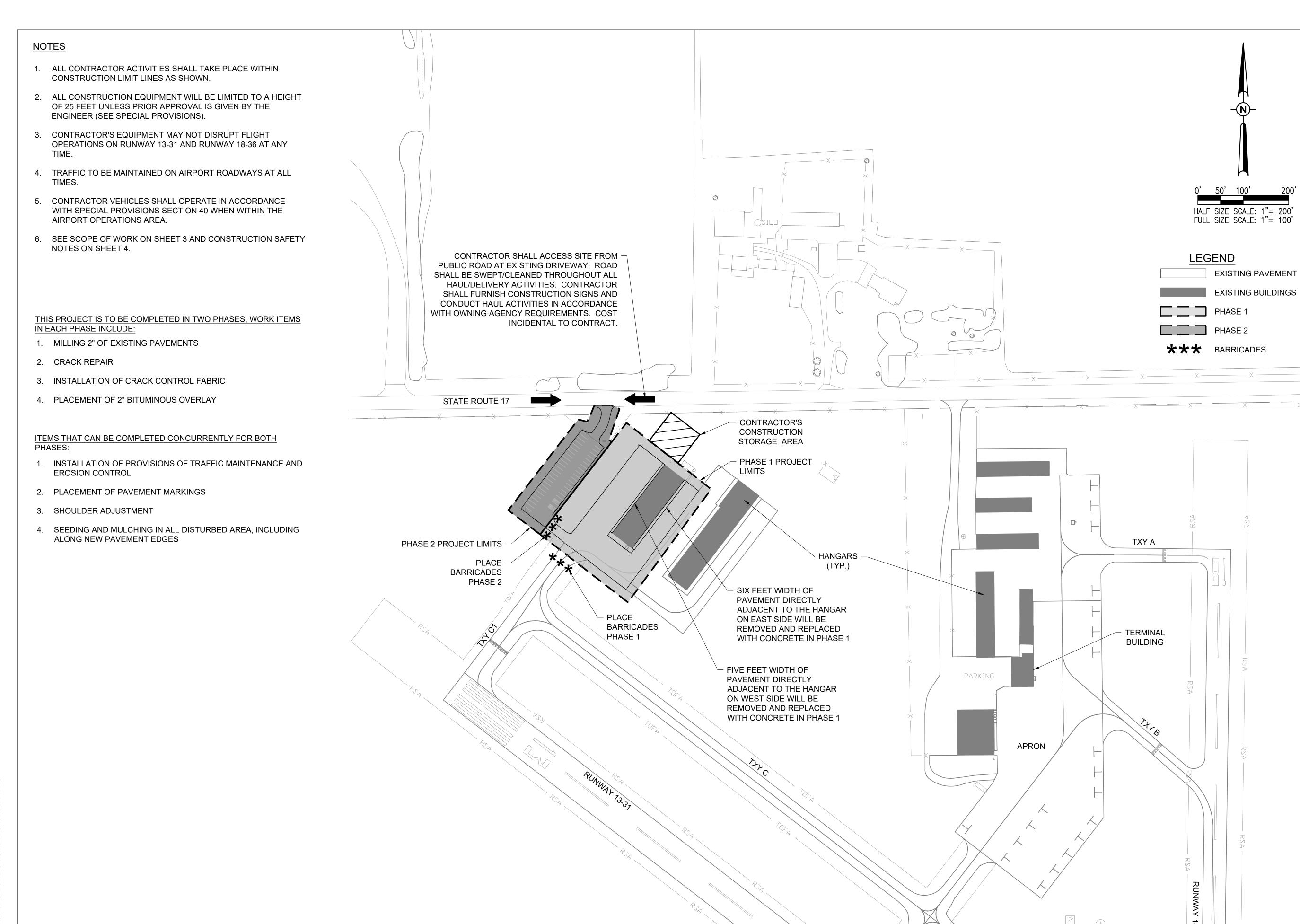
CAD FILE: C-104-CSPP.DWG DESIGN BY: LDH 11/10/2022 DRAWN BY: HLE 11/10/2022

SHEET TITLE

DETAILS

CONSTRUCTION SAFETY NOTES AND

REVIEWED BY: LDH 01/09/23





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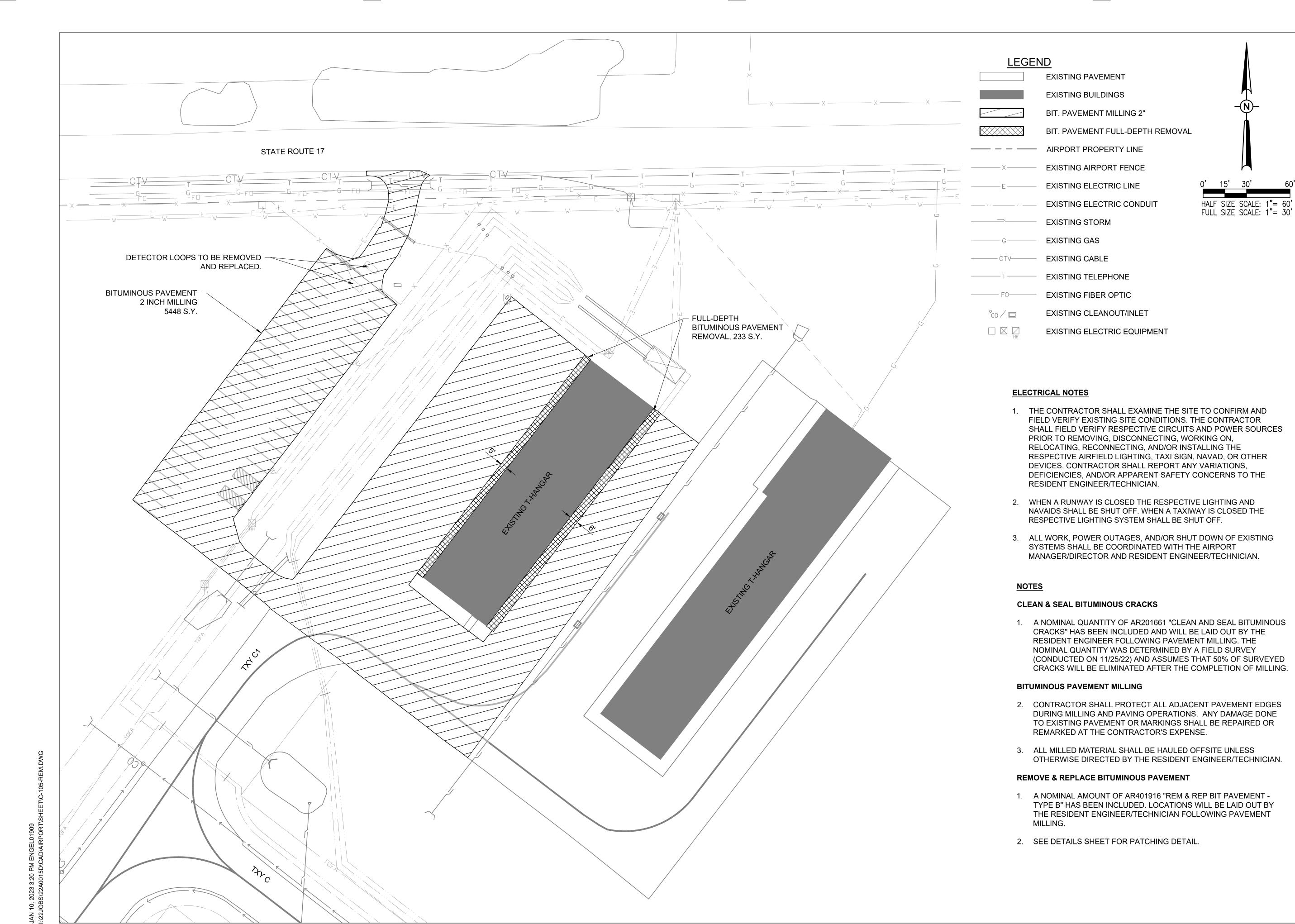
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CAD FILE: C-104-CSPP.DWG
DESIGN BY: LDH 11/10/2022

SHEET TITLE

CONSTRUCTION SAFETY AND PHASING PLAN

DRAWN BY: HLE 11/10/2022 REVIEWED BY: LDH 01/09/23





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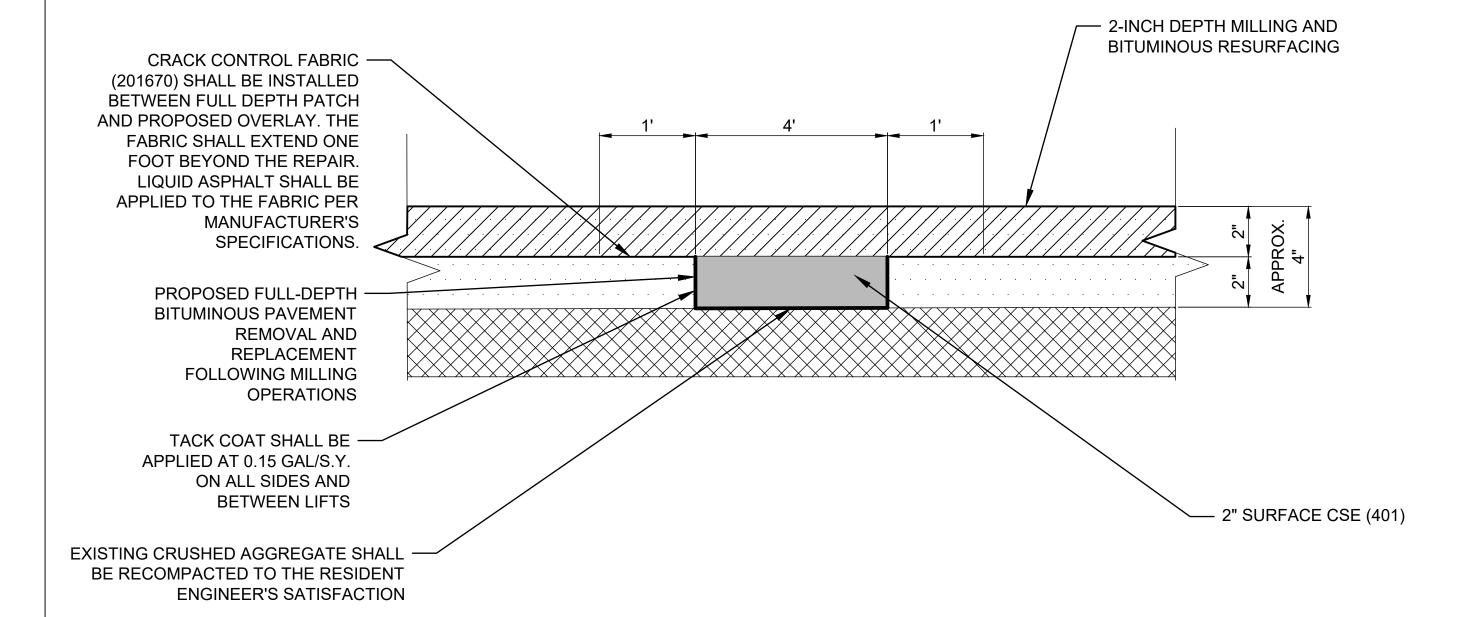
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PROJECT NO: 22A0015				

CAD FILE: C-105-REM.DWG DESIGN BY: LDH 11/11/2022 DRAWN BY: HLE 11/11/2022

REVIEWED BY: LDH 01/09/23

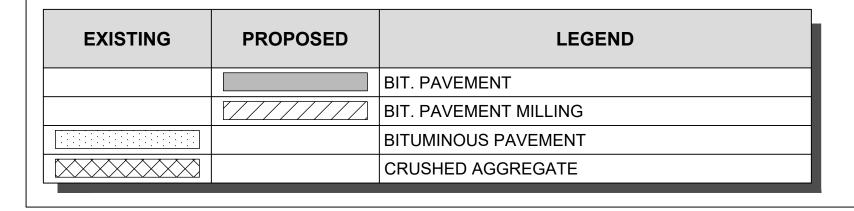
SHEET TITLE

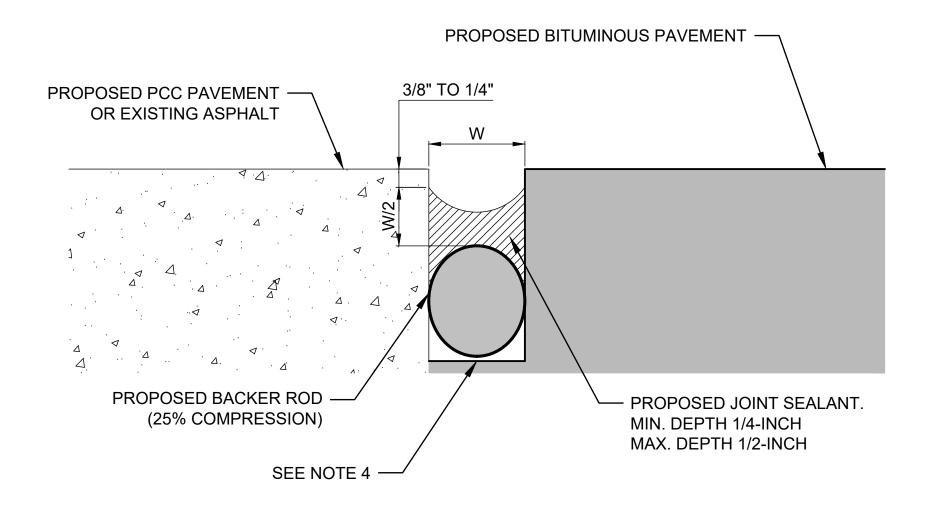
PAVEMENT PREPARATION PLAN



AR401916 REMOVE & REPLACE BITUMINOUS PAVEMENT - TYPE B (FULL DEPTH)

NOT TO SCALE



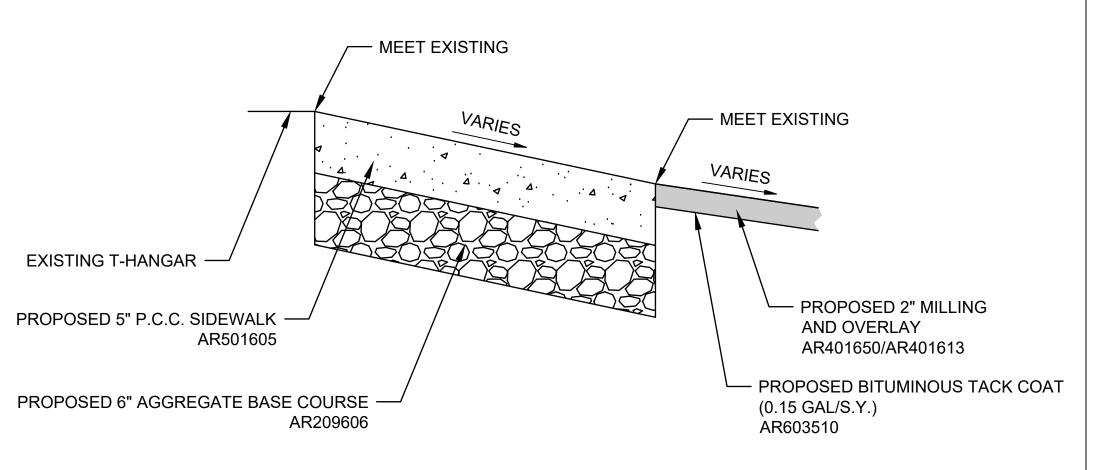


PCC TO ASPHALT OR ASPHALT TO ASPHALT JOINT SEALING DETAIL (AR401660)

NOT TO SCALE

NOTES:

- 1. SEALANT SHALL BE RECESSED A MINIMUM 3/8-INCH TO 1/4-INCH BELOW PAVEMENT (BASED ON DEPTH OF LOWEST SLAB).
- 2. JOINT SHALL HAVE A DEPTH/WIDTH RATIO OF 0.5 OR AS SPECIFIED BY THE MANUFACTURER.
- 3. A SHALLOW CUT MAY BE USED WHERE THE BACKER ROD IS PLACED AT THE BOTTOM OF THE JOINT.
- 4. BACKER ROD SIZING SHALL BE BASED ON THE MANUFACTUER'S RECOMMENDATION.
- 5. ASPHALT MUST BE COMPLETELY REMOVED FROM CONCRETE FACE.
- 6. NEW ASPHALT PAVEMENT MUST BE CLEAN, DRY, AND CURED. CURE TIME WILL BE BASED ON THE RESIDENT ENGINEER'S APPROVAL.



PCC SIDEWALK DETAIL (AR501605)

NOT TO SCALE

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REHABILITATE AIRCRAFT HANGAR PAVEMENT AND **AUTOMOBILE PARKING** LOT

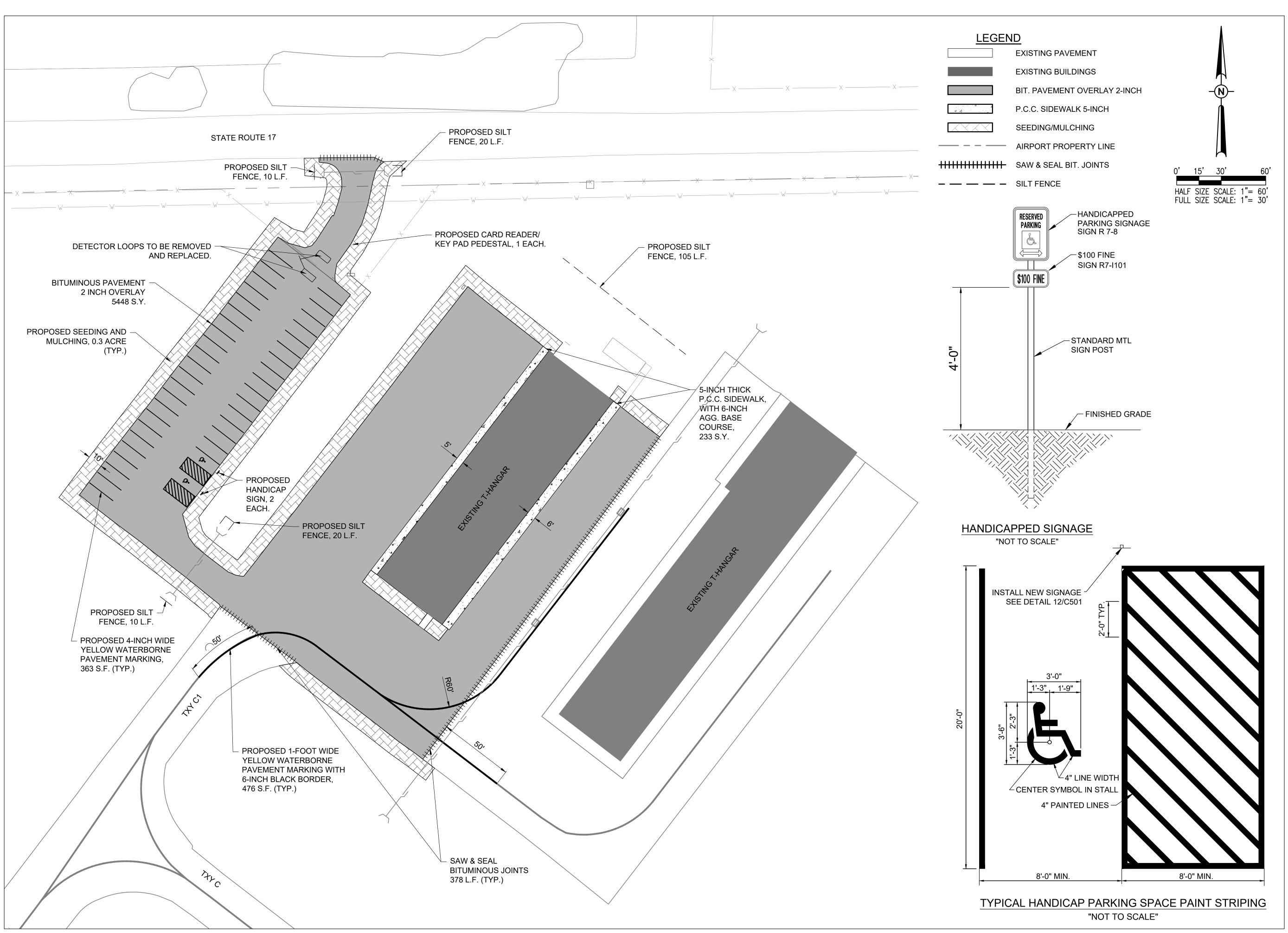
IDA No: C75-5008

Contract No. MA033

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PAVEMENT PATCHING DETAILS

SHEET TITLE





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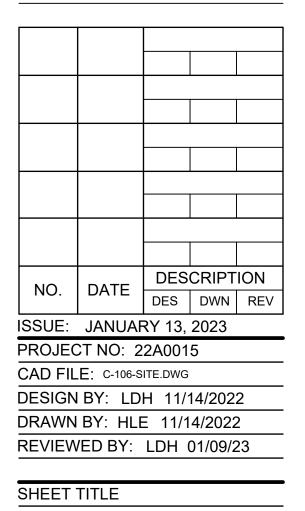


Marshall County Airport 1315 Illinois 17 Lacon, Illinois 61540 phone: 309-246-2870

REHABILITATE
AIRCRAFT HANGAR
PAVEMENT AND
AUTOMOBILE PARKING
LOT

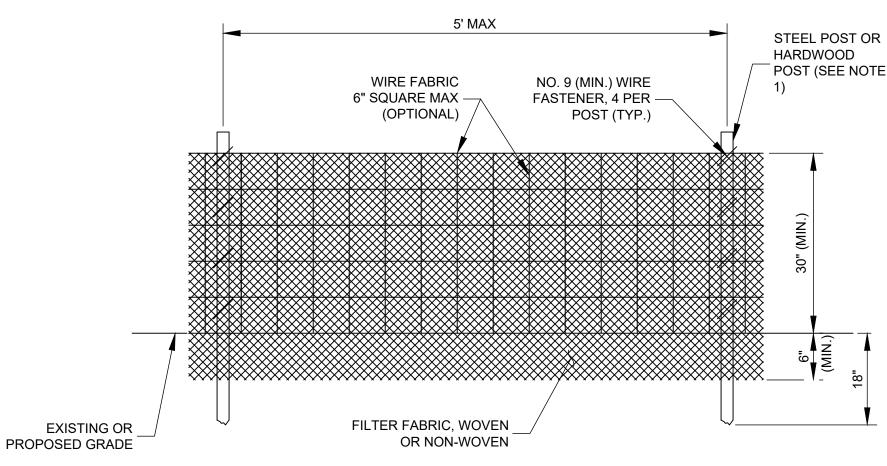
IDA No: C75-5008

Contract No. MA033



PROPOSED SITE PLAN

FABRIC ANCHOR DETAIL



ELEVATION

- 1. FENCE POST SHALL BE EITHER STEEL "T" LINE POST OR HARDWOOD POST WITH A MINIMUM SECTIONAL AREA OF 2.0 SQUARE INCHES. A CARPENTER'S (NOMINAL) 2"x2" POST WILL MEET SPECIFICATIONS.
- 2. TOP AND BOTTOM WIRE OF WIRE FABRIC SHALL BE MINIMUM GAGE NO. 9. INTERMEDIATE WIRES OF THE WIRE FABRIC SHALL BE MINIMUM GAGE NO. 11.
- 3. WIRE FABRIC SHALL BE SECURELY FASTENED TO FENCE POSTS WITH NO. 9 GAGE WIRE MINIMUM. FOUR (4) FASTENERS PER POST REQUIRED.
- 4. FILTER FABRIC SHALL BE SECURELY FASTENED TO WIRE FABRIC AND POSTS WITH TIES OR STAPLES SPACED AT 12" APART AT THE TOP, MIDDLE AND BOTTOM.
- 5. WHEN TWO SECTIONS OF FILTER FABRIC MEET, THEY SHALL BE OVERLAPPED BY 6" AND FOLDED AND ATTACHED TO THE WIRE FABRIC AT A POST.
- 6. FILTER FABRIC SHALL BE IN ACCORDANCE WITH SPECIAL PROVISIONS WITH APPARENT OPENING SIZE (AOS) OF AT LEAST 40 FOR NONWOVEN AND WOVEN. THE FABRIC MUST MEET THE APPLICABLE STANDARDS OF AASHTO 288-00 (Article IV, Section B.1.j.1.f.i, AS AMENDED), OR EQUIVALENT.
- 7. A MAXIMUM OF 5 FEET IS USED FOR POST-TO-POST SPACING.
- 8. SOIL DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE EROSION. SOIL STABILIZATION MEASURES SHALL CONSIDER THE TIME OF YEAR. SITE CONDITIONS AND THE USE OF TEMPORARY OR PERMANENT MEASURES.
- 9. ALL STORM SEWERS THAT ARE OR WILL BE FUNCTIONING DURING CONSTRUCTION SHALL BE PROTECTED BY AN APPROPRIATE SEDIMENT CONTROL MEASURE.
- 10. SILT FENCE SHALL BE INSTALLED PRIOR TO ANY GRADING WORK IN THE AREA TO BE PROTECTED. PERIODIC INSPECTION SHALL BE PERFORMED AND REQUIRED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN EVENT.
- 11. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED AND REPLACED WHEN BULGES DEVELOP IN THE SILT FENCE.
- 12. IF DEWATERING SERVICES ARE USED, ADJOINING PROPERTIES AND DISCHARGE LOCATIONS SHALL BE PROTECTED FROM EROSION. DISCHARGES SHALL BE ROUTED THROUGH AN EFFECTIVE SEDIMENT CONTROL MEASURE (E.G. SEDIMENT TRAP, SEDIMENT BASIN, OR OTHER APPROPRIATE MEASURE).
- 13. FENCE POSTS SHALL BE REMOVED WHEN DIRECTED AT PROJECT END.
- 14. THE EROSION CONTROL MEASURES INDICATED ON THE PLANS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL MEASURES MAY BE REQUIRED, AS DIRECTED BY THE ENGINEER OR GOVERNING AGENCY.

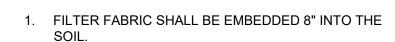


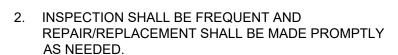
CATCH BASIN OR

INLET

WIRE AND FILTER

FABRIC





- SILT FENCE SHALL BE REMOVED WHEN IT HAS SERVED ITS USEFULNESS AT THE DIRECTION OF THE AIRPORT REPRESENTATIVE OR OWNER SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE. CONTRACTOR SHALL PLACE SEED AND MULCH PER LANDSCAPING PLAN. COST OF REMOVAL SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR SILT FENCE.
- AREAS DISTURBED OUTSIDE OF CONSTRUCTION LIMITS DURING PLACEMENT OF INLET PROTECTION TO BE RE-GRADED, SEEDED AND MULCHED, COST INCIDENTAL TO SILT FENCE.
- FENCE AND POSTS SHALL BE REMOVED WHEN DIRECTED AT PROJECT END.
- 6. PAID UNDER AR156510 SILT FENCE.

SEDIMENTATION AND EROSION CONTROL NOTES:

- A. SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE COMMENCEMENT OF HYDROLOGIC DISTURBANCE OF UPLAND AREAS.
- B. FOR THOSE DEVELOPMENTS THAT REQUIRE A DESIGNATED EROSION CONTROL INSPECTOR (DECI),
- INSPECTIONS AND DOCUMENTATION SHALL BE PERFORMED, AT A MINIMUM: UPON COMPLETION OF SEDIMENT AND RUNOFF CONTROL MEASURES (INCLUDING PERIMETER) CONTROLS AND DIVERSIONS), PRIOR TO PROCEEDING WITH ANY OTHER EARTH DISTURBANCE
- AFTER EVERY SEVEN (7) CALENDAR DAYS OR STORM EVENT WITH GREATER THAN 0.5 INCH OF RAINFALL OR LIQUID EQUIVALENT PRECIPITATION.
- C. SOIL DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE EROSION. IF STRIPPING, CLEARING, GRADING, OR LANDSCAPING ARE TO BE DONE IN PHASES, THE PERMITTEE SHALL PLAN FOR APPROPRIATE SOIL EROSION AND SEDIMENT CONTROL MEASURES.
- D. A STABILIZED MAT OF CRUSHED STONE MEETING IDOT GRADATION CA-01 UNDERLAIN WITH FILTER FABRIC AND IN ACCORDANCE WITH THE ILLINOIS URBAN MANUAL, OR OTHER APPROPRIATE MEASURE(S) AS APPROVED BY THE ENFORCEMENT OFFICER, SHALL BE INSTALLED AT ANY POINT WHERE TRAFFIC WILL BE ENTERING OR LEAVING A CONSTRUCTION SITE. SEDIMENT OR SOIL REACHING AN IMPROVED PUBLIC RIGHT OF WAY, STREET, ALLEY OR PARKING AREA SHALL BE REMOVED BY SCRAPING OR STREET CLEANING AS ACCUMULATIONS WARRANT AND TRANSPORTED TO A CONTROLLED SEDIMENT DISPOSAL AREA.
- TEMPORARY DIVERSIONS SHALL BE CONSTRUCTED AS NECESSARY TO DIRECT ALL RUNOFF FROM HYDROLOGICALLY DISTURBED AREAS TO AN APPROPRIATE SEDIMENT TRAP OR BASIN.
- F. DISTURBED AREAS SHALL BE STABILIZED WITH TEMPORARY OR PERMANENT MEASURES WITHIN SEVEN (7) CALENDAR DAYS FOLLOWING THE END OF ACTIVE HYDROLOGIC DISTURBANCE OR REDISTURBANCE.
- G. ALL STOCKPILES SHALL HAVE APPROPRIATE MEASURES TO PREVENT EROSION. STOCKPILES SHALL NOT BE PLACED IN FLOOD PRONE AREAS OR WETLANDS AND DESIGNATED BUFFERS.
- H. SLOPES STEEPER THAN 3H:1V SHALL BE STABILIZED WITH APPROPRIATE MEASURES AS APPROVED BY THE ENFORCEMENT OFFICER.
- APPROPRIATE EROSION CONTROL BLANKET SHALL BE INSTALLED ON ALL INTERIOR DETENTION BASIN SIDE SLOPES BETWEEN THE NORMAL WATER LEVEL AND HIGH WATER LEVEL.
- J. STORM SEWERS THAT ARE OR WILL BE FUNCTIONING DURING CONSTRUCTION SHALL BE PROTECTED BY AN APPROPRIATE SEDIMENT CONTROL MEASURE.
- K. IF DEWATERING SERVICES ARE USED, ADJOINING PROPERTIES AND DISCHARGE LOCATIONS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION. DISCHARGES SHALL BE ROUTED THROUGH AN APPROVED ANIONIC POLYMER DEWATERING SYSTEM OR A SIMILAR MEASURE AS APPROVED BY THE ENFORCEMENT OFFICER. DEWATERING SYSTEMS SHOULD BE INSPECTED DAILY DURING OPERATIONAL PERIODS. THE ENFORCEMENT OFFICER, OR APPROVED REPRESENTATIVE, MUST BE PRESENT AT THE COMMENCEMENT OF DEWATERING ACTIVITIES.
- IF INSTALLED SOIL EROSION AND SEDIMENT CONTROL MEASURES DO NOT MINIMIZE SEDIMENT LEAVING THE DEVELOPMENT SITE, ADDITIONAL MEASURES SUCH AS ANIONIC POLYMERS OR FILTRATION SYSTEMS MAY BE REQUIRED BY THE ENFORCEMENT OFFICER.
- M. ALL TEMPORARY AND PERMANENT EROSION CONTROL MEASURES MUST BE MAINTAINED AND REPAIRED AS NEEDED. THE PROPERTY OWNER SHALL BE ULTIMATELY RESPONSIBLE FOR MAINTENANCE AND REPAIR.
- N. ALL TEMPORARY SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY MEASURES ARE NO LONGER
- O. THE EROSION CONTROL MEASURES INDICATED ON THE PLANS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL MEASURES MAY BE REQUIRED, AS DIRECTED BY THE ENGINEER, ENFORCEMENT OFFICER, OR OTHER GOVERNING AGENCY.

STORM WATER POLLUTION PREVENTION NOTES

THE CONTRACTOR SHALL IMPLEMENT ALL PROVISIONS OF THE CONTRACT DOCUMENTS TO ASSURE THAT STORM WATER POLLUTION PREVENTION ITEMS ARE CONSTRUCTED AND MAINTAINED IN A TIMELY MANNER. SEDIMENTATION MUST NOT BE TRANSPORTED OFF THE CONSTRUCTION SITE. PERMANENT DRAINAGE FEATURES AND VEGETATIVE MEASURES SHALL BE PROVIDED AS SOON AS POSSIBLE.

THE MAINTENANCE OF ALL STORM WATER POLLUTION PREVENTION MEASURES IS INCIDENTAL TO THE ASSOCIATED ITEM.

POLLUTION PREVENTION MEASURES

THE CONTRACTOR SHALL BE REQUIRED TO IMPLEMENT AND MAINTAIN STORM WATER POLLUTION PREVENTION PRACTICES AND MEASURES PRIOR TO THE STRIPPING OF EXISTING VEGETATION WHEREVER POSSIBLE AND AS SOON AS CONSTRUCTION PERMITS IN OTHER AREAS. POLLUTION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, INCLUDING THESE CONSTRUCTION PLANS, AND WITH STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, ILLINOIS ENVIRONMENTAL PROTECTION AGENCY, CURRENT ISSUE. THE CONTRACTOR SHALL ADJUST HIS OPERATIONS AND IMPLEMENT POLLUTION CONTROL MEASURES SO THAT NO RUNOFF FROM STRIPPED AREAS WILL LEAVE THE CONSTRUCTION SITE OTHER THAN THROUGH SEDIMENT TRAPS OR OTHER SUITABLE CONTROL MEASURES.

POLLUTION CONTROL ITEMS SHALL BE PROVIDED AS NOTED ON THE STORM WATER POLLUTION PREVENTION PLAN AND IN THE STORM WATER POLLUTION PREVENTION DETAILS AND AS DIRECTED BY THE ENGINEER. THE LIMITS OF SUCH MEASURES SHALL BE STAKED BY THE CONTRACTOR PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. SUCH LIMITS MAY BE ADJUSTED BY THE ENGINEER TO ACCOUNT FOR ACTUAL SITE CONDITIONS EXPERIENCED DURING CONSTRUCTION. ADDITIONAL COMPENSATION FOR MEASURES EXCEEDING THE PLAN QUANTITIES WILL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR EACH ITEM.

THE CONTRACTOR IS TO MAINTAIN AND ADJUST, REPAIR OR REPLACE ALL POLLUTION PREVENTION MEASURES AS REQUIRED OR AS DIRECTED BY THE ENGINEER UNTIL PERMANENT VEGETATION HAS BEEN ESTABLISHED. MAINTENANCE OF POLLUTION CONTROL MEASURES IS TO BE PROVIDED AT NO ADDITIONAL COST TO THE CONTRACT.

ADDITIONAL STORMWATER POLLUTION PREVENTION MEASURES ARE EXISTING ON SITE LOCATED AT DRAINAGE FACILITIES AND ALONG THE PROPERTY LINE.

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REHABILITATE AIRCRAFT HANGAR PAVEMENT AND **AUTOMOBILE PARKING** LOT

IDA No: C75-5008

Contract No. MA033

DESCRIPTION NO. DATE DES DWN REV ISSUE: JANUARY 13, 2023

PROJECT NO: 22A0015

CAD FILE: C-106-SITE.DWG DESIGN BY: LDH 11/14/2022 DRAWN BY: HLE 11/14/2022

REVIEWED BY: LDH 01/09/23

SHEET TITLE

SILT FENCE DETAILS

ELEC	TRICAL LEGEND - ONE-LINE DIAGRAM
-	CABLE TERMINATOR/LUG
***	TRANSFORMER
__	DISCONNECT SWITCH
	FUSIBLE DISCONNECT SWITCH
	CIRCUIT BREAKER
<u>_</u> _	THERMAL MAGNETIC CIRCUIT BREAKER
	FUSE
↓ ‡	TRANSIENT VOLTAGE SURGE SUPPRESSOR OR SURGE PROTECTOR DEVICE
ŧ	GROUND - GROUND ROD, GROUNDING ELECTRODE, OR AT EARTH POTENTIAL
Ø	INDICATING LIGHT
M	MOTOR
(#)	LOAD, MOTOR, # = HORSEPOWER
0	ELECTRIC UTILITY METER BASE
0	JUNCTION BOX WITH SPLICE
xxx	EQUIPMENT, XXX = DEVICE DESCRIPTION
GND	GROUND BUS OR TERMINAL
S/N	NEUTRAL BUS
	PANELBOARD WITH MAIN LUGS
 	PANELBOARD WITH MAIN BREAKER
♣□≫	FUSE PANEL WITH MAIN FUSE PULLOUT
0	DUPLEX RECEPTACLE 120V SINGLE PHASE GROUNDING TYPE
	CONTROL STATION
N EM	TRANSFER SWITCH
\bigcirc G	ENGINE GENERATOR SET

EL	ECTRICAL LEGEND - SCHEMATIC
\dashv \vdash	NORMALLY OPEN (N.O.) CONTACT
-1/-	NORMALLY CLOSED (N.C.) CONTACT
S*	STARTER COIL, * = STARTER NUMBER
OL —}/	OVERLOAD RELAY CONTACT
CR*	CONTROL RELAY, * = CONTROL RELAY NUMBER
R*	RELAY, * = RELAY NUMBER
0	TOGGLE SWITCH / 2 POSITION SWITCH
OFF AUTO	2-POSITION SELECTOR SWITCH
HAND AUTO SO OOX	3-POSITION SELECTOR SWITCH (H-O-A SHOWN)
	2 POLE DISCONNECT SWITCH
	3 POLE DISCONNECT SWITCH
<u> </u>	PHOTOCELL
	TERMINAL BLOCK, * = TERMINAL NUMBER
	DEVICE TERMINAL, * = DEVICE TERMINAL NUMBER
	INTERNAL PANEL WIRING
	FIELD WIRING
	FUSE
GND	GROUND BUS OR TERMINAL
S/N	NEUTRAL BUS
<u></u>	GROUND, GROUND ROD, GROUND BUS
0 0	INDUSTRIAL CONTROL RELAY OR LIGHTING CONTACTOR
	S1 CUTOUT HANDLE REMOVED
	S1 CUTOUT HANDLE INSERTED
,	N.O. THERMAL SWITCH
्रु	N.C. THERMAL SWITCH
	L-830 SERIES ISOLATION TRANSFORMER

_	
	ELECTRICAL ABBREVIATIONS
A.F.F.	ABOVE FINISHED FLOOR
A, AMP	AMPERES
ATS	AUTOMATIC TRANSFER SWITCH
AWG	AMERICAN WIRE GAUGE
BKR	BREAKER
С	CONDUIT
СВ	CIRCUIT BREAKER
СКТ	CIRCUIT
CR	CONTROL RELAY
CU	COPPER
DPDT	DOUBLE POLE DOUBLE THROW
DPST	DOUBLE POLE SINGLE THROW
EM	EMERGENCY
EMT	ELECTRICAL METALLIC TUBING
ENCL	ENCLOSURE
EOR	ENGINEER OF RECORD
EOR	EXPLOSION PROOF
	EMERGENCY STOP
ES	
ETL	INTERTEK - ELECTRICAL TESTING LABS
ETM	ELAPSE TIME METER
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GFI	GROUND FAULT INTERRUPTER
GND	GROUND
GRSC	GALVANIZED RIGID STEEL CONDUIT
HID	HIGH INTENSITY DISCHARGE
НОА	HAND OFF AUTOMATIC
HP	HORSEPOWER
HPS	HIGH PRESSURE SODIUM
J	JUNCTION BOX
KVA	KILOVOLT AMPERE(S)
KNL	KEVIN NEIL LIGHTFOOT
KW	KILOWATTS
LC	LIGHTING CONTACTOR
LTFMC	LIQUID TIGHT FLEXIBLE METAL CONDUIT (UL LISTED)
LTG	LIGHTING
LP	LIGHTING PANEL
MAX	MAXIMUM
МСВ	MAIN CIRCUIT BREAKER
MCM	THOUSAND CIRCULAR MIL
MDP	MAIN DISTRIBUTION PANEL
MFR	MANUFACTURER
MH	METAL HALIDE
MIN	MINIMUM
MLO	MAIN LUGS ONLY
NEC	NATIONAL ELECTRICAL CODE (NFPA 70)
	NORMALLY CLOSED
NC NO	
NO	NORMALLY OPEN
NTS	NOT TO SCALE
OHE	OVERHEAD ELECTRIC
OL	OVERLOAD

	ELECT	RICAL ABBREVIATIONS (CONTINUED)
	РВ	PULL BOX
	PC	PHOTO CELL
	PDB	POWER DISTRIBUTION BLOCK
	PNL	PANEL
	RCPT	RECEPTACLE
	R	RELAY
	S	STARTER
	SPD	SURGE PROTECTION DEVICE
	SPST	SINGLE POLE SINGLE THROW
	TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR
	TYP	TYPICAL
	UG	UNDERGROUND
	UGE	UNDERGROUND ELECTRIC
	UL	UNDERWRITER'S LABORATORIES
	V	VOLTS
	W/	WITH
	W/O	WITHOUT
	WP	WEATHER PROOF
	XFER	TRANSFER
	XFMR	TRANSFORMER

AIRPORT	EQUIPMENT/FACILITY ABBREVIATIONS
ASOS	AUTOMATED SURFACE OBSERVING SYSTEM
ATCT	AIR TRAFFIC CONTROL TOWER
AWOS	AUTOMATED WEATHER OBSERVING SYSTEM
CCR	CONSTANT CURRENT REGULATOR
DME	DISTANCE MEASURING EQUIPMENT
FAR	FEDERAL AVIATION REGULATION
GS	GLIDE SLOPE FACILITY
HIRL	HIGH INTENSITY RUNWAY LIGHT
ILS	INSTRUMENT LANDING SYSTEM
IM	INNER MARKER
LIR	LOW IMPACT-RESISTANT
LOC	LOCALIZER FACILITY
MALS	MEDIUM INTENSITY APPROACH LIGHTING SYSTEM
MALSR	MEDIUM INTENSITY APPROACH LIGHTING SYSTEM WITH RUNWAY ALIGNMENT INDICATING LIGHTS
MIRL	MEDIUM INTENSITY RUNWAY LIGHT
MITL	MEDIUM INTENSITY TAXIWAY LIGHT
NDB	NON-DIRECTIONAL BEACON
PAPI	PRECISION APPROACH PATH INDICATOR
PLASI	PULSE LIGHT APPROACH SLOPE INDICATOR
RAIL	RUNWAY ALIGNMENT INDICATING LIGHTS
REIL	RUNWAY END IDENTIFIER LIGHT
RVR	RUNWAY VISUAL RANGE
VADI	VISUAL APPROACH DESCENT INDICATOR
VASI	VISUAL APPROACH SLOPE INDICATOR
VOR	VERY HIGH FREQUENCY OMNIDIRECTIONAL RANGE FACILITY
WC	WIND CONE

NOTES:

- 1. ALL ELECTRICAL EQUIPMENT AND MATERIALS SHALL BE INSTALLED IN CONFORMANCE WITH NFPA 70 NATIONAL ELECTRICAL CODE (NEC) MOST CURRENT ISSUE IN FORCE, THE RESPECTIVE EQUIPMENT MANUFACTURER'S DIRECTIONS AND ALL OTHER APPLICABLE LOCAL CODES, LAWS, ORDINANCES, AND REQUIREMENTS IN FORCE. ANY INSTALLATIONS WHICH VOID THE U.L. LISTING, INTERTEK TESTING SERVICES VERIFICATION/ETL LISTING (OR OTHER THIRD PARTY LISTING) AND/OR THE MANUFACTURER'S WARRANTY OF A DEVICE WILL NOT BE PERMITTED.
- 2. KEEP A COPY OF THE LATEST NEC IN FORCE ON SITE AT ALL TIMES DURING/CONSTRUCTION FOR USE AS A REFERENCE.
- S. VAULT WORK, POWER OUTAGES, AND/OR SHUT DOWN OF EXISTING SYSTEMS SHALL BE COORDINATED WITH THE AIRPORT MANAGER AND MAINTENANCE SUPERVISOR. ONCE SHUT DOWN, THE CIRCUITS SHALL BE LABELED AS SUCH TO PREVENT ACCIDENTAL ENERGIZING OF THE RESPECTIVE CIRCUITS. ALL PERSONNEL SHALL FOLLOW U.S. DEPARTMENT OF LABOR OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION (OSHA) 29 CFR PART 1910 OCCUPATIONAL SAFETY & HEALTH STANDARDS FOR ELECTRICAL SAFETY AND LOCKOUT/TAGOUT PROCEDURES INCLUDING, BUT NOT LIMITED TO, 29 CFR SECTION 1910.147 THE CONTROL OF HAZARDOUS ENERGY (LOCKOUT/TAGOUT).
- 4. IN THE EVENT A CONFLICT IS DETERMINED WITH RESPECT TO MANUFACTURER INSTALLATION INSTRUCTIONS, NEC, AND/OR THE CONTRACT DOCUMENTS, CONTACT THE PROJECT ENGINEER FOR FURTHER DIRECTIONS.
- 5. COLOR CODE PHASE AND NEUTRAL CONDUCTOR INSULATION FOR NO. 6 AWG OR SMALLER. PROVIDE COLORED INSULATION OR COLORED MARKING TAPE FOR PHASE AND NEUTRAL CONDUCTORS FOR NO. 4 AWG AND LARGER. INSULATED GROUND CONDUCTORS SHALL HAVE GREEN COLORED INSULATION FOR ALL CONDUCTOR AWG AND/OR KCMIL TO COMPLY WITH NEC 250.119. NEUTRAL CONDUCTORS SHALL HAVE WHITE COLORED INSULATION FOR NO. 6 AWG AND SMALLER TO MEET THE REQUIREMENTS OF NEC 200.6. STANDARD COLORS FOR POWER WIRING AND BRANCH CIRCUITS SHALL BE AS FOLLOWS: TO MATCH EXISTING COLOR CODING SYSTEM AT JACKSONVILLE AIRPORT TERMINAL BUILDING.

120/240 VAC, 1 PHASE, 3 WIRE

PHASE A BLACK (120V TO N)
PHASE B RED (120V TO N)
NEUTRAL WHITE
GROUND GREEN

- 6. SEE RESPECTIVE SITE PLANS FOR SITE LEGEND INFORMATION.
- 7. LTFMC DENOTES LIQUID TIGHT FLEXIBLE METAL CONDUIT UL LISTED, SUNLIGHT RESISTANT, & SUITABLE FOR GROUNDING. LIQUID TIGHT FLEXIBLE METAL CONDUIT AND ASSOCIATED FITTINGS SHALL BE U.L. LISTED TO MEET THE REQUIREMENTS OF NEC 350.6. LIQUID TIGHT FLEXIBLE METAL CONDUIT THAT IS USED FOR FLEXIBILITY (INCLUDING CONNECTIONS TO CCR'S & TRANSFORMERS) SHALL REQUIRE AN EXTERNAL BONDING JUMPER OR INTERNAL EQUIPMENT GROUNDING CONDUCTOR PER NEC 350.60. EXTERNAL BONDING JUMPERS USED WITH CCR INSTALLATIONS SHALL BE #6 AWG COPPER (MINIMUM). DO NOT INSTALL LTFMC THAT IS NOT UL LISTED. CONFIRM LTFMC BEARS THE UL LABEL PRIOR TO INSTALLATION.
- 8. ALL ENCLOSURES RATED NEMA 4, 4X SHALL HAVE WATERTIGHT HUBS AT CONDUIT ENTRANCES UL LISTED NEMA 4, 4X FOR THE RESPECTIVE ENCLOSURE, TO MAINTAIN THE NEMA 4, 4X RATING.
- 9. CONTRACTOR SHALL FIELD VERIFY EXISTING SITE CONDITIONS. CONTRACTOR SHALL FIELD VERIFY RESPECTIVE CIRCUITS AND POWER SOURCES PRIOR TO REMOVING, DISCONNECTING, ADJUSTING, CONNECTING, OR WORKING ON THE RESPECTIVE AIRFIELD LIGHTING, TAXI SIGN, NAVAID, VAULT EQUIPMENT, OR OTHER DEVICE.
- 10. HIGH VOLTAGE CIRCUITS (AIRFIELD LIGHTING 5000 VOLT SERIES CIRCUITS AND OTHER CIRCUITS RATED ABOVE 600 VOLTS) AND LOW VOLTAGE CIRCUITS (RATED 600 VOLTS AND BELOW) SHALL NOT BE INSTALLED IN THE SAME WIREWAY, CONDUIT, DUCT, RACEWAY, JUNCTION STRUCTURE OR HANDHOLE.



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Marshall County Airport 1315 Illinois 17 Lacon, Illinois 61540 phone: 309-246-2870

REHABILITATE AIRCRAFT HANGAR PAVEMENT AND AUTOMOBILE PARKING LOT

IDA No: C75-5008

Contract No. MA033

NO.	DATE	DESCRIPTION		
		DES	DWN	REV
ISSUE: JANUARY 13, 2023				
PROJEC	CT NO: 2	2A001	5	
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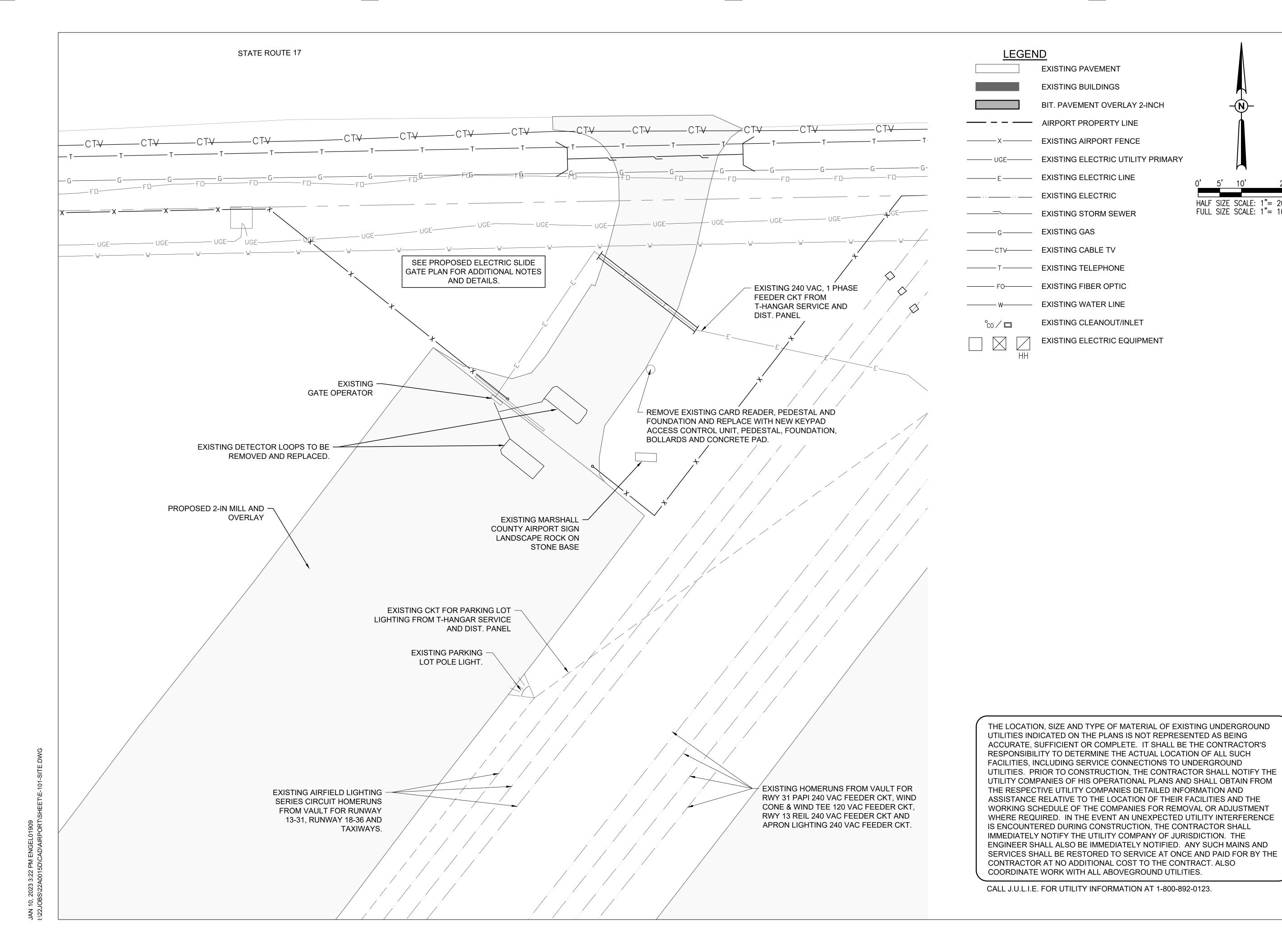
DESIGN BY: KNL 11/30/2022
DRAWN BY: CWS 12/01/2022

REVIEWED BY: LDH 01/09/23

71EVVED D1. EDIT 01/03/

SHEET TITLE

ELECTRICAL LEGEND AND ABBREVIATIONS





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HALF SIZE SCALE: 1"= 20' FULL SIZE SCALE: 1"= 10"

> REHABILITATE AIRCRAFT HANGAR PAVEMENT AND **AUTOMOBILE PARKING** LOT

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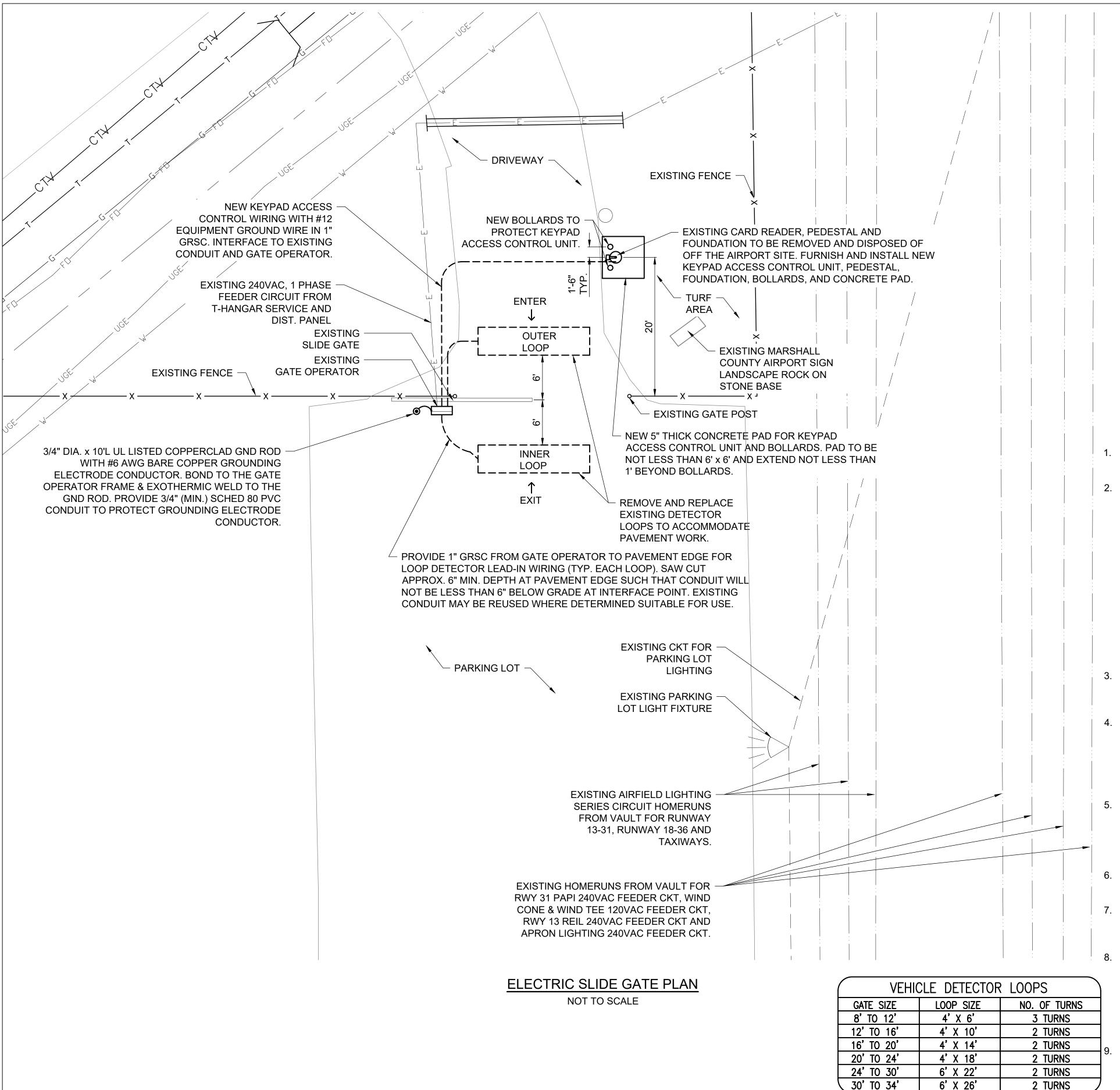
NO.	DATE	DESCRIPTION		
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ISSUE: JANUARY 13, 2023				
PROJECT NO: 22A0015				

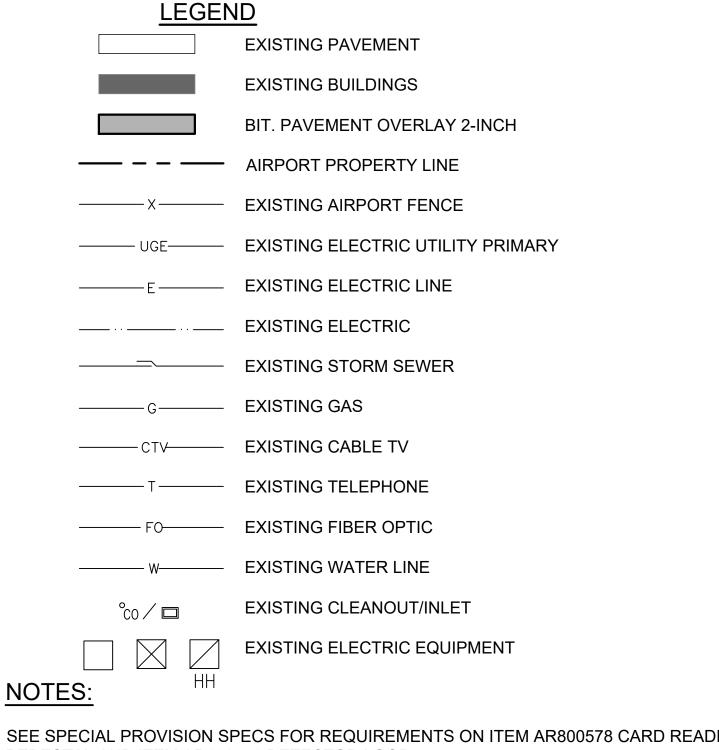
CAD FILE: E-101-SITE.DWG

DESIGN BY: KNL 12/02/2022 DRAWN BY: CWS 12/02/2022 REVIEWED BY: LDH 01/09/23

SHEET TITLE

PROPOSED ELECTRICAL PLAN





- SEE SPECIAL PROVISION SPECS FOR REQUIREMENTS ON ITEM AR800578 CARD READER/KEYPAD PEDESTAL AND ITEM AR162570 DETECTOR LOOP.
- LOOP DETECTOR WIRING SHALL CONFORM TO IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, (ADOPTED JANUARY 1, 2022) SECTION 1079 "DETECTOR LOOP" AND BE COMPATIBLE WITH THE DETECTOR AMPLIFIERS. INDUCTION LOOPS SHALL BE INSTALLED IN SAW CUT GROOVES CREATED BY THE CONTRACTOR IN THE ROAD SURFACE; SUCH GROOVES OF LENGTH, WIDTH, AND DEPTH AS REQUIRED BY THE MANUFACTURER OF THE LOOP CONTROL EQUIPMENT. LOOP DETECTOR WIRING SHALL BE INSTALLED IN ACCORDANCE WITH THE RESPECTIVE GATE OPERATOR AND/OR LOOP DETECTOR MANUFACTURER INSTRUCTIONS. CONTRACTOR SHALL SAW CUT APPROXIMATELY 6" MINIMUM DEPTH AT THE PAVEMENT EDGE SUCH THAT THE CONDUIT FOR THE LOOP DETECTOR LEAD-IN WIRING WILL NOT BE LESS THAN 6" BELOW GRADE AT THE INTERFACE POINT TO THE PAVEMENT. LOOP WIRES SHALL BE HELD IN PLACE IN THE BITUMINOUS/CONCRETE PAVEMENT BY COMPLETELY BACKFILLING AND COVERING SLOT WITH A SEALER RATED SUITABLE FOR THE RESPECTIVE APPLICATION. SEALER SHALL CONFORM TO THE REQUIREMENTS OF IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (ADOPTED JANUARY 1, 2022) SECTION 1079.02 DETECTOR LOOP AND SEALER.
- CONCRETE FOUNDATION SHALL BE PROVIDED FOR THE KEYPAD ACCESS CONTROL UNIT. FOUNDATION FOR THE KEYPAD ACCESS CONTROL UNIT SHALL BE 48" (MIN.) IN DEPTH, AS DETAILED HEREIN.
- 1" GRS CONDUIT WILL BE REQUIRED BETWEEN THE SLIDE GATE OPERATOR AND THE KEYPAD ACCESS CONTROL UNIT AND BETWEEN THE SLIDE GATE OPERATOR AND THE DETECTOR LOOPS. THE MINIMUM BURYING DEPTH FOR CONDUIT UNDER PAVEMENT IS 24". ALL METAL CONDUITS ENTERING THE GATE OPERATOR SHALL BE BONDED TO THE GATE OPERATOR FRAME WITH A #8 AWG (MIN.) COPPER BONDING JUMPER. CONFIRM CONTROL WIRING REQUIREMENTS WITH THE RESPECTIVE GATE OPERATOR SALES AND SERVICE REPRESENTATIVE.
- THE GUARD/BOLLARD POSTS SHALL BE 4" DIA. STEEL (HEAVY WALL) PIPE, CONCRETE FILLED, AND SHALL EXTEND FROM 3'-6"(MIN) ABOVE GRADE OR THE TOP OF THE KEYPAD UNIT WHICHEVER IN HIGHER TO A DEPTH OF 48" BELOW THE GROUND LINE. THE CONCRETE FOOTER DIMENSION SHALL BE AS DETAILED HEREIN. GUARD/BOLLARD POSTS SHALL BE PAINTED WITH YELLOW COLORED ENAMEL FINISH OR COVERED WITH A YELLOW SLEEVE.
- CONTRACTOR SHALL COORDINATE ANY POWER OUTAGES TO EXISTING EQUIPMENT WITH THE RESPECTIVE OWNER'S REPRESENTATIVE AND THE AIRPORT MANAGER.
- CONCRETE USED FOR INSTALLING THE KEYPAD ACCESS CONTROL UNIT, & BOLLARDS SHALL MEET THE REQUIREMENTS OF STRUCTURAL PORTLAND CEMENT CONCRETE ITEM 610, AND SHALL BE RATED 4000 PSI AT 28 DAYS.
- ALL ELECTRICAL EQUIPMENT AND MATERIALS SHALL BE INSTALLED IN CONFORMANCE WITH NFPA 70 - NATIONAL ELECTRICAL CODE (NEC) MOST CURRENT ISSUE IN FORCE, THE RESPECTIVE EQUIPMENT MANUFACTURER'S DIRECTIONS AND ALL OTHER APPLICABLE LOCAL CODES, LAWS, ORDINANCES, AND REQUIREMENTS IN FORCE. ANY INSTALLATIONS WHICH VOID THE UL LISTING, INTERTEK TESTING SERVICES VERIFICATION/ETL LISTING, (OR OTHER THIRD PARTY LISTING) AND/OR THE MANUFACTURER'S WARRANTY OF A DEVICE WILL NOT BE PERMITTED.

PAYMENT FOR ITEM AR800578 CARD READER/KEYPAD PEDESTAL SHALL BE ON A PER EACH BASIS AND SHALL BE FULL COMPENSATION FOR ALL MATERIALS, EQUIPMENT, CABLE IN CONDUIT, DUCT, GROUNDING, LABOR, TOOLS, COORDINATION, TESTING, AND INCIDENTALS REQUIRED TO REMOVE THE CARD READER AND REPLACE IT WITH A NEW KEYPAD ACCESS CONTROL UNIT COMPLETE AND IN OPERATING CONDITION.

10. PAYMENT FOR REMOVING AND REPLACING THE VEHICLE DETECTOR LOOPS WILL BE PAID FOR UNDER ITEM AR162570 DETECTOR LOOP PER LUMP SUM.



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REHABILITATE AIRCRAFT HANGAR **PAVEMENT AND AUTOMOBILE PARKING** LOT

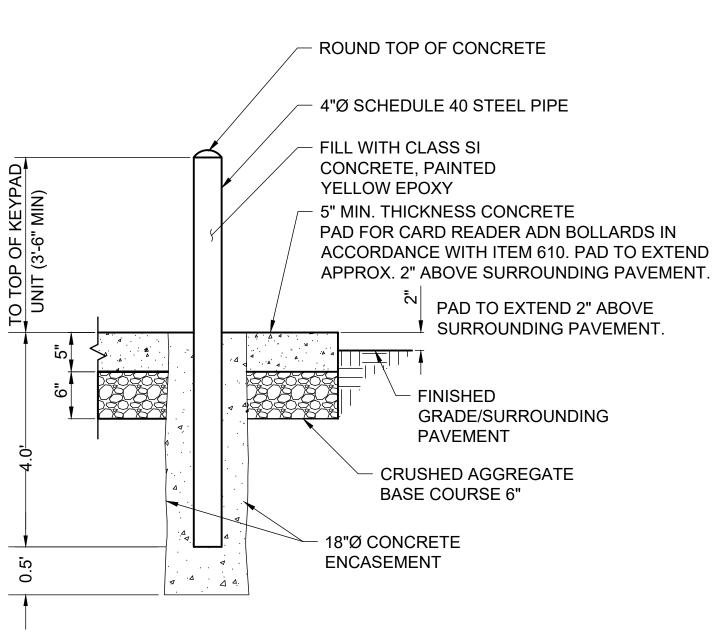
IDA No: C75-5008

Contract No. MA033

	NO DATE	DATE	DESCRIPTION		
	NO.	DATE	DES	DWN	REV
	ISSUE: JANUARY 13, 2023				
Ì	PROJECT NO: 22A0015				
(CAD FIL	E: E-501-D	ETL.DWG	}	
ĺ	DESIGN BY: KNL 12/01/2022				
ĺ	DRAWN BY: CWS 12/01/2022				
	REVIEWED BY: LDH 01/09/23				

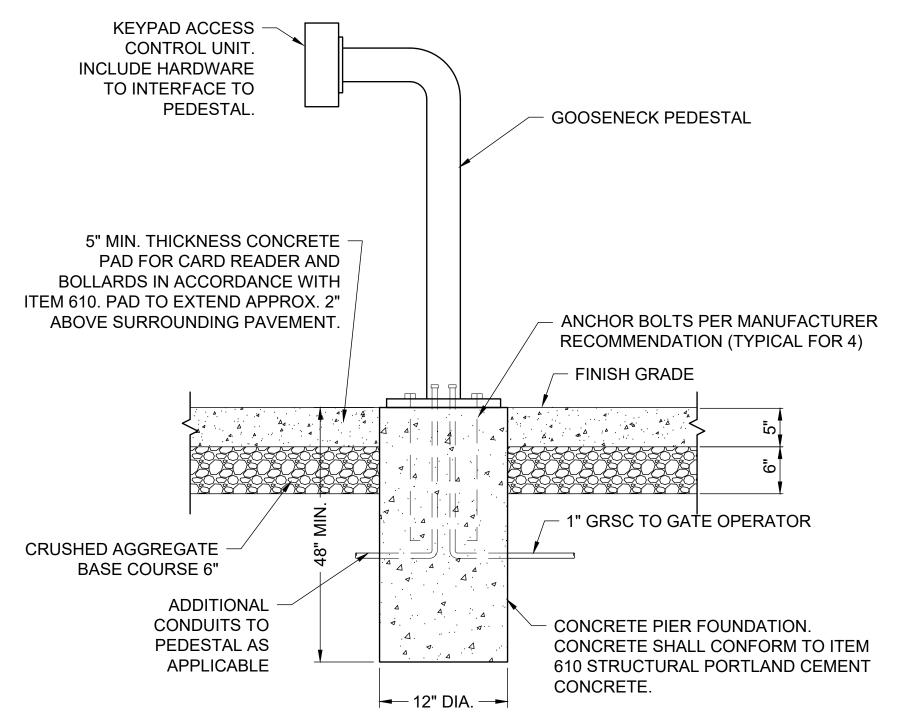
PROPOSED ELECTRIC SLIDE **GATE PLAN**

SHEET TITLE



- NOTES:
- 1. THE EXPOSED PORTION OF THE BOLLARD SHALL BE PAINTED YELLOW EPOXY OR SHALL HAVE YELLOW SLEEVES.
- 2. BOLLARDS SHALL MEET REQUIREMENTS OF INTERNATIONAL FIRE CODE SECTION 312 VEHICLE IMPACT PROTECTION.
- 3. BOLLARDS ANS ASSOCIATED ITEMS ARE INCIDENTAL TO THE RESPECTIVE WORK FOR THE KEYPAD ACCESS CONTROL UNIT.

BOLLARD DETAIL NOT TO SCALE

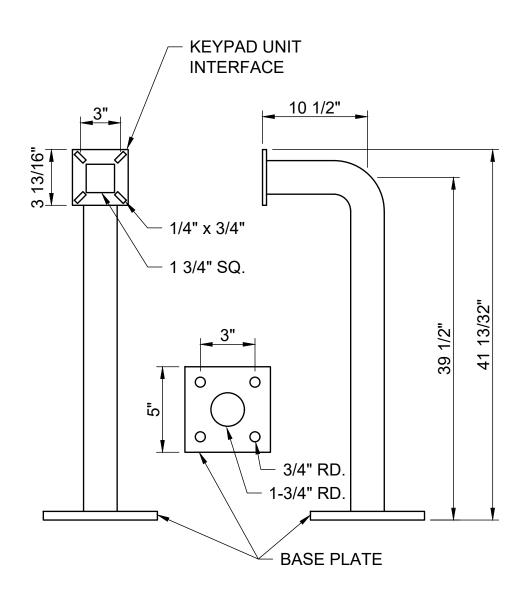


NOTES

- PROPOSED KEYPAD WITH PEDESTAL & FOUNDATION WILL REQUIRE INTERFACE TO THE EXISTING GATE OPERATOR.
- 2. INCLUDE #12 AWG EQUIPMENT GND WIRE FROM GATE OPERATOR TO KEYPAD ACCESS CONTROL UNIT METAL HOUSING FRAME.
- 3. FACE OF KEYPAD SHALL NOT EXTEND BEYOND BOLLARDS.

KEYPAD ACCESS CONTROL UNIT PEDESTAL ELEVATION DETAIL

NOT TO SCALE



NOTE:

GOOSENECK PEDESTAL SHALL BE NOMINAL 42" HIGH AND HAVE POWDER COATED BLACK FINISH; AMERICAN ACCESS SYSTEMS, INC. MODEL NUMBER 18-001, PEDESTAL PRO. MODEL 42-9C-BLK, PEDESTAL CEO MODEL 42-3-12, OR APPROVED EQUAL.

GOOSENECK PEDESTAL DETAIL

NOT TO SCALE



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REHABILITATE AIRCRAFT HANGAR PAVEMENT AND AUTOMOBILE PARKING LOT

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SHEET TITLE

KEYPAD ACCESS CONTROL UNIT DETAILS

- ALL WORK, POWER OUTAGES, AND/OR SHUT DOWN OF EXISTING SYSTEMS SHALL BE COORDINATED WITH THE AIRPORT DIRECTOR/MANAGER. ONCE SHUT DOWN, THE CIRCUITS SHALL BE LABELED AS SUCH TO PREVENT ACCIDENTAL ENERGIZING OF THE RESPECTIVE CIRCUITS. ALL PERSONNEL SHALL FOLLOW U.S. DEPARTMENT OF LABOR OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION (OSHA) 29 CFR PART 1910 OCCUPATIONAL SAFETY & HEALTH STANDARDS FOR ELECTRICAL SAFETY AND LOCKOUT/TAGOUT PROCEDURES INCLUDING, BUT NOT LIMITED TO, 29 CFR SECTION 1910.147 THE CONTROL OF HAZARDOUS ENERGY (LOCKOUT/TAGOUT).
- 2. CONTRACTOR SHALL EXAMINE THE SITE TO CONFIRM AND FIELD VERIFY EXISTING SITE CONDITIONS.
- 3. ALL ELECTRICAL EQUIPMENT AND MATERIALS SHALL BE INSTALLED IN CONFORMANCE WITH NFPA 70 NATIONAL ELECTRIC CODE (NEC) MOST CURRENT ISSUE IN FORCE, THE RESPECTIVE EQUIPMENT MANUFACTURER'S DIRECTIONS AND ALL OTHER APPLICABLE LOCAL CODES, LAWS, ORDINANCES, AND REQUIREMENTS IN FORCE. ANY INSTALLATIONS WHICH VOID THE U.L. LISTING, INTERTEK TESTING SERVICES VERIFICATION/ETL LISTING (OR OTHER THIRD PARTY LISTING) AND/OR MANUFACTURER'S WARRANTY OF A DEVICE WILL NOT BE PERMITTED.
- 1. CONTRACTOR SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS OF THE NFPA 70E - STANDARD FOR ELECTRICAL SAFETY IN THE WORKPLACE.
- TEST EXISTING GATE OPERATOR SYSTEM IN PRESENCE OF AIRPORT MANAGER AND/OR RESIDENT ENGINEER/TECHNICIAN TO CONFIRM PROPER OPERATION PRIOR TO REMOVAL, MODIFICATIONS AND WORK AFFECTING THE ELECTRIC SLIDE GATE INSTALLATION.
- 6. EXISTING SAFETY/DETECTOR LOOPS FOR THE T-HANGAR AND AUTO PARKING LOT GATE SHALL BE REMOVED AND REPLACED WITH NEW DETECTOR LOOPS TO ACCOMMODATE THE ASSOCIATED PAVING WORK. REPLACEMENT OF DETECTOR LOOPS WILL BE PAID FOR UNDER ITEM AR162570 DETECTOR LOOP PER LUMP SUM.
- 7. THE EXISTING CARD READER SHALL BE REMOVED AND REPLACED WITH A NEW KEYPAD ACCESS CONTROL UNIT WITH PEDESTAL, FOUNDATION AND BOLLARDS FOR VEHICLE IMPACT PROTECTION. A NEW CONCRETE PAD SHALL BE PROVIDED FOR KEYPAD ACCESS CONTROL UNIT AND BOLLARDS TO ACCOMMODATE THE PAVING WORK. CONTRACTOR SHALL REPLACE ASSOCIATED WIRING AND CONDUITS TO INTERFACE TO THE EXISTING GATE OPERATOR. ALL WORK AND MATERIAL ASSOCIATED WITH THE KEYPAD ACCESS CONTROL UNIT AND BOLLARDS WILL BE PAID FOR UNDER ITEM AR800578 CARD READER/KEYPAD PEDESTAL PER LUMP SUM.



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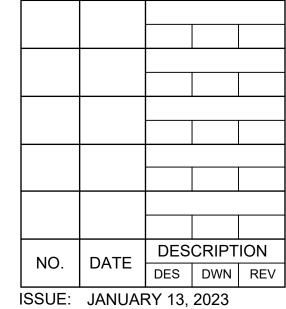


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REHABILITATE AIRCRAFT HANGAR PAVEMENT AND AUTOMOBILE PARKING LOT

IDA No: C75-5008

Contract No. MA033



PROJECT NO: 22A0015
CAD FILE: E-601.DWG

DESIGN BY: KNL 11/30/2022

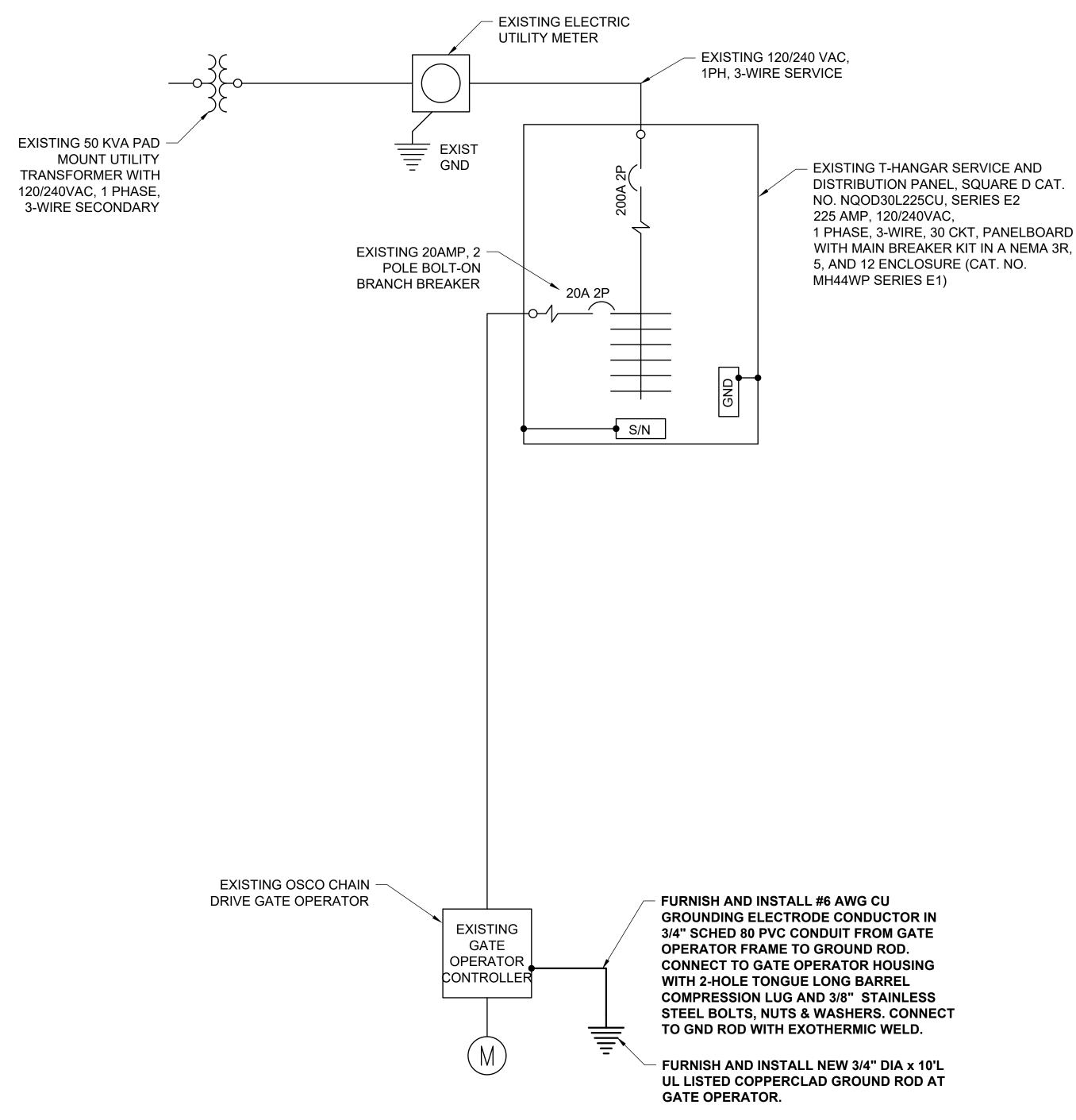
DRAWN BY: CWS 12/01/2022

REVIEWED BY: LDH 01/09/23

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SHEET TITLE

EXIST. T-HANGAR & AUTO PARKING LOT GATE OPERATOR ELEC. ONE-LINE



EXISTING T-HANGAR AND AUTO PARKING LOT GATE OPERATOR

ELETRICAL ONE-LINE

NOT TO SCALE

LEGEND PLATE SCHEDULE				
DEVICE	LABEL			
UTILITY METER BASE AT T-HANGAR	MAX AVAILABLE FAULT CURRENT AT UTILITY XFMR SECONDARY CALCULATED TO BE 9,470 AMPS LINE TO LINE 14,206 AMPS LINE TO NEUTRAL ON 11/30/2022			
T-HANGAR SERVICE AND DIST PANEL	MAX AVAILABLE FAULT CURRENT AT UTILITY XFMR SECONDARY CALCULATED TO BE 9,470 AMPS LINE TO LINE 14,206 AMPS LINE TO NEUTRAL ON 11/30/2022			
T-HANGAR SERVICE & DISTRIBUTION PANEL	T-HANGAR SERVICE AND DIST. PANEL 120/240 VAC, 1 PH, 3W FED FROM UTILITY SERVICE			
T-HANGAR AND AUTO PARKING LOT GATE OPERATOR	GATE OPERATOR 240VAC, 1 PHASE FED FROM T-HANGAR SERVICE AND DIST. PANEL			

	ARC FLASH RISK LABELS	
AROTEASTITION EADELS		
EQUIPMENT	LABEL	
UTILITY METER BASE AT T-HANGAR	WARNING ARC FLASH HAZARD APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT IS REQUIRED NOMINAL VOLTAGE: 120/240 VAC, 1 PHASE, 3-WIRE ARC FLASH BOUNDARY: 19 INCHES ARC-FLASH PPE CATEGORY; 1	
T-HANGAR SERVICE & DISTRIBUTION PANEL	WARNING ARC FLASH HAZARD APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT IS REQUIRED NOMINAL VOLTAGE: 120/240 VAC, 1 PHASE, 3-WIRE ARC FLASH BOUNDARY: 19 INCHES ARC-FLASH PPE CATEGORY; 1	
T-HANGAR AND AUTO PARKING LOT GATE OPERATOR	WARNING ARC FLASH HAZARD APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT IS REQUIRED NOMINAL VOLTAGE: 120/240 VAC, 1 PHASE, 3-WIRE ARC FLASH BOUNDARY: 19 INCHES ARC-FLASH PPE CATEGORY; 1	

NOTE: LABELS ARE BASED ON FAULT CURRENT FROM UTILITY TRANSFORMER THAT IS LESS THAN 25,000 AMPS AT 240 VAC.

RESTRICTED AREA NO TRESPASSING THIS AREA IS A DESIGNATED OPERATIONAL AREA OF AN AIRPORT AND ANYONE WHO TRESPASSES ON THIS PROPERTY COMMITS A FELONY. 1.35" 21.3" 1.35" **BORDER** R=1.5" SIGN DETAIL TH=0.5" NOT TO SCALE IN=0.3" 24" X 18" SIGN BLANK 0.080" ALUMINUM COLORS: LEGEND - RED BACKGROUND - WHITE (RETROREFLECTIVE)

TEXT: MUTCD/FHWA "SERIES C 2000"

NO TRESPASSING SIGN NOTES

- 1. INSTALL SIGNS AT EACH ACCESS GATE.
- 2. TOP OF SIGN SHALL BE INSTALL APPROXIMATELY ONE FOOT BELOW THE TOP RAIL OF THE FENCE. CONFIRM MOUNTING HEIGHT WITH OWNER REPRESENTATIVE.
- 3. MOUNT SIGNS TO THE FENCE WITH COMPATIBLE MOUNTING HARDWARE, SUCH AS BRACKETS, BOLTS, WASHERS AND NUTS. THERE IS NO SEPARATE PAY ITEM FOR FURNISHING AND INSTALLING THE SIGNS TO THE FENCE.
- 4. SIGNS ARE INCIDENTAL TO THE RESPECTIVE WORK FOR THE KEYPAD ACCESS CONTROL UNIT.

Moving Gate Can Cause Serious Injury or Death. KEEP CLEAR! Gate May Move At Any Time. Children Should Not Play Near Gate. Children Should Not Operate The Gate. Operate Gate Only When In Sight and Free of People and Obstructions. This Gate System for Vehicles Only.

WARNING SIGN NOTES

- 1. WARNING SIGNS/PLACARDS AS DETAILED ABOVE OR SIMILAR, SHALL BE INSTALLED WHERE CLEARLY VISIBLE ON BOTH SIDES OF EACH ELECTRIC SLIDE GATE. WARNING SIGNS SHALL BE WEATHERPROOF, CORROSION RESISTANT METAL, AS DETAILED ABOVE (OR SIMILAR), AND IN A ACCORDANCE WITH THE RESPECTIVE GATE OPERATOR MANUFACTURER'S RECOMMENDATIONS. PROVIDE SIGNS FOR EACH ELECTRIC SLIDE GATE (EXISTING AND NEW), ON EACH SIDE OF EACH GATE. SECURE TO GATE WITH STAINLESS STEEL HARDWARE.
- 2. SIGNS ARE INCIDENTAL TO THE RESPECTIVE WORK FOR THE KEYPAD ACCESS CONTROL UNIT.

WARNING SIGN DETAIL



NOTES:

1. LEGEND PLATES SHALL BE WEATHERPROOF

ENGRAVED PLASTIC OR PHENOLIC MATERIAL, 1/4"

HIGH BLACK LETTERS ON A WHITE BACKGROUND

WEATHERPROOF ADHESIVE AND MACHINE SCREWS.

DETAILED HEREIN ON THE PLANS, AND AS NOTED IN

REQUIRED BY CODE, FOR ADDITIONAL EQUIPMENT, AS

LOAD CENTER, CUTOUT, & CONTROL PANEL TO WARN

UNLESS NOTED OTHERWISE. SECURE WITH

THE SPECIAL PROVISION SPECIFICATIONS.

"ARC-FLASH HAZARD WARNING".

CURRENT CALCULATIONS.

CONTACT PROJECT ENGINEER.

CONTROL UNIT.

2. FURNISH & INSTALL A WEATHERPROOF WARNING LABEL FOR EACH SAFETY SWITCH, PANELBOARD,

PERSONS OF POTENTIAL ELECTRIC ARC FLASH

HAZARDS, PER THE REQUIREMENTS OF NEC 110.16

FAULT CURRENT INFORMATION TO BE PROVIDED BY

CONTACT PROJECT ENGINEER TO CONFIRM FAULT

CONTRACTOR SHALL PROVIDE APPROPRIATE LABELS ON ELECTRICAL EQUIPMENT, IN ACCORDANCE WITH NFPA 70E ARTICLE 130 WORK INVOLVING ELECTRICAL HAZARDS, PART 130.5 ARC FLASH RISK ASSESSMENT,

CALCULATED FAULT CURRENT EXCEEDS 25,000 AMPS

5. LEGEND PLATES, LABELS, AND SIGNS ARE INCIDENTAL TO THE RESPECTIVE WORK FOR THE KEYPAD ACCESS

(H) EQUIPMENT LABELING. WHERE MAXIMUM

SERVING ELECTRIC UTILITY COMPANY OR FROM DATA

OBTAINED FROM UTILITY TRANSFORMER NAMEPLATE.

FURNISH ADDITIONAL LEGEND PLATES WHERE

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REHABILITATE
AIRCRAFT HANGAR
PAVEMENT AND
AUTOMOBILE PARKING
LOT

IDA No: C75-5008

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SIGNAGE AND LEGEND PLATE SCHEDULES