

CONSTRUCTION DATA

PRIME CONTRACTOR:

MAJOR SUBCONTRACTORS AND/OR SUPPLIERS

WORK COMMENCED _____

WORK COMPLETED _____

PROJECT ENGINEER

ALL CONSTRUCTION PERFORMED UNDER THIS CONTRACT HAS BEEN COMPLETED IN FULL CONFORMITY WITH THE DRAWINGS, NOTES AND SPECIFICATIONS CONTAINED IN THESE PLANS ALL CHANGES FROM PLANS AS BID , HAVE BEEN NOTED.

(Certified) _____

PROJECT ENGINEER

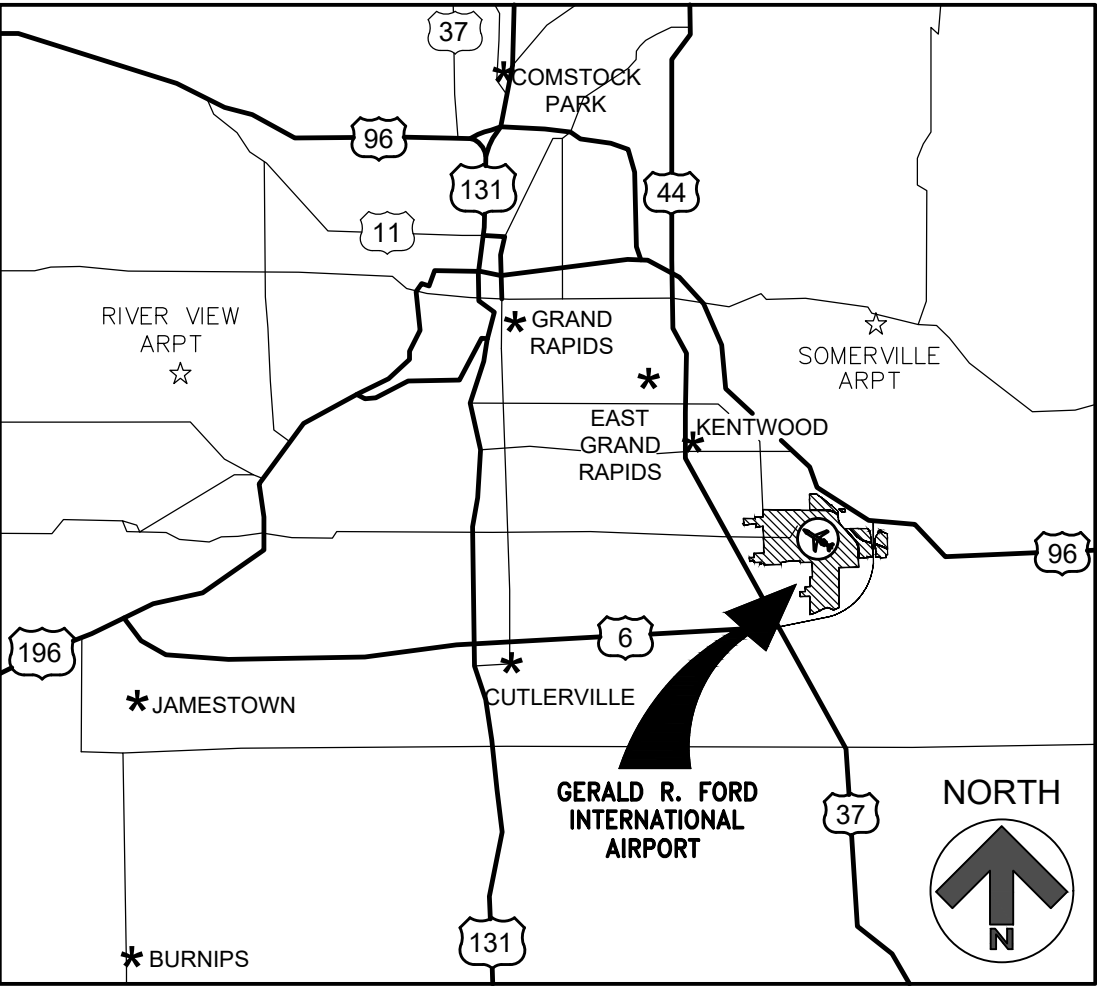
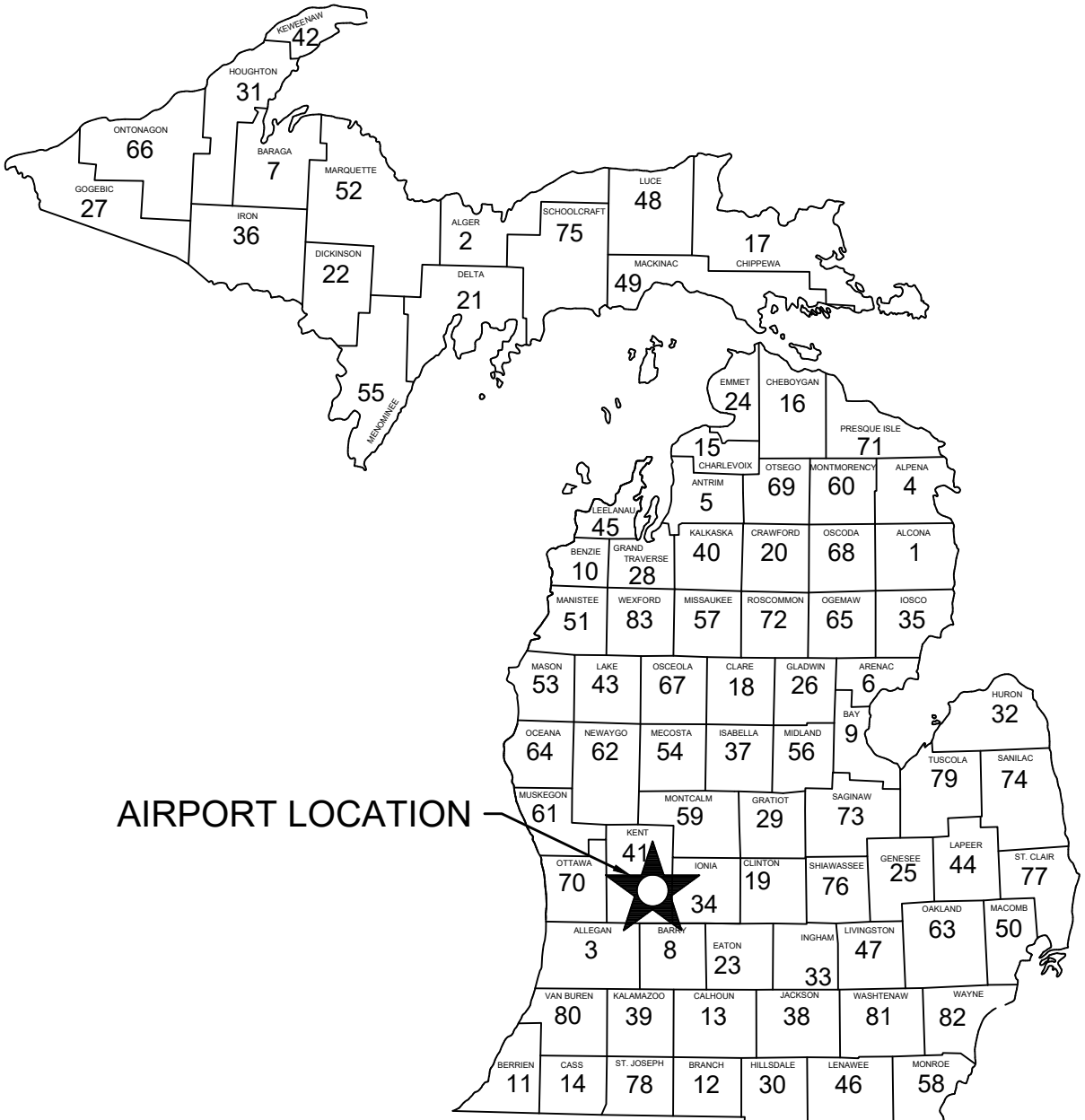
DATE

GERALD R. FORD INTERNATIONAL
AIRPORT

KENT COUNTY
GRAND RAPIDS, MICHIGAN

TAXIWAY D LIGHTING REHABILITATION

ISSUED FOR BID
MAY 2025



THIS DOCUMENT SHOULD BE PRINTED IN COLOR
IMPORTANT DESIGN INFORMATION MAY NOT BE CORRECTLY
INTERPRETED NOR EASILY DECIPHERED IF PRINTED IN
GRAYSCALE.

MISS DIG System, Inc.
1-800-482-7171



DESIGNERS & CONSULTANTS



RS & H MICHIGAN, INC.
436 South Main Street
Plymouth, Michigan 48170
PH: (734) 456-7060
FAX: 1-800-464-4358
www.rsandh.com

DESIGNER'S CERTIFICATION

IN COMPLIANCE WITH THE SPONSOR'S UNITED STATES CODE, TITLE 49 CERTIFICATION, THESE PLANS AND SPECIFICATIONS HAVE BEEN PREPARED IN ACCORDANCE WITH CURRENT F.A.A. STANDARDS. IDENTIFIED IN F.A.R. PART 152.11 AND / OR STANDARDS OF THE MICHIGAN AERONAUTICS COMMISSION PREVIOUSLY APPROVED BY THE F.A.A. ANY DEVIATIONS FROM THE F.A.A. OR M.A.C. STANDARDS WHERE APPROVED BY F.A.A. LETTER DATED ____/____/____ AND ARE DISCUSSED IN THE ENGINEERING REPORT ACCOMPANYING THESE PLANS.

CERTIFIED _____

M. ANEES RAHMAN, P.E. - ENGINEER

DATE

SHEET NUMBER	INDEX OF SHEETS	LATEST REVISION DATE
G001	COVER SHEET	
G010	SUMMARY OF QUANTITIES	
G020	CONTRACT LAYOUT PLAN	
G030	OVERALL CONSTRUCTION PHASING PLAN	
G031 - G033	INDIVIDUAL CONSTRUCTION PHASING PLANS	
G040	SAFETY AND SECURITY NOTES AND DETAILS	
E001	GENERAL ELECTRICAL NOTES	
E002	GENERAL KEY PLAN	
ED101 - ED112	DEMOLITION AIRFIELD LIGHTING PLANS	
E101 - E112	PROPOSED AIRFIELD LIGHTING PLANS	
ED201	AIRFIELD LIGHTING VAULT DEMOLITION PLAN	
E201	AIRFIELD LIGHTING VAULT PROPOSED PLAN	
E301	GENERAL ELECTRICAL DETAILS	
E302	EXISTING INSTALLATION PHOTOS	

Project Description:
TAXIWAY D LIGHTING REHABILITATION

Airport Type:
AIR CARRIER

Airport:
GERALD R. FORD INTERNATIONAL
AIRPORT

PLOTTED ON: 5/30/2025
PLOTTED BY: RAYCHERS
FILE LOCATION: P:\GERALD_FORD_INTL\10105865_GRR_AIRFIELD_LIGHTING_ONCALL_2025_2030\10105865001_GRR_TAXIWAY_D_LIGHTING_REHAB\03.00
PROJECT EXECUTION\03.05.DWG\$MODELS\CAD\GTTWD.G010.DWG

SUMMARY OF QUANTITIES						
ITEM NUMBER	ITEM DESCRIPTION	UNIT	BID QUANTITY	CHANGE ORDERS		FINAL QUANTITY
				1	2	
C-100	CONTRACTOR QUALITY CONTROL PROGRAM (CQCP)	LSUM	1			
C-105	MOBILIZATION (10% MAX)	LSUM	1			
G-102-11.1	SAFETY AND SECURITY	LSUM	1			
G-102-11.2	SAFETY PLAN COMPLIANCE DOCUMENT (SPCD)	LSUM	1			
L-105-7.1	REMOVE EXISTING TAXIWAY EDGE LIGHT AND TRANSFORMER AND SALVAGE, BASE CAN TO REMAIN	EACH	375			
L-105-7.2	REMOVE EXISTING CABLE IN CONDUIT OR DUCTBANK, CONDUIT TO REMAIN	LSUM	1			
L-108-5.1	NO. 8 AWG, 5 kV, L-824, TYPE C CABLE, INSTALLED IN EXISTING CONDUIT OR DUCTBANK	FT	66,700			
L-109-7.1	AIRFIELD LIGHTING ELECTRICAL VAULT POWER AND CONTROLS MODIFICATIONS	LSUM	1			
L-109-7.2	CONSTANT CURRENT REGULATOR REMOVAL AND SALVAGE	EACH	3			
L-109-7.3	CONSTANT CURRENT REGULATOR 10KW, 3-STEP, 6.6A, 480V, L-829	EACH	3			
L-125-5.1	L-861T(L) ELEVATED TAXIWAY EDGE LIGHT ON EXISTING BASE CAN, INCLUDING ISOLATION TRANSFORMER AND CONNECTIONS	EACH	375			
L-125-5.2	REFLECTIVE LIGHT LOCATOR - SNOW WAND, 30" TALL, BLUE	EACH	375			
L-125-5.3	NEW ISOLATION TRANSFORMER AND CONNECTIONS FOR EXISTING GUIDANCE SIGN	EACH	43			
L-126-5.1	MAINTENANCE OF AIRPORT LIGHTING SYSTEMS, INCLUDING TEMPORARY CONNECTIONS/JUMPERS AND POWER/CONTROLS, AS NEEDED	LSUM	1			
L-126-5.2	AIRFIELD CIRCUIT WIRING LOCATING, PROTECTING, CLEANING, RACKING, AND TAGGING IN ALL STRUCTURES ENTERED DURING PROJECT	LSUM	1			



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**GERALD R. FORD
INTERNATIONAL
AIRPORT**

**TAXIWAY D
LIGHTING
REHABILITATION**



REVISIONS

NO.	DESCRIPTION	DATE

DATE ISSUED: MAY 2025

REVIEWED BY: MAR

DRAWN BY: AZ

DESIGNED BY: EE

RS&H PROJECT NUMBER
1010-5865-001

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SHEET TITLE

**SUMMARY OF
QUANTITIES**

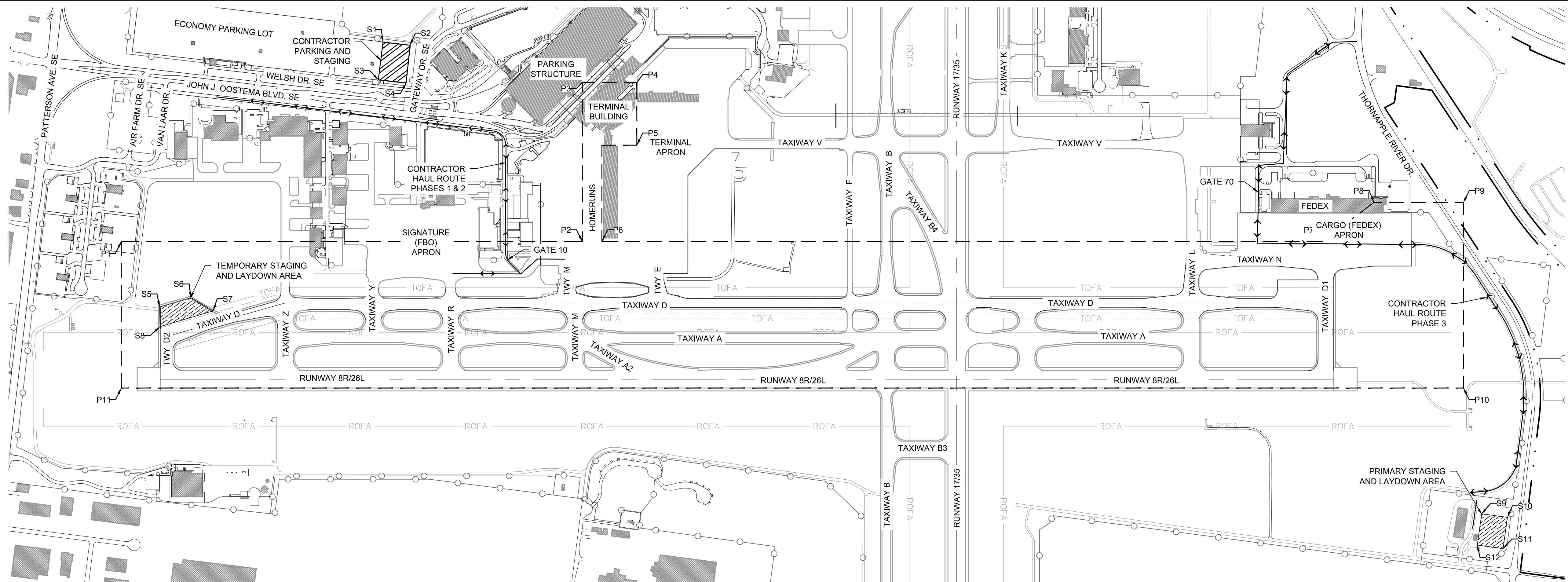
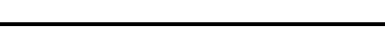
SHEET NUMBER

G010

**ISSUED FOR
BID**



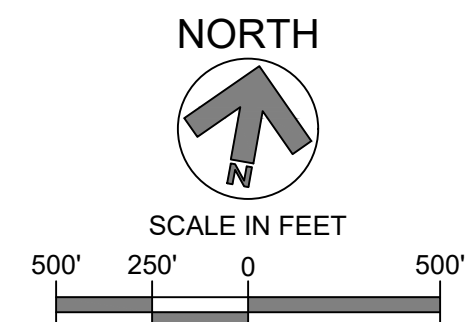
TAXIWAY D LIGHTING REHABILITATION



THE CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY RESTROOM FACILITIES FOR ALL CONTRACTOR AND SUBCONTRACTOR PERSONNEL. AT NO TIME WILL THE CONTRACTOR BE ALLOWED TO UTILIZE AIRPORT OR TENANT RESTROOM FACILITIES. TEMPORARY RESTROOM FACILITIES SHALL BE LOCATED IN THE CONTRACTOR STAGING AREA, UNLESS OTHERWISE APPROVED BY THE AIRPORT.

10. COMPLETION OF WORK: UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL REMOVE FROM THE SITE ALL TEMPORARY FACILITIES, SURPLUS MATERIAL, AND EQUIPMENT BELONGING TO HIM OR HIS SUBCONTRACTOR'S FORCES. PRIOR TO REMOVAL FROM AIRPORT PROPERTY OF SURPLUS MATERIALS, THE CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION OF THE OWNER.

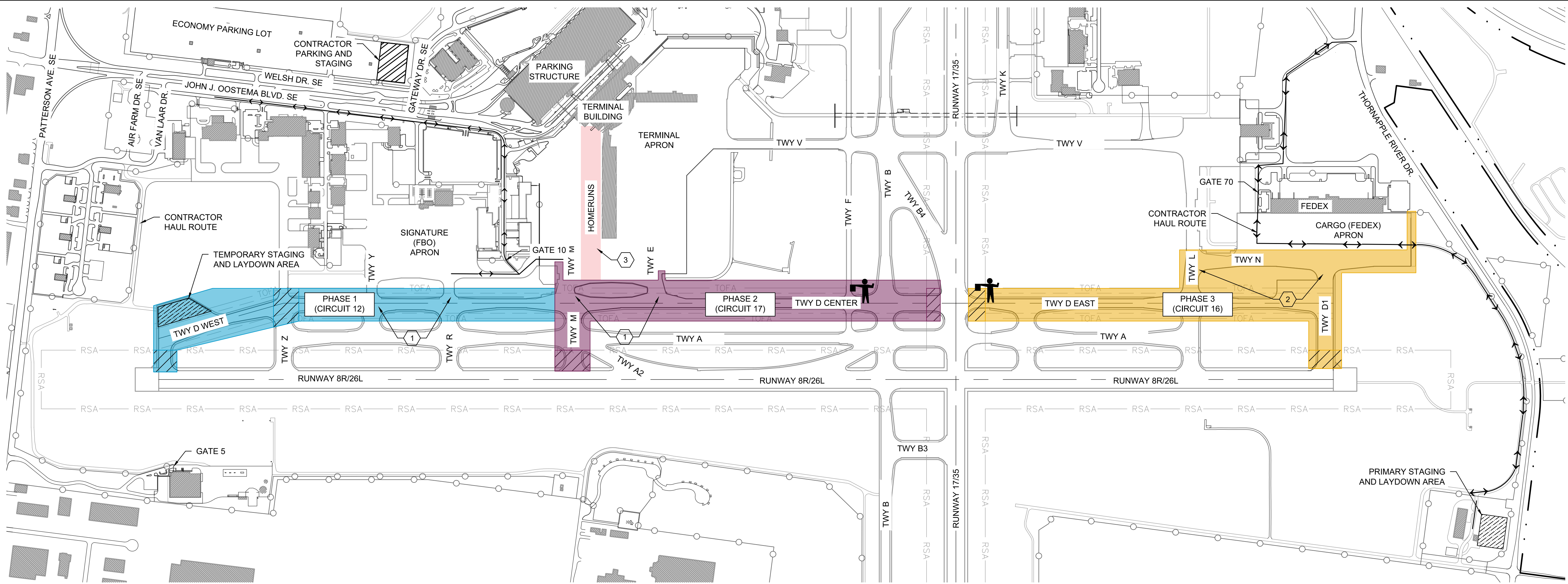
HAUL ROUTE



PROJECT LIMITS - COORDINATE TABLE		
POINT	LATITUDE	LONGITUDE
P1	N042° 52' 46.84"	W085° 32' 38.70"
P2	N042° 52' 52.72"	W085° 31' 46.52"
P3	N042° 53' 05.97"	W085° 31' 49.28"
P4	N042° 53' 06.65"	W085° 31' 43.10"
P5	N042° 53' 01.43"	W085° 31' 42.01"
P6	N042° 52' 52.96"	W085° 31' 44.31"
P7	N042° 53' 02.14"	W085° 30' 22.73"
P8	N042° 53' 06.04"	W085° 30' 17.59"
P9	N042° 53' 07.18"	W085° 30' 07.46"
P10	N042° 52' 51.73"	W085° 30' 04.25"
P11	N042° 52' 34.64"	W085° 32' 36.16"

STAGING AREA - COORDINATE TABLE		
POINT	LATITUDE	LONGITUDE
S1	N042° 53' 06.77"	W085° 32' 12.53"
S2	N042° 53' 06.85"	W085° 32' 09.42"
S3	N042° 53' 03.58"	W085° 32' 12.41"
S4	N042° 53' 03.67"	W085° 32' 09.21"
S5	N042° 52' 41.90"	W085° 32' 33.23"
S6	N042° 52' 43.05"	W085° 32' 29.86"
S7	N042° 52' 42.24"	W085° 32' 27.10"
S8	N042° 52' 40.24"	W085° 32' 32.85"
S9	N042° 52' 41.49"	W085° 30' 00.01"
S10	N042° 52' 41.52"	W085° 29' 57.03"
S11	N042° 52' 38.87"	W085° 29' 56.98"
S12	N042° 52' 38.84"	W085° 29' 59.96"

5/30/2025
RAYCHERS
PLOTTER ON:
FILE LOCATION:
P:\GERALD_FORD_INTL\10105865_GRR_AIRFIELD_LIGHTING_ONCALL_2025_2030\10105865001_GRR_TAXIWAY_D_LIGHTING_REHAB\03.00
PROJECT EXECUTION\03.05.DWG



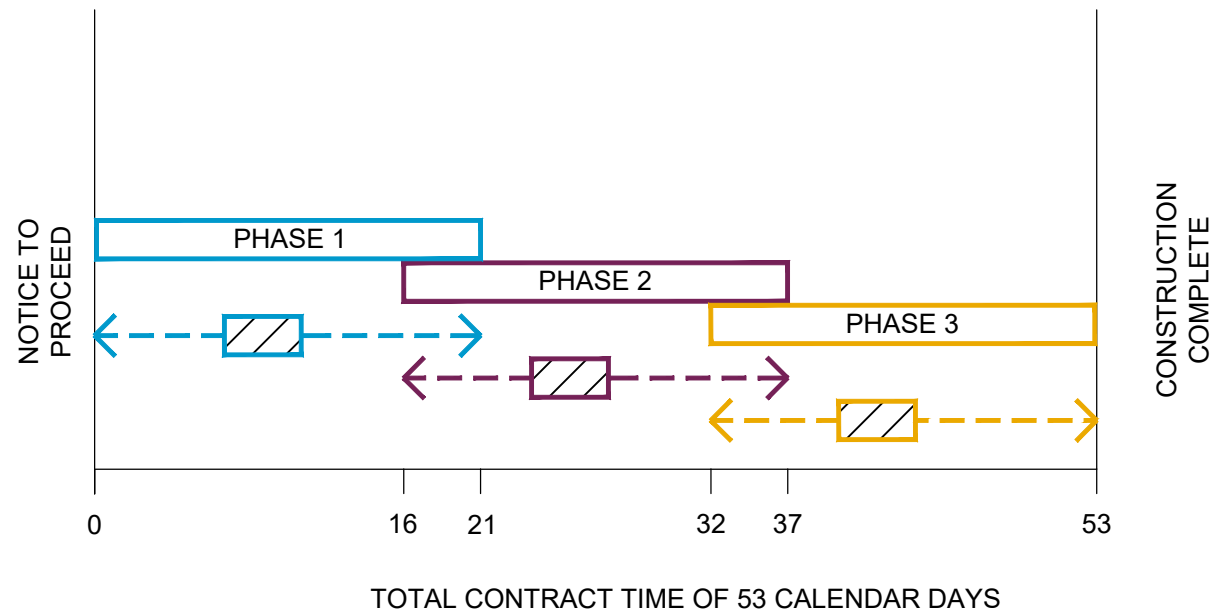
GENERAL PHASING NOTES:

1. THE CONTRACTOR SHALL BE GIVEN THE SPECIFIC NUMBER OF DAYS TO COMPLETE THE WORK AS SHOWN. LIQUIDATED DAMAGES SHALL BE ASSESSED AFTER THE CONTRACT TIME HAS EXPIRED UNLESS THE CONTRACTOR CAN SHOW JUST CAUSE FOR DELAYS. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE JUSTIFICATION FOR WAIVING ANY LIQUIDATED DAMAGE CHARGED.
2. THE CONTRACTOR MUST KEEP AIRFIELD PAVEMENTS OPERATIONAL AT ALL TIMES. AIRPORT OPERATIONS SHALL NOT BE INTERRUPTED BY CONSTRUCTION ACTIVITIES AT ANY TIME.
3. BARRICADES MUST BE INSTALLED AT THE LOCATIONS SHOWN ON THE PLAN THROUGH COORDINATION WITH THE RPR. BARRICADES MUST BE INSTALLED AT THE BEGINNING OF EACH PHASE AND REMAIN IN PLACE THROUGHOUT THE PHASE. ONE DRIVE LANE MUST REMAIN OPEN ON THE PERIMETER ROAD AT ALL TIMES.
4. COSTS ASSOCIATED WITH PLACING AND MAINTAINING BARRICADES AND CLOSURES WILL BE INCLUDED IN PAY ITEM C-105 "MOBILIZATION".
5. CONTRACTOR MUST SUBMIT CONSTRUCTION SEQUENCING PLAN TO BE REVIEWED BEFORE CONSTRUCTION START.
6. CONTRACTOR SHALL PROVIDE FULL-TIME FLAGGER DURING CONSTRUCTION. FLAGGER MUST BE TRAINED BY GFIAA IN ADVANCE OF CONSTRUCTION NTP.

KEYED NOTES:

1. AT LEAST ONE TAXIWAY FROM THE CORPORATE AND TERMINAL APRON TO TAXIWAY D MUST REMAIN OPEN FOR AIRPORT OPERATIONS AT ALL TIME. BARRICADES TO BE REMOVED/RELOCATED AS NEEDED.
2. AT LEAST ONE TAXIWAY FROM THE FEDEX APRON TO TAXIWAY D MUST REMAIN OPEN FOR AIRPORT OPERATIONS AT ALL TIME.
3. REPLACEMENT OF ALL HOMERUN CIRCUITS SHALL BE COMPLETED IN ONE SINGULAR OPERATION. CONTRACTOR MAY CHOOSE THE APPROPRIATE PHASE TO REPLACE HOMERUN CIRCUITS IN COORDINATION WITH AIRPORT AND ENGINEER.

SCHEMATIC CONSTRUCTION SEQUENCING:



PHASING DETAILS:

PHASE 1 - 21 DAYS

- CRITICAL WORK FLOATING SUBPHASE - 5 DAYS

PHASE 2 - 21 DAYS

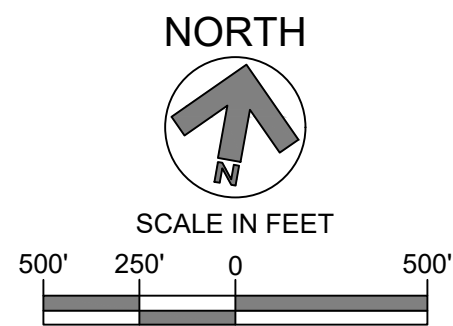
- CRITICAL WORK FLOATING SUBPHASE - 5 DAYS

PHASE 3 - 21 DAYS

- CRITICAL WORK FLOATING SUBPHASE - 5 DAYS

LEGEND:

- PHASE 1 LIMITS | PHASE 1 CRITICAL WORK AREA
- PHASE 2 LIMITS | PHASE 2 CRITICAL WORK AREA
- PHASE 3 LIMITS | PHASE 3 CRITICAL WORK AREA
- WORK AREA FOR HOMERUN CIRCUIT REPLACEMENT - SEE NOTE 3
- HAUL ROUTE
- TAXIWAY OBJECT FREE AREA
- RUNWAY SAFETY AREA
- CONSTRUCTION FLAGGER



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GERALD R. FORD INTERNATIONAL AIRPORT

TAXIWAY D LIGHTING REHABILITATION



REVISIONS

NO.	DESCRIPTION	DATE

DATE ISSUED: MAY 2025

REVIEWED BY: MAR

DRAWN BY: SCR

DESIGNED BY: SCR

RS&H PROJECT NUMBER
1010-5865-001

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SHEET TITLE

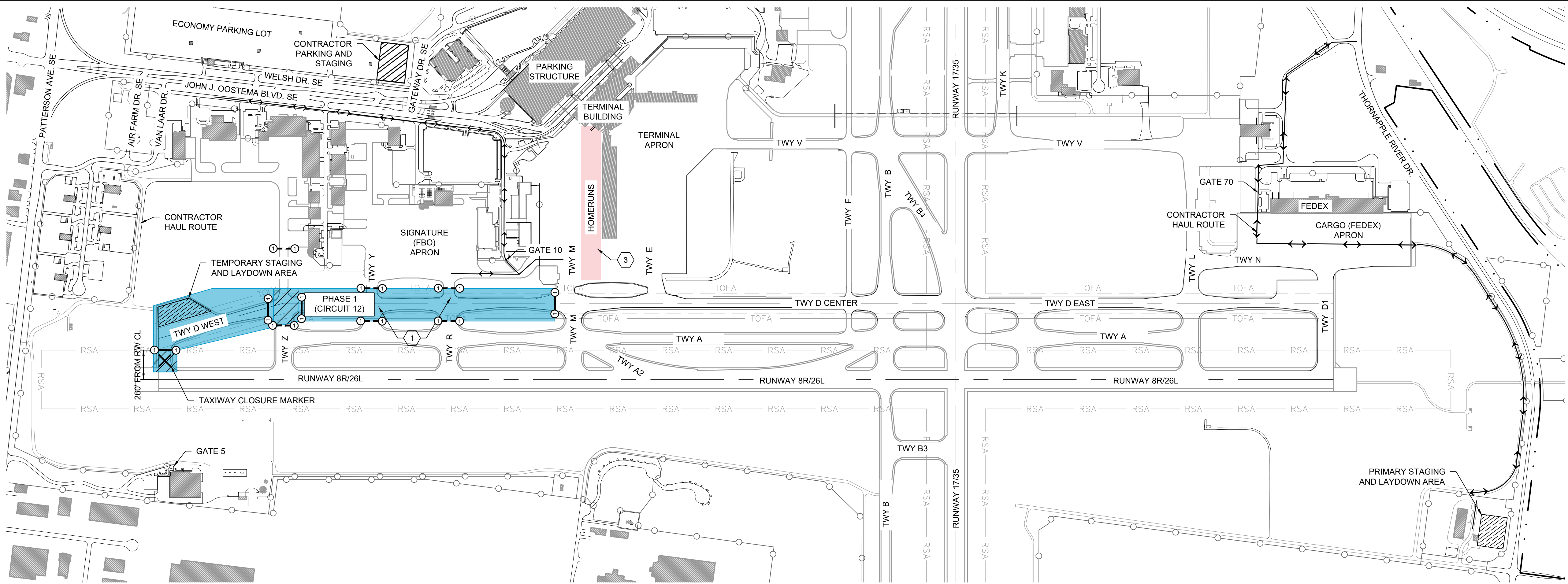
OVERALL CONSTRUCTION PHASING PLAN

SHEET NUMBER

G030

ISSUED FOR BID

5/30/2025
RAYCHERS
PLOTTED BY:
FILE LOCATION: P:\GERALD_FORD_INTL\10105865_GRR_AIRFIELD_LIGHTING_ONCALL_2025_2030\10105865001_GRR_TAXIWAY_D_LIGHTING_REHAB\03.00
PROJECT EXECUTION\03.05 DWGS_MODEL\SCAD\GTTWD\031.DWG



PHASE 1 NOTES:

- TAXIWAY Y AND TAXIWAY R NOT TO BE CLOSED CONCURRENTLY.
- THE CONTRACTOR MUST KEEP ACTIVE AIRFIELD PAVEMENTS OPERATIONAL AT ALL TIMES. AIRPORT OPERATIONS SHALL NOT BE INTERRUPTED BY CONSTRUCTION ACTIVITIES AT ANY TIME.
- BARRICADES MUST BE INSTALLED AT THE LOCATIONS SHOWN ON THE PLAN THROUGH COORDINATION WITH THE RPR. LOCATIONS ARE SUBJECT TO RELOCATION UPON REQUEST FROM AIRPORT OR RPR TO ENSURE ACCESS TO ALL AIRPORT TENANTS. BARRICADES MUST BE INSTALLED AT THE BEGINNING OF EACH PHASE AND REMAIN IN PLACE THROUGHOUT THE PHASE.
- COSTS ASSOCIATED WITH PLACING AND MAINTAINING BARRICADES AND CLOSURES WILL BE INCLUDED IN PAY ITEM C-105 "MOBILIZATION".
- CONTRACTOR MUST SUBMIT CONSTRUCTION SEQUENCING PLAN TO BE REVIEWED BEFORE CONSTRUCTION START.
- TEMPORARY LOW-PROFILE BARRICADES ARE ADDITIONAL BARRICADES TO BE PLACED WHEN WORKING IN CRITICAL WORK AREAS. CONTRACTOR TO COORDINATE WITH GFIAA AIRPORT OPERATIONS ON EXACT LOCATION AND POSITION OF TEMPORARY LOW-PROFILE BARRICADES. CONTRACTOR SHALL NOT PLACE ANY TEMPORARY BARRICADES WITHOUT EXPLICIT DIRECTION FROM GFIAA NOR WITHOUT AN ESCORT FROM GFIAA AIRPORT OPERATIONS. TEMPORARY BARRICADES SHALL BE REMOVED AFTER WORK IS COMPLETED IN EACH CRITICAL WORK AREA.
- CONTRACTOR SHALL PROVIDE FULL-TIME FLAGGER DURING CONSTRUCTION. FLAGGER MUST BE TRAINED BY GFIAA IN ADVANCE OF CONSTRUCTION NTP.

KEYED NOTES:

- AT LEAST ONE TAXIWAY FROM THE CORPORATE AND TERMINAL APRON TO TAXIWAY D MUST REMAIN OPEN FOR AIRPORT OPERATIONS AT ALL TIME. BARRICADES TO BE REMOVED/RELOCATED AS NEEDED.
- AT LEAST ONE TAXIWAY FROM THE FEDEX APRON TO TAXIWAY D MUST REMAIN OPEN FOR AIRPORT OPERATIONS AT ALL TIME.
- REPLACEMENT OF ALL HOMERUN CIRCUITS SHALL BE COMPLETED IN ONE SINGULAR OPERATION. CONTRACTOR MAY CHOOSE THE APPROPRIATE PHASE TO REPLACE HOMERUN CIRCUITS IN COORDINATION WITH AIRPORT AND ENGINEER.

PHASE 1 DETAILS:

PHASE 1 - 21 DAYS

CONSTRUCTION

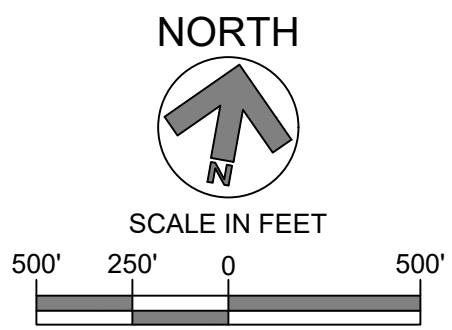
- REMOVAL OF TAXIWAY EDGE LIGHTING AND RELATED CIRCUITS
- INSTALLATION OF TAXIWAY EDGE LIGHTING AND RELATED CIRCUITS
- REPLACE ISOLATION TRANSFORMERS IN EXISTING SIGNS

AIRFIELD CLOSURES

- TAXIWAY D - CLOSED BETWEEN TAXIWAY M AND RUNWAY 8R
- TAXIWAY D2 - CLOSED
- TAXIWAY Y - CLOSED
- TAXIWAY R - CLOSED
- TAXIWAY Z - OFF PEAK ROTATING CLOSURES NORTH OF TAXIWAY D, INCLUDING TAXIWAY D INTERSECTION
- TERMINAL APRON - ROTATING DAYTIME CLOSURES
- RUNWAY 8R/26L - OFF PEAK CLOSURES

LEGEND:

- PHASE 1 LIMITS | PHASE 1 CRITICAL WORK AREA
- PHASE 2 LIMITS | PHASE 2 CRITICAL WORK AREA
- PHASE 3 LIMITS | PHASE 3 CRITICAL WORK AREA
- WORK AREA FOR HOMERUN CIRCUIT REPLACEMENT - SEE NOTE 3
- HAUL ROUTE
- LOW-PROFILE BARRICADES - NUMBER DENOTES PHASE
- TEMPORARY LOW-PROFILE BARRICADES - NUMBER DENOTES PHASE
- TAXIWAY OBJECT FREE AREA
- RUNWAY SAFETY AREA
- CONSTRUCTION FLAGGER - SEE NOTE 7
- TAXIWAY CLOSURE MARKER



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REVISIONS

NO.	DESCRIPTION	DATE

DATE ISSUED: MAY 2025

REVIEWED BY: MAR

DRAWN BY: SCR

DESIGNED BY: SCR

RS&H PROJECT NUMBER
1010-5865-001

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SHEET TITLE

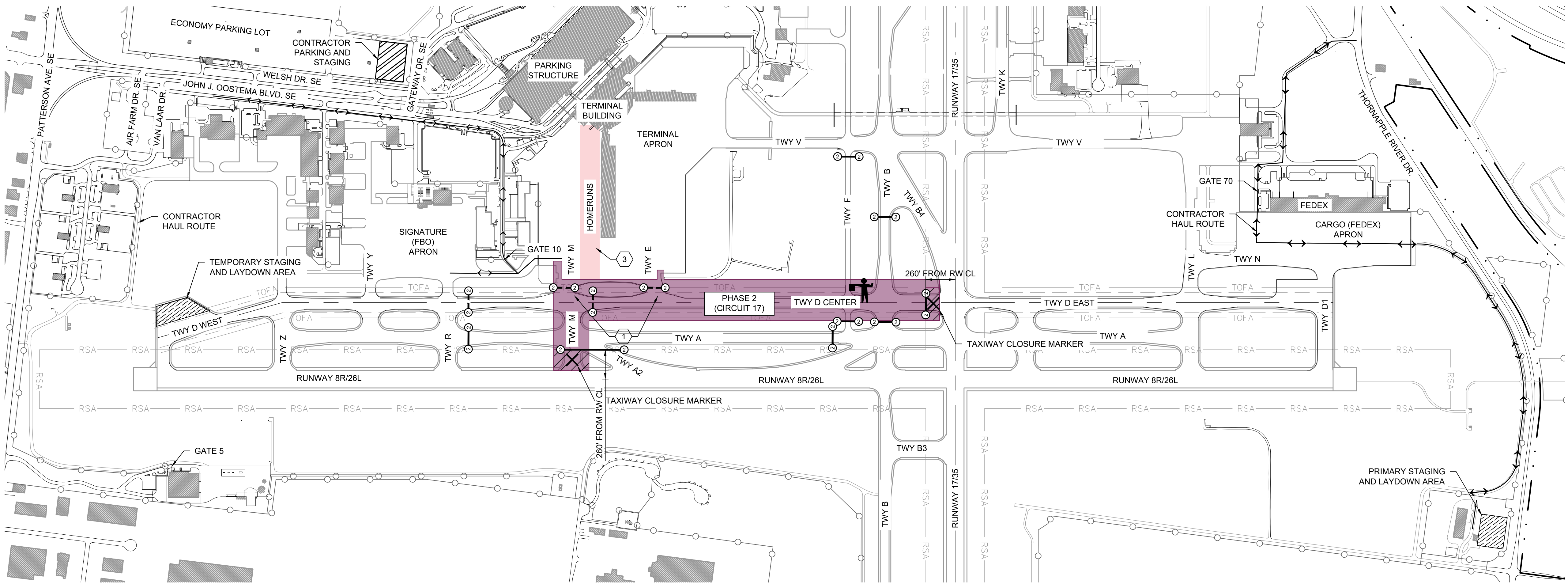
CONSTRUCTION
PHASING PLAN -
PHASE 1

SHEET NUMBER

G031

ISSUED FOR
BID

5/30/2025
RAYCHERS
PLOTTED BY:
FILE LOCATION: P:\GERALD_FORD_INTL\10105865_GRR_AIRFIELD_LIGHTING_ONCALL_2025_2030\10105865001_GRR_TAXIWAY_D_LIGHTING_REHAB\03.00
PROJECT EXECUTION\03.05 DWGS_MODELS\CAD\GTTWD\0301.DWG



PHASE 2 NOTES:

- TAXIWAY M AND TAXIWAY E NOT TO BE CLOSED CONCURRENTLY.
- THE CONTRACTOR MUST KEEP ACTIVE AIRFIELD PAVEMENTS OPERATIONAL AT ALL TIMES. AIRPORT OPERATIONS SHALL NOT BE INTERRUPTED BY CONSTRUCTION ACTIVITIES AT ANY TIME.
- BARRICADES MUST BE INSTALLED AT THE LOCATIONS SHOWN ON THE PLAN THROUGH COORDINATION WITH THE RPR. LOCATIONS ARE SUBJECT TO RELOCATION UPON REQUEST FROM AIRPORT OR RPR TO ENSURE ACCESS TO ALL AIRPORT TENANTS. BARRICADES MUST BE INSTALLED AT THE BEGINNING OF EACH PHASE AND REMAIN IN PLACE THROUGHOUT THE PHASE.
- COSTS ASSOCIATED WITH PLACING AND MAINTAINING BARRICADES AND CLOSURES WILL BE INCLUDED IN PAY ITEM C-105 "MOBILIZATION".
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- TEMPORARY LOW-PROFILE BARRICADES ARE ADDITIONAL BARRICADES TO BE PLACED WHEN WORKING IN CRITICAL WORK AREAS. CONTRACTOR TO COORDINATE WITH GFIAA AIRPORT OPERATIONS ON EXACT LOCATION AND POSITION OF TEMPORARY LOW-PROFILE BARRICADES. CONTRACTOR SHALL NOT PLACE ANY TEMPORARY BARRICADES WITHOUT EXPLICIT DIRECTION FROM GFIAA NOR WITHOUT AN ESCORT FROM GFIAA AIRPORT OPERATIONS. TEMPORARY BARRICADES SHALL BE REMOVED AFTER WORK IS COMPLETED IN EACH CRITICAL WORK AREA.
- CONTRACTOR SHALL PROVIDE FULL-TIME FLAGGER DURING CONSTRUCTION. FLAGGER MUST BE TRAINED BY GFIAA IN ADVANCE OF CONSTRUCTION NTP.

KEYED NOTES:

- AT LEAST ONE TAXIWAY FROM THE CORPORATE AND TERMINAL APRON TO TAXIWAY D MUST REMAIN OPEN FOR AIRPORT OPERATIONS AT ALL TIME. BARRICADES TO BE REMOVED/RELOCATED AS NEEDED.
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PHASE 2 DETAILS:

PHASE 2 - 21 DAYS

CONSTRUCTION

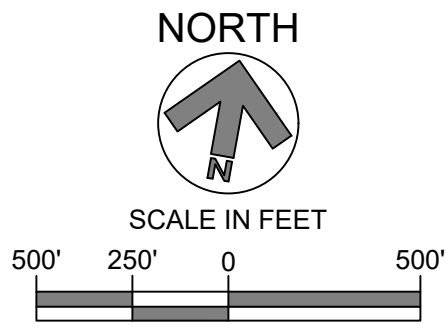
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- INSTALLATION OF TAXIWAY EDGE LIGHTING AND RELATED CIRCUITS
- REPLACE ISOLATION TRANSFORMERS IN EXISTING SIGNS

AIRFIELD CLOSURES

- TAXIWAY D - CLOSED BETWEEN TAXIWAY M AND RUNWAY 17/35
- TAXIWAY M - CLOSED
- TAXIWAY E - CLOSED
- TAXIWAY A - CLOSED WEST OF TAXIWAY F
- TAXIWAY A2 - CLOSED
- TAXIWAY F - CLOSED SOUTH OF TAXIWAY V
- TAXIWAY B - CLOSED BETWEEN TAXIWAY D AND SOUTH OF TAXIWAY B4
- TERMINAL APRON - ROTATING DAYTIME CLOSURES
- RUNWAY 8R/26L - OFF PEAK CLOSURES
- RUNWAY 17/35 - OFF PEAK CLOSURES

LEGEND:

- PHASE 1 LIMITS | PHASE 1 CRITICAL WORK AREA
- PHASE 2 LIMITS | PHASE 2 CRITICAL WORK AREA
- PHASE 3 LIMITS | PHASE 3 CRITICAL WORK AREA
- WORK AREA FOR HOMERUN CIRCUIT REPLACEMENT - SEE NOTE 3
- HAUL ROUTE
- LOW-PROFILE BARRICADES - NUMBER DENOTES PHASE
- TEMPORARY LOW-PROFILE BARRICADES - NUMBER DENOTES PHASE
- TAXIWAY OBJECT FREE AREA
- RUNWAY SAFETY AREA
- CONSTRUCTION FLAGGER - SEE NOTE 7
- TAXIWAY CLOSURE MARKER



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INTERNATIONAL
AIRPORT

TAXIWAY D
LIGHTING
REHABILITATION



REVISIONS

NO.	DESCRIPTION	DATE

DATE ISSUED: MAY 2025

REVIEWED BY: MAR

DRAWN BY: SCR

DESIGNED BY: SCR

RS&H PROJECT NUMBER
1010-5865-001

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SHEET TITLE

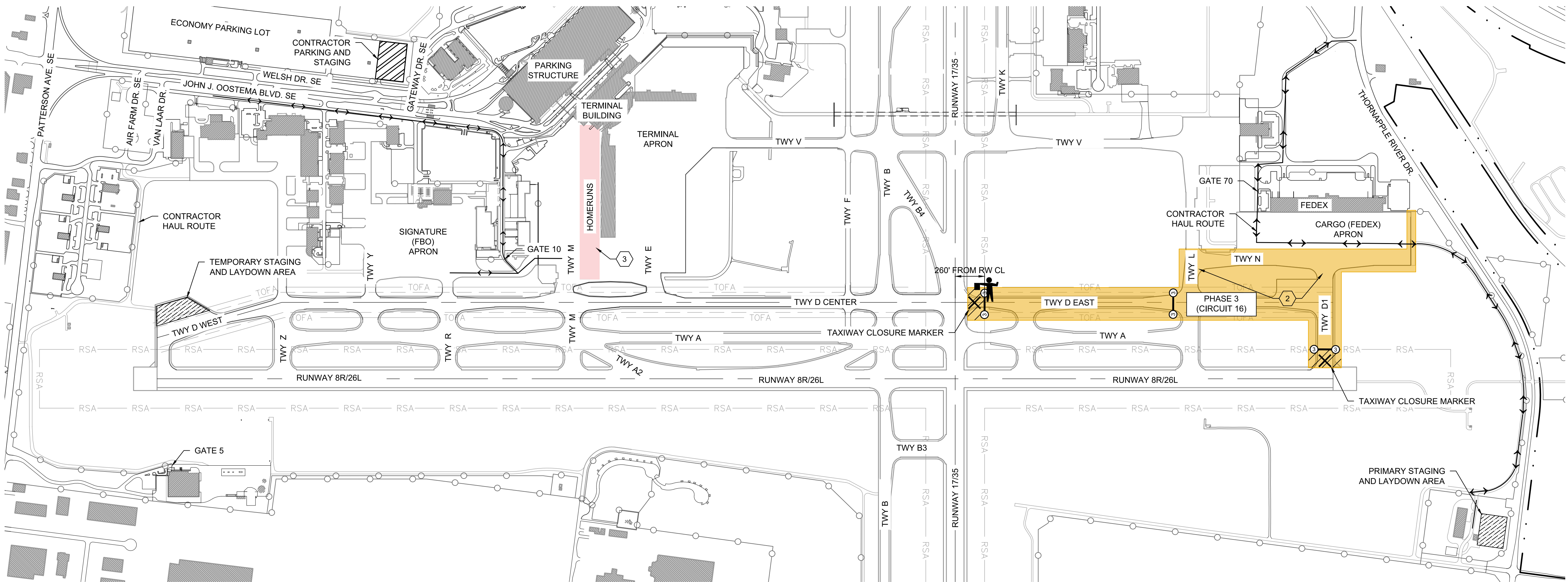
CONSTRUCTION
PHASING PLAN -
PHASE 2

SHEET NUMBER

G032

ISSUED FOR
BID

5/30/2025
RAYCHERS
PLOTTED ON:
FILE LOCATION:
P:\GERALD_FORD_INTL\10105865_GRR_AIRFIELD_LIGHTING_ONCALL_2025_2030\10105865001_GRR_TAXIWAY_D_LIGHTING_REHAB\03.00
PROJECT EXECUTION\03.05 DWGS_MODELS\CAD\GTTWD\0301.DWG



PHASE 3 NOTES:

1. TAXIWAY D1 AND TAXIWAY L NOT TO BE CLOSED CONCURRENTLY.
2. THE CONTRACTOR MUST KEEP ACTIVE AIRFIELD PAVEMENTS OPERATIONAL AT ALL TIMES. AIRPORT OPERATIONS SHALL NOT BE INTERRUPTED BY CONSTRUCTION ACTIVITIES AT ANY TIME.
3. BARRICADES MUST BE INSTALLED AT THE LOCATIONS SHOWN ON THE PLAN THROUGH COORDINATION WITH THE RPR. LOCATIONS ARE SUBJECT TO RELOCATION UPON REQUEST FROM AIRPORT OR RPR TO ENSURE ACCESS TO ALL AIRPORT TENANTS. BARRICADES MUST BE INSTALLED AT THE BEGINNING OF EACH PHASE AND REMAIN IN PLACE THROUGHOUT THE PHASE.
4. COSTS ASSOCIATED WITH PLACING AND MAINTAINING BARRICADES AND CLOSURES WILL BE INCLUDED IN PAY ITEM C-105 "MOBILIZATION".
5. CONTRACTOR MUST SUBMIT CONSTRUCTION SEQUENCING PLAN TO BE REVIEWED BEFORE CONSTRUCTION START.
6. TEMPORARY LOW-PROFILE BARRICADES ARE ADDITIONAL BARRICADES TO BE PLACED WHEN WORKING IN CRITICAL WORK AREAS. CONTRACTOR TO COORDINATE WITH GFIAA AIRPORT OPERATIONS ON EXACT LOCATION AND POSITION OF TEMPORARY LOW-PROFILE BARRICADES. CONTRACTOR SHALL NOT PLACE ANY TEMPORARY BARRICADES WITHOUT EXPLICIT DIRECTION FROM GFIAA NOR WITHOUT AN ESCORT FROM GFIAA AIRPORT OPERATIONS. TEMPORARY BARRICADES SHALL BE REMOVED AFTER WORK IS COMPLETED IN EACH CRITICAL WORK AREA.
7. CONTRACTOR SHALL PROVIDE FULL-TIME FLAGGER DURING CONSTRUCTION. FLAGGER MUST BE TRAINED BY GFIAA IN ADVANCE OF CONSTRUCTION NTP.

KEYED NOTES:

1. AT LEAST ONE TAXIWAY FROM THE CORPORATE AND TERMINAL APRON TO TAXIWAY D MUST REMAIN OPEN FOR AIRPORT OPERATIONS AT ALL TIME. BARRICADES TO BE REMOVED/RELOCATED AS NEEDED.
2. AT LEAST ONE TAXIWAY FROM THE FEDEX APRON TO TAXIWAY D MUST REMAIN OPEN FOR AIRPORT OPERATIONS AT ALL TIME.
3. REPLACEMENT OF ALL HOMERUN CIRCUITS SHALL BE COMPLETED IN ONE SINGULAR OPERATION. CONTRACTOR MAY CHOOSE THE APPROPRIATE PHASE TO REPLACE HOMERUN CIRCUITS IN COORDINATION WITH AIRPORT AND ENGINEER.

PHASE 3 DETAILS:

PHASE 3 - 21 DAYS

CONSTRUCTION

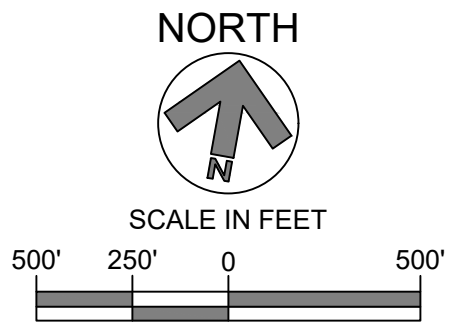
- REMOVAL OF TAXIWAY EDGE LIGHTING AND RELATED CIRCUITS
- INSTALLATION OF TAXIWAY EDGE LIGHTING AND RELATED CIRCUITS
- REPLACE ISOLATION TRANSFORMERS IN EXISTING SIGNS

AIRFIELD CLOSURES

- TAXIWAY D - CLOSED EAST OF RUNWAY 17/35
- TAXIWAY D1 - CLOSED
- TAXIWAY P - CLOSED NORTH OF TAXIWAY A
- TAXIWAY L - CLOSED BETWEEN TAXIWAY A AND TAXIWAY N INCLUDING TAXIWAY N INTERSECTION
- TERMINAL APRON - ROTATING DAYTIME CLOSURES
- RUNWAY 8R/26L - OFF PEAK CLOSURES
- RUNWAY 17/35 - OFF PEAK CLOSURES

LEGEND:

- PHASE 1 LIMITS | PHASE 1 CRITICAL WORK AREA
- PHASE 2 LIMITS | PHASE 2 CRITICAL WORK AREA
- PHASE 3 LIMITS | PHASE 3 CRITICAL WORK AREA
- WORK AREA FOR HOMERUN CIRCUIT REPLACEMENT - SEE NOTE 3
- HAUL ROUTE
- LOW-PROFILE BARRICADES - NUMBER DENOTES PHASE
- TEMPORARY LOW-PROFILE BARRICADES - NUMBER DENOTES PHASE
- TAXIWAY OBJECT FREE AREA
- RUNWAY SAFETY AREA
- CONSTRUCTION FLAGGER - SEE NOTE 7
- TAXIWAY CLOSURE MARKER



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INTERNATIONAL
AIRPORT

TAXIWAY D
LIGHTING
REHABILITATION

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REVISIONS

NO.	DESCRIPTION	DATE

DATE ISSUED: MAY 2025

REVIEWED BY: MAR

DRAWN BY: SCR

DESIGNED BY: SCR

RS&H PROJECT NUMBER
1010-5865-001

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SHEET TITLE

CONSTRUCTION
PHASING PLAN -
PHASE 3

SHEET NUMBER

G033

ISSUED FOR
BID

PLOTTED ON: 5/30/2025
FILE LOCATION: P:\GERALD_FORD_INTL\101058665_GRR_AIRFIELD_LIGHTING_ONCALL_2025_2030\101058665001_GRR_TAXIWAY_D_LIGHTING_REHAB\03.00
PROJECT EXECUTION\03.05 DWGS_MODEL\SCAD\GTTWD G040.DWG
RAYCHERS

AIRPORT'S SAFETY AND SECURITY REQUIREMENTS

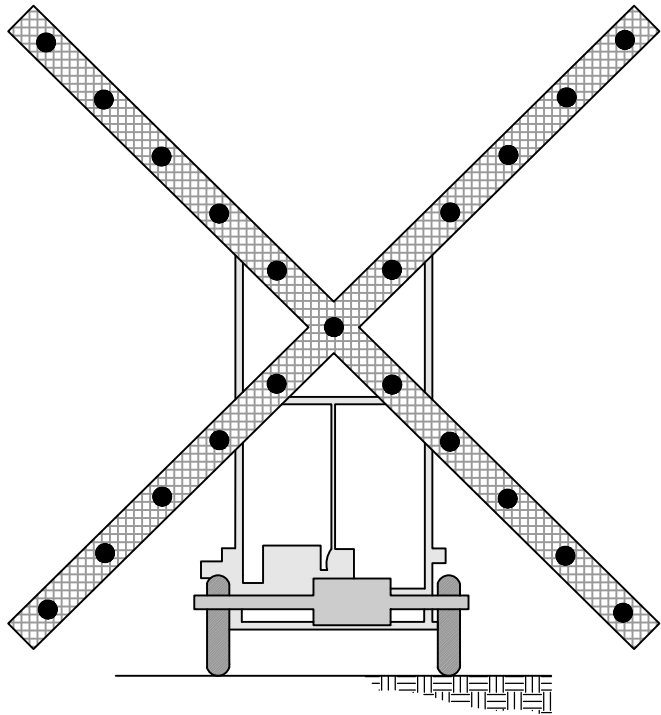
SAFETY:

- THE CONTRACTOR MUST ACQUAINT HIS SUPERVISORS AND EMPLOYEES WITH THE AIRPORT ACTIVITY AND OPERATIONS THAT ARE INHERENT TO THIS AIRPORT AND CONDUCT THE CONSTRUCTION ACTIVITIES TO CONFORM TO ALL ROUTINE AND EMERGENCY REQUIREMENTS AND GUIDELINES ON SAFETY AS SPECIFIED IN NOTE NO. 4 BELOW. ALL CONTRACTOR CONSTRUCTION COMMUNICATIONS WITH GERALD R. FORD INTERNATIONAL AIRPORT AUTHORITY (GFIAA) OPERATIONS OR ADMINISTRATION MUST BE VIA AIRPORT COMMUNICATIONS: 816-233-6000 OR AS DIRECTED BY GFIAA STAFF. THIS NUMBER SHOULD BE USED IN CASE OF EMERGENCIES AS WELL. CONTRACTOR MUST PROVIDE GFIAA AND THE ENGINEER WITH A CONTACT NUMBER FOR THE ON-SITE SUPERVISOR THAT CAN BE REACHED 24 HOURS A DAY, SEVEN DAYS A WEEK. THE SUPERVISOR SHALL HAVE AUTHORITY TO MAKE DECISIONS IN RESOLVING ANY EMERGENCY OR OTHER ISSUES.
- OPEN FLAME WELDING OR TORCH CUTTING OPERATIONS ARE PROHIBITED UNLESS ADEQUATE FIRE AND SAFETY PRECAUTIONS HAVE BEEN TAKEN AND THE PROCEDURE IS APPROVED AND A HOT WORK PERMIT IS OBTAINED FROM GFIAA.
- DEBRIS, WASTE, AND LOOSE MATERIAL CAPABLE OF CAUSING DAMAGE TO AIRCRAFT ARE NOT ALLOWED ON ACTIVE AIRCRAFT OPERATING SURFACES. IF THESE MATERIALS ARE OBSERVED TO BE ON ACTIVE AIRCRAFT OPERATING SURFACES, THE CONTRACTOR MUST INFORM GFIAA OPERATIONS IMMEDIATELY. DEBRIS, WASTE, AND LOOSE MATERIAL WILL BE REMOVED IMMEDIATELY AND/OR CONTINUOUSLY DURING CONSTRUCTION BY USE OF VACUUM TRUCK (SEE SAFETY NOTE 6 BELOW).
- THE CONTRACTOR IS DIRECTED TO COMPLY WITH AND ACQUAINT HIS/HER EMPLOYEES WITH THE FOLLOWING SAFETY GUIDELINES, RELATED MATERIALS AND FAA ADVISORY CIRCULARS:

150/5370-G "OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION"

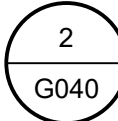
GERALD R. FORD INTERNATIONAL AIRPORT RULES AND REGULATIONS

COPIES OF THESE DOCUMENTS ARE AVAILABLE ONLINE AT
HTTP://WWW.FAA.GOV/AIRPORTS/RESOURCES/ADVISORY_CIRCULARS/
AND HTTPS://WWW.GRR.ORG/HUBFS/PDFS/RULES%26REGS2019.PDF?HSLANG=EN
- CONSTRUCTION DURING THE PROJECT MAY BE HALTED AT ANY TIME BY THE ENGINEER IF IT IS DETERMINED TO BE IN THE BEST INTEREST OF AIRPORT OPERATIONS OR SAFETY. THE CONTRACTOR MAY BE DIRECTED TO REMOVE EQUIPMENT AND/OR EVACUATE THE SITE. NECESSARY EXTENSIONS IN CONTRACT TIME WILL BE GRANTED OR A STOP WORK ORDER WILL BE ISSUED DUE TO THESE DELAYS. HOWEVER, THERE WILL BE NO ADJUSTMENTS IN CONTRACT COST DUE TO THESE DELAYS.
- THE CONTRACTOR SHALL PROVIDE A FULLY OPERATIONAL, SELF-CONTAINING VACUUM TRUCK. THE VACUUM TRUCK MUST BE AVAILABLE FOR THE DURATION OF THE PROJECT AND WITH AN OPERATOR AT THE DISCRETION OF THE ENGINEER TO VACUUM PAYEMENT AREAS ADJACENT TO THE CONSTRUCTION AREAS TO ENSURE NO FOREIGN OBJECT DEBRIS IS PRESENT ON PAVEMENTS WITHIN 500 FEET OF ANY CONSTRUCTION AREA. THE COST OF THE VACUUM TRUCK MUST BE INCLUDED IN THE SAFETY AND SECURITY BID ITEM.
- FAILURE TO COMPLY WITH ANY OF THE SAFETY AND SECURITY REQUIREMENTS MAY RESULT IN ANY OR ALL OF THE FOLLOWING ACTIONS:
 - PROJECT SHUT DOWN
 - REMOVAL FROM AIRPORT (PERSONNEL AND/OR EQUIPMENT)
 - FINES, IN ACCORDANCE WITH AIRPORT RULES AND REGULATIONS
- THE CONTRACTOR'S EQUIPMENT STORAGE AREA MUST BE WITHIN THE CONSTRUCTION SITE OR WITHIN THE STAGING AREA AS SHOWN ON THE CONTRACT LAYOUT. THE CONTRACTOR'S EQUIPMENT AND CONSTRUCTION VEHICLES ARE RESTRICTED TO THE CONSTRUCTION SITE OR STORAGE AREAS DURING CONSTRUCTION AND PARKED IN THE STAGING AREA DURING NON-WORKING PERIODS. EQUIPMENT HEIGHT MUST NOT EXCEED 25 FEET. EQUIPMENT HEIGHT MUST NOT EXCEED 20 FEET WHILE STORED IN THE EQUIPMENT STORAGE AREA.



NOTES:

- LIGHTED RUNWAY CLOSURE MARKERS (LIGHTED X'S) MUST BE PLACED ON EACH RUNWAY END FACING THE RUNWAY APPROACH WHENEVER A RUNWAY IS CLOSED. PLACE RUNWAY CLOSURE MARKER ON OR AS NEAR AS PRACTICAL TO THE RUNWAY DESIGNATION MARKING.
- CONTRACTOR SHALL FURNISH AND INSTALL TWO LIGHTED RUNWAY CLOSURE MARKERS AT BOTH ENDS OF RUNWAY 8R-26L DURING CLOSURES. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE TRANSPORT, PLACEMENT, AND REMOVAL OF THE LIGHTED RUNWAY CLOSURE MARKERS AT THE DIRECTION OF THE OWNER AND/OR ENGINEER. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE OPERATION AND MAINTENANCE OF THE LIGHTED RUNWAY CLOSURE MARKERS WHILE IN THE CONTRACTOR'S USE. THE CONTRACTOR IS REQUIRED TO PROVIDE ALL FUEL, OIL, BULBS, FILTERS, AND ANY ADDITIONAL REPLACEMENT PARTS TO KEEP THE RUNWAY CLOSURE MARKERS IN WORKING ORDER.
- A RECEPTACLE MUST BE PLACED AND SECURED UNDER THE LIGHTED RUNWAY CLOSURE MARKERS CAPABLE OF HOLDING SPILLED GASOLINE AND OIL. ANY MATERIAL SPILLED ON PAVEMENT MUST BE CLEANED IMMEDIATELY AT NO ADDITIONAL EXPENSE TO THE OWNER.
- UNDER NO CIRCUMSTANCE WILL THE CONTRACTOR BE PERMITTED TO SET UP OR REMOVE LIGHTED X'S WITHOUT OWNER OR ENGINEER AUTHORIZATION.
- LIGHTED X'S MUST COMPLY WITH FAA AC 150/5345-55 AND FAA AC 150-5370-2.



LIGHTED RUNWAY CLOSURE MARKING

SCALE: N.T.S

SECURITY:

- ACCESS TO THE SITE: CONTRACTOR'S ACCESS TO THE SITE MUST BE AS SHOWN ON THE PLANS. NO OTHER ACCESS POINTS ARE ALLOWED UNLESS APPROVED BY GFIAA. ALL CONTRACTOR TRAFFIC AUTHORIZED TO ENTER THE SITE MUST BE EXPERIENCED IN THE ROUTE OR GUIDED BY CONTRACTOR PERSONNEL. THE CONTRACTOR IS RESPONSIBLE FOR TRAFFIC CONTROL TO AND FROM THE VARIOUS CONSTRUCTION AREAS ON THE SITE AND FOR THE OPERATION AND SECURITY OF ACCESS TO THE SITE. A CONTRACTOR'S FLAGPERSON OR TRAFFIC CONTROL PERSON MUST MONITOR AND COORDINATE ALL CONTRACTOR TRAFFIC AT THE ACCESS POINT.

THE CONTRACTOR MUST NOT PERMIT ANY UNAUTHORIZED CONSTRUCTION PERSONNEL OR TRAFFIC ON THE SITE. ACCESS POINTS TO THE SITE MUST BE SECURED AND LOCKED AT ALL TIMES WHEN NOT ATTENDED BY THE CONTRACTOR. THE GATE OR GATE ARM MUST BE CLOSED AFTER EACH ACCESS. THE GATE GUARD MUST BE PROFESSIONALLY TRAINED AND MUST MAINTAIN A CONTRACTOR VEHICLE "ACTIVITY LOG" AS SUPPLIED BY THE OWNER. GATE GUARDS MUST HAVE AN APPROPRIATE MEANS OF COMMUNICATION TO CONTACT ADDITIONAL GATE MONITORS TO PROVIDE FOR BATHROOM, LUNCH AND OTHER BREAK PERIODS. AT NO TIME CAN THE GATE GUARD LEAVE THE UNSECURED GATE UNATTENDED WITHOUT AN APPROPRIATELY TRAINED SUBSTITUTE GUARD.

THE CONTRACTOR IS RESPONSIBLE FOR THE IMMEDIATE CLEANUP OF ANY DEBRIS DEPOSITED ALONG THE ACCESS ROUTE AS A RESULT OF HIS CONSTRUCTION TRAFFIC. DIRECTIONAL SIGNING FROM THE ACCESS POINT ALONG THE DELIVERY ROUTE TO THE STORAGE AREA OR WORK SITE ARE AS DIRECTED BY GFIAA.
- MATERIAL DELIVERY TO THE SITE: ALL CONTRACTOR'S MATERIAL ORDERS FOR DELIVERY TO THE WORK SITE WILL USE, AS A DELIVERY ADDRESS, THE STREET NAME ASSIGNED TO THE ACCESS POINT AT THE CONTRACTOR'S STAGING SITE AT THE AIRPORT. DELIVERIES MUST REFERENCE THE PROJECT NAME AND CONTRACTOR'S NAME. THIS CONSTRUCTION ADDRESS WILL BE DETERMINED AT THE PRE-CONSTRUCTION MEETING.
- CONSTRUCTION AREA LIMITS: THE LIMITS OF CONSTRUCTION, MATERIAL STORAGE AREAS, EQUIPMENT STORAGE AREA, PARKING AREA AND OTHER AREAS DEFINED AS REQUIRED FOR THE CONTRACTOR'S EXCLUSIVE USE DURING CONSTRUCTION MUST BE MARKED BY THE CONTRACTOR. THE CONTRACTOR MUST ERECT AND MAINTAIN AROUND THE PERIMETER OF THESE AREAS SUITABLE FENCING, MARKING AND/OR WARNING DEVICES VISIBLE FOR DAY/NIGHT USE. TEMPORARY BARRICADES, FLAGGING AND FLASHING WARNING LIGHTS WILL BE REQUIRED AT CRITICAL ACCESS POINTS. TYPE OF MARKING AND WARNING DEVICES MUST BE APPROVED BY THE GFIAA, THROUGH THE ENGINEER.
- SUPERVISION: CONTRACTOR MUST, AT ALL TIMES, HAVE A SUPERVISOR ON SITE DURING ALL OPERATIONS INCLUDING ALL SUBCONTRACTOR OPERATIONS.
- IDENTIFICATION VEHICLES: THE CONTRACTOR MUST ESTABLISH AND MAINTAIN A LIST OF CONTRACTOR AND SUBCONTRACTOR VEHICLES AUTHORIZED TO OPERATE ON THE SITE WHICH MUST BE MADE AVAILABLE UPON DEMAND BY THE ENGINEER OR GFIAA. EACH VEHICLE MUST DISPLAY A LARGE COMPANY SIGN ON BOTH SIDES OF THE VEHICLE. THE CONTRACTOR MUST PROVIDE THE GFIAA THROUGH THE ENGINEER, WITH A CURRENT LIST OF COMPANIES AUTHORIZED TO ENTER AND CONDUCT WORK ON THE AIRPORT. CONTRACTOR EMPLOYEE VEHICLES WILL BE RESTRICTED TO THE CONTRACTOR'S EMPLOYEE PARKING AREA AS DESIGNATED ON THE PLANS.
- FINES: PAYMENT OF ALL FINES ASSESSED TO GFIAA DUE TO FAA OR TSA VIOLATIONS BY THE CONTRACTOR WILL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. SUCH FINES WILL BE DEDUCTED FROM THE CONTRACT VIA CHANGE ORDER.

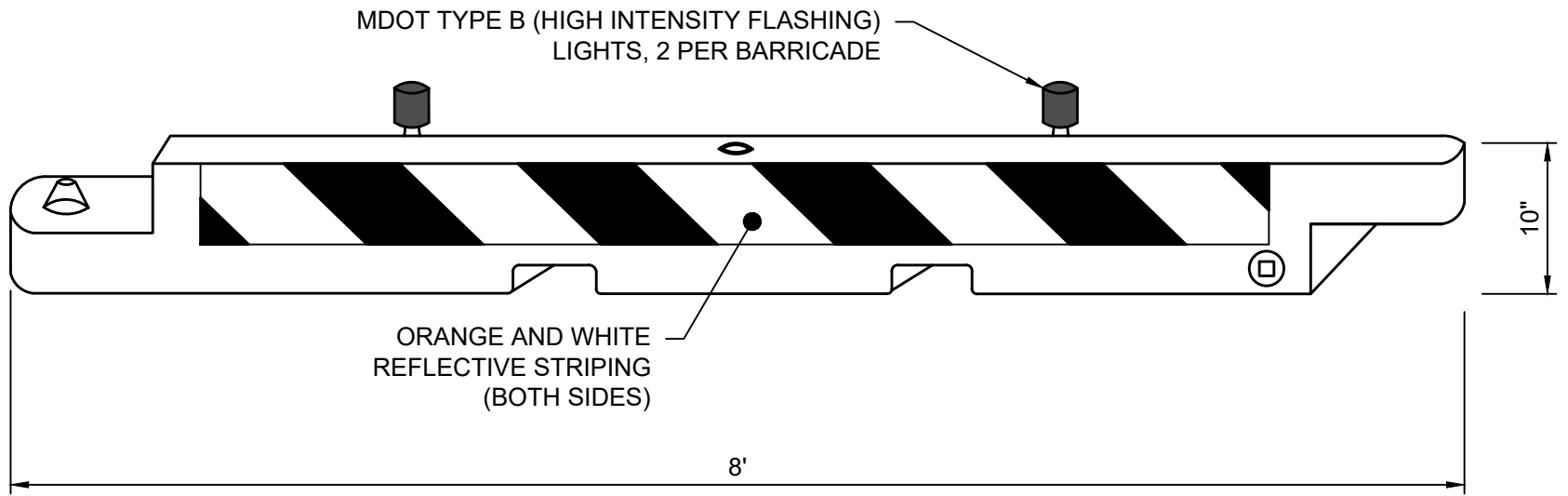
PROJECT SAFETY NARRATIVE:

- THERE IS CONSTRUCTION ACTIVITY ANTICIPATED WITHIN THE AIRPORT OPERATIONS AREA (AOA). REFER TO SHEET G030 FOR ANTICIPATED AIRFIELD CLOSURES.
 - BASIS FOR DEVIATING FROM STANDARDS: NOT APPLICABLE.
 - HEIGHT OF CONSTRUCTION EQUIPMENT: 25 FEET (ANY TYPE)*
- *- FAA APPROVAL MUST BE OBTAINED FOR ANY CONSTRUCTION EQUIPMENT EXPECTED TO EXCEED 15 FEET, BEFORE THE EQUIPMENT IS ALLOWED ON THE CONSTRUCTION SITE.

DATES FOR START AND COMPLETION:

ESTIMATED START: AUGUST 2025
ESTIMATED COMPLETE: OCTOBER 2025

TOTAL CONTRACT TIME: REFER TO SHEET G030 - CONSTRUCTION PHASING PLAN



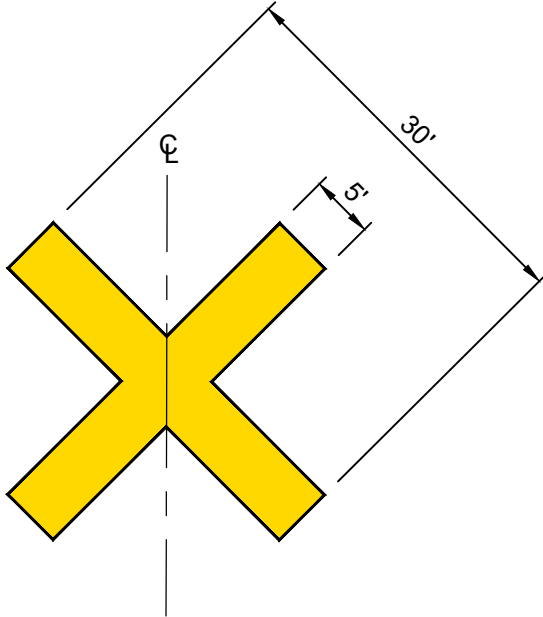
NOTES:

- ALL COSTS RELATED TO THE INSTALLATION, MAINTENANCE, REMOVAL, AND/OR RELOCATION OF BARRICADES SHALL BE INCLUDED IN ITEM G-102-11.1, "SAFETY AND SECURITY".
- BARRICADES SHALL BE AR-10x96 LOW-PROFILE BARRICADES (MANUFACTURED BY MULTI-BARRIER), OR APPROVED EQUAL. WEIGH DOWN EACH BARRICADE BY FILLING WITH WATER.
- BARRICADES SHALL BE PLACED AROUND ALL PAVEMENT DROP-OFFS AND IN AREAS IDENTIFIED ON THE PHASING PLAN.
- PLACE BARRICADES INTERLOCKED ON PAVED SURFACES AND A MAXIMUM OF 50 FT. APART IN TURF AREAS UNLESS OTHERWISE NOTED. BARRICADES SHOULD ALTERNATE COLORS, ORANGE AND WHITE.

1

LOW-PROFILE BARRICADE

SCALE: N.T.S



NOTES:

- ALL COSTS RELATED TO THE INSTALLATION, MAINTENANCE, REMOVAL, AND/OR RELOCATION OF TAXIWAY CLOSURE MARKERS SHALL BE INCLUDED IN ITEM G-102, "SAFETY AND SECURITY".
- MARKER SHALL BE YELLOW AND CONSTRUCTED OF MATERIAL APPROVED BY THE OWNER AND ENGINEER. TEMPORARY PAINT WILL NOT BE ALLOWED.
- TEMPORARY MARKER MATERIAL SHALL BE SECURELY ANCHORED TO THE PAVEMENT TO PREVENT DISLOCATION BY WIND OF JET/PROP BLAST. CONTRACTOR SHALL REPAIR PAVEMENT DAMAGED DURING ANY ANCHORING OF CLOSURE MARKERS.
- THE CONTRACTOR SHALL COORDINATE THE EXACT PLACEMENT AND LOCATION OF ALL TAXIWAY CLOSURE MARKERS WITH THE ENGINEER AND AIRPORT OPERATIONS.

3

TEMPORARY TAXIWAY CLOSURE MARKER

SCALE: N.T.S



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GERALD R. FORD INTERNATIONAL AIRPORT

TAXIWAY D LIGHTING REHABILITATION



REVISIONS

NO.	DESCRIPTION	DATE

DATE ISSUED: MAY 2025

REVIEWED BY: MAR

DRAWN BY: SCR

DESIGNED BY: SCR

RS&H PROJECT NUMBER
1010-5865-001

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SHEET TITLE

SAFETY AND SECURITY NOTES AND DETAILS

SHEET NUMBER

G040

ISSUED FOR BID

5/30/2025
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PROJECT EXECUTION\03.05.DWGS_MODELS\CADD\ET\WD E MISC.DWG

GENERAL ELECTRICAL NOTES:

1.

ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH THE LATEST ADOPTED VERSION OF THE NATIONAL ELECTRICAL CODE, THE NATIONAL ELECTRICAL SAFETY CODE, FAA ADVISORY CIRCULARS AND ORDERS, AND APPLICABLE LOCAL BUILDING CODES, LAWS AND ORDINANCES.
2.

THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL REQUIRED PERMITS, LICENSES, INSPECTIONS, FEES, AND APPROVALS.
3.

THE CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, AND EQUIPMENT TO REMOVE, RELOCATE, MODIFY, AND INSTALL THE ELECTRICAL SYSTEMS AS INDICATED ON THE DRAWINGS. ITEMS NOT SHOWN, BUT NECESSARY FOR COMPLETION OF THE WORK, SHALL BE INCLUDED.
4.

ALL ITEMS ARE NEW UNLESS SPECIFICALLY NOTED OTHERWISE. NEW MATERIALS SHALL BE U.L. LISTED.
5.

ALL MATERIALS SCHEDULED FOR REMOVAL SUCH AS EXISTING CONSTANT CURRENT REGULATORS, LIGHTS, COVERS, TRANSFORMERS, ETC. AND WHICH ARE DEEMED SALVAGEABLE BY THE AIRPORT, SHALL BE DELIVERED TO THE LOCATION ON AIRPORT PROPERTY AS INDICATED BY THE OWNER'S REPRESENTATIVE. ALL NON-SALVAGEABLE MATERIALS REMOVED SUCH AS STRUCTURES, CONCRETE FOUNDATIONS, CABLE, CONDUIT, LIGHT BASES, ETC. SHALL BE REMOVED FROM THE SITE AND LEGALLY DISPOSED OF BY THE CONTRACTOR IN ACCORDANCE WITH APPLICABLE LAWS AND ENVIRONMENTAL REGULATIONS.
6.

THE LOCATIONS OF UTILITIES, DUCT BANKS, AND CONDUITS SHOWN ON THE PLANS ARE APPROXIMATE AND SHALL NOT BE SCALED FOR EXACT LOCATIONS. ALL UTILITIES MIGHT NOT BE SHOWN. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT THE APPROPRIATE UTILITY/AGENCY PRIOR TO STARTING WORK FOR THE LOCATION OF EXISTING UTILITIES AND TO ALLOW THEM TIME TO PROPERLY LOCATE ALL UTILITIES. ANY INTERRUPTION OF AN EXISTING SYSTEM OR UTILITY SERVICE SHALL BE COORDINATED AND APPROVED BY THE AUTHORITY, AGENCY, OR UTILITY HAVING JURISDICTION.
7.

ALL EXISTING SYSTEMS AND UTILITIES TO REMAIN SHALL BE PROTECTED FROM DAMAGE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGED SYSTEM OR UTILITY AND SHALL REPLACE OR MAKE REPAIRS IMMEDIATELY, AT THEIR OWN EXPENSE, IN ACCORDANCE WITH THE AUTHORITY, AGENCY, OR UTILITY HAVING JURISDICTION. DAMAGED SYSTEMS OR UTILITIES SHALL BE IMMEDIATELY REPORTED TO THE OWNER'S REPRESENTATIVE.
8.

PRIOR TO START OF CONSTRUCTION, CONTRACTOR SHALL IDENTIFY THE ROUTING OF AIRFIELD LIGHTING CIRCUITS #12, #16 AND #17 THROUGH THE VAULT, DUCTBANKS, IN MANHOLES, HANDHOLES, AND IN CONDUITS. EXACT ROUTING SHALL BE DOCUMENTED AND PROVIDED TO THE AIRPORT AND ENGINEER PRIOR TO START OF CONSTRUCTION. THE CONTRACTOR SHALL UTILIZE A LOCATE SERVICE, AS WELL AS HAVE A CABLE TRACER AVAILABLE, TO LOCATE EXISTING CABLES. ALL EXCAVATION WITHIN FOUR FEET OF ANY UNDERGROUND UTILITY TO REMAIN SHALL BE PERFORMED BY HAND DIGGING METHODS.
9.

THE IDENTITY AND ROUTING OF ALL CABLES SHOWN ON THE PLANS SHALL BE VERIFIED IN THE FIELD. ANY DISCREPANCY SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE AND RECORDED IN THE AS-BUILT DRAWINGS TO PROVIDE AN ACCURATE RECORD OF CONDITIONS. THESE PLANS DO NOT PURPORT TO SHOW ALL EXISTING CABLES AND CONCEALED UTILITIES WHICH WILL REQUIRE STAKE OUT PRIOR TO CONSTRUCTION. CONTRACTOR SHALL VERIFY EXISTING CIRCUIT ROUTING PRIOR TO COMMENCING WORK.
10.

DEWATERING FOR ENTRANCE INTO OR FOR THE INSTALLATION OF STRUCTURES, FOUNDATIONS, DUCT BANKS, AND CONDUIT IS INCIDENTAL TO THE RESPECTIVE PAY ITEM. THE CONTRACTOR SHALL BE RESPONSIBLE TO PAY FOR AND OBTAIN ANY AND ALL PERMITS REQUIRED FOR DEWATERING.
11.

THE PROJECT PAY ITEMS PROVIDED ARE INCLUSIVE OF ALL WORK TO BE PERFORMED AS SHOWN IN THE PLANS. ALL WORK IDENTIFIED WITH A SPECIFIC PAY ITEM SHALL BE CONSIDERED REQUIRED WORK TO COMPLETE THE PROJECT AND IS SUBSIDIARY TO THE COST OF THE RESPECTIVE PROJECT PAY ITEM.
12.

ITEMS SHOWN SCREENED (LIGHT) ARE EXISTING ITEMS AND ITEMS SHOWN IN SOLID (BOLD) ARE ITEMS TO BE MODIFIED, REMOVED, OR INSTALLED UNDER THIS CONTRACT UNLESS NOTED OTHERWISE.
13.

AT THE END OF EACH SHIFT, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THAT ALL AIRFIELD LIGHTING CIRCUITS (EXCEPT THOSE SERVING CLOSED TAXIWAYS OR RUNWAYS) ARE OPERATIONAL USING TOWER CONTROLS. CONTROL FROM VAULT WILL BE ALLOWED ONLY WHEN NECESSARY DURING THE TIE-IN OF THE NEW CONSTANT CURRENT REGULATORS (CCRs) TO THE EXISTING ALCMS AND UPON ADVANCE WRITTEN AGREEMENT WITH THE RPR, AIRPORT, AND TOWER. ADVANCE NOTICE TIMEFRAME SHALL BE DETERMINED WITH ALL PARTIES. CONTRACTOR SHALL CERTIFY TO THE OWNER'S REPRESENTATIVE BEFORE LEAVING THE PROJECT SITE EACH DAY. ALL INOPERABLE CIRCUITS REQUIRED FOR THE OPERATION OF THE AIRPORT SHALL BE IMMEDIATELY RESTORED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS, INCLUDING REPAIRS MADE BY AIRPORT PERSONNEL, ASSOCIATED WITH RESTORATION OF CIRCUITS.
14.

CONTRACTOR SHALL PROVIDE ANY TEMPORARY SPLICES, CONDUITS, JUMPER WIRING, OR ANY OTHER ITEMS NECESSARY TO KEEP EXISTING CIRCUITS OPERATIONAL DURING CONSTRUCTION. THESE ITEMS SHALL BE CONSIDERED INCIDENTAL TO THE INSTALLATION OF THE NEW L-824, 5KV WIRING.
15.

THE CONTRACTOR SHALL COORDINATE ALL WORK WITH THE SAFETY AND PHASING PLANS.
16.

THE CONTRACTOR SHALL COMPLY WITH THE AIRPORT MAINTENANCE "LOCK-OUT/TAG-OUT" PROCEDURES AND NFPA 70E.
17.

FOR ANY LIGHT FIXTURE, SIGN, OR STRUCTURE INSTALLED OR RELOCATED UNDER THIS CONTRACT, THE CONTRACTOR SHALL OBTAIN THE EXACT LOCATION VIA SURVEY. THE LOCATION SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.
18.

THE CONTRACTOR SHALL CONDUCT INSULATION RESISTANCE TO GROUND (MEGGER) TESTS ON ALL AIRFIELD LIGHTING CIRCUITS BEFORE COMMENCING WORK ON ANY CIRCUITS. THE CONTRACTOR SHALL PREPARE AND PROVIDE TO THE OWNER'S REPRESENTATIVE A WRITTEN REPORT, BY CIRCUIT, OF THESE RESULTS. THE CONTRACTOR SHALL REPEAT THIS TEST ON EACH CIRCUIT AFTER COMPLETION OF THE WORK. RESULTS OF BOTH TESTS SHALL BE PROVIDED TO THE OWNER'S REPRESENTATIVE. WEATHER CONDITIONS SHALL BE INCLUDED IN THE WRITTEN REPORT. ANY CIRCUITS NOT BEING REPLACED UNDER THIS CONTRACT THAT EXHIBIT LOWER TEST RESULTS DURING FINAL TESTING SHALL BE REPAIRED UNTIL TESTS RESULTS MEET OR EXCEED ORIGINAL TEST RESULTS.
19.

WHEN PREPARING RECORD DRAWINGS, ALL ITEMS SHALL BE SHOWN IN THEIR ACTUAL INSTALLED LOCATIONS. ALL UNDERGROUND DUCTS, CONDUITS, DRAINS, GROUND GRIDS, FORCE MAINS, ETC. (ALL UNDERGROUND UTILITIES) INSTALLED BY THE CONTRACTOR OR LOCATED BY THE CONTRACTOR DURING CONSTRUCTION OF THIS PROJECT SHALL BE SURVEYED. THE DATA SHALL BE SUFFICIENTLY ACCURATE TO LOCATE THE UTILITY AT A LATER DATE. THE DATA SHALL INCLUDE NORTH-SOUTH AND EAST-WEST COORDINATES AND AN ELEVATION. ALL STRUCTURES INSTALLED BY THE CONTRACTOR SHALL BE SURVEYED. THE CENTER OF THE STRUCTURE SHALL BE LOCATED BY A NORTH-SOUTH AND EAST-WEST COORDINATE AND AN ELEVATION. CONTRACTOR SHALL EDIT THE EQUIPMENT SCHEDULES TO REFLECT ITEMS ACTUALLY FURNISHED. AT THE END OF THE PROJECT, ALL CHANGES SHALL BE TRANSFERRED TO A SET OF REPRODUCIBLE DESIGN DRAWINGS MARKED "AS-BUILT" AND DATED AND STAMPED BY THE ELECTRICAL CONTRACTOR.
20.

WHEN ENTERING EXISTING MANHOLES OR STRUCTURES, CONTRACTOR SHALL FOLLOW AIRPORT OR CONTRACTOR CONFINED SPACE REQUIREMENTS. REQUIREMENTS SHALL BE PROVIDED TO THE OWNER AND ENGINEER.
21.

ONLY THIRD PARTY CERTIFIED MANUFACTURERS, LISTED IN AC 150/5345-53, APPENDIX 3 ADDENDUM (AS REQUIRED) AND MEETING THE BUY AMERICAN PREFERENCE REQUIREMENTS CAN PROVIDE EQUIPMENT AND MATERIALS SPECIFIED IN THE CONTRACT DOCUMENTS. DOCUMENTATION CERTIFYING COMPLIANCE WITH THE BUY AMERICAN PREFERENCE RULES FOR AIRPORT IMPROVEMENT PROGRAM (AIP) CITED IN 49 USC §50101 SHALL BE INCLUDED WITH EACH EQUIPMENT AND MATERIAL SUBMITTAL.
22.

A MINIMUM OF THREE COPIES OF INSTRUCTION BOOKS MUST BE SUPPLIED WITH EACH TYPE OF EQUIPMENT. FOR MORE SOPHISTICATED TYPES OF EQUIPMENT SUCH AS REGULATORS, PAPI, REIL, ETC., THE INSTRUCTION BOOK MUST CONTAIN THE FOLLOWING:

A.

A DETAILED DESCRIPTION OF THE OVERALL EQUIPMENT AND ITS INDIVIDUAL COMPONENTS.

B.

THEORY OF OPERATION INCLUDING THE FUNCTION OF EACH COMPONENT.

C.

INSTALLATION INSTRUCTIONS.

D.

START-UP INSTRUCTIONS.

E.

PREVENTATIVE MAINTENANCE REQUIREMENTS.

F.

CHART FOR TROUBLESHOOTING.

G.

COMPLETE POWER AND CONTROL DETAILED WIRING DIAGRAM(S), SHOWING EACH CONDUCTOR/CONNECTION/COMPONENT; "BLACK" BOXES ARE NOT ACCEPTABLE. THE DIAGRAM OR THE NARRATIVE MUST SHOW VOLTAGES/CURRENT/WAVE SHAPES AT STRATEGIC LOCATIONS TO BE USED WHEN CHECKING AND/OR TROUBLESHOOTING THE EQUIPMENT. WHEN THE EQUIPMENT HAS SEVERAL BRIGHTNESS STEPS, THESE PARAMETERS MUST BE INDICATED FOR ALL THE DIFFERENT MODES.

H.

PARTS LIST WILL INCLUDE ALL MAJOR AND MINOR COMPONENTS, SUCH AS RESISTORS, DIODES, ETC. IT MUST INCLUDE A COMPLETE NOMENCLATURE OF EACH COMPONENT AND, IF APPLICABLE, THE NAME OF ITS MANUFACTURER AND THE CATALOG NUMBER.

I.

SAFETY INSTRUCTIONS.

GROUNDING NOTES:

1.

GROUND ALL NON-CURRENT-CARRYING METAL PARTS OF ELECTRICAL EQUIPMENT BY USING CONDUCTORS SIZED AND ROUTED PER NFPA 70 (NEC), ARTICLE 250.
2.

ALL GROUND CONNECTIONS TO BUSES, PANELS, ETC., SHALL BE MADE WITH PRESSURE TYPE SOLDERLESS LUGS AND GROUND CLAMPS. SOLDERED OR BOLT AND WASHER TYPE CONNECTIONS ARE NOT ACCEPTABLE. CLEAN ALL METAL SURFACES BEFORE MAKING GROUND CONNECTIONS. EXOTHERMIC WELDS ARE REQUIRED FOR CONNECTION TO A GROUND ROD.
3.

THE RESISTANCE TO GROUND OF THE VAULT GROUNDING SYSTEM WITH THE COMMERCIAL POWER LINE NEUTRAL DISCONNECTED SHALL NOT EXCEED 10 OHMS.
4.

THE RESISTANCE TO GROUND OF THE COUNTERPOISE SYSTEM, OR AT ISOLATED LOCATIONS, SUCH AS AIRPORT BEACON, SHALL NOT EXCEED 25 OHMS.

SPARE PARTS NOTES:

1.

THE SPARE PARTS TABLE ON THIS SHEET LISTS THE ELECTRICAL SPARE PARTS REQUIRED TO BE FURNISHED BY THE CONTRACTOR. ALL SPARE PARTS SHALL BE IDENTICAL TO THE SAME PARTS APPROVED AND INSTALLED ON THE PROJECT.
2.

THE QUANTITY OF SPARE PARTS PROVIDED SHALL BE A MINIMUM OF 10% OF THE QUANTITY REQUIRED BY THE PROJECT TO BE INSTALLED, PROVIDED THAT THE COST DOES NOT EXCEED 10% OF THE COST THE VISUAL AID FOR WHICH THEY ARE REQUIRED. ADDITIONALLY, THE TOTAL COST OF ALL SPARE PARTS MUST NOT EXCEED \$10,000. THE COST OF ALL DEFINED SPARE PARTS TO BE FURNISHED TO THE OWNER MUST BE INCLUDED IN THE VARIOUS UNIT BID ITEMS FOR WHICH THE SPARE PARTS ARE PROVIDED.
3.

CONTRACTOR TO PROVIDE A SHOP DRAWING SUBMITTAL LISTING THE SPARE PARTS TO BE PROVIDED FOR EACH ITEM BASED UPON THE MANUFACTURER'S RECOMMENDED SPARE PARTS. THIS SUBMITTAL SHALL INCLUDE THE MANUFACTURER PART NUMBERS FOR EACH SPARE PART AND WHICH ITEM IT PERTAINS TO ALONG WITH THE QUANTITY TO BE PROVIDED.
4.

SPARE PARTS SHALL BE DELIVERED TO A LOCATION ON THE AIRPORT DESIGNATED BY THE AIRPORT. SPARE PARTS SHALL BE PROTECTED FROM THE ELEMENTS. SUCH PROTECTION SHALL INCLUDE THE USE OF HEAT LAMPS, SUITABLE COVERINGS, INDOOR STORAGE, ETC. TO PROPERLY STORE THE SPARE PARTS. ANY SPARE PARTS, IN THE OPINION OF THE ENGINEER, DAMAGED DURING SHIPPING OR STORAGE PERIODS SHALL BE REPLACED BY AND AT THE EXPENSE OF THE CONTRACTOR.

ABBREVIATIONS:

ADJ	ADJUSTABLE	MITL	MEDIUM INTENSITY TAXIWAY LIGHT
ALCS	AIRFIELD LIGHTING CONTROL SYSTEM	N	NORTHING
ALCMS	AIRFIELD LIGHTING CONTROL AND MONITORING SYSTEM	NAD	NORTH AMERICAN DATUM
ALEV	AIRFIELD LIGHTING ELECTRICAL VAULT	NGVD	NATIONAL GEODETIC VERTICAL DATUM
AOA	AIRCRAFT OPERATIONS AREA	NOTAM	NOTICE TO AIRMEN
ARFF	AIRCRAFT RESCUE AND FIRE FIGHTING	NTS	NOT TO SCALE
ATCT	AIR TRAFFIC CONTROL TOWER	OFA	OBJECT FREE AREA
AWG	AMERICAN WIRE GAUGE	PCC	PORTLAND CEMENT CONCRETE
B	BASLINE	PG	PROPOSED GRADE
BSD	BARE SOFT DRAWN SOLID COPPER	PI	POINT OF INTERSECTION
C	CONDUIT	PT	POINT OF TANGENCY
CCR	CONSTANT CURRENT REGULATOR	PVC	POLYVINYL CHLORIDE
CONC	CONCRETE	REIL	RUNWAY END IDENTIFIER LIGHT
CP	COUNTERPOISE	ROFA	RUNWAY OBJECT FREE AREA
DIA	DIAMETER	RPR	RESIDENT PROJECT REPRESENTATIVE
DEB	DIRECT EARTH BURIED	RW	RUNWAY
DWG	DRAWING	RPZ	RUNWAY PROTECTION ZONE
E	EASTING	RSA	RUNWAY SAFETY AREA
EA	EACH	RT	RIGHT
ELEV	ELEVATION	RW	RUNWAY
EOP	EDGE OF PAVEMENT	SCH	SCHEDULE
ES	EQUAL SPACES	SGN	SIGN
EX	EXISTING	SS	SECURITY IDENTIFICATION DISPLAY AREA
FAA	FEDERAL AVIATION ADMINISTRATION	SS	STAINLESS STEEL
GND	GROUND	STA	STATION
GRS	GALVANIZED RIGID STEEL CONDUIT	STD	STANDARD
HDD	HYDRAULIC DIRECTIONAL DRILLING	SW	SWITCH
HIRL	HIGH INTENSITY RUNWAY LIGHT	T/L	TAXILANE
I/C	NUMBER OF CONDUCTORS/CONDUCTOR	TW	TAXIWAY
ILS	INSTRUMENT LANDING SYSTEM	TBR	TO BE REMOVED
kV	KILOVOLT	TDZ	TOUCHDOWN ZONE
LF	LINEAR FEET	TSA	TAXIWAY SAFETY AREA
LSUM	LUMP SUM	TYP.	TYPICAL
LT	LEFT	UG	UNDERGROUND ELECTRICAL DUCT
MAX	MAXIMUM	XFMR	TRANSFORMER
MCB	MAIN CIRCUIT BREAKER		
MIN	MINIMUM		
MIRL	MEDIUM INTENSITY RUNWAY LIGHT		

SPARE PARTS LIST	
ITEM TYPE	SPARE PARTS REQUIRED
ELEVATED FIXTURES	FRANGIBLE COUPLINGS
	FIXTURE STEMS, BOLTS, AND SCREWS
	HEAD ASSEMBLIES
	BASE PLATES
MISCELLANEOUS	ISOLATION TRANSFORMERS
	CONNECTORS, CABLE CLAMP, CORD SET, AND CABLE



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LIGHTING
REHABILITATION

MISS DIG System, Inc.
1-800-482-7171



REVISIONS

NO.	DESCRIPTION	DATE

DATE ISSUED: MAY 2025

REVIEWED BY: MAR

DRAWN BY: AZ

DESIGNED BY: EE

RS&H PROJECT NUMBER
1010-5865-001

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SHEET TITLE

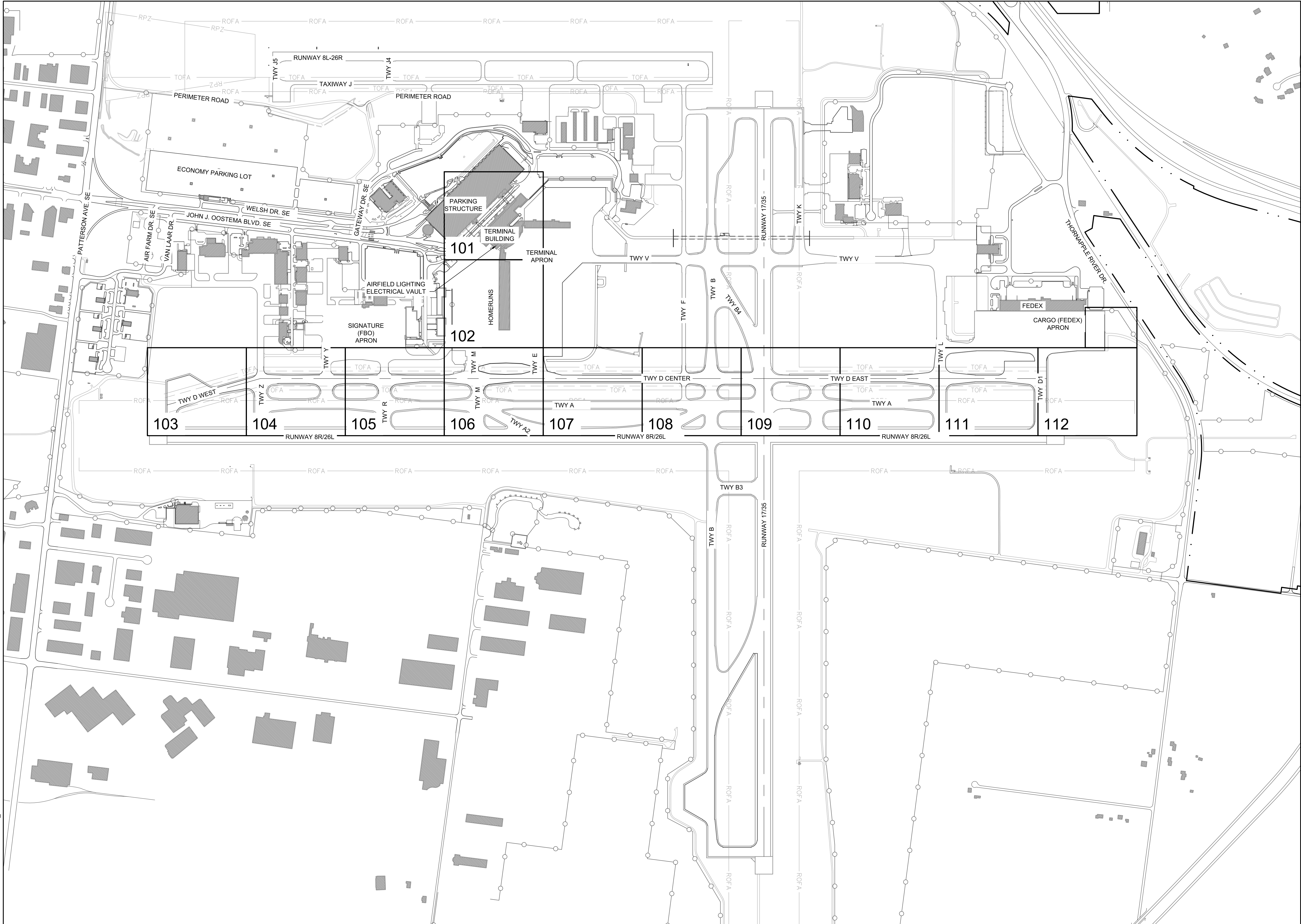
GENERAL
ELECTRICAL
NOTES


SHEET NUMBER

E001


ISSUED FOR
BID

PLOTTED ON: 5/30/2025
FILE LOCATION: P:\GERALD_FORD_INTL\10105865_GRR_AIRFIELD_LIGHTING_ONCALL_2025_2030\10105865001_GRR_TAXIWAY_D_LIGHTING_REHAB\03.00
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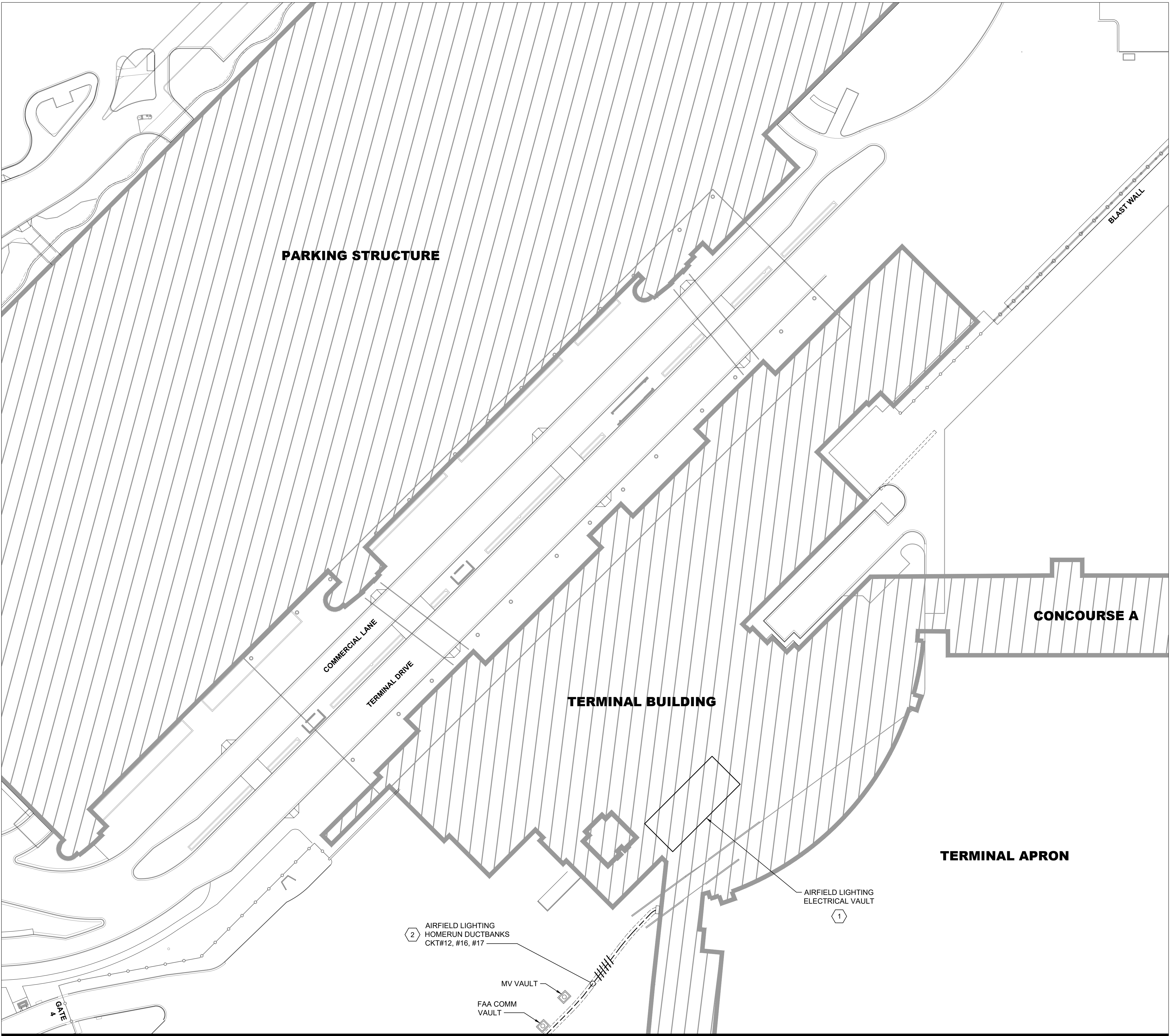
GENERAL KEY PLAN

SHEET NUMBER

E002

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PLOTTED ON: 5/30/2025
PLOTTED BY: RAYCHERS
FILE LOCATION: P:\GERALD_FORD_INTL\10105865_GRR_AIRFIELD_LIGHTING_ONCALL_2025_2030\10105865001_GRR_TAXIWAY_D_LIGHTING_REHAB\03.00
PROJECT EXECUTION\03.05.DWG\SCAD\ETWD.ED1XX.DEMO.DWG



LEGEND:

- CKT#
L-824 5KV CABLE IN EXISTING CONDUIT, REMOVE AND REPLACE WITH NEW CABLE, EXISTING CONDUIT TO REMAIN. HASH MARKS INDICATE NUMBER OF CABLES, CKT # = CIRCUIT DESIGNATOR
- EXISTING ELECTRICAL DUCT BANK
- EXISTING RUNWAY EDGE LIGHT TO REMAIN
- EXISTING TAXIWAY EDGE LIGHT TO REMAIN
- EXISTING TAXIWAY EDGE LIGHT, REMOVE AND REPLACE WITH NEW LED FIXTURE, EXISTING BASE CAN TO BE REUSED
- EXISTING AIRFIELD GUIDANCE SIGN TO REMAIN
- EXISTING AIRFIELD GUIDANCE SIGN, REMOVE AND REPLACE ISOLATION TRANSFORMER, SIGN TO REMAIN. XXX = SIGN NUMBER
- EXISTING WINDCONE TO REMAIN, REMOVE AND REPLACE ISOLATION TRANSFORMER
- EXISTING SINGLE JUNCTION CAN TO REMAIN
- EXISTING ELECTRICAL HANDHOLE TO REMAIN
- EXISTING ELECTRICAL MANHOLE TO REMAIN
- EXISTING COMMUNICATIONS MANHOLE TO REMAIN

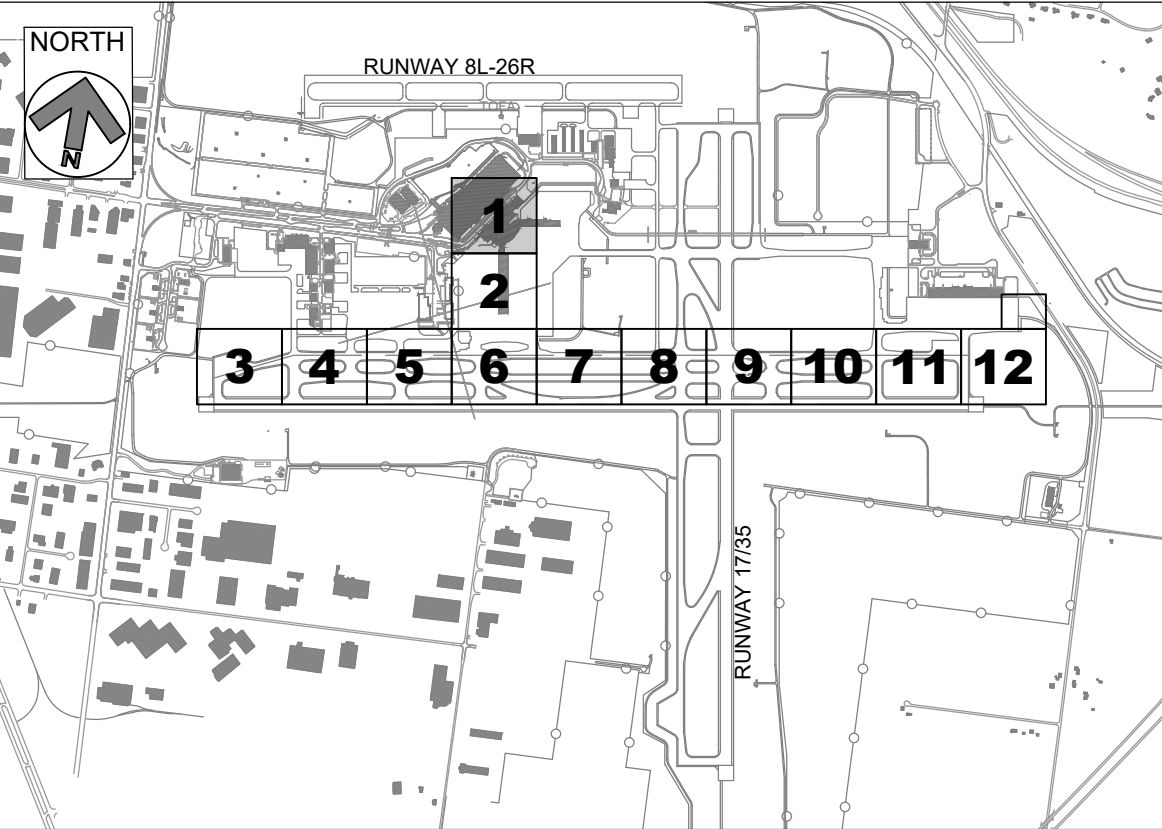
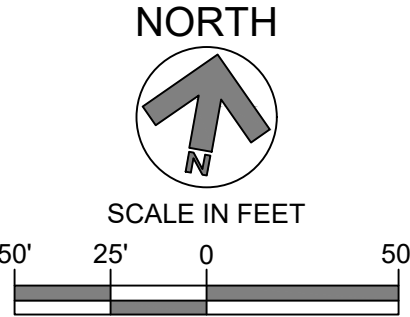
CKT #12 = TAXIWAY DELTA WEST
CKT #16 = TAXIWAY DELTA EAST
CKT #17 = TAXIWAY DELTA CENTER

GENERAL NOTES:

- SEE E001 FOR GENERAL ELECTRICAL NOTES.
- REMOVE AND REPLACE ALL ISOLATION TRANSFORMERS CONNECTED TO CIRCUITS #12, #16 AND #17, AT TAXIWAY EDGE LIGHTS, GUIDANCE SIGNS AND WINDCONES, AS APPLICABLE.
- EXACT ROUTING OF CABLES THROUGH EXISTING INFRASTRUCTURE SHALL BE FIELD VERIFIED.

KEYED NOTES:

- APPROXIMATE LOCATION OF EXISTING AIRFIELD LIGHTING ELECTRICAL VAULT. SEE SHEETS ED201 FOR DEMOLITION SCOPE OF WORK. EXACT ROUTING OF "HOMERUN" CONDUITS AND DUCTBANKS TO VAULT SHALL BE FIELD DETERMINED.
- REMOVE AND REPLACE TAXIWAY DELTA "HOMERUN" CIRCUITS #12, #16, AND #17 FROM EXISTING DUCTBANKS. ALL OTHER CIRCUITS SHALL BE PROTECTED IN PLACE.
- REMOVE AND REPLACE TAXIWAY DELTA CIRCUITS #12, #16, AND #17 FROM EXISTING CONDUITS. ALL OTHER CIRCUITS SHALL BE PROTECTED IN PLACE.
- ALL PROPOSED AND EXISTING WIRING TO BE PROPERLY IDENTIFIED, RACKED, AND TAGGED IN EACH MANHOLE. PROVIDE A MINIMUM OF ONE (1) LOOP OF WIRING IN EACH MANHOLE FOR EACH NEW CIRCUIT HOMERUN WIRE. CLEAN HOMERUN MANHOLES. ANY DEWATERING SHALL BE INCIDENTAL TO INSTALLATION OF NEW WIRING.
- EXISTING GUIDANCE SIGNS AND CONCRETE PADS TO REMAIN ON CIRCUITS #12, #16 AND #17. REPLACE ISOLATION TRANSFORMER AND CONNECTIONS. SIZE ISOLATION TRANSFORMER PER EACH SIGN LOAD, PER MANUFACTURER'S RECOMMENDATION.



KEY PLAN



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LIGHTING
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REVISIONS

NO.	DESCRIPTION	DATE

DATE ISSUED: MAY 2025
REVIEWED BY: MAR
DRAWN BY: AZ
DESIGNED BY: EE

RS&H PROJECT NUMBER
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SHEET TITLE
**DEMOLITION
AIRFIELD
LIGHTING PLAN
- AREA 1**

SHEET NUMBER
ED101

**ISSUED FOR
BID**

[illegible]

DATE ISSUED:	MAY 2025
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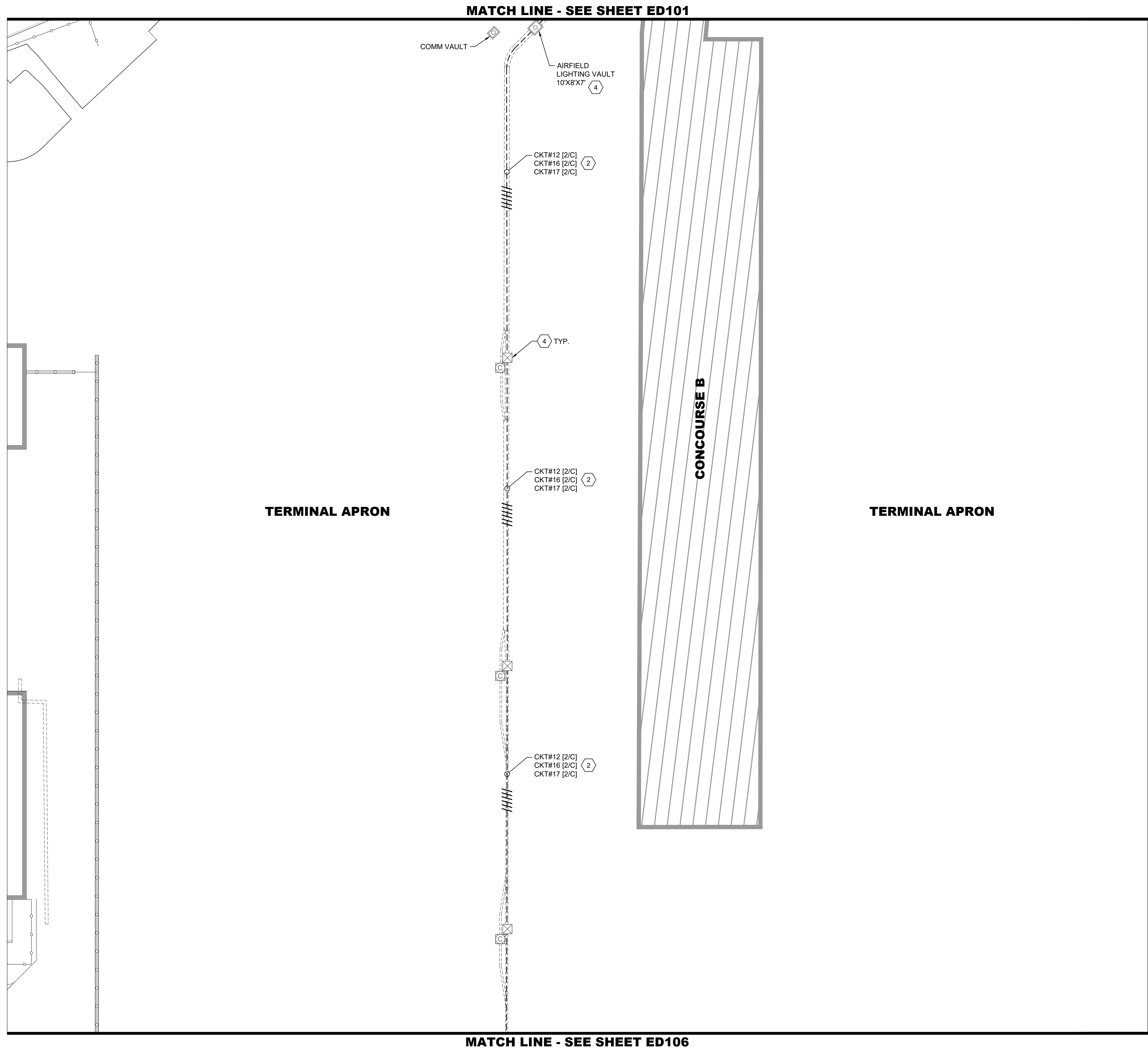
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SHEET TITLE

**DEMOLITION
AIRFIELD
LIGHTING PLAN
- AREA 2**

SHEET NUMBER
ED102

**ISSUED FOR
BID**




 CKT#
 L-824 5KV CABLE IN EXISTING CONDUIT, REMOVE
 AND REPLACE WITH NEW CABLE, EXISTING
 CONDUIT TO REMAIN. HASH MARKS INDICATE
 NUMBER OF CABLES, CKT # = CIRCUIT DESIGNATOR


----- EXISTING ELECTRICAL DUCT BANK

 EXISTING RUNWAY EDGE LIGHT TO REMAIN

EXISTING TAXIWAY EDGE LIGHT TO REMAIN

EXISTING TAXIWAY EDGE LIGHT, REMOVE AND
REPLACE WITH NEW LED FIXTURE, EXISTING
BASE CAN TO BE REUSED

 EXISTING AIRFIELD GUIDANCE SIGN TO REMAIN

 XXX EXISTING AIRFIELD GUIDANCE SIGN, REMOVE AND REPLACE ISOLATION TRANSFORMER, SIGN TO REMAIN. XXX = SIGN NUMBER

EXISTING WINDCONE TO REMAIN, REMOVE
AND REPLACE ISOLATION TRANSFORMER

① EXISTING SINGLE JUNCTION CAN TO REMAIN

 EXISTING ELECTRICAL HANDHOLE TO REMAIN

 EXISTING ELECTRICAL MANHOLE TO REMAIN

 EXISTING COMMUNICATIONS MANHOLE TO REMAIN

CKT #12 = TAXIWAY DELTA WEST

CKT #16 = TAXIWAY DELTA EAST

CKT #17 = TAXIWAY DELTA CENTER

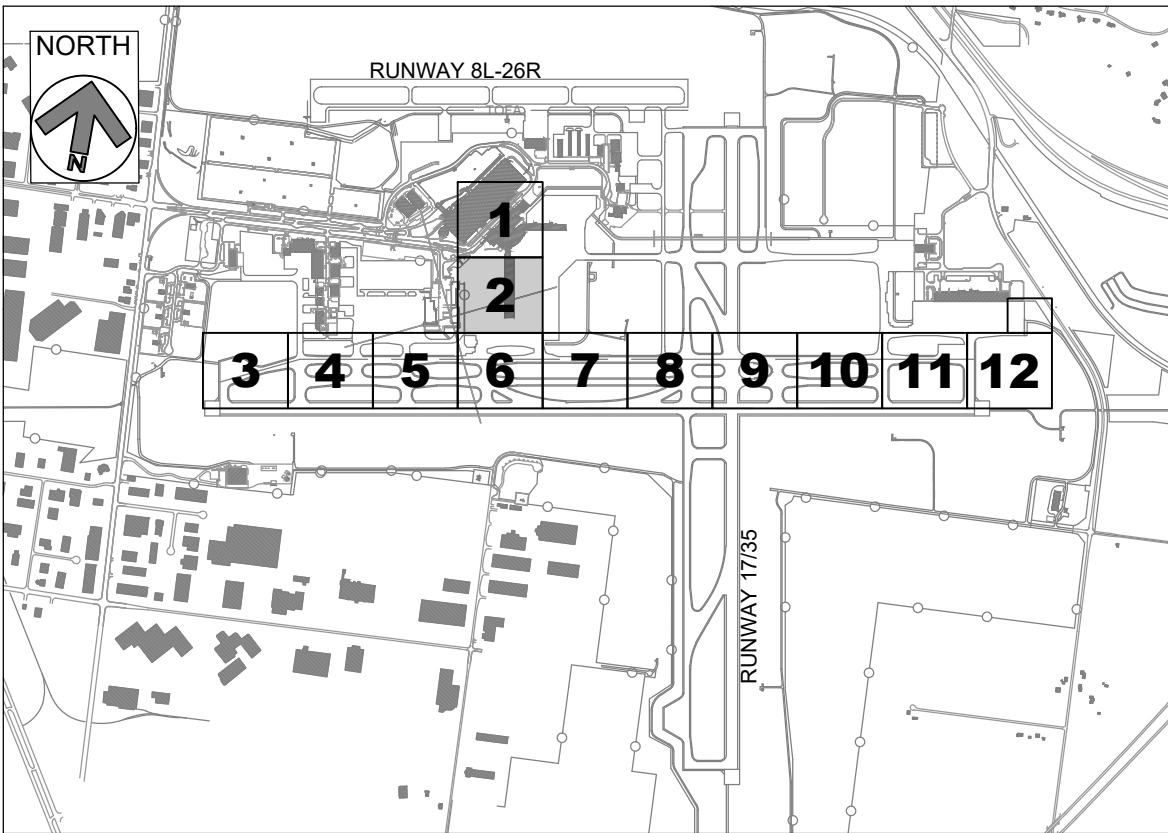
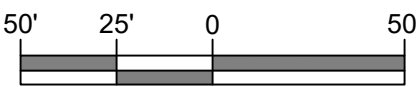
1. SEE E001 FOR GENERAL ELECTRICAL NOTES.
2. REMOVE AND REPLACE ALL ISOLATION TRANSFORMERS CONNECTED TO CIRCUITS #12, #16 AND #17, AT TAXIWAY EDGE LIGHTS, GUIDANCE SIGNS AND WINDCONES, AS APPLICABLE.
3. EXACT ROUTING OF CABLES THROUGH EXISTING INFRASTRUCTURE SHALL BE FIELD VERIFIED.

- 1 APPROXIMATE LOCATION OF EXISTING AIRFIELD LIGHTING ELECTRICAL VAULT. SEE SHEETS ED201 FOR DEMOLITION SCOPE OF WORK. EXACT ROUTING OF "HOMERUN" CONDUITS AND DUCTBANKS TO VAULT SHALL BE FIELD DETERMINED.
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- 5 EXISTING GUIDANCE SIGNS AND CONCRETE PADS TO REMAIN ON CIRCUITS #12, #16 AND #17. REPLACE ISOLATION TRANSFORMER AND CONNECTIONS. SIZE ISOLATION TRANSFORMER PER EACH SIGN LOAD, PER MANUFACTURER'S RECOMMENDATION.

NORTH

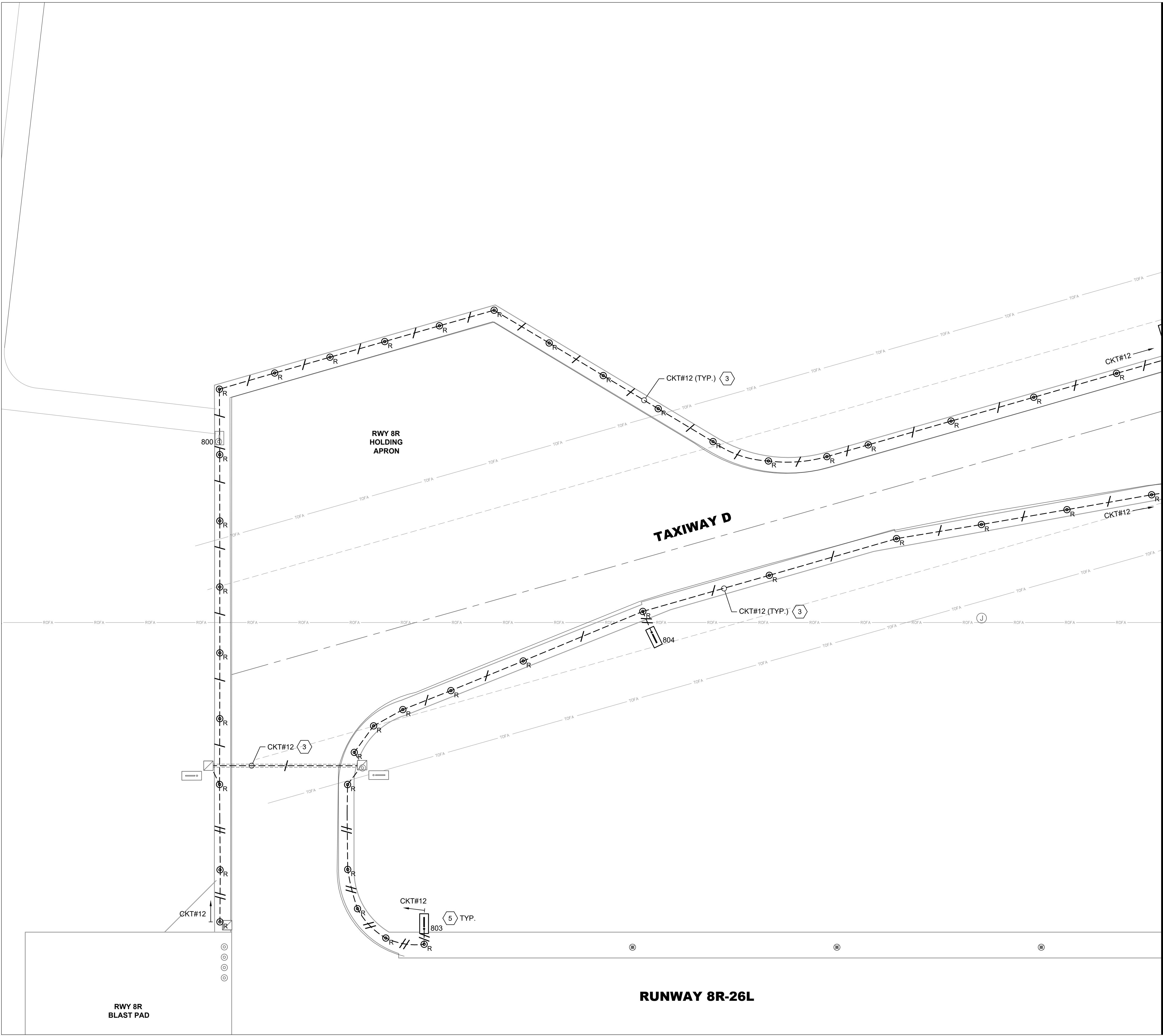


SCALE IN FEET



KEY PLAN

PLOTTED ON: 5/30/2025
PLOTTER BY: RAYCHERS
FILE LOCATION: P:\GERALD_FORD_INT\10105865_GRR_AIRFIELD_LIGHTING_ONCALL_2025_2030\10105865001_GRR_TAXIWAY_D_LIGHTING_REHAB\03.00
PROJECT EXECUTION\03.05.DWG\5_MODELS\CAD\ETWD ED1XX.DWG



LEGEND:

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- EXISTING ELECTRICAL HANDHOLE TO REMAIN
- EXISTING ELECTRICAL MANHOLE TO REMAIN
- EXISTING COMMUNICATIONS MANHOLE TO REMAIN

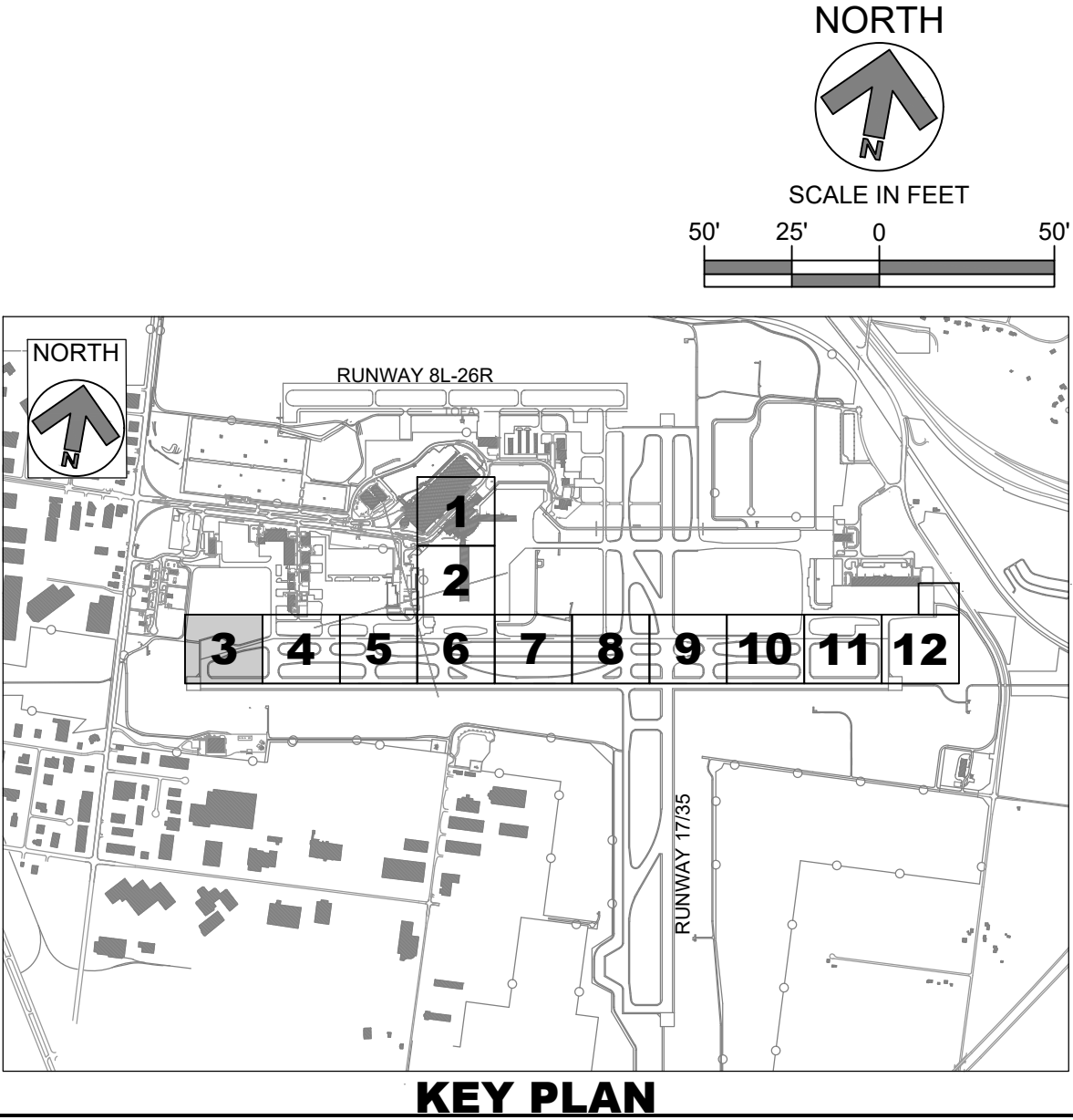
CKT #12 = TAXIWAY DELTA WEST
CKT #16 = TAXIWAY DELTA EAST
CKT #17 = TAXIWAY DELTA CENTER

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REVISIONS

NO.	DESCRIPTION	DATE

DATE ISSUED: MAY 2025
REVIEWED BY: MAR
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DESIGNED BY: EE

RS&H PROJECT NUMBER
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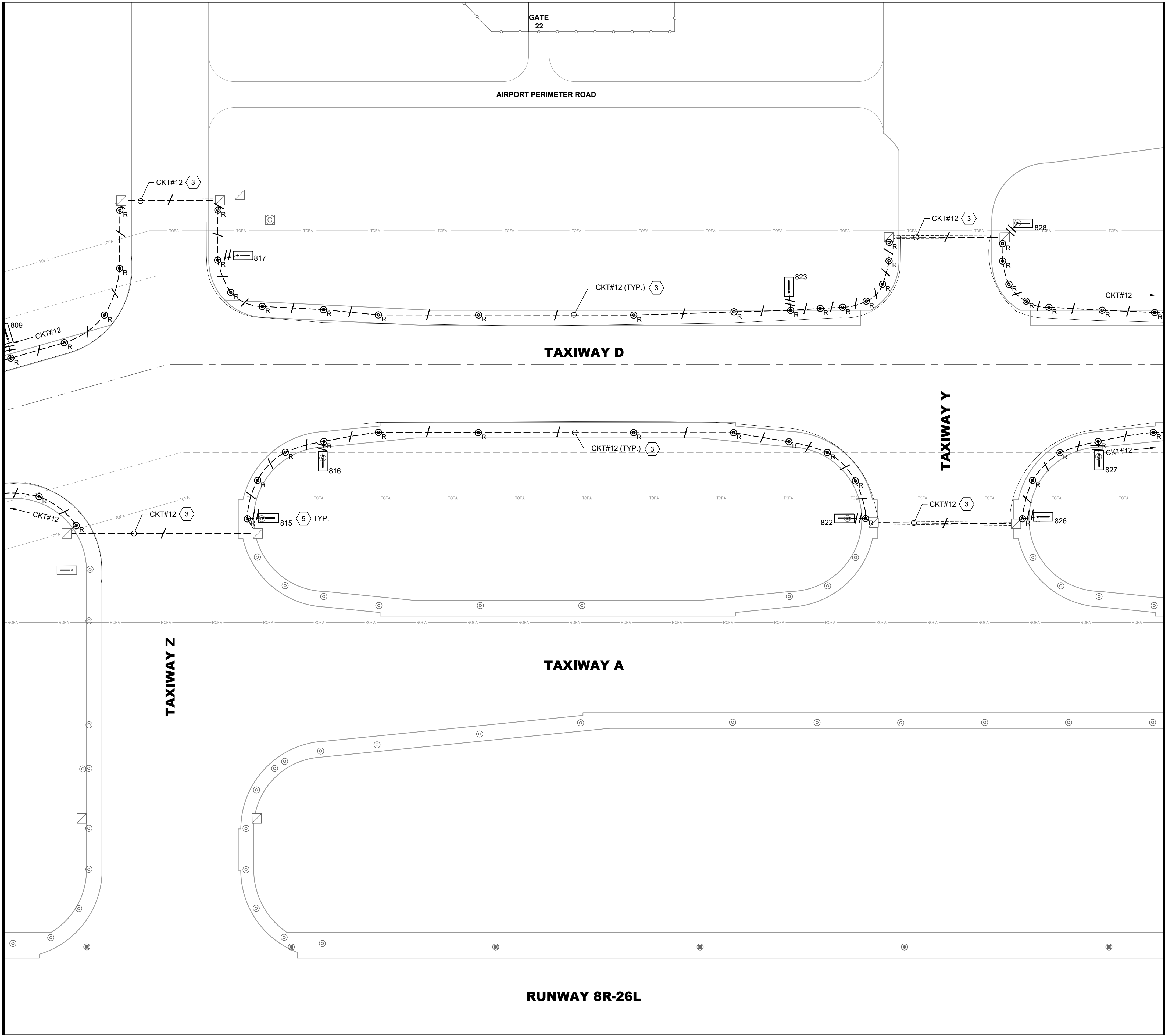
SHEET TITLE
DEMOLITION
AIRFIELD
LIGHTING PLAN
- AREA 3

SHEET NUMBER
ED103

ISSUED FOR
BID

PLOTTED ON: 5/30/2025
FILE LOCATION: P:\GERALD_FORD_INTL\10105865_GRR_AIRFIELD_LIGHTING_ONCALL_2025_2030\10105865001_GRR_TAXIWAY_D_LIGHTING_REHAB\03.00
PROJECT EXECUTION\03.05.DWG

MATCH LINE - SEE SHEET ED103



MATCH LINE - SEE SHEET ED105

LEGEND:

- CKT#
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L-824 5KV CABLE IN EXISTING CONDUIT, REMOVE AND REPLACE WITH NEW CABLE, EXISTING CONDUIT TO REMAIN. HASH MARKS INDICATE NUMBER OF CABLES, CKT # = CIRCUIT DESIGNATOR
- EXISTING ELECTRICAL DUCT BANK
- ⊙
EXISTING RUNWAY EDGE LIGHT TO REMAIN
- ⊙
EXISTING TAXIWAY EDGE LIGHT TO REMAIN
- ⊙_R
EXISTING TAXIWAY EDGE LIGHT, REMOVE AND REPLACE WITH NEW LED FIXTURE, EXISTING BASE CAN TO BE REUSED
- ⊞
EXISTING AIRFIELD GUIDANCE SIGN TO REMAIN
- ⊞_{XXX}
EXISTING AIRFIELD GUIDANCE SIGN, REMOVE AND REPLACE ISOLATION TRANSFORMER, SIGN TO REMAIN. XXX = SIGN NUMBER
- ⊞
EXISTING WINDCONE TO REMAIN, REMOVE AND REPLACE ISOLATION TRANSFORMER
- ⊙
EXISTING SINGLE JUNCTION CAN TO REMAIN
- ⊞
EXISTING ELECTRICAL HANDHOLE TO REMAIN
- ⊞
EXISTING ELECTRICAL MANHOLE TO REMAIN
- ⊞
EXISTING COMMUNICATIONS MANHOLE TO REMAIN

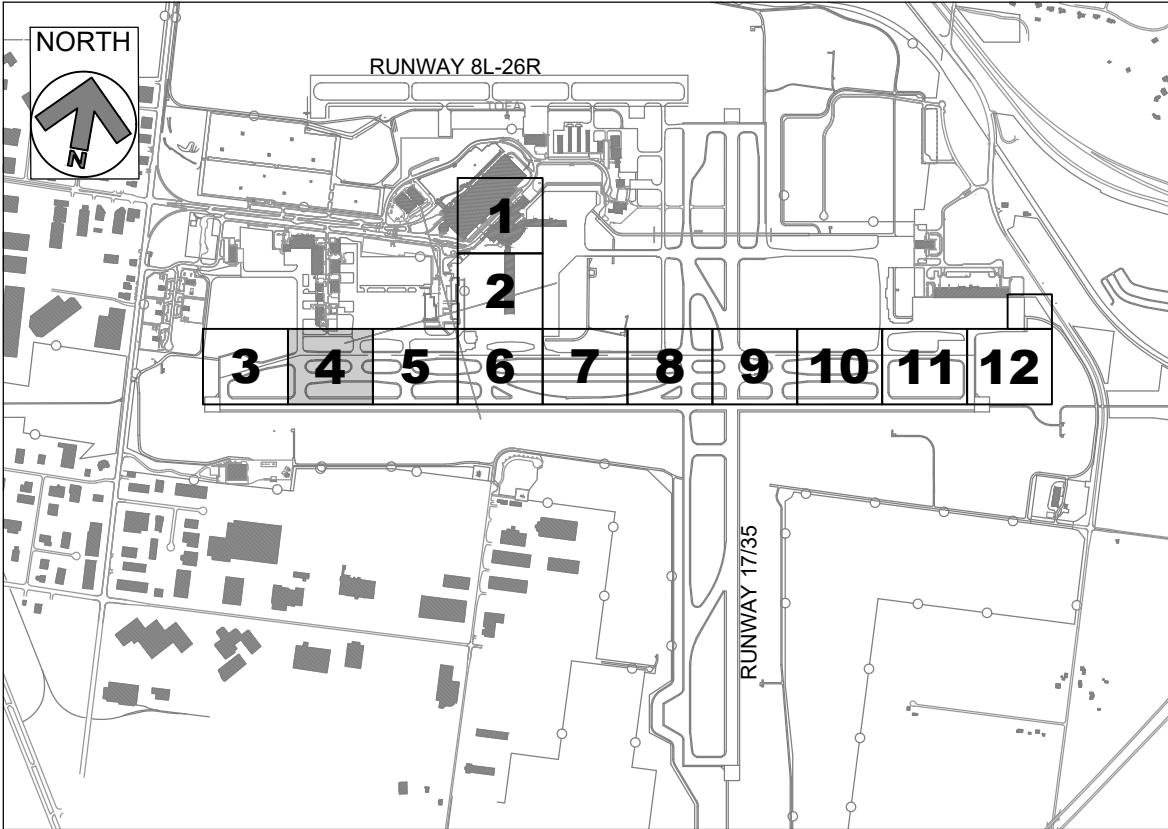
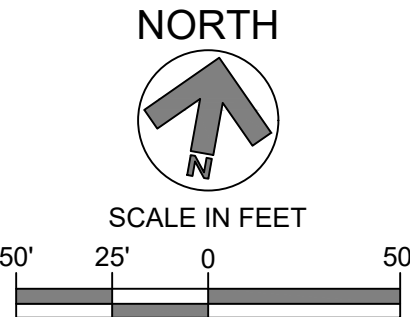
CKT #12 = TAXIWAY DELTA WEST
CKT #16 = TAXIWAY DELTA EAST
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GENERAL NOTES:

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KEY PLAN



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**GERALD R. FORD
INTERNATIONAL
AIRPORT**

**TAXIWAY D
LIGHTING
REHABILITATION**



REVISIONS

NO.	DESCRIPTION	DATE

DATE ISSUED: MAY 2025
REVIEWED BY: MAR
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SHEET TITLE
**DEMOLITION
AIRFIELD
LIGHTING PLAN
- AREA 4**

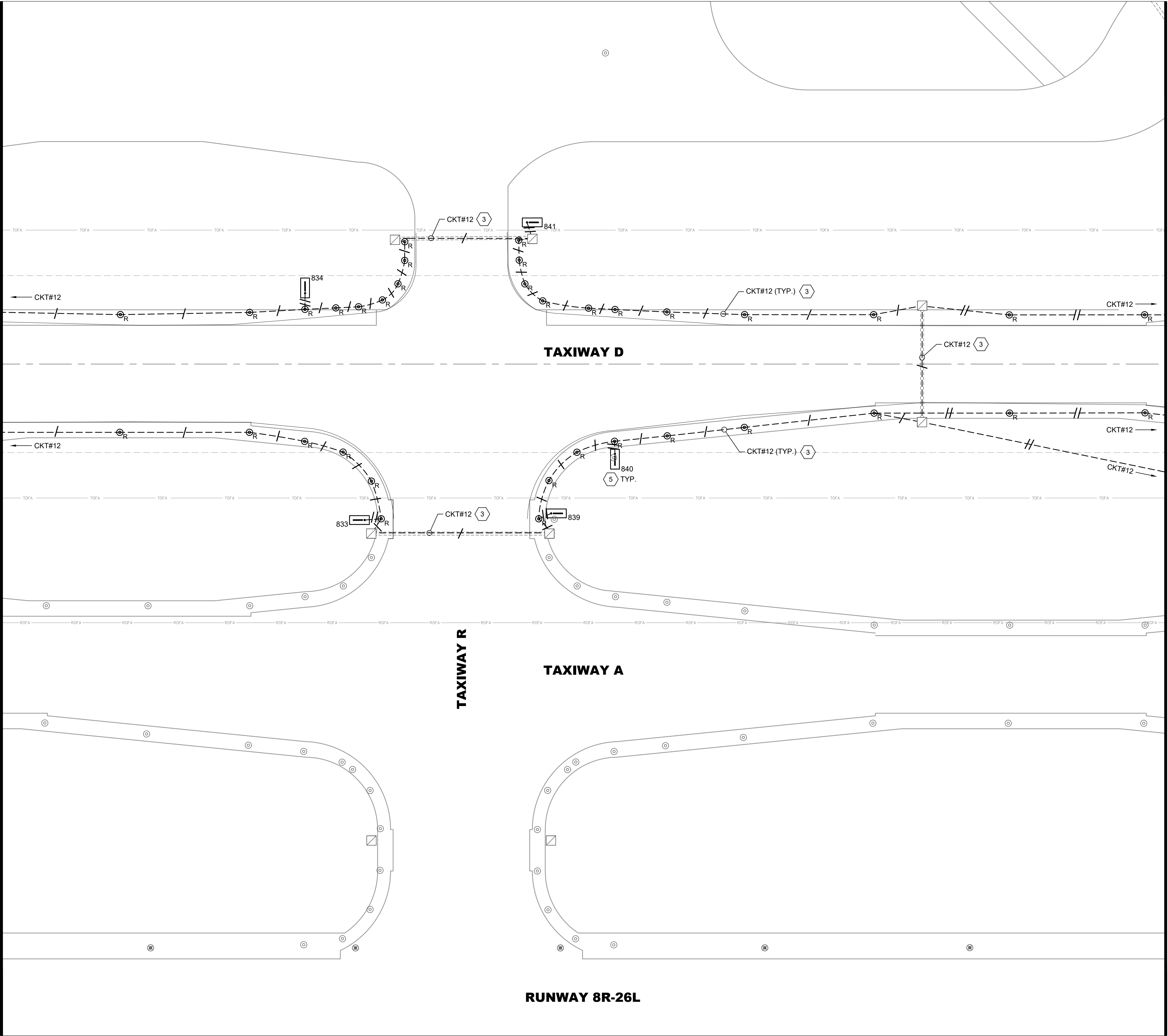
SHEET NUMBER
ED104

**ISSUED FOR
BID**

PLOTTED ON: 5/30/2025
PLOTTED BY: RAYCHERS
FILE LOCATION: P:\GERALD_FORD_INT\10105865_GRR_AIRFIELD_LIGHTING_ONCALL_2025_2030\10105865001_GRR_TAXIWAY_D_LIGHTING_REHAB\03.00
PROJECT EXECUTION\03.05.DWG\SCAD\ETWD.ED1XX.DWG

MATCH LINE - SEE SHEET ED104

MATCH LINE - SEE SHEET ED106



LEGEND:

- CKT# L-824 5KV CABLE IN EXISTING CONDUIT, REMOVE AND REPLACE WITH NEW CABLE, EXISTING CONDUIT TO REMAIN. HASH MARKS INDICATE NUMBER OF CABLES, CKT # = CIRCUIT DESIGNATOR
- EXISTING ELECTRICAL DUCT BANK
- EXISTING RUNWAY EDGE LIGHT TO REMAIN
- EXISTING TAXIWAY EDGE LIGHT TO REMAIN
- EXISTING TAXIWAY EDGE LIGHT, REMOVE AND REPLACE WITH NEW LED FIXTURE, EXISTING BASE CAN TO BE REUSED
- EXISTING AIRFIELD GUIDANCE SIGN TO REMAIN
- EXISTING AIRFIELD GUIDANCE SIGN, REMOVE AND REPLACE ISOLATION TRANSFORMER, SIGN TO REMAIN. XXX = SIGN NUMBER
- EXISTING WINDCONE TO REMAIN, REMOVE AND REPLACE ISOLATION TRANSFORMER
- EXISTING SINGLE JUNCTION CAN TO REMAIN
- EXISTING ELECTRICAL HANDHOLE TO REMAIN
- EXISTING ELECTRICAL MANHOLE TO REMAIN
- EXISTING COMMUNICATIONS MANHOLE TO REMAIN

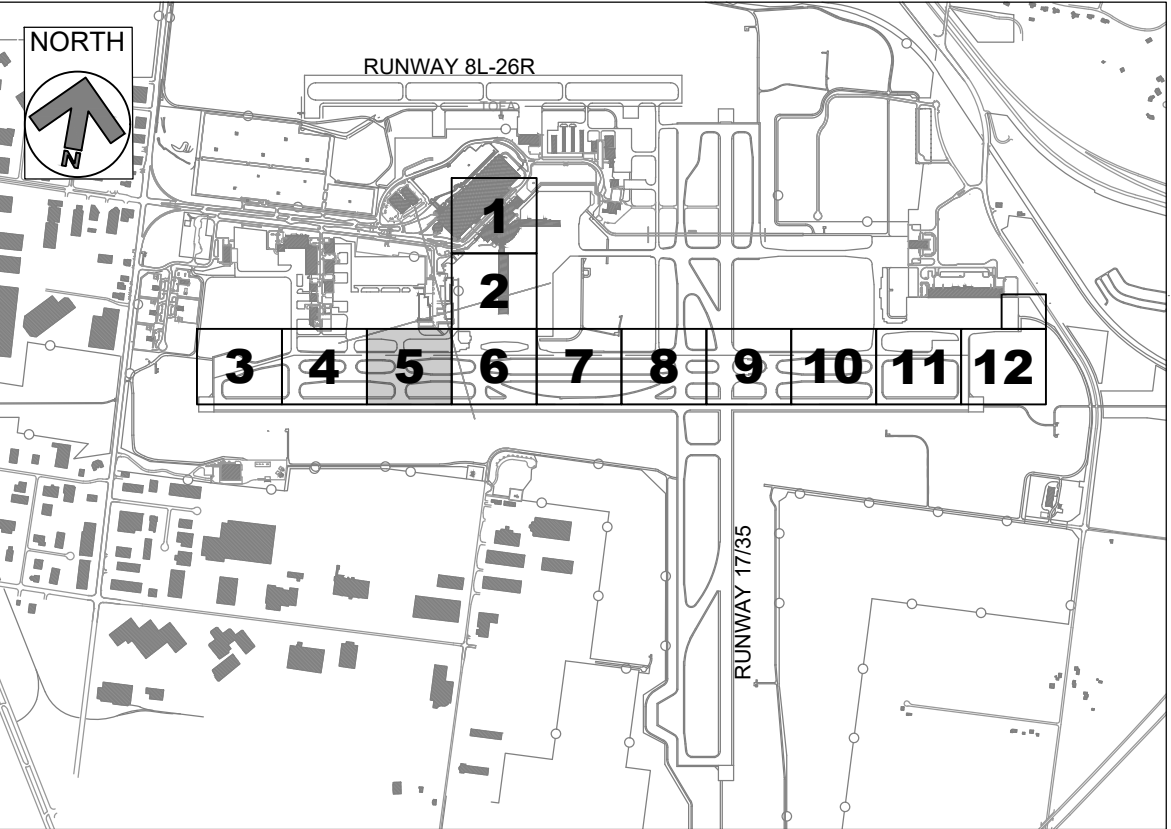
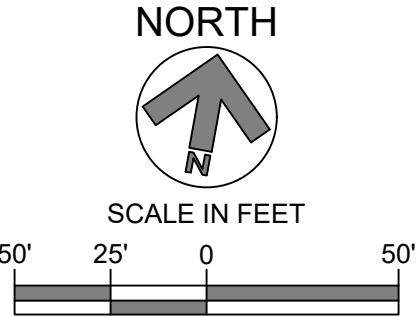
CKT #12 = TAXIWAY DELTA WEST
CKT #16 = TAXIWAY DELTA EAST
CKT #17 = TAXIWAY DELTA CENTER

GENERAL NOTES:

- SEE E001 FOR GENERAL ELECTRICAL NOTES.
- REMOVE AND REPLACE ALL ISOLATION TRANSFORMERS CONNECTED TO CIRCUITS #12, #16 AND #17, AT TAXIWAY EDGE LIGHTS, GUIDANCE SIGNS AND WINDCONES, AS APPLICABLE.
- EXACT ROUTING OF CABLES THROUGH EXISTING INFRASTRUCTURE SHALL BE FIELD VERIFIED.

KEYED NOTES:

- APPROXIMATE LOCATION OF EXISTING AIRFIELD LIGHTING ELECTRICAL VAULT. SEE SHEETS ED201 FOR DEMOLITION SCOPE OF WORK. EXACT ROUTING OF "HOMERUN" CONDUITS AND DUCTBANKS TO VAULT SHALL BE FIELD DETERMINED.
- REMOVE AND REPLACE TAXIWAY DELTA "HOMERUN" CIRCUITS #12, #16, AND #17 FROM EXISTING DUCTBANKS. ALL OTHER CIRCUITS SHALL BE PROTECTED IN PLACE.
- REMOVE AND REPLACE TAXIWAY DELTA CIRCUITS #12, #16, AND #17 FROM EXISTING CONDUITS. ALL OTHER CIRCUITS SHALL BE PROTECTED IN PLACE.
- ALL PROPOSED AND EXISTING WIRING TO BE PROPERLY IDENTIFIED, RACKED, AND TAGGED IN EACH MANHOLE. PROVIDE A MINIMUM OF ONE (1) LOOP OF WIRING IN EACH MANHOLE FOR EACH NEW CIRCUIT HOMERUN WIRE. CLEAN HOMERUN MANHOLES. ANY DEWATERING SHALL BE INCIDENTAL TO INSTALLATION OF NEW WIRING.
- EXISTING GUIDANCE SIGNS AND CONCRETE PADS TO REMAIN ON CIRCUITS #12, #16 AND #17. REPLACE ISOLATION TRANSFORMER AND CONNECTIONS. SIZE ISOLATION TRANSFORMER PER EACH SIGN LOAD, PER MANUFACTURER'S RECOMMENDATION.



KEY PLAN



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**GERALD R. FORD
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AIRPORT**

**TAXIWAY D
LIGHTING
REHABILITATION**



REVISIONS

NO.	DESCRIPTION	DATE

DATE ISSUED: MAY 2025
REVIEWED BY: MAR
DRAWN BY: AZ
DESIGNED BY: EE

RS&H PROJECT NUMBER
1010-5865-001

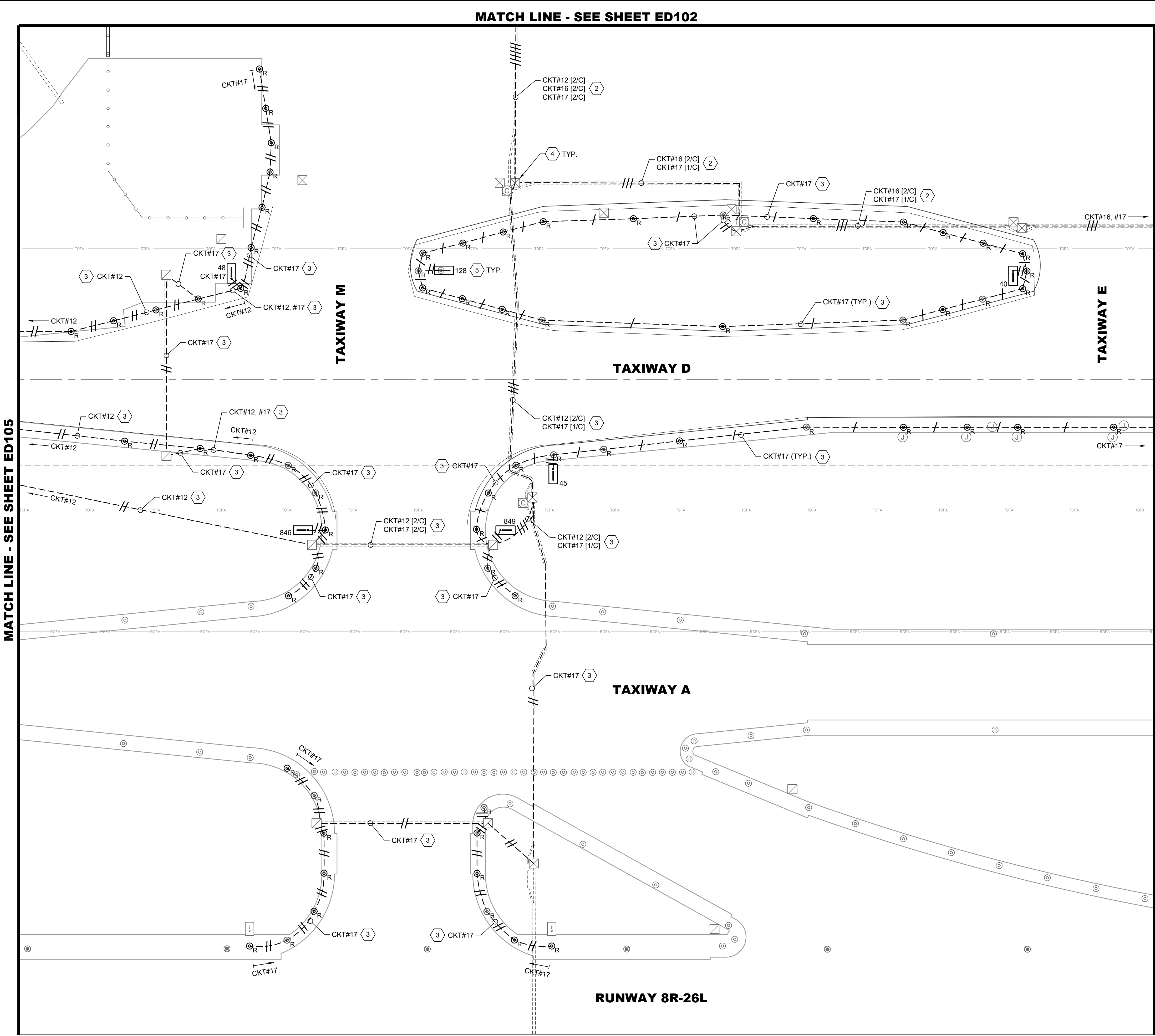
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SHEET TITLE
**DEMOLITION
AIRFIELD
LIGHTING PLAN
- AREA 5**

SHEET NUMBER
ED105

**ISSUED FOR
BID**

5/30/2025
PLOTTER: RAYCHERS
FILE LOCATION: P:\GERALD_FORD_INTL\10105865_GRR_AIRFIELD_LIGHTING_ONCALL_2025_2030\10105865001_GRR_TAXIWAY_D_LIGHTING_REHAB\03.00
PROJECT EXECUTION\03.05.DWG



LEGEND:

- CKT#
---//---
L-824 5KV CABLE IN EXISTING CONDUIT, REMOVE AND REPLACE WITH NEW CABLE, EXISTING CONDUIT TO REMAIN. HASH MARKS INDICATE NUMBER OF CABLES, CKT # = CIRCUIT DESIGNATOR
- EXISTING ELECTRICAL DUCT BANK
- ⊙
EXISTING RUNWAY EDGE LIGHT TO REMAIN
- ⊙
EXISTING TAXIWAY EDGE LIGHT TO REMAIN
- ⊙_R
EXISTING TAXIWAY EDGE LIGHT, REMOVE AND REPLACE WITH NEW LED FIXTURE, EXISTING BASE CAN TO BE REUSED
- ⊞
EXISTING AIRFIELD GUIDANCE SIGN TO REMAIN
- ⊞_{XXX}
EXISTING AIRFIELD GUIDANCE SIGN, REMOVE AND REPLACE ISOLATION TRANSFORMER, SIGN TO REMAIN. XXX = SIGN NUMBER
- ⏏
EXISTING WINDCONE TO REMAIN, REMOVE AND REPLACE ISOLATION TRANSFORMER
- ⋈
EXISTING SINGLE JUNCTION CAN TO REMAIN
- ⊞
EXISTING ELECTRICAL HANDHOLE TO REMAIN
- ⊞
EXISTING ELECTRICAL MANHOLE TO REMAIN
- ⊞_C
EXISTING COMMUNICATIONS MANHOLE TO REMAIN

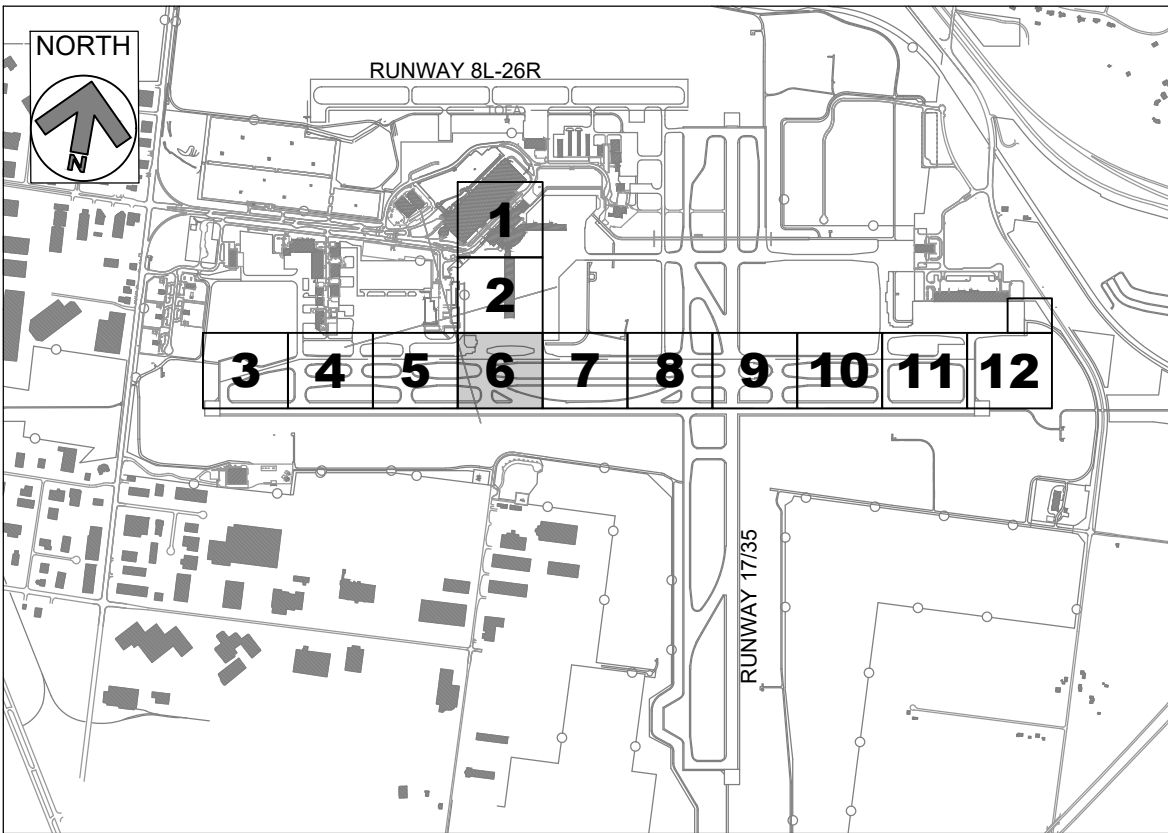
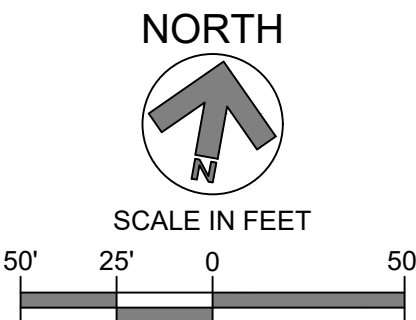
CKT #12 = TAXIWAY DELTA WEST
CKT #16 = TAXIWAY DELTA EAST
CKT #17 = TAXIWAY DELTA CENTER

GENERAL NOTES:

- SEE E001 FOR GENERAL ELECTRICAL NOTES.
- REMOVE AND REPLACE ALL ISOLATION TRANSFORMERS CONNECTED TO CIRCUITS #12, #16 AND #17, AT TAXIWAY EDGE LIGHTS, GUIDANCE SIGNS AND WINDCONES, AS APPLICABLE.
- EXACT ROUTING OF CABLES THROUGH EXISTING INFRASTRUCTURE SHALL BE FIELD VERIFIED.

KEYED NOTES:

- APPROXIMATE LOCATION OF EXISTING AIRFIELD LIGHTING ELECTRICAL VAULT. SEE SHEETS ED201 FOR DEMOLITION SCOPE OF WORK. EXACT ROUTING OF "HOMERUN" CONDUITS AND DUCTBANKS TO VAULT SHALL BE FIELD DETERMINED.
- REMOVE AND REPLACE TAXIWAY DELTA "HOMERUN" CIRCUITS #12, #16, AND #17 FROM EXISTING DUCTBANKS. ALL OTHER CIRCUITS SHALL BE PROTECTED IN PLACE.
- REMOVE AND REPLACE TAXIWAY DELTA CIRCUITS #12, #16, AND #17 FROM EXISTING CONDUITS. ALL OTHER CIRCUITS SHALL BE PROTECTED IN PLACE.
- ALL PROPOSED AND EXISTING WIRING TO BE PROPERLY IDENTIFIED, RACKED, AND TAGGED IN EACH MANHOLE. PROVIDE A MINIMUM OF ONE (1) LOOP OF WIRING IN EACH MANHOLE FOR EACH NEW CIRCUIT HOMERUN WIRE. CLEAN HOMERUN MANHOLES. ANY DEWATERING SHALL BE INCIDENTAL TO INSTALLATION OF NEW WIRING.
- EXISTING GUIDANCE SIGNS AND CONCRETE PADS TO REMAIN ON CIRCUITS #12, #16 AND #17. REPLACE ISOLATION TRANSFORMER AND CONNECTIONS. SIZE ISOLATION TRANSFORMER PER EACH SIGN LOAD, PER MANUFACTURER'S RECOMMENDATION.



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AIRPORT**

**TAXIWAY D
LIGHTING
REHABILITATION**



REVISIONS

NO.	DESCRIPTION	DATE

DATE ISSUED: MAY 2025

REVIEWED BY: MAR

DRAWN BY: AZ

DESIGNED BY: EE

RS&H PROJECT NUMBER
1010-5865-001

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SHEET TITLE
**DEMOLITION
AIRFIELD
LIGHTING PLAN
- AREA 6**

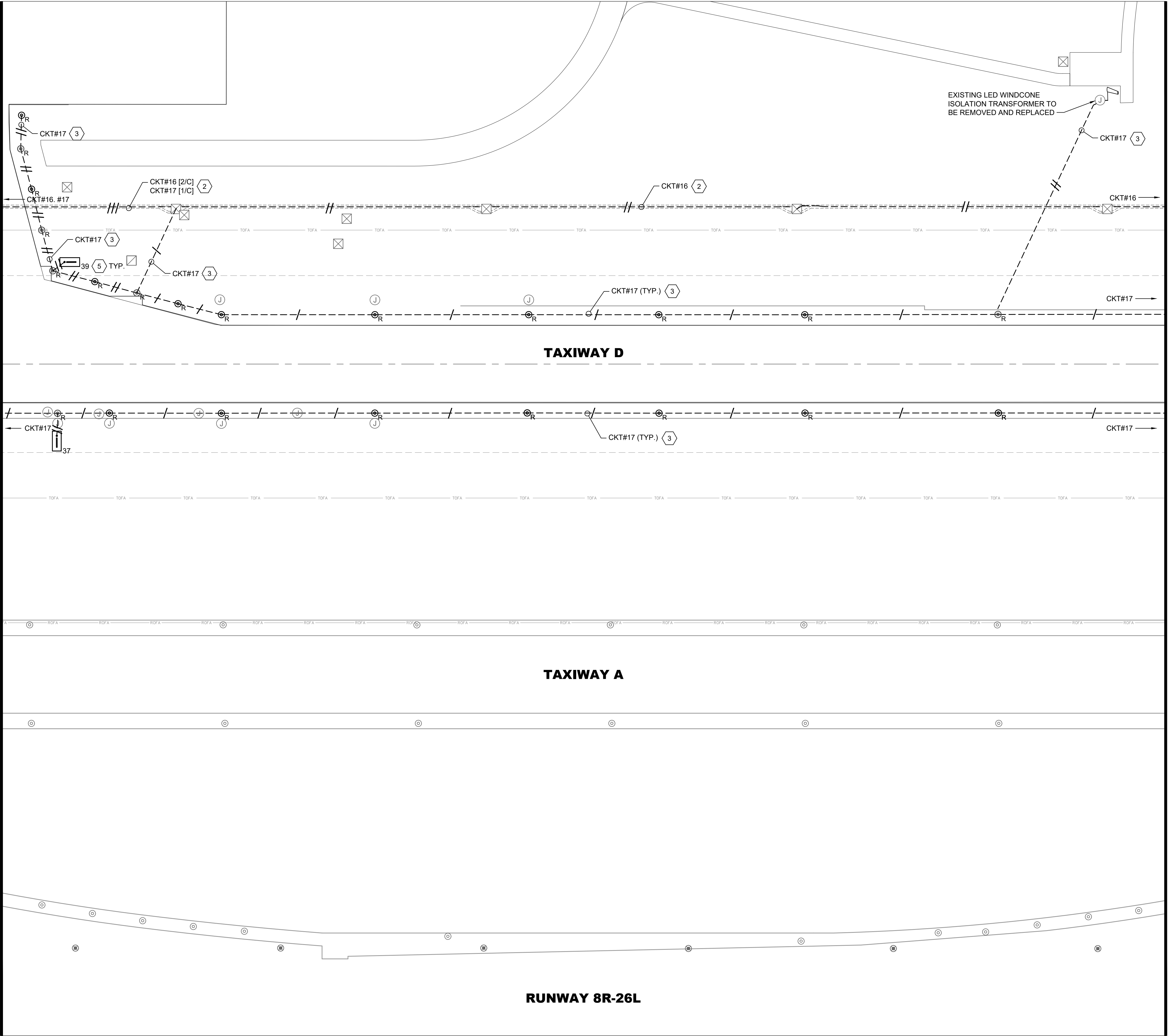
SHEET NUMBER
ED106

**ISSUED FOR
BID**

5/30/2025
RAYCHERS
P:\GERALD_FORD_INT\10105865_GRR_AIRFIELD_LIGHTING_ONCALL_2025_2030\10105865001_GRR_TAXIWAY_D_LIGHTING_REHAB\03.00
PROJECT EXECUTION\03.05.DWG\SCAD\ETWD ED1XX.DWG

MATCH LINE - SEE SHEET ED106

MATCH LINE - SEE SHEET ED108



LEGEND:

- CKT#
---//---
L-824 5KV CABLE IN EXISTING CONDUIT, REMOVE AND REPLACE WITH NEW CABLE, EXISTING CONDUIT TO REMAIN. HASH MARKS INDICATE NUMBER OF CABLES, CKT # = CIRCUIT DESIGNATOR
- EXISTING ELECTRICAL DUCT BANK
- ⊙
EXISTING RUNWAY EDGE LIGHT TO REMAIN
- ⊙
EXISTING TAXIWAY EDGE LIGHT TO REMAIN
- ⊙_R
EXISTING TAXIWAY EDGE LIGHT, REMOVE AND REPLACE WITH NEW LED FIXTURE, EXISTING BASE CAN TO BE REUSED
- ⊞
EXISTING AIRFIELD GUIDANCE SIGN TO REMAIN
- ⊞ XXX
EXISTING AIRFIELD GUIDANCE SIGN, REMOVE AND REPLACE ISOLATION TRANSFORMER, SIGN TO REMAIN. XXX = SIGN NUMBER
- ⏏
EXISTING WINDCONE TO REMAIN, REMOVE AND REPLACE ISOLATION TRANSFORMER
- ⓐ
EXISTING SINGLE JUNCTION CAN TO REMAIN
- ⓐ
EXISTING ELECTRICAL HANDHOLE TO REMAIN
- ⓐ
EXISTING ELECTRICAL MANHOLE TO REMAIN
- ⓐ
EXISTING COMMUNICATIONS MANHOLE TO REMAIN

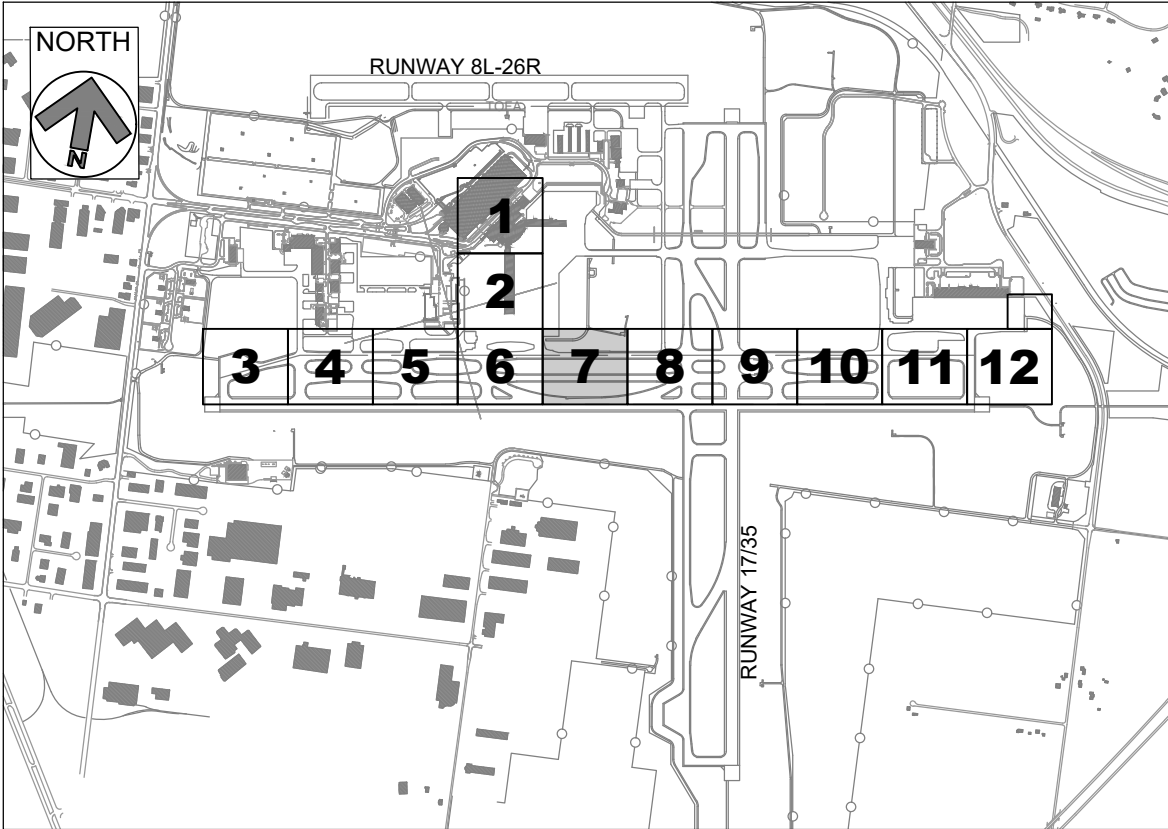
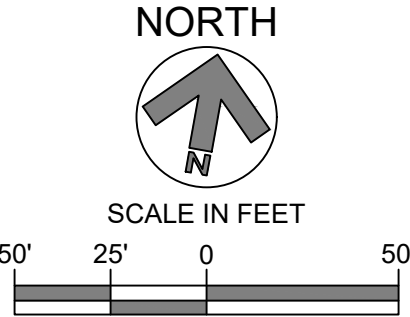
CKT #12 = TAXIWAY DELTA WEST
CKT #16 = TAXIWAY DELTA EAST
CKT #17 = TAXIWAY DELTA CENTER

GENERAL NOTES:

- SEE E001 FOR GENERAL ELECTRICAL NOTES.
- REMOVE AND REPLACE ALL ISOLATION TRANSFORMERS CONNECTED TO CIRCUITS #12, #16 AND #17, AT TAXIWAY EDGE LIGHTS, GUIDANCE SIGNS AND WINDCONES, AS APPLICABLE.
- EXACT ROUTING OF CABLES THROUGH EXISTING INFRASTRUCTURE SHALL BE FIELD VERIFIED.

KEYED NOTES:

- APPROXIMATE LOCATION OF EXISTING AIRFIELD LIGHTING ELECTRICAL VAULT. SEE SHEETS ED201 FOR DEMOLITION SCOPE OF WORK. EXACT ROUTING OF "HOMERUN" CONDUITS AND DUCTBANKS TO VAULT SHALL BE FIELD DETERMINED.
- REMOVE AND REPLACE TAXIWAY DELTA "HOMERUN" CIRCUITS #12, #16, AND #17 FROM EXISTING DUCTBANKS. ALL OTHER CIRCUITS SHALL BE PROTECTED IN PLACE.
- REMOVE AND REPLACE TAXIWAY DELTA CIRCUITS #12, #16, AND #17 FROM EXISTING CONDUITS. ALL OTHER CIRCUITS SHALL BE PROTECTED IN PLACE.
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- EXISTING GUIDANCE SIGNS AND CONCRETE PADS TO REMAIN ON CIRCUITS #12, #16 AND #17. REPLACE ISOLATION TRANSFORMER AND CONNECTIONS. SIZE ISOLATION TRANSFORMER PER EACH SIGN LOAD, PER MANUFACTURER'S RECOMMENDATION.



KEY PLAN



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AIRPORT**

**TAXIWAY D
LIGHTING
REHABILITATION**



REVISIONS

NO.	DESCRIPTION	DATE

DATE ISSUED: MAY 2025
REVIEWED BY: MAR
DRAWN BY: AZ
DESIGNED BY: EE

RS&H PROJECT NUMBER
1010-5865-001

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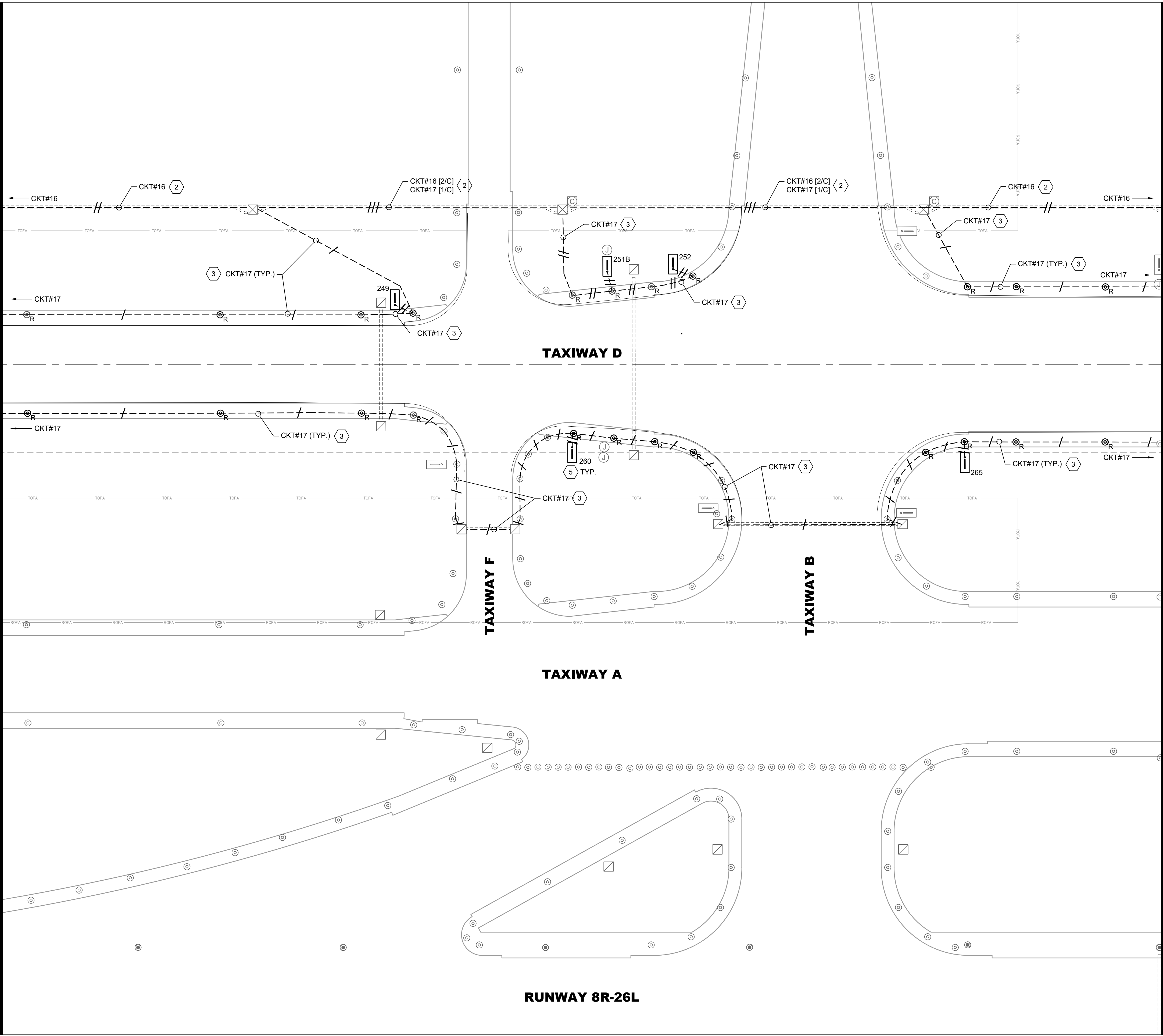
SHEET TITLE
**DEMOLITION
AIRFIELD
LIGHTING PLAN
- AREA 7**

SHEET NUMBER
ED107

**ISSUED FOR
BID**

PLOTTED ON: 5/30/2025
PLOTTER BY: RAYCHERS
FILE LOCATION: P:\GERALD_FORD_INTL\10105865_GRR_AIRFIELD_LIGHTING_ONCALL_2025_2030\10105865001_GRR_TAXIWAY_D_LIGHTING_REHAB\03.00
PROJECT EXECUTION\03.05.DWG\5_MODELS\CAD\ET\MD ED1XX.DWG

MATCH LINE - SEE SHEET ED107



MATCH LINE - SEE SHEET ED109

LEGEND:

- CKT# L-824 5KV CABLE IN EXISTING CONDUIT, REMOVE AND REPLACE WITH NEW CABLE, EXISTING CONDUIT TO REMAIN. HASH MARKS INDICATE NUMBER OF CABLES, CKT # = CIRCUIT DESIGNATOR
- EXISTING ELECTRICAL DUCT BANK
- EXISTING RUNWAY EDGE LIGHT TO REMAIN
- EXISTING TAXIWAY EDGE LIGHT TO REMAIN
- EXISTING TAXIWAY EDGE LIGHT, REMOVE AND REPLACE WITH NEW LED FIXTURE, EXISTING BASE CAN TO BE REUSED
- EXISTING AIRFIELD GUIDANCE SIGN TO REMAIN
- EXISTING AIRFIELD GUIDANCE SIGN, REMOVE AND REPLACE ISOLATION TRANSFORMER, SIGN TO REMAIN. XXX = SIGN NUMBER
- EXISTING WINDCONE TO REMAIN, REMOVE AND REPLACE ISOLATION TRANSFORMER
- EXISTING SINGLE JUNCTION CAN TO REMAIN
- EXISTING ELECTRICAL HANDHOLE TO REMAIN
- EXISTING ELECTRICAL MANHOLE TO REMAIN
- EXISTING COMMUNICATIONS MANHOLE TO REMAIN

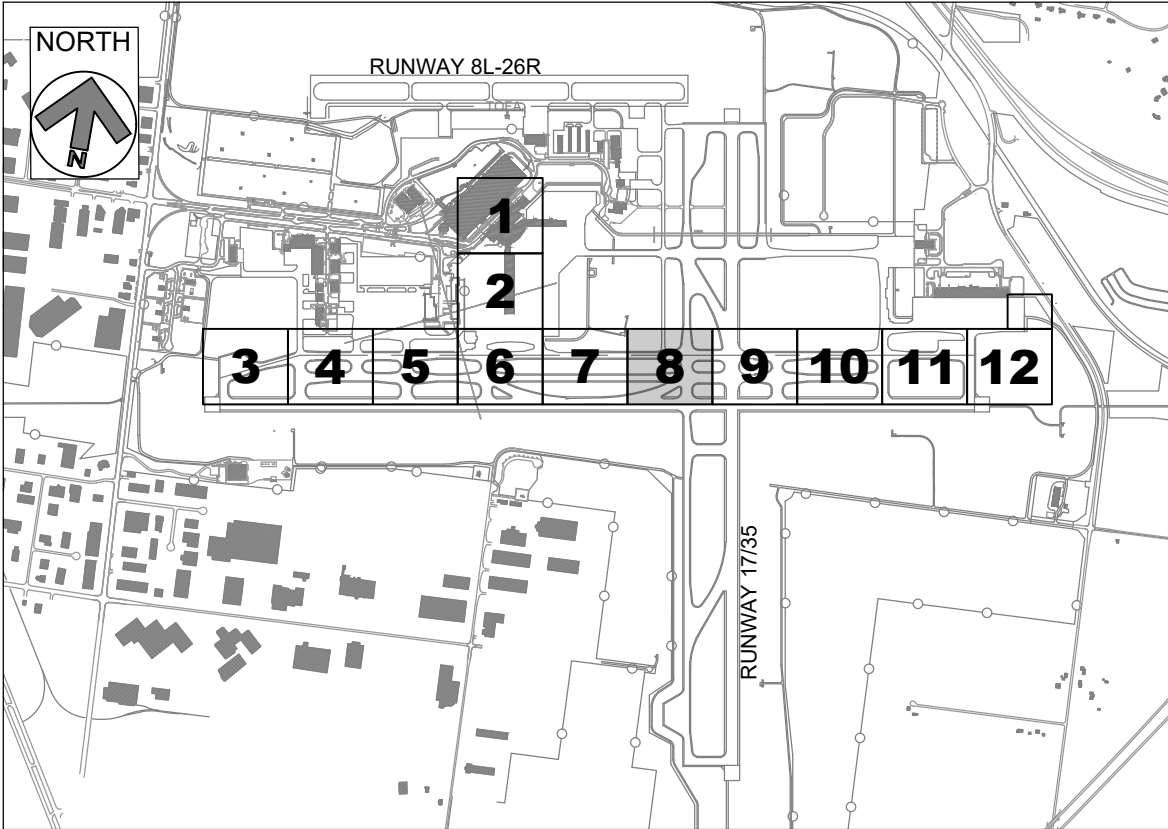
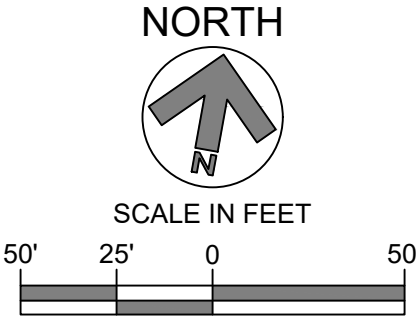
CKT #12 = TAXIWAY DELTA WEST
CKT #16 = TAXIWAY DELTA EAST
CKT #17 = TAXIWAY DELTA CENTER

GENERAL NOTES:

- SEE E001 FOR GENERAL ELECTRICAL NOTES.
- REMOVE AND REPLACE ALL ISOLATION TRANSFORMERS CONNECTED TO CIRCUITS #12, #16 AND #17, AT TAXIWAY EDGE LIGHTS, GUIDANCE SIGNS AND WINDCONES, AS APPLICABLE.
- EXACT ROUTING OF CABLES THROUGH EXISTING INFRASTRUCTURE SHALL BE FIELD VERIFIED.

KEYED NOTES:

- APPROXIMATE LOCATION OF EXISTING AIRFIELD LIGHTING ELECTRICAL VAULT. SEE SHEETS ED201 FOR DEMOLITION SCOPE OF WORK. EXACT ROUTING OF "HOMERUN" CONDUITS AND DUCTBANKS TO VAULT SHALL BE FIELD DETERMINED.
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KEY PLAN



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TAXIWAY D
LIGHTING
REHABILITATION



REVISIONS

NO.	DESCRIPTION	DATE

DATE ISSUED: MAY 2025
REVIEWED BY: MAR
DRAWN BY: AZ
DESIGNED BY: EE

RS&H PROJECT NUMBER
1010-5865-001

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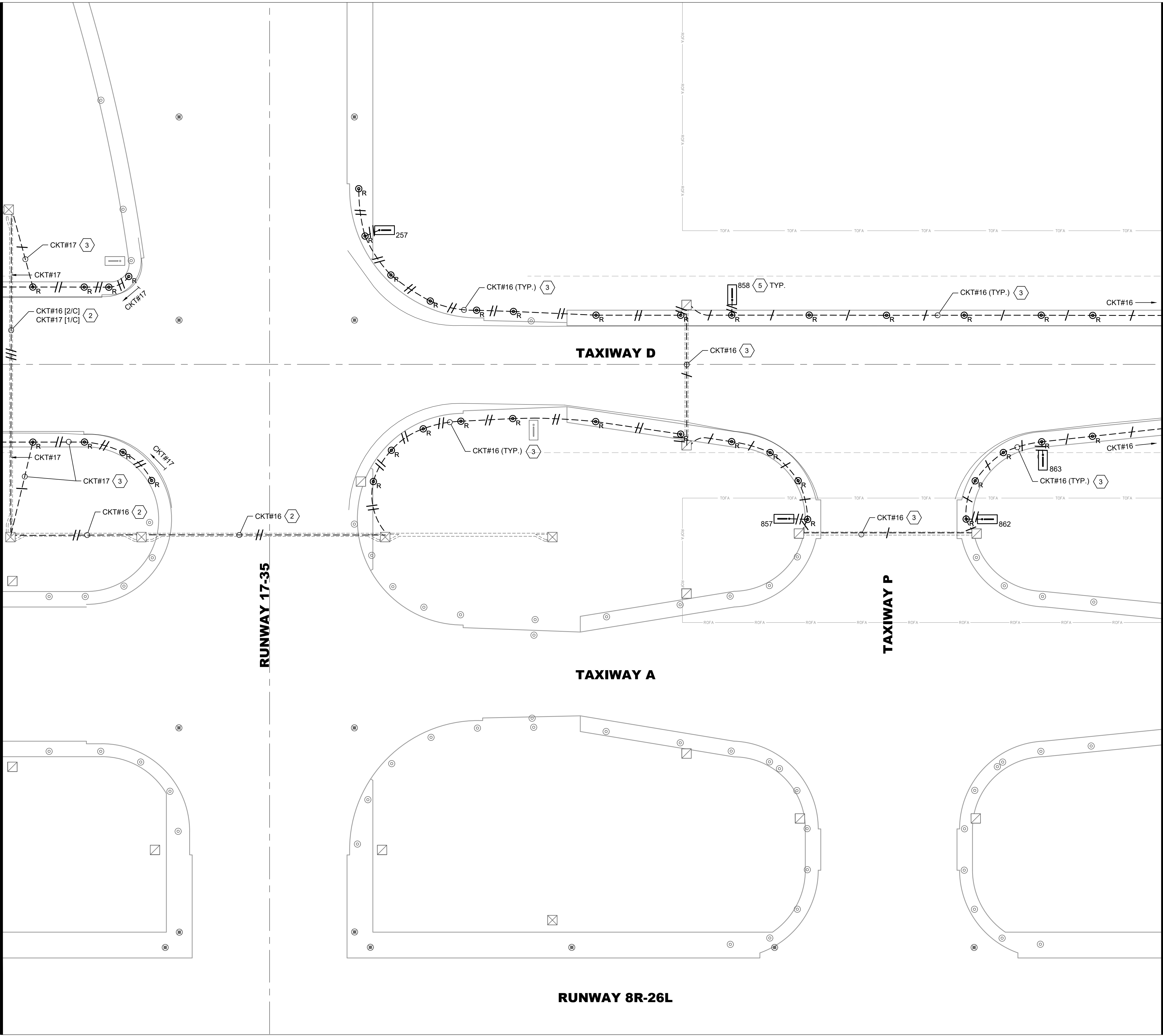
SHEET TITLE
DEMOLITION
AIRFIELD
LIGHTING PLAN
- AREA 8

SHEET NUMBER
ED108

ISSUED FOR
BID

PLOTTED ON: 5/30/2025
PLOTTED BY: RAYCHERS
FILE LOCATION: P:\GERALD_FORD_INT\10105865_GRR_AIRFIELD_LIGHTING_ONCALL_2025_2030\10105865001_GRR_TAXIWAY_D_LIGHTING_REHAB\03.DWG
PROJECT EXECUTION\03.05.DWG\SCAD\ETWD.ED1XX.DEMO.DWG

MATCH LINE - SEE SHEET ED108



MATCH LINE - SEE SHEET ED110

LEGEND:

- CKT# L-824 5KV CABLE IN EXISTING CONDUIT, REMOVE AND REPLACE WITH NEW CABLE, EXISTING CONDUIT TO REMAIN. HASH MARKS INDICATE NUMBER OF CABLES, CKT # = CIRCUIT DESIGNATOR
- EXISTING ELECTRICAL DUCT BANK
- EXISTING RUNWAY EDGE LIGHT TO REMAIN
- EXISTING TAXIWAY EDGE LIGHT TO REMAIN
- EXISTING TAXIWAY EDGE LIGHT, REMOVE AND REPLACE WITH NEW LED FIXTURE, EXISTING BASE CAN TO BE REUSED
- EXISTING AIRFIELD GUIDANCE SIGN TO REMAIN
- EXISTING AIRFIELD GUIDANCE SIGN, REMOVE AND REPLACE ISOLATION TRANSFORMER, SIGN TO REMAIN. XXX = SIGN NUMBER
- EXISTING WINDCONE TO REMAIN, REMOVE AND REPLACE ISOLATION TRANSFORMER
- EXISTING SINGLE JUNCTION CAN TO REMAIN
- EXISTING ELECTRICAL HANDHOLE TO REMAIN
- EXISTING ELECTRICAL MANHOLE TO REMAIN
- EXISTING COMMUNICATIONS MANHOLE TO REMAIN

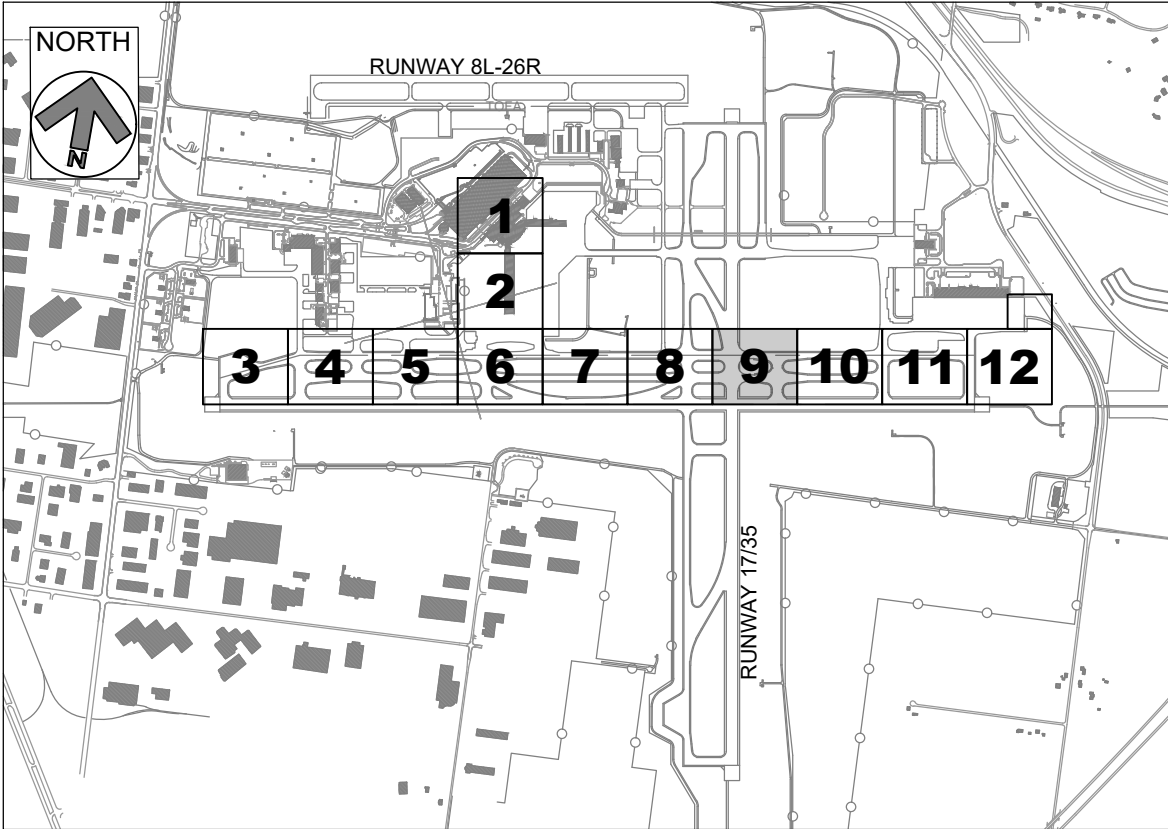
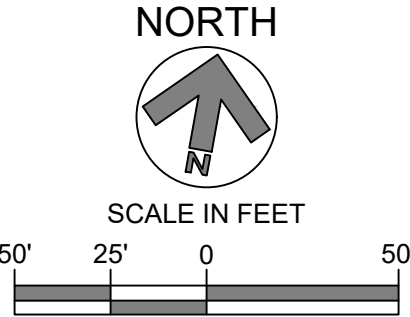
CKT #12 = TAXIWAY DELTA WEST
CKT #16 = TAXIWAY DELTA EAST
CKT #17 = TAXIWAY DELTA CENTER

GENERAL NOTES:

- SEE E001 FOR GENERAL ELECTRICAL NOTES.
- REMOVE AND REPLACE ALL ISOLATION TRANSFORMERS CONNECTED TO CIRCUITS #12, #16 AND #17, AT TAXIWAY EDGE LIGHTS, GUIDANCE SIGNS AND WINDCONES, AS APPLICABLE.
- EXACT ROUTING OF CABLES THROUGH EXISTING INFRASTRUCTURE SHALL BE FIELD VERIFIED.

KEYED NOTES:

- APPROXIMATE LOCATION OF EXISTING AIRFIELD LIGHTING ELECTRICAL VAULT. SEE SHEETS ED201 FOR DEMOLITION SCOPE OF WORK. EXACT ROUTING OF "HOMERUN" CONDUITS AND DUCTBANKS TO VAULT SHALL BE FIELD DETERMINED.
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KEY PLAN



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TAXIWAY D
LIGHTING
REHABILITATION



REVISIONS

NO.	DESCRIPTION	DATE

DATE ISSUED: MAY 2025
REVIEWED BY: MAR
DRAWN BY: AZ
DESIGNED BY: EE

RS&H PROJECT NUMBER
1010-5865-001

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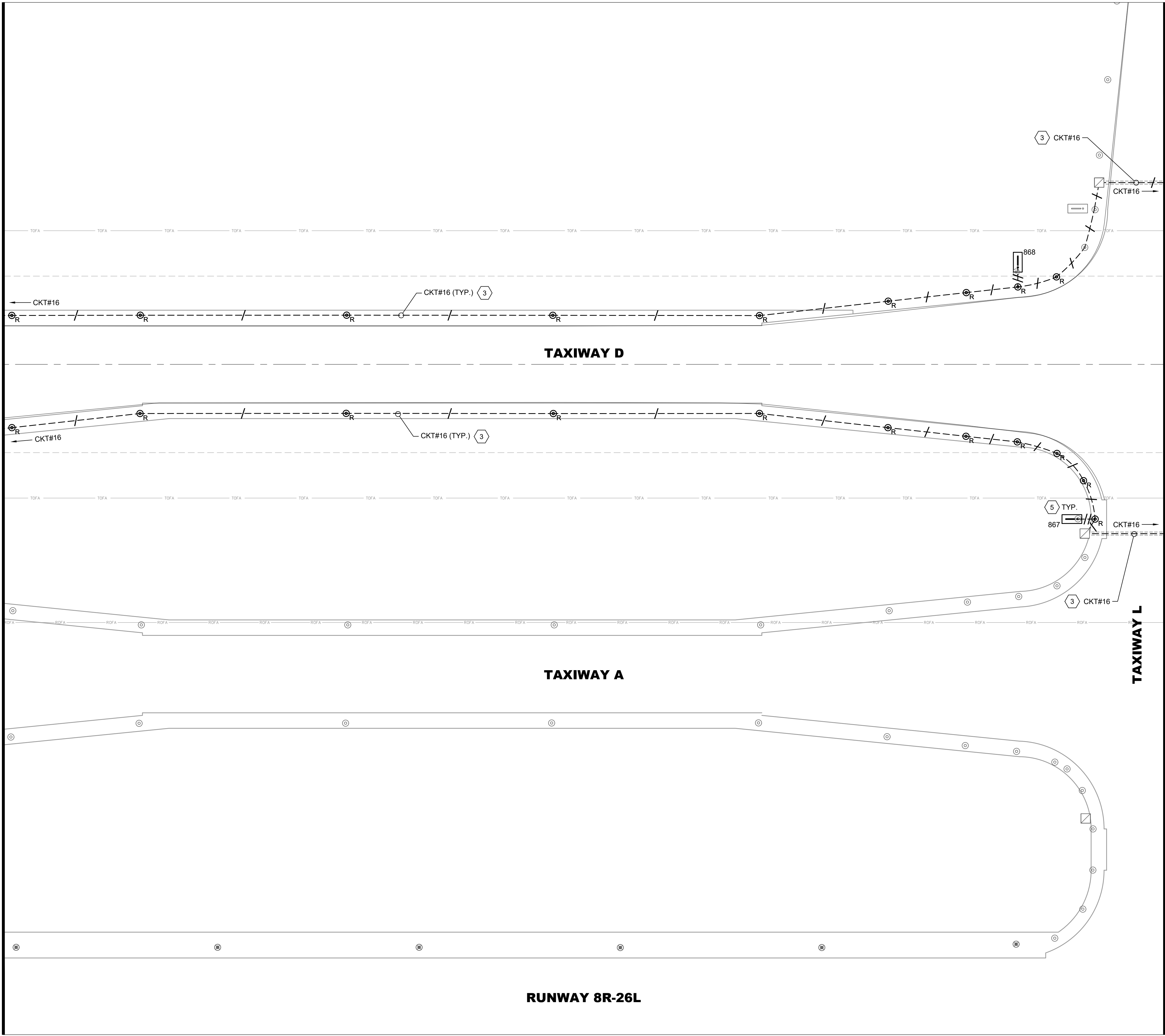
SHEET TITLE
DEMOLITION
AIRFIELD
LIGHTING PLAN
- AREA 9

SHEET NUMBER
ED109

ISSUED FOR
BID

PLOTTED ON: 5/30/2025
PLOTTED BY: RAYCHERS
FILE LOCATION: P:\GERALD_FORD_INT\10105865_GRR_AIRFIELD_LIGHTING_ONCALL_2025_2030\10105865001_GRR_TAXIWAY_D_LIGHTING_REHAB\03.00
PROJECT EXECUTION\03.05.DWG\SCAD\ETWD ED1XX.DWG

MATCH LINE - SEE SHEET ED109



MATCH LINE - SEE SHEET ED111

LEGEND:

- CKT#
L-824 5KV CABLE IN EXISTING CONDUIT, REMOVE AND REPLACE WITH NEW CABLE, EXISTING CONDUIT TO REMAIN. HASH MARKS INDICATE NUMBER OF CABLES, CKT # = CIRCUIT DESIGNATOR
- EXISTING ELECTRICAL DUCT BANK
- EXISTING RUNWAY EDGE LIGHT TO REMAIN
- EXISTING TAXIWAY EDGE LIGHT TO REMAIN
- EXISTING TAXIWAY EDGE LIGHT, REMOVE AND REPLACE WITH NEW LED FIXTURE, EXISTING BASE CAN TO BE REUSED
- EXISTING AIRFIELD GUIDANCE SIGN TO REMAIN
- EXISTING AIRFIELD GUIDANCE SIGN, REMOVE AND REPLACE ISOLATION TRANSFORMER, SIGN TO REMAIN. XXX = SIGN NUMBER
- EXISTING WINDCONE TO REMAIN, REMOVE AND REPLACE ISOLATION TRANSFORMER
- EXISTING SINGLE JUNCTION CAN TO REMAIN
- EXISTING ELECTRICAL HANDHOLE TO REMAIN
- EXISTING ELECTRICAL MANHOLE TO REMAIN
- EXISTING COMMUNICATIONS MANHOLE TO REMAIN

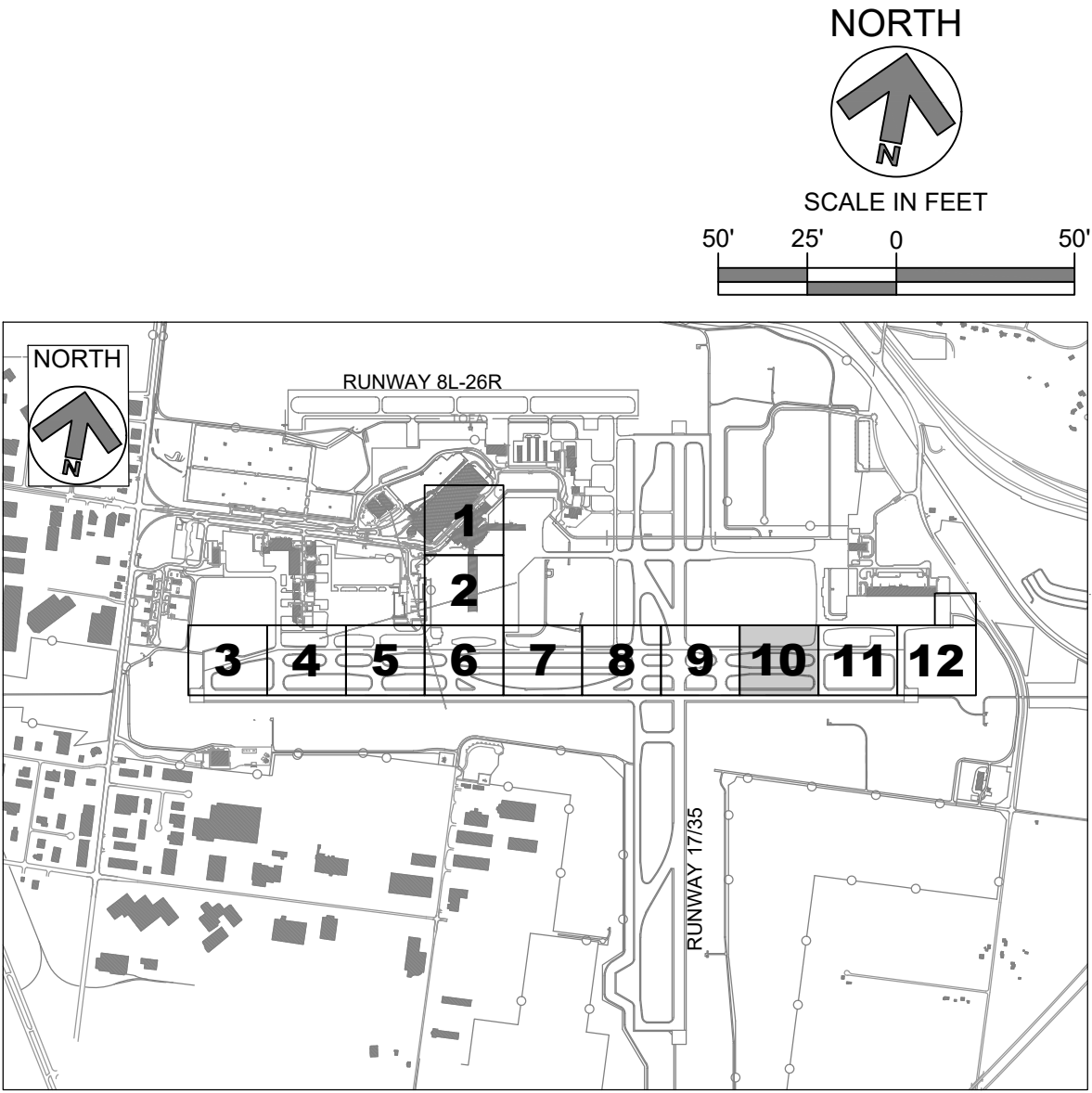
CKT #12 = TAXIWAY DELTA WEST
CKT #16 = TAXIWAY DELTA EAST
CKT #17 = TAXIWAY DELTA CENTER

GENERAL NOTES:

- SEE E001 FOR GENERAL ELECTRICAL NOTES.
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- EXACT ROUTING OF CABLES THROUGH EXISTING INFRASTRUCTURE SHALL BE FIELD VERIFIED.

KEYED NOTES:

- APPROXIMATE LOCATION OF EXISTING AIRFIELD ELECTRICAL VAULT. SEE SHEETS ED201 FOR DEMOLITION SCOPE OF WORK. EXACT ROUTING OF "HOMERUN" CONDUITS AND DUCTBANKS TO VAULT SHALL BE FIELD DETERMINED.
- REMOVE AND REPLACE TAXIWAY DELTA "HOMERUN" CIRCUITS #12, #16, AND #17 FROM EXISTING DUCTBANKS. ALL OTHER CIRCUITS SHALL BE PROTECTED IN PLACE.
- REMOVE AND REPLACE TAXIWAY DELTA CIRCUITS #12, #16, AND #17 FROM EXISTING CONDUITS. ALL OTHER CIRCUITS SHALL BE PROTECTED IN PLACE.
- ALL PROPOSED AND EXISTING WIRING TO BE PROPERLY IDENTIFIED, RACKED, AND TAGGED IN EACH MANHOLE. PROVIDE A MINIMUM OF ONE (1) LOOP OF WIRING IN EACH MANHOLE FOR EACH NEW CIRCUIT HOMERUN WIRE. CLEAN HOMERUN MANHOLES. ANY DEWATERING SHALL BE INCIDENTAL TO INSTALLATION OF NEW WIRING.
- EXISTING GUIDANCE SIGNS AND CONCRETE PADS TO REMAIN ON CIRCUITS #12, #16 AND #17. REPLACE ISOLATION TRANSFORMER AND CONNECTIONS. SIZE ISOLATION TRANSFORMER PER EACH SIGN LOAD, PER MANUFACTURER'S RECOMMENDATION.



KEY PLAN



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**GERALD R. FORD
INTERNATIONAL
AIRPORT**

**TAXIWAY D
LIGHTING
REHABILITATION**



REVISIONS

NO.	DESCRIPTION	DATE

DATE ISSUED: MAY 2025
REVIEWED BY: MAR
DRAWN BY: AZ
DESIGNED BY: EE

RS&H PROJECT NUMBER
1010-5865-001

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SHEET TITLE
**DEMOLITION
AIRFIELD
LIGHTING PLAN
- AREA 10**

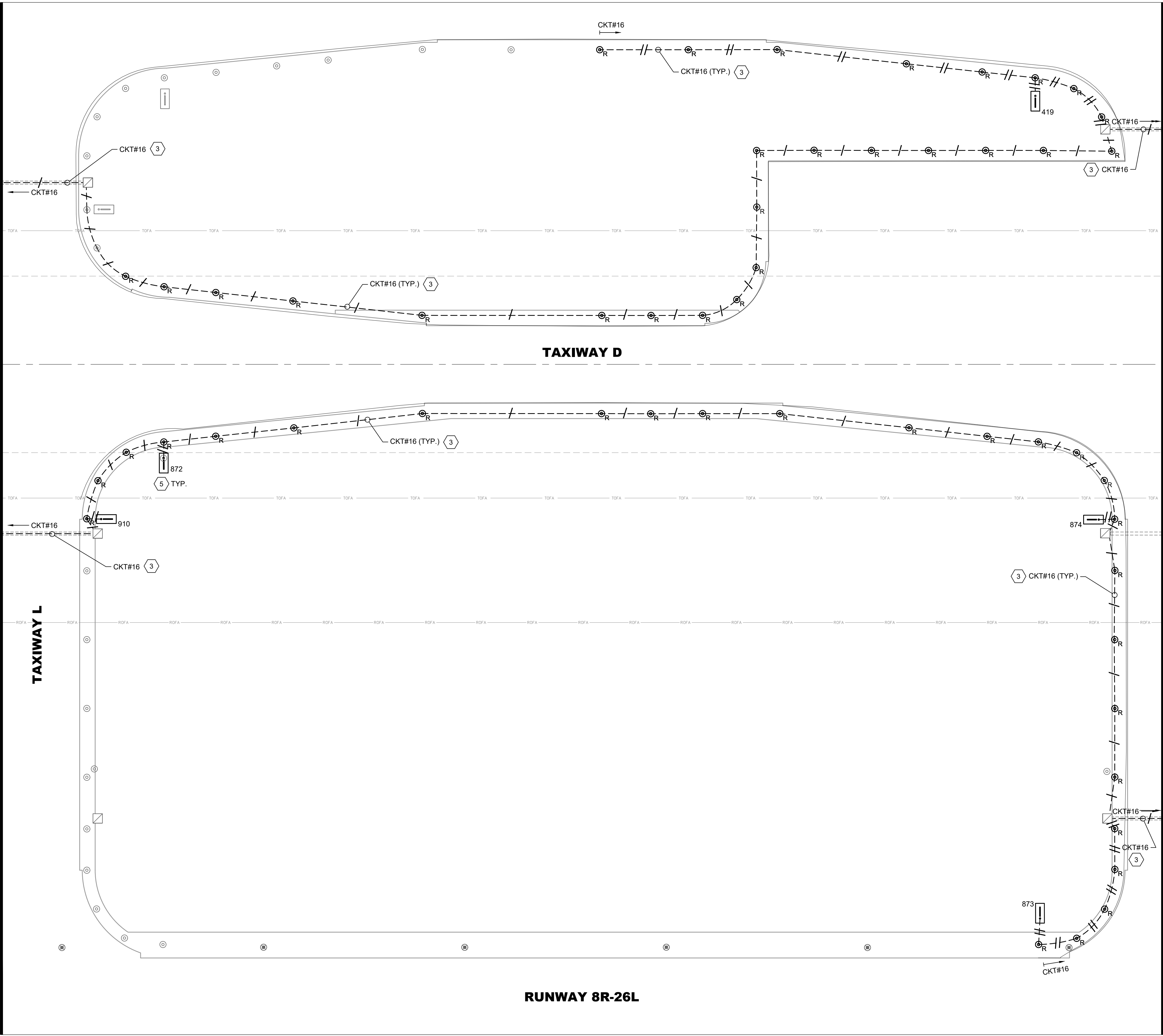
SHEET NUMBER
ED110

**ISSUED FOR
BID**

PLOTTED ON: 5/30/2025
PLOTTER BY: RAYCHERS
FILE LOCATION: P:\GERALD_FORD_INTL\10105865_GRR_AIRFIELD_LIGHTING_ONCALL_2025_2030\10105865001_GRR_TAXIWAY_D_LIGHTING_REHAB\03.00
PROJECT EXECUTION\03.05.DWG\SCAD\ETWD ED11X.DWG

MATCH LINE - SEE SHEET ED110

TAXIWAY L



MATCH LINE - SEE SHEET ED112

LEGEND:

- L-824 5KV CABLE IN EXISTING CONDUIT, REMOVE AND REPLACE WITH NEW CABLE, EXISTING CONDUIT TO REMAIN. HASH MARKS INDICATE NUMBER OF CABLES, CKT # = CIRCUIT DESIGNATOR
- EXISTING ELECTRICAL DUCT BANK
- EXISTING RUNWAY EDGE LIGHT TO REMAIN
- EXISTING TAXIWAY EDGE LIGHT TO REMAIN
- EXISTING TAXIWAY EDGE LIGHT, REMOVE AND REPLACE WITH NEW LED FIXTURE, EXISTING BASE CAN TO BE REUSED
- EXISTING AIRFIELD GUIDANCE SIGN TO REMAIN
- EXISTING AIRFIELD GUIDANCE SIGN, REMOVE AND REPLACE ISOLATION TRANSFORMER, SIGN TO REMAIN. XXX = SIGN NUMBER
- EXISTING WINDCONE TO REMAIN, REMOVE AND REPLACE ISOLATION TRANSFORMER
- EXISTING SINGLE JUNCTION CAN TO REMAIN
- EXISTING ELECTRICAL HANDHOLE TO REMAIN
- EXISTING ELECTRICAL MANHOLE TO REMAIN
- EXISTING COMMUNICATIONS MANHOLE TO REMAIN

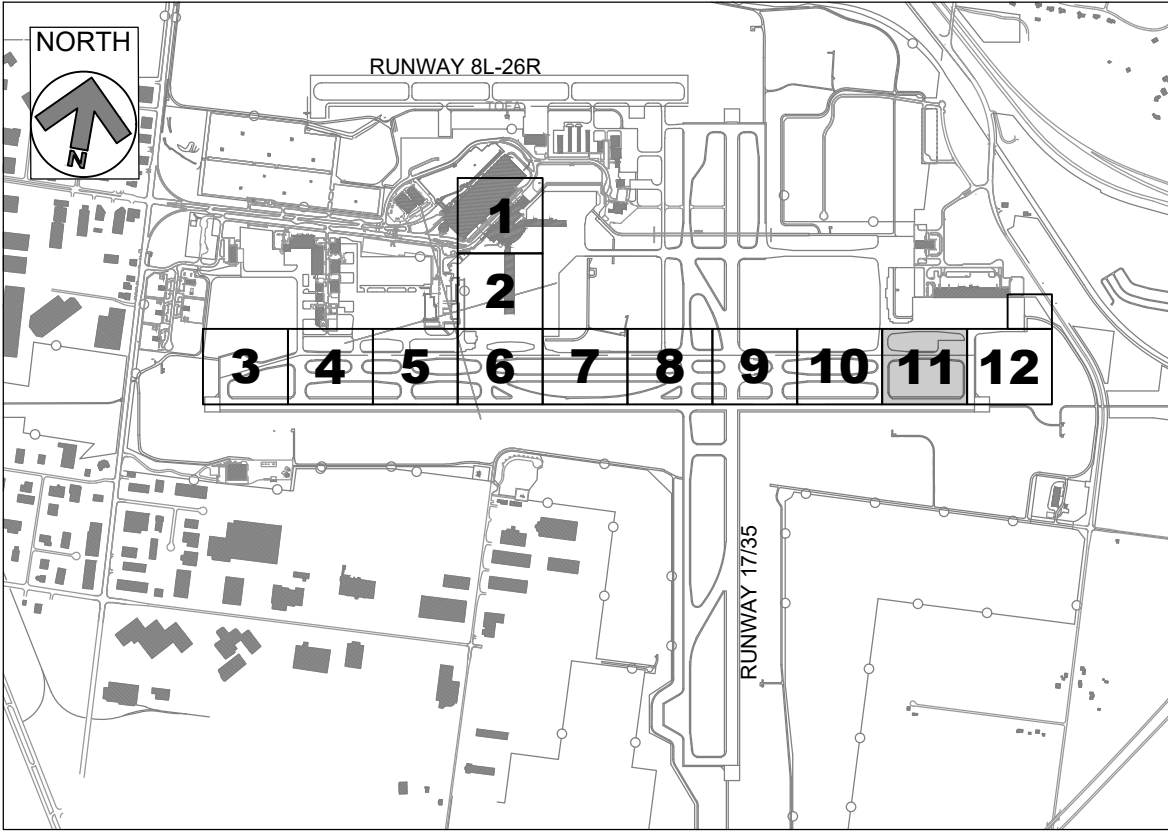
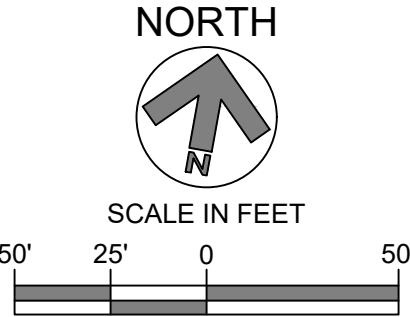
CKT #12 = TAXIWAY DELTA WEST
CKT #16 = TAXIWAY DELTA EAST
CKT #17 = TAXIWAY DELTA CENTER

GENERAL NOTES:

- SEE E001 FOR GENERAL ELECTRICAL NOTES.
- REMOVE AND REPLACE ALL ISOLATION TRANSFORMERS CONNECTED TO CIRCUITS #12, #16 AND #17, AT TAXIWAY EDGE LIGHTS, GUIDANCE SIGNS AND WINDCONES, AS APPLICABLE.
- EXACT ROUTING OF CABLES THROUGH EXISTING INFRASTRUCTURE SHALL BE FIELD VERIFIED.

KEYED NOTES:

- APPROXIMATE LOCATION OF EXISTING AIRFIELD ELECTRICAL VAULT. SEE SHEETS ED201 FOR DEMOLITION SCOPE OF WORK. EXACT ROUTING OF "HOMERUN" CONDUITS AND DUCTBANKS TO VAULT SHALL BE FIELD DETERMINED.
- REMOVE AND REPLACE TAXIWAY DELTA "HOMERUN" CIRCUITS #12, #16, AND #17 FROM EXISTING DUCTBANKS. ALL OTHER CIRCUITS SHALL BE PROTECTED IN PLACE.
- REMOVE AND REPLACE TAXIWAY DELTA CIRCUITS #12, #16, AND #17 FROM EXISTING CONDUITS. ALL OTHER CIRCUITS SHALL BE PROTECTED IN PLACE.
- ALL PROPOSED AND EXISTING WIRING TO BE PROPERLY IDENTIFIED, RACKED, AND TAGGED IN EACH MANHOLE. PROVIDE A MINIMUM OF ONE (1) LOOP OF WIRING IN EACH MANHOLE FOR EACH NEW CIRCUIT HOMERUN WIRE. CLEAN HOMERUN MANHOLES. ANY DEWATERING SHALL BE INCIDENTAL TO INSTALLATION OF NEW WIRING.
- EXISTING GUIDANCE SIGNS AND CONCRETE PADS TO REMAIN ON CIRCUITS #12, #16 AND #17. REPLACE ISOLATION TRANSFORMER AND CONNECTIONS. SIZE ISOLATION TRANSFORMER PER EACH SIGN LOAD, PER MANUFACTURER'S RECOMMENDATION.



KEY PLAN



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**GERALD R. FORD
INTERNATIONAL
AIRPORT**

**TAXIWAY D
LIGHTING
REHABILITATION**



REVISIONS

NO.	DESCRIPTION	DATE

DATE ISSUED: MAY 2025
REVIEWED BY: MAR
DRAWN BY: AZ
DESIGNED BY: EE

RS&H PROJECT NUMBER
1010-5865-001

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SHEET TITLE
**DEMOLITION
AIRFIELD
LIGHTING PLAN
- AREA 11**

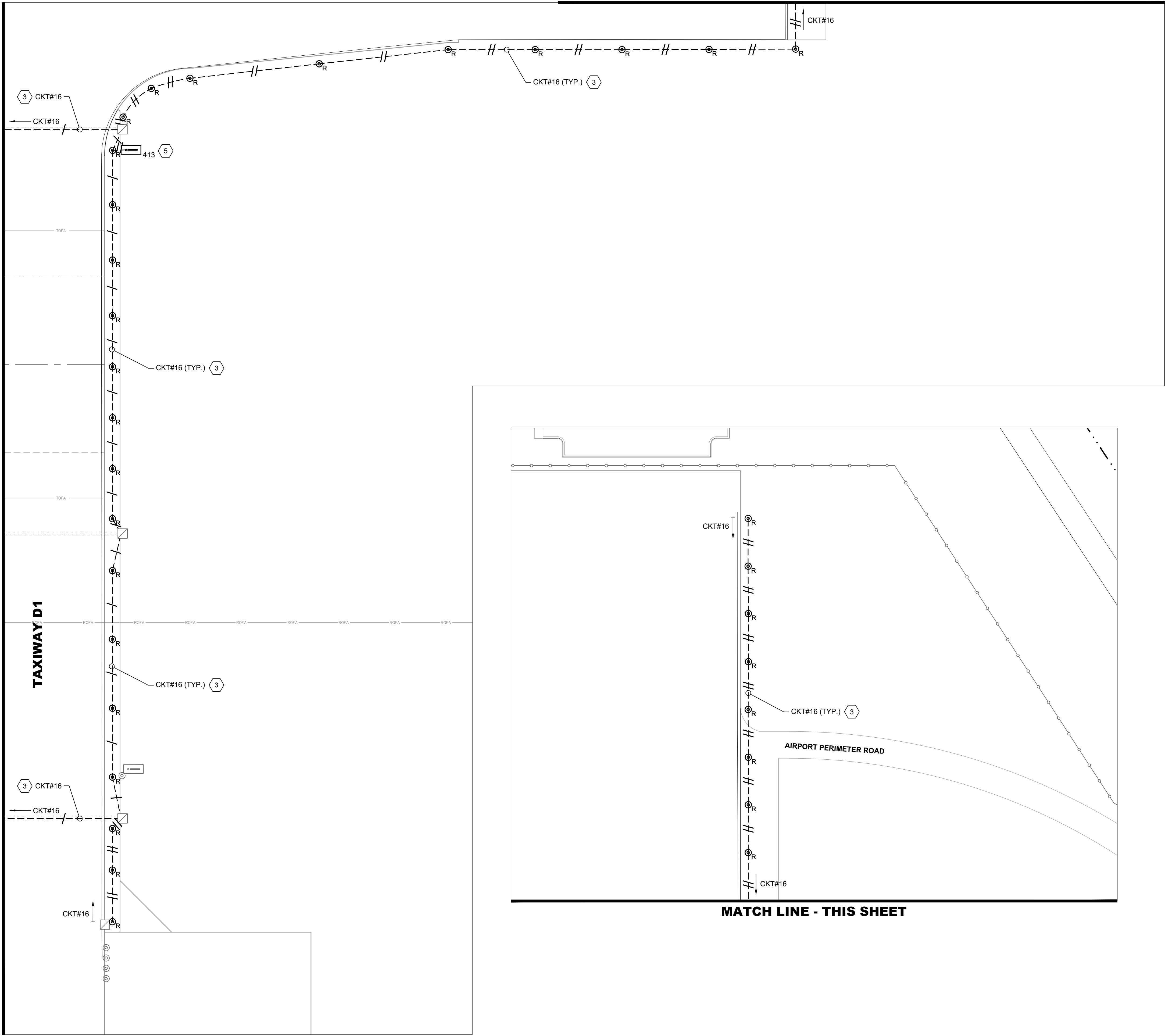
SHEET NUMBER
ED111

**ISSUED FOR
BID**

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PLOTTED BY: RAYCHERS
FILE LOCATION: P:\GERALD_FORD_INTL\10105865_GRR_AIRFIELD_LIGHTING_ONCALL_2025_2030\10105865001_GRR_TAXIWAY_D_LIGHTING_REHAB\03.00
PROJECT EXECUTION\03.05.DWG\5_MODELS\CAD\ET\WD ED1XX.DWG

MATCH LINE - SEE SHEET ED111

TAXIWAY D1



LEGEND:

- CKT# --- L-824 5KV CABLE IN EXISTING CONDUIT, REMOVE AND REPLACE WITH NEW CABLE, EXISTING CONDUIT TO REMAIN. HASH MARKS INDICATE NUMBER OF CABLES, CKT # = CIRCUIT DESIGNATOR
- EXISTING ELECTRICAL DUCT BANK
- EXISTING RUNWAY EDGE LIGHT TO REMAIN
- EXISTING TAXIWAY EDGE LIGHT TO REMAIN
- EXISTING TAXIWAY EDGE LIGHT, REMOVE AND REPLACE WITH NEW LED FIXTURE, EXISTING BASE CAN TO BE REUSED
- EXISTING AIRFIELD GUIDANCE SIGN TO REMAIN
- EXISTING AIRFIELD GUIDANCE SIGN, REMOVE AND REPLACE ISOLATION TRANSFORMER, SIGN TO REMAIN. XXX = SIGN NUMBER
- EXISTING WINDCONE TO REMAIN, REMOVE AND REPLACE ISOLATION TRANSFORMER
- EXISTING SINGLE JUNCTION CAN TO REMAIN
- EXISTING ELECTRICAL HANDHOLE TO REMAIN
- EXISTING ELECTRICAL MANHOLE TO REMAIN
- EXISTING COMMUNICATIONS MANHOLE TO REMAIN

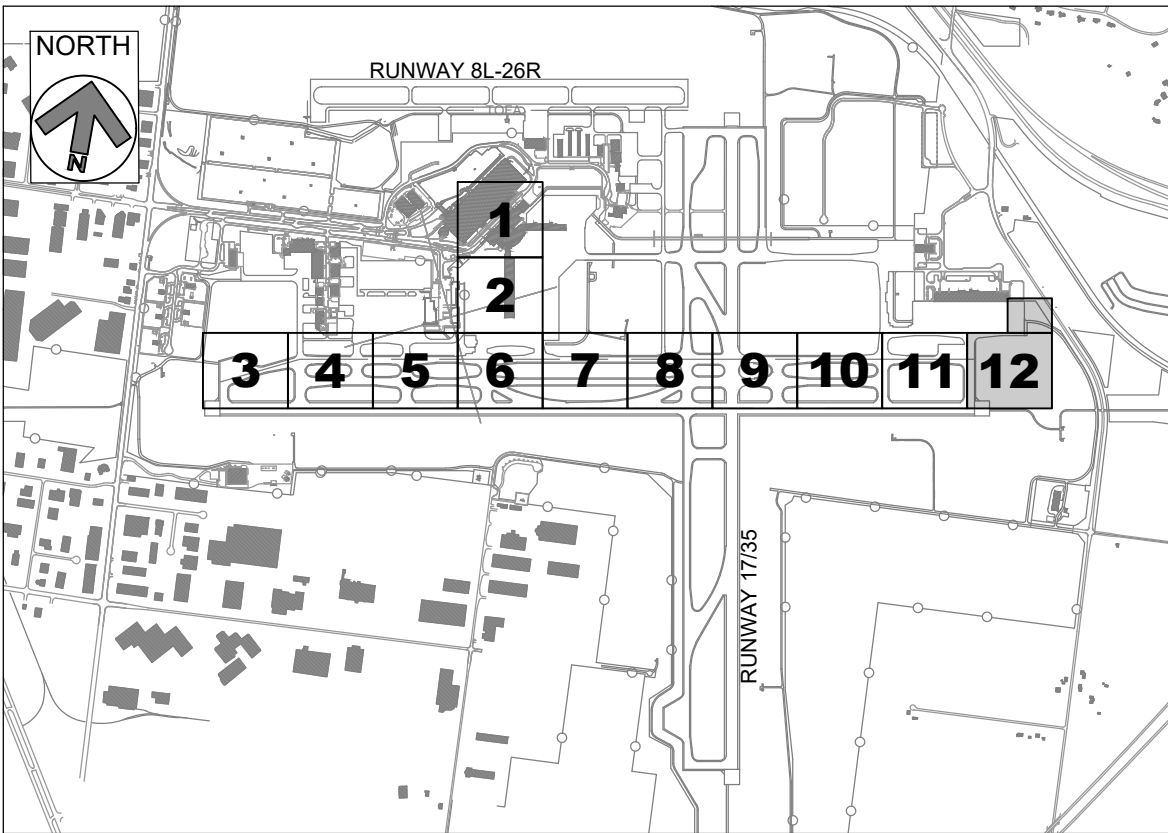
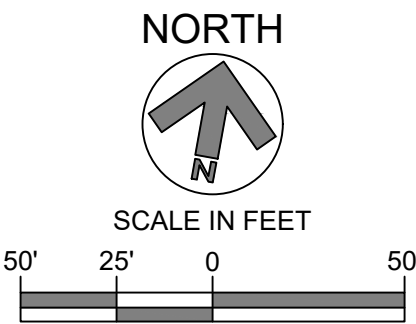
CKT #12 = TAXIWAY DELTA WEST
CKT #16 = TAXIWAY DELTA EAST
CKT #17 = TAXIWAY DELTA CENTER

GENERAL NOTES:

- SEE E001 FOR GENERAL ELECTRICAL NOTES.
- REMOVE AND REPLACE ALL ISOLATION TRANSFORMERS CONNECTED TO CIRCUITS #12, #16 AND #17, AT TAXIWAY EDGE LIGHTS, GUIDANCE SIGNS AND WINDCONES, AS APPLICABLE.
- EXACT ROUTING OF CABLES THROUGH EXISTING INFRASTRUCTURE SHALL BE FIELD VERIFIED.

KEYED NOTES:

- APPROXIMATE LOCATION OF EXISTING AIRFIELD LIGHTING ELECTRICAL VAULT. SEE SHEETS ED201 FOR DEMOLITION SCOPE OF WORK. EXACT ROUTING OF "HOMERUN" CONDUITS AND DUCTBANKS TO VAULT SHALL BE FIELD DETERMINED.
- REMOVE AND REPLACE TAXIWAY DELTA "HOMERUN" CIRCUITS #12, #16, AND #17 FROM EXISTING DUCTBANKS. ALL OTHER CIRCUITS SHALL BE PROTECTED IN PLACE.
- REMOVE AND REPLACE TAXIWAY DELTA CIRCUITS #12, #16, AND #17 FROM EXISTING CONDUITS. ALL OTHER CIRCUITS SHALL BE PROTECTED IN PLACE.
- ALL PROPOSED AND EXISTING WIRING TO BE PROPERLY IDENTIFIED, RACKED, AND TAGGED IN EACH MANHOLE. PROVIDE A MINIMUM OF ONE (1) LOOP OF WIRING IN EACH MANHOLE FOR EACH NEW CIRCUIT HOMERUN WIRE. CLEAN HOMERUN MANHOLES. ANY DEWATERING SHALL BE INCIDENTAL TO INSTALLATION OF NEW WIRING.
- EXISTING GUIDANCE SIGNS AND CONCRETE PADS TO REMAIN ON CIRCUITS #12, #16 AND #17. REPLACE ISOLATION TRANSFORMER AND CONNECTIONS. SIZE ISOLATION TRANSFORMER PER EACH SIGN LOAD, PER MANUFACTURER'S RECOMMENDATION.



KEY PLAN



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GERALD R. FORD INTERNATIONAL AIRPORT

TAXIWAY D LIGHTING REHABILITATION



REVISIONS

NO.	DESCRIPTION	DATE

DATE ISSUED: MAY 2025

REVIEWED BY: MAR

DRAWN BY: AZ

DESIGNED BY: EE

RS&H PROJECT NUMBER
1010-5865-001

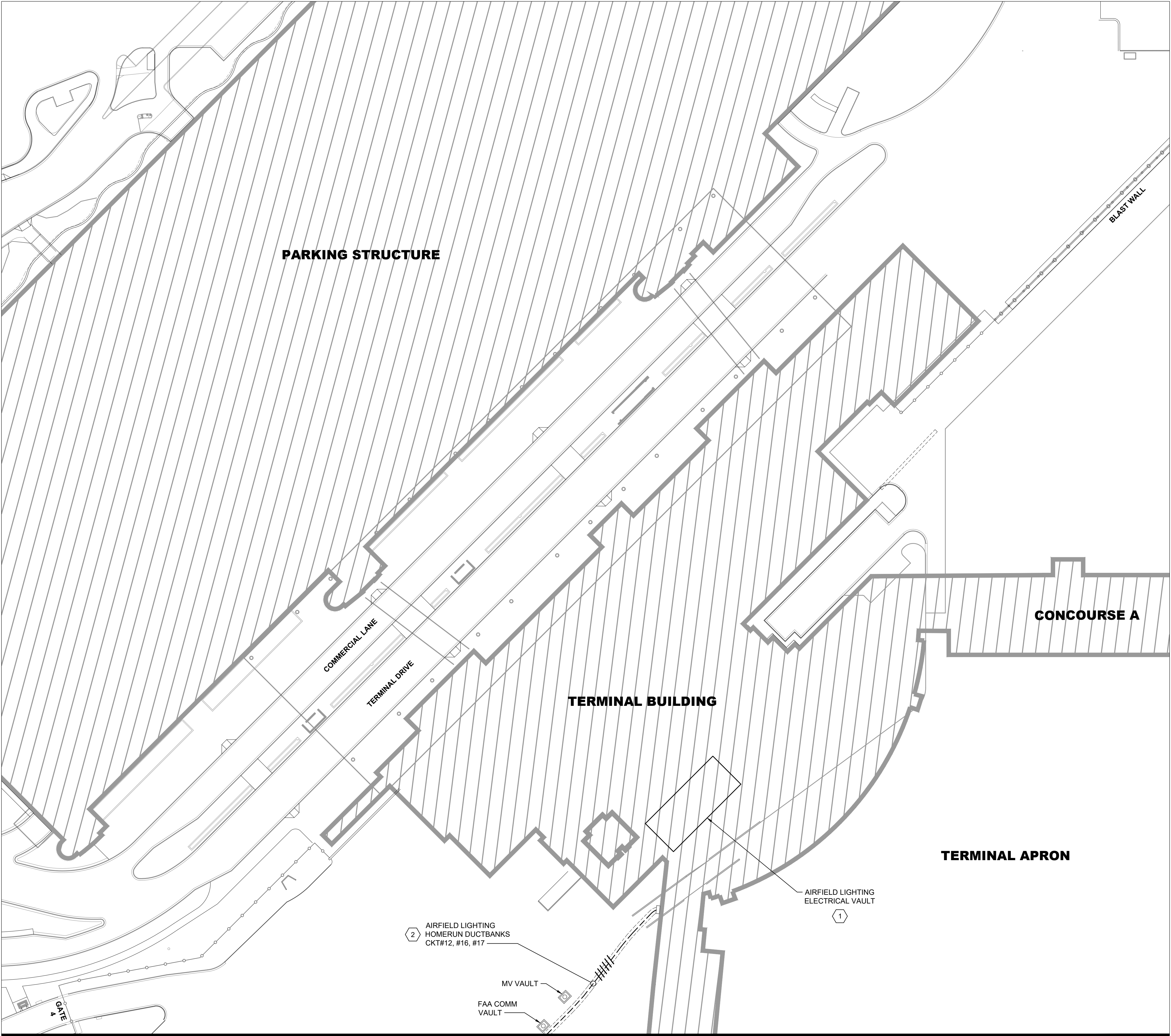
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SHEET TITLE
**DEMOLITION
AIRFIELD
LIGHTING PLAN
- AREA 12**

SHEET NUMBER
ED112

ISSUED FOR
BID

PLOTTED ON: 5/30/2025
PLOTTED BY: RAYCHERS
FILE LOCATION: P:\GERALD_FORD_INTL\10105865_GRR_AIRFIELD_LIGHTING_ONCALL_2025_2030\10105865001_GRR_TAXIWAY_D_LIGHTING_REHAB\03.DWG
PROJECT EXECUTION\03.05.DWG\$MODELS\CAD\ETWD E1XX PROPOSED.DWG



LEGEND:

- CKT#
---//---
PROPOSED L-824 5KV CABLE IN EXISTING CONDUIT.
HASH MARKS INDICATE NUMBER OF NEW L-824
CABLES INSTALLED IN EXISTING CONDUIT,
CKT # = CIRCUIT DESIGNATOR
- EXISTING ELECTRICAL DUCT BANK
- ⊙
EXISTING RUNWAY EDGE LIGHT TO REMAIN
- ⊙
EXISTING TAXIWAY EDGE LIGHT TO REMAIN
- ⊙
PROPOSED L-861T(L) ELEVATED OMNI-DIRECTIONAL
MEDIUM INTENSITY TAXIWAY EDGE LIGHT (MITL)
INSTALLED ON EXISTING BASE CAN
- ⊙
EXISTING AIRFIELD GUIDANCE SIGN TO REMAIN
- ⊙
EXISTING AIRFIELD GUIDANCE SIGN, PROVIDE
NEW ISOLATION TRANSFORMER, SIGN TO
REMAIN. XXX = SIGN NUMBER
- ⊙
EXISTING WINDCONE TO REMAIN, PROVIDE
NEW ISOLATION TRANSFORMER
- ⊙
EXISTING SINGLE JUNCTION CAN TO REMAIN
- ⊙
EXISTING ELECTRICAL HANDHOLE TO REMAIN
- ⊙
EXISTING ELECTRICAL MANHOLE TO REMAIN
- ⊙
EXISTING COMMUNICATIONS MANHOLE TO REMAIN

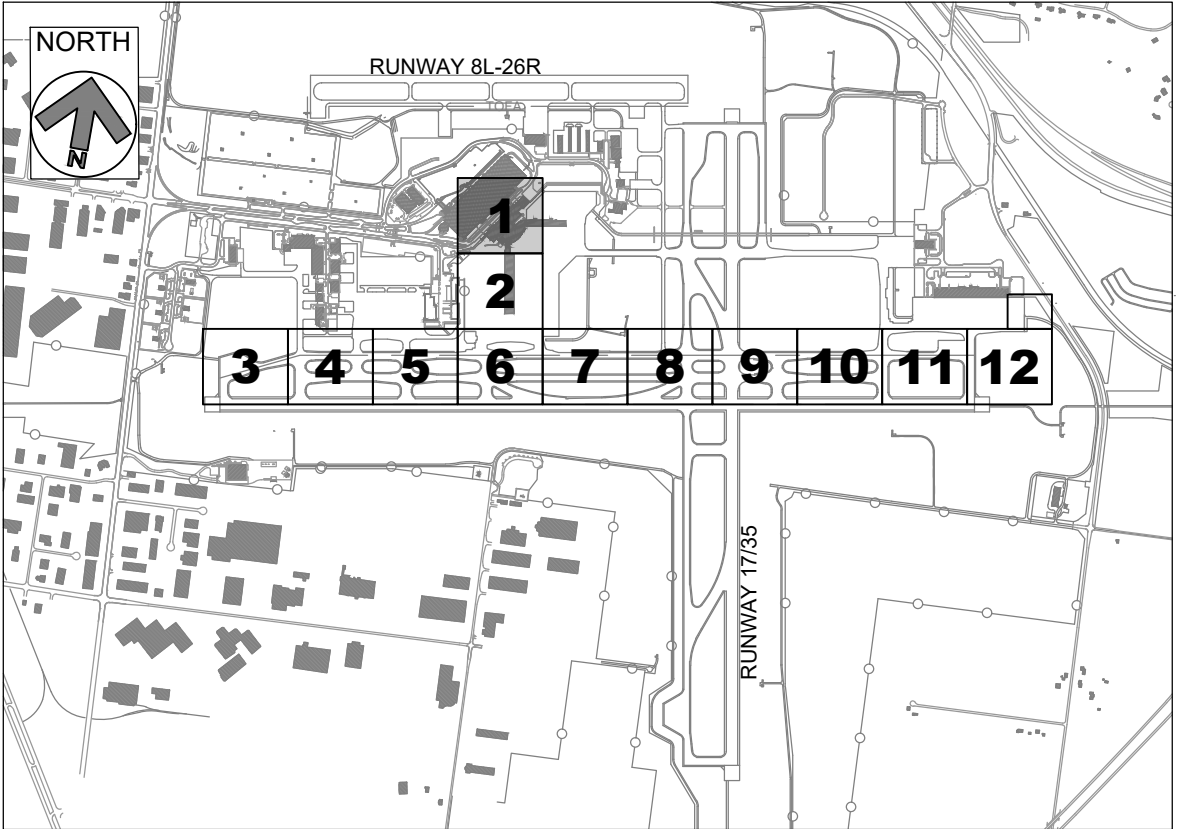
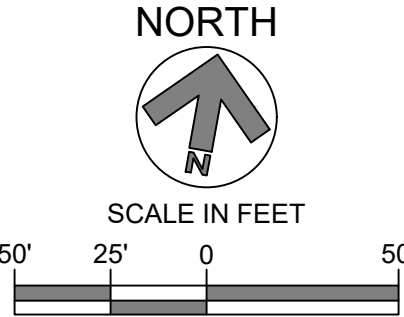
CKT #12 = TAXIWAY DELTA WEST
CKT #16 = TAXIWAY DELTA EAST
CKT #17 = TAXIWAY DELTA CENTER

GENERAL NOTES:

- SEE E001 FOR GENERAL ELECTRICAL NOTES.
- PROVIDE NEW ISOLATION TRANSFORMERS CONNECTED TO
CIRCUITS #12, #16 AND #17, AT TAXIWAY EDGE LIGHTS,
GUIDANCE SIGNS AND WINDCONES, AS APPLICABLE.
- EXACT ROUTING OF CABLES THROUGH EXISTING
INFRASTRUCTURE SHALL BE FIELD VERIFIED.
- ALL CIRCUIT FEEDERS TO GUIDANCE SIGNS SHALL CONSIST
OF 2/C L-824 5KV CABLES.

KEYED NOTES:

- APPROXIMATE LOCATION OF EXISTING AIRFIELD LIGHTING
ELECTRICAL VAULT. SEE SHEET E201 FOR PROPOSED SCOPE
OF WORK. EXACT ROUTING OF "HOMERUN" CONDUITS AND
DUCTBANKS TO VAULT SHALL BE FIELD DETERMINED.
- TAXIWAY DELTA "HOMERUN" CABLES IN EXISTING
DUCTBANK. PROPOSED L-824 CABLES FOR CIRCUITS #12,
#16, AND #17 SHALL BE INSTALLED IN EXISTING CONDUIT. ALL
OTHER CIRCUITS SHALL BE PROTECTED IN PLACE.
- TAXIWAY DELTA CABLES IN EXISTING CONDUIT. PROPOSED
L-824 5KV CABLES FOR CIRCUITS #12, #16, AND #17, AS
MARKED. SHALL BE INSTALLED IN EXISTING CONDUITS. ALL
OTHER CIRCUITS SHALL BE PROTECTED IN PLACE.
- ALL PROPOSED AND EXISTING WIRING TO BE PROPERLY
IDENTIFIED, RACKED, AND TAGGED IN EACH MANHOLE.
PROVIDE A MINIMUM OF ONE (1) LOOP OF WIRING IN EACH
MANHOLE FOR EACH NEW CIRCUIT HOMERUN WIRE. CLEAN
HOMERUN MANHOLES. ANY DEWATERING SHALL BE
INCIDENTAL TO INSTALLATION OF NEW WIRING.
- EXISTING GUIDANCE SIGNS AND CONCRETE PADS TO
REMAIN ON CIRCUITS #12, #16 AND #17. PROVIDE NEW
ISOLATION TRANSFORMER AND CONNECTIONS. SIZE
ISOLATION TRANSFORMER PER EACH SIGN LOAD, PER
MANUFACTURER'S RECOMMENDATION.



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**GERALD R. FORD
INTERNATIONAL
AIRPORT**

**TAXIWAY D
LIGHTING
REHABILITATION**



REVISIONS

NO.	DESCRIPTION	DATE

DATE ISSUED: MAY 2025
REVIEWED BY: MAR
DRAWN BY: AZ
DESIGNED BY: EE

RS&H PROJECT NUMBER
1010-5865-001

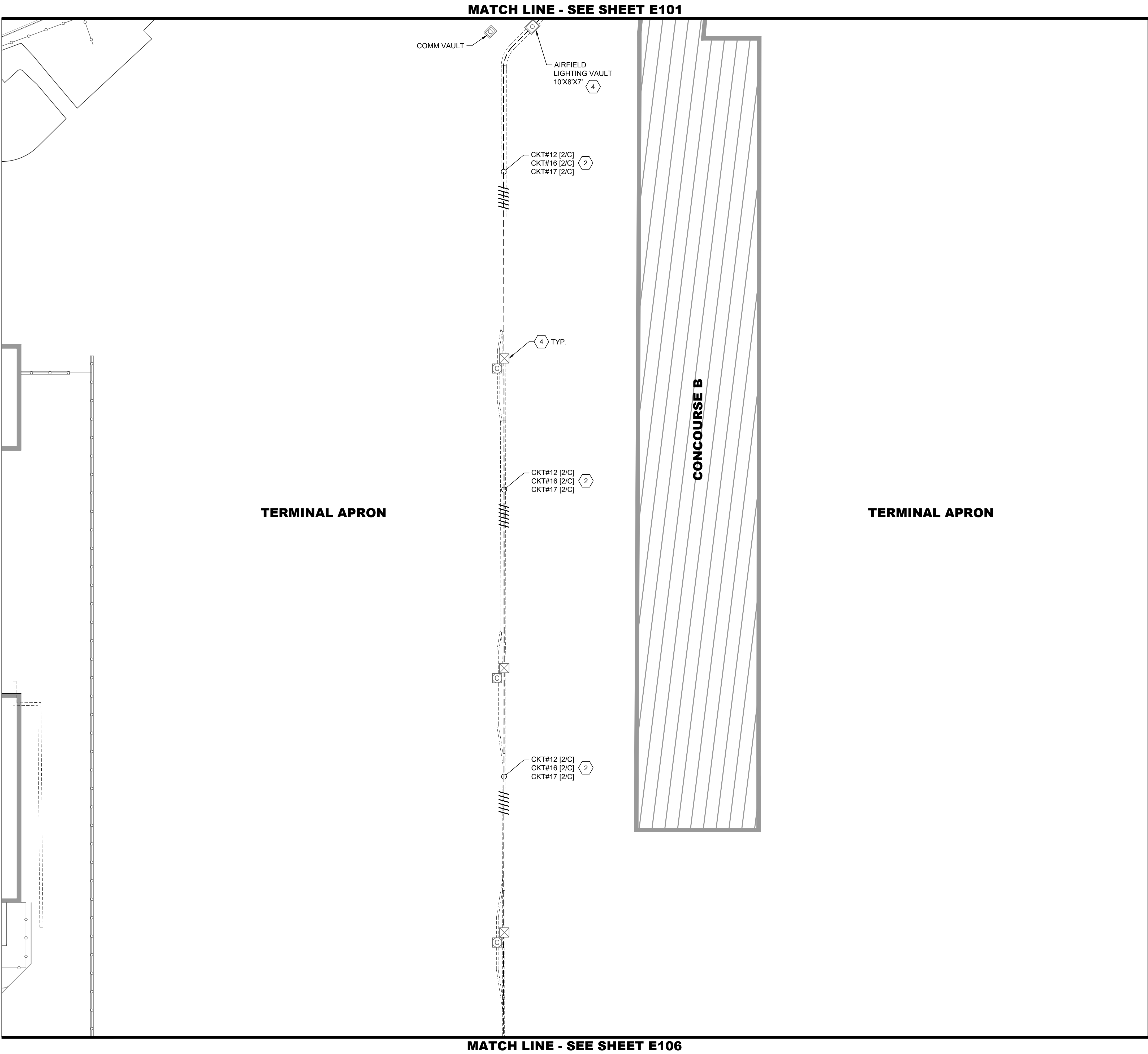
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SHEET TITLE
**PROPOSED
AIRFIELD
LIGHTING PLAN-
AREA 1**

SHEET NUMBER
E101

**ISSUED FOR
BID**

PLOTTED ON: 5/30/2025
PLOTTED BY: RAYCHERS
FILE LOCATION: P:\GERALD_FORD_INTL\10105865_GRR_AIRFIELD_LIGHTING_ONCALL_2025_2030\10105865001_GRR_TAXIWAY_D_LIGHTING_REHAB\03.00
PROJECT EXECUTION\03.05.DWG\$ _MODELS\CAD\ETWD E1XX PROPOSED.DWG



LEGEND:

- CKT#

PROPOSED L-824 5KV CABLE IN EXISTING CONDUIT.
HASH MARKS INDICATE NUMBER OF NEW L-824
CABLES INSTALLED IN EXISTING CONDUIT,
CKT # = CIRCUIT DESIGNATOR
- EXISTING ELECTRICAL DUCT BANK
- EXISTING RUNWAY EDGE LIGHT TO REMAIN
- EXISTING TAXIWAY EDGE LIGHT TO REMAIN
- EB
PROPOSED L-861T(L) ELEVATED OMNI-DIRECTIONAL
MEDIUM INTENSITY TAXIWAY EDGE LIGHT (MITL)
INSTALLED ON EXISTING BASE CAN
- EXISTING AIRFIELD GUIDANCE SIGN TO REMAIN
- XXX
EXISTING AIRFIELD GUIDANCE SIGN, PROVIDE
NEW ISOLATION TRANSFORMER, SIGN TO
REMAIN. XXX = SIGN NUMBER
- EXISTING WINDCONE TO REMAIN, PROVIDE
NEW ISOLATION TRANSFORMER
- J
EXISTING SINGLE JUNCTION CAN TO REMAIN
- EXISTING ELECTRICAL HANDHOLE TO REMAIN
- EXISTING ELECTRICAL MANHOLE TO REMAIN
- C
EXISTING COMMUNICATIONS MANHOLE TO REMAIN

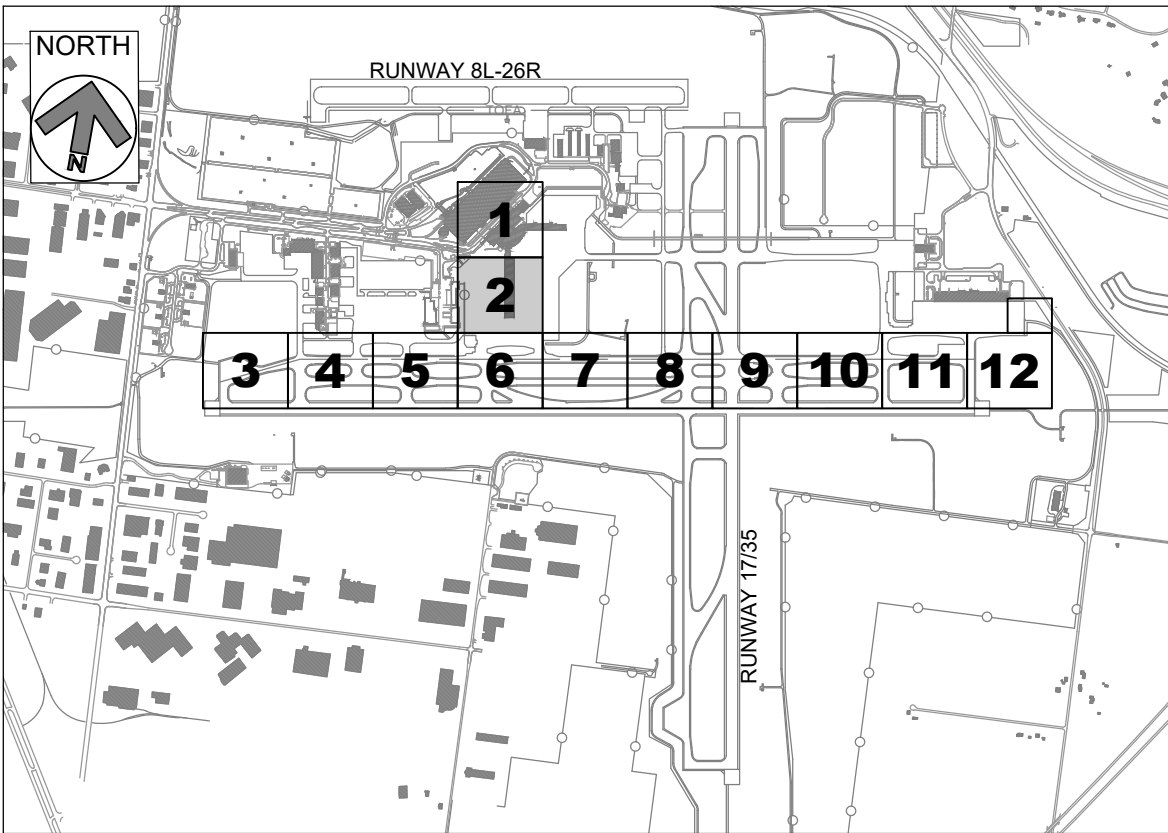
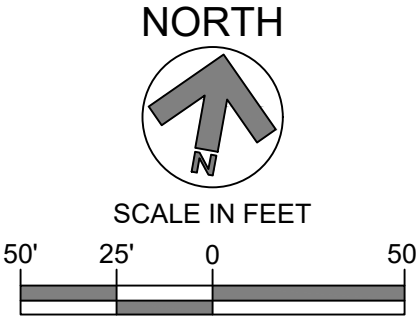
CKT #12 = TAXIWAY DELTA WEST
CKT #16 = TAXIWAY DELTA EAST
CKT #17 = TAXIWAY DELTA CENTER

GENERAL NOTES:

- SEE E001 FOR GENERAL ELECTRICAL NOTES.
- PROVIDE NEW ISOLATION TRANSFORMERS CONNECTED TO CIRCUITS #12, #16 AND #17, AT TAXIWAY EDGE LIGHTS, GUIDANCE SIGNS AND WINDCONES, AS APPLICABLE.
- EXACT ROUTING OF CABLES THROUGH EXISTING INFRASTRUCTURE SHALL BE FIELD VERIFIED.
- ALL CIRCUIT FEEDERS TO GUIDANCE SIGNS SHALL CONSIST OF 2/C L-824 5KV CABLES.

KEY NOTES:

- APPROXIMATE LOCATION OF EXISTING AIRFIELD LIGHTING ELECTRICAL VAULT. SEE SHEET E201 FOR PROPOSED SCOPE OF WORK. EXACT ROUTING OF "HOMERUN" CONDUITS AND DUCTBANKS TO VAULT SHALL BE FIELD DETERMINED.
- TAXIWAY DELTA "HOMERUN" CABLES IN EXISTING DUCTBANK. PROPOSED L-824 CABLES FOR CIRCUITS #12, #16, AND #17 SHALL BE INSTALLED IN EXISTING CONDUIT. ALL OTHER CIRCUITS SHALL BE PROTECTED IN PLACE.
- TAXIWAY DELTA CABLES IN EXISTING CONDUIT. PROPOSED L-824 5KV CABLES FOR CIRCUITS #12, #16, AND #17, AS MARKED, SHALL BE INSTALLED IN EXISTING CONDUITS. ALL OTHER CIRCUITS SHALL BE PROTECTED IN PLACE.
- ALL PROPOSED AND EXISTING WIRING TO BE PROPERLY IDENTIFIED, RACKED, AND TAGGED IN EACH MANHOLE. PROVIDE A MINIMUM OF ONE (1) LOOP OF WIRING IN EACH MANHOLE FOR EACH NEW CIRCUIT HOMERUN WIRE. CLEAN HOMERUN MANHOLES. ANY DEWATERING SHALL BE INCIDENTAL TO INSTALLATION OF NEW WIRING.
- EXISTING GUIDANCE SIGNS AND CONCRETE PADS TO REMAIN ON CIRCUITS #12, #16 AND #17. PROVIDE NEW ISOLATION TRANSFORMER AND CONNECTIONS. SIZE ISOLATION TRANSFORMER PER EACH SIGN LOAD, PER MANUFACTURER'S RECOMMENDATION.



KEY PLAN



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FAX: 1-800-464-4358
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**GERALD R. FORD
INTERNATIONAL
AIRPORT**

**TAXIWAY D
LIGHTING
REHABILITATION**



REVISIONS

NO.	DESCRIPTION	DATE

DATE ISSUED: MAY 2025
REVIEWED BY: MAR
DRAWN BY: AZ
DESIGNED BY: EE

RS&H PROJECT NUMBER
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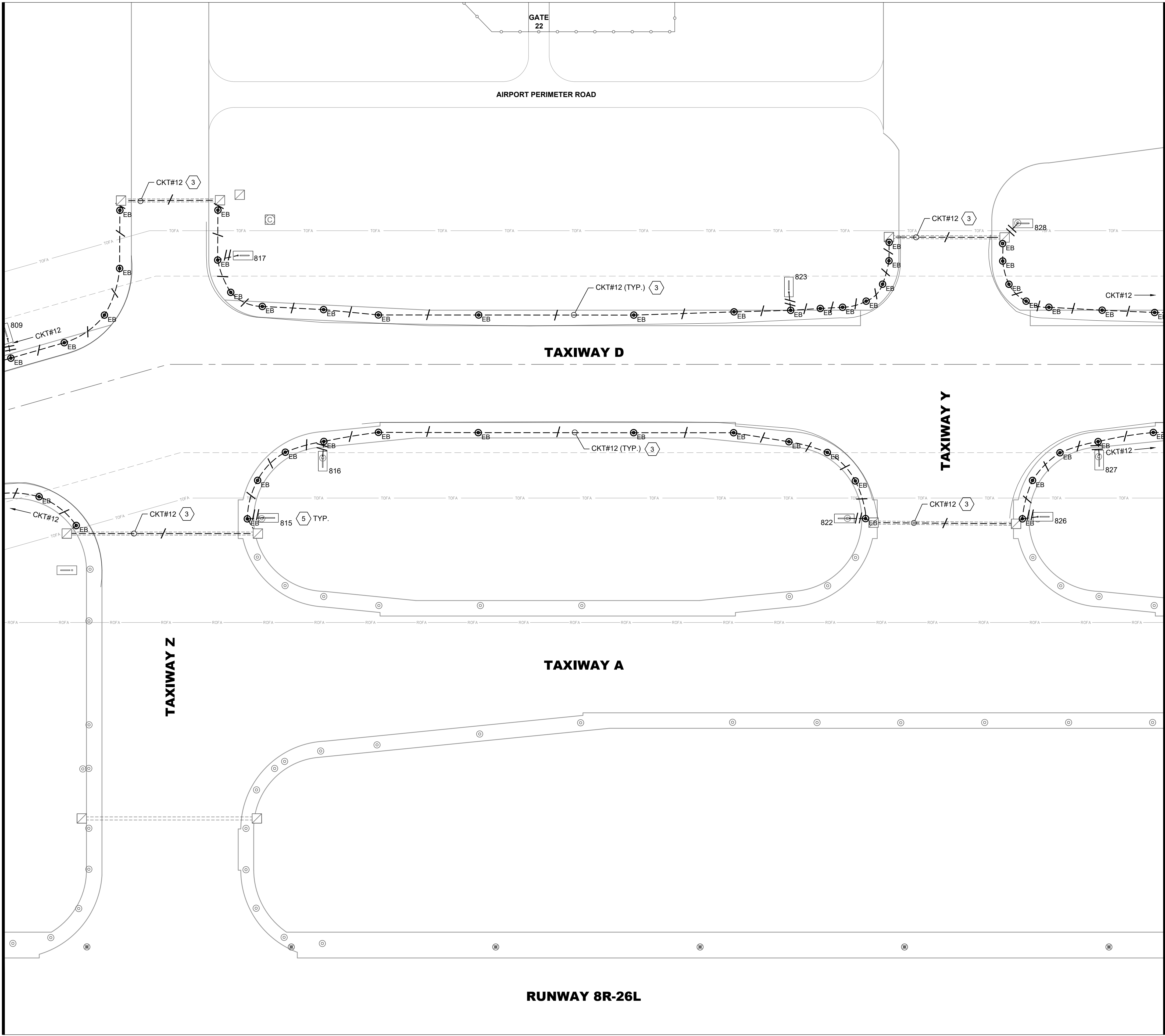
SHEET TITLE
**PROPOSED
AIRFIELD
LIGHTING PLAN-
AREA 2**

SHEET NUMBER
E102

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BID**

PLOTTED ON: 5/30/2025
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FILE LOCATION: P:\GERALD_FORD_INTL\10105865_GRR_AIRFIELD_LIGHTING_ONCALL_2025_2030\10105865001_GRR_TAXIWAY_D_LIGHTING_REHAB\03.DWG
PROJECT EXECUTION\03.05.DWG

MATCH LINE - SEE SHEET E103



MATCH LINE - SEE SHEET E105

LEGEND:

- CKT#

EXISTING ELECTRICAL DUCT BANK
- EXISTING RUNWAY EDGE LIGHT TO REMAIN
- EXISTING TAXIWAY EDGE LIGHT TO REMAIN
- PROPOSED L-861T(L) ELEVATED OMNI-DIRECTIONAL MEDIUM INTENSITY TAXIWAY EDGE LIGHT (MITL) INSTALLED ON EXISTING BASE CAN
- EXISTING AIRFIELD GUIDANCE SIGN TO REMAIN
- EXISTING AIRFIELD GUIDANCE SIGN, PROVIDE NEW ISOLATION TRANSFORMER, SIGN TO REMAIN. XXX = SIGN NUMBER
- EXISTING WINDCONE TO REMAIN, PROVIDE NEW ISOLATION TRANSFORMER
- EXISTING SINGLE JUNCTION CAN TO REMAIN
- EXISTING ELECTRICAL HANDHOLE TO REMAIN
- EXISTING ELECTRICAL MANHOLE TO REMAIN
- EXISTING COMMUNICATIONS MANHOLE TO REMAIN

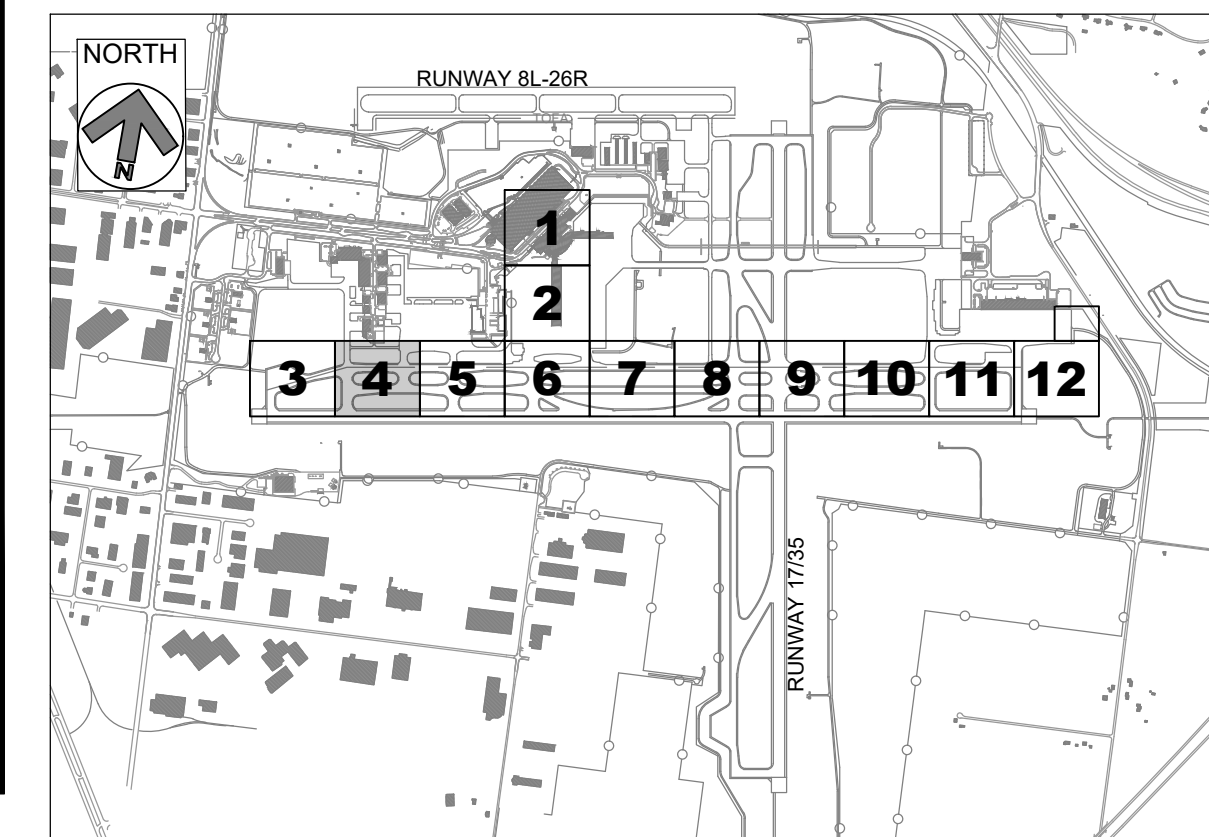
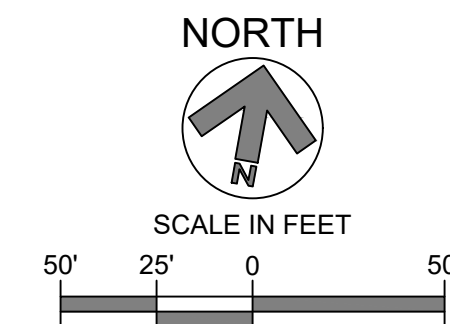
CKT #12 = TAXIWAY DELTA WEST
CKT #16 = TAXIWAY DELTA EAST
CKT #17 = TAXIWAY DELTA CENTER

GENERAL NOTES:

- SEE E001 FOR GENERAL ELECTRICAL NOTES.
- PROVIDE NEW ISOLATION TRANSFORMERS CONNECTED TO CIRCUITS #12, #16 AND #17, AT TAXIWAY EDGE LIGHTS, GUIDANCE SIGNS AND WINDCONES, AS APPLICABLE.
- EXACT ROUTING OF CABLES THROUGH EXISTING INFRASTRUCTURE SHALL BE FIELD VERIFIED.
- ALL CIRCUIT FEEDERS TO GUIDANCE SIGNS SHALL CONSIST OF 2/C L-824 5KV CABLES.

KEYED NOTES:

- APPROXIMATE LOCATION OF EXISTING AIRFIELD LIGHTING ELECTRICAL VAULT. SEE SHEET E201 FOR PROPOSED SCOPE OF WORK. EXACT ROUTING OF "HOMERUN" CONDUITS AND DUCTBANKS TO VAULT SHALL BE FIELD DETERMINED.
- TAXIWAY DELTA "HOMERUN" CABLES IN EXISTING DUCTBANK. PROPOSED L-824 CABLES FOR CIRCUITS #12, #16, AND #17 SHALL BE INSTALLED IN EXISTING CONDUIT. ALL OTHER CIRCUITS SHALL BE PROTECTED IN PLACE.
- TAXIWAY DELTA CABLES IN EXISTING CONDUIT. PROPOSED L-824 5KV CABLES FOR CIRCUITS #12, #16, AND #17, AS MARKED, SHALL BE INSTALLED IN EXISTING CONDUITS. ALL OTHER CIRCUITS SHALL BE PROTECTED IN PLACE.
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- EXISTING GUIDANCE SIGNS AND CONCRETE PADS TO REMAIN ON CIRCUITS #12, #16 AND #17. PROVIDE NEW ISOLATION TRANSFORMER AND CONNECTIONS. SIZE ISOLATION TRANSFORMER PER EACH SIGN LOAD, PER MANUFACTURER'S RECOMMENDATION.



KEY PLAN



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**GERALD R. FORD
INTERNATIONAL
AIRPORT**

**TAXIWAY D
LIGHTING
REHABILITATION**



REVISIONS		
NO.	DESCRIPTION	DATE

DATE ISSUED: MAY 2025
REVIEWED BY: MAR
DRAWN BY: AZ
DESIGNED BY: EE

RS&H PROJECT NUMBER
1010-5865-001

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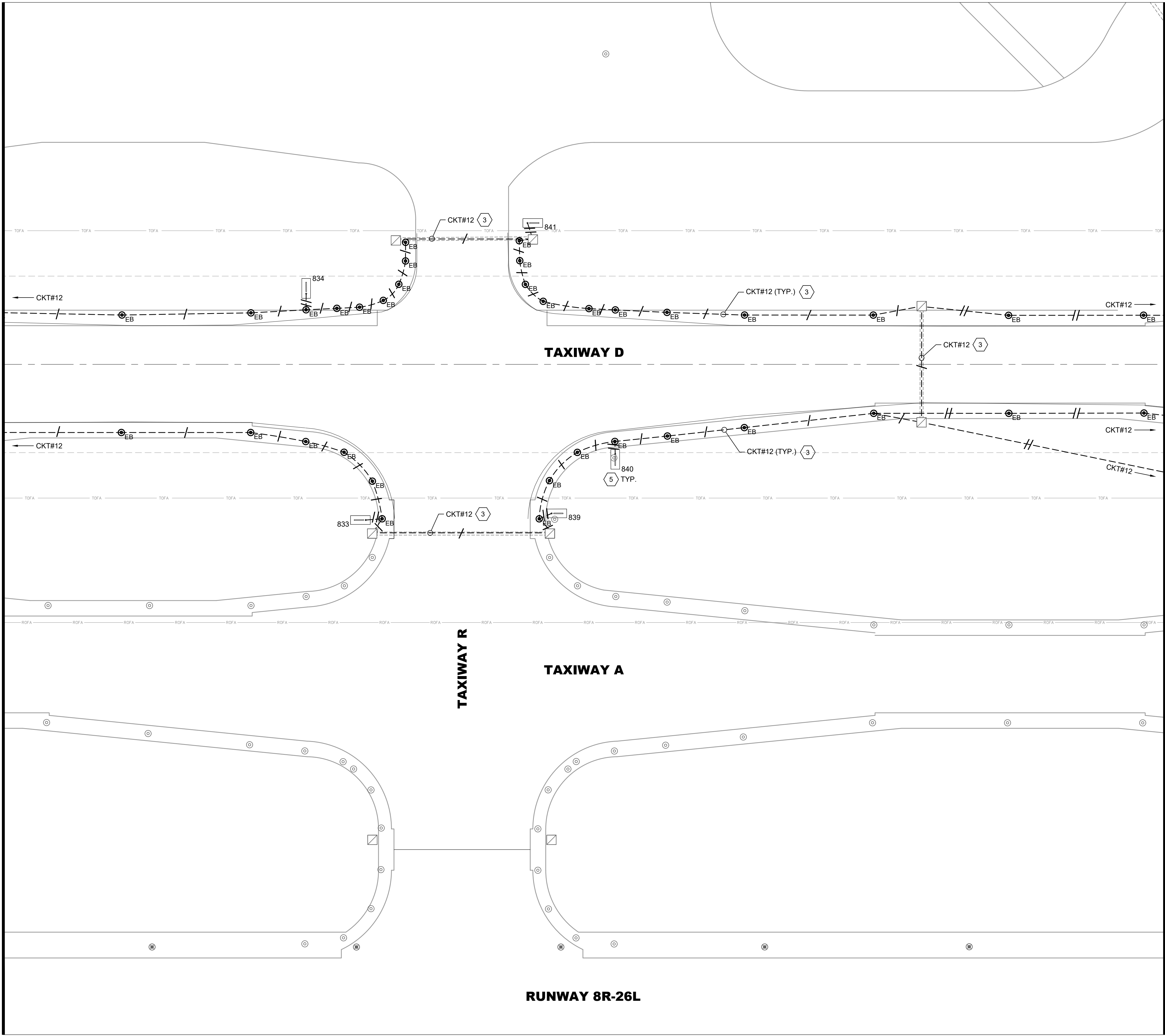
SHEET TITLE
**PROPOSED
AIRFIELD
LIGHTING PLAN-
AREA 4**

SHEET NUMBER
E104

**ISSUED FOR
BID**

PLOTTED ON: 5/30/2025
PLOTTED BY: RAYCHERS
FILE LOCATION: P:\GERALD_FORD_INT\10105865_GRR_AIRFIELD_LIGHTING_ONCALL_2025_2030\10105865001_GRR_TAXIWAY_D_LIGHTING_REHAB\03.00
PROJECT EXECUTION\03.05.DWG\SCAD\ETWD E1XX PROPOSED.DWG

MATCH LINE - SEE SHEET E104



MATCH LINE - SEE SHEET E106

LEGEND:

- CKT# PROPOSED L-824 5KV CABLE IN EXISTING CONDUIT. HASH MARKS INDICATE NUMBER OF NEW L-824 CABLES INSTALLED IN EXISTING CONDUIT, CKT # = CIRCUIT DESIGNATOR
- EXISTING ELECTRICAL DUCT BANK
- EXISTING RUNWAY EDGE LIGHT TO REMAIN
- EXISTING TAXIWAY EDGE LIGHT TO REMAIN
- PROPOSED L-861T(L) ELEVATED OMNI-DIRECTIONAL MEDIUM INTENSITY TAXIWAY EDGE LIGHT (MITL) INSTALLED ON EXISTING BASE CAN
- EXISTING AIRFIELD GUIDANCE SIGN TO REMAIN
- EXISTING AIRFIELD GUIDANCE SIGN, PROVIDE NEW ISOLATION TRANSFORMER, SIGN TO REMAIN. XXX = SIGN NUMBER
- EXISTING WINDCONE TO REMAIN, PROVIDE NEW ISOLATION TRANSFORMER
- EXISTING SINGLE JUNCTION CAN TO REMAIN
- EXISTING ELECTRICAL HANDHOLE TO REMAIN
- EXISTING ELECTRICAL MANHOLE TO REMAIN
- EXISTING COMMUNICATIONS MANHOLE TO REMAIN

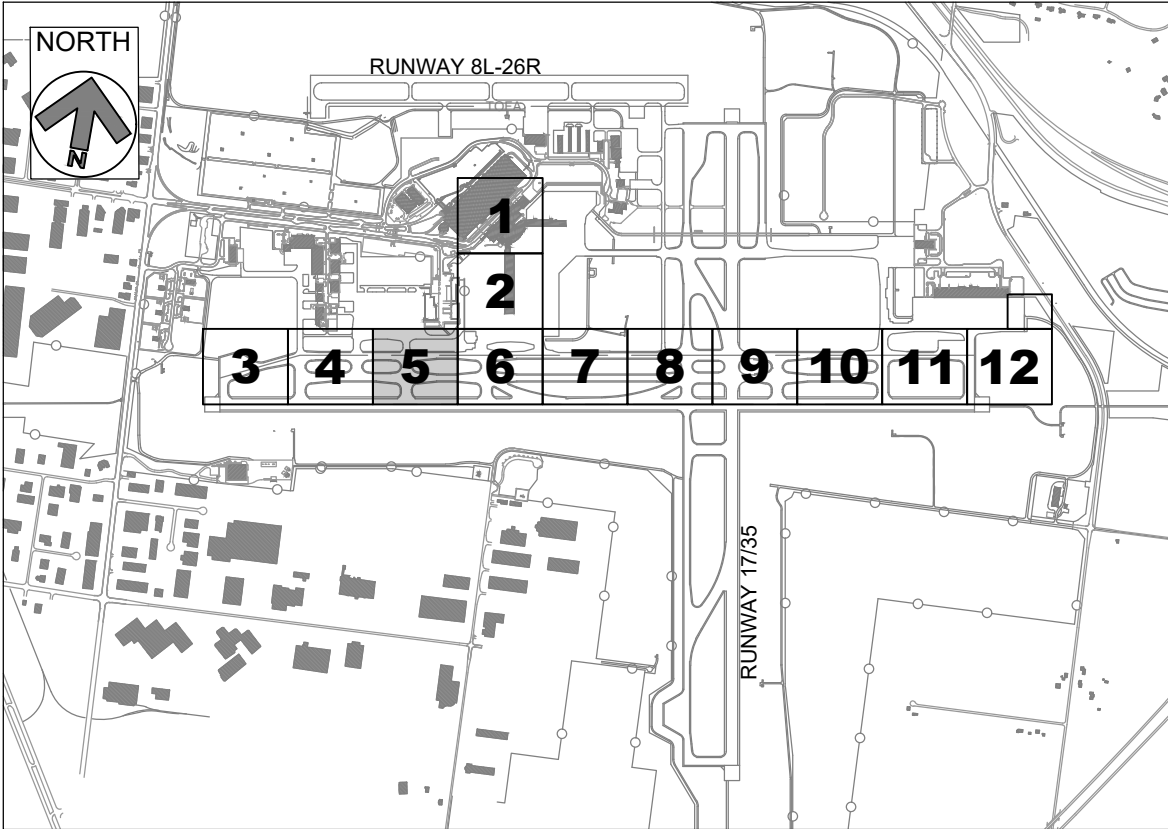
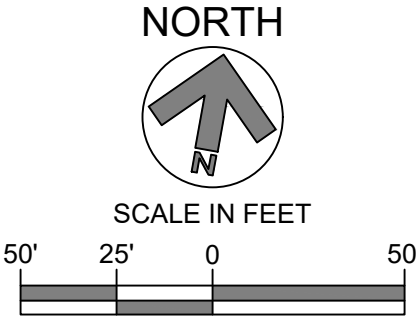
CKT #12 = TAXIWAY DELTA WEST
CKT #16 = TAXIWAY DELTA EAST
CKT #17 = TAXIWAY DELTA CENTER

GENERAL NOTES:

- SEE E001 FOR GENERAL ELECTRICAL NOTES.
- PROVIDE NEW ISOLATION TRANSFORMERS CONNECTED TO CIRCUITS #12, #16 AND #17, AT TAXIWAY EDGE LIGHTS, GUIDANCE SIGNS AND WINDCONES, AS APPLICABLE.
- EXACT ROUTING OF CABLES THROUGH EXISTING INFRASTRUCTURE SHALL BE FIELD VERIFIED.
- ALL CIRCUIT FEEDERS TO GUIDANCE SIGNS SHALL CONSIST OF 2/C L-824 5KV CABLES.

KEYED NOTES:

- APPROXIMATE LOCATION OF EXISTING AIRFIELD LIGHTING ELECTRICAL VAULT. SEE SHEET E201 FOR PROPOSED SCOPE OF WORK. EXACT ROUTING OF "HOMERUN" CONDUITS AND DUCTBANKS TO VAULT SHALL BE FIELD DETERMINED.
- TAXIWAY DELTA "HOMERUN" CABLES IN EXISTING DUCTBANK. PROPOSED L-824 CABLES FOR CIRCUITS #12, #16, AND #17 SHALL BE INSTALLED IN EXISTING CONDUIT. ALL OTHER CIRCUITS SHALL BE PROTECTED IN PLACE.
- TAXIWAY DELTA CABLES IN EXISTING CONDUIT. PROPOSED L-824 5KV CABLES FOR CIRCUITS #12, #16, AND #17, AS MARKED, SHALL BE INSTALLED IN EXISTING CONDUITS. ALL OTHER CIRCUITS SHALL BE PROTECTED IN PLACE.
- ALL PROPOSED AND EXISTING WIRING TO BE PROPERLY IDENTIFIED, RACKED, AND TAGGED IN EACH MANHOLE. PROVIDE A MINIMUM OF ONE (1) LOOP OF WIRING IN EACH MANHOLE FOR EACH NEW CIRCUIT HOMERUN WIRE. CLEAN HOMERUN MANHOLES. ANY DEWATERING SHALL BE INCIDENTAL TO INSTALLATION OF NEW WIRING.
- EXISTING GUIDANCE SIGNS AND CONCRETE PADS TO REMAIN ON CIRCUITS #12, #16 AND #17. PROVIDE NEW ISOLATION TRANSFORMER AND CONNECTIONS. SIZE ISOLATION TRANSFORMER PER EACH SIGN LOAD, PER MANUFACTURER'S RECOMMENDATION.



KEY PLAN



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FAX: 1-800-464-4358
www.rsandh.com



GERALD R. FORD
INTERNATIONAL
AIRPORT

TAXIWAY D
LIGHTING
REHABILITATION



REVISIONS

NO.	DESCRIPTION	DATE

DATE ISSUED: MAY 2025

REVIEWED BY: MAR

DRAWN BY: AZ

DESIGNED BY: EE

RS&H PROJECT NUMBER
1010-5865-001

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SHEET TITLE

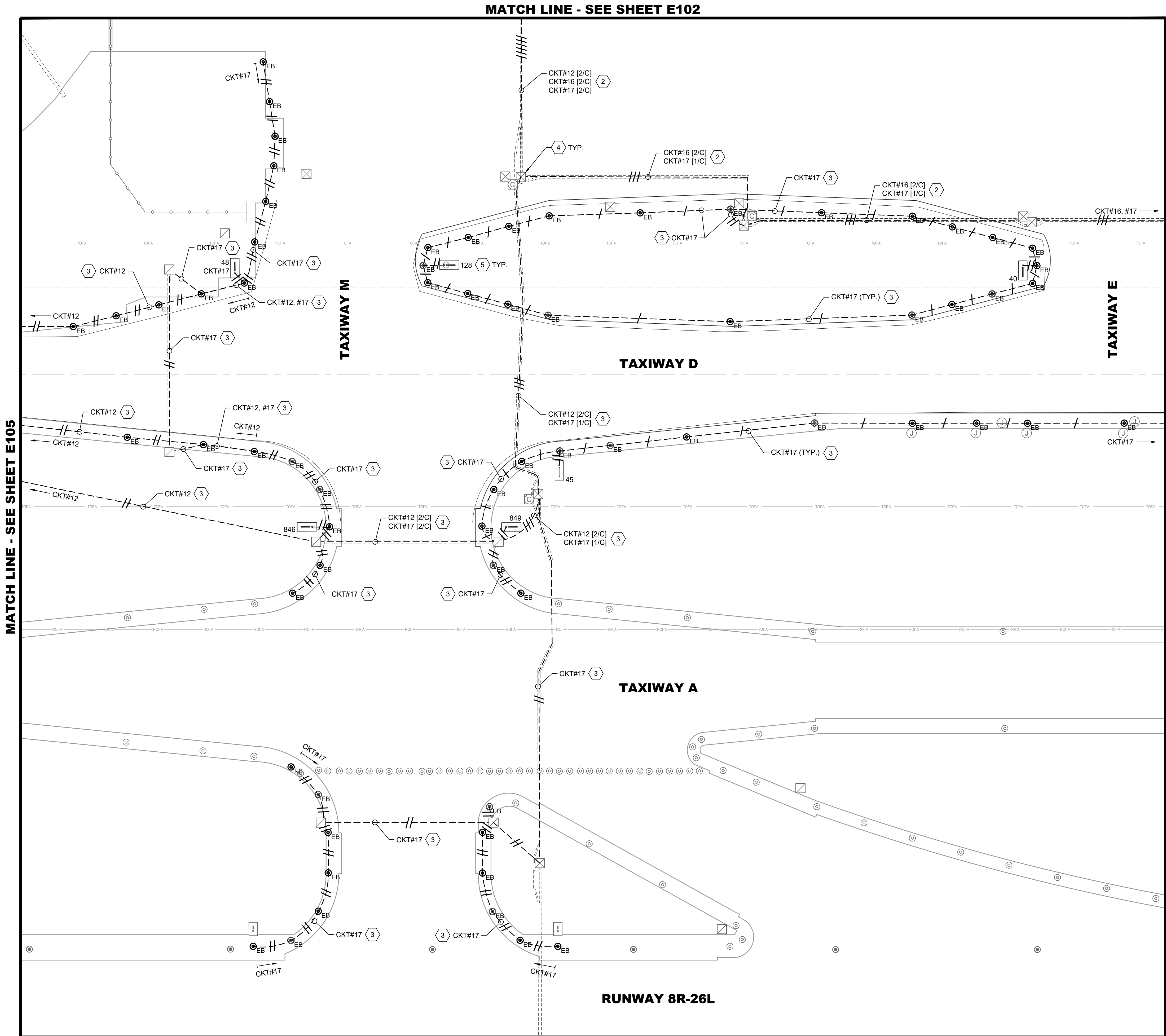
PROPOSED
AIRFIELD
LIGHTING PLAN-
AREA 5

SHEET NUMBER

E105

ISSUED FOR
BID

PLOTTED ON: 5/30/2025
PLOTTER BY: RAYCHERS
FILE LOCATION: P:\GERALD_FORD_INT\10105865_GRR_AIRFIELD_LIGHTING_ONCALL_2025_2030\10105865001_GRR_TAXIWAY_D_LIGHTING_REHAB\03.00
PROJECT EXECUTION\03.05.DWG\SCAD\ETMD E1XX PROPOSED.DWG



LEGEND:

- CKT# PROPOSED L-824 5KV CABLE IN EXISTING CONDUIT. HASH MARKS INDICATE NUMBER OF NEW L-824 CABLES INSTALLED IN EXISTING CONDUIT, CKT # = CIRCUIT DESIGNATOR
- EXISTING ELECTRICAL DUCT BANK
- EXISTING RUNWAY EDGE LIGHT TO REMAIN
- EXISTING TAXIWAY EDGE LIGHT TO REMAIN
- PROPOSED L-861T(L) ELEVATED OMNI-DIRECTIONAL MEDIUM INTENSITY TAXIWAY EDGE LIGHT (MITL) INSTALLED ON EXISTING BASE CAN
- EXISTING AIRFIELD GUIDANCE SIGN TO REMAIN
- EXISTING AIRFIELD GUIDANCE SIGN, PROVIDE NEW ISOLATION TRANSFORMER, SIGN TO REMAIN. XXX = SIGN NUMBER
- EXISTING WINDCONE TO REMAIN, PROVIDE NEW ISOLATION TRANSFORMER
- EXISTING SINGLE JUNCTION CAN TO REMAIN
- EXISTING ELECTRICAL HANDHOLE TO REMAIN
- EXISTING ELECTRICAL MANHOLE TO REMAIN
- EXISTING COMMUNICATIONS MANHOLE TO REMAIN

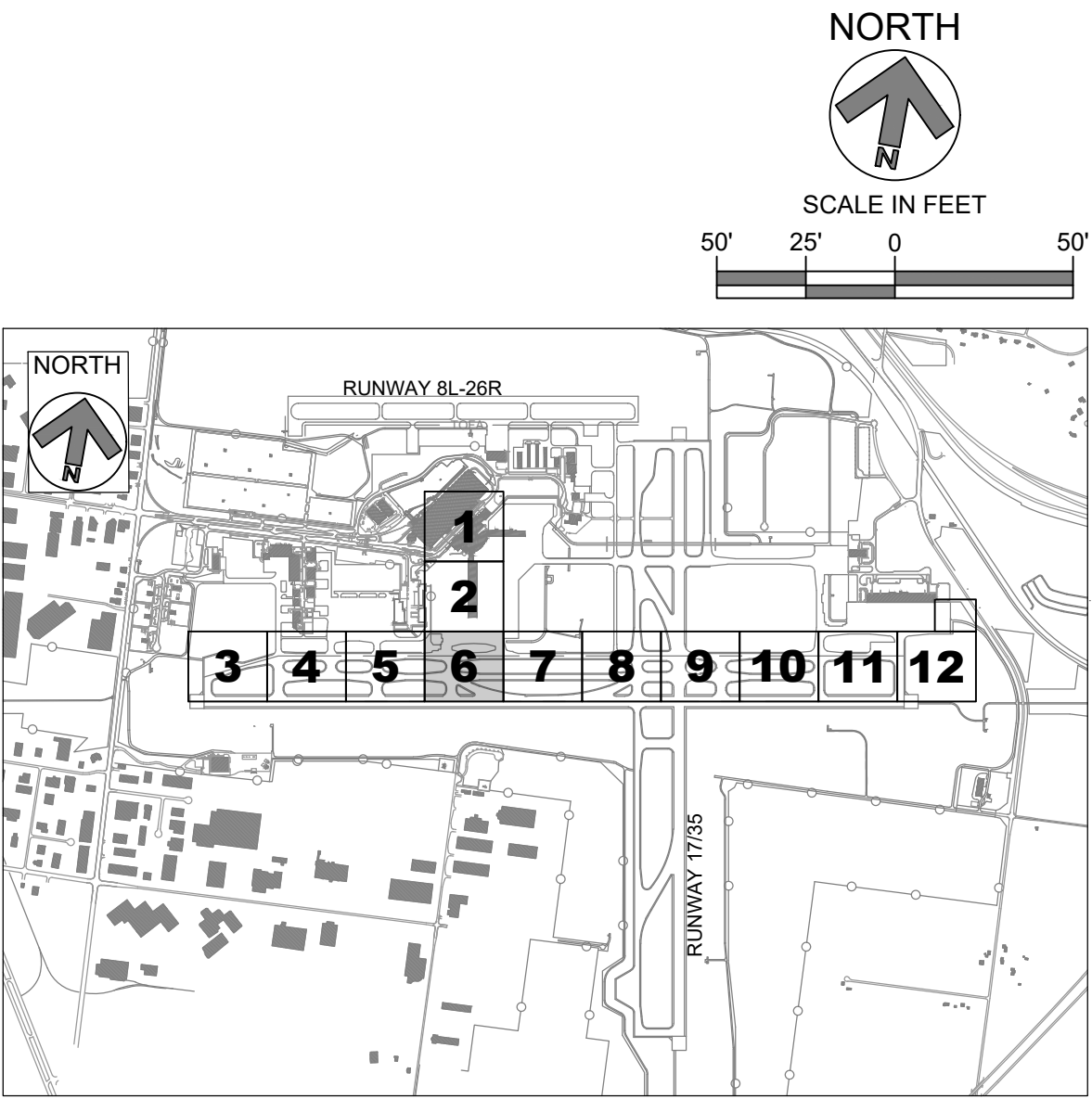
CKT #12 = TAXIWAY DELTA WEST
CKT #16 = TAXIWAY DELTA EAST
CKT #17 = TAXIWAY DELTA CENTER

GENERAL NOTES:

- SEE E001 FOR GENERAL ELECTRICAL NOTES.
- PROVIDE NEW ISOLATION TRANSFORMERS CONNECTED TO CIRCUITS #12, #16 AND #17, AT TAXIWAY EDGE LIGHTS, GUIDANCE SIGNS AND WINDCONES, AS APPLICABLE.
- EXACT ROUTING OF CABLES THROUGH EXISTING INFRASTRUCTURE SHALL BE FIELD VERIFIED.
- ALL CIRCUIT FEEDERS TO GUIDANCE SIGNS SHALL CONSIST OF 2/C L-824 5KV CABLES.

KEYED NOTES:

- APPROXIMATE LOCATION OF EXISTING AIRFIELD LIGHTING ELECTRICAL VAULT. SEE SHEET E201 FOR PROPOSED SCOPE OF WORK. EXACT ROUTING OF "HOMERUN" CONDUITS AND DUCTBANKS TO VAULT SHALL BE FIELD DETERMINED.
- TAXIWAY DELTA "HOMERUN" CABLES IN EXISTING DUCTBANK. PROPOSED L-824 CABLES FOR CIRCUITS #12, #16, AND #17 SHALL BE INSTALLED IN EXISTING CONDUIT. ALL OTHER CIRCUITS SHALL BE PROTECTED IN PLACE.
- TAXIWAY DELTA CABLES IN EXISTING CONDUIT. PROPOSED L-824 5KV CABLES FOR CIRCUITS #12, #16, AND #17, AS MARKED, SHALL BE INSTALLED IN EXISTING CONDUITS. ALL OTHER CIRCUITS SHALL BE PROTECTED IN PLACE.
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- EXISTING GUIDANCE SIGNS AND CONCRETE PADS TO REMAIN ON CIRCUITS #12, #16 AND #17. PROVIDE NEW ISOLATION TRANSFORMER AND CONNECTIONS. SIZE ISOLATION TRANSFORMER PER EACH SIGN LOAD, PER MANUFACTURER'S RECOMMENDATION.



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AIRPORT**

**TAXIWAY D
LIGHTING
REHABILITATION**



REVISIONS

NO.	DESCRIPTION	DATE

DATE ISSUED: MAY 2025

REVIEWED BY: MAR

DRAWN BY: AZ

DESIGNED BY: EE

RS&H PROJECT NUMBER
1010-5865-001

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SHEET TITLE
**PROPOSED
AIRFIELD
LIGHTING PLAN-
AREA 6**

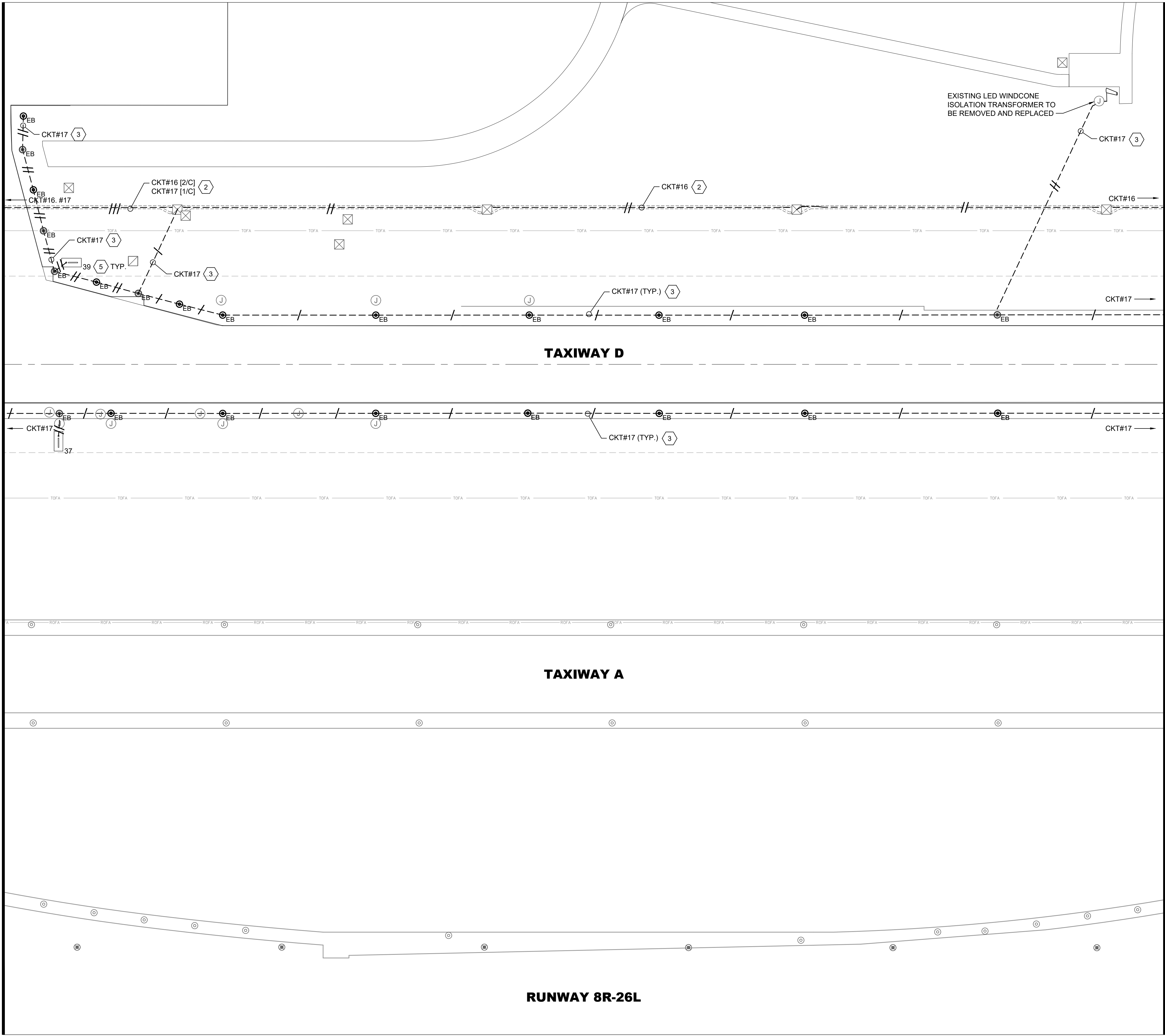
SHEET NUMBER
E106

**ISSUED FOR
BID**

PLOTTED ON: 5/30/2025
PLOTTED BY: RAYCHERS
FILE LOCATION: P:\GERALD_FORD_INT\10105865_GRR_AIRFIELD_LIGHTING_ONCALL_2025_2030\10105865001_GRR_TAXIWAY_D_LIGHTING_REHAB\03.00
PROJECT EXECUTION\03.05.DWG\SCAD\ETWD E1XX PROPOSED.DWG

MATCH LINE - SEE SHEET E106

MATCH LINE - SEE SHEET E108



LEGEND:

- CKT#
---//--- PROPOSED L-824 5KV CABLE IN EXISTING CONDUIT.
HASH MARKS INDICATE NUMBER OF NEW L-824 CABLES INSTALLED IN EXISTING CONDUIT.
CKT # = CIRCUIT DESIGNATOR
- EXISTING ELECTRICAL DUCT BANK
- EXISTING RUNWAY EDGE LIGHT TO REMAIN
- EXISTING TAXIWAY EDGE LIGHT TO REMAIN
- EB PROPOSED L-861T(L) ELEVATED OMNI-DIRECTIONAL MEDIUM INTENSITY TAXIWAY EDGE LIGHT (MITL) INSTALLED ON EXISTING BASE CAN
- EXISTING AIRFIELD GUIDANCE SIGN TO REMAIN
- EXISTING AIRFIELD GUIDANCE SIGN, PROVIDE NEW ISOLATION TRANSFORMER, SIGN TO REMAIN. XXX = SIGN NUMBER
- EXISTING WINDCONE TO REMAIN, PROVIDE NEW ISOLATION TRANSFORMER
- J EXISTING SINGLE JUNCTION CAN TO REMAIN
- EXISTING ELECTRICAL HANDHOLE TO REMAIN
- EXISTING ELECTRICAL MANHOLE TO REMAIN
- C EXISTING COMMUNICATIONS MANHOLE TO REMAIN

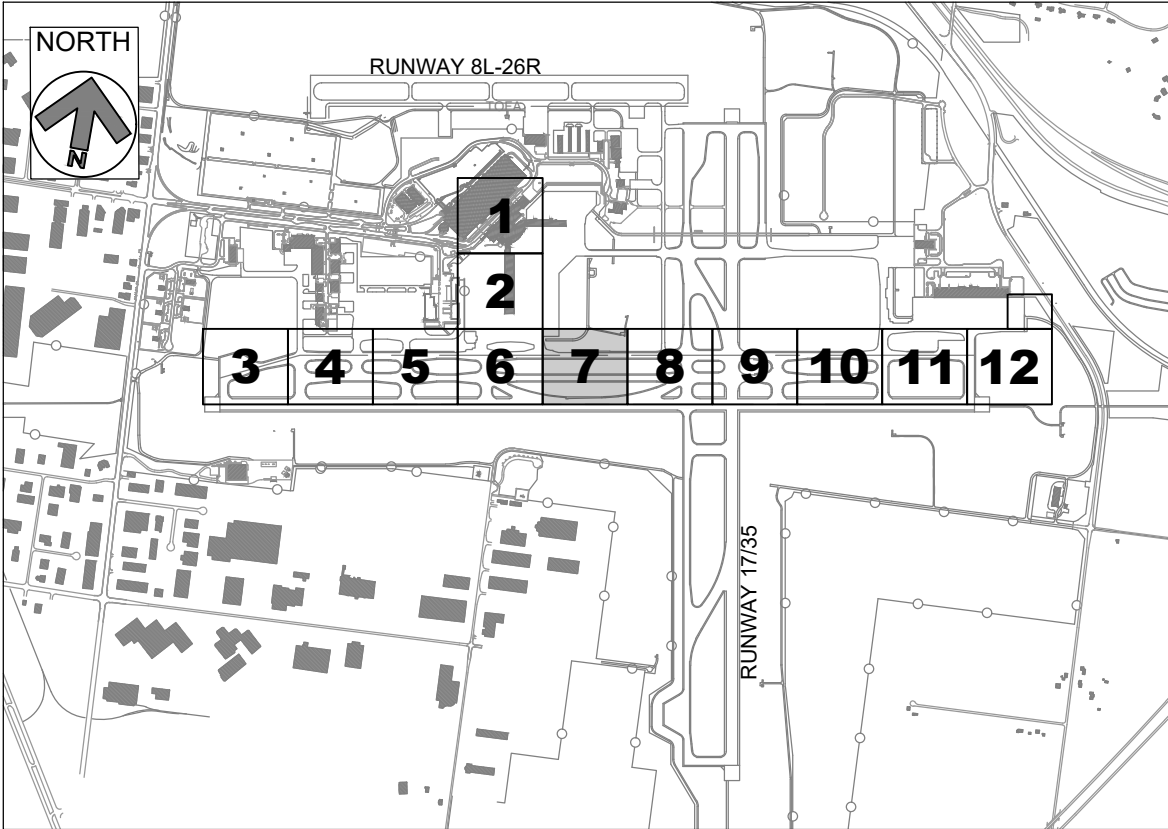
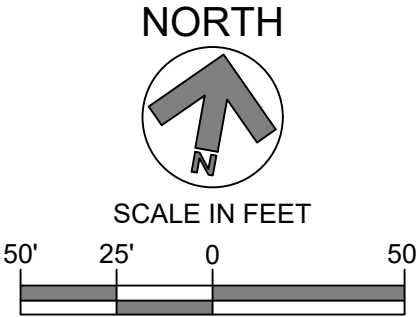
CKT #12 = TAXIWAY DELTA WEST
CKT #16 = TAXIWAY DELTA EAST
CKT #17 = TAXIWAY DELTA CENTER

GENERAL NOTES:

- SEE E001 FOR GENERAL ELECTRICAL NOTES.
- PROVIDE NEW ISOLATION TRANSFORMERS CONNECTED TO CIRCUITS #12, #16 AND #17, AT TAXIWAY EDGE LIGHTS, GUIDANCE SIGNS AND WINDCONES, AS APPLICABLE.
- EXACT ROUTING OF CABLES THROUGH EXISTING INFRASTRUCTURE SHALL BE FIELD VERIFIED.
- ALL CIRCUIT FEEDERS TO GUIDANCE SIGNS SHALL CONSIST OF 2/C L-824 5KV CABLES.

KEYED NOTES:

- APPROXIMATE LOCATION OF EXISTING AIRFIELD LIGHTING ELECTRICAL VAULT. SEE SHEET E201 FOR PROPOSED SCOPE OF WORK. EXACT ROUTING OF "HOMERUN" CONDUITS AND DUCTBANKS TO VAULT SHALL BE FIELD DETERMINED.
- TAXIWAY DELTA "HOMERUN" CABLES IN EXISTING DUCTBANK. PROPOSED L-824 CABLES FOR CIRCUITS #12, #16, AND #17 SHALL BE INSTALLED IN EXISTING CONDUIT. ALL OTHER CIRCUITS SHALL BE PROTECTED IN PLACE.
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- EXISTING GUIDANCE SIGNS AND CONCRETE PADS TO REMAIN ON CIRCUITS #12, #16 AND #17. PROVIDE NEW ISOLATION TRANSFORMER AND CONNECTIONS. SIZE ISOLATION TRANSFORMER PER EACH SIGN LOAD, PER MANUFACTURER'S RECOMMENDATION.



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AIRPORT**

**TAXIWAY D
LIGHTING
REHABILITATION**



REVISIONS

NO.	DESCRIPTION	DATE

DATE ISSUED: MAY 2025

REVIEWED BY: MAR

DRAWN BY: AZ

DESIGNED BY: EE

RS&H PROJECT NUMBER
1010-5865-001

SHEET TITLE

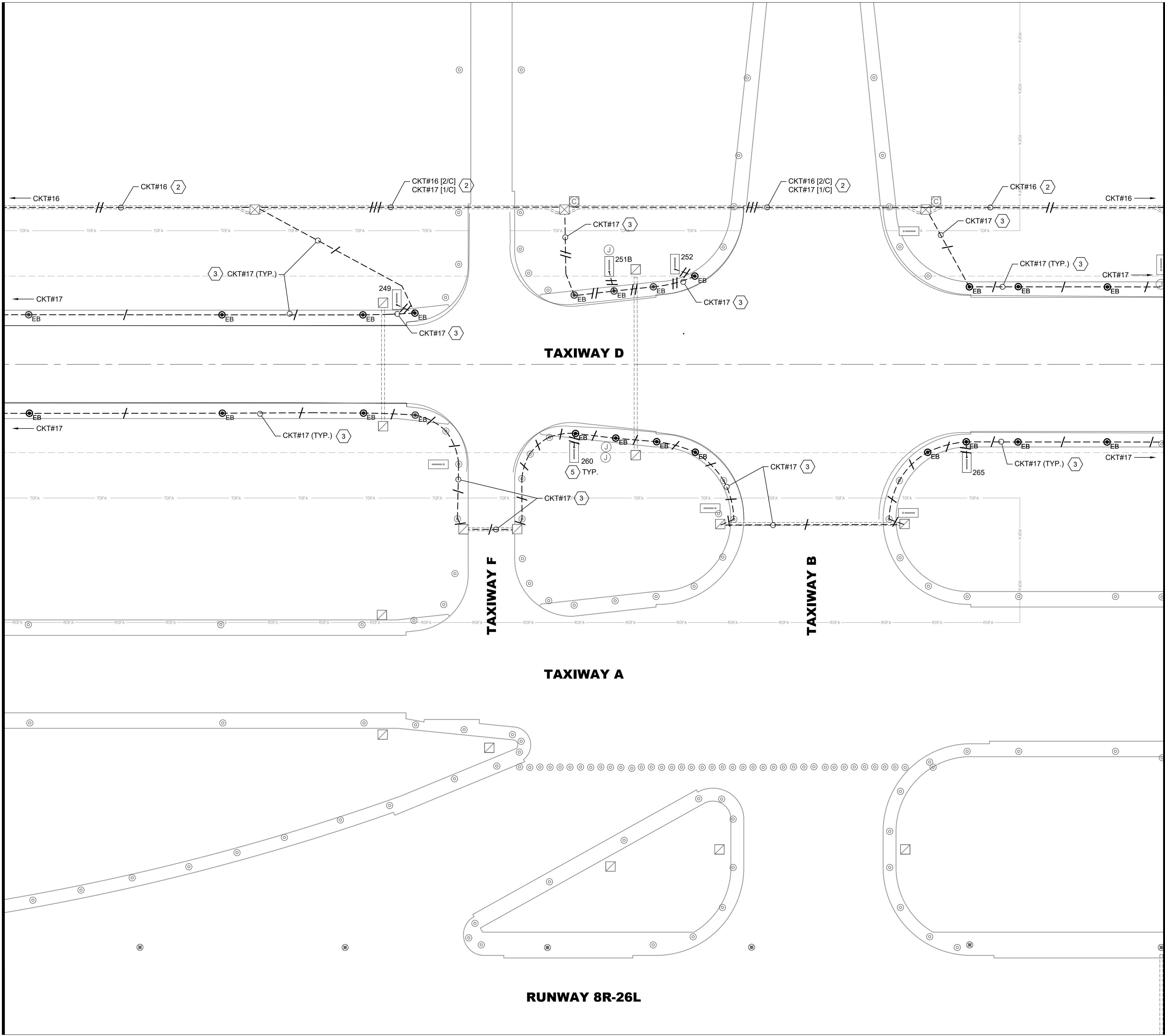
**PROPOSED
AIRFIELD
LIGHTING PLAN-
AREA 7**

SHEET NUMBER

E107

**ISSUED FOR
BID**

MATCH LINE - SEE SHEET E107



MATCH LINE - SEE SHEET E109

LEGEND:

- CKT# PROPOSED L-824 5KV CABLE IN EXISTING CONDUIT. HASH MARKS INDICATE NUMBER OF NEW L-824 CABLES INSTALLED IN EXISTING CONDUIT, CKT # = CIRCUIT DESIGNATOR
- EXISTING ELECTRICAL DUCT BANK
- EXISTING RUNWAY EDGE LIGHT TO REMAIN
- EXISTING TAXIWAY EDGE LIGHT TO REMAIN
- PROPOSED L-861T(L) ELEVATED OMNI-DIRECTIONAL MEDIUM INTENSITY TAXIWAY EDGE LIGHT (MITL) INSTALLED ON EXISTING BASE CAN
- EXISTING AIRFIELD GUIDANCE SIGN TO REMAIN
- EXISTING AIRFIELD GUIDANCE SIGN, PROVIDE NEW ISOLATION TRANSFORMER, SIGN TO REMAIN. XXX = SIGN NUMBER
- EXISTING WINDCONE TO REMAIN, PROVIDE NEW ISOLATION TRANSFORMER
- EXISTING SINGLE JUNCTION CAN TO REMAIN
- EXISTING ELECTRICAL HANDHOLE TO REMAIN
- EXISTING ELECTRICAL MANHOLE TO REMAIN
- EXISTING COMMUNICATIONS MANHOLE TO REMAIN

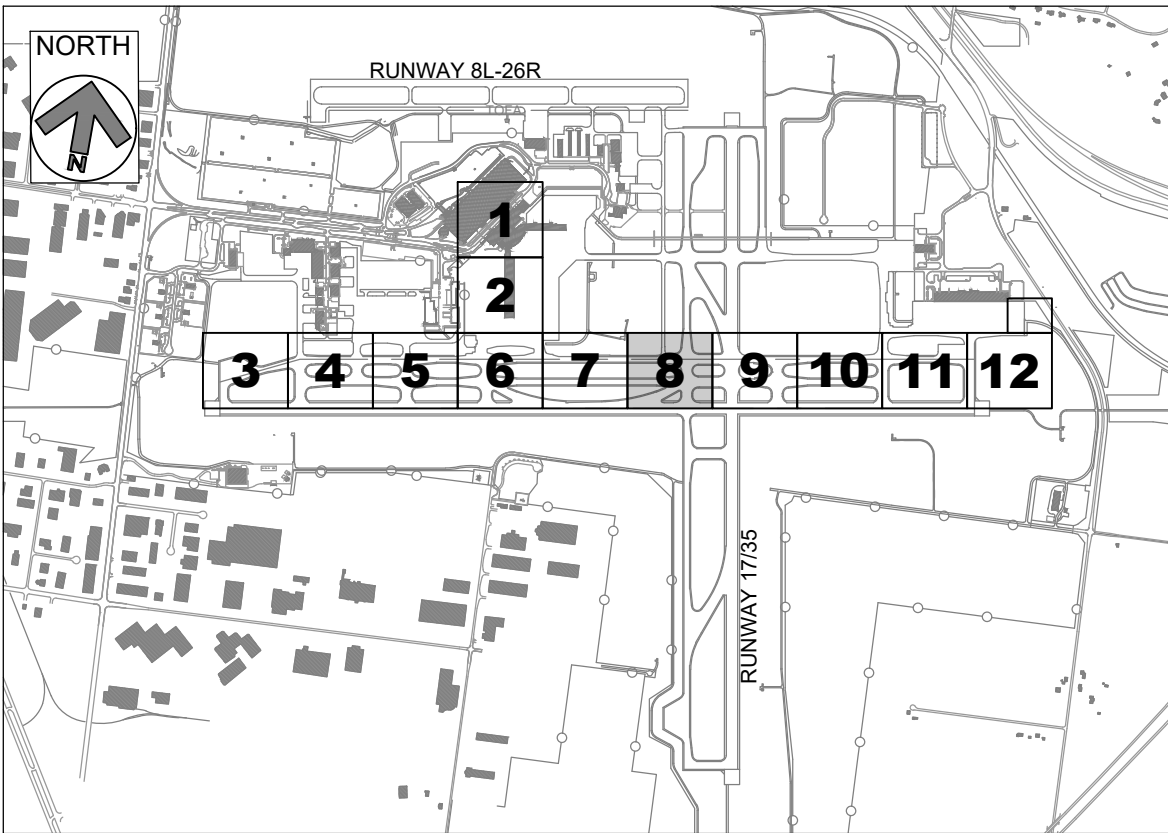
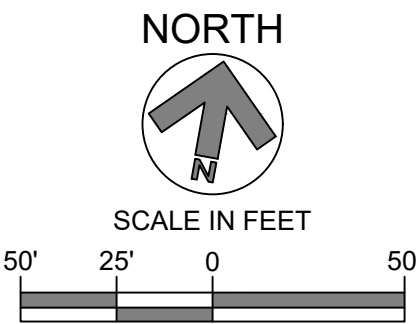
CKT #12 = TAXIWAY DELTA WEST
CKT #16 = TAXIWAY DELTA EAST
CKT #17 = TAXIWAY DELTA CENTER

GENERAL NOTES:

- SEE E001 FOR GENERAL ELECTRICAL NOTES.
- PROVIDE NEW ISOLATION TRANSFORMERS CONNECTED TO CIRCUITS #12, #16 AND #17, AT TAXIWAY EDGE LIGHTS, GUIDANCE SIGNS AND WINDCONES, AS APPLICABLE.
- EXACT ROUTING OF CABLES THROUGH EXISTING INFRASTRUCTURE SHALL BE FIELD VERIFIED.
- ALL CIRCUIT FEEDERS TO GUIDANCE SIGNS SHALL CONSIST OF 2/C L-824 5KV CABLES.

KEYED NOTES:

- APPROXIMATE LOCATION OF EXISTING AIRFIELD LIGHTING ELECTRICAL VAULT. SEE SHEET E201 FOR PROPOSED SCOPE OF WORK. EXACT ROUTING OF "HOMERUN" CONDUITS AND DUCTBANKS TO VAULT SHALL BE FIELD DETERMINED.
- TAXIWAY DELTA "HOMERUN" CABLES IN EXISTING DUCTBANK. PROPOSED L-824 CABLES FOR CIRCUITS #12, #16, AND #17 SHALL BE INSTALLED IN EXISTING CONDUIT. ALL OTHER CIRCUITS SHALL BE PROTECTED IN PLACE.
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KEY PLAN



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AIRPORT

TAXIWAY D
LIGHTING
REHABILITATION



REVISIONS

NO.	DESCRIPTION	DATE

DATE ISSUED: MAY 2025
REVIEWED BY: MAR
DRAWN BY: AZ
DESIGNED BY: EE

RS&H PROJECT NUMBER
1010-5865-001

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SHEET TITLE
PROPOSED
AIRFIELD
LIGHTING PLAN-
AREA 8

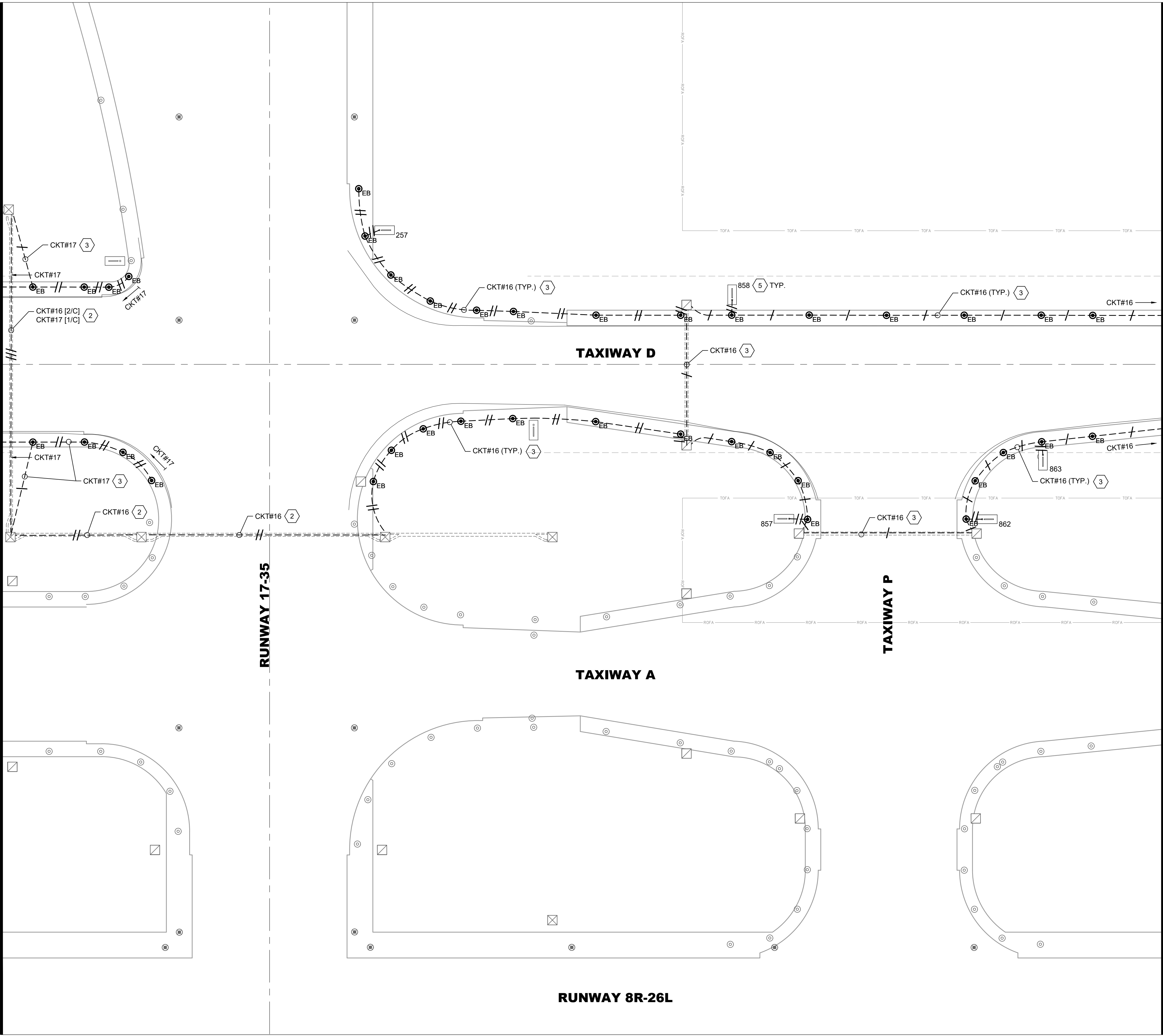
SHEET NUMBER
E108

ISSUED FOR
BID

PLOTTED ON: 5/30/2025
PLOTTER BY: RAYCHERS

FILE LOCATION: P:\GERALD_FORD_INT\10105865_GRR_AIRFIELD_LIGHTING_ONCALL_2025_2030\10105865001_GRR_TAXIWAY_D_LIGHTING_REHAB\03.00
PROJECT EXECUTION\03.05.DWG\SCAD\ETWD E1XX PROPOSED.DWG

MATCH LINE - SEE SHEET E108



MATCH LINE - SEE SHEET E110

LEGEND:

- CKT# PROPOSED L-824 5KV CABLE IN EXISTING CONDUIT. HASH MARKS INDICATE NUMBER OF NEW L-824 CABLES INSTALLED IN EXISTING CONDUIT, CKT # = CIRCUIT DESIGNATOR
- EXISTING ELECTRICAL DUCT BANK
- EXISTING RUNWAY EDGE LIGHT TO REMAIN
- EXISTING TAXIWAY EDGE LIGHT TO REMAIN
- PROPOSED L-861T(L) ELEVATED OMNI-DIRECTIONAL MEDIUM INTENSITY TAXIWAY EDGE LIGHT (MITL) INSTALLED ON EXISTING BASE CAN
- EXISTING AIRFIELD GUIDANCE SIGN TO REMAIN
- EXISTING AIRFIELD GUIDANCE SIGN, PROVIDE NEW ISOLATION TRANSFORMER, SIGN TO REMAIN. XXX = SIGN NUMBER
- EXISTING WINDCONE TO REMAIN, PROVIDE NEW ISOLATION TRANSFORMER
- EXISTING SINGLE JUNCTION CAN TO REMAIN
- EXISTING ELECTRICAL HANDHOLE TO REMAIN
- EXISTING ELECTRICAL MANHOLE TO REMAIN
- EXISTING COMMUNICATIONS MANHOLE TO REMAIN

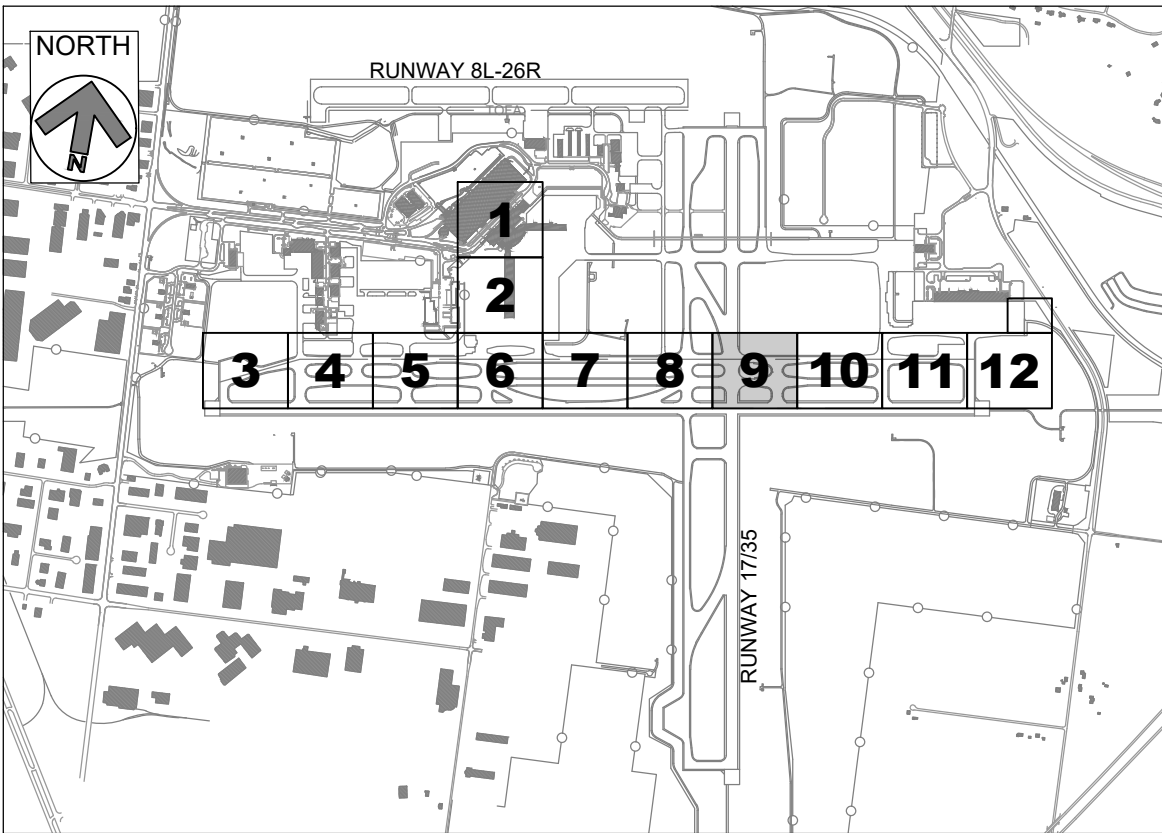
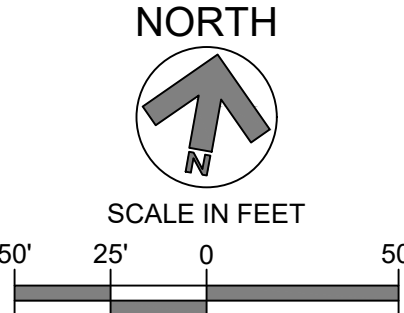
CKT #12 = TAXIWAY DELTA WEST
CKT #16 = TAXIWAY DELTA EAST
CKT #17 = TAXIWAY DELTA CENTER

GENERAL NOTES:

- SEE E001 FOR GENERAL ELECTRICAL NOTES.
- PROVIDE NEW ISOLATION TRANSFORMERS CONNECTED TO CIRCUITS #12, #16 AND #17, AT TAXIWAY EDGE LIGHTS, GUIDANCE SIGNS AND WINDCONES, AS APPLICABLE.
- EXACT ROUTING OF CABLES THROUGH EXISTING INFRASTRUCTURE SHALL BE FIELD VERIFIED.
- ALL CIRCUIT FEEDERS TO GUIDANCE SIGNS SHALL CONSIST OF 2/C L-824 5KV CABLES.

KEYED NOTES:

- APPROXIMATE LOCATION OF EXISTING AIRFIELD LIGHTING ELECTRICAL VAULT. SEE SHEET E201 FOR PROPOSED SCOPE OF WORK. EXACT ROUTING OF "HOMERUN" CONDUITS AND DUCTBANKS TO VAULT SHALL BE FIELD DETERMINED.
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INTERNATIONAL
AIRPORT**

**TAXIWAY D
LIGHTING
REHABILITATION**



REVISIONS		
NO.	DESCRIPTION	DATE

DATE ISSUED: MAY 2025
REVIEWED BY: MAR
DRAWN BY: AZ
DESIGNED BY: EE

RS&H PROJECT NUMBER
1010-5865-001

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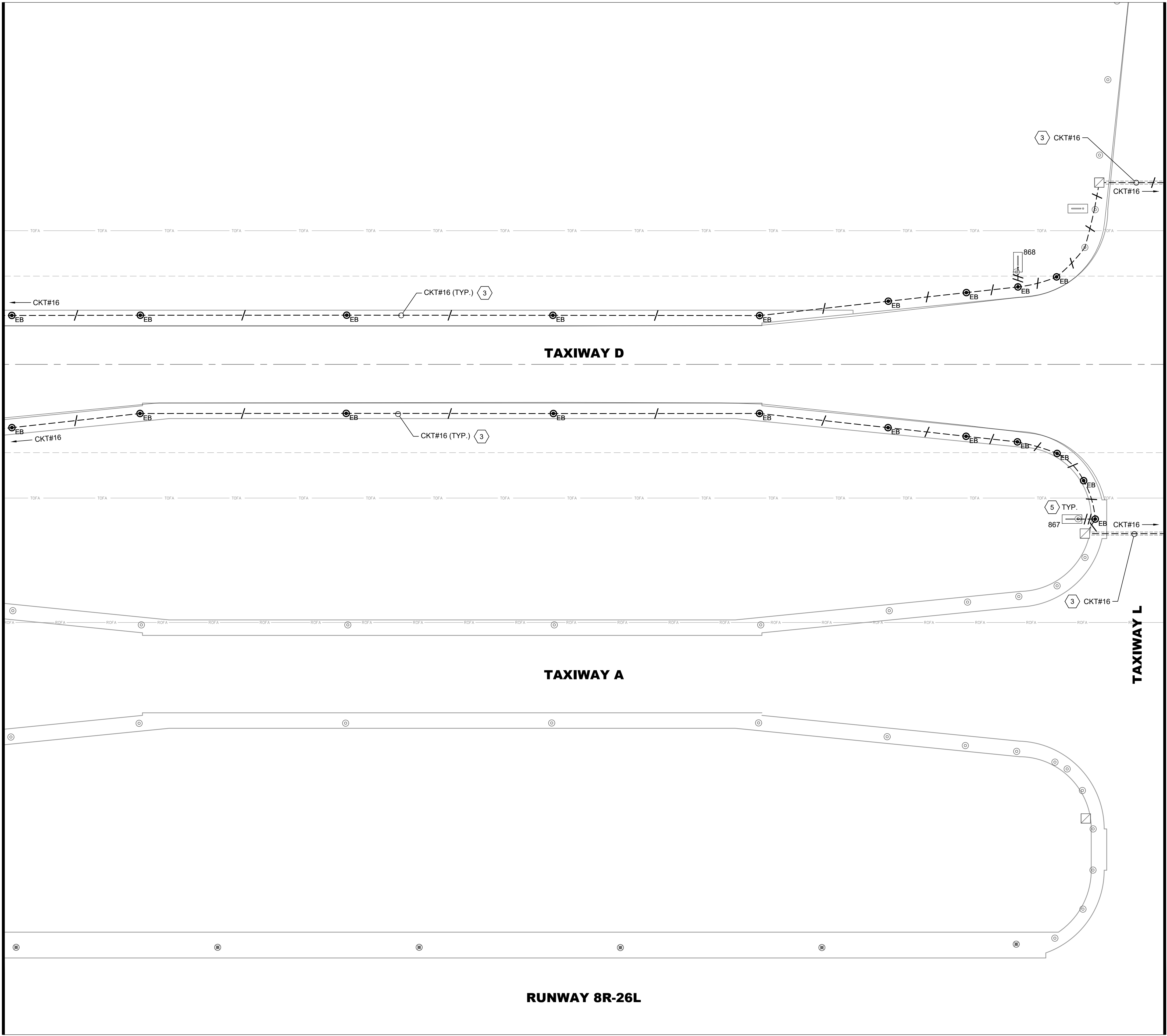
SHEET TITLE
**PROPOSED
AIRFIELD
LIGHTING PLAN-
AREA 9**

SHEET NUMBER
E109

**ISSUED FOR
BID**

PLOTTED ON: 5/30/2025
PLOTTED BY: RAYCHERS
FILE LOCATION: P:\GERALD_FORD_INT\10105865_GRR_AIRFIELD_LIGHTING_ONCALL_2025_2030\10105865001_GRR_TAXIWAY_D_LIGHTING_REHAB\03.00
PROJECT EXECUTION\03.05.DWG\SCAD\ETWD E1XX PROPOSED.DWG

MATCH LINE - SEE SHEET E109



MATCH LINE - SEE SHEET E111

LEGEND:

- CKT# PROPOSED L-824 5KV CABLE IN EXISTING CONDUIT. HASH MARKS INDICATE NUMBER OF NEW L-824 CABLES INSTALLED IN EXISTING CONDUIT, CKT # = CIRCUIT DESIGNATOR
- EXISTING ELECTRICAL DUCT BANK
- EXISTING RUNWAY EDGE LIGHT TO REMAIN
- EXISTING TAXIWAY EDGE LIGHT TO REMAIN
- PROPOSED L-861T(L) ELEVATED OMNI-DIRECTIONAL MEDIUM INTENSITY TAXIWAY EDGE LIGHT (MITL) INSTALLED ON EXISTING BASE CAN
- EXISTING AIRFIELD GUIDANCE SIGN TO REMAIN
- EXISTING AIRFIELD GUIDANCE SIGN, PROVIDE NEW ISOLATION TRANSFORMER, SIGN TO REMAIN. XXX = SIGN NUMBER
- EXISTING WINDCONE TO REMAIN, PROVIDE NEW ISOLATION TRANSFORMER
- EXISTING SINGLE JUNCTION CAN TO REMAIN
- EXISTING ELECTRICAL HANDHOLE TO REMAIN
- EXISTING ELECTRICAL MANHOLE TO REMAIN
- EXISTING COMMUNICATIONS MANHOLE TO REMAIN

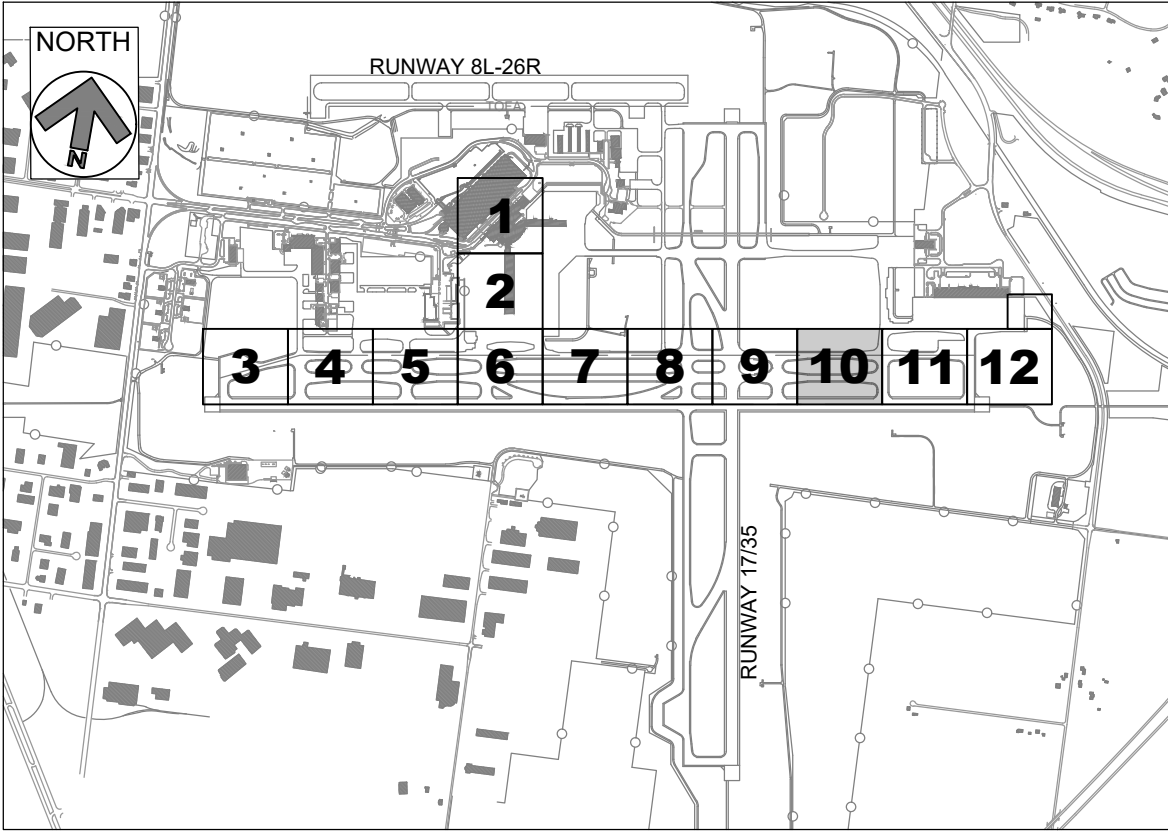
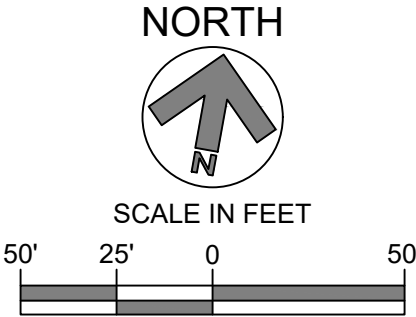
CKT #12 = TAXIWAY DELTA WEST
CKT #16 = TAXIWAY DELTA EAST
CKT #17 = TAXIWAY DELTA CENTER

GENERAL NOTES:

- SEE E001 FOR GENERAL ELECTRICAL NOTES.
- PROVIDE NEW ISOLATION TRANSFORMERS CONNECTED TO CIRCUITS #12, #16 AND #17, AT TAXIWAY EDGE LIGHTS, GUIDANCE SIGNS AND WINDCONES, AS APPLICABLE.
- EXACT ROUTING OF CABLES THROUGH EXISTING INFRASTRUCTURE SHALL BE FIELD VERIFIED.
- ALL CIRCUIT FEEDERS TO GUIDANCE SIGNS SHALL CONSIST OF 2/C L-824 5KV CABLES.

KEYED NOTES:

- APPROXIMATE LOCATION OF EXISTING AIRFIELD LIGHTING ELECTRICAL VAULT. SEE SHEET E201 FOR PROPOSED SCOPE OF WORK. EXACT ROUTING OF "HOMERUN" CONDUITS AND DUCTBANKS TO VAULT SHALL BE FIELD DETERMINED.
- TAXIWAY DELTA "HOMERUN" CABLES IN EXISTING DUCTBANK. PROPOSED L-824 CABLES FOR CIRCUITS #12, #16, AND #17 SHALL BE INSTALLED IN EXISTING CONDUIT. ALL OTHER CIRCUITS SHALL BE PROTECTED IN PLACE.
- TAXIWAY DELTA CABLES IN EXISTING CONDUIT. PROPOSED L-824 5KV CABLES FOR CIRCUITS #12, #16, AND #17, AS MARKED, SHALL BE INSTALLED IN EXISTING CONDUITS. ALL OTHER CIRCUITS SHALL BE PROTECTED IN PLACE.
- ALL PROPOSED AND EXISTING WIRING TO BE PROPERLY IDENTIFIED, RACKED, AND TAGGED IN EACH MANHOLE. PROVIDE A MINIMUM OF ONE (1) LOOP OF WIRING IN EACH MANHOLE FOR EACH NEW CIRCUIT HOMERUN WIRE. CLEAN HOMERUN MANHOLES. ANY DEWATERING SHALL BE INCIDENTAL TO INSTALLATION OF NEW WIRING.
- EXISTING GUIDANCE SIGNS AND CONCRETE PADS TO REMAIN ON CIRCUITS #12, #16 AND #17. PROVIDE NEW ISOLATION TRANSFORMER AND CONNECTIONS. SIZE ISOLATION TRANSFORMER PER EACH SIGN LOAD, PER MANUFACTURER'S RECOMMENDATION.



KEY PLAN



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**GERALD R. FORD
INTERNATIONAL
AIRPORT**

**TAXIWAY D
LIGHTING
REHABILITATION**



REVISIONS

NO.	DESCRIPTION	DATE

DATE ISSUED: MAY 2025

REVIEWED BY: MAR

DRAWN BY: AZ

DESIGNED BY: EE

RS&H PROJECT NUMBER
1010-5865-001

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SHEET TITLE

**PROPOSED
AIRFIELD
LIGHTING PLAN-
AREA 10**

SHEET NUMBER

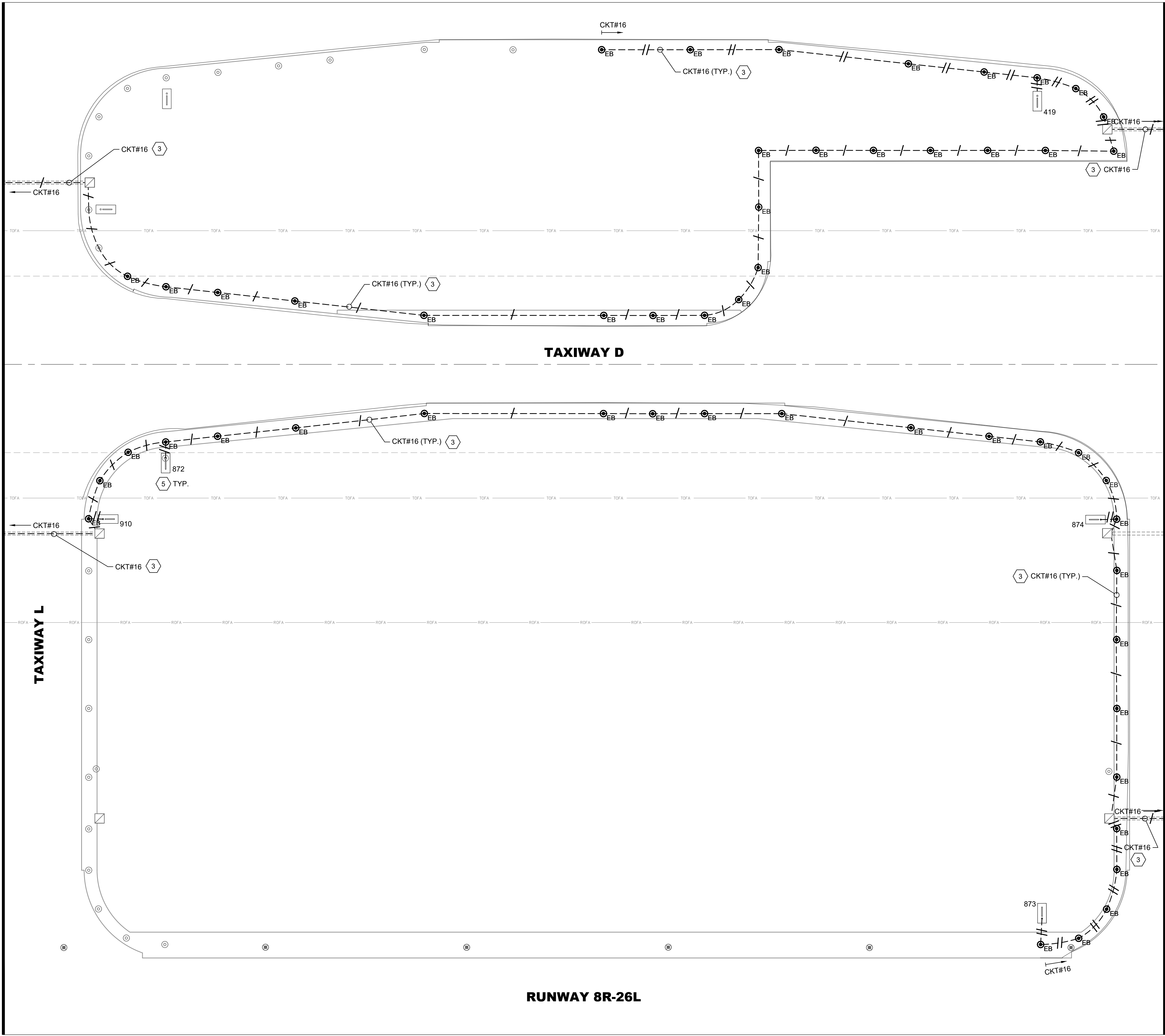
E110

**ISSUED FOR
BID**

PLOTTED ON: 5/30/2025
FILE LOCATION: P:\GERALD_FORD_INT\10105865_GRR_AIRFIELD_LIGHTING_ONCALL_2025_2030\10105865001_GRR_TAXIWAY_D_LIGHTING_REHAB\03.00
PROJECT EXECUTION\03.05.DWG

MATCH LINE - SEE SHEET E110

TAXIWAY L



MATCH LINE - SEE SHEET E112

LEGEND:

- CKT#
---//---
PROPOSED L-824 5KV CABLE IN EXISTING CONDUIT.
HASH MARKS INDICATE NUMBER OF NEW L-824
CABLES INSTALLED IN EXISTING CONDUIT,
CKT # = CIRCUIT DESIGNATOR
- EXISTING ELECTRICAL DUCT BANK
- ⊙
EXISTING RUNWAY EDGE LIGHT TO REMAIN
- ⊙
EXISTING TAXIWAY EDGE LIGHT TO REMAIN
- ⊙EB
PROPOSED L-861T(L) ELEVATED OMNI-DIRECTIONAL
MEDIUM INTENSITY TAXIWAY EDGE LIGHT (MTL)
INSTALLED ON EXISTING BASE CAN
- EXISTING AIRFIELD GUIDANCE SIGN TO REMAIN
- XXX
EXISTING AIRFIELD GUIDANCE SIGN, PROVIDE
NEW ISOLATION TRANSFORMER, SIGN TO
REMAIN. XXX = SIGN NUMBER
- ▽
EXISTING WINDCONE TO REMAIN, PROVIDE
NEW ISOLATION TRANSFORMER
- ⌋
EXISTING SINGLE JUNCTION CAN TO REMAIN
- ⌋
EXISTING ELECTRICAL HANDHOLE TO REMAIN
- ⌋
EXISTING ELECTRICAL MANHOLE TO REMAIN
- ⌋
EXISTING COMMUNICATIONS MANHOLE TO REMAIN

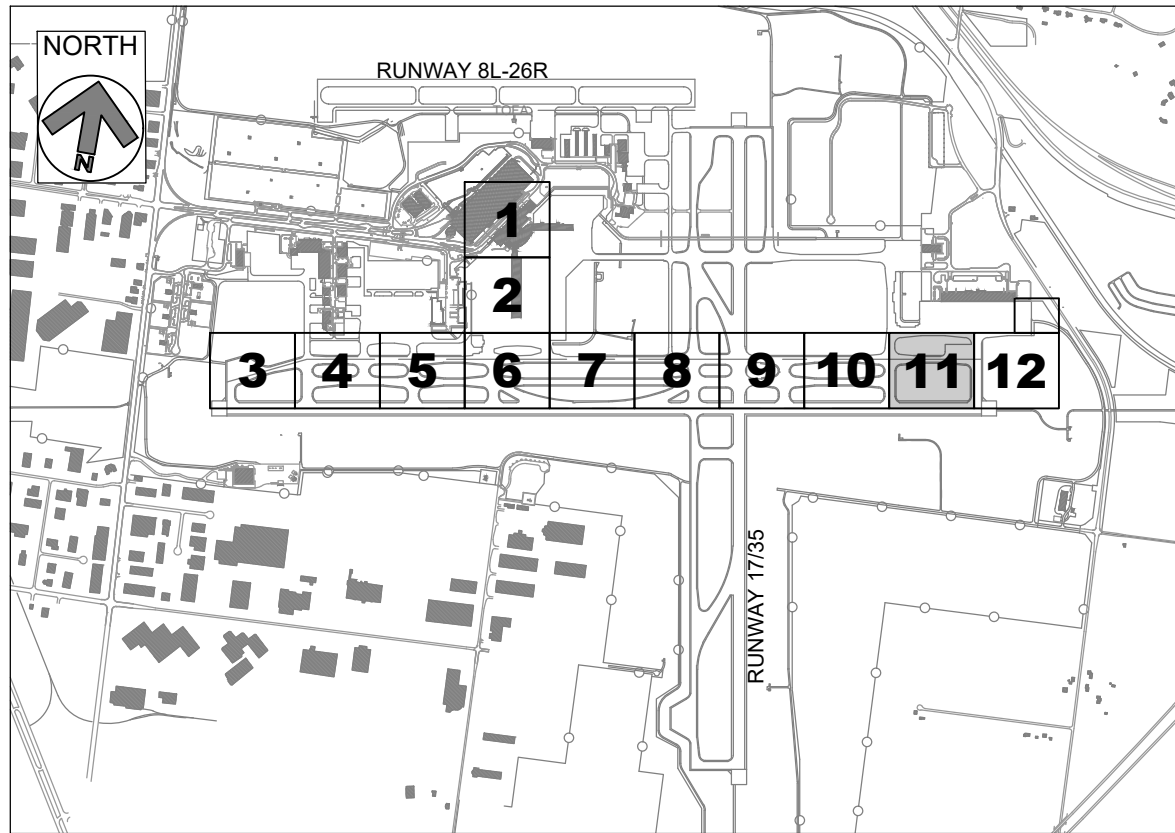
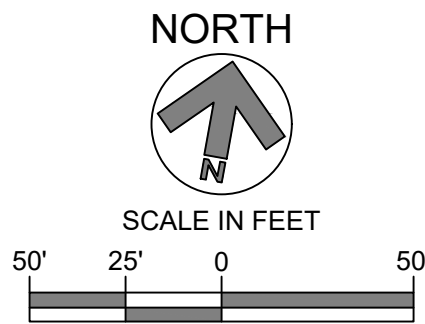
CKT #12 = TAXIWAY DELTA WEST
CKT #16 = TAXIWAY DELTA EAST
CKT #17 = TAXIWAY DELTA CENTER

GENERAL NOTES:

- SEE E001 FOR GENERAL ELECTRICAL NOTES.
- PROVIDE NEW ISOLATION TRANSFORMERS CONNECTED TO
CIRCUITS #12, #16 AND #17, AT TAXIWAY EDGE LIGHTS,
GUIDANCE SIGNS AND WINDCONES, AS APPLICABLE.
- EXACT ROUTING OF CABLES THROUGH EXISTING
INFRASTRUCTURE SHALL BE FIELD VERIFIED.
- ALL CIRCUIT FEEDERS TO GUIDANCE SIGNS SHALL CONSIST
OF 2/C L-824 5KV CABLES.

KEYED NOTES:

- APPROXIMATE LOCATION OF EXISTING AIRFIELD LIGHTING
ELECTRICAL VAULT. SEE SHEET E201 FOR PROPOSED SCOPE
OF WORK. EXACT ROUTING OF "HOMERUN" CONDUITS AND
DUCTBANKS TO VAULT SHALL BE FIELD DETERMINED.
- TAXIWAY DELTA "HOMERUN" CABLES IN EXISTING
DUCTBANK. PROPOSED L-824 CABLES FOR CIRCUITS #12,
#16, AND #17 SHALL BE INSTALLED IN EXISTING CONDUIT. ALL
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- TAXIWAY DELTA CABLES IN EXISTING CONDUIT. PROPOSED
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IDENTIFIED, RACKED, AND TAGGED IN EACH MANHOLE.
PROVIDE A MINIMUM OF ONE (1) LOOP OF WIRING IN EACH
MANHOLE FOR EACH NEW CIRCUIT HOMERUN WIRE. CLEAN
HOMERUN MANHOLES. ANY DEWATERING SHALL BE
INCIDENTAL TO INSTALLATION OF NEW WIRING.
- EXISTING GUIDANCE SIGNS AND CONCRETE PADS TO
REMAIN ON CIRCUITS #12, #16 AND #17. PROVIDE NEW
ISOLATION TRANSFORMER AND CONNECTIONS. SIZE
ISOLATION TRANSFORMER PER EACH SIGN LOAD, PER
MANUFACTURER'S RECOMMENDATION.



KEY PLAN



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**GERALD R. FORD
INTERNATIONAL
AIRPORT**

**TAXIWAY D
LIGHTING
REHABILITATION**



REVISIONS

NO.	DESCRIPTION	DATE

DATE ISSUED: MAY 2025

REVIEWED BY: MAR

DRAWN BY: AZ

DESIGNED BY: EE

RS&H PROJECT NUMBER
1010-5865-001

SHEET TITLE

**PROPOSED
AIRFIELD
LIGHTING PLAN-
AREA 11**

SHEET NUMBER

E111

**ISSUED FOR
BID**

FILE LOCATION:

PROJECT EXECUTION\03.05 DWGS_MODELS\CAD\ET\TWD.E1XX PROPOSED.DWG

MAT



AIRPORT PERIMETER ROAD

CKT#

HASH MARKS INDICATE NUMBER OF NEW L-824
CABLES INSTALLED IN EXISTING CONDUIT,
CKT # = CIRCUIT DESIGNATOR

EXISTING RUNWAY EDGE LIGHT TO REMAIN

MEDIUM INTENSITY TAXIWAY EDGE LIGHT (MITL)
INSTALLED ON EXISTING BASE CAN

EXISTING AIRFIELD GUIDANCE SIGN, PROVIDE
NEW ISOLATION TRANSFORMER, SIGN TO
REMAIN. XXX = SIGN NUMBER

EXISTING WINDCONE TO REMAIN, PROVIDE
NEW ISOLATION TRANSFORMER

EXISTING SINGLE JUNCTION CAN TO REMAIN

EXISTING ELECTRICAL HANDHOLE TO REMAIN

EXISTING ELECTRICAL MANHOLE TO REMAIN

EXISTING COMMUNICATIONS MANHOLE TO REMAIN

CKT #12 = TAXIWAY DELTA WEST

CKT #16 = TAXIWAY DELTA EAST

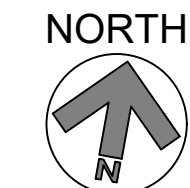
CKT #17 = TAXIWAY DELTA CENTER

1. SEE E001 FOR GENERAL ELECTRICAL NOTES

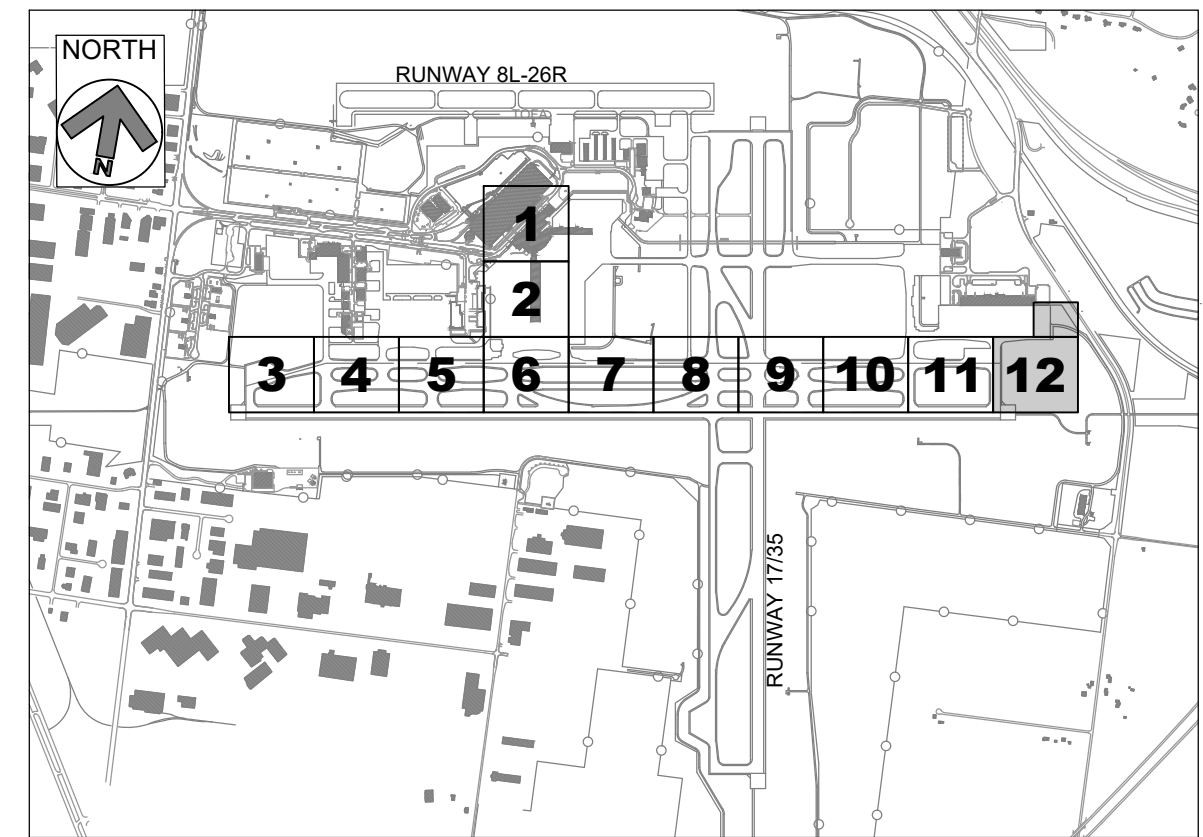
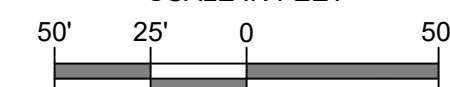
1. SEE E001 FOR GENERAL ELECTRICAL NOTES.
2. PROVIDE NEW ISOLATION TRANSFORMERS CONNECTED TO CIRCUITS #12, #16 AND #17, AT TAXIWAY EDGE LIGHTS, GUIDANCE SIGNS AND WINDCONES, AS APPLICABLE.
3. EXACT ROUTING OF CABLES THROUGH EXISTING INFRASTRUCTURE SHALL BE FIELD VERIFIED.
4. ALL CIRCUIT FEEDERS TO GUIDANCE SIGNS SHALL CONSIST OF 2/C L-824 5KV CABLES.

1 APPROXIMATE LOCATION OF EXISTING AIRFIELD LIGHTING ELECTRICAL VAULT. SEE SHEET E201 FOR PROPOSED SCOPE OF WORK. EXACT ROUTING OF "HOMERUN" CONDUITS AND DUCTBANKS TO VAULT SHALL BE FIELD DETERMINED.

- 2 TAXIWAY DELTA "HOMERUN" CABLES IN EXISTING DUCTBANK, PROPOSED L-824 CABLES FOR CIRCUITS #12, #16, AND #17 SHALL BE INSTALLED IN EXISTING CONDUIT. ALL OTHER CIRCUITS SHALL BE PROTECTED IN PLACE.
- 3 TAXIWAY DELTA CABLES IN EXISTING CONDUIT, PROPOSED L-824 5KV CABLES FOR CIRCUITS #12, #16, AND #17, AS MARKED, SHALL BE INSTALLED IN EXISTING CONDUITS. ALL OTHER CIRCUITS SHALL BE PROTECTED IN PLACE.
- 4 ALL PROPOSED AND EXISTING WIRING TO BE PROPERLY IDENTIFIED, RACKED, AND TAGGED IN EACH MANHOLE. PROVIDE A MINIMUM OF ONE (1) LOOP OF WIRING IN EACH MANHOLE FOR EACH NEW CIRCUIT HOMERUN WIRE. CLEAN HOMERUN MANHOLES. ANY DOWATERING SHALL BE INCIDENTAL TO INSTALLATION OF NEW WIRING.
- 5 EXISTING GUIDANCE SIGNS AND CONCRETE PADS TO REMAIN ON CIRCUITS #12, #16 AND #17. PROVIDE NEW ISOLATION TRANSFORMER AND CONNECTIONS. SIZE ISOLATION TRANSFORMER PER EACH SIGN LOAD, PER MANUFACTURER'S RECOMMENDATION.



SCALE IN FEET



KEY PLAN

**RS&H Michigan, Inc.**

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www.rsandh.com**



**GERALD R. FORD
INTERNATIONAL
AIRPORT**

TAXIWAY D LIGHTING REHABILITATION

MISS DIG System, Inc.
1-800-482-7171

[illegible]

DATE ISSUED: MAY 2025

REVIEWED BY: MAR

DRAWN BY: AZ

DESIGNED BY: EE

RS&H PROJECT NUMBER
1010-5865-001

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SHEET TITLE

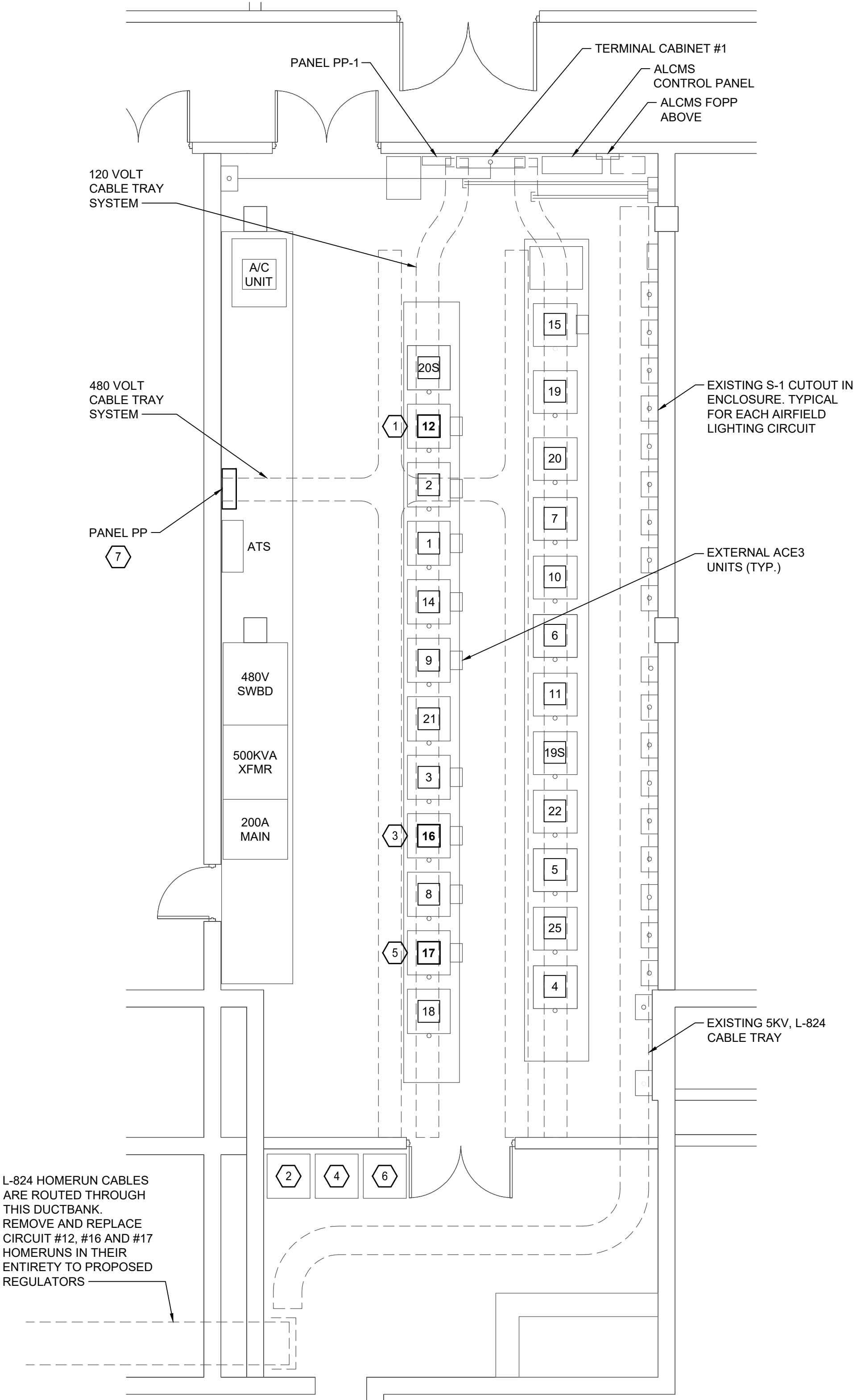
**PROPOSED
AIRFIELD
LIGHTING PLAN-
AREA 12**

SHEET NUMBER

E112

**ISSUED FOR
BID**

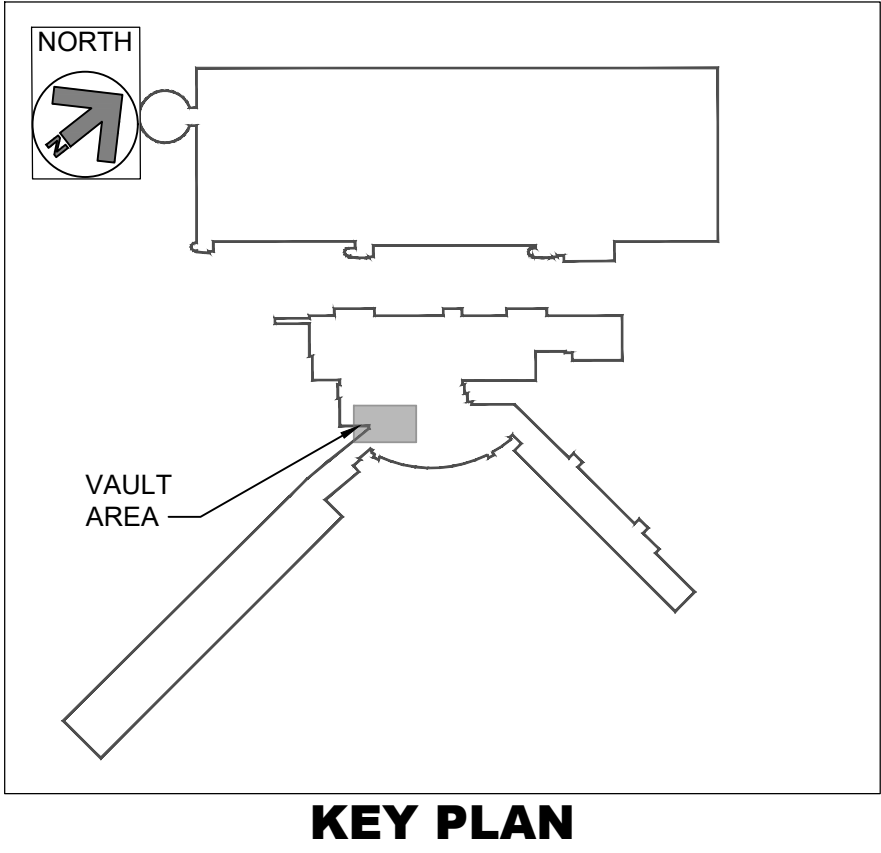
5/30/2025
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PLOTTER BY:
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PROJECT EXECUTION\03.05.DWGS_MODELS\CAD\ET\WD E MISC.DWG



1
ED201
AIRFIELD LIGHTING ELECTRICAL VAULT DEMOLITION PLAN
SCALE: N.T.S

REGULATOR SCHEDULE			
CIRCUIT #	CIRCUIT NAME	RATINGS	NOTES
1	TWY A - CENTER	15KW, 3-STEP, 6.6A, 480V, L-829	TO REMAIN
2	TWY A - EAST	15KW, 3-STEP, 6.6A, 480V, L-829	TO REMAIN
3	TWY A - WEST	15KW, 3-STEP, 6.6A, 480V, L-829	TO REMAIN
4	RWY 8R - 26L	15KW, 5-STEP, 6.6A, 480V, L-828	TO REMAIN
5	RWY 8R - 26L RGL'S	7.5KW, 3-STEP, 6.6A, 480V, L-828	TO REMAIN
6	RWY 17 - 35	15KW, 3-STEP, 6.6A, 480V, L-828	TO REMAIN
7	RWY 17 - 35 RGL'S	7.5KW, 3-STEP, 6.6A, 480V, L-828	TO REMAIN
8	TWY K	15KW, 3-STEP, 6.6A, 480V, L-829	TO REMAIN
9	TWY V & B	15KW, 3-STEP, 6.6A, 480V, L-829	TO REMAIN
10	TWY A - 1	4KW, 3-STEP, 6.6A, 480V, L-829	TO REMAIN
11	TWY A - 2	4KW, 3-STEP, 6.6A, 480V, L-829	TO REMAIN
12	TWY D - WEST	20KW, 3-STEP, 6.6A, 480V, L-829	TO BE REPLACED
13	-----	-----	-----
14	TWY B - SOUTH	15KW, 3-STEP, 6.6A, 480V, L-829	TO REMAIN
15	TWY F & G	15KW, 3-STEP, 6.6A, 480V, L-829	TO REMAIN
16	TWY D - EAST	15KW, 3-STEP, 6.6A, 480V, L-829	TO BE REPLACED
17	TWY D - CENTER	15KW, 3-STEP, 6.6A, 480V, L-829	TO BE REPLACED
18	TWY B - NORTH	7.5KW, 3-STEP, 6.6A, 480V, L-829	TO REMAIN
19	TWY J - WEST	10KW, 3-STEP, 6.6A, 480V, L-829	TO REMAIN
19S	SPARE	30KW, 5-STEP, 6.6A, 480V, L-829	TO REMAIN
20	TWY J - EAST	10KW, 3-STEP, 6.6A, 240V, L-829	TO REMAIN
20S	SPARE	30KW, 5-STEP, 6.6A, 480V, L-828	TO REMAIN
21	RWY 8L - 26R	20KW, 3-STEP, 6.6A, 240V, L-828	TO REMAIN
22	TWY B - 4	4KW, 3-STEP, 6.6A, 480V, L-829	TO REMAIN
23	-----	-----	-----
24	-----	-----	-----
25	TWY V - EAST, L, N	10KW, 3-STEP, 6.6A, 480V, L-829	TO REMAIN

EXISTING PANEL "PP" SCHEDULE													
DESIGNATION: PANEL "PP" LOCATION: BLDG 100, ROOM 028 VOLTAGE: 480/277 VOLTS PHASE: 3 PHASE, 4 WIRE							MAIN: 500 AMP MAIN CIRCUIT BREAKER BUS RATING: 600 AMP PANEL MOUNTING: SURFACE AIC RATING: 18 KAIC						
CKT. NO.	LOAD DESCRIPTION	KVA	AMPS	POLE	A	B	C	CKT. BKR. AMPS	POLE	KVA	LOAD DESCRIPTION	CKT. NO.	
1	CKT. 4 RUNWAY 8R-26L	16.62	80	2	33.24			80	2	16.62	CKT. 5 RUNWAY 8R-26L RGLS	2	
3	CKT. 4 RUNWAY 8R-26L	16.62	80			33.24		80		16.62	CKT. 5 RUNWAY 8R-26L RGLS	4	
5	CKT. 19 BACK-UP 30KW CCR	16.62	80	2			33.24	80	2	16.62	CKT. 6 RUNWAY 17-35	6	
7	CKT. 19 BACK-UP 30KW CCR	16.62	80		33.24			80		16.62	CKT. 6 RUNWAY 17-35	8	
9	CKT. 7 RUNWAY 17-35 RGLS	16.62	80	2		29.27		40	2	12.65	CKT. 17 TAXIWAY D-CENTER	10	8
11	CKT. 7 RUNWAY 17-35 RGLS	16.62	80				29.27	40		12.65	CKT. 17 TAXIWAY D-CENTER	12	
13	CKT. 16 TAXIWAY D-EAST	13.1	40	2	27.91			60	2	14.81	CKT. 12 TAXIWAY D-WEST	14	8
15	CKT. 16 TAXIWAY D-EAST	13.1	40			27.91		60		14.81	CKT. 12 TAXIWAY D-WEST	16	
17	CKT. 3 TAXIWAY A-WEST	8.86	40	2			17.72	40	2	8.86	CKT. 1 TAXIWAY A-CENTER	18	
19	CKT. 3 TAXIWAY A-WEST	8.86	40		17.72			40		8.86	CKT. 1 TAXIWAY A-CENTER	20	
21	CKT. 2 TAXIWAY A-EAST	8.86	40	2		13.29		20	2	4.43	SPARE	22	
23	CKT. 2 TAXIWAY A-EAST	8.86	40				13.29	20		4.43	SPARE	24	
25	CKT. 18 TAXIWAY B-NORTH	4.43	20	2	13.29			40	2	8.86	CKT. 14 TAXIWAY B-SOUTH	26	
27	CKT. 18 TAXIWAY B-NORTH	4.43	20			13.29		40		8.86	CKT. 14 TAXIWAY B-SOUTH	28	
29	CKT. 8 TAXIWAY K	8.86	40	2			17.72	40	2	8.86	CKT. 9 TAXIWAY V & B	30	
31	CKT. 8 TAXIWAY K	8.86	40		17.72			40		8.86	CKT. 9 TAXIWAY V & B	32	
33	CKT. 15 TAXIWAY F & G	8.86	40	2		17.72		40	2	8.86	SPARE	34	
35	CKT. 15 TAXIWAY F & G	8.86	40				17.72	40		8.86	SPARE	36	
37	NB WME ASOS	4.43	20	1	8.86			20	2	4.43	TOWER PANEL	38	
39	NB WME ASOS	4.43	20	1		8.86		20		4.43	TOWER PANEL	40	
41	CKT. 10 TAXIWAY A-1	4.43	20	1			8.86	20	2	4.43	CKT. 22 TAXIWAY B-4	42	
43	CKT. 10 TAXIWAY A-1	4.43	20	1	8.86			20		4.43	CKT. 22 TAXIWAY B-4	44	
45	CKT. 11 TAXIWAY A-2	4.43	20	1		11.07		30	2	6.64	CKT. 25 TAXIWAY V-EAST, L, N	46	
47	CKT. 11 TAXIWAY A-2	4.43	20	1			11.07	30		6.64	CKT. 25 TAXIWAY V-EAST, L, N	48	
49					0.00							50	
51						0.00						52	
53							0.00					54	
55					0.00							56	
57						0.00						58	
59							0.00					60	
TOTAL CONNECTED LOAD:					160.84	154.65	148.89	TOTAL = 464.38					



KEY PLAN

GENERAL NOTES:

- EXISTING CONSTANT CURRENT REGULATORS BEING REPLACED SHALL BE RELOCATED AS SHOWN ON THE PLANS. EXACT LOCATION TO BE CONFIRMED WITH THE AIRPORT. REMOVAL AND REPLACEMENT SHALL BE DONE AT THE SAME TIME TO MINIMIZE DOWN TIME AND ONLY AFTER AIRFIELD CIRCUIT HAS BEEN COMPLETELY REPLACED WITH LED TRANSITION, TESTED, MEGGERED, AND ACCEPTED BY AIRPORT AND ENGINEER.
- CONTRACTOR SHALL FOLLOW ALL AIRPORT LOCK-OUT-TAG-OUT PROCEDURES WHILE WORKING IN THE AIRFIELD LIGHTING ELECTRICAL VAULT.
- ANY DOWN TIME FOR AIRFIELD CIRCUITS SHALL BE APPROVED IN ADVANCE, IN WRITING, AND SHALL BE COMPLETED WITHIN A SINGLE TIME PERIOD, WHICH SHALL BE ESTIMATED BY THE CONTRACTOR AND APPROVED BY THE AIRPORT AND ENGINEER.

KEYED NOTES:

- EXISTING CIRCUIT 12, TWY D-WEST CCR AND ACE3 UNIT TO BE DISCONNECTED FROM EXISTING POWER, CONTROLS AND GROUNDING AND RELOCATED TO 2
- EXISTING CIRCUIT 12, TWY D-WEST CCR TO BE RELOCATED TO THIS LOCATION AND LEFT DISCONNECTED FROM POWER, CONTROLS AND GROUNDING.
- EXISTING CIRCUIT 16, TWY D-EAST CCR AND ACE3 UNIT TO BE DISCONNECTED FROM EXISTING POWER, CONTROLS AND GROUNDING AND RELOCATED TO 4
- EXISTING CIRCUIT 16, TWY D-EAST CCR TO BE RELOCATED TO THIS LOCATION AND LEFT DISCONNECTED FROM POWER, CONTROLS AND GROUNDING.
- EXISTING CIRCUIT 17, TWY D-CENTER CCR AND ACE3 UNIT TO BE DISCONNECTED FROM EXISTING POWER, CONTROLS AND GROUNDING AND RELOCATED TO 6
- EXISTING CIRCUIT 17, TWY D-CENTER CCR TO BE RELOCATED TO THIS LOCATION AND LEFT DISCONNECTED FROM POWER, CONTROLS AND GROUNDING.
- EXISTING PANEL "PP". RATED 277/480V, 3-PHASE, 4-WIRE, WITH 500A MCB. SEE SCHEDULE THIS SHEET.
- EXISTING CIRCUIT BREAKERS AND WIRING FOR TAXIWAY CIRCUITS 12, 16, AND 17 TO INDIVIDUAL CCRS TO BE REPLACED. CONDUITS TO BE REUSED AND EXTENDED OR MODIFIED AS NEEDED FOR INSTALLATION OF NEW CCRS.

RS&H

RS&H Michigan, Inc.

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GERALD R. FORD International Airport

GERALD R. FORD INTERNATIONAL AIRPORT

TAXIWAY D LIGHTING REHABILITATION

MISS DIG System, Inc.
1-800-482-7171



REVISIONS

NO.	DESCRIPTION	DATE

DATE ISSUED: MAY 2025

REVIEWED BY: MAR

DRAWN BY: AZ

DESIGNED BY: EE

RS&H PROJECT NUMBER
1010-5865-001

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SHEET TITLE

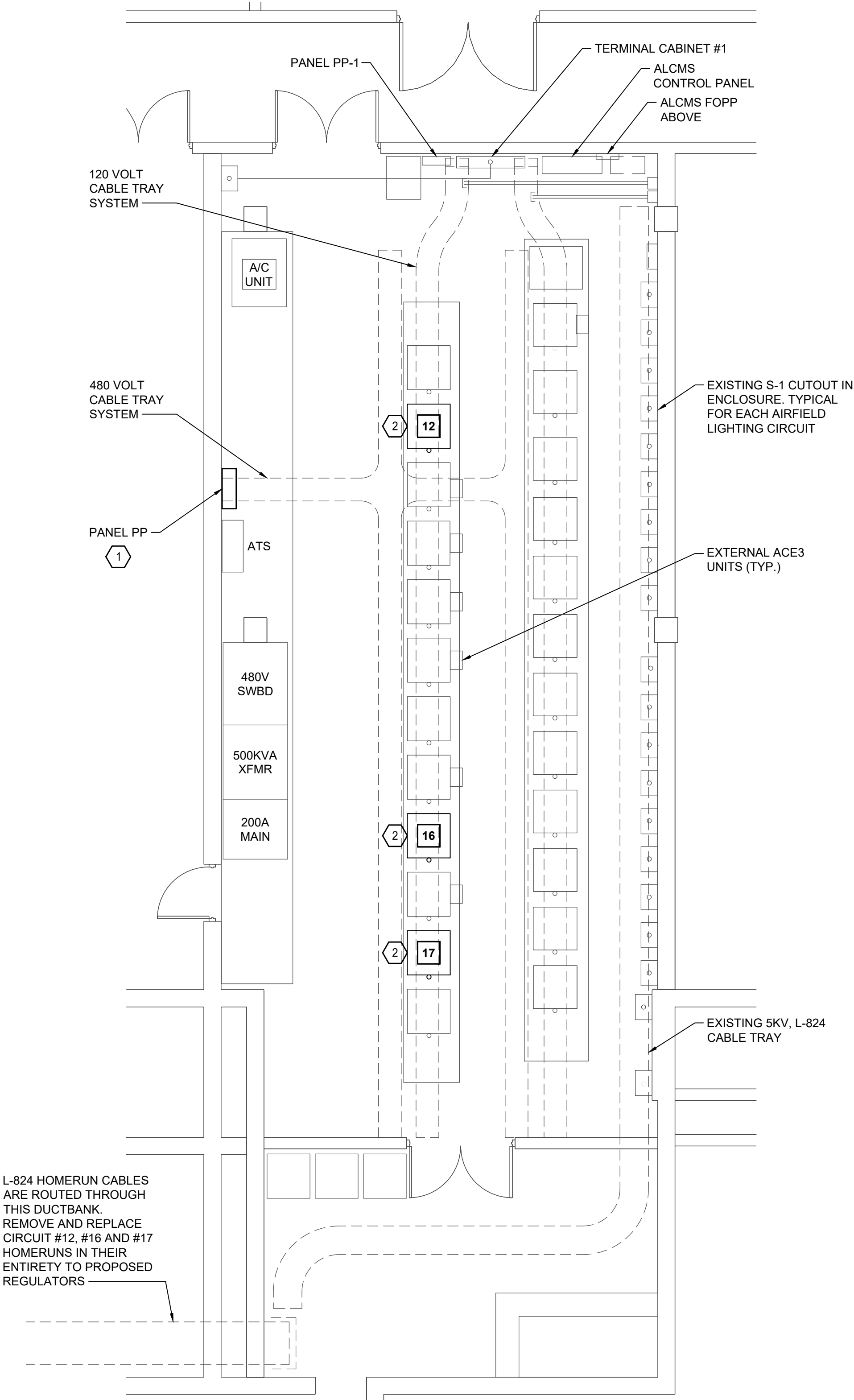
AIRFIELD LIGHTING VAULT DEMOLITION PLAN

SHEET NUMBER

ED201

ISSUED FOR BID

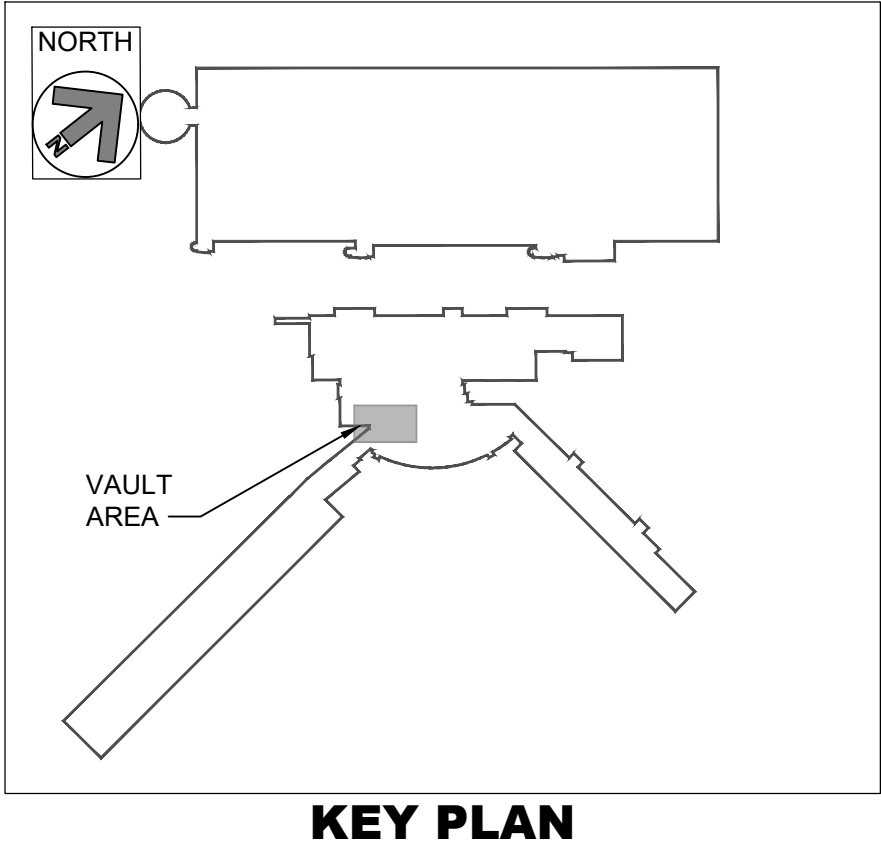
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PROJECT EXECUTION\03.05.DWG



1 **AIRFIELD LIGHTING ELECTRICAL VAULT PROPOSED PLAN**
E201 SCALE:N.T.S

PROPOSED REGULATOR SCHEDULE			
CIRCUIT #	CIRCUIT NAME	RATINGS	NOTES
12	TWY D - WEST	10KW, 3-STEP, 6.6A, 480V, L-829	1 3
16	TWY D - EAST	10KW, 3-STEP, 6.6A, 480V, L-829	1 3
17	TWY D - CENTER	10KW, 3-STEP, 6.6A, 480V, L-829	1 3

PROPOSED PANEL "PP" SCHEDULE													
DESIGNATION: PANEL "PP" LOCATION: BLDG 100, ROOM 028 VOLTAGE: 480/277 VOLTS PHASE: 3 PHASE, 4 WIRE							MAIN: 500 AMP MAIN CIRCUIT BREAKER BUS RATING: 600 AMP PANEL MOUNTING: SURFACE AIC RATING: 18 KAIC						
CKT. NO.	LOAD DESCRIPTION	KVA	AMPS	POLE	KVA			CKT. BKR.			LOAD DESCRIPTION		
					A	B	C	AMPS	POLE	KVA			CKT. NO.
1	CKT. 4 RUNWAY 8R-26L	16.62	80	2	33.24			80	2	16.62	CKT. 5 RUNWAY 8R-26L RGLS		2
3	CKT. 4 RUNWAY 8R-26L	16.62	80			33.24		80		16.62	CKT. 5 RUNWAY 8R-26L RGLS		4
5	CKT. 19 BACK-UP 30KW CCR	16.62	80	2			33.24	80	2	16.62	CKT. 6 RUNWAY 17-35		6
7	CKT. 19 BACK-UP 30KW CCR	16.62	80		33.24			80		16.62	CKT. 6 RUNWAY 17-35		8
9	CKT. 7 RUNWAY 17-35 RGLS	16.62	80	2		24.27		40	2	7.65	CKT. 17 TAXIWAY D-CENTER		10
11	CKT. 7 RUNWAY 17-35 RGLS	16.62	80				24.27	40		7.65	CKT. 17 TAXIWAY D-CENTER		12
13	CKT. 16 TAXIWAY D-EAST	7.91	40	2	16.97			40	2	9.06	CKT. 12 TAXIWAY D-WEST		14
15	CKT. 16 TAXIWAY D-EAST	7.91	40			16.97		40		9.06	CKT. 12 TAXIWAY D-WEST		16
17	CKT. 3 TAXIWAY A-WEST	8.86	40	2			17.72	40	2	8.86	CKT. 1 TAXIWAY A-CENTER		18
19	CKT. 3 TAXIWAY A-WEST	8.86	40		17.72			40		8.86	CKT. 1 TAXIWAY A-CENTER		20
21	CKT. 2 TAXIWAY A-EAST	8.86	40	2			13.29	20	2	4.43	SPARE		22
23	CKT. 2 TAXIWAY A-EAST	8.86	40				13.29	20		4.43	SPARE		24
25	CKT. 18 TAXIWAY B-NORTH	4.43	20	2	13.29			40	2	8.86	CKT. 14 TAXIWAY B-SOUTH		26
27	CKT. 18 TAXIWAY B-NORTH	4.43	20			13.29		40		8.86	CKT. 14 TAXIWAY B-SOUTH		28
29	CKT. 8 TAXIWAY K	8.86	40	2			17.72	40	2	8.86	CKT. 9 TAXIWAY V & B		30
31	CKT. 8 TAXIWAY K	8.86	40		17.72			40		8.86	CKT. 9 TAXIWAY V & B		32
33	CKT. 15 TAXIWAY F & G	8.86	40	2		17.72		40	2	8.86	SPARE		34
35	CKT. 15 TAXIWAY F & G	8.86	40				17.72	40		8.86	SPARE		36
37	NB WME ASOS	4.43	20	1	8.86			20	2	4.43	TOWER PANEL		38
39	NB WME ASOS	4.43	20	1		8.86		20		4.43	TOWER PANEL		40
41	CKT. 10 TAXIWAY A-1	4.43	20	1			8.86	20	2	4.43	CKT. 22 TAXIWAY B-4		42
43	CKT. 10 TAXIWAY A-1	4.43	20	1	8.86			20		4.43	CKT. 22 TAXIWAY B-4		44
45	CKT. 11 TAXIWAY A-2	4.43	20	1		11.07		30	2	6.64	CKT. 25 TAXIWAY V-EAST, L, N		46
47	CKT. 11 TAXIWAY A-2	4.43	20	1			11.07	30		6.64	CKT. 25 TAXIWAY V-EAST, L, N		48
49					0.00								50
51						0.00							52
53							0.00						54
55					0.00								56
57						0.00							58
59							0.00						60
TOTAL CONNECTED LOAD:					149.90	138.71	143.89	TOTAL = 432.50					



KEY PLAN

GENERAL NOTES:

- EXISTING CONSTANT CURRENT REGULATORS BEING REPLACED SHALL BE RELOCATED AS SHOWN ON THE PLANS. EXACT LOCATION TO BE CONFIRMED WITH THE AIRPORT. REMOVAL AND REPLACEMENT SHALL BE DONE AT THE SAME TIME TO MINIMIZE DOWN TIME AND ONLY AFTER AIRFIELD CIRCUIT HAS BEEN COMPLETELY REPLACED WITH LED TRANSITION, TESTED, MEGGERED, AND ACCEPTED BY AIRPORT AND ENGINEER.
- CONTRACTOR SHALL FOLLOW ALL AIRPORT LOCK-OUT-TAG-OUT PROCEDURES WHILE WORKING IN THE AIRFIELD LIGHTING ELECTRICAL VAULT.
- ANY DOWN TIME FOR AIRFIELD CIRCUITS SHALL BE APPROVED IN ADVANCE, IN WRITING, AND SHALL BE COMPLETED WITHIN A SINGLE TIME PERIOD, WHICH SHALL BE ESTIMATED BY THE CONTRACTOR AND APPROVED BY THE AIRPORT AND ENGINEER.

KEYED NOTES:

- REPLACE EXISTING 2-POLE CIRCUIT BREAKERS FOR TAXIWAY CIRCUITS 12, 16, AND 17 WITH NEW 40A, 2-POLE CIRCUIT BREAKERS (EVEN IF SAME SIZE). REPLACE WIRING BETWEEN PANEL "PP" TO EACH CCR WITH 2#8 THWN, 1#10G IN EXISTING CONDUITS (EVEN IF SAME SIZE). EXTEND CONDUITS (RIGID AND FLEXIBLE) AS NEEDED FOR INSTALLATION OF NEW CCR. REPLACE GROUND WIRE BETWEEN CCR AND GROUND BUS TO MATCH EXISTING.
- PROPOSED 10KW, 480V, 6.6A, 3-STEP CCR SHALL BE ADB SAFEGATE (WITH ACE3, IRMS, INPUT POWER MONITOR) OR EQUAL. CONTRACTOR SHALL REESTABLISH PRIMARY POWER, CONTROLS AND 5KV "HOMERUN" COMPLETE AND OPERATIONAL. ANY ITEMS REQUIRED FOR REPLACEMENT SHALL BE PROVIDED. NO MODIFICATIONS TO THE EXISTING ALCMS ARE ANTICIPATED. TRANSFER NAMEPLATES FROM OLD CCRS TO NEW CCRS. NEW CCRS SHALL BE COMPLETELY COMPATIBLE WITH EXISTING ALCMS AND SHALL MATCH ALL EXISTING CONTROLS, TESTING AND MONITORING CAPABILITIES.
- EXISTING CONTROL WIRING AND CONDUITS SHALL BE REUSED AND EXTENDED, AS NEEDED, TO ACCOMMODATE NEW CCR CONNECTION POINTS.



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TAXIWAY D
LIGHTING
REHABILITATION



REVISIONS		
NO.	DESCRIPTION	DATE

DATE ISSUED: MAY 2025
REVIEWED BY: MAR
DRAWN BY: AZ
DESIGNED BY: EE

RS&H PROJECT NUMBER
1010-5865-001

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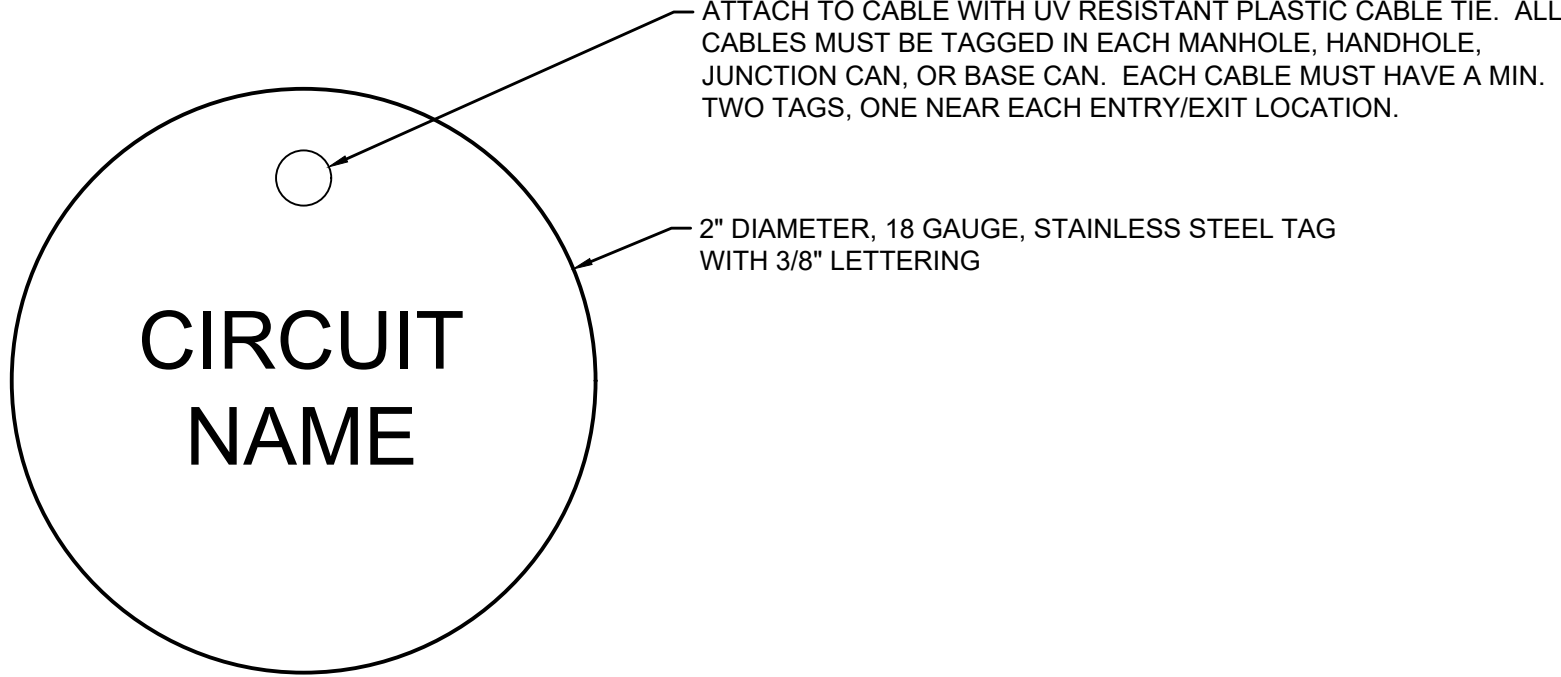
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AIRFIELD
LIGHTING VAULT
PROPOSED PLAN

SHEET NUMBER
E201

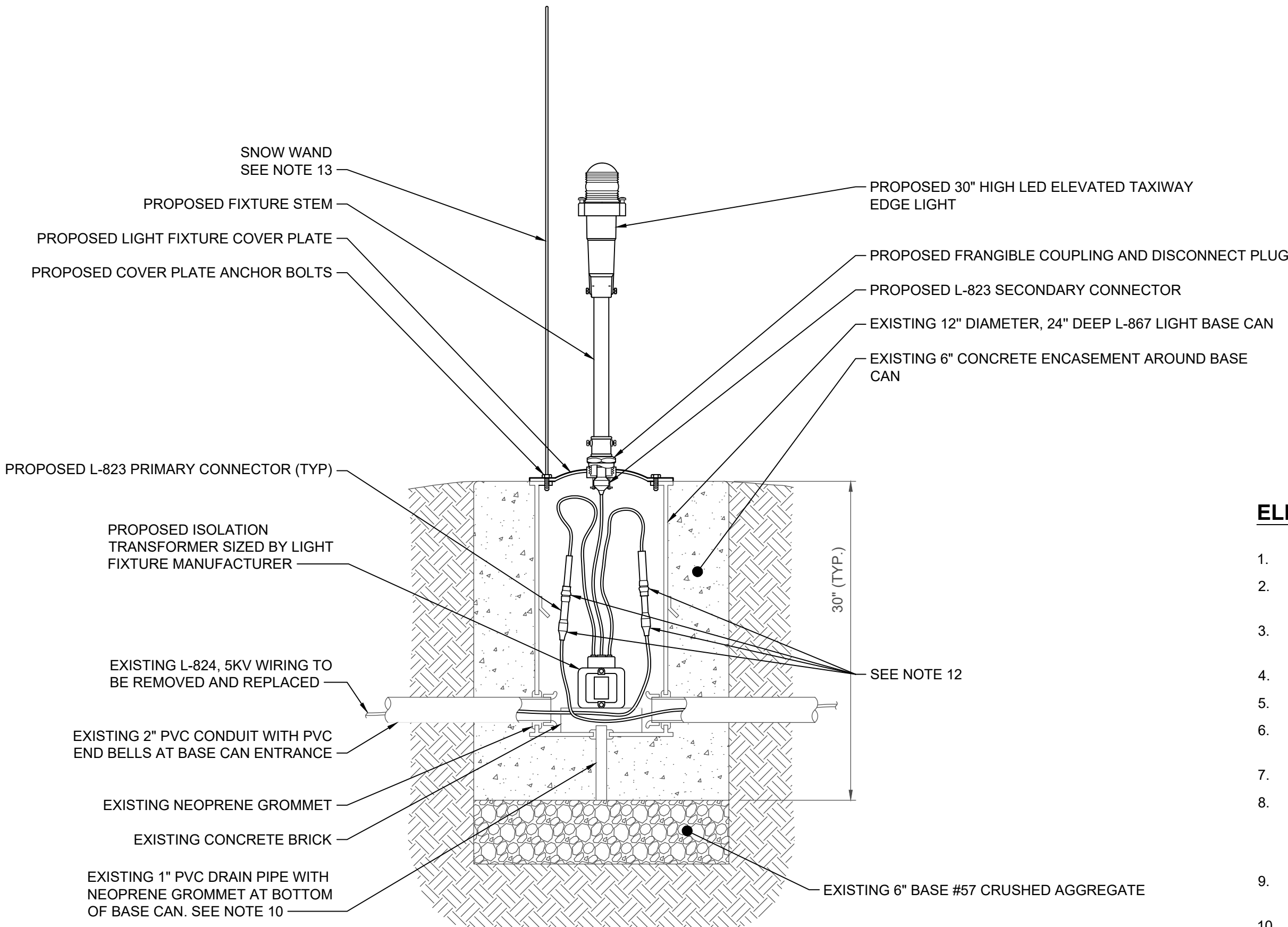
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5/30/2025
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PLOTTER ON:
PLOTTER BY:
FILE LOCATION:
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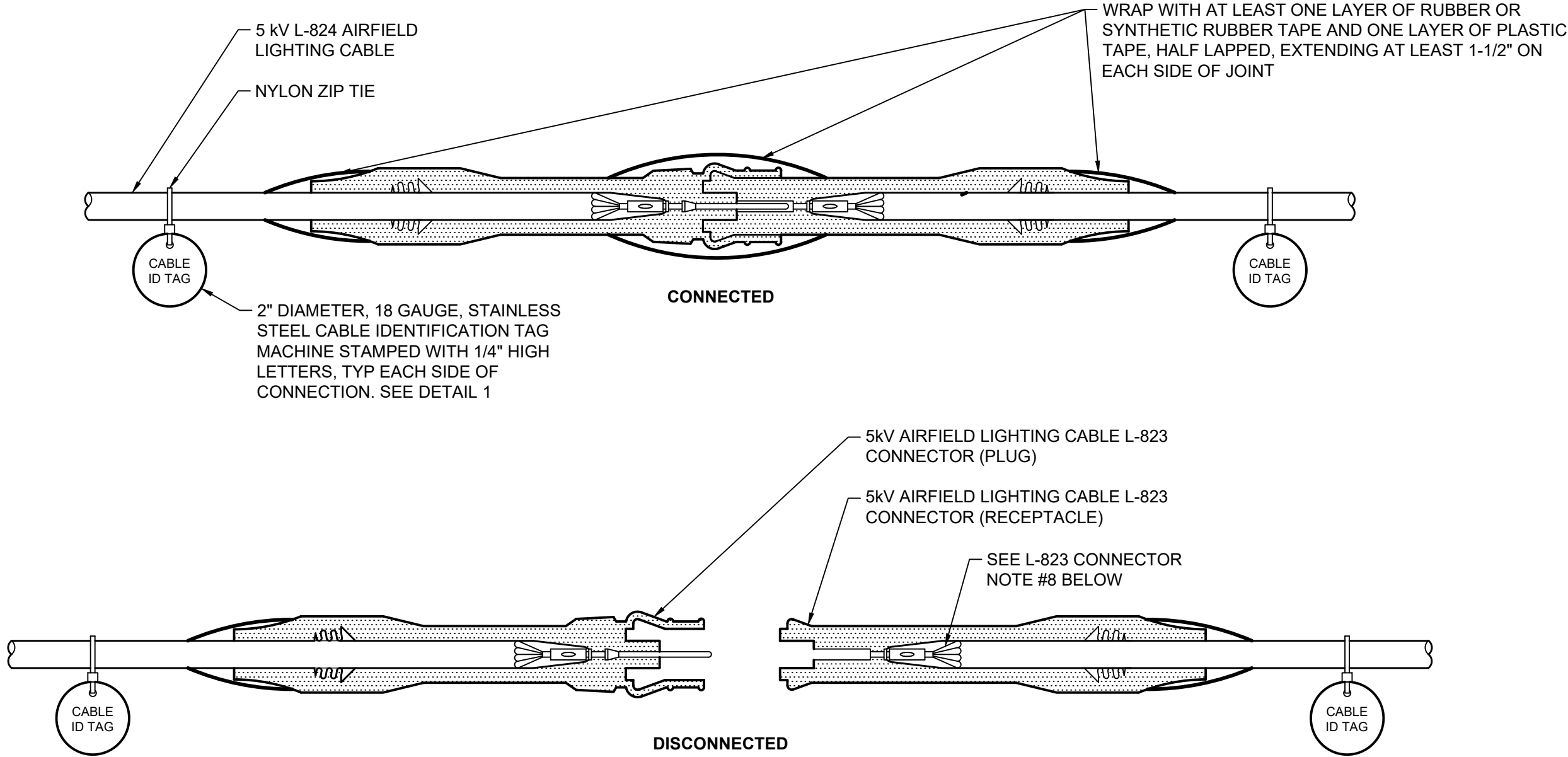


TAXIWAY CABLE TAGGING SCHEDULE	
EXISTING CIRCUIT DESIGNATION	PROPOSED CIRCUIT NAME
TAXIWAY D - WEST	TW-D CKT. 12
TAXIWAY D - CENTER	TW-D CKT. 17
TAXIWAY D - EAST	TW-D CKT. 16

1
E301
CABLE ID TAG AND TAGGING SCHEDULE DETAIL
SCALE: N.T.S



3
E301
EXISTING ELEVATED TAXIWAY EDGE LIGHT LED UPGRADE DETAIL
SCALE: N.T.S



L-823 CONNECTOR NOTES:

- L-823 CONNECTOR MUST BE INTEGRO "COMPLETE KIT" (PART 11805-01) OR EQUIVALENT.
- COORDINATE OUTSIDE DIAMETER OF EACH CABLE TYPE WITH ITS RESPECTIVE CONNECTOR KIT IN ORDER TO ASSURE WATERTIGHT CONNECTION BETWEEN CABLES AND CONNECTOR BOOTS.
- FOLLOW ALL CONNECTOR MANUFACTURER'S CABLE CLEANING, CABLE PREPARATION, AND CONNECTOR INSTALLATION INSTRUCTIONS.
- CONTRACTOR MUST USE CRIMPING TOOL MANUFACTURED BY, OR SPECIFICALLY RECOMMENDED BY, CONNECTOR MANUFACTURER WHEN INSTALLING CONNECTOR PINS AND CONNECTOR RECEPTACLES, TURN OVER CRIMPING TOOL TO AIRPORT AT PROJECT COMPLETION.
- ATTACH CABLE IDENTIFICATION TAGS ON BOTH SIDES OF CONNECTION.
- ATTACH CABLE IDENTIFICATION TAG TO CABLE WITH NYLON ZIP TIE, TIGHTEN ZIP TIE TO HOLD CABLE IDENTIFICATION TAG IN PLACE WITHOUT COMPRESSING CABLE INSULATION, TRIM OFF EXCESS ZIP TIE AFTER TIGHTENING.
- COORDINATE CIRCUIT NAMING CONVENTION OF CABLE IDENTIFICATION TAGS, ALONG WITH SIZE OF CABLE IDENTIFICATION TAGS, WITH OWNER PRIOR TO ORDERING AND INSTALLING CABLE IDENTIFICATION TAGS.
- USE PROPERLY SIZED AIRFIELD LIGHTING CABLE INSULATION STRIPPER/PENCILER (RIPLEY UTILITY TOOL WS 49 SERIES OR APPROVED EQUIVALENT) TO REMOVE INSULATION, KNIVES OR BOX CUTTERS MUST NOT BE USED.

2
E301
L-823 5kV AIRFIELD LIGHTING CABLE CONNECTOR DETAIL
SCALE: N.T.S

ELEVATED TAXIWAY LIGHT LED UPGRADE NOTES:

- ALL HARDWIRED TO BE REPLACED
- ANY BROKEN BOLTS SHALL BE REMOVED AND BASES SHALL BE DRILLED AND TAPPED, AS NEEDED FOR NEW HARDWARE.
- FIXTURE STEMS SHALL BE PROVIDED WITH RETRO-REFLECTIVE TAPE, TO MATCH EXISTING FIXTURES.
- ALL NEW BOLTS TO BE STAINLESS STEEL.
- USE ANTI-SIEZE COMPOUND ON ALL BOLTS.
- EXISTING FIXTURES AND TRANSFORMERS THAT ARE REMOVED SHALL BE TURNED OVER TO THE AIRPORT.
- EXISTING WIRING THAT IS REMOVED SHALL BE DISPOSED OFF SITE.
- EXISTING GROUNDING AND COUNTERPOISE TO REMAIN AND SHALL BE PROTECTED DURING CONSTRUCTION. ANY DAMAGED GROUNDING OR COUNTERPOISE SHALL BE REPAIRED TO MATCH ORIGINAL INSTALLATION.
- NEW ISOLATION TRANSFORMER SHALL BE PLACED ON EXISTING BRICK. IF BRICK IS MISSING, PROVIDE NEW BRICK.
- NOT ALL BASE CANS HAVE DRAINS. IF DRAINS EXIST, CLEAN OUT DRAIN AND DO NOT BLOCK WITH CONCRETE BRICK.
- NEW LED LIGHTING SHALL NOT HAVE ARCTIC KITS.
- WRAP WITH AT LEAST ONE LAYER OF RUBBER OR SYNTHETIC RUBBER TAPE AND ONE LAYER OF PLASTIC TAPE, HALF LAPPED, EXTENDED AT LEAST 1 1/2" ON EACH SIDE OF FIELD SPLICE.
- SNOW WANDS SHALL BE TURNED OVER TO THE AIRPORT AND INSTALLED AT A LATER TIME.



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**TAXIWAY D
LIGHTING
REHABILITATION**



REVISIONS

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DRAWN BY: AZ

DESIGNED BY: EE

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SHEET TITLE

**GENERAL
ELECTRICAL
DETAILS**

SHEET NUMBER

E301

**ISSUED FOR
BID**



1
E302

EXISTING PANEL "PP"
SCALE: N.T.S

1. EXISTING BREAKERS FOR TWY D-EAST, D-WEST, AND D-CENTER TO BE REPLACED



2
E302

EXISTING TWY D-WEST REGULATOR
SCALE: N.T.S

1. EXISTING TWY D-WEST, CIRCUIT #12 REGULATOR TO BE REPLACED. EXISTING ACE3 UNIT TO BE REMOVED.



3
E302

EXISTING TWY D-EAST REGULATOR
SCALE: N.T.S

1. EXISTING TWY D-EAST, CIRCUIT #16 REGULATOR TO BE REPLACED. EXISTING ACE3 UNIT TO BE REMOVED.



4
E302

EXISTING TWY D-CENTER REGULATOR
SCALE: N.T.S

1. EXISTING TWY D-CENTER, CIRCUIT #17 REGULATOR TO BE REPLACED. EXISTING ACE3 UNIT TO BE REMOVED.

PLOTTED ON: 5/30/2025
FILED BY: RAYCHERS
PLOT BY: RAYCHERS
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PROJECT EXECUTION\03.05.DWG\SCADE\ETWD E MISC.DWG



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SHEET TITLE

**EXISTING
INSTALLATION
PHOTOS**

SHEET NUMBER

E302

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