Addendum No. 4

To: All Plan Holders

Project: Taxiway Rehabilitation and Electrical Improvements

Airport: Texas Gulf Coast Regional Airport

KSA Project No.: 103006

Date: Wednesday, October 15, 2025

TxDOT CSJ No.: 2612ANGLE

The plans, specifications, and contract documents are modified as described below. All bidders shall acknowledge receipt of this and all other addenda on page 19 of 20 on the revised bid form titled **REVISED PER ADDENDUM NO. 4**. This addendum becomes a part of the contract documents. All provisions of the original plans, specifications, and contract documents shall remain in full force and effect, except as modified by this addendum.

I. **Contract Document Revisions**

A. **Bid Form**

Replace with the attached **Revised** Bid Form. Note that the award of bids will be based on the bid items and quantities listed in the revised bid form titled **REVISED PER ADDENDUM NO. 4**. Refer to TxDOT's website to acquire the revised bid form. Any variance in the bid submittals from the **Revised** Bid Form will result in the bid being disqualified.

Per the Bid Package Responsiveness Checklist, "handwritten acknowledgement of addenda, in excess of 3, is required."

II. **Plan Revisions**

A. Plan Sheet G03, Summary of Quantities – Bid Schedule No. 1

1. Replace with the attached Revised Plan Sheet G03, Summary of Quantities – Bid Schedule No. 1

B. Plan Sheet G04, Summary of Quantities - Bid Schedule No. 2

1. Replace with the attached Revised Plan Sheet G04, Summary of Quantities - Bid Schedule No. 2

C. Plan Sheet EL001, Airfield Lighting Symbols Legend and Notes

1. Replace with the attached Revised Plan Sheet EL001, Airfield Lighting Symbols Legend and Notes

D. Plan Sheet EL101, Airfield Lighting Layout Plan

1. Replace with the attached Revised Plan Sheet EL101, Airfield Lighting Layout Plan

E. Plan Sheet EL102, Airfield Lighting Layout Plan

1. Replace with the attached Revised Plan Sheet EL102, Airfield Lighting Layout Plan

F. Plan Sheet EL103, Airfield Lighting Layout Plan

1. Replace with the attached Revised Plan Sheet EL103, Airfield Lighting Layout Plan

G. Plan Sheet EL104, Airfield Lighting Layout Plan

1. Replace with the attached Revised Plan Sheet EL104, Airfield Lighting Layout Plan

H. Plan Sheet EL105, Airfield Lighting Layout Plan

1. Replace with the attached Revised Plan Sheet EL105, Airfield Lighting Layout Plan

I. Plan Sheet EL106, Airfield Lighting Layout Plan

1. Replace with the attached Revised Plan Sheet EL106, Airfield Lighting Layout Plan

J. Plan Sheet EL107, Airfield Lighting Layout Plan

1. Replace with the attached Revised Plan Sheet EL107, Airfield Lighting Layout Plan

K. Plan Sheet EL402, Electrical Vault Plan

1. Replace with the attached Revised Plan Sheet EL402, Electrical Vault Plan

L. Plan Sheet EL403, Electrical Vault Plan

1. Replace with the attached Revised Plan Sheet EL403, Electrical Vault Plan

M. Plan Sheet EL507, Airfield Electrical Details

1. Replace with the attached Revised Plan Sheet EL507, Airfield Electrical Details

N. Plan Sheet EL508, Airfield Electrical Details

1. Replace with the attached Revised Plan Sheet EL508, Airfield Electrical Details

O. Plan Sheet EL601, Airfield Lighting Schedule

1. Replace with the attached Revised Plan Sheet EL601, Airfield Lighting Schedule

P. Plan Sheet EL605, Airfield Signage Schedule

1. Replace with the attached Revised Plan Sheet EL605, Airfield Signage Schedule

III. **Specification Revisions**

A. Item L-107, Airport Wind Cones

1. Delete this item in its entirety and replace with the attached specification Item L-107, Airport Wind Cones shown as “ADD. 4: October 15, 2025” in the footer.

B. Item L-125, Installation of Airport Lighting Systems

1. Delete this item in its entirety and replace with the attached specification Item L-125, Installation of Airport Lighting Systems shown as “ADD. 4: October 15, 2025” in the footer.

IV. **Attachments**

A. Revised Plan Sheet G03, Summary of Quantities – Bid Schedule No. 1

B. Revised Plan Sheet G04, Summary of Quantities – Bid Schedule No. 2

C. Revised Plan Sheet EL001, Airfield Lighting Symbols Legend and Notes

D. Revised Plan Sheet EL101, Airfield Lighting Layout Plan

E. Revised Plan Sheet EL102, Airfield Lighting Layout Plan

F. Revised Plan Sheet EL103, Airfield Lighting Layout Plan

G. Revised Plan Sheet EL104, Airfield Lighting Layout Plan

H. Revised Plan Sheet EL105, Airfield Lighting Layout Plan

I. Revised Plan Sheet EL106, Airfield Lighting Layout Plan
J. Revised Plan Sheet EL107, Airfield Lighting Layout Plan
K. Revised Plan Sheet EL402, Electrical Vault Plan
L. Revised Plan Sheet EL403, Electrical Vault Plan
M. Revised Plan Sheet EL507, Airfield Electrical Details
N. Revised Plan Sheet EL508, Airfield Electrical Details
O. Revised Plan Sheet EL601, Airfield Lighting Schedule
P. Revised Plan Sheet EL605, Airfield Signage Schedule
Q. Revised Specification L-107, Airport Wind Cones
R. Revised Specification L-125, Installation of Airport Lighting Systems
S. Contractor Questions

Addendum No. 4 Issued By:
KSA

Nathan T. Mikell, P.E.
Project Manager

TBPE Firm Registration No. F-1356

BID SCHEDULE NO. 1

(HMAC PAVEMENT SECTION FOR TAXIWAY A RECONSTRUCTION AND TAXIWAY B RELOCATION)

Item No.	Spec. No.	Description	Units	Estimated Quantities
Base Bid:				
1.01	C-100-14.1	Contractor Quality Control Program	LS	1
1.02	C-102-5.1	Installation and Removal of Silt Fence	LF	405
1.03	C-102-5.2	Rock Construction Exit	EA	3
1.04	C-102-5.3	Storm Water Pollution Prevention Plan	LS	1
1.05	C-105-8.1	Mobilization	LS	1
1.06	C-105-8.2	Traffic Control Devices and Personnel	LS	1
1.07	C-105-8.3	Temporary Relocated Runway 35 Threshold	LS	1
1.08	P-101-5.1	Asphalt Pavement Removal (Full Depth)	SY	15,092
1.09	P-101-5.3	2.5" Asphalt Surface Course Removal	SY	2,800
1.10	P-101-5.4	1.5" Crushed Aggregate Base Course Removal	SY	2,800
1.11	P-101-5.5	Crack Repair	LF	35,000
1.12	P-101-5.6	1.5" - 2.0" Cold Milling	SY	38,990
1.13	P-101-5.8	SET Removal for 2 - 30" RCP	EA	2
1.14	P-101-5.10	30" RCP Removal	LF	620
1.15	P-152-4.1	Unclassified Excavation	CY	10,500
1.16	P-152-4.2	Offsite Borrow Excavation	CY	9,300
1.17	P-155-8.1	10" Lime Stabilized Subgrade (6% Lime)	SY	14,960
1.18	P-155-8.2	Commercial Lime Slurry, Grade 2	TON	404
1.19	P-304-8.1	6" Cement-Treated Base Course	SY	14,520
1.20	P-401-8.1	4" Asphalt Surface Course	TON	2,865
1.21	P-401-8.2	2" Asphalt Surface Course (Overlay)	TON	4,390
1.22	P-401-8.3	4" Asphalt Surface Course (Overlay)	TON	630
1.23	P-401-8.4	Full Depth Pavement Repair	SY	1,000
1.24	P-403-8.1	5" Asphalt Stabilized Base Course	TON	3,820
1.25	P-602-5.1	Emulsified Asphalt Prime Coat	GAL	3,630
1.26	P-620-5.2a	White Pavement Markings (Reflective)	SF	15,981
1.27	P-620-5.2b	Red Pavement Markings (Reflective)	SF	1,155
1.28	P-620-5.2c	Yellow Pavement Markings (Reflective)	SF	11,634
1.29	P-620-5.2d	Black Pavement Markings (Non-Reflective)	SF	27,821
1.30	P-620-5.3	Marking Removal	SF	4,660
1.31	P-620-5.4a	Phase 2 Temporary Markings (Non-Reflective)	SF	2,396
1.32	P-620-5.4b	Phase 3 Temporary Markings (Non-Reflective)	SF	3,853
1.33	P-620-5.4c	Phase 4 Temporary Markings (Non-Reflective)	SF	861
1.34	D-701-5.3	Class V 36" RCP, ASTM C76	LF	400
1.35	D-752-5.3	Safety End Treatment for 2 - 36" RCP (6:1 Slope, With Pipe Runners)	EA	2
1.36	T-901-5.1	Hydromulch, Seed & Fertilizer for Permanent Application	AC	23
1.37	T-904-5.1	Sodding	SY	13,826
1.38	T-905-5.1	Topsoil (Obtained on Site, Removed and Reinstalled)	CY	13,665
1.39	L-103-5.1	Install New Beacon on New 50' Tip Down Pole, Including Foundation	EA	1
1.40	L-105-5.1	Remove No. 8 AWG, L-824C Cable in Duct	LF	5,200
1.41	L-105-5.2	Remove 2-inch Conduit (Including Cable)	LF	43,600
1.42	L-105-5.3	Remove Concrete Encased Duct in Earth (Including	LF	575
1.43	L-105-5.4	Remove and Dispose of Elevated Edge Light, Base Can to be Removed	EA	395
1.44	L-105-5.5	Remove and Dispose of Elevated Edge Light, Base Can to Remain	EA	8
1.45	L-105-5.6	Remove and Dispose of In-Pavement Edge Light, Base Can to be Removed	EA	1
1.46	L-105-5.7	Remove and Dispose of Airfield Sign and Foundation	EA	60
1.47	L-105-5.8	Remove Airfield Sign Foundation	EA	2
1.48	L-105-5.9	Remove and Dispose of Pull Can in Turf	EA	29
1.49	L-105-5.10	Remove and Dispose of 4-Box L-880 PAPI System and Associated Foundations	EA	2
1.50	L-105-5.11	Remove and Dispose of Primary Windcone and Foundation	EA	1
1.51	L-105-5.12	Remove and Dispose of Supplemental Wind Cone and Foundation	EA	2
1.52	L-105-5.13	Remove and Dispose of Beacon, Beacon Tower, and Foundation	EA	1
1.53	L-105-5.14	Work in Existing Airfield Lighting Vault Equipment	LS	1
1.54	L-107-5.1	Install New L-807(L) Wind Cone Including Tip Down Pole and Foundation	EA	3
1.55	L-108-5.1	No. 8 AWG, L-824C, Installed in Conduit	LF	76,550
1.56	L-108-5.2	No. 6 AWG Bare Counterpoise Wire, Installed in Conduit Trench	LF	58,610
1.57	L-108-5.3	Electrical Circuit (Wind Cone), 2#10 AWG, 1#10G, Installed in Conduit	LF	2,000
1.58	L-108-5.4	Electrical Circuit (Beacon), 2#12 AWG, 1#12G, Installed in Conduit	LF	125
1.59	L-108-5.5	Temporary Electrical Provisions	LS	1
1.60	L-109-5.1	Install New Vault Building And Equipment	LS	1
1.61	L-109-5.2	Install New 4kW L-829 Constant Current Regulator	EA	1
1.62	L-109-5.3	Install New 7.5kW L-829 Constant Current Regulator	EA	1
1.63	L-109-5.4	Install New 10kW L-829 Constant Current Regulator	EA	1
1.64	L-109-5.5	Install Salvaged 10kW L-828 Constant Current Regulator	EA	1
1.65	L-110-5.1	1-Way, 2" Sch. 40 PVC Conduit, Direct Buried in Turf	LF	44,500
1.66	L-110-5.2	2-Way, 2" Sch. 40 PVC Conduit, Concrete Encased, in	LF	3,725
1.67	L-110-5.3	2-Way, 2" Sch. 40 PVC Conduit, Concrete Encased, in Full Strength Pavement	LF	415
1.68	L-110-5.4	4-Way, 2" Sch. 40 PVC Conduit, Concrete Encased, in	LF	1,705
1.69	L-110-5.5	6-Way, 2" Sch. 40 PVC Conduit, Concrete Encased, in	LF	150
1.70	L-110-5.6	8-Way, 2" Sch. 40 PVC Conduit, Concrete Encased, in	LF	470
1.71	L-112-5.1	2-Way, 2" HDPE Conduit, Installed Via Directional Drill	LF	735
1.72	L-112-5.2	2-Way, 4" HDPE Conduit, Installed Via Directional Drill	LF	175
1.73	L-112-5.3	4-Way, 2" HDPE Conduit, Installed Via Directional Drill	LF	250
1.74	L-112-5.4	6-Way, 2" HDPE Conduit, Installed Via Directional Drill	LF	100
1.75	L-112-5.5	8-Way, 2" HDPE Conduit, Installed Via Directional Drill	LF	425
1.76	L-115-5.1	2-Way Junction Can Plaza (JCP)	EA	24
1.77	L-115-5.2	4-Way Junction Can Plaza (JCP)	EA	4
1.78	L-115-5.3	6-Way Junction Can Plaza (JCP)	EA	1
1.79	L-115-5.4	8-Way Junction Can Plaza (JCP)	EA	3
1.80	L-115-5.5	Install New Pull Can in Turf	EA	3
1.81	L-115-5.6	Install New Pull Box in Turf	EA	1
1.82	L-125-5.1	Install New L-861T(L) LED Elevated Taxiway Edge Light on New L-867B Base Can in Turf	EA	320
1.83	L-125-5.2	Install New L-862(L) Elevated Runway Edge Light on New L-867B Base Can in Turf	EA	70
1.84	L-125-5.3	Install New L-862E(L) Elevated Runway Threshold End Light on Existing Base Can	EA	8
1.85	L-125-5.4	Install New L-862E(L) Elevated Runway Threshold End Light on New L-867B Base Can in Turf	EA	8
1.86	L-125-5.5	Install New New L-867B Base Can with Blank Cover in	EA	3
1.87	L-125-5.6	Install New 1-MOD L-858(L) Size 2, Style 2 LED Guidance Sign on New Foundation	EA	12
1.88	L-125-5.7	Install New 2-MOD L-858(L) Size 2, Style 2 LED Guidance Sign on New Foundation	EA	13
1.89	L-125-5.8	Install New 3-MOD L-858(L) Size 2, Style 2 LED Guidance Sign on New Foundation	EA	17
1.90	L-125-5.9	Install New 1-MOD L-858(L) Size 4, Style 3 LED Guidance Sign on New Foundation	EA	6
1.91	L-125-5.11	Install New 4-MOD L-858(L) Size 2, Style 2 LED Guidance Sign on New Foundation	EA	2
1.92	L-125-5.12	Install New 2-MOD L-858(L) Size 2, Style 3 LED Guidance Sign on New Foundation	EA	11
1.93	L-125-5.13	Install New 3-MOD L-858(L) Size 2, Style 3 LED Guidance Sign on New Foundation	EA	3
1.94	L-130-5.1	Install New LED L-880(L) Style B PAPI System	EA	2
1.95	L-16231-5.1	Install New Backup Standby Generator System	LS	1
1.96	262416-5.1	Electrical Service Including Rack, Equipment, Maintenance Pad, and Utility Company Ducts	LS	1
1.97	SEE PLANS	6' Wrought Iron Fence With Mow Strip	LF	132
1.98	SEE PLANS	12' Manual Rolling Wrought Iron Gate	EA	1
1.99	SEE PLANS	Remove and Dispose of Existing Segmented Circle and Traffic Pattern Indicators	LS	1
1.100	SEE PLANS	Construct Segmented Circle Including Traffic Pattern Indicators	LS	1
1.101	SEE PLANS	Gravel Access Drive	SY	165
1.102	SEE PLANS	Remove Existing Concrete Curb	LF	12
1.103	SEE PLANS	6" Reinfoced PCC	SY	43
1.104	SEE PLANS	12" Flexible Aggregate Base	SY	50
1.105	KSA-701-5.1	Solar Powered Green Taxiway Centerline Retroreflectors	EA	400

Item No.	Spec. No.	Description	Units	Estimated Quantities
Additive Alternate No. 1 - Installation of Runway End Identifier Lights (REILs) Runway 35:				
A1.01	L-125-5.10	Install New REIL UNIT	EA	1
Additive Alternate No. 2 - Upgraded Taxiway Fillet Geometry for Runway Connector Taxiways (E-HMAC and G-HMAC):				
A2.01	P-101-5.1	Asphalt Pavement Removal (Full Depth)	SY	581
A2.02	P-152-4.1	Unclassified Excavation	CY	1,754
A2.03	P-155-8.1	10" Lime Stabilized Subgrade (6% Lime)	SY	4,208
A2.04	P-155-8.2	Commercial Lime Slurry, Grade 2	TON	114
A2.05	P-304-8.1	6" Cement-Treated Base Course	SY	3,972
A2.06	P-401-8.1	4" Asphalt Surface Course	TON	684
A2.07	P-403-8.1	5" Asphalt Stabilized Base Course	TON	987
A2.08	P-602-5.1	Emulsified Asphalt Prime Coat	GAL	993
A2.09	T-901-5.1	Hydromulch, Seed & Fertilizer for Permanent Application	AC	2
A2.10	T-904-5.1	Sodding	SY	2,329
A2.11	T-905-5.1	Topsoil (Obtained on Site, Removed and Reinstalled)	CY	1,076
Additive Alternate No. 3 - Upgraded Taxiway Fillet Geometry for Apron Connector Taxiways (E1-PCC, F-PCC, G1-PCC and J-HMAC):				
A3.01	P-101-5.1	Asphalt Pavement Removal (Full Depth)	SY	75
A3.02	P-101-5.2	Concrete Pavement Removal (Full Depth)	SY	1,053
A3.03	P-101-5.7	24" RCP SET Removal	EA	1
A3.04	P-101-5.8	SET Removal for 2 - 30" RCP	EA	1
A3.05	P-101-5.9	42" RCP SET Removal	EA	1
A3.06	P-101-5.11	Storm Sewer Junction Box Removal	EA	2
A3.07	P-152-4.1	Unclassified Excavation	CY	7,580
A3.08	P-155-8.1	10" Lime Stabilized Subgrade (6% Lime)	SY	7,369
A3.09	P-155-8.2	Commercial Lime Slurry, Grade 2	TON	200
A3.10	P-304-8.1	6" Cement-Treated Base Course	SY	720
A3.11	P-304-8.2	8" Cement-Treated Base Course	SY	6,299
A3.12	P-401-8.1	4" Asphalt Surface Course	TON	123
A3.13	P-403-8.1	5" Asphalt Stabilized Base Course	TON	1,779
A3.14	P-501-8.1	12" Reinforced Portland Cement Concrete	SY	5,086
A3.15	P-602-5.1	Emulsified Asphalt Prime Coat	GAL	1,755
A3.16	P-605-5.1	Joint Sealing Filler	LF	8,260
A3.17	D-701-5.1	24" Dia. ASTM C76, Class V RCP	LF	16
A3.18	D-701-5.2	30" Dia. ASTM C76, Class V RCP	LF	64
A3.19	D-701-5.4	42" Dia. ASTM C76, Class V RCP	LF	32
A3.20	D-751-5.1	Storm Sewer Junction Box	EA	2
A3.21	D-752-5.1	Safety End Treatment for 1 - 24" RCP (6:1 Slope, With Pipe Runners)	EA	1
A3.22	D-752-5.2	Safety End Treatment for 2 - 30" RCP (6:1 Slope, With Pipe Runners)	EA	1
A3.23	D-752-5.4	Safety End Treatment for 1 - 42" RCP (6:1 Slope, With Pipe Runners)	EA	1
A3.24	T-901-5.1	Hydromulch, Seed & Fertilizer for Permanent Application	AC	4
A3.25	T-904-5.1	Sodding	SY	3,468
A3.26	T-905-5.1	Topsoil (Obtained on Site, Removed and Reinstalled)	CY	2,152
Additive Alternate No. 4 - Reconstruct Taxiway H:				
A4.01	P-101-5.1	Asphalt Pavement Removal (Full Depth)	SY	350
A4.02	P-101-5.2	Concrete Pavement Removal (Full Depth)	SY	355
A4.03	P-152-4.1	Unclassified Excavation	CY	2,700
A4.04	P-155-8.1	10" Lime Stabilized Subgrade (6% Lime)	SY	2,604
A4.05	P-155-8.2	Commercial Lime Slurry, Grade 2	TON	71
A4.06	P-304-8.2	8" Cement-Treated Base Course	SY	2,505
A4.07	P-403-8.1	5" Asphalt Stabilized Base Course	TON	780
A4.08	P-501-8.1	12" Reinforced Portland Cement Concrete	SY	2,111
A4.09	P-602-5.1	Emulsified Asphalt Prime Coat	GAL	627
A4.10	P-605-5.1	Joint Sealing Filler	LF	2,861
A4.11	T-901-5.1	Hydromulch, Seed & Fertilizer for Permanent Application	AC	2
A4.12	T-904-5.1	Sodding	SY	985
A4.13	T-905-5.1	Topsoil (Obtained on Site, Removed and Reinstalled)	CY	1,076

MARK	REVISION	DATE
2	ADDENDUM #2	10/02/25
1	ADDENDUM #4	10/15/25

SUMMARY OF QUANTITIES - BID SCHEDULE NO. 1

SHEET NAME:

103006 - TEXAS GULF COAST REGIONAL AIRPORT – TAXIWAY REHABILITATION AND ELECTRICAL IMPROVEMENTS – ANGLETON, TEXAS (BRAZORIA COUNTY)

TEXAS GULF COAST REGIONAL AIRPORT
TAXIWAY REHABILITATION AND ELECTRICAL IMPROVEMENTS
BRAZORIA COUNTY, TEXAS

PROJECT NAME:

DRAWN BY:	DESIGNED BY:	LATEST REVISION:	KSA JOB NO.:
AJ	NM	10/08/2025	103006

KSA
a Pape-Dawson company
2107 CityWest Boulevard, Third Floor
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STATE OF TEXAS
NATHAN T. MIKELL
136408
LICENSED
PROFESSIONAL ENGINEER
06/25/25

SEAL:
TBPE Firm Registration No. F-1356

SHEET NO.

G03

BID SCHEDULE NO. 2

(PCC PAVEMENT SECTION FOR TAXIWAY A RECONSTRUCTION AND TAXIWAY B RELOCATION)

Item No.	Spec. No.	Description	Units	Estimated Quantities
Base Bid:				
1.01	C-100-14.1	Contractor Quality Control Program	LS	1
1.02	C-102-5.1	Installation and Removal of Silt Fence	LF	405
1.03	C-102-5.2	Rock Construction Exit	EA	3
1.04	C-102-5.3	Storm Water Pollution Prevention Plan	LS	1
1.05	C-105-8.1	Mobilization	LS	1
1.06	C-105-8.2	Traffic Control Devices and Personnel	LS	1
1.07	C-105-8.3	Temporary Relocated Runway 35 Threshold	LS	1
1.08	P-101-5.1	Asphalt Pavement Removal (Full Depth)	SY	15,092
1.09	P-101-5.3	2.5" Asphalt Surface Course Removal	SY	2,800
1.10	P-101-5.4	1.5" Crushed Aggregate Base Course Removal	SY	2,800
1.11	P-101-5.5	Crack Repair	LF	35,000
1.12	P-101-5.6	1.5" - 2.0" Cold Milling	SY	38,990
1.13	P-101-5.8	SET Removal for 2 - 30" RCP	EA	2
1.14	P-101-5.10	30" Storm Sewer Pipe Removal	LF	620
1.15	P-152-4.1	Unclassified Excavation	CY	12,400
1.16	P-152-4.2	Offsite Borrow Excavation	CY	8,000
1.17	P-155-8.1	10" Lime Stabilized Subgrade (6% Lime)	SY	14,960
1.18	P-155-8.2	Commercial Lime Slurry, Grade 2	TON	404
1.19	P-304-8.2	8" Cement-Treated Base Course	SY	14,520
1.20	P-401-8.2	2" Asphalt Surface Course (Overlay)	TON	4,390
1.21	P-401-8.3	4" Asphalt Surface Course (Overlay)	TON	630
1.22	P-401-8.4	Full Depth Pavement Repair	SY	1,000
1.23	P-403-8.1	5" Asphalt Stabilized Base Course	TON	4,600
1.24	P-501-8.1	12" Reinforced Portland Cement Concrete	SY	12,733
1.25	P-602-5.1	Emulsified Asphalt Prime Coat	GAL	3,630
1.26	P-605-5.1	Joint Sealing Filler	LF	16,245
1.27	P-620-5.2a	White Pavement Markings (Reflective)	SF	15,981
1.28	P-620-5.2b	Red Pavement Markings (Reflective)	SF	1,155
1.29	P-620-5.2c	Yellow Pavement Markings (Reflective)	SF	11,634
1.30	P-620-5.2d	Black Pavement Markings (Non-Reflective)	SF	27,821
1.31	P-620-5.3	Marking Removal	SF	4,660
1.32	P-620-5.4a	Phase 2 Temporary Markings (Non-Reflective)	SF	2,396
1.33	P-620-5.4b	Phase 3 Temporary Markings (Non-Reflective)	SF	3,853
1.34	P-620-5.4c	Phase 4 Temporary Markings (Non-Reflective)	SF	861
1.35	D-701-5.3	Class V 36" RCP, ASTM C76	LF	400
1.36	D-752-5.3	Safety End Treatment for 2 - 36" RCP (6:1 Slope, With Pipe Runners)	EA	2
1.37	T-901-5.1	Hydromulch, Seed & Fertilizer for Permanent Application	AC	23
1.38	T-904-5.1	Sodding	SY	13,826
1.39	T-905-5.1	Topsoil (Obtained on Site, Removed and Reinstalled)	CY	13,665
1.40	L-103-5.1	Install New Beacon on New 50' Tip Down Pole, Including Foundation	EA	1
1.41	L-105-5.1	Remove No. 8 AWG, L-824C Cable in Duct	LF	5,200
1.42	L-105-5.2	Remove 2-inch Conduit (Including Cable)	LF	43,600
1.43	L-105-5.3	Remove Concrete Encased Duct in Earth (Including	LF	575
1.44	L-105-5.4	Remove and Dispose of Elevated Edge Light, Base Can to be Removed	EA	395
1.45	L-105-5.5	Remove and Dispose of Elevated Edge Light, Base Can to Remain	EA	8
1.46	L-105-5.6	Remove and Dispose of In-Pavement Edge Light, Base Can to be Removed	EA	1
1.47	L-105-5.7	Remove and Dispose of Airfield Sign and Foundation	EA	60
1.48	L-105-5.8	Remove Airfield Sign Foundation	EA	2
1.49	L-105-5.9	Remove and Dispose of Pull Can in Turf	EA	29
1.50	L-105-5.10	Remove and Dispose of 4-Box L-880 PAPI System and Associated Foundations	EA	2
1.51	L-105-5.11	Remove and Dispose of Primary Windcone and Foundation	EA	1
1.52	L-105-5.12	Remove and Dispose of Supplemental Wind Cone and Foundation	EA	2
1.53	L-105-5.13	Remove and Dispose of Beacon, Beacon Tower, and Foundation	EA	1
1.54	L-105-5.14	Work in Existing Airfield Lighting Vault Equipment	LS	1
1.55	L-107-5.1	Install New L-807(L) Wind Cone Including Tip Down Pole and Foundation	EA	3
1.56	L-108-5.1	No. 8 AWG, L-824C, Installed in Conduit	LF	76,550
1.57	L-108-5.2	No. 6 AWG Bare Counterpoise Wire, Installed in Conduit Trench	LF	58,610
1.58	L-108-5.3	Electrical Circuit (Wind Cone), 2#10 AWG, 1#10G, Installed in Conduit	LF	2,000
1.59	L-108-5.4	Electrical Circuit (Beacon), 2#12 AWG, 1#12G, Installed in Conduit	LF	125
1.60	L-108-5.5	Temporary Electrical Provisions	LS	1
1.61	L-109-5.1	Install New Vault Building And Equipment	LS	1
1.62	L-109-5.2	Install New 4kW L-829 Constant Current Regulator	EA	1
1.63	L-109-5.3	Install New 7.5kW L-829 Constant Current Regulator	EA	1
1.64	L-109-5.4	Install New 10kW L-829 Constant Current Regulator	EA	1
1.65	L-109-5.5	Install Salvaged 10kW L-828 Constant Current Regulator	EA	1
1.66	L-110-5.1	1-Way, 2" Sch. 40 PVC Conduit, Direct Buried in Turf	LF	44,500
1.67	L-110-5.2	2-Way, 2" Sch. 40 PVC Conduit, Concrete Encased, in	LF	3,725
1.68	L-110-5.3	2-Way, 2" Sch. 40 PVC Conduit, Concrete Encased, in Full Strength Pavement	LF	415
1.69	L-110-5.4	4-Way, 2" Sch. 40 PVC Conduit, Concrete Encased, in	LF	1,705
1.70	L-110-5.5	6-Way, 2" Sch. 40 PVC Conduit, Concrete Encased, in	LF	150
1.71	L-110-5.6	8-Way, 2" Sch. 40 PVC Conduit, Concrete Encased, in	LF	470
1.72	L-112-5.1	2-Way, 2" HDPE Conduit, Installed Via Directional Drill	LF	735
1.73	L-112-5.2	2-Way, 4" HDPE Conduit, Installed Via Directional Drill	LF	175
1.74	L-112-5.3	4-Way, 2" HDPE Conduit, Installed Via Directional Drill	LF	250
1.75	L-112-5.4	6-Way, 2" HDPE Conduit, Installed Via Directional Drill	LF	100
1.76	L-112-5.5	8-Way, 2" HDPE Conduit, Installed Via Directional Drill	LF	425
1.77	L-115-5.1	2-Way Junction Can Plaza (JCP)	EA	24
1.78	L-115-5.2	4-Way Junction Can Plaza (JCP)	EA	4
1.79	L-115-5.3	6-Way Junction Can Plaza (JCP)	EA	1
1.80	L-115-5.4	8-Way Junction Can Plaza (JCP)	EA	3
1.81	L-115-5.5	Install New Pull Can in Turf	EA	3
1.82	L-115-5.6	Install New Pull Box in Turf	EA	1
1.83	L-125-5.1	Install New L-861T(L) LED Elevated Taxiway Edge Light on New L-867B Base Can in Turf	EA	320
1.84	L-125-5.2	Install New L-862(L) Elevated Runway Edge Light on New L-867B Base Can in Turf	EA	70
1.85	L-125-5.3	Install New L-862E(L) Elevated Runway Threshold End Light on Existing Base Can	EA	8
1.86	L-125-5.4	Install New L-862E(L) Elevated Runway Threshold End Light on New L-867B Base Can in Turf	EA	8
1.87	L-125-5.5	Install New New L-867B Base Can with Blank Cover in	EA	3
1.88	L-125-5.6	Install New 1-MOD L-858(L) Size 2, Style 2 LED Guidance Sign on New Foundation	EA	12
1.89	L-125-5.7	Install New 2-MOD L-858(L) Size 2, Style 2 LED Guidance Sign on New Foundation	EA	13
1.90	L-125-5.8	Install New 3-MOD L-858(L) Size 2, Style 2 LED Guidance Sign on New Foundation	EA	17
1.91	L-125-5.9	Install New 1-MOD L-858(L) Size 4, Style 3 LED Guidance Sign on New Foundation	EA	6
1.92	L-125-5.11	Install New 4-MOD L-858(L) Size 2, Style 2 LED Guidance Sign on New Foundation	EA	2
1.93	L-125-5.12	Install New 2-MOD L-858(L) Size 2, Style 3 LED Guidance Sign on New Foundation	EA	11
1.94	L-125-5.13	Install New 3-MOD L-858(L) Size 2, Style 3 LED Guidance Sign on New Foundation	EA	3
1.95	L-130-5.1	Install New LED L-880(L) Style B PAPI System	EA	2
1.96	L-16231-5.1	Install New Backup Standby Generator System	LS	1
1.97	262416-5.1	Electrical Service Including Rack, Equipment, Maintenance Pad, and Utility Company Ducts	LS	1
1.98	SEE PLANS	6' Wrought Iron Fence With Mow Strip	LF	132
1.99	SEE PLANS	12' Manual Rolling Wrought Iron Gate	EA	1
1.10	SEE PLANS	Remove and Dispose of Existing Segmented Circle and Traffic Pattern Indicators	LS	1
1.10	SEE PLANS	Construct Segmented Circle Including Traffic Pattern	LS	1
1.102	SEE PLANS	Gravel Access Drive	SY	165
1.103	SEE PLANS	Remove Existing Concrete Curb	LF	12
1.104	SEE PLANS	6" Reinfoced PCC	SY	43
1.105	SEE PLANS	12" Flexible Aggregate Base	SY	50
1.106	KSA-701-5.1	Solar Powered Green Taxiway Centerline Retroreflectors	EA	400

Item No.	Spec. No.	Description	Units	Estimated Quantities
Additive Alternate No. 1 - Installation of Runway End Identifier Lights (REILs) Runway 35:				
A1.01	L-125-5.10	Install New REIL UNIT	EA	1
Additive Alternate No. 2 - Upgraded Taxiway Fillet Geometry for Runway Connector Taxiways (E-HMAC and G-HMAC):				
A2.01	P-101-5.1	Asphalt Pavement Removal (Full Depth)	SY	581
A2.02	P-152-4.1	Unclassified Excavation	CY	1,754
A2.03	P-155-8.1	10" Lime Stabilized Subgrade (6% Lime)	SY	4,208
A2.04	P-155-8.2	Commercial Lime Slurry, Grade 2	TON	114
A2.05	P-304-8.1	6" Cement-Treated Base Course	SY	3,972
A2.06	P-401-8.1	4" Asphalt Surface Course	TON	684
A2.07	P-403-8.1	5" Asphalt Stabilized Base Course	TON	987
A2.08	P-602-5.1	Emulsified Asphalt Prime Coat	GAL	993
A2.09	T-901-5.1	Hydromulch, Seed & Fertilizer for Permanent Application	AC	2
A2.10	T-904-5.1	Sodding	SY	2,329
A2.11	T-905-5.1	Topsoil (Obtained on Site, Removed and Reinstalled)	CY	1,076
Additive Alternate No. 3 - Upgraded Taxiway Fillet Geometry for Apron Connector Taxiways (E1-PCC, F-PCC, G1-PCC and J-HMAC):				
A3.01	P-101-5.1	Asphalt Pavement Removal (Full Depth)	SY	75
A3.02	P-101-5.2	Concrete Pavement Removal (Full Depth)	SY	1,053
A3.03	P-101-5.7	24" RCP SET Removal	EA	1
A3.04	P-101-5.8	SET Removal for 2 - 30" RCP	EA	1
A3.05	P-101-5.9	42" RCP SET Removal	EA	1
A3.06	P-101-5.11	Storm Sewer Junction Box Removal	EA	2
A3.07	P-152-4.1	Unclassified Excavation	CY	7,580
A3.08	P-155-8.1	10" Lime Stabilized Subgrade (6% Lime)	SY	7,369
A3.09	P-155-8.2	Commercial Lime Slurry, Grade 2	TON	200
A3.10	P-304-8.1	6" Cement-Treated Base Course	SY	720
A3.11	P-304-8.2	8" Cement-Treated Base Course	SY	6,299
A3.12	P-401-8.1	4" Asphalt Surface Course	TON	123
A3.13	P-403-8.1	5" Asphalt Stabilized Base Course	TON	1,779
A3.14	P-501-8.1	12" Reinforced Portland Cement Concrete	SY	5,086
A3.15	P-602-5.1	Emulsified Asphalt Prime Coat	GAL	1,755
A3.16	P-605-5.1	Joint Sealing Filler	LF	8,260
A3.17	D-701-5.1	24" Dia. ASTM C76, Class V RCP	LF	16
A3.18	D-701-5.2	30" Dia. ASTM C76, Class V RCP	LF	64
A3.19	D-701-5.4	42" Dia. ASTM C76, Class V RCP	LF	32
A3.20	D-751-5.1	Storm Sewer Junction Box	EA	2
A3.21	D-752-5.1	Safety End Treatment for 1 - 24" RCP (6:1 Slope, With Pipe Runners)	EA	1
A3.22	D-752-5.2	Safety End Treatment for 2 - 30" RCP (6:1 Slope, With Pipe Runners)	EA	1
A3.23	D-752-5.4	Safety End Treatment for 1 - 42" RCP (6:1 Slope, With Pipe Runners)	EA	1
A3.24	T-901-5.1	Hydromulch, Seed & Fertilizer for Permanent Application	AC	4
A3.25	T-904-5.1	Sodding	SY	3,468
A3.26	T-905-5.1	Topsoil (Obtained on Site, Removed and Reinstalled)	CY	2,152
Additive Alternate No. 4 - Reconstruct Taxiway H:				
A4.01	P-101-5.1	Asphalt Pavement Removal (Full Depth)	SY	350
A4.02	P-101-5.10	Concrete Pavement Removal (Full Depth)	SY	355
A4.03	P-152-4.1	Unclassified Excavation	CY	2,700
A4.04	P-155-8.1	10" Lime Stabilized Subgrade (6% Lime)	SY	2,604
A4.05	P-155-8.2	Commercial Lime Slurry, Grade 2	TON	71
A4.06	P-304-8.2	8" Cement-Treated Base Course	SY	2,505
A4.07	P-403-8.1	5" Asphalt Stabilized Base Course	TON	780
A4.08	P-501-8.1	12" Reinforced Portland Cement Concrete	SY	2,111
A4.09	P-602-5.1	Emulsified Asphalt Prime Coat	GAL	627
A4.10	P-605-5.1	Joint Sealing Filler	LF	2,861
A4.11	T-901-5.1	Hydromulch, Seed & Fertilizer for Permanent Application	AC	2
A4.12	T-904-5.1	Sodding	SY	985
A4.13	T-905-5.1	Topsoil (Obtained on Site, Removed and Reinstalled)	CY	1,076

MARK	REVISION	DATE
1	ADDENDUM #2	10/02/25
2	ADDENDUM #4	10/15/25

SUMMARY OF QUANTITIES - BID SCHEDULE NO. 2

SHEET NAME:

TEXAS GULF COAST REGIONAL AIRPORT – TAXIWAY REHABILITATION AND ELECTRICAL IMPROVEMENTS

BRAZORIA COUNTY, TEXAS

PROJECT NAME:

DRAWN BY:	DESIGNED BY:	LATEST REVISION:	KSA JOB NO.:
AJ	NM	10/08/2025	103006

KSA
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T: 281-494-3232
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STATE OF TEXAS
NATHAN T. MIKELL
136408
LICENSED
PROFESSIONAL ENGINEER
06/25/25

SEAL:
TBPE Firm Registration No. F-1356

SHEET NO.

G04

AIRFIELD LIGHTING DEMOLITION LEGEND

- ELEVATED TAXIWAY EDGE LIGHT AND BASE CAN TO REMAIN
- ELEVATED TAXIWAY EDGE LIGHT AND BASE CAN TO BE REMOVED.
- SIGN TO REMAIN
- SIGN TO BE REMOVED
- MANHOLE TO REMAIN
- PULLBOX TO BE REMAIN
- PULLCAN TO BE REMOVED
- RUNWAY THRESHOLD END LIGHT TO BE REMOVED
- EXISTING RUNWAY EDGE LIGHT TO BE REMOVED
- ROTATING BEACON, POLE, AND FOUNDATION TO BE REMOVED
- EXISTING PAPI TO BE REMOVED
- EXISTING POWER POLE WITH TRANSFORMER TO REMAIN
- EXISTING POWER POLE WITH TO REMAIN

- CONDUIT TO REMAIN, REMOVE AIRFIELD CABLES WITH BOLD/DARK CABLE CALLOUTS EXCEPT WHERE SHARED WITH CABLES TO REMAIN THEN ABANDON CABLES. AIRFIELD CABLES WITH SHADED/LIGHT CABLE CALLOUTS TO REMAIN
- (2) T / (2) S — REMOVE CABLE(S): 'T' DENOTES CIRCUIT ID (2) INDICATES 2 CABLES; CABLE(S) TO REMAIN: 'S' INDICATES CIRCUIT ID (2) INDICATES 2 CABLES
- DB — DUCT BANK TO REMAIN, REMOVE AIRFIELD CABLES FROM DUCT BANK WITH BOLD/DARK CABLE CALLOUTS WHERE INSTALLED IN SEPARATE CONDUIT. IF SHARED, ABANDON CABLES. AIRFIELD CABLES WITH SHADED/LIGHT CABLE CALLOUTS ARE EXISTING TO REMAIN
- (2) T / (2) S — REMOVE CABLE(S): 'T' DENOTES CIRCUIT ID (2) INDICATES 2 CABLES; CABLE(S) TO REMAIN: 'S' INDICATES CIRCUIT ID (2) INDICATES 2 CABLES
- EXISTING L-806 SUPPLEMENTAL WIND CONE TO BE DEMOLISHED

- 2 / DB — INDICATES NUMBER OF DUCTS. SQUARE INDICATES 2" DUCTS. CONCRETE ENCASED DUCTS TO BE DEMOLISHED
- 2 / DB — INDICATES NUMBER OF DUCTS. SQUARE INDICATES 2" DUCTS. CONCRETE ENCASED DUCTS TO REMAIN
- CONDUIT AND CABLES SHOWN FOR REFERENCE ONLY
- CONDUIT AND CABLES TO BE REMOVED
- TRANSITION POINT DEPICTING CONNECTION BETWEEN EXISTING CONDUIT AND CONDUIT TO BE REMOVED
- FAA — EXISTING FAA LINE TO REMAIN
- EXISTING L-807 PRIMARY WIND CONE AND SEGMENTED CIRCLE TO BE DEMOLISHED

EXISTING CIRCUIT DEFINITIONS -

T = TAXIWAY LIGHTING CIRCUIT

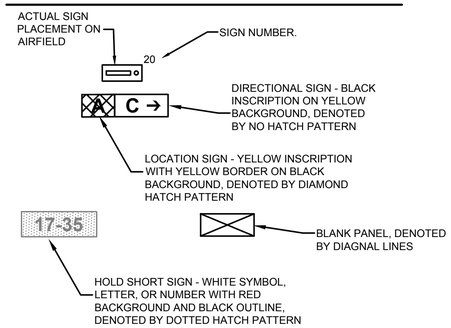
S = LIGHTED GUIDANCE SIGN CIRCUIT

R = RUNWAY LIGHTING CIRCUIT

P-17 = RUNWAY 17 PAPI CIRCUIT

P-35 = RUNWAY 35 PAPI CIRCUIT

GUIDANCE SIGN LEGEND - EXISTING



FAA UTILITY NOTES

1. CONTRACTOR SHALL NOTIFY ENGINEER AND RPR A MINIMUM OF 14 DAYS IN ADVANCE OF ANY WORK IN THE VICINITY OF ANY FAA UTILITY.
2. PRIOR TO EXCAVATION, THE CONTRACTOR SHALL POTHOLE BY MEANS OF HYDRO-EXCAVATION THE IDENTIFIED AREA MARKED TO VERIFY LOCATION AND DEPTH OFF FAA DUCT BANK.
3. CONTRACTOR SHALL HAND DIG OR HYDRO-EXCAVATE WHEN WORKING WITHIN 10' OF ANY MARKED FAA UTILITIES.
4. CONTRACTOR SHALL HAVE SPLICE KIT ON HAND AND HAVE QUALIFIED PERSON(S) TO PERFORM ANY CABLE REPAIRS IMMEDIATELY IN THE EVENT OF A CABLE CUT, SPLICES WILL ONLY SERVE AS A TEMPORARY MEANS TO RESTORE SERVICE. PERMANENT REPLACEMENT WILL REQUIRE FAA APPROVAL. SPLICES OF FAA CABLES SHALL BE INSPECTED BY FAA PERSONNEL PRIOR TO ACCEPTANCE.
5. CONTRACTOR SHALL NOTIFY RPR, ENGINEER, AND AIRPORT OF ANY DAMAGES TO FAA UTILITIES IMMEDIATELY.

AIRFIELD LIGHTING NEW CONSTRUCTION LEGEND

- EXISTING ELEVATED TAXIWAY EDGE LIGHT AND BASE CAN TO REMAIN
- NEW ELEVATED TAXIWAY EDGE LIGHT ON NEW BASE CAN
- G, R — SUBSCRIPT DENOTES LENS COLOR — NEW ELEVATED RUNWAY THRESHOLD END LIGHT ON NEW BASE CAN
- C, Y — SUBSCRIPT DENOTES LENS COLOR — NEW ELEVATED RUNWAY EDGE LIGHT ON NEW BASE CAN
- NEW BLANK COVER PLATE INSTALLED ON NEW L-867B BASE CAN
- EXISTING SIGN TO REMAIN
- NEW SIGN ON NEW SIGN FOUNDATION
- NEW JUNCTION CAN PLAZA
- NEW HIGH DENSITY JUNCTION CAN PLAZA
- JCP-18-6 — JCP ID DESCRIPTION: '18' INDICATES JCP ID # '6' INDICATES # OF BASE CANS IN JCP
- EXISTING PULLBOX TO REMAIN
- NEW L-867D PULLCAN
- EXISTING MANHOLE TO REMAIN
- NEW REIL UNIT
- EXISTING POWER POLE WITH TRANSFORMER TO REMAIN
- EXISTING POWER POLE WITH TO REMAIN
- PROPOSED TRANSFORMER ON EXISTING POWER POLE
- NEW PULLBOX

- INSTALL AIRFIELD CABLES WITH BOLD/DARK CABLE CALLOUTS IN EXISTING CONDUIT. AIRFIELD CABLES WITH SHADED/LIGHT CABLE CALLOUTS TO REMAIN
- (2) TW1 / (2) RW1 — INSTALL CABLE(S): 'TW1' DENOTES CIRCUIT ID (2) INDICATES 2 CABLES; CABLE(S) TO REMAIN: 'RW1' INDICATES CIRCUIT ID (2) INDICATES 2 CABLES
- DB — INSTALL AIRFIELD CABLES WITH BOLD/DARK CABLE CALLOUTS IN EXISTING ENCASED DUCT BANK. AIRFIELD CABLES WITH SHADED/LIGHT CABLE CALLOUTS ARE EXISTING TO REMAIN
- (2) TW1 / (2) RW1 — INSTALL CABLE(S): 'TW1 ' DENOTES CIRCUIT ID (2) INDICATES 2 CABLES; CABLE(S) TO REMAIN: 'TW1' INDICATES CIRCUIT ID (2) INDICATES 2 CABLES
- PROPOSED L-807(L) WIND CONE
- NEW L-880(L) PAPI
- NEW ROTATING BEACON INSTALLED ON NEW TIP DOWN POLE WITH A NEW FOUNDATION

- 2 — INDICATES NUMBER OF DUCTS. DIAMOND INDICATES 4" DUCTS.
- 2 / DB — INDICATES NUMBER OF DUCTS. SQUARE INDICATES 2" DUCTS. PROPOSED CONCRETE ENCASED DUCTS. SIZE AND QUANTITY AS NOTED
- 2 / DB — INDICATES NUMBER OF DUCTS. SQUARE INDICATES 2" DUCTS. CONCRETE ENCASED DUCTS TO REMAIN
- EXISTING CONDUIT AND CABLES SHOWN FOR REFERENCE ONLY
- NEW 2" SCHEDULE 40 PVC CONDUIT
- TRANSITION POINT DEPICTING CONNECTION BETWEEN EXISTING CONDUIT AND NEW ENCASED CONDUIT
- DB — PROPOSED DUCTS INSTALLED VIA DIRECTIONAL DRILL.
- FAA — EXISTING FAA LINE TO REMAIN
- PROPOSED L-807(L) PRIMARY WIND CONE AND SEGMENTED CIRCLE

PROPOSED CIRCUIT DEFINITIONS -

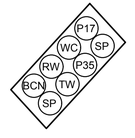
TW1 = TAXIWAY LIGHTING AND SIGNAGE CIRCUIT

RW1 = RUNWAY LIGHTING AND SIGNAGE CIRCUIT

PAPI-17 = RUNWAY 17 PAPI CIRCUIT

PAPI-35 = RUNWAY 35 PAPI CIRCUIT

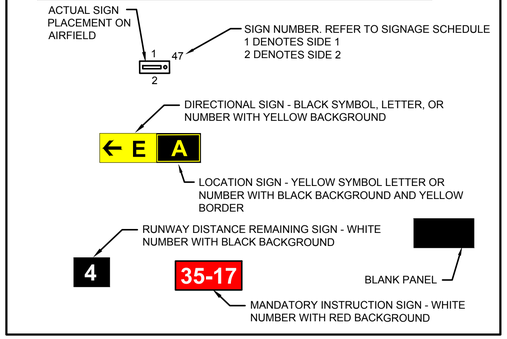
CIRCUIT INSTALLATION WITHIN JCP GUIDE



INTERCONECT DUCTS BETWEEN JCPS AND INSTALL CIRCUITS AS SHOWN ON THESE SYMBOLS IN THE EL101 SERIES. CONTACT THE ENGINEER OR RPR FOR ANY REQUESTED DEVIATIONS.

CIRCUIT ID LEGEND:
RW = RW1
TW = TW1
P17 = PAPI - 17
P35 = PAPI - 35
WC = WIND CONE
BCN = BEACON
SP = SPARE

GUIDANCE SIGN LEGEND - PROPOSED



MARK	REVISION	DATE
4	ADDENDUM 4	10/15/25

SHEET NAME:
AIRFIELD LIGHTING SYMBOLS LEGEND AND NOTES

103006 – TEXAS GULF COAST REGIONAL AIRPORT – TAXIWAY PAVEMENT AND ELECTRICAL IMPROVEMENTS – ANGLETON, TEXAS (BRAZORIA COUNTY)

PROJECT NAME:
TEXAS GULF COAST REGIONAL AIRPORT TAXIWAY REHABILITATION AND ELECTRICAL IMPROVEMENTS
BRAZORIA COUNTY, TEXAS

DRAWN BY:	DESIGNED BY:	LATEST REVISION:	KSA JOB NO.:
ALC	ALC	10/08/2025	103006

Ferguson Consulting
Aviation Specialists & Technology Solutions
Ferguson Consulting, Inc.
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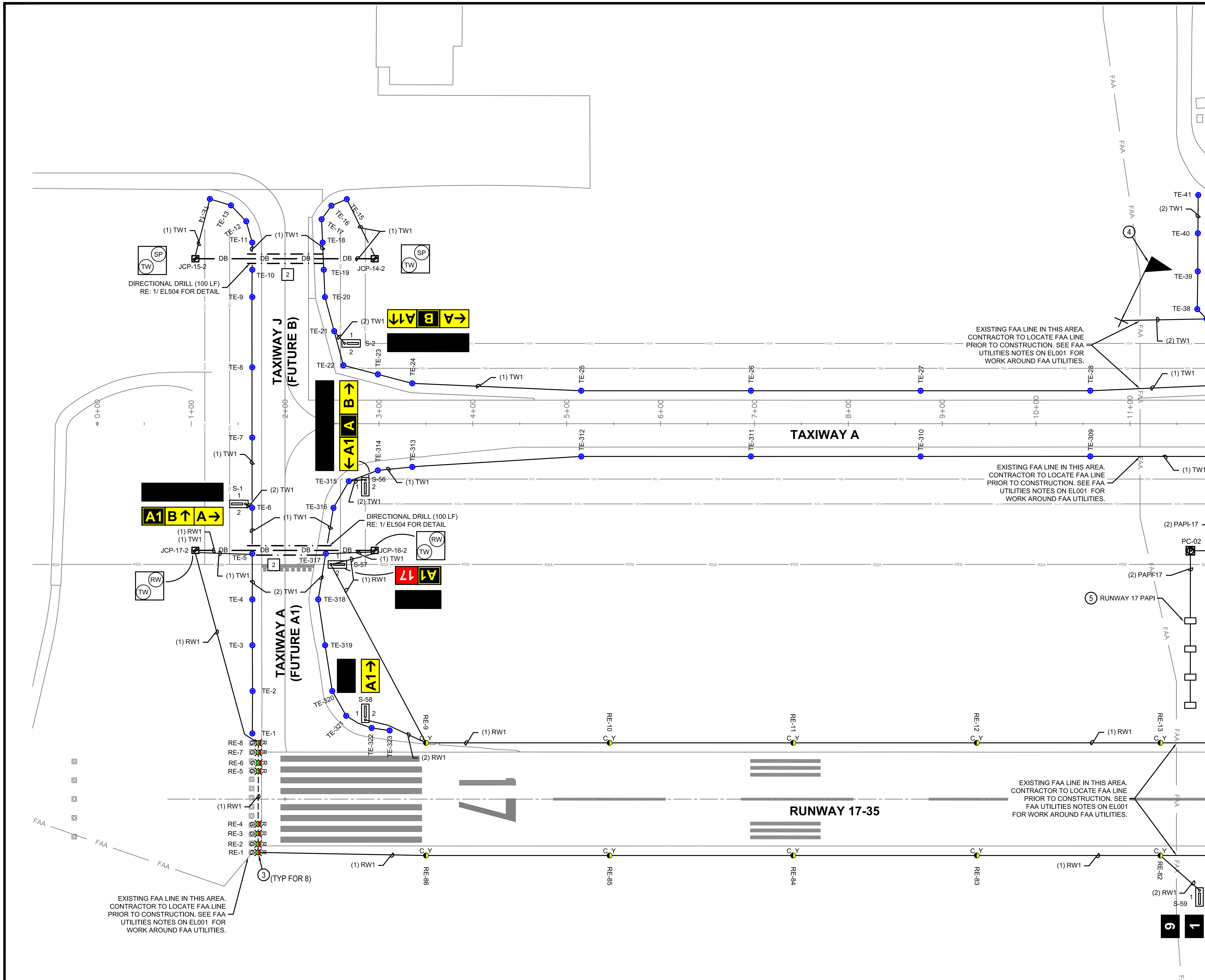
The Woodlands, TX 77380
(281) 203-9222 Firm No. 6864

STATE OF TEXAS
R. COLE FERGUSON
150146
LICENSED
PROFESSIONAL ENGINEER
10/15/25

SEAL:
TBPE Firm Registration No. F-6864

SHEET NO.
EL001

O:\SHARED\FCI PROJ AIR-ELEC\24041-TX GULF COAST REG AIRPORT\DWG\ EL001.DWG | EL001 | 10/15/2025 - 10:57 AM - LAST SAVED BY: ACOTE



50' 0 50' 100'
GRAPHIC SCALE IN FEET

GENERAL NOTES

1. ALL ITEMS SHOWN IN HEAVY LINEWEIGHT ARE NEW OR MODIFIED, ALL ITEMS SHADED ARE EXISTING TO REMAIN. REFER TO SHEET EL001 FOR ELECTRICAL SYMBOL LEGEND.
2. THE CONTRACTOR SHALL PROVIDE LOCK-OUT PROCEDURES PER NEC TO INSURE SAFETY OF PERSONNEL. REFER TO SECTION L-104
3. REFER TO ED1 SERIES FOR AIRFIELD ELECTRICAL DEMOLITION PLANS.
4. REFER TO EL6 SERIES FOR AIRFIELD LIGHTING AND SIGNAGE SCHEDULES.
5. KEYED NOTES ARE TYPICAL FOR ALL SHEETS OF THIS SERIES (EL1 SERIES). ALL LISTED KEYED NOTES FOR A PARTICULAR SHEET MAY NOT APPLY AND THEREFORE THE KEYED NOTE IDENTIFIER WILL NOT BE SHOWN ON THE PLAN PORTION OF THE SHEET.
6. EXISTING AIRFIELD CIRCUITS AND DUCT CROSSINGS HAVE BEEN TAKEN FROM AS-BUILT DOCUMENTATION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL EXISTING CIRCUIT ROUTES PRIOR TO WORK.
7. THE RUNWAY 35 PROPOSED REILS ARE ONLY TO BE INSTALLED IN THE EVENT ADD ALTERNATE 1 IS APPROVED.
8. ALL NEW AIRFIELD LIGHTING CONDUCTORS ARE #8 L-824 TYPE C UNLESS OTHERWISE NOTED.

KEYED NOTES

1. INSTALL NEW AIRFIELD ELECTRICAL LIGHTING VAULT. REFER TO EL4 SERIES FOR ENLARGED PLAN AND DETAILS.
2. INSTALL NEW LED BEACON ON NEW TIP DOWN POLE. REFER TO SHEET EL509 FOR DETAILS.
3. INSTALL NEW ELEVATED LIGHT FIXTURE ON EXISTING BASE CAN. REFER TO EL6 SERIES FOR LIGHT FIXTURE SCHEDULES.
4. INSTALL NEW L-807(L) WIND CONE ON NEW TIP DOWN POLE. REFER TO SHEET EL510 FOR DETAIL.
5. INSTALL NEW L-880(L) PAPI. REFER TO EL5 SERIES FOR DETAILS.
6. INSTALL NEW L-807(L) WIND CONE ON NEW TIP DOWN POLE WITH A NEW SEGMENTED CIRCLE. REFER TO SHEET EL505 FOR DETAILS.
7. INSTALL NEW L-849E(L) REIL. REFER TO SHEET EL511 FOR DETAIL. SEE NOTE 7 IN GENERAL NOTES.
8. CONDUCTOR SHALL BE 600V RATED, THWN-2

MARK	REVISION	DATE
4	ADDENDUM 4	10/15/25

SHEET NAME: AIRFIELD LIGHTING LAYOUT PLAN

PROJECT NAME: TEXAS GULF COAST REGIONAL AIRPORT TAXIWAY REHABILITATION AND ELECTRICAL IMPROVEMENTS BRAZORIA COUNTY, TEXAS

103006 ~ TEXAS GULF COAST REGIONAL AIRPORT ~ TAXIWAY PAVEMENT AND ELECTRICAL IMPROVEMENTS ~ ANGLETON, TEXAS (BRAZORIA COUNTY)

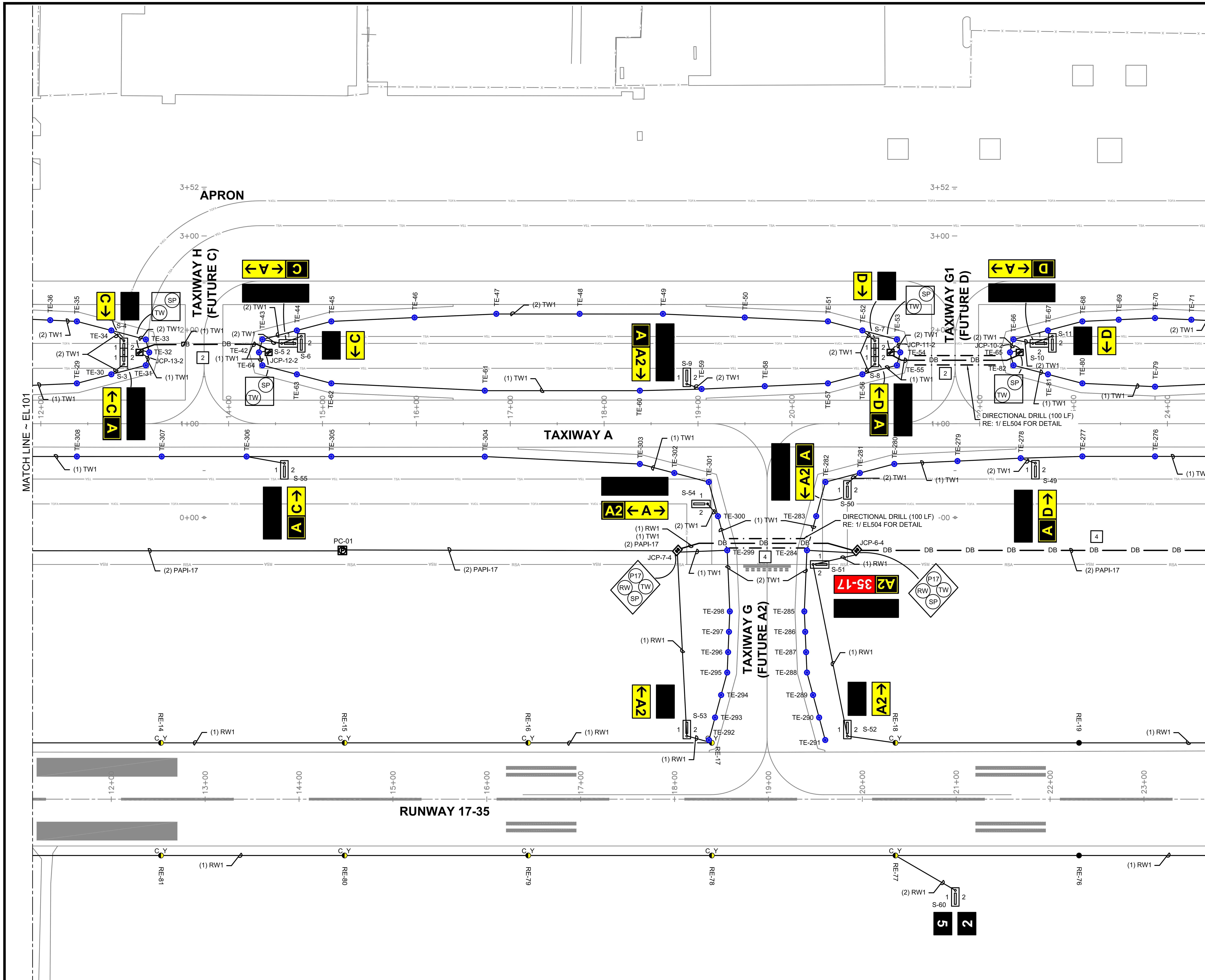
DRAWN BY: ALC
DESIGNED BY: ALC
LATEST REVISION: 10/08/2025
KSA JOB NO.: 103006

Ferguson Consulting
Ferguson Consulting Inc.
10200 Grogans Mill Rd. Ste. #420
The Woodlands, TX 77380
(281) 232-9232 Firm No. 6864

SEAL: STATE OF TEXAS R. COLE FERGUSON 150146 LICENSED PROFESSIONAL ENGINEER 10/15/25
TBPE Firm Registration No. F-6864

SHEET NO.
EL101

Q:\SHARED\FCI PROJ AIR-ELEC\24041-TX GULF COAST REG AIRPORT\DWG\EL1.DWG | EL101 | 10/15/2025 - 11:23 AM : LAST SAVED BY: ACOTE



50' 0 50' 100'
GRAPHIC SCALE IN FEET

GENERAL NOTES

1. ALL ITEMS SHOWN IN HEAVY LINEWEIGHT ARE NEW OR MODIFIED, ALL ITEMS SHADED ARE EXISTING TO REMAIN. REFER TO SHEET EL001 FOR ELECTRICAL SYMBOL LEGEND.
2. THE CONTRACTOR SHALL PROVIDE LOCK-OUT PROCEDURES PER NEC TO INSURE SAFETY OF PERSONNEL. REFER TO SECTION L-104
3. REFER TO ED1 SERIES FOR AIRFIELD ELECTRICAL DEMOLITION PLANS.
4. REFER TO EL6 SERIES FOR AIRFIELD LIGHTING AND SIGNAGE SCHEDULES.
5. KEYED NOTES ARE TYPICAL FOR ALL SHEETS OF THIS SERIES (EL1 SERIES). ALL LISTED KEYED NOTES FOR A PARTICULAR SHEET MAY NOT APPLY AND THEREFORE THE KEYED NOTE IDENTIFIER WILL NOT BE SHOWN ON THE PLAN PORTION OF THE SHEET.
6. EXISTING AIRFIELD CIRCUITS AND DUCT CROSSINGS HAVE BEEN TAKEN FROM AS-BUILT DOCUMENTATION, IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL EXISTING CIRCUIT ROUTES PRIOR TO WORK.
7. THE RUNWAY 35 PROPOSED REILS ARE ONLY TO BE INSTALLED IN THE EVENT ADD ALTERNATE 1 IS APPROVED.
8. ALL NEW AIRFIELD LIGHTING CONDUCTORS ARE #8 L-824 TYPE C UNLESS OTHERWISE NOTED.

KEYED NOTES

1. INSTALL NEW AIRFIELD ELECTRICAL LIGHTING VAULT. REFER TO EL4 SERIES FOR ENLARGED PLAN AND DETAILS.
2. INSTALL NEW LED BEACON ON NEW TIP DOWN POLE. REFER TO SHEET EL509 FOR DETAILS.
3. INSTALL NEW ELEVATED LIGHT FIXTURE ON EXISTING BASE CAN. REFER TO EL6 SERIES FOR LIGHT FIXTURE SCHEDULES.
4. INSTALL NEW L-807(L) WIND CONE ON NEW TIP DOWN POLE. REFER TO SHEET EL510 FOR DETAIL.
5. INSTALL NEW L-880(L) PAPI. REFER TO EL5 SERIES FOR DETAILS.
6. INSTALL NEW L-807(L) WIND CONE ON NEW TIP DOWN POLE WITH A NEW SEGMENTED CIRCLE. REFER TO SHEET EL505 FOR DETAILS.
7. INSTALL NEW L-849E(L) REIL. REFER TO SHEET EL511 FOR DETAIL. SEE NOTE 7 IN GENERAL NOTES.
8. CONDUCTOR SHALL BE 600V RATED, THWN-2

MARK	REVISION	DATE
4	ADDENDUM 4	10/15/25

103006 ~ TEXAS GULF COAST REGIONAL AIRPORT ~ TAXIWAY PAVEMENT AND ELECTRICAL IMPROVEMENTS ~ ANGLETON, TEXAS (BRAZORIA COUNTY)

SHEET NAME:
AIRFIELD LIGHTING LAYOUT PLAN

PROJECT NAME:
TEXAS GULF COAST REGIONAL AIRPORT
TAXIWAY REHABILITATION AND ELECTRICAL IMPROVEMENTS
BRAZORIA COUNTY, TEXAS

DRAWN BY: ALC
DESIGNED BY: ALC
LATEST REVISION: 10/08/2025
KSA JOB NO.: 103006

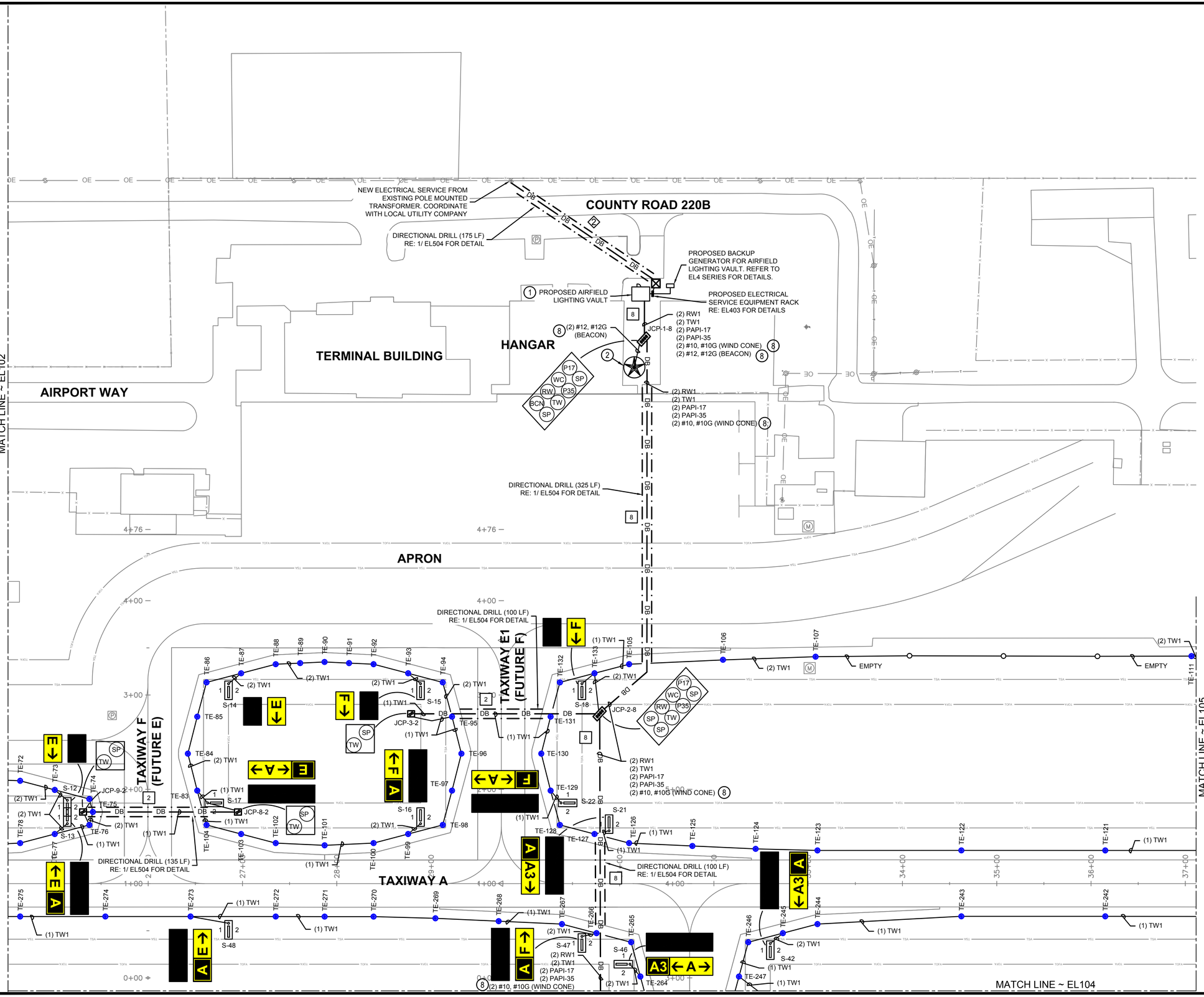
Ferguson Consulting
Ferguson Consulting Inc.
10200 Grogans Mill Rd. Ste. #420
The Woodlands, TX 77380
(281) 232-9232 Firm No. 6864

STATE OF TEXAS
R. COLE FERGUSON
150146
LICENSED PROFESSIONAL ENGINEER
10/15/25

SEAL:
TBPE Firm Registration No. F-6864

SHEET NO.
EL102

Q:\SHARED\FCI PROJ\AIR-ELEC\24041-TX GULF COAST REG AIRPORT\DWG\EL1.DWG | EL102 | 10/15/2025 - 11:23 AM - LAST SAVED BY: ACOTE



GRAPHIC SCALE IN FEET
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MARK	REVISION	DATE
⚠1	ADDENDUM 4	10/15/25

AIRFIELD LIGHTING LAYOUT PLAN

SHEET NAME:

103006 - TEXAS GULF COAST REGIONAL AIRPORT - TAXIWAY PAVEMENT AND ELECTRICAL IMPROVEMENTS - ANGLETON, TEXAS (BRAZORIA COUNTY)

TEXAS GULF COAST REGIONAL AIRPORT TAXIWAY REHABILITATION AND ELECTRICAL IMPROVEMENTS BRAZORIA COUNTY, TEXAS

PROJECT NAME:

DRAWN BY:	ALC
DESIGNED BY:	ALC
LATEST REVISION:	10/08/2025
KSA JOB NO.:	103006

Ferguson Consulting
Aviation Specialized Electrical Systems
Telecommunications and Security Systems
Ferguson Consulting, Inc.
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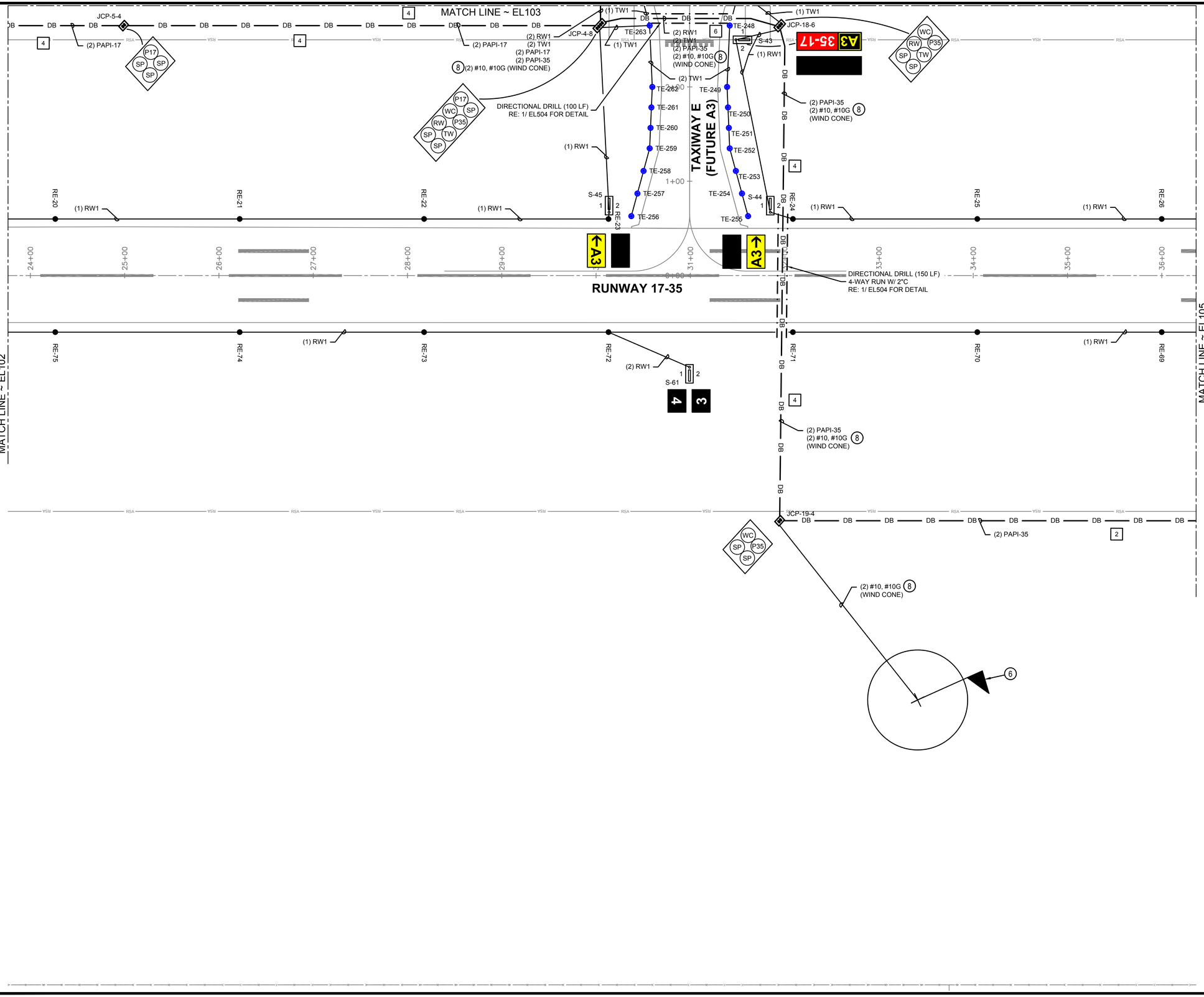
STATE OF TEXAS
P. COLE FERGUSON
150146
LICENSED
PROFESSIONAL ENGINEER
10/15/25

SEAL:
TBPE Firm Registration No. F-6864

SHEET NO.

EL103



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8. CONDUCTOR SHALL BE 600V RATED, THWN-2

50' 0 50' 100'
GRAPHIC SCALE IN FEET

MARK	REVISION	DATE
1	ADDENDUM 4	10/15/25

AIRFIELD LIGHTING LAYOUT PLAN

SHEET NAME:

103006 - TEXAS GULF COAST REGIONAL AIRPORT - TAXIWAY PAVEMENT AND ELECTRICAL IMPROVEMENTS - ANGLETON, TEXAS (BRAZORIA COUNTY)

TEXAS GULF COAST REGIONAL AIRPORT
TAXIWAY REHABILITATION AND ELECTRICAL IMPROVEMENTS
BRAZORIA COUNTY, TEXAS

PROJECT NAME:

DRAWN BY:	ALC
DESIGNED BY:	ALC
LATEST REVISION:	10/08/2025
KSA JOB NO.:	103006

Ferguson Consulting
Aviation Specialized Electrical Systems
Texas Registered Engineering Firm F-6864
Ferguson Consulting, Inc.
10200 Grogans Mill Rd., Ste. #420
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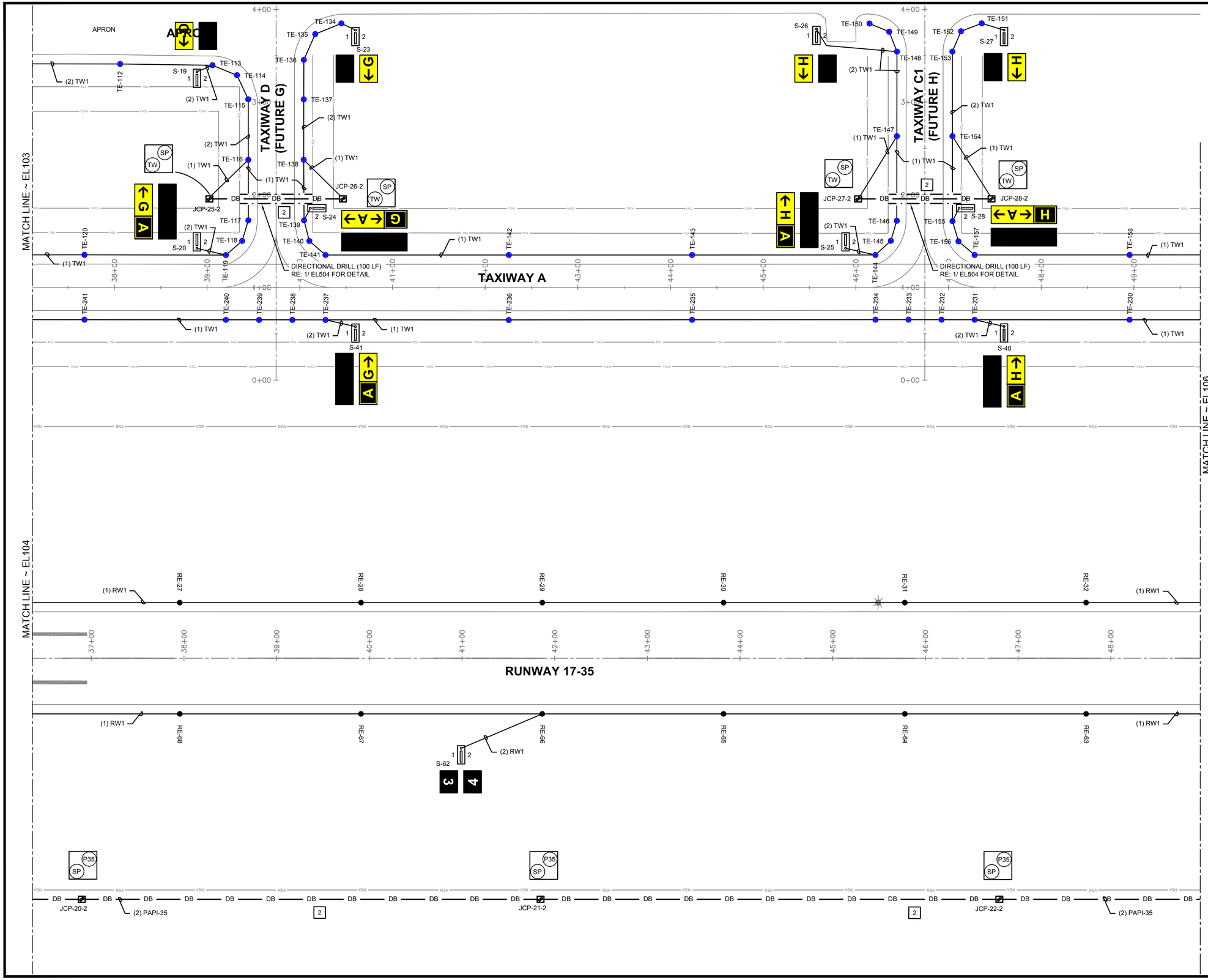
STATE OF TEXAS
R. COLE FERGUSON
150146
LICENSED
PROFESSIONAL ENGINEER
10/15/25

SEAL:
TBPE Firm Registration No. F-6864

SHEET NO.

EL104

O:\SHARED\FCI PROJ\AIR-ELEC\24041-TX GULF COAST REG AIRPORT\DWG\ EL1.DWG | EL104 | 10/15/2025 - 11:23 AM - LAST SAVED BY: ACOTE



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GRAPHIC SCALE IN FEET

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MARK	REVISION	DATE
4	ADDENDUM 4	10/15/25

AIRFIELD LIGHTING LAYOUT PLAN

SHEET NAME:

103006 - TEXAS GULF COAST REGIONAL AIRPORT - TAXIWAY PAVEMENT AND ELECTRICAL IMPROVEMENTS - ANGLETON, TEXAS (BRAZORIA COUNTY)

TEXAS GULF COAST REGIONAL AIRPORT TAXIWAY REHABILITATION AND ELECTRICAL IMPROVEMENTS BRAZORIA COUNTY, TEXAS

PROJECT NAME:

DRAWN BY:	DESIGNED BY:	LATEST REVISION:	KSA JOB NO.:
ALC	ALC	10/08/2025	103006

Ferguson Consulting
Aviation Specialized Electrical Systems
Texas Registered Engineering Firm F-6864
Ferguson Consulting, Inc.
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STATE OF TEXAS
R. COLE FERGUSON
150146
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PROFESSIONAL ENGINEER
10/15/25

SEAL:
TBPE Firm Registration No. F-6864

SHEET NO.

EL105

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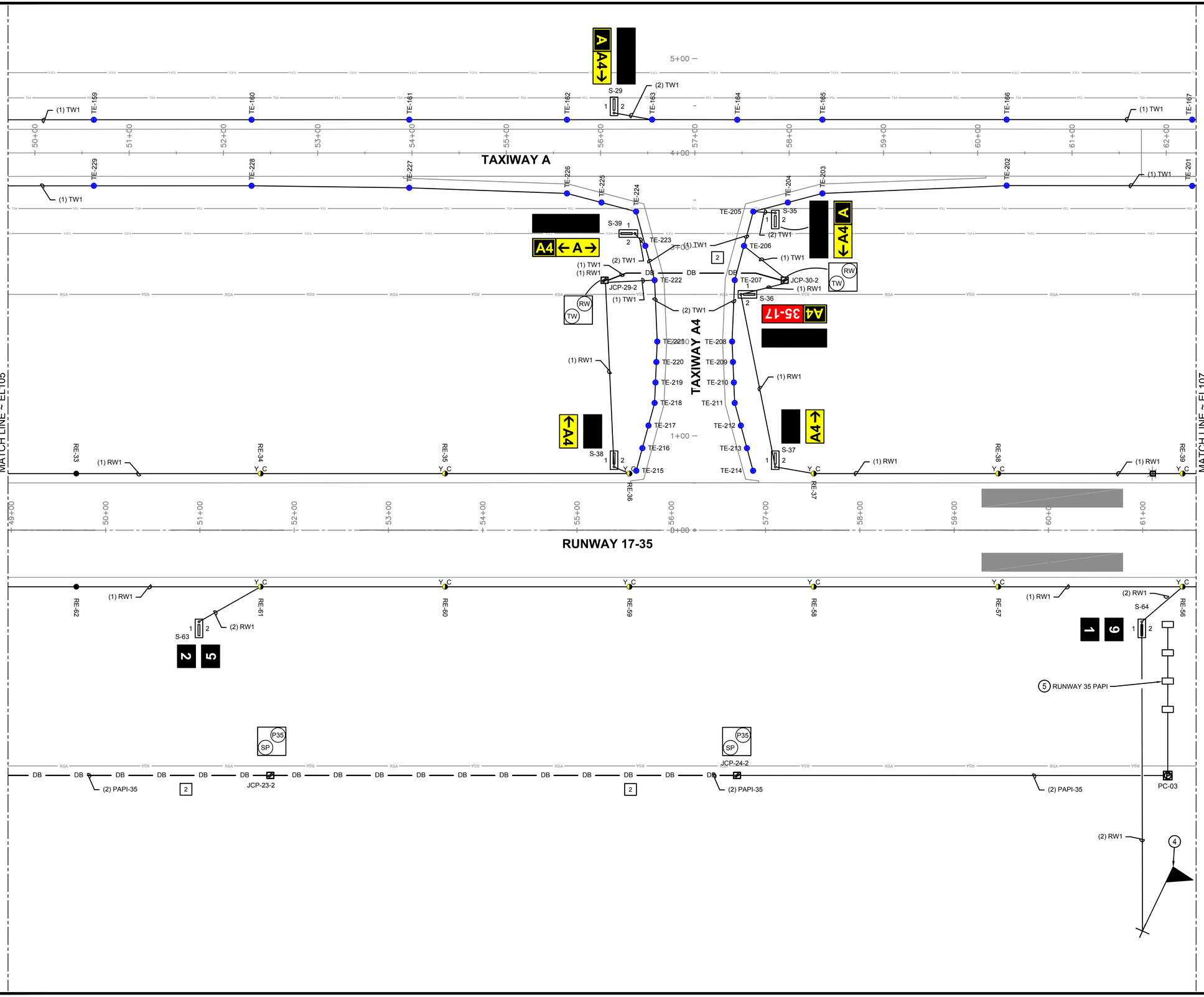

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50' 0 50' 100'

GRAPHIC SCALE IN FEET

MARK	REVISION	DATE
4	ADDENDUM 4	10/15/25

AIRFIELD LIGHTING LAYOUT PLAN

SHEET NAME:

103006 - TEXAS GULF COAST REGIONAL AIRPORT - TAXIWAY PAVEMENT AND ELECTRICAL IMPROVEMENTS - ANGLETON, TEXAS (BRAZORIA COUNTY)

TEXAS GULF COAST REGIONAL AIRPORT TAXIWAY REHABILITATION AND ELECTRICAL IMPROVEMENTS BRAZORIA COUNTY, TEXAS

PROJECT NAME:

DRAWN BY:	ALC
DESIGNED BY:	ALC
LATEST REVISION:	10/08/2025
KSA JOB NO.:	103006

Ferguson Consulting
Aviation Specialists and Electrical Engineers
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STATE OF TEXAS
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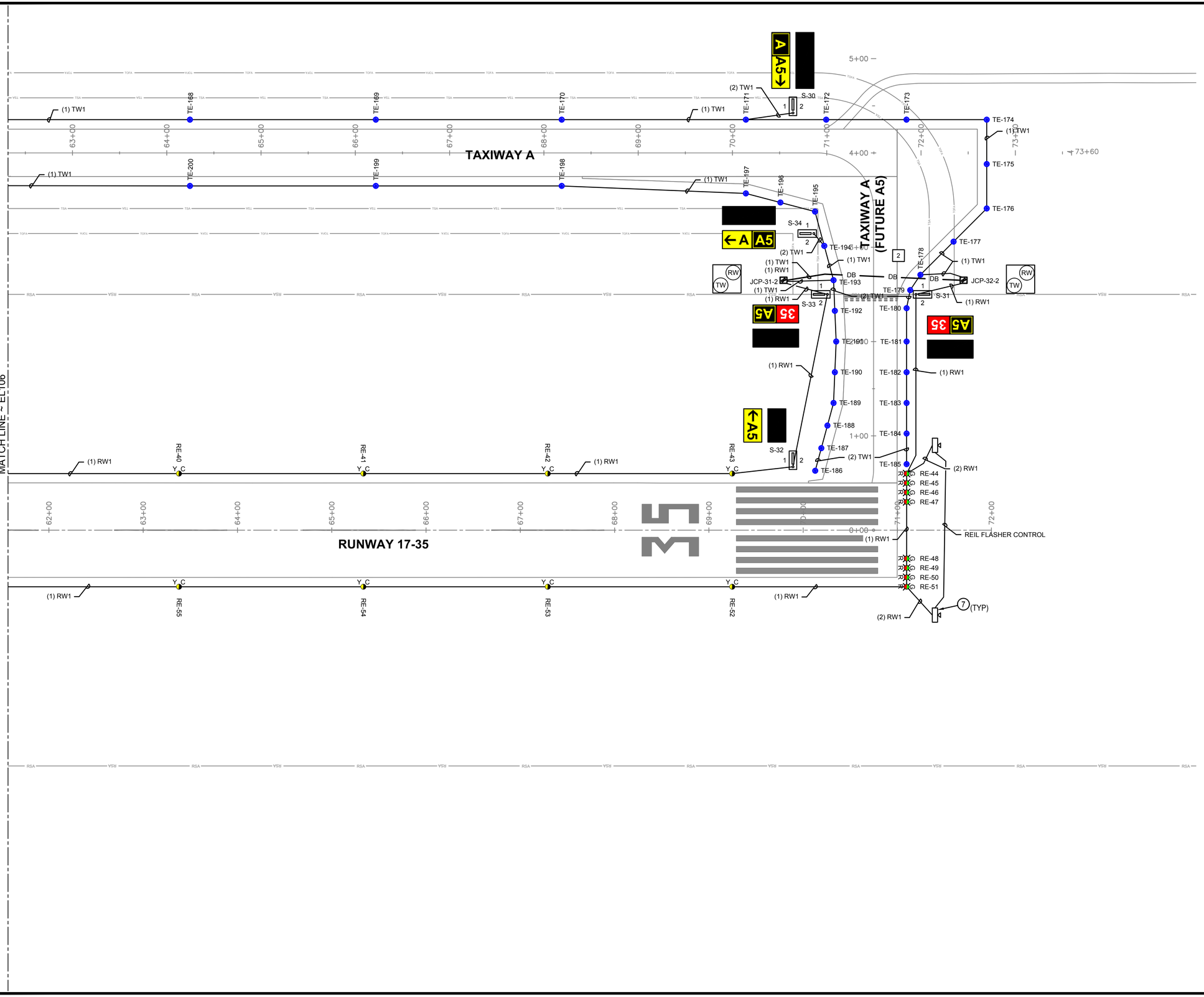
SEAL:
TBPE Firm Registration No. F-6864

SHEET NO.

EL106

O:\SHARED\FCI PROJ\AIR-ELEC\24041-TX GULF COAST REG AIRPORT\DWGS\ EL1.DWG | EL106 | 10/15/2025 - 11:23 AM - LAST SAVED BY: ACOTE



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4	ADDENDUM 4	10/15/25

AIRFIELD LIGHTING LAYOUT PLAN

SHEET NAME:

103006 - TEXAS GULF COAST REGIONAL AIRPORT - TAXIWAY PAVEMENT AND ELECTRICAL IMPROVEMENTS - ANGLETON, TEXAS (BRAZORIA COUNTY)

PROJECT NAME:

TEXAS GULF COAST REGIONAL AIRPORT
TAXIWAY REHABILITATION AND ELECTRICAL IMPROVEMENTS
BRAZORIA COUNTY, TEXAS

DRAWN BY:	ALC
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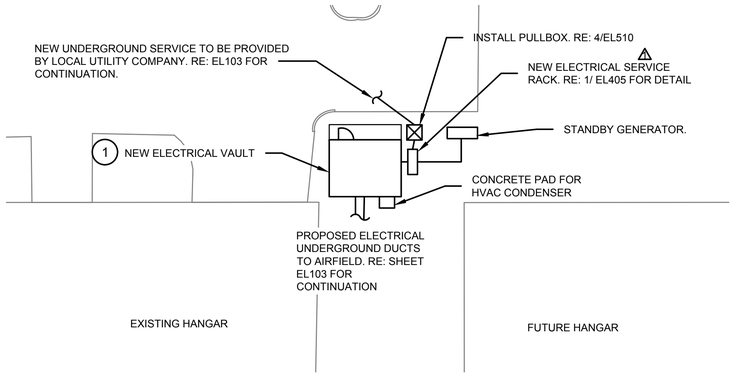
SHEET NO.

EL107

Q:\SHARED\FCI PROJ AIR-ELEC\24041-TX GULF COAST REG AIRPORT\DWG\EL1.DWG | EL107 | 10/15/2025 - 11:23 AM : LAST SAVED BY: ACOTE



1 / EL402 VAULT SITE PLAN

SCALE: N.T.S.

N

GENERAL NOTES

1. ALL ITEMS SHOWN IN HEAVY, SOLID LINEWEIGHT ARE NEW OR MODIFIED.
2. ALL CONDUIT BELOW 6' AFF TO BE RGS. ALL CONDUIT INSTALLED ABOVE 6' AFF MAY BE EMT.
3. ALL WORK RELATING TO ELECTRICAL SERVICE TO BE COORDINATED WITH LOCAL UTILITY COMPANY.

KEYED NOTES

(1) FURNISH 10' X 17' X 8'-6" MIN VAULT STRUCTURE. PROVIDE STRUCTURE WITH UV RESISTANT FINISH CONSISTING OF HIGH GLOSS GEL-COAT OR 3-COATS OF EXTERIOR GRADE PAINT. COORDINATE PAINT COLOR WITH RPR, INTENTION IS TO MATCH EXISTING HANGAR COLOR. STRUCTURE SHALL INCLUDE A 36"W X 7'H SOLID DOOR WITH KEY LOCK, WEATHER TRIM TO PREVENT INGRESS OF WATER, DUST OR OTHER FOREIGN PARTICLES. PROVIDE WITH MIN 250LB/SF FLOOR LOADING CAPACITY WITH COMMERCIAL GRADE VINYL TILE FINISH. PROVIDE SLOPED ROOF WITH 100LB/SF LOADING AND 220 FT-LB IMPACT RESISTANCE. ALL WALLS, FLOOR AND ROOF SHALL BE INSULATED. WALLS TO BE REINFORCED WITH 3/4" PLYWOOD FOR MOUNTING EQUIPMENT. ALL JOINTS SHALL BE AIR AND WATER-TIGHT. ALL HARDWARE SHALL BE STAINLESS STEEL. FURNISH COLOR SAMPLES FOR REVIEW. PRE-FABRICATED FIBERGLASS, PRE-CAST CONCRETE OR CONCRETE TILT-UP WALL CONSTRUCTION OR INSULATED METAL BUILDING ON SLAB IS AN APPROVED BUILDING TYPE. FURNISH VAULT WITH LIGHTS, RECEPTACLES, WALL SWITCH, 3-TON A/C WITH BUILT IN 3-TON HEATER, THERMOMETER, AND ALL INCIDENTALS COMPLETE AND IN PLACE.

(2) INSTALL LOAD CENTER WITH TYPE 1 SURGE PROTECTION DEVICE.

UTILITY LOAD ANALYSIS

LOAD DESCRIPTION	PROPOSED KW	DEMAND KW
REGULATOR 1	1.77	1.77
REGULATOR 2	7.11	7.11
REGULATOR 3	9.58	9.58
BEACON	0.22	0.28
WIND CONE	0.1	0.13
HVAC	4.0	4.0
RECEPTACLES	1.1	2.2
LIGHTING	0.64	0.8
SUB-TOTAL LOAD	24.52	25.87

25.87 KVA / 831V = 31.1 A

⚠ 100A SERVICE EXCEEDS NEC REQUIREMENTS

PROPOSED REGULATOR 1 (PAPI) LOAD ANALYSIS

LOAD DESCRIPTION	PROPOSED KW
REGULATOR 1 'PAPI' (4KW)	
STYLE B L-880(L) (2 @ 630W/EA)	1.26
CABLE LOSS (17100' @ 3W/100LF)	0.51
SUB-TOTAL LOAD	1.77

4KVA REGULATOR EXCEEDS NEC REQUIREMENTS

PROPOSED REGULATOR 2 (RW 17-35) LOAD ANALYSIS

LOAD DESCRIPTION	PROPOSED KW
REGULATOR 2 'RW 17-35' (7.5KW)	
LED RW LIGHTING (40 RWY EDGE LTG C/ Y) @ 55W/EA)	2.20
LED RW LIGHTING (30 RWY EDGE LTG C/ C) @ 59W/EA)	1.77
LED RW THSLD LIGHTING (16 RWY THSLD LTG @ 19W/EA)	0.30
SIGNS (LED)	1.76
SUPPLEMENTAL WIND CONE	0.07
CABLE LOSS (23115' @ 3W/100LF)	0.69
REIL (LED)	0.32
SUB-TOTAL LOAD	7.11

7.5KVA REGULATOR EXCEEDS NEC REQUIREMENTS

PROPOSED REGULATOR 3 (TAXIWAY) LOAD ANALYSIS

LOAD DESCRIPTION	PROPOSED KW
REGULATOR 3 'TAXIWAY' (10KW)	
LED TW LIGHTING (320 TWY EDGE LTG @ 15W/EA)	4.80
SIGNS (LED)	3.62
SUPPLEMENTAL WIND CONE	0.07
CABLE LOSS (36400' @ 3W/100LF)	1.09
SUB-TOTAL LOAD	9.58

10KW REGULATOR EXCEEDS NEC REQUIREMENTS

PANEL: HA

VOLTAGE: 277/480V | 3 * | 4 W | AIC: | REMARKS: (2)
MAINS: 100 AMPS | ☐ MLO ☒ MCB | ☒ SURFACE ☐ FLUSH
LUGS: ☐ SUB - FEED ☐ FEED - THRU | ☒ NEMA 1 ☐ NEMA 3R

C"	WIRE*	LOAD DESCRIPTION	KVA	BKR.	CKT	CKT	BKR.	KVA	LOAD DESCRIPTION	WIRE*	C"
1.5" C	2 #12	REG. 1, PAPI (4 KW)	0.89	20	1	2	40	0.0	REGULATOR 4 (15KW)	2 #8	1.5" C
—	#12G	↓	0.89		3	4		0.0	↓	1 #10G	-
1.5" C	2 # 10	REG. 2, RW 17-35 (7.5 KW)	3.6	30	5	6	70	3.33	XFMR 'TA'	2 #4	1.25" C
—	1 # 10G	↓	3.6		7	8		3.33	↓	1 #8G	-
1.5" C	2 # 10	REG. 3, TW (10 KW)	4.79	30	9	10	20		SPARE		
—	1 # 10G	↓	4.79		11	12	20		↓		
		SPARE		20	13	14	20				
		↓		20	15	16			SPACE		
		↓		20	17	18			↓		
		↓		20	19	20			↓		
		SPACE			21	22			↓		
		↓			23	24			↓		
		↓			25	26		0.0	TVSS		
		↓			27	28	50	0.0	↓		
		↓			29	30		0.0	↓		

24.52	KVA CONNECTED LOAD
25.87	KVA DEMAND
31.1	AMPS DEMAND @ 480V

* ALL CABLING IS 2 #12, 1 #12G UNLESS NOTED OTHERWISE.

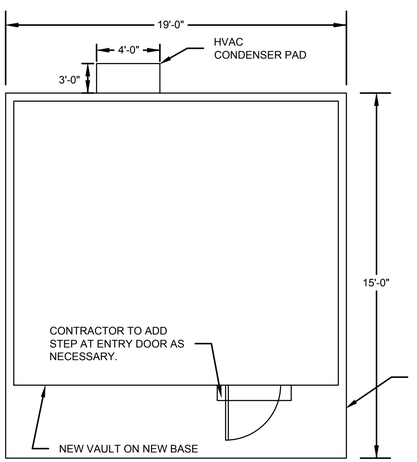
PANEL: LA

VOLTAGE: 120/240V | 1 * | 3 W | AIC: | REMARKS: (2)
MAINS: 100 AMPS | ☐ MLO ☒ MCB | ☒ SURFACE ☐ FLUSH
LUGS: ☐ SUB - FEED ☐ FEED - THRU | ☒ NEMA 1 ☐ NEMA 3R

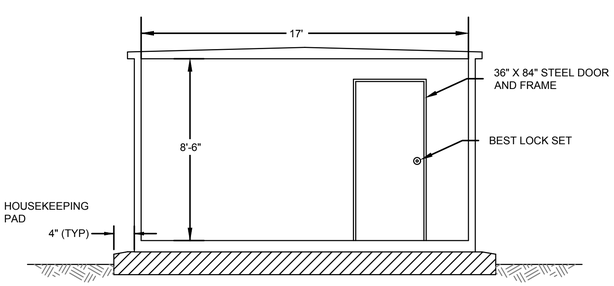
C"	WIRE*	LOAD DESCRIPTION	KVA	BKR.	CKT	CKT	BKR.	KVA	LOAD DESCRIPTION	WIRE*	C"
1" C	2 #8	HVAC (COOLING >HTG)	2.0	40	1	2	20	0.5	RADIO CONTROLLER		
—	#10G	↓	2.0		3	4	20	0.1	WINDCONE	2 #10, #10G	2" C
		SPARE		30	5	6	20	0.64	INDOOR LIGHTING		
		↓			7	8	20	0.22	BEACON		
		SPARE		20	9	10	20		SPARE		
		EXTERIOR LIGHT	0.1	20	11	12	20		↓		
		RECEPTACLES	1.1	20	13	14	20				
		SPARE		20	15	16	20		↓		
		↓			17	18			SPACE		
		SPACE			19	20			↓		
		↓			21	22			↓		
		↓			23	24			↓		
		↓			25	26			↓		
		↓			27	28			↓		
		↓			29	30			↓		

6.66	KVA CONNECTED LOAD
7.9	KVA DEMAND
32.92	AMPS DEMAND @ 240V

* ALL CABLING IS 2 #12, 1 #12G IN 1"C UNLESS NOTED OTHERWISE.



PLAN VIEW



PROFILE VIEW

GENERAL NOTES

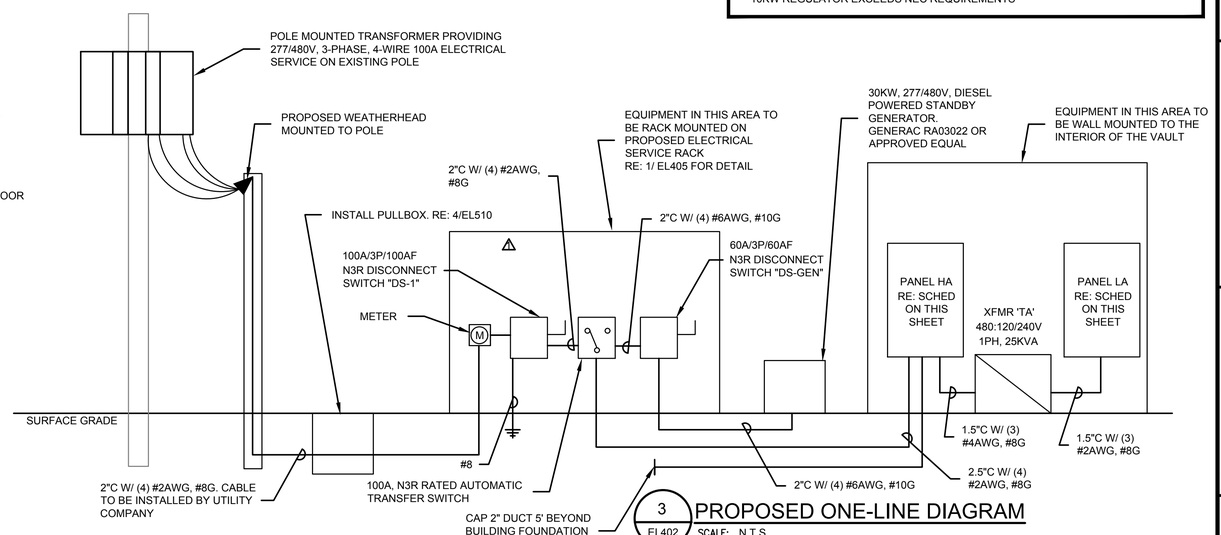
1. UTILITY COMPANY (CENTERPOINT) SHALL INSTALL TRANSFORMER, AND ALL WIRING BETWEEN TRANSFORMER AND WEATHER HEAD. CONTRACTOR IS REQUIRED TO INSTALL ALL OTHER EQUIPMENT AND CABLING. COORDINATE WORK WITH CENTERPOINT ENERGY. ⚠

NOTES

1. REFER TO CIVIL DETAILS FOR VAULT FOUNDATION PLAN.

2 / EL402 VAULT PLAN - FRONT ELEVATION

SCALE: N.T.S.



3 / EL402 PROPOSED ONE-LINE DIAGRAM

SCALE: N.T.S.

MARK	REVISION	DATE
1	ADDENDUM 2	10/08/25
2	ADDENDUM 4	10/15/25

ELECTRICAL VAULT PLAN

SHEET NAME:

103006 - TEXAS GULF COAST REGIONAL AIRPORT - TAXIWAY PAVEMENT AND ELECTRICAL IMPROVEMENTS - ANGLETON, TEXAS (BRAZORIA COUNTY)

TEXAS GULF COAST REGIONAL AIRPORT TAXIWAY REHABILITATION AND ELECTRICAL IMPROVEMENTS BRAZORIA COUNTY, TEXAS

PROJECT NAME:

DRAWN BY:	DESIGNED BY:	LATEST REVISION:	KSA JOB NO.:
ALC	ALC	10/08/2025	103006

Ferguson Consulting
Aviation, Infrastructure & Technology Solutions
Ferguson Consulting, Inc.
10200 Grogans Mill Rd. Ste. #420
The Woodlands, TX 77380
(281) 252-9232 Firm No. 6864

STATE OF TEXAS
R. COLE FERGUSON
150146
LICENSED
PROFESSIONAL ENGINEER
10/15/25

SEAL:
TBPE Firm Registration No. F-6864

SHEET NO.

EL402

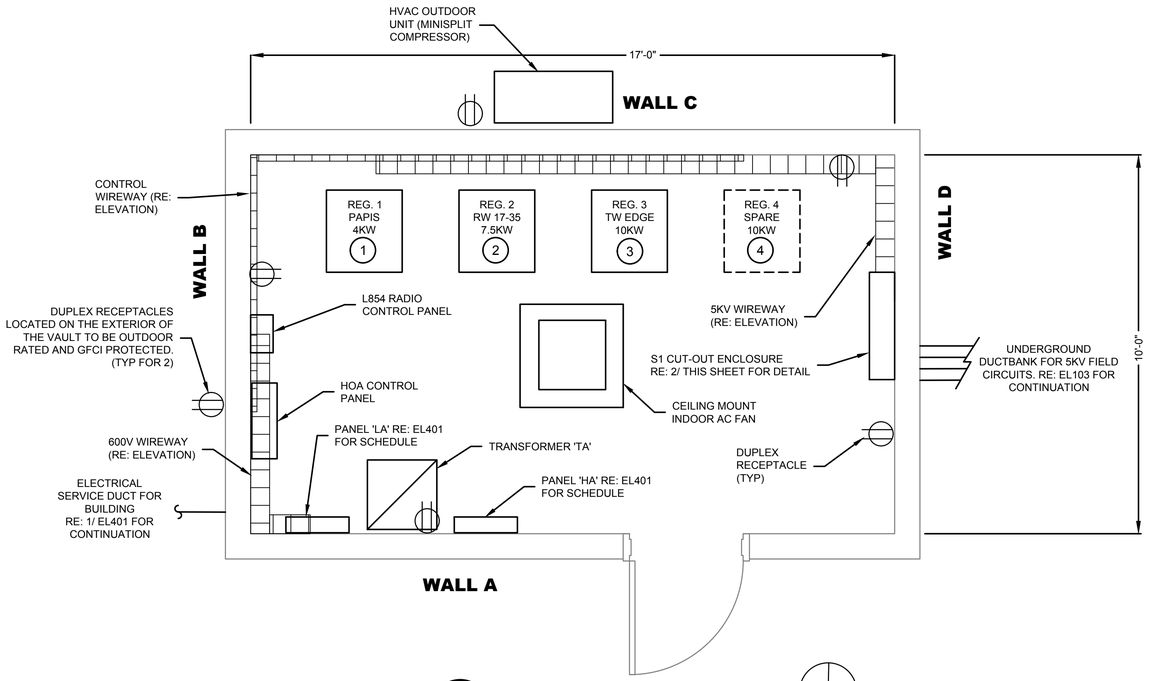
Q:\SHARED\FCI PROJ AIR\ELEC\24041-TX GULF COAST REG AIRPORT\DWG\ EL4.DWG | EL402 | 10/15/2025 - 10:47 AM - LAST SAVED BY: ACOTE

GENERAL NOTES

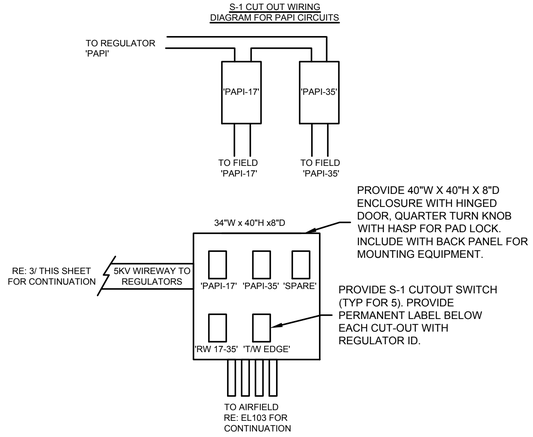
1. ALL NEW WIREWAYS TO INCLUDE HINGED COVERS. LABEL ALL WIREWAYS FOR USE AS NOTED.
2. ALL CONDUIT BELOW 6' AFF TO BE SCHED 80 PVC WITH PVC COADED RGS ELBOWS. ALL CONDUIT INSTALLED ABOVE 6' AFF MAY BE EMT. ALL CONNECTIONS TO REGULATOR TO USE LIQUID-TIGHT NON-METALLIC CONDUIT. ALL CONDUIT TO BE 1" UON.
3. PROVIDE NAMEPLATE ON REGULATOR STATING REGULATOR ID, STEPS, VOLTAGE AND CIRCUIT ID.
4. PROVIDE LETTER SIZE LAMINATED AIRFIELD PLAN SHOWING RESPECTIVE REGULATOR CIRCUIT IN COLOR ON PLAN. FASTEN LAYOUT PLAN ON FRONT DOOR OF THE RESPECTIVE REGULATOR.
5. ALL ITEMS SHOWN IN HEAVY LINEWEIGHT ARE TO BE REMOVED, NEW OR MODIFIED AS NOTED. ALL ITEMS IN SHADED ARE EXISTING TO REMAIN.

KEYED NOTES

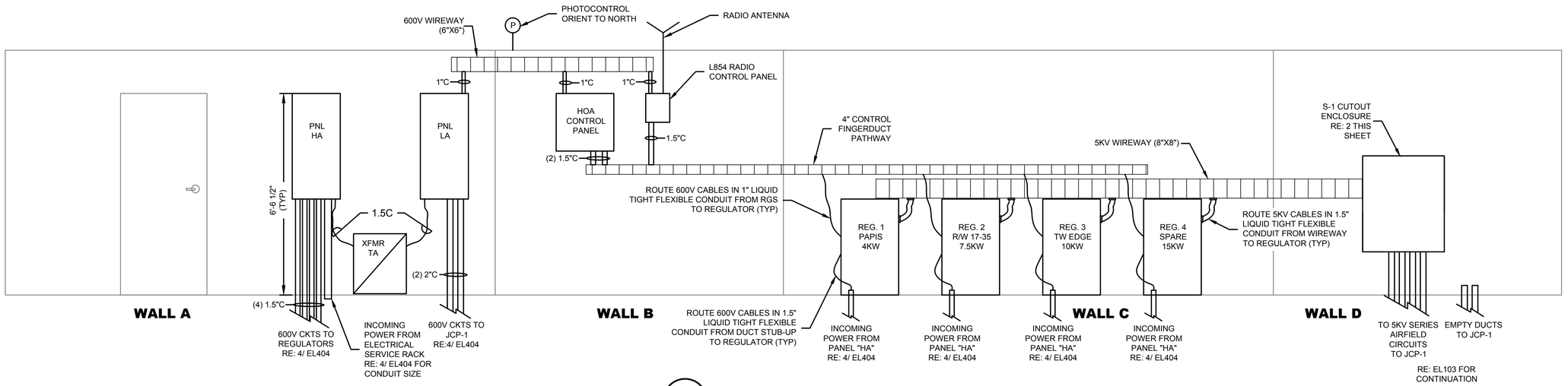
1. INSTALL NEW 4 KW, 480V, 3-STEP, FERRORESONANT TYPE L-829 REGULATOR. INSTALL ASSOCIATED 5KV CABLES, 600V CABLES, CONTROL CABLES, AND PATHWAYS FOR CONNECTIVITY.
2. INSTALL NEW 7.5 KW, 480V, 5-STEP, FERRORESONANT TYPE L-829 REGULATOR. INSTALL ASSOCIATED 5KV CABLES, 600V CABLES, CONTROL CABLES, AND PATHWAYS FOR CONNECTIVITY. ⚠2
3. INSTALL NEW 10 KW, 480V, 3-STEP, FERRORESONANT TYPE L-829 REGULATOR. INSTALL ASSOCIATED 5KV CABLES, 600V CABLES, CONTROL CABLES, AND PATHWAYS FOR CONNECTIVITY. ⚠2
4. INSTALL SALVAGED 10 KW, 480V, 3-STEP, FERRORESONANT TYPE L-828 REGULATOR. INSTALL ASSOCIATED 5KV CABLES, 600V CABLES, CONTROL CABLES, AND PATHWAYS FOR CONNECTIVITY.



1 EL403 PROPOSED VAULT PLAN
SCALE: 1" = 24'



2 EL403 S-1 CUT OUT ENCLOSURE DETAIL
SCALE: N.T.S.



3 EL403 VAULT PLAN - WALL ELEVATION
SCALE: N.T.S.

MARK	REVISION	DATE
2	ADDENDUM 2	10/08/25
4	ADDENDUM 4	10/15/25

ELECTRICAL VAULT PLAN

SHEET NAME:

103006 – TEXAS GULF COAST REGIONAL AIRPORT – TAXIWAY PAVEMENT AND ELECTRICAL IMPROVEMENTS – ANGLETON, TEXAS (BRAZORIA COUNTY)

TEXAS GULF COAST REGIONAL AIRPORT TAXIWAY REHABILITATION AND ELECTRICAL IMPROVEMENTS BRAZORIA COUNTY, TEXAS

PROJECT NAME:

DRAWN BY:	ALC
DESIGNED BY:	ALC
LATEST REVISION:	10/08/2025
KSA JOB NO.:	103006

Ferguson Consulting
Aviation Technology and Engineering Solutions
Ferguson Consulting, Inc.
10200 Grogans Mill Rd. Ste. #420
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(281) 252-9232 Firm No. 6864

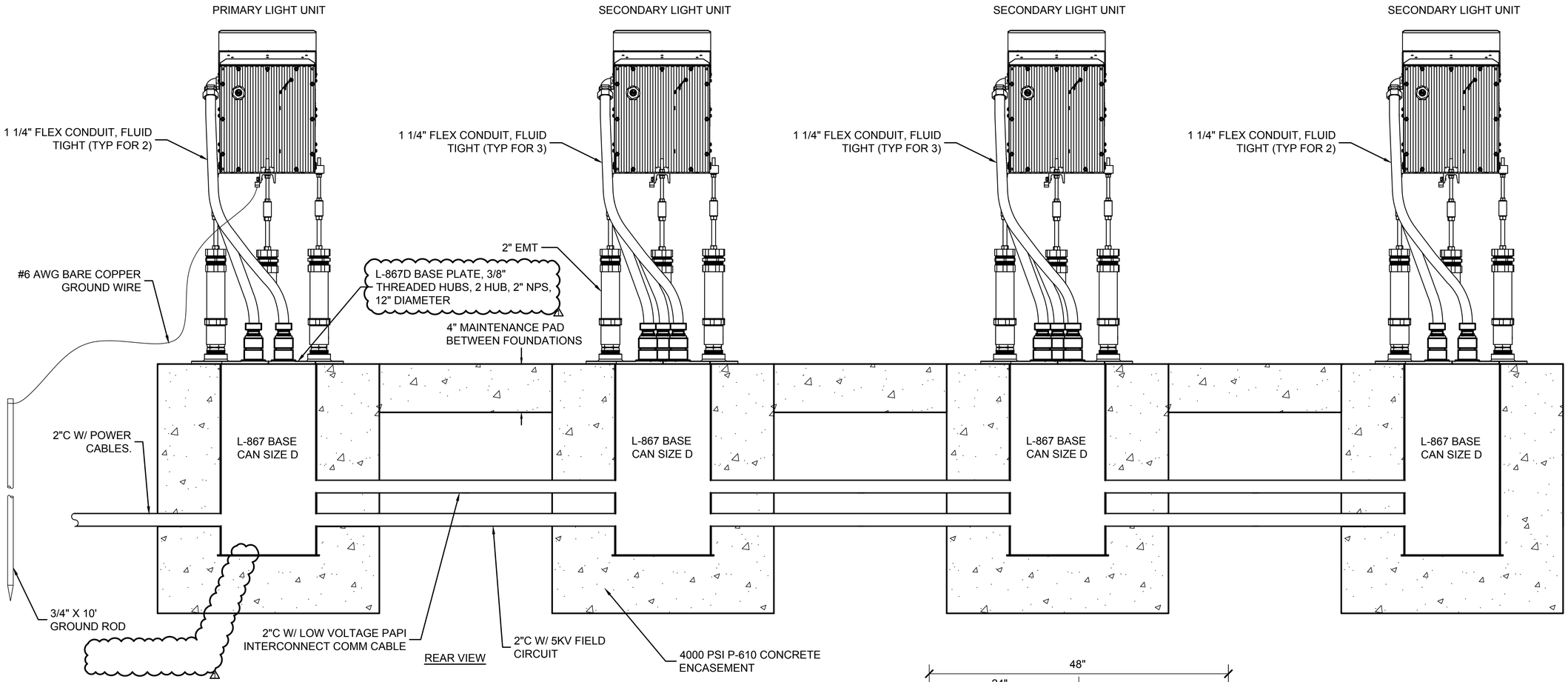
STATE OF TEXAS
R. COLE FERGUSON
150146
LICENSED
PROFESSIONAL ENGINEER
10/15/25

SEAL:
TBPE Firm Registration No. F-6864

SHEET NO.

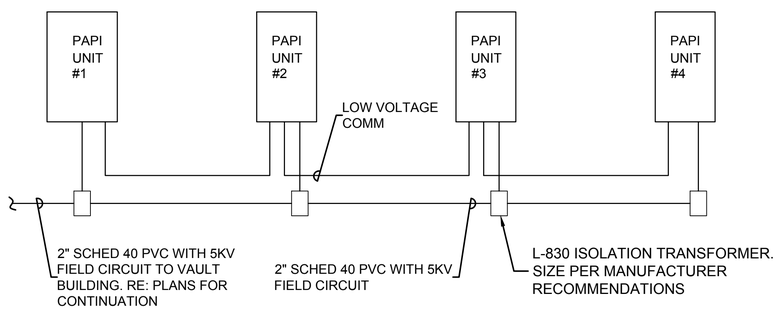
EL403

Q:\SHARED\FCI PROJ AIR\ELEC\24041-TX GULF COAST REG AIRPORT\DWG\ EL4.DWG | EL403 | 10/15/2025 - 10:47 AM - LAST SAVED BY: ACOTE



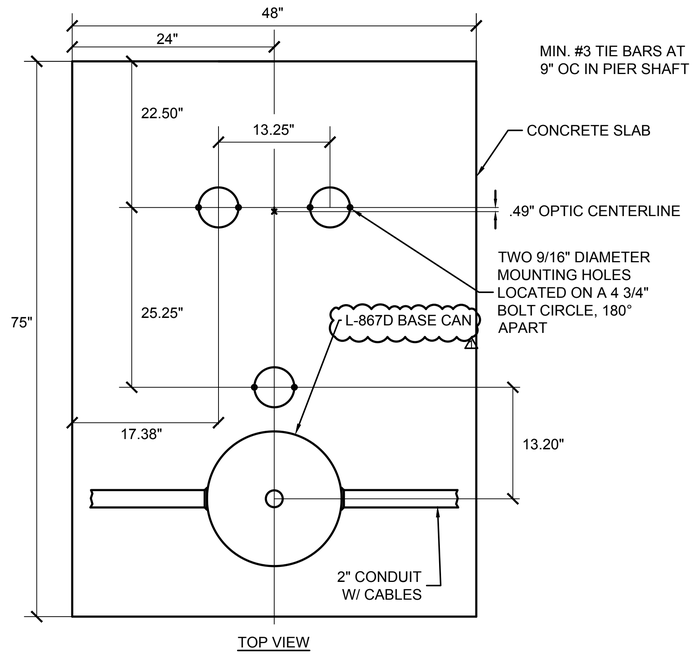
1 EL507 L-880B(L) PAPI INSTALLATION DETAIL

SCALE: N.T.S.



2 EL507 L-880B(L) PAPI WIRING DIAGRAM

SCALE: N.T.S.



TOP VIEW

MARK	REVISION	DATE
4	ADDENDUM 4	10/15/25

AIRFIELD ELECTRICAL DETAILS

SHEET NAME:

103006 - TEXAS GULF COAST REGIONAL AIRPORT - TAXIWAY PAVEMENT AND ELECTRICAL IMPROVEMENTS - ANGLETON, TEXAS (BRAZORIA COUNTY)

TEXAS GULF COAST REGIONAL AIRPORT
TAXIWAY REHABILITATION AND ELECTRICAL IMPROVEMENTS
BRAZORIA COUNTY, TEXAS

PROJECT NAME:

DRAWN BY:	DESIGNED BY:	LATEST REVISION:	KSA JOB NO.:
ALC	ALC	10/08/2025	103006

Ferguson Consulting
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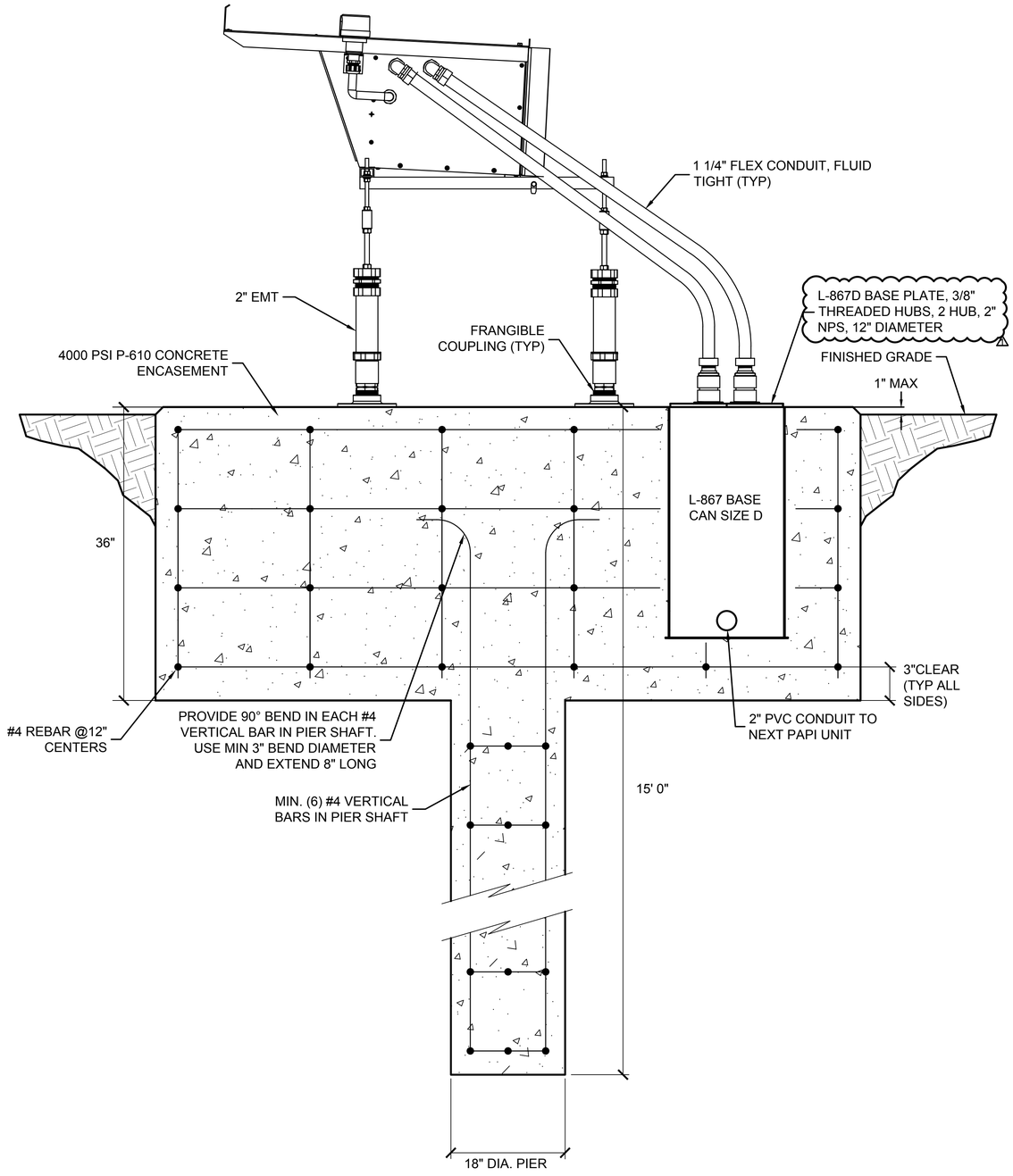
SHEET NO.

EL507



SIDE VIEW

1 EL508 L-880A(L) PAPI INSTALLATION DETAIL

SCALE: N.T.S.

MARK	REVISION	DATE
4	ADDENDUM 4	10/15/25

AIRFIELD ELECTRICAL DETAILS

SHEET NAME:

103006 – TEXAS GULF COAST REGIONAL AIRPORT – TAXIWAY PAVEMENT AND ELECTRICAL IMPROVEMENTS – ANGLETON, TEXAS (BRAZORIA COUNTY)

TEXAS GULF COAST REGIONAL AIRPORT TAXIWAY REHABILITATION AND ELECTRICAL IMPROVEMENTS BRAZORIA COUNTY, TEXAS

PROJECT NAME:

DRAWN BY:	ALC
DESIGNED BY:	ALC
LATEST REVISION:	10/08/2025
KSA JOB NO.:	103006

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Aviation Operations and Security Systems
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10300 Grogans Mill Rd. Ste. #420
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150146
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PROFESSIONAL ENGINEER
10/15/25

SEAL:
TBPE Firm Registration No. F-6864

SHEET NO.

EL508

RUNWAY - EDGE LIGHT FIXTURES (RE1)

FIXTURE NUMBER	FAA TYPE	FAA BASE	LIGHT ORIENTATION	COLOR	NORTHING	EASTING	REGULATOR ID	CIRCUIT NAME	KEYNOTES
RE-1	L-862E(L)	L-867B	BIDIRECTIONAL	EXISTING	EXISTING	EXISTING	RE1	RW1	2
RE-2	L-862E(L)	L-867B	BIDIRECTIONAL	EXISTING	EXISTING	EXISTING	RE1	RW1	2
RE-3	L-862E(L)	L-867B	BIDIRECTIONAL	EXISTING	EXISTING	EXISTING	RE1	RW1	2
RE-4	L-862E(L)	L-867B	BIDIRECTIONAL	EXISTING	EXISTING	EXISTING	RE1	RW1	2
RE-5	L-862E(L)	L-867B	BIDIRECTIONAL	EXISTING	EXISTING	EXISTING	RE1	RW1	2
RE-6	L-862E(L)	L-867B	BIDIRECTIONAL	EXISTING	EXISTING	EXISTING	RE1	RW1	2
RE-7	L-862E(L)	L-867B	BIDIRECTIONAL	EXISTING	EXISTING	EXISTING	RE1	RW1	2
RE-8	L-862E(L)	L-867B	BIDIRECTIONAL	EXISTING	EXISTING	EXISTING	RE1	RW1	2
RE-9	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-YELLOW	13607451.4596	3097953.0504	RE1	RW1	1
RE-10	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-YELLOW	13607255.9785	3097959.2010	RE1	RW1	1
RE-11	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-YELLOW	13607060.4974	3097965.3517	RE1	RW1	1
RE-12	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-YELLOW	13606865.0162	3097971.5024	RE1	RW1	1
RE-13	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-YELLOW	13606669.5351	3097977.6530	RE1	RW1	1
RE-14	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-YELLOW	13606474.0539	3097983.8037	RE1	RW1	1
RE-15	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-YELLOW	13606278.5728	3097989.9544	RE1	RW1	1
RE-16	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-YELLOW	13606083.0917	3097996.1050	RE1	RW1	1
RE-17	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-YELLOW	13605887.6105	3098002.2557	RE1	RW1	1
RE-18	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-CLEAR	13605692.1294	3098008.4064	RE1	RW1	1
RE-19	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-CLEAR	13605496.6482	3098014.5570	RE1	RW1	1
RE-20	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-CLEAR	13605301.1671	3098020.7077	RE1	RW1	1
RE-21	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-CLEAR	13605105.6859	3098026.8584	RE1	RW1	1
RE-22	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-CLEAR	13604910.2048	3098033.0090	RE1	RW1	1
RE-23	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-CLEAR	13604714.7237	3098039.1597	RE1	RW1	1
RE-24	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-CLEAR	13604519.2425	3098045.3104	RE1	RW1	1
RE-25	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-CLEAR	13604323.7614	3098051.4610	RE1	RW1	1
RE-26	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-CLEAR	13604128.2802	3098057.6117	RE1	RW1	1
RE-27	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-CLEAR	13603932.7991	3098063.7624	RE1	RW1	1
RE-28	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-CLEAR	13603737.3180	3098069.9130	RE1	RW1	1
RE-29	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-CLEAR	13603541.8368	3098076.0637	RE1	RW1	1
RE-30	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-CLEAR	13603346.3557	3098082.2144	RE1	RW1	1
RE-31	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-CLEAR	13603150.8745	3098088.3650	RE1	RW1	1
RE-32	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-CLEAR	13602955.3934	3098094.5157	RE1	RW1	1
RE-33	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-CLEAR	13602759.9123	3098100.6664	RE1	RW1	1
RE-34	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-YELLOW	13602564.4311	3098106.8170	RE1	RW1	1
RE-35	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-YELLOW	13602368.9500	3098112.9677	RE1	RW1	1
RE-36	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-YELLOW	13602173.4688	3098119.1184	RE1	RW1	1
RE-37	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-YELLOW	13601977.9877	3098125.2690	RE1	RW1	1
RE-38	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-YELLOW	13601782.5065	3098131.4197	RE1	RW1	1
RE-39	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-YELLOW	13601587.0254	3098137.5704	RE1	RW1	1
RE-40	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-YELLOW	13601391.5443	3098143.7210	RE1	RW1	1
RE-41	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-YELLOW	13601196.0631	3098149.8717	RE1	RW1	1
RE-42	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-YELLOW	13601000.5820	3098156.0224	RE1	RW1	1
RE-43	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-YELLOW	13600805.1008	3098162.1730	RE1	RW1	1
RE-44	L-862E(L)	L-867B	BIDIRECTIONAL	GREEN-RED	13600620.2184	3098167.9902	RE1	RW1	1
RE-45	L-862E(L)	L-867B	BIDIRECTIONAL	GREEN-RED	13600619.9018	3098157.9952	RE1	RW1	1
RE-46	L-862E(L)	L-867B	BIDIRECTIONAL	GREEN-RED	13600619.5851	3098148.0003	RE1	RW1	1
RE-47	L-862E(L)	L-867B	BIDIRECTIONAL	GREEN-RED	13600619.2684	3098138.0053	RE1	RW1	1
RE-48	L-862E(L)	L-867B	BIDIRECTIONAL	GREEN-RED	13600617.3685	3098078.0354	RE1	RW1	1
RE-49	L-862E(L)	L-867B	BIDIRECTIONAL	GREEN-RED	13600617.0518	3098068.0404	RE1	RW1	1
RE-50	L-862E(L)	L-867B	BIDIRECTIONAL	GREEN-RED	13600616.7352	3098058.0454	RE1	RW1	1

RUNWAY - EDGE LIGHT FIXTURES (RE1)

FIXTURE NUMBER	FAA TYPE	FAA BASE	LIGHT ORIENTATION	COLOR	NORTHING	EASTING	REGULATOR ID	CIRCUIT NAME	KEYNOTES
RE-51	L-862E(L)	L-867B	BIDIRECTIONAL	GREEN-RED	13600616.4185	3098048.0504	RE1	RW1	1
RE-52	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-YELLOW	13600801.3270	3098042.2324	RE1	RW1	1
RE-53	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-YELLOW	13600996.8081	3098036.0817	RE1	RW1	1
RE-54	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-YELLOW	13601192.2893	3098029.9311	RE1	RW1	1
RE-55	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-YELLOW	13601387.7704	3098023.7804	RE1	RW1	1
RE-56	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-YELLOW	13601583.2516	3098017.6297	RE1	RW1	1
RE-57	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-YELLOW	13601778.7327	3098011.4791	RE1	RW1	1
RE-58	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-YELLOW	13601974.2138	3098005.3284	RE1	RW1	1
RE-59	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-YELLOW	13602169.6950	3097999.1777	RE1	RW1	1
RE-60	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-YELLOW	13602365.1761	3097993.0271	RE1	RW1	1
RE-61	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-YELLOW	13602560.6573	3097986.8764	RE1	RW1	1
RE-62	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-CLEAR	13602756.1384	3097980.7257	RE1	RW1	1
RE-63	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-CLEAR	13602951.6196	3097974.5751	RE1	RW1	1
RE-64	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-CLEAR	13603147.1007	3097968.4244	RE1	RW1	1
RE-65	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-CLEAR	13603342.5818	3097962.2737	RE1	RW1	1
RE-66	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-CLEAR	13603538.0630	3097956.1231	RE1	RW1	1
RE-67	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-CLEAR	13603733.5441	3097949.9724	RE1	RW1	1
RE-68	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-CLEAR	13603929.0253	3097943.8217	RE1	RW1	1
RE-69	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-CLEAR	13604124.5064	3097937.6711	RE1	RW1	1
RE-70	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-CLEAR	13604319.9875	3097931.5204	RE1	RW1	1
RE-71	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-CLEAR	13604515.4687	3097925.3697	RE1	RW1	1
RE-72	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-CLEAR	13604710.9498	3097919.2191	RE1	RW1	1
RE-73	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-CLEAR	13604906.4310	3097913.0684	RE1	RW1	1
RE-74	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-CLEAR	13605101.9121	3097906.9177	RE1	RW1	1
RE-75	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-CLEAR	13605297.3932	3097900.7671	RE1	RW1	1
RE-76	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-CLEAR	13605492.8744	3097894.6164	RE1	RW1	1
RE-77	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-YELLOW	13605688.3555	3097888.4657	RE1	RW1	1
RE-78	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-YELLOW	13605883.8367	3097882.3151	RE1	RW1	1
RE-79	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-YELLOW	13606079.3178	3097876.1644	RE1	RW1	1
RE-80	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-YELLOW	13606274.7990	3097870.0137	RE1	RW1	1
RE-81	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-YELLOW	13606470.2801	3097863.8631	RE1	RW1	1
RE-82	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-YELLOW	13606665.7612	3097857.7124	RE1	RW1	1
RE-83	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-YELLOW	13606861.2424	3097851.5617	RE1	RW1	1
RE-84	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-YELLOW	13607056.7235	3097845.4111	RE1	RW1	1
RE-85	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-YELLOW	13607252.2047	3097839.2604	RE1	RW1	1
RE-86	L-862(L)	L-867B	BIDIRECTIONAL	CLEAR-YELLOW	13607447.6858	3097833.1097	RE1	RW1	1

GENERAL NOTES - LIGHTING

1. REFER TO EL1 SERIES FOR PROPOSED LIGHTING PLANS, THE EL3 SERIES FOR DIMENSIONS PLANS AND EL5 SERIES FOR DETAILS.
2. FIXTURES NORTHINGS AND EASTINGS HAVE BEEN PROVIDED FOR CONTRACTORS TO USE IN LOCATING NEW BASE CANS. HOWEVER THE CONTRACTOR MUST INSTALL ALL FIXTURES FOLLOWING THE DETAILS, WHERE NORTHINGS AND EASTINGS CONFLICT WITH DETAILS, THE CONTRACTOR SHALL CONTACT THE ENGINEER FOR GUIDANCE. TYPICALLY, THE DETTAILS SUPERSEDE NORTHINGS AND EASTINGS INFORMATION. IF MARKINGS ARE MODIFIED, THE NORTHINGS AND EASTINGS MAY NO LONGER BE ACCURATE.
3. DISPLAY LIGHT FIXTURE SCHEDULE PROVIDED BY ENGINEER INSIDE OF AIRFIELD LIGHTING VAULT ONCE PROJECT IS COMPLETE.

KEYED NOTES - LIGHTING

(1) PROCURE AND INSTALL NEW ELEVATED FIXTURE (TYPE AS NOTED) ON NEW BASE CAN WITH NEW ISOLATION TRANSFORMER, CONNECTOR KIT, BOLTING HARDWARE, ETC FOR A COMPLETE ACCEPTED SYSTEM.

(2) PROCURE AND INSTALL NEW ELEVATED FIXTURE (TYPE AS NOTED) ON EXISTING BASE CAN WITH NEW ISOLATION TRANSFORMER, CONNECTOR KIT, BOLTING HARDWARE, ETC FOR A COMPLETE ACCEPTED SYSTEM.

LIGHT FIXTURE ELECTRICAL INFORMATION:

FIXTURE TYPE	FAA TYPE	LAMP WATTAGE	ISOLATION TRANSFORMER
RUNWAY ELEVATED LED EDGE LIGHT (CLEAR/ CLEAR)	L-862(L)	49VA	L-830-3 (65W)
RUNWAY ELEVATED LED EDGE LIGHT (CLEAR/ YELLOW)	L-862(L)	46VA	L-830-3 (65W)
RUNWAY ELEVATED LED THRESHOLD END LIGHT	L-862E(L)	15VA	L-830-16 (10/15W)

MARK	REVISION	DATE
4	ADDENDUM 4	10/15/25

AIRFIELD LIGHTING SCHEDULE

SHEET NAME:

103006 - TEXAS GULF COAST REGIONAL AIRPORT - TAXIWAY PAVEMENT AND ELECTRICAL IMPROVEMENTS - ANGLETON, TEXAS (BRAZORIA COUNTY)

TEXAS GULF COAST REGIONAL AIRPORT
TAXIWAY REHABILITATION AND ELECTRICAL IMPROVEMENTS
BRAZORIA COUNTY, TEXAS

PROJECT NAME:

DRAWN BY:	DESIGNED BY:	LATEST REVISION:	KSA JOB NO.:
ALC	ALC	10/08/2025	103006

Ferguson Consulting
Texas Gulf Coast Regional Airport Taxiway Rehabilitation and Electrical Improvements
Ferguson Consulting Inc.
10200 Grogans Mill Rd. Ste. #420
The Woodlands, TX. 77380
(281) 203-9232 Firm No. 6864

STATE OF TEXAS
R. COLE FERGUSON
150146
LICENSED PROFESSIONAL ENGINEER
10/15/25

SEAL:
TBPE Firm Registration No. F-6864

SHEET NO.

EL601

Q:\SHARED\FCI PROJ AIR ELEC\24041-TX GULF COAST REG AIRPORT\DWG\ EL6.DWG | EL601 | 10/15/2025 - 10:49 AM - LAST SAVED BY: ACOTE

PROPOSED FIELD TAGGING	PROPOSED SIGN LEGEND SIDE 1	PROPOSED SIGN LEGEND SIDE 2	FIELD CKT	SIGN DATA MODULES	SIGN DATA SIZE	SIGN DATA STYLE	SIGN DATA CLASS	ISOL XFMR (QTY) (AND SIZE) *	LOAD INFORMATION TYPE	LOAD INFORMATION VA	SHEET NUMBER	NORTHING	EASTING	NOTES
S22	F ← A →		TW1	3	2	2	1	100 W	LED	82	EL103	13604775.5489	3098462.9565	1
S23		← G	TW1	1	2	2	1	100 W	LED	77	EL105	13603762.7212	3098684.2521	1
S24	G ← A →		TW1	3	2	2	1	100 W	LED	82	EL105	13603802.4884	3098493.5731	1
S25	← H A		TW1	2	2	2	1	100 W	LED	86	EL105	13603226.8896	3098471.2130	1
S26	H →		TW1	1	2	2	1	100 W	LED	77	EL105	13603265.5502	3098701.0297	1
S27		← H	TW1	1	2	2	1	100 W	LED	77	EL105	13603063.2004	3098706.2563	1
S28	H ← A →		TW1	3	2	2	1	100 W	LED	82	EL105	13603102.8584	3098515.5864	1
S29	A A4 →		TW1	3	2	2	1	100 W	LED	86	EL106	13602201.9517	3098503.6581	1
S30	A A5 →		TW1	3	2	2	1	100 W	LED	86	EL107	13600752.7724	3098549.2638	1
S31	A5 35		RW1	2	2	3	1	150 W	LED	90	EL107	13600613.4384	3098358.2976	1
S32	←A5		RW1	2	2	3	1	150 W	LED	90	EL107	13600740.9712	3098174.1958	1
S33	35 A5		RW1	2	2	3	1	150 W	LED	90	EL107	13600712.9850	3098355.1654	1
S34		← A A5	TW1	2	2	2	1	100 W	LED	86	EL107	13600729.3684	3098419.1819	1
S35		← A4 A	TW1	3	2	2	1	100 W	LED	86	EL106	13602027.5249	3098397.4370	1
S36	A4 35-17		RW1	3	2	3	1	150 W	LED	84	EL106	13602058.5429	3098312.8285	1
S37		A4 →	RW1	2	2	3	1	150 W	LED	90	EL106	13602019.2353	3098133.9762	1
S38	←A4		RW1	2	2	3	1	150 W	LED	90	EL106	13602190.1507	3098128.5984	1
S39		A4 ← A →	TW1	3	2	2	1	100 W	LED	82	EL106	13602178.5480	3098373.5845	1
S40		A H →	TW1	2	2	2	1	100 W	LED	86	EL105	13603053.1457	3098386.6942	1
S41		A G →	TW1	2	2	2	1	100 W	LED	86	EL105	13603752.6602	3098364.4901	1
S42		← A3 A	TW1	3	2	2	1	100 W	LED	86	EL103	13604551.7883	3098318.0129	1
S43	A3 35-17		RW1	3	2	3	1	150 W	LED	84	EL104	13604582.8064	3098233.4044	1
S44		A3 →	RW1	2	2	3	1	150 W	LED	90	EL104	13604543.4987	3098054.5521	1
S45	←A3		RW1	2	2	3	1	150 W	LED	90	EL104	13604714.4141	3098049.1744	1
S46		A3 ← A →	TW1	3	2	2	1	100 W	LED	82	EL103	13604702.8114	3098294.1605	1
S47		A F →	TW1	2	2	2	1	100 W	LED	86	EL103	13604751.7173	3098319.2834	1
S48		A E →	TW1	2	2	2	1	100 W	LED	86	EL103	13605126.7734	3098321.4345	1
S49		A D →	TW1	2	2	2	1	100 W	LED	86	EL102	13605552.3674	3098308.0441	1
S50		← A2 A	TW1	3	2	2	1	100 W	LED	82	EL102	13605751.9144	3098280.2518	1
S51	A2 35-17		RW1	3	2	3	1	150 W	LED	84	EL102	13605782.9325	3098195.6434	1
S52		A2 →	RW1	2	2	3	1	150 W	LED	90	EL102	13605743.6248	3098016.7911	1
S53	←A2		RW1	2	2	3	1	150 W	LED	90	EL102	13605914.5402	3098011.4133	1
S54		A2 ← A →	TW1	3	2	2	1	100 W	LED	82	EL102	13605902.9375	3098256.3994	1
S55		A C →	TW1	2	2	2	1	100 W	LED	86	EL102	13606351.9552	3098282.7654	1
S56		← A1 A B →	TW1	4	2	2	1	100 W	LED	93	EL101	13607524.7039	3098227.9612	1
S57	A1 17		RW1	2	2	3	1	150 W	LED	90	EL101	13607555.8789	3098139.8589	1
S58		A1 →	RW1	2	2	3	1	150 W	LED	90	EL101	13607516.8494	3097978.3279	1
S59	6	1	RW1	1	4	3	1	150 W	LED	86	EL101	13606622.8448	3097819.0429	1
S60	5	2	RW1	1	4	3	1	150 W	LED	86	EL102	13605623.3393	3097850.4916	1
S61	4	3	RW1	1	4	3	1	150 W	LED	86	EL104	13604623.8339	3097881.9403	1
S62	3	4	RW1	1	4	3	1	150 W	LED	86	EL105	13603624.3285	3097913.3890	1
S63	2	5	RW1	1	4	3	1	150 W	LED	86	EL106	13602624.8230	3097944.8377	1
S64	1	6	RW1	1	4	3	1	150 W	LED	86	EL106	13601625.3176	3097976.2864	1

GENERAL NOTES - SIGNAGE

1. REFER TO SIGN DETAILS ON EL502. ALL SIGN BASE CANS ARE LOCATED ON INBOARD SIDE OF THE SIGN (SIDE NEAREST TO EDGE MARKING) UNLESS OTHERWISE NOTED.
2. SIGN NORTHINGS AND EASTINGS HAVE BEEN PROVIDED FOR CONTRACTORS TO USE IN LOCATING NEW SIGNS. HOWEVER THE CONTRACTOR MUST INSTALL ALL SIGNS FOLLOWING THE DETAILS, WHERE NORTHINGS AND EASTINGS CONFLICT WITH DETAILS, THE CONTRACTOR SHALL CONTACT THE ENGINEER FOR GUIDANCE. TYPICALLY, THE DETAILS SUPERSEDE NORTHINGS AND EASTINGS INFORMATION. IF MARKINGS ARE MODIFIED, THE NORTHINGS AND EASTINGS MAY NO LONGER BE ACCURATE.

KEYED NOTES - SIGNAGE

1. FURNISH AND INSTALL NEW SIGN ON NEW FOUNDATION FOLLOWING PLANS, DETAILS, AND SPECIFICATIONS. COORDINATE FIELD TAG ID WITH OPERATIONS.

PROPOSED FIELD TAGGING	PROPOSED SIGN LEGEND SIDE 1	PROPOSED SIGN LEGEND SIDE 2	FIELD CKT	SIGN DATA MODULES	SIGN DATA SIZE	SIGN DATA STYLE	SIGN DATA CLASS	ISOL XFMR (QTY) (AND SIZE) *	LOAD INFORMATION TYPE	LOAD INFORMATION VA	SHEET NUMBER	NORTHING	EASTING	NOTES
S1		A1 B ↑ A →	TW1	3	2	2	1	100 W	LED	82	EL101	13607654.4385	3098201.2897	1
S2	← A B A1 ↑		TW1	4	2	2	1	100 W	LED	93	EL101	13607548.6635	3098375.7025	1
S3	← C A		TW1	2	2	2	1	100 W	LED	86	EL102	13606526.3751	3098388.7674	1
S4	C →		TW1	1	2	2	1	100 W	LED	77	EL102	13606526.9753	3098407.8451	1
S5	C ← A →		TW1	3	2	2	1	100 W	LED	82	EL102	13606356.0447	3098413.2274	1
S6		← C	TW1	1	2	2	1	100 W	LED	77	EL102	13606338.2151	3098418.5123	1
S7	D →		TW1	1	2	2	1	100 W	LED	77	EL102	13605727.3838	3098433.0037	1
S8	← D A		TW1	2	2	2	1	100 W	LED	86	EL102	13605726.7835	3098413.9260	1
S9	A A2 →		TW1	3	2	2	1	100 W	LED	82	EL102	13605926.3384	3098386.3836	1
S10	D ← A →		TW1	3	2	2	1	100 W	LED	82	EL102	13605556.4532	3098438.3859	1
S11		← D	TW1	1	2	2	1	100 W	LED	77	EL102	13605538.6089	3098443.6752	1
S12	E →		TW1	1	2	2	1	100 W	LED	77	EL103	13605301.7898	3098446.3946	1
S13	← E A		TW1	2	2	2	1	100 W	LED	86	EL103	13605301.1895	3098427.3170	1
S14		← E	TW1	1	2	2	1	100 W	LED	77	EL103	13605134.7625	3098575.3437	1
S15	F →		TW1	1	2	2	1	100 W	LED	77	EL103	13604931.2115	3098581.7877	1
S16	← F A		TW1	2	2	2	1	100 W	LED	86	EL103	13604926.7207	3098439.0599	1
S17	E ← A →		TW1	3	2	2	1	100 W	LED	82	EL103	13605150.1664	3098451.1694	1
S18		← F	TW1	1	2	2	1	100 W	LED	77	EL103	13604760.1449	3098587.1307	1
S19	G →		TW1	1	2	2	1	100 W	LED	77	EL105	13603932.2200	3098633.8491	1
S20	← G A		TW1	2	2	2	1	100 W	LED	86	EL105	13603926.4091	3098449.1671	1
S21	A A3 →		TW1	3	2	2	1	100 W	LED	86	EL103	13604726.6430	3098437.8335	1

* NEW SIGN ISOLATION TRANSFORMER SIZE WILL VARY PER MANUFACTURER. SIZES LISTED ARE FOR SIGN MANUFACTURER - ADB. IF ALTERNATE MANUFACTURER IS USED, PROVIDE ISOLATION TRANSFORMER SIZE PER MANUFACTURER RECOMMENDATIONS. THE CONTRACTOR SHALL BARE ALL THE COSTS ASSOCIATED WITH ANY EQUIPMENT UPGRADES NECESSARY DUE TO THE CONTRACTOR'S PROPOSED EQUIPMENT POWER REQUIREMENTS EXCEEDING THE CONTRACT DESIGN LOADS.

MARK	REVISION	DATE
1	ADDENDUM 1	9/19/25
2	ADDENDUM 4	10/15/25

AIRFIELD SIGNAGE SCHEDULE

SHEET NAME:
103006 - TEXAS GULF COAST REGIONAL AIRPORT - TAXIWAY PAVEMENT AND ELECTRICAL IMPROVEMENTS - ANGLETON, TEXAS (BRAZORIA COUNTY)

PROJECT NAME:
TEXAS GULF COAST REGIONAL AIRPORT TAXIWAY REHABILITATION AND ELECTRICAL IMPROVEMENTS BRAZORIA COUNTY, TEXAS

DRAWN BY:	DESIGNED BY:	LATEST REVISION:	KSA JOB NO.:
ALC	ALC	10/08/2025	103006

Ferguson Consulting
Aviation Specialized Engineering Solutions
Texas Registered Engineering Firm F-6864
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10200 Grogans Mill Rd. Suite #420
The Woodlands, TX 77380
(281) 252-9232 Firm No. 6864

STATE OF TEXAS
R. COLE FERGUSON
150146
LICENSED
PROFESSIONAL ENGINEER
10/15/25

SEAL:
TBPE Firm Registration No. F-6864

SHEET NO.
EL605

Q:\SHARED\FCI PROJ AIR-ELEC\24041-TX GULF COAST REG AIRPORT\DWG\ EL6.DWG | EL605 | 10/15/2025 - 10:49 AM - LAST SAVED BY: ACOTE

Item L-107 Airport Wind Cones

107-1.1 Description.

a. This item shall consist of furnishing and installing an airport wind cone per these specifications and per the dimensions, design, and details shown in the plans.

b. The work shall include the furnishing and installation of a support for mounting the wind cone, the specified wire, and a concrete foundation. The item shall also include all cable connections, conduit and conduit fittings, the furnishing and installation of all lamps, ground rod and ground connection, the testing of the installation, and all incidentals necessary to place the wind cone in operation as a completed unit to the satisfaction of the RPR.

EQUIPMENT AND MATERIALS

107-2.1 General.

a. Airport lighting equipment and materials covered by advisory circulars (ACs) shall be certified in AC 150/5345-53, Airport Lighting Equipment Certification Program (ALECP) and listed in the ALECP Addendum.

b. All other equipment and materials covered by other referenced specifications shall be subject to acceptance through manufacturer's certification of compliance with the applicable specification when requested by the RPR.

c. Manufacturer's certifications shall not relieve the Contractor of the responsibility to provide materials per these specifications. Materials supplied and/or installed that do not comply with these specifications shall be removed, when directed by the RPR and replaced with materials that comply with these specifications, at the Contractor's cost.

d. All materials and equipment used to construct this item shall be submitted to the RPR for approval prior to ordering the equipment. Submittals consisting of marked catalog sheets or shop drawings shall be provided. Submittal data shall be presented in a clear, precise and thorough manner. Original catalog sheets are preferred. Photocopies are acceptable provided they are as good a quality as the original. Clearly and boldly mark each copy to identify products or models applicable to this project. Indicate all optional equipment and delete non-pertinent data. Submittals for components of electrical equipment and systems shall identify the equipment for which they apply on each submittal sheet. Markings shall be made bold and clear with arrows or circles (highlighting is not acceptable). Contractor is solely responsible for delays in the project that may accrue directly or indirectly from late submissions or resubmissions of submittals.

e. The data submitted shall be sufficient, in the opinion of the RPR, to determine compliance with the Contract Documents plans and specifications. The Contractor's submittals shall be in an electronic pdf file format tabbed by specification section. The RPR reserves the right to reject any and all equipment, materials or procedures that do not meet the system design and the standards and codes, specified in this document.

f. All equipment and materials furnished and installed under this section shall be guaranteed against defects in materials and workmanship for at least twelve (12) months from final acceptance by the Owner. The defective materials and/or equipment shall be repaired or replaced, at the Owner's discretion, with no additional cost to the Owner.

107-2.2 Wind Cones. The primary wind cone assembly shall be identified on the drawings.

107-2.3 Electrical Wire and Cable. Cable rated up to 5,000 volts in conduit shall conform to AC 150/5345-7, Specification for L-824 Underground Electrical Cable for Airport Lighting Circuits. For ratings up to 600 volts, moisture and heat resistant thermoplastic wire conforming to Commercial Item Description A-A-59544A Type THWN-2 shall be used. The wires shall be of the type, size, number of conductors, and voltage shown in the plans or in the proposal.

107-2.4 Conduit. Rigid steel conduit and fittings shall conform to the requirements of Underwriters Laboratories Standards 6, 514B, and 1242.

107-2.5 Plastic Conduit (for use below grade only). Plastic conduit and fittings shall be per the following:

a. UL 514B covers W-C-1094 - Conduit fittings all types, Classes 1 thru 3 and 6 thru 10

b. UL 514C covers W-C-1094 - all types, Class 5 junction box and cover in plastic (polyvinyl chloride (PVC))

c. UL 651 covers W-C-1094 - Rigid PVC Conduit, types I and II, Class 4

d. UL 651A covers W-C-1094 - Rigid PVC Conduit and high-density polyethylene (HDPE) Conduit type III and Class 4

e. Underwriters Laboratories Standard UL-651 shall be one of the following, as shown in the plans:

1. Type I–Schedule 40 PVC suitable for underground use either direct-buried or encased in concrete.

2. Type II–Schedule 40 PVC suitable for either above ground or underground use.

f. Plastic conduit adhesive shall be a solvent cement manufactured specifically for the purpose of gluing the type of plastic conduit and fitting.

107-2.6 Concrete. The concrete for foundations shall be proportioned, placed, and cured in accordance with Item P-610, Structural Portland Cement Concrete.

107-2.7 Paint

a. Priming paint for non-galvanized metal surfaces shall be a high solids alkyd primer compatible with the manufacturer's recommendations for the intermediate or topcoat.

b. Priming paint for galvanized metal surfaces shall be zinc dust-zinc oxide primer paint conforming to MIL-DTL-24441C/19B. Use MIL-24441 thinner per paint manufacturer's recommendations.

c. Orange paint for the body and the finish coats on metal and wood surfaces shall consist of a ready-mixed non-fading paint per Master Painter's Institute (MPI) Reference #9 (gloss). The color shall be per Federal Standards 595, International Orange, Number 12197.

d. White paint for body and finish coats on metal and wood surfaces shall be ready-mixed paint conforming to the MPI, Reference #9, Exterior Alkyd, Gloss.

e. Priming paint for wood surfaces shall be mixed on the job by thinning the above specified aviation-orange or white paint by adding ½ pint (0.06 liter) of raw linseed oil to each gallon (liter).

CONSTRUCTION METHODS

107-3.1 Installation. The hinged support or hinged pole shall be installed on a concrete foundation as shown in the plans.

107-3.2 Support Pole Erection. The Contractor shall erect the pole on the foundation following the manufacturer's requirements and erection details. The pole shall be level and secure.

107-3.3 Electrical Connection. The Contractor shall furnish all labor and materials and shall make complete electrical connections per the wiring diagram furnished with the project plans. The electrical installation shall conform to the requirements of the latest edition of National Fire Protection Association, NFPA-70, National Electric Code.

Underground cable and duct for cable installation shall be installed in accordance with Item L-108, Underground Power Cables for Airports, and Item L-110, Airport Underground Electrical Duct Banks and Conduits in locations as shown on the plans.

107-4.1 Booster Transformer. If shown in plans or specified in job specifications, a booster transformer to compensate for voltage drop to the lamps shall be installed in a suitable weatherproof housing. The booster transformer shall be installed as indicated in the plans and described in the proposal. If the booster transformer is required for installation remotely from the windcone, it shall be incidental to the line item in which it is installed.

107-4.2 Ground Connection And Ground Rod. The Contractor shall furnish and install a ground rod, grounding cable, and ground clamps for grounding the "A" frame of the 12-foot (3.7-m) assembly or pipe support of the 8-foot (2.4-m) support near the base. The ground rod shall be of the type, diameter and length specified in Item L-108, Underground Power Cable for Airports. The ground rod shall be driven into the ground adjacent to the concrete foundation (minimum distance from foundation of 2 feet (60 cm)) so that the top is at least 6 inches (150 mm) below grade. The grounding cable shall consist of No. 6 American wire gauge (AWG) minimum stranded copper wire or larger and shall be firmly attached to the ground rod by exothermic welding. If an exothermic weld is not possible, connections to the grounding bus shall be made by using connectors approved for direct burial in soil or concrete per UL 467. The other end of the grounding cable shall be securely attached to a leg of the frame or to the base of the pipe support with non-corrosive metal and shall be of substantial construction. The resistance to ground shall not exceed 25 ohms. If a single rod grounding electrode has a resistance to earth of over 25 ohms, then install one supplemental rod not less than 10 feet from the first rod. If desired resistance to ground levels are still not achieved, see FAA-STD-019 for guidance on the application of coke breeze.

107-4.3 Painting. Three coats of paint shall be applied (one prime, one body, and one finish) to all exposed material installed under this item except the fabric cone, obstruction light globe, and lamp reflectors. The wind cone assembly, if already painted upon receipt, shall be given one finish coat of paint in lieu of the three coats specified above. The paint shall be per MPI Reference #9 (gloss). The color shall be per Federal Standard 595, International Orange, Number 12197.

107-4.4 Light Sources. The Contractor shall furnish and install lamps per the manufacturer's instruction book.

107-4.5 Chain And Padlock.

a. The Contractor shall furnish and install a suitable operating chain for lowering and raising the hinged top section. The chain shall be attached to the pole support in a manner to prevent the light fixture assembly from striking the ground in the lowered position.

b. A padlock shall also be furnished by the Contractor on the 8-foot (2.4-m) wind cone for securing the hinged top section to the fixed lower section. Keys for the padlock shall be delivered to the RPR.

METHOD OF MEASUREMENT

107-5.1 The quantity to be paid shall be the number of primary wind cones installed as completed units in place, accepted, and ready for operation. This item includes the wind cone, pole base, foundation with

concrete pad, anchor bolts, LED light kit, LED obstruction Light, shaft assembly, bearing assembly, aluminum mast structure, grounding, frangible coupling, boxes and L-867 Base Can with Steel cover, isolation transformer, L-823 connector kit, concrete encasement, terminations, testing, labels and all incidentals for a complete working system. ~~In addition, this item will include installing a new segmented circle and painting the new segmented circle with exterior grade paint using alternating aviation orange and white for a minimum of 3 coats of paint on all sides and edges.~~

~~**107-5.2** The quantity to be paid shall be the number of supplemental wind cones installed as completed units in place, accepted, and ready for operation. This item includes the wind cone, pole base, foundation with concrete pad, anchor bolts, LED light kit, LED obstruction Light, shaft assembly, bearing assembly, aluminum mast structure, grounding, frangible coupling, boxes and L-867 Base Can with Steel cover, isolation transformer, L-823 connector kit, concrete encasement, terminations, testing, labels and all incidentals for a complete working system.~~

BASIS OF PAYMENT

107-6.1 Payment will be made at the contract unit price for each completed and accepted job. This price shall be full compensation for furnishing all materials and for all preparation, assembly, and installation of these materials, and for all labor, equipment, tools, and incidentals necessary to complete this item.

Payment will be made under:

Item L-107-5.1 Install New L-807(L) Primary Wind Cone Including Tip Down Pole~~,~~ **and** Foundation~~, and Segmented Circle~~, per Each

~~Item L-107-5.2 Install New L-806(L) Supplemental Wind Cone Including Tip Down Pole and Foundation, per Each~~

REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

Advisory Circulars (AC)

AC 150/5340-5	Segmented Circle Airport Marker System
AC 150/5340-30	Design and Installation Details for airport Visual Aids
AC 150/5345-7	Specification for L-824 Underground Electrical Cable for Airport Lighting Circuits
AC 150/5345-27	Specification for Wind Cone Assemblies
AC 150/5345-53	Airport Lighting Equipment Certification Program

Commercial Item Description

A-A-59544	Cable and Wire, Electrical (Power, Fixed Installation)

Federal Standard (FED STD)

FED STD 595	Colors Used in Government Procurement

Master Painter's Institute (MPI)

MPI Reference #9	Alkyd, Exterior, Gloss (MPI Gloss Level 6)

Mil Standard

MIL-DTL-24441C/19B Paint, Epoxy-Polyamide, Zinc Primer, Formula 159, Type III

Underwriters Laboratories (UL)

UL Standard 6 Electrical Rigid Metal Conduit – Steel

UL Standard 514B Conduit, Tubing, and Cable Fittings

UL Standard 514C Nonmetallic Outlet Boxes, Flush-Device Boxes, and Covers

UL Standard 651 Schedule 40, 80, Type EB and A Rigid PVC Conduit and Fittings

UL Standard 651A Type EB and A Rigid PVC Conduit and HDPE Conduit

UL Standard 1242 Electrical Intermediate Metal Conduit - Steel

National Fire Protection Association (NFPA)

NFPA-70 National Electric Code (NEC)

END OF ITEM L-107

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Item L-125 Installation of Airport Lighting Systems

DESCRIPTION

125-1.1 This item shall consist of airport lighting systems furnished and installed in accordance with this specification, the referenced specifications, and the applicable advisory circulars (ACs). The systems shall be installed at the locations and in accordance with the dimensions, design, and details shown in the plans. This item shall include the furnishing of all equipment, materials, services, and incidentals necessary to place the systems in operation as completed units to the satisfaction of the RPR.

125-1.2 General.

Airport lighting equipment and materials covered by Federal Aviation Administration (FAA) specifications shall be certified under the Airport Lighting Equipment Certification Program in accordance with AC 150/5345-53, current version. FAA certified airfield lighting shall be compatible with each other to perform in compliance with FAA criteria and the intended operation. If the Contractor provides equipment that does not performs as intended because of incompatibility with the system, the Contractor assumes all costs to correct the system for to operate properly.

Manufacturer's certifications shall not relieve the Contractor of their responsibility to provide materials in accordance with these specifications and acceptable to the RPR. Materials supplied and/or installed that do not comply with these specifications shall be removed, when directed by the RPR and replaced with materials, which do comply with these specifications, at the sole cost of the Contractor.

All materials and equipment used shall be submitted to the RPR for approval prior to ordering the equipment. Submittals consisting of marked catalog sheets or shop drawings shall be provided. Clearly mark each copy to identify pertinent products or models applicable to this project. Indicate all optional equipment and delete non-pertinent data. Submittals for components of electrical equipment and systems shall identify the equipment for which they apply on each submittal sheet. Markings shall be clearly made with arrows or circles (highlighting is not acceptable). The Contractor shall be responsible for delays in the project accruing directly or indirectly from late submissions or resubmissions of submittals.

The data submitted shall be sufficient, in the opinion of the RPR, to determine compliance with the plans and specifications. The Contractor's submittals shall be submitted in electronic PDF format, tabbed by specification section. The RPR reserves the right to reject any or all equipment, materials or procedures, which, in the RPR’s opinion, does not meet the system design and the standards and codes, specified herein.

All equipment and materials furnished and installed under this section shall be guaranteed against defects in materials and workmanship for a period of at least **[** twelve (12) months **]** from final acceptance by the Owner. The defective materials and/or equipment shall be repaired or replaced, at the Owner's discretion, with no additional cost to the Owner.

EQUIPMENT AND MATERIALS

125-2.1 Conduit/Duct. Conduit shall conform to Specification Item L-110 Airport Underground Electrical Duct Banks and Conduits.

125-2.2 Cable and Counterpoise. Cable and Counterpoise shall conform to Item L-108 Underground Power Cable for Airports.

125-2.3 Tape. Rubber and plastic electrical tapes shall be Scotch Electrical Tape Numbers 23 and 88 respectively, as manufactured by 3M Company or an approved equal.

125-2.4 Cable Connections. Cable Connections shall conform to Item L-108 Installation of Underground Cable for Airports.

125-2.5 Retroreflective Markers. Retroreflective markers shall be type L-853 and shall conform to the requirements of AC 150/5345-39.

125-2.6 Runway and Taxiway Lights. Runway and taxiway lights shall conform to the requirements of AC 150/5345-46. Lamps shall be of size and type indicated, or as required by fixture manufacturer for each lighting fixture required under this contract. Filters shall be of colors conforming to the specification for the light concerned or to the standard referenced.

a. Refer to the contract documents for type of light, base and transformer including class, mode, style and option as appropriate for project.

b. See engineering FAA Engineering Brief No. 67 "Light Sources other than Incandescent and Xenon for Airport Lighting and Obstruction Lighting Fixtures for additional information on LED fixtures.

c. Refer to plan drawings for fixture installation details.

d. Fixture Hold Down Bolts. Fixture hold down bolts and installations shall adhere to the following requirements.

1. Bolts shall be all-thread, 18-8, Grade 2 Carbon Steel with Fluoropolymer Coating. Bolts shall be colored orange or pink.

2. Bolts information shall be submitted for approval of the Engineer. Submittal shall be specifically identified, at a minimum, the bolt material, dimensions and threading.

3. Bolt material shall be readily identifiable in the field by appropriate ASTM markings on the bolts or by having material identified on bolt packaging, as approved by the Engineer.

4. Normally, bolts are supplied with the bases, not the fixtures. However, the usual bolts supplied with the bases are too short to extend into base can. The Contractor shall install bolts long enough to extend 1 inch inside the rim of the can after proper installation to hold down fixtures. Bolts of appropriate length and type shall be ordered accordingly.

5. Lock washers shall be installed on each bolt as per fixture base manufacturer's recommendations. Appropriate lock washers are usually provided with bases.

e. Spacer Rings. Install as allowed by the FAA criteria.

f. Concrete. Concrete shall adhere to requirements of Item P-610. Reinforcing steel shall conform to provisions of Item P-610. Precast base cans are not approved for use.

g. Sealer Products. Products used shall conform to applicable requirements for Joint Sealing Filler. Submit materials with satisfactory adhesive and waterproofing qualities for approval of the Owners representative. The joint sealer shall be a 2-component, Polyurethane P-606 compliant sealant similar to Q-Seal 295 or equal.

h. Joints. Use joint sealing material across concrete pavement joints. Where conduit is being installed in saw cut trench in existing pavement, OZ Gedney Type DX Expansion Fitting shall be installed at intersection of conduit installation and existing concrete pavement expansion joints.

125-2.7 Runway and Taxiway Signs. Runway and Taxiway Guidance Signs should conform to the requirements of AC 150/5345-44.

a. Refer to the contract documents for sign type, size style class and mode.

b. The nameplate required by 150/5345-44, latest edition, shall be made of metal with the data stamped into the metal nameplate.

c. Provide 6 inch high, die cut labels for each sign, labels shall be reflective film, with pressure-sensitive adhesive backing, suitable for exterior applications. Labels shall be UV resistant. Labels shall be yellow for installation on black surface, black for installation on other surfaces. Text shall be: number and letter style; Helvetica medium, upper case, 6-inch height.

d. The quantity of sign modules is based on two (2) characters per module. Payment shall be made on the basis of a module consisting of two characters, regardless of the manufacturing methods or techniques.

125-2.8 Runway End Identifier Light (REIL). Not required.

125-2.9 Precision Approach Path Indicator (PAPI). Not required.

125-2.10 Circuit Selector Cabinet. Not required.

125-2.11 Light Base and Transformer Housings. Light Base and Transformer Housings should conform to the requirements of AC 150/5345-42. Light bases shall be as noted on the contract documents and shall be provided as indicated or as required to accommodate the fixture or device installed thereon. Base plates, cover plates, and adapter plates shall be provided to accommodate various sizes of fixtures

125-2.12 Isolation Transformers. Isolation Transformers shall be Type L-830, size as required for each installation. Transformer shall conform to AC 150/5345-47.

INSTALLATION

125-3.1 Installation. The Contractor shall furnish, install, connect and test all equipment, accessories, conduit, cables, wires, buses, grounds and support items necessary to ensure a complete and operable airport lighting system as specified here and shown in the plans.

The equipment installation and mounting shall comply with the requirements of the National Electrical Code and state and local code agencies having jurisdiction.

The Contractor shall install the specified equipment in accordance with the applicable advisory circulars and the details shown on the plans.

125-3.2 Testing. All lights shall be fully tested by continuous operation for not less than 24 hours as a completed system prior to acceptance. The test shall include operating the constant current regulator in each step not less than 10 times at the beginning and end of the 24-hour test. The fixtures shall illuminate properly during each portion of the test.

125-3.3 Shipping and Storage. Equipment shall be shipped in suitable packing material to prevent damage during shipping. Store and maintain equipment and materials in areas protected from weather and physical damage. Any equipment and materials, in the opinion of the RPR, damaged during construction or storage shall be replaced by the Contractor at no additional cost to the owner. Painted or galvanized surfaces that are damaged shall be repaired in accordance with the manufacturer's recommendations.

125-3.4 Elevated and In-pavement Lights. Water, debris, and other foreign substances shall be removed prior to installing fixture base and light.

A jig or holding device shall be used when installing each light fixture to ensure positioning to the proper elevation, alignment, level control, and azimuth control. Light fixtures shall be oriented with the light beams parallel to the runway or taxiway centerline and facing in the required direction. The outermost edge of fixture shall be level with the surrounding pavement. Surplus sealant or flexible embedding material shall be removed. The holding device shall remain in place until sealant has reached its initial set.

a. Install and mount the products to comply with the requirements of the National Electric Code, Item L-111 and Item L-108.

b. General Cable Installation Requirements

1. The primary cable shall enter the light base and transformer housing as shown on the plans.

2. Primary cable slack shall be provided inside the light fixture base following Item L-108. In general, enough slack shall be left in the cable to permit installation aboveground of the connections between the primary cable and the isolation transformer primary leads. A similar length of primary cable slack shall be provided for any unconnected cable installed in a fixture base can.

3. The transformer secondary leads shall be connected to the lamp leads with a disconnecting plug and receptacle. The secondary connection shall not be taped; the cable connections to the insulating transformer's leads shall be made following Item L-108.

4. The connector joints in the primary circuit shall be wrapped with at least 3 layers of synthetic rubber tape and 2 layers of plastic tape, one-half lapped, extending at least 1-1/2 inches on each side of the joint. Refer to section L-108.

5. Ends of cables shall be sealed with heat shrinkable tubing until the splice is made to prevent the entrance of moisture.

c. General Duct and Conduit Installation Requirements. Trenching, installation of ducts and conduits, concrete backfilling, trench backfilling, installation of duct markers and the type of material used shall conform to Item L-110.

d. General Light Fixture Base Installation Requirements.

1. Caution shall be exercised during light base installation to prevent the collection of foreign matter in products and on operating components. All installation residue shall be collected as installation progresses. As directed by Owners Representative, a cover shield shall be used to protect components from foreign matter during installation.

2. Fixture base shall be installed in existing reinforced concrete or asphalt pavements with connecting conduit as shown on the plans. Precast base cans are not approved for use.

3. Light bases shall be set level. Leveling jig shall be required as specified and as directed by the RPR. Turn leveling tool over to owner for spare parts.

4. Where fixtures bases are encased in concrete, use PVC coated rigid galvanized steel conduit for fixture connection through the encasement. Transition to PVC Schedule 40 outside of the encasement.

5. Install reinforcement in the concrete encasement consisting of No. 4 bar tie bar cage. Base can encasement shall be cast-in-place. Pre-cast base cans are not allowed.

6. Flexible, seal tight steel conduit shall not be used unless specifically approved by the RPR. If approved for use, a maximum length of two (2) feet of flexible, sealtight steel conduit can be installed at the connection point to fixture base cans, only where rigid conduit connections cannot be made. Any flexible, sealtight steel conduit bend radius shall meet the cable manufacturer's minimum bend radius requirements or shall meet bend radius requirements for rigid conduit. The more stringent requirement shall govern, as determined by the RPR.

7. Light or bases shall have 1, 2 or more 2-inch threaded metallic hubs for all required conduit entrances, or as indicated on the plans. Grommeted conduit entrances are strictly prohibited. The cable entrance hubs shall be oriented in the proper direction so as to align with the connecting conduit.

8. Stub-in conduit connections into existing light bases shall be Meyers Hub installation, where required on the plans and as noted on plan details.

9. Furnish base with a drain conduit connection as shown in contract drawings.

10. Furnish a light base ground consisting of a #6 AWG bare copper wire jumper bonded to the external ground lug on the base to a ground rod installed adjacent to the base.

11. Furnish a light fixture bonding conductor consisting of a (minimum 6-foot length) #6 AWG stranded copper wire rated for 600V with green XHHW insulation. Connect conductor from internal ground lug on base can to light fixture base plate following light fixture manufacturers recommendations.

12. When existing light fixtures are removed for the purpose of installing new conductors, lockwashers shall be re-installed using new hold down bolts.

13. Breakage of fixture hold down bolts normally and regularly occurs in the field during fixture removal or fixture installation. When breakage occurs, the Contractor shall adhere to the following requirements:

a) The Contractor shall submit a broken bolt removal process for approval of the RPR.

b) Submittal shall include information about the planned broken bolt removal process and jig required to effectively drill and tap broken bolts, when necessary.

c) Whenever encountered, broken bolts shall be removed.

d) Where drilling and tapping is required, a jig approved for use by the RPR shall be used.

e) All broken bolts shall be replaced with new hold down bolts. In the event that light fixture bases are permanently damaged in the course of removing broken bolts, the Contractor shall be held responsible for the immediate repair/replacement of the lighting base. Permanent damage includes drilling of holes which exceed the required 3/8 inch bolt diameter and/or any “off centered” impressions that penetrate the inner lip of the existing bolt holes.

f) Use of "helicoils" shall be strictly prohibited as a method of dealing with stripped bolt holes, unless specifically approved in extreme emergency conditions by the Owners Representative.

g) Light fixture bases to be used as junction boxes shall be installed at the approximate locations indicated in the plans, or as directed by the Owners Representative.

h) For elevated fixtures installed on standard L-867

1) Use 18-8 stainless steel bolts with 2-piece locking washer sets.

2) Provide material submittal of anti-seize compound to Engineer for approval prior to use.

3) Perform Bolt Clamping Force Test as noted in Section X-100 to determine required bolt torque.

i) For fixtures installed on stainless steel base cans or L-868 type galvanized steel base cans:

1) Use ceramic coated “orange” bolts, MCB Industries #L201-2416x1.75 or equal, with 2-piece locking washer sets.

2) Do NOT apply anti-seize compound.

3) Perform Bolt Clamping Force Test as noted in Section X-100 to determine required bolt torque.

j) For new fixtures installed on existing L-868 type base cans:

1) Remove existing bolts and install new ceramic coated "orange" bolts, MCB Industries #L201-2416x1.75 or equal, with 2-piece locking washer sets.

2) Do NOT apply anti-seize compound.

3) Perform Bolt Clamping Force Test as noted in Section X-100 to determine required bolt torque.

4) Provide new fixture ID following contract documents.

e. General Cable Installation Requirements

1. The primary cable shall enter the light base and transformer housing as shown on the plans.

2. Primary cable slack shall be provided inside the light fixture base following Item L-108. In general, enough slack shall be left in the cable to permit installation aboveground of the connections between the primary cable and the isolation transformer primary leads. A similar length of primary cable slack shall be provided for any unconnected cable installed in a fixture base can.

3. The transformer secondary leads shall be connected to the lamp leads with a disconnecting plug and receptacle. The secondary connection shall not be taped; the cable connections to the insulating transformer's leads shall be made following Item L-108.

4. The connector joints in the primary circuit shall be wrapped with at least 1 layer of synthetic rubber tape and 2 layers of plastic tape, one-half lapped, extending at least 1-1/2 inches on each side of the joint.

5. Ends of cables shall be sealed with heat shrinkable tubing until the splice is made to prevent the entrance of moisture.

f. Installing Light Fixtures at Existing Bases

1. At locations indicated on the plans, the Contractor shall install light fixtures at existing fixture bases. This shall include providing the following items, as required and directed by the RPR.

a) Remove and salvage existing base cover plates.

b) Refurbish and prepare the base flange with flange rings or spacer rings, as required and directed by the RPR, in order to properly install the specified light fixture.

c) Clean out and refurbish the interior of the bases, including conduits.

d) If no ground lug exists on the interior, provide new ground lug with ground strap following base manufacturer's recommendations.

e) Install primary airfield lighting circuit cable or verify existing airfield light cable is properly installed.

f) Install fixture isolation transformers of proper specified rating and wattage.

g) Install specified fixtures.

h) Install concrete collar as shown on the contract documents.

g. An identification tag shall be installed with each light or sign as shown in the plans. Circuit identification tags identifying each circuit shall be attached to each circuit as shown in the plans. Refer to section L-108.

h. Dow Corning Compound III valve lubricant non-curing sealant or approved equal shall be used to seal between sections of base cans, spacer rings, adapter rings or fixtures.

i. Demolition and Salvage. At locations noted on plans, the following shall be required:

1. Existing light fixtures, bases, cables and other materials identified as salvageable by the RPR shall be removed. Salvageable materials shall be delivered to the owner's salvage area or disposed of as directed by the RPR.

125-3.5 Signs, base cans.

a. All signs, base cans, etc. shall be installed as shown in the plans or approved shop drawings and in accordance with the applicable FAA Advisory Circulars and manufacturers' recommendations. Survey instruments shall be used to position all items to insure precise orientation. Tolerances given in the FAA Advisory Circulars, these specifications, and the plans shall not be exceeded. Where no tolerance is given, no deviation is permitted. Items not installed in accordance with the FAA Advisory Circulars, these specifications and plans shall be removed and replaced by and at the expense of the Contractor.

b. Signs shall be oriented at 90 degrees to the direction of the taxing path from which it is viewed unless noted otherwise.

c. For all signs, the concrete pad shall extend to not less than eighteen (18) inches out from the edge of the sign all around. The concrete pad shall be a minimum of six (6) inches thick. The concrete pad shall be poured in place and rest on undisturbed soil. The pad shall be reinforced with steel bars formed and placed as indicated in the Plans. Exposed concrete surface shall be finished smooth with a steel trowel or rubbed to a smooth finish. All horizontal edges to be chamfered one (1) inch at 45 degrees.

d. During construction of the pad, the transformer base shall be adjusted and firmly held in place so that machined upper surface of base flange will be level within -2 degrees and not more than 1/4 inch above the surface of pad. All other bearing areas for additional flange supports shall be in the same horizontal plane as the transformer base flange.

e. The Contractor shall completely survey and stake out each areas signage layout prior to starting any installation. Should any irregularities occur in the layout, the RPR shall be notified immediately. The bid item price shall include the necessary surveyed layout for each item and the cost for any additional adjustment or resurvey of the location of the items due to the existing geometric conditions. The new signage installation shall be coordinated with and blend into the signage installation.

f. All loose material shall be removed from all excavations for electrical equipment, raceways, manholes, pads, etc. The bottom of the excavation shall be compacted to 95% compaction in accordance with ASTM D 1557 prior to the installation of the electrical item and backfill.

g. Assemble units and connect to the system in accordance with the manufacturer's recommendations and instructions.

h. An identification monument shall be installed with each fixture, sign, etc. as shown in the plans.

i. Provide three feet (3') of slack in each end of each cable in each base can. All connections shall be able to be made above ground.

j. Painted and galvanized surfaces that are damaged shall be repaired according to the manufacturer's recommendations, to the satisfaction of the RPR. Use cold galvanizing compound or to repair galvanized surfaces. Obtain paint and primer, of same batch number, from the equipment manufacturer to repair painted surfaces.

k. All signs shall use an L-867D size Base Can shall be used.

l. Dewatering necessary to construct L-125 Items and related erosion and turbidity control shall be in accordance with federal, state, and local requirements and is incidental to its respective pay item as a part of L-125. The cost of all excavation regardless of type of material encountered, shall be included in the unit price bid for the L-125 Item.

METHOD OF MEASUREMENT

125-4.1 Measurement for this item will be per each, installed complete and accepted by the RPR. This item provides for the procurement and installation of a new elevated light of the type shown with new base can of the type shown in turf, existing pavement, or new shoulder pavement areas. This item includes installation of the light fixture with, lens, lamps, new L-867B base can with grade 2 carbon steel coated bolting hardware with CEC lock washers, nylon bushing, gasket, spacers, multi-hole adapter ring, connector kit, isolation transformer, heat shrinks, cable tags, light ID marker, concrete encasement with reinforcement, safety ground, copper clad steel ground rod including all terminations, testing and all items necessary to complete installation. For installation in existing pavement, this item additionally includes coring the pavement to prepare a capture section for the can. Incidental to this item, if required, is the special height base can with bricks. Incidental to this item is the testing to determine the required bolt torque following section X-100 including, but not limited to, testing for determination of the K factor, mock-up of lighting assembly and all materials and tools necessary to conduct the test following EB-83A. Separate measurement will be made for various installation scenarios.

125-4.2 Measurement for this item will be per each, installed complete and accepted by the RPR. This item provides for the procurement and installation of a new In-Pavement light of the type shown with new base can of the type shown in new full strength pavement areas. This item includes installation of the light fixture with, lens, lamps, new L-868B base can with grade 2 carbon steel coated bolting hardware with CEC lock washers, nylon bushing, gasket, spacers, multi-hole adapter ring, connector kit, isolation transformer, heat shrinks, cable tags, light ID marker, concrete encasement with reinforcement, safety ground, copper clad steel ground rod including all terminations, testing and all items necessary to complete installation. For installation in existing pavement, this item additionally includes coring the pavement to prepare a capture section for the can. Incidental to this item, if required, is the special height base can with bricks. Incidental to this item is the testing to determine the required bolt torque following section X-100 including, but not limited to, testing for determination of the K factor, mock-up of lighting assembly and all materials and tools necessary to conduct the test following EB-83A. Separate measurement will be made for various installation scenarios.

125-4.3 Measurement for this item will be per each, installed complete and accepted by the RPR. This item provides for the procurement and installation of a new L-867B base can in turf with a blank steel cover. This item includes installation of the base can with all required hardware and incidentals such as, grade 2 carbon steel coated bolting hardware with CEC lock washers, nylon bushing, gasket, spacers, concrete encasement with reinforcement, safety ground, copper clad steel ground rod including all terminations, testing and all items necessary to complete installation. Incidental to this item is the testing to determine the required bolt torque following section X-100 including, but not limited to, testing for determination of the K factor, mock-up of lighting assembly and all materials and tools necessary to conduct the test following EB-83A.

125-4.4 This item provides for the procurement and installation of a Size 2, L-858(L) airfield guidance sign, of the type and size shown on the drawings, and associated materials, as identified in the plans and specifications. This item includes procurement and installation of the new or salvaged sign structure with panels, lamps, isolation transformer, L-867D base can with steel cover, hubs, gasket, bolting hardware, sign, ID tag and marker, ground rod with test results, connector kit, tether, local on/off switch, cable tag

with all testing, terminations and all incidentals required to provide a complete and operational system. In addition, this includes installation of concrete foundation with reinforcement bars. Where signs are installed on existing pavement, this includes cutting into the existing pavement as shown in the contract documents. Measurement for this item will be per each sign, installed complete and accepted by the RPR.

125-4.5 This item provides for the procurement and installation of a Size 4, L-858(L) airfield guidance sign, of the type and size shown on the drawings, and associated materials, as identified in the plans and specifications. This item includes procurement and installation of the new or salvaged sign structure with panels, lamps, isolation transformer, L-867D base can with steel cover, hubs, gasket, bolting hardware, sign, ID tag and marker, ground rod with test results, connector kit, tether, local on/off switch, cable tag with all testing, terminations and all incidentals required to provide a complete and operational system. In addition, this includes installation of concrete foundation with reinforcement bars. Where signs are installed on existing pavement, this includes cutting into the existing pavement as shown in the contract documents. Measurement for this item will be per each sign, installed complete and accepted by the RPR.

125-4.6 This item provides for the procurement and installation of a new style E, current driven LED REIL unit, complete and accepted by the RPR. Incidental to this item is the base can, interconnecting conduit, isolation transformer, control cabling, foundation, and all other associated equipment required for a complete and accepted system. Measurement for this item will be per each, installed complete and accepted by the RPR.

BASIS OF PAYMENT

125-5.1 Payment for this item will be made at the contract unit price per each completed and accepted light assembly, which constitutes full compensation for furnishing all materials, for preparing and placing these materials, and for all labor, supervision, equipment, tools and incidentals necessary to complete this item. Unsuitable materials removed must be disposed of off-site by the Contractor in accordance with local laws and regulations. All other materials removed must be hauled separately to the EMMS, unless otherwise directed by the RPR. The cost of removing and disposing of the material will not constitute a pay item and will be considered incidental to installation.

125-5.2 Payment for this item will be made at the contract unit price per each, which constitutes full compensation for furnishing all materials, for preparing and placing these materials, and for all labor, supervision, equipment, tools and incidentals necessary to complete this item. No separate payment will be made for the various size and type of signs installed.

Payment will be made under:

Item L-125-5.1	Install New L-861T(L) Elevated Taxiway Edge Light on New L867B Base Can in Turf, per Each
Item L-125-5.2	Install New L-862~~1~~(L) Elevated Runway Edge Light on New L867B Base Can in Turf, per Each
Item L-125-5.3	Install New L-862~~1~~E(L) Elevated Runway Threshold End Light on Existing Base Can, per Each
Item L-125-5.4	Install New L-862~~1~~E(L) Elevated Runway Threshold End Light on New L-867B Base Can in Turf, per Each
Item L-125-5.5	Install New L-867B Base Can with Blank Cover in Turf, per Each
Item L-125-5.6	Install New 1-MOD L-858(L) Size 2, Style 2 LED Guidance Sign on New Foundation, per Each

Item L-125-5.7	Install New 2-MOD L-858(L) Size 2, Style 2 LED Guidance Sign on New Foundation, per Each
Item L-125-5.8	Install New 3-MOD L-858(L) Size 2, Style 2 LED Guidance Sign on New Foundation, per Each
Item L-125-5.9	Install New 1-MOD L-858(L) Size 4, Style ~~3~~2 LED Guidance Sign on New Foundation, per Each
Item L-125-5.10	Install New REIL Unit, per Each
Item L-125-5.11	**Install New 4-MOD L-858(L) Size 2, Style 2 LED Guidance Sign on New Foundation, per Each**
Item L-125-5.12	**Install New 2-MOD L-858(L) Size 2, Style 3 LED Guidance Sign on New Foundation, per Each**
Item L-125-5.13	**Install New 3-MOD L-858(L) Size 2, Style 3 LED Guidance Sign on New Foundation, per Each**

REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

Advisory Circulars (AC)

AC 150/5340-18	Standards for Airport Sign Systems
AC 150/5340-26	Maintenance of Airport Visual Aid Facilities
AC 150/5340-30	Design and Installation Details for Airport Visual Aids
AC 150/5345-5	Circuit Selector Switch
AC 150/5345-7	Specification for L-824 Underground Electrical Cable for Airport Lighting Circuits
AC 150/5345-26	Specification for L-823 Plug and Receptacle, Cable Connectors
AC 150/5345-28	Precision Approach Path Indicator (PAPI) Systems
AC 150/5345-39	Specification for L-853, Runway and Taxiway Retroreflective Markers
AC 150/5345-42	Specification for Airport Light Bases, Transformer Housings, Junction Boxes, and Accessories
AC 150/5345-44	Specification for Runway and Taxiway Signs
AC 150/5345-46	Specification for Runway and Taxiway Light Fixtures
AC 150/5345-47	Specification for Series to Series Isolation Transformers for Airport Lighting Systems
AC 150/5345-51	Specification for Discharge-Type Flashing Light Equipment
AC 150/5345-53	Airport Lighting Equipment Certification Program

Engineering Brief (EB)

EB No. 67	Light Sources Other than Incandescent and Xenon for Airport and Obstruction Lighting Fixtures

END OF ITEM L-125

Contractor Questions
Addendum No. 4

To: All Plan Holders

Project: Taxiway Rehabilitation and Electrical Improvements

Airport: Texas Gulf Coast Regional Airport

KSA Project No.: 103006

Date: Wednesday October 15, 2025

Client Project No.: TxDOT CSJ No. 2612ANGLE

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1. Question: The bid item associated with the replacement of the rotating beacon does not include the type of beacon, and the specification only states that the beacon shall be medium intensity. Please confirm that this is an L-801A(L) beacon.

   Response: This will be an L-801A(L) Beacon per the contract drawings.

2. Question: The bid for has a pay item for 3 each L-807 primary wind cones. Drawings show 1 L-807, and 2 L-806 wind cones. Are the different wind cones to be included in the same bid item?

   Response: All three wind cones will be L-807. Applicable revisions included with this addendum.

3. Question: Specifications call for 2 piece CEC Lock washers. The CEC Lock Washers are typically only used for inset lights. Are Lock Washers required for elevated lights and bases with blank covers?

   Response: Lock washers will be required for elevated lights and bases with blank covers.

4. Question: Installation detail for the Style A PAPI sheet EL508 is showing both L867B and L867D components. Which is proper base, Size B or D, that shall be provided? Will the bases require additional hubs between bases as shown for the Style B PAPI on sheet EL507?

   Response: L-867D cans shall be used for PAPI, and yes (2) conduits shall be run between PAPIs as shown on 1/EL507.

5. Question: The scope of the project states that MIRLs will be replaced with HIRLs. However, the edge lights and threshold lights in the bid form, drawings fixture schedules and specifications are MIRLs: L861/L861E. If the intent of the project is for fixtures to be HIRLs, should fixtures be L862/L862E?

   Response: Runway edge lights and threshold lights have been updated to L-862(L) / L-862E(L).

6. Question: Please verify the units associated with Bid Schedule No. 1, item 1.24, and Bid Schedule No. 2, item A2.07. The bid items are related to asphalt stabilized base course, yet the units on the bid form are shown as “SY”, whereas on other similar bid items the units are “TON”.

   Response: The correct unit for these two pay items is “TON”. The units have been updated in the revised bid form included with this addendum.