# ADDENDUM NO. 1 COVER SHEET

JUNE 4, 2025

#### TXDOT AVIATION DIVISION AIRFIELD LIGHTING AND REMARKING at NORTH TEXAS REGIONAL AIRPORT (GYI) DENISON, TX

**TXDOT PROJECT NUMBER 2501DENSN** 

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TOTAL NUMBER OF PAGES	21
(INCLUDING THIS COVER)	

DATE: June 4, 2025

# ADDENDUM NO. 1

### TXDOT AVIATION DIVISION AIRFIELD LIGHTING AND REMARKING at NORTH TEXAS REGIONAL AIRPORT (GYI) DENISON, TX

### **TXDOT PROJECT NUMBER 2501DENSN**

#### TO: All Plan-holders of Record

The following addendum items supplement, clarify, modify, change, replace, delete from or add to, the requirements of the contract documents for this project. The articles contained in the addendum take precedence over the requirements of the previously published contract documents. Where any article of the contract specifications or any detail of the contract drawings is modified or any paragraph, subparagraph or clause thereof is modified or deleted by the articles contained in this addendum, the unaltered provisions of that article, paragraph, subparagraph or clause shall remain in effect.

PREPARED BY: Woolpert, Inc. 11750 Katy Freeway, Suite 1260 Houston, TX 77079

CERTIFIED BY:

Sebastian De Castro

## ADDENDUM BEGINS

#### **BID FORM REVISIONS**

- Bid Form Revision: Removed L-101a and L-101b from the project. Justification: Airport already has an updated beacon.
- Bid Form Revision: Revise quantity for Item L-125a from 171 to read 257. Justification: The number of removals from soil was updated.
- Bid Form Revision: Revise quantity for Item L-125b from 226 to read 140. Justification: The number of removals from pavement was updated.

#### **TECHINCAL SPECIFICATION REVISIONS**

- Technical Specifications Revision: Specification L-101 Airport Rotating Beacons, delete specification in its entirety. Justification: The beacon installation is no longer part of the scope of this project.

### **CONSTRUCTION DRAWING UPDATES**

 Sheet Title.: SHEET INDEX AND SUMMARY OF APPROXIMATE QUANTITIES Sheet No.: 2 Revision: Removed L-101a and L-101b from the project, and revise items L-125a and L-125b as shown in the bid proposal. Revise Item L-109b to read ""Install L-829 Constant Current Regulator, 2.5KW, Ferroresonant Type with IRMS and Input Monitoring, Complete" Instification: The Airport has a newer beacon that does not need to be replaced. Items L-125a and L-125b

Justification: The Airport has a newer beacon that does not need to be replaced. Items L-125a and L-125b were revised to reflect actual removals. Item L-109b description was revised to show the correct CCR size.

- Sheet Title.: ELECTRICAL LEGEND AND GENERAL NOTES Sheet No.: 50 Revision: Revise note 26 to read "THE CONTRACTOR SHALL MEASURE THE INSULATION RESISTANCE OF ALL AIRFIELD CIRCUITS PRIOR TO STARTING ANY ELECTRICAL WORK." Justification: A megohmmeter will not be provided to the Airport by the Contractor.
- Sheet Title.: ELECTRICAL GEOMETRY PLAN ELECTRICAL VAULT AND ATCT Sheet No.: 67 Revision: Delete the note that reads "REMOVE EXISTING ROTATING BEACON LOCATED ON TOP OF ATCT. INSTALL NEW L-801A LED BEACON IN SAME LOCATION. RE-TERMINATE EXISTING WIRE TO NEW BEACON." Justification: A new beacon will not be installed during the project.

### **CLARIFICATIONS / RFI RESPONSES**

- 1. I think the days allotted on the job are unrealistic. Procurement of materials is running 10 weeks minimum. The performance of the work should be more like 120 days.
  - a. We recommend mobilizing simultaneous crews and procuring materials as early as possible.
- 2. The 4.5" trench in pavement seems a little tight to get P-610 concrete around the conduit and fill the 3" void under the pipe properly. Would a 6" to 8"trench be better? It would be easier to obtain equipment to do this size trench?
  - a. A wider trench would be considered by the Engineer if the Contractor's means and methods dictated it. The Contractor shall submit their alternate method to the Engineer for approval.
- 3. Are there bore logs available to better identify the existing pavement make up and thickness?a. Boring logs will become available upon selection.
- Are there as-builts available to better identify the existing pavement make up and thickness?
   a. No
- 5. In some of the concrete areas would it be permissible to do a 4" x4" kerf cut and short base (pancake) cans?a. Shallow base cans will not be acceptable for the project.
- 6. Plan sheet G004 Safety Note 4 states to use the airports lighted X's for Runway Closures. Plans sheet G055 state's that the contractor will provide lighted X's. Which note prevails?
  - a. Please provide lighted X's. Note G004 will be updated in the addendum.
- 7. Plan Sheet G072 is the Environmental Exhibit, it shows to use excelsior logs around the inlets, but there is no indication of how many or where the inlets are located. Trenching for conduit and drilling holes for light bases will be about the only soil that is disturbed, Please advise to as what is expected for erosion control.
  - a. Trenching for conduit and drilling light bases will constitute the majority of the disturbed soil. As such, the erosion control requirements are expected to be limited in scope. While Plan Sheet G072 provides standard details (e.g., use of excelsior logs around inlets), the plans do not specify exact quantities or inlet locations, as these may vary slightly based on final field conditions. It is the contractor's responsibility to develop and submit a site-specific erosion control plan prior to the issuance of Notice to Proceed, in accordance with TxDOT Aviation Division specifications and FAA AC 150/5370-10 standards. This plan should:
    - i. Identify locations of inlets and disturbed areas.
    - ii. Propose erosion control measures appropriate to the scope of disturbance.
    - iii. Be reviewed and approved by the Engineer and Airport Sponsor prior to mobilization.
- 8. On the C1XX pages it shows the electrical demo for the lights, signs and PAPI's and it shows either conduit or cable between them however does not have a note referring to the conduit/cable. Is the contractor to remove the existing conduit/cable and if so can a bid item please be provided?
  - a. See notes 9 thru 14 on Sheets C101 thru C121 for demolition guidance. Removal of abandoned cable is considered incidental to the various bid items. The cable will become the property of the Contractor upon removal.
- 9. Bid item L-115a is removal of 4ea Junction Boxes however they are not shown on the C1XX pages. Can the location of the 4ea junction box removals please be shown?
  - a. The item is a place holder for any unidentified junction boxes that are encountered and need to be removed during the project.
- 10. The scale for the C1XX pages and E2XX pages show 1"=50' on the plans however the scale appears to actually be 1"=100'. Please confirm the scale.
  - a. The scale bar on the sheets is correct. The plans are printed as an 11"x17" half size sheet. Thus if scaling in a pdf program, like Bluebeam, the scale would need to be set to 1"=100' to attain the

correct dimensions.

- 11. Are there any existing buried electrical cables or utilities within the proposed trenching and excavation areas? If so, will as-built or utility maps be provided to avoid conflicts during electrical removals?
  - a. The project includes electrical removals and trenching for new conduits. Contractors are expected to exercise caution and coordinate utility locating prior to excavation.
- 12. Are there any updates to the quantities or materials that bidders should be aware of?
  - a. The airport beacon will be removed from the project, as the airport already has a new one. The number of runway and taxiway light removals has been updated.
- 13. Are federal wage rates required for this project?
  - a. Yes. This project uses IIJA funds and is therefore subject to Davis-Bacon federal wage requirements. Certified payrolls must be submitted by contractors and all subcontractors.
- 14. Is a field office required for this project?
  - a. No. A field office is not required, and it is not included in the project specifications. Contractors should review the mobilization section for any related details.
- 15. Will contractors need to maintain communication with the airport tower during construction?
  - a. Yes. The contractor must maintain communication with the control tower during airfield operations, especially when working near active taxiways and runways. This is required due to the airport remaining operational during construction.
- 16. How should contractors arrange access to water on-site? Do they need to contact the city or county for a meter?
  - a. Contractors must set up an account and request a meter. Further coordination with the airfield manager is recommended. Multiple fire hydrants are available nearby, so water availability should not be an issue.
- 17. Bid item L-125a is the removal of Runway Edge Lights in soil. The bid item quantity is 171, but our field count identified 263 lights. Please verify the quantity.
  - a. The quantity will be revised in Addendum No. 1.
- 18. Bid item L-125b covers the removal of Runway and Taxiway edge lights located in existing pavement. The bid quantity is 226, but our count was 133. Please verify the quantity.
  - a. The quantity will be revised in Addendum No. 1.
- 19. The specified CCR for bid item L-109a (L-829 4kW Constant Current Regulator) appears to differ in size from the CCRs shown on Sheet E255, Page 73. Please clarify the required CCR sizes.
  - a. The CCRs will be 2.5KW as shown on sheet E255. The bid proposal will be updated with the change.
- 20. Bid item L-110c, which refers to the install of 2W-2" SCH 40 PVC concrete encased conduit in existing pavement, is not shown on the plans. Please clarify whether this bid item is represented in the drawings.
  - a. The 2-2" PVC Conduit are small sections where we are trenching outside of the pavement, in the soil and then turning, perpendicular to the pavement edge and trenching through the pavement to the new light location. We will install 2 conduits in this situation in the pavement where each conduit will be installed to the adjacent lights. An example of this can be seen on sheet E200 on the south side of Taxiway A6. See note 7 on this sheet for more information.
- 21. The following conduit runs appear to pass through existing pavement. Please confirm whether these sections are required to be directionally drilled: Pages 53 & 61: Between lights STA: 126+84.84 & STA: 126+89.44; Page 57: Between lights STA: 176+33.28 & STA: 180+24.99; Page 58: Between lights STA: 188+08.40 & STA: 190+04.26.

a. Directionally drilling will be required under pavements that are used by aircraft at the Airport. Closed taxiways will not require borings, conduit can be installed in the existing pavement. For lights installed between STA: 126+84.84 & STA: 126+89.44, boring is not required. For lights installed between STA: 176+33.28 & STA: 180+24.99, boring is not required. For lights installed between STA: 188+08.40 & STA: 190+04.26, boring is not required on the west side of RW 18L/36R but will be required on the east side as shown on the plans.

## ADDENDUM ENDS

**109-6.3** The quantity of equipment to be paid for under this item shall consist of all equipment installed, connected and accepted as a complete unit ready for operation within an existing vault or prefabricated metal housing.

#### Revise Section 109-7.1 as follows:

#### **BASIS OF PAYMENT**

**109-7.1** Payment will be made at the contract unit price for each completed and accepted vault or prefabricated metal housing equipment installation. 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 the item.

Payment will be made under:

Item L-109-7.1	Construction of Airport Transformer Vault in Place - per unit
Item L-109-7.2	Installation of Airport Transformer Vault Equipment in Place - per unit
Item L-109-7.3	Construction of [ Prefabricated Metal Housing ] [ Prefabricated Concrete Building ] and Foundation in Place - per unit
Item L-109-7.4	Installation of Equipment with in existing vault or prefabricated metal housing in Place - per unit

**109-7.1** Payment will be made at the contract unit price for each completed and accepted vault or prefabricated metal housing equipment installation. 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 the item.

Payment will be made under:

Item L-109a	Remove Constant Current Regulator, Complete – per each
Item L-109b	Install L-829 Constant Current Regulator, 2.5KW, Ferroresonant Type with IRMS and Input Monitoring, Complete – per each
Item L-109c	Install L-829 Constant Current Regulator, 7.5KW, Ferroresonant Type with IRMS and Input Monitoring, Complete – per each
Item L-109d	Install L-829 Constant Current Regulator, 10KW, Ferroresonant Type with IRMS and Input Monitoring, Complete – per each
Item L-109e	Install S-1 Cutout in Lockable NEMA-1 Enclosure, Complete – per each
Item L-109f	Install L-854 Radio Controller in Existing Vault, Complete – per each
Item L-109g	Install Airport Lighting Control and Monitoring System (ALCMS), Complete – per lump sum

SHEET NO.	SHEET I.D.	SHEET DESCRIPTION
1	G001	COVER SHEET
2	G002	SHEET INDEX AND SUMMARY OF APPROXIMATE QUANTITIES
3	G003	GENERAL NOTES
4	G004	
5	G005 G006	MASTER LEGEND & ABBREVIATIONS SURVEY CONTROL PLAN
7	G050	CONSTRUCTION SAFETY NOTES
8	G051	CONSTRUCTION SAFETY OVERALL PHASING PLAN
9	G052	CONSTRUCTION SAFETY PLAN - PHASE 1 & 2
10	G053	CONSTRUCTION SAFETY PLAN - PHASE 3
11	G054	CONSTRUCTION SAFETY PLAN - PHASE 4
12	G055	CONSTRUCTION SAFETY DETAILS
13	G070 G071	EROSION CONTROL NOTES - SHEET 1 OF 2 EROSION CONTROL NOTES - SHEET 2 OF 2
15	G071 G072	
16	C101	DEMOLITION PLAN - STA. 93+00 TO STA. 106+00, RUNWAY 18L/36R - OFFSET 300' LT TO 600' RT
17	C102	DEMOLITION PLAN - STA. 106+00 TO STA. 119+00, RUNWAY 18L/36R - OFFSET 300' LT TO 600' RT
18	C103	DEMOLITION PLAN - STA. 119+00 TO STA. 132+00, RUNWAY 18L/36R - OFFSET 300' LT TO 600' RT
19	C104	DEMOLITION PLAN - STA. 132+00 TO STA. 145+00, RUNWAY 18L/36R - OFFSET 300' LT TO 600' RT
20	C105	DEMOLITION PLAN - STA. 145+00 TO STA. 158+00, RUNWAY 18L/36R - OFFSET 300' LT TO 600' RT
21	C106	DEMOLITION PLAN - STA. 158+00 TO STA. 171+00, RUNWAY 18L/36R - OFFSET 300' LT TO 600' RT
22	C107 C108	DEMOLITION PLAN - STA. 171+00 TO STA. 184+00, RUNWAY 18L/36R - OFFSET 300' LT TO 600' RT DEMOLITION PLAN - STA. 184+00 TO STA. 197+00, RUNWAY 18L/36R - OFFSET 300' LT TO 600' RT
23	C108 C109	DEMOLITION PLAN - STA. 164+00 TO STA. 19/+00, RUNWAY 16L/36R - OFFSET 500 LT TO 500 RT DEMOLITION PLAN - STA. 97+00 TO STA. 106+00, RUNWAY 18L/36R - OFFSET 500' RT TO 1500' RT
25	C109	DEMOLITION PLAN - STA. 106+00 TO STA. 119+00, RUNWAY 18L/36R - OFFSET 600' RT TO 1500' RT
26	C111	DEMOLITION PLAN - STA. 119+00 TO STA. 132+00, RUNWAY 18L/36R - OFFSET 600' RT TO 1500' RT
27	C112	DEMOLITION PLAN - STA. 132+00 TO STA. 145+00, RUNWAY 18L/36R - OFFSET 600' RT TO 1500' RT
28	C113	DEMOLITION PLAN - STA. 145+00 TO STA. 158+00, RUNWAY 18L/36R - OFFSET 600' RT TO 1500' RT
29	C114	DEMOLITION PLAN - STA. 158+00 TO STA. 171+00, RUNWAY 18L/36R - OFFSET 600' RT TO 1500' RT
30	C115	DEMOLITION PLAN - STA. 171+00 TO STA. 184+00, RUNWAY 18L/36R - OFFSET 600' RT TO 1500' RT
31	C116	DEMOLITION PLAN - STA. 184+00 TO STA. 197+00, RUNWAY 18L/36R - OFFSET 300' RT TO 1500' RT
32	C117 C118	DEMOLITION PLAN - STA. 119+00 TO STA. 132+00, RUNWAY 18L/36R - OFFSET 1500' RT TO 2400' RT DEMOLITION PLAN - STA. 132+00 TO STA. 145+00, RUNWAY 18L/36R - OFFSET 1500' RT TO 2400' RT
33	C118 C119	DEMOLITION PLAN - STA. 152+00 TO STA. 145+00, RUNWAY 16L/30R - OFFSET 1500 RT TO 2400 RT
35	C120	DEMOLITION PLAN - STA. 158+00 TO STA. 171+00, RUNWAY 14L/36R - OFFSET 1500' RT TO 2400' RT
36	C121	DEMOLITION PLAN - STA. 171+00 TO STA. 184+00, RUNWAY 18L/36R - OFFSET 1500' RT TO 2400' RT
37	C701	PAVEMENT MARKING PLAN - STA. 100+00 TO STA. 149+50, RUNWAY 18L/36R
38	C702	PAVEMENT MARKING PLAN - STA. 149+50 TO STA. 190+00, RUNWAY 18L/36R
39	C703	PAVEMENT MARKING PLAN - TAXIWAY A AND APRON
40	C704	PAVEMENT MARKING PLAN - TAXIWAY A AND APRON
41	C705 C706	PAVEMENT MARKING PLAN - GENERAL APRON
42	C706 C707	MARKING POINT TABLE, POINTS 1 THRU 109 - STA. 100+00 TO STA. 149+50, RUNWAY 18L/36R MARKING POINT TABLE, POINTS 110 THRU 208 - STA. 149+50 TO STA. 191+03.35, RUNWAY 18L/36R
44	C708	MARKING POINT TABLE, POINTS 209 THRU 262 - STA. 100+63.20 TO STA. 142+29.31, RUNWAY 18L/36R
45	C709	MARKING POINT TABLE, POINTS 263 THRU 380 - STA. 154+19.56 TO STA. 191+24.20, RUNWAY 18L/36R
46	C710	MARKING POINT TABLE, POINTS 381 THRU 513 - STA. 124+37.04 TO STA. 173+75.66, RUNWAY 18L/36R
47	C751	PAVEMENT MARKING DETAILS - SHEET 1 OF 3
48	C752	PAVEMENT MARKING DETAILS - SHEET 2 OF 3
49	C753	PAVEMENT MARKING DETAILS - SHEET 3 OF 3
50	E001	ELECTRICAL LEGEND AND GENERAL NOTES ELECTRICAL GEOMETRY PLAN - STA. 93+00 TO 106+00 - RUNWAY 18L/36R, OFFSET 300' LT TO 600' RT
51 52	E200 E201	ELECTRICAL GEOMETRY PLAN - STA. 93400 TO 106400 - RUNWAY 18L/36R, OFFSET 300 LT TO 600 RT ELECTRICAL GEOMETRY PLAN - STA. 106400 TO 119400 - RUNWAY 18L/36R, OFFSET 300 LT TO 600 RT
53	E201	ELECTRICAL GEOMETRY PLAN - STA. 100100 TO 113100 TROINWAT 162/301, OT SET 300 ET 10 000 RT
54	E203	ELECTRICAL GEOMETRY PLAN - STA. 132+00 TO 145+00 - RUNWAY 18L/36R, OFFSET 300' LT TO 600' RT
55	E204	ELECTRICAL GEOMETRY PLAN - STA. 145+00 TO 158+00 - RUNWAY 18L/36R, OFFSET 300' LT TO 600' RT
56	E205	ELECTRICAL GEOMETRY PLAN - STA. 158+00 TO 171+00 - RUNWAY 18L/36R, OFFSET 300' LT TO 600' RT
57	E206	ELECTRICAL GEOMETRY PLAN - STA. 171+00 TO 184+00 - RUNWAY 18L/36R, OFFSET 300' LT TO 600' RT
58	E207	ELECTRICAL GEOMETRY PLAN - STA. 184+00 TO 197+00 - RUNWAY 18L/36R, OFFSET 300' LT TO 600' RT
59	E208	ELECTRICAL GEOMETRY PLAN - STA. 93+00 TO 106+00 - RUNWAY 18L/36R, OFFSET 600' RT TO 1500' RT
60	E209 E210	ELECTRICAL GEOMETRY PLAN - STA. 106+00 TO 119+00 - RUNWAY 18L/36R, OFFSET 600' RT TO 1500' RT ELECTRICAL GEOMETRY PLAN - STA. 119+00 TO 132+00 - RUNWAY 18L/36R, OFFSET 600' RT TO 1500' RT
62	E210 E211	ELECTRICAL GEOMETRY PLAN - STA. 119+00 TO 132+00 - RUNWAT 182/30R, OFFSET 600 RT TO 1300 RT ELECTRICAL GEOMETRY PLAN - STA. 132+00 TO 145+00 - RUNWAY 18L/36R, OFFSET 600' RT TO 1500' RT
63	E211	ELECTRICAL GEOMETRY PLAN - STA. 145+00 TO 158+00 - RUNWAY 18L/36R, OFFSET 600' RT TO 1500' RT
64	E213	ELECTRICAL GEOMETRY PLAN - STA. 158+00 TO 171+00 - RUNWAY 18L/36R, OFFSET 600' RT TO 1500' RT
65	E214	ELECTRICAL GEOMETRY PLAN - STA. 171+00 TO 184+00 - RUNWAY 18L/36R, OFFSET 600' RT TO 1500' RT
66	E215	ELECTRICAL GEOMETRY PLAN - STA. 184+00 TO 197+00 - RUNWAY 18L/36R, OFFSET 600' RT TO 1500' RT
67	E216	ELECTRICAL GEOMETRY PLAN ELECTRICAL VAULT AND ATCT
68	E250	ELECTRICAL DETAILS - SHEET 1 OF 8
69	E251	ELECTRICAL DETAILS - SHEET 2 OF 8
70	E252 E253	ELECTRICAL DETAILS - SHEET 3 OF 8 ELECTRICAL DETAILS - SHEET 4 OF 8
71	E253 E254	ELECTRICAL DETAILS - SHEET 4 OF 8 ELECTRICAL DETAILS - SHEET 5 OF 6
72	E255	ELECTRICAL DETAILS - SHEET 6 OF 8

			SUMMARY OF A	PPROXIMATE QUANTITIES					
						SCHE	DULE I		
ITEM NO.			ITEM DESCRIPTION		UNITS	ESTIMATE	AS BUILT		
C-105a	MOBILIZ	ATION (10% MAXI	MUM)		LS	1			
P-620a	REFLEC	TORIZED PAVEME	ENT MARKING (WHITE & YELLOW - RWY, TWY A, B, E, F, API	RON)	SF	200,000			
P-620b	NON-RE	FLECTORIZED PA	VEMENT MARKING (BLACK - RWY, TWY A, B, E, F, APRON)		SF	131,000			
P-620c	EXISTIN	G PAVEMENT MAI	RKING REMOVAL		SF	380,650			
	1			Â.					
L-107a	REMOVI	E EXISTING PRIMA	ARY WIND CONE AND SEGMENTED CIRCLE MARKER SYSTE	EM, COMPLETE	EA				
L-107b	INSTALL	L-806 LED WIND	CONE ON NEW FOUNDATION, COMPLETE		EA	2			
L-107c	INSTALL	L-807 LED WIND	CONE ON NEW FOUNDATION, COMPLETE		EA	1			
L-107d	INSTALL	SEGMENTED CIR	RCLE MARKER SYSTEM, COMPLETE		EA	1			
L-108a	INSTALL	#8 AWG, L-824C,	5000V, WIRE		LF	95,000			
L-108b	INSTALL	#6 AWG, BARE C	OPPER COUNTERPOISE INCLUDING GROUND RODS AND T	ERMINATIONS	LF	50,000			
L-109a	REMOVI	E CONSTANT CUR	RENT REGULATOR, COMPLETE	~~~~~~	EA	4			
L-109b	INSTALL	L-829 CONSTANT	CURRENT REGULATOR, 2.5KW, FERRORESONANT TYPE	WITH IRMS AND INPUT MONITORING, COMPLETE	EA	2			
L-109c	INSTALL	L-829 CONSTANT	CURRENT REGULATOR, 7.5KW, FERRORESONANT TYPE	WITH IRMS AND INPUT MONITORING, COMPLETE	EA	1			
L-109d	INSTALL	L-829 CONSTANT	CURRENT REGULATOR, 10KW, FERRORESONANT TYPE V	VITH IRMS AND INPUT MONITORING, COMPLETE	EA	1			
L-109e	INSTALL	. S-1 CUTOUT IN L	OCKABLE NEMA-1 ENCLOSURE, COMPLETE		EA	4			
L-109f	INSTALL	L-854 RADIO COM	NTROLLER IN EXISTING VAULT, COMPLETE		LS	1			
L-109g	INSTALL	AIRFIELD LIGHTI	NG CONTROL AND MONITORING SYSTEM (ALCMS), COMPL	ETE	LS	1			
L-110a	INSTALL	1-2" SCH 40 PVC	CONDUIT DIRECT EARTH BURIED (DEB)		LF	40,000			
L-110b	INSTALL	. 1-2" SCH 40 PVC	CONDUIT CONCRETE ENCASED (CE) IN EXISTING PAVEME	NT	LF	8,750			
L-110c	INSTALL	2-2" SCH 40 PVC	CONDUIT CONCRETE ENCASED (CE) IN EXISTING PAVEME	NT	LF	675			
L-110d	INSTALL	. 1-2" SCH 40 HDPI	E CONDUIT DIRECTIONALLY BORED		LF	2,750			
L-115a	REMOVI	E L-867B JUNCTIO	N BOX, COMPLETE		EA	4			
L-115b	INSTALL	L-867E JUNCTION	N BOX, COMPLETE		EA	7			
L-125a	REMOVI	E RUNWAY/TAXIW	AY EDGE LIGHT IN SOIL, COMPLETE		EA	2 257			
L-125b	REMOVI	E RUNWAY/TAXIW	AY EDGE LIGHT IN EXISTING PAVEMENT, COMPLETE		EA	140			
L-125c	INSTALL	L-861 LED RUNW	AY EDGE LIGHT, BASE MOUNTED, IN SOIL, COMPLETE		EA	75			
L-125d	INSTALL	L-861 LED RUNW	AY EDGE LIGHT, BASE MOUNTED, IN EXISTING PAVEMENT	, COMPLETE	EA	9		<b></b>	
L-125e	INSTALL	L-861E LED RUN	WAY THRESHOLD LIGHT, BASE MOUNTED, IN EXISTING PA	VEMENT, COMPLETE	EA	16		ISSUEI	D FOR BID
L-125f	INSTALL	L-861T LED TAXI	WAY EDGE LIGHT, BASE MOUNTED, IN SOIL, COMPLETE		EA	205		المحجم الم	OF TEL
L-125g	INSTALL	L-861T LED TAXI	WAY EDGE LIGHT, BASE MOUNTED, IN EXISTING PAVEMEN	IT, COMPLETE	EA	123		STALL.	A
L-125h	REMOVI	E L-858 GUIDANCE	SIGN AND CONCRETE FOUNDATION, COMPLETE		EA	41		2.25	
L-125i	INSTALL	. L-858 LED GUIDA	NCE SIGN, SIZE 1, 2 MODULE, COMPLETE		EA	11		1	· * 3
L-125j	INSTALL	L-858 LED GUIDA	NCE SIGN, SIZE 1, 3 MODULE, COMPLETE		EA	17		ZACHARY C	. AMBARIANTZ
L-125k	INSTALL	L-858 LED GUIDA	NCE SIGN, SIZE 1, 4 MODULE, COMPLETE		EA	4		14	6546
L-125I INSTALL L-858 LED RUNWAY DISTANCE REMAINING SIGN, SIZE 4, COMPLETE				EA	8			04/2025	
L-125m REMOVE VASI SYSTEM, COMPLETE					EA	2		L'Scie	ENSLENG
L-125n	INSTALL	L-880 LED PAPI S	SYSTEM, COMPLETE		EA	2			
					•		]	ZACHARY C. AMBARIAN	Z P.E. 146546 06/04/2025
								FOR AND ON BEHA	LF OF WOOLPERT, INC.
Z.C.A.			ISSUE RECORD						SHEET NAME
L.O.B.	NO. ΒΥ 1. 52.102.	. <b>G.</b> 12/13/2024	DESCRIPTION ISSUED FOR BID	-		0			G002
C.L.G.	2 Z.C.			AIRFIELD LIGHTING AND REM	ARKING	SUM	MARY OF APPR	ROXIMATE QUANTITIES	SHEET NO.
S.D.C.				_		STATE PROJ		WOOLPERT PROJ. NO.	2 <sub>of</sub> 75
3.2.0.						TXDOT CS	J NO.: 2501DENSN	10018211.01	20,70





NORTH TEXAS Regional Airport

			SUMMARY OF	APPROXIMATE QUANTITIES					
ITEM NO.			ITEM DESCRIPTI	ON .	UNITS	SCHE	DULE I		
TENINO.					UNITS	ESTIMATE	AS BUILT		
C-105a	MOBILIZA	ION (10% MAXIN	/UM)		LS	1			
P-620a	REFLECT	RIZED PAVEME	NT MARKING (WHITE & YELLOW - RWY, TWY A, B, E, F,	APRON)	SF	200,000			
P-620b	NON-REFI	ECTORIZED PA	/EMENT MARKING (BLACK - RWY, TWY A, B, E, F, APRO	N)	SF	131,000			
P-620c	EXISTING	PAVEMENT MAR	KING REMOVAL	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	SF	380,650			
L-107a	REMOVE	EXISTING PRIMA	RY WIND CONE AND SEGMENTED CIRCLE MARKER SY	STEM, COMPLETE	EA				
L-107b	INSTALL L	806 LED WIND C	CONE ON NEW FOUNDATION, COMPLETE		EA	2			
L-107c	INSTALL L	807 LED WIND C	CONE ON NEW FOUNDATION, COMPLETE		EA	1			
L-107d	INSTALL S	EGMENTED CIR	CLE MARKER SYSTEM, COMPLETE		EA	1			
L-108a	INSTALL #	8 AWG, L-824C, 5	5000V, WIRE		LF	95,000			
L-108b	INSTALL #	6 AWG, BARE CO	OPPER COUNTERPOISE INCLUDING GROUND RODS AN	ID TERMINATIONS	LF	50,000			
L-109a	REMOVE	CONSTANT CUR	RENT REGULATOR, COMPLETE		EA	4			
L-109b	INSTALL L	829 CONSTANT	CURRENT REGULATOR, 2.5KW, FERRORESONANT TY	PE WITH IRMS AND INPUT MONITORING, COMPLETE	EA	2			
L-109c	INSTALL L	829 CONSTANT	CURRENT REGULATOR, 7.5KW, FERRORESONANT TY		EA	1			
L-109d			CURRENT REGULATOR, 10KW, FERRORESONANT TYP		EA	1			
L-109e			DCKABLE NEMA-1 ENCLOSURE, COMPLETE		EA	4			
L-109f			TROLLER IN EXISTING VAULT, COMPLETE		LS	1			
L-109g			IG CONTROL AND MONITORING SYSTEM (ALCMS), CO	NDI ETE	LS	1			
				WFLE IE					
L-110a			CONDUIT DIRECT EARTH BURIED (DEB)		LF	40,000			
L-110b			CONDUIT CONCRETE ENCASED (CE) IN EXISTING PAVI		LF	8,750			
L-110c	INSTALL 2	-2" SCH 40 PVC (	CONDUIT CONCRETE ENCASED (CE) IN EXISTING PAVI	MENT	LF	675			
L-110d	INSTALL 1	2" SCH 40 HDPE	CONDUIT DIRECTIONALLY BORED		LF	2,750			
L-115a	REMOVE	-867B JUNCTION	N BOX, COMPLETE		EA	4			
L-115b	INSTALL L	867E JUNCTION	BOX, COMPLETE		EA				
L-125a	REMOVE	RUNWAY/TAXIWA	AY EDGE LIGHT IN SOIL, COMPLETE		EA	2 257			
L-125b	REMOVE	RUNWAY/TAXIWA	AY EDGE LIGHT IN EXISTING PAVEMENT, COMPLETE		EA	140			
L-125c	INSTALL L	861 LED RUNWA	AY EDGE LIGHT, BASE MOUNTED, IN SOIL, COMPLETE		EA	75			
L-125d	INSTALL L	861 LED RUNWA	AY EDGE LIGHT, BASE MOUNTED, IN EXISTING PAVEM	ENT, COMPLETE	EA	9		ISSUED F	
L-125e	INSTALL L	861E LED RUNV	VAY THRESHOLD LIGHT, BASE MOUNTED, IN EXISTING	PAVEMENT, COMPLETE	EA	16		ISSUED F	
L-125f	INSTALL L	861T LED TAXIV	VAY EDGE LIGHT, BASE MOUNTED, IN SOIL, COMPLETI	1	EA	205		TEOF	TEL
L-125g	INSTALL L	861T LED TAXIV	VAY EDGE LIGHT, BASE MOUNTED, IN EXISTING PAVE	IENT, COMPLETE	EA	123		e stain	145
L-125h	REMOVE	-858 GUIDANCE	SIGN AND CONCRETE FOUNDATION, COMPLETE		EA	41		200	
L-125i	INSTALL L	858 LED GUIDAN	NCE SIGN, SIZE 1, 2 MODULE, COMPLETE		EA	11			*
L-125j	INSTALL L	858 LED GUIDAN	NCE SIGN, SIZE 1, 3 MODULE, COMPLETE		EA	17		ZACHARY C. A	MBARIANTZ
L-125k	INSTALL L	858 LED GUIDA	NCE SIGN, SIZE 1, 4 MODULE, COMPLETE		EA	4		1465	46
L-125I	INSTALL L	858 LED RUNWA	AY DISTANCE REMAINING SIGN, SIZE 4, COMPLETE		EA	8		06/04/2	025
L-125m	REMOVE	ASI SYSTEM, CO	OMPLETE		EA	2		CEN SOCIES	S'ENGI
L-125n	INSTALL L	-880 LED PAPI S	YSTEM, COMPLETE		EA	2		-SIONA	
L	I				I	L	·]	ZACHARY C. AMBARIANTZ	P.E. 146546 06/04/2
								FOR AND ON BEHALF C	F WOOLPERT, INC.
:Z.C.A.			ISSUE RECORD					-	SHEET NAM
L.O.B. 1		DATE	DESCRIPTION ISSUED FOR BID					NDEX AND	G002
<u></u> /2				AIRFIELD LIGHTING AND REM	) REMARKING SUMMARY OF		MARY OF APPR	OXIMATE QUANTITIES	
C.L.G.	_			_			NO		SHEET NO
:S.D.C.				<u> </u>		STATE PROJ	. NO. J NO.: 2501DENSN	WOOLPERT PROJ. NO. 10018211.01	2 <sub>of</sub> 75

MASTER ELECTRICAL LEGEND								
	EXISTING	NEW	DEMOLITION	ADJUST				
L-850C R/W EDGE IN PAVEMENT LIGHT	Ø	Φ	0	_				
L-861 R/W EDGE ELEVATED LIGHT	Ø	۵	8	_				
L-861E R/W END ELEVATED LIGHT	Ø	۵	8	-				
L-852G R/W IN-PAVEMENT GUARD LIGHT	_	٥	_	-				
L-804 R/W ELEVATED GUARD LIGHT	<u>v</u>	<del>i s</del>	_	-				
R/W MALSR LIGHT	٨	0	8	Ô				
L-861T T/W EDGE LIGHT	۵	۵	Ø	Ø				
L-853 RETRO-REFLECTIVE MARKER	Ô	0	8					
L-853 RETRO-REFLECTIVE MARKER ON J-BOX	_	Ø	_	_				
RUNWAY/TAXIWAY SIGN	[•	•	M	_				
L-867 JUNCTION BOX 3	0	Ø	Ø	0				
HAND HOLE	÷	ŧ	—	Θ				
ELECTRICAL MANHOLE	· EMH	• емн	—	Емн				
2" ELECTRICAL CONDUIT (DEB)			—	_				
2" ELECTRICAL CONDUIT (CE)			—	_				
2" ELECTRICAL CONDUIT (CLSM)			—					
ELECTRICAL DUCT BANK (DEB) (2)			—	—				
ELECTRICAL DUCT BANK (CE)				_				
L-824C CABLE (HASH MARKS INDICATE THE NUMBER OF CONDUCTORS)	2	<i>"</i> (3)	_					

ABBREVIATIONS LEGEND (NOT ALL ABBREVIATIONS ARE USED)						
 A	-	AMP	OHT	-	OVERHEAD TELEPHONE	
AFF	-	ABOVE FINISHED FLOOR	Ρ	-	PHASE	
AFG	-	ABOVE FINISHED GRADE	PAPI	-	PRECISION APPROACH PATH INDICATOR	
ATS	-	AUTOMATIC TRANSFER SWITCH	PT	-	POINT OF TANGENCY	
BC	-	BARE COPPER	PVC	-	POLYVINYL CHLORIDE CONDUIT	
С	-	CONDUIT	REIL	-	RUNWAY END INDICATOR LIGHT	
CCR	-	CONSTANT CURRENT REGULATOR	RGL	-	RUNWAY GUARD LIGHT	
CE	-	CONCRETE ENCASED	RGS	-	RIGID GALVANIZED STEEL CONDUIT	
CKT.	-	CIRCUIT	RE	-	REFER TO	
CLSM	-	CONTROLLED LOW STRENGTH MATERIAL	RW	-	RUNWAY	
COMM.	-	COMMUNICATION	S	-	SEWER	
CONC.	-	CONCRETE	SCHD.	-	SCHEDULE	
DEB	-	DIRECT EARTH BURIED	SHT.	-	SHEET	
ELEC.	-	ELECTRIC/ELECTRICAL	STA.	-	STATION	
EXIST., EX.	-	EXISTING	TDZ	-	TOUCH DOWN ZONE	
FAA	-	FEDERAL AVIATION ADMINISTRATION	TW	-	TAXIWAY	
F.O.	-	FIBER OPTIC	TYP	-	TYPICAL	
GFI	-	GROUND FAULT INTERRUPTING	UE, UGE	-	UNDERGROUND ELECTRICAL	
GND., G	-	GROUND	U.G.	-	UNDERGROUND	
HDPE	-	HIGH-DENSITY POLYETHYLENE	UON	-	UNLESS OTHERWISE NOTED	
kV	-	KILOVOLTS	UT	-	UNDERGROUND TELEPHONE	
kW	-	KILOWATTS	V	-	VOLT	
MALSR	-	MEDIUM INTENSITY APPROACH LIGHT SYSTEM WITH RUNWAY ALIGNMENT INDICATOR LIGHTS	VA	-	VOLT AMP	
MH.		MANHOLE	W	-	WATT, WIRE	
N.I.C.	-	NOT IN CONTRACT	W/	-	WITH	
NO.		NUMBER	WP	-	WEATHERPROOF	
OHP	-	OVERHEAD POWER	XFMR	-	TRANSFORMER	

#### ELECTRICAL NOTES

- THE PROJECT PAY ITEMS PROVIDED ARE TO BE INCLUSIVE OF ALL WORK TO BE PERFORMED AS SHOWN IN THE CONTRACT DOCUMENTS. ALL WORK NOT IDENTIFIED WITH A SPECIFIC PAY ITEM IS TO BE CONSIDERED REQUIRED WORK TO COMPLETE THE PROJECT, AND IS TO BE INCIDENTAL TO THE COST OF PROJECT PAY ITEMS PROVIDED.
- WHENEVER, IN THE CONTRACT DOCUMENTS, THE WORDS "PROVIDE", "INSTALL", "FURNISH AND INSTALL", OR SIMILAR WORDS ARE USED, IT SHALL BE UNDERSTOOD THAT THE INTENT OF THE CONTRACT DOCUMENT IS TO PROVIDE FOR THE CONSTRUCTION AND COMPLETION IN EVERY DETAIL THE WORR DESCRIBED. IT IS FURTHER INTENDED THAT THE CONTRACTOR SHALL FURNISH ALL LABOR, SUPERVISION, MATERIALS, EQUIPMENT, TOOLS, TRANSPORTATION, SUPPLIES, TESTING, AND INCIDENTALS REQUIRED TO COMPLETE THE WORK IN ACCORDANCE WITH THE DRAWINGS (PLANS), SPECIFICATIONS, AND TERMS OF THE CONTRACT.
- THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL REQUIRED PERMITS, LICENSES, ETC., PRIOR TO COMMENCEMENT OF WORK. THE COST OF PERMITS, LICENSES, ETC. SHALL BE INCIDENTAL TO, AND INCLUDED IN THE BID PRICE FOR THE RESPECTIVE PAY ITEMS.
- 4. ALL DAMAGE TO UTILITIES OR EXISTING STRUCTURES FROM CONSTRUCTION ACTIVITIES SHALL BE IMMEDIATELY REPORTED TO THE RESIDENT PROJECT REPRESENTATIVE. THE RESIDENT PROJECT REPRESENTATIVE SHALL DETERMINE WHETHER REPAIR OR REPLACEMENT IS NECESSARY. ALL REPAIR METHODS SHALL BE SUBMITTED TO THE RESIDENT PROJECT REPRESENTATIVE FOR REVIEW AND APPROVAL PRIOR TO INITIATING THE WORK.
- IN NEW OR EXISTING PAVEMENT ALL CONDUITS, DUCT BANKS, BASE CANS, COUNTERPOISE, GROUND CONDUCTORS, ETC. SHALL BE INSTALLED PRIOR TO PLACEMENT OF THE FINAL LIFT OF PAVEMENT.
- AIRFIELD SIGNS PROVIDING DIRECTIONS TO CLOSED AREAS SHALL BE COVERED. ALL AREAS CLOSED TO AIRCRAFT SHALL NOT BE LIGHTED. ADEQUATE LIGHTING, IN THE OPINION OF THE RESIDENT PROJECT REPRESENTATIVE, SHALL BE PROVIDED TO DELINEATE THE ACTIVE AND CLOSED AREAS OF THE AOA. THE ABOVE ITEMS ARE CONSIDERED INCIDENTAL TO THE VARIOUS BID ITEMS.

WOOLPERT

- 7. ALL COMPONENTS OF THE AIRFIELD LIGHTING SYSTEM OUTSIDE OF THE PROJECT AREA AND CLOSED PORTIONS OF THE AIRFIELD SHALL BE OPERATIONAL AT THE END OF EACH WORK SHIFT AND FOR EVERY PERIOD OF LOW VISIBILITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL TEMPORARY JUMPER AND OTHER EQUIPMENT NECESSARY TO MAINTAIN AN OPERATIONAL SYSTEM DURING CONSTRUCTION. TEMPORARY JUMPERS SHALL BE CONSIDERED INCIDENTAL TO THE VARIOUS BID ITEMS. ALL TEMPORARY JUMPERS SHALL BE INSTALLED IN CONDUIT.
- CONTRACTOR SHALL BE REQUIRED TO PROVE TO THE SATISFACTION OF THE RESIDENT PROJECT REPRESENTATIVE THAT THE LIGHTING SYSTEM IS OPERATIONAL BEFORE LEAVING THE WORK SITE AFTER EVERY WORK SHIFT.
- THE AIRPORT MAINTENANCE DEPARTMENT'S "LOCKOUT/TAGOUT" PROCEDURE AND NFPA 70E SHALL BE COMPLIED WITH BY THIS CONTRACTOR.
- 10. THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO STARTING WORK.
- 11. EXISTING CONDUIT, DUCT BANK, CIRCUITING, AND UTILITY INFORMATION IS BASED ON "AS-BUILT" AND "RECORD" DRAWINGS AND SITE VISTS BY THE ENGINEER. THE EXISTING UTILITY LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE AND SHALL NOT BE SCALED FOR EXACT LOCATION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT THE APPROPRIATE UTILITY/AGENCY PRIOR TO STARTING WORK AND STAKEMARK THE LOCATION OF ALL EXISTING UTILITIES. ANY INTERRUPTION OF AN EXISTING SYSTEM OR UTILITY SERVICE SHALL BE COORDINATED AND APPROVED BY THE AIRPORT AND THE AUTHORITY, AGENCY, OR UTILITY HAVING JURISDICTION PRIOR TO STARTING WORK.
- 12. ALL REMOVED FIXTURES, BASEPLATES, SPACERS, SIGNS, TRANSFORMERS, ETC. SHALL BE TURNED OVER TO THE AIRPORT'S MAINTENANCE DEPARTMENT. ALL REMOVED CABLES, DUCT, BASECANS, CONCRETE PADS, MANHOLES, ETC. SHALL BE PROPERLY AND LEGALLY DISPOSED OF OFF THE SITE BY THE CONTRACTOR. ALL ITEMS TO BE RELOCATED SHALL BE REMOVED FIRST AND PROPERLY STORED FOR FUTURE INSTALLATION.
- PROVIDE WORK, EQUIPMENT AND MATERIALS THAT COMPLY WITH FAA REQUIREMENTS, NATIONAL ELECTRICAL CODE, AND ALL LOCAL CODES.

- PROVIDE PROPER CONSTRUCTION WARNINGS AND BARRICADES PER FAA REQUIREMENTS, AND PRESENT PLANS FOR SAME TO ENGINEER AND AIRPORT OPERATIONS MANAGER FOR APPROVAL PRIOR TO COMMENCING WORK.
- 15. NOTIFY ENGINEER OF ANY SIGNIFICANT DIFFERENCES BETWEEN DRAWINGS AND FIELD CONDITIONS.
- 16. DAMAGE TO EXISTING EQUIPMENT NOT ASSOCIATED WITH DEMOLITION FOR THIS PROJECT TO BE REPAIRED AND OPERATIONAL AT CONTRACTOR'S EXPENSE.
- 17. LOCATION OF EXISTING UTILITIES AND STRUCTURES IS BASED ON THE BEST AVAILABLE INFORMATION AND IS NOT WARRANTED TO BE EXACT, NOR IS IT WARRANTED THAT ALL UTILITIES ARE SHOWN.
- 18. WHERE NEW DUCT BANKS OR OTHER UTILITIES ARE NEAR EXISTING UTILITIES THE CONTRACTOR SHALL HAND EXCAVATE AROUND THE EXISTING UTILITIES IN ORDER TO PREVENT DAMAGE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMMEDIATELY REPAIRING ANY UTILITY DAMAGED DURING CONSTRUCTION.
- 19. THE CONTRACTOR SHALL REMOVE ALL CONDUIT AND CONDUCTORS MARKED FOR REMOVAL ON DEMOLITION SHEETS. ALL ABANDONED/JUNUSED CONDUCTORS SHALL BE REMOVED FROM EXISTING CONDUITS IN WHICH NEW CONDUCTORS ARE INSTALLED. NO ABANDONED CONDUCTORS SHALL BE LEFT IN PLACE AT THE COMPLETION OF THE JOB. NO PAYMENT WILL BE MADE FOR REMOVAL OF EXISTING CONDUCTORS. ALL REMOVED WIRE SHALL BE THE PROPERTY OF THE CONTRACTOR.
- 20. THE DIMENSION BETWEEN LIGHTS SHOWN ON A RADIUS IS DEFINED AS THE CHORD LENGTH. LOCATIONS SHOWN ARE TO THE CENTER OF THE LIGHTING FIXTURE.
- 21. CONTRACTOR TO FIELD VERIFY ALL ELEVATION ADJUSTMENTS PRIOR TO ORDERING EXTENSION RINGS OR EXCAVATING ELECTRICAL STRUCTURES.

#### 22. AT LOCATIONS WHERE NEW RUNWAY LIGHTS, TAXIWAY LIGHTS, SIGNS, OR CONDUIT ARE TO BE INSTALLED IN EXISTING PAVEMENT THE CONTRACTOR SHALL NEATLY SAWCUT, REMOVE, AND PATCH EXISTING PAVEMENT AS NECESSARY TO ALLOW THE INSTALLATION OF THE NEW EQUIPMENT. PAVEMENT REMOVAL AND PATCHING SHALL BE CONSIDERED INCIDENTAL TO INSTALLATION OF THE NEW EQUIPMENT. NO ADDITIONAL PAYMENT WILL BE MADE FOR PAVEMENT REMOVAL AND PATCHING

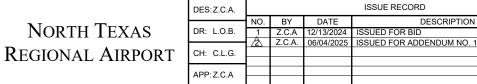
- 23. THE CONTRACTOR SHALL KEEP A SET OF AS-BUILT DRAWINGS THAT SHALL BE SUBMITTED TO THE ENGINEER AT THE COMPLETION OF THE JOB. THE CONTRACTOR SHALL NOTE. AND BRING TO THE ENGINEER'S ATTENTION, ANY DISCREPANCIES BETWEEN THE PLANS AND ACTUAL FIELD CONDITIONS. REDLINES AND SURVEY AUTOCAD AS-BUILTS SHALL BE PROVIDED UPON COMPLETION.
- 24. THE ELECTRICAL CONTRACTOR SHALL ATTEND THE CONSTRUCTION MEETINGS FOR THE DURATION OF THE PROJECT.
- 25. ALL ELECTRICAL WORK, INCLUDING CONDUITS, HANDHOLES, GROUNDING, POWER DISTRIBUTION EQUIPMENT, WIRING, JUNCTION BOXES, ETC., PERTAINING TO NAVIGATIONAL AIDS (LOCALIZER, LOCALIZER EQUIPMENT SHELTER, REILS, AND PAPI) SHALL BE CONSTRUCTED IN ACCORDANCE WITH FAA SPECIFICATIONS FAA-C-1217f, FAA-C-1391b, AND FAA-STD-019e IN ADDITION TO THE SPECIFICATIONS CONVAINEE WITHING THE SONTBUCT DOCUMENTS.
- 26. THE CONTRACTOR SHALL MEASURE THE INSULATION RESISTANCE OF ALL AIRFIELD CIRCUITS PRIOR TO STARTING ANY ELECTRICAL WORK.

#### THE CONFRECTORS OF THE INSTACTOR WITH PROVIDED LINDER EXISTING PAVEMENT MAY BE INSTALLED BY DIRECTIONAL BORING IN LIEU OF CUTTING AN OPEN TRENCH AS DESCRIBED ABOVE. ALL

CONDUIT INSTALLED BY DIRECTIONAL BORING SHALL BE SCHEDULE 40 HDPE. HDPE CONDUIT SHALL NOT BE USED OUTSIDE OF DIRECTIONAL BORING APPLICATIONS. ANY DAMAGE TO EXISTING PAVEMENT FROM BORING OPERATIONS (INCLUDING HEAVING) SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE SPONSOR, AND TO THE APPROVAL OF THE ENGINEER.

28. CONTRACTOR SHALL NOTIFY ENGINEER 24 HOURS IN ADVANCE AND BE IN RADIO CONTACT WITH THE ATC WHEN OPERATING INSIDE THE AOA

29. CONDUITS, ELECTRIC LINES, AND DUCT BANKS MARKED FOR REMOVAL ON UTILITY DEMOLITION SHEETS MAY BE ABANDONED IN



AIRFIELD LIGHTING AND REMARKING

CIRCUIT	LEGEND

RUNWAY EDGE LIGHTS
 TAXIWAY A LIGHTS
 RUNWAY 18R PAPI
 RUNWAY 36L PAPI

R/W LIGHT KEY
C - WHITE Y - YELLOW G - GREEN R - RED

#### LEGEND NOTES:

(1) ALL ELECTRICAL CONDUITS ARE 1-2" SCH. 40 PVC CONDUIT UNLESS IDENTIFIED OTHERWISE.

(2) SIZE AND NUMBER OF CONDUITS IN A DUCT BANK ARE AS INDICATED ON PLAN SHEETS.

(3) ALL L-867 JUNCTION BOXES ARE SIZE B, 12" DIA. X 24" DEEP WITH 3/8" THICK BLANK COVER, UNLESS OTHERWISE INDICATED.

#### PROJECT SPECIFIC DEMOLITION NOTES

- ALL COMPONENTS OF THE AIRFIELD LIGHTING SYSTEM OUTSIDE OF THE PROJECT AREA AND CLOSED PORTIONS OF THE AIRFIELD SHALL NOT BE DAMAGED BY THE CONTRACTOR. ANY DAMAGE TO THESE COMPONENTS WILL BE REPLACED BY THE CONTRACTOR AT NO EXPENSE TO THE SPONSOR.
- THE CONTRACTOR SHALL REMOVE ALL WIRES AND CABLES FROM CONDUITS WHICH ARE TO BE ABANDONED. NO ADDITIONAL PAYMENT WILL BE MADE FOR REMOVAL OF WIRES AND CABLES.

PLACE IF THEY ARE NOT DISTURBED DURING CONSTRUCTION ACTIVITIES. ANY CONDUIT, ELECTRIC LINES, OR DUCT BANK ENCOUNTERED DURING CONSTRUCTION SHALL BE REMOVED. NO PAYMENT SHALL BE MADE FOR REMOVAL OF CONDUITS, DUCT BANKS, AND ELECTRIC LINES.

THE CONTRACTOR SHALL REMOVE ALL ABANDONED/UNUSED CONDUCTORS AND CABLES FROM EXISTING CONDUITS IN WHICH NEW CONDUCTORS OR CABLES ARE INSTALLED. NO ABANDONED CONDUCTORS OR CABLES SHALL BE LEFT IN PLACE AT THE COMPLETION OF THE PROJECT. NO PAYMENT WILL BE MADE FOR REMOVAL OF EXISTING CONDUCTORS OR CABLES. ALL REMOVED CONDUCTORS AND CABLES SHALL BE THE PROPERTY OF THE

	ISSUED FO	R BID
	ZACHARY C. AM 146546 06/04/202 55/0NAL	
	ZACHARY C. AMBARIANTZ P	P.E. 146546 06/04/2025
	FOR AND ON BEHALF OF	WOOLPERT, INC.
		SHEET NAME
ELECTRICAL LEGEND AND	GENERAL NOTES	E001
		SHEET NO.

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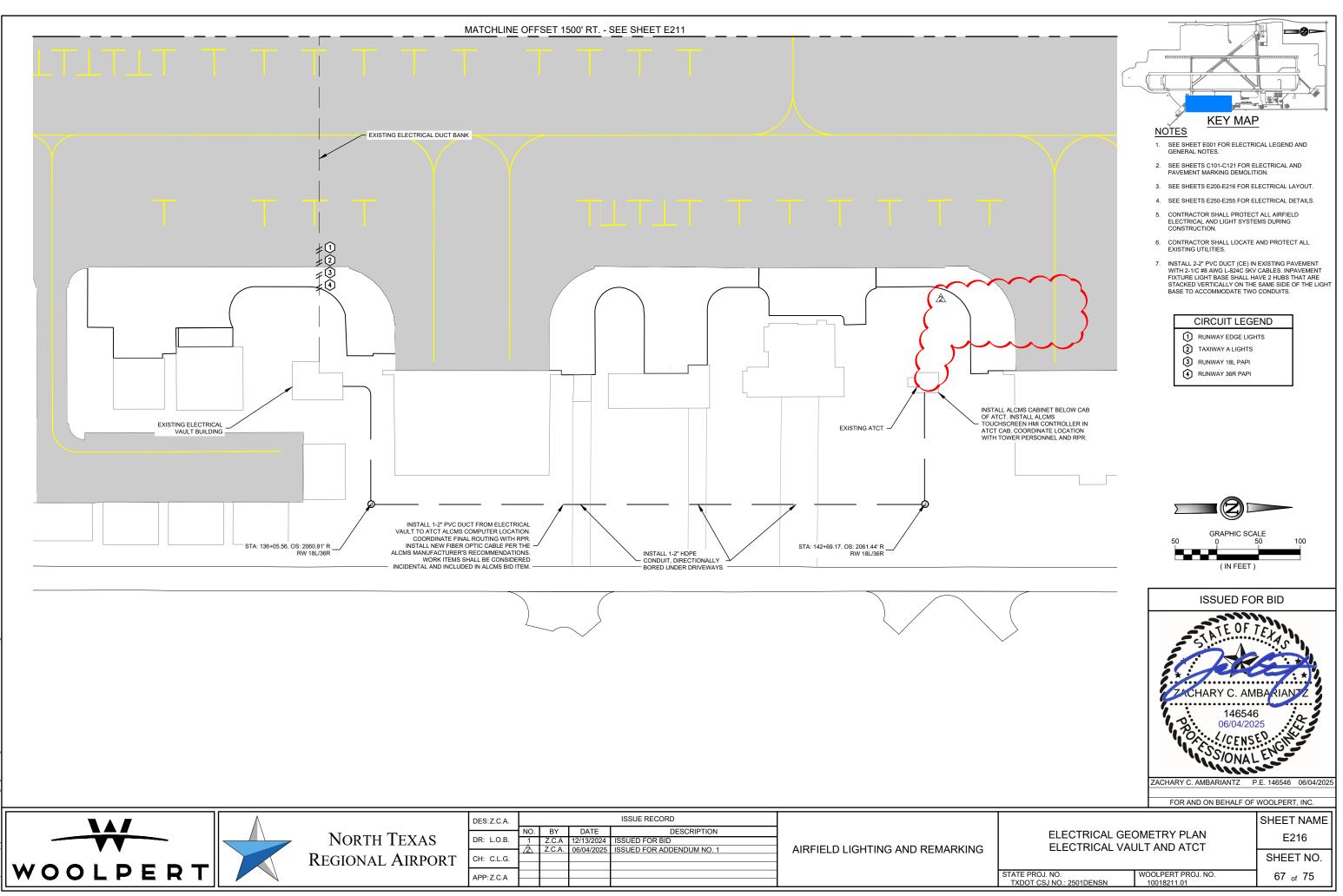
WOOLPERT PROJ. NO.

10018211.01

STATE PROJ. NO.

TXDOT CSJ NO .: 2501DENSN

CONTRACTOR



d June 5. 2025 @ 11:13 AM by Ambariantz, Zach zusisiones/LVUroniersisGY12024 Amfeiel Lichtine & Remarkinnit-, CAD/PI ANS/010-CY1.



Pre-Bid Meeting Sign In

Meeting Date / Location: Time:	North Texas Regional Airport Terminal Building, 470 Denison, TX 75020 3:00 p.m. (local time)	0 Airport Drive, Project Name: Project #:	Airfield Lighting and Remarking Project 2501DENSN	
Name	Company	Telephone No.	E-mail	
Sebastian De Castro	Woolpert	954-770-8397	sebastian.decastro@woolpert.co	
Ryan Hindman	TXDOT	512-520-7467	ryan.hindman@txdot.gov	
Bill Magers	Airport - Grayson County	903-786-2904	bill.magers@co.grayson.tx.us	
Scott Ford	Airport - Grayson County	940-736-6815	fordl@co.grayson.tx.us	
Dave	Royal Electric	972-209-3335		



#### Meeting Agenda: Pre-Bid Conference

Project No. 2501DENSN Date: Monday, May 19, 2025, 1:00 P.M. (Local Time) Location: North Texas Regional Airport Terminal Building, 4700 Airport Drive, Denison, TX 75020

Attendees: See Sign-In Sheet

#### Agenda:

#### 1. RECORDING OF ATTENDEES

- A. Recording of attendees, firm represented, address and phone number.
- B. Attendance & plan holder's list will be sent to all attendees.

#### 2. PROJECT DESCRIPTION & INTRODUCTIONS

- A. Project Scope of Work.
  - I. Schedule I:
    - (1) Phase 1A: Runway lighting, remarking, PAPIS
    - (2) Phase 1B: TW A, F remarking, lighting.
    - (3) Phase 2: Parallel TW Remarking, lighting.
    - (4) Phase 3: TW E Remarking, lighting, Apron remarking
    - (5) Phase 4: TW B Remarking, lighting, apron remarking
    - (6) Major Work to be completed: Erosion control measures, delineate wetland areas, clear and grub, electrical removals, existing pavement marking removals, trenching and excavation for electrical conduits, signs and light fixtures, permanent paint.
- B. Airport Sponsor.
  - I. Bill Magers Airport Manager.
- C. Airport Engineering. (Woolpert, Inc.)
  - I. Sebastian De Castro, Project Manager.
  - II. Zachary Ambariantz, Electrical Engineer
- D. Schedule:
  - Bidder hereby agrees to commence work under this contract on or before a date to be specified in a written "Notice to Proceed" and to fully complete the project within seventy (130) calendar days thereafter. Of the total seventy (130) calendar days, sixty (60) calendar days are for the procurement of materials, ten (10) calendar days are for staging, and sixty (60) calendar days are for on-site construction.
  - II. Phase 1A: 60 Calendar Days
  - III. Phase 1B: 60 Calendar Days
  - IV. Phase 2: 60 Calendar Days
  - V. Phase 3: 5 Calendar Days
  - VI. Phase 4: 5 Calendar Days
- E. Major Work Items.

Woolpert, Inc. 11750 Katy Fwy., Suite 1260 Houston TX 77079 Phone – 346.409.2067

#### Page 2

Schedule I					
C- 105a	MOBILIZATION (10% MAXIMUM)	LS	1		
P- 620a	REFLECTORIZED PAVEMENT MARKING (WHITE & YELLOW - RWY, TWY A, B, E, F, APRON)	SF	200,000		
P- 620b	NON-REFLECTORIZED PAVEMENT MARKING (BLACK - RWY, TWY A, B, E, F, APRON)	SF	131,000		
P- 620c	EXISTING PAVEMENT MARKING REMOVAL	SF	380,650		
L-101a	REMOVE AIRPORT BEAGON, COMPLETE	EA	4		
L-101b	INSTALL LED L-801A AIRPORT BEACON, COMPLETE	EA	4		
L-107a	REMOVE EXISTING PRIMARY WIND CONE AND SEGMENTED CIRCLE MARKER SYSTEM, COMPLETE	EA	1		
L-107b	INSTALL L-806 LED WIND CONE ON NEW FOUNDATION, COMPLETE	EA	2		
L-107c	INSTALL L-807 LED WIND CONE ON NEW FOUNDATION, COMPLETE	EA	1		
L-107d	INSTALL SEGMENTED CIRCLE MARKER SYSTEM, COMPLETE	EA	1		
L-108a	INSTALL #8 AWG, L-824C, 5000V, WIRE	LF	95,000		
L-108b	INSTALL #6 AWG, BARE COPPER COUNTERPOISE INCLUDING GROUND RODS AND TERMINATIONS	LF	50,000		
L-109a	REMOVE CONSTANT CURRENT REGULATOR, COMPLETE	EA	4		
L-109b	INSTALL L-829 CONSTANT CURRENT REGULATOR, 4KW, FERRORESONANT TYPE WITH IRMS AND INPUT MONITORING, COMPLETE	EA	2		
L-109c	INSTALL L-829 CONSTANT CURRENT REGULATOR, 7.5KW, FERRORESONANT TYPE WITH IRMS AND INPUT MONITORING, COMPLETE	EA	1		
L-109d	INSTALL L-829 CONSTANT CURRENT REGULATOR, 10KW, FERRORESONANT TYPE WITH IRMS AND INPUT MONITORING, COMPLETE	EA	1		
L-109e	INSTALL S-1 CUTOUT IN LOCKABLE NEMA-1 ENCLOSURE, COMPLETE	EA	4		
L-109f	INSTALL L-854 RADIO CONTROLLER IN EXISTING VAULT, COMPLETE	LS	1		
L-109g	INSTALL AIRFIELD LIGHTING CONTROL AND MONITORING SYSTEM (ALCMS), COMPLETE	LS	1		
L-110a	INSTALL 1-2" SCH 40 PVC CONDUIT DIRECT EARTH BURIED (DEB)	LF	40,000		
L-110b	INSTALL 1-2" SCH 40 PVC CONDUIT CONCRETE ENCASED (CE) IN EXISTING PAVEMENT	LF	8,750		
L-110c	INSTALL 2-2" SCH 40 PVC CONDUIT CONCRETE ENCASED (CE) IN EXISTING PAVEMENT	LF	675		
L-110d	INSTALL 1-2" SCH 40 HDPE CONDUIT DIRECTIONALLY BORED	LF	2,750		
L-115a	REMOVE L-867B JUNCTION BOX, COMPLETE	EA	4		
L-115b	INSTALL L-867E JUNCTION BOX, COMPLETE	EA	7		
L-125a	REMOVE RUNWAY/TAXIWAY EDGE LIGHT IN SOIL, COMPLETE	EA	171		
L-125b	REMOVE RUNWAY/TAXIWAY EDGE LIGHT IN EXISTING PAVEMENT, COMPLETE	EA	226		
L-125c	INSTALL L-861 LED RUNWAY EDGE LIGHT, BASE MOUNTED, IN SOIL, COMPLETE	EA	75		
L-125d	INSTALL L-861 LED RUNWAY EDGE LIGHT, BASE MOUNTED, IN EXISTING PAVEMENT, COMPLETE	EA	9		
L-125e	INSTALL L-861E LED RUNWAY THRESHOLD LIGHT, BASE MOUNTED, IN EXISTING PAVEMENT, COMPLETE	EA	16		
L-125f	INSTALL L-861T LED TAXIWAY EDGE LIGHT, BASE MOUNTED, IN SOIL, COMPLETE	EA	205		
L-125g	INSTALL L-861T LED TAXIWAY EDGE LIGHT, BASE MOUNTED, IN EXISTING PAVEMENT, COMPLETE	EA	123		
L-125h	REMOVE L-858 GUIDANCE SIGN AND CONCRETE FOUNDATION, COMPLETE	EA	41		
L-125i	INSTALL L-858 LED GUIDANCE SIGN, SIZE 1, 2 MODULE, COMPLETE	EA	11		
L-125j	INSTALL L-858 LED GUIDANCE SIGN, SIZE 1, 3 MODULE, COMPLETE	EA	17		
L-125k	INSTALL L-858 LED GUIDANCE SIGN, SIZE 1, 4 MODULE, COMPLETE	EA	4		
L-125I	INSTALL L-858 LED RUNWAY DISTANCE REMAINING SIGN, SIZE 4, COMPLETE	EA	8		
L- 125m	REMOVE VASI SYSTEM, COMPLETE	EA	2		
L-125n	INSTALL L-880 LED PAPI SYSTEM, COMPLETE	EA	2		

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#### **BID OPENING DATE & TIME**

F.	Date:	June 12, 2025, 2:00 pm (Local Time)
	Mailed to:	Kelle Chancey, TxDOT Aviation Division, 6230 E. Stassney Lane, 2nd Floor, Austin,
		Texas 78744. The delivered package must be clearly marked as "Bid Proposal".
G.	Opened at:	TXDOT Stassney Campus
		6230 E Stassney Lane
		Austin, TX
Н.	Bid security:	2% of bid amount
	Distance and	

#### I. Bid proposal: TXDOT bid form

#### 3. DBE GOALS

- A. X% of Contract Amount. Refer to Eli Lopez
- B. Turned in no later than 5 days after opening

#### 4. QUALIFICATION OF BIDDERS

A. Qualifications shall be furnished per Section 20-02.

#### 5. CRITICAL CONTRACT DATES

- A. Notice of Award: TBD
- B. Notice to Proceed: TBD

#### 6. BONDING

- A. Payment Bond: 100% of Bid Amount.
- B. Performance Bond: 100% of Bid Amount.

#### 7. INSURANCE REQUIREMENTS

A. Aviation Division General Construction Contract Provisions, volume dated February 2013.

#### 8. FEDERAL WAGE RATES (DAVIS BACON ACT)

- A. Federal wage rates are required for this project. Refer to Part 6.
- B. Contractor and all Subcontractors are required to submit certified payrolls.

#### 9. ENGINEER/RESIDENT PROJECT REPRESENTATIVE (RPR) FIELD OFFICE

A. Not Required. Refer to Part 4, Section 60-05 for more information.

#### 10. CONSTRUCTION SAFETY AND PHASING PLAN (CSPP)

- A. The Contractor shall review and adhere to the CSPP prepared by the Engineer.
- B. The Contractor shall submit a Safety Plan Compliance Document (SPCD) (Refer to Part 7) to the engineer and airport operator for approval PRIOR to the issuance of Notice to Proceed as required by FAA Advisory Circular (AC) 150/5370-2G "Operational Safety on Airports During Construction".

Woolpert, Inc. 11750 Katy Fwy., Suite 1260 Houston TX 77079 Phone – 346.409.2067 Meeting Agenda May 16, 2025

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#### **11. ENVIRONMENTAL REQUIREMENTS**

- A. Discuss all project specific requirements for environmentally sensitive areas. Discuss protocols for working in and around these sensitive areas. Adherence to these requirements will be strictly enforced.
- B. All changes to haul routes, staging areas, material storage areas, borrow/waste areas, and limits of disturbance will require approval by FAA Environmental.

#### 12. LIQUIDATED DAMAGES

A. Bidder agrees to pay as liquidated damages the sum of \$1,000 for each calendar day to complete the work beyond the allotted time or as extended by an approved Change Order or Supplemental Agreement.

#### 13. MISCELLANEOUS

- A. Airport Security Badging is not required for this project.
- B. Airport Driving no safety course required.
- C. Review Construction Safety Overall Phasing Plan G050 note the Staging Area & Airport Access gate.
- D. Review Construction Layout 4 Phases G052 thru G055 the contractor shall install flasher barricades around the perimeter of the construction site bordering the airfield to isolate the contractor from aircraft.
- E. Contractor shall stay within project boundaries.
- F. Radios for the project to be provided by Contractor. See Part 7 CSPP. The Air Traffic Control Tower can assist and alert the contractor as necessary.
- G. State Sales & Use Tax Exempt not exempt.
- H. Quality Assurance testing will be completed by QA Firm under the direction of the Engineer. The Quality Control testing and Quality Assurance testing shall be completed by separate firms.
- I. Construction Management Plan submitted by Contractor.
- J. Water availability To discuss with Scott Ford.
- K. Questions will only be taken via written format to the Project Manager Until June 4<sup>th</sup>, when the final addendum is due.

#### 14. ADDENDUM UPDATE

#### 15. QUESTIONS / ANSWERS

16. PROJECT SITE TOUR

Woolpert, Inc. 11750 Katy Fwy., Suite 1260 Houston TX 77079 Phone – 346.409.2067