OPERATIONAL AUDIT

OKLAHOMA ĀERONAUTICS COMMISSION CITY OF TULSA

PROJECT NUMBER RVS-13-FS
INSTALLATION OF PRECISION APPROACH PATH INDICATORS,
ADDITIONAL SIGNAGE, AND AIRFIELD LIGHTING ELECTRICAL
CONTROL UPDATE

For the period July 19, 2012 through March 21, 2014





Oklahoma State Auditor & Inspector Gary A. Jones, CPA, CFE

Audit Report of the Oklahoma Aeronautics Commission City of Tulsa - Project Number RVS-13-FS Installation of Precision Approach Path Indicators, Additional Signage, and Airfield Lighting Electrical Control Update

For the Period July 19, 2012 through March 21, 2014 2300 N. Lincoln Blvd. • State Capitol, Room 100 • Oklahoma City, OK 73105 • Phone: 405.521.3495 • Fax: 405.521.3426

April 18, 2014

TO THE OKLAHOMA AERONAUTICS COMMISSION

At management's request, we have conducted an audit of the Oklahoma Aeronautics Commission (Commission) – City of Tulsa (state project number RVS-13-FS) for the period July 19, 2012 through March 21, 2014. The objective of the audit was to determine whether expenditures paid to the City of Tulsa were in accordance with *Exhibit B-1 – Program Narrative* and *Exhibit B-2 – Project Costs* of the airport construction agreement.

According to Exhibit B-1 and Exhibit B-2, the project consisted of installation of precision approach path indicators on runway 1R/19L, replacement and addition of airport signage, control upgrade for airfield lighting, electrical system upgrade, and installation of a new airport beacon. The project was budgeted at \$1,804,779. The Commission's share of the budget was \$90,094, the FAA's share of the budget was \$1,621,690 and the City of Tulsa's share was \$92,995.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective.

Our audit procedures included inquiries of appropriate Commission personnel, the project engineer, the airport engineer, and the airport financial analyst; inspection of all invoices and supporting documentation related to project reimbursements; and a physical inspection of the completed project conducted on April 3, 2014. These procedures indicated that costs paid to the City of Tulsa by the Commission appeared to be in accordance with the *Program Narrative* and the *Project Costs*.

This report is a public document pursuant to the Oklahoma Open Records Act (51 O.S. § 24A.1 et seq.), and shall be open to any person for inspection and copying.

Sincerely,

GARY A. JONES, CPA, CFE

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OKLAHOMA STATE AUDITOR & INSPECTOR



Oklahoma Aeronautics Commission Operational Audit Appendix- Project Costs (unaudited) and Close Out Documentation

The following information has been presented at the request of management. Therefore, we did not conclude upon the data presented in the following schedules.

Category	Budget	Chai	nge Order	A	djusted Budget	Actual	•	Variance
Construction	\$ 1,552,943.00	\$	(1,008.00)	\$	5 1,551,935.00	\$ 1,551,561.32	\$	1,381.68
Engineering	140,500.00					165,310.00		(24,810.00)
Other (PSO Electrical Feed)	5,393.16					-		5,393.16
Advertising	1,042.80					1,042.80		-
Inspection	 104,900.00					 104,900.00		-
<u>Total</u> Project Cost	\$ 1,804,778.96					\$ 1,822,814.12	\$	(18,035.16)

	Bu	idget Amount	Budget Amount Including Change Orders	Actual	Variance
City's Share of costs (5.22%)	\$	92,995.00	\$ 92,944.60	\$ 95,137.81	(2,193.21)
OAC's Share of costs (4.92%)		90,094.00	90,043.60	89,755.16	288.44
FAA's Share of costs (89.86%)		1,621,690.00	1,620,782.80	1,637,921.16	(17,138.36)
	\$	1,804,779.00	\$ 1,803,771.00	\$ 1,822,814.12	\$ (19,043.12)

^{1.} OAC rounded up 4 cents to whole dollar amount. The total also includes the \$2901 in insurance costs that is not eligible for OAC participation.

Oklahoma Aeronautics Commission Operational Audit Appendix- Project Costs (unaudited) and Close Out Documentation

								Cit	be Out D	ocumentation
Line NO.	Spec No	Description	Bid Unit	Bid Quantity	Unit Price Bid	Bid Amount	Actual Quantity	Actual Cost	Quantity Variance	Cost Variance
1	SS-120-3.1	Site Preparation	LS	1.00	\$ 91,000.00	\$ 91,000.00	1.00	91,000.00	0.00 \$	-
2	SS-130-4.1	Trench and Excavation Safety Systems	LS	1.00	3,550.00	3,550.00	1.00	3,550.00	0.00	-
3	L-108-5.2	No. 6 AWG Solid, Bare Counterpoise Wire	LF	14,300.00	0.80	11,440.00	14,268.25	11,414.60	31.75	25.40
4	L-109-5.1	Construction of Airport Transformer Vault and Foundation	LS	1.00	160,000.00	160,000.00	1.00	160,000.00	0.00	-
5	L-109-5.2	Installation of Airport Transformer Vault and Foundation	LS	1.00	63,000.00	63,000.00	1.00	63,000.00	0.00	-
6	L-109-5.3	Existing Electrical Vault Modifications	LS	1.00	66,400.00	66,400.00	1.00	66,400.00	0.00	-
7	L-109-5.4	New Airport Lighting Control and Monitoring System Installed	LS	1.00	275,000.00	275,000.00	1.00	275,000.00	0.00	-
8	L-110-5.1 L-110-5.2	Electrical Duct Bank Encased, 6-Way 4"C. w/ Innerducts 24" Min Cover Electrical Duct Bank Encased, 6-Way 4"C. w/ Innerducts 24" Min Cover,	LF	2,290.00	66.00	151,140.00	1,852.00	122,232.00	438.00	28,908.00
		Including Asphalt Saw Cut, removal & Repair	LF	200.00	72.00	14,400.00	170.00	12,240.00	30.00	2,160.00
10	L-110-5.3	Electrical Duct Bank Encased, 6-Way 4"C. w/ Innerducts 48" Min Cover	LF	1,160.00	69.00	80,040.00	1,427.00	98,463.00	-267.00	(18,423.00)
11	L-110-5.4	Electrical Duct Bank, 6-Way 4"C. w/ Innerducts Installed in 18" Steel Casings	LF	380.00	50.00	19,000.00	380.00	19,000.00	0.00	-
12 13	L-110-5.10 L-110-5.11	Electrical Duct Bank Encased, 2-Way 2"C, 24" Min Cover Electrical Duct Bank Encased, 2-Way 2"C, 24" Min Cover, Including Asphalt	LF	710.00	23.90	16,969.00	789.00	18,857.10	-79.00	(1,888.10)
		Saw Cut, removal & Repair	LF	370.00	74.50	27,565.00	390.00	29,055.00	-20.00	(1,490.00)
14	L-110-5.14	Electrical Conduit for Utility Primary, Concrete Encased, 1-Way 4"C, 48" Min	LF	880.00	10.50	9,240.00	875.05	9,188.03	4.95	51.98
15	L-115-5.2	Precast Concrete Electrical Handhole, 3"Lx3"Wx4'D	EA	18.00	7,760.00	139,680.00	18.00	139,680.00	0.00	-
16	,	Unclassified Excavation	CY	100.00	14.80	1,480.00	-	-	100.00	1,480.00
17		Solid Slab Sodding	SY	535.00	3.80	2,033.00	889.00	3,378.20	-354.00	(1,345.20)
18 19	,	6" Concrete Sidewalk	SY SY	16.00 76.00	75.00 81.00	1,200.00	16.00 76.00	1,200.00	0.00	-
20		6" Concrete Driveway 14"x23" R.C. Pipe Elliptical Class HE-III	LF	28.00	177.50	6,156.00 4,970.00	28.00	6,156.00 4,970.00	0.00	-
21		14"x23" Prefab Culvert End Section	EA	2.00	888.00	1,776.00	2.00	1,776.00	0.00	-
22		18" Jacked Steel Casing, AWWA C200, 3/8" Wall Thickness	LF	360.00	445.00	160,200.00	370.00	164,650.00	-10.00	(4,450.00)
23	SP 30-10.1	Extra Premium for Naming Additional Insureds	LS	1.00	1.00	1.00	1.00	1.00	0.00	(4,430.00)
24	SP 30-10.2	Extra Premium for Owner's & Contractor's Protective Policy	LS	1.00	2,900.00	2,900.00	1.00	2,900.00	0.00	_
		Subtotal for Base Bid			_,,,,,,,,,,	\$ 1,309,140.00	_	\$ 1,304,110.92		5.029.08
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		Alternate 2 - PAPI's on Runway 1R/19L								
27	SS-305-5.1	Directional Boring. 2-Way 6"C Polyethylene Conduits	LF	230.00	\$ 180.00	\$ 41,400.00	230.00	\$ 41,400.00	0.00 \$	-
28	SS-310-5.1	Existing Vasi System Removed	EA	2.00	504.00	1,008.00	-	-	2.00	1,008.00
29	SS-310-5.2	L-880 PAPI Installed	EA	2.00	23,500.00	47,000.00	2.00	47,000.00	0.00	-
30	L-108-5.1	No. 8 AWG 5kv, L-824C Cable Installed in Trench, Duct Bank or Conduit	LF	15,700.00	1.60	25,120.00	16,550.00	26,480.00	-850.00	(1,360.00)
31	L-108-5.2	No. 6 AWG Solid, Bare Counterpoise Wire Installed in Trench, Duct Bank or	LF	3,100.00	1.13	3,503.00	3,100.00	3,503.00	0.00	-
32	L-109-5.3	Existing Electrical Vault Modifications	LS	1.00	2,700.00	2,700.00	1.00	2,700.00	0.00	-
33	L-110-5.5	Electrical Duct Bank, Concrete Encased, 4-Way 4"C, 24" Minimum Cover	LF	220.00	38.00	8,360.00	200.00	7,600.00	20.00	760.00
34	L-110-5.6	Electrical Duct Bank, Concrete Encased, 4-Way 4"C, 48" Minimum Cover	LF	260.00	43.50	11,310.00	244.00	10,614.00	16.00	696.00
35 36	L-110-5.7 L-110-5.8	Electrical Duct Bank, Concrete Encased, 2-Way 4"C, 24" Minimum Cover Electrical Duct Bank, Concrete Encased, 2-Way 4"C, 24" Minimum Cover,	LF	80.00	39.50	3,160.00	80.00	3,160.00	0.00	-
		Including Asphalt Pavement Sawcut, Removal and Repair	LF	40.00	101.00	4,040.00	40.00	4,040.00	0.00	-
37	L-110-5.9	Electrical Duct Bank, 2-Way 4"C, Installed in 6" Boring Sleeve	LF	210.00	200.00	42,000.00	230.00	46,000.00	-20.00	(4,000.00)
38	L-110-5.12	Electrical Duct Bank, Concrete Encased, 2-Way 2"C, 48" Minimum Cover	LF	490.00	31.00	15,190.00	449.00	13,919.00	41.00	1,271.00
39	L-110-5.13	Electrical Conduit, Non-Encased, 1-Way 2"C, 18" Minimum Cover	LF	980.00	7.90	7,742.00	1,236.00	9,764.40	-256.00	(2,022.40)
40	L-115-5.1	Concrete Encased, Electrical Junction Structure, L-867 Class 1, Size 16" Diam	EA	5.00	974.00	4,870.00	5.00	4,870.00	0.00	-
41	L-115-5.2	Precast Concrete Electrical Handhole, 3"Lx3"Wx4'D	EA	3.00	8,800.00	26,400.00 \$ 243,803.00	3.00	26,400.00	0.00	(2.647.40)
		Subtotal for Alternate 2			•	\$ 243,803.00	-	\$ 247,450.40	5	(3,647.40)
		Total for Base Bid and Alternate2				\$ 1,552,943.00	-	\$ 1,551,561.32	\$	1,381.68

^{1.} Item 28 was removed as part of Change Order #1

^{2.} Items 25 & 26 (Alternate 1) were removed from the B-2 so they are not shown on the bid tab.

NOTICE OF FINAL INSPECTION

	Date:	10/18/2013
	Project Number:	RVS-14-S
	Airport:	R.L. Jones Jr.
TO:	Oklahoma Aeronautics Commission 120 N. Robinson, Suite 1244 W Oklahoma City OK 73102 (405) 604-6900 – phone (405) 604-6919 – fax	
FROM:	Mark Soltero Project Engineer, Mayor, City Manager	
	P.O. Box 581838 Address	
	Tulsa, OK 74158 City/Town and Zip Code	
	918-838-5063 Area Code and Phone Number	
This is to ad final	vise you that the above referenced pr	roject is complete and ready for
inspection.	The final inspection is scheduled to be	egin at 10:30 AM (Time)
on10/25	/13 at R.L. Joi	nes Jr. Airport (Location)
there to be	ring this request, I have carefully gon e no known plan omissions and the close conformity with approved plans	nat the work is complete and in
Wandy Signature of above	Arthur person	Airports Facilities Engineer Title of above named person

As per OAC, this Notice of Final Inspection is for Project Number RVS-13-FS.

FINAL INSPECTION REPORT

Date: 10/2	5/13 Project No: RVS-13	Airport: R.L. Jones Jr. Airport					
TO:	Oklahoma Aeronautics Com 120 N. Robinson, Suite 1244 Oklahoma City OK 73102 (405) 604-6900 – phone (405) 604-6919 – fax						
FROM:	Kelly Fincannon Senior Project Manager 6450 S. Lewis, Suite 300 Address)					
	Tulsa, OK 74136 City/Town and Zip Code 918-250-5922 Area Code and Phone Number						
	Final inspection on the above project was made by Kelly Fincannon . Senior Project Manager						
on 10/25 (Date)	tending inspection:	xiway 'F' - R.L. Jones Jr. Airport .					
	me-title-organization	name-title-organization					
Mark Soltero - Facilities Engineer - TAA		Vivek Khanna - Eng. Manager - OAC					
Steve Mushrush - Airport Manager - RVS		Niranjan Desai Eng OAC					
Kelly Fincannon - Senior PM - Garver		Nick Johnson – Eng Garver					
Greg Kinsey - Const. Observer - Garver Russell Rodden - Superintendent - APAC							
		7.1.7.10					
The project w	vas found acceptable with the e						
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need to be		xception that the pavement edges					
need to be	graded to 1 ½-inches or less dr	xception that the pavement edges					

FINAL ACCEPTANCE NOTICE

	Date: 1	2/13/2013
	Project Number: R	RVS-13-S
	Airport: R	R.L. Jones Jr. Airport
TO:	Oklahoma Aeronautics Commission 120 N. Robinson, Suite 1244 W Oklahoma City OK 73102 (405) 604-6900 – phone (405) 604-6919 – fax	
FROM:	Kelly Fincannon Senior Project Manager 6450 S. Lewis, Suite 300 Address	
	Tulsa, OK 74136 City/Town and Zip Code	
	918-250-5922 Area Code and Phone Number	
This is to ad	vise you that the exceptions found at the	e final inspection have been
completed o	or corrected. The project is accepted by	Kelly Fincannon Senior Project Manager
on12/13 (Date)	3/2013 at <u>Taxiway '</u>	'F' - R.L. Jones Jr. Airport (Location)
Kelly Signature of above		nior Project Manager
NOTE:	If no exceptions are found at the Final I the same time the Final Inspection is confitted from the Project.	

As per OAC, this Notice of Final Inspection is for Project Number RVS-13-FS.



OFFICE OF THE STATE AUDITOR & INSPECTOR 2300 N. LINCOLN BOULEVARD, ROOM 100 OKLAHOMA CITY, OK 73105-4896

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