

ADDENDUM 4
TASK ORDER FROM LAKE HAVASU CITY TO
C&S ENGINEERS, INC.

LAKE HAVASU CITY PROJECT NO. AP1480

1. **Task Order Number:** 4
2. **Title:** Construction Administration New Electrical Vault and Back-up Emergency Generator
3. **Task Order Project Number:** _____
4. **Location:** Lake Havasu City Municipal Airport
5. **Scope of Services Required:** See Exhibit A
6. **City Contact:** Greg Froslic
Consultant Contact: Lance R. McIntosh, P.E.
7. **Performance Time:** 60 calendar days
8. **Cost:** \$58,041.25 – Rate Basis, See Exhibit B for derivation of fee
9. **Attachments:** A–Scope of Services; B-Manhour Estimate; C – Additional Work Fee Schedule
10. **The parties hereto executed the original Task Order on:** _____

Lake Havasu City

C&S Engineers, Inc.

Date

Date

EXHIBIT A

SCOPE OF WORK

Project Title: New Electrical Vault and Back-Up Emergency Generator
Airport Name: Lake Havasu City Municipal Airport
Services Provided: Construction Administration Services

Project Description:

The CONSULTANT shall provide the required construction administration services for the New Electrical Vault and Back-up Emergency Generator construction project (Project). The Project will be performed and constructed by the CITY with grant assistance from the Federal Aviation Administration (FAA) Airport Improvement Program (AIP) and the Arizona State Department of Transportation (ADOT).

During construction, CONSULTANT will provide part-time construction inspection and design support. Once construction is complete, CONSULTANT will produce record drawings and a final construction report and assist the City with the grant closeout process. CONSULTANT's cost proposal is based on a portion of the number of calendar days allotted to the Contractor in the construction contract (60 calendar days) and the hours outlined in EXHIBIT B.

Services to be provided by the CONSULTANT shall include construction administration and inspection services, as applicable, required to accomplish the following items ("Basic Services"):

TASK I - CONSTRUCTION CONTRACT ADMINISTRATION PHASE

The Construction Contract Administration Phase shall consist of observation of the construction to become generally familiar with the progress and quality of the Contractor's work to determine if the work is proceeding in general conformity with the Contract Documents. In addition, the CONSULTANT shall aid the CITY by acting as its liaison and Project coordinator with the FAA and ADOT during the construction of the Project. Construction Contract Administration, including the following services:

1. Provide consultation and advice to the CITY during construction, including the holding of a pre-construction conference, weekly construction coordination meetings, and other meetings required during the course of construction. Prepare and distribute minutes of all meetings.
2. Review, approve, or take other appropriate action on all Contractor-required submittals, such as construction schedules and phasing programs, shop drawings, product data, catalog cuts, and samples.
3. Review alternative construction methods proposed by the Contractor and advise the CITY of the impact of these methods on the schedule and quality of the Project.
4. Prepare supplemental drawings and change orders necessary to execute the work properly within the intended scope. Assist the CITY in resolving contractor claims and disputes.
5. Provide interpretation of the Contract Document requirements and advise the Contractor of these on behalf of the CITY when necessary.
6. Furnish the CITY record drawings for the completed Project taken from the annotated record drawings prepared by the resident inspector based upon Contractor-provided information.
7. Prepare reimbursement request packages for the CITY. The CITY shall submit the packages to the funding agencies.
8. Conduct pre-final and final inspections of the completed Project with the CITY's airport personnel, FAA, ADOT and the Contractor.
9. Issue certificates of construction completion to the CITY, FAA, and ADOT.

10. Perform an orderly closeout of the Project as required by the CITY, FAA, and ADOT, including preparation of the Final Project Construction Report per FAA standards.

TASK II - CONSTRUCTION OBSERVATION PHASE

The construction observation phase shall consist of construction observation by a part-time inspector and supporting staff during critical phases of the project such as work in the air operations area adjacent to taxiways and aprons, building placement and construction, circuit installation and connections, and installation of major bid items. Construction observers will also:

1. Maintain a Project record in accordance with requirements of the FAA and ADOT for aviation capital projects.
2. Review documents and submissions by Contractor(s) pertaining to scheduling and advise the CITY as to their acceptability.
3. Observe the Work when on site to determine general conformity with the Contract Documents and to ascertain the need for correction or rejection of the Work. Neither the activities of the inspector and/or supporting staff nor the presence of any of them at a construction/Project site shall relieve Contractor nor make Consultant responsible for, Contractor's obligations, duties, and responsibilities, including, but not limited to, construction means, methods, sequences, techniques, or procedures necessary for performing, superintending, or coordinating the Work in accordance with the Contract Documents and any health or safety precautions or measures required by regulatory agencies.
4. Attend and conduct pre-construction and pre-installation conferences; bi-weekly progress meetings; and final inspection of the completed Project.
5. Observe testing and inspection when on site. Arrange for, conduct, or witness field, laboratory, or shop tests of construction materials as required by the plans and specifications for the Project; monitor the suitability of materials on the Project site or brought to the Project site to be used in construction; interpret the contract plans and specifications and check the construction activities for general compliance with the design intent; measure, compute, or check quantities of Work performed and quantities of materials in-place for partial and final payments to the Contractor.
6. Prepare and submit inspection reports of construction activity and problems encountered as required by the CITY, FAA, and ADOT.
7. Prepare, review, and approve monthly and final payments to Contractor(s).

RESPONSIBILITIES/DUTIES OF INSPECTION STAFF

In general, the on-site inspection staff is responsible for monitoring construction activity on a project and documenting their observations in a formal project record.

Inspection activity generally consists of the following records and duties:

1. Inspector's Daily Reports(when on site)
2. Summary of Inspector's Daily Reports(when on site)
3. Preparation of FAA Weekly Reports
4. Review of Contractor Daily Reports
5. Preparation of Material Acceptance Reports
6. Preparation of Certification and Testing Log Book

7. Prepare statement of days charged on a weekly basis
8. Conduct Project meetings with CITY and Contractors
9. Field measure quantities on a daily basis(when on site)
10. Preparation of Periodic Payment Request for Contractor
11. Record deviations from the contract plans for preparation of record drawings
12. Preparation and review of Change Orders/Force Account Work

The Construction Observer will assist the CITY and Contractor regarding construction activity as it relates to aircraft operations and coordination of Notice to Airmen (NOTAMS) as required.

TASK III – SUBCONSULTANTS/SPECIAL SERVICES

Special inspection – Western Technologies Inc, will perform field, laboratory, and/or shop tests of construction materials as required by the plans and specifications for the Project.

Special inspection – JK Engineers will review electrical shop drawings and submittals to determine the suitability of materials proposed for use on the project. JK will also assist with the interpretation of the contract plans and specifications and perform a minimum of one (1) site visit to check the construction activities for general compliance with the design intent.

END OF EXHIBIT

C&S ENGINEERS, INC.	
ARCHITECTURAL/ENGINEERING	
WORK SUMMARY	

PROJECT:	NEW ELECTRICAL VAULT AND BACK-UP GENERATOR IMPROVEMENTS	Date:	9/28/17
SERVICES:	CONSTRUCTION ADMINISTRATION	Service Group Mgr:	MICHAEL HOTALING
CLIENT:	Lake Havasu City	Facility Manager:	LANCE MCINTOSH
CLIENT MGR:	Greg Froslie	Project Manager:	LANCE MCINTOSH
		Project Number:	K33.003.001

CONT NO.	PHASE NO.	TASK	ADMIN ASST	SEN DES	STAFF ENG	SEN PROJ ENG	MAN ENG	CONST SUP	SEN INSP	DIRECT COSTS	SERVICES BY OTHERS	TOTALS	TOTAL HOURS PER TASK
	403	CONSTRUCTION OBSERVATION							160	\$2,640.00		\$21,040.00	160
	404	DESIGN SUPPORT					32	42		\$1,001.25		\$13,481.25	74
	405	AS-BUILT/RECORD DRAWINGS		8	24		4	4	25			\$7,355.00	65
	406	PROJECT CLOSURE	8		16		4	4	15			\$5,165.00	47
	701	SBO - SPECIAL INSPECTION/CONSULTING									\$5,500.00	\$5,500.00	
	701	SBO - QUALITY ASSURANCE TESTING									\$5,500.00	\$5,500.00	
			8	8	40		40	50	200	\$3,641.25	\$11,000.00	\$58,041.25	346

CONSTRUCTION MANAGEMENT ASSUMPTIONS:									
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CONSTRUCTION OBSERVATION		
Observation: 4 weeks *5 days/wk* 8 hrs/day		160
Mileage: 4 weeks * 450 miles RT/wk @ \$0.445 per mile		\$1,001.25
Travel Time (OT): 4 weeks * 6 hrs per week		24
Per diem: 4 weeks * 5 nights per week * \$132 per night		\$2,640
	TOTAL	184
		\$3,641.25
DESIGN SUPPORT		
Managing Engineer: 3 trips @ 8 hours/trip		24
Managing Engineer: 4 weeks * 2 hours/week		8
	TOTAL	32
Const. Supr.: 4 trips @ 8 hours/trip		32
Const. Supr.: 5 weeks * 2 hours/week		10
	TOTAL	42



**ARCHITECTURAL/ENGINEERING
COST SUMMARY
EXHIBIT "B"
DESIGN & CONSTRUCTION
MANAGEMENT PHASE**

PROJECT NAME:	NEW ELECTRICAL VAULT AND BACK-UP GENERATOR IMPROVEMENTS				DATE:		22-Sep-17	
PROJ DESCRIPTION:	Construction observation, testing and design support for the New Electrical Vault and Back-Up Generator Improvements				A/E:	C & S ENGINEERS, INC.		
						PROJECT NO:	K33.003.001	
CLIENT:	Lake Havasu City				C&S CONTACT:	LANCE McINTOSH		
CLIENT MANAGER:	Greg Froslie							

I. ESTIMATE OF DIRECT SALARY COSTS:

I. ESTIMATE OF DIRECT SALARY COSTS:					BILLING					
		TITLE			RATE OF PAY (\$/HR)	@	ESTIMATED HOURS			ESTIMATED COST
	A.	MANAGING ENGINEER			\$180.00	X	40		=	\$7,200.00
	B.	SENIOR PROJECT ENGINEER			\$130.00	X	0		=	\$0.00
	C.	STAFF ENGINEER			\$100.00	X	40		=	\$4,000.00
	D.	SENIOR DESIGNER			\$90.00	X	8		=	\$720.00
	E.	ADMINISTRATIVE ASSISTANT			\$60.00	X	8		=	\$480.00
	F.	CONSTRUCTION SUPERVISOR			\$160.00	X	50		=	\$8,000.00
	G.	SENIOR INSPECTOR			\$115.00	X	200		=	\$23,000.00
					TOTAL ESTIMATED DIRECT SALARY COST:					\$43,400.00

II. ESTIMATE OF DIRECT EXPENSES:

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	A.	TRAVEL, BY AUTO:							
		5	TRIPS @	450	VILES/TRIP @	\$0.445	=	\$1,001.25	
	B.	TRAVEL, BY AIR:							
		0	TRIPS @	0	PERSONS @	\$0.00	=	\$0.00	
	C.	PER DIEM:							
		20	DAYS @	1	PERSONS @	\$132.00	=	\$2,640.00	
	D.	MISCELLANEOUS:					=	\$0.00	
							Subtotal =	\$3,641.25	
							TOTAL ESTIMATE OF DIRECT EXPENSES:		\$3,641.25

III. SUBCONTRACTS:

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				<u>COMPANY NAME</u>				<u>TYPE</u>		
	A	QUALITY ASSURANCE TESTING		WTI				RATE BASIS		\$5,500.00
	B.	OBSERVATION/CONSULT		JK ENGINEERS				RATE BASIS		\$5,500.00
								TOTAL COST OF SBO'S:		\$11,000.00

IV. TOTALS:

[illegible]

EXHIBIT C
ADDITIONAL SERVICES

Additional Services, as requested, will be provided at the following rates:

LABOR CATEGORY		BILLING RATE	OVERTIME RATE
Operations			
Service Group Manager		\$ 250.00	
Managing Engineer		\$ 180.00	
Administrative Assistant		\$ 60.00	
Engineering			
Principal Engineer		\$ 180.00	
Project Manager		\$ 150.00	
Senior Project Engineer		\$ 130.00	
Staff Engineer		\$ 100.00	
Senior Designer		\$ 90.00	
Design Technician		\$ 80.00	
CADD Operator		\$ 65.00	
Construction Management			
Senior Inspector		\$ 95.00	\$ 110.00
Inspector		\$ 85.00	\$ 105.00
Inspector (Outside Phoenix Metro Area)		\$ 115.00	\$ 115.00