AIRSIDE SOLUTIONS,INC
SALES; LOGISTICS;TECHNICAL SERVICES

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VISIT US AT: https://www.airsidesolutionsinc.com/

Project Quote

Project Name: ACE3 UPGRADE

Date: 2/8/2023

Quote #: 9119

THANK YOU FOR THE OPPORTUNITY TO SERVE YOU!

Name / Address
BILLINGS LOGAN INTL AIRPORT ATTN: CRAIG CALLICOT ACE3 UPGRADE

ASI Phone #	ASI Fax #
(253) 833-6434	(253) 833-6870

Project Name	Rep	Terms	FOB	Lead Time	Quote Expires
ACE3 UPGRADE	GCE	ASI STD TERMS	POS-PPD&ALL...	20 - 26 WEEKS	9/30/2023

Qty	Item	Description	Unit Price	Total
1	W-PROJECT UPGRADE	PROJECT UPGRADE - TO BE COMPLETED BY PEG BIL-2301 project is to update the existing ACE1 Constant Current Regulators (CCRs) to integrated ACE3 as part of the Airfield Lighting Control and Monitoring System (ALCMS) at Billings Logan International Airport (BIL). Update the ALCMS with the latest executable files. The new ACE3 units will be continue to communicate via the existing serial communication network	130,983.74	130,983.74T
1	TECHSVCS-NON	ASI TECH SERVICE SITE VISIT PER ATTACHED STATEMENT OF WORK SCOPE IN REFERENCE TO #9 CONTRACTOR/ AIRPORT RESPONSIBILITIES. ***Unless otherwise indicated in an additional Request for Quote (RFQ) from the Contractor/Airport, the Contractor/Airport is responsible for the following services as required for the project described herein***	27,425.00	27,425.00T

NOTES:

Subtotal	$158,408.74
Sales Tax (0.00)	$0.00
Total	**$158,408.74**

Signature

** All Copper Material Pricing is Based on COMEX and is Subject to Escalation / Descalation at Tme of Shipment. ~ Wire Tolerances: +/- 5%

ALL UNIT PRICING IS BASED ON THIS COMPLETE BILL OF MATERIAL AS QUOTED AND IS SUBJECT TO THE FULL TERMS AND CONDITIONS OF AIRSIDE SOLUTIONS, INC., A COPY OF WHICH MAY BE OBTAINED BY VISITING OUR WEB SITE AT: http://www.airsidesolutionsinc.com

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Quote
ALCMS Upgrade

Proposal Information	
Project Number:	BIL-2301
Estimated By:	Kevin Sharkey
Quote Revision:	1: 3/21/2023
Airport:	Billings Logan International Airport (BIL)
Project Description:	Ace 3 Upgrade to CCR's

This quote is valid for 90 days from quote date and will need to be re-quoted if expired

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1. Terms and Conditions

Herein is the project proposal which describes ADB SAFEGATE's interpretation of the work to be completed according to requirements gathered from available specifications, drawings and addendums received at the time of the quote date. Included is the preliminary scope statement, equipment list, block diagram, preliminary schedule, risk analysis and support service responsibilities of ADB SAFEGATE and the installing Airport.

2. References and Applicable Documents

This Quote information is based on the following applicable documents received as of the indicated quote date. Any changes / addendums that may result in changes to scope of this project will require a change order request.

Reference	Details
Specification Document	Constant Current Regulator information collected from BIL Drawing Set
Email / Phone Conversations	Request by sales group

Table 1: References and Applicable Documents

3. Project Scope Statement

The purpose of this project is to update the existing ACE1 Constant Current Regulators (CCRs) to integrated ACE3 as part of the Airfield Lighting Control and Monitoring System (ALCMS) at Billings Logan International Airport (BIL). The project scope includes:

Hardware

- Upgrade of fourteen (14) ACE1 to ACE3 Integrated CCRs

.1 These kits include an ACE3 to be installed in the existing position of the ACE1 located on the CCR door.
.2 The Current and Voltage Module (CVM) will be replaced inside of the CCR with an updated unit for communication to the new ACE3.
.3 The ACE3 will continue to communicate via the existing redundant serial communication network.

- Replacement of the two (2) – ACE1 I/O to ACE3 I/O

.1 Utilized for control and monitoring of the generator, PAPI 07, PAPI 25, RENL RWY 28, and Windcone

The internal universal regulator controller (URC) circuit boards for the CCRs are not being upgraded as part of this project.

Software

- Update the ALCMS with the latest executable files. The new ACE3 units will be continue to communicate via the existing serial communication network.

Travel

- The project will include up to three (3) trips for the installation and commissioning of the ACE3 Units

Request for Information

1. Upon project award, customer to provide pictures of the labels of the fourteen (14) CCRs being updated as part of this project.

4. Scope of Support Services

4.1 Submittal Phase

Technical written and electrical/mechanical Submittal drawings will be delivered within four (4) weeks from receipt of Purchase Order. Equipment will not be released to production until ADB SAFEGATE receives written hard-copy of approved Submittals including written technical proposal and electrical/mechanical drawings. Approved Submittals are ADB SAFEGATE's only indication that the system design is correct and provides ADB SAFEGATE authorization to begin procuring equipment.

4.2 Factory Acceptance Test [FAT]

An Un-witnessed Factory Acceptance Test will be performed in-house by ADB SAFEGATE Personnel prior to shipment. FAT Test Reports will be available upon customer request.

4.3 On Site Commissioning and System Acceptance Test [SAT]

ADB SAFEGATE will complete onsite commission and system readiness checks. A witnessed System Acceptance Test will be performed on site by ADB SAFEGATE Personnel to be witnessed by airport owner/owner representative and Airport. Copies of the SAT Reports can be provided upon request.

4.4 Scope Overview Training

Scope Overview Training will be completed during commissioning trip by commissioning engineer personnel. Training will include a review with the end user regarding any pertinent changes that will affect operation of the existing ALCMS.

4.5 Project Documentation

ADB SAFEGATE will provide and Electronic copies of the final As-Installed Drawings.

5. Proposed Project Hardware and Materials

5.1 Project Hardware and Materials List Accuracy

The project equipment list (Bill-of-Material) contained within this proposal is considered complete. ADB SAFEGATE is not liable for any shortage, losses, or damages resulting from any discrepancies, omissions, or errors. This proposal consists of ADB SAFEGATE's best interpretation of the bid documents, plans or specifications available to ADB SAFEGATE at time of quote date. The recipient of this proposal is responsible for the accuracy of this RFQ and is required to immediately inform ADB SAFEGATE of any discrepancies.

5.2 Proposed Hardware

5.2.1 Airfield Lighting Vault

- Fourteen (14) - ACE3 Integrated Upgrades
  - ACE3 Control and Monitoring Assembly
    - Default Card for Control and Monitoring Functions
  - Current and Voltage Module (CVM2)
  - Fiber Cables
- Two (2) – ACE3 I/O

6. Project Critical Milestones and Delivery

The project will be managed with the following milestones involved in the design, production, testing, commissioning, and training for this project.

ID	Milestone	Description
M1	Submittal	Written Proposal / Drawings submitted to customer for review/approval
M2	Submittal Approval	Submittal reviewed by the customer and approved for release
M3	Production Release	Equipment is released for procurement
M5	System Assembly	Equipment is assembled and ready for test
M6	Factory Acceptance Testing	Factory Acceptance Testing (FAT) is completed by project team at ADB SAFEGATE
M7	Shipment	System is shipped to installation site
M8	Airport Installation	Airport installs equipment, external wiring and completed install checklist
M9	Commissioning	ADB SAFEGATE commissioning team inspects installation, complete commissioning and performs Operational Readiness Test
M10	System Acceptance Testing	System Acceptance Testing (SAT) is witnessed by airport/owner and/or engineer

Table 2 Project Critical Milestones

6.1 Delivery Schedule and Contingencies

Equipment will not be released for purchasing or production until receipt of written approval of Submittals including written technical proposal and electrical/mechanical drawings. This means delivery date of equipment is contingent on length of *Submittal Approval Phase (M2).*

Shipment schedule will be confirmed upon ADB SAFEGATE's receipt of approved written Submittals and/or drawing package.

7. Invoicing

ADB SAFEGATE will invoice for completed work based on schedule milestone completion as follows:

ID	Invoice Milestone	Description
M1	Project Submittals	Once project submittals have been submitted. ADB SAFEGATE will invoice for costs associated with the submission.
M6	Factory Acceptance Test	Once FAT is completed (witnessed or un-witnessed), ADB SAFEGATE will invoice for costs associated with software, production and FAT.
M7	Shipment	Equipment will be invoiced when shipped
M10	SAT	Upon completion of commissioning responsibilities and completion of SAT, ADB SAFEGATE will invoice for project completion.

Table 3 Invoicing Schedule

8. ADB SAFEGATE Responsibilities

Unless otherwise indicated in an additional Request For Quote (RFQ) from the Airport, ADB SAFEGATE's project team will provide the following services as required for the project described herein:

- Coordinate and plan with Airport schedule for system commissioning. Coordinate date for switchover to new system pending completion of Airport's responsibilities
- Installation of ACE3 Integrated Kits into existing CCRs
- Update to the latest ACE3 executables
- Coordinate and plan with Airport Maintenance training sessions per project requirements. Please refer to Airport responsibilities
- Complete the commissioning of the control and monitoring system comprising of:
  - Confirm proper location and installation of distributed control (ACE™) units
  - Power up and test (ACE™) units
  - Power up and test control system communication lines.
- Perform operational readiness test (ORT) to demonstrate proper operation prior to system switchover.
- Make any hardware/software changes that are contractual requirements within scope
- Perform Maintenance training on agreed scheduled times
- Perform final System Acceptance Test (SAT) with owner/owner representative
- Resolve any punch list items that are contractual requirements within scope
- Record owner/owner representative system acceptance and provide formal SAT record upon request
- Provide required sets of Operator Manuals, As-Built drawings
- Pack up and ship service tools and extra commissioning material and unused parts from the "Spares Trunk"

9. Airport Responsibilities

Unless otherwise indicated in an additional Request For Quote (RFQ) from the Airport, the Airport is responsible for the following services as required for the project described herein:

- Provide manpower and airport escorts as needed through entire installation, commissioning and testing effort.
- Coordinate all on-site training activities including maintenance training and operations training.
- Provide existing input power for all ACE™ units
- Provide proper grounding for all ACE™ units
- Provide and install all hard-wire communication and peripherals as needed for a complete communication system. Including providing junction boxes / terminal cabinets as required.
- Install and terminate all cabling (including spares), between junction boxes and computer cabinet.
- Complete all airfield work such that all CCR loads are in their final configuration and circuits are fully operational (all lamps burning).
- Coordinate and provide manpower for completion of System Acceptance Testing (SAT) assuring appropriate personnel are present to witness and authorize the test report.
- Complete punch list items within project requirements
- Provide project sign-off upon completion of all project equipment