

Metropolitan Washington Airports Authority
PROCUREMENT AND CONTRACTS DEPT.
AMENDMENT OF SOLICITATION

Metropolitan Washington Airports Authority Procurement and Contracts Dept., MA-29-IAD Washington Dulles International Airport 45025 Aviation Drive, Suite 240 Dulles, VA 20166	1A. AMENDMENT OF SOLICITATION NO.	1B. DATED
	RFP-18-32181	March 27, 2019
	2A. AMENDMENT NO.	2B. EFFECTIVE DATE
	Four (0004)	May 1, 2019

The solicitation identified in Block 1A is amended as set forth in Block 3. Hour and date specified for receipt of offers is extended, is not extended. Offerors must acknowledge receipt of this amendment prior to the hour and dated specified in the solicitation or as amended, by one of the following methods: (a) by completing Block 4 and returning copy of the amendment; (b) by acknowledging receipt of this amendment on the Solicitation Offer and Award Sheet, Block 13. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER.

3. DESCRIPTION OF AMENDMENT

The Metropolitan Washington Airports Authority Solicitation RFP-18-32181, entitled “**Design-Build Concourse C/D Electrical Ductbank Rehabilitation and Feeder Replacement Project at Washington Dulles International Airport**” is amended as follows:

1. Section X Attachments – 01 – Statement of Work “Design-Build Services, Concourse C/D Electrical Ductbank Rehabilitation and Feeder Replacement for Washington Dulles International Airport”, dated April 2019 is hereby deleted in its entirety and replaced with the attachment “Design-Build Services, Concourse C/D Electrical Ductbank Rehabilitation and Feeder Replacement for Washington Dulles International Airport”, dated May 2019. Revised – Added Appendix 2 “Concourse C/D Schematic Feeder Tap Diagram”, page 10.
2. See additional Questions and Answers dated May 1, 2019.
3. The due date and time remains unchanged at May 15, 2019, no later than 1:00 pm local time.
4. All other terms and conditions of the solicitation remain unchanged.

Except as provided herein, all terms and conditions of the document referenced in Block 1A, as heretofore changed, remain unchanged and in full force and effect.

4A. NAME AND TITLE OF OFFEROR	4B. SIGNATURE	4C. DATE

METROPOLITAN WASHINGTON AIRPORTS AUTHORITY

DESIGN BUILD SERVICES

**CONCOURSE C/D ELECTRICAL DUCTBANK
REHABILITATION AND FEEDER REPLACEMENT**

FOR

WASHINGTON DULLES INTERNATIONAL AIRPORT

STATEMENT OF WORK

MAY 2019

1.0 PROJECT OVERVIEW

There are two existing 15kV feeders distributing power to the C and D Concourses. Each feeder consists of (3) 500-1C-EPR and (1) #4/0 ground (600V) conductors. Line-1 and Line-2 are tapped in manholes to (7) unit substations. Each feeder tap consists of (3) #4/0-1C-EPR and (1) #4/0 ground (600V) conductor.

The feeders are installed in a network of underground concrete encased conduit ductbank underneath the Concourse C/D building, which including (28) manholes. The ductbank consist of 5" Orangeburg conduits which were originally installed in the late 1950's to early 1960's.

Rehabilitation of ductbank and replacement of feeders are required to further extend the functional lifespan of this system.

2.0 PROJECT SCOPE

2.1. General

The Design Build Contractor shall furnish all labor (including required professional disciplines), materials, and equipment to perform all operations in connection with the task stated herein.

2.2. Review and Research

The Airports Authority will make available its files of documents related to existing conditions. The Design Build Contractor shall be responsible for the return of all documents upon completion of this project. The Design Build Contractor shall be provided access to record documents. However, such information must be verified by the Design Build Contractor for accuracy and completeness. The Design Build Contractor shall coordinate all field work and access to the site with the Airports Authority. The Airports Authority will review all work prepared by the Design Build Contractor for compliance with the Design Manual, requirements stated herein and other requirements which may be identified during the development of the project and will advise the Design Build Contractor of its findings. Review by the Airports Authority does not relieve the Design Build Contractor of responsibility for the technical accuracy of its work and for conformance to contractual requirements. Any work that does not meet contractual requirements shall be corrected by the Design Build Contractor without cost to the Airports Authority.

2.3. Site Investigation

The Design Build Contractor shall perform all site surveys necessary to become familiar with the existing conditions.

2.4. Project Task

The task requirement shall include, but not limited to:

1. Develop comprehensive design and construction sequencing plan to minimize the impact to the airport operation.
2. Clean the interior of (3) existing underground spare conduits, Remove all deformities in the existing spare conduits, and provide interior epoxy lining (between manhole “19EP-5 and 19EP-8”, “19EP-6 and 20EP-15”, and “20EP-1 and 20EP-20A”). Post-liner conduit opening size shall be at a minimum of 4.5”.
3. Manholes and conduits may contain groundwater. Contractor is required to pump out any standing water and dispose of the water in a manner approved by the Airports Authority.
4. Video inspection of precondition and post condition of the conduit must be submitted to the Airports Authority for review and record keeping. Post-cleaning videos of conduit interior must be approved by the Airports Authority prior to liner installation.
5. A 4.5” mandrel must be pulled through each cleaned and lined duct.
6. Contractor shall maintain log of conduit cleaning and re-lining process by recording daily production on project site.
7. Replace the (2) existing 15kV feeders (between the manhole as stated in requirement #2 above), the existing 15kV feeders shall be demolished after newly installed feeders are tested, connected to the new substations and energized.
8. Provide wall mounted dead break junction bars in manholes 19EP-5, 19EP-6, 19EP-8, 20EP-15, and manholes that distribute power to the substations within the Concourse C/D. Each dead break junction bar shall provide enough connection for each feeder plus (1) additional spare connection.
9. Provide dead break connectors on the feeders in the manholes stated in the requirement #7 above.
10. Power feeder shall be (3) 500MCM-1C-ERP (15kV rated with 133% insulation level), ground wire shall be (1) #4/0 (600V rated).
11. Each feeder tap shall be (3) 4/0-1C-ERP (15kV rated with 133% insulation level), ground wire shall be (1) #4/0 (600V rated).
12. All current carrying components shall be copper.
13. Third party testing by NETA certified agency is required. Testing shall be in accordance with the latest NETA acceptance testing requirement.
14. The normal contractor working hours shall be between 10PM – 5AM. The daily working hours is subject to change in order to accommodate the needs of airport operation.

Refer to Appendix 1 for the approximate location of the ductbank and manhole.

Refer to Appendix 2 for the schematic feeder route and tap information.

2.5. Design Report

The Design Build Contractor shall prepare a design report at each phase of the project, which provides a thorough and concise summation of the approach to the design including technical criteria affecting the project, recommendations and rationale for the design of the project. The report shall also identify all the design issues and questions with applicable recommendations for the Airports Authority's review and decision. The report may include graphic exhibits, schedules, responses to review comments and supporting documents as required to document project development. All graphics prepared for insertion in the report shall be legible at a minimum size of 8-1/2" x 11". Cost estimates, correspondence, etc. shall not be included in the Design Report.

2.6. Drawings

The Design Build Contractor shall prepare all construction drawings as necessary to thoroughly define all project requirements. Drawings shall be prepared on CADD to uniform standard policies and procedures for design and drafting work as established in policies and procedures for design and drafting work as established in the latest version of the Authority CADD Design Manual. Standard Authority title blocks and cover sheets shall be used. Drawing size shall be 22" x 34". Drawings which are not fully legible when reduced to half size will not be accepted.

Additional required drawings are as below:

- Manhole location and details plan
- Ductbank layout plan
- Ductbank cross section details

2.7. Calculations

Calculations shall be submitted as required by the Design Manual. Specific attention should be given to the requirement for certification, initialing, dating, and sealing of calculations at each phase of design. Calculations for individual disciplines shall be provided in separate volumes.

Additional required calculations are as below:

- Underground Cable Pulling Calculation

2.8. Design

The A/E shall prepare the design of this project in accordance VUSBC 2015 and the most recent version of the Airports Authority Design Manual.

2.9. Specifications

The Design Build Contractor shall prepare construction specifications that include requirements presented in the Statement of Work. Format for the specifications shall conform to the most recent version of the Airports Authority Design Manual. The Design Build Contractor shall verify the correctness and applicability of any portion of the standards utilized in the project specifications. No portion of the standards may be adopted by reference. Complete, comprehensive and customized specifications are required for the project. The Design Build Contractor shall investigate and specify the use of locally available construction materials and practices when practical.

2.10. Certifications

All drawings and each title page of the specifications, cost estimate, calculations, and reports shall be certified with the seal and signature of the Professional Engineer or Architect. Professional engineer and architect registration in the Commonwealth of Virginia is required.

2.11. Cost Proposal

Design Build cost proposals, with subtotals for labor and expenses shall clearly identify work elements required for the project and the level of effort and the cost associated with completing each element of design and construction.

Proposals should be formatted using Excel spreadsheets beginning with a rollup sheet that summarizes costs by phase and discipline, supported by supplemental sheets as needed to establish the basis for the proposed fees. Unit costs may include cents; however, line total should be rounded to the nearest dollar.

The form of the proposal shall be a lump sum amount for all professional services and related expenses required to perform the construction work. The Design Build Contractor shall not be entitled to any premium costs for overtime worked without prior approval of the Contracting officer.

2.12. Coordination with Adjacent Projects

The Design Build Contractor shall coordinate work and make information available to the construction contractor of the other projects within the vicinity of each work area.

2.13. Construction Sequencing and Schedule

The contract documents shall include workable recommended phasing sequences to allow demolition of the existing systems and installation of the new feeders and conduits.

2.14. Commissioning

The Design Build Contractor shall provide a third-party commissioning service to ensure a measure of quality assurance in the new building systems. The commissioning service shall consist of validation and documentation of the performance of the new building system in order to meet the design intent and requirements of the Authority. Commissioning service provider shall provide a comprehensive commissioning plan outlining the process of validation, acceptance and documentation of the new building system to be reviewed by the Authority. In addition, the Design Build Contractor shall coordinate commissioning service efforts to be executed in timely manner in accordance to the construction schedule to minimize any disturbance to the affected occupants/parties.

2.15. Unifier

The Metropolitan Washington Airports Authority has implemented Oracle Primavera Unifier (*Unifier*) as the Project Management/ Electronic Document Management System. *Unifier* will be used to ensure proper handling of incoming/outgoing documentation and sequential logging of incoming/outgoing correspondence. Also, *Unifier* will be used for document review, project reporting, and ultimately, as the project archive. The process will be from start (NTP) to the completion of the Design Build contract.

It is mandatory that any coordination and the transmittal of 'in progress' drawings and specifications be controlled, recorded, and monitored utilizing *Unifier* software.

The Project Team will have the facility to issue and receive documentation electronically. However, it must be noted that copies of certain documentation shall be issued, and signed, in hardcopy original form as described in the Statement of Work and the Authority Design Manual.

The contractor is to allow within the Proposal technicians and document controllers to adequately manage electronic and hardcopy document management for the duration of the Project.

3.0 REQUIRED SERVICES/DELIVERABLES

The Design Build Contractor shall provide all conceptual, technical, project and procurement support design services for including all required professional disciplines. The Design Build Contractor shall provide a Statement of Understanding of the efforts necessary to successfully complete all the tasks described in the Statement of Work. The Design Build Contractor shall indicate their technical methodology and expected levels of effort to satisfy the Statement of Work.

The Authority will assume full and complete ownership of all deliverables produced under this contract, including drawings, reports and all final documents.

3.1 Meetings

The Design Build Contractor shall prepare agendas and conduct meetings with the Authority and others as required for completing the work. Minutes will be prepared and distributed by the Design Build Contractor within five days of the meeting. Interviews with Authority offices will be held for the purpose of establishing requirements, reviewing progress and resolving issues affecting the completion of the project. These meetings will be held at the offices of the Authority.

These meetings include but are not limited to the following, which will be held at the Washington Dulles International Airport (IAD) and will require attendance and participation by the Design Build Contractor and any applicable sub-consultants as identified by the Design Build Contractor:

- Kick-off meeting with the Airports Authority and the Design Build Contractor
- On-site review meetings with Authority offices including Building Codes and Maintenance and Engineering offices to determine requirement
- 60% Design Documents review meeting
- 90% Design Documents review meeting
- 100% Final Design Documents review meeting
- Bi-Weekly Construction Progress Meetings
- Additional meetings as required by the Authority COTR

In additional to regular working meeting with the Authority offices and user groups, the Design Build Contractor shall anticipate providing a complete presentation for the requirements and documents that will be used in procuring work to meet Authority needs and requirements.

3.2 Deliverable Quantities

Deliverables	60% Submittal	90% Submittal	100% Final Submittal	Remarks for 100% Final Documents
Drawing - Half Size	15	15	2	Sign & Seal Final
Mylar-Full Size Title Sheet	N/A	N/A	1	Sign & Seal Final
Specifications	8	8	2	Sign & Seal Final
Design Report	14	14	2	Sign & Seal Final
Construction Schedules	6	6	2	Sign & Seal Final
Long Lead Items	3	6	2	Sign & Seal Final
Calculations	2	2	2	If Applicable
Cost Estimate	4	4	4	Sign & Seal Final

CD's	8	8	2	Native & PDF Formats
CD's with Cost Estimate	6	6	4	PDF Format
Building Code Compliance and A/E Certification	N/A	N/A	Authority Design Manual Section II, 2.5.7	Sign & Seal Final [2]

Notes:

1. All drawings are to be fully legible when reduced to half size.
2. Design Build Contractor required to submit: (3) sets of sign/sealed full size drawings; sign/sealed letters or forms related to Code Compliance for Construction Permit.

3.3 Project Schedule

<u>Project Item</u>	<u>Duration</u>	<u>NTP</u>
60% Design Submission	60 Days	60 Days
Authority Document Review	15 Days	75 Days
90% Design Submission	30 Days	105 Days
Authority Document Review	15 Days	120 Days
100% Final Submission	15 Days	135 Days
Construction	365 Days	500 Days

3.4 SUPPLEMENTAL INFORMATION

Project Name on all the contract documents shall be as listed below:

Dulles International Airport
 Concourse C/D Electrical Ductbank Rehabilitation and Feeder Replacement

Project Identifier: TBD

Signature Blocks: The following information is to be used in the signature blocks on cover sheets and initials on individual drawing sheets:

Accepted by: Simon Lai, Electrical Engineer
 Submitted by: Moe Wadda, Manager of Design
 Approved by: Roger M. Natsuhara, Vice President for Engineering

END

APPENDIX 1

Concourse C/D Ductbank and Manhole Layout

APPENDIX 2

Concourse C/D Schematic Feeder Tap Diagram