

PROPOSAL FOR DEVELOPMENT OF CONSTRUCTION DOCUMENTS FOR REPAIR AND EXPANSION OF EXISTING FUEL FARM

BACKGROUND

The Savannah Airport Commission (Commission) intends to repair and expand the existing Jet-A fuel farm located at the Savannah Hilton Head International Airport. The expansion includes the addition of three 40,000-gallon horizontal aboveground fuel tanks. AECOM Technical Services, Inc. (AECOM) conducted a site visit to the fuel farm on July 15, 2021 to assess the existing fuel farm and the feasibility of installing three additional horizontal aboveground fuel tanks at the fuel farm. On July 29, 2021, AECOM issued a report that summarized the results of the assessment. Based upon the AECOM report and at the request of the Commission, AECOM provides the following proposal for the design phase of this improvement.

SCOPE OF WORK

AECOM will provide civil, structural, mechanical, and electrical engineering design services. The program elements to be designed include:

- 1) Addition of three 40,000-gallon aboveground storage tanks to the existing fuel farm. New tanks will be connected to the existing bulk fuel receipt and issue systems. New tanks will be designed to meet requirements of ATA 103, NFPA 30, and NFPA 407.
- 2) Automatic tank level gauges for the new tanks will be connected to the existing tank level and alarm panel.
- 3) The three new tanks will be installed in a new concrete containment area.
- 4) Tanks will include platforms and stairs that can be used to access the tops of the tanks.
- 5) New tank containment area will include a stormwater drain. Drain line will be equipped with a post indicating valve. Drain line will discharge through a new oil water separator before discharging to an existing stormwater drain trench.
- 6) Relocation of existing containment area storm water drain as required to facilitate installation of containment area for the three additional tanks.
- 7) Demolition and replacement of existing 3-inch issue pump suction line with a new 6-inch pump suction line. Suction line will connect between the issue nozzles of the existing tanks and the suction flanges of the three issue pumps.
- 8) Replacement of the automatic tank level gauge probe in Tank 3.
- 9) Installation of a filter separator control valve on the filter separator connected to Pump #3.
- 10) Installation of high-level shutoff valves on existing Tanks 1, 2, and 3 and repair of tank high level shutoff valves on existing Tanks 4 and 5.
- 11) Repair of spot corrosion on existing tanks and piping.
- 12) Installation of UL142 product recovery tank for connection to Pump #1 and 2 filter separator.
- 13) Installation of thermal relief valves in sections of piping that can be isolated between valves.
- 14) Replacement of electrical conduit in classified areas as required to meet code.
- 15) Installation of sluice gate valves and overflow weirs. Sluice gate valves will be installed

between storm water drain openings of existing bulk tank containment areas. Valves will allow operators to isolate containment areas of individual tanks. Overflow weirs will be installed to connect the containment areas together and will allow full use of the containment area volume in the event of a major fuel spill.

DESIGN SUBMITTALS & REVIEW MEETINGS

Task 100 – Site Surveys

AECOM will conduct a utility location survey, topographical survey, and geotechnical survey in the project area. Utility location survey and topographical surveys will be conducted in delineated project area. Each survey will cover two acres of surface area.

Geotechnical survey will include one 15-ft boring at the location of each new fuel tank (3 total). Geotechnical survey will provide foundation recommendations for the new tanks based on soil conditions found at the site. One AECOM engineer will be on site during the geotechnical survey.

Task 200 – 35% Design

The 35% design documents will include plan view layouts from each discipline and will show the major features of the work. The 35% design documents will also include mechanical Piping and Instrumentation Diagrams (P&ID) that will show planned repairs to the existing fuel system and the addition of the three 40,000-gallon tanks. AECOM will issue a 35% design set to the Commission for review. The commission will provide one consolidated set of written comments to be reviewed with AECOM during the 35% design review meeting. The review meeting will be held virtually. The agreed upon comments and action items list developed during the review meetings will be addressed in the 95% submittal documents. Submittal will be provided in electronic format only.

Task 300 – 95% Design

The 95% design submittal will be based on the approved 35% design submittal. The 95% design submittal will include detailed drawings and include product specifications for items that will be used to construct the project. AECOM will issue a 95% design set to the Commission for review. The commission will provide one consolidated set of written comments to be reviewed with AECOM during the 95% design review meeting. The review meeting will be held virtually. The agreed upon comments and action items list developed during the review meetings will be addressed in the Final Design submittal documents. Submittal will be provided in electronic format only.

Task 400 – Final Design

The final design will be based on the approved 95% design documents. AECOM will provide stamped and sealed issued for construction documents that can be used to solicit bids for the project. AECOM will provide five hard copy sets of stamped and sealed issued for construction documents.

Task 500 – Permitting

AECOM will assist the Commission during the permitting process by providing information to the Commission required for the permit application forms. Permitting fees will be paid directly by the Commission. AECOM will provide up to five hard copy sets of the permitting documents.

Task 600 – Pre-Bid and Construction Contract Administration

- RFI Responses: AECOM will provide responses for up to 20 RFIs. Responses to RFIs will be provided within 5 business days of receipt by AECOM
- Construction Submittals: AECOM will provide review for up to 50 submittals. Review of submittals will be provided within 10 business days of submittal to AECOM. Re-submittal reviews is limited to 25.
- Pre-bid Conference and Site Walk: One AECOM fueling engineer will attend and help facilitate a one-day pre-bid conference and site walk. AECOM will respond to bidder RFIs after the site walk has been completed. Pre-bid RFIs are limited to 20.
- Bid Review and Recommendations: AECOM will review up to 4 contractor bids for the project and will provide recommendations for contractor award.
- Pre-construction Conference: One AECOM fueling engineer will attend a one day pre-construction conference. During this conference, AECOM will review the project with the contractor that has been awarded the project.
- Construction Site Visits: One AECOM fueling engineer will attend a one-day construction site visit.
- Start Up Verification Site Visit: One AECOM fueling engineer will attend a one-day startup site visit to verify operation of the completed system.

SCHEDULE

DESIGN TASKS	Design Duration	
Task 100 Site Surveys	8 weeks	
Task 200 35% Design	8 weeks	
Task 200 Review and Meeting	2 weeks	
Task 300 95% Design	8 weeks	
Task 300 Review and Meeting	2 weeks	
Task 400 Final Design	2 weeks	
Total Design Schedule	30 weeks	

CONSTRUCTION TASKS	Duration	
Task 500 Permitting	8 weeks	
Task 600 CA Services	52 weeks	
Total Construction Schedule	60 weeks	

ASSUMPTIONS AND CLARIFICATIONS

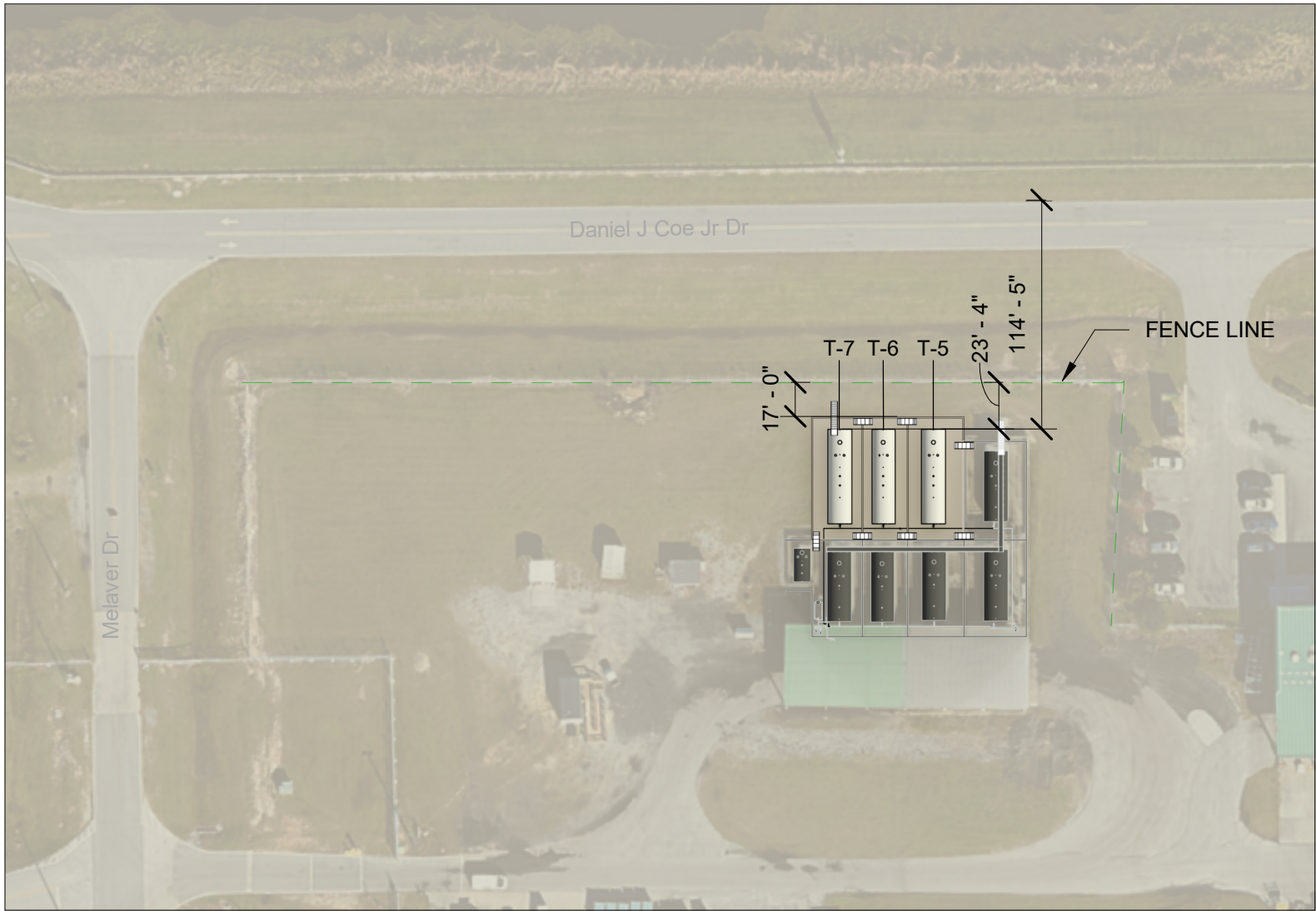
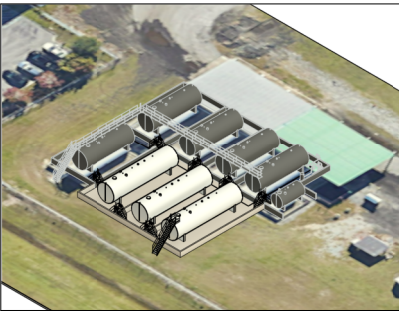
- AECOM will design the program elements based on the July 29, 2021 assessment report recommendations. Any additional design request beyond those identified in the report will be performed as an additional service.
- Additional review meetings or in person review meeting will be performed as an additional service.
- The schedule assumes that the Commission will provide one consolidated set of written comments within one week of receipt of the design submittals. This will allow AECOM time to review and develop responses prior to the Design Review meetings.
- Additional pre-bid RFI, Construction RFI's and submittal beyond those identified in the scope of work are considered additional services.
- The Commission will be responsible for managing and coordinating all construction services activities, including processing RFI's and submittals, pay applications, and schedule modifications.
- The Commission will require the contractor to provide complete submittals consistent with specification requirements. Partial submittals will be returned to the contractor/Commission without review.
- Additional borings beyond the three identified as well as any borings beyond 15ft in depth is considered an additional service.
- The Commission will fill out the permit applications, submit and pay required fees.
- Additional site visits beyond those identified in the scope of work are considered additional services.
- Changes due to unforeseen site and underground conditions requiring design changes are not the responsibility of AECOM. These differing conditions may require additional design not originally contemplated and are considered additional services.
- During the design phase, AECOM will participate in one 1-hour conference calls with the Commission once every two weeks.
- During the construction phase, AECOM will participate in up to 10 Owner-Contractor meetings to support the Commission. AECOMs participation is limited to 1 hour per call.

COMPENSATION

AECOM will perform the services described herein for a lump sum firm fixed price of **\$277,580.**

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Filename: C:\Users\matthew.bodine\AECOM\Fueling_SAV_AV.mxd
Project Management Initials:
DESIGN FILES\acm_Fueling_SAV_AV.mxd
Designer: Designer
Checked: Checker
Approved: Approver

HORIZONTAL TANK SCHEDULE				
Mark	Volume (Gal)	Description	Basis of Design	
			Model	Manufacturer
T-5	40,000	UL-142 SW Tank	12' DIA, 47' 6" Long	Highland
T-6	40,000	UL-142 SW Tank	12' DIA, 47' 6" Long	Highland
T-7	40,000	UL-142 SW Tank	12' DIA, 47' 6" Long	Highland



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F-001

SITE PLAN 40K TANK LAYOUT

Scale: 1" = 80'-0"

*DIMENSIONS SCALED BASED ON AERIAL IMAGERY



PROJECT

Fuel Storage Facility Expansion

CLIENT

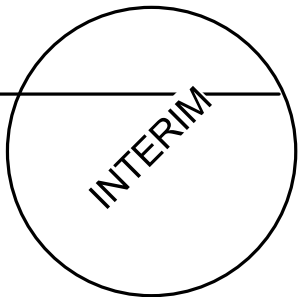


CONSULTANT

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REGISTRATION



ISSUE/REVISION

I/R	DATE	DESCRIPTION
	04-27-22	CONCEPT 1

PROJECT NUMBER

30619

SHEET TITLE

FUEL TANK LAYOUT OPTION #1

SHEET NUMBER

F-001