Dryden & LaRue, Inc.
CONSULTING ENGINEERS

November 2, 2009

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Reference: **Fort Wainwright – FTW336A Aircraft Parts Storage**

This letter is a response to your email dated 10/14/2009, requesting a fee proposal for engineering services.

Doyon Utilities has received a Notice to Proceed for the FTW336A Aircraft Parts Storage. This is a new building that is scheduled to start construction in the spring of 2010. Doyon Utilities has been requested to provide the electric service, parking lot lights, power to HBOs and metering equipment.

The following are our anticipated design and engineering support tasks. Each task describes work included and deliverables.

Task 1 – Site Visit

This task entails a visit to Fort Wainwright to verify the Corps of Engineers proposed site design and existing conditions at the proposed building location.

Work Included:

1. Site visit to FWA, Fairbanks.

Deliverables:

1. Report stating design anomalies and project status.

Task 2 – Preliminary Design

This task will develop the line extension, head-bolt heater receptacles service, building service, and replace the proposed site lighting layout with an LED design.

Work Included:

1. Update primary circuit drawings for the area based on the site visit.
2. Update backgrounds with Google Earth images.

3. Prepare preliminary design for primary based on the 2010 Doyon Design Manual.
4. Determine pole heights and class for various locations.
5. Pole locations and assemblies
    a. Determine ancillary equipment attached to existing poles.
    b. Prepare sample staking sheets.
6. Create lighting photometrics to use LED luminaires instead of the High Pressure Sodium (HPS) luminaires proposed by the Corp of Engineers for the parking lot lighting.
7. Provide a service for head-bolt heater receptacles and parking lot lighting.
8. Provide a service for the proposed building.

Deliverables:

1. List of Assemblies
2. Preliminary drawings and details
3. Sample staking sheets

Task 3 – Field Staking

This task consists of field staking of all new poles, anchors, and underground electrical equipment.

Work Included:

1. Field staking done in conjunction with other projects at FWA.

Deliverables:

1. None

Task 4 – Final Design and Construction Documents

This task will complete the design based on upon field staking information and any Doyon Utilities review comments and field staking changes.

Work Included:

1. Incorporate Doyon Utilities review comments.
2. Incorporate Field Staking changes.
3. Review calculations and update plans.
4. Review pole heights and class.
5. Verify pole locations and assemblies.
6. Revise list of assemblies.
7. Revise field staking as required.

Deliverables:

1. Construction drawings
2. Construction staking sheets
3. Assembly list update

Task 5 – Bid Assistance and Submittal Review

This task will provide technical support during bidding.

Work Included:

1. Respond to technical questions, and assist in issuing addenda as needed during the bidding phase.
2. Prepare addenda.

Deliverables:

1. Responses to technical questions
2. Technical input for addenda
3. Review letter of Contractor's design calculations and shop drawings.

Task 6 – Engineering During Construction

This task will provide engineering support for changes and questions during construction.

Work Included:

1. Site visits shall be coordinated with other FWA projects happening at the same time.
2. Coordinate with contractor by telephone.
3. Prepare design memos and sketches as required.

Deliverables:

1. Design memos and sketches

Task 7 – Record Documents

This task will prepare Record Documents based on the Contractor red-lines and site visits to verify construction.

Work Included:

1. Incorporate Contractor red-lines into bid documents.
2. Site visit to data log line extension shall be coordinated with other FWA 2010 projects.
3. Incorporate field data into drawings.

Deliverables:

1. GIS database information with other FWA 2010 projects.
2. Construction Drawing As-builts

Clarifications

1. Existing DPW drawings will be used to locate existing utilities. Dryden & LaRue will coordinate with existing utilities where construction scope may affect existing utilities, but it is not in the scope of this project to identify and survey all utilities on the Post.

2. No telecommunication is included in this scope.
3. Parking lot lighting will be converted to LED luminaires per the Army's directives. Lighting calculations and connections shall be limited to the southwest parking area near building 2097. "Yard Lighting" and HBOs to the north of the Aircraft Parts Storage Building are associated with the building contract.
4. Line extension shall consist of one pole and associated riser.
5. Services shall consist of one 480Y277V, 400A building service (Corps 225A size appears insufficient due to Fire pumps connected to service) and one 240/120V, 200A service for head bolt heaters and site lighting.
6. Staking shall be done in conjunction with Feeder 10, 13, 14, 15, & 25 projects done in 2010.
7. The proposed budget is based on completion of the tasks listed above by the summer of 2010.

Schedule

A material list will be generated by January 2010. Field staking is anticipated to be complete by early May 2010. Final Construction Documents shall be prepared within two weeks after field staking. Other tasks shall depend on the construction schedule.

Fee

We propose to provide design and engineering support on a time and materials basis with a budget of $20,000.

Please review the above proposal and let us know if it meets your expectations. If you have any questions, please feel free to call me at (907) 646-5108.

DRYDEN & LaRUE, INC.

Christopher T. Davis, PE

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