





Date of Action:	
Approved <input type="checkbox"/>	Denied <input type="checkbox"/>
By:	

CITY COUNCIL ACTION MEMORANDUM

AM No. 13-38: Contract Amendment to Hattenburg, Dilley and Linnell in the amount of \$83,560 for Wasilla Airport Security Equipment and Perimeter Fencing Engineering Services.

Originator: Public Works Director
 Date: November 13, 2013

Agenda of: November 25, 2013

Route to:	Department Head	Signature	Date
X	Public Works Director		11/13/13
X	Finance Director		11-14-13
X	Deputy Administrator		11-14-13
X	City Clerk		11/14/13

Reviewed by Mayor Verne E. Rupright: 

Fiscal Impact: yes \$83,560 **Funds Available:** yes

Account name/number: Security Equip. & Perimeter Fencing/330-4379-437-45-30
Attachments: HDL Fee Proposal (10 pages)

Summary Statement: The Federal Aviation Administration has made \$450,000 available this fiscal year for security improvements at the airport. The proposed security improvements consist of installing new gate controllers, fiber optic cables and new computer system to operate the 4 main gates at the airport. The work needs to be designed and bid before the grant application can be accepted by the FAA.

This contract will provide the necessary engineering design and bidding assistance needed to apply for the FAA construction grant next year. This contract amendment is being offered as a continuation of the work authorized by Action Memorandum No. 13-13 in May of this year.

Staff Recommendation: Adopt AM No. 13-38.

September 12, 2013

File: 83-103

Mr. Archie Giddings
City of Wasilla, Public Works Director
290 E. Herning Avenue
Wasilla, AK 99654

Re: Fee Proposal for Engineering Services
Task 4 - Wasilla Airport Security Equipment and Perimeter Fencing

Dear Mr. Giddings:

Hattenburg Dilley and Linnell (HDL) is pleased to present this fee proposal for engineering services for the Wasilla Airport Security Equipment and Perimeter Fencing project. This project includes design engineering and bid phase services for the replacement of vehicle gate controls and related equipment at the Wasilla Airport.

BACKGROUND

On June 18th HDL, Marsh Creek, and Tony Leoni inspected the four vehicle gates at Wasilla Airport. The following major operational problems were identified:

- There is no functional method to change or manage keypad access codes.
- The card reader access is not working.
- The short range radio frequency remote controls ("garage door openers") are not working.
- Remote access communications and control of the four individual gate control systems has not been available for several years and is currently still not working.
- The network communications to gate controllers not reliable.

The gate systems have been serviced multiple times in the last few years and the problems associated with the gate control systems cannot be adequately repaired or resolved. The lack of system programming access for managing access codes and establishing automatic gate open or close operations has not been re-established due to both computer software control and phone line communications problems.

All four of the gate access and control systems are considered to be unreliable at this time, and should a major failure occur in a gate controller electronic assembly, the existing basic system functionality would not be recoverable. See attached sketch.

CIVIL
ENGINEERING

GEOTECHNICAL
ENGINEERING

TRANSPORTATION
ENGINEERING

ENVIRONMENTAL
SERVICES

PLANNING

SURVEYING

CONSTRUCTION
ADMINISTRATION

MATERIAL
TESTING

SCOPE OF SERVICES

We propose to provide professional engineering services required for the replacement of controls and associated above ground electrical components and software to vehicle Gates A, B, C, and D, as well as installation of fiber optic cable between the gates and the gate control computer located in the Snow Removal Equipment Building (SREB). Due to limited FAA funding, Gate B will be an additive alternate in the bid documents. Electrical engineering will be provided by John Faschan, P.E. with EDC, Inc., and control system design by Steve Floyd with Marsh Creek, LLC.

Design

Plans, Specifications and Estimate. HDL will prepare an assembly of engineered drawings and specifications to approximately the 95% completion level. Specifications and contract documents will be based on the City of Wasilla's standard modifications to the Municipality of Anchorage Standard Specifications (MASS). Construction plans and specifications will be delivered in hardcopy format for review by City staff.

We anticipate approximately 12 plan sheets for the project, as follows:

- E1 – Electrical Site Plan, Legend & Abbreviations
- E2 – Electrical Demolition Plan
- E3 – Fiber Optic Cable Overall Routing Plan
- E4– Fiber Optic Cable Routing Detailed Plans
- E5– SREB Electrical Plan
- E6– Security Gate Access Control System Block Diagram
- E7– Fiber Optic Cabling Diagram
- E8– Security Gate Block Diagram
- E9– Security Gate Details
- E10 – Gate Operator Wiring Schematic
- E11- Fiber Optic Details
- E12– Electrical Details

Bid-Ready Documents. We will submit the 95% plans and specifications for review, address comments, and finalize the documents. Upon receiving City review comments, we will prepare bid-ready 11"x17" plans, stamped and signed by a professional engineer registered in the State of Alaska, a bid-ready Project Manual including bidding information, general contract requirements, and technical specifications, and an engineer's construction cost estimate. The construction cost estimate will reflect quantities and pay items determined during the final system design, and current bidding climate. We will provide two (2) hardcopy sets of deliverables and a CD in PDF format.

Environmental Review. An environmental review and categorical exclusion has been provided previously. We will file an FAA Form 7460-1, Notice of Proposed Construction or Alteration on Airport for the City. A 404 wetlands permit is not anticipated.

Bid Phase Services

After completion of bid-ready documents, HDL will assist with the bidding phase. On behalf of the City, we will prepare the invitation to bid, respond to bidder's questions, attend a pre-bid conference, issue written addendums, tabulate bids and check proposals for completeness, review bonding and insurance submittals, and provide a written recommendation for award to the City based on the lowest responsive bid.

ASSUMPTIONS

1. Construction administration (CA) services are not included. The scope, level of effort, and fee will be determined when the design is complete and can be added as a contract amendment later.
2. The improvements will be designed as a single package with additive alternates.
3. Geotechnical engineering and surveying are not anticipated.
4. Addressing environmental contamination is not included.

SCHEDULE

Upon notice to proceed (anticipated in early October), we will commence engineering work as soon as possible. We estimate that our design effort will take approximately 6 weeks. Allowing for a 28-day bidding period, we anticipate that a construction contract can be awarded in mid to late December 2013, with construction occurring in 2014.

COST PROPOSAL

We propose to provide the aforementioned services on a time and expenses basis at our published hourly labor rates and 10% mark-up of subcontracts and reimbursable expenses for a fee not to exceed **\$83,560.00**, as detailed on the fee estimate worksheet dated September 12, 2013.

RE: Wasilla Airport Security Equipment and Perimeter Fencing
September 12, 2013
Page 4 of 4

We appreciate the opportunity to provide this proposal and look forward to assisting you with this important project. If you have any questions, you can contact me at 746-5230.

Sincerely,
Hattenburg Dilley & Linnell, LLC

A handwritten signature in black ink, appearing to read "DL" followed by a flourish and the word "FOR" written in capital letters.

David Lundin, P.E.
Principal Civil Engineer / Project Manager

Attachments: Fee Worksheet September 12, 2013 (1 page),
EDC Proposal dated August 6, 2013 (2 pages)
Marsh Creek Proposal dated August 27, 2013 (2 pages)
Sketch (1 page)

FEE PROPOSAL WORKSHEET
Engineering Services
Wasilla Airport Security Equipment and Perimeter Fencing

<u>ACTIVITY</u>	<u>QTY</u>	<u>RATE</u>	<u>LABOR</u>	<u>EXPENSES</u>	<u>SUBS</u>	<u>SUBTOTAL</u>	<u>TOTAL</u>
Design.....							\$68,870
<u>100% Plans, Specifications and Estimate</u>						\$68,870	
Project Manager/Principal Civil E	8 hrs	@ \$170	\$1,360				
Civil Engineer	55 hrs	@ \$130	\$7,150				
Engineering Assistant	40 hrs	@ \$80	\$3,200				
Drafter	16 hrs	@ \$100	\$1,600				
Marsh Creek System Design	96 hrs	@ \$165			\$15,840		
EDC Electrical Design	1 sum	@ \$37,500			\$37,500		
Clerical	8 hrs	@ \$70	\$560				
Reproduction	1 sum	@ \$300		\$300			
QA Review	8 hrs	@ \$170	\$1,360				
Bid Phase Services.....							\$8,930
<u>Pre-Bid Meeting</u>						\$1,180	
Project Manager/Principal Civil E	2 hrs	@ \$170	\$340				
Civil Engineer	4 hrs	@ \$130	\$520				
Engineering Assistant	4 hrs	@ \$80	\$320				
<u>Assistance During Bidding</u>						\$7,020	
Project Manager/Principal Civil E	2 hrs	@ \$170	\$340				
Civil Engineer	8 hrs	@ \$130	\$1,040				
Marsh Creek Support	24 hrs	@ \$165			\$3,960		
Engineering Assistant	8 hrs	@ \$80	\$640				
Drafter	8 hrs	@ \$95	\$760				
Clerical	4 hrs	@ \$70	\$280				
<u>Bid Review, Tabulation, and Recommendation for Award</u>						\$730	
Project Manager/Principal Civil E	1 hrs	@ \$170	\$170				
Civil Engineer	2 hrs	@ \$130	\$260				
Engineering Assistant	2 hrs	@ \$80	\$160				
Clerical	2 hrs	@ \$70	\$140				
Subtotal			\$20,200	\$300	\$57,300		\$77,800
Markup*				\$30	\$5,730		\$5,760
Total (Not-to-exceed) Fee			\$20,200	\$330	\$63,030		\$83,560

*10% for subcontracts, 10% for reimbursable expenses



August 6, 2013

Scott Hattenburg, P.E.
Hattenburg, Dilley, & Linnell
3335 Arctic Boulevard, Suite 100
Anchorage, AK 99503

Subject: Wasilla Airport Security Equipment & Perimeter Fencing Project – Electrical
Design Proposal

Dear Scott:

This proposal is for providing electrical engineering services in support of Wasilla Airport's planned security improvements. This proposal is based on the following:

SCOPE OF WORK:

EDC, Inc. will provide the design for the replacement of the four security access gate controllers at the Wasilla Airport. The design will include fiber optic cabling and distribution equipment to interconnect the four security gates with new head-end equipment to be located in the office of the existing Snow Removal Equipment Building (SREB). The design will incorporate standby power via the existing standby generator if feasible.

The existing gate operators will be re-used, but existing gate control devices such as card readers, motion detectors, edge sensors and photo-eyes will be evaluated and replaced as necessary. The existing moose guards will also be evaluated and removed if deemed appropriate.

It is anticipated that the design will require the following drawings:

- E1 – Electrical Site Plan, Legend & Abbreviations
- E2 – Electrical Demolition Plan
- E3 – Fiber Optic Cable Overall Routing Plan
- E4– Fiber Optic Cable Routing Detailed Plans
- E5– SREB Electrical Plan
- E6– Security Gate Access Control System Block Diagram
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Scott Hattenburg, P.E.
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August 6, 2013

In addition to the drawings, the design will include electrical specifications and an engineer's construction cost estimate.

The scope of work shall also include bidding assistance such as attending a pre-bid conference and walk through. It will also include responding to bidder's questions and providing addenda as necessary.

DELIVERABLES – A full and/or half-size, reproducible copy of each of the design drawings will be provided. An electronic copy of the drawings in AutoCAD format will also be available upon request. Hard and electronic copies of the specifications and cost estimates will also be provided.

ASSUMPTIONS – It is assumed that HDL will provide EDC, Inc. with all the necessary background drawings in AutoCAD format for our use. This proposal also assumes that Marsh Creek shall provide the specifications and construction cost estimate for the gate access control system, system components, head-end equipment, software, equipment racks, etc. Marsh Creek shall also assist in developing the access control system block diagram, gate block diagram and gate details.

EXCLUSIONS – This proposal does not include any construction management services such as submittal reviews or inspections.

FEE - The fee to perform the above scope of work will be billed on a Time and Material basis with a Not-to-Exceed amount of: **\$37,500.00**

Please feel free to contact me if you have any questions concerning this proposal.

Sincerely,

A handwritten signature in black ink, appearing to read "John Faschan", written in a cursive style.

John Faschan, P.E.
EDC, INC.



August 27, 2013

Scott Hattenburg, PE
Hattenburg, Dilley, & Linnell
3335 Arctic Boulevard, Suite 100
Anchorage, AK 99503

Subject: Wasilla Airport Security Equipment & Perimeter Fencing Project – System Design Proposal

Dear Scott,

This proposal is for providing the electrical engineering design, product specifications, and system design assistance and review for the Wasilla Airport gate control system upgrade project as defined in the site survey report, dated July 8, 2013. This proposal is based on the following tasks:

Product Specification and Research: Provide market research and review of best available products to provide the gate control system functionality required. Special emphasis will be placed on maintaining commonality in component selection with the similar system being installed at Merrill Field. Chosen products will be evaluated for reliable performance in the Alaska environment and for ease of use by airport personnel.

Cost: \$1,650

System Design: Provide a detailed system design defining all gate control components and the fiber based local area network components. Required software components will be identified and defined. The system design strategy will be defined and performance trade-offs identified where necessary. Performance specifications will be provided and the overall system architecture and operational concept will be summarized.

Cost: \$6,600

Design Assistance: Coordinate with EDC, Inc. during the design phase to provide technical assistance with system drawings and specifications lists. Provide detailed specifications for all major system components. Provide block diagrams for system interconnection and installation descriptions. Coordinate and provide technical assistance to EDC and HDL as required.

Cost: \$4,950

ENCLOSURE
Attachment 1: Product Specification and Research
Attachment 2: System Design
Attachment 3: Design Assistance

Scott Hattenburg, P.E.
Page 2
August 27, 2013

Design Review: Review design documents prior to bidding and provide comments and technical support to HDL and EDC as required.

Cost: \$2,640

Bid Assistance: Provide technical assistance to HDL when contractor questions come up during the bidding process. Help prepare language for addendums to contract documents if necessary in response to bidder questions. Provide review and qualifications analysis for submitted bids from contractors.

Cost: \$3,960

The total cost to perform the above scope of work will be billed at an hourly rate of \$165/hour on an hourly basis with a Not-To-Exceed amount of: \$19,800

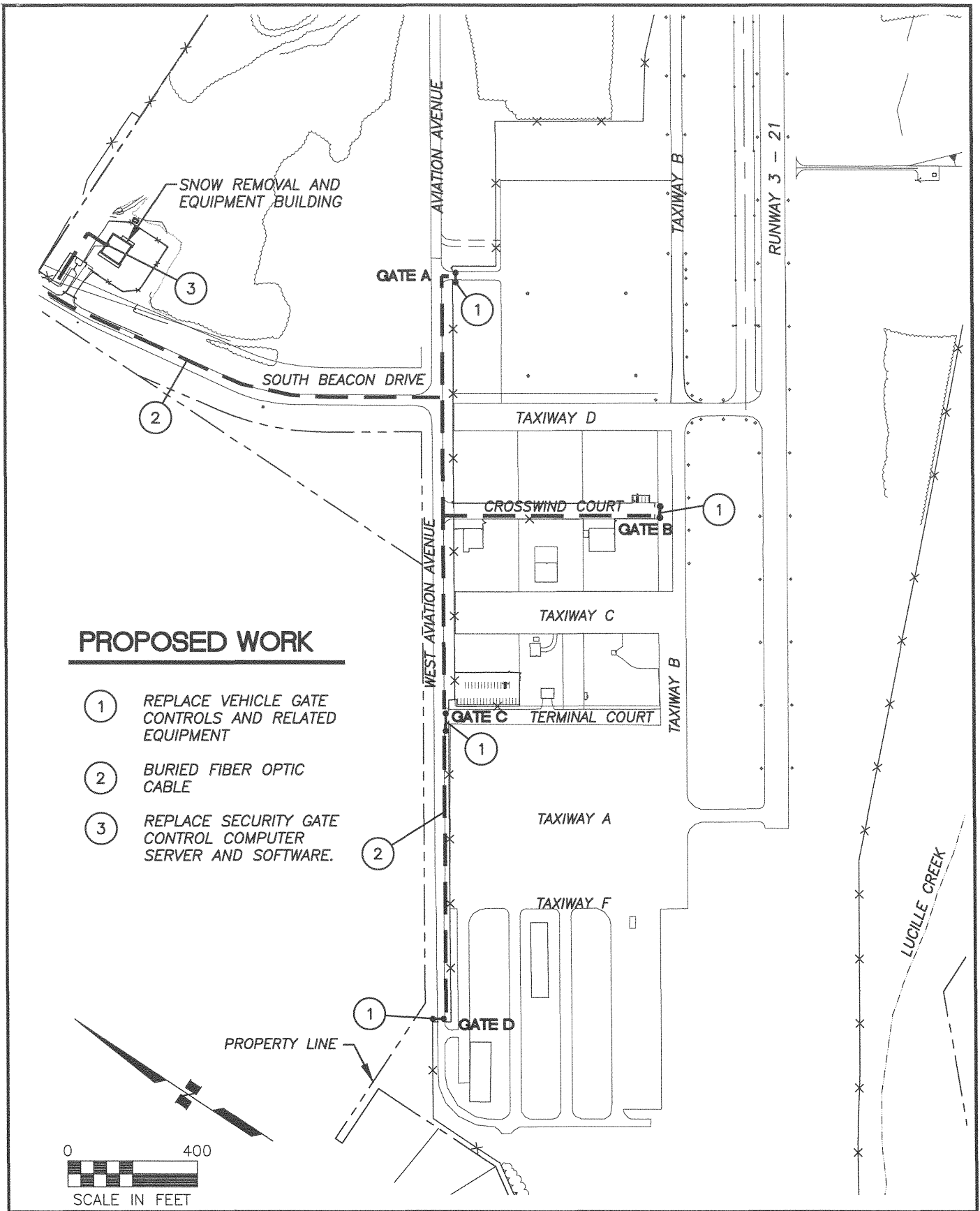
Please let me know if you have any questions or concerns.

Sincerely,

A handwritten signature in black ink, appearing to read "Steve Floyd", written over a horizontal line.

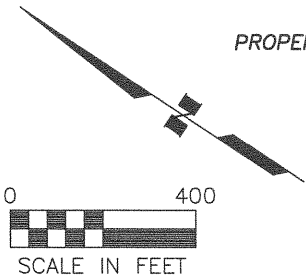
Steve Floyd

Principal Electrical Engineer
Marsh Creek, LLC



PROPOSED WORK

- ① REPLACE VEHICLE GATE CONTROLS AND RELATED EQUIPMENT
- ② BURIED FIBER OPTIC CABLE
- ③ REPLACE SECURITY GATE CONTROL COMPUTER SERVER AND SOFTWARE.



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**CIP DATA SHEET SKETCH
REPLACE SECURITY EQUIPMENT / PERIMETER FENCE
WASILLA MUNICIPAL AIRPORT
WASILLA, ALASKA**

DATE: 8-5-2013	DRAWN BY: KK	SHEET: FIGURE 1
SCALE: AS SHOWN	CHECKED BY: SLH	JOB NO.: 13-019-02