



## CITY COUNCIL STAFF REPORT

DATE: July 6, 2011

CONSENT AGENDA

SUBJECT: APPROVAL OF PLANS AND SPECIFICATIONS FOR AIRPORT PERIMETER FENCE IMPROVEMENTS PHASE II PROJECT AIP GRANT No. 48

FROM: David H. Ready, City Manager

BY: AIRPORT DEPARTMENT

---

### SUMMARY

This action will approve the Plans and Specifications and allow the bid to proceed for the Airport's Perimeter Fence Improvement Project.

### RECOMMENDATION:

1. Approve the plans and specifications for the Airport Perimeter Fence Improvement – Phase II Airport Improvement Project AIP No. 3-06-0181-48.
2. Authorize the City Manager to advertise and solicit bids.

### STAFF ANALYSIS

On July 21, 2010, the City Council approved the FAA Grant No. 3-06-0181-47 for the Design Phase of the Airport's Perimeter Fence Improvement Project. The design is complete and it is ready to bid out for the construction phase of the project. A general description of the project and cost estimate are attached.

This airport security project is specifically designed to improve the condition of the airport's perimeter fence, a primary component of the airport's overall security program, by replacing several thousand feet of old and worn fence line with new product. The project also includes reconfiguring the layout of some fencing and gates to accommodate deterrent effectiveness. A solid block wall, with seismic characteristics and impenetrable by vehicles, will be constructed north of the main terminal to replicate a wall that exists on the South side of the terminal. Additional video surveillance equipment and a new technologically advanced perimeter intrusion detection system will be incorporated into the airport's operation's control center. These new components will elevate the entire airport security program to a higher caliber. All of these project

ITEM NO. 2K

**Palm Springs International Airport (PSP)**  
**Perimeter Fence Improvement Project**  
**Project Scope and Justification**

**Project Scope**

Palm Springs International Airport (PSP) identified portions of the perimeter fence that are in substandard condition and in need of replacement. Encroachment of private development has made portions of the existing fence line potentially insecure. Some lengths of the existing fence do not meet adequate height requirements as outlined in the TSA Publication *Recommended Security Guidelines for Airport Planning, Design, and Construction*. In addition, the Airport is required by FAA and TSA policy to engage in a continuous safety and security awareness and improvement process. This project offers the opportunity to achieve this objective by better securing the Airport to deter, delay, detect and respond to intrusions (intentional and unintentional) by people and wildlife.

The perimeter fence improvement project will replace up to 12,315 linear feet of fencing, eliminate unused perimeter gates, and install approximately 650 linear feet of solid block perimeter wall that will be impenetrable to vehicle intrusion adjacent to the terminal area. To assure safe, efficient and secure access to the airfield, a new electric security identification display area (SIDA) gate with operator, card reader, signage and all required accessories will also be installed. In addition, as part of this safety and security project, a Perimeter Intrusion Detection System will be installed near the runway ends to protect against intruders. Six wireless security cameras will also be installed to provide additional coverage of the restricted access areas of the airfield. The airport staff will be better able to monitor the airport premises to prevent wildlife and vehicular runway incursions.

The proposed technology for Perimeter Intrusion Detection System consists of ground based high-resolution radar that accurately detects personnel and vehicles. The radar unit will be supplemented by a visible light closed circuit television (CCTV) camera and an infrared CCTV camera allowing visibility through a multitude of visibility conditions including smoke, rain, dust fog and lowlight conditions. In operation, the ground based radar units rapidly and continuously scan 360 degrees, detecting movement in virtually any condition, inside or outside the perimeter, 24 hours a day. In an alert situation, the airport's response team will be provided detailed information regarding the precise location of the intrusion, direction of travel and visual identification to determine an appropriate security response.

The project elements that comprised the design of the perimeter fence improvements include geotechnical investigations and field survey, fence analysis and design, block wall analysis and design, closed circuit television analysis and design, construction phasing, packaging and procurement determination, preparation of plans, contract documents and technical specifications, as well as preparation of cost

estimates, engineering reports, and developing project scheduling. The project support by the professional engineering firm continues after the award of the bids and includes pre-construction conferences, responding to the contractor's Request for Information documents (RFI), preparation of addenda (if necessary), site visits and construction meetings, review of change orders and claims, design clarifications and RFIs, review of payment applications, final inspection, warranties and record drawings, and progress reports. Also during the construction phase, part-time on-site resident project representation will be provided to work with airport staff ensuring the project is properly integrated into the daily airport operations.

**Project Justification:**

Federal Regulation 49 CFR 1542 requires the airport operator to maintain a security program which will prevent criminal acts against civil aviation. The principles of deter, delay, detect and respond are the core elements of this program. Every task intended in the PSP fencing program addresses these core elements and will significantly enhance the Airport's continued ability to comply with FAA and TSA security requirements. Moreover, keeping the airfield, taxiways and runways clear of unauthorized people and wildlife is one of the highest safety concerns at any airport given the potential catastrophic effect on life and property of an aircraft strike. Therefore, the elements of this project are of high importance to continue to maintain and enhance the safe operating environment at the Airport.



**Palm Springs International Airport**  
**Perimeter Fence Improvement Project 226-7196-002**  
**Construction Cost Estimate**

No.	Item	Item Description	Unit	Quantity	Unit Cost	Extended Cost
1	P-100-1	Mobilization (Not to Exceed 7%)	LS	1	\$108,000	\$108,000
2	P-102-1	Safety and Security (Not to Exceed 2%)	LS	1	\$30,900	\$30,900
3	P-104-1	Project Survey & Stakeout (Not to Exceed 3%)	LS	1	\$46,300	\$46,300
4	P-105-1	Temporary Construction Items (Not to Exceed 1%)	LS	1	\$15,500	\$15,500
5	P-105-2	Temporary Chain Link Fence	LS	1	\$50,000	\$50,000
6	P-151-1	Clearing and Grubbing	AC	3	\$5,000	\$15,000
7	P-151-2	Remove and Dispose Existing Chain Link Fence with Accessories	LF	12,540	\$9	\$112,860
8	P-151-3	Remove and Dispose Existing 14-ft Sliding Manual Gate	EA	1	\$500	\$500
9	P-151-4	Remove and Dispose Existing 16-ft Manual Swing Gate with Privacy Slats	EA	1	\$600	\$600
10	P-151-5	Remove and Dispose Existing Double Leaf Swing Electric Gate including Operator, Concrete Pad, Bollards and Accessories	EA	1	\$2,500	\$2,500
11	P-151-6	Remove and Dispose Existing 4-ft Manual Pedestrian Gate	EA	2	\$200	\$400
12	P-151-7	Remove and Dispose Existing 4-ft Manual Pedestrian Gate with Access Control	EA	1	\$300	\$300
13	P-151-8	Remove and Dispose Existing Trees (0-2 ft Diameter)	EA	5	\$400	\$2,000
14	F-162-1	Furnish & Install 7-ft Chain Link Fence with 3-Strands of Barbed Wire	LF	10,625	\$35	\$371,875
15	F-162-2	Furnish & Install 13-ft Chain Link Fence with 3-Strands of Barbed Wire	LF	1,400	\$45	\$63,000
16	F-162-3	Furnish & Install 16-ft Chain Link Fence with 3-Strands of Barbed Wire	LF	290	\$60	\$17,400
17	F-162-4	Furnish and Install 7-foot High Privacy Slats	LF	875	\$10	\$8,750
18	F-162-5	Furnish and Install 12-foot Manual Sliding Gates	EA	2	\$2,500	\$5,000
19	F-162-6	Furnish and Install 12-foot Single Leaf Swing Electric Gate with Operator	EA	1	\$25,000	\$25,000
20	F-162-7	Furnish and Install New 20-foot SIDA Gate, with Hydraulic Pump and Control Box, Signage, Complete	EA	1	\$50,000	\$50,000
21	04200	Install New Concrete Masonry Unit Wall with Iron Security Topping	LF	650	\$400	\$260,000
22	13711	ICx STS-1400 Radar Unit with 1-yr Extended Warranty	EA	2	\$88,500	\$177,000
23	13711	Defend IR 50mm with 1-yr Extended Warranty	EA	2	\$47,400	\$94,800
24	13711	LCD Monitors/ 42-inch Display Units	EA	2	\$2,000	\$4,000
25	13711	Outdoor Pan-Tilt-Zoom Camera - Complete	EA	8	\$8,500	\$68,000
26	13711	Radar Power (Direct Buried)	EA	2	\$20,000	\$40,000
27	13711	Radar Communications (Wireless)	EA	2	\$5,000	\$10,000
28	13711	ICx C2 and Site Survey	EA	1	\$17,500	\$17,500
29	13711	ICx System Integration	LS	1	\$4,000	\$4,000
30	13711	ICx Mobilization, Commissioning, Training	LS	1	\$30,700	\$30,700
31	13711	Fiber Optic Cable Installed and Tested	LF	4200	\$20	\$84,000
32	13711	Gate Access Controls with Installation, Testing Complete	EA	1	\$4,200	\$4,200
33	13711	Power Systems for Camera and Gate	LS	1	\$23,000	\$23,000
					<b>Sub-total</b>	<b>\$1,743,100</b>
					<b>10% Contingency</b>	<b>\$174,400</b>
					<b>Total Cost</b>	<b>\$1,917,500</b>

6/27/2011

FilePath 2267196 002 PSP fencing\DOCS\I-Design Data Cost Estimates\13 Construction Cost Data 90% Probable Cost Estimate.xlsx