



# ***CITY COUNCIL AGENDA REPORT***

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**MEETING DATE:** May 15, 2007

**ITEM NUMBER:**

**SUBJECT:** INSTALLATION OF SPORTS LIGHTING SYSTEM AT THE FARM SPORTS COMPLEX, 2750 FAIRVIEW ROAD, COSTA MESA - CITY PROJECT NO. 07-17

**DATE:** MAY 4, 2007

**FROM:** PUBLIC SERVICES DEPARTMENT/ENGINEERING DIVISION

**PRESENTATION BY:** WILLIAM J. MORRIS, DIRECTOR OF PUBLIC SERVICES

**FOR FURTHER INFORMATION CONTACT:** ERNESTO MUNOZ, CITY ENGINEER (714) 754-5343

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## **RECOMMENDATION:**

1. Adopt plans, specifications, and working details for the Installation of Sports Lighting System at the Farm Sports Complex, 2750 Fairview Road, Costa Mesa - City Project No. 07-17.
2. Award a construction contract to MacKenzie Electric, Inc., 7933 Palm Avenue, Highland, CA 92346, in the amount of \$648,000.00 (Base Bid plus Bid Item AB-3, minus Bid Items AB-1 and AB-2).
3. Authorize the Mayor and the City Clerk to execute the Public Works Agreement.

## **BACKGROUND:**

The Farm Sports Complex (the Farm) was dedicated on July 1, 2000, and by fall 2001, the fields were operating at full capacity. There are a total of two championship-size and four high school-size soccer fields (Attachment "1"). The two larger fields (Fields No. 1 and No. 2) are currently lighted.

On March 9, 2006, a community meeting was held to present the proposed lighting plan for Fields No. 3, No. 4, No. 5, and No. 6. The meeting was attended by adjacent residents, user groups, and staff. At this meeting, staff presented preliminary pole layout diagrams, photometric plans and preliminary cost estimates. A summary of their comments is included as Attachment "2".

At the March 22, 2006 Parks and Recreation Commission meeting, the Commission approved the proposed lighting plan for Fields No. 3 through No. 6 and recommended that the City Council approve funds for the construction of the project (Attachment "3").

Dream Engineering, Inc., the original electrical engineering firm that designed the existing electrical system, was retained to prepare the construction documents for this work. Dream Engineering has worked closely with Musco Lighting and staff to ensure that the work meets all light level requirements.

The scope of work for the recommended action includes replacing the existing electrical service and sports lighting control equipment, retrofitting existing lighting on Fields No. 1 and No. 2, and installing new sports lighting on Fields No. 3 and No. 4 at the Farm. The new state-of-the art sports lighting and control equipment is designed to provide light levels suitable for games and practices, primarily soccer and football while, at the same time, controlling light spill and glare to pre-determined maximum levels. The bulk of the work is scheduled to be completed within a specific window when the fields are down for rest and renovation in the summer of 2007. The Contractor shall furnish all materials, tools, and equipment necessary to perform and complete the work as shown on the plans and contract documents.

### **ANALYSIS:**

The City Clerk received and opened seven (7) bids for this project on April 30, 2007. MacKenzie Electric, Inc. was the apparent low bidder with a total base bid proposal of \$677,500.00. The base bid includes the lighting of Fields No. 3 through No. 6 to establish a fair benchmark for selecting the apparent low bidder. The Engineer's base bid estimate was \$805,000.00; and the average of the seven base bids received amounted to \$892,651.14. An analysis of the bids indicates that the apparent low bidder submitted a proposal that is 15.8 percent lower than the Engineer's estimate. The Bid Abstract is included as Attachment "4". The recommended action will require the deletion of Bid Items AB-1 and AB-2 from the base bid through a supplemental agreement.

In addition to the base bid, the bid solicitation included one additive bid item. The additive bid item includes retrofitting Fields No. 1 and No. 2 with the same type of fixtures as the ones for the new lighting system. The retrofit is designed to utilize the same poles but replaces all the fixtures to match the new lighted fields.

Retrofitting Fields No. 1 and No. 2 with the new Musco Light Structure Green system will not only reduce the number of fixtures per pole to achieve the desired light levels, it also reduces energy use and maintenance costs by about 50% while at the same time providing a more advanced photometric control that offers up to 50% less spill and glare light than Musco's prior industry leading technology. The existing fixtures were installed in August 1998.

The licenses and references of MacKenzie Electric, Inc. were checked, and staff has found them to be in good standing. MacKenzie Electric, Inc. successfully completed the installation of sports lighting at the Tewinkle Park Sports Complex in 2006.

### **ALTERNATIVES CONSIDERED:**

City Council may award a contract in the amount of \$504,200.00 to light Fields No. 3 and No. 4 only. If this alternative is selected, Bid Items AB-1 and AB-2 will be deleted from the base bid through a negotiated change order due to a reduction to the base bid amount of more than 25 percent.

A second alternative is to award a contract in the amount of \$677,500.00 to light Fields No. 3 through No. 6 and defer the retrofit of Fields No. 1 and No. 2 to future fiscal years. However, removing the retrofit of Fields No. 1 and No. 2 is not recommended since this project presents an opportunity to reduce the long-term costs of operating these two already-lighted fields with a single contract. Adequate funds are currently appropriated to accomplish this alternative.

A third alternative is to award a contract in the amount of \$821,300.00 for base bid and all additive bid items to provide lights for Fields No. 3 through No. 6 and replace the nine-year-old fixtures at Fields No. 1 and No. 2 with the new Musco "Green" lighting system. This would light all of the fields and upgrade Fields No. 1 and No. 2 to take advantage of the more energy efficient lighting technology. Adequate funding is currently appropriated to accomplish this alternative.

A fourth alternative would be to reject all bids. If all bids were rejected, the City would have to readvertise or cancel the project. Staff believes that readvertising the project will not yield lower bids.

**FISCAL REVIEW:**

\$1,062,000 remains unencumbered for this project from 2005-2006 and 2006-2007 budget year allocations. The unencumbered amount is adequate to fund any of the alternatives presented herein.

**LEGAL REVIEW:**

MacKenzie Electric, Inc. will furnish all of the necessary insurance and bond documents for approval as to form by the City Attorney's office prior to the start of work. After the award of the contract and the approval of the insurance documents, a "Notice to Proceed" will be issued.

**CONCLUSION:**

It is recommended that the City Council adopt the plans, specifications, and working details for the Installation of Sports Lighting System at the Farm Sports Complex, 2750 Fairview Road, Costa Mesa - City Project No. 07-17; award the contract to MacKenzie Electric, Inc. in the amount of \$648,000.00 for base bid plus Bid Item AB-3, minus Bid Items AB-1 and AB-2; and authorize the Mayor and the City Clerk to execute the Public Works Agreement.

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ERNESTO MUNOZ  
City Engineer

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WILLIAM J. MORRIS  
Director of Public Services

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MARC R. PUCKETT  
Director of Finance

DISTRIBUTION:      City Manager  
                             City Attorney  
                             City Clerk  
                             Staff  
                             File

- ATTACHMENTS:
- "1" [Farm Sports Complex Lighting Plan](#)
  - "2" [March 9, 2006 Public Meeting  
Comments](#)
  - "3" [March 22, 2006 Parks and Recreation  
Commission Meeting Minutes](#)
  - "4" [Bid Abstract](#)

File Name 07-17 Award Report

Date 05/04/07

Time 8:30 a.m.