



Memorandum

TO: HONORABLE MAYOR AND
CITY COUNCIL

FROM: Scott P. Johnson

SUBJECT: SEE BELOW

DATE: November 17, 2005

Approved 

Date 11/21/05

SUBJECT: REPORT ON BIDS FOR LED TRAFFIC SIGNAL MODULES

RECOMMENDATION

Report on bids and award the purchase of LED traffic signal modules to the lowest responsive bidder, Jam Services (Livermore, CA) and authorization for the Director of Finance to execute the purchase order(s) for Phase I at a cost of \$1,543,327 and Phase II at a cost of \$456,041.80 at the same bid price without further Council action other than the appropriation of funding for Fiscal Year 2006 – 2007, with a combined total cost of \$1,999,368.80 including tax, freight and a 60 month warranty against defects in materials and workmanship.

BACKGROUND

The Department of Transportation (DOT) has requested the purchase of LED traffic signal modules for installation throughout the City of San Jose, replacing existing incandescent traffic lamps and aging LED traffic signal modules.

This project will be completed in two phases. Phase I of this project will convert 400 intersections to LED technology and, as part of the San Jose Safe Street Initiative, retrofit 64 intersections with LED pedestrian countdown signal modules, by the end of this current fiscal year. Total cost for Phase I is \$1,543,327. Phase II, scheduled to be completed next fiscal year, will convert another 275 intersections to LED technology. Phase II, in the amount of \$456,041.80, will be addressed in the 2006-2007 budget process and is contingent upon Council approval. In total, this contract will provide the conversion of 675 traffic signal intersections to LED modules and 64 intersections to pedestrian countdown signal modules.

The new LED traffic signal modules will reduce the cost of electricity to the City by approximately \$485,000, annually, once both phases of this project are completed. At completion of this project, all traffic signal indications in the City will have been converted to LED technology.

Phase I and Phase II together will include the purchase and delivery of: red, yellow and green 12" ball modules; red, yellow and green 12" arrow modules; red, yellow, and green 8" ball modules; red, yellow and green Programmable Visibility (PV) modules; pedestrian signal modules; and, pedestrian countdown signal modules.

ANALYSIS

A notice inviting bids was published on October 4, 2005. Four bids representing three manufacturers were received and publicly opened on October 24, 2005.

The bid process required all bidders to submit with their bids, samples of each LED traffic signal module to DOT by a specified date and time. DOT reviewed and tested these samples for compliance with the bid specifications with the following results:

- Jam Services' bid was the only responsive bid with a total cost of \$1,999,368.80 including tax, freight and 60 month warranty of modules against defects in materials and workmanship.
- The Traconex Manufacturer Company failed to submit samples of their product. Therefore, Purchasing determined that the bid submitted was non-responsive.
- Advanced Traffic Products submitted samples that did not meet the bid specification of "*The lens shall have a visual appearance similar to that of an incandescent lamp (i.e., non-pixilated).*" The 12" arrows looked pixilated and did not have an appearance of an incandescent lamp. The light from a pixilated type of signal module appears dotted rather than the solid, uniform look of light coming from an incandescent lamp. The purpose of this specification is to create a uniformed band of light from the signal module and avoid pronounced dark spots if a single LED fails. Therefore, Purchasing determined that the bid submitted by Advanced Traffic Products was non-responsive.
- Leotech did not meet the bid specification of "*The use of tinting or other materials to enhance on/off contrasts shall not affect chromaticity and shall be uniform across the face of lens.*" Visual inspection showed the 12" arrow lens appeared to be hand spray-painted, resulting in an uneven arrow across the face of the lens and areas outside the arrow where light escaped. The 12" arrows also failed to meet the bid specification of "*The individual LEDs shall be wired such that a catastrophic loss or the failure of one or more LED will result in the loss of light from that LED only.*" Testing revealed that the loss of one LED caused a loss of other LEDs resulting in visible dark spots to the arrow signal module. Therefore, Purchasing determined that the bid submitted by Leotech was non-responsive.

SUMMARY

Staff recommends the award to Jam Services, as the lowest responsive bidder in accordance with the formal bidding procedures of the San Jose Municipal Code, Section 4.12.030.

OUTCOME

Approving this purchase will provide energy efficient and cost reducing LED traffic signal modules for use throughout the City of San Jose's traffic signal system and pedestrian countdown signals for installation at 64 traffic signals as part of the San Jose Safe Streets Initiative.

PUBLIC OUTREACH

This bid was placed on the City of San Jose web site and on the Demandstar bid notification system and all vendors on Caltrans pre-approved vendor list were notified by email.

COORDINATION

This memorandum has been coordinated with the City Manager’s Budget Office, the Department of Transportation, and the City Attorney’s Office.

COST IMPLICATIONS

This Council item is consistent with General Principle #2, “We must focus on protecting our vital core city services,” and General Principle #7 “We must continue to streamline, innovate, and simplify our operations...so that we can deliver services at a higher quality level, with better flexibility, at a lower cost.”

BUDGET REFERENCE

Fund #	Appn #	Appn. Name	RC#	Total Appn.	Amt. for Phase 1 of Contract	FY 2005-2006 Adopted Budget Page	Last Budget Action (Date, Ord. No.)
Current Funding Available							
429	5062	Traffic Signals Rehabilitation	TBD	\$2,400,000	\$1,259,852	Adopted Capital Budget pg. V-1091	N/A
429	5058	Safe Streets Program	TBD	\$500,000	\$112,000	Adopted Capital Budget pg. V-1083	N/A
001	0512	Department of Transportation Non-Personal/Equipment	55810	\$11,901,255*	\$171,475	Adopted Operating Budget pg. VII-132	10/18/2005 Ord. No. 27580
Total Current Funding Available				\$3,071,475	\$1,543,327		

* \$171,475 is allocated in the DOT’s Nonpersonal/Equipment budget for this type of expenditure.

CEQA

Not a project.


 SCOTT P. JOHNSON
 Director, Finance

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