

County of Santa Cruz 0281

DEPARTMENT OF PUBLIC WORKS

701 OCEAN STREET, ROOM 410, SANTA CRUZ, CA 95060 (831) 454-2160 FAX (831) 454-2385 TDD (831) 454-2123

AGENDA: NOVEMBER 21, 2000

November 8, 2000

SANTA CRUZ COUNTY BOARD OF SUPERVISORS 701 Ocean Street Santa Cruz, California 95060

LIGHT EMITTING DIODE (LED) TRAFFIC SIGNAL UPGRADE SUBJECT:

COUNTY SERVICE AREA NO. 9, HIGHWAY SAFETY LIGHTING

Members of the Board:

The Department of Public Works is proposing to proceed with a new project with Republic Electric, our traffic signal maintenance contractor, to provide for additional energy saving improvements for the County's traffic signals. The County may upgrade or modify its traffic signals through our current ongoing contract with Republic Electric on an on-call basis. Our department is proposing to replace the incandescent bulbs used for green lights at the **traffic** signals with green light emitting diodes (LEDs). As your Board may recall, our department entered into a similar program for red LEDs in 1999 that resulted in a 50 percent energy savings (approximately \$50,000 per year) for the traffic signals. In addition, the County received an energy rebate of approximately \$52,000 for the program. Although the currently proposed green LED program does not have the same amount of energy savings as the red LED program, it is expected that the program will pay for itself in less than two years. The energy costs at the traffic signals will be reduced by approximately 25 percent with the green LEDs. In addition, the maintenance cost requirements for the green LEDs are significantly lower per year than with incandescent bulbs.

The initial cost of the green LED program is \$135,000, including administrative overhead. A Pacific Gas and Electric rebate of approximately \$72,595 for the program will be returned to the County once the green LEDs are installed. The remaining \$62,405 will be returned to the County through the reduction in energy costs and maintenance as discussed above. The Public Works Department proposes to fund the initial cost of the project through the County Service Area (CSA) No. 9 Highway Safety Lighting budget through the reallocation of \$95,000 in

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funds from the Graham Hill Road Intelligent Transportation System Signage Program and \$40,000 from the Soquel Drive and Cabrillo College Signal Relocation Project. The Graham Hill Road Intelligent Transportation System Signage Program is proposed to be fully refunded during the 2001/2002 fiscal year budget to meet design and construction timelines for the Graham Hill Road Reconstruction Project near the Roaring Camp area. The expenditure of CSA No. 9 funds for the Soquel Drive and Cabrillo College Signal Relocation Project will not be necessary since the relocation of the traffic signal at the realigned intersection has been funded through grant funds and other funding sources.

It is therefore recommended that the Board of Supervisors approve the attached AUD 74 transferring funds in the amount of \$135,000 from Structures and Improvements to Department of Public Works Services for the Green LED Traffic Signal Upgrade Project.

Yours truly,

THOMAS L. BOLICH Director of Public Works

JJP:mg

Attachments

RECOMMENDED FOR APPROVAL:

County Administrative Officer

copy to: Public Works

Republic Electric

COUNTY OF SANTA CRUZ

REQUEST FOR TRANSFER OR REVISION
OF BUDGET APPROPRIATIONS AND/OR FUNDS

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AUD74 (REV 12/94)

COUNTY OF SANTA CRUZ

REQUEST FOR APPROVAL OF AGREEMENT

CO: Board of Supervisors County Administrative Officer County Counsel Aud'tor-Controller		FROM: PUBI	JC WORKS DEP	ARTMENT	0284 (1157:Dt	(Dept.) _ e)
The Boa d of Supervisors is hereby req	uested to approve the a	attoched agreement	and authorize the	e execution of	the same.	
1. Said agreement is between the REPUBLIC ELECTRIC and 7120 REDWOOD BOULEVAR					(Aame & A	Agency)
2. The agreement will provide FOR THE AND PEDESTRIAN SIGNALS FOR			RAFFIC SIGNAL	UNITS IN	ALL VEHICULA	<u>R</u>
3. The agreement is needed <u>BECAUS</u>	E THE WORK CAN BE	HANDLED MOST	EXPEDITIOUSI	Y BY CONTR	ACT.	
4. Pericd of the agreement is from <u>BO</u>	ARD APPROVAL		to JUNE	30, 2001		
5. Anticipated cost is \$ INCREASE \$	125,225		(Fixed	amount; Mont	hly rate: Not to	exceed
6. Remc rks: CONTRACT \$205,475;	7% OVERHEAD \$14,	384; TOTAL \$21	L9,859		,	
7. Appropriations are budgeted in 6.	22115! 22306! 366 PRIATIONS ARE INS			dex#)_3590 FORM AUD		oobject
Appropriation are not available and h	will be encumbered.		001679- KNUTSON, Audit Linda			Deputy
Proposa reviewed and approved. It is r <u>DIRECTOR OF PUBLIC WORKS</u>	to exe	Board of Supervisor cute the same on be	ehalf of the PUBL	IC WORKS I	DEPARTMENT _	
Remarks:	(Analyst)	Ву		inistrative Offi	Date 11/13/0	٥
Agreement approved as to form. Date						
JJP:ng						