



**City Council
Agenda Memo**

City Council Meeting Date: 9/22/2015

TO: Robert Hanna, City Manager

FROM: Michael Rice, Director of Public Works

SUBJECT: Battery Backups for Rail Road Signals

GENERAL INFORMATION

In June of 2012 Campbell Technology Corporation conducted an assessment of interconnected highway-rail crossings along North and South First Street for Union Pacific Railroad. The inspection was conducted as a result of Safety Advisory 2010-02 regarding preemption systems issued by the Federal Railroad Administration (FRA) on October 1, 2010. The following is an excerpt from the reports.

“When local power outages occur, a dark traffic signal loses its ability to provide a track clearance period. Railroad warning devices should be equipped with a back-up power supply to provide continuous operation for a number of hours. With the advent of LED technology, back-up power for traffic signals is now a realistic option. A back-up power supply maintains the operation of the traffic signal and its ability to display a track clearance interval. 2009 MUTCD recommends the use of back-up power for interconnected signals in Chapter 4D.27, Section 4D.27, Paragraph 11 which states:

Except for traffic control signals interconnected with light rail transit systems, traffic control signals with railroad preemption or coordinated with flashing-light signal systems should be provided with a back-up power supply.

It is recommended that a back-up power system be provided for the traffic control signals in accordance with section 4D.27, 2009 MUTCD.”

Traffic Engineering recommends the purchase of 12 UPS Battery Backup Systems from Paradigm Traffic Systems, Inc. from the TxBuyBoard Contract # 432-13 for \$60,000 which includes cost of setup, training and delivery. This is a government purchasing program that is provided to governmental agencies for procurement of quality products at low bid prices.

SPECIAL CONSIDERATIONS

Battery backup systems are a vital component to ensure the safety of the traveling public at railroad crossings. They ensure motorists have the opportunity to clear the tracks when a train comes during a power outage.

FUNDING/FISCAL IMPACT

During revised budget Traffic Engineering received \$55,000 for battery backup systems. The Traffic Engineering Department will also use \$5,000 of 2008 Certificate of Obligation (ADA Curb Ramps-Various Locations) funds for this purchase.

TxBuyBoard Price	\$ 60,000.00
Traffic Engineering Revised (14-15)	\$ 55,000.00
2008 CO	\$ 5,000.00
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Total	\$ 60,000.00

STAFF RECOMMENDATION

Staff recommends the purchase of 12 UPS Battery Backup Systems from Paradigm Traffic Systems, INC.

BOARD OR COMMISSION RECOMMENDATION

ATTACHMENTS:

Description	Type
<input type="checkbox"/> TxBuyBoard Quote	Backup Material
<input type="checkbox"/> Resolution	Resolution Letter

(713) 864-7545 ph
(713) 864-7588 fx

PARADIGM

TRAFFIC SYSTEMS, INC.

9001 Jameel Rd.
Houston, TX 77040

QUOTATION

REVISED ON 8/31/15 @ 3:55pm

TO: City of Abilene
P.O. Box 60
Abilene, Texas 79604
attn: James Rogge
ph: 325-676-6066 Shop

RFQ: BuyBoard Contract # 432-13

DATE	SLSMN	DELIVERY	FREIGHT	SHIP VIA	F.O.B.	TERMS	QUOTE #
8/31/15	DJ	30 - 45 Days ARO	PPD & Allowed	Best Way	Destination	Net 30	Q18423DJ
ITEM	QTY	DESCRIPTION				PRICE	TOTAL
1	12	UPS BATTERY BACKUP SYSTEM (ALPHA) C/O: 1 each Alpha FXM 2000 - SNMP UPS 1 each Automatic / Maual Transfer Switch 4 each 220 GXL Battery 1 each Battery Cable Kit 1 each Remote Battery Management System 1 each UPS S6 Cabinet 1 each Red LED Indicator(Top of Cabinet) Installation by Paradigm Traffic Systems Personel				\$5,000.00	\$60,000.00
NOTE: PURCHASE ORDER MUST BE PROCESSED THROUGH www.buyboard.com							
						TOTAL	\$60,000.00

Thank you for the opportunity to submit a proposal to you on this equipment. **Please reference this quotation (by QTE number) when placing order.** If you have any questions please call or send a fax to me.
This quote is valid for 60 days. Thereafter it is subject to change without notice.

OFFERED BY:

Dan Jaynes
Paradigm Traffic Systems, Inc.
Federal ID# 75-2520341

RESOLUTION NO. _____

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ABILENE, TEXAS,
PURCHASE 12 UPS BATTERY BACKUP SYSTEMS FROM PARADIGM TRAFFIC
SYSTEMS, Inc. FROM TXBUYBOARD CONTRACT #432-13**

WHEREAS, In June of 2012 Campbell Technology Corporation conducted an assessment of interconnected highway-rail crossings along North and South First Street for Union Pacific Railroad. The inspection was conducted as a result of Safety Advisory 2010-02 regarding preemption systems issued by the Federal Railroad Administration (FRA) on October 1, 2010.

“When local power outages occur, a dark traffic signal loses its ability to provide a track clearance period. Railroad warning devices should be equipped with a back-up power supply to provide continuous operation for a number of hours. With the advent of LED technology, back-up power for traffic signals is now a realistic option. A back-up power supply maintains the operation of the traffic signal and its ability to display a track clearance interval. 2009 MUTCD recommends the use of back-up power for interconnected signals in Chapter 4D.27, Section 4D.27, Paragraph 11 which states:

Except for traffic control signals interconnected with light rail transit systems, traffic control signals with railroad preemption or coordinated with flashing-light signal systems should be provided with a back-up power supply.

WHEREAS, Battery backup systems are a vital component to ensure the safety of the traveling public at railroad crossings; and

WHEREAS, the City of Abilene is purchasing 12 UPS Battery Backup Systems through the TxBuyBoard Contract #432-13; and

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF ABILENE, TEXAS:

PART 1: That the City Council approves this amount of \$60,000.00.

PART2: That this resolution shall take effect immediately from and after passage.

ADOPTED this 22nd day of September, 2015.

ATTEST:

Danette Dunlap, City Secretary

Norman Archibald, Mayor

APPROVED:

T. Daniel Santee, City Attorney