

SULTAN CITY COUNCIL AGENDA ITEM COVER SHEET

ITEM NO: A-4
DATE: August 12, 2010
SUBJECT: Purchase and Install Siren Equipment
CONTACT PERSON: Deborah Knight, City Administrator

ISSUE:

The issue before the city council is to authorize staff to amend the 2010 CR Equipment Fund budget to expend \$70,000 to purchase and install a single emergency warning siren at Sultan Elementary School (Attachment A).

The purchase and installation of a single emergency siren is part of a larger Department of Emergency Management (DEM) grant. The grant revenues and expenditures for the Sultan siren were not included in the 2010 budget.

Purchase and installation of the emergency warning siren is tentatively scheduled for mid-September. The city must first expend the funds and seek reimbursement through the grant to cover the purchase and installation expenses. City staff would like to complete the project and seek reimbursement before the end of the 2010.

STAFF RECOMMENDATION:

1. Authorize city staff to amend the 2010 budget and expend up to \$70,000 to purchase and install a single emergency warning siren at Sultan Elementary School.
2. Direct staff to return with a budget amendment to use the CR Equipment Fund as the temporary source of funding for the siren system purchase and installation until the city can be reimbursed through the DEM grant.

The staff recommendation is to purchase and install the siren equipment as quickly as possible in order to ensure a working siren system is in place before the rainy season begins in mid-November. Ideally, the siren would be in place and operational for the annual school evacuation drill in early October.

SUMMARY:

The city council has been working for several years to purchase and install an updated siren system to replace the now defunct sirens purchased and installed in the 1980s.

The city council approved surplusing the existing siren and the mounting pole at the council meeting on July 22, 2010 in anticipation of installing the proposed mounting pole and siren.

City partners

The city has partnered with Snohomish County Fire District 5, Snohomish County Department of Emergency Management, Snohomish County Public Utility District (PUD) and the Sultan School District on replacing the city's emergency sirens. The partnership has been coordinated through the city, school, fire committee. Fire Chief Merlin Halverson, School District Facilities Manager, Steve Becker, and the PUD staff have done the majority of the work to evaluate siren system alternatives and coordinate removal, purchase and installation of the proposed system. The proposed siren (Attachment B) is the same siren purchased and installed by Washington State and Snohomish County for earthquakes, tsunamis, lahars and other natural disasters.

The proposed siren system would be 100% funded through a Department of Emergency Management UASI grant. The siren can be part of the larger state system. This is a rare opportunity to replace the old sirens and leverage private funding from PUD with public grants through the State department of emergency management (DEM). For this reason, city staff recommend purchasing the same siren as Snohomish County DEM and other agencies throughout Washington State.

Timeline to complete the project

Under the UASI grant, all funds must be expended by July 2011. Pierce County, the UASI grant coordinator is requesting the city complete the project and submit the final paperwork no later than March 2011. City staff would like to move forward as quickly as possible to protect public safety and ensure any unanticipated delays won't jeopardize the grant funding.

Connection to PUD funded sirens

The proposed single siren will be part of the larger siren system negotiated with Snohomish County Public Utility District (PUD) as a part of the PUD's license renewal for the Jackson Hydroelectric Dam through the Federal Energy Regulator Commission (FERC). City staff anticipate PUD's license will be approved by FERC in 2011. Funding to purchase the additional sirens using the "settlement" payment from PUD will be included in the 2011 budget.

BACKGROUND:

Original siren agreement with PUD

In the 1980's, the city negotiated with the Snohomish County Public Utility District (PUD) to purchase two dam safety warning sirens. The sirens were purchased to mitigate the

increased risk of the water behind the Culmback Dam (Spada Lake) inundating the city in the event of a catastrophic dam failure. The sirens were negotiated as a part of the increased size of Culmback Dam to accommodate the Jackson Hydroelectric project. One siren was located on Reiner Road and the other was located at Sultan Elementary School.

The agreement negotiated in the 1980's required the city to be responsible for upkeep and maintenance of the sirens. As the sirens have aged maintaining the sirens in working order has been more and more difficult. Since 2005, the sirens have become unreliable. The city experienced a false alarm in 2006 when the siren in downtown Sultan was accidentally triggered during a routine maintenance check.

2009 negotiated settlement with PUD

As a part of the city's negotiated settlement with PUD last December, the city will receive funding from PUD to purchase easements and property in Osprey and Reese Parks for habitat enhancements to the Sultan River to mitigate damage to fish and other native wild life caused by the Culmback Dam. The city council made a decision to use the funding from PUD to purchase and install up to three additional emergency warning sirens to place around the Sultan community. The proposed siren system has many upgraded features such as remote activation, voice and sound warning. Although the sirens are intended to mitigate the impact of the Culmback Dam on the City of Sultan the system may be used for other community emergencies.

FISCAL IMPACT:

UASI grant

The UASI grant will cover up to \$70,000 for purchase, installation and activation of the system. The quote provided by the siren vendor (Federal Signal Corporation) is approximately \$62,000. There is approximately \$8,000 remaining to remove and dispose of the existing equipment, any miscellaneous inspection work and permits and any unanticipated expenses.

Hardware	\$32,708.66
Install	\$20,209.66
Activation Point	<u>\$ 9,134.61</u>
Total	\$62,052.93

City staff anticipate there won't be any additional funding required to complete the project.

Funding sources

There are three possible funding sources available for the city council to consider (Attachment C). City staff recommend using the CR Equipment Fund.

1. **General Fund.** The General Fund is used for collecting revenues and paying operating expenses for administration (mayor, council, administrator), finance, community development, building, public safety, and street and park maintenance. As of June 30, 2010 there is a balance in the general fund of \$251,279 to cover operating expenses. Property taxes, which provide a majority of the city's revenues will be remitted to the city in October and November. The city council could choose to amend the budget adding the grant funds as a revenue source and the expenditure for purchase and installation. Overall the 2010 budget would not be affected. However, cash flow would be affected since the city would be expending the \$62,000 and then seeking reimbursement. Project close out and reimbursement typically takes 3-4 months to complete.
2. **CR Equipment Fund.** The CR Equipment Fund collects revenues from the general fund and enterprise funds to replace city equipment. The CR Equipment Fund has a \$194,207 balance. The majority of the revenues are transfers from the garbage utility to replace the garbage truck in 2015. Since the CR Equipment Fund is specifically for equipment replacement, the city council could amend the budget to add the grant revenues and siren expenditure. Since the CR Equipment Fund is not used for operating expenses, using this fund would not have the same negative cash flow impacts as using the general fund. City staff recommend amending the CR Equipment Fund as the temporary source of funding for the siren system purchase and installation.
3. **LID Guarantee and Bond Fund.** The LID Guarantee and Bond Fund (LID Fund) has \$427,264 available. The purpose of the fund is to make LID bond payments should property owners fail to make assessment payments as needed for debt repayment. The fund is closely monitored to maintain compliance with state law and bond covenants. The city council could choose to do an interfund loan between the LID Fund and the General Fund. The interfund loan must include interest. The loan term would be 1-year. The loan would be repaid when the city is reimbursed through the UASI grant.

ALTERNATIVES:

1. Authorize city staff to amend the 2010 budget and expend up to \$70,000 to purchase and install a single emergency warning siren at Sultan Elementary School. Direct staff to return with a budget amendment to use the CR Equipment Fund as the temporary source of funding for the siren system purchase and installation until the city can be reimbursed through the DEM grant.

This alternative implies the city council is prepared to move forward with the siren installation and supports using the CR Equipment Fund as the revenue source until the city is reimbursed through the UASI grant.

2. Authorize city staff to amend the 2010 budget and expend up to \$70,000 to purchase and install a single emergency warning siren at Sultan Elementary

School. Direct staff to return with a budget amendment to use either the general fund or LID fund as the temporary source of funding for the siren system purchase and installation until the city can be reimbursed through the DEM grant.

Under this alternative the city council will consider sources of revenue other than the CR Equipment Fund as the preferred alternative for funding the siren purchase and installation.

3. Do not Authorize city staff to amend the 2010 budget and expend up to \$70,000 to purchase and install a single emergency warning siren at Sultan Elementary School. Direct staff to areas of concern.

This alternative implies the city council has questions or concerns that need to be discussed and resolved prior to taking action or postponing action to a later date.

RECOMMENDED ACTION:

1. Authorize city staff to amend the 2010 budget and expend up to \$70,000 to purchase and install a single emergency warning siren at Sultan Elementary School.
2. Direct staff to return with a budget amendment to use the CR Equipment Fund as the temporary source of funding for the siren system purchase and installation until the city can be reimbursed through the DEM grant.

ATTACHMENTS

A – Federal Signal Corporation Siren System Quotes (March 3, 2009)

B – Siren Data Sheet

COUNCIL ACTION:

DATE:



QUOTATION
FEDERAL SIGNAL CORPORATION
Federal Warning Systems
 Sales: 800-548-7229
 Fax: 708-534-4855

Quotation No.: FWS
30309090152
 Reference quote no. on your order

March 3, 2009

Contact Name: Danny Miles
Customer: Snohomish PUD
Address:
 City: Everett State: WA Zip:
 Country: USA email: dwmiles@snopud.com
 Phone: 425-783-8312 Fax:

Upon receipt of your order and acceptance by Federal Signal Corporation, the equipment herein will be supplied at the quoted prices below. Delivery schedule cannot be established until radio information is supplied, if applicable.

Item No.	Qty.	Federal Model/Part No.	Description	Weight	Kg Weight	Total Weight Lbs	Total Weight KG	Unit Price	Total
1			Installation Only						
#REF!	1	TK-I-MOD4-Z4	MOD6048 Install w/ Batteries Zone 4	-	-			\$8,941.60	\$8,941.60
#REF!	1	TK-IO-PREVAILE	PREVAILING WAGE ADDER					\$1,350.00	\$1,350.00
#REF!	1	IK-UVMOD6048-TP	FINAL ASSEMBLY, KIT, INSTALL, UV-MOD6048, TIM	2	1	2	1	\$1,098.00	\$1,098.00
#REF!	1	TK-M-IMSSITE	Installation Management Services Site Fee	-	-			\$298.80	\$298.80
#REF!	1	TK-I-ENCODER-Z4	Encoder Install Zone 4	-	-			\$1,577.70	\$1,577.70
#REF!	1	TK-S-FULOPTPGK	SYSTEM OPTIMIZATION & COMPLETE TRNG					\$3,424.50	\$3,424.50
#REF!	1	TK-IO-CUSTINS	CUSTOM - SITE OPTIMIZATION					\$855.00	\$855.00
#REF!	0								
#REF!	0								
#REF!	1	ES-FREIGHT	SHIPPING FEES	-	-			\$0.00	\$0.00
								ES-FREIGHT	\$1,120.05
								Taxes:	\$1,544.01
								Total:	\$20,209.66
Total Weight:						2	1		

Prices are firm for 120 days from the date of quotation unless shown otherwise. Upon acceptance, prices are firm for 6 months. This quotation is expressly subject to acceptance by Buyer of all Terms stated in the attached Terms document, and any exception to or modification of such Terms shall not be binding on Seller unless expressly accepted in writing by an authorized agent or Officer of Seller. Any order submitted to Seller on the basis set forth above, in whole or in part, shall constitute an acceptance by Buyer of the Terms. Any such order shall be subject to acceptance by Seller in its discretion. If the total price for the items set forth above exceeds \$50,000 then this quotation IS ONLY VALID if countersigned below by a Regional Manager of the Federal Warning Systems Division, Federal Signal Corporation. Installation is not included unless specifically quoted as a line item above. Adverse Site Conditions, including rock, caving soil conditions, contaminated soil, poor site access availability, and other circumstances which result in more than 2 hours to install a pole, will result in a \$385.00 per hour fee, plus equipment. Trenching is additional. Power Clause, bringing power to the siren equipment is the responsibility of the purchaser. Permit Clause, any special permits, licenses or fees will be additional.

\$17,545.60
\$19,089.61

Delivery: 6-8 weeks, plus shipping
Freight Terms: FOB, University Park (Factory)
Terms: Equipment, Net 30 Days upon shipment
 Services, Net 30 Days as completed
 billed monthly
 Delivery Trucks must be self-unloading

Proposed By: Kim Torp-Pedersen
Company: Alster Communications (Manufacturer's Representativ
Address: 3595 169th Ave. NE
City,State, Zip: Bellevue, WA 98008
Country: USA
Work Phone 425-702-8396
Fax: 425-861-7138
Approved By: Chris Lopez
Title: Regional Sales Manager

Signature:

Purchase order MUST be made out to:
 Federal Signal Corporation, Federal Warning Systems, 2645 Federal Signal Drive, University Park, IL 60466-3195

Accepted By: _____
 Signature: _____

 Title:

 Date:



QUOTATION
FEDERAL SIGNAL CORPORATION
Federal Warning Systems
 Sales: 800-548-7229
 Fax: 708-534-4855

Quotation No.: FWS
30309090056
 Reference quote no. on your order

March 3, 2009

Contact Name: Danny Miles
Customer: Snohomish PUD
Address:
 City: Everett State: WA Zip:
 Country: USA email: dwmiles@snopud.com
 Phone: 425-783-8312 Fax:

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Item No.	Qty.	Federal Model/Part No.	Description	Weight	Kg Weight	Total Weight Lbs	Total Weight KG	Unit Price	Total
1			Hardware only						
2	1	MOD6048	SIREN 4800W, OMNI DIR	1270	577	1270	577	\$13,366.00	\$13,366.00
3	1	UVTDH6048	DIGITAL,DUAL CNTL,HIGH	255	119	255	119	\$7,052.00	\$7,052.00
4	12	UV400	Amplifier - 400W	4	2	48	24	\$558.00	\$6,696.00
5	1	DV480	DIGITAL,VOICE CHIP,480SEC	2	1	2	1	\$301.50	\$301.50
6	1	OMNI-3	ANTENNA, 148-152MHz VHF	25	11	25	11	\$310.50	\$310.50
7	1	RP164	ANT,GROUNDING PLANE	12	5	12	5	\$90.00	\$90.00
8	0	SS2000D	DIGITAL 2-WAY CNTL,DESK MT	6	3	0	0	\$2,700.00	
#REF!	0								
#REF!	1	ES-FREIGHT	SHIPPING FEES	-	-			\$1,324.80	\$1,324.80
								ES-FREIGHT	\$1,120.05
								Taxes:	\$2,447.81
Total Weight:						1,612	737	Total:	\$32,708.66

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Delivery: 6-8 weeks, plus shipping
Freight Terms: FOB, University Park (Factory)
Terms: Equipment, Net 30 Days upon shipment Services, Net 30 Days as completed billed monthly
 Delivery Trucks must be self-unloading

Proposed By: Kim Torp-Pedersen
Company: Alster Communications (Manufacturer's Representative)
Address: 3595 169th Ave. NE
City,State, Zip: Bellevue, WA 98008
Country: USA
Work Phone: 425-702-8396
Fax: 425-861-7138
Approved By: Chris Lopez
Title: Regional Sales Manager

Signature:

Purchase order MUST be made out to:
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Accepted By: _____
 Signature: _____

 Title:

 Date:



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March 3, 2009

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Item No.	Qty.	Federal Model/Part No.	Description	Weight	Kg Weight	Total Weight Lbs	Total Weight KG	Unit Price	Total
1			Activation Point (only one needed)						
#REF!	1	SS2000D	DIGITAL 2-WAY CNTL_DESK MT	6	3	6	3	\$2,700.00	\$2,700.00
#REF!	1	SFCD10	PREVAILING WAGE ADDER	12	5	12	5	\$1,350.00	\$1,350.00
#REF!	1	SFCD-W10	SFCDWARE WARRANTY,UP TO 10 USER	2	1	2	1	\$446.25	\$446.25
#REF!	1	X-PC-17	DESKTOP PC WITH WIN XPPRO W/ 17" MONITOR	33	15	33	15	\$2,592.50	\$2,592.50
#REF!	0	TK-I-MOD4-Z4	MOD6048 Install w/ Batteries Zone 4	-	-			\$8,941.60	
#REF!	0	TK-IO-PREVAIL	PREVAILING WAGE ADDER					\$1,350.00	
#REF!	0								
#REF!	1	ES-FREIGHT	SHIPPING FEES	-	-			\$302.00	\$302.00
								ES-FREIGHT	\$1,120.05
								Taxes:	\$623.81
								Total:	\$9,134.61
Total Weight:						53	24		

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\$7,088.75
\$7,712.56

Delivery: 6-8 weeks, plus shipping
Freight Terms: FOB, University Park (Factory)
Terms: Equipment, Net 30 Days upon shipment
 Services, Net 30 Days as completed
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Proposed By: Kim Torp-Pedersen
Company: Alster Communications (Manufacturer's Representativ
Address: 3595 169th Ave. NE
City,State, Zip: Bellevue, WA 98008
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Fax: 425-861-7138
Approved By: Chris Lopez
Title: Regional Sales Manager

Signature:

Purchase order MUST be made out to:
 Federal Signal Corporation, Federal Warning Systems, 2645 Federal Signal Drive, University Park, IL 60466-3195

Accepted By: _____
 Signature: _____

 Title:

 Date:



MODULATOR ELECTRONIC SIREN SERIES

> Features

- Warning signals, voice communication and continued emergency operation regardless of primary power outages
- Excellent frequency response for clear voice reproduction
- 360° coverage with no sound variation in the horizontal plane
- Easy servicing through convenient access panels
- Fully tested in federal signal's certified anechoic chamber

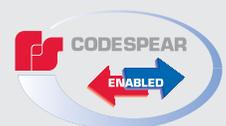


Federal Signal's Modulator siren series is capable of producing intense warning signals and live and digital voice messaging over a large area. An efficient design enables the siren to produce a high sound level while making moderate demands on the battery power source.

The innovative omni-directional electronic Modulator speaker array consists of modules that each utilize four 100 watt drivers.

The Modulator Speaker Array provides a flat frequency response from 200 to 2000Hz for excellent voice reproduction and offers warning signals such as: wail (attack); steady (alert); pulsed steady; fast wail; pulsed steady; pulsed wail and westminster chime which are produced by the UltraVoice™ electronic controller. Custom tones can be purchased upon request.

An excellent alert and notification device, the Modulator siren is ideal for locations where people congregate outdoors, or in industrial settings where immediate instruction is necessary.



> Specifications

Model Number	Active Modules*	Watts	dB(c)@100' **	Effective Range @ 70 dB(c) ***	Height In Inches	Shipping Weight lbs.	Net Weight lbs.
MOD1004	1	400	106	1200'	43.2	350	181
MOD2008	2	800	112	1800'	63.7	400	296
MOD3012	3	1200	115	2200'	84.3	600	411
MOD4016	4	1600	118	2800'	105	750	526
MOD5020	5	2000	120	3100'	125.5	1000	641
MOD6024	6	2400	121	3400'	146.1	1270	760
MOD6032	6	3200	123	4000'	146.1	1350	861
MOD6048	6	4800	125	4500'	146.1	1438	928

General Specifications

Color	Off White
Paint Type	TGIC-polyester powder coat
Modulator Horn Type	Hyperbolic flare
Frequency Response	200-2000 Hz
Horizontal Coverage	360o +/- 1 dB(C)
Diameter	44-1/2"

* The bottom module contains no active devices and is simply used as a reflective surface.

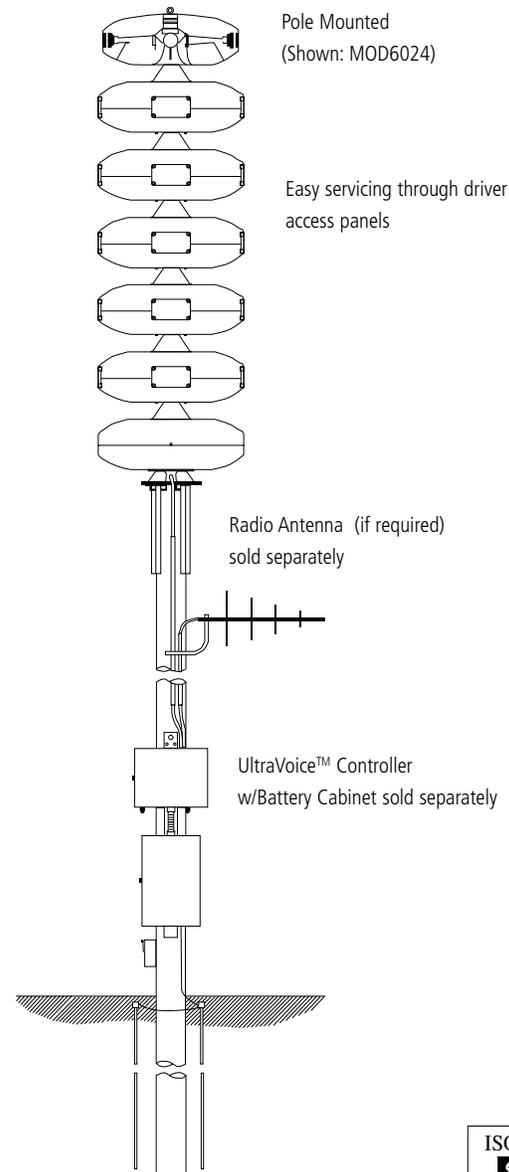
** Based on far field measurements.

*** Coverage based on 10 dB(C) distance labeled loss factor

Order Information

MOD1004	One module, four drivers per module
MOD2008	Two modules, four drivers per module
MOD3012	Three modules, four drivers per module
MOD4016	Four modules, four drivers per module
MOD5020	Five modules, four drivers per module
MOD6024	Six modules, four drivers per module
MOD6032	Six modules, center cells with eight drivers per module
MOD6048	Six modules, eight drivers per module

See UltraVoice™ product literature for controller information.



FEDERAL SIGNAL

2645 Federal Signal Drive, University Park, IL 60484
Tel.: (800) 548-7229 • www.federal-signal.com/ANS

