



MEETING DATE: October 9, 2024

AGENDA ITEM: 5. Bridge Monitoring

FROM: Susan Scarlett

RE: Bridge Monitoring

BACKGROUND:

Currently the bridge is being monitored by hand by City Staff. Staff feels that a more consistent method of monitoring would be essential. Martin McIlroy from MGE spoke to the Council at the September 11, 2024 meeting regarding the status of the bridge and different monitoring options.

City staff has been meeting with Mr. McIlroy and other consultants on this issue. Attached is the quote recommendation.

RECOMMENDATION:

Staff recommends approving the quote, installation which is estimated at \$15,000 and a "contingency" with a not to exceed of \$65,000 total.

FISCAL IMPACT:

Fiscal impact will be the not to exceed. Funds from the Road Maintenance and Repair Act are able to be used this year for the bridge and could offset most of this cost if no other funding is secured.

ATTACHMENTS:

- A. -202064-CITY OF PORTOLA - SCOUR.XLSX - GOOGLE SHEETS
- B. INSTALLATION

DATE:	9/19/2024
TITLE:	City of Portola Scour Monitoring System
QUOTED BY:	Andrew Ehlers
EMAIL:	andrew@etisensors.com

ETI INSTRUMENT SYSTEMS, INC.

40504 Weld County Road 17
 Severance, CO 80524
 Phone: (970) 484-9393
 Cell: (970) 443-3399
 FED. ID. # 84-4648781

PREPARED FOR:	Martin McIlroy
AGENCY:	MGE Engineering
PHONE:	916-421-1000
EMAIL:	mmcilroy@mgeeng.com
ADDRESS:	7415 Greenhaven Ddrive Sacramento, CA 95831

Quotation Total: \$ 37,538.00

QUOTATION:	202064
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ITEM NO.	HARDWARE, TELEMETRY AND DATA FEES	UNIT	QTY	AMOUNT
1	Monitoring Station with CR1000X Data Logger	Each	1	\$ 10,809.25
	X-Y Tilt Sensor	Each	4	
2	Cellular Modem with 5 Year Data Plan	Year	5	\$ 7,528.75
3	Cloud Hosted Data Server with Web Display	Year	5	\$ 8,200.00
	Alarm Notification (included)			
	5 Year Data Plan			
ITEMS TOTAL:				\$ 26,538.00
ITEM NO.	LABOR DESCRIPTION			AMOUNT
4	Project Management, Construction Planning, Installation Details			\$ 6,000.00
5	Fabrication, Assembly, Programming, Bench Testing			\$ 5,000.00
				\$ -
LABOR TOTAL:				\$ 11,000.00
TOTAL:				\$ 37,538.00

ETI will provide the scour monitoring system components. Installation of the scour monitoring system will be completed by a separate contractor.



Date 9/25/2024

Quotation XPMG001

Prepared for:
 MGE Engineering
 Attn: Martin W. McIlroy
 7415 Greenhaven Drive
 Sacramento, CA 95831
mmcilroy@mgeeng.com

Federal Tax Identification No. 84-1440328
Quote Valid Thru 10/25/2024

Prepared by: Markus Ritsch
Water & Earth Technologies, Inc.
 40504 Weld Co Rd 17
 Severance, CO 80524
 Phone (970) 225-6080
 email: mlritsch@wetec.us

Quote Title: Gulling Street Bridge Scour System Installation

Quote Information
 This quote provided by Water & Earth Technologies, Inc. (WET) is for the installation of the scour monitoring system at the Gulling Street Bridge. The scour monitoring system will be provided by ETI Instruments, Inc. and will consist of one (1) radar water surface elevation sensor, four (4) tilt sensors, one (1) NEMA enclosure containing a CR1000X data logger, cell modem (Verizon), 12v battery, solar panel and solar charging regulator. The NEMA enclosure will be mounted to the guardrail of the bridge. The radar sensor will be installed inside the NEMA enclosure. The four (4) tilt sensors will be mounted at locations specified by MGE Engineering. Once installed, the system will be tested to ensure sensor readings are sent to the Bridge Monitor Cloud Software (supplied by TriLynx Systems, Inc.) for data storage, analysis, visualization and alarm notification. WET will provide one fully equipped field service vehicle and two field engineers to install and test the system. Any required permitting and traffic control is not included in this quote and is assumed to be provided by MGE Engineering.

Item Description	Unit Price	Qty	Units	Amount
Installation Labor - Field Engineer	\$ 150.00	24	Hr	\$ 3,600.00
Installation Labor - Field Tech I	\$ 120.00	24	Hr	\$ 2,880.00
Mobilization	\$ 1,650.00	2	Day	\$ 3,300.00
Per Diem (Food and Lodging) 2 people for 5 days total	\$ 490.00	5	Day	\$ 2,450.00
Misc. Installation Hardware/Conduit Procured in California	\$ 1,000.00	1	N/A	\$ 1,000.00
Project Management	\$ 200.00	4	Hr	\$ 800.00
Rental Equipment (boom truck)	\$ 800.00	1	N/A	\$ 800.00
				\$ -
		Items Total		\$ 14,830.00

Total Cost	\$ 14,830.00
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