



STAFF REPORT

To: Honorable Mayor and Members of Town Council

Through: David L. Corliss, Town Manager

From: Mark Marlowe, P.E., Director of Castle Rock Water
Shawn Griffith, Assistant Director of Operations
Nicolas Van Kooten P.E., SCADA Superintendent

Title: **Resolution Approving an Equipment and Services Acquisition Agreement between the Town of Castle Rock and Tetra Tech for Phase VI of the SCADA Master Plan Design Project [Entire CRW service area]**

Executive Summary

Castle Rock Water (CRW) staff requests Town Manager approval for a services agreement with Tetra Tech for assistance in creating the SCADA MP Phase VI Meadows and Remotes Sites System Design and Bid Phase Services project, for the not-to-exceed amount of \$448,500, with a 10% Town managed contingency of \$44,850, for a total authorization request of \$493,350 (**see Attachment A**).

The table below shows the total approved expenditures to date on the SCADA MP by vendor:

Project	PO	Vendor	Year	Amount
Projects 2021-2023 MP Phases I-III				\$4,804,556
SCADA Master Plan Phase IV	2787	Tetra Tech	2024	\$90,744
Screen Development	2797	LSI	2024	\$302,800
Miller WTP PLC Equipment	2805	Rexel	2024	\$124,750
O&M Building PLC Equipment	2833	Rexel	2024	\$46,327
OWL Data Diode Renewal & Historian	2843	Rexel	2024	\$31,704
Remote Sites Screen Development	2854	LSI	2024	\$102,630
RFP for SCADA Master Plan Phase IV	2860	Burns & McDonnell	2024	\$79,236
Founders Emergency Programming & Commissioning	2907	Techneaux	2024	\$72,450
SCADA Master Plan Phase IV Founders Oversight	2937	Burns & McDonnell	2024	\$117,241
RFP for SCADA Master Plan Phase V	2860	Burns & McDonnell	2024	\$79,236
SCADA All Hazards Assessment	2979	Tetra Tech	2025	\$38,765
Edge MQTT Device Purchase	3119	LSI	2025	\$30,210
Portable Lift Station Panel Purchase	n/a	EMC	2025	\$13,396
Phase V -Ray Waterman Design Project	3018	Burns & McDonnell	2025	\$479,759
Phase IV- Miller WTP & Remote Sites Upgrade	2934	LSI	2024	\$4,475,720
Phase V -Ray Waterman Oversight Project	3229	Burns & McDonnell	2025	\$234,495
Phase V -Ray Waterman Implementation Project	3230	LSI	2026	\$6,513,320
Subtotal: Completed/Encumbered Projects to Date				\$17,637,339
Pending Projects				
Phase VI -Meadows Design Project	<i>pending</i>	<i>pending</i>	2026	\$493,350
Phase VI -Meadows Oversight Project	<i>pending</i>	<i>pending</i>	2027	\$300,000
Phase VI -Meadows Implementation Project	<i>pending</i>	Master Plan Estimate	2027	\$6,500,000
Total Expenses				\$24,930,689

The SCADA system is crucial to the security and efficient operation of CRW's water and wastewater facilities. In 2019, the SCADA Master Plan (MP) was completed to assess the system and develop a plan for its upgrade, maintenance, and operation. The Town Council approved the SCADA MP on December 17, 2019, which identified approximately \$12 million in expenditures over seven years.

In late 2023, the SCADA MP implementation cost was reviewed and updated, revealing a 26% increase in equipment and implementation costs since 2019. Additionally, the update included newly identified work not previously covered in the 2019 scope. As a result, the revised estimated cost for full implementation of the plan over the next six years is approximately \$24.9 million.

Notification and Outreach Efforts

This project is security-sensitive, and no public outreach is planned. Work will be performed at various CRW water treatment facilities and will be done out of the public eye.

History of Past Town Council, Boards & Commissions, or Other Discussions

Castle Rock Water Commission recommended approval of the SCADA Master Plan on December 11, 2019.

Town Council approved the SCADA Master Plan on December 17, 2019.

Castle Rock Water staff presented this item to the Castle Rock Water Commission at their meeting held on May 27, 2026, and the Castle Rock Water Commission voted unanimously 6 to 0 to recommend Town Council approval of the Resolution as presented.

Discussion

An engineering consultant is required to develop a comprehensive SCADA system design for Phase VI of the MP, including upgrades to the Meadows Water Treatment Plant (Meadows) and 17 remote sites. The scope of work for this project encompasses a complete SCADA system and electrical drawings; detailed scopes of work (SOW); equipment and Input/Output (I/O) lists; P&ID drawings; network diagrams; and site-specific control narratives. These deliverables are essential to ensure an accurate project estimate and proper implementation details. Additionally, the project will include bid-phase services. The design project is scheduled to be completed by September of 2026, and the Bid Phase by November of 2026.

Staff submitted a Request for Proposal (RFP) to two qualified consultants in April of 2026, as shown in the chart below:

Consultant	Proposal Cost
Burns & McDonnell Engineering	\$565,107
Tetra Tech	\$448,500

Staff recommends selecting Tetra Tech as the design contractor for the MP Phase VI project, as their lower bid provides the best value for the Town. Tetra Tech is a preferred contractor and has submitted a comprehensive quote detailing all the deliverables requested in the original Request for Proposal (RFP). The items outlined in their proposal are critical to the success and efficient execution of the MP Phase VI project.

Tetra Tech has extensive experience providing key consulting services for various segments of the SCADA MP and has participated in multiple SCADA MP RFPs. Their team has been consistently

relied upon for their expertise on numerous related projects. Additionally, their principal engineers and technical staff will be pivotal in the Phase VI design.

Given the security-sensitive nature of the Cybersecurity portion of the MP, Tetra Tech has signed a non-disclosure agreement with the Town to ensure confidentiality and protect sensitive information.

Tetra Tech will conduct site investigations at each facility listed below in collaboration with staff. Based on these investigations, a scope of work (SOW) will be developed and summarized for bid inclusion, detailing the identified work at each facility:

- Meadows Water Treatment Plant
- Diamond Ridge Pump Station
- Crystal Valley Pump Station / Tank 15
- Tank 8
- Tank 11
- Meadows 5 Lift Station
- Meadows 15 Lift Station
- Meadows 17 Lift Station
- Meadows A-1
- Meadows A-2
- Meadows A-3
- Meadows A-4
- Meadows A-5
- Meadows A-7
- Meadows A-8 (Well 49 only)
- Meadows A-11
- Meadows A-12 (ASR Wells)
- Meadows A-13

This project will also include the following deliverables:

- Site investigations and data gathering
- Progress meetings and project management
- Technical Memorandum summarizing the SOW for each site
- SCADA programmable logical control (PLC) cabinet design requirements and drawings
- Individual Control Narratives for each site
- New P&ID drawings for each site, aligned with CRW standards
- Electrical site plans
- Instrumentation lists
- Input/Output (I/O) lists
- Electrical lists
- Network diagrams
- Design and project scope documents
- Bid Phase services

Tetra Tech has submitted a target completion date of March 1, 2027. Upon completion of the design phase, they will assist with bid-phase activities, including vendor selection and contractor award-related tasks.

Budget Impact

Funds have been budgeted each year, through 2029, for the Master Plan Implementation. Funds for this project will be taken from the Water CIP SCADA System Improvements line items, by year, as follows:

Fund Name	Account Number	Cost	2026 Balance	2027 Projected Balance
Water SCADA System Improvements	210-4275-442.75-41	\$246,675	\$2,162,770	\$2,162,770
Water Resources SCADA System Improvements	211-4375-443.75-41	\$123,338	\$1,081,385	\$1,081,385
Wastewater SCADA System Improvements	213-4575-445.75-41	\$123,337	\$1,081,385	\$1,081,385
Total		\$493,350	\$4,325,540	\$4,325,540

Staff Recommendation

Staff recommends a services agreement with Tetra Tech to create the SCADA MP Phase VI Meadows and Remote Sites System Design and Bid Phase Services project, for the not-to-exceed amount of \$448,500, with a 10% Town-managed contingency of \$44,850, for a total authorization request of \$493,350.

Proposed Motion

“I move to approve the Resolution as introduced by title.”

Alternative Motions

“I move to approve the resolution as introduced by title, with the following conditions: (list conditions).”

“I move to continue this item to the Town Council meeting on _____ date to allow additional time to (list information needed).”

Attachments

Attachment A: Resolution
 Exhibit 1: Contract