

Mountain Regional Water is a political subdivision of Summit County and thereby exempt from State and Local Sales Tax. If a tax exemption certificate is required, please request a completed Utah State Form 721 from Financial Officer.

MOUNTAIN REGIONAL WATER
Bidding Information Form



General Information

Vendor Name

SKM Engineering LLC

Today's Date

10/12/2026

Please Check the First (1st) Box Below that Applies to this Payment:

☒

4 Sole Source Procurement

Check all Boxes Below Accurately Describe the Sole Source Purchase:

☐

Only One Source for Item

Criteria: Compatibility with existing equipment, technology, software, accessories, replacement parts or service

☒

Transitional Costs Unreasonable or Prohibitive

Training, conversion, compatibility, downtime, disruption of service, staff time, installation, ancillary software, hardware, equipment, or construction costs

Chief Procurement Officer Justification:

SKM provides the programming for SCADA system and designed how the system works. Thus, they have become an integral part of our water delivery system being efficient and operating optimally.

Check the Box Below that Applies to This Sole Source Purchase:

☐

The total amount of this purchase is less than \$50,000

☒

The total amount of this purchase is \$50,000 or More

☐

5 Emergency Procurement

The procurement must be necessary to "avoid harm or risk of harm to the public health, safety, welfare, or property."

Chief Procurement Officer Justification:

☐

6 Funding Mandated Procurements

Chief Procurement Officer Explanation of Vendor Required by Funding Mandate:

☐

7 All Other Procurements

Complete and attach a 'Summary of Bids Form'

Signatures

Name of Person Completing this Form: Sharon M. Kellner

Date: 10/12/2026

Signature:

Sharon M. Kellner

Chief Procurement Officer:

[Signature]

Date: 10/13/26

Required for Sole Source and Emergency Procurements; and if Low Bid is not Accepted (see Vendor Quote Form)



October 12, 2026

Chris Braun, CTO

Mountain Regional Water Special Service District

RE: Signal Hill WTP – PCM-MAIN PLC Backpanel Replacement

SKM Engineering is pleased to submit this proposal to Mountain Regional Water Special Service District (the District) to replace the backpanel in the main plant PLC control panel, PCM-MAIN, at the Signal Hill Water Treatment Plant. The bid documents for the Signal Hill WTP Optimization project assign this work to the District (Section 01 11 00, Article 1.06, and Section 01 14 00, Article 1.07), with the replacement planned for the full plant shutdown in November 2027.

Our approach reuses the existing ControlLogix racks and I/O cards where possible, upgrades the controller to the ControlLogix 5580 platform required by the project specifications, and adds the I/O capacity the project needs. SKM will design the new backpanel, have it built by our panel fabrication partner, Electro Power Utah (EPU), test it before the shutdown, and then perform the swap, re-land the existing field wiring, and check out the existing loops on site. SKM prepared the electrical design for the project and knows the facility, the drawings, and the existing PLC program.

Project Understanding

PCM-MAIN is in the existing electrical room of the main treatment building. Based on the existing PLC program (PLC_SHTP, last modified December 2025), it contains an Allen-Bradley 1756-L62 controller (firmware v20) with two 1756-ENBT modules in a 4-slot chassis, and two 13-slot remote racks on EtherNet/IP. The remote racks hold eight 1756-IF8 analog input, three 1756-OF4 analog output, eight 1756-IB16 digital input, and four 1756-OX8I relay output cards. Five Flex I/O adapters (1794-AENT) and several SCADA network devices are also connected to the controller and will remain in service.

The existing cards have little spare capacity (about 6 AI, 3 AO, 35 DI, and 5 DO channels), and only one rack slot is open. The Signal Hill WTP Optimization project adds 69 hardwired points to PCM-MAIN (18 AI, 3 AO, 44 DI, and 4 DO, from the Section 40 96 15 I/O List and the P&IDs), re-lands 73 existing points, and connects about 50 new EtherNet/IP devices. The 1756-L62 is also discontinued and does not meet the ControlLogix 5580 requirement in Section 40 64 01.

The plant must stay in service through construction, so the cutover must be completed within the November 2027 shutdown window with a tested backpanel and a detailed cutover plan.

Proposed Approach

SKM proposes to keep both 13-slot racks and the controller chassis, and to make room for the new points by consolidating the digital inputs onto 32-point cards. The proposed arrangement is:

- Controller chassis (existing 1756-A4, reused)
 - New 1756-L82E ControlLogix 5580 controller replacing the 1756-L62
 - Two new 1756-EN2TR modules replacing the 1756-ENBTs (I/O and SCADA networks keep their existing addresses)
 - One new 1756-IF8I isolated analog input card in the open slot
- Rack 1 (existing 1756-A13 and 1756-EN2TR, reused)
 - Seven existing 1756-IF8 analog input cards, reused
 - Three new 1756-IF8I isolated analog input cards
 - Two new 1756-OF8I isolated analog output cards for all analog outputs (replacing three 1756-OF4)
- Rack 2 (existing 1756-A13 and 1756-EN2TR, reused)
 - Six new 1756-IB32 digital input cards (replacing eight 1756-IB16)
 - Two new 1756-OB32 digital output cards driving interposing relays (replacing four 1756-OX8I)
 - One existing 1756-IF8 analog input card, reused in place
 - Three spare slots
- Installed capacity after replacement: 96 AI, 16 AO, 192 DI, and 64 DO (40 with interposing relays), which covers the existing and new points plus at least 25 percent spare of each type, with three spare rack slots
- Retired hardware (1756-L62, two 1756-ENBT, eight 1756-IB16, three 1756-OF4, and four 1756-OX8I) will be turned over to the District as spares

Scope of Services

Task 1 – Survey and Existing Conditions

- Kickoff meeting with District operations staff
- Field survey of PCM-MAIN: enclosure dimensions, existing backpanel, power and network connections, field wiring, and wire tags
- Cross-reference of the existing I/O between the PLC program, the field wiring, and the Section 40 96 15 I/O List, identifying points demolished by the project

Task 2 – Backpanel Design

- Backpanel layout, rack and card layout, and bill of materials
- Wiring schematics, terminal plan, and an old-to-new termination cross-reference for every existing field conductor

- Power supply, heat load, and UPS sizing calculations
- Design submittal for District (and Engineer, if requested) review, with one round of comment responses

Task 3 – Hardware and Backpanel Fabrication

- Furnish new hardware: 1756-L82E controller, two 1756-EN2TR, four 1756-IF8I, two 1756-OF8I, six 1756-IB32, two 1756-OB32 with interposing relays, and terminal blocks
- Furnish redundant 24 VDC power supplies, panel UPS UPS-MAIN-2 (Vertiv Liebert GXT5 2000VA lithium-ion with maintenance bypass and alarm relay card), circuit protection, surge protection, and cabinet monitoring (power supply, UPS, temperature, and intrusion)
- Furnish and configure three Allen-Bradley Stratix 5200 managed switches (ES-MAIN-2A, -2B, and -2C) for the PCM-MAIN I/O network shown on Drawings 00N10 and 00N12, including VLAN separation and addressing
- Backpanel fabrication and wiring by Electro Power Utah (EPU) to SKM's design, including panel materials, interposing relays, individually fused analog inputs, and all spare I/O wired to field terminals. Reused racks and cards are mounted on the new backpanel after they are removed at the shutdown
- SKM review and inspection of the completed backpanel at EPU before delivery to SKM for testing

Task 4 – Program Migration and Factory Acceptance Test

- Convert the existing PLC_SHTP program from the 1756-L62 (v20) to the 1756-L82E, rebuild the I/O configuration, and re-map existing tags to the new card addresses
- Re-establish communication with the existing Flex I/O adapters and SCADA network devices
- In-house testing of the migrated program with the powered backpanel
- Factory acceptance test (FAT) of the backpanel, witnessed by the District

Task 5 – Shutdown Cutover and Checkout

- Cutover plan and method of procedure for the November 2027 shutdown, coordinated with the District and the Contractor per Section 01 14 00
- Pre-shutdown verification and tagging of existing field wiring
- During the shutdown: remove the existing backpanel, transfer the reused racks and cards, install the new backpanel, and re-land the existing field wiring
- Power-up, controller download, and network bring-up
- Loop checkout of every existing point and return of the plant control system to service
- Post-cutover support and punch list resolution

Task 6 – Documentation

- As-built backpanel drawings and termination schedule
- Updated I/O list showing the new card addresses

- Migrated program file and O&M section for PCM-MAIN

Deliverables

- Existing-conditions I/O cross-reference
- Backpanel design submittal (layouts, bill of materials, schematics, termination cross-reference, calculations)
- Fabricated and factory-tested PCM-MAIN backpanel with new hardware, UPS-MAIN-2, and the ES-MAIN-2 switches
- FAT report and cutover plan
- Migrated PLC program (as-built), updated I/O list, as-built drawings, and O&M section
- Retired PLC hardware turned over to the District as spares

Project Schedule

Hardware will be ordered after design approval so the backpanel is complete and tested well before the shutdown. Key milestones are expected to be as follows:

Milestone	Timeline
Notice to proceed and field survey	Within 4 weeks of authorization
Backpanel design submittal	6 weeks after survey
Hardware procurement and fabrication	10–14 weeks after design approval (subject to lead times)
Program migration and FAT	Complete by September 2027
Cutover and checkout	November 2027 plant shutdown (about 7 working days on site)
As-built documentation	30 days after cutover

Fee

SKM proposes to perform the above scope of services on a time-and-materials basis for the following not-to-exceed fee:

Item	Amount
Not-to-exceed fee (Tasks 1–6)	\$247,200

Labor is billed monthly at SKM's standard hourly rates for the hours worked, and hardware and the EPU backpanel build are billed at cost plus markup when received. SKM will not exceed the amount above without the District's written authorization. Hardware pricing is based on October 2026 supplier quotes with an allowance for 2027 pricing; if the purchase is

delayed or manufacturer pricing changes significantly, SKM will review hardware costs with the District before ordering.

Assumptions

- Existing hardware and I/O counts are based on the PLC_SHTP program file and will be confirmed during the field survey. Changes found during the survey will be reviewed with the District before design proceeds.
- The existing PCM-MAIN enclosure, both 1756-A13 racks, the 1756-A4 chassis, the chassis power supplies, the remote 1756-EN2TR modules, and the 1756-IF8 cards are in good working condition and will be reused. Replacement of any failed reused hardware will be handled as a change in scope.
- Three spare rack slots remain after the replacement. Discrete outputs use 24 VDC output cards with interposing relays, which provide isolated dry contacts for the existing 120 VAC output circuits.
- The District will provide a full plant shutdown of at least 7 consecutive working days for the cutover, with operations staff available during the shutdown.
- Existing field wiring is in usable condition and long enough to reach the new terminal locations. Splicing or replacement of existing field wiring is not included.
- New field wiring for the Signal Hill WTP Optimization project is terminated at PCM-MAIN by the Contractor (Section 01 11 00, Article 1.06).
- Programming of new and modified process areas, HMI development, and integration of new EtherNet/IP devices are performed under the construction contract (Bid Item 6) and are not part of this proposal. This proposal covers migration of the existing program to the new hardware.
- Studio 5000 and Ignition licensing are provided by the District or are already held by SKM for this work.
- On-site work is during normal working hours except during the shutdown, when extended hours will be coordinated with the District.

Exclusions and Exceptions

Furnishing, installing, or terminating new field wiring and conduit (by the Contractor)

Replacement of the PCM-MAIN enclosure, or splicing or replacement of existing field wiring

Programming of new or modified process areas, HMI screens, and new EtherNet/IP device integration (under the construction contract)

Network rack NCP-MAIN, switch ES-MAIN-1, UPS-MAIN-1, and fiber or copper network cabling outside PCM-MAIN

Furnishing, calibrating, or replacing field instruments

Spare parts beyond the retired hardware turned over to the District

Work required by changes to the bid documents after the date of this proposal

About SKM Engineering

SKM Engineering designs and integrates instrumentation, electrical, and controls systems for water and wastewater utilities across the Intermountain West. SKM prepared the electrical design for the Signal Hill WTP Optimization project, so our team already knows the facility, the drawings, and the existing control system.

We appreciate the opportunity to submit this proposal and look forward to working with you. To authorize this work, please sign below and return one copy to our office.

Sincerely,

Allen Rogers, Principal
SKM Engineering, LLC.
allen.rogers@skmeng.com
(801) 683-3765

Accepted by

Signature

Printed Name

Title

Date

Attached: Articles of Terms and Conditions

SKM Engineering, LLC

Articles of Terms and Conditions

I. SCOPE

SKM, Engineering LLC.(SKM) agrees to perform the services described in the proposal attached hereto which incorporates these terms and conditions. Unless modified in writing by the parties hereto, the duties of SKM shall not be construed to exceed those services specifically set forth in the proposal. These terms and conditions and the proposal, when executed by Client, shall constitute a binding agreement on both parties (hereinafter the "Agreement").

II. COMPENSATION

Client agrees to pay for the services in Article I in accordance with the compensation provisions in the proposal. Payment to SKM will be made within 30 days after the date of billing. Interest on the unpaid balance will accrue beginning on the 31st day at the maximum interest rate permitted by law.

Time-related charges will be made in accordance with the billing rate referenced in the proposal or Agreement. Direct expenses and Subcontractor services shall be billed in accordance with the proposal or compensation exhibit attached to this Agreement. Otherwise, SKM's standard billing rates shall apply.

III. RESPONSIBILITY

SKM is employed to render a professional service only, and any payments made by Client are compensation solely for such services rendered and recommendations made in carrying out the Work. SKM shall perform the services in accordance with generally accepted engineering practices and standards in effect when the services are rendered. SKM does not expressly or impliedly warrant or guarantee its services.

In performing construction management services, SKM shall act as agent of Client. SKM's review or supervision of work prepared or performed by other individuals or firms employed by Client shall not relieve those individuals or firms of complete responsibility for the adequacy of their work.

The presence of SKM's personnel at a construction site, whether as on-site representative, resident engineer or construction manager, shall be for the sole purpose of determining that the work is generally proceeding in conformance with the intent of the project specifications and contract documents and does not constitute any form of guarantee or assurance with respect to contractor's performance. No other express or implied warranty with respect to the Work is provided and all such other warranties are expressly disclaimed.

IV. INDEMNIFICATION

SKM agrees to indemnify, defend, and hold Client harmless from and against any liability to the extent arising out of the negligent acts, errors or omissions of SKM, its agents, employees, or representatives, in the performance of duties under the Agreement. Regardless of any other term of this Agreement, in no event shall SKM be responsible or liable to the other for any incidental, consequential, or other indirect damages.

V. ATTORNEYS' FEES

In the event of any litigation arising from or related to this Agreement or the services provided under this Agreement, the prevailing party shall be entitled to recover from the nonprevailing party all reasonable costs incurred, including staff time, court costs, attorneys' fees and all other related expenses in such litigation.

VI. INSURANCE

SKM shall maintain during the life of the Agreement the following minimum insurance:

1. **Comprehensive general liability** insurance, including personal injury liability, blanket contractual liability, and broad form property damage liability. The combined single limit for bodily injury and property damage shall be not less than \$1,000,000.
2. **Automobile bodily injury and property damage liability** insurance covering owned, non-owned, rented, and hired cars. The combined single limit for bodily injury and property damage shall be not less than \$1,000,000
3. **Statutory Worker's compensation and employers' liability** insurance as required by state law.
4. **Professional liability** insurance with limits of not less than \$1,000,000.

VII. SUBCONTRACTS

SKM shall be entitled, to the extent determined to be appropriate by SKM, to subcontract any portion of the Work to be performed under this Agreement.

VIII. ASSIGNMENT

This Agreement is binding on the heirs, successors, and assigns of the parties hereto. The Agreement is not to be assigned by either Client or SKM without the prior written consent of the other.

IX. INTEGRATION

These terms and conditions and the proposal to which they are attached represent the entire understanding of Client and SKM as to those matters contained herein. No prior oral or written understanding shall be of any force or effect with respect to those matters covered herein. The Agreement may not be modified or altered except in writing signed by both parties, provided further that any terms and conditions in any Task Order or purchase order issued in connection or under the Agreement which are inconsistent with the Agreement are deemed null and void.

XI. CHOICE OF LAW/JURISDICTION

This Agreement shall be administered and interpreted under the laws of the State of Utah. Jurisdiction and venue of any litigation arising from the Agreement shall also be in Idaho.

XII. SEVERABILITY

If any part of the Agreement is found unenforceable under applicable laws, such part shall be inoperative, null and void insofar as it is in conflict with said laws, but the remainder of the Agreement shall be in full force and effect.

XIII. NO BENEFIT FOR THIRD PARTIES

The services to be performed by SKM hereunder are intended solely for the benefit of Client, and no right or benefit is conferred on, nor any contractual relationship intended or established with any person or entity not a party to this Agreement. No such person or entity shall be entitled to rely on SKM's performance of its services hereunder.

XIV. WORK PRODUCT

SKM and Client recognize that SKM's work product submitted in performance of this Agreement is intended only for the Client's benefit and use. Change, alteration, or reuse on another project by Client shall be at Client's sole risk, and Client shall hold harmless and indemnify SKM against all losses, damages, costs and expense, including attorneys' fees, arising out of or related to any such unauthorized change, alteration or reuse.

Any signed, stamped and dated Construction Documents prepared by the Consultant are the Work Product. CADD files are furnished for convenience only. The transfer of the CADD files for use by the Client shall not be deemed a sale and the Consultant makes no warranty, either express or implied, of merchantability or fitness for any particular purpose.

XV. SUSPENSION OF WORK

Work under this Agreement may be suspended as follows:

1. **BY Client.** By written notice to SKM, Client may suspend all or a portion of the Work under this Agreement if unforeseen circumstances beyond Client's control make normal progress of the Work impracticable. SKM shall be compensated for its reasonable expenses resulting from such suspension including mobilization and de-mobilization. If suspension is greater than 30 days, then SKM shall have the right to terminate this Agreement in accordance with Article XIV, Termination of Work.
2. **By SKM.** By written notice to Client, SKM may suspend the Work if SKM reasonably determines that working conditions at the Site (outside SKM's control) are unsafe, or in violation of applicable laws, or for other circumstances not caused by SKM that are interfering with the normal progress of the Work. SKM's suspension of Work hereunder shall be without prejudice to any other remedy of SKM at law or equity.

XVI. TERMINATION OF WORK

This Agreement may be terminated as follows

1. **Client** (a) for its convenience on 30 days' notice to SKM, or (b) for materially breaches this Agreement through no fault of Client and SKM neither cures such material breach nor makes reasonable progress toward cure within 15 days after Client has given written notice of the alleged breach to SKM.
2. **By SKM** (a) for cause, if Client materially breaches this Agreement through no fault of SKM and Client neither cures such material breach nor makes reasonable progress toward cure within 15 days after SKM has given written notice of the alleged breach to Client, or (b) upon five days' notice if Work under this Agreement has been suspended by either Client or SKM in the aggregate for more than 30 days.
3. **Payment upon Termination.** In the event of termination, SKM shall perform such additional work as is reasonably necessary for the orderly closing of the Work. SKM shall be compensated for all work performed prior to the effective date of termination, plus work required for the orderly closing of the Work. Except for termination of SKM by Client for cause, SKM shall also receive a termination fee equal to 15 percent of the total compensation yet to be earned under existing authorizations at the time of termination.

XVII. NOTICES

All notices required under this Agreement shall be by personal delivery, facsimile or mail to the SKM Project Manager and to the person signing the proposal on behalf of the Client, and shall be effective upon delivery to the address stated in the proposal