



**Purchasing Division**

**Change Order #1**

Date: September 7, 2023  
Firm: Burns & McDonnell  
From: City of Grand Junction  
Project: Conceptual Design Services for Gunnison River Reservoirs 5257-23-DH

Description: This change order to reflect the additional requirement for Burns & McDonnell to modify their required insurance certificate(s) to add any private property owners that may have areas of land that need to be accessed for this project as Additional Insured.

Summary of Contract Price Adjustments:

Original Contract	\$204,157
Approved Change Orders to Date	\$0.00
<u>This Change Order</u>	<u>\$0.00</u>
Revised Contract Amount	\$204,157

This modification constitutes compensation in full for all costs and mark-ups directly and/or indirectly attributable to the changes ordered herein, for all delays, impacts and disruptions related thereto and for performance of the changes within the Contract Time.

Owner: City of Grand Junction

Created by: DocuSigned by: Duane Hoff Jr. 9/12/2023  
Duane Hoff Jr. – Contract Administrator

Approved by: DocuSigned by: Mark Ritterbush – Water Services Manager, City of Grand Junction 9/13/2023  
Mark Ritterbush – Water Services Manager

Approved by: DocuSigned by: Randi Kim – Utilities Director, City of Grand Junction 9/13/2023  
Randi Kim – Utilities Director

Firm: Burns & McDonnell

Approved by: DocuSigned by: Daniel Korinek, PE, SR Vice President 9/8/2023  
Daniel Korinek, PE, Vice President



CITY OF GRAND JUNCTION, COLORADO

\*\*\*\*\*

**CONTRACT**

This CONTRACT made and entered into this 18<sup>th</sup> day of May, 2023 by and between the **City of Grand Junction, Colorado**, a government entity in the County of Mesa, State of Colorado, hereinafter in the Contract Documents referred to as the "Owner" and **Burns & McDonnell** hereinafter in the Contract Documents referred to as the "Firm."

WITNESSETH:

WHEREAS, the Contractor shall furnishing all labor, supplies, equipment, materials, and everything necessary and required for the Project described by the Contract Documents and known as **Conceptual Design Services for Gunnison River Reservoirs 5257-23-DH**.

WHEREAS, the Contract has been awarded to the above-named Firm by the Owner, and said Firm is now ready, willing and able to perform the Work specified in accordance with the Contract Documents;

NOW, THEREFORE, in consideration of the compensation to be paid the Firm, the mutual covenants hereinafter set forth and subject to the terms hereinafter stated, it is mutually covenanted and agreed as follows:

ARTICLE 1

**Contract Documents:** It is agreed by the parties hereto that the following list of instruments, drawings, and documents which are attached hereto, bound herewith, or incorporated herein by reference constitute and shall be referred to either as the "Contract Documents" or the "Contract", and all of said instruments, drawings, and documents taken together as a whole constitute the Contract between the parties hereto, and they are fully a part of this agreement as if they were set out verbatim and in full herein:

The order of contract document governance shall be as follows:

- a. The body of this contract agreement;
- b. Negotiated Modifications to Terms and Conditions;
- c. Terms and Conditions and Insurance Requirements;
- d. Contractors submitted Scope of Services and pricing proposal;
- e. Work Change Requests (directing that changed Work be performed);
- f. Change Orders.

## ARTICLE 2

Contract Services: The Contractor agrees to furnish all labor, supplies, equipment, materials, and all that is necessary and required to complete the tasks associated with the Work described, set forth, shown, and included in the Contract Documents as indicated in the Contract Document.

## ARTICLE 3

Contract Time: Time is of the essence with respect to this Contract. The Firm hereby agrees to commence Services under the Contract upon execution of this contract, and to achieve Substantial Completion and Final Completion of the Services within the time or times specified in the Contractor's Proposal.

## ARTICLE 4

Contract Price and Payment Procedures: The Firm shall accept as full and complete compensation for the performance and completion of all of the Work specified in the Contract Documents, the sum of **Two Hundred Four Thousand One Hundred Fifty-Seven and 00/100 Dollars (\$204,157.00)**. If this Contract contains unit price pay items, the Contract Price shall be adjusted in accordance with the actual quantities of items completed and accepted by the Owner at the unit prices quoted in the Contractor's Proposal. The amount of the Contract Price is and has heretofore been appropriated by the Grand Junction City Council for the use and benefit of this Project. The Contract Price shall not be modified except by Change Order or other written directive of the Owner. The Owner shall not issue a Change Order or other written directive which requires additional Services to be performed, which Services causes the aggregate amount payable under this Contract to exceed the amount appropriated for this Project, unless and until the Owner provides Firm written assurance that lawful appropriations to cover the costs of the additional Services have been made.

Unless otherwise provided in the Contract, monthly partial payments shall be made as the Service(s) progresses. Applications for partial and Final Payment shall be prepared by the Firm and approved by the Owner in accordance with the Contract.

## ARTICLE 5

Contract Binding: The Owner and the Firm each binds itself, its partners, successors, assigns and legal representatives to the other party hereto in respect to all covenants, agreements and obligations contained in the Contract Documents. The Contract Documents constitute the entire agreement between the Owner and Firm and may only be altered, amended or repealed by a duly executed written instrument. Neither the Owner nor the Firm shall, without the prior written consent of the other, assign or sublet in whole or in part its interest under any of the Contract Documents and specifically, the Firm shall not assign any moneys due or to become due without the prior written consent of the Owner.

ARTICLE 6

Severability: If any part, portion or provision of the Contract shall be found or declared null, void or unenforceable for any reason whatsoever by any court of competent jurisdiction or any governmental agency having the authority thereover, only such part, portion or provision shall be effected thereby and all other parts, portions and provisions of the Contract shall remain in full force and effect.

IN WITNESS WHEREOF, City of Grand Junction, Colorado, has caused this Contract to be subscribed and sealed and attested in its behalf; and the Firm has signed this Contract the day and the year first mentioned herein.

The Contract is executed in two counterparts.

**CITY OF GRAND JUNCTION, COLORADO**

DocuSigned by:  
By: Duane Hoff Jr.  
9F708E7D50F1486...  
Duane Hoff Jr., Contract Administrator

5/19/2023  
Date

**Burns & McDonnell**

DocuSigned by:  
By: Daniel Korinek, PE, Vice President - Burns & McDonnell Engineering Company, Inc  
0A2E8DFD3F03403...  
Daniel Korinek, PE, Vice President, Burns & McDonnell Engineering Company, Inc.

5/19/2023  
Date

## CONTRACT COMMENTS WITH CONTEXT

- ▶ Section 2.3 – We would prefer changing the section 2.3 to be more specific to the project by replace “all laws” with “applicable laws” and “bearing on” with “in”. **The City accepts this request**
- ▶ Section 2.5 – This section contradicts how I believe you want the Firm to be paid. This section assumes the firm will be paid based on percent complete of work. I believe you stated yesterday that you wanted us to be paid based on billable rates and the amount individuals have worked. We can discuss when I give you a call later today. **The City accepts this request.**
- ▶ Section 2.8 – This section is more applicable to a general contractor than a professional engineer. We propose removing this section of the contract. **The City accepts this request.**
- ▶ Section 2.12 - We would prefer changing the section 2.12 to be more specific to the project by replace “all federal” with “applicable federal” and “warrants” with “represents.” **The City accepts this request.**
- ▶ Section 2.14 – This section should be expanded to allow our team to be able to coordinate with permitting agencies, subconsultants, equipment vendors. During a previous meeting Randi mentioned that all information is public record so there should not be a confidentiality clause. **The City accepts this request.**
- ▶ Section 2.25 – We propose changing the first sentence to read as follows to more closely match professional engineer’s insurance policies: “Offeror shall indemnify the Owner and all its officers, employees from and against any injuries or damages received or sustained by any person, persons, or third-party property but only to the extent caused by any negligent act or omission of the Offeror, or any Offeror’s agent, employee, subcontractor or supplier in the execution of, or performance under, any contract which may result from proposal award.” **The City shall not accept this request.**
- ▶ Section 3.1 – Replace “sufficient to insure against all liabilities, claims, demands, and other obligations assumed by the Firm pursuant to this Section” with “as required herein **and/or under any contract which may result from proposal award.**” **The City accepts this request to include the City’s added language.**

Require the specific insurance requirements by removing the word “minimum” throughout. **The City accepts this request.**

Replace “Comprehensive” with “Commercial”. **The City accepts this request.**

Remove “This policy shall provide coverage to protect the contractor against liability incurred as a result of the professional services performed **under any contract which may result from proposal award.**” **The City accepts this request to include the City’s added language.**

- ▶ Include a limit of liability based on the overall contract value. **The City shall not accept this request.**
- ▶ Contractor may engage temporary staffing agencies or obtain assistance from its affiliates and subsidiaries including, without limitation, Burns & McDonnell Canada Ltd., Burns & McDonnell International Inc., and Burns & McDonnell India Pvt. Ltd. (“Labor Sources”) to fulfill Contractor’s performance obligations under this Agreement. The parties agree that contracts, purchase orders, or similar agreements between Contractor and any Labor Sources are not subcontracts as that term is used in this Agreement, and personnel from such Labor Sources shall be billed according to the applicable rate sheet for the Scope of Work as if such personnel is a direct hire employee. Personnel from Labor Sources shall be considered agents of Contractor and able to act on behalf of Contractor within the scope of the authority granted such personnel according to job function and billing classification. **The City accepts this request.**



## **2. General Contract Conditions for Construction Projects**

- 2.1. Acceptance of Terms:** A proposal submitted shall constitute a binding offer which shall be acknowledged by the Proposer on the Letter of Interest or Cover Letter. The Proposer must be legally authorized to execute a Letter of Interest or Cover Letter together with contractual obligations. By submitting a proposal, the Proposer accepts all terms and conditions including compensation, as set forth herein. A-Proposer shall identify clearly and thoroughly any variations between its proposal and the Owner's requirements. Failure to do so may be deemed a waiver of any right(s) to subsequently modify the term(s) of performance, except as specified in the Contract. A proposal that includes terms and conditions that do not conform to the terms and conditions of this Contract is subject to rejection as non-responsive. The Owner reserves the right to permit the Proposer to withdraw nonconforming terms and conditions from its proposal prior to a determination by the Owner of non-responsiveness based on the submission of nonconforming terms and conditions.
- 2.2. Execution, Correlation, Intent, and Interpretations:** The Contract Documents shall be signed by the Owner and the Firm. By executing the Contract, the Firm represents that it has familiarized itself with the local conditions under which the Services is to be performed and correlated its observations with the requirements of the Contract Documents. The Contract Documents are complementary, and what is required by anyone, shall be as binding as if required by all. The intention of the Contract Documents is to include all labor, materials, equipment, services, and other items necessary for the proper execution and completion of the Scope of Services as defined in the technical specifications and/or drawings contained herein.
- 2.3. Permits, Fees, & Notices:** The Firm shall secure and pay for all permits, governmental fees, and licenses necessary for the proper execution and completion of the Services. The Firm shall give all notices and comply with all laws, ordinances, rules, regulations, and orders of any public authority, including the City, bearing on the performance of the Services. If the Firm observes that any of the Contract Documents are at variance in any respect, it shall promptly notify the Purchasing Agent in writing, and necessary changes will be made. If the Firm performs any Services knowing it to be contrary to such laws, ordinances, rules, and regulations, and without such notice to the Owner, it shall assume full responsibility and shall bear all costs attributable to the non-conforming Services.
- 2.4. Responsibility for those Performing the Services:** The Firm shall be responsible to the Owner for the acts and omissions of all its employees and all other persons performing any of the Services under the Contract with the Firm.
- 2.5. Payment & Completion:** The Contract Sum is stated in the Contract and is the total amount payable by the Owner to the Firm for the performance of the Service(s) under the Contract. Upon receipt of written notice that the deliverable(s) is ready for final inspection and acceptance and upon receipt of application for payment, the Owner's Project Manager will promptly make such inspection and,

when the Owner finds the Service(s) acceptable under the Contract and the Contract fully completed, the Owner shall make payment in the manner provided in the Contract Documents. Partial payments will be based upon estimates, prepared by the Firm, of the value of Service(s) performed in accordance with the Contract Documents. The Service(s) performed by the Firm shall be in accordance with generally accepted professional practices and the level of competency presently maintained by other practicing professional Firms in the same or similar type of Service(s) in the community. The Service(s) to be performed by the Firm hereunder shall be done in compliance with applicable laws, ordinances, rules and regulations.

- 2.6. Changes in the Services:** The Owner, without invalidating the Contract, may order changes in the Services within the general scope of the Contract consisting of additions, deletions, or other revisions. All such changes in the Services shall be authorized by Change Order/Amendment and shall be executed under the applicable conditions of the Contract. A Change Order/Amendment is a written order to the Firm signed by the Purchasing Agent issued after the execution of the Contract, authorizing a change in the Services or an adjustment in the Contract sum or the Contract Time.
- 2.7. Minor Changes in the Services:** The Owner shall have authority to order minor changes in the Services not involving an adjustment in the Contract Sum or an extension of the Contract Time and not inconsistent with the intent of the Contract.
- 2.8. Uncovering & Correction of Services:** The Firm shall promptly correct all Services found by the Owner as defective or as failing to conform to the Contract. The Firm shall bear all costs of correcting such rejected Services, including the cost of the Owner's additional Services thereby made necessary. The Owner shall give such notice promptly after discovery of condition. All such defective or non-conforming Services under the above paragraphs shall be removed from the site where necessary and the Services shall be corrected to comply with the Contract without cost to the Owner.
- 2.9. Acceptance Not Waiver:** The Owner's acceptance or approval of Service(s) furnished hereunder shall not in any way relieve the Firm of its responsibility to maintain the high quality, integrity, and timeliness of its Services. The Owner's approval or acceptance of, or payment for, any Services shall not be construed as a future waiver of any right(s) under the Contract, or of any cause of action arising out of performance under this Contract.
- 2.10. Change Order/Amendment:** No oral statement of any person shall modify or otherwise change, or affect the terms, conditions or specifications stated in the Contract. All amendments to the Contract shall be made in writing by the City Contract Administrator.
- 2.11. Assignment:** The Firm shall not sell, assign, transfer or convey the Contract, in whole or in part, without the prior written approval from the Owner.
- 2.12. Compliance with Laws:** Proposals must comply with all Federal, State, County and local laws governing the Service and the fulfillment of the Service(s) for and

on behalf of the public. The Firm hereby warrants that it is qualified to assume the responsibilities and render the Services described herein and has all requisite corporate authority and professional licenses in good standing as required by law.

- 2.13. Debarment/Suspension:** The Firm hereby certifies that the Firm is not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any governmental department or agency.
- 2.14. Confidentiality:** All information disclosed by the Owner to the Proposer and/or the Firm for the purpose of the Services to be performed or information that comes to the attention of the Proposer during the course of performing such Services is to be kept strictly confidential.
- 2.15. Conflict of Interest:** No public official and/or Owner employee shall have interest in the Contract.
- 2.16. Contract:** Submitted documents, and any negotiations, when properly accepted by the Owner, shall constitute an enforceable agreement equally binding between the Owner and the Firm. The Contract represents the entire and integrated agreement between the City and the Firm and supersedes all prior negotiations, representations, or agreements, either written or oral. The Contract may be amended or modified with Change Orders or Amendment.
- 2.17. Project Manager/Administrator:** The Project Manager/Administrator, on behalf of the Owner, shall render decisions in a timely manner pertaining to the Services proposed and/or performed by the Firm. The Project Manager/Administrator shall be responsible for approval and/or acceptance of any related performance of the Scope of Services.
- 2.18. Contract Termination:** The Contract shall remain in effect until any of the following occurs: (1) Contract expires; (2) completion of Services; (3) final acceptance of Services or, (4) for convenience terminated by either party with a written *Notice of Cancellation* stating therein the reasons for such cancellation and the effective date of cancellation at least thirty days past notification.
- 2.19. Employment Discrimination:** During the performance of any Services, the Firm agrees to:
- 2.19.1. Not discriminate against any employee or applicant for employment because of race, religion, color, sex, age, disability, citizenship status, marital status, veteran status, sexual orientation, national origin, or any legally protected status except when such condition is a legitimate occupational qualification reasonably necessary for the normal operations of the Firm. The Firm agrees to post in conspicuous places, visible to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.
- 2.19.2. In all solicitations or advertisements for employees placed by or on behalf of the Firm, shall state that such Firm is an Equal Opportunity Employer.



- 2.19.3. Notices, advertisements, and solicitations placed in accordance with federal law, rule, or regulation shall be deemed sufficient for the purpose of meeting the requirements of this section.
- 2.20. Immigration Reform and Control Act of 1986 and Immigration Compliance:** The Firm certifies that it does not and will not during the performance of the Contract employ personnel without authorization services or otherwise violate the provisions of the Federal Immigration Reform and Control Act of 1986 and/or law regulating immigration compliance.
- 2.21. Ethics:** The Firm shall not accept or offer gifts or anything of value and/or enter into any business arrangement with any employee, official, or agent of the Owner.
- 2.22. Failure to Deliver:** In the event of failure of the Firm to perform in accordance with the Contract, the Owner, after due oral or written notice, may procure Services from other sources and hold the Firm responsible for any and all costs resulting in the purchase of additional Services and materials necessary to perform the Service(s). This remedy shall be in addition to any other remedies that the Owner may have.
- 2.23. Failure to Enforce:** Failure by the Owner at any time to enforce the provisions of the Contract shall not be construed as a waiver of any such provisions. Such failure to enforce shall not affect the validity of the Contract or any part thereof, or the right of the Owner to enforce any provision of the Contract at any time in accordance with the terms thereof.
- 2.24. Force Majeure:** The Firm shall not be held responsible for failure to perform the duties and responsibilities imposed by the Contract due to legal strikes, fires, riots, rebellions, and acts of God beyond the control of the Firm, unless otherwise specified in the Contract.
- 2.25. Indemnification:** The Firm shall defend, indemnify and save harmless the Owner and all its officers, employees, insurers, and self-insurance pool, from and against all liability, suits, actions, or other claims of any character, name and description brought for or on account of any injuries or damages received or sustained by any person, persons, or property on account of any negligent act or fault of the Firm, or of any Firm's agent, employee, Sub-Contractor or supplier in the execution of, or performance under, the Contract which may result from proposal award. The Firm shall pay any judgment with costs which may be obtained by and/or against the Owner arising out of or under the performance or non performance.
- 2.26. Independent Firm:** The Firm shall be legally considered an independent of the Firm and neither the Firm nor its employees shall, under any circumstances, be considered servants, or agents of the Owner. The Owner shall be at no time legally responsible for any negligence or other wrongdoing by the Firm, its servants, or agents. The Owner shall not withhold from the Contract, payments to the Firm any federal or state unemployment taxes, federal or state income taxes, Social Security, or any other amounts for benefit(s) to the Firm. Further, the Owner shall

not provide to the Firm any insurance coverage or other benefits, including Workers' Compensation, normally provided by the Owner to its employees.

- 2.27. Ownership:** All drawings, plans, prints, designs, concepts, renderings prepared pursuant to the Contact, etc., created by the Firm for this project, shall become the property of the Owner. All drawings, specifications, copies, and information furnished by the Owner are, and shall remain, Owner property.
- 2.28. Oral Statements:** No oral statement of any person shall modify or otherwise affect the terms, conditions, or specifications stated in this document and/or the Contract. All modifications to this request and any agreement must be made in writing by the Owner.
- 2.29. Patents/Copyrights:** The Firm agrees to protect the Owner from any claims involving infringements of patents and/or copyrights and/or other IP protections.. In no event shall the Owner be liable to the Firm for any/all suits arising on the grounds of patent(s)/copyright(s) infringement. Patent/copyright infringement may null and void any agreement.
- 2.30. Governing Law:** Any agreement made shall be deemed to have been made in, and shall be construed and interpreted in accordance with, the laws of the City of Grand Junction, Mesa County, Colorado.
- 2.31. Sovereign Immunity:** The Owner specifically reserves the protections of the CGIA/its sovereign immunity pursuant to Colorado Law as a defense to any action arising out of or under the Contract.
- 2.32. Public Funds/Non-Appropriation of Funds:** Funds for payment have been provided through the Owner's budget approved by the City Council for the stated fiscal year only. Colorado law prohibits the obligation and expenditure of public funds beyond the fiscal year for which a budget has been approved. Therefore, anticipated obligations that may arise past the end of the stated Owner's fiscal year shall be subject to budget approval. The Contract will be subject to and provide a non-appropriation of funds clause in accordance with Colorado law.
- 2.33. Collusion Clause:** Each Proposer by submitting a proposal certifies that it is not party to any collusive action or any action that may be in violation of the Sherman Antitrust Act. Any and all proposal(s) shall be rejected if there is evidence or reason to believe that collusion exists among the Proposers. The Owner may or may not, at its discretion, accept future proposals for the same service or commodities for participants in such collusion.
- 2.34. Gratuities:** The Firm certifies and agrees that no gratuities or kickbacks were paid in connection with this Contract, nor were any fees, commissions, gifts, or other considerations made contingent upon the award of this Contract. If the Firm breaches or violates this warranty, the Owner may, at its discretion, terminate the Contract without liability to the Owner.

**2.35. Performance of the Contract:** The Owner reserves the right to enforce the performance of the Contract in any manner prescribed by law or equity as deemed by the Owner to be in the best interest of the Owner (in the event of breach or default) of resulting Contract award.

**2.36. Default:** The Owner reserves the right to terminate the Contract in the event the Firm fails to meet delivery or completion schedules, or otherwise perform in accordance with the Contract. Breach of Contract or default authorizes the Owner to purchase like services elsewhere and charge the full cost to the defaulting Firm.

**2.37. Multiple Offers:** If an Proposer submits more than one proposal, THE ALTERNATE PROPOSAL must be clearly marked "Alternate PROPOSAL". The Owner reserves the right to make award in the best interest of the Owner.

**2.38. Definitions:**

2.38.1. "Proposer" refers to the person(s) legally authorized by the Firm to make an offer and/or submit a response fee proposal.

2.38.2. "Services" includes all labor, materials, equipment, and/or professional skill necessary to produce the requirements of the Contract Documents.

2.38.3. "City" or "Owner" is the City of Grand Junction, Colorado.

2.38.4. "Firm" is the person, organization, entity or consultant identified as such in the proposal and is referred to throughout the Contract. The term Firm or A/E means the Firm or its authorized representative(s).

2.38.5. "Sub-Contractor is a person(s) or organization that has a direct contract with the Firm to perform any of the service(s). The term Sub-Contractor is referred to throughout the Contract and means the Sub-Contractor or its authorized representative.

**2.39. Public Disclosure Record:** If the Proposer has knowledge of its employee(s) or sub-contractors having an immediate family relationship with an Owner employee or elected official, the Proposer must provide the Purchasing Agent with the name(s) of the individuals. The individuals are required to file a "Public Disclosure Record", and/or a statement of financial interest, before conducting business with the Owner.

**SECTION 3.0: INSURANCE REQUIREMENTS**

**3.1 Insurance Requirements:** The selected Firm agrees to procure and maintain, at its own cost, insurance policies sufficient to insure against all liability, claims, demands, and other obligations assumed by the Firm pursuant to the Contract. Such insurance shall be in addition to any other insurance requirements imposed by this Contract or by law. The Firm shall not be relieved of any liability, claims, demands, or other obligations assumed pursuant to the Contract by reason of its failure to procure or maintain insurance in sufficient amounts, durations, or types.

Firm shall procure and maintain and, if applicable, shall cause any Sub-Contractor of the Firm to procure and maintain insurance coverage listed below. Such coverage shall be procured and maintained with forms and insurers acceptable to

Owner. All coverage shall be continuously maintained to cover all liability, claims, demands, and other obligations assumed by the Firm pursuant to the Contract. In the case of any claims-made policy, the necessary retroactive dates and extended reporting periods shall be procured to maintain such continuous coverage. Minimum coverage limits shall be as indicated below unless specified otherwise in the Special Conditions:

(a) Worker Compensation: Firm shall comply with all State of Colorado Regulations concerning Workers' Compensation insurance coverage.

(b) General Liability insurance with minimum combined single limits of:

ONE MILLION DOLLARS (\$1,000,000) each occurrence and  
ONE MILLION DOLLARS (\$1,000,000) per job aggregate.

The policy shall be applicable to all premises, products and completed operations. The policy shall include coverage for bodily injury, broad form property damage (including completed operations), personal injury (including coverage for contractual and employee acts), blanket contractual, products, and completed operations. The policy shall contain a severability of interest provision.

(c) Comprehensive Automobile Liability insurance with minimum combined single limits for bodily injury and property damage of not less than:

ONE MILLION DOLLARS (\$1,000,000) each occurrence and  
ONE MILLION DOLLARS (\$1,000,000) aggregate

(d) Professional Liability & Errors and Omissions Insurance policy with a minimum of:

ONE MILLION DOLLARS (\$1,000,000) per claim

This policy shall provide coverage to protect the City against liability incurred as a result of the professional services performed under this Contract.

With respect to each of Firm's owned, hired, or non-owned vehicles assigned to be used in performance of the Services. The policy shall contain a severability of interest provision.

**3.2 Additional Insured Endorsement:** The policies required by paragraphs (b), and (c) above shall be endorsed to include the Grand Junction, its Elected and Appointed Officials, Employees and Volunteers are included as Additional Insureds. Every required policy above shall be primary insurance, and any insurance carried by the Owner, its officers, or its employees, or carried by or provided through any insurance pool of the Owner, shall be excess and not contributory insurance to that provided by Firm. The Firm shall be solely responsible for any deductible losses under any policy required above.



April 3, 2023

Randi Kim, PE  
Utilities Director  
City of Grand Junction  
250 North 5<sup>th</sup> Street  
Grand Junction, CO 81501

Re: Proposal for Conceptual Design Services, Gunnison River Reservoirs

Dear Ms. Kim:

We are pleased to submit the attached scope of work and fee for the above project.

The City of Grand Junction (City) is preparing a conceptual design for two raw water reservoirs on the Gunnison River, under a Water Plan Grant from the Colorado Water Conservation Board. Burns & McDonnell (BMcD) worked with the City in 2022 to prepare a grant application, including scope and schedule for the study. The scope of work includes:

- Feasibility of conversion of the Mule Pit and Whitewater gravel pits into water storage reservoirs
- Geotechnical services
- Conceptual design of the Mule Pit water storage reservoir, using the existing Gunnison River intake, multi-function pump station and related improvements.
- Conceptual design of the Whitewater site, including intake, pump station, return flow.

We respectfully request funds of \$204,157 to perform the services described in Exhibit A and the fee breakdown in Exhibit B. Our proposed schedule is included as Exhibit C. The scope of the geotechnical study is included as Exhibit D.



Randi Kim, PE  
City of Grand Junction  
April 3, 2023  
Page 2

We thank you for the opportunity to serve the City of Grand Junction.

Sincerely,

Burns & McDonnell Engineering Company, Inc.

A handwritten signature in blue ink, appearing to read "Brett Pugh".

Brett Pugh, PE  
Project Manager, Water

BDP/bdp

Enclosure

**EXHIBIT A**

**SCOPE OF WORK**

**PROJECT NAME:**

City of Grand Junction, CO  
Engineering Services for Gunnison River Reservoirs Project

**General Scope of Services**

The Scope of Services proposed by Burns & McDonnell Engineering Company, Inc. (Contractor) includes preparing engineering support for conceptual designs of two raw water augmentation sites along the Gunnison River as part of the City of Grand Junction's (City) Gunnison River Reservoirs Project.

**TASK SERIES 100 – CONCEPTUAL DESIGN**

**Task 101 – Stakeholder Engagement**

Contractor shall participate in the engagement of regional stakeholders to develop the multiple-benefits aspects of the project. Stakeholders may include gravel pit landowners, Clifton Water District, Orchard Mesa Irrigation District Colorado River, and Gunnison River basin roundtables, CWCB staff, Division of Water resources staff (Division engineer and water commissioner, as well as Colorado River Compact administration personnel), Colorado River District, Colorado Water Trust, Trout Unlimited, Redlands Water and Power, US Fish and Wildlife, US Bureau of Reclamation.

Contractor shall attend an initial two (2) day site visit and participate in in-person meetings. Contractor shall participate in up to four (4) follow up virtual meetings.

Meeting materials, minutes, and summary of the level of interest or commitment from each entity in a final report are excluded.

**Task 102 – Land and Easement Acquisition Evaluation**

Contractor shall support the City in developing costs and identify properties needed to be acquired, leased or where easements must be obtained for water storage facilities, pipelines, and other infrastructure necessary for this project.

City shall obtain appraisals for the identified gravel sites, identify leases or timing for any remaining mining, converting mine permit and associated reclamation requirements into water storage facility and evaluate potential land trade with gravel mine owners.

Contractor shall identify easements needed for the pipeline alignments identified and selected through Task 106 (Evaluate Multiple-Benefit Options) and Task 107 (Pump Station and Pipeline Conceptual Design).

City shall prepare a memorandum regarding ongoing and future mining activities, reclamation requirements, and other steps needed to convert the site to a water storage facility.

Contractor shall prepare a memorandum and mapping of pipeline alignment and easements required, upon completion of Task 107.

### **Task 103– Water Rights Engineering**

Contractor shall provide support information for Water Rights Engineering by others. Support includes providing necessary basefiles, conceptual design details and mapping. Contractor shall attend up to two (2) virtual meetings as part of this Task.

### **Task 104 – Reservoir Feasibility**

Contractor shall coordinate a feasibility study for the conversion of two gravel mining sites on the Gunnison River that could be converted to water storage facilities by a geotechnical sub-contractor (Terracon). This task will evaluate the feasibility of converting these sites into water storage facilities by evaluating geotechnical and geological conditions and estimating the water storage capacity of the sites and evaluating current and anticipated future mining activities and mining permit reclamation requirements in light of the proposed conversion to water storage.

A survey will be obtained by the City to determine potential alignment of a slurry wall and property boundaries. City shall coordinate the topographic survey of two gravel mining sites to capture surface features (top of bank, high water mark). City shall obtain existing mining records for depth of reservoirs instead of conducting a bathymetric survey. Discussions with mine operators during Task 101 shall be used to describe conditions observed operations (e.g., depth to bottom, soil conditions, seepage). Contractor shall participate in up to two (2) additional meetings with mining site owner/operators, as needed, if information is not collected during Task 101.

Contractor shall sub-contract a geological and geotechnical assessment to determine any impacting geological features to the project. The scope of the geological and geotechnical assessment are attached as Exhibit D, excluding the Additional Services listed (Design-Level Geotechnical Engineering Services, Review of Plans and Specifications and Environmental Assessments). Geotechnical sub-contractor shall provide a geotechnical engineering report summarizing the results of the geological assessment, field exploration and laboratory testing programs, and seepage modeling with opinions/recommendations regarding the feasibility of utilizing different seepage control structures at the sites.

Contractor shall provide estimates of potential storage volume, based on mining records and survey information, as collected in tasks above.



### **Task 105 – Reservoir Conceptual Design**

Assuming it is feasible to convert the gravel mining sits to water storage facilities in Task 104, the Contractor shall prepare conceptual design for two reservoir sites. It is assumed that seepage control will be achieved with a slurry wall keyed into an existing bedrock layer. Contractor shall size the inlet and outlet facilities, per capacities determined in Tasks 103 and 106. Conceptual design includes reservoir volume, inlet and outlet sizing, , sizing calculations, site plans, site improvements, process flow diagrams, general arrangement drawings, piping routing, slurry wall extents, and utility drawings.

Contractor shall consult with Colorado Parks and Wildlife to identify control of invasive species using United States Fish and Wildlife Regulations.

Task includes developing a preliminary engineer's opinion of probable construction costs, per Association for the Advancement of Cost Engineering (AACE) Class IV definition (30% below to 50% above).

Contractor shall prepare a technical memorandum describing conceptual basis of design for gravel pit conversion, slurry wall construction, inlet and outlet structures, yard piping, utilities, surface improvements and preliminary opinion of construction cost (Class IV).

### **Task 106 – Evaluate Multiple-Benefit Options**

Contractor shall provide support information for the evaluation of Multiple-Benefit Options by others. Support includes providing necessary base files, conceptual design details and mapping. Contractor shall attend up to two (2) virtual meetings as part of this Task.

### **Task 107 – Pump Station and Pipeline Conceptual Design**

Based on the analysis in prior tasks, the Contractor will prepare conceptual designs for an upgraded pump station near the existing Grand Junction Gunnison River pump station and an augmentation pump station at the Whitewater Reservoir. Task includes conceptual design for pipelines needed to serve the various scenarios identified in earlier tasks.

Scenarios will include initial pump and pipe sizing and approximate alignments, water use amounts and timing, and operational analysis. Contractor shall prepare conceptual designs for up to five (5) scenarios for comparison:

1. Mule Pit Reservoir to City of Grand Junction Water Treatment Plant
2. Mule Pit Reservoir to Clifton Water District – Alignment A
3. Mule Pit Reservoir to Clifton Water District – Alignment B
4. Mule Pit Reservoir to Orchard Mesa Irrigation District – Alignment A
5. Mule Pit Reservoir to Orchard Mesa Irrigation District – Alignment B

Contractor shall present the five scenarios to the City in a virtual meeting to select the preferred scenario and advance the selected option to the conceptual design.

Contractor shall prepare conceptual designs for the augmentation pump station at the Mule Pit Reservoir, using the nearby existing intake and an augmentation pump station at the Whitewater Reservoir. Conceptual design shall include the rates, volumes, and timing of water deliveries through various infrastructure pieces for pump station and pipeline design. Conceptual design includes pump sizing, sizing calculations, site plans, process flow diagrams, general arrangement drawings, electrical site plan, preliminary control diagrams and an initial process control narrative.

Contractor shall refine permitting considerations (local permits, high-level scan of utilities impacted by pipelines, , building permit, crossings, and authorities having jurisdiction) and develop a summary of the property and easement needs for the selected scenario.

Contractor shall evaluate the energy potential from floating solar generation at two reservoirs, considering using power on-site or selling back to the grid.

Task includes developing a preliminary engineer's opinion of probable construction costs, per Association for the Advancement of Cost Engineering (AACE) Class IV definition (30% below to 50% above).

Contractor shall prepare a Basis of Design Report to document the project scope, design criteria, operating philosophy, permitting requirements and an updated opinion of probable construction cost.

#### **Task 108 – Environmental and Cultural Survey**

Contractor shall provide support information for the Environmental and Cultural Survey by the City. Support includes providing necessary base files, conceptual design details and mapping. Contractor shall attend up to two (2) virtual meetings as part of this Task.

#### **Task 109 – Funding Opportunities**

Contractor shall provide support information for this task by others. Support includes providing necessary base files, conceptual design details and mapping. Contractor shall attend up to two (2) virtual meetings as part of this Task.

#### **Task 110 – Project Management**

Contractor shall coordinate project schedule, budget, and deliverables, for services provided by the Contractor. Services include contracting, invoicing, confirming compliance with grant requirements, coordination of meetings and attendance at monthly progress meetings.

#### **Exclusions:**

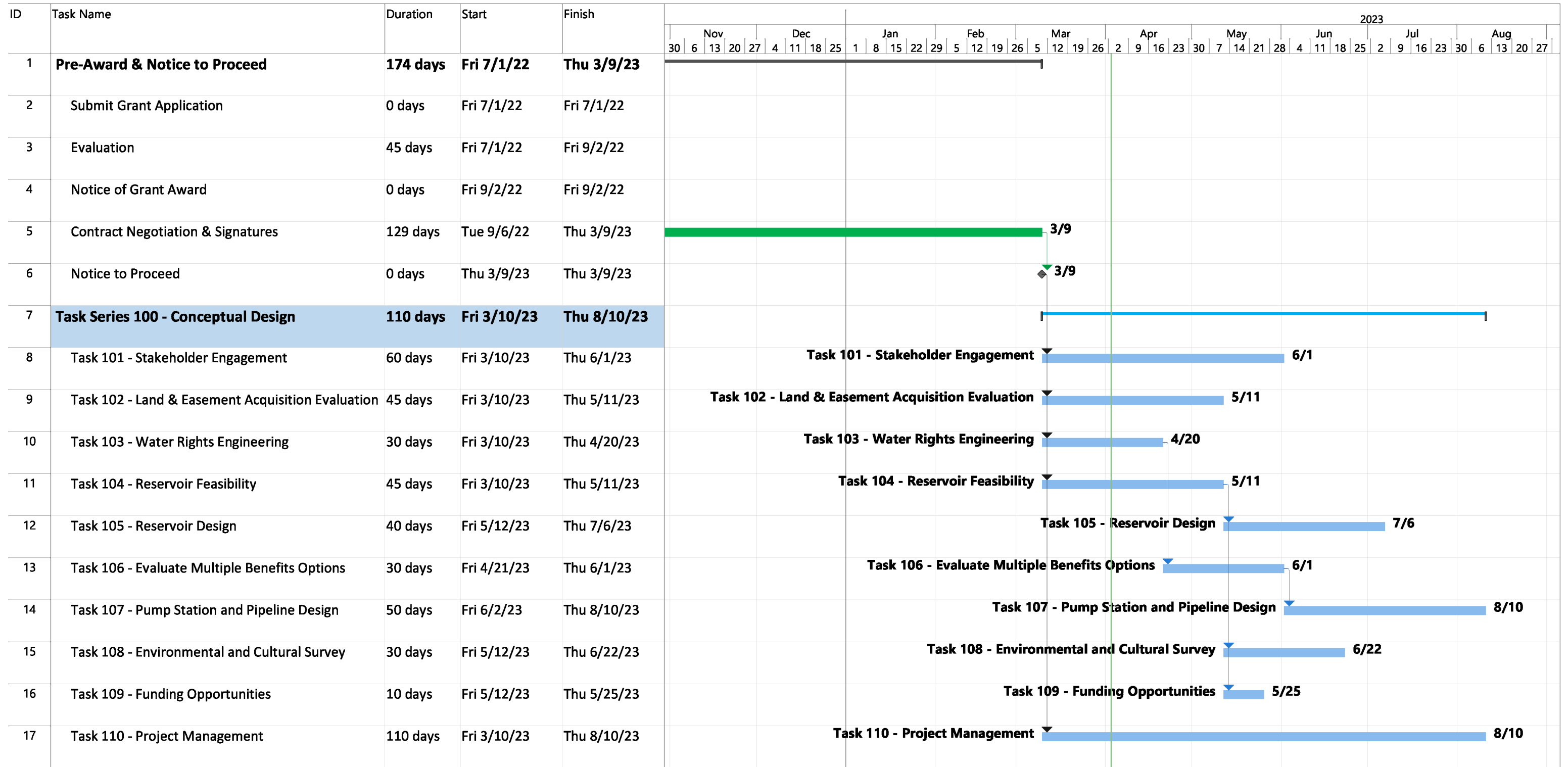
1. Survey
2. Environmental and Cultural Surveys
3. Permits
4. Utility Locates

**City of Grand Junction, CO**

**Conceptual Design, Gunnison River Reservoirs**

**Exhibit B - Work Breakdown Structure and Fee Schedule**

Activity	Project Manager	Project Engineer	Pipeline	Electrical, I&C	Civil	Design Technician	Quality Control	BMcD Total Labor		Expenses	Sub-Consultants	Total Cost
	Pugh	Campo	Brong	Hopkins	Tessitore Brothers	Mimiaga	Rachelson	Hours	Cost	Direct	Cost	
	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Cost	Direct	Cost	
<b>TASK SERIES 100 - Conceptual Design</b>												
101 - Stakeholder Engagement	20							20	\$5,580	\$863		\$ 6,443
102 - Land & Easement Acquisition Evaluation	2		12					14	\$3,198	\$130		\$ 3,328
103 - Water Rights Engineering	2	2						4	\$938	\$40		\$ 978
104 - Reservoir Feasibility	4	4					2	10	\$2,428	\$100	\$89,100	\$ 91,628
105 - Reservoir Conceptual Design	16	40	8	16	60	20		160	\$31,014	\$1,883		\$ 32,898
106 - Evaluate Multiple Benefits Options	8	8						16	\$3,751	\$150		\$ 3,901
107 - Pump Station and Pipeline Conceptual Design	24	80	60	40	8	42	4	258	\$50,360	\$2,010		\$ 52,370
108 - Environmental and Cultural Survey	4	4						8	\$1,876	\$80		\$ 1,956
109 - Funding Opportunities	4	4						8	\$1,876	\$80		\$ 1,956
110 - Project Management	30							30	\$8,370	\$330		\$ 8,700
<b>Project Subtotals</b>	<b>114</b>	<b>142</b>	<b>80</b>	<b>56</b>	<b>68</b>	<b>62</b>	<b>6</b>	<b>528</b>	<b>\$109,391</b>	<b>\$5,666</b>	<b>\$89,100</b>	<b>\$204,157</b>
<b>Project Total</b>											<b>\$204,157</b>	





1831 Lefthand Circle, Suite B  
Longmont, CO 80501  
P (303) 776-3921  
F (303) 776-4041  
**Terracon.com**

June 24, 2022

Burns & McDonnell Engineering Company, Inc.  
9785 Maroon Circle, Suite 400  
Centennial, Colorado 80112

Attn: Mr. Brett Pugh, P.E.  
P: (303) 583-0335  
E: bdpugh@burnsmcd.com

Re: **Proposal for Geotechnical Engineering Services  
Mule Pit and Whitewater Reservoirs Feasibility Study  
26 3/8 Road and Powerline Road  
Grand Junction, Colorado  
Terracon Proposal No. P20225054**

Dear Mr. Pugh:

We appreciate the opportunity to submit this proposal to Burns & McDonnell Engineering Company, Inc. (Burns & McDonnell) to provide geotechnical engineering services for the project referenced above. The following are exhibits to this proposal.

- **Exhibit A** Project Understanding
- **Exhibit B** Scope of Services
- **Exhibit C** Compensation and Project Schedule
- **Exhibit D** Site Location and Nearby Geotechnical Data
- **Exhibit E** Anticipated Exploration Plans (2 pages)

Our base fee to perform the Scope of Services described in this proposal is \$81,000. See Exhibit C for more details of our fees and consideration of additional services.

**Proposal for Geotechnical Engineering Services**

Mule Pit and Whitewater Reservoirs Feasibility Study ■ Grand Junction, Colorado

June 24, 2022 ■ Terracon Proposal No. P20225054



To authorize Terracon to Terracon to proceed in accordance with the services presented in this proposal, please issue us a Work Authorization form referencing the Master Services Agreement (MSA) dated November 21, 2013, between Burns & McDonnell and Terracon and this proposal.

Sincerely,

**Terracon Consultants, Inc.**

Handwritten signature of Alec N. Strassburg in blue ink.

Alec N. Strassburg, P.E. (KS, OK)  
Project Engineer

Handwritten signature of Eric D. Bernhardt in blue ink.

Eric D. Bernhardt, P.E.  
Geotechnical Department Manager

Reviewed by Donald R. Clark, P.E., Senior Consultant

**Proposal for Geotechnical Engineering Services**

Mule Pit and Whitewater Reservoirs Feasibility Study ■ Grand Junction, Colorado

June 24, 2022 ■ Terracon Proposal No. P20225054

**EXHIBIT A - PROJECT UNDERSTANDING**

Our Scope of Services is based on our understanding of the project as described by Burns & McDonnell and the expected conditions as described below. We have not visited the project site to confirm the information provided. Aspects of the project, undefined or assumed, are **highlighted as shown below**. We request the design team verify this information prior to our initiation of field exploration activities.

**Site Location and Anticipated Conditions**

Item	Description
<b>Parcel Information</b>	<p>The project includes two sites at the following locations in Grand Junction, Colorado:</p> <ul style="list-style-type: none"> <li>■ Mule Pit Reservoir: along the Gunnison River off 26 3/8 Road <ul style="list-style-type: none"> <li>○ An approximate Latitude/Longitude to the Mule Pit site is 39.02819° N / 108.55985° W</li> </ul> </li> <li>■ Whitewater Reservoir: along the Gunnison River off Powerline Road and CO-141 <ul style="list-style-type: none"> <li>○ An approximate Latitude/Longitude to the Whitewater site is 38.98223° N / 108.47005° W</li> </ul> </li> </ul> <p>Please refer to <b>Exhibit D</b>.</p>
<b>Existing Improvements</b>	Existing improvements at the sites include previously mined gravel/sand pits.
<b>Surrounding Developments</b>	The Gunnison River is located adjacent to each site. A rail line is also located adjacent to the sites.
<b>Current Ground Cover</b>	Current ground cover appears to consist of earthen or native grasses and weeds with a few trees/shrubs.
<b>Site Access</b>	<b>We expect the site, and all exploration locations, are accessible with our truck-mounted drilling equipment.</b>
<b>Expected Subsurface Conditions</b>	Our experience near the vicinity of the proposed development and geologic maps indicates subsurface conditions will likely consist of gravel and sand soils over sandstone/siltstone/shale bedrock. Groundwater elevations are anticipated to be similar to the adjacent river water elevations.
<b>Previous Geotechnical Studies</b>	Previously, Terracon prepared a Geotechnical Engineering Report (Project No. 25195375; report dated September 30, 2016) for a utility relocation planned north of the project sites along the Gunnison River. Data from this previous study were considered during preparation of this proposal.



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**Planned Construction**

Item	Description
<b>Information Provided</b>	<p>The project information described below is based on the following:</p> <ul style="list-style-type: none"> <li>■ Email and phone communication with the client</li> <li>■ Mule Pit Reservoir.kmz</li> <li>■ Whitewater Reservoir.kmz</li> </ul>
<b>Project Description</b>	<p>We understand the project will consist of a feasibility study for converting the existing Mule Pit and Whitewater Reservoirs into water storage cells for the City of Grand Junction. A seepage control structure, such as a slurry wall or liner, would be required around or in the existing reservoirs to reduce the loss of water from the pits. We also understand a new pump station, water intake structures, and associated new piping would be required to collect water from the Gunnison River and store it in the cells. Our geotechnical and geological study of the sites would then be used to develop 30 percent design plans for the new pump station, water structures, and seepage control structures.</p>

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**EXHIBIT B - SCOPE OF SERVICES**

Our proposed scope of services consists of field exploration, laboratory testing, and engineering/project delivery. These services are described in the following sections.

**Field Exploration**

We recommend the field exploration program for the feasibility studies of each site consist of the following:

Number of Borings	Planned Boring Depth (feet) <sup>1</sup>	Planned Location
8	50 to 60 or auger refusal	4 borings around the perimeter of Mule Pit Reservoir and 4 borings around the perimeter of Whitewater Reservoir

1. Proposed borings will be completed to the planned depths below existing site grades.
2. We plan to core a minimum of 10 to 25 feet of bedrock at all the borings.
3. Packer permeability tests are planned in two of the borings (one boring at each site).

**Pre-Exploration Site Meeting/Visit:** Prior to mobilizing our drilling equipment to the site, a Terracon representative will visit the site to meet with a representative of Burns & McDonnell and/or the project owner (as needed) to coordinate our field work, stake/mark boring locations, assess drill rig access/regress to/from the boring locations, and confirm private utilities have been appropriately marked or cleared. If conditions are identified during our pre-mobilization site visit that could negatively impact the field exploration, relative to private utilities and/or equipment access, we will contact you to discuss our concerns and options, and additional fees may apply. This site visit will be performed in tandem with the planned geologic assessment described below.

**Boring Layout and Elevations:** We will use handheld GPS equipment to locate borings with an estimated horizontal accuracy of +/-20 feet. Field measurements from existing site features are also typically utilized. We recommend a ground surface elevation at each boring location be determined by a professional surveyor. As an alternative, approximate ground surface elevations will be obtained by interpolation from a site specific, surveyed topographic map, if available.

**Subsurface Exploration Procedures:** We will advance soil borings with a truck-or ATV-mounted drill rig using continuous-flight augers (solid-stem and/or hollow-stem,

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as necessary, depending on subsurface conditions). Three to four samples will be obtained in the upper 10 feet of each boring and at intervals of 5 feet thereafter. Bulk samples of cuttings of material from the boreholes will also be collected at select boring locations and depths. Soil sampling will be performed using standard split-barrel and/or modified California barrel sampling procedures. For the standard split-barrel sampling procedure, a standard 2-inch outer diameter split-barrel sampling spoon is driven into the ground by a 140-pound automatic hammer falling a distance of 30 inches. The number of blows required to advance the sampling spoon the last 12 inches of a normal 18-inch penetration is recorded as the Standard Penetration Test (SPT) resistance value. The SPT resistance values, also referred to as N-values, are indicated on the boring logs at the test depths. For the modified California barrel sampling procedure, a 2½-inch outer diameter split-barrel sampling spoon is used for sampling. Modified California barrel sampling procedures are similar to standard split-barrel sampling procedures; however, blow counts are typically recorded for 6-inch intervals for a total of 12 inches of penetration. The samples will be placed in appropriate containers, taken to our soil laboratory for testing, and classified by a geotechnical engineer.

In addition, we will observe and record groundwater levels during drilling operations. No provisions have been made to obtain delayed groundwater measurements.

Upon encountering bedrock or refusal-to-drilling conditions, rock coring (using NQ/HQ rock core barrel) will be performed at the borings. A minimum of 10 to 25 feet of rock coring will be performed at each boring. The cores obtained will be placed in a core box, sealed and returned to our laboratory for observation and classification. We report the core run length, percent recovery, and the Rock Quality Designation (RQD) for each run within the borings. Water is used as a drilling fluid for rock coring and the spent water is discharged on site. Our budget considers water is available on-site and there are no special procedures for discharging our drilling fluids.

**Packer Permeability Testing:** At one boring at each site, packer permeability testing will be performed after coring into bedrock to determine the hydraulic characteristics of the bedrock encountered. We anticipate performing tests at depths of about 10 feet and 20 feet into the bedrock zone.

Our proposed fee assumes drill rigs can advance borings to the proposed depths using the methods described previously. If difficult drilling conditions are encountered, we will notify Burns & McDonnell as soon as it appears costs will exceed our proposed fee to discuss other drilling alternatives.

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Our exploration team will prepare field boring logs as part of standard drilling operations including sampling depths, penetration distances, and other relevant sampling information. Field logs will include visual classifications of materials encountered during drilling, and our interpretation of subsurface conditions between samples.

**Property Disturbance:** We will backfill the borings with auger cuttings and bentonite chips after completion of drilling. Our services do not include repair of the site beyond backfilling our boreholes. Excess auger cuttings will be dispersed in the general vicinity of the boreholes. Because backfill material often settles below the surface after a period, we recommend checking boreholes periodically and backfilling, if necessary. We can provide this service, or grout the boreholes, for additional fees at your request.

**Geologic Assessment:** A geologist will perform a geologic assessment to identify geologic features at or near the project sites which could impact the planned construction at the site. The geologic assessment will include a study of publicly available information (well logs, geologic maps, etc.) which will help to understand the geologic conditions at the site and a visit to the sites to observe geologic conditions at and surrounding the sites. Our geotechnical engineering report will include a summary of our geologic assessment.

**Safety**

Terracon is currently not aware of environmental concerns at this project site that would create health or safety hazards associated with our exploration program; thus, our scope considers standard OSHA Level D Personal Protection Equipment (PPE) appropriate. Our scope of services does not include environmental site assessment services, but identification of unusual or unnatural materials encountered while drilling will be noted on our logs and discussed in our report.

Exploration efforts require borings (and possibly excavations) into the subsurface; therefore, Terracon complies with local regulations to request a utility location service through Colorado 811 (CO811). We will consult with the owner/client regarding potential utilities, or other unmarked underground hazards. Based upon the results of this consultation, we will consider the need for alternative subsurface exploration methods, as the safety of our field crew is a priority.

Private utilities should be marked by the owner/client prior to commencement of field exploration. Terracon will not be responsible for damage to private utilities that are

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not made aware to us. If the owner/client is not able to accurately locate private utilities, Terracon can assist the owner/client by coordinating or subcontracting with a private utility locating services. Fees associated with the additional services are not included in our current scope of services and will be forwarded to our client for approval prior to initiating. The detection of underground utilities is dependent upon the composition and construction of the utility line; some utilities are comprised of non-electrically conductive materials and may not be readily detected. The use of a private utility locate service would not relieve the owner of their responsibilities in identifying private underground utilities.

**Site Access:** Terracon must be granted access to the site by the property owner. This proposal assumes Terracon has legal and ready access to the site for the purpose of conducting this investigation and there will not be delays due to site access. Terracon also assumes the sampling equipment proposed can access the proposed exploration locations and there is sufficient space available to maneuver the equipment and conduct the investigation. If site access issues are encountered, the investigation may be delayed, and additional changes may be incurred. We will notify Burns & McDonnell if access issues are encountered. By acceptance of this proposal without information to the contrary, we consider this as authorization to access the property for conducting field exploration in accordance with the scope of services. We assume the field work may be completed between 7 a.m. and 7 p.m. on weekdays.

**COVID-19:** Terracon retains the right to stop work without penalty at any time we believe it is in the best interests of Terracon's employees or subcontractors to do so in order to reduce the risk of exposure to the coronavirus. Burns & McDonnell agrees it will respond quickly to all requests for information made by Terracon related to our pre-task planning and risk assessment processes. Burns & McDonnell acknowledges its responsibility for notifying us of any circumstances that present a risk of exposure to the coronavirus or individuals who have tested positive for COVID-19 or are self-quarantining due to exhibiting symptoms associated with the coronavirus.

**Laboratory Testing**

The project engineer will review field data and assign various laboratory tests to better understand the engineering properties of various soil and bedrock strata. Exact types and number of tests cannot be defined until completion of field work. Laboratory testing will be conducted in general accordance with applicable or other locally recognized standards. Testing will be performed under the direction of a geotechnical engineer and may include the following:

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- Visual classification
- Dry density
- Grain-size analysis
- Permeability
- Soluble sulfates
- Moisture content
- Atterberg limits
- Hydrometer
- Unconfined compressive strength

Our laboratory testing program includes examination of soil samples by an engineer. Based on the material's texture and plasticity, we will describe and classify soil samples in accordance with the Unified Soil Classification System (USCS). If bedrock samples are obtained, rock classification is conducted using locally accepted practices for engineering purposes; petrographic analysis (if performed) may reveal other rock types. Rock core samples typically provide an improved specimen for this classification.

Soil and bedrock samples obtained during our field work will be disposed of after laboratory testing is complete unless a specific request is made to temporarily store the samples for a longer period of time.

### Engineering and Project Delivery

Results of our field and laboratory programs will be evaluated by a professional engineer. The engineer will develop a geotechnical site characterization, perform the engineering calculations necessary to evaluate preliminary foundation alternatives and seepage conditions at the sites, and develop appropriate preliminary geotechnical engineering design criteria for earth-related phases of the project.

Your project will be delivered using our **GeoReport®** system. Upon initiation, we provide you and your design team the necessary link and password to access the website (if not previously registered). Each project includes a calendar to track the schedule, an interactive site map, a listing of team members, access to the project documents as they are uploaded to the site, and a collaboration portal. The typical delivery process includes the following:

- Project Planning/Proposal Excerpts – Proposal information, schedule and anticipated exploration plan will be posted for review and verification
- Site Characterization – Findings of the site exploration
- Geotechnical Engineering – Recommendations and preliminary geotechnical engineering report

## Proposal for Geotechnical Engineering Services

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When our services are completed, we will upload a printable version of our completed geotechnical engineering report, including the professional engineer's seal and signature, which documents our services. Previous submittals, collaboration and the report are maintained in our system. This allows future reference and integration into subsequent aspects of our services as the project goes through final design and construction.

The feasibility level, preliminary geotechnical engineering report will provide the following:

- Site description
- Boring logs with field and laboratory data
- Stratification based on visual soil and/or bedrock classification
- Groundwater levels observed during and after completion drilling
- Site and boring location plans
- Subsurface exploration procedures
- Description of subsurface conditions
- Laboratory test results
- Packer test results
- Geologic site characterization
- Seepage modeling results and discussion
- Recommended preliminary foundation options and engineering design parameters
- Preliminary estimated movement of foundations
- Seismic site classification
- Preliminary subgrade preparation/earthwork recommendations
- Preliminary lateral earth pressure recommendations
- Opinions regarding the feasibility of converting the existing reservoirs to water storage cells and preliminary recommendations for seepage control measures (based on geotechnical conditions) which should be considered in further planning for each site

### Additional Services

In addition to the services noted above, the following are often associated with geotechnical engineering services. Fees for services noted above do not include the following:

**Design-Level Geotechnical Engineering Services:** After site-specific plans are developed for the project, we should be contacted to perform a supplemental

## **Proposal for Geotechnical Engineering Services**

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geotechnical exploration and provide design-level geotechnical engineering services for the proposed development. The scope of the final design-level geotechnical exploration will likely consist of additional borings and laboratory testing. The design-level exploration and testing quantities will depend on the total size of the proposed development and associated site improvements. The information collected during the preliminary geotechnical exploration will be incorporated into the final design-level geotechnical engineering report, where possible.

**Review of Plans and Specifications:** Our geotechnical report and associated verbal and written communications will be used by others in the design team to develop plans and specifications for construction. Review of project plans and specifications is a vital part of our geotechnical engineering services. This consists of review of project plans and specifications related to site preparation and foundation construction. Our review will include a written statement conveying our opinions relating to the plans and specifications' consistency with our geotechnical engineering recommendations.

**Environmental Assessments:** Our Scope for this project does not include, either specifically or by implication, an environmental assessment of the site intended to identify or quantify potential site contaminants. If the client/owner is concerned about the potential for such conditions, an environmental site assessment should be conducted. We can provide a proposal for an environmental assessment, if desired.



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**EXHIBIT C - COMPENSATION AND PROJECT SCHEDULE**

Based upon our understanding of the site, the project as summarized in **Exhibit A**, and our planned scope of services described in **Exhibit B**, our base fee is shown in the following table:

<b>Task</b>	<b>Lump Sum Fee</b>
Project Management	\$2,200
Field Exploration (includes geologic assessment, 8 total borings, and in situ packer testing)	\$60,800
Laboratory Testing	\$7,000
Analysis and Preliminary Report Preparation (includes geologic assessment write-up and seepage modeling)	\$11,000
<b>Total: Subsurface Exploration, Laboratory Testing, Geotechnical Consulting &amp; Reporting</b>	<b>\$81,000</b>

Additional services not part of the base fee include the following:

<b>Additional Services (see Exhibit B)</b>	<b>Lump Sum Fee</b>	<b>Initial for Authorization</b>
Design Level Geotechnical Engineering Services	TBD	
Plans and Specifications Review	TBD	
Environmental Assessments	TBD	

Our scope of services does not include services associated with site clearing, wet ground conditions, tree or shrub clearing, or repair of/damage to existing landscape. If such services are desired by the owner/client, we should be notified so we can adjust our scope of services.

Unless instructed otherwise, we will submit our invoice(s) to the address shown at the beginning of this proposal. If conditions are encountered that require scope of services revisions and/or result in higher fees, we will contact you for approval, prior to initiating services. A supplemental proposal stating the modified scope of services as well as its effect on our fee will be prepared. We will not proceed without your authorization, as evidenced by your signature on the appropriate form.

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**Project Schedule**

We developed a schedule to complete the scope of services based upon our existing availability and understanding of your project schedule. However, this does not account for delays in field exploration beyond our control, such as weather conditions, permit delays, or lack of permission to access the boring locations. In the event the schedule provided is inconsistent with your needs, please contact us so we may consider alternatives.

<b>GeoReport Stage/Project Milestones</b>	<b>Posting Date from Notice to Proceed <sup>1, 2, 3</sup></b>
Proposal Excerpts	2 to 3 days
Site Layout and Geologic Assessment	10 to 15 days
Field Exploration Completed	25 to 35 days <sup>4, 5</sup> (drilling is estimated to take about 1½ to 2 weeks to complete)
Laboratory Testing Completed	About 2 to 3 weeks after completion of drilling
Site Characterization & Preliminary Geotechnical Engineering Report	About 3 to 4 weeks after completion of drilling <sup>4, 5</sup>

1. Upon receipt of your notice to proceed, we will activate the schedule component of our **GeoReport** website with specific, anticipated calendar dates for the delivery points noted above as well as other pertinent events such as field exploration crews on-site, etc.
2. We will maintain a current calendar of activities within our **GeoReport** website. In the event of a need to modify the schedule, the schedule will be updated to maintain a current awareness of our plans for delivery.
3. Posting date presented in business day from receipt of notice to proceed.
4. Posting date can be affected by drilling rig availability at the time of receipt or notice to proceed. Any advanced notice of Terracon's selection to perform this work will allow for the timely scheduling of a drilling rig to perform the field work.
5. As you are likely aware, many industries and businesses have been impacted by the recent outbreak of the COVID-19 virus. Terracon holds the health and safety of its employees, clients, subcontractors and the general public in the highest possible regard, and as such, has implemented internal policies to help protect against and prevent the spread of the COVID-19 virus. While we have taken appropriate measures and steps to ensure our geotechnical report will be delivered on time, some delays in the project schedule may occur due to reasons beyond our control.

**EXHIBIT D – SITE LOCATION AND NEARBY GEOTECHNICAL DATA**

Mule Pit and Whitewater Reservoirs Feasibility Study ■ Grand Junction, Colorado

June 24, 2022 ■ Terracon Proposal No. P20225054



DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

MAP PROVIDED BY MICROSOFT BING MAPS

**EXHIBIT E – ANTICIPATED EXPLORATION PLAN – 1 OF 2**

Mule Pit and Whitewater Reservoirs Feasibility Study ■ Grand Junction, Colorado

June 24, 2022 ■ Terracon Proposal No. P20225054



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**EXHIBIT E – ANTICIPATED EXPLORATION PLAN – 2 OF 2**

Mule Pit and Whitewater Reservoirs Feasibility Study ■ Grand Junction, Colorado

June 24, 2022 ■ Terracon Proposal No. P20225054



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