

## Town of Castle Rock

# **Agenda Memorandum**

**Agenda Date:** 12/18/2018

Item #: File #: TMP 2018-906

**To:** Honorable Mayor and Members of Town Council

From: Mark Marlowe, P.E., Director of Castle Rock Water

Resolution Approving the Construction Phase Engineering Services Agreement with Burns & McDonnell Engineering Company, Inc. for the Plum Creek Water Purification

**Facility Advanced Treatment Project** 

### **Executive Summary**

Castle Rock Water is seeking Town Council approval of a resolution (*Attachment A*) awarding a Services Agreement (*Exhibit 1*) with Burns & McDonnell Engineering Company, Inc. (B&McD), for the Plum Creek Water Purification Facility (PCWPF) Advanced Treatment Construction Phase Engineering Services. B&McD was retained as the design consultant for this project through a competitive process, and they have prepared plans and specifications for construction of this facility. As engineering consultant for the project, they have direct knowledge and experience with the specialized components designed for this project. Their continued support during construction is important to maximize value and to ensure a quality-constructed facility built in accordance with facility plans and specifications.

At the request of Castle Rock Water, Burns & McDonnell submitted a proposal to provide engineering services during construction and startup. These services include attending weekly progress meetings, daily construction inspection, reviewing submittals, responding to requests for information from the contractor, reviewing project records, providing start-up assistance with operator training, and preparing record drawings. Staff recommends approval of the services agreement for a not-to-exceed amount of \$1,340,115 to retain B&McD for construction phase engineering services for the PCWPF Advanced Treatment Project.

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

Castle Rock Water staff presented the specifics of this project to the CRW Commission at their scheduled meeting held on November 28, 2018. The presentation highlighted the scope and complexity of this capital improvement project. These types of renewable water projects support the Town's long-term water goal of providing a 75% renewable water supply for the community by 2050. The Commission \_\_\_\_\_\_ that Town Council approve a resolution to award a Construction Phase Engineering Services Agreement with B&McD for the PCWPF Advanced Treatment Design Project.

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### **Discussion**

A need for a sustainable long-term water supply was identified in the Town's Water Resources Strategic Master Plan (WRSMP). One of the major goals of that plan is to establish a renewable, sustainable water supply that accounts for 75% of the annual demand for water in Castle Rock by 2050. Renewable water sources include alluvial wells, surface water using existing Town Water Rights, and imported surface water from outside of the Plum Creek Basin. This project will ad reusable water sources to the source supply for the Town.

The PCWPF Advanced Treatment project consists of treating collected renewable surface water sources from East Plum Creek (EPC). Changes in raw water quality and quantity to the PCWPF are anticipated from the new reusable source waters. Castle Rock Water is planning to pump surface water from the Town-owned Castle Rock Reservoir in Sedalia to the PCWPF. This reservoir is a new reusable source of supply and is located downstream from the Plum Creek Water Reclamation Authority. A pump station, pipeline and other facilities required to convey the new reusable source water to the PCPWF will be completed under separate contract and are not included with these construction phase services.

The 6 million gallons per day (MGD) capacity pretreatment facilities at the existing PCWPF include aeration, rapid mix, flocculation, sedimentation, and greensand filtration. The greensand filtration is followed by membrane filtration and primary disinfection by chlorine with secondary disinfection achieved by adding ammonia to form chloramines for a more effective residual disinfectant in the distribution system.

Town Council authorized award of a design services agreement to B&McD in December 2017 for a not to exceed amount of \$1,528,086. Since that time, the PCWPF Advanced Treatment Project components have been designed to match the current facility water treatment capacity of 6 MGD, and will be expandable to 12 MGD with a future expansion project. B&McD (with CRW direction) has followed a multiple barrier treatment approach design as recommended by a Basis of Design Report (BDR) completed by CH2M (dated September 7, 2017) for the PCWPF Advanced Treatment Project. The multiple barrier treatment approach includes pre-ozone, biologically active carbon filtration, ozone disinfection, granular activated carbon adsorption, and UV disinfection. This multiple barrier design will treat the new reuse source water for removal of pathogens, organics, regulated drinking water contaminants, and nonregulated contaminants of emerging concern (CECs). The primary goals of the PCWPF Advanced Treatment Project are to meet or exceed requirements of the US EPA Safe Drinking Water Act, additional requirements from the Colorado Department of Public Health and Environment (CDPHE), and purify the water removing currently unregulated contaminants.

In general, construction of the PCWPF Advanced Treatment Project includes a new 1 million gallon raw water blending tank, an ozone system for advanced oxidation, a biologically activated carbon (BAC) filter conversion, granular activated carbon contactors, an ultraviolet disinfection system, onsite solids handling equipment, and a new diesel powered generator for emergency electrical power.

In order to deliver a quality-constructed project and maximize value, CRW recommends retaining Burns & McDonnell for construction phase engineering services. At the request of staff, Burns &

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McDonnell submitted a proposal to provide these services. The scope of work and fee are included as exhibits to the agreement.

The B&McD fee for construction phase engineering services is \$1,340,115. This fee is approximately 4.8 percent of estimated construction costs (\$26,912,068). The proposed B&McD fee is fair and reasonable, and considering the highly technical nature of the water treatment systems to be installed, sole-sourcing these services with the design consultant will help ensure that the project is constructed in compliance with plans and specifications. In addition, Burns & McDonnell is familiar with the Guaranteed Maximum Price Construction Management (GMPCM) project delivery method. B&McD has worked with the contractor to revise designs as needed to fit the budget and scope, and their continued involvement is critical to maintaining the existing relationship that has developed between the Owner, Design Consultant and Contractor. Therefore, a sole source contract is recommended. A sole source justification form is included in *Attachment B*.

### **Budget Impact**

Funding for this project was budgeted in the 2018 budget line item "Advanced Oxidation Facility" (account no. 211-4375-443-77-75) with additional funding budgeted in 2019.

#### **Staff Recommendation**

Staff recommends Town Council approval of the resolution (*Attachment A*) approving the Construction Phase Engineering Services Agreement for the PCWPF Advanced Treatment Design Project with Burns and McDonnell in the amount of \$1,340,115.

### **Proposed Motion**

"I move to approve the Resolution as introduced by title."

#### **Attachments**

Attachment A: Resolution
Exhibit 1: Agreement
Attachment B: Sole Source

# TOWN OF CASTLE ROCK SERVICES AGREEMENT

# (PCWPF Advanced Treatment Construction-Phase Engineering Services)

**DATE:** , 2018.

**PARTIES:** TOWN OF CASTLE ROCK, a Colorado municipal corporation, 100 N. Wilcox Street, Castle Rock, Colorado 80104 ("Town").

BURNS AND MCDONNELL ENGINEERING CO., INC., a Missouri corporation, 9785 Maroon Circle, Suite 400, Centennial, Colorado 80112 ("Consultant").

#### **RECITALS:**

A. Town wishes to engage Consultant to provide the services more fully described in the following Agreement and Exhibits.

#### **TERMS:**

- Section 1. Scope of Services. Consultant shall provide construction phase engineering services for the Plum Creek Water Purification Facility Advanced Treatment Construction Project as set forth in the scope of services attached hereto as *Exhibit A* ("Services"). Consultant shall complete the Services for the cost of \$1,340,115.
- **Section 2.** Payment. Consultant shall invoice Town monthly for the Services rendered at the rates designated in *Exhibit B*. Town shall pay such invoices within 30 days' receipt of such invoice. In no event shall payment exceed \$1,340,115, unless authorized in writing by Town.
- Section 3. <u>Completion.</u> Consultant shall undertake the Services upon execution of this Agreement and complete the Services September 1, 2020. Consultant shall devote adequate resources to assure timely completion of the Services. Consultant shall perform the Services under this Agreement using a standard of care, skill and diligence ordinarily used by reputable professionals performing under circumstances similar to those required by this Agreement.

Town shall have the right to terminate this Agreement at any time with 30 days written notice to Consultant. In addition, this agreement shall terminate on December 31, 2019 in the event funds to support payment under this Agreement are not appropriated for calendar year 2020. The Town's only obligation in the event of termination shall be payment of fees and expenses incurred up to and including the effective date of termination. Consultant shall turn over all work product produced up to the date of termination.

**Section 4.** <u>Subcontractors.</u> Consultant may utilize subcontractors to assist with specialized works as necessary to complete the Services. Consultant will submit any proposed subcontractor and the description of their services to the Town for approval.

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- Section 5. <u>Assignment.</u> This Agreement shall not be assigned by Consultant without the written consent of the Town.
- Section 6. Notice. Any notice required or permitted by this Agreement shall be in writing and shall be deemed to have been sufficiently given for all purposes if sent by certified mail or registered mail, postage and fees prepaid, addressed to the party to whom such notice is to be given at the address set forth on the first page of this Agreement, or at such other address as has been previously furnished in writing to the other party or parties. Such notice shall be deemed given when deposited in the United States mail.
- Section 7. <u>Prohibition Against Employing Illegal Aliens</u>. Consultant shall not knowingly employ or contract with an illegal alien to perform work under this contract. Consultant shall not enter into a contract with a subcontractor that fails to certify to the Consultant that the subcontractor shall not knowingly employ or contract with an illegal alien to perform work under this contract.

Consultant has confirmed the employment eligibility of all employees who are newly hired for employment to perform work under the public contract for services through participation in either the E-verify program or the Department program, as defined in C.R.S. §§ 8-17.5-101(3.3) and 8-17.5-101(3.7), respectively. Consultant is prohibited from using the E-verify program or Department program procedures to undertake pre-employment screening of job applicants while this contract is being performed.

If Consultant obtains actual knowledge that a subcontractor performing work under this Agreement for services knowingly employs or contracts with an illegal alien, Consultant shall:

- A. Notify the subcontractor and the Town within three days that the Consultant has actual knowledge that the subcontractor is employing or contracting with an illegal alien; and
- B. Terminate the subcontract with the subcontractor if within three days of receiving notice required pursuant to this paragraph the subcontractor does not stop employee or contracting with the illegal alien; except that the Consultant shall not terminate the contract with the subcontractor if during such three days the subcontractor provides information to establish that the subcontractor has not knowingly employed or contracted with an illegal alien.

Consultant shall comply with any reasonable request by the Department of Labor and Employment made in the course of an investigation that the Department is undertaking pursuant to the authority established in C.R.S. §8-17.5-102(5).

If Consultant violates a provision of this Agreement required pursuant to C.R.S. §8-17.5-102, Town may terminate the Agreement for breach of contract. If the Agreement is so terminated, the Consultant shall be liable for actual and consequential damages to the Town.

Section 8. <u>Insurance.</u> Consultant agrees to procure and maintain, at is own cost, the following policy or policies of insurance. Consultant shall not be relieved of any liability, claims, demands or other obligations assumed pursuant to this Agreement by reason

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of its failure to procure or maintain insurance, or by reason of its failure to procure or maintain insurance in sufficient amounts, durations, or types.

- A. Consultant shall procure and maintain, and shall cause each subcontractor of the Consultant to procure and maintain a policy with the minimum insurance coverage listed below. Such coverage shall be procured and maintained with forms and insurers acceptable to the Town. All coverage shall be continuously maintained from the date of commencement of services hereunder. In the case of any claims-made policy, the necessary retroactive dates and extended reporting periods shall be procured to maintain such continuous coverage.
  - 1. Workers Compensation insurance to cover obligations imposed by the Workers Compensation Act of Colorado and any other applicable laws for any employee engaged in the performance of Work under this contract, and Employer's Liability insurance with minimum limits of FIVE HUNDRED THOUSAND DOLLARS (\$500,000) each accident, FIVE HUNDRED THOUSAND DOLLARS (\$500,000) disease-policy limit, and FIVE HUNDRED THOUSAND DOLLARS (\$500,000) disease-each employee.
  - 2. Comprehensive General Liability insurance with minimum combined single limits of ONE MILLION DOLLARS (\$1,000,000) each occurrence and ONE MILLION DOLLARS (\$1,000,000) aggregate. The policy shall be applicable to all premises and operations. The policy shall include coverage for bodily injury, broad form property damage (including for contractual and employee acts), blanket contractual, independent contractors, products, and completed operations. The policy shall contain a severability of interests provision.
  - 3. 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 with respect to each of Consultant 's owned, hired and/or non-owned vehicles assigned to or used in performance of the services. The policy shall contain a severability of interests provision.
  - 4. Professional Liability insurance with minimum limits of ONE MILLION DOLLARS (\$1,000,000) per claim and ONE MILLION DOLLARS (\$1,000,000) aggregate.
- B. The policies required above, except Workers' Compensation insurance, Employers' Liability insurance and Professional Liability insurance, shall be endorsed to include the Town, its officers and employees, as additional insureds. Every policy required above, except Workers' Compensation and Professional Liability insurance, if applicable, shall be primary insurance, and any insurance carried by the Town, its officers, or its employees, shall be excess and not contributory insurance to that provided by Consultant. The additional insured endorsement for the Comprehensive General Liability insurance required above shall not contain any exclusion for bodily injury or property damage arising from completed operations. The Consultant shall be solely responsible for any deductible losses under ach of the policies required above.

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- C. Certificates of insurance shall be completed by Consultant's insurance agent as evidence that policies providing the required coverage, conditions and minimum limits are in full force and effect, and shall be subject to review and approval by the Town. Each certificate shall identify the Project and shall provide that coverage afforded under the policies shall not be cancelled, terminated or materially changed until at least 30 days prior written notice has been given to the Town. If the words "endeavor to" appear in the portion of the certificate addressing cancellation, those words shall be stricken from the certificate by the agent(s) completing the certificate. The Town reserves the right to request and receive a certified copy of any policy and any endorsement thereto.
- D. Failure on the part of Consultant to procure or maintain policies providing the required coverage, conditions, and minimum limits shall constitute a material breach of contract upon which at the Town's discretion may procure or renew any such policy or any extended connection therewith, and all monies so paid by the Town shall be repaid by Consultant to the Town upon demand, or the Town may offset the cost of the premiums against any monies due to Consultant from the Town.
- E. The parties understand and agree that the Town is relying on, and does not waive or intend to waive by any provision of this contract, the monetary limitations (presently \$350,000 per person, \$990,000 per occurrence) or any other rights, immunities, and protections provided by the Colorado Governmental Immunity Act, §24-10-101, et sect, 10 C.R.S., as from time to time amended, or otherwise available to Town, its officers, or its employees.
- Section 9. <u>Indemnification.</u> Consultant expressly agrees to indemnify and hold harmless Town or any of its officers or employees from any and all claims, damages, liability, or court awards including attorney's fees that are or may be awarded as a result of any loss, injury or damage sustained or claimed to have been sustained by anyone, including, but not limited to, any person, firm, partnership, or corporation, to the extent caused by the negligent acts, errors or omissions of Consultant or any of their employees or agents in performing work pursuant to this Agreement. In the event that any such suit or action is brought against Town, Town will give notice within ten (10) days thereof to Consultant.
- Section 10. <u>Delays.</u> Any delays in or failure of performance by any party of his or its obligations under this Agreement shall be excused if such delays or failure are a result of acts of God, fires, floods, strikes, labor disputes, accidents, regulations or orders of civil or military authorities, shortages of labor or materials, or other causes, similar or dissimilar, which are beyond the control of such party.
- Section 11. <u>Additional Documents.</u> The parties agree to execute any additional documents or take any additional action that is necessary to carry out this Agreement.
- Section 12. Entire Agreement. This Agreement represents the entire agreement between the parties and there are no oral or collateral agreements or understandings. This Agreement may be amended only by an instrument in writing signed by the parties. If any other provision of this Agreement is held invalid or unenforceable, no other provision shall be

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affected by such holding, and all of the remaining provisions of this Agreement shall continue in full force and effect.

- Section 13. <u>Time of the Essence.</u> Time is of the essence. If any payment or any other condition, obligation, or duty is not timely made, tendered or performed by either party, then this Agreement, at the option of the party who is not in default, may be terminated by the non-defaulting party, in which case, the non-defaulting party may recover such damages as may be proper.
- Section 14. <u>Default and Remedies</u>. In the event either party should default in performance of its obligations under this agreement, and such default shall remain uncured for more than 10 days after notice of default is given to the defaulting party, the non-defaulting party shall be entitled to pursue any and all legal remedies and recover its reasonable attorney's fees and costs in such legal action. In addition, no Party will be entitled to lost profits, economic damages, or actual, direct, incidental, consequential, punitive or exemplary damages in the event of a default.
- Section 15. <u>Waiver.</u> A waiver by any party to this Agreement of the breach of any term or provision of this Agreement shall not operate or be construed as a waiver of any subsequent breach by either party.
- Section 16. Governing Law. This Agreement shall be governed by the laws of the State of Colorado.
- Section 17. <u>Independent Contractor.</u> Consultant and Town hereby represent that Consultant is an independent contractor for all purposes hereunder. As such, Consultant is not covered by any worker's compensation insurance or any other insurance maintained by Town except as would apply to members of the general public. Consultant shall not create any indebtedness on behalf of the Town.
- Section 18. No Third Party Beneficiaries. It is expressly understood and agreed that enforcement of the terms and conditions of this Agreement, and all rights of action relating to such enforcement, shall be strictly reserved to Town and Consultant, and nothing contained in this Agreement shall give or allow any such claim or right of action by any other third party on such Agreement. It is the express intention of the parties that any person other than Town or Consultant receiving services or benefits under this Agreement shall be deemed to be an incidental beneficiary only.

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ATTEST:	TOWN OF CASTLE ROCK
Lisa Anderson, Town Clerk	, Mayor
Approved as to form:	Approved as to content:
Robert J. Slentz, Town Attorney	Mark Marlowe, Director of Castle Rock Water
Consultant:	
BURNS & MCDONNELL ENGINEER	ING CO., INC.
Ву:	
Its:	

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# **EXHIBIT A Scope of Work for the Advanced Treatment Project**

#### TASK 100 SERIES - CONSTRUCTION ADMINISTRATION SERVICES

Provide construction contract administration services as indicated below:

#### Task 101 – Overall Project and Contract Administration

This task includes office administrative tasks to be performed throughout the construction phase including:

- Receive and review guarantees, tests, and approvals provided by the Contractor in accordance with the construction contract documents. Maintain and transmit project files to the Town and copy the Town's project manager with test results.
- Give written notifications of observations regarding defects or deficiencies in the Contractor's work relating to compliance with contract documents.
- Preparation of monthly invoices (a narrative addressing work completed for the invoice period) and monitoring of the budget and schedule.

The total construction phase for this project is anticipated to be 21 months in duration, and assumes 10 hours per month for the project manager. If the Contractor's approach to the project requires more than 21 months to complete, the additional work related to this task shall be considered as additional services.

#### Task 1002 - Pre-Construction Conference

Burns & McDonnell will prepare the pre-construction conference agenda, attend and run the meeting, and take, prepare, and distribute meeting minutes. It is anticipated that the pre-construction meeting will be attended by the Town and the Contractor's project manager and the Engineer's project manager, process engineer, and resident project representative.

#### Task 103 – Construction Progress Meetings

Burns & McDonnell will prepare the meeting agendas, attend and run the meetings, and take, prepare, and distribute minutes for a 90 week construction period on a weekly basis. It is anticipated that the construction meetings will be attended by the Town and the Contractor's project manager, and the Engineer's resident project representative. The Engineer's project manager and resident project representative are anticipated to attend all meetings. The fee assumes that every other meeting may also be attended by a support discipline. The resident project representative hours are included in Task 201. Labor assumptions for project manager and support disciplines are four (4) hours per meeting.

#### Task 104 – Periodic Site visits by Project Manager or Project Engineer

This includes one (1) site visit per week for one (1) discipline engineer for a 90 week construction period. Each site visit is assumed to be four (4) hours in duration, including travel.

Task 105 – Answer Contractor's Question through written RFI process

Burns & McDonnell will provide formal responses to RFI's to the contractor and the Town. This includes written response to 80 RFI's with a review, determination, and response time of approximately four (4) hours per RFI.

#### Task 106 – Submittal and Resubmittal Reviews

Burns & McDonnell will review material submittals for the project and provide a response and status for each submittal. Burns & McDonnell expects approximately 300 different submittals from the contractor. It is assumed that each submittal will require an average of two (2) hours review and response time for the first submittal and one (1) hours for resubmittals (one resubmittal per submittal).

# <u>Task 107 – Contingency Use Requests, Field Change Directives, Engineers Orders, and Change Order Preparation for Owner Approval and Execution</u>

Burns & McDonnell will review and respond to Contractor's requests for work change directives and change orders. We will evaluate and make recommendations for construction contract work change directives, engineer's orders, and change orders. The project engineer will coordinate input from the resident project representative and the Town on the validity and relative costs associated with change orders and prepare comparative cost estimates as needed to confirm Contractor change requests. This task assumes ten (10) change orders and twenty (20) engineers' orders at an average review and response time of ten (10) hours per order. Burns & McDonnell will prepare and distribute contingency use requests and engineer's orders for Town and Contractor approval and signature at reasonable intervals as changes are accrued during the work. Change Orders and Engineers Orders will provide current project accounting based upon contract value and completion time changes from the original agreement.

#### Task 108 - Substantial Completion Inspection and Punch List

Burns & McDonnell will participate in the field walks of the site with the Town and the Contractor. We will generate a punchlist of construction items to correct in the field and prepare the substantial completion letter with final completion requirements outlined. The fee assumes eight (8) hours each for five (5) discipline engineers and the project manager to perform the inspections, punch list preparations, and certificates of substantial completion.

#### Task 109 – Final Completion Inspection and Punchlist

Once the Contractors have indicated that they have corrected the punchlist items, a final field visit will be conducted to confirm that all work is complete. Based on the findings, final punch list letters of completion will be prepared and submitted. The fee assumes two (2) discipline engineers and the project manager each require eight (8) hours to perform the final inspection and develop final completion letter.

# TASK 200 SERIES - RESIDENT PROJECT REPRESENTATIVE AND START-UP SERVICES

Provide a full time Resident project representative as indicated below:

#### Task 201 – Full-Time Resident Project Representative

Burns & McDonnell will provide full-time resident project representation to observe and record the construction progress and administer the contract in accordance with the project manual, specifications, and executed contracts. The resident project representative will be on site for 17 months of the construction period with an assumed 40 hour work week. The construction period assumes 2,914 hours.

The resident project representative will:

- Administer the contract in accordance with the project manual, specifications, and executed contracts between the Contractor, Engineer, and Town.
- Provide on-site daily observation and record construction activities for general conformance to the contract documents.
- Examine and review delivered and on-site materials for conformance with the Contract Documents and approved submittals.
- Maintain a daily project diary documenting construction observations, construction
  installations, important conversations, site conditions, labor and equipment, field
  discrepancies, contractor safety, and other important job site circumstances. The resident
  project representative will prepare and submit daily construction reports to the Town of
  Castle Rock on a weekly basis.
- Compile as-constructed quantities for unit price adjustment pay items.
- Provide construction photos to assist in documenting construction activities.
- See that the Contractor is coordinating their construction activities with Town's operations as needed.
- Conduct weekly progress meetings, provide meeting agendas, and take and distribute meeting minutes.
- Coordinate with Contractor and Owner regarding start-up, testing, and commissioning of new waterlines.
- Report to Project Engineer, opinions and suggestions based on observations regarding defects or deficiencies in the work and compliance with drawings and specifications.
- Advise Project Engineer and Contractor immediately of any work requiring shop drawing review prior to work commencement.
- Observe and document differing subsurface and physical conditions encountered.
- Review Contractor's construction schedule for conformance with milestones, and other project requirements.
- Observe onsite quality assurance testing and maintain copies of testing results on site.
- Review as-built construction mark-ups on at least a weekly basis to verify that the
  contractor is accurately documenting field changes to the work in a common set of
  drawings/specifications.
- Includes special inspections for the following items:
  - o Reinforced steel
  - o Anchors cast in concrete
  - o Anchors post installed in concrete
  - o Concrete mix design
  - o Concrete placement
  - o Inspection of formwork
  - o Masonry size and location of structural elements
  - o Masonry type size and location of anchors

- The following special inspections will be provided by the contractor:
  - o Fabricate specimens for strength, perform slump, air content and temperature.
  - O Verification and inspection of soils by the Kumar and Associates.
  - o Masonry slump and VSI
  - o Verification of f'm
  - Verifications of grout and mortar are in compliance with the specifications
  - o Structural steel welding

Burns & McDonnell will subcontract to Bates Engineering for the following post tension tank inspections:

- Observe Base Slab Reinforcing/Tendon Placement:
- Observe Base Slab Stressing Operations:
- Observe Wall Reinforcing /Tendon Placement:
- Observe Wall Tendon Stressing Operations:
- Observe Top Slab Reinforcing and Tendon Placement:
- Observe Top Slab Stressing Operations:
- Observe Concrete Placement for the Base Slab:
- Observe Concrete Placement for the Walls:
- Observe Concrete Placement for the Top Slab:

#### Task 202 – Start-up Assistance

This task includes assisting Town staff and the contractor in starting up the new advanced treatment facility. It is assumed that this task will involve reviewing the Contractor's procedures for bringing the facility online, and twenty (20) 8-hour site visit trips to the facility. It is assumed that these activities will require the presence of the process engineer, and half of the visits also requiring the project manager or the electrical engineer.

#### Task 203 – Warranty Assistance

Currently not included within scope or fee.

#### TASK 300 SERIES - CONFORMING TO CONSTRUCTION RECORDS

#### Task 301 – Prepare and Furnish Conforming to Construction Records:

Following the construction of the Advanced Treatment Facility, and prior to recommendation of the final payment to the Contractor, the Contractor will be required to provide a complete set of red lined drawings indicating any changes that took place in the field during construction of the project.

Burns & McDonnell will prepare conforming to construction drawings from the Contractor and Resident project representative supplied redlines. A hard copy, pdf copy, and AutoCAD files of the information will be provided to the Town.

#### Task 302 – Project Closeout

This task includes provisions for the project manager to close out each projects documentation. This task will be conducted in the office and will include final coordination with the Contractors, receipt and review of lien releases, coordination of Final Completion, punch list items, final

payment, record drawings, and other documents required by the contract documents for final completion and final payment. The fee provides 24 hours to include this project closeout work.

Town of Castle Rock - Advanced Treatment Project Construction Phase Services Fee Proposal & Manhour Estimate

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ACTION   PROJECT REPRESENTATIVE AND START-UP SERVICES   50   50   50   50   50   50   50   5			282 \$69,276	282	\$54,604	40 \$7,	\$7,320 6	51,140	5 2723	\$570,265	\$27,461	0\$	\$587.726
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Atomatical In Scope)         40         \$9,400         160         \$22,480         \$0         40         \$17,300           CONFORMING TO CONSTRUCTION RECORDS         40         \$9,400         160         \$12,460         0         \$0         40         \$17,300           CONFORMING TO CONSTRUCTION RECORDS         40         \$9,400         160         \$12,460         0         \$2,700           Atomatical in Construction Records         4         \$9,400         20         \$4,600         8         \$1,800         8         \$1,460	\$0	0\$	\$0		0\$	_	\$0 2914	14 \$553,714	14 2914.2857	57 \$553,714	\$37,329	\$55,000	\$646,043
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4 \$940 20 \$4,060 8 \$1,808 8													
	-	H	4 \$812	80	\$1,496	140 \$25	\$25,620	0\$	192	\$36,196	\$1,448	98	\$37.644
302 - Project Closeout \$0 \$0 \$0	0\$	0\$	0\$		0\$		0\$	0\$	24	\$5,640	\$226	\$	\$5,866
Sub-Total Series 10200 20 \$4,060 8 \$1,808 8 \$1,800 8 \$1,800			4 \$812	80	\$1,496	140 \$25	\$25,620 0	9\$	216	\$41,836	\$1,674	8	\$43,510
							+						
Advanced Treatment - Construction Phase Services Total 754 \$1177,190 851 \$172,753 380 \$85,880 412 \$15,190 3	412	\$75,190 304	94 \$61,712	300	\$56,100	180 \$32,	\$32,940 2,920	20 \$554,854	6,101	\$1,216,619	\$68,496	\$55,000	\$1,340,115

# TOWN OF CASTLE ROCK SOLE SOURCE JUSTIFICATION FORM



State of Colorado Procurement Rule R-24-103-205-01 states the following two criteria must be met for sole source procurement:

✓ There is only one good or service that can reasonably meet the need, and

✓ There is only one vendor who can provide the good or service.

You must complete this form <b>BEFORE</b> beginning any sole source procurement.  All justifications must be printed legibly or typed on this form.				
DATE: November 15, 2018				
REQUESTORS NAME: Walt Schwarz				
DEPARTMENT: Utilities				
PHONE #: 720-733-6036				
Recommended Sole Source procurement action with:				
COMPANY NAME: Burns & McDonnell Engineering Company, Inc.				
CONTACT NAME: Jason Schaefer				
ADDRESS: 9785 Maroon Circle, Suite 400, Centennial, CO 80112				
PHONE: 303-474-2265				
GOOD/SERVICES REQUESTED: Construction Engineering Services				
QUALIFICATION QUESTIONS				
1. Are the goods or services proprietary to the contractor?  Yes No				
2. Is the recommended company the manufacturer?				
3. Is there another contractor capable of providing the goods or services?   No				
If yes, please explain why another contractor is not an option.				
The Town's proposed Plum Creek Water Purification Facility (PCWPF) Advanced Treatment Project includes a new 1 million gallon raw water blending tank, an				

The Town's proposed Plum Creek Water Purification Facility (PCWPF) Advanced Treatment Project includes a new 1 million gallon raw water blending tank, an ozone system for advanced oxidation, a biologically activated carbon (BAC) filter conversion, granular activated carbon contactors, an ultraviolet disinfection system, onsite solids handling equipment, and a new diesel powered generator for emergency electrical power, Burns & McDonnell Engineering (8&McD) was awarded the PCWPF Advanced Treatment design contract through a competitive process in December 2017. 8&McD has completed the project bidding documents (plans and specifications) for Work Package 1 and are the engineer on record for this project. Design for a final Work Package 2 will be completed for contractor bidding in January 2019.

In order to deliver a quality-constructed project and maximize value, Castle Rock Water (CRW) recommends retaining Burns & McDonnell for construction engineering services. At the request of CRW, Burns & McDonnell submitted a proposal to provide these services. Construction engineering services will include, but not be limited to, attending weekly progress meetings, onsite construction inspection, reviewing submittals, responding to requests for information from the contractor, providing start-up assistance, and preparing record drawings. The scope and fee proposed by Burns & McDonnell are fair and reasonable, and sole-sourcing these services with the design consultant will help ensure that the project is constructed in accordance with the intended design.

B&McD has a proven record working with the Town during construction and startup of the original Plum Creek Water Purification Facility project that was also completed using the Guaranteed Maximum Price Construction Management project delivery method. They have also worked successfully with Garney Companies (general contractor who was awarded a construction agreement for pre-construction services for the PCWPF Advanced Treatment Project). B&McD is best suited to efficiently and effectively complete the construction engineering services associated with advanced water treatment facility project. Therefore, a sole source contract is recommended.

### **EXPLANATION**

for removal of pa contaminants of Treatment Project	athogens, organics, regulemerging concern (CECs ot is to meet or exceed re onal requirements from the	ct is potable water treatment facility project needed lated drinking water contaminants, and nonregulate s). The primary goal of the PCWPF Advanced equirements of the US EPA Safe Drinking Water Ad ne Colorado Department of Public Health and	ed
SIGNED BY DEPT. DIRECTOR:	Mark Marlowe	Digitally signed by Mark Marlowe Date: 2018.11.16 12:49:08 -07'00'	
APPROVED BY FIN	IANCE:		
DATE RECEIVED IN		SING USE ONLY	
COMMENTS:	Troncincincin		