

#### TOWN OF CASTLE ROCK SERVICES AGREEMENT

### (Young American Infrastructure Improvements, Bell Mountain Raw Pipeline, and Bell Mountain Flow Meter Vault Upgrade Projects)

#### DATE:

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

**DEWBERRY ENGINEERS INC.**, a New York corporation, 8401 Arlington Blvd., Fairfax, Virginia 22031 ("Contractor").

#### **RECITALS:**

- I. The Town issued a Request for Bids from qualified contractors with expertise in project design services.
- II. Contractor timely submitted its Bids.
- III. The Town wishes to engage Contractor to provide the services more fully described in the following Agreement and Exhibits.

#### **TERMS:**

1. <u>Scope of Services.</u> Contractor shall provide all of the services as set forth on *Exhibit 1* ("Services"). Contractor shall complete the Services consistent with standards and practices of the profession.

2. <u>Payment</u>. Contractor shall invoice Town on a monthly basis for the Services rendered in accordance with the rate and fee schedule set forth in *Exhibit 1*. The Town shall pay such invoices within thirty (30) days receipt of such invoice. In no event shall payment exceed **\$623.784.00**, unless authorized in writing by Town.

3. <u>Completion.</u> Contractor shall commence the Services August 16, 2023 and complete the Services not later than April 30, 2023. Contractor shall devote adequate resources to assure timely completion of the Services in accordance with the standards specified in this Agreement. Contractor 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.

4. <u>Termination</u>. Town shall have the right to terminate this Agreement with or without cause at any time with ten (10) days' written notice to Contractor. 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. Upon termination, Contractor shall immediately turn over all work product, materials, deliverables created up to the point of termination.

5. <u>Subcontractors.</u> Contractor may utilize subcontractors to assist with specialized services as necessary to complete the Services. Contractor will submit any proposed subcontractor and the description of subcontractor services to the Town for its prior approval.



6. <u>Annual Appropriation</u>. The continuance of this Agreement is contingent upon the appropriation of funds to fulfill the requirements of the Agreement by the Town. If the Town fails to appropriate sufficient monies to provide for the continuance of the Agreement, the Agreement shall terminate on the final day preceding the date of the beginning of the first fiscal year for which funds are not appropriated. 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.

7. <u>Assignment.</u> This Agreement shall not be assigned by Contractor without the written consent of the Town.

8. <u>Notice.</u> 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.

#### 9. Insurance.

General Conditions: Contractor agrees to secure, at or before the time of execution of A. this Agreement, the following insurance covering all operations, goods or services provided pursuant to this Agreement. Contractor shall keep the required insurance coverage in force at all times during the term of the Agreement, including any extension thereof, and during any warranty period. The required insurance shall be underwritten by an insurer licensed or authorized to do business in Colorado and rated by A.M. Best Company as "A-VII" or better. Each policy shall require notification to the Town in the event any of the required policies be canceled or non-renewed before the expiration date thereof. Such written notice shall be sent to the parties identified in the Notices section of this Agreement. Such notice shall reference the Town. Said notice shall be sent thirty (30) days prior to such cancellation or non-renewal unless due to non-payment of premiums for which notice shall be sent ten (10) days prior. If such written notice is unavailable from the insurer, Contractor shall provide written notice of cancellation, non-renewal and any reduction in coverage to the Town by certified mail, return receipt requested within three (3) business days of such notice by its insurer(s). Contractor shall be responsible for the payment of any deductible or selfinsured retention. The insurance coverages specified in this Agreement are the minimum requirements, and these requirements do not lessen or limit the liability of the Contractor. The Contractor shall maintain, at its own expense, any additional kinds or amounts of insurance that it may deem necessary to cover its obligations and liabilities under this Agreement. All commercial and automobile liability policies shall have the following additional provisions:

- Severability of interests or separation of insureds provision;
- Provision that coverage is primary and non-contributory with other coverage maintained by the Town;
- The underlying Agreement is an "insured contract" under the policy;
- Defense costs shall be outside the policy limits for liability coverage.

B. **Proof of Insurance:** Contractor may not commence services or work relating to this Agreement prior to placement of coverages required under this Agreement. Contractor certifies that the certificate of insurance attached as *Exhibit 2*, preferably an ACORD form, complies with all insurance requirements of this Agreement. The Town's acceptance of a certificate of insurance or other proof of insurance that does not comply with all insurance requirements set forth in this Agreement shall not act as a waiver of Contractor's breach of this Agreement or of any of the Town's rights or remedies under this Agreement. 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 may require additional proof of insurance, including but not limited to policies and endorsements.

C. Additional Insureds: For Commercial General Liability, Automobile Liability and Excess Liability/Umbrella (if required), Contractor and subcontractor's insurer(s) shall include the Town, its elected and appointed officials, officers, employees, agents and volunteers acting within the course and scope of their duties for the Town as additional insured.

D. **Waiver of Subrogation:** For all coverages required under this Agreement, Contractor's insurer shall waive subrogation rights against the Town, its elected and appointed officials, officers, employees, agents and volunteers acting within the course and scope of their duties for the Town.

E. **Subcontractors and Subconsultants:** Contractor shall confirm and document that all subcontractors and subconsultants (including independent contractors, suppliers or other entities providing goods or services required by this Agreement) procure and maintain coverage as approved by the Contractor and appropriate to their respective primary business risks considering the nature and scope of services provided.

F. **Workers' Compensation and Employer's Liability Insurance:** Contractor shall maintain the coverage as required by statute for each work location and shall maintain Employer's Liability insurance with limits of \$100,000 per occurrence for each bodily injury claim, \$100,000 per occurrence for each bodily injury claim, \$100,000 per occurrence for each bodily injury claims.

G. **Commercial General Liability:** Contractor shall maintain a Commercial General Liability insurance policy with minimum limits of \$1,000,000 for each occurrence and \$2,000,000 products and completed operations aggregate, and \$2,000,000 general aggregate (per project). The policy shall provide coverage for all claims for bodily injury, property damage (including loss of use), products and completed operations, and contractual liability.

H. **Automobile Liability:** Contractor shall maintain Automobile Liability with minimum limits of \$1,000,000 combined single limit applicable to all owned, hired and non-owned vehicles used in performing services under this Agreement.

10. <u>Colorado Governmental Immunity Act.</u> 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 or any other rights, immunities, and protections provided by the Colorado Governmental Immunity Act, §24-10-101, *et seq.*, C.R.S., as from time to time amended, or otherwise available to Town, its officers, or its employees.

11. **Indemnification.** Contractor expressly agrees to defend, indemnify and hold harmless Town or any of its agents, 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 Contractor or any of their employees or agents in performing Services 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 Contractor. These defense and indemnification obligations shall survive the expiration or termination of this Agreement.

12. **Delays.** Any delays in or failure of performance by any party of the 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.

13. <u>Additional Documents & Entire Agreement.</u> The parties agree to execute any additional documents or take any additional action that is necessary to carry out this Agreement. Further, 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 affected by such holding, and all of the remaining provisions of this Agreement shall continue in full force and effect.

14. <u>**Time of the Essence.**</u> 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.

15. **Default and Remedies**. In the event either party should default in performance of its obligations under this agreement, and such default shall remain uncured for more than ten (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.

16. <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.

17. <u>Venue, Choice of Law and Disputes.</u> Venue for all legal actions shall lie in the District Court in and for the County of Douglas, State of Colorado, and shall be governed by the laws of the State of Colorado as well as the Charter and Municipal Code, rules, regulations, Executive Orders, and fiscal rules of the Town.

18. <u>Americans with Disabilities Act.</u> Contractor agrees to ensure that any deliverables, work, services, or equipment developed, designed, constructed or produced pursuant to this Agreement, to include website design services, will comply with all requirements of the Colorado Anti-Discrimination Act, Title II of the Americans with Disabilities Act and, where applicable, Section 504 of the Rehabilitation Act and the Architectural Barriers Act. To the extent any deliverables, work, services, or equipment developed, designed, constructed or produced pursuant to this Agreement fail to comply with the requirements of this Section, Contractor shall indemnify the Town in accordance with the terms or this Agreement and, at the Town's option, shall re-vise, re-construct, or similar, the non-compliant deliverable, work, service, or equipment, or reimburse the Town for the cost associated with bringing the non-compliance deliverable, work, service or equipment into compliance.

19. **No Discrimination in Employment.** The Town is a governmental agency and, therefore, in connection with the performance of Work or Services under this Agreement, Contractor shall not refuse to hire, discharge, promote or demote, or to discriminate in matters of compensation against any person otherwise qualified, solely because of race, color, religion, national origin, gender, age, military status,



sexual orientation, gender identity or gender expression, marital status, or physical or mental disability, or any other protected class under Federal or State law; and Contractor shall insert the foregoing provision in any subcontracts hereunder.

20. <u>Advertising and Public Disclosure.</u> Contractor shall not include any reference to this Agreement or goods or services provided pursuant to this Agreement in any of Contractor's advertising or public relations materials without first obtaining the written approval of the Town. Nothing herein, however, shall preclude the transmittal of any information to officials of the Town, including without limitation, the Town Attorney, Town Manager, and the Town Council.

21. Ownership of Documents, Open Records, and Copyright. Any work product, materials, and documents produced by the Contractor pursuant to this Agreement shall become property of the Town upon delivery and shall not be made subject to any copyright or made confidential or protected in any manner unless authorized by the Town. Other materials, methodology and proprietary work used or provided by the Contractor to the Town not specifically created and delivered pursuant to the Services outlined in this Agreement may be protected by a copyright held by the Contractor and the Contractor reserves all rights granted to it by any copyright. However, Contractor acknowledges and understands that the Town is subject to the Colorado Open Records Act, C.R.S. § 24-72-201, et seq. The Town shall not reproduce, sell, or otherwise make copies of any copyrighted, confidential or protected material, subject to the following exceptions: (1) for exclusive use internally by Town staff and/or employees; or (2) pursuant to a request under the Colorado Open Records Act, C.R.S. § 24-72-201, et seq., to the extent that such statute applies; or (3) pursuant to law, regulation, or court order. The Contractor waives any right to prevent its name from being used in connection with the Services.

Contractor warrants that all Services or Work performed under this Agreement shall comply with all applicable patent, trademark and copyright laws, rules, regulations and codes of the United States. Contractor shall not utilize any protected patent, trademark or copyright in performance of the Work or Services unless Contractor has obtained proper permission and all licenses, releases and other necessary documents. Contractor releases, defends, indemnifies and holds harmless the Town, its officers, agents, and employees from any and all claims, damages, suits, costs, expenses, liabilities actions or proceedings of any kind or nature whatsoever, of or by anyone whomsoever, in any way resulting from, or arising out of, directly or indirectly, the performance of the Work or Services under this Agreement which infringes upon any patent, trademark or copyright protected by law.

22. <u>Authority.</u> The individuals executing this Agreement represent that they are expressly authorized to enter into this Agreement on behalf of the Town and the Contractor and bind their respective entities. This Agreement is executed and made effective as provided above.

23. <u>Independent Contractor</u>. Contractor has completed the Affidavit of Independent Contractor Status, attached as *Exhibit 3*, and submitted same at the time of execution of this Agreement. In addition to the Affidavit, Contractor and the Town hereby represent that Contractor is an independent contractor for all purposes hereunder. Contractor 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. Contractor shall not create any indebtedness on behalf of the Town.

24. <u>No Third-Party Beneficiaries.</u> 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 Contractor, 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 Contractor receiving services or benefits under this Agreement shall be deemed to be an incidental beneficiary only.



25. <u>Counterparts & Electronic Signatures.</u> This Agreement may be executed in counterparts, each of which shall be deemed an original, and all of which together shall be deemed to constitute one and the same instrument. Each of the Parties hereto shall be entitled to rely upon a counterpart of the instrument executed by the other Party and sent by electronic mail. Each party agrees that this Agreement and any other documents to be delivered in connection herewith may be electronically signed, and that any electronic signatures appearing on this Agreement or such other documents are the same as handwritten signatures for the purposes of validity, enforceability, and admissibility.

26. <u>Licenses/Taxes.</u> Contractor affirms it is licensed to do business in the State of Colorado and is in good standing. Further, Contractor shall be solely responsible for paying all applicable taxes associated with or rising out of this Agreement.

27. <u>Confidentiality.</u> Contractor agrees that it shall treat as confidential all information provided by the Town regarding the Town's business and operations. All confidential information provided by the Town hereto shall be used by Contractor solely for the purposes of rendering services or work pursuant to this Agreement and, except as may be required in carrying out the terms of this Agreement, shall not be disclosed to any third party without the prior consent of the Town. The foregoing shall not be applicable to any information that is publicly available when provided or which thereafter becomes publicly available or which is required to be disclosed by any regulatory authority in the lawful and appropriate exercise of its jurisdiction over a party, any auditor of the parties hereto, by judicial or administrative process or otherwise by applicable law or regulation.

28. <u>Priority of Provisions.</u> In the event that any terms of this Agreement and any Exhibit, attachment, or other referenced document are inconsistent, the following order of priority shall control: (1) this Agreement; (2) Exhibit containing Certificate of Insurance; (3) Exhibit containing Services and Fee Schedule; and (4) Exhibit containing Town of Castle Rock Affidavit of Independent Contractor Status.

#### **ATTACHED EXHIBITS:**

EXHIBIT 1 – SERVICES AND FEE SCHEDULE EXHIBIT 2 – CONTRACTOR'S CERTIFICATE OF INSURANCE EXHIBIT 3 – TOWN OF CASTLE ROCK AFFIDAVIT OF INDEPENDENT CONTRACTOR STATUS

### **REMAINDER OF PAGE INTENTIONALLY LEFT BLANK**



### ATTEST:

### TOWN OF CASTLE ROCK

Lisa Anderson, Town Clerk

Approved as to form:

Jason Gray, Mayor

Approved as to content:

Lena McClelland, Assistant Town Attorney II

**CONTRACTOR:** 

**DEWBERRY ENGINEERS INC.** 

By:

Its:

David L. Corliss, Town Manager



### **EXHIBIT 1**

SERVICES AND FEE SCHEDULE

FEE PROPOSAL - Castle Rock Water - Young American Infrastructure, Bell Mountain Raw Water Pipeline and Bell Mountain Meter Vault	Upgrades
--	----------

A       American Prican Prican Prican Prican Prican Prican Preliminary         .1       Research, Co.         .2       CCTV/Manh         .3       Topographic         .4       CCTV Review         .5       Rehab Record         .6       Preliminary         .7       QA/QC         B       Preliminary         Mountain Priliminary       Research, Co.         .1       Research, Co.         .2       Natural Reso         .3       Topographic         .4       Routing Alter         .5       Preliminary         .6       QA/QC         2       Young Ameri         .1       30% Design         .5       100% Bid Re         .6       Workshops         .7       QA/QC         3       Geotechnica         .4       90% Design         .5       100% Bid Re         .6       Workshops         .7       QA/QC         3       Geotechnica         .4       90% Design         .5       100% Bid Re         .6       Workshops         .7       QA/QC <t< th=""><th></th><th>/</th><th></th><th></th><th>oconsultant</th><th>-</th><th></th><th></th><th></th><th></th><th></th><th>PM Eng 5</th><th>Eng 8</th><th>Eng 7</th><th>Str Eng 7</th><th>Elec Eng 5</th><th>_</th><th>Eng 2</th><th>Eng 1</th><th>Des 4</th><th>CAD 5</th><th>CAD 3</th><th>Admin 3</th></t<>		/			oconsultant	-						PM Eng 5	Eng 8	Eng 7	Str Eng 7	Elec Eng 5	_	Eng 2	Eng 1	Des 4	CAD 5	CAD 3	Admin 3
Preliminary         American Preliminary         American Preliminary         American Preliminary         3 Topographic         4 CCTV/Review         5 Rehab Recol         6 Preliminary         7 QA/QC         B Preliminary         Mountain Pr         1 Research, Cd         2 Natural Resc         3 Topographic         4 Routing Alter         5 Preliminary         6 QA/QC         2 Natural Resc         3 Topographic         4 Routing Alter         5 Preliminary         6 QA/QC         2 Young Amer         1 30% Design         2 Potholing         3 Geotechnica         4 90% Design         5 100% Bid Re         6 Workshops         7 QA/QC         8 Bell Mounta         1 30% Design         5 100% Bid Re         6 Workshops         7 QA/QC         8 Bell Mounta         1 30% Design         2 Potholing         3 Geotechnica         4 90% Design         5 100% Bid Re         6 Workshops         7 QA/QC <th></th> <th></th> <th>Survey/SUE</th> <th>ССТУ</th> <th>Wetlands</th> <th>Geotech</th> <th>Potholing CO Utility</th> <th>Sub 10%</th> <th>Direct</th> <th></th> <th>Total</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th>Billing</th> <th>Rate</th> <th></th> <th></th> <th></th> <th></th> <th></th>			Survey/SUE	ССТУ	Wetlands	Geotech	Potholing CO Utility	Sub 10%	Direct		Total						Billing	Rate					
A       American Prican Prican Prican Prican Prican Prican Preliminary         .1       Research, Co.         .2       CCTV/Manh         .3       Topographic         .4       CCTV Review         .5       Rehab Record         .6       Preliminary         .7       QA/QC         B       Preliminary         Mountain Priliminary       Research, Co.         .1       Research, Co.         .2       Natural Reso         .3       Topographic         .4       Routing Alter         .5       Preliminary         .6       QA/QC         2       Young Amer         .1       30% Design         .5       100% Bid Re         .6       Workshops         .7       QA/QC         3       Geotechnica         .4       90% Design         .5       100% Bid Re         .6       Workshops         .7       QA/QC         3       Geotechnica         .4       90% Design         .5       100% Bid Re         .6       Workshops         .7       QA/QC <td< th=""><th>Task Description</th><th>Task Cost</th><th>Precision</th><th>ProPipe</th><th>ERO</th><th>Kumar</th><th>Finders</th><th>Markup</th><th></th><th>Labor Costs</th><th>Hours</th><th>\$195.00</th><th>\$275.00</th><th>\$250.00</th><th>\$280.00</th><th>\$185.00</th><th>\$135.00</th><th>\$135.00</th><th>\$115.00</th><th>\$180.00</th><th>\$160.00</th><th>\$135.00</th><th>\$150.00</th></td<>	Task Description	Task Cost	Precision	ProPipe	ERO	Kumar	Finders	Markup		Labor Costs	Hours	\$195.00	\$275.00	\$250.00	\$280.00	\$185.00	\$135.00	\$135.00	\$115.00	\$180.00	\$160.00	\$135.00	\$150.00
American Pri1Research, Cd.2CCTV/Manh.3Topographic.4CCTV Review.5Rehab Recol.6Preliminary.7QA/QC8Preliminary.7QA/QC8Preliminary.7QA/QC8Preliminary.6QA/QC2Young Amer.1Research, Cd.3Topographic.4Routing Alter.5Preliminary.6QA/QC2Young Amer.130% Design.2Potholing3Geotechnica.490% Design.5100% Bid Re.6Workshops.7QA/QC8Bell Mounta.130% Design.5100% Bid Re.6Workshops.7QA/QC8Bell Mounta.130% Design.5100% Bid Re.6Workshops.7QA/QC8Bell Mounta.130% Design.5100% Bid Re.6Workshops.7QA/QC8Bell Mounta.130% Design.5100% Bid Re.6Workshops.7QA/QC8Project Mar.	nary Design and Condition Assessment - Young							Γ															
2       CCTV/Manh         3       Topographic         4       CCTV Review         5       Rehab Recol         6       Preliminary         7       QA/QC         8       Preliminary         7       QA/QC         8       Preliminary         7       QA/QC         8       Preliminary         7       QA/QC         8       Routing Alter         5       Preliminary         6       QA/QC         2       Young Amee         1       30% Design         2       Potholing         3       Geotechnica         4       90% Design         5       100% Bid Re         6       Workshops         7       QA/QC         8       Bell Mounta         1       30% Design         5       100% Bid Re         6       Workshops         7       QA/QC         8       Bell Mounta         1       30% Design         5       100% Bid Re         6       Workshops         7       QA/QC         <			1																				
3       Topographic         4       CCTV Review         5       Rehab Reco         6       Preliminary         7       QA/QC         8       Preliminary         7       QA/QC         8       Preliminary         7       QA/QC         8       Preliminary         6       Preliminary         7       QA/QC         2       Natural Resc         3       Topographic         4       Routing Alter         5       Preliminary         6       QA/QC         2       Young Amee         1       30% Design         5       100% Bid Re         6       Workshops         7       QA/QC         8       Bell Mounta         1       30% Design         5       100% Bid Re         6       Workshops         7       QA/QC         8       Bell Mounta         1       30% Design         5       100% Bid Re         6       Workshops         7       QA/QC         8       Bell Mounta	h, Collect and Evaluate Background Data	\$1,745	1					\$0		\$1,745	11	1	2					4	4				
<ul> <li>4 CCTV Review Rehab Recoil</li> <li>5 Rehab Recoil</li> <li>6 Preliminary OQA/QC</li> <li>8 Preliminary Mountain Pr</li> <li>1 Research, CC</li> <li>2 Natural Resc</li> <li>3 Topographic</li> <li>4 Routing Alter</li> <li>5 Preliminary</li> <li>6 QA/QC</li> <li>2 Young Amer</li> <li>1 30% Design</li> <li>2 Potholing</li> <li>3 Geotechnica</li> <li>4 90% Design</li> <li>5 100% Bid Re</li> <li>6 Workshops</li> <li>7 QA/QC</li> <li>8 Bell Mounta</li> <li>1 30% Design</li> <li>5 100% Bid Re</li> <li>6 Workshops</li> <li>7 QA/QC</li> <li>8 Bell Mounta</li> <li>1 30% Design</li> <li>2 Potholing</li> <li>3 Geotechnica</li> <li>4 90% Design</li> <li>5 100% Bid Re</li> <li>6 Workshops</li> <li>7 QA/QC</li> <li>8 Bell Mounta</li> <li>1 30% Design</li> <li>5 100% Bid Re</li> <li>6 Workshops</li> <li>7 QA/QC</li> <li>8 Bell Mounta</li> <li>1 30% Design</li> <li>5 100% Bid Re</li> <li>6 Workshops</li> <li>7 QA/QC</li> <li>8 Bell Mounta</li> <li>1 30% Design</li> <li>1 00% Bid Re</li> <li>6 Workshops</li> <li>7 QA/QC</li> <li>9 Potholing</li> <li>3 Geotechnica</li> <li>4 90% Design</li> <li>5 100% Bid Re</li> <li>6 Workshops</li> <li>7 QA/QC</li> <li>9 Potholing</li> <li>3 Geotechnica</li> <li>4 90% Design</li> <li>5 100% Bid Re</li> <li>6 Workshops</li> <li>7 QA/QC</li> </ul>	lanhole Inspections	\$63,294	1	\$56,767				\$5,677		\$850	4		2										2
<ul> <li>Rehab Recoil</li> <li>Preliminary</li> <li>QA/QC</li> <li>Preliminary</li> <li>QA/QC</li> <li>Preliminary</li> <li>Mountain Pr</li> <li>Research, CC</li> <li>Natural Resc</li> <li>Topographic</li> <li>Routing Alter</li> <li>Preliminary</li> <li>QA/QC</li> <li>Young Ameri</li> <li>30% Design</li> <li>QO% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Bell Mounta</li> <li>30% Design</li> <li>Geotechnica</li> <li>90% Design</li> <li>30% Design</li> <li>Geotechnica</li> <li>90% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Bell Mounta</li> <li>30% Design</li> <li>Geotechnica</li> <li>90% Design</li> <li>Geotechnica</li> <li>90% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Bell Mounta</li> <li>30% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Bell Mounta</li> <li>30% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Bell Mounta</li> <li>30% Design</li> <li>Geotechnica</li> <li>490% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Potholing</li> <li>Geotechnica</li> <li>490% Design</li> <li>Call Algo</li> <li>Potholing</li> <li>Geotechnica</li> <li>Potholing</li> <l< td=""><td>aphic Survey (Young American)</td><td>\$68,142</td><td>\$60,338</td><td></td><td></td><td></td><td></td><td>\$6,034</td><td></td><td>\$1,770</td><td>12</td><td>2</td><td></td><td></td><td></td><td></td><td></td><td>8</td><td></td><td></td><td></td><td></td><td>2</td></l<></ul>	aphic Survey (Young American)	\$68,142	\$60,338					\$6,034		\$1,770	12	2						8					2
66       Preliminary         77       QA/QC         8       Preliminary         Mountain Pr         1       Research, Cd.         2       Natural Resc         3       Topographic         4       Routing Alter         5       Preliminary         6       QA/QC         2       Young Amer         1       30% Design         2       Potholing         3       Geotechnica         4       90% Design         5       100% Bid Re         6       Workshops         7       QA/QC         8       Bell Mounta         13       30% Design         5       100% Bid Re         6       Workshops         7       QA/QC         8       Bell Mounta         13       30% Design         5       100% Bid Re         6       Workshops         7       QA/QC         8       Bell Mounta         13       30% Design         5       100% Bid Re         6       Workshops         7       QA/QC	eview / Cond Assess Report	\$12,800	1					\$0		\$12,800	78		16					60					2
7     QA/QC       B     Preliminary Mountain Pr       1     Research, Cd.       2     Natural Resc.       3     Topographic       4     Routing Alter       5     Preliminary       6     QA/QC       2     Young Amer       1     30% Design       2     Potholing       3     Geotechnica       4     90% Design       5     100% Bid Re       6     Workshops       7     QA/QC       8     Bell Mounta       1     30% Design       5     100% Bid Re       6     Workshops       7     QA/QC       8     Bell Mounta       1     30% Design       5     100% Bid Re       6     Workshops       7     QA/QC       8     Bell Mounta       1     30% Design       2     Potholing       3     Geotechnica       4     90% Design       5     100% Bid Re       6     Workshops       7     QA/QC       8     Bell Mounta       1     30% Design       5     100% Bid Re       6     Workshops	Recommendation Report	\$12,800	1					\$0		\$12,800	78		16					60					2
B       Preliminary Mountain Pr         1       Research, Cd.         2       Natural Resc.         3       Topographic         4       Routing Alter         5       Preliminary         6       QA/QC         2       Young Amee         1       30% Design         2       Potholing         3       Geotechnica         4       90% Design         5       100% Bid Re         6       Workshops         7       QA/QC         8       Bell Mounta         1       30% Design         5       100% Bid Re         6       Workshops         7       QA/QC         8       Bell Mounta         1       30% Design         5       100% Bid Re         6       Workshops         7       QA/QC         8       Bell Mounta         1       30% Design         2       Potholing         3       Geotechnica         4       90% Design         5       100% Bid Re         6       Workshops         7       QA/QC </td <td>nary Design Workshop</td> <td>\$3,470</td> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td>\$0</td> <td>\$50</td> <td>\$3,420</td> <td>20</td> <td>4</td> <td>4</td> <td></td> <td></td> <td></td> <td></td> <td>8</td> <td>4</td> <td></td> <td></td> <td></td> <td></td>	nary Design Workshop	\$3,470	1					\$0	\$50	\$3,420	20	4	4					8	4				
B       Mountain Program         1       Research, Co.         2       Natural Reso         3       Topographic         4       Routing Alter         5       Preliminary         6       QA/QC         2       Young Americ         1       30% Design         2       Potholing         3       Geotechnica         4       90% Design         5       100% Bid Re         6       Workshops         7       QA/QC         8       Bell Mounta         1       30% Design         5       100% Bid Re         6       Workshops         7       QA/QC         8       Bell Mounta         13       30% Design         5       100% Bid Re         6       Workshops         7       QA/QC         8       Bell Mounta         13       30% Design         2       Potholing         3       Geotechnica         4       90% Design         5       100% Bid Re         6       Workshops         7       QA/QC	ļ	\$3,200	1					\$0		\$3,200	12		8	4									
B       Mountain Program         1       Research, Co.         2       Natural Reso         3       Topographic         4       Routing Alter         5       Preliminary         6       QA/QC         2       Young Americ         1       30% Design         2       Potholing         3       Geotechnica         4       90% Design         5       100% Bid Re         6       Workshops         7       QA/QC         8       Bell Mounta         1       30% Design         5       100% Bid Re         6       Workshops         7       QA/QC         8       Bell Mounta         13       30% Design         5       100% Bid Re         6       Workshops         7       QA/QC         8       Bell Mounta         13       30% Design         2       Potholing         3       Geotechnica         4       90% Design         5       100% Bid Re         6       Workshops         7       QA/QC	Task 1A Subtotal (Base fee)	\$165,451	\$60,338	\$56,767	\$0	\$0	\$0	\$11,711	\$50	\$36,585	215	7	48	4	0	0	0	140	8	0	0	0	8
B       Mountain Program         1       Research, Co.         2       Natural Reso         3       Topographic         4       Routing Alter         5       Preliminary         6       QA/QC         2       Young Americ         1       30% Design         2       Potholing         3       Geotechnica         4       90% Design         5       100% Bid Re         6       Workshops         7       QA/QC         8       Bell Mounta         1       30% Design         5       100% Bid Re         6       Workshops         7       QA/QC         8       Bell Mounta         13       30% Design         5       100% Bid Re         6       Workshops         7       QA/QC         8       Bell Mounta         13       30% Design         2       Potholing         3       Geotechnica         4       90% Design         5       100% Bid Re         6       Workshops         7       QA/QC	nary Design and Condition Assessment - Bell																						
<ul> <li>Natural Resc.</li> <li>Topographic</li> <li>Routing Alter</li> <li>Preliminary</li> <li>QA/QC</li> <li>Young Amer</li> <li>30% Design</li> <li>Potholing</li> <li>Geotechnica</li> <li>90% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Bell Mounta</li> <li>30% Design</li> <li>Geotechnica</li> <li>90% Design</li> <li>30% Design</li> <li>20% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>70 QA/QC</li> <li>Bell Mounta</li> <li>30% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>70 QA/QC</li> <li>Bell Mounta</li> <li>30% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>70 QA/QC</li> <li>Bell Mounta</li> <li>30% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>70 QA/QC</li> <li>Bell Mounta</li> <li>30% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>70 QA/QC</li> <li>Potholing</li> <li>Geotechnica</li> <li>90% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>70 QA/QC</li> </ul>			1																				
<ul> <li>Topographic</li> <li>Routing Alte</li> <li>Preliminary</li> <li>QA/QC</li> <li>Young Ameri</li> <li>30% Design</li> <li>Potholing</li> <li>Geotechnica</li> <li>90% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Bell Mounta</li> <li>30% Design</li> <li>Geotechnica</li> <li>90% Design</li> <li>30% Design</li> <li>20% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Bell Mounta</li> <li>30% Design</li> <li>Geotechnica</li> <li>90% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Bell Mounta</li> <li>30% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Bell Mounta</li> <li>30% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Bell Mounta</li> <li>30% Design</li> <li>Geotechnica</li> <li>90% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Potholing</li> <li>Geotechnica</li> <li>90% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> </ul>	h, Collect and Evaluate Background Data	\$1,585	1					\$0		\$1,585	11	3						4	4				
<ul> <li>A Routing Alte</li> <li>Preliminary</li> <li>Preliminary</li> <li>QA/QC</li> <li>Young Ameri</li> <li>30% Design</li> <li>Potholing</li> <li>Geotechnica</li> <li>90% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Bell Mounta</li> <li>30% Design</li> <li>Geotechnica</li> <li>90% Design</li> <li>30% Design</li> <li>20% Design</li> <li>30% Design</li> <li>30% Design</li> <li>90% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Bell Mounta</li> <li>30% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Bell Mounta</li> <li>30% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Bell Mounta</li> <li>30% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Potholing</li> <li>Geotechnica</li> <li>90% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> </ul>	Resource Assessment	\$13,890	1		\$12,000			\$1,200		\$690	4	2											2
<ul> <li>Preliminary</li> <li>QA/QC</li> <li>Young Ameri</li> <li>30% Design</li> <li>Potholing</li> <li>Geotechnica</li> <li>90% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Bell Mounta</li> <li>30% Design</li> <li>90% Design</li> <li>Geotechnica</li> <li>90% Design</li> <li>30% Design</li> <li>90% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Bell Mounta</li> <li>30% Design</li> <li>90% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Bell Mounta</li> <li>30% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Bell Mounta</li> <li>30% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Potholing</li> <li>Geotechnica</li> <li>90% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Project Mar</li> </ul>	aphic Survey (Bell Mountain Projects)	\$23,744	\$19,976					\$1,998		\$1,770	12	2						8					2
<ul> <li>Preliminary</li> <li>QA/QC</li> <li>Young Ameri</li> <li>30% Design</li> <li>Potholing</li> <li>Geotechnica</li> <li>90% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Bell Mounta</li> <li>30% Design</li> <li>90% Design</li> <li>Geotechnica</li> <li>90% Design</li> <li>30% Design</li> <li>90% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Bell Mounta</li> <li>30% Design</li> <li>90% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Bell Mounta</li> <li>30% Design</li> <li>90% Design</li> <li>Geotechnica</li> <li>90% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Bell Mounta</li> <li>30% Design</li> <li>Geotechnica</li> <li>90% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Project Mar</li> </ul>	Alternative Analysis	\$8,010	1					\$0		\$8,010	60	8						20	30				2
<ul> <li>A. A A A A A A A A A A A A A A A A A A</li></ul>	nary Design Workshop	\$2,370	1					\$0	\$50	\$2,320	16	4						8	4				
<ul> <li>Young Amer.</li> <li>30% Design</li> <li>Potholing</li> <li>Geotechnica</li> <li>90% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Bell Mounta</li> <li>30% Design</li> <li>90% Design</li> <li>Geotechnica</li> <li>90% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Bell Mounta</li> <li>30% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Bell Mounta</li> <li>30% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Bell Mounta</li> <li>30% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Bell Mounta</li> <li>30% Design</li> <li>Geotechnica</li> <li>90% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Potholing</li> <li>Geotechnica</li> <li>90% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Project Mar</li> </ul>		\$2,000	1					\$0		\$2,000	8			8									
130% Design2Potholing3Geotechnica490% Design5100% Bid Re6Workshops7QA/QC8Bell Mounta130% Design2Potholing3Geotechnica490% Design5100% Bid Re6Workshops7QA/QC8Bell Mounta100% Bid Re6Workshops7QA/QC8Bell Mounta130% Design2Potholing3Geotechnica490% Design5100% Bid Re6Workshops7QA/QC5Project Mar	Task 1B Subtotal (Alternate)	\$51,599	\$19,976	\$0	\$12,000	\$0	\$0	\$3,198	\$50	\$16,375	111	19	0	8	0	0	0	40	38	0	0	0	6
130% Design2Potholing3Geotechnica490% Design5100% Bid Re6Workshops7QA/QC8Bell Mounta130% Design2Potholing3Geotechnica490% Design5100% Bid Re6Workshops7QA/QC8Bell Mounta100% Bid Re6Workshops7QA/QC8Bell Mounta130% Design2Potholing3Geotechnica490% Design5100% Bid Re6Workshops7QA/QC5Project Mar	American Infrastructure Improvements Design																						
<ul> <li>Potholing</li> <li>Geotechnica</li> <li>90% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Bell Mounta</li> <li>30% Design</li> <li>Potholing</li> <li>Geotechnica</li> <li>90% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Bell Mounta</li> <li>30% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Bell Mounta</li> <li>30% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Bell Mounta</li> <li>30% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Potholing</li> <li>Geotechnica</li> <li>90% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Project Mar</li> </ul>		\$42,240	1					\$0		\$42,240	264	0	20	0		0		92	0	0	152	0	0
<ul> <li>Geotechnica</li> <li>90% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Bell Mounta</li> <li>30% Design</li> <li>Potholing</li> <li>Geotechnica</li> <li>90% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Bell Mounta</li> <li>30% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Bell Mounta</li> <li>30% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>7 QA/QC</li> <li>Bell Mounta</li> <li>30% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>7 QA/QC</li> <li>Bell Mounta</li> <li>30% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>7 QA/QC</li> <li>Potholing</li> <li>Geotechnica</li> <li>90% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>7 QA/QC</li> <li>Project Mar</li> </ul>	•	\$42,240 \$15,790	1				\$14,000	\$0 \$1,400		\$42,240 \$390	204	2	20	0		0		52	0	0	152	0	0
<ul> <li>90% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Bell Mounta</li> <li>30% Design</li> <li>Potholing</li> <li>Geotechnica</li> <li>90% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Bell Mounta</li> <li>30% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Bell Mounta</li> <li>30% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Bell Mounta</li> <li>30% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Bell Mounta</li> <li>30% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Potholing</li> <li>Geotechnica</li> <li>90% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Project Mar</li> </ul>	•	\$13,790	1			\$7,000	\$14,000	\$1,400 \$700		\$390 \$390	2	2											
<ul> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Bell Mounta</li> <li>30% Design</li> <li>Potholing</li> <li>Geotechnica</li> <li>90% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Bell Mounta</li> <li>30% Design</li> <li>90% Design</li> <li>Geotechnica</li> <li>90% Design</li> <li>100% Bid Re</li> <li>90% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Bell Mounta</li> <li>30% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Potholing</li> <li>Geotechnica</li> <li>90% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Project Mar</li> </ul>	-	\$76,685	1			Ş7,000		\$700		\$390 \$76,685	455	2	75	0		0		100	0	0	100	0	4
<ul> <li>Keynelic Strategy</li> <li>Workshops</li> <li>QA/QC</li> <li>Bell Mounta</li> <li>30% Design</li> <li>Potholing</li> <li>Geotechnica</li> <li>90% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Bell Mounta</li> <li>30% Design</li> <li>Geotechnica</li> <li>90% Design</li> <li>Geotechnica</li> <li>90% Design</li> <li>Geotechnica</li> <li>90% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Potholing</li> <li>Geotechnica</li> <li>90% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Project Mar</li> </ul>			1							\$76,685 \$29,235	455 165	0	75	0		0		188	0	0	188 60	0	4
<ul> <li>7 QA/QC</li> <li>8 Bell Mounta</li> <li>1 30% Design</li> <li>2 Potholing</li> <li>3 Geotechnica</li> <li>4 90% Design</li> <li>5 100% Bid Re</li> <li>6 Workshops</li> <li>7 QA/QC</li> <li>8 Bell Mounta</li> <li>1 30% Design</li> <li>2 Potholing</li> <li>3 Geotechnica</li> <li>4 90% Design</li> <li>5 100% Bid Re</li> <li>6 Workshops</li> <li>7 QA/QC</li> <li>8 Bell Mounta</li> <li>1 30% Design</li> <li>2 Potholing</li> <li>3 Geotechnica</li> <li>4 90% Design</li> <li>5 100% Bid Re</li> <li>6 Workshops</li> <li>7 QA/QC</li> <li>8 Project Mar</li> </ul>	d Ready Design Package	\$29,235	1					\$0	ć. r.o.			°,	39	U		0		66	-	0	60	0	0
<ul> <li>Bell Mounta</li> <li>30% Design</li> <li>Potholing</li> <li>Geotechnica</li> <li>90% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Bell Mounta</li> <li>30% Design</li> <li>Potholing</li> <li>Geotechnica</li> <li>90% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>Q0% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> </ul>	ops	\$2,490	1					\$0	\$50	\$2,440	16	2	2 8	0				6	6				
1       30% Design         2       Potholing         3       Geotechnica         4       90% Design         5       100% Bid Re         6       Workshops         7       QA/QC         4       Bell Mounta         1       30% Design         2       Potholing         3       Geotechnica         4       90% Design         5       100% Bid Re         6       Workshops         7       QA/QC         5       100% Bid Re         6       Workshops         7       QA/QC	To the Contract of	\$4,200	\$0	ća	ćo	ć7.000	ć1 4 000	\$0	ć.c.o.	\$4,200 <b>\$155,580</b>	16 <b>920</b>	6	8 144	8	0	0	0	252	6	0	400	0	
1       30% Design         2       Potholing         3       Geotechnica         4       90% Design         5       100% Bid Re         6       Workshops         7       QA/QC         4       Bell Mounta         1       30% Design         2       Potholing         3       Geotechnica         4       90% Design         5       100% Bid Re         6       Workshops         7       QA/QC         5       100% Bid Re         6       Workshops         7       QA/QC	Task 2 Subtotal	\$178,730	ŞU	\$0	\$0	\$7,000	\$14,000	\$2,100	\$50	\$155,580	920	6	144	ð	U	U	U	352	D	U	400	U	4
<ul> <li>Potholing</li> <li>Geotechnica</li> <li>Geotechnica</li> <li>90% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Bell Mounta</li> <li>30% Design</li> <li>Potholing</li> <li>Geotechnica</li> <li>90% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Potpiect Mar</li> </ul>	untain Raw Pipeline Design (Alternate)		1																				
<ul> <li>Geotechnica</li> <li>90% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Bell Mounta</li> <li>30% Design</li> <li>Potholing</li> <li>Geotechnica</li> <li>90% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Project Mar</li> </ul>	•	\$29,580	1					\$0		\$29,580	220	12						40	60	8		100	
<ul> <li>90% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Bell Mounta</li> <li>30% Design</li> <li>Potholing</li> <li>Geotechnica</li> <li>90% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Project Mar</li> </ul>	•	\$3,300	1				\$3,000	\$300		\$0	0												
.5       100% Bid Re         .6       Workshops         .7       QA/QC         4       Bell Mounta         .1       30% Design         .2       Potholing         .3       Geotechnica         .4       90% Design         .5       100% Bid Re         .6       Workshops         .7       QA/QC         5       Project Mar	nnical Investigations	\$9,900	1			\$9,000		\$900		\$0	0												
<ul> <li>.6 Workshops</li> <li>.7 QA/QC</li> <li>Bell Mounta</li> <li>.1 30% Design</li> <li>.2 Potholing</li> <li>.3 Geotechnica</li> <li>.4 90% Design</li> <li>.5 100% Bid Re</li> <li>.6 Workshops</li> <li>.7 QA/QC</li> <li>.6 Project Mar</li> </ul>		\$35,180	1					\$0		\$35,180	264	12						40	80	8		120	4
<ul> <li>A.7 QA/QC</li> <li>Bell Mounta</li> <li>30% Design</li> <li>Potholing</li> <li>Geotechnica</li> <li>90% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>7 QA/QC</li> <li>Project Mar</li> </ul>	d Ready Design Package	\$11,930	1					\$0		\$11,930	90	4						20	32	4		30	
<ul> <li>Bell Mounta</li> <li>30% Design</li> <li>Potholing</li> <li>Geotechnica</li> <li>90% Design</li> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Project Mar</li> </ul>	ops	\$2,490	1					\$0	\$50	\$2,440	16	2	2					6	6				
1     30% Design       2     Potholing       3     Geotechnica       4     90% Design       5     100% Bid Re       6     Workshops       7     QA/QC	ļ	\$2,200	1					\$0		\$2,200	8		8										
1     30% Design       2     Potholing       3     Geotechnica       4     90% Design       5     100% Bid Re       6     Workshops       7     QA/QC	Task 3 Subtotal (Alternate)	\$94,580	\$0	\$0	\$0	\$9,000	\$3,000	\$1,200	\$50	\$81,330	598	30	10	0	0	0	0	106	178	20	0	250	4
2 Potholing 3 Geotechnica 4 90% Design 5 100% Bid Re 6 Workshops 7 QA/QC 5 Project Mar	untain Meter Vault Upgrades Design (Alternate)	j	1																				
2 Potholing 3 Geotechnica 4 90% Design 5 100% Bid Re 6 Workshops 7 QA/QC 5 Project Mar		, \$26,660	1 I					\$0		\$26,660	180	8				40	76	8	16		8	24	
.4         90% Design           .5         100% Bid Re           .6         Workshops           .7         QA/QC           .5         Project Mar		\$3,300	1				\$3,000	\$300		\$0	0												
.4         90% Design           .5         100% Bid Re           .6         Workshops           .7         QA/QC           .5         Project Mar	nnical Investigations	\$1,100	1			\$1,000		\$100		\$0	0												
<ul> <li>100% Bid Re</li> <li>Workshops</li> <li>QA/QC</li> <li>Project Mar</li> </ul>		\$49,370	1 I					\$0		\$49,370	338	8			8	40	86	24	48		40	80	4
.6 Workshops .7 QA/QC 5 Project Mar	d Ready Design Package	\$9,860	1					\$0		\$9,860	68	4				8	16	8	8		8	16	
7 QA/QC 5 Project Mar		\$2,490	1					\$0	\$50	\$2,440	16	2	2					6	6				
5 Project Mar	ļ	\$4,200	1 I					\$0		\$4,200	16		8	8									
-	Task 4 Subtotal (Alternate)	\$96,980	\$0	\$0	\$0	\$1,000	\$3,000	\$400	\$50	\$92,530	618	22	10	8	8	88	178	46	78	0	56	120	4
-																							
.i Project Man		622.400	1					60		622 400	100	120											60
	Management (6 month period)	\$32,400	1					\$0 ¢0	éar	\$32,400	180	120	A			2	2	~	~				60
.2 Kickoff Mee	0	\$4,045		<b>A</b> 0	<u>^</u>	<b>A</b> 0	<b>6</b> 0	\$0	\$25	\$4,020	24	4	4	<u> </u>	_	2	2	6	6	~	0	_	~
	Task 5 Subtotal	\$36,445	\$0	\$0	\$0	\$0	\$0	\$0	\$25	\$36,420	204	124	4	0	0	2	2	6	6	0	U	0	60
Fee Proposal		4000 00	447.44	4-6		4	4	A	A	4000							-					-	
	PROJECT TOTAL BASE PROPOSAL	\$380,626	\$60,338	\$56,767	\$0	\$7,000	\$14,000	\$13,811	\$125	\$228,585	1,339	137	196	12	0	2	2	498	20	0	400	0	72
rnates Fee Propos				4.5	410.000	440.000	40.000	44	Ac	6400 000	4 977						4.55	465					
	posal					C40.000	CC 000			C100 22F	1 227	74	30					403	204			170	14
Proposal with Alte	posal TOTAL ALTERNATES PROPOSAL	\$243,159	\$19,976	Ş0	\$12,000	\$10,000	\$6,000	\$4,798	\$150	\$190,235	1,327	71	20	16	8	88	178	192	294	20	56	370	14
suming that addition	posal TOTAL ALTERNATES PROPOSAL			\$0 \$56,767					\$150			208	20	28	8	90	178	690	314	20	456	370	86



.....

Young American Infrastructure Improvements Project Design, Bell Mountain Raw Pipeline, and Bell Mountain Wells Flow Meter Vault Electrical Upgrade Services Town of Castle Rock, CO

JULY 7, 2023





SUBMITTED BY

Dewberry Engineers Inc. 990 S. Broadway Suite 400 Denver, CO 80209

#### SUBMITTED TO

Town of Castle Rock Castle Rock Water 175 Kellogg Court Castle Rock, CO 80109



Dewberry Engineers Inc. 990 South Broadway, Suite 400 Denver, CO 80209-4275 303.825.2322 fax www.dewberry.com

303.825.1802 303.825.2322 fax

July 7, 2023

Town of Castle Rock, Castle Rock Water Department ATTN: Matthew Hayes 175 Kellogg Court Castle Rock, CO 80109

We acknowledge the receipt of Addendum No. 1.

RE: Young American Infrastructure Improvements Project Design, Bell Mountain Raw Water Pipeline, and Bell Mountain Wells Flow Meter Vault Electrical Upgrade Services

Dear Mr. Hayes

Dewberry is pleased to submit this proposal for the Young American Infrastructure Improvements Project Design, Bell Mountain Raw Water Pipeline, and Bell Mountain Wells Flow Meter Project. We understand that this project is an important element in enhancing the Town of Castle Rock's (Town) ability to maintain a high level of quality service to customers throughout its service area. This project includes several distinct types of work, and the Town will need a highly qualified, multidisciplinary project team with a responsive, local presence and a depth of experience with each type of work to deliver a successful project. Our team brings outstanding expertise in data collection and planning, water and sewer pipeline condition assessment and rehabilitation, pipeline routing studies and alternatives analysis, pipeline design, wellhead facilities design, and easement acquisition. We have a proven ability to successfully deliver quality projects with the Town. With the necessary skills, experience, and understanding of the key tasks needed to make this project successful the Dewberry team offers the following benefits for this project:

**Proven Track Record**. Dewberry is proud to have been providing professional engineering services for Colorado communities for over 28 years. We have been working successfully with the Town since 2000 and have completed more than 50 successful projects with the Town. The members of our team have experience working with the Town and are familiar with the Town's staff, design procedures, and processes. We have provided planning, design, and construction phase services for water and sewer pipelines, pump stations, water treatment facilities, and wellhead facilities, including some of your most critical, challenging, and fast-track projects with similar challenges and expertise requirements as this project.

Local, Cohesive Team with Superior Technical Expertise. The Dewberry team has worked on over 120 projects with our team of subconsultants, including over 50 projects for the Town. Working as an integrated team, we will leverage our long, successful history of working together, and with the Town, to co-deliver a successful project. In the last five years the Dewberry team has designed major raw water pumping facilities, three wellhead metering and electrical facilities, raw water transmission pipelines, and sewer upgrades for the Town. Sam Franzen and Dave Butler have worked on several recent, successful projects with the Town. Elton DeSouza has 30 years of experience in sewer and water projects, specializing in sewer design, inspection, and rehabilitation, providing valuable knowledge and skills to the team.

**Value.** Dewberry's highly competitive cost structure allows us to dedicate more time to a project while keeping costs in line with budgets and Town expectations. Having more time allows us to complete work products that are clear, consistent, and well-coordinated resulting in reduced construction costs and lower potential for conflicts, changes, and schedule impacts during construction. The Dewberry team takes pride in its proven track record of successful completion of a wide variety of projects on time and within budget, and we are dedicated to continue providing the Town with the same high-quality level of service they have come to expect.

Thank you again for the opportunity to propose on this project. Should you have any questions regarding our proposal, please feel free to reach out to myself at 303.951.0616 or sfranzen@dewberry.com.

Sincerely,

Sand Franzen, PE, Project Manager

# SECTION 2 – RESPONSE TO SCOPE OF WORK

# **Project Understanding**

Castle Rock Water has identified three infrastructure projects to improve their sanitary sewer collection system and upgrade their potable water distribution and raw water collection systems. These projects are identified as follows:

- Young American Infrastructure Includes the condition assessment of approximately 12,560 LF of sanitary sewer ranging in size from 6 to 8-inch in diameter, 76 manholes and upsizing of 14,251 LF water distribution pipe from 4 and 6-inch to 8 and 12-inch. The entire sanitary sewer collection system will be CCTV inspected, and each manhole will be inspected. Each pipe segment and manhole will be evaluated and recommended for rehabilitation, as necessary.
- <u>Bell Mountain Raw Water Pipeline</u> Design of approximately 6,400 LF of 12-inch pipeline to connect the Town's existing Denver Basin Wells in the Bell Mountain Ranch subdivision to the recently acquired Bell Mountain Water Treatment Plant (WTP).
- <u>Bell Mountain Well Facility Meter Upgrades</u> Design of approximately 200 LF of 3 to 6-inch pipeline to connect the new well being drilled at the Bell Mountain wellsite to the existing flow meter vault and upgrades to the existing meter vault, power equipment, instrumentation, and controls to accommodate the new well and meet Town standards.

# **Project Approach**

The following sections highlight critical elements of our approach to completing the engineering analysis and design for each of the components of this project. The process for each component will start with the study of existing data and information. The engineering evaluation will then proceed through preliminary and final design. The results of the study and evaluation phase for each component will be compiled into a technical memorandum for presentation to the Town. A preliminary design workshop will be held to discuss the findings and establish concurrence on the basis of design and set the direction for the design phase.

### Young American Sanitary Sewer Evaluation and Rehabilitation

We will collect and perform a thorough desktop review of all available/applicable data regarding the sanitary sewer collection system to confirm its configuration and to gain a true understanding of the system. A site map will be generated using GIS data and will include the pipe network with pipe sizes and material, identification of manholes, and potential areas of traffic concerns.

Dewberry will procure the services of a reputable pipeline inspection company, Pro-Pipe, to perform CCTV inspections of the pipelines using National Association of Sewer Service Companies' (NASSCO) Pipeline Assessment Certification Program (PACP) standards and manhole inspections conforming to Manhole Assessment Certification Program (MACP). Inspection reports will be created for each pipe segment presenting overall condition of the pipe and identifying damaged areas as well as other potential defects such as groundwater infiltration, sediment accumulation and displaced pipe alignment or grade. Manhole inspections will also be performed by ProPipe, using digital scanning equipment (PANORAMO®) to avoid confined space entry. This will be done to determine overall condition, identify defects and potential groundwater infiltration, and rehabilitation recommendations. All field data will be made available to the Town for review as it becomes available.

The field data will be reviewed and compiled into a detailed Condition Assessment Evaluation and Rehabilitation Recommendation Plan report. CCTV and manhole inspection data will be reviewed by Dewberry PACP/MACP certified personnel. Dewberry has invested in the NASSCO training of several local engineers to provide these services. Each pipe segment and manhole will be evaluated distinguishing between structural and O&M type defects and will be ranked according to the extent of the observed defects on a scale from 1 to 5. Preliminary rehabilitation recommendations will be assigned to



each pipe segment and may consist of open-cut pipe replacement or trenchless rehabilitation methods such as cured-in-place pipe (CIPP) lining (other trenchless technologies such as pipe bursting may be evaluated depending on the condition of the pipe, the number of services lateral connections, or at the request of the Town). These improvement recommendations will be dependent on physical condition of the host pipe, pipe size, and capacity needs. Manholes will be recommended for rehabilitation depending on the extent of deterioration.

Once preliminary recommendation alternatives have been identified and the report submitted, a workshop will be scheduled with the Town to discuss the report and confirm the recommended rehabilitation approach.

Upon approval of the rehabilitation plan, Dewberry will begin the design process by laying out the applicable pipe segments on plan sheets. It is assumed that any pipe replacement will occur in place without the need to identify alternate alignments. Plan and profile sheets will be created for pipe segment replacement while trenchless rehabilitation will be depicted on plan only sheets. Water main improvements will be shown, but not labeled on the sanitary sewer sheets to avoid potential conflicts.

We anticipate that pipe replacement will be performed by use of conventional open-cut trench methods with the existing vitrified clay pipe replaced with a more durable PVC, presumably of the same size. Rehabilitation will be accomplished by cured in place pipe (CIPP) method using either water, steam, or UV-cured curing process. Each curing process provides its own unique advantages and disadvantages. However, each are readily accepted methods of CIPP installation throughout the country. The preferred curing method will be discussed with the Town as part of the design process. CIPP related specifications may be written to allow for a competitive bid between the curing processes opening the project up to more contractors. Service laterals will be replaced or rehabilitated within the sewer replacement/rehabilitation scope of work.

Bypass pumping will be required to keep sewer lines operating during construction to maintain service to customers. It is envisioned that the Contractor will line or replace one or two segments (MH to MH) at a time and move the bypass system as the construction progresses. Individual houses will require flow control when they discharge directly into the pipe segment being replaced/ lined. There are a few ways to accomplish this, including plugging the service line (at a cleanout if available) and either pumping the sewage out with a small submersible pump or using a vacuum truck to evacuate the pipeline. The requirements for this process will be specified and details will be developed by the Contractor as part of the submittal process during construction.

### Young American Water Distribution Pipe Replacement

Approximately 14,251 LF of 4 and 6-inch diameter cast iron pipe water distribution pipe in the Young American subdivision requires upsizing to meet the Town's current standards. It is envisioned that these water mains will be replaced by open cut trench methods. The existing water distribution pipes are likely located near the edge of pavement (to maintain the 10-feet required horizontal offset from the sanitary sewer pipelines). It is critical to provide uninterrupted water service to all residents during construction. When space allows, the new water main will be installed in a new location within the right-of-way to keep the existing water mains in service until final tie-in of the new water mains. The new location will be as close as possible to the existing distribution pipe while maintaining clearances from the sanitary sewer and other utilities to facilitate service connections. However, the new waterlines may need to be located on the opposite side of the street, depending on space constraints. If there is not space within the right-of-way for offline replacement, online replacement with a temporary service line will be designed to maintain service to customers during construction. All service connections will be relocated and extended from the new pipe to the water meter prior to making the final connection. Once the new water main is in service, the final connections to each service will be made. Valve locations on the new distribution piping will be selected in collaboration with Town staff to minimize service interruptions during construction and facilitate future operation and maintenance.

Pot hole locations will be identified at critical utility tie-in locations and crossings to verify material, size and depths of existing utilities.

The amount of pavement demolition to install the replacement water mains and services connections is expected to be extensive. Depending on the location of the

new lines, it is likely that the entire width of the affected streets or at a minimum half of the street width will require pavement replacement. During design, the location for new waterlines will be selected to minimize the required pavement replacement. This project also provides a great opportunity to determine if there are other utilities, such as storm drains, that are scheduled or in need of upgrades. We will work with Town staff to identify and combine these efforts to minimize disruption to the community and patching of new pavement in the near future.

Other design considerations that will impact the location of the new distribution pipes include:

- Minimize traffic impacts
- Maintain home and business access
- Ease of future access for O&M
- Minimize impacts to and crossings of other utilities

# **Bell Mountain Raw Water Pipeline**

Design of the Bell Mountain Raw Water Pipeline will begin with a routing study to determine the optimal alignment for delivering raw water from the existing Bell Mountain Denver Basin Wells to the Bell Mountain WTP and in the future from the Bell Mountain Wells to the Crystal Valley Ranch WTP. Two alignments will be selected in collaboration with Town staff for evaluation to facilitate cost effective construction, long-term O&M efficiency, avoid permitting/property delays, and manage stakeholder impacts. Key considerations that will be focused on include:

- Constructability
- Total pipe length
- Maintenance access
- Required permanent and temporary easements
- Public impacts
- Wetland/environmental impacts
- Hydraulics
- Operational flexibility

Our team will use a GIS database alignment evaluation platform to place all relevant information into a single repository and facilitate efficient and comprehensive comparison of alternatives and identify fatal flaws in potential alignments. The tool incorporates aerial photos, profile data, land ownership, permitting requirements, environmentally sensitive areas, and surface improvements. This platform can be utilized to provide information to the Town and to import into CAD for presentations or easement discussions.

Alternatives will be scored qualitatively and quantitatively (cost), presented to the Town, and a preferred route will be selected. The alternative route analysis and construction cost estimating will be presented and summarized in an Alternatives Report. This report will present a detailed discussion of the route development, analysis, and selection.

# **Bell Mountain Well Facility Meter**

Upgrades to the existing meter vault and an alignment for the new well pipeline will be coordinated with the Town after reviewing available documentation and collecting field data on the existing site and meter vault. We have assumed upgrading the meter vault to the Town's standards will include:

- New electrical, instrumentation, and controls for new and existing wells meeting the Town's standards
- Adding a new meter run for the new well
- Splitting the existing meter run to measure flow from the two existing wells separately
- Other ancillary items to upgrade the vault to Town standards
- Valving for multiple pumping scenarios

The new pipeline alignment will minimize pipe length and utility crossings. Tie-ins to the existing discharge and blowoff piping will be designed to allow each well to pump to the WTP, blowoff, or other discharge locations simultaneously with the other wells pumping to the other discharge locations.

# Survey, Utility Research, & Potholing

Inadequately located existing utilities can produce some of the largest change orders on pipeline projects. As experts in pipeline design, we have developed processes, both internally and with our long-time subconsultants, to provide accurate and definitive potholing/locates. Immediately upon notice to proceed, Dewberry will contact all of the utility companies identified by 811 and directly obtain their mapping. We will then perform a field reconnaissance to visually verify as many of the utilities as possible. This is the information that will be used in route finalization, as well as shared with our surveyor.



Survey and utility location will be initiated at the beginning of the study phase. Subsurface utility engineering (SUE) will be conducted in accordance with the requirements of the latest edition of ASCE 38, Standard Guidelines for the Collection and Depiction of Existing Subsurface Utility Data and Colorado Subsurface Utility Law (SB18-167). Base mapping will define all existing property lines, easements, and rights-of-way, as well as topography and surface features. As with all of our projects, Dewberry will employ a private utility locator, working with our surveyor to depict initial utility locations in the base mapping. Aerial photography will be utilized in conjunction with a supplemental ground survey. Aerial imagery will also assist in the development of traffic phasing plans and easement acquisition. Dewberry will also survey locations of geotechnical borings and utility location potholes (discussed below).

Utility locating will be initiated using a private locator, and the surveyor will depict the surface locates on the mapping. When mapping is received, our engineering staff will backcheck the survey mapping against the previously obtained utility mapping to verify the presence and expected location of each utility (this is done by physically highlighting on the plans). Apparent discrepancies will be noted and tabulated for resolution. Additional field visits will be conducted to verify/validate this process. A potholing plan that identifies the location on the plan sheet, the identity, number and size of the utility will be developed. A field meeting will be held with our utility potholer, Colorado Utility Finders (CUF), and each location will be visited and discussed.

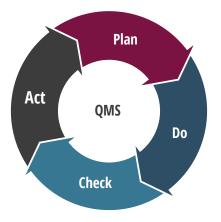
The potholing process will meet all the requirements of SUE, Quality Level A requirements; but more importantly, this is our normal process developed and utilized for the last 20 years.

### **Quality Management System**

Dewberry has a written Quality Manual that embodies a Quality Management System (QMS) that sets forth a flexible and scalable system of policies, procedures, and best practices in order to achieve the highest level of quality possible for our clients. These policies, procedures, and best practices are continuously assessed and revised through the Plan, Do, Check, Act process based model.

At the project level, this means each project must have:

- PLAN a written quality plan (plan),
- DO established quality assurance (QA) and quality control (QC) reviewers, key deliverables, and review procedures to be employed,
- **CHECK** established documentation against which the process can be measured,
- ACT team lessons learned debriefs which are actions to be taken to improve upon quality over time.



Each project QA/QC plan will include identified engineering discipline reviewers, anticipated review schedule dates, QC budgets, and the means/methods on how quality documentation and follow-up will be handled throughout the project duration. In its simplest form, all substantive QC review comments will be logged, comment responses documented, reviewer acknowledgement of agreeable comment responses documented, and final back-checking of all deliverables to verify agreeable resolution and disposition of the comments has been incorporated into the work.

# SECTION 3 – ACTION PLAN & SCHEDULE

We have broken our scope of work into four design tasks in addition to project management:

- 1. Preliminary Design and Condition Assessment
- 2. Young American Infrastructure Improvements Design
- 3. Bell Mountain Raw Water Pipeline Design
- 4. Bell Mountain Meter Vault Upgrades Design

# Tasks 1A & 1B: Preliminary Design and Condition Assessment

Task 1 encompasses data collection and analysis, condition assessment, and preliminary design for the three main components of the project. Task 1A is for the Young American base bid and Task 1B is for the Bell Mountain add alternate. Individual subtasks address the unique elements of each component.

# Task 1.1A and B – Data Collection, Research, and Review

Collect and review available data for each project area. This may include record drawings and reports, 811 utility locate data, and field visit information.

### Task 1.2A – CCTV/Manhole Inspections

Conduct CCTV inspections of sanitary sewers and manhole inspections.

### Task 1.2B – Delineate Wetlands

Delineate wetlands in the project areas for survey.

### Task 1.3A and B – Topographic Survey

Survey will be completed by Precision Survey for the project areas for the Young American Infrastructure Improvements and Bell Mountain Raw Water Pipeline. The survey of the Bell Mountain Pipeline alignment may be delayed until an alignment is selected.

### Task 1.4A – Condition Assessment

Review and evaluate the sanitary sewer inspection data and score the condition of each pipe segment.

### Task 1.4B – Routing Alternatives Analysis

Conduct an alternatives analysis for two alternatives for the new Bell Mountain Raw Water Pipeline. Document the results and recommendations in a technical memorandum.

# Task 1.5A – Rehabilitation Recommendation Report

Compile condition assessment data and rehabilitation recommendations into a report.

# Task 1.6A and 1.5B – Preliminary Design Workshop

Present the Rehabilitation Recommendation Report and Routing Alternatives Analysis technical memorandum to the Town and discuss steps and decisions needed to move forward.

### Task 1.7A and 1.6B – QA/QC

Review the Rehabilitation Recommendation Report and Alternatives Analysis prior to submittal.

### Tasks 2 - 4: Design

The design phase provides a separate task for each of the three main project components. Task 2 is the base bid. Tasks 3 and 4 are the bid alternate.

Each of tasks 2 through 4 has similar subtasks including:

- Potholing
- Geotechnical Investigations
- 30% Design
- 90% Design
- 100% Design Bid Package
- QA/QC

These subtasks include:

### Task 2.1, 3.1, and 4.1 – 30% Design

Information and recommendations from the preliminary design phase will be used to develop 30% design documents for each project. Project phasing for the Young American Infrastructure rehabilitation and replacement scope will be discussed with Town personnel during the 30% design to understand different design packages needed to align with the Town's expected bidding and construction schedule and available funding. Because the majority of the sewer mains have already been lined, with only approximately 2,100 LF unlined, it is envisioned that the first phase project includes all sewer related upgrades. Water main replacement will be included in the first phase



as budget allows. The second and third phases of water main replacement will be divided geographically and to accommodate any budget restraints.

The 30% design submittal will include drawings, a specifications list, and a 30% engineer's opinion of probable construction cost for each project area. Proposed temporary and permanent easements required for the new pipelines will be depicted on the drawings. The following drawings will be included (note that not all drawings listed are required for each project):

- Cover
- Civil legend, general notes, and drawing index
- Overall site plans
- Well site plan
- Horizontal pipeline alignment (plan view) for sanitary sewer rehabilitation (if necessary) and water distribution pipe replacement
- Vault plan

After the submittal of the 30% design package, and after Castle Rock Water has reviewed the information, Dewberry will schedule and lead a Workshop to discuss any comments generated during the Town's review. Legal descriptions and exhibits will be generated after alignments have been discussed and finalized at the 30% Design Workshop. Dewberry will generate and submit meeting notes to memorialize discussions, decisions, and potential action items.

### Task 2.2, 3.2, and 4.2 – Potholing

After pipeline alignments are selected, utility potholing will be performed by Colorado Utility Finders and potholes will be surveyed to provide an ASCE 38-02 Quality Level A at the pothole location. A \$20,000 allowance has been allocated for potholing due to the difficulty of accurately estimating the number of potholes required prior to having utility locates and survey. If the need for additional potholing is identified during design, additional funds will be required.

Utility location results will be compiled in a SUE Report meeting SB18-167 requirements and ASCE 38-02 guidelines. ASCE 38-02 location quality levels will be indicated on the drawings. Pothole locations will be shown on the drawings with information summarized in a reference table.

# Task 2.3, 3.3, and 4.3 – Geotechnical Investigation

Geotechnical investigations will be conducted by Kumar & Associates, Inc. after the well site layout and raw water transmission pipeline route refinements are completed. The information and data provided by these investigations will be used to guide the final design and will be provided to bidders. This task includes six boreholes in the Young American subdivision, nine boreholes along the Bell Mountain Raw Water Pipeline alignment, and one borehole for the new well pipeline for a total of 16 boreholes. Note that in order to keep the project within the Town's outlined schedule, it is recommended that these services be scheduled as soon as the project begins. Our recent experience indicates that boring companies' availability is at least three months out.

### Task 2.4, 3.4, and 4.4 – 90% Design

Design will continue to be developed and comments and decisions from the 30% Design review will be incorporated into the 90% Design package. Drawings for the 90% submittal will be prepared in accordance with Town criteria and will generally include (note that not all drawings listed are required for each project component):

- Cover
- Civil legend, general notes, and drawing index
- Overall project location drawing
- Overall site plans/key maps
- Well site plan
- TESC plans
- TESC standard notes and details
- Horizontal pipeline alignment (plan view) for sanitary sewer rehabilitation
- Phasing plan for sewer rehabilitation
- Plan and profile sheets for sewer (if necessary) and water distribution pipe replacement
- Pipeline replacement detail sheets
- Pipeline rehabilitation detail sheets
- Pipeline installation detail sheets
- Site detail sheets
- Meter vault process and instrumentation drawing
- Structural notes
- Mechanical details

# Dewberry

# TOWN OF CASTLE ROCK **RFP NO. 2023-06**

- Vault floor plan
- Vault section
- Electrical symbols and legends
- Electrical details
- Electrical enclosure layouts and views
- Power one line diagram
- Panel schedules
- Conduit and cable schedules
- Control one line diagram
- Pump motor control diagram
- Electrical site plan
- Electrical equipment pad plan
- Vault electrical power & lighting plan & sections
- Instrument index and installation details
- Control section wiring diagrams

Technical specifications will be prepared to cover materials and requirements for construction of the project. We will work with Town staff to select the appropriate standard specifications for each project area to meet the Town of Castle Rock's objectives. We anticipate that the Town will develop procurement and contracting requirements (Division 00), with our input and assistance as needed.

Temporary Erosion and Sediment Control (TESC) plans and report will be prepared in accordance with Town of Castle Rock and Douglas County Requirements. The TESC plan and report will meet the requirements of a Stormwater Management Plan (SWMP) for use by the contractor in obtaining a Construction Stormwater Discharge Permit from the State WQCD.

Easements and associated exhibits required for the Bell Mountain Raw Water Pipeline will be finalized during the 90% Design.

A 90% design review workshop will be held to discuss any comments and gain final design approval. A separate package of the 90% TESC plans will be submitted to the Town for approval at this stage.

# Task 2.5, 3.5, and 4.5 – 100% Bid Ready Design Package

Once final approval is gained, Dewberry will create bid ready final Contract Documents and cost opinions. The

bid drawings will include the same drawings listed under the 90% Design task. The final set of drawings will vary from this list as necessary to properly present the work. The 100% design submittal will include final technical specifications and engineer's opinion of probable construction cost.

Although not currently in the scope of work, bidding support and construction services can be negotiated and provided to support the Town.

### Task 2.6, 3.6, and 4.6 – Workshops

Workshop at each deliverable milestone to discuss steps and decisions needed to systematically move forward.

### Task 2.7, 3.7, and 4.7 – QA/QC

Review each phase submittal package prior to Town submittal.

# Task 5: Project Management

Sam Franzen has been assigned to manage this project. His duties will include close coordination with Town personnel, including monthly progress meeting attendance, budget and schedule tracking, preparation of monthly progress reports, billing, and scheduling thirdparty senior reviews of all deliverables to meet Dewberry's stringent quality standards.

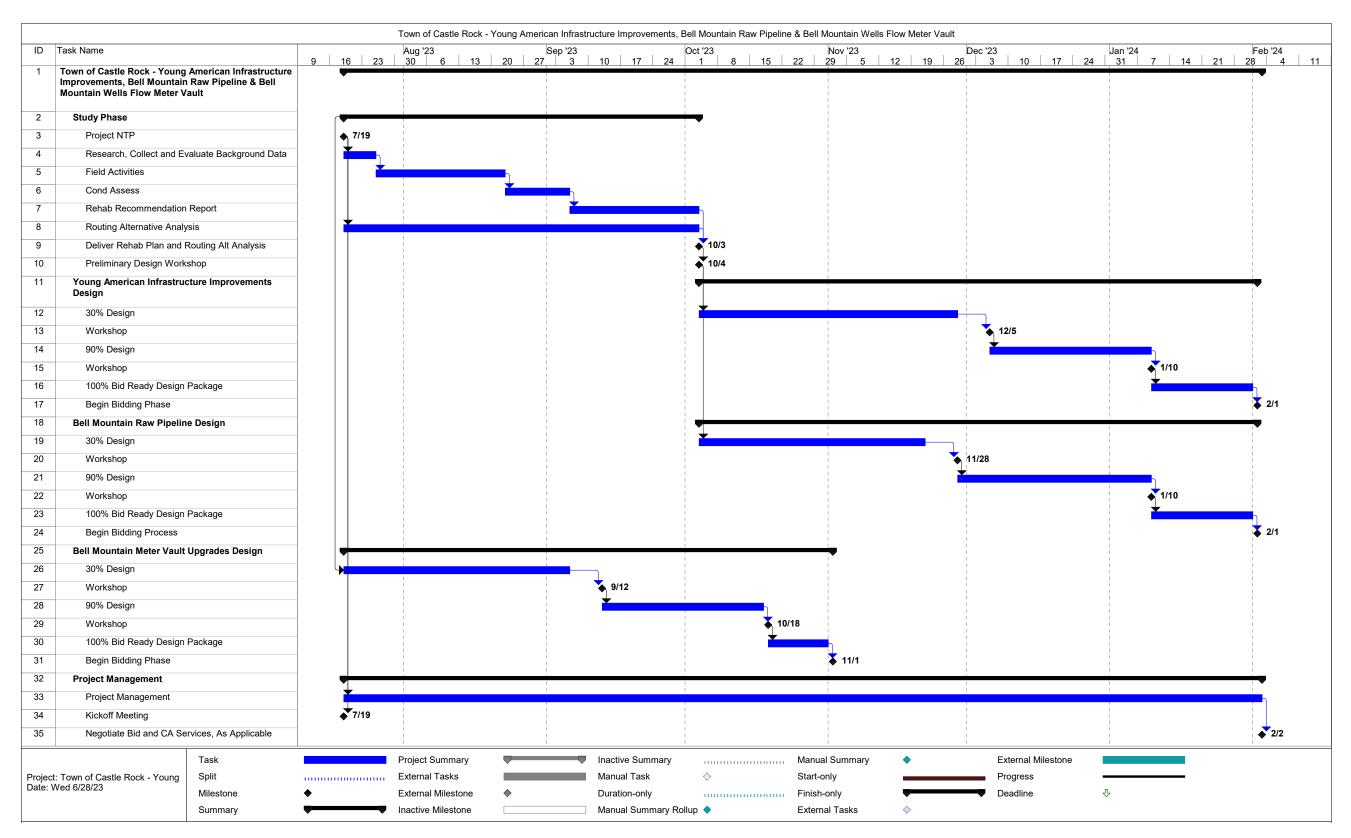
Upon receipt of the formal notice-to-proceed, the Dewberry team will prepare for and lead a project kickoff meeting to initiate the project. During this meeting, the team will identify key project team members, project tasks, major milestones, and schedule. Dewberry will prepare a meeting agenda prior to the meeting and subsequently prepare and distribute meeting notes.

### QA/QC

Dewberry prides itself on the high-quality of work that our team provides to our clients. Our philosophy on project management and quality control is founded on building in quality during project execution, and then independently validating success. As part of our management approach, we establish a QA/QC plan at the beginning of each project, during the development of our internal project plan.



# Schedule



**Dewberry** 

# **SECTION 4 - SIMILAR PROJECTS**

### **2021 PRV Vault Improvements** CITY OF AURORA, CO

Dewberry provided engineering and construction services to relocate and update the City's 50 S. Havana PRV Vault and upgrade the existing electrical and control panels at the City's Jewell and Peoria PRV Vault.



The preliminary design considered alternative locations for the new vault, established easements and property ownership, sized PRVs, and flow meter, and located existing utilities.

Final design included pipeline design and tie-in details to connect the new vaults to the existing water mains; construction sequencing and conceptual traffic control to minimize disruption of traffic; coordination with adjacent property owners; electrical system upgrades to meet current codes and City standards; and SCADA capabilities and communications to allow for remote monitoring, control, and data collection. Design of electrical and control systems and selection of equipment such as control panels, uninterruptible power supplies, programmable logic controllers, and security monitoring devices was carefully coordinated to match current City standards intended to provide uniformity and enhance performance and reliability across the City's water distribution system.

This project was a continuation of many similar vault projects where we worked closely with City Operations and SCADA system staff to develop a standard PRV facility design capable of being refined and adapted to suit each specific site. Dewberry has continued designing similar vaults for the City of Aurora with two additional vault projects currently under construction.

### • COMPLETION 2021

### • CONTACT

John Bruneau, City of Aurora 720.859.4325, jbruneau@auroragov.org

# Sanitary Sewer Evaluation, Rehab, & Replacement TOWN OF COLONIAL BEACH, VA

Dewberry has partnered with Colonial Beach to address significant inflow and infiltration (I&I) issues that had plagued the town for decades. Dewberry implemented a targeted approach around



the key areas with the highest I&I and evaluated the best methods for repair to obtain the return on investment. Our team approached the targeting evaluation through the use of an inexpensive overall investigation of the entire collection system based on pump station runtime records to identify two drainage areas with excessive I&I. Dewberry worked with the Town to complete appropriate additional investigation techniques, including flow monitoring, smoke testing, closed circuit television (CCTV) inspection, and manhole inspections to determine repair recommendations. After the critical areas were identified, Dewberry designed cost-effective improvements through a mixture of trenchless methods and replacement. Trenchless methods utilized included lining with curedin-place pipe and pipe bursting. Given the soil conditions of the riverfront town, a static pipe bursting system was utilized instead of a pneumatic system. Following the improvements, Dewberry was able to track the impact these improvements made to the Town's system and observed a pump station run time that was cut in half in the 3rd Street pump station drainage area, a noticeable decrease to influent flow at the WWTP and that sand was no longer an issue at the two drainage area pumps.

- COMPLETION 2022
- CONTACT

Diane Beyer Director of Public Works 804.224.7260, dbeyer@colonialbeachva.gov





### EXHIBIT 2

CONTRACTOR'S CERTIFICATION OF INSURANCE



### EXHIBIT 3

#### TOWN OF CASTLE ROCK AFFIDAVIT OF INDEPENDENT CONTRACTOR STATUS

In accordance with Section 8-70-115, C.R.S., I certify the following:

- With respect to the Agreement, Dewberry Engineers Inc. ("Entity") represents and warrants that it is the Entity's express intention to be employed as an independent contractor of the Town of Castle Rock (the "Town") for purposes of performing the work or services which are the subject of the Agreement, to include all employees and agents of the above-named entity. Entity understands and confirm that the Town reasonably relied on this intention in entering into the Agreement.
- The Town does not require Entity work exclusively for the Town, except that Entity may choose to work exclusively for the Town for a finite period of time specified in the document.
- The Town does not establish a quality standard for the work or services performed pursuant to the Agreement, except that the Town may provide plans and specifications regarding the work but cannot oversee the actual work or provide instruction as to how the work is performed.
- The Town does not pay a salary or hourly rate but rather a fixed or contract rate, as noted in the terms and conditions of the Agreement, and any Exhibits made part of the Agreement.
- The Town cannot terminate the work or services performed during the contract period unless otherwise agreed to in the terms and conditions of the Agreement.
- Entity is not provided with anything, if at all, more than minimal training from the Town.
- The Town does not provide Entity with tools or benefits for the performance of the work or services which are the subject of the Agreement, except materials and equipment may be supplied.
- The Town does not dictate the time of performance, except that a completion schedule and a range of mutually agreeable work hours may be established in the Agreement.
- The Town does not pay Entity personally but rather makes checks payable to the trade or business name of the Entity, who is a party to the Agreement; and the Town does not combine their business operations in any way with the entity's business, but instead maintains such operations as separate and distinct.
- Entity understands that if a professional license to practice a particular occupation under the laws of the State of Colorado requires the exercise of a supervisory function with regard to the work of services performed under this Agreement, such supervisory role shall not affect the independent contractor relationship with the Town.
- ENTITY UNDERSTANDS THAT NEITHER ENTITY NOR ITS EMPLOYEES ARE ENTITLED TO UNEMPLOYMENT INSURANCE BENEFITS OF THE TOWN. THE ONLY AVAILABLE UNEMPLOYMENT COMPENSATION COVERAGE IS THAT PROVIDED BY THE ENTITY.



# • ENTITY UNDERSTANDS THAT IT IS OBLIGATED TO PAY FEDERAL AND STATE INCOME TAX ON MONEYS PAID PURSUANT TO THE AGREEMENT.

CONTRACTOR

DEWBERRY ENGINEERS IN	С.	
Ву:		
Name		
STATE OF COLORADO	)	
	) ss.	
COUNTY OF	)	
The foregoing instrument	as acknowledged before me this day of	, 20 by
as	of the above-mentioned Contractor.	

Witness my official hand and seal.

My commission expires:

Notary Public