## ADAMS COUNTY CONSTRUCTION AGREEMENT

THIS CONSTRUCTION AGREEMENT ("Agreement") #2019-069 is made as of this day of October, 2019, by and between the Board of County Commissioners of Adams County, Colorado, located at 4430 South Adams County Parkway, Brighton, Colorado 80601, hereinafter referred to as the "County," and, Glacier Construction Co., Inc., located at 5460 South Quebec Street, Suite 200, Greenwood Village, Colorado 80111, hereinafter referred to as the "Contractor."

The County and the Contractor, for the consideration herein set forth, agree as follows:

#### 1. RESPONSIBILITIES/SERVICES OF THE CONTRACTOR

1.1. The Contractor shall furnish all labor, machinery, equipment, materials, and supplies necessary to perform the work shown on the plans and described in the specifications, and in all other documents incorporated herein by reference, entitled:

## IFB-AF-2019-069 SEWAGE LAGOON DECOMMISSIONING

- 1.2. The Contractor shall perform in accordance with the project scope and provisions of the Solicitation Type, and, in addition to the terms set forth in this Agreement, the Contractor agrees to be bound by and to perform in accordance with the following specified documents attached hereto and incorporated herein as if fully written into this Agreement:
  - 1.2.1. All terms set forth in the RFP/IFB DOCUMENTS attached hereto and identified as: REQUEST FOR PROPOSAL, BID PROPOSAL, BID SCHEDULE, BID BOND, CONSTRUCTION AGREEMENT, PERFORMANCE & PAYMENT BONDS, INSURANCE, BIDDER'S CLIENT LIST, BIDDER'S CREDIT LIST, NOTICE OF AWARD, ACCEPTANCE OF NOTICE OF AWARD, NOTICE TO PROCEED, LETTER OF ACCEPTANCE, APPLICATION FOR EXEMPTION CERTIFICATE, FIELD ORDER, CHANGE ORDER, APPLICATION FOR PAYMENT, PARTIAL WAIVER OF LIEN, FINAL WAIVER OF LIEN, CERTIFICATE OF FINAL COMPLETION, PROJECT DRAWINGS AND ANY SPECIAL DETAILS.
- 1.3. The Contractor agrees that it has satisfied itself as to the nature and location of the work, the character, quality, and quantity of the materials to be encountered, including subsurface conditions, the equipment and facilities needed to complete the work, the local conditions, and all other matters which can affect the work under this Agreement and Contractor assumes the risk should the conditions enumerated in this section differ from what Contractor anticipated.
- 1.4. When required by any document incorporated into this Agreement, certain specified materials shall not be incorporated in the work until tests have been made and the

- material found to be in accordance with the requirements of the specifications. All costs of initial testing shall be included in the price bid. The Contractor will pay for repeated tests due to failure of initial tests.
- 1.5. This Agreement does not guarantee to the Contractor any work except as authorized in accordance with this Section I, nor does it create an exclusive agreement for services.
- 1.6. The Contractor understands that close cooperation and coordination of this project with all or other contractors or subcontractors is required.
- 1.7. Emergency Services: In the event the Adams County Board of County Commissioners declares an emergency, the County may request additional services (of the type described in this Agreement or otherwise within the expertise of Contractor) to be performed by Contractor. If County requests such additional services, Contractor shall provide such services in a timely fashion given the nature of the emergency, pursuant to the terms of this Agreement. Unless otherwise agreed to in writing by the parties, Contractor shall bill for such services at the rates provided for in this Agreement.

#### 2. COMPLIANCE WITH C.R.S. § 8-17.5-101, ET. SEQ. AS AMENDED 5/13/08

- 2.1. Pursuant to Colorado Revised Statute (C.R.S.), § 8-17.5-101, et. seq., as amended 5/13/08, the Contractor shall meet the following requirements prior to signing this Agreement (public contract for service) and for the duration thereof:
- 2.2. The Contractor shall certify participation in the E-Verify Program (the electronic employment verification program that is authorized in 8 U.S.C. § 1324a and jointly administered by the United States Department of Homeland Security and the Social Security Administration, or its successor program) or the Department Program (the employment verification program established by the Colorado Department of Labor and Employment pursuant to C.R.S. § 8-17.5-102(5)) on the attached certification.
- 2.3. The Contractor shall not knowingly employ or contract with an illegal alien to perform work under this public contract for services.
- 2.4. The Contractor shall not enter into a contract with a subcontractor that fails to certify to the Contractor that the subcontractor shall not knowingly employ or contract with an illegal alien to perform work under this public contract for services.
- 2.5. At the time of signing this public contract for services, the Contractor has confirmed the employment eligibility of all employees who are newly hired for employment to perform work under this public contract for services through participation in either the E-Verify Program or the Department Program.
- 2.6. The Contractor shall not use either the E-Verify Program or the Department Program procedures to undertake pre-employment screening of job applicants while this public contract for services is being performed.

- 2.7. If Contractor obtains actual knowledge that a subcontractor performing work under this public contract for services knowingly employs or contracts with an illegal alien, the Contractor shall: notify the subcontractor and the County within three days that the Contractor has actual knowledge that the subcontractor is employing or contracting with an illegal alien; and terminate the subcontract with the subcontractor if within three days of receiving the notice required pursuant to the previous paragraph, the subcontractor does not stop employing or contracting with the illegal alien; except that the contractor shall not terminate the contract with the subcontractor if during such three days the subcontractor provides information to establish that the subcontractor has not knowingly employed or contracted with an illegal alien.
- 2.8. Contractor shall comply with any reasonable requests by the Department of Labor and Employment (the Department) made in the course of an investigation that the Department is undertaking pursuant to the authority established in C.R.S. § 8-17.5-102(5).
- 2.9. If Contractor violates this Section II of this Agreement, the County may terminate this Agreement for breach of contract. If the Agreement is so terminated, the Contractor shall be liable for actual and consequential damages to the County.

### 3. RESPONSIBILITIES OF THE COUNTY

The County shall:

- 3.1. Provide information as to its requirements for the project.
- 3.2. Give prompt notice to the Contractor whenever the County observes or otherwise becomes aware of any defect in the project.
- 3.3. Provide reasonable assistance to the Contractor in obtaining approval from all governmental authorities having jurisdiction over the project, and such approvals and consents from such other individuals or bodies as may be necessary for completion of the project.
- 3.4. Furnish, or direct the Contractor to provide, at the County's expense, necessary additional services.

#### 4. TERM

4.1. Term of Agreement: The work to be performed under this Agreement shall be completed by December 31, 2019.

#### 5. PAYMENT AND FEE SCHEDULE

5.1. The County shall pay the Contractor for services furnished under this Agreement, and the Contractor shall accept as full payment for those services, the sum not to exceed of \$909,843.00.

- 5.2. The Contractor shall maintain hourly records of time worked by its personnel to support any audits the County may require, and shall bill the County monthly for costs accrued during the preceding month. Payments on these billings will be subject to estimates prepared by the Project Manager of the value of work performed and materials delivered and materials placed in accordance with the specifications. Upon submission of such billings to the County and approval by the Project Manager, payment shall be issued. It is understood and agreed that the County may require a maximum of thirty-one (31) days to process payment after receiving billing in the proper form.
- 5.3. The County may deduct money from the partial payments in an amount necessary to protect the interests of the County, and is dependent upon the following:
  - 5.3.1. If the Agreement is for one hundred fifty thousand dollars (\$150,000) or more, the County shall withhold five percent (5%) of monthly partial payments until the contract is completed satisfactorily and finally accepted by the County. For Agreements less than one hundred fifty thousand dollars (\$150,000), the County may withhold more than five percent (5%).
  - 5.3.2. All money withheld pursuant to this section shall be retained by the County no more than thirty (30) days after the project has been completed to satisfaction and has been finally accepted by the County. If the County finds that satisfactory progress is being made in all phases of the Agreement, the County may, upon written request of the Contractor, authorize payment from the withheld percentage. Before such payment is made, the County shall determine that satisfactory and substantial reasons exist for the payment, and shall require written approval from any surety furnishing bonds for the work performed under the terms of this Agreement.
- 5.4. <u>Fund Availability:</u> The County has appropriated sufficient funds for this Agreement for the current fiscal year. Payment pursuant to this Agreement, whether in full or in part, is subject to and contingent upon the continuing availability of County funds for the purposes hereof. In the event funds become unavailable, as determined by the County, the County may immediately terminate this Agreement or amend it accordingly. To the extent allowed by the Colorado Taxpayer Bill of Rights and Title 29 of the Colorado Revised Statutes, the County represents that it has appropriated an amount of money for this Agreement that is at least equal to the contract price.

#### 6. LIQUIDATED DAMAGES

- 6.1. The Contractor agrees that time is of the essence in the performance of this Agreement. If the Contractor is delayed for any reason beyond its control, the Contractor shall submit the reason for the delay in writing to the Project Manager who shall decide whether it sufficiently justifies an extension of the completion date.
- 6.2. All decisions of the Project Manager are at his/her complete discretion and will be final.
- 6.3. Time is of the essence in the performance of this Agreement. In the event the Contractor shall fail to complete all the work to be performed by the completion time

aforementioned, the Contractor shall pay to the County as and for liquidated damages, not as a penalty, the applicable sum set forth in the schedule below, for each and every calendar day that the Contractor shall be in default. From more than to and including:

Original Contract Amount (\$)		Liquidated Damages per Calendar Day (\$)
From More Than	To And Including	
	150,000	500
150,000	500,000	1,000
500,000	1,000,000	1,600
1,000,000	2,000,000	2,300
2,000,000	4,000,000	4,100
4,000,000	10,000,000	5,800
10,000,000		7,000

- 6.4. Any deduction assessed as liquidated damages under this section shall not relieve the Contractor from liability for any damages or costs resulting from delays to other contractors on the job or to other projects caused by a failure of the Contractor to complete the work according to the agreed time.
- 6.5. Any extension(s) of the completion date authorized by the Project Manager pursuant to this section shall not relieve the Contractor from liability for any damages or costs resulting from delays to other contractors on the job. The Contractor agrees to indemnify and hold the County harmless from any claim against the County resulting from the Project Manager authorizing an extension of the completion date or from the Contractor's failure to complete this Agreement by the completion date aforementioned.
- 6.6. Permitting the Contractor to continue and finish the work, or any part thereof, after elapse of the agreed time will not operate as a waiver on the part of the County of any of its rights under this Agreement.

### 7. DAMAGES ARISING FROM BREACH OF PERFORMANCE OBLIGATIONS

7.1. Notwithstanding anything else set forth in this Agreement, if Contractor fails to comply with all terms of this contract, including but not limited to, its obligation to perform its work in a workmanlike manner in accordance with all codes, plans, specifications and industry standards, Contractor shall be liable to County for all damages arising from the breach, including but not limited to, all attorney fees, costs and other damages.

#### 8. WARRANTY

8.1. The Contractor warrants and guarantees to the County that all work, equipment, and materials furnished under the Agreement are free from defects in workmanship and materials for a period of one year after final acceptance by the County. The Contractor further warrants and guarantees that the plans and specifications incorporated herein are free of fault and defect sufficient for Contractor to warrant the

finished product after completion date. Should the Contractor fail to proceed promptly in accordance with this guarantee, the County may have such work performed at the expense of the Contractor. This section does not relieve the Contractor from liability for defects that become known after one year.

#### 9. **SUBCONTRACTING**

9.1. The Contractor may utilize the services of subcontractors on those parts of the work that would normally be performed by subcontractors. But the Contractor shall not subcontract any portion of the work until the written approval of such action has been obtained from the Project Manager. The Contractor shall be fully responsible to the County for the acts and omissions of its subcontractors and their employees.

#### 10. CHANGE ORDERS OR EXTENSIONS

- 10.1.The County may, from time to time, require changes in the scope of the services of the Contractor to be performed herein including but not limited to additional instructions, additional work, and the omission of work previously ordered. The Contractor shall be compensated for all authorized changes in services, pursuant to the applicable provision in the Solicitation, or, if no provision exists, pursuant to the terms of a Change Order. No Change Order shall be issued unless the County has appropriated sufficient funds to pay for the Change Order in the event the amount due pursuant to the Agreement as altered by the Change Order would result in the total contract price exceeding the amount originally appropriated by the County for the Agreement.
- 10.2. The County may, upon mutual written agreement by the parties, extend the time of completion of services to be performed by the Contractor.

### 11. INSPECTIONS, REVIEWS AND AUDITS

- 11.1.When the work is completed, the Contractor shall file a written notice with the Project Manager that the work, in the opinion of the Contractor, has been finished. Within ten (10) days after the Contractor files the written notice, the Project Manager and the Contractor shall make a final inspection of the project to determine whether all of the work has been completed in accordance with this Agreement and with all documents incorporated herein. A final list shall be made by the County, in sufficient detail to fully outline to the Contractor the following items:
  - 11.1.1. Work to be completed, if any; and,
  - 11.1.2. Work not in compliance with the Agreement, if any; and,
  - 11.1.3. Unsatisfactory work for any reason, if any.
- 11.2. The County shall not authorize final payment until all items on the list, if any, have been completed to the satisfaction of the Project Manager.

#### 12. CLEAN-UP

12.1.The Contractor shall frequently clean up all refuse or scrap materials resulting from the progress of the work. Upon completion of the work and prior to final inspection, the Contractor shall remove from the construction site and occupied adjoining property all refuse, unused materials, forming lumber, sanitary facilities, and any other materials belonging to the Contractor or subcontractors. Failure of the Contractor to clean up and restore the site satisfactorily will result in the County doing so. The cost will be charged to the account of the Contractor or his/her surety.

### 13. PROJECT ADMINISTRATION

- 13.1.The Project Manager for this Agreement shall be RANETTE CARLSON, who can be reached by phone at 720-523-6924. The Project Manager does not have the authority to alter or modify the terms of this Agreement.
- 13.2. The Project Manager is designated by the County to exercise authority on its behalf under this Agreement, and to see that it is performed according to its terms. The Project Manager shall furnish all explanations or directions and inspections necessary to carry out and complete satisfactorily the services contemplated and provided for under this Agreement. The Project Manager shall also approve all report formats and related procedures and shall be responsible for final acceptance of all work performed. Any conflict between the plans or specifications, and any other document incorporated herein, shall be submitted in writing to the Project Manager for review and determination.
- 13.3.If the Contractor considers any work demanded to be outside the Agreement requirements, or considers any determination of the Project Manager to be unfair, the Contractor shall immediately ask for a written instruction or decision from the Project Manager and shall proceed to perform the services to conform to the Project Manager's determination. If the Contractor considers such instructions or decision to be unsatisfactory, it shall, within five (5) days after their receipt, file a written protest with the Adams County Purchasing Office stating the objections and the reasons therefore. Unless protests or objections are made in the manner specified and within the time limit stated herein, the Contractor hereby waives all grounds for protests.
- 13.4.All claims, disputes, and other matters in question arising out of or relating to the Agreement documents or breach thereof between the Project Manager and the Contractor shall be submitted to the Adams County Purchasing Office.

#### 14. NONDISCRIMINATION

- 14.1. The Contractor shall not discriminate against any employee or qualified applicant for employment because of age, race, color, religion, marital status, disability, sex, or national origin. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices provided by the local public agency setting forth the provisions of this nondiscrimination clause.
  - 14.1.1. The Contractor will cause the foregoing provisions to be inserted in all subcontracts for any work covered by this Agreement so that such provisions will be binding upon each subcontractor, provided that the foregoing provisions shall not apply to contracts or subcontracts for standard commercial supplies or raw materials.

#### 15. INDEPENDENT CONTRACTOR

15.1.In providing services under this Agreement, the Contractor acts as an independent contractor and not as an employee of the County. The Contractor shall be solely and entirely responsible for his /her acts and the acts of his /her employees, agents, servants, and subcontractors during the term and performance of this Agreement. No employee, agent, servant, or subcontractor of the Contractor shall be deemed to be an employee, agent, or servant of the County because of the performance of any services or work under this Agreement. The Contractor, at its expense, shall procure and maintain workers' compensation insurance as required by State law and personal injury and property damage insurance in the coverage amounts as described in Section XIV. Pursuant to the Workers' Compensation Act § 8-40-202(2)(b)(IV), C.R.S., as amended, the Contractor understands that it and its employees and servants are not entitled to workers' compensation benefits from the County. The Contractor further understands that it is solely obligated for the payment of federal and state income tax on any moneys earned pursuant to this Agreement.

#### 16. **INDEMNIFICATION**

16.1. The Contractor agrees to indemnify and to hold the County and its agents harmless for, from, and against any and all claims, suits, expenses, damages or other liabilities, including reasonable attorney fees and court costs, arising out of damage or injury to persons or property caused or sustained by any person, persons, or entities as a result of the performance or failure of the Contractor, its agents or employees, or any subcontractor to provide services pursuant to the terms of this Agreement.

## 17. INSURANCE

- 17.1. The Contractor shall furnish a certificate of insurance for commercial general liability, comprehensive automobile liability, workers' compensation, and professional liability upon notification of award and prior to performance. Work shall not commence under this Agreement until the Contractor has submitted to the County, and received approval thereof, the certificate of insurance showing compliance with the following types and coverage of insurance.
  - 17.1.1. Commercial General Liability Insurance: to include products liability, completed operations, contractual, broad form property damage, and personal injury.

Each Occurrence

\$1,000,000

General Aggregate

\$2,000,000

to include all 17.1.2. Comprehensive Automobile Liability Insurance:

motor vehicles owned, hired, leased, or borrowed.

Bodily Injury/Property Damage

\$1,000,000 (each accident)

Personal Injury Protection

Per Colorado Statutes

17.1.3. Workers' Compensation Insurance: Per Colorado Statutes

17.1.4. <u>Professional Liability Insurance\*</u>: to include coverage for damages or claims for damages arising out of the rendering, or failure to render, any professional services.

Each Occurrence

\$1,000,000

\*This insurance requirement applies only to Contractors who are performing services under this Agreement as professionals licensed under the laws of the State of Colorado, such as physicians, lawyers, engineers, nurses, mental health providers, and any other licensed professionals.

- 17.2. The Contractor's commercial general liability, comprehensive automobile liability, workers' compensation, and professional liability insurance policies and/or certificates of insurance shall be issued to include Adams County and the Colorado Department of Transportation (CDOT) as an "additional insured" and shall include the following provisions:
  - 17.2.1. Underwriters shall have no right of recovery or subrogation against the County, it being the intent of the parties that the insurance policies so affected shall protect both parties and be primary coverage for any and all losses resulting from the actions or negligence of the Contractor.
  - 17.2.2. The insurance companies issuing the policy or policies shall have no response against the County for payment of any premiums due or for any assessments under any form of any policy.
  - 17.2.3. Any and all deductibles contained in any insurance policy shall be assumed by and at the sole risk of the Contractor.
- 17.3. If any of the said policies shall be or at any time become unsatisfactory to the County as to form or substance, or if a company issuing any such policy shall be or at any time becomes unsatisfactory to the County, the Contractor shall promptly obtain a new policy, submit the same to the Purchasing Agent of Adams County for approval, and thereafter submit a certificate of insurance as herein provided. Upon failure of the Contractor to furnish, deliver, and maintain such insurance as provided herein, this Agreement, at the election of the County, may be immediately declared suspended, discontinued, or terminated. Failure of the Contractor to obtain and/or maintain any required insurance shall not relieve the Contractor from any liability under the Agreement, nor shall the insurance requirements be construed to conflict with the obligations of the Contractor concerning indemnification.
- 17.4. If the Contractor is a Joint Venture, then the respective parties thereto are each individually held fully responsible for completion of the project according to the terms of this Agreement. The parties thereto also have joint and several liabilities to the County for any liquidated damages assessed or for performance bond claims against the Joint Venture. The performance bond and all insurance required by this Agreement shall set forth the identity of each party to the Joint Venture.

#### **18. TERMINATION**

18.1. <u>Termination of Agreement for the Convenience of the County:</u> The County, at its sole option and discretion, may terminate this Agreement at any time by giving written notice to the Contractor of such termination and specifying the effective date thereof, at least fifteen days before the effective date of termination. If the Agreement is

terminated by the County, the Contractor will be paid an amount which bears the same ratio to the total compensation as the services actually performed bear to the total services of the Contractor covered by this Agreement, less payments of compensation previously made.

- 18.2. <u>Termination of Agreement for Cause:</u> If, through any cause, the Contractor shall fail to fulfill its obligations under this Agreement in a timely and proper manner, or if the Contractor shall violate any of the covenants, agreements, or stipulations of this Agreement, the County shall thereupon have the right to immediately terminate this Agreement upon giving written notice to the Contractor of such termination and specifying the effective date thereof.
- 18.3. Ownership of Partially Completed Work: All work accomplished by the Contractor prior to the date of such termination shall be recorded and tangible work documents shall be transferred to and become the sole property of the County prior to payment for services rendered.
- 18.4. Notwithstanding the above, the Contractor shall not be relieved of liability to the County for damages sustained by the County by virtue of any breach of the Agreement by the Contractor and for the purposes of setoff until such time as the exact amount of damages due the County from the Contractor is determined.

#### 19. **BONDING:**

19.1. The Contractor shall secure a Performance Bond and a Payment Bond each in the amount of one hundred percent (100%) of the Agreement price with a corporate surety approved by the County and licensed to do business in the State of Colorado, said bonds to be released at the sole discretion of the County.

## 20. MUTUAL UNDERSTANDINGS

- 20.1. <u>Jurisdiction and Venue</u>: The laws of the State of Colorado shall govern as to the interpretation, validity, and effect of this Agreement. The parties agree that venue and jurisdiction for disputes regarding performance of this Agreement are with the District Court of Adams County, Colorado.
- 20.2. Compliance with Laws: The Contractor, at all times during the performance of this Agreement, agrees to strictly adhere to all applicable federal, state, and local laws, rules, and regulations that affect or govern the work as contemplated under this Agreement. If applicable, the Contractor and subcontractors shall abide by all applicable provisions of the Davis-Bacon Act for payment of wages to employees and the Contract Work Hours and Safety Standards Act. The parties hereto aver that they are familiar with §§ 18-3-301, et seq., C.R.S. (Bribery and Corrupt Influences), as amended, and §§ 18-8-401, et seq., C.R.S. (Abuse of Public Office), as amended, Title 2: Grants and Agreements: Part 200 Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards Subpart F, the Clean Air Act (42 U.S.C. 7401-7671q), and the Federal Water Pollution Control Act (33 U.S.C. 1251-1387), as amended, and that no violation of such provisions are present.

Contractor warrants that it is in compliance with the residency requirements in §§ 8-17-101, et seq., C.R.S.

- 20.3. Record Retention: The Contractor shall maintain records and documentation of the services provided under this Agreement, including fiscal records, and shall retain the records for a period of three (3) years from the date this Agreement is terminated. Said records and documents shall be subject at all reasonable times to inspection, review, or audit by authorized federal, state, or county personnel.
- 20.4. <u>Assignability:</u> Neither this Agreement, nor any rights hereunder, in whole or in part, shall be assignable or otherwise transferable by the Contractor without the prior written consent of the County.
- 20.5. <u>Waiver:</u> Waiver of strict performance or the breach of any provision of this Agreement shall not be deemed a waiver, nor shall it prejudice the waiving party's right to require strict performance of the same provision, or any other provision in the future, unless such waiver has rendered future performance commercially impossible.
- 20.6. Force Majeure: Neither party shall be liable for any delay or failure to perform its obligations hereunder to the extent that such delay or failure is caused by a force or event beyond the control of such party including, without limitation, war, embargoes, strikes, governmental restrictions, riots, fires, floods, earthquakes, or other acts of God.
- 20.7. Notice: Any notices given under this Agreement are deemed to have been received and to be effective:
  - 20.7.1. Three (3) days after the same shall have been mailed by certified mail, return receipt requested; and,
  - 20.7.2. Immediately upon hand delivery; or,
  - 20.7.3. Immediately upon receipt of confirmation that an E-mail was received.
  - 20.7.4. For the purposes of this Agreement, any and all notices should be addressed to the contacts listed below:

Department: Adams County Facility Operations

Contact: Ranette Carlson

Address: 4430 South Adams County Parkway City, State, Zip: Brighton, Colorado 80601

Phone: 720-523-6924

E-mail: rcarlson@adcogov.org

Department: Adams County Purchasing

Contact: Anna Forristall

Address: 4430 South Adams County Parkway City, State, Zip: Brighton, Colorado 80601

Phone: 720-523-6297

E-mail: aforristall@adcogov.org

Department: Adams County Attorney's Office Address: 4430 South Adams County Parkway City, State, Zip: Brighton, Colorado 80601

Phone: 720.523.6116

Contractor: Glacier Construction Company, Inc. Contact: Taylor Pearson or Randall L. Wambsganss Address: 5460 South Quebec Street, Suite 200 City, State, Zip: Greenwood Village, Colorado 80111

Phone: 303-618-8807 or 303-221-5383

E-mail: tpearson@gcci.com or rwambsganss@gcci.com

- 20.8. <u>Integration of Understanding:</u> This Agreement contains the entire understanding of the parties hereto and neither it, nor the rights and obligations hereunder, may be changed, modified, or waived except by an instrument in writing that is signed by the parties hereto.
- 20.9. <u>Severability:</u> If any provision of this Agreement is determined to be unenforceable or invalid for any reason, the remainder of this Agreement shall remain in effect, unless otherwise terminated in accordance with the terms contained herein.
- 20.10. <u>Authorization:</u> Each party represents and warrants that it has the power and ability to enter into this Agreement, to grant the rights granted herein, and to perform the duties and obligations herein described.
- 20.11. Confidentiality: All documentation related to this Agreement will become the property of Adams County. All documentation maintained or kept by Adams County shall be subject to the Colorado Open Records Act, C.R.S. 24-72-201 et seq. ("CORA"). The County does not guarantee the confidentiality of any records.

THE REMAINDER OF THIS PAGE LEFT BLANK INTENTIONALLY

IN WITNESS WHEREOF, the Parties have caused their names to be affixed hereto:

## ADAMS COUNTY COLORADO BOARD OF COUNTY COMMISSIONERS

Marin Genomis Chair	Date 10/29/19	
GLACIER CONSTRUCTION CO., INC.		
Signature	10-15-19 Date	<del></del>
Randall L. Wambsganss Printed Name	President Title	
Printed Name	_	
ATTEST: Josh Zygielbaum, Clerk and Recorder	EHANNA—  Deputy Clerk	
APPROVED AS TO FORM:	Adams County Attorney's Office	••
NOTARIZATION OF CONTRACTOR'S	S SIGNATURE:	
COUNTY OF Arapahoe	)STATE OF Colorado	)SS.
Signed and sworn to before me this	15th day of October	, 2019 ,
by Randall L. Wambsganss	STEPHANIE ZAUG	GG C
Manahaui Zaugg Notary Public	STATE OF COLOR. NOTARY ID 200740' MY COMMISSION EXPIRES	ADO 17388
My commission expires on:	100000000000000000000000000000000000000	<del></del>

IN WITNESS WHEREOF, the Parties have caused their names to be affixed hereto:

## ADAMS COUNTY COLORADO BOARD OF COUNTY COMMISSIONERS

Ateries & Ordonsies Chair		
GLACIER CONSTRUCTION COMPANY,	INC.	
Signature	Date	<del></del>
Printed Name	Title	<u>_</u>
ATTEST: Josh Zygielbaum, Clerk and Recorder	EHANNA Deputy Clerk	<del></del>
APPROVED AS TO FORM:	dams County Attorney's Office	•
NOTARIZATION OF CONTRACTOR'S S	IGNATURE:	
COUNTY OF	)STATE OF	)SS.
Signed and sworn to before me this	day of	, 2019 ,
by		
Notary Public		
My commission expires on:		

## CONTRACTOR'S CERTIFICATION OF COMPLIANCE

Pursuant to Colorado Revised Statute, § 8-17.5-101, et.seq., as amended 5/13/08, as a prerequisite to entering into a contract for services with Adams County, Colorado, the undersigned Contractor hereby certifies that at the time of this certification, Contractor does not knowingly employ or contract with an illegal alien who will perform work under the attached contract for services and that the Contractor will participate in the E-Verify Program or Department program, as those terms are defined in C.R.S. § 8-17.5-101, et. seq. in order to confirm the employment eligibility of all employees who are newly hired for employment to perform work under the attached contract for services.

Pursuant to Code of Federal Regulations 2 C.F.R. Part 200 Subpart C 200.213, the undersigned Contractor certifies that they are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency.

#### CONTRACTOR:

Glacier Construction Co., Inc.	10-15-19
Company Name	Date
Randall L. Wambsganss	
Name (Print or Type)	·
Signature	· · · · · · · · · · · · · · · · · · ·
President	·
Title	

Note: Registration for the E-Verify Program can be completed at: <a href="https://www.vis-dhs.com/employerregistration">https://www.vis-dhs.com/employerregistration</a>. It is recommended that employers review the sample "memorandum of understanding" available at the website prior to registering.



Adams County Finance Department
Purchasing Division
4430 South Adams County Parkway
Brighton, Colorado 80601

## ADDENDUM ONE

IFB Issue Date:

**AUGUST 8, 2019** 

IFB Number:

IFB-AF-2019-069

IFB Title:

SEWAGE LAGOON DECOMMISSIONING

Optional Pre-Bid Meeting:

AUGUST 19, 2019 at 11:00 am MT

(All potential subcontractors are encouraged to attend)

Adams County Regional Park

9755 Henderson Road, Brighton, CO 80601

IFB Questions Due:

AUGUST 22, 2019 by 5:00 pm MT

Bid Due Date:

AUGUST 30, 2019, 3:00pm MT

(Time according to our Clock)

Adams County Government Center

Central Front Lobby Desk

4430 South Adams County Parkway,

Brighton, CO 80601

For additional information please contact:

Anna Forristall, Contract Specialist III

720-523-6297

aforristall@adcogov.org

CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND ACKNOWLEDGING RECEIPT OF ALL SUBSEQUENT ADDENDA FROM THE ROCKY MOUNTAIN E-PURCHASING SYSTEM (BIDNET) WEBSITE. FAILURE TO ACKNOWLEDGE ALL ADDENDUM/ADDENDA MAY DEEM THE CONTRACTOR NON-RESPONSIVE. ADDENDUM/ADDENDA SHALL BE ACKNOWLEDGED ON THE CONTRACTOR'S STATEMENT FORM IN THE SPACE PROVIDED.

#### ADDENDUM #1

The purpose of this addendum is to answer vendor-submitted questions.

- 1. Is the bid going to be lump sum or by the gallon?
  - A) Please find included with the Addendum #1 an Updated Appendix D Itemized Bid Form for the Base Bid and Bid Alternate. Item No. 2 will be revised to lump sum. Additionally, the construction access road improvements were broken out of Item No. 1 and into two additional items, Item No. 7 & 8.
- 2. If solids have to be removed and the bid is by the gallon will the conversion of 202 gallons per cubic yard be used to convert yards removed into the gallon price?
  - A) This has been changed to lump sum bid.
- 3. Is this a prevailing wage project?
  - A) No, this I NOT a prevailing wage project. There are no Federal dollars.
- 4. Can the County acquire the traffic control permit?
  - A) The traffic control permit is the responsibility of the bidder. The County will assist when possible.
- 5. Please confirm the days and hours that work is allowed on-site?
  - A) Monday to Friday, sunrise to sunset is best for the county's and contractor's operations. However, if needed due to project time constraints, contractor may work during nights and weekends with County and Golf Course approval on a case by case basis.
- 6. Please confirm where wash water is available at the golf course to wash the pumping hose that will be laid to the north to the road?
  - A) There's a fire hydrant at the golf course shop that could be utilized, if the non-potable system isn't running, where the contractor could fill a water truck if necessary. If operational, the contractor can connect to the irrigation system via a quick coupler and a hose. The irrigation pond is also available if the contractor provided a pump and hose. The availability of the irrigation system depends on the time of year and temps.

The County has multiple water supplies nearby that the contractor can utilize (potable and/or non-potable).

- 7. Please confirm that the GC will be allowed to cut roads to the lagoon while minimizing impact to the area and what will be the restoration standard for those roads?
  - A) Contractor is allowed to cut roads along the access route shown on Sheet 02. See Revised Drawings Sheet 02 further defining the Construction Access Road. Restoration requirements are answered by Specification 01140, 01503, 01563, 02300, & 02360. All disturbed edge of fairways, natural grasslands, and concrete cart paths will need to be restored to existing conditions. Improvements to existing Construction Access Roads may remain. Existing Construction Access Roads are to be maintained and returned to existing or

better conditions at closeout. Contractor to walk construction access road with County, Engineer, and Golf Course prior to construction to discuss means and methods and access improvements to be made. Please find included with the Addendum #1 an Updated Appendix D Itemized Bid Form for the Base Bid and Bid Alternate. The construction access road improvements were broken out of Item No. 1 and into two additional items, Item No. 7 & 8.

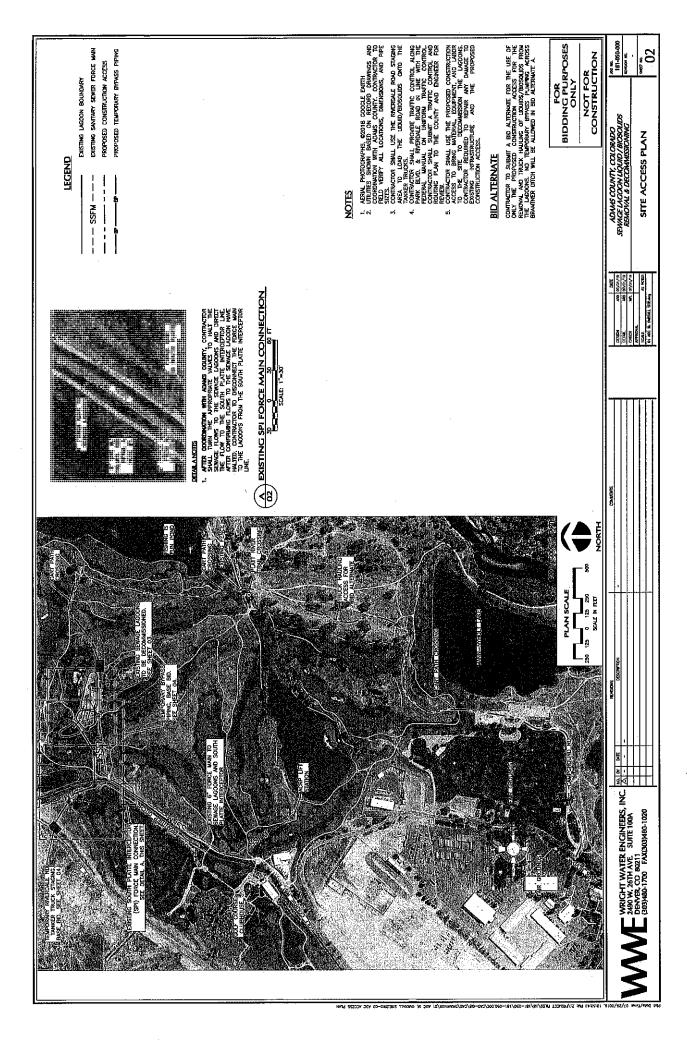
- 8. Is there going to be an allowance for concrete golf path repair?
  - A) Concrete golf path repairs are to be included in the new Item No. 8 for Construction Access Road Improvements. Existing concrete cart paths to be protected in place or removed and replaced if damaged.
- 9. Is it understood that weather may delay the project until next spring due to muddy or cold conditions at the pumping site or the application site and if so the force majeure language would suspend the contract with no penalty to the contractor or subcontractors?
  - A) Force Majeure language is included in all County agreements; however, the Contractor, Subcontractor and the County's Project Manager must agree when weather is a delaying factor to warrant work stoppage.

#### The bid due date and time shall remain the same:

AUGUST 30, 2019 at 3:00pm MT (The Time is According to our Clock)
Adams County Government Center
Central Lobby Front Desk
4430 South Adams County Parkway,
Brighton, CO 80601

Please incorporate this information into your RFP response.

END OF ADDENDUM ONE



# APPENDIX D - ITEMIZED BID FORM Sewage Lagoon Liquids/Biosolids Removal & Decommissioning BASE BID

	BASE BID			<b>,</b>
Item No.	Description, Approximate Quantity and Lump Sum or Unit Prices in Words and Figures	Unit Price (\$) in Figures	Quantity	Item Totals in Figures
1	Mobilization and Demobilization  All labor, materials, and equipment necessary for mobilization and demobilization for all work described in the Contract Documents. This includes all the cost for labor, materials, and equipment necessary for mobilization and demobilization. This includes preparatory work and operations, including, but not limited to, those necessary for the movement of personnel, equipment, and supplies to the project site, contractor's offices, necessary preconstruction direct costs, and other facilities and appurtenances necessary to undertake the work on the project.  (Words—Lump Sum Price)			
		\$	1 <u>LS</u>	#VALUE!
2	Liquid/Biosolids Removal – Base Bid Furnish all materials, labor, and equipment necessary for removing and properly disposing of all the liquids/biosolids and waste from the three sewage lagoons, including, but not limited to, pumps, temporary bypass piping, fairway crossing, pipe support over Brantner Ditch, trucks, fuel, traffic control, labor, repairs, maintenance, spill cleanup, permit fees, testing, insurance, and other associated costs.  (Words—Lump Sum Price)			
		\$	1 LS	#VALUE!
3	Demolition Furnish all labor, materials, and equipment necessary to remove all of the aerators, equipment, electrical and controls, piping, and materials in the decommissioned sewage lagoons as outlined in the Contract Documents.  (Words—Lump Sum Price)	\$	1 LS	#VALUE!
4	Clay Liner Testing Furnish all the cost for labor, materials, and equipment necessary to test and analyze the existing clay liner as outlined in the Contract Documents. (Words—Lump Sum Price)		1 20	n v dot.
		\$	1 LS	#VALUE!
5	Clay Liner Decommissioning, Project Topsoiling, and Finished Grading Furnish all cost for labor, materials, and equipment necessary to complete clay liner decommissioning, project topsoiling, seeding, irrigating, and finished grading. (Words—Lump Sum Price)			
		\$	1 LS	#VALUE!
6	Grading, Erosion, Sediment Control and Stormwater Management Plan Furnish, transport, install, and maintain all temporary erosion and sediment control Best Management Practices as described in the Contract Documents, including, but not limited to, the GESC Plan and Report, and preparation of a Stormwater Management Plan (SWMP), and obtaining associated permits, for a lump sum price of: (Words—Lump Sum Price)			
7	Construction Access Road Removal	\$	1 LS	#VALUE!
	Furnish all labor, materials, and equipment necessary to install ±600 LF of Construction Access Road as needed for construction access. Construction Access Road to be removed and grasslands to be restored to existing conditions at closeout.  (Words—Lump Sum Price)			
		\$	1 LS	#VALUE!

8	Construction Access Road Improvements Furnish all labor, materials, and equipment necessary to maintain and improve existing ±6,200 LF of Construction Access Road as needed for construction access. Improvements may remain. Restore construction access road to existing or better conditions at closeout. Existing concrete cart paths to be protected in place or removed and replaced if damaged. (Words—Lump Sum Price)			
		\$ 	1 LS	#VALUE!
7	Change Order Allowance Include with the bid amount a Change Order Allowance of \$75,000. Any change orders that are approved by the owner will be deducted from this Change Order Allowance. At the end of the project, any remaining Change Order Allowance not used for approved change orders will be credited to the Owner in the final pay application.  (Words—Lump Sum Price)			
	<u></u>	\$ 75,000	1 LS	\$75,000
				#VALUE!

#### **BID ALTERNATE**

Contractor to submit an alternate bid for the use of only the proposed construction access for the truck hauling removal of liquids/biosolids from the lagoon. No temporary bypass pumping across the golf course fairway or Brantner Ditch will be allowed.

Item No.	Description, Approximate Quantity and Lump Sum or Unit Prices in Words and Figures	Unit Price (\$) in Figures	Quantity	Item Totals in Figures
1	Mobilization and Demobilization  All labor, materials, and equipment necessary for mobilization and demobilization for all work described in the Contract Documents. This includes all the cost for labor, materials, and equipment necessary for mobilization and demobilization. This includes preparatory work and operations, including, but not limited to, those necessary for the movement of personnel, equipment, and supplies to the project site, contractor's offices, necessary preconstruction direct costs, and other facilities and appurtenances necessary to undertake the work on the project.  (Words—Lump Sum Price)			
		\$	1 LS	#VALUE!
2	Liquid/Biosolids Removal – Alternate Bid Furnish all materials, labor, and equipment necessary for removing and properly disposing of all the liquids/biosolids and waste from the three sewage lagoons, including, but not limited to, pumps, trucks, fuel, traffic control, labor, repairs, maintenance, spill cleanup, permit fees, testing, insurance, and other associated costs.  (Words—Lump Sum Price)			
		\$	1 LS	#VALUE!
3	Demolition Furnish all labor, materials, and equipment necessary to remove all of the aerators, equipment, electrical and controls, piping, and materials in the decommissioned sewage lagoons as outlined in the Contract Documents.  (Words—Lump Sum Price)	\$	1 LS	#VALUE!
4	Clay Liner Testing	Φ	I LO	TV/LOL:
<del>-</del>	Furnish all the cost for labor, materials, and equipment necessary to test and analyze the existing clay liner as outlined in the Contract Documents.  (Words—Lump Sum Price)		:	
		\$	1 LS	#VALUE!

			<del> </del>			
5	Clay Liner Decommissioning, Project Topsoiling, and Finished Grading Furnish all cost for labor, materials, and equipment necessary to complete clay liner decommissioning, project topsoiling, seeding, irrigating, and finished grading.  (Words—Lump Sum Price)		i			
		\$		1 LS	  #VALUE!	
6	Grading, Erosion, Sediment Control and Stormwater Management Plan Furnish, transport, install, and maintain all temporary erosion and sediment control Best Management Practices as described in the Contract Documents, including, but not limited to, the GESC Plan and Report, and preparation of a Stormwater Management Plan (SWMP), and obtaining associated permits, for a lump sum price of: (Words—Lump Sum Price)					
		\$		1_LS	#VALUE!	
7	Construction Access Road Removal Furnish all labor, materials, and equipment necessary to install ±600 LF of Construction Access Road as needed for construction access. Construction Access Road to be removed and grasslands to be restored to existing conditions at closeout. (Words—Lump Sum Price)					
		\$		1 LS	#VALUE!	
8	Construction Access Road Improvements  Furnish all labor, materials, and equipment necessary to maintain and improve existing ±6,200 LF of Construction Access Road as needed for construction access. Improvements may remain. Restore construction access road to existing or better conditions at closeout. Existing concrete cart paths to be protected in place or removed and replaced if damaged. (Words—Lump Sum Price)			1,25	WALUE:	
1	ı	\$		1 LS	#VALUE!	
9	Change Order Allowance Include with the bid amount a Changer Order Allowance of \$75,000. Any change orders that are approved by the owner will be deducted from this Change Order Allowance. At the end of the project, any remaining Change Order Allowance not used for approved change orders will be credited to the Owner in the final pay application.  (Words—Lump Sum Price)	ł		·		
1		\$	75,000	1 LS	\$	75.000
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**Adams County Finance Department Purchasing Division** 4430 S Adams County Parkway Brighton, Colorado 80601

## **INVITATION FOR BID (IFB)**

**COVER SHEET** 

IFB Issue Date:

**AUGUST 8, 2019** 

IFB Number:

IFB-AF-2019-069

IFB Title:

SEWAGE LAGOON DECOMMISSIONING

Optional Pre-Bid Meeting:

AUGUST 19, 2019 at 11:00 am MT

(All potential subcontractors are encouraged to attend)

Adams County Regional Park

9755 Henderson Road Brighton, CO 80601

IFB Questions Due:

AUGUST 22, 2019 by 5:00 pm MT

Bid Due Date:

AUGUST 30, 2019, 3:00pm MT (Time according to our Clock)

Adams County Government Center

Central Front Lobby Desk

4430 South Adams County Parkway,

Brighton, CO 80601

For additional information please contact:

Anna Forristall, Contract Specialist III

720-523-6297

aforristall@adcogov.org

Documents included in this package:

Bid Instructions

General Terms and Conditions Specifications/Scope of Work

Pricing Form

Submission Checklist

Contractor's Certificate of Compliance

Contractor's Statement

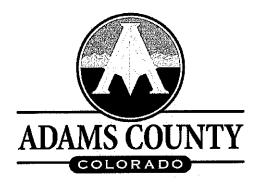
References Forms

Vendor Information Form

Appendix A – Sample Agreement

Appendix B – Technical Specifications

Appendix C – Drawings and Notes Appendix D - Itemized Bid Form



Adams County Finance Department Purchasing Division 4430 S Adams County Parkway Brighton, Colorado 80601

# INVITATION FOR BID BID INSTRUCTIONS

- PURPOSE/BACKGROUND: The Adams County Board of Commissioners by and through its Purchasing Division of the Finance Department is accepting bids for RIVERDALE REGIONAL PARK SEWAGE LAGOON DECOMMISSIONING as specified herein from a source of supply that will provide prompt and efficient service to the County.
- 2. SUBMISSION OF BIDS: The bid must be received before the due date and time as specified in the Cover Sheet of this solicitation. The Contractor is responsible for addressing the envelope as indicated below. If the submittal arrives late, it may be returned unopened. Address the envelope as follows:

#### Mailing Address:

Adams County Government Center
Purchasing Division
4430 South Adams County Parkway
Brighton, CO 80601
ATTN: Anna Forristall

Contract Specialist III IFB-AF-2019-069

#### Hand Deliveries accepted:

Adams County Government Center First Floor Central Lobby Receptionist 4430 South Adams County Parkway Brighton, CO 80601

ATTN: Anna Forristall
Contract Specialist III
IFB-AF-2019-069

- 3. All documents related to this IFB will be posted on the Rocky Mountain Bid System (BidNet) at: http://www.bidnetdirect.com/colorado/solicitations/open-bids
  - 3.1. Interested parties must register with this service (free) to view and download these documents.
  - 3.2. The construction plans and specifications will be posted along with this IFB on the BidNet Direct website. The plans and specifications can be downloaded from this site for the contractor's use.
- 4. BONDING/SURETY REQUIREMENTS:
  - 4.1.A 5% Bid Bond is required for Construction Projects over \$50,000 at the time of bid submittal.
  - 4.2 Performance and Payment Bonds, each in the amount of 100% of the contract value, will be required at time of contract execution, or as otherwise defined in the Specifications/Scope of Work.

- 4.3. Surety companies executing bonds must appear on the U.S. Treasury Department's most current list (Circular 570) as amended and be authorized to transact business in the State of Colorado.
- 4.4. A 5% Retainage Fee will be held for Construction contracts over \$150,000.
- 4.5. Bonds may be submitted on the Standard AIA form.
- 4.6. Liquidated Damages will apply.

#### 5. TERM OF AGREEMENT

The agreement term shall be through and to include December 31, 2019 for project work.

#### 6. CONTRACTUAL OBLIGATIONS

- 6.1. The successful Contractor may be required to sign an Agreement substantially similar to the Agreement form in Appendix A. The County reserves the right to add or delete provisions to the form prior to Agreement execution.
- 6.2. Issuance of this solicitation does not commit the County to award any Agreement or to procure or Agreement for any equipment, materials or services.
- 6.3. If a formal Agreement is required, the Contractor agrees and understands that a Notice of Award does not constitute an Agreement or create a property interest of any nature until an Agreement is signed by the Awardee and the Board of County Commissioners and/or their authorized designee.
- 6.4. Contractor is responsible for reviewing the form Agreement and understanding the terms and conditions contained therein, including, but not limited to, insurance requirements, indemnification, illegal aliens, equal opportunity, non-appropriation, and termination.
- 6.5 Contractor's Response must state its willingness to enter into the form Agreement or Contractor shall identify and include any proposed revisions they have for the form Agreement. Any proposed revisions made by the Contractor after the County Notice of Intent to Award the Solicitation may be grounds for rescinding said Notice. The identification of willingness to enter into the standard Agreement is for general purposes at this time but is part of the evaluation process and must be included. There may be negotiations on a project-by-project basis that provide further clarification.
- 6.6 Incorrect Pricing/Invoicing. As part of any award resulting from this process, Contractor(s) will discount all transactions as agreed. In the event the County discovers, through its Agreement monitoring process or formal audit process, that material or services were priced/invoiced incorrectly, Contractor(s) agree to promptly refund all overpayments and to pay all reasonable audit expenses incurred as a result of the non-compliance.
- 6.7. The County may, during the term of the Agreement and any extensions, request additional work at other locations throughout Adams County by the successful Contractor.

#### 7. PRE-BID CONFERENCE:

- 7.1.An OPTIONAL pre-bid conference will be held August 19, 2019 at 11:00 am MT at the Adams County Regional Park, Administration building, 9755 Henderson Road, Brighton, CO 80601. This meeting is an opportunity to discuss the Specifications, Work Scope and to tour the work location.
- 7.2. RSVP for the conference to Anna Forristall at 720-523-6297 or <a href="mailto:forristall@adcogov.org@if">forristall@adcogov.org@if</a> you are planning to attend this optional meeting and provide the number of attendees. Reservations will be made for your party for golf cart transportation back to the Lagoons. Please respond by 8/16 at 4:00pm so arrangements can be made. Walking back to the Lagoons is not an option. Please don't be late.
- 7.3. Contractor shall take all necessary precautions with going through secure facility, i.e. tools, camera, restricted access areas, etc.
- 8. **METHOD OF AWARD** It is the intent of the County to award to the Contractor who provides the lowest responsive and responsible bid.
- 9. Questions which arise during the Bid preparation period regarding issues around this Solicitation, or the award process should be directed to Anna Forristall, aforristall@adcogov.org via email only. The Contractor submitting the question(s) shall be responsible for ensuring the question(s) is/are received by the County.
- 10. Any official interpretation of this IFB must be made by an agent of the County's Purchasing Division who is authorized to act on behalf of the County. The County shall not be responsible for interpretations offered by employees of the County who are not agents of the County's Purchasing Division.
- 11. COOPERATIVE PURCHASING: Adams County encourages cooperative purchasing in an effort to assist other agencies to reduce their cost of bidding and to make better use of taxpayer dollars through volume purchasing. Contractor(s) may, at their discretion, agree to extend the prices and/or terms of the resulting award to other state or local government agencies, school districts, or political subdivisions in the event they would have a need for the same product/service. Usage by any entity shall not have a negative impact on Adams County in the current term or in any future terms.

The Contractor(s) must deal directly with any governmental agency concerning the placement of purchase orders/agreements, freight/delivery charges, Contractual disputes, invoices, and payments. Adams County shall not be liable for any costs or damages incurred by any other entity.

- 12.BUDGET: Budget will not be disclosed.
- 13. DEBARMENT: By submitting this bid, the Contractor warrants and certifies they are eligible to submit a bid because their company and/or subcontractor(s) is/are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in a transaction by any Federal, State, or local department or agency.



Adams County Finance Department Purchasing Division 4430 S Adams County Parkway Brighton, Colorado 80601

#### **INVITATION FOR BID**

## **GENERAL TERMS AND CONDITIONS**

14. APPLICABILITY: These General Terms and Conditions apply, but are not limited, to all bids, proposals, qualifications and quotations (hereinafter referred to as "Bid" or "Response") made to Adams County (hereinafter referred to as "County") by all prospective Contractors, bidders, firms, companies, publishers, consultants, or suppliers (herein after referred to as "Contractor" or "Contractors") in response, but not limited, to all Invitations to Bid, Requests for Proposals, Requests for Qualifications, and Requests for Quotations (hereinafter referred to as "Solicitation" or "Solicitations").

#### 15. CONTENTS OF BIDS

- 15.1.GENERAL CONDITIONS: Contractors are required to submit their Bids in accordance with the following expressed conditions:
  - 15.1.1. Contractors shall make all investigations necessary to thoroughly understand the requirements of the Solicitation. No plea of ignorance by the Contractor of conditions that exist or that may hereafter exist will be accepted as the basis for varying the requirements of the County or the compensation to the Contractor.
  - 15.1.2. Contractors are advised that all County Solicitations and Agreements are subject to all requirements contained in the County's Purchasing Division's Policies and Procedures and state and federal statutes. When conflicts occur, the highest authority will prevail.
  - 15.1.3. Contractors are required to state exactly what they intend to furnish to the County in their Bid and must indicate any variances to the terms, conditions, and specifications of this Solicitation no matter how slight. If variations are not stated in a Contractor's Bid, it shall be construed that the Contractor's Bid fully complies with all conditions identified in this Solicitation.
- 16. **Equal Opportunity:** The County intends and expects that the Contracting processes of the County and its Contractors provide equal opportunity without regard to gender, race, ethnicity, religion, age or disability and that its Contractors make available equal opportunities to the extent third parties are engaged to provide goods and services to the County as Subcontractors, Contractors, or otherwise. Accordingly, the Contractor shall not discriminate on any of the foregoing grounds in the performance of any Agreement awarded to the Contractor and shall make available equal opportunities to the extent third parties are engaged to provide goods and services in connection with performance of the Agreement. If submitting a joint venture bid, or a bid involving a partnership arrangement, articles of partnership stating each partner's responsibilities shall be furnished and submitted with the Bid Response.

17. Colorado Open Records Act: All documentation submitted in response to this solicitation will become the property of Adams County. All documentation maintained or kept by Adams County shall be subject to the Colorado Open Records Act. C.R.S. 24-72-201 et. seq. ("CORA"). Accordingly, respondents are discouraged from providing information that they consider confidential, privileged, and/or trade secrets as part of a response to this solicitation. Any portions of submissions that are reasonably considered confidential should be clearly marked. The County does not guarantee the confidentiality of any records.

Careful consideration should be given before submitting confidential information to the County. The Colorado Open Records Act permits public scrutiny of most materials collected in this Solicitation process. Information that is reasonably considered proprietary should be clearly marked as confidential.

## 18. CLARIFICATION AND MODIFICATIONS IN TERMS AND CONDITIONS

- 18.1. Where there appears to be variances or conflicts between the General Terms and Conditions, any Special Terms and Conditions and the Scope of Work/Specifications outlined in this Solicitation, the Scope of Work/ Specifications, and then the Special Terms and Conditions, will prevail.
  - 18.1.1. If any Contractor contemplating submitting a Bid under this Solicitation is in doubt as to the true meaning of the Specifications or any other portion of the Solicitation, the Contractor must submit a **written request** via email for clarification to the Point of Contact listed on the Cover Sheet of this Solicitation. The Contractor submitting the request shall be responsible for ensuring that the request is received by the County prior to the deadline for submitting questions.
  - 18.1.2. The County shall issue a written addendum if substantial changes which impact the technical submission of Bids are required. A copy of such addenda will be available at the Rocky Mountain E-Purchasing System (BIDNET) website. In the event of conflict with the original Solicitation documents, addenda shall supersede to the extent specified. Subsequent addenda shall supersede prior addenda only to the extent specified.
  - 18.1.3. ADDENDUM/ADDENDA: RESPONSIBLE FOR CONTRACTOR IS RECEIPT ALL OBTAINING AND **ACKNOWLEDGING** ADDENDUM/ADDENDA POSTED ON THE ROCKY MOUNTAIN E-PURCHASING SYSTEM (BIDNET). FAILURE TO SUBMIT ANY AND ALL SUBSEQUENT ADDENDUM/ADDENDA MAY DEEM THE CONTRACTOR NON-RESPONSIVE. EACH AND EVERY ADDENDUM SHALL SEPARATELY ACKNOWLEDGED ON THE CONTRACTOR'S STATEMENT FORM.

### 18.2. PRICES CONTAINED IN SUBMITTAL – DISCOUNTS, TAXES

18.2.1. Contractors may offer a cash discount for prompt payment. Discounts will be considered in determining the lowest net cost for the evaluation of Bids; discounts for periods of less than twenty days, however, will not be considered in making an award. If no prompt payment discount is being offered, the Contractor shall enter a zero (0) for the percentage discount to indicate net

- thirty (30) days. If the Contractor does not enter a percentage discount, it is hereby understood and agreed that the payment terms shall be net thirty days, effective on the date that the County receives an accurate invoice or accepts the products, whichever is the later date. Payment is deemed to be made on the date of the mailing of the check.
- 18.2.2. Contractors shall not include federal, state, or local excise or sales taxes in prices offered, as the County is exempt from payment of such taxes.
  - Federal Identification Number: 84-6000732
  - State of Colorado Tax Exempt Number: 98-03569

## 19. SIGNING BID AND COLLUSION

19.1. Contractor, by affixing its signature to this Solicitation, certifies that its Bid is made without previous understanding, agreement, or connection either with any persons, firms or corporations making a Bid for the same items, or with the County. The Contractor also certifies that its Bid is in all respects fair, without outside control, collusion, fraud, or otherwise illegal action. To ensure integrity of the County's public procurement process, all Contractors are hereby placed on notice that any and all Contractors who falsify the certifications required in conjunction with this section will be prosecuted to the fullest extent of the law.

#### 20. PREPARATION AND SUBMISSION OF BID

#### 20.1. PREPARATION

- 20.1.1. The Bid must be typed or legibly printed in ink. The use of erasable ink is not permitted. All corrections made by the Contractor must be initialed by the authorized agent of the Contractor.
- 20.1.2. Bids must contain a manual signature of an authorized agent of the Contractor in the space provided on the Contractor's Statement form. The Contractor's Statement form in this Solicitation must be included in all Bid responses. If the Contractor's authorized agent fails to sign and return this form in its Bid, the Bid may not be considered.
- 20.1.3 The County logo is trademarked and property solely of the County. Contractors do not have permission to use the County's logo on any documentation or presentation materials and to do so would be a violation of the County's trademark
- 20.1.4. Unit prices shall be provided by the Contractor on the Pricing Form. Prices that are not in accordance with the measurements and descriptions requested in the Pricing Form may be considered non-responsive. Where there is a discrepancy between the unit price and the extension of prices, the unit price shall prevail.
- 20.1.5. Alternate Bids will not be considered unless expressly permitted in the Specifications/Scope of Work.

20.1.6. The accuracy of the Bid is the sole responsibility of the Contractor. No changes in the Bid shall be allowed after the date and time that submission of the Bid is due.

#### 20.2. SUBMISSION

- 20.2.1. The Bid shall be sealed in an envelope with the Contractor's name and the Solicitation number on the outside. The County's Pricing Form, which is attached to this Solicitation, must be used when the Contractor is submitting its Bid response. The Contractor shall not alter this form (e.g. add or modify categories for posting prices offered) unless expressly permitted in the Solicitation or in an addendum duly issued by the County. Only sealed Bids received by the Purchasing Division will be accepted; Bids submitted by telephone, email, or facsimile machines are not acceptable.
- 20.2.2. Failure to provide any requested information may result in the rejection of the Bid as non-responsive.
- 20.2.3. Bid must be submitted in the format supplied and/or described by the County. Failure to submit in the format provided may be cause for rejection of the Bid.
- 20.2.4. Contractor is responsible for ensuring their Bid is received by the Purchasing Division prior to the deadline outlined in the solicitation regardless of the method of delivery.
- 20.2.5. Contractors, which qualify their Bid by requiring alternate Contractual terms and conditions as a stipulation for Agreement award must include such, alternate terms and conditions in their Response. The County reserves the right to declare a Contractor's Bid as non-responsive if any of these alternate terms and conditions conflict with the County's terms and conditions, or if they are not in the best interest of the County.

#### 21. LATE BIDS

- 21.1. Bids received after the date and time set for the opening shall be considered non-responsive and may be returned unopened to the Contractor.
- 21.2. The County assumes no responsibility for late deliveries of mail on behalf of the United States Post Office or any other delivery system.
- 21.3. The County assumes no responsibility for a Bid being either opened early or improperly routed if the envelope is not clearly marked on the outside:

## SEWAGE LAGOON DECOMMISSIONING IFB-AF-2019-069

21.4. In the event of a situation severe enough to cause the Adams County Board of Commissioners to close the County offices for any reason, the Purchasing Manager has the prerogative of rescheduling the Bid opening time and date. No Bid will be considered above all other Bids by having met the Bid opening time and date requirements to the exclusion of those who were unable to present their Bid due to a situation severe enough to cause the Board of County Commissioners to close the County offices.

#### 22. MODIFICATIONS AND WITHDRAWAL OF BIDS

22.1. MODIFICATIONS TO BIDS. Bids may only be modified in the form of a written notice on Contractor letterhead and must be received prior to the time and date set for the bids to be opened. Each modification submitted to the County's Purchasing Division must have the Contractor's name and return address and the applicable Solicitation number and title clearly marked on the face of the sealed envelope. If more than one modification is submitted, the modification bearing the latest date of receipt by the County's Purchasing Division will be considered the valid modification.

#### 22.2. WITHDRAWAL OF BIDS

- 22.2.1. Bids may be withdrawn in the form of a written notice on Contractor letterhead and must be received prior to the time and date set for the opening of Bids. Any withdrawal of a Bid submitted to Adams County Purchasing Division must have the Contractor's name, return address, and the applicable Solicitation number and title clearly marked on the face of the envelope and on the withdrawal letter.
- 22.2.2. Bids may not be withdrawn after the time and date set for the opening for a period of ninety calendar days. If a Bid is withdrawn by the Contractor during this ninety-day period, the County may, at its option, suspend the Contractor and may not accept any Bid from the Contractor for a six-month period following the withdrawal.

#### 23. REJECTION OF BIDS

- 23.1. REJECTION OF BIDS. The County may, at its sole and absolute discretion:
  - 23.1.1. Reject any and all, or parts of any or all, Bids submitted by prospective Contractors,
  - 23.1.2. Re-advertise this Solicitation;
  - 23.1.3. Postpone or cancel the process;
  - 23.1.4. Waive any irregularities in the Bids received in conjunction with this Solicitation.
- 23.2 REJECTION OF A PARTICULAR BID. In addition to any reason identified above, the County may reject a Bid under any of the following conditions:
  - 23.2.1. The Contractor misstates or conceals any material fact in its Bid Response;
  - 23.2.2. The Contractor's Bid does not strictly conform to the law or the requirements of the Solicitation;
  - 23.2.3. The Bid expressly requires or implies a conditional award that conflicts with the method of award stipulated in the Solicitation;

- 23.2.4. The Bid does not include documents, including, but not limited to, certificates, licenses, and/or samples, which are required for submission with the Bid in accordance with the Solicitation; and/or
- 23.2.5. The Bid has not been executed by the Contractor through an authorized signature on the Contractor's Statement form.
- 23.3. The County reserves the right to waive any irregularities or informalities, and the right to accept or reject any and all bids.

#### 24. ELIMINATION FROM CONSIDERATION

- 24.1. A Bid may not be accepted from, nor any Agreement be awarded to, any person or firm which is in arrears to the County upon any debt or Agreement or which is a defaulter as surety or otherwise upon any obligation to the County.
- 24.2. A Bid may not be accepted from, nor any Agreement awarded to, any person or firm who has failed to perform faithfully any previous Agreement with the County or other governmental entity, for a minimum period of three years after the previous Agreement was terminated for cause.
- 24.3. Any communications regarding this Solicitation must go through the Adams County Purchasing Division only. Any contact with other County personnel or County Contractors may be cause for disqualification.
- 24.4. No damages shall be recoverable by any challenger as a result of the determinations listed in this Section or decisions by the County.
- 24.5. The Board of County Commissioners may rescind the award of any Bid within one week thereof or at its next regularly scheduled meeting; whichever is later, when the public interest will be served thereby.
- 25. QUALIFICATIONS OF CONTRACTOR: The County may make such investigations as deemed necessary to determine the ability of the Contractor to perform work, and the Contractor shall furnish all information and data for this purpose as the County requests. Such information includes but is not limited to the following: current/maximum bonding capabilities, current licensing information, audited financial statements, history of the firm on assessments of liquidated damages, Agreements cancelled prior to completion and/or lawsuits and/or pending lawsuits against the firm and/or its principals. The County reserves the right to reject any Bid if the evidence submitted by, or investigation of, such Contractor fails to satisfy the County that such Contractor is properly qualified to carry out the obligations of the Agreement and to complete the work contemplated therein. Conditional Bids will not be accepted.
- 26 AWARD OF SOLICITATION: The County may award this Solicitation to the successful Contractor through the issuance of a Notice of Intent to Award. All Contractors that participated in the Solicitation process will be notified of Contractor selection. No services or goods shall be provided, and no compensation shall be paid, until and unless an Agreement has been signed by an authorized representative of the County and the Contractor.

#### **END OF GENERAL TERMS AND CONDITIONS**



Adams County Finance Department
Purchasing Division
4430 S Adams County Parkway
Brighton, Colorado 80601

# INVITATION FOR BID #2019-069 SPECIFICATIONS/SCOPE OF WORK

#### I. PROJECT BACKGROUND

Adams County is seeking bids from qualified and experienced suppliers to provide materials and services for the **SEWAGE LAGOON DECOMMISSIONING PROJECT.** 

#### II. REQUIRED DOCUMENTATION

Failure to provide the required information may deem your submittal non-responsive.

List items which must be included in the bid submittal in order to be accepted and reviewed:

- o 5% Bid Bond
- o W-9
- Pricing Form
- Itemized Bid Form (Appendix D)
- o Contractor's Certification of Compliance (Signature required)
- Contractor's Statement (Signature required)
- o References Form for projects of similar size and scope
- Vendor Information Form
- One (1) marked ORIGINAL bid and One (1) USB or CD with a single PDF formatted bid.

## III. RESPONSE FORMAT

Failure to respond in the required format may deem your submittal non-responsive.

SUBMISSION OF BIDS: One (1) marked ORIGINAL bid and One (1) electronic USB or CD with a single PDF formatted bid must be received at the time and place specified in this Solicitation. Submittals should be prepared simply and economically providing a straightforward, concise description of the Contractor's ability to perform the requirements of this solicitation.

The electronic copy shall be an EXACT reproduction of the original documents provided. All sections shall be combined into a single PDF electronic document.

#### IV. SPECIFICATIONS/SCOPE OF WORK

The work includes, but is not necessarily limited to, the furnishing of labor and materials, and equipment for the demolition, disposal, construction, and installation of the following:

- 1. Establish connection to existing South Platte Interceptor line. Disconnect existing lagoon force main.
- 2. Dredge and pump liquids and biosolids from the bottom of Lagoons #1, #2, and #3. Install temporary bypass piping and haul the biosolids off the site for proper disposal.
- 3. Test the existing clay liner for concentrations of contaminates of concern above the State, Federal, and local regulations for resident soil or groundwater cleanup standards.
- 4. Assuming acceptable results from the testing of the existing clay liner, till or scarify the existing clay liner thus rendering it permeable.
- 5. Demolish and remove existing lagoon infrastructure (i.e. concrete, electrical wire, aeration equipment, control panels, pumps, etc.)
- 6. Cleanout and abandon in place existing lagoon sanitary sewer force main.
- 7. Add topsoil, seed, and re-establish vegetation to match adjacent golf course vegetation.
- 8. <u>Project Work Location</u>: Riverdale Regional Park 9755 Henderson Road, Brighton, CO 80601

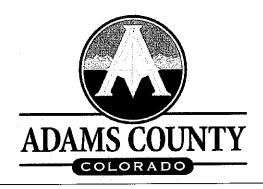
Adams County anticipates issuing a Notice to Proceed to the Awarded Contractor by September 2019 and all work must be complete from October 2019 to December 2019.

#### PROJECT PRICING

- All bid responses shall include a completed <u>Appendix D Sewage Lagoon</u> <u>Liquids/Biosolids Removal & Decommissioning Itemized Bid Form</u> in the Excel format provided on the USB or CD file.
- 2. All costs must be listed and all itemized rates shall be included as specified.
- 3. Adams County Facility Operations may selectively identify other work to be added or removed from the Scope of Work and shall require that the following unit pricing to be held through the term of the agreement as specified.
- 4. DO NOT attach a quote.
- 5. Costs must remain firm for 120 days from time of the submittal due date.

## END OF SPECIFICATIONS

Remainder of this page is left blank intentionally.



Adams County Finance Department Purchasing Division 4430 S Adams County Parkway Brighton, Colorado 80601

# INVITATION FOR BID #2019-069 PRICING FORM

PRINT OR TYPE KEY C	ONTACT INFORMATION	N BELOW (Contractor's Project Manager
Contractor Name		Date
Contact Person	Title	Phone
Email Address		

## Time and Material / Professional Hourly Rates:

Position Title	Regular Rate/Overtime Rate	Total Estimated Hours
	particular and the second	
	produced and the second	
	19. 19. 19. 19. 19. 19. 19. 19. 19. 19.	
41		



Adams County Finance Department Purchasing Division 4430 S Adams County Parkway Brighton, Colorado 80601

# INVITATION FOR BID SUBMISSION CHECK LIST

**SUBMISSION:** It is imperative you address your submittal envelope as noted in the Bid Instructions.

Does your Bid comply with all the terms and conditions of this Solicitation?	YES	NO
May any other governmental entity avail itself of this Agreement and purchase any and all items specified?	YES	NO
Have all Addendums been acknowledged, a duly authorized agent signature obtained, and enclosed on the Contractors Statement?	YES	NO
Original bid and electronic USB or CD with a single PDF formatted bid included?	YES	NO
If applicable, have all necessary Bonds been included?	YES	NO
Contractor Certification of Compliance signed and enclosed?	YES	NO



Adams County Finance Department Purchasing Division 4430 S Adams County Parkway Brighton, Colorado 80601

#### INVITATION FOR BID

## CONTRACTOR'S CERTIFICATION OF COMPLIANCE

(Signature Required)

Pursuant to Colorado Revised Statute, § 8-17.5-101, et.seq., as amended 5/13/08, as a prerequisite to entering into a Agreement for services with Adams County, Colorado, the undersigned Contractor hereby certifies that at the time of this certification, Contractor does not knowingly employ or Agreement with an illegal alien who will perform work under the attached Agreement for services and that the Contractor will participate in the E-Verify Program or Department program, as those terms are defined in C.R.S. § 8-17.5-101, et. seq. in order to confirm the employment eligibility of all employees who are newly hired for employment to perform work under the attached Agreement for services.

Contractor Name	
Printed or Typed Name	
Signature	
Title	
Date	

Note: Registration for the E-Verify Program can be completed at: <a href="https://www.vis-dhs.com/employerregistration">https://www.vis-dhs.com/employerregistration</a>. It is recommended that employers review the sample "memorandum of understanding" available at the website prior to registering.



**Adams County Finance Department Purchasing Division** 4430 S Adams County Parkway Brighton, Colorado 80601

#### **INVITATION FOR BID #2019-069**

### CONTRACTOR'S STATEMENT

(Signature Required)

I have read and fully understand all the conditions herein set forth in the foregoing paragraphs, and by my signature set forth hereunder. I hereby agree to comply with all said conditions as stated or implied. In consideration of the above statement, the following Bid is hereby submitted.

If any of the documents listed on the cover page are missing from this package, contact Adams County Purchasing. If you require additional information, call the Purchasing Division contact person.

The undersigned hereby affirms that (1) he/she is a duly authorized agent of the Contractor, (2) he/she has read all terms and conditions and technical specifications which were made available in conjunction with this solicitation and fully understands and accepts them unless specific variations have been expressly listed in his/her Bid, (3) the Bid is being submitted on behalf of the Contractor in accordance with any terms and conditions set forth in this Solicitation, and (4) the Contractor will accept any awards made to it as a result of the Bid submitted herein for a minimum of 120 calendar days following the date of submission.

## WE, THE UNDERSIGNED, HEREBY ACKNOWLEDGE RECEIPT OF ADDENDA:

(List each addendum number separately):	
Contractor Name	Date
Signature	Printed Name
Title	
Address	
City, State, Zip Code	County
Telephone	Fax
Email	



Adams County Finance Department Purchasing Division 4430 South Adams County Parkway Brighton, Colorado 80601

# INVITATION FOR BID REFERENCES FORM (For projects of similar size & scope)

Company Name	
Address	
Contact Name & Phone	
Contact Email Address	
Project Name	
Project Date & Project Value	
2. Company Name	
Address	
Contact Name & Phone	
Contact Email Address	
Project Name	
Project Date & Project Value	
3. Company Name	
Address	
Contact Name & Phone	
Contact Email Address	
Project Name	
Project Date & Project Value	



Adams County Finance Department
Purchasing Division
4430 South Adams County Parkway
Brighton, Colorado 80601

## INVITATION FOR BID APPENDIX A - SAMPLE AGREEMENT

The Sample Agreement for Construction is included in this Solicitation for informational and reference purposes only.

## ADAMS COUNTY CONSTRUCTION AGREEMENT

THIS CONSTRUCTION						
	, by and betweei					
Colorado, located at 4430	South Adams	County Parkway	y, Brighton	, Colora	do 80601, h	ıereinafter
referred to as the "County	," and, Contract	or Name, locate	ed at Addre	ess123, I	nereinafter ı	referred to
as the "Contractor."			***			

The County and the Contractor, for the consideration herein set forth, agree as follows:

## 1. RESPONSIBILITIES/SERVICES OF THE CONTRACTOR

1.1. The Contractor shall furnish all labor, machinery, equipment, materials, and supplies necessary to perform all work shown on the plans and described in the specifications, and in all other documents incorporated herein by reference, entitled:

## Solicitation & Project

- 1.2. The Contractor shall perform in accordance with the project scope and provisions of the Solicitation Type, and, in addition to the terms set forth in this Agreement, the Contractor agrees to be bound by and to perform in accordance with the following specified documents attached hereto and incorporated herein as if fully written into this Agreement:
  - 1.2.1. All terms set forth in the RFP/IFB DOCUMENTS attached hereto and identified as: REQUEST FOR PROPOSAL, BID PROPOSAL, BID BOND. CONSTRUCTION AGREEMENT. SCHEDULE. BID PÉRFORMANCE & PAYMENT BONDS, INSURANCE, BIDDER'S CLIENT LIST, BIDDER'S CREDIT LIST, NOTICE OF AWARD, ACCEPTANCE OF NOTICE OF AWARD, NOTICE TO PROCEED, LETTER OF ACCEPTANCE, APPLICATION FOR EXEMPTION CERTIFICATE, FIELD ORDER, CHANGE ORDER, APPLICATION FOR PAYMENT, PARTIAL WAIVER OF LIEN, FINAL WAIVER OF FINAL COMPLETION, CERTIFICATE OF DRAWINGS AND ANY SPECIAL DETAILS.
- 1.3. The Contractor agrees that it has satisfied itself as to the nature and location of the work, the character, quality, and quantity of the materials to be encountered, including subsurface conditions, the equipment and facilities needed to complete the work, the local conditions, and all other matters which can affect the work under this Agreement and

- Contractor assumes the risk should the conditions enumerated in this section differ from what Contractor anticipated.
- 1.4. When required by any document incorporated into this Agreement, certain specified materials shall not be incorporated in the work until tests have been made and the material found to be in accordance with the requirements of the specifications. All costs of initial testing shall be included in the price bid. The Contractor will pay for repeated tests due to failure of initial tests.
- 1.5. This Agreement does not guarantee to the Contractor any work except as authorized in accordance with this Section I, nor does it create an exclusive agreement for services.
- 1.6. The Contractor understands that close cooperation and coordination of this project with all or other contractors or subcontractors is required.
- 1.7. Emergency Services: In the event the Adams County Board of County Commissioners declares an emergency, the County may request additional services (of the type described in this Agreement or otherwise within the expertise of Contractor) to be performed by Contractor. If County requests such additional services, Contractor shall provide such services in a timely fashion given the nature of the emergency, pursuant to the terms of this Agreement. Unless otherwise agreed to in writing by the parties, Contractor shall bill for such services at the rates provided for in this Agreement.

## 2. COMPLIANCE WITH C.R.S. § 8-17.5-101, ET. SEQ. AS AMENDED 5/13/08

- 2.1. Pursuant to Colorado Revised Statute (C.R.S.), § 8-17.5-101, et. seq., as amended 5/13/08, the Contractor shall meet the following requirements prior to signing this Agreement (public contract for service) and for the duration thereof:
- 2.2. The Contractor shall certify participation in the E-Verify Program (the electronic employment verification program that is authorized in 8 U.S.C. § 1324a and jointly administered by the United States Department of Homeland Security and the Social Security Administration, or its successor program) or the Department Program (the employment verification program established by the Colorado Department of Labor and Employment pursuant to C.R.S. § 8-17.5-102(5)) on the attached certification.
- 2.3. The Contractor shall not knowingly employ or contract with an illegal alien to perform work under this public contract for services.
- 2.4. The Contractor shall not enter into a contract with a subcontractor that fails to certify to the Contractor that the subcontractor shall not knowingly employ or contract with an illegal alien to perform work under this public contract for services.
- 2.5. At the time of signing this public contract for services, the Contractor has confirmed the employment eligibility of all employees who are newly hired for employment to perform work under this public contract for services through participation in either the E-Verify Program or the Department Program.
- 2.6. The Contractor shall not use either the E-Verify Program or the Department Program procedures to undertake pre-employment screening of job applicants while this public contract for services is being performed.

- 2.7. If Contractor obtains actual knowledge that a subcontractor performing work under this public contract for services knowingly employs or contracts with an illegal alien, the Contractor shall: notify the subcontractor and the County within three days that the Contractor has actual knowledge that the subcontractor is employing or contracting with an illegal alien; and terminate the subcontract with the subcontractor if within three days of receiving the notice required pursuant to the previous paragraph, the subcontractor does not stop employing or contracting with the illegal alien; except that the contractor shall not terminate the contract with the subcontractor if during such three days the subcontractor provides information to establish that the subcontractor has not knowingly employed or contracted with an illegal alien.
- 2.8. Contractor shall comply with any reasonable requests by the Department of Labor and Employment (the Department) made in the course of an investigation that the Department is undertaking pursuant to the authority established in C.R.S. § 8-17.5-102(5).
- 2.9. If Contractor violates this Section II of this Agreement, the County may terminate this Agreement for breach of contract. If the Agreement is so terminated, the Contractor shall be liable for actual and consequential damages to the County.

## 3. RESPONSIBILITIES OF THE COUNTY

The County shall:

- 3.1. Provide information as to its requirements for the project.
- 3.2. Give prompt notice to the Contractor whenever the County observes or otherwise becomes aware of any defect in the project.
- 3.3. Provide reasonable assistance to the Contractor in obtaining approval from all governmental authorities having jurisdiction over the project, and such approvals and consents from such other individuals or bodies as may be necessary for completion of the project.
- 3.4. Furnish, or direct the Contractor to provide, at the County's expense, necessary additional services.

## 4. TERM

4.1. Term of Agreement: The work to be performed under this Agreement shall be for XXX

## 5. PAYMENT AND FEE SCHEDULE

- 5.1. The County shall pay the Contractor for services furnished under this Agreement, and the Contractor shall accept as full payment for those services, the sum of (\$).
- 5.2. The Contractor shall maintain hourly records of time worked by its personnel to support any audits the County may require, and shall bill the County monthly for costs accrued during the preceding month. Payments on these billings will be subject to estimates prepared by the Project Manager of the value of work performed and materials delivered and materials placed in accordance with the specifications. Upon submission

of such billings to the County and approval by the Project Manager, payment shall be issued. It is understood and agreed that the County may require a maximum of thirty-one (31) days to process payment after receiving billing in the proper form.

- 5.3. The County may deduct money from the partial payments in an amount necessary to protect the interests of the County, and is dependent upon the following:
  - 5.3.1. If the Agreement is for one hundred fifty thousand dollars (\$150,000) or more, the County shall withhold five percent (5%) of monthly partial payments until the contract is completed satisfactorily and finally accepted by the County. For Agreements less than one hundred fifty thousand dollars (\$150,000), the County may withhold more than five percent (5%).
  - 5.3.2. All money withheld pursuant to this section shall be retained by the County no more than thirty (30) days after the project has been completed to satisfaction and has been finally accepted by the County. If the County finds that satisfactory progress is being made in all phases of the Agreement, the County may, upon written request of the Contractor, authorize payment from the withheld percentage. Before such payment is made, the County shall determine that satisfactory and substantial reasons exist for the payment, and shall require written approval from any surety furnishing bonds for the work performed under the terms of this Agreement.
- 5.4. <u>Fund Availability</u>: The County has appropriated sufficient funds for this Agreement for the current fiscal year. Payment pursuant to this Agreement, whether in full or in part, is subject to and contingent upon the continuing availability of County funds for the purposes hereof. In the event funds become unavailable, as determined by the County, the County may immediately terminate this Agreement or amend it accordingly. To the extent allowed by the Colorado Taxpayer Bill of Rights and Title 29 of the Colorado Revised Statutes, the County represents that it has appropriated an amount of money for this Agreement that is at least equal to the contract price.

## 6. LIQUIDATED DAMAGES

- 6.1. The Contractor agrees that time is of the essence in the performance of this Agreement. If the Contractor is delayed for any reason beyond its control, the Contractor shall submit the reason for the delay in writing to the Project Manager who shall decide whether it sufficiently justifies an extension of the completion date.
- 6.2. All decisions of the Project Manager are at his/her complete discretion and will be final.
- 6.3. Time is of the essence in the performance of this Agreement. In the event the Contractor shall fail to complete all the work to be performed by the completion time aforementioned, the Contractor shall pay to the County as and for liquidated damages, not as a penalty, the applicable sum set forth in the schedule below, for each and every calendar day that the Contractor shall be in default. From more than to and including:

Original Con	tract Amount (\$)	Liquidated Damages per Calendar Day (\$)
From More Than	To And Including	
Ó	150,000	500

150,000	500,000	1,000
500,000	1,000,000	1,600
1,000,000	2,000,000	2,300
2,000,000	4,000,000	4,100
4,000,000	10,000,000	5,800
10,000,000	The state of the s	7,000

- 6.4. Any deduction assessed as liquidated damages under this section shall not relieve the Contractor from liability for any damages or costs resulting from delays to other contractors on the job or to other projects caused by a failure of the Contractor to complete the work according to the agreed time.
- 6.5. Any extension(s) of the completion date authorized by the Project Manager pursuant to this section shall not relieve the Contractor from liability for any damages or costs resulting from delays to other contractors on the job. The Contractor agrees to indemnify and hold the County harmless from any claim against the County resulting from the Project Manager authorizing an extension of the completion date or from the Contractor's failure to complete this Agreement by the completion date aforementioned.
- 6.6. Permitting the Contractor to continue and finish the work, or any part thereof, after elapse of the agreed time will not operate as a waiver on the part of the County of any of its rights under this Agreement.

## 7. DAMAGES ARISING FROM BREACH OF PERFORMANCE OBLIGATIONS

7.1. Notwithstanding anything else set forth in this Agreement, if Contractor fails to comply with all terms of this contract, including but not limited to, its obligation to perform its work in a workmanlike manner in accordance with all codes, plans, specifications and industry standards, Contractor shall be liable to County for all damages arising from the breach, including but not limited to, all attorney fees, costs and other damages.

## 8. WARRANTY

8.1. The Contractor warrants and guarantees to the County that all work, equipment, and materials furnished under the Agreement are free from defects in workmanship and materials for a period of one year after final acceptance by the County. The Contractor further warrants and guarantees that the plans and specifications incorporated herein are free of fault and defect sufficient for Contractor to warrant the finished product after completion date. Should the Contractor fail to proceed promptly in accordance with this guarantee, the County may have such work performed at the expense of the Contractor. This section does not relieve the Contractor from liability for defects that become known after one year.

### 9. SUBCONTRACTING

9.1. The Contractor may utilize the services of subcontractors on those parts of the work that would normally be performed by subcontractors. But the Contractor shall not subcontract any portion of the work until the written approval of such action has been obtained from the Project Manager. The Contractor shall be fully responsible to the County for the acts and omissions of its subcontractors and their employees.

## 10. CHANGE ORDERS OR EXTENSIONS

- 10.1. The County may, from time to time, require changes in the scope of the services of the Contractor to be performed herein including but not limited to additional instructions, additional work, and the omission of work previously ordered. The Contractor shall be compensated for all authorized changes in services, pursuant to the applicable provision in the Solicitation, or, if no provision exists, pursuant to the terms of a Change Order. No Change Order shall be issued unless the County has appropriated sufficient funds to pay for the Change Order in the event the amount due pursuant to the Agreement as altered by the Change Order would result in the total contract price exceeding the amount originally appropriated by the County for the Agreement.
- 10.2. The County may, upon mutual written agreement by the parties, extend the time of completion of services to be performed by the Contractor.

## 11 INSPECTIONS, REVIEWS AND AUDITS

- 11.1. When the work is completed, the Contractor shall file a written notice with the Project Manager that the work, in the opinion of the Contractor, has been finished. Within ten (10) days after the Contractor files the written notice, the Project Manager and the Contractor shall make a final inspection of the project to determine whether all of the work has been completed in accordance with this Agreement and with all documents incorporated herein. A final list shall be made by the County, in sufficient detail to fully outline to the Contractor the following items:
  - 11.1.1. Work to be completed, if any; and,
  - 11.1.2. Work not in compliance with the Agreement, if any; and,
  - 11.1.3. Unsatisfactory work for any reason, if any.
- 11.2.The County shall not authorize final payment until all items on the list, if any, have been completed to the satisfaction of the Project Manager.

## 12. CLEAN-UP

12.1. The Contractor shall frequently clean up all refuse or scrap materials resulting from the progress of the work. Upon completion of the work and prior to final inspection, the Contractor shall remove from the construction site and occupied adjoining property all refuse, unused materials, forming lumber, sanitary facilities, and any other materials belonging to the Contractor or subcontractors. Failure of the Contractor to clean up and restore the site satisfactorily will result in the County doing so. The cost will be charged to the account of the Contractor or his/her surety.

## 13 PROJECT

## **ADMINISTRATION**

13.1.The Project Manager for this Agreement shall be PM's NAME, who can be reached by phone at 720-523-XXXX. The Project Manager does not have the authority to alter or modify the terms of this Agreement.

- 13.2 The Project Manager is designated by the County to exercise authority on its behalf under this Agreement, and to see that it is performed according to its terms. The Project Manager shall furnish all explanations or directions and inspections necessary to carry out and complete satisfactorily the services contemplated and provided for under this Agreement. The Project Manager shall also approve all report formats and related procedures, and shall be responsible for final acceptance of all work performed. Any conflict between the plans or specifications, and any other document incorporated herein, shall be submitted in writing to the Project Manager for review and determination.
- 13.3.If the Contractor considers any work demanded to be outside the Agreement requirements, or considers any determination of the Project Manager to be unfair, the Contractor shall immediately ask for a written instruction or decision from the Project Manager and shall proceed to perform the services to conform to the Project Manager's determination. If the Contractor considers such instructions or decision to be unsatisfactory, it shall, within five (5) days after their receipt, file a written protest with the Adams County Purchasing Office stating the objections and the reasons therefore. Unless protests or objections are made in the manner specified and within the time limit stated herein, the Contractor hereby waives all grounds for protests.
- 13.4.All claims, disputes, and other matters in question arising out of or relating to the Agreement documents or breach thereof between the Project Manager and the Contractor shall be submitted to the Adams County Purchasing Office.

## 14. NONDISCRIMINATION

- 14.1. The Contractor shall not discriminate against any employee or qualified applicant for employment because of age, race, color, religion, marital status, disability, sex, or national origin. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices provided by the local public agency setting forth the provisions of this nondiscrimination clause.
  - 14.1.1 The Contractor will cause the foregoing provisions to be inserted in all subcontracts for any work covered by this Agreement so that such provisions will be binding upon each subcontractor, provided that the foregoing provisions shall not apply to contracts or subcontracts for standard commercial supplies or raw materials.

## 15. INDEPENDENT CONTRACTOR

15.1.In providing services under this Agreement, the Contractor acts as an independent contractor and not as an employee of the County. The Contractor shall be solely and entirely responsible for his /her acts and the acts of his /her employees, agents, servants, and subcontractors during the term and performance of this Agreement. No employee, agent, servant, or subcontractor of the Contractor shall be deemed to be an employee, agent, or servant of the County because of the performance of any services or work under this Agreement. The Contractor, at its expense, shall procure and maintain workers' compensation insurance as required by State law and personal injury and property damage insurance in the coverage amounts as described in Section XIV. Pursuant to the Workers' Compensation Act § 8-40-202(2)(b)(IV), C.R.S., as amended, the Contractor understands that it and its employees and servants are not entitled to workers' compensation benefits from the County. The Contractor further

## understands that it is solely obligated for the payment of federal and state income tax on any moneys earned pursuant to this Agreement.

## 16. INDEMNIFICATION

16.1. The Contractor agrees to indemnify and to hold the County and its agents harmless for, from, and against any and all claims, suits, expenses, damages or other liabilities, including reasonable attorney fees and court costs, arising out of damage or injury to persons or property caused or sustained by any person, persons, or entities as a result of the performance or failure of the Contractor, its agents or employees, or any subcontractor to provide services pursuant to the terms of this Agreement.

## 17. INDEMNIFICATION

17.1. The Contractor agrees to indemnify and to hold the County and its agents harmless for, from, and against any and all claims, suits, expenses, damages or other liabilities, including reasonable attorney fees and court costs, arising out of damage or injury to persons or property caused or sustained by any person, persons, or entities as a result of the performance or failure of the Contractor, its agents or employees, or any subcontractor to provide services pursuant to the terms of this Agreement.

## 18. **INSURANCE**

- 18.1. The Contractor shall furnish a certificate of insurance for commercial general liability, comprehensive automobile liability, workers' compensation, and professional liability upon notification of award and prior to performance. Work shall not commence under this Agreement until the Contractor has submitted to the County, and received approval thereof, the certificate of insurance showing compliance with the following types and coverage of insurance.
  - 18.1.1. <u>Commercial General Liability Insurance</u>: to include products liability, completed operations, contractual, broad form property damage, and personal injury.

Each Occurrence

\$1,000,000

General Aggregate

\$2,000,000

18.1.2. <u>Comprehensive Automobile Liability Insurance</u>: to include all motor vehicles owned, hired, leased, or borrowed.

Bodily Injury/Property Damage

\$1,000,000 (each accident)

Personal Injury Protection

Per Colorado Statutes

- 18.1.3. Workers' Compensation Insurance: Per Colorado Statutes
- 18.1.4. <u>Professional Liability Insurance\*</u>: to include coverage for damages or claims for damages arising out of the rendering, or failure to render, any professional services.

Each Occurrence

\$1,000,000

\*This insurance requirement applies only to Contractors who are performing services under this Agreement as professionals licensed under the laws of the State of Colorado, such as physicians, lawyers, engineers, nurses, mental health providers, and any other licensed professionals.

18.2. The Contractor's commercial general liability, comprehensive automobile liability, workers' compensation, and professional liability insurance policies and/or certificates of insurance shall be issued to include Adams County and the Colorado Department of

Transportation (CDOT) as an "additional insured" and shall include the following provisions:

- 18.2.1. Underwriters shall have no right of recovery or subrogation against the County, it being the intent of the parties that the insurance policies so affected shall protect both parties and be primary coverage for any and all losses resulting from the actions or negligence of the Contractor.
- 18.2.2. The insurance companies issuing the policy or policies shall have no response against the County for payment of any premiums due or for any assessments under any form of any policy.
- 18.2.3. Any and all deductibles contained in any insurance policy shall be assumed by and at the sole risk of the Contractor.
- 18.3. If any of the said policies shall be or at any time become unsatisfactory to the County as to form or substance, or if a company issuing any such policy shall be or at any time becomes unsatisfactory to the County, the Contractor shall promptly obtain a new policy, submit the same to the Purchasing Agent of Adams County for approval, and thereafter submit a certificate of insurance as herein provided. Upon failure of the Contractor to furnish, deliver, and maintain such insurance as provided herein, this Agreement, at the election of the County, may be immediately declared suspended, discontinued, or terminated. Failure of the Contractor to obtain and/or maintain any required insurance shall not relieve the Contractor from any liability under the Agreement, nor shall the insurance requirements be construed to conflict with the obligations of the Contractor concerning indemnification.
- 18.4. If the Contractor is a Joint Venture, then the respective parties thereto are each individually held fully responsible for completion of the project according to the terms of this Agreement. The parties thereto also have joint and several liabilities to the County for any liquidated damages assessed or for performance bond claims against the Joint Venture. The performance bond and all insurance required by this Agreement shall set forth the identity of each party to the Joint Venture.

## 19. TERMINATION

- 19.1. Termination of Agreement for the Convenience of the County: The County, at its sole option and discretion, may terminate this Agreement at any time by giving written notice to the Contractor of such termination and specifying the effective date thereof, at least fifteen days before the effective date of termination. If the Agreement is terminated by the County, the Contractor will be paid an amount which bears the same ratio to the total compensation as the services actually performed bear to the total services of the Contractor covered by this Agreement, less payments of compensation previously made.
- 19.2. <u>Termination of Agreement for Cause:</u> If, through any cause, the Contractor shall fail to fulfill its obligations under this Agreement in a timely and proper manner, or if the Contractor shall violate any of the covenants, agreements, or stipulations of this Agreement, the County shall thereupon have the right to immediately terminate this Agreement upon giving written notice to the Contractor of such termination and specifying the effective date thereof.

- 19.3. Ownership of Partially Completed Work: All work accomplished by the Contractor prior to the date of such termination shall be recorded and tangible work documents shall be transferred to and become the sole property of the County prior to payment for services rendered.
- 19.4. Notwithstanding the above, the Contractor shall not be relieved of liability to the County for damages sustained by the County by virtue of any breach of the Agreement by the Contractor and for the purposes of setoff until such time as the exact amount of damages due the County from the Contractor is determined.

## 20. BONDING:

20.1. The Contractor shall secure a Performance Bond and a Payment Bond each in the amount of one hundred percent (100%) of the Agreement price with a corporate surety approved by the County and licensed to do business in the State of Colorado, said bonds to be released at the sole discretion of the County.

## 21. MUTUAL UNDERSTANDINGS

- 21.1. <u>Jurisdiction and Venue:</u> The laws of the State of Colorado shall govern as to the interpretation, validity, and effect of this Agreement. The parties agree that venue and jurisdiction for disputes regarding performance of this Agreement are with the District Court of Adams County, Colorado.
- 21.2. Compliance with Laws: The Contractor, at all times during the performance of this Agreement, agrees to strictly adhere to all applicable federal, state, and local laws, rules, and regulations that affect or govern the work as contemplated under this Agreement. If applicable, the Contractor and subcontractors shall abide by all applicable provisions of the Davis-Bacon Act for payment of wages to employees and the Contract Work Hours and Safety Standards Act. The parties hereto aver that they are familiar with §§ 18-3-301, et seq., C.R.S. (Bribery and Corrupt Influences), as amended, and §§ 18-8-401, et seq., C.R.S. (Abuse of Public Office), as amended, Title 2: Grants and Agreements: Part 200 Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards Subpart F, the Clean Air Act (42 U.S.C. 7401-7671q), and the Federal Water Pollution Control Act (33 U.S.C. 1251-1387), as amended, and that no violation of such provisions are present. Contractor warrants that it is in compliance with the residency requirements in §§ 8-17-101, et seq., C.R.S.
- 21.3. Record Retention: The Contractor shall maintain records and documentation of the services provided under this Agreement, including fiscal records, and shall retain the records for a period of three (3) years from the date this Agreement is terminated. Said records and documents shall be subject at all reasonable times to inspection, review, or audit by authorized federal, state, or county personnel.
- 21.4. <u>Assignability:</u> Neither this Agreement, nor any rights hereunder, in whole or in part, shall be assignable or otherwise transferable by the Contractor without the prior written consent of the County.
- 21.5. <u>Waiver:</u> Waiver of strict performance or the breach of any provision of this Agreement shall not be deemed a waiver, nor shall it prejudice the waiving party's right to require

- strict performance of the same provision, or any other provision in the future, unless such waiver has rendered future performance commercially impossible.
- 21.6. <u>Force Majeure:</u> Neither party shall be liable for any delay or failure to perform its obligations hereunder to the extent that such delay or failure is caused by a force or event beyond the control of such party including, without limitation, war, embargoes, strikes, governmental restrictions, riots, fires, floods, earthquakes, or other acts of God.
- 21.7 <u>Notice:</u> Any notices given under this Agreement are deemed to have been received and to be effective:
  - 21.7.1. Three (3) days after the same shall have been mailed by certified mail, return receipt requested; and,
  - 21.7.2. Immediately upon hand delivery; or,
  - 21.7.3. Immediately upon receipt of confirmation that an E-mail was received.
  - 21.7.4. For the purposes of this Agreement, any and all notices should be addressed to the contacts listed below:

Department: Adams County (department name)

Contact: Address:

City, State, Zip:

Phone: E-mail:

Department: Adams County Purchasing

Contact:

Address: 4430 South Adams County Parkway City, State, Zip: Brighton, Colorado 80601

Phone: E-mail:

Department: Adams County Attorney's Office Address: 4430 South Adams County Parkway City, State, Zip: Brighton, Colorado 80601

Phone: 720.523.6116

Contractor: Company Name

Contact: Address:

City, State, Zip:

Phone: E-mail:

21.8. <u>Integration of Understanding:</u> This Agreement contains the entire understanding of the parties hereto and neither it, nor the rights and obligations hereunder, may be changed, modified, or waived except by an instrument in writing that is signed by the parties hereto.

- 21.9. <u>Severability:</u> If any provision of this Agreement is determined to be unenforceable or invalid for any reason, the remainder of this Agreement shall remain in effect, unless otherwise terminated in accordance with the terms contained herein.
- 21.10. <u>Authorization:</u> Each party represents and warrants that it has the power and ability to enter into this Agreement, to grant the rights granted herein, and to perform the duties and obligations herein described.
- 21.11. Confidentiality: All documentation related to this Agreement will become the property of Adams County. All documentation maintained or kept by Adams County shall be subject to the Colorado Open Records Act, C.R.S. 24-72-201 et seq. ("CORA"). The County does not guarantee the confidentiality of any records.

The remainder of this page is left blank intentionally.

IN WITNESS WHEREOF, the Parties have caused their names to be affixed hereto:

## ADAMS COUNTY COLORADO BOARD OF COUNTY COMMISSIONERS

Chair Da	ate
CONTRACTOR	
Signature	Date
Printed Name	Title
ATTEST: Josh Zygielbaum, Clerk and Recorder	Deputy Clerk
APPROVED AS TO FORM:	Adams County Attorney's Office
NOTARIZATION OF CONTRACTOR'S	₹ SIGNATURE:
COUNTY OF	)
STATE OF	)SS.
Signed and sworn to before me this _	day of, 2019 ,
by	
Notary Public	<del></del>
My commission expires on:	

#### CONTRACTOR'S CERTIFICATION OF COMPLIANCE

CONTRACTOR:

Pursuant to Colorado Revised Statute, § 8-17.5-101, et.seq., as amended 5/13/08, as a prerequisite to entering into a contract for services with Adams County, Colorado, the undersigned Contractor hereby certifies that at the time of this certification, Contractor does not knowingly employ or contract with an illegal alien who will perform work under the attached contract for services and that the Contractor will participate in the E-Verify Program or Department program, as those terms are defined in C.R.S. § 8-17.5-101, et. seq. in order to confirm the employment eligibility of all employees who are newly hired for employment to perform work under the attached contract for services.

Pursuant to Code of Federal Regulations 2 C.F.R. Part 200 Subpart C 200.213, the undersigned Contractor certifies that they are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency.

Company Name	Date
Name (Print or Type)	
Signature	
Title	

Note: Registration for the E-Verify Program can be completed at: <a href="https://www.vis-dhs.com/employerregistration">https://www.vis-dhs.com/employerregistration</a>. It is recommended that employers review the sample "memorandum of understanding" available at the website prior to registering.

## **APPENDIX B - TECHNICAL SPECIFICATIONS**

FOR
BIDDING PURPOSES
ONLY
NOT FOR
CONSTRUCTION

## ADAMS COUNTY, COLORADO SEWAGE LAGOON LIQUID/BIOSOLIDS REMOVAL & DECOMMISSIONING

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#### **DIVISION 1—GENERAL REQUIREMENTS**

## SECTION 01010 SUMMARY OF WORK

#### PART 1 GENERAL

#### 1.01 SECTION INCLUDES

Work covered by Contract Documents

#### 1.02 WORK COVERED BY CONTRACT DOCUMENTS

A. Work to be done under this Contract consists of furnishing all labor, materials, equipment, and accessories and performing all operations to complete the project work in accordance with the drawings and specifications.

In case of any discrepancies in any or all of the following specifications, the intent, either expressed or implied, shall govern in the interpretation of the drawings and specifications.

- B. The work includes, but is not necessarily limited to, the furnishing of labor and materials, and equipment for the demolition, disposal, construction, and installation of the following:
  - 1. Establish connection to existing South Platte Interceptor line. Disconnect existing lagoon force main.
  - 2. Dredge, pump and dispose of liquids and biosolids from the bottom of Lagoon #1, #2, and #3. Install temporary bypass piping (base bid) and haul the biosolids off the site for proper disposal.
  - Test the existing clay liner for concentrations of contaminants of concern above the State, Federal, and local regulations for resident soil or groundwater cleanup standards.
  - 4. Assuming acceptable results from the testing of the existing clay liner, till or scarify the existing clay liner thus rendering it permeable.
  - 5. Demolish and remove existing lagoon infrastructure (i.e. concrete, electrical wire, aeration equipment, control panels, pumps, etc.).
  - 6. Cleanout and abandon in place existing lagoon sanitary sewer force main.
  - 7. Add topsoil, seed, and reestablish vegetation to match adjacent golf course vegetation.
- C. Furnish all materials, equipment, supplies, and appurtenances; provide all construction plant equipment and tools; and perform all necessary labor and supervision.

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D. Coordinate the progress of the work, including coordination between trades, subcontractors, suppliers, public utilities, and Owner to assure the progress of the work.

## PART 2 PRODUCTS

All products required for the work are identified in the specifications and drawings.

PART 3 EXECUTION

Not used.

**END OF SECTION** 

## SECTION 01025 MEASUREMENT AND PAYMENT

#### PART 1-GENERAL

- A. The entire cost of the work and the material necessary to complete all items shown are implied on the drawings or specified herein, shall be included and merged into the pay items shown in Section 00300 Bid Form and Schedule. All payment shall be subject to the conditions of these specifications.
- B. All pay items shall include material, transportation expenses to the job site, cost of installation, maintenance during construction, insurance, bonds, guarantees and warranties, if applicable, profit, sales tax, license, permits, and other taxes required for the completion of the project in place for each item in the bid schedule.
- C. No additional compensation will be allowed for any item completed beyond the limits as shown on the contract drawing without the prior written approval of the Engineer and Owner.

#### **PART 2 - MEASUREMENT AND PAYMENT**

- A. Bid A Sewage Lagoon Liquid/Biosolids Removal & Decommissioning
  - 1. Item 1 Mobilization and Demobilization

This item shall be paid for on a lump sum basis and shall include all the cost for labor, materials, and equipment necessary for mobilization and demobilization. This includes preparatory work and operations, including, but not limited to, those necessary for the movement of personnel, equipment, and supplies to the project site and for the establishment of access, contractor's offices, necessary preconstruction direct costs, and other facilities and appurtenances necessary to undertake the work on the project.

2. Item 2 – Liquid/Biosolids Removal (Base Bid and Bid Alternate)

This item shall be paid for on a unit price basis (per gallon) to a maximum price for the total volume shown on the plans and metered in the temporary bypass pipeline, and shall include all the cost for labor, materials, and equipment necessary for removing and properly disposing of all the liquids/biosolids and waste from the three sewage lagoons.

3. Item 3 – Demolition

This item shall be paid for on a lump sum basis and shall include all the cost for labor, materials, and equipment necessary to remove all of the equipment, electrical, piping, and material as indicated in the Contract Documents.

4. Item 4 – Clay Liner Testing

This item shall be paid for on a lump sum basis and shall include all the cost for labor, materials, testing, and equipment necessary to test and analyze the existing clay liner.

5. Item 5 – Clay Liner Decommissioning, Project Topsoiling, and Finished Grading

This item shall be paid for on a lump sum basis and shall include all the cost for labor, materials, and equipment necessary to complete clay liner decommissioning, project topsoiling, finished grading, seeding, and temporary irrigation.

- 6. Item 6 – Grading, Erosion, Sediment Control and Stormwater Management Plan This item shall be paid for on a lump sum basis and shall include all the cost for labor, materials, and equipment necessary to complete and maintain temporary measures for erosion and sediment control work.
- 7. Item 7 - Change Order Allowance

This item shall be paid for whenever the Owner executes an approved Change Order. Any change orders that are approved by the owner will be deducted from this Change Order Allowance. At the end of the project, any remaining Change Order Allowance not used for approved change orders will be credited to the Owner in the final pay application.

**END OF SECTION** 

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### SECTION 01140 COORDINATION OF WORK

## **PART 1--GENERAL**

#### 1.01 SECTION INCLUDES

- A. Work Sequence
- B. Contractor's Use of Premises
- C. Owner Occupancy
- D. Work Limitations
- E. Protection of Natural Features
- F. Public Inconvenience
- G. Permits

#### 1.02 WORK SEQUENCE

#### A. General

- 1. The Riverdale Golf Courses are continuously operated 365 days per year. Golfing access must remain in continuous operation throughout the entire construction project.
- Construction operations shall be scheduled to allow the Owner uninterrupted operation of existing facilities. Coordinate work to assure timely completion of interfaced items.
- 3. At no time shall Contractor modify operation of the existing facilities or start construction modifications without approval of the Owner.
- 4. This project requires construction in close proximity to the Golf Course.

## B. Plan

- 1. The contractor shall submit a plan of methods and procedures for the work.
- 2. The contractor shall submit a truck routing and traffic control plan to Adams County for review.

### C. Site Access

1. Contractor construction access is shown on the drawings.

#### 1.03 CONTRACTOR'S USE OF PREMISES

- A. Contractor shall limit his use of the premises for work and storage to allow for Owner occupancy.
- B. Coordinate use of premises with the Engineer and Owner.
- C. Assume full responsibility for the protection of safekeeping of products furnished under this Contract, stored on or offsite.
- D. Obtain and pay for the use of additional storage or work areas needed for construction.
- E. Contractor may use those areas indicated on the drawings for storage and such additional areas as Owner may designate.

#### 1.04 WORK LIMITATIONS

A. The existing golf course must continue to operate during the construction.

#### 1.05 PROTECTION OF NATURAL FEATURES

- A. The Contractor will confine all operations to work limits of the project as shown on the drawings or as specified.
- B. Prevent damage to golf course and natural surroundings.
- C. Restore damaged areas, repairing or replacing damaged trees and plants at no additional expense.
- D. Do not remove, injure, or destroy trees or other plants without prior approval from the Owner.
- E. Coordinate with Owner, the removal of roots and branches interfering with construction.

#### 1.06 PUBLIC INCONVENIENCE

- A. The Contractor shall at all times conduct his operations to ensure the least inconvenience to the public.
- B. If the nature of construction work requires temporary disruption, Contractor will give a minimum of two weeks' notice for coordinating any impact. Approval or disapproval will be given by the Owner within seven days.

#### 1.07 PERMITS

A. Contractor shall obtain the following permits for the project:

Coordination of Work: 01140-2

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- 1. Erosion and Sediment Pollution Control Permit meeting, State, and Adams County requirements.
- 2. Colorado Department of Public Health and Environment (CDPHE) Stormwater Discharge Associated with Construction Activity General Permit.
- 3. Any additional permits not listed above.

#### 1.08 UNIT PRICES

All Contractor costs incurred in compiling with this section, will not be paid for directly but shall be included in the lump sum prices bid for other items of work.

#### **END OF SECTION**

#### **SECTION 01160** SITE CONDITIONS

#### PART 1 - SITE INVESTIGATIONS AND REPRESENTATION

- The Contractor acknowledges that he or she has satisfied him/herself as to the nature Α. and location of the work, the general and location conditions, particularly those bearing upon access to the site, disposal, handling and storage of materials, availability of water, electric power, roads and uncertainties of weather, or similar physical conditions at the site, the conformation and conditions of the ground, the character of equipment and facilities needed preliminary to and during the prosecution of the work and all other matters which can in any way affect the work or the cost thereof under this Contract.
- The Contractor further acknowledges that he or she has satisfied him/herself as to the B. character, quality, and quantity of surface and subsurface materials to be encountered from his or her inspection of the site and from reviewing any available records of exploratory work furnished by the Owner or included in these Documents. Failure by the Contractor to acquaint him/herself with the physical conditions of the site and all the available information will not relieve him or her from responsibility for properly estimating the difficulty or cost of successfully performing the work.
- C. The Contractor warrants that, as a result of his or her examination and investigation of all the aforesaid data, he or she can perform the work in a good and workmanlike manner and to the satisfaction of the Owner. The Owner assumes no responsibility for any representations made by any of its officers or agents during or prior to the execution of this Contract, unless (1) such representations are expressly stated in the Contract, and (2) the Contract expressly provides that the responsibility therefore is assumed by the Owner.

#### **PART 2-INFORMATION ON SITE CONDITIONS**

Any information obtained by the Engineer regarding site conditions, existing construction of site facilities as applicable, and similar data will be available for inspection at the office of the Engineer upon request. Such information is offered as supplementary information only. Neither the Engineer nor the Owner assumes any responsibility for the completeness or interpretation of such supplementary information.

#### Α. **Test Holes**

The Contractor may make arrangements with the Owner for permission to conduct such additional subsurface investigation as may be necessary to verify existing conditions.

#### B. **Underground Utilities**

Known utilities and structures adjacent to or encountered in the work are shown on the The locations shown are taken from existing records and the best information available from existing utility plans; however, it is expected that there may be

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some discrepancies and omissions in the locations and quantities of utilities and structures shown. Those shown are for the convenience of the Contractor only, and no responsibility is assumed by either the Owner or the Engineer for their accuracy or completeness.

#### PART 3 - CONTRACTOR'S RESPONSIBILITY FOR UTILITY PROPERTIES AND SERVICE

#### 3.01 GENERAL

- A. Contractor shall document preconstruction conditions of the site and access route, see Section 01300.
- B. Where the Contractor's operations could cause damage or inconvenience to power, water, sewer, or irrigation systems, the operations shall be suspended until all arrangements necessary for the protection of these utilities and services have been made by the Contractor.
- C. The Contractor shall be solely and directly responsible to the Owner and operators of such properties for any damage, injury, expense, loss, inconvenience, delay, suits, actions, or claims of any character brought because of any injuries or damage which may result from the construction operations under this Contract.
- D. Neither the Owner nor its officers or agents shall be responsible to the Contractor for damages as a result of the Contractor's failure to protect utilities encountered in the work.
- E. In the event of interruption to domestic water, sewer, storm drain, and other utility services as a result of accidental breakage due to construction operations, promptly notify the proper authority. Cooperate with said authority in the restoration of service as promptly as possible and bear all costs of repair. In no case shall interruption of any water or utility service be allowed to exist outside working hours unless prior approval is granted.
- F. In the event the Contractor encounters water service lines or sewer lines that interfere with the trenching, he or she may, by obtaining prior approval of the Owner, Utility Department, or Fire Department, as applicable, and the Engineer, cut the service, dig through, and restore the service with similar and equal materials at the Contractor's expense.
- G. The Contractor shall replace, at his or her own expense, any and all other existing utilities or structures removed or damaged during construction, unless otherwise provided for in these Contract Documents or ordered by the Engineer.

## 3.02 INTERFERING STRUCTURES

The Contractor shall take necessary precautions to prevent damage to existing structures whether on the surface, aboveground, or underground. An attempt has been made to show major structures on the Drawings. While the information has been compiled from the best

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available sources, its completeness and accuracy cannot be guaranteed, and it is presented simply as a guide to avoid known possible difficulties.

#### 3.03 FIELD RELOCATION

During the progress of construction, it is expected that minor relocations of the work will be necessary. Such relocations shall be made only when authorized by the Engineer. If existing structures are encountered which prevent the construction and which are not properly shown on the Drawings, notify the Engineer before continuing with the construction in order that the Engineer may make such field revision as necessary to avoid conflict with the existing structures. If the Contractor shall fail to so notify the Engineer when an existing structure is encountered and shall proceed with the construction despite the interference, he or she shall do so at his or her own risk.

#### **PERMITS** 3.04

- Α. All permits and licenses necessary for the prosecution of the work shall be the responsibility of the Contractor. The Contractor shall obtain all required permits and licenses, and all costs related to such permits and licenses shall be included in his or her Bid for the work.
- B. Strict compliance with the conditions of permits pertaining to construction shall be the responsibility of the Contractor.

#### 3.05 LAND MONUMENTS

The Contractor shall notify the Engineer of any existing federal, state, city, county, and private land monuments encountered. Private monuments that are within five feet of the trench centerline shall be preserved or replaced by a licensed surveyor at the Contractor's expense. When government monuments are encountered, the Contractor shall notify the Engineer at least two weeks in advance of the proposed construction in order that the Engineer will have ample opportunity to notify the proper authority and reference these monuments for later replacement.

#### **END OF SECTION**

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## SECTION 01200 PROJECT COORDINATION

#### **PART 1 GENERAL**

#### 1.01 SECTION INCLUDES

- A. Meetings
- B. Drawings and Contract Documents for Contractor Use
- C. Preconstruction Conference
- D. Progress Meetings
- E. Other Meetings
- F. Record Documents

#### 1.02 MEETINGS

- A. Contractor's Representative will attend all project meetings required by the Owner's Representative. Contractor's representative(s) shall include supervisor or Superintendent with the authority to commit the Contractor to solutions agreed upon. Other Contractor representatives may attend project meetings.
- B. Contractor shall provide all pertinent work-related reports or documents for each meeting as requested by the Owner's Representative.
- C. Engineer will record minutes of all meetings and will furnish one copy to the Contractor. Recipients of copies may make and distribute such other copies as they wish.
- D. Contractor shall advise the Owner's Representative of any inaccuracies, discrepancies, objections, or missing items in the minutes within five calendar days of receipt of the minutes.

#### 1.03 DRAWINGS AND CONTRACT DOCUMENTS FOR CONTRACTOR USE

- A. The Owner will furnish the Contractor, upon award of the Owner-Contractor Agreement, with the following documents:
  - Three (3) sets of full-size prints of Drawings and Specifications.
- B. Additional documents are available at a cost of seventy-five dollars (\$75) per set for prints of Drawings, Contract Documents, and Specifications.

Project Coordination: 01200-1

#### 1.04 PRECONSTRUCTION CONFERENCE

Key employees of the Contractor and Subcontractors scheduled to work on the project shall attend a preconstruction conference at a time and date determined by the Owner. A representative of the Engineer will be present at the meeting to discuss the project.

#### 1.05 PROGRESS MEETINGS

A. Progress meetings will be held throughout the duration of the project. Meeting schedule and location will be determined at the Preconstruction Conference. Milestones during construction will be established. Progress meetings shall be held as a minimum on a weekly basis.

#### B. Suggested Agenda

- 1. Review of work progress
- 2. Field observations, problems, and conflicts
- 3. Problems that impede construction schedules
- 4. Corrective measures and procedures to regain projected schedules
- 5. Revisions to construction schedules
- 6. Plan progress schedules during succeeding work period
- 7. Coordination of schedules
- 8. Review submittal schedules; expedite as required
- 9. Maintenance of quality standards and required corrective measures
- 10. Review proposed changes for effect on construction schedules and on completion dates
- 11. Other business

#### 1.08 OTHER MEETINGS

- A. Other meetings will be held from time to time as may be requested by the Owner's Representative or Contractor. Time and place of meetings shall be as mutually agreed upon. Those required to be in attendance at meetings shall be as requested.
- B. Other meetings shall also include meetings with regulatory agencies. When requested, the Contractor shall attend meetings held or required by governmental regulatory agencies having jurisdiction over the work.
- C. Other meetings may also include a Post-Construction Conference. The Post-Construction Conference will be held prior to initial acceptance of the work to discuss and resolve all unsettled matters.

#### 1.09 RECORD DOCUMENTS

The Contractor and the Owner's Representative shall each maintain an updated record set of Contract Specifications and Drawings. The Contractor and the Owner's Representative shall compare and update their master documents at least every five working days and prior to

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approval of pay applications. Discrepancies noted between the Contractor's documents and those of the Owner's Representative shall be resolved prior to the next meeting to compare documents. The Contractor's sets of as-built documents will be submitted for review by the Owner's Representative at the completion of work.

#### 1.10 UNIT PRICES

All Contractor costs incurred in complying with this section will not be paid for directly but shall be included in the lump sum prices bid for other items of work.

#### **PART 2 PRODUCTS**

Not Used.

#### PART 3 EXECUTION

Not Used.

**END OF SECTION** 

## SECTION 01300 SUBMITTALS

#### **PART 1—GENERAL**

#### 1.01 SECTION INCLUDES

- A. Submittal procedures.
- B. Required submittals
- C. Proposed products list.
- D. Samples.
- E. Project Record Documents.
- F. Preconstruction and construction photographs.

#### 1.02 SUBMITTAL PROCEDURES

- A. Transmit each submittal with the attached form.
- B. Sequentially number the transmittal forms. Insure that resubmittals have original number with an alphabetic suffix.
- C. Identify Project, Contractor, Subcontractor or supplier; pertinent Drawing sheet and detail number(s), and specification section number, as appropriate.
- D. Apply Contractor's stamp, signed or initialed certifying that review, verification of products required, field dimensions, adjacent construction Work, and coordination of information, is in accordance with the requirements of the Work and Contract Documents. The stamp shall read as follows:

(Contractor's Name) represents that we have determined and verified all field dimensions and measurements, field construction criteria, materials, catalog numbers, and similar data, and that we have checked with the requirements of the Specifications and Drawings, Contract Documents, and General Conditions.

- E. Do not mark the submittals in red. Insure that any marks are duplicated on all copies submitted. Outline the marks on reproducible transparencies with a rectangular box.
- F. Schedule submittals to expedite the Project and deliver them to the Engineer:

Wright Water Engineers, Inc. 2490 West 26<sup>th</sup> Avenue, Suite 100A Denver, CO 80211 Attn: Andrew Dixon adixon@wrightwater.com

Coordinate submission of related items.

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- G. Identify variations from the Contract Documents and product or system limitations that may be detrimental to successful performance of the completed Work.
- H. Provide space for Contractor and Engineer review stamps.
- I. Revise and resubmit submittals as required; identify all changes made since the previous submittal.
- J. Distribute copies of reviewed submittals to concerned parties. Instruct parties to promptly report any inability to comply with provisions.
- K. Submit a digital copy in PDF format of each Shop Drawing.

#### 1.03 REQUIRED SUBMITTALS

A. See individual technical specifications.

#### 1.04 PROPOSED PRODUCTS LIST

- A. Within 10 days after date of Notice to Proceed, submit a complete list of major products proposed for use, with the name of manufacturer, trade name, and model number of each product.
- B. For products specified only by reference standards, give the manufacturer, trade name, model or catalog designation, and reference standards.

## 1.05 SAMPLES

- A. Where required, submit two (2) samples each. Identify samples as to: manufacturer, item, use, type, project designation, tag number, specification section or drawing detail reference, color, range, texture, finish and other pertinent data.
- B. Forward with transmittal letters, including brochures and installation instructions. Stamp on samples of transmittals, as indication of checking and verifying dimensions and coordination with interrelated items. Resubmit samples of rejected items.
- C. Acceptable samples submitted or constructed constitute criteria for judging completed work. Finish work or items not equal to samples will be rejected.
- D. Samples may be retained for comparison purposes, and the Contractor shall remove samples when directed. The Contractor shall include in bid all costs of furnishing and removing samples.

#### 1.06 PROJECT RECORD DOCUMENTS

A. Maintain on site one set of the following record documents; record actual revisions to the Work:

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- 1. Contract Drawings.
- 2. Specifications.
- Addenda. 3.
- 4. Change Orders and other modifications to the Contract.
- Reviewed shop drawings, product data, and samples. 5.
- B. Store Record Documents separate from documents used for construction.
- C. Record information concurrent with construction progress.
- D. Specifications: legibly mark and record at each product section a description of actual products installed, including the following:
  - 1. Manufacturer's name, product model and number.
  - 2. Product substitutions or alternates used.
  - Changes made by addenda and modifications. 3.
- E. Record Documents and Shop Drawings: legibly mark each item to record actual construction including:
  - 1. Measured depths of foundations in relation to finish datum.
  - Measured horizontal and vertical locations of underground utilities and 2. appurtenances, referenced to permanent surface improvements.
  - Measured locations of internal utilities and appurtenances concealed in 3. construction, referenced to visible and accessible features of the Work.
  - 4. Field changes of dimension and detail.
  - Details not on the original Contract Drawings. 5.

#### PRECONSTRUCTION AND CONSTRUCTION PHOTOGRAPHS 1.07

- Α. Document by digital photographs and video the preconstruction conditions of the site and construction access route from Riverdale Road & Park Blvd. Include photographs and video to show asphalt and concrete conditions of access roads and features of off pavement route. Submit digital photographs on a flash drive to the Engineer.
- B. Take ten site photographs from differing directions indicating the relative progress of the Work each week with a digital camera. Submit digital photographs on a flash drive to the enaineer.
- C. Identify each photograph with the date, time, orientation and project identification.

#### PART 2 PRODUCTS

Not Used.

#### PART 3 EXECUTION

Not Used.

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## **END OF SECTION**

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# ADAMS COUNTY SEWAGE LAGOON LIQUIDS/BIOSOLIDS REMOVAL & DECOMMISSIONING SUBMITTAL

SUBMITTAL TRANSMITTAL - #	ROUTING	DATE SENT	DATE RECEIVED
CONTRACTOR:	Contractor to Engineer		
ENGINEER:	Engineer to Contractor		
OWNER:	Engineer to Owner		
SUBMITTAL			
ITEM:			
SPEC SECTION:	_EQUIPMENT DESIGNATION:_		
DRAWING NO.:	_LOCATION:		
OTHER:			
CONTRACTOR'S VERIFICATION			
CONTRACTOR'S VERIFICATION  This submittal meets all requirements of the co			
CONTRACTOR'S VERIFICATION  This submittal meets all requirements of the co	ontract document		ons:
CONTRACTOR'S VERIFICATION  This submittal meets all requirements of the co	ontract document	·s.	ons:
CONTRACTOR'S VERIFICATION  This submittal meets all requirements of the co	ontract document	·s.	ons:
CONTRACTOR'S VERIFICATION  This submittal meets all requirements of the co	ontract document	·s.	
CONTRACTOR'S VERIFICATION  This submittal meets all requirements of the co	ontract document	s. Following Deviatio	
CONTRACTOR'S VERIFICATION  This submittal meets all requirements of the control without Exception  By:	ontract document	s. Following Deviatio	e:
CONTRACTOR'S VERIFICATION  This submittal meets all requirements of the confidence o	ontract document	s. Following Deviation	e:
CONTRACTOR'S VERIFICATION  This submittal meets all requirements of the composition  Without Exception  By:  SUBMITTAL REVIEW  No Exception Taken	ontract document	Following Deviation  Date  Revise & Resubm	e:
CONTRACTOR'S VERIFICATION  This submittal meets all requirements of the composition  Without Exception  By:  SUBMITTAL REVIEW  No Exception Taken  Exceptions As Noted	ontract document	Following Deviation  Date  Revise & Resubm	e:

Bv:	Date:

Adams County

Sewage Lagoon Liquids/Biosolids Removal & Decommissioning

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## SECTION 01370 SCHEDULE OF VALUES

## **PART 1-GENERAL**

## 1.01 SECTION INCLUDES

- A. Schedule of Values
- B. Subschedule of Unit Material Values
- C. Cash Flow Projection

#### 1.02 RELATED SECTIONS

- A. Section 01025 Measurement and Payment
- B. Section 01200 Project Coordination

## 1.03 SUBMITTALS

- A. Submit to Engineer a Schedule of Values allocated to the various portions of the Work, within 10 days after Effective Date of Agreement.
- B. Upon request of Engineer, support the values with data which will substantiate their correctness.
- C. An unbalanced Schedule of Values providing over payment of Contractor on items of the Work which will be performed early will not be accepted.
- D. Revise and resubmit the Schedule of Values until acceptable to Engineer. No Applications for Payment shall be submitted until Schedule of Values is accepted.
- E. The Schedule of Values, when accepted by Engineer, shall be used only as the basis for the Contractor's Application for Payment.

## 1.04 FORM AND CONTENT OF SCHEDULE OF VALUES

- A. Type schedule on 8 ½" by 11" white paper; Contractor's standard forms and automated printout will be considered for approval by Engineer upon Contractor's request. Identify schedule with:
  - 1. Title of project and location
  - 2. Engineer and project number
  - 3. Name and address of Contractor
  - 4. Contract designation

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- 5. Date of submission
- B. Schedule shall list the installed value of the component parts of the Work in sufficient detail to serve as a basis for computing values for progress payments during construction.
- C. Follow the Table of Contents of this Project Manual as the format for listing component items:
  - 1. Identify each line item with the number and title of the respective major section of the specifications.
- D. For each major line item list sub-values of major products or operations under the item.
- E. List such items as bond and insurance premiums, temporary construction facilities, monthly field overhead, mobilization and demobilization separately.
- F. For the Various Portions of the Work:
  - 1. Each item shall include a directly proportional amount of the Contractor's overhead and profit.
  - 2. For items on which progress payments will be requested for stored materials, breakdown the value into:
    - a. The cost of the materials, delivered and unloaded, with taxes paid.
    - b. The total installed value, including the Contractor's overhead and profit.
- G. The sum of all values listed in the schedule shall equal the total Contract Sum.

## 1.05 SUBSCHEDULE OF UNIT MATERIAL VALUES

- A. Submit a Subschedule of Unit Costs and Quantities for:
  - 1. Products on which progress payments will be requested for stored products.
- B. The form of submittal shall parallel that of the Schedule of Values, with each item identified the same as the line item in the Schedule of Values.
- C. The unit quantity for bulk materials shall include an allowance for normal waste.
- D. The Unit Values for the Materials shall be Broken Down Into:
  - 1. Cost of the material, delivered and unloaded at the site, with taxes paid.
  - 2. Installation costs, including Contractor's overhead and profit.
- E. The installed unit value multiplied by the quantity listed shall equal the cost of that item in the Schedule of Values.

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## 1.06 CASH FLOW PROJECTION

- A. Submit estimated cash flow projection for the project:
  - 1. Estimate monthly pay applications.
  - 2. Coordinate with Schedule of Values and Construction Schedule.
- B. Resubmit a revised cash flow projection with any pay application which brings the aggregate of all pay applications to date to value which differs from the projected value by more than ±20 percent.

PART 2-PRODUCTS

Not used.

**PART 3-EXECUTION** 

Not used.

## SECTION 01400 QUALITY CONTROL

#### PART 1-GENERAL

### 1.01 SECTION INCLUDES

- A. Quality assurance and control of installation.
- B. Field samples.
- C. Inspection and testing laboratory services.
- D. Manufacturers' field services and reports.

### 1.02 QUALITY ASSURANCE/CONTROL OF INSTALLATION

- A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce Work of specified quality.
- B. Comply fully with manufacturers' instructions, including each step in sequence.
- C. Should manufacturers' instructions conflict with Contract Documents, request clarification from Engineer before proceeding.
- D. Comply with specified standards as a minimum quality for the Work except when more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- E. Perform work by persons qualified to produce workmanship of specified quality.
- F. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion or disfigurement.

#### 1.03 FIELD SAMPLES

- A. Collect field samples at the site as required by individual specifications sections for review.
- B. Acceptable samples represent a quality level for the Work.
- C. Where field sample is specified in individual sections to be removed, clear area after field sample has been accepted by Engineer.

#### 1.04 INSPECTION AND TESTING LABORATORY SERVICES

A. Secure an independent laboratory to perform all tests required in the individual specification sections.

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- B. Distribute reports of all tests made by testing laboratories to:
  - 1. 1 copy Contractor
  - 2. 1 copy Applicable Supplier or Subcontractor
  - 3. 1 copy Owner
  - 4. 1 copy Engineer
- C. Laboratory tests and examinations that the Owner elects to make in its own laboratory will be made at no cost to the Contractor, except that, if a sample of any material or equipment proposed for use by the Contractor fails to meet the Specifications, the cost of testing subsequent samples shall be borne by the Contractor.

# 1.05 MANUFACTURERS' FIELD SERVICES AND CERTIFICATES OF PROPER INSTALLATION

- A. When specified in individual specification Sections, require material or product suppliers or manufacturers to provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, quality of workmanship, test, adjust, and start-up of equipment, and to initiate instructions when necessary.
- B. Provide certificate stating that the equipment or system has been installed in accordance with the manufacturer's recommendation and has been inspected by a manufacturer's authorized representative, that it has been serviced with the proper initial lubricants, that applicable safety equipment has been properly installed, and that the proper electrical and mechanical connections have been made.
- C. Submit report in duplicate within 30 days of observation to Engineer for review.

#### 1.06 UNIT PRICES

All Contractor costs incurred in complying with this section will not be paid for directly but shall be included in the lump sum or unit prices bid for other items of work.

### **PART 2-PRODUCTS**

Not Used.

#### PART 3—EXECUTION

- A. The Contractor is responsible for the quality of the project and will undertake all quality measures necessary to ensure the final product meets the requirements of the Drawings and Specifications.
- B. The Contractor will make all submittals required by the Specifications to the Owner's Representative. The submittals include plans, schedules, and product certifications which will allow the Owner's Representative to evaluate the progress of work and the quality of materials being used on the project.

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- C. The Contractor will subcontract with qualified engineering firm(s) to conduct the necessary on-site Quality Control Testing (QC Testing) to verify earthwork operations, concrete, grout and boulder placement, and other construction activities are conducted in accordance with the Specifications. The Contractor shall remove surface soil and render any other assistance as necessary to enable performance of the QC Testing.
- D. The Owner's Representative will determine the suitability of all materials for construction purposes and the acceptability of in-place earthwork, boulders, grout and equipment based on the QC testing and submittals. All test results should be provided to the Owner's Representative within 24-hours of completion.

**END OF SECTION** 

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## SECTION 01500 CONSTRUCTION FACILITIES

## **PART 1—GENERAL**

#### 1.01 SECTION INCLUDES

Temporary Utilities: Electricity, water, and sanitary facilities.

## 1.02 TEMPORARY ELECTRICITY

- A. No electrical power is provided onsite. Contractor is to provide electricity from electric generators.
- B. Owner will not pay the cost of electric energy for the Contractor's facilities and equipment.

### 1.03 TEMPORARY WATER SERVICE

- A. Potable water is not available for use. Contractor is responsible to provide sufficient potable water for his or her work forces.
- B. Non-potable irrigation water is available for use for temporary irrigation only. Contractor to provide a temporary water meter and record water use on a weekly basis. Contractor to coordinate with the Golf Course.

## 1.04 TEMPORARY SANITARY FACILITIES

Provide and maintain required facilities and enclosures. No existing facilities are available.

#### 1.05 ON-SITE FIELD OFFICE AND SHEDS

A. A field office is not necessary, but can be provided by the Contractor. An area for locating a field office and equipment sheds will be designated by the Owner at the request of the Contractor. Telephone or internet service to the field office shall be the responsibility of the Contractor.

#### B. Construction:

- 1. Structurally sound, weather tight, with floors raised above ground
- 2. Temperature transmission resistance: compatible with occupancy and storage requirements
- 3. At Contractor's option, portable or mobile buildings modified for office and storage use may be used
- 4. Remove temporary field offices, storage sheds, contents, and service at a time they are no longer needed

#### 1.06 UNIT PRICES

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# **PART 2—PRODUCTS**

Not Used

## **PART 3—EXECUTION**

Not Used

# **SECTION 01503** PRESERVATION, RESTORATION, AND CLEAN UP

#### PART 1—GENERAL

#### 1.01 RELATED SECTIONS

Section 01563-Temporary Erosion and Sediment Control Section 02936-Seeding and Mulching

#### 1.02 SITE RESTORATION AND CLEAN UP

- Α. At all times during the work, keep the premises clean and orderly and, upon completion of the work, repair all damage caused by equipment and leave the project free of rubbish or excess materials of any kind.
- B. Stockpile excavated materials in a manner that will cause the least damage to adjacent lawns, grassed areas, gardens, shrubbery, or fences regardless of whether these are on private property or on city, state, or county rights-of-way. Remove all excavated materials from grassed and planted areas, and leave these surfaces in a condition equivalent to their original condition.
- C. All existing drainage ditches and culverts shall be reopened and graded, and natural drainage shall be restored. Restore culverts broken or damaged to their original condition and location.
- D. Upon completion of excavation and hauling operations, hand rake and drag all former grassed and planted areas, leaving all disturbed areas free from mud, rocks, gravel, clay, or any other foreign material. The finished surface shall be free draining and free from holes, ruts, rough spots, or other surface features detrimental to a seeded area.
- E. Haul routes along grassy areas, parking lots, and streets shall be cleaned by the Contractor if haul spillage has occurred.

#### 1.03 FINISHING OF SITE, BORROW, AND STORAGE AREAS

Upon completion of the project, all areas used by the Contractor shall be properly cleared of all temporary structures, rubbish, and waste materials and properly graded to drain and blend in with the abutting property. Areas used for the deposit of acceptable waste materials shall be finished to properly drain and blend with the surrounding terrain.

#### 1.04 UNIT PRICES

All Contractor costs incurred in complying with this section will not be paid for directly but shall be included in the lump sum prices bid for other items of work.

PART 2—PRODUCTS

Not used.

PART 3—EXECUTION

Not used.

# SECTION 01505 MOBILIZATION AND DEMOBILIZATION

### PART 1 - GENERAL

#### 1.01 SECTION INCLUDES

This section covers furnishing all equipment, labor and materials necessary for mobilization and demobilization. It includes preparatory work and operations, including, but not limited to, those necessary for the movement of personnel, equipment, supplies, and incidentals to the project site and for the establishment of the Contractor's offices, buildings, and other facilities necessary to undertake the work on the project.

This item shall also include other work and operations that must be performed, or for expenses incurred, before beginning work on the various Contract items on the project site. It shall also include pre-construction costs which are necessary direct costs to the project and are of a general nature rather than directly attributable to other pay items under the Contract.

#### 1.02 UNIT PRICES

Mobilization will be measured as a complete unit and will be paid for at the contract lump sum price bid.

Partial Payment Schedule	
Percentage of Original Contract Amount Earned	Percentage of Bid Price for Mobilization Allowed
First Progress Estimate	25
10	50
25	100

No adjustment in the amount bid for this item will be made for additional quantities or items of work required to satisfactorily complete the Contract.

IN NO CASE SHALL THE AMOUNT BID FOR THE ITEM OF "MOBILIZATION AND DEMOBILIZATION" EXCEED 15% OF THE TOTAL CONTRACT AMOUNT FOR ALL OTHER ITEMS LISTED IN THE PROPOSAL. Should the amount entered in the Proposal for this item exceed 15%, the Owner's Representative will reduce it to the maximum allowed amount to determine the correct total bid.

## PART 2-PRODUCTS

Not used.

#### **PART 3-EXECUTION**

Not used.

## SECTION 01520 SAFETY AND CONVENIENCE

#### PART 1 - GENERAL

## 1.01 CONSTRUCTION SAFETY PROGRAM

- A. The Contractor shall comply with Safety and Health Regulations for Construction, promulgated by the Secretary of Labor under Section 107 of the Contract Work Hours and Safety Standards Act, as set forth in Title 29, C.F.R. Copies of these regulations may be obtained from the Labor Building, 14<sup>th</sup> and Constitution Avenue Northwest, Washington, DC 20013. The Contractor shall also comply with the provisions of the Federal Occupational Safety and Health Act, as amended. An audit by a licensed health and safety professional will be conducted at a minimum every other month.
- B. The duty of the Engineer to conduct construction review of the Contractor's performance is not intended to include a review or acceptance of the adequacy of the Contractor's safety supervision, the safety program, or any safety measures taken in, on, or near the construction site.

## 1.02 SAFETY EQUIPMENT

- A. The Contractor, as part of his or her safety program, shall maintain at his or her office or other well-known place at the job site safety equipment, safety authorities, and all articles necessary for giving first-aid to the injured and shall establish the procedure for the immediate removal to a hospital or a doctor's care of any person who may be injured on the job site.
- B. The Contractor shall do all work necessary to protect the general public from hazards including, but not limited to, surface irregularities and trenches or excavations in roadway. Barricades, lanterns, and proper signs shall be furnished in sufficient amount to safeguard the public and the work.
- C. The performance of all work and all completed construction, particularly with respect to ladders, platforms, structure openings, scaffolding, shoring, lagging, machinery guards and the like, shall be in accordance with the applicable government safety authorities.

#### 1.03 ACCIDENT REPORTS

- A. If death or serious injuries or serious damages are caused, the accident shall be reported immediately by telephone or message to the Engineer and the Owner. In addition, the Contractor must promptly report in writing to the Engineer and the Owner all accidents whatsoever arising out of or in connection with the performance of the work whether on or adjacent to the site, giving full details and statements of witnesses.
- B. If a claim is made by anyone against the Contractor or any subcontractor on account of any accident, the Contractor shall promptly report the facts in writing to the Engineer and the Owner, giving full details of the claim.

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## 1.04 SAFE ACCESS BY FEDERAL, STATE, AND LOCAL GOVERNMENT OFFICIALS

Authorized representatives of the Colorado Department of Public Health and the Environment and other government officials shall at all times have safe access to the work, wherever it is in preparation or progress, and the Contractor shall provide proper facilities for such access and inspection.

## 1.05 TRAFFIC MAINTENANCE AND SAFETY

- A. Comply with all rules and regulations of the city, state, and county authorities regarding closing or restricting the use of public streets or highways. No public or private road shall be closed, except by express permission of the Owner. Conduct the work so as to assure the least possible obstruction to traffic and normal and commercial pursuits and protect all obstructions within traveled roadways by installing approved signs, barricades, and lights where necessary for the safety of the public. The convenience of the general public and the protection of persons and property are of prime importance and shall be provided for in an adequate and satisfactory manner.
- B. Where traffic will pass over trenches after they are backfilled, the top of the trench shall be maintained in a condition that will allow normal vehicular traffic to pass over. Temporary access driveways must be provided where required. Clean-up operations shall follow immediately behind backfilling, and the work site shall be kept in an orderly condition at all times.
- C. When flag men and guards are required by regulation or when deemed necessary for safety, they shall be furnished with approved orange wearing apparel and other regulation traffic-control devices.

## 1.06 TRAFFIC CONTROL

Traffic control on all local, county, and State of Colorado highway rights-of-way shall meet the requirements of the current edition (including all amendments) of the Manual on Uniform Traffic Control Devices for Streets and Highways published by the U.S. Department of Transportation Federal Highway and Administration as adopted by the State of Colorado and all State of Colorado supplements.

## 1.07 PROTECTION OF PROPERTY

A. Protect stored materials, cultivated trees and crops, and other items located adjacent to the proposed work. Notify property owners affected by the construction at least 48 hours in advance of the time construction begins. During construction operations, construct and maintain such facilities as may be required to provide access by all property owners to their property. No person shall be cut off from access to his residence or place of business unless the Contractor has made special arrangements with the affected person(s).

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B. Provide for access at all times for livestock through farm areas, and no portion of farmlands in which livestock are pastured shall be cut off from ready access by the farm animals.

#### 1.08 SNOW REMOVAL

Snow removal will be the Contractor's responsibility wherever construction has not been completed on any portion of public or private roads or areas subject to normal vehicular access. Snow removal shall be performed promptly and efficiently by means of suitable equipment whenever necessary for safety and as may be directed.

#### 1.09 BLASTING PRECAUTIONS AND METHODS

Blasting will not be allowed on this site.

## 1.10 FIRE PREVENTION AND PROTECTION

The Contractor shall perform all work in a fire-safe manner. He or she shall supply and maintain on the site adequate fire-fighting equipment capable of extinguishing incipient fires. The Contractor shall comply with applicable federal, local, and state fire-prevention regulations. Where these regulations do not apply, applicable parts of the National Fire Prevention Standard for Safeguarding Building Construction Operations (NPFA No. 241) shall be followed.

## 1.11 ACCESS FOR POLICE, FIRE, AND AMBULANCE SERVICE

- A. Notify the Fire Department and Police Department before closing any street or portion thereof. No closing shall be made without the Owner's approval. Notify said departments when the streets are again passable for emergency vehicles. Do not block off emergency vehicle access to consecutive arterial crossings or dead-end streets in excess of 300 linear feet without special written permission from the Fire Department. Conduct operations with the least interference to fire equipment access, and at no time prevent such access.
- B. The Contractor shall leave his or her night emergency telephone number or numbers with the Adams County Sheriff's Department so that contact may be made easily at all times in case of barricades and flare trouble or other emergencies.

#### 1.12 MATERIAL SAFETY DATA SHEETS

The Contractor shall submit to the Engineer a MSDS for all products to be used during construction or supplied as part of the project.

## **END OF SECTION**

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# SECTION 01550 ACCESS ROADS AND PARKING AREAS

## **PART 1 - GENERAL**

#### 1.01 SECTION INCLUDES

This section covers work required to provide and maintain temporary access roads and parking areas during construction activities.

## 1.02 RELATED SECTIONS

Section 01505 - Mobilization and Demobilization

#### 1.03 UNIT PRICES

All Contractor costs incurred in complying with this section will not be paid for directly, but shall be included in the unit prices bid for other items of work.

#### **PART 2 - PRODUCTS**

Not used.

## **PART 3 - EXECUTION**

- A. The Contractor shall construct temporary roads for access and parking areas during construction activities at locations approved by the Owner's Representative and/or as specified on the Drawings.
- B. The Contractor shall maintain safe access to areas of work for inspection and testing by the Owner or his employees or representatives of various regulatory agencies.
- C. The Contractor shall maintain haulage roads and parking areas and control fugitive dust emissions by grading, watering or chemical suppression agents approved by the Owner or Owner's Representative.
- D. All such roads and parking areas shall be reclaimed in a manner acceptable to the Owner's Representative and Engineer at the close of the project.
- E. Any damage to asphalt pavement or concrete along the access route shall be repaired by the Contractor at his or her expense.

# SECTION 01563 TEMPORARY EROSION AND SEDIMENT CONTROL

### **PART 1—GENERAL**

## 1.01 SECTION INCLUDES

This section covers furnishing all equipment, labor, and materials and performing all construction operations in connection with temporary measures for the control of erosion, sedimentation, and other pollutants during construction. Work includes installation of these temporary measures, maintenance of the measures during the contract period to ensure proper function, and removal of temporary measures in coordination with installation of permanent erosion control measures.

#### 1.02 RELATED SECTIONS

- A. Section 02140-Water Control and Dewatering
- B. Section 02936-Seeding and Mulching

## 1.03 REFERENCES

- A. The latest issue of the publication or standard listed below for material or operations form a part of this specification. The publications are referred to in the text by the basic designation. In case of a conflict between the referenced publication or standard and this specification, the more stringent requirements, as determined by the Owner's Representative, shall govern.
- B. Colorado Department of Transportation Standard Plans, M&S Standards 1998.
- C. Urban Storm Drainage Criteria Manual, Vol. 3, Best Management Practices published by the Denver Regional Council of Governments.
- D. Adams County, Stormwater Regulation Guide ESC Plan Template, BMP Details
- E. Adams County Development Standards and Regulations, Storm Drainage Design and Stormwater Quality Regulations, Chapter 9

## 1.04 SUBMITTALS

Prior to beginning construction, the Contractor shall prepare and submit to the Owner's Representative an Erosion and Sediment Control Plan including a sketch plan showing proposed methods for controlling erosion consistent with the project requirements and the applicable federal, state, and local laws and regulations. The Engineer has provided a conceptual erosion control plan; however, the Contractor shall submit a revised plan that includes construction staging and sequence considerations to the Engineer for approval. At a minimum, the plan shall include phasing the erosion and sediment control methods to be consistent with the sequence of construction activities; typical details; manufacturer's information for materials; and layouts for

proposed erosion and sediment control methods. This plan shall be a subsection of the Stormwater Pollution Prevention Plan identified in Section 01566.

### 1.05 UNIT PRICES

All Contractor costs incurred in complying with this section will not be paid for directly but rather shall be included in the lump sum prices bid for this and other items of work.

#### **PART 2—PRODUCTS**

## 2.01 GENERAL

The Contractor shall meet or exceed the requirements of the project Grading, Erosion and Sediment Control (GESC) Plan as approved by Adams County.

## 2.02 MATERIALS FOR USE WITH CHANNEL SLOPES AND OTHER DISTURBED AREAS

- A. Materials for use as temporary measures to control erosion of channel slopes and other disturbed areas include straw bales, silt fences, brush barriers, diversion dikes, sediment traps, water bars, and other stabilization materials. Erosion and sediment control materials shall be in conformance with the GESC Plan and Adams County, *Stormwater Regulation Guide ESC Plan Template, BMP Details*.
- B. Silt fence fabric shall meet the specification stated in the Adams County, *Stormwater Regulation Guide ESC Plan Template, BMP Details*.

## 2.03 MATERIALS FOR USE WITH ACTIVE FLOWING STREAM OR DIVERSION

Materials for use as temporary measures to stabilize the invert or toe of the slope zone of a live stream or diversion channel include concrete, riprap, plastic sheeting, synthetic erosion control matting, check dams, vegetation, or other functional material that will not adversely affect water quality.

## **PART 3—EXECUTION**

#### 3.01 GENERAL

Procedures for installation, maintenance, and removal of temporary erosion control methods shall conform to the guidelines contained in the Adams County, *Stormwater Regulation Guide ESC Plan Template, BMP Details*.

## 3.02 CONSTRUCTION IN WATERWAYS

Movement of construction equipment within the flowing portion of channels or waterways should be minimized. Fording of the stream should be avoided. Stream flow shall be isolated or diverted through the use of clear water diversions or some comparable method so construction equipment, materials, and earthwork are not exposed to flow.

### 3.03 TEMPORARY EROSION CONTROLS DURING SITE WORK

A. Sequencing and duration of earthwork activities

The excavation and moving of soil materials shall be sequenced and completed expeditiously so that the smallest possible areas will be unprotected from erosion for the shortest time feasible.

#### B. Diversion

Diversion ditches will be constructed to route flows away from the site. Diversion ditches must be stabilized against erosion.

## C. Sediment Control

- Sediment basins, sediment traps, perimeter dikes, sediment barriers (such as sediment control logs or silt fencing), and other measures intended to trap sediment on site must be constructed as a first step in grading and be made functional before upslope land disturbance takes place. Silt fences should be used to trap sediment from areas of limited runoff. Sediment filters must be properly anchored to prevent erosion beneath them. Sediment traps shall be inspected and cleaned as necessary by the Contractor on at least a biweekly basis and after each storm event which causes surface erosion.
- 2. Silt fences shall be installed and maintained in accordance with the following:
  - a. Silt fences shall be installed as indicated in the Adams County, *Stormwater Regulation Guide ESC Plan Template*, *BMP Details*.
  - b. Contractor shall inspect and repair fences after each storm event which causes surface erosion and at least on a biweekly basis. Sediment shall be removed when one-third the height of the fence has been filled. Removed sediment shall be deposited in the common fill as designated by the Owner's Representative.
- 3. Straw bale barriers are to be placed in accordance with the following:
  - a. Straw bale barriers shall be installed as dikes to stabilize temporary channel flow lines.
  - b. Straw bale barriers shall be placed so that the top of the downstream bale is above the ground elevation of the upstream bale in order to prevent cutting around bales.
  - c. Contractor shall inspect and repair straw bale barriers after each storm event which causes surface erosion and at least on a biweekly basis. Sediment shall be removed when one-third the height of the barrier has been filled. Removed sediment shall be deposited in an on-site area designated by the Owner's Representative.

- 4. Check dams are to be placed along ditches:
  - a. Check dams shall be constructed of clean rock/gravel, straw bales, concrete, or other suitable material.
  - b. Check dams shall be located at approximately 100-foot intervals and immediately upstream of a confluence.
  - c. Contractor shall inspect and repair check dams after each storm event which causes surface erosion and at least on a biweekly basis. Sediment shall be removed when one-third the height of the barrier has been filled. Removed sediment shall be deposited in an on-site area designated by the Owner's Representative.

#### D. Soil Erosion

- 1. Disturbed areas will be roughened to minimize erosion.
- 2. Diversion dikes and ditches should be constructed at the top of long or steep slopes which have significant drainage areas above the slope. Diversions, terraces or benching may also be used to reduce slope length. Slope rounding should be used to reduce the erosion potential of cut slopes. Diversion ditches should transition into level spreaders beyond the perimeter of the disturbed areas.
- 3. Temporary seeding should be conducted as specified in Section 02936 to protect disturbed areas.
- 4. Mulching should be conducted as specified in Section 02936 to protect soil surfaces from erosion.

#### E. Water Flow

Concentrated stormwater should not be allowed to flow down cut or fill slopes unless contained within a stabilized temporary or permanent channel, flume, or slope drain structure.

## F. Sediment Deposition

Roadways adjacent to the site shall be protected from sediment deposition. This may be accomplished by leaving a sod buffer strip around the lower perimeter of the land disturbance, by installing perimeter controls such as sediment barriers, filters or dikes, or by a combination of such measures.

## G. Other Additions and Adjustments

Contractor shall add, and/or adjust, sediment control upon direction from Owner's Representative. Adjustments to sediment control may be required based on local government inspections.

#### 3.04 DUST ABATEMENT

During the performance of the work required by these specifications or of any operation appurtenant thereto, the Contractor shall furnish all the labor, equipment, materials, and means required, and shall carry out proper and efficient measures whenever and as often as necessary to reduce the dust nuisance to persons and shall comply with and obtain permits required by federal, state, and local laws and regulations. The Contractor shall be liable for any damage resulting from dust originating from his or her operations under these specifications.

## 3.05 ACCESS ROADS AND PARKING AREAS

- A. The Contractor shall construct temporary roads for access and parking areas during construction activities at locations approved by the Owner and/or as specified on the Drawings.
- B. The Contractor shall maintain safe access to areas of work for inspection and testing by the Owner or his employees or representatives of various regulatory agencies.
- C. The Contractor shall maintain haulage roads and parking areas and control fugitive dust emissions by grading, watering or chemical suppression agents approved by the Engineer and Owner.
- D. All such roads and parking areas shall be reclaimed in a manner acceptable to the Engineer at the close of the project.

## 3.06 DISPOSITION OF TEMPORARY MEASURES

All temporary erosion and sediment control measures shall be removed and disposed of as permanent measures are being installed. Both operations shall be coordinated to prevent erosion or other damage to the channel or finished grading. Trapped sediment or other disturbed soil areas shall be permanently stabilized to prevent further erosion and sedimentation.

# SECTION 01566 STORMWATER MANAGEMENT PLAN AND POLLUTION CONTROL

## PART 1—GENERAL

#### 1.01 SECTION INCLUDES

This section covers furnishing all equipment, labor, and materials and taking all measures necessary to prevent pollution of water in streams and wetlands. The Contractor is required to apply for and obtain required stormwater, grading, and erosion control permits.

#### 1.02 RELATED SECTIONS

- A. Section 01300-Submittals
- B. Section 01563-Temporary Erosion and Sediment Control
- C. Section 01568-Protection of Water Quality and Wetlands
- D. Section 02260-Topsoiling and Finished Grading
- E. Section 02936-Seeding and Mulching

#### 1.03 REFERENCES

- A. The latest issue of the publication or standard listed below for material or operations form a part of this Specification. The publications are referred to in the text by the basic designation. In case of a conflict between the referenced publication or standard and this Specification, the more stringent requirements, as determined by the Owner, shall govern.
- B. State of Colorado Department of Transportation Standard Specifications for Road and Bridge Construction.
- C. Colorado Department of Public Health and Environment (CDPHE) General Permit in Colorado for Stormwater Discharges Associated with Construction Activity. Colorado Discharge Permit Number CO R-030000.
- D. Colorado Air Quality Control Act, Title 25, Article 7.
- E. Federal Water Pollution Control Act (33 USC § 1251 et seq.).

## 1.04 SUBMITTALS

A. Prior to beginning construction, the Contractor shall prepare and submit to the Engineer a Stormwater Management Plan. Many of the required elements for the Stormwater Management Plan are provided in these Specifications and the project drawings. The Contractor is responsible for final preparation and implementation of the plan.

B. The plan shall include phasing of pollution control measures anticipated during the construction, typical details, manufacturer's information for materials and plan and profile layouts for proposed methods. In addition, waste control, maintenance, and inspection practices shall be presented in accordance with state requirements.

## 1.05 UNIT PRICES

All Contractor costs incurred in complying with this section will not be paid for directly but rather shall be included in the lump sum prices bid for other items of work.

#### **PART 2—PRODUCTS**

Not used.

#### PART 3—EXECUTION

#### 3.01 GENERAL

- A. Contractor shall obtain a Stormwater Discharge Permit (CDPHE Stormwater Discharges Associated with Construction Activity) prior to construction on the site.
- B. The Contractor shall employ best management practices to prevent pollution by spills. Pollutants such as chemicals, fuels, lubricants, asphalt, raw sewage, concrete drum wash water, and other harmful wastes shall not be discharged into or alongside any waters of the United States but shall be disposed of in accordance with governing county, state, and federal regulations.
- C. Storage of pollutants shall not be allowed within 100 feet of a wetland or water body.
- D. Pollution prevention activities shall be coordinated with the Owner's Representative.

## 3.02 STORMWATER MANAGEMENT PLAN

The Contractor shall prepare and implement a Stormwater Management Plan fulfilling all requirements of the state for owners and operators of facilities discharging stormwater in association with industrial activity from construction sites. Key items to be included in this plan include:

- Site Description: includes description of construction activity, construction sequence, estimates of total land disturbance, estimates of the post-construction runoff coefficient of the site and the current soil conditions and runoff quality, and the name of receiving waters.
- 2. Controls: includes identification of pollution controls to be used and the timing of implementation. Minimum items to be addressed include:
  - a. Erosion and sediment controls: stabilization practices (e.g., seeding, mulching) and structural practices (e.g., silt fences, check dams).

- b. Stormwater management practices (e.g., detention structures, velocity dissipation).
- c. Other controls such as waste disposal, vehicle tracking and sanitary facilities.
- d. Approved state and local plans such as erosion and sediment control plans, site permits, etc.
- e. Maintenance (e.g., maintaining vegetation and erosion and sediment control measures).
- f. Inspections.
- g. Non-stormwater discharges.

The state guidance document for preparing a Stormwater Management Plan should be referenced for additional information on the required items. The remainder of this specification provides additional information for most key items, as do the Drawings. The Contractor is responsible for preparing the final plan and submitting it to county and state agencies for review and approval and issuance of permit. A stormwater permit (CDPHE Stormwater Discharges Associated with Construction Activity) will be obtained by the Contractor prior to construction on the site.

#### 3.03 SPILL PREVENTION

## A. Good Housekeeping

- 1. The quantity of materials stored on the project should be limited, as much as practical, to that quantity required to perform the work in an orderly sequence and should be stored in a neat, orderly manner in their original containers with original manufacturer's label.
- 2. Manufacturer's recommendations for proper use and disposal of materials shall be followed. All disposal shall be according to all local, state, and federal regulations in a permitted landfill or permitted disposal facility.
- 3. The Contractor should inspect daily to ensure proper use and disposal of materials.

## B. Hazardous Products

- 1. Hazardous products shall be kept in original containers with their original labels unless they are not re-sealable or are damaged.
- 2. Material safety data sheets shall be retained on site and shall be available to all personnel at all times.

3. If surplus products must be disposed of, manufacturer's recommendations and local, state, and federal regulations shall be followed.

## C. Product Specific Practices

The Contractor shall limit the amount of petroleum products and other chemicals in work areas adjacent to wetlands, water bodies, and other sensitive areas. The following product-specific practices shall be followed on site:

- 1. Petroleum Products. All on-site vehicles shall be monitored for leaks and receive regular preventive maintenance to reduce the chance of leakage. Petroleum products shall be stored in tightly sealed containers that are clearly labeled. Construction of berms with HDPE liners, or other similar measures, will be required for storage/refueling areas as a best management practice to contain spills.
- Fertilizers. Fertilizers shall be applied only in the manner and amounts required by the Specifications. Material shall be stored in a covered area and shall not be exposed to precipitation. Partially used bags shall not be discarded but removed and disposed of properly. No storage of these materials shall be allowed within a wetland or floodplain.
- 3. Paints and Solvents. All containers shall be tightly sealed and stored when not required for use. Excess material and waste shall not be discharged but shall be properly disposed of according to manufacturers' instructions and/or state and federal regulations. No storage of these materials shall be allowed within a wetland or floodplain.
- 4. Concrete Trucks. Concrete trucks shall be allowed to discharge surplus concrete or drum wash water on site only in areas designated by the Owner's Representative. Discharge areas shall not be in or where the discharge can be washed into wetlands or water bodies.
- 5. Concrete Curing Agents. Concrete curing agents shall be applied only in a manner and amount required by the Specifications. Excess material shall not be allowed to run off the area being treated.

# D. Waste Storage

The Contractor shall provide watertight tanks or barrels or construct an HDPE-lined sump to provide temporary containment of chemical pollutants such as drained lubrication or transmission oils, grease, soaps, concrete mixer wash water, asphalt, etc., produced as byproducts of the construction work. At the completion of the construction work, sumps shall be voided without causing pollution.

## E. Sanitary Facilities

The Contractor shall provide necessary sanitary facilities. These shall not be placed adjacent to live streams, wells, springs, or storm sewer inlets or outfalls. They shall be located at a distance sufficient to prevent contamination of any water sources. At the

completion of construction work, facilities shall be removed by the Contractor without causing pollution.

#### 3.04 SPILL REPORTING AND CLEANUP PRACTICES

- A. All spills shall be reported as required under state and federal laws.
- B. The practices below shall be followed:
  - 1. All spills shall be cleaned up immediately after discovery or contained until appropriate cleanup methods can be employed.
  - 2. The spill area shall be contained, and personnel shall wear appropriate protective clothing to prevent injury from contact with a hazardous substance.
  - 3. Manufacturer's recommendations for spill cleanup shall be followed along with proper disposal methods in accordance with local, state, and federal regulations referred to previously.
  - 4. Petroleum spills shall be remediated to a minimum standard of 100 parts per million (ppm) total petroleum hydrocarbons (TPH) in soil.
- C. Where a release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR § 110, 117, or 302, occurs during a 24-hour period, the following action shall be taken by the Contractor:
  - 1. Immediately notify Owner's Representative.
  - 2. Submit a report to the state within 24 hours of knowledge of the release. The report shall include a written description of the release (including the type and estimate of the amount of material released); the date that such a release occurred; the circumstances leading to the release; and the corrective actions taken.
  - 3. Modify the Stormwater Management Plan within 24 hours of knowledge of the release by addition of the above information. Review and modification of the plan must be made to identify measures to prevent the reoccurrence of such releases and to respond to such releases.

## 3.05 CONTRACTOR NEGLIGENCE

In the event that pollutant spills occur which are the result of the Contractor's actions or negligence, the cleanup shall be performed by the Contractor at no cost to the Owner.

# SECTION 01568 PROTECTION OF WATER QUALITY AND WETLANDS

#### **PART 1—GENERAL**

#### 1.01 SECTION INCLUDES

This section covers furnishing all equipment, labor and materials and taking all measures necessary to prohibit the degradation of water quality and wetlands. The purpose is to limit, control and contain fill materials, soil erosion, sedimentation and harmful wastewater resulting from construction operations that could harm wetlands and waters of the United States.

## 1.02 RELATED SECTIONS

- A. Section 01563-Temporary Erosion and Sediment Control
- B. Section 01566-Stormwater Management Plan and Pollution Control
- C. Section 02260-Topsoiling and Finished Grading
- D. Section 02936-Seeding and Mulching

#### 1.03 REFERENCES

- A. The latest issue of the publication or standard listed below for material or operations form a part of this Specification. The publications are referred to in the text by the basic designation. In case of a conflict between the referenced publication or standard and this Specification, the more stringent requirements, as determined by the Owner's Representative, shall govern.
- B. Federal Water Pollution Control Act (33 USC § 1251 et seq.).
- C. Filling or dredging of wetlands or stream channel areas is allowed only as specified in the U.S. Army Corps of Engineers Section 404 permit obtained by the Owner, if necessary. All other activities within wetlands or stream channel are prohibited. Contractor is to comply with all requirements of this section to protect water quality and the 404 Permit on the project.

#### 1.04 SUBMITTALS

Protection of water quality and wetlands shall be addressed in the Stormwater Management Plan.

## 1.05 UNIT PRICES

All Contractor costs incurred in complying with this section will not be paid for directly but rather shall be included in the lump sum prices bid for other items of work.

### PART 2—PRODUCTS

Not used.

#### PART 3—EXECUTION

#### 3.01 STANDARD CONDITIONS

#### Α. General

The following conditions are required on all projects for the protection of water quality and wetlands:

- 1. Compliance with all conditions of the Section 404 permit, NPDES permit, and Section 401 Water Quality Certification.
- 2. To the maximum extent practicable, discharges of dredged or fill material into waters of the United States shall be avoided or minimized through the use of other practicable alternatives.
- 3. No activity shall substantially interrupt the movement of the species of aquatic life native to the water body, including those species that normally migrate through the area.
- 4. No storage of petroleum, other chemical products, waste materials, trash, etc. shall be allowed within 100 feet of a wetland or water body boundary or elevation as shown on the plans. The Owner reserves the right to limit the storage of any material within the floodplain of a stream to preclude the possibility of an unlawful discharge to the stream.
- 5. Unless specified in the Section 404 permit and Drawings, material or debris resulting from Contractor operations entering a waterway is considered an unpermitted fill material, and the Owner's Representative shall determine whether it may remain. If it is determined that the material is to be removed from the waterway, the Owner will approve the Contractor's method of removal. Options for removal should consider the minimization of turbidity as a primary objective.
- 6. Temporary bridges or other structures shall be used whenever it is necessary to ford any body of water on the project more than twice in any six -month period.
- Equipment shall not be operated in any body of water on the project except when 7. required to construct channel changes or structures.
- 8. Cofferdams needed for work in water shall be constructed from non-erodible materials.
- 9. Materials excavated during polishing pond construction shall be placed on dry land outside the channel banks of all streams, at least 10 feet from the channel banks of a perennial stream and at least 25 feet from the channel banks of a 5 cubic feet

181-050.000 Wright Water Engineers, Inc. per second (cfs) or larger stream. This includes channelized streams and relief channels. This material shall be properly contained or stabilized to minimize erosion and degradation of water quality and be removed before the completion of the project.

## B. Wetland Areas

Wetland areas shall be preserved and protected. Work in or near wetlands shall be performed in a manner that will prevent harm to the wetlands. The Contractor shall be responsible for the protection of adjacent wetlands.

- 1. Clearing wetlands shall not be allowed unless shown on the drawings or approved in writing by the Owner.
- 2. Wetland areas inside or outside the construction limits will not be used for storage, parking, access, borrow material, haul roads, diversion dikes or any other construction support activity unless specifically approved in advance by the Owner and according to the applicable Section 404 permit.
- 3. When equipment is working in wetlands, appropriate measures, such as placing the equipment on mats, shall be taken to minimize soil disturbance.
- 4. Material shall not be wasted or temporarily stockpiled in wetlands.
- 5. Prior to construction, notify Engineer to have wetland areas flagged and staked with lathe.

## C. Temporary Fill

- Unless otherwise provided, temporary structures such as work ramps, haul roads, or diversion dikes, when permitted, shall provide sufficient waterway openings to allow the passage of expected high flows during the time the temporary structures are in place.
- 2. Temporary structures, if washed downstream, are considered to be unauthorized fill under the Section 404 permit, and the Owner's Representative shall determine whether it may remain. If it is determined that the material is to be removed from the waterway, the Owner's Representative will approve the Contractor's method of removal. When considering options for removal, the Contractor shall consider the minimization of turbidity as a primary objective. Replacement of washed fill may require a Section 404 permit change or an additional permit.
- 3. All temporary fill placed within the channel banks of a stream, within 10 feet of the channel banks of a perennial stream, and within 25 feet of the channel banks of a 5 cfs or larger stream shall be constructed using a riprap of sufficient size and gradation to resist erosion. This includes channelized streams and relief channels. A minimal amount of clean stone or gravel may be placed on top of the temporary fill in order to obtain a smooth working surface. The clean stone or gravel used shall have less than 12 percent passing the 0.075 mm (#200) sieve.

- 4. All fill material shall be free from toxic pollutants in harmful amounts.
- 5. All temporary fills must be removed, and the affected areas must be returned to their preexisting elevation.
- 6. All temporary fill in any body of water or wetland shall be properly contained or stabilized to minimize erosion and degradation of water quality.
- D. Impacted Wetland Areas: identified wetland areas that are to be temporarily impacted shall be stripped of vegetation, and the wetland topsoil must be removed and stockpiled for later replacement at the end of the project. Grassland areas where topsoil is encountered are to be stripped and stockpiled separately from wetland soils.
- E. Erosion and Sediment Control

See Section 01563.

#### 3.02 POLLUTANTS

See Section 01566.

## 3.03 CONTRACTOR NEGLIGENCE

If the Contractor violates the requirements of the Corps of Engineers Section 404 Permit, NPDES Permit, Owner's CDPS Discharge Permit or any other requirement of these Specifications and fails to properly maintain, install and/or construct erosion and sedimentation control items, the Owner may withhold contractor payments, suspend the project or take other appropriate measures. Any fines, penalties, time delays or other consequences of failure to comply with these permits shall be the sole responsibility of the Contractor.

# SECTION 01600 MATERIAL AND EQUIPMENT

## **PART 1 - GENERAL**

## 1.01 SECTION INCLUDES

- A. Products
- B. Transportation and handling
- C. Storage and protection
- D. Substitutions

#### 1.02 PRODUCTS

Means new material, machinery, components, equipment, fixtures, and systems forming the Work. Does not include machinery and equipment used for preparation, fabrication, conveying and erection of the Work. Products may also include existing materials or components required for reuse.

#### 1.03 TRANSPORTATION AND HANDLING

- A. Transport and handle products in accordance with manufacturer's instructions.
- B. Promptly inspect shipments to assure that products comply with requirements, quantities are correct, and products are undamaged.
- C. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage.

## 1.04 STORAGE AND PROTECTION

- A. Store and protect products in accordance with manufacturer's instructions, with seals and labels intact and legible. Store sensitive products in weather-tight, climate controlled enclosures.
- B. For exterior storage of fabricated products, place on sloped supports, above ground.
- C. Provide off-site storage and protection when site does not permit on-site storage or protection.
- D. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to avoid condensation.
- E. Store loose granular materials on solid flat surfaces in a well-drained area. Prevent mixing with foreign matter.

- F. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.
- G. Arrange storage of products to permit access for inspection. Periodically inspect to assure products are undamaged and are maintained under specified conditions.

#### 1.05 SUBSTITUTIONS

- A. Refer to paragraph 6.05 in the General Conditions.
- B. Engineer will consider Requests for Substitutions only within 10 days after date of Owner-Contractor Agreement.
- C. Substitutions may only be considered when a product becomes unavailable through no fault of the Contractor.
- D. Substitution Submittal Procedure:
  - 1. Submit three copies of Request for Substitution for consideration. Limit each request to one proposed Substitution.
  - 2. Submit letter from original product manufacturer stating that the product is no longer available or other reasons for not being able to supply the original product to the Contractor.
  - 3. Submit adequate information such as shop drawings, product data, and certified test results attesting to the proposed product equivalence.
  - 4. The Engineer will notify Contractor, in writing, of decision to accept or reject request.

## **PART 2 - PRODUCTS**

Not used.

## **PART 3 - EXECUTION**

Not used.

## SECTION 01700 CONTRACT CLOSEOUT

#### **PART 1—GENERAL**

#### 1.01 SECTION INCLUDES

- A. Closeout procedures.
- B. Final cleaning.
- C. Adjusting.
- D. Warranties.
- E. Spare parts and maintenance materials.

## 1.02 CLOSEOUT PROCEDURES

- A. Submit written certification that Project Record Documents as specified in Section 01300 have been reviewed and submitted to Engineer, Work has been inspected, and Work is complete in accordance with the Contract Documents and ready for Owner's Representative and Engineer's inspection.
- B. Provide submittals to Engineer that are required by governing or other authorities.
- C. Submit final Application for Payment identifying total adjusted Contract Sum, previous payments, and sum remaining due.

#### 1.03 FINAL CLEANING

- A. Execute final cleaning prior to final inspection.
- B. Clean interior and exterior glass and surfaces exposed to view; remove temporary labels, stains and foreign substances, polish transparent and glossy surfaces.
- C. Clean equipment and fixtures to a sanitary condition.
- D. Clean debris from drainage systems.

#### 1.04 ADJUSTING

Adjust operating products and equipment to ensure smooth and unhindered operation.

# 1.05 WARRANTIES

A. Provide notarized copies.

- B. Execute and assemble documents from subcontractors, suppliers, and manufacturers.
- C. Submit prior to final application for payment.
- D. For items of Work delayed beyond date of substantial completion, provide updated submittal within ten days after acceptance, listing date of acceptance as start of warranty period.

## 1.06 SPARE PARTS AND MAINTENANCE MATERIALS

Provide products, spare parts, maintenance and extra materials in quantities specified in individual specification sections.

## 1.07 UNIT PRICES

All Contractor costs incurred in complying with this section will not be paid for directly but shall be included in the lump sum prices bid for other items of work.

## PART 2—PRODUCTS

Not used.

# **PART 3—EXECUTION**

Not used.

#### **SECTION 02053**

#### LAGOON LIQUID/BIOSOLIDS REMOVAL &

#### **REUSE**

## **PART 1 - GENERAL**

### 1.01 SECTION INCLUDES

- A. Liquids/Biosolids removal and reuse from the Adams County Sewage Lagoon (Lagoon #1, Lagoon #2, and Lagoon #3).
- B. Liquid/Biosolids Removal and Reuse Affidavit.
- C. Contractor is required to do the following:
  - 1. Inspect all areas where sludge removal is required.
  - Field verify all access and equipment needs.
  - 3. Comply with all applicable county, state, and federal regulations pertaining to the handling and removal of biosolids materials, including but not limited to:
    - a. Colorado Department of Public Health and Environment (CDPHE)
    - b. Colorado Department of Transportation (CDOT)
    - c. United States Environmental Protection Agency (USEPA)
    - d. Tri-County Health Department
  - 4. Provide detailed and accurate written records of actual quantities of materials removed.

## 1.02 RELATED SECTIONS

- A. Section 01010 Summary of Work
- B. Section 02300 Earthwork

## 1.03 QUALITY ASSURANCE

- A. Liquid/Biosolids removal and reuse shall be performed by a contractor experienced in sludge cleaning and removal operations of this type with minimum 5 years of documented experience in Colorado with similar projects. The Contractor may want to sub-contract the biosolids removal and reuse to sub-contractors that specialize in lagoon biosolids removal and reuse. These companies include:
  - 1. McDonald Farms Enterprises, Inc. (303) 772-4577
  - Veris Environmental 1-888-BIO-SOLIDS

- B. Liquid/Biosolids Removal and Reuse Affidavit
  - 1. Contractor is required to sign attached Affidavit and attach it to the Bid Form.
  - 2. By signing the Affidavit, Contractor certifies that he has prepared or received a lump sum bid from a sludge removal and Reuse Contractor.
  - 3. By signing the Affidavit, the biosolids removal and reuse Contractor certifies that he has conducted all necessary investigations and testing required by the Contract Documents and all State, Federal, and local entities to submit a lump sum bid to the County for removal and reuse of all liquids/biosolids, waste, and sludge/grit regardless of volume, solids concentration or chemical composition.

#### 1.04 **SUBMITTALS**

- Α. Submit under provisions of 01300 – Shop Drawings, Product Data, and Samples.
- Provide an electronic copy of the "Letter of Intent for Use and Distribution of Biosolids" B. submitted to the Colorado Department of Public Health and Environment (CDPHE) for quantity and quality of materials being reused.
- C. Submit copies of necessary testing of sludge to the Engineer.
- D. Submit management plan and schedule to Engineer prior to submission to CDPHE, including:
  - 1. A detailed description and plan and layout of proposed equipment to be used on
  - 2. Identification and description of contractors proposed method of removal and reuse.
  - 3. A written Spill Plan.
- E. Submit a Notice of Authorization (NOA) from CDPHE to the Engineer & Owner prior to commencing work.
- F. Submit copies of all required permits and approvals to the Engineer & Owner.
- G. Submit the required biosolids application reports, including both the annual CDPHE and EPA reports. Submit copies to the Engineer & Owner.
- H. Submit all certified statements and records required by State, Federal, and local regulations to the Engineer & Owner.

#### 1.05 PERFORMANCE AND DESIGN REQUIREMENTS

- Contractor shall be responsible for all costs related to mobilization, permitting, Α. demobilization, transportation, and application. This will include all costs associated with fuel, labor, repairs, maintenance, spill cleanup, permit fees, testing, insurance, and other associated costs.
- B. Actual liquids/biosolids volume, solids concentration, and chemical composition to be determined by the Contractor.

C. Descriptive information, for the sole purpose of familiarizing the contractor and subcontractor(s) with the wastewater lagoons and the anticipated liquids/biosolids characterization are included below. These data are estimates only and are provided for the convenience of the contractor as pre-bid information. Bid prices, measurement and payment shall not rely on this data.

Parameter	Lagoon # 1	Lagoon #2	Lagoon # 3
Lagoon floor area (sq. ft.)	12,600	19,100	32,700
Lagoon water volume (cu. ft.)	100,200	70,900	28,600
Lagoon side slope	4:1	4:1	4:1
Aeration	Yes*	Yes	No
Biosolids depth (ft)	1-2 feet	1 foot	0.75 foot
Biosolids volume, in situ (cu. ft.)	30,300	9,700	11,100
Total liquid/biosolids volume (cu. ft.)	131,600	80,600	39,700

<sup>\*</sup> Aeration on Lagoon #1 only functioning on west half of the lagoon.

### 1.06 REGULATORY REQUIREMENTS

- A. Contractor shall comply with all federal and state laws and local regulations regarding the land application of liquids/biosolids, specifically including, without limitation, those contained in Federal Register 40 C.F.R. 503, Colorado Biosolids Regulations 64 (5CCR 1002-64), and any other corresponding guidelines or applicable legislation, regulations, or guidelines of any governmental entity, as amended. Contractor shall notify the OWNER immediately, in writing, about any aspect of this project that does not meet the requirements of all applicable regulations.
- B. Follow all requirements of State of Colorado Department of Public Health and Environment "Biosolids Regulation", Regulation No. 64 for land application of biosolids on reclamation sites, including the filing of a "Letter of Intent for Use and Distribution of Biosolids":
  - 1. Obtain additional samples and test sludge as required by CDHPE and EPA regulated sampling guidelines.
  - Submit certification and proof of compliance with all applicable Colorado Department of Health rules and regulations, including soil sampling and selfmonitoring report.
- C. Follow all requirements of the CDPHE for landfill disposal of sludge/grit that does not meet definition of "biosolids".
- D. Developing and maintaining records as required by a) Federal regulations governing sludge disposal and reuse, 40 CFR 503, b) any State regulations governing biosolids (including Section 4.9.0, 5CCR 1002-64 and other applicable regulations), and c) any requirements imposed by County or other local jurisdictions. The records shall be retained by the Contractor for a minimum of five years or as required by Federal regulations

# PART 2 - PRODUCTS

### **NOT USED**

### **PART 3 - EXECUTION**

# 3.01 GENERAL REQUIREMENTS

- A. Liquids/Biosolids removal shall not begin until connection has been made to the South Platte Interceptor (SPI) for conveyance to Metro Wastewater's new Northern Treatment Plant facility.
- B. All visible liquids/biosolids, grit, and debris shall be removed from the surface of the existing clay liner and the satisfaction of the Engineer and Owner.
- C. Land application of liquids/biosolids onsite at the existing wastewater lagoon site is not permitted.
- D. Contractor may land apply liquids/biosolids offsite in accordance with the approved Sludge Management Plan and conditions of CDPHE authorization.
  - 1. Owner is not responsible for providing, suggesting, arranging or ensuring site for land application of biosolids.
  - 2. Determination and arrangements for land application site and/or landfill is the sole responsibility of the Contractor and subcontractor(s).
  - 3. All soil and ground water testing required to determine appropriate application rates are to be performed by Contractor
  - 4. Contractor shall be responsible for calculation and compliance with proper annual and cumulative land application rates that are to be based upon the agronomic rate of the proposed crop to be grown on the site. Application is to be performed with agricultural equipment that uniformly applies biosolids and documents that application rates have not exceeded the amounts allowed by the CDPHE or the U.S. Environmental Protection Agency (EPA).
  - 5. Contractor shall be responsible for developing and maintaining records as required by: (a) federal regulations governing sludge disposal and reuse, 40 C.F.R. 503; (b) any state regulations governing biosolids (including 5 C.C.R. 1002-64, and other applicable regulations); (c) any requirements imposed by County or other local jurisdictions. The records shall be retained by Contractor for a minimum of five (5) years as required by federal regulations.
  - 6. Contractor shall provide accurate load tracking during the biosolids removal contract. Load tracking reporting data shall include; date, in gallons the beginning pump meter, ending pump meter, daily pump meter, calculated wet tons, average percent solids, calculated dry tons, farm code, field code, and crop year. Biosolids load tracking should be summited by the end of the following business day.
  - 7. In the event that weather or field conditions are such that Contractor is prevented from applying biosolids via sub-surface injection or surface application with immediate incorporation, the Contractor shall halt work until the conditions have improved. The County shall be notified (via email) that work has ceased and

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- contacted when work restarts.
- 8. Contractor shall notify the County immediately, in writing, of any analytical result or application rate that does not meet the requirements of all applicable regulations.
- 9. Contractor assumes complete responsibility and liability for the liquids/biosolids once it is removed from the lagoons including but not limited to pumping and transportation to applications site, cleanup of spillage during transportation, applications, and ultimate reuse or disposal.
- E. Contractor should be aware that due to the lagoons location within Riverdale Golf Course an unknown number of golf balls will be present inside the lagoon. Contractor shall take measures to separate the golf balls from the liquids/biosolids.
- F. All waste, sludge/grit, and gold balls not classified as biosolids, is to be disposed of properly off-site at a CDPHE approved landfill.
- G. Contractor shall include all costs for transportation and reuse at land application site and/or disposal at landfill, including landfill tipping fee in the lump sum bid.
- H. Contractor assumes complete responsibility and liability for any damages to the County property including, but not limited to, golf course turf and landscaping, irrigation, cart paths and trails, embankment on lagoon, and road maintenance for access road to and from the lagoon site.

# LIGUIDS/BIOSOLIDS REMOVAL AND REUSE AFFIDAVIT

The undersigned Contractor, having familiarized himself with the Work required by Section 02053 and the entirety of the Contract Documents has provided a legitimate lump sum price to remove and reuse the liquids/biosolids as defined in the Contract Documents. The undersigned Contractor has conducted all necessary investigations and has performed all necessary tests required to submit a lump sum price to the County. The contractor further certifies that the lump sum price includes the removal and reuse or disposal of all waste, liquid/biosolids as defined in the contract documents regardless of quantity, chemical composition or solids concentration.

In order for Owner to process reimbursement, this affidavit must be included with the Bid Form and submitted with the Bid at the time of the Bid.

SIGNATURE OF LIQUID/BIOSOLIDS REMOVAL AND REUSE CONTRACTOR				
Signed By:	Date:			
(Name)				
(Title)				

**END OF SECTION** 

# SECTION 02200 SITE PREPARATION

# PART 1 GENERAL

# 1.01 REFERENCE

All applicable requirements of other portions of the Contract Documents apply to the work of this Section, including but not limited to Division 1, General Requirements.

# 1.02 DESCRIPTION OF WORK

- A. Work of this Section includes, but is not limited to:
  - 1. Prepare the site for construction.
  - 2. Move in personnel and equipment.
  - 3. Set up temporary office, buildings, facilities, and utilities.

# 1.03 SITE CONDITIONS

The areas utilized for Contractor's parking, staging, and storage will be discussed and confirmed during the preconstruction conference.

# 1.04 SITE PREPARATION FOR CONTRACTOR OCCUPANCY

- A. The Contractor shall provide all temporary facilities as required for performing the work.
- B. It is the responsibility of the Contractor to designate and maintain suitable areas on site for materials storage.
- C. The Contractor may construct a temporary security fence for the protection of materials, tools, and equipment and maintain the fence during the construction period. Upon completion of work, the security fence shall be removed from the site.
- D. Provide adequate parking facilities for personnel working on the project.
- E. The Contractor shall obtain the necessary permits for connection to necessary services provided by utility companies serving the project area.
- F. Materials, equipment, and work required for temporary storm water management during the construction period shall be provided by the Contractor as required to ensure public safety and to protect the work in progress and materials stored on site.
- G. Set up temporary construction facilities in a neat and orderly manner within designated area. Accomplish all required work in accordance with applicable portions of these specifications. Confine operations to work area shown.
- H. Contractor to coordinate all temporary staging areas, facilities, and disturbance with Golf Course staff.

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### 1.05 UNIT PRICES

All Contractor costs incurred in complying with this section will not be paid for directly but rather shall be included in the lump sum or unit prices bid for other items of work.

# PART 2 PRODUCTS

Not used.

# PART 3 EXECUTION

### 3.01 CONSTRUCTION STAKING

- A. The Owner will not provide surveyed benchmarks for the Contractor. The Contractor shall stake out the construction, establish lines, levels, batter boards, and reference points and verify all dimensions in relation to connection with existing facilities. The Contractor shall be solely responsible for all errors in connection with this work.
- B. Prior to commencement of the work, the Contractor shall report to the Engineer any inconsistencies in the proposed lines, levels, grades, dimensions, or locations shown on the Drawings.

# 3.02 OBSTRUCTIONS

- A. Some obstructions may not be shown. Bidders are advised to carefully inspect the project site before preparing their proposals.
- B. Major obstructions encountered that are not shown on the Drawings or could not have been foreseen by visual inspection of the site prior to bidding should immediately be brought to the attention of the Engineer. The Engineer will make a determination for proceeding with the work. If the Engineer finds that the obstruction adversely affects the Contractor's costs or schedule for completion, a proper adjustment to the Contract will be made in accordance with the General Conditions.

# 3.03 CONTAMINATION PRECAUTIONS

- A. Prevent contamination of the project area.
- B. Do not dump waste oil, rubbish, or other similar materials on the ground. Do not deposit materials of any type in the adjacent watercourses.

# 3.04 CLEARING THE SITE

- A. Upon completion of the project, remove the construction facilities; complete, and clean up the construction area.
- B. Remove and replace any existing sign, structures, fences, etc. encountered on the job and restore them to their original condition.

### **END OF SECTION**

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# SECTION 02210 SITE CLEARING

#### PART 1 GENERAL

### 1.01 REFERENCE

A. All applicable requirements of other portions of the Contract Documents apply to the work of this Section, including but not limited to Division 1, General Requirements.

### 1.02 DESCRIPTION OF WORK

- A. Work of this Section includes, but is not limited to:
  - 1. Protection
  - 2. Clearing and grubbing (including tree removal)
  - 3. Topsoil removal and storage.
- B. Related work specified elsewhere includes, but is not limited to:
  - 1. Section 01503 Preservation, Restoration, and Cleanup
  - 2. Section 01563 Temporary Erosion and Sediment Control
  - 3. Section 01568 Protection of Water Quality and Wetlands

### 1.03 SUBMITTALS

A. All submittals shall conform completely to the requirements of the Contract Documents, including all requirements set forth in Section 01300, Submittals.

### 1.04 UNIT PRICES

All Contractor costs incurred in complying with this section will not be paid for directly, but shall be included in the lump sum price bid for clearing, grubbing, and tree removal.

# PART 2 PRODUCTS

Not used.

# PART 3 EXECUTION

# 3.01 PREPARATION

#### A. Protection

- 1. Provide barricades, coverings, and other protection necessary to prevent damage to existing improvements.
- 2. Protect improvements on adjoining properties as well as those on Owner's property.
- 3. Protect golf course (i.e. grass, turf, native plants, and irrigation) at all times. Contractor shall be responsible to repair any damages that occur.
- 4. Protect existing trees and other vegetation to remain against damage.

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- Do not smother trees by stockpiling construction materials or excavated a. materials within drip line.
- Avoid foot or vehicular traffic or parking of vehicles within drip line. b.
- Provide temporary protection as required to prevent damage to trees and C. vegetation to be left in place.
- d. Water trees and other vegetation which are to remain within limits of construction works as required to maintain their health during period of construction operations.
- e. Provide protection for roots with greater than 11/2 IN diameters that are cut during construction operations.
  - Coat cut faces with an emulsified asphalt, or other acceptable coating especially formulated for horticultural use on cut or damaged plant tissues.
  - (2) Temporarily cover all exposed roots with wet burlap to prevent roots from drying.
  - Provide earth cover as soon as possible. (3)
  - Repair or replace trees and vegetation damaged by construction (4) operations.
    - (a) Repair is to be performed by a qualified tree surgeon.
    - Remove trees that cannot be repaired. (b)
    - Replace with new trees of similar size. (c)
    - Repairs or replacements are to be completed in a manner (d) acceptable to Owner at no additional expense to Owner.

#### B. Disposal of Waste Materials

- 1. Contractor may not burn materials on site.
- Trees shall be limbed-up, cut into lengths not to exceed six (6) feet, removed 2. including stumps, and disposed of by the Contractor.
- All removed material shall become the property of the Contractor and shall be 3. removed from the site. It shall be disposed of in accordance with all Federal, State, and Local statutes and ordinances.

# **END OF SECTION**

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# **SECTION 02220**

#### **DEMOLITION**

# **PART 1 - GENERAL**

### 1.01 SECTION INCLUDES

A. This section includes all Demolition, removal, abandonment, and disposal of existing structures, pipes and materials as indicated on the drawings.

#### 1.02 RELATED SECTIONS

- A. Section 01500 Construction Facilities
- B. Section 02053 Pond Cleaning and Biosolids Disposal
- C. Section 02300 Earthwork
- D. Section 02950 Seeding

### 1.03 SUBMITTALS

- A. Permits and Certificates
  - 1. Certificates of severance of utility service.
  - 2. Permit for transport and disposal of debris.

# 1.04 PROJECT RECORD DOCUMENTS

- A. Submit under provisions of Division One specifications.
- B. Accurately record actual locations of capped utilities and subsurface obstructions.

# 1.05 REGULATORY REQUIREMENTS

- A. Conform to applicable State and local codes for demolition of structures, safety of adjacent structures, dust control, and disposal
- B. Obtain required permits from authorities.
- C. Notify affected utility companies before starting work and comply with their requirements.
- D. Do not close or obstruct roadways, sidewalks, or hydrants without written permission from Owner.
- E. Conform to applicable regulatory procedures when discovering hazardous or contaminated materials.

#### 1.06 **SCHEDULING**

- Α. Schedule and submit under provisions of Division One specifications.
- B. Provide detailed descriptions for demolition and removal procedures.
- C. Notify Engineer and Owner of any demolition work one (1) week prior to commencement.
- D. Coordinate all demolition work with Engineer and Owner.

#### PART 2 - PRODUCTS

#### 2.01 **SALVAGE OF MATERIALS**

A. All existing construction and items not salvaged to Owner shall be considered waste and shall become the property of Contractor for off-site disposal.

#### HANDLING AND STORAGE 2.02

Α. Contractor shall carefully disassemble Equipment and Materials that are to be reused and returned to Owner in such a way to avoid any damage. Contractor shall store such Equipment and Materials in such a way to avoid any damage, corrosion, or staining.

#### 2.03 **FILL MATERIALS**

#### Α. Fill Material

- 1. Use on site fill material to the extent available under provisions of Section 02300 and in accordance with Geotechnical recommendations.
- 2. Remaining fill will be import fill provided under provisions of Section 02300.

#### PART 3 **EXECUTION**

#### 3.01 **INSPECTION**

- Α. Do not commence work until pre-demolition meeting has been held and conditions are acceptable to Engineer.
- B. Existing conditions of Equipment and Materials, structures, surfaces, or properties that could be misinterpreted as damaged as a result of demolition work shall be photographed and filed with Owner and Engineer prior to commencement of Work.

#### 3.02 **PREPARATION**

Α. Provide, erect, and maintain: temporary barriers, enclosures, security fences, and shoring at demolition locations in accordance with Division One and other related specifications to protect personnel.

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- B. Protect existing golf course, cart paths, trails, structures, and utilities which are not to be demolished.
- C. Mark location of existing utilities.

# 3.03 GENERAL REQUIREMENTS

- A. Sprinkle Work with water to minimize dust where applicable. Provide hoses and water connections for this purpose.
- B. Do not use water to the extent that will cause flooding, contaminated runoff, or icing.
- C. Backfill in accordance with Section 02300.
- D. Repair damage to adjacent structures.
- E. Remove demolished material from the site.
- F. Leave site in clean condition after demolition activities.
- G. Reseed all disturbed areas in accordance with Section 02950.

# 3.04 REMOVAL, DISPOSAL AND ABANDONMENT OF EXISTING FACILITIES

### A. General

- 1. All demolished piping and equipment will be disposed of off-site unless specifically indicated to be reused or salvaged.
- 2. Contractor shall make efforts to recycle any materials as allowed by State, Federal, and local entities.
- 3. See Section 01010 for Work Sequence.

# B. Lagoons

- 1. Remove and dispose of floating surface aerators, electrical, mooring cables, and anchoring posts in each lagoon.
- 2. Remove all aeration piping and supports in each lagoon.
- 3. Remove concrete discharge aprons in each lagoon.
- 4. Cut, cap, grout fill, and abandon equalizer pipes between each lagoon.

### C. Force Main

- 1. Disconnect force main at the South Platte Interceptor line.
- 2. Clean out all liquids/biosolids out of the existing force main from the lagoon manholes to the connection at the South Platte Interceptor line.
- 3. Flush existing force main from the lagoons manholes to the connection at the South

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4. Cut, cap, and abandon force main between the lagoon manholes and the South Platte Interceptor Line.

# D. Existing Manholes

- 1. Clean out all liquids/biosolids from the existing manhole.
- 2. Power wash the existing manholes clean.

# 3.05 ELECTRICAL DEMOLITION

- A. Existing electrical service:
  - 1. Follow all applicable electric codes of the utility provider and the National Electric Code (NEC).
  - 2. Disconnect and remove existing three phase electrical service between the lagoon aeration controls and the pump hose.
  - 3. Remove existing electrical service between the lagoon aeration controls and the aerators.

# 3.06 DISPOSAL

- A. Do not store or burn waste materials on-site.
- B. Transport demolition debris to designated off-site disposal area.
- C. If hazardous materials are encountered during demolition work, Contractor shall comply with applicable regulations and laws regarding the removal, handling, and protection of environment and human health.

### 3.07 CLEANUP AND REPAIR

- A. Contractor shall remove tools, equipment and demolished materials from Site upon completion of demolition work.
  - 1. Remove protections.
  - 2. Interior areas shall be broom clean.
  - 3. Inspect and clean all electrical control cabinets, interior and exterior, exposed to dust and debris during the demolition process.
- B. Contractor shall repair demolition performed in excess of that required or indicated.

# 3.08 SITE DEMOLITION

A. Disconnect, remove, cap and identify designated utilities within demolition area.

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- B. Backfill areas excavated caused as a result of demolition, in accordance with Section 02300.
- C. Rough grade and compact areas affected by demolition to maintain site grades and contours as shown on drawings.
- D. Remove demolished materials from site.
- E. Do not burn or bury materials on site, unless otherwise directed by Owner. Leave site in clean condition.

### **END OF SECTION**

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# SECTION 02240 WATER CONTROL AND DEWATERING

# **PART 1: GENERAL**

# 1.01 SECTION INCLUDES

This section covers furnishing all equipment, labor, and materials and performing all construction operations in connection with controlling groundwater, surface water and stormwater during excavation and construction of all structures and all other appurtenances.

### 1.02 RELATED SECTIONS

Section 01563	Temporary Erosion and Sediment Control.
Section 01566	Stormwater Management Plan and Pollution Control.
Section 01568	Protection of Water Quality and Wetlands.
Section 02260	Topsoiling and Finished Grading.

### 1.03 REFERENCES

The latest issue of the publication or standard listed below for material or operations form a part of this specification. The publications are referred to in the text by the basic designation. In case of a conflict between the referenced publication or standard and this specification, the more stringent requirements, as determined by the Owner's Representative, shall govern.

American Society for Testing and Materials (ASTM) Standard:

ASTM D 698 Laboratory Compaction Characteristics of Soil Using Standard Effort

### 1.04 SUBMITTALS

The Contractor shall submit a dewatering plan to the Owner's Representative and Engineer for approval 7 days prior to dewatering activities.

#### 1.05 UNIT PRICES

All Contractor costs incurred in complying with this section will be paid for in the lump sum price bid for this item of work.

### **PART 2: PRODUCTS**

Onsite materials may be used within the limits of construction to build temporary dams and berms. Other materials such as pumps, pipelines, plastic sheeting, rock, concrete and sand bags may also be used as necessary or if desired by the Contractor.

# PART 3: EXECUTION

# 3.01 GENERAL

- A. All construction shall be completed under dewatered conditions. This construction includes, but is not limited to placement of fill, installation of concrete and foundations, pipelines, riprap and mortar. The Contractor shall provide suitable materials, equipment, labor, foundations and pipelines to remove water in areas of new construction and shall keep these areas dewatered so that construction can be conducted under dewatered conditions. Water control shall be accomplished so that no damage is done to adjacent stream banks, berms or outlet or inlet structures. The Contractor is responsible for investigating and familiarizing himself with all site conditions that may affect the dewatering work.
- B. All excavations made as part of dewatering operations shall be backfilled with the original excavated material compacted to 95 percent of maximum density (ASTM D 698) except where replacement by other materials and/or methods is specified or directed by the Owner's Representative.

### 3.02 SURFACE WATER CONTROL

- A. The Contractor shall coordinate, evaluate, design, construct, and maintain temporary water conveyance systems to divert surface water away from construction sites. Temporary structures such as berms, sandbags, pipeline diversions, etc. shall be permitted for the control of flow as long as such measures are not a major obstruction to flood flows, do not worsen flooding, or alter historic flow routes. The Contractor is responsible to ensure that any such worsening of flooding does not occur.
- B. Existing trees and vegetation shall be preserved to the extent possible.
- C. The Contractor shall conduct his operation in such a manner that stormwater may proceed uninterrupted along the drainage courses. By submitting a bid, the Contractor acknowledges that he has investigated the risk arising from such waters and has prepared his bid accordingly, and assumes all of said risk. Any damage done during storm flows to temporary or partially completed structures or resulting from the Contractor's operations shall be repaired by the Contractor at his expense.

#### 3.03 DEWATERING

- A. The Contractor shall furnish, install, operate, and maintain all drains, sumps, pumps, and other equipment needed to perform the dewatering of the construction area as necessary to keep the area free of standing water or excessively muddy conditions and minimize erosion. Dewatering shall not be conducted by pumping from inside the excavation unless specifically approved by the Owner's Representative because this method causes a decrease in the supporting capacity of the foundation soils.
- B. The Contractor may need to complete, submit, and obtain a Construction Dewatering Permit from the Colorado Department of Public Health and Environment (CDPHE). The Contractor shall maintain dewatering operations in full compliance with the permit

- conditions. The costs of obtaining samples and water quality testing required for permit compliance shall be paid for by the Contractor and will be included in the bid amount.
- C. The Contractor shall review the proposed dewatering plan and construction dewatering permit application with the Owner and Engineer prior to submission to the CDPHE. A final copy of the dewatering plan permit application shall be submitted to the Engineer for his files.

### 3.04 REMOVAL OF TEMPORARY WORKS

After the temporary dewatering and diversion provisions have served their purposes, the Contractor shall return the site to grades and conditions as specified on the Drawings or to the original contours. Pipes, casings, pumps, and other construction-related equipment will be removed from the construction area at the end of construction activities by the Contractor.

**END OF SECTION** 

### **SECTION 02242**

### **CHEMICAL SAMPLING & ANALYSIS OF LINER**

### **PART 1 - GENERAL**

#### 1.01 SECTION INCLUDES

- A. Sampling and analysis requirements of existing Clay Liner.
- B. Contractor is required to do the following:
  - 1. Comply with all applicable county, state, and federal regulations pertaining to the, sampling and analysis of the existing clay liner, including but not limited to:
    - a. Colorado Department of Public Health and Environment (CDPHE)
    - b. Colorado Department of Transportation (CDOT)
    - c. United States Environmental Protection Agency (USEPA)
    - d. Tri-County Health Department
  - 2. Provide detailed and accurate written records of sampling and analysis of existing clay liner.
  - 3. Provide written certification that existing clay liner meets the sampling and analysis requirements of the applicable county, state, and federal regulations.

# 1.02 RELATED SECTIONS

- A. Section 01010 Summary of Work
- B. Section 02053 Lagoon Liquid/Biosolids Disposal
- C. Section 02220 Demolition
- D. Section 02300 Earthwork

# 1.03 SUBMITTALS

- A. Submit under provisions of 01300 Shop Drawings, Product Data, and Samples.
- B. Submit copies of necessary testing of the clay liner to the Engineer.
- C. Submit copies of all required permits and approvals to the County.
- D. Submit all certified statements and records required by State, Federal, and local regulations to the County.

#### 1.04 PERFORMANCE AND DESIGN REQUIREMENTS

A. Contractor shall be responsible for all costs related to analysis and testing of existing clay liner. This will include all costs associated with labor, permit fees, testing, insurance, and other associated costs.

# 1.01 REGULATORY REQUIREMENTS

A. Liners at a decommissioned waste water treatment facility must be properly managed in accordance with Regulations Pertaining to the Solid Waste Sites and Facilities 6 CCR 1007-2 (Solid Waste regulations) and the Solid Wastes Disposal Sites and Facilities Act, Title 30, Article 20, Part 1, Colorado Revised Statutes (CRS), as amended.

#### **PART 2 - PRODUCTS**

**NOT USED** 

### **PART 3 - EXECUTION**

### 3.01 GENERAL REQUIREMENTS

A. Contractor shall test existing clay liner to confirm liner can be left in place in accordance with Regulations Pertaining to the Solid Waste Sites and Facilities 6 CCR 1007-2 (Solid Waste regulations) and the Solid Wastes Disposal Sites and Facilities Act, Title 30, Article 20, Part 1, Colorado Revised Statutes (CRS), as amended. Contractor shall test each existing clay liner for TCLP metals and Fecal Coliforms – Class A, at a minimum.

**END OF SECTION** 

# SECTION 02300 EARTHWORK

### **PART 1 - GENERAL**

# 1.01 SECTION INCLUDES

A. This Section includes all excavating, placing, filling, backfilling, compacting and grading for the sewage lagoons and site work shown on the drawings and specified herein.

#### 1.02 RELATED SECTIONS

A. Section 02242 – Chemical Sampling & Analysis of Liner

#### 1.03 REFERENCES

- A. American Society for Testing and Materials (ASTM)
  - 1. D698, Test Methods for the Moisture Density Relations of Soils and Soil Aggregate Using a 5.5 lb Rammer (Standard Proctor).
  - 2. D1557, Test Methods for the Moisture Density Relations of Soils and Soil Aggregate Using a 10 lb Rammer (Modified Proctor).

# 1.04 **DEFINITIONS**

- A. Excavation: The term "excavation," as used herein, consists of removal of material encountered to subgrade or over-excavation elevations indicated, and subsequent disposal or placement of materials removed.
- B. Unauthorized Excavation: The term "unauthorized excavation," as used herein, consists of inadvertently or purposely removing materials beyond indicated subgrade elevations or dimensions without specific direction of Owner. Unauthorized excavation as well as remedial work resulting from unauthorized excavation shall be at Contractor's expense.
  - 1. Unauthorized excavation, including deposition of additional excavated materials and other work resulting from slides, cave-ins or remedial work, shall be at Contractor's expense.
- C. Subgrade: The term "subgrade," as used herein, designates the undisturbed earth or the compacted soil layer immediately below proposed wall foundations or backfill.
- D. Structure: The term "structure", as used herein, refers to retaining walls, water containing structure, or other manmade stationary features occurring above or below ground surface.
- E. Unclassified Excavation: The term "unclassified excavation", as used herein, includes the excavation of all materials required for the work obtained within construction limits of project, including bedrock, boulders, cobbles, wasted sections of concrete, asphalt or other debris.
- F. Fill: The term "fill", as used herein, includes on-site and imported materials placed in order to raise the grade above existing contours.

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- G. Backfill: The term "backfill", as used herein, includes on-site and imported materials placed in authorized or unauthorized excavations.
- H. Foundations: The term "foundations," as used herein, refers to footings, foundation walls and any other support placed directly on soil.
- I. Overlot Fill: The term "overlot fill," as used herein, refers to fill or backfill 5 feet or more outside of the limits of all structures' foundations.
- J. Structural Fill: The term "structural fill", as used herein, refers to fill or backfill within 5 feet of any structure's foundation, or below interior slabs-on-grade.

#### 1.05 SUBMITTALS

- A. Comply with the requirements of Section 01300.
- B. Perform testing and submit certificates for the following:
  - Independent laboratory analysis of material proposed for use as structural fill.
  - 2. Subgrade soil and competent bedrock inspection results.
  - 3. In-place density tests for compacted subgrade material, fill, and backfill used.

### 1.06 QUALITY ASSURANCE

- A. Codes and Standards: Comply with all applicable local, state and Federal rules, regulations and ordinances concerning sloping of excavation, trenching, and safety of workers, including the latest OSHA requirements.
- B. Testing and Inspection Service: The Contractor shall employ and pay for a qualified independent geotechnical testing and inspection laboratory to perform soil testing and inspection service during earthwork operations; Contractor shall provide necessary means to assure cooperation with testing firm.
- C. Verify that finished grade and slopes are within 0.10 ft. of grades indicated.

### 1.07 PROJECT CONDITIONS

- A. Site Information: No geotechnical investigation is available for the site. Contractor shall be responsible for interpretations or conclusions drawn about the soils in the area.
  - 1. Additional test borings and other exploratory operations may be performed by Contractor, at the Contractor's option; however, no change in the Contract Sum will be authorized for such additional exploration.

# PART 2 - PRODUCTS

# 2.01 SOIL MATERIALS

A. General: All fill material, regardless of intended use category, must be clean and free from organic matter, roots, brush or other vegetation, trash, brick, debris, frozen material, or other

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detrimental substances, and rocks or unbroken lumps larger than 3-inches if placed within 5-feet of walls and 6-inches elsewhere, and must be tested and approved by the testing agency prior to placement. The existing onsite overburden soils, exclusive of particles larger than 9-inches, should be suitable for use as general site grading fill with the approval of the geotechnical engineer.

- B. Structural Fill: The material proposed for use shall be free of objectionable material as outlined in "A", and shall be non-expansive, granular material. On site material may be used for structural fill if tested and found to conform to both "A" and "B".
  - 1. Minus 2-inch nonexpansive granular soil
  - 2. Maximum 35% passing the No. 200 seive
  - 3. Maximum Plasticity Index of 15.
  - 4. Extend from 1:1 from edge of footings.
- C. Overlot Fill: This material can consist of on-site soils and processed, excavated bedrock; moisture conditioned and compacted during placement. On site material free of objectionable material as outlined in "A" may be used for overlot fill.
- D. Free-draining Gravel: This material should consist of minus 2-inch aggregate with less than 20% passing the No. 4 sieve and less than 5% passing the No. 200 sieve.
- E. Gravel: Uniformly graded 3/8" material. Gravel shall be clean, free of clay lumps or friable material, and have less than 2% passing a number 200 sieve.

### **PART 3 - EXECUTION**

#### 3.01 PREPARATION

# A. Protection:

- 1. Protect existing surface and subsurface features on site and adjacent to site as follows:
  - a. Provide barricades, coverings, or other types of protection necessary to prevent damage to existing items.
  - b. Protect and maintain bench marks, monuments or other established reference points and property corners. If disturbed or destroyed, replace at Contractor's expense to full satisfaction of Owner.
  - c. Verify location and existence of utilities. Omission or inclusion of utility items on the Drawings does not constitute non-existence or definite location. Secure and examine local utility records for location data. Field verify locations and depths of existing utilities. Include location and elevation of all existing utilities of as-built drawings.
    - 1) Take necessary precautions to protect existing utilities from damage due to any construction activity. Repair damages to utility items at Contractor's expense.
    - 2) Active Utilities: Do not interrupt existing utilities serving facilities occupied and used by adjacent properties, except when permitted in writing by the local utility company and the owner, and then only after acceptable temporary utility services have been provided. Remove or relocate utilities only as indicated or specified.
    - 3) Inactive Utilities: Report inactive or abandoned utilities encountered

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in excavating or grading operations, and remove, plug, or cap as required. In the absence of specific requirements, plug or cap such utility lines as required by local rules or regulations.

- e. Provide full access to public and private premises and other points to prevent normal interruption of travel.
- f. Maintain stockpiles and excavation in such a manner to prevent contamination or damage to adjoining property.
- g. Avoid surcharge or excavation procedures which can result in heaving, caving or slides.
- 2. Protection of Structures: Prevent new and existing structures to remain from being damaged due to construction operations or other reasons. Prevent subgrade under new and existing foundations to remain from becoming wet, frozen, or undermined during construction.
- 3. Frost Protection:
  - a. Do not place foundations or fill material on frozen ground.
  - b. When freezing temperatures may be expected, do not excavate to full depth indicated unless foundations or fill material can be placed immediately after excavation has been completed and approved.
  - c. Protect excavation from frost if placing of concrete or fill is delayed.
  - d. Protect subgrade under foundations from becoming frozen until structure is completed.
- B. Dust Control: Provide dust control as required to alleviate dust nuisance to adjacent properties.
- C. Unanticipated Conditions: Notify the Owner immediately upon finding evidence of previous structures, fill materials which extend below designated excavation levels, soils contamination, or other conditions which are not shown or which cannot be reasonably assumed from existing surveys and geotechnical reports. Secure the Owner's instruction before proceeding with further work in such areas.

# 3.02 EXCAVATION

# A. Site Excavation:

- 1. This work includes all operations in connection with excavation and borrow of materials in connection with the decommission of the sewage lagoons.
- 2. Perform excavation as required by the Drawings.
- 3. During construction, shape and drain embankment and excavations. Maintain ditches and drains to provide drainage at all times. Protect graded areas against action of elements prior to acceptance of work. Re-establish grade where settlement or erosion occurs.
- 4. Use of explosives: Blasting with any type of explosive is prohibited.

# B. Dewatering:

- 1. During construction, control grading so that ground is sloped to prevent water from running into excavated areas or damaging existing structures.
- 2. Where foundations or fill material are to be placed, maintain excavations free of

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water.

- 3. Provide dewatering as required to keep excavated spaces clear of water during construction:
  - a. Should groundwater water be encountered, notify the Engineer.
  - b. Where groundwater is, or is expected to be encountered during excavation, install dewatering system to prevent softening and disturbance of subgrade and fill material, to allow foundations and backfill material to be placed in the dry, and to maintain a stable excavation side slope.

# C. Drainage:

- 1. Control grading around structures so that ground is sloped to prevent water from running into excavated areas or damaging structures.
- 2. Provide pumping required to keep excavated spaces clear of water during construction.
- 3. The dewatering system should be capable of maintaining ground water level at the bedrock surface and at least 3-feet below the bottom of the excavation in the granular overburden soils.

### 3.03 EXPLOSIVES

A. Do not use explosives or blasting.

# 3.04 FILL AND BACKFILL

### A. General:

- 1. Subgrade to receive fill or backfill shall be stripped of vegetation, debris, organic matter, and free of undesirable material.
- Surface to receive fill shall be properly scarified, moisture conditioned, and compacted. Surface may be stepped by not more than 12 inches per step or may be sloped at not more than 25 percent. Plow or break up steeper sloped surfaces so that fill material will bond with existing surface.
- 3. Obtain approval of fill and backfill material and source from independent geotechnical laboratory prior to placing the material.
- 4. Prior to placing fill and backfill material, determine optimum moisture and maximum density properties for proposed materials through testing.

# B. Fill:

- Construct embankments and fills at locations and to line and grade indicated. Completed fill shall correspond to shape of typical cross section or contour indicated regardless of method used to show shape, size, and extent of line and grade of completed work.
- 2. Provide fill material meeting the requirements of Part 2. Do not place material in layers greater than 8 inches loose thickness. Place layers horizontally and compact each layer prior to placing additional fill.
- 3. Compact by sheepsfoot, pneumatic rollers, vibrators, or by other equipment as required to obtain specified density. Control moisture for each layer as necessary to meet requirements of compaction.
- 4. On site material is suitable for the fill and should be compacted to a minimum of 95%

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of Standard Proctor (ASTM D 698) maximum dry density at moisture content within 2 percentage points of the optimum moisture content.

### C. Backfill:

- 1. Provide fill material meeting the requirements of Part 2. Do not place material in layers greater than 8 inches loose thickness. Place layers horizontally and compact each layer prior to placing additional fill.
- 2. Compact material with equipment of sufficient size and proper type to obtain specified density.
  - a. Use vibratory equipment to compact granular material, do not use water.
  - b. Control moisture for each layer of on-site material as necessary to meet specified moisture content.
- 3. Do not place fill or backfill when material is frozen or when subgrade is frozen, wet, loose, or soft.
- 4. Do not start backfilling until concrete forms have been removed, trash removed from excavations, and concrete finishing completed.
- 5. Place fill evenly on each side of foundation wall or provide bracing.

# 3.05 GRADING

- A. General: Uniformly grade areas within project limits, including adjacent transition areas. Smooth finished surface within specified tolerances, compact with uniform levels or slopes between points where elevations or contours are indicated or between such points and existing grades.
- B. Clay Liner: After existing Clay Liner has met and exceeded the testing requirements of the State, Federal, and local entities as laid out in Technical Specification 02242 Chemical Sampling and Analysis of Liner, scarify and turn the liner to a depth of 6" into the underling soils. Clay Liner shall be made permeable.
- C. Finish surfaces free from irregular surface changes and as follows:
  - 1. Finish areas to receive topsoil to not more than 0.10 foot above or below required subgrade elevations.
  - 2. Finished slopes to be no more then 4:1.

# 3.06 MAINTENANCE

- A. Protection of Graded Areas: Protect newly graded areas from traffic and erosion. Keep free of trash and debris.
- B. Repair and reestablish grades in settled, eroded, and rutted areas to specified tolerances.
- C. Reconditioning Compacted Areas: Where completed compacted areas are disturbed by subsequent construction operations or adverse weather, scarify surface, reshape, and compact to required density prior to further construction.
- D. Settling: where settling is measurable or observable at excavated areas during general project warranty period, remove surface, add backfill material, and compact. Restore

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appearance, quality, and condition of surface or finish to match adjacent work, and eliminate evidence of restoration to greatest extent possible.

#### 3.07 FIELD QUALITY CONTROL

#### Α. General:

- 1. Extent of compaction testing shall be as necessary to assure compliance with Specifications. Such testing shall be performed by an independent geotechnical testing and inspection laboratory employed by the Contractor and qualified to perform such work.
- 2. Moisture density relations are required for all materials that are to be compacted.

#### B. Clay Liner

- 1. Notify the Engineer as soon as the Clay Liner has been scarified and made permeable.
- 2. Do not commence further construction until Clay Liner has been inspected and approved.

#### C. Compaction and Density Requirements:

- 1. Perform compaction of soils and all work associated with that effort with equipment designed for, and suitable to provide the compaction required.
- 2. Obtain approval of independent geotechnical laboratory with regard to suitability of soils and acceptable subgrade prior to subsequent operations.
- 3. Provide dewatering system necessary to successfully complete compaction and construction requirements.
- 4. Remove frozen, loose, wet or soft material and replace with approved material as directed by independent geotechnical laboratory.
- Stabilize subgrade with well graded granular materials as directed by independent 5. geotechnical laboratory.
- Assure by testing that the compaction densities comply with the following 6. requirements:

# **Location**

# **Compaction Density**

General Fill

80 percent of ASTM D698 maximum dry density

- D. Finished Grade: Shall be within 0.10 feet of required elevations.
- E. Test Frequency:

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- 1. Tests shall be performed at locations as directed by independent geotechnical
- Testing laboratory personnel are to be on site during continuous backfill and 2. compaction operation.

#### 3.08 **DISPOSAL OF EXCESS AND WASTE MATERIALS**

Α. Remove waste materials, including materials not allowed for fill, backfill or site grading as

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specified, trash, and debris, and dispose of legally off Owner's property at Contractor's expense.

# **END OF SECTION**

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# SECTION 02360 TOPSOILING AND FINISHED GRADING

### **PART 1 - GENERAL**

# 1.01 SUMMARY

- A. General work included in this Section
  - 1. All topsoil application and finished grading.

### B. Related Sections

General Conditions, Supplementary Conditions and Division 1 sections apply to the work of this Section.

Section 02210 - Site Clearing.

Section 02315 – Excavation and Fill.

Section 02936 - Seeding and Mulching.

# 1.02 SUBMITTALS

- A. Certifications and Testing consistent with Section 01300 and including:
  - 1. Test reports for furnished topsoil, as requested by Owner's Representative or Engineer for composition, fertility and pH.
  - 2. Representative sample with identity and location of source. Sample size: approximately ½ GAL container. Obtain approval from the Owner's Representative or Engineer prior to stockpiling topsoil.

### **PART 2 - PRODUCTS**

# 2.01 MATERIALS

- A. Topsoil refers to the original surface soil typical of the area, capable of supporting native plant growth.
  - 1. No additional top soil will be available on the site.
  - 2. Contractor to furnish all additional topsoil required to provide 6 inches of compacted topsoil over scarified clay liner of the decommissioned lagoon.
- B. Provide new topsoil which is fertile, friable, natural loam surface soil, reasonably free of clay lumps, brush, weeds and other litter such as roots, stones larger than 2 IN in any dimension, and other extraneous or toxic matter harmful to plant growth.
- C. Loam shall include soils meeting the following criteria
  - 1. Minimum 85 percent passing a No. 10 sieve.
  - 2. pH range: 6.1 to 7.8.

- 3. Sand and gravel component: 10 percent minimum to 70 percent maximum.
- 4. Silt component: 10 percent minimum to 70 percent maximum.
- 5. Clay component: 5 percent minimum to 30 percent maximum.
- 6. Organic matter component: 3 percent minimum to 20 percent maximum.
- D. Obtain topsoil from local sources. Do not obtain from bogs or marshes. Peat soils are not acceptable.
- E. A handful of moist topsoil should retain its form after squeezing, but should completely break apart when dropped from a 12 inch height.
- F. Topsoil placed on site which is not acceptable must either be removed or amended as determined by the OWNER'S REPRESENTATIVE OR ENGINEER, until it is acceptable.

# **PART 3 - EXECUTION**

### 3.01 PREPARATION

- A. Correct, adjust and/or repair rough graded areas.
  - 1. Cut off mounds and ridges.
  - 2. Fill gullies and depressions.
  - 3. Perform other necessary repairs.
  - 4. Bring all sub-grades to specified contours, even and properly compacted.
- B. Loosen surface to depth of 2 inches, minimum.
- C. Remove all stones and debris over 2 inches in any dimension.

### 3.02 ERECTION/INSTALLATION/APPLICATION

- A. Do not place topsoil when subgrade is either wet or frozen enough to cause clodding. Do not place wet topsoil, or work topsoil when wet.
- B. Spread topsoil to compacted depth of 6 inches along the lagoon bottoms and all disturbed earth areas which receive sod or native grass and flower seed.
- C. Make finished surface free of stones, sticks, or other material 1-inch or more in any dimension.
- D. Make finished surface smooth and true to required grades.
- E. Restore areas occupied by stockpiles to condition of rest of finished work.
- F. Finish grading tolerance: 0.2 feet plus/minus from required elevations and positive drainage.

# 3.04 FIELD QUALITY CONTROL

A. Make test holes where directed by Owner's Representative or Engineer, to verify proper placement and thickness of topsoil.

**END OF SECTION** 

# SECTION 02553 BITUMINOUS CONCRETE PAVEMENT

PART 1: GENERAL

# 1.01 DESCRIPTION

The work of this section consists of constructing one or more surface courses composed of a mixture of aggregate, filler if required, and bituminous material, placed on a prepared base.

### 1.02 QUALITY ASSURANCE

Testing required to determine compliance with the work of this section will be the responsibility of the Contractor at the Contractor's expense.

#### 1.03 SUBMITTALS

As specified in Section 01300.

- A. Job-Mix Formula: Before producing bituminous mixture, submit a job-mix formula for each mixture to the Engineer for approval. Should a change in source of material be proposed, or should a job-mix formula prove unsatisfactory, submit a new job-mix formula for approval.
  - 1. Each job-mix formula submitted shall propose definite single values for:
    - a. The percentage of aggregate passing each specified sieve, based on dry weight of aggregate. These percentages shall be within the range shown in Part 2 of this section.
    - b. The percentage of bituminous material to be added, based on the total weight of the mixture, and the percentage of any stabilizing agent such as lime, portland cement, or antistrip agent.
  - 2. In addition, the job-mix formula shall provide a mixture having a minimum wet retained strength of 125 psi, as determined by AASHTO T165-82, and an index of retained strength of not less than 70 percent.
- B. Samples: Asphalt cement, 1-quart minimum sample for each load delivered.

# C. Certificates:

- 1. Certification from supplier that asphalt cement is of correct type and meets requirements of this section. Two copies will be required for each load.
- 2. Two copies of certified weight ticket from supplier for each load of asphalt cement.
- 3. Two copies of certified weight tickets for each load of bituminous concrete.

#### 1.04 PROJECT CONDITIONS

Apply mixture only during hours of daylight; when air temperature is 50 degrees F or higher; when surfaces to be paved are dry and free of frost, snow, or ice; and when precipitation is not imminent.

### PART 2: PRODUCTS

### 2.01 AGGREGATE

- A. The aggregate shall be clean and free from decomposed materials, organic material, and other deleterious substances. When crushed gravel is used, a minimum of 50 percent of the material passing the No. 4 sieve shall have at least one fractured face.
- B. Coarse aggregate is defined as that portion of a representative sample retained on a No. 8 sieve, whereas fine aggregate is defined as that portion passing the No. 8 sieve.
- C. The aggregates for the mixture shall be graded and combined in such proportions that the resulting composite blend meets the requirements of the job-mix formula. The job-mix formula with the allowable tolerances shall be within the master range set forth in the following table.

Passing 3/4-inch square opening sieve	100 percent
Passing 3/8-inch square opening sieve	80-95 percent
Passing No. 4 mesh sieve	50-78 percent
Passing No. 8 mesh sieve	35-60 percent
Passing No. 30 mesh sieve	18-34 percent
Passing No. 200 mesh sieve	3-12 percent

### 2.02 BITUMINOUS MATERIAL

Asphalt cement, viscosity grade AR 4000, AASHTO M226-80, Table 1. The approximate percent of asphalt cement to be added to the mix shall be 5 to 7 percent based on total weight of mixture. The final percentage will be determined from the job-mix formula for each mixture specified. The asphalt cement used on the project shall be of the same grade and from the same supplier as that used and approved in the job-mix formula.

### 2.03 FILLER

If filler is required, the filler material shall meet the requirements of AASHTO M17-77.

# PART 3: EXECUTION

# 3.01 EQUIPMENT

Plant, hauling, placing, and rolling equipment shall be adequate to ensure uniformity and continuity of operations and be in good operating condition capable of performing according to manufacturer's specifications. The Contractor may, at his option, use the type plant he desires, provided the equipment meets the following requirements.

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# A. Requirements for All Plants:

- 1. Equipment for Preparation of Bituminous Material: Tanks for the storage of bituminous material shall be equipped to heat and hold the material at the required temperatures. The heating shall be accomplished by steam coils, electricity, or other approved means so that flame will not be in contact with the tank. The circulating system for the bituminous material shall be designed to ensure proper and continuous circulation during the operating period. Provision shall be made for measuring and sampling material in storage tanks.
- 2. Feeder for Dryer: The plant shall be provided with accurate mechanical means for uniformly feeding the aggregate into the dryer to obtain uniform production and temperature.
- 3. Dryer: The plant shall include a dryer or dryers that continuously agitate the aggregate during the heating and drying process.
- 4. Screens: Aggregate gradation control shall be provided either with plant screens or screenless plants in accordance with the following methods:

METHOD A: Plant screens shall screen the hot aggregate to the specified sizes and proportions and have normal capacities in excess of the full capacity of the mixer.

METHOD B: Screenless plants with cold feed control shall have the cold aggregate separated and stored in separate coarse aggregate and fine aggregate stockpiles.

- 5. Hot Aggregate Bins: Pugmill plants shall include storage bins of sufficient capacity to supply the mixer when it is operating at full capacity. Bins shall be arranged to ensure separate and adequate storage of appropriate fractions of the hot mineral aggregates. Separate dry storage shall be provided for filler or hydrated lime when used, and the plant shall be equipped to feed such material into the mixer. Each bin shall be provided with overflow pipes, of such size and at such locations as to prevent backing up of material into other compartments or bins. Each compartment shall be provided with its individual outlet gate, constructed so that when closed there shall be no leakage. The gates shall cut off quickly and completely. Bins shall be so constructed that samples can be readily obtained. Bins shall be equipped with adequate tell-tale devices to indicate the position of the aggregates in the bins at the lower quarter points.
- 6. Bituminous Control Unit: Satisfactory means, either by weighing or metering, shall be provided to obtain the proper amount of bituminous material in the mix. Means shall be provided for checking the quantity or rate of flow of bituminous material into the mixer.
- 7. Thermometric Equipment: An armored thermometer of adequate range shall be fixed in the bituminous feed line at a suitable location near the charging valve at

the mixer unit. The plant shall also be equipped with an approved temperature measuring apparatus placed at the discharge chute of the dryer.

- 8. Emission Control: Dust, smoke, or other contaminants shall be controlled by appropriate devices at the plant site to meet air pollution requirements.
- 9. Commercial Binders or Fillers: When materials are to be used that require the mixing of commercial binders or fillers with the aggregate, a central mixing plant of the twin pugmill type will be required. Other methods that ensure a thorough and homogeneous mixture will be permitted on written approval.

# B. Requirements for Batching Plants:

- Weight Box or Hopper: The equipment shall include a means for accurately weighing each size of aggregate in a weigh box or hopper suspended on scales and of ample size to hold a full batch without hand raking or running over. The gate shall close tightly so that material is not allowed to leak into the mixer while a batch is being weighed.
- 2. Bituminous Control: The equipment used to measure the bituminous material shall be accurate to plus or minus 0.5 percent. The bituminous material bucket shall be nontilting type with a loose sheet metal cover. The length of the discharge opening or spray bar shall be not less than 3/4 the length of the mixer and it shall discharge directly into the mixer. The bituminous material bucket, its discharge valve or valves, and spray bar shall be adequately heated. Steam jackets, if used, shall be efficiently drained and all connections shall be so constructed that they will not interfere with the efficient operation of the bituminous scales. The capacity of the bituminous material bucket shall be at least 15 percent in excess of the weight of bituminous material required in any batch. The plant shall have an adequately heated quick-acting, nondrip, charging valve located directly over the bituminous material bucket.

The indicator dial shall have a capacity of at least 15 percent in excess of the quantity of bituminous material used in a batch. The dial shall be in full view of the mixer operator. The flow of bituminous material shall be controlled so that it will begin when the dry mixing period is over. All of the bituminous material required for one batch shall be discharged in not more than 15 seconds after the flow has started. The size and spacing of the spray bar openings shall provide a uniform application of bituminous material the full length of the mixer. The section of the bituminous line between the charging valve and the spray bar shall be provided with a valve and outlet for checking the meter when a metering device is substituted for a bituminous material bucket.

3. Mixer: The batch mixer shall be an approved type capable of producing a uniform mixture within the job-mix tolerances. If not enclosed, the mixer box shall be equipped with a dust hood to prevent loss of dust.

The clearance of blades from all fixed and moving parts shall not exceed 1 inch unless the maximum diameter of the aggregate in the mix exceeds 1-1/4 inches, in

which case the clearance shall not exceed 1-1/2 inches.

# C. Requirements for Continuous Mixing Plants:

1. Aggregate Proportioning: The plant shall include means for accurately proportioning each size of aggregate.

The plant shall have a feeder mounted under each compartment bin. Each compartment bin shall have an accurately controlled individual gate to form an orifice for measuring the volume of material drawn from each compartment. The feeding orifice shall be rectangular with one dimension adjustable by positive mechanical means provided with a lock.

Indicators shall be provided for each gate to show the respective gate opening in inches.

- Weight Calibration of Aggregate Feed: The plant shall include a revolution counter in good working order and a means for calibration of gate openings by weighing samples. Provision shall be made so that material fed out of individual orifices may be bypassed to individual boxes. The plant shall be equipped to conveniently handle individual samples weighing not less than 200 pounds. Accurate scales shall be provided by the Contractor to weigh such samples.
- 3. Synchronization of Aggregate Feed and Bituminous Material Feed: Provide means to control the flow of aggregate from the bins and the flow of bituminous material from the meter or other proportioning device.
- 4. Mixer: The plant shall include a continuous mixer of an approved type, adequately heated, and capable of producing a uniform mixture within the job-mix tolerances. It shall be equipped with a discharge hopper with dump gates which will permit rapid and complete discharge of mixture. The paddles shall be adjustable for angular position on the shafts and reversible to retard the flow of the mix. The mixer shall have a manufacturer's plate giving the net volumetric contents of the mixer at the several heights inscribed on a permanent gauge. Charts shall be provided showing the rate of feed of aggregate per minute for the aggregate being used.

# D. Requirements for Dryer-Drum Mixer Plants:

- 1. Aggregate Proportioning: Aggregate shall be proportioned at the cold feed control in accordance with Method B.
- 2. Weight Measurement of Aggregate: The system shall provide positive weight measurement of the combined cold aggregate feed by use of belt scales or other devices which will allow regulation of the feed gate and permit correction for variations in load.
- 3. Synchronization of Aggregate Feed and Bituminous Material Feed: The bituminous feed control shall be coupled with the total aggregate weight

measurement device in such manner as to automatically vary the bitumen feed rate as required to maintain the required proportion.

- 4. Dryer-Drum Mixer: The dryer-drum mixer shall be of an approved type, capable of adequately heating, drying, and mixing the bitumen-aggregate mixture.
- E. Hauling Equipment: Trucks used for hauling bituminous mixtures shall have tight, clean, smooth metal beds which have been thinly coated with a minimum amount of paraffin oil, lime solution, or other approved material to prevent the mixture from adhering to the beds. Each truck shall have a cover of canvas or other suitable material of such size as to protect the mixture from the weather.
- F. Bituminous Pavers: Bituminous pavers shall be self-contained, power-propelled units, provided with an activated screed or strike-off assembly, heated if necessary, and capable of spreading and finishing courses of bituminous plant mix material in widths applicable to the specified typical section and thicknesses shown on the drawings.

The paver shall be equipped with a receiving hopper having sufficient capacity for a uniform spreading operation. The hopper shall be equipped with a distribution system to place the mixture uniformly in front of the screed.

The paving machine shall be equipped with an automatic control system which will control the elevation of the screed and which is automatically actuated by a system of sensor-operated devices which sense and follow reference lines or surfaces on one or both sides of the machine as required.

Maintain screed at the proper elevation at each end by controlling the elevation of one end and automatically controlling the transverse slope or by controlling the elevation of each end independently, as directed.

The automatic control system shall be capable of working with one of the following devices: ski-type device at least 30 feet in length; short ski or short shoe; at least 5,000 feet of control line and stakes.

When the control line is to be used, it shall be maintained taut and to the grade and alignment established.

The screed or strike-off assembly shall effectively produce a finished surface of the required evenness and texture without tearing, shoving or gouging the mixture. The paver shall be capable of being operated at forward speeds consistent with satisfactory laying of the mixture.

G. Rollers: Rollers shall be of the steel-wheel, vibratory, pneumatic tire type, or combination, capable of reversing without backlash. Steel-wheel rollers other than vibrating shall be capable of exerting a force of not less than 250 pounds per inch of width of the roller. Vibrating steel-wheel rollers shall have a minimum weight of 6 tons.

Pneumatic-tired rollers shall have smooth tread tires of equal size that will provide a uniform compaction pressure for the full width of the roller and shall be capable of exerting

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a ground pressure of at least 80 pounds per square inch.

# 3.02 APPLICATION

A. Conditioning of Existing Surface: When the surface of the existing pavement or old base is irregular, it shall be brought to uniform grade and cross section as directed.

Paint contact surfaces of curbing, gutters, manholes, and other structures with a thin, uniform coating of bituminous material before placing the bituminous mixture against them.

- B. Preparation of Bituminous Material: Provide a continuous supply of the bituminous material to the mixer at a uniform temperature at all times; avoid local overheating.
- C. Preparation of Aggregates: Aggregates for pugmill mixtures shall be dried and heated to the required temperature. Properly adjust flame to avoid damage to the aggregate and to avoid soot on the aggregate.

Untreated aggregates for dryer-drum mixtures will not require prior preparation other than gradation control, except that those containing gravitational water shall be stockpiled and allowed to drain prior to mixing. Moisture in final mixture shall be limited to 3 percent maximum.

### 3.03 MIXING

Combine aggregates in the mixer in the amount of each fraction of aggregates required to meet the job-mix formula. The bituminous material shall be measured or gauged and introduced into the mixer in the amount specified by the job-mix formula.

After the required amounts of aggregate and bituminous material have been introduced into the mixer, the materials shall be mixed until a complete and uniform coating of the particles is secured.

The bituminous material and aggregate for pugmill mixtures shall be introduced into the mixer within 35 degrees F of each other. Temperature of pugmill mixtures shall be controlled between 225 and 300 degrees F.

Material delivered to the paver shall not be less than 225 degrees F.

# 3.04 SPREADING AND FINISHING MIX

The mixture shall be laid upon an approved surface, spread and struck off to the grade and elevation established. Use bituminous pavers to distribute the mixture either over the entire width or over such partial width as may be practicable.

The longitudinal joint in one layer shall offset that in the layer immediately below by approximately 6 inches.

Where paving operations are on the present traveled roadway, and where the thickness of

pavement course being placed is greater than 1 inch, the Contractor shall arrange his paving operations so that there will be no exposed longitudinal joint between adjacent travel lanes at the end of a day's run.

On areas where irregularities or unavoidable obstacles make the use of mechanical spreading and finishing equipment impracticable, the mixture shall be spread, raked, and luted by hand tools. For such areas the mixture shall be dumped, spread, and screeded to give the required compacted thickness.

Transport and place bituminous mixture on the roadway in a manner that will minimize segregation. Remove segregated areas behind the paver immediately and replace the segregated material with specification material before the initial rolling has taken place. The removal and replacement of nonspecification material or unacceptable work shall be accomplished at no additional expense to the Owner.

Place bituminous material as continuously as possible. Rollers shall not pass over the unprotected end of a freshly laid mixture unless authorized by the Engineer. Form transverse joints by cutting back on the previous run to expose the full depth of the course. When directed, use a coat of bituminous material on contact surfaces of all joints just before additional mixture is placed against the previously rolled material.

### 3.05 COMPACTING MIX

After the bituminous mixture has been spread and struck off, and surface irregularities have been adjusted, thoroughly and uniformly compact mixture by rolling.

Roll surface when the mixture is in the proper condition and when the rolling does not cause undue displacement, cracking or shoving.

The number, weight, and type of rollers furnished shall be sufficient to obtain the required compaction while the mixture is in a workable condition.

Begin rolling at the sides and proceed longitudinally parallel to the road centerline, each trip overlapping one-half the roller width, gradually progressing to the crown of the road. When paving in echelon or abutting a previously placed lane, roll the longitudinal joint first, then follow regular rolling procedure. On superelevated curves begin rolling at the low side and progress to the high side by overlapping of longitudinal trips parallel to the centerline.

Continue rolling until all roller marks are eliminated and the minimum density specified has been obtained.

Any displacement occurring as a result of the reversing of the direction of a roller, or from other causes, shall be corrected at once by the use of rakes and addition of fresh mixture when required. Care shall be exercised in rolling not to displace the line and grade of the edges of the bituminous mixture.

To prevent adhesion of the mixture to the rollers, keep wheels properly moistened with water or water mixed with very small quantities of detergent or other approved material. Excess liquid will not be permitted.

8-02553: Bituminous Concrete Pavement

Along forms, curbs, headers, walls, and other places not accessible to the rollers, thoroughly compact mixture with hand tampers or with mechanical tampers.

Remove mixture that becomes loose and broken, mixed with dirt, or is in any way defective, and replace with fresh hot mixture; compact to conform with the surrounding area.

### 3.06 ACCEPTANCE REQUIREMENTS

- A. Surface Tolerance: The variation between any two contacts with the surface shall not exceed 3/16 inch in 10 feet. Correct all humps or depressions exceeding the specified tolerance by removing defective work and replacing it with new material at no additional expense to the Owner.
- B. Density: Acceptable density of the in-place bituminous concrete pavement shall be 95 percent of the optimum values as determined from the job-mix formula. Field sampling and density determinations will be made by the Contractor at the Contractor's expense in accordance with AASHTO T230-68, or an acceptable nuclear procedure.
- C. A uniform compacted thickness shall be obtained for each course equal to or greater than the thickness shown. Individual tests shall not vary by more than plus or minus 1/4 inch.
- D. Mix Tolerances: The following tolerances for the job-mix formula will be allowed per single test:

Passing Sieve	<u>Percent</u>
No. 8 and larger sieves	+ 8
Smaller than No. 8 to larger than No. 200	+ 6
No. 200 sieve	+ 3
Asphalt content, weight percent total mix	+ 0.5

### **END OF SECTION**

### SECTION 02936 SEEDING AND MULCHING

### PART 1 GENERAL

### 1.01 REFERENCE

- A. All applicable requirements of other portions of the Contract Documents apply to the work of this Section, including but not limited to Division 1, General Requirements.
- B. Perform all work in accordance with state and local specifications and requirements and in accord with federal rules and regulations.
- C. Refer to the following standard references with respect to materials, tests, and physical parameters. Current editions apply.
  - 1. United States Department of Agriculture-Federal Seed Act.
  - 2. American Standard of Nursery Stock.
  - 3. Standard Methods of the Association of Official Agricultural Chemists.
- D. Any materials or work may be rejected if, in the opinion of the Engineer, such does not meet requirements of specifications. Remove all rejected material from site and replace with acceptable material.

### 1.02 DESCRIPTION OF WORK

- A. Work of this Section includes, but is not limited to:
  - 1. Soil Preparation.
  - 2. Seeding and Mulching.
  - 3. Maintenance of Seeding Areas.

### 1.03 SUBMITTALS

- A. All submittals shall conform completely to the requirements of the Contract Documents, including all requirements set forth in Section 01300, Submittals.
- B. Provide signed copies of vendor's statement for seed mixture required, stating botanical and common name, place of origin, strain, percent of purity, percent of germination, and amount of PLS (Pure Live Seed) per bag. Statement to certify that each container will be labeled in accord with Federal and State Seed Laws.
- C. If fall planting of Native Grass is anticipated, submit listing of type of cover crop to be used and rate and procedures for planting.
- D. Submit type of herbicide to be used during first growing season to contain annual weeds.

### 1.04 QUALITY ASSURANCE

A. Quality Control

1. All pre-packaged standard products shall have the manufacturer's certified analysis affixed and be delivered in sealed containers.

#### 1.05 **DELIVERY, STORAGE AND HANDLING**

#### A. Packaged Materials

- Deliver fresh materials in sealed containers. Protect from deterioration during delivery, and while stored at the site. Material which becomes caked or otherwise damaged, making it unsuitable for use, shall be rejected.
- All seed shall be labeled in accordance with U.S. Department of Agriculture Rules and B. Regulations under the Federal Seed Act, in effect. All seed shall be furnished in sealed containers.

#### 1.06 **JOB CONDITIONS**

#### Α. General

- Examine subgrade, verify the elevations, observe the conditions under which 1. work is to be performed. Do not proceed with the work until unsatisfactory conditions have been corrected.
- 2. Planting Time: Plant materials only during normal planting seasons for each type of landscape work required. Correlate planting with specified maintenance service periods to provide maintenance until occupancy by the Owner.

#### 1.07 **UNIT PRICES**

All Contractor costs incurred in complying with this section shall be paid for in the price bid for seeding and mulching.

### PART 2 PRODUCTS

#### 2.01 **MATERIALS**

Α. Seed: All disturbed areas shall be graded, top soiled, mulched, and seeded. Areas of disturbance shall be seeded per the seed mix specified by Riverdale Golf Course. Contact the Engineer for clarification if there is a discrepancy between the Riverdale Golf Course and Adams County requirements. The following seed and rate shall be used:

2-02936: Seeding and Mulching 181-050.000 Rev. 0 Wright Water Engineers, Inc.

Buffalo Brand Seed Fine Fescue Mix					
Species	% In Mix	lbs/sq. ft			
Chewing Fescue	Jamestown IV	30	4-6		
Hard Fescue	Reliant IV	30	4-6		
Blue Fescue	Azay	20	4-6		
Creeping Red Fescue	Audubon	20	4-6		

### Riverdale Golf Course Standard Seed Mix

- B. Mulch: Provide peat or clean, seed-free, threshed straw of oats, wheat, barley, rye, beans, peanuts, or other locally available mulch material. Do not use mulch that contains matured seeds of noxious weeds or other species that will grow or be detrimental to seeding, or provide a menace to surrounding land. Do not use mulch material which is fresh or excessively brittle, or which is decomposed and will smother or retard growth of grass.
  - 1. Peat. Provide a natural product of either sphagnum moss, reed, or sledge peat free from lumps, roots and stones or other foreign matter, and of such physical condition that it will pass through a ½-inch mesh. Provide peat containing no less than 90 percent organic matter by weight on a dry weight basis.
- C. Water: Riverdale Gold Course will provide a 1" irrigation tap for contractor to connect to for temporary irrigation.

### PART 3 EXECUTION

### 3.01 SOIL PREPARATION

- A. Thoroughly loosen soil to a minimum depth of 6 inches except 3-inch depth on steep slopes and wooded areas; remove rocks, debris, and clods.
- B. Maintain grading and drainage patterns.
- C. The tilling shall pull a drag or other device to keep area smooth.
- D. On steep slopes and small areas, hand rake areas smooth.
- E. Topsoil generally consists of the upper 12 inches of soil material on the site that consists of fines (fine sand, silt, and clay) so that at least 90 percent of the soil passes a No. 200 sieve. Topsoil shall be friable to enable uniform placement and be free of lumps, stones over three (3) inches in maximum dimension, sticks, debris and weeds.
- F. Areas of gravel, cobble, larger stones, or debris may be encountered during the course of excavation activities. This material should not be mixed with topsoil.

### 3.02 SEEDING

Seed shall be uniformly sown by Brillion drill (or approved mechanical equivalent) or by broadcasting (at double seeding rates).

- A. All surfaces to receive seed shall be slightly moist and the top 6 inches (minimum) tilled or handworked into an even and loose seed bed at the specified grades and elevations.
- B. Seed shall not be sown in windy weather or when the ground is frozen or otherwise untillable.
- C. All broadcast seed shall be raked to a covered depth of at least ¼ inch. Soil conditions permitting.
- D. All seeded areas shall be watered and mulched immediately (within 48 hours).

#### 3.03 **MULCHING**

- Protect seeded areas against erosion by spreading specified mulch after completion of the A. seeding operations (spread uniformly).
- B. The mulch may be applied by the hydraulic method at the rate of per one thousand square feet.
- C. Do not spray mulch on buildings, fence, pavements, trees, etc.
- D. Mulch shall be straw mulch, certified seed-free.

#### 3.04 **EROSION CONTROL MAT**

Provide erosion control mat on all slopes 3:1 (H:V) or steeper per the GESC Plan and as required by the Owner's Representative.

#### 3.05 **CLEAN-UP**

Upon completion of work, remove debris and leave area in clean, acceptable condition.

#### 3.06 **MAINTENANCE**

- Α. Provide temporary irrigation to water and maintain seeded areas immediately after placement until grass is well established. OWNER approval needed prior to acceptance of established grass.
- B. Immediately reseed areas that show bare spots.
- C. Control growth of weeds. Apply herbicides in accordance with manufacturers' instructions.

### **END OF SECTION**

181-050.000 4-02936: Seeding and Mulching Rev. 0 Wright Water Engineers, Inc.

### SECTION 02960 TEMPORARY BYPASS PUMPING

#### PART 1 - GENERAL

### 1.01 SECTION INCLUDES

A. This section includes requirements for implementing a temporary pumping system for the purpose of diverting existing sewage flow around work area for duration of the project.

### 1.02 SUBMITTALS

- A. Submit following Section 01330.
  - 1. Detailed plan and description of proposed pumping system. Indicate number, size, material, location and method of installation of suction and discharge piping, size of pipeline, staging area for trucks, staging area for pumps, site access point, and expected flow rate.
    - a. Size and location of floating barge and arrangement of pumps and suction and discharge hose or piping.
    - b. Sections showing suction and discharge pipe.
    - c. Supports for Brantner Ditch crossing and temporary pipe supports and anchoring required.
    - d. Thrust and restraint block sizes and locations.
    - e. Bypass pump sizes, capacity, number of each size to be on site and power requirements.
    - f. Power equipment.
    - g. Calculations of static lift, friction losses, and flow velocity. Pump curves showing pump operating range.
    - h. Access to bypass pumping locations indicated on drawings.
    - i. Calculations for selection of bypass pumping pipe size.
    - j. Method of noise control for each pump and/or generator.
    - k. Schedule for installation and maintenance of bypass pumping lines.
    - I. Procedures for setup and breakdown of pumping operations.
    - m. Certify bypass system will meet requirements of codes, and regulatory agencies having jurisdiction.

### 1.03 CONTRACTORS RESPONSIBILITY FOR OVERFLOWS AND SPILLS

A. Schedule and perform work in manner that does not cause or contribute to incidence of overflows, pipeline leaks, releases or spills of sewage from lagoons, pumps, piping, trucks, or bypass operation.

### 1.04 DELIVERY AND STORAGE

- A. Transport, deliver, handle, and store pipe, fittings, pumps, ancillary equipment and materials to prevent damage and following manufacturer's recommendations.
  - 1. Inspect all material and equipment for proper operation before initiating work.

181-050.000 Wright Water Engineers, Inc. July 2019

- B. Material found to be defective or damaged due to manufacturer or shipment.
  - When Engineer deems repairable: Repair as recommended by manufacturer.
  - When Engineer deems not repairable: Replace as directed by Engineer before 2 initiating work.
  - Repair or replacement of defective or damaged material and equipment will be at 3. no cost to Owner.

### 1.05 QUALITY ASSURANCE

- A. Perform leakage and pressure tests on temporary bypass piping using clean water, before operation. Notify Engineer 24 hours prior to testing.
- B. Follow national standards and as specified herein.
- C. Maintain and inspect temporary pumping system every two hours. Responsible operator: on site when pumps are operating.
- D. Keep and maintain spare parts for pumps and piping on site, as required.
- E. Maintain adequate hoisting equipment and accessories on site for each pump.

#### 1.06 **UNIT PRICES**

All Contractor costs incurred in complying with this section will not be paid for directly but Α. shall be included in the lump sum prices bid for other items of work.

### **PART 2 - PRODUCTS**

#### 2.01 **MATERIALS**

- Α. Discharge and Suction Pipes: Approved by Engineer.
  - Discharge piping: Determined according to flow calculations and system operating 1. calculations.
  - 2. Suction piping: Determined according to pump size, flow calculations, and manhole/tank depth following manufacturer's specifications and recommendations.
- Polyethylene Plastic Pipe: B.
  - High density solid wall and following ASTM F714 Polyethylene (PE) Plastic Pipe 1. (SDR-DR) based on Outside Diameter. ASTM D1248 and ASTM D3550
  - Homogenous throughout, free of visible cracks, discoloration, pitting, varying wall 2. thickness, holes, foreign material, blisters, or other deleterious faults.
- C. High-Density Polyethylene (HDPE).
  - Homogenous throughout, free of visible cracks, discoloration, pitting, varying wall thickness, holes, foreign material, blisters, or other deleterious faults.
    - Defective areas of pipe: Cut out and joint fused as stated herein.
  - Assembled and joined at site using couplings, flanges or butt-fusion method to 2. provide leak proof joint. Follow manufacturer's instructions and ASTM D 2657.
    - Threaded or solvent joints and connections are not permitted. a.
  - 3. Fusing: By personnel certified as fusion technicians by manufacturer of HDPE pipe

and/or fusing equipment.

- 4. Butt-fused joint: True alignment and uniform roll-back beads resulting from use of proper temperature and pressure.
  - a. Allow adequate cooling time before removal of pressure.
  - b. Watertight and have tensile strength equal to that of pipe.
  - Acceptance by Engineer before insertion.
- 5. Use in streams, storm water culverts and environmentally sensitive areas.
- D. Flexible Hoses and Associated Couplings and Connectors.
  - 1. Abrasion resistant.
  - 2. Suitable for intended service.
  - 3. Rated for external and internal loads anticipated, including test pressure.
    - a. External loading design: Incorporate anticipated traffic loadings, including traffic impact loading.
  - 4. When subject to traffic loading, compose system, such as traffic ramps or covers.
    - a. Install system and maintain H-20 loading requirements while in use or as directed by the Engineer.
- E. Valves and Fittings: Determined according to flow calculations, pump sizes previously determined, and system operating pressures.
- F. Plugs: Selected and installed according to size of line to be plugged, pipe and manhole configurations, and based on specific site.
  - 1. Additional plugs: Available in the event a plug fails. Plugs will be inspected before use for defects which may lead to failure.
- G. Aluminum "irrigation type" piping or glued PVC piping will not be permitted.
- H. Discharge hose will only be allowed in short sections when approved by Engineer.

### 2.02 EQUIPMENT

- A. Pumps:
  - 1. Fully automatic self-priming units that do not require the use of foot-valves or vacuum pumps in priming system.
  - 2. Electric or diesel powered.
- B. Provide:
  - 1. Necessary stop/start controls for each pump.
  - 2. One standby pump of each size maintained on site.
    - a. On-line, isolated from primary system by a valve.

### 2.03 DESIGN REQUIREMENTS

- A. Bypass pumping systems:
  - 1. Sufficient capacity to pump sewage lagoon liquids/biosolids as outlined in the Contract Documents.

B. Provide pipeline plugs and pumps of adequate size to handle liquids/biosolids from lagoons, and temporary discharge piping to ensure total volume from lagoon liquid volume can be safely diverted to Riverdale Road, without leaking or spills.

#### PART 3 **EXECUTION**

### 3.01 OWNER NOTIFICATION

A. Follow Section 01140.

#### 3.02 **PREPARATION**

- A. Determining location of bypass pipelines.
  - Minimal disturbance to existing utilities.
  - Obtain approvals for staging and loading in Adams County right of way. 2.
  - Obtain Engineer's approval of location. 3.
  - Costs associated with obtaining approvals at no cost to the Owner. 4.

#### **INSTALLATION AND REMOVAL** 3.03

- Α. Provisions and requirements must be reviewed by Engineer before starting construction.
- B. Disconnect connections to existing lagoons and construct temporary bypass pumping structures at access location indicated on Drawings and as required to provide adequate suction conduit.
- C. When working inside manhole or force main, exercise caution. Follow OSHA, Local, State and Federal requirements. Take required measures to protect workforce against sewer gases and/or combustible or oxygen-deficient atmosphere.
- D. Meter liquid/biosolids removal at the sewage lagoons.
- E. Installation of Bypass Pipelines:
  - When bypass pipeline crosses golf course fairway, provide continued access for golf cart and pedestrian traffic.
  - When bypass pipeline crosses a concrete sidewalk or cart path, tunnel bypass 2. piping under concrete path.
  - 3. When bypass pipeline crosses Brantner Ditch, support bypass piping over ditch, as needed.
- F. Contractor to protect golf course turf and infrastructure during bypass pumping.
- G. Upon completion of bypass pumping operations, remove piping, restore property to preconstruction condition and restore pavement. Repair any damage to golf course turf and infrastructure.

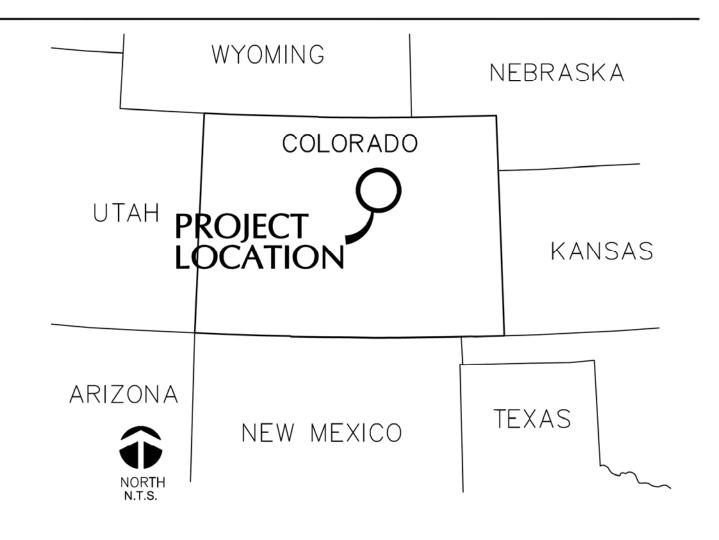
### **END OF SECTION**

# ADAMS COUNTY, COLORADO

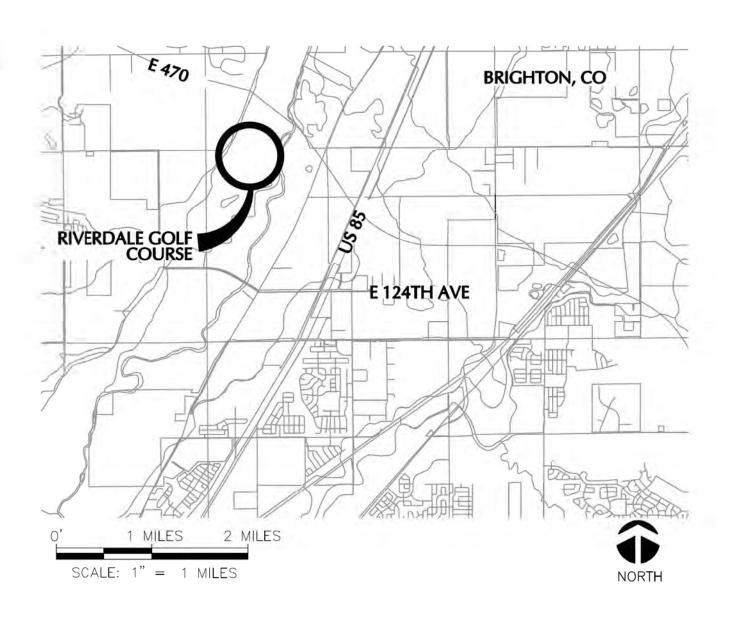
### **GENERAL NOTES**

- 1. AT LEAST FIVE (5) DAYS PRIOR TO THE START OF CONSTRUCTION, A PRE—CONSTRUCTION MEETING WILL BE HELD AND ATTENDED BY THE CONTRACTOR AND REPRESENTATIVES OF THE OWNER. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT THE ENGINEER AND OWNER.
- 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR:
  - A. OBTAINING AND ADHERING TO, AT THEIR OWN EXPENSE ALL PERMITS OR LICENSES WHICH ARE NECESSARY TO PERFORM THE PROPOSED WORK.
  - B. IN CASE OF AN EMERGENCY AFTER WORKING HOURS, CALL THE OWNER'S REPRESENTATIVE'S OFFICE.
  - C. PROPER NOTIFICATION OF ALL NECESSARY AGENCIES PRIOR TO CONSTRUCTION.
  - D. PROJECT SAFETY.
  - E. JOBSITE CONDITIONS AT ALL TIMES.
- 3. THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE AT LEAST 48 HOURS PRIOR TO THE START OF CONSTRUCTION. ALL WORK SHALL BE INSPECTED AND APPROVED BY THE OWNER'S REPRESENTATIVE.
- 4. WRIGHT WATER ENGINEERS IN DENVER IS TO BE NOTIFIED OF ANY DISCREPANCY OR CONFLICT PRIOR TO CONTINUING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING SITE CONDITIONS PRIOR TO CONSTRUCTION.
- 5. ALL MATERIALS, CONSTRUCTION, AND TESTS SHALL BE IN ACCORDANCE WITH THE CONTRACT DOCUMENT CONSTRUCTION SPECIFICATIONS.
- 6. THE CONTRACTOR SHALL CONTACT ALL APPROPRIATE UTILITY COMPANIES AND OWNER'S REPRESENTATIVES PRIOR TO THE BEGINNING OF ANY CONSTRUCTION, CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION (INCLUDING DEPTHS) OF ANY EXISTING UTILITIES. ALL EXISTING UTILITIES SHALL BE PROTECTED FROM DAMAGE BY THE CONTRACTOR. DAMAGED UTILITIES SHALL BE REPAIRED AT THE CONTRACTOR'S OWN EXPENSE.
- 7. ALL ITEMS SHOWN ON THE PLANS AS EXISTING ARE SHOWN IN APPROXIMATE LOCATIONS ONLY. THE ACTUAL LOCATION MAY VARY FROM THE PLANS. ESPECIALLY IN THE CASE OF UTILITIES. WHENEVER CONTRACTOR DISCOVERS A DISCREPANCY IN LOCATIONS, THEY SHALL CONTACT ENGINEER IMMEDIATELY.
- 8. ALL PIPE LENGTHS ARE APPROXIMATE. LENGTHS INDICATED ON THE PLANS ARE BETWEEN CENTER OF FITTING TO CENTER OF FITTING.
- 9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTROL OF SURFACE WATER, STORMWATER, AND GROUND WATER THROUGHOUT THE LENGTH OF THIS CONTRACT.
- 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING ALL SURFACES AND RELATED STRUCTURES, TO ORIGINAL CONDITIONS (OR BETTER) AND GRADES UNLESS DESIGNATED OTHERWISE ON THE DRAWINGS.
- 11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND REPLACING ANY EXISTING SIGN, STRUCTURES, FENCES ETC., ENCOUNTERED ON THE JOB AND RESTORING THEM TO THEIR ORIGINAL CONDITION OR BETTER.
- 12. THE CONTRACTOR SHALL HAVE IN THEIR POSSESSION AT ALL TIMES ONE (1) SIGNED COPY OF THE PLANS.
- 13. A SET OF RECORD DRAWINGS SHALL BE SUBMITTED BY THE CONTRACTOR TO THE ENGINEER. ALL UTILITIES ENCOUNTERED DURING CONSTRUCTION SHALL BE STATIONED AND SHOWN ACCURATELY ON THE PLANS BY THE CONTRACTOR.
- 14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR POLLUTION PREVENTION TECHNIQUES, INCLUDING, BUT NOT LIMITED TO, SPILL PREVENTION. DESIGNATED EQUIPMENT MAINTENANCE SHALL BE AVOIDED.
- 15. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES OF CONSTRUCTION.
- 16. SHOP DRAWING SUBMITTALS ARE REQUIRED TO BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO ORDERING EQUIPMENT OR MATERIALS.
- 17. PROTECT EXISTING BUILDINGS STRUCTURAL INTEGRITY AND FUNCTION AT ALL TIMES DURING CONSTRUCTION.
- 18. EQUIPMENT SPECIFIED BY NAME OR PART NUMBER PROVIDES A PERFORMANCE SPECIFICATION FOR THE PROJECT.
  "OR EQUAL" COMPONENTS MAY BE PROPOSED BY THE CONTRACTOR THROUGH THE SUBMITTAL REVIEW PROCESS.

### **LOCATION MAP**



### VICINITY MAP



### **CONTACTS**

OWNER / APPLICANT

CONTACT: RANETTE CARLSON 720.523.6924
RCARLSON@ADCOGOV.ORG

ADAMS COUNTY, COLORADO 4430 S. ADAMS COUNTY PARKWAY 1ST FLOOR, SUITE C1700 BRIGHTON, CO 80601 ENGINEER:

WAYNE LORENZ, P.E. OR ANDREW DIXON, E.I.T. 303.480.1700 ADIXON@WRIGHTWATER.COM

WRIGHT WATER ENGINEERS, INC. 2490 W. 26TH AVENUE SUITE 100A DENVER, CO 80211

### **DRAWING INDEX**

SHEET TITLE

01 COVER SHEET

02 SITE ACCESS PLAN

03 OVERALL SITE AND DEMOLITION PLAN

04 TEMPORARY BYPASS PIPING

05 LAGOON BATHYMETRIC SURVEY

6 CONSTRUCTION DETAILS

FOR BIDDING PURPOSES ONLY

NOT FOR CONSTRUCTION

CALL COLORADO

811

OR CALL UTILITY NOTIFICATION
CENTER OF COLORADO

1-800-922-1987

CALL 3-BUSINESS DAYS IN ADVANCE
BEFORE YOU DIG, GRADE, OR EXCAVATE
FOR THE MARKING OF UNDERGROUND
MEMBER UTILITIES

WRIGHT WATER ENGINEERS, INC. 2490 W. 26TH AVE. SUITE 100A DENVER, CO 80211 (303)480-1700 FAX(303)480-1020

REVISIONS	COMMENTS
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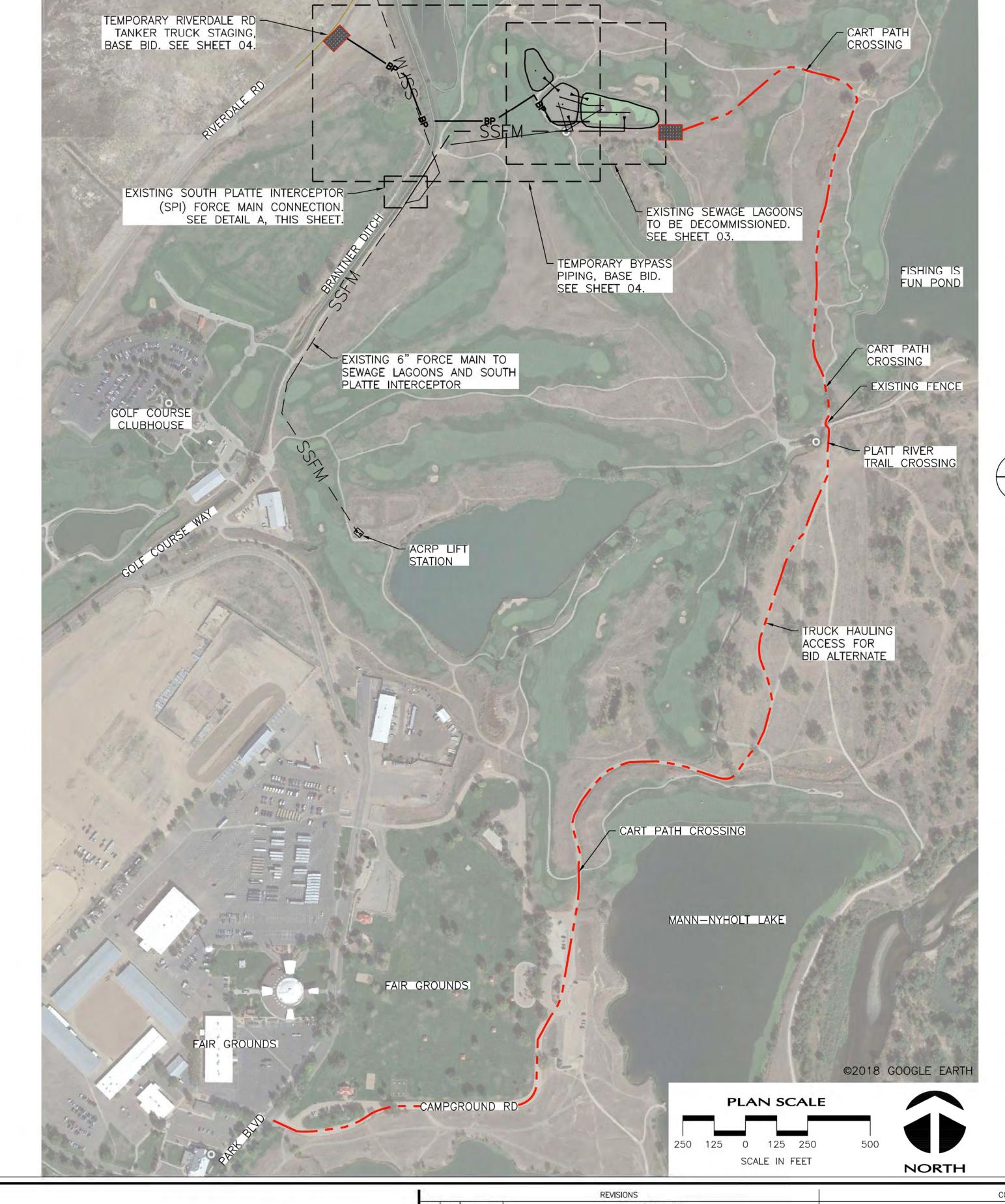
ADAMS COUNTY, COLORADO SEWAGE LAGOON LIQUID / BIOSOLIDS REMOVAL & DECOMMISSIONING

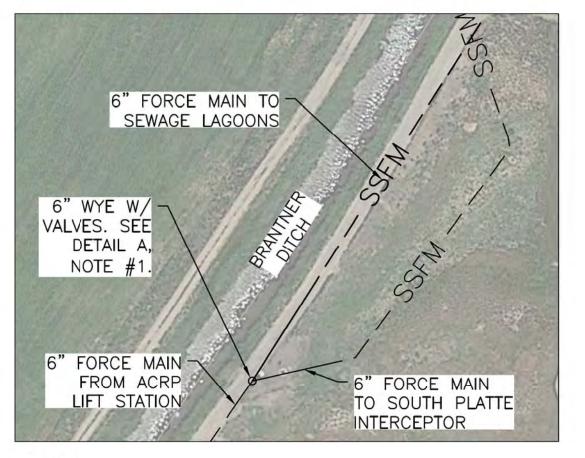
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**COVER SHEET** 

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181-050-000





### **DETAIL A NOTES**

1. AFTER COORDINATION WITH ADAMS COUNTY, CONTRACTOR SHALL TURN THE APPROPRIATE VALVES TO HALT THE SEWAGE FLOWS TO THE SEWAGE LAGOONS AND DIRECT THE FLOW TO THE SOUTH PLATTE INTERCEPTOR LINE. AFTER CONFIRMING FLOWS TO THE SEWAGE LAGOON HAVE HALTED, CONTRACTOR TO DISCONNECT THE FORCE MAIN TO THE LAGOONS FROM THE SOUTH PLATTE INTERCEPTOR LINE.



### **LEGEND**

--- SSFM ---

EXISTING LAGOON BOUNDARY

EXISTING SANITARY SEWER FORCE MAIN

PROPOSED CONSTRUCTION ACCESS PROPOSED TEMPORARY BYPASS PIPING

**NOTES** 

1. AERIAL PHOTOGRAPHS, ©2018 GOOGLE EARTH

2. UTILITIES SHOWN BASED ON RECORD DRAWINGS AND COORDINATION WITH ADAMS COUNTY. CONTRACTOR TO FIELD VERIFY ALL LOCATIONS, DIMENSIONS, AND PIPE

3. CONTRACTOR SHALL USE THE RIVERDALE ROAD STAGING AREA TO LOAD THE LIQUID/BIOSOLIDS ONTO THE TANKER TRUCKS.

4. CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL ALONG PARK BLVD. & RIVERDALE ROAD IN LINE WITH THE FEDERAL MANUAL ON UNIFORM TRAFFIC CONTROL. CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL AND ROUTING PLAN TO THE COUNTY AND ENGINEER FOR

5. CONTRACTOR SHALL USE THE PROPOSED CONSTRUCTION ACCESS TO BRING MATERIAL, EQUIPMENT, AND LABOR TO THE SITE TO DECOMMISSION THE LAGOONS. CONTRACTOR REQUIRED TO REPAIR ANY DAMAGE TO EXISTING INFRASTRUCTURE AND THE PROPOSED CONSTRUCTION ACCESS.

### **BID ALTERNATE**

CONTRACTOR TO SUBMIT A BID ALTERNATE FOR THE USE OF ONLY THE PROPOSED CONSTRUCTION ACCESS FOR THE REMOVAL AND TRUCK HAULING OF LIQUIDS/BIOSOLIDS FROM THE LAGOONS. NO TEMPORARY BYPASS PUMPING ACROSS BRANTNER DITCH WILL BE ALLOWED IN BID ALTERNATE A.

> **FOR BIDDING PURPOSES** ONLY

**NOT FOR** CONSTRUCTION

WRIGHT WATER ENGINEERS, INC.
 2490 W. 26TH AVE. SUITE 100A
 DENVER, CO 80211
 (303)480-1700 FAX(303)480-1020

COMMENTS DESCRIPTION

DATE ARD 07/31/19 DETAIL ARD 07/31/19 CHECK WFL 07/31/19 APPROVAL SCALE

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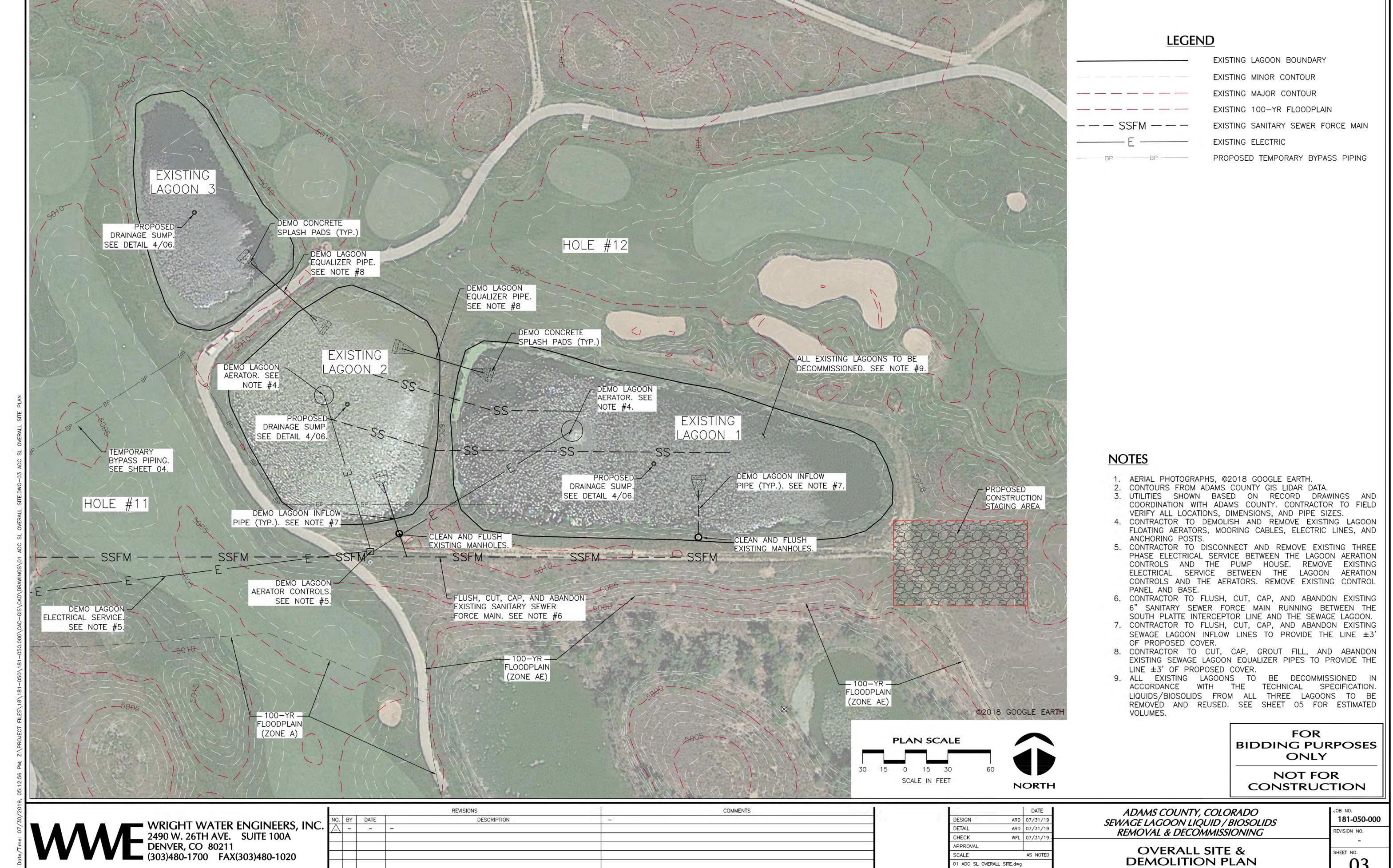
ADAMS COUNTY, COLORADO SEWAGE LAGOON LIQUID / BIOSOLIDS REMOVAL & DECOMMISSIONING

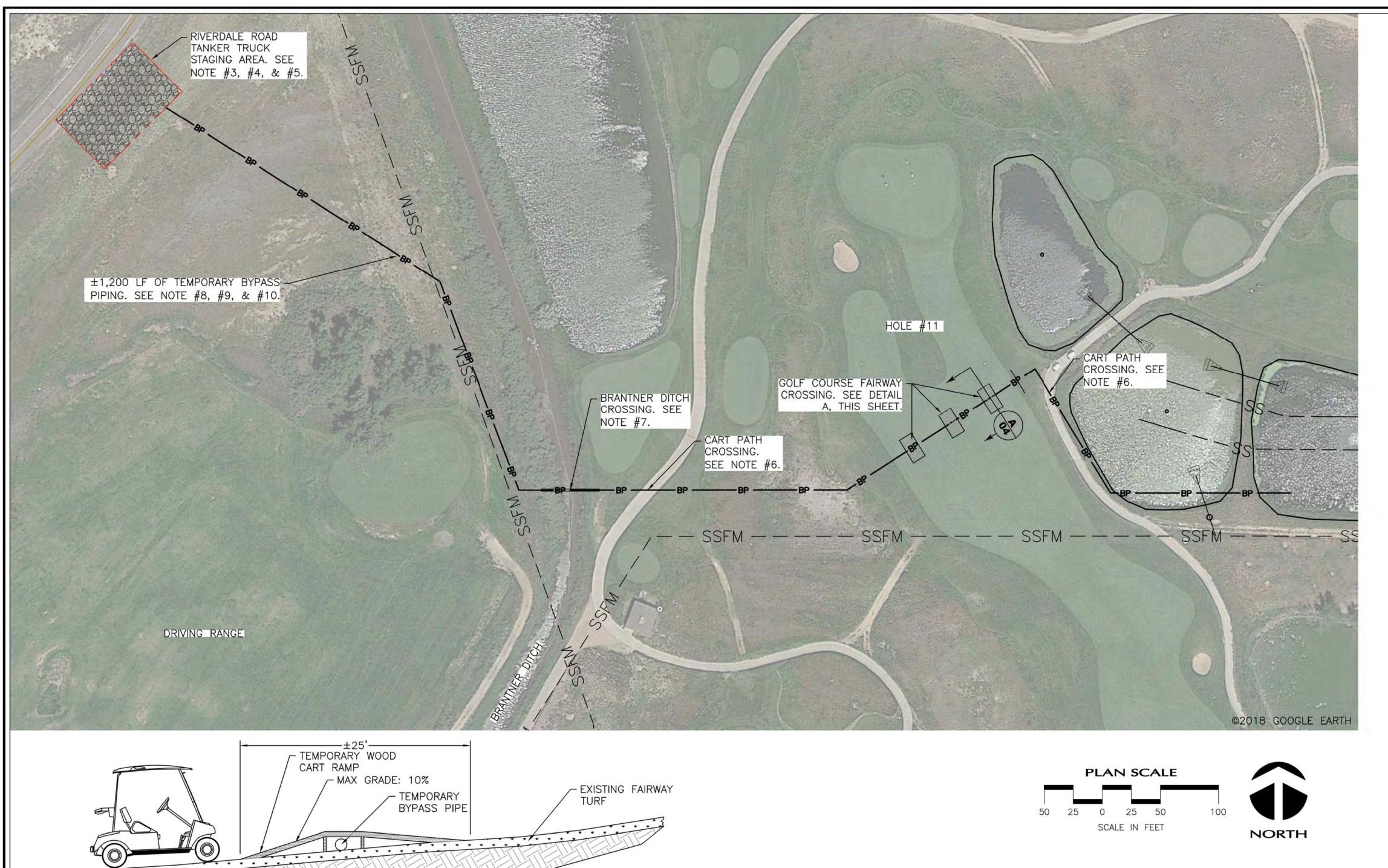
REVISION NO.

SITE ACCESS PLAN

SHEET NO.

181-050-000





- 1. INSTALL 12' WIDE WOOD CART RAMP (3) OVER THE TEMPORARY BYPASS
- PIPING TO ALLOW FOR CONTINUED ACCESS OF GOLF COURSE FAIRWAY. 2. WOOD CART RAMP SHALL BE ADEQUATELY DESIGNED AND CONSTRUCTED TO SUPPORT A FULLY LOADED GOLF CART. CONTRACTOR TO SUBMIT TO ENGINEER SHOP DRAWINGS FOR REVIEW.
- 3. CONTRACTOR TO PROVIDE SIGNAGE AT FAIRWAY TO NOTIFY GOLFERS OF THE TEMPORARY BYPASS PIPING AND THE CART RAMPS.
- 4. RESTORE GOLF COURSE FAIRWAY SOIL AND SOD TO ORIGINAL CONDITION AFTER BYPASS PUMPING COMPLETE.



## GOLF COURSE FAIRWAY CROSSING

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DATE ARD 07/31/19 DETAIL ARD 07/31/19 CHECK WFL 07/31/19 APPROVAL SCALE AS NOTED

01 ADC SL OVERALL SITE.dwg

SEWAGE LAGOON LIQUID / BIOSOLIDS REMOVAL & DECOMMISSIONING

ADAMS COUNTY, COLORADO

TURF AND INFRASTRUCTURE.

TEMPORARY BYPASS PIPING

181-050-000 REVISION NO.

SHEET NO.

FOR

**BIDDING PURPOSES** 

ONLY

NOT FOR CONSTRUCTION

WRIGHT WATER ENGINEERS, INC. 2490 W. 26TH AVE. SUITE 100A ■ (303)480-1700 FAX(303)480-1020

**LEGEND** 

1. AERIAL PHOTOGRAPHS, @2018 GOOGLE EARTH.

2. UTILITIES SHOWN BASED ON RECORD DRAWINGS AND

4. CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL ALONG

5. CONTRACTOR TO PROVIDE FILL AND ROAD BASE ALONG

6. CONTRACTOR SHALL BORE TEMPORARY BYPASS PIPING

7. CONTRACTOR TO PROVIDE SECONDARY CONTAINMENT PIPE FOR TEMPORARY BYPASS PIPING AT DITCH CROSSING. SECONDARY CONTAINMENT PIPE CAN BE MADE OF PRESSURE

RATED PVC, STEEL, OR HDPE AND IS TO EXTEND ±25' ON

EITHER SIDE OF THE THE DITCH. CONTRACTOR TO SUPPORT

TEMPORARY BYPASS PIPING OVER DITCH. CONTRACTOR TO

SUBMIT PROPOSED DESIGN OF SUPPORTS AND CONTAINMENT

PIPING TO ADAMS COUNTY AND THE ENGINEER FOR REVIEW

PIPING IN ACCORDANCE WITH THE TECHNICAL SPECIFICATIONS. IMMEDIATELY REMOVE TEMPORARY BYPASS PIPING UPON COMPLETION OF THE LIQUIDS/BIOSOLIDS

SEWAGE LAGOONS. CONTRACTOR TO TURN IN DAILY METERING LOGS TO THE COUNTY AND THE ENGINEER FOR

CONTRACTOR TO REPAIR ANY DAMAGE TO GOLF COURSE

8. CONTRACTOR TO PROVIDE TEMPORARY BYPASS PUMPS AND

9. CONTRACTOR TO METER LIQUID/BIOSOLIDS REMOVAL AT THE

10. CONTRACTOR TO PROTECT GOLF COURSE TURF AND INFRASTRUCTURE DURING TEMPORARY BYPASS PUMPING.

VERIFY ALL LOCATIONS, DIMENSIONS, AND PIPE SIZES. 3. CONTRACTOR SHALL USE THE RIVERDALE ROAD STAGING

COORDINATION WITH ADAMS COUNTY. CONTRACTOR TO FIELD

AREA TO LOAD THE LIQUID/BIOSOLIDS ONTO THE TANKER

RIVERDALE ROAD IN LINE WITH THE FEDERAL MANUAL ON UNIFORM TRAFFIC CONTROL. CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL AND ROUTING PLAN TO THE COUNTY AND

RIVERDALE ROAD TO PROVIDE TANKER TRUCK STAGING AREA. AFTER TRUCKING ACTIVITIES HAVE CEASED, RESTORE RIVERDALE ROAD STAGING AREA WITH CDOT STANDARD CLASS

--- SSFM ---

**NOTES** 

TRUCKS.

ENGINEER FOR REVIEW.

BEFORE CONSTRUCTION.

REMOVAL.

REVIEW.

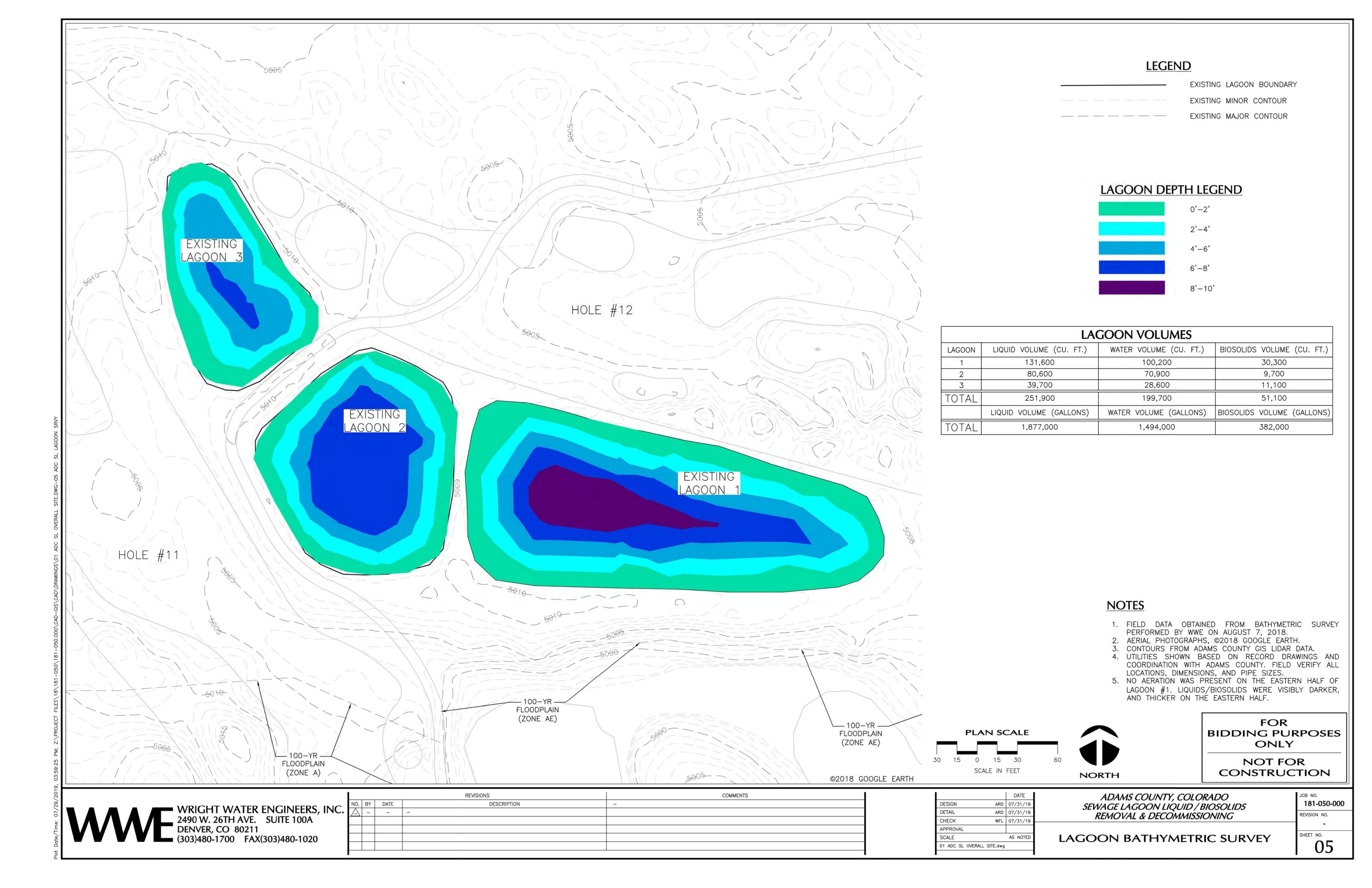
UNDER CONCRETE GOLF CART PATH.

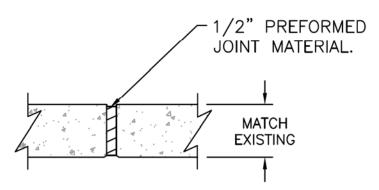
6 BASE COURSE.

EXISTING LAGOON BOUNDARY

EXISTING SANITARY SEWER FORCE MAIN

PROPOSED TEMPORARY BYPASS PIPING

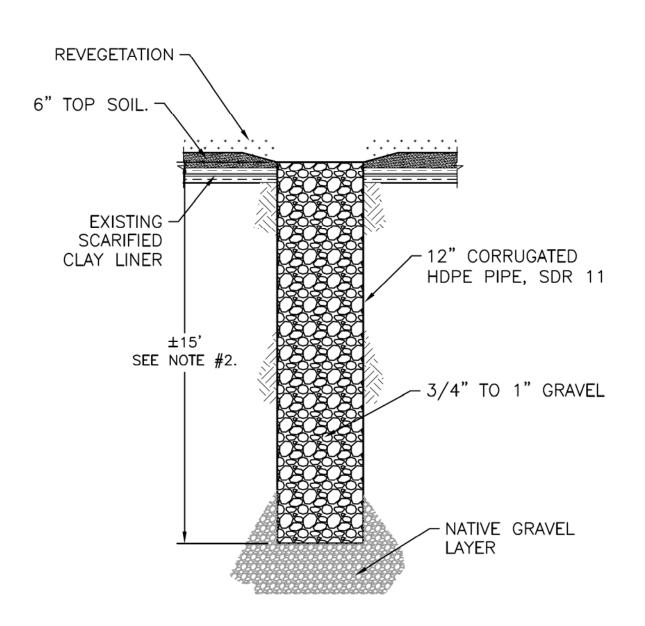




NOTES:

1. PROVIDE AT CONNECTION TO EXISTING SIDEWALK AND 100' OC IN SIDEWALKS.



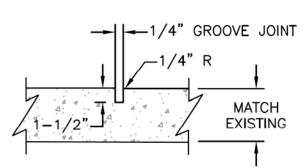


NOTES:

1. GRADE LAGOON FINISHED SURFACE SO THAT ALL DRAINAGE FLOWS TO THE DRAINAGE SUMP.

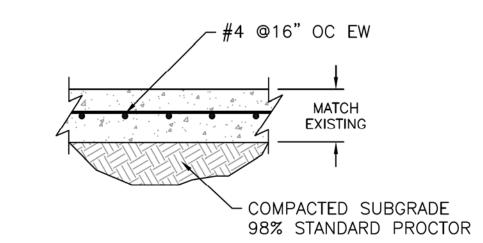
2. DRAINAGE SUMP SHALL BE INSTALLED TO THE NATIVE GRAVEL LAYER.





NOTES:
1. MATCH EXISTING SIDEWALK SPACING.

# 2 CONCRETE CONTRACTION JOINT N.T.S.



NOTES:
1. CONCRETE SHALL BE CDOT CLASS B.

3	CONCRETE SIDEWALK/TRAIL
06 /	N.T.S.

FOR BIDDING PURPOSES ONLY

NOT FOR CONSTRUCTION

WRIGHT WATER ENGINEERS, INC. 2490 W. 26TH AVE. SUITE 100A DENVER, CO 80211 (303)480-1700 FAX(303)480-1020

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# ADAMS COUNTY, COLORADO

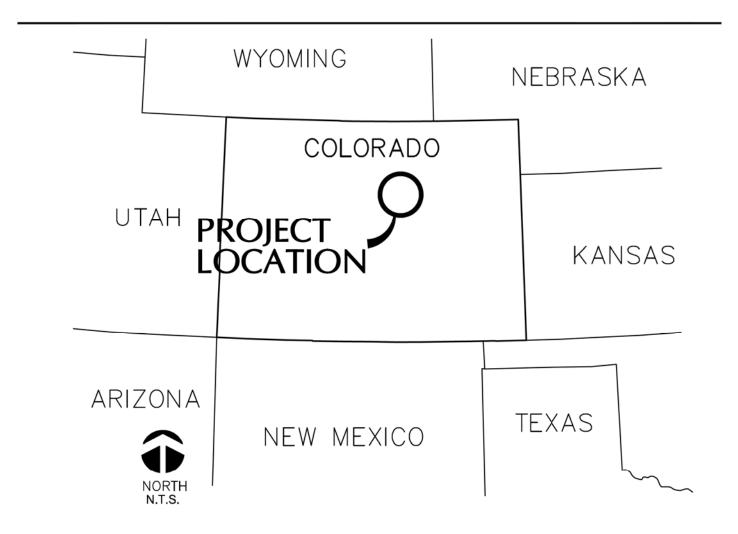
### ADAMS COUNTY ESC GENERAL NOTES

- 1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A STATE OF COLORADO, COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT (CDPHE) GENERAL PERMIT FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY COR-030000 PRIOR TO CONSTRUCTION (CDPS STORMWATER CONSTRUCTION PERMIT).
- 2. THE CONTRACTOR SHALL PROVIDE ADAMS COUNTY WITH A COPY OF THE CDPS STORMWATER CONSTRUCTION PERMIT INACTIVATION NOTICE APPLICATION. THERE WILL BE NO FEE CHARGED TO ADAMS COUNTY FOR THE INACTIVATION NOTICE OR IF THE CONTRACTOR NEGLECTS TO FILE THIS NOTICE
- 3. IT IS ANTICIPATED THAT THE BMPS IMPLEMENTED AT THE SITE WILL HAVE TO BE MAINTAINED AND MODIFIED TO ADAPT TO CHANGING CONDITIONS OR TO ENSURE THAT POTENTIAL POLLUTANTS ARE BEING PROPERLY MANAGED AT THE SITE. RESPONSIVE ESC PLAN CHANGES ADDRESSING BMP INSTALLATION, MAINTENANCE AND/OR IMPLEMENTATION OR WHEN BMPS ARE DETERMINED TO BE INEFFECTIVE; SHALL BE MADE PRIOR TO CHANGES IN SITE CONDITIONS. PRIOR TO BMP MODIFICATION, A NOTATION SHALL BE MADE IN THE ESC PLAN THAT INCLUDES DATE AND TIME OF CHANGES IN THE FIELD, AN IDENTIFICATION OF THE BMPS REMOVED OR ADDED, AND THE LOCATIONS OF THOSE BMPS.
- 4. CONSTRUCTION SAFETY BARRIER FENCING (ORANGE CONSTRUCTION FENCE) SHALL BE USED TO PROTECT WETLANDS AND OTHER SENSITIVE AREAS, TO PREVENT ACCESS, AND TO DELINEATE THE LIMITS OF CONSTRUCTION. THE CONSTRUCTION SAFETY BARRIER FENCING SHALL BE INSTALLED PRIOR TO ANY WORK OR EARTH DISTURBING ACTIVITIES. IT SHALL BE SPECIFIED IN THE ESC PLAN AND THE LOCATIONS SHOWN ON THE SITE MAP.
- 5. THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTING AND MAINTAINING EROSION AND SEDIMENT CONTROL MEASURES AT ALL TIMES DURING CONSTRUCTION. THE ESC PLAN SHALL BE MODIFIED IN COMPLIANCE TO THE ADAMS COUNTY STORMWATER REGULATIONS.
- 6. STORMWATER INSPECTIONS ALWAYS USE THE STORMWATER CONSTRUCTION INSPECTION REPORT FORM PROVIDED IN APPENDIX 7 INSPECTION REPORT INSTRUCTIONS AND FORM.
- 7. MINIMUM STORMWATER INSPECTION SCHEDULE A THOROUGH INSPECTION OF THE BEST MANAGEMENT PRACTICES (BMPS) SHALL BE PERFORMED EVERY FOURTEEN (14) CALENDAR DAYS AND WITHIN (24) TWENTY—FOUR HOURS AFTER ANY PRECIPITATION OR SNOWMELT EVENT THAT CAUSES SURFACE EROSION.
  - 1. POST-STORM EVENT STORMWATER INSPECTIONS AT TEMPORARILY IDLE SITES IF NO CONSTRUCTION ACTIVITIES WILL OCCUR FOLLOWING A STORM EVENT, POST-STORM EVENT INSPECTIONS SHALL BE CONDUCTED PRIOR TO RE-COMMENCING CONSTRUCTION ACTIVITIES, BUT NO LATER THAN SEVENTY TWO (72) HOURS FOLLOWING THE STORM EVENT. THE OCCURRENCE OF ANY SUCH DELAYED INSPECTIONS MUST BE DOCUMENTED IN THE INSPECTION RECORD. ROUTINE INSPECTIONS STILL MUST BE CONDUCTED AT LEAST EVERY FOURTEEN (14) CALENDAR DAYS.
  - 2. STORMWATER INSPECTIONS AT COMPLETED SITES/AREAS FOR SITES OR PORTIONS OF SITES THAT MEETING THE FOLLOWING CRITERIA, THE PERMITTEE SHALL MAKE A THOROUGH INSPECTION OF THEIR CONSTRUCTION SITE BMPS AT LEAST ONCE EVERY MONTH, AND POST-STORM EVENT STORMWATER INSPECTION ARE NOT REQUIRED.
  - A. ALL CONSTRUCTION ACTIVITIES THAT WILL RESULT IN SURFACE GROUND DISTURBED ARE COMPLETED;
  - B. ALL ACTIVITIES REQUIRED FOR FINAL STABILIZATION, IN ACCORDANCE WITH THE ESC PLAN, HAVE BEEN COMPLETED;
  - C. THE ESC PLAN HAS BEEN AMENDED TO INDICATE THOSE AREAS THAT WILL BE INSPECTED IN ACCORDANCE WITH THE REDUCED SCHEDULE ALLOWED.
- 8. ALWAYS USE BIODEGRADABLE EROSION CONTROL BLANKETS ON SLOPES 3:1 OR STEEPER AND IN SWALES, LONG CHANNELS AND ROADSIDE DITCHES.
- 9. ALL SOIL IMPORTED TO OR EXPORTED FROM THE SITE SHALL BE PROPERLY COVERED TO PREVENT THE LOSS OF MATERIAL DURING TRANSPORT. HAUL ROUTES MUST BE PERMITTED BY THE COUNTY. NO MATERIAL SHALL BE TRANSPORTED TO ANOTHER SITE WITHOUT FIRST OBTAINING A HAULING PERMIT FROM ADAMS COUNTY PLANNING.
- 10. SEDIMENT CAUSED BY ACCELERATED SOIL EROSION SHALL BE REMOVED FROM RUNOFF WATER BEFORE IT LEAVES THE SITE OF THE EARTH DISTURBANCE.
- 11. ANY CONSTRUCTION AREAS, NOT GRADED TO FINAL GRADE, REQUIRE TEMPORARY BMPS FOR SITE STABILIZATION.
- 12. CONSTRUCTION DEBRIS SHALL BE STOCKPILED WITHIN THE DESIGNATED STAGING AREA AND PROPERLY DISPOSED OF.
- PROPERLY DISPOSED OF.

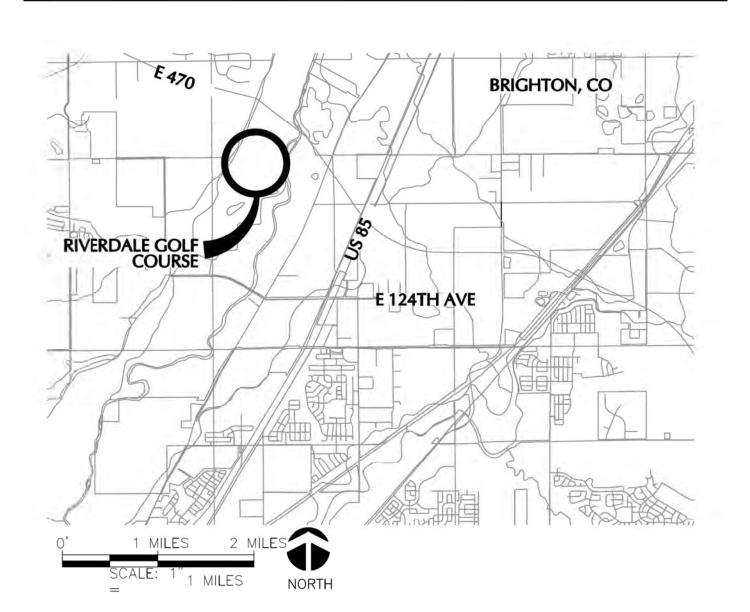
  13. EXCAVATED MATERIAL SHALL NOT BE STOCKPILED WITHIN THE ROADWAY SECTION UNLESS IT IS
- TEMPORARY AND HAS APPROPRIATE SEDIMENT CONTROL MEASURES IN PLACE.

  14. PERMANENT EROSION AND SEDIMENT CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, OR ANY DISTURBED LAND AREA SHALL BE STABILIZED IMMEDIATELY AFTER FINAL GRADING.
- 15. ALL SPILLS SHALL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY, OR CONTAINED UNTIL APPROPRIATE CLEANUP METHODS CAN BE EMPLOYED. SECTION 4.2, SPILL PREVENTION, CONTAINMENT AND CONTROL, OF THE STORMWATER REGULATION GUIDE SHALL BE FOLLOWED ALONG WITH PROPER DISPOSAL METHODS

### LOCATION MAP



### **VICINITY MAP**



### **CONTACTS**

OWNER / APPLICANT:

CONTACT: RANETTE CARLSON 720.523.6924 RCARLSON@ADCOGOV.ORG

ADAMS COUNTY, COLORADO 4430 S. ADAMS COUNTY PARKWAY 1ST FLOOR, SUITE C1700 BRIGHTON, CO 80601 **ENGINEER:** 

WAYNE LORENZ, P.E. OR ANDREW DIXON, E.I.T. 303.480.1700 ADIXON@WRIGHTWATER.COM

WRIGHT WATER ENGINEERS, INC. 2490 W. 26TH AVENUE SUITE 100A DENVER, CO 80211

### DRAWING INDEX

SHEET TITLE

01 ESC COVER SHEET

02 ESC INITIAL/INTERIM SITE MAP

03 ESC FINAL SITE MAP

### **BMP GENERAL NOTES**

- 1. PROJECT BOUNDARIES AND CONSTRUCTION LIMITS ARE APPROXIMATE. BMPs ARE SHOWN AS GRAPHIC SYMBOLS AND DO NOT REPRESENT ACTUAL SIZE AND SHAPE OF BMP.
- 2. THE PROJECT AREA IS APPROXIMATELY 1.5 ACRES. SOIL DISTURBANCE ASSOCIATED WITH THE PROJECT IS APPROXIMATELY 2.3 ACRES.
- 3. FINAL STABILIZATION WILL PRIMARILY CONSIST OF APPLYING FINAL SURFACING (SEE TYPICAL DETAIL) OF ROADBASE AND GRAVEL WITHIN THE SUBSTATION AND SEEDING AND MULCHING AND OR APPLYING EROSION CONTROL BLANKETS ON SLOPES 3:1 OR
- 4. STAGING AREAS MAY BE MODIFIED IN THE FIELD AND REDLINED ON THE BMP SITE MAPS INCLUDING ALL FEATURES WITHIN THE STAGING AREA.
- 5. PARKING, PORTALETS, DUMPSTERS AND MATERIAL STORAGE MAY BE LOCATED IN STAGING AREA. LOCATIONS MAY BE MODIFIED IN THE FIELD.
- 6. BMP MAINTENANCE NOTE: ALL EROSION AND SEDIMENT CONTROL PRACTICES AND OTHER PROTECTIVE MEASURES IDENTIFIED IN THE SWMP MUST BE MAINTAINED IN EFFECTIVE OPERATING CONDITION. PROPER SELECTION AND INSTALLATION OF BMPS AND IMPLEMENTATION OF COMPREHENSIVE INSPECTION AND MAINTENANCE PROCEDURES, IN ACCORDANCE WITH THE SWMP, SHOULD BE ADEQUATE TO MEET THIS CONDITION. BMPS THAT ARE NOT ADEQUATELY MAINTAINED IN ACCORDANCE WITH GOOD ENGINEERING, HYDROLOGIC AND POLLUTION CONTROL PRACTICES, INCLUDING REMOVAL OF COLLECTED SEDIMENT OUTSIDE THE ACCEPTABLE TOLERANCES OF THE BMPS, ARE CONSIDERED TO BE NO LONGER OPERATING EFFECTIVELY AND MUST BE ADDRESSED.
- 7. RECEIVING WATERS: COSPUS16C (SEGMENT ID 42673) TRIBUTARY TO THE SOUTH PLATTE.

CALL COLORADO

811

OR CALL UTILITY NOTIFICATION CENTER OF COLORADO

1-800-922-1987

CALL 3-BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES

FOR BIDDING PURPOSES ONLY

NOT FOR CONSTRUCTION

WRIGHT WATER ENGINEERS, INC. 2490 W. 26TH AVE. SUITE 100A DENVER, CO 80211 (303)480-1700 FAX(303)480-1020

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ADAMS COUNTY, COLORADO SEWAGE LAGOON LIQUID / BIOSOLIDS REMOVAL & DECOMMISSIONING ESC SITE MAP

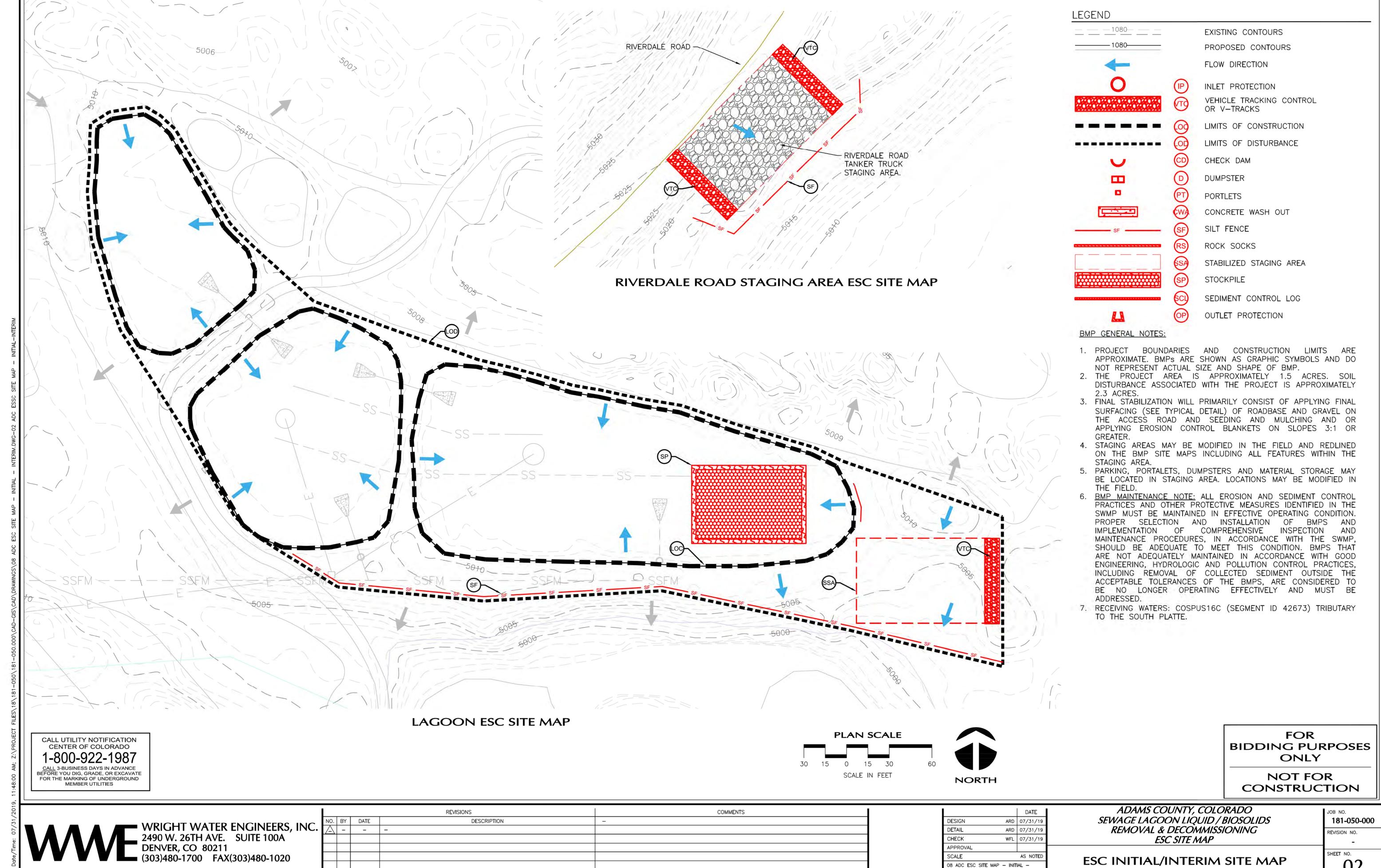
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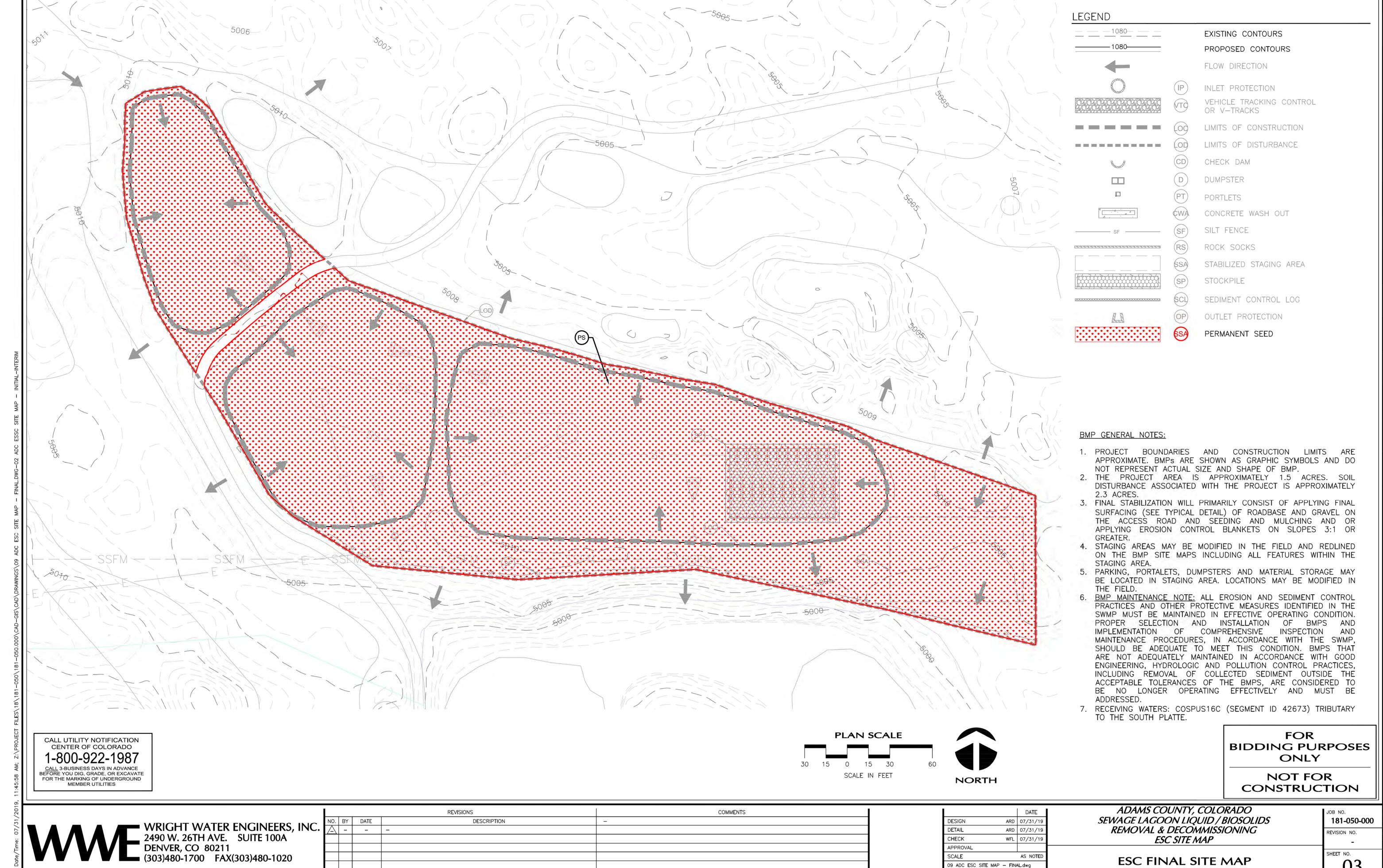
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**COVER SHEET** 

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SITE MAP



### **EXHIBIT A**

Sewage Lagoon Decommissioning
Adams County
GCCI – Clarifications to Bid/Proposal

Via Hard Copy/Electronic

August 30th, 2019

Adams County 4430 S. Adams County Parkway Brighton, CO 80601

To Whom It May Concern,

Glacier Construction Co., Inc. is pleased to submit this requested Proposal/Bid for the Sewage Lagoon Decommissioning project for Adams County located at the Riverdale Golf Course. Below are items for clarification regarding Glacier Construction Co., Inc. pricing for bid item #07 and #08 as it pertains to both Base and Alternate Bid, see below:

### Bid Item #07 (Construction Access Road Removal):

- Glacier Construction Co., Inc. impression was the bid item #07 was to be classified under the alternate bid pricing for the alternate access road per the bid construction drawings.
- Base Bid- To conform to the bid item, Glacier Construction Co., Inc. has included costs for maintenance of existing access road(s), existing access road/cart patch protection, removal of access road/cart path protection and anticipated restoration as needed.
- Alternate Bid- To conform to the bid item, Glacier Construction Co., Inc. has included costs for new access road as outlined in green area per Sheet 02 per addendum #1. Additionally, included in these costs are for access road/cart path maintenance/protection, access road removal and restoration.

### Bid Item #08 (Construction Access Road Improvements):

- Glacier Construction Co., Inc. Impression was the bid item #08 was to be classified under the alternate bid pricing for the alternate access road per the bid construction drawings.
- Base Bid- To conform to the bid item, Glacier Construction Co., Inc. has only included costs for cart path protection and an estimated total of 100 LF of potential cart path removal and replacement following construction activities. No other maintenance or improvements to the existing 6,200 LF access road costs are included.
- Alternate Bid- To conform to the bid item, Glacier Construction Co., Inc. has included the costs
  for maintenance and improvements to the existing 6,200LF access road including the existing
  cart path protection. Additionally, costs associated with alternate bid item #08 include an
  estimate total of 300LF of potential cart path removal and replacement following construction
  activities. Lastly, final restoration is included in these costs as well.



# Sewage Lagoon Decommissioning Adams County GCCI – Clarifications to Bid/Proposal

Via Hard Copy/Electronic

Lastly, should bid item #07/#08 specifically apply to the bid alternate pricing, Glacier Construction Co., Inc. would be able to VE/revise the base bid costs should it be required, as applicable to bid item #07/#08.

Respectfully,

**Taylor Pearson** 

Project Manager/Estimator

tpearson@gcci.com / 303-618-8807



Adams County Finance Department Purchasing Division 4430 S Adams County Parkway Brighton, Colorado 80801

# INVITATION FOR BID SUBMISSION CHECK LIST

**SUBMISSION:** It is imperative you address your submittal envelope as noted in the Bid Instructions.

Does your Bid comply with all the terms and conditions of this Solicitation?	YES	NO
May any other governmental entity avail itself of this Agreement and purchase any and all items specified?	YES	NO
Have all Addendums been acknowledged, a duly authorized agent signature obtained, and enclosed on the Contractors Statement?	YES	NO
Original bid and electronic USB or CD with a single PDF formatted bid included?	YES	NO
If applicable, have all necessary Bonds been included?	YES	NO
Contractor Certification of Compliance signed and enclosed?	YES	NO



### Adams County Finance Department Purchasing Division 4430 S Adams County Parkway Brighton, Colorado 80601

# INVITATION FOR BID #2019-069 PRICING FORM

### PRINT OR TYPE KEY CONTACT INFORMATION BELOW (Contractor's Project Manager):

Glacier Construction Co., Inc.		8/30/2019
Contractor Name	Date	
Randall L. Wambsganss	President	303-221-5383
Contact Person	Title	Phone
rwambsganss@gcci.com		
Email Address		

### Time and Material / Professional Hourly Rates:

Position Title	Regular Rate/Overtime Rate	Total Estimated Hours		
Bryan Caudill	\$90.00 per hour/ \$135 per OT Hour	270 Hrs (Base Bid Hour Estimate) 360 Hrs (Base Bid Hour Estimate)		
Schuyler Lemley	\$70.00 per hour/ \$105 per OT Hour			
		<u> </u>		

# APPENDIX D - ITEMIZED BID FORM Sewage Lagoon Liquids/Biosolids Removal & Decommissioning BASE BID

	BASE BID					
Item No.	Description, Approximate Quantity and Lump Sum or Unit Prices in Words and Figures	Unit Price (\$) in Figures	Quantity	Item Totals in Figures		
1	Mobilization and Demobilization  All labor, materials, and equipment necessary for mobilization and demobilization for all work described in the Contract Documents. This includes all the cost for labor, materials, and equipment necessary for mobilization and demobilization. This includes preparatory work and operations, including, but not limited to, those necessary for the movement of personnel, equipment, and supplies to the project site, contractor's offices, necessary preconstruction direct costs, and other facilities and appurtenances necessary to undertake the work on the project.  (Words—Lump Sum Price)	\$94,976.56	1 LS	\$94,976.56		
2	Liquid/Biosolids Removal – Base Bid Furnish all materials, labor, and equipment necessary for removing and properly disposing of all the liquids/biosolids and waste from the three sewage lagoons, including, but not limited to, pumps, temporary bypass piping, fairway crossing, pipe support over Brantner Ditch, trucks, fuel, traffic control, labor, repairs, maintenance, spill cleanup, permit fees, testing, insurance, and other associated costs.  (Words—Lump Sum Price)	\$432,997.57	1LS	\$432, <del>99</del> 7.57		
3	Demolition Furnish all labor, materials, and equipment necessary to remove all of the aerators, equipment, electrical and controls, piping, and materials in the decommissioned sewage lagoons as outlined in the Contract Documents. (Words—Lump Sum Price)	\$50,298.72	1 LS	\$50,298.72		
	Clay Liner Testing Furnish all the cost for labor, materials, and equipment necessary to test and analyze the existing clay liner as outlined in the Contract Documents. (Words—Lump Sum Price)	\$6,511.37	1 LS	6,511.37		
	Clay Liner Decommissioning, Project Topsoiling, and Finished Grading Furnish all cost for labor, materials, and equipment necessary to complete clay liner decommissioning, project topsoiling, seeding, irrigating, and finished grading. (Words—Lump Sum Price)	\$164,590.22	1 LS	164,590.22		
	Grading, Erosion, Sediment Control and Stormwater Management Plan Furnish, transport, install, and maintain all temporary erosion and sediment control Best Management Practices as described in the Contract Documents, including, but not limited to, the GESC Plan and Report, and preparation of a Stormwater Management Plan (SWMP), and obtaining associated permits, for a lump sum price of: (Words—Lump Sum Price)	\$42,716.80	1 LS	42,716.80		
	Construction Access Road Removal Furnish all labor, materials, and equipment necessary to install ±600 LF of Construction Access Road as needed for construction access. Construction Access Road to be removed and grasslands to be restored to existing conditions at closeout. (Words—Lump Sum Price)	\$31,168.93	1LS	31,168.93		

8	Construction Access Road Improvements Furnish all labor, materials, and equipment necessary to maintain and improve existing ±6,200 LF of Construction Access Road as needed for construction access. Improvements may remain. Restore construction access road to existing or better conditions at closeout. Existing concrete cart paths to be protected in place or removed and replaced if damaged. (Words—Lump Sum Price)	\$11,583.03	1LS	11,583.03
7	Change Order Allowance Include with the bid amount a Change Order Allowance of \$75,000. Any change orders that are approved by the owner will be deducted from this Change Order Allowance. At the end of the project, any remaining Change Order Allowance not used for approved change orders will be credited to the Owner in the final pay application.  (Words—Lump Sum Price)	\$75,000	1 LS	75,000.00
				\$909,843.20

### **BID ALTERNATE**

Contractor to submit an alternate bid for the use of only the proposed construction access for the truck hauling removal of liquids/biosolids from the lagoon. No temporary bypass pumping across the golf course fairway or Brantner Ditch will be allowed.

Item No.	Description, Approximate Quantity and Lump Sum or Unit Prices in Words and Figures	Unit Price (\$) in Figures	Quantity	Item Totals in Figures
1	Mobilization and Demobilization All labor, materials, and equipment necessary for mobilization and demobilization for all work described in the Contract Documents. This includes all the cost for labor, materials, and equipment necessary for mobilization and demobilization. This includes preparatory work and operations, including, but not limited to, those necessary for the movement of personnel, equipment, and supplies to the project site, contractor's offices, necessary preconstruction direct costs, and other facilities and appurtenances necessary to undertake the work on the project.  (Words—Lump Sum Price)	\$95,578.20	1 LS	\$95,578.20
2	Liquid/Biosolids Removal – Alternate Bid Furnish all materials, labor, and equipment necessary for removing and properly disposing of all the liquids/biosolids and waste from the three sewage lagoons, including, but not limited to, pumps, trucks, fuel, traffic control, labor, repairs, maintenance, spill cleanup, permit fees, testing, insurance, and other associated costs.  (Words—Lump Sum Price)	\$503,133.45	1LS	\$503,133.45
3	Demolition Furnish all labor, materials, and equipment necessary to remove all of the aerators, equipment, electrical and controls, piping, and materials in the decommissioned sewage lagoons as outlined in the Contract Documents. (Words—Lump Sum Price)	\$50,298.72	1 LS	\$50,298.72
4	Clay Liner Testing Furnish all the cost for labor, materials, and equipment necessary to test and analyze the existing clay liner as outlined in the Contract Documents. (Words—Lump Sum Price)	\$6,511.37	1 LS	\$6,511.37

5	Clay Liner Decommissioning, Project Topsoiling, and Finished Grading Furnish all cost for labor, materials, and equipment necessary to complete clay liner decommissioning, project topsoiling, seeding, irrigating, and finished grading. (Words—Lump Sum Price)	\$164,590.22	1 LS	\$164,590.22
6	Grading, Erosion, Sediment Control and Stormwater Management Plan Furnish, transport, install, and maintain all temporary erosion and sediment control Best Management Practices as described in the Contract Documents, including, but not limited to, the GESC Plan and Report, and preparation of a Stormwater Management Plan (SWMP), and obtaining associated permits, for a lump sum price of: (Words—Lump Sum Price)	\$45,619.36	1 LS	<b>\$45</b> ,619.36
7	Construction Access Road Removal Furnish all labor, materials, and equipment necessary to install ±600 LF of Construction Access Road as needed for construction access. Construction Access Road to be removed and grasslands to be restored to existing conditions at closeout. (Words—Lump Sum Price)	\$57,156.69	1 LS	\$57,156.69
	Construction Access Road Improvements Furnish all labor, materials, and equipment necessary to maintain and improve existing ±6,200 LF of Construction Access Road as needed for construction access. Improvements may remain. Restore construction access road to existing or better conditions at closeout. Existing concrete cart paths to be protected in place or removed and replaced if damaged. (Words—Lump Sum Price)	\$28,218.03	1 LS	\$28,218.03
9	Change Order Allowance Include with the bid amount a Changer Order Allowance of \$75,000. Any change orders that are approved by the owner will be deducted from this Change Order Allowance. At the end of the project, any remaining Change Order Allowance not used for approved change orders will be credited to the Owner in the final pay application.  (Words—Lump Sum Price)	\$75,000.00	1 LS	\$75,000
				\$1,026,106.04



### Adams County Finance Department Purchasing Division 4430 S Adams County Parkway Brighton, Colorado 80601

### **INVITATION FOR BID**

### CONTRACTOR'S CERTIFICATION OF COMPLIANCE

(Signature Required)

Pursuant to Colorado Revised Statute, § 8-17.5-101, et.seq., as amended 5/13/08, as a prerequisite to entering into a Agreement for services with Adams County, Colorado, the undersigned Contractor hereby certifies that at the time of this certification, Contractor does not knowingly employ or Agreement with an illegal alien who will perform work under the attached Agreement for services and that the Contractor will participate in the E-Verify Program or Department program, as those terms are defined in C.R.S. § 8-17.5-101, et. seq. in order to confirm the employment eligibility of all employees who are newly hired for employment to perform work under the attached Agreement for services.

Glacier Construction Co., Inc.	
Contractor Name	
Randall L. Wambsganss	
Printed or Typed Mame	
/ /	
Pro.	
Signature	
President	
Title	<del></del>
8/30/2019	
Date	

"memorandum of understanding" available at the website prior to registering.

Note: Registration for the E-Verify Program can be completed at: <a href="https://www.vis-dhs.com/employerregistration">https://www.vis-dhs.com/employerregistration</a>. It is recommended that employers review the sample



Adams County Finance Department Purchasing Division 4430 S Adams County Parkway Brighton, Colorado 80601

### **INVITATION FOR BID #2019-069**

### **CONTRACTOR'S STATEMENT**

(Signature Required)

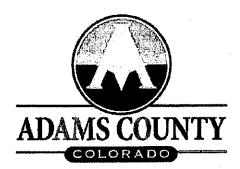
I have read and fully understand all the conditions herein set forth in the foregoing paragraphs, and by my signature set forth hereunder, I hereby agree to comply with all said conditions as stated or implied. In consideration of the above statement, the following Bid is hereby submitted.

If any of the documents listed on the cover page are missing from this package, contact Adams County Purchasing. If you require additional information, call the Purchasing Division contact person.

The undersigned hereby affirms that (1) he/she is a duly authorized agent of the Contractor, (2) he/she has read all terms and conditions and technical specifications which were made available in conjunction with this solicitation and fully understands and accepts them unless specific variations have been expressly listed in his/her Bid, (3) the Bid is being submitted on behalf of the Contractor in accordance with any terms and conditions set forth in this Solicitation, and (4) the Contractor will accept any awards made to it as a result of the Bid submitted herein for a minimum of 120 calendar days following the date of submission.

### WE, THE UNDERSIGNED, HEREBY ACKNOWLEDGE RECEIPT OF ADDENDA:

(List each addendum number separately):	#1
Glacier Construction Co., Inc.	8/30/2019
Contractor Name	Date
for feer	Randall L. Wambsganss
Signature	Printed Name
President <sup>1</sup>	
Title	
5460 S. Quebec St. Suite 200	
Address	
Greenwood Village, CO 80111	Arapahoe
City, State, Zip Code	County
303-221-5383	303-221-5385
Telephone	Fax
rwambsganss@gcci.com	
Email	



Adams County Finance Department Purchasing Division 4430 South Adams County Parkway Brighton, Colorado 80601

# INVITATION FOR BID REFERENCES FORM (For projects of similar size & scope)

1. Company Name	City of Longmont				
Address	385 Kimbark St.	Longmont, CO 80501			
Contact Name & Phone	Michelle Davis	303-651-8343			
Contact Email Address	michelle.davis@longmontcolorado.gov				
Project Name	Longmont Wastewater Treatment Plant Pipe & Structure Reha				
Project Date & Project Value	May 2018- May 2019	Project Value: \$1,814, 754			
2. Company Name	Metro Wastewater Reclama	tion District			
Address	6450 York St. Denver, CO 80229				
Contact Name & Phone	Jon Wicke (303) 286-3406				
Contact Email Address	jwicke@mwrd.dst.co.us				
Project Name	PAR 1088 Brantner Guich				
Project Date & Project Value	December 2016- May 2017	Project Value: \$3,680,994			
3. Company Name	South Adams Water and	Sanitation Distict			
Address	6595 E. 70th Ave Commerce City, CO 80037				
Contact Name & Phone	JM Grebenc	(303)288-2646			
Contact Email Address	jmgrebenc@sacwsd.org				
Project Name	Williams Monaco BNR Upgrade				
Project Date & Project Value	October 2014- May 2016	\$19,955,636.75			

### CONTRACTOR'S CERTIFICATION OF COMPLIANCE

Pursuant to Colorado Revised Statute, § 8-17.5-101, et.seq., as amended 5/13/08, as a prerequisite to entering into a contract for services with Adams County, Colorado, the undersigned Contractor hereby certifles that at the time of this certification, Contractor does not knowingly employ or contract with an illegal alien who will perform work under the attached contract for services and that the Contractor will participate in the E-Verify Program or Department program, as those terms are defined in C.R.S. § 8-17.5-101, et. seq. in order to confirm the employment eligibility of all employees who are newly hired for employment to perform work under the attached contract for services.

Pursuant to Code of Federal Regulations 2 C.F.R. Part 200 Subpart C 200.213, the undersigned Contractor certifies that they are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency.

### CONTRACTOR:

Glacier Construction Co., Inc.	8/30/2019	
Company Name	Date	
Randall. L. Wambsganss	<del></del>	
Name (Print or Type)		
les.		
Signature		
President		
Title		

Note: Registration for the E-Verify Program can be completed at: <a href="https://www.vis-dhs.com\employerregistration">https://www.vis-dhs.com\employerregistration</a>. It is recommended that employers review the sample "memorandum of understanding" available at the website prior to registering.

### THE AMERICAN INSTITUTE OF ARCHITECTS

### AIA Document A310 Bid Bond

			,	
KNOWALL MEN BY THESE PRESENTS, THAT WE G	Blacier Constru	ction Co., Inc.		
5460 South Quebec Street, Suite 200, Greenwood Village				
as Principal, hereinafter called the Principal, and Berkley	/ Insurance Co	mpany		
475 Steamboat Road, Greenwich, CT 06830				
a corporation duly organized under the laws of the State of	of		DE	
as Surety, hereinafter called the Surety, are held and firm				rs by and
through its Purchasing Division of the Finance Department 44	•			
as Obligee, hereinafter called the Obligee, in the sum of		t of Amount Bid	, , , , , , , , , , , , , , , , , , , ,	<del>-</del>
	Dollars		5%	),
WHEREAS, the Principal has submitted a bid for Riverd Henderson Road, Brighton, CO 80601  NOW, THEREFORE, if the Obligee shall accept the bid at the Obligee in accordance with the terms of such bid, and Contract Documents with good and sufficient surety for payment of labor and materials furnished in the prosecut such Contract and give such bond or bonds, if the Principality hereof between the amount specified in said bid contract with another party to perform the Work covered in the principal state of the party to perform the work covered in the process of the party to perform the work covered in the process of the party to perform the work covered in the process of the party to perform the work covered in the process of the party to perform the work covered in the process of the party to perform the work covered in the process of the party to perform the work covered in the process of the party to perform the work covered in the process of the party to perform the work covered in the process of the party to perform the work covered in the process of the party to perform the work covered in the process of the party to perform the work covered in the party to perform	of the Principa d give such bo r the faithful p ion thereof, or cipal shall pay and such large	I and the Principa nd or bonds as n erformance of su in the event of th to the Obligee is ar amount for whi	I shall enter into a lay be specified in ch Contract and f e failure of the Pri he difference not ch the Obligee ma	Contract with the bidding or or the prompt ncipal to enter to exceed the y in good faith
to remain in full force and effect.  Signed and sealed this 30th day of		August		, 2019
Attest:  By:  Rebecca Jackson  Vice President  (Attest)	Glacier Col	nstrucijon Co., ind Principal)	<i>J</i> .	(Seal) (Title)
By: (Witness)	Berkley Ins	urance Company (Surety)	mer L	(Seal)
Jessica Jean Rini, Surety Witness	Attomey-in-	Fact Kristen L. Mo	Cormick	(Title)

### POWER OF ATTORNEY BERKLEY INSURANCE COMPANY WILMINGTON, DELAWARE

NOTICE: The warning found elsewhere in this Power of Attorney affects the validity thereof. Please review carefully.

KNOW ALL MEN BY THESE PRESENTS, that BERKLEY INSURANCE COMPANY (the "Company"), a corporation duly organized and existing under the laws of the State of Delaware, having its principal office in Greenwich, CT, has made, constituted and appointed, and does by these presents make, constitute and appoint: Sheryll Shaw; Nicole L. McCollam; Kristen L. McCormick: Sarah Finn: Robert L. Cohen; Robert J. Reuer; Michael Lischer, Jr.; Brandi J. Tetley; Jennifer L. Clampert; or Jessica Jean Rini of IMA, Inc. of Denver, CO its true and lawful Attorney-in-Fact, to sign its name as surety only as delineated below and to execute, seal, acknowledge and deliver any and all bonds and undertakings, with the exception of Financial Guaranty Insurance, providing that no single obligation shall exceed One Hundred Million and 00/100 U.S. Dollars (U.S.\$100,000,000.00), to the same extent as if such bonds had been duly executed and acknowledged by the regularly elected officers of the Company at its principal office in their own proper persons.

This Power of Attorney shall be construed and enforced in accordance with, and governed by, the laws of the State of Delaware, without giving effect to the principles of conflicts of laws thereof. This Power of Attorney is granted pursuant to the following resolutions which were duly and validly adopted at a meeting of the Board of Directors of the Company held on January 25, 2010:

RESOLVED, that, with respect to the Surety business written by Berkley Surety, the Chairman of the Board, Chief Executive Officer, President or any Vice President of the Company, in conjunction with the Secretary or any Assistant Secretary are hereby authorized to execute powers of attorney authorizing and qualifying the attorney-in-fact named therein to execute bonds, undertakings, recognizances, or other suretyship obligations on behalf of the Company, and to affix the corporate seal of the Company to powers of attorney executed pursuant hereto; and said officers may remove any such attorney-in-fact and revoke any power of attorney previously granted; and further

RESOLVED, that such power of attorney limits the acts of those named therein to the bonds, undertakings, recognizances, or other suretyship obligations specifically named therein, and they have no authority to bind the Company except in the manner and to the extent therein stated; and further

RESOLVED, that such power of attorney revokes all previous powers issued on behalf of the attorney-in-fact named, and

RESOLVED, that the signature of any authorized officer and the seal of the Company may be affixed by facsimile to any power of attorney or certification thereof authorizing the execution and delivery of any bond, undertaking, recognizance, or other suretyship obligation of the Company; and such signature and seal when so used shall have the same force and effect as though manually affixed. The Company may continue to use for the purposes herein stated the facsimile signature of any person or persons who shall have been such officer or officers of the Company, notwithstanding the fact that they may have ceased to be such at the time when such instruments shall be issued.

IN WITNESS WHEREOF, the Company has caused these presents to be signed and attested by its appropriate officers and its

corporate seal hereunto affixed this ' day of ( Berkley Insurance Company Attest: (Seal) **Executive Vice President & Secretary** Vice President

WARNING: THIS POWER INVALID IF NOT PRINTED ON BLUE "BERKLEY" SECURITY PAPER.

STATE OF CONNECTICUT) SS: COUNTY OF FAIRFIELD

Sworn to before me, a Notary Public in the State of Connecticut, this 2019, by Ira S. Lederman and day of Jeffrey M. Hafter who are sworn to me to be the Executive Vice President/and Secretary and the Senior Vice President.

respectively, of Berkley Insurance Company. DNNECTICUT MY COMMISSION

Notary Public, State of Connecticut

### CERTIFICATE

I, the undersigned, Assistant Secretary of BERKLEY INSURANCE COMPANY, DO HEREBY CERTIFY that the foregoing is a true, correct and complete copy of the original Power of Attorney; that said Power of Attorney has not been revoked or rescinded and that the authority of the Attorney-in-Fact set forth therein, who executed the bond or undertaking to which this Power of Attorney is attached, is in full force and effect as of this date.

Given under my hand and seal of the Company, this 30 H

2019

### LIGUIDS/BIOSOLIDS REMOVAL AND REUSE AFFIDAVIT

The undersigned Contractor, having familiarized himself with the Work required by Section 02053 and the entirety of the Contract Documents has provided a legitimate lump sum price to remove and reuse the liquids/biosolids as defined in the Contract Documents. The undersigned Contractor has conducted all necessary investigations and has performed all necessary tests required to submit a lump sum price to the County. The contractor further certifies that the lump sum price includes the removal and reuse or disposal of all waste, liquid/biosolids as defined in the contract documents regardless of quantity, chemical composition or solids concentration.

In order for Owner to process reimbursement, this affidavit must be included with the Bid Form and submitted with the Bid at the time of the Bid.

SIGNATURE OF LIQUID/BIOSOLIDS REMOVAL AND REUSE CONTRACTOR

Signed By:

Date:

(Name)

Su Signed By:

(Title)

**END OF SECTION**