



**REQUEST FOR PROPOSAL**  
Construction

**R16- 138MZ**

Date issued: September 27, 2016

**MONUMENT BRANCH CHANNEL  
RESTORATION – PHASE 1**

**THE CITY OF COLORADO SPRINGS**

Fully or partially funded by federal grant

**The City of Colorado Springs requests Fixed Unit Price proposals, as detailed in this Request for Proposal (RFP), for Monument Branch Channel Restoration – Phase 1. The project consists of restoring approximately 1,500 linear feet of Monument Branch by filling in the eroded channel bed, constructing four (4) sculpted concrete drop structures, sheet pile cutoff walls, riprap placement, tree planting and seeding. The project is located in Monument Branch between Voyager Parkway and I-25.**

**The contractor must be experienced in natural channel restoration including large earthwork cut and fill, sculpted concrete drop structures, and landscape restoration. This project is partially funded through a grant with Natural Resources Conservation Services (NRCS) for Emergency Watershed Protection.**

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## SECTION I – PROPOSAL INFORMATION

### 1.0 PROPOSAL INFORMATION

Section I provides general information to potential Offerors, such as proposal submission instructions and other similar administrative elements. This RFP is available on Rocky Mountain E-Purchasing System. All addenda or amendments shall be issues through the Rocky Mountain E-Purchasing System and may not be available through any other source.

### 1.1 RFP SCHEDULE OF EVENTS

The upcoming schedule of events is as follows:

<u>Event</u>	<u>Date</u>
Issue Request for Proposal	September 27, 2016
Pre-Proposal Conference	October 4, 2016 9:00am October 5, 2016 3:00pm

**We will hold a Mandatory pre-proposal conference at the City of Colorado Springs Administration Building Room 401 Large. This meeting is mandatory, and to submit a proposal you must attend ONE of the meetings.**

Cut Off Date for Questions	October 12, 2016 2:00PM
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Questions about the RFP must be emailed in writing and directed to Michael Zeller, at the following email address [mzeller@springsgov.com](mailto:mzeller@springsgov.com). A written response to any inquiry may be provided in the form of an Amendment to the solicitation. See 1.7 Amendments. Questions must be received no later than Date.

**The only acceptable method of submitting questions is by email to the Contracting Specialist. Faxes or physical mail delivery are not acceptable.**

Proposal Due Date	October 18, 2016 2:00PM
Interviews (if applicable)	TBD
Award of Contract	TBD
Notice to Proceed	TBD

## 1.2 SUBMISSION OF PROPOSAL

Proposals are to be submitted to:  
Michael Zeller  
Contracts Specialist  
30 S. Nevada Avenue, Suite 201  
Colorado Springs, CO 80903

\*\*\*\*\***NO LATE OFFERS WILL BE ACCEPTED**\*\*\*\*\*

**Date/Time:** Proposals shall be received on or before October 18, 2016 2:00PM

### **Identification of Proposal:**

Proposals shall be submitted in an envelope(s) or container(s) with the solicitation number, date for submission of offer and the Offeror's name clearly marked on the outside of the envelope(s) or container(s).

**RFP No. and Title:** R16-138MZ Monument Creek Channel Restoration  
– Phase 1  
**Due Date:** October 18, 2016  
**Company:**

Any offer that is submitted without being properly marked may be opened for identification prior to the deadline for receipt of proposals and then resealed.

## 1.3 NUMBER OF COPIES

Offerors shall submit **one unbound original and four (4) hardcopies of the proposal documents. Offerors shall also submit one softcopy on Thumb Drive or CD.** Upon submission, all proposal documents shall become and remain the property of the City of Colorado Springs.

## 1.4 SPECIAL TERMS

Please note the following definitions of terms as used herein:

The term "City" means the City of Colorado Springs.

The term "Contractor" or "Consultant" means the Offeror whose offer is accepted and is awarded the contract to provide the products or services specified in the RFP.

The term "Offer" means the proposal.

The term "Offeror" means the person, firm, or corporation that submits a formal proposal or offer and that may or may not be successful in being awarded the contract.

The term "Project" refers to Camp Creek Channel Stabilization.

The term "Request for Proposal" or "RFP" means this solicitation of a formal, negotiable proposal/offer. Any offer that is accepted will be the offer that is deemed by the City of Colorado Springs to be most advantageous in terms of the criteria designated in the RFP.

## **1.5 RFP OBJECTIVE**

The objective of this RFP is to provide sufficient information to enable qualified Offerors to submit written proposals to the City of Colorado Springs. The RFP is not a contractual offer or commitment to purchase products or services. The Offeror may present options and variables to the scope while still meeting the minimum requirements of this solicitation. Innovative proposals/solutions are encouraged and considered in the selection and/or award.

All information included in proposals must be legible. Any and all corrections and or erasures must be initialed by Offeror. Each proposal shall be accompanied by a cover letter signed by an authorized representative of the Offeror. The contents of the proposal submitted by the successful Offeror may become part of any contract awarded as a result of this solicitation.

## **1.6 CONFIDENTIAL OR PROPRIETARY INFORMATION**

If an Offeror believes that parts of an offer are confidential, then the Offeror must so specify. The Offeror must include in bold letters the term "CONFIDENTIAL" on that part of the offer which the Offeror believes to be confidential. The Offeror must submit in writing specific detailed reasons, including any relevant legal authority, stating why the Offeror believes the material to be confidential. Vague and general claims as to confidentiality will not be accepted. The City of Colorado Springs will be the sole judge as to whether a claim is acceptable. Decisions regarding the confidentiality of information will be made when requests are made to make the information public. All offers and parts of offers, which are not marked as confidential, will automatically be considered public information after the contract is awarded. The successful offer may be considered public information even though parts are marked confidential.

## **1.7 AMENDMENTS**

Amendments to this RFP may be issued at any time prior to the time set for receipt of proposals. Offerors are required to acknowledge receipt of any amendments issued to this RFP by returning a signed copy of each amendment

issued. Signed copies of each amendment must be received on or before the time set for receipt of offers.

The City of Colorado Springs will post all amendments on the Rocky Mountain E-Purchasing System ([www.rockymountainProposalsystem.com](http://www.rockymountainProposalsystem.com)). It is the Offeror's responsibility to check the website for posted amendments or contact the Contracts Specialist listed to confirm the number of amendments which have been issued.

#### **1.8 WITHDRAWAL OR MODIFICATION OF OFFERS**

Any Offeror may modify or withdraw an offer in writing at any time prior to the deadline for submission of an offer.

#### **1.9 ACCEPTANCE**

Any offer received and not withdrawn shall be considered an offer, which may be accepted by the City of Colorado Springs based on initial submission without discussions or negotiations.

By submitting an offer in response to this solicitation, the Offeror agrees that any offer it submits may be accepted by the City of Colorado Springs at any time within 90 calendar days from the date of submission deadline.

The City of Colorado Springs reserves the right (a) to reject any or all offers,(b) to waive informalities and minor irregularities in offers received, and/or (c) to accept any portion of an offer if deemed in the best interest of the City of Colorado Springs. Failure of the Offeror to provide in its offer any information requested in the RFP may result in rejection of the offer for non-responsiveness.

#### **1.10 PROPOSAL PREPARATION COST**

The cost of proposal preparation is not a reimbursable cost. Proposal preparation shall be at the Offeror's sole expense and is the Offeror's total and sole responsibility.

#### **1.11 AWARD**

The City of Colorado Springs intends to make an award using the evaluation criteria listed in this RFP to determine the best value, considering all factors and criteria in the proposals submitted. Best value means the expected outcome of an acquisition that, in the City's estimation, provides the greatest overall benefit in response to the requirements detailed in the RFP. The City of Colorado Springs reserves the right to reject any or all offers and to not make an award.

## **1.12 PERFORMANCE PERIOD**

The performance period for the project detailed in this RFP will be established as 75 days from the issuance of a notice to proceed.

## **1.13 DEBRIEFING**

Offerors not selected may request a debriefing on the selection process as well as discussion of the strengths and weaknesses of their proposal upon receipt of notification that their offer was not selected.

A debriefing may be scheduled by contacting the Contracts Specialist listed above. The Contracts Specialist must receive a written request for debriefing no later than ten (10) calendar days after issuance of a notification that the Offeror's offer was not selected.

## **1.14 SUBSTANTIVE PROPOSALS**

By responding to this RFP, the Offeror certifies (a) that Offeror's proposal is genuine and is not made in the interest of, or on behalf of, an undisclosed person, firm, or corporation; (b) that Offeror has not directly or indirectly induced or solicited any other offerors to put in a false or sham proposal; (c) that Offeror has not solicited or induced any other person, firm, or corporation to refrain or abstain from proposing an offer or proposal; (d) that Offeror has not sought by collusion to obtain for themselves any advantage over any other offerors or over the City of Colorado Springs; and (e) that Offeror has not violated or caused any person to violate, and shall not violate or cause any person to violate, the City's Code of Ethics contained in Article 3, of Chapter 1 of the City Code and in the City's Procurement Rules and Regulations.

## **1.15 OFFEROR'S QUALIFICATIONS**

Each Offeror must complete Exhibit 6 – Qualification Statement.

No contract will be awarded to any Offeror who is in arrears to the City, upon any debt or contract, or who is in default, in any capacity, upon any obligation to the City or is deemed to be irresponsible or unreliable by the City based on past performance.

## **1.16 NON-COLORADO ENTITIES**

If Offeror is a foreign entity, Offeror shall comply with C.R.S. section 7-90-801, "Authority to transact business or conduct activities required," and section 7-90-802, "Consequences of transacting business or conducting activities without authority."

Before or at the time that the contract is awarded to an entity organized or operating outside the State of Colorado, such entity shall obtain authorization to do business in the State of Colorado, designate a place of business herein, and appoint an agent for service of process.

Such entity must furnish the City of Colorado Springs with a certificate from the Secretary of the State of Colorado to the effect that a certificate of authority to do business in the State of Colorado has been issued by that office and is still valid. The entity shall also provide the a certified copy of the designation of place of business and appointment of agent for service of process from the Colorado Secretary of State, or a letter from the Colorado Secretary of State that such designation of place of business and agent for service of process has been made.

### **1.17 PROCUREMENT RULES AND REGULATIONS**

All projects advertised by the City of Colorado Springs are solicited in accordance with the City's Procurement Rules and Regulations. The City's Procurement Rules and Regulations can be reviewed and/or downloaded from the City website [www.coloradosprings.gov](http://www.coloradosprings.gov). The Contracts Specialist may also provide a softcopy of the Rules and Regulations upon request. Any discrepancies regarding conflicting statements, decisions, irregularities, clauses, or specifications will be rectified utilizing the City's Procurement Rules and Regulations, when applicable. It is the Offeror's responsibility to advise the Contracts Specialist listed in this RFP of any perceived discrepancies prior to the date and time the offer is due.

### **1.18 FAIR TREATMENT OF OFFERORS**

The City Procurement Services Division shall be responsible for ensuring the procurement of products, commodities, and services are in a manner that affords all responsible businesses a fair and equal opportunity to compete. If an Offeror believes that a procurement is not conducted in a fair and equitable manner, the Offeror is encouraged to inform the City Procurement Services Manager as soon as possible.

### **1.19 ORDER OF PRECEDENCE**

Any inconsistency in this solicitation shall be resolved by giving precedence in the following order:

- (a) Sections I-IV of this Solicitation
- (b) Special Construction Terms and Conditions
- (c) General Construction Terms and Conditions
- (d) Exhibits
- (e) Plans

1. Detailed Plans
  2. Standard Drawings
- Calculated dimensions will govern over scaled dimensions.
- (f) Special Specifications
  - (g) Standard Specifications

## 1.20 SALES TAX

The successful Offeror, if awarded a contract, shall apply to the Colorado Department of Revenue for a tax-exempt certificate for this project. The certificate does not apply to City of Colorado Springs Sales and Use Tax which shall be applicable and should be included in all proposals. The tax exempt project number and the exemption certificate only apply to County, PPRTA (Pikes Peak Rural Transportation Authority), and State taxes when purchasing construction and building materials **to be incorporated into this project**.

Furthermore, the exemption **does not** include or apply to the purchase or rental of equipment, supplies or materials that **do not become a part of the completed project or structure**. In these instances, the purchase or rental is subject to full taxation at the current taxation rate.

The Offeror and all subcontractors shall include in their Offer City of Colorado Springs Sales and Use Tax on the work covered by the offer, and all other applicable taxes.

Forms and instructions can be downloaded at <https://coloradosprings.gov/cat/government/tax-information/sales-tax>. Questions can be directed to the City Sales Tax Division at (719) 385-5903.

Our Registration Numbers are as follows:  
City of Colorado Springs  
Federal I.D.: 84-6000573  
Federal Excise: A-138557  
State Sales Tax: 98-03479

## 1.21 BOND REQUIREMENTS

The Offeror is advised that the successful Offeror shall be required to furnish to the City of Colorado Springs, upon award, one copy of each: Performance Bond, Labor and Materials Payment Bond, and a Maintenance Bond in the amount of 100% of the total contract within ten (10) calendar days after notification of award of a contract. The cost of all bonds shall be included in Offeror's offer.

Bonds shall:

- a) Be for the full amount of the contract price.

- b) Guarantee the Contractor's faithful performance of the work under the contract, and the prompt and full payment for all labor and materials involved therein.
- c) Guarantee protection to the City of Colorado Springs against liens of any kind.
- d) Be, when a surety bond is furnished, from a surety company operating lawfully in the State of Colorado and be accompanied with an acceptable "Power-of-Attorney" form attached to each bond copy.
- e) Be issued from a surety company that is acceptable to the City of Colorado Springs.
- f) Be submitted using the forms in the Exhibit section of this solicitation.

## **1.22 INTERPRETATION OF QUANTITIES IN PROPOSAL FORM**

Except as otherwise provided in this RFP, the quantities appearing in the proposal form are estimates prepared for the comparison of proposals.

After award, payment to the Contractor will be made in accordance with the following procedures:

- (a) Measurement required. When the Contract requires measurement of work performed or material furnished, payment will be made for actual quantities measured and accepted.
- (b) Measurement Not Required. When the Contract does not require quantities of work performed or materials furnished to be measured, payment will be made for the quantities appearing in the Contract.

The estimated quantities of work to be performed and materials to be furnished may be increased, decreased or omitted.

## **1.23 INTERPRETATION OF PLANS AND SPECIFICATIONS**

Any change to proposal forms, plans, or specifications prior to the opening of proposals will be issued by the City in the form of an Amendment. Certain individuals may be named in the RFP that have authority to provide information, clarification or interpretation to Offerors prior to opening of proposals. Information obtained from persons other than those named individuals is invalid and shall not be used for proposal purposes.

#### **1.24 EXAMINATION OF PLANS, SPECIFICATIONS, SPECIAL PROVISIONS, AND SITE OF WORK.**

The Offeror is expected to examine the site of the proposed work, the proposal, plans, specifications, supplemental specifications, special provisions, and Contract forms, before submitting a proposal. The submission of a proposal will be considered conclusive evidence that the Offeror has made this examination and is aware of the conditions to be encountered in performing the work according to the Contract.

Boring logs and other records of subsurface investigations, if they exist, are available for inspection by Offerors. These logs and records are made available so that all Offerors have access to identical subsurface information that is available to the City, and is not intended as a substitute for personal investigation, interpretation, and judgment of the Offerors.

The City does not warrant the adequacy of boring logs and other records of subsurface investigations, and such information is not considered to be a part of the Contract. When a log of test borings is included in the subsurface investigation record, the data shown in the individual log of each test boring apply only to that particular boring and are not intended to be conclusive as to the character of any material between or around test borings. If Offerors use this information in preparing a proposal, it is used at their own risk, and Offerors are responsible for all conclusions, deductions, and inferences drawn from such information.

Offerors may conduct subsurface investigations at the project site at Offeror's expense; the City will afford them this opportunity prior to public opening of proposals.

If an Offeror discovers an apparent error or omission in the proposal form, estimated quantities, plan, or specifications, the Offeror shall immediately notify the Contracting Specialist to enable the City to make any necessary revisions. The City may consider it to be detrimental to the City for an Offeror to submit an obviously unbalanced unit proposal price.

#### **1.25 COMBINATION OR CONDITIONAL PROPOSALS**

If an RFP is issued for projects in combination and separately, the Offeror may submit proposals either on the combination or on separate units of the combination. The City reserves the right to make awards on combination or separate proposals to the advantage of the City. Combination proposals will be considered, only when specified.

## **1.26 ANTI-COLLUSION AFFIDAVIT**

The Offeror by signing their proposal submitted to the City is certifying that the Offeror has not participated in any collusion or taken any action in restraint of free competitive Proposals. This statement may also be in the form of an affidavit provided by the City and signed by the Offeror. The original of the signed anti-collusion affidavit, if separately required and provided with the RFP, shall be submitted with the proposal. The proposal will be rejected if it does not contain the completed anti-collusion affidavit.

## **1.27 MATERIAL GUARANTY**

The successful Offeror may be required to furnish a complete statement of the origin, composition, and manufacture of materials used in the construction of the work together with samples, which will be tested for conformance with Contract requirements.

## SECTION II – PROPOSAL CONTENT

### 2.0 PROPOSAL CONTENT

Section II provides instructions regarding the format and content required for proposals submitted in response to this solicitation.

### 2.1 PROPOSAL FORMAT

Offeror's written proposal should include concise, but complete, information, emphasizing why the Offeror is best or best qualified to provide the required services. The Offeror's written proposal should include the information in the format outlined below and must be limited to no more than ten (10) pages. **A page shall be defined as 8-1/2" x 11"; single sided, with one inch margins, and a minimum font of Times New Roman 10.** The only exception to the 8-1/2" x 11" paper size is the proposed project schedule. It may be submitted on 11" x 17" paper. Each 11" x 17" page for the schedule shall be counted in the overall page limitations above. Each section of the proposal should be labeled to clearly follow the requirements sections identified in this this section of the RFP. The following listed Exhibits must be filled out and returned with the proposal and are not counted against the page limit:

Exhibit 1	Proposal Certification
Exhibit 3	Exceptions
Exhibit 4	Minimum Insurance Requirements
Exhibit 6	Qualifications Statement
Exhibit 9	Certification Regarding Debarment
Exhibit 10	Restrictions on Lobbying Certification
Exhibit 11	Non-Collusion Affidavit
Exhibit 12	Equal Opportunity Status Report
Resumes do not count against page limit	

### 2.2 COVER LETTER

The cover letter shall be no more than three pages. The cover letter shall contain at least the following information.

- A. RFP Number and Project Name.
- B. Statement that the Offeror is qualified to perform the work.
- C. Certification Statement that the information and data submitted are true and complete to the best knowledge of the individual signing the letter.
- D. Name, telephone number, email address, and physical address of the individual to contact regarding the proposal.
- E. The signature of an authorized principal, partner, or officer of the Offeror.

## **2.3 PROPOSAL CERTIFICATION**

The Offeror must fill out and submit Exhibit 1 with its Proposal.

## **2.4 ORGANIZATIONAL BACKGROUND AND OVERVIEW**

The Offeror must provide a brief history and overview of its company and its organizational structure, with special emphasis on how this project will fit within that structure. Also include principal place of business location(s), office locations, size of firm, and financial stability (annual public reports or private financial statements shall be included in an appendix or under separate cover; private financial information will be kept confidential by the City).

## **2.5 PROPOSAL NARRATIVE/TECHNICAL AND MANAGEMENT APPROACH**

In the proposal narrative/technical and management approach section, the Offeror should explain what the Offeror will do and how it will perform if awarded a contract.

### **2.5.1 TECHNICAL AREA**

The Offeror must explain its overall solution, considering the scope of work or statement of work provided. The content must include, but not necessarily be limited to, the following information.

#### **A. Understanding of and Compliance with Technical Requirements**

In the Technical Area, the Offeror should address each work area in sufficient detail to demonstrate a clear and full understanding of the work necessary to complete the project. The proposal should not merely parrot the requirements of the RFP. Further, the Offeror should provide evidence of sufficient planning to ensure the work is completed on schedule and within budget. It is highly recommended that the Offeror provide sufficient content and detail to answer completely the following questions:

1. Does the proposal demonstrate a firm understanding of the requirements and goals of the Statement of Work, as well as industry standards and reasonable expectations for a company in the industry?
2. Does the proposal fully and completely address each requirement and goal of the Statement of Work?
3. Does the proposal provide solutions to indicate that requirements and goals will be met on schedule?
4. Does the technical solution seem realistic?
5. Does it generally appear that the Offeror knows and thoroughly understands the business and the RFP requirements?

## B. Project Approach

In the Technical Area, the Offeror should clearly present proposed solutions and indicate that it has performed adequate planning to accomplish project tasks as defined in the Statement of Work. Innovations, efficiencies, and detailed specifics are all encouraged.

The Offeror must at least address the following areas:

1. Construction phasing and traffic control for the project. Explain the phases, traffic control for each phase, and the logic in the construction phasing.
2. Erosion and sediment control during all phases of construction as well as post construction efforts through permit closure.
3. Coordination with utilities. Discuss Offeror's understanding of the key utility relocations required for this project and how Offeror will coordinate and phase construction to both facilitate and accommodate those relocations and the constraints that they impose.
4. Schedule Management. Discuss Offeror's approach to schedule management including updating and reporting progress of the work.
5. Quality Control. Discuss Offeror's quality control plan, processes and approach to ensure that the City receives a quality product.
6. Safety. Discuss Offeror's approach and commitment to safety for both construction workers and the public traveling through the construction site.
7. Potential issues that Offeror foresees with this project and how Offeror would make adjustments if encountered. Describe factors limiting construction phasing flexibility and potential remedies.

It is highly recommended that the Offeror provide sufficient content and detail to answer completely the following questions.

1. Does the proposal include a complete plan to accomplish each requirement, including subcontracting (if applicable)?
2. Does the proposal demonstrate that appropriate and qualified personnel and equipment will be provided to carry out the requirement?
3. Is the proper level of effort directed toward each requirement? Does the level of effort look unrealistically low or unreasonably high?

## **2.5.2 MANAGEMENT AREA**

The Offeror must explain its method of managing the work to be performed. The content must include, but no necessarily be limited to, the following information.

### **A. Program Management Controls**

In the Management Area, the Offeror should provide:

1. A plan of operation, to include management of personnel, workload, schedule, and budget
2. An organization chart which demonstrates clear and effective lines of authority, responsibility, and communication for management, supervisory, and technical personnel. The plan should address which job classification or personnel will be assigned to each task and how that determination is made. Basic human resource management concepts should be addressed, including hiring, firing, discipline, incentive plans, etc.
3. If the Offeror plans to subcontract more than 10% of the work, include information on how the Offeror plans to manage its subcontractors.
4. A detailed construction schedule for the project showing the key construction activities and how they will meet or improve the City's timeframe and maximize construction efficiency to provide the best value to the City and minimize impacts to the public. The schedule shall be based on the Offeror's understanding and approach to the work as addressed above. Schedules should address controls to ensure the project will remain on schedule and on budget. Schedules submitted for this project shall assume a start date of August 26, 2016 (Estimated).

It is highly recommended that the Offeror provide sufficient content and detail to answer completely the following questions.

1. Does the proposal address the issues above in sufficient detail to demonstrate a sophisticated and mature management control system?
2. Are program management controls consistent with the technical portion of the proposal, especially regarding schedule and level of effort?
3. Do the plan and controls indicate that the Offeror will obtain, keep, and efficiently utilize high-quality personnel?
4. Does the proposal explain how the Offeror will address corrective actions in case of delays (e.g. expediting materials, additional resources, etc.)?
5. Does the proposal explain how the Offeror will remain within schedule and budget?

### **B. Past Performance/Relevant Experience and Key Personnel**

In the Management Area, the Offeror should provide at least three references or name contracts demonstrating that it successfully provided services/products that are the same or similar to those required in the RFP. The proposal should

adequately explain how the projects were completed on schedule and within budget. It is highly recommended that the Offeror provide sufficient content and detail to answer completely the following questions.

1. Does the proposal include at least three references or past performance citations?
2. Are the references or past performance citations relevant to the requirements of the Statement of Work of the RFP?
3. Does the Offeror explain how they were successful on the projects provided as past performance?
4. Does the Offeror apply the past performance to the City requirement in such a way as to demonstrate added value due to experience?

### Key Personnel

In the Management Area, resumes must be provided for all personnel considered key, as required by the RFP. Resumes do not count toward the page limit. It is highly recommended that the Offeror provide sufficient content and detail to answer completely the following questions. Explain how the key personnel were related to the projects cited as relevant past performance.

1. Does the Offeror provide complete resumes, including education, experience, background information, accomplishments, and other pertinent information?
2. Does the Offeror provide resumes for all key personnel, as required by the RFP?
3. Do the resumes demonstrate adequate professional, technical, and management levels to accomplish the work effectively and efficiently?
4. According to the resumes do the following apply:
  - A. Has the Contractor and the Contractor's on-site supervisor successfully constructed a sculpted concrete drop structure similar to those included in the scope of work?
  - B. Has the Contractor and the Contractor's on-site supervisor successfully completed at least one significant natural channel restoration project exceeding \$250,000.00 in contract price within the last five years?
  - C. Does the Contractor or their Sub-Contractor have a minimum of five (5) years of experience in planting the types of vegetation to be planted in the scope of work?
  - D. Has the Contractor successfully completed at least one channel restoration project or similar requiring at 20,000 cubic yards of earthwork within the last five years?
  - E. Is the Contractor's proposed schedule realistic and can they meet the project deadline?

## **2.6 PRICE AREA**

The price must be all-inclusive and include all unit costs for material, labor, other direct costs (e.g. travel), indirect costs (i.e. overhead and general and administrative costs), and profit/fee. Offers must include sufficient detail to allow insight into the fairness and reasonableness of the price.

In addition, although price may not be the most important factor, it is still very important to the City of Colorado Springs. The Offeror's pricing must be competitive as compared to the budget amount, market pricing in the industry, and the pricing of other Offerors. It is highly recommended that the Offeror provide sufficient content and detail to answer completely the following questions.

1. How does the price compare to the industry competition?
2. If low, is it unrealistically low?
3. If high, is there demonstrated added value for the additional cost?
4. Is the price itemized, so that it is clear how the cost was built? If so, do the costs look appropriate for the task?
5. Does the Offeror leave applicable costs out of the calculations? For instance, some will say travel is not included and will be an extra cost. This should be considered when comparing to other Offerors.
6. Are there additional costs not addressed that the City would incur if the Offeror were awarded the contract? If so, include those costs when comparing to the budget amount and the competition.

## **2.7 PROPOSAL PRESENTATION**

Presentation is an important factor. Offerors should provide a highly professional product, which is complete, accurate, easily understood, and effectively presented.

## **2.8 EXCEPTIONS**

All Offerors must complete Exhibit 3, Exceptions Form and return it with their proposal. Some terms and conditions are not negotiable. Exceptions may be grounds for rendering the proposal unacceptable without further discussions.

## **2.9 INSURANCE REQUIREMENTS**

All Offerors must complete Exhibit 4, Minimum Insurance Requirements and return with their proposal. Lack of responsiveness in this area may be grounds for rendering the proposal unacceptable without further discussions.

## **SECTION III – EVALUATION FACTORS**

### **3.0 EVALUATION AND AWARD**

Section III provides information regarding evaluation criteria and scoring. It also includes information regarding proposal selection and award of the resultant contract.

### **3.1 EVALUATION CRITERIA**

#### **3.1.1 TECHNICAL AREA -- UNDERSTANDING OF AND COMPLIANCE WITH TECHNICAL REQUIREMENTS**

See Section II - Item 2.5.1A

#### **3.1.2 TECHNICAL AREA -- PROJECT APPROACH**

See Section II - Item 2.5.1B

#### **3.1.3 MANAGEMENT AREA -- PROGRAM MANAGEMENT CONTROLS**

See Section II - Item 2.5.2A

#### **3.1.4 MANAGEMENT AREA -- PAST PERFORMANCE/RELEVANT EXPERIENCE/KEY PERSONNEL**

See Section II – Item 2.5.2B

#### **3.1.5 PRICE/COST AREA -- PRICE/COST**

See Section II – Item 2.6

#### **3.1.6 PROPOSAL PRESENTATION AREA – PROPOSAL PRESENTATION**

See Section II – Item 2.7

#### **3.1.7 EXCEPTIONS AND INSURANCE**

See Section II – Items 2.8 and 2.9

### **3.2 RANKING**

A. The order of ranking or importance in the evaluation shall be as follows:

First: Management Area  
Second: Price/Cost Area  
Third: Technical Area  
Fourth: Proposal Presentation Area

B. Possible scores for each criterion shall be as follows:

5 – Exceptional

- 4 – Very Good
- 3 – Satisfactory
- 2 – Marginal
- 1 – Unacceptable

C. Definitions for scoring are as follows:

1. The following apply to the Technical and Management Areas:

Exceptional – The proposal meets all and exceeds many of the requirements of the RFP to the benefit of the City, and the information provided is of such a nature as to answer all questions without need for further inquiry. There are no corrective actions required, and no compromise of requirements is needed.

Very Good -- The proposal meets all and exceeds some of the requirements of the RFP to the benefit of the City, and the information provided is of such a nature as to answer most questions without need for further inquiry. There are no corrective actions required, and no compromise of requirements is needed.

Satisfactory -- The proposal meets the requirements of the RFP, and the information provided is of such a nature as to answer many questions without need for further inquiry. There are very few corrective actions required, and no substantive compromise of requirements is needed.

Marginal -- The proposal does not meet some of the requirements of the RFP, and the information provided is of such a nature as to require some clarification. There are some corrective actions required, and some non-substantive compromise of requirements is needed.

Unacceptable -- The proposal does not meet many of the requirements of the RFP, and the information provided is of such a nature as to require much clarification. There are many corrective actions required, and substantive compromise of requirements is needed.

2. The following apply to the Price Area:

Exceptional – The proposal meets all and exceeds many of the requirements of the RFP to the benefit of the City, and the information provided is of such a nature as to answer all questions without need for further inquiry. There are no corrective actions required, and no compromise of requirements is needed. The price is lower than the budget amount and/or the average price of the competition.

Very Good -- The proposal meets all and exceeds some of the requirements of the RFP to the benefit of the City, and the information provided is of such a nature as to answer most questions without need for further inquiry. There are no corrective actions required, and no compromise of requirements is needed.

The price is lower than the budget amount and/or the average price of the competition.

Satisfactory -- The proposal meets the requirements of the RFP, and the information provided is of such a nature as to answer many questions without need for further inquiry. There are very few corrective actions required, and no substantive compromise of requirements is needed. The price is very close to the budget amount and/or the average price of the competition.

Marginal -- The proposal does not meet some of the requirements of the RFP, and the information provided is of such a nature as to require some clarification. There are some corrective actions required, and some non-substantive compromise of requirements is needed. The price exceeds the budget amount and/or the average price of the competition.

Unacceptable -- The proposal does not meet many of the requirements of the RFP, and the information provided is of such a nature as to require much clarification. There are many corrective actions required, and substantive compromise of requirements is needed. The price significantly exceeds the budget amount and/or the average price of the competition.

3. The following apply to the Proposal Presentation Area:

Exceptional – The proposal is professionally communicated, complete in all areas, provides sufficient detail, and is presented in a clear and effective manner. The quality far exceeds that of the competition, industry standard, or reasonable expectation.

Good -- The proposal is professionally communicated, complete in all areas, provides sufficient detail, and is presented in a clear and effective manner. The quality exceeds that of the competition, industry standard, or reasonable expectation.

Satisfactory -- The proposal is professionally communicated, complete in all areas, provides sufficient detail, and is presented in a clear and effective manner. The quality is equal to that of the competition, industry standard, or reasonable expectation.

Marginal -- The proposal is not professionally communicated and is incomplete in some areas, provides insufficient detail, and is not presented in a clear and effective manner. The quality is below that of the competition, industry standard, or reasonable expectation.

Unacceptable -- The proposal is not professionally communicated and is incomplete in many areas, provides insufficient detail, and is not presented in a clear and effective manner. The quality is far below that of the competition,

industry standard, or reasonable expectation.

#### D. Final/Overall Scoring

The final proposal score will be determined by adding the area scoring. The sum of the area scores will be the final/overall score.

### **3.3 SELECTION COMMITTEE**

A selection committee will review all proposals. Through this process, the City will determine which proposals are acceptable or unacceptable. The City will notify, in writing, the Offerors whose proposals are deemed to be unacceptable. Those Offerors offering proposals deemed to be acceptable by the City will be evaluated and scored by the selection committee. This scoring will determine which Offerors are considered to be in the competitive range and may be the basis for an award decision without further steps.

If the selection committee elects not to award based upon evaluation scoring, it may engage in a forced elimination process. To inform this process, it may require oral presentations or interviews with the Offerors considered to be in the competitive range. If oral presentations or interviews are conducted, they may also be scored, or they may simply be considered as information supporting the forced elimination process. The selection committee may request revisions to the proposal from each of the Offerors at the conclusion of the interviews. The intent of the forced elimination process is to reach consensus. The decision will be based on all relevant factors, and based upon perception of best value. The final decision may or may not exactly reflect scoring ranking.

The City also reserves the right to request best and final offers from all Offerors at any point in the proposal evaluation process.

### **3.4 AWARD OF CONTRACT**

It is anticipated that there will be negotiations or discussions with Offerors. However, the City reserves the right to award without negotiations or discussions. The City also reserves the right to award a contract not necessarily or merely to the Offeror with the most advantageous price. The City intends to award to the Offeror that demonstrates the best value to the City and the most substantiated ability to fulfill the requirements contained in this Request for Proposal. A contract prepared by the City will be finalized and/or negotiated with the successful Offeror. In the event a contract cannot be negotiated with the top ranked Offeror, the City may enter into negotiations with the second highest ranked Offeror, or the City may decide to call for new proposals. Immediately after the notice of award, the successful Offeror will begin planning in conjunction with the City of Colorado Springs staff (to be designated by the City) to ensure fulfillment of all its obligations. The successful Offeror may be expected to attend regular meetings as required by the City to assist in the preparation for startup.

## **SECTION IV – SPECIAL CONTRACT TERMS AND CONDITIONS**

### **4.0 SPECIAL CONTRACT TERMS AND CONDITIONS/SPECIAL SOLICITATION PROVISIONS**

In addition to the special contract terms and conditions listed below, the City's sample contract, see Exhibit 2, contains contract terms and conditions.

#### Clauses for Contracts Subject to Federal Requirements

##### **1. EQUAL EMPLOYMENT OPPORTUNITY**

During the performance of this Contract, the Contractor agrees as follows:

- (1) The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, or national origin. such action shall include, but not be limited to the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
- (2) The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive considerations for employment without regard to race, color, religion, sex, or national origin.
- (3) The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- (4) The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
- (5) The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
- (6) In the event of the Contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further Government

contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

- (7) The Contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance: *Provided, however*, that in the event the Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency the Contractor may request the United States to enter into such litigation to protect the interests of the United States.
- (8) *Subcontracts*. Each nonexempt prime contractor or subcontractor shall include the equal opportunity clause in each of its nonexempt subcontracts.
- (9) *Incorporation by reference*. The equal opportunity clause may be incorporated by reference in all Government contracts and subcontracts, including Government bills of lading, transportation requests, contracts for deposit of Government funds, and contracts for issuing and paying U.S. savings bonds and notes, and such other contracts and subcontracts as the Deputy Assistant Secretary may designate.
- (10) *Incorporation by operation of the order*. By operation of the order, the equal opportunity clause shall be considered to be a part of every contract and subcontract required by the order and the regulations in this part to include such a clause whether or not it is physically incorporated in such contracts and whether or not the contract between the agency and the contractor is written.
- (11) *Adaptation of language*. Such necessary changes in language may be made in the equal opportunity clause as shall be appropriate to identify properly the parties and their undertakings. [43 FR 49240, Oct. 20, 1978, as amended at 62 FR 66971, Dec. 22, 1997]

## 2. EQUAL EMPLOYMENT OPPORTUNITY REPORTS AND OTHER REQUIRED INFORMATION

- (a) *Requirements for prime contractors and subcontractors*.
  - (1) Each prime contractor and subcontractor shall file annually, on or before the September 30, complete and accurate reports on Standard Form 100 (EEO-1) promulgated jointly by the Office of Federal Contract Compliance Programs, the Equal Employment Opportunity Commission and Plans for Progress or such form as may hereafter be promulgated in its place if

such prime contractor or subcontractor (i) is not exempt from the provisions of these regulations in accordance with § 60-1.5; (ii) has 50 or more employees; (iii) is a prime contractor or first tier subcontractor; and (iv) has a contract, subcontract or purchase order amounting to \$50,000 or more or serves as a depository of Government funds in any amount, or is a financial institution which is an issuing and paying agent for U.S. savings bonds and savings notes: *Provided*, That any subcontractor below the first tier which performs construction work at the site of construction shall be required to file such a report if it meets requirements of paragraphs (a)(1) (i), (ii), and (iv) of this section.

- (2) Each person required by § 60-1.7(a)(1) to submit reports shall file such a report with the contracting or administering agency within 30 days after the award to him of a contract or subcontract, unless such person has submitted such a report within 12 months preceding the date of the award. Subsequent reports shall be submitted annually in accordance with § 60-1.7(a)(1), or at such other intervals as the Deputy Assistant Secretary may require. The Deputy Assistant Secretary may extend the time for filing any report.
- (3) The Deputy Assistant Secretary or the applicant, on their own motions, may require a contractor to keep employment or other records and to furnish, in the form requested, within reasonable limits, such information as the Deputy Assistant Secretary or the applicant deems necessary for the administration of the order.
- (4) Failure to file timely, complete and accurate reports as required constitutes noncompliance with the prime contractor's or subcontractor's obligations under the equal opportunity clause and is ground for the imposition by the Deputy Assistant Secretary, an applicant, prime contractor or subcontractor, of any sanctions as authorized by the order and the regulations in this part.

(b) *Requirements for Proposalders or prospective contractors—*

- (1) *Certification of compliance with Part 60-2: Affirmative Action Programs.* Each agency shall require each Proposalder or prospective prime contractor and proposed subcontractor, where appropriate, to state in the Proposal or in writing at the outset of negotiations for the contract: (i) Whether it has developed and has on file at each establishment affirmative action programs pursuant to Part 60-2 of this chapter; (ii) whether it has participated in any previous contract or subcontract subject to the equal opportunity clause; (iii) whether it has filed with the Joint Reporting Committee, the Deputy Assistant Secretary or the Equal Employment Opportunity Commission all reports due under the applicable filing requirements.
- (2) *Additional information.* A Proposalder or prospective prime contractor or proposed subcontractor shall be required to submit such information as the Deputy Assistant Secretary requests prior to the award of the contract or subcontract. When a determination has been made to award the

contract or subcontract to a specific contractor, such contractor shall be required, prior to award, or after the award, or both, to furnish such other information as the applicant or the Deputy Assistant Secretary requests.

(c) *Use of reports.* Reports filed pursuant to this section shall be used only in connection with the administration of the order, the Civil Rights Act of 1964, or in furtherance of the purposes of the order and said Act.[43 FR 49240, Oct. 20, 1978, as amended at 62 FR 66971, Dec. 22, 1997]

3. CONSTRUCTION WAGE RATE REQUIREMENTS (DAVIS BACON) (From FAR 52.222-6)

The term “Contracting Officer” herein shall refer to the City of Colorado Springs Contracting Specialist assigned to this contract.

(a) Definition.-“Site of the work”-

(1) Means-

(i) *The primary site of the work.* The physical place or places where the construction called for in the contract will remain when work on it is completed; and

(ii) *The secondary site of the work, if any.* Any other site where a significant portion of the building or work is constructed, provided that such site is-

(A) Located in the United States; and

(B) Established specifically for the performance of the contract or project;

(2) Except as provided in paragraph (3) of this definition, includes any fabrication plants, mobile factories, batch plants, borrow pits, job headquarters, tool yards, etc., provided-

(i) They are dedicated exclusively, or nearly so, to performance of the contract or project; and

(ii) They are adjacent or virtually adjacent to the “primary site of the work” as defined in paragraph (a)(1)(i), or the “secondary site of the work” as defined in paragraph (a)(1)(ii) of this definition;

(3) Does not include permanent home offices, branch plant establishments, fabrication plants, or tool yards of a Contractor or subcontractor whose locations and continuance in operation are determined wholly without regard to a particular Federal contract or project. In addition, fabrication plants, batch plants, borrow pits, job headquarters, yards, etc., of a commercial or material supplier which are established by a supplier of materials for the project before opening of Proposals and not on the Project site, are not included in the “site of the work.” Such permanent, previously established facilities are not a part of the “site of the work” even if the operations for a period of time may be dedicated exclusively or nearly so, to the performance of a contract.

(b)

(1) All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, or as may be incorporated for a secondary site of the work, regardless of any contractual relationship which may be alleged to exist between the Contractor and such laborers and mechanics. Any wage determination incorporated for a secondary site of the work shall be effective from the first day on which work under the contract was performed at that site and shall be incorporated without any adjustment in contract price or estimated cost. Laborers employed by the construction Contractor or construction subcontractor that are transporting portions of the building or work between the secondary site of the work and the primary site of the work shall be paid in accordance with the wage determination applicable to the primary site of the work.

(2) Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Construction Wage Rate Requirements statute on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (e) of this clause; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such period.

(3) Such laborers and mechanics shall be paid not less than the appropriate wage rate and fringe benefits in the wage determination for the classification of work actually performed, without regard to skill, except as provided in the clause entitled Apprentices and Trainees. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein; provided that the employer's payroll records accurately set forth the time spent in each classification in which work is performed.

(4) The wage determination (including any additional classifications and wage rates conformed under paragraph (c) of this clause) and the Construction Wage Rate Requirements (Davis-Bacon Act) poster (WH-1321) shall be posted at all times by the Contractor and its subcontractors at the primary site of the work and the secondary site of the work, if any, in a prominent and accessible place where it can be easily seen by the workers.

(c)

(1) The Contracting Officer shall require that any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The Contracting Officer shall approve an additional classification and wage rate and fringe benefits therefor only when all the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination.

(ii) The classification is utilized in the area by the construction industry.

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) If the Contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the Contracting Officer agree on the classification and wage rate (including the amount designated for fringe benefits, where appropriate), a report of the action taken shall be sent by the Contracting Officer to the Administrator of the:

Wage and Hour Division  
Employment Standards Administration  
U.S. Department of Labor  
Washington, DC 20210

The Administrator or an authorized representative will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the Contracting Officer or will notify the Contracting Officer within the 30-day period that additional time is necessary.

(3) In the event the Contractor, the laborers or mechanics to be employed in the classification, or their representatives, and the Contracting Officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the Contracting Officer shall refer the questions, including the views of all interested parties and the recommendation of the Contracting Officer, to the Administrator of the Wage and Hour Division for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the Contracting Officer or will notify the Contracting Officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits, where appropriate) determined pursuant to paragraphs (c)(2) and (c)(3) of this clause shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(d) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an

hourly rate, the Contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(e) If the Contractor does not make payments to a trustee or other third person, the Contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program; provided, That the Secretary of Labor has found, upon the written request of the Contractor, that the applicable standards of the Construction Wage Rate Requirements statute have been met. The Secretary of Labor may require the Contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

4. CONTRACT WORK HOURS AND SAFETY STANDARDS (from FAR 52.222-4)  
The term "Contracting Officer" herein shall refer to the City of Colorado Springs Contracting Specialist assigned to this contract.

The term "Government" herein shall refer to the City of Colorado Springs and any interested federal or state entity.

(a) *Overtime requirements.* No Contractor or subcontractor employing laborers or mechanics (see Federal Acquisition Regulation 22.300) shall require or permit them to work over 40 hours in any workweek unless they are paid at least 1 and 1/2 times the basic rate of pay for each hour worked over 40 hours.

(b) *Violation; liability for unpaid wages; liquidated damages.* The responsible Contractor and subcontractor are liable for unpaid wages if they violate the terms in paragraph (a) of this clause. In addition, the Contractor and subcontractor are liable for liquidated damages payable to the Government. The Contracting Officer will assess liquidated damages at the rate of \$10 per affected employee for each calendar day on which the employer required or permitted the employee to work in excess of the standard workweek of 40 hours without paying overtime wages required by the Contract Work Hours and Safety Standards statute (found at 40 U.S.C. chapter 37).

(c) *Withholding for unpaid wages and liquidated damages.* The Contracting Officer will withhold from payments due under the contract sufficient funds required to satisfy any Contractor or subcontractor liabilities for unpaid wages and liquidated damages. If amounts withheld under the contract are insufficient to satisfy Contractor or subcontractor liabilities, the Contracting Officer will withhold payments from other Federal or federally assisted contracts held by the same Contractor that are subject to the Contract Work Hours and Safety Standards statute

(d) Payrolls and basic records.

(1) The Contractor and its subcontractors shall maintain payrolls and basic payroll records for all laborers and mechanics working on the contract during the contract and shall make them available to the Government until 3 years after contract completion. The records shall contain the name and address of each employee, social security number, labor classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. The records need not duplicate those required for construction work by Department of Labor regulations at 29 CFR 5.5(a)(3) implementing the Construction Wage Rate Requirements statute.

(2) The Contractor and its subcontractors shall allow authorized representatives of the Contracting Officer or the Department of Labor to inspect, copy, or transcribe records maintained under paragraph (d)(1) of this clause. The Contractor or subcontractor also shall allow authorized representatives of the Contracting Officer or Department of Labor to interview employees in the workplace during working hours.

(e) *Subcontracts*. The Contractor shall insert the provisions set forth in paragraphs (a) through (d) of this clause in subcontracts that may require or involve the employment of laborers and mechanics and require subcontractors to include these provisions in any such lower tier subcontracts. The Contractor shall be responsible for compliance by any subcontractor or lower-tier subcontractor with the provisions set forth in paragraphs (a) through (d) of this clause.

5. CLEAN AIR ACT

By signing this Contract, the Contractor agrees to comply with all applicable standards, orders, or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA). Further, the Contractor agrees to include this clause in all subcontracts in excess of \$150,000.

6. DEBARMENT AND SUSPENSION

By signing this Contract, the Contractor certifies to the best of its knowledge and belief that it and its principals:

- (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- (b) Have not within a three year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a

- public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, falsification or destruction of records, making false statements, or receiving stolen property;
- (c) Are not presently indicted for or otherwise criminally or civilly charged by a government entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
  - (d) Have not within a three-year period preceding this application/proposal had one or more public transactions(Federal, State, or local) terminated for cause or default.

## 7. BYRD ANTI-LOBBYING AMENDMENT

By signing this Contract, the Contractor certifies that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Further, the Contractor certifies that it has not engaged in lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. The Contractor must require the same certification from all subcontractors with subcontracts valued in excess of \$100,000 under this Contract.

## 8. SMALL BUSINESS REQUIREMENTS

The Contractor must take all necessary affirmative steps to assure that minority businesses, women's business enterprises, and labor surplus area firms are used when possible.

Affirmative steps must include:

- (1) Placing qualified small and minority businesses and women's business enterprises on subcontract solicitation lists;
- (2) Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources for subcontracting;
- (3) Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses, and women's business enterprises;
- (4) Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises; and

(5) Using the services and assistance, as appropriate, of such organizations as the Small Business Administration and the Minority Business Development Agency of the Department of Commerce.

9. PROCUREMENT OF RECOVERED MATERIALS

The Contractor must comply with section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds \$10,000 or the value of the quantity acquired by the preceding fiscal year exceeded \$10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery; and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.

## SECTION V – EXHIBITS

### 5.0 EXHIBITS

Exhibit 1	Proposal Certification
Exhibit 2	Sample Contract
Exhibit 3	Exceptions
Exhibit 4	Minimum Insurance Requirements
Exhibit 5	Scope of Work
Exhibit 6	Qualification Statement
Exhibit 7	Evaluation Scoresheet
Exhibit 8	Notification of Utilities
Exhibit 9	Certification Regarding Debarment
Exhibit 10	Restrictions on Lobbying Certification
Exhibit 11	Non-Collusion Affidavit
Exhibit 12	Equal Opportunity Status

**EXHIBIT 1 PROPOSAL CERTIFICATION**

Check or Mark the space after each number to indicate compliance.

1. \_\_\_\_\_ Address of Offeror's Principal Place of Business:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Does Offeror have an established office or facility in Colorado Springs?

Yes \_\_\_\_\_ No \_\_\_\_\_

If yes, indicate address below if different than Principal Place of Business.

Colorado Springs Facility - Year established \_\_\_\_\_

Address of Colorado Springs Facility:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Percent of Work to be Performed from Principal Place of Business? \_\_\_\_\_

Percent of Work to be Performed from Colorado Springs Facility? \_\_\_\_\_

2. \_\_\_\_\_ Indicate your ability to provide a certificate of insurance evidencing the required coverage types and limits specified in Minimum Insurance Requirements Exhibit. (The certificate of insurance must reflect the City of Colorado Springs as an Additional Insured, as applicable.)

Indicate your ability to comply with the following requirements:

The City shall be added as an Additional Insured to all liability policies:

Yes \_\_\_\_\_ No \_\_\_\_\_

Your property and liability insurance company is licensed to do business in Colorado:

Yes \_\_\_\_\_ No \_\_\_\_\_

Provide the name of your property and liability insurance company here:

Name: \_\_\_\_\_

Your property and liability insurance company has an AM best rating of not less than B+ and/or VII:

Yes \_\_\_\_\_ No \_\_\_\_\_

Worker's Compensation Insurance is carried for all employees and covers work done in Colorado.

Yes \_\_\_\_\_ No \_\_\_\_\_

3. \_\_\_\_\_ Provide one (1) copy of current financial statements (if required). Enclose financial information in a separate envelope; do not bind with the other proposal copies. If review of the information is to be restricted to the City's financial officer, it must be marked accordingly.

4. \_\_\_\_\_ Provide the completed and signed proposal. (Proposals must be identified as specified in this RFP document). All required Exhibits are attached.

By signing below, the Offeror certifies that no person or firm other than the Offeror or as otherwise indicated has any interest whatsoever in this offer or any Contract that may be entered into as a result of this offer and that in all respects the offer is legal and firm, submitted in good faith without collusion or fraud.

Offeror has appointed \_\_\_\_\_ as the Offeror's representative and contact for all questions or clarifications in regard to this Offeror.

Telephone: (\_\_\_\_) \_\_\_\_\_

Email: \_\_\_\_\_

The undersigned acknowledges and understands the terms, conditions, Specifications and all Requirements contained and/or referenced and are legally authorized by the Offeror to make the above statements or representations.

\_\_\_\_\_  
(Name of Company)

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Address)

\_\_\_\_\_  
Date

\_\_\_\_\_  
(City, State and Zip)

\_\_\_\_\_  
(Telephone Number)

\_\_\_\_\_  
(Name typed/Printed)

\_\_\_\_\_  
(Title)

\_\_\_\_\_  
(E-Mail Address)

**FEDERAL TAX ID #** \_\_\_\_\_

**This Company Is:** Corporation\_\_\_\_ Individual\_\_\_\_ Partnership\_\_\_\_  
LLC\_\_\_\_\_

**Offeror hereby acknowledges receipt of the following amendments, if applicable**  
Offeror agrees that it is bound by all Amendments identified herein.

AMENDMENT #1 \_\_\_\_\_ DATED: \_\_\_\_\_

AMENDMENT #2 \_\_\_\_\_ DATED: \_\_\_\_\_

AMENDMENT #3 \_\_\_\_\_ DATED: \_\_\_\_\_

**Please Note the attached Representations and Certifications must be initialed by Offeror in the spaces provided and returned with this certification.**

## REPRESENTATIONS AND CERTIFICATIONS

### Exhibit 1 Continued

#### 1. INSURANCE REQUIREMENTS

Offeror shall comply with all insurance requirements and will submit the Insurance Certificates prior to performance start date. If limits are different from the stated amounts, Offeror shall explain variance. Certain endorsements and “additionally insured” statements may require further clarification and specific statements on a project specific basis and should have been described in the Offeror’s proposal.

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Initials for 1

#### 2. ETHICS VIOLATIONS

- a) The Offeror shall have in place and follow reasonable procedures designed to prevent and detect possible violations described in this clause in its own operations and direct business relationships.
- b) Offeror certifies the Offeror has not violated or caused any person to violate, and shall not violate or cause any person to violate, the City’s Code of Ethics contained in Article 3, of Chapter 1 of the City Code and in the City’s Procurement Rules and Regulations
- c) When the Offeror has reasonable grounds to believe that a violation described in this clause may have occurred, the Offeror shall promptly report the possible violation to the City Contracts Specialist in writing.
- c) The Offeror must disclose with the signing of this proposal, the name of any officer, director, or agent who is also an employee of the City and any City employee who owns, directly or indirectly, an interest of ten percent (10%) or more in the Offeror’s firm or any of its branches.
- d) In addition, the Offeror must report any conflict or apparent conflict, current or discovered during the performance of the Contract, to the City Contracts Specialist.
- e) The Offeror shall not engage in providing gifts, meals or other amenities to City employees. The right of the Offeror to proceed may be terminated by written notice issued by City Contracts Specialist if Offeror offered or gave a gratuity to an officer, official, or employee of the City and intended by the gratuity to obtain a contract or favorable treatment under a contract.
- f) The Offeror shall cooperate fully with the City or any agency investigating a possible violation on behalf of the City. If any violation is determined, the Offeror will properly compensate the City.
- g) The Offeror agrees to incorporate the substance of this clause (after substituting “Contractor” for “Offeror”) in all subcontracts under this offer.

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Initials for 2

### 3. ILLEGAL ALIENS

If Offeror has any employees or subcontractors, Offeror shall comply with § 8-17.5-101, et seq., C.R.S. regarding Illegal Aliens – Public Contracts for Services, and this section of this Agreement. 8-17.5-102 includes, in part, that:

1. Offeror shall not:
  - a. Knowingly employ or contract with an illegal alien to perform work under this Agreement; or
  - b. Enter into a contract with a subcontractor that fails to certify to Offeror that the subcontractor shall not knowingly employ or contract with an illegal alien to perform work under this Agreement.
2. Offeror has verified or attempted to verify that Offeror does not employ any illegal aliens and, will participate in the E-Verify Program or State Department program in order to confirm eligibility of all employees who are newly hired to perform work under public contract for services.
3. Offeror will not use E-Verify Program or State Department program procedures to undertake pre-employment screening of job applicants while the public contract for services is being performed.
4. If Offeror obtains actual knowledge that a subcontractor performing work under this Agreement knowingly employs or contracts with an illegal alien, Provider shall:
  - a. Notify the subcontractor and the City within three days that Offeror has actual knowledge that the subcontractor is employing or contracting with an illegal alien; and
  - b. Terminate the subcontract with the subcontractor if within three days of receiving such notice, the subcontractor does not stop employing or contracting with the illegal alien. However, the Offeror shall not terminate the contract with the subcontractor if during this three day period:
    - i. The subcontractor provides information which establishes that the subcontractor has not knowingly employed or contracted with an illegal alien, and
    - ii. The Offeror will not employ the illegal aliens in the performance of any City contract.
5. Offeror shall comply with any reasonable request by the Department of Labor and Employment made in the course of an investigation that the Department is undertaking pursuant to the authority established in §8-17.5-102(5), C.R.S.
6. If Offeror violates this provision, the City may terminate the contract for a breach of contract. If the Agreement is terminated, the Offeror shall be liable for actual and consequential damages.

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Initials for 3

### 4. COOPERATION WITH OTHER CONTRACTORS

Other City activities/contracts may be in progress or start during the performance of this

contract. The Offeror shall coordinate the work harmoniously with the other contractors or City personnel, if applicable.

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Initials for 4

## **5. INTERNET USE**

Should the Offeror require access to City Internet resources in the performance of this requirement, a "Contractor's Internet Use Agreement" form must be separately signed by each individual having access to the City Network. The completed Contractor's Internet Use Agreement will be maintained with this agreement. Inappropriate use of the City Network will be grounds for immediate termination of any awarded contact.

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Initials for 5

## **6. LITIGATION**

If awarded a contract, Offeror shall notify the City within five (5) calendar days after being served with a summons, complaint, or other pleading in any matter which has been filed in any federal or state court or administrative agency. The Offeror shall deliver copies of such document(s) to the City's Procurement Services Manager. The term "litigation" includes an assignment for the benefit of creditors, and filings of bankruptcy, reorganization and/or foreclosure.

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Initials for 6

## **7. CONTRACTOR'S REGISTRATION INFORMATION**

Offeror's firm verifies and states that they are (check all that apply):

- Large Business (i.e. do not qualify as a small business or non-profit)
- Nonprofit
- Small Business
- Minority Owned Business/Small Disadvantaged Business
- Woman Owned Business

- \_\_\_\_\_ Veteran Owned Business
- \_\_\_\_\_ Service-Disabled Veteran Owned Business
- \_\_\_\_\_ HUBZone Business

Note: The City accepts self-certification for these categories in accordance with Small Business Administration (SBA) standards. The SBA size standards are found on the SBA website <https://www.sba.gov/content/am-i-small-business-concern>.

\_\_\_\_\_  
Initials for 7

**8. CONTRACTOR PERSONNEL**

- a) The Offeror shall appoint one of its key personnel as the “Authorized Representative” who shall have the power and authority to interface with the City and represent the Offeror in all administrative matters concerning this proposal and any awarded contract, including without limitation such administrative matters as correction of problems modifications, and reduction of costs.
- b) The Authorized Representative shall be the person identified in the Offeror’s proposal, unless the Offeror provides written notice to the City naming another person to serve as its Authorized Representative. Communications received by the City Contracts Specialist from the Authorized Representative shall be deemed to have been received from the Offeror.

The individual, \_\_\_\_\_ (Name)  
 with position, \_\_\_\_\_ (Title)  
 Can be reached at  
 Work telephone number: \_\_\_\_\_  
 Home telephone number: \_\_\_\_\_  
 Cellular telephone number: \_\_\_\_\_  
 E-mail address: \_\_\_\_\_

\_\_\_\_\_  
Initials for 8

**9. OFFEROR’S CERTIFICATION**

- The undersigned hereby affirms that:
- a) He/She is a duly authorized agent of the Offeror;
  - b) He/She has read and agrees to the City’s standard terms and conditions attached.
  - c) The offer is presented in full compliance with the collusive prohibitions of the City of Colorado Springs. The Offeror certifies that no employee of its firm has discussed, or

compared the offer with any other offeror or City employee and has not colluded with any other offeror or City employee.

d) The Offeror certifies that it has checked all of its figures, and understands that the City will not be responsible for any errors or omissions on the part of the Offeror in preparing its proposal.

e) By submitting an offer the Offeror certifies that it has complied and will comply with all requirements of local, state, and federal laws, and that no legal requirements have been or will be violated in making or accepting this solicitation.

I hereby certify that I am submitting the proposal based on my company's capabilities to provide quality products and/or services on time.

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Initials for 9

**10. OFFEROR CERTIFICATION REGARDING DEBARMENT, SUSPENSION, PROPOSED DEBARMENT, AND OTHER RESPONSIBILITY MATTERS:**

1. The Offeror certifies to the best of its knowledge and belief, that (i) the Offeror and/or any of its Principals
  - a. Are ( ), Are not ( ) presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency;
  - b. Have ( ), Have not ( ), within a three year period preceding this offer, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (federal, state, local) contract or subcontract; violation of Federal or state antitrust statutes relation to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statement, tax evasion, or receiving stolen property; and
  - c. Are ( ), Are not ( ) presently indicated for, or otherwise criminally or civilly charged by a governmental entity with, commission of any of the offenses enumerated in any paragraphs above.
2. The Offeror shall provide immediate written notice to the City Contracts Specialist if, at any time prior to contract award, the Offeror learns that its certification was erroneous when submitted or has become erroneous by reasons of changed circumstances.
3. The certification in paragraph 1. above, is a material representation of fact upon which reliance was placed when making award. If it is later determined that the Offeror knowingly rendered an erroneous certification, in addition to other remedies available to the City, the City Contracts Specialist may terminate the contract resulting from this solicitation for default. Termination for default may result in additional charges being levied for the costs incurred by the City to initiate activities to replace the awarded Contractor.

\_\_\_\_\_  
Initials for 10

**11. ACCEPTANCE OF CITY CONTRACTS SPECIALIST'S SOLE AUTHORITY  
FOR CHANGES**

Unless otherwise specified in the Contract, the Offeror hereby agrees that any changes to the scope of work, subsequent to the original contract signing, shall be generated in writing and an approval signature shall be obtained from the City Contracts Specialist prior to additional work performance.

\_\_\_\_\_  
Initials for 11

Name of Company:

Federal Tax ID Number:

DUNS Number:

Principle Place of Business:

\_\_\_\_\_  
Signature of Authorized Representative

Printed Name:

Title:

Date:

## EXHIBIT 2 SAMPLE CONTRACT

### CONSTRUCTION CONTRACT

Contract Number:		Project Name/Title	
Vendor/Contractor			
Contact Name:		Telephone:	Email:
Address:			
Federal Tax ID #		Please check one:	<input type="checkbox"/> Corporation <input type="checkbox"/> Individual <input type="checkbox"/> Partnership
City Contracting Specialist	Name & Phone#	City Dept Rep	Name & Phone# & Department Name
NOT TO EXCEED Contract Amount:		City Account #	Acct Code (5) Fund (3) Dept (4) Project (7)
Contract Type:		Period of Performance:	
Contract Value Amount:		Contract Funding Amount:	

### 1. INTRODUCTION

THIS TYPE CONTRACT ("Contract") is made and entered into this \_\_\_ day of \_\_\_\_\_, 2016 by and between the City of Colorado Springs, a Colorado municipal corporation and home rule city, in the County of El Paso, State of Colorado, (the "City"), and \_\_\_\_\_ (the "Contractor").

THE CITY AND THE CONTRACTOR HEREBY AGREE AS FOLLOWS:

The City has heretofore prepared the necessary Contract Documents for the following Activity: XXXXXXXX.

The Contractor did on the \_\_\_ day of \_\_\_\_\_, 2016 submit to the City the Contractor's written offer and proposal to do the work therein described under the terms and conditions therein set forth and furnish all materials, supplies, labor, services, transportation, tools, equipment, and parts for said work in strict conformity with the accompanying Contract Documents, which are attached hereto and incorporated herein by this reference, including the following:

1. This Contract Document
2. Appendix A – Additional Terms and Conditions
3. Appendix B – Contractor's Proposal,
4. Appendix C – Statement of Work.
5. Schedule A – Proposal Price Sheet

6. Schedule B – General Construction Terms and Conditions
7. Schedule C – Special Construction Terms and Conditions
8. Schedule D – General Specifications
9. Schedule E – Special Specifications
10. Exhibit 1 – Performance Bond
11. Exhibit 2 – Labor and Material Payment Bond
12. Exhibit 3 – Maintenance Bond
13. Exhibit 4 – Notification of Utilities
14. Exhibit 5 – Project Schedule

## 2. COMPENSATION/CONSIDERATION

If FFP:

THIS FIRM FIXED PRICE CONTRACT is established at firm fixed amount of \$xxxxxxx.

Subject to the terms and conditions of the Contract Documents, Contractor shall provide all materials, supplies, labor, services, transportation, tools, equipment, and parts to perform \_\_\_\_\_ services for the City of Colorado Springs in a good and workmanlike manner to the satisfaction of the City for the total contract amount designated above and in the Notice of Award, to be paid by the City to the Contractor.

If T&M

Subject to the terms and conditions of the Contract Documents, Contractor shall provide all materials, supplies, labor, services, transportation, tools, equipment, and parts to perform \_\_\_\_\_ services for the City of Colorado Springs in a good and workmanlike manner to the satisfaction of the City for the estimated price of \_\_\_\_\_, not to exceed \$\_\_\_\_\_ (“Not to Exceed estimate”). If the performance of this Contract involves the services of others or the furnishing of equipment, supplies, or materials, the Contractor agrees to pay for the same in full. At the time of payment by the City, the Contractor shall certify in writing that said payments have been so made.

This is a Time and Material (T&M) type contract. The Not to Exceed estimate is in accordance with the Contractor’s T&M proposal and rates, as included in the attached proposal, dated XXXXXX. All labor charges shall be in accordance with the T&M rates provided therein. Invoiced hours shall be subject to City review and approval before payable.

The parties estimate that performance of this Contract will not exceed the Not to Exceed estimate. The Contractor shall notify the City Contracts Specialist in writing whenever it has reason to believe that the costs the Contractor expects to incur under this Contract in the following 60 days, when added to all costs previously incurred, will exceed 75 percent of the estimated cost specified herein; or the total

cost for the performance of this Contract will be either greater or substantially less than had been previously estimated. As part of the notification, the Contractor shall provide the Contracts Specialist a revised estimate of the total cost of performing this Contract.

The City is not liable for any costs above the Not to Exceed estimate, and the Contractor is not obligated to continue performance under this Contract (including actions under the Termination clause of this Contract) or otherwise incur costs in excess of the Not to Exceed estimate specified herein, until the City Contracts Specialist

(i) notifies the Contractor in writing that the estimated cost has been increased and

(ii) provides a revised estimated total not to exceed price of performing this Contract.

#### IF FIXED UNIT PRICE

THIS FIXED UNIT PRICE CONTRACT is established at the Not to Exceed amount of \$xxxxxxx.

Subject to the terms and conditions of the Contract Documents, Contractor agrees to furnish all materials and to perform all work as set forth in its proposal and as required by the Contract Documents.

All pricing is in accordance with the fixed unit prices found in Schedule A, as proposed by the Contractor. Payment made for actual quantities as set forth in Schedule B, General Construction Terms and Conditions. At no time shall the total obligation of the City exceed the not to exceed amount of this Contract.

### 3. TERM OF CONTRACT

Contractor will start work promptly after the Notice to Proceed and continue to work diligently until completed. The Contractor shall complete all work on an as ordered basis throughout the Contract period which is Calendar Days after the Notice-to-Proceed ("Period of Performance") as per the specifications and drawings. The Contractor shall provide a two-year guarantee on all work performed under this Contract after the job has been completed and accepted.

### 4. INSURANCE

The Contractor shall provide and maintain an acceptable Certificate of Insurance Policy(s) which includes Property, Liability and Professional Errors and Omissions coverage, as listed in Schedule F. The City of Colorado Springs shall be reflected as an additional insured on the Property and Liability policy(s).

Further, Contractor understands and agrees that Contractor shall have no right of coverage under any existing or future City comprehensive, self, or personal injury policies. Contractor shall provide insurance coverage for and on behalf of Contractor that will sufficiently protect Contractor, or Contractor's agents, employees, servants or other personnel, in connection with the services which are to be provided by Contractor pursuant to this Contract, including protection from claims for bodily injury, death, property damage, and lost income. Contractor shall provide worker's compensation insurance coverage for Contractor and all Contractor personnel. Contractor shall file applicable insurance certificates with the City and shall also provide additional insurance as indicated in this Contract. ***A CURRENT CERTIFICATE OF INSURANCE IS REQUIRED PRIOR TO COMMENCEMENT OF SERVICES LISTING THE CITY AS ADDITIONALLY INSURED.***

## **5. RESPONSIBILITY OF THE CONTRACTOR**

- A. The Contractor shall be responsible for the professional quality, technical accuracy, and the coordination of all Scope of Work services furnished by the Contractor under this Contract. The Contractor shall, without additional compensation, correct or revise any errors or deficiencies in services provided under this Contract to the satisfaction of the City.
- B. The City's review, approval of, acceptance of, or payment for the services required under this Contract shall not be construed to operate as a waiver of any rights under this Contract or of any cause of action arising out of the performance of this Contract, and the Contractor shall be and remain liable to the City for any and all damages to the City caused by the Contractor's negligent performance of any of the services furnished under this Contract.
- C. The rights and remedies of the City provided for under this Contract are in addition to any other rights and remedies provided by law.
- D. If the Contractor is comprised of more than one legal entity, each such entity shall be jointly and severally liable hereunder.

## **6. WORK OVERSIGHT**

- A. The extent and character of the work to be done by the Contractor shall be subject to the general approval of the City's delegated Project Manager.
- B. If any of the work or services being performed does not conform with Contract requirements, the City may require the Contractor to perform the work or services again in conformity with Contract requirements, at no increase in Contract amount. When defects in work or services cannot be corrected by re-performance, the City may (1) require the Contractor to take necessary action to ensure that future performance conforms to Contract requirements and (2)

reduce the Contract price to reflect the reduced value of the work or services performed.

- C. If the Contractor fails to promptly perform the defective work or services again or to take the necessary action to ensure future performance is in conformity with Contract requirements, the City may (1) by Contract or otherwise, perform the services and charge to the Contractor any cost incurred by the City that is directly related to the performance of such work or service or (2) terminate the Contract for breach of contract.

## **7. SUBCONTRACTORS, ASSOCIATES, AND OTHER CONTRACTORS**

- A. Any subcontractor, outside associates, or other contractors used by the Contractor in connection with Contractor's work under this Contract shall be limited to individuals or firms that are specifically identified by the Contractor in the Contractor's proposal and agreed to by the City. The Contractor shall obtain the City's Project Manager's written consent before making any substitution of these subcontractors, associates, or other contractors.
- B. The Contractor shall include a flow down clause in all of its subcontracts, agreements with outside associates, and agreements with other contractors. The flow down clause shall cause all of the terms and conditions of this Contract, including all of the applicable parts of the Contract Documents, to be incorporated into all subcontracts, agreements with outside associates, and agreements with other contractors. The flow down clause shall provide clearly that there is no privity of contract between the City and the Contractor's subcontractors, outside associates, and other contractors.

## **8. KEY PERSONNEL**

The key personnel listed in the proposal and/or below will be the individuals used in the performance of the work. If any of the listed key personnel leave employment or are otherwise not utilized in the performance of the work, approval to substitute must be obtained by the Contractor from the City's Project Manager. Any substitute shall have the same or a higher standard of qualifications that the key personnel possessed at the time of Contract award.

## **9. START AND CONTINUANCE OF WORK**

It is further agreed that the Contractor will start work promptly and continue to work diligently until this Contract is completed.

The following provisions shall apply to this Contract and shall take precedence and control in the event of conflict with any other provisions of the Contract:

## **10. APPROPRIATION OF FUNDS**

This Contract is expressly made subject to the limitations of the Colorado Constitution and Section 7-60 of the Charter of the City of Colorado Springs. Nothing herein shall constitute, nor be deemed to constitute, the creation of a debt or multi-year fiscal obligation or an obligation of future appropriations by the City Council of Colorado Springs, contrary to Article X, § 20, Colo. Const., or any other constitutional, statutory, or charter debt limitation. Notwithstanding any other provision of this Contract, with respect to any financial obligation of the City which may arise under this Agreement in any fiscal year after the year of execution, in the event the budget or other means of appropriation for any such year fails to provide funds in sufficient amounts to discharge such obligation, such failure (i) shall act to terminate this Contract at such time as the then-existing and available appropriations are depleted, and (ii) neither such failure nor termination shall constitute a default or breach of this Contract, including any sub-agreement, attachment, schedule, or exhibit thereto, by the City. As used herein, the term "appropriation" shall mean and include the due adoption of an appropriation ordinance and budget and the approval of a Budget Detail Report (Resource Allocations) which contains an allocation of sufficient funds for the performance of fiscal obligations arising under this Contract.

## **11. CHANGES**

The Contractor and the City agree and acknowledge as a part of this Contract that no change order or other form or order or directive may be issued by the City which requires additional compensable work to be performed, which work causes the aggregate amount payable under the Contract to exceed the amount appropriated for this Contract as listed above, unless the Contractor has been given a written assurance by the City that lawful appropriations to cover the costs of the additional work have been made or unless such work is covered under a remedy-granting provision of this Contract. The Contractor and the City further agree and acknowledge as a part of this Contract that no change order or other form or order or directive which requires additional compensable work to be performed under this Contract shall be issued by the City unless funds are available to pay such additional costs, and, regardless of any remedy-granting provision included within this Contract, the Contractor shall not be entitled to any additional compensation for any change which increases or decreases the Contract completion date, or for any additional compensable work performed under this Contract, and expressly waives any rights to additional compensation, whether by law or equity, unless, prior to commencing the additional work, the Contractor was given a written change order describing the change in Contract completion date or the additional compensable work to be performed, and setting forth the amount of compensation to be paid, which change order was signed by the authorized City representative. The amount of compensation to be paid, if any, shall be deemed to cover any and all additional general, extended overhead, direct, indirect or other cost or expense or profit of the Contractor whatsoever. It is the Contractor's sole responsibility to know, determine,

and ascertain the authority of the City representative signing any change order under this Contract.

No change to this Contract shall be valid unless duly approved and issued in writing by the City of Colorado Springs Procurement Services Division. The City shall not be liable for any costs incurred by the Contractor resulting from work performed for changes not issued in writing by the City of Colorado Springs Procurement Services Division.

## **12. ASSIGNMENT**

No assignment or transfer by the Contractor of this Contract or any part thereof or of the funds to be received thereunder by the Contractor will be recognized unless such assignment has had the prior written approval of the City and the surety has been given due notice of such assignment. Such written approval by the City shall not relieve the Contractor of the obligations under the terms of this Contract. In addition to the usual recitals in assignment contracts, the following language must be included in the assignment:

It is agreed that the funds to be paid to the assignee under this assignment are subject to a prior lien for services rendered or materials supplied for the performance of the work called for in said contract in favor of all persons, firms, or corporations rendering such services or supplying such materials.

## **13. CHOICE OF LAW**

This Contract is subject to and shall be interpreted under the law of the State of Colorado, and the Charter, City Code, Ordinances, Rules and Regulations of the City of Colorado Springs, Colorado, a Colorado home rule city. Court venue and jurisdiction shall be exclusively in the Colorado District Court for El Paso County, Colorado. The Parties agree that the place of performance for this Contract is deemed to be in the City of Colorado Springs, El Paso County, State of Colorado. The Contractor shall ensure that the Contractor and the Contractor's employees, agents, officers and subcontractors are familiar with, and comply with, applicable Federal, State, and Local laws and regulations as now written or hereafter amended.

## **14. WORKERS' COMPENSATION INSURANCE**

Contractor shall take out and maintain during the Period of Performance, Colorado Worker's Compensation Insurance for the Contractor and all employees of the Contractor. If any service is sublet by the Contractor, the Contractor shall require the subcontractor to provide the same coverage for the subcontractor and subcontractor's employees. Workers' Compensation Insurance shall include occupational disease provisions covering any obligations of the Contractor in accord with the provisions of the Workers' Compensation Act of Colorado.

## **15. INDEMNIFICATION**

Contractor agrees that the Contractor shall indemnify, defend and hold harmless the City, its officers, employees and agents, from and against any and all loss, damage, injuries, claims, cause or causes of action, or any liability whatsoever resulting from, or arising out of, or in connection with the Contractor's obligations or actions under this Contract caused by any willful or negligent error, omission or act or a failure to observe any applicable standard of care by the Contractor or any person employed by it or anyone for whose acts the Contractor is legally liable. In consideration of the award of this Contract, to the extent damages are covered by insurance, the Contractor agrees to waive all rights of subrogation against the City, its subsidiary, parent, associated and/or affiliated entities, successors, or assigns, its elected officials, trustees, employees, agents, and volunteers for losses arising from the work performed by the Contractor for the City.

## **16. INDEPENDENT CONTRACTOR**

In the performance of the Contractor's obligations under this Contract, it is understood, acknowledged and agreed between the parties that the Contractor is at all times acting and performing as an independent contractor, and the City shall neither have nor exercise any control or direction over the manner and means by which the Contractor performs the Contractor's obligations under this Contract, except as otherwise stated within the Contract terms. The City shall not provide any direction to the Contractor on the work necessary to complete the project. Contractor understands that it is an independent contractor responsible for knowing how to perform all work or tasks necessary to complete project. The Contractor understands and agrees that the Contractor and the Contractor's employees, agents, servants, or other personnel are not City employees. The Contractor shall be solely responsible for payment of salaries, wages, payroll taxes, unemployment benefits or any other form of compensation or benefit to the Contractor or any of the Contractor's employees, agents, servants or other personnel performing services or work under this Contract, whether it is of a direct or indirect nature. Further in that regard, it is expressly understood and agreed that for such purposes neither the Contractor nor the Contractor's employees, agents, servants or other personnel shall be entitled to any City payroll, insurance, unemployment, worker's compensation, retirement or any other benefits whatsoever.

## **17. APPLICABLE LAW AND LICENSES**

In the conduct of the services or work contemplated in this Contract, the Contractor shall ensure that the Contractor and all subcontractors comply with all applicable state, federal and City and local law, rules and regulations, technical standards or specifications. The Contractor shall qualify for and obtain any required licenses prior to commencement of work.

## **18. PRIOR AGREEMENTS**

This is a completely integrated Contract and contains the entire agreement between the parties. Any prior written or oral agreements or representations regarding this Contract shall be of no effect and shall not be binding on the City. This Contract may only be amended in writing, and executed by duly authorized representatives of the parties hereto.

## **19. INTELLECTUAL PROPERTY**

The Parties hereby agree, and acknowledge, that all products, items writings, designs, models, examples, or other work product of the Contractor produced pursuant to this Contract are works made for hire, and that the City owns, has, and possesses any and all ownership rights and interests to any work products of the Contractor made under this Contract, including any and all copyright, trademark, or patent rights, and that compensation to the Contractor for Agreement and acknowledgment of this intellectual property right section of this Contract is included in any compensation or price whatsoever paid to the Contractor under this Contract. It is the intent of the parties that the City shall have full ownership and control of the Contractor's work products produced pursuant to this Contract, and the Contractor specifically waives and assigns to the City all rights which Contractor may have under the 1990 Visual Artists Rights Act, federal, and state law, as now written or later amended or provided. In the event any products, items writings, designs, models, examples, or other work product produced pursuant to this Contract is deemed by a court of competent jurisdiction not to be a work for hire under federal copyright laws, this intellectual property rights provision shall act as an irrevocable assignment to the City by the Contractor of any and all copyrights, trademark rights, or patent rights in the Contractor's products, items writings, designs, models, examples, or other work product produced pursuant to this Contract, including all rights in perpetuity. Under this irrevocable assignment, the Contractor hereby assigns to the City the sole and exclusive right, title, and interest in and to the Contractor's products, items writings, designs, models, examples, or other work product produced pursuant to this Contract, without further consideration, and agrees to assist the City in registering and from time to time enforcing all copyrights and other rights and protections relating to the Contractor's products, items writings, designs, models, examples, or other work product in any and all countries. It is the Contractor's specific intent to assign all right, title, and interest whatsoever in any and all copyright rights in the Contractor's products, items writings, designs, models, examples, or other work product produced pursuant to this Contract, in any media and for any purpose, including all rights of renewal and extension, to the City. To that end, the Contractor agrees to execute and deliver all necessary documents requested by the City in connection therewith and appoints the City as Contractor's agent and attorney-in-fact to act for and in Contractor's behalf and stead to execute, register, and file any such applications, and to do all other lawfully permitted acts to further the registration, prosecution, issuance, renewals, and extensions of copyrights or other protections with the same legal force and effect as if executed by

the Contractor; further, the parties expressly agree that the provisions of this intellectual property rights section shall be binding upon the parties and their heirs, legal representatives, successors, and assigns.

## **20. WAIVERS**

No waiver of default by the City of any of the terms, covenants, and conditions hereof to be performed, kept, and observed by the Contractor shall be construed, or shall operate, as a waiver of any subsequent default of any of the terms, covenants, or conditions herein contained to be performed, kept, and observed by the Contractor.

## **21. THIRD PARTIES**

It is expressly understood and agreed that enforcement of the terms and conditions of this Contract, and all rights of action relating to such enforcement, shall be strictly reserved to the Parties hereto, and nothing contained in this Contract shall give or allow any such claim or right of action by any other or third person or entity on such Contract. It is the express intention of the Parties hereto that any person or entity, other than the Parties to this Contract, receiving services or benefits under this Contract shall be deemed to be incidental beneficiaries only.

## **22. TERMINATION**

### **A. Termination for Convenience.**

By signing this Contract, Contractor represents that it is a sophisticated business and enters into the Contract voluntarily, has calculated all business risks associated with this Contract, and understands and assumes all risks of being terminated for convenience, whether such risks are known or not known. Contractor agrees that the City may terminate this Contract at any time for convenience of the City, upon written notice to the Contractor. Contractor expressly agrees to and assumes the risk that the City shall not be liable for any costs or fees of whatsoever kind and nature if termination for convenience occurs before Contractor begins any work or portion of the work. Contractor further expressly agrees and assumes the risks that the City shall not be liable for any unperformed work, anticipated profits, overhead, mobilizations costs, set-up, demobilization costs, relocation costs of employees, layoffs or severance costs, administrative costs, productivity costs, losses on disposal of equipment or materials, cost associated with the termination of subcontractors, costs associated with purchase orders or purchases, or any other costs or fees of any kind and nature, if Contractor has started or performed portions of the Contract prior to receiving notice from the City. The City shall be liable only for the portions of work Contractor actually satisfactorily completed up to the point of the issuance of the Notice of Termination for convenience. Upon receipt of this notice the Contractor shall immediately: discontinue all services affected (unless the notice directs otherwise), and deliver to the City all data, drawings, specifications,

reports, estimates, summaries, and other information and materials accumulated in performing this Contract, whether completed or in process.

B. Termination for Cause: The occurrence of any one or more of the following events (“Event of Default”) will justify termination for cause:

- i. Contractor’s failure to perform the work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment or failure to adhere to the progress schedule as adjusted from time to time.
- ii. Contractor’s disregard of the laws or regulations of any public body having jurisdiction.
- iii. Contractor’s disregard of the authority of Project Manager.
- iv. Contractor’s violation in any material provision of the Contract Documents.
- v. Contractor’s failure to make prompt payments to its subcontractors, and suppliers of any tier, or laborers or any person working on the work by, through, or under the Contractor or any of them, any all of their employees, officers, servants, members, and agents.
- vi. Contractor files a petition commencing a voluntary case under the U.S. Bankruptcy Code, or for liquidation, reorganization, or an arrangement pursuant to any other U.S. or state bankruptcy Laws, or shall be adjudicated a debtor or be declared bankrupt or insolvent under the U.S. Bankruptcy Code, or any other federal or state laws relating to bankruptcy, insolvency, winding-up, or adjustment of debts, or makes a general assignment for the benefit of creditors, or admits in writing its inability to pay its debts generally as they become due, or if a petition commencing an involuntary case under the U.S. Bankruptcy Code or an answer proposing the adjudication of Contractor as a debtor or bankrupt or proposing its liquidation or reorganization pursuant to the Bankruptcy Code or any other U.S. federal or state bankruptcy laws is filed in any court and Contractor consents to or acquiesces in the filing of that pleading or the petition or answer is not discharged or denied within sixty (60) Calendar Days after it is filed.
- vii. A custodian, receiver, trustee or liquidator of Contractor, all or substantially all of the assets or business of Contractor, or of Contractor’s interest in the Work or the Contract, is appointed in any proceeding brought against Contractor and not discharged within sixty (60) Calendar Days after that appointment, or if Contractor shall consent to or acquiesces in that appointment.
- viii. Contractor fails to commence correction of defective work or fails to correct defective work within a reasonable period of time after written notice.

If one or more of the events identified in Paragraphs i-viii above occur, City may give Contractor written notice of the event and direct the event be cured. Any such Notice to Cure will Contractor a minimum of ten (10) calendar days to prepare and submit to the Project Manager a plan to correct the Event of Default. If such plan to correct the Event of Default is not submitted to the Project Manager within ten (10) days after the date of the written notice or such plan is unacceptable to the City, the City may, give Contractor (and the Surety, if any) written notice that Contractor's services are being terminated for cause. Upon delivery of the termination notice, City may terminate the services of Contractor in whole or in part, exclude Contractor from the site, and take possession of the work and of all Contractor's tools, appliances, construction equipment, and machinery at the project site, and use the same to the full extent they could be used by Contractor (without liability to Contractor for trespass or conversion), incorporate in the work all materials and equipment stored at the site or for which City has paid Contractor but which are stored elsewhere, and finish the work as City may deem expedient. In such case, Contractor shall not be entitled to receive any further payment until Certificate of Completion of the work. In the event City terminates this Contract for Cause and the cost of completing the work exceeds the unpaid balance of the Contract price, Contractor shall pay City for any costs of completion which exceed the Contract price when combined with all amounts previously paid to Contractor. When exercising any rights or remedies under this paragraph City shall not be required to obtain the lowest price for the work performed. Should the cost of such completion, including all proper charges, be less than the original Contract price, the amount so saved shall accrue to the City. Neither the City nor any officer, agent or employee of the City shall be in any way liable or accountable to the Contractor or the Surety for the method by which the completion of the said work, or any portion thereof, may be accomplished or for the price paid.

Where Contractor's services have been so terminated by City, the termination will not affect any rights or remedies of City against Contractor or Surety then existing or which may thereafter accrue. Any retention or payment of moneys due Contractor by City will not release Contractor from liability.

C. Termination Notice. Upon receipt of a termination notice, whether for convenience or cause, the Contractor shall immediately: discontinue all services affected (unless the notice directs otherwise), and deliver to the City all data, drawings, specifications, reports, estimates, summaries, and other information and materials accumulated in performing this Contract, whether completed or in process.

D. Removal of Equipment. Except as provided above, in the case of termination of this Contract before completion from any cause whatever, the Contractor, if notified to do so by the City, shall promptly remove any part or all of Contractor's equipment and supplies from the property of the City, failing which the City shall have the right to remove such equipment and supplies at the expense of the Contractor.

## **23. BOOKS OF ACCOUNT AND AUDITING**

The Contractor shall make available to the City if requested, true and complete records, which support billing statements, reports, performance indices, and all other related documentation. The City's authorized representatives shall have access during reasonable hours to all records, which are deemed appropriate to auditing billing statements, reports, performance indices, and all other related documentation. The Contractor agrees that it will keep and preserve for at least seven years all documents related to the Contract which are routinely prepared, collected or compiled by the Contractor during the performance of this Contract.

The City's Auditor and the Auditor's authorized representatives shall have the right at any time to audit all of the related documentation. The Contractor shall make all documentation available for examination at the Auditor's request at either the Auditor's or Contractor's offices, and without expense to the City.

## **24. ILLEGAL ALIENS**

Illegal Aliens - Public Contracts for Services - Compliance with Title 8, Article 17.5, Colorado Revised Statutes: The Contractor acknowledges, understands, agrees, and certifies that: In the performance of any work or the provision of any services by the Contractor under this Contract, the Contractor shall not knowingly employ or contract with an illegal alien to perform work under this Contract; or enter into a contract with any 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 Contract or under the subcontract to this Contract. The Contractor certifies in accord with Section 8-17.5-102(1) C.R.S. that, on the date the Contractor signs this Contract, the Contractor does not knowingly employ or Contract with an illegal alien who will perform work under this Contract and that the Contractor shall participate in the e-verify program or Colorado Department of Labor and Employment program in order to confirm the employment eligibility of all employees who are newly hired for employment or to perform work under this Contract. The Contractor is expressly prohibited from using the e-verify program or Colorado Department of Labor and Employment program procedures to undertake pre-employment screening of job applicants while this Contract and any services under this Contract are being performed. If the Contractor obtains actual knowledge that a subcontractor performing work under this Contract for services knowingly employs or contracts with an illegal alien, the Contractor shall notify the subcontractor and the City 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 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 the three days the subcontractor provides information to establish that the subcontractor has not knowingly employed or contracted with an illegal alien. The Contractor shall comply with any request by the City, federal government, or the

Colorado Department of Labor and Employment made in the course of an investigation. If the Contractor violates or fails to comply with any provision of C.R.S. 8-17.5-101 et seq, the City may terminate this Contract for breach of contract. If this Contract is so terminated, the Contractor shall be liable for any actual and consequential damages to the City.

## **25. COMPLIANCE WITH IMMIGRATION AND CONTROL ACT**

Contractor certifies that Contractor has complied with the United States Immigration and Control Act of 1986. All persons employed by Contractor for performance of this Contract have completed and signed Form I-9 verifying their identities and authorization for employment.

## **26. LABOR**

The Contractor shall employ only competent and skilled workmen and foremen in the conduct of work on this Contract. The Contractor shall at all times enforce strict discipline and good order among Contractor's employees. The Project Manager shall have the authority to order the removal from the work of any person, including Contractor's or any subcontractor's employees, who refuses or neglects to observe any of the provisions of these Plans or Specifications, or who is incompetent, abusive, threatening, or disorderly in conduct and any such person shall not again be employed on the Project.

In accord with the Keep Jobs in Colorado Act, codified at sections 8-17-101, et seq., C.R.S., Colorado labor shall be employed to perform the work to the extent of not less than eighty percent (80%) of each type or class of labor in the several classifications of skilled and common labor employed on this Project et seq. =; provided however, that this paragraph shall not apply if the Project receives federal funding.

In no event shall the City be responsible for overtime pay.

## **27. GRATUITIES**

- A. This Contract may be terminated if the Mayor, the Mayor's designee, and/or the Procurement Services Manager determine, in their sole discretion, that the Contractor or any officer, employee, agent, or other representative whatsoever, of the Contractor offered or gave a gift or hospitality to a City officer, employee, agent or Contractor for the purpose of influencing any decision to grant a City contract or to obtain favorable treatment under any City contract.
- B. The terms "hospitality" and "gift" include, but are not limited to, any payment, subscription, advance, forbearance, acceptance, rendering or deposit of money, services, or anything of value given or offered, including but not limited to food, lodging, transportation, recreation or entertainment, token or award.

- C. Contract termination under this provision shall constitute a breach of contract by the Contractor, and the Contractor shall be liable to the City for all costs of reletting the contract or completion of the project. Further, if the Contractor is terminated under this provision, or violates this provision but is not terminated, the Contractor shall be subject to debarment under the City's Procurement Regulations. The rights and remedies of the City provided in this clause shall not be exclusive and are in addition to any other rights and remedies provided by law or under this Contract.

## **28. NON-DISCRIMINATION**

- A. In accord with section 24-34-402, C.R.S., the Contractor will not discriminate against any employee or applicant for employment because of disability, race, creed, color, sexual orientation, religion, age, national origin, or ancestry. But, with regard to a disability, it is not a discriminatory or an unfair employment practice for an employer to take into consideration disability if there is no reasonable accommodation that the employer can make with regard to the disability, the disability actually disqualifies the person from the job, and the disability has a significant impact on the job. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their disability, race, creed, color, sexual orientation, religion, age, national origin, or ancestry. Such actions shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training; including apprenticeship.
- B. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
- C. The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to disability, race, creed, color, sexual orientation, religion, age, national origin, or ancestry.
- D. Contractor will cooperate with the City in using Contractor's best efforts to ensure that Disadvantaged Business Enterprises are afforded the maximum opportunity to compete for subcontracts or work under this Contract.

## **29. ORDER OF PRECEDENCE**

Any inconsistency in this Contract shall be resolved by giving precedence in the following order:

- A. This Contract document with its terms and conditions
- B. Specific Construction Terms and Conditions

- C. General Construction Terms and Conditions
- D. The Statement of Work
- E. Specific Specifications
- F. General Specifications
- G. Other Appendices, Attachments, Exhibits, or Schedules

### **30. HEADINGS**

The section headings contained in this Contract are for reference purposes only and shall not affect the meaning or interpretation of this Contract.

### **31. DISPUTES**

- A. All administrative and contractual disputes arising from or related to this Contract other than those arising under Unanticipated Circumstances provisions (in section 107.27 of Schedule B General Construction Terms and Conditions) shall be addressed in the following manner:
  - i. If either Party disputes or disagrees with a Contract term or the other Party's interpretation of a Contract term or has any other administrative or contractual dispute not addressed in the Unanticipated Circumstances provisions, such Party shall promptly give the other Party written notice of said dispute.
  - ii. The Parties shall hold a meeting as soon as reasonably possible, but in no event later than thirty (30) calendar days from the initial written notice of the dispute, attended by persons with decision-making authority regarding the dispute, to attempt in good faith to negotiate a resolution of the dispute; provided, however, that no such meeting shall be deemed to vitiate or reduce the obligations and liabilities of the Parties or be deemed a waiver by a Party of any remedies to which such Party would otherwise be entitled unless otherwise agreed to by the Parties in writing.
  - iii. If, within thirty (30) calendar days after such meeting, the Parties have not succeeded in negotiating a resolution of the dispute, they agree to submit the dispute to non-binding mediation and to bear equally the costs of the mediation.
  - iv. The Parties will jointly appoint a mutually acceptable mediator. If they fail to do so within twenty (20) calendar days from the conclusion of the negotiation period, they shall each select a mediator. The two mediators will then appoint a third mediator who shall conduct mediation for the Parties as the sole mediator.
  - v. The Parties agree to participate in good faith in the mediation and negotiations for a period of thirty (30) calendar days. The substantive and procedural law of the State of Colorado shall apply to the proceedings. If the Parties are not successful in resolving the dispute through mediation, then the Parties shall be free to pursue any other remedy afforded by the laws of the State of Colorado.

- vi. Until final resolution of any dispute hereunder, the Contractor shall diligently proceed with the performance of this Contract as directed by the City. For purposes of this Contract, termination for convenience shall not be deemed a dispute. The City of Colorado Springs and the Contractor agree to notify each other in a timely manner of any claim, dispute, or cause of action arising from or related to this Contract, and to negotiate in good faith to resolve any such claim, dispute, or cause of action. To the extent that such negotiations fail, the City of Colorado Springs and the Contractor agree that any lawsuit or cause of action that arises from or is related to this Contract shall be filed with and litigated only by the Colorado District Court for El Paso County, CO.

### **32. DELIVERY**

The City may cancel this Contract or any portion thereof if delivery is not made when and as specified, time being of the essence in this Contract. Contractor shall pay the City for any loss or damage sustained by the City because of failure to perform in accordance with this Contract.

### **33. PAYMENTS**

All invoices shall be sent to the Project Manager identified in this Contract.

The City will pay the Contractor, upon submission of proper invoices, the prices stipulated in the Contract for services rendered and accepted, less any deductions provided in this Contract within 30 days (Net 30). The City will not pay late fees or interest. Any discount payment terms offered on the invoice may be taken by the City.

All payments for Construction will be made in accordance with the Payment provisions found in Schedule B – General Construction Terms and Conditions.

Each invoice must contain at least the following information:

Contract number, issued purchase order number, invoice number, invoice date, timeframe covered by invoice, type and amount of labor and materials used for that time period, dollar amount in unit price, extended price, and total value of invoice.

#### **IF T&M**

The City will make payments for services on a monthly basis for services performed during the previous month in accordance with this Contract. All labor Invoices shall include labor categories, rates, hours worked, and total amounts per category. All labor categories and rates charged must be included in this Contract. No other categories or rates will be allowed or payable. All labor invoices are subject to City approval.

Materials will be payable on a reimbursable basis with no additional profit, fee, overhead, handling, or General and Administrative (G&A) costs. All costs for materials shall be approved by the City Contracts Specialist before the costs are incurred and payable.

The City will pay the Contractor, upon submission of proper invoices, the prices stipulated in the Contract for services rendered and accepted, less any deductions provided in this Contract within 30 days (Net 30). The City will not pay late fees or interest. Any discount payment terms offered on the invoice may be taken by the City.

### **34. INSPECTION OF SERVICES**

The Contractor is responsible for performing or having performed all inspections and tests necessary to substantiate that the services furnished under this Contract conform to Contract requirements, including any applicable technical requirements for specified manufacturers' parts. This clause takes precedence over any City inspection and testing required in the Contract's specifications, except for specialized inspections or tests specified to be performed solely by the City.

- A. Definition of "services", as used in this clause, includes services performed, workmanship, and material furnished or utilized in the performance of services.
- B. The Contractor shall provide and maintain an inspection system acceptable to the City covering the services under this Contract. Complete records of all inspection work performed by the Contractor shall be maintained and made available to the City during Contract performance and for as long afterwards as the Contract requires.
- C. The City has the right to inspect and test all services called for by the Contract, to the extent practicable at all times and places during the term of the Contract. The City will perform inspections and tests in a manner that will not unduly delay the work.
- D. If the City performs inspections or test on the premises of the Contractor or a subcontractor, the Contractor shall furnish, and shall require subcontractors to furnish, at no increase in Contract price, all reasonable facilities and assistance for the safe and convenient performance of these duties.

### **35. SECURITY**

The City maintains security requirements regarding access to City buildings and other City workplaces and worksites on City property. All Contractor personnel accessing City buildings, workplaces, or worksites, may be required to produce a valid, Government issued picture identification. Contractor personnel lacking such

identification may not be allowed access to such sites. No costs incurred by the Contractor due to City security requirements shall be allowable or payable under this Contract.

### **36. TIME IS OF THE ESSENCE**

In as much as the Contract concerns a needed or required service, the terms, conditions, and provisions of the Contract relating to the time of performance and completion of work are of the essence of this Contract. The Contractor shall begin work on the day specified and shall prosecute the work diligently so as to assure completion of the work within the number of calendar days or date specified, or the date to which the time for completion may have been extended.

### **37. EMPLOYMENT OF LABOR**

The Contractor shall comply with, and defend and hold the City harmless from any violation of all laws and lawful rules and regulations, both of the State of Colorado and of the United States, relating to Workmen's Compensation, unemployment compensation, Social Security, payment for overtime, and all other expenses and conditions of employment under this Contract.

### **38. SALES TAX**

The Contractor must have a tax-exemption certificate from the Colorado Department of Revenue for this project. The certificate does not apply to City of Colorado Springs Sales and Use Tax which shall be applicable. The tax exempt project number and the exemption certificate only applies to County, PPRTA (Pikes Peak Rural Transportation Authority), and State taxes when purchasing construction and building materials **to be incorporated into this project.**

Furthermore, the exemption **does not** include or apply to the purchase or rental of equipment, supplies or materials that **do not become a part of the completed project or structure.** Such purchases and rentals are subject to full applicable taxation.

All contracts with subcontractors must include the City of Colorado Springs Sales and Use Tax on the work covered by the Contract, and other taxes as applicable.

Note: For all equipment, materials and supplies incorporated into the work purchased from vendors or suppliers not licensed to collect City Sales Tax (i.e. out of state suppliers, etc.), City Use Tax is due and payable to the City. The Contractor shall execute and deliver, and shall cause the Contractor's subcontractors to execute and deliver to the City Sales Tax Office, ST 16 forms listing all said equipment, materials and supplies and the corresponding use tax due, along with payment for said taxes. Any outstanding taxes due may be withheld from the final payment due the Contractor and may result in suspension of Contractor from Proposalding on City projects.

Forms and instructions can be downloaded at <https://coloradosprings.gov/cat/government/tax-information/sales-tax>. Questions can be directed to the City Sales Tax Division at (719) 385-5903.

Our Registration Numbers are as follows:  
City of Colorado Springs  
Federal I.D.: 84-6000573  
Federal Excise: A-138557  
State Sales Tax: 98-03479

The Contractor's payment or exemption of State of Colorado, El Paso County and City Sales and Use Taxes shall be as specified herein.

### **39. SEVERABILITY**

If any terms, conditions, or provisions of this Contract shall be held unconstitutional, illegal, or void, such finding shall not affect any other terms, conditions, or provisions of this Contract.

### **40. LIABILITY OF CITY EMPLOYEES**

All authorized representatives of the City are acting solely as agents and representatives of the City when carrying out and exercising the power or authority granted to them under the Contract. There shall not be any liability on them either personally or as employees of the City.

### **41. APPENDICES**

The following Appendices are made a part of this Agreement:

1. Appendix A – Additional Terms and Conditions
2. Appendix B – Contractor's Proposal,
3. Appendix C – Statement of Work.
4. Appendix D – Project Schedule
5. Appendix E – Exhibits from the RFP
  - Performance Bond (Exhibit 8 of the RFP)
  - Labor and Material Payment Bond (Exhibit 9 of the RFP)
  - Maintenance Bond (Exhibit 10 of the RFP)
  - Notification of Utilities (Exhibit 11 of the RFP)
6. Schedule A – Proposal Price Sheet
7. Schedule B – General Construction Terms and Conditions
8. Schedule C – Special Construction Terms and Conditions
9. Schedule D – General Specifications
10. Schedule E – Special Specifications
11. Schedule F – Insurance Requirements

**CONTRACT SIGNATURE PAGE**

The Contractor certifies in accord with Section 8-17.5-102(1) C.R.S. that, on the date the Contractor signs this Contract, the Contractor does not knowingly employ or Contract with an illegal alien who will perform work under this Contract and that the Contractor shall participate in the e-verify program or Colorado Department of Labor and Employment program in order to confirm the employment eligibility of all employees who are newly hired for employment or to perform work under this Contract. The Contractor is expressly prohibited from using the e-verify program or Colorado Department of Labor and Employment program procedures to undertake pre-employment screening of job applicants while this Contract and any services under this Contract are being performed.

**IN WITNESS WHEREOF**, the parties have caused these presents to be executed on the day and the year first above written.

This Contract is executed in one (1) original copy.

<b>THE CITY OF COLORADO SPRINGS, COLORADO:</b>

<b>SECOND PARTY:</b>	
Corporate Name	
Signature	Date
Title	

### EXHIBIT 3 EXCEPTIONS

Print the words "no exceptions"(here)\_\_\_\_\_ if there are no exceptions taken to any of the terms, conditions, or specifications of these proposal documents or contract.

If there are exceptions taken to any of the terms, conditions, or specifications of the proposal document or contract, they must be clearly stated on a separate sheet of paper attached to this sheet and returned with your proposal.

**Note:** All potential Offerors are hereby advised that exceptions taken may be considered during the evaluation phase which may affect the final scoring of proposals. Offerors stipulating that the City must use their contract or agreement may be determined non-responsive and their Proposal determined unacceptable.

Company Name: \_\_\_\_\_

Address: \_\_\_\_\_  
(City, State and Zip Code)

Authorized Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Printed Name/Title: \_\_\_\_\_

Return this form with your Proposal.

## EXHIBIT 4 MINIMUM INSURANCE REQUIREMENTS

The following listed minimum insurance requirements shall be carried by all contractors and consultants unless otherwise specified in the City's solicitation package, Special Provisions, or Standard Specifications.

1.	X	Workers' Compensation and Employers Liability as required by statute. Employers Liability coverage is to be carried for a minimum limit of \$100,000.
2.	X	Automobile Liability covering any auto (including owned, hired, and non-owned autos) with a minimum of \$1,000,000 each accident combined single limit.
3.	X	Commercial General Liability for limits not less than \$1,000,000 combined single limit for bodily injury and property damage for each occurrence. Coverage shall include blanket contractual, broad form property damage, products and completed operations and contractors protective endorsements.
4.	-	Liquor Legal Liability Insurance: If the event producer is a business that manufactures, distributes, sells, or serves alcoholic beverages, and intends to serve or sell alcoholic beverages at an event, they must also submit a Certificate of Insurance providing proof of a liquor legal liability insurance policy or properly endorsed general liability policy. <ul style="list-style-type: none"> <li>a. If this event producer hires a vendor to serve or sell alcoholic beverages, rather than providing the alcohol themselves, they must submit a Certificate of Insurance from the vendor providing proof of a liquor legal liability insurance policy or properly endorsed general liability policy.</li> <li>b. In either case, the minimum acceptable limit of liability per claim and aggregate is \$1,000,000. This requirement applies to the business or group which serves or sells the alcohol.</li> </ul>
5.	-	Technology Errors and Omissions Liability including Network Security and Privacy Liability not less than \$3,000,000 per loss with a \$3,000,000 aggregate. <ul style="list-style-type: none"> <li>a. The policy shall provide a waiver of subrogation.</li> <li>b. The insurance shall provide coverage for liability arising from theft, dissemination and/or use of confidential information stored or transmitted in electronic form.</li> <li>c. Network Security Liability arising from the unauthorized access to, use of or tampering to gain access to your services including denial of service, unless caused by a mechanical or electrical failure</li> <li>d. Liability arising from the introduction of a computer virus into, or otherwise causing damage to, a customer's or third person's computer, computer system, network or similar computer related property and the data, software, and programs thereon.</li> </ul>
6.	X	Excess Liability for limits not less than \$1,000,000 combined single limit for bodily injury and property damage for each occurrence.
7.	-	Builders Risk or Installation Floater Insurance: Contractor shall purchase and maintain property insurance written on a builder's risk "all-risk" or equivalent policy form in the amount of the initial Contract Sum, plus value of subsequent Contract Modifications and cost of materials supplied or installed by others, comprising total value for the



## EXHIBIT 5 SCOPE OF WORK FOR CAMP CREEK CHANNEL STABILIZATION

The *Project Specific Special Provisions* amend or supplement the *General Construction Terms & Conditions* of the Construction Contract and other provisions of the Contract Documents as indicated below. All Provisions, which are not so amended or supplemented, remain in full force and effect.

### 5.0 STANDARD SPECIFICATIONS

#### 5.01 STANDARD SPECIFICATIONS

The Standard Specifications for this project shall be "CITY OF COLORADO SPRINGS ENGINEERING DIVISIONS STANDARD SPECIFICATIONS", (revised March 2005), except as modified hereinafter, which are incorporated in the contract documents by reference as though embodied herein in their entirety.

All Contractors on this project are required to have on the job site and utilize the current updated copy of the City of Colorado Springs Engineering Divisions Standard Specification.

Copies are available on line through the City of Colorado Springs internet site or for purchase at the cost of \$20.00 from the City of Colorado Springs,– Office Services Unit, 30. South Nevada Avenue, Suite L01, Colorado Springs, during regular business hours.

#### 5.02 UTILITY SPECIFICATIONS

Listed below are utility department specifications that should be utilized (current issue or revision) in the construction and/or protection of the respective utility lines. No work involving water, wastewater, or gas lines is planned to be executed with this project.

Hard copies of these specifications are available at Colorado Springs Utilities Development Services, 111 S. Cascade Avenue, Suite 105, Colorado Springs, Colorado 80903. The specifications can also be accessed online at [www.csu.org/pages/standards-bulletins.aspx](http://www.csu.org/pages/standards-bulletins.aspx).

#### UTILITY SPECIFICATIONS

Colorado Springs Utilities  
Wastewater Line Extension  
And Service Standards

Colorado Springs Utilities  
Water Line Extension  
And Service Standards

Colorado Springs Utilities  
Natural Gas Line Extension  
And Service Standards

Colorado Springs Utilities  
Electric Line Extension  
And Service Standards

## 5.0 PROJECT SPECIFIC SPECIAL CONDITIONS

### 5.01 GENERAL

Work to be completed under this contract consists of furnishing all labor, materials, equipment, accessories, and performing all operations to complete the project work in accordance with the Drawings and Specifications.

All work shall be completed in accordance with the "**City of Colorado Springs Engineering Divisions Standard Specifications**," (revised March 2005,) referred to hereinafter as "**Standard Specifications**", except as modified in these **Special Conditions** and the **Special Technical Specifications** contained in Schedule C of this document.

The **Contractor** shall visit the jobsite to carefully examine the proposed work. The **Contractor** shall also thoroughly review the Drawings and Specifications. The **Contractor** shall satisfy himself as to the character, quality, and quantities of work to be performed, materials to be furnished, and as to the requirements of these Specifications.

### 5.02 PROJECT DESCRIPTION

#### General

The project consists of restoring approximately 1,500 LF of Monument Branch by filling in the eroded channel bed, constructing four (4) sculpted concrete drop structures, sheet pile cutoff walls, riprap placement, tree plantings, and seeding. The project is located in Monument Branch between Voyager Parkway and I-25.

### 5.03 CONTROL OF WORK

In case of any discrepancies in any of the Drawings, Specifications, Special Conditions, and Technical Specifications, the order of precedence is as follows:

- a) Project Specific Special Conditions
- b) Special Technical Specifications
- c) Plans
  - i) General Plans
  - ii) Field Markings and Construction Oversight  
(Figure dimensions will govern over scaled dimensions on all plans)
- d) General Provisions
- e) City of Colorado Springs Engineering Division Standard Specifications
- f) Colorado Springs Utilities Specifications

#### **5.04 Owner**

The City of Colorado Springs (hereinafter referred to as *Owner*) shall administer this project including the finalization of any change orders, pay estimates and payments of such, acceptance of work, and other matters as stipulated in these Contract Documents.

#### **5.05 Engineer**

*Engineer* refers to the City Engineer of Colorado Springs or designated representative.

#### **5.06 Drawings**

The drawings for this project are separate from the Contract Documents book and are entitled "*Camp Creek Channel Stabilization Plans 2016*" (hereinafter referred to as *The Construction Plans or The Plans*).

#### **5.07 Construction Limits**

The *Contractor* shall limit construction activities to the "Approximate Limits of Disturbance" as shown in the construction plans and details and as described in these special provisions. Even within the designated limits of disturbance there are existing native trees, shrubs and grasses that are desirable to maintain. To the full extent practical, the contractor shall perform the work in a manner that minimizes damage to the existing vegetation.

#### **5.08 INSPECTION**

At all times, representatives of the ***Owner or Owner's Representative*** and representatives of other agencies affected by the construction work, and the ***Owner or Owner's Representative*** shall have the right to enter and inspect any and all parts of the work for compliance with the Drawings and Specifications.

The ***Owner or Owner's Representative*** shall decide any and all questions that may arise as to the quality and acceptability of the materials furnished, the work performed, the manner of performance, and the progress of the work. He shall decide all questions that may arise as to the acceptable fulfillment of the contract. The decision of the ***Owner or Owner's Representative*** shall be final.

The ***Contractor*** shall give inspection personnel a minimum of forty-eight (48) hours notice prior to needing inspection.

#### **5.09 MATERIAL TESTING**

The ***Contractor*** shall give the ***Owner or Owner's Representative*** two (2) days notice before placing earthen fill so that the ***Owner or Owner's Representative*** may arrange for material tests and or observation. The ***Owner or Owner's Representative*** reserves the right to reject any request for placing fill with less than two (2) days notice. The

**Contractor** agrees to pay any minimum call-out charges or standby time for the tester due to his failure to place on schedule for any reason except by the action of the **Owner or Owner's Representative**. The **Owner or Owner's Representative** shall pay for all materials tests taken with the exception of retesting and as specified in the City General Provisions, Section 108.22

#### 5.10 EXISTING UTILITIES

No underground utility locating or utility potholing was performed in the design of this project. The **Contractor** shall field verify the existence and location of all existing utilities which might affect the work and shall notify the **Owner or Owner's Representative** of any utilities not shown on the construction plans. The utilities shown on the Drawings are noted for informational purposes only and are believed to be correct. However, additional utilities may be present in the area. The **Contractor** must take sole responsibility for damage to any utility line encountered whether or not shown on the Drawings and whether or not actually located in the field as shown on the Drawings. The **Contractor** shall notify the utility companies for field locations prior to the start of construction. This section is supplemental to the **City General Provisions, Section 108.09**.

If the exact location and depth of existing underground utilities are unknown, the **Contractor** shall perform all necessary exploratory excavation at his expense to locate these facilities which may affect the work prior to beginning construction. The **Contractor** shall notify the **Engineer** immediately of any utility discrepancies or conflicts.

The **Contractor** shall inform the **Owner or Owner's Representative** of existing utilities that may need to be relocated. The **Contractor** shall be responsible for contacting, coordinating, and requesting relocations from affected utility owners, and scheduling any relocation in his Work Sequence Plan to meet the Contract Time of Performance.

If the **Contractor** requests that utility companies relocate their utilities for his convenience in construction of any portion of the work, the cost of such shall be at the **Contractor's** expense.

Contract time will not be extended to account for repair of utilities that are damaged by the **Contractor** due to his negligence.

The **Contractor** will be required to contact all Utility Owners 72 hours prior to beginning excavation and/or grading.

Full compensation for compliance and cooperation, as required by this section, shall be considered to be included in the prices Proposal for items included on the contract Proposal schedule and no additional compensation will be provided.

#### 5.11 FEES AND PERMITS

Except as noted below, the **Contractor**, prior to commencing any work, shall secure at his own expense (including fees) all of the permits required for the performance of the work. Full compensation for compliance and cooperation, as required by this section,

shall be considered to be included in the prices Proposal for items included on the contract Proposal schedule and no additional compensation will be provided.

The **Owner** will acquire authorization to utilize a Regional 404 permit and a floodplain development permit for the project. The **Contractor** shall perform the work in conformance with the terms of these permits.

The **Contractor** shall obtain at a minimum a **Traffic Control/Access Permit and an approval of an Erosion and Stormwater Quality Control Plan from the City and a Construction Dewatering Permit and CDPS Stormwater Discharge Permit from the Colorado Department of Public Health and Environment.** The **Contractor** shall comply with all requirements of the permits.

The **Contractor** shall submit required permits to the **Owner** for approval at or prior to the preconstruction meeting. The **Contractor** shall also submit a traffic control plan at the preconstruction meeting for approval by the **Owner.** The **Contractor** shall obtain any additional permits required for the construction of the project. The **Contractor** shall comply with all conditions of all the required permits.

#### **5.12 WASTE MATERIALS**

The **Contractor** shall clean up any debris created by his construction activities and shall dispose of the same in suitable trash containers on a daily basis. All debris shall be disposed of off-site at a disposal site approved by the **Owner.** Should the **Contractor** fail to maintain the construction area in a suitable manner, the **Owner** will have the right to contract with a third party and withhold any amounts incurred from the **Contractor's** payment.

#### **5.13 OPERATIONS WITH OTHERS**

The **Owner** reserves the right to have other work performed by other contractors and to permit the public utility companies and others to do work adjacent to or within the site. The **Contractor** shall conduct his operations and shall cooperate with the other parties so as to minimize interference with this other work.

#### **5.14 CONSTRUCTION STAGING AND ACCESS**

Staging areas shall be limited to those shown in the plans. The **Contractor** shall restore the staging areas to the pre-project condition at the completion of construction.

Access to the project area will be shown as on the plans. The **Contractor** shall be responsible for: establishing and maintaining the access route during construction; limiting disturbances from vehicles and equipment to the width and length of the access route that is described in these special provisions and shown on the plans; and restoring the temporary access route to a vegetated state at the completion of construction..

All areas affected by construction shall be cleaned, and restored to the pre-project condition or better at the completion of the project work. All work and costs associated with the use and restoration of staging and access areas shall be considered to be

included in the Proposal price for Erosion and Sediment Control and no additional compensation will be provided.

#### **5.15 SANITARY FACILITIES**

The **Contractor** shall provide suitable temporary sanitary restroom facilities for use by the construction personnel. Wastes collected in the temporary facilities shall be removed and disposed of in a timely and satisfactory manner, as required to maintain the facilities in a sanitary usable condition.

The **Contractor** shall maintain the facilities so that any offensive odor is controlled.

Full compensation for compliance and cooperation, as required by this section, shall be considered to be included in the prices Proposal for items included on the contract Proposal schedule and no additional compensation will be provided.

#### **5.16 CONTRACTOR'S AND OWNERS REPRESENTATIVES**

The **Contractor** shall have on the job at all times as his agent, a competent superintendent capable of reading and thoroughly understanding the **Drawings and Specifications** and being thoroughly experienced in the type of work being performed. The **Owner** will have a representative on the job site periodically to observe work for conformance with the **Drawings and Specifications**, and clarify questions the **Contractor** has relative to the job. The **Contractor** shall provide accurate records of any field changes made during construction.

#### **5.17 DUST AND EROSION CONTROL**

The **Contractor** shall be responsible to install sufficient temporary erosion control facilities in order to minimize erosion in areas impacted by access, staging, and construction activities. The **Contractor** shall repair, at no additional cost to the project, any erosion and washouts that may occur due to the lack of proper erosion control facilities.

The **Contractor** shall use measures to prevent and control dust and mud within the area affected by the project. No additional compensation will be paid to the **Contractor** for general dust control. ***Vehicle-tracking control mats will be required at the access points to the public and private paved roadways. Removal of vehicle-tracking mats will be accomplished prior to re-vegetation.***

The **Contractor** shall clean off any soil, dirt, or debris tracked onto any adjacent streets. When notified by the **Owner** that the adjacent streets require cleaning, the **Contractor** shall clean the streets within **2 hours** of such notification, or the **Owner** shall arrange to have the streets cleaned and shall deduct the cost of such cleaning from the **Contractor's** payments.

All work and materials associated with installation and maintenance of temporary erosion control facilities until permanent stabilization is achieved will be paid for in the lump sum price Proposal for erosion and sediment control.

## 5.18 TRAFFIC CONTROL AND PEDESTRIAN BARRICADES

The **Contractor** shall furnish all necessary flag persons; erect and maintain warning lights, advance warning signs, detour signs, barricades, temporary fence, and sufficient safeguards around all excavations, embankments, obstructions; and any other work for this project for the protection of all work being performed and for the safety of the public and pedestrian traffic, as well as bicycles and motor vehicles.

The **Contractor** shall provide adequate temporary construction fencing around active work zones and access routes when hazards to pedestrian traffic exist. The **Contractor** shall provide proper warning signs on existing trails, driveways, and roadways that cross or are a part of temporary access routes, staging areas or work zones.

All signs and barricades shall conform to the **Manual of Uniform Traffic Control Devices** and meet the requirements of **General Provision 105.07 and Section 800 of the Standard Specifications**.

The **Contractor** shall submit three (3) copies of a **Traffic Control Plan**, acceptable to the **Owner**, for review **at or before the Preconstruction Conference**. This plan must provide traffic control at all access points, and when loading and unloading equipment and material in public street right-of-ways.

## 5.19 WATER CONTROL

Until the **Owner** issues final written acceptance of the project, the **Contractor** shall take every precaution against damage to any part of the project including the adjacent land, vegetation, utilities, paving and structures from any cause, including all surface and subsurface water, whether arising from the execution of work or any other cause. The **Contractor** shall rebuild, repair, restore, replant and make good all damages to any portion of the work due to causes beyond the control of and without the fault of negligence of the **Contractor**, including but not restricted to, acts of God, of the public enemy, or of governmental authorities.

The **Contractor** shall be responsible for the project and shall take such precautions as may be necessary to construct the project in a dry condition and provide for drainage, dewatering, and control of all surface and subsurface water. The **Contractor** shall erect any necessary temporary structures or other facilities at his expense to control surface water and groundwater. **The Contractor is advised that he is working in a major drainage course subject to continuous low flow and intermittent flow of significant magnitude. As such, proper management and control of water through the project area will be required to avoid localized flooding, damage to the work and adjacent facilities and properties and/or extensive soil erosion. At or prior to the Preconstruction Conference and prior to beginning any work, the Contractor shall submit three (3) copies of a plan for Water Control and Dewatering to the Owner for review. The Owner, at his option, may require the Contractor to update the Water Control Plan as conditions warrant. The Contractor shall acquire a Construction Dewatering Permit from the Colorado Department of Public Health and Environment.**

The **Contractor** shall carefully evaluate and plan the work and develop a water control plan that is compatible with the work plan and minimizes risks to adjacent properties, facilities and completed and in-progress work.

The **Contractor**, at his expense, shall furnish all necessary equipment and materials required to control the surface and subsurface water in all the areas from start of work through the completion of the total project work. The **Contractor** shall perform all work associated with "Project Water Control" in accordance with the **Section 920 "Protection of Product from Water during Construction"** included in the special technical specifications.

## **5.20 PROGRESS**

If the completion of any part of the work or the delivery of materials is behind the approved schedule, the **Contractor** must submit a plan acceptable to the **Owner** for bringing the work up to schedule. The **Owner** shall have the right to withhold progress payments for the work if the **Contractor** fails to update and submit the progress/manpower schedule and reports as specified.

## **5.21 PRE-CONSTRUCTION CONFERENCE RESPONSIBILITIES**

The **Contractor** will attend a **pre-construction meeting** before beginning construction. The purpose of the meeting will be to discuss project issues, scheduling, phasing, environmental concerns, water control, private property issues, pedestrian issues, storm water clean water act, safety, etc., the **Contractor's** designated Superintendent or Supervisor assigned to the project shall attend this meeting. The **Contractor shall**, at a minimum, provide the following materials at or prior to the **Pre-Construction Conference**:

1. Traffic Control and Pedestrian Safety Plan
2. Water Control and Dewatering Plan
3. Construction Dewatering Permit
4. CDPS Stormwater Discharge Permit
5. Stormwater Management Plan
6. Construction Schedule and Manpower Report
7. Detailed Construction Method and Phasing Plan for Construction (Refer to 2.30)

The plans are to be reviewed by the **Owner** prior to construction. All issues are to be resolved prior to beginning construction.

## **5.22 SHOP DRAWINGS**

**Contractor** shall submit all required **Shop Drawings and Product Submittals (3 copies)** to the **Owner or Owner's Representative** for review. These include, at a minimum, the following:

1. Test results for any imported topsoil and soil riprap, and concrete mix designs
2. Geotextiles
3. Seed, mulch, temporary erosion control blanket

### 5.23 COORDINATION WITH PRIVATE PROPERTY OWNERS

The **Contractor** is not to enter *private property*, outside of the work area and access route shown on the plans unless written access permission from the owner of property is obtained by the **Contractor** and approved by the **Owner**. All damages to private property shall be immediately repaired to as good or better conditions at no additional cost to the project. The **Contractor** will notify the **Owner** immediately if damages occur to private property.

### 5.24 MOBILIZATION

The Proposal Schedule has an item for mobilization, which may include such items as administration, bonding, and insurance. ***Mobilization shall be paid as shown in Section 627 of the Special Technical Specifications.***

### 5.25 DISPOSAL SITE

The **Contractor** is responsible for the removal of all debris, unsuitable material, asphalt, concrete, bushes, portions of trees not used in the work, stumps, remains from clearing and grubbing, and all other materials not used for the construction of the improvements. Disposal of these materials shall not be measured separately but included in the unit price Proposal for each applicable item on the Proposal schedule. The **Contractor** shall designate in writing a disposal site acceptable to the **Owner**. Further, the **Contractor** shall consider the following for hauling suitable or disposing of unsuitable materials:

- ❑ Access to the project beyond the immediate confines of the work area shall be over suitable roadways without violation of any City, County, State, or Federal restrictions for vehicle and truck weights or any other limitation on movement of heavy equipment hauling materials to and from the site.
- ❑ ***Violation costs, including fines and repairs to either public or private roadways or appurtenance structures, above or below ground level, shall be at the Contractor's expense.***

Unless otherwise presented in the Proposal Schedule, the **Contractor's** cost for loading, hauling, daily cleaning of streets and trails, the disposal of material that must be removed from the site, together with the construction, maintaining and altering of haul roads, dump fees and permits, shall not be paid for separately.

### 5.26 EXCAVATION AND REPLACEMENT OF UNSUITABLE MATERIAL

Excavation and Replacement of Unsuitable Material is defined in the Technical Specifications. The **Contractor** shall not complete any excavation and replacement of unsuitable material without prior written approval from the **Owner**. Excavation and replacement of unsuitable material shall not be used in lieu of proper dewatering.

## 5.27 WORK HOURS

Normal work hours are 7:30 AM to 5:30 PM Monday through Friday. Work outside normal hours may be allowed but must be approved in advance in writing by the **Owner**.

## 5.28 ARCHAEOLOGICAL AND HISTORICAL DISCOVERIES

The **Contractor** is required to inform the **Owner** of any evidence which might suggest to a lay person that archaeological or historic materials may be present in the work area. Upon making such a discovery, the **Contractor** shall do whatever is necessary to avoid disturbing the work area. This could require that the **Contractor's** activities be redirected or stopped until the **Owner** or **Engineer** determines how to proceed.

## 5.29 CONSTRUCTION DOCUMENTATION

### **Photographs**

1. Construction photographs will be required on the project.
2. Photographs shall be 3" X 5" size or larger, matte finish, in color and mounted in 3-ring binders.
3. Each photograph shall be marked with date description and identification number.
4. Each photograph must indicate a station reference to work as shown on the plans.
5. The preconstruction photographs shall be delivered to and approved by the **Owner or Owner's Representative**, prior to the beginning of construction.
6. Include progress photographs with each pay request. The photos will be a requirement for payment.
7. Digital pictures on a disk may be substituted for the above. However, the pictures must be labeled as described above.

### **Red-line Drawings**

The **Contractor** shall maintain a **red-line set of drawings indicating field changes** to the design, existing facilities not shown, pertinent construction data, etc. The **Contractor** shall submit a current set of red-line plans to the **Owner** with each pay estimate. The **Contractor** shall submit a complete set of red-line plans to the **Owner** at the completion of the project.

***Construction photographs and red-line drawings will not be paid for separately, but will be considered incidental to the work.***

## 5.30 SPILL KIT

The **Contractor** shall supply and maintain a spill kit on-site. The spill kit shall contain any and all necessary devices to be used in the event of a spill on-site during construction activities. The **Contractor** shall coordinate with the **Owner's** stormwater inspector regarding the site specific contents of the spill kit. The spill kit shall remain

on-site and be available at all times for the **Contractor's** crew. A meeting shall be set up by the **Contractor's** Stormwater Supervisor prior to any construction activities to clarify the uses and implementation of the spill kit.

***The spill kit will not be paid for separately, but will be considered incidental to the Proposal item for Temporary Erosion and Sediment Control.***

### **5.31 CONSTRUCTION METHOD AND PHASING PLAN**

***The Contractor shall submit a construction method and phasing plan detailing the methods and sequence to be utilized in construction of the proposed facilities.*** The plan is to include the following items:

1. Control of base flows, flood flows, and groundwater.
2. Pedestrian, bicycle, and motorized vehicle Traffic Control as it relates to work phasing.
3. Establishment, maintenance and restoration of access routes
4. Earthwork activities
5. Sheet pile installation
6. Construction of sculpted concrete drops
7. Plantings

The **Owner** is to review the construction method and phasing plan and have all questions and issues addressed before construction can proceed. All costs associated with preparation and potential revisions to the method and phasing plan will be considered incidental to the price Proposal for associated items and no separate payment will be provided.

### **5.32 REQUESTS FOR INFORMATION (RFI)**

**“Requests for Information” (RFI)** sheets shall be completed by the **Contractor** if additional information of clarification is required. The **RFI** shall be submitted to the **Owner** for processing. Any changes to the plans, specifications, and construction requirements are to be made in writing. No changes will be permitted based on verbal agreements.

### **5.33 CONSTRUCTION COORDINATION MEETINGS**

The **Contractor will conduct weekly construction progress meetings** with the attendance of all pertinent project related personnel. The **Contractor** shall coordinate with the **Owner** as to the location where the meetings are to be held.

### **5.34 CONSTRUCTION STAKING**

The **Owner** shall be responsible for providing grade and horizontal control for the project elements. The **Contractor** shall protect all existing control points, property corners and monuments. The **Contractor** shall be responsible for replacing any damaged or destroyed monument, property corner or control point.

### 5.35 CLEAN UP AND REMOVAL OF SEDIMENT DEPOSITS

The **Contractor** shall implement stabilization measures within the project area to control erosion to the extent practical. If sediment or other material from the site migrates downstream of the project area during construction it shall be removed and disposed of by the **Contractor** without any additional compensation. The **Contractor** is advised to document the existing conditions in the channel and to provide a copy of the documentation to the **Owner** prior to beginning construction.

### 5.36 MEASUREMENT AND PAYMENT

The provisions for measurement and payment contained in this section replace and take precedence over the measurement and payment provisions contained in the standard specifications.

Payment for work performed by the **Contractor** under these Contract Documents will be made at the approved unit price or lump sum price for each of the items as listed in the Proposal and measured as hereinafter specified. Such payment shall compensate the **Contractor** for all costs in connection with furnishing all labor, equipment and material required and performing the operations necessary to complete the item in accordance with the contract documents.

Any items of work which are called out in the plans and/or the specifications or are typical for the type of construction being accomplished and do not have a specific line item in the Proposal but which are necessary to complete the work in accordance with the requirements of good and standard practice, such as sub-grade preparation and grading are to be considered as incidental to the construction of the project and the **Contractor's** cost for such work shall be included in the Proposal price for the related item of work.

The **Contractor** shall accomplish all incidental work essential to the completion of the project, including cleanup and disposal of waste or surplus material without additional cost to the **Owner**. The cleanup and disposal of waste or surplus material shall be performed during construction or as soon after as is reasonably possible in order to better maintain the safety and aesthetics of the construction area.

The estimated quantities shown in the Proposal form are estimates only, being given only as the basis for tabulation and evaluation of the Proposal, and the City does not warrant, expressly or by implication, that the actual amount of work will correspond therewith. The right to increase or decrease the amount of any class or portion of the work or to make changes in the work required as may be deemed necessary is reserved by the City as provided elsewhere in these specifications. Unless otherwise noted in the following Proposal items descriptions, the basis of payment will be the plan/Proposal form quantity. The contractor should perform an independent estimate of quantities and bring large discrepancies to the attention of the Engineer before completion of their Proposal. It should be noted that certain Proposal items may be

included in the Proposal Form to establish a unit price should the use of those items become necessary during construction. Allowance will not be made for loss of anticipated profits of additional compensation should the use of these items be deemed unnecessary.

## **ITEMS DESCRIPTIONS:**

### **Item No. 1: Mobilization and Demobilization (LS)**

#### a. Item Description

Mobilization consists of preparatory work and operations necessary for: the movement of personnel, equipment, supplies, and incidentals to the Project site, temporary signage, all permits and preparation of various construction operation plans, project administration including the specifically documented project meetings for utility locates including coordination with utilities and potholing to confirm utility line locations as needed and other facilities necessary for the Work, for premiums on bond and insurance for the Work, and for other operations performed or costs incurred before the beginning of Work.

Mobilization also includes demobilization as Work concludes, including revegetation with upland seeding, restoration of access, staging and other area of occurred disturbance

#### b. Payment

Payment will be according to the following schedule:

When 5% of the original contract amount is earned, 20% of the amount Proposal for mobilization will be paid.

When 20% of the original contract amount is earned, 50% of the amount Proposal for mobilization will be paid.

When 35% of the original contract amount is earned, 60% of the amount Proposal for mobilization will be paid.

When 75% of the original contract amount is earned, 100% of the amount Proposal for mobilization will be paid.

Payment for the Proposal Item shall include but is not limited to full compensation for all labor, equipment, tools and materials necessary to mobilize and obtain permitting, and all other costs incurred or labor and operations which must be performed prior to beginning the other items under the contract. Payment shall be made at the applicable contract unit price for the Proposal Item and shall include full compensation for all labor, equipment, tools, and materials necessary to complete the work.

### **Item No. 2: Water Control and Dewatering (LS)**

#### a. Item Description

This item will not be measured for payment; it will be a lump sum.

#### b. Payment

Items of work involving removal of surface water, ground water, diverting surface water, and dewatering construction sites and burrow areas are paid for a the Contract lump sum price for this pay item. Such payment will constitute full compensation for all labor, equipment, tools, permits and all other necessary and incidental to the completion of the work. Progress payments will be made based on the percent of work completed.

### **Item No. 3: Erosion and Sediment Control (LS)**

#### a. Item Description

This item will not be measured for payment; it will be a lump sum.

#### b. Payment

A lump sum price stipulated for silt fence, inlet protections, check dams, vehicle traffic control, concrete washouts, and other required erosion and sediment control measures from the SWMP permit during all phases of construction. This shall also include all restoration or areas disturbed outside of the construction limits identified in the plans. It shall include the furnishing of all labor, materials, tools and appurtenances necessary to complete the work as specified, shown or directed.

### **Item No. 4: Clearing and Grubbing (AC)**

#### a. Item Description

This item will be measured for payment by acres

#### b. Payment

Accepted quantities will be paid for at the contract unit price for this item. Such payment shall constitute full compensation for labor, equipment, tools, haul, disposal and all other items necessary and incidental to the completion of the work.

## **Item No. 5 Earthwork – Excavate and Fill Onsite (CY)**

### **a. Item Description**

This item will be measured for payment by number of cubic yards and will be measured once for payment at a time, place and conditions as agreed to in advance. Contractor shall work with Project Manager to validate quantities and methods used to calculate the quantities prior to excavation activities taking place. The calculated quantity shall be a comparison of the finished grade at the completion of construction activities to the Matrix existing conditions base topography (June 2016) shown in the plans. Contractor and Project Manager shall come to consensus regarding any discrepancies between the actual site conditions and the base topography prior to excavation activities taking place. Additional or updated topography, if required, shall be collected by the Project Manager prior to excavation activities taking place. The finished grade quantity shall exclude the upper six (6) inches of topsoil if topsoil has been placed at the time of measurement. The quantity excludes imported fill which shall be paid for separately under Item No. 6 Earthwork – Imported Fill. The quantity is based on the neat lines shown on the drawings and does not account for shrinkage or swell, and does not include structural excavation or pre-excavation required to install other items. This item includes but is not limited to:

1. Excavating, transporting, stockpiling with BMP's and hauling excavated material to fill areas within the project.
2. Placing, reworking, and compacting fill material
3. Cross hauling material
4. Moistening, drying and reconditioning material as necessary to meet moisture density requirements
5. Surface roughening and terracing BMP's as shown on the drawings
6. Removing and hauling deleterious materials
7. Providing all other related and necessary labor, equipment and materials to complete the work.

### **b. Payment**

Accepted quantities will be paid for at the contract unit price for this item. Payment will be full compensation for all materials, equipment and labor necessary to excavate, dump, spread, compact and grade this material at the designated fill site complete in place. Suitable fill material shall be agreed upon by the Project Manager and Contractor per standards of the specifications.

## **Items No. 6 Earthwork – Imported Fill (CY)**

### **a. Item Description**

The measurement for payment for this item will be the actual number of cubic yards according to verified material load tickets to be imported from an offsite source to be

properly stockpiled and placed along the finished lines and grades in accordance with the drawings and specifications or as otherwise directed by the Project Manager. . Contractor shall work with Project Manager to validate quantities and methods used to calculate the quantities prior to fill being placed. Contractor and Project Manager shall come to consensus regarding any discrepancies between the actual site conditions and the base topography prior to fill being placed. Additional or updated topography if required shall be collected by the Project Manager prior to fill being placed. The unit price will include all of the Contractors costs. This item includes, but not limited to:

1. Locating, supplying and transporting of approved material
2. Stockpiling with BMPs
3. Hauling, placing, reworking and compacting fill material
4. Moistening, drying and reconditioning material as necessary to meet moisture density requirements
5. Surface roughening and terracing BMP's as shown on the drawings
6. Providing all other related and necessary labor, equipment and materials to complete the work.

b. Payment

Accepted quantities will be paid for at the contract unit price for this item. Payment will be full compensation for all materials, equipment and labor necessary to excavate, dump, spread, compact and grade this material at the designated fill site complete in place. Suitable fill material shall be agreed upon by the Project Manager and Contractor per standards of the specifications.

**Item No. 7: Topsoil – Stripping and Stockpiling, Amend (CY)**

a. Item Description

The measurement for payment for this item will be the actual number of cubic yards of topsoil excavated, properly stockpiled, amended if necessary and replaced in accordance with the drawings and specifications or as otherwise directed by the Project Manager. No measurement of this item will be made unless changes to the contract documents are made, in which case the Project Manager will perform measurement of the modified volume. The quantity is based on the neat lines shown on the drawings and specifications and does not account for shrinkage or swell. Contractor shall work with the Project Manager to validate the quantities and methods used to calculate the quantities prior to stripping and stockpiling taking place. Contractor and Project Manager shall come to consensus regarding any discrepancies between the actual site conditions and the base topography prior to stripping and stockpiling taking place. Additional or updated topography if required shall be collected by the Project Manager prior to stripping and stockpiling taking place. The quantity excludes imported topsoil which shall be paid for separately under item no 9 Import Topsoil. No additional payment will be made for areas disturbed outside of construction limits or areas within construction limits that are not identified on the drawings and specifications to be

disturbed unless approved by the Project Manager. The unit price will include all of the Contractors costs. This item includes but not limited to:

1. Excavating topsoil and vegetation to required depths.
2. Stockpiling and segregating upland and wetland soil in an upland area
3. Removing and properly stockpiling of topsoil and wetland topsoil
4. Protecting stockpiles from erosion
5. Preparing subgrade
6. Replacing and moistening of topsoil and wetland topsoil in the designated areas to required depths.
7. Testing
8. Distributing, placing and compacting as shown on the drawings
9. Reconditioning or amending material as necessary to meet moisture density and nutrient requirements
10. Providing all other related and necessary labor, equipment and materials required to complete the work.

b. Payment

The accepted quantities will be paid for at the Contract unit price for this item. Payment will be full compensation for all materials, labor and equipment including fine grading of surface to receive import soil and physical conditioning of topsoil to receive vegetation.

**Item No. 8: Import Topsoil (CY)**

a. Item Description

The measurement for payment for this item will be the actual number of cubic yards according to verified material load tickets to be imported from an offsite source to be properly stockpiled and placed along the finished lines and grades in accordance with the DRAWINGS and SPECIFICATIONS or as otherwise directed by the Project Manager. The unit price will include all of the CONTRACTOR's costs. This BID item includes, but is not limited to:

1. Furnishing approved material, transporting and stockpiling topsoil
2. Stockpiling with BMPs
3. Testing
4. Distributing, placing and compacting as shown in the drawings
5. Reconditioning or amending material as necessary to meet moisture density and nutrient requirements
6. Providing all other related and necessary labor, equipment and materials to complete the work.

b. Payment

Accepted quantities will be paid for at the contract unit price for this item. Payment will be full compensation for all materials, equipment and labor necessary to furnish, transport, dump, spread, test, amend, and grade this material at the designated fill site complete in place. Suitable fill material shall be agreed upon by the Project Manager and Contractor per standards of the specifications.

**Item No. 9: Upland Seeding (AC)**

**Item No. 10: Riparian Seeding (AC)**

a. Item Description

This item will be measured for payment by the number of acres.

b. Payment

The accepted quantities will be paid for at the contract price for this item. Payment will be considered full compensation for all materials and labor necessary to complete the seeding including soil preparation, fertilizing, soil, seed, conditioning, signs, tilling and raking.

**Item No. 11: Cottonwood Poles (EA)**

**Item No. 12: Willow Stakes (EA)**

**Item No. 13: Shrub, 1 gallon (EA)**

a. Item Description

These items will be for payment but the number of each unit placed.

b. Payment

The accepted quantities will be paid for at the Contract unit price for this item. Payment will be considered full compensation for all materials and labor necessary to furnish and plant healthy and live trees, including equipment, excavation, harvesting, transporting, soil augmentation, planting, backfilling, pruning, staking, and wrapping as complete in place.

**Items No. 14: 100% Coconut Erosion Control Blanket (SY)**

a. Item Description

This Item will be measured for payment by the number of square yards. The measurement for payment for this item will be the actual number of square yards of erosion control blanket placed measured along the exposed slope (length x width), but will not include the material buried in the anchor trenches or required lapping of the blanket, in accordance with the DRAWINGS and SPECIFICATIONS or as otherwise

directed by the Project Manager. Anchor pins and/or stakes will be included in this item and not be measured separately.

b. Payment

The accepted quantities will be paid for at the Contract unit price for this Item. Payment will be full compensation for all materials and labor necessary to complete the erosion control blanket including blankets, anchor pins/stakes, soil preparation, equipment, excavation, dewatering, as complete in place.

**Item No. 15: Erosion Control Fabric (KoirWrap 1200) (SY)**

a. Item Description

This Item will be measured for payment by the number of square yards. The measurement for payment for this item will be the actual number of square yards of KoirWrap™ 1200 (or approved equal) placed measured along the exposed slope (length x width), but will not include the material buried in the anchor trenches or required lapping of the blanket, in accordance with the DRAWINGS and SPECIFICATIONS or as otherwise directed by the Project Manager. Anchor pins and/or stakes will be included in this item and not be measured separately. Erosion control fabric used for wrapped soil lifts will be paid for separately under Bid Item No. 22.

b. Payment

The accepted quantities will be paid for at the Contract unit price for this Item. Payment will be full compensation for all materials and labor necessary to install the KoirWrap™ 1200 (or approved equal) including fabric, anchor pins, soil preparation, equipment, excavation, dewatering, as complete in place.

**Item No. 16: Sculpted Concrete Drop Structure (CY)**

a. Item Description

The measurement for payment for this item will be the actual number of cubic yards of concrete or shotcrete placed in accordance with the DRAWINGS and SPECIFICATIONS or as otherwise directed by the Project Manager. No separate measurement for payment will be made for any labor, equipment, and materials required for this item. The unit price will include all of the CONTRACTOR's costs. This BID item includes, but is not limited to:

1. Preparing and stabilizing subgrade including excavating, backfilling, and compacting
2. Placing base course and bedding as shown on the DRAWINGS
3. Furnishing, forming and placing concrete, including coloring and fibermesh as shown on the DRAWINGS

4. Furnishing and applying curing compounds
5. Finishing applications applied to the concrete including shaping, troweling, cutting, or texturing
6. Furnishing and placing reinforcing steel
7. Furnishing and installing weep drains

b. Payment

The accepted quantities will be paid for at the Contract unit price for this Item. Payment will be full compensation for all materials and labor necessary to install the concrete/shotcrete including subgrade preparation, furnishing and forming, curing, finishing, reinforcing with rebar, and installation of weep drains.

**Item No. 17: Sheet Pile (PZ 22) Cutoff Wall (SF)**

a. Item Description

The measurement for payment for this item shall be the total surface area of all sheet pile installed in accordance with the DRAWINGS and SPECIFICATIONS or as otherwise directed by the Project Manager. The unit price shall include all of CONTRACTOR's costs including:

1. Transporting materials.
2. Equipment necessary to drive the sheet pile into position and depth per the DRAWINGS.
3. Equipment and labor involved with cutting of the installed pile to match construction DRAWINGS.
4. Protecting existing structures.
5. Providing all other related and necessary labor, equipment, and ancillary materials to complete the WORK including, but not limited to, joint sealant, cutting lift holes, or welding sheet pile.

b. Payment

Accepted quantities will be paid for at the contract unit price for this Item. Payment will be full compensation for all materials, equipment and labor necessary to install sheet pile per the DRAWINGS and SPECIFICATIONS by the Contractor. Payment includes any necessary fees for special handling or disposal of excess sheet pile.

**Item No. 18: Concrete Sheet Pile Cap (LF)**

a. Item Description

The measurement for payment for this item shall be the actual number of linear feet of concrete sheet pile cap installed in accordance with the DRAWINGS and

SPECIFICATIONS or as otherwise directed by the Project Manager The unit price shall include all of CONTRACTOR's costs including:

1. Transporting materials.
2. Equipment necessary to mix concrete.
3. Forming and placing the caps.
4. Protecting existing structures.
5. Installing gasket material as required
6. Providing all other related and necessary labor, equipment, and materials to complete the WORK.

b. Payment

Accepted quantities will be paid for at the contract unit price for this Item. Payment will be full compensation for all materials, equipment and labor necessary to install sheet pile capping per the DRAWINGS and SPECIFICATIONS by the Contractor. Payment includes any necessary fees for special handling or disposal of excess material.

**Item No. 19: Type M Soil Riprap (CY)**

a. Item Description

This item will be measured for payment by the number of cubic yards.

b. Payment

The accepted quantities will be paid for at the Contract unit price for this Item. Payment will be full compensation for all materials and labor necessary to furnish and install the soil riprap including equipment, subgrade preparation, excavation, trenching, mixing of plain riprap with stabilization soil, dewatering, backfill and compaction as complete in place.

**Item No. 20: Type VH Soil Riprap (CY)**

a. Item Description

This item will be measured for payment by the number of cubic yards.

b. Payment

The accepted quantities will be paid for at the Contract unit price for this Item. Payment will be full compensation for all materials and labor necessary to furnish and install the soil riprap including equipment, subgrade preparation, excavation, trenching, mixing of plain riprap with stabilization soil, dewatering, backfill and compaction as complete in place.

**Item No. 21: Wrapped Soil Lift (LF)**

## a. Item Description

This item will be measured for payment by the number of linear feet of wrapped soil lift measured longitudinally along the bank of the lift.

## b. Payment

The accepted quantities will be paid for at the Contract unit price for this Item. Payment will be full compensation for all materials and labor necessary to furnish and install the wrapped soil lift including equipment, subgrade preparation, excavation, trenching, dewatering, backfill and compaction as complete in place. Erosion control fabric, topsoil, staking or pinning, brush layering, and seeding associated with each lift shall also be included in the unit cost. Riprap with bedding material and/or soil riprap placed under the wrapped soil lifts shall be paid for separately.

## EXHIBIT 6 – QUALIFICATION STATEMENT

### CITY OF COLORADO SPRINGS QUALIFICATION STATEMENT

This statement will provide information which will enable the City to evaluate the qualifications of your firm and staff with regard to the requirements of this Request for Proposal. Please complete this form in its entirety and submit it (in the number of copies requested) along with the other required proposal documents. If a request in the Qualification Statement is contained in the proposal, indicate the section in the proposal where that information can be found.

**(PRINT)**

FIRM NAME: \_\_\_\_\_  
ADDRESS: \_\_\_\_\_  
CITY STATE ZIP: \_\_\_\_\_  
AUTHORIZED REPRESENTATIVE: \_\_\_\_\_  
TITLE: \_\_\_\_\_  
AUTHORIZED SIGNATURE: \_\_\_\_\_  
PHONE: \_\_\_\_\_ FAX: \_\_\_\_\_  
E-MAIL ADDRESS: \_\_\_\_\_

**1. TYPE OF BUSINESS**

CORPORATION  INDIVIDUAL   
PARTNERSHIP  JOINT VENTURE   
OTHER: \_\_\_\_\_

**2. TYPE OF LICENSE & LOCATION**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**3. TYPE OF SERVICE TO BE PROVIDED FOR RFP:** \_\_\_\_\_  
\_\_\_\_\_

**4. NUMBER OF YEARS IN BUSINESS:** \_\_\_\_\_

**5. ON A SEPARATE SHEET PROVIDE A BRIEF HISTORY OF YOUR FIRM, STAFF SIZE AND EXPERIENCE. SUBMIT A RESUME FOR THE PROJECT MANAGER AND EACH KEY PERSONNEL ASSIGNED TO THIS PROJECT.**

**6. WHAT OTHER NAME(S) HAS YOUR COMPANY OPERATED UNDER:** \_\_\_\_\_  
\_\_\_\_\_

**7. HAVE YOU OR YOUR FIRM EVER FAILED TO COMPLETE ANY WORK AWARDED TO YOU? YES  NO  IF "YES", EXPLAIN:**  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**8. HAS ANY OFFICER OR PARTNER OF YOUR ORGANIZATION EVER BEEN AN OFFICER OR PARTNER OF ANOTHER ORGANIZATION THAT FAILED TO COMPLETE A CONTRACT WITHIN THE LAST FIVE (5) YEARS? YES  NO**   
IF "YES", EXPLAIN:

9. HAS YOUR FIRM OR ANY PARTNERS OR OFFICERS EVER BEEN INVOLVED IN ANY BANKRUPTCY ACTION? YES  NO  IF "YES", EXPLAIN:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

10. ARE YOU PRESENTLY INVOLVED IN ANY LITIGATION WITH ANY GOVERNMENT AGENCY? YES  NO  IF "YES", EXPLAIN TYPE, KIND, PLAINTIFF, DEFENDANT, ETC., AND STATE THE CURRENT STATUS:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

11. BANK REFERENCE: \_\_\_\_\_  
ADDRESS: \_\_\_\_\_  
CONTACT: \_\_\_\_\_ PHONE: \_\_\_\_\_

12. LIST THREE (3) SIMILAR PROJECTS (LOCAL OR STATE-WIDE) **FROM LAST FIVE (5) YEARS**-INCLUDE LOCATION OF PROJECT, SIZE OF PROJECT (CONTRACT AMOUNT), CONTACT NAME, ADDRESS, TELEPHONE NUMBERS  
NOTE: DETAILED INFORMATION ON THESE PROJECTS MAY ALSO BE REQUESTED IN THE RFP PACKAGE.

- 1. Location of Project: \_\_\_\_\_  
Size of Project: \_\_\_\_\_  
Contract Amount: \_\_\_\_\_  
Contact Name and Title: \_\_\_\_\_  
Contract Address: \_\_\_\_\_  
Contact telephone and FAX Numbers: \_\_\_\_\_
- 2. Location of Project: \_\_\_\_\_  
Size of Project: \_\_\_\_\_  
Contract Amount: \_\_\_\_\_  
Contact Name: \_\_\_\_\_  
Contract Address: \_\_\_\_\_  
Contact telephone and FAX Numbers: \_\_\_\_\_
- 3. Location of Project: \_\_\_\_\_  
Size of Project: \_\_\_\_\_  
Contract Amount: \_\_\_\_\_  
Contact Name: \_\_\_\_\_  
Contract Address: \_\_\_\_\_  
Contact telephone and FAX Numbers: \_\_\_\_\_

13. LIST **CURRENT** SIMILAR PROJECTS (LOCAL OR STATE-WIDE) UNDER CONTRACT- INCLUDE LOCATION OF PROJECT, SIZE OF PROJECT (CONTRACT AMOUNT) CONTACT NAME, ADDRESS, TELEPHONE NUMBERS.

NOTE: DETAILED INFORMATION ON THESE PROJECTS MAY ALSO BE REQUESTED IN THE RFP PACKAGE.

- 1. Location of Project: \_\_\_\_\_  
Size of Project: \_\_\_\_\_  
Contract Amount: \_\_\_\_\_

\_\_\_\_\_  
Contact Name and Title:  
\_\_\_\_\_  
Contact Address:  
\_\_\_\_\_

\_\_\_\_\_  
Contact telephone and FAX Numbers:  
\_\_\_\_\_

2. Location of Project: \_\_\_\_\_  
Size of Project: \_\_\_\_\_  
Contract Amount: \_\_\_\_\_  
Contact Name and Title: \_\_\_\_\_  
Contact Address: \_\_\_\_\_  
Contact telephone and FAX Numbers: \_\_\_\_\_

3. Location of Project: \_\_\_\_\_  
Size of Project: \_\_\_\_\_  
Contract Amount: \_\_\_\_\_  
Contact Name and Title: \_\_\_\_\_  
Contact Address: \_\_\_\_\_  
Contact telephone and FAX Numbers: \_\_\_\_\_

14. LIST OF SUB-CONTRACTORS TO BE USED FOR THIS PROJECT:  
(INCLUDE NAME, ADDRESS, TELEPHONE NUMBER, TYPE OF WORK)

1. Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
Telephone Number: \_\_\_\_\_  
Type of Work: \_\_\_\_\_

2. Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
Telephone Number: \_\_\_\_\_  
Type of Work: \_\_\_\_\_

3. Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
Telephone Number: \_\_\_\_\_  
Type of Work: \_\_\_\_\_

**IF ADDITIONAL INFORMATION IS PROVIDED ON A SEPARATE SHEET FOR ANY OF THE ITEMS, CLEARLY SPECIFY WHERE IT CAN BE LOCATED IN YOUR PROPOSAL PACKAGE.**

## EXHIBIT 7 – EVALUATION SCORESHEET

Criteria	Elements	Max Points
<b>TECHNICAL AREA</b>	<b>(MAX 40 POINTS)</b>	
	<b>A. UNDERSTANDING &amp; COMPLY WITH TECH REQUIREMENTS</b>	
	Does proposal demonstrate firm understanding of the requirements and goals of the Statement of Work (SOW) as well as industry standards and reasonable expectations for a company in the industry?	5 Points
	2 Does the proposal fully/completely address each requirement and goal of the SOW?	5 Points
	3 Does the proposal provide solutions to indicate that requirements and goals will be met on schedule?	5 Points
	4 Does the technical solution seem realistic?	5 Points
	5 Does the offeror appear to understand the business & the RFP requirements?	5 Points
	<b>B. PROJECT APPROACH</b>	
	1 Does the proposal include a complete plan to accomplish each requirement, including subcontracting (if applicable)?	5 Points
	2 Does the proposal demonstrate that appropriate personnel & equipment will be provided to carry out the requirement?	5 Points
	3 Is the proper level of effort directed toward each requirement? Does the level of effort look unreasonably high or low?	5 Points
	<b>TOTAL</b>	
<b>MANAGEMENT AREA</b>	<b>(MAX 85 POINTS)</b>	
	<b>A. PROGRAM MANAGEMENT CONTROLS</b>	
	1 Does proposal address the issues in sufficient detail to demonstrate a sophisticated and mature management control system?	5 Points
	2 Are program management controls consistent with the technical portion of the proposal, especially regarding schedule and level of effort?	5 Points
	3 Do the plan and controls indicate offeror will obtain/keep/utilize high quality personnel?	5 Points
	4 Does Offeror address corrective actions in cases of delay (expediting materials, additional resources)?	5 Points
	5 Does the proposal explain how the Offeror will remain within schedule and budget?	5 Points
	<b>B. PAST PERFORMANCE/RELEVANT EXPERIENCE</b>	
	1 Does proposal include at least 3 references or past performance citations?	5 Points
	2 Are the references relevant to the requirements of the SOW and RFP?	5 Points
	3 Does the offeror explain success of references/projects/performance?	5 Points
	4 Does the offeror apply the past performance to the City requirement in such a way as to demonstrate added value due to experience?	5 Points
	<b>C. KEY PERSONNEL</b>	
	1 Did the offeror include complete resumes including education, experience, background information, accomplishments, etc?	5 Points
	2 Does the offeror provide resumes for all key personnel as required by the RFP?	5 Points
	3 Do the resumes demonstrate adequate professional, technical, and management levels to accomplish the work effectively/efficiently?	5 Points
	4 According to the resumes do the the following apply?	
	4A Has the Contractor and the Contractor's on-site supervisor successfully constructed a sculpted concrete drop structure similar to those included in the scope of work?	5 Points
	4B Has the Contractor and the Contractor's on-site supervisor successfully completed at least one significant natural channel stream restoration project exceeding \$250,000.00 in contract price within the last five (5) years?	5 Points
	4C Does the Contractor or their Sub-Contractor have a minimum of five (5) years of experience in planting the types of vegetation to be planted in the scope of work?	5 Points
	4D Has the Contractor successfully completed at least one channel restoration project or similar requiring atleast 20,000 CY of earthwork within the last five years?	5 Points
	4E Is the Contractor's proposed schedule realistic and can they meet the project deadline?	5 Points
	<b>PRICE/COST AREA</b>	<b>(MAX 50 POINTS)</b>
	1 How does the price compare to the industry competition? Lowest Price = 30 Points, Highest Price = 0 Points)	30 Points
	2 If low, is it unrealistically low?	5 Points
	3 If high, is there demonstrated added value for the additional cost?	5 Points
	4 Does the offeror leave applicable costs out of the calculations?	5 Points
	5 Are there additional costs not addressed that the City would incur if the offeror were awarded the contract?	5 Points
	<b>TOTAL</b>	
<b>PROPOSAL PRESENTATION</b>	<b>(MAXIMUM 25 POINTS)</b>	25 Points
<b>EXCEPTIONS</b>	<b>(PASS/FAIL)</b>	PASS/FAIL
<b>INSURANCE REQUIREMENTS</b>	<b>(PASS/FAIL)</b>	PASS/FAIL
<b>200 POINTS MAX</b>	<b>TOTAL POINTS GIVEN</b>	200 Points

## EXHIBIT 8 – NOTIFICATION OF UTILITIES

### General Information

It is the responsibility of the Contractor to notify all applicable utilities (including, but not limited to Colorado Springs Utilities) for utility locations at least two business days or twenty-four hours prior to commencing any work. Should any street be closed off for any amount of time, the Contractor must notify the Traffic Department. See the City of Colorado Springs Standard Specifications General Provisions for more information regarding utilities.

The City of Colorado Springs Standard Specifications and General Provisions indicated on the RFP for this project are included by reference. The above document may be reviewed or purchased at the City Administration Building, Engineering Division, at 30 South Nevada, Suite 403, Colorado Springs, Colorado, between the hours of 8:00 A.M. and 5:00 P.M., Monday through Friday, except holidays.

### Telephone References

- |   |                |
|---|----------------|
| 1. Utility Notification Center of Colorado      | 1-800-922-1987 |
| 2. Colorado Springs Utilities Electric          | (719) 448-4811 |
| 3. Colorado Springs Utilities Water, Wastewater | (719) 448-4200 |
| 4. Traffic Department                           | (719) 385-5908 |
| 5. Colorado Springs Utilities Gas Emergencies   | (719) 520-0100 |
| 6. Cable Television                             | (719) 633-6616 |
| 7. Telephone                                    | 1-800-954-0211 |

### Standard Utility Color Code

- |                  |        |
|------------------|--------|
| 1. Natural Gas - | Yellow |
| 2. Electric -    | Red    |
| 3. Water -       | Blue   |
| 4. Wastewater -  | Green  |

### Contractor Responsibilities

1. Contact Colorado Springs Utilities, and/or other applicable utilities company or provider, at least twenty four hours prior to starting the project so that our service inspector can make contact on the job site.
2. All replacement taps will have to be coordinated and notification must be given to Colorado Springs Utilities twenty four hours prior to scheduling.
3. Any water interruption to properties involved must be notified at least twenty-four hours prior to shut down and coordinated with a service inspector.
4. If in the event a property or business is involved that cannot be without water the Contractor will be responsible for keeping them in water while the shut down is in effect.
5. If for any reason when water is restored after the shut down that a property has no water and Colorado Springs Utilities is contacted to determine the problem, the Contractor will be responsible for digging, regardless of the time of day to restore service. Contractor must provide Colorado Springs Utilities with a name and telephone number of an after hours contact in case of emergency.
6. All services which would be replaced will have to meet our water specifications and be approved by the Water service inspector.
7. All materials pertaining to lowering or replacing water service lines, regardless of size, will be the responsibility of the Contractor unless otherwise specified in Engineering

Specifications and Plans.

8. If for any reason it would not be feasible to shut down and notify affected properties, it would be the responsibility of the Contractor to provide temporary water for the houses or businesses involved.

Pre-excavation Checklist

1. Indicate all gas and other utility lines a set of construction plans.
2. Notify City of Colorado Springs Underground Utility Line Locators at least two business days in advance at the division numbers listed above.
3. Utilities locations should be marked on the ground by City Locators.
4. All employees should be briefed on the marking and the standard utility color codes.
5. Employees should be trained on excavation and safety procedures for natural gas lines.
6. When excavation approaches gas lines, employees should expose lines by careful hand digging and probing.
7. Contact the City Forester for any tree protection requirements that may be included on contract specifications

**EXHIBIT 9 - CERTIFICATION REGARDING DEBARMENT, SUSPENSION AND OTHER RESPONSIBILITY MATTERS**

The undersigned duly authorized official of the proposer certifies to the best of its knowledge and belief, that it and its principals:

- A. Are not presently debarred, suspended, proposed for debarment, and declared ineligible or voluntarily excluded from covered transactions by any Federal department or agency.
- B. Have not within a three-year period preceding this proposal been convicted of or had a civil judgement rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain or performing a public (federal, state or local) transaction or contract under a public transaction; violation of federal or state antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification, or destruction of records, making false statements or receiving stolen property.
- C. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (federal, state or local) with commission of any of the offenses enumerated in paragraph (B) of this certification; and
- D. Have not within a three-year period preceding this application/proposal had one or more public transaction (federal, state or local) terminated for cause or default.
- E. Are not on the Comptroller General's List of Ineligible Proposalders or any similar list maintained by any other governmental entity.

Where the proposer is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

**(Check One)**

**I DO CERTIFY (\_\_\_\_) I DO NOT CERTIFY (\_\_\_\_)**

**Date:** \_\_\_\_\_

**Signature:** \_\_\_\_\_

**Title:** \_\_\_\_\_

## EXHIBIT 10 - RESTRICTIONS ON LOBBYING CERTIFICATION

Pursuant to United States Public Law 101-121, Section 319, the undersigned duly authorized official of the proposer hereby certifies, to the best of her/his knowledge and belief, that:

1. No Federal appropriated funds have paid or will be paid, by or on behalf of the undersigned, to any person for the purpose of influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress, in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
2. If any funds other than Federal appropriated funds have been paid or will be paid to any person or agency for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress, in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit a Standard Form-LLL, "Disclosure Form to Report Lobbying", in accordance with its instructions.
3. The undersigned duly authorized official shall require and ensure that the language of this certification be included in any award documents for subcontracts, grants, loans, and cooperative agreements, and that all subcontractors shall so certify and disclose accordingly.

This Certification is a material representation of fact, upon which reliance was placed when this transaction was made or entered into. The submission of this Certification is a prerequisite for making or entering into this transaction, imposed by Title 31 USC Section 1352. Any proposer (person) who fails to file the required certification shall be subject to civil penalty of not less than ten thousand dollars (\$10,000) and not more than one hundred thousand dollars (\$100,000) for each such failure to file.

Proposer: \_\_\_\_\_

Signature: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**EXHIBIT 11 - NON-COLLUSION AFFIDAVIT**

The undersigned duly authorized official of the proposer hereby certifies, to the best of her/his knowledge and belief, that:

1. That I am an officer or employee of the \_\_\_\_\_(proposing entity) having the authority to sign on behalf of the corporation, and,
2. That the prices in the attached proposal were arrived at independently by \_\_\_\_\_(proposing entity) without collusion, consultation, communication, or any agreement, for the purpose of restricting competition as to any matter relating to such prices with any other proposer or with any other competitor regarding an understanding, or planned common course of action with any other vendor of materials, supplies, equipment, or service described in the RFP/IFB designed to limit independent proposals or competition; and
3. That unless otherwise required by law, the contents and prices contained in the proposal have not been communicated by \_\_\_\_\_(proposing entity) or its employees or agents to any person not an employee or agent of \_\_\_\_\_(proposing entity), or its surety on any bond furnished with the proposal, and will not be communicated to any such person prior to the official opening of the proposal; and,
4. That I have fully informed myself regarding the accuracy of the statements made in this affidavit.

Proposer: \_\_\_\_\_

Signature: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

## EXHIBIT 12 - EQUAL EMPLOYMENT STATUS REPORT

Contractor's Name

---

Street Address

---

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

This firm is:

\_\_\_\_\_ Independently owned and operated

\_\_\_\_\_ An Affiliate Parent Company

---

or

\_\_\_\_\_ A Subsidiary of Address

---

or

\_\_\_\_\_ A Division City and State

---

Zip \_\_\_\_\_

1. Contractor \_\_\_\_ HAS \_\_\_\_ HAS NOT

Developed and has on file an affirmative action program in conformance with 41 CFR 60-2.

2. Contractor \_\_\_\_ HAS \_\_\_\_ HAS NOT

Participated in any previous contract or subcontract subject to the equal opportunity clause either with the City or any Federal agency.

3. Contractor \_\_\_\_ HAS \_\_\_\_ HAS NOT

Filed with the City, or where applicable, joint Reporting Committee, or other Federal Agency, all reports due under the applicable contract(s) or subcontract(s).

Contractor's Equal Employment Opportunity Program \_\_\_\_ HAS \_\_\_\_ HAS NOT been subject to a Federal Equal Opportunity Compliance Review. If so, then state date of Review below.

---

Signature \_\_\_\_\_ Date \_\_\_\_\_

Title \_\_\_\_\_

## SECTION VI

### 6.0 SCHEDULES

Schedule A	Price Sheet
Schedule B	General Construction Terms and Conditions
Schedule C	Technical Provisions
Schedule D	Clauses for Federal Requirements

## SCHEDULE A – PRICE SHEET

The Offeror's signature will be considered the offerer's acknowledgment of understanding and ability to comply with all items in this solicitation. If an offeror makes any changes or corrections to the proposal documents (such as white out, or writing over a figure, etc.) such changes or corrections must be initialed and dated by the person signing the offer prior to its submittal.

ITEM	DESCRIPTION	QTY	UNIT	UNIT COST	EXT COST
1	Mobilization & Demobilization	1	LS	\$	\$
2	Water Control and Dewatering	1	LS	\$	\$
3	Erosion and Sediment Control	1	LS	\$	\$
4	Clearing and Grubbing	5.7	AC	\$	\$
5	Earthwork – Excavate and Fill Onsite	20,100	CY	\$	\$
6	Earthwork – Imported Fill	3,100	CY	\$	\$
7	Topsoil – Stripping and Stockpiling, Amended	2,260	CY	\$	\$
8	Import Topsoil	1,180	CY	\$	\$
9	Upland Seeding	3.7	AC	\$	\$
10	Riparian Seeding	0.4	AC	\$	\$
11	Cottonwood Poles	63	EA	\$	\$
12	Willow Stakes	12,600	EA	\$	\$
13	Shrub, 1-Gallon	75	EA	\$	\$
14	100% Coconut Erosion Control Blanket	4,60	SY	\$	\$
15	Erosion Control Fabric (KoirWrap 1200)	2,000	SY	\$	\$
16	Sculpted Concrete Drop Structure	500	CY	\$	\$
17	Sheet Pile (PZ 22) Cutoff Wall	5,035	SF	\$	\$
18	Concrete Sheet Pile Cap	117	LF	\$	\$
19	Type M Soil Riprap	2,620	CY	\$	\$
20	Type VH Soil Riprap	1,300	LF	\$	\$
21	Wrapped Soil Lift	1,420	LF	\$	\$
				<b>TOTAL</b>	<b>\$</b>

The undersigned declares that it has carefully examined the cost information and the complete Solicitation, (The term solicitation means the complete request for proposal) in submitting a proposal for “**Monument Creek Channel Restoration – Phase 1**”. Offeror’s signature will be considered the offerer’s acknowledgment of understanding and ability to comply with all items in this solicitation.

\_\_\_\_\_

**Name**

\_\_\_\_\_

**Phone Number**

\_\_\_\_\_

**Email Address**

\_\_\_\_\_

**Signature**

\_\_\_\_\_

**Date**

\_\_\_\_\_

**Company**

## **SCHEDULE B – GENERAL CONSTRUCTION TERMS AND CONDITIONS**

### **GENERAL CONSTRUCTION TERMS AND CONDITIONS**

#### **SECTION 100 DEFINITIONS AND TERMS**

Titles used in these specifications having a masculine gender, such as “workmen” and the pronouns “he” or “his”, are for the sake of brevity and are intended to refer to persons of any gender.

The titles or headings of the sections and subsections herein are intended for convenience of reference and shall not have any bearing on their interpretation.

When the Contract indicates that something “shall” be done, the action is required and is not discretionary.

Calendar Day                      Each and every day shown on the calendar, beginning and ending at midnight.

Change Order                      A written order issued to the Contractor by the City covering contingencies, extra work, increases or decreases in Contract quantities, and additions or alterations to the plans or specifications, within the scope of the Contract, and establishing the basis of payment and time adjustments for the work affected by the changes. The Change Order is the only method authorized for changing the Contract.

City                                      The City of Colorado Springs, Colorado.

Contract Documents              Contract Documents include the Request for Proposal, Instructions to Offerors, Proposal, Amendments, the signed Contract, surety bonds, insurance documents, all terms, conditions, and provisions, and the Specifications, including all modifications thereof incorporated in any of the documents before execution of the agreement.

Contract                              The executed written agreement between the City and the Contractor setting forth the obligations of the parties for the performance of the work and the basis of payment. The Contract includes the Contract Documents, Notice to Proceed, and executed Change Orders, all of which constitute one instrument.

Contractor	The person, persons, firm, or corporation to whom a Contract is awarded by the City and who is subject to the terms of said Contract. Contractor shall include the agents, employees, workmen, subcontractors and any assignees of said Contract.
Engineer	An engineer of the City of Colorado Springs.
Notice	<p>Any written notice served pursuant to the terms of the Contract. Notice shall be deemed to have been duly served if delivered in person or by registered mail to:</p> <p style="margin-left: 40px;">The Project Manager assigned to the Contract, City of Colorado Springs, City Engineering, 30 South Nevada Ave., Room 403, Colorado Springs, CO 80903.</p> <p>Notice to the Contractor will be to the Authorized Representative of the Contractor at the site of the Project in person; or by registered mail to the Contractor's principal place of business as indicated in the Contractor's proposal certifications; or as to the Surety on the performance bond by registered mail to the Surety at the home office of such surety.</p>
Plans	The drawings, or reproductions, provided by the City that show the location, character, dimensions, and details of the work to be done.
Project Manager	An individual representing the City responsible for managing and oversight of the Contract. .
Project	The entire improvement outlined in the Scope of Services which is to be constructed in whole or in part pursuant to the Contract.
Subcontractor	A person, firm, or corporation, other than the Contractor, supplying labor or materials, or both, or equipment furnished at the site of the project under an Agreement with the Contractor.
Surety	The person, firm, or corporation that has executed as surety the Contractor's Proposal, Performance, Payment and Maintenance Bonds.
Work	Work performed under the Contract.

Working Days

Days of the week, not including weekends and City holidays, unless otherwise stated.

## **SECTION 101      CONTRACT DOCUMENT INTERPRETATION**

### **101.00      INTENT OF CONTRACT DOCUMENTS**

The sections of the Contract Documents are complementary, and what is called for by any one shall be as binding as if called for by all. The intent of the Contract Documents is to include the cost of all labor and materials, water, fuel, tools, plants, equipment, light, transportation, and all other expenses as may be necessary for the proper execution of the work. If the Contract Documents should be contradictory in any part, the order of precedence shall be as described in the Contract.

Any work shown on the Plans and not covered in the specifications, or included in the Specifications and not shown on the Plans, shall be executed by the Contractor as though shown both on the Plans and included in the Specifications.

If the Contractor, in the course of the work, finds any discrepancy between the Plans and the physical layout, or any errors or omissions in Plans or layout, he shall immediately so inform the Project Manager and the Project Manager will promptly verify them. Any work done after such discovery without written consent of the Project Manager authorizing the same shall be done at the Contractor's risk and sole expense.

Any incidental and/or appurtenant items not specifically called for in the Plans and Specifications, but which are necessary to complete the work in accordance with the requirements of good practice, as determined by the Project Manager, shall be included as a part of the Contractor's proposal price and furnished at no additional cost to the City.

In interpreting the Contract Documents, words describing materials or work which have a well-known technical or trade meaning, unless otherwise specifically defined in the Contract documents, shall be constructed in accordance with such well known meaning recognized by architects, engineers, and the trade.

### **101.01      SPECIAL PROVISIONS, SPECIAL SPECIFICATIONS**

Special Provisions or Special Specifications may be written to expand upon, modify or cancel these general provisions or the standard specifications.

### **101.02      STANDARD MANUFACTURER**

Wherever the terms "standard", "recognized" or "reputable" manufacturers are used, they shall be construed as meaning manufacturers who have been

engaged in the business of fabricating materials, equipment, or supplies of the nature called for by the Specifications for a reasonable period of time prior to the date set for submission of proposals, and who can demonstrate to the satisfaction of the City that said manufacturer has successfully installed equipment, materials, or supplies of the type proposed to be furnished in at least three instances and that the performance of such materials, equipment, or supplies for a period of over twelve months prior to the date fixed for submission of proposals shall, prima facie, be deemed to have been engaged in such business for a reasonable length of time.

**101.03 "OR EQUAL" CLAUSE**

Whenever in any section of the Contract documents, any article, material, or equipment is defined by describing a proprietary product, or by using the name of manufacturer or vendor, the term "or equal" if not inserted, shall not be construed in such a manner as to exclude manufacturers' products of comparable quality, design, and efficiency, subject to review and approval by the Project Manager. The Project Manager may require that proposed equals be submitted for review and approval.

**SECTION 102 COMPLIANCE WITH LAWS**

**102.00 PUBLIC IMPROVEMENT ASSESSMENT**

If the cost of the improvement to be constructed under the Contract is to be assessed upon the owners of land benefited by such improvement, upon complaint of any such landowner that the improvement is not being constructed in accordance with the Contract, the City Council may consider the complaint and make such order in the premises as shall be just to ensure compliance with the Contract.

**102.01 ALL LEGAL PROVISIONS INCLUDED**

It is the intention and agreement of the parties to this Contract that all legal provisions of law required to be inserted, shall be and are inserted. However, if by mistake or otherwise, some such provision is not inserted, or is not inserted in proper form, then upon application of either party, the Contract shall be amended so as to strictly comply with the law and without prejudice to the rights of either party.

**102.02 LICENSES AND PERMITS**

It shall be the responsibility of the Contractor to obtain, at its expense, all necessary licenses and permits to do the Project, in accordance with applicable Federal, State and local laws, regulations and ordinances. Typical permits and fees include, but are not limited to, Excavation/Boring Permits, Concrete

Construction Permits, Fugitive Dust Permits, Regional Building Permits, Pavement Degradation fees, as well as Traffic Control and Barricade Plans to be approved by the City Traffic Division for all work within public rights-of-way and easements i.e. (curb and gutter, sidewalks, pedestrian ramps and cross pans).

## **SECTION 103      AWARD AND EXECUTION OF CONTRACT**

### **103.00      CONTRACT EXECUTED**

A single original Contract to include the Contractor's Performance, Labor and Material Payment and Maintenance Bonds may be executed and maintained in the official Contract file located in the City Contracts office. The original copy of the Contract maintained in the City Procurement Services file shall take precedence for purposes of interpretation or determining what the Contract says. After all required signatures are obtained; photocopy counterparts (copies) will be made and distributed to the following, as applicable:

- (a) Contractor
- (b) Project Manager
- (c) City Finance Department
- (d) Inspector

Each Bond shall have an original Power of Attorney attached. The Contractor shall provide compensation insurance and public liability and property damage insurance as outlined in the Contract. The costs of executing the bonds, Contract, and insurance, including all notaries' fees and expense, are to be paid by the Contractor to whom the Contract is awarded. Bonds shall be furnished on forms prepared by the City. Copies of the City's Bond Forms are included in the Exhibits Section of the Request for Proposal, if applicable.

### **103.01      VERBAL AGREEMENTS**

No verbal agreements or conversations with any agent or employee of the City either before or after execution of the Contract shall affect or modify any of the terms or obligations contained in any of the documents comprising the Contract.

### **103.02      CONTRACT SECURITY**

The Contractor shall furnish good and sufficient Performance, Labor and Material Payment and Maintenance Bonds on the form attached hereto in an amount not less than the full amount of the Contract price as security for the faithful performance of the Contract, for the payment of all persons performing labor and furnishing material in connection with the work, and for all guarantees of materials and workmanship required in the Contract. If at any time during the continuance of the Contract a surety on the Contractor's bond or bonds becomes irresponsible, as determined in the City's sole and absolute discretion, the City

shall have the right to require additional and sufficient sureties which the Contractor shall furnish within ten (10) days after written notice to do so. Any additional surety bonds shall cover the entire original Contract amount and any increases thereto.

### **103.03 INDEPENDENT CONTRACTOR**

In the performance of the Contractor's obligations under this Contract, it is understood, acknowledged and agreed between the parties that the Contractor is at all times acting and performing as an Independent Contractor, and the City shall neither have nor exercise any control or direction over the manner and means by which the Contractor performs the Contractor's obligations under this Contract, except as otherwise stated within the Contract terms. The City shall not provide any direction to the Contractor on the work necessary to complete the Project. Contractor understands that it is an independent contractor responsible for knowing how to perform all work or tasks necessary to complete Project. The Contractor understands and agrees that the Contractor and the Contractor's employees, agents, servants, or other personnel are not City employees. The Contractor shall be solely responsible for payment of salaries, wages, payroll taxes, unemployment benefits or any other form of compensation or benefit to the Contractor or any of the Contractor's employees, agents, servants or other personnel performing services or work under this Contract, whether it be of a direct or indirect nature. Further in that regard, it is expressly understood and agreed that for such purposes neither the Contractor nor the Contractor's employees, agents, servants or other personnel shall be entitled to any City payroll, insurance, unemployment, worker's compensation, retirement or any other benefits whatsoever.

## **SECTION 104 THE CONTRACT: FOLLOWING EXECUTION**

### **104.00 MATERIALS**

Unless otherwise stipulated in the Contract, the Contractor shall provide and pay for all materials, labor, water, tools, equipment, light power, transportation, and other facilities necessary for the execution and completion of the work. The Contractor shall, if required, furnish satisfactory evidence as to the kind and quality of materials.

### **104.01 SCHEDULE**

In the event of contradictions or inconsistencies, this clause shall take precedence over any language relevant to scheduling included anywhere else in this Contract.

The Contractor shall be responsible for planning, scheduling, and reporting the progress of the work to ensure timely completion of the work as called for in the

Contract Documents. The Contractor shall prepare a detailed Project schedule ("Project Schedule") that shall be used for coordination, for evaluation of progress, and for the evaluation of changes to the Contract. The Project Schedule shall include all activities, including those of subcontractors, Contractor's engineers and surveyors, and suppliers. Seasonal and weather constraints, utility coordination, railroad restrictions, right of way restrictions, traffic constraints, environmental constraints, other project interfaces, expected job learning curves and other constraints shall be considered when preparing the Project Schedule, including any phasing or sequencing of the work specified in the Contract Documents. Days scheduled as no work days shall be indicated. The Project Schedule shall consist of a Methods Statement as defined in subsection (a) below and a progress schedule consisting of (1) a Critical Path Method ("CPM") schedule as defined in subsection (b) below, or (2) a Bar Chart schedule as defined in subsection (c) below. A CPM Schedule shall be required if the Contract exceeds \$250,000 or if the construction period exceeds 150 Calendar Days, unless the Contract Documents stipulate otherwise. The CPM Schedule shall utilize Primavera's Suretrak Project Manager software (or other software designated by the Project Manager), or be capable of being read and manipulated by Suretrak Project Manager software (or other software designated by the Project Manager). The Project Schedule shall show all work completed within the Contract Period of Performance. The City reserves the right to approve or disapprove any proposed schedule. If disapproved, the Contractor must make requested changes and resubmit the schedule for approval within five working days of the disapproval by the City.

After award, the Contractor shall submit two copies of all required schedule information as described below. Schedules, schedule updates, diagrams and reports using CPM shall also be submitted electronically in the appropriate software format. All schedules, diagrams, and reports shall include a title, project number, date of preparation, and the name of the Contractor.

The Bar Chart or CPM 90-day schedule shall be submitted at least 14 Calendar Days prior to the start of the work. The Project Manager's review will not exceed five working days. Work shall not begin until the Project Schedule is accepted in writing, unless otherwise approved by the Project Manager.

(a) Methods Statement. A Methods Statement shall be prepared for the prominent features listed in the Contract Documents, and for any feature not listed in the Contract Documents that the Contractor considers a controlling factor for timely completion. The Methods Statement shall be a detailed narrative describing each feature and all work necessary to complete the feature. The Methods Statement shall be submitted with the Contractor's schedule. The following format is required:

1. Feature: Name of the feature;

2. Responsibility: Contractor, subcontractor, supplier, utility, etc. responsible for the feature;
3. Procedures: Procedures to be used to complete the work. The procedure to be used shall include general information regarding methods such as forming, excavation, pouring, heating and curing, backfill and embankment, trenching, protecting the work, etc. When separate or different procedures are to be employed by the Contractor due to seasonal or Project phasing requirements, such differing procedures shall be described in the procedure statement;
4. Production Rates: The planned quantity of work per day for each feature;
5. Labor Force: The labor force planned to do the work;
6. Equipment: The number, types, and capacities of equipment planned to do the work;
7. Work Times: The planned time for the work to include:
  - (a) number of work days per week
  - (b) number of shifts per day
  - (c) number of hours per shift

At the Project Manager's request, the Contractor shall update the Methods Statement, or any part thereof, and submit it with the Job Progress Narrative Report or Schedule Update, whichever is earlier.

- (b) Critical Path Method. CPM is a scheduling method which shows the interdependencies between work activities. The critical path is that path through the schedule which, if delayed, will cause a delay to project completion.

The progress schedule shall include as a minimum the prominent features of this Project as listed in the Contract Documents. The progress schedule shall include all activities for all work on the Project, including subcontracted work, delivery dates for critical material, submittal and review periods, milestone requirements and no work periods. Where the Project has specific phases, each phase shall be described separately for each applicable prominent feature.

Construction activity duration shall not exceed 15 Calendar Days unless approved by the Project Manager. Series of activities that have aggregate durations of five Calendar Days or less may be grouped in a single activity. For example, "form, reinforce, and pour pier" could be defined as a single activity rather than three. Single activities or a series of grouped

activities of at least one Calendar Day duration may also need to be included in the Project Schedule as determined by the Project Manager (e.g. same activities but noted separately by location).

**Time Scaled Logic Diagram:** This diagram shall show the logical progression of all activities required to complete the work defined in the Contract Documents. Activity information shall include activity ID, description, duration, early start and finish dates, late start and finish dates, total float, and responsibility.

1. **90-Day Schedule.** The 90-Day Schedule shall provide all necessary detail for procurement, construction and submittal activities required during the first 90 days of the Period of Performance. This submittal shall include a Time Scaled Logic Diagram.

2. Project Schedule, as described above.

The Project Schedule shall cover the entire Period of Performance.

3. **Schedule Updates.** The Contractor shall update the 90-Day Schedule or the Project Schedule to reflect actual construction progress of all work activities on the project. Updates shall show the previous 30 days progress and a 60-day projection for all work started, completed, or in progress during this three month window.

The Project Schedule shall be updated as of the cutoff date for the monthly progress pay estimate and submitted to the Project Manager before the payment of the progress pay estimate is approved.

Each of the diagrams, charts, and reports shall comply with the requirements for the Project Schedule above, except that they shall also include the actual completion dates and percentages of completion for the appropriate activities.

(c) **Bar Chart.** The Bar Chart shall be time scaled and shall show the following:

1. The prominent features, as listed in the Contract Documents.
2. Any feature not listed in the Contract Documents that the Contractor considers a controlling factor for timely completion.
3. The number of days required to complete each feature and its relationship in time to other features.

4. Sufficient space for each feature to permit two additional plots parallel to the original time span plot.
5. The anticipated delivery dates for equipment or materials in any feature that could affect timely completion of the project.
6. Critical completion dates for any activity within any feature that could affect timely completion of the project.
7. Connecting lines between features that show the intended progression of activities.

The Project Schedule shall cover the time from the Day of Notice to Proceed to the predicted completion date. The Project Schedule shall be updated as of the cutoff date for the monthly progress pay estimate and submitted to the Project Manager before the payment of the progress pay estimate is approved. The Contractor shall provide a copy of the original bar chart showing, for each feature, the days actually worked and the anticipated days required to complete.

(d) Project Coordination. The Contractor shall coordinate and schedule its work to include anticipated utility work. Various City and private utility entities may be working to install and/or inspect their utilities within the Project area. Reasonable delays should be expected for utility lowering, relocations and placement. These delays shall not be reason for granting any monetary change or performance time alteration to the Contract. As a minimum, the Contractor's Project Schedule shall reflect coordination with the following:

1. City of Colorado Springs City Engineering Division
2. City of Colorado Springs Traffic Engineering Division
3. Colorado Springs Utilities (water, wastewater, gas, electric)
4. City of Colorado Springs Parks, Recreation and Cultural Services Department
5. Private Utility and Telecommunication Companies

(e) Contractor Early Finish or Voluntary Acceleration. Early finish or voluntary acceleration of the schedule by the Contractor is acceptable provided:

1. At the time the Contractor submits the Project Schedule indicating an early finish or voluntary acceleration, the City is notified in writing of actions on the City's part necessary to accommodate the change(s).

2. The City agrees to such change(s) in writing.
3. The City is compensated by the Contractor for any inconvenience or expense associated with the change(s).
4. There is no increase to Contract cost.

A Job Progress Narrative Report shall be submitted bi-weekly as a minimum and with all Project Schedule updates. It shall detail the description of job progress, problem areas, current and anticipated delaying factors and their anticipated effects, impacts to job milestones or Project completion, any corrective action proposed or taken, and any minor revisions to the Project Schedule. If the Job Progress Narrative Report indicates problem areas and impacts to job milestones or Project completion, a revised Project Schedule shall also be submitted as specified below.

Revision of the Project Schedule may be required, as determined by the Project Manager, for: a major revision in the schedule logic or methods of construction; the addition, deletion, or revision of activities required by Contract modification; delays in milestones or the completion of the Project; or for prosecution of work that revises the phasing or staging which is represented on the plans or on the progress schedule. If in the opinion of the Project Manager, the Contractor falls behind the approved Project Schedule, the Contractor shall take steps necessary to improve Project progress, including those steps that may be required by the Project Manager, without additional costs to the City. In those circumstances where the Contractor is behind schedule, the City may require the Contractor to increase the number of shifts, overtime operations, days of work, and/or the amount of construction planned and to submit such changes and revisions to the Project Schedule to the Project Manager for approval that will demonstrate how the approved rate of required progress will be regained. Failure of the Contractor to comply with the requirements of the Project Manager under this subsection shall be grounds for a determination by the City that the Contractor is not prosecuting the work with sufficient diligence to ensure timely completion of the Contract as required.

If it is determined that a revision to the Project Schedule is required, it shall be provided to the Project Manager for review within 15 Calendar Days of Contractor receiving written notification of the requirement from the Project Manager. The Project Manager's review of the revised schedule will not exceed 5 working days. Revisions required as a result of the Project Manager's review shall be submitted within 5 working days. When accepted by the Project Manager in writing, the revised schedule shall become the Project Schedule.

The Contractor shall participate in the Project Manager's review and evaluation of the submittals. Meetings will be held to review progress and planning when

requested by the Project Manager or Contractor. The Project Manager may request additional project scheduling information and documentation as deemed necessary, including reports and other information that may be reasonably generated using CPM software if required by the Contract.

The Contractor shall prosecute the work according to the Project Schedule. The Contractor shall be responsible for assuring that its subcontractors, suppliers, and engineers/surveyors, at any tier, also prosecute the work according to the Project Schedule. The City shall be entitled to rely on the Project Schedule for planning and coordination.

Acceptance of the Contractor's Project Schedule by the Project Manager is not to be construed as relieving the Contractor of obligation to complete the Contract work within the Contract time allowed for the portion of the work or the entire Contract, or granting, rejecting or in any other way acting on the Contractor's request for extension of Contract time, or claims for additional compensation.

All costs relating to preparation, submittal, and acceptance of the Project Schedule, reports and revisions, and all requirements of this subsection will not be paid for separately, but shall be included in the work.

Failure of the Contractor to comply with the requirements of this subsection may be grounds for a determination by the Project Manager that no further progress payments are to be made until the Contractor is in full compliance.

## **104.02 SCHEDULE OF VALUES**

Promptly following the execution of the Contract Documents for all Firm Fixed Price, lump sum Contracts, the Contractor shall prepare and transmit to the Project Manager two copies of an itemized Project cost breakdown showing the unit quantities of each major construction item and the corresponding unit prices. Such unit prices shall contain all costs including profit and overhead of each item complete in place. The total cost of all the items shall equal the Contract price for the Project. This breakdown, once approved by the Project Manager, will be used primarily in determining payment due the Contractor as provided herein. If, in the opinion of the Project Manager, any unit price submitted by the Contractor is unbalanced, a detailed breakdown of the items contained in the unit will be required.

For Contracts executed on a fixed unit price basis, payment shall be made based on the actual number of units installed or performed that are complete, however, payment shall not exceed the total Contract amount unless previously approved by Change Order.

### **104.03 SURVEYS**

Unless otherwise specified in the Contract Documents, the City will furnish all site surveys, easements, pipeline licenses, etc., necessary to authorize construction of any permanent works required in the Contract, where such work is to be done on property other than the City's.

The Project limits of construction shall be within the public right-of-way and/or City easements. The Contractor shall not trespass on premises outside of the limits of construction for this Project, unless permission to do so is granted by the property owner in writing. Copies of any such grant shall be furnished to the City prior to the performance of any work outside the limits of construction.

### **104.04 SUBCONTRACTS**

The Contractor will be permitted to subcontract a portion of the Contract; however, the Contractor shall perform work amounting to 30 percent or more of the original total cost of proposal items. Any items designated in the Contract as "specialty items" may be performed by subcontractor. The cost of "specialty items" so performed by subcontractor may be deducted from the original total cost of proposal items before computing the amount of work required to be performed by the Contractor.

The calculation of the percentage of subcontracted work shall be based on the Contract unit prices rather than subcontract unit prices. Proportional value for a subcontracted partial Contract item will be verified by the Project Manager. For the purpose of calculating the value of subcontracted work, the cost of procuring materials and manufactured products can be included in either the Contract or subcontract. However, when a firm both sells material to a Contractor and performs the work of incorporating the materials into the Project, these two phases shall be considered in combination and as constituting a single subcontract.

The Contractor shall as soon as practical after signing the Contract notify the Project Manager in writing, giving the names and qualifications, of all subcontractors proposed to do work on the Project within fifteen (15) business days of notice of award. The City shall have the right to reject subcontractors who are debarred or suspended from doing business with the federal government, State government, or the City of Colorado Springs. The Contractor shall notify the Project Manager of each subcontract he awards, giving:

- (a) Name, address, and telephone number of the subcontractor
- (b) Branch of work covered
- (c) Total price of subcontract

(d) Date of subcontract

It shall be the responsibility of the Contractor to file with the Project Manager copies of applicable permits and licenses required to do the subcontracted work. Subcontracts or transfer of Contract obligations shall not release the Contractor of liability under the Contract and bonds.

**104.05 OTHER CONTRACTS**

The City may undertake or award other Contracts for additional work at or near the site of the work under this Contract. The Contractor shall fully cooperate with the other Contractors and with City employees and shall carefully adapt their scheduling and performance of the work to accommodate the additional work, heeding any direction that may be directed by the Project Manager. The Contractor shall not commit or permit any act, which will interfere with the performance of work by any other contractor.

**SECTION 105 CONSTRUCTION SITE**

**105.00 LANDS TO BE USED FOR WORK**

The Contractor shall confine the work activities to the area shown in the construction drawings. The Project Manager will furnish the Contractor with copies of all executed right of way (ROW) and easement documents for the Project. The established work zone shall be marked and secured with orange safety fence. Any additional work area required within adjoining private properties must be acquired by the Contractor by written permission from the property owner. The Contractor shall restore any damage or disruption to other properties utilized in the performance of this Project to an equal or better than pre-construction condition at no cost to the City. The Contractor shall indemnify and hold the City harmless from any claims or losses from damage or disruption of private property.

Contractor shall provide, at its expense and without liability to the City, any additional land and access thereto that may be required for temporary construction facilities or for storage of materials. All such costs will be considered incidental to the work and will not result in additional cost to the City. Contractor personnel shall not unnecessarily enter upon private property without the express written consent of the landowner. The Contractor shall provide the Project Manager with a copy of the written permission. The Contractor shall indemnify and hold the City harmless from any claims or losses related to Contractor trespassing.

#### **105.01 STORAGE OF MATERIALS**

The Contractor shall confine its equipment, apparatus, the storage of materials and operations of Contractor's workmen to limits indicated by law, ordinances, permits, or directions of the City and shall not encumber the Project site with materials or equipment not necessary for the Project.

#### **105.02 LOADING OF STRUCTURES**

The Contractor shall not load or permit any part of a structure to be loaded with a weight that will endanger the structure's safety. The Contractor shall enforce the Project Manager's instructions regarding signs, advertisements, fires, and smoke.

#### **105.03 SANITARY PROVISIONS**

The Contractor shall provide and maintain on the construction site at all times suitable sanitary facilities for use of those employed on this Contract without committing any public nuisance. All toilet facilities shall be subject to the approval of the El Paso County Public Health Department. All portable toilet facilities for this Project shall be kept on City or State right-of-way as directed by the Project Manager.

#### **105.04 ACCIDENT PREVENTION**

The Contractor shall be solely responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work. The Contractor shall submit to the City an acceptable, comprehensive Safety Plan for review prior to commencement of the Work. The Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury, or loss to:

- a.) All persons on or about the Site or who may be affected by the Work;
- b.) All Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and
- c.) Other property at the site or adjacent thereto, including buildings, real property, trees, shrubs, lawns, walks, pavements, roadways, structures, utilities, and underground facilities not designated for removal, relocation, or replacement in the course of the Work.

Notwithstanding the foregoing, the City reserves the right to direct the Contractor to stop work and correct an unsafe condition at any time that any person present at the job site identifies any unsafe condition or action. For this purpose only, any person at the job site is authorized to act on behalf of the City, but such

intermittent delay shall not be grounds for an increase in the Contract price or schedule.

Precaution shall be exercised at all times for the protection of persons, including employees, and property. The safety provisions of all Federal, State and Municipal laws and any other codes relating to the public safety, shall be strictly observed, and the Contractor shall, at all times, whether or not so specifically directed by the Project Manager, take the necessary precautions to ensure the protection of the public.

Piling, sheeting and shoring shall be utilized where required to prevent any excessive widening or sloughing of a trench which may be detrimental to human safety, traffic flow, a pipe being placed, trees, or to any existing structure.

Excavated materials shall be placed a safe distance from the sides of the trench. Heavy equipment shall not be used or placed near the sides of a trench unless the trench is adequately braced.

The Contractor shall not load or permit any part of a structure to be loaded with a weight that will endanger the structure's safety.

The Contractor shall designate a qualified and experienced safety representative at the Work site(s) whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety plans and programs.

#### **105.05 PROTECTION OF THE PUBLIC WORKS AND PROPERTY**

The Contractor shall provide and maintain all necessary watchmen, barricades, lights, and warning signs and take all necessary precautions for the protection of the public. The Contractor shall continuously maintain adequate protection of all work from damage, and shall take all reasonable precautions to protect the City's property from injury or loss arising in connection with the Contract. The Contractor shall make good any damage, injury, or loss to their work and to the property of the City resulting from lack of reasonable protective precautions except such as may be due to errors in the Contract Documents, or caused by agents or employees of the City. The Contractor shall check all cautionary signs at least once a day during this Contract.

The Contractor shall continuously maintain adequate protection of all their work from damage and shall protect the City's and adjacent property from injury arising in connection with this Contract.

The Contractor will be responsible for any and all damage to property, public or private, that may be caused by its operations in the performance of this Contract, and the Contractor shall defend any suit that may be brought against itself or the City on account of damage inflicted by its operations, and shall pay any

judgments awarded to cover such damage and shall indemnify the City for any losses arising out of such damage or related claims.

The Contractor shall be responsible for the restoration of all existing surface or subsurface improvements damaged as a result of construction at no additional cost to the City.

## **105.06 PUBLIC ROADS**

The Contractor in executing the work on this Project shall not unnecessarily impede or interfere with traffic on public highways or streets. Detours, including surfacing, guard rails, temporary bridges and culverts, as may be shown on the drawings, or ordered by the Project Manager to accommodate the general public, residents adjacent to the improvements, and the United States mail shall be provided and maintained by the Contractor in a good workmanlike manner. Any call out of City Barricade Crews shall be charged to and paid for by the Contractor.

All work done within the public right-of-way and/or easements requires a Traffic Control Plan approved by the City Traffic Engineering Division.

The Contractor shall provide and maintain in place all barricades, warning signs, lights and other safety devices required to protect the work, divert traffic, and warn pedestrians of open excavation, unfilled trenches, and other areas or conditions which might be hazardous or dangerous. Detour routings must first be submitted to the City Traffic Engineer for review and approval and shall be signed for the entire route of the detour as required to return the traffic to their street or origination. Detours shall be maintained throughout the period of construction in such a manner as to provide the least amount of disruption to normal traffic flow.

All signing and barricading shall conform to the latest editions of the following:

- (a) Manual of Uniform Traffic Control Devices for Street and Highways (MUTCD)
- (b) City of Colorado Springs Traffic Signage and Markings Manual
- (c) City of Colorado Springs Construction Traffic Control Manual

The City Traffic Engineer may require flag persons or off-duty police officers for traffic direction.

#### **105.07 PROTECTION OF EXISTING CURBS, GUTTERS AND DRIVEWAYS**

The Contractor shall exercise care in protecting existing curbs, gutters and driveways. Curbs, gutters and driveways damaged by the Contractor's operations shall be removed and replaced by the Contractor at Contractor's expense.

#### **105.08 PROTECTING AND REMOVING PLANTINGS**

The Contractor shall protect all existing trees, shrubs and other plantings from above ground and root structure damage during the construction activities. Plantings which are considered to be slightly damaged shall be properly pruned and sealed according to accepted nursery practices. Contractor shall be liable for the costs of any unnecessary damage to plants or trees as determined by the Project Manager. Where plantings are in conflict with new work, as determined by the City Forester (plantings in the public right-of-way) or by the inspector or owner (plantings on private property), the Contractor shall at his expense remove the planting. The Contractor shall coordinate with the City Forester prior to working in the vicinity of plantings in the public right of way.

In all cases, the proper planting season shall be observed to assure proper establishment and growth of the plantings.

Tree branches shall be trimmed back to the trunk, all around, to a minimum height of 8' above the adjacent walkway. Work shall be done only by a licensed Tree Service as provided in City Code Chapter 2, Article 3, Part 3.

#### **105.09 PUBLIC CONVENIENCE AND SAFETY**

The Contractor shall make every effort to minimize the inconvenience to property owners and to the traveling and pedestrian public, and shall conduct the Work to minimize obstruction to traffic and inconvenience to property owners affected by the Work.

The Contractor shall notify and coordinate the closing and construction of the driveways, curb, gutter and sidewalks with the Project Manager and the adjoining property owners in advance of Work in writing. The Contractor shall provide 72 hours written notice in advance of any construction that may affect access, parking and/or existing structures, including fences adjacent to that property.

Suitable access and parking will be maintained at all times. Access may be limited to half the existing driveway width for limited periods during concrete driveway and street construction. An additional verbal notice shall be provided to each business or property owner 30 minutes prior to the actual access drive closure.

Relocating of fences and structures shall be coordinated with property owners and shall include miscellaneous items including, but not limited to, utility services, street signs and mailboxes, sod replacement, sprinkler system modifications, control boxes, railroad tie walls, etc. If no such items are specifically included in the Contract, these items will be considered incidental to the work and are to be included in the unit prices. The Contractor shall coordinate the salvaging of any materials suitable for re-use with the City Inspector and, if on private property, with the respective property owners.

Any restrictions on street parking or traffic movement shall be coordinated with the City Traffic Engineer.

#### **105.10 FAILURE TO MAINTAIN SAFE SITE**

If the City becomes aware of failure to comply with applicable safety regulations, the Project Manager may inform the Contractor who shall take immediate steps to remedy the noncompliance. The Project Manager shall give written notification to the Contractor directing it to correct the unsafe acts or conditions. If the Contractor fails to comply with such a notification, the Project Manager may issue a Stop Work order in accordance with this Contract, and work shall only be resumed after adequate corrective actions have been taken to correct the safety deficiencies the Contractor has been notified of. Stoppage of work because of noncompliance with prescribed accident precaution measures shall not be considered a changed condition or changes in work, nor reason for extension of completion time.

In case of injury to persons or property by reason of failure to erect and to maintain necessary barricades, safeguards, and signals, or by reason of any act or omission of the Contractor, or Contractor's subcontractors, agents, or employees, during the performance of this Contract, the City may withhold payments due the Contractor so long as shall be reasonably necessary to indemnify the City on account of any such injuries, but the City's payment or failure to pay any sum shall not be considered a waiver of its right to indemnity under the this Contract.

#### **105.11 EROSION AND DRAINAGE CONTROL**

Contractor shall provide for the drainage of stormwater and such water as may be applied or discharged on the site in performance of the work per the latest revision of the City of Colorado Springs Drainage Criteria Manual, Volume II. Drainage facilities shall be adequate to prevent damage to the work, the site, and adjacent property.

The Contractor shall prevent the pollution of drains and watercourses by sanitary waste, sediment, debris or other substances resulting from this work. Contractor shall be required to clean up and isolate such materials on a continuing basis to prevent risk of washing into such drainage ways.

Should the affected areas of the Project exceed one acre, a Stormwater Discharge Permit shall be required. Affected area includes excavations, material stockpiles and areas where equipment and vehicles disturb the ground. An exact definition of the affected area should be obtained from the Colorado Department of Public Health and Environment (CDPHE).

#### **105.12 POLLUTION**

The Contractor shall at all times ensure compliance with applicable Federal, State, and Municipal air, water, and noise pollution laws and ordinances. The Contractor shall at all times have the proper sprinkling equipment available and shall apply water in the amount determined by each site condition or as directed by the Project Manager. The Contractor shall obtain all necessary permits at Contractor's expense, which may include, but not be limited to, El Paso County or a State Air Emission permit, State of Colorado Construction Activity permit, State of Colorado Dewatering permit and Section 404 Corp of Engineers permit, unless otherwise specified in the RFP.

#### **105.13 TEMPORARY CONSTRUCTION**

All temporary facilities, including the Contractor's field office which it may maintain at the site, and additional offices erected by subcontractors, shall be neatly constructed and arranged on the site in an orderly manner. The Contractor shall prepare and submit to the Project Manager, for approval prior to starting work, a construction plan layout, showing arrangement of storage areas, temporary buildings, equipment, and work areas. The Contractor shall provide suitable weather-tight storage sheds of capacity required to contain all materials which might be damaged by storage in the open. The Contractor shall at all times keep copies of all Contract Documents readily accessible at its office at the site.

#### **105.14 TEMPORARY WATER SUPPLY**

The Contractor shall provide, at Contractor's own expense, temporary water connections and water supply necessary for the prosecution of the work and permit all contractors on the work to use this supply at a reasonable prorated charge, or by sub-metering. The Contractor shall pay for all water consumed in the work, and shall arrange with Colorado Springs Utilities for temporary connections and payment of service charges. Upon completion of the Contract work, all temporary waterlines shall be removed. The City will devise a method and plan to monitor and enforce the proper use of temporary water. The City will inspect for compliance.

#### **105.15 TEMPORARY ELECTRICITY**

The Contractor shall arrange with the Colorado Springs Utilities for temporary electricity necessary for the prosecution of the work. The Contractor shall pay for

all electric current consumed, and shall permit all contractors on the work to use this supply at a reasonable prorated charge, or by sub-metering.

#### **105.16      TEMPORARY HEAT**

The Contractor shall provide adequate, temporary heat required during construction. Until the building or work area is enclosed, heavy tarpaulin shall be used to enclose any space requiring heating or protection from weather during construction operations. After the heating plant is in operating condition and the building is enclosed, heat may be provided from the permanent heating plant if such is approved by the Project Manager. In such case, the Contractor shall arrange to operate the plant, connect permanent or temporary radiation or unit heaters, and so maintain the plant during operation that it will be turned over to the City undamaged at the completion of the work. The Contractor shall provide all fuel required. In no case shall salamander heating be used in finished or plastered surfaces; instead, gas-steam radiators, unit heaters, or other suitable and approved means shall be used if the permanent heating plant is not available. This applies only to structures. It does not apply to road improvements or other outdoor improvements.

#### **105.17      TEMPORARY ENCLOSURES**

The Contractor shall provide and maintain temporary enclosures for the work as may be required to permit continuation of interior work during inclement weather, if wall and roof construction has progressed sufficiently to make interior work possible. This applies only to structures. It does not apply to road improvements or other outdoor improvements.

#### **105.18      CLEAN-UP**

The Contractor shall at all times keep the work area including storage and staging areas, free from accumulations of waste materials. The Contractor is also responsible for any costs associated with cleanup of debris from the work site or storage areas that may inadvertently be scattered outside the area by weather or vandalism. Upon completion of the work, the Contractor shall leave the work area in a clean neat and orderly condition satisfactory to the Project Manager.

### **SECTION 106      ROYALTIES, PATENT INFRINGEMENTS, SPECIAL LICENSES AND PERMITS**

#### **106.00      ROYALTIES AND PATENTS**

The Contractor shall pay all applicable royalties and license fees. The Contractor shall defend all suits or claims for infringement of any patent rights and save the City harmless from loss on account thereof except that the City may be responsible for any such loss when a particular process, design, or the product of

a particular manufacturer or manufacturers is specified, unless the City has notified the Contractor prior to the signing of the Contract that the particular process, design, or product is patented or is believed to be patented.

## **SECTION 107      WORK PROVISIONS AND RULES**

### **107.00      COMMENCEMENT AND COMPLETION OF WORK**

- (a) Preconstruction Conference. After issuance of Notice to Proceed, or as otherwise established by the City, a preconstruction conference ("Preconstruction Conference") shall be held for review of the construction schedule, Contractor's written list of subcontractors and suppliers, written list of all required permits, project contracts, utility support plan, water control plan, Traffic Control Supervisor name and telephone number, gradations, test results, certifications, review procedures for handling shop drawings and other submittals, processing applications for payment, and other pertinent items.
- (b) At the Preconstruction Conference, the Contractor shall furnish the Project Manager a written list of all permits required for the proper completion of the Contract. The list shall clearly identify the type of permit or permits that must be obtained before work on any particular phase or phases of work can be started.
- (c) The Contractor shall commence work within ten (10) Calendar Days of the date specified on the Notice to Proceed and complete the Contract within the number of Calendar Days or by the date specified in the proposal form. Unless otherwise noted in the Contract, the number of days are Calendar Days.
- (d) The dates fixed for commencement and completion of the work may be extended by the Project Manager. All requests for extension of time by the Contractor shall be made in writing to the Project Manager and shall set forth the reasons for such requests. The Project Manager may fix the period of extension, if any. In addition, the Project Manager may grant a period of extension upon an execution of a Change Order. Any Project Manager's decision on extensions of time shall be binding upon the parties hereto. Requests for extension of time received twenty (20) or more days after the occurrence of the delay will not be honored. No requests for extension of time shall be honored if submitted after the completion date.
- (e) If satisfactory execution and completion of the Contract shall require work or materials in greater amounts or quantities other than those set forth in the Contract, then the Contract time may be adjusted at the time of the execution of the Change Order. No allowance will be made for delays or

suspension of the prosecution of the work due to the fault of the Contractor.

**107.01 FAILURE TO COMPLETE WORK ON TIME, LIQUIDATED DAMAGES**

If the Contractor fails to fully perform and complete the work in conformity to the provisions and conditions of the Contract within the specified time limit set forth in the Contract, including any extensions granted hereto, the Contractor may be subject to a stop work order, as provided in this Contract. In addition, the Contractor shall pay to the City for each Calendar Day of delay until such time the Contract is complete, liquidated damages at the applicable daily rate below. The amounts shown are considered to be liquidated damages to reimburse the City for the additional cost of construction engineering and Contract administration services and in no case are considered a penalty.

Original Contract Amount	Amount of Liquidated Damages Per Day
Less than \$50,000	\$300.00
\$50,000 to \$100,000	\$500.00
\$100,000 to \$500,000	\$700.00
\$500,000 to \$1,000,000	\$900.00
Over \$1,000,000	\$1500.00

**107.02 WORK IN BAD WEATHER**

No construction work shall be done during stormy, freezing, or inclement weather, except such as can be done satisfactorily, and in a manner to secure first class construction throughout, and then only subject to permission of the Project Manager.

The granting of a time extension for inclement weather does not imply or guarantee that additional compensation for incidental and appurtenant work caused by such weather will be approved or authorized by the Project Manager. Weather delays that can be reasonably anticipated shall not result in increased cost to the City. The Project Manager will be the sole judge as to the reasonableness of delays for inclement weather.

**107.03 EXCUSABLE DELAYS**

The Contractor's right to proceed will not be terminated, and the Contractor will not be charged with damages, for delays in completing the work that arise from unforeseeable causes beyond the control and without the fault or negligence of the Contractor. Examples of such causes include:

- (a) Acts of God or of the public enemy,

- (b) Acts of the government in either its sovereign or Contractual capacity,
- (c) Acts of another contractor in the performance of a contract with the government,
- (d) Fires,
- (e) Floods,
- (f) Epidemics,
- (g) Quarantine restrictions,
- (h) Strikes of employees other than Contractor's employees,
- (i) Freight Embargos,
- (j) Unusually severe weather, or
- (k) Delays of subcontractors or suppliers at any tier arising from unforeseeable causes beyond the control and without the fault or negligence of both the Contractor and the subcontractors or suppliers.

**107.04      COMPENSATION FOR COMPENSABLE DELAYS**

If the Project Manager determines that a delay is compensable in accordance with the Contract, monetary compensation will be determined in accordance with this subsection.

- (a) These categories represent the only costs that are recoverable by the Contractor. All other costs or categories of costs are not recoverable:
  - 1. Actual, reasonable wages and benefits, including FICA, paid for additional non-salaried labor;
  - 2. Reasonable and actual costs for additional bond, insurance and tax;
  - 3. Increased, reasonable, and actual costs for materials;
  - 4. Reasonable equipment costs calculated in accordance with the current edition of the Rental Rate Blue Book of Rental Rates for Construction Equipment for Contractor-owned equipment and based on invoice costs for rented equipment;
  - 5. Reasonable and actual costs of extended job site overhead;

6. Reasonable subcontractor's claims (the same level of detail as specified herein is required for all subcontractors' claims)
  7. An additional 10 percent will be added to the total of items (1), (2), (3), (4), (5), and (6) as compensation for items for which no specific allowance is provided, including profit, overhead, and general and administrative expenses.
- (b) In adjustment for costs as allowed above, the City will have no liability for the following items of damages or expense:
1. Profit in excess of that provided in (a) above;
  2. Loss of profit;
  3. Additional cost of labor inefficiencies in excess of that provided in (a) above;
  4. Home office or other overhead or general and administrative expenses in excess of that provided in (a) above;
  5. Consequential damages, including but not limited to loss of bonding capacity, loss of Proposalsding opportunities, and insolvency;
  6. Indirect costs or expenses of any nature in excess of that provided in (a) above;
  7. Attorney's fees, claim preparation fees, and expert fees.

All costs claimed must be documented and accompanied by a written certification from the Contractor.

#### **107.05      EMERGENCY WORK**

In an emergency affecting the safety of life or of the work or of adjoining property, the Contractor is, without special instructions or authorization from the Project Manager, hereby permitted to act at Contractor's discretion to prevent such threatening loss or injury. Contractor shall also act, without appeal, if so authorized or instructed by the Project Manager. Any reasonable compensation claimed by the Contractor on account of emergency work shall be determined by mutual agreement or in accordance with the Changes provision of this Contract.

**107.06        RESERVED**

**107.07        AUTHORITY OF THE PROJECT MANAGER**

The Project Manager will decide all questions regarding the quality and acceptability of materials furnished, work performed, and the rate of progress of the work, all interpretation of the plans and specifications, and the acceptable fulfillment of the Contract. The Project Manager will perform technical inspection of the work and shall have authority to reject all work and materials which do not conform to the Contract.

The Project Manager has authority to stop the work whenever such stoppage may be necessary to insure the proper execution of the Contract or for the convenience of the City. The Project Manager may order the Contractor, by giving ten (10) days written notice, to suspend, delay, or interrupt all or any portion of the work required by the Contract for a period of up to (10) ten Calendar Days at no additional cost to the City. The Project Manager may immediately stop the work when it is determined that the public's safety and welfare is in jeopardy.

The Project Manager will, within a reasonable time after their presentation to the Project Manager, make decisions in writing on all claims submitted to the City by the Contractor and on all other matters relating to the execution and progress of the work or the interpretation of the Contract Documents. The Project Manager's decisions shall be final.

**107.08        DUTIES OF THE INSPECTOR**

Inspectors employed by the City are authorized to inspect all work done and materials furnished. Any such inspection may extend to all or any part of the work and to the preparation, fabrication or manufacture of the materials to be used. An inspector is not authorized to alter or waive the provisions of the Contract. An inspector is not authorized to issue instructions contrary to the provisions of the Contract or to act as foreman for the Contractor.

**107.09        CONSTRUCTION OBSERVATION AND INSPECTION**

The Project Manager shall at all times have access to the work, and the Contractor shall provide proper equipment, materials and labor as required for such access and inspection.

All equipment, material, and articles incorporated into the work covered by this Contract shall be new and of the most suitable grade for the purpose intended, unless otherwise specifically provided in this Contract. The Project Manager shall have the right to reject materials and workmanship, which are defective, or require their correction. Rejected workmanship shall be satisfactorily corrected

and rejected materials shall be removed from the premises and replaced without charge to the City. If the Contractor does not correct such rejected work and remove rejected materials within a reasonable time fixed by written notice, the City may remove them and charge the expense to the Contractor.

Should it be considered necessary or advisable by the Project Manager at any time before final acceptance of the entire work to make an examination of work already completed, by removing or tearing out same, the Contractor shall on request promptly furnish necessary facilities, labor and materials. If such work is found to be defective in any material respect due to fault of the Contractor or his subcontractors, he shall defray all the expenses of such examination and of satisfactory reconstruction. If, however, such work is found to meet the requirements of the Contract, the actual, reasonable cost of labor and material necessarily involved in the examination and replacement, plus ten (10) percent, will be allowed the Contractor.

All materials to be incorporated in the work, all labor performed, all tools, appliances, and methods used shall be subject to the inspection and approval or rejection of the Project Manager.

If the Project Manager points out to the Contractor, Contractor's foreman, or agent any neglect or disregard of the Contract provisions, such neglect or disregard shall be remedied and further defective work be discontinued immediately.

The Contractor shall execute the work only in the presence of the Project Manager or authorized representative, unless provision has been made for the work to proceed without complete engineering supervision or inspection. The presence of the Project Manager or authorized representative shall in no way relieve the Contractor of any responsibility under this Contract.

The observation of the work by the Project Manager is intended to aid the Contractor in applying labor, materials, and workmanship in compliance with the Contract provisions. Such observation, however, shall not relieve the Contractor from any of Contractor's Contract obligations.

#### **107.10 CONTRACTOR COOPERATION**

All work under this Contract shall be performed in a skillful and professional manner. The Project Manager shall have the authority to order the Contractor to remove from the work site any employee the Project Manager deems incompetent, careless, or otherwise objectionable to the general public or the City by notify the Contractor of such order in writing.

- (a) Workmen, Methods and Equipment: Permission from the Project Manager to use any particular methods, equipment or appliances shall not be so

construed as to relieve the Contractor from furnishing other equipment or appliances or adopting other methods when those in use prove unsatisfactory to the Project Manager, or as to bind the Project Manager to accept work which does not comply with the Contract.

#### **107.11 CONTRACTOR'S RESPONSIBILITY FOR WORK**

Until the work is accepted by the Project Manager as evidenced by the issuance of the Certificate of Completion, the Contractor shall have the charge and care thereof and shall take every necessary precaution against injury or damage to any part thereof by action of the elements or from any other cause, whether arising from the execution or from the non-execution of the work. The Contractor shall rebuild, repair, restore, and make good all injuries or damages to any portion of the work occasioned by any of the above causes before its completion and acceptance and shall bear the expense thereof.

The Contractor shall be responsible for the preservation of all public and private property, trees, fences, monuments, and other property, along and adjacent to the improvements and shall use suitable precautions necessary to prevent damage to pipes, conduits, and other underground structures. When or where any direct or indirect damage or injury is done to public or private property by or on account of any act, omission, neglect or misconduct in the execution of the work, or in consequence of the non-execution thereof on the part of the Contractor, such property will be restored by the Contractor and at Contractor's expense to a condition similar, or equal to that existing before such damage or injury to the satisfaction of the City's Project Manager.

It shall be the responsibility of the Contractor, when moving or operating equipment, to make all arrangements for temporary crossings of telephone, transmission, pipe lines, railroad tracks, and irrigation ditches. This work shall not be paid for as a separate item but shall be considered as incidental to the project.

#### **107.12 PROTECTION OF UTILITIES**

The Contractor's attention is directed to the fact that utilities may encroach on the construction of this Project, and also to the importance of protecting all public/private utilities encountered on this project. These may include telecommunications, cablevision, traffic signal lines, power lines, water lines, sewer lines, gas lines, railroad tracks, and other overhead and underground utilities.

The City does not warrant any survey work or location of utilities or other underground apparatuses whether performed by the City, its agent, or an independent contractor. Contractor understands and agrees any survey or location work performed by the City, its agent, or other independent contractor is provided for guidance purposes only, so as to show the approximate location of

underground utilities or apparatuses. Contractor understands the existence or exact location of underground utilities or apparatuses may not be known to the City or the design engineer of record. Contractor, therefore, agrees that it shall verify the existence and location of any underground utilities or apparatus along the route of work. Verification shall be done by potholing or using other methods which will detect the exact depth, dimensions, and location of any underground utilities or apparatus.

Contractor shall be liable for any damages, loss, or claims of whatsoever kind caused by its failure to pothole or use other methods of identifying the exact depth, dimensions, and location of any underground utilities or apparatus. Contractor agrees that any claim of any kind whatsoever, damages, loss, lawsuit, demand, or request for equitable adjustment ("Claims"), shall be waived and the City shall be forever released and discharged from such Claims if Contractor fails to comply with its obligations under this section. Contractor agrees that if it fails to maintain all records or other evidence establishing that it potholed or otherwise determined the exact location, depth, and dimensions of all underground utilities and apparatuses, then it shall not be permitted to make any Claim arising from or related to the location of underground utilities or apparatus.

The size and location of all existing utilities as known to the Project Manager have been noted on the plans for the information and guidance of the Contractor. The Contractor shall be responsible for the location and protection of all utilities located within his working area regardless of whether or not their existence or location is shown or noted on the drawings.

It is the Contractor's responsibility to complete required work and to schedule inspections during normal working hours. The Contractor is responsible for contacting each affected utility for their inspectors' working hours. The Contractor is responsible to request an inspection two (2) working days in advance of the inspection. In the case of an overtime inspection, the request must be in writing. All overtime costs for inspection by Colorado Springs Utilities, or other utilities personnel, shall be the Contractor's expense. The City will not entertain any requests for time extensions for delays caused by the Contractor's failure to properly notify the affected utility of a required inspection or the Contractor's failure to complete the required work by the time of the scheduled inspection.

Any information concerning underground utilities shown on the drawings is intended to be merely an aid to the Contractor. The accuracy of information with respect to underground utilities is not guaranteed. The Contractor shall make their own investigation, including exploratory excavations, to determine the locations and type of existing mains or service laterals or appurtenances when their presence can be inferred from the presence of other visible facilities, such as building, manholes, inlets, meters and junction boxes, on or adjacent to the

site of the work. If the Contractor discovers utility facilities not identified in the plans or specifications or in a position different from that shown in the plans and specifications, the Contractor shall immediately notify, verbally and in writing, the Project Manager and Owner of the utility facility.

Before any excavation is begun in the vicinity of water lines, railroad tracks, or structures, sewer lines, telecommunication conduits or cablevision line, each utility company, including Colorado Springs Utilities (if applicable), department, or company concerned must be notified in advance of such excavation, and such excavation shall not be made until an authorized representative of the utility concerned is at the site.

All utilities encountered must be kept in operation by the Contractor and must be protected and/or repaired at the Contractor's own expense, unless otherwise specified in the Contract documents. The Contractor shall be held liable for all damages to any and all public utilities encountered on the project, which damages are due to the Contractor's operations. Such damages shall include all physical damages to utilities and also all damages due to interruption of service of such utilities, when such damages and interruptions are caused by the Contractor's operations.

Where alterations or moving of utilities is not required to permit construction of the project, the Contractor shall take such measures as the Project Manager may direct to properly protect these utilities throughout his construction operations and shall cooperate at all times with the proper authorities and/or owners in maintaining service of railroads, conduits, pole lines, transmission lines, pipe lines, sewers, etc., affected by this project.

The costs of damages due to the Contractor's operation shall not be allowable under this Contract and shall result in no additional cost to the City. The cost of protecting utilities where alteration or relocation is not required to permit construction of the project shall be considered as included in the original Contract price for the project and shall result in no additional cost to the City.

Should any pipe line, water lines, or gas mains, electrical conduits, sewer pipes, overhead wiring, telecommunication lines, power lines, or any other such utilities, not specifically mentioned and provided for elsewhere as a part of this Contract, have to be moved, repaired, reconditioned, or revised due to the construction, or moved temporarily to permit construction of the project the party or parties owning and operating such utilities shall perform the actual work of moving, repairing, reconditioning, or revising such utilities. Any such work would be added via change order, and the cost of this work will be borne by Colorado Springs Utilities, the utility companies involved, or other means arranged by the City.

(a) Existing Utilities

1. Existing Gas Lines: As of April 1, 1983, Federal law requires anyone who uncovers a gas line to report it to the gas company and allow it to be inspected by the gas company personnel before it is backfilled. Colorado Springs Utilities or other provider is to be notified prior to any excavation around gas lines. A Colorado Springs Utilities. or other applicable provider. inspector is to be notified and present on site prior to construction activities around gas lines.
2. Existing Sewer Mains and Services: All relocation, replacement protection shown on the plans or determined necessary by the inspector shall be performed according to the latest Colorado Springs Utilities Wastewater Standard Specifications. Minimum 48 hours' notice must be given to Colorado Springs Utilities prior to any related work.
3. The Contractor shall adjust sanitary sewer manhole rims to an elevation acceptable to Colorado Springs Utilities. The Contractor shall contact Colorado Springs Utilities twenty-four (24) hours prior to manhole rim adjustments.
4. Existing Water Mains and Services: All relocation, replacement or protection shown on the plans or determined necessary by the inspector shall be performed according to the latest Colorado Springs Utilities Water Standard Specifications and the Water Service Standard Specifications. Minimum 48-hour notice must be given to Colorado Springs Utilities prior to any related work. Colorado Springs Utilities reserves the right to schedule any operations at their discretion and to provide for any requirements determined necessary to perform the work. The Contractor shall coordinate with the Colorado Springs Utilities and receive their approval prior to performance of the work.

(b) Utility Support Systems:

1. If required by the Contract documents, or requested by the Project Manager, the Contractor shall submit shop drawings for the method of temporary support for all existing utilities during construction. The temporary support details for existing utilities shall be submitted for review and approval prior to performance of the work. Shop drawings must bear the seal of a Professional Project Manager registered in the State of Colorado, unless so waived by the City.
2. Regardless of City approved shop drawings, the Contractor shall be responsible for the satisfactory support of the utility system and any damages that may occur to the utility involved.

(c) Electric Utility Installation:

1. Any electric facilities unless otherwise noted are to be relocated or modified by Colorado Springs Utilities. The Contractor shall coordinate the work with Colorado Springs Utilities and Colorado Springs Utilities Contractor.
2. Light Pole Installation or Relocation:
  - a. The Contractor is responsible for coordinating with Colorado Springs Utilities, removing existing light pole foundations, constructing new light pole foundations, installing new conduits, and installing lighting junction boxes. The Contractor is responsible for coordinating with Colorado Springs Utilities for the de-energizing and removal of existing light poles.
  - b. Colorado Springs Utilities will remove the existing light standards, reset the light standards upon completion of the new foundations, conduit and junction boxes, pulling wire, and beginning operations of the lighting within the project limits. The Contractor is responsible for scheduling and coordination with Colorado Springs Utilities crews for reinstallation and re-energizing completed light poles.

(d) Gas Utilities: The Contractor is responsible for coordinating with Colorado Springs Utilities for the relocation of existing Gas lines. Colorado Springs Utilities will relocate the existing gas lines as necessary to install project improvements within the project limits. The Contractor is responsible for scheduling and coordination with Colorado Springs Utilities crews.

(e) Telecommunication Agencies: Any telephone facilities unless otherwise noted are to be relocated or modified by the respective private utility company. The Contractor shall coordinate the work with the respective private utility company.

(f) Cablevision: The television utilities are to be relocated by the cable provider. The Contractor shall coordinate the work with any affected cable provider.

**107.13 FEDERAL FUNDS**

If this Contract is a federally assisted construction contract all applicable federal requirements, terms and conditions, provisions and forms shall apply.

Additionally, during the performance of this Contract, the Contractor agrees as follows:

1. The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this nondiscrimination clause
2. The Contractor will, in all solicitations or advancements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.
3. The Contractor will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the contractor's legal duty to furnish information.
4. The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other Contract or understanding a notice advising the labor union or workers representative of the Contractor's commitments under Section 202 of Executive Order No. 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

5. The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
6. The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by the rules, regulations and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the Secretary of Labor, State of Colorado Civil Rights Commission and any other governmental agency entity which may be assisting with the funding under this Contract for purposes of investigation to ascertain compliance with such rules, regulations and orders.
7. In the event of the Contractor's noncompliance with the nondiscrimination clauses of this Contract or with any such rules, regulations, or orders, this Contract may be cancelled, terminated, or suspended in whole or in part, and the Contractor may be declared ineligible for further government Contracts or Federally assisted construction Contracts in accordance with the procedures authorized in Executive Order No. 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order No. 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or otherwise provided by law.
8. The Contractor shall include the provisions of Paragraphs (1) through (8) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order No. 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the city, state, or any federal governmental entity may direct as a means of enforcing such provisions, including sanctions for noncompliance. Provided, however, that in the event the Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction, the Contractor may request the city, the state, or the United States to enter into such litigations to protect the interests of such governmental entity.

#### **107.14 SUPERINTENDENCE**

The Contractor shall give the work the constant attention necessary to facilitate the progress thereof and shall cooperate with the Project Manager and with other contractors or Colorado Springs Utilities employees in every way possible. The Contractor shall have at all times, on the work, as Contractor's agent, a competent superintendent capable of reading and thoroughly understanding the

Plans and Specifications, and who shall have the necessary authority to receive and promptly execute the instructions and orders from the Project Manager or the Project Manager's authorized representative. Such superintendent shall be furnished irrespective of the amount of work sublet. The Contractor shall supply the Project Manager with a list of phone numbers at which the Contractor and its superintendent and foreman can be reached at any time. The assigned superintendent must adhere to the cooperation requirements specified in this Contract and is subject to removal if so ordered in writing by the Project Manager.

#### **107.15 PREPARATION**

All vegetation, stumps, and debris and other objectionable objects shall be removed from the area staked out by the Project Manager, and where necessary from the area immediately adjacent thereto. Such debris shall be hauled from the site of the construction and wasted as directed by the Project Manager.

#### **107.16 STAKING WORK**

The Project Manager may provide reference points (horizontal and vertical control) only, unless otherwise noted in the proposal and project specifications. The Contractor shall engage the services of a licensed surveyor or surveying firm (hereinafter referred to as the Surveyor) to be approved by the Project Manager. The Surveyor shall perform all detailed construction layout and staking including the staking of all storm sewer, street improvements, and utility relocations in accordance with the plans and specifications. The Contractor shall be responsible for the correctness and accuracy of the detailed layout of finished structures.

Any instrument man or survey assistant employed on the work by the Contractor or his subcontractors, who are judged by the Project Manager to be incompetent, shall be removed from the work and replaced by a competent individual.

#### **107.17 DEVIATION ALLOWED**

Finished surfaces in all cases shall conform to lines, grades, cross sections and dimensions shown on the approved drawings or described in the Specifications. Deviations from the approved drawings and working drawings as may be required by the expedencies of construction, in all cases, must be determined by the Project Manager and authorized in writing. If the Project Manager deems it inexpedient to correct work injured or done in an unauthorized manner, an equitable deduction from the Contract price of the work done shall be made by the Project Manager subject to approval of the City Procurement Services Manager.

## **107.18 RIGHT-OF-WAY**

The City's right-of-way will in general be adequate for construction purposes. Nothing marked on the drawings shall be interpreted as giving the Contractor exclusive occupancy of the territory provided by the City. The City and its employees for any purpose, and other contractors of the City, for any purpose required by their respective contracts, may enter upon or occupy any portion of the land furnished by the City. When the territory of one contract is a necessary or convenient means of access for the execution of another contract, such privileges of access or any other reasonable privilege shall be granted by the Contractor to the extent, amount, in the manner and at times necessary. No such joint occupancy or use of the territory shall be made as the basis of any claim for delay or damages.

## **107.19 SHOP DRAWINGS AND SUBMITTALS**

The Contractor shall submit to the Project Manager all shop drawings and submittals required for the work, including those pertaining to structural and reinforcing steel within fifteen (15) Calendar Days from the date of the Notice of Award. The Contractor shall make any corrections in the drawings required by the Project Manager and resubmit the same without delay.

Three final copies of all shop drawings (if applicable), submittals (if applicable) and schedules shall be submitted to the Project Manager, who after checking will retain two copies and return one copy to the Contractor. The Project Manager's approval of shop drawings of equipment and material shall extend only to determining the conformity of such equipment and materials with the general features of the design drawings prepared by the Project Manager. It shall be the responsibility of the Contractor to determine the correctness of all dimensions and minor details of such equipment and materials so that when incorporated in the work, correct operations will result.

## **107.20 RECORD DRAWINGS**

The Contractor shall maintain an up-to-date set of Contract drawings and Contract records, legibly marked; depicting all constructed improvements at the site or as otherwise specified and shall submit a complete set labeled "Project Record" to the Project Manager upon completion of the Project.

(a) Drawings:

1. Depths of various elements of foundation in relation to finish floor datum.

2. Horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements and Project survey control.
3. Location of internal utilities and appurtenances concealed in the construction, referenced to permanent surface improvements and project survey control.
4. Field changes of dimensions and detail.
5. Changes made by Change Order.
6. Details not on original Contract drawings.

(b) Specifications and Addenda:

1. Manufacturer, trade name, catalog number, and supplier of each product and item of equipment actually installed.
2. Changes made by Change Order.

#### **107.21 MATERIALS**

Unless otherwise stipulated in the Specifications, all workmanship, equipment, materials, and articles incorporated in the work covered by this Contract are to be new and of the best grade of their respective kinds for the purpose. The Contractor shall furnish to the Project Manager for the Project Manager's approval, the name of the manufacturer of machinery, mechanical and other equipment, which he contemplates installing, together with their performance capacities and other pertinent information including but not limited to instruction manuals pertaining to the use and operation of such machinery, mechanical and other equipment.

When required by the Specifications, or when called for by the Project Manager, the Contractor shall furnish for approval full information concerning the materials or articles which he contemplates incorporating in the work. Samples of materials shall be submitted for approval when so directed. Machinery, equipment, materials, and articles installed or used without such approval shall be at the risk of subsequent rejection.

#### **107.22 MATERIAL INSPECTION AT PLANT**

If the Project Manager inspects the materials at the source, the following conditions shall be met:

(a) The Project Manager shall have the cooperation and assistance of the Contractor and the materials producer.

(b) The Project Manager shall have full entry to all parts of the plant necessary for the manufacture or production of the materials being furnished.

(c) Adequate safety measures shall be provided and maintained.

The City reserves the right to retest all materials which have been previously tested or inspected. The retesting may be prior to or after incorporation of the materials into the work. Those materials inspected and tested after delivery on the Project or after incorporation into the work that do not meet the requirements of the Contract will be rejected and replaced at no additional cost to the City.

### **107.23 HANDLING MATERIALS**

All materials shall be handled so their quality and fitness for the work is preserved. Aggregates shall be transported to the work in vehicles constructed to prevent loss or segregation of materials.

### **107.24 CITY FURNISHED MATERIALS**

Material furnished by the City will be made available to the Contractor at the points specified in the Contract.

The cost of handling and placing materials after they are made available to the Contractor shall be considered as included in the Contract price for the item, and shall result in no additional cost to the City.

The Contractor will be held responsible for all material received until it is incorporated into the work and accepted.

Demurrage charges resulting from the Contractor's failure to accept the material at the designated time and point of delivery will be deducted from monies due the Contractor.

### **107.25 BUY AMERICA REQUIREMENTS**

All manufacturing processes, including the application of a coating, for all steel and iron products permanently incorporated in the work shall have occurred in the United States of America. All manufacturing processes are defined as "processes required to change the raw ore or scrap metal into the finished, in-place steel or iron product". This requirement will not prevent a minimal use of foreign steel or iron provided the total project delivered cost of all such steel and iron which includes the cost of delivering the steel and iron to the Project, does

not exceed one-tenth of one percent of the total Contract cost or \$2,500, whichever is greater.

With every steel or iron product that requires pre-inspection, pretesting, certified test results, or certificate of compliance, the Contractor shall provide a certification by each supplier, distributor, fabricator, and manufacturer that has handled the steel or iron product that every process, including the application of a coating, performed on the steel or iron product either has or has not been carried out in the United States of America. These certifications shall create a chain of custody trail that includes every supplier, distributor, fabricator, and manufacturer that handles the steel or iron product. The lack of these certifications will be justification for rejection of the steel or iron product. Upon completion of the Project, the Contractor shall certify in writing of compliance with this requirement and provide evidence of the Project delivered cost of all foreign steel or iron permanently incorporated into the Project.

#### **107.26 TESTING OF MATERIALS**

Tests and Inspections. The City will employ and pay for the services of an approved testing laboratory to perform specified services for the field testing of:

- (a) Soil Compaction Control
- (b) Cast-in-Place Concrete
- (c) Asphalt Concrete Pavement

The Contractor shall perform, or arrange for the performance, and pay all costs in connection therewith, all other tests and inspections required by the Contract documents. The Contractor shall pay for all testing laboratory services in connection with tests verifying conformance of proposed materials and installation with project requirements including, but not limited to, mix designs, riprap, gradation tests for embedment, fill and backfill materials. The City shall pay for testing laboratory services in connection with tests on materials after incorporation into the project, unless retesting of materials is necessary because of the failure of the materials to meet the Project requirements. The Contractor shall obtain the City's written acceptance of the testing laboratory before having services performed.

(a) Requirements for Independent Testing Consultants.

1. Consultants shall comply with "Recommended Requirements for Independent Laboratory Qualifications", latest edition, published by the American Council of Independent Laboratories, and basic requirements of ASTM E-329, "Standards of Recommended Practice

for Inspection and Testing Agencies for Concrete, Steel, and Bituminous Materials as Used in Construction", latest edition.

2. The Contractor shall submit to the City for prior approval, the name and address of the proposed testing laboratory with description of personnel, facilities, equipment and other qualification data, including certificate of calibration of applicable testing equipment made by an accredited calibrated agency no more than twelve (12) months prior to submittal date.

(b) Test Reports

1. Testing agency shall be instructed to submit directly to the City three (3) copies of all reports of tests or inspections made, showing compliance, irregularities or deficiencies, identifying Project, date of test, location in Project, applicable specification section, applicable standard(s) for compliance, observations relating to compliance, name and signature of inspector.

(c) Contractor Responsibilities

1. Furnish access to the work, materials, equipment and labor required to accommodate inspections and tests when testing laboratory is retained by the City. In the event retesting of materials or recompaction is necessary because of the failure of the materials or compaction to meet the Project requirements, the cost of said retesting shall be borne by the Contractor. Cost of said retest will be deducted from the final payment amount due the Contractor, or invoiced directly to the Contractor at the City's discretion.

(d) Reliance on Technical Data

Without warranty or representation as to the accuracy or completeness of any information or data, Contractor may rely upon the general accuracy of the "technical data" contained in the reports, specifications and drawings. The "technical data" is identified in the work technical specifications, drawings and reports that are signed and sealed by a registered Professional Engineer, Architect or Landscape Architect in the State of Colorado. Except for the reliance on the general accuracy of the "technical data," Contractor may not rely upon or make any claim against the City with respect to:

1. the accuracy or completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of

construction to be employed by Contractor, and safety precautions and programs incident thereto; or

2. other data, interpretations, opinions, and information contained in the reports or shown or indicated in such drawings; or
3. any Contractor interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions, or information.

#### **107.27 UNANTICIPATED CIRCUMSTANCES**

Contractor understands that this is a firm fixed price contract and so long as there are no changes in the scope of work or unanticipated circumstances as provided in subsection A-C below, Contractor must deliver the project for the agreed price. The parties agree that not every circumstance can be anticipated or known at the time this Contract was executed. Compensation for unanticipated circumstances, limited to subsections A –C, shall, at the City's sole discretion, be provided by the following method(s): (1) Unit prices previously approved; (2) allowing additional compensation on a time and materials method, not to exceed an agreed-to amount; (3) an agreed lump sum; and/or (4) the actual cost of:

- (a) labor (including foreman and additional supervision, if necessary);
- (b) materials necessary for incorporation into the Project;
- (c) rental cost of construction plant and equipment used for work;
- (d) Power and fuel required for operation of power equipment necessary to perform work;
- (e) Contractor shall provide to the City physical evidence of all costs, including, but limited to, payroll, invoices, vouchers, estimates, bills, accounting records, or other relevant records. Contractor agrees that its failure to provide evidence of a claimed cost shall be a waiver of such cost(s) and the City shall be released and forever discharged from any claim of any kind whatsoever, loss, damages, request for equitable adjustment, or demand related thereto. Contractor further agrees that, at the City's discretion, a fixed fee, not to exceed 10% of the costs of work shall be added to such costs as compensation for the cost of management, insurance, benefits, bond, profit, and any other expenses.

To the extent unanticipated circumstances arise, Contractor shall follow the procedures and processes set forth herein and, if applicable, the Dispute Resolution provisions of this Contract. Contractor agrees that its failure to follow the processes set forth herein and the Dispute Resolution process shall forever waive, release, and discharge the City from any claim of any kind whatsoever, damages, losses, lawsuits, or demands known or unknown. Additionally, the terms "detail" or "particularity" mean specificity, providing the exact basis and reason therefor with citations to the Contract or Contract Documents. Vague or

ambiguous references such as “other matters” or “other costs” shall not be permitted and are not subject to any compensation method whatsoever.

A. Differing Site Conditions or Changed Conditions: A differing site condition or changed condition means subsurface, latent, or unknown physical site conditions that are materially different than that which is indicated in the contract and which is not ordinarily encountered and generally recognized in the work provided for in the Contract.

Contractor understands the City must be permitted the opportunity to timely investigate all differing site/changed condition matters; document conditions as they existed on the site at the time; take measurements, photographs, witness statements and the like; negotiate a compromise resolution with the Contractor and/or subcontractors; and avoid the cost, expense and delay of formal litigation.

Upon discovering a differing site condition, the Contractor shall not disturb the conditions and immediately contact the Project Manager. Within five days of discovering the condition, the Contractor shall provide written notice to the Project Manager of the condition. The written notice shall describe the condition with particularity; provide the precise material difference of the condition from the Contract, design plans, and/or other Contract Documents; describe, in detail, how the condition is not a condition that would be ordinarily encountered and generally recognized in the work provided for in the Contract; and provide a detailed explanation, including all accounting and other evidence supporting, Contractor’s losses, costs, delays, and changes in time required for performing the work. Contractor agrees that any claim, loss, damage, delay, or change in time that is not supported by evidence shall be disallowed. Contractor waives and forever releases and discharges the City from any claim of whatsoever kind, loss, damages, demand, and/or request for equitable adjustment whether known or unknown by disturbing the condition before notifying the Project Manager and by failing to provide timely detailed written notice as required herein. Any issue which is not provided for, in detail, in the written notice shall also be waived and the City shall be forever released and discharged from any claim whatsoever, loss, damage, or request for equitable adjustment, or demand arising therefrom.

After Contractor fully complies with the provisions in this section and after receiving the written notice, the Project Manager shall promptly investigate the condition and determine whether such condition materially differs from that indicated in the Contract Documents and whether it is a condition that would not ordinarily be encountered and generally recognized in the work provided for in the Contract. If the Project Manager determines the condition is a “differing site condition,” then a Change Order shall be issued describing the differing site condition and compensation method

agreed to by the parties. By signing the Change Order, Contractor agrees the City shall be released and fully discharged from any claim whatsoever, loss, damage, request for equitable adjustment, or demand arising from the matters described in the Change Order. The parties shall also sign a document which describes in detail each condition and each claim, loss, damage, delay, or change in time related to that particular condition which was agreed to and fully resolved as well as any condition and each claim loss, damage, delay, or change in time related to that particular condition which is disputed.

If the Contractor disputes, disagrees with, or otherwise considers unfair any decision or ruling by the City, then Contractor shall, within 10 Calendar Days, provide the City with written notice of the dispute as set forth in the dispute section of this Contract and shall follow the dispute resolution process provided therein.

B. Defective or Deficient Construction Plans or Documents: A defective or deficient construction plan or document means a material error, mistake, oversight, or omission in the design plans or documents providing the specifications depicting the general and detail features of the work to be performed.

Upon discovering a defect or deficiency, the Contractor shall immediately contact the Project Manager. Within five days of initially advising the Project Manager of the defect or deficiency, the Contractor shall provide written notice to the Project Manager. The written notice shall describe the defect or deficiency with particularity explaining why it is a material defect or deficiency; provide precise detail explaining why the defect or deficiency is not something Contractor should know how to do or why the defect or deficiency is not a condition that would be ordinarily encountered and generally recognized in the work provided for in the Contract; and provide a detailed explanation, including all accounting and other evidence supporting, Contractor's losses, costs, delays, and changes in time required for performing the work. Contractor agrees that any claim, loss, damage, delay, or change in time that is not supported by evidence shall be disallowed. Contractor agrees that it shall waive and forever release and discharge the City from any claim of whatsoever kind, loss, damages, demand, and/or request for equitable adjustment whether known or unknown by failing to immediately notifying the Project Manager and by failing to provide timely detailed written notice as required herein. Any issue which is not provided for in the written notice shall also be waived and the City shall be forever released and discharged from any claim whatsoever, loss, damage, or request for equitable adjustment, or demand arising therefrom.

After Contractor fully complies with the provisions in this section and after receiving the written notice, the Project Manager shall promptly investigate the condition and determine whether such matter is a “defective or deficient design plan or document” as defined herein. If the Project Manager determines the matter is a “defective or deficient design plan or document,” then a Change Order shall be issued describing the defective or deficient design plan or document, the correction and compensation method agreed to by the parties. By signing the Change Order, Contractor agrees the City shall be released and fully discharged from any claim whatsoever, loss, damage, request for equitable adjustment, or demand arising from the matters described in the change order. The parties shall also sign Form A of this Contract which describes in detail each condition and each claim, loss, damage, delay, or change in time related to that particular condition which was agreed to and fully resolved as well as any condition and each claim loss, damage, delay, or change in time related to that particular condition which is disputed.

If Contractor disputes, disagrees with, or otherwise considers unfair any decision or ruling by the City, then Contractor shall, within 10 Calendar Days, provide the City with written notice of the dispute as set forth in the Dispute Resolution section of this Contract and shall follow the dispute resolution process provided therein.

C. Changes in Work and Additional/Extra Work (fixed price contract): When additional information through excavation, testing, site investigation, differing site conditions, or otherwise is obtained the City shall have the right to alter, change the location, re-design, change the work, add to the work, accelerate work, or reduce work, change the method or manner of performance, change services, and/or change materials described in the Contract (collectively “Changed Work”).

If the City changes work, then a Change Order shall be issued by the Project Manager. Contractor shall not be required to perform any Changed Work without a Change Order issued by the Project Manager. Such Changed Work shall be performed under the terms set forth in the original Contract and compensated as agreed in this section of the Contract.

If Contractor disputes any Changed Work or compensation method for such Changed Work requested by the City or set forth in a Change Order, Contractor shall, without delay, perform such work. Within 10 Calendar Days of receiving the Change Order, Contractor shall provide the City with written notice of the dispute as set forth in the Dispute Resolution section of this Contract and shall follow the dispute resolution process provided therein. Contractor further agrees that any issue not provided for, in detail, in the written notice shall also be waived and the City shall be forever released and discharged from any claim whatsoever, loss, damage,

or request for equitable adjustment, or demand arising therefrom. Any matter resolved through the Dispute Resolution process shall be set forth in Form A of this Contract which describes in detail each Changed Work, including the compensation method, which was agreed to and fully resolved. By signing Form A, Contractor agrees that the City shall be released and fully discharged from any claim whatsoever, loss, damage, request for equitable adjustment, or demand arising from the matters described in Form A.

If Contractor does not dispute any Changed Work or the compensation method for such work, then Contractor shall sign the Change Order and agrees that the City shall be released and fully discharged from any claim whatsoever, loss, damage, request for equitable adjustment, or demand arising from the matters described in the Change Order.

Contractor agrees that the Project Manager shall have the authority to make minor changes in the work which do not involve additional costs and are not inconsistent with the purpose and scope of the work.

If the City finds it necessary or advisable, the City may omit, increase, or decrease any items as it may deem necessary or desirable without changing the unit prices in the proposal, provided such increase or decrease does not exceed 15% of the total monetary value of the original Contract. If material or labor involved in such change is not included in the unit prices of the Contract, but forms an inseparable part of the work to be done under this Contract, and the delay involved in asking for the Proposals or proposals and the letting of a new contract therefore might result in damage, injury, or impairment of the plant, work system, or other property belonging to the City, the City may in its discretion declare an emergency and require Contractor to proceed with such alterations and additions. The Contract shall not be required to perform such work or furnish extra materials without a Change Order issued by the Project Manager.

## **107.28 DISPUTE RESOLUTION**

Mindful of the high cost of litigation, not only in dollars, but also in time and energy, the parties intend to and do hereby establish the following out-of-court alternate dispute resolution procedure to be followed in the event any dispute, claim of any kind, loss, damage, demand, request for equitable adjustment, or controversy should arise out of, or relating to this Contract or relating to any Change Order or other changes or addendums to this Contract. During the dispute resolution procedure provided in this section, Contract shall continue to perform the work as provided for in this Contract as modified by any Change Order or Contract amendment. Nothing in this section precludes the parties from pursuing any other remedy afforded by the laws of the State

of Colorado once the remedies afforded under this Contract have been complied with and exhausted.

A. Disputes Arising from Unanticipated Circumstances: If Contractor disputes, disagrees with, or considers any decision, order, ruling, demand, request, directive, Change Order, or Contract amendment, related to the Unanticipated Circumstances provision of this Contract, and issued by the City, whether verbally or in writing, then Contractor shall:

1. Within 10 days of the City issuing any written or verbal decision, order, ruling, demand, request, directive, Change Order, or Contract amendment, Contractor shall provide written notice to the Project Manager identifying, with specific detail, each disputed matter. Any Unanticipated Circumstance dispute or matter of any kind or nature whatsoever, which Contractor does not identify in detail shall be waived and the City is released and fully discharged from any claim whatsoever, loss, damage, request for equitable adjustment, or demand arising from any matter not explicitly set forth in the written notice and described in detail;
2. Contractor shall provide to the City all evidence of any claim of whatsoever kind, loss, damages, delay cost, or other costs, including, but not limited to payroll reports, daily logs, invoices, accounting file, receipts, email, or other relevant record or document. Any item claimed by Contractor shall be supported by verifiable evidence described herein. If Contractor requires additional time to obtain or compile such evidence, then the Contractor shall have an additional 30 days, but must identify the exact document(s) or other evidence needed, where it is maintained, and explain why it is not available. The City shall not be responsible for any delay or other damage arising from Contractor's request for additional time to obtain documents. Any item unsupported by verifiable evidence shall be waived and Contractor agrees to release and fully discharge the City from any claim of whatsoever kind, loss, damage, request for equitable adjustment, or demand related to such unsupported item.
3. Upon receipt of Contractor's written notice, the Project Manager will investigate the disputed matter(s) and issue a written decision, ruling, order, and/or directive to Contractor. If Contractor does not dispute the Project Manager's decision, ruling, order, or directive, or a compromise has been reached, then Contractor shall sign Form A. If Contractor disputes or disagrees with the Project Manager's Ruling, then within 20 days of receiving the Project Manager's decision, ruling, order, and/or directive, Contractor must file with the City a written request for review to the City Engineer or City's Manager of the Procurement Services Division. The written request for review shall (a) state in detail the exact issue raised to the Project Manager and the issue(s) related to those matters raised to be reviewed by the City Engineer or Procurement Services

Manager; (b) provide an analysis, detailing the basis, reason therefor and the how and why Contractor disagrees with the Project Manager's decision, ruling, order, or directive; and (c) attach all evidence supporting Contractor's dispute. If Contractor fails to provide a timely written request for review to the City Engineer or Procurement Services Manager, then Contractor agrees that it waives, releases, and forever discharges the City from any claim of whatsoever kind, loss, damage, request for equitable adjustment, or demand arising from or related to the Project Manager's decision, ruling, order, or directive.

4. The City Engineer's or Procurement Services Manager's decision shall be final and conclusive for the City of Colorado Springs. If Contractor disputes, disagrees with, or considers such decision unfair, then Contractor shall be free to pursue any other remedy afforded by the laws of the State of Colorado. If Contractor does not dispute the City Engineer's or Procurement Services Manager's decision, ruling, order, or directive or a compromise is reached, then Contractor shall sign Form A.
5. Contractor shall pay the City reasonable attorney's fees and costs associated with its failure to comply with any part of this alternate dispute process.

B. All Other Claims: If a dispute, disagreement, or controversy of any kind, other than those covered in the Unanticipated Circumstances section of this Contract, arises from or is related to the Contract, shall be resolved under the Disputes section in the Contract.

#### **107.29 REMOVAL AND SUSPENSION FOR DEFECTIVE WORK**

All work or material which has been rejected shall be remedied or removed and replaced in an acceptable manner. Additional compensation will not be allowed for such removal and replacement. Any work done beyond the lines and grades shown on the drawings, except as herein provided, will be considered as unauthorized and will not be measured or paid for. Work so done may be ordered removed at the Contractor's expense. Should the Contractor fail to comply promptly with any order of the Project Manager made under the provisions of this paragraph, the Project Manager shall have the authority to cause said work to be removed and to deduct the cost from any money due, or to become due, from the Contractor. At any time during the course of construction of this project if the provisions of the Plans, Specifications, or Contract provisions are being violated by the Contractor or his employees, the Project Manager shall have the right and authority to order all construction to cease or material to be removed, until arrangements satisfactory to the Project Manager are made by the Contractor for resumption of the work in compliance with the provisions of the Contract.

The Contractor shall promptly remove from the premises all materials and work rejected by the Project Manager as failing to meet Contract requirements, whether incorporated in the work or not, and the Contractor shall promptly replace and re-execute Contractor's own work in accordance with the Contract and without expense to the City and shall bear the expense of making good all work of other Contractors destroyed or damaged by such removal or replacement.

All removal and replacement work shall be done at the Contractor's expense. If the Contractor does not take action to remove such rejected work and materials within ten (10) days' time thereafter, the City may, upon ten (10) days written notice, sell such materials at auction or at private sale and retain the proceeds without compensation to the Contractor.

### **107.30           CLEANING UP AND FINAL INSPECTION**

The Contractor shall at the completion of the work, remove all rubbish from and about the work and all tools, equipment, scaffolding, and surplus materials and shall leave the work clean and ready for use. If not completed by Contractor, the City may remove the rubbish and surplus materials and charge the cost to the Contractor.

All sewers, conduits, pipes, and appurtenances and all tanks, pump wells, chambers, buildings, and other structures shall be kept clean during construction and as the work or any part thereof approaches completion, the Contractor shall systematically and thoroughly clean and make any needed repairs to them. Contractor shall furnish at Contractor's own expense, suitable tools and labor for removing all water and cleaning out all dirt, mortar, and foreign substances. Any undue leakage of water into the structures such as to make the work, in the opinion of the Project Manager, fall short of first class work, shall be promptly corrected by the Contractor at Contractor's own expense.

Cleaning and repairs shall be arranged, so far as practicable, to be completed upon finishing the construction work. Notice to begin the final cleaning, and repairing, if such is needed, will be given by the Project Manager, who at the same time will make his final inspection of the work. The Project Manager will not approve the final estimate of any portion of the work until after the final inspection is made and the work is found to be satisfactory.

### **107.31           CUTTING AND PATCHING**

The Contractor shall do all cutting, fitting, or patching of work that may be required to make its several parts fit together or to receive the work of other contractors shown upon, or reasonably implied by the Plans and Specifications for the completed Project.

Cold or wet weather conditions that do not permit a permanent asphalt pavement replacement will require a minimum 2" bituminous pavement patch prior to opening the area to traffic as a temporary measure until the permanent asphalt pavement replacement can be installed. This item shall be incidental to any work requiring such removal of asphalt and will be considered to be included in the unit price of the related item of work.

Any cost caused by defective or ill-timed work shall be borne by the Contractor. The Contractor shall not endanger any work by cutting, digging, or otherwise and shall not cut or alter the work of any other Contractor without the consent of the Project Manager.

#### **107.32 FINAL TESTS**

After completion of the work, the Contractor shall make any and all tests required by the Specifications or by municipal, state, or federal regulations, and where so provided in said regulations shall furnish the City with certificates of inspection by the applicable regulatory bodies. The Contractor shall also make all tests required by the National Board of Fire Underwriters for the purpose of determining insurance rates or other protection of the City or the public.

#### **107.33 CORRECTION OF WORK AFTER FINAL PAYMENT**

Neither the final payment nor any provision in the Contract Documents shall relieve the Contractor of the responsibility for negligence or faulty materials or workmanship within the extent and periods provided by law and by this Contract.

#### **107.34 NO WAIVER OF LEGAL RIGHTS**

Upon written notice that the Contractor considers all work complete, the Project Manager will make a pre-final inspection with the Contractor and will notify the Contractor in writing of incomplete or defective work revealed by the inspection. The Contractor shall promptly remedy such deficiencies.

After the Contractor has remedied all deficiencies to the satisfaction of the Project Manager and delivered all construction records including record drawings, maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection and other documents (all as required by the Contract Documents), the Contractor will be promptly issued a Certificate of Completion by the Project Manager stating that the work is acceptable.

Upon completion of the Contract, the City will make final inspection and notify the Contractor of acceptance. Final acceptance shall not preclude the City from correcting any measurement, estimate, or certificate made before or after completion of the Contract, nor from recovering from the Contractor or Surety, or

both, overpayments sustained because the Contractor failed to fulfill the obligations under the Contract.

The Contractor shall be liable to the City for latent defects, fraud, or such mistakes as may amount to fraud, or as regards the City's rights under any warranty or guarantee.

For all non-federally funded projects, the following additional requirements shall apply:

- (a) All work shall be constructed in compliance with standard construction codes, and all materials and workmanship must be guaranteed for a period of two years from the date of final acceptance. If any defect in the work in violation of the foregoing warranty arises, Contractor shall, upon receipt of written notice of such defect, promptly furnish, at no cost to the City, design and engineering, labor, equipment, and materials necessary to correct such defect and cause the Work to comply fully with the foregoing warranty and Contract Documents. This obligation shall survive both final completion of and final payment for the Work. The City shall not be invoiced for any of costs of warranty work, and Contractor shall not be entitled to submit any claim for an increased fee arising therefrom. The Contractor guarantee period (two-year warranty period) will not begin until the Contract is 100 percent complete, as determined by the Project Manager. Acceptance of the 100 percent complete work shall be requested in writing by the Contractor. Any item requiring repair and/or replacement prior to expiration of the two-year warranty period shall be guaranteed for a period of one-year after the date of said correction or repair or for the remainder of the two-year warranty period, whichever is longer.
  
- (b) In placing orders for equipment, the Contractor shall purchase such equipment only under a written guarantee from the respective manufacturers that the equipment supplied will function satisfactorily as an integral part of the completed Project in accordance with the Plans and Specifications. Furthermore, the Contractor shall require that the manufacturer agree in writing at the time an order of equipment is placed that manufacturer will be responsible for the proper functioning of the equipment in cooperation with the Contractor, and that whenever necessary during the installation period or tuning up period following construction period, the manufacturer will supply without additional cost to the City, such superintendence and mechanical labor and any adjustments and additional parts and labor needed to make the equipment function satisfactorily, even if the same was not shown on approved shop drawings.

## **107.35 ACCEPTANCE**

- (a) *Partial Acceptance.* If, during the performance of the project, the Contractor satisfactorily completes a unit or portion of the Project, such as a structure, an interchange, or a section of road or pavement that can be used advantageously for traffic, the Project Manager may make final inspection of that unit. If the Project Manager finds that the unit has been satisfactorily completed in compliance with the Contract, the Contractor may be relieved of further responsibility for that unit except as otherwise provided in these general provisions. Partial acceptance shall not void or alter any of the terms of the Contract.
- (b) *Final Acceptance.* Upon notice from the Contractor of presumptive completion of the entire Project, the Project Manager will make an inspection. If the work provided for by the Contract has been satisfactorily completed, that inspection shall constitute the final inspection and the Project Manager will notify the Contractor in writing of final acceptance indicating the date on which the Project was inspected and accepted.

If the inspection discloses any unsatisfactory work, the Project Manager will give the Contractor a written list of the work needing correction. Upon correction of the work, another inspection will be made. If the work has been satisfactorily completed, the Project Manager will notify the Contractor in writing of the date of final inspection and acceptance. Final acceptance under this subsection does not waive any legal rights contained in the No Waiver of Legal Rights section of this Contract.

## **SECTION 108 PAYMENTS AND ACCEPTANCE OF WORK**

### **108.00 PAYMENTS AND RETAINAGE**

Payments will be made, and required retainage withheld if applicable, in accordance with this section as the work progresses at the end of each month or as soon thereafter as practicable in compliance with C.R.S. Title 24, Article 91, on statements made and approved by the Project Manager. In preparing statements, only completed work will be taken into consideration. No payment will be made for materials in storage and/or delivered to the site, unless otherwise approved by the City.

Payment for work performed by the Contractor under the Contract Documents will be made at the approved unit price or lump sum price for each of the several items as listed in the proposal and measured as hereinafter specified. Such payment shall compensate the Contractor for all costs in connection with furnishing all labor, equipment and material required and performing the operations necessary to complete the item in accordance with the Contract Documents. All incidental work essential to the completion of the Project in a workmanlike manner, and including cleanup and disposal of waste or surplus

material, shall be accomplished by the Contractor without additional cost to the City. The cleanup and disposal of waste or surplus material shall be performed during construction or as soon after as is reasonably possible in order to better maintain the aesthetics and safety of the construction area. Payment will be made for the actual quantities constructed or installed, unless otherwise noted in these Contract Documents. However, any changes to plan quantity must be approved through proper Change Order procedures, said quantities being measured as specified in the Contract Documents.

- (1) If the Contract exceeds one hundred fifty thousand dollars (\$150,000.00), and is for the construction, alteration, or repair of any highway, public work, or public improvement, structure, and the Contractor has provided Performance and Payment Bonds: the City shall authorize partial progress payments of the amount due under this Contract monthly, or as soon thereafter as practicable, to the Contractor, if the Contractor is satisfactorily performing the Contract. If the City finds that satisfactory progress is being achieved during any period for which progress is to be made, the City may authorize payment to be made in full without withholding retainage. However, if satisfactory progress has not been made, the City may retain a maximum of ten percent (10%) of the amount of the requested payment until satisfactory progress is achieved. When the work is substantially complete, the City may retain from the remaining unpaid balance that amount the City Procurement Services Manager, at the advice of the Project Manager, considers adequate for protection of the City, suppliers, subcontractors, laborers, vendors, etc., provided that such retainage shall not exceed five percent (5%) of the amount due, and shall release to the Contractor all the remaining funds associated with completed and acceptable work.

If satisfactory progress has not been made the withheld percentage of the Contract price of any such work, improvement, or construction shall be retained on an invoice-to-invoice basis and shall not be cumulative. In other words, if the Contractor is not performing satisfactorily the City will hold ten percent (10%) of what is actually due to the Contractor. For example, if the Contractor is behind schedule and has successfully completed fifty percent (50%) of the work, the City will only pay forty percent (40%) of the invoice, withholding ten percent (10%) of what is due until the Contractor gets back on schedule.

- (2) Whenever a Contractor receives payment pursuant to this section, the Contractor shall make payments to each of the subcontractors of any amount actually received which were included in the Contractor's request for payment to the City for such subcontracts. The Contractor shall make such payments within seven (7) Calendar Days of receipt of payments from the City in the same manner as the City is required to pay the Contractor under this section if the subcontractor is satisfactorily

performing under the Contract with the Contractor. The subcontractor shall pay all suppliers, sub-subcontractors, laborers, and any other persons who provide goods, materials, labor, or equipment to the subcontractor any amounts actually received which were included in the subcontractor's request for payment to the Contractor for such persons, in the same manner set forth in this subsection (2) regarding payments by the Contractor to the subcontractor. If the subcontractor fails to make such payments in the required manner, the subcontractor shall pay those suppliers, sub-subcontractors, and laborers interest in the same manner set forth in this subsection (2) regarding payments by the Contractor to the subcontractor.

At the time a subcontractor submits a request for payment to the Contractor, the subcontractor shall also submit to the Contractor a list of the subcontractor's suppliers, sub-subcontractors and laborers. The Contractor shall be relieved of the requirements of this subsection (2) regarding payment in seven (7) days and interest payment until the subcontractor submits such list. If the Contractor fails to make timely payments to the subcontractor as required by this section, the Contractor shall pay the subcontractor interest as specified by Contract or at the rate of fifteen percent (15%) per annum, whichever is higher, on the amount of the payment which was not made in a timely manner. The interest shall accrue for the period from the required payment date to the date on which payment is made. Nothing in this subsection (2) shall be construed to affect the retention provisions of any Contract.

- (3) If the Contractor is not progressing in accordance with the Project Schedule or not performing quality work in accordance with the specifications, the City Procurement Services Manager, at the advice of the Project Manager may withholding retainage up to and including ten percent (10%) of the total contract amount.

#### **108.01 PAYMENTS WITHHELD PRIOR TO FINAL ACCEPTANCE OF WORK**

The City may withhold or nullify the whole or part of any certificate of payment to such extent as may be necessary to protect it from loss caused by:

- (a) Defective work not remedied.
- (b) Claims filed or reasonable evidence indicating probable filing of claims by other parties against the Contractor.
- (c) Failure of the Contractor to make payments properly to subcontractors or for material or labor.
- (d) Damage to another contractor.

When the above grounds are removed, payment will be made for amounts withheld because of them.

## **108.02 ACCEPTANCE OF FINAL PAYMENT**

If the work is finally accepted by Project Manager under the terms and conditions of the Contract the entire balance found by the Project Manager to be due the Contractor, including the retained percentage, less any retention based on; (1) the Project Manager's estimate of the fair value of the claims against the Contractor; and (2) the cost of completing the incomplete or unsatisfactory items of work with specified amounts for each incomplete or defective item of work; and (3) retentions required by law, shall be due and payable to the Contractor. The date of completion is the date as specified in the Certificate of Completion issued by the Project Manager.

Upon completion of the work under the Contract and before the Contractor will receive or be paid for the Project Manager's final statement, the City Procurement Services Division shall post a notice on the website [www.coloradosprings.gov](http://www.coloradosprings.gov) that the City has accepted such work as completed according to the Plans and Specifications and rules set forth in the Contract; that the Contractor is entitled to final settlement; that after the date specified in the Notice, the City will pay the full balance due under the Contract; and that persons having claims for labor or material furnished the Contractor must present their claim to the City Procurement Services Division prior to the date specified for such payment. Nothing herein shall be construed as relieving the Contractor and the Sureties on the Contractor's bonds from any claim or claims for work or labor done or materials or supplies furnished in the execution of the Contract.

The making and acceptance of the final payment shall constitute a waiver of all claims by the Contractor against the City.

If, after the work has been substantially completed, full completion thereof is materially delayed through no fault of the Contractor, and the Project Manager so certifies, the City may, upon Certificate of Completion by the Project Manager, and without terminating the Contract, make payment of the balance due for that portion of the work fully completed and accepted. Such payment shall be made under the terms and conditions governing final payment, and acceptance of the payment shall constitute a waiver of all claims by the Contractor but acceptance of the work shall not constitute a waiver of City claims against the Contractor.

Advertising for Final Payment and processing of the Final Pay Request shall not take place until after the Contractor has submitted Sales and Use Tax Forms to the City and said forms have been reviewed and approved by the City Sales Tax Office.

## SCHEDULE C – TECHNICAL PROVISIONS

The Technical Specifications for this project shall be the City of Colorado Springs; Engineering Division “Standard Specifications” (herein referenced as Standard Specifications) revised March 2005. The following Special Technical Specifications take precedence over, supplement, or modify the Standard Specifications.

### INDEX OF REVISIONS AND ADDITIONS

#### SECTION REVISED OR ADDED

- 620 Drainage Channels
- 620.04 Riprap and Soil Riprap
- 626 Sculpted Concrete
- 626.04 Weep Drains
- 627 Sheet Pile
- 900 Seeding, Fertilizer, Blanket, and Mulching
- 900.02 Seed Mix Tables
- 905 Willow Planting
- 906 Cottonwood Poles
- 907 Rooted Trees and Shrubs
- 908 Wrapped Soil Lifts
- 910 Erosion and Sediment Control during Construction
- 915 Mobilization
- 920 Protection of Project from Water during Construction
- 925 Clearing and Grubbing
- 970 Topsoil

#### SPECIAL TECHNICAL SPECIFICATIONS

##### REVISION OF SECTION 620 DRAINAGE CHANNELS

Section 620 of the Standard Specifications is hereby revised as follows:

In Subsection 621.02, delete the Surface Tolerance Table and replace with the following:

<u>Surfaces</u>	<u>Tolerance</u>
Side Slopes	± 2%

Profile of invert of channel ± 0.2 foot

Revise Subsection 621.04 to delete the words “at no additional cost to the owner” and replace with “all of the costs for dewatering shall be included in the Lump Sum Proposal price for Water Control and Dewatering”.

Under Subsection 621.05 Add the Following:

**Excavation and Trench Construction**

Excavations into the on-site soils will likely encounter relatively shallow groundwater and caving soils. The contractor is responsible for designing and constructing stable, temporary excavations as required to maintain stability of both the excavation sides and bottom. All excavations should be sloped or shored in the interest of safety following local, and federal regulations, including current OSHA excavation and trench safety standards.

Under Subsection 621.05 Modify the Following:

In Paragraph A modify the compaction standard for cohesive soils to be 92% maximum Standard Proctor dry density at ± 2% of optimum moisture content, or 95% maximum Standard Proctor dry density and ± 2# of optimum moisture content.

In Paragraph B modify the compaction standard for cohesionless soils to be 95% maximum Standard Proctor dry density (ASTM D698) at +2% optimum moisture content. The compaction standard for cohesionless soils shall be 92% maximum Modified Proctor dry density (ASTM D1557) at ± 2% optimum moisture content.

*Add Subsection 621.052 “Imported Fill Requirements”*

Additional imported fill, if required, should meet the following criteria:

<b>Gradation Requirements</b>		
	<b>Embankment Fill</b>	<b>Channel Bottom Fill</b>
<b>Standard Sieve Size</b>	<b>Percent Passing</b>	<b>Percent Passing</b>
3 inch	100	100
No. 4	30 – 70	30 – 50
No. 200	5 – 30	3 – 12

<b>Plasticity Requirements (Atterberg Limits)</b>	
Liquid Limit	30 or less
Plasticity Index	10 or less

*Add Subsection 621.052 "Drop Structure Subgrade Stabilization"*

Following subgrade stripping in the proposed drop structure areas, the exposed subgrade shall be proof rolled in order to identify soft or disturbed areas. Unsuitable areas identified by the proof rolling operation should be removed and replaced with channel bottom fill. Proof rolling should be accomplished through use of a fully loaded, rubber tired, tandem-axle dump truck or similar equipment providing an equivalent subgrade loading. In areas where a proof roll is not viable due to site conditions, an alternative compaction method shall be proposed by the CONTRACTOR and submitted in writing to the ENGINEER a minimum of twenty-four hours prior to implementation. Upon the ENGINEER's approval, CONTRACTOR may conduct the alternative compaction method under observation of ENGINEER. The subgrade should be carefully observed during the proof rolling procedure. In areas with soft or loose soils and a relatively high water table, this procedure may reduce the stability of the subgrade. If this condition occurs, subgrade stabilization shall be required according to the following section.

Soft areas within the proposed drop structure areas identified during proof rolling of the existing subgrade shall be removed to firm soil below the soft layer and replaced with properly compacted channel fill in accordance with Section 621.051. Additionally, if isolated areas of deep soft soil are encountered, stabilization of the subgrade using geogrid is acceptable. In these isolated areas, the over-excavation should extend to a depth of approximately 12 inches below the existing ground surface. After the over-excavation, approximately 3 to 6 inches of aggregate base material should be placed at the bottom of the excavation and lightly compacted. A geogrid should then be placed on top of this aggregate base layer. A minimum of 6 inches of aggregate base should then be placed on top of the geogrid. This procedure should continue until subgrade is stabilized. After a stable platform is constructed, the remaining earthwork construction can commence. The geogrid should be designed by the manufacturer for stabilization/reinforcement purposes and should be equivalent or better than Tensar TX5.

*Add Subsection 621.053 "Drop Structure Backfill"*

Fill placed under drop structure locations shall be compacted per section 621.05. Fill should be placed in level lifts not exceeding 6 inches in loose thickness, and compacted to the specified percent compaction to produce a firm and unyielding surface. If field density tests indicate the required percent compaction has not been obtained or the surface is pumping/deflecting under construction traffic, the fill material should be reconditioned as necessary and re-compacted to the required percent compaction before placing any additional material.

*Add Subsection 621.056 "Field Quality Control"*

In-place moisture density tests will be performed to ensure fill complies with specified requirements. The following minimum tests will be performed.

1. Drop Structure Fill: One per 200 cu yards
2. Channel Fill: One per 2,000 cu yards
3. Embankment Fill: One per 2,000 cu yards
4. Additional testing as requested by ENGINEER.

Backfill Compaction Tests:

1. Backfill compaction tests will be performed until compaction meets or exceeds requirements.
2. All tests shall be paid by CONTRACTOR.
3. Test locations shall be approved by ENGINEER.

For general fill and embankment fill, testing shall be completed after the first two lifts have been placed to verify the compaction methods being used adequately compact the fill.

CONTRACTOR shall provide completed soil density tests to ENGINEER for review. Locations that do not meet the compaction requirements shall be adjusted and retested at the expense of the CONTRACTOR.

Under Subsection 622.03 Add the Following:

When embankment is to be placed and compacted on slopes, or when new embankment is to be compacted against existing slopes, or when embankment is built 1/2 width at a time, the slopes shall be continuously benched over those areas where it is required as the work is brought up in layers. Benching shall be well keyed and where practical a minimum of 5 feet wide and maximum of 2 feet high. Each horizontal cut shall begin at the intersection of the original ground and the vertical sides of the previous cuts. Material thus cut out shall be re-compacted along with the new embankment material at CONTRACTOR'S expense. An exception to this provision will be made for areas where the total depth of embankment will be 6" or less thick. In these areas, the embankment can be compacted on the slope provided that the foundation material is roughened and moisture conditioned prior to placement of the embankment material and the compaction standards are met.

Frozen materials shall not be used in construction of embankments.

During the construction of the channel, the channel bottom shall be maintained in such condition that it will be well drained at all times.

Embankment (Fill) and Structure Backfill that has eroded, washed away or has become unstable due to rain, snow, snow melt, channel flows or lack of proper

water control shall be removed and replaced, re-compacted and/or reshaped as directed by the ENGINEER and in accordance with the DRAWINGS and SPECIFICATIONS at CONTRACTOR'S sole expense. Removed unsuitable materials shall be hauled away and disposed of at CONTRACTOR'S expense. Replacement materials for removed unsuitable materials shall be purchased, placed and compacted at CONTRACTOR'S expense. All embankment fill material shall be compacted as described in section 621.051

Proof rolling should be accomplished through use of a fully loaded, rubber tired, tandem-axle dump truck or similar equipment providing an equivalent subgrade loading to verify stable foundation material, if designated on the DRAWINGS or when ordered by the ENGINEER. Proof rolling shall be done after specified compaction has been obtained. Areas found to be weak and those areas which failed shall be ripped, scarified, wetted if necessary, and re-compacted to the requirements for density and moisture at CONTRACTOR'S expense. In areas where a proof roll is not viable due to site conditions, an alternative compaction method shall be proposed by the CONTRACTOR and submitted in writing to the ENGINEER a minimum of twenty-four hours before implementation. Upon ENGINEER approval, CONTRACTOR may conduct the alternative compaction method under observation of ENGINEER.

Proof rolling as shown on the DRAWINGS or as ordered by the ENGINEER shall not be measured and paid for separately, but shall be included in the unit prices bid for the work.

Add the following Section 624.04 **"Riprap and Soil Rip Rap"**

PART 1 GENERAL

1.0 SUBMITTALS

CONTRACTOR shall provide the ENGINEER samples of specified materials and certified laboratory test certificates for all items required in this Section including:

Specific gravity – for riprap and bedding materials

AASHTO T96 (L.A. Abrasion test) – for both riprap and bedding materials

AASHTO Test T104 (sodium sulfate) and/or ASTM C88 – for both riprap and bedding materials

AASHTO Test T103 (freeze and thaw) – for both riprap and bedding materials

Gradation analysis from rock quarry for bedding material

Sample load of riprap delivered to site and field measured gradation data

Stabilization Soil sample along with sieve analysis, hydrometer analysis and nutrient testing results

**PART 2 PRODUCTS**  
**2.0 MATERIALS**

Plain Riprap. Plain Riprap used shall be the type designated on the DRAWINGS and shall conform to the following:

Riprap Designation	% Smaller Than Given Size By Weight	Intermediate Rock Dimension (inches)	d <sub>50</sub> * (inches)
Type VL	70 - 100	12	6
	50 - 70	9	
	35 - 50	6	
	2 - 10	2	
Type L	70 - 100	15	9
	50 - 70	12	
	35 - 50	9	
	2 - 10	3	
Type M	70 - 100	21	12
	50 - 70	18	
	35 - 50	12	
	2 - 10	4	
Type H	70 - 100	30	18
	50 - 70	24	
	35 - 50	18	
	2 - 10	6	
Type VH	70 - 100	42	24
	50 - 70	33	
	35 - 50	24	
	2 - 10	9	

\* d<sub>50</sub> = Mean Particle Size

The riprap designation and total thickness of riprap shall be as shown on the DRAWINGS. The maximum stone size shall not be larger than two times the d<sub>50</sub>.

The minimum specific gravity of the riprap shall be 2.65. The specific gravity shall be according to the bulk-saturated, surface-dry basis, AASHTO T85.

Neither width nor thickness of a single stone of riprap shall be less than one-third (1/3) of its length.

All riprap shall be entirely composed of quarried, angular rock. Broken concrete or asphalt pavement shall not be acceptable for use in the WORK. Rounded river rock is also not acceptable for use in the WORK.

The color of the riprap shall be approved by ENGINEER prior to delivery to the PROJECT site. Color shall be consistent on the entire PROJECT and shall match the color of rock to be used for all other portions of the WORK.

The riprap shall have a percentage loss of not more than forty percent (40%) after five hundred (500) revolutions when tested in the Los Angeles machine in accordance with AASHTO Test T96.

The riprap shall have a percentage loss of not more than ten percent (10%) after five (5) cycles when tested in accordance with AASHTO Test T104 and/or ASTM C88 for ledge rock using sodium sulfate.

The riprap shall have a percentage loss of not more than ten percent (10%) after twelve (12) cycles of freezing and thawing when tested in accordance with AASHTO T103. In the event the Contractor is unable to complete the required testing in a timely manner, other testing methods may be accepted with prior approval from the Engineer.

Rock shall be free of calcite intrusions.

Each individual load of riprap shall be well graded from the smallest to the largest size specified and shall meet the gradation requirements of section 2.01A.

Before any riprap is placed, the CONTRACTOR will have a sample load of riprap for each designation delivered to the project site. Under the direction of the ENGINEER, the contractor will provide the equipment and labor to measure individual rock pieces in the sample load(s) and the ENGINEER will use the measurements to assess whether it meets the specified gradation. If needed, the sample riprap load will be adjusted to meet the SPECIFICATIONS by adding or removing rock. The needed adjustments will be communicated to the quarry by the CONTRACTOR. The completed riprap sample is to be protected with construction fencing and remain undisturbed on the project site until completion of the project. The sample(s) will serve as a visual reference for the CONTRACTOR to help verify the gradation of subsequent riprap loads. After this initial sample has been established, control of gradation by the CONTRACTOR shall be by visual inspection. Any riprap not appearing to meet this visual reference shall be rejected. During subsequent construction, in the event the ENGINEER believes riprap being delivered to the site does not meet the SPECIFICATIONS, the ENGINEER shall pick one (1) to two (2) random truckloads to be dumped and checked for gradation. Mechanical equipment and labor needed to assist in checking gradation shall be provided by CONTRACTOR at no additional cost.

Soil Riprap. Soil Riprap shall consist of Plain Riprap mixed with Stabilization Soil in accordance with Part 3 (Execution) of this SPECIFICATION. Rock for Soil Riprap shall comply with all rock requirements for Plain Riprap as specified in the above Paragraph A. Stabilization Soil utilized in Soil Riprap shall comply with paragraph 2.01.C of this SPECIFICATION.

Where soil riprap is designated to be buried, place on-site excavated material less than 2- inches in size that is free from trash and organic matter in riprap voids by mixing. The onsite material shall be mixed with the riprap to achieve a mixture of 35% soil and 65% riprap. When voids are filled and the surface accepted by the ENGINEER, place a nominal 6-inches of top soil over the area. Fine grade, seed, and install erosion control blanket per the SPECIFICATIONS and or DRAWING details.

Stabilization Soil. Stabilization Soil shall consist of 30 to 40 percent clay, and not more than 20 percent sands and gravels. The Stabilization Soil shall be subject to approval by the ENGINEER and the CONTRACTOR shall submit a gradation analysis including hydrometer testing and nutrient testing results. If nutrient content is determined by the ENGINEER to be inadequate, amendments shall be established by the ENGINEER and paid for under a separate bid item for soil amendments. The stabilization soil shall have characteristics consistent with Topsoil per section 970.03 and may require soil amendments per section 970.05 as directed by the ENGINEER.

Bedding Material. Granular bedding designation and total thickness of bedding shall be as shown on the DRAWINGS. Gradations for Granular Bedding are as follows:

U.S. Standard <u>Sieve Size</u>	Percent by Weight Passing <u>Type I</u>	Square Mesh Sieves <u>Type II</u>
3 inch		90 - 100
1-½ inch		
¾ inch		20 - 90
⅜ inch	100	
No. 4	95 - 100	0 - 20
No. 16	45 - 80	
No. 50	10 - 30	
No. 100	2 - 10	
No. 200	0 - 2	0 - 3

Granular bedding shall meet the same requirements for specific gravity, absorption, abrasion, sodium sulfate soundness, and freeze-thaw durability as

required for riprap and specified above. Broken concrete, asphalt pavement and rounded river rock shall not be acceptable for use in the WORK.

## PART 3 EXECUTION

### CONSTRUCTION REQUIREMENTS

Channel slopes, bottoms, or other areas to be protected with riprap or soil riprap shall be free of brush, trees, stumps, and other objectionable material and be graded to a smooth compacted surface. CONTRACTOR shall excavate areas to receive riprap to the subgrade for granular bedding or for soil riprap to the specified depth (bedding material is not required for soil riprap). The subgrade materials shall be stable. If unsuitable materials are encountered, they shall be removed and replaced as Unsuitable Foundation Materials Excavation in accordance with Section 621.051 of the SPECIFICATIONS. For subgrade that has been excavated in undisturbed soil, additional compaction shall not be required unless specified by ENGINEER. When subgrade is built up with embankment material it shall be compacted to ninety-five percent (95%) of the Standard Proctor Density (ASTM D698) at optimum moisture content + or - two percent (2%). After an acceptable subgrade is established, the riprap or bedding shall be immediately placed and leveled to the specified elevation. Immediately following the placement of the bedding material, the riprap shall be placed. If bedding material is disturbed for any reason, it shall be replaced and graded at CONTRACTOR's expense. In-place bedding materials shall not be contaminated with soils, debris or vegetation before the riprap is placed. If contaminated, the bedding material shall be removed and replaced at CONTRACTOR's expense.

### PLACEMENT

Following acceptable placement of granular bedding, riprap placement shall commence as follows:

Plain Riprap. Plain Riprap shall be placed so as to be in conformance with the required rock gradation and to the lines, grades, and thicknesses shown on the DRAWINGS. Plain Riprap shall be placed in two layers. The first layer shall have a thickness of approximately the riprap  $d_{50}$  and consist of the smaller size fractions in the riprap gradation. In placing the first layer, care shall be exercised not to displace the bedding material layer. The second and top layer of riprap shall consist of rocks that are largely  $d_{50}$  size or greater with voids filled as necessary with smaller riprap. The mixture shall be consolidated by large vibratory equipment or full weighting with a backhoe bucket to create a tight, dense, interlocked mass with a smooth surface plane free from large projections. Some hand placement may be required to achieve the described placement goals. Any areas of accumulation of smaller sizes of stone on the surface shall

be reworked at the direction of the ENGINEER. Smaller rock shall be securely locked between the larger stone. It is essential that smaller rock material between the larger stones not be loose or easily displaced by flow or by vandalism. The basic procedure shall result in larger materials flush to the top surface with faces and shapes arranged to minimize voids, and smaller material below and to a lesser extent, between larger materials.

Surface grades shall be a plane and projections above or depressions below the finished design grade more than ten percent (10%) of the rock layer thickness shall not be allowed.

All rock is to be placed in a dewatered condition beginning at the toe of the slope or other lowest point. CONTRACTOR shall maintain the riprap protection in a dewatered condition until accepted. Any material displaced for any reason shall be replaced to the lines and grades shown on the DRAWINGS at no additional cost to the CITY.

Soil Riprap. Mix 25 to 35 percent moist Stabilization Soil by volume with stockpiled Plain Riprap. Use moisture and other control procedures as necessary to assure a homogenous mixture. It is intended that the rock content in a cubic yard of Soil Riprap be the same as the rock content in a cubic yard Plain Riprap of the same gradation. Stabilization Soil should completely fill all voids in the riprap without displacing any rock.

A Granular Bedding Material layer is NOT required and shall not be permitted for any Soil Riprap installation.

Soil Riprap shall be placed so as to be in conformance with the required rock gradation and to the lines, grades, and thicknesses shown on the DRAWINGS. Soil Riprap shall be placed in two layers. The first layer shall have a thickness of approximately the riprap  $d_{50}$  and consist of the smaller size fractions in the riprap gradation. The second and top layer of riprap shall consist of rocks that are largely  $d_{50}$  size or greater with voids filled as necessary with smaller riprap. The mixture shall be consolidated by large vibratory equipment or full weighting with a backhoe bucket to create a tight, dense, interlocked mass with a smooth surface plane free from large projections. Some hand placement may be required to achieve the described placement goals. Any areas of accumulation of smaller sizes of stone or soil shall be reworked at the direction of the ENGINEER. Smaller rock shall be securely locked between the larger stone. It is essential that smaller rock material between the larger stones not be loose or easily displaced by flow or by vandalism. The basic procedure shall result in larger materials flush to the top surface with faces and shapes arranged to minimize voids, and smaller material below, and to a lesser extent, between larger materials.

Surface grades shall be a plane and projections above or depressions below the finished design grade more than ten percent (10%) of the rock layer thickness shall not be allowed. The stone shall be consolidated by full loading with the bucket of the backhoe or other approved means. The top surface of the Soil Riprap shall be covered with a minimum of three (3) inches of topsoil. The final surface shall be thoroughly wetted for good compaction, smoothed and compacted by vibrating equipment; the surface shall then be hand raked to receive planting or seeding

All rock is to be placed in a dewatered condition beginning at the toe of the slope or other lowest point. CONTRACTOR shall maintain the riprap protection in a dewatered condition until accepted. Any material displaced for any reason shall be replaced to the lines and grades shown on the DRAWINGS at no additional cost to the CITY.

Rejection of Work and Materials. ENGINEER may reject delivered or placed riprap which does not conform to all of the requirements of this section. Rejected riprap shall be removed from the PROJECT site by CONTRACTOR and replaced at CONTRACTOR's expense.

#### REJECTION OF WORK AND MATERIALS

ENGINEER may reject delivered or placed rock which do not conform to all of the requirements of this section. Rejected rock shall be removed from the PROJECT site by the CONTRACTOR and replaced at CONTRACTOR'S expense.

#### END OF SECTION

Add the following Section and Subsection

#### *Section 626 - Sculpted Concrete*

##### *626.01 Submittals*

CONTRACTOR shall provide concrete or shotcrete mix designs, including all admixtures. Provide product data on the following:

- Ready-mixed concrete or Shotcrete mix designs.
- Fly ash.
- Admixtures (such as air-entraining and water-reducing admixtures).
- Form release agents.
- Bonding agents.
- Grout.
- Concrete coloring pigment.

Data for proprietary materials and items including patching compounds, curing compounds, and other requested by the ENGINEER.

Detailed shop drawings and schedules shall be submitted as required by the ENGINEER covering all reinforcement in ample time to be checked and to permit corrected drawings to be delivered to the ENGINEER a minimum ninety-six hours in advance of the time for proceeding with the work. These drawings shall show the size, number, exact position and spacing of steel reinforcement and the exact location of all openings, framing, or special conditions affecting the work. Detailing of reinforcement shall conform to ACI 315.

CONTRACTOR shall provide statement detailing previous sculpted concrete experience including photos and locations of previous installations.

A sculpted concrete construction plan shall be submitted by the CONTRACTOR to the ENGINEER for review minimum 7 days prior to construction. This plan shall describe methods and equipment proposed for hauling, placing, curing, and protecting sculpted concrete as well as placement schedules indicating anticipated daily progress.

#### *626.02 Materials*

##### Concrete

Concrete mix shall be made with AASHTO M 43 Size No. 8 Coarse Aggregate.

Fibermesh (BASF Masterfiber F100) shall be included at the application rate of 1.5 lb/cy.

Use cement conforming to the following.

Portland cement conforming to ASTM C-150. CONTRACTOR shall use only one brand of cement throughout the project.

Blended hydraulic cement conforming to ASTM C-595 Type IS, IS-A, or IP.

The color of the cement shall conform to the following:

Match existing material within the project area as approved by the ENGINEER.

Color for bid purposes shall be Creekside Buff, RC1509, by BASF Admixtures or approved equal. ENGINEER shall select final color from manufacturer or concrete supplier color samples.

##### Reinforcement

Reinforcement shall be provided as a minimum of #4 (1/2" deformed, 60ksi) bars, 12" on center each way, or equivalent welded wire mesh, with minimum 3" clearance above subgrade. Minimum equivalent WWF shall have a cross sectional area of 0.2 in<sup>2</sup>/ft<sup>2</sup> with a minimum tensile strength of 60ksi, (eg. 6x6 W10 or 4x4 W7).

Clearance for all reinforcing bars, unless shown otherwise, shall be:

When placed on ground – 3"

All other concrete surfaces – 2"

All bends, unless otherwise shown, shall be a 90 degree standard hook as defined in the latest edition of ACI 318.

All wall corner and wall intersection reinforcement bars shall be continuous around corners and through columns or pilasters. Reinforcement shall be extended into connecting walls and lapped on the opposite face of the connecting walls.

Vertical bars shall be lapped with dowels from base slabs and extended into the top face of roof slabs and lapped with top slab reinforcement, provide a minimum of two full height vertical bars with matching dowels at wall ends, corners, and intersections with size to match typical vertical reinforcing steel shown.

Unless otherwise indicated, CONTRACTOR may splice continuous slab or longitudinal beam bars at locations of his choosing, except that top bar splices shall be located at midspan and bottom bar splices shall be located at supports. All reinforcement bends and laps, unless otherwise noted, shall satisfy the following requirement:

GRADE 60 REINFORCING STEEL (ASTM A615)							
BAR SIZE		#3	#4	#5	#6	#7	#8
LAP SPLICE LENGTH							
SPACING <6"	TOP BAR	1'-4"	2'-0"	3'-0"	4'-0"	5'-10"	6'-8"
	OTHER BAR	1'-4"	1'-7"	2'-3"	3'-1"	4'-6"	5'-2"
SPACING >6"	TOP BAR	1'-4"	1'-7"	2'-0"	2'-5"	3'-6"	4'-0"
	OTHER BAR	1'-4"	1'-4"	1'-7"	1'-10"	2'-9"	3'-1"
EMBEDMENT LENGTH							
SPACING <6"	TOP BAR	1'-0"	1'-7"	2'-3"	3'-1"	4'-6"	5'-2"
	OTHER BAR	1'-0"	1'-2"	1'-9"	2'-5"	3'-6"	4'-0"
SPACING >6"	TOP BAR	1'-0"	1'-3"	1'-7"	1'-10"	2'-9"	3'-1"
	OTHER BAR	1'-0"	1'-0"	1'-2"	1'-5"	2'-1"	2'-5"
TOP BARS SHALL BE DEFINED AS ANY HORIZONTAL BARS PLACED SUCH THAT MORE THAN 12" OF FRESH CONCRETE IS CAST IN THE MEMBER BELOW THE BAR IN ANY SINGLE POUR. HORIZONTAL WALL BARS ARE CONSIDERED TOP BARS.							

### Subgrade

Area underneath sculpted concrete drop structures shall be stripped of topsoil, organic, and deleterious material and fill to a depth of 2' minimum below existing grade or as directed by the ENGINEER.

Subgrade shall be inspected by ENGINEER prior to placement of engineered fill.

Excavation to subgrade shall be carefully considered by the CONTRACTOR. Subgrade shall be sloped uniformly or stepped in accordance with the grading shown on the DRAWINGS. The building of earthen steps on top of a sloping subgrade plane that has been compacted and approved is prohibited.

All contours, spot elevations, and limits shown are finish design grade.

### *626.03 Execution*

#### Placement

Prior to placing concrete, CONTRACTOR shall remove all debris and thoroughly dampen the surfaces that may come into contact with the concrete to be placed.

Subgrade shall be free of water, mud, debris, or loose or frozen materials.

Subgrade shall meet compaction requirements described in Subsection 621.053 "Drop Structure Backfill".

A shotcrete flash coat may be applied over the completed subgrade. The flash coat shall consist of a 1-inch layer of shotcrete that will cap and protect the

subgrade material during placement of reinforcing steel and prior to placement of sculpted concrete.

Prior to placement of structural concrete for the sculpted concrete feature, the ENGINEER shall observe all reinforcing forms and surfaces receiving concrete. Prior to placing concrete, CONTRACTOR shall repair all discrepancies identified by the ENGINEER.

Concrete shall be placed when form surfaces, reinforcement, embedded items, or sub-base are greater than 32°F. When mean daily outdoor temperature is less than 40°F, the temperature of the concrete shall be maintained between 50°F and 70°F during the curing period.

Concrete shall not be placed against forms exposed to heating unless the temperature of the forms is first cooled to less than or equal to 90°F.

Concrete shall be placed directly on approved subgrade.

Concrete shall be placed so as to avoid segregation of the materials and the displacement of the reinforcement.

Concrete shall not be dropped more than 5' unless confined by closed chutes or pipes.

Shotcrete shall be placed using only suitable delivery equipment and procedures that will meet the requirements of this SPECIFICATION. Refer to ACI Standards 506-66, recommended practice for shotcreting.

Remove over-spray or rebound prior to final set and before placement of shotcrete material on such adjacent surfaces.

CONTRACTOR shall control thickness, method of support, air pressure, and water content of shotcrete to prevent sagging or sloughing.

Dampen absorptive substrate surfaces prior to placement of shotcrete to facilitate bond and reduce water loss.

Broom or scarify the surface of freshly placed shotcrete to which after hardening, additional layers of shotcrete are placed.

Hold nozzle at such a distance and angle to place material behind reinforcement before any material is allowed to accumulate on its face.

Do not place shotcrete through more than one layer of reinforcing steel in one application, unless demonstrated by pre-construction tests that steel is properly encased.

## Finishing

CONTRACTOR shall provide an expert(s) opinion approved by ENGINEER to preform texturing and shaping of the concrete that is left above exposed ground.

Finished product shall simulate natural rock as described in the DRAWINGS and SPECIFICATIONS. CONTRACTOR shall achieve the desired appearance by:

Troweling sculpted concrete smooth.

Cutting rock formation scars into the surface.

Texturing the entire surface using both texture mats and power washing to achieve a natural rock finish.

Alternative methods must be approved by the ENGINEER.

Shaping and finishing top surface of sculpted concrete shall be performed to effect a finish similar to existing bedrock in project area.

The fabrication of sculpted concrete, installation and adjustment of finish details, shall be accomplished in such a manner as to appear as realistic as possible. This element is artistic in nature and may require field adjustments to completed work to obtain the desired effect. The ENGINEER shall decide questions of aesthetic effect. Minor changes or adjustments to in-place work shall be made at the CONTRACTOR'S expense.

#### *626.04 Sample Installation*

CONTRACTOR shall construct a sample sculpted concrete panel measuring not less than 50 square feet. Sample shall represent all aspects of the proposed installation including:

Concrete thickness

Reinforcement

Finished surface texturing

Coloring and etching of the concrete feature

The ENGINEER shall observe and approve the sample panel prior to the construction of any sculpted concrete features.

Sample installation will be paid using unit prices for sculpted concrete.

Sample installation will be placed at an approved location under direction of the ENGINEER.

## 626.05 Weep Drains

### GENERAL

CONTRACTOR shall furnish all labor, tools, and equipment and perform all WORK necessary for, or incidental to, the supply and installation of weep systems as shown in the DRAWINGS and specified herein. This WORK includes trenching, placement of a geotextile fabric, rock and pipe. The WORK shall be coordinated with the work of all other trades and activities on the PROJECT.

CONTRACTOR shall furnish and install all supplementary and miscellaneous items, appurtenances and devices incidental to or necessary for a complete installation.

### SUBMITTALS

CONTRACTOR shall provide the ENGINEER samples of all specified materials and certified laboratory test certificates for all items required in this Section including:

Geotextile fabric manufacturer's data  
Rock bedding material gradation test results  
AASHTO T96 (L.A. Abrasion test) – for rock bedding  
AASHTO Test T104 (sodium sulfate) and/or ASTM C88 – for rock bedding  
ASTM D5312 (freeze and thaw) – for rock bedding. In the event the Contractor is unable to complete the required testing in a timely manner, other testing methods may be accepted with prior approval from the Engineer.  
Sample load of rock bedding delivered to site  
HDPE pipe manufacturer's data

### PRODUCTS

#### GEOTEXTILE FABRIC

The fabric shall have complete resistance to deterioration from ambient temperatures, acid, and alkaline conditions, and shall be indestructible to microorganisms and insects. The material shall be resistant to short-term (until placement) deterioration by ultraviolet light or protected until placement, as recommended by the manufacturer, such that no deterioration occurs. During shipment and storage, the rolls of fabric shall be protected against deterioration from the sun, mud, dirt, dust, and other deleterious conditions at all times.

Fibers used in the manufacture of geotextiles, and the threads used in joining geotextiles by sewing, shall consist of long chain synthetic polymers composed of at least eighty five percent (85%) by weight polyolefins, polyesters, or polyamides. They shall be formed into a network such that the filaments or yarns retain dimensional stability relative to each other, including selvages.

The property values shown below are not design values, but represent the minimum accepted physical characteristics of the geotextile required. The number represents a value to be confirmed by the manufacturer. These values represent minimum average roll values (i.e., any roll tested should meet or exceed the minimum values in the table).

PROPERTY	VALUE	TEST METHOD
Grab Strength	120 lbs.	ASTM D 4632
Grab Tensile Elongation	55%	ASTM D 4632
Burst Strength	225 psi	ASTM D 3786
Puncture Resistance	65 lbs.	ASTM D 4833
Trapezoid Tear Strength	50 lbs.	ASTM D 4533
Apparent Opening Size	70, U.S. Standard Sieve	ASTM D 4751
Permittivity	1.7 sec. <sup>-1</sup>	ASTM D 4491
Water Flow Rate	140 gal./min./ft. <sup>2</sup>	ASTM D 4491

Geotextile fabric for weep drains shall be Mirafi 140N or equivalent.

## ROCK BEDDING

Unless otherwise shown in the DRAWINGS, rock shall consist of dense, clean, uniformly graded material with a maximum size of one (1) inch and less than five percent (5%) passing the three-eighths-inch (3/8") sieve. Coarse concrete aggregate meeting the requirements of ASTM C 33 No. 5 may be used.

## PIPE AND FITTINGS

Pipe and fittings for weep drain systems shall be HDPE. HDPE pipe shall be Hancor Heavy Duty Pipe, single wall, flexible pipe or approved equal made from virgin compounds and meeting the requirements of ASTM F 405. HDPE joints shall be Hancor "soil tight" type or approved equal. Perforations for perforated pipe shall provide a minimum inlet area of 1.0 square inches per linear foot and may not exceed one-quarter-inch (1/4") in any dimension. Field perforated pipe is permitted and shall utilize one-quarter-inch (1/4") diameter holes. Field holes shall be equally spaced both along the length of the pipe and around the circumference. Approximately 21 holes per linear foot of length are required.

Unless otherwise approved, the pattern shall be three holes spaced around the circumference of the pipe at third points and on maximum 1.7-inch centers along the length of the pipe. Adjacent holes along the length of the pipe shall be offset. No perforations shall be made within six (6) inches of either end of the pipe.

## EXECUTION

### GEOTEXTILE FABRIC

Geotextile fabric shall completely surround the weep drain filter material at all points. Care shall be taken not to tear any geotextile fabric during backfilling.

### ROCK

Rock shall be placed on the geotextile fabric to the depth shown prior to placement of the underdrain pipe. After the pipe is in place, rock shall be placed along and over the top of the pipe in a manner that will not damage the pipe.

### HDPE PIPE AND FITTINGS

The pipe shall be installed in accordance with the manufacturer's written instructions, a copy of which shall be maintained on site during pipe installation.

*Add the following Section and Subsections*

*Section 627 - Sheet Pile*

*627.01 Submittals*

Provide qualifications of proposed sheet pile installer.

CONTRACTOR shall provide information from the manufacturer that indicates the sheet piling meets or exceeds the SPECIFICATIONS listed in this section.

CONTRACTOR shall submit verification from the manufacturer that the hammer can deliver the required energy.

Splice locations, if necessary, shall be reviewed and accepted by ENGINEER prior to installation.

*627.02 Submittals*

Installer Qualifications: Sheet piling installer shall have, as a minimum, three (3) successful past installations of sheet piling of comparable overall heights and sections and comparable penetration into soils similar to those found on the PROJECT.

*627.03 Products*

All steel sheet piling shall be new and unspliced material throughout, unless otherwise reviewed and accepted by ENGINEER.

Steel sheet piles and special fabricated shapes shall be of a design that ensures continuous interlock throughout the entire length when in place.

*627.04 Materials*

Steel sheet piling shall meet the requirements of ASTM A328, (Grade 50).

Steel corners, tees, wyes, and crosses shall meet the requirements of ASTM A328 or ASTM A690.

Steel sheet piles required for the PROJECT shall be the type and weight shown on the DRAWINGS. Sheet piling shall be constructed with a weathering finish.

Additional length beyond those indicated on the DRAWINGS may be required to provide for trimming of tops of sheet piling.

The interlocks between steel sheet pile sections shall be configured such that the average width of the annular space between all contact points of the interlocks shall be a maximum of one-eighth (1/8) inch, as determined by ENGINEER.

Steel sheet piles and interlocks shall not have excessive kinks, camber or twist that would prevent the pile from reasonably free sliding to grade.

All fabricated connections shall be made with the use of angles or bent plates, as necessary, and shall be adequately welded or connected with high strength bolts as accepted by ENGINEER.

#### Handling Holes:

If handling holes are provided, they shall be two (2) standard two and nine-sixteenth (2-9/16) inch diameter handling holes located six (6) inches from one end.

The holes shall be plugged by welding a piece of steel over the hole prior to installing any riprap, backfill or drop structure cap.

The plated hole shall be watertight.

#### *627.05 Storage and Handling*

Do not subject piles to damage by impact bending stresses in transporting to and storing piles onsite.

Store and handle piles such that corrosion protection coating will not be damaged.

#### *627.06 Execution*

##### Examination

Do not begin sheet pile installation until the earthwork in the area where the piles are to be driven has been completed to the extent that the grade elevation is at no more than twelve (12) inches above or below the top of the piling elevation as indicated on the DRAWINGS.

##### Preparation

Any fill along the alignment of the sheet pile must be in place to sub-grade elevations and compacted prior to driving the sheet pile.

Fill material (except riprap, boulders, bedding and grout) is not to be placed around the sheet pile after the sheet pile is in place.

##### Installation

General: All welding or gas cutting shall be in accordance with the current standards of the American Welding Society.

## Virtual Refusal

Steel sheet piling shall be driven to the depths shown on the DRAWINGS or to virtual refusal in claystone or sandstone.

Virtual refusal is defined as ten (10) blows per inch with an approved pile hammer. Alternative methods of determining virtual refusal shall be approved by ENGINEER.

A pile hammer shall be used to determine virtual refusal.

The hammer shall be operating at the manufacturer's recommended stroke and speed when virtual refusal is measured.

## Sheet Pile Driving

Steel sheet piling shall be assembled before driving and then driven as a continuous wall, progressively in stages to keep the piles aligned correctly and minimize the danger of breaking the interlock between the sheets. Steel sheet piling shall be driven to form a tight bulkhead.

A driving head shall be used and any piling which is damaged in driving or which has broken interlocks between sections shall be pulled and replaced at CONTRACTOR's expense.

The piling shall be driven within the following tolerances:

### Alignment:

Sheet pile shall be driven to form a relatively straight line between the termini points shown on the DRAWINGS.

Horizontal deviation of any point from a straight line connecting the two ends of the wall section shall be a maximum of six (6) inches.

Plumbness: Each individual sheet pile section shall be driven vertical, within a horizontal tolerance of two percent (2%) of any vertical length measured along the pile.

### Elevation:

Tops of sheet pile sections shall be within a tolerance of one (1) inch from plan elevations shown in the DRAWINGS.

CONTRACTOR shall not be paid for excess sheet pile trimmed off the end of the pile to meet final grade.

CONTRACTOR shall brace and/or provide soil grading as necessary during construction operations in order to provide lateral stability for the sheet pile wall. The sheet pile wall has been designed for the soil grades of the final configuration denoted on the

DRAWINGS only. Other temporary configurations during the construction period shall not be allowed.

Care shall be taken during driving to keep from causing deformations of the top of the piles, splitting of section, or breaking of the interlock between sections. Care shall also be taken during driving to prevent and correct any tendency of steel sheet piles to twist or get out of plumb.

Steel Z piling shall be driven with the ball-end leading. Proper care and planning shall be used to allow for this construction procedure in both immediate and possible future walls.

Alternate Z piles shall be reversed end for end for proper interlocking in the "normal" position. Piles shall also be aligned properly to maintain a "normal" driving width.

For sheet piles driven into the native soils, pre-drilled soils, or excavated soils a vibratory driver may be used as long as the required depth is obtained.

For sheet piles being driven into bedrock, an approved hammer utilizing minimum hammer energy of 19,000 foot-pounds shall be used to obtain the required depth or virtual refusal. The hammer shall be clearly marked so that it can be identified at the job site.

Steel sheet pile that is full length as shown on the DRAWINGS and is required to be driven below the specified cutoff elevation shall be spliced with additional steel sheet piling with a full penetration butt weld.

#### REVISION OF SECTION 900 - SEEDING, FERTILIZER, BLANKET AND MULCHING

*Section 900 of the Standard SPECIFICATIONS is amended as follows:*

*Subsection 900.01 is revised as follows:*

Delete the first paragraph and replace with the following:

"This work shall consist of furnishing and spreading fertilizers; soil preparation; furnishing and drilling or sowing seed; mulching or blanketing the seeded areas in accordance with these SPECIFICATIONS, accepted horticultural practice, and in reasonably close conformity with the locations and details shown on the DRAWINGS or as designated. The seeded areas shall be all areas that have been disturbed during construction exclusive of areas to be paved, covered with turf grass sod, or gravel base course.

*Subsection 900.02 is revised as follows:*

UPLAND SEED MIXES. Upland seed mix shall be used for revegetating select disturbed areas as shown on the DRAWINGS. All seed mixes shall consist of certified seed varieties that are free of noxious weeds and have been tested for purity and germination within six (6) months of the planting date. Certification labels which indicate the species, purity, germination, weed content, origin, and test date shall be submitted

for all seed materials. Refer to the DRAWINGS for the locations of upland seed mix. Upland areas shall be seeded with the following mix:

Scientific Name	Common Name	% of Mix	PLS lbs/Acre
<i>Bouteloua gracilis</i>	Blue Grama-Bad River	5.0	0.5
<i>Bouteloua gracilis</i>	Blue Grama-Hachita	5.0	0.5
<i>Pascopyrum smithii</i>	Western Wheatgrass-Arriba	25.0	5.9
<i>Bouteloua curtipendula</i>	Sideoats Grama-Vaughn	25.0	2.1
<i>Schizachyrium scoparium</i>	Little Bluestem-Pastura	6.0	1.0
<i>Oryzopsis hymenoides</i>	Indian Ricegrass-Paloma	5.0	1.5
<i>Buchloe dactyloides</i>	Buffalograss-Texoka	7.0	1.5
<i>Nasella viridula</i>	Green Needlegrass-Lodorm	6.0	2.5
<i>Andropogon gerardii</i>	Big Bluestem-Champ	6.0	1.2
<i>Koeleria macrantha</i>	Junegrass-VNS	4.0	0.15
<i>Avena sativa 'Monida'</i>	Oats-Monida	22.6	6.0

Riparian Seed Mixes: Riparian seed mix shall be used for revegetating select disturbed areas as shown on the DRAWINGS. All seed mixes shall consist of certified seed varieties that are free of noxious weeds and have been tested for purity and germination within six (6) months of the planting date. Certification labels which indicate the species, purity, germination, weed content, origin, and test date shall be submitted for all seed materials. Refer to the DRAWINGS for the locations of various seed mixes. Riparian areas shall be seeded with the following mix:

Scientific Name	Common Name	% of Mix	PLS lbs/Acre
<i>Andropogon gerardii 'Champ'</i>	Big Bluestem-Champ	5.2	1.6
<i>Andropogon hallii 'Garden'</i>	Sand Bluestem-Garden	9.2	2.8
<i>Elymus canadensis</i>	Canada Wildrye-VNS	9.8	3.0
<i>Elymus lanceolatus</i> spp. <i>lanceolatus 'Critana'</i>	Thickspike Wheatgrass-Critana	5.6	1.7
<i>Elymus trachycaulus 'San Luis'</i>	Slender Wheatgrass-San Luis	7.2	2.2
<i>Glyceria striata</i>	Fowl Mannagrass-VNS	6.5	2.0
<i>Panicum virgatum 'Blackwell'</i>	Switchgrass-Blackwell	4.9	1.5
<i>Pascopyrum smithii 'Arriba'</i>	Western Wheatgrass-Arriba	4.9	1.5
<i>Sorghastrum nutans 'Cheyenne' or 'Holt'</i>	Yellow Indiangrass-Cheyenne or Holt	6.5	2.0
<i>Spartina pectinata</i>	Prairie Cordgrass-VNS	6.5	2.0
<i>Sporobolus airoides 'Salado'</i>	Alkali Sacaton-Salado	0.7	0.2
<i>Sporobolus cryptandrus</i>	Sand Dropseed-VNS	0.2	0.06
<i>Avena sativa 'Monida'</i>	Oats-Monida	32.7	10

Seeding Dates: Seeding shall occur during the fall (September-November) or spring (March-May) to maximize planting success. If the project schedule does not coincide with the preferred seeding periods, or there are unsuitable site conditions (i.e., frozen

ground), then soil stabilization and/or storm water Best Management Practices shall be implemented to stabilize the area until the next appropriate seeding date. Any seeding conducted outside the preferred months shall be approved by the ENGINEER.

**Seeding Locations:** The location and extent of seeding shall be in accordance with this specification and the revegetation details contained in the DRAWINGS.

**Seeding Methods:** Drill seeding or broadcast seeding shall be used for revegetation. As outlined below, the size and slope of the disturbed area shall determine which seeding method(s) is appropriate and acceptable. Where feasible, drill seeding is the required method. If broadcast seeding is employed, either by hand, spreader, hydro-seeder, or other means, the seeding rate (PLS lbs/Acre) shall be doubled.

**Slopes equal to or less than 3:1 –** Seed shall be planted using a rangeland drill with a small seed/legume box and an agitator box for fluffy or bulky seed. Seed rows shall be spaced seven (7) to ten (10) inches apart, and planted one-half (0.5) to three-quarters (0.75) of an inch deep. The drill shall have double-disk furrow openers with depth bands (or other depth control configurations as approved by the ENGINEER) and packer wheels. Seeding shall be accomplished using bi-directional drilling and with the second direction following the slope contour. The drill equipment shall be calibrated each day or whenever there is a change in the seed mix to ensure proper seed distribution and rate.

**Slopes greater than 3:1 –** Seed shall be broadcast by hand, mechanical spreader, or hydro-seeding equipment. Broadcast seeded areas shall be raked or harrowed to incorporate the seed into the soil at a depth not exceeding three-quarters (0.75) of an inch. Broadcast seeding shall be avoided when wind speed exceeds 15 miles-per-hour.

*Subsection 900.5 is to include the following:*

Maintenance and Acceptance

*Initial Inspection:*

**Revegetation:** The CONTRACTOR will inspect existing site conditions and note irregularities affecting work of this section. The CONTRACTOR will: Verify that grading operations have been satisfactorily completed and that topsoil of adequate quantity and quality has been replaced in all disturbed areas as specified; Verify that the area to be re-vegetated is protected from concentrated runoff and sediment from adjacent areas; Note any previous treatments to the area such as temporary seeding or mulching and discuss how these treatments will effect permanent revegetation with the ENGINEER. Report all irregularities affecting work of this section to the ENGINEER before beginning work; Beginning the work of this section implies acceptance of existing conditions.

**Conditional Acceptance:** Upon completion of the seeding operations, the CONTRACTOR shall notify the ENGINEER to review the work. Seeded areas shall receive "Final Acceptance" provided all requirements of the 1 year warranty have been complied with and a healthy, even colored, viable turf is established, free of weeds and undesirable grass species, disease and insects. Seeded areas shall meet the required coverage for seed establishment.

*Seed Establishment Period:* Seed establishment period shall begin upon notice of "Conditional Acceptance" given by the ENGINEER in writing. Areas seeded in the spring shall be inspected for required coverage the following Fall not later than October 1st. Required coverage for dry land grass seed areas shall be ten (10) viable live seedlings of the species specified per square foot, or 50% foliage cover as measured from 5 feet directly overhead, with no bare spots larger than one square foot. Determination of required coverage will be based on a random sampling of the entire project area, and shall consist of a minimum of five samples, each two square feet in area. Bare spots are defined as those areas larger than one square foot, which do not meet the required coverage. The following Spring prior to May 15th the seeded areas shall be re-inspected for the required coverage. At this time 75% foliage cover as measured from 5 feet directly overhead shall be required. The same random sampling method will be used to determine coverage.

After the inspections it is the CONTRACTOR'S responsibility to perform the required maintenance within one week to insure a healthy established seeded condition once the maintenance periods are completed and seed establishment is accepted, the CITY REPRESENTATIVE shall issue a "Final Acceptance of Seeding Work".

*Maintenance Requirements:*

*Weed Control:* Apply appropriate herbicide(s) in accordance with manufacturers suggested rate(s) to control weeds. Herbicide application must comply with all requirements of herbicide/pesticide applicators license, including suitable warning/signing following application.

*Disease and Insect Control:* Apply fungicides and insecticides as required to control diseases and insects by a licensed applicator in accordance with state law requirements.

*Watering:* The CONTRACTOR shall be responsible for watering of seeded areas if he deems it necessary to insure performance under this Section. Apply only the amount of water necessary to maintain seeded areas in a healthy condition until the end of the warranty period. Reduce amount of water after seed is established. Avoid standing water, surface wash, or erosion from over-watering.

*Protection:* Provide sufficient barriers and signage notifying the public to keep off newly seeded areas.

*Repair:* Re-seed areas that have washed out or are eroded.

*Inspection:* The CONTRACTOR shall notify the ENGINEER prior to watering, mowing, fertilizing, and spraying operations.

After the first six months the ENGINEER and the CITY REPRESENTATIVE shall perform an intermediate inspection of the site with the CONTRACTOR to determine that maintenance is sufficient to insure a healthy condition of the seeding work at the end of the two growing season maintenance period.

At this time a second inspection will be agreed upon between the ENGINEER and the CONTRACTOR if deemed necessary.

*Cleaning:* Perform cleaning daily during installation of the work, and upon completion the work. Remove and haul from the site all excess materials, debris, and equipment. Repair damage resulting from seeding and maintenance operations. Clean mulch from paved surfaces.

*Warranty:* For a period of one (1) year after the date of "Final Completion of the Contract", the CONTRACTOR shall maintain and guarantee all seeded areas to be in a vigorous, healthy growing condition. The CONTRACTOR shall re-seed any areas that are dead, diseased, or in the opinion of the ENGINEER in an unhealthy condition at no additional cost to the CITY. The CONTRACTOR shall perform reseeding operations within ten days of notification from the ENGINEER.

*Payment:* Payment will be made based on Section 900.05 of the Standard SPECIFICATIONS for the City of Colorado Springs with the exception of the following:  
Units will be based on acres for Upland Seeding with Temporary Blanket.  
Units will be based on acres for Riparian Seeding with Temporary Blanket.  
25% of the total bid price for Bid Items "Native Seeding" and "Riparian Seeding" will be withheld until the warranty requirements have been satisfactorily met.

## SECTION 905 - WILLOW PLANTING

Section 905 is hereby added to the Standard SPECIFICATIONS and shall include the following:

905.01 Scope of Work: Furnish all labor, materials, supplies, equipment, tools and transportation, and perform all operations in connection with and reasonably incidental to complete installation of willow stakes and guarantee as shown on the DRAWINGS and as specified herein.

Additional work shall be paid for at contract unit prices. If unit prices are not available, the work shall be paid for on a time and material basis or for an agreed to lump sum amount.

No substitutions for specified materials shall be accepted in the base bid. Alternative bid proposals, which propose material substitutions, may be submitted for consideration by the ENGINEER. Alternative proposals must be fully supported by necessary documentation showing compatibility/comparability with specified materials.

CONTRACTOR shall appoint a competent resident superintendent. The superintendent shall be on site whenever the work is in progress. The superintendent shall not be replaced without notice to the ENGINEER. Workers shall be competent in performance of work they are assigned.

### Inspections and Observations

#### Site Inspection:

1. General CONTRACTOR, Landscape CONTRACTOR and the ENGINEER shall inspect site prior to being accepted by the ENGINEER as complete and acceptable for the Landscape CONTRACTOR to proceed.

2. Beginning work of this section implies acceptance of existing conditions.

#### B. Pre-Planting Observation of Materials:

The ENGINEER shall observe and approve on-site willow harvesting areas, or off-site source of willow materials. Materials planted prior to approval are subject to rejection. All rejected materials must be removed from the site, replaced and reinspected before planting.

#### C. Planting Observation:

The ENGINEER shall approve the location of all willow plantings before installation.

#### D. Final Walk-Through:

1. The final walk-through shall be performed at the completion of all planting operations under this contract.
2. At the time of the final walk-through, the Landscape CONTRACTOR shall have planting areas free of debris. Plant basins shall be in good repair. Debris and litter shall be cleaned up, and walkways, curbs, and roads shall be cleared of soil and debris. The inspection shall not occur until these conditions are met.
3. The ENGINEER shall identify any deficiencies in the form of a punch list.
4. The ENGINEER shall give written notice of final acceptance when work has been performed in compliance with the contract documents.
5. Correct deficiencies within the first ten days of the final walk-through. Correct work in accordance with the contract documents at no cost to CITY.
6. Final acceptance shall not be given until all deficiencies are corrected. The Landscape CONTRACTOR shall maintain site until final acceptance.

#### Guarantee and Placement

Guarantee willow plantings to root and thrive free from defects from any cause until final acceptance of project.

Replace plants when they are no longer in a satisfactory condition as determined by the ENGINEER prior to final acceptance. This includes plants that die back and lose the form and size originally specified.

1. Make replacements within seven days of notification from the ENGINEER.
  2. Replace plants in the dormant season only, unless approved otherwise. Remove dead plants within two days of notification.
- C. All replacements shall be of the same kind and size as originally. Repairs and replacements shall be made at no expense to CITY.
- D. Guarantee shall apply to originally specified and installed plants and other landscape materials, and any replacements made during the construction period.
- E. 25 percent of vegetation stock and erosion control fabric bid price will be withheld until the warranty/watering requirements have been satisfactorily met.

#### Planting Time and Completion

A. Willows shall be planted only when weather and soil conditions permit and in accordance with locally accepted practices, and as approved by the ENGINEER. Cuttings shall not be planted when freezing temperatures are forecast 24 hours in advance or when the ground is frozen or otherwise unsuitable.

Willow cuttings shall be harvested and planted in the dormant season; mid-October to April 1. However, best success is achieved when willows/cottonwoods are harvested and planted in March.

905.02 Materials:

Willow Cuttings

Willow materials shall be Coyote Willow (*Salix Exigua*) species, live wood at least 2 years old. Avoid suckers and current year's growth.

B. Cuttings shall be ½ inch to 1 inch in diameter, of various lengths:

Willow stakes shall be approximately 3' to 5' long (depending on depth of groundwater).

C. Willows should be harvested from on-site sources approved by the ENGINEER. Any off-site sources are to be approved by the ENGINEER.

D. All side branches and the terminal bud shall be trimmed off.

Handling and Storage

Use extreme care to avoid damage to all remaining plants in harvest areas and the cuttings themselves. Only 50% of harvest plants shall be removed for cuttings.

Cutting shall be kept moist, cool and shaded at all times until installed. Cuttings shall be stored between 35 and 50 degrees Fahrenheit for no longer than one week. Cuttings shall be stored in protected locations where they are shaded and sheltered from sun and wind. The butt end (bottom end) of cuttings shall be submerged in water for a minimum of 24 hours but not longer than 7 days. The upper end of cuttings shall not be submerged. Plastic trash cans work well for storing willow cuttings.

Cuttings shall not be dropped or otherwise mishandled. Minor broken and damaged cuttings shall be pruned prior to planting. Major damage shall be cause for rejection.

D. Cuttings shall be covered with tarp or burlap during any transportation in vehicles.

## Harvesting Willows

All willow cuttings must be collected and installed in dormant condition. Cuttings shall be harvested with sharp pruning shears. Cuts are to be made 8 to 10 inches above the ground. The base cut shall be an angle cut and any top cuts shall be blunt. All material shall be handled with care to avoid bark stripping and trunk wood splitting. Older, woody stems or stems with dead inner wood shall not be used. For willow stakes, all side branches and leaves of a cutting shall be trimmed. Live cuttings shall be bound together with twine at the collection site for ease of handling and protection during transport. The harvesting site shall be left clean and tidy; excess woody debris material should be promptly removed from the site. Any soil disturbance outside of construction limits caused by accessing areas for willow harvesting will be ripped and re-seeded. There will be no additional payment for such disturbance.

## Planting Willow Stakes

1. Willow stakes shall be single sticks. Willows should be 3-5' long, taken from the lower stem, approximately ½" to 1" in diameter. Cut the apical buds plus several inches off the cutting before planting it. (The apical bud at the tip of the branch draws too much energy from stored reserves.) All side branches must be trimmed.
2. Planting locations shall be staked by the CONTRACTOR for approval by ENGINEER prior to planting.
3. Cuttings shall be planted in a staggered pattern or random pattern in the locations shown on the DRAWINGS. Prepare a pilot hole to the groundwater depth by hammering a rebar, dibble bar, or stinger, or other approved method, into the soil. Place cutting gently into the hole, upright (IMPORTANT!) ensuring that the bottom 1/3 of the cutting is below the ground water level. Willow cuttings shall protrude from the ground 4-6". There should be at least two lateral buds and/or a terminal scar above ground on the cuttings (cuttings put out the largest number and strongest shoots just below a terminal bud scar).
4. Holes shall be backfilled as necessary so that no voids remain around the cutting. Watering should be done between backfill lifts to ensure all voids are filled. Do not bury top of cutting. Tamp surface around the cutting to secure it in place.
5. If heavy equipment is used to facilitate digging of pilot holes for willow stakes (such as within riprap), all disturbed soil will be ripped and scarified prior to final seeding.

## SECTION 906 - COTTONWOOD POLES

Section 906 is hereby added to the Standard SPECIFICATIONS and shall include the following:

All cottonwood poles shall be live saplings or straight branches, trimmed or cut to length for the installation, disease and insect free.

Cottonwood poles shall be harvested on-site or purchased from a supplier. Cottonwood poles shall be harvested from on-site sources approved by the ENGINEER.

Cottonwood poles shall be harvested and planted in late-winter to early-spring before plant dormancy is broken (identified by swelling buds). Planting shall only be conducted when the weather and soil conditions allow. Poles shall not be planted when the ground is frozen, when freezing temperatures are forecasted within 24 hours, or when conditions are otherwise unsuitable.

Cottonwood poles shall be a six (6) to eight (8) feet in length

Cottonwood poles shall be one (1) inch minimum in diameter at the base and reasonably straight.

Poles shall be kept moist, cool and shaded and protected from the wind until installed. During transport or storage, the poles shall be covered to protect them from heat, light and wind damage. All poles shall be planted within seven (7) calendar days of harvest. Cottonwood poles shall be installed such that the base extends a minimum of six (6) inches into groundwater and is exposed one (1) to three (3) feet above the finished grade. An auger, bar, dibble or "stinger" will be required for the installation. Stakes shall be gently placed in the hole. Each hole shall be backfilled, hand-tamped, and/or watered to eliminate all voids around the stake.

The location of pole plantings shall be in accordance with the DRAWINGS and approved by the ENGINEER.

## SECTION 907 - ROOTED TREES AND SHRUBS

Section 907 is hereby added to the Standard SPECIFICATIONS and shall include the following:

Use plants which are symmetrical and typical of their species; healthy, well-branched, and well-proportioned in respect to height and width; free from disease, injury, insects, and weak roots; and, conforming to the requirements of the American Standard for Nursery Stock, ANSI 260.11990. All plants are subject to inspection.

Plant Protection. Trees and shrubs shall be handled so that roots are adequately protected at all times from drying out and from other injury. Protect balls of balled plants which cannot be planted within twelve hours of delivery with soil or other suitable materials. Where possible, store plants in the shade. Keep all plant roots moist before, during, and after planting.

ENGINEER shall approve location of all trees and shrubs before any planting occurs. Some field adjustments of the limits of planting for various species may be necessary to adjust to site conditions.

## Planting

Dig planting pits two (2) times the width and depth of the root/soil ball.

Trees shall be located and the depth of the pit shall be such that the root ball is in contact with groundwater.

Roughen sides of the pit to remove any compacting or glazing. Backfill one-half (½) of pit with backfill mixture and water in thoroughly before placing any more backfill.

Plant trees and shrubs such that when planted they are at finished grade elevations. Backfill the rest of the planting pit with backfill mixture. Water in thoroughly on day of planting.

Table 907.01 lists the species of plants to be installed according to the DRAWINGS or direction of the ENGINEER.

Table 907.01 – Species of Rooted Trees and Shrubs

Scientific Name	Common Name	Zone
<i>Cornus sericea sericea</i>	Redtwig Dogwood	Riparian
<i>Amorpha fruticosa</i>	False Indigo Bush	Riparian
<i>Dasiphora fruticosa</i>	Golden Hardhack	Riparian
<i>Rosa woodsii</i>	Woods Rose	Upland/Mesic
<i>Symphoricarpos occidentalis</i>	Western Snowberry	Upland/Mesic
<i>Rhus trilobata</i>	Skunkbush Sumac	Upland/Mesic
<i>Prunus virginiana melanocarpa</i>	Chokecherry	Upland/Mesic

## SECTION 908 - WRAPPED SOIL LIFTS

Section 908 is hereby added to the Standard SPECIFICATIONS and shall include the following:

### 908.01 Scope of Work:

Furnish all labor, materials, supplies, equipment, tools and transportation, and perform all operations in connection with and reasonably incidental to complete installation of wrapped soil lifts and guarantee as shown on the DRAWINGS and as specified herein.

### 908.02 Submittals:

CONTRACTOR shall submit product sheet for selected erosion control fabric to be used with wrapped soil lift.

908.03 Products:

Erosion control fabric shall be Nedia Enterprises, Inc. KoirWrap™ 1200 or approved equal.

908.04 Materials:

Erosion control fabric (KoirWrap™ 1200 or approved equal)

Compacted fill shall conform to section 621.051 “General Fill Requirements”

Topsoil shall conform to Section 970 “Topsoil”

Riparian seed mix and upland seed mix shall conform to section 900 “Seeding, Fertilizer, Blanket, and Mulching.”

Stakes shall be wooden and triangular (in the long dimension) with a minimum 12-inch length and a one and a half (1.5)-inch by three and a half (3.5)-inch minimum top dimension spacing. “Ecostakes” may be used with prior approval by the Engineer.

908.05 Execution:

Clean and grade the base of the slope or stream bank to create a level and compact soil surface. Place riprap layer with bedding material or soil riprap layer according to the type and dimensions shown in the DRAWINGS. Place a stabilizer board (3/4” plywood cut to the lift height) vertically on the outside face of the base lift. Lift height varies depending upon the lift and shall conform to the details show in the DRAWINGS. Secure the stabilizer board using 2” x 2” wood stakes or #4 rebar pins or other method.

Unroll the erosion control fabric perpendicular to the stream bank or face of the slope as the case may be. Ensure that the secondary layer (jute fabric) is on top. Drape the erosion control fabric over the stabilizer board so that it forms a 90-degree angle where the inner face of the stabilizer board meets the soil surface. Keep a minimum embedment length of 10 feet. Anchor erosion control fabric using wooden stakes at 3’ spacing along the stabilizer board and along the edge of the erosion control fabric. Fill the portion of the lift that will be exposed to sunlight with suitable topsoil. Fill the remainder of the lift with material suitable for compacted fill.

Compact soil to the required degree of compaction specified in section 621.051 “General Fill Requirements”. Spread seeding on the portion of the lift that will be exposed to sunlight per the revegetation plan shown in the DRAWINGS. Stretch the erosion control fabric over the compacted soil and extend towards the bank. Anchor the erosion control fabric using stakes at 3’ spacing. This base lift forms the foundation for

the upper lifts and provides adequate stability to the slope. Place live self-rooting cuttings.

Repeat the same procedure for the upper lifts. Offset each lift a minimum of 2.25' from the previous lift as specified on the DRAWINGS.

On the topmost lift, spread topsoil, seed and fertilizer. Cover the topsoil with erosion control fabric as shown in the DRAWINGS.

Anchors to be 12" wooden stakes set 18" O.C. in the middle of blanket and 6" O.C. along seams.

Erosion control fabric shall overlap at seams by 12" with top later in the downstream direction.

## SECTION 910 - EROSION AND SEDIMENT CONTROL DURING CONSTRUCTION

*Section 910 is added to the Standard SPECIFICATIONS and shall include the following:*

### 910.1 GENERAL

#### *910.1.1 Scope of Work:*

A. This work shall consist of temporary measures needed to control erosion and water pollution. These temporary measures shall include, but not be limited to, berms, dikes, dams, sediment basins, fiber mats, sediment control logs, netting, gravel, mulches, grasses, slope drains and other erosion control devices or methods. These temporary measures shall be installed at the locations where needed to control erosion and water pollution during the construction of the project, and as directed by the ENGINEER, and as shown on the DRAWINGS.

B. The Erosion Control Plan presented in the DRAWINGS serves as a minimum for the requirements of erosion control during construction. CONTRACTOR has the ultimate responsibility for developing an adequate erosion control plan that is compatible with his plan for executing the work and for providing adequate erosion control and water quality throughout the duration of the project. Therefore, if the provided plan is not working sufficiently to protect the project areas, then CONTRACTOR shall provide additional measures as required to obtain the required protection. CONTRACTOR shall include in his bid price for erosion control a minimum of all items shown on the Erosion Control Plan and any additional items that may be needed to control erosion and water pollution during the execution of the work.

#### *910.1.2 Submittals:*

The erosion and sediment control facilities shown on the DRAWINGS are conceptual. The CONTRACTOR shall not install any components of the erosion and sediment control facilities by scaling dimensions from the DRAWINGS. The CONTRACTOR shall develop a detailed Storm Water Management Plan (SWMP), retain an updated copy on the site, submit an application to the State, and submit the SWMP to the State at their

request. The CONTRACTOR shall obtain a Storm Water Construction Permit from the State. The CONTRACTOR shall also submit the SWMP (referred to as the Erosion and Sediment Control Plan by the City) with the required signature blocks and signatures to the ENGINEER for approval. The SWMP shall indicate that it has been prepared for the City and the State. Permits/approvals must be obtained prior to construction. The CONTRACTOR is responsible for implementing the SWMP and compliance with the conditions of the Storm Water Construction Permit. The State or the ENGINEER may direct the CONTRACTOR to modify the SWMP during construction as conditions warrant. The CONTRACTOR shall note changes on the SWMP immediately as it must reflect current site conditions.

*Materials:*

Materials may include hay bales, straw, fiber mats, erosion control logs, fiber netting, wood cellulose, fiber fabric, gravel and other suitable materials, and shall be reasonably clean, free of deleterious materials, and certified weed free. All materials shall be submitted to the ENGINEER for approval prior to installation.

Use erosion control blankets on slopes equal to or steeper than 6H:1V. Add blankets after application of mulch.

Blankets used for temporary stormwater pollution, erosion and sediment control shall consist of a biodegradable (12 to 18 months) straw or coconut mat.

Erosion control blanket to be applied in strips perpendicular to prevailing wind or to water flow direction. Lapping will be at least four (4) inches on sides and six (6) inches on ends and will be configured to allow wind or water flow over (not into) lapped seams.

E. Temporary grass cover (if required) shall be a quick growing species suitable to the area, which will provide temporary cover and will not later compete with the grasses sown for permanent cover. All grass seed shall be approved by the ENGINEER prior to installation.

F. Fertilizer and soil conditioners shall be approved by the ENGINEER prior to installation.

G. Miscellaneous: All other material used by the CONTRACTOR for water diversion and erosion control shall be specified on a detailed Erosion and Sediment Control Plan to be completed by the CONTRACTOR and reviewed by the ENGINEER prior to starting work.

*910.1.4 Construction Requirements:*

All materials for erosion and sediment control shall be installed in accordance with these SPECIFICATIONS. To the extent possible, movement of construction equipment within the flowing portions of waterways should be minimized. Frequent fording of the channel should be avoided. The CONTRACTOR shall isolate or divert flows so construction equipment, materials, and earthwork are not exposed to flow.

The erosion and sediment control facilities shall be installed prior to construction and shall remain in place throughout. The CONTRACTOR will be required to clean

sediment collected in BMPs and provide other maintenance as required to the erosion and sediment control facilities during construction.

#### 910.2 Permits and Compliance

A. CONTRACTOR must apply for and obtain a Construction Dewatering Permit (Colorado Wastewater Discharge Permit), a Stormwater Construction Permit from the Colorado Department of Health and Environment, and an Erosion and Stormwater Quality Control Permit from the City of Colorado Springs. All costs for these permits shall be the responsibility of CONTRACTOR. These permits require that specific actions be performed at designated times. CONTRACTOR is legally obligated to comply with all terms and conditions of the permits including testing for effluent limitations if required by the terms of the permits.

CONTRACTOR shall allow the Colorado Department of Public Health and Environment or other representatives to enter the site to test for compliance with the permit. Noncompliance with the permit can result in stoppage of all work.

In addition to permit requirements, ENGINEER shall also monitor CONTRACTOR'S erosion control and work methods. If the overall function and intent of erosion control is not being met, then ENGINEER shall require CONTRACTOR to provide additional measures as required to obtain the desired results. Costs for any additional erosion control measures shall be the responsibility of CONTRACTOR, since he has the ultimate responsibility for providing adequate erosion control and water quality for the duration of the project.

#### 910.3 STABILIZATION OF DISTURBED AREAS

A. Temporary sediment control measures shall be established within 5 days from time of exposure/disturbance. Permanent erosion protection measures shall be established within 21 days after final grading of areas.

#### 910.4 PROTECTION OF ADJACENT PROPERTIES

A. Properties adjacent to the site of a land disturbance shall be protected from sediment deposition. In addition to the erosion control measures required on the DRAWINGS, perimeter controls may be required if damage to adjacent properties is likely. Perimeter controls include, but are not limited to, a vegetated buffer strip around the lower perimeter of the land disturbance, sediment barriers such as straw bales and silt fences; sediment basins; or a combination of such measures. Vegetated buffer strips may be used only where runoff in sheet flow is expected and should be at least 20 feet in width.

#### 910.5 TIMING AND STABILIZATION OF SEDIMENT AND EROSION CONTROL MEASURES

A. Sediment barriers, perimeter dikes, and other measures intended to either trap sediment or prevent runoff from flowing over disturbed areas must be constructed as a first step in grading and be made functional before land disturbance takes place. Earthen structures such as dams, dikes, and diversions must be stabilized within 5 days of installation. Stormwater outlets must also be stabilized prior to any upstream land disturbing activities.

#### 910.6 STABILIZATION OF WATERWAYS AND OUTLETS

A. All on-site stormwater conveyance channels used by CONTRACTOR for temporary erosion control purposes shall be designed and constructed with adequate capacity and protection to prevent erosion during storm and runoff events. Stabilization adequate to prevent erosion shall also be provided at the outlets of all pipes and channels.

#### 910.7 STORM SEWER INLET PROTECTIONS

A. All storm sewer inlets which are made operable during construction or which drain stormwater runoff from a construction site shall be protected from sediment deposition by the use of filters.

#### 910.8 WORKING IN OR CROSSING WATERCOURSES

A. Construction vehicles should be kept out of watercourses to the extent possible. Where in-channel work is necessary, precautions must be taken to stabilize the work area during construction to minimize erosion. The channel (including bed and banks) must always be destabilized immediately after in-channel work is completed.

B. Where a live (wet) watercourse must be crossed by construction vehicles during construction, a Temporary Stream Crossing must be provided for this purpose.

#### 910.9 CONSTRUCTION ACCESS ROUTES

A. Wherever construction vehicles enter or leave a construction site, a Stabilized Construction Entrance is required. Where sediment is transported onto a public road surface, the roads shall be cleaned thoroughly at the end of each day. Sediment shall be removed from roads by shoveling or sweeping and be transported to a sediment controlled disposal area. Street washing shall be allowed only after sediment is removed in this manner.

#### 910.10 DISPOSITION OF TEMPORARY MEASURES

A. All temporary erosion and sediment control measures shall be disposed of within 30 days after final site stabilization is achieved or after the temporary measures are no longer needed as determined by ENGINEER. Trapped sediment and other disturbed soil areas resulting from the disposition of temporary measures shall be permanently stabilized to prevent further erosion.

#### 910.11 MAINTENANCE

A. All temporary and permanent erosion and sediment control practices must be maintained and repaired as needed to assure continued performance of their intended function.

#### ADDITION OF SECTION 915 - MOBILIZATION

*Section 915 is added to the Standard SPECIFICATIONS and shall include the following:*

##### *915.1 Description*

Mobilization shall consist of the preparatory work and operations in mobilizing for beginning work on the Project. This work shall include, but not be limited to, those operations necessary for the movement of personnel, equipment, supplies and incidentals to the Project Site, and for the establishment of temporary offices, building facilities, utilities, testing laboratories, safety equipment and first aid supplies, sanitary and other facilities, as required by these SPECIFICATIONS, and State and local laws and regulations. The costs of bonds, permits and any required insurance and other pre-construction expense necessary for the start of the work, excluding the cost of construction materials, shall also be included in this section.

##### *Basis of Payment*

The work and incidental costs covered under this item will be paid for at the Contract lump sum price for the item of Mobilization. Partial payments for mobilization will be made once each month as the work progresses. These partial payments will be made as follows:

When 5 percent of the original contract amount is earned, 20 percent of the amount bid for this item will be paid, not to exceed 2 percent of the original contract amount.

When 20 percent of the original contract amount is earned, 50 percent of the amount bid for this item, less previous payments, will be paid, not to exceed 5 percent of the original contract amount.

When 35 percent of the original contract amount is earned, 60 percent of the amount bid for this item, less all-previous payments, will be paid, not to exceed 6 percent of the original contract amount.

When 75 percent of the original contract amount is earned, the amount bid for this item, less all-previous payments, will be paid, not to exceed 10 percent of the original contract amount.

When 90 percent of the original contract amount is earned, the amount in excess of 10 percent of the original contract amount, less all previous payments, will be paid.

For the purpose of the SPECIFICATIONS the term "original contract amount" as used above shall mean the amount of the award for the construction items on this contract not including the amount bid for mobilization. Payments for materials on hand will not be included as a percent of original contract amount earned until said materials on hand have been incorporated into the work and accepted as contract items.

This price shall extend to the general CONTRACTOR and to any and all subcontractors. No additional payment will be made to any bid item to compensate the CONTRACTOR or subcontractors for loss of profits attributed to mobilization costs.

## SECTION 920 – PROTECTION OF PROJECT FROM WATER DURING CONSTRUCTION

*Section 920 is added to the Standard SPECIFICATIONS and shall include the following:*

### *920.1 General*

#### *920.1.01 Scope of Work*

The work of this section consists of controlling: groundwater, continuous low flow in the channel, large channel flow from storm events, pipe outlet flows, and surface flow from adjacent areas.

#### *920.1.02 Materials*

Onsite materials may be used within the limits of construction to construct temporary dams and berms. Other materials such as plastic sheeting, sandbags, and storm sewer pipe may also be used if desired by the CONTRACTOR.

#### *920.1.03 Submittals*

The CONTRACTOR is required to submit a detailed water control and dewatering plan for review prior to installing any components of the plan.

#### *920.1.04 Construction Requirements*

**General:** For all excavation, the CONTRACTOR shall provide suitable equipment and labor to remove water and ice and keep the excavation dewatered so that construction can be completed in dry conditions where required by the DRAWINGS and SPECIFICATIONS. Water control shall be accomplished such that no damage is done to adjacent channel banks, structures and utilities. The CONTRACTOR is responsible for investigating and familiarizing himself with all site conditions that may affect the work including surface water; level of groundwater and the time of year the work is to be done. All excavations made as part of dewatering operations shall be backfilled with the same type material as was removed and compacted to a minimum of 95% of the maximum dry density standard proctor (ASTM D698) except where replacement by other materials and/or methods are required. Moisture content shall be within a range of  $\pm 3\%$  optimum moisture content.

**Surface Water Control:** Surface water control generally falls in to the following categories:

Normal low flows along the channel

Storm/flood flows along the channel

Flows from existing storm drain pipelines and other flows entering the channel

Local surface inflows not conveyed by pipelines

The CONTRACTOR shall coordinate, evaluate, design, construct, and maintain temporary water conveyance systems. These systems shall not worsen flooding,

increase the potential for erosion, or worsen flow characteristics during construction. The CONTRACTOR is responsible to ensure that any such worsening of flooding or erosion potential does not occur.

At a minimum, the CONTRACTOR will be responsible for diverting surface flow around the construction area so that the excavation for the concrete, shotcrete and grouted boulder channel remain free of surface water and ice for the time it takes to install these materials, and the time required for curing of any concrete and grout. It shall be the CONTRACTOR'S responsibility to determine the quantity of water which shall be diverted to protect all work and adjacent properties from potential damage caused by stormwater. The CONTRACTOR will be responsible for all repairs required due to flood and erosion damage.

The CONTRACTOR shall, at all times, maintain a flow path for the channel flow. Temporary structures such as berms, sandbags, pipeline diversions, etc. may be permitted for the control of channel flow, as long as such measures are not a major obstruction to flood flows, do not worsen flooding, and do not increase the potential for erosion affecting adjacent private property.

Groundwater Control: Groundwater may be encountered in excavation activities within the project. If groundwater is encountered it will need to be temporarily lowered to construct portions of the improvements. The CONTRACTOR shall install adequate measures to maintain the level of groundwater below the foundation subgrade elevation and maintain sufficient bearing capacity for the concrete structures, pipelines, earthwork, and rockwork. Such measures may include, but are not limited to, installation of perimeter sub drains, pumping from drilled holes or by pumping from sumps excavated below the subgrade elevation. The foundation bearing surfaces are to be kept dewatered and stable until the structures or other types of work are complete and backfilled. Disturbance of foundation subgrade by CONTRACTOR operations shall not be considered as originally unsuitable foundation subgrade and shall be repaired at CONTRACTOR'S expense. Any temporary dewatering trenches or well points shall be restored following dewatering operations to reduce permeability in those areas as approved by the ENGINEER.

## REVISION OF SECTION 925 – CLEARING AND GRUBBING

*Section 925 is added to the Standard SPECIFICATIONS and shall include the following:*

### *925.1 Description*

This work consists of clearing, grubbing, removing, and disposing of vegetation and debris within the limits of the project site as shown on the DRAWINGS and as required by the Work. Vegetation and objects designated to remain shall be preserved free from injury or defacement.

### *925.2 Construction Requirements*

All trees located within the project limits as shown on the DRAWINGS are to be removed, unless otherwise specified on the DRAWINGS or by the ENGINEER. Trees to be removed shall be marked by the CONTRACTOR and approved by the ENGINEER prior to removal. Any object including trees, shrubs, plants, not designated for removal by the ENGINEER, that are damaged shall be repaired or replaced as directed by the ENGINEER, at the CONTRACTOR'S expense.

All surface objects, trees, stumps, roots, and other protruding obstructions not designated to remain shall be cleared and grubbed, including mowing, as required. Undisturbed stumps, roots, and nonperishable solid objects located two feet or more below sub grade or embankment slope may remain in place.

Except in areas to be excavated, all holes resulting from the removal of obstructions shall be backfilled with suitable material and compacted in accordance with the Standard SPECIFICATIONS.

All cleared timber shall be removed from the project and shall become the property of the CONTRACTOR. Branches on trees or shrubs shall be removed as directed. All trimming shall be done in accordance with good tree surgery practices as recommended by *City Parks and Recreation Department*.

The CONTRACTOR shall scalp the areas within the excavation or embankment grading limits. Scalping shall include the removal from the ground surface of sawdust, and other vegetation matter.

## SECTION 970 - TOPSOIL

*Section 970 is hereby added to the Standard SPECIFICATIONS and shall include the following:*

970.01      Scope of Work: This work consists of off-site available sources and on-site topsoil to place on designated areas. It shall include the placing of topsoil upon constructed cut and fill slopes after grading slope construction operations are completed. Top soil shall be placed on all disturbed areas excluding drop structures and the flat channel bottom. Topsoil from the site or imported topsoil may require soil amendments. Topsoil is to be included at elevated bench sections of channel bottom.

970.02      Materials: Topsoil shall consist of loose friable soil from the zone of major root development free of subsoil, refuse, stumps, woody roots, rocks, brush, noxious weed seed and reproductive plant parts from current state and county weed lists, heavy clay, hard clods, toxic substances, or other material which would be detrimental to its use on the project. Wetland topsoil material shall consist of the moist, organic soil, including any existing wetland vegetation and seeds, to be excavated from areas as shown on the DRAWINGS or as directed.

A. Topsoil: ASTM D5268, pH range of 5.5 to 7, a minimum 4 percent organic material content; free of stones 3/4 inch or larger in any dimension and other extraneous materials harmful to plant growth.

1. Topsoil Source: Import topsoil or manufactured topsoil from off-site sources approved by ENGINEER.

2. Topsoil Source: Reuse surface soil stockpiled on-site. Verify suitability of stockpiled surface soil to produce topsoil. Clean surface soil of roots, plants, sod, stones, clay lumps, and other extraneous materials harmful to plant growth.

#### 970.03 Construction Requirements:

Topsoil within the limits of the project area shall be salvaged prior to beginning hauling, excavating, or fill operations by excavating and stockpiling the material at designated locations in a manner that will facilitate measurement, minimize sediment damage, and not obstruct natural drainage. Topsoil should be protected during the construction period to retain its structure, avoid compaction, and to prevent erosion and contamination. Topsoil shall be placed directly upon completed cut and fill slopes whenever conditions and the progress of construction will permit. Topsoil shall be placed on all disturbed areas to a thickness of 6 inches.

Imported topsoil, if required, shall conform to the following characteristics. Only good quality, certified weed seed free, topsoil should be used. Topsoil quality should be verified through soil testing, with topsoil of acceptable quality meeting these characteristics:

1. A loamy texture with balanced proportions of sand, silt and clay.

2. Chemical characteristics:

Soil reaction (pH): 5.5 – 7.8

Organic Matter Content: 3%

Soluble Salt Content (conductivity): <0.8 mmhos/cm for soil: water ratio of 1:2

Nitrogen: 15 – 20 ppm (typically must be added)

Phosphorus: 10 – 15 ppm (Olson bicarbonate method); 20 – 30 ppm (Mehlic III method)

Potassium: 50 – 200 ppm

Magnesium: 2.0 – 5.0 ppm

Sulfur: 2.0 – 5.0 ppm (typically must be added)

Zinc: 1.0 – 1.5 ppm

3. Clean and uncontaminated with chemicals or debris.

4. Imported from one location only and from a known source. To reduce the potential damage of extra handling and temporary storage on undisturbed land, imported topsoil should be applied to the revegetation area following delivery.

970.04      Soil Testing:

An ideal soil generally includes these characteristics:

50% porosity in the soil, with half of that porosity allowing easy circulation of air into and out of the soil to a depth of at least 18 inches.

50% porosity in the soil, with half that porosity full of water, but not allowing too rapid drainage down through the soil layers.

An adequate organic matter content – equal to 3% or greater of the total soil volume.

Good water-holding capability.

A favorable range of soil pH (5.5 – 7.8).

The presence of optimum levels of nutrients in available forms and the ability to exchange nutrients driven by the desired plant type.

The soil texture is a loam with roughly equal proportions of sand, silt and clay particle sizes.

CONTRACTOR may be required to perform soil testing at the direction of ENGINEER. Soil tests can be obtained by mailing or delivering a sample to one of the approved laboratories listed in Section 3.5.2 of the Colorado Springs Drainage Criteria Manual, Volume 1 (May 2014). The sample should be collected in a soil sample bag provided by the laboratory following the protocol in Section 3.5.1 and be accompanied by a “Soil Sample Information Form.” The form outlines the types of analyses that can be conducted and explains the proper procedure for collecting a soil sample.

970.05      Soil Amendments:

Soil amendments may be required by ENGINEER to improve the characteristics of the soil and increase the likelihood of successful revegetation. Types of amendments include

Fertilizer

Compost - Compost should be Class A as defined by CFR Title 40, Part 503 or Class 1 with the characteristics shown in Table 970.05.1. Compost should be applied in accordance with manufacturer and soil testing laboratory recommendations. At a minimum, compost should be applied and incorporated into the top 6 inches of soil at a sufficient rate to achieve 2% organic matter by volume.

Table 970.05.1 – Characteristics of Class 1 Compost

Characteristic	Criteria
Minimum Stability Indicator (Respirometry)	Stable to Very Stable
Maturity Indicator Expressed as Ammonia N / Nitrate N Ratio	< 4
Maturity Indicator Expressed as Carbon to Nitrogen Ratio	< 12
Maturity Indicator Expressed as Percentage of Germinator/Vigor	80+ / 80+
pH – Acceptable Range	6.0 – 8.4
Soluble Salts – Acceptable Range (1:5 by weight)	0 – 5 mmhos/cm
Testing and Test Report Submittal Requirement	Seal of Testing Assurance (STA)/Test Methods for the Examination of Composting and Compost (TMECC)
Chemical Contaminants	Equal or better than US EPA Class A Standard, 40 CFR 503.13, Table 1 & 3 levels
Pathogens	Meet or exceed US EPA Class A standard, 40 CFR 503.32(a) levels

Humate Conditioners - Humate conditioners, natural humic acid-based concentrated solution, or granular material should have the following characteristics:

Maximum of 10% retained on a #50 mesh screen  
 4% N, 20% P as P<sub>2</sub>O<sub>5</sub>, 20% K as K<sub>2</sub>O  
 1% Ca, 0.4% Fe, 0.4% S, humic acid 45%

Granular humate should be applied at a rate of 750 pounds/acre in a uniform manner prior to tilling soils for seeding. Soluble concentrates should be applied a rate of 1.0 pound/acre. Humate conditioners must be thoroughly mixed into soil to increase organic matter and nutrient content.

Biosol organic fertilizer - Biosol organic fertilizer should have following characteristics:  
 6% N, 1% P as P<sub>2</sub>O<sub>5</sub>, 3% K as K<sub>2</sub>O  
 90% fungal biomass

Biosol fertilizers should be applied at a rate of 1,200 pounds/acre in a uniform manner, prior to tilling soils for seeding, and must be thoroughly mixed into soil to increase nutrients.

970.06      Grading and Compaction:

In areas to be seeded, the upper 3 inches of the soil should not be heavily compacted and should be in a friable condition. Less than an 85% standard proctor density is acceptable.

**SCHEDULE D – CLAUSES FOR CONTRACTS SUBJECT TO FEDERAL REQUIREMENTS**

## **D.1 DISPUTES**

D.1.1 All administrative and contractual disputes arising from or related to this Contract, which are not resolved by mutual agreement, may be decided by recourse to an action at law or in equity in accordance with subparagraph b) of this provision. Until final resolution of any dispute hereunder, the Contractor shall diligently proceed with the performance of this Contract as directed by the City of Colorado Springs Procurement Services Representative. For purposes of this Contract, termination for convenience shall not be deemed a dispute.

D.1.2 The City of Colorado Springs and the Contractor agree to notify each other in a timely manner of any claim, dispute, or cause of action arising from or related to this Contract, and to negotiate in good faith to resolve any such claim, dispute, or cause of action. To the extent that such negotiations fail, the City of Colorado Springs and the Contractor agree that any lawsuit or cause of action that arises from or is related to this Contract shall be filed with and litigated only by the Colorado District Court for El Paso County, CO.

## **D.2 TERMINATION**

D.2.1 The City may terminate this Contract in whole or, from time to time, in part, for the City's convenience or because of the failure of the Contractor to fulfill the contract obligations.

The City shall terminate by delivering to the Contractor a Notice of Termination specifying the nature, extent, and effective date of the termination. Upon receipt of the notice, the Contractor shall:

- A). immediately discontinue all services affected (unless the notice directs otherwise), and
- B). Deliver to the City all data, drawings, specifications, reports, estimates, summaries, and other information and materials accumulated in performing this contract, whether completed or in process.

D.2.2 If the termination is for the convenience of the City, the City's delegated representative shall make an equitable adjustment in the contract price but shall allow no anticipated profit on unperformed services. In the event of such termination, Seller shall immediately stop all work hereunder, and shall immediately cause any of its suppliers or subcontractors to cease such work. Seller shall be paid a reasonable termination charge consisting of a percentage of the order price reflecting the percentage of the work performed prior to the

notice of termination. Seller shall not be paid for any work done after receipt of the notice of termination, nor for any costs incurred by Seller's suppliers or subcontractors which Seller could reasonably have avoided.

D.2.3 If the termination is for failure of the Contractor to fulfill the contract obligations, the City may complete the work by contract or otherwise, and the Contractor shall be liable for any additional cost incurred by the City. Prior to issuing a Termination for failure to fulfill the contract obligations, the City will issue a Notice to Cure allowing the Contractor ten (10) calendar days to prepare a plan to correct whatever failures are causing the contract obligation failure (s).

D.2.4 If, after termination for failure to fulfill contract obligations, it is determined that the Contractor had not failed, the rights and obligations of the parties shall be the same as if the termination had been issued for the convenience of the City.

D.2.5 Disputes under this clause shall be governed by the provisions of the Disputes Clause of this Contract, under Article 1 of this Exhibit. The parties agree that termination for convenience is not a dispute for purposes of this Contract.

D.2.6 The rights and remedies of the City provided in this clause are in addition to any other rights and remedies provided by law or under this Contract

### **D.3 EQUAL EMPLOYMENT OPPORTUNITY**

During the performance of this Contract, the Contractor agrees as follows:

- A. The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, or national origin. such action shall include, but not be limited to the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
- B. The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants

will receive considerations for employment without regard to race, color, religion, sex, or national origin.

- C. The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- D. The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
- E. The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
- F. In the event of the Contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
- G. The Contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance: *Provided, however,* that in the event the Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency the Contractor may request the

United States to enter into such litigation to protect the interests of the United States.

- H. *Subcontracts.* Each nonexempt prime contractor or subcontractor shall include the equal opportunity clause in each of its nonexempt subcontracts.
- I. *Incorporation by reference.* The equal opportunity clause may be incorporated by reference in all Government contracts and subcontracts, including Government bills of lading, transportation requests, contracts for deposit of Government funds, and contracts for issuing and paying U.S. savings bonds and notes, and such other contracts and subcontracts as the Deputy Assistant Secretary may designate.
- J. *Incorporation by operation of the order.* By operation of the order, the equal opportunity clause shall be considered to be a part of every contract and subcontract required by the order and the regulations in this part to include such a clause whether or not it is physically incorporated in such contracts and whether or not the contract between the agency and the contractor is written.
- K. *Adaptation of language.* Such necessary changes in language may be made in the equal opportunity clause as shall be appropriate to identify properly the parties and their undertakings. [43 FR 49240, Oct. 20, 1978, as amended at 62 FR 66971, Dec. 22, 1997]

#### **D.4 EQUAL EMPLOYMENT OPPORTUNITY REPORTS AND OTHER REQUIRED INFO**

##### ***D.4.1 Requirements for prime contractors and subcontractors.***

- (5) Each prime contractor and subcontractor shall file annually, on or before the September 30, complete and accurate reports on Standard Form 100 (EEO-1) promulgated jointly by the Office of Federal Contract Compliance Programs, the Equal Employment Opportunity Commission and Plans for Progress or such form as may hereafter be promulgated in its place if such prime contractor or subcontractor (i) is not exempt from the provisions of these regulations in accordance with § 60-1.5; (ii) has 50 or more employees; (iii) is a prime contractor or first tier subcontractor; and (iv) has a contract, subcontract or purchase order amounting to \$50,000 or more or serves as a depository of Government funds in any amount, or is a financial institution which is an issuing and paying agent for U.S. savings bonds and savings notes: *Provided*, That any subcontractor below the first tier which performs construction work at the site of construction shall be

- required to file such a report if it meets requirements of paragraphs (a)(1) (i), (ii), and (iv) of this section.
- (6) Each person required by § 60-1.7(a)(1) to submit reports shall file such a report with the contracting or administering agency within 30 days after the award to him of a contract or subcontract, unless such person has submitted such a report within 12 months preceding the date of the award. Subsequent reports shall be submitted annually in accordance with § 60-1.7(a)(1), or at such other intervals as the Deputy Assistant Secretary may require. The Deputy Assistant Secretary may extend the time for filing any report.
- (7) The Deputy Assistant Secretary or the applicant, on their own motions, may require a contractor to keep employment or other records and to furnish, in the form requested, within reasonable limits, such information as the Deputy Assistant Secretary or the applicant deems necessary for the administration of the order.
- (8) Failure to file timely, complete and accurate reports as required constitutes noncompliance with the prime contractor's or subcontractor's obligations under the equal opportunity clause and is ground for the imposition by the Deputy Assistant Secretary, an applicant, prime contractor or subcontractor, of any sanctions as authorized by the order and the regulations in this part.

#### **D.4.2 Requirements for Proposalers or prospective contractors—**

- (3) **Certification of compliance with Part 60-2: Affirmative Action Programs.** Each agency shall require each Proposaler or prospective prime contractor and proposed subcontractor, where appropriate, to state in the Proposal or in writing at the outset of negotiations for the contract: (i) Whether it has developed and has on file at each establishment affirmative action programs pursuant to Part 60-2 of this chapter; (ii) whether it has participated in any previous contract or subcontract subject to the equal opportunity clause; (iii) whether it has filed with the Joint Reporting Committee, the Deputy Assistant Secretary or the Equal Employment Opportunity Commission all reports due under the applicable filing requirements.
- (4) **Additional information.** A Proposaler or prospective prime contractor or proposed subcontractor shall be required to submit such information as the Deputy Assistant Secretary requests prior to the award of the contract or subcontract. When a determination has been made to award the contract or subcontract to a specific contractor, such contractor shall be

required, prior to award, or after the award, or both, to furnish such other information as the applicant or the Deputy Assistant Secretary requests.

**D.4.3 Use of reports.** Reports filed pursuant to this section shall be used only in connection with the administration of the order, the Civil Rights Act of 1964, or in furtherance of the purposes of the order and said Act.[43 FR 49240, Oct. 20, 1978, as amended at 62 FR 66971, Dec. 22, 1997]

**D.5 RESERVED**

**D.6 CONTRACT WORK HOURS AND SAFETY STANDARDS (from FAR 52.222-4)**

The term “Contracting Officer” herein shall refer to the City of Colorado Springs Contracting Specialist assigned to this contract.

The term “Government” herein shall refer to the City of Colorado Springs and any interested federal or state entity.

(a) *Overtime requirements.* No Contractor or subcontractor employing laborers or mechanics (see Federal Acquisition Regulation 22.300) shall require or permit them to work over 40 hours in any workweek unless they are paid at least 1 and 1/2 times the basic rate of pay for each hour worked over 40 hours.

(b) *Violation; liability for unpaid wages; liquidated damages.* The responsible Contractor and subcontractor are liable for unpaid wages if they violate the terms in paragraph (a) of this clause. In addition, the Contractor and subcontractor are liable for liquidated damages payable to the Government. The Contracting Officer will assess liquidated damages at the rate of \$10 per affected employee for each calendar day on which the employer required or permitted the employee to work in excess of the standard workweek of 40 hours without paying overtime wages required by the Contract Work Hours and Safety Standards statute (found at 40 U.S.C. chapter 37).

(c) *Withholding for unpaid wages and liquidated damages.* The Contracting Officer will withhold from payments due under the contract sufficient funds required to satisfy any Contractor or subcontractor liabilities for unpaid wages and liquidated damages. If amounts withheld under the contract are insufficient to satisfy Contractor or subcontractor liabilities, the Contracting Officer will withhold payments from other Federal or federally assisted contracts held by the same Contractor that are subject to the Contract Work Hours and Safety Standards statute

(d) Payrolls and basic records.

(1) The Contractor and its subcontractors shall maintain payrolls and basic payroll records for all laborers and mechanics working on the contract during the contract and shall make them available to the Government until 3 years after contract completion. The records shall contain the name and address of each employee, social security number, labor classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. The records need not duplicate those required for construction work by Department of Labor regulations at 29 CFR 5.5(a)(3) implementing the Construction Wage Rate Requirements statute.

(2) The Contractor and its subcontractors shall allow authorized representatives of the Contracting Officer or the Department of Labor to inspect, copy, or transcribe records maintained under paragraph (d)(1) of this clause. The Contractor or subcontractor also shall allow authorized representatives of the Contracting Officer or Department of Labor to interview employees in the workplace during working hours.

(e) *Subcontracts*. The Contractor shall insert the provisions set forth in paragraphs (a) through (d) of this clause in subcontracts that may require or involve the employment of laborers and mechanics and require subcontractors to include these provisions in any such lower tier subcontracts. The Contractor shall be responsible for compliance by any subcontractor or lower-tier subcontractor with the provisions set forth in paragraphs (a) through (d) of this clause.

#### **D.7 CLEAN AIR ACT**

By signing this Contract, the Contractor agrees to comply with all applicable standards, orders, or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA). Further, the Contractor agrees to include this clause in all subcontracts in excess of \$150,000.

#### **D.8 DEBARMENT AND SUSPENSION**

By signing this Contract, the Contractor certifies to the best of its knowledge and belief that it and its principals:

(e) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;

- (f) Have not within a three year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, falsification or destruction of records, making false statements, or receiving stolen property;
- (g) Are not presently indicted for or otherwise criminally or civilly charged by a government entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
- (h) Have not within a three-year period preceding this application/proposal had one or more public transactions(Federal, State, or local) terminated for cause or default.

#### **D.9 BYRD ANTI-LOBBYING AMENDMENT**

By signing this Contract, the Contractor certifies that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Further, the Contractor certifies that it has not engaged in lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. The Contractor must require the same certification from all subcontractors with subcontracts valued in excess of \$100,000 under this Contract.

#### **D.10 SMALL BUSINESS REQUIREMENTS**

The Contractor must take all necessary affirmative steps to assure that minority businesses, women's business enterprises, and labor surplus area firms are used when possible.

Affirmative steps must include:

- (1) Placing qualified small and minority businesses and women's business enterprises on subcontract solicitation lists;
- (2) Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources for subcontracting;

(3) Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses, and women's business enterprises;

(4) Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises; and

(5) Using the services and assistance, as appropriate, of such organizations as the Small Business Administration and the Minority Business Development Agency of the Department of Commerce.

#### **D.11 PROCUREMENT OF RECOVERED MATERIALS**

The Contractor must comply with section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds \$10,000 or the value of the quantity acquired by the preceding fiscal year exceeded \$10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery; and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.



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# MONUMENT BRANCH CHANNEL RESTORATION

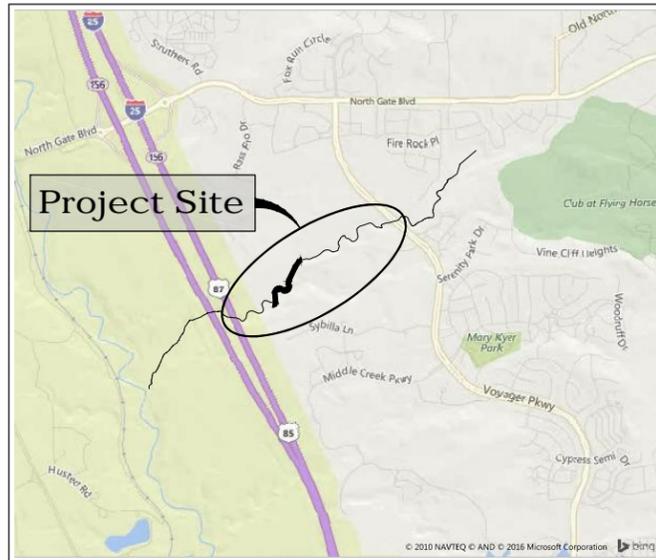
## CITY OF COLORADO SPRINGS

APPENDIX A - PLAN SET

### PHASE 1 - 30% BID PLAN SET

### SEPTEMBER 2016

MATRIX PROJECT No. 16.069.072



VICINITY MAP  
N.T.S.



LOCATION MAP  
SCALE: 1" = 1,000'

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APPROVED

SIGNED: \_\_\_\_\_ DATE: \_\_\_\_\_  
CITY OF COLORADO SPRINGS

VERTICAL DATUM: THE ELEVATIONS ON THIS PROJECT ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988.

PROPERTY INFORMATION: PARCEL LINES AND PROPERTY OWNERSHIP INFORMATION SHOWN WERE PROVIDED BY THE EL PASO COUNTY PROPERTY APPRAISER'S OFFICE.



No.	DATE	DESCRIPTION	BY
COMPUTER FILE MANAGEMENT			
FILE NAME: S:\16.069.072 Stormwater Design Services - Monument Branch\Drawings\Design Plans_Phase 1\069-TS01.dwg			
CTB FILE: Matrix(black).ctb			
PLOT DATE: September 6, 2016 5:50:20 PM			
THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE.			

**PHASE 1 - 30% BID PLAN**

**NOTICE:**  
THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF BIDDING AND INTERIM REVIEW UNDER THE AUTHORITY OF AARON J. SUTHERLIN (P.E. 0050947). IT IS NOT TO BE USED FOR CONSTRUCTION OR PERMIT PURPOSES.



SEAL			
PRELIMINARY THIS DRAWING HAS NOT BEEN APPROVED BY GOVERNING AGENCIES AND IS SUBJECT TO CHANGE			
CITY OF COLORADO SPRINGS			
MONUMENT BRANCH CHANNEL RESTORATION PHASE 1 - 30% DESIGN PLAN			
TITLE SHEET			
FOR AND ON BEHALF OF MATRIX DESIGN GROUP, INC. PROJECT No. 16.069.072	DESIGNED BY: AJS DRAWN BY: RAF CHECKED BY: GWT	SCALE: HORIZ N/A VERT. N/A	DATE ISSUED: September 2016 SHEET 01 OF 17 DRAWING No. TS01



Know what's below.  
Call before you dig.

**GENERAL NOTES:**

- THE LOCATIONS OF EXISTING ABOVE GROUND AND UNDERGROUND UTILITIES ARE SHOWN IN THEIR APPROXIMATE LOCATIONS ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. CONTRACTOR TO CALL FOR UTILITY LOCATOR AT LEAST 3 CALENDAR DAYS BEFORE EXCAVATION. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE CAUSED BY THEIR FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL ABOVE GROUND AND UNDERGROUND UTILITIES. IN THE EVENT THAT THE CONTRACTOR UTILITY VERIFICATION RESULTS IN EXISTING STRUCTURES OR UTILITIES BEING IN CONFLICT WITH THE PROPOSED WORK OF THIS CONTRACT, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY UTILITIES AND COORDINATE ANY NEEDED MODIFICATIONS TO THE PROPOSED WORK.
- THE CONTRACTOR SHALL COORDINATE WITH ALL AFFECTED UTILITY OWNERS TO ESTABLISH THE REQUIREMENTS AND METHODS TO ACCOMMODATE THE PROTECTION, TEMPORARY SUPPORT, ADJUSTMENT OR RELOCATION OF UTILITIES PRIOR TO THE START OF CONSTRUCTION.
- OVERHEAD UTILITIES ARE NOT INDICATED ON PROFILE OR SECTION DRAWINGS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING AND MAINTAINING IN CONTINUOUS OPERATION, ALL EXISTING STRUCTURES. NOT ALL POTENTIALLY IMPACTED STRUCTURES MAY BE SHOWN ON THE DRAWINGS AND IT IS THE CONTRACTOR'S RESPONSIBILITY TO IDENTIFY AND PROTECT ALL STRUCTURES INCLUDING BUT NOT LIMITED TO STREETS, CURB AND GUTTER, BRIDGE PIERS AND ABUTMENTS, CREEK BANK PROTECTION OF VARIOUS TYPES, CREEK DROP STRUCTURES, SIGNS, PEDESTRIAN WALKS, RETAINING WALLS AND FENCING. IN THE EVENT THAT A STRUCTURE OR UTILITY IS DAMAGED DURING CONSTRUCTION THE CONTRACTOR SHALL IMMEDIATELY NOTIFY UTILITIES IN WRITING AND MAKE REPAIRS IN ACCORDANCE WITH UTILITIES' REQUIREMENTS.
- THE CONTRACTOR SHALL CONFIRM THE RECEIPT OF ALL NECESSARY PERMITS AND APPROVALS BEFORE THE START OF CONSTRUCTION.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STANDARDS OF THE CITY OF COLORADO SPRINGS UNLESS SPECIFICALLY DETAILED OTHERWISE ON THESE PLANS AND ASSOCIATED SPECIFICATIONS. ANY ELEMENT OF CONSTRUCTION WHICH IS NOT ADDRESSED EITHER BY THESE PLANS AND SPECIFICATIONS OR BY THE STANDARDS OF UTILITIES SHALL CONFORM TO THE STANDARD SPECIFICATIONS OF THE CITY OF COLORADO SPRINGS, AND AGREEMENT DOCUMENTS.
- THE CONTRACTOR SHALL MAINTAIN AT THE SITE AT ALL TIMES ONE SIGNED COPY OF THE PROJECT DRAWINGS AND SPECIFICATIONS, ONE COPY OF THE STORMWATER MANAGEMENT PLAN AND ONE COPY OF ALL REQUIRED PERMITS.
- THE CONTRACTOR SHALL CONDUCT THEIR OPERATIONS IN SUCH A WAY THAT THE AREA OF DISTURBANCE IS MINIMIZED. ALL EXISTING TREES, SHRUBS AND VEGETATION SHALL BE PROTECTED UNLESS OTHERWISE NOTED ON THE DRAWINGS. NO TREES SHALL BE REMOVED WITHOUT APPROVAL FROM THE CITY OF COLORADO SPRINGS.
- FOR ALL SITE GRADING, SMOOTH, PARABOLIC TRANSITIONS SHALL BE MADE BETWEEN CHANGES IN SLOPE.
- THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR PROVIDING STABLE EXCAVATIONS AND TEMPORARY SLOPES AND FOR SATISFYING ALL APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS.
- CONSTRUCTION OF THE PROPOSED WORK WILL TAKE PLACE WITHIN THE CHANNEL AND WATER CONTROL MEASURES WILL BE REQUIRED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ACCEPTANCE AND CONTROL OF DRAINAGE WATER FROM AREAS ADJACENT TO MONUMENT BRANCH AND FOR FLOW WITHIN MONUMENT BRANCH AND ITS TRIBUTARIES INCLUDING STORMWATER OUTFALLS. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ESTABLISHING MEANS AND METHODS OF GROUND AND SURFACE WATER CONTROL APPROPRIATE FOR CONSTRUCTION IN ACCORDANCE WITH THE REQUIREMENTS OF THE PROJECT DRAWINGS AND SPECIFICATIONS AND ALL APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS AND PERMITS.
- THE CONTRACTOR SHALL PREPARE AND MAINTAIN THE STORMWATER MANAGEMENT PLAN AND OBTAIN THE NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT THROUGH THE COLORADO DEPARTMENT OF PUBLIC HEALTH (CDPHE) AND ALL OTHER APPROPRIATE FEDERAL, STATE AND LOCAL PERMITS.
- THE CONTRACTOR SHALL PROVIDE DAILY ON-SITE SURVEY CONTROL.
- CONTRACTOR SHALL FENCE OFF CRITICAL AREAS TO BE PROTECTED AT THE DISCRETION OF THE CITY OF COLORADO SPRINGS.
- THE CONTRACTOR SHALL DEVELOP A TRAFFIC CONTROL PLAN. REFER TO SECTION 800 OF THE COLORADO SPRINGS STANDARD SPECIFICATIONS MANUAL.

**ABBREVIATIONS**

CL	CENTER LINE	APPROX.	APPROXIMATE
HCL	HORIZONTAL CONTROL LINE	MIN.	MINIMUM
DIA	DIAMETER	MAX.	MAXIMUM
EX/EXIST	EXISTING	HORIZ	HORIZONTAL
EL./ELEV	ELEVATION	VERT.	VERTICAL
FT.	FEET	DIST.	DISTANCE
INV.	INVERT	NTS	NOT TO SCALE
LF	LINEAR FEET	TYP	TYPICAL
LT	LEFT	O.C.	ON CENTER
N,S,E,W	NORTH, SOUTH, EAST, WEST	L.O.C.	LIMITS OF CONSTRUCTION
PL	PROPERTY LINE	RR	RAILROAD
ROW	RIGHT-OF-WAY	BCL	BANKFULL CONTROL LINE
RT	RIGHT	TCL	THALWEG CONTROL LINE
SF	SQUARE FEET		
STA.	STATION		

**STANDARD SYMBOLS**

	CENTER LINE
	EXISTING CONTOURS
	PROPOSED CONTOURS
	L.O.C.
	CONSTRUCTION ACCESS
	ROW
	RAILROAD ROW
	PROTECT EXISTING VEGETATION

**LEGEND**

	PROPOSED KOIRWRAP 1200 AT DROP STRUCTURE (SEE TYPICAL SECTIONS & REVEGETATION PLAN FOR DETAILED FABRIC LIMITS AND FABRIC TYPES)
	PROPOSED TYPE M SOIL RIPRAP
	PROPOSED SCULPTED CONCRETE DROP STRUCTURE

REFERENCE DRAWINGS			
No.	DATE	DESCRIPTION REVISIONS	BY
<b>COMPUTER FILE MANAGEMENT</b>			
FILE NAME: S:\16.069.072 Stormwater Design Services - Monument Branch\Drawg\Design Plans_Phase 1\069-GN01.dwg			
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**PHASE 1 - 30% BID PLAN**

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CITY OF COLORADO SPRINGS			
MONUMENT BRANCH CHANNEL RESTORATION PHASE 1 - 30% BID PLAN			
LEGEND AND GENERAL NOTES			
DESIGNED BY: AJS	SCALE:	DATE ISSUED: September 2016	DRAWING No.
DRAWN BY: RAF	HORIZ N/A		
CHECKED BY: GWT	VERT. N/A	SHEET 02 OF 17	GN01



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**LEGEND:**

<span style="color: red;">█</span>	PHASE 1	GRADE CONTROL AND STREAM RESTORATION
<span style="color: green;">█</span>	PHASE 2	GRADE STABILIZATION AND STREAM RESTORATION
<span style="color: blue;">█</span>	PHASE 3	GRADE STABILIZATION AND STREAM RESTORATION

**PHASE 1 GRADING:**  
APPROXIMATE CUT = 23,484 CY  
APPROXIMATE FILL = 26,520 CY



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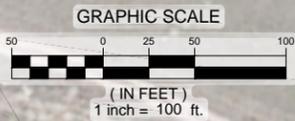


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FOR AND ON BEHALF OF  
MATRIX DESIGN GROUP, INC.  
PROJECT No. 16.069.072

CITY OF COLORADO SPRINGS			
MONUMENT BRANCH CHANNEL RESTORATION PHASE 1 - 30% BID PLAN			
OVERALL PHASING PLAN			
DESIGNED BY: AJS	SCALE: 1" = 300'	DATE ISSUED: September 2016	DRAWING No. DR01
CHECKED BY: GWT	HORIZ: N/A	SHEET 03 OF 17	



LINE TABLE (TRIBUTARY)		
LINE #	LENGTH	DIRECTION
L1	8.48	N76° 51' 47.33"W
L2	251.32	N3° 56' 58.88"W
L3	30.15	S46° 15' 55.47"E
L4	58.44	N12° 20' 07.19"W
L5	334.48	N25° 42' 03.78"E
L6	152.27	N34° 14' 11.30"E
L7	131.38	N76° 40' 06.67"E
L8	57.30	S81° 06' 36.90"E
L9	120.61	N66° 30' 34.66"E
L10	41.94	N62° 57' 13.61"E

CURVE TABLE (TRIBUTARY)			
CURVE #	LENGTH	RADIUS	DELTA
C1	74.29	39.75	107.09
C2	22.19	80.00	15.89
C3	144.49	100.50	82.38
C4	55.04	80.00	39.42
C5	57.62	80.00	41.27
C6	144.76	98.50	84.20
C7	28.76	80.00	20.60
C8	88.29	133.00	38.04
C9	19.37	130.00	8.54
C10	29.62	40.00	42.43
C11	15.51	40.00	22.22
C12	28.26	50.00	32.38
C13	12.41	200.00	3.56

LINE TABLE (TRIBUTARY)		
LINE #	LENGTH	DIRECTION
L11	80.18	N81° 32' 17.45"E
L12	81.21	N85° 31' 59.00"E
L13	38.17	N49° 29' 15.88"E
L14	11.64	N31° 39' 11.47"E

CURVE TABLE (TRIBUTARY)			
CURVE #	LENGTH	RADIUS	DELTA
C16	25.36	233.91	6.21
C17	6.97	100.00	3.99
C18	78.64	125.00	36.05
C19	15.56	50.00	17.83

REFERENCE DRAWINGS			
X-069-MDG22334			
X-069-EX-IMAGE			
No.	DATE	DESCRIPTION REVISIONS	BY
COMPUTER FILE MANAGEMENT			
FILE NAME: S:\16.069.072 Stormwater Design Services - Monument Branch\Drawings\Design Plans_Phase 1\069-HZ01.dwg			
CTB FILE: Matrix(black).ctb			
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FOR AND ON BEHALF OF  
MATRIX DESIGN GROUP, INC.  
PROJECT No. 16.069.072

CITY OF COLORADO SPRINGS			
MONUMENT BRANCH CHANNEL RESTORATION PHASE 1 - 30% BID PLAN			
HORIZONTAL CONTROL PLAN			
DESIGNED BY: AJS	SCALE: 1" = 100'	DATE ISSUED: September 2016	DRAWING No. HZ01
DRAWN BY: RAF	HORIZ: 1" = 100'	SHEET 04 OF 17	
CHECKED BY: GWT	VERT: N/A		



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**EROSION CONTROL LEGEND**

- SF SILT FENCE
- SBB STRAW BALE BARRIER
- VTC VEHICLE TRACKING CONTROL
- CWA CONCRETE WASHOUT
- CD CHECK DAM

**NOTES**

1. TOTAL DISTURBED AREA = ±5.7 AC.
2. REFER TO CITY OF COLORADO SPRINGS DRAINAGE CRITERIA MANUAL, VOLUME 11, CHAPTER 7 FOR STANDARD CONSTRUCTION BMP GUIDANCE.
3. REFER TO EL PASO COUNTY DRAINAGE CRITERIA MANUAL, CHAPTER 3, FOR CONSTRUCTION BMP FACT SHEETS AND STANDARDS.
4. ADDITIONAL CONSTRUCTION BMP GUIDANCE IS AVAILABLE IN THE URBAN STORM DRAINAGE CRITERIA MANUAL, VOLUME 3, CHAPTER 7.
5. DISTURBED AREAS OUTSIDE OF THE DRAINAGE CHANNEL TO BE RESEDED (SEE REVEGETATION PLAN).

**LEGEND**

- CONSTRUCTION ACCESS
- CONSTRUCTION STAGING AREA



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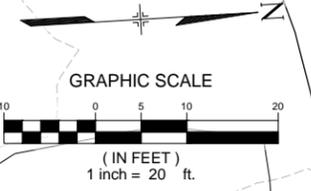
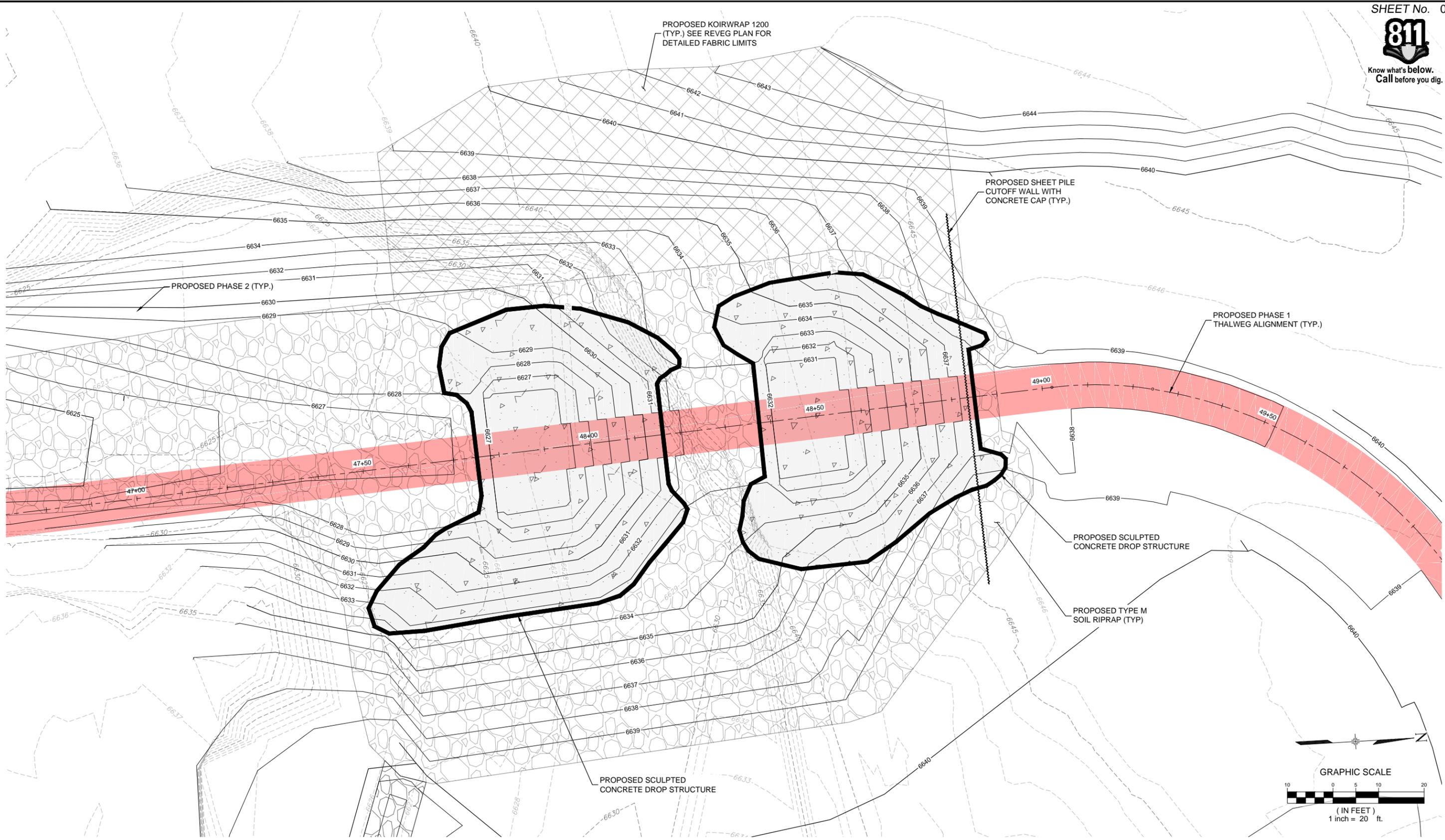
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CITY OF COLORADO SPRINGS			
MONUMENT BRANCH CHANNEL RESTORATION PHASE 1 - 30% BID PLAN			
EROSION CONTROL PLAN			
DESIGNED BY: AJS	SCALE: 1" = 400'	DATE ISSUED: September 2016	DRAWING No. EC01
CHECKED BY: RAF	HORIZ: N/A	SHEET 05 OF 17	
	VERT: N/A		



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REFERENCE DRAWINGS			
X-069-MDG2234			
X-069-EX-IMAGE			
X-069-EX-UTIL			
X-069-EX-PARCELS			
X-069-PR-GRAD			
No.	DATE	DESCRIPTION REVISIONS	BY
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SEAL

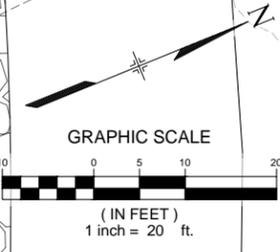
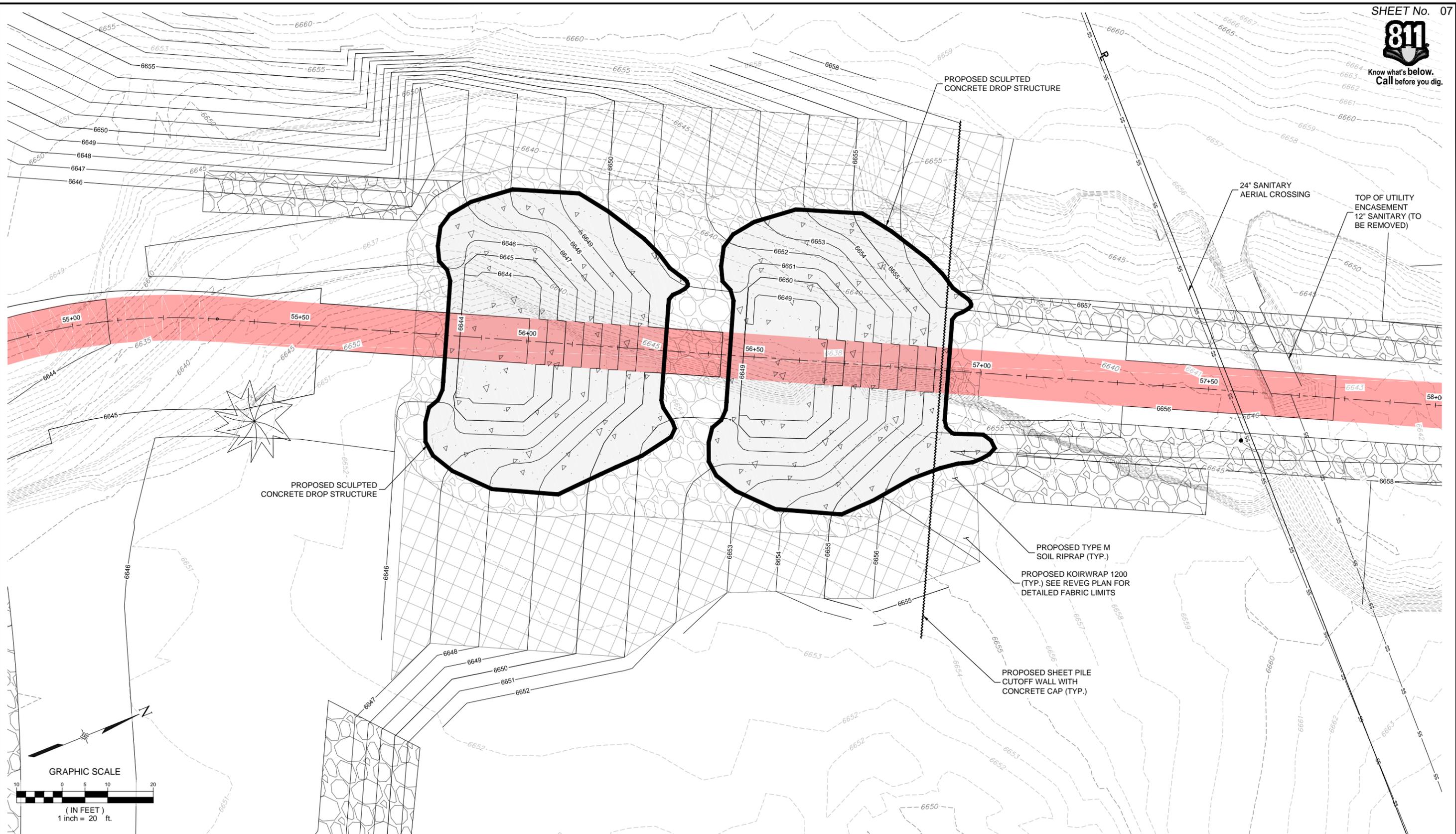
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FOR AND ON BEHALF OF  
MATRIX DESIGN GROUP, INC.  
PROJECT No. 16.069.072

CITY OF COLORADO SPRINGS			
MONUMENT BRANCH CHANNEL RESTORATION PHASE 1 - 30% BID PLAN			
GRADING PLAN SCULPTED CONCRETE DROP STRUCTURE (1)			
DESIGNED BY: AJS	SCALE: HORIZ 1" = 20'	DATE ISSUED: September 2016	DRAWING No. GD01
CHECKED BY: RAF	VERT. 1" = 5'	SHEET 06 OF 17	



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REFERENCE DRAWINGS	No.	DATE	DESCRIPTION REVISIONS	BY
X-069-MDG22x34				
X-069-EX-MADE				
X-069-EX-UTIL				
X-069-EX-PARCELS				
X-069-PR-GRAD				

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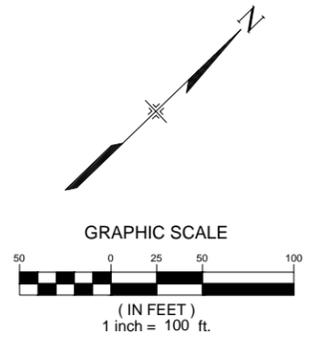
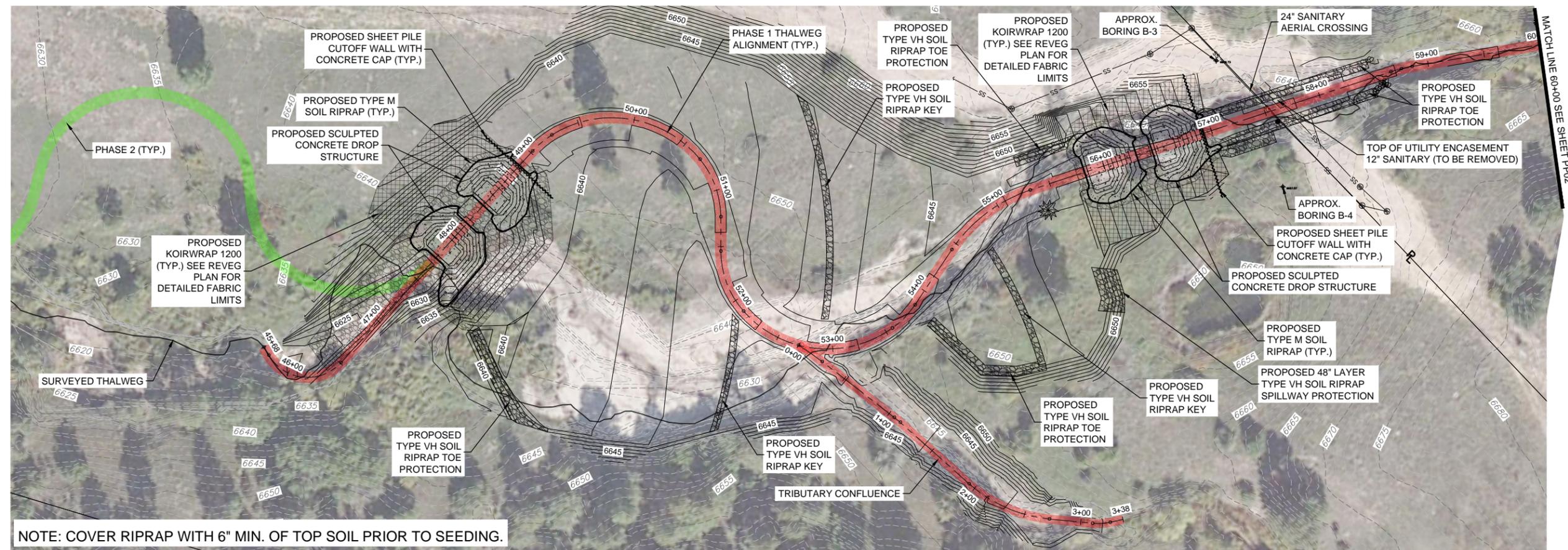
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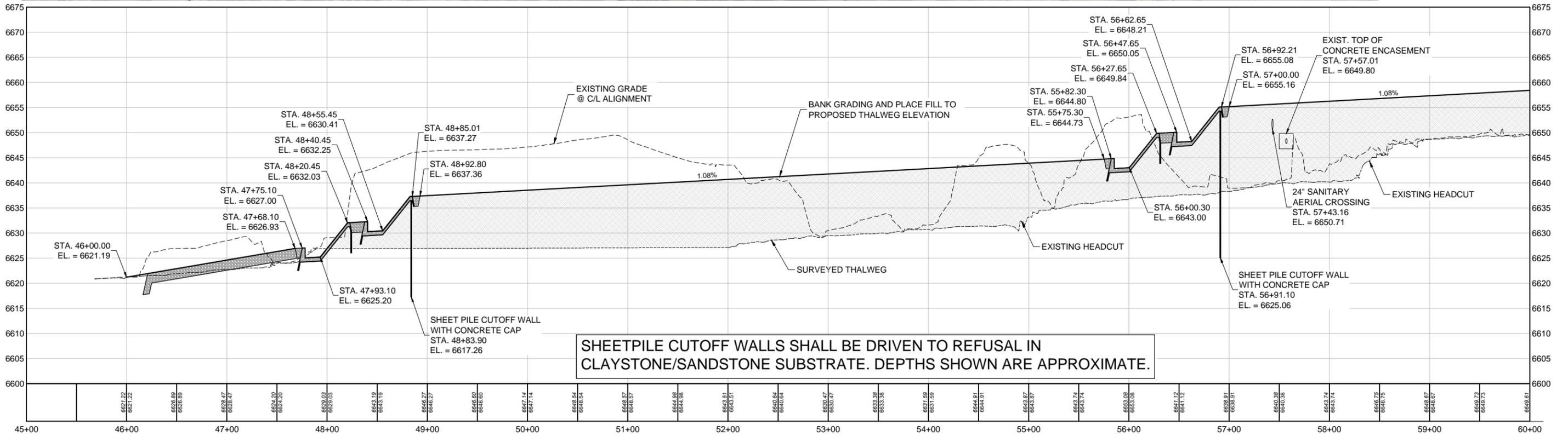
CITY OF COLORADO SPRINGS	
MONUMENT BRANCH CHANNEL RESTORATION PHASE 1 - 30% BID PLAN	
GRADING PLAN SCULPTED CONCRETE DROP STRUCTURE (2)	
DESIGNED BY: AJS	SCALE: HORIZ 1" = 20'
DRAWN BY: RAF	DATE ISSUED: September 2016
CHECKED BY: GWT	VERT. 1" = 5'
	SHEET 07 OF 17
	DRAWING No. GD02



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NOTE: COVER RIPRAP WITH 6" MIN. OF TOP SOIL PRIOR TO SEEDING.



SHEETPILE CUTOFF WALLS SHALL BE DRIVEN TO REFUSAL IN CLAYSTONE/SANDSTONE SUBSTRATE. DEPTHS SHOWN ARE APPROXIMATE.

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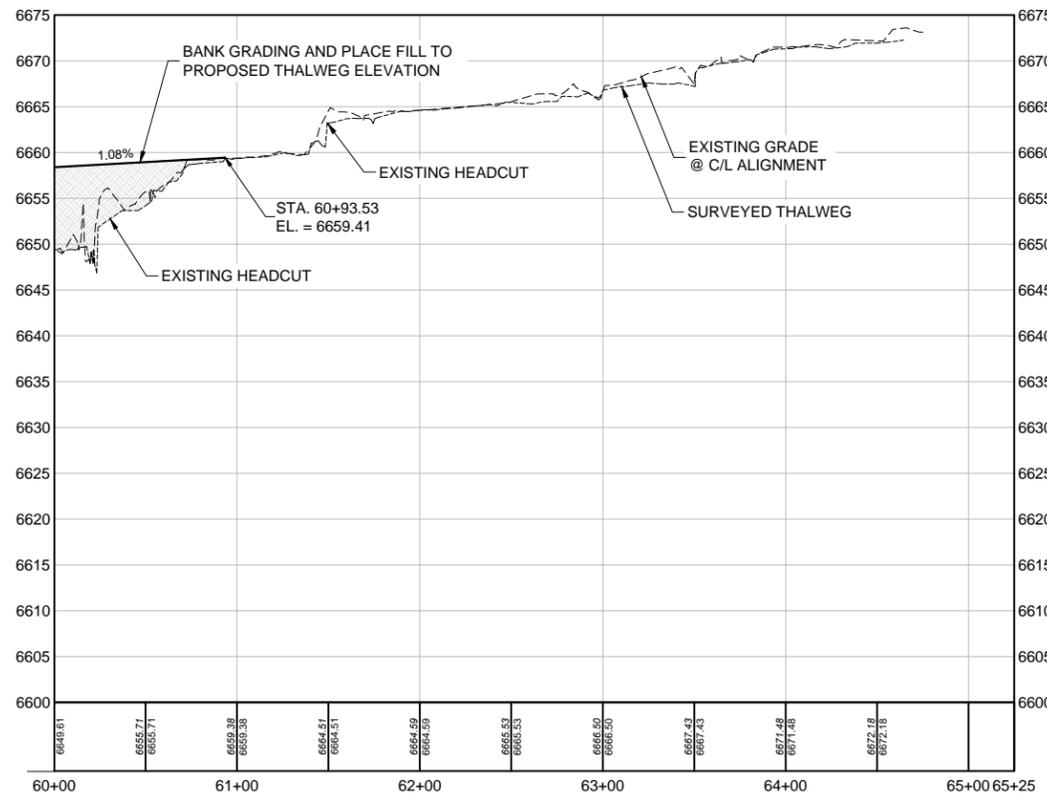
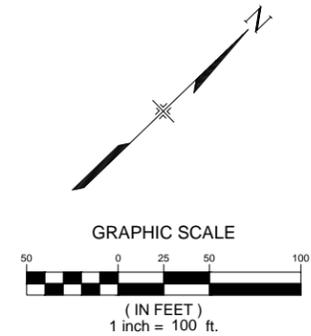
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CITY OF COLORADO SPRINGS			
MONUMENT BRANCH CHANNEL RESTORATION PHASE 1 - 30% BID PLAN			
PLAN AND PROFILE STA. 45+68.04 TO STA. 60+00.00			
DESIGNED BY: AJS	SCALE: HORIZ 1" = 100'	DATE ISSUED: September 2016	DRAWING No. PP01
CHECKED BY: RAF	VERT. 1" = 20'	SHEET 08 OF 17	



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**PHASE 1 - 30% BID PLAN**

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CITY OF COLORADO SPRINGS			
MONUMENT BRANCH CHANNEL RESTORATION PHASE 1 - 30% BID PLAN			
PLAN AND PROFILE STA. 60+00.00 TO STA. 65+00.00			
DESIGNED BY: AJS	SCALE: HORIZ. 1" = 100'	DATE ISSUED: September 2016	DRAWING No.
CHECKED BY: RAF	VERT. 1" = 20'	SHEET 09 OF 17	PP02



**LEGEND:**

- WETLAND/ RIPARIAN SEED MIX
- UPLAND SEED MIX
- LIVE WILLOW STAKING
- SOIL WRAP LIFT (WITH KOIRWRAP 1200 OR APPROVED EQUAL)
- KOIRWRAP 1200 OR APPROVED EQUAL
- EROSION CONTROL BLANKET
- COTTONWOOD LONG POLES @ 25' O.C. (FIELD LOCATE)
- SHRUB, 1 GALLON (75 TOTAL)

NOTE: LIMITS OF RIPRAP ARE NOT SHOWN.



No.	DATE	DESCRIPTION REVISIONS	BY

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**CITY OF COLORADO SPRINGS**

**MONUMENT BRANCH CHANNEL RESTORATION**  
 PHASE 1 - 30% BID PLAN

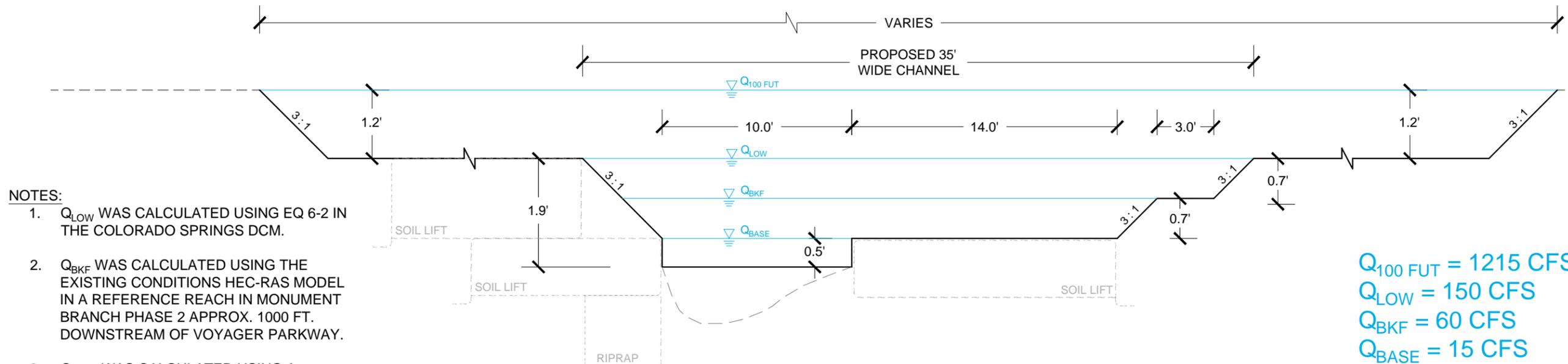
**REVEGETATION PLAN**

DESIGNED BY: AJS	SCALE: 1" = 100'	DATE ISSUED: September 2016	DRAWING No. RV01
CHECKED BY: RAF	HORIZ: 1" = 100'	SHEET: 10 OF 17	
	VERT: N/A		

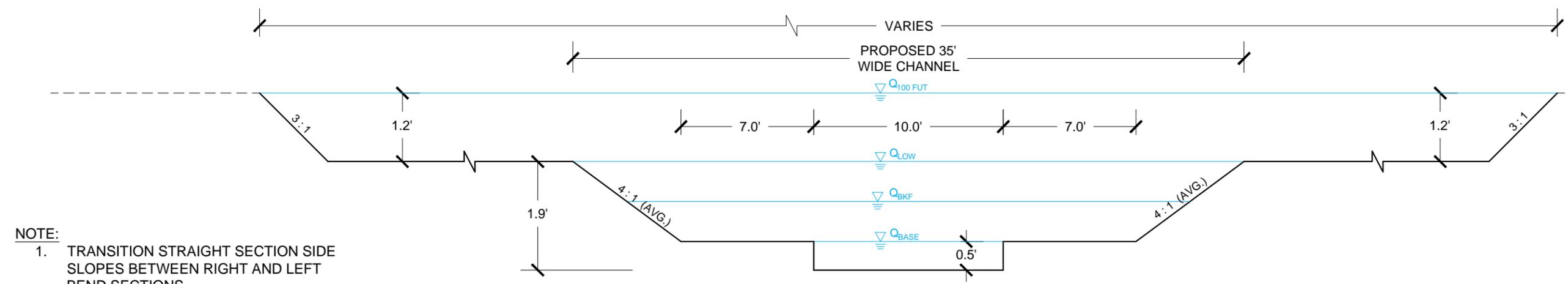
FOR AND ON BEHALF OF MATRIX DESIGN GROUP, INC. PROJECT No. 16.069.072



Know what's below.  
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- NOTES:
1. Q<sub>LOW</sub> WAS CALCULATED USING EQ 6-2 IN THE COLORADO SPRINGS DCM.
  2. Q<sub>BKF</sub> WAS CALCULATED USING THE EXISTING CONDITIONS HEC-RAS MODEL IN A REFERENCE REACH IN MONUMENT BRANCH PHASE 2 APPROX. 1000 FT. DOWNSTREAM OF VOYAGER PARKWAY.
  3. Q<sub>BASE</sub> WAS CALCULATED USING A REGIONAL BANKFULL REGRESSION EQUATION AND VERIFIED WITH OBSERVED REFERENCE REACH CONDITIONS.
  4. Q<sub>100 FUT</sub> FROM MONUMENT CREEK WATERSHED MASTER PLAN STUDY.



- NOTE:
1. TRANSITION STRAIGHT SECTION SIDE SLOPES BETWEEN RIGHT AND LEFT BEND SECTIONS.

REFERENCE DRAWINGS	No.	DATE	DESCRIPTION REVISIONS	BY
X-069-MDG22x34				

COMPUTER FILE MANAGEMENT

FILE NAME: S:\16.069.072 Stormwater Design Services - Monument Branch\Drawings\Design Plans\_Phase 1\069-DT01-04.dwg  
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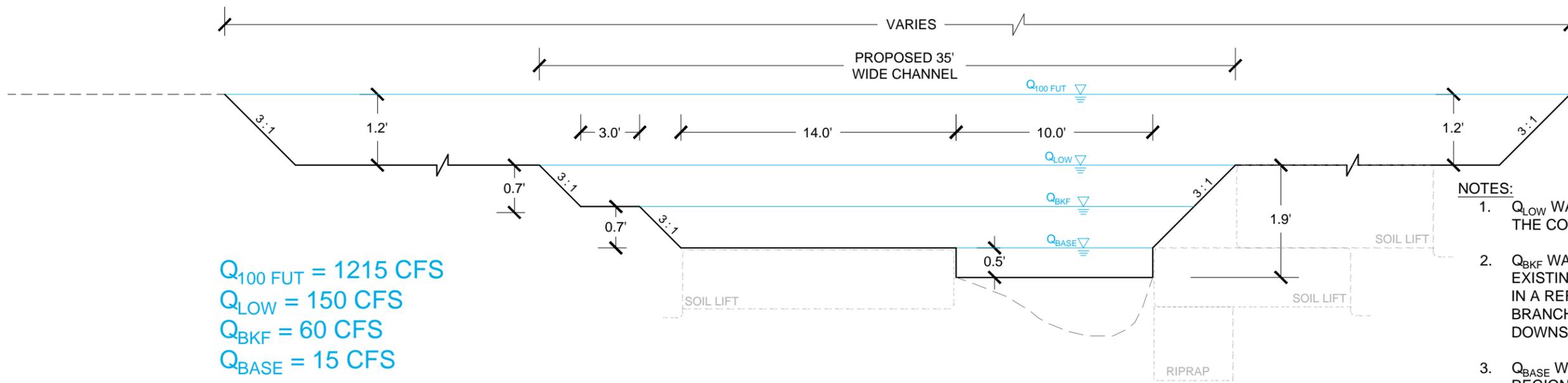
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CITY OF COLORADO SPRINGS			
MONUMENT BRANCH CHANNEL RESTORATION PHASE 1 - 30% BID PLAN			
TYPICAL CHANNEL SECTION			
DESIGNED BY: AJS	SCALE: HORIZ N/A	DATE ISSUED: September 2016	DRAWING No. DT01
CHECKED BY: RAF	VERT. N/A	SHEET 11 OF 17	



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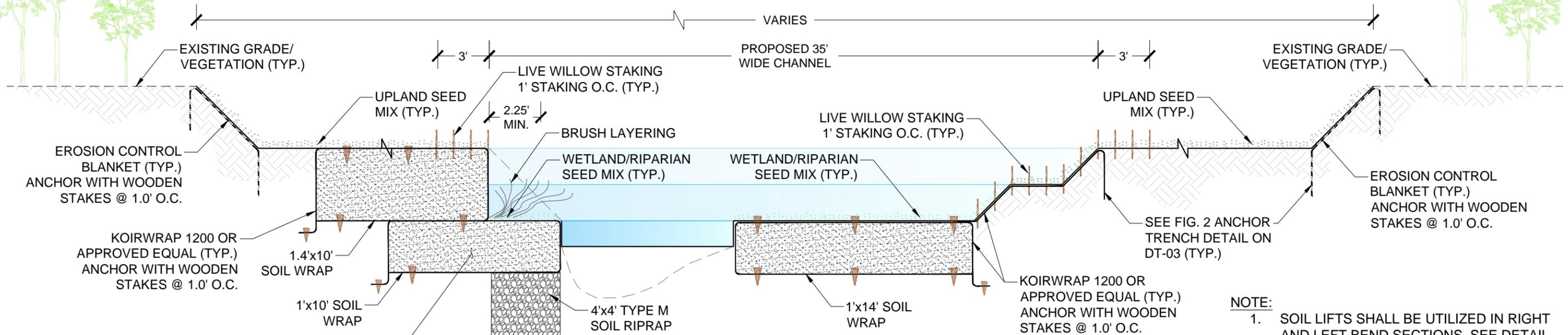
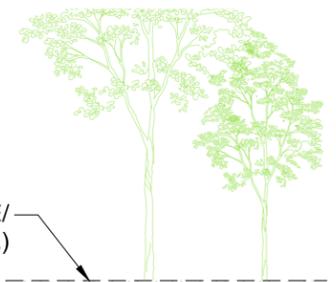
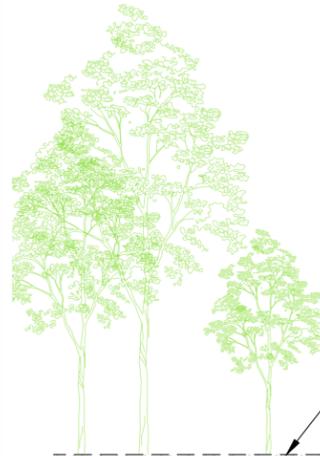


$Q_{100\text{ FUT}} = 1215\text{ CFS}$   
 $Q_{\text{LOW}} = 150\text{ CFS}$   
 $Q_{\text{BKF}} = 60\text{ CFS}$   
 $Q_{\text{BASE}} = 15\text{ CFS}$

- NOTES:**
- $Q_{\text{LOW}}$  WAS CALCULATED USING EQ 6-2 IN THE COLORADO SPRINGS DCM.
  - $Q_{\text{BKF}}$  WAS CALCULATED USING THE EXISTING CONDITIONS HEC-RAS MODEL IN A REFERENCE REACH IN MONUMENT BRANCH PHASE 2 APPROX. 1000 FT. DOWNSTREAM OF VOYAGER PARKWAY.
  - $Q_{\text{BASE}}$  WAS CALCULATED USING A REGIONAL BANKFULL REGRESSION EQUATION AND VERIFIED WITH OBSERVED REFERENCE REACH CONDITIONS.
  - $Q_{100\text{ FUT}}$  FROM MONUMENT CREEK WATERSHED MASTER PLAN STUDY.

**PHASE 1 DESIGN CHANNEL SECTION  
(RIGHT BEND)**

NOT TO SCALE NOTE: 3:1 VERTICAL EXAGGERATION



**PHASE 1 TYPICAL PLANTING / SEEDING / SOIL LIFT SECTION**

NOT TO SCALE NOTE: 3:1 VERTICAL EXAGGERATION

- NOTE:**
- SOIL LIFTS SHALL BE UTILIZED IN RIGHT AND LEFT BEND SECTIONS. SEE DETAIL ON DT-03 FOR ADDITIONAL INFORMATION.

REFERENCE DRAWINGS	No.	DATE	DESCRIPTION REVISIONS	BY
X-069-MDG22x34				

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**PHASE 1 - 30% BID PLAN**

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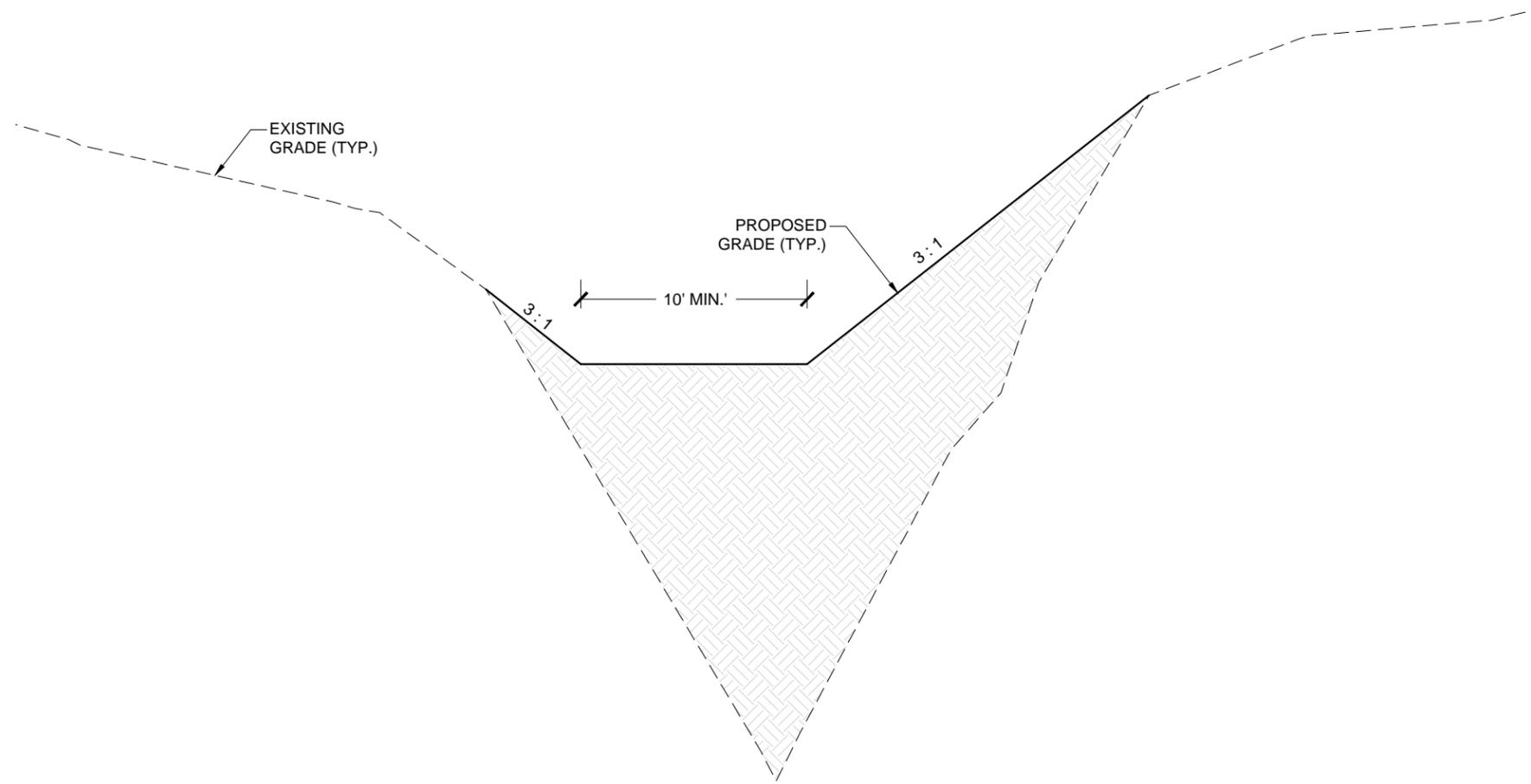
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 PROJECT No. 16.069.072

CITY OF COLORADO SPRINGS			
MONUMENT BRANCH CHANNEL RESTORATION PHASE 1 - 30% BID PLAN			
TYPICAL CHANNEL SECTION			
DESIGNED BY: AJS	SCALE: HORIZ N/A	DATE ISSUED: September 2016	DRAWING No. DT02
CHECKED BY: RAF	VERT. N/A	SHEET 12 OF 17	

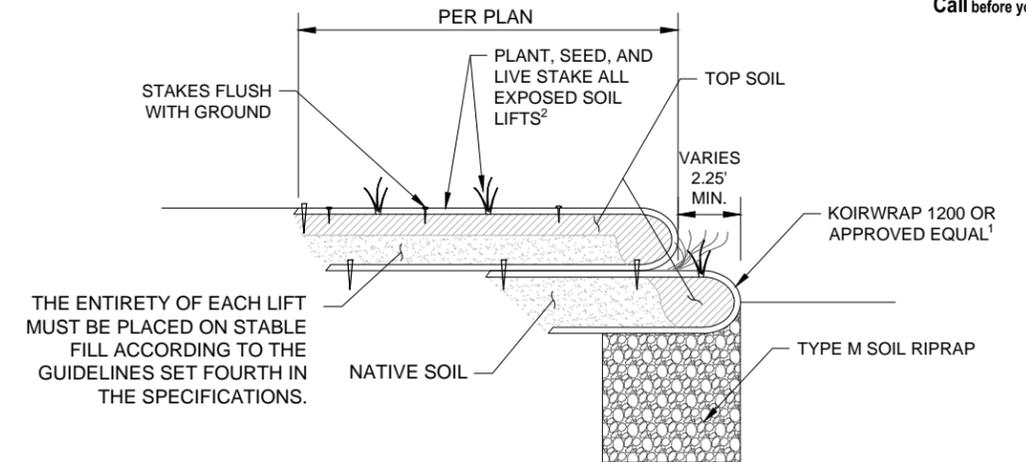


Know what's below.  
Call before you dig.



**PHASE 1 TYPICAL TRIBUTARY SECTION**

NOT TO SCALE NOTE: 2:1 VERTICAL EXAGGERATION



NOTE: COMPACT SOIL TO THE REQUIRED DEGREE OF COMPACTION SPECIFIED IN SECTION 621.051 "GENERAL FILL REQUIREMENTS". SPREAD SEEDING ON THE PORTION OF THE LIFT THAT WILL BE EXPOSED TO SUNLIGHT PER THE REVEGETATION PLAN SHOWN IN THE DRAWINGS. STRETCH THE EROSION CONTROL FABRIC OVER THE COMPACTED SOIL AND EXTEND TOWARDS THE SLOPE. ANCHOR THE EROSION CONTROL FABRIC USING WEDGE STAKES AT 3' SPACING IN A KEY TRENCH. THIS BASE LIFT FORMS THE FOUNDATION FOR THE UPPER LIFTS AND PROVIDES ADEQUATE STABILITY TO THE SLOPE.

**SOIL LIFT DETAIL**  
NTS

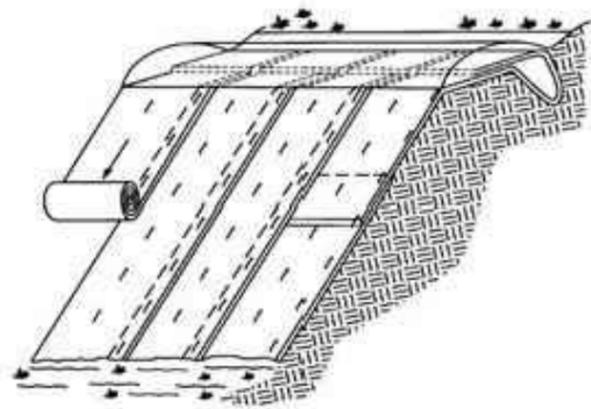


FIG. 1

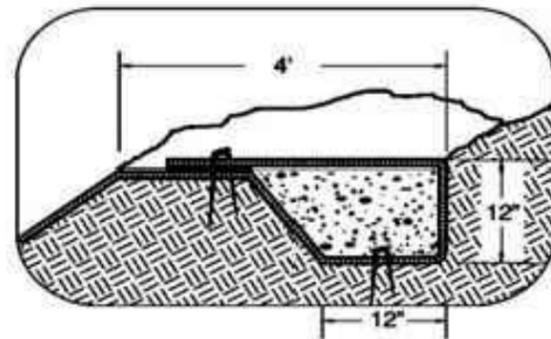


FIG. 2

**KOIR WRAP (OR SIMILAR) INSTALLATION ON SLOPES**

1. BEGIN AT THE TOP OF THE SLOPE AND ANCHOR BLANKETS IN A 12" DEEP AND 12" WIDE INITIAL ANCHOR TRENCH (SEE FIG.2) AND ANCHOR WITH STAPLES AT 18" SPACING.
2. UNROLL BLANKET DOWN SLOPE IN THE DIRECTION OF THE WATER FLOW (SEE FIG.1). THE BLANKET SHOULD NOT BE STRETCHED BUT SHOULD HAVE FULL CONTACT WITH THE SOIL. ANCHOR BLANKET USING STAPLES OR STAKES. SEE "STAPLE PATTERN GUIDE FOR SLOPES" ON THE BELOW.
3. OVERLAP EDGES OF ADJACENT PARALLEL ROLLS BY APPROXIMATELY 6" AND ANCHOR WITH STAPLES AT 24" TO 36" SPACING DEPENDING ON THE SLOPE.
4. WHEN BLANKETS HAVE TO BE SPLICED, PLACE UPPER BLANKET END OVER LOWER BLANKET END (SHINGLE STYLE) WITH 12" OVERLAP AND ANCHOR WITH TWO STAGGERED ROWS OF STAPLES AT 12" SPACING.
5. ANCHOR, FILL AND COMPACT ENDS OF BLANKETS IN 12" DEEP AND 6" WIDE TERMINAL ANCHOR TRENCH. ANCHOR WITH STAPLES AT 18" SPACING.

NTS

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**PHASE 1 - 30% BID PLAN**

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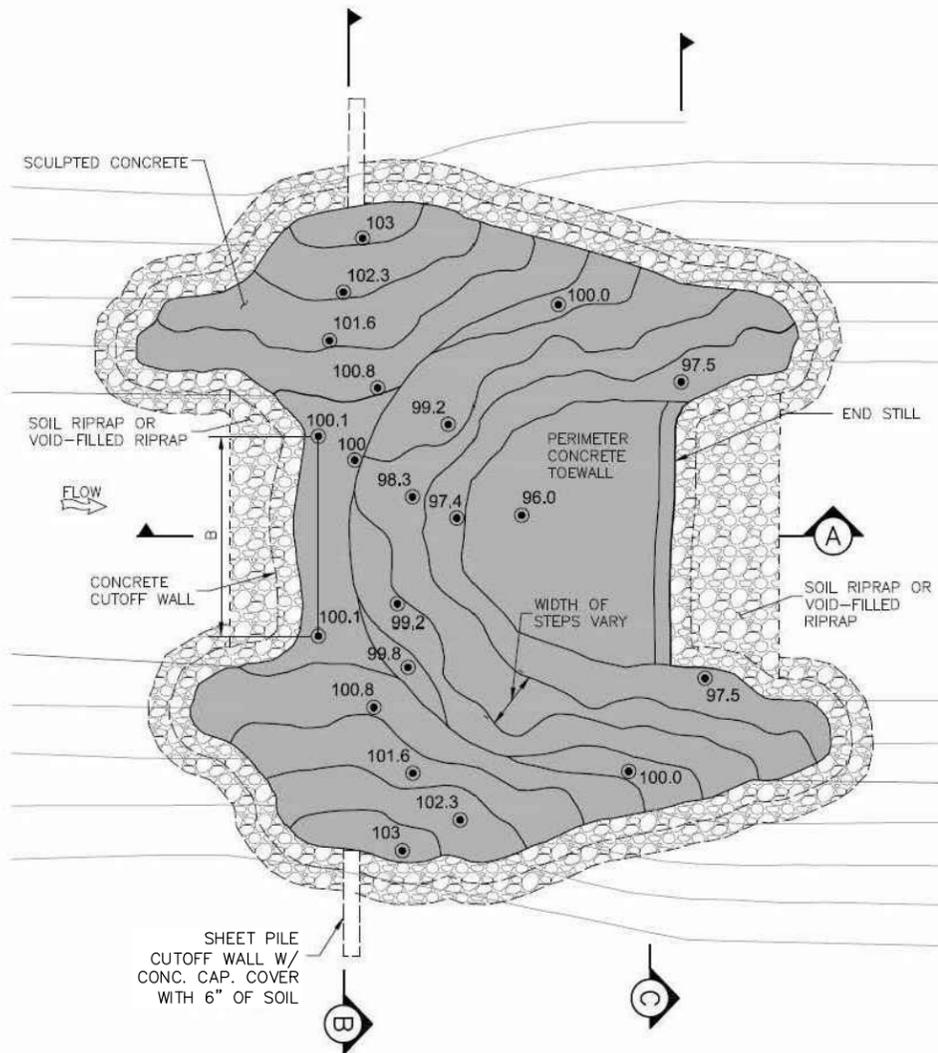
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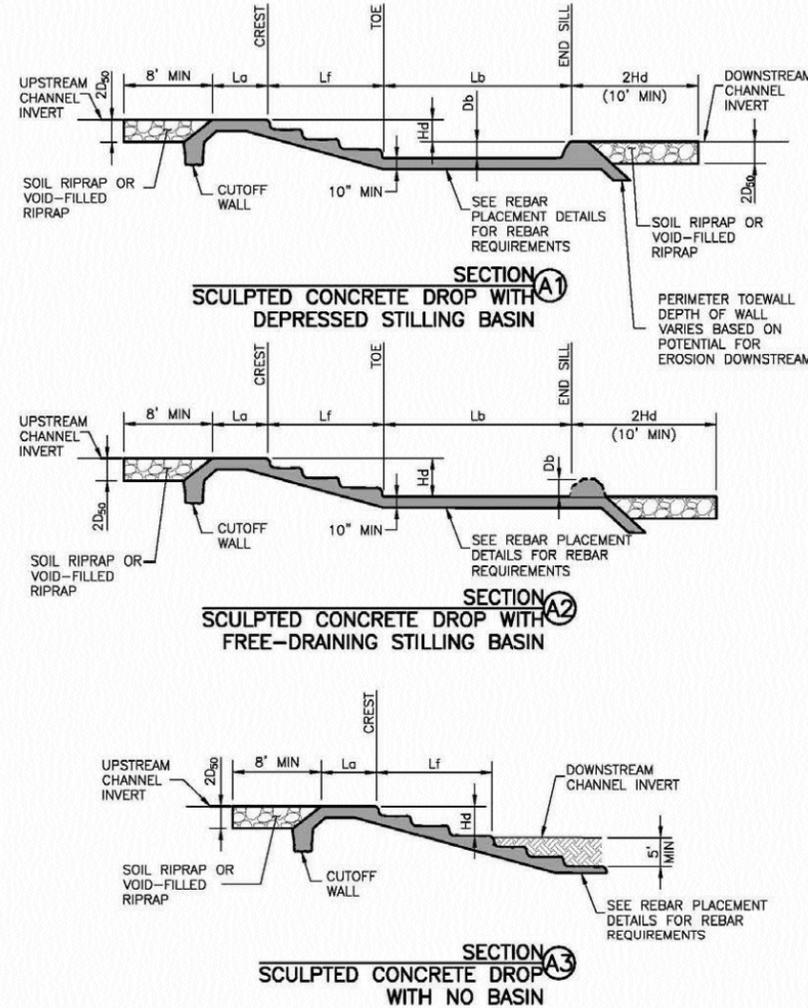
CITY OF COLORADO SPRINGS			
MONUMENT BRANCH CHANNEL RESTORATION PHASE 1 - 30% BID PLAN			
TYPICAL TRIBUTARY SECTION AND CONSTRUCTION DETAILS			
DESIGNED BY: AJS	SCALE: HORIZ N/A	DATE ISSUED: September 2016	DRAWING No.
DRAWN BY: RAF	VERT. N/A	SHEET 13 OF 17	DT03
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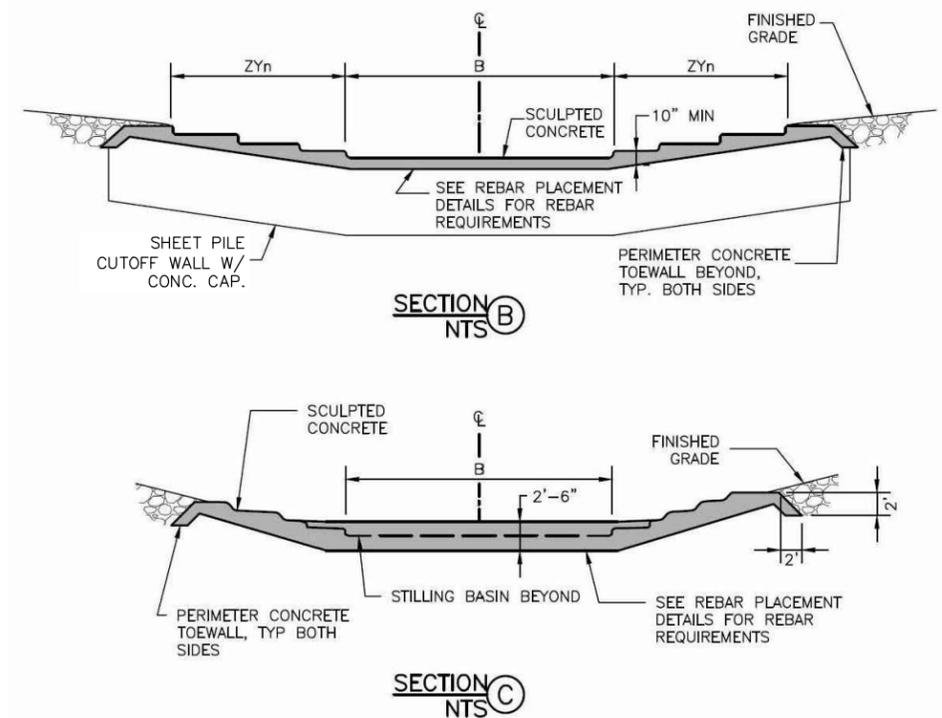
EXAMPLE PLAN VIEW OF A SCULPTED CONCRETE DROP STRUCTURE



EXAMPLE PROFILES OF A SCULPTED CONCRETE DROP STRUCTURE



Photograph 9-10. This drop structure located along Oak Hills Tributary represents a complex design example. CONTRACTOR MUST PROVIDE SAMPLE ON-SITE PER SPECIFICATIONS.



EXAMPLE CROSS SECTIONS OF A SCULPTED CONCRETE DROP STRUCTURE

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**PHASE 1 - 30% BID PLAN**

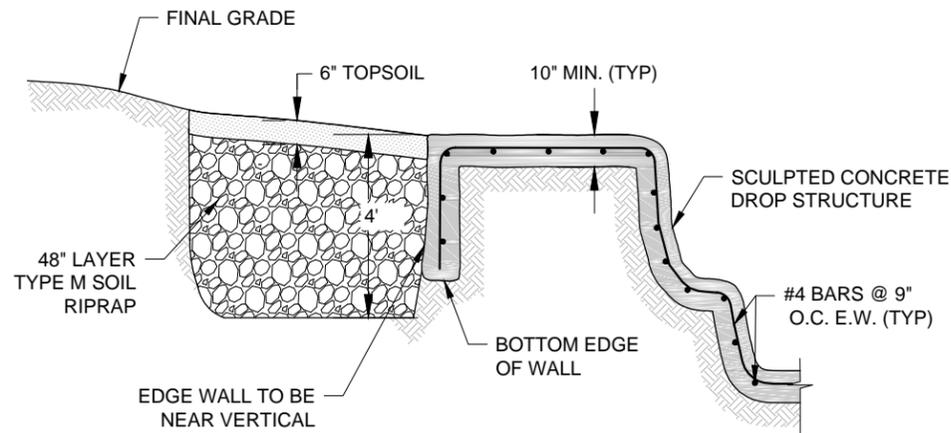
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CITY OF COLORADO SPRINGS			
MONUMENT BRANCH CHANNEL RESTORATION PHASE 1 - 30% BID PLAN			
TYPICAL GRADE CONTROL DETAILS SCULPTED CONCRETE DROP STRUCTURE			
DESIGNED BY: GWT	SCALE: HORIZ N/A	DATE ISSUED: September 2016	DRAWING No. DT04
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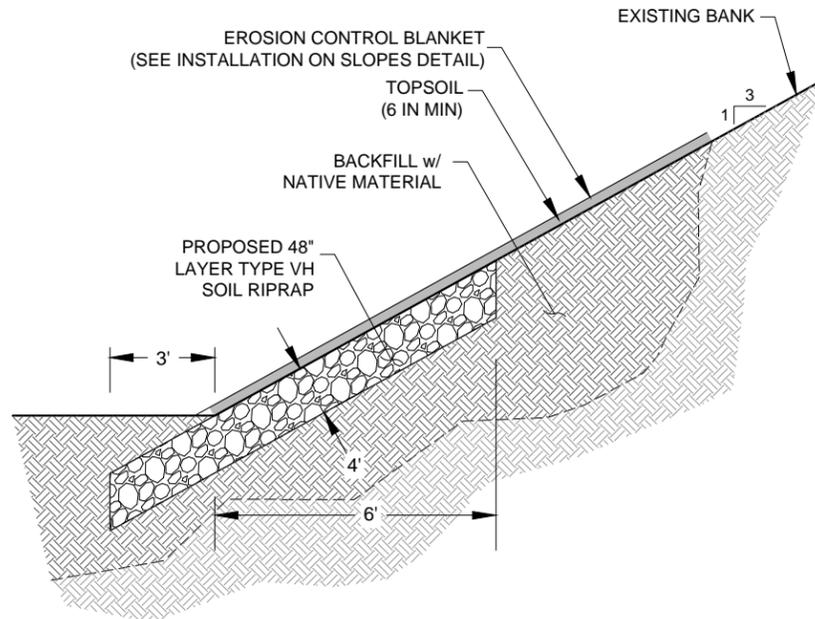


**NOTES:**

1. DETAIL APPLIES TO THE PERIMETER OF THE ENTIRE STRUCTURE
2. SEE THE REBAR PLACEMENT DETAIL FOR CLEARANCE FROM TOP AND BOTTOM OF THE STRUCTURE

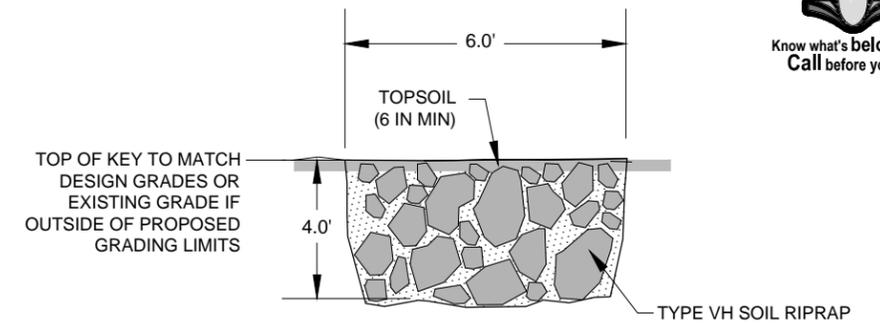
**STRUCTURE EDGE WALL DETAIL (SC)**

NTS



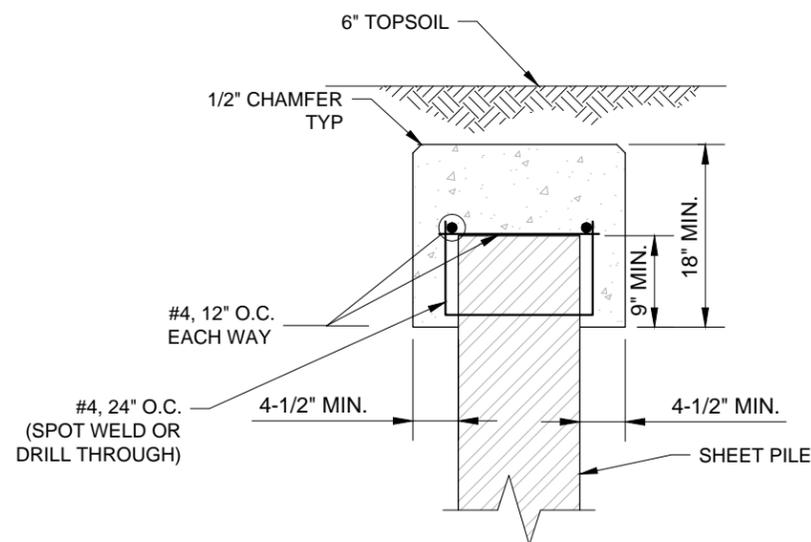
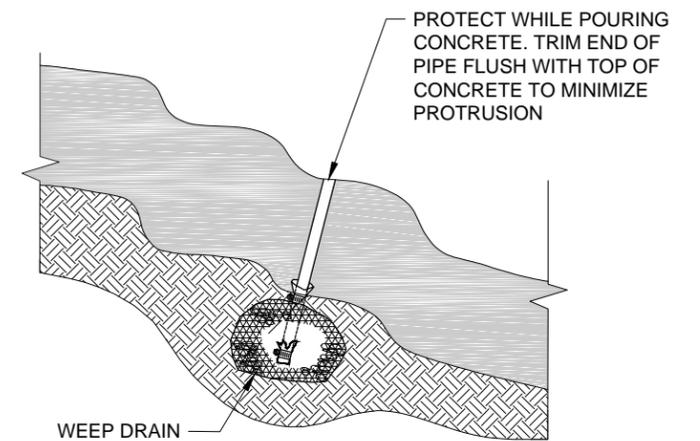
**RIPRAP TOE PROTECTION**

NTS



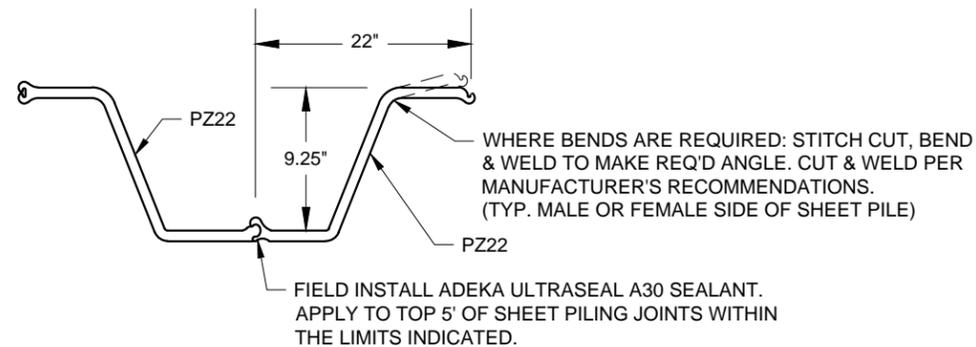
**TYPICAL SECTION - BURIED RIPRAP KEY**

NTS



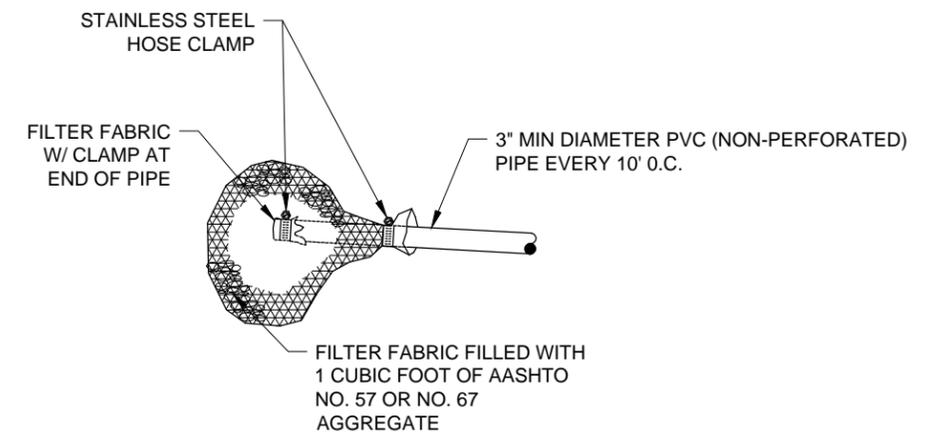
**CONCRETE SHEET PILE CAP**

NTS



**PZ22 SHEET PILE DETAIL**

NTS



**WEEP DRAINS (SCULPTED CONCRETE)**

NTS

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**PHASE 1 - 30% BID PLAN**

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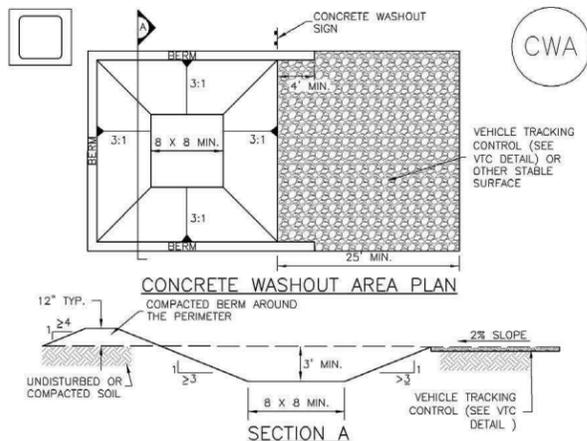
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CITY OF COLORADO SPRINGS MONUMENT BRANCH CHANNEL RESTORATION PHASE 1 - 30% BID PLAN			
CONSTRUCTION DETAILS			
FOR AND ON BEHALF OF MATRIX DESIGN GROUP, INC. PROJECT No. 16.069.072	DESIGNED BY: AJS DRAWN BY: RAF CHECKED BY: GWT	SCALE: HORIZ N/A VERT. N/A	DATE ISSUED: September 2016 SHEET 15 OF 17 DRAWING No. DT05



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**Concrete Washout Area (CWA)**

**MM-1**



**CWA-1. CONCRETE WASHOUT AREA**

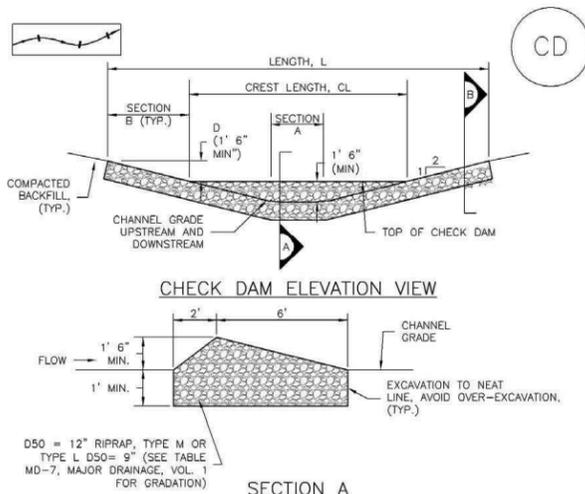
**CWA INSTALLATION NOTES**

- SEE PLAN VIEW FOR: -CWA INSTALLATION LOCATION.
- DO NOT LOCATE AN UNLINED CWA WITHIN 400' OF ANY NATURAL DRAINAGE PATHWAY OR WATERBODY. DO NOT LOCATE WITHIN 1,000' OF ANY WELLS OR DRINKING WATER SOURCES. IF SITE CONSTRAINTS MAKE THIS INFEASIBLE, OR IF HIGHLY PERMEABLE SOILS EXIST ON SITE, THE CWA MUST BE INSTALLED WITH AN IMPERMEABLE LINER (16 MIL MIN. THICKNESS) OR SURFACE STORAGE ALTERNATIVES USING PREFABRICATED CONCRETE WASHOUT DEVICES OR A LINED ABOVE GROUND STORAGE ARE SHOULD BE USED.
- THE CWA SHALL BE INSTALLED PRIOR TO CONCRETE PLACEMENT ON SITE.
- CWA SHALL INCLUDE A FLAT SUBSURFACE PIT THAT IS AT LEAST 8' BY 8' SLOPES LEADING OUT OF THE SUBSURFACE PIT SHALL BE 3:1 OR FLATTER. THE PIT SHALL BE AT LEAST 3' DEEP.
- BERM SURROUNDING SIDES AND BACK OF THE CWA SHALL HAVE MINIMUM HEIGHT OF 1'.
- VEHICLE TRACKING PAD SHALL BE SLOPED 2% TOWARDS THE CWA.
- SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE CWA, AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CWA TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS.
- USE EXCAVATED MATERIAL FOR PERIMETER BERM CONSTRUCTION.

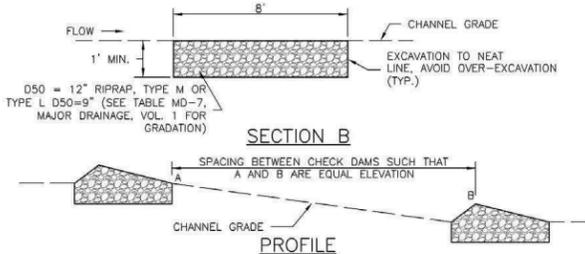
November 2010 Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3 CWA-3

**Check Dams (CD)**

**EC-12**



**CD-1. CHECK DAM**



November 2010 Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3 CD-3

**EC-12**

**Check Dams (CD)**

**CHECK DAM INSTALLATION NOTES**

- SEE PLAN VIEW FOR: -LOCATION OF CHECK DAMS. -CHECK DAM TYPE (CHECK DAM OR REINFORCED CHECK DAM). -LENGTH (L), CREST LENGTH (CL), AND DEPTH (D).
- CHECK DAMS INDICATED ON INITIAL SWMP SHALL BE INSTALLED AFTER CONSTRUCTION FENCE, BUT PRIOR TO ANY UPSTREAM LAND DISTURBING ACTIVITIES.
- RIPRAP UTILIZED FOR CHECK DAMS SHOULD BE OF APPROPRIATE SIZE FOR THE APPLICATION. TYPICAL TYPES OF RIPRAP USED FOR CHECK DAMS ARE TYPE M (D50 12") OR TYPE L (D50 9").
- RIPRAP PAD SHALL BE TRENCHED INTO THE GROUND A MINIMUM OF 1'.
- THE ENDS OF THE CHECK DAM SHALL BE A MINIMUM OF 1' 6" HIGHER THAN THE CENTER OF THE CHECK DAM.

**CHECK DAM MAINTENANCE NOTES**

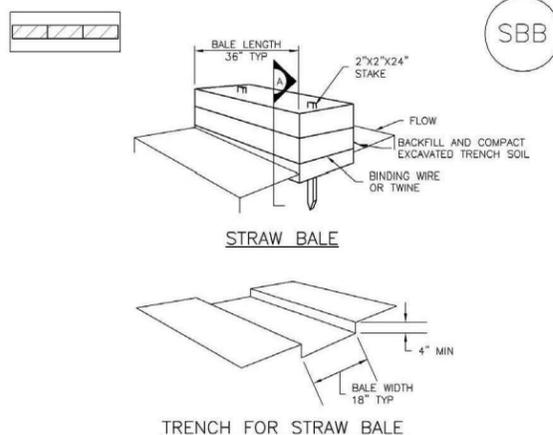
- INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
- FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
- WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
- SEDIMENT ACCUMULATED UPSTREAM OF THE CHECK DAMS SHALL BE REMOVED WHEN THE SEDIMENT DEPTH IS WITHIN 1/2 OF THE HEIGHT OF THE CREST.
- CHECK DAMS ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION.
- WHEN CHECK DAMS ARE REMOVED, EXCAVATIONS SHALL BE FILLED WITH SUITABLE COMPACTED BACKFILL. DISTURBED AREA SHALL BE SEEDDED AND MULCHED AND COVERED WITH GEOTEXTILE OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

(DETAILS ADAPTED FROM DOUGLAS COUNTY, COLORADO, NOT AVAILABLE IN AUTOCAD)  
**NOTE:** MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

CD-4 Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3 November 2010

**SC-3**

**Straw Bale Barrier (SBB)**



**STRAW BALE**

**TRENCH FOR STRAW BALE**

SBB-2 Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3 November 2010

**Straw Bale Barrier (SBB)**

**SC-3**

**STRAW BALE INSTALLATION NOTES**

- SEE PLAN VIEW FOR: -LOCATION(S) OF STRAW BALES.
- STRAW BALES SHALL CONSIST OF CERTIFIED WEED FREE STRAW OR HAY. LOCAL JURISDICTIONS MAY REQUIRE PROOF THAT BALES ARE WEED FREE.
- STRAW BALES SHALL CONSIST OF APPROXIMATELY 5 CUBIC FEET OF STRAW OR HAY AND WEIGH NOT LESS THAN 35 POUNDS.
- WHEN STRAW BALES ARE USED IN SERIES AS A BARRIER, THE END OF EACH BALE SHALL BE TIGHTLY ABUTTING ONE ANOTHER.
- STRAW BALE DIMENSIONS SHALL BE APPROXIMATELY 36"x18"x18".
- A UNIFORM ANCHOR TRENCH SHALL BE EXCAVATED TO A DEPTH OF 4". STRAW BALES SHALL BE PLACED SO THAT BINDING TWINE IS ENCOMPASSING THE VERTICAL SIDES OF THE BALE(S). ALL EXCAVATED SOIL SHALL BE PLACED ON THE UPHILL SIDE OF THE STRAW BALE(S) AND COMPACTED.
- TWO (2) WOODEN STAKES SHALL BE USED TO HOLD EACH BALE IN PLACE. WOODEN STAKES SHALL BE 2"x2"x24". WOODEN STAKES SHALL BE DRIVEN 6" INTO THE GROUND.

**STRAW BALE MAINTENANCE NOTES**

- INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
- FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
- WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
- STRAW BALES SHALL BE REPLACED IF THEY BECOME HEAVILY SOILED, ROTTEN, OR DAMAGED BEYOND REPAIR.
- SEDIMENT ACCUMULATED UPSTREAM OF STRAW BALE BARRIER SHALL BE REMOVED AS NEEDED TO MAINTAIN FUNCTIONALITY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY 1/2 OF THE HEIGHT OF THE STRAW BALE BARRIER.
- STRAW BALES ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION.
- WHEN STRAW BALES ARE REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.

(DETAILS ADAPTED FROM TOWN OF PARKER, COLORADO, NOT AVAILABLE IN AUTOCAD)  
**NOTE:** MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

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**PHASE 1 - 30% BID PLAN**

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MATRIX DESIGN GROUP, INC.  
PROJECT No. 16.069.072

CITY OF COLORADO SPRINGS			
MONUMENT BRANCH CHANNEL RESTORATION PHASE 1 - 30% BID PLAN			
EROSION CONTROL DETAILS			
DESIGNED BY: AJS	SCALE: HORIZ N/A	DATE ISSUED: September 2016	DRAWING No. DT06
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SC-1

Silt Fence (SF)

SILT FENCE INSTALLATION NOTES

1. SILT FENCE MUST BE PLACED AWAY FROM THE TOE OF THE SLOPE TO ALLOW FOR WATER PONDING. SILT FENCE AT THE TOE OF A SLOPE SHOULD BE INSTALLED IN A FLAT LOCATION AT LEAST SEVERAL FEET (2-5 FT) FROM THE TOE OF THE SLOPE TO ALLOW ROOM FOR PONDING AND DEPOSITION.
2. A UNIFORM 6" X 4" ANCHOR TRENCH SHALL BE EXCAVATED USING TRENCHER OR SILT FENCE INSTALLATION DEVICE. NO ROAD GRADERS, BACKHOES, OR SIMILAR EQUIPMENT SHALL BE USED.
3. COMPACT ANCHOR TRENCH BY HAND WITH A "JUMPING JACK" OR BY WHEEL ROLLING. COMPACTION SHALL BE SUCH THAT SILT FENCE RESISTS BEING PULLED OUT OF ANCHOR TRENCH BY HAND.
4. SILT FENCE SHALL BE PULLED TIGHT AS IT IS ANCHORED TO THE STAKES. THERE SHOULD BE NO NOTICEABLE SAG BETWEEN STAKES AFTER IT HAS BEEN ANCHORED TO THE STAKES.
5. SILT FENCE FABRIC SHALL BE ANCHORED TO THE STAKES USING 1" HEAVY DUTY STAPLES OR NAILS WITH 1" HEADS. STAPLES AND NAILS SHOULD BE PLACED 3" ALONG THE FABRIC DOWN THE STAKE.
6. AT THE END OF A RUN OF SILT FENCE ALONG A CONTOUR, THE SILT FENCE SHOULD BE TURNED PERPENDICULAR TO THE CONTOUR TO CREATE A "J-HOOK." THE "J-HOOK" EXTENDING PERPENDICULAR TO THE CONTOUR SHOULD BE OF SUFFICIENT LENGTH TO KEEP RUNOFF FROM FLOWING AROUND THE END OF THE SILT FENCE (TYPICALLY 10' - 20').
7. SILT FENCE SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.

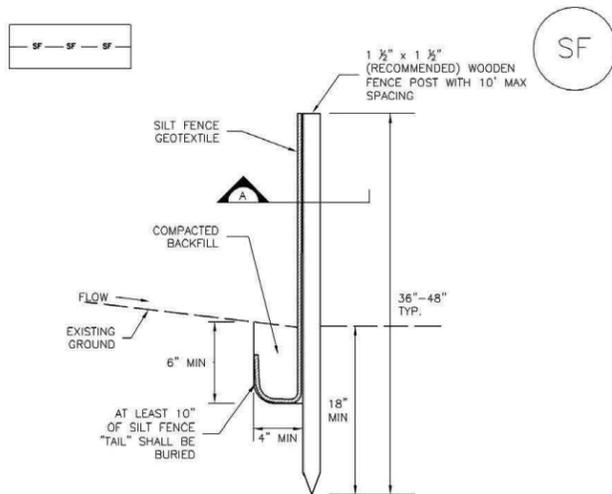
SILT FENCE MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
4. SEDIMENT ACCUMULATED UPSTREAM OF THE SILT FENCE SHALL BE REMOVED AS NEEDED TO MAINTAIN THE FUNCTIONALITY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY 6".
5. REPAIR OR REPLACE SILT FENCE WHEN THERE ARE SIGNS OF WEAR, SUCH AS SAGGING, TEARING, OR COLLAPSE.
6. SILT FENCE IS TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION, OR IS REPLACED BY AN EQUIVALENT PERIMETER SEDIMENT CONTROL BMP.
7. WHEN SILT FENCE IS REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.

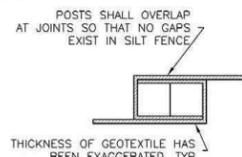
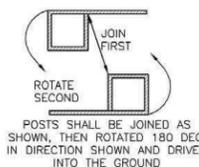
(DETAIL ADAPTED FROM TOWN OF PARKER, COLORADO AND CITY OF AURORA, NOT AVAILABLE IN AUTOCAD)  
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Silt Fence (SF)

SC-1



SILT FENCE

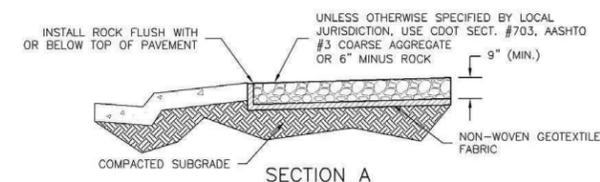
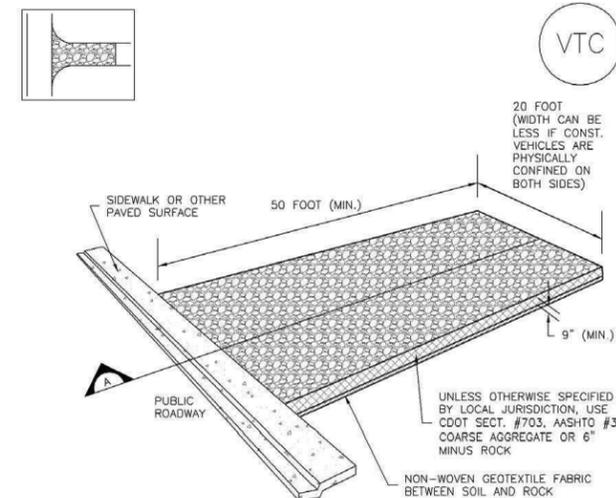


SECTION A

SF-1. SILT FENCE

Vehicle Tracking Control (VTC)

SM-4



VTC-1. AGGREGATE VEHICLE TRACKING CONTROL

SF-4 Urban Drainage and Flood Control District November 2010  
Urban Storm Drainage Criteria Manual Volume 3

November 2010 Urban Drainage and Flood Control District SF-3  
Urban Storm Drainage Criteria Manual Volume 3

November 2010 Urban Drainage and Flood Control District VTC-3  
Urban Storm Drainage Criteria Manual Volume 3

SM-4 Vehicle Tracking Control (VTC)

STABILIZED CONSTRUCTION ENTRANCE/EXIT INSTALLATION NOTES

1. SEE PLAN VIEW FOR
  - LOCATION OF CONSTRUCTION ENTRANCE(S)/EXIT(S).
  - TYPE OF CONSTRUCTION ENTRANCE(S)/EXITS(S) (WITH/WITHOUT WHEEL WASH, CONSTRUCTION MAT OR TRM).
2. CONSTRUCTION MAT OR TRM STABILIZED CONSTRUCTION ENTRANCES ARE ONLY TO BE USED ON SHORT DURATION PROJECTS (TYPICALLY RANGING FROM A WEEK TO A MONTH) WHERE THERE WILL BE LIMITED VEHICULAR ACCESS.
3. A STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE LOCATED AT ALL ACCESS POINTS WHERE VEHICLES ACCESS THE CONSTRUCTION SITE FROM PAVED RIGHT-OF-WAYS.
4. STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.
5. A NON-WOVEN GEOTEXTILE FABRIC SHALL BE PLACED UNDER THE STABILIZED CONSTRUCTION ENTRANCE/EXIT PRIOR TO THE PLACEMENT OF ROCK.
6. UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, ROCK SHALL CONSIST OF DOT SECT. #703, AASHTO #3 COARSE AGGREGATE OR 6" (MINUS) ROCK.

STABILIZED CONSTRUCTION ENTRANCE/EXIT MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
  2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
  3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
  4. ROCK SHALL BE REAPPLIED OR REGRADED AS NECESSARY TO THE STABILIZED ENTRANCE/EXIT TO MAINTAIN A CONSISTENT DEPTH.
  5. SEDIMENT TRACKED ONTO PAVED ROADS IS TO BE REMOVED THROUGHOUT THE DAY AND AT THE END OF THE DAY BY SHOVELING OR SWEEPING. SEDIMENT MAY NOT BE WASHED DOWN STORM SEWER DRAINS.
- NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.
- (DETAILS ADAPTED FROM CITY OF BROOMFIELD, COLORADO, NOT AVAILABLE IN AUTOCAD)

REFERENCE DRAWINGS	No.	DATE	DESCRIPTION REVISIONS	BY
X-069-MDG22x34				
<b>COMPUTER FILE MANAGEMENT</b>				
FILE NAME: S:\16.069.072 Stormwater Design Services - Monument Branch\Design Plans_Phase 1\069-DT01-04.dwg				
CTB FILE: Matrix(black).ctb				
PLOT DATE: September 6, 2016 5:37:33 PM				
THIS DRAWING IS CURRENT AS OF PLOT DATE AND MAY BE SUBJECT TO CHANGE.				

**PHASE 1 - 30% BID PLAN**

**NOTICE:**  
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SEAL

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FOR AND ON BEHALF OF  
MATRIX DESIGN GROUP, INC.  
PROJECT No. 16.069.072

CITY OF COLORADO SPRINGS			
MONUMENT BRANCH CHANNEL RESTORATION PHASE 1 - 30% BID PLAN			
EROSION CONTROL DETAILS			
DESIGNED BY: AJS	SCALE: HORIZ N/A	DATE ISSUED: September 2016	DRAWING No. DT07
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