

CITY OF THORNTON

REQUEST FOR PROPOSALS

FOR

ENGINEERING SERVICES

**THORNTON WATER PROJECT
SEGMENT F DESIGN**

PROJECT NO. 12-777H9

JULY 2024

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III. NOTICE

REQUEST FOR PROPOSALS

The City of Thornton, CO (“Thornton”) respectfully requests separate sealed Proposals for Engineering Services for **Thornton Water Project – Segment F Design, Project No. 12-777H9** (hereinafter referred to as “Project”). Proposals will be received until **5:00 p.m.**, local time, **Thursday, August 29, 2024**, in the Contract Administration Office, 9500 Civic Center Drive, 2nd Floor City Hall, Thornton, CO 80229-4326.

Approved Methods for Submission of Proposals:

- Electronic proposals shall be submitted/ uploaded to BidnetDirect.com website in response to this solicitation;
- Or Physical proposals may be submitted by mail or courier service;
- Or Physical Proposals will be received in the Contract Administration Office, 9500 Civic Center Drive, 2nd Floor City Hall, Thornton, CO 80229-4326.

Late Proposals will not be accepted under any circumstances.

Project Description:

This Project requires Design Services be performed by Consultant for Segment F of the Thornton Water Project located within unincorporated Larimer County, Colorado and unincorporated Weld County, Colorado. The Services include design of 5.8 miles of 42-inch welded steel raw water pipeline and associated appurtenances, including but not limited to, air release valves, mainline isolation valves, blow-off valves, drain valves, manways, temporary pipe bulkheads, corrosion protection system, and fiber optic conduit.

To be minimally qualified for consideration for award, proposing firms must have successfully completed two (2) water pipeline projects in the western United States with a similar degree of complexity, size, geography, and location within the past ten (10) years. Proposing firms must have a minimum of two (2) staff members with licensure as professional engineers in the State of Colorado who will be assigned to the Project.

Thornton utilizes the BidNet Direct System at www.BidNetDirect.com to distribute official copies of the Request for Proposals (“RFP”) for use in preparing Proposals. Proposing firms will be required to register with the website to download the RFP documents and addenda. There is no charge by BidNet Direct for this service. If you experience problems with the BidNet Direct website, please call 1-800-835-4603 for assistance. Proposing firms are required to acknowledge all addenda with their Proposal and are encouraged to either register with the website or to request to view the addenda posted on the Contract Administration bulletin board prior to submission of a Proposal. Proposing firms that do not acknowledge all addenda may be considered non-responsive. Upon request, the RFP documents, including addenda, are also available for viewing on the City of Thornton Website, <https://solicitations.thorntonco.gov/solicitations> or at the Contract Administration office located on the 2nd floor of City Hall at 9500 Civic Center Drive, Thornton, CO. Proposing firms that do not have download and/or printing capability in-house may contact a commercial reprographics company for assistance with downloading and printing the RFP.

Late Proposals will not be accepted under any circumstances. Any Proposal(s) received after the scheduled deadline for submitting Proposals will be returned to the proposing firm unopened. Sole responsibility rests with the proposing firm to see that their Proposal is received on or before the deadline.

Thornton reserves the right to reject any and all Proposals, in part or in whole, and to award the Project to the most responsive and responsible firm(s) as deemed in the best interest of Thornton; further, the right is reserved to waive any formalities or informalities contained in said Proposal(s).

An optional Pre-Proposal Conference to discuss the Project(s) will be held at **1:00 p.m., Tuesday, August 13, 2024**, in the **Community Room** of the **Infrastructure Maintenance Center (IMC) at 12450 Washington St., Thornton CO**. If possible, please hold all questions concerning this RFP until that time.

Physical proposals shall be submitted in a sealed envelope plainly marked on the outside with the proposing firm's name and address and **"Request for Proposals, Thornton Water Project – Segment F Design, Project No. 12-777H9"**. Proposals delivered by mail or courier service shall be in the sealed envelope inserted into a separate mailing envelope. On the outside of the mailing envelope note **"Proposal Enclosed, Thornton Water Project – Segment F Design, Project No. 12-777H9"**.

Proposals submitted electronically shall be uploaded to the Vendor's portal through the BidnetDirect.com website and shall follow the process/guidelines identified on the website and this solicitation.

All questions shall be directed in writing to Patrick Hinterberger, Contracts Supervisor, 9500 Civic Center Drive, Thornton, CO 80229-4326, fax 303-538-7556, or e-mail – patrick.hinterberger@ThorntonCo.gov, 8:00 a.m. to 5:00 p.m., local time, Monday through Friday, excluding holidays.

Date First Published: July 24, 2024

Published at: BidNet Direct, COT Website, and the Contracts & Purchasing Bulletin Board.

BY: 
6DABE281E4154C8
Patrick Hinterberger
Contract Supervisor

IV. PROPOSAL INSTRUCTIONS AND INFORMATION

Thornton is soliciting written Proposals from qualified firms for Engineering Services for **Thornton Water Project – Segment F Design, Project No. 12-777H9**. To be eligible for consideration, the proposing firm must be capable of supplying the Services as described herein, and must meet all other criteria outlined in this RFP.

A. INQUIRIES AND CORRECTIONS

All inquiries relating to this RFP shall be addressed in writing to:

City of Thornton
Attention: Patrick Hinterberger, Contracts Supervisor
9500 Civic Center Drive
Thornton, CO 80229-4326
Fax: 303-538-7556
E-mail: patrick.hinterberger@ThorntonCo.gov

If a proposing firm, subsequent to the Pre-Proposal Conference, finds discrepancies in or omissions from the RFP, or requires additional clarification of any part thereof, a written request for interpretation shall be submitted to the Contracts Supervisor. Any interpretation of or change made to the RFP will be made by written addendum to each proposing firm, and will become part of the RFP and of any Agreement awarded. Thornton will not be responsible for the accuracy of any other ORAL EXPLANATIONS, INTERPRETATIONS, OR REPRESENTATIONS. All inquiries shall be made in writing and all responses will be provided in writing, with responses being made available to all proposing firms. To be given consideration, inquiries must be received no later than 5:00 p.m. on the tenth (10th) Calendar Day prior to the date established for the submission of the Proposal. It shall be the responsibility of each proposing firm to verify that every addendum has been received prior to submitting a Proposal.

B. SUBMITTAL DATE AND LOCATION

All Proposals must be received in the Contracts and Purchasing office located at Thornton City Hall, City of Thornton, 9500 Civic Center Drive, 2nd Floor City Hall, Thornton, CO 80229-4326 or submitted via the BidnetDirect.com vendor portal **prior to 5:00 p.m., Thursday, August 29, 2024**. Physical proposals must be submitted in a sealed envelope plainly marked on the outside with the proposing firm's name and address and "**Request for Proposals, Thornton Water Project – Segment F Design, Project No. 12-777H9**", and addressed to the Contracts Manager. Proposing firm's name and address shall also appear on the outside of the sealed envelope containing the Proposal. If the Proposal is sent by U.S. mail or courier service, the Proposal shall be contained in a sealed inner envelope or box, which is then inserted into the mailing envelope or box. Indicate "**Proposal Enclosed, Thornton Water Project – Segment F Design, Project No. 12-777H9**", on the outside of the mailing envelope or box.

C. LATE AND ELECTRONIC PROPOSALS

Late Proposals will not be accepted under any circumstance, and any Proposal so received shall be returned to the proposing firm unopened. In addition, proposals received via electronic devices other than the BidnetDirect.com website (i.e. e-mail) are

not acceptable and will be rejected upon receipt. Proposing firms will be expected to allow adequate time for delivery of their Proposals either by airfreight, postal service, or other means.

D. CONFIDENTIAL AND PROPRIETARY INFORMATION

Prior to Award, any information contained within the Proposal may be held confidential and proprietary by Thornton as solely determined by Thornton. After Award, the information within the Proposal becomes public information with the exception of information that has been clearly marked as confidential and proprietary by the proposing firm. Any information marked confidential shall comply with Colorado's Open Records Act (CORA) and other applicable statutes. Thornton shall be held harmless from any claims arising from the release of confidential and proprietary information not clearly designated as such by the proposing firm or which does not comply with CORA. In general, it is not acceptable to Thornton to mark information other than financial statements, project financing data, litigation history, tax audit history, or client lists as confidential and proprietary. Further, it is not acceptable to mark price proposal information as confidential and proprietary. Failure to adhere to these restrictions may result in the entire Proposal being deemed non-responsive.

E. DEFINITION, CONTEXT, AND GENDER

Unless otherwise specified in this document, all words shall have a common meaning unless the context in which they are used clearly requires a different meaning. Words in the singular number include the plural, and in the plural include the singular. Additionally, words of the masculine gender include the feminine and the neuter, and when the sense so indicates, words of the neuter gender may refer to any gender.

F. CONDITIONS OF PROPOSAL SUBMITTAL

1. All proposing firms shall comply with all conditions, requirements, and specifications contained herein, and any departure from such conditions, requirements, or specifications may constitute sufficient cause for rejection of the entire Proposal.
2. The Proposal must be signed by a duly authorized official of the proposing firm submitting the Proposal.
3. No Proposal will be accepted from any person, firm, or corporation that is in arrears for any obligation to Thornton, or that otherwise may be deemed irresponsible, unresponsive, or untrustworthy by Thornton staff or Thornton City Council.
4. Only one (1) Proposal will be accepted from any person or corporation. If multiple options are requested or offered, each option must be submitted under a single Proposal and in a single envelope or box.
5. All terms and prices quoted must be firm for a period of sixty (60) Calendar Days from the Proposal submittal date or until Award, whichever is sooner.
6. Thornton reserves the right to reject any and all Proposals, or any part thereof. Thornton further reserves the right to waive any formalities, or informalities contained in any Proposal, and to award the Agreement to the most responsive, responsible, and trustworthy proposing firm as deemed in the best interest of Thornton.

7. All Proposals shall be prepared in a comprehensive manner as to content, but no necessity exists for expensive binders or promotional materials.
8. All costs, including travel and expenses incurred in the preparation of the Proposal, shall be borne solely by the proposing firm.
9. Section 7.4 of the Thornton City Charter prohibits Thornton from entering into any contracts involving an amount in excess of one hundred dollars (\$100) in which an elective or appointive officer or any member of the officer's family has any pecuniary interest, direct or indirect, in the proposing firm or this RFP. Certain other restrictions may also apply to contracts in which an employee, member of a board or commission, City Council member or member of their family has an existing or pending financial or personal interest. For the purposes of this Charter Section, a domestic partner shall be considered a family member. Therefore, the proposing firm shall submit with the Proposal the following declaration contained in Exhibit 1, Acceptance of Conditions Statement.
 - i. No City Council member, member of a board or commission, Municipal Judge, City Manager, City Attorney, or employee of the City of Thornton, or any such person's family member, domestic partner, or person assuming a relationship being the substantial equivalent of the above, has an existing or pending direct or indirect financial, pecuniary, or personal interest in the proposing firm or this RFP, except as follows (list, if any): _____

10. Thornton reserves the right to negotiate final terms with the selected firm, which terms may vary from those contained in this document.
11. Thornton reserves the right to request a client list from the proposing firm, for the purpose of determining potential conflicts of interest. Such list shall be considered proprietary.
12. Thornton will not return Proposals, or other information supplied to Thornton, to the proposing firms.

G. EVALUATION OF PROPOSALS

All Proposals will be evaluated by a Project Committee assigned by the City Manager, or his designee. Proposals shall be evaluated on the basis of the Evaluation Criteria set forth herein. In addition, any other pertinent information which becomes available during the evaluation, interview, or negotiations may be considered in the evaluation. The committee may make a recommendation for award on the basis of the Proposals received, or may choose to "short list" prospective firms for further consideration, which may include interviews and/or negotiations. The proposing firm selected for the award will be chosen on the basis of the apparent greatest benefit to Thornton, and not necessarily on the basis of lowest price. The City Manager, or his designee, shall make the final determination of the firm selected.

H. EVALUATION CRITERIA

To be minimally qualified for consideration for award, proposing firms must have successfully completed two (2) water pipeline projects in the western United States with a similar degree of complexity, size, geography, and location within the past ten (10) years. Proposing firms must have a minimum of two (2) staff members with licensure as professional engineers in the State of Colorado who will be assigned to the Project.

Proposals shall be evaluated on the basis of the following criteria:

1. Responsiveness to the needs of Thornton and the degree to which the Proposal meets or exceeds the requirements of the RFP, including the time required to complete the Project, the proposed solutions offered, the means and methods of accomplishing the Services, and the Scope of Services offered.
2. Responsibility and trustworthiness of the proposing firm, including financial capability to perform the Project and claims and litigation history.
3. Past performance of the proposing firm for Thornton and other owners and results of reference checks.
4. Experience of the proposing firm in dealing with municipal or other governmental agencies in projects of similar size, scope, and nature.
5. The proposing firm's engagement team, including the experience and resumes of key personnel assigned to the Project.
6. The proposing firm's fee (not-to-exceed price) structure based on the Services to be provided.

I. GENERAL REQUIREMENTS OF THE SUCCESSFUL PROPOSING FIRM

1. The successful proposing firm shall enter into a written Agreement with Thornton in the form attached hereto as Exhibit 2 and incorporated by reference herein.
2. The successful proposing firm shall be required to maintain insurance coverages as set forth in Exhibit 2.
3. The successful proposing firm shall be prohibited from assigning or subcontracting the whole, or any part of the Agreement, without the prior written consent of Thornton.
4. The successful proposing firm shall not hire, discharge, promote, demote, or otherwise discriminate in matters of compensation, terms, conditions, or privileges of employment against any person otherwise qualified solely because of race, color, creed, religion, national origin, ancestry, gender, physical or mental disability, or age.
5. The successful proposing firm and its employees will operate as an independent contractor and will not be considered employees of Thornton.

V. PROPOSAL PREPARATION

- A. Proposals submitted shall contain all information as requested herein, and any additional information necessary to evaluate the overall benefit of the Proposal to Thornton.
- a. If your firm is submitting a physical proposal submission and **not** through the Vendor portal of BidNet (if allowed), then the following items shall also be included:
 - i. One (1) original paper copy of the proposal submission with the proposal stamped as "Original".
 - b. One (1) electronic copy on a flash drive of the proposal submission. All envelopes containing these items shall be clearly marked.
 - i. **Note:** Vendors submitting confidential information shall only submit one (1) copy of such information. When submitting electronically through the BidNetDirect.com vendor portal, confidential information shall be submitted in a separate PDF format file and marked confidential in both the file name and on the individual pages. When submitting a physical proposal, confidential information shall be placed in a separate sealed envelope and inserted into the main proposal submittal envelope or box. Any information not marked as confidential will be considered public record.
- B. Proposals shall include the following:
1. A cover letter stating the name, address, and telephone number of the proposing firm, and bearing the signature of the person having the authority to make the Proposal for the proposing firm, and bind the firm in a formal Agreement with Thornton.
 2. An executed Exhibit 1, Acceptance of Conditions Statement, which:
 - a. Affirms the acceptance of all conditions and requirements contained in this RFP;
 - b. Contains acknowledgement of all addenda issued; and
 - c. Lists the names of any of the proposing firms' employees who are family members of Thornton employees, officers, board or Council members.
 3. The proposed Exhibit B, Consultant's Personnel and Subconsultants Listing, which is in Exhibit 2, Agreement, showing all personnel and subconsultants proposed for assignment to the Project team. Also submit resumes with education and work experience for key personnel.
 4. A written narrative that defines the methods and means by which the proposing firm will perform the Services outlined in this RFP.
 5. A Project timeline outlining the major tasks, phases, timeframes, and milestones necessary to complete the Project. Identify the specific employees and subconsultants that will be involved in each task.

6. An estimate of labor resources needed by task or phase broken down by man-hours for each individual assigned to the Project, including subconsultant personnel. In addition, indicate total estimated cost for each task or phase by multiplying the applicable billable hourly rates by the proposed labor hours, and adding in subconsultant fees, and other estimated reimbursable expenses. In addition, indicate the proposed fixed fee, including subconsultant / subcontractor fees and other estimated reimbursable expenses, for each phase or task.
 7. The proposed Exhibit C, Schedule of Charges, which is in Exhibit 2, Agreement, containing the billable hourly rate schedule of the proposing firm including the hourly rates for all personnel assigned to the Project team broken out by Project phase, subconsultant's or subcontractor's fees, and rates for proposed reimbursable expenses such as mileage, equipment, printing, postage, courier service fees, etc. Reimbursable expense categories identified in the Reimbursable Expense Schedule must include all expenses for which the proposing firm will expect separate reimbursement. Expense categories not identified will not be reimbursed separately but are assumed to be included in the billable hourly rates or the fixed fee, whichever is applicable. Reimbursable expenses are reimbursed at cost. The proposed Schedule of Charges will be the sole basis of payment.
 8. A list of what portion of the Services, if any, will be subcontracted.
 9. A list of at least five (5) references for which similar services have been provided. Include current contact names, addresses, and telephone numbers.
 10. An executed Exhibit 3, Reference Authorization and Release Form.
 11. A letter of reference from the proposing firm's primary bank or financial institution which indicates the bank's opinion on the proposing firm's financial capacity to perform their obligations under the Agreement. The letter shall be placed in a separate sealed envelope labeled with the firm name and the notation "CONFIDENTIAL FINANCIAL REFERENCE". The sealed confidential envelope shall be placed inside the envelope or box containing the firm's proposal.
 12. Litigation and claims history in Colorado over the past five (5) years in which the proposing firm or any of its principals were named in a claim or lawsuit related to the proposing firm's provision of goods or services. Include a list of any ongoing or settled claims, mediations, arbitrations, lawsuits, and judgments during the time period. List must contain a description of the type of claim or suit, the general nature of the dispute, whether it is ongoing or settled, and the general outcome if settled, but need not reveal the other parties' names if it is not in the public record. The history shall be placed in a separate sealed envelope labeled with the firm name and the notation "CONFIDENTIAL LITIGATION AND CLAIM HISTORY". The sealed confidential envelope shall be placed inside the envelope or box containing the proposing firm's proposal.
 13. Any other information deemed necessary by the proposing firm.
- C. Submittal of a Proposal shall be taken as prima facie evidence that the proposing firm has full knowledge of the scope, nature, quality, and quantity of the Services to be performed, and the detailed requirements and conditions under which the Services are to be performed.

VI. ATTACHMENT 1
ACCEPTANCE OF CONDITIONS STATEMENT

A. Proposing firm indicates acceptance of the following conditions:

1. City of Thornton Charter Section 7.4 prohibits Thornton from making Contracts with firms which employ certain relatives of Thornton employees unless the City Council determines that the making of such a Contract is in Thornton's best interest.

No City Council member, member of a board or commission, Municipal Judge, City Manager, City Attorney, or employee of the City of Thornton, or any such person's family member, domestic partner, or person assuming a relationship being the substantial equivalent of the above, has an existing or pending, direct or indirect, financial, pecuniary or personal interest in the proposing firm or this Request for Proposal, except as follows (list, if any, or if none so state): _____

2. I/we hereby agree to all instructions, terms and conditions, and specifications contained herein.

B. I/we acknowledge the following addenda (list, if any, or if none so state): _____

Proposing Firm Name: _____

Address: _____

Telephone Number: _____

Submitted By: _____

(Print)

(Signature)

Title: _____

Date: _____

Attest (by officer if corporation) or Notary (if individual): _____

My Commission Expires (if notarized): _____

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VII. ATTACHMENT 2

AGREEMENT FOR PROFESSIONAL CONSULTING SERVICES

Thornton Water Project – Segment F Design, Project No. 12-777H9

This Professional Consulting Services Agreement for Thornton Water Project – Segment F Design, Project No. 12-777H9 (“Agreement”) is made and entered into this _____ day of _____, 20__, by and between the **City of Thornton**, a Colorado home rule municipality, whose address is 9500 Civic Center Drive, Thornton, CO 80229 (“Thornton”) and **Business Name** whose principal place of business is located at **Business Address** (“Consultant” or “Service Provider”) each may be referred to collectively as, the (“Parties”) or individually as the (“Party”).

I. RECITALS

- A. Thornton requires Professional Consulting Services in connection with Thornton Water Project – Segment F Design, Project No. 12-777H9 (the "Project").
- B. On or about **[Date]**, Thornton selected Consultant as the most qualified firm to provide the services described in this Agreement.
- C. Consultant selected by Thornton represents it has the requisite expertise and professional experience to perform the services this Project requires as described herein and Thornton needs during the term of this Agreement.

In consideration of the promises stated herein, the Parties agree as follows:

II. TERMS AND CONDITIONS

- A. **Definitions, Interpretation.** Capitalized terms not defined below shall have the meanings given them in the Contract Documents where they are defined. Further, otherwise consistent with the context, the singular shall include the plural and the plural shall include the singular. The titles of articles and sections used in this Agreement are primarily for the convenience but may be used as aids in interpreting any provision herein.
 - 1. **Agreement** means the Agreement between Thornton and Consultant, including Amendments, Change Orders, and exhibits made part of the Agreement upon or after its execution.
 - 2. **Contract Documents** consist of those documents identified in the Agreement, and Change Orders and Amendments issued after execution of the Agreement.
 - 3. **Day** in any Contract Document refers to a Calendar Day of twenty-four (24) hours measured from midnight to the next midnight.

4. Drawings are the graphic and pictorial portions of the Contract Documents, wherever located and whenever issued, showing the design, location and dimensions of the Work, generally including plans, elevations, sections, details, schedules, diagrams, and notes, also sometimes referred to as plans. The Drawings may contain Specifications, and the Specifications may contain Drawings.
5. Commencement Date is the designated date on which it becomes effective, but if no such date is designated, it is the date on which Thornton signs the Agreement.
6. Including shall, unless otherwise specifically stated, mean ***including, but not limited to*** and words such as ***hereby, herein, and hereunder*** and words of similar import shall be construed to refer to this Agreement in its entirety.
7. Specifications are that part of the Contract Documents consisting of written technical descriptions of materials, equipment, systems, standards, and workmanship as applied to the Work and certain administrative details applicable thereto.
8. Subconsultant (“Subcontractor”) is a person or entity retained by Consultant as an independent contractor to provide labor, materials, equipment, and/or services necessary to complete a specific portion of the Work; or any other party supplying labor and material or only labor for Work under a separate contract or agreement with Consultant. Moreover, the terms “Subconsultant” and “Subcontractor” are interchangeable herein and will, at all times, have, express or convey the same meaning. The term does not include a Separate Consultant or a Separate Consultant’s subcontractors.
9. Work (“Services”) is the various elements identified and required by the Contract Documents and includes and is the result of performing or providing all labor, services, and documentation necessary to produce, furnish, install, and incorporate all materials and equipment necessary to complete the services in accordance with the Contract Documents. Moreover, the terms “Work” and “Services” are interchangeable herein and will, at all times, have, express or convey the same meaning.

B. Contract Documents.

1. The following documents, including all exhibits and attachments listed, contained, or referenced in this Agreement, by this reference are incorporated verbatim into this Agreement:
 - a. Thornton Approved Amendments to this Agreement.

- b. This Agreement for Professional Consulting Services (together with Exhibits);
 - i. Exhibit A Consultant's General Scope Of Services
 - ii. Exhibit B Personnel and Subconsultants Listing
 - iii. Exhibit C Schedule Of Charges
 - c. Purchase Orders.
 - 2. In the event there is a conflict between any of the above-listed documents, the provisions of the document listed first in order shall govern over those documents listed in descending order in subparagraph B.1 above after the first listed document
 - 3. Consultant may need additional documents to perform the required Work and Services, or to clarify certain aspects of the Work and Services, that are not listed in Section B.1 above. Such documents, unless specifically identified as such, are not Contract Documents. These documents, by way of example include, but are not limited to:
 - a. The Request for Proposals (including Addenda);
 - b. The Consultant's response to the Request for Proposals; and
 - c. Other Thornton policies and procedures as applicable.
 - 4. Consultant shall perform the Services with the staff identified in the attached **Exhibit B**, unless otherwise authorized in writing by Thornton.
- C. **Project Description.** This Project includes design services for Segment F of the Thornton Water Project located within unincorporated Larimer County, Colorado and unincorporated Weld County, Colorado. The Services include design of 5.8 miles of 42-inch welded steel raw water pipeline and associated appurtenances, including but not limited to air release valves, mainline isolation valves, blow-off valves, drain valves, manways, temporary pipe bulkheads, corrosion protection system, and fiber optic conduit.
- D. **Consultant's Scope of Services.** Upon receipt of a written Notice to Proceed from Thornton, Consultant acknowledges that its scope of services includes furnishing all of the technical, administrative, professional, and other labor; all supplies and materials, equipment, printing, vehicles, local travel, office space and facilities, testing and analyses, calculations, and any other facilities or resources required to perform and complete the Services described in the attached **Exhibit A**. ("Scope of Services" or "Services").
- E. **Term; Commencement and Termination Dates.** This Agreement shall commence on the date written above and shall terminate at such time when all of the Scope of Services in **Exhibit A** up to, and through the end of the Warranty Phase

are complete, or upon Thornton providing Consultant with seven (7) Calendar Days advance written notice, whichever occurs first. In the event this Agreement is terminated by Thornton for convenience, Thornton shall issue a written Notice of Intent to Terminate and Thornton shall pay Consultant for all Services previously authorized and completed prior to the date of the Notice of Termination and Consultant shall not be entitled to profit or overhead on uncompleted Services. If, however, Consultant has substantially or materially breached the terms of this Agreement, Thornton shall have any remedy or right of set-off available at law and equity.

F. **Compensation.**

1. **Remuneration.** Thornton agrees to pay Consultant's billable hourly rates and approved reimbursable expenses as set forth in the attached **Exhibit C, Schedule of Charges**, provided, however, the maximum amount Thornton will pay Consultant under this Agreement is not to exceed _____ dollars (\$ _____) without a written amendment executed by the Parties.
2. **Invoicing.**
 - a. Consultant shall prepare and send by electronic format a detailed monthly invoice to ap.invoices@ThorntonCo.gov.
 - b. Invoices become due and payable thirty (30) days after date of receipt by Thornton of a complete and correct invoice.
 - c. Invoices shall reference the Purchase Order Number assigned by Thornton, and be itemized showing hourly breakdowns for personnel, and other charges.
 - d. Each invoice will show the total amount from the date of the original Agreement, and any subsequently issued Purchase Orders and amendments that change the amount of the Agreement. In addition, invoices must include billing and payment summaries up to the date of the submitted invoice. Thornton reserves the right to withhold final payment until the Services are complete. Consultant shall not perform any Services without receiving a Purchase Order issued by Thornton.
 - e. Consultant shall break down invoices by the phases specified in the Scope of Work. Each phase shall be further itemized by cost for each completed task performed for that phase. Consultants will only invoice Thornton for work that is performed to Thornton's satisfaction, or the percentage of work satisfactorily performed for that phase, unless Consultant has Thornton's written approval in advance. Under no circumstances will Consultant submit an invoice for work for more than the total amount specified for any given phase. Furthermore, under no circumstances may Consultant bill or otherwise invoice for work not specifically authorized.

G. **Changes to Consultant's Scope of Services.**

1. A change in the Consultant's Scope of Services shall constitute any change or amendment of Services, which is different from or additional to Consultant's Scope of Services as defined in **Exhibit A** of this Agreement.
2. No change to the General Scope of Services, including any requested changes to contractually established billable/unit rates, shall be effective or paid unless authorized by a written Amendment executed by Thornton's City Manager ("Manager") or Manager's designee(s) with the same formality as this agreement.
3. Except as expressly provided herein, no agent, employee, or representative of Thornton has the authority to change or modify - directly or by an implied course of action, the Scope of Services or the terms of this Agreement.
4. If Consultant proceeds without such written authorization, then Consultant shall be deemed to have waived any claim for additional compensation, including a claim based on a theory of promissory estoppel, unjust enrichment, quantum meruit, or implied Agreement.

H. **Consultant's Personnel, Subcontracting.**

1. Approval of Key Professionals. Consultant shall perform the Services with the persons, personnel, subconsultants and named entities identified in the attached **Exhibit B**, unless otherwise authorized in writing by Thornton. All of Consultant's key professional personnel identified in **Exhibit B** shall be assigned by Consultant or its subconsultant (including any subcontractors) to perform the Services under this Agreement. If Thornton requires Consultant to identify certain subcontractors, other entities, personnel or individuals ("Key Professionals") before the Agreement's commencement date for Thornton's review and acceptance, Consultant shall submit a list of Key Professionals, along with their résumés and information, describing each one's abilities to perform their assigned tasks no later than thirty (30) days before this Agreement's commencement date. If Thornton does not respond within 15 days from receiving Consultant's list, all listed Key Professionals will be deemed approved by Thornton.
2. Replacement of Key Professionals. The Parties understand that Key Professionals will be engaged to perform their specialty Services required by this Agreement, and Consultant and its subconsultant shall retain Key Professionals for the term of this Agreement to the extent practicable and to the extent their specialties maximizes the quality of Services performed hereunder. If Consultant decides to replace a Key Professional, it shall notify Thornton in writing of the changes it desires to make. Thornton will respond to Consultant regarding replacement of a Key Professional within fifteen (15) days from the date Thornton receives Consultant's request. Consultant shall not replace any Key Professional without Thornton's written approval, which will not be withheld unreasonably.

3. Performance by Key Professionals. If, during the term of this Agreement, Thornton determines that a Key Professional's performance is unacceptable, they will notify Consultant and give Consultant the time that Thornton considers reasonable to correct such performance. Thereafter, if a Key Professional's performance is still unacceptable, Thornton will notify Consultant to reassign the Key Professional and Consultant shall use its best efforts to obtain an adequate substitute within ten (10) days from the date of the notice.

4. Consultant's Subconsultants.
 - a. Thornton's Approval Required. Consultant may retain and subcontract with subconsultants listed in **Exhibit B, Consultant's Personnel and Subconsultants Listing**; however, Consultant shall not execute a final agreement with any other subconsultant without obtaining written approval from Thornton first. For Thornton's approval, Consultant must submit a written description of the nature and extent of the Services a subconsultant will provide, and the subconsultant's name, address, professional experience and qualifications and any other important information. Thornton's approval of the subconsultant shall not relieve Consultant of any obligations under this Agreement. Since Consultant's representations and professional qualifications are the consideration for Thornton to enter into this Agreement, Thornton, for any reason, has the right to reject any proposed subconsultant it deems unqualified or unsuitable to perform the proposed Services, and to limit the number of subconsultants retained by Consultant.

 - b. Conflict of Interest Prohibited. No Consultant shall retain any subconsultant to perform any Services under this Agreement if Consultant, by making a reasonable inquiry, knows or should know is connected with the sale or promotion of equipment or material used to perform any Services that would be a conflict of interest. However, in unusual circumstances, Thornton may waive in writing a conflict of interest provided Consultant has fully disclosed the conflict of interest beforehand. If at any time, the Consultant becomes aware of a potential conflict of interest, it shall immediately notify Thornton in writing of the potential conflict. The notification shall contain all pertinent information to fully and accurately describe the conflict of interest. Thornton, in its sole discretion, shall determine the existence of a conflict of interest and may terminate this Agreement in the event such a conflict exists after it has given Consultant written notice describing the conflict.

5. Approval, Rejection of Consultant's Key Professionals, Personnel and Subconsultants. Thornton may, in its reasonable discretion, approve or reject any person or persons at any time working for Consultant. No acceptance by Thornton of any Key Professional, subcontractor, supplier, or

other individual or entity, whether initially or as a replacement, shall constitute a waiver of any right of Thornton to reject defective Work.

6. Waiver. Consultant shall be fully responsible to Thornton for all acts and omissions of its subcontractors, Key Professionals and other persons performing or furnishing any Work or Services on behalf of Consultant just as Consultant is responsible for Consultant's own acts and omissions. Any agreement between Consultant and its approved subconsultant(s), Key Professionals and other persons must have a legally binding provision whereby they agree to waive all rights to make a claim of liability or payment against Thornton arising out of the performance of the Services under this Agreement. Nothing in the Contract Documents shall create any contractual relationship or obligation to pay any monies due to the same, except as the law may require.

I. Compliance with All Laws and Regulations.

1. All of the Services performed under this Agreement by Consultant shall comply with all applicable laws, rules, regulations, and codes of the United States and the State of Colorado and with the charter, ordinances, and rules and regulations of Thornton.
2. All applicable state and federal laws, county and city ordinances, licenses and regulations of all authorities having jurisdiction over this Agreement and the Services shall apply to this Agreement throughout and will be deemed to be included in this Agreement the same as though written out in full.

J. Confidentiality of Thornton's Information.

1. Thornton will provide Consultant with reports and such other data as may be available to Thornton ("Project Information") and reasonably required by Consultant to perform the Services.
2. No Project Information shall be disclosed by Consultant to third parties without prior written consent of Thornton or pursuant to a lawful Court Order directing such disclosure.
3. All Project Information provided by Thornton to Consultant shall be returned to Thornton at the end of the Project upon Thornton's request. Consultant is otherwise authorized by Thornton to retain copies of Project Information at Consultant's expense.

K. Ownership, Use of Work Product.

1. All Services, data, drawings, designs, plans, reports, studies, computer programs (nonproprietary), computer input and output, analyses, tests, maps, surveys, aerial photography or any other materials ("Work Product")

developed for this Project by Consultant are and shall be the sole and exclusive property of Thornton. Aerial photography supplied by Thornton to Consultant shall not be utilized by Consultant for any purpose other than the Project.

2. Consultant hereby transfers any copyright, trademark, or other intellectual property rights of Work Product to Thornton. However, any reuse of Work Product by Thornton without prior written authorization by Consultant other than for the specific intended purpose of this Agreement will be at Thornton's risk.
3. Consultant shall provide Thornton with ten (10) days of advance written notice that it has Project Information and Work Product it intends to dispose of, during which time Thornton may take physical possession of such documents.

L. **Compliance With Patent, Trademark and Copyright Laws.**

1. Consultant warrants that all Services performed under this Agreement shall comply with all applicable patent, trademark, and copyright laws, rules, regulations, and codes of the United States. Consultant shall not utilize any protected patent, trademark, or copyright in performance of the Services unless Consultant has obtained proper permission and all releases and other necessary documents. If Consultant specifies or uses any material, equipment, process, or procedure, that is protected, Consultant shall disclose such patents, trademarks, and copyrights in Consultant's deliverables.
2. Consultant releases, indemnifies, and holds harmless Thornton, its officers, agents, and employees from any and all claims, damages, suits, costs, expenses, liabilities, actions, or proceedings of any kind or nature whatsoever, including attorneys' fees and costs, of or by anyone whomsoever, in any way resulting from, or arising out of, directly or indirectly, the performance of Services under this Agreement which infringes upon any patent, trademark, or copyright protected by law.

III. GENERAL CONDITIONS

- A. **Indemnification.** To the fullest extent permitted by law, Consultant agrees to defend, indemnify and hold harmless Thornton, its officers, agents and employees, from and against all liability, judgments, damages or losses which arise out of, result from, or are in any manner connected with the Services to be performed under this Agreement, to the extent it is determined such liability, judgments, damages or losses were caused by the negligent acts, errors, or omissions of Consultant, any subconsultant of Consultant, or any officer, employee or agent of Consultant, or anyone else employed directly or indirectly by any of them or anyone for whose acts any of them may be liable and will pay to Thornton any expenses incurred by reason of such liability, judgments, damages or losses,

including, but not limited to, court costs and reasonable attorneys' fees incurred in defending or investigating such claims. Such payments on behalf of Thornton shall be in addition to any and all other legal remedies available to Thornton and shall not be considered Thornton's exclusive remedy.

B. **Insurance.** Consultant agrees to procure and maintain in force during the term of this Agreement, at its own cost, the following coverages:

1. **Workers' Compensation Insurance.** Workers' Compensation Insurance as required by the Labor Code of the State of Colorado and Employer's Liability Insurance. Statutory limits are required. Evidence of qualified self-insured status may be substituted.

2. **Commercial General Liability Insurance** **(MINIMUM LIMITS)**

- | | | |
|----|---|-------------|
| a. | Each Occurrence | \$2,000,000 |
| b. | Products/Completed Operations Aggregate | \$2,000,000 |
| c. | Personal and Advertising Injury | \$2,000,000 |
| d. | General Aggregate | \$4,000,000 |
- e. This policy shall include coverage protecting against bodily injury, property damage, and personal injury claims arising from the exposures of:
- i. Premises-operations;
 - ii. Products and completed operations including materials designed, furnished, and/or modified in any way by Consultant;
 - iii. Independent subcontractors or subconsultants;
 - iv. Contractual liability risk covering the indemnity obligations set forth in this Agreement; and
 - v. Where applicable, liability resulting from explosion, collapse, or underground exposures. Where applicable, liability resulting from explosion, collapse, or underground exposures.
- f. If the above insurance is written on a claims-made form, it shall continue for three (3) years following termination of this Agreement. The insurance shall provide for a retroactive date of placement prior to or coinciding with the effective date of this Agreement.

3. Professional Liability Insurance **(MINIMUM LIMITS)**
- | | | |
|----|---|-------------|
| a. | Each Claim | \$2,000,000 |
| b. | Aggregate | \$2,000,000 |
| c. | If the above insurance is written on a claims-made form, it shall continue for three (3) years following termination of this Agreement. The insurance shall provide for a retroactive date of placement prior to or coinciding with the effective date of this Agreement. | |
4. Automobile Liability Insurance. Automobile Liability Insurance with minimum combined single limits for bodily injury and property damage of not less than one million dollars (\$1,000,000) for any one (1) occurrence. This insurance will insure against bodily injury and/or property damage arising out of Consultant's operation, maintenance, use, loading or unloading of any auto including owned, non-owned, hired, and employee autos.
5. Additional Insured. Consultant shall name Thornton, its officers, agents, and employees as additional insureds with respect to the commercial general liability and auto liability coverages required herein. A Certificate of Insurance shall be completed and forwarded, along with the Additional Insured Endorsements, to Thornton by Consultant's Insurance Agent(s) as evidence that policies providing the required coverages, conditions, and minimum limits are in full force and effect and shall be subject to review and approval by Thornton **prior to commencement of any Services under this Agreement.**
6. Certificates of Insurance. The initial completed Certificates of Insurance and Additional Insured Endorsements shall include Consultant's e-mail address for future inquiries and updates, and shall be sent to:

City of Thornton
 Patrick Hinterberger, Contracts Supervisor
 9500 Civic Center Drive
 Thornton, CO 80229-4326

Subsequent Certificates of Insurance, along with the renewal Additional Insured Endorsements, indicating renewal of coverage(s) shall be sent to Thornton's Risk Management office at certificatesofinsurance@ThorntonCo.gov no later than thirty (30) days prior to the expiration date and shall indicate "Renewal COI" and the Project Number in the e-mail subject line.

Thornton further reserves the right to request and receive a certified copy of any policy and any endorsement. Consultant agrees to execute any and all documents necessary to allow Thornton access to any and all required insurance policies and endorsements.

7. Failure to Insure. Failure on the part of Consultant or a subconsultant to procure or maintain policies providing the required coverages, conditions, and minimum limits **shall constitute a material breach of Agreement upon which Thornton may immediately terminate this Agreement**, or at its discretion, Thornton may procure, or renew any such policy, or any extended reporting period, and may pay any and all premiums in connection therewith, and all monies so paid by Thornton shall be repaid by Consultant to Thornton upon demand, or Thornton may offset the cost of such premiums against any monies due or that become due to Consultant from Thornton.
8. Other Insurance Requirements.
 - a. From time to time, Thornton, by mutual agreement with Consultant, may require Consultant to obtain other insurance with varying limits against other insurable hazards relating to the Services.
 - b. Consultant shall procure and maintain the minimum insurance coverages listed herein. Such coverages shall be procured and maintained with forms and insurers acceptable to Thornton. All coverages shall be continuously maintained to cover all liability, claims, demands, and other obligations assumed by Consultant pursuant to this Agreement. In the case of any claims-made policy, the necessary retroactive dates and extended reporting periods shall be procured to maintain such continuous coverage.
 - c. Consultant shall cause any subconsultants to procure and maintain adequate levels of insurance coverage for Workers' Compensation, Commercial General Liability, Automobile Liability, Professional Liability and other coverages as Contractor may require.
 - d. Every policy required above shall be primary insurance and any insurance carried by Thornton, its officers, or its employees shall be excess and not contributory insurance to that provided by Consultant. Consultant shall be solely responsible for any deductible losses under the policies required above.
 - e. Consultant shall not be relieved of any liability, claims, demands, or other obligations assumed pursuant to this Agreement by reason of its failure to procure and maintain insurance, or by reason of its failure to procure or maintain insurance in sufficient amounts, durations, or types.

- f. All policies shall include a provision that the coverages afforded under the policies shall not be canceled or materially changed prior to the natural termination date until at least thirty (30) days prior written notice has been sent to Thornton. The Certificate(s) shall indicate the form used, if any, under which this provision is included.

C. **Governmental Immunity.** The Parties understand and agree that Thornton, its officers, and its employees are relying on, and do not waive or intend to waive by any provision of this Agreement, the monetary limitations or any other rights, immunities and protections provided by the Colorado Governmental Immunity Act, C.R.S. 24-10-101 et seq., as from time to time may be amended, or otherwise available to Thornton, its agents, officers, or employees.

D. **Independent Contractor.**

1. It is understood and agreed by and between the Parties that the status of Consultant shall be that of an independent contractor and of a person retained on a contractual basis to perform professional and/or technical services for limited periods of time and it is not intended, nor shall it be construed, that Consultant is an employee or officer of Thornton under Chapter VII of the City Charter, or Chapter 54 of the City Code, or for any purpose whatsoever.
2. Without limiting the foregoing, the Parties hereby specifically acknowledge that **Consultant** or any employee, agent or subconsultant of Consultant **is not entitled to unemployment insurance benefits unless unemployment compensation coverage is provided by Consultant or some other entity besides Thornton, that Consultant is not entitled to Workers' Compensation benefits from Thornton and that Consultant is obligated to pay federal and state income tax on any monies earned pursuant to this Agreement.** The Parties further acknowledge that the provisions of this paragraph are consistent with Consultant's insurance obligations which are set forth in this Agreement.

E. **Termination.**

1. **Termination for Convenience.**
 - a. Thornton shall have the right to terminate this Agreement at any time upon seven (7) days advance written notice to Consultant ("Notice of Termination").
 - b. Should Thornton terminate this Agreement for convenience, in accordance with subsection E.1.a above, Thornton shall pay Consultant for all Services previously authorized and properly completed prior to the date of termination set forth in the Notice of Termination. Consultant shall not be entitled to profit or overhead on uncompleted Services.

- c. In any event, the terms and conditions of this Agreement shall survive the termination date of the Agreement and continue until the Services are complete to Thornton's satisfaction.
 - 2. Termination for Cause. Thornton shall have the right to terminate this Agreement immediately upon notice to Consultant if Consultant has materially breached the terms of this Agreement. In such event, Thornton shall pay Consultant for all Services previously authorized and completed prior to the date of termination in compliance with the terms of this Agreement and to Thornton's satisfaction, provided that there shall be no limitation of Thornton's right to exercise any and all available legal and equitable remedies.
 - 3. Termination for Non-Appropriation. In the event that the Thornton City Council fails to appropriate funds for the continuation of this Agreement for any fiscal year beyond the initial fiscal year hereof, Thornton may terminate this Agreement without penalty as of the end of the fiscal year for which funding was appropriated and shall be released of further obligations.
- F. **Venue / Law / Statute Of Limitations.** This Agreement shall be governed by the laws of the State of Colorado, notwithstanding its choice of law principles. Any legal action concerning the provisions hereof shall be brought in the District Court, County of Adams, State of Colorado. Any action arising out of or relating to this Agreement or the Services asserted by Consultant against Thornton shall be brought within two (2) years from when the action accrued, pursuant to C.R.S. § 13-80-102(h).
- G. **Notice.** Any notice or communication between Consultant and Thornton which may be required, or which may be given, under the terms of this Agreement shall be in writing, and shall be deemed to have been sufficiently given when directly presented or sent pre-paid, first class United States Mail, addressed as follows:

THORNTON:

City of Thornton
Attention: Contracts Supervisor
9500 Civic Center Drive
Thornton, CO 80229-4326

CONSULTANT:

Company Name
Attention:
Address

- H. **Exhibits.** All documents marked and referred to as “Exhibits” in this Agreement are incorporated by this reference and are made a part of this Agreement.
- I. **Assignment of Agreement Not Permitted.** Consultant shall not be entitled to assign, pledge, or transfer its duties and rights, in whole or in part, under this Agreement, or any Work, Services, or its rights to any payment from Thornton without the prior written consent of Thornton, which Thornton may withhold in its sole discretion. Any approved assignee of Consultant’s interest in this Agreement, any Work or Services shall execute a written acknowledgement in a form satisfactory to Thornton expressly agreeing to be bound by all of its terms. No assignment shall relieve Consultant of primary liability under this Agreement. In this regard, Consultant understands that the performance of the scope of work is considered personal services under this Agreement.
- J. **General Warranty.** Consultant will faithfully perform the services required under this Agreement in accordance with standards of care, skill, training, diligence, and judgment provided by competent professionals who perform services of a similar nature as described in this Agreement.
- K. **No Waiver of Rights.** No assent, expressed or implied, to any breach of any one (1) or more of the terms and conditions of this Agreement shall be deemed to be or taken to be by Thornton a waiver of any subsequent breach of any such terms and conditions.
- L. **Inspection of Records.** In connection with the Services performed hereunder, Thornton and any of its duly authorized representatives shall have access to all of Consultant’s and subconsultant’s books, documents, papers, and any other records of Consultant and subconsultants that relate to the Services. Consultant further agrees that such records shall contain information concerning the personnel who performed the Services, the specific tasks they performed and the hours they worked. Consultant shall retain these records for three (3) years after termination of this Agreement.
- M. **Conflict of Interest.** Consultant agrees that it and its subsidiaries, affiliates, subconsultants, principals, or employees shall not engage in any transaction, activity, or conduct which would result in a conflict of interest. Consultant represents that it has disclosed any and all current or potential conflicts of interest. A conflict of interest shall include transactions, activities, or conduct that would affect the judgment, actions, or Services of Consultant by placing Consultant’s own interests, or the interest of any party with whom Consultant has a contractual arrangement, in conflict with those of Thornton. Thornton, in its sole discretion, will determine the existence of a conflict of interest and may terminate this Agreement in the event such a conflict exists after it has given Consultant written notice, which describes the conflict. Consultant shall have twenty (20) days after the notice is received to eliminate or cure the conflict of interest in a manner acceptable to Thornton.

- N. **Coordination of Services.** Consultant shall fully coordinate its Services with other consultants, contractors or other entities performing services on the Project that interfaces with or is affected in any way by Consultant's Services, and with any interested Thornton or other governmental agencies.
- O. **Non-Discrimination.** Consultant, its agents, employees, contractors, and subconsultants shall not discriminate on the basis of race, color, creed, national origin, ancestry, age, gender, religion, or mental or physical disability in any policy or practice.
- P. **Advertising and Public Disclosures.** Consultant shall not include any reference to this Agreement or to the Services performed hereunder in any of its advertising or public relations materials without first obtaining the written approval from Thornton. Any oral presentation or written materials related to Consultant's Services shall include only presentation materials, Work product, designs, renderings, and technical data that have been accepted by Thornton. Thornton shall be notified in advance of the date and time of any such presentations. Nothing herein, however, shall preclude the transmittal of any information to officials of Thornton, including without limitation, the Mayor or member or members of City Council.
- Q. **Other Project Work.** Consultant and its subsidiaries and affiliates shall not bid upon or otherwise attempt to perform any other work associated with this Project. Consultant shall require in its contracts with its subconsultants that they and their subsidiaries or affiliates shall not bid upon or otherwise attempt to perform any work associated with this Project other than the Services described in their written agreements unless specifically approved in writing by Thornton.
- R. **Time is of the Essence.** The Parties agree that in the performance of the terms and requirements of this Agreement by Consultant that time is of the essence.
- S. **Inurement.** The rights and obligations of the Parties set forth herein shall inure to the benefit of and be binding upon the Parties and their respective successors and assigns permitted under this Agreement.
- T. **Headings.** The headings contained in this Agreement are for reference purposes only and shall not in any way affect the meaning or interpretation of this Agreement.
- U. **Joint Venture.** If Consultant is a Joint Venture, participants shall be jointly and severally liable to Thornton for the performance of all duties and obligations of Consultant set forth in this Agreement.
- V. **Taxes and Licenses.** Consultant shall promptly pay, when they are due, all taxes, excises, license fees, and permit fees of whatever nature applicable to the Services, and shall take out and keep current all required municipal, county, state, or federal licenses required to perform the Services. Consultant shall furnish Thornton, upon request, duplicate receipts or other satisfactory evidence showing or certifying to the proper payment of all required licenses and taxes. Consultant

shall promptly pay, when due, all bills, debts, and obligations it incurs performing the Services and to allow no lien, mortgage, judgment, or execution to be filed against land, facilities, or improvements owned by Thornton.

- W. **Severability.** In the event any of the provisions, or applications thereof, of this Agreement are held to be unenforceable or invalid by any court of competent jurisdiction, the validity and enforceability of the remaining provisions, or applications thereof, shall not be affected.

- X. **No Third Party Beneficiaries.** The enforcement of the terms and conditions of this Agreement and all rights of action relating to such enforcement, shall be strictly reserved to Thornton and Consultant and nothing contained in this Agreement shall give or allow any such claim or right of action by any other or third person on such Agreement. It is the express intention of Thornton and Consultant that subconsultants and any other persons other than Thornton or Consultant receiving any benefits from this Agreement shall be deemed to be incidental, and not intended, beneficiaries only.

- Y. **Electronic Signatures And Electronic Records.** The Parties consent to the use of electronic signatures. The Agreement, and any other documents requiring a signature hereunder, may be signed electronically by the Parties in the manner specified by any applicable City regulation, rule, and/or ordinance. The Parties agree not to deny the legal effect or enforceability of the Agreement solely because it is in electronic form or because an electronic record was used in its formation. The Parties agree not to object to the admissibility of the Agreement in the form of an electronic record, or a paper copy of an electronic document, or a paper copy of a document bearing an electronic signature, on the ground that it is an electronic record or electronic signature or that it is not in its original form or is not an original.

- Z. **Entire Agreement.** The Parties acknowledge and agree that the provisions contained herein constitute the entire Agreement and that all representations made by any officer, agent, or employee of the respective Parties unless included herein are null and void and of no effect. No alterations, amendments, changes, or modifications to this Agreement, except those that are expressly reserved herein, shall be valid unless they are contained in an instrument, which is executed by the Parties with the same formality as this Agreement.

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This Agreement is expressly subject to and will not become effective or binding on Thornton until it is fully approved and executed by Thornton.

APPROVED AS TO LEGAL FORM:
Tami Yellico, City Attorney

CITY OF THORNTON, COLORADO:

By: _____
Diana Fantano Hoffman
Senior Assistant City Attorney

Kimberly Newhart
Finance Director

ATTEST:

CITY OF THORNTON, COLORADO:

Kristen N. Rosenbaum, City Clerk

Sean Saddler, PE
Support Services Director

ATTEST FOR FIRM SIGNATURE: (If corporation)	INSERT FIRM NAME (ALL CAPS):
_____ Signature	_____ Signature
_____ Print Name	_____ Print Name
_____ Title	_____ Title

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EXHIBIT A

CONSULTANT'S GENERAL SCOPE OF SERVICES

Project Description

The Scope of this Professional Service Agreement includes the design of the construction of a segment of the Thornton Water Project, the segment known as Segment F Pipeline Design, Project No. 12-777H9

DESCRIPTION OF SERVICES TO BE PERFORMED

Thornton requires that the following Design Services be performed by Consultant for Segment F of the Thornton Water Project located within unincorporated Larimer County, Colorado and unincorporated Weld County, Colorado. The Services include design of 5.8 miles of 42-inch welded steel raw water pipeline and associated appurtenances, including but not limited to air release valves, mainline isolation valves, blow-off valves, drain valves, manways, temporary pipe bulkheads, corrosion protection system, and fiber optic conduit.

The water pipeline from the source water pump station, in general, extends southeast to the Larimer County Canal (LCC), then south along the LCC, then east to Colorado State Highway 1 (SH1). The crossing of SH1 is not included in this design. The route then generally follows the Tri-State Generation easement southeast to Larimer County Road (LCR) 56, then east along LCR 56 to the BNSF Railroad, then extending south along the BNSF Railroad to a point of connection with pipeline designed by others on the south side of LCR 54. **Attachment 1** shows the general pipeline location and alignment.

Consultant to identify tunneled crossing locations per regulatory/facility owner requirements. Jurisdictional water crossings and irrigation ditches that are historically eligible or potentially eligible for the National Register of Historic Places or State Register of Historic Places may require tunneling. Coordinate with Thornton and Thornton's Environmental Consultant as described below regarding nationwide permits to allow open-cut crossing of waters of the US. For the basis of Consultant's proposal, the following tunneled crossings are assumed:

1. Larimer County Road 9; and
2. Burlington Northern Santa Fe Railroad.

It is anticipated that other trenchless crossings may be required. Assume two (2) additional tunneled crossings for this proposal, for a total of four (4).

Pending ditch owner approval, irrigation facility crossings may be constructed using open cut methods. Consultant shall coordinate the need for tunnel crossings with irrigation facility owner and additional permitting requirements with Thornton's environmental consultant.

Consultant shall design this work in a single, complete construction bid package.

Consultant will be expected to follow specific requirements for permitting, construction and design in accordance with Larimer County requirements.

Consultant will be required to coordinate Project design efforts with other portions of the TWP, including the SWPS, SH 1 crossing, and pipeline at the downstream connection near the intersection of the BNSF Railroad and LCR 54.

Consultant shall design a complete and effective impressed current cathodic protection system for corrosion protection of the water pipeline designed to be consistent and integrated with other Thornton Water Project work packages.

Consultant shall design a full-length fiber optic conduit duct bank (three – two-inch diameter SDR 11 HDPE) located parallel to the waterline with appropriately located handholes.

Mainline isolation valves shall be manual and located in vaults. The need for mainline isolation valves, in some cases, may be determined by regulatory agencies, roadway crossings, topographical features, and required drain times for maintenance or emergencies. It is Thornton's desire to keep mainline isolation valves to a minimum. Consultant shall determine regulatory agency requirements and provide a recommendation on the number and location of mainline isolation valves.

Consultant shall also plan to participate in four (4) public outreach meetings with Thornton.

The Consultant shall develop, revise, and provide information and input required for the Baseline Schedule and progress schedule updates for the performance of the work in accordance with this Agreement. The schedule shall employ the Critical Path Method (CPM) as set forth in the Associated General Contractors of America (AGC) publication, *"The Use of CPM in Construction, A Manual for General Contractors and the Construction Industry,"* Copyright 1976. The CPM network shall be utilized for planning, scheduling, and reporting the progress of the work. Work activities shall be indicated in a time-scaled format, and a calendar shall be shown on all sheets of paper along the entire sheet length.

Thornton's Owner's Advisor (OA) for the Thornton Water Project is Jacobs Engineering Group, Inc. Consultant shall include coordination with the OA throughout the full course of its Scope of Services.

I. Information Available

Thornton will provide Consultant with available information related to the Project. Information will include Thornton's standard front-end documents for construction contracts, general alignment for the pipeline, guide specifications as noted below, conceptual level hydraulic profile and surge analysis, and title work, legal descriptions, and exhibits of easements as they become available. Thornton can provide related electronic Computer Aided Design and Drafting (CADD) files, including surveys completed to identify and acquire necessary project related easements. Consultant will be responsible for verifying all information supplied by Thornton. The documentation given to Consultant is for information only, and Thornton does not guarantee its accuracy. This information will be for Consultant's initial guidance only.

Guide Specifications

To provide design consistency for the Thornton Water Project, Thornton will provide the following guide specifications for Consultant's use in developing work package specific technical specifications:

- Section 01 33 00 Submittal Procedures;
- Section 01 45 16.13 Contractor Quality Control;
- Section 33 05 01.01 Welded Steel Pipe and Fittings; and
- Section 40 27 02 Process Valves and Operators.

The guide specifications present Thornton specific requirements for the Work, but are intended to be modified by Consultant for work package specific requirements without compromising desired consistency for the Thornton Water Project. However, Consultant shall have responsibility for the final, edited specifications that are included in the Construction Documents.

Thornton has contracted with Western States Land Services (WSLS) to assist Thornton with obtaining land for the, in general, permanent (50-foot) easements and temporary (40-foot) easements for construction of the Segment F pipeline. The general alignment of easements has been determined by Thornton and will be provided to the Consultant. Acquisition of easements will continue during the design phase of this segment. Consultant and survey access to all properties will not be available at the start of this work and easement acquisition for portions of the alignment may take the entire duration of this contract to conclude to ensure and verify that all property acquisition needed for construction has been obtained. Consultant to locate the water pipeline within the permanent easement. Consultant to verify that infrastructure can be located fully within the permanent easement and that construction activities can be accommodated within the permanent and temporary easements. If a Right of Entry is needed for design investigations and surveys; Consultant will identify these early in the process. Consultant shall coordinate with WSLS regarding individual landowner requirements resulting from easement negotiations and include those requirements within the Contract Documents. Consultant shall coordinate with WSLS and Thornton regarding the need for additional permanent or temporary construction easements at the tunnel locations and/or for staging and/or laydown areas.

Consultant shall review easement documents obtained by Thornton. Thornton may not have all easements acquired during the design process. A desired easement alignment will be selected by Thornton and will be provided to Consultant.

Consultant to support Thornton in eminent domain proceedings for pipeline easements. Assume forty (40) hours are required for this task. Tasks may include, but are not limited to, meeting with land representatives, property owners, and preparation of exhibits.

Consultant shall review water pipeline easements and title work for the need for coordination, “consent letters,” approvals, and/or other permissions needed by others having existing or overlapping property interests in each property. Consultant shall include information in the permit matrix and Utility Coordination technical memorandum. Consultant shall prepare consent letters during the utility coordination phase and with Thornton’s approval submit upon Thornton’s behalf. Title work or updated title work can be ordered by Thornton for each property (allow one (1) month once requested to obtain title work). Designer to note that buried power lines, to be provided by PVREA, will be installed in an easement parallel and adjacent to the pipeline permanent easement for the westerly approximately one (1) mile of the Project.

Consultant will review agreements between Thornton and property owners, identify requirements most appropriately addressed during construction by construction contractor, and will include those property owner requirements in the Contract Documents. Property owner requirements include, but are not limited to, land restoration, temporary fencing, fence replacement, tree mitigation, and irrigation coordination. Consultant to coordinate with WSLs, as necessary. Consultant shall assume property owner agreements for 16 individual parcels and 13 unique landowners.

The Larimer County 1041 Permit includes approximately 82 Conditions of Approval (COA) with which the Work must comply. Those COA (applicable to this pipeline design are included in **Attachment 2**. Consultant shall review the COA and include those requirements in the design and the project compliance matrix.

The Larimer County 1041 Permit includes approximately 162 mitigations with which Thornton has committed to compliance. Those mitigations applicable to this pipeline design are included in **Attachment 3**. Consultant shall review the mitigations and include those requirements in the design and the project compliance matrix.

As shown in **Attachments 2 and 3**, some items require Consultant to include, as part of its project team, specialty services not typically required for pipeline design, such as soil scientist, agronomist, or agricultural engineer (Condition 68) and an ISA certified arborist (Condition 78) local to northern Colorado. Consultant shall include such services to be performed by qualified personnel, either directly or through subconsultants, as required. In addition, Consultant is advised that approximately one-half mile of the pipeline alignment west of Larimer County Road 9 is located in an agricultural field that is irrigated with a subsurface drip system. The pipeline alignment is adjacent and parallel to the header for this system. Consultant shall consider this system in design and development of construction restrictions to minimize disruption and cost of restoration. Consultant shall include such services to be performed by qualified personnel, either directly or through subconsultant.

To better assure an accurate estimate throughout the design process, Consultant will collaborate with Thornton to comment on Thornton’s established baseline budget for the Project within thirty (30) days of Notice to Proceed.

The Consultant shall submit a preliminary baseline cost loaded schedule (Schedule) for review and comment by Thornton. The Consultant shall meet with Thornton within thirty (30) days following Notice to Proceed for a joint review of the preliminary baseline Schedule and to identify any corrections or adjustments to the preliminary baseline Schedule. Within fourteen (14) days of such joint review meeting, the Consultant shall submit final baseline Schedule incorporating any decisions from the joint review meeting. The final baseline Schedule will replace the preliminary baseline Schedule for the remainder of the execution of the work.

The Consultant shall indicate the duration for each activity and shall represent time considering the scope of the Work and resources planned for the activity. The Consultant shall prepare the tabulated schedule so that the following information is provided with respect to each activity:

- Activity number;
- Original duration;
- Activity description;
- Early start date (calendar dated);
- Early finish date (calendar dated);
- Float;
- Budgeted Cost; and
- Actual Cost.

The baseline schedule shall encompass the entire Work. The baseline schedule shall show the sequence and interdependence of activities required for complete performance of the Work. The baseline schedule shall consist of, but not be limited to, the following work breakdown structure (WBS) nodes for each Phase of the Work with additional detail to allow Consultant to manage and report progress and for Thornton to confirm progress:

- Pre-Design;
- Preliminary Design;
- Pre-Final Design;
- Final Design and Bid Documents;
- Bidding Support;
- Construction;
- Closeout; and
- Warranty.

The baseline schedules shall include milestones for at least following activities:

- Notice to Proceed (NTP);
- Submit Segment F Water Pipeline Pre-Design (thirty-five percent [35%] Design);
- Pre-Design Review Meeting;
- Submit Water Pipeline Preliminary Design (seventy-five percent [75%] Design);

- Attend Field Inspection Review (FIR) Meeting;
- Submit Pre-Final Design and Larimer County Technical Review;
- Final Office Review (FOR) Meeting;
- Submit Final Design, Permits, and Bid Documents;
- Submit "For Construction" Contract Documents;
- Submit As-Built documents; and
- Project Complete.

The Consultant shall be responsible for assuring that work sequences are logical, and activity durations are reasonable based on their scope, and the resources allocated for them and that the baseline schedules reflect a coordinated plan of the Work. Each work activity shall have an assigned dollar value (cost-loading) using the Agreement pay item amounts related to such work activity. Each Agreement pay item shall have at least one scheduled activity. The total of cost loading shall equal the Agreement Price. The Consultant shall revise the cost loading and schedule activities as required to incorporate Change Orders.

The Consultant shall prepare and provide to Thornton, monthly, an updated progress schedule at a minimum of one (1) week before and consistent with that month's invoice. The Consultant shall prepare and provide a narrative report and a summary of the status of the ongoing work, including permitting, submittals, and progress. The narrative shall address any changes, additions, or deletions to schedule activities including changes to activity number, activity name, activity original duration, activity logic, or activity constraints. The remaining duration of a schedule activity shall be the result of the Consultant's best estimate of when that schedule activity will be completed based on the resources assigned for that activity and not the percent of the Work remaining.

Thornton is actively identifying the Segment F water pipeline easements and initiating acquisition of required easements. Thornton will issue a Notice to Proceed for the following pipeline design:

- II. Pre-Design (thirty-five percent [35%]) of the Segment F Pipeline
 - A. Consultant shall plan, organize, and conduct a Project Kickoff Meeting with Thornton staff for design of the Segment F water pipeline when the Notice to Proceed is issued.
 - B. Consultant shall conduct data gathering and Progress Meetings, with the Thornton Water Project Team. Consultant shall plan to attend up to twenty-six (26) meetings during this phase at Thornton's IMC or via remote, video conferencing with Thornton's staff to exchange and share information during preparation of the Pre-Design documents (for proposal pricing purposes assume all meetings are at the IMC). Consultant to prepare and distribute meeting agenda and minutes to attendees.

- C. Design shall conform to all current Thornton construction specifications, construction details, standard sections, storm and sanitary sewer crossing elevations and major drainage way planning.
- D. Design shall comply with Larimer County requirements including, but not limited to, the mitigation and commitments made in the 1041 application and Conditions of Approval (COA) for Thornton's 1041 Permit (See **Attachment 2**). See **Attachment 3** for additional mitigation and commitments. Consultant will be responsible for verifying all information supplied by Thornton. Consultant shall prepare a compliance matrix documenting that the construction packages meet Larimer County requirements.
- E. Consultant shall contact the Utility Notification Center for utility marking, and have budget available for paying utility marking that is not normally performed for design services and shall review information obtained from all applicable public and private utility providers to accurately depict existing utility locations, depths, and points. Consultant shall determine whether the level of accuracy thus provided is adequate. Consultant shall be responsible for establishing such accuracy through other appropriate means such as surveying and potholing. Consultant to assume that up to fifty (50) potholes are required to verify horizontal and vertical alignment of existing utilities. Consultant is responsible to pay the cost for the first fifty (50) potholing locations via vacuum excavation in the not-to-exceed fee. Consultant shall provide a unit price per each additional pothole location. Consultant to provide recommended potholing plan with recommendations for needed additional potholes. If Thornton and Consultant agree that additional pothole locations are necessary, Consultant shall be compensated at the unit price provided in the Schedule of Charges. All utility crossings shall be identified and verified for adequate clearance, or Consultant shall provide recommendations for relocation of existing utilities. Design shall be in compliance with the updated Colorado Subsurface Utility Engineering Law (Senate Bill 18-167) and other subsequent requirements. Consultant's scope of work during Pre-Design Phase (35% Design) is to horizontally locate utilities. Consultant shall pothole utilities during Preliminary Design Phase (seventy-five percent [75%] Design).
- F. Consultant shall plan, organize, conduct, and document Utility Coordination meetings with utilities, including oil and gas companies, special districts, municipalities, and others as required to present the scope of the Project, identify facilities potentially impacted by the Project or impacting the Project, identify lines of communication and determine crossing and/or relocation requirements, including required permits and agreements. Consultant to identify the need for potential utility relocations as early as possible to begin coordination activities with utility owner. Consultant to develop a technical memorandum presenting summary of meetings and discussions with utilities, including an appendix of crossing and/or relocation requirements. Consultant shall prepare designs, including drawings and specifications for protection, relocation, or adjustment of any utility required to be protected, relocated, or

adjusted as determined by Consultant or the owner of the utility. For the purpose of this proposal, Consultant shall assume that up to five (5) different existing utility locations will require designs for protection, relocation or adjustment. Consultant shall be prepared to assemble and coordinate any significant relocations early enough to allow the various utilities sufficient time to budget, plan and schedule their relocations well in advance of the arrival of Project construction activities. Consultant shall assume coordination with up to ten (10) utility companies.

G. Consultant shall provide the necessary field survey, using Thornton's survey control points, to identify surface topography at a maximum 1-foot contour interval within 200-feet of the proposed work area and to include surface topography on the Thornton provided boundary and improvement survey drawings. Consultant shall take full responsibility for verifying the accuracy of all elements of the integrated drawings. Field survey shall identify:

1. ROW and Site improvements.
2. Landscape elements including fences, gates, trails, trees, plant materials, sprinkler vaults, water features, streams, etc.
3. Surface treatments including pavements, curb and gutter, curb ramps, driveways, drainage swales, steps, etc.
4. All structures.
5. All utilities, including water lines, sanitary sewer lines, storm sewer lines, irrigation lines, poles, vaults, hydrants, cabinets, oil and gas lines, special district water lines, fiber optic, electrical etc. Note: Extensive oil and gas development activity is occurring within the Project area. Consultant shall coordinate with all oil and gas companies within the Project area.
6. All easements.
7. Parcel numbers and ownership.
8. Property lines and corners.
9. Surface topography at a maximum 1-foot contour interval.

The survey work shall be performed by a licensed surveyor registered to practice surveying in the State of Colorado. Selection of the surveying firm(s) is at the Consultants discretion. The Consultant is permitted to obtain pricing for the surface topography and to use the following survey firm that Thornton used for obtaining boundary and improvement surveys necessary for easement identification:

JR Engineering
2900 S. College Avenue
Fort Collins, CO 80525
(970) 491-9888
Attention: Jarrod Adams, PLS

H. Design Criteria

Consultant shall prepare a Design Criteria technical memorandum to include, at a minimum, a summary, in tabular form, of all the standards, guidelines and assumptions that will be used to complete the final design.

- I. Consultant shall perform geotechnical explorations and testing to determine soil properties. Consultant shall prepare a map for Thornton review and approval that includes locations where Consultant plans to perform geotechnical explorations prior to drilling.
 1. Consultant shall prepare a Geotechnical Investigative Report (GIR) presenting the results of the geotechnical exploration. The GIR will contain descriptions of the field work performed, boring logs using the guidelines presented in ASTM D2487, laboratory test results, data summaries, data histograms, geologic profiles, and other relevant data compiled during the geotechnical exploration and testing. Consultant shall operate a Photoionization Detector (PID) on each sample to test for the potential presence of hydrocarbons in the soil and report the results of the PID readings in the GIR. Consultant shall present lab testing data on the boring logs along with field data, field blow counts, field notes, and PID results. Consultant shall not present interpretations or construction recommendations in the GIR, interpretations of the data and construction recommendation will be provided by Consultant in a Geotechnical Baseline Report (GBR) for tunnels and in a Geotechnical Design Memorandum (GDM) for trenched pipeline prepared during the Preliminary Design Phase. Consultant is responsible to pay the cost for the borings and investigations noted below in the not-to-exceed fee. Consultant shall provide a unit price per each additional boring and Thornton agrees to pay the agreed upon fee, per additional borings that are deemed necessary by the Consultant and Thornton.
 2. The basis of Consultant proposal for geotechnical services is shown below. Actual scope of geotechnical work will be mutually agreed to following Consultant selection and will be reflected in the final Scope of Services. Include in proposal a discussion of any value-added geotechnical services, capabilities, qualifications, and specialized knowledge. Include an optional cost to provide any value-added geotechnical services above and beyond those noted below, including expansion of the scope based on Consultant recommendations.

3. Proposed Trenched Pipeline:

Complete thirty-five (35) geotechnical borings, 15-feet deep along the proposed trenched water pipeline alignment, collect (5-foot intervals) and test soil samples for natural moisture content, grain size distribution, Atterberg limits, Proctor compaction test, and swell/consolidation tests, as appropriate to fully classify soil type, and to help determine bearing pressure, settlement potential, slope stability, and other geotechnical conditions.

4. Proposed Tunnel or Bore Location

Complete geotechnical borings at each shaft location as follows. Assume four (4) tunnel locations shown below with two (2) geological borings each (minimum one (1) boring per shaft), for a total of eight (8):

<u>Proposed Tunnel/Bore Location</u>	<u>Depth of Borings (feet)</u>
Larimer County Road 9	40
Burlington Northern Santa Fe Railroad	40
Up to two (2) additional tunneled crossings to be determined during design	40

5. Conduct sampling on approximately 5-foot depth intervals using the Standard Penetration Test (SPT), the California Sampler, or Shelby tube. Collect samples at 2-foot intervals from one (1) tunnel diameter above the anticipated tunnel crown to one (1) tunnel diameter below the anticipated tunnel invert. For purposes of this proposal assume tunnel diameter is 6-feet. Final tunnel crown and tunnel invert will be developed by Consultant in consultation with the Project team and upon results of field investigations. Upon completion of drilling, backfill boreholes.

6. Install groundwater observation wells near each shaft location. Measure the groundwater level at the time of completion of the observation well, and monthly for up to twelve (12) months. Maintain an updated graph of groundwater level in each observation well and include in design submittals. Conduct falling or rising head tests at each well in accordance with ASTM or USBR procedures and provide an estimate of hydraulic conductivity of the soils. Obtain applicable well permits from the State of Colorado assuming wells will be installed and used for greater than 18 months. Provide copies of all permit

applications and permits to Thornton. Assume observation wells will be abandoned by the contractor performing the pipeline/tunnel work and include abandonment as a contractor requirement in the design documents, including the filing of well abandonment reports as required by the State of Colorado.

7. Test soil samples for natural moisture content, grain size distribution, Atterberg limits, Proctor compaction test, and swell/consolidation tests, as appropriate to fully classify soil type, and to help determine bearing pressure, settlement potential, slope stability, corrosion potential, and other geotechnical conditions, including Cerchar Abrasivity testing, unconfined compressive strength, triaxial testing, and hydrometer analyses. ASTM D 698 (Standard Proctor) is the appropriate standard for compaction of cohesive soils, particularly if there is the potential for swelling when saturated. ASTM D 1557 (Modified Proctor) is appropriate for granular soils, such as aggregate base course and Structure Backfill, Class 1. Provide graphical well completion details.
- J. Consultant shall plan and provide any required traffic control for the survey, testing, or design process for field activities which interfere with vehicular, bicycle, or pedestrian traffic within existing roadways, sidewalks, trails, or parking areas. Traffic control operations will be in accordance with the Manual on Uniform Traffic Control Devices (MUTCD) as well as the American Traffic Safety Services Association's (ATSSA) Guide for Work Area Traffic Control. Consultant shall submit its traffic control plan to applicable entities and obtain the necessary permit(s). Provide copies of all traffic control permits to Thornton.
- K. Consultant shall conduct a thorough regulatory analysis and prepare a draft permit matrix that identifies all permits, licenses, agreements, and similar approvals (permits) required for design and construction of the Project. This includes, but is not limited to, regulatory permits, municipality permits, and utility, ditch company, railroad crossing/license, and property owner agreements. The matrix shall include the permit title, permit issuer, permit holder (Thornton, contractor and/or subcontractor, Consultant and/or subconsultant, etc.), range of permit fees, agency contact information, application submittal requirements, timeline for acquiring, permit closeout requirements, date acquired, permit expiration date, and permit closeout date as applicable. The permit matrix will be used during design and construction to track permits. The permit matrix shall be updated with each design phase.
- L. Consultant shall prepare a draft compliance matrix listing all permit requirements including commitments and mitigation measures made in permit applications and permit conditions of approval. The compliance matrix shall identify compliance within the construction documents. The compliance matrix shall be updated with each design phase.

- M. Consultant shall have responsibility for obtaining all permits required to perform the design services, including payment of permit fees required for it or its subconsultants. Consultant shall submit copies of permit applications, permits, and record of permit termination to Thornton.
- N. Permitted alignment of Segment F Pipeline is within proximity to existing dam embankments. Consultant shall meet with and coordinate Project and necessary approvals with dam owner(s) and Colorado State Engineer's Office, Division of Water Resources, Dam Safety Branch to identify regulatory requirements for construction near reservoirs and dam embankments, incorporation of requirements into design, required regulatory reviews, and addressing review comments.
- O. Consultant shall include obtaining and completing permit applications; providing design information to support permit applications; preparation of technical exhibits and reports, including drainage report if required; coordination on permit acquisition strategy; and jointly coordinating with Thornton and permitting agencies. Consultant to coordinate with Thornton on who will lead communications with permitting agencies. Consultant shall support Thornton's communications. Thornton will pay for all required permit fees outside of the design services.
- P. Consultant shall be responsible for identifying requirements for permits to be obtained by contractor and including the same in construction documents with sufficient detail that contractor can adequately include costs within its bid for permit compliance.
- Q. Consultant shall base its not-to-exceed fee on the following permitting requirements:
1. Larimer County regulates the approval of pipeline projects being constructed within its county limits via Areas and Activities of State Interest (1041). Design shall comply with Larimer County requirements including, but not limited to, the mitigation and commitments made in the application and the conditions of approval for the Larimer County 1041 Permit (see **Attachments 2 and 3**). The compliance matrix shall list 1041 permit mitigation and commitments, and conditions of approval and provide reference to contract documents demonstrating that the requirement is met.
 2. Larimer County, either directly or indirectly through other agencies, may require permits including, but not limited to, floodplain encroachment permits, access permits, building permits, storm water management during construction permits, and excavation or grading permits. Consultant shall assist Thornton with obtaining these permits, including development of technical reports and drawings, and/or defining requirements for the contractor to obtain applicable permits. Consultant shall plan to participate in four (4) meetings with Larimer County staff for various permit representation assistance.

3. Consultant to assist Thornton in obtaining access and or road crossing permits/license agreements from regulatory agencies.
 4. Fire departments within Larimer County and the Larimer County Sheriff require an Emergency Response Plan. Consultant shall identify and prepare emergency response plans for submittal to applicable fire departments and Larimer County Sheriff requiring such plans.
 5. Consultant shall identify contractor requirements for construction dewatering permits (general or individual) from the Colorado Department of Public Health and Environment (CDPHE), and include those requirements in the Construction Contract Documents. Assistance will include consulting with Thornton and CDPHE to determine the most appropriate permit required for the work, and developing and implementing a permitting strategy to obtain necessary data to include in the Contract Documents to guide the contractor in adequately preparing for and pricing the construction dewatering work. For the purposes of preparing Consultant's not-to-exceed price, assume that the Project is not located within the influence of a contaminated groundwater source, but water from construction dewatering may exceed receiving water quality standards pursuant to CDPHE Water Quality Control Commission "Regulation #38 - Classifications and Numeric Standards for South Platte River Basin, Laramie River Basin, Republican River Basin, and Smoky Hill River Basin." At a single piezometer location (see geotechnical exploration requirements) for each of the tunneled or bored crossings, Consultant shall take a single water sample and budget to have it tested for the applicable receiving water quality standard as presented in Appendix 38-1 of the Regulation. Consultant shall itemize testing cost based on Regulation 38, and actual extent of testing completed and paid will be based on CDPHE direction provided to Consultant.
 6. Consultant shall obtain and analyze water samples from geotechnical borings within proposed trenched areas with groundwater. Assume one (1) water sample per geotechnical boring.
 7. Consultant to assist Thornton in obtaining consent letters, utility crossing/encroachment permits, and license agreements from utility agencies.
- R. Thornton has retained ERO Resources Corporation (ERO) to perform environmental studies and investigations for wetlands and threatened and endangered species and studies for areas of historic or archeological importance. Consultant shall not include these services in the scope of its proposal except to the extent that Consultant will be responsible to coordinate Thornton's environmental consultant's scope of services, deliverables and schedule with its own and its Subconsultants and to include recommendations of those studies and investigations in construction documents. Consultant to

prepare exhibits for use by ERO for agency consultation. During Pre-Design, Consultant shall provide to Thornton any recommendations for additional environmental and historical studies to be performed by ERO to advance the Project or mitigate potential Project risks. Recommendations shall be submitted as a separate technical memorandum to the Pre-Design Reports. Upon review and acceptance of recommendation(s) by Thornton and within two (2) weeks of acceptance, Consultant will prepare a scope of work describing the recommended studies that Thornton will provide to ERO. Consultant shall provide technical information and exhibits to ERO for coordination with environmental and historical agencies and attend up to two (2) coordination meetings with ERO and environmental agencies.

- S. Thornton has retained Wave Engineering, Inc. (Wave) to perform acoustical modeling and prepare a Noise Mitigation Plan. Consultant shall not include these services in the scope of its proposal except to the extent that Consultant will be responsible to coordinate Thornton's noise consultant's scope of services, deliverables and schedule with its own and its Subconsultants and to include recommendations of those models and plans in construction documents. Consultant to prepare exhibits and develop lists of expected construction equipment for open cut and tunneled construction for use by Wave in performance of their scope. During Pre-Design, Consultant shall provide to Thornton any recommendations for additional noise studies to be performed by Wave to advance the Project or mitigate potential Project noise risks. Recommendations shall be submitted as a separate technical memorandum to the Pre-Design Reports. Upon review and acceptance of recommendation(s) by Thornton and within two (2) weeks of acceptance, Consultant will prepare a scope of work describing the recommended studies that Thornton will provide to Wave. Consultant shall provide technical information and exhibits to Wave for coordination with Larimer County and attend up to two (2) coordination meetings with Wave and Larimer County.
- T. Consultant shall organize, conduct and document a Risk Identification and Mitigation Workshop wherein potential risks to Project cost and schedule are identified and quantified. Provide particular attention to the tunneled sections of the Project with specific emphasis on tunnels within any areas of known groundwater. Consultant shall identify the potential risk, propose mitigation measures, quantify potential impacts to cost and schedule and present pros and cons of alternative risk sharing and allocation strategies that Thornton can consider how it contracts for the construction work. Where possible illustrate the concepts presented with real world examples. Prepare a Project Risk Register and submit as part of the Pre-Design Reports.
- U. Based on thorough site investigations and analyses performed independently by Consultant, Consultant shall prepare a Pre-Design Report including the following, at a minimum:
 - 1. Set of drawings:
 - A Title Sheet or Sheets with Thornton's approval signature block, a location map, the Project name and number, issue block with dates and revision number, summary of applicable codes and standards,

Drawing Index, sheet number block, space for professional stamp, name, street address, phone, fax, and e-mail address of Consultant and all subconsultants.

Plan views, including survey control drawings.

Utility relocation plans.

Consultant shall fully describe the benchmark utilized for vertical control, including the specific datum or origin of the bench-mark. Consultant shall provide the specific datum of any USGS information (i.e., NAVD 88, NGVD 29 etc.). More than one (1) control point must be used to develop the horizontal control for the Project. The control points utilized for horizontal control must be completely described to allow the points to be found by an individual who is unfamiliar with the area.

Drawings shall be 22-inches x 34-inches, with a plan scale of 1-inch = 50-feet; or as otherwise appropriate and acceptable to Thornton. All drawing graphics shall fit on 11-inch x 17-inch paper when reduced to half size. All graphics, including text and dimensions, shall be legible when reduced to half size. Drawing graphics or notes shall not be obscured under the binding. Refer to the Final Design Phase herein for specification format requirements.

2. Outline of technical specifications for performing the construction work.
3. Preliminary schedule of bid items.
4. A technical memorandum presenting an Engineer's Estimate of Probable Construction Cost, which includes a description for the basis for estimated costs. Thornton requires that a construction contingency allowance of at least ten percent (10%) of the Project construction budget be reserved and carried as a separate line item in all construction cost estimates. Should the cost estimates prepared for the Pre-Design Report exceed the currently approved budget, Consultant shall prepare a list of possible design alternates to bring the design back within budget.
5. Utility information in compliance with the Colorado Subsurface Utility Engineering law (Senate Bill 18-167) and other subsequent requirements. A technical memorandum presenting summary of meetings and discussions with utilities, including an appendix of consent letters, crossing, encroachment, and/or relocation requirements.
6. Design Criteria technical memorandum.
7. Copy of Geotechnical Data Reports with any recommendations for additional field exploration or testing.
8. Draft Permit Matrix.

9. Draft Compliance Matrix
 10. Copies of permits acquired for pre-design activities.
 11. Initial Project risk register identifying and numerically quantifying possible risks to Project cost and schedule.
- V. Consultant shall upload to the appropriate project SharePoint document library draft Pre-Design Reports and mapping within one hundred eighty-two (182) Calendar Days following Notice to Proceed. Thornton requires twenty-one (21) Calendar Days to review the documents. Consultant shall plan, organize and conduct a Pre-Design Review Meeting with Thornton, record comments of interested parties, and distribute minutes to all attendees within seven (7) Calendar Days following the meeting. In the minutes, provide written disposition of comments received and incorporate into the Preliminary Design.
- III. Preliminary Design Phase (seventy-five percent [75%])
- A. Consultant shall prepare engineering designs and produce appropriate drawings and specifications as directed by Thornton to approximately the seventy-five percent (75%) complete stage.
- Consultant shall perform a thorough coordination review of all drawings and specifications, including Subconsultant drawings and specifications, and correct any discrepancies. The drawings shall show, at a minimum, all existing and proposed features both above and below the ground including, but not limited to, streets, highways, sidewalks, fences, gates, utilities, signs, fixtures, pavements, plantings, trails, water, sewer, electrical services, and other proposed utilities such as storm sewer, telephone, cable, and structures as well as proposed land development improvements.
- B. Consultant shall update and expand on survey information provided in the Pre-Design Phase to include information necessary to develop the design and for construction of the Project.
- C. Consultant shall provide drawing sheets which shall include, but not be limited to, the following:
- Pipelines
1. Plan and profiles of the water pipeline, with corrosion protection and all appurtenances.
 2. Sections, including typical trench sections, and appurtenance structure sections.
 3. Details, including typical details, and preliminary details for appurtenances.
 4. Utility relocation plans.
 5. Staging area plan, site access restriction plan.
 6. Roadway improvement / restoration plans.
 7. Traffic control plan

- D. Consultant shall prepare preliminary technical specifications to describe the elements of work proposed. In general, the technical specifications will be as detailed as possible for all work to be performed. All technical specifications shall be coordinated with Thornton's General and Special Conditions and shall not repeat or conflict with any information contained in the General and Special Conditions or other standard Thornton front end Contract Documents.

The technical specifications shall not make any generalized blanket references to Thornton Standards and Specifications, to CDOT Specifications, or to other national standards. If any sections of these standards and specifications are to be included by reference, the Project technical specifications shall cite specific chapters and/or paragraphs of the reference standards.

The Thornton Standards and Specifications are intended to be the minimum standards acceptable on private development projects, and do not necessarily represent the technical requirements Thornton wishes to achieve on a particular Thornton project. Obtain approval in writing from Thornton prior to citing these reference standards and specifications. **Performance specifications in lieu of prescriptive specifications shall only be used with the prior written approval of Thornton.**

The technical specifications documents must be prepared without section breaks (use page breaks at end of each section), and the page numbering shall be sequential and located in the footer at the bottom center of the page. Consultant shall prepare a Technical Specification Index/Table of Contents. Refer to Final Design Phase, paragraph L.1. for additional format requirements for technical specifications.

For projects which utilize a unit price contract for construction, Consultant shall include information on the method for measurement and payment for work performed under each section of the technical specifications. The measurement for payment for each item shall be coordinated with other referenced specification standards, such as CDOT specifications. Consultant's drawings and specifications regarding measurement for payment shall be coordinated with Thornton standards for certain measurement and payment methods contained in Thornton's Special Conditions. Consultant shall at a minimum coordinate the following sections:

1. Excavation;
2. Muck excavation;
3. Fill;
4. Subgrade preparation;
5. Asphalt and/or concrete paving;
6. Temporary and permanent asphalt patching;
7. Potholing;
8. Pipe installation;

9. Pipeline Testing;
10. Mobilization;
11. Clearing and Grubbing;
12. Site restoration and seeding;
13. Measurement and payment; and
14. Corrosion protection.

Consultant shall read and be familiar with Thornton's standard construction contract language regarding the Schedule of Contract Items and Prices and Special and General Conditions regarding measurement and payment. Consultant and Thornton shall determine which pay items shall be paid at the Plan Quantity and which pay items shall have an estimated quantity designated as possibly varying more than plus or minus twenty-five percent (+/- 25%) from the stated quantity.

- E. Consultant shall prepare the following geotechnical reports:
- a. Draft Geotechnical Data Reports (GDR) for tunnel crossings. The GDR presents the raw geotechnical data from the GIR relevant to the tunnels without interpretation. It includes soil and rock test results, borehole logs, laboratory test data, and field observations for applicable tunnel boreholes that Consultant has used in developing the GBR.
 - b. Draft Geotechnical Baseline Report (GBR) for tunnel crossings. The GBR is intended to set the baselines for geotechnical conditions anticipated to be encountered during underground construction for tunnel crossings. Prepare the GBR in general accordance with the latest version of the Guideline for Geotechnical Baseline Reports developed by the Underground Research Council and should also include recommendations on backfill materials and trench dewatering, bearing capacities for appurtenant structures, and soil resistivity information. The GBRs will be included as a contract document.
 - c. Draft Geotechnical Design Memorandum (GDM) for trenched pipeline. A GDM provides guidance to designers for geotechnical design of the pipeline and appurtenances. It outlines design assumptions, parameters, and methodologies to support geotechnical design decisions. GDM shall present geotechnical engineering design recommendations and construction related considerations for the pipeline.
- F. For the proposed 42-inch steel raw water pipeline, Consultant shall design a continuous, effective impressed current cathodic protection system for the Project. System shall be equipped with all essential components for corrosion protection, including appropriately located above ground and/or at grade monitoring test stations and shall be coordinated with other Thornton Water Project water pipeline segments. Thornton will provide information on cathodic

protection system components included in other segments including rectifier locations and deep bed anode spacing. Consultant to prepare Corrosion Protection Technical Memorandum, which includes evaluation and estimated costs. Evaluation and memorandum shall follow current NACE standards.

- G. Consultant shall prepare a draft Pipeline Hydrostatic Testing Technical Memorandum that will present alternative pipe testing methods (single section, multiple sections, etc.) with estimated costs. Identify alternate sources of testing water and disposal following testing.
- H. Consultant shall prepare a draft Pipe Filling and Draining Technical Memorandum, to include options, necessary permits and estimated costs for the filling and draining of the proposed Project.
- I. Consultant shall prepare an updated draft permit matrix.
- J. Consultant shall prepare an updated draft compliance matrix.
- K. Consultant shall attend up to sixteen (16) weekly Progress Meetings at Thornton's IMC or via remote, video conferencing with Thornton's staff to exchange and share information during preparation of the preliminary documents (for proposal pricing purposes assume all meetings are at the IMC). Consultant to prepare and distribute meeting minutes to attendees.
- L. Consultant shall comply with all local and nationally adopted design standards, as well as other standards adopted by Thornton, in designing each element of the Project.
- M. Before submission of the Preliminary Design documents, Consultant shall identify and utilize an individual or individuals to perform an independent quality control check of the drawings and specifications to assure the documents are clear and complete and to assure functional coordination of the varied systems and components of the construction documents. This individual shall not have had a role in the development of the construction documents and must be approved by Thornton. Submit the resume and qualifications of the individual or individuals for approval at the start of Preliminary Design. Quality control checks shall be conducted by individuals having experience on water pipeline projects with a similar degree of complexity and size within the past fifteen (15) years. The quality control check shall include checking dimensions, sizes, detail, section, and elevation references, coordination between Consultant and Subconsultant's drawings, compatibility of materials, references within technical specifications to other sections and to drawings, and constructability. Consultant shall submit the comments from the independent quality control check and responses to those comments on how comments were adjudicated. Consultant shall include a statement from the reviewer(s) that comments have been appropriately addressed to the satisfaction of the reviewer. Consultant shall assume a minimum of forty (40) hours for this task. Thornton may engage independent consultants to perform a separate peer review. Consultant shall supply all necessary calculations, analyses, and other documents, and cooperate fully with any such independent peer review.

- N. Consultant shall prepare an updated Engineer's Estimate of Probable Construction Cost for the Project. Information shall be presented in a technical memorandum, which includes a description for the basis for estimated costs and description and reason for cost change from previous estimate. The estimate shall be based on a work breakdown structure describing finite elements of the Work and unit prices applicable to each element. The Work breakdown structure shall include separate line items for mobilization and Project close-out. Thornton requires that a construction contingency allowance of at least ten percent (10%) of the Project construction budget be reserved and carried as a separate line item in all cost estimates. For projects that are to use the unit price method of measurement and payment, Consultant shall prepare measurement and payment specifications for each item proposed. Should the updated cost estimate exceed the currently approved budget, Consultant shall prepare a list of possible design alternates or revisions to bring the design back within budget.
- O. Consultant shall prepare detailed plan and profile drawings of the following trenchless crossings, including narratives of the proposed construction:
- Larimer County Road 9;
 - Burlington Northern Santa Fe Railroad; and
 - Other Consultant identified crossings.
- P. Consultant shall prepare information to be incorporated with Thornton's standard construction Contract Documents including, at a minimum, the following:
1. A brief description (one [1] paragraph) of the Project that adequately depicts the Work to be completed, which will be used in the Invitation for Bids of Thornton's standard Contract Documents.
 2. An estimate of the number of consecutive Calendar Days required for completion of construction of the Project, which will be included in Thornton's standard construction Contract Documents. The estimates shall take into account average weather conditions for the time of the year when construction is anticipated to take place, as well as any other limitations on the Work by the contractor, such as planting windows, seasonal water flows, and school schedules. The estimates shall consider any intermediate milestones and construction phasing that may be necessary to complete the construction.
 3. A summary of recommended modifications to the Special Conditions section of Thornton's standard construction Contract Documents. The Special Conditions are used to modify the standard General Conditions to fit the specifics of each project. Consultant shall not edit the General Conditions. The summaries shall include, at a minimum, Consultant's recommendations regarding the type of schedule to be provided by the contractor (Critical Path Method [CPM] for example versus simple bar chart), a list of other outside contractors and/or

agencies the contractor will be required to coordinate with, any special insurance requirements, language for unique conditions such as assignment of pre-purchased materials or equipment to the contractor, a calculation for recommended liquidated damages to be imposed if the contractor should fail to substantially complete the Project within the specified contract time, bid item descriptions including measurement and payment information, and an estimate of the time required for the review of shop drawings and submittals.

4. A "Schedule of Contract Items and Prices" using Thornton's standard format. The schedules shall contain blank areas where the bidder will fill in the amount of its bid for each recommended item. A separate mobilization and closeout item is mandatory for all bid schedules. Do not include the Project contingency line from the estimate in the Schedule of Contract Items and Prices.
5. Thornton will provide a technical specification section (01 33 00) for submittal requirements, which coordinates with and is consistent with Thornton's Special and General Conditions sections on Submittals. Consultant shall provide a thorough and complete Project Submittal Log.

The Submittal Logs shall list all submittals for this Project, including but not limited to all Shop Drawings, Samples, Materials Certificates, and Equipment that are required by the technical specifications to be submitted for review and approval by either Thornton and/or the Consultant. The Submittal Logs shall indicate the timeframe required for Thornton's and/or the Consultant's review of each individual submittal and responsible party for review. The Submittal Logs shall include blank columns for the contractor's future use to indicate the submittal processing dates, review and approval status, and comments.

- Q. Consultant shall complete the Preliminary Design Phase of Services and upload to the appropriate project SharePoint document library preliminary design phase documents within one hundred twelve (112) Calendar Days following the Pre-Design Review Meeting. Thornton will require twenty-one (21) Calendar Days to review the submitted information. Consultant shall plan, organize, and conduct a Field Inspection Review (FIR) Meeting and record comments of all interested parties. Consultant shall be responsible for documenting all decisions reached during the meetings and preparing and submitting the meeting minutes to all attendees and incorporate comments in the development of the Final Design documents.

IV. Final Design Phase

- A. Based on comments received at the FIR Meeting, Consultant shall prepare pre-final and final drawings and specifications in Thornton's required format.
- B. Consultant shall attend up to thirteen (13) Progress Meetings at Thornton's IMC or via remote, video conferencing with Thornton's staff during the Final

Design Phase to discuss previously undiscovered conditions or concerns arising during Final Design (for proposal pricing purposes assume all meetings are at the IMC). Consultant to prepare and distribute meeting minutes to attendees.

- C. Before submission of the Pre-Final Documents, Consultant shall identify and utilize an individual or individuals to perform an independent quality control check of the drawings and specifications to assure the documents are clear and complete and to assure functional coordination of the varied systems and components of the construction documents. This individual shall not have had a role in the development of the construction documents and must be approved by Thornton. Submit the resume and qualifications of the individual or individuals for approval at the start of Final Design. Quality control checks shall be conducted by individuals having experience on water pipeline projects with a similar degree of complexity and size within the past fifteen (15) years. The quality control check shall include checking dimensions, sizes, detail, section, and elevation references, verification that infrastructure is located within the permanent easement and that construction activities can be accommodated within the permanent and temporary easements, coordination between Consultant and Subconsultant's drawings, compatibility of materials, references within technical specifications to other sections and to drawings, and constructability. Consultant shall submit the comments from the independent quality control check and responses to those comments on how comments were adjudicated. Consultant shall include a statement from the reviewer(s) that comments have been appropriately addressed to the satisfaction of the reviewer. Consultant shall assume a minimum of forty (40) hours for this task. Thornton may engage independent consultants to perform a separate peer review. Consultant shall supply all necessary calculations, analyses, and other documents, and cooperate fully with any such independent peer review.
- D. Consultant shall prepare an updated Engineer's Estimate of Probable Construction Cost based on the Pre-Final Documents (approximately ninety-five percent [95%] complete design). Information shall be presented in a technical memorandum, which includes a description for the basis for estimated costs and description and reason for cost change from previous estimate. The estimates shall include a work breakdown structure describing finite elements of the Work and estimated unit prices applicable to each element. The Work breakdown structure shall include items for mobilization and Project close-out. Thornton requires that a construction contingency allowance of at least ten percent (10%) of the Project construction budget be reserved and carried as a separate line item in all cost estimates.

It is Thornton's desire for the Project construction to remain within the allocated Project budget and Thornton expects to be notified of significant budgetary issues with the submission of Engineer's Estimates of Probable Construction Costs during the Pre-design and Preliminary Design Phases. Should Consultant fail to notify Thornton that construction costs are likely to exceed the allocated budget, and the Engineer's Estimate of Probable Construction

Costs submitted during the Final Design Phase exceeds Thornton's currently approved budget by more than ten percent (10%), Consultant shall be required to work with Thornton to find appropriate changes to the bid and/or design documents that will resolve the budgetary concerns. Under these circumstances, any necessary revisions to the design to come within Thornton's budget shall be completed at no cost to Thornton. Note that Thornton may engage the services of an independent third party to provide assistance in cost estimating and to verify Consultant's estimate. Thornton may request that the independent third- party estimator assist with development of design alternatives if required to bring the Project back within budget. Should Thornton engage the services of a third-party cost estimator, Consultant shall cooperate with and participate in the independent third-party cost estimating and design alternatives evaluation. Consultant shall make changes to the design documents at no cost to Thornton resulting from this effort.

- E. Prepare final Pipeline Hydrostatic Testing Technical Memorandums.
- F. Prepare final Pipeline Filling and Draining Technical Memorandums.
- G. Prepare final permit matrix.
- H. Prepare final compliance matrix.
- I. Prepare final Emergency Incident Action Plan required by applicable fire departments.
- J. Consultant shall complete the Pre-Final Design Documents (approximately ninety-five percent [95%] design completion) and upload to the appropriate project SharePoint document library Pre-Final Design Documents within ninety-one (91) Calendar Days following the FIR Meeting. Thornton will require twenty-one (21) Calendar Days to review the documents. Consultant shall plan, organize and conduct a Final Office Review (FOR) Meeting to receive comments on the Pre-Final Documents from all interested parties. Consultant shall be responsible for documenting all comments and decisions reached during the meeting, and preparing and submitting the minutes of the meeting.
- K. Consultant's pre-final and final Contract Documents shall provide drawing sheets which shall include, but not be limited to, the following:
 - 1. Title sheet or sheets with Thornton's approval signature block, a location map, the Project name and number, issue block with dates and revision numbers, summary of applicable codes and standards, Drawing Index, sheet number block, space for professional stamp, name, street address, phone, fax, and e-mail address of Consultant and all subconsultants.
 - 2. Table of "Estimated Quantities," with notation of items which will be paid at Plan Quantity and items which may vary by more than plus or minus twenty-five (25%) or estimate.

3. Dimensioned construction drawings for all required disciplines which may include, but not necessarily be limited to, easement and ROW plans including reception numbers, demolition plans, staging plans, traffic control, erosion control, drainage, roads, trails, utilities, grading, paving, landscape, irrigation, with notes, profiles, sections, elevations, schedules, and details as required to detail the Work sufficiently to allow for the complete construction of the Project.
- L. Consultant shall comply with the IBC, ADA, and all other nationally adopted design standards, as well as other standards adopted by Thornton, in designing each element of the Project.
 - M. Consultant shall make document revisions noted and agreed upon at the FOR Meeting within thirty-five (35) Calendar Days following the FOR Meeting. Revisions may include denoting work elements as bid alternatives and revising the bidding forms and alternates specification sections if, in Thornton's sole opinion, the cost estimates are not consistent with the budgeted level of funding, and the design alternatives accepted have not sufficiently reduced the cost estimate to align with the budget. If, in Thornton's sole opinion, the final documents submitted by Consultant do not adequately respond to the FOR comments, Consultant shall revise and reissue the final documents at no additional cost to Thornton until all comments are resolved to Thornton's satisfaction.
 - N. When Thornton determines that the final Contract Documents are acceptable, are ready for submission to Thornton and others as determined by the Consultant for permitting, and are ready for bidding, Consultant shall submit the following to Thornton:
 1. Technical Specifications: Submit technical specifications in Microsoft Word, either emailed to Contract Administrator or on a CD, prepared using the following format:
 - i. 8 ½" x 11", 11.5 pt. Arial font, single line spacing;
 - ii. Margins: left 1.0", right 1.0", top 1.0", bottom 1.0"; footer 0.5", no headers;
 - iii. Index/Table of Content of Technical Specs with no page numbers indicated;
 - iv. No section breaks, use page breaks between spec sections;
 - v. Section titles in all caps, bold, 14-pt. Arial, centered on page at top of each new spec section;
 - vi. Entire set of specification pages numbered sequentially beginning with Page 1 of x, centered;
 - vii. Footer with file path name left justified, 8-pt. font.

2. Bid Documents

Thornton will prepare the Project Manual for bidding. The Project Manuals for bidding will not be stamped by Consultant. The cover page on the Project Manuals shall include the text "Issued for Bidding" with date.

Consultant shall submit electronic files of drawings on CD. Submit one (1) disk with drawing file(s) in AutoCAD format compatible with Thornton's system. Submit another disk with drawings combined into a single file using .pdf format. Alternatively, the .pdf version may be e-mailed to the Contract Administrator provided the file size is small enough to e-mail successfully.

3. Consultant shall submit a final Engineer's Estimate of Probable Construction Cost. Information shall be presented in a technical memorandum, which includes a description for the basis for estimated costs and description and reason of cost changes from previous estimates. Thornton requires that ten percent (10%) of the engineer's estimates be available in the overall budget for a construction contingency at the time of bidding to cover unforeseen changes during the construction of the Project.

V. Bid Phase

- A. Consultant shall attend Pre-Bid Conference and shall provide assistance to Thornton in responding to inquiries by the prospective bidders during the bidding period. The schedule for the Bid period is to be determined.
- B. Consultant shall prepare all necessary corrections and additional information based on prospective bidder inquiries. All answers to questions shall be coordinated with Thornton and issued by Thornton. Consultant shall not respond directly to any prospective bidder or subcontractor during the Bid Phase. Consultant shall assist Thornton with preparation of addenda. Thornton will issue all addenda.
- C. Consultant shall assist Thornton in the review of Bids received and the qualification of bidders as deemed appropriate by Thornton.
- D. If more than one hundred eighty (180) Calendar Days have elapsed between the date of Consultant's most recent Estimate of Probable Construction Cost and the date of the Bid submission, the Estimate of Probable Construction Cost total shall be adjusted for inflation based on the Engineering News Record Construction Cost Index for Denver. The adjusted estimate shall be used as the basis for evaluating the Bids and the Project budget.
- E. Should the Bid of the lowest responsive and responsible bidder exceed Consultant's Estimate of Probable Construction Cost, Thornton and Consultant shall explore options, including but not limited to, awarding the Project as designed if sufficient budget contingency is available, evaluating design

alternatives and estimates of related cost savings to bring the Project back within budget, and re-designing and re-bidding. Thornton, at its sole option, will determine the course of action to take.

- F. If the Bid results exceed the Engineer's Estimate of Probable Construction Cost by more than ten percent (10%), as adjusted for inflation (if applicable), and should Thornton choose to re-design and re-bid the Project, Consultant shall prepare revised Contract Documents as required, and shall assist in the re-bidding phase, all at no additional cost to Thornton. Should Thornton choose to award the Project without rebidding, Consultant shall, in cooperation with the selected contractor, assist in preparation of "Proposal Requests" as directed by Thornton to reduce the Project cost to within budget, all at no additional cost to Thornton.
- G. At the end of the Bid Phase, Consultant shall make final revisions to the Contract Documents based on addenda issued during the Bid Phase. Drawing revisions shall be indicated by encircling addenda changes with "clouds" and including a delta indicating the addendum number. All addenda dates and delta numbers shall also be indicated in the revision block on each sheet. Project Manual addenda revisions shall be denoted by striking through deleted text and italicizing added text with the addendum number noted in parentheses immediately following each text revision. The Project Manual index shall indicate those sections that contain addenda revisions by placing an asterisk next to the section number in the Index/Table of Contents. Consultant shall provide revised reproducible and electronic documents to Thornton within fourteen (14) Calendar Days following the opening of the Bids. Issue block shall say "For Construction" and shall be dated as of the contractor's date of Notice of Award. Thornton will issue the "For Construction" documents to the successful contractor for use during the Construction Phase. Consultant shall be responsible for the cost of printing and distributing hard copies of the "For Construction" documents to themselves and its Subconsultants.

VI. Construction Phase and Services during Construction.

- A. Consultant shall attend the "Pre-Construction Meeting" and provide assistance to Thornton in responding to inquiries by the contractor during the Pre-Construction Meetings.
- B. Consultant shall attend any public meetings that are needed prior to construction. Assume one (1) public meeting.
- C. Consultant and its Subconsultants shall provide periodic field observation on a weekly basis to assure themselves and Thornton that the Work is proceeding in accordance with the intent of the Contract Documents. Consultant shall submit a report to Thornton and the contractor for all field observations performed. Notwithstanding the foregoing, if required by any permitting agency or Thornton, Consultant's engineer shall be required to inspect structural work, including but not limited to, any foundations and steel structures, and provide a letter to the permitting agency and Thornton certifying that the Work was

constructed substantially in accordance with the design intent. Consultant's field observations shall include ongoing coordination with Thornton. Assume a fourteen (14) month construction duration.

- D. Consultant shall attend weekly meetings on-site with the contractor and Thornton. Thornton intends to contract for services with a third party or parties to provide visual observation, testing, and inspection services during construction. Consultant shall promptly respond to inquiries by the third party which may arise during the course of this work. See VI. C for assumed construction duration.
- E. Consultant shall review the contractor's proposed submittal schedule and comment on submittal review times proposed. Consultant and contractor shall negotiate until mutually acceptable review times are established for each submittal. Consultant shall complete submittal review within the agreed upon allotted time so as to not delay the construction. Assume one hundred fifty (150) submittals.
- F. Consultant shall promptly respond to requests for information issued by Thornton, the contractors, subcontractors, testing agencies, or other entities so as not to delay construction. Assume fifty (50) requests for information.
- G. Consultant shall issue "Supplemental Instructions" to Thornton or its designated representative when an ambiguous condition requiring clarification is discovered in the Contract Documents. **Consultant shall prepare documents providing clarification and/or correcting errors or omissions in the Contract Documents at no charge to Thornton.** Consultant shall prepare a Proposal Request for issuance to the contractor when such items may have a cost or schedule impact. Consultant shall not include costs for "Supplemental Instructions" as described above within its proposed costs. "Supplemental Instructions" may be necessary for discretionary changes requested by Thornton; however, such consultation is not included in the not-to-exceed fee for this Agreement. Compensation for Thornton directed "Supplemental Instructions" shall be made on a time and expense basis at the rates specified in the Schedule of Charges included in the Professional Service Agreement.
- H. Consultant shall be included in the workflow for review and approval of Contractor progress payments. Thornton's retained Construction Management firm will lead review and verification of quantities in progress payments and will be the first approver in the progress payment approval workflow.
- I. Consultant shall provide Change Order consultation as it relates to Change Order requests submitted by the contractor, including but not limited to, review of Change Order requests for impacts on schedule, quality, constructability, aesthetics, functionality, and proposed Change Order pricing. Change Order consultation may also be necessary for discretionary changes requested by Thornton; however, such consultation is not included in the not-to-exceed fee for this Agreement. Compensation for discretionary Change Order

consultation shall be made on a time and expense basis at the rates specified in the Schedule of Charges included in the Professional Service Agreement.

- J. Consultant's observation or monitoring portions of the Work performed under construction contracts shall not relieve construction contractor(s) from responsibility for performing Work in accordance with applicable Contract Documents. Consultant does not control, and shall not be responsible for, construction means, methods, techniques, sequences, procedures of construction, health or safety programs or precautions connected with the Work and shall not manage, supervise, control nor have charge of construction.
- K. Thornton will retain an independent Construction Management firm that will administer the construction contract and perform on-site construction observation and monitoring. Consultant shall coordinate its construction responsibilities described herein with the assigned construction manager, acting as a team.

VII. Closeout Phase

- A. When the contractor applies for "Substantial Completion", Consultant, in consultation with Thornton's representative(s), shall perform a walk-through of the Project to review and add to the contractor's punch list. Consultant shall monitor the contractor's progress on the punch list and recommend to Thornton when all items are satisfactorily completed, and "Initial Acceptance" may be granted.
- B. Within sixty (60) Calendar Days after Initial Acceptance of the Project, Consultant will be required to submit the following as applicable:

The full Pre-Design Report with review comments addressed in Microsoft Word submitted via Microsoft SharePoint.

- 1. FIR review comments in Microsoft Word submitted via Microsoft SharePoint
- 2. FOR review comments in Microsoft Word submitted via Microsoft SharePoint
- 3. Consultant shall prepare as-built documents. The issue block on the drawings shall say "As-Built" and indicate the date which shall be the date of Initial Acceptance. The As-Built Project Manual shall indicate "As-Built" and the Initial Acceptance date on the cover page.
 - a. As-Built electronic drawing files shall be in a vector format compatible with the AutoCAD version currently in use by Thornton. Provide both .dwg and .pdf via Microsoft SharePoint.
 - b. The Project Manuals shall be submitted both in hard copy submitted via Microsoft SharePoint. Submit electronic files in a Microsoft Word file compatible with the version currently in use by Thornton and as a .pdf file.

VIII. Warranty Phase

- A. Consultant shall assist Thornton in resolving warranty repairs during the warranty period.
- B. Consultant shall participate in a walk-through of the Project near the end of the warranty period and prepare a final punch list of items needing correction. Consultant shall review progress made by the contractor on the warranty period punch list and recommend when the Work is completed satisfactorily, and the Project is ready for Final Acceptance.

Project Schedule

All deliverables, meetings, and review times shall be as follows:

1. Segment F Pipeline - Design Services Notice to Proceed – Fall 2024 (anticipated).

Pre-Design Phase (Thirty-five percent [35%] Design) Segment F Pipeline

1. Attend Project Kickoff Meeting – date to be determined.
2. Attend Data Gathering and Progress Meetings – dates to be determined.
3. Attend field conditions walk-through – date to be determined.
4. Submit Pre-Design Report within one hundred eighty-two (182) Calendar Days following Notice to Proceed.
5. Attend Pre-Design Review Meeting within twenty-one (21) Calendar Days after submission of Pre-Design Report.

Preliminary Design Phase (Seventy-five percent [75%] Design)

1. Attend Progress Meetings – dates to be determined.
2. Submit Preliminary Design documents within one hundred twelve (112) Calendar Days following Pre-Design Review Meeting.
3. Attend Field Inspection Review (FIR) Meeting within twenty-one (21) Calendar Days following submission of Preliminary Design documents.

Final Design Phase

1. Attend Progress Meetings on-site– dates to be determined.
2. Submit Pre-Final Design documents within ninety-one (91) Calendar Days following the FIR Meeting.
3. Attend Final Office Review (FOR) Meeting within twenty-one (21) Calendar Days following submission of Pre-Final Design documents.
4. Submit Final Design, permits and bid documents within thirty-five (35) Calendar Days after FOR Meeting.

Bid Phase

1. Attend Pre-Bid Conference – date to be determined.
2. Revise documents as required to meet budget – submission date to be determined.
3. Prepare addenda for Thornton’s review – dates to be determined.
4. Prepare “For Construction” Contract Documents incorporating all addenda items – deadline to be determined and to correspond to date of Notice of Award for the contractor.

Construction Phase

1. Attend Pre-Construction Meetings– dates to be determined and to correspond to date of Notice to Proceed for the contractors.
2. Attend Public Meetings ahead of construction.
3. Perform periodic field observations weekly– dates to be determined.
4. Attend monthly Construction Meetings on-site– dates to be determined.

Closeout Phase

1. Attend punch list walk-through– dates to be determined.
2. Monitor punch list progress– dates to be determined.
3. Review contractor submitted closeout documents– dates to be determined.
4. Recommend issuance of Initial Acceptance– dates to be determined.
5. Submit As-Built documents– within sixty (60) Calendar Days following issuance of Initial Acceptance to contractor(s).

Warranty Phase

1. Assist Thornton with obtaining warranty repairs as needed– dates to be determined.
2. Attend warranty punch list walk-through– dates to be determined.

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EXHIBIT C

SCHEDULE OF CHARGES

BILLABLE HOURLY RATES AND ESTIMATED TOTAL COST:

Category	Billable Hourly Rate		Estimated Total Hours		Estimated Total Cost
		X		=	\$
		X		=	\$
		X		=	\$
		X		=	\$
		X		=	\$
		X		=	\$
		X		=	\$
		X		=	\$
		X		=	\$
		X		=	\$
TOTAL					\$

(Use additional page if necessary.)

REIMBURSABLE EXPENSES:

Reimbursable expenses include, but are not necessarily limited to, copying, printing, postage, local mileage, out of town travel and living expenses, courier expenses, owned or rented equipment costs, subconsultant costs, and subcontractor costs, if any.

All categories of reimbursable expenses for which Consultant will expect compensation are listed below. Categories of expenses not listed shall not be reimbursed separately and shall be considered to be included in Consultant’s personnel billable hourly rates, or if a NTE amount was converted to a lump sum fee, to be included in the lump sum fee.

Listed expenses incurred by Consultant from outside vendors such as printers, courier services, rental equipment, subconsultants, or subcontractors will be reimbursed at cost without further mark up. Consultant’s management of outside subconsultants and or subcontractors will be reimbursed at the Billable Hourly Rates for Consultant’s personnel involved in the management and not through a percent fee mark up. Detailed documentation (vendor invoices) must be supplied for an outside expense to be eligible for reimbursement.

Expenses incurred by Consultant from in-house operations, such as in-house printing, copying, Consultant owned equipment, etc., will be reimbursed at the rates indicated below. Detailed unit prices for all in-house expenses for which Consultant will expect compensation are listed below. Vehicle mileage in connection with the performance of the Services will be reimbursed at the rate currently allowable under IRS rules for passenger vehicles, and at rates herein defined for specialty vehicles, such as survey trucks.

REIMBURSABLE EXPENSE CATEGORIES AND RATES:

In-house Expense Category	UOM	Rate		Outside Expense Category	UOM	Rate
Passenger Vehicle	Mile	IRS		Postage	LS	Cost
Copying ___" x ___" BW				Courier	LS	Cost
Copying ___" x ___" Color				Subconsultants	LS	Cost
Printing ___" x ___" BW				Subcontractors	LS	Cost
Printing ___" x ___" Color				Rental Equipment	LS	Cost
_____ Equipment						

(Use additional sheet if necessary.)

Certificate Of Completion

Envelope Id: 7EFC3AE0ED0A4354AE0664B8459B2406	Status: Completed
Subject: Complete with DocuSign: 12-777H9 RFP 7-24-24.pdf	
Source Envelope:	
Document Pages: 67	Signatures: 1
Certificate Pages: 1	Initials: 0
AutoNav: Disabled	Envelope Originator:
Envelope Stamping: Disabled	Patrick Hinterberger
Time Zone: (UTC-07:00) Mountain Time (US & Canada)	9500 Civic Center Drive
	Thornton, CO 80229
	Patrick.Hinterberger@ThorntonCO.gov
	IP Address: 199.117.212.4

Record Tracking

Status: Original	Holder: Patrick Hinterberger	Location: DocuSign
7/24/2024 3:11:55 PM	Patrick.Hinterberger@ThorntonCO.gov	

Signer Events

Patrick Hinterberger
 Patrick.Hinterberger@ThorntonCO.gov
 Sr. Contract Administrator
 SHI OBO City of Thornton
 Security Level: Email, Account Authentication (None)

Signature

DocuSigned by:

 6DA8F281E4154C8...
 Signature Adoption: Pre-selected Style
 Using IP Address: 199.117.212.4

Timestamp

Sent: 7/24/2024 3:12:04 PM
 Viewed: 7/24/2024 3:12:08 PM
 Signed: 7/24/2024 3:12:20 PM
 Freeform Signing

Electronic Record and Signature Disclosure:
 Not Offered via DocuSign

In Person Signer Events	Signature	Timestamp
Editor Delivery Events	Status	Timestamp
Agent Delivery Events	Status	Timestamp
Intermediary Delivery Events	Status	Timestamp
Certified Delivery Events	Status	Timestamp
Carbon Copy Events	Status	Timestamp
Witness Events	Signature	Timestamp
Notary Events	Signature	Timestamp
Envelope Summary Events	Status	Timestamps
Envelope Sent	Hashed/Encrypted	7/24/2024 3:12:04 PM
Certified Delivered	Security Checked	7/24/2024 3:12:08 PM
Signing Complete	Security Checked	7/24/2024 3:12:20 PM
Completed	Security Checked	7/24/2024 3:12:20 PM
Payment Events	Status	Timestamps