

CITY OF THORNTON

REQUEST FOR PROPOSALS

FOR

ENGINEERING SERVICES

PFAS TREATMENT

PROJECT NO. 23-127

SEPTEMBER 2024

THIS PAGE INTENTIONALLY LEFT BLANK

II. INDEX OF CONTENTS

- I. TITLE PAGE
- II. INDEX OF CONTENTS
- III. NOTICE REQUEST FOR PROPOSALS
- IV. PROPOSAL INSTRUCTIONS AND INFORMATION
- V. PROPOSAL PREPARATION
- VI. EXHIBIT 1 ACCEPTANCE OF CONDITIONS STATEMENT
- VII. EXHIBIT 2 AGREEMENT FOR PROFESSIONAL CONSULTING SERVICES
 - EXHIBIT A CONSULTANT'S GENERAL SCOPE OF SERVICES
 - EXHIBIT B CONSULTANT'S PERSONNEL AND SUBCONSULTANTS LISTING
 - EXHIBIT C SCHEDULE OF CHARGES
- VIII. EXHIBIT 3 REFERENCE AUTHORIZATION AND RELEASE FORM
- IX. EXHIBIT 4 TREATMENT TECHNOLOGY STUDY (UNDER SEPARATE COVER)
- X. EXHIBIT 5 CONCEPTUAL DESIGN REPORT (UNDER SEPARATE COVER)
- XI. EXHIBIT 6 THORNTON WATER TREATMENT PLANT CONFORMING TO CONSTRUCTION DRAWINGS (UNDER SEPARATE COVER)
- XII. EXHIBIT 7 COLORADO STATE REVOLVING FUND REQUIRED SPECIFICATIONS (UNDER SEPARATE COVER)

THIS PAGE INTENTIONALLY LEFT BLANK

III. NOTICE REQUEST FOR PROPOSALS

The City of Thornton, CO (“Thornton”) respectfully requests separate sealed Proposals for Design Services for **PFAS Treatment, Project No. 23-127** (hereinafter referred to as “Project”). Proposals will be received until **5:00 p.m.**, local time, **October 8, 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 includes Design Services for a new PFAS treatment facility at the Thornton Water Treatment Plant located at 920 Thornton Parkway, Thornton, CO 80229. This Project shall be delivered using the Construction Manager at Risk (CMAR) project delivery method. The Consultant’s Scope of Services is included as Exhibit A. The Treatment Technology Study is attached under separate cover as Exhibit 4. The Conceptual Design Report is attached under separate cover as Exhibit 5. The Thornton Water Treatment Plant Conforming to Construction Drawings are attached under separate cover as Exhibit 6.

To be minimally qualified for consideration for award, proposing firms must have successfully completed the design of a gravity filter or gravity granular activated carbon (GAC) contactor project with a minimum capacity of twenty (20) mgd as design engineer within the past eight (8) years. In addition, proposing firms must have successfully completed (construction completion) a project utilizing CMAR or progressive design-build project delivery method on a water treatment plant project with construction value of at least fifty million dollars (\$50,000,000) within the past eight (8) years.

Thornton is pursuing the following funding opportunities:

1. Colorado Department of Public Health and Environment (CDPHE) Drinking Water Revolving Fund Emerging Contaminants Loan and Principal Forgiveness.
2. United States Bureau of Reclamation WaterSMART Drought Response Program Grant.

Both funding opportunities have federal compliance requirements including, but not limited to, American Iron and Steel, Davis Bacon wage determinations, anti-lobbying, Disadvantaged Business Enterprise, Build America Buy America, Williams-Steiger Occupational Safety and Health Act, and environmental, archeological, procurement, and reporting requirements. Attention is called to the requirements in the Colorado State Revolving Fund Required Specifications provided in Exhibit 7 (under separate cover). Disadvantaged Business Enterprise (DBE) requirements and goals are included. Also, certified DBEs or a consortium

of certified DBEs are encouraged to bid. The Consultant is responsible for ensuring the design complies with all funding requirements in the event that one or both of these funding opportunities are awarded to Thornton.

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).

A mandatory Pre-Proposal Conference to discuss the Project(s) will be held at **1:30 p.m., September 24, 2024**, in Conference Room 202, at the Thornton Water Treatment Plant (TWTP) at the address 920 Thornton Parkway, Thornton, CO 80229. 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, Proposal Enclosed, Design Services PFAS Treatment, Project No. 23-127”**. 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, Design Services PFAS Treatment, Project No. 23-127”**.

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 Dennis Laurita, Contracts Supervisor, 9500 Civic Center Drive, Thornton, CO 80229-4326, fax 303-538-7556, or e-mail – Dennis.Laurita@ThorntonCo.gov, 8:00 a.m. to 5:00 p.m., local time, Monday through Friday, excluding holidays.

Date First Published: September 5, 2024

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

BY: _____
Dennis Laurita
Contracts Supervisor

THIS PAGE INTENTIONALLY LEFT BLANK

IV. PROPOSAL INSTRUCTIONS AND INFORMATION

Thornton is soliciting written Proposals from qualified firms for Design Services for **PFAS Treatment, Project No. 23-127**. 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: Dennis Laurita, Contracts Supervisor
9500 Civic Center Drive
Thornton, CO 80229-4326
Fax: 303-538-7556 or Office: 303-538-7649
E-mail: Dennis.Laurita@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. local time on October 8, 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, Design Services PFAS Treatment, Project No. 23-127"**, 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, Design Services, Project No. 23-127"**, 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.

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 the design of a gravity filter or gravity granular activated carbon (GAC) contactor project with a minimum capacity of twenty (20) million gallons per day (mgd) as design engineer within the past eight (8) years. In addition, proposing firms must have successfully completed (construction completion) a project utilizing CMAR or progressive design-build project delivery method on a water treatment plant project with construction value of at least fifty million dollars (\$50,000,000) within the past eight (8) years.

Proposals from firms meeting the minimum qualifications shall be evaluated based on 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, including its proposed key personnel, in dealing with municipal or other governmental agencies in projects of similar size, scope, and nature. Experience of the proposing firm serving as the Designer in for project utilizing CMAR and/or progressive design-build.
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.

THE REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK

THIS PAGE INTENTIONALLY LEFT BLANK

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.

1. 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:

- a. 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.

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 Subconsultant's 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.

- a. Identify the Project Manager who would be responsible for this Project. List the Project Manager's relevant experience, availability of time for work on the Project, and office location. Preference will be given to local Project Managers located within 60 miles of the City of Thornton.
 - b. Identify the Project Engineer that will be performing the proposed services. List the Project Engineer's relevant experience, availability of time for work on the Project, and office location. Preference will be given to local Project Engineers located within 60 miles of the City of Thornton.
 - c. Identify other key personnel that will be performing the proposed services. List the key personnel's relevant experience, availability of time for work on the Project, and office location.
4. A written narrative that defines the methods and means by which the proposing firm will perform the Services outlined in this RFP, including but not limited to:
 - a. Proposed enhancements and/or modifications to the Indicative Design (refer to Conceptual Design Report), including potential site locations of the proposed facilities, approach to key tie-ins to the existing facility, and required plant shutdowns / durations.
 - b. Proposed early construction packages and impacts to the overall design, construction, start-up, and commissioning schedule.
 - c. Potential risks and challenges, and the proposing firm's approach for mitigation or minimizing impacts.
 - d. Collaboration between the Designer, Contractor, Owner's Advisor, and Owner during design and construction phases of the Work.
 - e. Proposed quality management and control approach.
 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.
 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, subconsultant'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. Proposed not-to-exceed cost for all Services, including all estimated reimbursable expenses.
 9. A list of what portion of the Services, if any, will be subcontracted.
 10. A list of at least five (5) project references for which similar services have been provided. Include description and relevance of project, start and end date of project or if project is ongoing, current contact names, addresses, and telephone numbers.
 11. An executed Exhibit 3, Reference Authorization and Release Form.
 12. 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.
 13. 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.
 14. 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.

THIS PAGE INTENTIONALLY LEFT BLANK

VI. EXHIBIT 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: _____

(Signature)

Title: _____

Date: _____

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

My Commission Expires (if notarized): _____

THIS PAGE INTENTIONALLY LEFT BLANK

VII. EXHIBIT 2

AGREEMENT FOR PROFESSIONAL CONSULTING SERVICES (PFAS Treatment, Project No. 23-127)

This Professional Consulting Services Agreement for **PFAS Treatment, Project No. 23-127** ("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 may be referred to as Service Provider"). Hereafter, 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 PFAS Treatment, Project No. 23-127 (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 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 the following Exhibits):

- i. Exhibit A Consultant's General Scope Of Services
 - ii. Exhibit B Consultant's 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.

Thornton requires that the following design services be performed by the Consultant as it relates to the above described Project and constitutes the basis for this Agreement.

The Services include a new PFAS treatment facility at the existing Thornton Water Treatment Plant (TWTP) located at 920 Thornton Parkway, Thornton, CO 80229. The Project shall be delivered using the Construction Manager at Risk (CMAR) method of project delivery.

- 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 \$4,000,000

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
Dennis Laurita, Contract Administrator
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.
- g. Contractor waives and must require all its insurers to waive subrogation rights against Thornton for losses paid under the insurance policies required by this contract.

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.

THE REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK

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

[EDITOR – delete ATTEST block when editing PSA for awarded firm if not applicable to the firm (i.e.: they are not incorporated).]

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

EXHIBIT A

CONSULTANT'S GENERAL SCOPE OF SERVICES

Project Description

The scope of this Professional Service Agreement includes the design for the construction of the PFAS Treatment Project (Project No. 23-127).

DESCRIPTION OF SERVICES TO BE DONE

Thornton requires that the following engineering services be performed by the Consultant as it relates to the above described Project and constitutes the basis for this Agreement.

The Services include a new PFAS treatment facility at the existing Thornton Water Treatment Plant (TWTP) located at 920 Thornton Parkway, Thornton, CO 80229. The Project shall be delivered using the Construction Manager at Risk (CMAR) method of project delivery.

The Services shall be completed in phases as further described below.

I. Information Available

Thornton will provide the Consultant with available information related to the Project. Information will include Thornton's standard front-end documents for construction contracts, existing drawings, geotechnical information, aerial photographs, survey, utility maps, applicable environmental studies and reports, Thornton standards, the PFAS Treatment Technology Study (Carollo; June 2024), and the PFAS Treatment Conceptual Design Report (Carollo; July 2024). Thornton can provide related electronic computer aided design and drafting (CADD) files. The Consultant will be responsible for verifying the information supplied by Thornton. The documentation given to the Consultant is for information only, and Thornton does not guarantee its accuracy. The Consultant shall not utilize aerial photography supplied by Thornton to the Consultant for any purpose other than Thornton's Project.

II. Design Initiation:

A. The Consultant shall prepare a draft Project Management Plan summarizing the design phase objectives and the Consultant approach; organization requirements defining resources/staffing, roles/responsibilities, contacts, and communication plan; Consultant's quality assurance/quality control (QA/QC) plan; design phase budget, schedule, and work breakdown structure; financial tracking procedures; decision/outstanding items log; and scope change management process.

B. Submit an electronic copy in Adobe Acrobat PDF format of the draft Project Management Plan to Thornton within thirty (30) Calendar Days following

written authorization to proceed. Account for a period of ten (10) Calendar Days for Thornton's review of the draft Project management plan submittal. Update the draft Project management plan based on comments received from Thornton and submit ten (10) paper copies and an electronic copy in Adobe Acrobat PDF format of the final Project management plan to Thornton within fourteen (14) Calendar Days after receipt of Thornton's comments.

- C. Schedule and facilitate a Project kickoff meeting with Thornton at the Wes Brown Water Treatment Plant (Thornton, CO) to review, among other topics, the contents of the proposed Project Management Plan and to discuss Project goals, objectives, and critical success factors. Prepare agenda and submit to Thornton no later than seven (7) Calendar Days before meeting. Prepare and provide to Thornton meeting minutes from the Project kickoff meeting. Consultant and Subconsultants shall attend Project kickoff meeting with Thornton's staff and Owner's Advisor.

III. Project Coordination and Management:

- A. The Consultant shall provide Project coordination and management for the activities performed during the Design Phase of the Work. This includes management and monitoring of labor utilization, Project schedule, and Project budget on a regular basis. It shall be the ongoing responsibility of the Consultant to adequately manage and adhere to the task budgets and to submit deliverables to Thornton on time and in accordance with the contract requirements.
- B. Monthly Progress Reports. Consultant shall prepare and submit monthly progress reports with invoices for work completed during the prior pay period and compare earned value to actual expenditures for the month and Project duration. Invoices shall be in accordance with the Professional Services Agreement (Agreement) and the progress reports shall:
 - 1. Identify or forecast proposed modifications to the Project scope;
 - 2. Include work completed to date, and work planned for next month;
 - 3. Include estimated percentages of completion for each task and subtask;
 - 4. Provide current Project cash flow and updated forecast;
 - 5. Provide any outstanding decision items or key issues that may impact the Project;
 - 6. Provide updated Project schedule, as indicated herein; and

7. Provide Project S-Curve with comparison of percent completes for estimated complete (earned value), actual budget used, and contractual projection.
- C. Progress Meetings. Consultant shall prepare, facilitate, and document bi-weekly (one meeting every two weeks), at a minimum, progress meetings throughout the duration of the Design Phase. Consultant shall coordinate meeting times and dates with the City's Project Manager. Design progress meetings shall be in-person (with a virtual option) a minimum of every other meeting (one in-person meeting every four weeks). During in-person meetings, the Project Manager, Project Engineer, and key personnel required for discussion topics shall be present in-person as an attendee. Every other meeting may be virtual. Consultant shall maintain logs and Project controls for tracking the items below and shall make copies available to Thornton and other attendees at each progress meeting.
1. Work completed since the prior meeting.
 2. Design Schedule status and near term look ahead schedule.
 3. Problems requiring Thornton's input for resolution.
 4. Additional information as agreed to by Thornton and Consultant.
- D. Contractor Coordination Meetings. In addition to progress meetings, Consultant shall participate in miscellaneous coordination meetings with the Contractor, Thornton and Owner's Advisor. At a minimum Consultant shall assume participation in twenty (20), 2-hour meetings. It is estimated that Contractor award will be in July 2025.
- E. Change Management. Consultant shall document scope and schedule changes associated with completion of Consultant's work by using a decision log, which describes the major issues that arise, and shall provide a status of each item for Thornton's review during progress meetings.
- F. Quality Management. Consultant shall perform in-progress quality management reviews to ensure that the Project objectives are realized. At a minimum, the Consultant shall perform the following:
1. Designate a quality assurance/quality control (QA/QC) officer to the Design Phase that is responsible for implementation of the QA/QC plan, and documentation of QA/QC activities. The Consultant shall appoint an engineer or equally qualified specialist as the QA/QC manager who has at least fifteen (15) years of total professional experience, or experience on at least five (5) separate projects of similar magnitude and complexity as this Project. The QA/QC manager proposed by the Consultant is subject to Thornton's approval;

2. Provide checklists and quality management guidance documents for performance of the Design Phase;
3. Require all Project personnel to read the approved Project Management Plan and be familiar with the Project procedures and requirements;
4. Perform internal review of all calculations and deliverables by designated quality management personnel prior to each submission;
5. Record and submit all internal review and comment information on forms to Thornton. Forms shall be submitted with draft deliverables with certification by the Project manager that submitted information has been reviewed and checked in accordance with the procedures documented within the Project Management Plan;
6. Review and discuss review comments provided by Thornton and Owner's Advisor on all deliverables. Record responses to comments on approved forms;
7. Consultant shall identify and utilize an individual or individuals on its staff 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. This individual shall not have had a role in the development of the Documents to assure a "fresh eyes" review. The quality control check shall be comprehensive and shall include at a minimum checking dimensions, sizes, detail, section, and elevation references, coordination between the architectural and engineering disciplines' Drawings and Specifications, reviewing designs for compatibility of materials and equipment, coordinating references within technical Specifications to other sections and to the Drawings, constructability, and future maintenance access. Consultant shall submit the comments from the independent quality control check to Thornton upon request; and
8. 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. Thornton may also engage an independent commissioning agent to review mechanical, electrical, plumbing or other special system designs and to monitor the construction and testing of such systems. Consultant shall cooperate fully with Thornton's commissioning agent.

- G. Schedule Management. Consultant shall prepare and provide updates to a Design Schedule as follows:
1. All schedules shall be prepared using Primavera P6 or MS Project scheduling software (latest version). The Consultant shall follow the 'Activity ID' format and work breakdown structure (WBS) approved by Thornton;
 2. Schedules shall be submitted as electronic files (native and Adobe Acrobat PDF format) and hardcopy and shall be updated monthly to show progress;
 3. Prepare baseline Design Schedule within thirty (30) days of the Notice to Proceed for the Design Phase that details schedule for Design Phase activities and also summarizes activities for the Construction Phase including any agreed upon early work packages. Thornton shall provide written approval of Milestone Dates in the Design Schedule. The Design Schedule shall be based upon the schedule submitted with the Consultant's proposal, and shall include at a minimum:
 - a. Start date for each activity;
 - b. Finish date for each activity;
 - c. Major milestones;
 - d. Meeting and workshop dates;
 - e. Submittal dates including draft submission dates, Thornton review periods, and final submission dates;
 - f. Identification of critical path; and
 - g. Float.
 4. The Design Schedule shall show the activities of Thornton, Design Professional, and Subconsultants necessary to meet Thornton's Design Phase completion requirements;
 5. The baseline Design Schedule shall be submitted at the kickoff meeting. It shall subsequently be reviewed and analyzed by Thornton and Owner's Advisor. Consultant shall discuss with Thornton and Owner's Advisor any review comments and shall provide a revised baseline schedule based on agreed-to changes; and
 6. Schedule updates shall be updated monthly and included in the Monthly Progress Reports. If an update indicates a previously submitted Design Schedule will not be met, Consultant shall provide a corrective recovery plan of action to Thornton in writing.

H. Work Management System.

1. Document Management. Consultant will maintain and coordinate all pertinent electronic design files and documents including all Computer-Aided Design and Drafting (CADD)-related files related to the Project. Electronic files submitted during the Design Phase shall use a naming convention approved by Thornton and described in the Project Management Plan.
 2. Project Management Information System. Thornton has implemented a web-based project management information system (PMIS) using Microsoft SharePoint to facilitate collaboration and management of the Project. The Consultant will be required to use Thornton's PMIS and follow established procedures and workflows for documenting, sharing, and control of Project information. At a minimum, the PMIS will be used for the following:
 - a. Meeting and workshop agendas, presentations, and notes;
 - b. Action items, issues, decision logs, and tracking;
 - c. Budget and schedule tracking;
 - d. Document submittals and transmittals including drawings (pdf format);
 - e. Quality management documentation including comments, responses, and confirmations;
 - f. Value engineering submissions;
 - g. Invoices and monthly reports; and
 - h. Project related communication.
 3. Thornton will provide PMIS access to Consultant for the duration of the Design Phase.
 4. The Consultant, Thornton and Contractor will coordinate during the Design Phase to evaluate the use of SharePoint and/or another system for work flow management to be utilized during the Construction Phase.
- I. All Project communications shall be directed through Thornton's Project Manager or their designee.
- J. Public Meetings: It is Thornton's intent to conduct one (1) Public Meeting during the Design Phase after the site layout alternative has been selected and prior to the Contractor breaking ground. Thornton will prepare and distribute notices for Public Meeting(s). Consultant shall prepare graphic presentation materials and give a presentation to attendees as appropriate. Consultant shall document the proceedings of this meeting and shall assist Thornton in addressing and resolving concerns.

IV. Pre-Design Phase

- A. The Consultant shall conduct data gathering meetings, as necessary, with Thornton staff, in order to obtain information and understand the desired outcome of the Project. The Consultant shall plan to attend two (2) meetings during this task.
- B. The Consultant shall evaluate alternatives as follows:
1. Alternatives for location of PFAS treatment facility and influent pump station on site, including tie-ins to existing facilities.
 - a. Evaluate the three site layout alternatives identified in the Conceptual Design Report in addition to any additional site layout alternatives proposed/identified by Consultant.
 2. Confirmation of design criteria identified in the Conceptual Design Report.
 - a. Number of GAC contactors.
 - b. GAC contactor dimensions (width and length).
 - c. Empty bed contact time.
 - d. Number of influent pumps, pump type, capacity, and required turndown for coverage over the full range of facility flow rates.
 - e. Confirmation of re-use of existing backwash supply system for backwash.
- C. The Consultant shall meet at the Project site and review the existing field conditions. Subconsultants, Thornton's staff and other designated representatives shall be present during this review.
- D. The Consultant shall contact the Utility Notification Center for utility marking, shall review Xcel Energy, CenturyLink, Comcast, AT&T, Level 3, Thornton signal and fiber, Thornton water, sanitary sewer, and storm sewer, and other public and/or private utility provider maps, as required, to accurately depict existing utility locations, depths, and points. The Consultant shall determine whether the level of accuracy thus provided is adequate and in accordance with Colorado Senate Bill 18-167; if it is not, the Consultant shall be responsible for establishing such accuracy through other appropriate means such as surveying and potholing.

The Consultant shall include allowance of twenty thousand dollars (\$20,000) for potholing utilities, as needed, within the not-to-exceed fee. The actual direct costs of potholing and associated roadway repairs will be tracked and billed separately against the allowance. Pothole locations shall be mutually agreed to by the Consultant and Thornton prior to proceeding.

The Consultant shall ensure that the location of all the subsurface utilities have been properly investigated, located and depicted on the drawings, and that all utility locations and depictions are in compliance with Colorado Senate Bill 18-167. Consultant shall further attempt to achieve ASCE 38 utility quality level B (or its successor utility quality level) on all utilities within any proposed excavation areas unless a reasonable rationale by a licensed Professional Engineer is provided in writing for not doing so.

- E. The Consultant shall provide the necessary field survey, using Thornton's control points, to identify existing features necessary to accurately complete the design of the Project. All features shall be shown within 50 feet of the proposed work area. A licensed surveyor registered to practice surveying in the State of Colorado shall perform the survey work. The Services shall include, but not be limited to, the following:
1. Site improvements;
 2. Landscape elements including fences, gates, trails, plant materials, sprinkler vaults, water features, streams, etc.;
 3. Surface treatments including pavements, curb and gutter, curb ramps, driveways, steps, etc.;
 4. All structures;
 5. All utilities, including irrigation lines, poles, vaults, hydrants, cabinets, etc.;
 6. All easements, including easements for Thornton-owned utilities;
 7. Street addresses of building structures; and
 8. All property lines and corners.
- F. The Consultant shall provide a Geotechnical Report with the necessary number of geotechnical borings or pits to determine soil properties and make recommendations on the design of the applicable elements including, but not limited to, pavement design, structure foundations, retaining structures, pipe bedding, backfill, grading, compaction, and waterproofing if applicable. The Consultant is responsible to pay the cost for the first ten borings and/or test pits in the not-to-exceed fee. If Thornton and the Consultant agree that additional borings and/or test pits are necessary, Consultant shall be compensated at the unit price provided in the Schedule of Charges.
- G. The Consultant shall initiate applications for permits required and reviews of other governmental and non-governmental agencies. The Consultant shall initiate meetings with Thornton's Building Department to obtain preliminary information of building code requirements.

- H. Based on input from Thornton, and from thorough site investigations and analyses performed independently by the Consultant, the Consultant shall prepare and submit a Basis of Design Report including the following, at a minimum:
1. Project summary, goals/objectives, and requirements;
 2. Alternatives evaluation, results, and justification for proposed alternative selection;
 3. Overall treatment process design (including process design criteria and process flow diagram);
 4. Hydraulics (including hydraulic profiles for the main process and backwash/waste streams);
 5. Site plan;
 6. Architectural, landscaping, and structural criteria;
 7. Electrical power distribution and standby power;
 8. Instrumentation and controls, and SCADA;
 9. Engineers Estimate of Probable Construction Cost for each proposed alternative. Thornton requires that a construction contingency allowance of at least twenty percent (20%) 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 Basis of Design Report exceed the currently approved budget, Consultant shall prepare a list of possible design alternates to bring the design back within budget. Thornton will either approve the incorporation of some or all of the suggestions into the next design phase and/or amend the budget prior to commencing with the next phase of design;
 10. Identification of construction early work packages;
 11. Updated design schedule (with Construction Phase schedule elements included);
 12. Copy of Geotechnical Report and summary of results and recommendations;
 13. Summary of all national and local codes and standards applicable to the Project; and

14. Sufficient number of two-dimension (2D) and three-dimensional (3D) drawings to adequately depict the preliminary design of the facilities.

I. The Consultant shall submit an electronic copy in Adobe Acrobat PDF format of the draft Basis of Design Report and mapping. Thornton requires a minimum of fourteen (14) Calendar Days to review the documents. The Consultant shall attend a 4-hour Basis of Design Review Meeting with Thornton, record comments of interested parties, and distribute minutes to all attendees. The Consultant shall revise the draft Basis of Design Report and mapping to reflect the comments and submit an electronic copy in Adobe Acrobat PDF format of the final Basis of Design documents within fourteen (14) Calendar Days following the Basis of Design Review Meeting.

J. Thornton will select the design alternative that shall be the basis for preliminary and final design phases prior to Consultant proceeding on the subsequent phases.

V. Preliminary Design Phase

A. After acceptance of the Basis of Design Report by Thornton, the Consultant shall prepare engineering designs and produce appropriate drawings and specifications, to approximately the thirty percent (30%) complete stage, for the selected design alternative.

Drawings shall be twenty-two inches (22") by thirty-four inches (34") or as otherwise appropriate and acceptable to Thornton. All drawing graphics shall fit on eleven-inch (11") by seventeen-inch (17") 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.

The 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, sidewalks, fences, gates, utilities, signs, fixtures, pavements, plantings, trails, water, sewer, and electrical services, and other proposed utilities such as storm sewer, telephone, cable, structures, including foundation and framing plans, elevations, sections, details, schedules, for architectural, structural, mechanical, electrical, plumbing, fire protection, voice/data, A/V, surveillance, access control, other special systems. Drawings for the PFAS treatment facility and booster pump station shall be prepared in 3D CAD utilizing software tools capable of detecting interference or constructability problems between building components. All component conflicts shall be resolved by the Consultant prior to issuance of the documents for bidding.

B. The Consultant shall expand on survey information provided in the Pre-Design Phase to provide information necessary for the design and necessary for construction of the Project. This information shall be shown on the drawings and shall include, but not be limited to, the following:

1. General.

The Consultant shall fully describe the benchmark utilized for vertical control, including the specific datum or origin of the benchmark. The 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.

2. Piped facilities.

The Consultant shall begin the stationing for any gravity pipe system at the low end, which shall be station 0+00.

C. The Consultant shall provide drawing sheets, which shall include, but not be limited to, the following:

1. 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 email address of Consultant and all Subconsultants (100% complete).

2. General Drawings:

- a) List of Drawings (90% complete);
- b) Site plan (90% complete);
- c) Drawing symbols, numbering & tagging conventions, symbols, and abbreviations (90% complete);
- d) Hydraulic profiles (90% complete);
- e) Design criteria (90% complete);
- f) Process flow diagrams (90% complete);
- g) Pipe material schedule (90% complete);
- h) Equipment schedule (90% complete);
- i) Valve and gate schedules (60% complete); and
- j) Boundary survey (100% complete).

3. Civil Drawings:
 - a) Yard piping, paving, grading, and stormwater drawings (30% complete); and
 - b) Yard piping/utility profiles (30% complete).
4. Structural Drawings:
 - a) General notes, plans and sections (30% complete).
5. Architectural Drawings:
 - a) Floor plans (90% complete);
 - b) Elevations (30% complete); and
 - c) Schedules (30% complete).
6. Mechanical Drawings:
 - a) Plans and sections (30% complete).
7. Plumbing, Heating, Ventilation and Air Conditioning (HVAC) and Fire Protection Drawings:
 - a) Schedules (60% complete).
8. Electrical Drawings:
 - a) Symbols, abbreviations (60% complete);
 - b) Main switchgear single line diagram (60% complete);
 - c) Load schedules (30% complete);
 - d) Single line diagrams (30% complete);
 - e) Electrical distribution site plan (30% complete);
 - f) Project Facility electrical plans (30% complete); and
 - g) Lighting and receptacle plans (30% complete).
9. Instrumentation:
 - a) Legends and symbols (90% complete);
 - b) Control system block diagrams/network architecture (90% complete); and
 - c) Process and instrumentation diagrams (P&IDs) (90% complete).
10. Security Drawings:
 - a) Project Site plan (30% complete).

The Drawings shall schematically show, at a minimum, all existing and proposed features both above and below the ground including, but not limited to, roads, sidewalks, trails, fences, gates, utilities, signs, fixtures, landscaping, plantings, structures, mechanical, electrical, plumbing and other building systems. Drawings for building and plant projects shall be prepared in 3D CAD or utilizing BIM software tools capable of detecting interference, constructability problems, and future maintenance access problems between components. All component conflicts shall be resolved by Consultant.

- D. The 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.

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 document 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. The Consultant shall prepare a Technical Specification Index/Table of Contents. Refer to Final Design Phase, paragraph M.1., for additional format requirements for technical specifications.

The 30% design Specifications shall be developed to the following:

1. Complete list of Specifications;
2. Identification of Thornton standard specifications and Consultant specifications intended use;

3. Major equipment Specifications (30% complete); and
 4. All Specifications required for the early work package (30% complete).
- E. Stormwater Sediment and Erosion Control and Stormwater Quality Control Measures:
1. The Colorado Department of Public Health and Environment (CDPHE), Water Quality Control Division (WQCD), through the Municipal Separate Storm Sewer System (MS4) permit issued to Thornton, requires Thornton to control and reduce the discharge of pollutants to protect stormwater quality and to satisfy the appropriate water quality requirements of the Colorado Water Quality Control Act and the Colorado Discharge Permit Regulations (Colorado Regulation 61). The MS4 permit requires the implementation of a program to reduce the discharge from public and private construction sites.
 2. Pursuant to Thornton's stormwater program, the Consultant shall develop designs and prepare drawings and details for stormwater quality control measures (CM) for temporary sediment and erosion control to conform to the latest edition of Urban Drainage Criteria Manual Volume III or CDOT M-Standards and in compliance with the CDPS General Permit for Stormwater Discharges Associated with Construction Activity (Permit No. COR400000) for CDPHE. The drawings shall show a minimum of three (3) phases for temporary control measures to differentiate the phases of construction. For complex projects, additional phases may be added for proper stormwater management control.
 3. If the earth disturbance is less than one (1) acre, the Consultant shall develop temporary sediment and erosion control drawings and details to control construction stormwater runoff. There is no SWMP or CDPS permit required for disturbances under one (1) acre. Sediment and erosion control measures are required for all construction in Thornton.
 4. The Consultant shall design permanent water quality CMs for new development, redevelopment, and Capital Improvement Projects that disturb one (1) or more acres, as well as for projects that disturb less than one (1) acre that are part of a larger common plan of development or sale. The requirement does not apply to excluded projects as defined in the MS4 permit.

5. The design criteria for stormwater quality CMs shall be as described in the MS4 Permit and the latest edition of Urban Drainage and Flood Control District (UDFCD) Criteria Manual Volume III.
 6. For guidance on selecting sediment and erosion control measures and permanent stormwater quality control measures, including project work sheets, checklists and general notes, visit the Thornton stormwater webpage at:

<https://www.thorntonco.gov/government/infrastructure/stormwater/Pages/stormwater-quality.aspx>
 7. The work sheets and checklists must be submitted with the final water quality design documents.
- F. The Consultant shall comply with the International Building Code (IBC), UDFCD, Americans with Disabilities Act (ADA), and all other nationally adopted design standards, as well as other standards adopted by Thornton, in designing each element of the Project.
- G. The Contractor will prepare an Estimate of Probable Construction Cost for the Project based on the 30% drawings and specifications. Upon delivery of the Estimate of Probable Construction Cost from the Contractor, the Consultant shall conduct a value-engineering review if the cost exceeds the Engineer Estimate of Probable Construction Cost. Findings from the review will be documented in a technical memorandum provided to Thornton for review and comment.
- H. The Consultant shall prepare and submit information to be incorporated with Thornton's standard construction contract documents including, at a minimum, the following:
1. A brief description (one paragraph) of the Project that adequately depicts the work to be completed.
 2. 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. The General Conditions will not be edited. The summary shall include, at a minimum:
 - a. Consultant's recommendations regarding the type of schedule to be provided by the Contractor (critical path method (CPM) for example versus simple bar chart);
 - b. A list of other outside contractors and/or agencies the Contractor will be required to coordinate with;
 - c. Any special insurance requirements;

- d. Language for unique conditions such as assignment of pre-purchased materials or equipment to the Contractor;
 - e. A calculation for recommended liquidated damages to be imposed if the Contractor should fail to substantially complete the Project within the specified contract time;
 - f. Bid item descriptions including measurement and payment information;
 - g. An estimate of the time required for the review of shop drawings and submittals.
3. A technical specification section on Submittal requirements, which coordinates with and is consistent with Thornton's Special and General Conditions sections on Submittals, and which includes a thorough and complete Project Submittal Log.

The Submittal Log shall list all submittals for this Project including, but not limited to, all Shop Drawing, 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 Log shall indicate the time frame required for Thornton and/or the Consultant review of each individual Submittal. The Submittal Log shall include blank columns for the contractor's future use to indicate the submittal processing dates, review and approval status, and comments.

- I. Thornton will require a minimum of fourteen (14) Calendar Days for Thornton, Owner's Advisor, and Contractor review of the 30% drawings and specifications. The Consultant shall attend a Field Inspection Review (FIR) Meeting and record comments of all interested parties. The Consultant shall be responsible for documenting all decisions reached during the meeting and preparing and submitting the meeting minutes to all attendees.
- J. Based upon comments received at the FIR Meeting, the Consultant shall prepare engineering designs and produce appropriate drawings and specifications, to approximately the sixty percent (60%) complete stage. The 60% design Drawings shall be developed to the following approximate levels of completion:
 1. 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 email address of Consultant and all Subconsultants (100% complete).

2. General Drawings:
 - a. List of Drawings (100% complete);
 - b. Site plan (100% complete);
 - c. Drawing symbols, numbering & tagging conventions, symbols, and abbreviations (100% complete);
 - d. Hydraulic profiles (100% complete);
 - e. Design criteria (100% complete);
 - f. Process flow diagrams (100% complete);
 - g. Pipe material schedule (100% complete);
 - h. Equipment schedule (100% complete);
 - i. Valve and gate schedules (90% complete); and
 - j. Boundary survey (100% complete).

3. Civil Drawings:
 - a. General notes (60% complete);
 - b. Yard piping, paving, grading, and stormwater drawings (60% complete);
 - c. Yard piping/utility profiles (60% complete); and
 - d. Details (60% complete).

4. Structural Drawings:
 - a. General notes (100% complete); and
 - b. Plans and sections (60% complete).

5. Architectural Drawings:
 - a. General notes (60% complete);
 - b. Schedules (60% complete);
 - c. Code review drawings (90% complete);
 - d. Floor plans (100% complete);
 - e. Roof plans (60% complete);
 - f. Elevations (60% complete);
 - g. Reflected ceiling plans (60% complete);
 - h. Sections (60% complete); and
 - i. Details (60% complete).

6. Mechanical Drawings:
 - a. Plans, sections, and details (60% complete).

7. Plumbing, Heating, Ventilation and Air Conditioning (HVAC) and Fire Protection Drawings:
 - a. Schedules (90% complete);
 - b. Plumbing isometric drawings (60% complete); and
 - c. Plans and details (60% complete).

8. Electrical Drawings:
 - a. General notes, symbols, and abbreviations (90% complete);
 - b. Main switchgear single line diagram (90% complete);
 - c. Load schedules (90% complete);
 - d. Panel schedules (90% complete);
 - e. Single line diagrams (90% complete);
 - f. Electrical distribution site plan (60% complete);
 - g. Project facility electrical plans (60% complete);
 - h. Conduit plans (30% complete);
 - i. Grounding plans (60% complete);
 - j. Lighting and receptacle plans (60% complete); and
 - k. Details (60% complete).

9. Instrumentation:
 - a. Legends and symbols (90% complete);
 - b. Control system block diagrams/network architecture (90% complete); and
 - c. Process and instrumentation diagrams (P&IDs) (90% complete).

10. Security Drawings:
 - a. Project Site plan (60% complete); and
 - b. Equipment schedules (60% complete).

The 60% design Specifications shall be developed to the following:

- a. Table of contents (100%);
- b. Identification of Thornton's standard specifications and Consultant specifications intended use;
- c. Major equipment Specifications (90% complete);
- d. Concrete specifications (90% complete);
- e. Piping and valve specifications (90% complete);
- f. Control narratives (90% complete); and
- g. Balance of specifications (60% complete).

- K. The Contractor will prepare an Estimate of Probable Construction Cost for the Project based on the 60% drawings and specifications. Upon delivery of the Estimate of Probable Construction Cost from the Contractor, the Consultant shall conduct a value-engineering review. Findings from the review will be documented in a technical memorandum provided to Thornton for review and comment.
- L. Thornton will require a minimum of twenty-one (21) Calendar Days for Thornton, Owner's Advisor, and Contractor review of the 60% drawings and specifications. The Consultant shall attend a FIR Meeting and record comments of all interested parties. The Consultant shall be responsible for documenting all decisions reached during the meeting and preparing and submitting the meeting minutes to all attendees.
- M. Consultant shall prepare and submit all required documents to CDPHE at the 60% design development stage for facility design approval for drinking water. Consultant shall organize and attend two (2) meetings with Thornton and CDPHE prior to submittal (one after BODR submittal and one prior to 60% submittal) to confirm Project design criteria and compliance with the drinking water design submittal. Consultant shall address all comments received from CDPHE, as needed, for approval of the Project.
- N. Consultant shall prepare one (1) early work package including Project elements identified in the Basis of Design Report. Early work package elements are anticipated to include site grading, deep foundations, and long-lead equipment (major electrical equipment and other process equipment identified). Pre-Final (approximately ninety-five percent (95%) design completion) and Final drawings and specification submittals shall be prepared for the early work package. Thornton will require a minimum of twenty-one (21) Calendar Days for Thornton Owner's Advisor, and Contractor review of the pre-final drawings and specifications. The Consultant shall attend a Final Office Review (FOR) Meeting to receive comments on the pre-final documents from all interested parties. The Consultant shall be responsible for documenting all comments and decisions reached during the meeting and preparing and submitting the minutes of the meeting.

VI. Final Design Phase

- A. Based on comments received at the FIR Meeting, the Consultant shall prepare pre-final (approximately ninety-five percent (95%) design completion) and final drawings and specifications in Thornton's required format.
- B. During the Final Design Phase and when Thornton and the Consultant believe the documents are sufficiently complete, the Consultant shall submit design documents to Thornton's Building Department for review. Consultant

shall respond to review comments and shall make revisions as necessary to obtain approval for the design. These revisions shall be coordinated with Thornton's project representative(s) and all Subconsultants to assure all documents are coordinated among all design disciplines, to assure the revisions do not negatively impact efficient functioning of the Project, and to assure code compliance is achieved.

- C. Thornton will require a minimum of twenty-one (21) Calendar Days for Thornton, Owner's Advisor, and Contractor review of the pre-final drawings and specifications. The Consultant shall attend a Final Office Review (FOR) Meeting to receive comments on the pre-final documents from all interested parties. The Consultant shall be responsible for documenting all comments and decisions reached during the meeting and preparing and submitting the minutes of the meeting.
- D. The 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.
- E. The Consultant shall make document revisions noted and agreed upon at the FOR Meeting within twenty-eight (28) Calendar Days following the FOR Meeting. Revisions may include denoting work elements as bid alternatives and revising the bidding form and alternates specification section 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 the Consultant do not adequately respond to the FOR comments, the Consultant shall revise and reissue the final documents at no additional cost to Thornton until all comments are resolved to Thornton's satisfaction.
- F. When Thornton determines that the final contract documents are acceptable and are ready for bidding, the Consultant shall submit the following to Thornton:
 - 1. Technical Specifications: Submit technical specifications in Microsoft Word delivered electronically, prepared using the following format:
 - a. 8 ½" x 11", 11.5 pt. Arial font, single line spacing;
 - b. Margins: left 1.0", right 1.0", top 1.0", bottom 1.0"; footer 0.5", no headers;
 - c. Index/Table of Content of Technical Specs with no page numbers indicated;
 - d. No section breaks, use page breaks between specification sections;
 - e. Section titles in all caps, bold, 14 pt. Arial font, centered on page at top of each new specification section;

- f. Entire set of specification pages numbered sequentially beginning with Page 1 of X; and
- g. Footer with file path name left justified and page number centered, 8 pt. Arial font.

2. Bid documents:

Thornton will prepare the Project Manual for bidding or for receiving a Guaranteed Maximum Price (GMP) Proposal. The Project Manual for bidding will not be stamped by the Consultant. The cover page on the Project Manual shall read "Issued for Bidding" with date.

Consultant shall submit drawing files electronically. Submit drawing files in AutoCAD format compatible with Thornton's system and with drawings combined into a single file using .pdf format.

VII. GMP Proposal Phase

- A. The Consultant shall prepare all necessary corrections and additional information based on Contractor inquiries. All answers to questions shall be coordinated with Thornton and issued by Thornton. Consultant shall not respond directly to the Contractor or subcontractor during the GMP Proposal Phase. Consultant shall provide technical information and documentation for Thornton's preparation of Contractor contract amendments. Thornton will prepare and issue all Contractor contract amendments. Two GMP proposal phases are expected for the items below, one for the early work and one for remaining work construction packages. The estimated time in between GMPs is six months.
- B. The Consultant shall assist Thornton in the review of the GMP proposal received and the qualification of subcontractors, suppliers, and vendors as deemed appropriate by Thornton.
- C. If more than one hundred eighty (180) Calendar Days have elapsed between the date of the Consultant's most recent Estimate of Probable Construction Cost and the date of the GMP 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 GMP and the Project budget.
- D. Should the GMP exceed the Consultant's Estimate of Probable Construction Cost, Thornton and the 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 (i.e., revised GMP proposal). Thornton, at its sole option, will determine the course of action to take.

- E. If the GMP exceeded the Consultant's estimate of probable construction cost, as adjusted for inflation if applicable, and should Thornton choose to re-design and re-bid (i.e., request revised GMP proposal from Contractor) the Project, the 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, the Consultant shall cooperate with the Contractor and 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.
- F. At the end of the GMP Proposal Phase, the Consultant shall make final revisions to the contract documents based on addenda/amendments issued during the GMP Proposal 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. The Consultant shall provide revised reproducible and electronic documents to Thornton within twenty-eight (28) Calendar Days following the GMP Proposal date. Issue block shall read "For Construction" and shall be dated as of the general contractor's date of Notice to Proceed with construction. Thornton will issue the "For Construction" documents to the successful general 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 their Subconsultants.

VIII. Additional Services

- A. At the request of Thornton, the Consultant shall perform Additional Services, which may include:
 - 1. Construction Phase Services;
 - 2. Close-out Phase Services; and
 - 3. Warranty Phase Services.
- B. All Additional Services shall be performed upon request by Thornton and shall be governed by the terms and conditions in the Agreement for Consultant's Services.

- C. The cost of Additional Services shall be negotiated with Thornton upon request of Services to be provided. The expected scope of Additional Services is presented below.

IX. Construction Phase

- A. Construction is anticipated to commence approximately two (2) months following the delivery of the early work package set of documents. The Consultant shall attend the “Pre-Construction Meeting” and assist Thornton in responding to inquiries by the contractor during the Pre-Construction Meeting.
- B. The Consultant shall:
 - 1. Develop an engineering services during construction (ESDC) Work plan that defines the construction engineering staff and responsibilities, engineering services procedures and protocols, and engineering deliverables during construction.
 - 2. Assign a lead resident engineer, discipline resident engineers, and an engineering manager to the Construction Phase of the Work. The lead resident engineer shall be full-time, on-site throughout the duration of construction, and will be responsible for coordination with the Owner’s and Owner’s Advisor Project staff.
 - 3. Supervise and coordinate engineering and technical services subconsultants, including geotechnical, environmental, and other subconsultants.
 - 4. Perform document management responsibilities.
 - 5. Coordinate efforts between field and office staff, construction, and permitting activities. The Engineering Manager shall support the field staff, coordinate office engineering activities, attend on site meetings (as necessary), and manage Project administration activities.
- C. The Resident Engineers shall provide field engineering services at the Project site, including but not limited to:
 - 1. Provide field observation on a daily basis to assure themselves and Thornton that the work is proceeding in accordance with the intent of the contract documents. The 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, the 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.

2. Documentation of Contractor's construction activities, including photographic documentation, sufficient to adequately capture Contractor's daily construction progress and included in daily construction observation records.
 - a. All photographs shall follow a file naming convention of "YYYY MMDD-Subject.file extension". For example, a photograph of GAC media installation in Contactor No. 1 on August 1, 2026 would be labeled "2026 0801-GAC Contactor No. 1 Media Installation.jpg".
3. Interface with the design team in the event of unusual or unexpected conditions or other field conditions encountered during construction that may warrant input from various disciplines within the design team.
4. Expedite the resolution of RFIs and coordinate interpretation of Agreement drawings and specifications.
5. Coordinate observation and support of QA/QC, special inspections, and material testing.
6. Review of proposed resolutions to non-conformance reports and corrective action plans.
7. Verify compliance with environmental/permitting requirements.
8. Coordinate production of Record Documents with construction staff and verify record drawings are kept current on-site.
9. Attendance at construction and QA/QC coordination meetings held on-site.

D. Submittals and Shop Drawings:

1. Follow Project procedures for managing, tracking, and reviewing relevant documents utilizing the Project document management system. Submittals will be reviewed in accordance with Project document requirements.
2. Review Shop Drawings, Product Data and Samples, and submittals for conformance with the design concept and compliance with the Project documents.

3. The Consultant shall review the contractor's proposed submittal schedule and comment on submittal review times proposed. The Consultant and contractor shall negotiate until mutually acceptable review times are established for each submittal. The Consultant shall complete submittal review within the agreed upon allotted time so as to not delay the construction.

E. Requests for Information (RFI) and Technical Changes:

1. The Consultant shall promptly respond to requests for information issued by Thornton, the contractor, subcontractors, testing agencies, commissioning agent, building department, or other entities so as not to delay construction.
2. Consultant shall produce revised design documentation (drawings and specifications) to support field (construction or differing site conditions), design issues, or changes as a result of an approved RFI. Consultant shall update drawing information in accordance with the required design change for incorporation into Project Record Documents.
3. The Consultant shall issue "Supplemental Instructions" to Thornton or their designated representative when an ambiguous condition requiring clarification is discovered in the contract documents. The 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.
4. The 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.

F. Quality Control Support:

1. Coordinate shop tests and inspections of work, materials, and equipment for the Project at off-site facilities and suppliers for one (1) off-site visit at three (3) days per visit.

2. Attend and witness field and factory performance tests, for selected equipment/suppliers.
 3. Monitor the coordination of inspection and testing by regulatory and third-party agencies that have jurisdiction over the Project.
- G. The Consultant shall attend weekly meetings on site with the contractor and Thornton.
- H. The Consultant shall review progress payments and make recommendations as to the validity of percentages complete claimed by the contractor.
- I. The Consultant shall periodically update the electronic documents to reflect As-Built information throughout the Construction Phase, as a minimum at the completion of each trades work, to keep the electronic documents current. The As-Built information shall be confirmed with the contractor and Thornton's Construction Coordinator before the revisions are finalized.
- J. Process Training:
1. The Consultant shall prepare training materials and handouts prior to conducting on-site training. Training material will be delivered to Thornton no less than one week in advance of the date of training. Date of training shall be coordinated with Thornton and shall occur prior to project Substantial Completion.
 2. The Consultant shall conduct process training sessions with minimum course length of two hours per session for four sessions.
 3. Training shall be tailored to the Thornton's operations staff requirements.
- K. Startup, Testing, and Initial Operations Assistance:
1. Provide field assistance with startup and optimization of the PFAS treatment facility improvements, including coordination with plant operations staff for optimization of process startup.
 2. Provide confirmation of point-to-point loop checkout and Site Acceptance Testing (SAT) to prove all control logic functionality and HMI screen functionality. The functional SAT will include control strategy field testing by the Consultant working together with the Contractor and Thornton staff to verify the proper operation of all PLC control logic and its interaction with field equipment and devices. The Consultant will exercise programs, conduct tests, and record results for submittal in the SAT testing report. The Contractor will be

responsible for equipment operation and verification of correct field operation results. It is anticipated that the functional portion of the SAT will last for one week.

X. Closeout Phase

- A. When the contractor applies for “Substantial Completion,” the 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. The 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, the Consultant will be required to submit the following:
 - 1. The Consultant shall prepare and submit As-Built documents. The issue block on the drawings shall read “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 formats.
 - b. The Project Manual shall be submitted both in hard copy and as electronic files. Submit electronic files in a Microsoft Word file compatible with the version currently in use by Thornton and as a .pdf file.

XI. Warranty Phase

- A. The Consultant shall assist Thornton in resolving warranty repairs during the warranty period.
- B. The Consultant shall participate in a walk-through of the Project near the end of the Warranty Phase and prepare a final punch list of items needing correction. The Consultant shall review progress made by the contractor on the Warranty Phase 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:

- Notice to Proceed – Date to be determined. Target date is December 12, 2024.

Pre-Design Phase

- Attend Project Kick Off Meeting – date to be determined.
- Attend Data Gathering Meetings – dates to be determined.
- Attend field conditions walk-through – date to be determined.
- Submit Basis of Design documents within 56 Calendar Days after Notice to Proceed.
- Attend Pre-Design Review Meeting within 70 Calendar Days after Notice to Proceed.

Preliminary Design Phase

- Submit 30% Preliminary Design documents within 140 Calendar Days after Notice to Proceed.
- Attend 30% Field Inspection Review (FIR) Meeting within 154 Calendar Days after Notice to Proceed.
- Submit 60% Preliminary Design documents within 238 Calendar Days after Notice to Proceed.
- Attend 60% Field Inspection Review (FIR) Meeting within 259 Calendar Days after Notice to Proceed.
- Submit pre-final Early Work Package design documents – date to be determined.
- Submit Early Work Package bid documents within 28 Calendar Days after Final Office Review (FOR) Meeting.

Final Design Phase

- Submit pre-final design documents within 315 Calendar Days after Notice to Proceed.
- Attend Final Office Review (FOR) Meeting within 336 Calendar Days after Notice to Proceed.
- Submit Final Design permit and bid documents within 28 Calendar Days after Final Office Review (FOR) Meeting.

GMP Proposal Phase

- Revise documents as required to meet budget – submission date to be determined.
- Prepare technical information and documentation for Contractor amendment(s) for Thornton's review – dates to be determined.
- Prepare "For Construction" contract documents incorporating all addenda/amendment items – deadline to be determined and to correspond to date of Notice of Award for the construction contractor.

THIS PAGE INTENTIONALLY LEFT BLANK

EXHIBIT C

SCHEDULE OF CHARGES

NOTE TO EDITOR – MODIFY CHART BELOW TO SUIT ANTICIPATED PROJECT CONDITIONS. DELETE CHART FOR FIXED FEE PROPOSALS AND SUBSTITUTE A LIST OF DESIGN, CONSTRUCTION, AND CLOSE OUT PHASES WITH SPACE FOR CONSULTANT TO INSERT PERCENTAGES APPLICABLE TO EACH PHASE FOR INVOICING PURPOSES.

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		=	\$
TOTAL					\$

(Use additional page if necessary.)

REIMBURSABLE EXPENSES:

[NOTE TO EDITOR: When editing final Agreement for the awarded firm, modify below to delete language that is an instruction to proposers, such as "List all categories..."]

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

THIS PAGE INTENTIONALLY LEFT BLANK

IX. EXHIBIT 4
TREATMENT TECHNOLOGY STUDY
(UNDER SEPARATE COVER)

THIS PAGE INTENTIONALLY LEFT BLANK

X. EXHIBIT 5
CONCEPTUAL DESIGN REPORT
(UNDER SEPARATE COVER)

THIS PAGE INTENTIONALLY LEFT BLANK

XI. EXHIBIT 6

**THORNTON WATER TREATMENT PLANT CONFORMING TO
CONSTRUCTION DRAWINGS**

(UNDER SEPARATE COVER)

THIS PAGE INTENTIONALLY LEFT BLANK

XII. EXHIBIT 7

COLORADO STATE REVOLVING FUND REQUIRED SPECIFICATIONS

(UNDER SEPARATE COVER)