



**CONTRACT FOR PROFESSIONAL SERVICES  
CDM SMITH, INC.**

This Contract, dated \_\_\_\_\_, 2024, is between the **City of Bryan**, a Texas home-rule municipal corporation (City) and **CDM Smith, Inc.**, a Texas corporation (Engineer), City and Engineer, in consideration of the mutual covenants set forth herein, agree as follows:

**1. Scope of Services**

The Engineer agrees to provide the City with professional services for Brushy Creek Wastewater Treatment Plant conceptual alternative and funding assessment. The services are more particularly described in **Attachment A**.

**2. Payment**

The City shall pay the Engineer according to the terms set forth in **Attachment B**. Except in the event of a duly authorized change order, approved by the City in writing, the total cost of all professional services and expenses provided under this Contract may not exceed **\$3,323,000**.

**3. Time of Performance**

- A. All professional services provided under this Contract must be completed by **December 31, 2028**. Any extension of the time for completion must be approved by the Public Works Director and agreed by both parties in writing.
- B. **Time is of the essence of this Contract.** The Engineer shall be prepared to provide the professional services in the most expedient and efficient manner possible in order to perform the work according to the Project Schedule in **Attachment C** and by the completion date indicated in Section 3.A.

**4. Warranty, Indemnification, and Release**

- A. As an experienced and qualified landscape Engineer, the Engineer warrants that Engineer will perform all services under this Contract, including but not limited to providing information, design preparation of drawing, designation or selection of materials and equipment and selection and supervision of personnel, (1) with the professional skill and care ordinarily provided by competent Engineers practicing in the same or similar locality and under the same or similar circumstances and professional license; and (2) as expeditiously as is prudent considering the ordinary professional skill and care of a competent landscape Engineer. Approval of the City shall not constitute, or be deemed, a release of the responsibility and liability of the Engineer, its employees, agents, or associates for the exercise of skill and diligence to promote the accuracy and competency of their designs, information, plans, specifications or any other document, nor shall the City's approval be deemed to be the assumption of responsibility by the City for any defect or error in the aforesaid documents prepared by the Engineer, its employees, associates, agents, or subcontractors.

- B. The Engineer shall promptly correct any defective designs or specifications furnished by the Engineer at no cost to the City. The City's approval, acceptance, use of, or payment for, all or any part of the Engineer's services hereunder or of the project itself shall in no way alter the Engineer's obligations or the City's rights hereunder.
- C. In all activities or services performed hereunder, the Engineer is an independent contractor and not an agent or employee of the City. The Engineer and its employees are not the agents, servants, or employees of the City. As an independent contractor, the Engineer shall be responsible for the professional services and the final work product contemplated under this Contract. Except for materials furnished by the City, the Engineer shall supply all materials, equipment, and labor required for the professional services to be provided under this Contract. The Engineer shall have ultimate control over the execution of the professional services. The Engineer shall have the sole obligation to employ, direct, control, supervise, manage, discharge, and compensate all of its employees or subcontractors, and the City shall have no control of or supervision over the employees of the Engineer or any of the Engineer's subcontractors.
- D. The Engineer must at all times exercise reasonable precautions on behalf of, and be solely responsible for, the safety of its officers, employees, agents, subcontractors, licensees, and other persons, as well as their personal property, while in the vicinity of the project or any of the work being done on or for the project. It is expressly understood and agreed that the City shall not be liable or responsible for the negligence of the Engineer, its officers, employees, agents, subcontractors, invitees, licensees, and other persons.
- E. **Responsibility for damage claims (indemnification):** Engineer shall indemnify and save harmless the City and all its officers, agents, and employees from all suits, actions, or claims of any character, name and description brought for or on account of any injuries or damages received or sustained by any person or persons or property resulting from the Engineer's negligent act, intentional tort, intellectual property infringement or failure to pay a subcontractor or supplier, or by or on account of any claims or amounts recovered under the Workmen's Compensation Law or any other law, ordinance, order or decree arising therefrom, and his sureties shall be held until such suit or suits, action or actions, claim or claims for injury or damages as aforesaid shall have been settled and satisfactory evidence to the effect furnished the City. Engineer shall indemnify and save harmless the City, its officers, agents and employees in accordance with this indemnification clause only for that portion of the damage caused by Engineer's negligence, intentional tort, intellectual property infringement or failure to pay a subcontractor or supplier. Engineer shall reimburse City for its reasonable attorney's fees in proportion to Engineer's liability for any such claim.
- F. **Release.** The Engineer releases, relinquishes, and discharges the City, its officers, agents, and employees from all claims, demands, and causes of action of every kind and character, including the cost of defense thereof, for any injury to, sickness or death of the Engineer or its employees and any loss of or damage to any property of the Engineer or its employees that is caused by or alleged to be caused by, arises out of, or is in connection with the Engineer's negligent performance of the work. Both the City and the Engineer expressly intend that this release shall apply regardless of whether said claims, demands, and causes of action are covered, in whole or in part, by insurance.

## **5. Insurance Requirement**

Engineer agrees to have and maintain the policies set forth in the insurance requirements attached as **Attachment D**. All policies, endorsements, certificates, and/or binders shall be subject to approval by the City as to form and content. These requirements are subject to amendment or waiver only if so approved in writing by the City. A lapse in any required coverage shall be a breach of this Contract.

## **6. Termination**

- A. The City or Engineer may terminate this Contract at any time upon thirty (30) calendar days' written notice. Upon the receipt of such notice, the Engineer shall discuss with the City what will be accomplished within the thirty (30) calendar day timeframe and document this in an exit strategy that must be approved by the City. The Engineer shall be compensated for the services satisfactorily performed prior to the termination date.
- B. If, through any cause, the Engineer fails to fulfill its obligations under this Contract, or if the Engineer violates any of the agreements of this Contract, the City has the right to terminate this Contract by giving five (5) calendar days' written notice to the Engineer. The Engineer will be compensated for the services satisfactorily performed before the termination date.
- C. No term or provision of this Contract shall be construed to relieve the Engineer of liability to the City for damages sustained by the City because of any breach of contract by the Engineer. The City may withhold payments to the Engineer for the purpose of setoff until the exact amount of damages due the City from the Engineer is determined and paid.

## **7. Governmental Contract Requirement**

- A. Engineer must submit a disclosure of interested parties to the City in accordance with Section 2252.908 of the Texas Government code and rules adopted under that section. The disclosure must be submitted, on a form prescribed by the Texas Ethics Commission, at the time the Engineer submits the signed contract to the City.
- B. Engineer verifies that it is not engaged in business with Iran, Sudan, or a foreign terrorist organization, as prohibited by Section 2252.152 of the Texas Government Code.
- C. Engineer verifies, to the extent authorized by law, that it does not, and will not for the duration of this Contract, boycott Israel, in accordance with Section 2271.002 of the Texas Government Code.

## **8. Miscellaneous Terms**

- A. This Contract has been made under and shall be governed by the laws of the State of Texas. The parties agree that performance and all matters related thereto shall be in Brazos County, Texas. Venue for any matter arising from this Contract shall be in the court of competent jurisdiction in Brazos County, Texas.
- B. Notices shall be mailed to the addresses designated herein or as may be designated in writing by the parties from time to time and shall be deemed received when sent postage prepaid U.S. Mail to the following addresses:

The City of Bryan  
Attn: Jayson Barfknecht, Ph.D. P.E.  
P.O. Box 1000  
Bryan TX 77805

The Engineer: CDM Smith, Inc.  
Attn: Allen Woelke, P.E.  
8310-1 N Capital of Texas Hwy, Suite 250  
Austin TX 78731

- C. No waiver by either party hereto of any term or condition of this Contract shall be deemed or construed to be a waiver of any other term or condition or subsequent waiver of the same term or condition.
- D. This Contract represents the entire and integrated agreement between the City and the Engineer and supersedes all prior contracts, negotiations, representations, or agreements, either written or oral. This Contract may only be amended by written instrument approved and executed by the parties.
- E. This Contract and all rights and obligations contained herein may not be assigned by the Engineer without the prior written approval of the City.
- F. The Engineer, its agents, employees, and subcontractors must comply with all applicable federal and state laws, the charter and ordinances of the City of Bryan, and with all applicable rules and regulations promulgated by local, state, and national boards, bureaus, and agencies. The Engineer must obtain all necessary permits and licenses required in completing the work and providing the services required by this Contract.
- G. The Engineer certifies that neither he, nor any co-owner of the organization is related to a member of the City Council of the City of Bryan within the first, second, or third degree of consanguinity (blood) or affinity (marriage).
- H. The Engineer shall apply basic safeguarding requirements and procedures to protect Engineer's information systems whenever the information systems store, process or transmit any information, not intended for public release, which is provided by or generated for the City. This requirement does not include information provided by the City to the public or simple transactional information, such as that necessary to process payments. These requirements and procedures shall include, at a minimum, the security control requirements "reflective of actions a prudent business person would employ" which are outlined in the Federal Acquisition Regulations FAR 52.204-21(b) and codified in the Code of Federal Regulations at 48 C.F.R. § 52.204-21(b) (2016). Engineer shall include the substance of this clause in subcontracts under this contract in which the subcontractor may have City contract information residing in or transiting through its information system.
- I. The provisions of this Contract are independent and severable from each other, and no provision shall be affected or rendered invalid or unenforceable by virtue of the fact that, for any reason, any other or others of them may be invalid or unenforceable in whole or in part. Furthermore, if a court of competent jurisdiction determines that any provision of this Contract is invalid or unenforceable as written, the court may interpret, construe, rewrite, or revise such provision to the fullest extent allowed by law, so as to make it valid and enforceable, consistent it the intent of the parties hereto.

- J. The attachments to this Contract are incorporated herein and shall be considered part of this Contract. In the event of a conflict between this Contract and any attachments to this Contract, the provision of this Contract shall prevail.
- K. The parties acknowledge that they have read, understood, and intend to be bound by the terms and conditions of this Contract.

**[Remainder of Page Intentionally Left Blank – Signature Page Follows]**

**CITY OF BRYAN:**

**APPROVED AS TO FORM:**

\_\_\_\_\_  
Thomas A. Leeper, City Attorney

**PREPARED AND RECOMMENDED:**

\_\_\_\_\_  
Mark Jurica, Treatment & Compliance Manager

**APPROVED FOR PROCESSING:**

\_\_\_\_\_  
Jayson Barfknecht, P.E., Ph.D.  
Director of Public Works

\_\_\_\_\_  
Kean Register, City Manager

(Corporate Seal)

**APPROVED:**

\_\_\_\_\_  
Bobby Gutierrez, Mayor

**ATTESTED:**

\_\_\_\_\_  
Mary Lynne Stratta, City Secretary

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

**ENGINEER:**

By: \_\_\_\_\_

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

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

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

Firm's License No. \_\_\_\_\_

**ATTACHMENT A**  
**Scope of Services and Fee**  
**for**  
**City of Bryan, Texas**  
**Thompson’s Creek Wastewater Treatment Plant Expansion**

This Exhibit A is part of CDM Smith Inc. (CDM Smith)’s June 1, 2024 Engineering Services Agreement with the City of Bryan, Texas (City) for professional engineering services related to the proposed expansion of the Thompson’s Creek Wastewater Treatment Plant (the “Project”).

**PROJECT UNDERSTANDING AND DESCRIPTION**

The City of Bryan owns and operates the Thompson’s Creek Wastewater Treatment Plant (TCWWTP). Constructed in the early 2010s, this facility has an average annual design flow capacity of two million gallons per day (mgd). Due to service area growth and increased influent flows, the City is interested in expanding the AADF capacity from two to four mgd. Anticipated scope for additional and expanded facilities required for this treatment capacity expansion would be as follows:

- **Preliminary Engineering Report:** Engineer will update the preliminary engineering report with updated design requirements and constraints.
- **Influent Lift Station:** Upgrade the Jones Road Influent Lift Station with four (4) Hidrostal pumps with pre-rotation basins and electric pump lifting hoist. Replace slide gates, add a plug valve on discharge header, replace back-up power generator and remove 8-feet of grit from the bottom of the wet well. Provide revised control narrative for pre-rotation basin pumps.
- **Headworks:** Headworks improvements include a second Vortex Grit Removal System, replace the grit pump and grit cyclone. Add weirs downstream of headworks and remove blind flanges from outlet piping stub-outs. Replace the mechanical screen with a multi-rake climbing mechanical screen and add an odor control unit. Replace vendor provided panel for existing grit vortex system.
- **Aeration Facilities:** Aeration facility improvements consist of adding two (2) additional aeration basins and two (2) new turbo blowers adjacent to the two existing aeration blowers. Demolish the existing multi-stage blower. Replace existing check valve and isolation valve and provide a wheel-chain for new isolation valve.
- **Secondary Clarifiers:** Clarifier improvements consist of adding two (2) additional secondary clarifiers. The clarifier splitter box will require the construction of outfall boxes for the related yard piping.
- **Return Activated Sludge (RAS) Pumps:** Add additional RAS pumping facilities and add additional isolation valve to existing RAS pump station.
- **Ultraviolet (UV) Disinfection Facility:** Replace the existing UV equipment installed at existing UV Disinfection and Water Reuse Facility with a new system sized for increased flow. Provide a sunshade canopy for the facility. Replace control valve and strainer in Water Reuse Facility.
- **Waste Activated Sludge (WAS) Storage Tank:** Add one (1) additional WAS Storage

- Tank, telescoping valve and associated blowers and pumps.
- **Belt Filter Press:** Improvements consist of adding polymer masonry building.
  - **Electrical and Automation:** Plant improvements consist of all required electrical and automation required for plant to operate as designed. Engineer will design and integrate (as a part of AESS. Section 6.2 of this document) new equipment into existing SCADA system, including all required programming. Engineer will confirm new equipment software complies with the City’s cyber security standards, and demolish the uninterruptible power supply in the Server Room. Engineer will revise existing HMI screens to include additional new asset tags, associated graphics for each tag, strategy, and reporting for the added equipment.
  - **Yard Piping:** Plant improvements include all interconnecting yard piping.
  - **Site Restoration:** Plant improvements include all site grading and site work. Extend pavement from Aeration to the Dewatering Facilities.
  - **Permitting:** Engineer will provide professional services to prepare TPDES permit amendment to increase effluent discharge limits to AADF of 8 mgd for future use by the City.

This scope of work includes professional engineering services by CDM Smith for the design, bidding and limited construction phase services for the Project.

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## ASSUMPTIONS

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The following assumptions have been made in the development of this scope and fee proposal for engineering services related to the Scope of Work Tasks 1 through 6 as described herein:

1. The City will execute the construction under design/bid/build approach with a single construction package.
2. Notice to proceed will be in June 2024. Design will be completed no later than March 2025. Bidding Phase services will be completed in second quarter of 2025. Construction phase and related services will begin on or about August 2025 and be complete by August 2028.
3. All permit applications and execution fees and costs for City of Bryan permit fees, inspection fees, certificate of occupancy fees shall be paid by the construction contractor.
4. All deliverable submittals will be in digital (.pdf) format unless otherwise noted. Hard (paper) copies will be provided as noted below for design submittals.
5. Front End Division 00 and Division 01 Specification will employ City standard documents, supplemented in by CDM Smith Division 01 specification as required.
6. Existing security system will not be replaced.
7. Scope does not provide for a resident project representative (RPR) to provide daily inspection services. ENGINEER on-site services are limited to those identified in Task 4 and does not include construction observation services. Owner will provide all construction observation services.



8. No start-up, testing (except FAT and FDT for plant SCADA, as listed below), training, or O&M documentation will be provided by ENGINEER. These services are expected to be provided by the installing contractor and equipment supplier.
  - a. CDM Smith will support Factory Acceptance Testing (FAT) for plant control systems for a 3-day duration.
  - b. CDM Smith will support FAT for the UV control system for a 1-day duration.
  - c. CDM Smith will support Functional Demonstration Testing (FDT) during commissioning of plant controls for a 5-day period.
9. Security scope only includes addition of new intrusion detection switches for new construction (if needed). There is no existing security system (cameras, door card readers etc.) at the plant.
10. Excluded work includes expansion of Reuse Pumping and expansion of influent sewer or outfall pipeline

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## **SCOPE OF WORK**

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CDM Smith proposes to provide professional engineering services for the above referenced Project as follows.

### **A. BASIC SERVICES SCOPE OF WORK**

#### **Task 1 - Project Management**

Under all work tasks, CDM Smith will provide the following ongoing project management and administration services during the execution of the project as follows:

- Conduct a project kickoff meeting to discuss project objectives, scope of work, communications, information needs, and schedule. The project kickoff meeting will also include CDM Smith Project Quality Management (PQM) process to identify project stakeholders' critical success factors and identify processes/activities/tasks with (responsible persons identified) to achieve the desired successes. It is expected that this meeting will last up to four hours. CDM Smith will prepare an agenda prior to the meeting for the City's preview and will prepare and distribute meeting summary minutes following the meeting.
- Maintain communication between CDM Smith's and City's project manager.
- Implement quality assurance and quality control standards of the Engineer.
- Establish and update a project schedule as the work progresses.
- Provide City with monthly status reports of project progress, expenditures to date, and cost-to-budget information.

- Provide monthly progress invoices based on work completed to date and project phase.
- Advise City when the established project expectations cannot be met or when the engineering fee or construction cost will increase as a changed directives from City on the scope of the desired improvements.

**Summary of Task 1 Supplemental Work Products**

- Project Kickoff Meeting and PQM Agenda and Meeting Summary (.pdf format)

**Task 2 - Preliminary Investigations**

To provide additional information required for design of the Project, CDM Smith will complete the following preliminary investigation subtasks.

**Subtask 2.1 - Site Topographic Survey**

CDM Smith will provide topographic and existing utility (record drawing-based) survey for the TCWWTP site affected by the proposed work of the Project (assumed to be approximately 2.51 total acres). Topographic surveys will be completed in accordance with the following:

- a. Horizontal control for the site will be established on the Texas State Plane Coordinate System, North Central Texas Zone 4202 NAD 93 Coordinates. Vertical control will be based on NAVD 88 Datum.
- b. Surveyor will establish an adequate number of documented and retraceable benchmarks on the site.
- c. Existing utilities will be mapped by visible features and utility owner field markup. No additional potholing or other exploratory means will be provided to locate buried utilities.
- d. Surface elevation contour intervals of 1-foot will be provided for site grade.

**Summary of Task 2.1 Supplemental Work Products:**

- Topographic site survey (AutoCAD file format)

**Subtask 2.2 - Updated Geotechnical Investigations/Engineering Report**

A geotechnical subsurface investigation and report consistent with International Building Code requirements will be developed for use by the design team for all new structures and general site work that is part of the Project. The investigation and report will be performed prior to final foundation and structural design and will be based on the proposed locations and sizes of the new structures and improvements. CDM Smith will conduct a geotechnical investigation (soil borings) and laboratory analyses and will prepare an Updated Geotechnical Engineering Report for Project's facilities. The report will summarize findings from the geotechnical investigation consisting of recommendations for foundation design of new structures, pipe embedment design and general construction considerations consisting of excavation protection, dewatering, backfill and testing requirements. It is assumed that up

to six (6) test borings at an average depth of thirty (30) feet will be completed at the site. One groundwater piezometer will also be installed at the site to a depth of approximately 40 feet to provide seasonal groundwater level data to potential contractors.

**Summary of Task 2.2 Supplemental Work Products:**

- Updated Geotechnical Report (include soil borings logs and laboratory soil analyses results (.pdf format))

**Task 3 - Design Phase Services**

CDM Smith will provide the following services as part of the design of the proposed Project:

A. Site Visit: CDM Smith's design team will also conduct a site visit to confirm existing conditions as observable and as related to the proposed work. TCWWTP plant staff will need to provide access to appropriate facilities.

B. Develop a Preliminary Engineering Report

CDM Smith will prepare an Updated Preliminary Engineering Report (PER) based on 30% progress design that documents the following for the components of the Project:

- Description of project objectives
- Summary of current and projected wastewater flows and pollutant loadings.
- Summary of Effluent Discharge Permit requirements and effluent limitations.
- Description and summary of treatment process basis of design for new and modified liquid and solids treatment facilities.
- Site/civil requirements and design (including review of applicable codes and land use zoning requirements).
- Review of plant hydraulics, including required added flow conveyances (yard piping).
- Odor control requirements and design.
- Architectural requirements and design (including codes and standards).
- Structural requirements and design (including codes and standards).
- Geotechnical Foundation requirements (geotechnical report as Appendix)
- Electrical requirements and design (including codes and standards)
- Instrumentation/controls/site security requirements and design.
- Building mechanical (HVAC, plumbing, and fire protection) requirements and design (including codes and standards).

CDM Smith will submit draft PER report to City for review and discussion during project workshops. Following receipt of comments, CDM Smith will update and revise the sections and prepare a consolidated Final PER for submittal for TCEQ review and approval.

C. Develop Contract Documents:

CDM Smith will prepare Contract Documents (plans technical specifications, and Contract Provisions) for use in bidding and constructing the Project. We have assumed that the Project will be bid as a single construction contract with a single base bid (no bid alternates). Drawings

and specifications will depict required construction work for the following design discipline areas:

- General (partial hydraulic profile and process flow diagram of affected processes)
- Civil/Site (yard piping, paving/drainage).
- Structural
- Architectural
- Process Mechanical
- Building Mechanical (HVAC, Plumbing, and Fire Protection)
- Electrical
- Instrumentation

D. Progress Reviews Submittals:

CDM Smith will provide progress submittals in PDF format at the approximate 30%, and 90% design progression points for City review and confirmation of project intent. The City shall provide one consolidated set of review comments on plans and specifications for each review submittal, including a list of comments in spreadsheet form. CDM Smith will respond to one consolidated set of comments, addressing each item in the City’s review.

For 30% design submittal, the approximate percent complete by discipline is assumed as follows:

- |  |     |
|--|-----|
| • General (hydraulic profile and process flow diagram) | 40% |
| • Civil/Site (yard piping, paving, grading, drainage)  | 40% |
| • Geotechnical/Foundation                              | 50% |
| • Architectural  | 30% |
| • Structural   | 30% |
| • Process Mechanical                                   | 40% |
| • Instrumentation/PMIDs                                | 60% |
| • Building Mechanical                                  | 30% |
| • Electrical   | 10% |

For 90% design submittal, the approximate percent complete by discipline is assumed as follows:

- |  |     |
|--|-----|
| • General (hydraulic profile and process flow diagram) | 90% |
| • Civil/Site (yard piping, paving, grading, drainage)  | 90% |
| • Geotechnical/Foundation                              | 90% |
| • Architectural  | 90% |
| • Structural   | 85% |
| • Process Mechanical                                   | 95% |
| • Instrumentation/PMIDs                                | 95% |
| • Building Mechanical                                  | 90% |
| • Electrical   | 85% |

E. Progress Review Workshops:

CDM Smith will schedule and coordinate with the City and attend meetings following the 30%, and 90% design submittals to discuss comments and resolve significant issues prior to progression of the design. CDM Smith has assumed that CDM Smith's project manager, and lead civil, process mechanical, structural, architect, electrical, or instrumentation engineers would attend these workshops, which will last up to approximately three hours each.

F. Opinion of Probable Construction Cost:

CDM Smith will prepare updated opinions of probable construction cost following the 30%, and 90% design submittals. The 30% cost opinion will be a Class 4 estimate, per AACE International Recommended Practice No. 18R-97, with appropriate contingencies based on design progress completion. The 90% cost opinion will be a Class 2 estimate, per AACE International Recommended Practice No. 18R-97, with appropriate contingencies based on design progress completion.

G. Final Submittals:

CDM Smith will provide six sets of final (ready for bid) Contract Documents sets (1/2 size drawings and Project Specifications Manual) containing special conditions, and technical specifications. CDM Smith assumes that the contract provisions ("front end") would be City of Bryan standard and provided in electronic format for use in development of the Project Manual and do not require extensive edits from CDM Smith.

H. Regulatory Submittals:

CDM Smith will prepare and submit a Summary Transmittal Letter to TCEQ in accordance with TCEQ 217.6(c). We have assumed that TCEQ approval would be granted following the submittal of the Summary Transmittal Letter.

***Summary of Task 3 Deliverables:***

- 30% Design Submittal (Draft PER, Progress Drawings)
- 90% Design Submittal (Progress Drawings, Technical Specifications, and Contract Provisions)
- Final Design Submittal (Progress Drawings, Technical Specifications, and Contract Provisions)

***Summary of Task 3 Supplemental Work Products***

- Workshop meeting summaries
- 30%, and 90% opinions of probable construction cost
- TCEQ 217.6(c) Summary Transmittal Letter

**Task 4 - Bidding Assistance Services**

CDM Smith will provide the following services to assist the City in the advertisement, solicitation, receipt, and evaluation of the bid phases for the Project:

- Conduct in conjunction with the City, a pre-bid meeting and site visit for the prospective bidders.
- Prepare up to four addenda as required to interpret, clarify, or expand the Contract Documents.
- Assist the City in evaluating bid proposals by confirming the two apparent low contractor qualifications and references.
- Review the questionnaire to determine the acceptability of materials and equipment submitted by the apparent successful bidder when the review is required by the bidding documents after bid opening and prior to award of contract.
- Review and evaluate the qualifications of the apparent successful bidder and the proposed major or specialty subcontractors when warranted. The review and evaluation will include such factors as previously constructed work, financial resources, technical experience, and responses from references.
- Provide formal letter of recommendation for the award of construction contract to the lowest, responsible bidder.
- Incorporate addenda items into the Contract Documents and prepare the following numbers of conformed contract document sets:
  - Four fully executed spec books (conformed and with original signatures).
  - Five conformed (addenda posted) specification books.
  - Five half-size drawing sets (conformed)
  - Two full-size drawing sets (conformed).

**Summary of Task 4 Supplemental Work Products**

- Pre-Bid Meeting Minutes
- Contract Addenda
- Summaries of bid tabulation and review
- Conformed Contract Documents

**Task 5 – Engineering Services during Construction**

The following engineering services will be provided during project construction.

- A. **Construction Meetings.** ENGINEER will attend in person the project kick-off meeting, twenty-four (24) on-site project site visits, the substantial completion meeting and the final completion walk-through. ENGINEER will provide meeting minutes following each meeting.
  - a. CDM Smith will support Factory Acceptance Testing (FAT) for plant control systems for a 3-day duration.
  - b. CDM Smith will support FAT for the UV control system for a 1-day duration.

- c. CDM Smith will support Functional Demonstration Testing (FDT) during commissioning of plant controls for a 5-day period.
- B. Submittal Review.** ENGINEER will review 140 shop drawing submittals and up to 80 resubmittals. ENGINEER will log-in, track and distribute submittals to the various disciplines. ENGINEER will perform a technical and functional review of shop drawings and other submittals. It is understood that the Owner reserves the right and may elect to review site civil submittals.
- C. RFI Review.** ENGINEER will log, track, review and respond to up to twenty-four (24) technical RFIs submitted by the contractor and subcontractors. ENGINEER will provide a copy of the RFI log at the construction progress meeting.
- D. Change Order Review.** ENGINEER will log, track, review and comment on up to eight (8) Change Proposal requests.
- E. Record Drawings.** ENGINEER will prepare Record Drawings for the combined drawings set for the Thompson Creek WWTP Expansion project based on the Contractor's red-line markups of the construction contractor's confirmed field plans. The Record Drawings will be produced with AutoCAD. The Record Drawings will be delivered to the OWNER in electronic (.pdf) format.

## **Task 6 – Additional Services**

### **Subtask Task 6.1 – TPDES Permitting**

CDM Smith understands that the City of Bryan would like to amend the existing TPDES permit (WQ0010426004) for the Thompson Creek WWTP to account for a future maximum daily average discharge of 8.0 MGD to accommodate anticipated growth. This change would be considered a major amendment.

- CDM Smith will coordinate a pre-application consultation with TCEQ to discuss the assimilative capacity of the receiving water and the likely permit limits that will apply after expansion.
- Following this discussion, CDM Smith will prepare the permit application documents required for the proposed major amendment. This will include development of TCEQ forms 100053, 100054, and related appendices including: revised maps, adjacent property notices, site layout figures, process flow diagrams, and calculations associated with the amendment.
- Additional effluent water quality sampling will be necessary, and sampling and analyses costs are assumed to be performed by the City and not included in this scope.
- The City shall also provide WWTP service area boundaries, survey and property boundary information, and other plant information not readily available to CDM Smith as required for the permit application by the TCEQ.
- CDM Smith will provide a draft permit application package to the City for review prior to submittal to TCEQ. The permit application fee (currently \$2,050.00 for a major amendment) is included in this estimate and will be paid to TCEQ by CDM Smith at the time of application.
- CDM Smith will coordinate responses to any additional requests for information by the TCEQ during the permit application review process and will assist with development of the Public Involvement Plan (PIP) and required public notices. The City will be responsible for providing a public viewing location and publishing the two public notices in the local newspaper, as required.
- CDM Smith will review the draft permit from the TCEQ once issued to identify potential

concerns and provide a list of concerns to the City and will participate in up to two (2) additional teleconferences with City and/or TCEQ to discuss the Draft Permit and associated issues or conditions.

The fee associated with this scope of work assumes that the major permit amendment application is uncontested. Should the amended permit be contested and additional time is needed for meeting with the City, TCEQ, or others; CDM Smith proposes to work on a time-and-materials basis, as needed and as requested by the City.

## **Subtask Task 6.2 – Application Engineering Services Scope (AESS)**

CDM Smith will serve as the Application Engineering Services Supplier (AESS) for the project. AESS scope includes additions and modifications to the city's existing SCADA system affected by the project scope as follows:

- **HMI Software.** Existing Citect HMI software version will not be upgraded. Project scope only includes addition of new I/O points, or modification to existing points affected by the project scope, to the existing Citect HMI software database.
- **HMI Programming.** The HMI programming scope includes modification of existing screens affected by project scope (additions and modifications) and creation of up to 4 new HMI overview screens.
- **Historian Programming.** Existing Wonderware historian, reporting software, and alarm dialer will not be upgraded. Project scope only includes addition of new I/O points to the existing Wonderware historian (up to 500 points), reporting software (up to 2 reports), and Win 911 alarm dialer (up to 500 points).
- **Win 911 Tag harmonization.** I/O tags in the win911 tag database will be harmonized to match the tags in HMI and PLC databases.
- **PLC Programming.** PLC programming scope includes modifications to existing PLC programs:
  - PLC - JRLS
  - PLC – PLT3
  - Modifications for PLC-JRLS and PLC-PLT3 affected by the project scope, as well as additions to existing PLC programs for new system additions. The scope includes programming of up to 300 hard I/O and up to 200 soft I/O points.
  - Control logic for the JRLS pump station will be updated to accommodate installation of the new pumps and pre-rotation basins.
- **Communications to UV PLC.** PLC/HMI programming scope includes updating communications programming to accommodate replacement of the existing UV PLC with a new UV PLC.
  - The scope assumes that the new UV vendor PLC data will continue to be directly mapped to the plant Citect HMI instead of being mapped via plant PLC-PLT3 like the other vendor packaged systems.
  - Provision for separate dedicated signals of effluent flow rate and total non-potable water flow rate to the new UV system will be coordinated with the design effort.
- **Network Switches.** Network switch configuration or any cybersecurity appliance configuration will be performed by the City's IT department and is not included in CDM Smith scope.
- **Development System.** During design, an application development system will be specified by the CDM Smith engineering team to be furnished by the PCSS, and used by



the CDM Smith AESS team for conducting the Witnessed Functional Acceptance Test at CDM Smith office.

- **Commissioning and startup.** CDM Smith scope includes up to 40 man days (4 weeks on-site with 2 individuals at a time) for Operational Readiness Test (ORT), 9 man days (3 days on site with 3 individuals) for Functional Demonstration Test (FDT), and 40 hours for Site Acceptance Testing (SAT). For the SAT, support will be remote or on-site depending upon the severity of the issue.
- **Training.** 1 training course, up to 4 hours, will be developed for the project SCADA and will be offered on 2 consecutive days of the Owner's choice.

### **Subtask Task 6.3 – Allowances Items for Select Engineering Investigations**

The following task will be evaluated on an hourly billing basis to assist the Plant Operators in determining site specific solutions.

- Subtask 6.3.1: Review Thompson Creek WWTP for opportunity to reuse generator from the Jones Road Influent Lift Station. Not to exceed \$20,000.
- Subtask 6.3.2: Engineer will investigate up to three (3) suppliers to determine the most cost effective approach to upgrading or replacing the control panels for the existing Grit System and the Belt Filter Press. (Not to exceed \$25,000)
  - Such investigation would include:
    - Basic integrity of the panel shell;
    - Condition of lights and switches;
    - Condition of any dedicated controllers, wiring or any proprietary equipment;
    - Photographic documentation of any observations;
    - Recommendation for panel upgrade or replacement during construction phase.

## ATTACHMENT B

### FEE

Compensation by the City to CDM Smith for Basic Services described in this Attachment A to the Engineering Services Agreement shall be on a lump sum basis for Task 1-4, 6.1 and 6.2. Engineer will prepare invoices monthly based on an estimate of percent complete for each task itemized below. Task 5 – ESDC and Task 6.3 will be billed on a not-to-exceed basis using the billing rates noted below.

The total amount for services authorized is **\$3,323,000**, with per task breakdown as follows:

<b>Engineering Task</b>	<b>Associated Cost</b>
Task 1: Project Management (lump sum)	\$108,000
Task 2: Preliminary Investigations (lump sum)	\$34,000
Task 3: Design Phase (lump sum)	\$1,803,000
Task 4: Bid Phase Services (lump sum)	\$48,000
Task 5: ESDC (billing rates)	\$835,000
<b>Total for Design, Bid Phase and ESDC Services</b>	<b>\$2,828,000</b>
Task 6: Additional Services	
6.1 Permitting (lump sum)	\$35,000
6.2 AESS (billing rates)	\$415,000
6.3 Engineering Evaluations	
6.3.1 Generator Relocation (billing rates)	\$20,000
6.3.2 Existing Panel Evaluation (billing rates)	\$25,000
<b>Total for Special Services</b>	<b>\$495,000</b>
<b>Total</b>	<b>\$3,323,000</b>

Personnel Category	Billing Rate *
	(\$/hr)
Principal	370
Technical Specialist	340
Project Manager	300
Engineer 8	313
Engineer 7	266
Engineer 6	235
Engineer 5	200
Engineer 4	175
Engineer 3	150
Project Engineer 1/2	135
Technician/CADD	132
Senior Technician/CADD	180
GIS Technician	160
Senior Administration	130
Contract Administration	133

\* Billing rates through December 31, 2027. Rates subject to 4% increase annually thereafter.

**ATTACHMENT C**

**City of Bryan  
Thompson Creek WWTP Expansion Project Schedule  
April 2024**

ID	Task Name	Duration	Start	Finish	Predecessors	2024				2025				2026				2027				2028		
						Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3
1	<b>Thompson Creek WWTP Expansion</b>	<b>1063 days</b>	<b>Mon 6/3/24</b>	<b>Wed 6/28/28</b>																				
2	<b>NTP</b>	<b>0 days</b>	<b>Mon 6/3/24</b>	<b>Mon 6/3/24</b>																				
3	<b>Preliminary Investigations</b>	<b>60 days</b>	<b>Mon 6/3/24</b>	<b>Fri 8/23/24</b>																				
4	Site Survey	30 days	Mon 6/3/24	Fri 7/12/24	2																			
5	Geotechnical Report	60 days	Mon 6/3/24	Fri 8/23/24	2																			
6	<b>Design Phase</b>	<b>228 days</b>	<b>Mon 6/3/24</b>	<b>Wed 4/16/25</b>																				
7	<b>PER - 10%</b>	<b>18 days</b>	<b>Mon 6/3/24</b>	<b>Wed 6/26/24</b>																				
8	10% PER	12 days	Mon 6/3/24	Tue 6/18/24	2																			
9	10% TRC	6 days	Wed 6/19/24	Wed 6/26/24	8																			
10	<b>30% Design</b>	<b>64 days</b>	<b>Thu 6/27/24</b>	<b>Tue 9/24/24</b>																				
11	30% Design	38 days	Thu 6/27/24	Mon 8/19/24	9																			
12	30% TRC	6 days	Tue 8/20/24	Tue 8/27/24	11																			
13	30% - Address Comments	8 days	Wed 8/28/24	Fri 9/6/24	12																			
14	30% - Submittal to City	0 days	Fri 9/6/24	Fri 9/6/24	13																			
15	30% - Submittal Review	12 days	Mon 9/9/24	Tue 9/24/24	14																			
16	<b>60% Design</b>	<b>48 days</b>	<b>Mon 9/9/24</b>	<b>Wed 11/13/24</b>																				
17	60% Design	40 days	Mon 9/9/24	Fri 11/1/24	14																			
18	60% TRC/RYG	8 days	Mon 11/4/24	Wed 11/13/24	17																			
19	<b>90% Design</b>	<b>63 days</b>	<b>Thu 11/14/24</b>	<b>Mon 2/10/25</b>																				
20	90% Design	29 days	Thu 11/14/24	Tue 12/24/24	18																			
21	Holiday	8 days	Wed 12/25/24	Fri 1/3/25	20																			
22	90% TRC/RYG	6 days	Mon 1/6/25	Mon 1/13/25	21																			
23	90% - Address Comments	8 days	Tue 1/14/25	Thu 1/23/25	22																			
24	90% - Submittal to City	0 days	Thu 1/23/25	Thu 1/23/25	23																			
25	90% Review by City	12 days	Fri 1/24/25	Mon 2/10/25	24																			
26	<b>Permit Application to TCEQ</b>	<b>118 days</b>	<b>Mon 11/4/24</b>	<b>Wed 4/16/25</b>																				
27	Pre and Post Application Meetings with TCEQ	21 days	Mon 11/4/24	Mon 12/2/24	17																			
28	Data Collection	21 days	Tue 12/3/24	Tue 12/31/24	27																			
29	Draft Application Development	8 days	Wed 1/1/25	Fri 1/10/25	28																			
30	Final Application Development	8 days	Mon 1/13/25	Wed 1/22/25	29																			
31	Draft Permit Review	60 days	Thu 1/23/25	Wed 4/16/25	30																			
32	<b>100% Design</b>	<b>22 days</b>	<b>Tue 2/11/25</b>	<b>Wed 3/12/25</b>																				
33	100% Design and Final Review	22 days	Tue 2/11/25	Wed 3/12/25	25																			
34	<b>100% Submittal to City</b>	<b>0 days</b>	<b>Wed 3/12/25</b>	<b>Wed 3/12/25</b>	<b>33</b>																			
35	<b>Bid Phase</b>	<b>78 days</b>	<b>Thu 3/13/25</b>	<b>Mon 6/30/25</b>																				

Project: sch_2024.04.18_Thomp Date: Thu 4/18/24	Task		Project Summary		Manual Task		Start-only		Deadline	
	Split		Inactive Task		Duration-only		Finish-only		Progress	
	Milestone		Inactive Milestone		Manual Summary Rollup		External Tasks		Manual Progress	
	Summary		Inactive Summary		Manual Summary		External Milestone			

**City of Bryan  
Thompson Creek WWTP Expansion Project Schedule  
April 2024**

ID	Task Name	Duration	Start	Finish	Predecessors	2024				2025				2026				2027				2028		
						Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3
36	Advertise Project	35 days	Thu 3/13/25	Wed 4/30/25	34																			
37	PreBid Meeting	1 day	Thu 5/8/25	Thu 5/8/25	36FS+5 days																			
38	Bid Opening	1 day	Fri 5/23/25	Fri 5/23/25	37FS+10 days																			
39	Notice of Award	1 day	Mon 6/30/25	Mon 6/30/25	38FS+25 days																			
40	<b>ESDC</b>	<b>782 days</b>	<b>Tue 7/1/25</b>	<b>Wed 6/28/28</b>																				
41	Construction Services	775 days	Tue 7/1/25	Mon 6/19/28	39																			
42	Substantial Completion	5 days	Tue 6/20/28	Mon 6/26/28	41																			
43	<b>Final Completion</b>	<b>2 days</b>	<b>Tue 6/27/28</b>	<b>Wed 6/28/28</b>	<b>42</b>																			



Project: sch_2024.04.18_Thomp Date: Thu 4/18/24	Task		Project Summary		Manual Task		Start-only		Deadline	
	Split		Inactive Task		Duration-only		Finish-only		Progress	
	Milestone		Inactive Milestone		Manual Summary Rollup		External Tasks		Manual Progress	
	Summary		Inactive Summary		Manual Summary		External Milestone			

**ATTACHMENT D**  
**Insurance Requirements for Professional Services**

Contractor agrees to procure and maintain for the duration of this contract insurance against claims for injuries to persons or damage to property which may arise from or in connection with the performance of the work hereunder by the Contractor, its agents, representatives, or employees.

If the Contractor fails to maintain the required insurance, the City shall have the right to withhold payment to Contractor until coverage is reinstated or to terminate the Contract.

**MINIMUM SCOPE AND LIMIT OF INSURANCE**

**Coverage shall be at least as broad as:**

1. **Commercial General Liability (CGL).** Contractor shall maintain CGL insurance with a limit of not less than **\$1,000,000 each occurrence**. If a general aggregate limit applies, either the general aggregate limit shall apply separately to this project/location (ISO CG 25 03 or CG 25 04) or the general aggregate limit shall be twice the required occurrence limit.
  - 1.1 CGL insurance shall be written on ISO occurrence form CG 00 01 and shall cover liability arising from premises, operations, products-completed operations, property damage, bodily injury, and personal and advertising injury, and liability assumed under an insured's contract.
  - 1.2 **The City, its officers, officials, employees, and volunteers are to be covered as additional insureds** if any, with respect to liability arising out of work or operations performed by or on behalf of the Contractor including materials, parts or equipment furnished in connection with such work or operations. This can be provided in the form of an endorsement to the Contractor's insurance.
2. **Business Automobile Liability (AL).** Contractor shall maintain automobile liability with a limit not less than **\$1,000,000 each accident**.
  - 2.1. Such insurance shall cover liability arising out of any auto (including owned, hired, and non-owned autos).
  - 2.2. Coverage shall be written on ISO form CA 00 01, CA 00 08, CA 00 09.
3. **Workers' Compensation (WC).** Contractor shall maintain workers compensation insurance with **Texas Statutory Limits** and Employers Liability insurance with a limit of not less than **\$1,000,000** per accident for bodily injury or disease.
  - 3.1. **This policy shall be endorsed with a waiver of subrogation in favor of the City** for all work performed by the Contractor, its employees, agents, and subcontractors.
4. **Professional Liability (Errors and Omissions).** Contractor shall maintain professional liability/error and omissions liability insurance appropriate to the Contractor's profession. Coverage shall apply to liability for a professional error, act, or omission arising out of the scope of the contractor's services as defined in this contract. Coverage shall be written subject to limits not less than **\$2,000,000 per occurrence or claim, \$2,000,000 aggregate**.
  - 4.1 If coverage is written on a claims-made basis, the Contractor warrants that any retroactive date applicable to coverage under the policy precedes the effective date of this contract;

and that coverage will be maintained or an extended discovery period will be exercised for a period of **at least three (3) years after completion of the contract of work.**

- 4.2 A copy of the claims reporting requirements must be submitted to the City within 5 days of City's written request.

If the Contractor maintains broader coverage and/or higher limits than the minimums shown above, the City requires and shall be entitled to the broader coverage and/or higher limits maintained by the Contractor.

By requiring insurance herein, the City does not represent that coverage and limits will necessarily be adequate to protect Contractor, and such coverage and limits shall not be deemed as a limitation on Contractor's liability under the indemnities granted to the City in this contract.

Self-insured retentions must be declared and approved by the City. The City may require the contractor to purchase coverage with a lower retention or provide proof of ability to pay losses and related investigations, claim administration, and defense expenses within the retention. The policy language shall provide, or be endorsed to provide, that the self-insured retention may be satisfied by either the name insured or the City.

### **General Insurance Provisions**

**The insurance policies are to contain, or be endorsed to contain, the following provisions:**

1. **Primary Coverage.** For any claims related to this contract, the **Contractor's insurance coverage shall be primary** insurance coverage as respects the City, its officers, officials, employees, and volunteers. There shall be no modification to make it excess over other available insurance. Any insurance or self-insurance maintained by the City, its officers, officials, employees, or volunteers shall be excess of the Contractor's insurance and shall not contribute with it.
2. **Notice of Cancellation.** Each insurance policy required above shall provide that **coverage shall not be canceled, except with notice to the City.** If City is notified a required insurance coverage will cancel or non-renew during the contract period, the Contractor shall agree to furnish prior to the expiration of such insurance, a new or revised certificate(s) as proof that equal and like coverage is in effect.
3. **Acceptability of Insurers.** Insurance is to be placed with insurers authorized to conduct business in the State with a current A.M. Best's rating of no less than A-:VII, unless otherwise acceptable to the City.
4. **Waiver of Subrogation.** Contractor hereby grants to City a waiver of any right to subrogation which any insurer of Contractor may acquire against the City by virtue of payment of any loss under such insurance. Contractor agrees to obtain any endorsement that may be necessary to affect this waiver of subrogation, but this provision applies regardless of whether or not the City has received a waiver of subrogation endorsement from the insurer.
5. **Evidence of Insurance.** Contractor shall furnish the City with certificates of insurance, executed by a duly authorized representative of each insurer, showing compliance with the insurance requirements set forth above, including all required amendatory endorsements (or copies of the applicable policy language effecting coverage required by this clause) before work begins. However, failure to obtain the required documents prior to the work beginning or failure to identify a deficiency from evidence that has been provided shall not be construed as a waiver of Contractor's obligation to maintain such insurance, or as a waiver as to eh

enforcement of any provisions. Contractor shall provide certified copies of all required insurance policies within 10 days of City's written request of said copies.

6. ***Subcontractors.*** If the Contractor's insurance does not afford coverage on behalf of any subcontractor hired by the Contractor, the Contractor shall require and verify that all subcontractors shall maintain insurance meeting all the requirements stated herein, and Contractor shall ensure that City is an additional insured on insurance required from subcontractors.

**Special Risks or Circumstances**

City reserves the right to modify these requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other circumstances.

Note: Professional liability insurance coverage is normally required if the Contractor is providing a professional service regulated by the state. Examples of service providers regulated by the state are insurance agents, professional architects and engineers, doctors, certified public accountants, lawyers, etc. However, other professional contractors, such as computer or software designers, and service providers such as claims administrators, should also have professional liability. If in doubt, consult with Risk Management.