

**CONTRACT AGREEMENT FOR PROFESSIONAL SERVICES FOR THE  
WASTEWATER TREATMENT PLANT EXPANSION**

**STATE OF TEXAS           §  
                                     §  
COUNTY OF HAYS       §**

THIS IS AN AGREEMENT by and between the CITY OF KYLE, Texas, a Texas home rule City (hereinafter called "CITY"), acting through its duly authorized agent, R. Todd Webster, Mayor, and BURGESS & NIPLE, INC., Austin, Texas (hereinafter called "DESIGN PROFESSIONAL") for engineering design professional services (hereinafter called "the Agreement").

WHEREAS, the CITY desires to obtain DESIGN PROFESSIONAL's services for the Design and Bidding Phase to expand the existing Wastewater Treatment Plant, hereinafter called the "PROJECT";

WHEREAS, the CITY desires to obtain professional engineering design services in connection with the PROJECT; and

WHEREAS, the DESIGN PROFESSIONAL is qualified and capable of performing the professional engineering design services proposed herein, which are acceptable to the CITY, and is willing to enter into an Agreement with the CITY to perform such services.

NOW, THEREFORE, the parties hereto do mutually CONTRACT and AGREE as follows:

**ARTICLE 1  
SERVICES TO BE PROVIDED**

- 1.1** The CITY agrees to retain the DESIGN PROFESSIONAL, and the DESIGN PROFESSIONAL agrees to perform professional services for the PROJECT as an independent contractor and professional consultant as set forth in the sections following; and CITY agrees to pay, and the DESIGN PROFESSIONAL agrees to accept fees as specified in the sections following as full and final compensation for the work accomplished.
- 1.2** The DESIGN PROFESSIONAL shall provide its services in accordance with the normal degree of care and skill of other reputable engineers providing similar services on similar projects of like size and nature at the same time and in the same locale as this PROJECT. No other guarantee or warranty of any kind, unless expressed or implied at common law or created by statute, is extended, made, or intended by the rendition of DESIGN PROFESSIONAL's services.

## **ARTICLE 2 SCOPE OF WORK**

- 2.1** The DESIGN PROFESSIONAL agrees to provide all services described in **Exhibit “A” – Project Work Plan** attached to this contract Agreement.

## **ARTICLE 3 PROJECT SCHEDULE**

- 3.1** The DESIGN PROFESSIONAL agrees to perform the Engineer’s Scope of Work in accordance with the **Exhibit “B” – Project Schedule** attached to the Agreement, and which is wholly incorporated into the Agreement for all purposes.

## **ARTICLE 4 COMPENSATION**

### **4.1** DEFINITION OF COMPENSATION TERMS

**4.1.1 Hourly Rates (HR)** – Hourly rates is the cost of salaries of DESIGN PROFESSIONAL (technicians, drafters, stenographers, surveyors, clerks, laborers, etc.), fringe benefits (social security contributions, unemployment excise and payroll taxes, employment compensation insurance, medical and other insurance benefits, sick leave, vacation, holiday pay, contributions to a pension or retirement plan), overhead and profit for time directly chargeable to the PROJECT. Hourly rates for Basic and Additional Services for this PROJECT will not exceed those listed in **Exhibit “C” – Summary of Compensation** attached to the Agreement, and which is wholly incorporated into the Agreement for all purposes. DESIGN PROFESSIONAL shall provide documentation of said hourly rates upon written request of the CITY and shall be in a form and include information requested by the CITY. The CITY reserves the right and option to contest any said hourly rates not customarily or ordinarily attributable to “Hourly Rates”. The DESIGN PROFESSIONAL shall not bill the CITY more frequently than one (1) time per every thirty (30) days unless and until the CITY agrees in writing to a more frequent or less frequent billing cycle.

**4.1.2 Direct Non-Labor Expenses (DNLE)** – Direct non-labor expenses are defined as all non-labor expenses incurred by the DESIGN PROFESSIONAL which are directly chargeable to the PROJECT, which is defined as expenses for supplies, transportation, equipment, travel, communications, subsistence and lodging, field office expenses, reproductions, and similar incidentals. DESIGN PROFESSIONAL shall provide documentation of said expenses upon written request of the CITY and shall be in a form and include information requested by the CITY. The CITY reserves the right and option to contest any said expenses not customarily or ordinarily attributable to DNLE or which are in excess in an amount which are not customarily or ordinarily attributable to DNLE. The DESIGN PROFESSIONAL shall not bill the CITY more frequently than one (1) time per every thirty (30) days unless and until the CITY agrees in writing to a more frequent or less frequent billing cycle.

**4.1.3 Lump Sum (LS)** – The CITY shall pay the DESIGN PROFESSIONAL a Lump Sum amount

for the specified category of services. The “Lump Sum” is defined as compensation for engineer’s services, services of Consultants, if any, labor, overhead, profit, and DNLE. The portion of the Lump Sum amount billed for the DESIGN PROFESSIONAL’s services shall be based upon DESIGN PROFESSIONAL’s estimate of the proportion of the total services actually completed during the billing period to the Lump Sum. The CITY has the option of agreeing to this amount before making Lump Sum payment to the DESIGN PROFESSIONAL.

**4.1.4 Unit Price (UP)** – The CITY shall pay the DESIGN PROFESSIONAL an amount equal to the Unit Price times the actual quantity of unit(s) for the specified category of services. The amount equal to the Unit Price is defined as compensation for engineer’s services, services of Consultants, if any, labor, overhead, profit, and Reimbursable Expenses. The portion of the amount billed for engineer’s services shall be based upon engineer’s estimate of the proportion of the Unit Price for services actually completed during the billing period to the Unit Price. The CITY has the option of agreeing to this amount before making Unit Price payments to the DESIGN PROFESSIONAL. The DESIGN PROFESSIONAL shall not bill the CITY more frequently than one (1) time per every thirty (30) days unless and until the CITY agrees in writing to a more frequent or less frequent billing cycle.

## **4.2 PAYMENT FOR SERVICES**

**4.2.1** Based upon applications for payment submitted by the DESIGN PROFESSIONAL and approved by the CITY, the CITY will make progress payments as scheduled hereafter for services described in **Exhibit “A” – Project Work Plan** attached to this Agreement and incorporated herein by reference. The application for payment will be computed on the basis of hourly rates, direct non-labor expenses, lump sum and unit price work items shown in **Exhibit “C” – Summary of Compensation**. The DESIGN PROFESSIONAL will be paid a total amount not to exceed \$1,413,201.00 for engineering services. Partial payments will be made upon presentation of statements to the CITY in the manner otherwise set forth in this Agreement.

## **4.3 PAYMENT FOR ADDITIONAL SERVICES**

**4.3.1** As determined by the DESIGN PROFESSIONAL or the CITY or both parties, when the need for additional services arises, the scope of work, compensation terms and total compensation will be negotiated between the CITY and DESIGN PROFESSIONAL before said additional work shall begin. In the event said additional work is begun before the CITY gives its prior written approval, the CITY has the option to ratify its approval of said additional work. Payment for additional services will be computed on the basis of hourly rates, direct non-labor expenses, lump sum and/or unit prices for additional work. For the services of personnel described in this section, the DESIGN PROFESSIONAL will be compensated in accordance with the schedule for various employees of the DESIGN PROFESSIONAL as set forth in **Exhibit “C” – Summary of Compensation**.

**4.3.2** Payment for Additional Services will be made in the manner otherwise set forth in this Agreement, based upon presentation of invoices, statements and billings to the CITY

sufficient to show the work accomplished. Under no conditions will any additional services be paid for until the DESIGN PROFESSIONAL has received written authorization from the CITY for such work.

#### **4.4 ADDITIONAL COPIES OF PRINTED DOCUMENTS**

- 4.4.1** Additional copies, above the number due as part of the basic services outlined in Article 2, of reproduced plans, specifications, maps and exhibits will be available to the CITY at actual invoice cost to the DESIGN PROFESSIONAL.

### **ARTICLE 5 SERVICES BY THE CITY**

- 5.1** In general, the CITY will render services as follows:

- 5.1.1** Provide available criteria and full information as to the CITY's requirements for the PROJECT.

- 5.1.2** Assist the DESIGN PROFESSIONAL by placing at its disposal all available written data pertinent to previous operations, reports, and any other data affecting the design and/or construction of the PROJECT.

- 5.1.3** Assist in acquiring rights of ingress and egress on private property, if required.

- 5.1.4** Respond in writing no later than thirty (30) days to requests by the DESIGN PROFESSIONAL for authorization to proceed with specific activities deemed desirable.

- 5.1.5** No later than thirty (30) days from the date of submittal, examine documents submitted by the DESIGN PROFESSIONAL and render decisions pertaining thereto in order to avoid delay in the progress of the DESIGN PROFESSIONAL's services.

- 5.1.6** Timely provide to DESIGN PROFESSIONAL information that is required or necessary for the orderly progress of the work.

- 5.2** The DESIGN PROFESSIONAL will be entitled to rely upon the CITY's Engineer regarding decisions made by the CITY pertaining to this PROJECT and rely upon the accuracy and completeness of all information and data provided by or through the CITY or its engineer; further, all notices or information will be deemed made when conveyed in writing to the DESIGN PROFESSIONAL.

- 5.3** The services, information and reports required above will be furnished at the CITY's expense.

## **ARTICLE 6 PROJECT DOCUMENTS**

- 6.1** All documents including, but not limited to, tracings, drawings, field surveys, maps, estimates, specifications, investigations, and studies completed or partially completed, with the exception of those standard details and specifications regularly used by the DESIGN PROFESSIONAL in its normal course of business, will upon payment of all amounts rightfully owed by the CITY to the DESIGN PROFESSIONAL herein be the property of the CITY. The latest version of all documents including, but not limited to, tracings, drawings, estimates, specifications, investigations, and studies completed or partially completed will be available to the CITY no later than thirty (30) days from the date the CITY makes a verbal or written request to DESIGN PROFESSIONAL. DESIGN PROFESSIONAL, its subcontractors, agents and employees will be liable to the CITY for any loss or damage to any such documents while they are in the possession of or while being worked upon by the DESIGN PROFESSIONAL or anyone connected with it. All documents so lost or damaged will be replaced or restored by DESIGN PROFESSIONAL without cost to the CITY. Any reuse or modification of such documents for purposes other than those intended by the DESIGN PROFESSIONAL shall be at the CITY's sole risk and without liability to the DESIGN PROFESSIONAL unless said unintended reuse or modification occurs as a result of DESIGN PROFESSIONAL's negligence, malfeasance, or willful misconduct. Upon completion of the PROJECT, all documents shall be transferred to the CITY. DESIGN PROFESSIONAL shall not be required to maintain the records but may do so in accordance with its Document Retention Policy.

## **ARTICLE 7 NOTICE TO PROCEED**

- 7.1** It is understood and agreed that the DESIGN PROFESSIONAL will work as an Independent Contractor by the CITY, will have ultimate control of the services to be rendered except as otherwise provided in this Agreement or in the event said control shall be in violation of this Agreement, and that no work will be done under this Agreement until the DESIGN PROFESSIONAL is instructed in writing to proceed with the work. In the event the DESIGN PROFESSIONAL does work before it is instructed in writing to proceed, the CITY shall not be obligated or in any way liable for payment of compensation or other reimbursements to the DESIGN PROFESSIONAL.

## **ARTICLE 8 ASSIGNMENT**

- 8.1** The parties each hereby bind themselves, their successors, assigns and legal representatives to each other with respect to the terms of this Agreement. Neither party will assign, sublet nor transfer any interest in this Agreement without the written authorization of the other.

## **ARTICLE 9 TERMINATION**

- 9.1** In connection with the work outlined in this contract, it is agreed and fully understood by the DESIGN PROFESSIONAL that the CITY may cancel or indefinitely suspend further work hereunder or terminate this Agreement upon fifteen (15) days written notice to the DESIGN PROFESSIONAL with the understanding that immediately upon receipt of said notice all work and labor being performed under this contract will cease. As a condition precedent for termination for cause, the DESIGN PROFESSIONAL shall have the fifteen (15) day notice period to cure such cause and shall have failed to so cure. Before the end of such fifteen (15) day period DESIGN PROFESSIONAL will invoice CITY for all work completed satisfactorily to the CITY and will be compensated in accordance with the terms of this Agreement. All tracings, drawings, field surveys, maps, estimates, specifications, investigations, studies, and other data work related to the PROJECT will become the property of the CITY upon termination of the Agreement.
- 9.2** Nothing contained in paragraph 9.1 above will require the CITY to pay for any work which fails to meet the Standard of Care. The CITY will not be required to make any payments to the DESIGN PROFESSIONAL when the DESIGN PROFESSIONAL is in default under this Agreement. The CITY and the DESIGN PROFESSIONAL retain their respective rights and remedies under law and this Agreement does not, nor shall be interpreted, to waive or otherwise modify said rights.
- 9.3** The DESIGN PROFESSIONAL understands and agrees that time is of the essence and that any failure of the DESIGN PROFESSIONAL to complete its services within the time limit established herein solely due to the fault of the DESIGN PROFESSIONAL will constitute a material breach of this Agreement. However, it is agreed that DESIGN PROFESSIONAL must use sound professional practices. The DESIGN PROFESSIONAL will be fully responsible for any delays or for failures to use its professional efforts in developing contractual documents in accordance with the terms of this Agreement. Where damage is caused to the CITY due to the DESIGN PROFESSIONAL's failure to perform in this manner, as determined by the governing body of the CITY, the CITY may withhold all or any portion of the DESIGN PROFESSIONAL's payments hereunder without waiver of any of either Party's additional legal rights or remedies.
- 9.4** The DESIGN PROFESSIONAL will have the right to terminate this Agreement, upon fifteen (15) days written notice to the CITY should the CITY fail to perform its obligation herein to the satisfaction of the DESIGN PROFESSIONAL. In the event of termination, the DESIGN PROFESSIONAL will be paid for all services rendered to date of termination. Nothing contained herein will constitute a waiver of DESIGN PROFESSIONAL's right to bring a suit for damages or to enforce specific performances of this Agreement under these circumstances. In the event of termination hereunder, DESIGN PROFESSIONAL will invoice CITY for all work satisfactorily completed up to the date of this notice of termination and will be compensated in accordance with the terms of the Agreement.
- 9.5** Notwithstanding anything contained herein to the contrary, the CITY will have the right to

withdraw from this Agreement on the last day of CITY's current fiscal year in the event of non-appropriation of funds by its governing body, and providing ten (10) days written notice from CITY to DESIGN PROFESSIONAL.

## **ARTICLE 10 VENUE**

- 10.1** Venue and jurisdiction of any suit or right or cause of action arising under or in connection with this Agreement will lie exclusively in a court of competent jurisdiction Hays County, Texas, and such court will interpret this Agreement in accordance with the laws of the State of Texas.

## **ARTICLE 11 ENTIRE AGREEMENT**

- 11.1** This instrument represents the entire understanding between the CITY and the DESIGN PROFESSIONAL in respect to the PROJECT and may only be modified in writing signed by both parties.

## **ARTICLE 12 SEVERABILITY**

- 12.1** In the event any provision of this Agreement shall be held invalid or unenforceable by any court of competent jurisdiction, such holding shall not invalidate or render unenforceable any other provision hereof, but rather this entire Agreement will be construed as if not containing the particular invalid or unenforceable provision or provisions, and the rights and obligations of the Parties hereto shall be construed and enforced in accordance therewith. The Parties hereto acknowledge that if any provision of this Agreement is determined to be invalid or unenforceable, it is their desire and intention that such provision be reformed and construed in such a manner that it will, to the maximum extent practicable, be deemed to be validated and enforceable.

## **ARTICLE 13 RESPONSIBILITIES FOR CLAIMS AND LIABILITIES**

- 13.1** Approval by the CITY will not constitute nor be deemed a release of the responsibility and liability of the DESIGN PROFESSIONAL, its employees, subcontractors, agents and consultants for the accuracy and competency of their designs, drawings, or other documents and work, nor will such approval be deemed to be an assumption of such responsibility by the CITY for the DESIGN PROFESSIONAL's negligent acts, errors or omissions in the performance of the professional services that are the subject of this agreement, including the preparation of the designs, drawings, or other documents and work, nor will such approval be deemed to be an assumption of such responsibility by the CITY for DESIGN PROFESSIONAL's negligent acts, errors or omissions in the performance of the professional services that are the subject of this agreement, including the preparation of the designs, drawings, or other documents prepared by the DESIGN PROFESSIONAL, its

employees, subcontractors, agents and consultants.

- 13.2** The CITY agrees the DESIGN PROFESSIONAL is not responsible for damages arising from any circumstances beyond the DESIGN PROFESSIONAL's reasonable control. For purposes of this Agreement, such causes include, but are not limited to, strikes or other labor disputes; severe weather disruptions, natural disasters, fire or other acts of God; riots, war or other emergencies; failure of any governmental agency to act in a timely manner; failure of performance by the CITY or the CITY's other subcontractors or consultants; or discovery of any hazardous substances or differing and unforeseeable site conditions.

## **ARTICLE 14 INDEMNIFICATION**

- 14.1** The DESIGN PROFESSIONAL will indemnify and hold the CITY and all of its officers, agents, servants, and employees harmless from any loss, damage, liability or expense, including costs of court, reasonable attorneys' fees, expert witnesses' and consultants' fees, on account of damage to property and injuries, including death, to all persons, whether caused by DESIGN PROFESSIONAL or its officers, agents, employees, subcontractors, licensees, or invitees to the extent caused by any act of negligence or intentionally wrongful act or material breach of any obligation under this Agreement, and pay all expenses and satisfy all judgments which may be incurred by or rendered against them, or any of them in connection herewith resulting from such act of negligence or intentional act or breach for which DESIGN PROFESSIONAL is found to be legally liable.

In no event shall either Party be liable, whether in contract or tort or otherwise, to the other Party for loss of profits, delay damages, or for any special incidental, liquidated or consequential loss or damage of any nature arising at any time or from any cause whatsoever.

The indemnity obligations herein shall survive the termination of the contract for any reason and shall survive the completion of the work on the PROJECT.

It is understood and agreed that the indemnity and defense obligations contained and described herein shall be interpreted in accordance with Texas law current as of the date of this Agreement and that any indemnity or defense obligation, if at all, shall be claimed, interpreted and enforced on a comparative basis of fault and responsibility. Neither Party to this Agreement will allege, claim, file suit or otherwise demand that the other Party provide any indemnity or defense as such may relate to the negligent acts, errors or omissions of the claiming Party.

## **ARTICLE 15 INSURANCE**

- 15.1** The DESIGN PROFESSIONAL will maintain at all times professional liability or errors and omissions insurance covering any claim hereunder occasioned by DESIGN PROFESSIONAL's negligent act, or error or omission in an amount of not less than \$250,000 per claim and \$500,000 annual aggregate. DESIGN PROFESSIONAL agrees to



maintain professional liability insurance during the term of this agreement and, if the policy is on a claims made basis, for a period of not less than five (5) years after the PROJECT is complete and provide proof of such continuing coverage providing such coverage is readily available and financially feasible. DESIGN PROFESSIONAL further agrees to provide proof of coverage as needed for prior acts back to the date of execution of this agreement if DESIGN PROFESSIONAL changes insurance carriers during this extended indemnity period.

DESIGN PROFESSIONAL will further maintain general commercial liability coverage with minimum limits for damages resulting from bodily injury or death of \$250,000 per person and \$500,000 per occurrence, and \$100,000 per occurrence for property damage, or single limit of \$500,000.

DESIGN PROFESSIONAL further agrees that with respect to the above required liability insurance, the CITY will:

1. Be named as additional insured for general liability insurance.
2. Be provided with a waiver of subrogation, in favor of CITY.
3. Be provided with thirty (30) days advance written notice of cancellation, or nonrenewal (all “endeavor to” and similar language of reservation stricken from cancellation section of certificate).
4. Upon execution of this Agreement by DESIGN PROFESSIONAL, be provided through the office of the City Secretary with either their original Certificate of Insurance or their insurance policy evidencing the above limits and requirements and subject to approval by the City Attorney.

The insurance requirements set out in this section are independent from all other obligations of DESIGN PROFESSIONAL under this Agreement and apply whether or not required by any other provision of this Agreement.

## **ARTICLE 16 COMPLIANCE WITH LAWS**

- 16.1** The DESIGN PROFESSIONAL, its consultants, agents, employees and subcontractors, will comply with all applicable federal and state laws, the Charter and Code of Ordinances of the City of Kyle, and all other applicable rules and regulations promoted by all local, state and national boards, bureaus and agencies.

## **ARTICLE 17 NOTICES**

- 17.1** This contract will be administered on the CITY’s behalf by the City Engineer. All notices, documentation, or questions arising under this Agreement should be addressed to the CITY’s

Engineer at:

City Engineer  
Kyle City Hall  
P.O. Box 40  
100 W. Center Street  
Kyle, Texas 78640

All written notices from CITY to DESIGN PROFESSIONAL will be addressed to the DESIGN PROFESSIONAL as follows:

Leigh A. Cerda, P.E.  
Burgess & Niple, Inc.  
4029 Capital of Texas Hwy., Suite 220  
Austin, TX 78704

#### **ARTICLE 18 CAPTIONS**

**18.1** The captions of this Agreement are for information purposes only and will not in any way affect the substantive terms and conditions of this Agreement.

#### **ARTICLE 19 MEDIATION**

**19.1** In the event a dispute arises between the CITY and the DESIGN PROFESSIONAL in the application or interpretation of this Agreement, or one or more of its provisions, the Parties may mutually agree to take such dispute to a mediator mutually agreed upon by both parties to this Agreement for resolution. Neither Party is bound to the mediator's decision.

#### **ARTICLE 20 EXECUTION AND EFFECTIVE DATE OF AGREEMENT**

**20.1** The execution of this Agreement shall proceed as follows: the Agreement shall be submitted to the City Attorney for review, whereupon signature of the DESIGN PROFESSIONAL shall be affixed hereto, and then to the City Council for final review and approval. After such approval from the City Council, the Agreement shall then be signed by the Mayor. This Agreement will become effective immediately upon the signature of both parties. An executed original of this Agreement shall be kept on file in the City Secretary's office.

**IN WITNESS WHEREOF**, the City of Kyle, Texas has caused these presents to be executed by its Mayor and attested by its City Secretary and executed by David Koberlein, P.E., GISP on behalf of Burgess & Niple, Inc.

**THE CITY OF KYLE, TEXAS**

**DESIGN PROFESSIONAL: BURGESS  
& NIPLE, INC.**

\_\_\_\_\_  
R. Todd Webster, Mayor

\_\_\_\_\_  
David Koberlein, P.E., GISP

**ATTEST:**

\_\_\_\_\_  
Jennifer A. Vetrano, City Secretary

**STATE OF TEXAS**       §  
                                  §  
**COUNTY OF HAYS**     §

This instrument was acknowledged before me on the \_\_\_\_ day of \_\_\_\_\_, 2017, by R. Todd Webster, Mayor, of the City of Kyle, Texas.

\_\_\_\_\_  
Notary Public, State of Texas

**CORPORATE ACKNOWLEDGEMENT**

**STATE OF TEXAS**       §  
                                  §  
**COUNTY OF HAYS**     §

This instrument was acknowledged before me on the \_\_\_\_ day of \_\_\_\_\_, 2017, by BURGESS & NIPLE, INC., a Texas corporation, on behalf of such corporation.

\_\_\_\_\_  
Notary Public, State of Texas

# **Exhibit “A” Project Work Plan**

# CITY OF KYLE WASTEWATER TREATMENT PLANT EXPANSION DESIGN PHASE

## EXHIBIT A - PROJECT WORK PLAN

### Overview

The purpose of this project is to provide professional engineering services for the design and bidding of new treatment facilities supplementing existing wastewater treatment and pumping facilities serving the City of Kyle. The City of Kyle owns, operates, and maintains an existing wastewater treatment plant (WWTP), which consists of two separate plants, each permitted for a design flow rate of 1.50 MGD and a 2-hour peak flow of 6.0 MGD. Plant 1 was constructed in 2000 and Plant 2 was completed in 2006.


The new treatment facilities are grouped into four categories. They include preliminary treatment (screening) and influent pumping, secondary treatment (aeration basins, clarifiers, and solids transfer pumps) and tertiary treatment (filters and UV disinfection). These three categories are liquid treatment and liquid/solids pumping. The fourth category is solids-related, and treats the residuals produced from operation of the secondary and tertiary treatment trains. Proposed solids facilities include digestion tanks, dewatering presses, storage tanks, and ancillary pumping and aeration equipment.

The new treatment and solids handling facilities will be designed as proposed in the WWTP's planning phase deliverable, the Preliminary Design Report (PDR), with aspects required by the Texas Commission on Environmental Quality (TCEQ) and any other applicable regulatory agencies.

In general, the proposed new facilities will consist of units with the following components:

- **Operations Building** (3,000 sf). Includes three offices, a control room, laboratory, and break/meeting room with a central common area and outdoor demonstration areas.
- **Headworks Building** (1,260 sf). Houses two mechanically-cleaned screens and two presses.
- **Influent Lift Station**. Wet well common-walled with Headworks, with six submersible pumps.
- **Aeration Basins**. Two parallel tanks with fine bubble diffusers supplied by existing blowers.
- **Secondary Clarifiers**. Two circular tanks fitted with sludge and scum removal mechanisms.
- **Return/Waste Sludge Pump Station**. Wet well serving clarifiers with four submersible pumps.
- **Tertiary Treatment Building** (4,200 sf). Houses four disc filters and four UV disinfection units.
- **Post-Aeration Tanks**. Two common-walled tanks with fine bubble diffusers and new blowers.
- **Aerobic Digesters**. Four common-walled tanks served by new aeration blowers.
- **Sludge Storage Tank**. Tank common-walled with aerobic digester and new aeration blowers.
- **Dewatering Building** (1,728 sf). Houses two belt filter presses, sludge pumps, polymer system.
- **Dewatered Sludge Storage Enclosure** (6,300 sf). Concrete bin with metal top to stockpile biosolids.
- **Electrical and I&C Design**. Power distribution, lighting, grounding, process equipment tie-ins, HVAC, instrumentation, conduit raceways, cable schedules, P&ID drawings, system controls & instrumentation.
- **Roadway Design**. WWTP second route primary access road for both construction and daily O&M.
- **Stormwater Design**. Site improvements to mitigate site flooding, improved drainage and sampling.





Ancillary facilities that will be incorporated with the new facilities include two flow splitting boxes, potable and non-potable water pumping systems, chemical conditioning system for sludge dewatering, and digested sludge transfer pump station (serving the aerobic digesters, sludge storage tank, and belt filter presses).

The three new treatment buildings will consist of cast concrete foundations, precast tilt-up walls, and hollow core roof panels. The buildings will be designed for equipment access using roll-up wall doors. Operator access will be provided per applicable local and national codes occupancy requirements.

The enclosure for storing dewatered sludge will be comprised of a cast concrete operating floor with 6-ft high enclosure walls, and pre-engineered metal superstructure with an open end. The remaining wet wells, basins, tanks, splitter boxes, and equipment support slabs will be cast concrete structures designed for local soil conditions.

Production of the design documents shall be accomplished through completion of the following tasks.

### **Task 1 – Project Management**

Project management consists of general project administration, supervision, and management. It also includes the quality assurance/control of all engineering and fieldwork, data management and security, data collection activities, engineering analysis, and deliverable preparation. B&N will prepare and submit for approval, monthly invoices and will be responsible for providing management, supervision, and coordination of all engineering and field tasks, and project deliverables. The City shall provide input and review regarding the overall progress of the project and information regarding any potential changes in scope of the project. B&N will provide project schedules, updates, status reports, and invoices.

### **Task 2 – Kickoff Meeting**

An initial project meeting will be conducted with City Staff to review the proposed layout concepts and operational parameters for each of the process facilities. As part of the meeting B&N will host, project aspects that will be discussed include reviewing project design parameters and criteria; establishing project schedule, milestones, and meetings; defining drawing and specification formats, reviewing TCEQ permitting and approval process, and reiterating the project's funding approach. B&N will provide meeting agendas, handouts, presentation materials and prepare meeting minutes. City staff shall attend the meeting and provide input and review regarding the overall project scope of work, as well as review and provide input regarding materials presented in the meeting.

### **Task 3 – Progress Review Meetings**

Project meetings at the 50-percent complete and 95-percent complete document packages will be held to review design deliverable progress with City staff. Design drawings and technical specifications sections for the treatment facilities will be submitted to the City for review and comment. B&N will provide meeting agendas and design package handouts, and prepared minutes consisting of decisions and action items. The City's project representatives shall attend each meeting and provide input and review regarding overall progress of the project and materials presented in the meeting.

#### **Task 4 – Design Parameters Confirmation**

B&N design staff will review parameters established for treatment facility and site components in the PDR, and coordinate those required for the building layouts, environmental controls, and to meet applicable local and national codes. These parameters and criteria will be incorporated into the design drawings and specifications.

#### **Task 5 - Equipment Selection**

Process treatment and transfer equipment identified in the PDR will be incorporated into the design drawings and specifications. Supporting equipment regarding electrical, ventilating, and instrumentation/control components will also be sized and selected, along with piping, valves, fittings, gates, and support utilities such as potable water supply.

#### **Task 6 – Electrical and I&C Design**

Electrical design to include plans and technical specifications for power distribution, area classification drawings (for hazardous areas), lighting, grounding, process equipment tie-ins, HVAC, instrumentation, conduit raceways, cable schedules and other electrical design components necessary for the new process system and facilities associated with this project. An arc flash analysis and labeling will also be included for new electrical equipment. Design will include Class I Division 1 rated equipment within hazardous areas (as defined by NFPA 820), including the headworks/ screening, aeration basins, and related scum and sludge systems. The electrical power distribution and controls raceway design will follow existing standards and use of underground concrete encased duct banks. Electrical design will also include coordination with the electric utility provider for any required modifications or new site power feeds to support the additional process systems and facilities associated with this project.

I&C design to include system P&ID drawings and vendor equipment system controls and instrumentation requirements, compliant with the applicable NFPA and NEC hazardous area ratings. I&C plans and technical specifications will be provided for new field instruments and equipment requiring communications and/or remote monitoring by the plant SCADA system. A control system architecture diagram and associated specifications will detail the requirements for locating and implementing a centralized SCADA monitoring and control system, including detailed control descriptions for outlining the functional control and monitoring requirements for new process systems connected the plant SCADA system.

#### **Task 7 – Operations Building Design**

The Operations Center will include three offices, a control room, laboratory, and break/meeting room. The central common area of the center will allow for visitor gathering and display areas that build upon the outdoor demonstration areas. Rest rooms and a utility/mechanical room will be adjacent to the common area. The exterior of this 3,000 sf building will be split-face concrete block and a shingled, hip style roof. Interior stud walls, durable flooring over concrete slab, and drop ceilings will comprise the main interior features.

This building will be an asset to the community and minimize its impact on the environment. The building will utilize a high-efficiency air conditioning system selected for occupant and laboratory cooling with an emphasis on humidity control. The roof overhangs will provide window shade to minimize summer solar gain. A high-efficiency heating system will be selected for winter heating. The walls and roofing will be



insulated above the minimums required by code and include an air barrier system to reduce cooling and heating costs. Windows will allow solar heat into the building during the winter. Finish materials will be selected based upon their durability and then their impact on the environment. Low Impact Development (LID) features will be designed for the building exterior in compliance with the grant funding requirements. Assistance with grant funding compliance and reporting requirements during the design phase will be provided.

### **Task 8 – Roadway Design**

Design of a second route to be used as the primary access road to the WWTP site for both construction traffic during the plant expansion and operations and maintenance access for daily plant operations. The route of the roadway will be in accordance with the route analysis performed in the Technical Memorandum-Roadway designated preferences and results of easement acquisition processes.

Topographic survey work for the designated roadway route to the plant site will be performed, with a preliminary route alignment developed from the results of the survey, prior to final design. Assistance in the easement acquisition process will be provided, including the development of map exhibits and site drawings, meeting attendance and coordination with property owners.

### **Task 9 - Stormwater Design**

In accordance with the Technical Memorandum-Stormwater, design shall include:

- A Cantilever style floodwall to protect on-site infrastructure and channel on-site runoff to proposed sampling point to protect the east side of the property.
- An Earth Berm wall to protect the southern portion of the property.
- Site grading operations to alleviate localized flooding and to accommodate overall site drainage, and channelize on-site stormwater runoff.
- All-weather 30-foot wide roadways with 6-foot wide sidewalks at critical points on site to facilitate transportation of personnel and materials to and from critical infrastructure.
- A stormwater sampling point structure with automated sampling equipment as the primary location for stormwater sampling.

### **Task 10 – Design Document Preparation**

Design drawings and technical specifications will be developed to fully define the new facilities (equipment and structures) and those existing facilities that are to be upgraded or repurposed. The design documents will also include detailed site plan drawings to show existing equipment and piping in relation to proposed additions.

### **Task 11 - Constructability Review**

Upon the completion of the 50-percent complete design documents, a review and evaluation of all subsurface reports, drawings, site conditions and drainage requirements will be completed. Discussions with the City of Kyle and project design staff regarding cost value and effectiveness of plant improvements, equipment, and construction phases/processes will be applied in the review. An analysis of plant design with project design staff will be performed to determine acceptable and alternative plant improvements regarding processes, phasing, and equipment. An evaluation of drawings and specifications will be completed to ensure consistency with recommendations for any identified potential conflicts during the review.



A review and analysis of any construction constraints imposed by the current plant operations will be performed. Appropriate contract requirements will be confirmed in the construction specifications. Design drawings and construction specifications will be reviewed together to evaluate feasibility of construction considering such factors as facility operations, project interfaces, utility relocations or shutdowns, emergency vehicle access, and public access.

Following preparation of the 95-percent complete design documents, drawings and specifications will be reviewed for clarity and coordination, ensuring consistency among drawings, specification and general conditions of construction contract documents. Corrections for any potential conflicts will be identified. Final drawing and specifications review performed with regard to the feasibility of construction considering such factors as facility operations, project interfaces, utility relocations or shutdowns, emergency vehicle access, and public access. An evaluation of the proposed time of construction completion, advertisement, bidding, award, and construction start-up dates will be performed. Recommendations regarding liquidated damages provisions will be provided. The preliminary project construction schedule will be evaluated, noting phasing, constraints, and long-lead time equipment items. A written report of all findings will be provided.

### **Task 12 – Construction Cost Estimate**

An opinion of probable construction cost of the new treatment facilities and associated infrastructure improvements defined on the design drawings and specifications will be prepared following the 95-percent complete review meeting

### **Task 13 – Permitting**

A 95-percent complete design document package will be prepared and submitted to TCEQ for TAC 30 Chapter 217 compliance notice. B&N will coordinate the review and approval process of the design documents, participate in any related correspondence with TCEQ and attend any required meetings between TCEQ and the City. Evaluation and determination of construction permits/authorizations necessary (such as Texas Historical Commission and/or SW3P from TCEQ) and assistance in the application/submission/approval process for such permits will be performed.


### **Task 14 – Bidding**

The project will be advertised for bid for construction. B&N will conduct a preconstruction meeting, answer contractor questions during the bid process, and issue addenda as necessary to define aspects of the project. Received bid documents will be reviewed and tabulated, contractor references checked, bid submittals reviewed and recommendation of award issued to the City.

### **Task 15 - Public Outreach**

B&N will coordinate with City staff to apply existing City media platforms for communication about the project status. The initiatives of the public outreach will include: 1) Working to create positive messaging about the expansion; 2) Keeping the community adjacent to the plant facilities informed with project status updates available on the City website; 3) Capitalize on the positives of the project work, including the grant funded public education building.

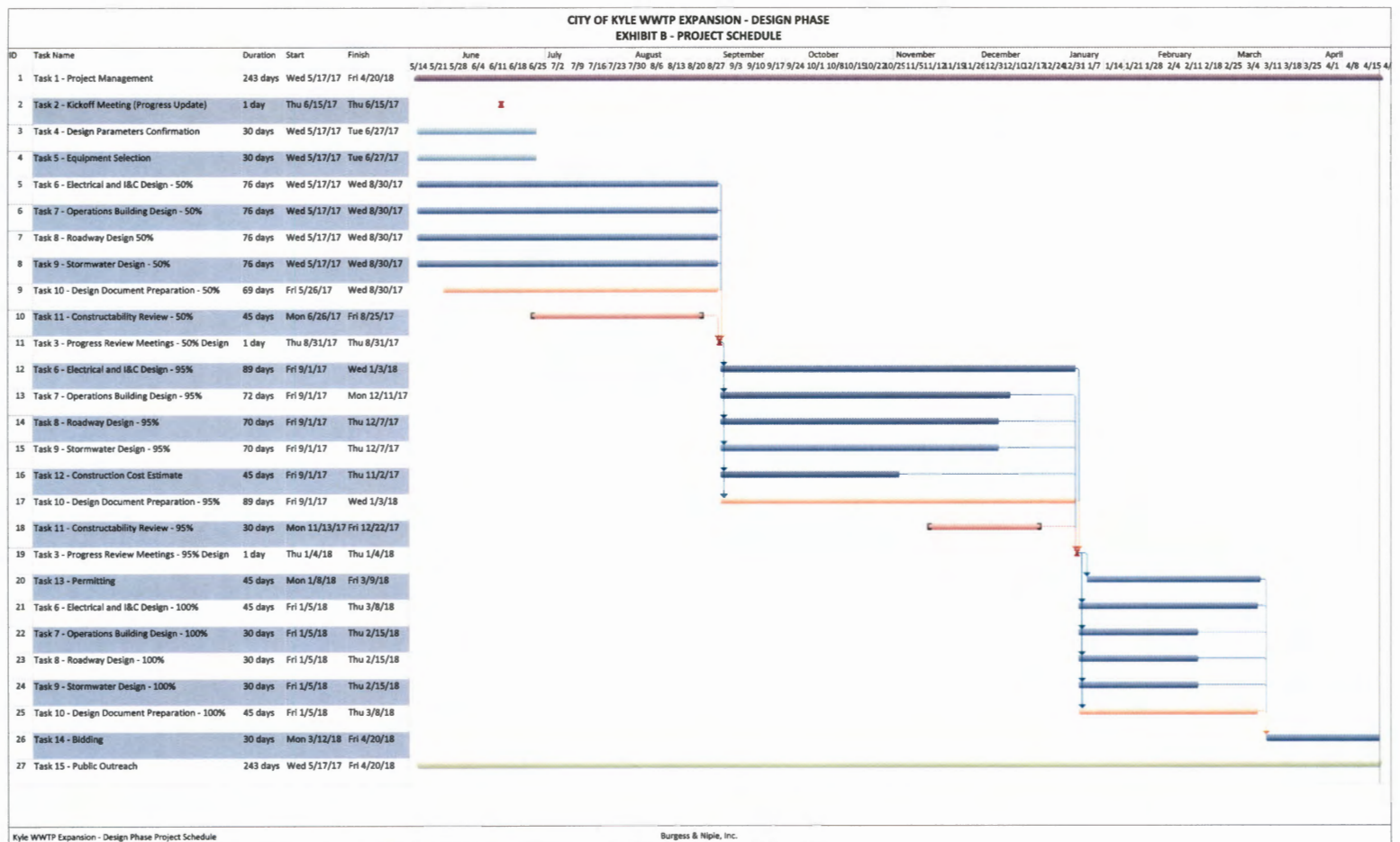
B&N will develop project schematics and graphics for inclusion on the City website as the design phase progresses. B&N will coordinate public open house discussion meetings with City staff at 60% design



and pre-construction phases of the project. Project messaging assistance will be provided by B&N to City staff in drafting project status updates to the public.

The goal of the public outreach will be to communicate to the public the advantages and requirements of the project work being conducted and provide an avenue for residents and stakeholders to ask questions and receive timely and accurate answers.

# **Exhibit “B” Project Schedule**



**Exhibit “C”**  
**Summary of Compensation**



EXHIBIT "C" - Kyle WWTP DESIGN - SUMMARY OF HOURS AND COMPENSATION																	
Task No.	Task Description		Design Discipline Categories														Total Costs and Hours
			Process/ Mechanical Design	Architecture Design Review	Architecture Design	Mechanical Engineering Design	Plumbing Engineering Design	Structural Engineering Design	Site Civil Engineering Design	Engineering Design Drafting	Electrical Engineering I&C Design	Construction Management Review	Clerical Support	ROW Services	Project Management	QA/QC Review	
1	Project Management	Hours	80					60	40	60	76				80	48	444
																Task 1 Total	\$ 82,280.00
2	Kickoff Meeting	Hours	16	8					8	8	55				16		111
																Task 2 Total	\$ 21,825.00
3	Progress Review Meetings	Hours	104					32	32	80	41	18			40	16	363
																Task 3 Total	\$ 64,461.00
4	Design Parameters Confirmation	Hours	16						8						8		32
																Task 4 Total	\$ 6,576.00
5	Equipment Selection	Hours	272					672		256					40		1240
																Task 5 Total	\$ 189,104.00
6	Electrical and I&C Design	Hours	8			8					1,331				8		1355
																Task 6 Total	\$ 270,930.00
7	Operations Building Design	Hours		24	134	24	8	20	40	64	90				16		420
																Task 7 Total	\$ 68,658.00
8	Roadway Design	Hours							80	80				55	16		231
																Task 8 Total	\$ 37,288.00
9	Stormwater Design	Hours							80	80					24		184
																Task 9 Total	\$ 32,432.00
10	Design Document Preparation	Hours	892	14	64			44	40	2,270		40	136		40	16	3556
																Task 10 Total	\$ 470,769.00
11	Constructability Review	Hours	8		8			8	8			139			8		179
																Task 11 Total	\$ 28,144.00
12	Construction Cost Estimate	Hours	48	0	16	8	6	2	24	96	14	26			40	8	288
																Task 12 Total	\$ 48,280.00
13	Permitting	Hours	32		8	4			16	56					64		180
																Task 13 Total	\$ 32,136.00
14	Bidding	Hours	32	0	16	8	4	24	24	40	36		24		64		272
																Task 14 Total	\$ 46,846.00
15	Public Outreach	Hours	0							56			24		24		104
																Task 15 Total	\$ 13,472.00
																Project Total Cost	\$ 1,413,201.00
	Total Hours by Design Discipline		1,508	46	246	52	18	862	400	3,146	1,643	223	184	55	488	88	8,959