# SECOND AMENDMENT TO PROFESSIONAL SERVICES AGREEMENT (TRINITY WATER TREATMENT PLANT AND PUMP STATION EXPANSION)

This **SECOND AMENDMENT TO PROFESSIONAL SERVICES AGREEMENT** (the "Second Amendment") is made and entered into by and between **NEW BRAUNFELS UTILITIES**, a Texas municipal owned utility ("NBU"), and **FREESE AND NICHOLS**, **INC.**, a Texas corporation (the "Professional") (collectively, "the Parties").

#### RECITALS

WHEREAS, NBU and the Professional entered into a Professional Services Agreement dated July 12, 2021 (the "Original Agreement"), for project management, design, bid, and construction phase services, field services, and permitting and coordination with certain stakeholders (the "Original Services") for the Trinity Water Treatment Plant and Pump Station Expansion Project (the "Project") to be completed by June 8, 2024;

WHEREAS, the Parties entered into the First Amendment to the Original Agreement on April 29, 2022, to add additional preliminary engineering, final design, permitting and coordination with stakeholders, bid, and construction services to prepare supporting engineering documents to submit to the Texas Water Development Board ("TWDB") for the Project (the "First Amendment") to be completed by June 8, 2024;

WHEREAS, NBU and the Professional included Supplemental Services in the Original Agreement for Project specific professional engineering services contemplated by Chapter 2254 of the Texas Government Code (the "Supplemental Services"), whereby NBU and the Professional could agree in writing to engage such Supplemental Services at a later date, if needed;

WHEREAS, NBU entered into a Supplemental Services Authorization on October 25, 2022, for preparation of a stand-alone water pollution abatement plan amendment for the Project and for acquisition of a topographical survey for the metes and bounds exhibit of a new drainage easement north of the Project (the "Authorization" and, together with the Original Agreement and the First Amendment, the "Agreement");

WHEREAS, the Parties have identified a need for additional construction phase services not contemplated in the Agreement, to include (i) pre-commissioning planning, testing and development of a commissioning plan, (ii) commissioning administration, testing and support, (iii) and system training, as all of the foregoing are more fully described in Exhibit "A" attached hereto (the "New Services" and, together with the Original Services, the "Services");

WHEREAS, the New Services require an increase in the compensation to the Professional;

WHEREAS, the Agreement requires NBU and the Professional to agree in writing to amend or modify the Agreement; and

WHEREAS, NBU and the Professional desire to amend the Agreement to (i) add the New Services and (ii) authorize additional compensation for the New Services.

NOW THEREFORE, in consideration of the foregoing promises and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree, as follows:

#### **AGREEMENT**

- Section 1. <u>Amendment to Exhibit A</u>. Exhibit A to the Agreement is hereby amended, in part, as described by Exhibit A to this Second Amendment as of the effective date of this Second Amendment.
- Section 2. <u>Amendment to Exhibit B</u>. Exhibit B to the Agreement is hereby deleted in its entirety and replaced by Exhibit B to this Second Amendment as of the effective date of this Second Amendment.
- Section 3. <u>Remaining Terms</u>. Except as stated herein, all other terms and conditions of the Agreement remain in full force and effect.
- Section 4. <u>Entire Agreement</u>. This Second Amendment, together with the Agreement, sets forth the entire understanding of NBU and the Professional and supersedes all prior agreements and understandings, whether written or oral, with respect to the subject matter hereof.
- Section 5. <u>Binding Effect</u>. This Second Amendment will extend to and be binding upon NBU and the Professional and their respective successors and permitted assigns.
- Section 6. <u>Severability</u>. If any term or provision of this Second Amendment is held to be invalid, illegal, or unenforceable in any respect under applicable law, the legality, validity or enforceability of the remaining terms or provisions of this Second Amendment shall not be affected thereby, and this Second Amendment shall be construed as if such invalid, illegal, or unenforceable provision had never been contained herein.
- Section 7. <u>Governing Law</u>. This Second Amendment shall be governed by and construed in accordance with the laws of the State of Texas.

(The remainder of this page is intentionally left blank.)

<b>IN WITNESS WHEREOF</b> , the Parties hereto, upon lawful approval and authority, have executed this Second Amendment on this the day of, 20
NBU:
New Braunfels Utilities, a Texas municipal owned utility
By: Name: Ryan Kelso Title: Interim Chief Executive Officer
THE PROFESSIONAL:
FREESE AND NICHOLS, INC., a Texas corporation
By: Name: David T. Bennett, P.E.  Title: Principal

# Exhibit A

# **Services**

NO CHANGE
Water Treatment Plant
NO CHANGE
Water Pump Station
NO CHANGE
Raw Water Pipeline
NO CHANGE
Water Storage Tank
NO CHANGE
Wastewater Lift Station
NO CHANGE
Finished Water Line
NO CHANGE
Programmable Logic Controller ("PLC")
NO CHANGE
SERVICES
The Professional shall provide the following Services in accordance with the tasks described herein.

## Task 1. Project Management

1. NO CHANGE

# Task 2. Preliminary Engineering Phase

2. NO CHANGE

## Task 3. Final Design Phase

3. NO CHANGE

#### Task 4. Field Services

4. NO CHANGE

## Task 5. Permitting & Stakeholders

5. NO CHANGE

#### Task 6. Bid Phase Services

6. NO CHANGE

#### Task 7. Construction Phase Services

- 7. Upon completion of the bid phase services, the Professional shall proceed with construction phase administration services described herein.
  - 7.1. NO CHANGE
  - 7.2. NO CHANGE
  - 7.3. NO CHANGE
  - 7.4. NO CHANGE
  - 7.5. NO CHANGE
  - 7.6. NO CHANGE
  - 7.7. NO CHANGE
  - 7.8. NO CHANGE
  - 7.9. NO CHANGE
  - 7.10. The Professional shall provide the pre-commissioning, commissioning and system/process training services described herein.

## 7.10.1. Pre-Commissioning

## 7.10.1.1. Pre-Commissioning Planning

7.10.1.1.1. Pre-Commissioning Workshops. The Professional shall lead pre-commissioning workshops with the Project stakeholders to advance

the commissioning planning efforts. Workshops shall be held monthly starting three months prior to the scheduled commissioning. One workshop shall be in person and two shall be held virtually.

- 7.10.1.1.2. The Professional shall develop a commissioning plan for the Project ("Commissioning Plan"). The Commissioning Plan shall consider equipment-specific conditions and constraints and shall include: objective(s), necessary activities, sequence of activities, roles and responsibilities, risks and mitigation strategies, and safety considerations.
- 7.10.1.1.3. The Professional shall split the Project into manageable functional and performance test packages ("FAPTPs") and develop these packages. FAPTPs will include: name and tag number of all equipment to be started up concurrently or in the same package; all pre-startup requirements including responsibilities for the Project contractor ("Contractor"), owner, and engineer; requirements for process mechanical, electrical, instrumentation, and automatic control needs; detailed description of step-by-step procedures for startup, as well as sequence of startup for equipment. Up to twelve (12) FAPTPs will be developed, which may include the following:
  - 7.10.1.1.3.1. Raw Water Flow Control Valve and Pretreatment;
  - 7.10.1.1.3.2. Pall Equipment;
  - 7.10.1.1.3.3. Chemical Feed Systems;
  - 7.10.1.1.3.4. Backwash Transfer System;
  - 7.10.1.1.3.5. Backwash Recycle System;
  - 7.10.1.1.3.6. Ground Storage Tank;
  - 7.10.1.1.3.7. Booster Pump Station;
  - 7.10.1.1.3.8. New SCADA/Communications;
  - 7.10.1.1.3.9. Enclave Lift Station;
  - 7.10.1.1.3.10. Mission Hills;
  - 7.10.1.1.3.11. Replacement PLC: Chemical PLCs and Well PLCs; and
  - 7.10.1.1.3.12. Generators and Automatic Transfer Switches ("ATS").
- 7.10.1.1.4. Scheduling Support. The Professional shall work with the Contractor's Project Team to develop recommended baseline schedules for training and commissioning.
- 7.10.1.2. Pre-Commissioning Field Testing. The Professional shall monitor the status of pre-commissioning field testing/documentation for each FAPTP to verify conformance with operative construction contract documents and completion prior to startup of the associated equipment/processes.

#### 7.10.2. Commissioning

## 7.10.2.1. Commissioning Administration

- 7.10.2.1.1. Commissioning Coordination. The Professional shall coordinate with the Contractor and NBU to oversee the contractor's implementation of the FAPTPs.
- 7.10.2.1.2. Recurring Status Meetings. The Professional shall participate in weekly virtual commissioning team meetings to monitor the progress and coordinate the upcoming commissioning activities.

# 7.10.2.2. Commissioning Testing

- 7.10.2.2.1. The Professional shall witness the Contractor's execution of commissioning field and factory testing for each FAPTP. Witnessing of the commissioning testing includes:
  - 7.10.2.2.1.1. Raw Water Flow Control Valve and Pretreatment Functional Demonstration Testing ("FDT"): Mechanical Process Engineers 1 day on site; Electrical Controls Engineers 1 day on site;
  - 7.10.2.2.1.2. Pall Water Equipment: Mechanical Process Engineers 8 days on site; Electrical Controls Engineers 3 days on site;
  - 7.10.2.2.1.3. Chemical Feed Equipment: Mechanical Process Engineers 3 days on site;
  - 7.10.2.2.1.4. Backwash Transfer System: Mechanical Process Engineers 5 days on site; Electrical Controls Engineers 2 days on site;
  - 7.10.2.2.1.5. Backwash Recycle System: Mechanical Process Engineers 5 days on site; Electrical Controls Engineers 2 days on site;
  - 7.10.2.2.1.6. Ground Storage Tank: Mechanical Process Engineers -1/2 day on site;
  - 7.10.2.2.1.7. Booster Pump Station Functional Demonstration Testing: Mechanical Process Engineers 5 days on site; Electrical Controls Engineers 6 days on site;
  - 7.10.2.2.1.8. New SCADA Communications FDT: Electrical Controls Engineers 1 day on site;

- 7.10.2.2.1.9. Enclave Lift Station FDT: Electrical Controls Engineers 1/2 day on site;
- 7.10.2.2.1.10. Mission Hills FDT: Electrical Controls Engineers 1/2 day on site;
- 7.10.2.2.1.11. PLC Factory Witness Testing: Electrical Controls Engineer 2 Trips, 6 days on site;
- 7.10.2.2.1.12. PLC FDT: Electrical Controls Engineer 9 days on site; and
- 7.10.2.2.1.13. Generator and ATS FDT: Electrical Controls Engineer 4 days on site.
- 7.10.2.2.2. Contractor shall submit commissioning documentation for each FAPTP. The Professional shall review each commissioning field testing submittal for conformance with the operative construction contract documents.
- 7.10.2.2.3. The Professional shall monitor the status of each FAPTP to verify completion of commissioning field testing.
- 7.10.2.2.4. The Professional shall provide support, as needed, to monitor and provide guidance for any issues that may arise during the commissioning field testing.

## 7.10.3. System/Process Training

7.10.3.1. Based on the Facility Integration and Operations Memorandum, the Professional shall provide system training for the Project. The Professional shall prepare an agenda for the training workshop and a slide deck to accompany the training session. A copy of the slide deck shall be provided to the Owner in PDF format. The training shall be recorded and provided to the Owner as an MPEG-4 (.mp4) video file.

## SUPPLEMENTAL SERVICES

**NO CHANGE** 

#### TIME OF COMPLETION

NO CHANGE

#### Exhibit B

## Compensation

NBU agrees to pay the Professional for the Services and the Supplemental Services rendered under this Agreement in accordance with the tables below and made part of this Agreement.

## **Services**

NBU shall pay the Professional for the Services during the term of this Agreement in an amount not to exceed \$3,321,624.

	Cost				
Task	Original	First	Second	Total	
	Agreement	Amendment	Amendment		
Task 1: Project Management	\$172,605	\$0	\$0	\$172,605	
Task 2: Preliminary Design Phase	\$265,294	\$101,952	\$0	\$367,246	
Task 3: Final Design Phase	\$847,345	\$297,276	\$0	\$1,144,621	
Task 4: Field Services	\$53,434	\$131,161	\$0	\$184,595	
Task 5: Permitting & Stakeholders	\$82,640	\$84,936	\$0	\$167,576	
Task 6: Bid Phase	\$38,415	\$13,636	\$0	\$52,051	
Task 7: Construction Phase	\$808,348	\$30,057	\$394,525	\$1,232,930	
Total	\$2,268,081	\$659,018	\$394,525	\$3,321,624	

## **Supplemental Services**

NBU shall pay the Professional for the Supplemental Services in an amount not to exceed \$362,527, as modified below; provided, however, that NBU must provide written approval in the form of a supplemental services agreement or contract amendment, as appropriate, prior to the Professional performing the Supplemental Services.

Supplemental Services Cost Breakdown						
Task	Original Agreement	First Supplemental Services	Balance			
Board Approved Funds Available for Supplemental Services	\$362,527	\$0	\$362,527			
Supplemental Task 1: WPAP Amendment		(\$38,400)	(\$38,400)			
Supplemental Task 2: Topographic Survey		(\$5,100)	(\$5,100)			
Total	\$362,527	(\$43,500)	\$319,027			