PROFESSIONAL SERVICES AGREEMENT

This **Professional Services Agreement** (the "Agreement") is made and entered by and between **New Braunfels Utilities**, a Texas municipally owned utility ("NBU"), and **Freese And Nichols**, **Inc.**, a Texas corporation (the "Professional"). For good and valuable consideration, the receipt and sufficiency of which is acknowledged, the parties agree as set forth herein.

Section 1. <u>Term of Agreement</u>. This Agreement shall become effective the date on which the last party to this Agreement executes this Agreement and this Agreement shall not be binding until executed by all parties (the "Effective Date"). Once this Agreement is executed by both parties, this Agreement shall remain in effect until the completion date specified in Exhibit A, unless terminated as provided for in this Agreement. Subject to Section 271.904 of the Texas Local Government Code, as amended, Exhibit A shall provide, in either calendar days or by providing a final date, a time of completion prior to which the Professional shall have completed all tasks related to the Services (hereinafter defined).

Section 2. Scope of Services.

- (A) The Professional shall perform the services described in Exhibit A (the "Services") within the timeframe specified therein. The time limits for the Services stated in Exhibit A are of the essence of the Agreement. By executing this Agreement, the Professional confirms that the timeframe in Exhibit A is a reasonable period for performing the Services.
- (B) The quality of Services provided hereunder shall be of the level of professional quality performed by professionals regularly rendering this type of service.
- (C) The Professional shall perform the Services in compliance with all statutory, regulatory, and contractual requirements now or hereafter in effect as may be applicable to the rights and obligations set forth in the Agreement.
- (D) The Professional may rely upon the accuracy of reports and surveys provided to it by NBU except when defects should have been apparent to a reasonably competent professional or when it has actual notice of any defects in the reports and surveys.

Section 3. Compensation.

- (A) <u>Amount</u>. The Professional shall be paid the amount set forth in Exhibit B as described herein.
- (B) <u>Billing Period</u>. NBU shall pay the Professional within thirty (30) days after receipt and approval of invoices and based upon work satisfactorily performed and completed to date. All invoices shall document and itemize all work completed to date. Each invoice statement shall include a record of time expended and work performed in sufficient detail to justify payment. In the event any uncontested portions of any invoice are not paid within thirty (30) days of receipt and approval of the Professional's invoice, the Professional shall have the right to suspend work.

(C) <u>Reimbursable Expenses</u>. Any and all reimbursable expenses related to the Services shall be described in Exhibit A and accounted for in the total compensation amount in Exhibit B. If these items are not specifically accounted for in both Exhibit A and Exhibit B, NBU shall not be required to pay such amounts unless otherwise agreed to in writing by both parties or unless agreed to pursuant to Section 4 of this Agreement.

Section 4. Changes to the Services; Additional Work.

- (A) Changes to the Services. The Professional shall make such revisions to any work related to the Services that has been completed as are necessary to correct any errors or omissions as may appear in such work. If NBU finds it necessary to make changes to previously satisfactorily completed work or parts thereof related to the Services, the Professional shall make such revisions if requested and as directed by NBU and such services shall be considered as additional work and paid for as specified under the following paragraph.
- (B) Additional Work. NBU retains the right to make changes to the Services at any time by a written contract amendment. Work that is clearly not within the general description of the Services under this Agreement must be approved in writing by NBU by contract amendment before the additional work is undertaken by the Professional. If the Professional is of the opinion that any work is beyond that contemplated in this Agreement and the Services described in Exhibit A and therefore constitutes additional work, the Professional shall promptly notify NBU of that opinion in writing. If NBU agrees that such work does constitute additional work, then NBU and the Professional shall execute a contract amendment for the additional work and NBU shall compensate the Professional for the additional work on the same basis of the rates for the Services contained in Exhibit B. If the changes reduce the scope of the Services, the contract sum shall be adjusted accordingly. All such changes shall be executed under the conditions of the original Agreement. Any work undertaken by the Professional not previously approved as additional work shall be at risk of the Professional.
- Section 5. Ownership of Documents. Upon completion or termination of this Agreement, all documents prepared by the Professional or furnished to the Professional by NBU shall be delivered to and become the property of NBU. All drawings, charts, calculations, plans, specifications and other data, including electronic files and raw data, prepared under or pursuant to this Agreement shall be made available, upon request, to NBU without restriction or limitation on the further use of such materials; however, such materials are not intended or represented to be suitable for reuse by NBU or others. Any reuse of the materials related to the Services without prior verification or adaptation by the Professional for the specific purpose intended will be at NBU's sole risk and without liability to the Professional. Where applicable, the Professional shall retain all pre-existing proprietary rights in the materials provided to NBU but shall grant to NBU a non-exclusive, perpetual, royalty-free license to use such proprietary information solely for the purposes for which the information was provided. The Professional may, at the Professional's expense, have copies made of the documents or any other data furnished to NBU under or pursuant to this Agreement.

Section 6. <u>Personnel</u>. The Professional shall provide adequate, experienced personnel, capable of and devoted to the successful completion of the Services to be performed under this Agreement.

The Professional agrees that, upon commencement of the Services to be performed under this Agreement, key personnel will not be removed or replaced without prior written notice to NBU. If key personnel are not available to perform the Services for a continuous period exceeding thirty (30) calendar days, or are expected to devote substantially less effort to the Services than initially anticipated, the Professional shall immediately notify NBU of same and shall replace such personnel with personnel possessing substantially equal ability and qualifications.

Section 7. <u>Licenses; Materials</u>. The Professional shall maintain in current status all federal, state, and local licenses and permits required for the Professional to perform the Services and operate its business. NBU has no obligation to provide the Professional, its employees or subcontractors any business registrations or licenses required to perform the Services described in this Agreement. NBU has no obligation to provide tools, equipment, or materials to the Professional.

Section 8. Professional's Seal; Standard of Care. To the extent the Professional has a professional seal, the Professional shall place such seal on all final documents and data furnished by the Professional to NBU. Preliminary documents released from a license holder's control shall identify the purpose of the document, the engineer(s) of record and the engineer license number(s), and the release date on the title sheet of bound engineering reports, specifications, details, calculations or estimates, and each sheet of plans or drawings regardless of size or binding. As required by Section 271.904 of the Texas Local Government Code, as amended, all services provided under this Agreement will be performed with the professional skill and care ordinarily provided by competent engineers or architects, as applicable, practicing under the same or similar circumstances and professional license. The Professional shall perform its services as expeditiously as is prudent considering the ordinary professional skill and care of a competent engineer or architect, as applicable. The plans, specifications, and data provided by the Professional shall be adequate and sufficient to enable those performing the actual work to perform the work as and within the time contemplated by NBU and the Professional. NBU acknowledges that the Professional does not have control over the methods or means of work or the costs of labor, materials, or equipment. Unless otherwise agreed in writing, any estimates of costs by the Professional are for informational purposes only and are not guarantees.

Section 9. Indemnification.

- (A) GENERAL. TO THE EXTENT PERMITTED BY LAW, INCLUDING SECTION 271.904 OF THE TEXAS LOCAL GOVERNMENT CODE, THE PROFESSIONAL SHALL INDEMNIFY AND HOLD HARMLESS NBU AND EACH BOARD MEMBER, OFFICER, EMPLOYEE, AGENT, AND REPRESENTATIVE THEREOF (NBU AND ANY SUCH PERSON BEING HEREIN CALLED AN "INDEMNIFIED PARTY") FOR, FROM AND AGAINST ANY AND ALL LOSSES, CLAIMS, DAMAGES, LIABILITIES, COSTS AND EXPENSES (INCLUDING, BUT NOT LIMITED TO, REASONABLE ATTORNEYS' FEES AND COURT COSTS) INCURRED BY ANY INDEMNIFIED PARTY WHICH ARE:
 - i. Due to the violation of any ordinance, regulation, statute, or other legal requirement in the performance of this Agreement, by the Professional, its agent, employee, any consultant under contract, or any other entity over which the Professional exercises control;

- ii. CAUSED BY OR RESULTING FROM ANY NEGLIGENT OR INTENTIONAL ACT OR OMISSION IN VIOLATION OF PROFESSIONAL'S STANDARD OF CARE, BY THE PROFESSIONAL, ITS AGENT, ANY CONSULTANT UNDER CONTRACT, OR ANY OTHER ENTITY OVER WHICH THE PROFESSIONAL EXERCISES CONTROL;
- iii. CAUSED BY OR RESULTING FROM ANY CLAIM ASSERTING INFRINGEMENT OR ALLEGED INFRINGEMENT OF A PATENT, TRADEMARK, COPYRIGHT OR OTHER INTELLECTUAL PROPERTY RIGHT IN CONNECTION WITH THE INFORMATION FURNISHED BY OR THROUGH THE PROFESSIONAL, ITS AGENT, ANY CONSULTANT UNDER CONTRACT, OR ANY OTHER ENTITY OVER WHICH THE PROFESSIONAL EXERCISES CONTROL;
- iv. Due to the failure of the Professional, its agent, any consultant under contract, or any other entity over which the professional exercises control to pay their consultants or subconsultants amounts due for services provided in connection with the Agreement; or
- V. OTHERWISE ARISING OUT OF OR RESULTING FROM THE PERFORMANCE OF THE SERVICES UNDER THIS AGREEMENT, INCLUDING SUCH CLAIMS, DAMAGES, LOSSES OR EXPENSES ATTRIBUTABLE TO BODILY INJURY, SICKNESS, DISEASE OR DEATH, OR TO INJURY TO OR DESTRUCTION OF TANGIBLE PROPERTY, INCLUDING LOSS OF USE RESULTING THEREFROM, BUT ONLY TO THE EXTENT SUCH CLAIMS, DAMAGES, LOSSES, COSTS AND EXPENSES ARE CAUSED BY OR RESULT FROM ANY NEGLIGENT OR INTENTIONAL ACTS OR OMISSIONS OF THE PROFESSIONAL, ITS AGENT, ANY CONSULTANT UNDER CONTRACT, OR ANY OTHER ENTITY OVER WHICH THE PROFESSIONAL EXERCISES CONTROL.
- (B) REIMBURSEMENT OF NBU'S FEES IN DEFENSE OF CLAIMS. TO THE EXTENT NBU INCURS ATTORNEY'S FEES IN DEFENSE OF ANY CLAIM ASSERTED AGAINST NBU THAT ARISES OR RESULTS FROM THE ALLEGED ACTS OR OMISSIONS OF THE PROFESSIONAL DESCRIBED IN THIS SECTION, THE PROFESSIONAL SHALL REIMBURSE NBU ITS REASONABLE ATTORNEY'S FEES IN PROPORTION TO THE PROFESSIONAL'S LIABILITY FOUND AFTER A FINAL ADJUDICATION OF LIABILITY.

The obligations of the Professional under this Section shall survive the termination of this Agreement.

Section 10. Insurance.

(A) General.

i. <u>Insurer Qualifications</u>. Without limiting any obligations or liabilities of the Professional, the Professional shall purchase and maintain, at its own expense, hereinafter stipulated minimum insurance with insurance companies authorized to do business in the State of Texas with an A.M. Best, Inc. rating of A- VII or above

- with policies and forms satisfactory to NBU. Failure to maintain insurance as specified herein may result in termination of this Agreement at NBU's option.
- ii. No Representation of Coverage Adequacy. By requiring insurance, NBU does not represent that coverage and limits will be adequate to protect the Professional. NBU reserves the right to review any and all of the insurance policies and/or endorsements cited in this Agreement, but has no obligation to do so. Failure to demand such evidence of full compliance with the insurance requirements set forth in this Agreement or failure to identify any insurance deficiency will not relieve the Professional from, nor be construed or deemed a waiver of, its obligation to maintain the required insurance at all times during the performance of this Agreement.
- iii. <u>Additional Insured</u>. All insurance coverage and self-insured retention or deductible portions, except Workers' Compensation insurance and Professional Liability insurance, if applicable, shall name, to the fullest extent permitted by law for claims arising out of the performance of this Agreement, NBU, its agents, representatives, officers, and Board of Trustees as an Additional Insured as specified under the respective coverage sections of this Agreement.
- iv. <u>Coverage Term</u>. All insurance required herein shall be maintained in full force and effect until all the Services required to be performed under the terms of this Agreement are satisfactorily performed, completed and formally accepted by NBU, unless specified otherwise in this Agreement.
- v. <u>Primary Insurance</u>. The Professional's insurance shall be primary insurance with respect to performance of this Agreement and in the protection of NBU as an Additional Insured.
- vi. <u>Claims Made</u>. In the event any insurance policies required by this Agreement are written on a "claims made" basis, coverage will extend, either by keeping coverage in force or purchasing an extended reporting option, for three years after the conclusion of the term of this Agreement. Such continuing coverage will be evidenced by submission of annual certificates of insurance stating applicable coverage is in force and containing provisions as required herein for the three-year period.
- vii. Waiver. All policies (except for Professional Liability, if applicable), including Workers' Compensation insurance, will contain a waiver of rights of recovery (subrogation) against NBU, its agents, representatives, officers, employees, and Board of Trustees for any claims arising out of the Services performed by the Professional. The Professional shall arrange to have such subrogation waivers incorporated into each policy via formal written endorsement thereto.
- viii. <u>Policy Deductibles and/or Self-Insured Retentions</u>. The policies set forth in these requirements may provide coverage that contains deductibles or self-insured Page 5 of 27

- retention amounts. Such deductibles or self-insured retention shall not be applicable with respect to the policy limits provided to NBU. The Professional shall be solely responsible for any such deductible or self-insured retention amount.
- ix. <u>Use of Subcontractors</u>. The Professional shall not use subcontractors for all or any work under this Agreement without the prior written consent of NBU in its sole discretion. If any work under this Agreement is subcontracted in any way, the Professional shall execute written agreements with its subcontractors containing the indemnification provisions set forth in this Agreement and insurance requirements set forth herein protecting NBU and the Professional. The Professional shall be responsible for executing any agreements with its subcontractors and obtaining certificates of insurance verifying the insurance requirements.
- x. Evidence of Insurance. Prior to the Effective Date of this Agreement, the Professional shall provide suitable evidence of insurance to NBU, which confirms that all required insurance policies are in full force and effect. Evidence of insurance shall be in a form acceptable to NBU. Confidential information such as the policy premium may be redacted from the documents evidencing each insurance policy, provided that such redactions do not alter any of the information required by this Agreement. NBU will rely upon the requested information, including, but not limited to, certificates of insurance, endorsements, schedule of forms and endorsements, or other policy language as evidence of coverage but such acceptance and reliance will not waive or alter in any way the insurance requirements or obligations of this Agreement. If any of the policies required by this Agreement expire during the life of this Agreement, it will be the Professional's responsibility to forward renewal certificates and evidence of insurance to NBU five (5) days prior to the expiration date.
- (B) <u>Required Insurance Coverage</u>. Any of the coverage set forth below may be waived by NBU in its sole discretion, but any such waiver must be signed by an authorized representative of NBU on or before the Effective Date of this Agreement.
 - i. Commercial General Liability. The Professional shall maintain "occurrence" form Commercial General Liability insurance with an unimpaired limit of not less than \$1,000,000 for each occurrence and a \$2,000,000 General Aggregate Limit. The policy shall cover liability arising from premises, operations, independent contractors, products, completed operations, personal injury, and property damage. The definition of insured contract cannot have any modifications as outlined in the ISO policy form CG 0001 0413. Third party action over coverage must not be specifically excluded. To the fullest extent allowed by law, for claims arising out of the performance of this Agreement, NBU, its agents, representatives, officers, and Board of Trustees shall be cited as an Additional Insured. If any Excess insurance is utilized to fulfill the requirements of this subsection, such Excess insurance shall be "follow form" equal or broader in coverage scope than underlying insurance.

- ii. <u>Auto Liability</u>. The Professional shall maintain Automobile Liability insurance with a limit of \$1,000,000 combined single limit on the Professional's owned or hired and non-owned vehicles, as applicable, assigned to or used in the performance of the Services by the Professional under this Agreement. To the fullest extent allowed by law, for claims arising out of the performance of this Agreement, NBU, its agents, representatives, officers, and Board of Trustees shall be cited as an Additional Insured. If any Excess insurance is utilized to fulfill the requirements of this subsection, such Excess insurance shall be "follow form" equal or broader in coverage scope than underlying insurance.
- iii. Professional Liability. The Professional shall maintain Professional Liability insurance covering negligent errors and omissions arising out of the Services performed by the Professional, or anyone employed by the Professional, or anyone for whose negligent acts, mistakes, errors and omissions the Professional is legally liable, with an unimpaired liability insurance limit of \$1,000,000 each claim and \$2,000,000 annual aggregate. In the event the Professional Liability insurance policy is written on a "claims made" basis, coverage shall extend for three years after the conclusion of the term of this Agreement, and the Professional shall be required to submit certificates of insurance and other requested information evidencing proper coverage is in effect as required above. Confidential information such as the policy premium or proprietary information may be redacted from the insurance information requested, provided that such redactions do not alter any of the information required by this Agreement.
- iv. <u>Workers' Compensation and Employer's Liability Insurance</u>. The Professional shall maintain Workers' Compensation insurance to cover the Professional's employees engaged in the performance of the Services under this Agreement and shall also maintain Employers Liability Insurance of not less than \$1,000,000 for each accident, \$1,000,000 disease for each employee and \$1,000,000 disease policy limit.
- (C) <u>Cancellation and Expiration Notice</u>. Insurance required herein shall not expire, be canceled, or be materially changed without thirty (30) days' prior written notice to NBU.

Section 11. Termination.

(A) For NBU's Convenience. This Agreement is for the convenience of NBU and, as such, may be terminated by NBU for any reason upon thirty (30) days' written notice by NBU to the Professional. Upon termination for convenience, the Professional will be paid for the Services performed to the termination date less any offsets to which NBU may be entitled under the terms of this Agreement. By written notice to NBU, the Professional may suspend work if the Professional reasonably determines that working conditions at the site (outside the Professional's control) are unsafe, or in violation of applicable laws, or in the event NBU has not made timely payment in accordance with this Agreement, or for other circumstances not caused by the Professional that are materially interfering with the normal progress of the work. The

Professional's suspension of work hereunder shall be without prejudice to any other remedy of the Professional at law or equity.

- For Cause. If either party violates any provision or fails to perform any obligation of this Agreement and such party fails to cure its nonperformance within thirty (30) days after written notice of nonperformance is given by the non-defaulting party, such party will be in default. In the event of such default, the non-defaulting party may terminate this Agreement immediately for cause and will have all remedies that are available to it at law or in equity including, without limitation, the remedy of specific performance. If the nature of the defaulting party's nonperformance is such that it cannot reasonably be cured within thirty (30) days, then the defaulting party will have such additional period of time as may be reasonably necessary under the circumstances, provided the defaulting party immediately (i) provides written notice to the non-defaulting party and (ii) commences to cure its nonperformance and thereafter diligently continues to completion the cure of its nonperformance. In no event will any such cure period exceed ninety (90) days. Only one notice of nonperformance will be required during the term of this Agreement and in the event of a second breach or violation, the nondefaulting party may immediately terminate this Agreement without notice to the defaulting party. In the event of any termination for cause by NBU, payment will be made by NBU to the Professional for the undisputed portion of its fee due as of the termination date less any offsets to which NBU may be entitled under the terms of this Agreement.
- (C) <u>Non-Collusion</u>. The Professional represents and warrants that the Professional has not given, made, promised or paid, nor offered to give, make, promise or pay any gift, bonus, commission, money or other consideration to any person as an inducement to or in order to obtain the work to be provided to NBU under this Agreement. If NBU determines that the Professional gave, made, promised, paid or offered any gift, bonus, commission, money, or other consideration to NBU or any of its officers, agents, or employees to secure this Agreement, NBU may elect to cancel this Agreement by written notice to the Professional. The Professional further agrees that the Professional shall not accept any gift, bonus, commission, money, or other consideration from any person (other than from NBU pursuant to this Agreement) for any of the Services performed by the Professional under or related to this Agreement. If any such gift, bonus, commission, money, or other consideration is received by or offered to the Professional, the Professional shall immediately report that fact to NBU and, NBU, at its sole option, may elect to cancel this Agreement by written notice to the Professional.
- (D) Agreement Subject to Appropriation. This Agreement is subject to appropriation of funds. The provisions of this Agreement for payment of funds by NBU shall be effective when funds are appropriated for purposes of this Agreement and are actually available for payment. NBU shall be the sole judge and authority in determining the availability of funds under this Agreement and NBU shall keep the Professional fully informed as to the availability of funds for the Agreement. The obligation of NBU to make any payment pursuant to this Agreement is a current expense of NBU, payable exclusively from such annual appropriations, and is not a general obligation or indebtedness of NBU. If sufficient funds are not appropriated to pay the amounts as set forth in this Agreement during any immediately succeeding fiscal year, this Agreement shall terminate at the end of the then-current fiscal year and NBU and the Professional shall be relieved of any subsequent obligation under this Agreement.

Section 12. Miscellaneous.

- (A) <u>Independent Contractor</u>. The Professional acknowledges that the Professional is an independent contractor of NBU and is not an employee, agent, official or representative of NBU. The Professional shall not represent, either expressly or through implication, that the Professional is an employee, agent, official or representative of NBU. Income taxes, self-employment taxes, social security taxes and the like shall be the sole responsibility of the Professional.
- (B) <u>Governing Law; Venue</u>. This Agreement and all of the transactions contemplated herein shall be governed by and construed in accordance with the laws of the State of Texas. The provisions and obligations of this Agreement are performable in Comal County, Texas such that exclusive venue for any action arising out of this Agreement shall be in Comal County, Texas.
- (C) <u>Compliance with Laws</u>. The Professional shall comply with all federal, state and local laws, statutes, ordinances, rules and regulations, and the orders and decrees of any courts, administrative, or regulatory bodies in any matter affecting the performance of this Agreement, including, without limitation, worker's compensation laws, minimum and maximum salary and wage statutes and regulations, and licensing laws and regulations. When required, the Professional shall furnish satisfactory proof of compliance to NBU.
- (D) <u>Amendments</u>. This Agreement may only be amended, modified, or supplemented by a written amendment signed by persons duly authorized to enter into contracts on behalf of NBU and the Professional.
- (E) <u>Provisions Required by Law</u>. Each and every provision of law and any clause required by law to be in the Agreement shall be read and enforced as though it were included herein and, if through mistake or otherwise any such provision is not inserted, or is not correctly inserted, then upon the application of either party, the Agreement shall promptly be physically amended to make such insertion or correction.
- (F) <u>Severability</u>. If any term or provision of this Agreement 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 Agreement shall not be affected thereby, and this Agreement shall be construed as if such invalid, illegal, or unenforceable provision had never been contained herein.
- (G) Entire Agreement; Interpretation; Parol Evidence. This Agreement and the related Exhibits constitute the entire agreement of the parties with respect to the subject matter, and all previous agreements, whether oral or written, entered into prior to this Agreement are hereby revoked and superseded thereby. No representations, inducements or oral agreements have been made by any of the parties except as expressly set forth in this Agreement. This Agreement shall be construed and interpreted according to its plain meaning, and no presumption shall be deemed to apply in favor of, or against the party drafting the Agreement.

- (H) <u>No Assignment</u>. Neither party shall have the right to assign that party's interest in this Agreement without the prior written consent of the other party. Any purported assignment in violation of this Section shall be null and void.
- (I) <u>Subcontractors</u>. The Professional shall not transfer any portion of the work related to the Services under this Agreement to any subcontractor without the prior written consent of NBU, which consent shall not be unreasonably withheld. The approval or acquiescence of NBU in the subletting of any work shall not relieve the Professional of any responsibility for work done by such subcontractor. Failure to pay subcontractors in a timely manner pursuant to any subcontract shall be a material breach of this Agreement by the Professional.
- (J) <u>Waiver</u>. No waiver by any party of any of the provisions of this Agreement shall be effective unless explicitly set forth in writing and signed by the party so waiving. No waiver of any breach or violation of any term of this Agreement shall be deemed or construed to constitute a waiver of any other breach or violation, whether concurrent or subsequent, and whether of the same or of a different type of breach or violation. No failure to exercise, or delay in exercising, any right, remedy, power, or privilege arising from this Agreement shall operate or be construed as a waiver thereof; nor shall any single or partial exercise of any right, remedy, power, or privilege hereunder preclude any other or further exercise thereof or the exercise of any other right, remedy, power, or privilege.
- (K) <u>Attorneys' Fees</u>. In the event either party brings any action for any relief, declaratory or otherwise, arising out of this Agreement or on account of any breach or default hereof, the prevailing party will be entitled to receive from the other party reasonable attorneys' fees and reasonable costs and expenses, which will be deemed to have accrued on the commencement of such action.
- (L) <u>Liens</u>. All materials or services provided under this Agreement shall be free of all liens and, if NBU requests, a formal release of all liens shall be delivered to NBU.

(M) Offset.

- i. Offset for Damages. In addition to all other remedies at law or equity, NBU may offset from any money due to the Professional any amount the Professional owes to NBU for damages resulting from breach or deficiencies in performance or breach of any obligation under this Agreement, including but not limited to all costs, expenses, fines, fees, and charges associated with obtaining performance from alternative sources, shipping, handling, materials, equipment rental, travel expenses and associated costs.
- ii. Offset for Delinquent Fees or Taxes. NBU may offset from any money due to the Professional any amount the Professional owes to NBU for delinquent fees, including any interest or penalties.
- (N) <u>Notices</u>. Any notice or other communication required or permitted to be given under this Agreement shall be in writing and shall be deemed to have been duly given if (i) delivered to the Page 10 of 27

party at the address set forth below, (ii) deposited in the U.S. Mail, registered or certified, return receipt requested, to the address set forth below, or (iii) given to a recognized and reputable overnight delivery service, to the address set forth below:

If to NBU:

New Braunfels Utilities Attn: Director of Water Services 263 Main Plaza New Braunfels, TX 78130

With copy to:

New Braunfels Utilities Attn: Purchasing Manager 355 FM 306 New Braunfels, TX 78130

If to the Professional:

Freese and Nichols, Inc. 801 Cherry St. Ste 2800 Fort Worth, TX 76102

or at such other address, and to the attention of such other person or officer, as any party may designate by providing thirty (30) days' prior written notice of such change to the other party in the manner set forth in this Section. Notices shall be deemed received (i) when delivered to the party, (ii) three business days after being placed in the U.S. Mail, properly addressed, with sufficient postage or (iii) the following business day after being given to a recognized overnight delivery service, with the person giving the notice paying all required charges and instructing the delivery service to deliver on the following business day. If a copy of a notice is also given to a party's counsel or other recipient, the provisions above governing the date on which a notice is deemed to have been received by a party shall mean and refer to the date on which the party, and not its counsel or other recipient to which a copy of the notice may be sent, is deemed to have received the notice.

(O) <u>Confidentiality of Records</u>. The Professional shall establish and maintain procedures and controls that are acceptable to NBU for the purpose of ensuring that information contained in its records or obtained from NBU or from others in carrying out the Professional's obligations under this Agreement shall not be used or disclosed by it, its agents, officers, or employees, except as required to perform the Professional's duties under this Agreement. Persons requesting such information should be referred to NBU. The Professional also agrees that any information pertaining to individual persons shall not be divulged other than to employees or officers of the Professional as needed for the performance of duties under this Agreement.

- (P) Right to Audit. NBU shall have the right to examine and audit the books and records of the Professional with regard to the Services, or any subsequent changes, at any reasonable time. Such books and records shall be maintained in accordance with generally accepted principles of accounting and shall be adequate to enable determination of (1) the substantiation and accuracy of any payments required to be made under this Agreement; and (2) compliance with the provisions of this Agreement.
- (Q) <u>Paragraph Headings; Construction</u>. The paragraph headings contained in this Agreement are for convenience only and shall in no way enlarge or limit the scope or meaning of the various and several paragraphs hereof. Both parties have participated in the negotiation and preparation of this Agreement and this Agreement shall not be construed either more or less strongly against or for either party.
- (R) <u>Binding Effect</u>. Except as limited herein, the terms and provisions of this Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective heirs, devisees, personal and legal representatives, successors and assigns.
- (S) <u>Gender</u>. Within this Agreement, words of any gender shall be held and construed to include any other gender, and words in the singular number shall be held and construed to include the plural, unless the context otherwise requires.
- (T) <u>Multiple Counterparts</u>. This Agreement may be executed in multiple counterparts, each of which shall be deemed an original, and all of which shall constitute but one and the same instrument.
- (U) <u>Exhibits</u>. Except as specified in Subsection (V) of this Section, all exhibits to this Agreement are incorporated herein by reference for all purposes wherever reference is made to the same.
- (V) <u>Conflicting Terms</u>. In the case of any conflicts between the terms of this Agreement and the Exhibits, the statements in the body of this Agreement shall govern. The Exhibits are intended to detail the technical scope of services, fee schedule, and the term of the contract only and shall not dictate Agreement terms.
- (W) <u>Relationship of Parties</u>. Nothing contained in this Agreement shall be deemed or construed by the parties hereto or by any third party to create the relationship of principal and agent or of partnership or of joint venture or of any association whatsoever between the parties, it being expressly understood and agreed that no provision contained in this Agreement nor any act or acts of the parties hereto shall be deemed to create any relationship between the parties other than the relationship of independent parties contracting with each other solely for the purpose of effecting the provisions of this Agreement.
- (X) <u>No Third-Party Beneficiaries</u>. This Agreement is for the sole benefit of the parties hereto and their respective assigns and nothing herein, express or implied, is intended to or shall confer upon any other person or entity any legal or equitable right, benefit, or remedy of any nature whatsoever under or by reason of this Agreement.

(Y) <u>Non-Exclusive Contract</u>. This Agreement is entered into with the understanding and agreement that it is for the sole convenience of NBU. NBU reserves the right to obtain like goods and services from another source when necessary.

Section 13. Force Majeure. If the performance of any covenant or obligation to be performed hereunder by any party is delayed as a result of circumstances that are beyond the reasonable control of such party (which circumstances may include, without limitation, acts of God, war, acts of civil disobedience, epidemic, pandemic, fire or other casualty, shortage of materials, adverse weather conditions (such as, by way of illustration and not of limitation, severe rain storms or below freezing temperatures, or tornados), labor action, strikes or similar acts, moratoriums or regulations or actions by governmental authorities), the time for such performance shall be extended by the amount of time of such delay, but no longer than the amount of time reasonably occasioned by the delay. In no event will any delay or failure of performance caused by any force majeure condition extend this Agreement beyond its stated Term unless both parties agree in writing to such extension in an amendment to this Agreement. The party claiming delay of performance as a result of any of the foregoing force majeure events shall deliver written notice of the commencement of any such delay resulting from such force majeure event not later than seven (7) days after the claiming party becomes aware of the same, and if the claiming party fails to so notify the other party of the occurrence of a force majeure event causing such delay and the other party shall not otherwise be aware of such force majeure event, the claiming party shall not be entitled to avail itself of the provisions for the extension of performance contained in this subsection.

Section 14. <u>Dispute Resolution</u>. In accordance with the provisions of Subchapter I, Chapter 271 of the Texas Local Government Code, as amended, the parties agree that, prior to instituting any lawsuit or other proceeding arising from a dispute under this agreement, the parties shall first attempt to resolve the dispute by taking the steps described in this Section. <u>First</u>, the dissatisfied party shall deliver to the other party a written notice substantially describing the nature of the dispute, which notice shall request a written response to be delivered to the dissatisfied party not less than five (5) days after receipt of the notice of dispute. <u>Second</u>, if the response does not reasonably resolve the dispute, in the opinion of the dissatisfied party, the dissatisfied party shall give five (5) days' written notice to that effect to the other party whereupon each party shall appoint a person having authority over the activities of the respective parties who shall promptly meet, in person, in an effort to resolve the dispute. <u>Third</u>, if those persons cannot or do not resolve the dispute, then the parties shall each appoint a person from the highest tier of managerial responsibility within each respective party, who shall then promptly meet, in person, in an effort to resolve the dispute.

Section 15. <u>Disclosure of Business Relationships/Affiliations; Conflict of Interest Questionnaire</u>. The Professional represents that it is in compliance with the applicable filing and disclosure requirements of Chapter 176 of the Texas Local Government Code, as amended.

Section 16. <u>Information Technology</u>

- <u>Limited Access</u>. If necessary for the fulfillment of the Agreement, NBU may provide the (A) Professional with non-exclusive, limited access to NBU's information technology infrastructure. The Professional understands and agrees to abide by NBU policies, standards, regulations and restrictions regarding access and usage of NBU's information technology infrastructure. The Professional shall reasonably enforce such policies, standards, regulations and restrictions with all the Professional's employees, agents or any tier of subcontractor granted access in the performance of this Agreement, and shall be granted and authorize only such access as may be necessary for the purpose of fulfilling the requirements of the Agreement. The Professional's employees, agents and subcontractors must receive prior, written approval from NBU before being granted access to NBU's information technology infrastructure and data and NBU, in its sole determination, shall determine accessibility and limitations thereto. NBU reserves the right to condition or terminate the Professional's access to NBU's information technology infrastructure or data at any time. The Professional agrees that the requirements of this Section shall be incorporated into all subcontractor agreements entered into by the Professional. The parties further agree that a violation of this Section shall be deemed to cause irreparable harm that justifies injunctive relief in court. A violation of this Section may result in immediate termination of this Agreement without notice.
- (B) <u>Data Confidentiality</u>. All data, regardless of form, including originals, images and reproductions, prepared by, obtained by or transmitted to the Professional in connection with this Agreement is confidential, proprietary information owned by NBU. Except as specifically provided in this Agreement, the Professional shall not intentionally disclose data generated in the performance of the Services to any third party without the prior, written consent of NBU.
- (C) <u>Data Security</u>. Personal identifying information, financial account information, or restricted NBU information, whether electronic format or hard copy, is confidential and must be secured and protected at all times to avoid unauthorized access. At a minimum, the Professional must encrypt or password-protect electronic files. This includes data saved to laptop computers, computerized devices or removable storage devices.
- (D) <u>Compromised Security</u>. In the event that data collected or obtained by the Professional in connection with this Agreement is believed to have been compromised or in the event of a Security Incident, as defined by Section 2054.603 of the Texas Government Code, the Professional shall notify NBU within twenty-four (24) hours of discovery of such compromise or Security Incident. To the Extent Permitted by Section 271.904 of the Texas Local Government Code, as amended, the Professional shall indemnify and hold NBU harmless from any Claims resulting from an act of negligence, intentional tort, intellectual property infringement, or failure to pay a subcontractor or supplier committed in connection with the performance of this Agreement by the Professional, its officers, employees, consultants, agents, any tier of subcontractor, or any entity over which the Professional exercises Control.
- (E) <u>Survival</u>. The obligations of the Professional under this Section shall survive the termination of this Agreement.

Section 17. <u>Prohibition on Contracts with Companies Boycotting Israel</u>. The Professional hereby verifies that it and its parent company, wholly or majority owned subsidiaries, and other affiliates, if any, do not boycott Israel and, to the extent this Agreement is a contract for goods or services, will not boycott Israel during the term of this Agreement as described in Chapter 2271 of the Texas Government Code, as amended.

The foregoing verification is made solely to comply with Section 2271.002 of the Texas Government Code, as amended. As used in the foregoing verification, "boycott Israel" means refusing to deal with, terminating business activities with, or otherwise taking any action that is intended to penalize, inflict economic harm on, or limit commercial relations specifically with Israel, or with a person or entity doing business in Israel or in an Israeli-controlled territory, but does not include an action made for ordinary business purposes. The Professional understands "affiliate" to mean an entity that controls, is controlled by, or is under common control with the Professional and exists to make a profit.

Section 18. Contracts with Companies Engaged in Business with Iran, Sudan or Foreign Terrorist Organizations Prohibited. The Professional represents that neither it nor any of its parent company, wholly or majority owned subsidiaries, and other affiliates is a company identified on a list prepared and maintained by the Texas Comptroller of Public Accounts under Section 2252.153 or Section 2270.0201, Texas Government Code, as amended, and posted on any of the following pages of such officer's internet website:

https://comptroller.texas.gov/purchasing/publications/divestment.php.

The foregoing representation is made solely to comply with Section 2252.152, Texas Government Code, as amended, and excludes the Professional and each of its parent company, wholly or majority owned subsidiaries, and other affiliates, if any, that the United States government has affirmatively declared to be excluded from its federal sanctions regime relating to Sudan or Iran or any federal sanctions regime relating to a foreign terrorist organization. The Professional understands "affiliate" to mean an entity that controls, is controlled by, or is under common control with the Professional and exists to make a profit.

Section 19. <u>Prohibition on Contracts with Companies in China, Iran, North Korea, or Russia.</u> If the Professional is granted direct or remote access to or control of critical infrastructure in the State of Texas under this Agreement, the Professional represents the following:

- (A) it is not owned by or the majority of stock or other ownership interest in the Professional is not held or controlled by:
 - i. individuals who are citizens of China, Iran, North Korea, Russia, or a country designated by the Governor of Texas as a threat to critical infrastructure under Section 2275.0103 of the Texas Government Code, as amended ("designated country"); or
 - ii. a company or other entity, including a governmental entity, that is owned or controlled by citizens of or is directly controlled by the government of China, Iran, North Korea, Russia, or a designated country; or

(B) it is not headquartered in China, Iran, North Korea, Russia, or a designated country.

The foregoing representation is made solely to comply with Chapter 2275 of the Texas Government Code, as amended. As used in the foregoing verification, "critical infrastructure" means a communication infrastructure system, cybersecurity system, electric grid, hazardous waste treatment system, or water treatment facility. "Affiliate," with respect to a company entering into an agreement in which the critical infrastructure is electric grid equipment, has the meaning assigned by the protocols of the independent organization certified under Section 39.151, Utilities Code, for the ERCOT power region.

Section 20. <u>Prohibition on Contracts with Companies Boycotting Energy Companies</u>. The Professional hereby verifies that it and its parent company, wholly or majority owned subsidiaries, and other affiliates, if any, do not boycott energy companies and, to the extent this Agreement is a contract for goods or services, will not boycott energy companies during the term of this Agreement as described in Chapter 2276 of the Texas Government Code, as amended.

The foregoing verification is made solely to comply with Section 2276.002 of the Texas Government Code, as amended. As used in the foregoing verification, "boycott energy companies" has the meaning used in Section 809.001 of the Texas Government Code, as amended. The Professional understands "affiliate" to mean an entity that controls, is controlled by, or is under common control with the Professional and exists to make a profit.

Section 21. Prohibition on Contracts with Companies that Discriminate Against Firearm and Ammunition Industries. The Professional hereby verifies that it and its parent company, wholly or majority owned subsidiaries, and other affiliates, if any, do not have a practice, policy, guidance, or directive that discriminates against a firearm entity or firearm trade association and, to the extent this Agreement is a contract for goods or services, will not discriminate against a firearm entity or firearm trade association during the term of this Agreement as described in Chapter 2274 of the Texas Government Code, as amended.

The foregoing verification is made solely to comply with Section 2274.002 of the Texas Government Code, as amended. As used in the foregoing verification, "discriminate against a firearm entity or firearm trade association" has the meaning used in Section 2274.001(3) of the Texas Government Code, as amended. The Professional understands "affiliate" to mean an entity that controls, is controlled by, or is under common control with the Professional and exists to make a profit.

Section 22. <u>Texas Public Information Act</u>. The Professional recognizes that NBU is subject to the disclosure requirements of the Texas Public Information Act (the "PIA"). As part of its obligations within this Agreement, the Professional agrees, at no additional cost to NBU, to cooperate with NBU for any particular needs or obligations arising out of the NBU's obligations under the PIA. This acknowledgment and obligation are in addition to and complementary to the NBU's audit rights in Section 12(P).

This provision applies if the Agreement has a stated expenditure of at least \$1 million in public funds for the purchase of goods or services by NBU or results in the expenditure of at least \$1 million in public funds for the purchase of goods or services by NBU in a fiscal year of NBU.

The Professional must (1) preserve all contracting information related to the Agreement as provided by the records retention requirements applicable to NBU for the duration of the Agreement; (2) promptly provide to NBU any contracting information related to the Agreement that is in the custody or possession of the Professional on request of NBU; and (3) on completion of the Agreement, either:

- (i) provide at no cost to NBU all contracting information related to the Agreement that is in the custody or possession of the Professional; or
- (ii) preserve the contracting information related to the Agreement as provided by the records retention requirements applicable to NBU.

The requirements of Subchapter J, Chapter 552, Texas Government Code, may apply to this Agreement and the Professional agrees that the Agreement can be terminated if the Professional knowingly or intentionally fails to comply with a requirement of that subchapter.

Section 23. <u>Electronic Signatures</u>. Pursuant to Chapter 322 of the Texas Business and Commerce Code, as amended, the parties agree to the use of electronic signatures herein and that the use of an electronic signature, whether digital or encrypted, is intended to have the same force and effect as a manual signature. Electronic signature means any electronic sound, symbol or process attached to or logically associated with a record and executed and adopted by a party with the intent to sign such record, including facsimile or e-mail electronic signatures. Each party further agrees that if it agrees to conduct a transaction by electronic means in this Agreement, it may refuse to conduct other transactions by electronic means and that such right may not be waived by this Agreement.

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IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the Effective Date.

NBU :				
NEW BRAUNFELS UTILITIES,				
a Texas	municipally owned utility			
By:				
Name:	Ryan Kelso			
Title:	Chief Executive Officer			
Date:				
PROFE	ESSIONAL:			
	E & NICHOLS, INC.,			
a Texas	corporation			
	1			
By:				
Name: _	Anne Hoskins			
Title	Principal			

Date: ____10/25/2024

Exhibit A

Scope of Services

The Professional shall prepare an update to the Water and Wastewater Master Plan (the "Project"). The intent of the Project is to develop a capital improvement plan ("CIP") for the water and wastewater systems. The Professional shall develop projections for population growth and the associated water demand and wastewater flows within the NBU service area. The Professional shall update and calibrate the hydraulic models of the water and wastewater systems as part of this Project. The models will be used to evaluate the hydraulic capacity and operation of the water and wastewater systems to identify and address deficiencies. The Professional will use the hydraulic modeling results to develop system improvements. The improvements will then be grouped into projects and prioritized based on when the projects will be needed. The analysis, findings, and recommendations will be documented in a Water and Wastewater Master Plan Report.

I. SERVICES BY TASK

The Professional shall provide the following services in accordance with the tasks described herein, corresponding to the schedule set out in Table 1 below.

1. Task 1: Project Management and Data Collection

- 1.1. <u>Project Kickoff Meeting</u>: The Professional shall meet with NBU staff to discuss the scope of work, project goals, and expectations. The Professional shall prepare a meeting agenda, project schedule, and an initial list of data needed from NBU to begin working on the Project within ten (10) business days of receiving Notice to Proceed from NBU's project manager ("Project Manager"). The Professional shall provide the agenda, schedule, and list of data needed via email in portable document format ("PDF").
- 1.2. <u>Monthly Reporting and Invoices</u>: The Professional shall provide monthly progress reports with status updates and decisions made on the Project and shall submit billing invoices and progress reports to NBU's Project Manager on or before the 25th day of each month for the previous month's work via email.
- 1.3. <u>Data Collection</u>: The Professional shall compile and review information from NBU, including the current water and wastewater system geographic information mapping, asbuilt drawings of water and wastewater facilities, the historical water production and water demands, metered billing data for water customers, wastewater treatment plant flows, and other information as needed for the Project.
- 1.4. <u>Meeting Agendas and Minutes</u>: The Professional shall provide a meeting agenda one (1)

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day prior to meetings and provide a copy of the summary meeting minutes and action item logs to NBU's Project Manager within one (1) week after meetings. The Professional shall provide meeting agendas, minutes, and an action item log to the NBU Project Manager in PDF format via email. The Professional shall provide updates on the action item logs with their monthly progress reports identified in Task 1.2.

1.5. <u>Project Schedule</u>: The Professional shall develop a project schedule that includes the expected duration of each scope item and anticipated dates for meetings and deliverables. The Professional shall email the project schedule in PDF format to the NBU Project Manager. The schedule will also be included in the meeting materials for the project kickoff meeting described in Task 1.1.

2. Task 2: Water Hydraulic Model Update and Calibration

- 2.1. <u>Review Pump Field Testing Data</u>: The Professional shall obtain the head and flow data collected as part of NBU's pump testing efforts and update the performance curves of each pump within the hydraulic model.
- 2.2. Conduct Temporary Pressure Recording: The Professional shall work with NBU staff to conduct up to three (3) sessions of temporary pressure recording at up to twenty (20) locations in the distribution system per session. The Professional shall prepare a procedure showing the proposed location of pressure recording, pressure recording duration, required Supervisory Control and Data Acquisition ("SCADA") data during the pressure recording, and assistance required from NBU. NBU will be responsible for installing and removing the pressure recorders on the designated fire hydrants. The Professional shall collect pressure data for up to three (3) two-week periods to capture the system behavior during three (3) different water demand conditions.
- 2.3. <u>Update Hydraulic Model of Water Distribution System</u>: The Professional shall update NBU's existing water model using as-built drawings of recently completed projects and updated Geographic Information System ("GIS") data provided by NBU. The updated model will consist of all water lines and facilities in GIS.
- 2.4. <u>Allocate Water Demands</u>: The Professional shall coordinate with NBU staff to obtain the existing water meter shapefiles and customer billing data corresponding to each of the three calibration periods to locate and distribute water system demands for each calibration.
- 2.5. <u>Develop Diurnal Demand Curves for Each Pressure Zone</u>: The Professional shall utilize NBU's SCADA records and meter data to develop diurnal demand curves representing the existing usage patterns within each pressure zone for each of the three (3) periods from the pressure recording.

- 2.6. Conduct Extended Period Simulation ("EPS") Model Calibrations: The Professional shall utilize the updated hydraulic model to conduct three separate EPS model calibrations representing a variation in water demand conditions and water system operational schemes. The calibrations shall consist of adjusting c-factors, diurnal curves, demand distribution, and/or pump characteristics until modeling results match the field pressure measurements and pump/tank operation.
- 2.7. <u>Meeting with NBU to Review Model Calibration Results</u>: The Professional shall prepare graphics showing comparison of water pressure testing results and SCADA data versus model results from the water model calibrations and meet with NBU to review results.

3. Task 3: Wastewater Hydraulic Model Update and Calibration

- 3.1. <u>Flow Meter Preparatory Work</u>: The Professional shall collect and review existing NBU information to identify temporary wastewater flow metering sites. The Professional shall perform reconnaissance of the metering sites with NBU personnel to determine the suitability for metering based on hydraulics and accessibility during rainfall periods.
- 3.2. Temporary Flow Meter Installation and Data Collection: The Professional shall install, maintain, and remove eight (8) temporary velocity/depth recorders to monitor the wastewater flow. The Professional shall install the flow meters at the locations selected by the Professional after initial investigation for the site's suitability for flow metering. If a site is unsuitable for flow metering, the Professional shall recommend an alternate site to NBU. The Professional shall obtain velocity and depth readings at 15-minute intervals to allow flow analysis at each location. The Professional shall maintain flow metering equipment and collect data for sixty (60) days to cover representative dry weather flows and any rainfall events that may occur. The Professional shall install two (2) rainfall gauges within the existing NBU wastewater service area to obtain localized rainfall data.
- 3.3. Flow Data Analysis and Infiltration/Inflow Evaluation: The Professional shall analyze raw flow monitoring data and tabulate 15-minute flow data for the entire flow monitoring period. The Professional shall prepare flow hydrographs and scattergraphs for the flow monitoring period. The Professional shall analyze flow data for average dry weather flow, peak dry weather flow, and wet weather peak flow rates. The Professional shall compare flow data with rainfall data to determine the amount of inflow/infiltration experienced during storm events.
- 3.4. <u>Wastewater Model Update</u>: The Professional shall utilize NBU's GIS data and the existing InfoWorks Integrated Catchment Modeling ("ICM") model to create an updated model of the wastewater collection system. The Professional shall utilize pipe invert elevations from GIS or as-built information. If invert elevation is unavailable, the Professional shall use inference tools within InfoWorks ICM to estimate the elevation.

- 3.5. <u>Develop Diurnal Flow Patterns for Importation to Model</u>: The Professional shall utilize the temporary flow monitoring data from Task 3.2 and data developed as part of the previous Master Plan to develop diurnal flow patterns for each meter basin for dry and wet weather conditions. The Professional shall import diurnal patterns to the InfoWorks ICM model developed in Task 3.4.
- 3.6. <u>Analyze SCADA Data</u>: The Professional shall coordinate with NBU staff to obtain SCADA records related to the wastewater collection system. The Professional shall utilize data for updating information such as pump on/off levels at lift stations, pump run times, and wastewater treatment plant influent flows.
- 3.7. <u>Subcatchment Generation</u>: The Professional shall create sewer subcatchments to delineate areas in which flows enter the wastewater system. The Professional shall utilize subcatchments in the InfoWorks ICM model to allocate wastewater flows and contributing area to each manhole.
- 3.8. <u>Dry Weather Calibration</u>: The Professional shall update the dry weather calibration for basins that were monitored in Task 3.2 for the selected dry weather flow event by adjusting antecedent conditions, per capita flows, diurnal curves, and dry weather infiltration. The Professional shall adjust lift station parameters based on the system response observed during the calibration event using SCADA records and flow meter responses. The Professional shall prepare charts at selected calibration points showing metered versus modeled dry weather flows to document the model calibration results.
- 3.9. Wet Weather Calibration: The Professional shall update the wet weather calibration for a storm event captured during the temporary flow monitoring in Task 3.2. The Professional shall adjust model parameters, such as lift station operations, inflow and infiltration volume, timing of flow response, and runoff area, to match observed flow, velocity, and depth. The Professional shall prepare charts at selected calibration points showing metered vs. modeled wet weather flows to document the model calibration results.
- 3.10. <u>Meet with NBU to Review Wastewater Model Calibration Results:</u> The Professional shall prepare material and attend a meeting with NBU on a date reasonably specified by NBU to discuss the wastewater model development and calibration results.

4. Task 4: Water and Wastewater Projections

- 4.1. <u>Coordination Meetings</u>: The Professional shall attend, facilitate, and prepare meeting materials for the following meetings related to the water and wastewater projections:
 - 4.1.1. one (1) virtual meeting with City of New Braunfels planning staff;
 - 4.1.2. one (1) virtual meeting with NBU's water resources consultant;

- 4.1.3. one (1) virtual meeting with NBU data analytics staff to discuss current NBU population growth projections;
- 4.1.4. one (1) in-person meeting with NBU staff to discuss future service area boundaries; and
- 4.1.5. one (1) in-person meeting with NBU staff to discuss projected water and wastewater connections.
- 4.2. <u>Develop Land Use Assumptions</u>: The Professional shall utilize available data on impending developments, existing vacant lots, and future land use to develop projected connections for the planning years 2026, 2031, 2036, 2051, and buildout. The Professional shall convert residential and non-residential growth into equivalent single-family connections by Census Block Group. The Professional shall use connections as defined by Texas Administrative Code ("TAC") §290.38(18) as population units for this study.
- 4.3. <u>Develop Water Demand and Wastewater Flow Projections</u>: The Professional shall obtain and evaluate historical water usage and wastewater flow data to develop trends and calculate peaking factors. The Professional shall use this data in conjunction with the projected connections developed in Task 4.2 to project water demand and wastewater flows. The Professional shall develop water demand and wastewater flow projections for the planning years 2026, 2031, 2036, 2051, and buildout by Census Block Group.

5. Task 5: Hydraulic Analyses and System Evaluation

- 5.1. <u>Water Supply Integration Alternatives Meeting</u>: The Professional shall conduct a meeting with NBU staff and NBU's water resources planning consultant to discuss and document current and future water supply alternatives. The Professional shall further evaluate up to four alternatives developed during the workshop.
- 5.2. Evaluate Water Supply Integration Alternatives: The Professional shall evaluate the four alternatives developed during the meeting described in Task 5.1. The Professional shall evaluate the alternatives based on factors such as cost, ease of operations, redundancy, and/or schedule. The Professional shall recommend a water supply integration strategy to inform the development of the water distribution system improvements.
- 5.3. Evaluate Water System Capacity Requirements: The Professional shall evaluate existing and future pumping, storage, and production capacity based on Texas Commission on Environmental Quality minimum requirements and level of service criteria to be developed by the Professional through coordination with NBU. The Professional shall identify existing system deficiencies and future improvements for each water system component.

- 5.4. Evaluate Wastewater System Capacity Requirements: The Professional shall evaluate existing and future lift station and treatment capacity based on level of service criteria. The Professional shall identify existing system deficiencies and future improvements for each wastewater system component.
- 5.5. <u>Design Storm Evaluation</u>: The Professional shall develop a design storm to be used for wastewater system evaluation. The Professional shall base the design storm on the National Oceanic and Atmospheric Administration Atlas 14 data for Texas.
- 5.6. <u>Review NBU Design Criteria</u>: The Professional shall review NBU's current design criteria related to connections, water demands, and wastewater flows. The Professional shall document any differences between the design criteria and the recommended master planning criteria.
- 5.7. Prepare Water and Wastewater Models for Analysis: The Professional shall allocate existing and future demands and flows in the hydraulic models. The Professional shall set up and validate model scenarios and networks. The Professional shall develop additional model parameters as necessary to conduct modeling identified in Tasks 5.7 and 5.8.
- 5.8. <u>Identify Water System Improvements</u>: The Professional shall utilize the water model to develop and analyze alternatives to determine sizing of water system transmission mains, elevated and ground storage, and pumping facilities needed to serve 25-year demands throughout each pressure zone. The Professional shall develop interim model runs for the planning years 2026, 2031, and 2036 to determine phasing of water system improvements. The Professional shall include production, conveyance, storage, and pumping needs in the system improvements. The Professional will not develop model runs or system improvements for buildout but will evaluate pumping and storage needs at buildout to inform sizing of 2051 system improvements.
- 5.9. <u>Identify Wastewater System Improvements</u>: The Professional shall utilize the wastewater model to develop and analyze alternatives to determine sizing of wastewater system conveyance, storage, and lift station facilities needed to serve 25-year flows throughout each basin. The Professional shall develop interim model runs for the planning years 2026, 2031, and 2036 to determine phasing of wastewater system improvements. System improvements will include treatment, conveyance, and pumping needs. FNI will not develop model runs or system improvements for buildout but will evaluate lift station and treatment capacity needs at buildout to inform sizing of 2051 system improvements.
- 5.10. Coordination Meetings: The Professional shall attend, facilitate, and prepare meeting

materials for the following meetings related to the hydraulic analysis and system evaluation:

- 5.10.1. meeting with NBU staff to discuss draft wastewater system improvements, one (1) meeting;
- 5.10.2. meeting with NBU staff to discuss draft water system improvements, one (1) meeting; and
- 5.10.3. meeting with NBU staff to discuss phased improvements, one (1) meeting.

6. Task 6: Capital Improvements Plan, Report, and Board Presentation

- 6.1. <u>Develop Water and Wastewater Capital Improvements Plan (CIP)</u>: The Professional shall develop prioritization and costs for proposed projects through the 25-year planning period. The Professional shall conduct a more detailed investigation of the projects recommended within the 5-year CIP to better define the components of proposed improvements. The Professional shall develop high-level planning stage cost estimates for projects beyond five (5) years. The Professional shall produce large-scale citywide maps showing proposed projects, costs, and phasing.
- 6.2. <u>Prepare CIP Budget Information</u>: The Professional shall prepare information for the Authorization for Expenditure ("AFE") forms needed for NBU's budgeting process. The Professional shall develop unique project identifiers to aid in tracking new projects year-to-year. For each project in the 5-year CIP, the Professional shall determine a budget for design and construction by fiscal year.
- 6.3. <u>Prepare Draft Water and Wastewater Master Plan Report:</u> The Professional shall prepare a draft Water and Wastewater Master Plan Report documenting the assumptions, methodologies, findings, and recommendations of the Project. The Professional shall submit an electronic PDF copy of the draft Water and Wastewater Master Plan Report for NBU staff review during the timeframe listed in Table 1 for Task 6.
- 6.4. Revise and Finalize Report: NBU shall provide written comments on the draft Water and Wastewater Master Plan Report. Within thirty (30) days after the Professional receives NBU's written comments to the draft Water and Wastewater Master Plan Report, the Professional shall revise the draft Water and Wastewater Master Plan Report based on NBU comments and submit five (5) final hard copies and one (1) electronic copy in PDF format of the final Water and Wastewater Master Plan Report to NBU.
- 6.5. <u>Project Presentations:</u> The Professional shall attend up to three (3) meetings to discuss and/or present the Water and Wastewater Master Plan report. The Professional shall be available to answer questions and discuss content on all aspects of the Project. Meetings could include the Board of Trustees, the Chief Operations Officer, the Chief Executive Officer, and/or others.

- 6.6. Prepare Summary Interactive Deliverable: The Professional shall meet with NBU staff to solicit input on the content of an interactive deliverable for internal or external use. The interactive deliverable may include dynamic mapping showing CIP projects, cost information, hydraulic information, and/or phasing. The Professional shall prepare the interactive deliverable using the Environmental Systems Research Institutes, Inc. ArcGIS Online platform, Microsoft Power BI, or other platform agreed upon during development.
- 6.7. <u>Deliver Model Files:</u> The Professional shall deliver the necessary electronic files for the deliverable described in Task 6.6 via a file transfer protocol ("FTP") link for the water and wastewater models to the NBU Project Manager within thirty (30) days of delivering the final Water and Wastewater Master Plan Report.

TIME OF COMPLETION

The Professional is authorized to commence work on the services upon execution of this Agreement and agrees to complete these services in accordance with the schedule below.

Table 1

Project Milestones	Start Date	End Date
Task 1: Project Management and Data Collection	01/06/25	07/31/26
Task 2: Water Hydraulic Model Update and Calibration	01/15/25	10/31/25
Task 3: Wastewater Hydraulic Model Update and Calibration	03/01/25	08/31/25
Task 4: Water and Wastewater Projections	06/01/25	10/15/25
Task 5: Hydraulic Analyses and System Evaluation	10/01/25	02/28/26
Task 6: Capital Improvements Plan, Report, and Board Presentation	02/01/26	07/31/26

Exhibit B

Compensation

NBU agrees to pay the Professional for the Services during the term of this Agreement in an amount not to exceed \$598,758 as further described in the table below and made a part of this Agreement.

Task	Cost
Task 1: Project Management and Data Collection	\$26,561
Task 2: Water Hydraulic Model Update and Calibration	\$80,001
Task 3: Wastewater Hydraulic Model Update and Calibration	\$145,026
Task 4: Water and Wastewater Projections	\$54,134
Task 5: Hydraulic Analyses and System Evaluation	\$132,568
Task 6: Capital Improvements Plan, Report, and Board Presentation	\$160,468
Total	\$598,758