

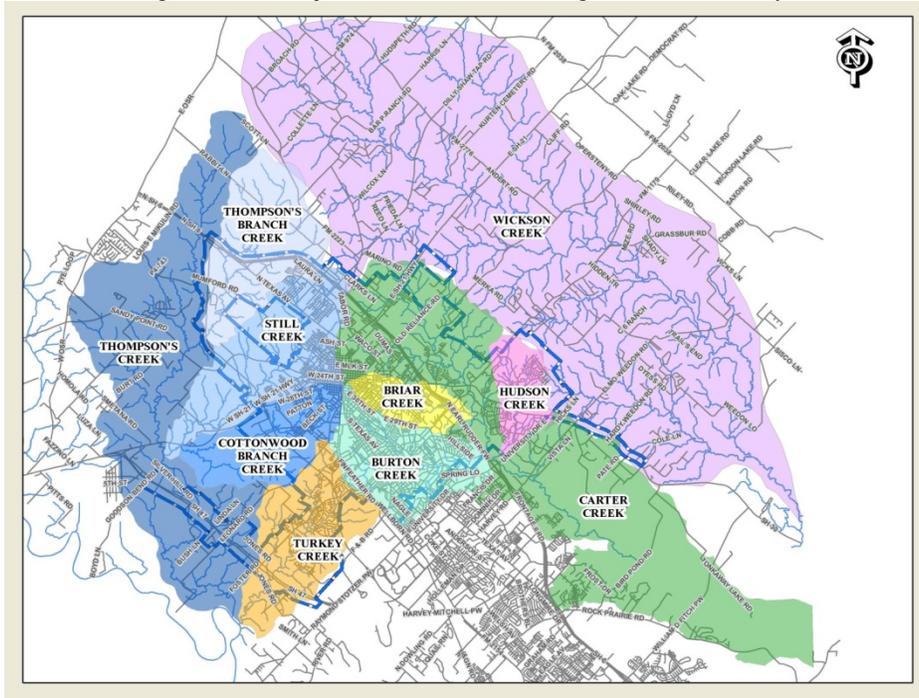
ACTION FORM BRYAN CITY COUNCIL

DATE OF COUNCIL MEETING: September 10, 2013	DATE SUBMITTED: August 27, 2013
DEPARTMENT OF ORIGIN: PW – Engineering	SUBMITTED BY: Paul Kaspar

MEETING TYPE:	CLASSIFICATION:	ORDINANCE:	STRATEGIC INITIATIVE:
<input type="checkbox"/> BCD	<input type="checkbox"/> PUBLIC HEARING	<input type="checkbox"/> 1ST READING	<input checked="" type="checkbox"/> PUBLIC SAFETY
<input type="checkbox"/> SPECIAL	<input type="checkbox"/> CONSENT	<input type="checkbox"/> 2ND READING	<input checked="" type="checkbox"/> SERVICE
<input checked="" type="checkbox"/> REGULAR	<input checked="" type="checkbox"/> STATUTORY		<input type="checkbox"/> ECONOMIC DEVELOP.
<input type="checkbox"/> WORKSHOP	<input type="checkbox"/> REGULAR		<input checked="" type="checkbox"/> INFRASTRUCTURE
			<input checked="" type="checkbox"/> QUALITY OF LIFE

AGENDA ITEM DESCRIPTION: Consideration for future execution of an Engineering Contract in the amount of \$488,981 with Freese and Nichols to design drainage improvements in the Still Creek Watershed only if the upcoming grant application to the Texas Water Development Board is approved.

SUMMARY STATEMENT: Over the last several years, the City has performed watershed studies to more accurately depict 100 year floodplain boundaries thereby helping protect citizens and development from encroaching into flood prone areas, and to generate models to assist in alleviating existing flood problems within the City. Currently, the City has completed the studies of Carter, Briar, Burton, Hudson, Turkey, Thompson’s Branch and is about to complete Still and Cottonwood Branch Creeks. The Still Creek Basin was developed prior to FEMA 100 year floodplain delineation; therefore a significant number of structures are located within the 100 year floodplain and have experienced flooding, with two major flood events occurring within the last 6 years.



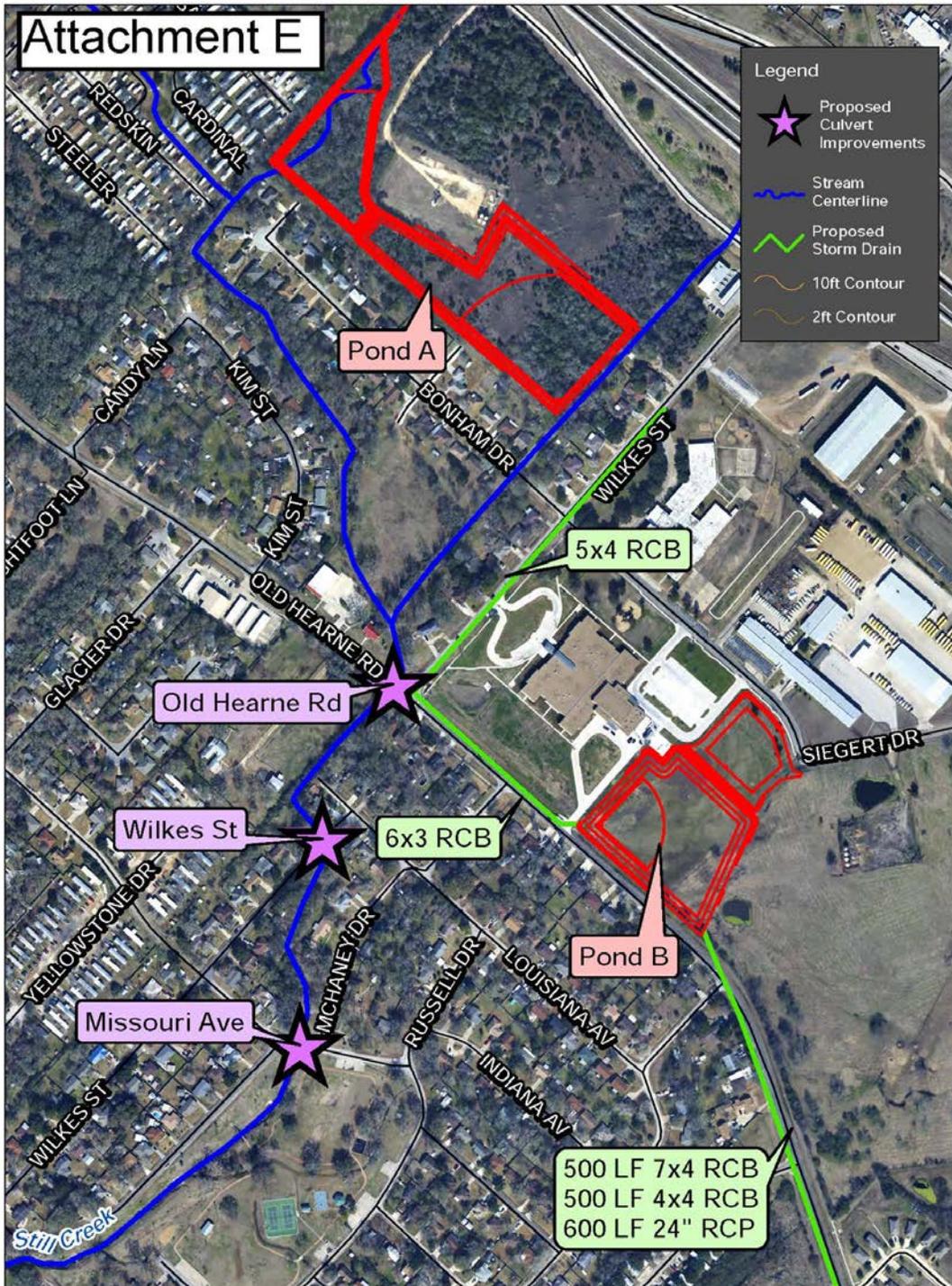
In late 2009, City staff visited with the Texas Water Development Board (TWDB) about possible grant opportunities, which resulted in an application for a Flood Protection Planning Grant. City Council passed a resolution in support of this application in February 2010 and later that year the City was awarded grant funding for the Flood Protection Study for the Still Creek Basin. The grant application was prepared primarily by Freese and

Nichols consulting engineers with the assistance of City staff and in August of 2010 the City Council approved a contract with Freese and Nichols to perform the engineering study with TWDB funding approximately one-half (½) the cost through reimbursement.

The Still Creek Basin study involved multiple public meetings with the neighborhood and several scenarios were analyzed evaluating their benefits, costs and negatives. The final recommendations included increased sized of storm sewers, culvert replacements and regional stormwater detention. In 2011 the City of Bryan applied for federal grant funding through the Severe Repetitive Loss (SRL) and Flood Mitigation Assistance (FMA) programs to fund the construction of the improvements recommended from the Flood Protection Study. The grant application was ranked high and recommended to FEMA for funding by the Texas Water Development Board; however, due to the Brazos County Hazard Mitigation Plan being out of date and not updated yet by the Brazos Valley Council of Governments, TWDB was not able to secure the federal funding for the project due to that technicality.

Since that time, the Brazos County Hazard Mitigation Plan has been updated and is current but the opportunity to apply for the construction grant funding has not been available since the program was not funded in 2012. City staff received notice in July 2013 that construction dollars would be available through a revised Flood Mitigation Assistance (FMA) grant program with the expected cost share to be worst case 75% Federal, 25% City. The cost share to the City would be approximately \$1,900,000. It is anticipated that the current funds already allocated for Old Hearne Wilkes Project in FY14 would qualify as the matching amount. While the cost share information on the grant is not clear and could reach as high as 100% federal share, staff is preparing for worse case. The federal deadline for applications is October 18, 2013, which means the application deadline to the Texas Water Development Board is September 18, 2013.

The proposed construction grant scope includes construction funding for two regional stormwater detention ponds, storm sewer improvements along Wilkes and Old Hearne Road and culvert improvements at Old Hearne, Wilkes and Missouri Avenue. The grant application also includes reimbursement of the design funding for the detention Pond A and additional design costs for expanding detention Pond B and design costs for culvert improvements at Wilkes and Missouri. Design for a portion of Detention Pond B, storm sewer improvements and culvert at Old Hearne Road has already been authorized and is not eligible for reimbursement. The total cost included in the grant application is approximately \$7,650,000 with the exact federal share to be determined. It is expected that the federal share will be between 75% and 100%.



Staff is bringing this contract to City Council for consideration at this time to be transparent about the grant application process. Freese and Nichols is again helping to prepare the grant application, however the majority of the hard work was done with the previous grant submittal in 2011. The grant needs to be reformatted to match the current grant application and some additional information provided. The intent of this Council action item is to acknowledge that in exchange for Freese and Nichols assisting in the submittal of the grant application at this time, if the City of Bryan were successful in receiving a construction grant, the City would enter into a design contract with Freese and Nichols. The scope of that design contract, based on the grant application submitted, is included in the attached draft engineering contract.

It should be noted that in addition to Freese and Nichols having a substantial amount of knowledge and background in this specific project and grant application process, this firm was also the highest ranked of private consultants who submitted qualifications packages for drainage projects in 2012. The contract presented also is consistent with the City Engineering Professional Services Fee Negotiation Guidelines.

If the grant application were to be only partially funded or the scope of the construction grant modified upon award, the proposed engineering contract would have to be renegotiated with Freese and Nichols and brought back to City Council for consideration. If the full grant were to be awarded, this contract could be executed by the Mayor at that time.

Staff believes bringing this item to the City Council for consideration at this time is the best way to keep everyone informed of the process and future intent.

STAFF ANALYSIS AND RECOMMENDATION: Staff recommends that the Council consider authorizing the Mayor to execute this engineering design contract at a future date only if the proposed grant application is fully funded. If the scope of the grant application changes during award from the TWDB, staff would bring back a renegotiated contract with Freese and Nichols matching the proposed change in grant scope if the City decided to move forward.

OPTIONS (In Suggested Order of Staff Preference):

1. Authorize the execution of this contract at a future date only if full grant funding is secured.
2. Do not authorize execution of this contract at a future date and provide direction to staff.

ATTACHMENTS:

1. Proposed Engineering Contract with Freese & Nichols including detailed scope of work.

FUNDING SOURCE: FY 14 Bond Issuance / Drainage Utility Fee – both reimbursed by Grant Funds if secured

APPROVALS: Jayson E. Barfknecht 08/19/13; Hugh R. Walker, 08/23/2013

APPROVED FOR SUBMITTAL: CITY MANAGER Kean Register. 09-03-2013

APPROVED FOR SUBMITTAL: CITY ATTORNEY Janis K. Hampton, 09-03-2013

**CONTRACT FOR ENGINEERING SERVICES
FREESE AND NICHOLS, INC.**

This Contract, dated _____, 2013, is between the **City of Bryan**, a Texas home-rule municipal corporation, (the City) and **Freese and Nichols, Inc.**, a corporation (the Engineer), whereby the Engineer agrees to provide the City with certain professional services as described herein and the City agrees to pay the Engineer for those services.

1. Scope of Services

In consideration of the compensation stated in paragraph 2, the Engineer agrees to provide the City with the professional services as described in Attachment A, the Scope of Services, which is incorporated herein by reference for all purposes, and which services may be more generally described as follows:

Still Creek FEMA Grant Application and Flood Protection Project.

2. Payment

In consideration of the Engineer's provision of the professional services in compliance with all terms and conditions of this Contract, the City shall pay the Engineer according to the terms set forth in Attachment B. Except in the event of a duly authorized change order, approved by the City in writing, the total cost of all professional services provided under this Contract shall be a not to exceed fee of Four Hundred Eighty Eight Thousand Nine Hundred Eighty One Dollars (\$488,981).

3. Time of Performance

- A. All design work and other professional services provided under this Contract must be completed by the following date: June 1, 2016. The City Engineer may agree to an extension of the time for completion. Any extension of the time for completion approved by the City Engineer, however, shall only be effective upon the execution of an instrument in writing stating the terms of the extension and signed by both the City Engineer and the Engineer. The Schedule is more fully defined in Attachment C.
- B. **Time is of the essence of this Contract.** The Engineer shall be prepared to provide the professional services in the most expedient and efficient manner possible in order to complete the work by the times specified.

4. Standard of Care, Indemnification, & Release

- A. As an experienced and qualified design professional, the Engineer will provide services consistent with industry standards, procedures, and performances. The Engineer agrees that the design preparation of drawings, the designation or selection of materials and equipment, the selection and supervision of personnel, and the performance of other services under this Contract, is pursuant to the industry standard of care for performance in the profession. The Engineer agrees that the Engineer will exercise diligence and due care and perform in a good and workmanlike manner all of the services pursuant to this Contract. Approval of the City shall not constitute, or be deemed, a release of the responsibility and liability of the Engineer, its employees, agents, or associates for the exercise of skill and diligence to promote the accuracy and competency of their designs, information, plans, specifications or any other document, nor shall the City's approval be deemed to be the assumption of responsibility by the City for any

defect or error in the aforesaid documents prepared by the Engineer, its employees, associates, agents, or subcontractors.

- B. The Engineer shall promptly correct any defective designs or specifications furnished by the Engineer at no cost to the City. The City's approval, acceptance, use of, or payment for, all or any part of the Engineer's services hereunder or of the Project itself shall in no way alter the Engineer's obligations or the City's rights hereunder.
- C. In all activities or services performed hereunder, the Engineer is an independent contractor and not an agent or employee of the City. The Engineer and its employees are not the agents, servants, or employees of the City. As an independent contractor, the Engineer shall be responsible for the professional services and the final work product contemplated under this Contract. Except for materials furnished by the City, the Engineer shall supply all materials, equipment, and labor required for the professional services to be provided under this Contract. The Engineer shall have ultimate control over the execution of the professional services. The Engineer shall have the sole obligation to employ, direct, control, supervise, manage, discharge, and compensate all of its employees or subcontractors, and the City shall have no control of or supervision over the employees of the Engineer or any of the Engineer's subcontractors.
- D. The Engineer must at all times exercise reasonable precautions on behalf of, and be solely responsible for, the safety of its officers, employees, agents, subcontractors, licensees, and other persons, as well as their personal property, while in the vicinity of the Project or any of the work being done on or for the Project. It is expressly understood and agreed that the City shall not be liable or responsible for the negligence of the Engineer, its officers, employees, agents, subcontractors, invitees, licensees, and other persons.
- E. **Responsibility for damage claims (indemnification): Engineer shall defend, indemnify and save harmless the City and all its officers, agents, and employees from all suits, actions, or claims of any character, name and description brought for or on account of any injuries or damages received or sustained by any person or persons or property resulting from the Engineer's negligent performance of the work, or by or on account of any claims or amounts recovered under the Workmen's Compensation Law or any other law, ordinance, order or decree, and his sureties, as defined in Item 5 "Engineer's Insurance", shall be held until such suit or suits, action or actions, claim or claims for injury or damages as aforesaid shall have been settled and satisfactory evidence to the effect furnished the City. Engineer shall defend, indemnify and save harmless the City, its officers, agents and employees in accordance with this indemnification clause only for that portion of the damage caused by Engineer's negligence.**
- F. Release. The Engineer releases, relinquishes, and discharges the City, its officers, agents, and employees from all claims, demands, and causes of action of every kind and character, including the cost of defense thereof, for any injury to, sickness or death of the Engineer or its employees and any loss of or damage to any property of the Engineer or its employees that is caused by or alleged to be caused by, arises out of, or is in connection with the Engineer's negligent performance of the work. Both the City and the Engineer expressly intend that this release shall apply regardless of whether said claims, demands, and causes of action are covered, in whole or in part, by insurance.

5. **Engineer's Insurance**

The Engineer agrees to maintain, on a primary basis, for the duration of this contract the insurance coverages and limits as described below. See Attachment D for insurance example. The Engineer must deliver to the City a certificate(s) of insurance evidencing that such policies are in full force and effect within 5 business days of notification of the City's intent to award a contract. Failure to meet the insurance requirements and provide the required certificate(s) and any necessary endorsements within five business days **may cause the contract to be rejected.** The City reserves the right to obtain complete, certified copies of all required insurance policies at any time.

The requirements as to types and limits, as well as the City's review or acceptance of insurance coverage to be maintained by Engineer, is not intended to nor shall in any manner limit or qualify the liabilities and obligations assumed by the Engineer under the Agreement.

- A. **Commercial General Liability Insurance** – Limit of liability not less than \$1,000,000 per occurrence Engineer agrees to maintain a standard ISO version Commercial General Liability occurrence form, or its equivalent providing coverage for, but not limited to, Bodily Injury and Property Damage, Premises/Operations, Products/Completed Operations, Independent Engineers.
- B. **Professional Liability Insurance** – Limit of liability not less than \$1,000,000 per occurrence Engineer agrees to maintain Professional (Errors & Omissions) Liability to pay on behalf of the insured all sums which the insured shall become legally obligated to pay as damages by reason of any act, malpractice, error or omission of the Engineer or any person employed or acting on the Engineer's behalf (including but not limited to sub-contractors). For policies written on a "claims-made" basis, Engineer agrees to maintain a retroactive date prior to or equal to the effective date of this contract and that continuous coverage will be maintained or a supplemental extended reporting period will be purchased with a minimum reporting period not less than two years after the completion of this contract. The Engineer is solely responsible for any additional premium for the supplemental extended reporting period.

No "claims made" policies are acceptable without prior approval by the City Attorney. If approved, coverage must be maintained for two years after the completion of this contract.
- C. **Business Automobile Liability Insurance** – Limit of liability not less than \$1,000,000 per occurrence Engineer agrees to maintain a standard ISO version Business Automobile Liability, or its equivalent, providing coverage for all owned, non-owned and hired automobiles. Should the Engineer not own any automobiles, the business auto liability requirement shall be amended to allow the Engineer to agree to maintain only Hired & Non-Owned Auto Liability. This amended coverage requirement may be satisfied by way of endorsement to the Commercial General Liability, or separate Business Auto policy.
- D. **Workers' Compensation Insurance & Employers' Liability Insurance** – Statutory & \$500,000/\$500,000/\$500,000. The Engineer agrees to maintain Worker's Compensation Insurance & Employers Liability. In the event any work is sublet, the Engineer shall require the subcontractor similarly to provide the same coverage and shall himself acquire evidence of such coverage on behalf of the subcontractor.
- E. **Additional Insured Endorsements** The Engineer agrees to endorse the City as an Additional Insured on each insurance policy required to be maintained, with the exception of the worker's compensation, employer's liability and professional liability policy.

- F. **Waiver Of Subrogation** Waiver of subrogation in favor of the City of Bryan for each required policy. When required by the insurer or should a policy condition not permit Engineer to enter into a pre-loss agreement to waive subrogation without an endorsement, then Engineer agrees to notify the insurer and request the policy be endorsed with a Waiver of Transfer of rights of Recovery Against Others, or its equivalent. This Waiver of Subrogation requirement shall not apply to any policy, which includes a condition specifically prohibiting such an endorsement, or voids coverage should Engineer enter into such an agreement on a pre-loss basis.
- G. **Deductibles, Coinsurance Penalties, & Self-Insured Retention** Engineer shall agree to be fully and solely responsible for any costs or expenses as a result of a coverage deductible, coinsurance penalty, or self-insured retention; including any loss not covered because of the operation of such deductible, coinsurance penalty, or self-insured retention.
- H. **Subcontractor's Insurance** The Engineer shall agree to cause each subcontractor employed by Engineer to purchase and maintain insurance of the type specified, provided the Engineer's insurance does not afford coverage on behalf of the subcontractor.
- I. **Certificate Of Insurance** Engineer shall furnish the City with a certificate(s) of insurance, executed by a duly authorized representative of each insurer, showing compliance with the insurance requirements. The certificate must be from a company with an A.M. Best rating of "A-VI" or better and/or otherwise acceptable to the City. Certificates must be submitted using the ACORD form and all endorsements must be included with the submittal. Contractor must provide minimum 30 days prior written notice to the City of Bryan of policy cancellation, material change, exhaustion of aggregate limits, or intent not to renew insurance coverage. If City is notified a required insurance coverage will cancel or non-renew during the contract period, the Contractor shall agree to furnish prior to the expiration of insurance, a new or revised certificate(s) as proof that equal and like coverage is in effect. The City reserves the right to withhold payment to Contractor until coverage is reinstated. If the Contractor fails to maintain the required insurance, the City shall have the right, but not the obligation, to purchase the required insurance at Contractor's expense.

Failure of the City to demand such certificate(s) or other evidence of full compliance with these insurance requirements or failure of the City to identify a deficiency from evidence that is provided shall not be construed as a waiver of Contractor's obligation to maintain such insurance.

Certificates and notices should be given to the City at the following address:

City of Bryan
Attn: Risk Management Department
300 S. Texas Ave.
Bryan, TX 77803

RIGHT TO REVIEW AND ADJUST The City reserves the right to review these requirements and to modify insurance coverage and their limits when deemed necessary and prudent. Furthermore, the City reserves the right, but not the obligation, to review and reject any insurer providing coverage because of poor financial condition.

6. Termination

- A. The City may terminate this Contract at any time upon **thirty (30)** calendar days written notice. Upon the Engineer's receipt of such notice, the Engineer shall cease work immediately. The

Engineer shall be compensated for the services satisfactorily performed prior to the termination date.

- B. If, through any cause, the Engineer fails to fulfill its obligations under this Contract, or if the Engineer violates any of the agreements of this Contract, the City has the right to terminate this Contract by giving the Engineer **five (5)** calendar days written notice to the Engineer. The Engineer will be compensated for the services satisfactorily performed before the termination date.
- C. No term or provision of this Contract shall be construed to relieve the Engineer of liability to the City for damages sustained by the City because of any breach of contract by the Engineer. The City may withhold payments to the Engineer for the purpose of setoff until the exact amount of damages due the City from the Engineer is determined and paid.

7. Miscellaneous Terms

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

The City of Bryan
Attn: W. Paul Kaspar, P.E.
P.O. Box 1000
Bryan, Texas 77805

Freese and Nichols, Inc.
Attn: Scott Hubley, P.E.
4055 International Plaza, Ste. 200
Fort Worth, Texas 76109

- C. No waiver by either party hereto of any term or condition of this Contract shall be deemed or construed to be a waiver of any other term or condition or subsequent waiver of the same term or condition.
- D. This Contract represents the entire and integrated agreement between the City and the Engineer and supersedes all prior negotiations, representations, or agreements, either written or oral. This Contract may only be amended by written instrument approved and executed by the parties.
- E. This Contract and all rights and obligations contained herein may not be assigned by the Engineer without the prior written approval of the City.
- F. The Engineer, its agents, employees, and subcontractors must comply with all applicable federal and state laws, the charter and ordinances of the City of Bryan, and with all applicable rules and regulations promulgated by local, state, and national boards, bureaus, and agencies. The Engineer must obtain all necessary permits and licenses required in completing the work and providing the services required by this Contract.
- G. The parties acknowledge that they have read, understood, and intend to be bound by the terms and conditions of this Contract.

Party of the First Part
CITY OF BRYAN, TEXAS

Approved as to Form:

Janis Hampton, City Attorney

Prepared and Recommended:

W. Paul Kaspar, P.E., City Engineer

Approved for Processing:

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

Kean Register, City Manager

Approved:

By: _____
Jason P. Bienski, Mayor

Attest:

By: _____
Mary Lynne Stratta, City Secretary

Date: _____

Party of the Second Part
FREESE AND NICHOLS, INC.:

By: _____
Printed Name: _____
Title: Principal
Date _____
Firm's License No. F-2144

Witness

ATTACHMENT "A" **SCOPE OF SERVICES**

The scope set forth herein defines the work to be performed by the ENGINEER in completing the project. Both the CITY and ENGINEER have attempted to clearly define the work to be performed and address the needs of the Project. Under this scope, "ENGINEER" is expanded to include any sub-consultant, including surveyor, employed or contracted by the ENGINEER.

PROJECT UNDERSTANDING

The project is defined as Still Creek Flood Protection Project and includes a grant application and design services for surface detention ponds and roadway culverts recommended during the Still Creek Watershed Study, completed by Freese and Nichols, Inc. (FNI) for the City of Bryan in February 2012. FNI is providing in-kind services to complete a FEMA Flood Mitigation Assistance grant application for approximately \$7,650,000 on behalf of the City of Bryan. The remaining items in the scope of services are contingent upon the award of said grant. It is mutually understood that adjustment of the scope of services and/or compensation may be required pending the award of the grant as the actual award amount may change.

One surface detention pond is to be located on the Bonham Elementary School property and will outfall into a proposed storm drain system beneath Old Hearne Road. A portion of this pond is under design as part of the Old Hearne Road widening project. This contract includes the expansion of that pond to the full extents identified in the Study. A second pond is to be located in an undeveloped tract of land between SH 6 and Bonham Drive. Finally, culvert replacements at Wilkes Street and Missouri Avenue are included in the scope.

WORK TO BE PERFORMED

IN-KIND SERVICES

Task 1. Grant Application

BASIC SERVICES

Task 2. Design Management

Task 3. Field Survey and SUE

Task 4. Preliminary (50%) Design

Task 5. Final (95% and 100%) Design

Task 6. Bid Phase Services

Task 7. Construction Phase Services

SPECIAL SERVICES

Task 8. Grant Administration

Task 9. Geotechnical Investigations

Task 10. Public Meeting

Task 11. Easement Coordination

Task 12. Environmental Permitting

IN KIND SERVICES

TASK 1. GRANT APPLICATION

- FNI will prepare an application for the FEMA Flood Mitigation Assistance grant program and coordinate with TWDB and/or FEMA as necessary to promote the successful award of the grant.
- The grant application includes construction funding for the improvements shown in Attachment E including Detention Pond A, Detention Pond B, storm drain improvements along Wilkes Street and Old Hearne Road, and culvert improvements at Old Hearne Road, Wilkes Street, and Missouri Avenue.
- The grant application also includes reimbursement of design funding for Detention Pond A, expansion of Detention Pond B, and culvert improvements at Wilkes Street and Missouri Avenue. Design for a portion of Detention Pond B, the storm drain improvements, and the culvert at Old Hearne Road has already been authorized and will not be included in the grant application.
- The total grant application is a request of approximately \$7,650,000 with the federal share to be determined. It is expected that the federal share will be between 75% and 100%.

BASIC SCOPE OF SERVICES

The basic scope of services proposed for this project is contingent upon the award of the grant and includes the following:

TASK 2. DESIGN MANAGEMENT.

ENGINEER will manage the work outlined in this scope to ensure efficient and effective use of ENGINEER's and CITY's time and resources. ENGINEER will manage change, communicate effectively, coordinate internally and externally as needed, and proactively address issues with the CITY's Project Manager and others as necessary to make progress on the work.

2.1 Managing the Team

- Lead, manage and direct design team activities
- Ensure quality control is practiced in performance of the work
- Communicate internally among team members
- Task and allocate team resources

2.2 Communications and Reporting

- Attend a pre-design project kickoff/chartering meeting with CITY staff to confirm and clarify scope, understand CITY objectives, and ensure economical and functional designs that meet CITY requirements.
- Conduct and document project update meetings with CITY Project Manager.
- Conduct review meetings with the CITY at the end of each design phase.
- Conduct and document internal design team meetings.
- Prepare and submit monthly progress reports.

- Prepare and submit baseline Project Schedule initially, and Project Schedule updates as necessary.
- Coordinate with other agencies and entities such as the TWDB/FEMA or school representatives as necessary for the design of the proposed infrastructure, and provide and obtain information needed to prepare the design.

ASSUMPTIONS

- Assumes Project Kickoff, 50%, 95%, and 100% design review meetings with project manager and project engineer in attendance.
- Assumes three (3) additional project coordination meetings with CITY, TWDB, School District, and/or other project stakeholders to be conducted by phone conference.
- Assumes twelve (12) month design schedule for progress reports and invoicing.

DELIVERABLES

- A. Meeting summaries with action items
- B. Monthly progress reports
- C. Baseline design schedule

TASK 3. FIELD SURVEY AND SUE

ENGINEER will perform survey and SUE services as follows.

3.1 Field Survey

ENGINEER will perform field surveys to collect horizontal and vertical elevations and other information needed by ENGINEER in design and preparation of plans for the project. Information gathered during the survey shall include topographic data, utilities as required by the SUE, structures, trees, and other features relevant to the final plan sheets.

3.2 Subsurface Utility Engineering (SUE)

Provide Subsurface Utility Engineering (SUE) to Quality Level A, as described below. The SUE shall be performed in accordance with CI/ASCE 38-02.

Quality Level D

- Conduct appropriate investigations (e.g., owner records, County/CITY records, personal interviews, visual inspections, etc.), to help identify utility owners that may have facilities within the project limits or that may be affected by the project.
- Collect applicable records (e.g., utility owner base maps, “as built” or record drawings, permit records, field notes, geographic information system data, oral histories, etc.) on the existence and approximate location of existing involved utilities.
- Review records for: evidence or indication of additional available records; duplicate or conflicting information; need for clarification.
- Develop SUE plan sheets and transfer information on all involved utilities to appropriate design plan sheets, electronic files, and/or other documents as required. Exercise professional judgment to resolve conflicting information. For information depicted, indicate: utility type

and ownership; date of depiction; quality level(s); end points of any utility data; line status (e.g., active, abandoned, out of service); line size and condition; number of jointly buried cables; and encasement.

Quality Level C (includes tasks as described for Quality Level D)

- Identify surface features, from project topographic data and from field observations, that are surface appurtenances of subsurface utilities.
- Include survey and correlation of aerial or ground-mounted utility facilities in Quality Level C tasks.
- Survey surface features of subsurface utility facilities or systems.
- The survey shall also include (in addition to subsurface utility features visible at the ground surface): determination of invert elevations of any manholes and vaults; sketches showing interior dimensions and line connections of such manholes and vaults; any surface markings denoting subsurface utilities, furnished by utility owners for design purposes.
- Exercise professional judgment to correlate data from different sources, and to resolve conflicting information.
- Update (or prepare) plan sheets, electronic files, and/or other documents to reflect the integration of Quality Level D and Quality Level C information.
- Recommend follow-up investigations (e.g., additional surveys, consultation with utility owners, etc.) as may be needed to further resolve discrepancies.
- Provide Quality Level C to identify overhead utilities on the project and provide the overhead utility information on the SUE plan sheets.

Level B (includes tasks as described for Quality Level C)

- Select and apply appropriate surface geophysical method(s) to search for and detect subsurface utilities within the project limits, and/or to trace a particular utility line or system.
- Based on an interpretation of data, mark the indications of utilities on the ground surface for subsequent survey. Utilize paint or other method acceptable for marking of lines.
- Unless otherwise directed, mark centerline of single-conduit lines, and outside edges of multi-conduit systems.
- Resolve differences between designated utilities and utility records and surveyed appurtenances.
- Recommend additional measures to resolve differences if they still exist. Recommendations may include additional or different surface geophysical methods, exploratory excavation, or upgrade to Quality Level A data.
- As an alternative to the physical marking of lines, the ENGINEER may, with CITY's approval, utilize other means of data collection, storage, retrieval, and reduction, that enables the correlation of surface geophysical data to the project's survey control.

Level A

- Expose and locate utilities at specific locations.
- Tie horizontal and vertical location of utility to survey control.
- Provide utility size and configuration.
- Provide paving thickness and type, where applicable.
- Provide general soil type and site conditions and such other pertinent information as is reasonably ascertainable from each test hole site.

ASSUMPTIONS

- Scope includes Level B SUE for entire pond footprints and culvert crossings for 100 ft on either side of each culvert

- Scope includes up to six (6) level A test holes

DELIVERABLES

- A. Field Survey Data
- B. SUE Data and AutoCAD drawing

TASK 4. PRELIMINARY DESIGN (50 PERCENT).

The detention design will be based on the conceptual design prepared by FNI during the Still Creek Study. ENGINEER will develop the preliminary design of the infrastructure as follows.

4.1 Data Collection

- In addition to data obtained from the CITY, ENGINEER will research and make efforts to obtain pertinent information to aid in coordination of the proposed improvements with any planned future improvements that may influence the project. ENGINEER will also identify and seek to obtain data for existing conditions that may impact the project including; utilities, agencies (such as TxDOT and railroads), CITY Master Plans, CITY drainage complaint files, existing applicable drainage studies, FEMA floodplain and floodway maps, existing models of project area (if any) and property ownership as available from the Tax Assessor's office.
- ENGINEER will make up to two (2) visits to the site to observe and document existing conditions and aid in the design of the detention pond. It is assumed that these site visits will be made in conjunction with other meetings with the City to reduce travel expenses.

4.2 Preliminary Design Drawings

- Sheet List for Preliminary Drawings to include the following:
 - Cover Sheet (1)
 - Index and General Notes (2)
 - Drainage area map (1)
 - Drainage calculation sheets (2)
 - Site plan/horizontal control for the detention ponds (2)
 - Grading plans for the detention ponds (4)
 - Plan and profile drawing for the pond outlet structures (2)
 - Plan and profile drawings for the culverts (2)
 - Utility relocation sheets (4)
 - Standard and special details (4)

ASSUMPTIONS

- Area of design is limited to improvements identified in Project Understanding section
- Two (2) 11x17 Half Size Sets and One (1) PDF set of design drawings will be provided for City review

- ENGINEER shall not proceed with Final Design activities without written approval by the CITY of the Preliminary Design plans.

DELIVERABLES

- C. 50% Preliminary Design Drawings
- D. 50% Cost Estimate

TASK 5. FINAL DESIGN (95 PERCENT) AND FINAL CONSTRUCTION DOCUMENTS (100 PERCENT).

Upon approval of the Preliminary plans, ENGINEER will incorporate CITY comments on preliminary construction plans and prepare final construction plans as follows:

- Final draft construction plans and specifications shall be submitted to CITY per the approved Project Schedule.
- The ENGINEER shall submit a final design estimate of probable construction cost with the final design plans submitted.
- Following a 95% construction plan review meeting with the CITY, the ENGINEER shall submit Final Plans (100%) to the CITY per the approved Project Schedule. Each plan sheet shall be stamped, dated, and signed by the ENGINEER registered in State of Texas.
- Final Sheet List anticipated to include the following:
 - Cover Sheet (1)
 - Index and General Notes (2)
 - Drainage area map (1)
 - Drainage calculation sheets (2)
 - Site plan/horizontal control for the detention ponds (2)
 - Grading plans for the detention pond (4)
 - Plan and profile drawings for the pond outlet structure (2)
 - Pond cross section sheets showing earthwork quantities (2)
 - Plan and profile drawings for the culverts (2)
 - Headwall grading plans for culverts (4)
 - Utility relocation sheets (4)
 - Standard and special details (16)
 - Vegetation/Planting plans (2)
 - Erosion control plan and details (2)

ASSUMPTIONS

- 2 half size 11x17 and 2 full size 22x34 drawings and 1 copy of the project specifications will be delivered for the 95% design. 1 PDF copy of the project drawings and specifications will be provided.
- 1 full size 22x34 drawings and 1 copy of the project specifications will be delivered for the 100% design. 1 PDF copy of the drawings and specifications will be provided.

DELIVERABLES

- A. 95% construction plans specifications.
- B. 100% construction plans and specifications.
- C. Detailed estimates of probable construction cost for the authorized construction project, including summaries of bid items and quantities.

TASK 6. BID PHASE SERVICES.

ENGINEER will support the bid phase of the project as follows.

6.1 Bid Support

- FNI will attend the pre-bid conference in support of the City.
- FNI will answer questions from potential bidders and prepare addenda if necessary.
- Incorporate all addenda into the contract documents and issue conformed contract documents.

ASSUMPTIONS

- The project will be bid only once and awarded to one contractor.
- 3 sets of conformed plans and specifications will be delivered to the CITY and made available by PDF. The conformed plans shall consist of three half size 11x17 drawings.

DELIVERABLES

- A. Addenda
- B. Conformed construction documents

TASK 7. CONSTRUCTION PHASE SERVICES.

7.1 Construction Support

- ENGINEER will attend pre-construction conference.
- As requested by the CITY, the ENGINEER shall provide necessary interpretations and clarifications of contract documents. It is expected that these services will be provided by email and phone calls.

ASSUMPTIONS

- Assumes 5 RFI and/or change order reviews

DELIVERABLES

A. Response to Contractor's Request for Information

SPECIAL SCOPE OF SERVICES

The special scope of services proposed for this project includes the following:

TASK 8. GRANT ADMINISTRATION

FNI will perform activities related to the grant administration including monthly reporting, invoicing, documentation of reimbursable expenses, final reporting, coordination with FEMA and/or TWDB by phone or email, up to three meetings with the City, TWDB and/or FEMA, and updating of the benefit cost analysis as required by the grant.

TASK 9. GEOTECHNICAL INVESTIGATION

FNI will perform geotechnical investigations and make recommendation for the designs as follows:

- Seven (7) 30 ft borings shall be drilled within the footprint of Pond A, one (1) 30 ft boring shall be drilled within the footprint of Pond B, two (2) 30 ft borings shall be drilled within the vicinity of the Wilkes Street culvert crossing, and two (2) 30 ft borings shall be drilled within the vicinity of the Missouri Avenue culvert crossing
- Detailed logs of borings shall be provided with field penetration tests for sand and rock and undisturbed samples for clay, as appropriate
- Laboratory testing shall include up to 50 Atterberg limits and minus 200 mesh sieve and up to 60 unconfined compression (UC) tests, if undisturbed samples are collected
- A strength test (UC, Texas Highway Department Cone Penetration Test, or Standard Penetration Test) shall be provided for every 5 feet of boring
- Drilling shall proceed according to the standard exploratory drilling procedures, such as detailed notes regarding water observations, material types, or any specific observations that would aid FNI in defining the subsurface
- FNI will coordinate with the geotechnical driller during the field work if needed.
- ENGINEER will evaluate the existing soils and make recommendations for design and construction as necessary. FNI will document our geotechnical recommendations in a technical memorandum.

DELIVERABLES

A. Technical Memorandum documenting geotechnical recommendations

TASK 10. PUBLIC MEETING

FNI will assist with a public meeting for the project as follows:

- After the preliminary plans have been reviewed and approved by the CITY, the ENGINEER shall prepare project exhibits, and attend public meeting to help explain the proposed project to residents. The CITY shall select a suitable location and mail the invitation letters to the affected citizens.

DELIVERABLES

A. Public Meeting exhibits

TASK 11. ROW/EASEMENT SERVICES.

ENGINEER will support and perform activities related to ROW and easements as outlined below.

11.1 Right-of-Way Research

- The ENGINEER shall determine rights-of-way and easement needs for construction of the project. Required temporary and permanent easements will be identified based on available information and recommendations will be made for approval by the CITY.

11.2 Right-of-Way/Easement Preparation and Submittal.

- The ENGINEER shall prepare legal documents to be used to obtain right-of-way and permanent and/or temporary easements required to construct the improvements.

ASSUMPTIONS

- Right-of-Way research includes review of property/right-of-way records based on current internet based Brazos Appraisal District information available at the start of the project and available on-ground property information (i.e. iron rods, fences, stakes, etc.). It does not include effort for chain of title research, parent track research, additional research for easements not included in the TAD, right-of-way takings, easement vacations and abandonments, right-of-way vacations, and street closures.

DELIVERABLES

A. Easement documents

TASK 12. ENVIRONMENTAL PERMITTING.

ENGINEER will support and perform activities related to environmental permitting as follows:

12.1 USACE 404 Permits

- The ENGINEER shall prepare necessary permit applications as required by the USACE.

ASSUMPTIONS

- It is assumed that nationwide permits will be used to cover construction activities following preparation of a pre-construction notification (PCN) and written authorization from the USACE. Preparation of an individual permit application will be considered an additional service.

DELIVERABLES

A. Completed permit documents

ADDITIONAL SERVICES

Additional Services not included in the existing Scope of Services – CITY and ENGINEER agree that the following services are beyond the Scope of Services described in the tasks above. However, ENGINEER can provide these services, if needed, upon the CITY's written request. Any additional amounts paid to the ENGINEER as a result of any material change to the Scope of the Project shall be agreed upon in writing by both parties before the services are performed. These additional services include the following:

1. Negotiation of easements or property acquisition.
2. Services related to development of the CITY's project financing and/or budget.
3. Services related to disputes over pre-qualification, bid protests, bid rejection and re-bidding of the contract for construction.
4. Construction management and inspection services.
5. Performance of materials testing or specialty testing services.
6. Services necessary due to the default of the Contractor.
7. Services related to damages caused by fire, flood, earthquake or other acts of God.
8. Services related to warranty claims, enforcement and inspection after final completion.
9. Services to support, prepare, document, bring, defend, or assist in litigation undertaken or defended by the CITY.
10. Performance of miscellaneous and supplemental services related to the project as requested by the CITY.
11. Surveying or SUE services other than those stated above.
12. Design of other surface detention or other drainage improvement projects within the Still Creek Watershed.
13. Preparation of FEMA (CLOMR or LOMR) submittals.

longevity payments, sick leave, vacation and holiday pay applicable thereto. (Salary Cost is equal to 1.632 times payroll. This factor is adjusted annually).

Other Direct Expenses

Actual Cost Times Multiplier of 1.00

Other direct expenses shall include outside printing and reproduction expense, communication expense, travel, transportation and subsistence away from the FNI office and other miscellaneous expenses directly related to the work, including costs of laboratory analysis, test, and other work required to be done by independent persons other than staff members. For Resident Representative services performed by non-FNI employees and CAD services performed In-house by non-FNI employees where FNI provides workspace and equipment to perform such services, these services will be billed at cost times a multiplier of 2.0. This markup approximates the cost to FNI if an FNI employee was performing the same or similar services.

Rates for In-house Services

Technology Charge

\$8.50 per hour

Bulk Printing

Black and White \$0.10 per copy

Color \$.50 per copy

Binding \$5.75 per book

These rates will be updated annually.

**ATTACHMENT “C”
PROJECT SCHEDULE**

SCHEDULE:

Anticipated Notice to Proceed for Design:
May 2014

Anticipated Final Completion for Design:
February 2015

Contract Completion:
(360 calendar days from the Anticipated Final Completion for Design):
February 2016

If FNI's services are delayed through no fault of FNI, FNI shall be entitled to adjust contract schedule consistent with the number of days of delay. These delays may include but are not limited to delays in OWNER or regulatory reviews, delays on the flow of information to be provided to FNI, governmental approvals, etc.

ATTACHMENT "D" - THE CITY OF BRYAN INSURANCE REQUIREMENTS

