

WORK AUTHORIZATION NO. 3

PROJECT: Wilco Site Detention & Water Quality Pond

This Work Authorization is made pursuant to the terms and conditions of the Williamson County Contract for Engineering Services, being dated July 16, 2019 and entered into by and between Williamson County, Texas, a political subdivision of the State of Texas, (the "County") and Doucet & Associates (the "Engineer").

Part 1. The Engineer will provide the following Engineering Services set forth in Attachment "B" of this Work Authorization.

Part 2. The maximum amount payable for services under this Work Authorization without modification is \$179,590.00.

Part 3. Payment to the Engineer for the services established under this Work Authorization shall be made in accordance with the Contract.

Part 4. This Work Authorization shall become effective on the date of final acceptance and full execution of the parties hereto and shall terminate on December 31, 2026. The Engineering Services set forth in Attachment "B" of this Work Authorization shall be fully completed on or before said date unless extended by a Supplemental Work Authorization.

Part 5. This Work Authorization does not waive the parties' responsibilities and obligations provided under the Contract.

Part 6. County believes it has sufficient funds currently available and authorized for expenditure to finance the costs of this Work Authorization. Engineer understands and agrees that County's payment of amounts under this Work Authorization is contingent on the County receiving appropriations or other expenditure authority sufficient to allow the County, in the exercise of reasonable administrative discretion, to continue to make payments under this Contract. It is further understood and agreed by Engineer that County shall have the right to terminate this Contract at the end of any County fiscal year if the governing body of County does not appropriate sufficient funds as determined by County's budget for the fiscal year in question. County may effect such termination by giving written notice of termination to Engineer.

Part 7. This Work Authorization is hereby accepted and acknowledged below.

EXECUTED this May 22, 2024.

ENGINEER:

Doucet & Associates, Inc.


By: 
Signature

Duke Altman, PE, CFM
Printed Name

Sr. Program Manager -
Public Works & Water Resources
Title

COUNTY:

Williamson County, Texas

By: 
Signature

Bill Gravell, Jr.
Printed Name

Williamson County Judge
Title

LIST OF ATTACHMENTS

Attachment A - Services to be Provided by County

Attachment B - Services to be Provided by Engineer

Attachment C - Work Schedule

Attachment D - Fee Schedule

Attachment A - Services to be Provided by County

Williamson County will provide a Project Manager and any requested data that is in the County's control.

Attachment B - Services to be Provided by Engineer

Please see attached. Additionally, the Engineer will also evaluate existing and proposed infrastructure within this county campus and design improvements to the on-site stormwater management system.

Attachment C - Work Schedule

Please see attached.

Attachment D - Fee Schedule

Please see attached.

November 28, 2023
Updated April 12, 2024
Updated April 17, 2024

Mr. David Zwernemann, P.E.
Wilco Floodplain Manager
Williamson County
3151 S.E. Inner Loop
Georgetown, Texas 78626

RE: Engineering Services for Wilco Site Detention & Water Quality Pond – Proposal No. P215-018

Dear Mr. Zwernemann,

Doucet & Associates, Inc. (Doucet) is pleased to submit this proposal for the above-referenced Williamson County (County) project work for your review and approval. This proposal constitutes proposed engineering services within the Williamson County parcel (WCAD Parcel No. R038840) located at 200 Wilco Way, Georgetown, Texas. The proposed work related to stormwater detention and water quality improvements will be performed in the following phases:

- I. Preliminary hydrologic and hydraulic modeling
- II. Final design & permitting
- III. Development of construction drawings & bid documents
- IV. Construction phase services

The proposed pond location(s), channel improvements, and other required site improvements developed as part of preliminary scoping efforts are shown on **Attachment 3** for reference.

In order to cover the wide range of professional services that are required for this overall project while leveraging site experience and context gained from the nearby Smith Branch Flood Control Wilco project, our team will be led by myself, Colin Slagle, and Duke Altman. We understand the complexity of this project and have been in continuous coordination with Wilco and its other development design partners on the Wilco campus.

As you may know, Doucet was acquired by Kleinfelder in 2023, greatly expanding the depth and breadth of the capabilities, expertise, and service lines we are able to offer Williamson County. For the purposes of this Scope and Fee Proposal, we have separated distinct Scopes of Work to be performed by each of these groups, and their respective subproposals are attached to this overall Doucet proposal. These groups and their involvement in the project are provided below:

- Doucet Environmental Division (Compliance with Threatened and Endangered Species Act, Waters of the US, Cultural Resources & THC) – See **Attachment 4**.
- Kleinfelder Geotechnical Services (Geotech Investigations, Geologic Assessment) – See **Attachment 5**.
- Doucet Geospatial Division (Topographic & Tree Survey) – See **Attachment 6**.

GENERAL PROJECT DESCRIPTION

This work order request is for final design, construction documents, and construction phase services associated with the proposed detention and water quality ponds. The County wishes to provide two centrally-located ponds that adequately detain and remove Total Suspended Solids (TSS) from fully developed discharge resulting from current and future facility developments on the Wilco property. The property lies within the full-purpose City Limits of Georgetown, Texas and is owned by Williamson County. Detention design parameters will observe the stricter of the two governing jurisdictions. Water quality design calculations will use City of Georgetown criteria since it is stricter than TCEQ water quality requirements for areas within the Edwards Aquifer Recharge Zone, as reflected in TCEQ publication RG-348, "Complying with the Edwards Aquifer Rules", revised July 2005.

Prior to this proposal, Doucet performed a preliminary conceptual analysis of anticipated detention and water quality volume demands for current and future impervious cover on the Wilco site. Doucet presented Williamson County with four options for the proposed detention and water quality design approach. To briefly summarize:

1. **Single Pond** – Provide detention and water quality in a single location by expanding the existing pond near Tributary 4 and its confluence with Smith Branch. Over-detain and over-treat TSS to account for developed runoff east of Tributary 4 that cannot be routed to the proposed pond.
2. **Two Ponds** – Expand the existing pond near Tributary 4 and Smith Branch and construct a new pond east of Tributary 4.
3. **Valley Storage** – Expand excavation along Smith Branch on the Wilco property to add valley storage. No detention pond would be designed in this option.
4. **Regional Detention** – Construct a regional detention pond upstream of the Maple Street embankment. This option would require substantial property purchase and/or easement acquisition.

Doucet and Williamson County concluded that options 3 and 4 were likely infeasible due to diminishing returns on detention capacity and anticipated adverse impacts to the FEMA floodplain for Smith Branch. Upon discussion with and confirmation by TCEQ personnel, Option 2 was selected as the ideal configuration for the proposed improvements.

The overall project goal is to design sufficient stormwater detention and water quality treatment features so that future development on the Wilco property will not require independent detention and water quality features. The proposed work in Phase I - Preliminary H&H Modeling will evaluate Option 2 to identify the optimal configuration of the proposed improvements. Should an additional option be required, Doucet may submit a contract addendum. In Phase 2 - Final Design & Permitting, the proposed improvements will be designed to meet all governing jurisdictions' criteria and will identify all required permits. In Phase 3, Doucet will produce construction plans and documents to support bidding and contract award for construction. In Phase 4, Doucet will perform construction management services including project close-out.

SCOPE OF SERVICES

The scope of services for this Work Authorization consists of four (4) phases: I) Preliminary H&H Design, II) Final Design and Permitting, III) Construction Drawings & Bid Documents, and IV) Construction Phase Services. A detailed breakdown of tasks within each phase of work is provided below.

Phase I – Preliminary H&H Design

1) Field Reconnaissance

To fully understand site conditions and provide solid solutions during design and construction document development (prior to the construction phase), Doucet staff will take approximately four (4) field reconnaissance trips (e.g. if two people go to the site at one time, that represents two trips) to the site during the performance of the design work outlined in this proposal. Site visits during the construction phase are included as part of Phase IV. Field investigations performed by our Geospatial and Geotechnical groups will also be part of the work proposed, but the time and cost associated with their trips are included in their respective proposed work efforts (see attachments).

2) Project Meetings & Coordination

To coordinate the considerable work that will be required for Phase I of the proposed project, it is anticipated that three (3) meetings will be held with the County and attended by two Doucet staff per meeting. If only one Doucet staff attends, then proportionately more meetings can be attended within the proposed budget. Project progress/status, upcoming work, problems and/or potential problems, agency coordination, and other items will be discussed with plans made to eliminate or minimize any impacts to the project progress and budget. Our teaming partners will participate in certain meetings as needed and per their respective scopes of work.

In addition to regular project meetings, Doucet will coordinate one (1) initial meeting with the City of Georgetown and TCEQ to obtain concurrence on the proposed detention and water quality design configuration. During this coordination, Doucet will also ascertain all required submittal elements and/or permit applications described in Task II – Final Design and Permitting.

3) Teaming Partners Coordination

The Doucet Project Manager (PM) will coordinate with the Survey, Geotechnical, Geologic, and Environmental groups to achieve project goals and maintain schedule adherence. The PM will also keep the County informed on the progress of their efforts and discuss any problems that might be encountered. The proposed teaming partners have worked with Wilco before, so we anticipate great teamwork and an efficiently run project. Our teaming partners and their respective work descriptions are outlined in **Attachments 4, 5, and 6.**

4) Field Surveying

Some survey work completed with the Smith Branch Flood Control project may be utilized for this proposed work, including boundary survey of the approx. 180-acre tract). The proposed field surveying work associated with this proposal will include additional tree and topographic survey of the work area (approx. 40 acres).

Our PM will oversee the work and coordinate with the County to obtain access and needed information. Details regarding the Doucet Geospatial scope and fee are provided in **Attachment 6**.

5) Hydrologic & Hydraulic Modeling

This task will include refined H&H modeling of the project area, focusing current and future planned development on the Wilco property. Two model conditions will be evaluated: Current Conditions reflecting existing site conditions and development projects already underway, and Fully Developed Conditions reflecting future development of buildings, roadways, and parking areas on the Wilco property. Drainage areas will be delineated in each model condition to quantify runoff to Smith Branch and Tributary 4 which bisects the Wilco property north-to-south. Analysis of downstream peak discharges will be evaluated at the crossing of Smith Branch and Southwestern Boulevard at the northern corner of the Wilco property. Modeling of the conceptual detention and water quality solutions will allow our design team to select the most advantageous improvements that will meet all project goals and align with future developments planned by Williamson County. Analysis will focus on the 2-, 10-, 25-, and 100-year design storm events per City of Georgetown drainage criteria.

Modeling will also consider on-site routing of developed discharge through existing and proposed channels and/or storm drain networks to pond improvements. Per TCEQ guidance, proposed pond improvements will be located on either side of Tributary 4, generally on the east and west sides of the tributary. Doucet will continue to coordinate with Wilco's development design teams for the adjacent planned projects to ensure comprehensive stormwater and water quality management design for both of the proposed ponds.

6) Preliminary Engineering Report

A preliminary engineering report will be developed to present and document all pertinent project work that led to the designs developed. The results presented will form the basis for the final design of the proposed improvements. The report will include all applicable reports and findings produced by our teaming partners (some possibly by reference or as attachments) that influence improvement designs.

Phase II – Final Design and Permitting

1) Project Meetings & Coordination

To coordinate the considerable work that will be required for Phase II of the proposed project, it is anticipated that four (4) meetings will be held with the County and attended by two Doucet staff per meeting. If only one Doucet staff attends, then proportionately more meetings can be attended within the proposed budget. Project progress/status, upcoming work, problems and/or potential problems, agency coordination, and other items will be discussed with plans made to eliminate or minimize any impacts to the project progress and budget. Teaming partners will participate in certain meetings as needed and per their respective scopes of work.

2) Teaming Partners Coordination

The Doucet Project Manager (PM) will continue to coordinate with the Survey, Geotechnical, Geologic, and Environmental groups to incorporate their findings and recommendations into the various design elements. The PM will continue to update the County on the progress of their efforts and discuss any problems that

might be encountered. In the Final Design and Permitting phase, deliverables from each group will aid in permitting efforts, inform the design of earthwork and site improvements, and will support the development of construction plans.

3) Hydrologic & Hydraulic Modeling

Following review of the Preliminary Engineering Report, Doucet will finalize all hydrologic and hydraulic modeling on which design drawings will be based. Doucet will finalize detention calculations, outfall design, and water quality calculations using TCEQ and City of Georgetown design guidelines. Proposed on-site routing features will be designed to provide conveyance of future flows to the detention and water quality ponds. Final H&H modeling parameters and results will be summarized in the Final Engineering Report.

4) Permitting Coordination

Permitting Coordination will be significant for this project as there are numerous project elements that must be designed to meet all respective requirements. Additionally, project plans and supporting documentation must be submitted to specific agencies/entities for their review and approval to ensure that the project meets their respective requirements. The environmental permitting will be of significant importance as project improvements must be developed in a manner to avoid and/or mitigate potential impacts. Therefore, design engineers will work very closely with the Doucet Environmental Division and Kleinfelder Geotechnical Services group. The environmental scope of work is outlined in **Attachment 4**, and the geologic assessment scope of work is outlined in **Attachment 5**. Permitting coordination includes:

- a. Environmental (Williamson County, City of Georgetown, ESA, WOUS, THC)
- b. TCEQ WPAP (including Geologic Assessment) – required in Edwards Aquifer Recharge Zone
- c. Williamson County Review
- d. City of Georgetown Review

5) Final Engineering Report

Updates to preliminary designs will be incorporated into a Final Engineering Report to present and document all pertinent project work that led to the designs developed. The results presented will form the basis for construction drawings of the proposed improvements. The report will include all applicable reports and findings produced by our teaming partners (some possibly by reference or as attachments) that influence improvement designs. Doucet will also prepare preliminary opinion of probable construction cost at this time.

Phase III – Construction Drawings & Bid Documents

Construction drawings and bid document development will be provided based on the analyses and designs that were developed in Phases I and II. A listing of the anticipated drawings is provided below.

1) Construction Drawings

- a. Cover
- b. General Notes
- c. Existing Conditions – Topo & Tree Survey
- d. Proposed Conditions – Overall Site Project Layout
- e. Drainage Plan – Existing Conditions

- f. Drainage Plan – Proposed Conditions
 - g. Erosion & Sedimentation Control Plan
 - h. Pond Improvements Plan and Profile
 - i. Channel Improvements Plan and Profile
 - j. Miscellaneous Details
- 2) Project Manual & Specifications
A project manual with specifications will be developed per the County’s requirements. The manual, specifications, and construction drawings will guide interested contractors in providing solid bids to perform the construction work required. The manual and specifications will specifically outline how the project improvements are to be built by the selected bidder (contractor).
- 3) Engineer’s Opinion of Probable Construction Cost
Doucet will provide an updated construction cost estimate at the final design level to allow the County to plan and budget costs of the project improvements during the design/construction drawing process.
- 4) Pre-Bid Conference & Bid Addenda Coordination
Doucet will assist the County in holding a pre-bid conference and coordinate bid addenda as needed.
- 5) Bid Review & Award Assistance
Once bids are received, Doucet will review and tabulate the bids and assist the County in selecting the contractor that will construct the project.

Phase IV – Construction Phase Services

During the construction phase services, Doucet will perform certain tasks to assist the County’s staff in overseeing project construction. County staff will have the primary day-to-day responsibility to oversee construction with Doucet staff providing assistance by performing the functions outlined below.

- 1) Meetings & Coordination
 - a. Pre-Construction
 - b. Regular Site Visits (approx. 2 per month)
 - c. Final Inspection & Punch List
- 2) Contractor Schedule Review
- 3) Contractor Submittal Review (assume 10)
- 4) Contractor RFI Review & Response (assume 5)
- 5) Change Order Request Review & Preparation (assume 2)
- 6) As-Built Drawings
Construction contractor to provide as-built field survey for Doucet consideration and review. If Doucet is to provide this as-built field survey, and additional service will be developed for the County’s consideration.

ASSUMPTIONS

1. Reimbursables - Printing, reproduction, and other non-labor charges that are directly related to this project will be billed at cost. In-house printing charges will be based on competitive rates of local reproduction companies.
2. Services excluded from this proposal are, but not limited to,: street pavement design; **easement development and acquisition without a scope of work change and associated additional services agreement; as-built surveying**; OSSF (Septic) Design; construction staking; permit fees; zoning; site electrical design; site landscape design; architectural elevations; traffic impact analysis (TIA); Phase 1 ESAs; and unanticipated engineering services associated with issues that may arise during construction. Should any of these services be desired or required, an additional scope and fee proposal will likely be necessary.
3. All permit, license, inspection, testing fees, etc., shall be the responsibility of the Owner or Client and are not included in this agreement.
4. Should the Owner request changes to the above defined SCOPE OF SERVICES after an agreement is developed or if additional services are requested, the additional work shall be billed on a time and materials basis or other arrangement agreeable to both parties. An estimate of additional costs will be provided and approved prior to proceeding with the additional project work.
5. The professional services fees associated with this proposal do not include fees payable to the City, County, TCEQ, USACE, FEMA, or other review or permitting authorities.
6. Once our deliverables are reviewed and all comments addressed, further modifications to the document will be considered additional services if they are significant.

COMPENSATION

Client will pay Doucet for the Services in accordance with the attached Rate Schedule provided in **Attachment 1**. If additional services are required, these services will be invoiced at the rates that have been approved at that time. An overall fee spreadsheet for our Doucet project team is provided in **Attachment 2**. The estimated cost of the services and basis of payment are as follows:

Description		Basis of Payment	Estimated Fee
I.	Preliminary H&H Design	Rate Schedule	\$ 17,565
II.	Final Design & Permitting	Rate Schedule	\$ 33,955
III.	Construction Drawings & Bid Documents	Rate Schedule	\$ 43,500
IV.	Construction Phase Services	Rate Schedule	\$ 29,490
V.	Specialized Scopes (Teaming Partners)		
	Survey (Doucet Geospatial)	Lump Sum, NTE	\$ 12,825
	Environmental (Doucet Environmental)	Lump Sum, NTE	\$ 17,000
	Geotechnical (Kleinfelder)	Lump Sum, NTE	\$ 17,000
	Geologic Assessment (Kleinfelder)	Lump Sum, NTE	\$ 6,255
VI.	Reimbursables (estimate)	At Cost (no markup)	\$ 2,000
Total Cost:			\$ 179,590

SCHEDULE

Upon receiving authorization to proceed from the County, the Doucet team anticipates that Phases I & II (Preliminary and Final Design) can be completed in Q3 of 2024, Phase III (Construction Documents) completed in Q1 of 2025, and Phase IV (Construction) can be completed by end of Q3 of 2025. However, agency reviews and unknown

conditions/situations that could arise out of the environmental work could require additional time to complete the project. **Attachment 7** provides an Anticipated Project Timeline incorporating our best estimates of agency review and coordination timeframes. Please note that field surveying will require granting of access to all needed properties prior to performing some of that work.

APPROVAL

Thank you for considering this new work authorization. We look forward to continuing to work with Williamson County on this challenging project that has numerous professional elements. We have assembled a great team within Doucet and Kleinfelder to meet the many work disciplines needed. Should this proposal be acceptable, please let us know how we can help to incorporate it into our County contract. If you have any questions, please do not hesitate to call me at (817) 371-7730 (my cell phone) or (512) 583-7605 (my office phone). You can also contact me by email at: dclark@kleinfelder.com.

Sincerely,



David Clark, P.E., CFM
Program Manager – Austin Public Works

TBPELS Engineering Firm No F-3937
TBPELS Surveying Firm No. 10194551

cc: Duke Altman - Doucet
Colin Slagle - Doucet

Attachments:

1. 2023 Doucet Rates
2. Doucet Labor Breakdown
3. Proposed Pond Layout Exhibits
4. Doucet Environmental Division Proposal
5. Kleinfelder Geotechnical & Geological Proposal
6. Doucet Geospatial Survey Proposal
7. Anticipated Project Timeline



ATTACHMENT 1

2023 Doucet Rates

Schedule A

Doucet Fee Schedule (2023)

<u>Personnel</u>	<u>Hourly Fee</u>	<u>Personnel</u>	<u>Hourly Fee</u>
Principal Engineer (PE)	\$295.00	Principal Surveyor (RPLS)	\$290.00
Senior Project Manager	\$275.00	Project Manager (RPLS)	\$245.00
Project Manager	\$230.00	Project Surveyor	\$165.00
Senior Project Engineer (PE)	\$215.00	Survey Specialist	\$150.00
Project Engineer III	\$195.00	Survey Technician	\$125.00
Project Engineer II	\$185.00		
Project Engineer I	\$170.00	GIS Specialist	\$155.00
Engineer Associate III	\$160.00	GIS Technician	\$125.00
Engineer Associate II	\$150.00	LiDAR Specialist	\$150.00
Engineer Associate I	\$135.00	LiDAR Technician	\$120.00
		Aerial Mapping Specialist	\$150.00
Sr. Construction Manager	\$180.00	Aerial Mapping Technician	\$120.00
Sr. Construction Inspector	\$170.00	Utility Specialist	\$145.00
Construction Manager	\$125.00	Utility Technician	\$115.00
Construction Inspector	\$115.00		
		Field Coordinator	\$165.00
Sr. Civil Technician	\$165.00	Field Specialist	\$130.00
Civil Technician	\$145.00	Crew of 1	\$130.00
Assistant Civil Technician	\$130.00	Crew of 2	\$170.00
		Crew of 3	\$230.00
Senior Planner (AICP)	\$210.00	Environmental Project Manager	\$200.00
Project Planner	\$160.00	Environmental Specialist	\$145.00
Project Technical Lead	\$165.00	Environmental Technician	\$120.00
Staff Planner	\$140.00	Project Archaeologist	\$165.00
Planning Technician	\$120.00		
		Division Administrator	\$125.00
Project Coordinator	\$135.00	LiDAR Scanner	\$120.00
Sr. Operations Assistant	\$120.00	Drone	\$675.00
Engineering Intern	\$90.00	Ground Targets	\$35/ea.
Operations Assistant	\$85.00	Concrete Monuments	\$290/ea.
		ATV/Boat/Sonar	
Expert Witness	\$550.00	Mileage	\$0.655/ mile

Doucet reserves the right to periodically adjust our fee schedule.

DA 2023A



ATTACHMENT 2

Doucet Labor Breakdown

ATTACHMENT 2
Doucet Associates, Inc.
Manhour Breakdown and Direct Labor
Williamson County Detention Water Quality
Engineering Services

	Tasks	Duke Principal Engineer (\$295/Hr.)	Colin S Sr. Project Manager (\$275/Hr.)	David C Project Manager (\$230/Hr.)	Project Engineer III (\$195/Hr.)	Civil Technician (\$145/Hr.)	Sr. Operations Assistant (\$120/Hr.)	Task Budget	Approx Budget per Contract Task
1.	Preliminary H&H Design								\$17,565.00
	Field Reconnaissance			4	4			\$ 1,700.00	
	Project Meetings and Coordination	2	3	3	3			\$ 2,690.00	
	Meeting with Georgetown & TCEQ	1	1	2				\$ 1,030.00	
	Prelim Hydrologic & Hydraulic Modeling	1	2	12	24			\$ 8,285.00	
	Preliminary Engineering Report	2	2	4	8		2	\$ 3,860.00	
		6	8	25	39	0	2		
	Total for Phase I	\$1,770.00	\$2,200.00	\$5,750.00	\$7,605.00	\$0.00	\$240.00		
2.	Final Design and Permitting								\$33,955.00
	Project Meetings and Coordination	2	4	4	4			\$ 3,390.00	
	Final Hydrologic & Hydraulic Modeling			8	20			\$ 5,740.00	
	Permitting Coordination	2	8	16	16	4	4	\$ 10,650.00	
	Final Engineering Report		2	20	10			\$ 7,100.00	
	QA/QC for Final Engineering Report & Modeling	4	2	2				\$ 2,190.00	
	Comment Response (1 round)	1	2	4	16			\$ 4,885.00	
		9	18	54	66	4	4		
	Total for Phase II	\$2,655.00	\$4,950.00	\$12,420.00	\$12,870.00	\$580.00	\$480.00		
3.	Construction Drawings & Bid Documents								\$43,500.00
	Construction Drawings	2	2	10	30	50		\$ 16,540.00	
	Project Manual & Specifications		2	10	10			\$ 4,800.00	
	Engineer's Opinion of Probable Construction Cost	1	1	4	8	8		\$ 4,210.00	
	QA/QC for Construction Drawings & Bid Docs	4	2	2	4	4		\$ 3,550.00	
	Comment Response (1 round)	1	2	4	10	10		\$ 5,165.00	
	Permitting Coordination	1	2	8	8	4	2	\$ 5,065.00	
	Pre-Bid Conference & Bid Addenda Coordination	2	2	4	4		2	\$ 3,080.00	
	Bid Review & Award Assistance			2	2		2	\$ 1,090.00	
		11	13	44	76	76	6		
	Total for Phase III	\$3,245.00	\$3,575.00	\$10,120.00	\$14,820.00	\$11,020.00	\$720.00		
4.	Construction Phase Services								\$29,490.00
	Meetings and Coordination (Pre-con, regular site visits, Final inspection & punchlist)	6	6	10	10			\$ 7,670.00	
	Contractor Schedule Review			6	6			\$ 2,550.00	
	Contractor Submittal Review			8	4			\$ 2,620.00	
	Contractor RFI Review & Response		4	16	16			\$ 7,900.00	
	Change Order Request Review & Preparation		2	8	8			\$ 3,950.00	
	As-Built Drawings			4	8	16		\$ 4,800.00	
		6	12	52	52	16	0		
	Total for Phase IV	\$1,770.00	\$3,300.00	\$11,960.00	\$10,140.00	\$2,320.00	\$0.00		
	Total Labor								\$124,510.00
	Sum of Non-labor services: Data transfer, materials, etc.								\$ 2,000.00
	Teaming Partners - Specialized Scopes of Work								\$ 53,080.00
	Surveying Services - Doucet Geospatial Division							\$12,825.00	
	Environmental Services - Doucet Environmental Division							\$17,000.00	
	Geotechnical Investigation & Geologic Assessment - Kleinfelder Geotechnical Services							\$23,255.00	
	Doucet TOTAL								\$179,590.00

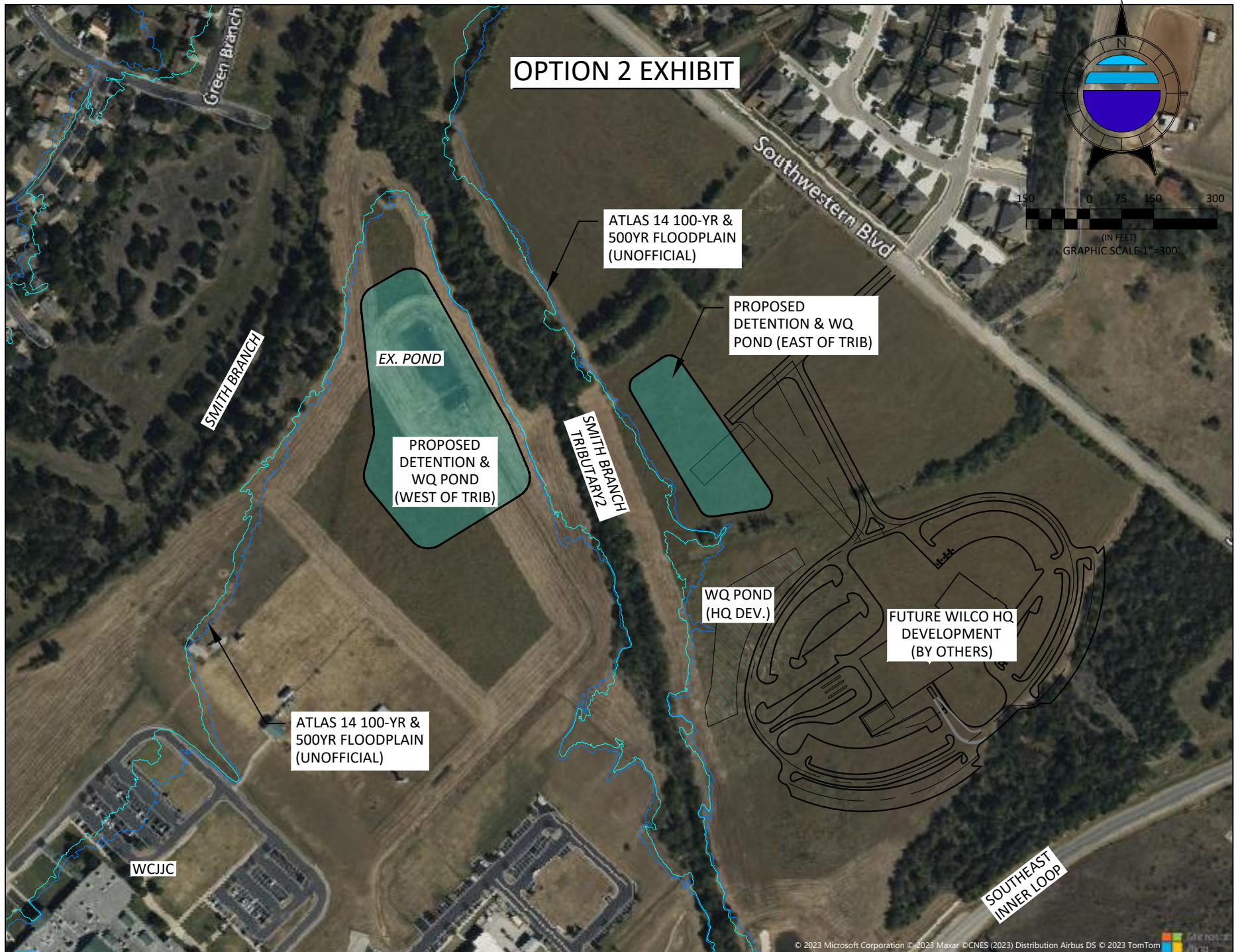
ATTACHMENT 3

Proposed Pond Layout Exhibit
Option 2 – Ponds Either Side of Tributary 4

OPTION 2 EXHIBIT



150 0 75 150 300
(IN FEET)
GRAPHIC SCALE 1"=300'





ATTACHMENT 4
Doucet Environmental Division Proposal
Environmental Services



WILLIAMSON COUNTY – DETENTION & WATER QUALITY POND PROJECT ENVIRONMENTAL CONSULTING SUBPROPOSAL

Threatened and Endangered Species Habitat Assessment: \$7,000 Lump Sum

The Endangered Species Act of 1973 (ESA) provides for protection of plant and animal species listed by the U.S. Fish and Wildlife Service (USFWS) as threatened or endangered. The federal agency regulates the “take” of threatened and endangered species under Section 9 of the ESA. “Take” is defined as to “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct.” “Harm” is further defined as any act that actually kills or injures fish or wildlife or that results in habitat modification or degradation that significantly impairs essential behavioral patterns of fish or wildlife. However, the ESA provides exemptions for “take” that is incidental to otherwise lawful activities on non-federal lands through Section 10 Incidental Take Permit (ITP) or Section 7 interagency consultation for projects with a Federal nexus. Chapter 68 of the Texas Parks and Wildlife Code protects state-listed threatened and endangered species and also prohibits “take”.

The first step in evaluating the potential impacts on federal or state listed threatened or endangered species is to conduct a habitat assessment. A threatened and endangered species habitat assessment will characterize the project site, conduct an ecological survey of the project site, assess potential impacts of the project to threatened and endangered species and offer recommendations for moving the project forward.

A Doucet qualified Biologist or Environmental Scientist will review the project site regarding the above-mentioned state and federal regulations, characterize the site, habitat features, vegetation associations and cover types, water resources, geology, soils and ecological communities on or near the Site. A map of these features, a photo log of the site visit and a list of regulated species (along with an assessment of their potential to exist on-Site) will be provided in a report deliverable. Additionally, compliance recommendations will be made based on known project constraints.

**Please note we are obligated by conditions of USFWS 10(a)1(a) permits to report findings to USFWS. Additionally, species specific surveys are not included in this scope of work.*

***Doucet makes no warranty regarding the action of any regulatory agency, including local, state or federal in connection with the services performed.*

Waters of the US General Consulting Services: hourly NTE \$5,000

This task is set up as an hourly rate to assist in the project planning of potential impacts to wetlands and waters of the US. The hourly task allows for flexibility based on the client’s needs and expectations as the project moves forward to permitting. Additional tasks may include Agency Consultation and No Permit Required letter, Pre-Construction Notification to the USACE, NWP application, general environmental consulting services or other requests as directed by the client.

Cultural Resource Desktop Investigations: \$5,000 Lump Sum

Doucet will conduct a cultural and historical resources risk assessment of the project site for compliance with the Antiquities Code of Texas (ACT) and the Texas Historical Commission (THC). Doucet will conduct a desktop investigation and summary report documenting all cultural work and clearances needed for the project.



The first phase will involve background research to gather data on previously recorded cultural resources (archaeological sites, historic cemeteries, National Register of Historic Places (NRHP) on or within a one-mile location. Additionally, we will review soil data, surface geology, topography and aerial imagery examining both publicly available and restricted access data. Based on the results of this work, Doucet will identify the location and extend of any areas that are deemed as high probability for the presence of archaeological sites within the project area and identify potential historic resources within the project area and a one-mile radius with a potential for impacts.

Recommendations for field investigations (if warranted) will be provided in a technical summary report. This initial task assumes no fieldwork and all maps and reports submitted in a digital format. Areas of High Probability directly impacted by the proposed project may require additional investigations outside of this Scope of Work to determine whether archaeological or historic sites occur within the Area of Potential Effects (APE). Potential fatal flaws or issues in permitting through the Antiquities Code of Texas or Section 106 of the National Historic Preservation Act will be highlighted.

Doucet assumes that the project would avoid deep impacts that would require archeological investigations to include deep (i.e., mechanical) excavations. If site conditions or agency coordination identify a need for mechanical excavation, those services could be provided under a separate work authorization.

Additional work such as coordination with the Texas Historical Commission and Antiquities Permit application will be authorized under a separate scope of work.

Sarah Weber Parnell
Environmental Division Leader



1911 Corporate Drive, Ste. 103
San Marcos, TX 78666
C: 737.213.8557

ATTACHMENT 5
Kleinfelder Geotechnical Services Proposals
Geotechnical Investigation & Geological Assessment



MEMORANDUM

TO:	David Clark, P.E., CFM PM– Doucet & Assoc.	CC:	Kelly Daniel – Operations Mgr. - Kleinfelder
FROM:	Hector Gonzalez, PE Geotech Eng. - Kleinfelder	DATE:	10/27/2023
RE:	Geotechnical services fee estimates for Williamson County Detention and Water Quality Pond		

SCOPE OF SERVICES

The purpose of the project is to provide geotechnical recommendations for a Williamson County project involving a detention and water quality pond. At the time this communication was prepared, a decision had not been made to whether use an impervious clay liner or High-Density Polyethylene (HDPE) liner. The project will have an approximate area of 16.1 Acres and will be located at the northwest corner of Southwestern Boulevard and Southeast Inner Loop, in Georgetown, Texas.

The project site sits on top of the Del Rio Clay and Georgetown Limestone geologic formations (TXKdg) that belong to the Cretaceous period, and are composed of clay minerals, including montmorillonite, illite, and kaolinite, with occasional interbedded sandstone layers and limestone at its bed.

Kleinfelder's proposed scope of services includes exploring the subsurface conditions by performing geotechnical borings, obtaining physical soil properties by field and laboratory testing, and performing engineering analyses and preparing an engineering report. This scope is discussed in detail below.

Subsurface soil and bedrock conditions will be explored by drilling a total of three (3) borings to a depth of 25 feet below existing grade. Each boring will be drilled to its target depth or refusal, whichever happens first. Borings will be logged by a representative of Kleinfelder. Representative soil samples will be collected for classification and laboratory testing. Borings will be backfilled with cement bentonite grout. Excess drill cuttings, if any, will be spread out in landscape areas within the site.

Geotechnical laboratory testing is expected to include water content, soil fraction passing the No. 200 sieve, Atterberg limits, and permeability tests.

Based on the findings of our field and laboratory investigations, we will report our findings, opinions, and recommendations regarding the following:

- ⊕ Site plan to scale illustrating the approximate location of the borings.
- ⊕ A log of the borings indicating the boring number, depth of each stratum, soil classification and description, and groundwater information.
- ⊕ Description of the field exploration and laboratory testing.
- ⊕ Summary of laboratory test results and field permeability tests.
- ⊕ Discussion of subsurface soil and groundwater conditions.
- ⊕ General discussion of the site geology.
- ⊕ Discussion of potential vertical movements of the subgrade soils.



- ⊕ General shallow foundation recommendations for light structures, e.g. weir walls and inflow/outflow structure wingwalls.
- ⊕ Recommendations for trenching and installation of underground lines.
- ⊕ An electronic copy of the report
- ⊕ One meeting or conference call with the client or his representative to discuss the findings of our geotechnical study.

We will present our opinions and recommendations in a written report complete with logs of the explorations and laboratory test results. The report will be submitted as an electronic document.

COST ESTIMATE

The services will be performed in accordance with this communication. Services will be billed on a lump sum basis with a **fee of \$17,000**. If we anticipate a deviation from the provided estimate, we will notify the client and provide a revised estimate.

SAFETY

Kleinfelder takes safety seriously and uses a behavioral based safety training and reporting program known as Loss Prevention System™ (LPS). Our field work will be performed under a site-specific Health and Safety Plan (HASP) prepared by Kleinfelder.

We will notify the Client if the project location presents a potential safety concern to our employees. Unsafe conditions for field work may require a modification of our estimated scope of work and associated fees. We will report any additional costs necessary to mitigate these unanticipated conditions, if applicable.

ASSUMPTIONS

The scope of work described above, and the associated fee assumes the following.

- ⊕ Permission to access the site for drill rig access will be provided by the client. The fee does not include delays in the field, caused by others, including “right-of-entry” for Kleinfelder, and its subcontractors to complete the work proposed herein.
- ⊕ We assumed the site will be accessible to our truck-mounted drilling equipment at the time of our field investigation. If an additional mobilization is required, or if an all-terrain drill rig is required, additional fees will be incurred.
- ⊕ Boring locations will be staked by a representative of Kleinfelder using a hand-help GPS with a horizontal accuracy of approximately 15 feet prior to the start of our field work to facilitate location of existing public and private underground utility lines.
- ⊕ Prior to drilling at the site, Texas 811 will be notified so the member utility companies can mark their facilities prior to our field investigation. The owner or client will provide plans or information, if available, of utilities present at the site. Kleinfelder and its drilling subcontractor cannot be responsible for damage caused to unmarked or mis-marked utilities.
- ⊕ The fieldwork will be performed during daylight hours. Drilling at night or on weekends is not required.



Our estimated fee specifically excludes the assessment of the environmental characteristics of the site, and costs associated with decontamination of personnel/equipment as a result of encountering hazardous/toxic materials at site or regulatory agency requirement. We ask that any information regarding the presence of hazardous materials at the site be made available to our office prior to the start of our field investigation. In the event that there are known contaminants at the site we may need to revise our scope of services and our fees.

This fee does not include costs associated with: The services of specialty sub-consultants or other special outside services other than those described in the above Scope; construction observation, testing, or engineering consultation during construction; performing field work at night, weekends, or holidays; long term groundwater monitoring or analysis; Hard copy documents; document revisions after final submission, or revisions resulting from changed regulations or design; coordination with regulatory agencies other than described in the above Scope. Any other services not specifically included in the above Scope.

Kleinfelder would be pleased to provide some of the additional services described in the paragraph above, upon request.

We understand that our services will be authorized through an Inter-Company Work order, which we will use as formal notice of the client review, understanding, and approval of the scope and fee presented herein.



SCOPE OF SERVICES

Task 1 – Geological Assessment

Based on the requirements set forth by the Edwards Aquifer rules via the Texas Commission on Environmental Quality referenced in Title 30, Texas Administration Code § 213.5, a site-specific Geological Assessment is required for the protection of the Edwards Aquifer. The Geological Assessment report must identify all potential pathways for contaminant movement to the Edwards Aquifer. The report will also be developed to meet the Georgetown, Texas Unified Development Code – Section 11.07.050. The following scope items will be conducted for the development a Geological Assessment:

Field Survey

Prior to development of a deliverable report, the entire subject site will be walked by a field geologist to survey the ground surface for the presence of geologic and manmade features systematically in spaced transects 50 feet apart or smaller, paying close attention to streambeds and structural features observed on aerial photographs. Features identified will be marked with flagging or stakes, accurately located via GPS, assigned a unique number, and the location accurately plotted on the geologic map. Data will be entered in the Geologic Assessment Table and supplementary interpretative data recorded in the narrative description of site geology.

Geological Assessment Reporting

Per TCEQ requirements, a deliverable will be assembled by a licensed Geologist detailing the site reconnaissance as well a review of publicly available geological information for the site. To assist with the compilation of the report, an initial request will be made to the client to obtain any subsurface investigations, assessments, or general geologic knowledge that may exist for the site. In addition, a literature or database will be conducted for the presence of documented caves or other karst features on the property or in proximity to the property boundary. The following items will be contained and discussed within the report:

- A geologic map, at site-plan scale, illustrating the outcrop of surface geology, and all geologic and manmade features associated with the site;
- A stratigraphic column showing, at a minimum, formations, members, and thicknesses;
- A description and evaluation of all geologic, sensitive, and manmade features;
- A detailed assessment of the potential for fluid movement to the Edwards Aquifer;
- A narrative description of soil units and a soil profile, including thickness and hydrologic characteristics.

Upon completion of the aforementioned items, the report will be submitted back to you to assist with your development of the site. It is anticipated that Kleinfelder can complete the scope of work within 30 days of authorization.

FEE

The estimated cost to complete the requested scope of work is provided below.

<u>Amendment</u>	<u>Description</u>	<u>Estimated Cost</u>
1.0	Geological Assessment	\$6,255.00

LIMITATIONS

Our work will be performed in a manner consistent with that level of care and skill ordinarily exercised by other members of Kleinfelder's profession practicing in the same locality, under similar conditions and at the date the services are provided. Our conclusions, opinions and recommendations will be based on a limited number of observations and data. It is possible that conditions could vary between or beyond the data evaluated. Kleinfelder makes no guarantee or warranty, express or implied, regarding the services, communication (oral or written), report, opinion, or instrument of service provided.

Regulations and professional standards applicable to Kleinfelder's engineering services are continually evolving. Techniques are, by necessity, often new and relatively untried. Different professionals may reasonably adopt different approaches to similar problems. As such, our services are intended to provide the Client with a source of professional advice, opinions and recommendations based on our limited number of field observations and tests, collected and performed in accordance with the generally accepted engineering practice that exists at the time our services are rendered and may depend on, and be qualified by, information gathered previously by others and provided to Kleinfelder by the Client.

Kleinfelder offers various levels of investigative and engineering services to suit the varying needs of different clients. Although risk can never be eliminated, more detailed and extensive studies will yield more information, which may help understand and manage the level of risk involved. Since detailed study and analysis involves greater expense, our clients participate in determining levels of service that provide adequate information for their purposes at acceptable levels of risk. More extensive studies could be performed to reduce these uncertainties. Therefore, no warranty or guarantee, express or implied, will be included in Kleinfelder's scope of service.

This proposal may be used only by the client and only for the purposes stated, within a reasonable time from its issuance. Land use, site conditions (both on site and off site) or other factors may change over time, and additional work may be required with the passage of time.

This proposal is valid for a period of 60 days from the date of this proposal, unless a longer period is specifically required by the proposal request in which case that time frame will apply. This proposal was prepared specifically for the client and its designated representatives and may not be provided to others without Kleinfelder's express permission.



ATTACHMENT 6
Doucet Geospatial Division Proposal
Tree & Topo Survey



**WILLIAMSON COUNTY – DETENTION & WATER QUALITY POND PROJECT
DOUCET GEOSPATIAL DIVISION – TREE & TOPO SURVEY SUBPROPOSAL**

Topographic & Tree Survey (Task 705)

\$12,825 Lump Sum

Doucet will prepare a design-level tree and topographic survey to update existing survey with approximately 36 additional acres, according to exhibit "Survey Footprint.jpg" received 10/20/2023. The survey will tag and locate protected trees, 12 inches and greater in diameter, within the boundary limits of said site. The tree survey will be performed in accordance with the City of Georgetown Tree Preservation Plan Section-8.05.020 and a Tree Schedule will be prepared.

The topographic design survey will be performed in accordance with Texas Society of Professional Survey standards for a Category 6 Condition II Topographic survey and will be based on NAD 83 (2011) using NAVD88 vertical datum with Geoid 12B. The survey will field locate found visible features, both horizontally and vertically, including existing on-site structures, buildings, drainage features, adjacent and onsite sidewalks, curb lines, pavement, and visible above-ground utility appurtenances. Two vertical benchmark monuments will be set on-site. Topographic data will be utilized in developing a digital terrain model used to generate one-foot contours on the survey.

Doucet will contact Texas 811 for utility locate, markings placed by purveyors will be surveyed at time of design survey. The survey drawing will be signed and sealed by a Texas Registered Professional Land Surveyor. Client is to provide site right-of-entry access upon notice-to-proceed.

Chris Terry, RPLS
Division Manager, Geospatial



CTerry@kleinfelder.com

C: 210.469.3370

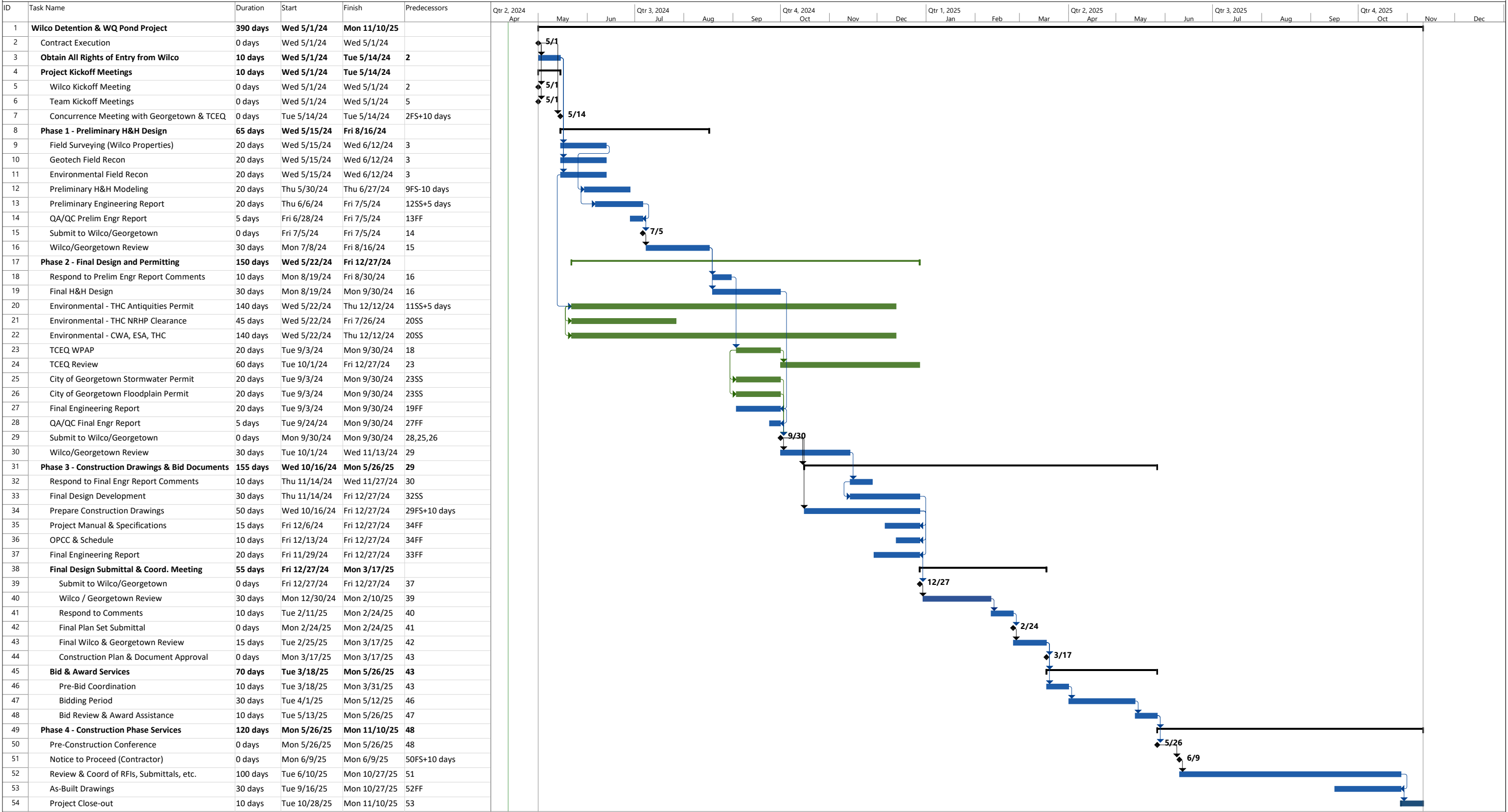
TBPELS Engineering Firm No. F-3937

TBPELS Surveying Firm No. 10194551

ATTACHMENT 7
Anticipated Project Timeline

PROPOSAL

WILCO DETENTION & WATER QUALITY
WILLIAMSON COUNTY, TEXAS
Draft Project Schedule - April 2024
Attachment 7



Project: 215-018 Wilco Detention_Prelim Schedule_2024-04-12_D
Date: Fri 4/12/24

Task Milestone Summary Project Summary Agency Review Manual Summary

Williamson County - Detention for Future Wilco Development**Preliminary Design and Construction Cost Estimate****Doucet & Associates**

Option 2 - Two Ponds, Over-Detain, with stacked Water Quality				
Construction OPC				
Item	QTY	UNIT	PRICE	COST
Prep ROW	6	AC	\$ 4,000	\$ 24,000
Excavation (haul off)	9000	CY	\$ 20	\$ 180,000
Embankment	500	CY	\$ 15	\$ 7,500
On-site Channel Earthwork	2500	CY	\$ 25	\$ 62,500
Remove Ex. Rock Riprap	250	SY	\$ 30	\$ 7,500
Remove Ex. Outfall Structures	2	EA	\$ 2,500	\$ 5,000
Install New Outfall Structure	2	EA	\$ 25,000	\$ 50,000
Tree Protection Fence	1800	LF	\$ 5	\$ 9,000
Furnish & Place Topsoil 4"	9000	SY	\$ 3	\$ 27,000
Broadcast Seed (PERM)(RURAL)	9000	SY	\$ 2	\$ 18,000
Cell Fbr Mulch	9000	SY	\$ 2	\$ 18,000
Silt Fence Install	2500	LF	\$ 1	\$ 2,500
Silt Fence Remove	2500	LF	\$ 1	\$ 2,500
Rock Filter Berm	240	LF	\$ 50	\$ 12,000
12" Rock Riprap	45	CY	\$ 250	\$ 11,250
Mobilization	1	LS	\$ 50,000	\$ 50,000
Contingency (30%)	1	LS	\$ 146,100	\$ 146,100
CONSTRUCTION TOTAL:			\$	632,850
Engineering OPC (From Proposal)				
Item	QTY	UNIT	PRICE	COST
Topo & Tree Survey	1	LS	\$ 12,825	\$ 12,825
Environmental Analysis & Report	1	LS	\$ 17,000	\$ 17,000
Geotech Analysis & Report	1	LS	\$ 23,255	\$ 23,255
Preliminary H&H Design	2	MO	\$ 8,800	\$ 17,600
Final Design & Permitting	5	MO	\$ 6,800	\$ 34,000
Construction Drawings & Bid Docs.	5	MO	\$ 9,000	\$ 45,000
Construction Phase Services	4	MO	\$ 7,500	\$ 30,000
ENGINEERING TOTAL:			\$	179,680

TOTAL ESTIMATED PROJECT COST \$ 812,530