

To:

From:

Additional Services Confirmation

Ryan Nolting, Sanger Parks and Recreation Director

Jacob Hays, Halff Public Works

Team Leader

Email:	jhays@halff.com	Pro	oject:	Sanger Sports Park Pond Rehabilitation	
VIA:	E-mail				
coordination, s investigation ar described unde	urvey, geotechnical engineering, encord rehabilitation via a new clay or poer Exhibit A.	gineeri oly line	ng, bidding r of the afo	rementioned retention pond as	
We estimate approximately \$81,600.00, as described under Exhibit B, will be needed to perform these additional services with a proposed completion time of 110 working days (subject to weather and excluding City review time).					
	ur signature below to confirm the sca ase notify us immediately. The exect ed.	•		•	
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3/8/2024

57185.001

EXHIBIT A

SCOPE OF WORK

FOR

SANGER SPORTS PARK

POND REHABILITATION

GENERAL DESCRIPTION

Halff was approached by the City of Sanger to provide a scope and fee for the investigation and rehabilitation of a retention pond at the southern end of Sanger Sports Park due to abnormal water level loss.

This scope of work includes the project management, coordination, survey, geotechnical engineering, engineering, bidding, and construction services for the investigation and rehabilitation via a new clay or poly liner of the aforementioned retention pond. A detailed scope of work is provided below:

SCOPE OF ENGINEERING SERVICES

PHASE 1 – PROJECT MANAGEMENT AND COORDINATION

- I. Kickoff Meeting and Site Visit
 - A. Within ten (10) days of notice to proceed, the ENGINEER will setup a kickoff meeting with the CITY to confirm project scope and goals and perform an onsite investigation and site walk.
- II. Design Coordination Meetings
 - A. The ENGINEER shall attend a virtual plan's in hand review meeting to discuss comments and the resolution to said comments after each milestone submittal. For this scope the ENGINEER assumes a meeting will be held after the 60% and 90% milestones for a total of two (2) in-person meetings.
- III. Project Billing
 - A. The ENGINEER will submit invoices as the work progresses but not more frequently than monthly.
- IV. Project Management and Quality Assurance and Quality Control
 - A. The ENGINEER will prepare, implement, and document a formal QA/QC plan in accordance with the Public Works section of the ENGINEER's Quality Assurance/Quality Control Program manual.
 - B. The ENGINEER shall conduct regular coordination meetings with project sub-consultants and include all sub-consultant work in the ENGINEER's QA/QC project program.

PHASE 2 – FIELD DATA COLLECTION

- I. Design Survey
 - A. ENGINEER will conduct a topographic and design survey within the trail limits surrounding the pond up to 4-acres in area.

- 1. Establish horizontal and vertical control based on Texas Coordinate System of 1983, North Central Zone (4202), North American Datum of 1983 (NAD83) 2011 Adjustment, Epoch 2010.00.
- 2. Conduct a 25-foot grid using a boat to contour the existing pond within water limits.
- 3. Topo of all surface features or improvements from edge of trail to pond, including:
 - a) Existing trails, docks, trees greater than 6-inches in caliper diameter, barrier free ramps, and floating docks.
- 4. Prepare a final topographic drawing in digital format (including contours and break lines) showing the features located in the field, an ASCII coordinate file of the points located in the field, and a hard copy of the coordinates and feature descriptions.

II. Geotechnical Exploration, Testing, and Reporting

A. Subsurface Exploration

- 1. Based on past experience in the vicinity of the project, we anticipate subsurface conditions to consist of alluvial deposits overlying the Duck Creek geological formation.
- 2. An experienced technician will recon subsurface conditions and obtain representative samples of soils around the existing pond banks. These soils will be bagged, marked, and returned to our laboratory for testing. In addition, experienced drillers and technicians will evaluate subsurface conditions with a total of three (3) sample borings to depths of 25 feet below existing grades.
- 3. The field personnel will drill the borings using truck-mounted equipment. Cohesive and non-cohesive soil samples will be obtained using 3-inch diameter Shelby tube samplers and 2-inch diameter standard split-spoon samplers, respectively. In addition, rock encountered will be evaluated by use of Texas Department of Transportation (TXDOT) cone penetration tests. A soils logger will extrude the samples in the field, check the samples for consistency with a hand penetrometer, carefully wrap them to preserve their condition, and return them to the laboratory for testing. A log of each boring will be prepared to document field activities and results.
- 4. Personnel will stake the boring locations using hand-held GPS equipment. Approximate locations of the borings will be shown on the plan of borings.
- 5. At the completion of drilling operations, boreholes will be backfilled with bentonite and plugged at the surface by hand tamping.

B. Laboratory Testing

- Considering the planned facilities, anticipated soil conditions and geology, laboratory tests will be required for classification purposes, and to determine permeability characteristics. The following types of tests are therefore recommended:
 - a) Moisture content and soil identification
 - b) Sieve and hydrometer grain size analysis
 - c) Liquid and plastic limit (Plasticity Index-PI)
 - d) Optimum moisture-density tests
 - e) Falling-head permeability tests on various percentages of soil-bentonite mixtures

- f) Unit weight determination
- 2. The specific types and quantities of tests will be determined based on geologic conditions encountered in the borings.

C. Engineering Services

- 1. An engineering report will be prepared to present the results of the field and laboratory data together with our analyses of the results and recommendations.
- 2. The report will address:
 - a) General soil conditions and ground-water conditions
 - b) Comments on pond bank materials type, strength, and general permeability characteristics
 - c) Comments on remedial needs, to include recommendations for imported clay liner, or synthetic/poly liner
 - d) Recommendations for bentonite application concentration, as necessary
 - e) Bentonite-soil construction requirements, as necessary
 - f) General comments and recommendations for bank erosion protection
 - g) Earthwork recommendations
- 3. Up to two hard copies of the report shall be provided.

PHASE 3 – ENVIRONMENTAL

- I. Desktop Jurisdictional Determination and Memorandum
 - A. ENGINEER will conduct a desktop level jurisdictional analysis and document their findings in a memorandum. Based on initial review the pond was constructed as a retention and amenity pond in an upland area of the Duck Creek banks however cross flow between the pond and Duck Creek during flood events requires evaluation to verify that the Waters of the United States threshold is not met.
 - B. The U.S. Army Corps of Engineers (USACE) regulates, under the authority of Section 404 of the Clean Water Act (Section 404), the placement of fill material into waters of the United States and special aquatic sites that include wetlands. Under Section 404, the USACE utilizes permits to authorize the discharge of dredged and fill material into waters of the United States when the discharge is expected to result in less than adverse impacts to the aquatic environment. Activities that do not qualify for authorization under a nationwide permit are authorized by a specific individual permit. Preparation of a delineation of waters of the United States is the first step in determining what type of permit, if any, will be required for the proposed activity. A preliminary review of the project area support that a 'desktop' study should be sufficient to document the presence/absence of waters of the United States. The exercise will entail a desktop delineation to determine the presence/absence of potential waters of the United States. A summary report including USGS data, aerial imagery, and LiDAR topography data will be prepared describing the methodology and results of the investigation. A field investigation is not proposed at this time. This task does not assume the preparation and submittal of any Section 404 permit documents.

PHASE 4 - DESIGN

- I. 60% Design
 - A. 60% Design
 - 1. The ENGINEER will develop 60% design plans based on the recommendations contained in the geotechnical report and record drawings provided by the City.
 - 2. Plans shall be prepared with the full size set being 22-inch by 34-inch and of an appropriate scale to allow for the reduction and reproduction of a half size 11-inch by 17-inch set.
 - Design shall be in general accordance with City standards and specifications, NCTCOG standards and specifications, TXDOT standards and specifications, where applicable, and good consulting practices for projects off this nature.
 - 4. Design assumes that the proposed pond limits and grading shall generally conform to original design grades with the exception of areas where slopes may need to be modified, at the engineers discretion, to allow for a more stable and/or maintainable configuration given the soil characteristics determined by the project geotechnical report.
 - 5. Due to the proposed grades generally conforming to existing no tree or large landscape element removal is anticipated and therefore no tree removal permit or landscaping services will be necessary.
 - 6. It is assumed that the existing concrete overflow structure shall remain in place and only minor in-place modifications may be necessary to protect or address existing deficiencies.
 - 7. It is assumed that the proposed improvements shall be contained within the existing sidewalk limits and therefore no local drainage calculations or drainage structure design will be necessary.
 - 8. It is assumed that the southern portion of the Sanger Sports Park western parking lot shall be used for access and portions of the southern trail loop may be closed to pedestrian access to allow for the safe flow of construction and pedestrian traffic within the park.
 - 9. The preliminary drawings shall include the following:
 - a) Cover Sheet and Sheet Index
 - b) General Notes and Legend
 - c) Project Layout and Survey Control (100 scale)
 - d) Staging and Haul Plans
 - e) Demolition and Adjustment Plans (20 scale, dual pane if possible)
 - f) Dimension Control Plan (20, dual pane if possible)
 - g) Grading Plans (20 scale, dual pane if possible)
 - h) Grading Sections
 -) Erosion Control Plan (20 scale. Dual pane if possible)
 - 10. The ENGINEER may submit working drawings depicting elements of concern to the CITY for review and comment to reduce the number of revisions that otherwise could be required.
 - B. 60% EOPCC
 - 1. The ENGINEER shall prepare an Engineers Opinion of Probable Construction Cost (EOPCC) with a level of detail commensurate to the status of the design.
 - C. 60% Design Submittal

1. The ENGINEER shall provide the CITY with up to three (3) hard copies and one digital copy of the 60% deliverables outlined above.

II. 90% Design

- A. 90% Design
 - 1. Incorporate CITY review comments from the 30% milestone submittal.
 - 2. Advancement of the 30% design plans to a 90% level ready for bid upon addressment of the City's 90% comments.
 - 3. Incorporate and develop any necessary design details including:
 - a) Consultant Provided Project Specific Details
 - b) City Standard Details
 - c) Agency Standard Details
- B. 90% EOPCC
 - 1. The ENGINEER shall submit a 90% EOPCC with the respective updates to bid items, quantities and/or unit prices resulting from changes made between the 30% and 90% milestones.
- C. 90% Project Manual and Specifications
 - 1. The ENGINEER shall prepare a 90% Project Manual including Specifications and other construction contract documents provided by the CITY.
- D. 90% Design Submittal :
 - 1. The ENGINEER shall provide the CITY with up to three (3) hard copies and one digital copy of the 90% deliverables outlined above.
- III. Signed and Sealed Construction Drawings, OPCC, and Project Manual
 - A. The ENGINEER shall revise the drawings, OPCC, and Project Manual based upon comments received from the 90% milestone submittal and deliver a signed and sealed package ready for CITY procurement.
 - B. The ENGINEER shall submit three (3) hard copies and one (1) electronic copy to the CITY for their records.

PHASE 5 – BIDDING

- I. Notice to Bidders
 - A. The ENGINEER shall provide a draft copy of the Notice to Bidders (Bid Advertisement) for CITY to use in notifying construction news publications and publishing appropriate legal notice. The ENGINEER shall provide copies of the Notice to Bidders to selected plan rooms. The cost for publication(s) shall be paid for by CITY.
- II. Distribution of Bid Documents
 - A. The CITY will distribute plans, specifications, addendums, and all other bidding documents through the media of their choice.
- III. Plan Holders List
 - A. The plan holders list will be maintained by the CITY and published on the media of their choice.
- IV. Pre-Bid Meeting
 - A. The ENGINEER will conduct a pre-bid conference for the construction project and coordinate responses with CITY. Response to the pre-bid conference questions will be in the form of Addenda issued after the conference.
- V. Bidding Assistance and Addenda

- A. The ENGINEER shall respond to prospective bidder's questions and prepare and issue one (1) addenda to the bid documents if necessary.
- VI. Bid Opening and Recommendation of Award
 - A. The ENGINEER will assist CITY in the opening, tabulation, and analysis of the bids received. The ENGINEER will also review the qualification information provided by the apparent low bidder and present findings to CITY. Based on review of the qualification, references and other bid information the ENGINEER will prepare a low bidder summary letter documenting findings of these review items for the CITY's use in the award of the contract Pre-qualifications of all prospective bidders and issuing a list of eligible bidders prior to the bid opening are not part of the services provided by ENGINEER.
- VII. Assemble Construction Contract Documents
 - A. The ENGINEER will assist CITY in the preparation of Construction Contract Documents for the construction Contract. After execution of the documents, five (5) 22-inch by 34-inch hard copies and one (1) electronic copy will be assembled and distributed by the ENGINEER.

PHASE 6 – CONSTRUCTION

- I. Pre-Construction Meeting
 - A. The ENGINEER will conduct a pre-construction conference for the construction project and coordinate responses with CITY.
- II. Submittals
 - A. The ENGINEER shall review and respond to up to four (4) submittals from the CONTRACTOR.
- III. Request's for Information (RFI)
 - A. The ENGINEER shall review and respond to up to four (5) RFI's from the CONTRACTOR.
- IV. Site Visits
 - A. The ENGINEER shall visit the site up to two (2) times during construction to observe and report on the progress and quality of the executed work. In performing these services the ENGINEER will endeavor to protect the CITY against defects and deficiencies in the work of the CONTRACTOR. However, the ENGINEER cannot guarantee the performance of the CONTRACTOR, nor be responsible for the actual supervision of the construction operations or for the safety measures that the CONTRACTOR takes or should take.
- V. Punch List
 - A. The ENGINEER shall attend a final inspection and assist the CITY in the preparation of a punch list report for the CONTRACTOR to address.
 - B. The ENGINEER shall attend a final punch list verification walk to review whether all items have been satisfactorily addressed.
- VI. Closure
 - A. The ENGINEER shall prepare "record" plans, incorporating all changes and know variations provided by the CONTRACTOR in their red line to provide the CITY with the best possible set of record drawings. The final record drawings shall be furnished in .pdf format on CD. CADD files shall be furnished on CD as well.

EXCLUSIONS

- I. Other additional services, not included in this contract, will be negotiated with the CITY as needed. Compensation will be based upon a mutually agreed lump sum fee or an hourly rate as described below. Items that are considered additional services include but are not limited to:
 - A. Any services not specifically mentioned herein
 - B. Attendance or preparation for Public Meeting(s)
 - C. Attendance or preparation for City Council Meetings
 - D. Attendance or preparation for Planning and Zoning Meetings
 - E. Landscape architecture and irrigation design
 - F. Resurvey to reflect project scope changes requested by the CITY, required to address changed conditions or change in direction previously approved by the CITY, mandated by changing governmental laws, or necessitated by the County acceptance of substitutions proposed by the CONTRACTOR
 - G. Design for Site Lighting or incidental power connections
 - H. Revisions to plans requested by the CITY after plans are approved
 - I. Permit fees, filing fees, pro-rated fees, impact fees and taxes
 - J. Property acquisition closing services
 - K. Identification, coordination, and/or design of sanitary sewer, water, gas, telephone, or other utility improvements, relocations, or adjustments
 - L. Graphic products except as noted herein
 - M. Design of utilities or other improvements outside of the project boundary
 - N. SWPPP preparation
 - O. Environmental assessments beyond the desktop level jurisdictional assessment provided in the proposed scope.
 - P. Construction staking
 - Q. Material testing or review of material testing information provided by the CONTRACTOR
 - R. Boundary resolution. It is assumed that the property on which the proposed work is being conducted is entirely owned by the CITY and no access or easement exist which may encumber or limit the proposed scope of work.
 - S. Texas Department of Licensing and Regulation Accessibility review, permits, and inspections.
 - T. Aquatic resources relocation plan (ARRP). ENGINEER will prepare a specification for the CONTRACTOR to prepare and execute the ARRP required to drain the pond and conduct any muscle species necessitate by the intermittent crossflow between Duck Creek and the pond.
 - U. Environmental constituents testing. ENGINEER will prepare a specification for the CONTRACTOR to use in the collection and analysis of the existing material to be removed for disposal site determination.

- V. Conditional Letter of Map Revision, Letter of Map Revision, or Floodplain development permits.
- W. Modifications to the pond the original design except as otherwise stated in this scope of services.
- X. Hydraulic modeling, structure design, and/or permitting

SCHEDULE

I. The scope of services outlined for the above project is based on the schedule provided below. For the purposes of this schedule all days are considered to be working days based upon an assumed 5-day work week.

A.	Kickoff Meeting	15-working days from Notice to Proceed
B.	Geotechnical	40-working days from Notice to Proceed
C.	Design Survey	40-working days from Notice to Proceed
D.	30% Design	80-working days from Notice to Proceed
E.	90% Design	20-working days from receipt of 30% comments
F.	Signed and Sealed Design	10-working days from receipt of 90% comments
G.	Bidding and Construction Services	Based upon corridor clearance and City's established letting and construction schedule

EXHIBIT B

SCHEDULE OF FEES

FOR

SANGER SPORTS PARK

POND REHABILITATION

Exhibit B defines the basis of compensation to the ENGINEER for the services renders as described under Exhibit A.

<u>PHASE</u>	<u>FEE</u>
PHASE 1 – PROJECT MANAGEMENT AND COORDINATION	\$5,600
PHASE 2 – FIELD DATA COLLECTION	\$26,700
PHASE 3 – ENVIRONMENTAL	\$3,600
PHASE 4 – DESIGN	\$37,400
PHASE 5 – BIDDING	\$4,400
PHASE 6 – CONSTRUCTION	\$3,900
PROJECT TOTAL	\$81,600

Services will be provided on a lump sum basis not to exceed the project total shown above. Printing, delivery, and subconsultant charges will be invoiced at direct cost times 1.1.