December 21, 2023

Mr. Kevin Padgett
Public Works Director
City of Seabrook
1100 Red Bluff
Seabrook, Texas 77586

Re: Proposal for Engineering Services
Seabrook – Seascape Water Line
CobbFendley Project No. _____

Dear Mr. Padgett:

Cobb, Fendley & Associates, Inc. (CobbFendley) is pleased to submit this proposal to provide Professional Engineering Services for the Seascape Water Line Project in Seabrook, Texas. CobbFendley proposes to provide the Scope of Services for the Compensation as outlined in Attachments A and B, respectively.

Thank you for the opportunity to submit this proposal. Please advise if you have any questions or require additional information.

Sincerely,

COBB, FENDLEY & ASSOCIATES, INC.

Amber Hurd, P.E.
Vice President, Department Manager

Attachments

This proposal accepted by:

CITY OF SEABROOK, TEXAS

_____
Signature

_____
Print Name

_____
Title

_____
Date of Authorization

ATTACHMENT A
SCOPE OF SERVICES

Cobb, Fendley & Associates, Inc.
Proposal for Professional Engineering Services
Seascape Water Line Improvements

PROJECT DESCRIPTION AND LIMITS

This project is a part of the City's Capital Improvement Project (CIP) list as it relates to water system improvements. Seascape Water Line is known as CIP No. W31. The purpose of this project is to replace existing asbestos concrete (AC) water lines throughout the neighborhood and to increase the capacity in water lines less than 6-inches.

This project will abandon the existing 6-inch and 8-inch AC water lines and install approximately 8,150 linear feet of new 8-inch water line. The limits included are listed below:

- South Heron Drive from Albatross Drive to North Heron Drive
- North Heron Drive from South Heron Drive to Red Bluff Road
- West Flamingo Drive from Albatross Drive to Todville Road
- Sandpiper Drive from Albatross Drive to North Heron Drive
- Albatross Drive from Red Bluff Road to North Heron Drive
- Allegro Street from Red Bluff Road to End
- Beechcraft Street from Red Bluff Road to End
- Coronado Street from Red Bluff Road to End

Engineering services include surveying, water line design, traffic control plans, storm water pollution prevention plans, geotechnical investigation, construction materials testing, and utility coordination.

Exhibit A – Seascape Water Line Overall Exhibit
Exhibit B – Opinion of Probable Construction Cost

SUBCONSULTANTS

CobbFendley shall subcontract the geotechnical and construction materials testing services. Below is a list of the consultants that we anticipate on using for this project:

- Geotechnical Services – Geoscience Engineering and Testing, Inc.
- Construction Materials Testing – Geoscience Engineering and Testing, Inc.

A proposal for Geotechnical Services is attached to this document.

GENERAL REQUIREMENTS

CobbFendley shall prepare all work in accordance with the latest version of applicable City of Seabrook's (City) procedures, specifications, manuals, guidelines, standard drawings, and standard specifications or previously approved special provisions and special specifications. When design criteria are not identified in City manuals, CobbFendley shall notify the City and refer to State approved manuals, which include: *Roadway Design Manual*, *Hydraulic Design Manual*, the *Texas Manual on Uniform Traffic Control Devices* (TMUTCD), *Standard Specifications for Construction and Maintenance of Highways, Streets and Bridges (latest Edition)*, and other State approved manuals.

CobbFendley shall notify the client and secure permission to enter private property to perform any surveying, engineering, or geotechnical activities needed outside of current right-of-way. CobbFendley shall contact each property owner prior to any entry onto the owner's property and shall request concurrence from the client prior to each entry.

The Engineer shall coordinate with the City throughout the PS&E development and with any local entity having jurisdiction or interest in the project (e.g. City, County, TxDOT, HCFCD, etc.).

The Engineer shall invoice according to Descriptions shown in Attachment A. The Engineer shall submit each invoice in a format acceptable to the City.

A. BASIC SERVICES

DESIGN

I. WATER LINE DESIGN

a. Plan and Profiles - CobbFendley will provide construction plan and profile drawings using CADD standards as required by the City. The drawings will consist of a plan and profile view of existing features and proposed improvements. The construction drawings will contain line work that depicts existing surface features and surface utilities obtained from survey, existing visible subsurface utilities, and existing and proposed right-of-way lines. Plan and Profile sheets will be prepared on 22"x34" format sheets.

Plan view will include:

1. Roadway centerline alignments
2. Existing pavement edges
3. Right-of-way dimensions
4. Existing utilities and structures
5. Benchmark information
6. Proposed water line alignments as they relate to the project centerlines, approx. 8,150 linear feet of relocated water line
7. Starting and ending locations as well as the connection to the existing water main
8. Proposed water valve, services lines, and fire hydrant locations

Profile view will include:

1. Existing and grade lines for pavement and natural ground along the project centerline and edge of apparent right-of-ways
2. Visible existing utilities and structures
3. Proposed utilities and structures

II. TRAFFIC CONTROL PLAN

CobbFendley will prepare Traffic Control detail sheets in accordance with the Texas Manual on Uniform Traffic Control Devices (TMUTCD) for Streets and Highways (latest edition).

III. STORMWATER POLLUTION PREVENTION PLAN (SW3P)

CobbFendley will prepare SW3P detail sheets based on the latest NPDES, and City of Seabrook Stormwater Quality Standards to minimize the potential impact to receiving waterways.

IV. UTILITY COORDINATION

CobbFendley will perform the utility and investigation work involving the research and identification of private and public utilities within the project limits. This will include:

1. Researching the existence of public utilities such as sanitary, storm sewer, and water lines within the project limits
2. Request any additional information from private (CenterPoint Energy, AT&T and Others within the project corridor) and pipeline utilities, regarding locations of facilities within the proposed project limits
3. Coordinate with other governmental entities, specifically Harris County, which are impacted by the project(s) and obtain necessary approvals, signatures or letters of no objection.
4. Identify potential conflicts between the existing utilities and the proposed project improvements
5. Communicate with utility companies on plans for relocations and provide updated project design information

V. SUMMARY

The full plan set will include at a minimum:

1. Cover Sheet
2. General Construction Notes
3. Overall Project Layout
4. Survey Control
5. Plan and Profiles
6. Traffic Control Plan Details
7. Storm Water Pollution Prevention Plan Details
8. Detail Sheets
9. Harris County Review Sheets

VI. MILESTONE SUBMITTALS

CobbFendley shall prepare plans and submit for approval from the City. CobbFendley shall provide the following information at each submittal:

a. 60% Milestone Submittal:
Digital Copy of the following items in .pdf format:
- Set of 22”x34” Plans for review
- Contract Front End Documents and Technical Specifications
- Opinion of Probable Construction Cost

b. 90% Milestone Submittal:
Digital Copy of the following items in .pdf format:
- Set of 22”x34” Plans for review
- Contract Front End Documents and Technical Specifications
- Revised supporting documents from 60% review comments
- Opinion of Probable Construction Cost

c. Final Submittal:
Digital Copy of the following items in .pdf format:
- Set of 22”x34” Plans for review
- Contract Front End Documents and Technical Specifications – Bid Ready
- Revised supporting documents from 90% review comments
- Opinion of Probable Construction Cost
- Construction Schedule

VII. PROJECT MANUAL, SPECIFICATIONS AND GENERAL NOTES

CobbFendley will prepare a Project Manual including the City of Seabrook’s standard front-end documents, standard specifications, special specifications, special provisions and the general note items for inclusion in the plans and bidding documents.

VIII. PROJECT MANAGEMENT

This task is to provide the overall management of the contract which includes:

1. Project scheduling
2. Project invoicing
3. Monthly progress reports
4. Progress review meetings (limited to once a month)
5. Coordination with sub-consultants

BID PHASE

CobbFendley shall provide Bid Phase services. These services shall include:

1. Provide the Client with signed and sealed construction plans and specifications bid documents

2. Distribute digital plans and specifications for contractors on CivCast, an internet-based bidding system, and maintain a planholder's list.

3. Attend Pre-Bid meeting and attend the Bid Opening.

4. Respond in writing to questions from Bidders and prepare Addenda as necessary

5. Prepare Engineer's Recommendation of Award Letter that includes the following required content:

    a. Check for math errors and reconcile any mathematical discrepancies

    b. Review for unbalanced bid items and determine responsiveness and responsibility of low bidders.

    c. Provide Bid Tabulation

    d. Review of bidder's financial standing and references provided

    e. Explanation of discrepancies between the Opinion of Probable Construction Cost and bids

    f. Recommendation to award

6. Produce and transmit for execution with the Notice of Intent to Award (NOI).

Note: The Client will advertise the bid within one local newspaper. Upon Award of Contract by City Council the Client will route and obtain all necessary signatures for execution of the contract and will notify all parties.

CONSTRUCTION ADMINSTRATION

CobbFendley shall provide Construction Administration services. These services shall include:

1. Attend and conduct pre-construction meeting

2. Prepare and submit monthly progress reports for monthly meetings, as required

3. Consultant shall visit the site at intervals appropriate to the stage of construction to become generally familiar with the progress and quality of the portion of Work completed, and to determine, in general, if the Work observed is being performed in a manner indicating that the Work, when fully completed, will be in accordance with the Contract Documents. However, Consultant shall not be required to make

exhaustive or continuous on-site inspections to check the quality or quantity of the Work.

4. Review Contractors Pay Applications and submit to the Client for approval
5. Coordinate with City Staff, Contractor, and Inspector on a weekly basis to communicate construction progress and schedule
6. Calculate quantities and assist in preparing change orders
7. Review and approval of submittals and shop drawings
8. Responding to requests for information (RFIs)
9. Attend Substantial Completion Inspection and Prepare Punchlist
10. Attend Final Completion Inspection
11. Prepare Record Drawings *(Based on Contractors Mark-ups)* and submit to the Client

B. ADDITIONAL SERVICES

I. SURVEY

CobbFendley, as the project surveyor shall:

1. Establish horizontal and vertical project control within the project limits.
2. Collect cross-section data within the project limits. Cross sections shall consist of natural ground, sidewalk edges, back of curb, gutter, crown of road, and any visible grade breaks in between.
3. Perform a One-Call request for existing utilities prior to conducting field survey. Surveyor shall keep a record of all correspondence.
4. Locate all pipelines and associated markers, vents, and test leads. Provide the following Information for each line (Company Name, Contact Number, Pipe Material (if provided), Depth (if toned/probed by owner, not the surveyor), and Product Type as indicated on record drawings provided to surveyor or verified by the Texas Railroad Commission GIS Online Maps.
5. Locate existing overhead and visible indication of underground utilities. Surveyor is not performing subsurface excavation or field utility designation.
6. Surveyor will also collect measure downs and pipe sizes and direction of sanitary and storm sewer utilities.
7. Locate topographical features and existing improvements (e.g., mailboxes (including type), traffic speed bumps or dips, streetlights, street signs, landscaping limits, widths of driveways, curb and gutter, driveway joints nearest to ROW line, etc.).
8. Locate trees 8” in diameter and larger. Provide tree species and trunk caliper size in inches as well as the drip line.
9. Tie in pavement limits, including type.

II. GEOTECHNICAL INVESTIGATION

The Geotechnical Investigation will be performed by Geoscience Engineering and Testing, Inc. in accordance with the attached proposal.

III. CONSTRUCTION MATERIALS TESTING

Construction Materials Testing will be performed by Geoscience Engineering and Testing, Inc.

EXCLUSIONS FROM THE SCOPE OF SERVICES:

The services described above are the identified Basic and Additional Services for this assignment. Other items that may arise during the course of the project that the Client may wish to add to the scope of services shall be deemed as SUPPLEMENTAL SERVICES. CobbFendley shall undertake such additional services as assigned by the Client upon written direction from the Client. Examples of such items are as follows:

1. Sanitary Sewer Design
2. Infrastructure design for adjacent properties
3. Acquisition Services
4. Agency, application, or approval fees
5. Splitting Project into multiple bid packages
6. Bidding Project more than once
7. Public Meetings
8. Urban Forestry Services – Tree Preservation Plan
9. Obtaining Construction Permits
10. Construction Management and Inspection
11. Any other services not specifically included within the description of the Basic or Additional Services described above.

CobbFendley

ATTACHMENT B
BASIS OF COMPENSATION
Cobb, Fendley & Associates, Inc.
Proposal for Professional Engineering Services
Seascape Water Line

A. BASIC SERVICES

The Compensation to be paid to CobbFendley for providing the BASIC SERVICES rendered under this agreement shall be based on Lump sum fees for overall phases of the work as shown below. Reimbursable items and subconsultants will be subject to a 10% administration charge.

1. DESIGN *(Lump Sum)* $100,300
2. BID PHASE SERVICES *(Lump Sum)* $7,600
3. CONSTRUCTION ADMIN. SERVICES *(Lump Sum)* $25,600

Subtotal *(Lump Sum)*..... $133,500

Reimbursable Expenses

1. Reproduction, mileage, delivery charges, etc. *(Not to Exceed)* $2,000

B. ADDITIONAL SERVICES

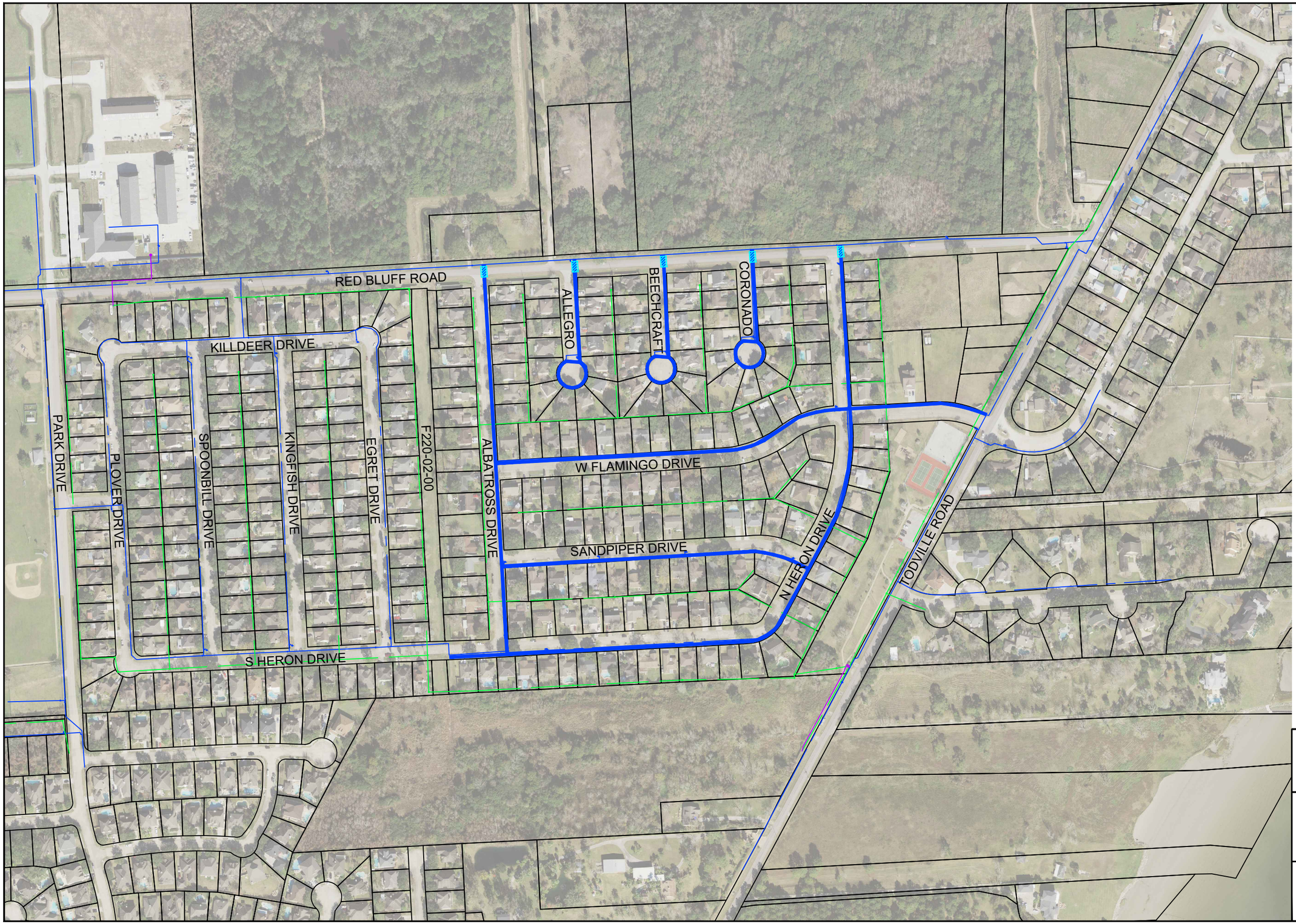
1. Survey by CobbFendley *(Lump Sum)*..... ……$88,600
2. Geotechnical Investigation by Geoscience - (incl 10% markup)..... ……$6,500
3. Construction Materials Testing by Geoscience - (incl 10% markup) ..... ……$4,000

Subtotal, Additional Services $99,100

TOTAL, Basic & Additional Services Including Reimbursables $234,600

The Compensation for any other Supplemental Services which the City desires to be added to the Scope of Services of the project shall be negotiated. Reimbursable items are included. Subconsultant invoices will be subject to a 10% administration charge. Services will be charged according to those personnel directly involved in providing the service and will be rounded to the nearest half hour.

This proposal/supplement is in accordance with the Terms and Conditions outlined in the Professional Services Agreement executed on October 11, 2004 between the City of Seabrook and CobbFendley.



0 150' 300'

SCALE: 1"=300'

LEGEND

- PARCELS
- PROP. 8" WATER LINE
- PROP. STEEL CASING
- EXIST. FORCE MAIN
- EXIST. GRAVITY SEWER
- EXIST. WATER MAIN

SEABROOK

CITY OF SEABROOK, TEXAS

CobbFendley
Texas Registration No. 274
1920 Country Place Parkway, Suite 400
Pearland, Texas 77584
281.993.4952 | fax 281.993.8086
www.cobbfendley.com

EXHIBIT A

SEASCAPE WATER LINE

Exhibit B

Client: City of Seabrook

Project Name: Seascape Water Line

Opinion of Probable Construction Cost

Item No.	Item Description	Unit	Quantity	Unit Price	Extended Price
1	Mobilization (No Greater Than 5% of Total Bid)	LS	1	$ 50,000.00	$ 50,000.00
2	Cut, Plug & Abandon Existing Water Line, Complete in Place	EA	7	$ 600.00	$ 4,200.00
3	8-Inch PVC Water Line, Complete in Place	LF	8,150	$ 65.00	$ 529,750.00
4	16" Steel Casing, Complete in Place	LF	175	$ 250.00	$ 43,750.00
5	Fire Hydrant Assembly, Complete in Place	EA	18	$ 6,500.00	$ 117,000.00
6	12-Inch Wet Connection, Complete in Place	EA	7	$ 4,000.00	$ 28,000.00
7	8-Inch Gate Valves, AWWA C509, Mechanical Joint, Resilient Wedge, NRS Open Counterclockwise with Valve Boxes and Concrete Pad, Complete in Place	EA	22	$ 2,500.00	$ 55,000.00
8	Water Service Connections, Long Side and Short Side, Excluding Meter Replacement, Complete in Place	EA	180	$ 1,000.00	$ 180,000.00
9	SWPPP Measures, in Accordance with Drawings and Specifications	LS	1	$ 3,000.00	$ 3,000.00
10	Traffic Control and Regulation, in Accordance with Drawings and Specifications	LS	1	$ 15,000.00	$ 15,000.00
SUBTOTAL					**$ 1,025,700.00**
20% CONTINGENCY					**$ 205,140.00**
TOTAL CONSTRUCTION COST					**$ 1,230,840.00**

GEOSCIENCE
ENGINEERING & TESTING, INC.
405 E. 20th Street
Houston, Texas 77008
713.861.9700
713.861.4477 Fax
HOUSTON
THE WOODLANDS

December 20, 2023

CobbFendley
1920 Country Place Parkway, Suite 400
Pearland, Texas 77584

Attention: Ms. Kimberly Waddell, PE
KWaddell@cobbfendley.com

Reference: **Proposed Geotechnical Exploration**
Seascape Water Line Improvements
Red Bluff Road, Seabrook, Texas
GETI Proposal No: 23-11961 Rev. 1

Geoscience Engineering & Testing, Inc., is pleased to offer this proposal for a geotechnical exploration for the referenced project. We prepared this proposal based on updated and revised information provided by Kimberly Waddell with CobbFendley, as well as reference to Harris County Geotechnical Guidelines.

Project Location: The Seascape subdivision is located just south of Red Bluff Road and east of Friendship Park in Seabrook, Harris County, Texas. Neighborhood streets are accessed from Red Bluff Road in the north, Albatross Drive in the west, and North Heron Drive on the eastern extremity. These pavements comprise concrete paving traverse east-west and north-south.

Project Information: Principal elements of the project include the proposed installation of 8-inch diameter water lines throughout the neighborhood, as well as five proposed trenchless steel casing crossings along Red Bluff Road. Fig. 1 Seascape Water Line – Bore Locations presents these principal elements of the project.

Assumptions: Our proposal assumes and is based on the following:

- ✓ The site is readily accessible,
- ✓ Boring locations can be accessed by truck-mounted drilling equipment,
- ✓ Boring locations at the site are covered by concrete,
- ✓ Concrete coring for boring access is required,
- ✓ Traffic control requirements are minimal.

FIELD INVESTIGATION

Fig. 2 Boring Location Plan shows the proposed field investigation which includes **3 borings each 10 feet**, throughout the neighborhood and **1 boring at 20 feet** near the Harris County drainage ditch specifically,

totaling 50 linear feet of drilling. These borings are generally distributed within suggested guidelines provided by Harris County for Geotechnical Explorations.

All borings will be advanced within the paved ROW, necessitating coring at each location for access. Upon completion, each boing location will be grouted to the surface and capped.

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 (ASTM D-1587) and 2-inch diameter standard split-spoon samplers (ASTM D-1586), respectively. An engineering geologist or soil technician 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. GETI will stake the boring locations using normal taping procedures. Locations will be shown on the plan of borings. Precise surveying of boring locations and elevations is not included in the cost estimate. At the completion of drilling operations, boreholes will be backfilled with cementitious grout and capped at the surface with high strength grout.

LABORATORY INVESTIGATION

Laboratory tests will be required for classification purposes, to determine strength characteristics, and to evaluate both the short and long-term deformation/swell properties of the materials encountered. Testing will include moisture content and soil identification, liquid and plastic limit determinations, strength tests on soil, and unit weight determinations.

ENGINEERING SERVICES

The engineering report will be directed and prepared by a registered engineer and will present the results of the field and laboratory data together with our analyses of the results and recommendations. We will provide a digitally signed and sealed report in electronic PDF format. The report will generally address:

- ✓ soil and groundwater conditions encountered,
- ✓ brief geological desktop fault study hazards review,
- ✓ subsurface conditions for bedding and backfill of water line,
- ✓ estimated potential vertical rise or soil heave percent,
- ✓ ground water control (dewatering) review,
- ✓ trenchless installation recommendations,
- ✓ open trench recommendations,
- ✓ subgrade repair evaluation,
- ✓ earthwork recommendations, including material and compaction requirements; and
- ✓ construction considerations related to soil and groundwater conditions encountered.

COST OF SERVICES

Based on the scope of services described above, we propose a lump sum fee of **$5,890.00** for the initial geotechnical investigation. This fee will not be exceeded without prior authorization. Items other than those specified above, or changes in drilling requirements, which are revealed by these studies or are necessitated by a change in project scope, may require revised field, laboratory, and engineering services. These services will be discussed and negotiated on an individual basis.

Partial payment for field and laboratory services will be invoiced. The final invoice will be sent to you with our report.

PROJECT SCHEDULE

We plan to initiate these studies within 5 working days of receipt of notice-to-proceed and anticipate that one to two working days will be required to complete the field investigation (weather and site access conditions permitting). You will receive the final report in approximately 15 working days following the completion of field and laboratory operations.

Items to be provided by the client include the right-of-entry and drill rig access to conduct the exploration and information regarding the location of any utilities on the subject site. Staked boring locations are requested also. Any restrictions or special project requirements should be brought to our attention before we commence fieldwork. Should weather or other factors present unforeseen changes in site accessibility, we will contact the client to discuss accessibility options and associated fees. Please authorize us through the execution of the attached Proposal Acceptance Sheet.

Thank you for the opportunity to present this proposal. Please call if you have any questions or if you have suggestions regarding changes to the agreement or to the proposed work scope. We look forward to working with you on the project.

Respectfully Submitted,
Geoscience Engineering & Testing, Inc.

Telfryn L. John, PE
Principal Engineer
President

Digitally signed by Telfryn L John PE
Date: 2023.12.20 10:57:46 -06'00'

F-4802

Attachments:

Proposal Acceptance Sheet
Terms and General Conditions
Figure 1. Seascape Water Line - Bore Locations
Fee Estimate and Fee Schedules

PROPOSAL ACCEPTED BY:

_____ _____
Signature Date

_____ _____
Printed Name Company

_____
Title

Geoscience Engineering & Testing, Inc.

GENERAL TERMS AND CONDITIONS

Payment Terms: Payment is due upon receipt of our invoice. If payment is not received within 30 days from the invoice date, client agrees to pay a finance charge on the principal amount of the past due account of one and one-half percent per month (18% per annum). If one and one-half percent per month exceeds the maximum allowed by law, the charge shall automatically be reduced to the maximum legally allowable. Reasonable attorney fees, personnel charges, or any costs incurred in collecting delinquent accounts will be charged to the client. All sums due are payable in Harris County, Texas. In the event client requests termination prior to completion, a termination charge in the amount equal to all charges incurred through the date services are stopped plus any shut down costs may, at the discretion of Geoscience Engineering & Testing, Inc. (GETI) be made. If GETI is required to stop operations because of changes in the scope of services as requested by the client or requirements of third parties, additional charges will be applicable. GETI reserves the right to withhold any letters and reports pending payment for services.

Standard of Care: GETI will represent CLIENT in a professional manner, using proper skills and care normally associated with the type of project and geographical location of the project. The only warranty or guarantee made by GETI about the services requested or performed hereunder is that we will use that level of skill ordinarily exercised under similar conditions by reputable members of our profession practicing in the same or similar locality. No other warranty, expressed or implied, is made or intended by our proposal for services or by furnishing oral or written reports.

Data and Project Confidentiality: GETI will strive to observe reasonable confidentiality concerning CLIENT project details. Data collected by GETI will not be shared with third parties unless so directed by CLIENT for project related engineering purposes. Data will remain the property of GETI and will be disposed after a period of 3 years unless otherwise directed by CLIENT. Project details may be shared in general by GETI for Marketing purposes.

Sample Disposal Agreement: Unless otherwise requested, test specimens will be disposed of immediately upon completion of testing. Upon written request, GETI will retain test specimens for a specified period, to be determined at the time of writing.

Insurance: GETI maintains Comprehensive General Liability Insurance and Liability Insurance w/bodily injury and property damage. Professional Liability Insurance is also provided for protection of GETI. A Certificate of Insurance can be supplied evidencing such coverage.

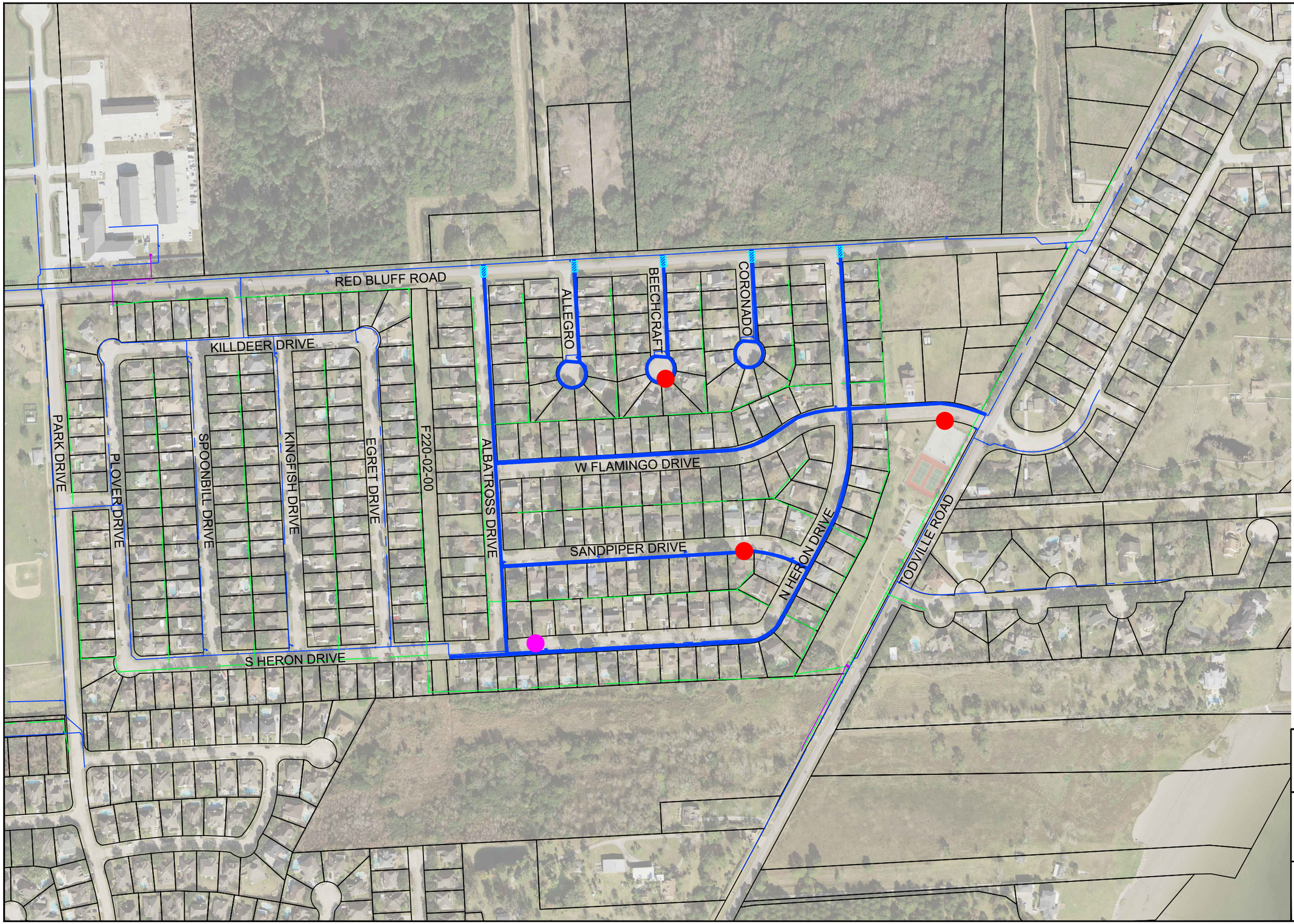
This agreement may be terminated by either party based on two days' written notice. Upon termination, the GETI will be paid in full for all services performed and will provide copies of all reports to CLIENT.

Underground Utilities: GETI is not responsible for locating or identifying underground utilities. Although GETI will call DIGG TESS to seek input from utility owners and take all reasonable care to avoid damage or injury to subterranean structures or utilities, the CLIENT agrees to hold the GETI harmless for any damages to subterranean structures which are not called to GETI attention and correctly shown on the plans furnished.

Right of Entry: The CLIENT further agrees to provide the right of entry of GETI to the site for the provision of service. While GETI will take all reasonable precautions to minimize any damage to the property, It Is understood by the CLIENT that in the normal course of work, some damage may occur and that the correction of such is not part of this agreement.

Limitation of Liability: The CLIENT agrees to limit GETI's liability to the owner, all construction contractors, sub-contractors, sub-consultants and other third parties arising from GETI's professional acts, errors, or omissions, on the project such that the total aggregate liability of GETI to all those named shall not exceed the lesser of the fee for this project or $50,000. GETI maintains professional liability insurance in the amount of $1,000,000 as of the date of this contract.

Agreement: This agreement including these terms and conditions represents the entire agreement between GETI and CLIENT and supersedes any previous agreements, negotiations or representations, whether oral or written. This agreement may be amended only in writing, signed by both GETI and CLIENT. This agreement shall be bounded by the laws of the State of Texas.



0 150' 300'

SCALE: 1"=300'

LEGEND

- PARCELS
- PROP. 8" WATER LINE
- PROP. STEEL CASING
- EXIST. FORCE MAIN
- EXIST. GRAVITY SEWER
- EXIST. WATER MAIN
- PROPOSED 10' BORE
- PROPOSED 20' BORE

SEABROOK

CITY OF SEABROOK, TEXAS

CobbFendley
Texas Registration No. 274
1920 Country Place Parkway, Suite 400
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281.993.4952 | fax 281.993.8086
www.cobbfendley.com

EXHIBIT A

SEASCAPE WATER LINE

GEOTECHNICAL EXPLORATION AND ENGINEERING COST ESTIMATE

Prepared by GeoScience Engineering & Testing

Estimate No.:	23-11961 Rev. 1
Proposal Date:	December 20, 2023
Project:	Seascape Waterline Improvements
Location:	Red Blluff Road Area, Seabrook, Texas

PLANNING (One Call, Drilling Package/Scheduling, Permits, Internal Project Kick-off Meeting)

Item	Unit Rate	Unit	Quantity	Cost
Principal Engineer	$ 200.00	Hour		$ -
Senior Engineer	$ 175.00	Hour	1	$ 175.00
Project Engineer	$ 125.00	Hour	1	$ 125.00
Staff Engineer	$ 100.00	Hour		$ -
Administrative	$ 75.00	Hour	2	$ 150.00
Lane Closure Permit	$ 750.00	LS		$ -
			Planning Subtotal:	$ 450.00

FIELD (Borings, Corings, Piezometers)

Item	Unit Rate	Unit	Quantity	Cost
Vehicle / Pickup	$ 100.00	per day	1	$ 100.00
Field Soil Technician	$ 75.00	Hour	6	$ 450.00
Field Engineer	$ 100.00	Hour		$ -
Project Engineer (Site Visit)	$ 125.00	Hour		$ -
Labor Per Diem	$ 200.00	Day		$ -
Traffic Control	$ 3,000.00	Day		$ -
Concrete Coring Mobilization	$ 250.00	LS	1	$ 250.00
Concrete Coring Up to 6 -inch Diameter	$ 150.00	Per Core	4	$ 600.00
Truck Drilling Rig Mobilization	$ 350.00	Lump Sum	1	$ 350.00
Truck Mileage	$ 3.00	Mile		$ -
Truck Drilling (0 - 50')	$ 15.00	Foot	50	$ 750.00
Wash Drilling Additional, below 20'	$ 3.00	Foot		$ -
TruckDrilling - (50' - 100')	$ 18.00	Foot		$ -
Rock Coring Set Up	$ 85.00	Hole		$ -
Drilling - Soft Rock	$ 20.00	Foot		$ -
Driling - Hard Rock	$ 25.00	Foot		$ -
Drill Crew Per Diem	$ 150.00	Day		$ -
Portable Rig	$ 300.00	per day		$ -
Photoionization Detector	$ 100.00	Day		$ -
TxDOT Cone Tests	$ 25.00	Each		$ -
Piezometer (in existing boring)	$ 40.00	Foot		$ -
Borehole Grouting	$ 6.00	Foot	50	$ 300.00
Sample Shipping	$ 200.00	LS		$ -
Steam Cleaner	$ 250.00	Day		$ -
Bushwhacking (No Big Tree Cuts) - Client Request	$ 5,000.00	LS		$ -
			Field Subtotal:	$ 2,800.00

LABORATORY (Classification, Strength, Swell Potential)

Item	Unit Rate	Unit	Quantity	Cost
Project Engineer (Lab Assignments)	$ 125.00	Hour	1	$ 125.00
Sr. Engineer (Lab Assignments)	$ 175.00	Hour		$ -
Moisture Content / Classification	$ 6.00	Each	25	$ 150.00
Atterberg Limits	$ 45.00	Each	8	$ 360.00
- No. 200 Sieve	$ 35.00	Each	8	$ 280.00
Soil Unit Weight	$ 10.00	Each		$ -
Triaxial Unconfined Undrianed (UU) test	$ 65.00	Each		$ -
Unconfined Compression	$ 50.00	Each		$ -
CU (Consolidated Undrained) Triaxial w/ PPM	$ 1,500.00	each		$ -
Swell	$ 150.00	Each		$ -
Pin Hole	$ 275.00	Each		$ -
Crumb Test	$ 50.00	Each		$ -
Permeability	$ 500.00	Each		$ -
Consolidation	$ 600.00	Each		$ -
Hydrometer	$ 100.00	Each		$ -
Sulfates	$ 50.00	Each		$ -
Sieve Analysis	$ 40.00	LS		$ -
			Laboratory Subtotal:	$ 915.00

BORING LOG PREPARATION

Item	Unit Rate	Unit	Quantity	Cost
Principal Engineer	$ 200.00	Hour		$ -
Senior Engineer	$ 175.00	Hour	1	$ 175.00
Project Engineer	$ 125.00	Hour		$ -
Staff Engineer	$ 100.00	Hour	2	$ 200.00
Administrative	$ 75.00	Hour		$ -
			Boring Log Preparation Subtotal:	$ 375.00

ANALYSIS AND REPORT

Item	Unit Rate	Unit	Quantity	Cost
Principal Engineer	$ 200.00	Hour	1	$ 200.00
Senior Engineer	$ 175.00	Hour	2	$ 350.00
Project Engineer	$ 125.00	Hour		$ -
Staff Engineer	$ 100.00	Hour	8	$ 800.00
Administrative	$ 75.00	Hour		$ -
Overnight Shipping (for Hard Copies)	$ 50.00	LS		$ -
Report Supplies (for Hard Copies)	$ 50.00	LS		$ -
			Analysis and Report Subtotal:	$ 1,350.00
			PROJECT TOTAL:	**$ 5,890.00**